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

Sundry Print Report

01/30/2025

Well Name: AVION FEDERAL COM

Well Location: T23S / R32E / SEC 22 / NWNE / 32.296593 / -103.658381

County or Parish/State: LEA / NM

Well Number: 704H

Type of Well: OIL WELL

Allottee or Tribe Name:

Lease Number: NMNM88163

Unit or CA Name:

Unit or CA Number:

US Well Number: 3002553796

Operator: COG OPERATING LLC

Notice of Intent

Sundry ID: 2833115

Type of Submission: Notice of Intent

Type of Action: APD Change

Date Sundry Submitted: 01/21/2025

Time Sundry Submitted: 02:52

Date proposed operation will begin: 01/21/2025

Procedure Description: COG Operating LLC, respectfully requests approval for the following changes to the original approved APD. SHL Change: Due to another company pipelines being in the way of the original SHL. From: 295' FNL & 1365' FEL Section 22. T23S. R32E. To: 265' FNL & 1425' FEL Section 22. T23S. R32E. C102 Attached. Drilling: Drilling Program, Directional Program, AC Report and Specs Attached.

NOI Attachments

Procedure Description

AVION_FEDERAL_COM_704H_Updated_New_C102_20250121145143.pdf

Avion_Fed_Com_704H_Updated_Drilling_Program_for_Sundry_20250121145139.pdf

5.500_23_P110_CY_WEDGE_441_08192024_20250121145138.pdf

AVION_FEDERAL_COM_704H_PWP1_DIR_RPT_20250121145138.pdf

AVION_FEDERAL_COM_704H_PWP1_AC_RPT_20250121145138.pdf

AVION_FEDERAL_COM_704H_PWP1_WPLOT_20250121145139.pdf

5.500_23_P110_CY_TXP_BTC_08192024_20250121145135.pdf

Well Name: AVION FEDERAL COM

Well Location: T23S / R32E / SEC 22 / NWNE / 32.296593 / -103.658381

County or Parish/State: LEA / NM

Well Number: 704H

Type of Well: OIL WELL

Allottee or Tribe Name:

Lease Number: NMNM88163

Unit or CA Name:

Unit or CA Number:

US Well Number: 3002553796

Operator: COG OPERATING LLC

Conditions of Approval

Additional

AVION_FED_COM_704H_COAs_20250129105007.pdf

SEC22_T23S_R32E_AVION_FED_COM_Lea__CONOCOPHILLIPS_COMPANY_45567_JS_20250129105007.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 21, 2025 02:51 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: 01/29/2025

Signature: Chris Walls

C-102	State of New Mexico Energy, Minerals & Natural Resources Department OIL CONSERVATION DIVISION	Revised July 9, 2024
Submit Electronically Via OCD Permitting		Submittal Type: ☐ Initial Submittal ☒ Amended Report ☐ As Drilled

WELL LOCATION INFORMATION

API Number	Pool Code	Pool Name
30-025-53796	98248	WC-025 G-08 S243217P; UPR Wolfcamp

Property Code	Property Name	Well Number
325741	AVION FEDERAL COM	704H

OGRID No.	Operator Name	Ground Level Elevation
229137	COG OPERATING LLC	3700.9'

Surface Owner: ☐ State ☐ Fee ☐ Tribal ☒ Federal Mineral Owner: ☐ State ☐ Fee ☐ Tribal ☒ Federal

Surface Location

UL	Section	Township	Range	Lot	Ft. from N/S	Ft. from E/W	Latitude	Longitude	County
B	22	23-S	32-E		265 FNL	1425 FEL	32.296675°N	103.658574°W	LEA

Bottom Hole Location

UL	Section	Township	Range	Lot	Ft. from N/S	Ft. from E/W	Latitude	Longitude	County
O	27	23-S	32-E		50 FSL	2310 FEL	32.268496°N	103.661430°W	LEA

Dedicated Acres	Infill or Defining Well	Defining Well API	Overlapping Spacing Unit (Y/N)	Consolidation Code
640	Infill	30-025-53595	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
B	22	23-S	32-E		265 FNL	1425 FEL	32.296675°N	103.658574°W	LEA

First Take Point (FTP)

UL	Section	Township	Range	Lot	Ft. from N/S	Ft. from E/W	Latitude	Longitude	County
B	22	23-S	32-E		100 FNL	2310 FEL	32.297122°N	103.661439°W	LEA

Last Take Point (LTP)

UL	Section	Township	Range	Lot	Ft. from N/S	Ft. from E/W	Latitude	Longitude	County
O	27	23-S	32-E		100 FSL	2310 FEL	32.268634°N	103.661430°W	LEA

Unitized Area or Area of Uniform Interest	Spacing Unit Type ☒ Horizontal ☐ Vertical	Ground Floor Elevation:
COM		3700.9'

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: 1/21/2025

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 12/16/24

Signature and Seal of Professional Suveyor

Certificate Number: 17777

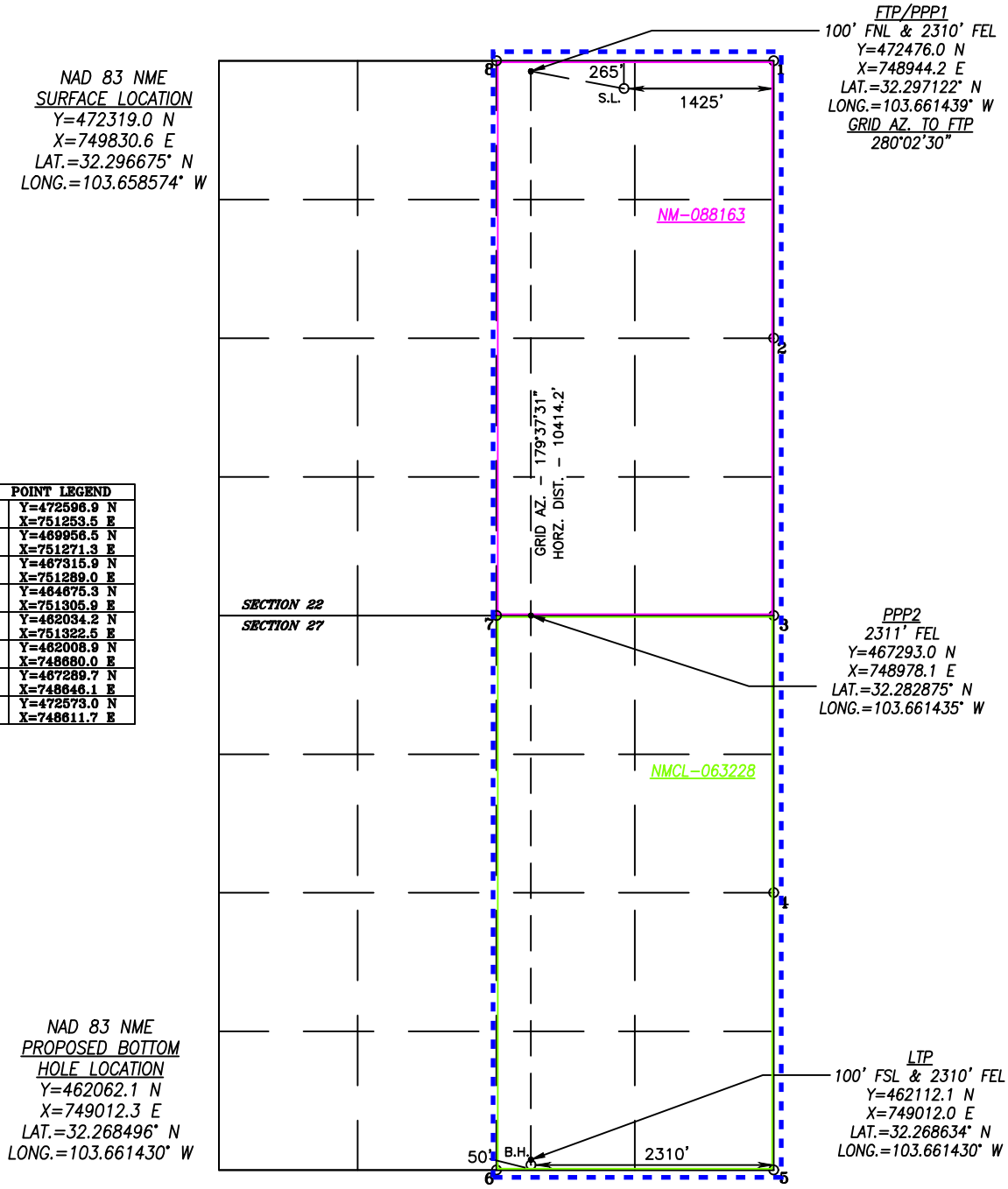
Date of Survey: DECEMBER 10, 2024

W.O.#24-1250 | DRAWN BY: WN | PAGE 1 OF 2

ACREAGE DEDICATION PLATS

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

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



POINT LEGEND	
1	Y=472596.9 N X=751253.5 E
2	Y=469956.5 N X=751271.3 E
3	Y=467315.9 N X=751289.0 E
4	Y=464675.3 N X=751305.9 E
5	Y=462034.2 N X=751322.5 E
6	Y=462008.9 N X=748680.0 E
7	Y=467289.7 N X=748646.1 E
8	Y=472573.0 N X=748611.7 E

PAGE 2 OF 2

ConocoPhillips - Avion Fed Com 704H

1. Geologic Formations

TVD of target	12,373' EOL	Pilot hole depth	NA
MD at TD:	22,734'	Deepest expected fresh water:	713'

Formation	Depth (TVD) from KB	Water/Mineral Bearing/ Target Zone?	Hazards*
Quaternary Fill	Surface	Water	
Rustler	1226	Water	
Top of Salt	1694	Salt	
Base of Salt	4696	Salt	
Lamar	4944	Salt Water	
Bell Canyon	5001	Salt Water	
Cherry Canyon	5897	Oil/Gas	
Brushy Canyon	7052	Oil/Gas	
Bone Spring	8776	Oil/Gas	
1st Bone Spring Sand	9909	Oil/Gas	
2nd Bone Spring Sand	10515	Oil/Gas	
3rd Bone Spring Sand	11843	Oil/Gas	
Wolfcamp Sand	12271	Target Oil/Gas	

2. Casing Program

Hole Size	Casing Interval		Csg. Size	Weight (lbs)	Grade	Conn.	SF Collapse	SF Burst	SF Body	SF Joint
	From	To								
14.75"	0	1350	10.75"	45.5	J55	BTC	3.38	1.15	11.64	12.96
9.875"	0	8200	7.625"	29.7	L80-ICY	BTC	1.50	1.08	2.98	3.01
8.750"	8200	11900	7.625"	29.7	P110-ICY	W513	1.29	1.63	3.02	1.81
6.75"	0	11700	5.5"	23	P110-CY	BTC	1.91	2.14	2.71	2.71
6.75"	11700	22,734	5.5"	23	P110-CY	W441	1.81	2.14	2.56	2.33
					BLM Minimum Safety Factor		1.125	1	1.6 Dry 1.8 Wet	1.6 Dry 1.8 Wet

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

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 - Avion Fed Com 704H

	Y or N
Is casing new? If used, attach certification as required in Onshore Order #1	Y
Does casing meet API specifications? If no, attach casing specification sheet.	Y
Is premium or uncommon casing planned? If yes attach casing specification sheet.	Y
Does the above casing design meet or exceed BLM's minimum standards? If not provide justification (loading assumptions, casing design criteria).	Y
Will the intermediate pipe be kept at a minimum 1/3 fluid filled to avoid approaching the collapse pressure rating of the casing?	Y
Is well located within Capitan Reef?	N
If yes, does production casing cement tie back a minimum of 50' above the Reef?	
Is well within the designated 4 string boundary?	
Is well located in SOPA but not in R-111-P?	N
If yes, are the first 2 strings cemented to surface and 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 - Avion Fed Com 704H

3. Cementing Program

Casing	# Sks	Wt. lb/ gal	Yld ft3/ sack	H_20 gal/sk	500# Comp. Strength (hours)	Slurry Description
Surf.	501	13.5	1.75	9	12	Lead: Class C
	187	14.8	1.34	6.34	8	Tail: Class C
Int. Stage 1	1200	11	2.54	15.33	12	Lead: Class C
	112	14.8	1.34	6.52	8	Tail: Class C
Int. Stage 2	524	12.9	1.9	10.52	24	Lead: Class C
	192	14.8	1.34	6.52	8	Tail: Class C
Prod	646	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	11,400'	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.	501	13.5	1.75	9	12	Lead: Class C
	187	14.8	1.34	6.34	8	Tail: Class C
Bradenhead Stage 1	639	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	646	12.7	1.68	9.09	72	Lead: Class C
	1054	14.5	1.18	5.26	19	Tail: Class H

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

Volumes Subject to Observed Hole Conditions and/or Fluid Caliper Results
Lab reports with the 500 psi compressive strength time for the cement will be onsite for review.

Casing String	TOC	% Excess
Surface	0’	50%
BH Stg 1	0’	50%
BH Stg 2	7,052'	151%
Production	11,400'	35% OH in Lateral (KOP to EOL)

ConocoPhillips - Avion Fed Com 704H

4. Pressure Control Equipment

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

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

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

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

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

ConocoPhillips - Avion Fed Com 704H

5. Mud Program

Depth		Type	Weight (ppg)	Viscosity	Water Loss
From	To				
0	Surf. Shoe	FW Gel	8.6 - 8.8	28-34	N/C
Surf csg	7-5/8" Int shoe	Brine Diesel Emulsion	8.4 - 9.2	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 - Avion Fed Com 704H

7. Drilling Conditions

Condition	Specify what type and where?
BH Pressure at deepest TVD	8045 psi at 12373' 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

DELAWARE BASIN EAST

LEA COUNTY SOUTHEAST
AVION FEDERAL COM PROJECT
AVION FEDERAL COM 704H

OWB
PWP1

Anticollision Report

12 January, 2025

ConocoPhillips

Anticollision Report

Company:	DELAWARE BASIN EAST	**Local Co-ordinate Reference:**	Well AVION FEDERAL COM 704H
Project:	LEA COUNTY SOUTHEAST	**TVD Reference:**	RKB=27ft @ 3728.0usft
Reference Site:	AVION FEDERAL COM PROJECT	**MD Reference:**	RKB=27ft @ 3728.0usft
Site Error:	0.0 usft	**North Reference:**	Grid
Reference Well:	AVION FEDERAL COM 704H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.0 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	OWB	**Database:**	EDT 17 Permian Prod
Reference Design:	PWP1	**Offset TVD Reference:**	Offset Datum

Reference PWP1

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 22,733.6usft	**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** 1/12/2025

From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description
0.0	1,500.0	PWP1 (OWB)	r.5 SDI_KPR_WL_NS-CT	SDI Keeper Wireline Gyrocomp-Initilzd Con
1,500.0	11,999.1	PWP1 (OWB)	r.5 MWD+IFR1+SAG+FDIR	ISCWSA MWD + IFR1 + SAG + FDIR Corr
11,999.1	22,733.6	PWP1 (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
AVION FEDERAL COM PROJECT						
AVION FEDERAL COM 501H - OWB - PWP1	1,200.0	1,201.0	99.9	93.6	15.917 CC, ES	
AVION FEDERAL COM 501H - OWB - PWP1	1,400.0	1,400.8	106.7	99.6	15.116 SF	
AVION FEDERAL COM 502H - OWB - PWP1	1,200.0	1,201.0	59.9	53.6	9.544 CC, ES	
AVION FEDERAL COM 502H - OWB - PWP1	1,300.0	1,301.0	61.6	54.9	9.228 SF	
AVION FEDERAL COM 503H - OWB - PWP1	1,200.0	1,200.0	20.0	13.7	3.187 CC, ES, SF	
AVION FEDERAL COM 701H - OWB - PWP1	1,200.0	1,201.0	119.9	113.6	19.104 CC, ES	
AVION FEDERAL COM 701H - OWB - PWP1	1,400.0	1,400.8	126.7	119.6	17.950 SF	
AVION FEDERAL COM 702H - OWB - PWP1	1,166.3	1,167.3	80.0	73.8	12.926 CC	
AVION FEDERAL COM 702H - OWB - PWP1	1,200.0	1,201.0	80.0	73.7	12.745 ES	
AVION FEDERAL COM 702H - OWB - PWP1	1,300.0	1,300.0	82.8	76.1	12.296 SF	
AVION FEDERAL COM 703H - OWB - PWP1	1,200.0	1,200.0	39.9	33.3	6.043 CC, ES	
AVION FEDERAL COM 703H - OWB - PWP1	22,733.6	22,658.9	660.0	479.4	3.655 SF	
GRUMPY CAT 15 FEDERAL 213H - OWB - AWP	10,832.6	15,671.0	445.6	322.6	3.621 CC, ES, SF	

Offset Design: AVION FEDERAL COM PROJECT - AVION FEDERAL COM 501H - OWB - PWP1

Offset Site Error: 0.0 usft

Survey Program: 0-r.5 SDI_KPR_WL_NS-CT, 2000-r.5 MWD+IFR1+SAG+FDIR, 10558-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	1.0	1.0	0.0	0.0	89.48	0.9	99.9	99.9				
100.0	100.0	101.0	101.0	0.6	0.6	89.48	0.9	99.9	99.9	98.3	1.59	62.927	
200.0	200.0	201.0	201.0	1.1	1.1	89.48	0.9	99.9	99.9	97.4	2.52	39.608	
300.0	300.0	301.0	301.0	1.4	1.4	89.48	0.9	99.9	99.9	96.8	3.15	31.744	
400.0	400.0	401.0	401.0	1.7	1.7	89.48	0.9	99.9	99.9	96.3	3.65	27.362	
500.0	500.0	501.0	501.0	1.9	1.9	89.48	0.9	99.9	99.9	95.8	4.09	24.453	
600.0	600.0	601.0	601.0	2.1	2.1	89.48	0.9	99.9	99.9	95.4	4.47	22.336	
700.0	700.0	701.0	701.0	2.3	2.3	89.48	0.9	99.9	99.9	95.1	4.83	20.703	
800.0	800.0	801.0	801.0	2.5	2.5	89.48	0.9	99.9	99.9	94.8	5.15	19.391	
900.0	900.0	901.0	901.0	2.7	2.7	89.48	0.9	99.9	99.9	94.4	5.46	18.307	
1,000.0	1,000.0	1,001.0	1,001.0	2.9	2.9	89.48	0.9	99.9	99.9	94.2	5.74	17.392	
1,100.0	1,100.0	1,101.0	1,101.0	3.1	3.1	89.48	0.9	99.9	99.9	93.9	6.02	16.604	

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 AVION FEDERAL COM 704H
Project:	LEA COUNTY SOUTHEAST	**TVD Reference:**	RKB=27ft @ 3728.0usft
Reference Site:	AVION FEDERAL COM PROJECT	**MD Reference:**	RKB=27ft @ 3728.0usft
Site Error:	0.0 usft	**North Reference:**	Grid
Reference Well:	AVION FEDERAL COM 704H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.0 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	OWB	**Database:**	EDT 17 Permian Prod
Reference Design:	PWP1	**Offset TVD Reference:**	Offset Datum

Offset Design: AVION FEDERAL COM PROJECT - AVION FEDERAL COM 501H - OWB - PWP1 — **Offset Site Error:** 0.0 usft

Survey Program: 0-r.5 SDI_KPR_WL_NS-CT, 2000-r.5 MWD+IFR1+SAG+FDIR, 10558-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
1,200.0	1,200.0	1,201.0	1,201.0	3.2	3.2	89.48	0.9	99.9	99.9	93.6	6.28	15.917	CC, ES
1,300.0	1,300.0	1,301.0	1,301.0	3.4	3.4	166.69	0.9	99.9	101.6	94.9	6.68	15.219	
1,400.0	1,399.8	1,400.8	1,400.8	3.6	3.5	167.31	0.9	99.9	106.7	99.6	7.06	15.116	SF
1,500.0	1,499.5	1,500.5	1,500.5	3.8	3.7	168.23	0.9	99.9	115.2	107.8	7.43	15.502	
1,600.0	1,598.7	1,599.7	1,599.7	4.1	3.8	169.30	0.9	99.9	127.2	119.4	7.81	16.278	
1,700.0	1,697.5	1,698.5	1,698.5	4.4	4.0	170.42	0.9	99.9	142.6	134.3	8.24	17.312	
1,800.0	1,795.6	1,796.6	1,796.6	4.6	4.1	171.49	0.9	99.9	161.4	152.8	8.65	18.672	
1,900.0	1,893.1	1,894.1	1,894.1	4.9	4.3	172.47	0.9	99.9	183.7	174.7	9.04	20.314	
1,900.1	1,893.2	1,894.2	1,894.2	4.9	4.3	172.47	0.9	99.9	183.7	174.7	9.04	20.316	
2,000.0	1,990.1	1,991.1	1,991.1	5.1	4.4	173.34	0.9	99.9	207.7	198.4	9.33	22.271	
2,100.0	2,087.1	2,082.1	2,082.1	5.3	4.5	173.87	1.3	101.0	232.9	223.3	9.67	24.101	
2,200.0	2,184.1	2,171.2	2,171.1	5.4	4.7	174.01	2.5	104.8	260.9	250.8	10.05	25.968	
2,300.0	2,281.2	2,258.8	2,258.4	5.6	4.8	173.88	4.6	111.0	291.5	281.0	10.43	27.955	
2,400.0	2,378.2	2,344.7	2,343.9	5.8	5.0	173.56	7.4	119.6	324.6	313.8	10.79	30.079	
2,500.0	2,475.2	2,429.0	2,427.4	6.0	5.2	173.13	11.0	130.3	360.4	349.2	11.15	32.327	
2,600.0	2,572.3	2,511.4	2,508.7	6.2	5.3	172.62	15.2	143.1	398.6	387.1	11.48	34.731	
2,700.0	2,669.3	2,597.8	2,593.5	6.4	5.4	172.04	20.3	158.5	438.9	427.2	11.72	37.438	
2,800.0	2,766.3	2,689.1	2,683.2	6.6	5.6	171.52	25.8	175.1	479.5	467.4	12.06	39.762	
2,900.0	2,863.3	2,780.4	2,772.8	6.8	5.7	171.08	31.3	191.6	520.1	507.7	12.40	41.943	
3,000.0	2,960.4	2,871.7	2,862.4	7.0	5.9	170.71	36.8	208.1	560.8	548.0	12.75	43.996	
3,100.0	3,057.4	2,963.0	2,952.0	7.2	6.0	170.38	42.3	224.7	601.5	588.4	13.09	45.932	
3,200.0	3,154.4	3,054.3	3,041.7	7.4	6.2	170.10	47.7	241.2	642.2	628.7	13.45	47.757	
3,300.0	3,251.5	3,145.6	3,131.3	7.6	6.3	169.85	53.2	257.7	682.9	669.1	13.80	49.479	
3,400.0	3,348.5	3,236.9	3,220.9	7.8	6.5	169.63	58.7	274.3	723.6	709.4	14.16	51.107	
3,500.0	3,445.5	3,328.2	3,310.5	8.0	6.7	169.43	64.2	290.8	764.3	749.8	14.52	52.647	
3,600.0	3,542.5	3,419.5	3,400.2	8.2	6.8	169.25	69.7	307.4	805.0	790.1	14.88	54.104	
3,700.0	3,639.6	3,510.8	3,489.8	8.4	7.0	169.09	75.1	323.9	845.8	830.5	15.24	55.485	
3,800.0	3,736.6	3,602.1	3,579.4	8.6	7.2	168.94	80.6	340.4	886.5	870.9	15.61	56.795	
3,900.0	3,833.6	3,693.4	3,669.0	8.8	7.3	168.81	86.1	357.0	927.2	911.3	15.98	58.038	
4,000.0	3,930.7	3,784.7	3,758.7	9.1	7.5	168.69	91.6	373.5	968.0	951.6	16.35	59.219	

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 AVION FEDERAL COM 704H
Project:	LEA COUNTY SOUTHEAST	**TVD Reference:**	RKB=27ft @ 3728.0usft
Reference Site:	AVION FEDERAL COM PROJECT	**MD Reference:**	RKB=27ft @ 3728.0usft
Site Error:	0.0 usft	**North Reference:**	Grid
Reference Well:	AVION FEDERAL COM 704H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.0 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	OWB	**Database:**	EDT 17 Permian Prod
Reference Design:	PWP1	**Offset TVD Reference:**	Offset Datum

Offset Design: AVION FEDERAL COM PROJECT - AVION FEDERAL COM 502H - OWB - PWP1 — **Offset Site Error:** 0.0 usft

Survey Program: 0-r.5 SDI_KPR_WL_NS-CT, 1500-r.5 MWD+IFR1+SAG+FDIR, 9487-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	1.0	1.0	0.0	0.0	89.33	0.7	59.9	59.9				
100.0	100.0	101.0	101.0	0.6	0.6	89.33	0.7	59.9	59.9	58.3	1.59	37.732	
200.0	200.0	201.0	201.0	1.1	1.1	89.33	0.7	59.9	59.9	57.4	2.52	23.750	
300.0	300.0	301.0	301.0	1.4	1.4	89.33	0.7	59.9	59.9	56.8	3.15	19.034	
400.0	400.0	401.0	401.0	1.7	1.7	89.33	0.7	59.9	59.9	56.3	3.65	16.407	
500.0	500.0	501.0	501.0	1.9	1.9	89.33	0.7	59.9	59.9	55.8	4.09	14.663	
600.0	600.0	601.0	601.0	2.1	2.1	89.33	0.7	59.9	59.9	55.4	4.47	13.393	
700.0	700.0	701.0	701.0	2.3	2.3	89.33	0.7	59.9	59.9	55.1	4.83	12.414	
800.0	800.0	801.0	801.0	2.5	2.5	89.33	0.7	59.9	59.9	54.8	5.15	11.627	
900.0	900.0	901.0	901.0	2.7	2.7	89.33	0.7	59.9	59.9	54.4	5.46	10.977	
1,000.0	1,000.0	1,001.0	1,001.0	2.9	2.9	89.33	0.7	59.9	59.9	54.2	5.74	10.428	
1,100.0	1,100.0	1,101.0	1,101.0	3.1	3.1	89.33	0.7	59.9	59.9	53.9	6.02	9.956	
1,200.0	1,200.0	1,201.0	1,201.0	3.2	3.2	89.33	0.7	59.9	59.9	53.6	6.28	9.544	CC, ES
1,300.0	1,300.0	1,301.0	1,301.0	3.4	3.4	166.69	0.7	59.9	61.6	54.9	6.68	9.228	SF
1,400.0	1,399.8	1,400.8	1,400.8	3.6	3.5	167.70	0.7	59.9	66.7	59.6	7.06	9.448	
1,500.0	1,499.5	1,500.5	1,500.5	3.8	3.7	169.08	0.7	59.9	75.2	67.8	7.44	10.117	
1,600.0	1,598.7	1,599.3	1,599.2	4.1	3.9	169.42	2.4	60.2	87.5	79.7	7.81	11.197	
1,700.0	1,697.5	1,697.4	1,697.2	4.4	4.2	168.13	7.4	61.2	103.7	95.4	8.31	12.476	
1,800.0	1,795.6	1,794.5	1,793.9	4.6	4.5	165.97	15.5	62.9	123.9	115.1	8.78	14.114	
1,900.0	1,893.1	1,890.2	1,889.0	4.9	4.8	163.47	26.7	65.2	148.3	139.1	9.23	16.076	
1,900.1	1,893.2	1,890.3	1,889.1	4.9	4.8	163.46	26.7	65.2	148.4	139.2	9.23	16.078	
2,000.0	1,990.1	1,985.4	1,983.1	5.1	4.9	160.98	40.7	68.0	175.4	165.9	9.48	18.492	
2,100.0	2,087.1	2,081.3	2,077.9	5.3	5.1	158.97	55.4	71.0	202.9	193.1	9.81	20.680	
2,200.0	2,184.1	2,177.3	2,172.6	5.4	5.2	157.44	70.1	73.9	230.5	220.4	10.15	22.707	
2,300.0	2,281.2	2,273.2	2,267.4	5.6	5.4	156.24	84.8	76.9	258.3	247.8	10.50	24.606	
2,400.0	2,378.2	2,369.1	2,362.1	5.8	5.6	155.27	99.5	79.9	286.2	275.3	10.84	26.388	
2,500.0	2,475.2	2,465.1	2,456.9	6.0	5.7	154.47	114.2	82.9	314.1	302.9	11.19	28.061	
2,600.0	2,572.3	2,561.0	2,551.7	6.2	5.9	153.80	128.9	85.8	342.1	330.5	11.54	29.634	
2,700.0	2,669.3	2,657.0	2,646.4	6.4	6.1	153.24	143.7	88.8	370.1	358.2	11.87	31.187	
2,800.0	2,766.3	2,755.4	2,743.7	6.6	6.2	152.82	158.1	91.8	397.8	385.6	12.19	32.629	
2,900.0	2,863.3	2,854.6	2,842.1	6.8	6.4	152.68	171.1	94.4	424.9	412.4	12.56	33.844	
3,000.0	2,960.4	2,954.3	2,941.1	7.0	6.6	152.76	182.4	96.7	451.3	438.4	12.92	34.939	
3,100.0	3,057.4	3,054.3	3,040.6	7.2	6.8	153.03	192.0	98.6	477.0	463.7	13.28	35.926	
3,200.0	3,154.4	3,154.6	3,140.6	7.4	6.9	153.45	200.0	100.2	502.0	488.4	13.63	36.819	
3,300.0	3,251.5	3,255.1	3,240.9	7.6	7.1	154.02	206.3	101.5	526.4	512.4	13.99	37.627	
3,400.0	3,348.5	3,355.8	3,341.5	7.8	7.3	154.71	210.8	102.4	550.1	535.7	14.34	38.360	
3,500.0	3,445.5	3,456.6	3,442.2	8.0	7.4	155.51	213.6	103.0	573.2	558.5	14.69	39.029	
3,600.0	3,542.5	3,557.5	3,543.1	8.2	7.6	156.41	214.7	103.2	595.8	580.8	15.01	39.703	
3,700.0	3,639.6	3,655.0	3,640.6	8.4	7.7	157.31	214.7	103.2	618.2	602.9	15.31	40.379	
3,800.0	3,736.6	3,752.0	3,737.6	8.6	7.8	158.14	214.7	103.2	640.7	625.0	15.64	40.967	
3,900.0	3,833.6	3,849.0	3,834.6	8.8	7.9	158.91	214.7	103.2	663.3	647.3	15.97	41.536	
4,000.0	3,930.7	3,946.1	3,931.7	9.1	8.0	159.64	214.7	103.2	686.0	669.7	16.30	42.087	
4,100.0	4,027.7	4,043.1	4,028.7	9.3	8.1	160.32	214.7	103.2	708.8	692.2	16.63	42.621	
4,200.0	4,124.7	4,140.1	4,125.7	9.5	8.2	160.95	214.7	103.2	731.7	714.7	16.96	43.138	
4,300.0	4,221.7	4,237.1	4,222.7	9.7	8.3	161.55	214.7	103.2	754.7	737.4	17.29	43.639	
4,400.0	4,318.8	4,334.2	4,319.8	9.9	8.4	162.11	214.7	103.2	777.7	760.1	17.63	44.124	
4,500.0	4,415.8	4,431.2	4,416.8	10.1	8.5	162.64	214.7	103.2	800.9	782.9	17.96	44.595	
4,600.0	4,512.8	4,528.2	4,513.8	10.4	8.6	163.14	214.7	103.2	824.0	805.7	18.29	45.050	
4,700.0	4,609.9	4,625.3	4,610.9	10.6	8.7	163.62	214.7	103.2	847.3	828.7	18.62	45.492	
4,800.0	4,706.9	4,722.3	4,707.9	10.8	8.8	164.06	214.7	103.2	870.6	851.6	18.96	45.920	
4,840.1	4,745.8	4,761.2	4,746.8	10.9	8.9	164.24	214.7	103.2	879.9	860.8	19.07	46.134	

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 AVION FEDERAL COM 704H
Project:	LEA COUNTY SOUTHEAST	**TVD Reference:**	RKB=27ft @ 3728.0usft
Reference Site:	AVION FEDERAL COM PROJECT	**MD Reference:**	RKB=27ft @ 3728.0usft
Site Error:	0.0 usft	**North Reference:**	Grid
Reference Well:	AVION FEDERAL COM 704H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.0 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	OWB	**Database:**	EDT 17 Permian Prod
Reference Design:	PWP1	**Offset TVD Reference:**	Offset Datum

Offset Design: AVION FEDERAL COM PROJECT - AVION FEDERAL COM 502H - OWB - PWP1

Offset Site Error: 0.0 usft

Survey Program: 0-r.5 SDI_KPR_WL_NS-CT, 1500-r.5 MWD+IFR1+SAG+FDIR, 9487-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
4,900.0	4,804.0	4,819.4	4,805.0	11.0	8.9	164.54	214.7	103.2	893.5	874.2	19.25	46.405	
5,000.0	4,901.7	4,917.1	4,902.7	11.2	9.0	164.98	214.7	103.2	914.1	894.5	19.60	46.641	
5,100.0	4,999.9	5,015.3	5,000.9	11.4	9.1	165.35	214.7	103.2	932.4	912.4	19.94	46.759	
5,200.0	5,098.6	5,114.0	5,099.6	11.6	9.2	165.65	214.7	103.2	948.1	927.8	20.27	46.765	
5,300.0	5,197.6	5,213.0	5,198.6	11.9	9.3	165.91	214.7	103.2	961.4	940.8	20.60	46.668	
5,400.0	5,297.0	5,312.4	5,298.0	12.1	9.4	166.10	214.7	103.2	972.1	951.2	20.92	46.473	
5,500.0	5,396.7	5,412.1	5,397.7	12.3	9.5	166.25	214.7	103.2	980.3	959.1	21.23	46.187	
5,600.0	5,496.5	5,511.9	5,497.5	12.4	9.6	166.35	214.7	103.2	986.0	964.5	21.52	45.821	
5,700.0	5,596.4	5,611.8	5,597.4	12.6	9.7	166.41	214.7	103.2	989.2	967.4	21.80	45.384	
5,773.6	5,670.0	5,685.4	5,671.0	12.7	9.8	89.44	214.7	103.2	989.8	967.9	21.93	45.140	
5,800.0	5,696.4	5,711.8	5,697.4	12.7	9.8	89.44	214.7	103.2	989.8	967.9	21.96	45.081	
5,900.0	5,796.4	5,811.8	5,797.4	12.7	9.9	89.44	214.7	103.2	989.8	967.7	22.12	44.747	
6,000.0	5,896.4	5,911.8	5,897.4	12.8	10.0	89.44	214.7	103.2	989.8	967.6	22.28	44.425	
6,100.0	5,996.4	6,011.8	5,997.4	12.9	10.2	89.44	214.7	103.2	989.8	967.4	22.44	44.108	
6,200.0	6,096.4	6,111.8	6,097.4	12.9	10.3	89.44	214.7	103.2	989.8	967.2	22.60	43.795	
6,300.0	6,196.4	6,211.8	6,197.4	13.0	10.4	89.44	214.7	103.2	989.8	967.1	22.76	43.487	
6,400.0	6,296.4	6,311.8	6,297.4	13.1	10.5	89.44	214.7	103.2	989.8	966.9	22.92	43.182	
6,500.0	6,396.4	6,411.8	6,397.4	13.1	10.6	89.44	214.7	103.2	989.8	966.8	23.08	42.882	
6,600.0	6,496.4	6,511.8	6,497.4	13.2	10.6	89.44	214.7	103.2	989.8	966.6	23.24	42.586	
6,700.0	6,596.4	6,611.8	6,597.4	13.2	10.7	89.44	214.7	103.2	989.8	966.4	23.40	42.294	
6,800.0	6,696.4	6,711.8	6,697.4	13.3	10.8	89.44	214.7	103.2	989.8	966.3	23.56	42.007	
6,900.0	6,796.4	6,811.8	6,797.4	13.4	10.9	89.44	214.7	103.2	989.8	966.1	23.72	41.722	
7,000.0	6,896.4	6,911.8	6,897.4	13.4	11.0	89.44	214.7	103.2	989.8	966.0	23.88	41.442	
7,100.0	6,996.4	7,011.8	6,997.4	13.5	11.1	89.44	214.7	103.2	989.8	965.8	24.05	41.166	
7,200.0	7,096.4	7,111.8	7,097.4	13.6	11.2	89.44	214.7	103.2	989.8	965.6	24.21	40.893	
7,300.0	7,196.4	7,211.8	7,197.4	13.6	11.3	89.44	214.7	103.2	989.8	965.5	24.37	40.624	
7,400.0	7,296.4	7,311.8	7,297.4	13.7	11.4	89.44	214.7	103.2	989.8	965.3	24.53	40.358	
7,500.0	7,396.4	7,411.8	7,397.4	13.8	11.5	89.44	214.7	103.2	989.8	965.2	24.69	40.096	
7,600.0	7,496.4	7,511.8	7,497.4	13.8	11.6	89.44	214.7	103.2	989.8	965.0	24.85	39.837	
7,700.0	7,596.4	7,611.8	7,597.4	13.9	11.7	89.44	214.7	103.2	989.8	964.8	25.01	39.581	
7,800.0	7,696.4	7,711.8	7,697.4	14.0	11.8	89.44	214.7	103.2	989.8	964.7	25.17	39.329	
7,900.0	7,796.4	7,811.8	7,797.4	14.0	11.9	89.44	214.7	103.2	989.8	964.5	25.33	39.079	
8,000.0	7,896.4	7,911.8	7,897.4	14.1	12.0	89.44	214.7	103.2	989.8	964.4	25.49	38.833	
8,100.0	7,996.4	8,011.8	7,997.4	14.2	12.1	89.44	214.7	103.2	989.8	964.2	25.65	38.590	
8,200.0	8,096.4	8,111.8	8,097.4	14.2	12.2	89.44	214.7	103.2	989.8	964.0	25.81	38.350	
8,300.0	8,196.4	8,211.8	8,197.4	14.3	12.3	89.44	214.7	103.2	989.8	963.9	25.97	38.113	
8,400.0	8,296.4	8,311.8	8,297.4	14.4	12.4	89.44	214.7	103.2	989.8	963.7	26.13	37.879	
8,500.0	8,396.4	8,411.8	8,397.4	14.5	12.5	89.44	214.7	103.2	989.8	963.6	26.29	37.648	
8,600.0	8,496.4	8,511.8	8,497.4	14.5	12.6	89.44	214.7	103.2	989.8	963.4	26.45	37.420	
8,700.0	8,596.4	8,611.8	8,597.4	14.6	12.7	89.44	214.7	103.2	989.8	963.2	26.61	37.194	
8,800.0	8,696.4	8,711.8	8,697.4	14.7	12.8	89.44	214.7	103.2	989.8	963.1	26.77	36.971	
8,900.0	8,796.4	8,811.8	8,797.4	14.7	12.9	89.44	214.7	103.2	989.8	962.9	26.93	36.751	
9,000.0	8,896.4	8,911.8	8,897.4	14.8	13.0	89.44	214.7	103.2	989.8	962.8	27.09	36.533	
9,100.0	8,996.4	9,011.8	8,997.4	14.9	13.1	89.44	214.7	103.2	989.8	962.6	27.26	36.318	
9,200.0	9,096.4	9,111.8	9,097.4	14.9	13.1	89.44	214.7	103.2	989.8	962.4	27.42	36.105	
9,300.0	9,196.4	9,211.8	9,197.4	15.0	13.2	89.44	214.7	103.2	989.8	962.3	27.58	35.895	
9,400.0	9,296.4	9,311.8	9,297.4	15.1	13.3	89.44	214.7	103.2	989.8	962.1	27.74	35.687	
9,500.0	9,396.4	9,411.8	9,397.4	15.1	13.4	89.44	214.7	103.2	989.8	962.0	27.90	35.483	
9,600.0	9,496.4	9,512.0	9,497.6	15.2	13.5	89.48	214.0	103.2	989.8	961.8	28.03	35.309	
9,630.8	9,527.2	9,542.7	9,528.2	15.2	13.5	89.63	211.4	103.2	989.8	961.8	28.06	35.275	
9,700.0	9,596.4	9,609.9	9,594.1	15.3	13.6	90.35	199.0	103.3	989.9	961.8	28.12	35.204	

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 AVION FEDERAL COM 704H
Project:	LEA COUNTY SOUTHEAST	**TVD Reference:**	RKB=27ft @ 3728.0usft
Reference Site:	AVION FEDERAL COM PROJECT	**MD Reference:**	RKB=27ft @ 3728.0usft
Site Error:	0.0 usft	**North Reference:**	Grid
Reference Well:	AVION FEDERAL COM 704H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.0 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	OWB	**Database:**	EDT 17 Permian Prod
Reference Design:	PWP1	**Offset TVD Reference:**	Offset Datum

Offset Design: AVION FEDERAL COM PROJECT - AVION FEDERAL COM 502H - OWB - PWP1

Offset Site Error: 0.0 usft

Survey Program: 0-r.5 SDI_KPR_WL_NS-CT, 1500-r.5 MWD+IFR1+SAG+FDIR, 9487-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
9,800.0	9,696.4	9,698.4	9,677.1	15.4	13.6	92.10	168.6	103.5	991.0	962.8	28.21	35.130	
9,900.0	9,796.4	9,775.0	9,743.4	15.4	13.7	94.31	130.4	103.7	994.6	966.3	28.32	35.119	

ConocoPhillips

Anticollision Report

Company:	DELAWARE BASIN EAST	**Local Co-ordinate Reference:**	Well AVION FEDERAL COM 704H
Project:	LEA COUNTY SOUTHEAST	**TVD Reference:**	RKB=27ft @ 3728.0usft
Reference Site:	AVION FEDERAL COM PROJECT	**MD Reference:**	RKB=27ft @ 3728.0usft
Site Error:	0.0 usft	**North Reference:**	Grid
Reference Well:	AVION FEDERAL COM 704H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.0 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	OWB	**Database:**	EDT 17 Permian Prod
Reference Design:	PWP1	**Offset TVD Reference:**	Offset Datum

Offset Design: AVION FEDERAL COM PROJECT - AVION FEDERAL COM 503H - OWB - PWP1

Offset Site Error: 0.0 usft

Survey Program: 0-r.5 SDI_KPR_WL_NS-CT, 1500-r.5 MWD+IFR1+SAG+FDIR, 10536-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	89.43	0.2	20.0	20.0				
100.0	100.0	100.0	100.0	0.6	0.6	89.43	0.2	20.0	20.0	18.4	1.58	12.635	
200.0	200.0	200.0	200.0	1.1	1.1	89.43	0.2	20.0	20.0	17.5	2.52	7.940	
300.0	300.0	300.0	300.0	1.4	1.4	89.43	0.2	20.0	20.0	16.9	3.14	6.360	
400.0	400.0	400.0	400.0	1.7	1.7	89.43	0.2	20.0	20.0	16.4	3.65	5.481	
500.0	500.0	500.0	500.0	1.9	1.9	89.43	0.2	20.0	20.0	15.9	4.08	4.898	
600.0	600.0	600.0	600.0	2.1	2.1	89.43	0.2	20.0	20.0	15.5	4.47	4.473	
700.0	700.0	700.0	700.0	2.3	2.3	89.43	0.2	20.0	20.0	15.2	4.82	4.146	
800.0	800.0	800.0	800.0	2.5	2.5	89.43	0.2	20.0	20.0	14.9	5.15	3.883	
900.0	900.0	900.0	900.0	2.7	2.7	89.43	0.2	20.0	20.0	14.5	5.46	3.666	
1,000.0	1,000.0	1,000.0	1,000.0	2.9	2.9	89.43	0.2	20.0	20.0	14.3	5.74	3.483	
1,100.0	1,100.0	1,100.0	1,100.0	3.1	3.1	89.43	0.2	20.0	20.0	14.0	6.02	3.325	
1,200.0	1,200.0	1,200.0	1,200.0	3.2	3.2	89.43	0.2	20.0	20.0	13.7	6.28	3.187	CC, ES, SF
1,300.0	1,300.0	1,300.0	1,300.0	3.4	3.4	167.48	0.2	20.0	21.7	15.0	6.68	3.251	
1,400.0	1,399.8	1,399.8	1,399.8	3.6	3.5	169.89	0.2	20.0	26.8	19.8	7.07	3.797	
1,500.0	1,499.5	1,499.5	1,499.5	3.8	3.7	172.34	0.2	20.0	35.4	28.0	7.45	4.755	
1,600.0	1,598.7	1,600.3	1,600.3	4.1	3.8	173.82	0.8	18.3	45.9	37.9	7.96	5.763	
1,700.0	1,697.5	1,701.5	1,701.3	4.4	4.1	174.32	2.6	13.3	56.3	47.8	8.58	6.569	
1,800.0	1,795.6	1,803.1	1,802.5	4.6	4.3	174.30	5.6	4.9	66.8	57.7	9.16	7.297	
1,900.0	1,893.1	1,905.0	1,903.7	4.9	4.6	173.96	9.9	-6.9	77.3	67.6	9.70	7.969	
1,900.1	1,893.2	1,905.2	1,903.8	4.9	4.6	173.96	9.9	-6.9	77.3	67.6	9.70	7.970	
2,000.0	1,990.1	2,005.8	2,003.3	5.1	4.7	173.40	15.1	-21.4	86.6	76.7	9.97	8.688	
2,100.0	2,087.1	2,105.4	2,101.6	5.3	4.9	172.90	20.4	-36.0	95.6	85.3	10.33	9.254	
2,200.0	2,184.1	2,205.0	2,200.0	5.4	5.1	172.49	25.7	-50.7	104.6	93.9	10.70	9.778	
2,300.0	2,281.2	2,304.6	2,298.4	5.6	5.2	172.14	31.0	-65.4	113.6	102.5	11.07	10.264	
2,400.0	2,378.2	2,404.2	2,396.7	5.8	5.4	171.85	36.3	-80.0	122.6	111.2	11.44	10.715	
2,500.0	2,475.2	2,503.8	2,495.1	6.0	5.6	171.59	41.6	-94.7	131.6	119.8	11.82	11.135	
2,600.0	2,572.3	2,603.4	2,593.5	6.2	5.8	171.37	46.8	-109.3	140.6	128.4	12.20	11.526	
2,700.0	2,669.3	2,703.0	2,691.8	6.4	6.0	171.17	52.1	-124.0	149.6	137.0	12.58	11.891	
2,800.0	2,766.3	2,802.5	2,790.2	6.6	6.2	171.00	57.4	-138.6	158.6	145.7	12.97	12.233	
2,900.0	2,863.3	2,902.1	2,888.6	6.8	6.4	170.85	62.7	-153.3	167.6	154.3	13.35	12.553	
3,000.0	2,960.4	3,001.7	2,986.9	7.0	6.6	170.71	68.0	-168.0	176.6	162.9	13.74	12.854	
3,100.0	3,057.4	3,101.3	3,085.3	7.2	6.8	170.58	73.3	-182.6	185.7	171.5	14.13	13.136	
3,200.0	3,154.4	3,200.9	3,183.7	7.4	6.9	170.47	78.6	-197.3	194.7	180.1	14.52	13.402	
3,300.0	3,251.5	3,300.5	3,282.0	7.6	7.1	170.36	83.8	-211.9	203.7	188.8	14.92	13.653	
3,400.0	3,348.5	3,400.1	3,380.4	7.8	7.3	170.27	89.1	-226.6	212.7	197.4	15.31	13.890	
3,500.0	3,445.5	3,499.7	3,478.8	8.0	7.5	170.18	94.4	-241.2	221.7	206.0	15.71	14.113	
3,600.0	3,542.5	3,599.3	3,577.1	8.2	7.7	170.10	99.7	-255.9	230.7	214.6	16.11	14.325	
3,700.0	3,639.6	3,698.9	3,675.5	8.4	7.9	170.03	105.0	-270.5	239.7	223.2	16.50	14.526	
3,800.0	3,736.6	3,798.5	3,773.9	8.6	8.1	169.96	110.3	-285.2	248.7	231.8	16.90	14.717	
3,900.0	3,833.6	3,898.1	3,872.2	8.8	8.3	169.89	115.6	-299.9	257.8	240.5	17.30	14.898	
4,000.0	3,930.7	3,997.7	3,970.6	9.1	8.5	169.83	120.8	-314.5	266.8	249.1	17.70	15.070	
4,100.0	4,027.7	4,097.2	4,069.0	9.3	8.7	169.78	126.1	-329.2	275.8	257.7	18.10	15.234	
4,200.0	4,124.7	4,196.8	4,167.3	9.5	8.9	169.73	131.4	-343.8	284.8	266.3	18.51	15.391	
4,300.0	4,221.7	4,296.4	4,265.7	9.7	9.1	169.68	136.7	-358.5	293.8	274.9	18.91	15.540	
4,400.0	4,318.8	4,396.0	4,364.1	9.9	9.3	169.63	142.0	-373.1	302.8	283.5	19.31	15.682	
4,500.0	4,415.8	4,495.6	4,462.4	10.1	9.5	169.59	147.3	-387.8	311.9	292.1	19.71	15.819	
4,600.0	4,512.8	4,595.2	4,560.8	10.4	9.7	169.55	152.6	-402.5	320.9	300.8	20.12	15.949	
4,700.0	4,609.9	4,694.8	4,659.2	10.6	9.9	169.51	157.9	-417.1	329.9	309.4	20.52	16.074	
4,800.0	4,706.9	4,794.4	4,757.5	10.8	10.1	169.47	163.1	-431.8	338.9	318.0	20.93	16.194	
4,840.1	4,745.8	4,834.3	4,796.9	10.9	10.1	169.46	165.3	-437.6	342.5	321.4	21.07	16.254	

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 AVION FEDERAL COM 704H
Project:	LEA COUNTY SOUTHEAST	**TVD Reference:**	RKB=27ft @ 3728.0usft
Reference Site:	AVION FEDERAL COM PROJECT	**MD Reference:**	RKB=27ft @ 3728.0usft
Site Error:	0.0 usft	**North Reference:**	Grid
Reference Well:	AVION FEDERAL COM 704H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.0 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	OWB	**Database:**	EDT 17 Permian Prod
Reference Design:	PWP1	**Offset TVD Reference:**	Offset Datum

Offset Design: AVION FEDERAL COM PROJECT - AVION FEDERAL COM 503H - OWB - PWP1 — **Offset Site Error:** 0.0 usft

Survey Program: 0-r.5 SDI_KPR_WL_NS-CT, 1500-r.5 MWD+IFR1+SAG+FDIR, 10536-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
4,900.0	4,804.0	4,894.0	4,855.9	11.0	10.3	169.44	168.4	-446.4	347.5	326.2	21.30	16.315	
5,000.0	4,901.7	4,993.8	4,954.5	11.2	10.5	169.33	173.7	-461.1	353.7	331.9	21.71	16.287	
5,100.0	4,999.9	5,093.8	5,053.2	11.4	10.7	169.15	179.0	-475.8	357.3	335.2	22.12	16.151	
5,200.0	5,098.6	5,193.7	5,151.9	11.6	10.9	168.88	184.3	-490.5	358.4	335.8	22.51	15.917	
5,300.0	5,197.6	5,288.0	5,245.2	11.9	11.1	168.59	189.1	-503.7	357.7	334.7	22.93	15.597	
5,400.0	5,297.0	5,382.4	5,338.8	12.1	11.3	168.29	193.3	-515.4	356.0	332.7	23.29	15.284	
5,500.0	5,396.7	5,476.8	5,432.5	12.3	11.5	167.98	197.0	-525.6	353.3	329.7	23.63	14.953	
5,600.0	5,496.5	5,571.2	5,526.5	12.4	11.6	167.67	200.2	-534.4	349.7	325.7	23.94	14.603	
5,700.0	5,596.4	5,665.7	5,620.6	12.6	11.8	167.33	202.8	-541.8	345.0	320.8	24.23	14.236	
5,773.6	5,670.0	5,735.2	5,690.0	12.7	11.9	90.10	204.4	-546.2	341.0	316.6	24.38	13.985	
5,800.0	5,696.4	5,760.2	5,714.9	12.7	12.0	90.01	204.9	-547.6	339.5	315.1	24.41	13.905	
5,900.0	5,796.4	5,854.9	5,809.5	12.7	12.1	89.74	206.5	-552.1	334.8	310.2	24.59	13.617	
6,000.0	5,896.4	5,949.6	5,904.2	12.8	12.3	89.55	207.6	-555.0	331.7	306.9	24.75	13.401	
6,100.0	5,996.4	6,044.5	5,999.0	12.9	12.4	89.46	208.1	-556.5	330.1	305.2	24.89	13.262	
6,167.4	6,063.9	6,109.3	6,063.9	12.9	12.4	89.44	208.2	-556.7	329.9	304.9	24.97	13.210	
6,200.0	6,096.4	6,141.9	6,096.4	12.9	12.5	89.44	208.2	-556.7	329.9	304.9	25.03	13.179	
6,300.0	6,196.4	6,241.9	6,196.4	13.0	12.6	89.44	208.2	-556.7	329.9	304.7	25.20	13.094	
6,400.0	6,296.4	6,341.9	6,296.4	13.1	12.6	89.44	208.2	-556.7	329.9	304.6	25.33	13.026	
6,500.0	6,396.4	6,441.9	6,396.4	13.1	12.7	89.44	208.2	-556.7	329.9	304.5	25.46	12.959	
6,600.0	6,496.4	6,541.9	6,496.4	13.2	12.8	89.44	208.2	-556.7	329.9	304.3	25.59	12.892	
6,700.0	6,596.4	6,641.9	6,596.4	13.2	12.9	89.44	208.2	-556.7	329.9	304.2	25.72	12.826	
6,800.0	6,696.4	6,741.9	6,696.4	13.3	12.9	89.44	208.2	-556.7	329.9	304.1	25.86	12.760	
6,900.0	6,796.4	6,841.9	6,796.4	13.4	13.0	89.44	208.2	-556.7	329.9	303.9	25.99	12.695	
7,000.0	6,896.4	6,941.9	6,896.4	13.4	13.1	89.44	208.2	-556.7	329.9	303.8	26.12	12.630	
7,100.0	6,996.4	7,041.9	6,996.4	13.5	13.1	89.44	208.2	-556.7	329.9	303.7	26.25	12.566	
7,200.0	7,096.4	7,141.9	7,096.4	13.6	13.2	89.44	208.2	-556.7	329.9	303.5	26.39	12.503	
7,300.0	7,196.4	7,241.9	7,196.4	13.6	13.3	89.44	208.2	-556.7	329.9	303.4	26.52	12.439	
7,400.0	7,296.4	7,341.9	7,296.4	13.7	13.3	89.44	208.2	-556.7	329.9	303.3	26.66	12.377	
7,500.0	7,396.4	7,441.9	7,396.4	13.8	13.4	89.44	208.2	-556.7	329.9	303.1	26.79	12.315	
7,600.0	7,496.4	7,541.9	7,496.4	13.8	13.5	89.44	208.2	-556.7	329.9	303.0	26.93	12.253	
7,700.0	7,596.4	7,641.9	7,596.4	13.9	13.5	89.44	208.2	-556.7	329.9	302.9	27.06	12.192	
7,800.0	7,696.4	7,741.9	7,696.4	14.0	13.6	89.44	208.2	-556.7	329.9	302.7	27.20	12.131	
7,900.0	7,796.4	7,841.9	7,796.4	14.0	13.7	89.44	208.2	-556.7	329.9	302.6	27.33	12.071	
8,000.0	7,896.4	7,941.9	7,896.4	14.1	13.7	89.44	208.2	-556.7	329.9	302.4	27.47	12.011	
8,100.0	7,996.4	8,041.9	7,996.4	14.2	13.8	89.44	208.2	-556.7	329.9	302.3	27.60	11.952	
8,200.0	8,096.4	8,141.9	8,096.4	14.2	13.9	89.44	208.2	-556.7	329.9	302.2	27.74	11.893	
8,300.0	8,196.4	8,241.9	8,196.4	14.3	14.0	89.44	208.2	-556.7	329.9	302.0	27.88	11.834	
8,400.0	8,296.4	8,341.9	8,296.4	14.4	14.0	89.44	208.2	-556.7	329.9	301.9	28.01	11.776	
8,500.0	8,396.4	8,441.9	8,396.4	14.5	14.1	89.44	208.2	-556.7	329.9	301.8	28.15	11.719	
8,600.0	8,496.4	8,541.9	8,496.4	14.5	14.2	89.44	208.2	-556.7	329.9	301.6	28.29	11.662	
8,700.0	8,596.4	8,641.9	8,596.4	14.6	14.2	89.44	208.2	-556.7	329.9	301.5	28.43	11.605	
8,800.0	8,696.4	8,741.9	8,696.4	14.7	14.3	89.44	208.2	-556.7	329.9	301.3	28.57	11.549	
8,900.0	8,796.4	8,841.9	8,796.4	14.7	14.4	89.44	208.2	-556.7	329.9	301.2	28.70	11.494	
9,000.0	8,896.4	8,941.9	8,896.4	14.8	14.5	89.44	208.2	-556.7	329.9	301.1	28.84	11.439	
9,100.0	8,996.4	9,041.9	8,996.4	14.9	14.5	89.44	208.2	-556.7	329.9	300.9	28.98	11.384	
9,200.0	9,096.4	9,141.9	9,096.4	14.9	14.6	89.44	208.2	-556.7	329.9	300.8	29.12	11.329	
9,300.0	9,196.4	9,241.9	9,196.4	15.0	14.7	89.44	208.2	-556.7	329.9	300.7	29.26	11.275	
9,400.0	9,296.4	9,341.9	9,296.4	15.1	14.7	89.44	208.2	-556.7	329.9	300.5	29.40	11.222	
9,500.0	9,396.4	9,441.9	9,396.4	15.1	14.8	89.44	208.2	-556.7	329.9	300.4	29.54	11.169	
9,600.0	9,496.4	9,541.9	9,496.4	15.2	14.9	89.44	208.2	-556.7	329.9	300.2	29.68	11.116	
9,700.0	9,596.4	9,641.9	9,596.4	15.3	15.0	89.44	208.2	-556.7	329.9	300.1	29.82	11.064	

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 AVION FEDERAL COM 704H
Project:	LEA COUNTY SOUTHEAST	**TVD Reference:**	RKB=27ft @ 3728.0usft
Reference Site:	AVION FEDERAL COM PROJECT	**MD Reference:**	RKB=27ft @ 3728.0usft
Site Error:	0.0 usft	**North Reference:**	Grid
Reference Well:	AVION FEDERAL COM 704H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.0 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	OWB	**Database:**	EDT 17 Permian Prod
Reference Design:	PWP1	**Offset TVD Reference:**	Offset Datum

Offset Design: AVION FEDERAL COM PROJECT - AVION FEDERAL COM 503H - OWB - PWP1

Offset Site Error: 0.0 usft

Survey Program: 0-r.5 SDI_KPR_WL_NS-CT, 1500-r.5 MWD+IFR1+SAG+FDIR, 10536-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
9,800.0	9,696.4	9,741.9	9,696.4	15.4	15.0	89.44	208.2	-556.7	329.9	300.0	29.96	11.012	
9,900.0	9,796.4	9,841.9	9,796.4	15.4	15.1	89.44	208.2	-556.7	329.9	299.8	30.10	10.961	
10,000.0	9,896.4	9,941.9	9,896.4	15.5	15.2	89.44	208.2	-556.7	329.9	299.7	30.24	10.910	
10,100.0	9,996.4	10,041.9	9,996.4	15.6	15.2	89.44	208.2	-556.7	329.9	299.5	30.38	10.859	
10,200.0	10,096.4	10,141.9	10,096.4	15.6	15.3	89.44	208.2	-556.7	329.9	299.4	30.52	10.809	
10,300.0	10,196.4	10,241.9	10,196.4	15.7	15.4	89.44	208.2	-556.7	329.9	299.3	30.66	10.759	
10,400.0	10,296.4	10,341.9	10,296.4	15.8	15.5	89.44	208.2	-556.7	329.9	299.1	30.81	10.710	
10,500.0	10,396.4	10,441.9	10,396.4	15.8	15.5	89.44	208.2	-556.7	329.9	299.0	30.95	10.661	
10,600.0	10,496.4	10,541.9	10,496.4	15.9	15.6	89.45	208.2	-556.7	329.9	298.8	31.07	10.619	
10,625.8	10,522.2	10,567.7	10,522.2	15.9	15.6	89.63	207.1	-556.7	329.9	298.8	31.10	10.610	
10,700.0	10,596.4	10,640.4	10,594.1	16.0	15.6	91.42	196.8	-556.6	330.1	298.9	31.20	10.580	
10,800.0	10,696.4	10,730.8	10,679.9	16.1	15.6	96.22	169.0	-556.4	332.5	301.1	31.40	10.588	
10,900.0	10,796.4	10,808.5	10,748.5	16.1	15.7	102.37	132.5	-556.2	341.6	309.8	31.80	10.742	
11,000.0	10,896.4	10,875.0	10,801.8	16.2	15.7	108.74	92.8	-555.9	361.8	329.2	32.60	11.096	
11,100.0	10,996.4	10,925.0	10,837.9	16.3	15.7	113.91	58.3	-555.7	395.1	361.2	33.97	11.632	
11,200.0	11,096.4	10,967.9	10,865.9	16.3	15.8	118.42	25.9	-555.5	441.4	405.8	35.61	12.398	
11,300.0	11,196.4	11,000.0	10,884.9	16.4	15.8	121.76	-0.1	-555.3	498.8	461.5	37.33	13.363	
11,400.0	11,296.4	11,025.0	10,898.4	16.5	15.8	124.30	-21.1	-555.2	565.1	526.2	38.94	14.513	
11,500.0	11,396.4	11,050.0	10,910.9	16.6	15.9	126.77	-42.7	-555.1	638.0	597.8	40.27	15.842	
11,600.0	11,496.4	11,075.0	10,922.1	16.6	15.9	129.15	-65.1	-554.9	716.1	674.7	41.39	17.300	
11,700.0	11,596.4	11,091.8	10,929.0	16.7	15.9	130.70	-80.4	-554.8	798.1	755.6	42.43	18.808	
11,800.0	11,696.4	11,100.0	10,932.2	16.8	15.9	131.44	-87.9	-554.8	883.1	839.7	43.41	20.343	
11,900.0	11,796.4	11,125.0	10,941.1	16.9	16.0	133.61	-111.3	-554.6	970.5	926.3	44.12	21.994	

ConocoPhillips

Anticollision Report

Company:	DELAWARE BASIN EAST	**Local Co-ordinate Reference:**	Well AVION FEDERAL COM 704H
Project:	LEA COUNTY SOUTHEAST	**TVD Reference:**	RKB=27ft @ 3728.0usft
Reference Site:	AVION FEDERAL COM PROJECT	**MD Reference:**	RKB=27ft @ 3728.0usft
Site Error:	0.0 usft	**North Reference:**	Grid
Reference Well:	AVION FEDERAL COM 704H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.0 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	OWB	**Database:**	EDT 17 Permian Prod
Reference Design:	PWP1	**Offset TVD Reference:**	Offset Datum

Offset Design: AVION FEDERAL COM PROJECT - AVION FEDERAL COM 701H - OWB - PWP1 — **Offset Site Error:** 0.0 usft

Survey Program: 0-r.5 SDI_KPR_WL_NS-CT, 1500-r.5 MWD+IFR1+SAG+FDIR, 12028-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	1.0	1.0	0.0	0.0	89.47	1.1	119.9	119.9				
100.0	100.0	101.0	101.0	0.6	0.6	89.47	1.1	119.9	119.9	118.3	1.59	75.525	
200.0	200.0	201.0	201.0	1.1	1.1	89.47	1.1	119.9	119.9	117.4	2.52	47.538	
300.0	300.0	301.0	301.0	1.4	1.4	89.47	1.1	119.9	119.9	116.8	3.15	38.099	
400.0	400.0	401.0	401.0	1.7	1.7	89.47	1.1	119.9	119.9	116.3	3.65	32.840	
500.0	500.0	501.0	501.0	1.9	1.9	89.47	1.1	119.9	119.9	115.8	4.09	29.349	
600.0	600.0	601.0	601.0	2.1	2.1	89.47	1.1	119.9	119.9	115.4	4.47	26.808	
700.0	700.0	701.0	701.0	2.3	2.3	89.47	1.1	119.9	119.9	115.1	4.83	24.847	
800.0	800.0	801.0	801.0	2.5	2.5	89.47	1.1	119.9	119.9	114.8	5.15	23.273	
900.0	900.0	901.0	901.0	2.7	2.7	89.47	1.1	119.9	119.9	114.4	5.46	21.973	
1,000.0	1,000.0	1,001.0	1,001.0	2.9	2.9	89.47	1.1	119.9	119.9	114.2	5.74	20.873	
1,100.0	1,100.0	1,101.0	1,101.0	3.1	3.1	89.47	1.1	119.9	119.9	113.9	6.02	19.928	
1,200.0	1,200.0	1,201.0	1,201.0	3.2	3.2	89.47	1.1	119.9	119.9	113.6	6.28	19.104	CC, ES
1,300.0	1,300.0	1,301.0	1,301.0	3.4	3.4	166.64	1.1	119.9	121.6	114.9	6.68	18.216	
1,400.0	1,399.8	1,400.8	1,400.8	3.6	3.5	167.16	1.1	119.9	126.7	119.6	7.06	17.950	SF
1,500.0	1,499.5	1,500.0	1,500.0	3.8	3.7	167.94	1.1	119.9	135.2	127.8	7.43	18.198	
1,600.0	1,598.7	1,595.0	1,594.9	4.1	3.8	168.68	1.5	121.4	148.8	140.8	7.92	18.782	
1,700.0	1,697.5	1,687.9	1,687.8	4.4	4.0	169.20	2.5	125.9	168.8	160.3	8.51	19.846	
1,800.0	1,795.6	1,778.8	1,778.4	4.6	4.2	169.49	4.1	133.1	195.2	186.2	9.05	21.567	
1,900.0	1,893.1	1,867.1	1,866.1	4.9	4.5	169.62	6.3	142.8	227.8	218.2	9.56	23.831	
1,900.1	1,893.2	1,867.2	1,866.2	4.9	4.5	169.62	6.3	142.8	227.8	218.3	9.56	23.834	
2,000.0	1,990.1	1,952.9	1,951.0	5.1	4.7	169.71	9.1	154.7	264.7	254.8	9.94	26.627	
2,100.0	2,087.1	2,036.8	2,033.6	5.3	4.9	169.63	12.3	168.8	304.3	294.0	10.31	29.524	
2,200.0	2,184.1	2,118.6	2,113.8	5.4	5.1	169.45	16.0	184.7	346.4	335.8	10.62	32.610	
2,300.0	2,281.2	2,207.8	2,200.9	5.6	5.2	169.23	20.3	203.6	389.9	379.0	10.91	35.730	
2,400.0	2,378.2	2,297.8	2,288.8	5.8	5.4	169.05	24.6	222.6	433.4	422.2	11.25	38.535	
2,500.0	2,475.2	2,387.9	2,376.7	6.0	5.6	168.90	29.0	241.5	477.0	465.4	11.59	41.162	
2,600.0	2,572.3	2,477.9	2,464.6	6.2	5.7	168.78	33.3	260.5	520.5	508.6	11.93	43.624	
2,700.0	2,669.3	2,567.9	2,552.5	6.4	5.9	168.68	37.7	279.5	564.0	551.8	12.28	45.934	
2,800.0	2,766.3	2,657.9	2,640.3	6.6	6.1	168.59	42.0	298.5	607.6	595.0	12.63	48.103	
2,900.0	2,863.3	2,747.9	2,728.2	6.8	6.3	168.52	46.4	317.5	651.1	638.1	12.99	50.142	
3,000.0	2,960.4	2,838.0	2,816.1	7.0	6.4	168.45	50.7	336.5	694.7	681.3	13.34	52.061	
3,100.0	3,057.4	2,928.0	2,904.0	7.2	6.6	168.39	55.1	355.5	738.2	724.5	13.70	53.869	
3,200.0	3,154.4	3,018.0	2,991.9	7.4	6.8	168.34	59.4	374.5	781.8	767.7	14.07	55.575	
3,300.0	3,251.5	3,108.0	3,079.8	7.6	7.0	168.29	63.8	393.5	825.3	810.9	14.43	57.185	
3,400.0	3,348.5	3,198.0	3,167.7	7.8	7.1	168.25	68.1	412.5	868.9	854.1	14.80	58.706	
3,500.0	3,445.5	3,288.1	3,255.5	8.0	7.3	168.21	72.5	431.5	912.4	897.2	15.17	60.146	
3,600.0	3,542.5	3,378.1	3,343.4	8.2	7.5	168.18	76.8	450.4	956.0	940.4	15.54	61.509	
3,700.0	3,639.6	3,468.1	3,431.3	8.4	7.7	168.15	81.2	469.4	999.5	983.6	15.92	62.801	

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 AVION FEDERAL COM 704H
Project:	LEA COUNTY SOUTHEAST	**TVD Reference:**	RKB=27ft @ 3728.0usft
Reference Site:	AVION FEDERAL COM PROJECT	**MD Reference:**	RKB=27ft @ 3728.0usft
Site Error:	0.0 usft	**North Reference:**	Grid
Reference Well:	AVION FEDERAL COM 704H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.0 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	OWB	**Database:**	EDT 17 Permian Prod
Reference Design:	PWP1	**Offset TVD Reference:**	Offset Datum

Offset Design: AVION FEDERAL COM PROJECT - AVION FEDERAL COM 702H - OWB - PWP1 — **Offset Site Error:** 0.0 usft

Survey Program: 0-r.5 SDI_KPR_WL_NS-CT, 1200-r.5 MWD+IFR1+SAG+FDIR, 11947-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	1.0	1.0	0.0	0.0	89.50	0.7	80.0	80.0				
100.0	100.0	101.0	101.0	0.6	0.6	89.50	0.7	80.0	80.0	78.4	1.59	50.392	
200.0	200.0	201.0	201.0	1.1	1.1	89.50	0.7	80.0	80.0	77.5	2.52	31.718	
300.0	300.0	301.0	301.0	1.4	1.4	89.50	0.7	80.0	80.0	76.9	3.15	25.420	
400.0	400.0	401.0	401.0	1.7	1.7	89.50	0.7	80.0	80.0	76.4	3.65	21.911	
500.0	500.0	501.0	501.0	1.9	1.9	89.50	0.7	80.0	80.0	75.9	4.09	19.582	
600.0	600.0	601.0	601.0	2.1	2.1	89.50	0.7	80.0	80.0	75.5	4.47	17.887	
700.0	700.0	701.0	701.0	2.3	2.3	89.50	0.7	80.0	80.0	75.2	4.83	16.579	
800.0	800.0	801.0	801.0	2.5	2.5	89.50	0.7	80.0	80.0	74.9	5.15	15.528	
900.0	900.0	901.0	901.0	2.7	2.7	89.50	0.7	80.0	80.0	74.5	5.46	14.661	
1,000.0	1,000.0	1,001.0	1,001.0	2.9	2.9	89.50	0.7	80.0	80.0	74.3	5.74	13.927	
1,100.0	1,100.0	1,101.0	1,101.0	3.1	3.1	89.50	0.7	80.0	80.0	74.0	6.02	13.297	
1,166.3	1,166.3	1,167.3	1,167.3	3.2	3.2	89.50	0.7	80.0	80.0	73.8	6.19	12.926 CC	
1,200.0	1,200.0	1,201.0	1,201.0	3.2	3.2	89.50	0.7	80.0	80.0	73.7	6.28	12.745 ES	
1,300.0	1,300.0	1,300.0	1,300.0	3.4	3.5	165.83	2.0	81.1	82.8	76.1	6.74	12.296 SF	
1,400.0	1,399.8	1,396.7	1,396.6	3.6	3.8	164.19	5.9	84.3	91.3	84.1	7.27	12.563	
1,500.0	1,499.5	1,493.4	1,492.8	3.8	4.1	162.04	12.2	89.6	105.6	97.8	7.77	13.580	
1,600.0	1,598.7	1,588.5	1,587.3	4.1	4.4	159.83	20.8	96.9	125.5	117.3	8.28	15.154	
1,700.0	1,697.5	1,684.9	1,682.8	4.4	4.6	158.09	31.1	105.5	150.3	141.5	8.76	17.147	
1,800.0	1,795.6	1,777.2	1,774.2	4.6	4.7	157.44	40.4	114.7	179.0	169.8	9.22	19.422	
1,900.0	1,893.1	1,867.3	1,863.2	4.9	4.9	157.73	48.1	126.0	213.1	203.5	9.58	22.241	
1,900.1	1,893.2	1,867.4	1,863.3	4.9	4.9	157.73	48.1	126.0	213.2	203.6	9.58	22.245	
2,000.0	1,990.1	1,960.4	1,955.2	5.1	5.0	158.48	55.5	138.5	249.6	239.6	9.90	25.197	
2,100.0	2,087.1	2,053.5	2,047.1	5.3	5.2	159.03	62.9	151.1	286.0	275.8	10.25	27.895	
2,200.0	2,184.1	2,146.6	2,139.0	5.4	5.4	159.46	70.3	163.6	322.5	311.9	10.60	30.411	
2,300.0	2,281.2	2,239.7	2,231.0	5.6	5.5	159.81	77.7	176.2	359.0	348.0	10.96	32.760	
2,400.0	2,378.2	2,332.8	2,322.9	5.8	5.7	160.08	85.1	188.7	395.4	384.1	11.31	34.957	
2,500.0	2,475.2	2,425.9	2,414.9	6.0	5.9	160.32	92.5	201.3	431.9	420.3	11.67	37.014	
2,600.0	2,572.3	2,518.9	2,506.8	6.2	6.1	160.51	99.9	213.8	468.4	456.4	12.03	38.943	
2,700.0	2,669.3	2,612.0	2,598.8	6.4	6.2	160.68	107.3	226.4	504.9	492.6	12.39	40.755	
2,800.0	2,766.3	2,705.1	2,690.7	6.6	6.4	160.83	114.7	238.9	541.5	528.7	12.75	42.460	
2,900.0	2,863.3	2,798.2	2,782.6	6.8	6.6	160.95	122.1	251.5	578.0	564.8	13.12	44.066	
3,000.0	2,960.4	2,891.3	2,874.6	7.0	6.8	161.06	129.5	264.0	614.5	601.0	13.48	45.580	
3,100.0	3,057.4	2,984.4	2,966.5	7.2	7.0	161.16	136.9	276.5	651.0	637.1	13.85	47.011	
3,200.0	3,154.4	3,077.5	3,058.5	7.4	7.1	161.25	144.3	289.1	687.5	673.3	14.22	48.364	
3,300.0	3,251.5	3,170.6	3,150.4	7.6	7.3	161.33	151.7	301.6	724.0	709.4	14.58	49.644	
3,400.0	3,348.5	3,263.7	3,242.4	7.8	7.5	161.40	159.1	314.2	760.5	745.6	14.95	50.858	
3,500.0	3,445.5	3,356.8	3,334.3	8.0	7.7	161.47	166.5	326.7	797.1	781.7	15.33	52.011	
3,600.0	3,542.5	3,449.8	3,426.2	8.2	7.9	161.53	173.9	339.3	833.6	817.9	15.70	53.105	
3,700.0	3,639.6	3,542.9	3,518.2	8.4	8.0	161.58	181.3	351.8	870.1	854.1	16.05	54.226	
3,800.0	3,736.6	3,650.7	3,624.8	8.6	8.2	161.67	189.4	365.6	905.9	889.5	16.44	55.091	
3,900.0	3,833.6	3,760.6	3,733.7	8.8	8.4	161.81	196.6	377.8	940.1	923.2	16.87	55.719	
4,000.0	3,930.7	3,871.7	3,844.2	9.1	8.6	162.00	202.8	388.3	972.7	955.4	17.30	56.232	

ConocoPhillips

Anticollision Report

Company:	DELAWARE BASIN EAST	**Local Co-ordinate Reference:**	Well AVION FEDERAL COM 704H
Project:	LEA COUNTY SOUTHEAST	**TVD Reference:**	RKB=27ft @ 3728.0usft
Reference Site:	AVION FEDERAL COM PROJECT	**MD Reference:**	RKB=27ft @ 3728.0usft
Site Error:	0.0 usft	**North Reference:**	Grid
Reference Well:	AVION FEDERAL COM 704H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.0 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	OWB	**Database:**	EDT 17 Permian Prod
Reference Design:	PWP1	**Offset TVD Reference:**	Offset Datum

Offset Design: AVION FEDERAL COM PROJECT - AVION FEDERAL COM 703H - OWB - PWP1 — **Offset Site Error:** 0.0 usft

Survey Program: 0-r.5 SDI_KPR_WL_NS-CT, 2000-r.5 MWD+IFR1+SAG+FDIR, 11926-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	89.43	0.4	39.9	39.9				
100.0	100.0	100.0	100.0	0.6	0.6	89.43	0.4	39.9	39.9	38.0	1.91	20.879	
200.0	200.0	200.0	200.0	1.1	1.1	89.43	0.4	39.9	39.9	37.1	2.85	14.014	
300.0	300.0	300.0	300.0	1.4	1.4	89.43	0.4	39.9	39.9	36.4	3.47	11.490	
400.0	400.0	400.0	400.0	1.7	1.7	89.43	0.4	39.9	39.9	35.9	3.98	10.033	
500.0	500.0	500.0	500.0	1.9	1.9	89.43	0.4	39.9	39.9	35.5	4.41	9.045	
600.0	600.0	600.0	600.0	2.1	2.1	89.43	0.4	39.9	39.9	35.1	4.80	8.314	
700.0	700.0	700.0	700.0	2.3	2.3	89.43	0.4	39.9	39.9	34.7	5.15	7.745	
800.0	800.0	800.0	800.0	2.5	2.5	89.43	0.4	39.9	39.9	34.4	5.48	7.283	
900.0	900.0	900.0	900.0	2.7	2.7	89.43	0.4	39.9	39.9	34.1	5.78	6.899	
1,000.0	1,000.0	1,000.0	1,000.0	2.9	2.9	89.43	0.4	39.9	39.9	33.8	6.07	6.572	
1,100.0	1,100.0	1,100.0	1,100.0	3.1	3.1	89.43	0.4	39.9	39.9	33.6	6.34	6.290	
1,200.0	1,200.0	1,200.0	1,200.0	3.2	3.2	89.43	0.4	39.9	39.9	33.3	6.60	6.043	CC, ES
1,300.0	1,300.0	1,300.0	1,300.0	3.4	3.4	166.96	0.4	39.9	41.6	34.6	7.00	5.940	
1,400.0	1,399.8	1,399.8	1,399.8	3.6	3.5	168.39	0.4	39.9	46.7	39.3	7.39	6.321	
1,500.0	1,499.5	1,499.5	1,499.5	3.8	3.7	170.18	0.4	39.9	55.3	47.5	7.77	7.114	
1,600.0	1,598.7	1,598.7	1,598.7	4.1	3.8	171.91	0.4	39.9	67.3	59.3	8.00	8.414	
1,700.0	1,697.5	1,697.5	1,697.5	4.4	4.0	173.40	0.4	39.9	82.8	74.4	8.43	9.829	
1,800.0	1,795.6	1,795.6	1,795.6	4.6	4.1	174.60	0.4	39.9	101.8	93.0	8.84	11.518	
1,900.0	1,893.1	1,893.1	1,893.1	4.9	4.3	175.54	0.4	39.9	124.2	115.0	9.24	13.447	
1,900.1	1,893.2	1,893.2	1,893.2	4.9	4.3	175.54	0.4	39.9	124.3	115.0	9.24	13.450	
2,000.0	1,990.1	1,990.1	1,990.1	5.1	4.4	176.27	0.4	39.9	148.4	138.9	9.52	15.583	
2,100.0	2,087.1	2,087.1	2,087.1	5.3	4.6	176.79	0.4	39.9	172.5	162.7	9.87	17.473	
2,200.0	2,184.1	2,184.1	2,184.1	5.4	4.8	177.18	0.4	39.9	196.7	186.5	10.22	19.239	
2,300.0	2,281.2	2,287.1	2,287.1	5.6	4.9	177.35	1.2	38.9	219.8	209.1	10.65	20.639	
2,400.0	2,378.2	2,392.6	2,392.4	5.8	5.2	177.05	4.4	34.8	239.7	228.7	11.08	21.628	
2,500.0	2,475.2	2,499.3	2,498.7	6.0	5.4	176.38	10.0	27.6	256.5	245.0	11.51	22.285	
2,600.0	2,572.3	2,602.2	2,601.0	6.2	5.5	175.47	17.5	18.1	270.5	258.7	11.78	22.958	
2,700.0	2,669.3	2,701.2	2,699.2	6.4	5.6	174.65	25.0	8.6	284.2	272.1	12.13	23.433	
2,800.0	2,766.3	2,800.2	2,797.4	6.6	5.8	173.89	32.4	-0.9	298.0	285.5	12.48	23.880	
2,900.0	2,863.3	2,899.2	2,895.7	6.8	5.9	173.21	39.9	-10.4	311.8	299.0	12.83	24.302	
3,000.0	2,960.4	2,998.1	2,993.9	7.0	6.1	172.58	47.3	-19.9	325.7	312.5	13.19	24.700	
3,100.0	3,057.4	3,097.1	3,092.2	7.2	6.2	172.01	54.8	-29.3	339.6	326.0	13.54	25.076	
3,200.0	3,154.4	3,196.1	3,190.4	7.4	6.4	171.47	62.2	-38.8	353.5	339.6	13.90	25.431	
3,300.0	3,251.5	3,295.1	3,288.6	7.6	6.5	170.98	69.7	-48.3	367.4	353.2	14.26	25.768	
3,400.0	3,348.5	3,394.0	3,386.9	7.8	6.7	170.53	77.1	-57.8	381.4	366.8	14.62	26.087	
3,500.0	3,445.5	3,493.0	3,485.1	8.0	6.9	170.11	84.6	-67.3	395.4	380.4	14.98	26.391	
3,600.0	3,542.5	3,592.0	3,583.3	8.2	7.0	169.71	92.0	-76.8	409.4	394.1	15.35	26.679	
3,700.0	3,639.6	3,691.0	3,681.6	8.4	7.2	169.35	99.5	-86.3	423.4	407.7	15.71	26.954	
3,800.0	3,736.6	3,789.9	3,779.8	8.6	7.4	169.00	107.0	-95.8	437.5	421.4	16.07	27.216	
3,900.0	3,833.6	3,888.9	3,878.1	8.8	7.5	168.68	114.4	-105.2	451.6	435.1	16.44	27.465	
4,000.0	3,930.7	3,987.9	3,976.3	9.1	7.7	168.38	121.9	-114.7	465.6	448.8	16.81	27.704	
4,100.0	4,027.7	4,086.9	4,074.5	9.3	7.9	168.09	129.3	-124.2	479.7	462.5	17.17	27.932	
4,200.0	4,124.7	4,185.8	4,172.8	9.5	8.0	167.82	136.8	-133.7	493.8	476.3	17.54	28.150	
4,300.0	4,221.7	4,284.8	4,271.0	9.7	8.2	167.57	144.2	-143.2	507.9	490.0	17.91	28.358	
4,400.0	4,318.8	4,383.8	4,369.2	9.9	8.4	167.33	151.7	-152.7	522.0	503.8	18.28	28.559	
4,500.0	4,415.8	4,482.8	4,467.5	10.1	8.5	167.10	159.1	-162.2	536.2	517.5	18.65	28.751	
4,600.0	4,512.8	4,581.7	4,565.7	10.4	8.7	166.88	166.6	-171.7	550.3	531.3	19.02	28.935	
4,700.0	4,609.9	4,680.7	4,664.0	10.6	8.9	166.68	174.0	-181.2	564.4	545.1	19.39	29.112	
4,800.0	4,706.9	4,779.7	4,762.2	10.8	9.1	166.48	181.5	-190.6	578.6	558.8	19.76	29.276	
4,840.1	4,745.8	4,818.3	4,800.5	10.9	9.1	166.41	184.4	-194.3	584.3	564.4	19.89	29.374	

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 AVION FEDERAL COM 704H
Project:	LEA COUNTY SOUTHEAST	**TVD Reference:**	RKB=27ft @ 3728.0usft
Reference Site:	AVION FEDERAL COM PROJECT	**MD Reference:**	RKB=27ft @ 3728.0usft
Site Error:	0.0 usft	**North Reference:**	Grid
Reference Well:	AVION FEDERAL COM 704H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.0 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	OWB	**Database:**	EDT 17 Permian Prod
Reference Design:	PWP1	**Offset TVD Reference:**	Offset Datum

Offset Design: AVION FEDERAL COM PROJECT - AVION FEDERAL COM 703H - OWB - PWP1 — **Offset Site Error:** 0.0 usft

Survey Program: 0-r.5 SDI_KPR_WL_NS-CT, 2000-r.5 MWD+IFR1+SAG+FDIR, 11926-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
4,900.0	4,804.0	4,873.2	4,855.1	11.0	9.2	166.35	188.3	-199.3	592.6	572.6	20.08	29.516	
5,000.0	4,901.7	4,964.9	4,946.3	11.2	9.4	166.28	194.1	-206.7	605.6	585.1	20.44	29.632	
5,100.0	4,999.9	5,056.6	5,037.6	11.4	9.5	166.24	198.9	-212.9	617.2	596.4	20.79	29.694	
5,200.0	5,098.6	5,148.3	5,129.1	11.6	9.7	166.24	202.9	-217.9	627.6	606.4	21.12	29.710	
5,300.0	5,197.6	5,240.0	5,220.6	11.9	9.8	166.26	206.0	-221.9	636.6	615.2	21.45	29.681	
5,400.0	5,297.0	5,331.7	5,312.3	12.1	10.0	166.30	208.2	-224.6	644.4	622.6	21.76	29.613	
5,500.0	5,396.7	5,423.4	5,403.9	12.3	10.1	166.37	209.4	-226.2	650.9	628.8	22.05	29.513	
5,600.0	5,496.5	5,515.9	5,496.5	12.4	10.2	166.47	209.8	-226.7	656.1	633.8	22.32	29.388	
5,700.0	5,596.4	5,615.9	5,596.4	12.6	10.3	166.55	209.8	-226.7	659.2	636.6	22.58	29.193	
5,773.6	5,670.0	5,689.4	5,670.0	12.7	10.4	89.58	209.8	-226.7	659.9	637.2	22.71	29.064	
5,800.0	5,696.4	5,715.9	5,696.4	12.7	10.4	89.58	209.8	-226.7	659.9	637.2	22.73	29.031	
5,900.0	5,796.4	5,815.9	5,796.4	12.7	10.5	89.58	209.8	-226.7	659.9	637.0	22.88	28.840	
6,000.0	5,896.4	5,915.9	5,896.4	12.8	10.6	89.58	209.8	-226.7	659.9	636.9	23.03	28.655	
6,100.0	5,996.4	6,015.9	5,996.4	12.9	10.6	89.58	209.8	-226.7	659.9	636.7	23.18	28.472	
6,200.0	6,096.4	6,115.9	6,096.4	12.9	10.7	89.58	209.8	-226.7	659.9	636.6	23.33	28.291	
6,300.0	6,196.4	6,215.9	6,196.4	13.0	10.8	89.58	209.8	-226.7	659.9	636.4	23.47	28.113	
6,400.0	6,296.4	6,315.9	6,296.4	13.1	10.9	89.58	209.8	-226.7	659.9	636.3	23.62	27.936	
6,500.0	6,396.4	6,415.9	6,396.4	13.1	11.0	89.58	209.8	-226.7	659.9	636.1	23.77	27.762	
6,600.0	6,496.4	6,515.9	6,496.4	13.2	11.1	89.58	209.8	-226.7	659.9	636.0	23.92	27.589	
6,700.0	6,596.4	6,615.9	6,596.4	13.2	11.2	89.58	209.8	-226.7	659.9	635.8	24.07	27.418	
6,800.0	6,696.4	6,715.9	6,696.4	13.3	11.3	89.58	209.8	-226.7	659.9	635.7	24.22	27.249	
6,900.0	6,796.4	6,815.9	6,796.4	13.4	11.3	89.58	209.8	-226.7	659.9	635.6	24.37	27.083	
7,000.0	6,896.4	6,915.9	6,896.4	13.4	11.4	89.58	209.8	-226.7	659.9	635.4	24.52	26.918	
7,100.0	6,996.4	7,015.9	6,996.4	13.5	11.5	89.58	209.8	-226.7	659.9	635.3	24.67	26.754	
7,200.0	7,096.4	7,115.9	7,096.4	13.6	11.6	89.58	209.8	-226.7	659.9	635.1	24.82	26.593	
7,300.0	7,196.4	7,215.9	7,196.4	13.6	11.7	89.58	209.8	-226.7	659.9	635.0	24.97	26.433	
7,400.0	7,296.4	7,315.9	7,296.4	13.7	11.8	89.58	209.8	-226.7	659.9	634.8	25.12	26.276	
7,500.0	7,396.4	7,415.9	7,396.4	13.8	11.9	89.58	209.8	-226.7	659.9	634.7	25.27	26.120	
7,600.0	7,496.4	7,515.9	7,496.4	13.8	11.9	89.58	209.8	-226.7	659.9	634.5	25.42	25.965	
7,700.0	7,596.4	7,615.9	7,596.4	13.9	12.0	89.58	209.8	-226.7	659.9	634.4	25.57	25.812	
7,800.0	7,696.4	7,715.9	7,696.4	14.0	12.1	89.58	209.8	-226.7	659.9	634.2	25.72	25.661	
7,900.0	7,796.4	7,815.9	7,796.4	14.0	12.2	89.58	209.8	-226.7	659.9	634.1	25.87	25.512	
8,000.0	7,896.4	7,915.9	7,896.4	14.1	12.3	89.58	209.8	-226.7	659.9	633.9	26.02	25.364	
8,100.0	7,996.4	8,015.9	7,996.4	14.2	12.4	89.58	209.8	-226.7	659.9	633.7	26.17	25.218	
8,200.0	8,096.4	8,115.9	8,096.4	14.2	12.4	89.58	209.8	-226.7	659.9	633.6	26.32	25.073	
8,300.0	8,196.4	8,215.9	8,196.4	14.3	12.5	89.58	209.8	-226.7	659.9	633.4	26.47	24.930	
8,400.0	8,296.4	8,315.9	8,296.4	14.4	12.6	89.58	209.8	-226.7	659.9	633.3	26.62	24.788	
8,500.0	8,396.4	8,415.9	8,396.4	14.5	12.7	89.58	209.8	-226.7	659.9	633.1	26.77	24.648	
8,600.0	8,496.4	8,515.9	8,496.4	14.5	12.8	89.58	209.8	-226.7	659.9	633.0	26.92	24.510	
8,700.0	8,596.4	8,615.9	8,596.4	14.6	12.9	89.58	209.8	-226.7	659.9	632.8	27.08	24.372	
8,800.0	8,696.4	8,715.9	8,696.4	14.7	13.0	89.58	209.8	-226.7	659.9	632.7	27.23	24.237	
8,900.0	8,796.4	8,815.9	8,796.4	14.7	13.0	89.58	209.8	-226.7	659.9	632.5	27.38	24.102	
9,000.0	8,896.4	8,915.9	8,896.4	14.8	13.1	89.58	209.8	-226.7	659.9	632.4	27.53	23.969	
9,100.0	8,996.4	9,015.9	8,996.4	14.9	13.2	89.58	209.8	-226.7	659.9	632.2	27.68	23.838	
9,200.0	9,096.4	9,115.9	9,096.4	14.9	13.3	89.58	209.8	-226.7	659.9	632.1	27.84	23.707	
9,300.0	9,196.4	9,215.9	9,196.4	15.0	13.4	89.58	209.8	-226.7	659.9	631.9	27.99	23.579	
9,400.0	9,296.4	9,315.9	9,296.4	15.1	13.5	89.58	209.8	-226.7	659.9	631.8	28.14	23.451	
9,500.0	9,396.4	9,415.9	9,396.4	15.1	13.6	89.58	209.8	-226.7	659.9	631.6	28.29	23.325	
9,600.0	9,496.4	9,515.9	9,496.4	15.2	13.6	89.58	209.8	-226.7	659.9	631.5	28.45	23.200	
9,700.0	9,596.4	9,615.9	9,596.4	15.3	13.7	89.58	209.8	-226.7	659.9	631.3	28.60	23.076	
9,800.0	9,696.4	9,715.9	9,696.4	15.4	13.8	89.58	209.8	-226.7	659.9	631.2	28.75	22.953	

ConocoPhillips

Anticollision Report

Company:	DELAWARE BASIN EAST	**Local Co-ordinate Reference:**	Well AVION FEDERAL COM 704H
Project:	LEA COUNTY SOUTHEAST	**TVD Reference:**	RKB=27ft @ 3728.0usft
Reference Site:	AVION FEDERAL COM PROJECT	**MD Reference:**	RKB=27ft @ 3728.0usft
Site Error:	0.0 usft	**North Reference:**	Grid
Reference Well:	AVION FEDERAL COM 704H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.0 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	OWB	**Database:**	EDT 17 Permian Prod
Reference Design:	PWP1	**Offset TVD Reference:**	Offset Datum

Offset Design: AVION FEDERAL COM PROJECT - AVION FEDERAL COM 703H - OWB - PWP1

Offset Site Error: 0.0 usft

Survey Program: 0-r.5 SDI_KPR_WL_NS-CT, 2000-r.5 MWD+IFR1+SAG+FDIR, 11926-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	9,796.4	9,815.9	9,796.4	15.4	13.9	89.58	209.8	-226.7	659.9	631.0	28.90	22.832	
10,000.0	9,896.4	9,915.9	9,896.4	15.5	14.0	89.58	209.8	-226.7	659.9	630.9	29.06	22.712	
10,100.0	9,996.4	10,015.9	9,996.4	15.6	14.1	89.58	209.8	-226.7	659.9	630.7	29.21	22.593	
10,200.0	10,096.4	10,115.9	10,096.4	15.6	14.1	89.58	209.8	-226.7	659.9	630.6	29.36	22.475	
10,300.0	10,196.4	10,215.9	10,196.4	15.7	14.2	89.58	209.8	-226.7	659.9	630.4	29.52	22.358	
10,400.0	10,296.4	10,315.9	10,296.4	15.8	14.3	89.58	209.8	-226.7	659.9	630.2	29.67	22.243	
10,500.0	10,396.4	10,415.9	10,396.4	15.8	14.4	89.58	209.8	-226.7	659.9	630.1	29.82	22.129	
10,600.0	10,496.4	10,515.9	10,496.4	15.9	14.5	89.58	209.8	-226.7	659.9	629.9	29.98	22.015	
10,700.0	10,596.4	10,615.9	10,596.4	16.0	14.6	89.58	209.8	-226.7	659.9	629.8	30.13	21.903	
10,800.0	10,696.4	10,715.9	10,696.4	16.1	14.7	89.58	209.8	-226.7	659.9	629.6	30.28	21.792	
10,900.0	10,796.4	10,815.9	10,796.4	16.1	14.7	89.58	209.8	-226.7	659.9	629.5	30.44	21.682	
11,000.0	10,896.4	10,915.9	10,896.4	16.2	14.8	89.58	209.8	-226.7	659.9	629.3	30.59	21.573	
11,100.0	10,996.4	11,015.9	10,996.4	16.3	14.9	89.58	209.8	-226.7	659.9	629.2	30.74	21.465	
11,200.0	11,096.4	11,115.9	11,096.4	16.3	15.0	89.58	209.8	-226.7	659.9	629.0	30.90	21.359	
11,300.0	11,196.4	11,215.9	11,196.4	16.4	15.1	89.58	209.8	-226.7	659.9	628.9	31.05	21.253	
11,400.0	11,296.4	11,315.9	11,296.4	16.5	15.2	89.58	209.8	-226.7	659.9	628.7	31.21	21.148	
11,500.0	11,396.4	11,415.9	11,396.4	16.6	15.2	89.58	209.8	-226.7	659.9	628.6	31.36	21.044	
11,600.0	11,496.4	11,515.9	11,496.4	16.6	15.3	89.58	209.8	-226.7	659.9	628.4	31.51	20.941	
11,700.0	11,596.4	11,615.9	11,596.4	16.7	15.4	89.58	209.8	-226.7	659.9	628.2	31.67	20.839	
11,800.0	11,696.4	11,715.9	11,696.4	16.8	15.5	89.58	209.8	-226.7	659.9	628.1	31.82	20.738	
11,900.0	11,796.4	11,815.9	11,796.4	16.9	15.6	89.58	209.8	-226.7	659.9	627.9	31.98	20.638	
11,999.1	11,895.5	11,915.0	11,895.5	16.9	15.7	89.58	209.8	-226.7	659.9	627.8	32.11	20.554	
12,000.0	11,896.4	11,915.9	11,896.4	16.9	15.7	-90.04	209.8	-226.7	659.9	627.8	32.11	20.554	
12,025.0	11,921.4	11,940.9	11,921.4	16.9	15.7	-90.08	209.6	-226.7	659.9	628.0	31.94	20.661	
12,050.0	11,946.3	11,965.9	11,946.5	16.9	15.7	-90.13	208.1	-226.7	659.9	628.0	31.94	20.659	
12,075.0	11,971.1	11,991.0	11,971.4	16.9	15.7	-90.18	205.4	-226.7	659.9	628.0	31.94	20.658	
12,100.0	11,995.7	12,016.1	11,996.2	16.9	15.7	-90.23	201.3	-226.6	659.9	628.0	31.95	20.658	
12,125.0	12,020.0	12,041.3	12,020.7	16.9	15.7	-90.28	195.9	-226.6	659.9	628.0	31.95	20.658	
12,150.0	12,043.9	12,066.5	12,045.0	17.0	15.7	-90.33	189.3	-226.6	659.9	628.0	31.95	20.658	
12,175.0	12,067.5	12,091.7	12,068.9	17.0	15.7	-90.38	181.3	-226.5	659.9	628.0	31.94	20.659	
12,200.0	12,090.6	12,116.9	12,092.4	17.0	15.7	-90.42	172.1	-226.5	659.9	628.0	31.94	20.659	
12,225.0	12,113.1	12,142.2	12,115.4	17.0	15.7	-90.47	161.7	-226.4	659.9	628.0	31.94	20.659	
12,250.0	12,135.0	12,167.5	12,137.9	17.0	15.8	-90.51	150.0	-226.3	659.9	628.0	31.94	20.659	
12,275.0	12,156.3	12,192.8	12,159.7	17.0	15.8	-90.55	137.2	-226.2	659.9	628.0	31.95	20.658	
12,300.0	12,176.9	12,218.1	12,180.8	17.0	15.8	-90.59	123.2	-226.1	660.0	628.0	31.95	20.655	
12,325.0	12,196.7	12,243.5	12,201.2	17.1	15.8	-90.63	108.0	-226.0	660.0	628.0	31.96	20.652	
12,350.0	12,215.7	12,268.9	12,220.7	17.1	15.8	-90.67	91.8	-225.9	660.0	628.0	31.96	20.647	
12,375.0	12,233.8	12,294.3	12,239.4	17.1	15.8	-90.70	74.6	-225.8	660.0	628.0	31.98	20.639	
12,400.0	12,251.0	12,319.8	12,257.2	17.1	15.9	-90.74	56.4	-225.7	660.0	628.0	31.99	20.630	
12,425.0	12,267.2	12,345.2	12,274.0	17.2	15.9	-90.77	37.3	-225.6	660.0	628.0	32.01	20.617	
12,450.0	12,282.3	12,370.7	12,289.7	17.2	15.9	-90.80	17.2	-225.4	660.0	627.9	32.03	20.602	
12,475.0	12,296.5	12,396.2	12,304.4	17.2	15.9	-90.82	-3.6	-225.3	660.0	627.9	32.06	20.584	
12,500.0	12,309.5	12,421.7	12,317.9	17.3	15.9	-90.85	-25.3	-225.2	660.0	627.9	32.10	20.562	
12,525.0	12,321.4	12,447.2	12,330.3	17.3	16.0	-90.87	-47.6	-225.0	660.0	627.9	32.14	20.537	
12,550.0	12,332.1	12,472.8	12,341.4	17.3	16.0	-90.89	-70.5	-224.9	660.0	627.8	32.18	20.508	
12,575.0	12,341.6	12,498.3	12,351.3	17.4	16.0	-90.91	-94.1	-224.7	660.0	627.8	32.23	20.475	
12,600.0	12,349.9	12,523.9	12,360.0	17.4	16.0	-90.92	-118.1	-224.6	660.0	627.7	32.29	20.438	
12,625.0	12,357.0	12,549.5	12,367.3	17.4	16.0	-90.93	-142.6	-224.4	660.0	627.6	32.36	20.398	
12,650.0	12,362.8	12,575.0	12,373.4	17.5	16.1	-90.94	-167.5	-224.2	660.0	627.6	32.43	20.354	
12,675.0	12,367.3	12,600.6	12,378.1	17.5	16.1	-90.95	-192.6	-224.1	660.0	627.5	32.50	20.306	
12,700.0	12,370.5	12,626.2	12,381.4	17.5	16.1	-90.95	-218.0	-223.9	660.0	627.4	32.58	20.255	

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 AVION FEDERAL COM 704H
Project:	LEA COUNTY SOUTHEAST	**TVD Reference:**	RKB=27ft @ 3728.0usft
Reference Site:	AVION FEDERAL COM PROJECT	**MD Reference:**	RKB=27ft @ 3728.0usft
Site Error:	0.0 usft	**North Reference:**	Grid
Reference Well:	AVION FEDERAL COM 704H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.0 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	OWB	**Database:**	EDT 17 Permian Prod
Reference Design:	PWP1	**Offset TVD Reference:**	Offset Datum

Offset Design: AVION FEDERAL COM PROJECT - AVION FEDERAL COM 703H - OWB - PWP1

Offset Site Error: 0.0 usft

Survey Program: 0-r.5 SDI_KPR_WL_NS-CT, 2000-r.5 MWD+IFR1+SAG+FDIR, 11926-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
12,725.0	12,372.4	12,651.8	12,383.4	17.6	16.1	-90.96	-243.5	-223.8	660.0	627.3	32.67	20.202	
12,748.7	12,373.0	12,676.0	12,384.0	17.6	16.2	-90.95	-267.7	-223.6	660.0	627.3	32.76	20.148	
12,749.1	12,373.0	12,676.5	12,384.0	17.6	16.2	-90.95	-268.2	-223.6	660.0	627.2	32.76	20.147	
12,800.0	12,373.0	12,727.4	12,384.0	17.7	16.2	-90.95	-319.1	-223.3	660.0	627.0	32.97	20.021	
12,900.0	12,373.0	12,827.4	12,384.0	17.9	16.4	-90.95	-419.1	-222.6	660.0	626.6	33.45	19.732	
13,000.0	12,373.0	12,927.4	12,384.0	18.2	16.6	-90.95	-519.0	-222.0	660.0	626.0	34.01	19.406	
13,100.0	12,373.0	13,027.4	12,384.0	18.5	16.9	-90.95	-619.0	-221.3	660.0	625.4	34.65	19.049	
13,200.0	12,373.0	13,127.4	12,384.0	18.8	17.2	-90.95	-719.0	-220.7	660.0	624.7	35.36	18.667	
13,300.0	12,373.0	13,227.4	12,384.0	19.2	17.6	-90.95	-819.0	-220.0	660.0	623.9	36.13	18.266	
13,400.0	12,373.0	13,327.4	12,384.0	19.6	18.0	-90.95	-919.0	-219.4	660.0	623.0	36.97	17.852	
13,500.0	12,373.0	13,427.4	12,384.0	20.0	18.4	-90.95	-1,019.0	-218.7	660.0	622.1	37.87	17.429	
13,600.0	12,373.0	13,527.4	12,384.0	20.4	18.9	-90.95	-1,119.0	-218.1	660.0	621.2	38.82	17.001	
13,700.0	12,373.0	13,627.4	12,384.0	20.9	19.4	-90.95	-1,219.0	-217.4	660.0	620.2	39.82	16.573	
13,800.0	12,373.0	13,727.4	12,384.0	21.4	20.0	-90.95	-1,319.0	-216.8	660.0	619.1	40.87	16.148	
13,900.0	12,373.0	13,827.4	12,384.0	21.9	20.5	-90.95	-1,419.0	-216.1	660.0	618.0	41.97	15.728	
14,000.0	12,373.0	13,927.4	12,384.0	22.5	21.1	-90.95	-1,519.0	-215.5	660.0	616.9	43.10	15.314	
14,100.0	12,373.0	14,027.4	12,384.0	23.0	21.7	-90.95	-1,619.0	-214.8	660.0	615.7	44.27	14.910	
14,200.0	12,373.0	14,127.4	12,384.0	23.6	22.3	-90.95	-1,719.0	-214.2	660.0	614.5	45.47	14.515	
14,300.0	12,373.0	14,227.4	12,384.0	24.2	23.0	-90.95	-1,819.0	-213.5	660.0	613.3	46.70	14.132	
14,400.0	12,373.0	14,327.4	12,384.0	24.8	23.6	-90.95	-1,919.0	-212.9	660.0	612.0	47.97	13.760	
14,500.0	12,373.0	14,427.4	12,384.0	25.5	24.3	-90.95	-2,019.0	-212.2	660.0	610.8	49.26	13.399	
14,600.0	12,373.0	14,527.4	12,384.0	26.1	25.0	-90.95	-2,119.0	-211.6	660.0	609.4	50.57	13.051	
14,700.0	12,373.0	14,627.4	12,384.0	26.8	25.6	-90.95	-2,219.0	-210.9	660.0	608.1	51.91	12.715	
14,800.0	12,373.0	14,727.4	12,384.0	27.4	26.3	-90.95	-2,319.0	-210.3	660.0	606.7	53.27	12.391	
14,900.0	12,373.0	14,827.4	12,384.0	28.1	27.0	-90.95	-2,419.0	-209.6	660.0	605.4	54.64	12.078	
15,000.0	12,373.0	14,927.4	12,384.0	28.8	27.8	-90.95	-2,519.0	-209.0	660.0	604.0	56.04	11.778	
15,100.0	12,373.0	15,027.4	12,384.0	29.5	28.5	-90.95	-2,619.0	-208.3	660.0	602.6	57.45	11.488	
15,200.0	12,373.0	15,127.4	12,384.0	30.2	29.2	-90.95	-2,719.0	-207.7	660.0	601.1	58.88	11.210	
15,300.0	12,373.0	15,227.4	12,384.0	30.9	30.0	-90.95	-2,819.0	-207.0	660.0	599.7	60.32	10.942	
15,400.0	12,373.0	15,327.4	12,384.0	31.7	30.7	-90.95	-2,919.0	-206.4	660.0	598.2	61.77	10.684	
15,500.0	12,373.0	15,427.4	12,384.0	32.4	31.5	-90.95	-3,019.0	-205.7	660.0	596.8	63.24	10.436	
15,600.0	12,373.0	15,527.4	12,384.0	33.1	32.2	-90.95	-3,119.0	-205.1	660.0	595.3	64.72	10.198	
15,700.0	12,373.0	15,627.4	12,384.0	33.9	33.0	-90.95	-3,219.0	-204.4	660.0	593.8	66.21	9.968	
15,800.0	12,373.0	15,727.4	12,384.0	34.6	33.7	-90.95	-3,319.0	-203.8	660.0	592.3	67.71	9.748	
15,900.0	12,373.0	15,827.4	12,384.0	35.4	34.5	-90.95	-3,419.0	-203.1	660.0	590.8	69.22	9.535	
16,000.0	12,373.0	15,927.4	12,384.0	36.1	35.3	-90.95	-3,519.0	-202.5	660.0	589.3	70.74	9.331	
16,100.0	12,373.0	16,027.4	12,384.0	36.9	36.1	-90.95	-3,619.0	-201.8	660.0	587.8	72.26	9.134	
16,200.0	12,373.0	16,127.4	12,384.0	37.7	36.9	-90.95	-3,719.0	-201.2	660.0	586.2	73.80	8.944	
16,300.0	12,373.0	16,227.4	12,384.0	38.4	37.6	-90.95	-3,819.0	-200.5	660.0	584.7	75.34	8.761	
16,400.0	12,373.0	16,327.4	12,384.0	39.2	38.4	-90.95	-3,919.0	-199.8	660.0	583.1	76.88	8.584	
16,500.0	12,373.0	16,427.4	12,384.0	40.0	39.2	-90.95	-4,019.0	-199.2	660.0	581.6	78.44	8.414	
16,600.0	12,373.0	16,527.4	12,384.0	40.8	40.0	-90.95	-4,119.0	-198.5	660.0	580.0	80.00	8.250	
16,700.0	12,373.0	16,627.4	12,384.0	41.5	40.8	-90.95	-4,219.0	-197.9	660.0	578.4	81.56	8.092	
16,800.0	12,373.0	16,727.4	12,384.0	42.3	41.6	-90.95	-4,319.0	-197.2	660.0	576.9	83.14	7.939	
16,900.0	12,373.0	16,827.4	12,384.0	43.1	42.4	-90.95	-4,419.0	-196.6	660.0	575.3	84.71	7.791	
17,000.0	12,373.0	16,927.4	12,384.0	43.9	43.2	-90.95	-4,519.0	-195.9	660.0	573.7	86.29	7.649	
17,100.0	12,373.0	17,027.4	12,384.0	44.7	44.0	-90.95	-4,619.0	-195.3	660.0	572.1	87.88	7.511	
17,200.0	12,373.0	17,127.4	12,384.0	45.5	44.9	-90.95	-4,719.0	-194.6	660.0	570.5	89.47	7.377	
17,300.0	12,373.0	17,227.4	12,384.0	46.3	45.7	-90.95	-4,819.0	-194.0	660.0	569.0	91.06	7.248	
17,400.0	12,373.0	17,327.4	12,384.0	47.1	46.5	-90.95	-4,919.0	-193.3	660.0	567.4	92.66	7.123	
17,500.0	12,373.0	17,427.4	12,384.0	47.9	47.3	-90.95	-5,019.0	-192.7	660.0	565.8	94.26	7.002	

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 AVION FEDERAL COM 704H
Project:	LEA COUNTY SOUTHEAST	**TVD Reference:**	RKB=27ft @ 3728.0usft
Reference Site:	AVION FEDERAL COM PROJECT	**MD Reference:**	RKB=27ft @ 3728.0usft
Site Error:	0.0 usft	**North Reference:**	Grid
Reference Well:	AVION FEDERAL COM 704H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.0 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	OWB	**Database:**	EDT 17 Permian Prod
Reference Design:	PWP1	**Offset TVD Reference:**	Offset Datum

Offset Design: AVION FEDERAL COM PROJECT - AVION FEDERAL COM 703H - OWB - PWP1

Offset Site Error: 0.0 usft

Survey Program: 0-r.5 SDI_KPR_WL_NS-CT, 2000-r.5 MWD+IFR1+SAG+FDIR, 11926-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	12,373.0	17,527.4	12,384.0	48.7	48.1	-90.95	-5,119.0	-192.0	660.0	564.1	95.86	6.885	
17,700.0	12,373.0	17,627.4	12,384.0	49.5	48.9	-90.95	-5,219.0	-191.4	660.0	562.5	97.47	6.771	
17,800.0	12,373.0	17,727.4	12,384.0	50.3	49.8	-90.95	-5,318.9	-190.7	660.0	560.9	99.08	6.661	
17,900.0	12,373.0	17,827.4	12,384.0	51.2	50.6	-90.95	-5,418.9	-190.1	660.0	559.3	100.70	6.554	
18,000.0	12,373.0	17,927.4	12,384.0	52.0	51.4	-90.95	-5,518.9	-189.4	660.0	557.7	102.31	6.451	
18,100.0	12,373.0	18,027.4	12,384.0	52.8	52.2	-90.95	-5,618.9	-188.8	660.0	556.1	103.93	6.350	
18,200.0	12,373.0	18,127.4	12,384.0	53.6	53.0	-90.95	-5,718.9	-188.1	660.0	554.5	105.56	6.253	
18,300.0	12,373.0	18,227.4	12,384.0	54.4	53.9	-90.95	-5,818.9	-187.5	660.0	552.8	107.18	6.158	
18,400.0	12,373.0	18,327.4	12,384.0	55.2	54.7	-90.95	-5,918.9	-186.8	660.0	551.2	108.81	6.066	
18,500.0	12,373.0	18,427.4	12,384.0	56.1	55.5	-90.95	-6,018.9	-186.2	660.0	549.6	110.44	5.976	
18,600.0	12,373.0	18,527.4	12,384.0	56.9	56.4	-90.95	-6,118.9	-185.5	660.0	547.9	112.07	5.889	
18,700.0	12,373.0	18,627.4	12,384.0	57.7	57.2	-90.95	-6,218.9	-184.9	660.0	546.3	113.70	5.805	
18,800.0	12,373.0	18,727.4	12,384.0	58.5	58.0	-90.95	-6,318.9	-184.2	660.0	544.7	115.34	5.723	
18,900.0	12,373.0	18,827.4	12,384.0	59.4	58.9	-90.95	-6,418.9	-183.6	660.0	543.0	116.97	5.642	
19,000.0	12,373.0	18,927.4	12,384.0	60.2	59.7	-90.95	-6,518.9	-182.9	660.0	541.4	118.61	5.565	
19,100.0	12,373.0	19,027.4	12,384.0	61.0	60.5	-90.95	-6,618.9	-182.3	660.0	539.8	120.25	5.489	
19,200.0	12,373.0	19,127.4	12,384.0	61.8	61.4	-90.95	-6,718.9	-181.6	660.0	538.1	121.89	5.415	
19,300.0	12,373.0	19,227.4	12,384.0	62.7	62.2	-90.95	-6,818.9	-181.0	660.0	536.5	123.54	5.343	
19,400.0	12,373.0	19,327.4	12,384.0	63.5	63.0	-90.95	-6,918.9	-180.3	660.0	534.8	125.18	5.272	
19,500.0	12,373.0	19,427.4	12,384.0	64.3	63.9	-90.95	-7,018.9	-179.7	660.0	533.2	126.83	5.204	
19,600.0	12,373.0	19,527.4	12,384.0	65.2	64.7	-90.95	-7,118.9	-179.0	660.0	531.5	128.48	5.137	
19,700.0	12,373.0	19,627.4	12,384.0	66.0	65.5	-90.95	-7,218.9	-178.4	660.0	529.9	130.13	5.072	
19,800.0	12,373.0	19,727.4	12,384.0	66.8	66.4	-90.95	-7,318.9	-177.7	660.0	528.2	131.78	5.008	
19,900.0	12,373.0	19,827.4	12,384.0	67.7	67.2	-90.95	-7,418.9	-177.1	660.0	526.6	133.43	4.946	
20,000.0	12,373.0	19,927.4	12,384.0	68.5	68.1	-90.95	-7,518.9	-176.4	660.0	524.9	135.09	4.886	
20,100.0	12,373.0	20,027.4	12,384.0	69.3	68.9	-90.95	-7,618.9	-175.8	660.0	523.3	136.74	4.827	
20,200.0	12,373.0	20,127.4	12,384.0	70.2	69.7	-90.95	-7,718.9	-175.1	660.0	521.6	138.40	4.769	
20,300.0	12,373.0	20,227.4	12,384.0	71.0	70.6	-90.95	-7,818.9	-174.5	660.0	520.0	140.05	4.713	
20,400.0	12,373.0	20,327.4	12,384.0	71.8	71.4	-90.95	-7,918.9	-173.8	660.0	518.3	141.71	4.658	
20,500.0	12,373.0	20,427.4	12,384.0	72.7	72.3	-90.95	-8,018.9	-173.2	660.0	516.6	143.37	4.604	
20,600.0	12,373.0	20,527.4	12,384.0	73.5	73.1	-90.95	-8,118.9	-172.5	660.0	515.0	145.03	4.551	
20,700.0	12,373.0	20,627.4	12,384.0	74.4	74.0	-90.95	-8,218.9	-171.9	660.0	513.3	146.69	4.499	
20,800.0	12,373.0	20,727.4	12,384.0	75.2	74.8	-90.95	-8,318.9	-171.2	660.0	511.7	148.35	4.449	
20,900.0	12,373.0	20,827.4	12,384.0	76.0	75.6	-90.95	-8,418.9	-170.6	660.0	510.0	150.01	4.400	
21,000.0	12,373.0	20,927.4	12,384.0	76.9	76.5	-90.95	-8,518.9	-169.9	660.0	508.3	151.68	4.351	
21,100.0	12,373.0	21,027.4	12,384.0	77.7	77.3	-90.95	-8,618.9	-169.3	660.0	506.7	153.34	4.304	
21,200.0	12,373.0	21,127.4	12,384.0	78.6	78.2	-90.95	-8,718.9	-168.6	660.0	505.0	155.01	4.258	
21,300.0	12,373.0	21,227.4	12,384.0	79.4	79.0	-90.95	-8,818.9	-168.0	660.0	503.3	156.67	4.213	
21,400.0	12,373.0	21,327.4	12,384.0	80.2	79.9	-90.95	-8,918.9	-167.3	660.0	501.7	158.34	4.168	
21,500.0	12,373.0	21,427.4	12,384.0	81.1	80.7	-90.95	-9,018.9	-166.7	660.0	500.0	160.01	4.125	
21,600.0	12,373.0	21,527.4	12,384.0	81.9	81.6	-90.95	-9,118.9	-166.0	660.0	498.3	161.67	4.082	
21,700.0	12,373.0	21,627.4	12,384.0	82.8	82.4	-90.95	-9,218.9	-165.4	660.0	496.7	163.34	4.041	
21,800.0	12,373.0	21,727.4	12,384.0	83.6	83.3	-90.95	-9,318.9	-164.7	660.0	495.0	165.01	4.000	
21,900.0	12,373.0	21,827.4	12,384.0	84.5	84.1	-90.95	-9,418.9	-164.1	660.0	493.3	166.68	3.960	
22,000.0	12,373.0	21,927.4	12,384.0	85.3	85.0	-90.95	-9,518.9	-163.4	660.0	491.7	168.35	3.920	
22,100.0	12,373.0	22,027.4	12,384.0	86.2	85.8	-90.95	-9,618.9	-162.8	660.0	490.0	170.02	3.882	
22,200.0	12,373.0	22,127.4	12,384.0	87.0	86.7	-90.95	-9,718.9	-162.1	660.0	488.3	171.70	3.844	
22,300.0	12,373.0	22,227.4	12,384.0	87.8	87.5	-90.95	-9,818.9	-161.5	660.0	486.6	173.37	3.807	
22,400.0	12,373.0	22,327.4	12,384.0	88.7	88.4	-90.95	-9,918.9	-160.8	660.0	485.0	175.04	3.771	
22,500.0	12,373.0	22,427.4	12,384.0	89.5	89.2	-90.95	-10,018.8	-160.2	660.0	483.3	176.71	3.735	
22,600.0	12,373.0	22,527.4	12,384.0	90.4	90.1	-90.95	-10,118.8	-159.5	660.0	481.6	178.39	3.700	

ConocoPhillips

Anticollision Report

Company:	DELAWARE BASIN EAST	**Local Co-ordinate Reference:**	Well AVION FEDERAL COM 704H
Project:	LEA COUNTY SOUTHEAST	**TVD Reference:**	RKB=27ft @ 3728.0usft
Reference Site:	AVION FEDERAL COM PROJECT	**MD Reference:**	RKB=27ft @ 3728.0usft
Site Error:	0.0 usft	**North Reference:**	Grid
Reference Well:	AVION FEDERAL COM 704H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.0 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	OWB	**Database:**	EDT 17 Permian Prod
Reference Design:	PWP1	**Offset TVD Reference:**	Offset Datum

Offset Design: AVION FEDERAL COM PROJECT - AVION FEDERAL COM 703H - OWB - PWP1

Offset Site Error: 0.0 usft

Survey Program: 0-r.5 SDI_KPR_WL_NS-CT, 2000-r.5 MWD+IFR1+SAG+FDIR, 11926-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
22,683.6	12,373.0	22,610.9	12,384.0	91.1	90.8	-90.95	-10,202.4	-159.0	660.0	480.2	179.79	3.671	
22,700.0	12,373.0	22,627.4	12,384.0	91.2	90.9	-90.95	-10,218.8	-158.9	660.0	480.0	180.06	3.666	
22,703.0	12,373.0	22,630.4	12,384.0	91.3	90.9	-90.95	-10,221.9	-158.9	660.0	479.9	180.11	3.664	
22,733.6	12,373.0	22,658.9	12,384.0	91.5	91.2	-90.95	-10,250.4	-158.7	660.0	479.4	180.59	3.655 SF	

ConocoPhillips

Anticollision Report

Company:	DELAWARE BASIN EAST	**Local Co-ordinate Reference:**	Well AVION FEDERAL COM 704H
Project:	LEA COUNTY SOUTHEAST	**TVD Reference:**	RKB=27ft @ 3728.0usft
Reference Site:	AVION FEDERAL COM PROJECT	**MD Reference:**	RKB=27ft @ 3728.0usft
Site Error:	0.0 usft	**North Reference:**	Grid
Reference Well:	AVION FEDERAL COM 704H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.0 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	OWB	**Database:**	EDT 17 Permian Prod
Reference Design:	PWP1	**Offset TVD Reference:**	Offset Datum

Offset Design: AVION FEDERAL COM PROJECT - GRUMPY CAT 15 FEDERAL 213H - OWB - AWP

Offset Site Error: 0.0 usft

Survey Program: 72-MWD - OWSG R1 **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
10,000.0	9,896.4	15,671.0	10,705.0	15.5	93.5	71.02	349.9	-465.2	944.4	856.9	87.47	10.797	
10,100.0	9,996.4	15,671.0	10,705.0	15.6	93.5	71.02	349.9	-465.2	857.5	767.0	90.48	9.477	
10,200.0	10,096.4	15,671.0	10,705.0	15.6	93.5	71.02	349.9	-465.2	773.8	679.7	94.16	8.218	
10,300.0	10,196.4	15,671.0	10,705.0	15.7	93.5	71.02	349.9	-465.2	694.5	595.8	98.62	7.042	
10,400.0	10,296.4	15,671.0	10,705.0	15.8	93.5	71.02	349.9	-465.2	621.1	517.2	103.91	5.977	
10,500.0	10,396.4	15,671.0	10,705.0	15.8	93.5	71.02	349.9	-465.2	556.1	446.2	109.90	5.060	
10,600.0	10,496.4	15,671.0	10,705.0	15.9	93.5	71.02	349.9	-465.2	502.7	386.7	116.02	4.333	
10,700.0	10,596.4	15,671.0	10,705.0	16.0	93.5	71.02	349.9	-465.2	465.0	343.9	121.01	3.842	
10,800.0	10,696.4	15,671.0	10,705.0	16.1	93.5	71.02	349.9	-465.2	446.8	323.6	123.19	3.627	
10,832.6	10,729.0	15,671.0	10,705.0	16.1	93.5	71.02	349.9	-465.2	445.6	322.6	123.06	3.621	CC, ES, SF
10,900.0	10,796.4	15,671.0	10,705.0	16.1	93.5	71.02	349.9	-465.2	450.7	329.3	121.43	3.712	
11,000.0	10,896.4	15,671.0	10,705.0	16.2	93.5	71.02	349.9	-465.2	476.0	359.8	116.27	4.094	
11,100.0	10,996.4	15,671.0	10,705.0	16.3	93.5	71.02	349.9	-465.2	519.7	410.2	109.47	4.748	
11,200.0	11,096.4	15,671.0	10,705.0	16.3	93.5	71.02	349.9	-465.2	577.6	474.9	102.66	5.626	
11,300.0	11,196.4	15,671.0	10,705.0	16.4	93.5	71.02	349.9	-465.2	645.8	549.1	96.74	6.675	
11,400.0	11,296.4	15,671.0	10,705.0	16.5	93.5	71.02	349.9	-465.2	721.5	629.5	91.95	7.846	
11,500.0	11,396.4	15,671.0	10,705.0	16.6	93.5	71.02	349.9	-465.2	802.5	714.3	88.21	9.097	
11,600.0	11,496.4	15,671.0	10,705.0	16.6	93.5	71.02	349.9	-465.2	887.4	802.1	85.35	10.397	
11,700.0	11,596.4	15,671.0	10,705.0	16.7	93.5	71.02	349.9	-465.2	975.2	892.0	83.17	11.725	

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

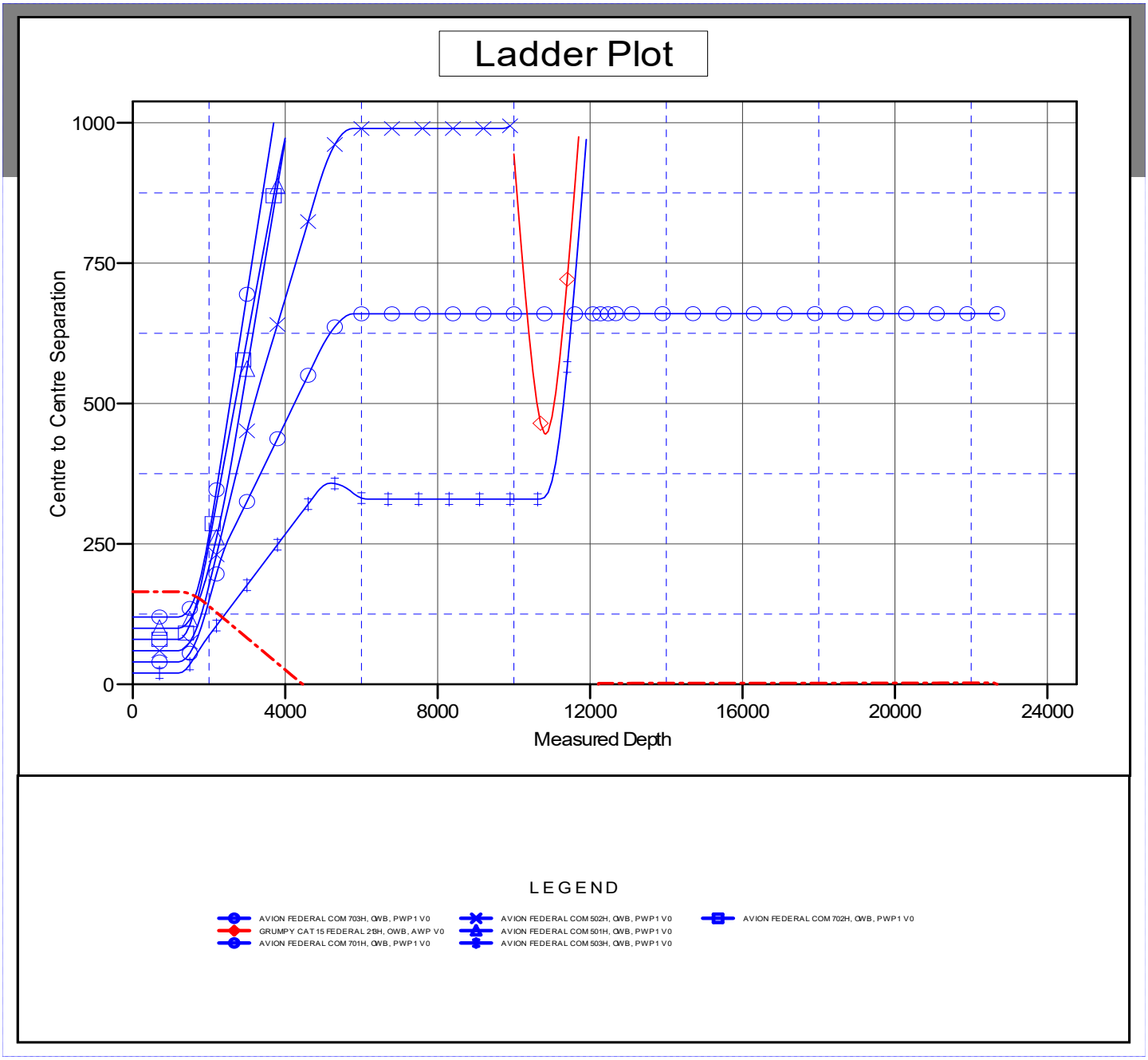
ConocoPhillips

Anticollision Report

Company:	DELAWARE BASIN EAST	**Local Co-ordinate Reference:**	Well AVION FEDERAL COM 704H
Project:	LEA COUNTY SOUTHEAST	**TVD Reference:**	RKB=27ft @ 3728.0usft
Reference Site:	AVION FEDERAL COM PROJECT	**MD Reference:**	RKB=27ft @ 3728.0usft
Site Error:	0.0 usft	**North Reference:**	Grid
Reference Well:	AVION FEDERAL COM 704H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.0 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	OWB	**Database:**	EDT 17 Permian Prod
Reference Design:	PWP1	**Offset TVD Reference:**	Offset Datum

Reference Depths are relative to RKB=27ft @ 3728.0usft
Offset Depths are relative to Offset Datum
Central Meridian is 104° 20' 0.000 W

Coordinates are relative to: AVION FEDERAL COM 704H
Coordinate System is US State Plane 1927 (Exact solution), New Mexico East 30
Grid Convergence at Surface is: 0.36°



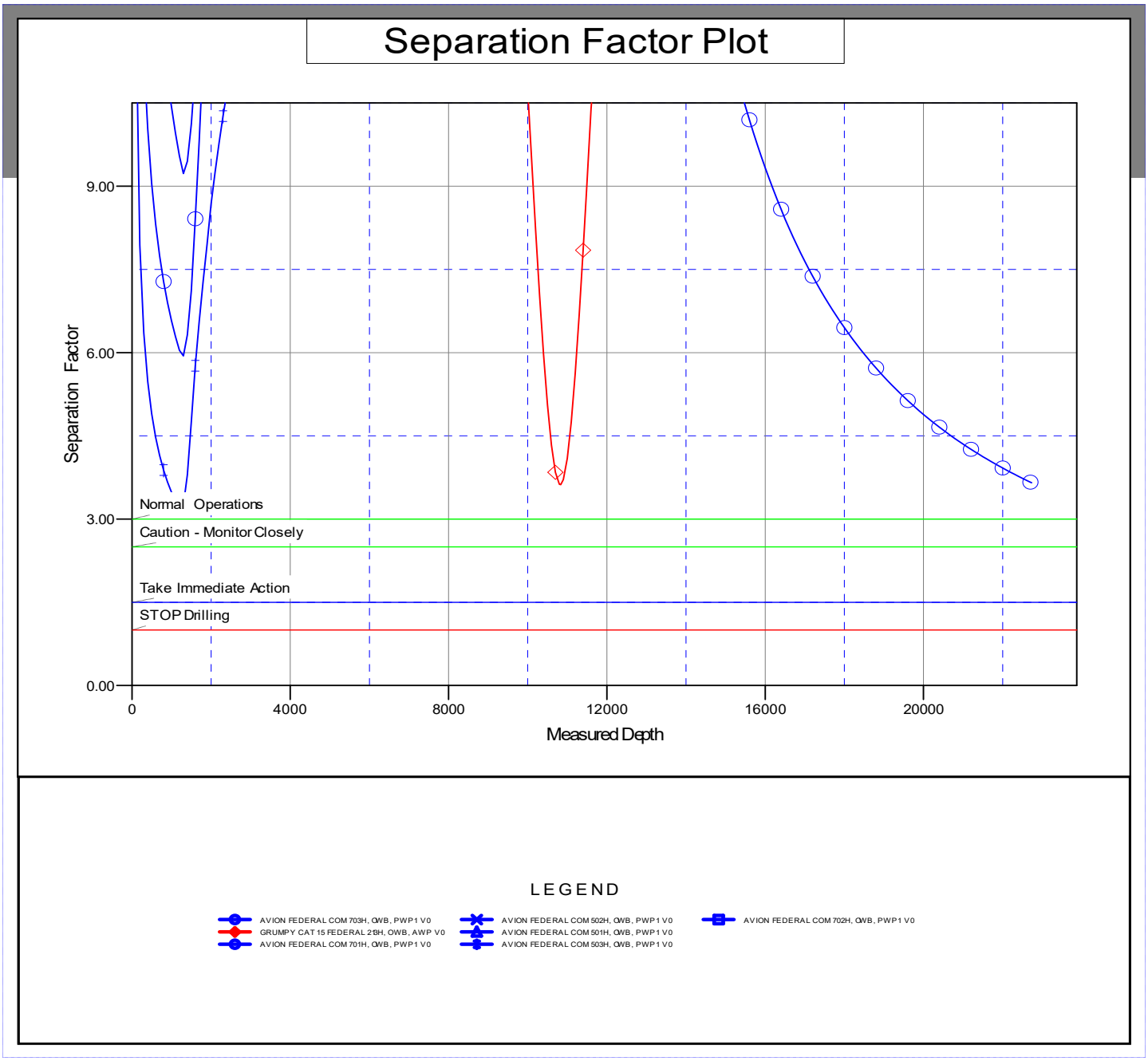
ConocoPhillips

Anticollision Report

Company:	DELAWARE BASIN EAST	**Local Co-ordinate Reference:**	Well AVION FEDERAL COM 704H
Project:	LEA COUNTY SOUTHEAST	**TVD Reference:**	RKB=27ft @ 3728.0usft
Reference Site:	AVION FEDERAL COM PROJECT	**MD Reference:**	RKB=27ft @ 3728.0usft
Site Error:	0.0 usft	**North Reference:**	Grid
Reference Well:	AVION FEDERAL COM 704H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.0 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	OWB	**Database:**	EDT 17 Permian Prod
Reference Design:	PWP1	**Offset TVD Reference:**	Offset Datum

Reference Depths are relative to RKB=27ft @ 3728.0usft
Offset Depths are relative to Offset Datum
Central Meridian is 104° 20' 0.000 W

Coordinates are relative to: AVION FEDERAL COM 704H
Coordinate System is US State Plane 1927 (Exact solution), New Mexico East 30
Grid Convergence at Surface is: 0.36°



DELAWARE BASIN EAST

LEA COUNTY SOUTHEAST
AVION FEDERAL COM PROJECT
AVION FEDERAL COM 704H

OWB

Plan: PWP1

Standard Planning Report

12 January, 2025

ConocoPhillips

Planning Report

Database:	EDT 17 Permian Prod	**Local Co-ordinate Reference:**	Well AVION FEDERAL COM 704H
Company:	DELAWARE BASIN EAST	**TVD Reference:**	RKB=27ft @ 3728.0usft
Project:	LEA COUNTY SOUTHEAST	**MD Reference:**	RKB=27ft @ 3728.0usft
Site:	AVION FEDERAL COM PROJECT	**North Reference:**	Grid
Well:	AVION FEDERAL COM 704H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	OWB		
Design:	PWP1		

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 AVION FEDERAL COM PROJECT

Site Position:		**Northing:**	467,238.17 usft	**Latitude:**	32° 16' 57.890 N
From:	Map	**Easting:**	708,776.75 usft	**Longitude:**	103° 39' 27.986 W
Position Uncertainty:	0.0 usft	**Slot Radius:**	13-3/16 "		

Well AVION FEDERAL COM 704H

Well Position	**+N/-S**	0.0 usft	**Northing:**	472,259.50 usft	**Latitude:**	32° 17' 47.587 N
	+E/-W	0.0 usft	**Easting:**	708,647.30 usft	**Longitude:**	103° 39' 29.126 W
Position Uncertainty		0.0 usft	**Wellhead Elevation:**	usft	**Ground Level:**	3,701.0 usft
Grid Convergence:		0.36 °				

Wellbore OWB

Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	BGGM2024	7/1/2025	6.29	59.87	47,291.71366540

Design PWP1

Audit Notes:

Version:	**Phase:**	PLAN	**Tie On Depth:**	0.0

Vertical Section:	Depth From (TVD) (usft)	+N/-S (usft)	+E/-W (usft)	Direction (°)
	0.0	0.0	0.0	184.56

Plan Survey Tool Program **Date** 1/12/2025

	Depth From (usft)	Depth To (usft)	Survey (Wellbore)	Tool Name	Remarks
1	0.0	1,500.0	PWP1 (OWB)	r.5 SDI_KPR_WL_NS-CT SDI Keeper Wireline Gyrocomp	
2	1,500.0	11,999.1	PWP1 (OWB)	r.5 MWD+IFR1+SAG+FDIR ISCWSA MWD + IFR1 + SAG ·	
3	11,999.1	22,733.6	PWP1 (OWB)	r.5 MWD+IFR1+SAG+FDIR ISCWSA MWD + IFR1 + SAG ·	

ConocoPhillips

Planning Report

Database:	EDT 17 Permian Prod	**Local Co-ordinate Reference:**	Well AVION FEDERAL COM 704H
Company:	DELAWARE BASIN EAST	**TVD Reference:**	RKB=27ft @ 3728.0usft
Project:	LEA COUNTY SOUTHEAST	**MD Reference:**	RKB=27ft @ 3728.0usft
Site:	AVION FEDERAL COM PROJECT	**North Reference:**	Grid
Well:	AVION FEDERAL COM 704H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	OWB		
Design:	PWP1		

Plan Sections

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	TFO (°)	Target
0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.00	0.00	
1,200.0	0.00	0.00	1,200.0	0.0	0.0	0.00	0.00	0.00	0.00	
1,900.1	14.00	283.02	1,893.2	19.2	-82.9	2.00	2.00	0.00	283.02	
4,840.1	14.00	283.02	4,745.8	179.4	-776.0	0.00	0.00	0.00	0.00	
5,773.6	0.00	0.00	5,670.0	205.0	-886.6	1.50	-1.50	0.00	180.00	
11,999.1	0.00	0.00	11,895.5	205.0	-886.6	0.00	0.00	0.00	0.00	
12,749.1	90.00	179.63	12,373.0	-272.5	-883.5	12.00	12.00	23.95	179.63	
22,683.6	90.00	179.63	12,373.0	-10,206.7	-818.9	0.00	0.00	0.00	0.00	
22,733.6	90.00	179.63	12,373.0	-10,256.7	-818.6	0.00	0.00	0.00	0.00	

ConocoPhillips

Planning Report

Database:	EDT 17 Permian Prod	**Local Co-ordinate Reference:**	Well AVION FEDERAL COM 704H
Company:	DELAWARE BASIN EAST	**TVD Reference:**	RKB=27ft @ 3728.0usft
Project:	LEA COUNTY SOUTHEAST	**MD Reference:**	RKB=27ft @ 3728.0usft
Site:	AVION FEDERAL COM PROJECT	**North Reference:**	Grid
Well:	AVION FEDERAL COM 704H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	OWB		
Design:	PWP1		

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	2.00	283.02	1,300.0	0.4	-1.7	-0.3	2.00	2.00	0.00
1,400.0	4.00	283.02	1,399.8	1.6	-6.8	-1.0	2.00	2.00	0.00
1,500.0	6.00	283.02	1,499.5	3.5	-15.3	-2.3	2.00	2.00	0.00
1,600.0	8.00	283.02	1,598.7	6.3	-27.2	-4.1	2.00	2.00	0.00
1,700.0	10.00	283.02	1,697.5	9.8	-42.4	-6.4	2.00	2.00	0.00
1,800.0	12.00	283.02	1,795.6	14.1	-61.0	-9.2	2.00	2.00	0.00
1,900.1	14.00	283.02	1,893.2	19.2	-82.9	-12.5	2.00	2.00	0.00
2,000.0	14.00	283.02	1,990.1	24.6	-106.5	-16.1	0.00	0.00	0.00
2,100.0	14.00	283.02	2,087.1	30.1	-130.1	-19.6	0.00	0.00	0.00
2,200.0	14.00	283.02	2,184.1	35.5	-153.6	-23.2	0.00	0.00	0.00
2,300.0	14.00	283.02	2,281.2	41.0	-177.2	-26.7	0.00	0.00	0.00
2,400.0	14.00	283.02	2,378.2	46.4	-200.8	-30.3	0.00	0.00	0.00
2,500.0	14.00	283.02	2,475.2	51.9	-224.4	-33.9	0.00	0.00	0.00
2,600.0	14.00	283.02	2,572.3	57.3	-247.9	-37.4	0.00	0.00	0.00
2,700.0	14.00	283.02	2,669.3	62.8	-271.5	-41.0	0.00	0.00	0.00
2,800.0	14.00	283.02	2,766.3	68.2	-295.1	-44.5	0.00	0.00	0.00
2,900.0	14.00	283.02	2,863.3	73.7	-318.7	-48.1	0.00	0.00	0.00
3,000.0	14.00	283.02	2,960.4	79.1	-342.2	-51.7	0.00	0.00	0.00
3,100.0	14.00	283.02	3,057.4	84.6	-365.8	-55.2	0.00	0.00	0.00
3,200.0	14.00	283.02	3,154.4	90.0	-389.4	-58.8	0.00	0.00	0.00
3,300.0	14.00	283.02	3,251.5	95.5	-413.0	-62.3	0.00	0.00	0.00
3,400.0	14.00	283.02	3,348.5	100.9	-436.5	-65.9	0.00	0.00	0.00
3,500.0	14.00	283.02	3,445.5	106.4	-460.1	-69.4	0.00	0.00	0.00
3,600.0	14.00	283.02	3,542.5	111.8	-483.7	-73.0	0.00	0.00	0.00
3,700.0	14.00	283.02	3,639.6	117.3	-507.2	-76.6	0.00	0.00	0.00
3,800.0	14.00	283.02	3,736.6	122.7	-530.8	-80.1	0.00	0.00	0.00
3,900.0	14.00	283.02	3,833.6	128.2	-554.4	-83.7	0.00	0.00	0.00
4,000.0	14.00	283.02	3,930.7	133.6	-578.0	-87.2	0.00	0.00	0.00
4,100.0	14.00	283.02	4,027.7	139.1	-601.5	-90.8	0.00	0.00	0.00
4,200.0	14.00	283.02	4,124.7	144.5	-625.1	-94.3	0.00	0.00	0.00
4,300.0	14.00	283.02	4,221.7	150.0	-648.7	-97.9	0.00	0.00	0.00
4,400.0	14.00	283.02	4,318.8	155.4	-672.3	-101.5	0.00	0.00	0.00
4,500.0	14.00	283.02	4,415.8	160.9	-695.8	-105.0	0.00	0.00	0.00
4,600.0	14.00	283.02	4,512.8	166.3	-719.4	-108.6	0.00	0.00	0.00
4,700.0	14.00	283.02	4,609.9	171.8	-743.0	-112.1	0.00	0.00	0.00
4,800.0	14.00	283.02	4,706.9	177.2	-766.6	-115.7	0.00	0.00	0.00
4,840.1	14.00	283.02	4,745.8	179.4	-776.0	-117.1	0.00	0.00	0.00
4,900.0	13.10	283.02	4,804.0	182.6	-789.7	-119.2	1.50	-1.50	0.00
5,000.0	11.60	283.02	4,901.7	187.4	-810.5	-122.3	1.50	-1.50	0.00
5,100.0	10.10	283.02	4,999.9	191.7	-828.9	-125.1	1.50	-1.50	0.00
5,200.0	8.60	283.02	5,098.6	195.3	-844.7	-127.5	1.50	-1.50	0.00

ConocoPhillips

Planning Report

Database:	EDT 17 Permian Prod	**Local Co-ordinate Reference:**	Well AVION FEDERAL COM 704H
Company:	DELAWARE BASIN EAST	**TVD Reference:**	RKB=27ft @ 3728.0usft
Project:	LEA COUNTY SOUTHEAST	**MD Reference:**	RKB=27ft @ 3728.0usft
Site:	AVION FEDERAL COM PROJECT	**North Reference:**	Grid
Well:	AVION FEDERAL COM 704H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	OWB		
Design:	PWP1		

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	7.10	283.02	5,197.6	198.4	-858.0	-129.5	1.50	-1.50	0.00
5,400.0	5.60	283.02	5,297.0	200.9	-868.8	-131.1	1.50	-1.50	0.00
5,500.0	4.10	283.02	5,396.7	202.8	-877.1	-132.4	1.50	-1.50	0.00
5,600.0	2.60	283.02	5,496.5	204.1	-882.8	-133.2	1.50	-1.50	0.00
5,700.0	1.10	283.02	5,596.4	204.8	-885.9	-133.7	1.50	-1.50	0.00
5,773.6	0.00	0.00	5,670.0	205.0	-886.6	-133.8	1.50	-1.50	0.00
5,800.0	0.00	0.00	5,696.4	205.0	-886.6	-133.8	0.00	0.00	0.00
5,900.0	0.00	0.00	5,796.4	205.0	-886.6	-133.8	0.00	0.00	0.00
6,000.0	0.00	0.00	5,896.4	205.0	-886.6	-133.8	0.00	0.00	0.00
6,100.0	0.00	0.00	5,996.4	205.0	-886.6	-133.8	0.00	0.00	0.00
6,200.0	0.00	0.00	6,096.4	205.0	-886.6	-133.8	0.00	0.00	0.00
6,300.0	0.00	0.00	6,196.4	205.0	-886.6	-133.8	0.00	0.00	0.00
6,400.0	0.00	0.00	6,296.4	205.0	-886.6	-133.8	0.00	0.00	0.00
6,500.0	0.00	0.00	6,396.4	205.0	-886.6	-133.8	0.00	0.00	0.00
6,600.0	0.00	0.00	6,496.4	205.0	-886.6	-133.8	0.00	0.00	0.00
6,700.0	0.00	0.00	6,596.4	205.0	-886.6	-133.8	0.00	0.00	0.00
6,800.0	0.00	0.00	6,696.4	205.0	-886.6	-133.8	0.00	0.00	0.00
6,900.0	0.00	0.00	6,796.4	205.0	-886.6	-133.8	0.00	0.00	0.00
7,000.0	0.00	0.00	6,896.4	205.0	-886.6	-133.8	0.00	0.00	0.00
7,100.0	0.00	0.00	6,996.4	205.0	-886.6	-133.8	0.00	0.00	0.00
7,200.0	0.00	0.00	7,096.4	205.0	-886.6	-133.8	0.00	0.00	0.00
7,300.0	0.00	0.00	7,196.4	205.0	-886.6	-133.8	0.00	0.00	0.00
7,400.0	0.00	0.00	7,296.4	205.0	-886.6	-133.8	0.00	0.00	0.00
7,500.0	0.00	0.00	7,396.4	205.0	-886.6	-133.8	0.00	0.00	0.00
7,600.0	0.00	0.00	7,496.4	205.0	-886.6	-133.8	0.00	0.00	0.00
7,700.0	0.00	0.00	7,596.4	205.0	-886.6	-133.8	0.00	0.00	0.00
7,800.0	0.00	0.00	7,696.4	205.0	-886.6	-133.8	0.00	0.00	0.00
7,900.0	0.00	0.00	7,796.4	205.0	-886.6	-133.8	0.00	0.00	0.00
8,000.0	0.00	0.00	7,896.4	205.0	-886.6	-133.8	0.00	0.00	0.00
8,100.0	0.00	0.00	7,996.4	205.0	-886.6	-133.8	0.00	0.00	0.00
8,200.0	0.00	0.00	8,096.4	205.0	-886.6	-133.8	0.00	0.00	0.00
8,300.0	0.00	0.00	8,196.4	205.0	-886.6	-133.8	0.00	0.00	0.00
8,400.0	0.00	0.00	8,296.4	205.0	-886.6	-133.8	0.00	0.00	0.00
8,500.0	0.00	0.00	8,396.4	205.0	-886.6	-133.8	0.00	0.00	0.00
8,600.0	0.00	0.00	8,496.4	205.0	-886.6	-133.8	0.00	0.00	0.00
8,700.0	0.00	0.00	8,596.4	205.0	-886.6	-133.8	0.00	0.00	0.00
8,800.0	0.00	0.00	8,696.4	205.0	-886.6	-133.8	0.00	0.00	0.00
8,900.0	0.00	0.00	8,796.4	205.0	-886.6	-133.8	0.00	0.00	0.00
9,000.0	0.00	0.00	8,896.4	205.0	-886.6	-133.8	0.00	0.00	0.00
9,100.0	0.00	0.00	8,996.4	205.0	-886.6	-133.8	0.00	0.00	0.00
9,200.0	0.00	0.00	9,096.4	205.0	-886.6	-133.8	0.00	0.00	0.00
9,300.0	0.00	0.00	9,196.4	205.0	-886.6	-133.8	0.00	0.00	0.00
9,400.0	0.00	0.00	9,296.4	205.0	-886.6	-133.8	0.00	0.00	0.00
9,500.0	0.00	0.00	9,396.4	205.0	-886.6	-133.8	0.00	0.00	0.00
9,600.0	0.00	0.00	9,496.4	205.0	-886.6	-133.8	0.00	0.00	0.00
9,700.0	0.00	0.00	9,596.4	205.0	-886.6	-133.8	0.00	0.00	0.00
9,800.0	0.00	0.00	9,696.4	205.0	-886.6	-133.8	0.00	0.00	0.00
9,900.0	0.00	0.00	9,796.4	205.0	-886.6	-133.8	0.00	0.00	0.00
10,000.0	0.00	0.00	9,896.4	205.0	-886.6	-133.8	0.00	0.00	0.00
10,100.0	0.00	0.00	9,996.4	205.0	-886.6	-133.8	0.00	0.00	0.00
10,200.0	0.00	0.00	10,096.4	205.0	-886.6	-133.8	0.00	0.00	0.00
10,300.0	0.00	0.00	10,196.4	205.0	-886.6	-133.8	0.00	0.00	0.00
10,400.0	0.00	0.00	10,296.4	205.0	-886.6	-133.8	0.00	0.00	0.00
10,500.0	0.00	0.00	10,396.4	205.0	-886.6	-133.8	0.00	0.00	0.00

ConocoPhillips

Planning Report

Database:	EDT 17 Permian Prod	**Local Co-ordinate Reference:**	Well AVION FEDERAL COM 704H
Company:	DELAWARE BASIN EAST	**TVD Reference:**	RKB=27ft @ 3728.0usft
Project:	LEA COUNTY SOUTHEAST	**MD Reference:**	RKB=27ft @ 3728.0usft
Site:	AVION FEDERAL COM PROJECT	**North Reference:**	Grid
Well:	AVION FEDERAL COM 704H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	OWB		
Design:	PWP1		

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	10,496.4	205.0	-886.6	-133.8	0.00	0.00	0.00
10,700.0	0.00	0.00	10,596.4	205.0	-886.6	-133.8	0.00	0.00	0.00
10,800.0	0.00	0.00	10,696.4	205.0	-886.6	-133.8	0.00	0.00	0.00
10,900.0	0.00	0.00	10,796.4	205.0	-886.6	-133.8	0.00	0.00	0.00
11,000.0	0.00	0.00	10,896.4	205.0	-886.6	-133.8	0.00	0.00	0.00
11,100.0	0.00	0.00	10,996.4	205.0	-886.6	-133.8	0.00	0.00	0.00
11,200.0	0.00	0.00	11,096.4	205.0	-886.6	-133.8	0.00	0.00	0.00
11,300.0	0.00	0.00	11,196.4	205.0	-886.6	-133.8	0.00	0.00	0.00
11,400.0	0.00	0.00	11,296.4	205.0	-886.6	-133.8	0.00	0.00	0.00
11,500.0	0.00	0.00	11,396.4	205.0	-886.6	-133.8	0.00	0.00	0.00
11,600.0	0.00	0.00	11,496.4	205.0	-886.6	-133.8	0.00	0.00	0.00
11,700.0	0.00	0.00	11,596.4	205.0	-886.6	-133.8	0.00	0.00	0.00
11,800.0	0.00	0.00	11,696.4	205.0	-886.6	-133.8	0.00	0.00	0.00
11,900.0	0.00	0.00	11,796.4	205.0	-886.6	-133.8	0.00	0.00	0.00
11,999.1	0.00	0.00	11,895.5	205.0	-886.6	-133.8	0.00	0.00	0.00
12,025.0	3.11	179.63	11,921.4	204.3	-886.6	-133.1	12.00	12.00	0.00
12,050.0	6.11	179.63	11,946.3	202.3	-886.6	-131.1	12.00	12.00	0.00
12,075.0	9.11	179.63	11,971.1	199.0	-886.6	-127.8	12.00	12.00	0.00
12,100.0	12.11	179.63	11,995.7	194.4	-886.5	-123.2	12.00	12.00	0.00
12,125.0	15.11	179.63	12,020.0	188.5	-886.5	-117.4	12.00	12.00	0.00
12,150.0	18.11	179.63	12,043.9	181.4	-886.4	-110.3	12.00	12.00	0.00
12,175.0	21.11	179.63	12,067.5	173.0	-886.4	-101.9	12.00	12.00	0.00
12,200.0	24.11	179.63	12,090.6	163.4	-886.3	-92.3	12.00	12.00	0.00
12,225.0	27.11	179.63	12,113.1	152.6	-886.3	-81.6	12.00	12.00	0.00
12,250.0	30.11	179.63	12,135.0	140.6	-886.2	-69.6	12.00	12.00	0.00
12,275.0	33.11	179.63	12,156.3	127.5	-886.1	-56.6	12.00	12.00	0.00
12,300.0	36.11	179.63	12,176.9	113.3	-886.0	-42.4	12.00	12.00	0.00
12,325.0	39.11	179.63	12,196.7	98.0	-885.9	-27.2	12.00	12.00	0.00
12,350.0	42.11	179.63	12,215.7	81.8	-885.8	-11.0	12.00	12.00	0.00
12,375.0	45.11	179.63	12,233.8	64.5	-885.7	6.1	12.00	12.00	0.00
12,400.0	48.11	179.63	12,251.0	46.4	-885.6	24.2	12.00	12.00	0.00
12,425.0	51.11	179.63	12,267.2	27.3	-885.4	43.2	12.00	12.00	0.00
12,450.0	54.11	179.63	12,282.3	7.5	-885.3	63.0	12.00	12.00	0.00
12,475.0	57.11	179.63	12,296.5	-13.2	-885.2	83.5	12.00	12.00	0.00
12,500.0	60.11	179.63	12,309.5	-34.5	-885.0	104.8	12.00	12.00	0.00
12,525.0	63.11	179.63	12,321.4	-56.5	-884.9	126.7	12.00	12.00	0.00
12,550.0	66.11	179.63	12,332.1	-79.1	-884.8	149.2	12.00	12.00	0.00
12,575.0	69.11	179.63	12,341.6	-102.2	-884.6	172.2	12.00	12.00	0.00
12,600.0	72.11	179.63	12,349.9	-125.8	-884.4	195.7	12.00	12.00	0.00
12,625.0	75.11	179.63	12,357.0	-149.7	-884.3	219.6	12.00	12.00	0.00
12,650.0	78.11	179.63	12,362.8	-174.1	-884.1	243.8	12.00	12.00	0.00
12,675.0	81.11	179.63	12,367.3	-198.6	-884.0	268.3	12.00	12.00	0.00
12,700.0	84.11	179.63	12,370.5	-223.4	-883.8	293.0	12.00	12.00	0.00
12,725.0	87.11	179.63	12,372.4	-248.4	-883.7	317.9	12.00	12.00	0.00
12,749.1	90.00	179.63	12,373.0	-272.5	-883.5	341.9	12.00	12.00	0.00
12,800.0	90.00	179.63	12,373.0	-323.3	-883.2	392.6	0.00	0.00	0.00
12,900.0	90.00	179.63	12,373.0	-423.3	-882.5	492.2	0.00	0.00	0.00
13,000.0	90.00	179.63	12,373.0	-523.3	-881.9	591.8	0.00	0.00	0.00
13,100.0	90.00	179.63	12,373.0	-623.3	-881.2	691.5	0.00	0.00	0.00
13,200.0	90.00	179.63	12,373.0	-723.3	-880.6	791.1	0.00	0.00	0.00
13,300.0	90.00	179.63	12,373.0	-823.3	-879.9	890.7	0.00	0.00	0.00
13,400.0	90.00	179.63	12,373.0	-923.3	-879.3	990.4	0.00	0.00	0.00
13,500.0	90.00	179.63	12,373.0	-1,023.3	-878.6	1,090.0	0.00	0.00	0.00
13,600.0	90.00	179.63	12,373.0	-1,123.3	-878.0	1,189.6	0.00	0.00	0.00

ConocoPhillips

Planning Report

Database:	EDT 17 Permian Prod	**Local Co-ordinate Reference:**	Well AVION FEDERAL COM 704H
Company:	DELAWARE BASIN EAST	**TVD Reference:**	RKB=27ft @ 3728.0usft
Project:	LEA COUNTY SOUTHEAST	**MD Reference:**	RKB=27ft @ 3728.0usft
Site:	AVION FEDERAL COM PROJECT	**North Reference:**	Grid
Well:	AVION FEDERAL COM 704H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	OWB		
Design:	PWP1		

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)
13,700.0	90.00	179.63	12,373.0	-1,223.3	-877.3	1,289.2	0.00	0.00	0.00
13,800.0	90.00	179.63	12,373.0	-1,323.3	-876.7	1,388.9	0.00	0.00	0.00
13,900.0	90.00	179.63	12,373.0	-1,423.3	-876.0	1,488.5	0.00	0.00	0.00
14,000.0	90.00	179.63	12,373.0	-1,523.3	-875.4	1,588.1	0.00	0.00	0.00
14,100.0	90.00	179.63	12,373.0	-1,623.3	-874.7	1,687.8	0.00	0.00	0.00
14,200.0	90.00	179.63	12,373.0	-1,723.3	-874.1	1,787.4	0.00	0.00	0.00
14,300.0	90.00	179.63	12,373.0	-1,823.3	-873.4	1,887.0	0.00	0.00	0.00
14,400.0	90.00	179.63	12,373.0	-1,923.3	-872.8	1,986.7	0.00	0.00	0.00
14,500.0	90.00	179.63	12,373.0	-2,023.3	-872.1	2,086.3	0.00	0.00	0.00
14,600.0	90.00	179.63	12,373.0	-2,123.3	-871.5	2,185.9	0.00	0.00	0.00
14,700.0	90.00	179.63	12,373.0	-2,223.3	-870.8	2,285.5	0.00	0.00	0.00
14,800.0	90.00	179.63	12,373.0	-2,323.3	-870.2	2,385.2	0.00	0.00	0.00
14,900.0	90.00	179.63	12,373.0	-2,423.3	-869.5	2,484.8	0.00	0.00	0.00
15,000.0	90.00	179.63	12,373.0	-2,523.3	-868.9	2,584.4	0.00	0.00	0.00
15,100.0	90.00	179.63	12,373.0	-2,623.3	-868.2	2,684.1	0.00	0.00	0.00
15,200.0	90.00	179.63	12,373.0	-2,723.3	-867.6	2,783.7	0.00	0.00	0.00
15,300.0	90.00	179.63	12,373.0	-2,823.3	-866.9	2,883.3	0.00	0.00	0.00
15,400.0	90.00	179.63	12,373.0	-2,923.3	-866.3	2,982.9	0.00	0.00	0.00
15,500.0	90.00	179.63	12,373.0	-3,023.3	-865.6	3,082.6	0.00	0.00	0.00
15,600.0	90.00	179.63	12,373.0	-3,123.3	-865.0	3,182.2	0.00	0.00	0.00
15,700.0	90.00	179.63	12,373.0	-3,223.3	-864.3	3,281.8	0.00	0.00	0.00
15,800.0	90.00	179.63	12,373.0	-3,323.3	-863.7	3,381.5	0.00	0.00	0.00
15,900.0	90.00	179.63	12,373.0	-3,423.3	-863.0	3,481.1	0.00	0.00	0.00
16,000.0	90.00	179.63	12,373.0	-3,523.3	-862.4	3,580.7	0.00	0.00	0.00
16,100.0	90.00	179.63	12,373.0	-3,623.3	-861.7	3,680.3	0.00	0.00	0.00
16,200.0	90.00	179.63	12,373.0	-3,723.3	-861.1	3,780.0	0.00	0.00	0.00
16,300.0	90.00	179.63	12,373.0	-3,823.3	-860.4	3,879.6	0.00	0.00	0.00
16,400.0	90.00	179.63	12,373.0	-3,923.3	-859.8	3,979.2	0.00	0.00	0.00
16,500.0	90.00	179.63	12,373.0	-4,023.3	-859.1	4,078.9	0.00	0.00	0.00
16,600.0	90.00	179.63	12,373.0	-4,123.3	-858.5	4,178.5	0.00	0.00	0.00
16,700.0	90.00	179.63	12,373.0	-4,223.3	-857.8	4,278.1	0.00	0.00	0.00
16,800.0	90.00	179.63	12,373.0	-4,323.3	-857.2	4,377.8	0.00	0.00	0.00
16,900.0	90.00	179.63	12,373.0	-4,423.3	-856.5	4,477.4	0.00	0.00	0.00
17,000.0	90.00	179.63	12,373.0	-4,523.3	-855.9	4,577.0	0.00	0.00	0.00
17,100.0	90.00	179.63	12,373.0	-4,623.3	-855.2	4,676.6	0.00	0.00	0.00
17,200.0	90.00	179.63	12,373.0	-4,723.3	-854.6	4,776.3	0.00	0.00	0.00
17,300.0	90.00	179.63	12,373.0	-4,823.3	-853.9	4,875.9	0.00	0.00	0.00
17,400.0	90.00	179.63	12,373.0	-4,923.2	-853.3	4,975.5	0.00	0.00	0.00
17,500.0	90.00	179.63	12,373.0	-5,023.2	-852.6	5,075.2	0.00	0.00	0.00
17,600.0	90.00	179.63	12,373.0	-5,123.2	-852.0	5,174.8	0.00	0.00	0.00
17,700.0	90.00	179.63	12,373.0	-5,223.2	-851.3	5,274.4	0.00	0.00	0.00
17,800.0	90.00	179.63	12,373.0	-5,323.2	-850.7	5,374.0	0.00	0.00	0.00
17,900.0	90.00	179.63	12,373.0	-5,423.2	-850.0	5,473.7	0.00	0.00	0.00
18,000.0	90.00	179.63	12,373.0	-5,523.2	-849.4	5,573.3	0.00	0.00	0.00
18,100.0	90.00	179.63	12,373.0	-5,623.2	-848.7	5,672.9	0.00	0.00	0.00
18,200.0	90.00	179.63	12,373.0	-5,723.2	-848.1	5,772.6	0.00	0.00	0.00
18,300.0	90.00	179.63	12,373.0	-5,823.2	-847.4	5,872.2	0.00	0.00	0.00
18,400.0	90.00	179.63	12,373.0	-5,923.2	-846.8	5,971.8	0.00	0.00	0.00
18,500.0	90.00	179.63	12,373.0	-6,023.2	-846.1	6,071.4	0.00	0.00	0.00
18,600.0	90.00	179.63	12,373.0	-6,123.2	-845.5	6,171.1	0.00	0.00	0.00
18,700.0	90.00	179.63	12,373.0	-6,223.2	-844.8	6,270.7	0.00	0.00	0.00
18,800.0	90.00	179.63	12,373.0	-6,323.2	-844.2	6,370.3	0.00	0.00	0.00
18,900.0	90.00	179.63	12,373.0	-6,423.2	-843.5	6,470.0	0.00	0.00	0.00
19,000.0	90.00	179.63	12,373.0	-6,523.2	-842.9	6,569.6	0.00	0.00	0.00

ConocoPhillips

Planning Report

Database:	EDT 17 Permian Prod	**Local Co-ordinate Reference:**	Well AVION FEDERAL COM 704H
Company:	DELAWARE BASIN EAST	**TVD Reference:**	RKB=27ft @ 3728.0usft
Project:	LEA COUNTY SOUTHEAST	**MD Reference:**	RKB=27ft @ 3728.0usft
Site:	AVION FEDERAL COM PROJECT	**North Reference:**	Grid
Well:	AVION FEDERAL COM 704H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	OWB		
Design:	PWP1		

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)
19,100.0	90.00	179.63	12,373.0	-6,623.2	-842.2	6,669.2	0.00	0.00	0.00
19,200.0	90.00	179.63	12,373.0	-6,723.2	-841.6	6,768.9	0.00	0.00	0.00
19,300.0	90.00	179.63	12,373.0	-6,823.2	-840.9	6,868.5	0.00	0.00	0.00
19,400.0	90.00	179.63	12,373.0	-6,923.2	-840.3	6,968.1	0.00	0.00	0.00
19,500.0	90.00	179.63	12,373.0	-7,023.2	-839.6	7,067.7	0.00	0.00	0.00
19,600.0	90.00	179.63	12,373.0	-7,123.2	-838.9	7,167.4	0.00	0.00	0.00
19,700.0	90.00	179.63	12,373.0	-7,223.2	-838.3	7,267.0	0.00	0.00	0.00
19,800.0	90.00	179.63	12,373.0	-7,323.2	-837.6	7,366.6	0.00	0.00	0.00
19,900.0	90.00	179.63	12,373.0	-7,423.2	-837.0	7,466.3	0.00	0.00	0.00
20,000.0	90.00	179.63	12,373.0	-7,523.2	-836.3	7,565.9	0.00	0.00	0.00
20,100.0	90.00	179.63	12,373.0	-7,623.2	-835.7	7,665.5	0.00	0.00	0.00
20,200.0	90.00	179.63	12,373.0	-7,723.2	-835.0	7,765.1	0.00	0.00	0.00
20,300.0	90.00	179.63	12,373.0	-7,823.2	-834.4	7,864.8	0.00	0.00	0.00
20,400.0	90.00	179.63	12,373.0	-7,923.2	-833.7	7,964.4	0.00	0.00	0.00
20,500.0	90.00	179.63	12,373.0	-8,023.2	-833.1	8,064.0	0.00	0.00	0.00
20,600.0	90.00	179.63	12,373.0	-8,123.2	-832.4	8,163.7	0.00	0.00	0.00
20,700.0	90.00	179.63	12,373.0	-8,223.2	-831.8	8,263.3	0.00	0.00	0.00
20,800.0	90.00	179.63	12,373.0	-8,323.2	-831.1	8,362.9	0.00	0.00	0.00
20,900.0	90.00	179.63	12,373.0	-8,423.2	-830.5	8,462.5	0.00	0.00	0.00
21,000.0	90.00	179.63	12,373.0	-8,523.2	-829.8	8,562.2	0.00	0.00	0.00
21,100.0	90.00	179.63	12,373.0	-8,623.2	-829.2	8,661.8	0.00	0.00	0.00
21,200.0	90.00	179.63	12,373.0	-8,723.2	-828.5	8,761.4	0.00	0.00	0.00
21,300.0	90.00	179.63	12,373.0	-8,823.2	-827.9	8,861.1	0.00	0.00	0.00
21,400.0	90.00	179.63	12,373.0	-8,923.2	-827.2	8,960.7	0.00	0.00	0.00
21,500.0	90.00	179.63	12,373.0	-9,023.2	-826.6	9,060.3	0.00	0.00	0.00
21,600.0	90.00	179.63	12,373.0	-9,123.2	-825.9	9,160.0	0.00	0.00	0.00
21,700.0	90.00	179.63	12,373.0	-9,223.2	-825.3	9,259.6	0.00	0.00	0.00
21,800.0	90.00	179.63	12,373.0	-9,323.2	-824.6	9,359.2	0.00	0.00	0.00
21,900.0	90.00	179.63	12,373.0	-9,423.2	-824.0	9,458.8	0.00	0.00	0.00
22,000.0	90.00	179.63	12,373.0	-9,523.2	-823.3	9,558.5	0.00	0.00	0.00
22,100.0	90.00	179.63	12,373.0	-9,623.1	-822.7	9,658.1	0.00	0.00	0.00
22,200.0	90.00	179.63	12,373.0	-9,723.1	-822.0	9,757.7	0.00	0.00	0.00
22,300.0	90.00	179.63	12,373.0	-9,823.1	-821.4	9,857.4	0.00	0.00	0.00
22,400.0	90.00	179.63	12,373.0	-9,923.1	-820.7	9,957.0	0.00	0.00	0.00
22,500.0	90.00	179.63	12,373.0	-10,023.1	-820.1	10,056.6	0.00	0.00	0.00
22,600.0	90.00	179.63	12,373.0	-10,123.1	-819.4	10,156.2	0.00	0.00	0.00
22,683.6	90.00	179.63	12,373.0	-10,206.7	-818.9	10,239.5	0.00	0.00	0.00
22,700.0	90.00	179.63	12,373.0	-10,223.1	-818.8	10,255.9	0.00	0.00	0.00
22,733.6	90.00	179.63	12,373.0	-10,256.7	-818.6	10,289.3	0.00	0.00	0.00

ConocoPhillips

Planning Report

Database:	EDT 17 Permian Prod	**Local Co-ordinate Reference:**	Well AVION FEDERAL COM 704H
Company:	DELAWARE BASIN EAST	**TVD Reference:**	RKB=27ft @ 3728.0usft
Project:	LEA COUNTY SOUTHEAST	**MD Reference:**	RKB=27ft @ 3728.0usft
Site:	AVION FEDERAL COM PROJECT	**North Reference:**	Grid
Well:	AVION FEDERAL COM 704H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	OWB		
Design:	PWP1		

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
TNGT WNDW_50'A/B x - plan hits target center - Rectangle (sides W70.0 H100.0 D2,939.9)	14.00	103.02	4,745.8	179.4	-776.0	472,438.93	707,871.28	32° 17' 49.411 N	103° 39' 38.153 W
KOP BOX_0'N x 100'S x - plan hits target center - Rectangle (sides W100.0 H100.0 D6,225.5)	0.00	359.63	11,895.5	205.0	-886.6	472,464.50	707,760.70	32° 17' 49.671 N	103° 39' 39.439 W
PBHL (AVION FEDERAI - plan hits target center - Rectangle (sides W100.0 H10,413.9 D20.0)	0.00	359.63	12,373.0	-10,256.7	-818.6	462,002.80	707,828.70	32° 16' 6.142 N	103° 39' 39.411 W
FTP (AVION FEDERAL - plan misses target center by 164.7usft at 12400.0usft MD (12251.0 TVD, 46.4 N, -885.6 E) - Circle (radius 50.0)	0.00	0.00	12,373.0	156.9	-886.4	472,416.40	707,760.90	32° 17' 49.195 N	103° 39' 39.441 W
LTP (AVION FEDERAL - plan hits target center - Point	0.00	0.00	12,373.0	-10,206.7	-818.9	462,052.80	707,828.40	32° 16' 6.637 N	103° 39' 39.411 W

Plan Annotations

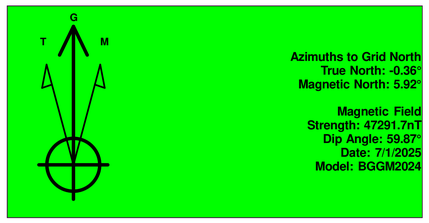
Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates +N/-S (usft)	Local Coordinates +E/-W (usft)	Comment
0.0	0.0	0.0	0.0	HOLD TO NUDGE KOP
1,200.0	1,200.0	0.0	0.0	NUDGE @ DLS 2.00
1,900.1	1,893.2	19.2	-82.9	HOLD TANGENT
4,840.1	4,745.8	179.4	-776.0	END NUDGE
5,773.6	5,670.0	205.0	-886.6	HOLD TO CURVE KOP
11,999.1	11,895.5	205.0	-886.6	KOP-START DLS 12.00 TFO 179.63
12,749.1	12,373.0	-272.4	-883.5	EOC-HOLD
22,683.6	12,373.0	-10,206.7	-818.9	LTP-HOLD
22,733.6	12,373.0	-10,256.7	-818.6	TD @ 22733.6 MD / 10289.3 VS

ConocoPhillips

Project:	LEA COUNTY SOUTHEAST
Site:	AVION FEDERAL COM PROJECT
Well:	AVION FEDERAL COM 704H
Wellbore:	OWB
Design:	PWP1
GL:	3701.0
RKB=27ft @ 3728.0usft	

WELL DETAILS: AVION FEDERAL COM 704H

+N/-S	+E/-W	Northing	Easting	Latittude	Longitude
0.0	0.0	472259.50	708647.30	32° 17' 47.587 N	103° 39' 29.126 W

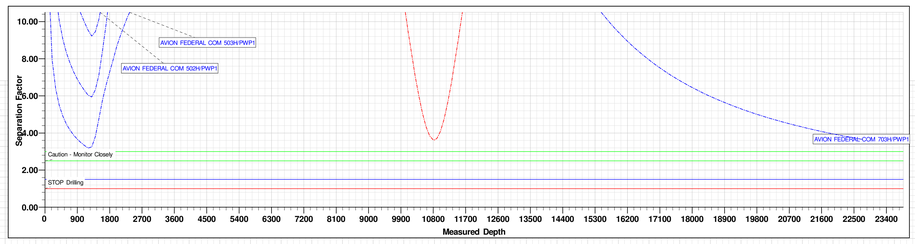


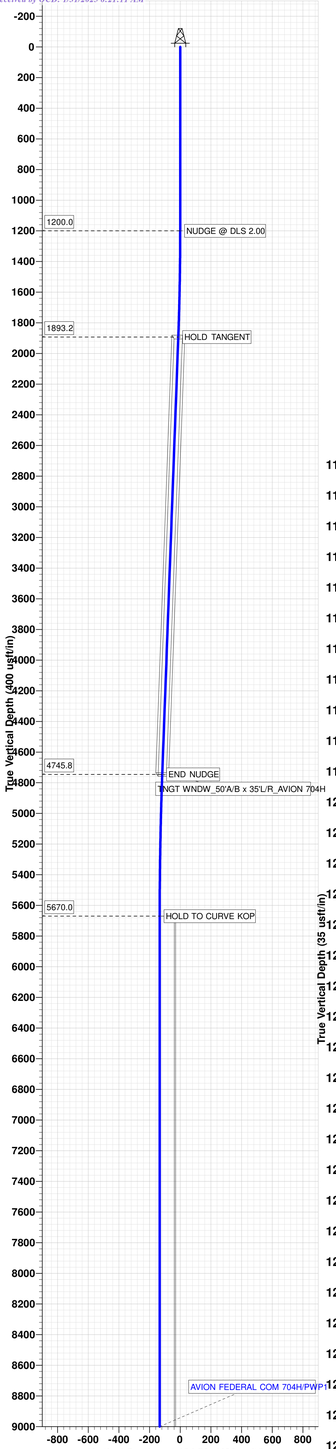
Azimuths to Grid North
True North: -0.36°
Magnetic North: 5.92°

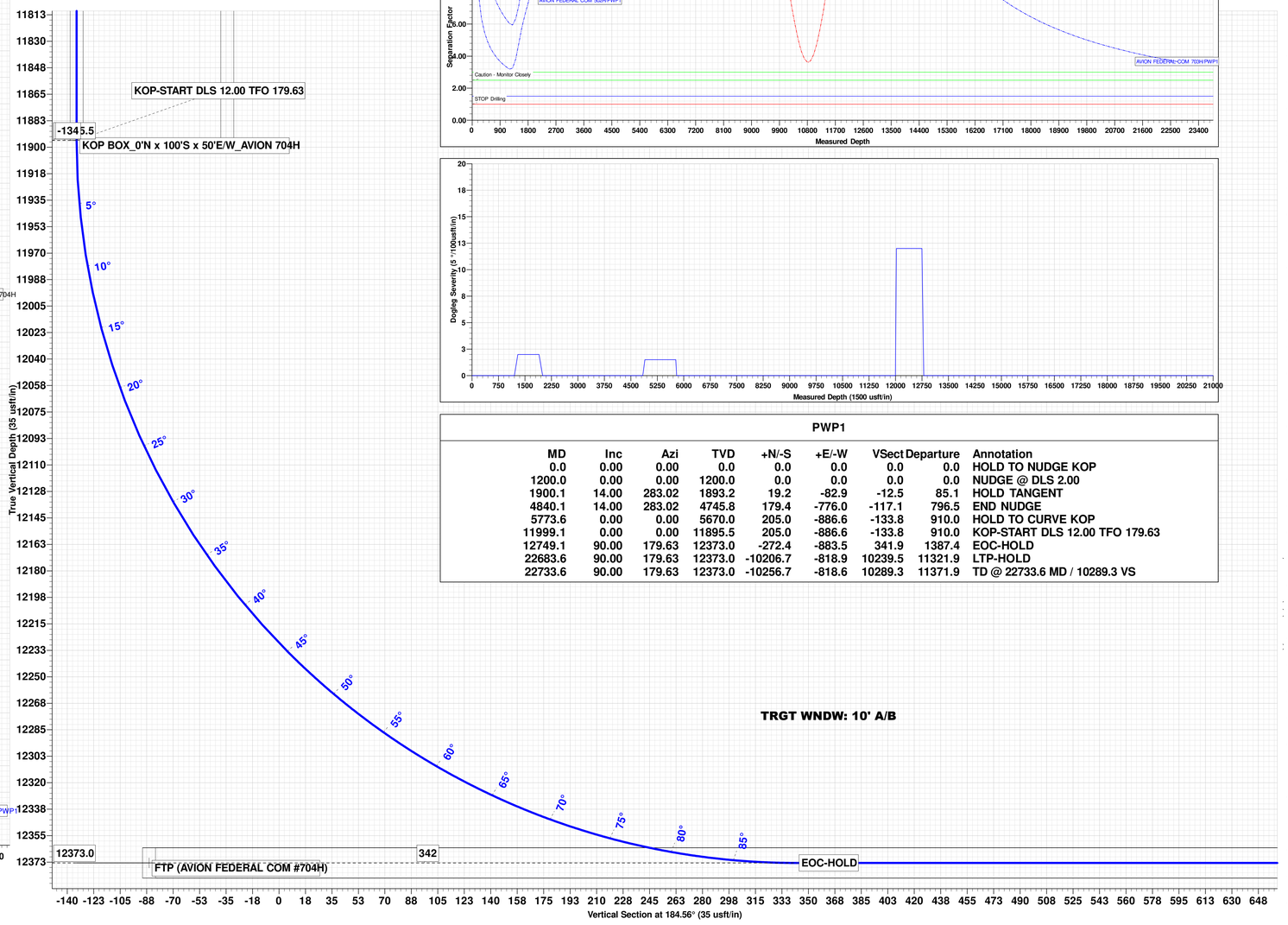
Magnetic Field
Strength: 47291.7nT
Dip Angle: 59.87°
Date: 7/1/2025
Model: BGGM2024

DESIGN TARGET DETAILS

Name	TVD	+N/-S	+E/-W	Northing	Easting	Shape
TNGT WNDW_50'A/B x 35'L/R_AVION 704H	4745.8	179.4	-776.0	472438.93	707871.28	Rectangle (Sides: L100.0 W70.0)
KOP BOX_0'N x 100'S x 50'E/W_AVION 704H	11895.5	205.0	-886.6	472464.50	707760.70	Rectangle (Sides: L100.0 W100.0)
FTP (AVION FEDERAL COM #704H)	12373.0	156.9	-886.4	472416.40	707760.90	Circle (Radius: 50.0)
LTP (AVION FEDERAL COM #704H)	12373.0	-10206.7	-818.9	462052.80	707828.40	Point
PBHL (AVION FEDERAL COM #704H)	12373.0	-10256.7	-818.6	462002.80	707828.70	Rectangle (Sides: L10413.9 W100.0)

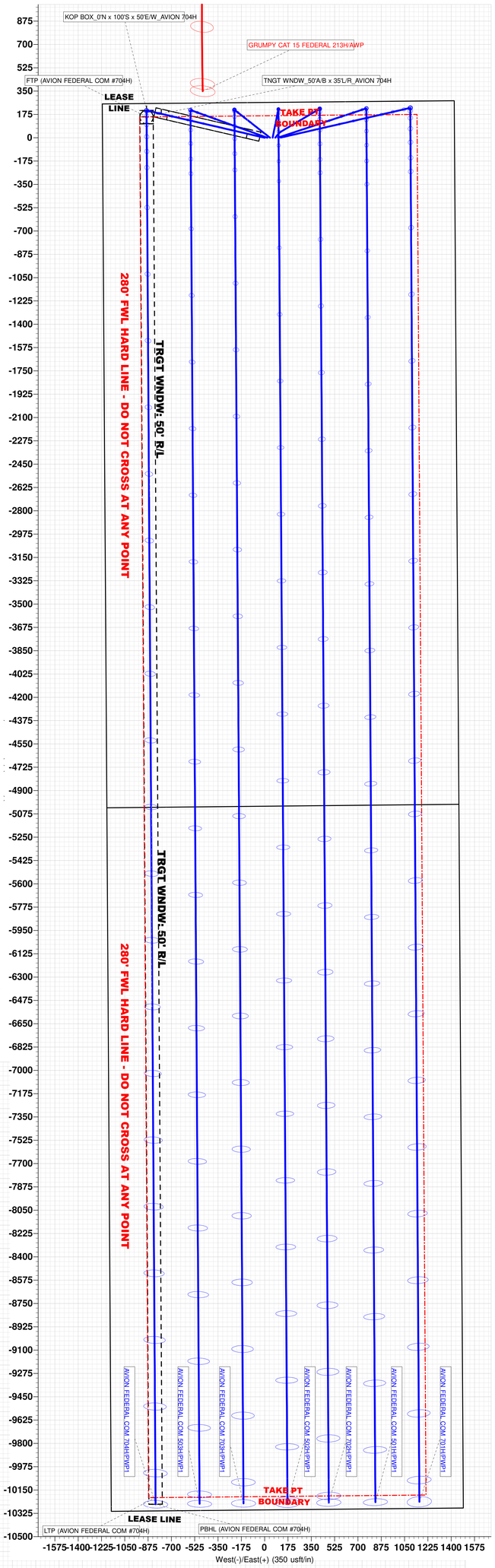


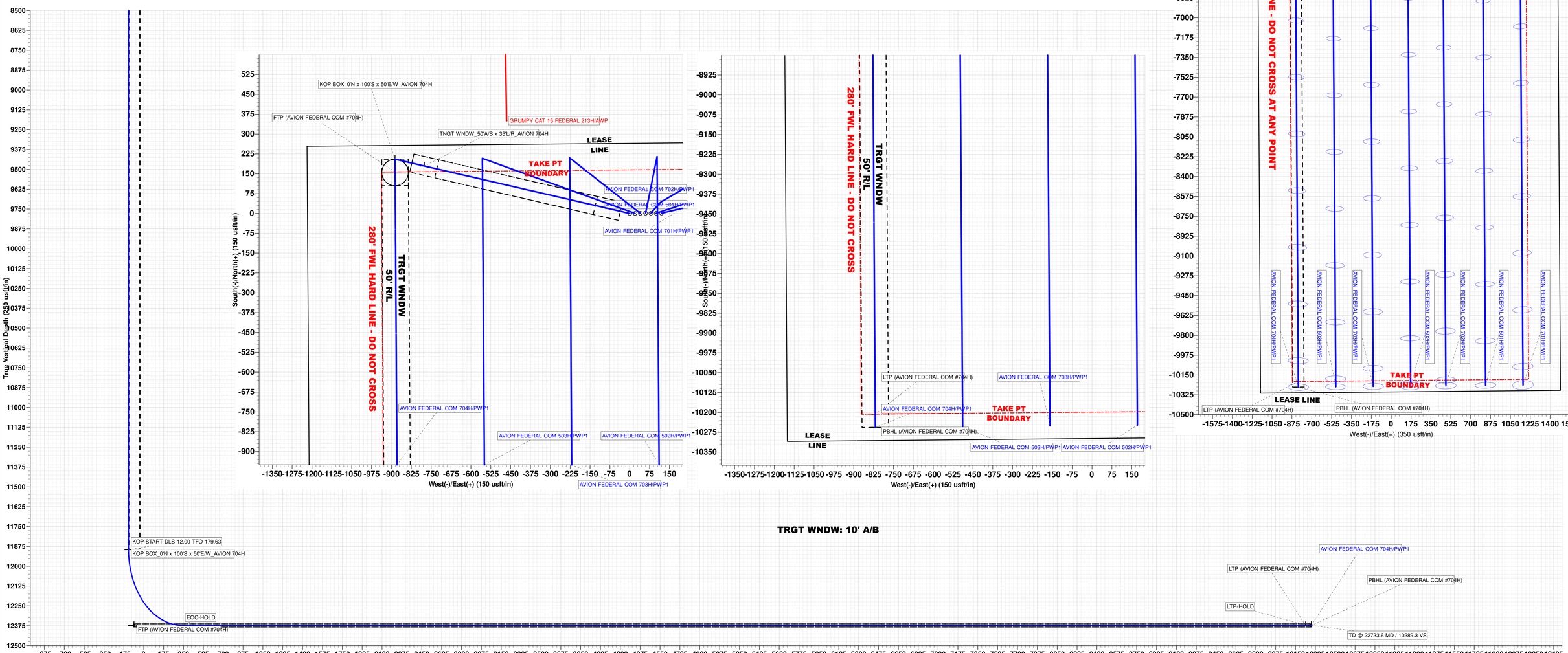




PWP1

MD	Inc	Azi	TVD	+N/-S	+E/-W	VSect	Departure	Annotation
0.0	0.00	0.00	0.0	0.0	0.0	0.0	0.0	HOLD TO NUDGE KOP
1200.0	0.00	0.00	1200.0	0.0	0.0	0.0	0.0	NUDGE @ DLS 2.00
1900.1	14.00	283.02	1893.2	19.2	-82.9	-12.5	85.1	HOLD TANGENT
4840.1	14.00	283.02	4745.8	179.4	-776.0	-117.1	796.5	END NUDGE
5773.6	0.00	0.00	5670.0	205.0	-886.6	-133.8	910.0	HOLD TO CURVE KOP
11999.1	0.00	0.00	11895.5	205.0	-886.6	-133.8	910.0	KOP-START DLS 12.00 TFO 179.63
12749.1	90.00	179.63	12373.0	-272.4	-883.5	341.9	1387.4	EOC-HOLD
22683.6	90.00	179.63	12373.0	-10206.7	-818.9	10239.5	11321.9	LTP-HOLD
22733.6	90.00	179.63	12373.0	-10256.7	-818.6	10289.3	11371.9	TD @ 22733.6 MD / 10289.3 VS





Tenaris

TXP® BTC

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

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

Pipe Body Data

Geometry				Performance	
Nominal OD	5.500 in.	**Wall Thickness**	0.415 in.	**Body Yield Strength**	729 x1000 lb
Nominal Weight	23.00 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	6.200 in.	**Tension Efficiency**	100 %	**Minimum**	12,980 ft-lb
Coupling Length	9.450 in.	**Joint Yield Strength**	729 x1000 lb	**Optimum**	14,420 ft-lb
Connection ID	4.658 in.	**Internal Pressure Capacity**	14,530 psi	**Maximum**	15,860 ft-lb
Make-up Loss	4.204 in.	**Compression Efficiency**	100 %		
Threads per inch	5	**Compression Strength**	729 x1000 lb	**Operation Limit Torques**	
Connection OD Option	Regular	**Max. Allowable Bending**	92 °/100 ft	**Operating Torque**	24,200 ft-lb
		External Pressure Capacity	14,540 psi	**Yield Torque**	26,900 ft-lb
		Coupling Face Load	302,000 lb		

Notes

This connection is fully interchangeable with:
TXP® BTC - 5.5 in. - 0.275 (15.50) / 0.304 (17.00) / 0.361 (20.00) / 0.476 (26.00) in. (lb/ft)
Connections with Dopeless® Technology are fully compatible with the same connection in its doped version
Datasheet is also valid for Special Bevel option when applicable - except for Coupling Face Load, which will be reduced. Please contact a local Tenaris technical sales representative.
Standard coupling design comes with optimized 20° bevel.

For the 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	23.00 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	
Connection OD	5.900 in.	**Tension Efficiency**	90.80 %
Coupling Length	8.714 in.	**Joint Yield Strength**	662 x1000 lb
Connection ID	4.670 in.	**Internal Pressure Capacity**	14,530 psi
Make-up Loss	3.780 in.	**Compression Efficiency**	90.80 %
Threads per inch	3.40	**Compression Strength**	662 x1000 lb
Connection OD Option	Regular	**Max. Allowable Bending**	83.54 °/100 ft
		External Pressure Capacity	14,540 psi
		Coupling Face Load	172,000 lb

Make-Up Torques	
Minimum	15,000 ft-lb
Optimum	16,000 ft-lb
Maximum	19,200 ft-lb
Operation Limit Torques	
Operating Torque	33,000 ft-lb
Yield Torque	39,000 ft-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 (26.00) 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

PECOS DISTRICT
DRILLING CONDITIONS OF APPROVAL

OPERATOR'S NAME:	COG OPERATING LLC
WELL NAME & NO.:	AVION FED COM 704H
LOCATION:	Section 22, T.23 S., R.32 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	[x] Fluid Filled	[ ] Pilot Hole	[ ] Open Annulus
Cementing	[x] Contingency Cement Squeeze	[ ] EchoMeter	[ ] Primary Cement Squeeze
Special Requirements	[ ] Water Disposal	[x] COM	[ ] Unit
Special Requirements	[ ] Batch Sundry		
Special Requirements Variance	[ ] Break Testing	[x] Offline Cementing	[x] 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 **1350 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.**

Operator has proposed 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.

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.

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.

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.

Offline Cementing

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

Casing Clearance:

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

Operator shall clean up cycles until wellbore is clear of cuttings and any large debris, ensure cutting sizes are adequate "coffee ground or less" before cementing.

GENERAL REQUIREMENTS

The BLM is to be notified in advance for a representative to witness:

a. Spudding well (minimum of 24 hours)
b. Setting and/or Cementing of all casing strings (minimum of 4 hours)
c. BOPE tests (minimum of 4 hours)

☒ Eddy County
EMAIL or call the Carlsbad Field Office, 620 East Greene St., Carlsbad, NM 88220,
BLM_NM_CFO_DrillingNotifications@BLM.GOV
(575) 361-2822

☒ Lea County
Call the Hobbs Field Station, 414 West Taylor, Hobbs NM 88240,
(575) 689-5981

1. Unless the production casing has been run and cemented or the well has been properly plugged, the drilling rig shall not be removed from over the hole without prior approval.
    a. In the event the operator has proposed to drill multiple wells utilizing a skid/walking rig. Operator shall secure the wellbore on the current well, after installing and testing the wellhead, by installing a blind flange of like pressure rating to the wellhead and a pressure gauge that can be monitored while drilling is performed on the other well(s).
    b. When the operator proposes to set surface casing with Spudder Rig
        i. Notify the BLM when moving in and removing the Spudder Rig.
        ii. Notify the BLM when moving in the 2nd Rig. Rig to be moved in within 90 days of notification that Spudder Rig has left the location.
        iii. BOP/BOPE test to be conducted per **43 CFR 3172** as soon as 2nd Rig is rigged up on well.
2. Floor controls are required for 3M or Greater systems. These controls will be on the rig floor, unobstructed, readily accessible to the driller and will be operational at all times during drilling and/or completion activities. Rig floor is defined as the area immediately around the rotary table; the area immediately above the substructure on which the draw works are located, this does not include the dog house or stairway area.
3. For intervals in which cement to surface is required, cement to surface should be verified with a visual check and density or pH check to differentiate cement from spacer and drilling mud. The results should be documented in the driller's log and daily reports.

A. CASING

1. Changes to the approved APD casing program need prior approval if the items substituted are of lesser grade or different casing size or are Non-API. The Operator can exchange the components of the proposal with that of superior strength (i.e. changing from J-55 to N-80, or from 36# to 40#). Changes to the approved cement program need prior approval if the altered cement plan has less volume or strength or if the changes are substantial (i.e. Multistage tool, ECP, etc.). The initial wellhead installed on the well will remain on the well with spools used as needed.

2. Wait on cement (WOC) for Potash Areas: After cementing but before commencing any tests, the casing string shall stand cemented under pressure until both of the following conditions have been met: 1) cement reaches a minimum compressive strength of 500 psi for all cement blends of both lead and tail cement, 2) until cement has been in place at least 8 hours. WOC time will be recorded in the driller's log. The casing integrity test can be done (prior to the cement setting up) immediately after bumping the plug.
3. Wait on cement (WOC) for Water Basin: After cementing but before commencing any tests, the casing string shall stand cemented under pressure until both of the following conditions have been met: 1) cement reaches a minimum compressive strength of 500 psi at the shoe, 2) until cement has been in place at least 8 hours. WOC time will be recorded in the driller's log. See individual casing strings for details regarding lead cement slurry requirements. The casing integrity test can be done (prior to the cement setting up) immediately after bumping the plug.
4. Provide compressive strengths including hours to reach required 500 pounds compressive strength prior to cementing each casing string. Have well specific cement details onsite prior to pumping the cement for each casing string.
5. No pea gravel permitted for remedial or fall back remedial without prior authorization from the BLM engineer.
6. On that portion of any well approved for a 5M BOPE system or greater, a pressure integrity test of each casing shoe shall be performed. Formation at the shoe shall be tested to a minimum of the mud weight equivalent anticipated to control the formation pressure to the next casing depth or at total depth of the well. This test shall be performed before drilling more than 20 feet of new hole.
7. If hardband drill pipe is rotated inside casing, returns will be monitored for metal. If metal is found in samples, drill pipe will be pulled and rubber protectors which have a larger diameter than the tool joints of the drill pipe will be installed prior to continuing drilling operations.
8. Whenever a casing string is cemented in the R-111-Q potash area, the NMOCD requirements shall be followed.

B. PRESSURE CONTROL

1. All blowout preventer (BOP) and related equipment (BOPE) shall comply with well control requirements as described in **43 CFR 3172**.
2. If a variance is approved for a flexible hose to be installed from the BOP to the choke manifold, the following requirements apply: The flex line

must meet the requirements of API 16C. Check condition of flexible line from BOP to choke manifold, replace if exterior is damaged or if line fails test. Line to be as straight as possible with no hard bends and is to be anchored according to Manufacturer's requirements. The flexible hose can be exchanged with a hose of equal size and equal or greater pressure rating. Anchor requirements, specification sheet and hydrostatic pressure test certification matching the hose in service, to be onsite for review. These documents shall be posted in the company man's trailer and on the rig floor.

3. 5M or higher system requires an HCR valve, remote kill line and annular to match. The remote kill line is to be installed prior to testing the system and tested to stack pressure.
4. If the operator has proposed a multi-bowl wellhead assembly in the APD. The following requirements must be met:
    i. Wellhead shall be installed by manufacturer's representatives, submit documentation with subsequent sundry.
    ii. If the welding is performed by a third party, the manufacturer's representative shall monitor the temperature to verify that it does not exceed the maximum temperature of the seal.
    iii. Manufacturer representative shall install the test plug for the initial BOP test.
    iv. Whenever any seal subject to test pressure is broken, all the tests in 43 CFR 3172.6(b)(9) must be followed.
    v. If the cement does not circulate and one inch operations would have been possible with a standard wellhead, the well head shall be cut off, cementing operations performed and another wellhead installed.
5. The appropriate BLM office shall be notified a minimum of 4 hours in advance for a representative to witness the tests.
    i. In a water basin, for all casing strings utilizing slips, these are to be set as soon as the crew and rig are ready and any fallback cement remediation has been done. The casing cut-off and BOP installation can be initiated four hours after installing the slips, which will be approximately six hours after bumping the plug. For those casing strings not using slips, the minimum wait time before cut-off is eight hours after bumping the plug. BOP/BOPE testing can begin after cut-off or once cement reaches 500 psi compressive strength (including lead cement), whichever is greater. However, if the float does not hold, cut-off cannot be initiated until cement

reaches 500 psi compressive strength (including lead when specified).

ii. In potash areas, for all casing strings utilizing slips, these are to be set as soon as the crew and rig are ready and any fallback cement remediation has been done. For all casing strings, casing cut-off and BOP installation can be initiated at twelve hours after bumping the cement plug. The BOPE test can be initiated after bumping the cement plug with the casing valve open. (only applies to single stage cement jobs, prior to the cement setting up.)

iii. The tests shall be done by an independent service company utilizing a test plug not a cup or J-packer and can be initiated immediately with the casing valve open. The operator also has the option of utilizing an independent tester to test without a plug (i.e. against the casing) pursuant to **43 CFR 3172** with the pressure not to exceed 70% of the burst rating for the casing. Any test against the casing must meet the WOC time for 8 hours or 500 pounds compressive strength, whichever is greater, prior to initiating the test (see casing segment as lead cement may be critical item).

iv. The test shall be run on a 5000 psi chart for a 2-3M BOP/BOP, on a 10000 psi chart for a 5M BOP/BOPE and on a 15000 psi chart for a 10M BOP/BOPE. If a linear chart is used, it shall be a one hour chart. A circular chart shall have a maximum 2 hour clock. If a twelve hour or twenty-four hour chart is used, tester shall make a notation that it is run with a two hour clock.

v. The results of the test shall be reported to the appropriate BLM office.

vi. All tests are required to be recorded on a calibrated test chart. A copy of the BOP/BOPE test chart and a copy of independent service company test will be submitted to the appropriate BLM office.

vii. The BOP/BOPE test shall include a low pressure test from 250 to 300 psi. The test will be held for a minimum of 10 minutes if test is done with a test plug and 30 minutes without a test plug. This test shall be performed prior to the test at full stack pressure.

viii. BOP/BOPE must be tested by an independent service company within 500 feet of the top of the Wolfcamp formation if the time between the setting of the intermediate casing and reaching this depth exceeds 20 days. This test does not exclude the test prior to drilling out the casing shoe as per **43 CFR 3172**.

C. DRILLING MUD

Mud system monitoring equipment, with derrick floor indicators and visual and audio alarms, shall be operating before drilling into the Wolfcamp formation, and shall be used until production casing is run and cemented.

D. WASTE MATERIAL AND FLUIDS

All waste (i.e. drilling fluids, trash, salts, chemicals, sewage, gray water, etc.) created as a result of drilling operations and completion operations shall be safely contained and disposed of properly at a waste disposal facility. No waste material or fluid shall be disposed of on the well location or surrounding area. Porto-johns and trash containers will be on-location during fracturing operations or any other crew-intensive operations.

JS 1/29/2025

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: 427031
	Action Type: [C-103] NOI Change of Plans (C-103A)

CONDITIONS

Created By	Condition	Condition Date
matthew.gomez	The C-103 NOI was not approved or rejected; however, the work requested in the C-103 NOI was performed and completed without NMOCD approval. This action will result in review for potential compliance actions.	8/26/2025