Form 3160-5
(June 2019)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

FORM 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. NMNM108476

6. If Indian, Allottee or Tribe Name

7. If Unit of CA/Agreement, Name and/or No.

1. Type of Well
☑ Oil Well ☐ Gas Well ☐ Other

8. Well Name and No.
PITCHBLENDE 24-25 FEDERAL COM/606H

2. Name of Operator COG OPERATING LLC

9. API Well No. 3002553943

3a. Address 600 West Illinois Ave, Midland, TX 79701

3b. Phone No. *(include area code)* (432) 683-7443

10. Field and Pool or Exploratory Area
FAIRVIEW MILLS/Bone Spring

4. Location of Well *(Footage, Sec., T.,R.,M., or Survey Description)*
SEC 24/T25S/R34E/NMP

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
	☐ Alter Casing	☐ Hydraulic Fracturing	☐ Reclamation	☐ Well Integrity
☐ Subsequent Report	☐ Casing Repair	☐ New Construction	☐ Recomplete	☐ Other
	☑ Change Plans	☐ Plug and Abandon	☐ Temporarily Abandon	
☐ Final Abandonment Notice	☐ 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 recomplete 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 perfonned 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 recompletion 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 1000' FWL Section. 25. T25S. R34E.
To: 50' FSL and 330' FWL Section. 25. T25S. R34E.
C102 Attached.

Dedicated Acres:
From: 640. 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

Title Regulatory Analyst

Signature (Electronic Submission)

Date 01/15/2025

THE SPACE FOR FEDERAL OR STATE OFICE USE

Approved by
CHRISTOPHER WALLS / Ph: (575) 234-2234 / Approved

Title 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 ofthis form to U.S. Department ofthe Interior, Bureau ofLand 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: NENW / 210 FNL / 1370 FWL / TWSP: 25S / RANGE: 34E / SECTION: 24 / LAT: 32.122624 / LONG: -103.42778 (TVD: 0 feet, MD: 0 feet)

PPP: NWNW / 100 FNL / 1000 FWL / TWSP: 25S / RANGE: 34E / SECTION: 24 / LAT: 32.122929 / LONG: -103.428975 (TVD: 12394 feet, MD: 12455 feet)

BHL: NWNW / 50 FSL / 1000 FWL / TWSP: 25S / RANGE: 34E / SECTION: 25 / LAT: 32.094322 / LONG: -103.428965 (TVD: 12526 feet, MD: 22768 feet)

U.S. Department of the Interior
BUREAU OF LAND MANAGEMENT

Sundry Print Report

05/20/2025

Well Name: PITCHBLENDE 24-25 FEDERAL COM

Well Location: T25S / R34E / SEC 24 / NENW / 32.122624 / -103.42778

County or Parish/State: LEA / NM

Well Number: 606H

Type of Well: OIL WELL

Allottee or Tribe Name:

Lease Number: NMNM108476

Unit or CA Name:

Unit or CA Number:

US Well Number: 3002553943

Operator: COG OPERATING LLC

Notice of Intent

Sundry ID: 2831868

Type of Submission: Notice of Intent

Type of Action: APD Change

Date Sundry Submitted: 01/15/2025

Time Sundry Submitted: 01:34

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 1000' FWL Section. 25. T25S. R34E. To: 50' FSL and 330' FWL Section. 25. T25S. R34E. C102 Attached. Dedicated Acres: From: 640. To: 320. Drilling Changes: Drilling Program, Directional Plan, AC Report and Specs Attached.

NOI Attachments

Procedure Description

Pitchblende_24_25_Federal_Com_606H_Drilling_Program_01082025_20250115133339.pdf

Pitchblende_24_25_Federal_Com_606H_Directonal_Plan_20250115133340.pdf

Wedge_513_7.625_0.375_P110_ICY_10112023_20250115133335.pdf

Pitchblende_24_25_Federal_Com_606H_AC_Report_20250115133330.pdf

API_BTC_10.750_0.400_J55_Casing_11092022_20250115133330.pdf

23_5.5_Wedge_441_P110_CY_20250115133330.pdf

23_5.5_TXP_BTC_P110_CY_20250115133330.pdf

Wedge_513_7.625_0.375_P110_ICY_01192024_90rbw_20250115133331.pdf

COG_Pitchblende_24_25_Federal_Com_606H_New_C102_20250115133328.pdf

Well Name: PITCHBLENDE 24-25 FEDERAL COM

Well Location: T25S / R34E / SEC 24 / NENW / 32.122624 / -103.42778

County or Parish/State: LEA / NM

Well Number: 606H

Type of Well: OIL WELL

Allottee or Tribe Name:

Lease Number: NMNM108476

Unit or CA Name:

Unit or CA Number:

US Well Number: 3002553943

Operator: COG OPERATING LLC

Conditions of Approval

Additional

PITCHBLENDE_24_25_FED_COM_606H_COAs_20250509122824.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 01:32 PM

Name: COG OPERATING LLC

Title: Regulatory Analyst

Street Address: 925 N ELDRIDGE PARKWAY

City: HOUSTON **State:** TX

Phone: (281) 293-1000

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

Field

Representative Name: Gerald Herrera

Street Address: 2208 West Main Street

City: Artesia **State:** NM **Zip:** 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	Pool Code	Pool Name
30-025-53943	96340	Fairview Mills; Bone Spring
Property Code	**Property Name**	**Well Number**
	PITCHBLENDE 24-25 FEDERAL COM	606H
OGRID No.	**Operator Name**	**Ground Level Elevation**
229137	COG OPERATING LLC	3366.5'

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
C	24	25-S	34-E		210 FNL	1370 FWL	32.122624°N	103.427780°W	LEA

Bottom Hole Location

UL	Section	Township	Range	Lot	Ft. from N/S	Ft. from E/W	Latitude	Longitude	County
M	25	25-S	34-E		50 FSL	330 FWL	32.094325°N	103.431129°W	LEA

Dedicated Acres	Infill or Defining Well	Defining Well API	Overlapping Spacing Unit (Y/N)	Consolidation Code
320	Defining	30-025-53943	N	
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
C	24	25-S	34-E		210 FNL	1370 FWL	32.122624°N	103.427780°W	LEA

First Take Point (FTP)

UL	Section	Township	Range	Lot	Ft. from N/S	Ft. from E/W	Latitude	Longitude	County
D	24	25-S	34-E		100 FNL	330 FWL	32.122935°N	103.431139°W	LEA

Last Take Point (LTP)

UL	Section	Township	Range	Lot	Ft. from N/S	Ft. from E/W	Latitude	Longitude	County
M	25	25-S	34-E		100 FSL	330 FWL	32.094462°N	103.431129°W	LEA

Unitized Area or Area of Uniform Interest	Spacing Unit Type ☒ Horizontal ☐ Vertical	Ground Floor Elevation:
COM		3366.5'

OPERATOR CERTIFICATIONS

I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief, and, if the well is a vertical or directional well, that this organization either owns a working interest or unleased mineral interest in the land including the proposed bottom hole location or has a right to drill this well at this location pursuant to a contract with an owner of a working interest or unleased mineral interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division.

If this well is a horizontal well, I further certify that this organization has received the consent of at least one lessee or owner of a working interest or unleased mineral interest in each tract (in the target pool or formation) in which any part of the well's completed interval will be located or obtained a compulsory pooling order from the division.

Signature: Mayte Reyes Date: 12/6/2024

Printed Name: Mayte Reyes

Email Address: mayte.x.reyes@cop.com

SURVEYOR CERTIFICATIONS

I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made be me or under my supervision, and that the same is true and correct to the best of my belief.

CHAD L. HARCROW NEW MEXICO 17777 LICENSED PROFESSIONAL SURVEYOR

Chad Harcrow 11/10/24

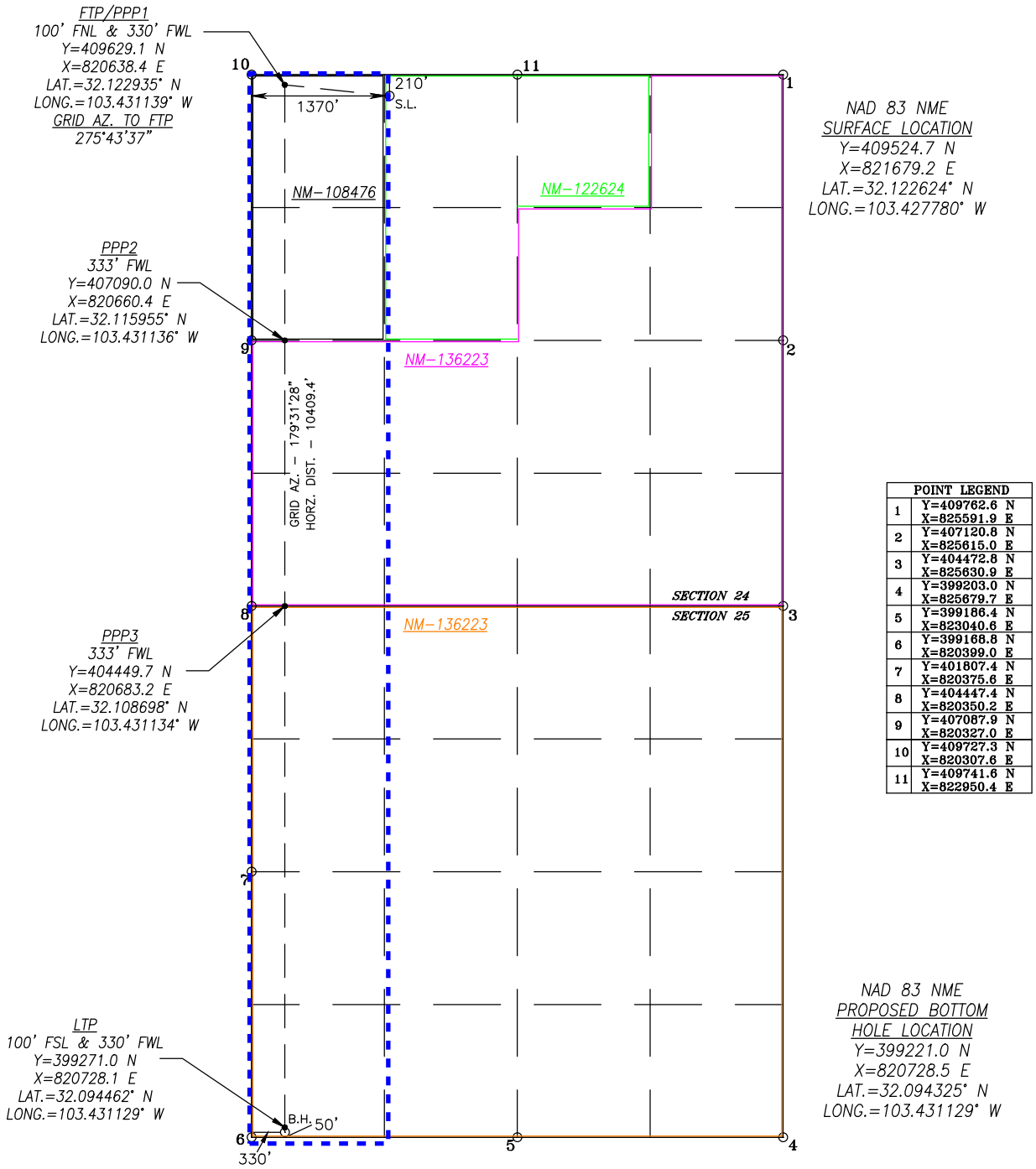
Signature and Seal of Professional Suveyor

Certificate Number	Date of Survey
17777	NOVEMBER 11, 2021
	W.O.#24-1091 | DRAWN BY: WN | PAGE 1 OF 2

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

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

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.



POINT LEGEND	
1	Y=409762.6 N X=825591.9 E
2	Y=407120.8 N X=825615.0 E
3	Y=404472.8 N X=825630.9 E
4	Y=399203.0 N X=825679.7 E
5	Y=399186.4 N X=823040.6 E
6	Y=399168.8 N X=820399.0 E
7	Y=401807.4 N X=820375.6 E
8	Y=404447.4 N X=820350.2 E
9	Y=407087.9 N X=820327.0 E
10	Y=409727.3 N X=820307.6 E
11	Y=409741.6 N X=822950.4 E

PAGE 2 OF 2

DELAWARE BASIN EAST

LEA COUNTY SOUTHEAST
PITCHBLENDE 24-25 FEDERAL PROJECT
PITCHBLENDE 24-25 FED COM 606H

OWB
PWP0

Anticollision Report

19 December, 2024

ConocoPhillips

Anticollision Report

Company:	DELAWARE BASIN EAST	**Local Co-ordinate Reference:**	Well PITCHBLENDE 24-25 FED COM 606H
Project:	LEA COUNTY SOUTHEAST	**TVD Reference:**	RKB=27ft @ 3393.5usft
Reference Site:	PITCHBLENDE 24-25 FEDERAL PROJECT	**MD Reference:**	RKB=27ft @ 3393.5usft
Site Error:	0.0 usft	**North Reference:**	Grid
Reference Well:	PITCHBLENDE 24-25 FED COM 606H	**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 22,690.5usft	**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	11,959.7	PWP0 (OWB)	r.5 MWD+IFR1+SAG+FDIR	ISCWSA MWD + IFR1 + SAG + FDIR Corr
11,959.7	22,690.5	PWP0 (OWB)	r.5 MWD+IFR1+SAG+FDIR	ISCWSA MWD + IFR1 + SAG + FDIR Corr

Summary

Site Name / Offset Well - Wellbore - Design	Reference Measured Depth (usft)	Offset Measured Depth (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Separation Factor	Warning
BANDANA FEDERAL PROJECT						
BANDANA FEDERAL COM 604H - OWB - AWP	12,225.0	20,868.0	352.0	258.4	3.760 SF	
BANDANA FEDERAL COM 604H - OWB - AWP	12,300.0	20,868.0	329.8	247.0	3.983 ES	
BANDANA FEDERAL COM 604H - OWB - AWP	12,322.6	20,868.0	328.5	249.6	4.164 CC	
BANDANA FEDERAL COM 704H - ST01 - AWP ST01	12,375.0	20,974.0	851.7	762.0	9.498 SF	
BANDANA FEDERAL COM 704H - ST01 - AWP ST01	12,415.2	20,974.0	849.7	760.5	9.523 CC, ES	
RIDER BRQ FEDERAL COM 2H - OWB - AWP	5,337.8	5,265.6	396.2	365.7	12.995 CC, ES	
RIDER BRQ FEDERAL COM 2H - OWB - AWP	9,375.9	9,264.6	492.7	441.9	9.697 SF	
PITCHBLENDE 24-25 FEDERAL PROJECT						
PITCHBLENDE 24-25 FED COM 705H - OWB - PWP0	2,000.0	1,999.8	30.0	22.0	3.732 CC, ES	
PITCHBLENDE 24-25 FED COM 705H - OWB - PWP0	2,100.0	2,100.5	30.6	22.2	3.640 SF	

Offset Design: BANDANA FEDERAL PROJECT - BANDANA FEDERAL COM 604H - OWB - AWP

Offset Site Error: 0.0 usft

Survey Program: 100-r.5 SDI_KPR_WL_NS-CT, 1141-r.5 MWD+IFR1+MS, 12092-r.5 MWD+IFR1+MS **Rule Assigned:** **Offset Well Error:** 3.0 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	No-Go Distance (usft)	Separation Factor	Warning
11,600.0	11,487.9	20,868.0	12,430.9	17.5	75.7	0.13	260.9	-1,039.4	921.1	815.5	105.65	8.719	
11,700.0	11,587.9	20,868.0	12,430.9	17.5	75.7	0.13	260.9	-1,039.4	821.9	716.3	105.59	7.784	
11,800.0	11,687.9	20,868.0	12,430.9	17.6	75.7	0.13	260.9	-1,039.4	722.9	617.4	105.45	6.855	
11,900.0	11,787.9	20,868.0	12,430.9	17.6	75.7	0.13	260.9	-1,039.4	624.1	518.9	105.18	5.934	
11,959.7	11,847.5	20,868.0	12,430.9	17.7	75.7	0.13	260.9	-1,039.4	565.4	460.5	104.94	5.388	
11,975.0	11,862.9	20,868.0	12,430.9	17.7	75.7	-179.47	260.9	-1,039.4	550.4	445.6	104.84	5.250	
12,000.0	11,887.8	20,868.0	12,430.9	17.7	75.7	-179.56	260.9	-1,039.4	526.3	421.6	104.62	5.030	
12,025.0	11,912.7	20,868.0	12,430.9	17.7	75.7	-179.63	260.9	-1,039.4	502.6	398.3	104.30	4.819	
12,050.0	11,937.3	20,868.0	12,430.9	17.7	75.7	-179.67	260.9	-1,039.4	479.5	375.7	103.86	4.617	
12,075.0	11,961.7	20,868.0	12,430.9	17.7	75.7	-179.70	260.9	-1,039.4	457.2	354.0	103.26	4.428	
12,100.0	11,985.8	20,868.0	12,430.9	17.7	75.7	-179.73	260.9	-1,039.4	435.9	333.4	102.47	4.254	
12,125.0	12,009.6	20,868.0	12,430.9	17.7	75.7	-179.75	260.9	-1,039.4	415.8	314.3	101.43	4.099	
12,150.0	12,032.9	20,868.0	12,430.9	17.7	75.7	-179.76	260.9	-1,039.4	397.0	296.9	100.09	3.967	
12,175.0	12,055.6	20,868.0	12,430.9	17.7	75.7	-179.77	260.9	-1,039.4	380.0	281.6	98.38	3.862	
12,200.0	12,077.8	20,868.0	12,430.9	17.7	75.7	-179.78	260.9	-1,039.4	364.9	268.6	96.24	3.791	

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

ConocoPhillips

Anticollision Report

Company:	DELAWARE BASIN EAST	**Local Co-ordinate Reference:**	Well PITCHBLENDE 24-25 FED COM 606H
Project:	LEA COUNTY SOUTHEAST	**TVD Reference:**	RKB=27ft @ 3393.5usft
Reference Site:	PITCHBLENDE 24-25 FEDERAL PROJECT	**MD Reference:**	RKB=27ft @ 3393.5usft
Site Error:	0.0 usft	**North Reference:**	Grid
Reference Well:	PITCHBLENDE 24-25 FED COM 606H	**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: BANDANA FEDERAL PROJECT - BANDANA FEDERAL COM 604H - OWB - AWP

Offset Site Error: 0.0 usft

Survey Program: 100-r.5 SDI_KPR_WL_NS-CT, 1141-r.5 MWD+IFR1+MS, 12092-r.5 MWD+IFR1+MS

Rule Assigned:

Offset Well Error: 3.0 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	No-Go Distance (usft)	Separation Factor	Warning
12,225.0	12,099.4	20,868.0	12,430.9	17.7	75.7	-179.79	260.9	-1,039.4	352.0	258.4	93.62	3.760 SF	
12,250.0	12,120.3	20,868.0	12,430.9	17.8	75.7	-179.79	260.9	-1,039.4	341.7	251.2	90.49	3.777	
12,275.0	12,140.4	20,868.0	12,430.9	17.8	75.7	-179.80	260.9	-1,039.4	334.3	247.4	86.86	3.848	
12,300.0	12,159.8	20,868.0	12,430.9	17.8	75.7	-179.80	260.9	-1,039.4	329.8	247.0	82.80	3.983 ES	
12,322.6	12,176.5	20,868.0	12,430.9	17.8	75.7	-179.80	260.9	-1,039.4	328.5	249.6	78.88	4.164 CC	
12,325.0	12,178.2	20,868.0	12,430.9	17.8	75.7	-179.80	260.9	-1,039.4	328.5	250.1	78.45	4.188	
12,350.0	12,195.8	20,868.0	12,430.9	17.8	75.7	-179.80	260.9	-1,039.4	330.4	256.5	73.98	4.467	
12,375.0	12,212.4	20,868.0	12,430.9	17.9	75.7	-179.80	260.9	-1,039.4	335.5	265.9	69.60	4.821	
12,400.0	12,228.0	20,868.0	12,430.9	17.9	75.7	-179.79	260.9	-1,039.4	343.5	278.0	65.50	5.245	
12,425.0	12,242.6	20,868.0	12,430.9	17.9	75.7	-179.79	260.9	-1,039.4	354.3	292.5	61.83	5.730	
12,450.0	12,256.1	20,868.0	12,430.9	17.9	75.7	-179.78	260.9	-1,039.4	367.6	308.9	58.71	6.262	
12,475.0	12,268.5	20,868.0	12,430.9	18.0	75.7	-179.77	260.9	-1,039.4	383.2	327.0	56.14	6.825	
12,500.0	12,279.7	20,868.0	12,430.9	18.0	75.7	-179.76	260.9	-1,039.4	400.6	346.4	54.12	7.402	
12,525.0	12,289.7	20,868.0	12,430.9	18.0	75.7	-179.74	260.9	-1,039.4	419.6	367.0	52.57	7.982	
12,550.0	12,298.5	20,868.0	12,430.9	18.1	75.7	-179.72	260.9	-1,039.4	440.0	388.6	51.42	8.556	
12,575.0	12,306.1	20,868.0	12,430.9	18.1	75.7	-179.70	260.9	-1,039.4	461.5	410.9	50.60	9.121	
12,600.0	12,312.5	20,868.0	12,430.9	18.2	75.7	-179.66	260.9	-1,039.4	484.0	434.0	50.01	9.677	
12,625.0	12,317.5	20,868.0	12,430.9	18.2	75.7	-179.62	260.9	-1,039.4	507.2	457.6	49.61	10.223	
12,650.0	12,321.3	20,868.0	12,430.9	18.3	75.7	-179.55	260.9	-1,039.4	531.0	481.6	49.34	10.762	
12,675.0	12,323.7	20,868.0	12,430.9	18.3	75.7	-179.44	260.9	-1,039.4	555.2	506.0	49.15	11.295	
12,700.0	12,324.9	20,868.0	12,430.9	18.4	75.7	-179.26	260.9	-1,039.4	579.8	530.7	49.04	11.823	
12,709.7	12,325.0	20,868.0	12,430.9	18.4	75.7	-179.15	260.9	-1,039.4	589.3	540.3	49.00	12.026	
12,800.0	12,325.0	20,868.0	12,430.9	18.6	75.7	-179.15	260.9	-1,039.4	679.0	630.2	48.80	13.915	
12,900.0	12,325.0	20,868.0	12,430.9	18.8	75.7	-179.15	260.9	-1,039.4	778.4	729.7	48.67	15.993	
13,000.0	12,325.0	20,868.0	12,430.9	19.1	75.7	-179.15	260.9	-1,039.4	878.0	829.4	48.61	18.063	
13,100.0	12,325.0	20,868.0	12,430.9	19.4	75.7	-179.15	260.9	-1,039.4	977.6	929.0	48.58	20.124	

ConocoPhillips

Anticollision Report

Company:	DELAWARE BASIN EAST	**Local Co-ordinate Reference:**	Well PITCHBLENDE 24-25 FED COM 606H
Project:	LEA COUNTY SOUTHEAST	**TVD Reference:**	RKB=27ft @ 3393.5usft
Reference Site:	PITCHBLENDE 24-25 FEDERAL PROJECT	**MD Reference:**	RKB=27ft @ 3393.5usft
Site Error:	0.0 usft	**North Reference:**	Grid
Reference Well:	PITCHBLENDE 24-25 FED COM 606H	**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: BANDANA FEDERAL PROJECT - BANDANA FEDERAL COM 704H - ST01 - AWP ST01

Offset Site Error: 0.0 usft

Survey Program: 100-r.5 SDI_KPR_WL_NS-CT, 1050-r.5 MWD+IFR1+MS, 12241-r.5 MWD+IFR1+MS, 16397-r.5 MWD+IFR1+MS **Rule Assigned:** **Offset Well Error:** 3.0 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	No-Go Distance (usft)	Separation Factor	Warning
12,050.0	11,937.3	20,974.0	12,696.0	17.7	64.1	-110.35	263.4	-374.0	994.6	904.7	89.85	11.070	
12,075.0	11,961.7	20,974.0	12,696.0	17.7	64.1	-112.98	263.4	-374.0	977.4	887.5	89.96	10.865	
12,100.0	11,985.8	20,974.0	12,696.0	17.7	64.1	-115.37	263.4	-374.0	961.0	870.9	90.06	10.670	
12,125.0	12,009.6	20,974.0	12,696.0	17.7	64.1	-117.51	263.4	-374.0	945.4	855.2	90.16	10.486	
12,150.0	12,032.9	20,974.0	12,696.0	17.7	64.1	-119.43	263.4	-374.0	930.7	840.5	90.23	10.314	
12,175.0	12,055.6	20,974.0	12,696.0	17.7	64.1	-121.14	263.4	-374.0	917.0	826.7	90.29	10.156	
12,200.0	12,077.8	20,974.0	12,696.0	17.7	64.1	-122.63	263.4	-374.0	904.3	814.0	90.33	10.011	
12,225.0	12,099.4	20,974.0	12,696.0	17.7	64.1	-123.93	263.4	-374.0	892.8	802.5	90.34	9.882	
12,250.0	12,120.3	20,974.0	12,696.0	17.8	64.1	-125.05	263.4	-374.0	882.5	792.2	90.32	9.770	
12,275.0	12,140.4	20,974.0	12,696.0	17.8	64.1	-125.99	263.4	-374.0	873.5	783.2	90.27	9.676	
12,300.0	12,159.8	20,974.0	12,696.0	17.8	64.1	-126.77	263.4	-374.0	865.9	775.7	90.19	9.601	
12,325.0	12,178.2	20,974.0	12,696.0	17.8	64.1	-127.38	263.4	-374.0	859.7	769.6	90.06	9.546	
12,350.0	12,195.8	20,974.0	12,696.0	17.8	64.1	-127.84	263.4	-374.0	854.9	765.0	89.88	9.512	
12,375.0	12,212.4	20,974.0	12,696.0	17.9	64.1	-128.15	263.4	-374.0	851.7	762.0	89.67	9.498 SF	
12,400.0	12,228.0	20,974.0	12,696.0	17.9	64.1	-128.31	263.4	-374.0	850.0	760.6	89.40	9.507	
12,415.2	12,237.0	20,974.0	12,696.0	17.9	64.1	-128.34	263.4	-374.0	849.7	760.5	89.22	9.523 CC, ES	
12,425.0	12,242.6	20,974.0	12,696.0	17.9	64.1	-128.33	263.4	-374.0	849.8	760.7	89.10	9.538	
12,450.0	12,256.1	20,974.0	12,696.0	17.9	64.1	-128.20	263.4	-374.0	851.2	762.4	88.74	9.592	
12,475.0	12,268.5	20,974.0	12,696.0	18.0	64.1	-127.92	263.4	-374.0	854.1	765.8	88.35	9.667	
12,500.0	12,279.7	20,974.0	12,696.0	18.0	64.1	-127.49	263.4	-374.0	858.5	770.6	87.91	9.765	
12,525.0	12,289.7	20,974.0	12,696.0	18.0	64.1	-126.91	263.4	-374.0	864.4	777.0	87.45	9.885	
12,550.0	12,298.5	20,974.0	12,696.0	18.1	64.1	-126.17	263.4	-374.0	871.7	784.8	86.95	10.026	
12,575.0	12,306.1	20,974.0	12,696.0	18.1	64.1	-125.27	263.4	-374.0	880.4	794.0	86.43	10.187	
12,600.0	12,312.5	20,974.0	12,696.0	18.2	64.1	-124.19	263.4	-374.0	890.5	804.6	85.88	10.368	
12,625.0	12,317.5	20,974.0	12,696.0	18.2	64.1	-122.93	263.4	-374.0	901.7	816.4	85.33	10.567	
12,650.0	12,321.3	20,974.0	12,696.0	18.3	64.1	-121.48	263.4	-374.0	914.1	829.4	84.77	10.784	
12,675.0	12,323.7	20,974.0	12,696.0	18.3	64.1	-119.82	263.4	-374.0	927.6	843.4	84.20	11.017	
12,700.0	12,324.9	20,974.0	12,696.0	18.4	64.1	-117.95	263.4	-374.0	942.1	858.5	83.64	11.264	
12,709.7	12,325.0	20,974.0	12,696.0	18.4	64.1	-117.17	263.4	-374.0	948.0	864.6	83.43	11.363	

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Anticollision Report

Company:	DELAWARE BASIN EAST	**Local Co-ordinate Reference:**	Well PITCHBLENDE 24-25 FED COM 606H
Project:	LEA COUNTY SOUTHEAST	**TVD Reference:**	RKB=27ft @ 3393.5usft
Reference Site:	PITCHBLENDE 24-25 FEDERAL PROJECT	**MD Reference:**	RKB=27ft @ 3393.5usft
Site Error:	0.0 usft	**North Reference:**	Grid
Reference Well:	PITCHBLENDE 24-25 FED COM 606H	**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: BANDANA FEDERAL PROJECT - RIDER BRQ FEDERAL COM 2H - OWB - AWP

Offset Site Error: 0.0 usft

Survey Program: 100-r.5 GYRO-NS, 9251-r.5 MWD

Offset Well Error: 3.0 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Rule Assigned: Distance Between Centres (usft)	Distance Between Ellipses (usft)	No-Go Distance (usft)	Separation Factor	Warning
0.0	0.0	0.0	0.0	0.0	3.0	-53.05	537.4	-714.4	893.9				
100.0	100.0	97.8	97.8	0.6	3.0	-53.07	537.1	-714.5	893.9	889.1	4.76	187.622	
169.8	169.8	166.3	166.3	0.9	3.1	-53.10	536.7	-714.7	893.8	888.9	4.95	180.675	
200.0	200.0	195.9	195.9	1.1	3.1	-53.11	536.6	-714.8	893.8	888.8	5.05	176.886	
300.0	300.0	299.2	299.2	1.4	3.2	-53.14	536.1	-715.1	893.7	888.3	5.39	165.945	
395.7	395.7	392.2	392.2	1.6	3.4	-53.15	535.8	-715.1	893.6	887.8	5.72	156.317	
400.0	400.0	396.4	396.4	1.7	3.4	-53.15	535.8	-715.1	893.6	887.8	5.73	155.878	
500.0	500.0	493.1	493.1	1.9	3.6	-53.15	536.0	-715.2	893.8	887.7	6.10	146.558	
600.0	600.0	595.0	595.0	2.1	3.8	-53.11	536.7	-715.0	894.0	887.6	6.49	137.664	
700.0	700.0	693.5	693.4	2.3	4.0	-53.09	537.1	-715.0	894.3	887.4	6.90	129.689	
800.0	800.0	790.5	790.5	2.5	4.3	-53.09	537.3	-715.5	894.8	887.5	7.30	122.506	
900.0	900.0	889.7	889.7	2.7	4.5	-53.11	537.5	-716.3	895.5	887.8	7.73	115.869	
1,000.0	1,000.0	990.6	990.6	2.9	4.8	-53.16	537.4	-717.2	896.2	888.1	8.17	109.735	
1,100.0	1,100.0	1,098.4	1,098.4	3.1	5.1	-53.22	536.8	-718.0	896.5	887.9	8.64	103.800	
1,200.0	1,200.0	1,210.4	1,210.3	3.2	5.4	-53.36	534.4	-718.5	895.6	886.4	9.13	98.108	
1,300.0	1,300.0	1,311.5	1,311.4	3.4	5.7	-53.52	531.4	-718.7	894.0	884.4	9.59	93.230	
1,400.0	1,400.0	1,412.0	1,411.8	3.5	6.0	-53.67	528.6	-718.7	892.3	882.2	10.05	88.781	
1,500.0	1,500.0	1,513.5	1,513.4	3.7	6.3	-53.81	525.7	-718.5	890.5	879.9	10.52	84.651	
1,600.0	1,600.0	1,614.1	1,613.9	3.8	6.6	-53.95	522.8	-718.3	888.5	877.6	10.99	80.869	
1,700.0	1,700.0	1,716.1	1,715.8	4.0	7.0	-54.09	519.8	-717.8	886.5	875.0	11.46	77.334	
1,800.0	1,800.0	1,817.7	1,817.3	4.1	7.3	-54.22	516.8	-717.1	884.2	872.2	11.94	74.054	
1,900.0	1,900.0	1,917.3	1,917.0	4.3	7.6	-54.33	514.1	-716.3	881.9	869.5	12.41	71.056	
2,000.0	2,000.0	2,019.1	2,018.7	4.4	7.9	-54.42	511.5	-715.0	879.4	866.5	12.89	68.214	
2,100.0	2,100.0	2,116.1	2,115.7	4.5	8.3	27.17	509.4	-713.7	875.5	862.1	13.41	65.297	
2,200.0	2,199.8	2,218.6	2,218.1	4.7	8.6	27.35	507.5	-712.1	868.5	854.5	13.99	62.071	
2,300.0	2,299.5	2,319.7	2,319.2	4.9	8.9	27.69	505.7	-710.2	858.2	843.6	14.57	58.913	
2,400.0	2,398.7	2,422.0	2,421.5	5.0	9.3	28.22	503.8	-707.8	844.5	829.3	15.14	55.762	
2,500.0	2,497.5	2,519.7	2,519.1	5.2	9.6	28.92	502.4	-705.1	827.7	812.0	15.70	52.713	
2,600.0	2,595.6	2,617.3	2,616.6	5.5	9.9	29.82	501.3	-702.3	808.0	791.7	16.26	49.705	
2,655.5	2,649.8	2,672.9	2,672.2	5.5	10.1	30.44	500.7	-700.6	795.8	779.2	16.52	48.156	
2,700.0	2,693.1	2,716.5	2,715.8	5.6	10.2	30.86	500.3	-699.0	785.6	768.9	16.73	46.957	
2,800.0	2,790.5	2,812.1	2,811.3	5.8	10.6	31.85	499.7	-695.6	762.9	745.6	17.23	44.264	
2,900.0	2,887.9	2,909.3	2,908.5	5.9	10.9	32.95	499.3	-691.7	740.4	722.6	17.75	41.715	
3,000.0	2,985.3	3,004.8	3,003.9	6.1	11.2	34.11	499.3	-687.8	718.2	700.0	18.26	39.333	
3,100.0	3,082.7	3,100.0	3,099.0	6.3	11.5	35.34	499.3	-684.1	696.6	677.8	18.77	37.104	
3,200.0	3,180.1	3,194.9	3,193.9	6.5	11.9	36.64	499.4	-680.4	675.4	656.1	19.29	35.019	
3,300.0	3,277.5	3,287.8	3,286.7	6.7	12.2	38.03	500.1	-676.8	655.0	635.2	19.80	33.086	
3,400.0	3,374.9	3,382.6	3,381.4	6.8	12.5	39.57	501.4	-673.1	635.4	615.1	20.31	31.279	
3,500.0	3,472.3	3,479.0	3,477.6	7.0	12.8	41.28	503.1	-669.0	616.4	595.6	20.84	29.581	
3,600.0	3,569.7	3,573.1	3,571.6	7.2	13.1	43.09	505.3	-664.7	598.2	576.9	21.36	28.010	
3,700.0	3,667.1	3,666.7	3,665.1	7.4	13.5	44.97	507.5	-661.0	581.1	559.2	21.87	26.568	
3,800.0	3,764.5	3,763.7	3,762.1	7.6	13.8	46.92	509.5	-658.1	565.0	542.6	22.40	25.221	
3,900.0	3,861.9	3,865.9	3,864.3	7.8	14.1	49.05	510.9	-655.1	549.0	526.1	22.95	23.925	
4,000.0	3,959.2	3,967.7	3,966.0	8.0	14.5	51.32	511.4	-651.3	532.7	509.2	23.49	22.675	
4,100.0	4,056.6	4,065.5	4,063.7	8.2	14.8	53.58	511.1	-647.8	516.6	492.6	24.02	21.504	
4,200.0	4,154.0	4,162.1	4,160.3	8.4	15.2	55.92	510.6	-644.6	501.3	476.7	24.55	20.419	
4,300.0	4,251.4	4,259.4	4,257.5	8.6	15.5	58.41	510.1	-641.3	486.8	461.7	25.08	19.412	
4,400.0	4,348.8	4,358.3	4,356.4	8.8	15.8	61.06	509.2	-637.9	473.0	447.4	25.61	18.471	
4,500.0	4,446.2	4,460.0	4,458.0	9.0	16.2	63.97	507.6	-634.1	459.5	433.4	26.14	17.576	
4,600.0	4,543.6	4,558.7	4,556.5	9.2	16.5	67.02	505.2	-629.6	446.2	419.5	26.67	16.729	
4,700.0	4,641.0	4,657.7	4,655.4	9.4	16.9	70.24	502.5	-625.2	433.9	406.7	27.20	15.953	

ConocoPhillips

Anticollision Report

Company:	DELAWARE BASIN EAST	**Local Co-ordinate Reference:**	Well PITCHBLENDE 24-25 FED COM 606H
Project:	LEA COUNTY SOUTHEAST	**TVD Reference:**	RKB=27ft @ 3393.5usft
Reference Site:	PITCHBLENDE 24-25 FEDERAL PROJECT	**MD Reference:**	RKB=27ft @ 3393.5usft
Site Error:	0.0 usft	**North Reference:**	Grid
Reference Well:	PITCHBLENDE 24-25 FED COM 606H	**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: BANDANA FEDERAL PROJECT - RIDER BRQ FEDERAL COM 2H - OWB - AWP

Offset Site Error: 0.0 usft

Survey Program: 100-r.5 GYRO-NS, 9251-r.5 MWD

Offset Well Error: 3.0 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Rule Assigned: Distance Between Centres (usft)	Distance Between Ellipses (usft)	No-Go Distance (usft)	Separation Factor	Warning
4,800.0	4,738.4	4,753.3	4,750.8	9.6	17.2	73.57	499.3	-620.3	422.4	394.7	27.71	15.241	
4,900.0	4,835.8	4,845.5	4,842.9	9.8	17.5	76.89	496.9	-615.9	413.2	385.0	28.22	14.642	
5,000.0	4,933.2	4,939.2	4,936.5	10.0	17.8	80.29	495.3	-612.3	406.5	377.8	28.73	14.150	
5,100.0	5,030.6	5,036.3	5,033.5	10.3	18.2	83.90	493.8	-608.6	401.8	372.5	29.25	13.736	
5,200.0	5,128.0	5,134.6	5,131.7	10.5	18.5	87.63	491.7	-604.8	398.2	368.4	29.78	13.373	
5,300.0	5,225.4	5,229.9	5,227.0	10.7	18.8	91.22	489.8	-601.7	396.3	366.0	30.29	13.084	
5,337.8	5,262.2	5,265.6	5,262.7	10.8	19.0	92.55	489.2	-600.7	396.2	365.7	30.49	12.995	CC, ES
5,400.0	5,322.8	5,324.9	5,321.9	10.9	19.2	94.70	488.4	-599.3	396.6	365.8	30.81	12.872	
5,500.0	5,420.1	5,421.2	5,418.2	11.1	19.5	98.10	487.5	-597.5	398.6	367.3	31.33	12.724	
5,600.0	5,517.5	5,518.4	5,515.4	11.3	19.8	101.41	486.7	-596.3	402.2	370.4	31.86	12.625	
5,700.0	5,614.9	5,615.7	5,612.6	11.5	20.2	104.59	486.0	-595.5	407.1	374.7	32.39	12.568	
5,800.0	5,712.3	5,713.2	5,710.1	11.7	20.5	107.70	485.3	-594.8	413.3	380.3	32.93	12.549	
5,900.0	5,809.7	5,809.6	5,806.5	12.0	20.9	110.65	484.8	-594.1	420.7	387.3	33.47	12.570	
6,000.0	5,907.1	5,907.1	5,904.1	12.2	21.2	113.52	484.4	-593.6	429.4	395.3	34.01	12.623	
6,100.0	6,004.5	6,004.7	6,001.6	12.4	21.5	116.26	483.9	-593.1	439.0	404.4	34.56	12.701	
6,200.0	6,101.9	6,103.4	6,100.3	12.6	21.9	118.90	483.4	-592.9	449.4	414.3	35.12	12.797	
6,300.0	6,199.3	6,200.1	6,197.0	12.8	22.2	121.35	482.9	-592.8	460.7	425.0	35.67	12.915	
6,301.1	6,200.3	6,201.1	6,198.1	12.8	22.2	121.38	482.9	-592.8	460.8	425.1	35.68	12.916	
6,400.0	6,296.9	6,298.7	6,295.6	13.0	22.5	123.74	482.4	-592.8	472.3	436.0	36.23	13.036	
6,500.0	6,394.8	6,396.0	6,393.0	13.2	22.9	125.82	481.9	-592.8	483.5	446.7	36.78	13.147	
6,600.0	6,493.1	6,496.2	6,493.2	13.4	23.2	127.69	481.2	-592.9	494.1	456.8	37.34	13.235	
6,700.0	6,591.7	6,594.9	6,591.8	13.7	23.6	129.29	480.5	-593.2	503.9	466.0	37.88	13.302	
6,800.0	6,690.6	6,693.2	6,690.2	13.8	23.9	130.68	479.8	-593.5	512.9	474.5	38.42	13.350	
6,900.0	6,789.7	6,790.9	6,787.9	14.0	24.3	131.87	479.2	-593.6	521.3	482.3	38.96	13.381	
7,000.0	6,889.0	6,890.1	6,887.0	14.2	24.6	132.87	478.9	-593.7	528.8	489.3	39.49	13.389	
7,100.0	6,988.5	6,989.8	6,986.7	14.4	24.9	133.70	478.6	-593.8	535.2	495.2	40.02	13.372	
7,200.0	7,088.2	7,089.3	7,086.2	14.6	25.3	134.35	478.4	-594.1	540.5	500.0	40.55	13.330	
7,300.0	7,188.0	7,189.0	7,185.9	14.8	25.6	134.85	478.3	-594.3	544.7	503.6	41.07	13.262	
7,400.0	7,287.9	7,289.4	7,286.3	14.9	26.0	135.22	478.0	-594.5	547.6	506.0	41.59	13.168	
7,500.0	7,387.9	7,389.4	7,386.3	15.1	26.3	135.46	477.7	-594.7	549.3	507.2	42.10	13.049	
7,600.0	7,487.9	7,489.5	7,486.5	15.2	26.7	135.55	477.4	-594.9	549.7	507.1	42.59	12.906	
7,612.1	7,500.0	7,501.7	7,498.6	15.2	26.7	53.99	477.3	-595.0	549.7	507.0	42.65	12.889	
7,700.0	7,587.9	7,590.0	7,587.0	15.3	27.0	54.00	477.1	-595.2	549.3	506.2	43.06	12.755	
7,800.0	7,687.9	7,692.5	7,689.4	15.3	27.4	54.01	476.6	-595.8	548.6	505.0	43.54	12.599	
7,900.0	7,787.9	7,794.8	7,791.7	15.4	27.7	54.01	475.9	-596.6	547.5	503.4	44.02	12.437	
8,000.0	7,887.9	7,895.2	7,892.2	15.4	28.1	54.02	475.0	-597.8	546.1	501.6	44.49	12.275	
8,100.0	7,987.9	7,996.6	7,993.5	15.5	28.4	54.02	474.0	-599.0	544.5	499.6	44.96	12.111	
8,200.0	8,087.9	8,099.3	8,096.2	15.5	28.8	53.97	473.3	-600.9	542.6	497.1	45.44	11.941	
8,300.0	8,187.9	8,203.1	8,200.0	15.6	29.1	53.84	472.7	-603.8	540.1	494.1	45.92	11.761	
8,400.0	8,287.9	8,310.5	8,307.3	15.6	29.5	53.78	470.9	-607.2	536.4	490.0	46.41	11.559	
8,500.0	8,387.9	8,412.8	8,409.4	15.7	29.9	53.84	467.7	-610.6	531.9	485.0	46.88	11.345	
8,600.0	8,487.9	8,512.0	8,508.6	15.7	30.2	53.94	464.2	-613.8	527.2	479.9	47.35	11.135	
8,700.0	8,587.9	8,611.0	8,607.4	15.8	30.6	54.09	460.5	-616.6	522.8	474.9	47.82	10.931	
8,800.0	8,687.9	8,711.9	8,708.2	15.8	30.9	54.25	456.7	-619.4	518.2	469.9	48.30	10.730	
8,900.0	8,787.9	8,811.6	8,807.8	15.9	31.3	54.40	452.9	-622.4	513.7	464.9	48.77	10.532	
9,000.0	8,887.9	8,911.9	8,908.0	15.9	31.6	54.56	449.1	-625.3	509.1	459.8	49.25	10.337	
9,100.0	8,987.9	9,014.0	9,009.9	16.0	32.0	54.75	444.8	-628.4	504.2	454.4	49.73	10.139	
9,200.0	9,087.9	9,112.9	9,108.7	16.1	32.3	54.93	440.7	-631.5	499.2	449.0	50.20	9.944	
9,300.0	9,187.9	9,209.0	9,204.7	16.1	32.6	55.12	436.7	-634.3	494.5	443.9	50.65	9.764	
9,375.9	9,263.8	9,264.6	9,260.3	16.2	32.7	55.18	435.5	-635.1	492.7	441.9	50.81	9.697	SF
9,400.0	9,287.9	9,282.0	9,277.7	16.2	32.7	55.10	436.2	-635.3	492.9	442.1	50.84	9.697	

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

ConocoPhillips

Anticollision Report

Company:	DELAWARE BASIN EAST	**Local Co-ordinate Reference:**	Well PITCHBLENDE 24-25 FED COM 606H
Project:	LEA COUNTY SOUTHEAST	**TVD Reference:**	RKB=27ft @ 3393.5usft
Reference Site:	PITCHBLENDE 24-25 FEDERAL PROJECT	**MD Reference:**	RKB=27ft @ 3393.5usft
Site Error:	0.0 usft	**North Reference:**	Grid
Reference Well:	PITCHBLENDE 24-25 FED COM 606H	**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: BANDANA FEDERAL PROJECT - RIDER BRQ FEDERAL COM 2H - OWB - AWP

Offset Site Error: 0.0 usft

Survey Program: 100-r.5 GYRO-NS, 9251-r.5 MWD

Rule Assigned:

Offset Well Error: 3.0 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	No-Go Distance (usft)	Separation Factor	Warning
9,500.0	9,387.9	9,330.2	9,325.4	16.2	32.7	54.47	442.6	-635.7	499.8	449.1	50.69	9.859	
9,600.0	9,487.9	9,377.0	9,370.3	16.3	32.8	53.26	455.5	-636.0	516.4	466.2	50.26	10.276	
9,700.0	9,587.9	9,440.0	9,428.0	16.3	32.8	50.97	480.7	-636.8	541.5	491.7	49.84	10.866	
9,800.0	9,687.9	9,491.8	9,472.8	16.4	32.8	48.73	506.5	-638.1	574.5	525.3	49.19	11.678	
9,900.0	9,787.9	9,533.0	9,506.8	16.5	32.8	46.83	529.9	-639.1	615.2	566.9	48.36	12.722	
10,000.0	9,887.9	9,565.0	9,531.6	16.5	32.9	45.27	550.1	-640.0	664.0	616.6	47.41	14.005	
10,100.0	9,987.9	9,603.9	9,559.6	16.6	32.9	43.31	577.0	-640.9	719.8	673.2	46.65	15.429	
10,200.0	10,087.9	9,637.9	9,582.5	16.6	32.9	41.62	602.1	-641.7	781.5	735.5	45.94	17.011	
10,300.0	10,187.9	9,659.0	9,596.1	16.7	32.9	40.58	618.2	-642.1	848.1	802.9	45.18	18.770	
10,400.0	10,287.9	9,691.0	9,615.6	16.7	32.9	39.02	643.7	-643.0	918.8	874.1	44.73	20.541	
10,500.0	10,387.9	9,723.0	9,633.4	16.8	32.9	37.46	670.2	-644.3	993.2	948.8	44.39	22.373	

ConocoPhillips

Anticollision Report

Company:	DELAWARE BASIN EAST	**Local Co-ordinate Reference:**	Well PITCHBLENDE 24-25 FED COM 606H
Project:	LEA COUNTY SOUTHEAST	**TVD Reference:**	RKB=27ft @ 3393.5usft
Reference Site:	PITCHBLENDE 24-25 FEDERAL PROJECT	**MD Reference:**	RKB=27ft @ 3393.5usft
Site Error:	0.0 usft	**North Reference:**	Grid
Reference Well:	PITCHBLENDE 24-25 FED COM 606H	**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 705H - OWB - PWP0

Offset Site Error: 0.0 usft

Survey Program: 0-r.5 SDI_KPR_WL_NS-CT, 2000-r.5 MWD+IFR1+SAG+FDIR, 12061-r.5 MWD+IFR1+SAG+FDIR

Rule Assigned:

Offset Well Error: 0.0 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	No-Go Distance (usft)	Separation Factor	Warning
0.0	0.0	0.0	0.0	0.0	0.0	89.62	0.2	30.0	30.0				
100.0	100.0	99.8	99.8	0.6	0.6	89.62	0.2	30.0	30.0	28.4	1.58	18.966	
200.0	200.0	199.8	199.8	1.1	1.1	89.62	0.2	30.0	30.0	27.5	2.52	11.913	
300.0	300.0	299.8	299.8	1.4	1.4	89.62	0.2	30.0	30.0	26.9	3.14	9.542	
400.0	400.0	399.8	399.8	1.7	1.7	89.62	0.2	30.0	30.0	26.4	3.65	8.223	
500.0	500.0	499.8	499.8	1.9	1.9	89.62	0.2	30.0	30.0	25.9	4.08	7.348	
600.0	600.0	599.8	599.8	2.1	2.1	89.62	0.2	30.0	30.0	25.5	4.47	6.711	
700.0	700.0	699.8	699.8	2.3	2.3	89.62	0.2	30.0	30.0	25.2	4.82	6.219	
800.0	800.0	799.8	799.8	2.5	2.5	89.62	0.2	30.0	30.0	24.9	5.15	5.825	
900.0	900.0	899.8	899.8	2.7	2.7	89.62	0.2	30.0	30.0	24.5	5.46	5.499	
1,000.0	1,000.0	999.8	999.8	2.9	2.9	89.62	0.2	30.0	30.0	24.3	5.74	5.224	
1,100.0	1,100.0	1,099.8	1,099.8	3.1	3.1	89.62	0.2	30.0	30.0	24.0	6.02	4.987	
1,200.0	1,200.0	1,199.8	1,199.8	3.2	3.2	89.62	0.2	30.0	30.0	23.7	6.27	4.781	
1,300.0	1,300.0	1,299.8	1,299.8	3.4	3.4	89.62	0.2	30.0	30.0	23.5	6.52	4.599	
1,400.0	1,400.0	1,399.8	1,399.8	3.5	3.5	89.62	0.2	30.0	30.0	23.2	6.76	4.436	
1,500.0	1,500.0	1,499.8	1,499.8	3.7	3.7	89.62	0.2	30.0	30.0	23.0	6.99	4.290	
1,600.0	1,600.0	1,599.8	1,599.8	3.8	3.8	89.62	0.2	30.0	30.0	22.8	7.21	4.158	
1,700.0	1,700.0	1,699.8	1,699.8	4.0	4.0	89.62	0.2	30.0	30.0	22.6	7.43	4.038	
1,800.0	1,800.0	1,799.8	1,799.8	4.1	4.1	89.62	0.2	30.0	30.0	22.4	7.64	3.928	
1,900.0	1,900.0	1,899.8	1,899.8	4.3	4.3	89.62	0.2	30.0	30.0	22.2	7.84	3.826	
2,000.0	2,000.0	1,999.8	1,999.8	4.4	4.4	89.62	0.2	30.0	30.0	22.0	8.04	3.732 CC, ES	
2,100.0	2,100.0	2,100.5	2,100.5	4.5	4.6	169.23	1.5	28.8	30.6	22.2	8.40	3.640 SF	
2,200.0	2,199.8	2,201.1	2,200.9	4.7	4.8	163.81	5.4	25.2	32.5	23.6	8.91	3.645	
2,300.0	2,299.5	2,301.5	2,301.0	4.9	5.1	156.16	11.9	19.3	36.2	26.8	9.38	3.856	
2,400.0	2,398.7	2,401.7	2,400.4	5.0	5.3	147.91	20.9	11.0	42.2	32.3	9.82	4.293	
2,500.0	2,497.5	2,501.3	2,498.9	5.2	5.4	141.77	31.6	1.3	51.0	40.8	10.22	4.995	
2,600.0	2,595.6	2,600.6	2,597.2	5.5	5.6	139.52	42.2	-8.4	62.9	52.3	10.60	5.933	
2,655.5	2,649.8	2,655.6	2,651.6	5.5	5.7	139.38	48.0	-13.8	70.6	59.9	10.75	6.574	
2,700.0	2,693.1	2,699.5	2,695.1	5.6	5.8	139.56	52.7	-18.1	77.2	66.3	10.85	7.112	
2,800.0	2,790.5	2,798.4	2,793.0	5.8	5.9	139.88	63.3	-27.7	91.9	80.7	11.17	8.221	
2,900.0	2,887.9	2,897.4	2,890.8	5.9	6.1	140.11	73.9	-37.4	106.5	95.0	11.50	9.268	
3,000.0	2,985.3	2,996.3	2,988.7	6.1	6.2	140.29	84.4	-47.1	121.2	109.4	11.82	10.256	
3,100.0	3,082.7	3,095.2	3,086.6	6.3	6.4	140.42	95.0	-56.7	135.9	123.8	12.14	11.191	
3,200.0	3,180.1	3,194.1	3,184.4	6.5	6.6	140.53	105.6	-66.4	150.6	138.1	12.47	12.076	
3,300.0	3,277.5	3,292.9	3,282.3	6.7	6.7	140.63	116.1	-76.0	165.3	152.5	12.76	12.950	
3,400.0	3,374.9	3,391.2	3,379.6	6.8	6.9	141.03	125.9	-84.9	180.2	167.1	13.10	13.751	
3,500.0	3,472.3	3,489.3	3,477.0	7.0	7.1	141.86	134.3	-92.7	195.5	182.1	13.43	14.554	
3,600.0	3,569.7	3,587.1	3,574.3	7.2	7.2	143.01	141.6	-99.3	211.3	197.5	13.76	15.352	
3,700.0	3,667.1	3,684.6	3,671.5	7.4	7.4	144.41	147.6	-104.8	227.5	213.4	14.09	16.150	
3,800.0	3,764.5	3,781.8	3,768.5	7.6	7.5	146.00	152.3	-109.2	244.4	230.0	14.42	16.952	
3,900.0	3,861.9	3,878.6	3,865.2	7.8	7.7	147.72	155.8	-112.4	262.0	247.3	14.75	17.766	
4,000.0	3,959.2	3,975.0	3,961.5	8.0	7.8	149.53	158.2	-114.5	280.4	265.3	15.08	18.595	
4,100.0	4,056.6	4,070.8	4,057.3	8.2	8.0	151.41	159.3	-115.5	299.7	284.3	15.41	19.446	
4,200.0	4,154.0	4,167.3	4,153.8	8.4	8.1	153.30	159.4	-115.6	319.9	304.1	15.74	20.320	
4,300.0	4,251.4	4,264.7	4,251.2	8.6	8.2	155.01	159.4	-115.6	340.4	324.3	16.08	21.173	
4,400.0	4,348.8	4,362.1	4,348.6	8.8	8.3	156.52	159.4	-115.6	361.1	344.7	16.41	22.014	
4,500.0	4,446.2	4,459.5	4,446.0	9.0	8.4	157.87	159.4	-115.6	382.1	365.4	16.73	22.836	
4,600.0	4,543.6	4,556.9	4,543.4	9.2	8.5	159.08	159.4	-115.6	403.3	386.3	17.06	23.638	
4,700.0	4,641.0	4,654.3	4,640.8	9.4	8.6	160.17	159.4	-115.6	424.6	407.3	17.39	24.419	
4,800.0	4,738.4	4,751.7	4,738.2	9.6	8.7	161.16	159.4	-115.6	446.1	428.4	17.72	25.181	
4,900.0	4,835.8	4,849.1	4,835.6	9.8	8.8	162.05	159.4	-115.6	467.7	449.7	18.04	25.921	

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

ConocoPhillips

Anticollision Report

Company:	DELAWARE BASIN EAST	**Local Co-ordinate Reference:**	Well PITCHBLENDE 24-25 FED COM 606H
Project:	LEA COUNTY SOUTHEAST	**TVD Reference:**	RKB=27ft @ 3393.5usft
Reference Site:	PITCHBLENDE 24-25 FEDERAL PROJECT	**MD Reference:**	RKB=27ft @ 3393.5usft
Site Error:	0.0 usft	**North Reference:**	Grid
Reference Well:	PITCHBLENDE 24-25 FED COM 606H	**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 705H - OWB - PWP0

Offset Site Error: 0.0 usft

Survey Program: 0-r.5 SDI_KPR_WL_NS-CT, 2000-r.5 MWD+IFR1+SAG+FDIR, 12061-r.5 MWD+IFR1+SAG+FDIR

Rule Assigned:

Offset Well Error: 0.0 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	No-Go Distance (usft)	Separation Factor	Warning
5,000.0	4,933.2	4,946.5	4,933.0	10.0	8.9	162.87	159.4	-115.6	489.4	471.0	18.37	26.642	
5,100.0	5,030.6	5,043.9	5,030.4	10.3	9.0	163.62	159.4	-115.6	511.1	492.4	18.69	27.342	
5,200.0	5,128.0	5,141.3	5,127.8	10.5	9.1	164.30	159.4	-115.6	533.0	514.0	19.02	28.023	
5,300.0	5,225.4	5,238.7	5,225.2	10.7	9.2	164.94	159.4	-115.6	554.9	535.6	19.34	28.685	
5,400.0	5,322.8	5,336.1	5,322.6	10.9	9.3	165.52	159.4	-115.6	576.9	557.2	19.67	29.328	
5,500.0	5,420.1	5,433.4	5,419.9	11.1	9.4	166.06	159.4	-115.6	598.9	578.9	19.99	29.953	
5,600.0	5,517.5	5,530.8	5,517.3	11.3	9.5	166.57	159.4	-115.6	621.0	600.6	20.32	30.561	
5,700.0	5,614.9	5,628.2	5,614.7	11.5	9.6	167.03	159.4	-115.6	643.1	622.4	20.64	31.151	
5,800.0	5,712.3	5,725.6	5,712.1	11.7	9.7	167.47	159.4	-115.6	665.2	644.3	20.97	31.725	
5,900.0	5,809.7	5,823.0	5,809.5	12.0	9.8	167.88	159.4	-115.6	687.4	666.1	21.29	32.283	
6,000.0	5,907.1	5,920.4	5,906.9	12.2	9.8	168.27	159.4	-115.6	709.6	688.0	21.62	32.826	
6,100.0	6,004.5	6,017.8	6,004.3	12.4	9.9	168.63	159.4	-115.6	731.9	709.9	21.94	33.354	
6,200.0	6,101.9	6,115.2	6,101.7	12.6	10.0	168.97	159.4	-115.6	754.2	731.9	22.27	33.867	
6,300.0	6,199.3	6,212.6	6,199.1	12.8	10.1	169.29	159.4	-115.6	776.5	753.9	22.59	34.366	
6,301.1	6,200.3	6,213.6	6,200.1	12.8	10.1	169.29	159.4	-115.6	776.7	754.1	22.60	34.371	
6,400.0	6,296.9	6,310.2	6,296.7	13.0	10.2	169.62	159.4	-115.6	797.9	775.0	22.92	34.821	
6,500.0	6,394.8	6,408.1	6,394.6	13.2	10.3	169.91	159.4	-115.6	817.8	794.6	23.23	35.198	
6,600.0	6,493.1	6,506.4	6,492.9	13.4	10.4	170.16	159.4	-115.6	835.9	812.4	23.55	35.499	
6,700.0	6,591.7	6,605.0	6,591.5	13.7	10.5	170.38	159.4	-115.6	852.4	828.6	23.86	35.728	
6,800.0	6,690.6	6,703.9	6,690.4	13.8	10.6	170.57	159.4	-115.6	867.2	843.1	24.16	35.888	
6,900.0	6,789.7	6,803.0	6,789.5	14.0	10.7	170.73	159.4	-115.6	880.3	855.8	24.46	35.983	
7,000.0	6,889.0	6,902.3	6,888.8	14.2	10.8	170.87	159.4	-115.6	891.7	866.9	24.76	36.016	
7,100.0	6,988.5	7,001.8	6,988.3	14.4	10.9	170.98	159.4	-115.6	901.4	876.3	25.05	35.990	
7,200.0	7,088.2	7,101.5	7,088.0	14.6	11.0	171.08	159.4	-115.6	909.3	884.0	25.32	35.907	
7,300.0	7,188.0	7,201.3	7,187.8	14.8	11.1	171.15	159.4	-115.6	915.6	890.0	25.59	35.772	
7,400.0	7,287.9	7,301.2	7,287.7	14.9	11.2	171.20	159.4	-115.6	920.1	894.2	25.85	35.587	
7,500.0	7,387.9	7,401.2	7,387.7	15.1	11.3	171.23	159.4	-115.6	922.9	896.8	26.10	35.359	
7,600.0	7,487.9	7,501.2	7,487.7	15.2	11.3	171.24	159.4	-115.6	924.0	897.6	26.32	35.105	
7,612.1	7,500.0	7,513.3	7,499.8	15.2	11.4	89.68	159.4	-115.6	924.0	897.6	26.33	35.085	
7,700.0	7,587.9	7,601.2	7,587.7	15.3	11.4	89.68	159.4	-115.6	924.0	897.5	26.47	34.908	
7,800.0	7,687.9	7,701.2	7,687.7	15.3	11.5	89.68	159.4	-115.6	924.0	897.4	26.61	34.728	
7,900.0	7,787.9	7,801.2	7,787.7	15.4	11.6	89.68	159.4	-115.6	924.0	897.2	26.74	34.549	
8,000.0	7,887.9	7,901.2	7,887.7	15.4	11.7	89.68	159.4	-115.6	924.0	897.1	26.88	34.371	
8,100.0	7,987.9	8,001.2	7,987.7	15.5	11.8	89.68	159.4	-115.6	924.0	896.9	27.02	34.195	
8,200.0	8,087.9	8,101.2	8,087.7	15.5	11.9	89.68	159.4	-115.6	924.0	896.8	27.16	34.020	
8,300.0	8,187.9	8,201.2	8,187.7	15.6	12.0	89.68	159.4	-115.6	924.0	896.7	27.30	33.847	
8,400.0	8,287.9	8,301.2	8,287.7	15.6	12.1	89.68	159.4	-115.6	924.0	896.5	27.44	33.675	
8,500.0	8,387.9	8,401.2	8,387.7	15.7	12.2	89.68	159.4	-115.6	924.0	896.4	27.58	33.505	
8,600.0	8,487.9	8,501.2	8,487.7	15.7	12.3	89.68	159.4	-115.6	924.0	896.2	27.72	33.336	
8,700.0	8,587.9	8,601.2	8,587.7	15.8	12.4	89.68	159.4	-115.6	924.0	896.1	27.86	33.168	
8,800.0	8,687.9	8,701.2	8,687.7	15.8	12.5	89.68	159.4	-115.6	924.0	896.0	28.00	33.002	
8,900.0	8,787.9	8,801.2	8,787.7	15.9	12.5	89.68	159.4	-115.6	924.0	895.8	28.14	32.837	
9,000.0	8,887.9	8,901.2	8,887.7	15.9	12.6	89.68	159.4	-115.6	924.0	895.7	28.28	32.674	
9,100.0	8,987.9	9,001.2	8,987.7	16.0	12.7	89.68	159.4	-115.6	924.0	895.5	28.42	32.512	
9,200.0	9,087.9	9,101.2	9,087.7	16.1	12.8	89.68	159.4	-115.6	924.0	895.4	28.56	32.352	
9,300.0	9,187.9	9,201.2	9,187.7	16.1	12.9	89.68	159.4	-115.6	924.0	895.3	28.70	32.192	
9,400.0	9,287.9	9,301.2	9,287.7	16.2	13.0	89.68	159.4	-115.6	924.0	895.1	28.84	32.034	
9,500.0	9,387.9	9,401.2	9,387.7	16.2	13.1	89.68	159.4	-115.6	924.0	895.0	28.98	31.878	
9,600.0	9,487.9	9,501.2	9,487.7	16.3	13.2	89.68	159.4	-115.6	924.0	894.8	29.13	31.723	
9,700.0	9,587.9	9,601.2	9,587.7	16.3	13.3	89.68	159.4	-115.6	924.0	894.7	29.27	31.569	
9,800.0	9,687.9	9,701.2	9,687.7	16.4	13.4	89.68	159.4	-115.6	924.0	894.6	29.41	31.416	

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

ConocoPhillips

Anticollision Report

Company:	DELAWARE BASIN EAST	**Local Co-ordinate Reference:**	Well PITCHBLENDE 24-25 FED COM 606H
Project:	LEA COUNTY SOUTHEAST	**TVD Reference:**	RKB=27ft @ 3393.5usft
Reference Site:	PITCHBLENDE 24-25 FEDERAL PROJECT	**MD Reference:**	RKB=27ft @ 3393.5usft
Site Error:	0.0 usft	**North Reference:**	Grid
Reference Well:	PITCHBLENDE 24-25 FED COM 606H	**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 705H - OWB - PWP0

Offset Site Error: 0.0 usft

Survey Program: 0-r.5 SDI_KPR_WL_NS-CT, 2000-r.5 MWD+IFR1+SAG+FDIR, 12061-r.5 MWD+IFR1+SAG+FDIR

Rule Assigned:

Offset Well Error: 0.0 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	No-Go Distance (usft)	Separation Factor	Warning
9,900.0	9,787.9	9,801.2	9,787.7	16.5	13.5	89.68	159.4	-115.6	924.0	894.4	29.55	31.264	
10,000.0	9,887.9	9,901.2	9,887.7	16.5	13.5	89.68	159.4	-115.6	924.0	894.3	29.70	31.114	
10,100.0	9,987.9	10,001.2	9,987.7	16.6	13.6	89.68	159.4	-115.6	924.0	894.1	29.84	30.965	
10,200.0	10,087.9	10,101.2	10,087.7	16.6	13.7	89.68	159.4	-115.6	924.0	894.0	29.98	30.817	
10,300.0	10,187.9	10,201.2	10,187.7	16.7	13.8	89.68	159.4	-115.6	924.0	893.8	30.13	30.671	
10,400.0	10,287.9	10,301.2	10,287.7	16.7	13.9	89.68	159.4	-115.6	924.0	893.7	30.27	30.525	
10,500.0	10,387.9	10,401.2	10,387.7	16.8	14.0	89.68	159.4	-115.6	924.0	893.6	30.41	30.381	
10,600.0	10,487.9	10,501.2	10,487.7	16.9	14.1	89.68	159.4	-115.6	924.0	893.4	30.56	30.238	
10,700.0	10,587.9	10,601.2	10,587.7	16.9	14.2	89.68	159.4	-115.6	924.0	893.3	30.70	30.097	
10,800.0	10,687.9	10,701.2	10,687.7	17.0	14.3	89.68	159.4	-115.6	924.0	893.1	30.84	29.956	
10,900.0	10,787.9	10,801.2	10,787.7	17.0	14.4	89.68	159.4	-115.6	924.0	893.0	30.99	29.816	
11,000.0	10,887.9	10,901.2	10,887.7	17.1	14.4	89.68	159.4	-115.6	924.0	892.8	31.13	29.678	
11,100.0	10,987.9	11,001.2	10,987.7	17.2	14.5	89.68	159.4	-115.6	924.0	892.7	31.28	29.541	
11,200.0	11,087.9	11,101.2	11,087.7	17.2	14.6	89.68	159.4	-115.6	924.0	892.5	31.42	29.405	
11,300.0	11,187.9	11,201.2	11,187.7	17.3	14.7	89.68	159.4	-115.6	924.0	892.4	31.57	29.270	
11,400.0	11,287.9	11,301.2	11,287.7	17.3	14.8	89.68	159.4	-115.6	924.0	892.3	31.71	29.136	
11,500.0	11,387.9	11,401.2	11,387.7	17.4	14.9	89.68	159.4	-115.6	924.0	892.1	31.86	29.003	
11,600.0	11,487.9	11,501.2	11,487.7	17.5	15.0	89.68	159.4	-115.6	924.0	892.0	32.00	28.871	
11,700.0	11,587.9	11,601.2	11,587.7	17.5	15.1	89.68	159.4	-115.6	924.0	891.8	32.15	28.741	
11,800.0	11,687.9	11,701.2	11,687.7	17.6	15.2	89.68	159.4	-115.6	924.0	891.7	32.29	28.611	
11,900.0	11,787.9	11,801.2	11,787.7	17.6	15.2	89.68	159.4	-115.6	924.0	891.5	32.44	28.482	
11,959.7	11,847.5	11,860.8	11,847.3	17.7	15.3	89.68	159.4	-115.6	924.0	891.5	32.51	28.423	
11,975.0	11,862.9	11,876.2	11,862.7	17.7	15.3	-89.85	159.4	-115.6	924.0	891.4	32.52	28.411	
12,000.0	11,887.8	11,901.1	11,887.6	17.7	15.3	-89.94	159.4	-115.6	924.0	891.4	32.54	28.393	
12,010.7	11,898.5	11,911.8	11,898.3	17.7	15.3	-90.00	159.4	-115.6	924.0	891.4	32.55	28.386	
12,025.0	11,912.7	11,926.0	11,912.5	17.7	15.4	-90.11	159.4	-115.6	924.0	891.4	32.56	28.377	
12,050.0	11,937.3	11,950.6	11,937.1	17.7	15.4	-90.35	159.4	-115.6	924.0	891.4	32.58	28.363	
12,075.0	11,961.7	11,975.0	11,961.5	17.7	15.4	-90.67	159.4	-115.6	924.0	891.4	32.59	28.352	
12,100.0	11,985.8	11,999.1	11,985.6	17.7	15.4	-91.05	159.4	-115.6	924.1	891.5	32.60	28.345	
12,125.0	12,009.6	12,022.9	12,009.4	17.7	15.4	-91.49	159.4	-115.6	924.3	891.7	32.60	28.350	
12,150.0	12,032.9	12,046.2	12,032.7	17.7	15.4	-91.98	159.4	-115.6	924.6	892.0	32.60	28.360	
12,175.0	12,055.6	12,069.8	12,056.3	17.7	15.4	-92.53	159.3	-115.6	925.1	892.5	32.60	28.379	
12,200.0	12,077.8	12,095.1	12,081.6	17.7	15.5	-93.12	158.2	-115.6	925.6	893.0	32.59	28.403	
12,225.0	12,099.4	12,121.1	12,107.5	17.7	15.5	-93.71	155.6	-115.6	926.3	893.7	32.58	28.431	
12,250.0	12,120.3	12,147.9	12,133.9	17.8	15.5	-94.30	151.5	-115.6	927.1	894.5	32.58	28.459	
12,275.0	12,140.4	12,175.3	12,160.7	17.8	15.5	-94.88	145.8	-115.5	928.0	895.4	32.58	28.487	
12,300.0	12,159.8	12,203.6	12,188.0	17.8	15.5	-95.47	138.3	-115.5	929.0	896.4	32.58	28.512	
12,325.0	12,178.2	12,232.7	12,215.6	17.8	15.5	-96.05	128.9	-115.4	930.1	897.5	32.60	28.532	
12,350.0	12,195.8	12,262.8	12,243.3	17.8	15.5	-96.63	117.4	-115.3	931.3	898.6	32.62	28.545	
12,375.0	12,212.4	12,293.8	12,271.2	17.9	15.6	-97.20	103.8	-115.2	932.5	899.8	32.66	28.548	
12,400.0	12,228.0	12,325.8	12,298.9	17.9	15.6	-97.76	87.9	-115.0	933.8	901.1	32.72	28.537	
12,425.0	12,242.6	12,358.8	12,326.4	17.9	15.6	-98.32	69.5	-114.9	935.1	902.3	32.80	28.512	
12,450.0	12,256.1	12,393.0	12,353.4	17.9	15.6	-98.85	48.6	-114.7	936.4	903.5	32.89	28.468	
12,475.0	12,268.5	12,428.2	12,379.6	18.0	15.6	-99.37	25.0	-114.5	937.7	904.7	33.01	28.406	
12,500.0	12,279.7	12,464.6	12,404.7	18.0	15.7	-99.86	-1.2	-114.3	939.0	905.9	33.15	28.323	
12,525.0	12,289.7	12,502.1	12,428.5	18.0	15.7	-100.32	-30.2	-114.0	940.2	906.9	33.32	28.221	
12,550.0	12,298.5	12,540.7	12,450.5	18.1	15.7	-100.75	-61.9	-113.7	941.4	907.9	33.50	28.100	
12,575.0	12,306.1	12,580.2	12,470.3	18.1	15.8	-101.14	-96.2	-113.4	942.4	908.7	33.70	27.965	
12,600.0	12,312.5	12,620.8	12,487.6	18.2	15.8	-101.47	-132.8	-113.1	943.3	909.4	33.91	27.818	
12,625.0	12,317.5	12,662.1	12,502.0	18.2	15.8	-101.75	-171.6	-112.8	944.1	910.0	34.13	27.664	
12,650.0	12,321.3	12,704.2	12,513.1	18.3	15.8	-101.97	-212.1	-112.5	944.7	910.4	34.34	27.508	

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

ConocoPhillips

Anticollision Report

Company:	DELAWARE BASIN EAST	**Local Co-ordinate Reference:**	Well PITCHBLENDE 24-25 FED COM 606H
Project:	LEA COUNTY SOUTHEAST	**TVD Reference:**	RKB=27ft @ 3393.5usft
Reference Site:	PITCHBLENDE 24-25 FEDERAL PROJECT	**MD Reference:**	RKB=27ft @ 3393.5usft
Site Error:	0.0 usft	**North Reference:**	Grid
Reference Well:	PITCHBLENDE 24-25 FED COM 606H	**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 705H - OWB - PWP0

Offset Site Error: 0.0 usft

Survey Program: 0-r.5 SDI_KPR_WL_NS-CT, 2000-r.5 MWD+IFR1+SAG+FDIR, 12061-r.5 MWD+IFR1+SAG+FDIR

Rule Assigned:

Offset Well Error: 0.0 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	No-Go Distance (usft)	Separation Factor	Warning
12,675.0	12,323.7	12,746.8	12,520.7	18.3	15.9	-102.13	-254.0	-112.1	945.1	910.6	34.55	27.356	
12,700.0	12,324.9	12,789.7	12,524.5	18.4	15.9	-102.21	-296.7	-111.7	945.4	910.6	34.74	27.211	
12,709.7	12,325.0	12,806.3	12,525.0	18.4	15.9	-102.22	-313.4	-111.6	945.4	910.6	34.81	27.158	
12,800.0	12,325.0	12,898.6	12,525.0	18.6	16.0	-102.23	-405.6	-110.8	945.4	910.2	35.18	26.870	
12,900.0	12,325.0	12,998.6	12,525.0	18.8	16.2	-102.23	-505.6	-109.9	945.4	909.7	35.67	26.508	
13,000.0	12,325.0	13,098.6	12,525.0	19.1	16.4	-102.23	-605.6	-109.1	945.4	909.2	36.22	26.104	
13,100.0	12,325.0	13,198.6	12,525.0	19.4	16.8	-102.23	-705.6	-108.2	945.4	908.6	36.84	25.664	
13,200.0	12,325.0	13,298.6	12,525.0	19.8	17.1	-102.23	-805.6	-107.4	945.4	907.9	37.52	25.195	
13,300.0	12,325.0	13,398.6	12,525.0	20.2	17.5	-102.23	-905.6	-106.5	945.4	907.1	38.27	24.704	
13,400.0	12,325.0	13,498.6	12,525.0	20.6	18.0	-102.23	-1,005.6	-105.6	945.4	906.3	39.07	24.196	
13,500.0	12,325.0	13,598.6	12,525.0	21.0	18.5	-102.23	-1,105.6	-104.8	945.4	905.5	39.93	23.676	
13,600.0	12,325.0	13,698.6	12,525.0	21.4	19.0	-102.23	-1,205.6	-103.9	945.4	904.6	40.84	23.149	
13,700.0	12,325.0	13,798.6	12,525.0	21.9	19.5	-102.23	-1,305.6	-103.1	945.4	903.6	41.80	22.620	
13,800.0	12,325.0	13,898.6	12,525.0	22.4	20.1	-102.23	-1,405.6	-102.2	945.4	902.6	42.80	22.091	
13,900.0	12,325.0	13,998.6	12,525.0	22.9	20.7	-102.23	-1,505.6	-101.4	945.4	901.6	43.84	21.567	
14,000.0	12,325.0	14,098.6	12,525.0	23.5	21.3	-102.23	-1,605.6	-100.5	945.4	900.5	44.92	21.049	
14,100.0	12,325.0	14,198.6	12,525.0	24.0	21.9	-102.23	-1,705.6	-99.6	945.4	899.4	46.03	20.539	
14,200.0	12,325.0	14,298.6	12,525.0	24.6	22.5	-102.23	-1,805.6	-98.8	945.4	898.2	47.18	20.039	
14,300.0	12,325.0	14,398.6	12,525.0	25.2	23.1	-102.23	-1,905.6	-97.9	945.4	897.0	48.36	19.551	
14,400.0	12,325.0	14,498.6	12,525.0	25.8	23.8	-102.23	-2,005.6	-97.1	945.4	895.8	49.56	19.075	
14,500.0	12,325.0	14,598.6	12,525.0	26.4	24.5	-102.23	-2,105.6	-96.2	945.4	894.6	50.79	18.612	
14,600.0	12,325.0	14,698.6	12,525.0	27.1	25.2	-102.23	-2,205.6	-95.3	945.4	893.4	52.05	18.163	
14,700.0	12,325.0	14,798.6	12,525.0	27.7	25.9	-102.23	-2,305.6	-94.5	945.4	892.1	53.33	17.727	
14,800.0	12,325.0	14,898.6	12,525.0	28.4	26.6	-102.23	-2,405.6	-93.6	945.4	890.8	54.63	17.305	
14,900.0	12,325.0	14,998.6	12,525.0	29.0	27.3	-102.23	-2,505.6	-92.8	945.4	889.4	55.95	16.896	
15,000.0	12,325.0	15,098.6	12,525.0	29.7	28.0	-102.23	-2,605.6	-91.9	945.4	888.1	57.29	16.502	
15,100.0	12,325.0	15,198.6	12,525.0	30.4	28.7	-102.23	-2,705.6	-91.1	945.4	886.8	58.65	16.120	
15,200.0	12,325.0	15,298.6	12,525.0	31.1	29.5	-102.23	-2,805.5	-90.2	945.4	885.4	60.02	15.752	
15,300.0	12,325.0	15,398.6	12,525.0	31.8	30.2	-102.23	-2,905.5	-89.3	945.4	884.0	61.40	15.396	
15,400.0	12,325.0	15,498.6	12,525.0	32.5	31.0	-102.23	-3,005.5	-88.5	945.4	882.6	62.80	15.053	
15,500.0	12,325.0	15,598.6	12,525.0	33.2	31.7	-102.23	-3,105.5	-87.6	945.4	881.2	64.22	14.722	
15,600.0	12,325.0	15,698.6	12,525.0	34.0	32.5	-102.23	-3,205.5	-86.8	945.4	879.8	65.64	14.402	
15,700.0	12,325.0	15,798.6	12,525.0	34.7	33.2	-102.23	-3,305.5	-85.9	945.4	878.3	67.08	14.094	
15,800.0	12,325.0	15,898.6	12,525.0	35.4	34.0	-102.23	-3,405.5	-85.1	945.4	876.9	68.52	13.797	
15,900.0	12,325.0	15,998.6	12,525.0	36.2	34.8	-102.23	-3,505.5	-84.2	945.4	875.4	69.98	13.509	
16,000.0	12,325.0	16,098.6	12,525.0	36.9	35.6	-102.23	-3,605.5	-83.3	945.4	874.0	71.45	13.232	
16,100.0	12,325.0	16,198.6	12,525.0	37.7	36.3	-102.23	-3,705.5	-82.5	945.4	872.5	72.92	12.965	
16,200.0	12,325.0	16,298.6	12,525.0	38.4	37.1	-102.23	-3,805.5	-81.6	945.4	871.0	74.40	12.706	
16,300.0	12,325.0	16,398.6	12,525.0	39.2	37.9	-102.23	-3,905.5	-80.8	945.4	869.5	75.89	12.457	
16,400.0	12,325.0	16,498.6	12,525.0	39.9	38.7	-102.23	-4,005.5	-79.9	945.4	868.0	77.39	12.216	
16,500.0	12,325.0	16,598.6	12,525.0	40.7	39.5	-102.23	-4,105.5	-79.0	945.4	866.5	78.90	11.983	
16,600.0	12,325.0	16,698.6	12,525.0	41.5	40.3	-102.23	-4,205.5	-78.2	945.4	865.0	80.41	11.758	
16,700.0	12,325.0	16,798.6	12,525.0	42.3	41.1	-102.23	-4,305.5	-77.3	945.4	863.5	81.92	11.540	
16,800.0	12,325.0	16,898.6	12,525.0	43.0	41.9	-102.23	-4,405.5	-76.5	945.4	862.0	83.45	11.330	
16,900.0	12,325.0	16,998.6	12,525.0	43.8	42.7	-102.23	-4,505.5	-75.6	945.4	860.4	84.97	11.126	
17,000.0	12,325.0	17,098.6	12,525.0	44.6	43.5	-102.23	-4,605.5	-74.8	945.4	858.9	86.51	10.929	
17,100.0	12,325.0	17,198.6	12,525.0	45.4	44.3	-102.23	-4,705.5	-73.9	945.4	857.4	88.05	10.738	
17,200.0	12,325.0	17,298.6	12,525.0	46.2	45.1	-102.23	-4,805.5	-73.0	945.4	855.8	89.59	10.553	
17,300.0	12,325.0	17,398.6	12,525.0	47.0	45.9	-102.23	-4,905.5	-72.2	945.4	854.3	91.14	10.374	
17,400.0	12,325.0	17,498.6	12,525.0	47.8	46.7	-102.23	-5,005.5	-71.3	945.4	852.7	92.69	10.200	
17,500.0	12,325.0	17,598.6	12,525.0	48.6	47.6	-102.23	-5,105.5	-70.5	945.4	851.2	94.24	10.032	

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Anticollision Report

Company:	DELAWARE BASIN EAST	**Local Co-ordinate Reference:**	Well PITCHBLENDE 24-25 FED COM 606H
Project:	LEA COUNTY SOUTHEAST	**TVD Reference:**	RKB=27ft @ 3393.5usft
Reference Site:	PITCHBLENDE 24-25 FEDERAL PROJECT	**MD Reference:**	RKB=27ft @ 3393.5usft
Site Error:	0.0 usft	**North Reference:**	Grid
Reference Well:	PITCHBLENDE 24-25 FED COM 606H	**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 705H - OWB - PWP0

Offset Site Error: 0.0 usft

Survey Program: 0-r.5 SDI_KPR_WL_NS-CT, 2000-r.5 MWD+IFR1+SAG+FDIR, 12061-r.5 MWD+IFR1+SAG+FDIR

Rule Assigned:

Offset Well Error: 0.0 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	No-Go Distance (usft)	Separation Factor	Warning
17,600.0	12,325.0	17,698.6	12,525.0	49.4	48.4	-102.23	-5,205.5	-69.6	945.4	849.6	95.80	9.868	
17,700.0	12,325.0	17,798.6	12,525.0	50.2	49.2	-102.23	-5,305.5	-68.8	945.4	848.0	97.36	9.710	
17,800.0	12,325.0	17,898.6	12,525.0	51.0	50.0	-102.23	-5,405.5	-67.9	945.4	846.5	98.93	9.556	
17,900.0	12,325.0	17,998.6	12,525.0	51.8	50.8	-102.23	-5,505.4	-67.0	945.4	844.9	100.50	9.407	
18,000.0	12,325.0	18,098.6	12,525.0	52.6	51.6	-102.23	-5,605.4	-66.2	945.4	843.3	102.07	9.262	
18,100.0	12,325.0	18,198.6	12,525.0	53.4	52.5	-102.23	-5,705.4	-65.3	945.4	841.8	103.65	9.121	
18,200.0	12,325.0	18,298.6	12,525.0	54.2	53.3	-102.23	-5,805.4	-64.5	945.4	840.2	105.23	8.985	
18,300.0	12,325.0	18,398.6	12,525.0	55.0	54.1	-102.23	-5,905.4	-63.6	945.4	838.6	106.81	8.852	
18,400.0	12,325.0	18,498.6	12,525.0	55.8	54.9	-102.23	-6,005.4	-62.7	945.4	837.0	108.39	8.722	
18,500.0	12,325.0	18,598.6	12,525.0	56.7	55.8	-102.23	-6,105.4	-61.9	945.4	835.4	109.98	8.596	
18,600.0	12,325.0	18,698.6	12,525.0	57.5	56.6	-102.23	-6,205.4	-61.0	945.4	833.8	111.56	8.474	
18,700.0	12,325.0	18,798.6	12,525.0	58.3	57.4	-102.23	-6,305.4	-60.2	945.4	832.2	113.15	8.355	
18,800.0	12,325.0	18,898.6	12,525.0	59.1	58.3	-102.23	-6,405.4	-59.3	945.4	830.7	114.75	8.239	
18,900.0	12,325.0	18,998.6	12,525.0	59.9	59.1	-102.23	-6,505.4	-58.5	945.4	829.1	116.34	8.126	
19,000.0	12,325.0	19,098.6	12,525.0	60.7	59.9	-102.23	-6,605.4	-57.6	945.4	827.5	117.94	8.016	
19,100.0	12,325.0	19,198.6	12,525.0	61.6	60.8	-102.23	-6,705.4	-56.7	945.4	825.9	119.54	7.909	
19,200.0	12,325.0	19,298.6	12,525.0	62.4	61.6	-102.23	-6,805.4	-55.9	945.4	824.3	121.14	7.804	
19,300.0	12,325.0	19,398.6	12,525.0	63.2	62.4	-102.23	-6,905.4	-55.0	945.4	822.7	122.74	7.702	
19,400.0	12,325.0	19,498.6	12,525.0	64.0	63.3	-102.23	-7,005.4	-54.2	945.4	821.1	124.35	7.603	
19,500.0	12,325.0	19,598.6	12,525.0	64.9	64.1	-102.23	-7,105.4	-53.3	945.4	819.5	125.95	7.506	
19,600.0	12,325.0	19,698.6	12,525.0	65.7	64.9	-102.23	-7,205.4	-52.4	945.4	817.8	127.56	7.412	
19,700.0	12,325.0	19,798.6	12,525.0	66.5	65.8	-102.23	-7,305.4	-51.6	945.4	816.2	129.17	7.319	
19,800.0	12,325.0	19,898.6	12,525.0	67.3	66.6	-102.23	-7,405.4	-50.7	945.4	814.6	130.78	7.229	
19,900.0	12,325.0	19,998.6	12,525.0	68.2	67.4	-102.23	-7,505.4	-49.9	945.4	813.0	132.39	7.141	
20,000.0	12,325.0	20,098.6	12,525.0	69.0	68.3	-102.23	-7,605.4	-49.0	945.4	811.4	134.00	7.055	
20,100.0	12,325.0	20,198.6	12,525.0	69.8	69.1	-102.23	-7,705.4	-48.2	945.4	809.8	135.62	6.971	
20,200.0	12,325.0	20,298.6	12,525.0	70.7	70.0	-102.23	-7,805.4	-47.3	945.4	808.2	137.23	6.889	
20,300.0	12,325.0	20,398.6	12,525.0	71.5	70.8	-102.23	-7,905.4	-46.4	945.4	806.6	138.85	6.809	
20,400.0	12,325.0	20,498.6	12,525.0	72.3	71.6	-102.23	-8,005.4	-45.6	945.4	804.9	140.47	6.730	
20,500.0	12,325.0	20,598.6	12,525.0	73.2	72.5	-102.23	-8,105.4	-44.7	945.4	803.3	142.09	6.654	
20,600.0	12,325.0	20,698.6	12,525.0	74.0	73.3	-102.23	-8,205.3	-43.9	945.4	801.7	143.71	6.579	
20,700.0	12,325.0	20,798.6	12,525.0	74.8	74.2	-102.23	-8,305.3	-43.0	945.4	800.1	145.33	6.505	
20,800.0	12,325.0	20,898.6	12,525.0	75.7	75.0	-102.23	-8,405.3	-42.2	945.4	798.5	146.95	6.433	
20,900.0	12,325.0	20,998.6	12,525.0	76.5	75.8	-102.23	-8,505.3	-41.3	945.4	796.8	148.57	6.363	
21,000.0	12,325.0	21,098.6	12,525.0	77.3	76.7	-102.23	-8,605.3	-40.4	945.4	795.2	150.20	6.294	
21,100.0	12,325.0	21,198.6	12,525.0	78.2	77.5	-102.23	-8,705.3	-39.6	945.4	793.6	151.82	6.227	
21,200.0	12,325.0	21,298.6	12,525.0	79.0	78.4	-102.23	-8,805.3	-38.7	945.4	792.0	153.45	6.161	
21,300.0	12,325.0	21,398.6	12,525.0	79.8	79.2	-102.23	-8,905.3	-37.9	945.4	790.3	155.08	6.096	
21,400.0	12,325.0	21,498.6	12,525.0	80.7	80.1	-102.23	-9,005.3	-37.0	945.4	788.7	156.70	6.033	
21,500.0	12,325.0	21,598.6	12,525.0	81.5	80.9	-102.23	-9,105.3	-36.1	945.4	787.1	158.33	5.971	
21,600.0	12,325.0	21,698.6	12,525.0	82.4	81.7	-102.23	-9,205.3	-35.3	945.4	785.4	159.96	5.910	
21,700.0	12,325.0	21,798.6	12,525.0	83.2	82.6	-102.23	-9,305.3	-34.4	945.4	783.8	161.59	5.851	
21,800.0	12,325.0	21,898.6	12,525.0	84.0	83.4	-102.23	-9,405.3	-33.6	945.4	782.2	163.22	5.792	
21,900.0	12,325.0	21,998.6	12,525.0	84.9	84.3	-102.23	-9,505.3	-32.7	945.4	780.5	164.85	5.735	
22,000.0	12,325.0	22,098.6	12,525.0	85.7	85.1	-102.23	-9,605.3	-31.9	945.4	778.9	166.49	5.679	
22,100.0	12,325.0	22,198.6	12,525.0	86.6	86.0	-102.23	-9,705.3	-31.0	945.4	777.3	168.12	5.623	
22,200.0	12,325.0	22,298.6	12,525.0	87.4	86.8	-102.23	-9,805.3	-30.1	945.4	775.7	169.75	5.569	
22,300.0	12,325.0	22,398.6	12,525.0	88.2	87.7	-102.23	-9,905.3	-29.3	945.4	774.0	171.39	5.516	
22,400.0	12,325.0	22,498.6	12,525.0	89.1	88.5	-102.23	-10,005.3	-28.4	945.4	772.4	173.02	5.464	
22,500.0	12,325.0	22,598.6	12,525.0	89.9	89.4	-102.23	-10,105.3	-27.6	945.4	770.7	174.66	5.413	
22,600.0	12,325.0	22,698.6	12,525.0	90.8	90.2	-102.23	-10,205.3	-26.7	945.4	769.1	176.29	5.363	

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

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Anticollision Report

Company:	DELAWARE BASIN EAST	**Local Co-ordinate Reference:**	Well PITCHBLENDE 24-25 FED COM 606H
Project:	LEA COUNTY SOUTHEAST	**TVD Reference:**	RKB=27ft @ 3393.5usft
Reference Site:	PITCHBLENDE 24-25 FEDERAL PROJECT	**MD Reference:**	RKB=27ft @ 3393.5usft
Site Error:	0.0 usft	**North Reference:**	Grid
Reference Well:	PITCHBLENDE 24-25 FED COM 606H	**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 705H - OWB - PWP0

Offset Site Error: 0.0 usft

Survey Program: 0-r.5 SDI_KPR_WL_NS-CT, 2000-r.5 MWD+IFR1+SAG+FDIR, 12061-r.5 MWD+IFR1+SAG+FDIR

Rule Assigned:

Offset Well Error: 0.0 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	No-Go Distance (usft)	Separation Factor	Warning
22,690.5	12,325.0	22,789.1	12,525.0	91.5	91.0	-102.23	-10,295.7	-25.9	945.4	767.6	177.77	5.318	

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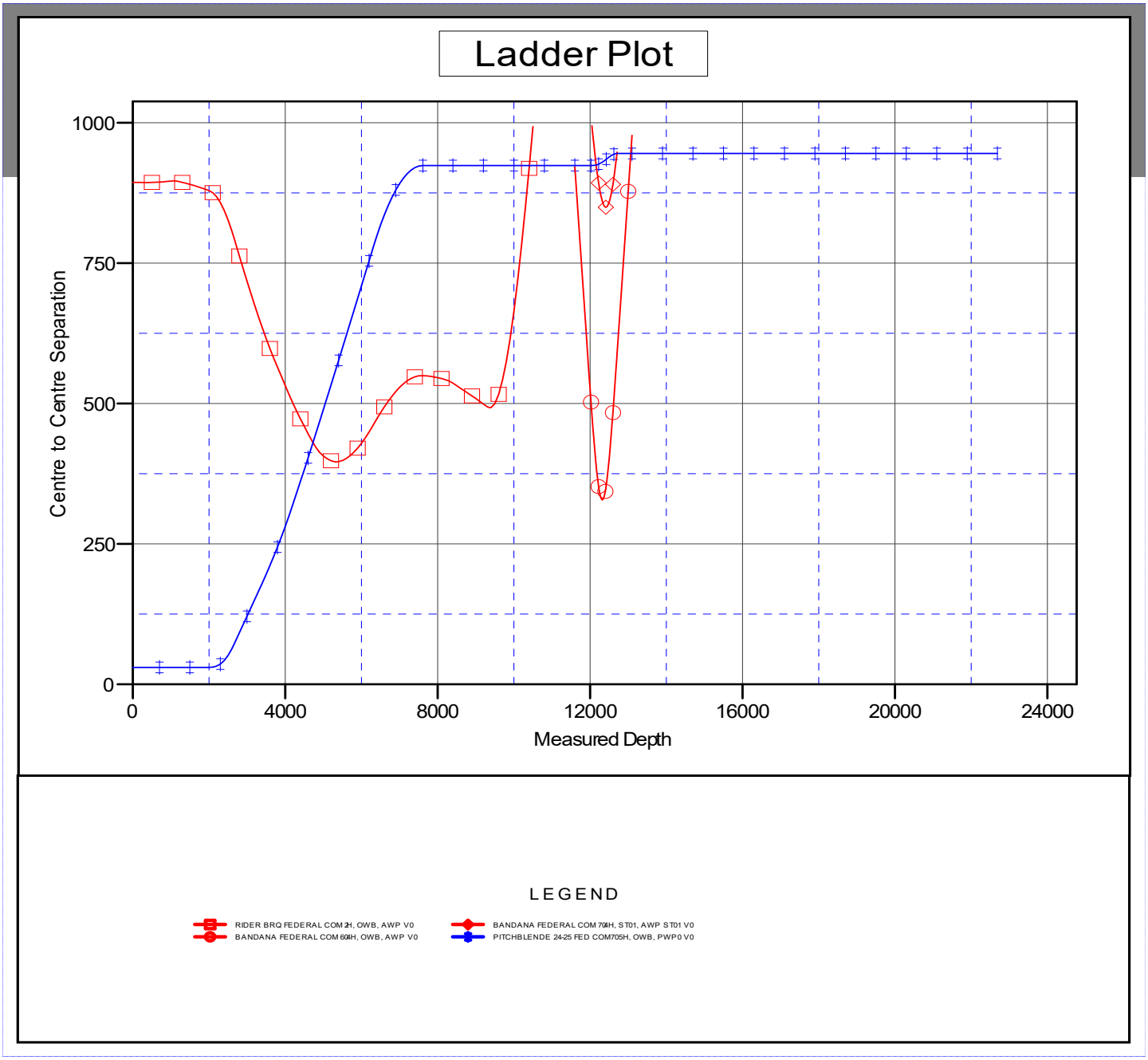
Anticollision Report

Company:	DELAWARE BASIN EAST	**Local Co-ordinate Reference:**	Well PITCHBLENDE 24-25 FED COM 606H
Project:	LEA COUNTY SOUTHEAST	**TVD Reference:**	RKB=27ft @ 3393.5usft
Reference Site:	PITCHBLENDE 24-25 FEDERAL PROJECT	**MD Reference:**	RKB=27ft @ 3393.5usft
Site Error:	0.0 usft	**North Reference:**	Grid
Reference Well:	PITCHBLENDE 24-25 FED COM 606H	**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 @ 3393.5usft
Offset Depths are relative to Offset Datum
Central Meridian is 104° 20' 0.000 W

Coordinates are relative to: PITCHBLENDE 24-25 FED COM 606H
Coordinate System is US State Plane 1927 (Exact solution), New Mexico East 30
Grid Convergence at Surface is: 0.48°



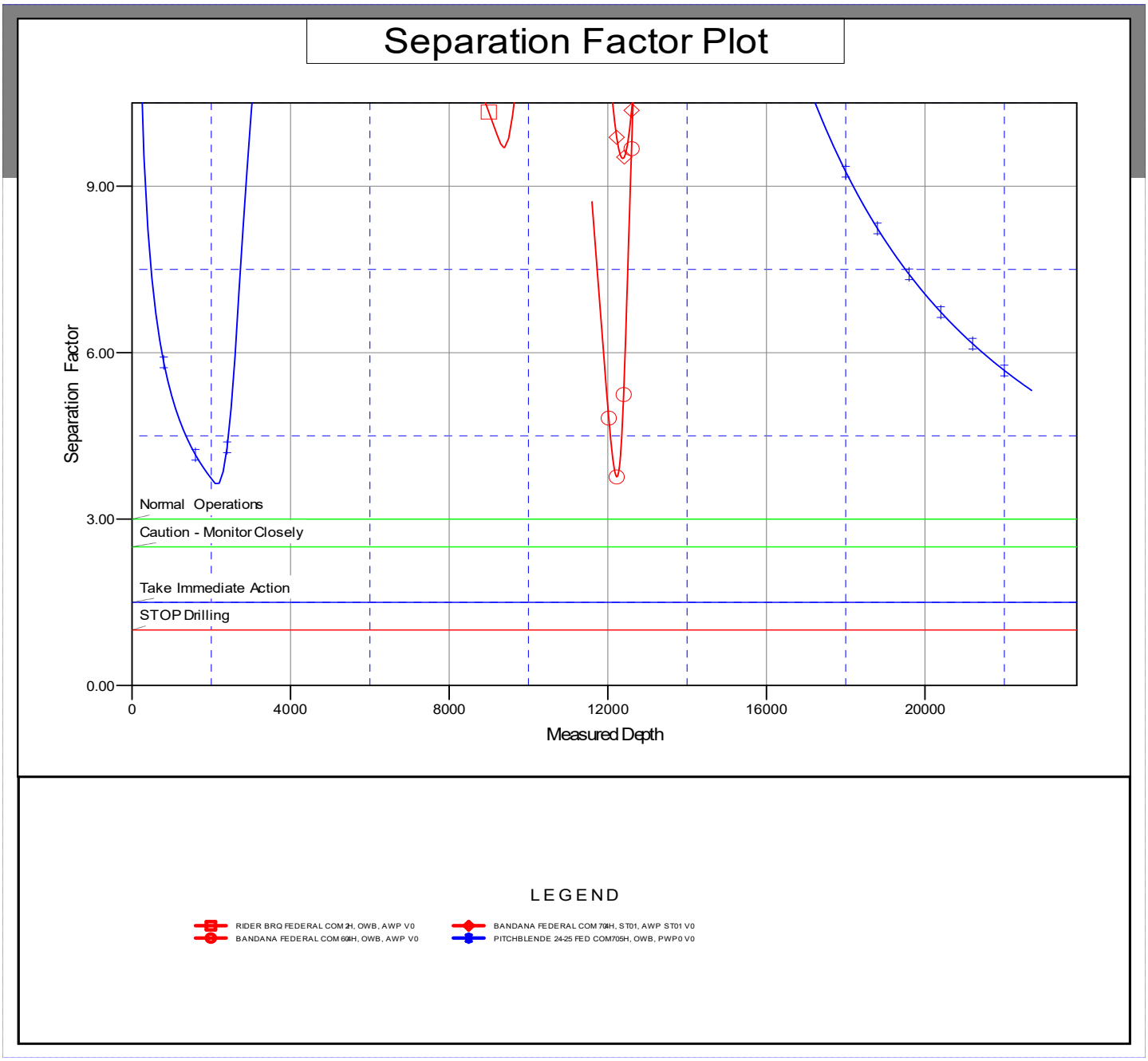
ConocoPhillips

Anticollision Report

Company:	DELAWARE BASIN EAST	**Local Co-ordinate Reference:**	Well PITCHBLENDE 24-25 FED COM 606H
Project:	LEA COUNTY SOUTHEAST	**TVD Reference:**	RKB=27ft @ 3393.5usft
Reference Site:	PITCHBLENDE 24-25 FEDERAL PROJECT	**MD Reference:**	RKB=27ft @ 3393.5usft
Site Error:	0.0 usft	**North Reference:**	Grid
Reference Well:	PITCHBLENDE 24-25 FED COM 606H	**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 @ 3393.5usft
Offset Depths are relative to Offset Datum
Central Meridian is 104° 20' 0.000 W

Coordinates are relative to: PITCHBLENDE 24-25 FED COM 606H
Coordinate System is US State Plane 1927 (Exact solution), New Mexico East 30
Grid Convergence at Surface is: 0.48°



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

DELAWARE BASIN EAST

LEA COUNTY SOUTHEAST
PITCHBLENDE 24-25 FEDERAL PROJECT
PITCHBLENDE 24-25 FED COM 606H

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 606H
Company:	DELAWARE BASIN EAST	**TVD Reference:**	RKB=27ft @ 3393.5usft
Project:	LEA COUNTY SOUTHEAST	**MD Reference:**	RKB=27ft @ 3393.5usft
Site:	PITCHBLENDE 24-25 FEDERAL PROJECT	**North Reference:**	Grid
Well:	PITCHBLENDE 24-25 FED COM 606H	**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 606H

Well Position	**+N/-S**	0.0 usft	**Northing:**	409,466.70 usft	**Latitude:**	32° 7' 20.995 N
	+E/-W	0.0 usft	**Easting:**	780,492.60 usft	**Longitude:**	103° 25' 38.326 W
Position Uncertainty		0.0 usft	**Wellhead Elevation:**	usft	**Ground Level:**	3,366.5 usft
Grid Convergence:		0.48 °				

Wellbore OWB

Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	BGGM2024	9/1/2024	6.13	59.67	47,240.64684944

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	185.27

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	11,959.7	PWP0 (OWB)	r.5 MWD+IFR1+SAG+FDIR ISCWSA MWD + IFR1 + SAG ·	
3	11,959.7	22,690.5	PWP0 (OWB)	r.5 MWD+IFR1+SAG+FDIR ISCWSA MWD + IFR1 + SAG ·	

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Planning Report

Database:	EDT 17 Permian Prod	**Local Co-ordinate Reference:**	Well PITCHBLENDE 24-25 FED COM 606H
Company:	DELAWARE BASIN EAST	**TVD Reference:**	RKB=27ft @ 3393.5usft
Project:	LEA COUNTY SOUTHEAST	**MD Reference:**	RKB=27ft @ 3393.5usft
Site:	PITCHBLENDE 24-25 FEDERAL PROJECT	**North Reference:**	Grid
Well:	PITCHBLENDE 24-25 FED COM 606H	**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	
2,655.5	13.11	278.44	2,649.8	11.0	-73.9	2.00	2.00	0.00	278.44	
6,301.1	13.11	278.44	6,200.3	132.3	-891.9	0.00	0.00	0.00	0.00	
7,612.1	0.00	0.00	7,500.0	154.2	-1,039.6	1.00	-1.00	0.00	180.00	
11,959.7	0.00	0.00	11,847.5	154.2	-1,039.6	0.00	0.00	0.00	0.00	
12,709.7	90.00	179.51	12,325.0	-323.2	-1,035.5	12.00	12.00	23.93	179.51	
22,690.5	90.00	179.51	12,325.0	-10,303.7	-949.9	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 606H
Company:	DELAWARE BASIN EAST	**TVD Reference:**	RKB=27ft @ 3393.5usft
Project:	LEA COUNTY SOUTHEAST	**MD Reference:**	RKB=27ft @ 3393.5usft
Site:	PITCHBLENDE 24-25 FEDERAL PROJECT	**North Reference:**	Grid
Well:	PITCHBLENDE 24-25 FED COM 606H	**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	278.44	2,100.0	0.3	-1.7	-0.1	2.00	2.00	0.00
2,200.0	4.00	278.44	2,199.8	1.0	-6.9	-0.4	2.00	2.00	0.00
2,300.0	6.00	278.44	2,299.5	2.3	-15.5	-0.9	2.00	2.00	0.00
2,400.0	8.00	278.44	2,398.7	4.1	-27.6	-1.5	2.00	2.00	0.00
2,500.0	10.00	278.44	2,497.5	6.4	-43.1	-2.4	2.00	2.00	0.00
2,600.0	12.00	278.44	2,595.6	9.2	-61.9	-3.5	2.00	2.00	0.00
2,655.5	13.11	278.44	2,649.8	11.0	-73.9	-4.1	2.00	2.00	0.00
2,700.0	13.11	278.44	2,693.1	12.4	-83.8	-4.7	0.00	0.00	0.00
2,800.0	13.11	278.44	2,790.5	15.8	-106.3	-5.9	0.00	0.00	0.00
2,900.0	13.11	278.44	2,887.9	19.1	-128.7	-7.2	0.00	0.00	0.00
3,000.0	13.11	278.44	2,985.3	22.4	-151.2	-8.4	0.00	0.00	0.00
3,100.0	13.11	278.44	3,082.7	25.7	-173.6	-9.7	0.00	0.00	0.00
3,200.0	13.11	278.44	3,180.1	29.1	-196.0	-10.9	0.00	0.00	0.00
3,300.0	13.11	278.44	3,277.5	32.4	-218.5	-12.2	0.00	0.00	0.00
3,400.0	13.11	278.44	3,374.9	35.7	-240.9	-13.4	0.00	0.00	0.00
3,500.0	13.11	278.44	3,472.3	39.1	-263.3	-14.7	0.00	0.00	0.00
3,600.0	13.11	278.44	3,569.7	42.4	-285.8	-15.9	0.00	0.00	0.00
3,700.0	13.11	278.44	3,667.1	45.7	-308.2	-17.2	0.00	0.00	0.00
3,800.0	13.11	278.44	3,764.5	49.0	-330.7	-18.4	0.00	0.00	0.00
3,900.0	13.11	278.44	3,861.9	52.4	-353.1	-19.7	0.00	0.00	0.00
4,000.0	13.11	278.44	3,959.2	55.7	-375.5	-20.9	0.00	0.00	0.00
4,100.0	13.11	278.44	4,056.6	59.0	-398.0	-22.2	0.00	0.00	0.00
4,200.0	13.11	278.44	4,154.0	62.4	-420.4	-23.5	0.00	0.00	0.00
4,300.0	13.11	278.44	4,251.4	65.7	-442.9	-24.7	0.00	0.00	0.00
4,400.0	13.11	278.44	4,348.8	69.0	-465.3	-26.0	0.00	0.00	0.00
4,500.0	13.11	278.44	4,446.2	72.3	-487.7	-27.2	0.00	0.00	0.00
4,600.0	13.11	278.44	4,543.6	75.7	-510.2	-28.5	0.00	0.00	0.00
4,700.0	13.11	278.44	4,641.0	79.0	-532.6	-29.7	0.00	0.00	0.00
4,800.0	13.11	278.44	4,738.4	82.3	-555.0	-31.0	0.00	0.00	0.00
4,900.0	13.11	278.44	4,835.8	85.7	-577.5	-32.2	0.00	0.00	0.00
5,000.0	13.11	278.44	4,933.2	89.0	-599.9	-33.5	0.00	0.00	0.00
5,100.0	13.11	278.44	5,030.6	92.3	-622.4	-34.7	0.00	0.00	0.00
5,200.0	13.11	278.44	5,128.0	95.6	-644.8	-36.0	0.00	0.00	0.00

ConocoPhillips

Planning Report

Database:	EDT 17 Permian Prod	**Local Co-ordinate Reference:**	Well PITCHBLENDE 24-25 FED COM 606H
Company:	DELAWARE BASIN EAST	**TVD Reference:**	RKB=27ft @ 3393.5usft
Project:	LEA COUNTY SOUTHEAST	**MD Reference:**	RKB=27ft @ 3393.5usft
Site:	PITCHBLENDE 24-25 FEDERAL PROJECT	**North Reference:**	Grid
Well:	PITCHBLENDE 24-25 FED COM 606H	**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	13.11	278.44	5,225.4	99.0	-667.2	-37.2	0.00	0.00	0.00
5,400.0	13.11	278.44	5,322.8	102.3	-689.7	-38.5	0.00	0.00	0.00
5,500.0	13.11	278.44	5,420.1	105.6	-712.1	-39.7	0.00	0.00	0.00
5,600.0	13.11	278.44	5,517.5	109.0	-734.5	-41.0	0.00	0.00	0.00
5,700.0	13.11	278.44	5,614.9	112.3	-757.0	-42.2	0.00	0.00	0.00
5,800.0	13.11	278.44	5,712.3	115.6	-779.4	-43.5	0.00	0.00	0.00
5,900.0	13.11	278.44	5,809.7	118.9	-801.9	-44.7	0.00	0.00	0.00
6,000.0	13.11	278.44	5,907.1	122.3	-824.3	-46.0	0.00	0.00	0.00
6,100.0	13.11	278.44	6,004.5	125.6	-846.7	-47.2	0.00	0.00	0.00
6,200.0	13.11	278.44	6,101.9	128.9	-869.2	-48.5	0.00	0.00	0.00
6,301.1	13.11	278.44	6,200.3	132.3	-891.9	-49.7	0.00	0.00	0.00
6,400.0	12.12	278.44	6,296.9	135.5	-913.2	-50.9	1.00	-1.00	0.00
6,500.0	11.12	278.44	6,394.8	138.4	-933.2	-52.1	1.00	-1.00	0.00
6,600.0	10.12	278.44	6,493.1	141.1	-951.4	-53.1	1.00	-1.00	0.00
6,700.0	9.12	278.44	6,591.7	143.6	-967.9	-54.0	1.00	-1.00	0.00
6,800.0	8.12	278.44	6,690.6	145.8	-982.7	-54.8	1.00	-1.00	0.00
6,900.0	7.12	278.44	6,789.7	147.7	-995.9	-55.6	1.00	-1.00	0.00
7,000.0	6.12	278.44	6,889.0	149.4	-1,007.3	-56.2	1.00	-1.00	0.00
7,100.0	5.12	278.44	6,988.5	150.8	-1,017.0	-56.7	1.00	-1.00	0.00
7,200.0	4.12	278.44	7,088.2	152.0	-1,024.9	-57.2	1.00	-1.00	0.00
7,300.0	3.12	278.44	7,188.0	153.0	-1,031.2	-57.5	1.00	-1.00	0.00
7,400.0	2.12	278.44	7,287.9	153.6	-1,035.7	-57.8	1.00	-1.00	0.00
7,500.0	1.12	278.44	7,387.9	154.0	-1,038.5	-57.9	1.00	-1.00	0.00
7,600.0	0.12	278.44	7,487.9	154.2	-1,039.6	-58.0	1.00	-1.00	0.00
7,612.1	0.00	0.00	7,500.0	154.2	-1,039.6	-58.0	1.00	-1.00	0.00
7,700.0	0.00	0.00	7,587.9	154.2	-1,039.6	-58.0	0.00	0.00	0.00
7,800.0	0.00	0.00	7,687.9	154.2	-1,039.6	-58.0	0.00	0.00	0.00
7,900.0	0.00	0.00	7,787.9	154.2	-1,039.6	-58.0	0.00	0.00	0.00
8,000.0	0.00	0.00	7,887.9	154.2	-1,039.6	-58.0	0.00	0.00	0.00
8,100.0	0.00	0.00	7,987.9	154.2	-1,039.6	-58.0	0.00	0.00	0.00
8,200.0	0.00	0.00	8,087.9	154.2	-1,039.6	-58.0	0.00	0.00	0.00
8,300.0	0.00	0.00	8,187.9	154.2	-1,039.6	-58.0	0.00	0.00	0.00
8,400.0	0.00	0.00	8,287.9	154.2	-1,039.6	-58.0	0.00	0.00	0.00
8,500.0	0.00	0.00	8,387.9	154.2	-1,039.6	-58.0	0.00	0.00	0.00
8,600.0	0.00	0.00	8,487.9	154.2	-1,039.6	-58.0	0.00	0.00	0.00
8,700.0	0.00	0.00	8,587.9	154.2	-1,039.6	-58.0	0.00	0.00	0.00
8,800.0	0.00	0.00	8,687.9	154.2	-1,039.6	-58.0	0.00	0.00	0.00
8,900.0	0.00	0.00	8,787.9	154.2	-1,039.6	-58.0	0.00	0.00	0.00
9,000.0	0.00	0.00	8,887.9	154.2	-1,039.6	-58.0	0.00	0.00	0.00
9,100.0	0.00	0.00	8,987.9	154.2	-1,039.6	-58.0	0.00	0.00	0.00
9,200.0	0.00	0.00	9,087.9	154.2	-1,039.6	-58.0	0.00	0.00	0.00
9,300.0	0.00	0.00	9,187.9	154.2	-1,039.6	-58.0	0.00	0.00	0.00
9,400.0	0.00	0.00	9,287.9	154.2	-1,039.6	-58.0	0.00	0.00	0.00
9,500.0	0.00	0.00	9,387.9	154.2	-1,039.6	-58.0	0.00	0.00	0.00
9,600.0	0.00	0.00	9,487.9	154.2	-1,039.6	-58.0	0.00	0.00	0.00
9,700.0	0.00	0.00	9,587.9	154.2	-1,039.6	-58.0	0.00	0.00	0.00
9,800.0	0.00	0.00	9,687.9	154.2	-1,039.6	-58.0	0.00	0.00	0.00
9,900.0	0.00	0.00	9,787.9	154.2	-1,039.6	-58.0	0.00	0.00	0.00
10,000.0	0.00	0.00	9,887.9	154.2	-1,039.6	-58.0	0.00	0.00	0.00
10,100.0	0.00	0.00	9,987.9	154.2	-1,039.6	-58.0	0.00	0.00	0.00
10,200.0	0.00	0.00	10,087.9	154.2	-1,039.6	-58.0	0.00	0.00	0.00
10,300.0	0.00	0.00	10,187.9	154.2	-1,039.6	-58.0	0.00	0.00	0.00
10,400.0	0.00	0.00	10,287.9	154.2	-1,039.6	-58.0	0.00	0.00	0.00
10,500.0	0.00	0.00	10,387.9	154.2	-1,039.6	-58.0	0.00	0.00	0.00

ConocoPhillips

Planning Report

Database:	EDT 17 Permian Prod	**Local Co-ordinate Reference:**	Well PITCHBLENDE 24-25 FED COM 606H
Company:	DELAWARE BASIN EAST	**TVD Reference:**	RKB=27ft @ 3393.5usft
Project:	LEA COUNTY SOUTHEAST	**MD Reference:**	RKB=27ft @ 3393.5usft
Site:	PITCHBLENDE 24-25 FEDERAL PROJECT	**North Reference:**	Grid
Well:	PITCHBLENDE 24-25 FED COM 606H	**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)
10,600.0	0.00	0.00	10,487.9	154.2	-1,039.6	-58.0	0.00	0.00	0.00
10,700.0	0.00	0.00	10,587.9	154.2	-1,039.6	-58.0	0.00	0.00	0.00
10,800.0	0.00	0.00	10,687.9	154.2	-1,039.6	-58.0	0.00	0.00	0.00
10,900.0	0.00	0.00	10,787.9	154.2	-1,039.6	-58.0	0.00	0.00	0.00
11,000.0	0.00	0.00	10,887.9	154.2	-1,039.6	-58.0	0.00	0.00	0.00
11,100.0	0.00	0.00	10,987.9	154.2	-1,039.6	-58.0	0.00	0.00	0.00
11,200.0	0.00	0.00	11,087.9	154.2	-1,039.6	-58.0	0.00	0.00	0.00
11,300.0	0.00	0.00	11,187.9	154.2	-1,039.6	-58.0	0.00	0.00	0.00
11,400.0	0.00	0.00	11,287.9	154.2	-1,039.6	-58.0	0.00	0.00	0.00
11,500.0	0.00	0.00	11,387.9	154.2	-1,039.6	-58.0	0.00	0.00	0.00
11,600.0	0.00	0.00	11,487.9	154.2	-1,039.6	-58.0	0.00	0.00	0.00
11,700.0	0.00	0.00	11,587.9	154.2	-1,039.6	-58.0	0.00	0.00	0.00
11,800.0	0.00	0.00	11,687.9	154.2	-1,039.6	-58.0	0.00	0.00	0.00
11,900.0	0.00	0.00	11,787.9	154.2	-1,039.6	-58.0	0.00	0.00	0.00
11,959.7	0.00	0.00	11,847.5	154.2	-1,039.6	-58.0	0.00	0.00	0.00
11,975.0	1.84	179.51	11,862.9	154.0	-1,039.6	-57.7	12.00	12.00	0.00
12,000.0	4.84	179.51	11,887.8	152.5	-1,039.6	-56.3	12.00	12.00	0.00
12,025.0	7.84	179.51	11,912.7	149.7	-1,039.5	-53.6	12.00	12.00	0.00
12,050.0	10.84	179.51	11,937.3	145.7	-1,039.5	-49.5	12.00	12.00	0.00
12,075.0	13.84	179.51	11,961.7	140.3	-1,039.5	-44.2	12.00	12.00	0.00
12,100.0	16.84	179.51	11,985.8	133.7	-1,039.4	-37.6	12.00	12.00	0.00
12,125.0	19.84	179.51	12,009.6	125.9	-1,039.3	-29.8	12.00	12.00	0.00
12,150.0	22.84	179.51	12,032.9	116.8	-1,039.3	-20.7	12.00	12.00	0.00
12,175.0	25.84	179.51	12,055.6	106.5	-1,039.2	-10.5	12.00	12.00	0.00
12,200.0	28.84	179.51	12,077.8	95.0	-1,039.1	0.9	12.00	12.00	0.00
12,225.0	31.84	179.51	12,099.4	82.4	-1,039.0	13.5	12.00	12.00	0.00
12,250.0	34.84	179.51	12,120.3	68.6	-1,038.9	27.2	12.00	12.00	0.00
12,275.0	37.84	179.51	12,140.4	53.8	-1,038.7	41.9	12.00	12.00	0.00
12,300.0	40.84	179.51	12,159.8	38.0	-1,038.6	57.7	12.00	12.00	0.00
12,325.0	43.84	179.51	12,178.2	21.1	-1,038.4	74.4	12.00	12.00	0.00
12,350.0	46.84	179.51	12,195.8	3.4	-1,038.3	92.1	12.00	12.00	0.00
12,375.0	49.84	179.51	12,212.4	-15.3	-1,038.1	110.7	12.00	12.00	0.00
12,400.0	52.84	179.51	12,228.0	-34.8	-1,038.0	130.1	12.00	12.00	0.00
12,425.0	55.84	179.51	12,242.6	-55.1	-1,037.8	150.3	12.00	12.00	0.00
12,450.0	58.84	179.51	12,256.1	-76.2	-1,037.6	171.2	12.00	12.00	0.00
12,475.0	61.84	179.51	12,268.5	-97.9	-1,037.4	192.9	12.00	12.00	0.00
12,500.0	64.84	179.51	12,279.7	-120.2	-1,037.2	215.1	12.00	12.00	0.00
12,525.0	67.84	179.51	12,289.7	-143.1	-1,037.0	237.9	12.00	12.00	0.00
12,550.0	70.84	179.51	12,298.5	-166.5	-1,036.8	261.1	12.00	12.00	0.00
12,575.0	73.84	179.51	12,306.1	-190.4	-1,036.6	284.8	12.00	12.00	0.00
12,600.0	76.84	179.51	12,312.5	-214.5	-1,036.4	308.9	12.00	12.00	0.00
12,625.0	79.84	179.51	12,317.5	-239.0	-1,036.2	333.2	12.00	12.00	0.00
12,650.0	82.84	179.51	12,321.3	-263.7	-1,036.0	357.8	12.00	12.00	0.00
12,675.0	85.84	179.51	12,323.7	-288.6	-1,035.8	382.6	12.00	12.00	0.00
12,700.0	88.84	179.51	12,324.9	-313.6	-1,035.6	407.4	12.00	12.00	0.00
12,709.7	90.00	179.51	12,325.0	-323.2	-1,035.5	417.1	12.00	12.00	0.00
12,800.0	90.00	179.51	12,325.0	-413.6	-1,034.7	506.9	0.00	0.00	0.00
12,900.0	90.00	179.51	12,325.0	-513.6	-1,033.9	606.4	0.00	0.00	0.00
13,000.0	90.00	179.51	12,325.0	-613.6	-1,033.0	705.9	0.00	0.00	0.00
13,100.0	90.00	179.51	12,325.0	-713.6	-1,032.1	805.4	0.00	0.00	0.00
13,200.0	90.00	179.51	12,325.0	-813.5	-1,031.3	904.9	0.00	0.00	0.00
13,300.0	90.00	179.51	12,325.0	-913.5	-1,030.4	1,004.4	0.00	0.00	0.00
13,400.0	90.00	179.51	12,325.0	-1,013.5	-1,029.6	1,103.9	0.00	0.00	0.00
13,500.0	90.00	179.51	12,325.0	-1,113.5	-1,028.7	1,203.4	0.00	0.00	0.00

ConocoPhillips

Planning Report

Database:	EDT 17 Permian Prod	**Local Co-ordinate Reference:**	Well PITCHBLENDE 24-25 FED COM 606H
Company:	DELAWARE BASIN EAST	**TVD Reference:**	RKB=27ft @ 3393.5usft
Project:	LEA COUNTY SOUTHEAST	**MD Reference:**	RKB=27ft @ 3393.5usft
Site:	PITCHBLENDE 24-25 FEDERAL PROJECT	**North Reference:**	Grid
Well:	PITCHBLENDE 24-25 FED COM 606H	**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	179.51	12,325.0	-1,213.5	-1,027.9	1,302.9	0.00	0.00	0.00
13,700.0	90.00	179.51	12,325.0	-1,313.5	-1,027.0	1,402.4	0.00	0.00	0.00
13,800.0	90.00	179.51	12,325.0	-1,413.5	-1,026.1	1,501.9	0.00	0.00	0.00
13,900.0	90.00	179.51	12,325.0	-1,513.5	-1,025.3	1,601.4	0.00	0.00	0.00
14,000.0	90.00	179.51	12,325.0	-1,613.5	-1,024.4	1,700.9	0.00	0.00	0.00
14,100.0	90.00	179.51	12,325.0	-1,713.5	-1,023.6	1,800.3	0.00	0.00	0.00
14,200.0	90.00	179.51	12,325.0	-1,813.5	-1,022.7	1,899.8	0.00	0.00	0.00
14,300.0	90.00	179.51	12,325.0	-1,913.5	-1,021.8	1,999.3	0.00	0.00	0.00
14,400.0	90.00	179.51	12,325.0	-2,013.5	-1,021.0	2,098.8	0.00	0.00	0.00
14,500.0	90.00	179.51	12,325.0	-2,113.5	-1,020.1	2,198.3	0.00	0.00	0.00
14,600.0	90.00	179.51	12,325.0	-2,213.5	-1,019.3	2,297.8	0.00	0.00	0.00
14,700.0	90.00	179.51	12,325.0	-2,313.5	-1,018.4	2,397.3	0.00	0.00	0.00
14,800.0	90.00	179.51	12,325.0	-2,413.5	-1,017.6	2,496.8	0.00	0.00	0.00
14,900.0	90.00	179.51	12,325.0	-2,513.5	-1,016.7	2,596.3	0.00	0.00	0.00
15,000.0	90.00	179.51	12,325.0	-2,613.5	-1,015.8	2,695.8	0.00	0.00	0.00
15,100.0	90.00	179.51	12,325.0	-2,713.5	-1,015.0	2,795.3	0.00	0.00	0.00
15,200.0	90.00	179.51	12,325.0	-2,813.5	-1,014.1	2,894.8	0.00	0.00	0.00
15,300.0	90.00	179.51	12,325.0	-2,913.5	-1,013.3	2,994.3	0.00	0.00	0.00
15,400.0	90.00	179.51	12,325.0	-3,013.5	-1,012.4	3,093.8	0.00	0.00	0.00
15,500.0	90.00	179.51	12,325.0	-3,113.5	-1,011.6	3,193.3	0.00	0.00	0.00
15,600.0	90.00	179.51	12,325.0	-3,213.5	-1,010.7	3,292.8	0.00	0.00	0.00
15,700.0	90.00	179.51	12,325.0	-3,313.5	-1,009.8	3,392.3	0.00	0.00	0.00
15,800.0	90.00	179.51	12,325.0	-3,413.5	-1,009.0	3,491.7	0.00	0.00	0.00
15,900.0	90.00	179.51	12,325.0	-3,513.4	-1,008.1	3,591.2	0.00	0.00	0.00
16,000.0	90.00	179.51	12,325.0	-3,613.4	-1,007.3	3,690.7	0.00	0.00	0.00
16,100.0	90.00	179.51	12,325.0	-3,713.4	-1,006.4	3,790.2	0.00	0.00	0.00
16,200.0	90.00	179.51	12,325.0	-3,813.4	-1,005.5	3,889.7	0.00	0.00	0.00
16,300.0	90.00	179.51	12,325.0	-3,913.4	-1,004.7	3,989.2	0.00	0.00	0.00
16,400.0	90.00	179.51	12,325.0	-4,013.4	-1,003.8	4,088.7	0.00	0.00	0.00
16,500.0	90.00	179.51	12,325.0	-4,113.4	-1,003.0	4,188.2	0.00	0.00	0.00
16,600.0	90.00	179.51	12,325.0	-4,213.4	-1,002.1	4,287.7	0.00	0.00	0.00
16,700.0	90.00	179.51	12,325.0	-4,313.4	-1,001.3	4,387.2	0.00	0.00	0.00
16,800.0	90.00	179.51	12,325.0	-4,413.4	-1,000.4	4,486.7	0.00	0.00	0.00
16,900.0	90.00	179.51	12,325.0	-4,513.4	-999.5	4,586.2	0.00	0.00	0.00
17,000.0	90.00	179.51	12,325.0	-4,613.4	-998.7	4,685.7	0.00	0.00	0.00
17,100.0	90.00	179.51	12,325.0	-4,713.4	-997.8	4,785.2	0.00	0.00	0.00
17,200.0	90.00	179.51	12,325.0	-4,813.4	-997.0	4,884.7	0.00	0.00	0.00
17,300.0	90.00	179.51	12,325.0	-4,913.4	-996.1	4,984.2	0.00	0.00	0.00
17,400.0	90.00	179.51	12,325.0	-5,013.4	-995.3	5,083.7	0.00	0.00	0.00
17,500.0	90.00	179.51	12,325.0	-5,113.4	-994.4	5,183.1	0.00	0.00	0.00
17,600.0	90.00	179.51	12,325.0	-5,213.4	-993.5	5,282.6	0.00	0.00	0.00
17,700.0	90.00	179.51	12,325.0	-5,313.4	-992.7	5,382.1	0.00	0.00	0.00
17,800.0	90.00	179.51	12,325.0	-5,413.4	-991.8	5,481.6	0.00	0.00	0.00
17,900.0	90.00	179.51	12,325.0	-5,513.4	-991.0	5,581.1	0.00	0.00	0.00
18,000.0	90.00	179.51	12,325.0	-5,613.4	-990.1	5,680.6	0.00	0.00	0.00
18,100.0	90.00	179.51	12,325.0	-5,713.4	-989.2	5,780.1	0.00	0.00	0.00
18,200.0	90.00	179.51	12,325.0	-5,813.4	-988.4	5,879.6	0.00	0.00	0.00
18,300.0	90.00	179.51	12,325.0	-5,913.4	-987.5	5,979.1	0.00	0.00	0.00
18,400.0	90.00	179.51	12,325.0	-6,013.4	-986.7	6,078.6	0.00	0.00	0.00
18,500.0	90.00	179.51	12,325.0	-6,113.4	-985.8	6,178.1	0.00	0.00	0.00
18,600.0	90.00	179.51	12,325.0	-6,213.4	-985.0	6,277.6	0.00	0.00	0.00
18,700.0	90.00	179.51	12,325.0	-6,313.3	-984.1	6,377.1	0.00	0.00	0.00
18,800.0	90.00	179.51	12,325.0	-6,413.3	-983.2	6,476.6	0.00	0.00	0.00
18,900.0	90.00	179.51	12,325.0	-6,513.3	-982.4	6,576.1	0.00	0.00	0.00

ConocoPhillips

Planning Report

Database:	EDT 17 Permian Prod	**Local Co-ordinate Reference:**	Well PITCHBLENDE 24-25 FED COM 606H
Company:	DELAWARE BASIN EAST	**TVD Reference:**	RKB=27ft @ 3393.5usft
Project:	LEA COUNTY SOUTHEAST	**MD Reference:**	RKB=27ft @ 3393.5usft
Site:	PITCHBLENDE 24-25 FEDERAL PROJECT	**North Reference:**	Grid
Well:	PITCHBLENDE 24-25 FED COM 606H	**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	179.51	12,325.0	-6,613.3	-981.5	6,675.6	0.00	0.00	0.00
19,100.0	90.00	179.51	12,325.0	-6,713.3	-980.7	6,775.1	0.00	0.00	0.00
19,200.0	90.00	179.51	12,325.0	-6,813.3	-979.8	6,874.5	0.00	0.00	0.00
19,300.0	90.00	179.51	12,325.0	-6,913.3	-979.0	6,974.0	0.00	0.00	0.00
19,400.0	90.00	179.51	12,325.0	-7,013.3	-978.1	7,073.5	0.00	0.00	0.00
19,500.0	90.00	179.51	12,325.0	-7,113.3	-977.2	7,173.0	0.00	0.00	0.00
19,600.0	90.00	179.51	12,325.0	-7,213.3	-976.4	7,272.5	0.00	0.00	0.00
19,700.0	90.00	179.51	12,325.0	-7,313.3	-975.5	7,372.0	0.00	0.00	0.00
19,800.0	90.00	179.51	12,325.0	-7,413.3	-974.7	7,471.5	0.00	0.00	0.00
19,900.0	90.00	179.51	12,325.0	-7,513.3	-973.8	7,571.0	0.00	0.00	0.00
20,000.0	90.00	179.51	12,325.0	-7,613.3	-972.9	7,670.5	0.00	0.00	0.00
20,100.0	90.00	179.51	12,325.0	-7,713.3	-972.1	7,770.0	0.00	0.00	0.00
20,200.0	90.00	179.51	12,325.0	-7,813.3	-971.2	7,869.5	0.00	0.00	0.00
20,300.0	90.00	179.51	12,325.0	-7,913.3	-970.4	7,969.0	0.00	0.00	0.00
20,400.0	90.00	179.51	12,325.0	-8,013.3	-969.5	8,068.5	0.00	0.00	0.00
20,500.0	90.00	179.51	12,325.0	-8,113.3	-968.7	8,168.0	0.00	0.00	0.00
20,600.0	90.00	179.51	12,325.0	-8,213.3	-967.8	8,267.5	0.00	0.00	0.00
20,700.0	90.00	179.51	12,325.0	-8,313.3	-966.9	8,367.0	0.00	0.00	0.00
20,800.0	90.00	179.51	12,325.0	-8,413.3	-966.1	8,466.5	0.00	0.00	0.00
20,900.0	90.00	179.51	12,325.0	-8,513.3	-965.2	8,565.9	0.00	0.00	0.00
21,000.0	90.00	179.51	12,325.0	-8,613.3	-964.4	8,665.4	0.00	0.00	0.00
21,100.0	90.00	179.51	12,325.0	-8,713.3	-963.5	8,764.9	0.00	0.00	0.00
21,200.0	90.00	179.51	12,325.0	-8,813.3	-962.7	8,864.4	0.00	0.00	0.00
21,300.0	90.00	179.51	12,325.0	-8,913.3	-961.8	8,963.9	0.00	0.00	0.00
21,400.0	90.00	179.51	12,325.0	-9,013.2	-960.9	9,063.4	0.00	0.00	0.00
21,500.0	90.00	179.51	12,325.0	-9,113.2	-960.1	9,162.9	0.00	0.00	0.00
21,600.0	90.00	179.51	12,325.0	-9,213.2	-959.2	9,262.4	0.00	0.00	0.00
21,700.0	90.00	179.51	12,325.0	-9,313.2	-958.4	9,361.9	0.00	0.00	0.00
21,800.0	90.00	179.51	12,325.0	-9,413.2	-957.5	9,461.4	0.00	0.00	0.00
21,900.0	90.00	179.51	12,325.0	-9,513.2	-956.6	9,560.9	0.00	0.00	0.00
22,000.0	90.00	179.51	12,325.0	-9,613.2	-955.8	9,660.4	0.00	0.00	0.00
22,100.0	90.00	179.51	12,325.0	-9,713.2	-954.9	9,759.9	0.00	0.00	0.00
22,200.0	90.00	179.51	12,325.0	-9,813.2	-954.1	9,859.4	0.00	0.00	0.00
22,300.0	90.00	179.51	12,325.0	-9,913.2	-953.2	9,958.9	0.00	0.00	0.00
22,400.0	90.00	179.51	12,325.0	-10,013.2	-952.4	10,058.4	0.00	0.00	0.00
22,500.0	90.00	179.51	12,325.0	-10,113.2	-951.5	10,157.9	0.00	0.00	0.00
22,600.0	90.00	179.51	12,325.0	-10,213.2	-950.6	10,257.3	0.00	0.00	0.00
22,690.5	90.00	179.51	12,325.0	-10,303.7	-949.9	10,347.4	0.00	0.00	0.00

ConocoPhillips
Planning Report

Database:	EDT 17 Permian Prod	**Local Co-ordinate Reference:**	Well PITCHBLENDE 24-25 FED COM 606H
Company:	DELAWARE BASIN EAST	**TVD Reference:**	RKB=27ft @ 3393.5usft
Project:	LEA COUNTY SOUTHEAST	**MD Reference:**	RKB=27ft @ 3393.5usft
Site:	PITCHBLENDE 24-25 FEDERAL PROJECT	**North Reference:**	Grid
Well:	PITCHBLENDE 24-25 FED COM 606H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	OWB		
Design:	PWP0		

Design Targets

Target Name - hit/miss target - Shape	Dip Angle (°)	Dip Dir. (°)	TVD (usft)	+N/-S (usft)	+E/-W (usft)	Northing (usft)	Easting (usft)	Latitude	Longitude
POI 1_PITCHBLENDE 2	0.00	0.00	12,325.0	-2,434.7	-1,018.9	407,032.00	779,473.70	32° 6' 56.987 N	103° 25' 50.410 W
- plan misses target center by 1.5usft at 14821.2usft MD (12325.0 TVD, -2434.7 N, -1017.4 E)									
- Point									
PBHL_PITCHBLENDE 2	0.00	359.50	12,325.0	-10,303.5	-951.1	399,163.20	779,541.50	32° 5' 39.117 N	103° 25' 50.388 W
- plan misses target center by 1.2usft at 22690.3usft MD (12325.0 TVD, -10303.5 N, -949.9 E)									
- Rectangle (sides W100.0 H10,408.3 D20.0)									
POI 2_PITCHBLENDE 2	0.00	0.00	12,325.0	-5,074.9	-996.1	404,391.80	779,496.50	32° 6' 30.860 N	103° 25' 50.402 W
- plan misses target center by 1.4usft at 17461.5usft MD (12325.0 TVD, -5074.9 N, -994.7 E)									
- Point									
FTP_PITCHBLENDE 24	0.00	0.00	12,325.0	104.4	-1,040.8	409,571.10	779,451.80	32° 7' 22.114 N	103° 25' 50.418 W
- plan misses target center by 163.5usft at 12360.4usft MD (12202.8 TVD, -4.3 N, -1038.2 E)									
- Circle (radius 50.0)									
LTP_PITCHBLENDE 24	90.00	0.00	12,325.0	-10,253.5	-951.5	399,213.20	779,541.10	32° 5' 39.612 N	103° 25' 50.388 W
- plan misses target center by 40.3usft at 22600.0usft MD (12325.0 TVD, -10213.2 N, -950.6 E)									
- Circle (radius 50.0)									

Plan Annotations

Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates +N/-S (usft)	Local Coordinates +E/-W (usft)	Comment
2,000.0	2,000.0	0.0	0.0	Start Build 2.00
2,655.5	2,649.8	11.0	-73.9	Start 3645.5 hold at 2655.5 MD
6,301.1	6,200.3	132.3	-891.9	Start Drop -1.00
7,612.1	7,500.0	154.2	-1,039.6	Start 4347.5 hold at 7612.1 MD
11,959.7	11,847.5	154.2	-1,039.6	Start DLS 12.00 TFO 179.51
12,709.7	12,325.0	-323.2	-1,035.5	Start 9980.8 hold at 12709.7 MD
22,690.5	12,325.0	-10,303.7	-949.9	TD at 22690.5

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Project:	LEA COUNTY SOUTHEAST
Site:	PITCHBLENDE 24-25 FEDERAL PROJECT
Well:	PITCHBLENDE 24-25 FED COM 606H
Wellbore:	OWB
Design:	PWP0
GL:	3366.5
RKB=27ft @ 3393.5usft	

WELL DETAILS: PITCHBLENDE 24-25 FED COM 606H

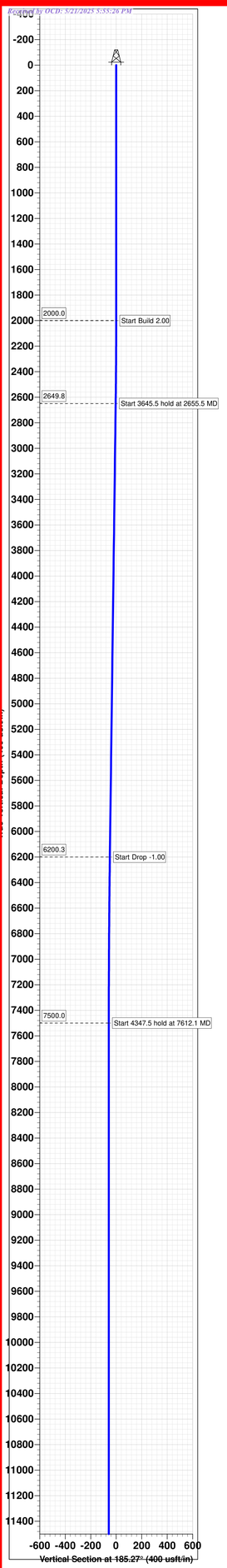
+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
0.0	0.0	409466.70	780492.60	32° 7' 20.995 N	103° 25' 38.326 W

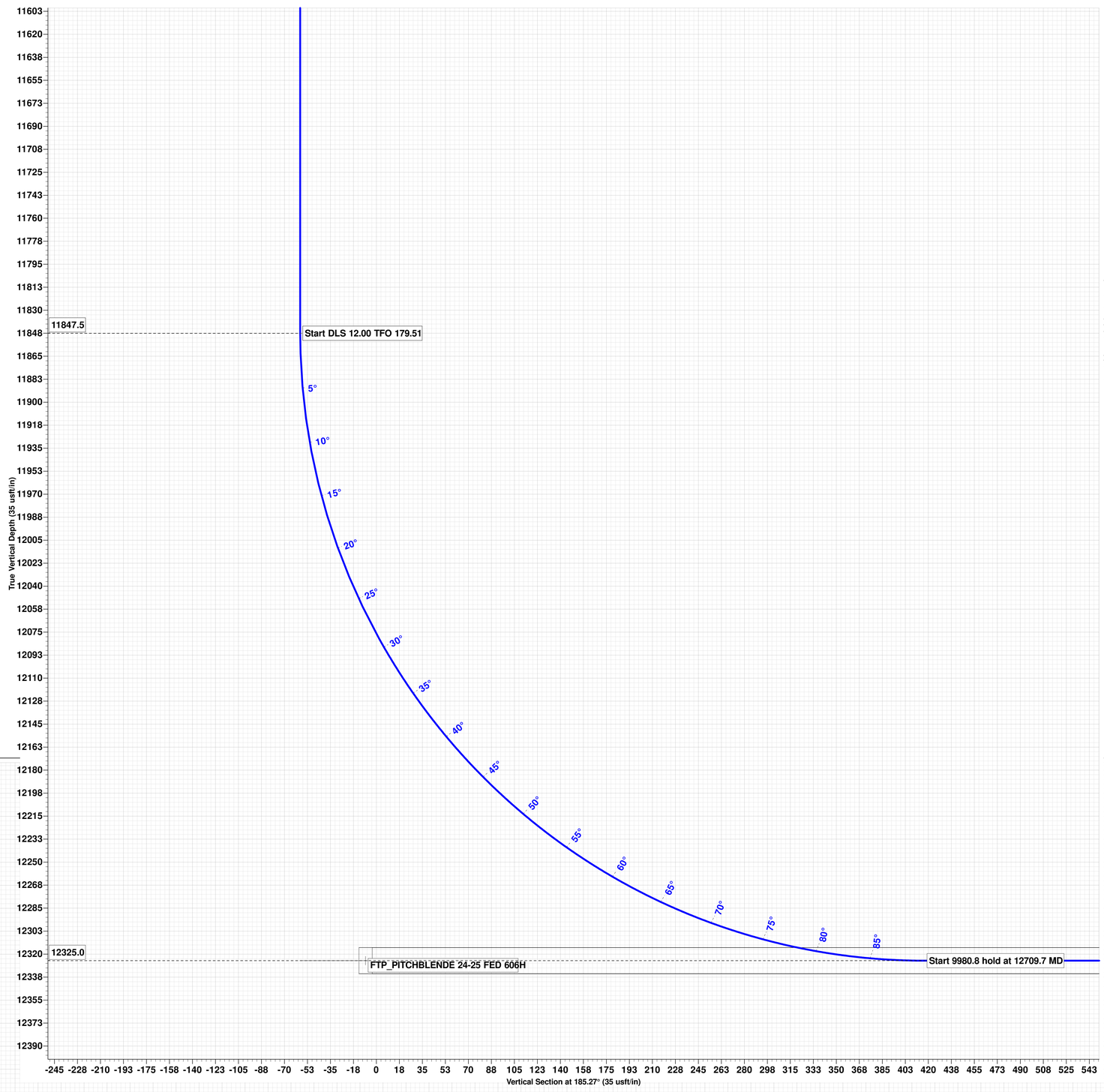
DESIGN TARGET DETAILS

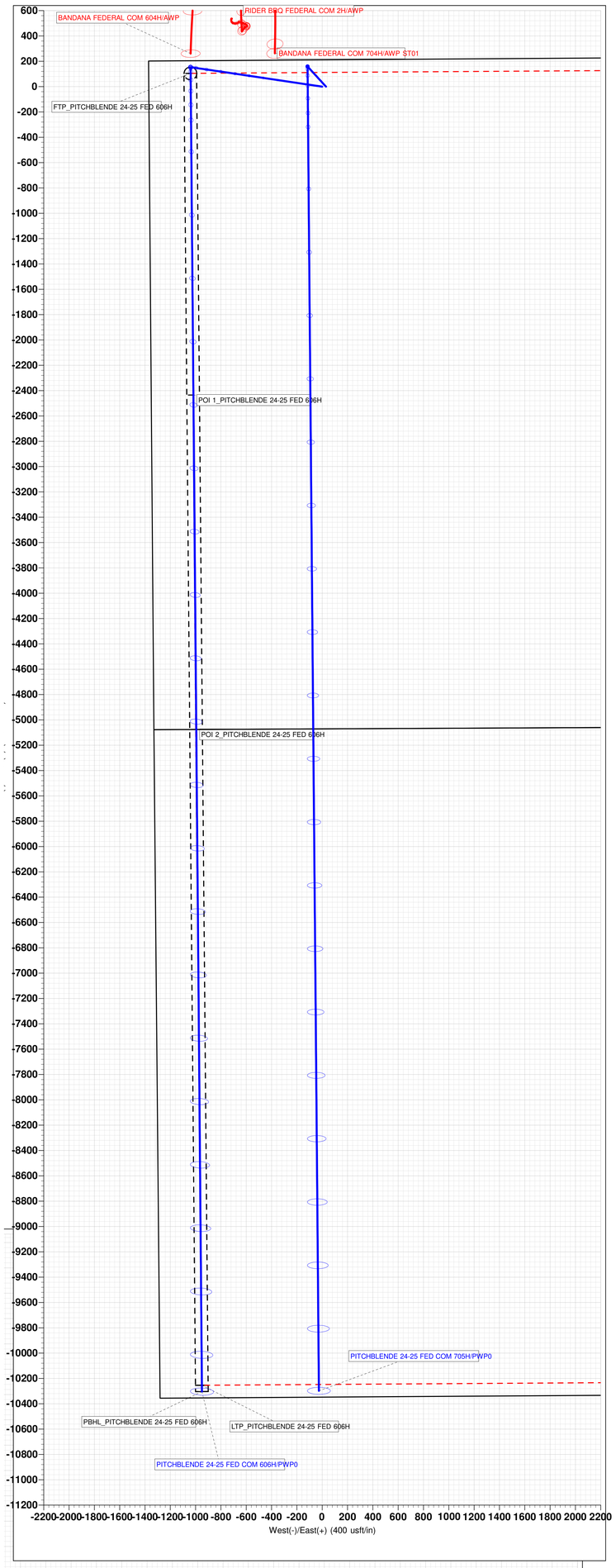
Name	TVD	+N/-S	+E/-W	Northing	Easting
FTP_PITCHBLENDE 24-25 FED 606H	12325.0	104.4	-1040.8	409571.10	779451.80
LTP_PITCHBLENDE 24-25 FED 606H	12325.0	-10253.5	-951.5	399213.20	779541.10
PBHL_PITCHBLENDE 24-25 FED 606H	12325.0	-10303.5	-951.1	399163.20	779541.50
POI 1_PITCHBLENDE 24-25 FED 606H	12325.0	-2434.7	-1018.9	407032.00	779473.70
POI 2_PITCHBLENDE 24-25 FED 606H	12325.0	-5074.9	-996.1	404391.80	779496.50

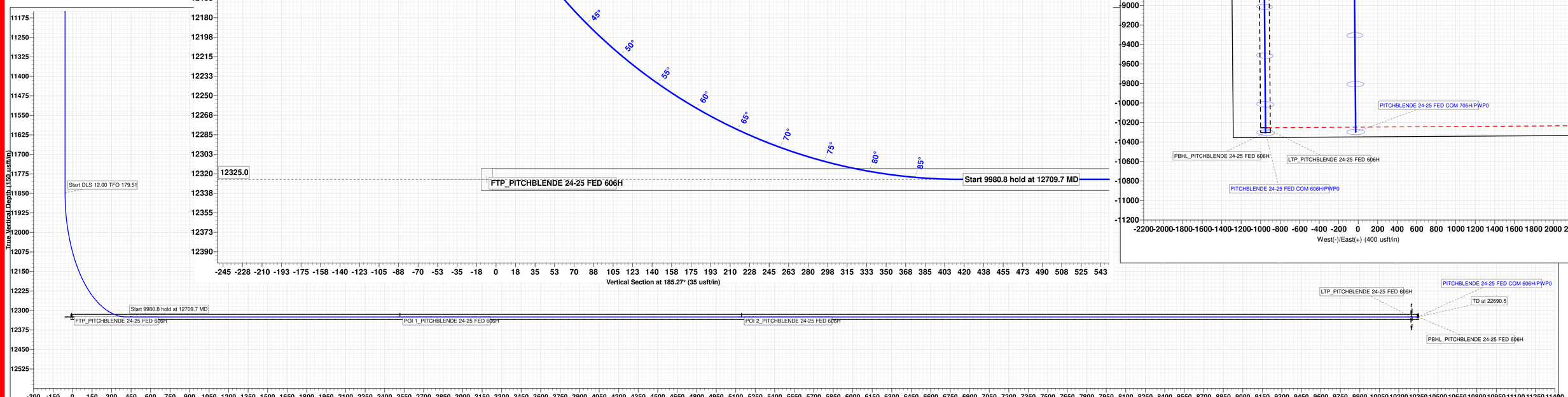
SECTION DETAILS

MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	VSect
0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.0
2000.0	0.00	0.00	2000.0	0.0	0.0	0.00	0.00	0.0
2655.5	13.11	278.44	2649.8	11.0	-73.9	2.00	278.44	-4.1
6301.1	13.11	278.44	6200.3	132.3	-891.9	0.00	0.00	-49.7
7612.1	0.00	0.00	7500.0	154.2	-1039.6	1.00	180.00	-58.0
11959.7	0.00	0.00	11847.5	154.2	-1039.6	0.00	0.00	-58.0
12709.7	90.00	179.51	12325.0	-323.2	-1035.5	12.00	179.51	417.1
22690.5	90.00	179.51	12325.0	-10303.7	-949.9	0.00	0.00	10347.4









ConocoPhillips - Pitchblende 24-25 Fed Com 606H

1. Geologic Formations

TVD of target	12,382' EOL	Pilot hole depth	NA
MD at TD:	22,763'	Deepest expected fresh water:	300'

Formation	Depth (TVD) from KB	Water/Mineral Bearing/ Target Zone?	Hazards*
Quaternary Fill	Surface	Water	
Rustler	877	Water	
Top of Salt	1378	Salt	
Base of Salt	5064	Salt	
Lamar	5348	Salt Water	
Bell Canyon	5368	Salt Water	
Cherry Canyon	6370	Oil/Gas	
Brushy Canyon	8002	Oil/Gas	
Bone Spring	9295	Oil/Gas	
1st Bone Spring Sand	10423	Oil/Gas	
2nd Bone Spring Sand	10954	Oil/Gas	
3rd Bone Spring Sand	12025	Target Oil/Gas	
Wolfcamp A	12600	Not Penetrated	

2. Casing Program

Hole Size	Casing Interval		Csg. Size	Weight (lbs)	Grade	Conn.	SF Collapse	SF Burst	SF Body	SF Joint
	From	To								
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	1.07	2.98	3.01
8.750"	8200	11930	7.625"	29.7	P110-ICY	W513	1.26	1.63	3.01	1.81
6.75"	0	11730	5.5"	23	P110-CY	BTC	1.91	2.13	2.70	2.70
6.75"	11730	22,763	5.5"	23	P110-CY	W441	1.81	2.13	2.56	2.32
				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 606H

	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 3rd 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 2nd 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 606H

3. Cementing Program

Casing	# Sks	Wt. lb/ gal	Yld ft3/ sack	H_20 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	1202	11	2.54	15.33	12	Lead: Class C
	112	14.8	1.34	6.52	8	Tail: Class C
Int. Stage 2	578	12.9	1.9	10.52	24	Lead: Class C
	192	14.8	1.34	6.52	8	Tail: Class C
Prod	648	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	11,430'	35% OH in Lateral (KOP to EOL)

3b. Contingency Cementing Program

Casing	# Sks	Wt. lb/ gal	Yld ft3/ sack	H_20 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	391	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	648	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	8,002'	121%
Production	11,430'	35% OH in Lateral (KOP to EOL)

ConocoPhillips - Pitchblende 24-25 Fed Com 606H

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 606H

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 606H

7. Drilling Conditions

Condition	Specify what type and where?
BH Pressure at deepest TVD	8050 psi at 12382' 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	H2S Plan.
x	BOP & Choke Schematics.
x	Directional Plan

Form 3160-5
(June 2019)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

FORM 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. NMNM108476

6. If Indian, Allottee or Tribe Name

7. If Unit of CA/Agreement, Name and/or No.

1. Type of Well
☑ Oil Well ☐ Gas Well ☐ Other

8. Well Name and No.
PITCHBLENDE 24-25 FEDERAL COM/606H

2. Name of Operator COG OPERATING LLC

9. API Well No. 3002553943

3a. Address 600 West Illinois Ave, Midland, TX 79701

3b. Phone No. *(include area code)* (432) 683-7443

10. Field and Pool or Exploratory Area
FAIRVIEW MILLS/Bone Spring

4. Location of Well *(Footage, Sec., T.,R.,M., or Survey Description)*
SEC 24/T25S/R34E/NMP

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
	☐ Alter Casing	☐ Hydraulic Fracturing	☐ Reclamation	☐ Well Integrity
☐ Subsequent Report	☐ Casing Repair	☐ New Construction	☐ Recomplete	☐ Other
	☑ Change Plans	☐ Plug and Abandon	☐ Temporarily Abandon	
☐ Final Abandonment Notice	☐ 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 recomplete 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 perfonned 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 recompletion 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 1000' FWL Section. 25. T25S. R34E.
To: 50' FSL and 330' FWL Section. 25. T25S. R34E.
C102 Attached.

Dedicated Acres:
From: 640. 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

Title Regulatory Analyst

Signature (Electronic Submission)

Date 01/15/2025

THE SPACE FOR FEDERAL OR STATE OFICE USE

Approved by
CHRISTOPHER WALLS / Ph: (575) 234-2234 / Approved

Title 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 ofthis form to U.S. Department ofthe Interior, Bureau ofLand 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: NENW / 210 FNL / 1370 FWL / TWSP: 25S / RANGE: 34E / SECTION: 24 / LAT: 32.122624 / LONG: -103.42778 (TVD: 0 feet, MD: 0 feet)

PPP: NWNW / 100 FNL / 1000 FWL / TWSP: 25S / RANGE: 34E / SECTION: 24 / LAT: 32.122929 / LONG: -103.428975 (TVD: 12394 feet, MD: 12455 feet)

BHL: NWNW / 50 FSL / 1000 FWL / TWSP: 25S / RANGE: 34E / SECTION: 25 / LAT: 32.094322 / LONG: -103.428965 (TVD: 12526 feet, MD: 22768 feet)

Tenaris

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

Nominal OD	7.625 in.	**Wall Thickness**	0.375 in.
Nominal Weight	29.70 lb/ft	**Plain End Weight**	29.06 lb/ft
Drift	6.750 in.	**OD Tolerance**	API
Nominal ID	6.875 in.		

Performance

Body Yield Strength	1068 x1000 lb
Min. Internal Yield Pressure	11,070 psi
SMYS	125,000 psi
Collapse Pressure	7360 psi

Connection Data

Geometry

Connection OD	7.625 in.
Connection ID	6.800 in.
Make-up Loss	4.420 in.
Threads per inch	3.29
Connection OD Option	Regular

Performance

Tension Efficiency	60 %
Joint Yield Strength	641 x1000 lb
Internal Pressure Capacity	11,070 psi
Compression Efficiency	75.20 %
Compression Strength	803 x1000 lb
Max. Allowable Bending	45 °/100 ft
External Pressure Capacity	7360 psi

Make-Up Torques

Minimum	9000 ft-lb
Optimum	10,800 ft-lb
Maximum	15,800 ft-lb

Operation Limit Torques

Operating Torque	53,000 ft-lb
Yield Torque	79,000 ft-lb

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 lastest 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

Tenaris

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 %		
Threads per inch	3.40	**Compression Strength**	662 x1000 lb	**Operation Limit Torques**	
Connection OD Option	Regular	**Max. Allowable Bending**	79 °/100 ft	**Operating Torque**	33,000 ft-lb
		External Pressure Capacity	14,540 psi	**Yield Torque**	39,000 ft-lb
		Coupling Face Load	172,000 lb	**Buck-On**	
				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 lastest performance data, always visit our website: www.tenaris.com

Tenaris

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 %		
Connection OD Option	Regular	**Compression Strength**	803 x1000 lb	**Operation Limit Torques**	
		Max. Allowable Bending	45 °/100 ft	**Operating Torque**	53,000 ft-lb
		External Pressure Capacity	7360 psi	**Yield Torque**	79,000 ft-lb

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 lastest 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

Tenaris

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.

PECOS DISTRICT
DRILLING CONDITIONS OF APPROVAL

OPERATOR'S NAME:	COG OPERATING LLC
WELL NAME & NO.:	PITCHBLENDE 24-25 FED COM 606H
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

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

General Information
Phone: (505) 629-6116

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

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

CONDITIONS

Operator:	OGRID:
COG OPERATING LLC 600 W Illinois Ave Midland, TX 79701	229137
	Action Number: 466111
	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.	6/13/2025
matthew.gomez	Any previous COA's not addressed within the updated COA's still apply.	6/13/2025