

Form 3160-5
(June 2019)UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENTFORM APPROVED
OMB No. 1004-0137
Expires: October 31, 2021**SUNDRY NOTICES AND REPORTS ON WELLS**
Do not use this form for proposals to drill or to re-enter an abandoned well. Use Form 3160-3 (APD) for such proposals.5. Lease Serial No. **NMNM122624**
6. If Indian, Allottee or Tribe Name**SUBMIT IN TRIPLICATE - Other instructions on page 2**

1. Type of Well

☒ Oil Well ☐ Gas Well ☐ Other2. Name of Operator
COG OPERATING LLC3a. Address **600 West Illinois Ave, Midland, TX 79701**3b. Phone No. (include area code)
(432) 683-744310. Field and Pool or Exploratory Area
DOGIE DRAW/Wolfcamp4. Location of Well (Footage, Sec., T., R., M., or Survey Description)
SEC 24/T25S/R34E/NMP11. Country or Parish, State
LEA/NM**12. CHECK THE APPROPRIATE BOX(ES) TO INDICATE NATURE OF NOTICE, REPORT OR OTHER DATA**

TYPE OF SUBMISSION	TYPE OF ACTION				
☒ Notice of Intent	☐ Acidize	☐ Deepen	☐ Production (Start/Resume)	☐ Water Shut-Off	
☐ Subsequent Report	☐ Alter Casing	☐ Hydraulic Fracturing	☐ Reclamation	☐ Well Integrity	
☐ Final Abandonment Notice	☐ Casing Repair	☐ New Construction	☐ Recomplete	☐ Other	
	☒ Change Plans	☐ Plug and Abandon	☐ Temporarily Abandon		
	☐ Convert to Injection	☐ Plug Back	☐ Water Disposal		

13. Describe Proposed or Completed Operation: Clearly state all pertinent details, including estimated starting date of any proposed work and approximate duration thereof. If the proposal is to deepen directionally or recompleat horizontally, give subsurface locations and measured and true vertical depths of all pertinent markers and zones. Attach the Bond under which the work will be performed or provide the Bond No. on file with BLM/BIA. Required subsequent reports must be filed within 30 days following completion of the involved operations. If the operation results in a multiple completion or recompleat in a new interval, a Form 3160-4 must be filed once testing has been completed. Final Abandonment Notices must be filed only after all requirements, including reclamation, have been completed and the operator has detennined that the site is ready for final inspection.)

COG Operating LLC respectfully requests approval for the following changes to the original approved APD.

BHL Changes:

From: 50' FSL and 2625' FEL Section. 25. T25S. R34E.

To: 50' FSL and 2178' FEL Section. 25. T25S. R34E.

C102 Attached.

Dedicated Acres:

From: 1280. To: 320.

Drilling Changes:

Drilling Program, Directional Plan, AC Report and Specs Attached.

14. I hereby certify that the foregoing is true and correct. Name (Printed/Typed)
MAYTE REYES / Ph: (281) 293-1000Title **Regulatory Analyst**

Signature (Electronic Submission)

Date **01/15/2025****THE SPACE FOR FEDERAL OR STATE OFFICE USE**

Approved by

CHRISTOPHER WALLS / Ph: (575) 234-2234 / ApprovedTitle **Petroleum Engineer**Date **05/12/2025**

Conditions of approval, if any, are attached. Approval of this notice 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.

Office **CARLSBAD**

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.

(Instructions on page 2)

GENERAL INSTRUCTIONS

This form is designed for submitting proposals to perform certain well operations and reports of such operations when completed as indicated on Federal and Indian lands pursuant to applicable Federal law and regulations. Any necessary special instructions concerning the use of this form and the number of copies to be submitted, particularly with regard to local area or regional procedures and practices, are either shown below, will be issued by or may be obtained from the local Federal office.

SPECIFIC INSTRUCTIONS

Item 4 - Locations on Federal or Indian land should be described in accordance with Federal requirements. Consult the local Federal office for specific instructions.

Item 13: Proposals to abandon a well and subsequent reports of abandonment should include such special information as is required by the local Federal office. In addition, such proposals and reports should include reasons for the abandonment; data on any former or present productive zones or other zones with present significant fluid contents not sealed off by cement or otherwise; depths (top and bottom) and method of placement of cement plugs; mud or other material placed below, between and above plugs; amount, size, method of parting of any casing, liner or tubing pulled and the depth to the top of any tubing left in the hole; method of closing top of well and date well site conditioned for final inspection looking for approval of the abandonment. If the proposal will involve **hydraulic fracturing operations**, you must comply with 43 CFR 3162.3-3, including providing information about the protection of usable water. Operators should provide the best available information about all formations containing water and their depths. This information could include data and interpretation of resistivity logs run on nearby wells. Information may also be obtained from state or tribal regulatory agencies and from local BLM offices.

NOTICES

The privacy Act of 1974 and the regulation in 43 CFR 2.48(d) provide that you be furnished the following information in connection with information required by this application.

AUTHORITY: 30 U.S.C. 181 et seq., 351 et seq., 25 U.S.C. 396; 43 CFR 3160.

PRINCIPAL PURPOSE: The information is used to: (1) Evaluate, when appropriate, approve applications, and report completion of subsequent well operations, on a Federal or Indian lease; and (2) document for administrative use, information for the management, disposal and use of National Resource lands and resources, such as: (a) evaluating the equipment and procedures to be used during a proposed subsequent well operation and reviewing the completed well operations for compliance with the approved plan; (b) requesting and granting approval to perform those actions covered by 43 CFR 3162.3-2, 3162.3-3, and 3162.3-4; (c) reporting the beginning or resumption of production, as required by 43 CFR 3162.4-1(c) and (d) analyzing future applications to drill or modify operations in light of data obtained and methods used.

ROUTINE USES: Information from the record and/or the record will be transferred to appropriate Federal, State, local or foreign agencies, when relevant to civil, criminal or regulatory investigations or prosecutions in connection with congressional inquiries or to consumer reporting agencies to facilitate collection of debts owed the Government.

EFFECT OF NOT PROVIDING THE INFORMATION: Filing of this notice and report and disclosure of the information is mandatory for those subsequent well operations specified in 43 CFR 3162.3-2, 3162.3-3, 3162.3-4.

The Paperwork Reduction Act of 1995 requires us to inform you that:

The BLM collects this information to evaluate proposed and/or completed subsequent well operations on Federal or Indian oil and gas leases.

Response to this request is mandatory.

The BLM would like you to know that you do not have to respond to this or any other Federal agency-sponsored information collection unless it displays a currently valid OMB control number.

BURDEN HOURS STATEMENT: Public reporting burden for this form is estimated to average 8 hours per response, including the time for reviewing instructions, gathering and maintaining data, and completing and reviewing the form. Direct comments regarding the burden estimate or any other aspect of this form to U.S. Department of the Interior, Bureau of Land Management (1004-0137), Bureau Information Collection Clearance Officer (WO-630), 1849 C St., N.W., Mail Stop 401 LS, Washington, D.C. 20240

Additional Information

Location of Well

0. SHL: NWNE / 255 FNL / 1510 FEL / TWSP: 25S / RANGE: 34E / SECTION: 24 / LAT: 32.122488 / LONG: -103.420013 (TVD: 0 feet, MD: 0 feet)

PPP: NWNE / 100 FNL / 2625 FEL / TWSP: 25S / RANGE: 34E / SECTION: 24 / LAT: 32.122916 / LONG: -103.423614 (TVD: 12664 feet, MD: 12800 feet)

BHL: SWSE / 50 FSL / 2625 FEL / TWSP: 25S / RANGE: 34E / SECTION: 25 / LAT: 32.094314 / LONG: -103.423619 (TVD: 12796 feet, MD: 23111 feet)

CONFIDENTIAL

Well Name: PITCHBLENDE 24-25 FEDERAL COM	Well Location: T25S / R34E / SEC 24 / NWNW / 32.122488 / -103.420013	County or Parish/State: LEA / NM
Well Number: 704H	Type of Well: OIL WELL	Allottee or Tribe Name:
Lease Number: NMNM122624	Unit or CA Name:	Unit or CA Number:
US Well Number: 3002553945	Operator: COG OPERATING LLC	

Notice of Intent

Sundry ID: 2831882

Type of Submission: Notice of Intent	Type of Action: APD Change
Date Sundry Submitted: 01/15/2025	Time Sundry Submitted: 02:03
Date proposed operation will begin: 01/15/2025	

Procedure Description: COG Operating LLC respectfully requests approval for the following changes to the original approved APD. BHL Changes: From: 50' FSL and 2625' FEL Section. 25. T25S. R34E. To: 50' FSL and 2178' FEL Section. 25. T25S. R34E. C102 Attached. Dedicated Acres: From: 1280. To: 320. Drilling Changes: Drilling Program, Directional Plan, AC Report and Specs Attached.

NOI Attachments

Procedure Description

- Pitchblende_24_25_Federal_Com_704H_Directonal_Plan_20250115135834.pdf
- Wedge_513_7.625_0.375_P110_ICY_10112023_20250115135833.pdf
- Pitchblende_24_25_Federal_Com_704H_Drilling_Program_01082025_20250115135834.pdf
- COG_Pitchblende_24_25_Federal_Com_704H_New_C102_20250115135824.pdf
- API_BTC_10.750_0.400_J55_Casing_11092022_20250115135827.pdf
- 23_5.5_TXP_BTC_P110_CY_20250115135826.pdf
- Pitchblende_24_25_Federal_Com_704H_AC_Report_20250115135827.pdf
- 23_5.5_Wedge_441_P110_CY_20250115135827.pdf
- Wedge_513_7.625_0.375_P110_ICY_01192024_90rbw_20250115135827.pdf

Received by OCD: 5/21/2025 6:09:06 PM

Well Name: PITCHBLENDE 24-25
FEDERAL COM

Well Location: T25S / R34E / SEC 24 /
NWNE / 32.122488 / -103.420013

County or Parish/State: LEA /
NM

Well Number: 704H

Type of Well: OIL WELL

Allottee or Tribe Name:

Lease Number: NMNM122624

Unit or CA Name:

Unit or CA Number:

US Well Number: 3002553945

Operator: COG OPERATING LLC

Conditions of Approval

Additional

PITCHBLENDE_24_25_FED_COM_704H_COAs_20250509112841.pdf

Operator

I certify that the foregoing is true and correct. 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. Electronic submission of Sundry Notices through this system satisfies regulations requiring a

Operator Electronic Signature: MAYTE REYES

Signed on: JAN 15, 2025 01:59 PM

Name: COG OPERATING LLC

Title: Regulatory Analyst

Street Address: 925 N ELDRIDGE PARKWAY

City: HOUSTONState: TX

Phone: (281) 293-1000

Email address: MAYTE.X.REYES@CONOCOPHILLIPS.COM

Field

Representative Name: Gerald Herrera

Street Address: 2208 West Main Street

City: ArtesiaState: NMZip: 88210

Phone: (575)748-6940

Email address: gerald.a.herrera@conocophillips.com

BLM Point of Contact

BLM POC Name: CHRISTOPHER WALLS

BLM POC Title: Petroleum Engineer

BLM POC Phone: 5752342234

BLM POC Email Address: cwalls@blm.gov

Disposition: Approved

Disposition Date: 05/12/2025

Signature: Chris Walls

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 30-025-53945	Pool Code 17980	Pool Name Dogie Draw; Wolfcamp
Property Code	Property Name PITCHBLEND 24-25 FEDERAL COM	Well Number 704H
OGRID No. 229137	Operator Name COG OPERATING LLC	Ground Level Elevation 3353.1'
Surface Owner: ☐ State ☐ Fee ☐ Tribal ☒ Federal		Mineral Owner: ☐ State ☐ Fee ☐ Tribal ☒ Federal

Surface Location

UL	Section	Township	Range	Lot	Ft. from N/S	Ft. from E/W	Latitude	Longitude	County
B	24	25-S	34-E		255 FNL	1510 FEL	32.122488°N	103.420013°W	LEA

Bottom Hole Location

UL	Section	Township	Range	Lot	Ft. from N/S	Ft. from E/W	Latitude	Longitude	County
O	25	25-S	34-E		50 FSL	2178 FEL	32.094311°N	103.422176°W	LEA

Dedicated Acres 320	Infill or Defining Well Defining	Defining Well API 30-025-53945	Overlapping Spacing Unit (Y/N) N	Consolidation Code
Order Numbers.			Well setbacks are under Common Ownership: ☒ Yes ☐ No	

Kick Off Point (KOP)

UL	Section	Township	Range	Lot	Ft. from N/S	Ft. from E/W	Latitude	Longitude	County
B	24	25-S	34-E		255 FNL	1510 FEL	32.122488°N	103.420013°W	LEA

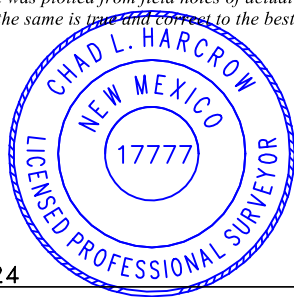
First Take Point (FTP)

UL	Section	Township	Range	Lot	Ft. from N/S	Ft. from E/W	Latitude	Longitude	County
B	24	25-S	34-E		100 FNL	2178 FEL	32.122915°N	103.422171°W	LEA

Last Take Point (LTP)

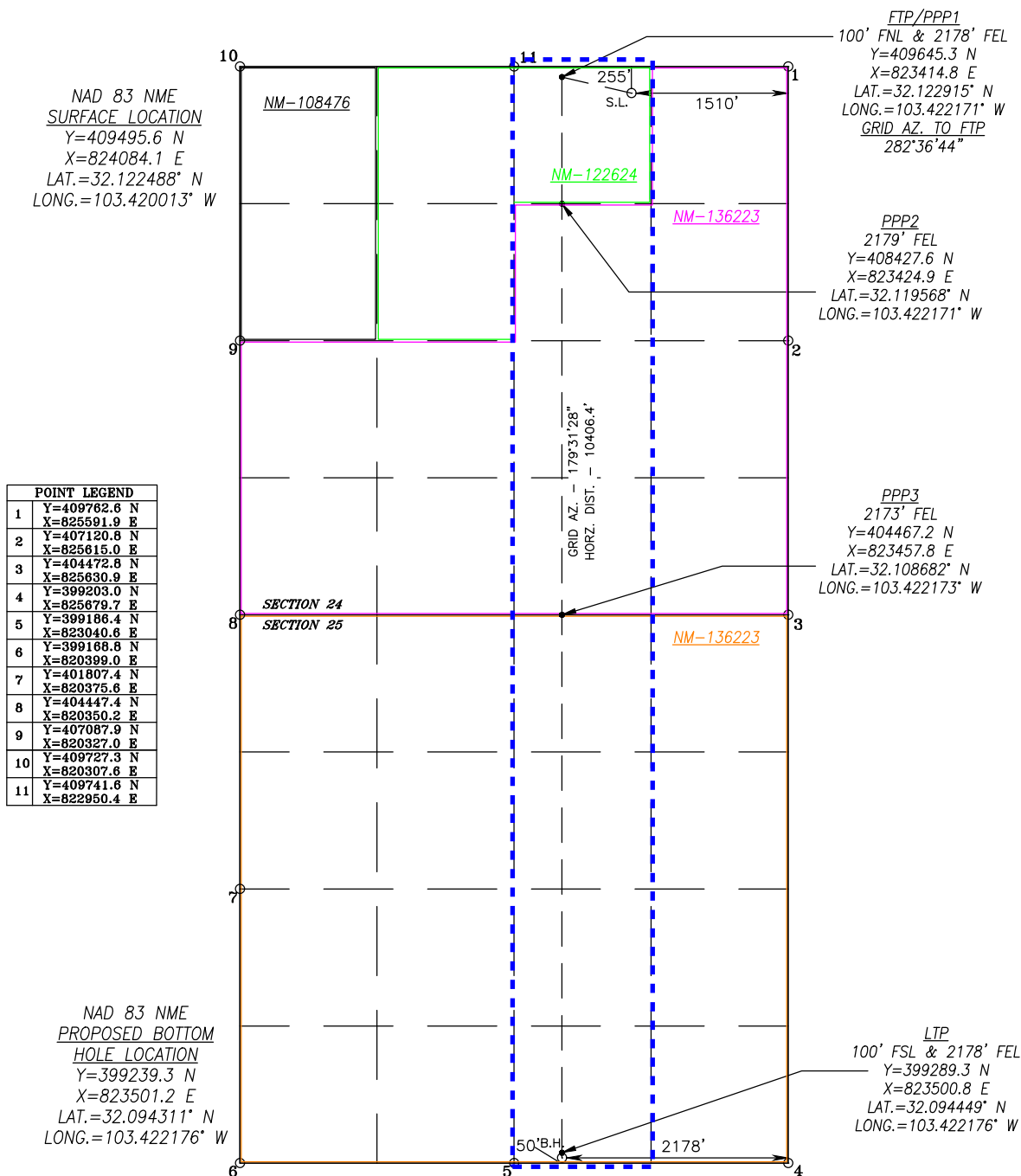
UL	Section	Township	Range	Lot	Ft. from N/S	Ft. from E/W	Latitude	Longitude	County
O	25	25-S	34-E		100 FSL	2178 FEL	32.094449°N	103.422176°W	LEA

Unitized Area or Area of Uniform Interest COM	Spacing Unit Type ☒ Horizontal ☐ Vertical	Ground Floor Elevation: 3353.1'
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OPERATOR CERTIFICATIONS <i>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.</i> <i>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.</i>		SURVEYOR CERTIFICATIONS <i>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.</i>	
Signature Mayte Reyes	Date 12/6/2024	Signature and Seal of Professional Surveyor  Chad Harcrow 11/10/24	
Printed Name Mayte Reyes	Certificate Number 17777	Date of Survey NOVEMBER 3, 2021	
Email Address mayte.x.reyes@op.com		W.O.#24-1088	DRAWN BY: WN PAGE 1 OF 2

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

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



DELAWARE BASIN EAST

LEA COUNTY SOUTHEAST

PITCHBLEND 24-25 FEDERAL PROJECT

PITCHBLEND 24-25 FED COM 704H

OWB

PWP0

Anticollision Report

19 December, 2024

ConocoPhillips
Anticollision Report

Company:	DELAWARE BASIN EAST	Local Co-ordinate Reference:	Well PITCHBLENDE 24-25 FED COM 704H
Project:	LEA COUNTY SOUTHEAST	TVD Reference:	RKB=27ft @ 3380.1usft
Reference Site:	PITCHBLENDE 24-25 FEDERAL PROJECT	MD Reference:	RKB=27ft @ 3380.1usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	PITCHBLENDE 24-25 FED COM 704H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDT 17 Permian Prod
Reference Design:	PWP0	Offset TVD Reference:	Offset Datum

Reference	PWP0		
Filter type:	NO GLOBAL FILTER: Using user defined selection & filtering criteria		
Interpolation Method:	MD + Stations Interval 100.0usft	Error Model:	ISCWSA
Depth Range:	0.0 to 22,829.4usft	Scan Method:	Closest Approach 3D
Results Limited by:	Maximum centre distance of 1,000.0usft	Error Surface:	Combined Pedal Curve
Warning Levels Evaluated at:	2.79 Sigma	Casing Method:	Added to Error Values

Survey Tool Program		Date	12/19/2024		
From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description	
0.0	2,000.0	PWP0 (OWB)	r.5 SDI_KPR_WL_NS-CT	SDI Keeper Wireline Gyrocomp-Initilzd Con	
2,000.0	12,100.7	PWP0 (OWB)	r.5 MWD+IFR1+SAG+FDIR	ISCWSA MWD + IFR1 + SAG + FDIR Corru	
12,100.7	22,829.4	PWP0 (OWB)	r.5 MWD+IFR1+SAG+FDIR	ISCWSA MWD + IFR1 + SAG + FDIR Corru	

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						
BANDANA FEDERAL PROJECT						
BANDANA FEDERAL COM 602H - OWB - AWP	12,325.0	20,399.0	280.6	193.8	3.233 SF	
BANDANA FEDERAL COM 602H - OWB - AWP	12,375.0	20,399.0	264.1	185.9	3.377 ES	
BANDANA FEDERAL COM 602H - OWB - AWP	12,409.2	20,399.0	260.8	189.5	3.657 CC	
BANDANA FEDERAL COM 702H - OWB - AWP	12,425.0	20,620.0	726.0	631.9	7.715 SF	
BANDANA FEDERAL COM 702H - OWB - AWP	12,525.0	20,620.0	710.7	620.8	7.904 ES	
BANDANA FEDERAL COM 702H - OWB - AWP	12,531.4	20,620.0	710.7	621.1	7.930 CC	
BANDANA FEDERAL COM 703H - OWB - AWP	12,400.0	21,064.0	906.0	805.3	8.997 SF	
BANDANA FEDERAL COM 703H - OWB - AWP	12,475.0	21,064.0	898.2	799.1	9.063 ES	
BANDANA FEDERAL COM 703H - OWB - AWP	12,489.0	21,064.0	898.0	799.2	9.092 CC	
PITCHBLENDE 24-25 FEDERAL PROJECT						
PITCHBLENDE 24-25 FED COM 603H - OWB - PWP0	2,000.0	2,000.0	30.0	22.0	3.732 CC, ES, SF	
PITCHBLENDE 24-25 FED COM 604H - OWB - PWP0	2,665.7	2,664.2	33.9	22.6	3.018 CC, ES	
PITCHBLENDE 24-25 FED COM 604H - OWB - PWP0	2,700.0	2,698.2	34.1	22.7	3.001 SF	
PITCHBLENDE 24-25 FED COM 703H - OWB - PWP0	1,966.6	1,966.7	54.1	45.3	6.160 CC	
PITCHBLENDE 24-25 FED COM 703H - OWB - PWP0	2,000.0	2,000.0	54.1	45.2	6.100 ES, SF	

Offset Design:		BANDANA FEDERAL PROJECT - BANDANA FEDERAL COM 602H - OWB - AWP										Offset Site Error:		0.0 usft	
Survey Program:		100-r.5 SDI_KPR_WL_NS-CT, 1096-r.5 MWD+IFR1+MS, 12123-r.5 MWD+IFR1+MS										Offset Well Error:		3.0 usft	
Reference		Offset		Semi Major Axis			Offset Wellbore Centre			Rule Assigned:					
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	No-Go Distance (usft)	Separation Factor	Warning		
11,600.0	11,546.8	20,399.0	12,509.8	16.4	66.0	-39.76	300.0	-752.5	946.1	844.6	101.51	9.320			
11,700.0	11,646.8	20,399.0	12,509.8	16.5	66.0	-39.76	300.0	-752.5	847.2	745.7	101.47	8.349			
11,800.0	11,746.8	20,399.0	12,509.8	16.6	66.0	-39.76	300.0	-752.5	748.5	647.2	101.35	7.385			
11,900.0	11,846.8	20,399.0	12,509.8	16.6	66.0	-39.76	300.0	-752.5	650.3	549.2	101.13	6.431			
12,000.0	11,946.8	20,399.0	12,509.8	16.7	66.0	-39.76	300.0	-752.5	552.7	452.0	100.70	5.489			
12,100.0	12,046.8	20,399.0	12,509.8	16.8	66.0	-39.76	300.0	-752.5	456.2	356.3	99.91	4.566			
12,100.7	12,047.5	20,399.0	12,509.8	16.8	66.0	-39.76	300.0	-752.5	455.5	355.6	99.90	4.559			
12,125.0	12,071.8	20,399.0	12,509.8	16.8	66.0	145.97	300.0	-752.5	432.4	332.9	99.52	4.345			
12,150.0	12,096.7	20,399.0	12,509.8	16.8	66.0	149.93	300.0	-752.5	409.2	310.2	99.04	4.132			
12,175.0	12,121.5	20,399.0	12,509.8	16.8	66.0	152.90	300.0	-752.5	386.8	288.4	98.39	3.931			

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

ConocoPhillips

Anticollision Report

Company:	DELAWARE BASIN EAST	Local Co-ordinate Reference:	Well PITCHBLENDE 24-25 FED COM 704H
Project:	LEA COUNTY SOUTHEAST	TVD Reference:	RKB=27ft @ 3380.1usft
Reference Site:	PITCHBLENDE 24-25 FEDERAL PROJECT	MD Reference:	RKB=27ft @ 3380.1usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	PITCHBLENDE 24-25 FED COM 704H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDT 17 Permian Prod
Reference Design:	PWPO	Offset TVD Reference:	Offset Datum

Offset Design: BANDANA FEDERAL PROJECT - BANDANA FEDERAL COM 602H - OWB - AWP												Offset Site Error:	0.0 usft
Survey Program: 100-r.5 SDI_KPR_WL_NS-CT, 1096-r.5 MWD+IFR1+MS, 12123-r.5 MWD+IFR1+MS												Offset Well Error:	3.0 usft
Reference		Offset		Semi Major Axis		Offset Wellbore Centre		Distance		Rule Assigned:		Warning	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	No-Go Distance (usft)	Separation Factor	
12,200.0	12,146.1	20,399.0	12,509.8	16.8	66.0	155.15	300.0	-752.5	365.2	267.7	97.50	3.745	
12,225.0	12,170.4	20,399.0	12,509.8	16.8	66.0	156.88	300.0	-752.5	344.8	248.4	96.31	3.580	
12,250.0	12,194.4	20,399.0	12,509.8	16.8	66.0	158.23	300.0	-752.5	325.7	231.0	94.74	3.438	
12,275.0	12,218.0	20,399.0	12,509.8	16.8	66.0	159.27	300.0	-752.5	308.5	215.8	92.69	3.328	
12,300.0	12,241.1	20,399.0	12,509.8	16.8	66.0	160.07	300.0	-752.5	293.3	203.2	90.06	3.257	
12,325.0	12,263.6	20,399.0	12,509.8	16.8	66.0	160.66	300.0	-752.5	280.6	193.8	86.78	3.233 SF	
12,350.0	12,285.6	20,399.0	12,509.8	16.9	66.0	161.08	300.0	-752.5	270.8	187.9	82.81	3.269	
12,375.0	12,307.0	20,399.0	12,509.8	16.9	66.0	161.35	300.0	-752.5	264.1	185.9	78.23	3.377 ES	
12,400.0	12,327.6	20,399.0	12,509.8	16.9	66.0	161.47	300.0	-752.5	261.0	187.8	73.20	3.566	
12,409.2	12,335.0	20,399.0	12,509.8	16.9	66.0	161.48	300.0	-752.5	260.8	189.5	71.30	3.657 CC	
12,425.0	12,347.4	20,399.0	12,509.8	16.9	66.0	161.45	300.0	-752.5	261.5	193.5	68.02	3.844	
12,450.0	12,366.5	20,399.0	12,509.8	16.9	66.0	161.29	300.0	-752.5	265.6	202.5	63.04	4.213	
12,475.0	12,384.6	20,399.0	12,509.8	16.9	66.0	160.99	300.0	-752.5	273.1	214.5	58.61	4.660	
12,500.0	12,401.9	20,399.0	12,509.8	16.9	66.0	160.52	300.0	-752.5	283.7	228.8	54.95	5.163	
12,525.0	12,418.1	20,399.0	12,509.8	17.0	66.0	159.88	300.0	-752.5	297.1	244.9	52.16	5.695	
12,550.0	12,433.4	20,399.0	12,509.8	17.0	66.0	159.02	300.0	-752.5	312.9	262.7	50.21	6.231	
12,575.0	12,447.6	20,399.0	12,509.8	17.0	66.0	157.90	300.0	-752.5	330.6	281.7	48.95	6.755	
12,600.0	12,460.7	20,399.0	12,509.8	17.0	66.0	156.46	300.0	-752.5	350.1	301.9	48.20	7.262	
12,625.0	12,472.6	20,399.0	12,509.8	17.1	66.0	154.60	300.0	-752.5	370.8	323.0	47.81	7.757	
12,650.0	12,483.4	20,399.0	12,509.8	17.1	66.0	152.19	300.0	-752.5	392.7	345.0	47.63	8.245	
12,675.0	12,493.0	20,399.0	12,509.8	17.1	66.0	148.99	300.0	-752.5	415.4	367.8	47.56	8.734	
12,700.0	12,501.4	20,399.0	12,509.8	17.2	66.0	144.69	300.0	-752.5	438.7	391.2	47.53	9.230	
12,725.0	12,508.5	20,399.0	12,509.8	17.2	66.0	138.74	300.0	-752.5	462.6	415.1	47.51	9.736	
12,750.0	12,514.4	20,399.0	12,509.8	17.2	66.0	130.34	300.0	-752.5	486.8	439.3	47.46	10.257	
12,775.0	12,519.0	20,399.0	12,509.8	17.3	66.0	118.38	300.0	-752.5	511.3	463.9	47.37	10.793	
12,800.0	12,522.3	20,399.0	12,509.8	17.3	66.0	102.09	300.0	-752.5	535.9	488.7	47.24	11.345	
12,825.0	12,524.3	20,399.0	12,509.8	17.4	66.0	82.68	300.0	-752.5	560.6	513.5	47.06	11.912	
12,850.7	12,525.0	20,399.0	12,509.8	17.4	66.0	63.57	300.0	-752.5	586.0	539.2	46.84	12.512	
12,900.0	12,525.0	20,399.0	12,509.8	17.5	66.0	63.57	300.0	-752.5	634.7	588.3	46.42	13.673	
13,000.0	12,525.0	20,399.0	12,509.8	17.7	66.0	63.57	300.0	-752.5	733.8	688.0	45.79	16.025	
13,100.0	12,525.0	20,399.0	12,509.8	18.0	66.0	63.57	300.0	-752.5	833.1	787.8	45.36	18.368	
13,200.0	12,525.0	20,399.0	12,509.8	18.3	66.0	63.57	300.0	-752.5	932.6	887.5	45.04	20.704	

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 PITCHBLENDE 24-25 FED COM 704H
Project:	LEA COUNTY SOUTHEAST	TVD Reference:	RKB=27ft @ 3380.1usft
Reference Site:	PITCHBLENDE 24-25 FEDERAL PROJECT	MD Reference:	RKB=27ft @ 3380.1usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	PITCHBLENDE 24-25 FED COM 704H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDT 17 Permian Prod
Reference Design:	PWPO	Offset TVD Reference:	Offset Datum

Offset Design: BANDANA FEDERAL PROJECT - BANDANA FEDERAL COM 702H - OWB - AWP												Offset Site Error:	0.0 usft
Survey Program: 100-r.5 SDI_KPR_WL_NS-CT, 1096-r.5 MWD+IFR1+MS, 9605-r.5 MWD+IFR1+MS												Offset Well Error:	3.0 usft
Reference		Offset		Semi Major Axis		Offset Wellbore Centre		Distance		No-Go		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)	Separation Factor	
12,100.0	12,046.8	20,620.0	12,804.7	16.8	65.8	79.01	305.2	-124.5	919.1	819.1	100.07	9.185	
12,100.7	12,047.5	20,620.0	12,804.7	16.8	65.8	79.01	305.2	-124.5	918.6	818.5	100.07	9.179	
12,125.0	12,071.8	20,620.0	12,804.7	16.8	65.8	-104.17	305.2	-124.5	899.4	799.4	100.01	8.994	
12,150.0	12,096.7	20,620.0	12,804.7	16.8	65.8	-107.66	305.2	-124.5	880.1	780.3	99.81	8.818	
12,175.0	12,121.5	20,620.0	12,804.7	16.8	65.8	-110.85	305.2	-124.5	861.4	761.9	99.57	8.651	
12,200.0	12,146.1	20,620.0	12,804.7	16.8	65.8	-113.75	305.2	-124.5	843.4	744.1	99.29	8.494	
12,225.0	12,170.4	20,620.0	12,804.7	16.8	65.8	-116.36	305.2	-124.5	826.1	727.1	98.96	8.347	
12,250.0	12,194.4	20,620.0	12,804.7	16.8	65.8	-118.69	305.2	-124.5	809.6	711.0	98.58	8.213	
12,275.0	12,218.0	20,620.0	12,804.7	16.8	65.8	-120.76	305.2	-124.5	794.1	695.9	98.14	8.091	
12,300.0	12,241.1	20,620.0	12,804.7	16.8	65.8	-122.58	305.2	-124.5	779.6	681.9	97.65	7.984	
12,325.0	12,263.6	20,620.0	12,804.7	16.8	65.8	-124.16	305.2	-124.5	766.2	669.1	97.08	7.892	
12,350.0	12,285.6	20,620.0	12,804.7	16.9	65.8	-125.53	305.2	-124.5	754.1	657.6	96.45	7.818	
12,375.0	12,307.0	20,620.0	12,804.7	16.9	65.8	-126.69	305.2	-124.5	743.3	647.5	95.75	7.763	
12,400.0	12,327.6	20,620.0	12,804.7	16.9	65.8	-127.66	305.2	-124.5	733.9	638.9	94.97	7.728	
12,425.0	12,347.4	20,620.0	12,804.7	16.9	65.8	-128.44	305.2	-124.5	726.0	631.9	94.11	7.715 SF	
12,450.0	12,366.5	20,620.0	12,804.7	16.9	65.8	-129.05	305.2	-124.5	719.7	626.5	93.17	7.725	
12,475.0	12,384.6	20,620.0	12,804.7	16.9	65.8	-129.50	305.2	-124.5	715.0	622.9	92.16	7.759	
12,500.0	12,401.9	20,620.0	12,804.7	16.9	65.8	-129.78	305.2	-124.5	712.0	621.0	91.08	7.818	
12,525.0	12,418.1	20,620.0	12,804.7	17.0	65.8	-129.90	305.2	-124.5	710.7	620.8	89.92	7.904 ES	
12,531.4	12,422.2	20,620.0	12,804.7	17.0	65.8	-129.90	305.2	-124.5	710.7	621.1	89.62	7.930 CC	
12,550.0	12,433.4	20,620.0	12,804.7	17.0	65.8	-129.86	305.2	-124.5	711.2	622.4	88.71	8.017	
12,575.0	12,447.6	20,620.0	12,804.7	17.0	65.8	-129.66	305.2	-124.5	713.3	625.8	87.44	8.157	
12,600.0	12,460.7	20,620.0	12,804.7	17.0	65.8	-129.30	305.2	-124.5	717.1	631.0	86.14	8.325	
12,625.0	12,472.6	20,620.0	12,804.7	17.1	65.8	-128.78	305.2	-124.5	722.6	637.8	84.80	8.521	
12,650.0	12,483.4	20,620.0	12,804.7	17.1	65.8	-128.08	305.2	-124.5	729.7	646.2	83.45	8.744	
12,675.0	12,493.0	20,620.0	12,804.7	17.1	65.8	-127.21	305.2	-124.5	738.3	656.2	82.09	8.994	
12,700.0	12,501.4	20,620.0	12,804.7	17.2	65.8	-126.15	305.2	-124.5	748.4	667.6	80.73	9.270	
12,725.0	12,508.5	20,620.0	12,804.7	17.2	65.8	-124.89	305.2	-124.5	759.8	680.4	79.39	9.571	
12,750.0	12,514.4	20,620.0	12,804.7	17.2	65.8	-123.42	305.2	-124.5	772.6	694.5	78.07	9.895	
12,775.0	12,519.0	20,620.0	12,804.7	17.3	65.8	-121.72	305.2	-124.5	786.5	709.7	76.79	10.242	
12,800.0	12,522.3	20,620.0	12,804.7	17.3	65.8	-119.79	305.2	-124.5	801.5	726.0	75.54	10.610	
12,825.0	12,524.3	20,620.0	12,804.7	17.4	65.8	-117.59	305.2	-124.5	817.5	743.2	74.34	10.996	
12,850.7	12,525.0	20,620.0	12,804.7	17.4	65.8	-115.05	305.2	-124.5	834.9	761.7	73.16	11.412	
12,900.0	12,525.0	20,620.0	12,804.7	17.5	65.8	-115.05	305.2	-124.5	869.8	798.8	71.01	12.248	
13,000.0	12,525.0	20,620.0	12,804.7	17.7	65.8	-115.05	305.2	-124.5	944.5	877.4	67.08	14.080	

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 PITCHBLENDE 24-25 FED COM 704H
Project:	LEA COUNTY SOUTHEAST	TVD Reference:	RKB=27ft @ 3380.1usft
Reference Site:	PITCHBLENDE 24-25 FEDERAL PROJECT	MD Reference:	RKB=27ft @ 3380.1usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	PITCHBLENDE 24-25 FED COM 704H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDT 17 Permian Prod
Reference Design:	PWPO	Offset TVD Reference:	Offset Datum

Offset Design: BANDANA FEDERAL PROJECT - BANDANA FEDERAL COM 703H - OWB - AWP												Offset Site Error:	0.0 usft
Survey Program: 100-r.5 SDI_KPR_WL_NS-CT, 1141-r.5 MWD+IFR1+MS, 11960-r.5 MWD+IFR1+MS												Offset Well Error:	3.0 usft
Reference	Offset	Semi Major Axis	Offset Wellbore Centre	Rule Assigned:				Warning					
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	No-Go Distance (usft)	Separation Factor	
12,175.0	12,121.5	21,064.0	12,726.8	16.8	71.1	105.07	318.0	-1,474.2	990.5	887.0	103.48	9.572	
12,200.0	12,146.1	21,064.0	12,726.8	16.8	71.1	106.85	318.0	-1,474.2	977.3	874.0	103.29	9.462	
12,225.0	12,170.4	21,064.0	12,726.8	16.8	71.1	108.48	318.0	-1,474.2	965.0	861.9	103.08	9.362	
12,250.0	12,194.4	21,064.0	12,726.8	16.8	71.1	109.94	318.0	-1,474.2	953.5	850.6	102.84	9.272	
12,275.0	12,218.0	21,064.0	12,726.8	16.8	71.1	111.25	318.0	-1,474.2	942.9	840.4	102.57	9.193	
12,300.0	12,241.1	21,064.0	12,726.8	16.8	71.1	112.41	318.0	-1,474.2	933.3	831.1	102.27	9.127	
12,325.0	12,263.6	21,064.0	12,726.8	16.8	71.1	113.41	318.0	-1,474.2	924.8	822.9	101.93	9.073	
12,350.0	12,285.6	21,064.0	12,726.8	16.9	71.1	114.26	318.0	-1,474.2	917.4	815.8	101.56	9.033	
12,375.0	12,307.0	21,064.0	12,726.8	16.9	71.1	114.97	318.0	-1,474.2	911.1	810.0	101.15	9.008	
12,400.0	12,327.6	21,064.0	12,726.8	16.9	71.1	115.53	318.0	-1,474.2	906.0	805.3	100.70	8.997 SF	
12,425.0	12,347.4	21,064.0	12,726.8	16.9	71.1	115.96	318.0	-1,474.2	902.2	802.0	100.21	9.002	
12,450.0	12,366.5	21,064.0	12,726.8	16.9	71.1	116.24	318.0	-1,474.2	899.6	799.9	99.68	9.024	
12,475.0	12,384.6	21,064.0	12,726.8	16.9	71.1	116.39	318.0	-1,474.2	898.2	799.1	99.11	9.063 ES	
12,489.0	12,394.4	21,064.0	12,726.8	16.9	71.1	116.41	318.0	-1,474.2	898.0	799.2	98.77	9.092 CC	
12,500.0	12,401.9	21,064.0	12,726.8	16.9	71.1	116.39	318.0	-1,474.2	898.1	799.6	98.49	9.119	
12,525.0	12,418.1	21,064.0	12,726.8	17.0	71.1	116.27	318.0	-1,474.2	899.3	801.5	97.84	9.192	
12,550.0	12,433.4	21,064.0	12,726.8	17.0	71.1	116.00	318.0	-1,474.2	901.8	804.7	97.14	9.284	
12,575.0	12,447.6	21,064.0	12,726.8	17.0	71.1	115.59	318.0	-1,474.2	905.5	809.1	96.40	9.394	
12,600.0	12,460.7	21,064.0	12,726.8	17.0	71.1	115.04	318.0	-1,474.2	910.5	814.8	95.62	9.521	
12,625.0	12,472.6	21,064.0	12,726.8	17.1	71.1	114.35	318.0	-1,474.2	916.6	821.8	94.81	9.668	
12,650.0	12,483.4	21,064.0	12,726.8	17.1	71.1	113.52	318.0	-1,474.2	923.9	829.9	93.97	9.832	
12,675.0	12,493.0	21,064.0	12,726.8	17.1	71.1	112.53	318.0	-1,474.2	932.3	839.2	93.11	10.013	
12,700.0	12,501.4	21,064.0	12,726.8	17.2	71.1	111.40	318.0	-1,474.2	941.7	849.5	92.22	10.212	
12,725.0	12,508.5	21,064.0	12,726.8	17.2	71.1	110.11	318.0	-1,474.2	952.2	860.9	91.31	10.428	
12,750.0	12,514.4	21,064.0	12,726.8	17.2	71.1	108.66	318.0	-1,474.2	963.6	873.2	90.39	10.660	
12,775.0	12,519.0	21,064.0	12,726.8	17.3	71.1	107.05	318.0	-1,474.2	975.8	886.4	89.46	10.907	
12,800.0	12,522.3	21,064.0	12,726.8	17.3	71.1	105.29	318.0	-1,474.2	988.9	900.3	88.53	11.169	

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 PITCHBLENDE 24-25 FED COM 704H
Project:	LEA COUNTY SOUTHEAST	TVD Reference:	RKB=27ft @ 3380.1usft
Reference Site:	PITCHBLENDE 24-25 FEDERAL PROJECT	MD Reference:	RKB=27ft @ 3380.1usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	PITCHBLENDE 24-25 FED COM 704H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDT 17 Permian Prod
Reference Design:	PWP0	Offset TVD Reference:	Offset Datum

Offset Design: PITCHBLENDE 24-25 FEDERAL PROJECT - PITCHBLENDE 24-25 FED COM 603H - OWB - PWP0													Offset Site Error:	0.0 usft
Survey Program: 0-r.5 SDI_KPR_WL_NS-CT, 2000-r.5 MWD+IFR1+SAG+FDIR, 11867-r.5 MWD+IFR1+SAG+FDIR													Offset Well Error:	0.0 usft
Reference	Offset	Semi Major Axis		Offset Wellbore Centre		Distance								Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	No-Go Distance (usft)	Separation Factor		
0.0	0.0	0.0	0.0	0.0	0.0	89.43	0.3	30.0	30.0					
100.0	100.0	100.0	100.0	0.6	0.6	89.43	0.3	30.0	30.0	28.4	1.58	18.953		
200.0	200.0	200.0	200.0	1.1	1.1	89.43	0.3	30.0	30.0	27.5	2.52	11.909		
300.0	300.0	300.0	300.0	1.4	1.4	89.43	0.3	30.0	30.0	26.9	3.14	9.540		
400.0	400.0	400.0	400.0	1.7	1.7	89.43	0.3	30.0	30.0	26.4	3.65	8.222		
500.0	500.0	500.0	500.0	1.9	1.9	89.43	0.3	30.0	30.0	25.9	4.08	7.347		
600.0	600.0	600.0	600.0	2.1	2.1	89.43	0.3	30.0	30.0	25.5	4.47	6.710		
700.0	700.0	700.0	700.0	2.3	2.3	89.43	0.3	30.0	30.0	25.2	4.82	6.219		
800.0	800.0	800.0	800.0	2.5	2.5	89.43	0.3	30.0	30.0	24.9	5.15	5.825		
900.0	900.0	900.0	900.0	2.7	2.7	89.43	0.3	30.0	30.0	24.5	5.46	5.499		
1,000.0	1,000.0	1,000.0	1,000.0	2.9	2.9	89.43	0.3	30.0	30.0	24.3	5.74	5.224		
1,100.0	1,100.0	1,100.0	1,100.0	3.1	3.1	89.43	0.3	30.0	30.0	24.0	6.02	4.987		
1,200.0	1,200.0	1,200.0	1,200.0	3.2	3.2	89.43	0.3	30.0	30.0	23.7	6.28	4.781		
1,300.0	1,300.0	1,300.0	1,300.0	3.4	3.4	89.43	0.3	30.0	30.0	23.5	6.52	4.599		
1,400.0	1,400.0	1,400.0	1,400.0	3.5	3.5	89.43	0.3	30.0	30.0	23.2	6.76	4.436		
1,500.0	1,500.0	1,500.0	1,500.0	3.7	3.7	89.43	0.3	30.0	30.0	23.0	6.99	4.290		
1,600.0	1,600.0	1,600.0	1,600.0	3.8	3.8	89.43	0.3	30.0	30.0	22.8	7.21	4.158		
1,700.0	1,700.0	1,700.0	1,700.0	4.0	4.0	89.43	0.3	30.0	30.0	22.6	7.43	4.038		
1,800.0	1,800.0	1,800.0	1,800.0	4.1	4.1	89.43	0.3	30.0	30.0	22.4	7.64	3.928		
1,900.0	1,900.0	1,900.0	1,900.0	4.3	4.3	89.43	0.3	30.0	30.0	22.2	7.84	3.826		
2,000.0	2,000.0	2,000.0	2,000.0	4.4	4.4	89.43	0.3	30.0	30.0	22.0	8.04	3.732 CC, ES, SF		
2,100.0	2,100.0	2,099.1	2,099.1	4.5	4.6	161.69	1.5	31.3	33.0	24.6	8.41	3.920		
2,200.0	2,199.8	2,197.7	2,197.6	4.7	4.8	159.26	4.9	35.0	41.9	32.9	8.94	4.684		
2,300.0	2,299.5	2,295.3	2,294.7	4.9	5.0	156.89	10.6	41.2	56.8	47.3	9.45	6.008		
2,400.0	2,398.7	2,391.2	2,390.0	5.1	5.2	155.06	18.3	49.6	77.5	67.6	9.93	7.811		
2,460.1	2,458.1	2,449.2	2,447.5	5.2	5.3	154.34	23.8	55.6	92.5	82.4	10.11	9.153		
2,500.0	2,497.5	2,487.8	2,485.6	5.2	5.4	154.15	27.4	59.5	102.8	92.6	10.20	10.076		
2,600.0	2,596.2	2,584.4	2,581.3	5.3	5.6	153.80	36.5	69.4	128.6	118.1	10.53	12.214		
2,700.0	2,694.9	2,681.0	2,677.0	5.5	5.7	153.56	45.6	79.3	154.4	143.5	10.86	14.223		
2,800.0	2,793.6	2,777.6	2,772.6	5.7	5.9	153.40	54.7	89.2	180.2	169.0	11.18	16.111		
2,900.0	2,892.4	2,874.2	2,868.3	5.8	6.0	153.27	63.8	99.2	206.0	194.5	11.52	17.891		
3,000.0	2,991.1	2,970.8	2,964.0	6.0	6.2	153.18	72.9	109.1	231.8	220.0	11.85	19.568		
3,100.0	3,089.8	3,067.4	3,059.6	6.2	6.3	153.10	82.0	119.0	257.6	245.5	12.18	21.153		
3,200.0	3,188.5	3,164.1	3,155.3	6.4	6.5	153.03	91.1	128.9	283.5	270.9	12.51	22.651		
3,300.0	3,287.2	3,260.7	3,251.0	6.5	6.7	152.98	100.2	138.8	309.3	296.4	12.85	24.070		
3,400.0	3,385.9	3,357.3	3,346.6	6.7	6.8	152.94	109.3	148.7	335.1	321.9	13.18	25.415		
3,500.0	3,484.6	3,453.9	3,442.3	6.9	7.0	152.90	118.4	158.6	360.9	347.4	13.52	26.691		
3,600.0	3,583.4	3,550.5	3,538.0	7.1	7.2	152.87	127.6	168.5	386.7	372.8	13.86	27.904		
3,700.0	3,682.1	3,647.1	3,633.7	7.3	7.3	152.84	136.7	178.4	412.5	398.3	14.20	29.057		
3,800.0	3,780.8	3,743.7	3,729.3	7.4	7.5	152.81	145.8	188.3	438.3	423.8	14.54	30.155		
3,900.0	3,879.5	3,840.3	3,825.0	7.6	7.7	152.79	154.9	198.2	464.2	449.3	14.88	31.201		
4,000.0	3,978.2	3,936.9	3,920.7	7.8	7.8	152.77	164.0	208.1	490.0	474.8	15.21	32.206		
4,100.0	4,076.9	4,036.8	4,019.6	8.0	8.0	152.76	173.3	218.2	515.7	500.1	15.60	33.063		
4,200.0	4,175.6	4,141.9	4,123.9	8.2	8.3	152.84	182.0	227.7	540.1	524.1	16.03	33.692		
4,300.0	4,274.3	4,247.8	4,229.2	8.4	8.5	153.03	189.5	235.9	563.1	546.7	16.39	34.353		
4,400.0	4,373.1	4,354.4	4,335.4	8.6	8.7	153.31	195.7	242.6	584.5	567.8	16.75	34.903		
4,500.0	4,471.8	4,461.7	4,442.5	8.8	8.8	153.67	200.6	248.0	604.4	587.3	17.10	35.354		
4,600.0	4,570.5	4,569.5	4,550.2	9.0	9.0	154.12	204.1	251.8	622.8	605.4	17.44	35.712		
4,700.0	4,669.2	4,677.8	4,658.4	9.1	9.2	154.65	206.3	254.2	639.7	622.0	17.78	35.989		
4,800.0	4,767.9	4,786.6	4,767.2	9.3	9.3	155.25	207.1	255.1	655.1	637.1	18.08	36.232		
4,900.0	4,866.6	4,886.1	4,866.6	9.5	9.5	155.82	207.1	255.1	669.7	651.3	18.44	36.312		

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 PITCHBLENDE 24-25 FED COM 704H
Project:	LEA COUNTY SOUTHEAST	TVD Reference:	RKB=27ft @ 3380.1usft
Reference Site:	PITCHBLENDE 24-25 FEDERAL PROJECT	MD Reference:	RKB=27ft @ 3380.1usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	PITCHBLENDE 24-25 FED COM 704H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDT 17 Permian Prod
Reference Design:	PWP0	Offset TVD Reference:	Offset Datum

Offset Design: PITCHBLENDE 24-25 FEDERAL PROJECT - PITCHBLENDE 24-25 FED COM 603H - OWB - PWP0													Offset Site Error:	0.0 usft
Survey Program: 0-r.5 SDI_KPR_WL_NS-CT, 2000-r.5 MWD+IFR1+SAG+FDIR, 11867-r.5 MWD+IFR1+SAG+FDIR													Offset Well Error:	0.0 usft
Reference	Offset	Semi Major Axis	Distance	Rule Assigned:										
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	No-Go Distance (usft)	Separation Factor	Warning	
5,000.0	4,965.3	4,984.8	4,965.3	9.7	9.6	156.37	207.1	255.1	684.4	665.7	18.73	36.534		
5,100.0	5,064.0	5,083.5	5,064.0	9.9	9.7	156.89	207.1	255.1	699.1	680.1	19.01	36.779		
5,200.0	5,162.8	5,182.2	5,162.8	10.1	9.8	157.40	207.1	255.1	713.9	694.6	19.29	37.016		
5,300.0	5,261.5	5,280.9	5,261.5	10.3	9.8	157.88	207.1	255.1	728.7	709.1	19.56	37.247		
5,400.0	5,360.2	5,379.6	5,360.2	10.5	9.9	158.34	207.1	255.1	743.5	723.7	19.84	37.472		
5,500.0	5,458.9	5,478.3	5,458.9	10.7	10.0	158.79	207.1	255.1	758.5	738.3	20.12	37.691		
5,600.0	5,557.6	5,577.0	5,557.6	10.9	10.1	159.21	207.1	255.1	773.4	753.0	20.40	37.903		
5,700.0	5,656.3	5,675.8	5,656.3	11.1	10.2	159.63	207.1	255.1	788.4	767.7	20.69	38.110		
5,800.0	5,755.0	5,774.5	5,755.0	11.3	10.3	160.02	207.1	255.1	803.4	782.5	20.97	38.312		
5,900.0	5,853.8	5,873.2	5,853.8	11.5	10.4	160.40	207.1	255.1	818.5	797.3	21.26	38.508		
6,000.0	5,952.5	5,971.9	5,952.5	11.7	10.5	160.77	207.1	255.1	833.6	812.1	21.54	38.699		
6,100.0	6,051.2	6,070.6	6,051.2	11.9	10.6	161.13	207.1	255.1	848.8	826.9	21.83	38.885		
6,133.0	6,083.7	6,103.1	6,083.7	11.9	10.6	161.24	207.1	255.1	853.7	831.8	21.91	38.973		
6,200.0	6,150.0	6,169.4	6,150.0	12.0	10.6	161.49	207.1	255.1	863.6	841.5	22.08	39.110		
6,300.0	6,249.0	6,268.4	6,249.0	12.2	10.7	161.83	207.1	255.1	876.8	854.5	22.36	39.209		
6,400.0	6,348.2	6,367.6	6,348.2	12.4	10.8	162.11	207.1	255.1	888.5	865.8	22.64	39.241		
6,500.0	6,447.7	6,467.1	6,447.7	12.6	10.9	162.34	207.1	255.1	898.5	875.6	22.92	39.208		
6,600.0	6,547.3	6,566.7	6,547.3	12.8	11.0	162.54	207.1	255.1	906.9	883.7	23.18	39.114		
6,700.0	6,647.0	6,666.5	6,647.0	13.0	11.1	162.69	207.1	255.1	913.6	890.1	23.45	38.963		
6,800.0	6,746.9	6,766.3	6,746.9	13.1	11.2	162.80	207.1	255.1	918.6	894.9	23.70	38.758		
6,900.0	6,846.8	6,866.2	6,846.8	13.3	11.3	162.88	207.1	255.1	922.0	898.1	23.95	38.504		
7,000.0	6,946.8	6,966.2	6,946.8	13.4	11.3	162.92	207.1	255.1	923.7	899.6	24.18	38.210		
7,053.2	7,000.0	7,019.4	7,000.0	13.5	11.4	89.53	207.1	255.1	924.0	899.7	24.25	38.094		
7,100.0	7,046.8	7,066.2	7,046.8	13.5	11.4	89.53	207.1	255.1	924.0	899.7	24.31	38.013		
7,200.0	7,146.8	7,166.2	7,146.8	13.5	11.5	89.53	207.1	255.1	924.0	899.5	24.45	37.783		
7,300.0	7,246.8	7,266.2	7,246.8	13.6	11.6	89.53	207.1	255.1	924.0	899.4	24.60	37.556		
7,400.0	7,346.8	7,366.2	7,346.8	13.7	11.7	89.53	207.1	255.1	924.0	899.2	24.75	37.331		
7,500.0	7,446.8	7,466.2	7,446.8	13.7	11.8	89.53	207.1	255.1	924.0	899.1	24.90	37.108		
7,600.0	7,546.8	7,566.2	7,546.8	13.8	11.9	89.53	207.1	255.1	924.0	898.9	25.05	36.888		
7,700.0	7,646.8	7,666.2	7,646.8	13.8	12.0	89.53	207.1	255.1	924.0	898.8	25.20	36.670		
7,800.0	7,746.8	7,766.2	7,746.8	13.9	12.1	89.53	207.1	255.1	924.0	898.6	25.35	36.455		
7,900.0	7,846.8	7,866.2	7,846.8	14.0	12.1	89.53	207.1	255.1	924.0	898.5	25.49	36.242		
8,000.0	7,946.8	7,966.2	7,946.8	14.0	12.2	89.53	207.1	255.1	924.0	898.3	25.64	36.031		
8,100.0	8,046.8	8,066.2	8,046.8	14.1	12.3	89.53	207.1	255.1	924.0	898.2	25.79	35.823		
8,200.0	8,146.8	8,166.2	8,146.8	14.2	12.4	89.53	207.1	255.1	924.0	898.0	25.94	35.616		
8,300.0	8,246.8	8,266.2	8,246.8	14.2	12.5	89.53	207.1	255.1	924.0	897.9	26.09	35.412		
8,400.0	8,346.8	8,366.2	8,346.8	14.3	12.6	89.53	207.1	255.1	924.0	897.7	26.24	35.210		
8,500.0	8,446.8	8,466.2	8,446.8	14.4	12.7	89.53	207.1	255.1	924.0	897.6	26.39	35.010		
8,600.0	8,546.8	8,566.2	8,546.8	14.4	12.8	89.53	207.1	255.1	924.0	897.4	26.54	34.812		
8,700.0	8,646.8	8,666.2	8,646.8	14.5	12.8	89.53	207.1	255.1	924.0	897.3	26.69	34.617		
8,800.0	8,746.8	8,766.2	8,746.8	14.6	12.9	89.53	207.1	255.1	924.0	897.1	26.84	34.423		
8,900.0	8,846.8	8,866.2	8,846.8	14.6	13.0	89.53	207.1	255.1	924.0	897.0	26.99	34.231		
9,000.0	8,946.8	8,966.2	8,946.8	14.7	13.1	89.53	207.1	255.1	924.0	896.8	27.14	34.041		
9,100.0	9,046.8	9,066.2	9,046.8	14.7	13.2	89.53	207.1	255.1	924.0	896.7	27.29	33.853		
9,200.0	9,146.8	9,166.2	9,146.8	14.8	13.3	89.53	207.1	255.1	924.0	896.5	27.44	33.668		
9,300.0	9,246.8	9,266.2	9,246.8	14.9	13.4	89.53	207.1	255.1	924.0	896.4	27.59	33.484		
9,400.0	9,346.8	9,366.2	9,346.8	14.9	13.4	89.53	207.1	255.1	924.0	896.2	27.75	33.301		
9,500.0	9,446.8	9,466.2	9,446.8	15.0	13.5	89.53	207.1	255.1	924.0	896.1	27.90	33.121		
9,600.0	9,546.8	9,566.2	9,546.8	15.1	13.6	89.53	207.1	255.1	924.0	895.9	28.05	32.942		
9,700.0	9,646.8	9,666.2	9,646.8	15.1	13.7	89.53	207.1	255.1	924.0	895.8	28.20	32.766		
9,800.0	9,746.8	9,766.2	9,746.8	15.2	13.8	89.53	207.1	255.1	924.0	895.6	28.35	32.591		

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 PITCHBLENDE 24-25 FED COM 704H
Project:	LEA COUNTY SOUTHEAST	TVD Reference:	RKB=27ft @ 3380.1usft
Reference Site:	PITCHBLENDE 24-25 FEDERAL PROJECT	MD Reference:	RKB=27ft @ 3380.1usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	PITCHBLENDE 24-25 FED COM 704H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDT 17 Permian Prod
Reference Design:	PWP0	Offset TVD Reference:	Offset Datum

Offset Design: PITCHBLENDE 24-25 FEDERAL PROJECT - PITCHBLENDE 24-25 FED COM 603H - OWB - PWP0													Offset Site Error: 0.0 usft	
Survey Program: Reference		0-r.5 SDI_KPR_WL_NS-CT, 2000-r.5 MWD+IFR1+SAG+FDIR, 11867-r.5 MWD+IFR1+SAG+FDIR							Rule Assigned:		Offset Well Error: 0.0 usft			
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	No-Go Distance (usft)	Separation Factor	Warning	
9,900.0	9,846.8	9,866.2	9,846.8	15.3	13.9	89.53	207.1	255.1	924.0	895.5	28.50	32.418		
10,000.0	9,946.8	9,966.2	9,946.8	15.3	14.0	89.53	207.1	255.1	924.0	895.3	28.65	32.246		
10,100.0	10,046.8	10,066.2	10,046.8	15.4	14.1	89.53	207.1	255.1	924.0	895.2	28.81	32.076		
10,200.0	10,146.8	10,166.2	10,146.8	15.5	14.1	89.53	207.1	255.1	924.0	895.0	28.96	31.908		
10,300.0	10,246.8	10,266.2	10,246.8	15.5	14.2	89.53	207.1	255.1	924.0	894.9	29.11	31.741		
10,400.0	10,346.8	10,366.2	10,346.8	15.6	14.3	89.53	207.1	255.1	924.0	894.7	29.26	31.577		
10,500.0	10,446.8	10,466.2	10,446.8	15.7	14.4	89.53	207.1	255.1	924.0	894.6	29.41	31.413		
10,600.0	10,546.8	10,566.2	10,546.8	15.7	14.5	89.53	207.1	255.1	924.0	894.4	29.57	31.252		
10,700.0	10,646.8	10,666.2	10,646.8	15.8	14.6	89.53	207.1	255.1	924.0	894.2	29.72	31.091		
10,800.0	10,746.8	10,766.2	10,746.8	15.9	14.7	89.53	207.1	255.1	924.0	894.1	29.87	30.933		
10,900.0	10,846.8	10,866.2	10,846.8	16.0	14.7	89.53	207.1	255.1	924.0	893.9	30.02	30.776		
11,000.0	10,946.8	10,966.2	10,946.8	16.0	14.8	89.53	207.1	255.1	924.0	893.8	30.18	30.620		
11,100.0	11,046.8	11,066.2	11,046.8	16.1	14.9	89.53	207.1	255.1	924.0	893.6	30.33	30.466		
11,200.0	11,146.8	11,166.2	11,146.8	16.2	15.0	89.53	207.1	255.1	924.0	893.5	30.48	30.313		
11,300.0	11,246.8	11,266.2	11,246.8	16.2	15.1	89.53	207.1	255.1	924.0	893.3	30.63	30.162		
11,400.0	11,346.8	11,366.2	11,346.8	16.3	15.2	89.53	207.1	255.1	924.0	893.2	30.79	30.012		
11,500.0	11,446.8	11,466.2	11,446.8	16.4	15.3	89.53	207.1	255.1	924.0	893.0	30.94	29.864		
11,600.0	11,546.8	11,566.2	11,546.8	16.4	15.3	89.53	207.1	255.1	924.0	892.9	31.09	29.717		
11,700.0	11,646.8	11,666.2	11,646.8	16.5	15.4	89.53	207.1	255.1	924.0	892.7	31.25	29.571		
11,800.0	11,746.8	11,766.2	11,746.8	16.6	15.5	89.53	207.1	255.1	924.0	892.6	31.40	29.427		
11,900.0	11,846.8	11,866.2	11,846.8	16.6	15.6	89.53	207.1	255.1	924.0	892.4	31.54	29.296		
11,904.4	11,851.3	11,870.7	11,851.3	16.6	15.6	89.53	207.1	255.1	924.0	892.4	31.54	29.291		
12,000.0	11,946.8	11,964.8	11,944.7	16.7	15.6	90.15	197.1	255.2	924.0	892.4	31.63	29.216		
12,100.0	12,046.8	12,055.7	12,031.4	16.8	15.7	91.81	170.3	255.4	924.8	893.1	31.73	29.149		
12,100.7	12,047.5	12,056.4	12,032.0	16.8	15.7	91.83	170.0	255.4	924.8	893.1	31.73	29.149		
12,125.0	12,071.8	12,076.9	12,050.7	16.8	15.7	-87.16	161.7	255.4	925.3	893.6	31.73	29.160		
12,150.0	12,096.7	12,097.7	12,069.4	16.8	15.7	-86.61	152.4	255.5	925.8	894.1	31.75	29.164		
12,175.0	12,121.5	12,118.2	12,087.3	16.8	15.7	-86.07	142.5	255.6	926.5	894.7	31.76	29.168		
12,200.0	12,146.1	12,138.5	12,104.6	16.8	15.7	-85.54	132.0	255.7	927.2	895.4	31.78	29.171		
12,225.0	12,170.4	12,158.5	12,121.3	16.8	15.7	-85.02	120.8	255.8	927.9	896.1	31.81	29.172		
12,250.0	12,194.4	12,178.3	12,137.3	16.8	15.7	-84.51	109.1	255.9	928.7	896.9	31.84	29.170		
12,275.0	12,218.0	12,200.0	12,154.2	16.8	15.7	-83.97	95.6	256.0	929.6	897.7	31.87	29.169		
12,300.0	12,241.1	12,217.3	12,167.3	16.8	15.8	-83.53	84.3	256.1	930.5	898.6	31.92	29.154		
12,325.0	12,263.6	12,236.5	12,181.3	16.8	15.8	-83.06	71.1	256.2	931.5	899.5	31.97	29.139		
12,350.0	12,285.6	12,255.5	12,194.6	16.9	15.8	-82.61	57.5	256.3	932.4	900.4	32.02	29.119		
12,375.0	12,307.0	12,275.0	12,207.7	16.9	15.8	-82.16	43.1	256.4	933.4	901.3	32.08	29.096		
12,400.0	12,327.6	12,293.2	12,219.4	16.9	15.8	-81.74	29.2	256.5	934.4	902.2	32.15	29.064		
12,425.0	12,347.4	12,311.8	12,230.8	16.9	15.8	-81.34	14.4	256.7	935.3	903.1	32.22	29.028		
12,450.0	12,366.5	12,330.3	12,241.5	16.9	15.8	-80.95	-0.6	256.8	936.3	904.0	32.30	28.987		
12,475.0	12,384.6	12,350.0	12,252.3	16.9	15.9	-80.57	-17.1	256.9	937.2	904.9	32.38	28.945		
12,500.0	12,401.9	12,367.0	12,261.0	16.9	15.9	-80.24	-31.6	257.0	938.2	905.7	32.47	28.890		
12,525.0	12,418.1	12,385.2	12,269.8	17.0	15.9	-79.91	-47.6	257.2	939.1	906.5	32.57	28.835		
12,550.0	12,433.4	12,400.0	12,276.5	17.0	15.9	-79.64	-60.8	257.3	939.9	907.2	32.67	28.766		
12,575.0	12,447.6	12,421.3	12,285.5	17.0	15.9	-79.32	-80.1	257.4	940.7	908.0	32.76	28.714		
12,600.0	12,460.7	12,439.3	12,292.3	17.0	15.9	-79.06	-96.7	257.6	941.5	908.6	32.86	28.649		
12,625.0	12,472.6	12,457.1	12,298.5	17.1	15.9	-78.82	-113.5	257.7	942.2	909.2	32.96	28.582		
12,650.0	12,483.4	12,475.0	12,304.1	17.1	16.0	-78.61	-130.5	257.8	942.8	909.8	33.07	28.514		
12,675.0	12,493.0	12,492.8	12,308.9	17.1	16.0	-78.42	-147.6	258.0	943.4	910.2	33.17	28.444		
12,700.0	12,501.4	12,510.5	12,313.2	17.2	16.0	-78.25	-164.8	258.1	943.9	910.6	33.27	28.374		
12,725.0	12,508.5	12,525.0	12,316.2	17.2	16.0	-78.12	-179.0	258.2	944.4	911.0	33.37	28.301		
12,750.0	12,514.4	12,545.9	12,319.7	17.2	16.0	-77.99	-199.6	258.4	944.7	911.2	33.46	28.235		

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 PITCHBLENDE 24-25 FED COM 704H
Project:	LEA COUNTY SOUTHEAST	TVD Reference:	RKB=27ft @ 3380.1usft
Reference Site:	PITCHBLENDE 24-25 FEDERAL PROJECT	MD Reference:	RKB=27ft @ 3380.1usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	PITCHBLENDE 24-25 FED COM 704H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDT 17 Permian Prod
Reference Design:	PWP0	Offset TVD Reference:	Offset Datum

Offset Design: PITCHBLENDE 24-25 FEDERAL PROJECT - PITCHBLENDE 24-25 FED COM 603H - OWB - PWP0													Offset Site Error:	0.0 usft
Survey Program:		0-r.5 SDI_KPR_WL_NS-CT, 2000-r.5 MWD+IFR1+SAG+FDIR, 11867-r.5 MWD+IFR1+SAG+FDIR							Rule Assigned:			Offset Well Error:	0.0 usft	
Reference		Offset		Semi Major Axis		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)	Highside Toolface (°)	+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)				
12,775.0	12,519.0	12,563.6	12,322.0	17.3	16.0	-77.90	-217.1	258.6	945.0	911.4	33.55	28.166		
12,800.0	12,522.3	12,581.2	12,323.7	17.3	16.1	-77.84	-234.6	258.7	945.2	911.6	33.64	28.099		
12,825.0	12,524.3	12,600.0	12,324.7	17.4	16.1	-77.80	-253.4	258.9	945.3	911.6	33.72	28.034		
12,850.7	12,525.0	12,617.0	12,325.0	17.4	16.1	-77.79	-270.4	259.0	945.4	911.6	33.80	27.970		
12,900.0	12,525.0	12,666.2	12,325.0	17.5	16.1	-77.79	-319.6	259.4	945.4	911.4	33.99	27.816		
13,000.0	12,525.0	12,766.2	12,325.0	17.7	16.3	-77.79	-419.6	260.2	945.4	910.9	34.44	27.452		
13,100.0	12,525.0	12,866.2	12,325.0	18.0	16.5	-77.79	-519.6	261.0	945.4	910.4	34.96	27.039		
13,200.0	12,525.0	12,966.2	12,325.0	18.3	16.8	-77.79	-619.6	261.9	945.4	909.8	35.56	26.584		
13,300.0	12,525.0	13,066.2	12,325.0	18.6	17.1	-77.79	-719.6	262.7	945.4	909.1	36.23	26.096		
13,400.0	12,525.0	13,166.2	12,325.0	19.0	17.5	-77.79	-819.6	263.5	945.4	908.4	36.96	25.581		
13,500.0	12,525.0	13,266.2	12,325.0	19.3	17.9	-77.79	-919.6	264.3	945.4	907.6	37.75	25.045		
13,600.0	12,525.0	13,366.2	12,325.0	19.8	18.3	-77.79	-1,019.6	265.2	945.4	906.8	38.59	24.496		
13,700.0	12,525.0	13,466.2	12,325.0	20.2	18.8	-77.79	-1,119.6	266.0	945.4	905.9	39.49	23.938		
13,800.0	12,525.0	13,566.2	12,325.0	20.7	19.3	-77.79	-1,219.6	266.8	945.4	904.9	40.44	23.376		
13,900.0	12,525.0	13,666.2	12,325.0	21.2	19.9	-77.79	-1,319.6	267.6	945.4	903.9	41.44	22.815		
14,000.0	12,525.0	13,766.2	12,325.0	21.7	20.4	-77.79	-1,419.6	268.4	945.4	902.9	42.47	22.257		
14,100.0	12,525.0	13,866.2	12,325.0	22.3	21.0	-77.79	-1,519.6	269.3	945.4	901.8	43.55	21.707		
14,200.0	12,525.0	13,966.2	12,325.0	22.8	21.6	-77.79	-1,619.6	270.1	945.4	900.7	44.67	21.166		
14,300.0	12,525.0	14,066.2	12,325.0	23.4	22.2	-77.79	-1,719.6	270.9	945.4	899.5	45.81	20.635		
14,400.0	12,525.0	14,166.2	12,325.0	24.0	22.9	-77.79	-1,819.6	271.7	945.4	898.4	46.99	20.117		
14,500.0	12,525.0	14,266.2	12,325.0	24.6	23.5	-77.79	-1,919.6	272.5	945.4	897.2	48.20	19.613		
14,600.0	12,525.0	14,366.2	12,325.0	25.3	24.2	-77.79	-2,019.6	273.4	945.4	895.9	49.44	19.123		
14,700.0	12,525.0	14,466.2	12,325.0	25.9	24.8	-77.79	-2,119.6	274.2	945.4	894.7	50.70	18.647		
14,800.0	12,525.0	14,566.2	12,325.0	26.6	25.5	-77.79	-2,219.6	275.0	945.4	893.4	51.98	18.187		
14,900.0	12,525.0	14,666.2	12,325.0	27.2	26.2	-77.79	-2,319.6	275.8	945.4	892.1	53.29	17.741		
15,000.0	12,525.0	14,766.2	12,325.0	27.9	26.9	-77.79	-2,419.6	276.7	945.4	890.8	54.61	17.311		
15,100.0	12,525.0	14,866.2	12,325.0	28.6	27.6	-77.79	-2,519.5	277.5	945.4	889.4	55.95	16.895		
15,200.0	12,525.0	14,966.2	12,325.0	29.3	28.4	-77.79	-2,619.5	278.3	945.4	888.0	57.32	16.494		
15,300.0	12,525.0	15,066.2	12,325.0	30.0	29.1	-77.79	-2,719.5	279.1	945.4	886.7	58.69	16.107		
15,400.0	12,525.0	15,166.2	12,325.0	30.7	29.8	-77.79	-2,819.5	279.9	945.4	885.3	60.08	15.734		
15,500.0	12,525.0	15,266.2	12,325.0	31.4	30.6	-77.79	-2,919.5	280.8	945.4	883.9	61.49	15.374		
15,600.0	12,525.0	15,366.2	12,325.0	32.2	31.3	-77.79	-3,019.5	281.6	945.4	882.5	62.91	15.028		
15,700.0	12,525.0	15,466.2	12,325.0	32.9	32.1	-77.79	-3,119.5	282.4	945.4	881.0	64.34	14.694		
15,800.0	12,525.0	15,566.2	12,325.0	33.6	32.8	-77.79	-3,219.5	283.2	945.4	879.6	65.78	14.372		
15,900.0	12,525.0	15,666.2	12,325.0	34.4	33.6	-77.79	-3,319.5	284.1	945.4	878.1	67.23	14.061		
16,000.0	12,525.0	15,766.2	12,325.0	35.1	34.4	-77.79	-3,419.5	284.9	945.4	876.7	68.69	13.762		
16,100.0	12,525.0	15,866.2	12,325.0	35.9	35.2	-77.79	-3,519.5	285.7	945.4	875.2	70.17	13.473		
16,200.0	12,525.0	15,966.2	12,325.0	36.7	35.9	-77.79	-3,619.5	286.5	945.4	873.7	71.65	13.195		
16,300.0	12,525.0	16,066.2	12,325.0	37.4	36.7	-77.79	-3,719.5	287.3	945.4	872.2	73.13	12.926		
16,400.0	12,525.0	16,166.2	12,325.0	38.2	37.5	-77.79	-3,819.5	288.2	945.4	870.7	74.63	12.667		
16,500.0	12,525.0	16,266.2	12,325.0	39.0	38.3	-77.79	-3,919.5	289.0	945.4	869.2	76.13	12.417		
16,600.0	12,525.0	16,366.2	12,325.0	39.7	39.1	-77.79	-4,019.5	289.8	945.4	867.7	77.64	12.176		
16,700.0	12,525.0	16,466.2	12,325.0	40.5	39.9	-77.79	-4,119.5	290.6	945.4	866.2	79.16	11.943		
16,800.0	12,525.0	16,566.2	12,325.0	41.3	40.7	-77.79	-4,219.5	291.4	945.4	864.7	80.68	11.717		
16,900.0	12,525.0	16,666.2	12,325.0	42.1	41.5	-77.79	-4,319.5	292.3	945.4	863.2	82.21	11.500		
17,000.0	12,525.0	16,766.2	12,325.0	42.9	42.3	-77.79	-4,419.5	293.1	945.4	861.6	83.74	11.289		
17,100.0	12,525.0	16,866.2	12,325.0	43.7	43.1	-77.79	-4,519.5	293.9	945.4	860.1	85.28	11.085		
17,200.0	12,525.0	16,966.2	12,325.0	44.5	43.9	-77.79	-4,619.5	294.7	945.4	858.5	86.82	10.888		
17,300.0	12,525.0	17,066.2	12,325.0	45.3	44.7	-77.79	-4,719.5	295.6	945.4	857.0	88.37	10.698		
17,400.0	12,525.0	17,166.2	12,325.0	46.1	45.5	-77.79	-4,819.5	296.4	945.4	855.4	89.92	10.513		
17,500.0	12,525.0	17,266.2	12,325.0	46.9	46.3	-77.79	-4,919.5	297.2	945.4	853.9	91.48	10.334		

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 PITCHBLENDE 24-25 FED COM 704H
Project:	LEA COUNTY SOUTHEAST	TVD Reference:	RKB=27ft @ 3380.1usft
Reference Site:	PITCHBLENDE 24-25 FEDERAL PROJECT	MD Reference:	RKB=27ft @ 3380.1usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	PITCHBLENDE 24-25 FED COM 704H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDT 17 Permian Prod
Reference Design:	PWP0	Offset TVD Reference:	Offset Datum

Offset Design: PITCHBLENDE 24-25 FEDERAL PROJECT - PITCHBLENDE 24-25 FED COM 603H - OWB - PWP0											Offset Site Error:		0.0 usft	
Survey Program:		0-r.5 SDI_KPR_WL_NS-CT, 2000-r.5 MWD+IFR1+SAG+FDIR, 11867-r.5 MWD+IFR1+SAG+FDIR						Rule Assigned:		Offset Well Error:		0.0 usft		
Reference	Offset	Semi Major Axis		Offset Wellbore Centre		Distance		Warning						
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	No-Go Distance (usft)	Separation Factor		
17,600.0	12,525.0	17,366.2	12,325.0	47.7	47.1	-77.79	-5,019.5	298.0	945.4	852.3	93.04	10.161		
17,700.0	12,525.0	17,466.2	12,325.0	48.5	47.9	-77.79	-5,119.5	298.8	945.4	850.8	94.60	9.993		
17,800.0	12,525.0	17,566.2	12,325.0	49.3	48.7	-77.79	-5,219.5	299.7	945.4	849.2	96.17	9.830		
17,900.0	12,525.0	17,666.2	12,325.0	50.1	49.6	-77.79	-5,319.5	300.5	945.4	847.6	97.74	9.672		
18,000.0	12,525.0	17,766.2	12,325.0	50.9	50.4	-77.79	-5,419.5	301.3	945.4	846.1	99.31	9.519		
18,100.0	12,525.0	17,866.2	12,325.0	51.7	51.2	-77.79	-5,519.4	302.1	945.4	844.5	100.89	9.370		
18,200.0	12,525.0	17,966.2	12,325.0	52.5	52.0	-77.79	-5,619.4	302.9	945.4	842.9	102.47	9.226		
18,300.0	12,525.0	18,066.2	12,325.0	53.3	52.9	-77.79	-5,719.4	303.8	945.4	841.3	104.05	9.085		
18,400.0	12,525.0	18,166.2	12,325.0	54.2	53.7	-77.79	-5,819.4	304.6	945.4	839.7	105.64	8.949		
18,500.0	12,525.0	18,266.2	12,325.0	55.0	54.5	-77.79	-5,919.4	305.4	945.4	838.1	107.22	8.817		
18,600.0	12,525.0	18,366.2	12,325.0	55.8	55.3	-77.79	-6,019.4	306.2	945.4	836.5	108.81	8.688		
18,700.0	12,525.0	18,466.2	12,325.0	56.6	56.2	-77.79	-6,119.4	307.1	945.4	835.0	110.41	8.563		
18,800.0	12,525.0	18,566.2	12,325.0	57.4	57.0	-77.79	-6,219.4	307.9	945.4	833.4	112.00	8.441		
18,900.0	12,525.0	18,666.2	12,325.0	58.3	57.8	-77.79	-6,319.4	308.7	945.4	831.8	113.60	8.322		
19,000.0	12,525.0	18,766.2	12,325.0	59.1	58.6	-77.79	-6,419.4	309.5	945.4	830.2	115.20	8.207		
19,100.0	12,525.0	18,866.2	12,325.0	59.9	59.5	-77.79	-6,519.4	310.3	945.4	828.6	116.80	8.094		
19,200.0	12,525.0	18,966.2	12,325.0	60.7	60.3	-77.79	-6,619.4	311.2	945.4	827.0	118.40	7.985		
19,300.0	12,525.0	19,066.2	12,325.0	61.6	61.1	-77.79	-6,719.4	312.0	945.4	825.4	120.00	7.878		
19,400.0	12,525.0	19,166.2	12,325.0	62.4	62.0	-77.79	-6,819.4	312.8	945.4	823.8	121.61	7.774		
19,500.0	12,525.0	19,266.2	12,325.0	63.2	62.8	-77.79	-6,919.4	313.6	945.4	822.1	123.22	7.672		
19,600.0	12,525.0	19,366.2	12,325.0	64.0	63.6	-77.79	-7,019.4	314.5	945.4	820.5	124.83	7.573		
19,700.0	12,525.0	19,466.2	12,325.0	64.9	64.5	-77.79	-7,119.4	315.3	945.4	818.9	126.44	7.477		
19,800.0	12,525.0	19,566.2	12,325.0	65.7	65.3	-77.79	-7,219.4	316.1	945.4	817.3	128.05	7.383		
19,900.0	12,525.0	19,666.2	12,325.0	66.5	66.1	-77.79	-7,319.4	316.9	945.4	815.7	129.66	7.291		
20,000.0	12,525.0	19,766.2	12,325.0	67.4	67.0	-77.79	-7,419.4	317.7	945.4	814.1	131.28	7.201		
20,100.0	12,525.0	19,866.2	12,325.0	68.2	67.8	-77.79	-7,519.4	318.6	945.4	812.5	132.89	7.114		
20,200.0	12,525.0	19,966.2	12,325.0	69.0	68.7	-77.79	-7,619.4	319.4	945.4	810.9	134.51	7.028		
20,300.0	12,525.0	20,066.2	12,325.0	69.9	69.5	-77.79	-7,719.4	320.2	945.4	809.2	136.13	6.945		
20,400.0	12,525.0	20,166.2	12,325.0	70.7	70.3	-77.79	-7,819.4	321.0	945.4	807.6	137.75	6.863		
20,500.0	12,525.0	20,266.2	12,325.0	71.5	71.2	-77.79	-7,919.4	321.8	945.4	806.0	139.37	6.783		
20,600.0	12,525.0	20,366.2	12,325.0	72.4	72.0	-77.79	-8,019.4	322.7	945.4	804.4	140.99	6.705		
20,700.0	12,525.0	20,466.2	12,325.0	73.2	72.8	-77.79	-8,119.4	323.5	945.4	802.7	142.62	6.629		
20,800.0	12,525.0	20,566.2	12,325.0	74.0	73.7	-77.79	-8,219.4	324.3	945.4	801.1	144.24	6.554		
20,900.0	12,525.0	20,666.2	12,325.0	74.9	74.5	-77.79	-8,319.4	325.1	945.4	799.5	145.87	6.481		
21,000.0	12,525.0	20,766.2	12,325.0	75.7	75.4	-77.79	-8,419.3	326.0	945.4	797.9	147.49	6.410		
21,100.0	12,525.0	20,866.2	12,325.0	76.5	76.2	-77.79	-8,519.3	326.8	945.4	796.2	149.12	6.340		
21,200.0	12,525.0	20,966.2	12,325.0	77.4	77.1	-77.79	-8,619.3	327.6	945.4	794.6	150.75	6.271		
21,300.0	12,525.0	21,066.2	12,325.0	78.2	77.9	-77.79	-8,719.3	328.4	945.4	793.0	152.38	6.204		
21,400.0	12,525.0	21,166.2	12,325.0	79.1	78.7	-77.79	-8,819.3	329.2	945.4	791.4	154.00	6.139		
21,500.0	12,525.0	21,266.2	12,325.0	79.9	79.6	-77.79	-8,919.3	330.1	945.4	789.7	155.64	6.074		
21,600.0	12,525.0	21,366.2	12,325.0	80.7	80.4	-77.79	-9,019.3	330.9	945.4	788.1	157.27	6.011		
21,700.0	12,525.0	21,466.2	12,325.0	81.6	81.3	-77.79	-9,119.3	331.7	945.4	786.5	158.90	5.949		
21,800.0	12,525.0	21,566.2	12,325.0	82.4	82.1	-77.79	-9,219.3	332.5	945.4	784.8	160.53	5.889		
21,900.0	12,525.0	21,666.2	12,325.0	83.3	83.0	-77.79	-9,319.3	333.4	945.4	783.2	162.16	5.830		
22,000.0	12,525.0	21,766.2	12,325.0	84.1	83.8	-77.79	-9,419.3	334.2	945.4	781.6	163.80	5.772		
22,100.0	12,525.0	21,866.2	12,325.0	85.0	84.7	-77.79	-9,519.3	335.0	945.4	779.9	165.43	5.714		
22,200.0	12,525.0	21,966.2	12,325.0	85.8	85.5	-77.79	-9,619.3	335.8	945.4	778.3	167.07	5.659		
22,300.0	12,525.0	22,066.2	12,325.0	86.6	86.3	-77.79	-9,719.3	336.6	945.4	776.7	168.71	5.604		
22,400.0	12,525.0	22,166.2	12,325.0	87.5	87.2	-77.79	-9,819.3	337.5	945.4	775.0	170.34	5.550		
22,500.0	12,525.0	22,266.2	12,325.0	88.3	88.0	-77.79	-9,919.3	338.3	945.4	773.4	171.98	5.497		
22,600.0	12,525.0	22,366.2	12,325.0	89.2	88.9	-77.79	-10,019.3	339.1	945.4	771.7	173.62	5.445		

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 PITCHBLENDE 24-25 FED COM 704H
Project:	LEA COUNTY SOUTHEAST	TVD Reference:	RKB=27ft @ 3380.1usft
Reference Site:	PITCHBLENDE 24-25 FEDERAL PROJECT	MD Reference:	RKB=27ft @ 3380.1usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	PITCHBLENDE 24-25 FED COM 704H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDT 17 Permian Prod
Reference Design:	PWP0	Offset TVD Reference:	Offset Datum

Offset Design:		PITCHBLENDE 24-25 FEDERAL PROJECT - PITCHBLENDE 24-25 FED COM 603H - OWB - PWP0										Offset Site Error:		0.0 usft	
Survey Program:		0-r.5 SDI_KPR_WL_NS-CT, 2000-r.5 MWD+IFR1+SAG+FDIR, 11867-r.5 MWD+IFR1+SAG+FDIR										Offset Well Error:		0.0 usft	
Reference		Offset		Semi Major Axis		Offset Wellbore Centre			Rule Assigned:						
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	No-Go Distance (usft)	Separation Factor	Warning		
22,700.0	12,525.0	22,466.2	12,325.0	90.0	89.7	-77.79	-10,119.3	339.9	945.4	770.1	175.26	5.394			
22,800.0	12,525.0	22,566.2	12,325.0	90.9	90.6	-77.79	-10,219.3	340.7	945.4	768.5	176.89	5.344			
22,829.4	12,525.0	22,595.7	12,325.0	91.1	90.8	-77.79	-10,248.7	341.0	945.4	768.0	177.38	5.330			

ConocoPhillips

Anticollision Report

Company:	DELAWARE BASIN EAST	Local Co-ordinate Reference:	Well PITCHBLENDE 24-25 FED COM 704H
Project:	LEA COUNTY SOUTHEAST	TVD Reference:	RKB=27ft @ 3380.1usft
Reference Site:	PITCHBLENDE 24-25 FEDERAL PROJECT	MD Reference:	RKB=27ft @ 3380.1usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	PITCHBLENDE 24-25 FED COM 704H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDT 17 Permian Prod
Reference Design:	PWP0	Offset TVD Reference:	Offset Datum

Offset Design: PITCHBLENDE 24-25 FEDERAL PROJECT - PITCHBLENDE 24-25 FED COM 604H - OWB - PWP0													Offset Site Error:	0.0 usft
Survey Program: 0-r.5 SDI_KPR_WL_NS-CT, 2000-r.5 MWD+IFR1+SAG+FDIR, 12046-r.5 MWD+IFR1+SAG+FDIR													Offset Well Error:	0.0 usft
Reference	Offset	Semi Major Axis		Offset Wellbore Centre		Distance		Rule Assigned:						
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	No-Go Distance (usft)	Separation Factor	Warning	
0.0	0.0	0.2	0.2	0.0	0.0	-0.51	45.1	-0.4	45.1					
100.0	100.0	100.2	100.2	0.6	0.6	-0.51	45.1	-0.4	45.1	43.5	1.60	28.267		
200.0	200.0	200.2	200.2	1.1	1.1	-0.51	45.1	-0.4	45.1	42.5	2.56	17.651		
300.0	300.0	300.2	300.2	1.4	1.4	-0.51	45.1	-0.4	45.1	41.9	3.21	14.040		
400.0	400.0	400.2	400.2	1.7	1.7	-0.51	45.1	-0.4	45.1	41.3	3.75	12.012		
500.0	500.0	500.2	500.2	1.9	1.9	-0.51	45.1	-0.4	45.1	40.9	4.23	10.657		
600.0	600.0	600.2	600.2	2.1	2.1	-0.51	45.1	-0.4	45.1	40.4	4.67	9.664		
700.0	700.0	700.2	700.2	2.3	2.3	-0.51	45.1	-0.4	45.1	40.0	5.07	8.894		
800.0	800.0	800.2	800.2	2.5	2.5	-0.51	45.1	-0.4	45.1	39.6	5.45	8.272		
900.0	900.0	900.2	900.2	2.7	2.7	-0.51	45.1	-0.4	45.1	39.3	5.82	7.755		
1,000.0	1,000.0	1,000.2	1,000.2	2.9	2.9	-0.51	45.1	-0.4	45.1	38.9	6.16	7.317		
1,100.0	1,100.0	1,100.2	1,100.2	3.1	3.1	-0.51	45.1	-0.4	45.1	38.6	6.50	6.938		
1,200.0	1,200.0	1,200.2	1,200.2	3.2	3.2	-0.51	45.1	-0.4	45.1	38.3	6.83	6.606		
1,300.0	1,300.0	1,300.2	1,300.2	3.4	3.4	-0.51	45.1	-0.4	45.1	38.0	7.14	6.313		
1,400.0	1,400.0	1,400.2	1,400.2	3.5	3.5	-0.51	45.1	-0.4	45.1	37.6	7.45	6.050		
1,500.0	1,500.0	1,500.2	1,500.2	3.7	3.7	-0.51	45.1	-0.4	45.1	37.3	7.76	5.813		
1,600.0	1,600.0	1,600.2	1,600.2	3.8	3.8	-0.51	45.1	-0.4	45.1	37.0	8.06	5.598		
1,700.0	1,700.0	1,700.2	1,700.2	4.0	4.0	-0.51	45.1	-0.4	45.1	36.8	8.35	5.402		
1,800.0	1,800.0	1,800.2	1,800.2	4.1	4.1	-0.51	45.1	-0.4	45.1	36.5	8.64	5.222		
1,900.0	1,900.0	1,900.2	1,900.2	4.3	4.3	-0.51	45.1	-0.4	45.1	36.2	8.92	5.055		
1,966.6	1,966.6	1,966.8	1,966.8	4.4	4.4	-0.51	45.1	-0.4	45.1	36.0	9.11	4.952		
2,000.0	2,000.0	2,000.2	2,000.2	4.4	4.4	-0.51	45.1	-0.4	45.1	35.9	9.20	4.901		
2,100.0	2,100.0	2,100.0	2,100.0	4.5	4.5	72.80	45.3	-2.1	44.8	35.3	9.43	4.747		
2,200.0	2,199.8	2,199.9	2,199.7	4.7	4.7	72.55	45.7	-7.3	43.8	34.0	9.76	4.485		
2,300.0	2,299.5	2,299.7	2,299.1	4.9	4.9	72.11	46.5	-16.0	42.1	32.0	10.08	4.176		
2,400.0	2,398.7	2,399.5	2,398.2	5.1	5.0	71.45	47.7	-28.1	39.7	29.3	10.39	3.823		
2,460.1	2,458.1	2,459.5	2,457.5	5.2	5.1	70.90	48.5	-37.0	38.0	27.5	10.54	3.606		
2,500.0	2,497.5	2,499.3	2,496.7	5.2	5.2	70.03	49.1	-43.6	36.8	26.2	10.63	3.465		
2,600.0	2,596.2	2,598.9	2,594.5	5.3	5.5	63.64	50.9	-62.5	34.5	23.5	10.97	3.141		
2,665.7	2,661.1	2,664.2	2,658.3	5.5	5.6	56.01	52.2	-76.7	33.9	22.6	11.22	3.018 CC, ES		
2,700.0	2,694.9	2,698.2	2,691.3	5.5	5.7	51.09	52.9	-84.7	34.1	22.7	11.35	3.001 SF		
2,800.0	2,793.6	2,797.3	2,787.2	5.7	5.8	35.32	55.3	-109.8	37.4	25.7	11.66	3.204		
2,900.0	2,892.4	2,896.7	2,883.2	5.8	6.0	22.48	57.6	-135.4	43.4	31.3	12.01	3.609		
3,000.0	2,991.1	2,996.1	2,979.2	6.0	6.2	13.08	60.0	-160.9	51.0	38.6	12.36	4.124		
3,100.0	3,089.8	3,095.6	3,075.3	6.2	6.3	6.25	62.4	-186.5	59.6	46.9	12.70	4.691		
3,200.0	3,188.5	3,195.0	3,171.3	6.4	6.5	1.19	64.8	-212.1	68.8	55.8	13.05	5.273		
3,300.0	3,287.2	3,294.4	3,267.3	6.5	6.7	-2.65	67.1	-237.7	78.5	65.1	13.41	5.854		
3,400.0	3,385.9	3,393.8	3,363.4	6.7	6.9	-5.64	69.5	-263.3	88.4	74.6	13.77	6.422		
3,500.0	3,484.6	3,493.2	3,459.4	6.9	7.1	-8.02	71.9	-288.9	98.5	84.4	14.13	6.972		
3,600.0	3,583.4	3,592.6	3,555.4	7.1	7.3	-9.96	74.3	-314.5	108.8	94.3	14.50	7.502		
3,700.0	3,682.1	3,692.0	3,651.5	7.3	7.5	-11.57	76.6	-340.0	119.1	104.3	14.87	8.011		
3,800.0	3,780.8	3,791.4	3,747.5	7.4	7.7	-12.91	79.0	-365.6	129.6	114.3	15.25	8.498		
3,900.0	3,879.5	3,890.8	3,843.5	7.6	7.9	-14.06	81.4	-391.2	140.1	124.4	15.62	8.964		
4,000.0	3,978.2	3,990.3	3,939.6	7.8	8.1	-15.04	83.8	-416.8	150.6	134.6	16.00	9.410		
4,100.0	4,076.9	4,089.7	4,035.6	8.0	8.3	-15.90	86.1	-442.4	161.2	144.8	16.39	9.837		
4,200.0	4,175.6	4,189.1	4,131.6	8.2	8.5	-16.65	88.5	-468.0	171.8	155.0	16.77	10.245		
4,300.0	4,274.3	4,288.5	4,227.7	8.4	8.7	-17.31	90.9	-493.6	182.4	165.3	17.15	10.634		
4,400.0	4,373.1	4,387.9	4,323.7	8.6	8.9	-17.90	93.3	-519.1	193.1	175.5	17.54	11.008		
4,500.0	4,471.8	4,487.3	4,419.7	8.8	9.1	-18.43	95.6	-544.7	203.8	185.8	17.93	11.365		
4,600.0	4,570.5	4,586.7	4,515.8	9.0	9.3	-18.90	98.0	-570.3	214.5	196.1	18.32	11.706		
4,700.0	4,669.2	4,686.1	4,611.8	9.1	9.5	-19.34	100.4	-595.9	225.2	206.5	18.71	12.034		

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 PITCHBLENDE 24-25 FED COM 704H
Project:	LEA COUNTY SOUTHEAST	TVD Reference:	RKB=27ft @ 3380.1usft
Reference Site:	PITCHBLENDE 24-25 FEDERAL PROJECT	MD Reference:	RKB=27ft @ 3380.1usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	PITCHBLENDE 24-25 FED COM 704H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDT 17 Permian Prod
Reference Design:	PWP0	Offset TVD Reference:	Offset Datum

Offset Design: PITCHBLENDE 24-25 FEDERAL PROJECT - PITCHBLENDE 24-25 FED COM 604H - OWB - PWP0												Offset Site Error:	0.0 usft
Survey Program: 0-r.5 SDI_KPR_WL_NS-CT, 2000-r.5 MWD+IFR1+SAG+FDIR, 12046-r.5 MWD+IFR1+SAG+FDIR												Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis		Offset Wellbore Centre		Distance					
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	No-Go Distance (usft)	Separation Factor	Warning
4,800.0	4,767.9	4,785.6	4,707.8	9.3	9.7	-19.73	102.8	-621.5	235.9	216.8	19.10	12.348	
4,900.0	4,866.6	4,885.0	4,803.9	9.5	9.9	-20.08	105.1	-647.1	246.6	227.1	19.50	12.649	
5,000.0	4,965.3	4,984.4	4,899.9	9.7	10.2	-20.41	107.5	-672.7	257.3	237.4	19.89	12.938	
5,100.0	5,064.0	5,083.8	4,995.9	9.9	10.4	-20.71	109.9	-698.3	268.1	247.8	20.28	13.216	
5,200.0	5,162.8	5,183.2	5,092.0	10.1	10.6	-20.99	112.3	-723.8	278.8	258.2	20.68	13.483	
5,300.0	5,261.5	5,282.6	5,188.0	10.3	10.8	-21.25	114.6	-749.4	289.6	268.5	21.08	13.740	
5,400.0	5,360.2	5,382.0	5,284.0	10.5	11.0	-21.49	117.0	-775.0	300.3	278.9	21.47	13.986	
5,500.0	5,458.9	5,481.4	5,380.1	10.7	11.3	-21.71	119.4	-800.6	311.1	289.2	21.87	14.224	
5,600.0	5,557.6	5,580.8	5,476.1	10.9	11.5	-21.92	121.8	-826.2	321.9	299.6	22.27	14.453	
5,700.0	5,656.3	5,680.3	5,572.1	11.1	11.7	-22.11	124.1	-851.8	332.7	310.0	22.67	14.674	
5,800.0	5,755.0	5,779.7	5,668.2	11.3	11.9	-22.29	126.5	-877.4	343.4	320.4	23.07	14.886	
5,900.0	5,853.8	5,879.1	5,764.2	11.5	12.1	-22.46	128.9	-902.9	354.2	330.7	23.47	15.092	
6,000.0	5,952.5	5,978.5	5,860.2	11.7	12.4	-22.63	131.3	-928.5	365.0	341.1	23.87	15.290	
6,100.0	6,051.2	6,077.9	5,956.3	11.9	12.6	-22.78	133.6	-954.1	375.8	351.5	24.27	15.481	
6,133.0	6,083.7	6,110.7	5,987.9	11.9	12.7	-22.83	134.4	-962.5	379.3	354.9	24.39	15.552	
6,200.0	6,150.0	6,177.3	6,052.3	12.0	12.8	-22.93	136.0	-979.7	386.9	362.3	24.65	15.700	
6,300.0	6,249.0	6,276.5	6,148.1	12.2	13.0	-23.00	138.4	-1,005.2	399.6	374.5	25.05	15.953	
6,400.0	6,348.2	6,375.5	6,243.7	12.4	13.3	-22.98	140.8	-1,030.7	413.8	388.4	25.45	16.262	
6,500.0	6,447.7	6,474.2	6,339.1	12.6	13.5	-22.88	143.1	-1,056.1	429.7	403.8	25.85	16.623	
6,600.0	6,547.3	6,572.6	6,434.2	12.8	13.7	-22.71	145.5	-1,081.4	447.1	420.9	26.24	17.036	
6,700.0	6,647.0	6,670.8	6,529.0	13.0	13.9	-22.48	147.8	-1,106.7	466.1	439.5	26.64	17.499	
6,800.0	6,746.9	6,768.6	6,623.5	13.1	14.2	-22.20	150.2	-1,131.9	486.8	459.7	27.03	18.011	
6,900.0	6,846.8	6,866.0	6,717.6	13.3	14.4	-21.88	152.5	-1,156.9	509.0	481.6	27.41	18.571	
7,000.0	6,946.8	6,963.1	6,811.4	13.4	14.6	-21.53	154.8	-1,181.9	532.8	505.0	27.78	19.180	
7,053.2	7,000.0	7,014.5	6,861.1	13.5	14.7	-94.72	156.0	-1,195.2	546.1	518.2	27.94	19.545	
7,100.0	7,046.8	7,059.7	6,904.7	13.5	14.8	-94.51	157.1	-1,206.8	558.0	530.0	28.07	19.880	
7,200.0	7,146.8	7,156.3	6,998.0	13.5	15.0	-94.07	159.4	-1,231.7	583.6	555.2	28.38	20.566	
7,300.0	7,246.8	7,252.9	7,091.4	13.6	15.3	-93.68	161.7	-1,256.5	609.1	580.4	28.68	21.238	
7,400.0	7,346.8	7,349.5	7,184.7	13.7	15.5	-93.31	164.0	-1,281.4	634.7	605.7	28.98	21.897	
7,500.0	7,446.8	7,446.1	7,278.0	13.7	15.7	-92.98	166.3	-1,306.3	660.2	631.0	29.29	22.543	
7,600.0	7,546.8	7,542.7	7,371.3	13.8	15.9	-92.67	168.7	-1,331.1	685.9	656.3	29.59	23.176	
7,700.0	7,646.8	7,639.3	7,464.6	13.8	16.2	-92.38	171.0	-1,356.0	711.5	681.6	29.90	23.796	
7,800.0	7,746.8	7,735.9	7,558.0	13.9	16.4	-92.11	173.3	-1,380.8	737.1	706.9	30.20	24.404	
7,900.0	7,846.8	7,833.7	7,652.4	14.0	16.6	-91.86	175.6	-1,406.0	762.8	732.3	30.50	25.006	
8,000.0	7,946.8	7,945.6	7,760.8	14.0	16.9	-91.60	178.2	-1,433.6	787.3	756.5	30.83	25.538	
8,100.0	8,046.8	8,058.6	7,870.8	14.1	17.1	-91.37	180.6	-1,459.3	810.0	778.9	31.16	25.998	
8,200.0	8,146.8	8,172.6	7,982.3	14.2	17.4	-91.18	182.8	-1,483.0	830.8	799.4	31.48	26.395	
8,300.0	8,246.8	8,287.6	8,095.2	14.2	17.6	-91.01	184.8	-1,504.7	849.7	817.9	31.79	26.731	
8,400.0	8,346.8	8,403.4	8,209.3	14.3	17.8	-90.86	186.6	-1,524.3	866.6	834.5	32.09	27.007	
8,500.0	8,446.8	8,519.9	8,324.5	14.4	18.1	-90.74	188.2	-1,541.7	881.5	849.1	32.38	27.225	
8,600.0	8,546.8	8,637.1	8,440.8	14.4	18.3	-90.64	189.6	-1,556.8	894.3	861.7	32.66	27.387	
8,700.0	8,646.8	8,754.9	8,557.9	14.5	18.5	-90.55	190.8	-1,569.6	905.2	872.3	32.92	27.494	
8,800.0	8,746.8	8,873.2	8,675.7	14.6	18.7	-90.49	191.8	-1,580.1	914.0	880.9	33.18	27.548	
8,900.0	8,846.8	8,991.9	8,794.1	14.6	18.9	-90.44	192.5	-1,588.1	920.8	887.4	33.42	27.551	
9,000.0	8,946.8	9,110.9	8,912.9	14.7	19.1	-90.40	193.0	-1,593.7	925.5	891.9	33.65	27.506	
9,100.0	9,046.8	9,230.0	9,032.0	14.7	19.2	-90.38	193.3	-1,596.9	928.2	894.3	33.85	27.419	
9,200.0	9,146.8	9,345.0	9,147.0	14.8	19.3	-90.38	193.4	-1,597.6	928.8	894.8	33.99	27.323	
9,300.0	9,246.8	9,445.0	9,247.0	14.9	19.4	-90.38	193.4	-1,597.6	928.8	894.7	34.09	27.246	
9,400.0	9,346.8	9,545.0	9,347.0	14.9	19.4	-90.38	193.4	-1,597.6	928.8	894.6	34.19	27.165	
9,500.0	9,446.8	9,645.0	9,447.0	15.0	19.5	-90.38	193.4	-1,597.6	928.8	894.5	34.29	27.084	
9,600.0	9,546.8	9,745.0	9,547.0	15.1	19.5	-90.38	193.4	-1,597.6	928.8	894.4	34.40	27.003	

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

ConocoPhillips

Anticollision Report

Company:	DELAWARE BASIN EAST	Local Co-ordinate Reference:	Well PITCHBLENDE 24-25 FED COM 704H
Project:	LEA COUNTY SOUTHEAST	TVD Reference:	RKB=27ft @ 3380.1usft
Reference Site:	PITCHBLENDE 24-25 FEDERAL PROJECT	MD Reference:	RKB=27ft @ 3380.1usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	PITCHBLENDE 24-25 FED COM 704H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDT 17 Permian Prod
Reference Design:	PWP0	Offset TVD Reference:	Offset Datum

Offset Design: PITCHBLENDE 24-25 FEDERAL PROJECT - PITCHBLENDE 24-25 FED COM 604H - OWB - PWP0												Offset Site Error:	0.0 usft
Survey Program: 0-r.5 SDI_KPR_WL_NS-CT, 2000-r.5 MWD+IFR1+SAG+FDIR, 12046-r.5 MWD+IFR1+SAG+FDIR												Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis		Offset Wellbore Centre		Distance					
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	No-Go Distance (usft)	Separation Factor	Warning
9,700.0	9,646.8	9,845.0	9,647.0	15.1	19.5	-90.38	193.4	-1,597.6	928.8	894.3	34.50	26.922	
9,800.0	9,746.8	9,945.0	9,747.0	15.2	19.6	-90.38	193.4	-1,597.6	928.8	894.2	34.60	26.842	
9,900.0	9,846.8	10,045.0	9,847.0	15.3	19.6	-90.38	193.4	-1,597.6	928.8	894.1	34.71	26.762	
10,000.0	9,946.8	10,145.0	9,947.0	15.3	19.7	-90.38	193.4	-1,597.6	928.8	894.0	34.81	26.681	
10,100.0	10,046.8	10,245.0	10,047.0	15.4	19.7	-90.38	193.4	-1,597.6	928.8	893.9	34.92	26.601	
10,200.0	10,146.8	10,345.0	10,147.0	15.5	19.8	-90.38	193.4	-1,597.6	928.8	893.8	35.02	26.521	
10,300.0	10,246.8	10,445.0	10,247.0	15.5	19.8	-90.38	193.4	-1,597.6	928.8	893.7	35.13	26.442	
10,400.0	10,346.8	10,545.0	10,347.0	15.6	19.8	-90.38	193.4	-1,597.6	928.8	893.6	35.23	26.362	
10,500.0	10,446.8	10,645.0	10,447.0	15.7	19.9	-90.38	193.4	-1,597.6	928.8	893.5	35.34	26.283	
10,600.0	10,546.8	10,745.0	10,547.0	15.7	19.9	-90.38	193.4	-1,597.6	928.8	893.4	35.45	26.203	
10,700.0	10,646.8	10,845.0	10,647.0	15.8	20.0	-90.38	193.4	-1,597.6	928.8	893.3	35.55	26.124	
10,800.0	10,746.8	10,945.0	10,747.0	15.9	20.0	-90.38	193.4	-1,597.6	928.8	893.1	35.66	26.045	
10,900.0	10,846.8	11,045.0	10,847.0	16.0	20.1	-90.38	193.4	-1,597.6	928.8	893.0	35.77	25.967	
11,000.0	10,946.8	11,145.0	10,947.0	16.0	20.1	-90.38	193.4	-1,597.6	928.8	892.9	35.88	25.888	
11,100.0	11,046.8	11,245.0	11,047.0	16.1	20.2	-90.38	193.4	-1,597.6	928.8	892.8	35.99	25.810	
11,200.0	11,146.8	11,345.0	11,147.0	16.2	20.2	-90.38	193.4	-1,597.6	928.8	892.7	36.10	25.732	
11,300.0	11,246.8	11,445.0	11,247.0	16.2	20.3	-90.38	193.4	-1,597.6	928.8	892.6	36.21	25.654	
11,400.0	11,346.8	11,545.0	11,347.0	16.3	20.3	-90.38	193.4	-1,597.6	928.8	892.5	36.32	25.576	
11,500.0	11,446.8	11,645.0	11,447.0	16.4	20.3	-90.38	193.4	-1,597.6	928.8	892.4	36.43	25.498	
11,600.0	11,546.8	11,745.0	11,547.0	16.4	20.4	-90.38	193.4	-1,597.6	928.8	892.3	36.54	25.421	
11,700.0	11,646.8	11,845.0	11,647.0	16.5	20.4	-90.38	193.4	-1,597.6	928.8	892.2	36.65	25.344	
11,800.0	11,746.8	11,945.0	11,747.0	16.6	20.5	-90.38	193.4	-1,597.6	928.8	892.0	36.76	25.267	
11,900.0	11,846.8	12,045.0	11,847.0	16.6	20.5	-90.38	193.4	-1,597.6	928.8	891.9	36.86	25.198	
11,942.7	11,889.5	12,087.8	11,889.7	16.7	20.5	-90.49	191.5	-1,597.6	928.8	891.9	36.89	25.177	
12,000.0	11,946.8	12,144.0	11,945.3	16.7	20.6	-91.00	183.3	-1,597.6	928.8	891.9	36.91	25.163	
12,100.0	12,046.8	12,235.2	12,032.2	16.8	20.6	-92.67	156.2	-1,597.3	929.6	892.7	36.93	25.169	
12,100.7	12,047.5	12,235.8	12,032.8	16.8	20.6	-92.68	156.0	-1,597.3	929.6	892.7	36.93	25.169	
12,125.0	12,071.8	12,256.3	12,051.5	16.8	20.6	87.25	147.6	-1,597.3	930.0	893.1	36.94	25.176	
12,150.0	12,096.7	12,277.2	12,070.2	16.8	20.6	86.70	138.3	-1,597.2	930.6	893.6	36.94	25.191	
12,175.0	12,121.5	12,297.8	12,088.2	16.8	20.6	86.16	128.3	-1,597.1	931.2	894.2	36.94	25.206	
12,200.0	12,146.1	12,318.1	12,105.5	16.8	20.6	85.63	117.7	-1,597.0	931.9	894.9	36.95	25.219	
12,225.0	12,170.4	12,338.1	12,122.1	16.8	20.7	85.11	106.5	-1,596.9	932.6	895.6	36.96	25.232	
12,250.0	12,194.4	12,358.0	12,138.1	16.8	20.7	84.60	94.8	-1,596.8	933.4	896.4	36.98	25.242	
12,275.0	12,218.0	12,377.6	12,153.4	16.8	20.7	84.11	82.5	-1,596.7	934.3	897.3	37.00	25.250	
12,300.0	12,241.1	12,397.0	12,168.1	16.8	20.7	83.62	69.8	-1,596.6	935.2	898.1	37.03	25.254	
12,325.0	12,263.6	12,416.2	12,182.1	16.8	20.7	83.15	56.6	-1,596.5	936.1	899.0	37.06	25.256	
12,350.0	12,285.6	12,435.3	12,195.4	16.9	20.7	82.70	43.0	-1,596.4	937.0	899.9	37.10	25.254	
12,375.0	12,307.0	12,454.2	12,208.1	16.9	20.8	82.26	28.9	-1,596.2	938.0	900.8	37.15	25.247	
12,400.0	12,327.6	12,475.0	12,221.4	16.9	20.8	81.80	12.9	-1,596.1	939.0	901.8	37.19	25.245	
12,425.0	12,347.4	12,491.6	12,231.5	16.9	20.8	81.43	-0.3	-1,596.0	939.9	902.7	37.27	25.222	
12,450.0	12,366.5	12,510.1	12,242.2	16.9	20.8	81.04	-15.4	-1,595.9	940.9	903.6	37.33	25.203	
12,475.0	12,384.6	12,528.5	12,252.3	16.9	20.9	80.67	-30.8	-1,595.7	941.8	904.4	37.40	25.179	
12,500.0	12,401.9	12,550.0	12,263.2	16.9	20.9	80.28	-49.2	-1,595.6	942.8	905.3	37.46	25.165	
12,525.0	12,418.1	12,565.0	12,270.4	17.0	20.9	79.99	-62.4	-1,595.5	943.6	906.1	37.57	25.119	
12,550.0	12,433.4	12,583.2	12,278.5	17.0	20.9	79.68	-78.6	-1,595.3	944.5	906.8	37.65	25.083	
12,575.0	12,447.6	12,600.0	12,285.5	17.0	21.0	79.41	-93.9	-1,595.2	945.3	907.5	37.75	25.039	
12,600.0	12,460.7	12,619.1	12,292.8	17.0	21.0	79.14	-111.6	-1,595.0	946.0	908.2	37.84	25.000	
12,625.0	12,472.6	12,637.0	12,298.9	17.1	21.0	78.90	-128.4	-1,594.9	946.7	908.8	37.94	24.953	
12,650.0	12,483.4	12,654.9	12,304.4	17.1	21.1	78.68	-145.4	-1,594.7	947.4	909.3	38.04	24.903	
12,675.0	12,493.0	12,675.0	12,309.9	17.1	21.1	78.47	-164.8	-1,594.6	948.0	909.8	38.13	24.859	
12,700.0	12,501.4	12,690.4	12,313.5	17.2	21.1	78.32	-179.8	-1,594.4	948.5	910.2	38.25	24.796	

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 PITCHBLENDE 24-25 FED COM 704H
Project:	LEA COUNTY SOUTHEAST	TVD Reference:	RKB=27ft @ 3380.1usft
Reference Site:	PITCHBLENDE 24-25 FEDERAL PROJECT	MD Reference:	RKB=27ft @ 3380.1usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	PITCHBLENDE 24-25 FED COM 704H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDT 17 Permian Prod
Reference Design:	PWP0	Offset TVD Reference:	Offset Datum

Offset Design: PITCHBLENDE 24-25 FEDERAL PROJECT - PITCHBLENDE 24-25 FED COM 604H - OWB - PWP0												Offset Site Error:	0.0 usft
Survey Program: 0-r.5 SDI_KPR_WL_NS-CT, 2000-r.5 MWD+IFR1+SAG+FDIR, 12046-r.5 MWD+IFR1+SAG+FDIR												Offset Well Error:	0.0 usft
Reference	Offset	Semi Major Axis	Highside	Offset Wellbore Centre		Distance		Between	Between	No-Go	Separation	Warning	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Toolface (°)	+N/-S (usft)	+E/-W (usft)	Centres (usft)	Ellipses (usft)	Distance (usft)	Factor	
12,725.0	12,508.5	12,708.1	12,317.0	17.2	21.2	78.17	-197.1	-1,594.3	948.9	910.6	38.36	24.740	
12,750.0	12,514.4	12,725.0	12,319.8	17.2	21.2	78.06	-213.8	-1,594.2	949.3	910.8	38.46	24.679	
12,775.0	12,519.0	12,743.5	12,322.2	17.3	21.2	77.96	-232.1	-1,594.0	949.6	911.0	38.57	24.622	
12,800.0	12,522.3	12,761.1	12,323.8	17.3	21.3	77.89	-249.6	-1,593.8	949.8	911.1	38.67	24.562	
12,825.0	12,524.3	12,778.7	12,324.7	17.4	21.3	77.85	-267.2	-1,593.7	949.9	911.1	38.77	24.501	
12,850.7	12,525.0	12,797.4	12,325.0	17.4	21.3	77.83	-285.9	-1,593.5	950.0	911.1	38.87	24.440	
12,900.0	12,525.0	12,846.7	12,325.0	17.5	21.4	77.83	-335.2	-1,593.1	949.9	910.9	39.04	24.333	
13,000.0	12,525.0	12,946.7	12,325.0	17.7	21.7	77.83	-435.2	-1,592.3	949.9	910.5	39.44	24.085	
13,100.0	12,525.0	13,046.7	12,325.0	18.0	21.9	77.83	-535.2	-1,591.4	949.9	910.0	39.91	23.803	
13,200.0	12,525.0	13,146.7	12,325.0	18.3	22.2	77.83	-635.2	-1,590.5	949.8	909.4	40.44	23.490	
13,300.0	12,525.0	13,246.7	12,325.0	18.6	22.5	77.83	-735.2	-1,589.7	949.8	908.8	41.03	23.150	
13,400.0	12,525.0	13,346.7	12,325.0	19.0	22.9	77.83	-835.2	-1,588.8	949.8	908.1	41.68	22.788	
13,500.0	12,525.0	13,446.7	12,325.0	19.3	23.2	77.83	-935.2	-1,588.0	949.7	907.3	42.39	22.407	
13,600.0	12,525.0	13,546.7	12,325.0	19.8	23.6	77.83	-1,035.2	-1,587.1	949.7	906.6	43.15	22.011	
13,700.0	12,525.0	13,646.7	12,325.0	20.2	24.0	77.83	-1,135.2	-1,586.2	949.7	905.7	43.96	21.604	
13,800.0	12,525.0	13,746.7	12,325.0	20.7	24.4	77.83	-1,235.1	-1,585.4	949.6	904.8	44.82	21.189	
13,900.0	12,525.0	13,846.7	12,325.0	21.2	24.9	77.83	-1,335.1	-1,584.5	949.6	903.9	45.72	20.769	
14,000.0	12,525.0	13,946.7	12,325.0	21.7	25.3	77.83	-1,435.1	-1,583.7	949.6	902.9	46.67	20.347	
14,100.0	12,525.0	14,046.7	12,325.0	22.3	25.8	77.83	-1,535.1	-1,582.8	949.5	901.9	47.65	19.925	
14,200.0	12,525.0	14,146.7	12,325.0	22.8	26.3	77.83	-1,635.1	-1,582.0	949.5	900.8	48.68	19.505	
14,300.0	12,525.0	14,246.7	12,325.0	23.4	26.8	77.83	-1,735.1	-1,581.1	949.5	899.7	49.74	19.089	
14,400.0	12,525.0	14,346.7	12,325.0	24.0	27.4	77.83	-1,835.1	-1,580.2	949.4	898.6	50.83	18.678	
14,500.0	12,525.0	14,446.7	12,325.0	24.6	27.9	77.83	-1,935.1	-1,579.4	949.4	897.4	51.95	18.274	
14,600.0	12,525.0	14,546.7	12,325.0	25.3	28.5	77.83	-2,035.1	-1,578.5	949.3	896.2	53.10	17.877	
14,700.0	12,525.0	14,646.7	12,325.0	25.9	29.1	77.83	-2,135.1	-1,577.7	949.3	895.0	54.28	17.488	
14,800.0	12,525.0	14,746.7	12,325.0	26.6	29.7	77.83	-2,235.1	-1,576.8	949.3	893.8	55.49	17.108	
14,900.0	12,525.0	14,846.7	12,325.0	27.2	30.3	77.82	-2,335.1	-1,576.0	949.2	892.5	56.71	16.737	
15,000.0	12,525.0	14,946.7	12,325.0	27.9	30.9	77.82	-2,435.1	-1,575.1	949.2	891.2	57.96	16.376	
15,100.0	12,525.0	15,046.7	12,325.0	28.6	31.5	77.82	-2,535.1	-1,574.2	949.2	889.9	59.23	16.024	
15,200.0	12,525.0	15,146.7	12,325.0	29.3	32.2	77.82	-2,635.1	-1,573.4	949.1	888.6	60.52	15.682	
15,300.0	12,525.0	15,246.7	12,325.0	30.0	32.8	77.82	-2,735.1	-1,572.5	949.1	887.3	61.83	15.350	
15,400.0	12,525.0	15,346.7	12,325.0	30.7	33.5	77.82	-2,835.1	-1,571.7	949.1	885.9	63.16	15.027	
15,500.0	12,525.0	15,446.7	12,325.0	31.4	34.1	77.82	-2,935.1	-1,570.8	949.0	884.5	64.50	14.714	
15,600.0	12,525.0	15,546.7	12,325.0	32.2	34.8	77.82	-3,035.1	-1,569.9	949.0	883.1	65.85	14.411	
15,700.0	12,525.0	15,646.7	12,325.0	32.9	35.5	77.82	-3,135.1	-1,569.1	949.0	881.7	67.22	14.116	
15,800.0	12,525.0	15,746.7	12,325.0	33.6	36.2	77.82	-3,235.1	-1,568.2	948.9	880.3	68.61	13.831	
15,900.0	12,525.0	15,846.7	12,325.0	34.4	36.9	77.82	-3,335.1	-1,567.4	948.9	878.9	70.00	13.555	
16,000.0	12,525.0	15,946.7	12,325.0	35.1	37.6	77.82	-3,435.1	-1,566.5	948.8	877.4	71.41	13.287	
16,100.0	12,525.0	16,046.7	12,325.0	35.9	38.3	77.82	-3,535.1	-1,565.7	948.8	876.0	72.83	13.028	
16,200.0	12,525.0	16,146.7	12,325.0	36.7	39.0	77.82	-3,635.1	-1,564.8	948.8	874.5	74.26	12.777	
16,300.0	12,525.0	16,246.7	12,325.0	37.4	39.7	77.82	-3,735.1	-1,563.9	948.7	873.0	75.70	12.534	
16,400.0	12,525.0	16,346.7	12,325.0	38.2	40.5	77.82	-3,835.1	-1,563.1	948.7	871.6	77.14	12.298	
16,500.0	12,525.0	16,446.7	12,325.0	39.0	41.2	77.82	-3,935.0	-1,562.2	948.7	870.1	78.60	12.070	
16,600.0	12,525.0	16,546.7	12,325.0	39.7	41.9	77.82	-4,035.0	-1,561.4	948.6	868.6	80.06	11.848	
16,700.0	12,525.0	16,646.7	12,325.0	40.5	42.7	77.82	-4,135.0	-1,560.5	948.6	867.1	81.54	11.634	
16,800.0	12,525.0	16,746.7	12,325.0	41.3	43.4	77.82	-4,235.0	-1,559.7	948.6	865.5	83.02	11.426	
16,900.0	12,525.0	16,846.7	12,325.0	42.1	44.2	77.82	-4,335.0	-1,558.8	948.5	864.0	84.50	11.225	
17,000.0	12,525.0	16,946.7	12,325.0	42.9	44.9	77.81	-4,435.0	-1,557.9	948.5	862.5	86.00	11.029	
17,100.0	12,525.0	17,046.7	12,325.0	43.7	45.7	77.81	-4,535.0	-1,557.1	948.5	861.0	87.50	10.840	
17,200.0	12,525.0	17,146.7	12,325.0	44.5	46.5	77.81	-4,635.0	-1,556.2	948.4	859.4	89.00	10.656	
17,300.0	12,525.0	17,246.7	12,325.0	45.3	47.2	77.81	-4,735.0	-1,555.4	948.4	857.9	90.51	10.478	

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 PITCHBLENDE 24-25 FED COM 704H
Project:	LEA COUNTY SOUTHEAST	TVD Reference:	RKB=27ft @ 3380.1usft
Reference Site:	PITCHBLENDE 24-25 FEDERAL PROJECT	MD Reference:	RKB=27ft @ 3380.1usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	PITCHBLENDE 24-25 FED COM 704H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDT 17 Permian Prod
Reference Design:	PWP0	Offset TVD Reference:	Offset Datum

Offset Design: PITCHBLENDE 24-25 FEDERAL PROJECT - PITCHBLENDE 24-25 FED COM 604H - OWB - PWP0											Offset Site Error:	0.0 usft
Survey Program: 0-r.5 SDI_KPR_WL_NS-CT, 2000-r.5 MWD+IFR1+SAG+FDIR, 12046-r.5 MWD+IFR1+SAG+FDIR											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
17,400.0	12,525.0	17,346.7	12,325.0	46.1	48.0	77.81	-4,835.0	-1,554.5	948.4	856.3	92.03	10.305
17,500.0	12,525.0	17,446.7	12,325.0	46.9	48.8	77.81	-4,935.0	-1,553.6	948.3	854.8	93.55	10.137
17,600.0	12,525.0	17,546.7	12,325.0	47.7	49.5	77.81	-5,035.0	-1,552.8	948.3	853.2	95.08	9.973
17,700.0	12,525.0	17,646.7	12,325.0	48.5	50.3	77.81	-5,135.0	-1,551.9	948.2	851.6	96.61	9.815
17,800.0	12,525.0	17,746.7	12,325.0	49.3	51.1	77.81	-5,235.0	-1,551.1	948.2	850.1	98.15	9.661
17,900.0	12,525.0	17,846.7	12,325.0	50.1	51.9	77.81	-5,335.0	-1,550.2	948.2	848.5	99.69	9.511
18,000.0	12,525.0	17,946.7	12,325.0	50.9	52.7	77.81	-5,435.0	-1,549.4	948.1	846.9	101.23	9.366
18,100.0	12,525.0	18,046.7	12,325.0	51.7	53.5	77.81	-5,535.0	-1,548.5	948.1	845.3	102.78	9.225
18,200.0	12,525.0	18,146.7	12,325.0	52.5	54.3	77.81	-5,635.0	-1,547.6	948.1	843.7	104.33	9.087
18,300.0	12,525.0	18,246.7	12,325.0	53.3	55.0	77.81	-5,735.0	-1,546.8	948.0	842.1	105.89	8.953
18,400.0	12,525.0	18,346.7	12,325.0	54.2	55.8	77.81	-5,835.0	-1,545.9	948.0	840.5	107.45	8.823
18,500.0	12,525.0	18,446.7	12,325.0	55.0	56.6	77.81	-5,935.0	-1,545.1	948.0	839.0	109.01	8.696
18,600.0	12,525.0	18,546.7	12,325.0	55.8	57.4	77.81	-6,035.0	-1,544.2	947.9	837.4	110.57	8.573
18,700.0	12,525.0	18,646.7	12,325.0	56.6	58.2	77.81	-6,135.0	-1,543.3	947.9	835.7	112.14	8.453
18,800.0	12,525.0	18,746.7	12,325.0	57.4	59.0	77.81	-6,235.0	-1,542.5	947.9	834.1	113.71	8.336
18,900.0	12,525.0	18,846.7	12,325.0	58.3	59.8	77.81	-6,335.0	-1,541.6	947.8	832.5	115.28	8.222
19,000.0	12,525.0	18,946.7	12,325.0	59.1	60.6	77.81	-6,435.0	-1,540.8	947.8	830.9	116.86	8.110
19,100.0	12,525.0	19,046.7	12,325.0	59.9	61.4	77.81	-6,535.0	-1,539.9	947.7	829.3	118.44	8.002
19,200.0	12,525.0	19,146.7	12,325.0	60.7	62.3	77.80	-6,634.9	-1,539.1	947.7	827.7	120.02	7.896
19,300.0	12,525.0	19,246.7	12,325.0	61.6	63.1	77.80	-6,734.9	-1,538.2	947.7	826.1	121.60	7.793
19,400.0	12,525.0	19,346.7	12,325.0	62.4	63.9	77.80	-6,834.9	-1,537.3	947.6	824.5	123.19	7.693
19,500.0	12,525.0	19,446.7	12,325.0	63.2	64.7	77.80	-6,934.9	-1,536.5	947.6	822.8	124.77	7.595
19,600.0	12,525.0	19,546.7	12,325.0	64.0	65.5	77.80	-7,034.9	-1,535.6	947.6	821.2	126.36	7.499
19,700.0	12,525.0	19,646.7	12,325.0	64.9	66.3	77.80	-7,134.9	-1,534.8	947.5	819.6	127.95	7.405
19,800.0	12,525.0	19,746.7	12,325.0	65.7	67.1	77.80	-7,234.9	-1,533.9	947.5	818.0	129.55	7.314
19,900.0	12,525.0	19,846.7	12,325.0	66.5	67.9	77.80	-7,334.9	-1,533.1	947.5	816.3	131.14	7.225
20,000.0	12,525.0	19,946.7	12,325.0	67.4	68.8	77.80	-7,434.9	-1,532.2	947.4	814.7	132.74	7.137
20,100.0	12,525.0	20,046.7	12,325.0	68.2	69.6	77.80	-7,534.9	-1,531.3	947.4	813.1	134.34	7.052
20,200.0	12,525.0	20,146.7	12,325.0	69.0	70.4	77.80	-7,634.9	-1,530.5	947.4	811.4	135.94	6.969
20,300.0	12,525.0	20,246.7	12,325.0	69.9	71.2	77.80	-7,734.9	-1,529.6	947.3	809.8	137.54	6.888
20,400.0	12,525.0	20,346.7	12,325.0	70.7	72.0	77.80	-7,834.9	-1,528.8	947.3	808.1	139.14	6.808
20,500.0	12,525.0	20,446.7	12,325.0	71.5	72.9	77.80	-7,934.9	-1,527.9	947.3	806.5	140.75	6.730
20,600.0	12,525.0	20,546.7	12,325.0	72.4	73.7	77.80	-8,034.9	-1,527.0	947.2	804.9	142.35	6.654
20,700.0	12,525.0	20,646.7	12,325.0	73.2	74.5	77.80	-8,134.9	-1,526.2	947.2	803.2	143.96	6.579
20,800.0	12,525.0	20,746.7	12,325.0	74.0	75.3	77.80	-8,234.9	-1,525.3	947.1	801.6	145.57	6.506
20,900.0	12,525.0	20,846.7	12,325.0	74.9	76.1	77.80	-8,334.9	-1,524.5	947.1	799.9	147.18	6.435
21,000.0	12,525.0	20,946.7	12,325.0	75.7	77.0	77.80	-8,434.9	-1,523.6	947.1	798.3	148.79	6.365
21,100.0	12,525.0	21,046.7	12,325.0	76.5	77.8	77.80	-8,534.9	-1,522.8	947.0	796.6	150.41	6.297
21,200.0	12,525.0	21,146.7	12,325.0	77.4	78.6	77.80	-8,634.9	-1,521.9	947.0	795.0	152.02	6.230
21,300.0	12,525.0	21,246.7	12,325.0	78.2	79.5	77.79	-8,734.9	-1,521.0	947.0	793.3	153.63	6.164
21,400.0	12,525.0	21,346.7	12,325.0	79.1	80.3	77.79	-8,834.9	-1,520.2	946.9	791.7	155.25	6.099
21,500.0	12,525.0	21,446.7	12,325.0	79.9	81.1	77.79	-8,934.9	-1,519.3	946.9	790.0	156.87	6.036
21,600.0	12,525.0	21,546.7	12,325.0	80.7	81.9	77.79	-9,034.9	-1,518.5	946.9	788.4	158.48	5.974
21,700.0	12,525.0	21,646.7	12,325.0	81.6	82.8	77.79	-9,134.9	-1,517.6	946.8	786.7	160.10	5.914
21,800.0	12,525.0	21,746.7	12,325.0	82.4	83.6	77.79	-9,234.9	-1,516.8	946.8	785.1	161.72	5.854
21,900.0	12,525.0	21,846.7	12,325.0	83.3	84.4	77.79	-9,334.8	-1,515.9	946.8	783.4	163.34	5.796
22,000.0	12,525.0	21,946.7	12,325.0	84.1	85.3	77.79	-9,434.8	-1,515.0	946.7	781.8	164.97	5.739
22,100.0	12,525.0	22,046.7	12,325.0	85.0	86.1	77.79	-9,534.8	-1,514.2	946.7	780.1	166.59	5.683
22,200.0	12,525.0	22,146.7	12,325.0	85.8	86.9	77.79	-9,634.8	-1,513.3	946.6	778.4	168.21	5.628
22,300.0	12,525.0	22,246.7	12,325.0	86.6	87.8	77.79	-9,734.8	-1,512.5	946.6	776.8	169.84	5.574
22,400.0	12,525.0	22,346.7	12,325.0	87.5	88.6	77.79	-9,834.8	-1,511.6	946.6	775.1	171.46	5.521

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 PITCHBLENDE 24-25 FED COM 704H
Project:	LEA COUNTY SOUTHEAST	TVD Reference:	RKB=27ft @ 3380.1usft
Reference Site:	PITCHBLENDE 24-25 FEDERAL PROJECT	MD Reference:	RKB=27ft @ 3380.1usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	PITCHBLENDE 24-25 FED COM 704H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDT 17 Permian Prod
Reference Design:	PWP0	Offset TVD Reference:	Offset Datum

Offset Design: PITCHBLENDE 24-25 FEDERAL PROJECT - PITCHBLENDE 24-25 FED COM 604H - OWB - PWP0													Offset Site Error:	0.0 usft
Survey Program: 0-r.5 SDI_KPR_WL_NS-CT, 2000-r.5 MWD+IFR1+SAG+FDIR, 12046-r.5 MWD+IFR1+SAG+FDIR													Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis		Offset Wellbore Centre		Distance		Rule Assigned:				
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	No-Go Distance (usft)	Separation Factor	Warning	
22,500.0	12,525.0	22,446.7	12,325.0	88.3	89.4	77.79	-9,934.8	-1,510.7	946.5	773.5	173.09	5.469		
22,600.0	12,525.0	22,546.7	12,325.0	89.2	90.3	77.79	-10,034.8	-1,509.9	946.5	771.8	174.72	5.417		
22,700.0	12,525.0	22,646.7	12,325.0	90.0	91.1	77.79	-10,134.8	-1,509.0	946.5	770.1	176.34	5.367		
22,800.0	12,525.0	22,746.7	12,325.0	90.9	91.9	77.79	-10,234.8	-1,508.2	946.4	768.5	177.97	5.318		
22,827.2	12,525.0	22,773.9	12,325.0	91.1	92.2	77.79	-10,262.0	-1,507.9	946.4	768.0	178.41	5.305		
22,829.4	12,525.0	22,774.1	12,325.0	91.1	92.2	77.79	-10,262.2	-1,507.9	946.4	768.0	178.45	5.303		

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 PITCHBLENDE 24-25 FED COM 704H
Project:	LEA COUNTY SOUTHEAST	TVD Reference:	RKB=27ft @ 3380.1usft
Reference Site:	PITCHBLENDE 24-25 FEDERAL PROJECT	MD Reference:	RKB=27ft @ 3380.1usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	PITCHBLENDE 24-25 FED COM 704H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDT 17 Permian Prod
Reference Design:	PWP0	Offset TVD Reference:	Offset Datum

Offset Design: PITCHBLENDE 24-25 FEDERAL PROJECT - PITCHBLENDE 24-25 FED COM 703H - OWB - PWP0													Offset Site Error:	0.0 usft
Survey Program: 0-r.5 SDI_KPR_WL_NS-CT, 2000-r.5 MWD+IFR1+SAG+FDIR, 12177-r.5 MWD+IFR1+SAG+FDIR													Offset Well Error:	0.0 usft
Reference	Offset	Semi Major Axis		Distance		Rule Assigned:		Warning						
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	No-Go Distance (usft)	Separation Factor		
0.0	0.0	0.1	0.1	0.0	0.0	33.16	45.3	29.6	54.1					
100.0	100.0	100.1	100.1	0.6	0.6	33.16	45.3	29.6	54.1	52.5	1.59	33.999		
200.0	200.0	200.1	200.1	1.1	1.1	33.16	45.3	29.6	54.1	51.6	2.54	21.268		
300.0	300.0	300.1	300.1	1.4	1.4	33.16	45.3	29.6	54.1	50.9	3.19	16.952		
400.0	400.0	400.1	400.1	1.7	1.7	33.16	45.3	29.6	54.1	50.4	3.72	14.534		
500.0	500.0	500.1	500.1	1.9	1.9	33.16	45.3	29.6	54.1	49.9	4.19	12.921		
600.0	600.0	600.1	600.1	2.1	2.1	33.16	45.3	29.6	54.1	49.5	4.61	11.741		
700.0	700.0	700.1	700.1	2.3	2.3	33.16	45.3	29.6	54.1	49.1	5.00	10.826		
800.0	800.0	800.1	800.1	2.5	2.5	33.16	45.3	29.6	54.1	48.7	5.36	10.088		
900.0	900.0	900.1	900.1	2.7	2.7	33.16	45.3	29.6	54.1	48.4	5.71	9.476		
1,000.0	1,000.0	1,000.1	1,000.1	2.9	2.9	33.16	45.3	29.6	54.1	48.1	6.04	8.957		
1,100.0	1,100.0	1,100.1	1,100.1	3.1	3.1	33.16	45.3	29.6	54.1	47.8	6.36	8.509		
1,200.0	1,200.0	1,200.1	1,200.1	3.2	3.2	33.16	45.3	29.6	54.1	47.4	6.67	8.116		
1,300.0	1,300.0	1,300.1	1,300.1	3.4	3.4	33.16	45.3	29.6	54.1	47.1	6.97	7.769		
1,400.0	1,400.0	1,400.1	1,400.1	3.5	3.5	33.16	45.3	29.6	54.1	46.9	7.26	7.459		
1,500.0	1,500.0	1,500.1	1,500.1	3.7	3.7	33.16	45.3	29.6	54.1	46.6	7.54	7.179		
1,600.0	1,600.0	1,600.1	1,600.1	3.8	3.8	33.16	45.3	29.6	54.1	46.3	7.81	6.925		
1,700.0	1,700.0	1,700.1	1,700.1	4.0	4.0	33.16	45.3	29.6	54.1	46.0	8.09	6.692		
1,800.0	1,800.0	1,800.1	1,800.1	4.1	4.1	33.16	45.3	29.6	54.1	45.8	8.35	6.479		
1,900.0	1,900.0	1,900.1	1,900.1	4.3	4.3	33.16	45.3	29.6	54.1	45.5	8.61	6.282		
1,966.6	1,966.6	1,966.7	1,966.7	4.4	4.4	33.16	45.3	29.6	54.1	45.3	8.79	6.160 CC		
2,000.0	2,000.0	2,000.0	2,000.0	4.4	4.4	33.16	45.3	29.6	54.1	45.2	8.87	6.100 ES, SF		
2,100.0	2,100.0	2,098.7	2,098.7	4.5	4.5	109.52	45.5	31.3	55.8	46.7	9.09	6.144		
2,200.0	2,199.8	2,196.7	2,196.6	4.7	4.7	117.27	46.3	36.3	61.8	52.4	9.37	6.593		
2,300.0	2,299.5	2,293.4	2,292.9	4.9	4.9	126.94	47.5	44.4	73.7	64.0	9.69	7.609		
2,400.0	2,398.7	2,388.1	2,386.9	5.1	5.0	135.82	49.1	55.6	92.8	82.7	10.07	9.215		
2,460.1	2,458.1	2,443.8	2,442.1	5.2	5.1	140.23	50.3	63.5	107.8	97.5	10.26	10.511		
2,500.0	2,497.5	2,480.3	2,478.1	5.2	5.2	142.82	51.1	69.3	119.0	108.6	10.37	11.475		
2,600.0	2,596.2	2,570.6	2,566.8	5.3	5.4	147.65	53.5	85.6	150.0	139.2	10.74	13.962		
2,700.0	2,694.9	2,658.8	2,653.0	5.5	5.6	150.87	56.3	104.2	184.6	173.5	11.06	16.679		
2,800.0	2,793.6	2,749.6	2,741.3	5.7	5.8	153.19	59.4	125.4	221.7	210.3	11.38	19.475		
2,900.0	2,892.4	2,842.1	2,831.1	5.8	5.9	154.87	62.6	147.0	259.2	247.4	11.73	22.096		
3,000.0	2,991.1	2,934.6	2,921.0	6.0	6.1	156.13	65.8	168.7	296.8	284.7	12.06	24.613		
3,100.0	3,089.8	3,027.1	3,010.8	6.2	6.2	157.11	69.0	190.3	334.5	322.1	12.39	26.996		
3,200.0	3,188.5	3,119.6	3,100.7	6.4	6.4	157.89	72.1	212.0	372.3	359.6	12.73	29.250		
3,300.0	3,287.2	3,212.0	3,190.6	6.5	6.6	158.53	75.3	233.6	410.1	397.1	13.07	31.384		
3,400.0	3,385.9	3,304.5	3,280.4	6.7	6.7	159.06	78.5	255.3	448.0	434.6	13.41	33.404		
3,500.0	3,484.6	3,397.0	3,370.3	6.9	6.9	159.50	81.7	276.9	485.9	472.1	13.76	35.318		
3,600.0	3,583.4	3,489.5	3,460.1	7.1	7.1	159.88	84.9	298.6	523.8	509.7	14.11	37.133		
3,700.0	3,682.1	3,581.9	3,550.0	7.3	7.3	160.22	88.1	320.2	561.8	547.3	14.46	38.853		
3,800.0	3,780.8	3,674.4	3,639.8	7.4	7.4	160.50	91.3	341.9	599.7	584.9	14.81	40.487		
3,900.0	3,879.5	3,766.9	3,729.7	7.6	7.6	160.76	94.4	363.5	637.7	622.5	15.17	42.039		
4,000.0	3,978.2	3,859.4	3,819.5	7.8	7.8	160.98	97.6	385.2	675.6	660.1	15.53	43.514		
4,100.0	4,076.9	3,951.9	3,909.4	8.0	8.0	161.19	100.8	406.8	713.6	697.7	15.89	44.918		
4,200.0	4,175.6	4,044.3	3,999.2	8.2	8.2	161.37	104.0	428.5	751.6	735.4	16.25	46.254		
4,300.0	4,274.3	4,136.8	4,089.1	8.4	8.4	161.53	107.2	450.1	789.6	773.0	16.61	47.528		
4,400.0	4,373.1	4,229.3	4,178.9	8.6	8.5	161.68	110.4	471.8	827.6	810.6	16.98	48.742		
4,500.0	4,471.8	4,321.8	4,268.8	8.8	8.7	161.82	113.6	493.5	865.6	848.3	17.35	49.901		
4,600.0	4,570.5	4,414.3	4,358.6	9.0	8.9	161.94	116.7	515.1	903.6	885.9	17.72	51.007		
4,700.0	4,669.2	4,506.7	4,448.5	9.1	9.1	162.05	119.9	536.8	941.6	923.5	18.09	52.065		
4,800.0	4,767.9	4,599.2	4,538.3	9.3	9.3	162.16	123.1	558.4	979.6	961.2	18.46	53.077		

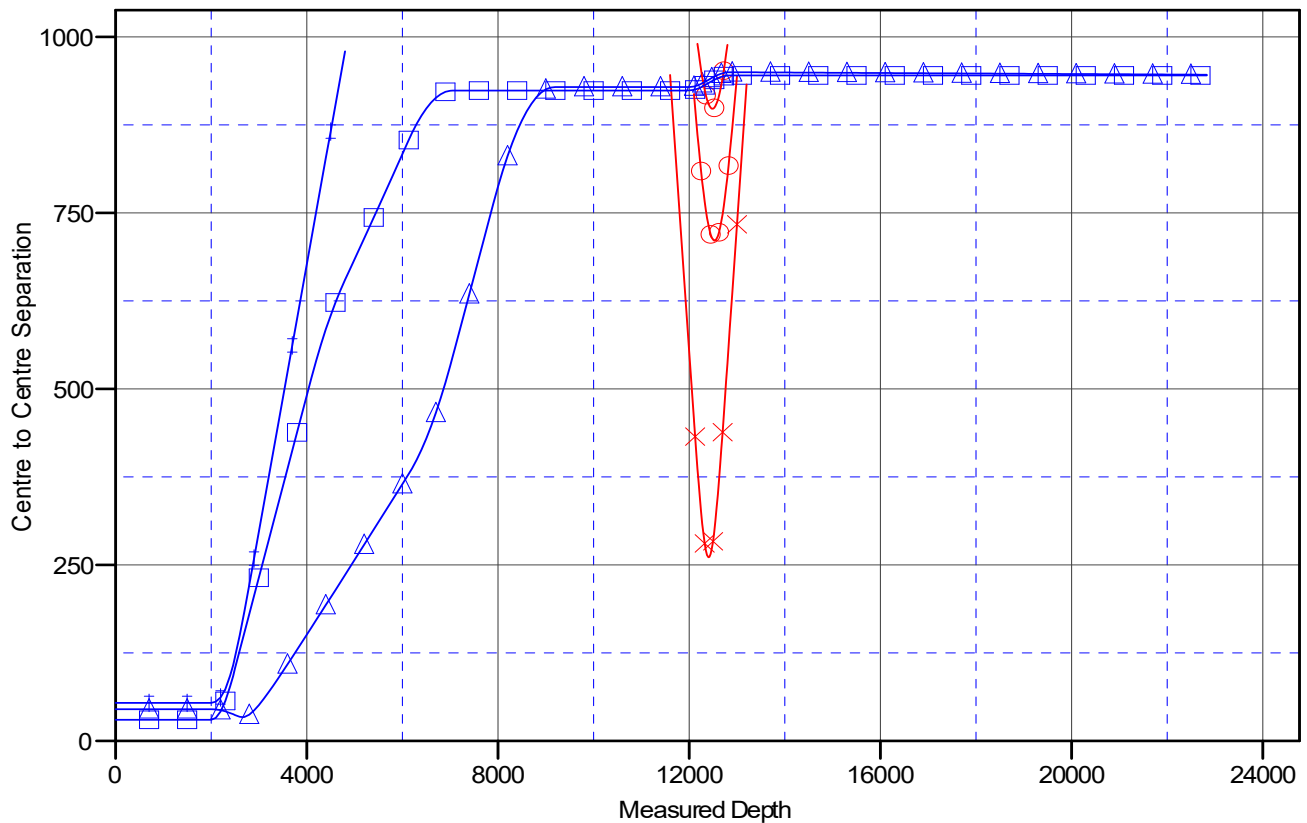
CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation

ConocoPhillips
Anticollision Report

Company:	DELAWARE BASIN EAST	Local Co-ordinate Reference:	Well PITCHBLENDE 24-25 FED COM 704H
Project:	LEA COUNTY SOUTHEAST	TVD Reference:	RKB=27ft @ 3380.1usft
Reference Site:	PITCHBLENDE 24-25 FEDERAL PROJECT	MD Reference:	RKB=27ft @ 3380.1usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	PITCHBLENDE 24-25 FED COM 704H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDT 17 Permian Prod
Reference Design:	PWP0	Offset TVD Reference:	Offset Datum

Reference Depths are relative to RKB=27ft @ 3380.1usft
Offset Depths are relative to Offset Datum
Central Meridian is 104° 20' 0.000 W

Coordinates are relative to: PITCHBLENDE 24-25 FED COM 704H
Coordinate System is US State Plane 1927 (Exact solution), New Mexico East 30
Grid Convergence at Surface is: 0.49°

Ladder Plot**LEGEND**

BANDANA FEDERAL COM 704H, OWB, AWP V0
 BANDANA FEDERAL COM 604H, OWB, AWP V0
 PITCHBLENDE 24-25 FED COM 704H, OWB, PWP0 V0
 PITCHBLENDE 24-25 FED COM 604H, OWB, PWP0 V0

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

ConocoPhillips

Anticollision Report

Company:	DELAWARE BASIN EAST	Local Co-ordinate Reference:	Well PITCHBLENDE 24-25 FED COM 704H
Project:	LEA COUNTY SOUTHEAST	TVD Reference:	RKB=27ft @ 3380.1usft
Reference Site:	PITCHBLENDE 24-25 FEDERAL PROJECT	MD Reference:	RKB=27ft @ 3380.1usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	PITCHBLENDE 24-25 FED COM 704H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDT 17 Permian Prod
Reference Design:	PWP0	Offset TVD Reference:	Offset Datum

Reference Depths are relative to RKB=27ft @ 3380.1usft

Offset Depths are relative to Offset Datum

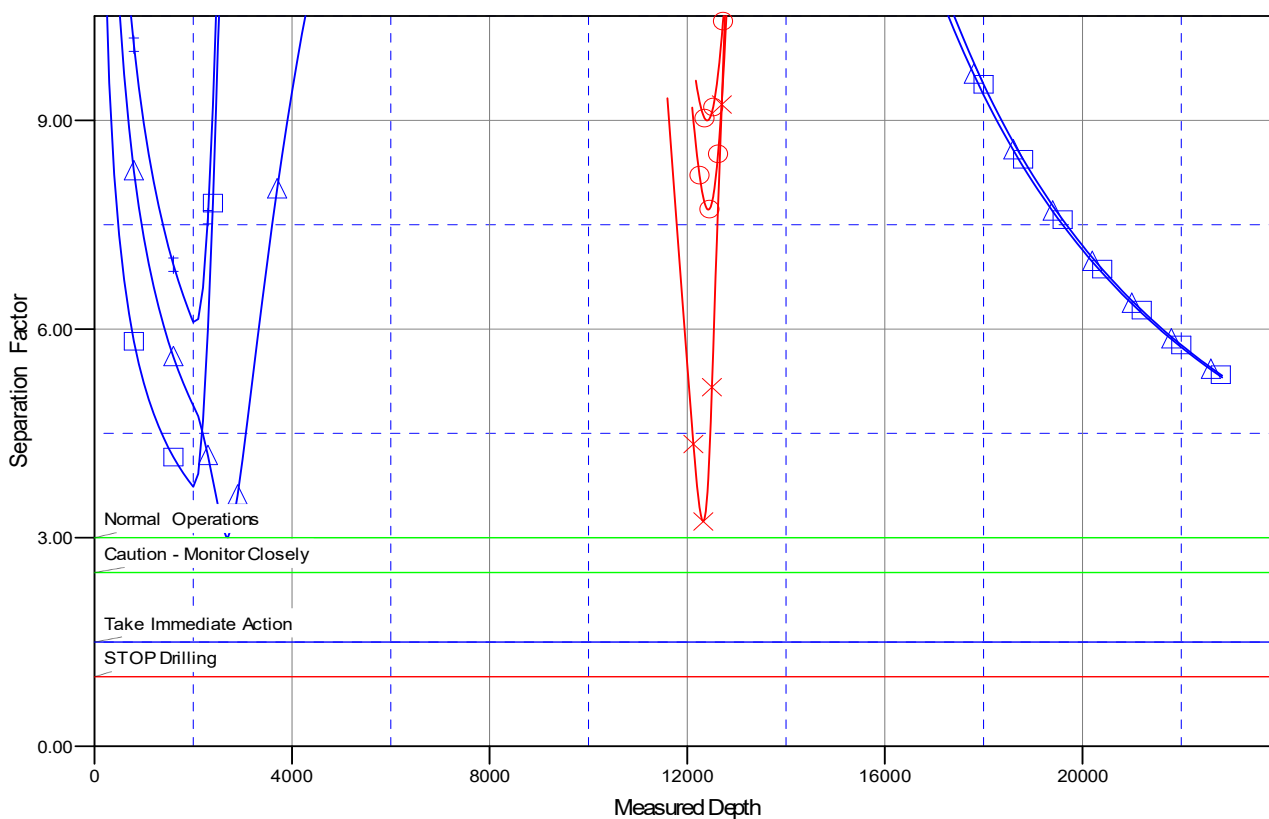
Central Meridian is 104° 20' 0.000 W

Coordinates are relative to: PITCHBLENDE 24-25 FED COM 704H

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

Grid Convergence at Surface is: 0.49°

Separation Factor Plot



LEGEND

● BANDANA FEDERAL COM 703H, OWB, AWP V0
 ✕ BANDANA FEDERAL COM 604H, OWB, AWP V0
 ■ PITCHBLENDE 24-25 FED COM 703H, OWB, PWP0 V0
○ BANDANA FEDERAL COM 703H, OWB, AWP V0
 ▲ PITCHBLENDE 24-25 FED COM 604H, OWB, PWP0 V0
 □ PITCHBLENDE 24-25 FED COM 603H, OWB, PWP0 V0

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

DELAWARE BASIN EAST

LEA COUNTY SOUTHEAST

PITCHBLEND 24-25 FEDERAL PROJECT

PITCHBLEND 24-25 FED COM 704H

OWB

Plan: PWP0

Standard Planning Report

19 December, 2024

ConocoPhillips
Planning Report

Database:	EDT 17 Permian Prod	Local Co-ordinate Reference:	Well PITCHBLENDE 24-25 FED COM 704H
Company:	DELAWARE BASIN EAST	TVD Reference:	RKB=27ft @ 3380.1usft
Project:	LEA COUNTY SOUTHEAST	MD Reference:	RKB=27ft @ 3380.1usft
Site:	PITCHBLENDE 24-25 FEDERAL PROJECT	North Reference:	Grid
Well:	PITCHBLENDE 24-25 FED COM 704H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OWB		
Design:	PWP0		

Project	LEA COUNTY SOUTHEAST		
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		PITCHBLENDE 24-25 FEDERAL PROJECT			
Site Position:		Northing:	409,683.59 usft	Latitude:	32° 7' 23.035 N
From:	Map	Easting:	781,763.86 usft	Longitude:	103° 25' 23.524 W
Position Uncertainty:	0.0 usft	Slot Radius:	13-3/16 "		

Well	PITCHBLENDE 24-25 FED COM 704H					
Well Position	+N/-S	0.0 usft	Northing:	409,437.50 usft	Latitude:	32° 7' 20.505 N
	+E/-W	0.0 usft	Easting:	782,897.50 usft	Longitude:	103° 25' 10.367 W
Position Uncertainty		0.0 usft	Wellhead Elevation:	usft	Ground Level:	3,353.1 usft
Grid Convergence:		0.49 °				

Wellbore	OWB				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	BGGM2024	10/1/2025	6.04	59.62	47,113.87534816

Design	PWP0				
Audit Notes:					
Version:		Phase:	PLAN	Tie On Depth:	0.0
Vertical Section:		Depth From (TVD) (usft)	+N/-S (usft)	+E/-W (usft)	Direction (°)
		0.0	0.0	0.0	183.26

Plan Survey Tool Program		Date	12/19/2024		
Depth From (usft)	Depth To (usft)	Survey (Wellbore)	Tool Name	Remarks	
1	0.0	2,000.0 PWP0 (OWB)	r.5 SDI_KPR_WL_NS-CT SDI Keeper Wireline Gyrocomp		
2	2,000.0	12,100.7 PWP0 (OWB)	r.5 MWD+IFR1+SAG+FDIR ISCWSA MWD + IFR1 + SAG		
3	12,100.7	22,829.4 PWP0 (OWB)	r.5 MWD+IFR1+SAG+FDIR ISCWSA MWD + IFR1 + SAG		

ConocoPhillips

Planning Report

Database:	EDT 17 Permian Prod	Local Co-ordinate Reference:	Well PITCHBLENDE 24-25 FED COM 704H
Company:	DELAWARE BASIN EAST	TVD Reference:	RKB=27ft @ 3380.1usft
Project:	LEA COUNTY SOUTHEAST	MD Reference:	RKB=27ft @ 3380.1usft
Site:	PITCHBLENDE 24-25 FEDERAL PROJECT	North Reference:	Grid
Well:	PITCHBLENDE 24-25 FED COM 704H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OWB		
Design:	PWP0		

Plan Sections										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	TFO (°)	Target
0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.00	0.00	
2,000.0	0.00	0.00	2,000.0	0.0	0.0	0.00	0.00	0.00	0.00	
2,460.1	9.20	286.61	2,458.1	10.5	-35.3	2.00	2.00	0.00	286.61	
6,133.0	9.20	286.61	6,083.7	178.4	-598.2	0.00	0.00	0.00	0.00	
7,053.2	0.00	0.00	7,000.0	199.5	-668.9	1.00	-1.00	0.00	180.00	
12,100.7	0.00	0.00	12,047.5	199.5	-668.9	0.00	0.00	0.00	0.00	
12,850.7	90.00	179.53	12,525.0	-277.9	-664.9	12.00	12.00	23.94	179.53	
22,829.4	90.00	179.53	12,525.0	-10,256.3	-582.9	0.00	0.00	0.00	0.00	

ConocoPhillips

Planning Report

Database:	EDT 17 Permian Prod	Local Co-ordinate Reference:	Well PITCHBLENDE 24-25 FED COM 704H
Company:	DELAWARE BASIN EAST	TVD Reference:	RKB=27ft @ 3380.1usft
Project:	LEA COUNTY SOUTHEAST	MD Reference:	RKB=27ft @ 3380.1usft
Site:	PITCHBLENDE 24-25 FEDERAL PROJECT	North Reference:	Grid
Well:	PITCHBLENDE 24-25 FED COM 704H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OWB		
Design:	PWP0		

Planned Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
0.0	0.00	0.00	0.0	0.0	0.0	0.0	0.00	0.00	0.00
100.0	0.00	0.00	100.0	0.0	0.0	0.0	0.00	0.00	0.00
200.0	0.00	0.00	200.0	0.0	0.0	0.0	0.00	0.00	0.00
300.0	0.00	0.00	300.0	0.0	0.0	0.0	0.00	0.00	0.00
400.0	0.00	0.00	400.0	0.0	0.0	0.0	0.00	0.00	0.00
500.0	0.00	0.00	500.0	0.0	0.0	0.0	0.00	0.00	0.00
600.0	0.00	0.00	600.0	0.0	0.0	0.0	0.00	0.00	0.00
700.0	0.00	0.00	700.0	0.0	0.0	0.0	0.00	0.00	0.00
800.0	0.00	0.00	800.0	0.0	0.0	0.0	0.00	0.00	0.00
900.0	0.00	0.00	900.0	0.0	0.0	0.0	0.00	0.00	0.00
1,000.0	0.00	0.00	1,000.0	0.0	0.0	0.0	0.00	0.00	0.00
1,100.0	0.00	0.00	1,100.0	0.0	0.0	0.0	0.00	0.00	0.00
1,200.0	0.00	0.00	1,200.0	0.0	0.0	0.0	0.00	0.00	0.00
1,300.0	0.00	0.00	1,300.0	0.0	0.0	0.0	0.00	0.00	0.00
1,400.0	0.00	0.00	1,400.0	0.0	0.0	0.0	0.00	0.00	0.00
1,500.0	0.00	0.00	1,500.0	0.0	0.0	0.0	0.00	0.00	0.00
1,600.0	0.00	0.00	1,600.0	0.0	0.0	0.0	0.00	0.00	0.00
1,700.0	0.00	0.00	1,700.0	0.0	0.0	0.0	0.00	0.00	0.00
1,800.0	0.00	0.00	1,800.0	0.0	0.0	0.0	0.00	0.00	0.00
1,900.0	0.00	0.00	1,900.0	0.0	0.0	0.0	0.00	0.00	0.00
2,000.0	0.00	0.00	2,000.0	0.0	0.0	0.0	0.00	0.00	0.00
2,100.0	2.00	286.61	2,100.0	0.5	-1.7	-0.4	2.00	2.00	0.00
2,200.0	4.00	286.61	2,199.8	2.0	-6.7	-1.6	2.00	2.00	0.00
2,300.0	6.00	286.61	2,299.5	4.5	-15.0	-3.6	2.00	2.00	0.00
2,400.0	8.00	286.61	2,398.7	8.0	-26.7	-6.4	2.00	2.00	0.00
2,460.1	9.20	286.61	2,458.1	10.5	-35.3	-8.5	2.00	2.00	0.00
2,500.0	9.20	286.61	2,497.5	12.4	-41.4	-10.0	0.00	0.00	0.00
2,600.0	9.20	286.61	2,596.2	16.9	-56.8	-13.7	0.00	0.00	0.00
2,700.0	9.20	286.61	2,694.9	21.5	-72.1	-17.4	0.00	0.00	0.00
2,800.0	9.20	286.61	2,793.6	26.1	-87.4	-21.1	0.00	0.00	0.00
2,900.0	9.20	286.61	2,892.4	30.6	-102.7	-24.8	0.00	0.00	0.00
3,000.0	9.20	286.61	2,991.1	35.2	-118.1	-28.5	0.00	0.00	0.00
3,100.0	9.20	286.61	3,089.8	39.8	-133.4	-32.1	0.00	0.00	0.00
3,200.0	9.20	286.61	3,188.5	44.4	-148.7	-35.8	0.00	0.00	0.00
3,300.0	9.20	286.61	3,287.2	48.9	-164.0	-39.5	0.00	0.00	0.00
3,400.0	9.20	286.61	3,385.9	53.5	-179.4	-43.2	0.00	0.00	0.00
3,500.0	9.20	286.61	3,484.6	58.1	-194.7	-46.9	0.00	0.00	0.00
3,600.0	9.20	286.61	3,583.4	62.6	-210.0	-50.6	0.00	0.00	0.00
3,700.0	9.20	286.61	3,682.1	67.2	-225.3	-54.3	0.00	0.00	0.00
3,800.0	9.20	286.61	3,780.8	71.8	-240.7	-58.0	0.00	0.00	0.00
3,900.0	9.20	286.61	3,879.5	76.4	-256.0	-61.7	0.00	0.00	0.00
4,000.0	9.20	286.61	3,978.2	80.9	-271.3	-65.4	0.00	0.00	0.00
4,100.0	9.20	286.61	4,076.9	85.5	-286.6	-69.1	0.00	0.00	0.00
4,200.0	9.20	286.61	4,175.6	90.1	-302.0	-72.8	0.00	0.00	0.00
4,300.0	9.20	286.61	4,274.3	94.6	-317.3	-76.5	0.00	0.00	0.00
4,400.0	9.20	286.61	4,373.1	99.2	-332.6	-80.2	0.00	0.00	0.00
4,500.0	9.20	286.61	4,471.8	103.8	-347.9	-83.9	0.00	0.00	0.00
4,600.0	9.20	286.61	4,570.5	108.4	-363.3	-87.5	0.00	0.00	0.00
4,700.0	9.20	286.61	4,669.2	112.9	-378.6	-91.2	0.00	0.00	0.00
4,800.0	9.20	286.61	4,767.9	117.5	-393.9	-94.9	0.00	0.00	0.00
4,900.0	9.20	286.61	4,866.6	122.1	-409.2	-98.6	0.00	0.00	0.00
5,000.0	9.20	286.61	4,965.3	126.6	-424.6	-102.3	0.00	0.00	0.00
5,100.0	9.20	286.61	5,064.0	131.2	-439.9	-106.0	0.00	0.00	0.00
5,200.0	9.20	286.61	5,162.8	135.8	-455.2	-109.7	0.00	0.00	0.00

ConocoPhillips

Planning Report

Database:	EDT 17 Permian Prod	Local Co-ordinate Reference:	Well PITCHBLENDE 24-25 FED COM 704H
Company:	DELAWARE BASIN EAST	TVD Reference:	RKB=27ft @ 3380.1usft
Project:	LEA COUNTY SOUTHEAST	MD Reference:	RKB=27ft @ 3380.1usft
Site:	PITCHBLENDE 24-25 FEDERAL PROJECT	North Reference:	Grid
Well:	PITCHBLENDE 24-25 FED COM 704H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OWB		
Design:	PWP0		

Planned Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
5,300.0	9.20	286.61	5,261.5	140.3	-470.5	-113.4	0.00	0.00	0.00
5,400.0	9.20	286.61	5,360.2	144.9	-485.9	-117.1	0.00	0.00	0.00
5,500.0	9.20	286.61	5,458.9	149.5	-501.2	-120.8	0.00	0.00	0.00
5,600.0	9.20	286.61	5,557.6	154.1	-516.5	-124.5	0.00	0.00	0.00
5,700.0	9.20	286.61	5,656.3	158.6	-531.8	-128.2	0.00	0.00	0.00
5,800.0	9.20	286.61	5,755.0	163.2	-547.2	-131.9	0.00	0.00	0.00
5,900.0	9.20	286.61	5,853.8	167.8	-562.5	-135.6	0.00	0.00	0.00
6,000.0	9.20	286.61	5,952.5	172.3	-577.8	-139.3	0.00	0.00	0.00
6,100.0	9.20	286.61	6,051.2	176.9	-593.1	-143.0	0.00	0.00	0.00
6,133.0	9.20	286.61	6,083.7	178.4	-598.2	-144.2	0.00	0.00	0.00
6,200.0	8.53	286.61	6,150.0	181.4	-608.1	-146.6	1.00	-1.00	0.00
6,300.0	7.53	286.61	6,249.0	185.4	-621.5	-149.8	1.00	-1.00	0.00
6,400.0	6.53	286.61	6,348.2	188.9	-633.2	-152.6	1.00	-1.00	0.00
6,500.0	5.53	286.61	6,447.7	191.9	-643.3	-155.0	1.00	-1.00	0.00
6,600.0	4.53	286.61	6,547.3	194.4	-651.7	-157.1	1.00	-1.00	0.00
6,700.0	3.53	286.61	6,647.0	196.4	-658.4	-158.7	1.00	-1.00	0.00
6,800.0	2.53	286.61	6,746.9	197.9	-663.5	-159.9	1.00	-1.00	0.00
6,900.0	1.53	286.61	6,846.8	198.9	-666.9	-160.7	1.00	-1.00	0.00
7,000.0	0.53	286.61	6,946.8	199.4	-668.6	-161.1	1.00	-1.00	0.00
7,053.2	0.00	0.00	7,000.0	199.5	-668.9	-161.2	1.00	-1.00	0.00
7,100.0	0.00	0.00	7,046.8	199.5	-668.9	-161.2	0.00	0.00	0.00
7,200.0	0.00	0.00	7,146.8	199.5	-668.9	-161.2	0.00	0.00	0.00
7,300.0	0.00	0.00	7,246.8	199.5	-668.9	-161.2	0.00	0.00	0.00
7,400.0	0.00	0.00	7,346.8	199.5	-668.9	-161.2	0.00	0.00	0.00
7,500.0	0.00	0.00	7,446.8	199.5	-668.9	-161.2	0.00	0.00	0.00
7,600.0	0.00	0.00	7,546.8	199.5	-668.9	-161.2	0.00	0.00	0.00
7,700.0	0.00	0.00	7,646.8	199.5	-668.9	-161.2	0.00	0.00	0.00
7,800.0	0.00	0.00	7,746.8	199.5	-668.9	-161.2	0.00	0.00	0.00
7,900.0	0.00	0.00	7,846.8	199.5	-668.9	-161.2	0.00	0.00	0.00
8,000.0	0.00	0.00	7,946.8	199.5	-668.9	-161.2	0.00	0.00	0.00
8,100.0	0.00	0.00	8,046.8	199.5	-668.9	-161.2	0.00	0.00	0.00
8,200.0	0.00	0.00	8,146.8	199.5	-668.9	-161.2	0.00	0.00	0.00
8,300.0	0.00	0.00	8,246.8	199.5	-668.9	-161.2	0.00	0.00	0.00
8,400.0	0.00	0.00	8,346.8	199.5	-668.9	-161.2	0.00	0.00	0.00
8,500.0	0.00	0.00	8,446.8	199.5	-668.9	-161.2	0.00	0.00	0.00
8,600.0	0.00	0.00	8,546.8	199.5	-668.9	-161.2	0.00	0.00	0.00
8,700.0	0.00	0.00	8,646.8	199.5	-668.9	-161.2	0.00	0.00	0.00
8,800.0	0.00	0.00	8,746.8	199.5	-668.9	-161.2	0.00	0.00	0.00
8,900.0	0.00	0.00	8,846.8	199.5	-668.9	-161.2	0.00	0.00	0.00
9,000.0	0.00	0.00	8,946.8	199.5	-668.9	-161.2	0.00	0.00	0.00
9,100.0	0.00	0.00	9,046.8	199.5	-668.9	-161.2	0.00	0.00	0.00
9,200.0	0.00	0.00	9,146.8	199.5	-668.9	-161.2	0.00	0.00	0.00
9,300.0	0.00	0.00	9,246.8	199.5	-668.9	-161.2	0.00	0.00	0.00
9,400.0	0.00	0.00	9,346.8	199.5	-668.9	-161.2	0.00	0.00	0.00
9,500.0	0.00	0.00	9,446.8	199.5	-668.9	-161.2	0.00	0.00	0.00
9,600.0	0.00	0.00	9,546.8	199.5	-668.9	-161.2	0.00	0.00	0.00
9,700.0	0.00	0.00	9,646.8	199.5	-668.9	-161.2	0.00	0.00	0.00
9,800.0	0.00	0.00	9,746.8	199.5	-668.9	-161.2	0.00	0.00	0.00
9,900.0	0.00	0.00	9,846.8	199.5	-668.9	-161.2	0.00	0.00	0.00
10,000.0	0.00	0.00	9,946.8	199.5	-668.9	-161.2	0.00	0.00	0.00
10,100.0	0.00	0.00	10,046.8	199.5	-668.9	-161.2	0.00	0.00	0.00
10,200.0	0.00	0.00	10,146.8	199.5	-668.9	-161.2	0.00	0.00	0.00
10,300.0	0.00	0.00	10,246.8	199.5	-668.9	-161.2	0.00	0.00	0.00
10,400.0	0.00	0.00	10,346.8	199.5	-668.9	-161.2	0.00	0.00	0.00

ConocoPhillips

Planning Report

Database:	EDT 17 Permian Prod	Local Co-ordinate Reference:	Well PITCHBLENDE 24-25 FED COM 704H
Company:	DELAWARE BASIN EAST	TVD Reference:	RKB=27ft @ 3380.1usft
Project:	LEA COUNTY SOUTHEAST	MD Reference:	RKB=27ft @ 3380.1usft
Site:	PITCHBLENDE 24-25 FEDERAL PROJECT	North Reference:	Grid
Well:	PITCHBLENDE 24-25 FED COM 704H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OWB		
Design:	PWP0		

Planned Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
10,500.0	0.00	0.00	10,446.8	199.5	-668.9	-161.2	0.00	0.00	0.00
10,600.0	0.00	0.00	10,546.8	199.5	-668.9	-161.2	0.00	0.00	0.00
10,700.0	0.00	0.00	10,646.8	199.5	-668.9	-161.2	0.00	0.00	0.00
10,800.0	0.00	0.00	10,746.8	199.5	-668.9	-161.2	0.00	0.00	0.00
10,900.0	0.00	0.00	10,846.8	199.5	-668.9	-161.2	0.00	0.00	0.00
11,000.0	0.00	0.00	10,946.8	199.5	-668.9	-161.2	0.00	0.00	0.00
11,100.0	0.00	0.00	11,046.8	199.5	-668.9	-161.2	0.00	0.00	0.00
11,200.0	0.00	0.00	11,146.8	199.5	-668.9	-161.2	0.00	0.00	0.00
11,300.0	0.00	0.00	11,246.8	199.5	-668.9	-161.2	0.00	0.00	0.00
11,400.0	0.00	0.00	11,346.8	199.5	-668.9	-161.2	0.00	0.00	0.00
11,500.0	0.00	0.00	11,446.8	199.5	-668.9	-161.2	0.00	0.00	0.00
11,600.0	0.00	0.00	11,546.8	199.5	-668.9	-161.2	0.00	0.00	0.00
11,700.0	0.00	0.00	11,646.8	199.5	-668.9	-161.2	0.00	0.00	0.00
11,800.0	0.00	0.00	11,746.8	199.5	-668.9	-161.2	0.00	0.00	0.00
11,900.0	0.00	0.00	11,846.8	199.5	-668.9	-161.2	0.00	0.00	0.00
12,000.0	0.00	0.00	11,946.8	199.5	-668.9	-161.2	0.00	0.00	0.00
12,100.7	0.00	0.00	12,047.5	199.5	-668.9	-161.2	0.00	0.00	0.00
12,125.0	2.91	179.53	12,071.8	198.9	-668.9	-160.6	12.00	12.00	0.00
12,150.0	5.91	179.53	12,096.7	197.0	-668.8	-158.7	12.00	12.00	0.00
12,175.0	8.91	179.53	12,121.5	193.7	-668.8	-155.4	12.00	12.00	0.00
12,200.0	11.91	179.53	12,146.1	189.2	-668.8	-150.9	12.00	12.00	0.00
12,225.0	14.91	179.53	12,170.4	183.4	-668.7	-145.2	12.00	12.00	0.00
12,250.0	17.91	179.53	12,194.4	176.4	-668.7	-138.1	12.00	12.00	0.00
12,275.0	20.91	179.53	12,218.0	168.1	-668.6	-129.8	12.00	12.00	0.00
12,300.0	23.91	179.53	12,241.1	158.5	-668.5	-120.3	12.00	12.00	0.00
12,325.0	26.91	179.53	12,263.6	147.8	-668.4	-109.6	12.00	12.00	0.00
12,350.0	29.91	179.53	12,285.6	135.9	-668.3	-97.7	12.00	12.00	0.00
12,375.0	32.91	179.53	12,307.0	122.9	-668.2	-84.7	12.00	12.00	0.00
12,400.0	35.91	179.53	12,327.6	108.7	-668.1	-70.6	12.00	12.00	0.00
12,425.0	38.91	179.53	12,347.4	93.6	-668.0	-55.5	12.00	12.00	0.00
12,450.0	41.91	179.53	12,366.5	77.4	-667.9	-39.3	12.00	12.00	0.00
12,475.0	44.91	179.53	12,384.6	60.2	-667.7	-22.2	12.00	12.00	0.00
12,500.0	47.91	179.53	12,401.9	42.1	-667.6	-4.1	12.00	12.00	0.00
12,525.0	50.91	179.53	12,418.1	23.1	-667.4	14.8	12.00	12.00	0.00
12,550.0	53.91	179.53	12,433.4	3.3	-667.2	34.6	12.00	12.00	0.00
12,575.0	56.91	179.53	12,447.6	-17.3	-667.1	55.1	12.00	12.00	0.00
12,600.0	59.91	179.53	12,460.7	-38.6	-666.9	76.4	12.00	12.00	0.00
12,625.0	62.91	179.53	12,472.6	-60.5	-666.7	98.3	12.00	12.00	0.00
12,650.0	65.91	179.53	12,483.4	-83.1	-666.5	120.8	12.00	12.00	0.00
12,675.0	68.91	179.53	12,493.0	-106.2	-666.4	143.8	12.00	12.00	0.00
12,700.0	71.91	179.53	12,501.4	-129.7	-666.2	167.3	12.00	12.00	0.00
12,725.0	74.91	179.53	12,508.5	-153.7	-666.0	191.2	12.00	12.00	0.00
12,750.0	77.91	179.53	12,514.4	-178.0	-665.8	215.5	12.00	12.00	0.00
12,775.0	80.91	179.53	12,519.0	-202.5	-665.6	240.0	12.00	12.00	0.00
12,800.0	83.91	179.53	12,522.3	-227.3	-665.4	264.7	12.00	12.00	0.00
12,825.0	86.91	179.53	12,524.3	-252.2	-665.1	289.6	12.00	12.00	0.00
12,850.7	90.00	179.53	12,525.0	-277.9	-664.9	315.3	12.00	12.00	0.00
12,900.0	90.00	179.53	12,525.0	-327.2	-664.5	364.4	0.00	0.00	0.00
13,000.0	90.00	179.53	12,525.0	-427.2	-663.7	464.2	0.00	0.00	0.00
13,100.0	90.00	179.53	12,525.0	-527.2	-662.9	564.0	0.00	0.00	0.00
13,200.0	90.00	179.53	12,525.0	-627.2	-662.1	663.8	0.00	0.00	0.00
13,300.0	90.00	179.53	12,525.0	-727.2	-661.2	763.6	0.00	0.00	0.00
13,400.0	90.00	179.53	12,525.0	-827.2	-660.4	863.4	0.00	0.00	0.00
13,500.0	90.00	179.53	12,525.0	-927.2	-659.6	963.2	0.00	0.00	0.00

ConocoPhillips

Planning Report

Database:	EDT 17 Permian Prod	Local Co-ordinate Reference:	Well PITCHBLENDE 24-25 FED COM 704H
Company:	DELAWARE BASIN EAST	TVD Reference:	RKB=27ft @ 3380.1usft
Project:	LEA COUNTY SOUTHEAST	MD Reference:	RKB=27ft @ 3380.1usft
Site:	PITCHBLENDE 24-25 FEDERAL PROJECT	North Reference:	Grid
Well:	PITCHBLENDE 24-25 FED COM 704H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OWB		
Design:	PWP0		

Planned Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
13,600.0	90.00	179.53	12,525.0	-1,027.2	-658.8	1,062.9	0.00	0.00	0.00
13,700.0	90.00	179.53	12,525.0	-1,127.2	-658.0	1,162.7	0.00	0.00	0.00
13,800.0	90.00	179.53	12,525.0	-1,227.2	-657.1	1,262.5	0.00	0.00	0.00
13,900.0	90.00	179.53	12,525.0	-1,327.2	-656.3	1,362.3	0.00	0.00	0.00
14,000.0	90.00	179.53	12,525.0	-1,427.2	-655.5	1,462.1	0.00	0.00	0.00
14,100.0	90.00	179.53	12,525.0	-1,527.2	-654.7	1,561.9	0.00	0.00	0.00
14,200.0	90.00	179.53	12,525.0	-1,627.2	-653.9	1,661.7	0.00	0.00	0.00
14,300.0	90.00	179.53	12,525.0	-1,727.2	-653.0	1,761.5	0.00	0.00	0.00
14,400.0	90.00	179.53	12,525.0	-1,827.2	-652.2	1,861.2	0.00	0.00	0.00
14,500.0	90.00	179.53	12,525.0	-1,927.2	-651.4	1,961.0	0.00	0.00	0.00
14,600.0	90.00	179.53	12,525.0	-2,027.2	-650.6	2,060.8	0.00	0.00	0.00
14,700.0	90.00	179.53	12,525.0	-2,127.2	-649.7	2,160.6	0.00	0.00	0.00
14,800.0	90.00	179.53	12,525.0	-2,227.2	-648.9	2,260.4	0.00	0.00	0.00
14,900.0	90.00	179.53	12,525.0	-2,327.1	-648.1	2,360.2	0.00	0.00	0.00
15,000.0	90.00	179.53	12,525.0	-2,427.1	-647.3	2,460.0	0.00	0.00	0.00
15,100.0	90.00	179.53	12,525.0	-2,527.1	-646.5	2,559.8	0.00	0.00	0.00
15,200.0	90.00	179.53	12,525.0	-2,627.1	-645.6	2,659.6	0.00	0.00	0.00
15,300.0	90.00	179.53	12,525.0	-2,727.1	-644.8	2,759.3	0.00	0.00	0.00
15,400.0	90.00	179.53	12,525.0	-2,827.1	-644.0	2,859.1	0.00	0.00	0.00
15,500.0	90.00	179.53	12,525.0	-2,927.1	-643.2	2,958.9	0.00	0.00	0.00
15,600.0	90.00	179.53	12,525.0	-3,027.1	-642.3	3,058.7	0.00	0.00	0.00
15,700.0	90.00	179.53	12,525.0	-3,127.1	-641.5	3,158.5	0.00	0.00	0.00
15,800.0	90.00	179.53	12,525.0	-3,227.1	-640.7	3,258.3	0.00	0.00	0.00
15,900.0	90.00	179.53	12,525.0	-3,327.1	-639.9	3,358.1	0.00	0.00	0.00
16,000.0	90.00	179.53	12,525.0	-3,427.1	-639.1	3,457.9	0.00	0.00	0.00
16,100.0	90.00	179.53	12,525.0	-3,527.1	-638.2	3,557.7	0.00	0.00	0.00
16,200.0	90.00	179.53	12,525.0	-3,627.1	-637.4	3,657.4	0.00	0.00	0.00
16,300.0	90.00	179.53	12,525.0	-3,727.1	-636.6	3,757.2	0.00	0.00	0.00
16,400.0	90.00	179.53	12,525.0	-3,827.1	-635.8	3,857.0	0.00	0.00	0.00
16,500.0	90.00	179.53	12,525.0	-3,927.1	-635.0	3,956.8	0.00	0.00	0.00
16,600.0	90.00	179.53	12,525.0	-4,027.1	-634.1	4,056.6	0.00	0.00	0.00
16,700.0	90.00	179.53	12,525.0	-4,127.1	-633.3	4,156.4	0.00	0.00	0.00
16,800.0	90.00	179.53	12,525.0	-4,227.1	-632.5	4,256.2	0.00	0.00	0.00
16,900.0	90.00	179.53	12,525.0	-4,327.1	-631.7	4,356.0	0.00	0.00	0.00
17,000.0	90.00	179.53	12,525.0	-4,427.1	-630.8	4,455.8	0.00	0.00	0.00
17,100.0	90.00	179.53	12,525.0	-4,527.1	-630.0	4,555.5	0.00	0.00	0.00
17,200.0	90.00	179.53	12,525.0	-4,627.1	-629.2	4,655.3	0.00	0.00	0.00
17,300.0	90.00	179.53	12,525.0	-4,727.1	-628.4	4,755.1	0.00	0.00	0.00
17,400.0	90.00	179.53	12,525.0	-4,827.1	-627.6	4,854.9	0.00	0.00	0.00
17,500.0	90.00	179.53	12,525.0	-4,927.1	-626.7	4,954.7	0.00	0.00	0.00
17,600.0	90.00	179.53	12,525.0	-5,027.1	-625.9	5,054.5	0.00	0.00	0.00
17,700.0	90.00	179.53	12,525.0	-5,127.1	-625.1	5,154.3	0.00	0.00	0.00
17,800.0	90.00	179.53	12,525.0	-5,227.0	-624.3	5,254.1	0.00	0.00	0.00
17,900.0	90.00	179.53	12,525.0	-5,327.0	-623.5	5,353.9	0.00	0.00	0.00
18,000.0	90.00	179.53	12,525.0	-5,427.0	-622.6	5,453.6	0.00	0.00	0.00
18,100.0	90.00	179.53	12,525.0	-5,527.0	-621.8	5,553.4	0.00	0.00	0.00
18,200.0	90.00	179.53	12,525.0	-5,627.0	-621.0	5,653.2	0.00	0.00	0.00
18,300.0	90.00	179.53	12,525.0	-5,727.0	-620.2	5,753.0	0.00	0.00	0.00
18,400.0	90.00	179.53	12,525.0	-5,827.0	-619.3	5,852.8	0.00	0.00	0.00
18,500.0	90.00	179.53	12,525.0	-5,927.0	-618.5	5,952.6	0.00	0.00	0.00
18,600.0	90.00	179.53	12,525.0	-6,027.0	-617.7	6,052.4	0.00	0.00	0.00
18,700.0	90.00	179.53	12,525.0	-6,127.0	-616.9	6,152.2	0.00	0.00	0.00
18,800.0	90.00	179.53	12,525.0	-6,227.0	-616.1	6,251.9	0.00	0.00	0.00
18,900.0	90.00	179.53	12,525.0	-6,327.0	-615.2	6,351.7	0.00	0.00	0.00

ConocoPhillips
Planning Report

Database:	EDT 17 Permian Prod	Local Co-ordinate Reference:	Well PITCHBLENDE 24-25 FED COM 704H
Company:	DELAWARE BASIN EAST	TVD Reference:	RKB=27ft @ 3380.1usft
Project:	LEA COUNTY SOUTHEAST	MD Reference:	RKB=27ft @ 3380.1usft
Site:	PITCHBLENDE 24-25 FEDERAL PROJECT	North Reference:	Grid
Well:	PITCHBLENDE 24-25 FED COM 704H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OWB		
Design:	PWP0		

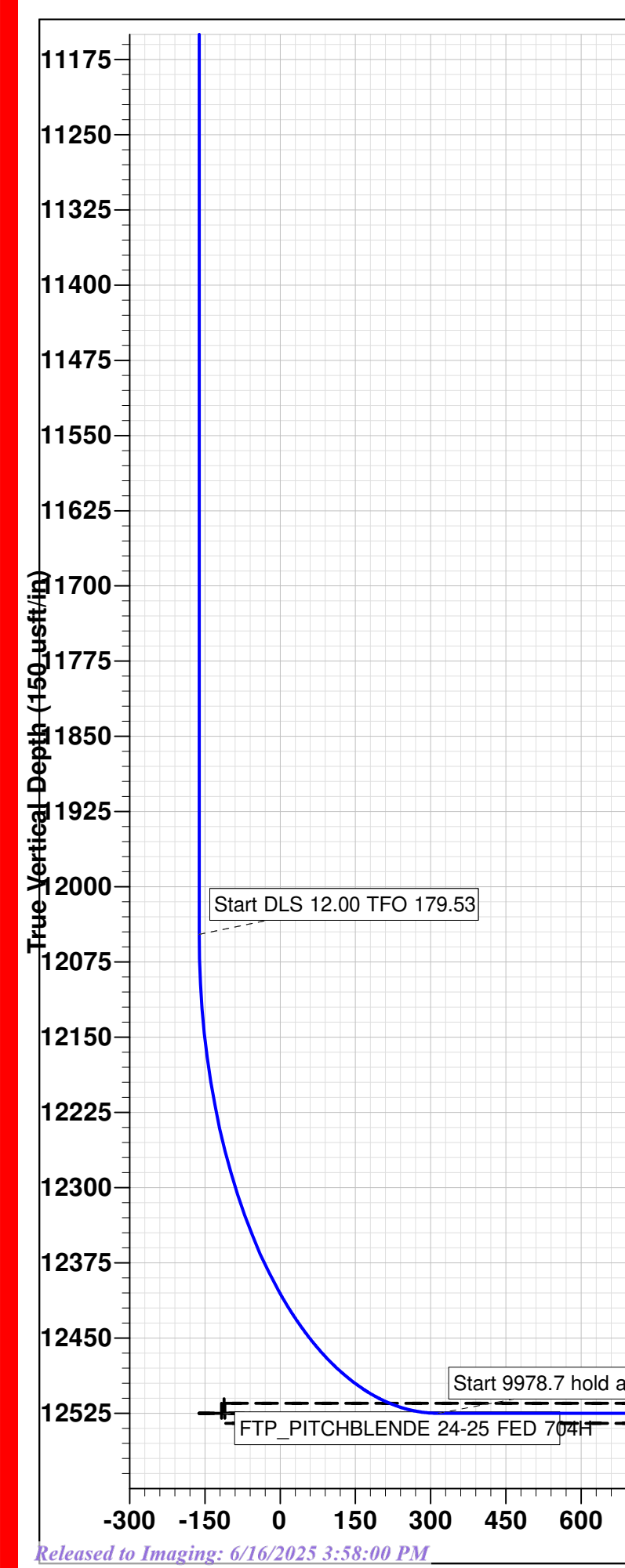
Planned Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
19,000.0	90.00	179.53	12,525.0	-6,427.0	-614.4	6,451.5	0.00	0.00	0.00
19,100.0	90.00	179.53	12,525.0	-6,527.0	-613.6	6,551.3	0.00	0.00	0.00
19,200.0	90.00	179.53	12,525.0	-6,627.0	-612.8	6,651.1	0.00	0.00	0.00
19,300.0	90.00	179.53	12,525.0	-6,727.0	-611.9	6,750.9	0.00	0.00	0.00
19,400.0	90.00	179.53	12,525.0	-6,827.0	-611.1	6,850.7	0.00	0.00	0.00
19,500.0	90.00	179.53	12,525.0	-6,927.0	-610.3	6,950.5	0.00	0.00	0.00
19,600.0	90.00	179.53	12,525.0	-7,027.0	-609.5	7,050.3	0.00	0.00	0.00
19,700.0	90.00	179.53	12,525.0	-7,127.0	-608.7	7,150.0	0.00	0.00	0.00
19,800.0	90.00	179.53	12,525.0	-7,227.0	-607.8	7,249.8	0.00	0.00	0.00
19,900.0	90.00	179.53	12,525.0	-7,327.0	-607.0	7,349.6	0.00	0.00	0.00
20,000.0	90.00	179.53	12,525.0	-7,427.0	-606.2	7,449.4	0.00	0.00	0.00
20,100.0	90.00	179.53	12,525.0	-7,527.0	-605.4	7,549.2	0.00	0.00	0.00
20,200.0	90.00	179.53	12,525.0	-7,627.0	-604.6	7,649.0	0.00	0.00	0.00
20,300.0	90.00	179.53	12,525.0	-7,727.0	-603.7	7,748.8	0.00	0.00	0.00
20,400.0	90.00	179.53	12,525.0	-7,827.0	-602.9	7,848.6	0.00	0.00	0.00
20,500.0	90.00	179.53	12,525.0	-7,927.0	-602.1	7,948.4	0.00	0.00	0.00
20,600.0	90.00	179.53	12,525.0	-8,027.0	-601.3	8,048.1	0.00	0.00	0.00
20,700.0	90.00	179.53	12,525.0	-8,127.0	-600.4	8,147.9	0.00	0.00	0.00
20,800.0	90.00	179.53	12,525.0	-8,226.9	-599.6	8,247.7	0.00	0.00	0.00
20,900.0	90.00	179.53	12,525.0	-8,326.9	-598.8	8,347.5	0.00	0.00	0.00
21,000.0	90.00	179.53	12,525.0	-8,426.9	-598.0	8,447.3	0.00	0.00	0.00
21,100.0	90.00	179.53	12,525.0	-8,526.9	-597.2	8,547.1	0.00	0.00	0.00
21,200.0	90.00	179.53	12,525.0	-8,626.9	-596.3	8,646.9	0.00	0.00	0.00
21,300.0	90.00	179.53	12,525.0	-8,726.9	-595.5	8,746.7	0.00	0.00	0.00
21,400.0	90.00	179.53	12,525.0	-8,826.9	-594.7	8,846.5	0.00	0.00	0.00
21,500.0	90.00	179.53	12,525.0	-8,926.9	-593.9	8,946.2	0.00	0.00	0.00
21,600.0	90.00	179.53	12,525.0	-9,026.9	-593.0	9,046.0	0.00	0.00	0.00
21,700.0	90.00	179.53	12,525.0	-9,126.9	-592.2	9,145.8	0.00	0.00	0.00
21,800.0	90.00	179.53	12,525.0	-9,226.9	-591.4	9,245.6	0.00	0.00	0.00
21,900.0	90.00	179.53	12,525.0	-9,326.9	-590.6	9,345.4	0.00	0.00	0.00
22,000.0	90.00	179.53	12,525.0	-9,426.9	-589.8	9,445.2	0.00	0.00	0.00
22,100.0	90.00	179.53	12,525.0	-9,526.9	-588.9	9,545.0	0.00	0.00	0.00
22,200.0	90.00	179.53	12,525.0	-9,626.9	-588.1	9,644.8	0.00	0.00	0.00
22,300.0	90.00	179.53	12,525.0	-9,726.9	-587.3	9,744.6	0.00	0.00	0.00
22,400.0	90.00	179.53	12,525.0	-9,826.9	-586.5	9,844.3	0.00	0.00	0.00
22,500.0	90.00	179.53	12,525.0	-9,926.9	-585.7	9,944.1	0.00	0.00	0.00
22,600.0	90.00	179.53	12,525.0	-10,026.9	-584.8	10,043.9	0.00	0.00	0.00
22,700.0	90.00	179.53	12,525.0	-10,126.9	-584.0	10,143.7	0.00	0.00	0.00
22,800.0	90.00	179.53	12,525.0	-10,226.9	-583.2	10,243.5	0.00	0.00	0.00
22,829.4	90.00	179.53	12,525.0	-10,256.3	-582.9	10,272.9	0.00	0.00	0.00

ConocoPhillips
Planning Report

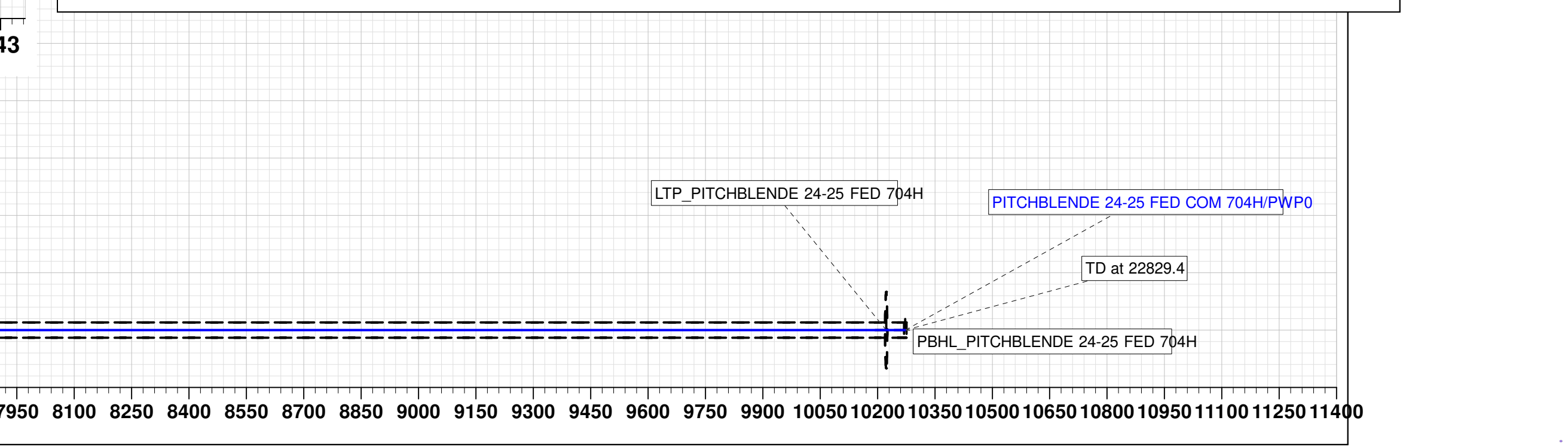
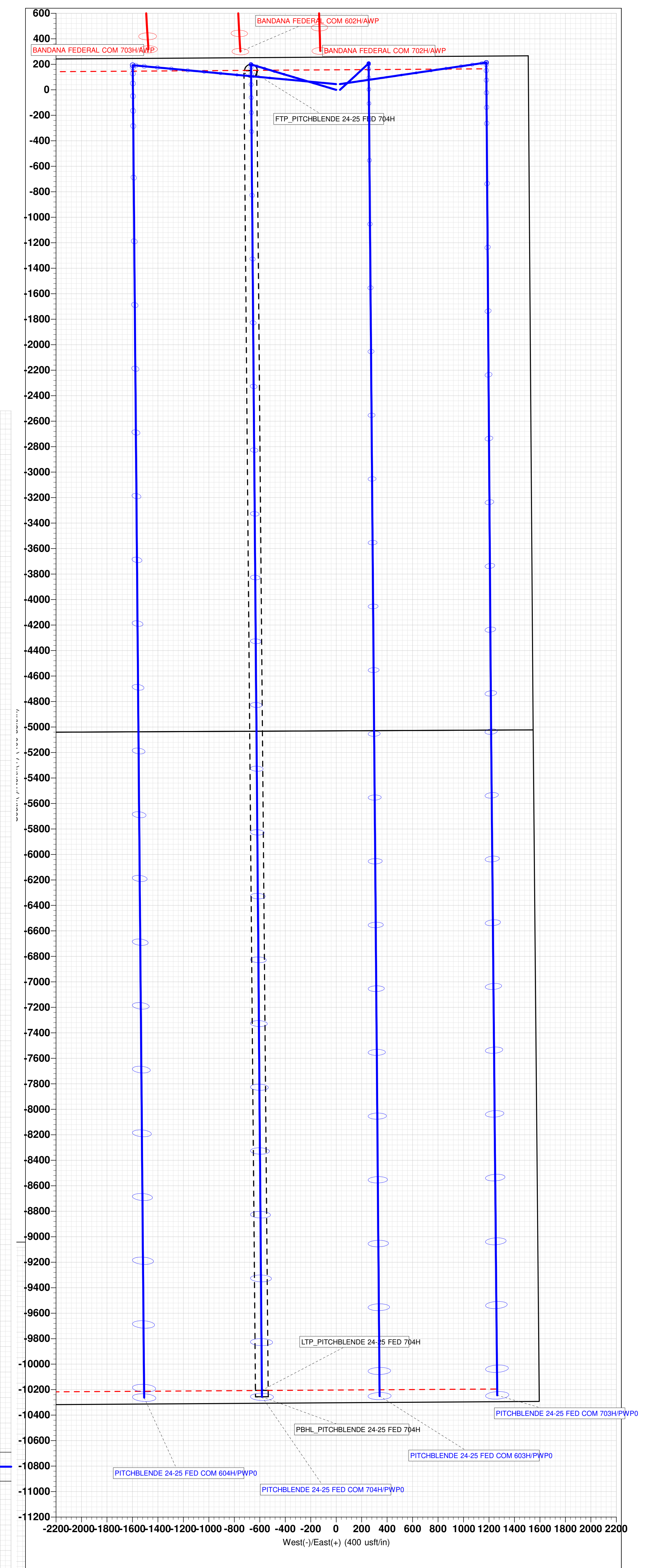
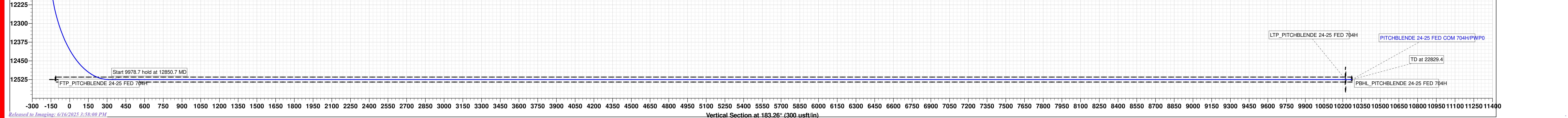
Database:	EDT 17 Permian Prod	Local Co-ordinate Reference:	Well PITCHBLENDE 24-25 FED COM 704H
Company:	DELAWARE BASIN EAST	TVD Reference:	RKB=27ft @ 3380.1usft
Project:	LEA COUNTY SOUTHEAST	MD Reference:	RKB=27ft @ 3380.1usft
Site:	PITCHBLENDE 24-25 FEDERAL PROJECT	North Reference:	Grid
Well:	PITCHBLENDE 24-25 FED COM 704H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OWB		
Design:	PWP0		

Design Targets									
Target Name									
- hit/miss target	Dip Angle	Dip Dir.	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
- Shape	(°)	(°)	(usft)	(usft)	(usft)	(usft)	(usft)		
FTP_PITCHBLENDE 24	0.00	0.00	12,525.0	149.8	-669.3	409,587.30	782,228.20	32° 7' 22.043 N	103° 25' 18.135 W
- plan misses target center by 163.6usft at 12500.0usft MD (12401.9 TVD, 42.1 N, -667.6 E)									
- Circle (radius 50.0)									
LTP_PITCHBLENDE 24	90.00	0.00	12,525.0	-10,206.0	-583.8	399,231.50	782,313.70	32° 5' 39.562 N	103° 25' 18.159 W
- plan misses target center by 0.4usft at 22779.1usft MD (12525.0 TVD, -10206.0 N, -583.4 E)									
- Circle (radius 50.0)									
PBHL_PITCHBLENDE 24	0.00	359.50	12,525.0	-10,256.0	-583.3	399,181.50	782,314.20	32° 5' 39.067 N	103° 25' 18.158 W
- plan misses target center by 0.4usft at 22829.1usft MD (12525.0 TVD, -10256.0 N, -582.9 E)									
- Rectangle (sides W100.0 H10,408.3 D20.0)									

Plan Annotations				
Measured Depth	Vertical Depth	Local Coordinates		Comment
(usft)	(usft)	+N/-S (usft)	+E/-W (usft)	
2,000.0	2,000.0	0.0	0.0	Start Build 2.00
2,460.1	2,458.1	10.5	-35.3	Start 3672.8 hold at 2460.1 MD
6,133.0	6,083.7	178.4	-598.2	Start Drop -1.00
7,053.2	7,000.0	199.5	-668.9	Start 5047.5 hold at 7053.2 MD
12,100.7	12,047.5	199.5	-668.9	Start DLS 12.00 TFO 179.53
12,850.7	12,525.0	-277.9	-664.9	Start 9978.7 hold at 12850.7 MD
22,829.4	12,525.0	-10,256.3	-582.9	TD at 22829.4



MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	VSection
0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.00
2000.0	0.00	0.00	2000.0	0.0	0.0	0.00	0.00	0.00
2460.1	92.0	286.61	2458.1	10.5	-35.3	2.00	286.61	-8.5
6193.0	92.0	286.61	6083.7	178.4	-593.2	0.00	0.00	-144.2
7053.2	90.0	0.00	7000.0	199.5	-668.9	1.00	180.00	-161.21
12100.7	90.0	0.00	12047.5	199.5	-668.9	1.00	0.00	-161.21
12850.7	90.00	179.53	12525.0	-277.9	-582.9	12.00	179.53	315.35
22829.4	90.00	179.53	12525.0	-10265.3	-684.9	0.00	0.00	10272.9





ConocoPhillips Pre-Drill Geological Prognosis			
Pitchblend Horizontal Project			
Wireline Evaluation:	CH Logs Only	Chicken:	No
Coring and Testing:	None	Potash:	No
Mudlogging:	Log out from int csg to TD w 2 man crew	Lizard:	No
Land Obligations:	None	CCA:	No
		Pad KB:	3380.8
County:	Lea	Pad GL:	3353.3

Well name:	Pitchblend 24-25 Fed Com 704H	Est. TVD:	12639
Target Formation:	Wolfcamp A	Est. MD:	23050

Surface	Lithology	X	Y	Z	TVD
Rustler	Alluvium	782228.0	409587	2517	864
TOS	Salt	782228.0	409587	2081	1300
BOS	Anhydrite	782228.0	409587	-1715	5096
LMAR (T/ Delaware)	Limestone	782228.0	409587	-1985	5365
BLCN	Sandstone	782228.0	409587	-2023	5403
CYCN	Sandstone	782228.0	409587	-2989	6370
BYCN	Sandstone	782228.0	409587	-4613	7994
Bone Spring	Shale	782228.0	409587	-5931	9312
BS1S	Sandstone	782228.0	409587	-7060	10441
BS1SH	Limestone	782228.0	409587	-7212	10592
BS2S	Sandstone	782228.0	409587	-7604	10984
BS3C	Limestone	782228.0	409587	-8149	11529
BS3S	Sandstone	782228.0	409587	-8702	12083
BS3S Target	Sandstone	782228.0	409587	-9034	12415
WFMP	Sandstone	782228.0	409587	-9084	12465
WFMP A	Shale	782228.0	409587	-9209	12589
WFMP A Target	Shale	782228.0	409587	-9259	12639
WFMP B	Shale	782228.0	409587	-9534	12915

ConocoPhillips - Pitchblende 24-25 Fed Com 704H

1. Geologic Formations

TVD of target	12,639' EOL	Pilot hole depth	NA
MD at TD:	22,953'	Deepest expected fresh water:	300'

Formation	Depth (TVD) from KB	Water/Mineral Bearing/ Target Zone?	Hazards*
Quaternary Fill	Surface	Water	
Rustler	864	Water	
Top of Salt	1300	Salt	
Base of Salt	5096	Salt	
Lamar	5365	Salt Water	
Bell Canyon	5403	Salt Water	
Cherry Canyon	6370	Oil/Gas	
Brushy Canyon	7994	Oil/Gas	
Bone Spring	9312	Oil/Gas	
1st Bone Spring Sand	10441	Oil/Gas	
2nd Bone Spring Sand	10984	Oil/Gas	
3rd Bone Spring Sand	12083	Oil/Gas	
Wolfcamp A	12589	Target 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	1065	10.75"	45.5	J55	BTC	4.29	1.12	14.76	16.43
9.875"	0	8200	7.625"	29.7	L80-ICY	BTC	1.47	1.05	2.98	3.01
8.750"	8200	12125	7.625"	29.7	P110-ICY	W513	1.24	1.59	2.97	1.78
6.75"	0	11925	5.5"	23	P110-CY	BTC	1.88	2.09	2.66	2.66
6.75"	11925	22,953	5.5"	23	P110-CY	W441	1.77	2.09	2.51	2.28
BLM Minimum Safety Factor							1.125	1	1.6 Dry 1.8 Wet	1.6 Dry 1.8 Wet

Intermediate casing will be kept at least 1/3 full while running casing to mitigate collapse. Surface burst based on 0.7 frac gradient at the shoe with Gas Gradient 0.1 psi/ft to surface and
All casing strings will be tested in accordance with 43 CFR Part 3170 Subpart 3172

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

ConocoPhillips - Pitchblende 24-25 Fed Com 704H

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

ConocoPhillips - Pitchblende 24-25 Fed Com 704H

3. Cementing Program

Casing	# Sks	Wt. lb/ gal	Yld ft3/ sack	H ₂ O gal/sk	500# Comp. Strength (hours)	Slurry Description
Surf.	365	13.5	1.75	9	12	Lead: Class C
	187	14.8	1.34	6.34	8	Tail: Class C
Int. Stage 1	1214	11	2.54	15.33	12	Lead: Class C
	112	14.8	1.34	6.52	8	Tail: Class C
Int. Stage 2	580	12.9	1.9	10.52	24	Lead: Class C
	192	14.8	1.34	6.52	8	Tail: Class C
Prod	659	12.7	1.68	9.09	72	Lead: Class C
	1054	14.5	1.18	5.26	19	Tail: Class H

Intermediate cement job to be performed offline.

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%
Int Stg 1	0'	50%
Int Stg 2	0'	20%
Production	11,625'	35% OH in Lateral (KOP to EOL)

3b. Contingency Cementing Program

Casing	# Sks	Wt. lb/ gal	Yld ft3/ sack	H ₂ O gal/sk	500# Comp. Strength (hours)	Slurry Description
Surf.	365	13.5	1.75	9	12	Lead: Class C
	187	14.8	1.34	6.34	8	Tail: Class C
Bradenhead Stage 1	417	15.6	1.216	5.28	6	Stage 1 Lead: Class H
	134	16.2	1.123	4.6	11	Stage 1 Tail: Class H
Bradenhead Stage 2	2500	14.8	1.5	7.2	4	Bradenhead: Thixotropic Class C
	400	14.8	1.33	6.4	5	Top Out: Class C
Prod	659	12.7	1.68	9.09	72	Lead: Class C
	1054	14.5	1.18	5.26	19	Tail: Class H

If conditions dictate, an offline bradenhead cement job will be performed to ensure cement to surface.

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%
BH Stg 1	0'	50%
BH Stg 2	7,994'	121%
Production	11,625'	35% OH in Lateral (KOP to EOL)

ConocoPhillips - Pitchblende 24-25 Fed Com 704H

4. Pressure Control Equipment

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

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

BOP/BOPE will be tested by an independent service company to 250 psi low and the high pressure indicated above per 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 43 CFR part 3170 Subpart 3172. 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 - Pitchblende 24-25 Fed Com 704H

5. Mud Program

Depth		Type	Weight (ppg)	Viscosity	Water Loss
From	To				
0	Surf. Shoe	FW Gel	8.6 - 8.8	28-34	N/C
Surf csg	7-5/8" Int shoe	Brine Diesel Emulsion	8.4 - 9.4	28-34	N/C
7-5/8" Int shoe	Lateral TD	OBM	9 - 12.5	35-45	<20

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

What will be used to monitor the loss or gain of fluid?	PVT/Pason/Visual Monitoring
---	-----------------------------

6. Logging and Testing Procedures

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

Additional logs planned		Interval
N	Resistivity	Pilot Hole TD to ICP
N	Density	Pilot Hole TD to ICP
N	CBL	Production casing
Y	Mud log	Intermediate shoe to TD
N	PEX	

ConocoPhillips - Pitchblende 24-25 Fed Com 704H**7. Drilling Conditions**

Condition	Specify what type and where?
BH Pressure at deepest TVD	8220 psi at 12639' TVD
Abnormal Temperature	NO 180 Deg. F.

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

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

Hydrogen Sulfide (H₂S) monitors will be installed prior to drilling out the surface shoe. If H₂S is detected in concentrations greater than 100 ppm, the operator will comply with the provisions of Onshore Oil and Gas Order #6. If Hydrogen Sulfide is encountered, measured values and formations will be provided to the BLM.

N H₂S is present

Y H₂S Plan attached

8. Other Facets of Operation

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

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

Form 3160-5
(June 2019)UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENTFORM APPROVED
OMB No. 1004-0137
Expires: October 31, 2021**SUNDRY NOTICES AND REPORTS ON WELLS**
Do not use this form for proposals to drill or to re-enter an abandoned well. Use Form 3160-3 (APD) for such proposals.

SUBMIT IN TRIPLICATE - Other instructions on page 2		5. Lease Serial No. NMNM122624
1. Type of Well ☒ Oil Well ☐ Gas Well ☐ Other		6. If Indian, Allottee or Tribe Name
2. Name of Operator COG OPERATING LLC		7. If Unit of CA/Agreement, Name and/or No.
3a. Address 600 West Illinois Ave, Midland, TX 79701	3b. Phone No. (include area code) (432) 683-7443	8. Well Name and No. PITCHBLEND 24-25 FEDERAL COM/704H
4. Location of Well (Footage, Sec., T., R., M., or Survey Description) SEC 24/T25S/R34E/NMP		9. API Well No. 3002553945
		10. Field and Pool or Exploratory Area DOGIE DRAW/Wolfcamp
		11. Country or Parish, State LEA/NM

12. CHECK THE APPROPRIATE BOX(ES) TO INDICATE NATURE OF NOTICE, REPORT OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION				
☒ Notice of Intent	☐ Acidize	☐ Deepen	☐ Production (Start/Resume)	☐ Water Shut-Off	
☐ Subsequent Report	☐ Alter Casing	☐ Hydraulic Fracturing	☐ Reclamation	☐ Well Integrity	
☐ Final Abandonment Notice	☐ Casing Repair	☐ New Construction	☐ Recomplete	☐ Other	
	☒ Change Plans	☐ Plug and Abandon	☐ Temporarily Abandon		
	☐ Convert to Injection	☐ Plug Back	☐ Water Disposal		

13. Describe Proposed or Completed Operation: Clearly state all pertinent details, including estimated starting date of any proposed work and approximate duration thereof. If the proposal is to deepen directionally or recompleat horizontally, give subsurface locations and measured and true vertical depths of all pertinent markers and zones. Attach the Bond under which the work will be performed or provide the Bond No. on file with BLM/BIA. Required subsequent reports must be filed within 30 days following completion of the involved operations. If the operation results in a multiple completion or recompleat in a new interval, a Form 3160-4 must be filed once testing has been completed. Final Abandonment Notices must be filed only after all requirements, including reclamation, have been completed and the operator has detennined that the site is ready for final inspection.)

COG Operating LLC respectfully requests approval for the following changes to the original approved APD.

BHL Changes:

From: 50' FSL and 2625' FEL Section. 25. T25S. R34E.

To: 50' FSL and 2178' FEL Section. 25. T25S. R34E.

C102 Attached.

Dedicated Acres:

From: 1280. To: 320.

Drilling Changes:

Drilling Program, Directional Plan, AC Report and Specs Attached.

14. I hereby certify that the foregoing is true and correct. Name (Printed/Typed) MAYTE REYES / Ph: (281) 293-1000	Regulatory Analyst	
	Title	
(Electronic Submission) Signature	Date	01/15/2025

THE SPACE FOR FEDERAL OR STATE OFFICE USE

Approved by CHRISTOPHER WALLS / Ph: (575) 234-2234 / Approved	Petroleum Engineer	05/12/2025
Conditions of approval, if any, are attached. Approval of this notice 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.	Title	Date
	Office CARLSBAD	

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.

(Instructions on page 2)

GENERAL INSTRUCTIONS

This form is designed for submitting proposals to perform certain well operations and reports of such operations when completed as indicated on Federal and Indian lands pursuant to applicable Federal law and regulations. Any necessary special instructions concerning the use of this form and the number of copies to be submitted, particularly with regard to local area or regional procedures and practices, are either shown below, will be issued by or may be obtained from the local Federal office.

SPECIFIC INSTRUCTIONS

Item 4 - Locations on Federal or Indian land should be described in accordance with Federal requirements. Consult the local Federal office for specific instructions.

Item 13: Proposals to abandon a well and subsequent reports of abandonment should include such special information as is required by the local Federal office. In addition, such proposals and reports should include reasons for the abandonment; data on any former or present productive zones or other zones with present significant fluid contents not sealed off by cement or otherwise; depths (top and bottom) and method of placement of cement plugs; mud or other material placed below, between and above plugs; amount, size, method of parting of any casing, liner or tubing pulled and the depth to the top of any tubing left in the hole; method of closing top of well and date well site conditioned for final inspection looking for approval of the abandonment. If the proposal will involve **hydraulic fracturing operations**, you must comply with 43 CFR 3162.3-3, including providing information about the protection of usable water. Operators should provide the best available information about all formations containing water and their depths. This information could include data and interpretation of resistivity logs run on nearby wells. Information may also be obtained from state or tribal regulatory agencies and from local BLM offices.

NOTICES

The privacy Act of 1974 and the regulation in 43 CFR 2.48(d) provide that you be furnished the following information in connection with information required by this application.

AUTHORITY: 30 U.S.C. 181 et seq., 351 et seq., 25 U.S.C. 396; 43 CFR 3160.

PRINCIPAL PURPOSE: The information is used to: (1) Evaluate, when appropriate, approve applications, and report completion of subsequent well operations, on a Federal or Indian lease; and (2) document for administrative use, information for the management, disposal and use of National Resource lands and resources, such as: (a) evaluating the equipment and procedures to be used during a proposed subsequent well operation and reviewing the completed well operations for compliance with the approved plan; (b) requesting and granting approval to perform those actions covered by 43 CFR 3162.3-2, 3162.3-3, and 3162.3-4; (c) reporting the beginning or resumption of production, as required by 43 CFR 3162.4-1(c) and (d) analyzing future applications to drill or modify operations in light of data obtained and methods used.

ROUTINE USES: Information from the record and/or the record will be transferred to appropriate Federal, State, local or foreign agencies, when relevant to civil, criminal or regulatory investigations or prosecutions in connection with congressional inquiries or to consumer reporting agencies to facilitate collection of debts owed the Government.

EFFECT OF NOT PROVIDING THE INFORMATION: Filing of this notice and report and disclosure of the information is mandatory for those subsequent well operations specified in 43 CFR 3162.3-2, 3162.3-3, 3162.3-4.

The Paperwork Reduction Act of 1995 requires us to inform you that:

The BLM collects this information to evaluate proposed and/or completed subsequent well operations on Federal or Indian oil and gas leases.

Response to this request is mandatory.

The BLM would like you to know that you do not have to respond to this or any other Federal agency-sponsored information collection unless it displays a currently valid OMB control number.

BURDEN HOURS STATEMENT: Public reporting burden for this form is estimated to average 8 hours per response, including the time for reviewing instructions, gathering and maintaining data, and completing and reviewing the form. Direct comments regarding the burden estimate or any other aspect of this form to U.S. Department of the Interior, Bureau of Land Management (1004-0137), Bureau Information Collection Clearance Officer (WO-630), 1849 C St., N.W., Mail Stop 401 LS, Washington, D.C. 20240

Additional Information

Location of Well

0. SHL: NWN / 255 FNL / 1510 FEL / TWSP: 25S / RANGE: 34E / SECTION: 24 / LAT: 32.122488 / LONG: -103.420013 (TVD: 0 feet, MD: 0 feet)

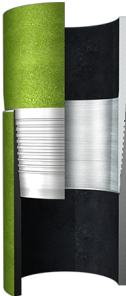
PPP: NWN / 100 FNL / 2625 FEL / TWSP: 25S / RANGE: 34E / SECTION: 24 / LAT: 32.122916 / LONG: -103.423614 (TVD: 12664 feet, MD: 12800 feet)

BHL: SWSE / 50 FSL / 2625 FEL / TWSP: 25S / RANGE: 34E / SECTION: 25 / LAT: 32.094314 / LONG: -103.423619 (TVD: 12796 feet, MD: 23111 feet)

CONFIDENTIAL



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 (29.70) in. (lb/ft)
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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TenarisHydril Wedge 441®



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

Connection Data

Geometry		Performance		Make-Up Torques	
Connection OD	5.900 in.	Tension Efficiency	90.80 %	Minimum	15,000 ft-lb
Coupling Length	8.714 in.	Joint Yield Strength	662 x1000 lb	Optimum	16,000 ft-lb
Connection ID	4.670 in.	Internal Pressure Capacity	14,530 psi	Maximum	19,200 ft-lb
Make-up Loss	3.780 in.	Compression Efficiency	90.80 %	Operation Limit Torques	
Threads per inch	3.40	Compression Strength	662 x1000 lb	Operating Torque	33,000 ft-lb
Connection OD Option	Regular	Max. Allowable Bending	79 °/100 ft	Yield Torque	39,000 ft-lb
		External Pressure Capacity	14,540 psi	Buck-On	
		Coupling Face Load	172,000 lb	Minimum	19,200 ft-lb
				Maximum	20,700 ft-lb

Notes

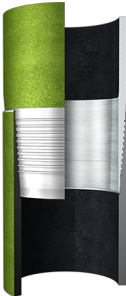
This connection is fully interchangeable with:
Wedge 441® - 5.5 in. - 0.476 in.
Connections with Dopeless® Technology are fully compatible with the same connection in its Standard version

For the latest performance data, always visit our website: www.tenaris.com

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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 (29.70) in. (lb/ft)
Connections with Dopeless® Technology are fully compatible with the same connection in its doped 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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API BTC

Coupling	Pipe Body
Grade: J55 (Casing)	Grade: J55 (Casing)
Body: Bright Green	1st Band: Bright Green
1st Band: White	2nd Band: -
2nd Band: -	3rd Band: -
3rd Band: -	4th Band: -

Outside Diameter	10.750 in.	Wall Thickness	0.400 in.	Grade	J55 (Casing)
Min. Wall Thickness	87.50 %	Pipe Body Drift	API Standard	Type	Casing
Connection OD Option	Regular				

Pipe Body Data

Geometry			Performance		
Nominal OD	10.750 in.	Drift	9.794 in.	SMYS	55,000 psi
Wall Thickness	0.400 in.	Plain End Weight	44.26 lb/ft	Min UTS	75,000 psi
Nominal Weight	45.500 lb/ft	OD Tolerance	API	Body Yield Strength	715 x1000 lb
Nominal ID	9.950 in.			Min. Internal Yield Pressure	3580 psi
				Collapse Pressure	2090 psi
				Max. Allowed Bending	23 °/100 ft

Connection Data

Geometry		Performance	
Thread per In	5	Joint Strength	796 x1000 lb
Connection OD	11.750 in.	Coupling Face Load	628 x1000 lb
Hand Tight Stand Off	1 in.	Internal Pressure Capacity	3580 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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PECOS DISTRICT DRILLING CONDITIONS OF APPROVAL

OPERATOR'S NAME:	COG OPERATING LLC
WELL NAME & NO.:	PITCHBLENDE 24-25 FED COM 704H
LOCATION:	Section 24, T.25 S., R.34 E.
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 **1065 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. The surface hole shall be **14 3/4 inch** in diameter.

- 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.

Intermediate casing must be kept fluid filled to meet BLM minimum collapse requirement.

2. The minimum required fill of cement behind the 7-5/8 inch intermediate casing is:
 - Cement to surface. If cement does not circulate see B.1.a, c-d above.
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.

Contingency:

Operator has proposed a contingency if losses are encountered, a DV tool, the depth may be adjusted as long as the cement is changed proportionally. The DV tool may be cancelled if cement circulates to surface on the first stage.

- a. First stage to DV tool: Cement to circulate. If cement does not circulate off the DV tool, contact the appropriate BLM office before proceeding with second stage cement job.
- b. Second stage above DV tool:
 - Cement to surface. If cement does not circulate, contact the appropriate BLM office.
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.

Contingency Bradenhead Squeeze

Operator has proposed to pump down 10-3/4" X 7-5/8" annulus. Operator must top out cement after the bradenhead squeeze and verify cement to surface. Operator can also check TOC with Echo-meter. CBL must be run from TD of the 7-5/8" casing to surface if confidence is lacking on the quality of the bradenhead squeeze cement job. Submit results to BLM.

Submit results to the BLM. No displacement fluid/wash out shall be utilized at the top of the cement slurry between second stage BH and top out. Operator must run one CBL per Well Pad.

If cement does not reach surface, the next casing string must come to surface.

Operator must use a limited flush fluid volume of 1 bbl following backside cementing procedures.

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

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)

Communitization Agreement

- The operator will submit a Communitization Agreement to the Santa Fe Office, 301 Dinosaur Trail Santa Fe, New Mexico 87508, at least 90 days before the anticipated date of first production from a well subject to a spacing order issued by the New Mexico Oil Conservation Division. The Communitization Agreement will include the signatures of all working interest owners in all Federal and Indian leases subject to the Communitization Agreement (i.e., operating rights owners and lessees of record), or certification that the operator has obtained the written signatures of all such owners and will make those signatures available to the BLM immediately upon request.
- The operator will submit an as-drilled survey well plat of the well completion, but are not limited to, those specified in Onshore Order 1 and 2.
- If the operator does not comply with this condition of approval, the BLM may take enforcement actions that include, but are not limited to, those specified in 43 CFR 3163.1.
- In addition, the well sign shall include the surface and bottom hole lease numbers. When the Communitization Agreement number is known, it shall also be on the sign.

(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.

Offline Cementing

Contact the BLM prior to the commencement of any offline cementing procedure.

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 5/9/2025

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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 466113

CONDITIONS

Operator: COG OPERATING LLC 600 W Illinois Ave Midland, TX 79701	OGRID: 229137
	Action Number: 466113
	Action Type: [C-103] NOI Change of Plans (C-103A)

CONDITIONS

Created By	Condition	Condition Date
matthew.gomez	Notify the OCD 24 hours prior to casing & cement.	6/16/2025
matthew.gomez	Any previous COA's not addressed within the updated COA's still apply.	6/16/2025