

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

Form C-101
August 1, 2011
Permit 407911

APPLICATION FOR PERMIT TO DRILL, RE-ENTER, DEEPEN, PLUGBACK, OR ADD A ZONE

1. Operator Name and Address COG OPERATING LLC 600 W Illinois Ave Midland, TX 79701		2. OGRID Number 229137
4. Property Code 317530		3. API Number 30-025-55898
5. Property Name COLUMBUS FEDERAL COM		6. Well No. 653H

7. Surface Location

UL - Lot C	Section 34	Township 25S	Range 33E	Lot Idn	Feet From 400	N/S Line N	Feet From 2405	E/W Line W	County Lea
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8. Proposed Bottom Hole Location

UL - Lot O	Section 3	Township 26S	Range 33E	Lot Idn O	Feet From 50	N/S Line S	Feet From 1980	E/W Line E	County Lea
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9. Pool Information

WC-025 G-09 S253335K;LWR BONE SPRIN	97741
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Additional Well Information

11. Work Type New Well	12. Well Type OIL	13. Cable/Rotary	14. Lease Type Federal	15. Ground Level Elevation 3329
16. Multiple N	17. Proposed Depth 21540	18. Formation 3rd Bone Spring Carbonate	19. Contractor	20. Spud Date 1/1/2027
Depth to Ground water		Distance from nearest fresh water well		Distance to nearest surface water

We will be using a closed-loop system in lieu of lined pits

21. Proposed Casing and Cement Program

Type	Hole Size	Casing Size	Casing Weight/ft	Setting Depth	Sacks of Cement	Estimated TOC
Surf	14.75	10.75	45.5	1230	840	0
Int1	8.75	7.625	29.7	10900	1010	0
Int1	9.875	7.625	29.7	7500	1010	0
Prod	6.75	5.5	20	21540	1500	10400

Casing/Cement Program: Additional Comments

Tapered intermediate hole: 0' - 7500' 9.875", 7500' - 10900' 8.75".

22. Proposed Blowout Prevention Program

Type	Working Pressure	Test Pressure	Manufacturer
Double Ram	10000	5000	N/A

23. I hereby certify that the information given above is true and complete to the best of my knowledge and belief. I hereby certify that no additives containing PFAS chemicals will be added to the completion or recompletion of this well. I further certify I have complied with 19.15.14.9 (A) NMAC <input checked="" type="checkbox"/> and/or 19.15.14.9 (B) NMAC <input checked="" type="checkbox"/> if applicable. Signature:	OIL CONSERVATION DIVISION		
	Printed Name: Electronically filed by Robyn Russell	Approved By: Jeffrey Harrison	
	Title: Supervisor Delaware Regulatory	Title: Petroleum Specialist III	
	Email Address: robyn.m.russell@conocophillips.com	Approved Date: 2/5/2026	Expiration Date: 2/5/2028
	Date: 1/28/2026	Phone: 432-685-4385	Conditions of Approval Attached

C-102 Submit Electronically Via OCD Permitting	State of New Mexico Energy, Minerals & Natural Resources Department OIL CONSERVATION DIVISION	Revised July 9, 2024 Submittal Type: <input checked="" type="checkbox"/> Initial Submittal <input type="checkbox"/> Amended Report <input type="checkbox"/> As Drilled
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WELL LOCATION INFORMATION

API Number 30-025-55898	Pool Code 97741	Pool Name WC-025 G-09 S253335K; LWR Bone Spring
Property Code 317530	Property Name COLUMBUS FEDERAL COM	Well Number 653H
OGRID No. 229137	Operator Name COG OPERATING LLC	Ground Level Elevation 3330.1'
Surface Owner: <input type="checkbox"/> State <input type="checkbox"/> Fee <input type="checkbox"/> Tribal <input checked="" type="checkbox"/> Federal		Mineral Owner: <input type="checkbox"/> State <input checked="" type="checkbox"/> Fee <input type="checkbox"/> Tribal <input type="checkbox"/> Federal

Surface Location

UL	Section	Township	Range	Lot	Ft. from N/S	Ft. from E/W	Latitude	Longitude	County
C	34	25-S	33-E		400 FNL	2405 FWL	32.093166°N	103.560987°W	LEA

Bottom Hole Location

UL	Section	Township	Range	Lot	Ft. from N/S	Ft. from E/W	Latitude	Longitude	County
0	3	26-S	33-E		50 FSL	1980 FEL	32.065388°N	103.558064°W	LEA

Dedicated Acres 960	Infill or Defining Well Infill	Defining Well API Pending 504H	Overlapping Spacing Unit (Y/N) Yes	Consolidation Code Com
Order Numbers.			Well setbacks are under Common Ownership: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	

Kick Off Point (KOP)

UL	Section	Township	Range	Lot	Ft. from N/S	Ft. from E/W	Latitude	Longitude	County
C	34	25-S	33-E		400 FNL	2405 FWL	32.093166°N	103.560987°W	LEA

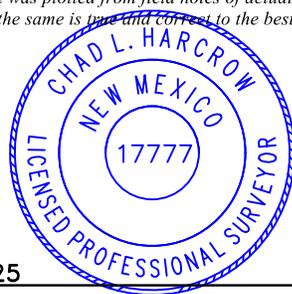
First Take Point (FTP)

UL	Section	Township	Range	Lot	Ft. from N/S	Ft. from E/W	Latitude	Longitude	County
B	34	25-S	33-E		100 FNL	1980 FEL	32.093993°N	103.558050°W	LEA

Last Take Point (LTP)

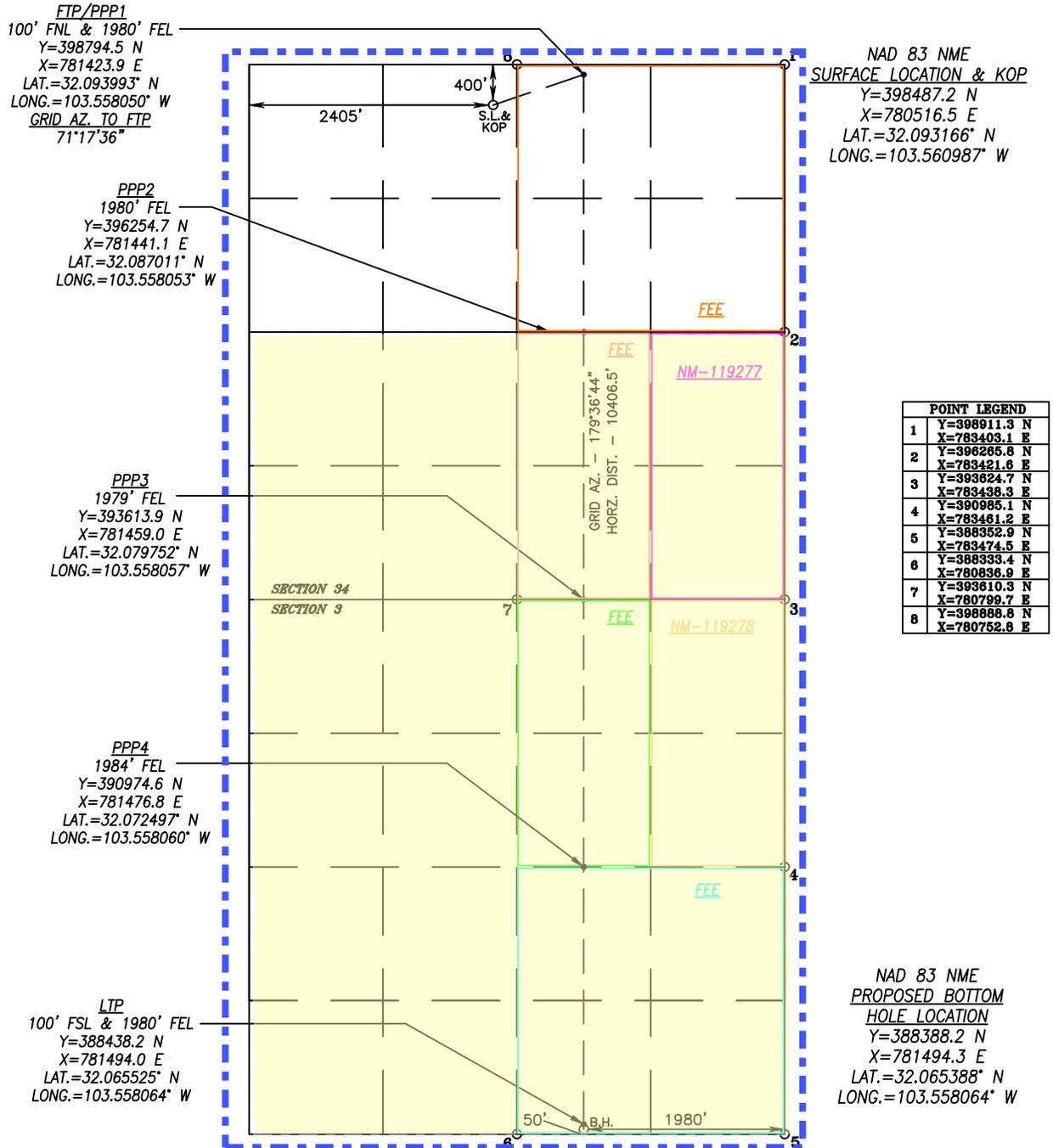
UL	Section	Township	Range	Lot	Ft. from N/S	Ft. from E/W	Latitude	Longitude	County
0	3	26-S	33-E		100 FSL	1980 FEL	32.065525°N	103.558064°W	LEA

Unitized Area or Area of Uniform Interest	Spacing Unit Type <input checked="" type="checkbox"/> Horizontal <input type="checkbox"/> Vertical	Ground Floor Elevation: 3330.1'
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<p>OPERATOR CERTIFICATIONS</p> <p><i>I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief, and, if the well is a vertical or directional well, that this organization either owns a working interest or unleased mineral interest in the land including the proposed bottom hole location or has a right to drill this well at this location pursuant to a contract with an owner of a working interest or unleased mineral interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division.</i></p> <p><i>If this well is a horizontal well, I further certify that this organization has received the consent of at least one lessee or owner of a working interest or unleased mineral interest in each tract (in the target pool or formation) in which any part of the well's completed interval will be located or obtained a compulsory pooling order from the division.</i></p>	<p>SURVEYOR CERTIFICATIONS</p> <p><i>I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my belief.</i></p> <div style="text-align: right;">  </div> <p style="text-align: right;"><i>Chad Harcrow</i> 11/30/25</p>
Signature: <i>Stan Wagner</i> Date: 1/22/26	Signature and Seal of Professional Surveyor
Printed Name: Stan Wagner	Certificate Number: 17777
Email Address:	Date of Survey: NOVEMBER 10, 2025
	W.O.#25-1385 DRAWN BY: WN PAGE 1 OF 2

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

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



C-102 Submit Electronically Via OCD Permitting	State of New Mexico Energy, Minerals & Natural Resources Department OIL CONSERVATION DIVISION	Revised July 9, 2024			
		Submittal Type: <table border="1" style="width:100%; border-collapse: collapse;"> <tr> <td><input checked="" type="checkbox"/> Initial Submittal</td> </tr> <tr> <td><input type="checkbox"/> Amended Report</td> </tr> <tr> <td><input type="checkbox"/> As Drilled</td> </tr> </table>	<input checked="" type="checkbox"/> Initial Submittal	<input type="checkbox"/> Amended Report	<input type="checkbox"/> As Drilled
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<input type="checkbox"/> Amended Report					
<input type="checkbox"/> As Drilled					

WELL LOCATION INFORMATION

API Number 30-025-55898	Pool Code 97741	Pool Name Red Hills; Lower Bone Springs
Property Code 317530	Property Name COLUMBUS FEDERAL COM	Well Number 653H
OGRID No. 229137	Operator Name COG OPERATING LLC	Ground Level Elevation 3330.1'
Surface Owner: <input type="checkbox"/> State <input type="checkbox"/> Fee <input type="checkbox"/> Tribal <input checked="" type="checkbox"/> Federal		Mineral Owner: <input type="checkbox"/> State <input checked="" type="checkbox"/> Fee <input type="checkbox"/> Tribal <input type="checkbox"/> Federal

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Dedicated Acres 320	Infill or Defining Well Infill	Defining Well API Pending 504H	Overlapping Spacing Unit (Y/N) Yes	Consolidation Code Com
Order Numbers.			Well setbacks are under Common Ownership: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	

Kick Off Point (KOP)

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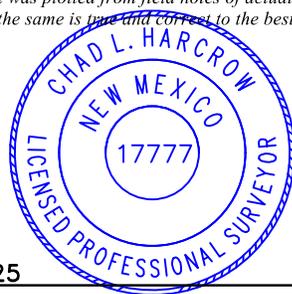
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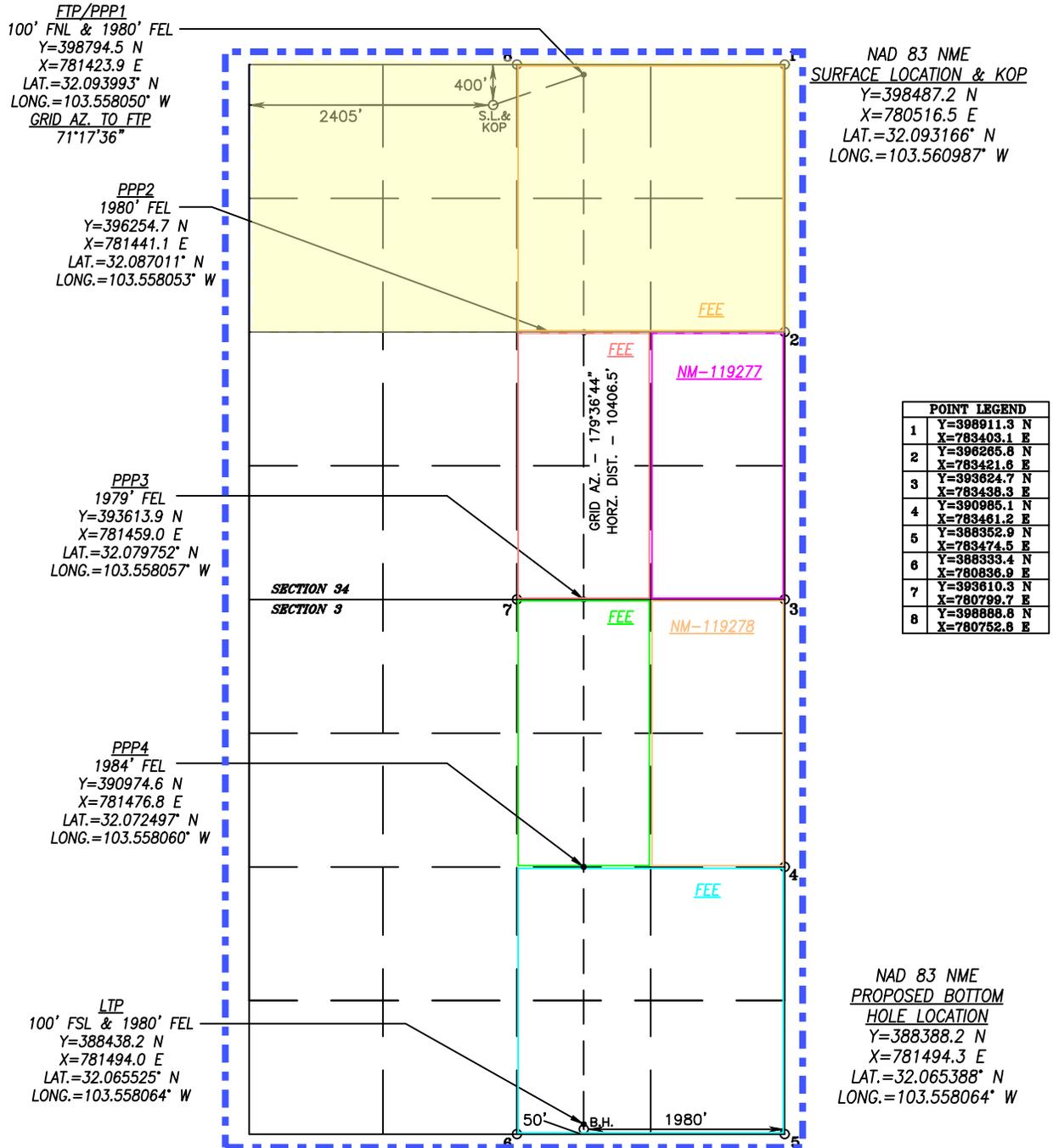
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Signature <i>Stan Wagner</i> Date 1/22/26	Signature and Seal of Professional Surveyor
Printed Name Stan Wagner	Certificate Number 17777
Email Address	Date of Survey NOVEMBER 10, 2025
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State of New Mexico
Energy, Minerals and Natural Resources
Oil Conservation Division
1220 S. St Francis Dr.
Santa Fe, NM 87505

Form APD Comments

Permit 407911

PERMIT COMMENTS

Operator Name and Address: COG OPERATING LLC [229137] 600 W Illinois Ave Midland, TX 79701		API Number: 30-025-55898
		Well: COLUMBUS FEDERAL COM #653H
Created By	Comment	Comment Date
jeffrey.harrison	Infill to 30-025-55896 COLUMBUS FEDERAL COM #504H	2/5/2026

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Phone: (505) 476-3441

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

Form APD Conditions

Permit 407911

PERMIT CONDITIONS OF APPROVAL

Operator Name and Address: COG OPERATING LLC [229137] 600 W Illinois Ave Midland, TX 79701	API Number: 30-025-55898
	Well: COLUMBUS FEDERAL COM #653H

OCD Reviewer	Condition
jeffrey.harrison	No additives containing PFAS chemicals will be added to the drilling fluids or completion fluids used during drilling, completions, or recompletions operations.
jeffrey.harrison	NSP required if not included in an existing order or not an infill to an appropriate defining well in the same pool and spacing unit.
jeffrey.harrison	Cement must be in place for at least 8 hours and achieve a minimum compressive strength of 500 psi before performing further operations on the well.
jeffrey.harrison	File As Drilled C-102 and a directional Survey with C-104 completion packet.
jeffrey.harrison	Notify the OCD 24 hours prior to casing & cement.
jeffrey.harrison	A [C-103] Sub. Drilling (C-103N) is required within (10) days of spud.
jeffrey.harrison	Oil base muds are not to be used until fresh water zones are cased and cemented providing isolation from the oil or diesel. This includes synthetic oils. Oil based mud, drilling fluids and solids must be contained in a steel closed loop system.
jeffrey.harrison	Once the well is spud, to prevent ground water contamination through whole or partial conduits from the surface, the operator shall drill without interruption through the fresh water zone or zones and shall immediately set in cement the water protection string.

DELAWARE BASIN EAST

**LEA COUNT SOUTH WEST (NM-E)
COLUMBUS FEDERAL PROJECT
_COLUMBUS FEDERAL COM 653H**

**OWB
PWP0**

Anticollision Report

14 January, 2026

ConocoPhillips Anticollision Report

Company:	DELAWARE BASIN EAST	Local Co-ordinate Reference:	Well _COLUMBUS FEDERAL COM 653H - Slot SLOT 7
Project:	LEA COUNT SOUTH WEST (NM-E)	TVD Reference:	KB @ 3362.00usft
Reference Site:	COLUMBUS FEDERAL PROJECT	MD Reference:	KB @ 3362.00usft
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	_COLUMBUS FEDERAL COM 653H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDT 17 Permian Prod
Reference Design:	PWP0	Offset TVD Reference:	Reference Datum

Reference	PWP0		
Filter type:	NO GLOBAL FILTER: Using user defined selection & filtering criteria		
Interpolation Method:	MD + Stations Interval 100.00usft	Error Model:	ISCWSA
Depth Range:	Unlimited	Scan Method:	Closest Approach 3D
Results Limited by:	Max. Cent. Dist. of 1,000.00usft or Max. Ell. Sep. of 500.00usft	Error Surface:	Combined Pedal Curve
Warning Levels Evaluated at:	2.79 Sigma	Casing Method:	Added to Error Values

Survey Tool Program	Date	1/13/2026		
From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description
0.00	21,539.67	PWP0 (OWB)	r.5 MWD+IFR1+SAG+FDIR	ISCWSA MWD + IFR1 + SAG + FDIR Corr

Site Name	Reference Measured Depth (usft)	Offset Measured Depth (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Separation Factor	Warning
Summary						
Offset Well - Wellbore - Design						
COLUMBUS FEDERAL PROJECT						
_COLUMBUS FEDERAL COM 503H - OWB - PWP0	2,000.00	2,000.00	40.00	28.56	3.497	CC, ES
_COLUMBUS FEDERAL COM 503H - OWB - PWP0	2,100.00	2,099.04	41.18	29.40	3.496	SF
_COLUMBUS FEDERAL COM 504H - OWB - PWP0	1,699.75	1,699.91	18.75	8.26	1.787	Caution - Monitor Closely, CC
_COLUMBUS FEDERAL COM 504H - OWB - PWP0	1,700.00	1,700.16	18.75	8.26	1.787	Caution - Monitor Closely, ES, SF
_COLUMBUS FEDERAL COM 505H - OWB - PWP0	2,000.00	2,000.00	19.94	8.50	1.743	Caution - Monitor Closely, CC, ES, SF
_COLUMBUS FEDERAL COM 506H - OWB - PWP0	1,500.00	1,500.00	59.94	50.12	6.102	CC, ES
_COLUMBUS FEDERAL COM 506H - OWB - PWP0	1,600.00	1,597.91	61.65	51.41	6.019	SF
_COLUMBUS FEDERAL COM 651H - OWB - PWP0	2,000.00	2,000.00	100.00	88.56	8.742	CC, ES
_COLUMBUS FEDERAL COM 651H - OWB - PWP0	2,100.00	2,096.65	101.66	89.86	8.612	SF
_COLUMBUS FEDERAL COM 652H - OWB - PWP0	2,000.00	2,000.00	60.00	48.56	5.245	CC, ES
_COLUMBUS FEDERAL COM 652H - OWB - PWP0	2,100.00	2,098.18	61.49	49.70	5.214	SF
_COLUMBUS FEDERAL COM 654H - OWB - PWP0	1,500.00	1,500.00	40.00	30.18	4.072	CC, ES
_COLUMBUS FEDERAL COM 654H - OWB - PWP0	1,600.00	1,598.59	41.72	31.47	4.072	SF
COLUMBUS FEDERAL COM #21H - OWB - AWP						Out of range
COLUMBUS FEDERAL COM #22H - OWB - AWP	11,073.86	11,004.93	773.89	741.98	24.252	CC
COLUMBUS FEDERAL COM #22H - OWB - AWP	11,075.00	11,006.04	773.89	741.97	24.251	ES
COLUMBUS FEDERAL COM #22H - OWB - AWP	11,150.00	11,077.27	774.29	742.34	24.240	SF
COLUMBUS FEDERAL COM #701H - OWB - AWP						Out of range
COLUMBUS FEDERAL COM #702H - OWB - AWP						Out of range
COLUMBUS FEDERAL COM 501H - OWB - PWP1	1,710.00	1,710.00	119.99	110.88	13.166	CC, ES
COLUMBUS FEDERAL COM 501H - OWB - PWP1	1,900.00	1,893.92	123.72	113.98	12.705	SF
COLUMBUS FEDERAL COM 502H - OWB - PWP1	2,000.00	2,000.00	80.00	70.11	8.090	CC, ES
COLUMBUS FEDERAL COM 502H - OWB - PWP1	2,100.00	2,097.31	81.66	71.43	7.983	SF
COLUMBUS FEE #23H - OWB (PH) - AWP	11,189.08	11,125.98	433.10	387.68	9.536	CC
COLUMBUS FEE #23H - OWB (PH) - AWP	11,200.00	11,135.95	433.13	387.68	9.529	ES
COLUMBUS FEE #23H - OWB (PH) - AWP	11,225.00	11,158.32	433.47	387.94	9.521	SF
COLUMBUS FEE #23H - ST01 - AWP	11,189.08	11,125.98	433.10	387.68	9.536	CC
COLUMBUS FEE #23H - ST01 - AWP	11,200.00	11,135.95	433.13	387.68	9.529	ES
COLUMBUS FEE #23H - ST01 - AWP	11,225.00	11,158.32	433.47	387.94	9.521	SF
COLUMBUS FEE #24H - OWB - AWP	8,532.87	8,478.23	72.27	26.36	1.574	Caution - Monitor Closely, CC, ES, SF
COLUMBUS FEE #2H - OWB - AWP	7,963.66	7,914.78	34.98	14.11	1.676	Caution - Monitor Closely, CC, ES, SF
RED BULL 35 FEDERAL #1H - OWB - AWP	15,343.23	16,179.14	800.24	726.49	10.850	CC, ES
RED BULL 35 FEDERAL #1H - OWB - AWP	15,900.00	16,227.82	973.48	867.20	9.160	SF
ROJO 7811 34 27 FEDERAL #18H - OWB - AWP						Out of range
ROJO 7811 34 27 FEDERAL #21H - OWB - AWP						Out of range

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

ConocoPhillips Anticollision Report

Company:	DELAWARE BASIN EAST	Local Co-ordinate Reference:	Well _COLUMBUS FEDERAL COM 653H - Slot SLOT 7
Project:	LEA COUNT SOUTH WEST (NM-E)	TVD Reference:	KB @ 3362.00usft
Reference Site:	COLUMBUS FEDERAL PROJECT	MD Reference:	KB @ 3362.00usft
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	_COLUMBUS FEDERAL COM 653H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDT 17 Permian Prod
Reference Design:	PWP0	Offset TVD Reference:	Reference Datum

Site Name	Reference Measured Depth (usft)	Offset Measured Depth (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Separation Factor	Warning
Offset Well - Wellbore - Design						
COLUMBUS FEDERAL PROJECT						
SALADO DRAW 10 FEDERAL #2H - OWB - AWP	8,460.42	8,377.81	533.34	487.27	11.577	CC
SALADO DRAW 10 FEDERAL #2H - OWB - AWP	8,500.00	8,415.98	533.41	487.15	11.531	ES
SALADO DRAW 10 FEDERAL #2H - OWB - AWP	8,700.00	8,614.02	535.20	488.19	11.384	SF

Offset Design: COLUMBUS FEDERAL PROJECT - _COLUMBUS FEDERAL COM 503H - OWB - PWP0													Offset Site Error: 0.00 usft
Survey Program: 0-r.5 MWD+IFR1													Offset Well Error: 0.00 usft
Reference		Offset		Semi Major Axis		Highside Toolface (°)	Offset Wellbore Centre		Distance		No-Go Distance (usft)	Separation Factor	Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)		+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)			
0.00	0.00	0.00	0.00	0.00	0.00	-90.39	-0.27	-40.00	40.00				
100.00	100.00	100.00	100.00	0.77	0.77	-90.39	-0.27	-40.00	40.00	38.01	1.99	20.089	
200.00	200.00	200.00	200.00	1.44	1.44	-90.39	-0.27	-40.00	40.00	36.69	3.31	12.079	
300.00	300.00	300.00	300.00	1.88	1.88	-90.39	-0.27	-40.00	40.00	35.81	4.20	9.535	
400.00	400.00	400.00	400.00	2.25	2.25	-90.39	-0.27	-40.00	40.00	35.09	4.91	8.144	
500.00	500.00	500.00	500.00	2.56	2.56	-90.39	-0.27	-40.00	40.00	34.47	5.53	7.230	
600.00	600.00	600.00	600.00	2.84	2.84	-90.39	-0.27	-40.00	40.00	33.91	6.09	6.568	
700.00	700.00	700.00	700.00	3.10	3.10	-90.39	-0.27	-40.00	40.00	33.40	6.60	6.060	
800.00	800.00	800.00	800.00	3.34	3.34	-90.39	-0.27	-40.00	40.00	32.92	7.08	5.653	
900.00	900.00	900.00	900.00	3.57	3.57	-90.39	-0.27	-40.00	40.00	32.48	7.52	5.317	
1,000.00	1,000.00	1,000.00	1,000.00	3.79	3.79	-90.39	-0.27	-40.00	40.00	32.05	7.95	5.033	
1,100.00	1,100.00	1,100.00	1,100.00	3.99	3.99	-90.39	-0.27	-40.00	40.00	31.65	8.35	4.790	
1,200.00	1,200.00	1,200.00	1,200.00	4.19	4.19	-90.39	-0.27	-40.00	40.00	31.26	8.74	4.577	
1,300.00	1,300.00	1,300.00	1,300.00	4.38	4.38	-90.39	-0.27	-40.00	40.00	30.89	9.11	4.390	
1,400.00	1,400.00	1,400.00	1,400.00	4.56	4.56	-90.39	-0.27	-40.00	40.00	30.53	9.47	4.222	
1,500.00	1,500.00	1,500.00	1,500.00	4.74	4.74	-90.39	-0.27	-40.00	40.00	30.18	9.82	4.072	
1,600.00	1,600.00	1,600.00	1,600.00	4.91	4.91	-90.39	-0.27	-40.00	40.00	29.84	10.16	3.936	
1,700.00	1,700.00	1,700.00	1,700.00	5.08	5.08	-90.39	-0.27	-40.00	40.00	29.51	10.49	3.812	
1,800.00	1,800.00	1,800.00	1,800.00	5.24	5.24	-90.39	-0.27	-40.00	40.00	29.19	10.82	3.698	
1,900.00	1,900.00	1,900.00	1,900.00	5.40	5.40	-90.39	-0.27	-40.00	40.00	28.87	11.13	3.594	
2,000.00	2,000.00	2,000.00	2,000.00	5.56	5.56	-90.39	-0.27	-40.00	40.00	28.56	11.44	3.497	CC, ES
2,100.00	2,100.00	2,099.04	2,099.02	5.71	5.79	-88.61	1.00	-41.15	41.18	29.40	11.78	3.496	SF
2,200.00	2,200.00	2,197.84	2,197.68	5.86	6.03	-83.88	4.78	-44.60	44.91	32.79	12.12	3.706	
2,300.00	2,300.00	2,296.17	2,295.64	6.01	6.29	-77.62	11.04	-50.30	51.68	39.20	12.48	4.141	
2,400.00	2,400.00	2,393.80	2,392.56	6.15	6.56	-71.29	19.71	-58.19	61.89	49.03	12.86	4.813	
2,500.00	2,500.00	2,491.36	2,488.99	6.30	6.73	-65.78	30.66	-68.15	75.54	62.38	13.16	5.740	
2,600.00	2,600.00	2,590.09	2,586.47	6.44	6.96	-61.78	42.24	-78.70	90.33	76.79	13.54	6.669	
2,700.00	2,700.00	2,688.83	2,683.96	6.58	7.22	-58.91	53.82	-89.24	105.44	91.49	13.95	7.557	
2,800.00	2,800.00	2,787.56	2,781.44	6.71	7.50	-56.76	65.40	-99.78	120.73	106.36	14.37	8.400	
2,900.00	2,900.00	2,886.30	2,878.93	6.85	7.79	-55.10	76.97	-110.32	136.16	121.35	14.81	9.193	
3,000.00	3,000.00	2,985.03	2,976.41	6.98	8.09	-53.77	88.55	-120.86	151.68	136.41	15.26	9.938	
3,100.00	3,099.98	3,083.61	3,073.74	7.17	8.40	-129.87	100.11	-131.39	168.36	152.62	15.74	10.697	
3,200.00	3,199.84	3,181.80	3,170.69	7.35	8.73	-129.91	111.63	-141.87	187.26	171.05	16.21	11.553	
3,300.00	3,299.45	3,279.48	3,267.13	7.53	9.06	-130.60	123.09	-152.30	208.38	191.70	16.68	12.493	
3,383.28	3,382.14	3,360.35	3,346.98	7.64	9.34	-131.52	132.57	-160.93	227.74	210.69	17.05	13.357	
3,400.00	3,398.71	3,376.53	3,362.96	7.65	9.40	-131.79	134.47	-162.66	231.79	214.68	17.12	13.543	
3,500.00	3,497.81	3,473.35	3,458.55	7.79	9.75	-133.20	145.82	-173.00	256.13	238.54	17.59	14.564	
3,600.00	3,596.92	3,570.17	3,554.14	7.90	10.10	-134.37	157.18	-183.33	280.59	262.54	18.04	15.551	

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

ConocoPhillips Anticollision Report

Company:	DELAWARE BASIN EAST	Local Co-ordinate Reference:	Well _COLUMBUS FEDERAL COM 653H - Slot SLOT 7
Project:	LEA COUNT SOUTH WEST (NM-E)	TVD Reference:	KB @ 3362.00usft
Reference Site:	COLUMBUS FEDERAL PROJECT	MD Reference:	KB @ 3362.00usft
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	_COLUMBUS FEDERAL COM 653H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDT 17 Permian Prod
Reference Design:	PWP0	Offset TVD Reference:	Reference Datum

Offset Design: COLUMBUS FEDERAL PROJECT - _COLUMBUS FEDERAL COM 503H - OWB - PWP0														Offset Site Error:	0.00 usft
Survey Program: 0-r.5 MWD+IFR1														Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis		Highside Toolface (°)	Offset Wellbore Centre		Distance		No-Go Distance (usft)	Separation Factor	Warning		
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)		+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)					
3,700.00	3,696.03	3,666.98	3,649.73	8.02	10.46	-135.36	168.53	-193.67	305.14	286.63	18.51	16.487			
3,800.00	3,795.13	3,763.80	3,745.33	8.15	10.82	-136.19	179.89	-204.01	329.76	310.78	18.98	17.375			
3,900.00	3,894.24	3,860.62	3,840.92	8.27	11.19	-136.91	191.24	-214.34	354.44	334.99	19.46	18.217			
4,000.00	3,993.35	3,957.44	3,936.51	8.40	11.56	-137.54	202.60	-224.68	379.17	359.23	19.94	19.015			
4,100.00	4,092.45	4,054.25	4,032.10	8.53	11.94	-138.09	213.95	-235.02	403.93	383.50	20.43	19.771			
4,200.00	4,191.56	4,151.07	4,127.69	8.67	12.32	-138.57	225.30	-245.35	428.73	407.80	20.93	20.488			
4,300.00	4,290.67	4,247.89	4,223.28	8.80	12.71	-139.01	236.66	-255.69	453.55	432.12	21.43	21.168			
4,400.00	4,389.77	4,347.07	4,321.22	8.94	13.09	-139.41	248.23	-266.23	478.32	456.38	21.94	21.805			
4,500.00	4,488.88	4,452.62	4,425.67	9.08	13.51	-139.85	259.49	-276.48	501.87	479.39	22.48	22.320			
4,600.00	4,587.98	4,558.97	4,531.18	9.22	13.92	-140.34	269.40	-285.49	523.77	500.75	23.02	22.753			
4,700.00	4,687.09	4,666.06	4,637.64	9.37	14.33	-140.86	277.91	-293.24	544.01	520.48	23.54	23.113			
4,800.00	4,786.20	4,773.82	4,744.97	9.51	14.72	-141.43	284.98	-299.68	562.60	538.56	24.03	23.410			
4,900.00	4,885.30	4,882.17	4,853.06	9.66	15.10	-142.04	290.59	-304.79	579.51	555.01	24.50	23.653			
5,000.00	4,984.41	4,991.05	4,961.79	9.81	15.46	-142.70	294.70	-308.53	594.77	569.84	24.94	23.853			
5,100.00	5,083.52	5,100.37	5,071.05	9.96	15.79	-143.41	297.29	-310.89	608.38	583.06	25.33	24.021			
5,200.00	5,182.62	5,210.06	5,180.73	10.11	16.04	-144.16	298.34	-311.84	620.35	594.72	25.63	24.201			
5,300.00	5,281.73	5,311.06	5,281.73	10.26	16.10	-144.88	298.36	-311.86	631.27	605.52	25.75	24.514			
5,400.00	5,380.83	5,410.16	5,380.83	10.42	16.16	-145.57	298.36	-311.86	642.26	616.38	25.88	24.812			
5,500.00	5,479.94	5,509.27	5,479.94	10.57	16.23	-146.22	298.36	-311.86	653.34	627.32	26.02	25.107			
5,600.00	5,579.05	5,608.37	5,579.05	10.73	16.29	-146.86	298.36	-311.86	664.50	638.33	26.16	25.398			
5,700.00	5,678.15	5,707.48	5,678.15	10.89	16.35	-147.48	298.36	-311.86	675.74	649.43	26.31	25.686			
5,800.00	5,777.26	5,806.59	5,777.26	11.05	16.42	-148.08	298.36	-311.86	687.05	660.59	26.46	25.970			
5,900.00	5,876.37	5,905.69	5,876.37	11.21	16.48	-148.65	298.36	-311.86	698.43	671.83	26.61	26.250			
6,000.00	5,975.47	6,004.80	5,975.47	11.37	16.55	-149.21	298.36	-311.86	709.89	683.13	26.76	26.526			
6,100.00	6,074.58	6,103.91	6,074.58	11.54	16.61	-149.75	298.36	-311.86	721.41	694.48	26.92	26.798			
6,200.00	6,173.69	6,203.01	6,173.69	11.70	16.67	-150.28	298.36	-311.86	732.98	705.90	27.08	27.065			
6,300.00	6,272.79	6,302.12	6,272.79	11.87	16.74	-150.78	298.36	-311.86	744.62	717.38	27.25	27.328			
6,400.00	6,371.90	6,401.23	6,371.90	12.03	16.80	-151.28	298.36	-311.86	756.32	728.90	27.42	27.587			
6,500.00	6,471.00	6,500.33	6,471.00	12.20	16.87	-151.75	298.36	-311.86	768.07	740.48	27.59	27.841			
6,600.00	6,570.11	6,599.44	6,570.11	12.37	16.93	-152.22	298.36	-311.86	779.87	752.10	27.76	28.091			
6,700.00	6,669.22	6,698.54	6,669.22	12.53	17.00	-152.67	298.36	-311.86	791.71	763.77	27.94	28.336			
6,800.00	6,768.32	6,797.65	6,768.32	12.70	17.06	-153.10	298.36	-311.86	803.61	775.49	28.12	28.577			
6,900.00	6,867.43	6,896.76	6,867.43	12.87	17.13	-153.53	298.36	-311.86	815.55	787.25	28.30	28.813			
7,000.00	6,966.54	6,995.86	6,966.54	13.04	17.19	-153.94	298.36	-311.86	827.53	799.04	28.49	29.045			
7,100.00	7,065.64	7,094.97	7,065.64	13.21	17.26	-154.34	298.36	-311.86	839.56	810.88	28.68	29.273			
7,200.00	7,164.75	7,194.08	7,164.75	13.39	17.32	-154.72	298.36	-311.86	851.62	822.75	28.87	29.496			
7,300.00	7,263.86	7,293.18	7,263.86	13.56	17.39	-155.10	298.36	-311.86	863.72	834.65	29.07	29.714			
7,400.00	7,362.96	7,392.29	7,362.96	13.73	17.46	-155.47	298.36	-311.86	875.86	846.59	29.26	29.929			
7,500.00	7,462.07	7,491.40	7,462.07	13.91	17.52	-155.82	298.36	-311.86	888.03	858.56	29.46	30.139			
7,600.00	7,561.17	7,590.50	7,561.17	14.08	17.59	-156.17	298.36	-311.86	900.23	870.56	29.67	30.345			
7,700.00	7,660.28	7,689.61	7,660.28	14.26	17.65	-156.51	298.36	-311.86	912.47	882.59	29.87	30.547			
7,800.00	7,759.39	7,788.71	7,759.39	14.43	17.72	-156.84	298.36	-311.86	924.73	894.65	30.08	30.744			
7,900.00	7,858.49	7,887.82	7,858.49	14.61	17.79	-157.16	298.36	-311.86	937.03	906.74	30.29	30.938			
8,000.00	7,957.60	7,986.93	7,957.60	14.78	17.85	-157.47	298.36	-311.86	949.35	918.85	30.50	31.128			
8,100.00	8,056.71	8,086.03	8,056.71	14.96	17.92	-157.78	298.36	-311.86	961.70	930.99	30.71	31.314			
8,200.00	8,155.81	8,185.14	8,155.81	15.14	17.99	-158.07	298.36	-311.86	974.08	943.15	30.93	31.496			
8,300.00	8,254.92	8,284.25	8,254.92	15.32	18.05	-158.36	298.36	-311.86	986.48	955.34	31.14	31.674			
8,400.00	8,354.02	8,383.35	8,354.02	15.50	18.12	-158.64	298.36	-311.86	998.91	967.54	31.36	31.849			

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

ConocoPhillips Anticollision Report

Company:	DELAWARE BASIN EAST	Local Co-ordinate Reference:	Well_COLUMBUS FEDERAL COM 653H - Slot SLOT 7
Project:	LEA COUNT SOUTH WEST (NM-E)	TVD Reference:	KB @ 3362.00usft
Reference Site:	COLUMBUS FEDERAL PROJECT	MD Reference:	KB @ 3362.00usft
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	_COLUMBUS FEDERAL COM 653H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDT 17 Permian Prod
Reference Design:	PWP0	Offset TVD Reference:	Reference Datum

Offset Design: COLUMBUS FEDERAL PROJECT - _COLUMBUS FEDERAL COM 504H - OWB - PWP0													Offset Site Error:	0.00 usft
Survey Program: 0-r.5 MWD+IFR1+SAG+FDIR													Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis		Highside Toolface (°)	Offset Wellbore Centre		Distance		No-Go Distance (usft)	Separation Factor	Warning	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)		+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)				
0.00	0.00	0.00	0.00	0.00	0.00	-90.40	-0.14	-20.00	20.00					
100.00	100.00	100.00	100.00	0.77	0.77	-90.40	-0.14	-20.00	20.00	18.01	1.99	10.044		
200.00	200.00	200.00	200.00	1.44	1.44	-90.40	-0.14	-20.00	20.00	16.69	3.31	6.040		
300.00	300.00	300.00	300.00	1.88	1.88	-90.40	-0.14	-20.00	20.00	15.81	4.20	4.767		
400.00	400.00	400.00	400.00	2.25	2.25	-90.40	-0.14	-20.00	20.00	15.09	4.91	4.072		
500.00	500.00	500.00	500.00	2.56	2.56	-90.40	-0.14	-20.00	20.00	14.47	5.53	3.615		
600.00	600.00	600.00	600.00	2.84	2.84	-90.40	-0.14	-20.00	20.00	13.91	6.09	3.284		
700.00	700.00	700.00	700.00	3.10	3.10	-90.40	-0.14	-20.00	20.00	13.40	6.60	3.030		
800.00	800.00	800.00	800.00	3.34	3.34	-90.40	-0.14	-20.00	20.00	12.92	7.08	2.826	Normal Operations	
900.00	900.00	900.00	900.00	3.57	3.57	-90.40	-0.14	-20.00	20.00	12.48	7.52	2.658	Normal Operations	
1,000.00	1,000.00	1,000.00	1,000.00	3.79	3.79	-90.40	-0.14	-20.00	20.00	12.05	7.95	2.517	Normal Operations	
1,100.00	1,100.00	1,100.00	1,100.00	3.99	3.99	-90.40	-0.14	-20.00	20.00	11.65	8.35	2.395	Caution - Monitor Closely	
1,200.00	1,200.00	1,200.00	1,200.00	4.19	4.19	-90.40	-0.14	-20.00	20.00	11.26	8.74	2.289	Caution - Monitor Closely	
1,300.00	1,300.00	1,300.00	1,300.00	4.38	4.38	-90.40	-0.14	-20.00	20.00	10.89	9.11	2.195	Caution - Monitor Closely	
1,400.00	1,400.00	1,400.00	1,400.00	4.56	4.56	-90.40	-0.14	-20.00	20.00	10.53	9.47	2.111	Caution - Monitor Closely	
1,500.00	1,500.00	1,500.00	1,500.00	4.74	4.74	-90.40	-0.14	-20.00	20.00	10.18	9.82	2.036	Caution - Monitor Closely	
1,600.00	1,600.00	1,600.20	1,600.18	4.91	5.01	-85.56	1.51	-19.40	19.46	9.29	10.17	1.914	Caution - Monitor Closely	
1,699.75	1,699.75	1,699.91	1,699.75	5.08	5.27	-70.00	6.41	-17.62	18.75	8.26	10.49	1.787	Caution - Monitor Closely, CC	
1,700.00	1,700.00	1,700.16	1,700.00	5.08	5.27	-69.95	6.43	-17.61	18.75	8.26	10.49	1.787	Caution - Monitor Closely, ES, SF	
1,800.00	1,800.00	1,800.07	1,799.55	5.24	5.36	-45.40	14.15	-14.35	20.15	9.38	10.77	1.872	Caution - Monitor Closely	
1,900.00	1,900.00	1,900.03	1,899.00	5.40	5.55	-19.88	21.87	-7.91	23.28	12.05	11.23	2.073	Caution - Monitor Closely	
2,000.00	2,000.00	1,999.50	1,997.72	5.56	5.74	3.77	29.08	1.92	29.24	17.64	11.60	2.521	Normal Operations	
2,100.00	2,100.00	2,098.36	2,095.49	5.71	5.83	22.55	35.81	14.87	39.04	27.22	11.81	3.305		
2,200.00	2,200.00	2,197.17	2,193.12	5.86	5.99	33.96	42.42	28.57	51.61	39.52	12.08	4.271		
2,300.00	2,300.00	2,295.98	2,290.75	6.01	6.14	40.76	49.04	42.26	65.40	53.03	12.37	5.288		
2,400.00	2,400.00	2,394.78	2,388.38	6.15	6.30	45.16	55.65	55.96	79.77	67.12	12.66	6.303		
2,500.00	2,500.00	2,493.59	2,486.01	6.30	6.46	48.21	62.27	69.66	94.47	81.52	12.95	7.294		
2,600.00	2,600.00	2,592.40	2,583.64	6.44	6.62	50.43	68.88	83.35	109.36	96.11	13.25	8.253		
2,700.00	2,700.00	2,691.21	2,681.27	6.58	6.79	52.12	75.50	97.05	124.38	110.83	13.55	9.178		
2,800.00	2,800.00	2,790.02	2,778.90	6.71	6.95	53.45	82.11	110.75	139.47	125.62	13.85	10.068		
2,900.00	2,900.00	2,888.82	2,876.53	6.85	7.12	54.51	88.73	124.44	154.63	140.47	14.16	10.924		
3,000.00	3,000.00	2,987.63	2,974.16	6.98	7.29	55.39	95.34	138.14	169.83	155.37	14.46	11.746		
3,100.00	3,099.98	3,086.68	3,072.03	7.17	7.46	-20.95	101.97	151.87	183.44	168.63	14.81	12.387		
3,200.00	3,199.84	3,186.14	3,170.30	7.35	7.63	-20.78	108.63	165.66	193.83	178.68	15.15	12.791		
3,300.00	3,299.45	3,285.87	3,268.84	7.53	7.81	-21.00	115.31	179.48	200.97	185.47	15.50	12.965		
3,383.28	3,382.14	3,369.06	3,351.04	7.64	7.95	-21.45	120.88	191.01	204.44	188.69	15.76	12.976		
3,400.00	3,398.71	3,385.77	3,367.55	7.65	7.98	-21.57	122.00	193.33	204.91	189.12	15.79	12.975		
3,500.00	3,497.81	3,485.69	3,466.29	7.79	8.16	-22.27	128.69	207.18	207.76	191.64	16.12	12.890		
3,600.00	3,596.92	3,585.62	3,565.02	7.90	8.34	-22.95	135.37	221.03	210.64	194.22	16.42	12.827		
3,700.00	3,696.03	3,685.55	3,663.76	8.02	8.52	-23.61	142.06	234.88	213.54	196.81	16.73	12.765		
3,800.00	3,795.13	3,785.48	3,762.50	8.15	8.70	-24.25	148.75	248.74	216.48	199.44	17.04	12.706		
3,900.00	3,894.24	3,885.40	3,861.23	8.27	8.88	-24.88	155.44	262.59	219.43	202.08	17.35	12.648		
4,000.00	3,993.35	3,985.33	3,959.97	8.40	9.07	-25.49	162.13	276.44	222.42	204.76	17.66	12.591		
4,100.00	4,092.45	4,085.26	4,058.71	8.53	9.25	-26.08	168.82	290.29	225.43	207.45	17.98	12.537		
4,200.00	4,191.56	4,185.19	4,157.44	8.67	9.44	-26.66	175.51	304.14	228.46	210.16	18.30	12.484		
4,300.00	4,290.67	4,285.12	4,256.18	8.80	9.62	-27.22	182.20	318.00	231.52	212.90	18.62	12.434		
4,400.00	4,389.77	4,385.04	4,354.92	8.94	9.81	-27.77	188.89	331.85	234.60	215.65	18.94	12.385		
4,500.00	4,488.88	4,484.97	4,453.65	9.08	9.99	-28.31	195.58	345.70	237.69	218.43	19.27	12.338		
4,600.00	4,587.98	4,584.90	4,552.39	9.22	10.18	-28.83	202.27	359.55	240.81	221.22	19.59	12.292		
4,700.00	4,687.09	4,684.83	4,651.13	9.37	10.37	-29.33	208.96	373.40	243.95	224.03	19.92	12.249		
4,800.00	4,786.20	4,784.75	4,749.86	9.51	10.56	-29.83	215.65	387.26	247.11	226.86	20.24	12.207		

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

ConocoPhillips Anticollision Report

Company:	DELAWARE BASIN EAST	Local Co-ordinate Reference:	Well _COLUMBUS FEDERAL COM 653H - Slot SLOT 7
Project:	LEA COUNT SOUTH WEST (NM-E)	TVD Reference:	KB @ 3362.00usft
Reference Site:	COLUMBUS FEDERAL PROJECT	MD Reference:	KB @ 3362.00usft
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	_COLUMBUS FEDERAL COM 653H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDT 17 Permian Prod
Reference Design:	PWP0	Offset TVD Reference:	Reference Datum

Offset Design: COLUMBUS FEDERAL PROJECT - _COLUMBUS FEDERAL COM 504H - OWB - PWP0														Offset Site Error:	0.00 usft
Survey Program: 0-r.5 MWD+IFR1+SAG+FDIR														Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis		Highside Toolface (°)	Offset Wellbore Centre		Distance		No-Go Distance (usft)	Separation Factor	Warning		
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)		+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)					
4,900.00	4,885.30	4,884.68	4,848.60	9.66	10.75	-30.31	222.34	401.11	250.28	229.71	20.57	12.167			
5,000.00	4,984.41	4,984.61	4,947.34	9.81	10.94	-30.78	229.03	414.96	253.47	232.57	20.90	12.128			
5,100.00	5,083.52	5,084.54	5,046.07	9.96	11.13	-31.24	235.72	428.81	256.68	235.45	21.23	12.091			
5,200.00	5,182.62	5,184.47	5,144.81	10.11	11.32	-31.68	242.41	442.66	259.91	238.35	21.56	12.056			
5,300.00	5,281.73	5,284.39	5,243.55	10.26	11.51	-32.12	249.10	456.51	263.15	241.26	21.89	12.022			
5,400.00	5,380.83	5,384.32	5,342.28	10.42	11.70	-32.54	255.79	470.37	266.40	244.18	22.22	11.989			
5,500.00	5,479.94	5,484.25	5,441.02	10.57	11.89	-32.96	262.48	484.22	269.67	247.12	22.55	11.958			
5,600.00	5,579.05	5,584.18	5,539.76	10.73	12.08	-33.36	269.17	498.07	272.95	250.07	22.88	11.928			
5,700.00	5,678.15	5,685.08	5,639.46	10.89	12.25	-33.76	275.91	512.02	276.21	253.02	23.19	11.910			
5,800.00	5,777.26	5,789.75	5,743.08	11.05	12.44	-34.27	282.33	525.32	278.32	254.79	23.53	11.829			
5,900.00	5,876.37	5,894.42	5,846.96	11.21	12.64	-34.91	287.93	536.92	278.75	254.89	23.86	11.684			
6,000.00	5,975.47	5,999.04	5,951.00	11.37	12.82	-35.71	292.71	546.80	277.54	253.37	24.17	11.481			
6,100.00	6,074.58	6,103.52	6,055.08	11.54	13.01	-36.67	296.65	554.97	274.71	250.24	24.47	11.225			
6,200.00	6,173.69	6,207.80	6,159.11	11.70	13.19	-37.83	299.76	561.40	270.30	245.55	24.75	10.920			
6,300.00	6,272.79	6,311.81	6,262.99	11.87	13.35	-39.20	302.04	566.13	264.37	239.36	25.01	10.570			
6,400.00	6,371.90	6,415.48	6,366.61	12.03	13.51	-40.82	303.50	569.15	256.99	231.75	25.24	10.181			
6,500.00	6,471.00	6,518.76	6,469.87	12.20	13.64	-42.75	304.14	570.47	248.26	222.83	25.43	9.763			
6,600.00	6,570.11	6,619.00	6,570.11	12.37	13.70	-44.93	304.17	570.54	238.66	213.12	25.54	9.346			
6,700.00	6,669.22	6,718.10	6,669.22	12.53	13.77	-47.27	304.17	570.54	229.37	203.71	25.66	8.940			
6,800.00	6,768.32	6,817.21	6,768.32	12.70	13.84	-49.81	304.17	570.54	220.49	194.73	25.76	8.559			
6,900.00	6,867.43	6,916.32	6,867.43	12.87	13.91	-52.54	304.17	570.54	212.08	186.23	25.85	8.205			
7,000.00	6,966.54	7,015.42	6,966.54	13.04	13.99	-55.50	304.17	570.54	204.19	178.27	25.92	7.879			
7,100.00	7,065.64	7,114.53	7,065.64	13.21	14.06	-58.68	304.17	570.54	196.89	170.93	25.97	7.582			
7,200.00	7,164.75	7,213.63	7,164.75	13.39	14.13	-62.09	304.17	570.54	190.25	164.25	26.00	7.317			
7,300.00	7,263.86	7,312.74	7,263.86	13.56	14.21	-65.73	304.17	570.54	184.34	158.32	26.02	7.085			
7,400.00	7,362.96	7,411.85	7,362.96	13.73	14.28	-69.59	304.17	570.54	179.23	153.20	26.03	6.887			
7,500.00	7,462.07	7,510.95	7,462.07	13.91	14.35	-73.65	304.17	570.54	174.99	148.96	26.03	6.723			
7,600.00	7,561.17	7,610.06	7,561.17	14.08	14.42	-77.89	304.17	570.54	171.68	145.65	26.03	6.595			
7,700.00	7,660.28	7,709.17	7,660.28	14.26	14.50	-82.27	304.17	570.54	169.36	143.31	26.05	6.502			
7,800.00	7,759.39	7,808.27	7,759.39	14.43	14.57	-86.74	304.17	570.54	168.07	141.98	26.08	6.443			
7,872.35	7,831.09	7,879.98	7,831.09	14.56	14.62	-90.00	304.17	570.54	167.79	141.66	26.13	6.421			
7,900.00	7,858.49	7,907.38	7,858.49	14.61	14.64	-91.25	304.17	570.54	167.83	141.68	26.15	6.417			
8,000.00	7,957.60	8,006.49	7,957.60	14.78	14.72	-95.74	304.17	570.54	168.65	142.39	26.26	6.422			
8,100.00	8,056.71	8,105.59	8,056.71	14.96	14.79	-100.17	304.17	570.54	170.51	144.10	26.41	6.456			
8,200.00	8,155.81	8,204.70	8,155.81	15.14	14.86	-104.48	304.17	570.54	173.39	146.78	26.61	6.516			
8,300.00	8,254.92	8,303.80	8,254.92	15.32	14.94	-108.62	304.17	570.54	177.22	150.37	26.85	6.600			
8,400.00	8,354.02	8,402.91	8,354.02	15.50	15.01	-112.57	304.17	570.54	181.95	154.83	27.13	6.708			
8,500.00	8,453.13	8,502.02	8,453.13	15.67	15.09	-116.31	304.17	570.54	187.52	160.08	27.44	6.835			
8,600.00	8,552.24	8,601.12	8,552.24	15.85	15.16	-119.83	304.17	570.54	193.84	166.07	27.77	6.981			
8,700.00	8,651.34	8,700.23	8,651.34	16.03	15.23	-123.11	304.17	570.54	200.85	172.73	28.12	7.143			
8,800.00	8,750.45	8,799.34	8,750.45	16.21	15.31	-126.16	304.17	570.54	208.48	180.00	28.48	7.320			
8,900.00	8,849.56	8,898.44	8,849.56	16.40	15.38	-129.00	304.17	570.54	216.67	187.81	28.85	7.509			
9,000.00	8,948.66	8,997.55	8,948.66	16.58	15.46	-131.62	304.17	570.54	225.34	196.12	29.23	7.710			
9,100.00	9,047.77	9,096.65	9,047.77	16.76	15.53	-134.05	304.17	570.54	234.46	204.86	29.60	7.921			
9,200.00	9,146.88	9,195.76	9,146.88	16.94	15.61	-136.29	304.17	570.54	243.96	213.99	29.97	8.140			
9,300.00	9,245.98	9,294.87	9,245.98	17.12	15.68	-138.36	304.17	570.54	253.81	223.47	30.34	8.366			
9,400.00	9,345.09	9,393.97	9,345.09	17.30	15.75	-140.28	304.17	570.54	263.97	233.26	30.70	8.598			
9,500.00	9,444.19	9,493.08	9,444.19	17.49	15.83	-142.05	304.17	570.54	274.39	243.33	31.06	8.834			
9,600.00	9,543.30	9,592.19	9,543.30	17.67	15.90	-143.70	304.17	570.54	285.07	253.65	31.42	9.074			
9,700.00	9,642.41	9,691.29	9,642.41	17.85	15.98	-145.22	304.17	570.54	295.95	264.19	31.76	9.317			

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

ConocoPhillips Anticollision Report

Company:	DELAWARE BASIN EAST	Local Co-ordinate Reference:	Well _COLUMBUS FEDERAL COM 653H - Slot SLOT 7
Project:	LEA COUNT SOUTH WEST (NM-E)	TVD Reference:	KB @ 3362.00usft
Reference Site:	COLUMBUS FEDERAL PROJECT	MD Reference:	KB @ 3362.00usft
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	_COLUMBUS FEDERAL COM 653H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDT 17 Permian Prod
Reference Design:	PWP0	Offset TVD Reference:	Reference Datum

Offset Design: COLUMBUS FEDERAL PROJECT - _COLUMBUS FEDERAL COM 504H - OWB - PWP0														Offset Site Error:	0.00 usft
Survey Program: 0-r.5 MWD+IFR1+SAG+FDIR														Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis		Highside Toolface (°)	Offset Wellbore Centre		Distance		No-Go Distance (usft)	Separation Factor	Warning		
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)		+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)					
9,794.15	9,735.72	9,784.60	9,735.72	18.02	16.05	-146.56	304.17	570.54	306.38	274.30	32.09	9.549			
9,800.00	9,741.51	9,790.40	9,741.51	18.03	16.05	-146.64	304.17	570.54	307.03	274.93	32.10	9.564			
9,900.00	9,840.74	9,889.63	9,840.74	18.26	16.13	-147.92	304.17	570.54	317.47	284.98	32.49	9.772			
10,000.00	9,940.18	9,989.06	9,940.18	18.44	16.20	-148.96	304.17	570.54	326.55	293.75	32.80	9.957			
10,100.00	10,039.78	10,088.66	10,039.78	18.61	16.28	-149.78	304.17	570.54	334.21	301.13	33.09	10.101			
10,200.00	10,139.52	10,188.40	10,139.52	18.77	16.35	-150.42	304.17	570.54	340.43	307.07	33.36	10.205			
10,300.00	10,239.37	10,288.26	10,239.37	18.93	16.43	-150.89	304.17	570.54	345.15	311.54	33.61	10.268			
10,400.00	10,339.30	10,401.24	10,352.15	19.07	16.42	-151.94	299.64	570.58	347.37	313.53	33.84	10.264			
10,500.00	10,439.28	10,517.58	10,464.31	19.21	16.35	-156.91	269.85	570.80	343.09	308.79	34.30	10.002			
10,560.72	10,500.00	10,579.35	10,519.99	19.25	16.31	-84.37	243.21	570.99	339.23	304.63	34.60	9.805			
10,600.00	10,539.28	10,615.18	10,550.56	19.26	16.28	-87.53	224.53	571.13	337.38	302.61	34.77	9.703			
10,635.26	10,574.54	10,644.58	10,574.54	19.28	16.27	-90.42	207.54	571.25	336.76	301.83	34.93	9.641			
10,700.00	10,639.28	10,692.15	10,610.99	19.32	16.25	-95.60	177.00	571.47	339.32	304.07	35.25	9.626			
10,800.00	10,739.28	10,750.00	10,650.95	19.37	16.24	-102.54	135.22	571.78	355.58	319.64	35.94	9.893			
10,900.00	10,839.28	10,800.00	10,681.20	19.43	16.24	-108.83	95.44	572.07	388.54	351.64	36.90	10.529			
10,958.26	10,897.54	10,819.30	10,691.74	19.45	16.24	-111.27	79.27	572.19	414.99	377.40	37.59	11.040			
10,975.00	10,914.28	10,825.00	10,694.73	19.45	16.24	67.33	74.42	572.22	423.38	385.60	37.78	11.206			
11,000.00	10,939.23	10,834.23	10,699.44	19.44	16.25	64.60	66.48	572.28	436.22	398.17	38.06	11.462			
11,025.00	10,964.06	10,843.43	10,703.98	19.43	16.25	61.94	58.48	572.34	449.33	411.00	38.33	11.722			
11,050.00	10,988.72	10,850.00	10,707.13	19.42	16.25	59.62	52.71	572.38	462.62	423.99	38.64	11.974			
11,075.00	11,013.12	10,862.30	10,712.81	19.41	16.26	56.85	41.81	572.46	475.97	437.10	38.87	12.245			
11,100.00	11,037.21	10,875.00	10,718.38	19.40	16.26	54.19	30.39	572.55	489.35	450.25	39.10	12.516			
11,125.00	11,060.91	10,881.71	10,721.20	19.38	16.27	52.16	24.30	572.59	502.64	463.25	39.39	12.761			
11,150.00	11,084.17	10,891.60	10,725.20	19.37	16.27	50.00	15.26	572.66	515.81	476.17	39.64	13.012			
11,175.00	11,106.91	10,900.00	10,728.45	19.36	16.28	48.06	7.51	572.71	528.80	488.90	39.90	13.253			
11,200.00	11,129.08	10,911.66	10,732.73	19.35	16.28	46.06	-3.33	572.79	541.54	501.42	40.12	13.498			
11,225.00	11,150.62	10,925.00	10,737.31	19.34	16.29	44.12	-15.86	572.88	554.03	513.71	40.32	13.741			
11,250.00	11,171.46	10,932.06	10,739.59	19.33	16.30	42.63	-22.54	572.93	566.16	525.59	40.57	13.955			
11,275.00	11,191.56	10,942.37	10,742.73	19.33	16.31	41.11	-32.36	573.00	577.95	537.17	40.78	14.172			
11,300.00	11,210.84	10,950.00	10,744.93	19.32	16.31	39.80	-39.67	573.06	589.36	548.35	41.01	14.372			
11,325.00	11,229.27	10,963.19	10,748.44	19.32	16.33	38.40	-52.37	573.15	600.32	559.14	41.18	14.579			
11,350.00	11,246.79	10,975.00	10,751.29	19.32	16.34	37.16	-63.84	573.23	610.85	569.50	41.35	14.772			
11,375.00	11,263.35	10,984.22	10,753.32	19.32	16.35	36.11	-72.83	573.30	620.90	579.36	41.53	14.949			
11,400.00	11,278.91	11,000.00	10,756.38	19.32	16.36	34.98	-88.31	573.41	630.50	588.83	41.67	15.132			
11,425.00	11,293.42	11,000.00	10,756.38	19.32	16.36	34.32	-88.31	573.41	639.54	597.66	41.88	15.272			
11,450.00	11,306.85	11,016.09	10,758.98	19.33	16.38	33.37	-104.19	573.53	647.99	606.00	41.99	15.433			
11,475.00	11,319.15	11,025.00	10,760.19	19.35	16.39	32.65	-113.02	573.59	655.94	613.82	42.12	15.572			
11,500.00	11,330.30	11,037.52	10,761.60	19.36	16.41	31.95	-125.45	573.69	663.32	621.09	42.23	15.707			
11,525.00	11,340.27	11,050.00	10,762.69	19.38	16.42	31.32	-137.89	573.78	670.12	627.79	42.33	15.831			
11,550.00	11,349.02	11,059.05	10,763.28	19.40	16.44	30.80	-146.92	573.84	676.32	633.90	42.43	15.941			
11,575.00	11,356.53	11,075.00	10,763.89	19.43	16.46	30.27	-162.86	573.96	681.97	639.48	42.49	16.049			
11,600.00	11,362.78	11,080.68	10,763.98	19.46	16.47	29.92	-168.54	574.00	686.92	644.35	42.57	16.137			
11,625.00	11,367.76	11,099.22	10,764.01	19.49	16.49	29.51	-187.08	574.14	691.21	648.60	42.61	16.221			
11,650.00	11,371.46	11,123.95	10,764.01	19.52	16.54	29.17	-211.80	574.32	694.43	651.79	42.64	16.285			
11,675.00	11,373.85	11,148.83	10,764.01	19.56	16.58	28.95	-236.68	574.50	696.51	653.85	42.66	16.325			
11,700.00	11,374.93	11,173.80	10,764.01	19.60	16.62	28.85	-261.65	574.68	697.46	654.78	42.68	16.342			
11,708.26	11,375.01	11,182.06	10,764.01	19.62	16.64	28.84	-269.91	574.74	697.52	654.84	42.68	16.343			
11,800.00	11,375.01	11,273.80	10,764.00	19.80	16.82	28.84	-361.65	575.41	697.49	654.78	42.71	16.329			
11,900.00	11,375.00	11,373.80	10,764.00	20.04	17.04	28.83	-461.65	576.14	697.46	654.68	42.78	16.302			
12,000.00	11,375.00	11,473.80	10,764.00	20.30	17.29	28.83	-561.65	576.87	697.43	654.55	42.88	16.264			
12,100.00	11,375.00	11,573.80	10,764.00	20.59	17.58	28.82	-661.64	577.61	697.40	654.39	43.01	16.215			

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

ConocoPhillips Anticollision Report

Company:	DELAWARE BASIN EAST	Local Co-ordinate Reference:	Well _COLUMBUS FEDERAL COM 653H - Slot SLOT 7
Project:	LEA COUNT SOUTH WEST (NM-E)	TVD Reference:	KB @ 3362.00usft
Reference Site:	COLUMBUS FEDERAL PROJECT	MD Reference:	KB @ 3362.00usft
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	_COLUMBUS FEDERAL COM 653H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDT 17 Permian Prod
Reference Design:	PWP0	Offset TVD Reference:	Reference Datum

Offset Design: COLUMBUS FEDERAL PROJECT - _COLUMBUS FEDERAL COM 504H - OWB - PWP0														Offset Site Error: 0.00 usft
Survey Program: 0-r.5 MWD+IFR1+SAG+FDIR														Offset Well Error: 0.00 usft
Reference		Offset		Semi Major Axis		Highside Toolface (°)	Offset Wellbore Centre		Distance		No-Go Distance (usft)	Separation Factor	Warning	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)		+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)				
12,200.00	11,375.00	11,673.80	10,764.00	20.91	17.89	28.82	-761.64	578.34	697.38	654.21	43.17	16.154		
12,300.00	11,375.00	11,773.80	10,764.00	21.26	18.24	28.82	-861.64	579.07	697.35	653.99	43.36	16.084		
12,400.00	11,375.00	11,873.80	10,764.00	21.62	18.61	28.81	-961.64	579.80	697.32	653.74	43.57	16.003		
12,500.00	11,375.00	11,973.80	10,764.00	22.01	19.02	28.81	-1,061.63	580.53	697.29	653.47	43.82	15.913		
12,600.00	11,375.00	12,073.80	10,764.00	22.43	19.46	28.80	-1,161.63	581.26	697.26	653.17	44.09	15.814		
12,700.00	11,375.00	12,173.80	10,764.00	22.86	19.92	28.80	-1,261.63	581.99	697.23	652.84	44.39	15.706		
12,800.00	11,375.00	12,273.80	10,764.00	23.32	20.41	28.79	-1,361.62	582.72	697.20	652.48	44.72	15.591		
12,900.00	11,375.00	12,373.80	10,764.00	23.80	20.92	28.79	-1,461.62	583.45	697.17	652.10	45.07	15.468		
13,000.00	11,375.00	12,473.80	10,764.00	24.29	21.46	28.78	-1,561.62	584.19	697.14	651.69	45.45	15.338		
13,100.00	11,375.00	12,573.80	10,764.00	24.80	22.01	28.78	-1,661.62	584.92	697.11	651.26	45.85	15.203		
13,200.00	11,375.00	12,673.80	10,764.00	25.33	22.59	28.78	-1,761.61	585.65	697.08	650.80	46.28	15.061		
13,300.00	11,375.00	12,773.80	10,764.00	25.88	23.18	28.77	-1,861.61	586.38	697.05	650.32	46.73	14.915		
13,400.00	11,375.00	12,873.80	10,764.00	26.44	23.80	28.77	-1,961.61	587.11	697.03	649.82	47.21	14.764		
13,500.00	11,375.00	12,973.80	10,764.00	27.02	24.42	28.76	-2,061.61	587.84	697.00	649.29	47.71	14.610		
13,600.00	11,375.00	13,073.80	10,764.00	27.61	25.06	28.76	-2,161.60	588.57	696.97	648.74	48.23	14.452		
13,700.00	11,375.00	13,173.80	10,764.00	28.21	25.71	28.75	-2,261.60	589.30	696.94	648.17	48.76	14.292		
13,800.00	11,375.00	13,273.80	10,764.00	28.82	26.38	28.75	-2,361.60	590.03	696.91	647.59	49.32	14.129		
13,900.00	11,375.00	13,373.80	10,764.00	29.45	27.06	28.75	-2,461.60	590.77	696.88	646.98	49.90	13.965		
14,000.00	11,375.00	13,473.80	10,764.00	30.09	27.74	28.74	-2,561.59	591.50	696.85	646.35	50.50	13.799		
14,100.00	11,375.00	13,573.80	10,764.00	30.74	28.44	28.74	-2,661.59	592.23	696.82	645.71	51.12	13.632		
14,200.00	11,375.00	13,673.80	10,764.00	31.40	29.14	28.73	-2,761.59	592.96	696.79	645.04	51.75	13.465		
14,300.00	11,375.00	13,773.80	10,764.00	32.06	29.86	28.73	-2,861.58	593.69	696.76	644.36	52.40	13.297		
14,400.00	11,375.00	13,873.80	10,764.00	32.74	30.58	28.72	-2,961.58	594.42	696.73	643.67	53.06	13.130		
14,500.00	11,375.00	13,973.80	10,764.00	33.42	31.31	28.72	-3,061.58	595.15	696.71	642.96	53.75	12.963		
14,600.00	11,375.00	14,073.80	10,764.00	34.11	32.04	28.71	-3,161.58	595.88	696.68	642.23	54.44	12.796		
14,700.00	11,375.00	14,173.80	10,764.00	34.81	32.78	28.71	-3,261.57	596.61	696.65	641.49	55.15	12.631		
14,800.00	11,375.00	14,273.80	10,764.00	35.52	33.53	28.71	-3,361.57	597.34	696.62	640.74	55.88	12.467		
14,900.00	11,375.00	14,373.80	10,764.00	36.23	34.28	28.70	-3,461.57	598.08	696.59	639.97	56.62	12.304		
15,000.00	11,375.00	14,473.80	10,764.00	36.95	35.04	28.70	-3,561.57	598.81	696.56	639.19	57.37	12.142		
15,100.00	11,375.00	14,573.80	10,764.00	37.67	35.80	28.69	-3,661.56	599.54	696.53	638.40	58.13	11.982		
15,200.00	11,375.00	14,673.80	10,764.00	38.40	36.57	28.69	-3,761.56	600.27	696.50	637.60	58.90	11.824		
15,300.00	11,375.00	14,773.80	10,764.00	39.14	37.34	28.68	-3,861.56	601.00	696.47	636.78	59.69	11.668		
15,400.00	11,375.00	14,873.80	10,764.00	39.88	38.11	28.68	-3,961.55	601.73	696.44	635.96	60.49	11.514		
15,500.00	11,375.00	14,973.80	10,764.00	40.62	38.89	28.68	-4,061.55	602.46	696.41	635.12	61.29	11.362		
15,600.00	11,375.00	15,073.80	10,764.00	41.37	39.67	28.67	-4,161.55	603.19	696.39	634.28	62.11	11.212		
15,700.00	11,375.00	15,173.80	10,764.00	42.13	40.46	28.67	-4,261.55	603.92	696.36	633.42	62.94	11.064		
15,800.00	11,375.00	15,273.80	10,764.00	42.88	41.24	28.66	-4,361.54	604.66	696.33	632.55	63.77	10.919		
15,900.00	11,375.00	15,373.80	10,764.00	43.64	42.03	28.66	-4,461.54	605.39	696.30	631.68	64.62	10.776		
16,000.00	11,375.00	15,473.80	10,764.00	44.41	42.83	28.65	-4,561.54	606.12	696.27	630.80	65.47	10.635		
16,100.00	11,375.00	15,573.80	10,764.00	45.18	43.62	28.65	-4,661.54	606.85	696.24	629.91	66.33	10.496		
16,200.00	11,375.00	15,673.80	10,764.00	45.95	44.42	28.64	-4,761.53	607.58	696.21	629.01	67.20	10.360		
16,300.00	11,375.00	15,773.80	10,764.00	46.72	45.22	28.64	-4,861.53	608.31	696.18	628.11	68.08	10.226		
16,400.00	11,375.00	15,873.80	10,764.00	47.50	46.02	28.64	-4,961.53	609.04	696.15	627.19	68.96	10.095		
16,500.00	11,375.00	15,973.80	10,764.00	48.28	46.83	28.63	-5,061.53	609.77	696.12	626.27	69.85	9.966		
16,600.00	11,375.00	16,073.80	10,764.00	49.06	47.63	28.63	-5,161.52	610.50	696.10	625.35	70.75	9.839		
16,700.00	11,375.00	16,173.80	10,764.00	49.84	48.44	28.62	-5,261.52	611.24	696.07	624.41	71.65	9.714		
16,800.00	11,375.00	16,273.80	10,764.00	50.63	49.25	28.62	-5,361.52	611.97	696.04	623.47	72.56	9.592		
16,900.00	11,375.00	16,373.80	10,764.00	51.42	50.06	28.61	-5,461.51	612.70	696.01	622.53	73.48	9.472		
17,000.00	11,375.00	16,473.80	10,764.00	52.21	50.87	28.61	-5,561.51	613.43	695.98	621.58	74.40	9.355		
17,100.00	11,375.00	16,573.80	10,764.00	53.01	51.69	28.61	-5,661.51	614.16	695.95	620.62	75.33	9.239		

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

ConocoPhillips Anticollision Report

Company:	DELAWARE BASIN EAST	Local Co-ordinate Reference:	Well _COLUMBUS FEDERAL COM 653H - Slot SLOT 7
Project:	LEA COUNT SOUTH WEST (NM-E)	TVD Reference:	KB @ 3362.00usft
Reference Site:	COLUMBUS FEDERAL PROJECT	MD Reference:	KB @ 3362.00usft
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	_COLUMBUS FEDERAL COM 653H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDT 17 Permian Prod
Reference Design:	PWP0	Offset TVD Reference:	Reference Datum

Offset Design: COLUMBUS FEDERAL PROJECT - _COLUMBUS FEDERAL COM 504H - OWB - PWP0														Offset Site Error:	0.00 usft
Survey Program: 0-r.5 MWD+IFR1+SAG+FDIR														Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis		Highside Toolface (°)	Offset Wellbore Centre		Distance		No-Go Distance (usft)	Separation Factor	Warning		
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)		+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)					
17,200.00	11,375.00	16,673.80	10,764.00	53.80	52.50	28.60	-5,761.51	614.89	695.92	619.66	76.26	9.126			
17,300.00	11,375.00	16,773.80	10,764.00	54.60	53.32	28.60	-5,861.50	615.62	695.89	618.69	77.20	9.014			
17,400.00	11,375.00	16,873.80	10,764.00	55.40	54.14	28.59	-5,961.50	616.35	695.86	617.72	78.14	8.905			
17,500.00	11,375.00	16,973.80	10,764.00	56.20	54.96	28.59	-6,061.50	617.08	695.83	616.75	79.09	8.798			
17,600.00	11,375.00	17,073.80	10,764.00	57.00	55.78	28.58	-6,161.50	617.82	695.81	615.77	80.04	8.693			
17,700.00	11,375.00	17,173.80	10,764.00	57.81	56.60	28.58	-6,261.49	618.55	695.78	614.78	80.99	8.590			
17,800.00	11,375.00	17,273.80	10,764.00	58.61	57.43	28.57	-6,361.49	619.28	695.75	613.79	81.95	8.489			
17,900.00	11,375.00	17,373.80	10,764.00	59.42	58.25	28.57	-6,461.49	620.01	695.72	612.80	82.92	8.390			
18,000.00	11,375.00	17,473.80	10,764.00	60.23	59.08	28.57	-6,561.49	620.74	695.69	611.80	83.89	8.293			
18,100.00	11,375.00	17,573.80	10,764.00	61.04	59.90	28.56	-6,661.48	621.47	695.66	610.80	84.86	8.198			
18,200.00	11,375.00	17,673.80	10,764.00	61.85	60.73	28.56	-6,761.48	622.20	695.63	609.80	85.83	8.104			
18,300.00	11,375.00	17,773.80	10,764.00	62.66	61.56	28.55	-6,861.48	622.93	695.60	608.79	86.81	8.013			
18,400.00	11,375.00	17,873.80	10,764.00	63.48	62.38	28.55	-6,961.47	623.66	695.57	607.78	87.80	7.923			
18,500.00	11,375.00	17,973.80	10,764.00	64.29	63.21	28.54	-7,061.47	624.40	695.55	606.76	88.78	7.834			
18,600.00	11,375.00	18,073.80	10,764.00	65.11	64.04	28.54	-7,161.47	625.13	695.52	605.75	89.77	7.748			
18,700.00	11,375.00	18,173.80	10,764.00	65.93	64.88	28.54	-7,261.47	625.86	695.49	604.72	90.76	7.663			
18,800.00	11,375.00	18,273.80	10,764.00	66.75	65.71	28.53	-7,361.46	626.59	695.46	603.70	91.76	7.579			
18,900.00	11,375.00	18,373.80	10,764.00	67.56	66.54	28.53	-7,461.46	627.32	695.43	602.67	92.76	7.497			
19,000.00	11,375.00	18,473.80	10,764.00	68.39	67.37	28.52	-7,561.46	628.05	695.40	601.64	93.76	7.417			
19,100.00	11,375.00	18,573.80	10,764.00	69.21	68.21	28.52	-7,661.46	628.78	695.37	600.61	94.76	7.338			
19,200.00	11,375.00	18,673.80	10,764.00	70.03	69.04	28.51	-7,761.45	629.51	695.34	599.58	95.77	7.261			
19,300.00	11,375.00	18,773.80	10,764.00	70.85	69.88	28.51	-7,861.45	630.24	695.31	598.54	96.77	7.185			
19,400.00	11,375.00	18,873.80	10,764.00	71.68	70.71	28.50	-7,961.45	630.97	695.28	597.50	97.78	7.110			
19,500.00	11,375.00	18,973.80	10,764.00	72.50	71.55	28.50	-8,061.44	631.71	695.26	596.46	98.80	7.037			
19,600.00	11,375.00	19,073.80	10,764.00	73.33	72.38	28.50	-8,161.44	632.44	695.23	595.41	99.81	6.965			
19,700.00	11,375.00	19,173.80	10,764.00	74.15	73.22	28.49	-8,261.44	633.17	695.20	594.37	100.83	6.895			
19,800.00	11,375.00	19,273.80	10,764.00	74.98	74.06	28.49	-8,361.44	633.90	695.17	593.32	101.85	6.825			
19,900.00	11,375.00	19,373.80	10,764.00	75.81	74.90	28.48	-8,461.43	634.63	695.14	592.27	102.87	6.757			
20,000.00	11,375.00	19,473.80	10,764.00	76.64	75.74	28.48	-8,561.43	635.36	695.11	591.22	103.90	6.691			
20,100.00	11,375.00	19,573.80	10,764.00	77.46	76.58	28.47	-8,661.43	636.09	695.08	590.16	104.92	6.625			
20,200.00	11,375.00	19,673.80	10,764.00	78.29	77.41	28.47	-8,761.43	636.82	695.05	589.11	105.95	6.560			
20,300.00	11,375.00	19,773.80	10,764.00	79.12	78.25	28.47	-8,861.42	637.55	695.03	588.05	106.98	6.497			
20,400.00	11,375.00	19,873.80	10,764.00	79.96	79.09	28.46	-8,961.42	638.29	695.00	586.99	108.01	6.435			
20,500.00	11,375.00	19,973.80	10,764.00	80.79	79.94	28.46	-9,061.42	639.02	694.97	585.93	109.04	6.373			
20,600.00	11,375.00	20,073.80	10,764.00	81.62	80.78	28.45	-9,161.42	639.75	694.94	584.86	110.08	6.313			
20,700.00	11,375.00	20,173.80	10,764.00	82.45	81.62	28.45	-9,261.41	640.48	694.91	583.80	111.11	6.254			
20,800.00	11,375.00	20,273.80	10,764.00	83.29	82.46	28.44	-9,361.41	641.21	694.88	582.73	112.15	6.196			
20,900.00	11,375.00	20,373.80	10,764.00	84.12	83.30	28.44	-9,461.41	641.94	694.85	581.66	113.19	6.139			
21,000.00	11,375.00	20,473.80	10,764.00	84.95	84.14	28.43	-9,561.40	642.67	694.82	580.60	114.23	6.083			
21,100.00	11,375.00	20,573.80	10,764.00	85.79	84.99	28.43	-9,661.40	643.40	694.79	579.52	115.27	6.028			
21,200.00	11,375.00	20,673.80	10,764.00	86.62	85.83	28.43	-9,761.40	644.13	694.77	578.45	116.31	5.973			
21,300.00	11,375.00	20,773.80	10,764.00	87.46	86.67	28.42	-9,861.40	644.87	694.74	577.38	117.36	5.920			
21,400.00	11,375.00	20,873.80	10,764.00	88.29	87.52	28.42	-9,961.39	645.60	694.71	576.31	118.40	5.867			
21,500.00	11,375.00	20,973.80	10,764.00	89.13	88.36	28.41	-10,061.39	646.33	694.68	575.23	119.45	5.816			
21,539.67	11,375.00	21,013.47	10,764.00	89.46	88.70	28.41	-10,101.06	646.62	694.67	574.80	119.86	5.795			

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

ConocoPhillips Anticollision Report

Company:	DELAWARE BASIN EAST	Local Co-ordinate Reference:	Well _COLUMBUS FEDERAL COM 653H - Slot SLOT 7
Project:	LEA COUNT SOUTH WEST (NM-E)	TVD Reference:	KB @ 3362.00usft
Reference Site:	COLUMBUS FEDERAL PROJECT	MD Reference:	KB @ 3362.00usft
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	_COLUMBUS FEDERAL COM 653H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDT 17 Permian Prod
Reference Design:	PWP0	Offset TVD Reference:	Reference Datum

Offset Design: COLUMBUS FEDERAL PROJECT - _COLUMBUS FEDERAL COM 505H - OWB - PWP0													Offset Site Error:	0.00 usft
Survey Program: 0-r.5 MWD+IFR1+SAG+FDIR													Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis		Highside Toolface (°)	Offset Wellbore Centre		Distance		No-Go Distance (usft)	Separation Factor	Warning	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)		+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)				
0.00	0.00	0.00	0.00	0.00	0.00	89.57	0.15	19.94	19.94	17.95	1.99	10.014		
100.00	100.00	100.00	100.00	0.77	0.77	89.57	0.15	19.94	19.94	16.63	3.31	6.022		
200.00	200.00	200.00	200.00	1.44	1.44	89.57	0.15	19.94	19.94	15.75	4.20	4.753		
300.00	300.00	300.00	300.00	1.88	1.88	89.57	0.15	19.94	19.94	15.03	4.91	4.060		
400.00	400.00	400.00	400.00	2.25	2.25	89.57	0.15	19.94	19.94	14.41	5.53	3.604		
500.00	500.00	500.00	500.00	2.56	2.56	89.57	0.15	19.94	19.94	13.85	6.09	3.274		
600.00	600.00	600.00	600.00	2.84	2.84	89.57	0.15	19.94	19.94	13.34	6.60	3.021		
700.00	700.00	700.00	700.00	3.10	3.10	89.57	0.15	19.94	19.94	12.86	7.08	2.818	Normal Operations	
800.00	800.00	800.00	800.00	3.34	3.34	89.57	0.15	19.94	19.94	12.42	7.52	2.650	Normal Operations	
900.00	900.00	900.00	900.00	3.57	3.57	89.57	0.15	19.94	19.94	11.99	7.95	2.509	Normal Operations	
1,000.00	1,000.00	1,000.00	1,000.00	3.79	3.79	89.57	0.15	19.94	19.94	11.59	8.35	2.388	Caution - Monitor Closely	
1,100.00	1,100.00	1,100.00	1,100.00	4.19	4.19	89.57	0.15	19.94	19.94	11.20	8.74	2.282	Caution - Monitor Closely	
1,200.00	1,200.00	1,200.00	1,200.00	4.38	4.38	89.57	0.15	19.94	19.94	10.83	9.11	2.188	Caution - Monitor Closely	
1,300.00	1,300.00	1,300.00	1,300.00	4.56	4.56	89.57	0.15	19.94	19.94	10.47	9.47	2.105	Caution - Monitor Closely	
1,400.00	1,400.00	1,400.00	1,400.00	4.74	4.74	89.57	0.15	19.94	19.94	10.12	9.82	2.030	Caution - Monitor Closely	
1,500.00	1,500.00	1,500.00	1,500.00	4.91	4.91	89.57	0.15	19.94	19.94	9.78	10.16	1.962	Caution - Monitor Closely	
1,600.00	1,600.00	1,600.00	1,600.00	5.08	5.08	89.57	0.15	19.94	19.94	9.45	10.49	1.900	Caution - Monitor Closely	
1,700.00	1,700.00	1,700.00	1,700.00	5.24	5.24	89.57	0.15	19.94	19.94	9.12	10.82	1.844	Caution - Monitor Closely	
1,800.00	1,800.00	1,800.00	1,800.00	5.40	5.40	89.57	0.15	19.94	19.94	8.81	11.13	1.791	Caution - Monitor Closely	
1,900.00	1,900.00	1,900.00	1,900.00	5.56	5.56	89.57	0.15	19.94	19.94	8.50	11.44	1.743	Caution - Monitor Closely, CC, ES, SF	
2,000.00	2,000.00	2,000.00	2,000.00	5.71	5.79	88.64	0.51	21.62	21.64	8.83	11.81	1.832	Caution - Monitor Closely	
2,100.00	2,100.00	2,099.28	2,099.26	5.86	6.00	86.57	1.60	26.65	26.76	14.60	12.16	2.201	Caution - Monitor Closely	
2,200.00	2,200.00	2,198.33	2,198.17	6.01	6.21	84.46	3.39	34.97	35.32	22.83	12.49	2.828	Normal Operations	
2,300.00	2,300.00	2,296.90	2,296.37	6.15	6.42	82.80	5.87	46.49	47.30	34.50	12.80	3.694		
2,400.00	2,400.00	2,394.77	2,393.53	6.30	6.62	81.60	9.02	61.09	62.67	49.57	13.11	4.782		
2,500.00	2,500.00	2,491.73	2,489.32	6.44	6.73	80.75	12.81	78.67	81.27	67.96	13.31	6.107		
2,600.00	2,600.00	2,588.22	2,584.12	6.58	6.86	80.19	16.85	97.42	100.82	87.24	13.57	7.427		
2,700.00	2,700.00	2,686.29	2,680.29	6.71	7.00	79.80	20.89	116.18	120.37	106.52	13.85	8.690		
2,800.00	2,800.00	2,784.36	2,776.46	6.85	7.14	79.53	24.94	134.94	139.92	125.79	14.13	9.902		
2,900.00	2,900.00	2,882.43	2,872.64	6.98	7.28	79.32	28.98	153.69	159.48	145.07	14.41	11.066		
3,000.00	3,000.00	2,980.49	2,968.81	7.17	7.43	2.19	33.03	172.51	177.32	162.57	14.75	12.023		
3,100.00	3,099.98	3,078.88	3,065.30	7.35	7.59	2.10	37.11	191.43	191.73	176.65	15.08	12.716		
3,200.00	3,199.84	3,177.84	3,162.34	7.53	7.74	2.06	41.21	210.44	202.67	187.26	15.41	13.151		
3,300.00	3,299.45	3,277.23	3,259.81	7.64	7.88	2.06	44.63	226.32	209.13	193.48	15.65	13.361		
3,383.28	3,382.14	3,360.26	3,341.24	7.65	7.90	2.07	45.32	229.51	210.19	194.50	15.69	13.400		
3,400.00	3,398.71	3,376.94	3,357.60	7.79	8.07	2.08	49.44	248.60	216.50	200.51	15.99	13.538		
3,500.00	3,497.81	3,476.74	3,455.47	7.90	8.23	2.10	53.55	267.68	222.81	206.53	16.28	13.687		
3,600.00	3,596.92	3,576.54	3,553.34	8.02	8.40	2.11	57.66	286.77	229.12	212.55	16.57	13.826		
3,700.00	3,696.03	3,676.34	3,651.21	8.15	8.57	2.13	61.78	305.86	235.44	218.57	16.87	13.957		
3,800.00	3,795.13	3,776.14	3,749.08	8.27	8.74	2.14	65.89	324.94	241.75	224.58	17.17	14.080		
3,900.00	3,894.24	3,875.95	3,846.96	8.40	8.91	2.16	70.01	344.03	248.06	230.58	17.48	14.195		
4,000.00	3,993.35	3,975.75	3,944.83	8.53	9.09	2.17	74.12	363.12	254.37	236.59	17.78	14.303		
4,100.00	4,092.45	4,075.55	4,042.70	8.67	9.26	2.18	78.23	382.20	260.68	242.59	18.10	14.404		
4,200.00	4,191.56	4,175.35	4,140.57	8.80	9.44	2.19	82.35	401.29	267.00	248.58	18.41	14.499		
4,300.00	4,290.67	4,275.15	4,238.44	8.94	9.62	2.20	86.46	420.38	273.31	254.57	18.74	14.588		
4,400.00	4,389.77	4,374.95	4,336.32	9.08	9.80	2.21	90.58	439.46	279.62	260.56	19.06	14.671		
4,500.00	4,488.88	4,474.75	4,434.19	9.22	9.99	2.22	94.69	458.55	285.93	266.55	19.39	14.750		
4,600.00	4,587.98	4,574.55	4,532.06	9.37	10.17	2.23	98.80	477.64	292.24	272.53	19.71	14.824		
4,700.00	4,687.09	4,674.35	4,629.93	9.51	10.35	2.24	102.92	496.72	298.56	278.51	20.05	14.893		
4,800.00	4,786.20	4,774.15	4,727.80	9.66	10.54	2.25	107.03	515.81	304.87	284.49	20.38	14.958		
4,900.00	4,885.30	4,873.95	4,825.68											

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

ConocoPhillips Anticollision Report

Company:	DELAWARE BASIN EAST	Local Co-ordinate Reference:	Well _COLUMBUS FEDERAL COM 653H - Slot SLOT 7
Project:	LEA COUNT SOUTH WEST (NM-E)	TVD Reference:	KB @ 3362.00usft
Reference Site:	COLUMBUS FEDERAL PROJECT	MD Reference:	KB @ 3362.00usft
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	_COLUMBUS FEDERAL COM 653H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDT 17 Permian Prod
Reference Design:	PWP0	Offset TVD Reference:	Reference Datum

Offset Design: COLUMBUS FEDERAL PROJECT - _COLUMBUS FEDERAL COM 505H - OWB - PWP0														Offset Site Error:	0.00 usft
Survey Program: 0-r.5 MWD+IFR1+SAG+FDIR														Offset Well Error:	0.00 usft
Measured Depth (usft)	Vertical Depth (usft)	Offset		Semi Major Axis		Highside Toolface (°)	Offset Wellbore Centre		Distance		No-Go Distance (usft)	Separation Factor	Warning		
		Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)		+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)					
5,000.00	4,984.41	4,973.75	4,923.55	9.81	10.73	2.26	111.15	534.90	311.18	290.46	20.72	15.019			
5,100.00	5,083.52	5,073.55	5,021.42	9.96	10.92	2.27	115.26	553.98	317.49	296.43	21.06	15.076			
5,200.00	5,182.62	5,173.35	5,119.29	10.11	11.11	2.27	119.37	573.07	323.80	302.40	21.40	15.130			
5,300.00	5,281.73	5,273.15	5,217.16	10.26	11.30	2.28	123.49	592.16	330.12	308.37	21.75	15.181			
5,400.00	5,380.83	5,372.95	5,315.04	10.42	11.49	2.29	127.60	611.24	336.43	314.34	22.09	15.229			
5,500.00	5,479.94	5,472.75	5,412.91	10.57	11.68	2.30	131.72	630.33	342.74	320.30	22.44	15.274			
5,600.00	5,579.05	5,572.56	5,510.78	10.73	11.87	2.30	135.83	649.42	349.05	326.26	22.79	15.316			
5,700.00	5,678.15	5,672.36	5,608.65	10.89	12.07	2.31	139.94	668.50	355.37	332.22	23.14	15.356			
5,800.00	5,777.26	5,772.16	5,706.52	11.05	12.26	2.32	144.06	687.59	361.68	338.18	23.50	15.394			
5,900.00	5,876.37	5,871.96	5,804.40	11.21	12.45	2.32	148.17	706.68	367.99	344.14	23.85	15.429			
6,000.00	5,975.47	5,971.76	5,902.27	11.37	12.65	2.33	152.29	725.76	374.30	350.10	24.21	15.462			
6,100.00	6,074.58	6,071.56	6,000.14	11.54	12.85	2.33	156.40	744.85	380.61	356.05	24.57	15.494			
6,200.00	6,173.69	6,171.36	6,098.01	11.70	13.04	2.34	160.51	763.94	386.93	362.00	24.92	15.524			
6,300.00	6,272.79	6,271.16	6,195.88	11.87	13.24	2.34	164.63	783.02	393.24	367.95	25.29	15.552			
6,400.00	6,371.90	6,370.96	6,293.76	12.03	13.44	2.35	168.74	802.11	399.55	373.90	25.65	15.578			
6,500.00	6,471.00	6,470.76	6,391.63	12.20	13.64	2.35	172.86	821.20	405.86	379.85	26.01	15.603			
6,600.00	6,570.11	6,570.56	6,489.50	12.37	13.84	2.36	176.97	840.28	412.18	385.80	26.38	15.627			
6,700.00	6,669.22	6,670.36	6,587.37	12.53	14.04	2.36	181.08	859.37	418.49	391.75	26.74	15.649			
6,800.00	6,768.32	6,770.16	6,685.24	12.70	14.24	2.37	185.20	878.46	424.80	397.69	27.11	15.670			
6,900.00	6,867.43	6,869.96	6,783.12	12.87	14.44	2.37	189.31	897.54	431.11	403.64	27.48	15.690			
7,000.00	6,966.54	6,969.76	6,880.99	13.04	14.64	2.38	193.43	916.63	437.42	409.58	27.85	15.709			
7,100.00	7,065.64	7,069.56	6,978.86	13.21	14.84	2.38	197.54	935.72	443.74	415.52	28.22	15.726			
7,200.00	7,164.75	7,169.36	7,076.73	13.39	15.05	2.38	201.65	954.80	450.05	421.46	28.59	15.743			
7,300.00	7,263.86	7,269.16	7,174.60	13.56	15.25	2.39	205.77	973.89	456.36	427.40	28.96	15.759			
7,400.00	7,362.96	7,368.97	7,272.48	13.73	15.45	2.39	209.88	992.98	462.67	433.34	29.33	15.774			
7,500.00	7,462.07	7,468.77	7,370.35	13.91	15.66	2.39	214.00	1,012.06	468.99	439.28	29.70	15.788			
7,600.00	7,561.17	7,568.57	7,468.22	14.08	15.86	2.40	218.11	1,031.15	475.30	445.22	30.08	15.802			
7,700.00	7,660.28	7,668.37	7,566.09	14.26	16.07	2.40	222.22	1,050.24	481.61	451.16	30.45	15.814			
7,800.00	7,759.39	7,768.17	7,663.96	14.43	16.27	2.40	226.34	1,069.32	487.92	457.09	30.83	15.826			
7,900.00	7,858.49	7,867.97	7,761.84	14.61	16.48	2.41	230.45	1,088.41	494.23	463.03	31.21	15.838			
8,000.00	7,957.60	7,967.77	7,859.71	14.78	16.68	2.41	234.57	1,107.50	500.55	468.96	31.58	15.849			
8,100.00	8,056.71	8,067.57	7,957.58	14.96	16.89	2.41	238.68	1,126.58	506.86	474.90	31.96	15.859			
8,200.00	8,155.81	8,167.37	8,055.45	15.14	17.10	2.42	242.79	1,145.67	513.17	480.83	32.34	15.868			
8,300.00	8,254.92	8,267.17	8,153.32	15.32	17.30	2.42	246.91	1,164.76	519.48	486.77	32.72	15.877			
8,400.00	8,354.02	8,366.97	8,251.20	15.50	17.51	2.42	251.02	1,183.84	525.80	492.70	33.10	15.886			
8,500.00	8,453.13	8,466.77	8,349.07	15.67	17.72	2.43	255.14	1,202.93	532.11	498.63	33.48	15.894			
8,600.00	8,552.24	8,566.57	8,446.94	15.85	17.92	2.43	259.25	1,222.02	538.42	504.56	33.86	15.902			
8,700.00	8,651.34	8,666.37	8,544.81	16.03	18.13	2.43	263.36	1,241.10	544.73	510.49	34.24	15.909			
8,800.00	8,750.45	8,766.17	8,642.68	16.21	18.34	2.43	267.48	1,260.19	551.05	516.42	34.62	15.916			
8,900.00	8,849.56	8,865.97	8,740.56	16.40	18.55	2.44	271.59	1,279.28	557.36	522.35	35.00	15.922			
9,000.00	8,948.66	8,965.77	8,838.43	16.58	18.76	2.44	275.71	1,298.36	563.67	528.28	35.39	15.928			
9,100.00	9,047.77	9,065.58	8,936.30	16.76	18.97	2.44	279.82	1,317.45	569.98	534.21	35.77	15.934			
9,200.00	9,146.88	9,165.38	9,034.17	16.94	19.18	2.44	283.93	1,336.54	576.29	540.14	36.15	15.940			
9,300.00	9,245.98	9,271.29	9,138.10	17.12	19.40	2.45	288.23	1,356.49	582.32	545.77	36.56	15.930			
9,400.00	9,345.09	9,382.54	9,247.62	17.30	19.63	2.46	292.36	1,375.61	588.62	549.66	36.96	15.871			
9,500.00	9,444.19	9,493.94	9,357.64	17.49	19.86	2.47	296.03	1,392.66	588.97	551.62	37.36	15.766			
9,600.00	9,543.30	9,605.40	9,468.04	17.67	20.07	2.49	299.26	1,407.63	589.38	551.64	37.74	15.615			
9,700.00	9,642.41	9,716.83	9,578.69	17.85	20.28	2.52	302.03	1,420.50	587.85	549.73	38.12	15.421			
9,794.15	9,735.72	9,821.64	9,682.98	18.02	20.47	2.55	304.22	1,430.68	584.63	546.17	38.46	15.199			
9,800.00	9,741.51	9,828.15	9,689.47	18.03	20.48	2.55	304.35	1,431.25	584.38	545.89	38.48	15.185			

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

ConocoPhillips Anticollision Report

Company:	DELAWARE BASIN EAST	Local Co-ordinate Reference:	Well _COLUMBUS FEDERAL COM 653H - Slot SLOT 7
Project:	LEA COUNT SOUTH WEST (NM-E)	TVD Reference:	KB @ 3362.00usft
Reference Site:	COLUMBUS FEDERAL PROJECT	MD Reference:	KB @ 3362.00usft
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	_COLUMBUS FEDERAL COM 653H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDT 17 Permian Prod
Reference Design:	PWP0	Offset TVD Reference:	Reference Datum

Offset Design: COLUMBUS FEDERAL PROJECT - _COLUMBUS FEDERAL COM 505H - OWB - PWP0													Offset Site Error:	0.00 usft
Survey Program: 0-r.5 MWD+IFR1+SAG+FDIR													Offset Well Error:	0.00 usft
Reference				Offset		Semi Major Axis		Offset Wellbore Centre		Distance		No-Go Distance (usft)	Separation Factor	Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)				
9,900.00	9,840.74	9,939.35	9,800.31	18.26	20.67	2.58	306.21	1,439.88	579.94	541.05	38.88	14.915		
10,000.00	9,940.18	10,050.43	9,911.19	18.44	20.86	2.61	307.62	1,446.40	575.30	536.08	39.22	14.668		
10,100.00	10,039.78	10,161.41	10,022.07	18.61	21.02	2.64	308.57	1,450.82	570.47	530.93	39.54	14.427		
10,200.00	10,139.52	10,272.26	10,132.90	18.77	21.17	2.67	309.07	1,453.14	565.45	525.61	39.84	14.194		
10,300.00	10,239.37	10,378.73	10,239.37	18.93	21.24	2.70	309.15	1,453.52	560.39	520.34	40.05	13.993		
10,400.00	10,339.30	10,491.69	10,352.11	19.07	21.24	3.19	304.49	1,453.56	556.08	515.92	40.16	13.846		
10,500.00	10,439.28	10,607.49	10,463.71	19.21	21.19	6.27	274.66	1,453.78	550.46	510.32	40.14	13.714		
10,560.72	10,500.00	10,668.99	10,519.14	19.25	21.17	86.01	248.11	1,453.97	547.63	507.59	40.04	13.677		
10,600.00	10,539.28	10,704.68	10,549.58	19.26	21.15	87.95	229.50	1,454.11	546.55	506.61	39.95	13.682		
10,632.29	10,571.57	10,731.59	10,571.57	19.28	21.15	89.58	213.99	1,454.22	546.24	506.37	39.87	13.701		
10,700.00	10,639.28	10,781.38	10,609.81	19.32	21.14	92.92	182.15	1,454.45	547.96	508.25	39.70	13.801		
10,800.00	10,739.28	10,840.60	10,650.68	19.37	21.14	97.36	139.34	1,454.77	558.39	518.87	39.52	14.129		
10,900.00	10,839.28	10,886.39	10,678.46	19.43	21.16	101.07	102.96	1,455.03	580.14	540.63	39.52	14.681		
10,958.26	10,897.54	10,908.30	10,690.49	19.45	21.17	102.90	84.65	1,455.17	598.31	558.70	39.61	15.105		
10,975.00	10,914.28	10,914.22	10,693.59	19.45	21.17	-75.49	79.62	1,455.20	604.20	564.55	39.65	15.239		
11,000.00	10,939.23	10,925.00	10,699.08	19.44	21.18	-73.49	70.34	1,455.27	613.32	573.62	39.70	15.448		
11,025.00	10,964.06	10,932.41	10,702.74	19.43	21.18	-71.75	63.89	1,455.32	622.75	582.94	39.81	15.644		
11,050.00	10,988.72	10,941.76	10,707.21	19.42	21.19	-69.87	55.68	1,455.38	632.45	592.53	39.91	15.845		
11,075.00	11,013.12	10,950.00	10,711.01	19.41	21.19	-68.09	48.37	1,455.43	642.33	602.28	40.05	16.039		
11,100.00	11,037.21	10,960.91	10,715.85	19.40	21.20	-66.16	38.60	1,455.50	652.33	612.16	40.17	16.240		
11,125.00	11,060.91	10,975.00	10,721.77	19.38	21.21	-64.08	25.81	1,455.60	662.43	622.16	40.27	16.449		
11,150.00	11,084.17	10,975.00	10,721.77	19.37	21.21	-62.90	25.81	1,455.60	672.53	632.01	40.52	16.596		
11,175.00	11,106.91	10,990.52	10,727.84	19.36	21.23	-60.87	11.52	1,455.70	682.53	641.90	40.64	16.796		
11,200.00	11,129.08	11,000.00	10,731.33	19.35	21.24	-59.25	2.71	1,455.77	692.49	651.67	40.82	16.966		
11,225.00	11,150.62	11,010.75	10,735.06	19.34	21.25	-57.64	-7.37	1,455.84	702.31	661.32	40.99	17.133		
11,250.00	11,171.46	11,025.00	10,739.67	19.33	21.26	-55.96	-20.85	1,455.94	711.98	670.84	41.14	17.304		
11,275.00	11,191.56	11,031.29	10,741.57	19.33	21.27	-54.70	-26.85	1,455.98	721.40	680.03	41.37	17.438		
11,300.00	11,210.84	11,041.66	10,744.53	19.32	21.29	-53.35	-36.78	1,456.05	730.58	689.02	41.56	17.577		
11,325.00	11,229.27	11,050.00	10,746.76	19.32	21.30	-52.14	-44.82	1,456.11	739.49	697.71	41.78	17.701		
11,350.00	11,246.79	11,062.57	10,749.85	19.32	21.31	-50.87	-57.01	1,456.20	748.07	706.11	41.96	17.829		
11,375.00	11,263.35	11,075.00	10,752.59	19.32	21.33	-49.70	-69.13	1,456.29	756.32	714.18	42.14	17.946		
11,400.00	11,278.91	11,083.68	10,754.32	19.32	21.34	-48.71	-77.64	1,456.35	764.19	721.84	42.35	18.043		
11,425.00	11,293.42	11,100.00	10,757.14	19.32	21.37	-47.61	-93.71	1,456.47	771.72	729.20	42.51	18.152		
11,450.00	11,306.85	11,100.00	10,757.14	19.33	21.37	-46.96	-93.71	1,456.47	778.78	736.00	42.77	18.206		
11,475.00	11,319.15	11,115.65	10,759.33	19.35	21.40	-46.04	-109.20	1,456.58	785.37	742.44	42.94	18.291		
11,500.00	11,330.30	11,125.00	10,760.40	19.36	21.41	-45.32	-118.49	1,456.65	791.56	748.42	43.13	18.351		
11,525.00	11,340.27	11,137.12	10,761.51	19.38	21.43	-44.62	-130.56	1,456.74	797.27	753.95	43.31	18.407		
11,550.00	11,349.02	11,150.00	10,762.36	19.40	21.46	-43.99	-143.41	1,456.83	802.50	759.01	43.49	18.454		
11,575.00	11,356.53	11,158.69	10,762.73	19.43	21.47	-43.48	-152.09	1,456.90	807.22	763.55	43.67	18.483		
11,600.00	11,362.78	11,174.90	10,763.01	19.46	21.50	-42.95	-168.30	1,457.02	811.48	767.65	43.83	18.516		
11,625.00	11,367.76	11,187.22	10,763.01	19.49	21.53	-42.54	-180.62	1,457.11	815.09	771.10	43.99	18.529		
11,650.00	11,371.46	11,211.95	10,763.01	19.52	21.58	-42.14	-205.34	1,457.29	817.84	773.73	44.11	18.542		
11,675.00	11,373.85	11,236.83	10,763.01	19.56	21.64	-41.89	-230.23	1,457.47	819.63	775.41	44.22	18.535		
11,700.00	11,374.93	11,261.80	10,763.01	19.60	21.70	-41.77	-255.20	1,457.65	820.45	776.12	44.33	18.507		
11,708.26	11,375.01	11,270.06	10,763.01	19.62	21.72	-41.77	-263.46	1,457.71	820.51	776.14	44.37	18.494		
11,800.00	11,375.01	11,361.80	10,763.00	19.80	21.95	-41.77	-355.20	1,458.38	820.54	775.78	44.77	18.329		
11,900.00	11,375.00	11,461.80	10,763.00	20.04	22.22	-41.77	-455.19	1,459.11	820.59	775.34	45.24	18.138		
12,000.00	11,375.00	11,561.80	10,763.00	20.30	22.52	-41.77	-555.19	1,459.84	820.63	774.88	45.75	17.938		
12,100.00	11,375.00	11,661.80	10,763.00	20.59	22.84	-41.78	-655.19	1,460.58	820.67	774.38	46.29	17.730		
12,200.00	11,375.00	11,761.80	10,763.00	20.91	23.18	-41.78	-755.19	1,461.31	820.71	773.85	46.86	17.515		
12,300.00	11,375.00	11,861.80	10,763.00	21.26	23.54	-41.78	-855.18	1,462.04	820.75	773.29	47.46	17.295		

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

ConocoPhillips Anticollision Report

Company:	DELAWARE BASIN EAST	Local Co-ordinate Reference:	Well _COLUMBUS FEDERAL COM 653H - Slot SLOT 7
Project:	LEA COUNT SOUTH WEST (NM-E)	TVD Reference:	KB @ 3362.00usft
Reference Site:	COLUMBUS FEDERAL PROJECT	MD Reference:	KB @ 3362.00usft
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	_COLUMBUS FEDERAL COM 653H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDT 17 Permian Prod
Reference Design:	PWP0	Offset TVD Reference:	Reference Datum

Offset Design: COLUMBUS FEDERAL PROJECT - _COLUMBUS FEDERAL COM 505H - OWB - PWP0													Offset Site Error:	0.00 usft
Survey Program: 0-r.5 MWD+IFR1+SAG+FDIR													Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis		Highside Toolface (°)	Offset Wellbore Centre		Distance		No-Go Distance (usft)	Separation Factor	Warning	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)		+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)				
12,400.00	11,375.00	11,961.80	10,763.00	21.62	23.92	-41.79	-955.18	1,462.77	820.79	772.70	48.09	17.069		
12,500.00	11,375.00	12,061.80	10,763.00	22.01	24.32	-41.79	-1,055.18	1,463.50	820.83	772.09	48.74	16.841		
12,600.00	11,375.00	12,161.80	10,763.00	22.43	24.74	-41.79	-1,155.17	1,464.23	820.87	771.44	49.42	16.609		
12,700.00	11,375.00	12,261.80	10,763.00	22.86	25.18	-41.80	-1,255.17	1,464.96	820.91	770.78	50.13	16.375		
12,800.00	11,375.00	12,361.80	10,763.00	23.32	25.63	-41.80	-1,355.17	1,465.69	820.95	770.08	50.86	16.140		
12,900.00	11,375.00	12,461.80	10,763.00	23.80	26.10	-41.80	-1,455.17	1,466.43	820.99	769.37	51.62	15.905		
13,000.00	11,375.00	12,561.80	10,763.00	24.29	26.59	-41.81	-1,555.16	1,467.16	821.03	768.63	52.40	15.669		
13,100.00	11,375.00	12,661.80	10,763.00	24.80	27.09	-41.81	-1,655.16	1,467.89	821.07	767.87	53.20	15.435		
13,200.00	11,375.00	12,761.80	10,763.00	25.33	27.60	-41.81	-1,755.16	1,468.62	821.11	767.09	54.02	15.201		
13,300.00	11,375.00	12,861.80	10,763.00	25.88	28.14	-41.82	-1,855.16	1,469.35	821.15	766.29	54.86	14.969		
13,400.00	11,375.00	12,961.80	10,763.00	26.44	28.68	-41.82	-1,955.15	1,470.08	821.19	765.48	55.71	14.740		
13,500.00	11,375.00	13,061.80	10,763.00	27.02	29.24	-41.82	-2,055.15	1,470.81	821.23	764.64	56.59	14.512		
13,600.00	11,375.00	13,161.80	10,763.00	27.61	29.81	-41.82	-2,155.15	1,471.54	821.27	763.79	57.48	14.288		
13,700.00	11,375.00	13,261.80	10,763.00	28.21	30.39	-41.83	-2,255.14	1,472.27	821.31	762.92	58.39	14.066		
13,800.00	11,375.00	13,361.80	10,763.00	28.82	30.98	-41.83	-2,355.14	1,473.01	821.35	762.04	59.31	13.848		
13,900.00	11,375.00	13,461.80	10,763.00	29.45	31.59	-41.83	-2,455.14	1,473.74	821.39	761.14	60.25	13.633		
14,000.00	11,375.00	13,561.80	10,763.00	30.09	32.20	-41.84	-2,555.14	1,474.47	821.43	760.23	61.21	13.421		
14,100.00	11,375.00	13,661.80	10,763.00	30.74	32.83	-41.84	-2,655.13	1,475.20	821.47	759.30	62.17	13.213		
14,200.00	11,375.00	13,761.80	10,763.00	31.40	33.46	-41.84	-2,755.13	1,475.93	821.51	758.36	63.15	13.009		
14,300.00	11,375.00	13,861.80	10,763.00	32.06	34.10	-41.85	-2,855.13	1,476.66	821.55	757.41	64.14	12.809		
14,400.00	11,375.00	13,961.80	10,763.00	32.74	34.76	-41.85	-2,955.13	1,477.39	821.60	756.45	65.14	12.612		
14,500.00	11,375.00	14,061.80	10,763.00	33.42	35.42	-41.85	-3,055.12	1,478.12	821.64	755.48	66.16	12.419		
14,600.00	11,375.00	14,161.80	10,763.00	34.11	36.08	-41.86	-3,155.12	1,478.85	821.68	754.49	67.18	12.231		
14,700.00	11,375.00	14,261.80	10,763.00	34.81	36.76	-41.86	-3,255.12	1,479.59	821.72	753.50	68.22	12.046		
14,800.00	11,375.00	14,361.80	10,763.00	35.52	37.44	-41.86	-3,355.12	1,480.32	821.76	752.50	69.26	11.865		
14,900.00	11,375.00	14,461.80	10,763.00	36.23	38.13	-41.87	-3,455.11	1,481.05	821.80	751.48	70.31	11.688		
15,000.00	11,375.00	14,561.80	10,763.00	36.95	38.83	-41.87	-3,555.11	1,481.78	821.84	750.46	71.38	11.514		
15,100.00	11,375.00	14,661.80	10,763.00	37.67	39.53	-41.87	-3,655.11	1,482.51	821.88	749.43	72.45	11.345		
15,200.00	11,375.00	14,761.80	10,763.00	38.40	40.24	-41.88	-3,755.10	1,483.24	821.92	748.39	73.53	11.179		
15,300.00	11,375.00	14,861.80	10,763.00	39.14	40.95	-41.88	-3,855.10	1,483.97	821.96	747.35	74.61	11.016		
15,400.00	11,375.00	14,961.80	10,763.00	39.88	41.67	-41.88	-3,955.10	1,484.70	822.00	746.29	75.71	10.858		
15,500.00	11,375.00	15,061.80	10,763.00	40.62	42.39	-41.88	-4,055.10	1,485.44	822.04	745.23	76.81	10.703		
15,600.00	11,375.00	15,161.80	10,763.00	41.37	43.12	-41.89	-4,155.09	1,486.17	822.08	744.17	77.91	10.551		
15,700.00	11,375.00	15,261.80	10,763.00	42.13	43.85	-41.89	-4,255.09	1,486.90	822.12	743.09	79.03	10.403		
15,800.00	11,375.00	15,361.80	10,763.00	42.88	44.59	-41.89	-4,355.09	1,487.63	822.16	742.01	80.15	10.258		
15,900.00	11,375.00	15,461.80	10,763.00	43.64	45.33	-41.90	-4,455.09	1,488.36	822.20	740.93	81.28	10.116		
16,000.00	11,375.00	15,561.80	10,763.00	44.41	46.08	-41.90	-4,555.08	1,489.09	822.24	739.83	82.41	9.978		
16,100.00	11,375.00	15,661.80	10,763.00	45.18	46.83	-41.90	-4,655.08	1,489.82	822.28	738.74	83.55	9.842		
16,200.00	11,375.00	15,761.80	10,763.00	45.95	47.58	-41.91	-4,755.08	1,490.55	822.32	737.63	84.69	9.710		
16,300.00	11,375.00	15,861.80	10,763.00	46.72	48.34	-41.91	-4,855.07	1,491.28	822.36	736.53	85.84	9.580		
16,400.00	11,375.00	15,961.80	10,763.00	47.50	49.10	-41.91	-4,955.07	1,492.02	822.40	735.41	86.99	9.454		
16,500.00	11,375.00	16,061.80	10,763.00	48.28	49.86	-41.92	-5,055.07	1,492.75	822.44	734.30	88.15	9.330		
16,600.00	11,375.00	16,161.80	10,763.00	49.06	50.62	-41.92	-5,155.07	1,493.48	822.49	733.17	89.31	9.209		
16,700.00	11,375.00	16,261.80	10,763.00	49.84	51.39	-41.92	-5,255.06	1,494.21	822.53	732.05	90.48	9.091		
16,800.00	11,375.00	16,361.80	10,763.00	50.63	52.16	-41.93	-5,355.06	1,494.94	822.57	730.92	91.65	8.975		
16,900.00	11,375.00	16,461.80	10,763.00	51.42	52.94	-41.93	-5,455.06	1,495.67	822.61	729.78	92.82	8.862		
17,000.00	11,375.00	16,561.80	10,763.00	52.21	53.71	-41.93	-5,555.06	1,496.40	822.65	728.65	94.00	8.751		
17,100.00	11,375.00	16,661.80	10,763.00	53.01	54.49	-41.94	-5,655.05	1,497.13	822.69	727.50	95.18	8.643		
17,200.00	11,375.00	16,761.80	10,763.00	53.80	55.27	-41.94	-5,755.05	1,497.86	822.73	726.36	96.37	8.537		
17,300.00	11,375.00	16,861.80	10,763.00	54.60	56.06	-41.94	-5,855.05	1,498.60	822.77	725.21	97.56	8.434		

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

ConocoPhillips Anticollision Report

Company:	DELAWARE BASIN EAST	Local Co-ordinate Reference:	Well _COLUMBUS FEDERAL COM 653H - Slot SLOT 7
Project:	LEA COUNT SOUTH WEST (NM-E)	TVD Reference:	KB @ 3362.00usft
Reference Site:	COLUMBUS FEDERAL PROJECT	MD Reference:	KB @ 3362.00usft
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	_COLUMBUS FEDERAL COM 653H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDT 17 Permian Prod
Reference Design:	PWP0	Offset TVD Reference:	Reference Datum

Offset Design: COLUMBUS FEDERAL PROJECT - _COLUMBUS FEDERAL COM 505H - OWB - PWP0														Offset Site Error:	0.00 usft
Survey Program: 0-r.5 MWD+IFR1+SAG+FDIR														Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis		Highside Toolface (°)	Offset Wellbore Centre		Distance		No-Go Distance (usft)	Separation Factor	Warning		
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)		+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)					
17,400.00	11,375.00	16,961.80	10,763.00	55.40	56.84	-41.94	-5,955.05	1,499.33	822.81	724.06	98.75	8.332			
17,500.00	11,375.00	17,061.80	10,763.00	56.20	57.63	-41.95	-6,055.04	1,500.06	822.85	722.90	99.95	8.233			
17,600.00	11,375.00	17,161.80	10,763.00	57.00	58.42	-41.95	-6,155.04	1,500.79	822.89	721.74	101.15	8.136			
17,700.00	11,375.00	17,261.80	10,763.00	57.81	59.21	-41.95	-6,255.04	1,501.52	822.93	720.58	102.35	8.040			
17,800.00	11,375.00	17,361.80	10,763.00	58.61	60.01	-41.96	-6,355.03	1,502.25	822.97	719.42	103.55	7.947			
17,900.00	11,375.00	17,461.80	10,763.00	59.42	60.80	-41.96	-6,455.03	1,502.98	823.01	718.25	104.76	7.856			
18,000.00	11,375.00	17,561.80	10,763.00	60.23	61.60	-41.96	-6,555.03	1,503.71	823.05	717.08	105.97	7.767			
18,100.00	11,375.00	17,661.80	10,763.00	61.04	62.40	-41.97	-6,655.03	1,504.45	823.09	715.91	107.19	7.679			
18,200.00	11,375.00	17,761.80	10,763.00	61.85	63.20	-41.97	-6,755.02	1,505.18	823.13	714.73	108.40	7.593			
18,300.00	11,375.00	17,861.80	10,763.00	62.66	64.00	-41.97	-6,855.02	1,505.91	823.17	713.55	109.62	7.509			
18,400.00	11,375.00	17,961.80	10,763.00	63.48	64.80	-41.98	-6,955.02	1,506.64	823.21	712.37	110.84	7.427			
18,500.00	11,375.00	18,061.80	10,763.00	64.29	65.61	-41.98	-7,055.02	1,507.37	823.26	711.19	112.06	7.346			
18,600.00	11,375.00	18,161.80	10,763.00	65.11	66.41	-41.98	-7,155.01	1,508.10	823.30	710.01	113.29	7.267			
18,700.00	11,375.00	18,261.80	10,763.00	65.93	67.22	-41.99	-7,255.01	1,508.83	823.34	708.82	114.52	7.190			
18,800.00	11,375.00	18,361.80	10,763.00	66.75	68.03	-41.99	-7,355.01	1,509.56	823.38	707.63	115.75	7.114			
18,900.00	11,375.00	18,461.80	10,763.00	67.56	68.84	-41.99	-7,455.00	1,510.29	823.42	706.44	116.98	7.039			
19,000.00	11,375.00	18,561.80	10,763.00	68.39	69.65	-41.99	-7,555.00	1,511.03	823.46	705.25	118.21	6.966			
19,100.00	11,375.00	18,661.80	10,763.00	69.21	70.46	-42.00	-7,655.00	1,511.76	823.50	704.05	119.45	6.894			
19,200.00	11,375.00	18,761.80	10,763.00	70.03	71.27	-42.00	-7,755.00	1,512.49	823.54	702.85	120.68	6.824			
19,300.00	11,375.00	18,861.80	10,763.00	70.85	72.09	-42.00	-7,854.99	1,513.22	823.58	701.66	121.92	6.755			
19,400.00	11,375.00	18,961.80	10,763.00	71.68	72.90	-42.01	-7,954.99	1,513.95	823.62	700.46	123.16	6.687			
19,500.00	11,375.00	19,061.80	10,763.00	72.50	73.72	-42.01	-8,054.99	1,514.68	823.66	699.25	124.41	6.621			
19,600.00	11,375.00	19,161.80	10,763.00	73.33	74.53	-42.01	-8,154.99	1,515.41	823.70	698.05	125.65	6.555			
19,700.00	11,375.00	19,261.80	10,763.00	74.15	75.35	-42.02	-8,254.98	1,516.14	823.74	696.84	126.90	6.491			
19,800.00	11,375.00	19,361.80	10,763.00	74.98	76.17	-42.02	-8,354.98	1,516.87	823.78	695.64	128.14	6.429			
19,900.00	11,375.00	19,461.80	10,763.00	75.81	76.99	-42.02	-8,454.98	1,517.61	823.82	694.43	129.39	6.367			
20,000.00	11,375.00	19,561.80	10,763.00	76.64	77.81	-42.03	-8,554.98	1,518.34	823.86	693.22	130.64	6.306			
20,100.00	11,375.00	19,661.80	10,763.00	77.46	78.63	-42.03	-8,654.97	1,519.07	823.90	692.01	131.90	6.247			
20,200.00	11,375.00	19,761.80	10,763.00	78.29	79.46	-42.03	-8,754.97	1,519.80	823.94	690.80	133.15	6.188			
20,300.00	11,375.00	19,861.80	10,763.00	79.12	80.28	-42.04	-8,854.97	1,520.53	823.98	689.58	134.40	6.131			
20,400.00	11,375.00	19,961.80	10,763.00	79.96	81.10	-42.04	-8,954.96	1,521.26	824.03	688.37	135.66	6.074			
20,500.00	11,375.00	20,061.80	10,763.00	80.79	81.93	-42.04	-9,054.96	1,521.99	824.07	687.15	136.92	6.019			
20,600.00	11,375.00	20,161.80	10,763.00	81.62	82.75	-42.04	-9,154.96	1,522.72	824.11	685.93	138.17	5.964			
20,700.00	11,375.00	20,261.80	10,763.00	82.45	83.58	-42.05	-9,254.96	1,523.46	824.15	684.71	139.43	5.911			
20,800.00	11,375.00	20,361.80	10,763.00	83.29	84.40	-42.05	-9,354.95	1,524.19	824.19	683.49	140.70	5.858			
20,900.00	11,375.00	20,461.80	10,763.00	84.12	85.23	-42.05	-9,454.95	1,524.92	824.23	682.27	141.96	5.806			
21,000.00	11,375.00	20,561.80	10,763.00	84.95	86.06	-42.06	-9,554.95	1,525.65	824.27	681.05	143.22	5.755			
21,100.00	11,375.00	20,661.80	10,763.00	85.79	86.89	-42.06	-9,654.95	1,526.38	824.31	679.82	144.49	5.705			
21,200.00	11,375.00	20,761.80	10,763.00	86.62	87.71	-42.06	-9,754.94	1,527.11	824.35	678.60	145.75	5.656			
21,300.00	11,375.00	20,861.80	10,763.00	87.46	88.54	-42.07	-9,854.94	1,527.84	824.39	677.37	147.02	5.607			
21,400.00	11,375.00	20,961.80	10,763.00	88.29	89.37	-42.07	-9,954.94	1,528.57	824.43	676.15	148.28	5.560			
21,500.00	11,375.00	21,061.80	10,763.00	89.13	90.20	-42.07	-10,054.94	1,529.30	824.47	674.92	149.55	5.513			
21,539.67	11,375.00	21,101.47	10,763.00	89.46	90.53	-42.07	-10,094.61	1,529.59	824.49	674.43	150.06	5.495			

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

ConocoPhillips Anticollision Report

Company:	DELAWARE BASIN EAST	Local Co-ordinate Reference:	Well _COLUMBUS FEDERAL COM 653H - Slot SLOT 7
Project:	LEA COUNT SOUTH WEST (NM-E)	TVD Reference:	KB @ 3362.00usft
Reference Site:	COLUMBUS FEDERAL PROJECT	MD Reference:	KB @ 3362.00usft
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	_COLUMBUS FEDERAL COM 653H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDT 17 Permian Prod
Reference Design:	PWP0	Offset TVD Reference:	Reference Datum

Offset Design: COLUMBUS FEDERAL PROJECT - _COLUMBUS FEDERAL COM 506H - OWB - PWP0													Offset Site Error:	0.00 usft
Survey Program: 0-r.5 MWD+IFR1+SAG+FDIR											Rule Assigned:		Offset Well Error:	0.00 usft
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Semi Major Axis (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	No-Go Distance (usft)	Separation Factor	Warning
0.00	0.00	0.00	0.00	0.00	0.00	0.00	89.64	0.38	59.94	59.94				
100.00	100.00	100.00	100.00	0.77	0.77	89.64	0.38	59.94	59.94	57.95	1.99	30.103		
200.00	200.00	200.00	200.00	1.44	1.44	89.64	0.38	59.94	59.94	56.63	3.31	18.101		
300.00	300.00	300.00	300.00	1.88	1.88	89.64	0.38	59.94	59.94	55.75	4.20	14.287		
400.00	400.00	400.00	400.00	2.25	2.25	89.64	0.38	59.94	59.94	55.03	4.91	12.203		
500.00	500.00	500.00	500.00	2.56	2.56	89.64	0.38	59.94	59.94	54.41	5.53	10.833		
600.00	600.00	600.00	600.00	2.84	2.84	89.64	0.38	59.94	59.94	53.85	6.09	9.842		
700.00	700.00	700.00	700.00	3.10	3.10	89.64	0.38	59.94	59.94	53.34	6.60	9.080		
800.00	800.00	800.00	800.00	3.34	3.34	89.64	0.38	59.94	59.94	52.86	7.08	8.470		
900.00	900.00	900.00	900.00	3.57	3.57	89.64	0.38	59.94	59.94	52.42	7.52	7.967		
1,000.00	1,000.00	1,000.00	1,000.00	3.79	3.79	89.64	0.38	59.94	59.94	51.99	7.95	7.542		
1,100.00	1,100.00	1,100.00	1,100.00	3.99	3.99	89.64	0.38	59.94	59.94	51.59	8.35	7.177		
1,200.00	1,200.00	1,200.00	1,200.00	4.19	4.19	89.64	0.38	59.94	59.94	51.20	8.74	6.859		
1,300.00	1,300.00	1,300.00	1,300.00	4.38	4.38	89.64	0.38	59.94	59.94	50.83	9.11	6.578		
1,400.00	1,400.00	1,400.00	1,400.00	4.56	4.56	89.64	0.38	59.94	59.94	50.47	9.47	6.327		
1,500.00	1,500.00	1,500.00	1,500.00	4.74	4.74	89.64	0.38	59.94	59.94	50.12	9.82	6.102 CC, ES		
1,600.00	1,600.00	1,597.91	1,597.89	4.91	4.99	89.65	0.38	61.61	61.65	51.41	10.24	6.019 SF		
1,700.00	1,700.00	1,695.60	1,695.44	5.08	5.23	89.67	0.38	66.61	66.77	56.14	10.63	6.280		
1,800.00	1,800.00	1,792.84	1,792.33	5.24	5.32	89.68	0.42	74.89	75.28	64.43	10.85	6.936		
1,900.00	1,900.00	1,889.42	1,888.22	5.40	5.54	89.45	0.83	86.34	87.14	75.94	11.20	7.779		
2,000.00	2,000.00	1,985.13	1,982.82	5.56	5.77	89.05	1.67	100.83	102.30	90.75	11.55	8.861		
2,100.00	2,100.00	2,079.76	2,075.82	5.71	5.99	88.59	2.91	118.23	120.72	108.84	11.88	10.165		
2,200.00	2,200.00	2,173.13	2,166.97	5.86	6.20	88.12	4.54	138.38	142.34	130.15	12.19	11.676		
2,300.00	2,300.00	2,265.07	2,256.04	6.01	6.42	87.67	6.54	161.08	167.10	154.61	12.49	13.374		
2,400.00	2,400.00	2,355.42	2,342.82	6.15	6.57	87.27	8.89	186.14	194.93	182.21	12.72	15.323		
2,500.00	2,500.00	2,450.64	2,433.79	6.30	6.69	86.91	11.57	214.12	224.42	211.44	12.98	17.284		
2,600.00	2,600.00	2,546.18	2,525.08	6.44	6.84	86.63	14.27	242.20	253.92	240.64	13.29	19.113		
2,700.00	2,700.00	2,641.73	2,616.36	6.58	7.00	86.41	16.96	270.28	283.43	269.84	13.59	20.857		
2,800.00	2,800.00	2,737.27	2,707.64	6.71	7.16	86.23	19.66	298.36	312.94	299.05	13.90	22.522		
2,900.00	2,900.00	2,832.81	2,798.93	6.85	7.32	86.08	22.36	326.44	342.46	328.25	14.20	24.110		
3,000.00	3,000.00	2,928.35	2,890.21	6.98	7.49	85.96	25.05	354.52	371.97	357.46	14.51	25.628		
3,100.00	3,099.98	3,024.39	2,981.96	7.17	7.67	8.82	27.76	382.74	399.84	384.96	14.88	26.876		
3,200.00	3,199.84	3,121.33	3,074.58	7.35	7.84	8.76	30.50	411.23	424.37	409.14	15.23	27.859		
3,300.00	3,299.45	3,219.05	3,167.95	7.53	8.02	8.78	33.25	439.95	445.55	429.95	15.60	28.569		
3,383.28	3,382.14	3,300.95	3,246.20	7.64	8.18	8.85	35.57	464.02	460.61	444.74	15.86	29.036		
3,400.00	3,398.71	3,317.43	3,261.95	7.65	8.21	8.88	36.03	468.86	463.39	447.49	15.90	29.140		
3,500.00	3,497.81	3,416.03	3,356.14	7.79	8.40	9.04	38.81	497.84	480.06	463.82	16.24	29.552		
3,600.00	3,596.92	3,514.62	3,450.34	7.90	8.59	9.19	41.59	526.82	496.73	480.17	16.57	29.982		
3,700.00	3,696.03	3,613.21	3,544.54	8.02	8.79	9.32	44.38	555.79	513.41	496.51	16.90	30.387		
3,800.00	3,795.13	3,711.80	3,638.74	8.15	8.99	9.45	47.16	584.77	530.09	512.86	17.23	30.768		
3,900.00	3,894.24	3,810.40	3,732.93	8.27	9.19	9.57	49.94	613.74	546.77	529.20	17.57	31.128		
4,000.00	3,993.35	3,908.99	3,827.13	8.40	9.39	9.68	52.72	642.72	563.45	545.54	17.91	31.466		
4,100.00	4,092.45	4,007.58	3,921.33	8.53	9.60	9.79	55.50	671.69	580.14	561.88	18.25	31.786		
4,200.00	4,191.56	4,106.18	4,015.53	8.67	9.81	9.89	58.29	700.67	596.82	578.22	18.60	32.087		
4,300.00	4,290.67	4,204.77	4,109.72	8.80	10.02	9.99	61.07	729.65	613.51	594.56	18.95	32.372		
4,400.00	4,389.77	4,303.36	4,203.92	8.94	10.24	10.08	63.85	758.62	630.20	610.89	19.31	32.641		
4,500.00	4,488.88	4,401.95	4,298.12	9.08	10.45	10.16	66.63	787.60	646.89	627.23	19.67	32.895		
4,600.00	4,587.98	4,500.55	4,392.32	9.22	10.67	10.25	69.41	816.57	663.58	643.56	20.03	33.135		
4,700.00	4,687.09	4,599.14	4,486.51	9.37	10.90	10.32	72.20	845.55	680.28	659.89	20.39	33.363		
4,800.00	4,786.20	4,697.73	4,580.71	9.51	11.12	10.40	74.98	874.52	696.97	676.22	20.76	33.578		
4,900.00	4,885.30	4,796.32	4,674.91	9.66	11.35	10.47	77.76	903.50	713.67	692.54	21.13	33.782		

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

ConocoPhillips Anticollision Report

Company:	DELAWARE BASIN EAST	Local Co-ordinate Reference:	Well _COLUMBUS FEDERAL COM 653H - Slot SLOT 7
Project:	LEA COUNT SOUTH WEST (NM-E)	TVD Reference:	KB @ 3362.00usft
Reference Site:	COLUMBUS FEDERAL PROJECT	MD Reference:	KB @ 3362.00usft
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	_COLUMBUS FEDERAL COM 653H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDT 17 Permian Prod
Reference Design:	PWP0	Offset TVD Reference:	Reference Datum

Offset Design: COLUMBUS FEDERAL PROJECT - _COLUMBUS FEDERAL COM 506H - OWB - PWP0													Offset Site Error:	0.00 usft
Survey Program: 0-r.5 MWD+IFR1+SAG+FDIR													Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis		Highside Toolface (°)	Offset Wellbore Centre		Distance		No-Go Distance (usft)	Separation Factor	Warning	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)		+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)				
5,000.00	4,984.41	4,894.92	4,769.11	9.81	11.58	10.53	80.54	932.48	730.37	708.87	21.50	33.975		
5,100.00	5,083.52	4,993.51	4,863.30	9.96	11.81	10.60	83.32	961.45	747.06	725.19	21.87	34.159		
5,200.00	5,182.62	5,092.10	4,957.50	10.11	12.04	10.66	86.10	990.43	763.76	741.52	22.25	34.333		
5,300.00	5,281.73	5,190.69	5,051.70	10.26	12.28	10.72	88.89	1,019.40	780.46	757.84	22.62	34.498		
5,400.00	5,380.83	5,289.29	5,145.90	10.42	12.51	10.77	91.67	1,048.38	797.16	774.16	23.00	34.655		
5,500.00	5,479.94	5,387.88	5,240.09	10.57	12.75	10.83	94.45	1,077.35	813.87	790.48	23.38	34.805		
5,600.00	5,579.05	5,486.47	5,334.29	10.73	12.98	10.88	97.23	1,106.33	830.57	806.80	23.77	34.947		
5,700.00	5,678.15	5,585.07	5,428.49	10.89	13.22	10.93	100.01	1,135.31	847.27	823.12	24.15	35.082		
5,800.00	5,777.26	5,683.66	5,522.69	11.05	13.46	10.98	102.80	1,164.28	863.97	839.44	24.54	35.211		
5,900.00	5,876.37	5,782.25	5,616.88	11.21	13.70	11.02	105.58	1,193.26	880.68	855.75	24.92	35.333		
6,000.00	5,975.47	5,880.84	5,711.08	11.37	13.94	11.07	108.36	1,222.23	897.38	872.07	25.31	35.450		
6,100.00	6,074.58	5,979.44	5,805.28	11.54	14.18	11.11	111.14	1,251.21	914.09	888.38	25.70	35.562		
6,200.00	6,173.69	6,078.03	5,899.48	11.70	14.43	11.15	113.92	1,280.18	930.79	904.70	26.10	35.668		
6,300.00	6,272.79	6,176.62	5,993.67	11.87	14.67	11.19	116.71	1,309.16	947.50	921.01	26.49	35.770		
6,400.00	6,371.90	6,275.21	6,087.87	12.03	14.91	11.23	119.49	1,338.13	964.20	937.32	26.88	35.867		
6,500.00	6,471.00	6,373.81	6,182.07	12.20	15.15	11.27	122.27	1,367.11	980.91	953.63	27.28	35.960		
6,600.00	6,570.11	6,472.40	6,276.27	12.37	15.40	11.30	125.05	1,396.09	997.62	969.94	27.67	36.049		

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

ConocoPhillips Anticollision Report

Company:	DELAWARE BASIN EAST	Local Co-ordinate Reference:	Well _COLUMBUS FEDERAL COM 653H - Slot SLOT 7
Project:	LEA COUNT SOUTH WEST (NM-E)	TVD Reference:	KB @ 3362.00usft
Reference Site:	COLUMBUS FEDERAL PROJECT	MD Reference:	KB @ 3362.00usft
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	_COLUMBUS FEDERAL COM 653H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDT 17 Permian Prod
Reference Design:	PWP0	Offset TVD Reference:	Reference Datum

Offset Design: COLUMBUS FEDERAL PROJECT - _COLUMBUS FEDERAL COM 651H - OWB - PWP0														Offset Site Error:	0.00 usft
Survey Program: 0-r.5 MWD+IFR1+SAG+FDIR											Rule Assigned:		Offset Well Error:	0.00 usft	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Semi Major Axis (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	No-Go Distance (usft)	Separation Factor	Warning	
0.00	0.00	0.00	0.00	0.00	0.00	0.00	-90.38	-0.67	-100.00	100.00					
100.00	100.00	100.00	100.00	0.77	0.77	0.77	-90.38	-0.67	-100.00	100.00	98.01	1.99	50.221		
200.00	200.00	200.00	200.00	1.44	1.44	1.44	-90.38	-0.67	-100.00	100.00	96.69	3.31	30.198		
300.00	300.00	300.00	300.00	1.88	1.88	1.88	-90.38	-0.67	-100.00	100.00	95.81	4.20	23.836		
400.00	400.00	400.00	400.00	2.25	2.25	2.25	-90.38	-0.67	-100.00	100.00	95.09	4.91	20.359		
500.00	500.00	500.00	500.00	2.56	2.56	2.56	-90.38	-0.67	-100.00	100.00	94.47	5.53	18.074		
600.00	600.00	600.00	600.00	2.84	2.84	2.84	-90.38	-0.67	-100.00	100.00	93.91	6.09	16.420		
700.00	700.00	700.00	700.00	3.10	3.10	3.10	-90.38	-0.67	-100.00	100.00	93.40	6.60	15.149		
800.00	800.00	800.00	800.00	3.34	3.34	3.34	-90.38	-0.67	-100.00	100.00	92.93	7.08	14.131		
900.00	900.00	900.00	900.00	3.57	3.57	3.57	-90.38	-0.67	-100.00	100.00	92.48	7.52	13.292		
1,000.00	1,000.00	1,000.00	1,000.00	3.79	3.79	3.79	-90.38	-0.67	-100.00	100.00	92.05	7.95	12.583		
1,100.00	1,100.00	1,100.00	1,100.00	3.99	3.99	3.99	-90.38	-0.67	-100.00	100.00	91.65	8.35	11.974		
1,200.00	1,200.00	1,200.00	1,200.00	4.19	4.19	4.19	-90.38	-0.67	-100.00	100.00	91.26	8.74	11.443		
1,300.00	1,300.00	1,300.00	1,300.00	4.38	4.38	4.38	-90.38	-0.67	-100.00	100.00	90.89	9.11	10.974		
1,400.00	1,400.00	1,400.00	1,400.00	4.56	4.56	4.56	-90.38	-0.67	-100.00	100.00	90.53	9.47	10.556		
1,500.00	1,500.00	1,500.00	1,500.00	4.74	4.74	4.74	-90.38	-0.67	-100.00	100.00	90.18	9.82	10.181		
1,600.00	1,600.00	1,600.00	1,600.00	4.91	4.91	4.91	-90.38	-0.67	-100.00	100.00	89.84	10.16	9.840		
1,700.00	1,700.00	1,700.00	1,700.00	5.08	5.08	5.08	-90.38	-0.67	-100.00	100.00	89.51	10.49	9.530		
1,800.00	1,800.00	1,800.00	1,800.00	5.24	5.24	5.24	-90.38	-0.67	-100.00	100.00	89.19	10.82	9.246		
1,900.00	1,900.00	1,900.00	1,900.00	5.40	5.40	5.40	-90.38	-0.67	-100.00	100.00	88.87	11.13	8.984		
2,000.00	2,000.00	2,000.00	2,000.00	5.56	5.56	5.56	-90.38	-0.67	-100.00	100.00	88.56	11.44	8.742 CC, ES		
2,100.00	2,100.00	2,096.65	2,096.63	5.71	5.78	5.78	-90.22	-0.38	-101.60	101.66	89.86	11.80	8.612 SF		
2,200.00	2,200.00	2,193.07	2,192.93	5.86	5.99	5.99	-89.74	0.48	-106.40	106.64	94.49	12.14	8.781		
2,300.00	2,300.00	2,289.06	2,288.57	6.01	6.19	6.19	-89.04	1.91	-114.34	114.93	102.46	12.47	9.217		
2,400.00	2,400.00	2,384.41	2,383.25	6.15	6.40	6.40	-88.22	3.89	-125.34	126.52	113.74	12.78	9.899		
2,500.00	2,500.00	2,478.90	2,476.67	6.30	6.59	6.59	-87.37	6.40	-139.30	141.39	128.31	13.08	10.810		
2,600.00	2,600.00	2,572.36	2,568.56	6.44	6.79	6.79	-86.55	9.42	-156.09	159.50	146.13	13.37	11.933		
2,700.00	2,700.00	2,665.09	2,659.13	6.58	6.91	6.91	-85.79	12.94	-175.63	180.79	167.22	13.57	13.323		
2,800.00	2,800.00	2,762.47	2,753.97	6.71	7.03	7.03	-85.12	16.85	-197.41	203.41	189.58	13.82	14.717		
2,900.00	2,900.00	2,859.86	2,848.80	6.85	7.16	7.16	-84.59	20.77	-219.19	226.05	211.95	14.10	16.034		
3,000.00	3,000.00	2,957.24	2,943.64	6.98	7.31	7.31	-84.15	24.69	-240.97	248.70	234.32	14.38	17.299		
3,100.00	3,099.98	3,054.24	3,038.10	7.17	7.45	7.45	-160.72	28.59	-262.66	272.97	258.26	14.71	18.561		
3,200.00	3,199.84	3,150.39	3,131.74	7.35	7.60	7.60	-160.56	32.46	-284.17	300.42	285.39	15.03	19.993		
3,300.00	3,299.45	3,245.58	3,224.44	7.53	7.75	7.75	-160.58	36.29	-305.46	331.02	315.68	15.35	21.571		
3,383.28	3,382.14	3,324.04	3,300.84	7.64	7.87	7.87	-160.70	39.45	-323.00	358.90	343.32	15.58	23.038		
3,400.00	3,398.71	3,339.71	3,316.10	7.65	7.90	7.90	-160.77	40.08	-326.51	364.71	349.10	15.61	23.357		
3,500.00	3,497.81	3,433.43	3,407.38	7.79	8.05	8.05	-161.15	43.85	-347.47	399.49	383.59	15.90	25.121		
3,600.00	3,596.92	3,527.16	3,498.65	7.90	8.21	8.21	-161.47	47.62	-368.43	434.28	418.11	16.17	26.852		
3,700.00	3,696.03	3,620.89	3,589.93	8.02	8.37	8.37	-161.74	51.39	-389.39	469.08	452.63	16.45	28.518		
3,800.00	3,795.13	3,714.62	3,681.21	8.15	8.53	8.53	-161.97	55.16	-410.35	503.89	487.16	16.73	30.121		
3,900.00	3,894.24	3,808.35	3,772.48	8.27	8.69	8.69	-162.17	58.93	-431.31	538.70	521.69	17.01	31.663		
4,000.00	3,993.35	3,902.07	3,863.76	8.40	8.85	8.85	-162.35	62.71	-452.28	573.52	556.22	17.30	33.147		
4,100.00	4,092.45	3,995.80	3,955.03	8.53	9.02	9.02	-162.51	66.48	-473.24	608.35	590.75	17.60	34.575		
4,200.00	4,191.56	4,089.53	4,046.31	8.67	9.19	9.19	-162.65	70.25	-494.20	643.17	625.28	17.89	35.948		
4,300.00	4,290.67	4,183.26	4,137.59	8.80	9.36	9.36	-162.78	74.02	-515.16	678.01	659.81	18.19	37.268		
4,400.00	4,389.77	4,276.99	4,228.86	8.94	9.53	9.53	-162.89	77.79	-536.12	712.84	694.34	18.50	38.539		
4,500.00	4,488.88	4,370.71	4,320.14	9.08	9.70	9.70	-162.99	81.56	-557.09	747.67	728.87	18.80	39.761		
4,600.00	4,587.98	4,464.44	4,411.42	9.22	9.88	9.88	-163.09	85.33	-578.05	782.51	763.40	19.11	40.938		
4,700.00	4,687.09	4,558.17	4,502.69	9.37	10.05	10.05	-163.17	89.10	-599.01	817.35	797.92	19.43	42.070		
4,800.00	4,786.20	4,651.90	4,593.97	9.51	10.23	10.23	-163.25	92.87	-619.97	852.19	832.45	19.75	43.159		
4,900.00	4,885.30	4,745.63	4,685.24	9.66	10.41	10.41	-163.32	96.64	-640.93	887.03	866.97	20.06	44.209		

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

ConocoPhillips Anticollision Report

Company:	DELAWARE BASIN EAST	Local Co-ordinate Reference:	Well _COLUMBUS FEDERAL COM 653H - Slot SLOT 7
Project:	LEA COUNT SOUTH WEST (NM-E)	TVD Reference:	KB @ 3362.00usft
Reference Site:	COLUMBUS FEDERAL PROJECT	MD Reference:	KB @ 3362.00usft
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	_COLUMBUS FEDERAL COM 653H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDT 17 Permian Prod
Reference Design:	PWP0	Offset TVD Reference:	Reference Datum

Offset Design: COLUMBUS FEDERAL PROJECT - _COLUMBUS FEDERAL COM 651H - OWB - PWP0												Offset Site Error:	0.00 usft
Survey Program: 0-r.5 MWD+IFR1+SAG+FDIR												Offset Well Error:	0.00 usft
Rule Assigned:													
Measured Reference Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Semi Major Axis		Highside Toolface (°)	Offset Wellbore Centre		Distance		No-Go Distance (usft)	Separation Factor	Warning
				Reference (usft)	Offset (usft)		+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)			
5,000.00	4,984.41	4,839.35	4,776.52	9.81	10.59	-163.39	100.42	-661.89	921.88	901.49	20.39	45.219	
5,100.00	5,083.52	4,933.08	4,867.80	9.96	10.77	-163.45	104.19	-682.86	956.72	936.01	20.71	46.192	
5,200.00	5,182.62	5,026.81	4,959.07	10.11	10.95	-163.51	107.96	-703.82	991.57	970.53	21.04	47.130	

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

ConocoPhillips Anticollision Report

Company:	DELAWARE BASIN EAST	Local Co-ordinate Reference:	Well _COLUMBUS FEDERAL COM 653H - Slot SLOT 7
Project:	LEA COUNT SOUTH WEST (NM-E)	TVD Reference:	KB @ 3362.00usft
Reference Site:	COLUMBUS FEDERAL PROJECT	MD Reference:	KB @ 3362.00usft
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	_COLUMBUS FEDERAL COM 653H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDT 17 Permian Prod
Reference Design:	PWP0	Offset TVD Reference:	Reference Datum

Offset Design: COLUMBUS FEDERAL PROJECT - _COLUMBUS FEDERAL COM 652H - OWB - PWP0														Offset Site Error:	0.00 usft
Survey Program: 0-r.5 MWD+IFR1+SAG+FDIR											Rule Assigned:		Offset Well Error:	0.00 usft	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre		Distance		No-Go Distance (usft)	Separation Factor	Warning		
							+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)					
0.00	0.00	0.00	0.00	0.00	0.00	-90.38	-0.40	-60.00	60.00						
100.00	100.00	100.00	100.00	0.77	0.77	-90.38	-0.40	-60.00	60.00	58.01	1.99	30.133			
200.00	200.00	200.00	200.00	1.44	1.44	-90.38	-0.40	-60.00	60.00	56.69	3.31	18.119			
300.00	300.00	300.00	300.00	1.88	1.88	-90.38	-0.40	-60.00	60.00	55.81	4.20	14.302			
400.00	400.00	400.00	400.00	2.25	2.25	-90.38	-0.40	-60.00	60.00	55.09	4.91	12.215			
500.00	500.00	500.00	500.00	2.56	2.56	-90.38	-0.40	-60.00	60.00	54.47	5.53	10.844			
600.00	600.00	600.00	600.00	2.84	2.84	-90.38	-0.40	-60.00	60.00	53.91	6.09	9.852			
700.00	700.00	700.00	700.00	3.10	3.10	-90.38	-0.40	-60.00	60.00	53.40	6.60	9.089			
800.00	800.00	800.00	800.00	3.34	3.34	-90.38	-0.40	-60.00	60.00	52.92	7.08	8.479			
900.00	900.00	900.00	900.00	3.57	3.57	-90.38	-0.40	-60.00	60.00	52.48	7.52	7.975			
1,000.00	1,000.00	1,000.00	1,000.00	3.79	3.79	-90.38	-0.40	-60.00	60.00	52.05	7.95	7.550			
1,100.00	1,100.00	1,100.00	1,100.00	3.99	3.99	-90.38	-0.40	-60.00	60.00	51.65	8.35	7.184			
1,200.00	1,200.00	1,200.00	1,200.00	4.19	4.19	-90.38	-0.40	-60.00	60.00	51.26	8.74	6.866			
1,300.00	1,300.00	1,300.00	1,300.00	4.38	4.38	-90.38	-0.40	-60.00	60.00	50.89	9.11	6.584			
1,400.00	1,400.00	1,400.00	1,400.00	4.56	4.56	-90.38	-0.40	-60.00	60.00	50.53	9.47	6.334			
1,500.00	1,500.00	1,500.00	1,500.00	4.74	4.74	-90.38	-0.40	-60.00	60.00	50.18	9.82	6.108			
1,600.00	1,600.00	1,600.00	1,600.00	4.91	4.91	-90.38	-0.40	-60.00	60.00	49.84	10.16	5.904			
1,700.00	1,700.00	1,700.00	1,700.00	5.08	5.08	-90.38	-0.40	-60.00	60.00	49.51	10.49	5.718			
1,800.00	1,800.00	1,800.00	1,800.00	5.24	5.24	-90.38	-0.40	-60.00	60.00	49.19	10.82	5.548			
1,900.00	1,900.00	1,900.00	1,900.00	5.40	5.40	-90.38	-0.40	-60.00	60.00	48.87	11.13	5.391			
2,000.00	2,000.00	2,000.00	2,000.00	5.56	5.56	-90.38	-0.40	-60.00	60.00	48.56	11.44	5.245 CC, ES			
2,100.00	2,100.00	2,098.18	2,098.16	5.71	5.79	-89.60	0.43	-61.46	61.49	49.70	11.79	5.214 SF			
2,200.00	2,200.00	2,196.13	2,195.97	5.86	6.00	-87.48	2.90	-65.84	66.03	53.90	12.13	5.442			
2,300.00	2,300.00	2,293.62	2,293.10	6.01	6.22	-84.53	7.00	-73.09	73.74	61.28	12.46	5.916			
2,400.00	2,400.00	2,391.66	2,390.49	6.15	6.31	-81.38	12.58	-82.96	84.44	71.76	12.68	6.660			
2,500.00	2,500.00	2,490.93	2,489.03	6.30	6.44	-78.81	18.46	-93.37	95.80	82.84	12.96	7.392			
2,600.00	2,600.00	2,590.20	2,587.58	6.44	6.58	-76.80	24.35	-103.78	107.32	94.07	13.24	8.103			
2,700.00	2,700.00	2,689.47	2,686.13	6.58	6.73	-75.17	30.23	-114.19	118.93	105.41	13.53	8.792			
2,800.00	2,800.00	2,788.75	2,784.68	6.71	6.88	-73.83	36.12	-124.60	130.63	116.82	13.81	9.459			
2,900.00	2,900.00	2,888.02	2,883.23	6.85	7.03	-72.72	42.00	-135.01	142.38	128.29	14.09	10.103			
3,000.00	3,000.00	2,987.29	2,981.78	6.98	7.18	-71.77	47.89	-145.42	154.18	139.81	14.38	10.725			
3,100.00	3,099.98	3,086.39	3,080.15	7.17	7.33	-148.12	53.76	-155.81	167.49	152.79	14.70	11.396			
3,200.00	3,199.84	3,185.05	3,178.10	7.35	7.48	-148.11	59.61	-166.16	183.73	168.72	15.01	12.244			
3,300.00	3,299.45	3,283.17	3,275.50	7.53	7.64	-148.58	65.43	-176.45	202.90	187.58	15.31	13.249			
3,383.28	3,382.14	3,364.37	3,356.12	7.64	7.76	-149.21	70.24	-184.96	221.12	205.58	15.54	14.231			
3,400.00	3,398.71	3,380.62	3,372.25	7.65	7.79	-149.39	71.21	-186.67	224.99	209.42	15.57	14.449			
3,500.00	3,497.81	3,477.82	3,468.74	7.79	7.94	-150.37	76.97	-196.86	248.16	232.30	15.86	15.649			
3,600.00	3,596.92	3,575.02	3,565.23	7.90	8.10	-151.18	82.73	-207.05	271.39	255.27	16.12	16.833			
3,700.00	3,696.03	3,672.22	3,661.72	8.02	8.26	-151.85	88.49	-217.25	294.66	278.27	16.39	17.979			
3,800.00	3,795.13	3,769.42	3,758.21	8.15	8.42	-152.44	94.26	-227.44	317.96	301.30	16.66	19.086			
3,900.00	3,894.24	3,866.62	3,854.71	8.27	8.58	-152.94	100.02	-237.63	341.29	324.36	16.93	20.155			
4,000.00	3,993.35	3,963.82	3,951.20	8.40	8.74	-153.37	105.78	-247.83	364.65	347.44	17.21	21.189			
4,100.00	4,092.45	4,061.02	4,047.69	8.53	8.90	-153.76	111.54	-258.02	388.02	370.53	17.49	22.188			
4,200.00	4,191.56	4,158.22	4,144.18	8.67	9.06	-154.10	117.31	-268.21	411.40	393.63	17.77	23.153			
4,300.00	4,290.67	4,255.42	4,240.67	8.80	9.22	-154.40	123.07	-278.41	434.80	416.75	18.05	24.085			
4,400.00	4,389.77	4,352.62	4,337.17	8.94	9.39	-154.68	128.83	-288.60	458.21	439.87	18.34	24.985			
4,500.00	4,488.88	4,449.82	4,433.66	9.08	9.55	-154.92	134.59	-298.79	481.62	463.00	18.63	25.855			
4,600.00	4,587.98	4,547.02	4,530.15	9.22	9.72	-155.15	140.36	-308.99	505.05	486.13	18.92	26.696			
4,700.00	4,687.09	4,644.22	4,626.64	9.37	9.88	-155.35	146.12	-319.18	528.48	509.27	19.21	27.509			
4,800.00	4,786.20	4,741.42	4,723.13	9.51	10.05	-155.54	151.88	-329.37	551.91	532.41	19.51	28.295			
4,900.00	4,885.30	4,838.62	4,819.63	9.66	10.22	-155.71	157.64	-339.57	575.36	555.55	19.80	29.054			

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

ConocoPhillips Anticollision Report

Company:	DELAWARE BASIN EAST	Local Co-ordinate Reference:	Well _COLUMBUS FEDERAL COM 653H - Slot SLOT 7
Project:	LEA COUNT SOUTH WEST (NM-E)	TVD Reference:	KB @ 3362.00usft
Reference Site:	COLUMBUS FEDERAL PROJECT	MD Reference:	KB @ 3362.00usft
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	_COLUMBUS FEDERAL COM 653H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDT 17 Permian Prod
Reference Design:	PWP0	Offset TVD Reference:	Reference Datum

Offset Design: COLUMBUS FEDERAL PROJECT - _COLUMBUS FEDERAL COM 652H - OWB - PWP0													Offset Site Error:	0.00 usft
Survey Program: 0-r.5 MWD+IFR1+SAG+FDIR											Rule Assigned:		Offset Well Error:	0.00 usft
Measured Reference Depth (usft)	Vertical Reference Depth (usft)	Measured Offset Depth (usft)	Vertical Offset Depth (usft)	Semi Major Axis Reference (usft)	Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre		Distance		No-Go Distance (usft)	Separation Factor	Warning	
							+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)				
5,000.00	4,984.41	4,935.82	4,916.12	9.81	10.38	-155.87	163.41	-349.76	598.80	578.70	20.10	29.789		
5,100.00	5,083.52	5,033.02	5,012.61	9.96	10.55	-156.01	169.17	-359.95	622.25	601.85	20.40	30.499		
5,200.00	5,182.62	5,130.22	5,109.10	10.11	10.72	-156.15	174.93	-370.15	645.71	625.00	20.70	31.187		
5,300.00	5,281.73	5,227.42	5,205.59	10.26	10.89	-156.27	180.69	-380.34	669.16	648.15	21.01	31.852		
5,400.00	5,380.83	5,324.62	5,302.09	10.42	11.05	-156.39	186.46	-390.53	692.62	671.32	21.30	32.515		
5,500.00	5,479.94	5,433.76	5,410.54	10.57	11.21	-156.54	192.49	-401.20	715.34	693.72	21.62	33.090		
5,600.00	5,579.05	5,544.78	5,521.07	10.73	11.40	-156.73	197.58	-410.21	736.29	714.33	21.95	33.537		
5,700.00	5,678.15	5,656.59	5,632.57	10.89	11.59	-156.97	201.65	-417.40	755.45	733.17	22.29	33.899		
5,800.00	5,777.26	5,769.13	5,744.94	11.05	11.77	-157.26	204.65	-422.73	772.82	750.21	22.61	34.184		
5,900.00	5,876.37	5,882.31	5,858.05	11.21	11.94	-157.59	206.58	-426.14	788.38	765.46	22.92	34.398		
6,000.00	5,975.47	5,996.05	5,971.78	11.37	12.09	-157.97	207.42	-427.61	802.12	778.91	23.21	34.553		
6,100.00	6,074.58	6,098.85	6,074.58	11.54	12.16	-158.33	207.45	-427.67	814.57	791.15	23.43	34.769		
6,200.00	6,173.69	6,197.96	6,173.69	11.70	12.24	-158.67	207.45	-427.67	827.00	803.34	23.66	34.955		
6,300.00	6,272.79	6,297.06	6,272.79	11.87	12.32	-159.00	207.45	-427.67	839.45	815.56	23.89	35.135		
6,400.00	6,371.90	6,396.17	6,371.90	12.03	12.40	-159.32	207.45	-427.67	851.94	827.81	24.13	35.312		
6,500.00	6,471.00	6,495.27	6,471.00	12.20	12.49	-159.63	207.45	-427.67	864.44	840.08	24.36	35.483		
6,600.00	6,570.11	6,594.38	6,570.11	12.37	12.57	-159.94	207.45	-427.67	876.97	852.37	24.60	35.651		
6,700.00	6,669.22	6,693.49	6,669.22	12.53	12.65	-160.23	207.45	-427.67	889.53	864.69	24.84	35.814		
6,800.00	6,768.32	6,792.59	6,768.32	12.70	12.73	-160.52	207.45	-427.67	902.10	877.03	25.08	35.973		
6,900.00	6,867.43	6,891.70	6,867.43	12.87	12.81	-160.80	207.45	-427.67	914.70	889.38	25.32	36.128		
7,000.00	6,966.54	6,990.81	6,966.54	13.04	12.89	-161.07	207.45	-427.67	927.32	901.76	25.56	36.279		
7,100.00	7,065.64	7,089.91	7,065.64	13.21	12.97	-161.33	207.45	-427.67	939.96	914.16	25.80	36.426		
7,200.00	7,164.75	7,189.02	7,164.75	13.39	13.06	-161.59	207.45	-427.67	952.62	926.57	26.05	36.570		
7,300.00	7,263.86	7,288.12	7,263.86	13.56	13.14	-161.84	207.45	-427.67	965.30	939.00	26.30	36.710		
7,400.00	7,362.96	7,387.23	7,362.96	13.73	13.22	-162.08	207.45	-427.67	977.99	951.45	26.54	36.846		
7,500.00	7,462.07	7,486.34	7,462.07	13.91	13.30	-162.32	207.45	-427.67	990.70	963.91	26.79	36.979		

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

ConocoPhillips Anticollision Report

Company:	DELAWARE BASIN EAST	Local Co-ordinate Reference:	Well _COLUMBUS FEDERAL COM 653H - Slot SLOT 7
Project:	LEA COUNT SOUTH WEST (NM-E)	TVD Reference:	KB @ 3362.00usft
Reference Site:	COLUMBUS FEDERAL PROJECT	MD Reference:	KB @ 3362.00usft
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	_COLUMBUS FEDERAL COM 653H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDT 17 Permian Prod
Reference Design:	PWP0	Offset TVD Reference:	Reference Datum

Offset Design: COLUMBUS FEDERAL PROJECT - _COLUMBUS FEDERAL COM 654H - OWB - PWP0														Offset Site Error:	0.00 usft
Survey Program: 0-r.5 MWD+IFR1+SAG+FDIR														Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis		Highside Toolface (°)	Offset Wellbore Centre		Distance		No-Go Distance (usft)	Separation Factor	Warning		
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)		+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)					
0.00	0.00	0.00	0.00	0.00	0.00	89.63	0.26	40.00	40.00						
100.00	100.00	100.00	100.00	0.77	0.77	89.63	0.26	40.00	40.00	38.01	1.99	20.088			
200.00	200.00	200.00	200.00	1.44	1.44	89.63	0.26	40.00	40.00	36.69	3.31	12.079			
300.00	300.00	300.00	300.00	1.88	1.88	89.63	0.26	40.00	40.00	35.81	4.20	9.535			
400.00	400.00	400.00	400.00	2.25	2.25	89.63	0.26	40.00	40.00	35.09	4.91	8.144			
500.00	500.00	500.00	500.00	2.56	2.56	89.63	0.26	40.00	40.00	34.47	5.53	7.230			
600.00	600.00	600.00	600.00	2.84	2.84	89.63	0.26	40.00	40.00	33.91	6.09	6.568			
700.00	700.00	700.00	700.00	3.10	3.10	89.63	0.26	40.00	40.00	33.40	6.60	6.060			
800.00	800.00	800.00	800.00	3.34	3.34	89.63	0.26	40.00	40.00	32.92	7.08	5.653			
900.00	900.00	900.00	900.00	3.57	3.57	89.63	0.26	40.00	40.00	32.48	7.52	5.317			
1,000.00	1,000.00	1,000.00	1,000.00	3.79	3.79	89.63	0.26	40.00	40.00	32.05	7.95	5.033			
1,100.00	1,100.00	1,100.00	1,100.00	3.99	3.99	89.63	0.26	40.00	40.00	31.65	8.35	4.790			
1,200.00	1,200.00	1,200.00	1,200.00	4.19	4.19	89.63	0.26	40.00	40.00	31.26	8.74	4.577			
1,300.00	1,300.00	1,300.00	1,300.00	4.38	4.38	89.63	0.26	40.00	40.00	30.89	9.11	4.390			
1,400.00	1,400.00	1,400.00	1,400.00	4.56	4.56	89.63	0.26	40.00	40.00	30.53	9.47	4.222			
1,500.00	1,500.00	1,500.00	1,500.00	4.74	4.74	89.63	0.26	40.00	40.00	30.18	9.82	4.072 CC, ES			
1,600.00	1,600.00	1,598.59	1,598.57	4.91	5.00	89.42	0.42	41.69	41.72	31.47	10.25	4.072 SF			
1,700.00	1,700.00	1,696.95	1,696.79	5.08	5.24	88.89	0.91	46.74	46.85	36.22	10.64	4.405			
1,800.00	1,800.00	1,794.84	1,794.32	5.24	5.48	88.22	1.71	55.09	55.41	44.40	11.01	5.032			
1,900.00	1,900.00	1,892.05	1,890.82	5.40	5.71	87.58	2.82	66.66	67.35	55.98	11.37	5.924			
2,000.00	2,000.00	1,988.36	1,985.99	5.56	5.93	87.02	4.23	81.33	82.64	70.93	11.71	7.057			
2,100.00	2,100.00	2,083.56	2,079.53	5.71	6.15	86.58	5.92	98.96	101.23	89.19	12.04	8.411			
2,200.00	2,200.00	2,177.48	2,171.18	5.86	6.36	86.22	7.88	119.37	123.05	110.70	12.35	9.966			
2,300.00	2,300.00	2,271.25	2,262.00	6.01	6.48	85.95	10.11	142.60	147.92	135.36	12.56	11.773			
2,400.00	2,400.00	2,367.89	2,355.40	6.15	6.61	85.73	12.48	167.32	173.61	160.77	12.84	13.517			
2,500.00	2,500.00	2,464.54	2,448.80	6.30	6.77	85.58	14.85	192.04	199.30	186.16	13.14	15.164			
2,600.00	2,600.00	2,561.18	2,542.19	6.44	6.92	85.46	17.22	216.76	224.99	211.55	13.44	16.736			
2,700.00	2,700.00	2,657.82	2,635.59	6.58	7.08	85.36	19.60	241.48	250.69	236.94	13.75	18.237			
2,800.00	2,800.00	2,754.46	2,728.99	6.71	7.24	85.28	21.97	266.20	276.38	262.33	14.05	19.670			
2,900.00	2,900.00	2,851.11	2,822.39	6.85	7.41	85.22	24.34	290.92	302.07	287.72	14.36	21.041			
3,000.00	3,000.00	2,947.75	2,915.78	6.98	7.58	85.16	26.71	315.63	327.77	313.10	14.66	22.351			
3,100.00	3,099.98	3,044.82	3,009.59	7.17	7.75	8.11	29.10	340.46	351.79	336.76	15.02	23.414			
3,200.00	3,199.84	3,142.65	3,104.14	7.35	7.92	8.12	31.50	365.49	372.44	357.06	15.38	24.220			
3,300.00	3,299.45	3,241.14	3,199.33	7.53	8.10	8.21	33.92	390.68	399.70	373.96	15.73	24.767			
3,383.28	3,382.14	3,323.58	3,279.00	7.64	8.26	8.34	35.94	411.77	401.47	385.48	16.00	25.095			
3,400.00	3,398.71	3,340.16	3,295.02	7.65	8.29	8.38	36.35	416.01	403.60	387.56	16.04	25.168			
3,500.00	3,497.81	3,439.34	3,390.86	7.79	8.47	8.59	38.78	441.37	416.32	399.95	16.37	25.430			
3,600.00	3,596.92	3,538.51	3,486.71	7.90	8.66	8.79	41.22	466.74	429.04	412.35	16.69	25.712			
3,700.00	3,696.03	3,637.69	3,582.56	8.02	8.85	8.98	43.65	492.11	441.77	424.76	17.01	25.976			
3,800.00	3,795.13	3,736.86	3,678.40	8.15	9.05	9.15	46.09	517.48	454.50	437.17	17.33	26.225			
3,900.00	3,894.24	3,836.04	3,774.25	8.27	9.24	9.32	48.52	542.84	467.24	449.58	17.66	26.459			
4,000.00	3,993.35	3,935.22	3,870.10	8.40	9.44	9.48	50.96	568.21	479.98	461.99	17.99	26.678			
4,100.00	4,092.45	4,034.39	3,965.94	8.53	9.64	9.63	53.39	593.58	492.72	474.39	18.33	26.885			
4,200.00	4,191.56	4,133.57	4,061.79	8.67	9.84	9.77	55.83	618.95	505.47	486.80	18.67	27.079			
4,300.00	4,290.67	4,232.75	4,157.64	8.80	10.04	9.91	58.26	644.31	518.22	499.21	19.01	27.262			
4,400.00	4,389.77	4,331.92	4,253.48	8.94	10.24	10.03	60.70	669.68	530.97	511.62	19.35	27.435			
4,500.00	4,488.88	4,431.10	4,349.33	9.08	10.45	10.16	63.13	695.05	543.73	524.02	19.70	27.597			
4,600.00	4,587.98	4,530.28	4,445.18	9.22	10.65	10.28	65.57	720.42	556.48	536.43	20.05	27.750			
4,700.00	4,687.09	4,629.45	4,541.02	9.37	10.86	10.39	68.00	745.78	569.24	548.84	20.41	27.895			
4,800.00	4,786.20	4,728.63	4,636.87	9.51	11.07	10.49	70.43	771.15	582.01	561.24	20.76	28.031			
4,900.00	4,885.30	4,827.81	4,732.72	9.66	11.28	10.60	72.87	796.52	594.77	573.65	21.12	28.160			

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

ConocoPhillips Anticollision Report

Company:	DELAWARE BASIN EAST	Local Co-ordinate Reference:	Well _COLUMBUS FEDERAL COM 653H - Slot SLOT 7
Project:	LEA COUNT SOUTH WEST (NM-E)	TVD Reference:	KB @ 3362.00usft
Reference Site:	COLUMBUS FEDERAL PROJECT	MD Reference:	KB @ 3362.00usft
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	_COLUMBUS FEDERAL COM 653H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDT 17 Permian Prod
Reference Design:	PWP0	Offset TVD Reference:	Reference Datum

Offset Design: COLUMBUS FEDERAL PROJECT - _COLUMBUS FEDERAL COM 654H - OWB - PWP0													Offset Site Error:	0.00 usft
Survey Program: 0-r.5 MWD+IFR1+SAG+FDIR											Rule Assigned:		Offset Well Error:	0.00 usft
Measured Depth (usft)	Vertical Reference Depth (usft)	Measured Depth (usft)	Vertical Offset Depth (usft)	Semi Major Axis Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre		Distance		No-Go Distance (usft)	Separation Factor	Warning	
							+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)				
5,000.00	4,984.41	4,926.98	4,828.56	9.81	11.49	10.70	75.30	821.89	607.53	586.05	21.48	28.282		
5,100.00	5,083.52	5,026.16	4,924.41	9.96	11.70	10.79	77.74	847.25	620.30	598.46	21.84	28.397		
5,200.00	5,182.62	5,125.34	5,020.26	10.11	11.91	10.88	80.17	872.62	633.07	610.86	22.21	28.506		
5,300.00	5,281.73	5,224.51	5,116.10	10.26	12.12	10.97	82.61	897.99	645.84	623.27	22.57	28.609		
5,400.00	5,380.83	5,323.69	5,211.95	10.42	12.34	11.05	85.04	923.36	658.61	635.67	22.94	28.706		
5,500.00	5,479.94	5,422.87	5,307.79	10.57	12.55	11.13	87.48	948.72	671.38	648.07	23.31	28.799		
5,600.00	5,579.05	5,522.04	5,403.64	10.73	12.77	11.21	89.91	974.09	684.16	660.47	23.68	28.887		
5,700.00	5,678.15	5,621.22	5,499.49	10.89	12.98	11.28	92.35	999.46	696.93	672.88	24.06	28.970		
5,800.00	5,777.26	5,720.40	5,595.33	11.05	13.20	11.35	94.78	1,024.83	709.71	685.28	24.43	29.049		
5,900.00	5,876.37	5,819.57	5,691.18	11.21	13.42	11.42	97.22	1,050.19	722.49	697.68	24.81	29.124		
6,000.00	5,975.47	5,918.75	5,787.03	11.37	13.64	11.49	99.65	1,075.56	735.27	710.08	25.18	29.195		
6,100.00	6,074.58	6,017.93	5,882.87	11.54	13.86	11.56	102.09	1,100.93	748.05	722.48	25.56	29.263		
6,200.00	6,173.69	6,117.10	5,978.72	11.70	14.08	11.62	104.52	1,126.30	760.83	734.88	25.94	29.327		
6,300.00	6,272.79	6,216.28	6,074.57	11.87	14.30	11.68	106.96	1,151.66	773.61	747.28	26.32	29.388		
6,400.00	6,371.90	6,315.46	6,170.41	12.03	14.52	11.74	109.39	1,177.03	786.39	759.68	26.71	29.446		
6,500.00	6,471.00	6,414.63	6,266.26	12.20	14.74	11.79	111.82	1,202.40	799.17	772.08	27.09	29.502		
6,600.00	6,570.11	6,513.81	6,362.11	12.37	14.96	11.85	114.26	1,227.77	811.96	784.48	27.47	29.555		
6,700.00	6,669.22	6,612.99	6,457.95	12.53	15.18	11.90	116.69	1,253.13	824.74	796.88	27.86	29.605		
6,800.00	6,768.32	6,712.16	6,553.80	12.70	15.41	11.95	119.13	1,278.50	837.53	809.28	28.24	29.653		
6,900.00	6,867.43	6,811.34	6,649.65	12.87	15.63	12.00	121.56	1,303.87	850.31	821.68	28.63	29.699		
7,000.00	6,966.54	6,910.52	6,745.49	13.04	15.85	12.05	124.00	1,329.24	863.10	834.08	29.02	29.743		
7,100.00	7,065.64	7,009.69	6,841.34	13.21	16.08	12.10	126.43	1,354.60	875.88	846.48	29.41	29.784		
7,200.00	7,164.75	7,108.87	6,937.19	13.39	16.30	12.14	128.87	1,379.97	888.67	858.87	29.80	29.824		
7,300.00	7,263.86	7,208.05	7,033.03	13.56	16.53	12.19	131.30	1,405.34	901.46	871.27	30.19	29.862		
7,400.00	7,362.96	7,307.22	7,128.88	13.73	16.75	12.23	133.74	1,430.71	914.25	883.67	30.58	29.899		
7,500.00	7,462.07	7,406.40	7,224.73	13.91	16.98	12.27	136.17	1,456.07	927.04	896.07	30.97	29.934		
7,600.00	7,561.17	7,505.58	7,320.57	14.08	17.21	12.31	138.61	1,481.44	939.83	908.46	31.36	29.967		
7,700.00	7,660.28	7,604.75	7,416.42	14.26	17.43	12.35	141.04	1,506.81	952.62	920.86	31.76	29.999		
7,800.00	7,759.39	7,703.93	7,512.27	14.43	17.66	12.39	143.48	1,532.18	965.41	933.26	32.15	30.029		
7,900.00	7,858.49	7,803.11	7,608.11	14.61	17.89	12.43	145.91	1,557.54	978.20	945.65	32.54	30.058		
8,000.00	7,957.60	7,902.28	7,703.96	14.78	18.11	12.47	148.35	1,582.91	990.99	958.05	32.94	30.086		

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_COLUMBUS FEDERAL COM 653H - Slot SLOT 7
Project:	LEA COUNT SOUTH WEST (NM-E)	TVD Reference:	KB @ 3362.00usft
Reference Site:	COLUMBUS FEDERAL PROJECT	MD Reference:	KB @ 3362.00usft
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	_COLUMBUS FEDERAL COM 653H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDT 17 Permian Prod
Reference Design:	PWP0	Offset TVD Reference:	Reference Datum

Offset Design: COLUMBUS FEDERAL PROJECT - COLUMBUS FEDERAL COM #22H - OWB - AWP													Offset Site Error:	0.00 usft
Survey Program: 100- VES GyroFlex, 11798-MWD - OWSG R1										Rule Assigned:			Offset Well Error:	3.00 usft
Measured Depth (usft)	Vertical Depth (usft)	Offset		Semi Major Axis		Highside Toolface (°)	Offset Wellbore Centre		Distance		No-Go Distance (usft)	Separation Factor	Warning	
		Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)		+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)				
8,500.00	8,453.13	8,422.45	8,431.35	15.67	10.60	10.73	200.46	1,684.42	995.58	968.96	26.61	37.407		
8,600.00	8,552.24	8,521.14	8,530.01	15.85	10.74	10.84	201.06	1,686.62	984.71	957.78	26.93	36.567		
8,700.00	8,651.34	8,622.39	8,631.24	16.03	10.88	10.97	201.52	1,688.78	973.74	946.49	27.25	35.737		
8,800.00	8,750.45	8,721.80	8,730.63	16.21	11.03	11.13	201.49	1,690.80	962.66	935.10	27.56	34.924		
8,900.00	8,849.56	8,820.66	8,829.46	16.40	11.17	11.29	201.47	1,692.95	951.73	923.84	27.88	34.134		
9,000.00	8,948.66	8,926.16	8,934.95	16.58	11.33	11.45	201.67	1,694.77	940.35	912.15	28.21	33.338		
9,100.00	9,047.77	9,028.26	9,037.04	16.76	11.47	11.60	202.04	1,696.14	928.62	900.09	28.53	32.553		
9,200.00	9,146.88	9,132.18	9,140.95	16.94	11.61	11.76	202.34	1,697.02	916.41	887.56	28.84	31.770		
9,300.00	9,245.98	9,233.98	9,242.75	17.12	11.71	11.90	202.89	1,697.54	903.86	874.72	29.14	31.020		
9,400.00	9,345.09	9,335.33	9,344.10	17.30	11.77	12.03	203.68	1,697.72	890.99	861.60	29.40	30.307		
9,500.00	9,444.19	9,434.27	9,443.03	17.49	11.81	12.12	204.98	1,697.80	878.05	848.41	29.65	29.619		
9,600.00	9,543.30	9,532.20	9,540.95	17.67	11.86	12.25	205.85	1,697.98	865.20	835.30	29.90	28.939		
9,700.00	9,642.41	9,630.27	9,639.02	17.85	11.94	12.38	206.74	1,698.31	852.51	822.35	30.17	28.261		
9,794.15	9,735.72	9,723.40	9,732.15	18.02	12.03	12.53	207.20	1,698.68	840.62	810.19	30.43	27.624		
9,800.00	9,741.51	9,729.14	9,737.89	18.03	12.04	12.54	207.22	1,698.70	839.88	809.44	30.45	27.586		
9,900.00	9,840.74	9,828.44	9,837.18	18.26	12.14	12.64	208.07	1,699.17	828.28	797.49	30.78	26.908		
10,000.00	9,940.18	9,930.13	9,938.87	18.44	12.21	12.73	208.86	1,699.44	818.17	787.13	31.04	26.361		
10,100.00	10,039.78	10,034.10	10,042.84	18.61	12.25	12.79	209.80	1,699.46	809.51	778.25	31.27	25.892		
10,200.00	10,139.52	10,143.83	10,152.55	18.77	12.23	12.81	210.91	1,698.30	801.48	770.03	31.45	25.482		
10,300.00	10,239.37	10,250.83	10,259.53	18.93	12.17	12.83	211.71	1,696.05	794.09	762.49	31.60	25.127		
10,400.00	10,339.30	10,351.72	10,360.38	19.07	12.10	12.84	212.17	1,693.26	787.74	756.02	31.73	24.830		
10,500.00	10,439.28	10,451.82	10,460.44	19.21	12.04	12.88	211.89	1,690.69	783.29	751.46	31.83	24.608		
10,560.72	10,500.00	10,513.79	10,522.39	19.25	12.00	12.89	211.48	1,688.93	781.26	749.40	31.86	24.525		
10,600.00	10,539.28	10,551.68	10,560.27	19.26	11.98	12.91	211.20	1,687.88	780.16	748.32	31.85	24.497		
10,700.00	10,639.28	10,647.00	10,655.55	19.32	11.93	12.92	210.40	1,685.57	777.74	745.88	31.86	24.412		
10,800.00	10,739.28	10,742.17	10,750.69	19.37	11.89	12.90	208.97	1,683.91	775.99	744.11	31.88	24.342		
10,900.00	10,839.28	10,838.11	10,846.62	19.43	11.85	12.91	208.16	1,682.72	774.76	742.86	31.91	24.283		
10,958.26	10,897.54	10,893.53	10,902.04	19.45	11.83	12.91	207.87	1,682.30	774.32	742.41	31.91	24.268		
10,975.00	10,914.28	10,909.65	10,918.16	19.45	11.83	-12.91	207.80	1,682.21	774.22	742.32	31.91	24.266		
11,000.00	10,939.23	10,933.91	10,942.42	19.44	11.83	-12.90	207.65	1,682.10	774.10	742.19	31.90	24.263		
11,025.00	10,964.06	10,958.08	10,966.59	19.43	11.83	-12.89	207.47	1,682.01	773.99	742.08	31.90	24.259		
11,050.00	10,988.72	10,982.09	10,990.60	19.42	11.83	-12.89	207.25	1,681.95	773.91	742.01	31.91	24.255		
11,073.86	11,012.01	11,004.93	11,013.43	19.41	11.83	-12.89	207.01	1,681.90	773.89	741.98	31.91	24.252 CC		
11,075.00	11,013.12	11,006.04	11,014.54	19.41	11.83	-12.89	207.00	1,681.90	773.89	741.97	31.91	24.251 ES		
11,100.00	11,037.21	11,030.16	11,038.67	19.40	11.84	-12.89	206.73	1,681.86	773.92	742.00	31.92	24.244		
11,125.00	11,060.91	11,053.93	11,062.43	19.38	11.85	-12.89	206.45	1,681.82	774.04	742.11	31.93	24.240		
11,150.00	11,084.17	11,077.27	11,085.77	19.37	11.86	-12.89	206.17	1,681.78	774.29	742.34	31.94	24.240 SF		
11,175.00	11,106.91	11,100.00	11,108.50	19.36	11.86	-12.89	205.89	1,681.75	774.69	742.74	31.95	24.245		
11,200.00	11,129.08	11,122.37	11,130.87	19.35	11.87	-12.89	205.61	1,681.72	775.31	743.35	31.96	24.258		
11,225.00	11,150.62	11,144.01	11,152.51	19.34	11.88	-12.89	205.34	1,681.69	776.18	744.21	31.97	24.280		
11,250.00	11,171.46	11,164.98	11,173.47	19.33	11.89	-12.89	205.07	1,681.66	777.36	745.39	31.97	24.313		
11,275.00	11,191.56	11,185.21	11,193.70	19.33	11.90	-12.89	204.81	1,681.64	778.91	746.93	31.98	24.359		
11,300.00	11,210.84	11,204.69	11,213.18	19.32	11.91	-12.89	204.56	1,681.61	780.87	748.89	31.98	24.421		
11,325.00	11,229.27	11,223.42	11,231.91	19.32	11.91	-12.89	204.31	1,681.59	783.29	751.32	31.97	24.499		
11,350.00	11,246.79	11,241.28	11,249.77	19.32	11.92	-12.89	204.07	1,681.57	786.22	754.26	31.97	24.595		
11,375.00	11,263.35	11,258.20	11,266.69	19.32	11.93	-12.89	203.82	1,681.55	789.72	757.77	31.96	24.712		
11,400.00	11,278.91	11,274.15	11,282.64	19.32	11.94	-12.89	203.58	1,681.53	793.83	761.88	31.94	24.850		
11,425.00	11,293.42	11,289.08	11,297.56	19.32	11.94	-12.89	203.35	1,681.51	798.58	766.65	31.93	25.011		
11,450.00	11,306.85	11,302.93	11,311.41	19.33	11.95	-12.89	203.13	1,681.50	804.01	772.10	31.91	25.196		
11,475.00	11,319.15	11,315.61	11,324.09	19.35	11.96	-12.89	202.93	1,681.48	810.14	778.26	31.89	25.405		
11,500.00	11,330.30	11,327.15	11,335.63	19.36	11.96	-12.89	202.74	1,681.47	817.01	785.14	31.87	25.639		

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

ConocoPhillips Anticollision Report

Company:	DELAWARE BASIN EAST	Local Co-ordinate Reference:	Well _COLUMBUS FEDERAL COM 653H - Slot SLOT 7
Project:	LEA COUNT SOUTH WEST (NM-E)	TVD Reference:	KB @ 3362.00usft
Reference Site:	COLUMBUS FEDERAL PROJECT	MD Reference:	KB @ 3362.00usft
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	_COLUMBUS FEDERAL COM 653H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDT 17 Permian Prod
Reference Design:	PWP0	Offset TVD Reference:	Reference Datum

Offset Design: COLUMBUS FEDERAL PROJECT - COLUMBUS FEDERAL COM #22H - OWB - AWP												Offset Site Error:	0.00 usft		
Survey Program: 100- VES GyroFlex, 11798-MWD - OWSG R1												Offset Well Error:	3.00 usft		
Reference						Rule Assigned:									
Measured		Vertical		Semi Major Axis		Offset Wellbore Centre		Distance		No-Go		Separation		Warning	
Depth	Depth	Depth	Depth	Reference	Offset	+N/-S	+E/-W	Between	Between	Distance	Factor				
(usft)	(usft)	(usft)	(usft)	(usft)	(usft)	(usft)	(usft)	Centres	Ellipses	(usft)					
								(usft)	(usft)	(usft)					
						Highside									
						Toolface									
						(°)									
11,525.00	11,340.27	11,337.52	11,346.00	19.38	11.97	-98.27	202.57	1,681.45	824.61	792.77	31.84	25.899			
11,550.00	11,349.02	11,346.69	11,355.16	19.40	11.97	-97.84	202.42	1,681.44	832.96	801.15	31.81	26.183			
11,575.00	11,356.53	11,354.62	11,363.10	19.43	11.97	-97.23	202.29	1,681.43	842.05	810.26	31.79	26.492			
11,600.00	11,362.78	11,361.31	11,369.78	19.46	11.98	-96.43	202.17	1,681.43	851.86	820.10	31.76	26.825			
11,625.00	11,367.76	11,366.72	11,375.20	19.49	11.98	-95.43	202.08	1,681.42	862.37	830.64	31.73	27.181			
11,650.00	11,371.46	11,370.85	11,379.32	19.52	11.98	-94.23	202.01	1,681.42	873.56	841.86	31.70	27.558			
11,675.00	11,373.85	11,373.68	11,382.15	19.56	11.98	-92.83	201.96	1,681.41	885.38	853.71	31.67	27.956			
11,700.00	11,374.93	11,375.20	11,383.67	19.60	11.98	-91.23	201.94	1,681.41	897.79	866.15	31.64	28.373			
11,708.26	11,375.01	11,375.41	11,383.89	19.62	11.98	-90.66	201.93	1,681.41	902.01	870.38	31.63	28.514			
11,800.00	11,375.01	11,376.99	11,385.46	19.80	11.99	-90.77	201.91	1,681.41	952.48	920.93	31.54	30.194			

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

ConocoPhillips Anticollision Report

Company:	DELAWARE BASIN EAST	Local Co-ordinate Reference:	Well _COLUMBUS FEDERAL COM 653H - Slot SLOT 7
Project:	LEA COUNT SOUTH WEST (NM-E)	TVD Reference:	KB @ 3362.00usft
Reference Site:	COLUMBUS FEDERAL PROJECT	MD Reference:	KB @ 3362.00usft
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	_COLUMBUS FEDERAL COM 653H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDT 17 Permian Prod
Reference Design:	PWP0	Offset TVD Reference:	Reference Datum

Offset Design: COLUMBUS FEDERAL PROJECT - COLUMBUS FEDERAL COM 501H - OWB - PWP1														Offset Site Error:	0.00 usft
Survey Program: 0-r.5 SDI_KPR_WL_NS-CT, 1750-r.5 MWD+IFR1+SAG+FDIR, 10558-r.5 MWD+IFR1+SAG+FDIR														Offset Well Error:	0.00 usft
Rule Assigned:															
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Semi Major Axis (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	No-Go Distance (usft)	Separation Factor	Warning	
0.00	0.00	0.00	0.00	0.00	0.00	0.00	-90.38	-0.80	-119.99	119.99					
100.00	100.00	100.00	100.00	0.77	0.52	-90.38	-90.38	-0.80	-119.99	119.99	118.23	1.76	68.053		
200.00	200.00	200.00	200.00	1.44	1.03	-90.38	-90.38	-0.80	-119.99	119.99	117.07	2.93	41.005		
300.00	300.00	300.00	300.00	1.88	1.36	-90.38	-90.38	-0.80	-119.99	119.99	116.30	3.70	32.457		
400.00	400.00	400.00	400.00	2.25	1.64	-90.38	-90.38	-0.80	-119.99	119.99	115.67	4.32	27.782		
500.00	500.00	500.00	500.00	2.56	1.89	-90.38	-90.38	-0.80	-119.99	119.99	115.14	4.86	24.707		
600.00	600.00	600.00	600.00	2.84	2.11	-90.38	-90.38	-0.80	-119.99	119.99	114.65	5.34	22.480		
700.00	700.00	700.00	700.00	3.10	2.31	-90.38	-90.38	-0.80	-119.99	119.99	114.21	5.78	20.768		
800.00	800.00	800.00	800.00	3.34	2.51	-90.38	-90.38	-0.80	-119.99	119.99	113.81	6.19	19.397		
900.00	900.00	900.00	900.00	3.57	2.69	-90.38	-90.38	-0.80	-119.99	119.99	113.42	6.57	18.265		
1,000.00	1,000.00	1,000.00	1,000.00	3.79	2.87	-90.38	-90.38	-0.80	-119.99	119.99	113.06	6.93	17.310		
1,100.00	1,100.00	1,100.00	1,100.00	3.99	3.04	-90.38	-90.38	-0.80	-119.99	119.99	112.72	7.28	16.489		
1,200.00	1,200.00	1,200.00	1,200.00	4.19	3.21	-90.38	-90.38	-0.80	-119.99	119.99	112.39	7.61	15.773		
1,300.00	1,300.00	1,300.00	1,300.00	4.38	3.37	-90.38	-90.38	-0.80	-119.99	119.99	112.07	7.92	15.142		
1,400.00	1,400.00	1,400.00	1,400.00	4.56	3.53	-90.38	-90.38	-0.80	-119.99	119.99	111.76	8.23	14.579		
1,500.00	1,500.00	1,500.00	1,500.00	4.74	3.68	-90.38	-90.38	-0.80	-119.99	119.99	111.47	8.53	14.073		
1,600.00	1,600.00	1,600.00	1,600.00	4.91	3.83	-90.38	-90.38	-0.80	-119.99	119.99	111.18	8.81	13.614		
1,700.00	1,700.00	1,700.00	1,700.00	5.08	3.98	-90.38	-90.38	-0.80	-119.99	119.99	110.90	9.09	13.197		
1,710.00	1,710.00	1,710.00	1,710.00	5.09	3.99	-90.38	-90.38	-0.80	-119.99	119.99	110.88	9.11	13.166 CC, ES		
1,800.00	1,800.00	1,798.01	1,798.01	5.24	4.05	-90.35	-90.35	-0.74	-120.39	120.41	111.09	9.31	12.930		
1,900.00	1,900.00	1,893.92	1,893.86	5.40	4.22	-90.13	-90.13	-0.27	-123.57	123.72	113.98	9.74	12.705 SF		
2,000.00	2,000.00	1,989.50	1,989.22	5.56	4.39	-89.71	-89.71	0.65	-129.89	130.34	120.19	10.15	12.844		
2,100.00	2,100.00	2,084.56	2,083.80	5.71	4.57	-89.16	-89.16	2.04	-139.30	140.25	129.71	10.54	13.307		
2,200.00	2,200.00	2,178.88	2,177.28	5.86	4.78	-88.54	-88.54	3.86	-151.69	153.43	142.52	10.91	14.058		
2,300.00	2,300.00	2,272.27	2,269.38	6.01	5.02	-87.91	-87.91	6.10	-166.96	169.85	158.58	11.27	15.066		
2,400.00	2,400.00	2,364.56	2,359.85	6.15	5.26	-87.29	-87.29	8.74	-184.96	189.47	177.85	11.62	16.306		
2,500.00	2,500.00	2,455.56	2,448.45	6.30	5.50	-86.72	-86.72	11.76	-205.52	212.21	200.26	11.95	17.757		
2,600.00	2,600.00	2,547.44	2,537.22	6.44	5.69	-86.20	-86.20	15.20	-228.94	237.88	225.64	12.24	19.441		
2,700.00	2,700.00	2,643.87	2,630.22	6.58	5.85	-85.74	-85.74	18.91	-254.19	264.28	251.73	12.54	21.069		
2,800.00	2,800.00	2,740.31	2,723.21	6.71	6.03	-85.37	-85.37	22.62	-279.45	290.69	277.83	12.85	22.613		
2,900.00	2,900.00	2,836.74	2,816.20	6.85	6.20	-85.06	-85.06	26.33	-304.70	317.11	303.94	13.17	24.082		
3,000.00	3,000.00	2,933.17	2,909.20	6.98	6.38	-84.80	-84.80	30.04	-329.96	343.54	330.06	13.48	25.481		
3,100.00	3,099.98	3,029.16	3,001.76	7.17	6.56	-161.45	-161.45	33.73	-355.09	371.56	357.72	13.85	26.831		
3,200.00	3,199.84	3,124.16	3,093.38	7.35	6.74	-161.29	-161.29	37.39	-379.97	402.75	388.55	14.20	28.356		
3,300.00	3,299.45	3,218.08	3,183.94	7.53	6.93	-161.26	-161.26	41.00	-404.57	437.06	422.51	14.56	30.027		
3,383.28	3,382.14	3,295.37	3,258.48	7.64	7.08	-161.29	-161.29	43.97	-424.81	468.00	453.19	14.81	31.593		
3,400.00	3,398.71	3,310.80	3,273.36	7.65	7.11	-161.35	-161.35	44.57	-428.85	474.43	459.57	14.85	31.939		
3,500.00	3,497.81	3,403.08	3,362.35	7.79	7.29	-161.66	-161.66	48.12	-453.01	512.87	497.70	15.17	33.807		
3,600.00	3,596.92	3,495.37	3,451.34	7.90	7.48	-161.93	-161.93	51.67	-477.18	551.32	535.85	15.47	35.641		
3,700.00	3,696.03	3,587.65	3,540.34	8.02	7.67	-162.16	-162.16	55.22	-501.35	589.78	574.01	15.77	37.396		
3,800.00	3,795.13	3,679.94	3,629.33	8.15	7.86	-162.37	-162.37	58.77	-525.52	628.24	612.17	16.08	39.074		
3,900.00	3,894.24	3,772.22	3,718.32	8.27	8.05	-162.55	-162.55	62.31	-549.68	666.72	650.33	16.39	40.680		
4,000.00	3,993.35	3,864.50	3,807.31	8.40	8.24	-162.71	-162.71	65.86	-573.85	705.19	688.49	16.70	42.217		
4,100.00	4,092.45	3,956.79	3,896.31	8.53	8.43	-162.85	-162.85	69.41	-598.02	743.68	726.65	17.02	43.688		
4,200.00	4,191.56	4,049.07	3,985.30	8.67	8.63	-162.98	-162.98	72.96	-622.18	782.16	764.82	17.34	45.095		
4,300.00	4,290.67	4,141.36	4,074.29	8.80	8.82	-163.10	-163.10	76.51	-646.35	820.65	802.98	17.67	46.443		
4,400.00	4,389.77	4,233.64	4,163.28	8.94	9.02	-163.21	-163.21	80.06	-670.52	859.14	841.14	18.00	47.734		
4,500.00	4,488.88	4,325.92	4,252.28	9.08	9.22	-163.31	-163.31	83.61	-694.68	897.63	879.30	18.33	48.971		
4,600.00	4,587.98	4,418.21	4,341.27	9.22	9.42	-163.40	-163.40	87.16	-718.85	936.13	917.47	18.66	50.156		
4,700.00	4,687.09	4,510.49	4,430.26	9.37	9.62	-163.48	-163.48	90.71	-743.02	974.63	955.63	19.00	51.293		

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

ConocoPhillips Anticollision Report

Company:	DELAWARE BASIN EAST	Local Co-ordinate Reference:	Well _COLUMBUS FEDERAL COM 653H - Slot SLOT 7
Project:	LEA COUNT SOUTH WEST (NM-E)	TVD Reference:	KB @ 3362.00usft
Reference Site:	COLUMBUS FEDERAL PROJECT	MD Reference:	KB @ 3362.00usft
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	_COLUMBUS FEDERAL COM 653H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDT 17 Permian Prod
Reference Design:	PWP0	Offset TVD Reference:	Reference Datum

Offset Design: COLUMBUS FEDERAL PROJECT - COLUMBUS FEDERAL COM 502H - OWB - PWP1														Offset Site Error:	0.00 usft		
Survey Program: 0-r.5 SDI_KPR_WL_NS-CT, 2000-r.5 MWD+IFR1, 10422-r.5 MWD+IFR1+SAG+FDIR														Rule Assigned:		Offset Well Error:	0.00 usft
Measured Depth (usft)	Vertical Depth (usft)	Offset		Semi Major Axis		Highside Toolface (°)	Offset Wellbore Centre		Distance		No-Go Distance (usft)	Separation Factor	Warning				
		Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)		+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)							
0.00	0.00	0.00	0.00	0.00	0.00	-90.19	-0.27	-80.00	80.00								
100.00	100.00	100.00	100.00	0.77	0.52	-90.19	-0.27	-80.00	80.00	78.24	1.76	45.372					
200.00	200.00	200.00	200.00	1.44	1.03	-90.19	-0.27	-80.00	80.00	77.07	2.93	27.338					
300.00	300.00	300.00	300.00	1.88	1.36	-90.19	-0.27	-80.00	80.00	76.30	3.70	21.640					
400.00	400.00	400.00	400.00	2.25	1.64	-90.19	-0.27	-80.00	80.00	75.68	4.32	18.522					
500.00	500.00	500.00	500.00	2.56	1.89	-90.19	-0.27	-80.00	80.00	75.14	4.86	16.472					
600.00	600.00	600.00	600.00	2.84	2.11	-90.19	-0.27	-80.00	80.00	74.66	5.34	14.988					
700.00	700.00	700.00	700.00	3.10	2.31	-90.19	-0.27	-80.00	80.00	74.22	5.78	13.846					
800.00	800.00	800.00	800.00	3.34	2.51	-90.19	-0.27	-80.00	80.00	73.81	6.19	12.932					
900.00	900.00	900.00	900.00	3.57	2.69	-90.19	-0.27	-80.00	80.00	73.43	6.57	12.178					
1,000.00	1,000.00	1,000.00	1,000.00	3.79	2.87	-90.19	-0.27	-80.00	80.00	73.07	6.93	11.541					
1,100.00	1,100.00	1,100.00	1,100.00	3.99	3.04	-90.19	-0.27	-80.00	80.00	72.72	7.28	10.994					
1,200.00	1,200.00	1,200.00	1,200.00	4.19	3.21	-90.19	-0.27	-80.00	80.00	72.39	7.61	10.516					
1,300.00	1,300.00	1,300.00	1,300.00	4.38	3.37	-90.19	-0.27	-80.00	80.00	72.08	7.92	10.095					
1,400.00	1,400.00	1,400.00	1,400.00	4.56	3.53	-90.19	-0.27	-80.00	80.00	71.77	8.23	9.720					
1,500.00	1,500.00	1,500.00	1,500.00	4.74	3.68	-90.19	-0.27	-80.00	80.00	71.47	8.53	9.382					
1,600.00	1,600.00	1,600.00	1,600.00	4.91	3.83	-90.19	-0.27	-80.00	80.00	71.19	8.81	9.077					
1,700.00	1,700.00	1,700.00	1,700.00	5.08	3.98	-90.19	-0.27	-80.00	80.00	70.91	9.09	8.798					
1,800.00	1,800.00	1,800.00	1,800.00	5.24	4.13	-90.19	-0.27	-80.00	80.00	70.64	9.36	8.543					
1,900.00	1,900.00	1,900.00	1,900.00	5.40	4.27	-90.19	-0.27	-80.00	80.00	70.37	9.63	8.308					
2,000.00	2,000.00	2,000.00	2,000.00	5.56	4.41	-90.19	-0.27	-80.00	80.00	70.11	9.89	8.090 CC, ES					
2,100.00	2,100.00	2,097.31	2,097.29	5.71	4.53	-89.94	0.08	-81.61	81.66	71.43	10.23	7.983 SF					
2,200.00	2,200.00	2,194.39	2,194.24	5.86	4.69	-89.25	1.13	-86.44	86.64	76.01	10.64	8.146					
2,300.00	2,300.00	2,291.03	2,290.53	6.01	4.87	-88.27	2.86	-94.43	94.95	83.90	11.05	8.594					
2,400.00	2,400.00	2,387.01	2,385.83	6.15	5.10	-87.15	5.26	-105.51	106.59	95.12	11.47	9.294					
2,500.00	2,500.00	2,482.12	2,479.85	6.30	5.39	-86.03	8.31	-119.55	121.52	109.63	11.90	10.214					
2,600.00	2,600.00	2,576.18	2,572.30	6.44	5.73	-84.99	11.96	-136.44	139.73	127.40	12.34	11.327					
2,700.00	2,700.00	2,670.69	2,664.62	6.58	5.99	-84.06	16.25	-156.20	160.98	148.28	12.70	12.673					
2,800.00	2,800.00	2,768.22	2,759.73	6.71	6.29	-83.30	20.82	-177.27	182.98	169.83	13.15	13.920					
2,900.00	2,900.00	2,865.74	2,854.85	6.85	6.63	-82.71	25.39	-198.34	204.99	191.37	13.62	15.049					
3,000.00	3,000.00	2,963.27	2,949.96	6.98	6.98	-82.23	29.95	-219.41	227.03	212.91	14.11	16.084					
3,100.00	3,099.98	3,060.43	3,044.72	7.17	7.34	-158.78	34.50	-240.40	250.66	235.99	14.67	17.087					
3,200.00	3,199.84	3,156.77	3,138.68	7.35	7.71	-158.65	39.01	-261.21	277.44	262.21	15.22	18.227					
3,300.00	3,299.45	3,252.18	3,231.72	7.53	8.09	-158.72	43.48	-281.82	307.34	291.56	15.78	19.478					
3,383.28	3,382.14	3,330.84	3,308.44	7.64	8.41	-158.90	47.17	-298.81	334.61	318.40	16.21	20.637					
3,400.00	3,398.71	3,346.55	3,323.76	7.65	8.47	-158.98	47.90	-302.21	340.30	324.01	16.29	20.888					
3,500.00	3,497.81	3,440.54	3,415.43	7.79	8.86	-159.44	52.30	-322.51	374.34	357.51	16.83	22.242					
3,600.00	3,596.92	3,534.53	3,507.09	7.90	9.25	-159.81	56.71	-342.81	408.41	391.05	17.36	23.526					
3,700.00	3,696.03	3,628.52	3,598.75	8.02	9.65	-160.13	61.11	-363.12	442.48	424.58	17.90	24.720					
3,800.00	3,795.13	3,722.50	3,690.42	8.15	10.05	-160.41	65.51	-383.42	476.57	458.12	18.45	25.830					
3,900.00	3,894.24	3,816.49	3,782.08	8.27	10.46	-160.65	69.91	-403.72	510.67	491.66	19.01	26.863					
4,000.00	3,993.35	3,910.48	3,873.74	8.40	10.87	-160.86	74.31	-424.03	544.77	525.19	19.58	27.826					
4,100.00	4,092.45	4,004.47	3,965.41	8.53	11.28	-161.04	78.71	-444.33	578.88	558.72	20.15	28.724					
4,200.00	4,191.56	4,098.46	4,057.07	8.67	11.70	-161.20	83.12	-464.63	612.99	592.25	20.74	29.561					
4,300.00	4,290.67	4,192.44	4,148.73	8.80	12.12	-161.35	87.52	-484.94	647.11	625.78	21.33	30.344					
4,400.00	4,389.77	4,286.43	4,240.40	8.94	12.54	-161.48	91.92	-505.24	681.23	659.31	21.92	31.077					
4,500.00	4,488.88	4,380.42	4,332.06	9.08	12.97	-161.60	96.32	-525.55	715.35	692.83	22.52	31.763					
4,600.00	4,587.98	4,474.41	4,423.72	9.22	13.39	-161.71	100.72	-545.85	749.48	726.35	23.13	32.407					
4,700.00	4,687.09	4,568.40	4,515.39	9.37	13.82	-161.80	105.12	-566.15	783.60	759.87	23.74	33.011					
4,800.00	4,786.20	4,662.39	4,607.05	9.51	14.25	-161.90	109.53	-586.46	817.73	793.38	24.35	33.579					
4,900.00	4,885.30	4,756.37	4,698.71	9.66	14.68	-161.98	113.93	-606.76	851.86	826.89	24.97	34.114					

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

ConocoPhillips Anticollision Report

Company:	DELAWARE BASIN EAST	Local Co-ordinate Reference:	Well _COLUMBUS FEDERAL COM 653H - Slot SLOT 7
Project:	LEA COUNT SOUTH WEST (NM-E)	TVD Reference:	KB @ 3362.00usft
Reference Site:	COLUMBUS FEDERAL PROJECT	MD Reference:	KB @ 3362.00usft
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	_COLUMBUS FEDERAL COM 653H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDT 17 Permian Prod
Reference Design:	PWP0	Offset TVD Reference:	Reference Datum

Offset Design: COLUMBUS FEDERAL PROJECT - COLUMBUS FEDERAL COM 502H - OWB - PWP1												Offset Site Error:	0.00 usft		
Survey Program: 0-r.5 SDI_KPR_WL_NS-CT, 2000-r.5 MWD+IFR1, 10422-r.5 MWD+IFR1+SAG+FDIR												Offset Well Error:	0.00 usft		
Reference												Rule Assigned:			
Offset				Semi Major Axis		Offset Wellbore Centre		Distance		No-Go		Separation		Warning	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Distance (usft)	Factor			
5,000.00	4,984.41	4,850.36	4,790.38	9.81	15.11	-162.06	118.33	-627.06	886.00	860.40	25.59	34.618			
5,100.00	5,083.52	4,944.35	4,882.04	9.96	15.54	-162.13	122.73	-647.37	920.13	893.91	26.22	35.093			
5,200.00	5,182.62	5,038.34	4,973.70	10.11	15.98	-162.19	127.13	-667.67	954.26	927.42	26.85	35.542			
5,300.00	5,281.73	5,132.33	5,065.37	10.26	16.41	-162.25	131.53	-687.97	988.40	960.92	27.48	35.966			

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

ConocoPhillips Anticollision Report

Company:	DELAWARE BASIN EAST	Local Co-ordinate Reference:	Well_COLUMBUS FEDERAL COM 653H - Slot SLOT 7
Project:	LEA COUNT SOUTH WEST (NM-E)	TVD Reference:	KB @ 3362.00usft
Reference Site:	COLUMBUS FEDERAL PROJECT	MD Reference:	KB @ 3362.00usft
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	_COLUMBUS FEDERAL COM 653H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDT 17 Permian Prod
Reference Design:	PWP0	Offset TVD Reference:	Reference Datum

Offset Design: COLUMBUS FEDERAL PROJECT - COLUMBUS FEE #23H - OWB (PH) - AWP														Offset Site Error:	0.00 usft
Survey Program: 176-r.5 MWD+IFR1														Offset Well Error:	3.00 usft
Reference		Offset		Semi Major Axis		Highside Toolface (°)	Offset Wellbore Centre		Distance		No-Go Distance (usft)	Separation Factor	Warning		
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)		+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)					
6,700.00	6,669.22	6,712.82	6,718.76	12.53	17.85	5.10	242.52	1,430.70	985.55	955.93	29.62	33.275			
6,800.00	6,768.32	6,804.36	6,810.20	12.70	18.05	5.18	241.61	1,426.51	967.64	937.63	30.02	32.236			
6,900.00	6,867.43	6,900.76	6,906.51	12.87	18.25	5.29	240.43	1,422.57	950.19	919.77	30.43	31.230			
7,000.00	6,966.54	6,999.25	7,004.91	13.04	18.46	5.42	239.08	1,418.68	932.85	902.01	30.84	30.249			
7,100.00	7,065.64	7,098.16	7,103.73	13.21	18.66	5.56	237.61	1,414.70	915.44	884.18	31.26	29.287			
7,200.00	7,164.75	7,191.86	7,197.36	13.39	18.85	5.69	236.22	1,411.20	898.31	866.65	31.66	28.371			
7,300.00	7,263.86	7,287.36	7,292.80	13.56	19.05	5.83	235.05	1,408.08	881.67	849.61	32.07	27.492			
7,400.00	7,362.96	7,387.21	7,392.59	13.73	19.27	5.95	234.15	1,404.78	865.05	832.56	32.49	26.625			
7,500.00	7,462.07	7,485.66	7,490.98	13.91	19.49	6.06	233.43	1,401.53	848.46	815.54	32.91	25.780			
7,600.00	7,561.17	7,584.67	7,589.93	14.08	19.72	6.19	232.62	1,398.11	831.70	798.36	33.34	24.947			
7,700.00	7,660.28	7,678.97	7,684.19	14.26	19.94	6.30	232.10	1,395.13	815.27	781.52	33.75	24.155			
7,800.00	7,759.39	7,772.69	7,777.87	14.43	20.14	6.42	231.46	1,392.71	799.40	765.25	34.15	23.406			
7,900.00	7,858.49	7,867.30	7,872.46	14.61	20.33	6.56	230.78	1,390.90	784.18	749.63	34.54	22.701			
8,000.00	7,957.60	7,962.48	7,967.63	14.78	20.50	6.71	230.12	1,389.42	769.32	734.40	34.92	22.032			
8,100.00	8,056.71	8,057.48	8,062.62	14.96	20.65	6.85	229.60	1,388.59	755.15	719.88	35.27	21.410			
8,200.00	8,155.81	8,156.46	8,161.60	15.14	20.80	7.00	229.21	1,387.83	741.11	705.48	35.62	20.804			
8,300.00	8,254.92	8,255.66	8,260.79	15.32	20.94	7.16	228.66	1,387.14	727.12	691.15	35.97	20.213			
8,400.00	8,354.02	8,356.31	8,361.44	15.50	21.08	7.35	227.98	1,386.28	712.98	676.65	36.33	19.627			
8,500.00	8,453.13	8,457.48	8,462.60	15.67	21.24	7.55	227.11	1,385.16	698.57	661.87	36.70	19.035			
8,600.00	8,552.24	8,554.99	8,560.09	15.85	21.39	7.76	226.26	1,383.93	684.03	646.97	37.06	18.458			
8,700.00	8,651.34	8,654.07	8,659.16	16.03	21.52	8.02	224.99	1,382.95	669.73	632.32	37.40	17.906			
8,800.00	8,750.45	8,752.24	8,757.32	16.21	21.64	8.29	223.61	1,381.95	655.39	617.66	37.73	17.369			
8,900.00	8,849.56	8,851.59	8,856.65	16.40	21.76	8.58	222.23	1,381.02	641.15	603.09	38.07	16.843			
9,000.00	8,948.66	8,951.79	8,956.84	16.58	21.95	8.87	221.01	1,379.90	626.77	588.30	38.47	16.291			
9,100.00	9,047.77	9,051.66	9,056.69	16.76	22.15	9.18	219.71	1,378.59	612.21	573.33	38.88	15.747			
9,200.00	9,146.88	9,150.55	9,155.57	16.94	22.30	9.50	218.34	1,377.27	597.63	558.39	39.24	15.213			
9,300.00	9,245.98	9,250.54	9,255.54	17.12	22.47	9.85	216.94	1,375.78	582.92	543.31	39.61	14.717			
9,400.00	9,345.09	9,350.97	9,355.95	17.30	22.66	10.19	215.80	1,374.13	568.10	528.10	40.00	14.204			
9,500.00	9,444.19	9,451.97	9,456.91	17.49	22.87	10.57	214.46	1,371.99	552.81	512.41	40.40	13.683			
9,600.00	9,543.30	9,550.01	9,554.92	17.67	23.08	10.96	213.19	1,369.81	537.45	496.64	40.80	13.172			
9,700.00	9,642.41	9,648.09	9,652.97	17.85	23.29	11.35	212.08	1,367.84	522.33	481.13	41.20	12.678			
9,794.15	9,735.72	9,740.52	9,745.38	18.02	23.49	11.72	211.14	1,366.02	508.16	466.59	41.57	12.224			
9,800.00	9,741.51	9,746.23	9,751.09	18.03	23.50	11.74	211.09	1,365.91	507.29	465.69	41.59	12.197			
9,900.00	9,840.74	9,846.70	9,851.54	18.26	23.73	12.09	210.37	1,363.98	493.25	451.21	42.04	11.732			
10,000.00	9,940.18	9,950.93	9,955.72	18.44	23.99	12.41	209.74	1,361.22	480.22	437.74	42.48	11.304			
10,100.00	10,039.78	10,054.24	10,058.97	18.61	24.28	12.68	209.25	1,357.40	467.85	424.91	42.94	10.896			
10,200.00	10,139.52	10,146.35	10,151.02	18.77	24.52	12.91	208.71	1,354.26	457.46	414.13	43.34	10.556			
10,300.00	10,239.37	10,241.03	10,245.68	18.93	24.72	13.15	207.80	1,352.45	450.27	406.58	43.69	10.306			
10,400.00	10,339.30	10,339.16	10,343.79	19.07	24.88	13.43	206.38	1,351.29	445.52	401.54	43.98	10.130			
10,500.00	10,439.28	10,438.00	10,442.60	19.21	24.99	13.78	204.07	1,350.45	442.82	398.62	44.20	10.019			
10,560.72	10,500.00	10,498.88	10,503.45	19.25	25.04	13.91	202.22	1,349.99	442.07	397.79	44.28	9.983			
10,600.00	10,539.28	10,538.47	10,543.02	19.26	25.08	13.91	200.91	1,349.64	441.75	397.43	44.32	9.966			
10,700.00	10,639.28	10,638.09	10,642.59	19.32	25.17	13.91	197.74	1,348.82	441.00	396.55	44.45	9.921			
10,800.00	10,739.28	10,741.18	10,745.61	19.37	25.30	14.00	194.37	1,347.56	439.88	395.28	44.60	9.862			
10,900.00	10,839.28	10,842.22	10,846.56	19.43	25.45	14.00	190.68	1,345.76	438.25	393.48	44.77	9.789			
10,958.26	10,897.54	10,899.63	10,903.92	19.45	25.53	14.00	188.29	1,344.75	437.34	392.49	44.85	9.751			
10,975.00	10,914.28	10,916.22	10,920.49	19.45	25.55	-86.74	187.56	1,344.48	437.08	392.21	44.87	9.742			
11,000.00	10,939.23	10,941.07	10,945.31	19.44	25.59	-86.85	186.45	1,344.07	436.64	391.74	44.90	9.725			
11,025.00	10,964.06	10,965.87	10,970.08	19.43	25.62	-87.13	185.33	1,343.67	436.14	391.20	44.94	9.705			
11,050.00	10,988.72	10,990.55	10,994.73	19.42	25.65	-87.58	184.20	1,343.29	435.60	390.61	44.99	9.682			
11,075.00	11,013.12	11,015.55	11,019.71	19.41	25.69	-88.21	183.05	1,342.89	435.03	389.98	45.05	9.656			

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

ConocoPhillips Anticollision Report

Company:	DELAWARE BASIN EAST	Local Co-ordinate Reference:	Well _COLUMBUS FEDERAL COM 653H - Slot SLOT 7
Project:	LEA COUNT SOUTH WEST (NM-E)	TVD Reference:	KB @ 3362.00usft
Reference Site:	COLUMBUS FEDERAL PROJECT	MD Reference:	KB @ 3362.00usft
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	_COLUMBUS FEDERAL COM 653H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDT 17 Permian Prod
Reference Design:	PWP0	Offset TVD Reference:	Reference Datum

Offset Design: COLUMBUS FEDERAL PROJECT - COLUMBUS FEE #23H - OWB (PH) - AWP													Offset Site Error:	0.00 usft
Survey Program: 176-r.5 MWD+IFR1													Offset Well Error:	3.00 usft
Measured Depth (usft)	Vertical Reference Depth (usft)	Measured Depth (usft)	Vertical Offset Depth (usft)	Semi Major Axis		Highside Toolface (°)	Offset Wellbore Centre		Distance		No-Go Distance (usft)	Separation Factor	Warning	
				Reference (usft)	Offset (usft)		+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)				
11,100.00	11,037.21	11,040.56	11,044.69	19.40	25.73	-89.01	181.92	1,342.46	434.44	389.32	45.13	9.627		
11,125.00	11,060.91	11,065.22	11,069.31	19.38	25.77	-89.98	180.84	1,342.00	433.89	388.68	45.20	9.598		
11,150.00	11,084.17	11,089.45	11,093.52	19.37	25.80	-91.08	179.80	1,341.51	433.43	388.14	45.29	9.571		
11,175.00	11,106.91	11,112.98	11,117.02	19.36	25.84	-92.28	178.81	1,341.01	433.15	387.78	45.37	9.547		
11,189.08	11,119.47	11,125.98	11,130.01	19.36	25.87	-93.00	178.26	1,340.73	433.10	387.68	45.42	9.536 CC		
11,200.00	11,129.08	11,135.95	11,139.96	19.35	25.88	-93.57	177.84	1,340.51	433.13	387.68	45.45	9.529 ES		
11,225.00	11,150.62	11,158.32	11,162.32	19.34	25.92	-94.93	176.89	1,340.00	433.47	387.94	45.53	9.521 SF		
11,250.00	11,171.46	11,180.05	11,184.01	19.33	25.96	-96.31	175.97	1,339.48	434.26	388.67	45.59	9.526		
11,275.00	11,191.56	11,201.45	11,205.39	19.33	26.00	-97.73	175.05	1,338.96	435.58	389.95	45.63	9.545		
11,300.00	11,210.84	11,222.23	11,226.14	19.32	26.04	-99.14	174.15	1,338.41	437.52	391.86	45.66	9.582		
11,325.00	11,229.27	11,242.18	11,246.06	19.32	26.08	-100.50	173.28	1,337.85	440.17	394.51	45.66	9.640		
11,350.00	11,246.79	11,261.25	11,265.10	19.32	26.12	-101.77	172.42	1,337.28	443.63	398.00	45.63	9.723		
11,375.00	11,263.35	11,279.38	11,283.21	19.32	26.16	-102.93	171.60	1,336.71	447.98	402.41	45.57	9.831		
11,400.00	11,278.91	11,296.17	11,299.98	19.32	26.20	-103.91	170.84	1,336.16	453.30	407.82	45.47	9.969		
11,425.00	11,293.42	11,311.95	11,315.72	19.32	26.23	-104.72	170.11	1,335.63	459.65	414.31	45.34	10.138		
11,450.00	11,306.85	11,326.65	11,330.40	19.33	26.27	-105.34	169.44	1,335.13	467.08	421.91	45.18	10.339		
11,475.00	11,319.15	11,340.25	11,343.98	19.35	26.30	-105.74	168.81	1,334.65	475.63	430.65	44.98	10.575		
11,500.00	11,330.30	11,352.69	11,356.40	19.36	26.32	-105.90	168.24	1,334.21	485.29	440.54	44.75	10.844		
11,525.00	11,340.27	11,363.96	11,367.65	19.38	26.35	-105.79	167.72	1,333.80	496.07	451.57	44.50	11.148		
11,550.00	11,349.02	11,374.06	11,377.74	19.40	26.37	-105.40	167.25	1,333.43	507.94	463.72	44.23	11.485		
11,575.00	11,356.53	11,383.36	11,387.01	19.43	26.39	-104.76	166.81	1,333.08	520.87	476.93	43.94	11.854		
11,600.00	11,362.78	11,391.33	11,394.98	19.46	26.41	-103.78	166.44	1,332.77	534.79	491.15	43.64	12.255		
11,625.00	11,367.76	11,397.96	11,401.59	19.49	26.43	-102.45	166.12	1,332.50	549.66	506.33	43.33	12.684		
11,650.00	11,371.46	11,403.23	11,406.85	19.52	26.44	-100.74	165.87	1,332.29	565.40	522.38	43.02	13.142		
11,675.00	11,373.85	11,407.10	11,410.71	19.56	26.45	-98.64	165.69	1,332.13	581.94	539.22	42.71	13.624		
11,700.00	11,374.93	11,409.58	11,413.18	19.60	26.46	-96.13	165.57	1,332.02	599.19	556.78	42.41	14.129		
11,708.26	11,375.01	11,410.09	11,413.69	19.62	26.46	-95.22	165.54	1,332.00	605.03	562.72	42.31	14.300		
11,800.00	11,375.01	11,414.88	11,418.48	19.80	26.47	-95.86	165.31	1,331.80	673.33	632.05	41.29	16.309		
11,900.00	11,375.00	11,420.16	11,423.75	20.04	26.49	-96.57	165.06	1,331.57	753.45	713.10	40.35	18.671		
12,000.00	11,375.00	11,425.50	11,429.07	20.30	26.50	-97.28	164.80	1,331.33	837.82	798.22	39.60	21.158		
12,100.00	11,375.00	11,430.89	11,434.45	20.59	26.51	-98.00	164.53	1,331.09	925.29	886.29	38.99	23.730		

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

ConocoPhillips Anticollision Report

Company:	DELAWARE BASIN EAST	Local Co-ordinate Reference:	Well_COLUMBUS FEDERAL COM 653H - Slot SLOT 7
Project:	LEA COUNT SOUTH WEST (NM-E)	TVD Reference:	KB @ 3362.00usft
Reference Site:	COLUMBUS FEDERAL PROJECT	MD Reference:	KB @ 3362.00usft
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	_COLUMBUS FEDERAL COM 653H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDT 17 Permian Prod
Reference Design:	PWP0	Offset TVD Reference:	Reference Datum

Offset Design: COLUMBUS FEDERAL PROJECT - COLUMBUS FEE #23H - ST01 - AWP														Offset Site Error:	0.00 usft		
Survey Program: 176-r.5 MWD+IFR1, 11791-r.5 MWD+IFR1+MS														Offset Well Error:	3.00 usft		
Reference														Rule Assigned:		Warning	
Measured Depth (usft)	Vertical Depth (usft)	Offset		Semi Major Axis		Highside Toolface (°)	Offset Wellbore Centre		Distance		No-Go Distance (usft)	Separation Factor					
		Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)		+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)							
6,700.00	6,669.22	6,712.82	6,718.76	12.53	17.85	5.10	242.52	1,430.70	985.55	955.93	29.62	33.275					
6,800.00	6,768.32	6,804.36	6,810.20	12.70	18.05	5.18	241.61	1,426.51	967.64	937.63	30.02	32.236					
6,900.00	6,867.43	6,900.76	6,906.51	12.87	18.25	5.29	240.43	1,422.57	950.19	919.77	30.43	31.230					
7,000.00	6,966.54	6,999.25	7,004.91	13.04	18.46	5.42	239.08	1,418.68	932.85	902.01	30.84	30.249					
7,100.00	7,065.64	7,098.16	7,103.73	13.21	18.66	5.56	237.61	1,414.70	915.44	884.18	31.26	29.287					
7,200.00	7,164.75	7,191.86	7,197.36	13.39	18.85	5.69	236.22	1,411.20	898.31	866.65	31.66	28.371					
7,300.00	7,263.86	7,287.36	7,292.80	13.56	19.05	5.83	235.05	1,408.08	881.67	849.61	32.07	27.492					
7,400.00	7,362.96	7,387.21	7,392.59	13.73	19.27	5.95	234.15	1,404.78	865.05	832.56	32.49	26.625					
7,500.00	7,462.07	7,485.66	7,490.98	13.91	19.49	6.06	233.43	1,401.53	848.46	815.54	32.91	25.780					
7,600.00	7,561.17	7,584.67	7,589.93	14.08	19.72	6.19	232.62	1,398.11	831.70	798.36	33.34	24.947					
7,700.00	7,660.28	7,678.97	7,684.19	14.26	19.94	6.30	232.10	1,395.13	815.27	781.52	33.75	24.155					
7,800.00	7,759.39	7,772.69	7,777.87	14.43	20.14	6.42	231.46	1,392.71	799.40	765.25	34.15	23.406					
7,900.00	7,858.49	7,867.30	7,872.46	14.61	20.33	6.56	230.78	1,390.90	784.18	749.63	34.54	22.701					
8,000.00	7,957.60	7,962.48	7,967.63	14.78	20.50	6.71	230.12	1,389.42	769.32	734.40	34.92	22.032					
8,100.00	8,056.71	8,057.48	8,062.62	14.96	20.65	6.85	229.60	1,388.59	755.15	719.88	35.27	21.410					
8,200.00	8,155.81	8,156.46	8,161.60	15.14	20.80	7.00	229.21	1,387.83	741.11	705.48	35.62	20.804					
8,300.00	8,254.92	8,255.66	8,260.79	15.32	20.94	7.16	228.66	1,387.14	727.12	691.15	35.97	20.213					
8,400.00	8,354.02	8,356.31	8,361.44	15.50	21.08	7.35	227.98	1,386.28	712.98	676.65	36.33	19.627					
8,500.00	8,453.13	8,457.48	8,462.60	15.67	21.24	7.55	227.11	1,385.16	698.57	661.87	36.70	19.035					
8,600.00	8,552.24	8,554.99	8,560.09	15.85	21.39	7.76	226.26	1,383.93	684.03	646.97	37.06	18.458					
8,700.00	8,651.34	8,654.07	8,659.16	16.03	21.52	8.02	224.99	1,382.95	669.73	632.32	37.40	17.906					
8,800.00	8,750.45	8,752.24	8,757.32	16.21	21.64	8.29	223.61	1,381.95	655.39	617.66	37.73	17.369					
8,900.00	8,849.56	8,851.59	8,856.65	16.40	21.76	8.58	222.23	1,381.02	641.15	603.09	38.07	16.843					
9,000.00	8,948.66	8,951.79	8,956.84	16.58	21.95	8.87	221.01	1,379.90	626.77	588.30	38.47	16.291					
9,100.00	9,047.77	9,051.66	9,056.69	16.76	22.15	9.18	219.71	1,378.59	612.21	573.33	38.88	15.747					
9,200.00	9,146.88	9,150.55	9,155.57	16.94	22.30	9.50	218.34	1,377.27	597.63	558.39	39.24	15.213					
9,300.00	9,245.98	9,250.54	9,255.54	17.12	22.47	9.85	216.94	1,375.78	582.92	543.31	39.61	14.717					
9,400.00	9,345.09	9,350.97	9,355.95	17.30	22.66	10.19	215.80	1,374.13	568.10	528.10	40.00	14.204					
9,500.00	9,444.19	9,451.97	9,456.91	17.49	22.87	10.57	214.46	1,371.99	552.81	512.41	40.40	13.683					
9,600.00	9,543.30	9,550.01	9,554.92	17.67	23.08	10.96	213.19	1,369.81	537.45	496.64	40.80	13.172					
9,700.00	9,642.41	9,648.09	9,652.97	17.85	23.29	11.35	212.08	1,367.84	522.33	481.13	41.20	12.678					
9,794.15	9,735.72	9,740.52	9,745.38	18.02	23.49	11.72	211.14	1,366.02	508.16	466.59	41.57	12.224					
9,800.00	9,741.51	9,746.23	9,751.09	18.03	23.51	11.74	211.09	1,365.91	507.29	465.69	41.59	12.196					
9,900.00	9,840.74	9,846.70	9,851.54	18.26	23.73	12.09	210.37	1,363.98	493.25	451.21	42.04	11.732					
10,000.00	9,940.18	9,950.93	9,955.72	18.44	23.99	12.41	209.74	1,361.22	480.22	437.74	42.48	11.304					
10,100.00	10,039.78	10,054.24	10,058.97	18.61	24.28	12.68	209.25	1,357.40	467.85	424.91	42.94	10.896					
10,200.00	10,139.52	10,146.35	10,151.02	18.77	24.52	12.91	208.71	1,354.26	457.46	414.13	43.34	10.556					
10,300.00	10,239.37	10,241.03	10,245.68	18.93	24.72	13.15	207.80	1,352.45	450.27	406.58	43.69	10.306					
10,400.00	10,339.30	10,339.16	10,343.79	19.07	24.88	13.43	206.38	1,351.29	445.52	401.54	43.98	10.130					
10,500.00	10,439.28	10,438.00	10,442.60	19.21	24.99	13.78	204.07	1,350.45	442.82	398.62	44.20	10.019					
10,560.72	10,500.00	10,498.88	10,503.45	19.25	25.04	13.91	202.22	1,349.99	442.07	397.79	44.28	9.983					
10,600.00	10,539.28	10,538.47	10,543.02	19.26	25.08	13.91	200.91	1,349.64	441.75	397.43	44.32	9.966					
10,700.00	10,639.28	10,638.09	10,642.59	19.32	25.17	13.91	197.74	1,348.82	441.00	396.55	44.45	9.921					
10,800.00	10,739.28	10,741.18	10,745.61	19.37	25.30	14.00	194.37	1,347.56	439.88	395.28	44.60	9.862					
10,900.00	10,839.28	10,842.22	10,846.56	19.43	25.45	14.00	190.68	1,345.76	438.25	393.48	44.77	9.789					
10,958.26	10,897.54	10,899.63	10,903.92	19.45	25.53	14.00	188.29	1,344.75	437.34	392.49	44.85	9.751					
10,975.00	10,914.28	10,916.22	10,920.49	19.45	25.55	-86.74	187.56	1,344.48	437.08	392.21	44.87	9.742					
11,000.00	10,939.23	10,941.07	10,945.31	19.44	25.59	-86.85	186.45	1,344.07	436.64	391.74	44.90	9.725					
11,025.00	10,964.06	10,965.87	10,970.08	19.43	25.62	-87.13	185.33	1,343.67	436.14	391.20	44.94	9.705					
11,050.00	10,988.72	10,990.55	10,994.73	19.42	25.65	-87.58	184.20	1,343.29	435.60	390.61	44.99	9.682					
11,075.00	11,013.12	11,015.55	11,019.71	19.41	25.69	-88.21	183.05	1,342.89	435.03	389.98	45.05	9.656					

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

ConocoPhillips Anticollision Report

Company:	DELAWARE BASIN EAST	Local Co-ordinate Reference:	Well _COLUMBUS FEDERAL COM 653H - Slot SLOT 7
Project:	LEA COUNT SOUTH WEST (NM-E)	TVD Reference:	KB @ 3362.00usft
Reference Site:	COLUMBUS FEDERAL PROJECT	MD Reference:	KB @ 3362.00usft
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	_COLUMBUS FEDERAL COM 653H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDT 17 Permian Prod
Reference Design:	PWP0	Offset TVD Reference:	Reference Datum

Offset Design: COLUMBUS FEDERAL PROJECT - COLUMBUS FEE #23H - ST01 - AWP													Offset Site Error:	0.00 usft
Survey Program: 176-r.5 MWD+IFR1, 11791-r.5 MWD+IFR1+MS													Offset Well Error:	3.00 usft
Measured Depth (usft)	Vertical Reference Depth (usft)	Offset		Semi Major Axis		Highside Toolface (°)	Offset Wellbore Centre		Distance		No-Go Distance (usft)	Separation Factor	Warning	
		Measured Depth (usft)	Vertical Reference Depth (usft)	Reference (usft)	Offset (usft)		+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)				
11,100.00	11,037.21	11,040.56	11,044.69	19.40	25.73	-89.01	181.92	1,342.46	434.44	389.32	45.13	9.627		
11,125.00	11,060.91	11,065.22	11,069.31	19.38	25.77	-89.98	180.84	1,342.00	433.89	388.68	45.20	9.598		
11,150.00	11,084.17	11,089.45	11,093.52	19.37	25.80	-91.08	179.80	1,341.51	433.43	388.14	45.29	9.571		
11,175.00	11,106.91	11,112.98	11,117.02	19.36	25.84	-92.28	178.81	1,341.01	433.15	387.77	45.37	9.547		
11,189.08	11,119.47	11,125.98	11,130.01	19.36	25.87	-93.00	178.26	1,340.73	433.10	387.68	45.42	9.536 CC		
11,200.00	11,129.08	11,135.95	11,139.96	19.35	25.88	-93.57	177.84	1,340.51	433.13	387.68	45.45	9.529 ES		
11,225.00	11,150.62	11,158.32	11,162.32	19.34	25.92	-94.93	176.89	1,340.00	433.47	387.94	45.53	9.521 SF		
11,250.00	11,171.46	11,180.05	11,184.01	19.33	25.96	-96.31	175.97	1,339.48	434.26	388.67	45.59	9.526		
11,275.00	11,191.56	11,201.45	11,205.39	19.33	26.00	-97.73	175.05	1,338.96	435.58	389.95	45.63	9.545		
11,300.00	11,210.84	11,222.23	11,226.14	19.32	26.04	-99.14	174.15	1,338.41	437.52	391.86	45.66	9.582		
11,325.00	11,229.27	11,242.18	11,246.06	19.32	26.08	-100.50	173.28	1,337.85	440.17	394.51	45.66	9.640		
11,350.00	11,246.79	11,261.25	11,265.10	19.32	26.12	-101.77	172.42	1,337.28	443.63	398.00	45.63	9.723		
11,375.00	11,263.35	11,279.38	11,283.21	19.32	26.16	-102.93	171.60	1,336.71	447.98	402.41	45.57	9.831		
11,400.00	11,278.91	11,296.17	11,299.98	19.32	26.20	-103.91	170.84	1,336.16	453.30	407.82	45.47	9.969		
11,425.00	11,293.42	11,311.95	11,315.72	19.32	26.23	-104.72	170.11	1,335.63	459.65	414.31	45.34	10.138		
11,450.00	11,306.85	11,326.65	11,330.40	19.33	26.27	-105.34	169.44	1,335.13	467.08	421.91	45.18	10.339		
11,475.00	11,319.15	11,340.25	11,343.98	19.35	26.30	-105.74	168.81	1,334.65	475.63	430.65	44.98	10.575		
11,500.00	11,330.30	11,352.69	11,356.40	19.36	26.32	-105.90	168.24	1,334.21	485.29	440.54	44.75	10.844		
11,525.00	11,340.27	11,363.96	11,367.65	19.38	26.35	-105.79	167.72	1,333.80	496.07	451.57	44.50	11.148		
11,550.00	11,349.02	11,374.06	11,377.74	19.40	26.37	-105.40	167.25	1,333.43	507.94	463.72	44.23	11.485		
11,575.00	11,356.53	11,383.36	11,387.01	19.43	26.39	-104.76	166.81	1,333.08	520.87	476.93	43.94	11.854		
11,600.00	11,362.78	11,391.33	11,394.98	19.46	26.41	-103.78	166.44	1,332.77	534.79	491.15	43.64	12.255		
11,625.00	11,367.76	11,397.96	11,401.59	19.49	26.43	-102.45	166.12	1,332.50	549.66	506.33	43.33	12.684		
11,650.00	11,371.46	11,403.23	11,406.85	19.52	26.44	-100.74	165.87	1,332.29	565.40	522.38	43.02	13.142		
11,675.00	11,373.85	11,407.10	11,410.71	19.56	26.45	-98.64	165.69	1,332.13	581.94	539.22	42.71	13.624		
11,700.00	11,374.93	11,409.58	11,413.18	19.60	26.46	-96.13	165.57	1,332.02	599.19	556.78	42.41	14.129		
11,708.26	11,375.01	11,410.09	11,413.69	19.62	26.46	-95.22	165.54	1,332.00	605.03	562.72	42.31	14.300		
11,800.00	11,375.01	11,414.88	11,418.48	19.80	26.47	-95.86	165.31	1,331.80	673.33	632.05	41.29	16.309		
11,900.00	11,375.00	11,420.16	11,423.75	20.04	26.49	-96.57	165.06	1,331.57	753.45	713.10	40.35	18.671		
12,000.00	11,375.00	11,425.50	11,429.07	20.30	26.50	-97.28	164.80	1,331.33	837.82	798.22	39.60	21.158		
12,100.00	11,375.00	11,430.89	11,434.45	20.59	26.51	-98.00	164.53	1,331.09	925.29	886.29	38.99	23.730		

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

ConocoPhillips Anticollision Report

Company:	DELAWARE BASIN EAST	Local Co-ordinate Reference:	Well_COLUMBUS FEDERAL COM 653H - Slot SLOT 7
Project:	LEA COUNT SOUTH WEST (NM-E)	TVD Reference:	KB @ 3362.00usft
Reference Site:	COLUMBUS FEDERAL PROJECT	MD Reference:	KB @ 3362.00usft
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	_COLUMBUS FEDERAL COM 653H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDT 17 Permian Prod
Reference Design:	PWP0	Offset TVD Reference:	Reference Datum

Offset Design: COLUMBUS FEDERAL PROJECT - COLUMBUS FEE #24H - OWB - AWP												Offset Site Error:	0.00 usft
Survey Program: 146-MWD - OWSG R1												Offset Well Error:	3.00 usft
Reference		Offset		Semi Major Axis		Highside Toolface (°)	Offset Wellbore Centre		Distance		No-Go Distance (usft)	Separation Factor	Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)		+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)			
0.00	0.00	0.00	8.00	0.00	3.00	73.96	194.85	677.74	705.24				
100.00	100.00	95.18	103.18	0.77	3.00	73.96	194.82	677.53	704.99	700.18	4.80	146.783	
185.40	185.40	177.41	185.41	1.34	3.02	73.95	194.82	677.11	704.58	699.50	5.08	138.597	
200.00	200.00	190.05	198.05	1.44	3.02	73.94	194.89	677.11	704.60	699.45	5.15	136.899	
300.00	300.00	281.30	289.28	1.88	3.08	73.87	195.99	677.84	705.69	700.17	5.51	128.029	
400.00	400.00	379.63	387.60	2.25	3.17	73.80	197.27	679.18	707.36	701.46	5.90	119.871	
500.00	500.00	482.15	490.10	2.56	3.31	73.75	198.41	680.63	709.03	702.72	6.31	112.279	
600.00	600.00	585.30	593.25	2.84	3.48	73.72	199.10	681.64	710.16	703.41	6.75	105.264	
700.00	700.00	687.83	695.77	3.10	3.68	73.73	199.23	682.44	710.94	703.75	7.19	98.901	
800.00	800.00	793.83	801.77	3.34	3.90	73.75	198.96	682.75	711.15	703.51	7.64	93.050	
900.00	900.00	897.01	904.95	3.57	4.13	73.76	198.70	682.30	710.66	702.57	8.09	87.794	
1,000.00	1,000.00	996.73	1,004.67	3.79	4.37	73.76	198.54	681.63	709.97	701.43	8.55	83.068	
1,100.00	1,100.00	1,094.53	1,102.47	3.99	4.63	73.76	198.47	681.16	709.49	700.49	9.00	78.826	
1,200.00	1,200.00	1,193.48	1,201.42	4.19	4.89	73.75	198.41	680.85	709.17	699.70	9.46	74.942	
1,248.78	1,248.78	1,240.84	1,248.78	4.28	5.03	73.75	198.44	680.79	709.12	699.43	9.69	73.207	
1,300.00	1,300.00	1,291.31	1,299.25	4.38	5.17	73.74	198.58	680.79	709.16	699.24	9.93	71.443	
1,400.00	1,400.00	1,393.40	1,401.34	4.56	5.47	73.71	198.88	680.65	709.11	698.70	10.41	68.138	
1,500.00	1,500.00	1,493.59	1,501.52	4.74	5.76	73.68	199.18	680.30	708.86	697.97	10.89	65.119	
1,600.00	1,600.00	1,592.51	1,600.44	4.91	6.07	73.65	199.51	680.09	708.76	697.39	11.36	62.373	
1,700.00	1,700.00	1,692.60	1,700.53	5.08	6.38	73.61	199.97	679.88	708.68	696.83	11.85	59.818	
1,800.00	1,800.00	1,792.52	1,800.45	5.24	6.69	73.57	200.44	679.67	708.61	696.28	12.33	57.454	
1,900.00	1,900.00	1,892.12	1,900.05	5.40	7.01	73.53	200.93	679.48	708.57	695.75	12.82	55.269	
2,000.00	2,000.00	1,992.58	2,000.51	5.56	7.33	73.48	201.48	679.30	708.55	695.23	13.31	53.225	
2,100.00	2,100.00	2,092.38	2,100.30	5.71	7.66	73.42	202.19	679.02	708.48	694.68	13.80	51.325	
2,126.08	2,126.08	2,118.16	2,126.08	5.75	7.74	73.40	202.40	678.95	708.47	694.54	13.93	50.856	
2,200.00	2,200.00	2,191.07	2,198.99	5.86	7.98	73.36	202.94	678.84	708.53	694.23	14.29	49.575	
2,300.00	2,300.00	2,290.22	2,298.13	6.01	8.31	73.29	203.83	678.79	708.73	693.95	14.78	47.942	
2,400.00	2,400.00	2,388.92	2,396.83	6.15	8.64	73.21	204.87	678.80	709.05	693.78	15.27	46.425	
2,500.00	2,500.00	2,486.79	2,494.69	6.30	8.97	73.11	206.19	679.12	709.75	693.99	15.76	45.034	
2,600.00	2,600.00	2,589.88	2,597.77	6.44	9.31	73.01	207.52	679.25	710.24	693.97	16.27	43.655	
2,700.00	2,700.00	2,689.06	2,696.95	6.58	9.65	72.91	208.75	679.15	710.52	693.75	16.76	42.382	
2,800.00	2,800.00	2,785.89	2,793.76	6.71	9.98	72.81	210.23	679.39	711.20	693.95	17.25	41.227	
2,900.00	2,900.00	2,884.22	2,892.08	6.85	10.31	72.68	212.01	679.88	712.22	694.47	17.74	40.142	
3,000.00	3,000.00	2,980.99	2,988.83	6.98	10.64	72.56	213.79	680.61	713.49	695.26	18.23	39.143	
3,100.00	3,099.98	3,080.15	3,087.97	7.17	10.98	-4.53	215.54	681.88	713.50	694.73	18.77	38.022	
3,200.00	3,199.84	3,177.69	3,185.48	7.35	11.30	-4.58	216.13	683.47	710.02	690.73	19.28	36.821	
3,300.00	3,299.45	3,281.50	3,289.28	7.53	11.65	-4.64	216.65	685.42	703.27	683.44	19.83	35.468	
3,383.28	3,382.14	3,366.47	3,374.25	7.64	11.94	-4.74	217.19	686.32	694.40	674.15	20.25	34.292	
3,400.00	3,398.71	3,383.18	3,390.95	7.65	12.00	-4.76	217.32	686.48	692.36	672.04	20.32	34.070	
3,500.00	3,497.81	3,480.54	3,488.30	7.79	12.33	-4.90	218.21	687.46	680.29	659.47	20.82	32.677	
3,600.00	3,596.92	3,578.05	3,585.80	7.90	12.67	-5.06	219.39	688.65	668.53	647.22	21.30	31.384	
3,700.00	3,696.03	3,690.27	3,698.01	8.02	13.06	-5.26	220.47	689.10	655.91	634.06	21.85	30.019	
3,800.00	3,795.13	3,792.12	3,799.85	8.15	13.40	-5.44	220.93	688.12	641.86	619.51	22.35	28.716	
3,900.00	3,894.24	3,881.95	3,889.68	8.27	13.70	-5.52	220.76	688.24	628.64	605.84	22.80	27.567	
4,000.00	3,993.35	3,978.25	3,985.97	8.40	14.03	-5.54	220.11	689.58	616.45	593.17	23.28	26.478	
4,100.00	4,092.45	4,081.29	4,089.00	8.53	14.38	-5.66	220.28	690.39	603.97	580.17	23.80	25.378	
4,200.00	4,191.56	4,186.61	4,194.32	8.67	14.74	-5.85	220.91	690.55	591.04	566.71	24.33	24.294	
4,300.00	4,290.67	4,293.35	4,301.05	8.80	15.10	-5.94	219.97	689.29	576.36	551.51	24.85	23.193	
4,400.00	4,389.77	4,387.11	4,394.80	8.94	15.41	-5.98	218.60	688.19	561.54	536.21	25.33	22.172	
4,500.00	4,488.88	4,482.23	4,489.90	9.08	15.73	-5.96	217.06	688.37	547.92	522.11	25.81	21.232	
4,600.00	4,587.98	4,580.52	4,588.17	9.22	16.06	-5.93	215.47	688.78	534.53	508.22	26.30	20.323	

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

ConocoPhillips Anticollision Report

Company:	DELAWARE BASIN EAST	Local Co-ordinate Reference:	Well_COLUMBUS FEDERAL COM 653H - Slot SLOT 7
Project:	LEA COUNT SOUTH WEST (NM-E)	TVD Reference:	KB @ 3362.00usft
Reference Site:	COLUMBUS FEDERAL PROJECT	MD Reference:	KB @ 3362.00usft
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	_COLUMBUS FEDERAL COM 653H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDT 17 Permian Prod
Reference Design:	PWP0	Offset TVD Reference:	Reference Datum

Offset Design: COLUMBUS FEDERAL PROJECT - COLUMBUS FEE #24H - OWB - AWP														Offset Site Error:	0.00 usft
Survey Program: 146-MWD - OWSG R1														Offset Well Error:	3.00 usft
Reference		Offset		Semi Major Axis		Highside Toolface (°)	Offset Wellbore Centre		Distance		No-Go Distance (usft)	Separation Factor	Warning		
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)		+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)					
4,700.00	4,687.09	4,676.55	4,684.17	9.37	16.38	-5.78	213.04	689.81	521.45	494.66	26.79	19.465			
4,800.00	4,786.20	4,772.48	4,780.06	9.51	16.70	-5.63	210.79	691.49	509.08	481.79	27.28	18.659			
4,900.00	4,885.30	4,871.79	4,879.35	9.66	17.04	-5.66	210.27	693.01	497.07	469.28	27.80	17.883			
5,000.00	4,984.41	4,970.70	4,978.25	9.81	17.38	-5.77	210.21	694.28	484.99	456.68	28.31	17.131			
5,100.00	5,083.52	5,069.41	5,076.95	9.96	17.72	-5.85	210.08	695.71	473.04	444.21	28.83	16.410			
5,200.00	5,182.62	5,168.90	5,176.43	10.11	18.06	-5.93	209.81	697.25	461.13	431.79	29.35	15.713			
5,300.00	5,281.73	5,268.00	5,275.52	10.26	18.40	-6.02	209.62	698.71	449.18	419.31	29.87	15.039			
5,400.00	5,380.83	5,366.42	5,373.93	10.42	18.74	-6.13	209.52	700.25	437.36	406.97	30.39	14.393			
5,500.00	5,479.94	5,466.53	5,474.03	10.57	19.09	-6.22	209.33	701.89	425.57	394.65	30.92	13.765			
5,600.00	5,579.05	5,566.22	5,573.71	10.73	19.44	-6.34	209.18	703.34	413.62	382.17	31.44	13.154			
5,700.00	5,678.15	5,665.31	5,672.78	10.89	19.78	-6.45	208.97	704.82	401.69	369.72	31.97	12.564			
5,800.00	5,777.26	5,764.85	5,772.31	11.05	20.13	-6.56	208.73	706.25	389.69	357.19	32.50	11.990			
5,900.00	5,876.37	5,863.96	5,871.41	11.21	20.47	-6.69	208.51	707.74	377.77	344.74	33.03	11.437			
6,000.00	5,975.47	5,964.05	5,971.49	11.37	20.82	-6.82	208.21	709.10	365.70	332.13	33.56	10.895			
6,100.00	6,074.58	6,063.72	6,071.16	11.54	21.17	-7.04	208.36	710.13	353.47	319.37	34.10	10.366			
6,200.00	6,173.69	6,164.65	6,172.08	11.70	21.52	-7.48	209.55	710.57	341.04	306.40	34.64	9.845			
6,300.00	6,272.79	6,265.40	6,272.81	11.87	21.87	-8.06	211.01	710.18	327.98	292.80	35.18	9.323			
6,400.00	6,371.90	6,364.68	6,372.09	12.03	22.22	-8.66	212.33	709.61	314.72	279.01	35.71	8.813			
6,500.00	6,471.00	6,464.06	6,471.46	12.20	22.56	-9.34	213.73	708.95	301.45	265.21	36.25	8.317			
6,600.00	6,570.11	6,563.33	6,570.71	12.37	22.91	-10.08	215.09	708.18	288.11	251.34	36.78	7.834			
6,700.00	6,669.22	6,662.38	6,669.75	12.53	23.25	-10.89	216.42	707.38	274.79	237.48	37.31	7.365			
6,800.00	6,768.32	6,761.43	6,768.79	12.70	23.60	-11.78	217.75	706.58	261.52	223.68	37.84	6.911			
6,900.00	6,867.43	6,861.07	6,868.41	12.87	23.94	-12.79	219.10	705.64	248.20	209.83	38.38	6.467			
7,000.00	6,966.54	6,960.20	6,967.53	13.04	24.29	-13.88	220.26	704.61	234.81	195.90	38.91	6.035			
7,100.00	7,065.64	7,059.42	7,066.74	13.21	24.63	-15.05	221.22	703.61	221.44	182.00	39.44	5.615			
7,200.00	7,164.75	7,158.85	7,166.16	13.39	24.98	-16.35	222.03	702.49	208.00	168.03	39.97	5.204			
7,300.00	7,263.86	7,258.01	7,265.32	13.56	25.32	-17.81	222.72	701.28	194.53	154.03	40.49	4.804			
7,400.00	7,362.96	7,357.10	7,364.38	13.73	25.66	-19.56	223.54	699.87	181.11	140.09	41.02	4.415			
7,500.00	7,462.07	7,456.08	7,463.36	13.91	26.01	-21.61	224.41	698.38	167.83	126.30	41.53	4.041			
7,600.00	7,561.17	7,555.04	7,562.29	14.08	26.35	-24.00	225.24	696.87	154.77	112.72	42.05	3.681			
7,700.00	7,660.28	7,654.09	7,661.34	14.26	26.69	-26.83	226.07	695.33	142.00	99.45	42.55	3.337			
7,800.00	7,759.39	7,753.20	7,760.43	14.43	27.04	-30.24	226.83	693.61	129.46	86.42	43.04	3.008			
7,900.00	7,858.49	7,852.09	7,859.29	14.61	27.38	-34.35	227.53	691.85	117.39	73.88	43.51	2.698 Normal Operations			
8,000.00	7,957.60	7,950.96	7,958.14	14.78	27.73	-39.36	228.26	690.09	106.09	62.13	43.96	2.413 Caution - Monitor Closely			
8,100.00	8,056.71	8,049.86	8,057.03	14.96	28.07	-45.50	228.97	688.33	95.76	51.39	44.37	2.158 Caution - Monitor Closely			
8,200.00	8,155.81	8,148.72	8,155.87	15.14	28.41	-53.01	229.69	686.53	86.78	42.04	44.74	1.940 Caution - Monitor Closely			
8,300.00	8,254.92	8,247.62	8,254.75	15.32	28.76	-62.09	230.45	684.66	79.64	34.56	45.08	1.767 Caution - Monitor Closely			
8,400.00	8,354.02	8,346.64	8,353.75	15.50	29.10	-72.49	231.05	682.93	74.73	29.33	45.40	1.646 Caution - Monitor Closely			
8,500.00	8,453.13	8,445.65	8,452.75	15.67	29.45	-83.87	231.46	681.25	72.42	26.65	45.77	1.582 Caution - Monitor Closely			
8,532.87	8,485.71	8,478.23	8,485.32	15.73	29.56	-87.71	231.55	680.71	72.27	26.36	45.91	1.574 Caution - Monitor Closely, CC, ES, SF			
8,600.00	8,584.24	8,577.83	8,584.92	15.89	29.89	-95.42	231.65	679.77	72.86	26.63	46.23	1.576 Caution - Monitor Closely			
8,700.00	8,683.34	8,676.93	8,684.01	16.03	30.14	-106.18	231.64	678.73	75.81	29.03	46.79	1.620 Caution - Monitor Closely			
8,800.00	8,782.44	8,776.03	8,783.11	16.21	30.48	-115.85	231.58	677.68	81.20	33.79	47.42	1.712 Caution - Monitor Closely			
8,900.00	8,881.54	8,875.13	8,882.21	16.40	30.82	-124.15	231.46	676.69	88.54	40.45	48.09	1.841 Caution - Monitor Closely			
9,000.00	8,980.64	8,974.23	8,981.31	16.58	31.16	-131.06	231.39	675.61	97.54	48.78	48.76	2.000 Caution - Monitor Closely			
9,100.00	9,079.74	9,073.33	9,080.41	16.76	31.51	-136.73	231.34	674.63	107.65	58.22	49.43	2.178 Caution - Monitor Closely			
9,200.00	9,178.84	9,172.43	9,179.51	16.94	31.85	-141.34	231.46	673.40	118.93	68.86	50.07	2.375 Caution - Monitor Closely			
9,300.00	9,277.94	9,271.53	9,279.01	17.12	32.20	-145.08	231.83	672.07	131.03	80.32	50.70	2.584 Normal Operations			
9,400.00	9,377.04	9,370.63	9,377.71	17.30	32.55	-148.10	232.40	670.83	143.56	92.24	51.32	2.797 Normal Operations			
9,500.00	9,476.14	9,469.73	9,476.81	17.49	32.89	-150.63	232.93	669.74	156.28	104.35	51.92	3.010			

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

ConocoPhillips Anticollision Report

Company:	DELAWARE BASIN EAST	Local Co-ordinate Reference:	Well_COLUMBUS FEDERAL COM 653H - Slot SLOT 7
Project:	LEA COUNT SOUTH WEST (NM-E)	TVD Reference:	KB @ 3362.00usft
Reference Site:	COLUMBUS FEDERAL PROJECT	MD Reference:	KB @ 3362.00usft
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	_COLUMBUS FEDERAL COM 653H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDT 17 Permian Prod
Reference Design:	PWP0	Offset TVD Reference:	Reference Datum

Offset Design: COLUMBUS FEDERAL PROJECT - COLUMBUS FEE #24H - OWB - AWP														Offset Site Error:	0.00 usft
Survey Program: 146-MWD - OWSG R1														Offset Well Error:	3.00 usft
Reference		Offset		Semi Major Axis		Highside Toolface (°)	Offset Wellbore Centre		Distance		No-Go Distance (usft)	Separation Factor	Warning		
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)		+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)					
9,600.00	9,543.30	9,534.95	9,541.97	17.67	33.24	-152.76	233.46	668.88	169.02	116.49	52.52	3.218			
9,700.00	9,642.41	9,635.33	9,642.35	17.85	33.59	-154.69	233.63	668.43	181.47	128.36	53.11	3.417			
9,794.15	9,735.72	9,729.23	9,736.24	18.02	33.92	-156.57	232.70	668.46	192.72	139.06	53.66	3.592			
9,800.00	9,741.51	9,735.02	9,742.04	18.03	33.94	-156.68	232.63	668.46	193.42	139.73	53.69	3.603			
9,900.00	9,840.74	9,833.29	9,840.30	18.26	34.27	-158.39	231.52	668.37	204.78	150.49	54.29	3.772			
10,000.00	9,940.18	9,930.85	9,937.85	18.44	34.60	-159.73	230.58	667.63	215.34	160.50	54.84	3.927			
10,100.00	10,039.78	10,029.79	10,036.77	18.61	34.95	-160.87	229.48	666.23	225.00	169.60	55.39	4.062			
10,200.00	10,139.52	10,129.45	10,136.42	18.77	35.29	-161.78	228.35	664.78	233.12	177.18	55.94	4.167			
10,300.00	10,239.37	10,228.91	10,235.86	18.93	35.63	-162.49	227.30	663.30	239.67	183.19	56.48	4.243			
10,400.00	10,339.30	10,328.23	10,335.16	19.07	35.98	-163.11	225.93	661.62	244.77	187.76	57.01	4.294			
10,500.00	10,439.28	10,428.81	10,435.70	19.21	36.33	-163.66	224.26	659.97	248.15	190.62	57.53	4.313			
10,560.72	10,500.00	10,489.01	10,495.89	19.25	36.53	-86.92	223.39	658.99	249.40	191.58	57.82	4.313			
10,600.00	10,539.28	10,527.99	10,534.86	19.26	36.67	-87.03	222.94	658.30	250.07	192.07	58.00	4.312			
10,700.00	10,639.28	10,627.77	10,634.62	19.32	37.02	-87.34	221.68	656.36	251.95	193.48	58.47	4.309			
10,800.00	10,739.28	10,729.03	10,735.85	19.37	37.37	-87.64	220.43	654.70	253.53	194.58	58.95	4.301			
10,900.00	10,839.28	10,829.68	10,836.49	19.43	37.72	-87.98	218.99	653.45	254.72	195.30	59.43	4.286			
10,958.26	10,897.54	10,888.12	10,894.92	19.45	37.92	-88.17	218.17	652.80	255.35	195.65	59.70	4.277			
10,975.00	10,914.28	10,905.24	10,912.04	19.45	37.98	92.21	217.95	652.63	255.52	195.75	59.77	4.275			
11,000.00	10,939.23	10,930.78	10,937.57	19.44	38.06	92.46	217.63	652.42	255.77	195.90	59.87	4.272			
11,025.00	10,964.06	10,956.21	10,963.00	19.43	38.15	93.01	217.34	652.27	256.04	196.07	59.97	4.270			
11,050.00	10,988.72	10,981.46	10,988.25	19.42	38.24	93.84	217.08	652.18	256.37	196.31	60.06	4.269			
11,075.00	11,013.12	11,006.45	11,013.24	19.41	38.33	94.94	216.83	652.15	256.81	196.67	60.14	4.270			
11,100.00	11,037.21	11,031.12	11,037.91	19.40	38.41	96.27	216.59	652.17	257.44	197.24	60.21	4.276			
11,125.00	11,060.91	11,055.41	11,062.19	19.38	38.49	97.82	216.36	652.23	258.37	198.10	60.27	4.287			
11,150.00	11,084.17	11,078.96	11,085.75	19.37	38.57	99.51	216.14	652.34	259.70	199.38	60.32	4.306			
11,175.00	11,106.91	11,101.37	11,108.16	19.36	38.65	101.26	215.95	652.43	261.60	201.24	60.36	4.334			
11,200.00	11,129.08	11,123.22	11,130.01	19.35	38.73	103.08	215.77	652.48	264.22	203.83	60.38	4.376			
11,225.00	11,150.62	11,144.44	11,151.22	19.34	38.80	104.92	215.61	652.49	267.67	207.27	60.40	4.432			
11,250.00	11,171.46	11,164.98	11,171.76	19.33	38.87	106.73	215.46	652.48	272.07	211.66	60.41	4.504			
11,275.00	11,191.56	11,184.40	11,191.18	19.33	38.94	108.42	215.32	652.43	277.53	217.13	60.40	4.595			
11,300.00	11,210.84	11,203.04	11,209.82	19.32	39.00	109.98	215.19	652.31	284.16	223.77	60.39	4.705			
11,325.00	11,229.27	11,220.87	11,227.65	19.32	39.06	111.38	215.05	652.15	292.01	231.63	60.38	4.836			
11,350.00	11,246.79	11,237.85	11,244.63	19.32	39.12	112.59	214.91	651.95	301.12	240.76	60.36	4.989			
11,375.00	11,263.35	11,253.92	11,260.70	19.32	39.18	113.57	214.77	651.71	311.51	251.17	60.34	5.162			
11,400.00	11,278.91	11,269.31	11,276.08	19.32	39.23	114.33	214.63	651.44	323.16	262.84	60.32	5.357			
11,425.00	11,293.42	11,283.80	11,290.57	19.32	39.28	114.83	214.51	651.18	336.05	275.74	60.31	5.572			
11,450.00	11,306.85	11,297.23	11,303.99	19.33	39.33	115.02	214.38	650.93	350.13	289.84	60.29	5.807			
11,475.00	11,319.15	11,309.56	11,316.32	19.35	39.37	114.87	214.27	650.69	365.34	305.07	60.27	6.061			
11,500.00	11,330.30	11,320.76	11,327.52	19.36	39.41	114.34	214.17	650.46	381.63	321.37	60.26	6.333			
11,525.00	11,340.27	11,330.80	11,337.56	19.38	39.45	113.40	214.08	650.25	398.91	338.67	60.25	6.621			
11,550.00	11,349.02	11,339.64	11,346.40	19.40	39.48	112.00	213.99	650.06	417.11	356.88	60.24	6.925			
11,575.00	11,356.53	11,347.28	11,354.03	19.43	39.50	110.10	213.92	649.89	436.14	375.92	60.22	7.242			
11,600.00	11,362.78	11,353.67	11,360.43	19.46	39.53	107.65	213.86	649.75	455.91	395.70	60.21	7.572			
11,625.00	11,367.76	11,358.83	11,365.58	19.49	39.54	104.60	213.81	649.63	476.32	416.12	60.20	7.912			
11,650.00	11,371.46	11,362.72	11,369.47	19.52	39.56	100.89	213.78	649.54	497.29	437.10	60.19	8.262			
11,675.00	11,373.85	11,365.33	11,372.08	19.56	39.57	96.52	213.75	649.48	518.71	458.55	60.17	8.621			
11,700.00	11,374.93	11,366.64	11,373.39	19.60	39.57	91.48	213.74	649.45	540.51	480.36	60.15	8.986			
11,708.26	11,375.01	11,366.79	11,373.54	19.62	39.57	89.68	213.74	649.44	547.78	487.64	60.14	9.108			
11,800.00	11,375.01	11,367.67	11,374.41	19.80	39.57	89.87	213.73	649.42	630.15	570.07	60.08	10.488			
11,900.00	11,375.00	11,368.63	11,375.37	20.04	39.58	90.08	213.72	649.40	722.51	662.46	60.05	12.032			
12,000.00	11,375.00	11,369.59	11,376.34	20.30	39.58	90.29	213.71	649.38	816.67	756.64	60.03	13.604			

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

ConocoPhillips Anticollision Report

Company:	DELAWARE BASIN EAST	Local Co-ordinate Reference:	Well _COLUMBUS FEDERAL COM 653H - Slot SLOT 7
Project:	LEA COUNT SOUTH WEST (NM-E)	TVD Reference:	KB @ 3362.00usft
Reference Site:	COLUMBUS FEDERAL PROJECT	MD Reference:	KB @ 3362.00usft
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	_COLUMBUS FEDERAL COM 653H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDT 17 Permian Prod
Reference Design:	PWP0	Offset TVD Reference:	Reference Datum

Offset Design: COLUMBUS FEDERAL PROJECT - COLUMBUS FEE #24H - OWB - AWP													Offset Site Error:	0.00 usft
Survey Program: 146-MWD - OWSG R1													Offset Well Error:	3.00 usft
Reference				Semi Major Axis			Offset Wellbore Centre		Rule Assigned:				Warning	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	No-Go Distance (usft)	Separation Factor		
12,100.00	11,375.00	11,370.56	11,377.30	20.59	39.58	90.51	213.70	649.36	912.07	852.05	60.03	15.194		

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

ConocoPhillips Anticollision Report

Company:	DELAWARE BASIN EAST	Local Co-ordinate Reference:	Well _COLUMBUS FEDERAL COM 653H - Slot SLOT 7
Project:	LEA COUNT SOUTH WEST (NM-E)	TVD Reference:	KB @ 3362.00usft
Reference Site:	COLUMBUS FEDERAL PROJECT	MD Reference:	KB @ 3362.00usft
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	_COLUMBUS FEDERAL COM 653H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDT 17 Permian Prod
Reference Design:	PWP0	Offset TVD Reference:	Reference Datum

Offset Design: COLUMBUS FEDERAL PROJECT - COLUMBUS FEE #2H - OWB - AWP													Offset Site Error:	0.00 usft
Survey Program: 100- VES GyroFlex, 8769-r.5 MWD										Rule Assigned:			Offset Well Error:	3.00 usft
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	No-Go Distance (usft)	Separation Factor	Warning	
0.00	0.00	0.00	8.00	0.00	3.00	71.34	194.15	574.84	606.79					
100.00	100.00	87.44	95.44	0.77	3.00	71.33	194.36	575.12	607.09	602.29	4.80	126.501		
200.00	200.00	186.14	194.13	1.44	3.01	71.30	194.87	575.88	607.98	602.86	5.13	118.609		
300.00	300.00	284.09	292.08	1.88	3.02	71.29	195.33	576.88	609.10	603.66	5.44	111.903		
400.00	400.00	383.72	391.70	2.25	3.04	71.31	195.59	578.22	610.46	604.71	5.75	106.131		
500.00	500.00	483.66	491.62	2.56	3.07	71.37	195.47	579.70	611.82	605.77	6.05	101.086		
600.00	600.00	584.92	592.88	2.84	3.10	71.42	195.36	581.11	613.11	606.76	6.35	96.592		
700.00	700.00	688.84	696.79	3.10	3.14	71.46	195.25	582.10	613.98	607.34	6.64	92.523		
800.00	800.00	786.14	794.09	3.34	3.19	71.49	195.15	582.83	614.66	607.74	6.92	88.865		
900.00	900.00	887.83	895.78	3.57	3.24	71.52	195.07	583.80	615.54	608.35	7.20	85.549		
1,000.00	1,000.00	986.07	994.01	3.79	3.30	71.56	194.94	584.66	616.33	608.86	7.47	82.526		
1,100.00	1,100.00	1,080.54	1,088.47	3.99	3.37	71.58	195.18	585.95	617.71	609.97	7.74	79.806		
1,200.00	1,200.00	1,175.58	1,183.48	4.19	3.44	71.59	195.71	588.07	620.00	611.99	8.01	77.397		
1,300.00	1,300.00	1,273.47	1,281.33	4.38	3.51	71.62	196.28	590.85	622.88	614.60	8.28	75.222		
1,400.00	1,400.00	1,375.14	1,382.96	4.56	3.60	71.69	196.52	593.90	625.80	617.25	8.55	73.184		
1,500.00	1,500.00	1,481.40	1,489.19	4.74	3.69	71.72	196.98	596.31	628.09	619.27	8.82	71.184		
1,600.00	1,600.00	1,586.44	1,594.22	4.91	3.76	71.66	198.03	597.39	629.38	620.29	9.09	69.259		
1,700.00	1,700.00	1,687.86	1,695.63	5.08	3.82	71.57	199.23	597.81	630.15	620.82	9.33	67.522		
1,800.00	1,800.00	1,790.53	1,798.28	5.24	3.86	71.42	200.95	597.78	630.65	621.09	9.56	65.989		
1,900.00	1,900.00	1,889.94	1,897.68	5.40	3.90	71.24	202.93	597.42	630.95	621.18	9.77	64.592		
2,000.00	2,000.00	1,995.63	2,003.35	5.56	3.92	71.07	204.66	596.79	630.92	620.95	9.96	63.322		
2,100.00	2,100.00	2,096.42	2,104.13	5.71	3.92	70.96	205.63	595.81	630.31	620.17	10.14	62.190		
2,200.00	2,200.00	2,196.84	2,204.54	5.86	3.92	70.85	206.57	594.75	629.62	619.31	10.30	61.105		
2,300.00	2,300.00	2,297.90	2,305.59	6.01	3.93	70.72	207.59	593.53	628.81	618.34	10.47	60.051		
2,400.00	2,400.00	2,398.34	2,406.01	6.15	3.94	70.58	208.79	592.13	627.89	617.25	10.64	59.014		
2,500.00	2,500.00	2,494.42	2,502.07	6.30	3.97	70.39	210.47	590.87	627.24	616.42	10.82	57.975		
2,589.27	2,589.27	2,581.65	2,589.27	6.42	4.02	70.21	212.35	590.05	627.10	616.11	10.99	57.071		
2,600.00	2,600.00	2,592.14	2,599.76	6.44	4.02	70.18	212.60	589.97	627.10	616.09	11.01	56.966		
2,700.00	2,700.00	2,690.34	2,697.93	6.58	4.09	69.96	214.95	589.31	627.29	616.09	11.20	55.991		
2,800.00	2,800.00	2,793.80	2,801.36	6.71	4.16	69.77	216.95	588.68	627.39	615.99	11.39	55.059		
2,900.00	2,900.00	2,895.30	2,902.87	6.85	4.18	69.69	217.67	588.04	627.04	615.48	11.56	54.252		
3,000.00	3,000.00	2,994.32	3,001.88	6.98	4.16	69.69	217.51	587.69	626.65	614.95	11.70	53.539		
3,100.00	3,099.98	3,091.52	3,099.08	7.17	4.15	-7.29	217.23	587.70	624.84	612.89	11.95	52.298		
3,200.00	3,199.84	3,188.36	3,195.91	7.35	4.19	-7.31	216.89	588.23	620.03	607.82	12.21	50.797		
3,300.00	3,299.45	3,281.48	3,289.03	7.53	4.24	-7.35	216.45	589.52	612.52	600.04	12.47	49.109		
3,383.28	3,382.14	3,360.82	3,368.35	7.64	4.30	-7.39	216.09	591.37	604.37	591.72	12.65	47.770		
3,400.00	3,398.71	3,376.87	3,384.39	7.65	4.31	-7.40	216.08	591.78	602.55	589.88	12.67	47.555		
3,500.00	3,497.81	3,482.08	3,489.58	7.79	4.40	-7.52	216.22	594.03	591.38	578.46	12.91	45.796		
3,600.00	3,596.92	3,584.76	3,592.25	7.90	4.51	-7.68	216.49	595.06	579.17	566.04	13.13	44.112		
3,700.00	3,696.03	3,683.15	3,690.64	8.02	4.61	-7.88	216.90	595.79	566.78	553.43	13.35	42.458		
3,800.00	3,795.13	3,780.61	3,788.09	8.15	4.72	-8.06	217.28	596.79	554.66	541.09	13.57	40.861		
3,900.00	3,894.24	3,876.25	3,883.72	8.27	4.82	-8.26	217.86	598.18	543.02	529.21	13.80	39.339		
4,000.00	3,993.35	3,976.65	3,984.10	8.40	4.94	-8.46	218.51	600.03	531.76	517.72	14.04	37.871		
4,100.00	4,092.45	4,081.31	4,088.75	8.53	5.06	-8.71	219.21	601.20	519.84	505.56	14.28	36.402		
4,200.00	4,191.56	4,180.57	4,188.01	8.67	5.17	-9.00	219.95	601.54	507.25	492.74	14.51	34.950		
4,300.00	4,290.67	4,276.37	4,283.80	8.80	5.28	-9.30	220.81	602.23	495.07	480.32	14.75	33.555		
4,400.00	4,389.77	4,371.27	4,378.68	8.94	5.40	-9.56	221.63	603.76	483.72	468.72	15.00	32.241		
4,500.00	4,488.88	4,469.68	4,477.06	9.08	5.51	-9.76	222.09	606.25	473.06	457.80	15.26	31.006		
4,600.00	4,587.98	4,569.57	4,576.91	9.22	5.61	-9.86	221.69	609.06	462.34	446.83	15.51	29.815		
4,700.00	4,687.09	4,674.53	4,681.82	9.37	5.69	-9.88	220.36	611.84	451.14	435.39	15.74	28.653		
4,800.00	4,786.20	4,780.98	4,788.24	9.51	5.73	-9.86	218.11	613.18	438.33	422.38	15.95	27.478		

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

ConocoPhillips Anticollision Report

Company:	DELAWARE BASIN EAST	Local Co-ordinate Reference:	Well_COLUMBUS FEDERAL COM 653H - Slot SLOT 7
Project:	LEA COUNT SOUTH WEST (NM-E)	TVD Reference:	KB @ 3362.00usft
Reference Site:	COLUMBUS FEDERAL PROJECT	MD Reference:	KB @ 3362.00usft
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	_COLUMBUS FEDERAL COM 653H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDT 17 Permian Prod
Reference Design:	PWP0	Offset TVD Reference:	Reference Datum

Offset Design: COLUMBUS FEDERAL PROJECT - COLUMBUS FEE #2H - OWB - AWP														Offset Site Error:	0.00 usft
Survey Program: 100- VES GyroFlex, 8769-r.5 MWD														Offset Well Error:	3.00 usft
Reference		Offset		Semi Major Axis		Highside Toolface (°)	Offset Wellbore Centre		Distance		No-Go Distance (usft)	Separation Factor	Warning		
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)		+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)					
4,900.00	4,885.30	4,879.74	4,886.97	9.66	5.74	-9.82	215.58	613.62	424.61	408.46	16.14	26.300			
5,000.00	4,984.41	4,979.09	4,986.29	9.81	5.76	-9.82	213.34	614.16	411.09	394.75	16.34	25.161			
5,100.00	5,083.52	5,079.09	5,086.26	9.96	5.77	-9.83	211.10	614.48	397.38	380.85	16.53	24.038			
5,200.00	5,182.62	5,178.18	5,185.32	10.11	5.79	-9.84	208.81	614.67	383.52	366.79	16.72	22.932			
5,300.00	5,281.73	5,277.51	5,284.63	10.26	5.80	-9.88	206.62	614.80	369.65	352.73	16.92	21.849			
5,400.00	5,380.83	5,377.00	5,384.10	10.42	5.82	-9.92	204.46	614.79	355.66	338.55	17.11	20.784			
5,500.00	5,479.94	5,475.07	5,482.15	10.57	5.84	-10.01	202.54	614.72	341.70	324.39	17.31	19.741			
5,600.00	5,579.05	5,572.42	5,579.48	10.73	5.87	-10.16	201.13	614.89	328.16	310.64	17.52	18.732			
5,700.00	5,678.15	5,670.93	5,677.99	10.89	5.93	-10.36	199.98	615.39	315.04	297.30	17.74	17.760			
5,800.00	5,777.26	5,769.67	5,776.72	11.05	6.00	-10.49	198.48	616.15	302.02	284.05	17.97	16.810			
5,900.00	5,876.37	5,868.59	5,875.62	11.21	6.08	-10.70	197.30	616.91	289.13	270.94	18.20	15.888			
6,000.00	5,975.47	5,967.72	5,974.74	11.37	6.16	-10.91	196.11	617.72	276.29	257.86	18.43	14.989			
6,100.00	6,074.58	6,067.76	6,074.77	11.54	6.23	-11.12	194.73	618.50	263.34	244.68	18.66	14.113			
6,200.00	6,173.69	6,167.58	6,174.58	11.70	6.30	-11.40	193.39	618.83	250.01	231.12	18.89	13.238			
6,300.00	6,272.79	6,266.73	6,273.73	11.87	6.35	-11.74	192.12	618.97	236.54	217.44	19.10	12.386			
6,400.00	6,371.90	6,365.21	6,372.20	12.03	6.42	-12.15	191.00	619.16	223.18	203.86	19.32	11.554			
6,500.00	6,471.00	6,464.72	6,471.71	12.20	6.48	-12.71	190.25	619.37	210.02	190.49	19.53	10.753			
6,600.00	6,570.11	6,563.66	6,570.64	12.37	6.53	-13.41	189.61	619.23	196.61	176.88	19.74	9.961			
6,700.00	6,669.22	6,662.39	6,669.37	12.53	6.60	-14.23	189.14	619.32	183.52	163.56	19.95	9.198			
6,800.00	6,768.32	6,761.67	6,768.65	12.70	6.68	-15.13	188.56	619.50	170.50	150.33	20.16	8.456			
6,900.00	6,867.43	6,861.37	6,868.35	12.87	6.74	-16.21	187.93	619.44	157.29	136.93	20.36	7.724			
7,000.00	6,966.54	6,960.52	6,967.49	13.04	6.78	-17.49	187.15	619.08	143.82	123.27	20.55	6.997			
7,100.00	7,065.64	7,059.76	7,066.73	13.21	6.83	-18.98	186.28	618.82	130.46	109.72	20.74	6.291			
7,200.00	7,164.75	7,158.80	7,165.76	13.39	6.88	-20.74	185.17	618.45	116.99	96.07	20.92	5.592			
7,300.00	7,263.86	7,257.94	7,264.90	13.56	6.93	-22.98	184.16	618.10	103.73	82.65	21.08	4.920			
7,400.00	7,362.96	7,357.09	7,364.04	13.73	6.97	-26.02	183.17	617.44	90.44	69.21	21.22	4.261			
7,500.00	7,462.07	7,456.32	7,463.26	13.91	7.00	-30.03	182.00	616.72	77.32	55.99	21.33	3.625			
7,600.00	7,561.17	7,555.56	7,562.49	14.08	7.04	-35.97	180.77	615.42	64.29	42.93	21.36	3.009			
7,700.00	7,660.28	7,654.43	7,661.33	14.26	7.07	-44.66	179.20	613.98	51.91	30.61	21.29	2.438	Caution - Monitor Closely		
7,800.00	7,759.39	7,752.96	7,759.85	14.43	7.10	-57.98	177.95	612.76	41.78	20.72	21.06	1.984	Caution - Monitor Closely		
7,900.00	7,858.49	7,851.71	7,858.59	14.61	7.12	-77.02	177.55	612.00	36.02	15.20	20.82	1.730	Caution - Monitor Closely		
7,963.66	7,921.58	7,914.78	7,921.66	14.72	7.14	-90.95	177.39	611.77	34.98	14.11	20.87	1.676	Caution - Monitor Closely, CC, ES, SF		
8,000.00	7,957.60	7,950.84	7,957.72	14.78	7.17	-98.95	177.26	611.70	35.30	14.28	21.02	1.680	Caution - Monitor Closely		
8,100.00	8,056.71	8,050.10	8,056.98	14.96	7.25	-118.84	176.65	611.70	39.19	17.45	21.74	1.803	Caution - Monitor Closely		
8,200.00	8,155.81	8,149.28	8,156.15	15.14	7.36	-133.55	175.93	612.17	46.34	23.81	22.52	2.057	Caution - Monitor Closely		
8,300.00	8,254.92	8,248.34	8,255.21	15.32	7.48	-143.87	175.28	612.46	55.87	32.70	23.17	2.412	Caution - Monitor Closely		
8,400.00	8,354.02	8,347.52	8,354.40	15.50	7.60	-150.91	174.77	612.87	66.60	42.93	23.67	2.814	Normal Operations		
8,500.00	8,453.13	8,446.61	8,453.48	15.67	7.72	-155.91	174.31	613.29	78.04	53.96	24.09	3.240			
8,600.00	8,552.24	8,545.57	8,552.44	15.85	7.84	-159.47	174.08	613.60	90.05	65.61	24.45	3.683			
8,700.00	8,651.34	8,644.70	8,651.56	16.03	7.95	-162.19	173.88	613.72	102.54	77.76	24.78	4.139			
8,800.00	8,750.45	8,744.39	8,751.24	16.21	8.10	-164.83	172.65	614.12	114.87	89.74	25.13	4.572			
8,900.00	8,849.56	8,843.49	8,849.68	16.40	8.22	-170.80	162.94	615.18	127.03	101.57	25.46	4.989			
9,000.00	8,948.66	8,933.28	8,935.52	16.58	8.38	-177.78	137.02	616.57	143.94	118.15	25.79	5.581			
9,100.00	9,047.77	9,013.57	9,008.38	16.76	8.55	-166.30	103.41	617.01	172.69	146.46	26.23	6.583			
9,200.00	9,146.88	9,080.49	9,064.52	16.94	8.74	-156.77	67.09	617.65	215.22	188.19	27.03	7.962			
9,300.00	9,245.98	9,133.95	9,106.23	17.12	8.88	-150.21	33.70	617.08	270.68	242.57	28.11	9.629			
9,400.00	9,345.09	9,185.41	9,143.49	17.30	9.02	-145.02	-1.73	614.99	336.06	307.02	29.04	11.571			
9,500.00	9,444.19	9,238.00	9,179.52	17.49	9.20	-140.65	-39.96	612.84	406.97	377.17	29.80	13.658			
9,600.00	9,543.30	9,272.96	9,201.39	17.67	9.38	-137.81	-67.21	613.05	482.44	451.68	30.76	15.684			
9,700.00	9,642.41	9,302.78	9,218.20	17.85	9.53	-135.39	-91.80	614.49	562.24	530.63	31.61	17.785			

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

ConocoPhillips Anticollision Report

Company:	DELAWARE BASIN EAST	Local Co-ordinate Reference:	Well _COLUMBUS FEDERAL COM 653H - Slot SLOT 7
Project:	LEA COUNT SOUTH WEST (NM-E)	TVD Reference:	KB @ 3362.00usft
Reference Site:	COLUMBUS FEDERAL PROJECT	MD Reference:	KB @ 3362.00usft
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	_COLUMBUS FEDERAL COM 653H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDT 17 Permian Prod
Reference Design:	PWP0	Offset TVD Reference:	Reference Datum

Offset Design: COLUMBUS FEDERAL PROJECT - COLUMBUS FEE #2H - OWB - AWP												Offset Site Error:	0.00 usft		
Survey Program: 100- VES GyroFlex, 8769-r.5 MWD												Offset Well Error:	3.00 usft		
Reference												Rule Assigned:			
Offset				Semi Major Axis		Offset Wellbore Centre		Distance		No-Go		Separation		Warning	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Distance (usft)	Factor			
9,794.15	9,735.72	9,332.00	9,233.33	18.02	9.68	133.19	-116.74	616.09	640.57	608.28	32.29	19.840			
9,800.00	9,741.51	9,332.00	9,233.33	18.03	9.68	133.25	-116.74	616.09	645.49	613.15	32.34	19.959			
9,900.00	9,840.74	9,351.38	9,242.67	18.26	9.79	133.07	-133.69	617.22	731.00	697.93	33.07	22.104			
10,000.00	9,940.18	9,379.00	9,255.06	18.44	9.95	132.45	-158.30	618.97	818.13	784.46	33.66	24.304			
10,100.00	10,039.78	9,379.00	9,255.06	18.61	9.95	133.83	-158.30	618.97	906.54	872.18	34.35	26.389			
10,200.00	10,139.52	9,408.86	9,267.44	18.77	10.17	133.32	-185.43	620.54	995.62	960.78	34.84	28.576			

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

ConocoPhillips Anticollision Report

Company:	DELAWARE BASIN EAST	Local Co-ordinate Reference:	Well _COLUMBUS FEDERAL COM 653H - Slot SLOT 7
Project:	LEA COUNT SOUTH WEST (NM-E)	TVD Reference:	KB @ 3362.00usft
Reference Site:	COLUMBUS FEDERAL PROJECT	MD Reference:	KB @ 3362.00usft
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	_COLUMBUS FEDERAL COM 653H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDT 17 Permian Prod
Reference Design:	PWP0	Offset TVD Reference:	Reference Datum

Offset Design: COLUMBUS FEDERAL PROJECT - RED BULL 35 FEDERAL #1H - OWB - AWP													Offset Site Error:	0.00 usft
Survey Program: 200-r.5 GYRO-NS, 11615-r.5 MWD													Offset Well Error:	3.00 usft
Reference		Offset		Semi Major Axis		Highside Toolface (°)	Offset Wellbore Centre		Distance		No-Go Distance (usft)	Separation Factor	Warning	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)		+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)				
14,800.00	11,375.00	16,135.79	12,176.64	35.52	107.04	179.91	-3,898.12	934.32	965.99	861.24	104.74	9.223		
14,900.00	11,375.00	16,143.45	12,176.14	36.23	107.21	179.37	-3,898.90	926.71	913.92	816.02	97.90	9.335		
15,000.00	11,375.00	16,151.25	12,175.65	36.95	107.38	178.81	-3,899.70	918.97	870.19	779.59	90.60	9.605		
15,100.00	11,375.00	16,159.19	12,175.17	37.67	107.55	178.25	-3,900.53	911.08	836.10	752.63	83.47	10.017		
15,200.00	11,375.00	16,167.29	12,174.69	38.40	107.73	177.67	-3,901.38	903.04	812.86	735.30	77.56	10.481		
15,300.00	11,375.00	16,175.53	12,174.22	39.14	107.91	177.08	-3,902.25	894.86	801.40	727.24	74.16	10.806		
15,343.23	11,375.00	16,179.14	12,174.02	39.46	107.99	176.83	-3,902.64	891.27	800.24	726.49	73.75	10.850	CC, ES	
15,400.00	11,375.00	16,183.93	12,173.76	39.88	108.09	176.49	-3,903.15	886.52	802.24	727.97	74.27	10.801		
15,500.00	11,375.00	16,192.49	12,173.31	40.62	108.28	175.88	-3,904.07	878.02	815.33	737.45	77.88	10.469		
15,600.00	11,375.00	16,205.00	12,172.68	41.37	108.55	174.99	-3,905.43	865.60	840.10	755.97	84.13	9.986		
15,700.00	11,375.00	16,205.00	12,172.68	42.13	108.55	174.99	-3,905.43	865.60	875.56	784.26	91.30	9.590		
15,800.00	11,375.00	16,218.97	12,172.01	42.88	108.85	173.99	-3,906.96	851.73	920.44	821.38	99.06	9.292		
15,900.00	11,375.00	16,227.82	12,171.61	43.64	109.05	173.36	-3,907.93	842.94	973.48	867.20	106.27	9.160	SF	

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

ConocoPhillips Anticollision Report

Company:	DELAWARE BASIN EAST	Local Co-ordinate Reference:	Well_COLUMBUS FEDERAL COM 653H - Slot SLOT 7
Project:	LEA COUNT SOUTH WEST (NM-E)	TVD Reference:	KB @ 3362.00usft
Reference Site:	COLUMBUS FEDERAL PROJECT	MD Reference:	KB @ 3362.00usft
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	_COLUMBUS FEDERAL COM 653H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDT 17 Permian Prod
Reference Design:	PWP0	Offset TVD Reference:	Reference Datum

Offset Design: COLUMBUS FEDERAL PROJECT - SALADO DRAW 10 FEDERAL #2H - OWB - AWP														Offset Site Error:	0.00 usft		
Survey Program: 100-r.5 GYRO-NS, 8578-MWD - OWSG R1														Offset Well Error:	3.00 usft		
Reference														Rule Assigned:		Warning	
Measured Depth (usft)	Vertical Depth (usft)	Offset		Reference (usft)	Semi Major Axis (usft)	Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre		Distance		No-Go Distance (usft)	Separation Factor				
		Measured Depth (usft)	Vertical Depth (usft)					+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)						
3,300.00	3,299.45	3,330.81	3,357.33	7.53	12.39	38.79	-420.76	909.06	991.06	970.47	20.58	48.146					
3,383.28	3,382.14	3,411.74	3,438.08	7.64	12.67	39.17	-416.59	905.87	978.54	957.56	20.98	46.631					
3,400.00	3,398.71	3,427.89	3,454.19	7.65	12.72	39.21	-415.66	905.29	975.86	954.80	21.06	46.344					
3,500.00	3,497.81	3,523.64	3,549.70	7.79	13.05	39.44	-409.52	902.33	959.95	938.40	21.55	44.541					
3,600.00	3,596.92	3,617.10	3,642.90	7.90	13.37	39.61	-402.75	900.32	944.53	922.50	22.02	42.886					
3,700.00	3,696.03	3,712.84	3,738.34	8.02	13.70	39.75	-395.49	898.89	929.55	907.04	22.51	41.299					
3,800.00	3,795.13	3,810.40	3,835.63	8.15	14.04	39.91	-388.22	897.58	914.77	891.77	23.00	39.773					
3,900.00	3,894.24	3,904.69	3,929.69	8.27	14.36	40.08	-381.68	896.46	900.36	876.88	23.48	38.347					
4,000.00	3,993.35	4,004.40	4,029.19	8.40	14.70	40.32	-375.48	895.13	886.16	862.18	23.98	36.953					
4,100.00	4,092.45	4,102.84	4,127.47	8.53	15.04	40.62	-370.17	893.38	871.95	847.48	24.48	35.624					
4,200.00	4,191.56	4,200.00	4,224.49	8.67	15.37	40.96	-365.39	891.44	857.79	832.82	24.97	34.355					
4,300.00	4,290.67	4,294.24	4,318.61	8.80	15.70	41.29	-360.66	890.00	844.04	818.59	25.45	33.164					
4,400.00	4,389.77	4,389.94	4,414.18	8.94	16.03	41.60	-355.77	889.23	830.90	804.96	25.94	32.033					
4,500.00	4,488.88	4,485.60	4,509.72	9.08	16.35	41.92	-351.08	888.79	818.17	791.74	26.43	30.959					
4,600.00	4,587.98	4,577.88	4,601.90	9.22	16.67	42.23	-346.64	888.93	806.06	779.16	26.90	29.964					
4,700.00	4,687.09	4,670.07	4,693.97	9.37	16.99	42.50	-342.17	890.05	794.88	767.50	27.37	29.038					
4,800.00	4,786.20	4,762.95	4,786.73	9.51	17.30	42.77	-337.90	891.97	784.57	756.72	27.85	28.172					
4,900.00	4,885.30	4,858.49	4,882.17	9.66	17.63	43.10	-334.24	894.30	774.99	746.65	28.33	27.351					
5,000.00	4,984.41	4,958.94	4,982.56	9.81	17.97	43.52	-331.44	896.40	765.65	736.81	28.84	26.545					
5,100.00	5,083.52	5,061.82	5,085.42	9.96	18.33	44.08	-329.55	897.51	755.98	726.62	29.36	25.745					
5,200.00	5,182.62	5,159.18	5,182.76	10.11	18.66	44.64	-327.93	898.18	746.13	716.28	29.86	24.989					
5,300.00	5,281.73	5,258.44	5,282.00	10.26	19.01	45.23	-326.46	899.22	736.77	706.41	30.36	24.266					
5,400.00	5,380.83	5,357.12	5,380.67	10.42	19.35	45.83	-324.97	900.01	727.25	696.39	30.86	23.564					
5,500.00	5,479.94	5,455.18	5,478.72	10.57	19.68	46.47	-323.82	900.95	718.14	686.78	31.36	22.900					
5,600.00	5,579.05	5,554.40	5,577.92	10.73	20.03	47.11	-322.47	902.02	709.10	677.24	31.86	22.254					
5,700.00	5,678.15	5,654.41	5,677.92	10.89	20.37	47.80	-321.39	902.93	700.18	667.81	32.37	21.629					
5,800.00	5,777.26	5,756.46	5,779.96	11.05	20.72	48.51	-320.06	903.66	691.08	658.19	32.89	21.012					
5,900.00	5,876.37	5,855.35	5,878.85	11.21	21.07	49.27	-319.07	903.77	681.78	648.38	33.39	20.416					
6,000.00	5,975.47	5,953.26	5,976.76	11.37	21.40	50.07	-318.48	903.94	672.88	638.99	33.89	19.854					
6,100.00	6,074.58	6,052.19	6,075.68	11.54	21.75	50.94	-318.29	903.85	664.16	629.76	34.40	19.309					
6,200.00	6,173.69	6,150.97	6,174.46	11.70	22.09	51.83	-318.18	903.76	655.65	620.75	34.90	18.787					
6,300.00	6,272.79	6,250.69	6,274.18	11.87	22.43	52.77	-318.16	903.59	647.31	611.90	35.41	18.283					
6,400.00	6,371.90	6,351.64	6,375.13	12.03	22.78	53.74	-318.04	903.25	638.94	603.02	35.92	17.789					
6,500.00	6,471.00	6,450.49	6,473.98	12.20	23.12	54.74	-317.90	902.61	630.51	594.09	36.42	17.312					
6,600.00	6,570.11	6,548.44	6,571.93	12.37	23.46	55.75	-317.89	902.18	622.53	585.62	36.92	16.863					
6,700.00	6,669.22	6,649.27	6,672.76	12.53	23.81	56.80	-317.71	901.84	614.71	577.28	37.43	16.424					
6,800.00	6,768.32	6,750.30	6,773.79	12.70	24.16	57.86	-317.10	901.32	606.67	568.73	37.94	15.990					
6,900.00	6,867.43	6,849.61	6,873.09	12.87	24.50	58.94	-316.49	900.61	598.69	560.25	38.44	15.573					
7,000.00	6,966.54	6,946.90	6,970.38	13.04	24.84	60.03	-315.95	899.94	591.00	552.06	38.94	15.179					
7,100.00	7,065.64	7,042.53	7,066.00	13.21	25.17	61.14	-315.84	899.56	584.05	544.63	39.42	14.817					
7,200.00	7,164.75	7,138.62	7,162.10	13.39	25.50	62.29	-316.23	899.44	577.90	538.00	39.90	14.485					
7,300.00	7,263.86	7,236.61	7,260.08	13.56	25.83	63.49	-316.97	899.52	572.41	532.02	40.38	14.174					
7,400.00	7,362.96	7,336.97	7,360.44	13.73	26.18	64.79	-317.94	899.23	567.12	526.23	40.89	13.871					
7,500.00	7,462.07	7,436.58	7,460.04	13.91	26.52	66.10	-318.72	898.77	561.87	520.49	41.38	13.578					
7,600.00	7,561.17	7,534.07	7,557.53	14.08	26.85	67.38	-319.39	898.68	557.07	515.20	41.87	13.306					
7,700.00	7,660.28	7,631.17	7,654.62	14.26	27.19	68.72	-320.63	898.31	552.87	510.53	42.35	13.056					
7,800.00	7,759.39	7,729.07	7,752.51	14.43	27.52	70.09	-322.13	898.20	549.37	506.53	42.83	12.826					
7,900.00	7,858.49	7,830.28	7,853.71	14.61	27.87	71.52	-323.55	898.02	546.04	502.70	43.34	12.599					
8,000.00	7,957.60	7,932.12	7,955.54	14.78	28.22	72.99	-325.60	897.47	542.55	498.70	43.85	12.373					
8,100.00	8,056.71	8,031.42	8,054.83	14.96	28.57	74.44	-328.32	896.72	539.04	494.69	44.35	12.155					
8,200.00	8,155.81	8,127.06	8,150.47	15.14	28.90	75.86	-326.36	896.10	536.26	491.44	44.82	11.964					

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

ConocoPhillips Anticollision Report

Company:	DELAWARE BASIN EAST	Local Co-ordinate Reference:	Well _COLUMBUS FEDERAL COM 653H - Slot SLOT 7
Project:	LEA COUNT SOUTH WEST (NM-E)	TVD Reference:	KB @ 3362.00usft
Reference Site:	COLUMBUS FEDERAL PROJECT	MD Reference:	KB @ 3362.00usft
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	_COLUMBUS FEDERAL COM 653H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDT 17 Permian Prod
Reference Design:	PWP0	Offset TVD Reference:	Reference Datum

Offset Design: COLUMBUS FEDERAL PROJECT - SALADO DRAW 10 FEDERAL #2H - OWB - AWP													Offset Site Error:	0.00 usft
Survey Program: 100-r.5 GYRO-NS, 8578-MWD - OWSG R1													Offset Well Error:	3.00 usft
Reference		Offset		Semi Major Axis		Highside Toolface (°)	Offset Wellbore Centre		Distance		No-Go Distance (usft)	Separation Factor	Warning	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)		+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)				
8,300.00	8,254.92	8,222.89	8,246.28	15.32	29.23	77.31	-327.98	895.72	534.49	489.19	45.30	11.799		
8,400.00	8,354.02	8,319.88	8,343.25	15.50	29.56	78.79	-330.05	895.41	533.51	487.73	45.78	11.654		
8,460.42	8,413.90	8,377.81	8,401.16	15.60	29.76	79.68	-331.52	895.24	533.34	487.27	46.07	11.577 CC		
8,500.00	8,453.13	8,415.98	8,439.32	15.67	29.89	80.28	-332.60	895.12	533.41	487.15	46.26	11.531 ES		
8,600.00	8,552.24	8,513.57	8,536.86	15.85	30.23	81.85	-335.76	894.50	534.11	487.37	46.75	11.426		
8,700.00	8,651.34	8,614.02	8,637.24	16.03	30.39	83.50	-339.14	893.40	535.20	488.19	47.02	11.384 SF		
8,800.00	8,750.45	8,677.30	8,700.39	16.21	30.39	84.61	-342.91	892.57	539.36	492.44	46.92	11.494		
8,900.00	8,849.56	8,733.86	8,756.34	16.40	30.39	85.78	-350.97	891.41	551.46	504.79	46.67	11.816		
9,000.00	8,948.66	8,782.00	8,803.35	16.58	30.40	86.79	-361.29	890.87	571.64	525.44	46.20	12.373		
9,100.00	9,047.77	8,844.00	8,862.74	16.76	30.41	87.95	-379.00	892.17	599.57	553.72	45.85	13.077		
9,200.00	9,146.88	8,895.81	8,911.33	16.94	30.43	88.94	-396.93	893.25	633.75	588.42	45.34	13.979		
9,300.00	9,245.98	8,939.00	8,950.88	17.12	30.44	89.77	-414.25	893.96	674.19	629.49	44.70	15.083		
9,400.00	9,345.09	8,988.30	8,994.65	17.30	30.47	90.71	-436.90	894.64	720.61	676.41	44.21	16.301		
9,500.00	9,444.19	9,035.00	9,034.67	17.49	30.50	91.56	-460.93	895.37	772.41	728.68	43.74	17.660		
9,600.00	9,543.30	9,066.00	9,060.36	17.67	30.52	92.11	-478.28	895.81	829.04	785.94	43.10	19.236		
9,700.00	9,642.41	9,098.00	9,085.99	17.85	30.56	92.65	-497.42	896.33	890.20	847.63	42.58	20.908		
9,794.15	9,735.72	9,130.00	9,110.58	18.02	30.59	93.16	-517.89	896.97	951.56	909.36	42.20	22.547		
9,800.00	9,741.51	9,130.00	9,110.58	18.03	30.59	93.22	-517.89	896.97	955.48	913.33	42.15	22.666		

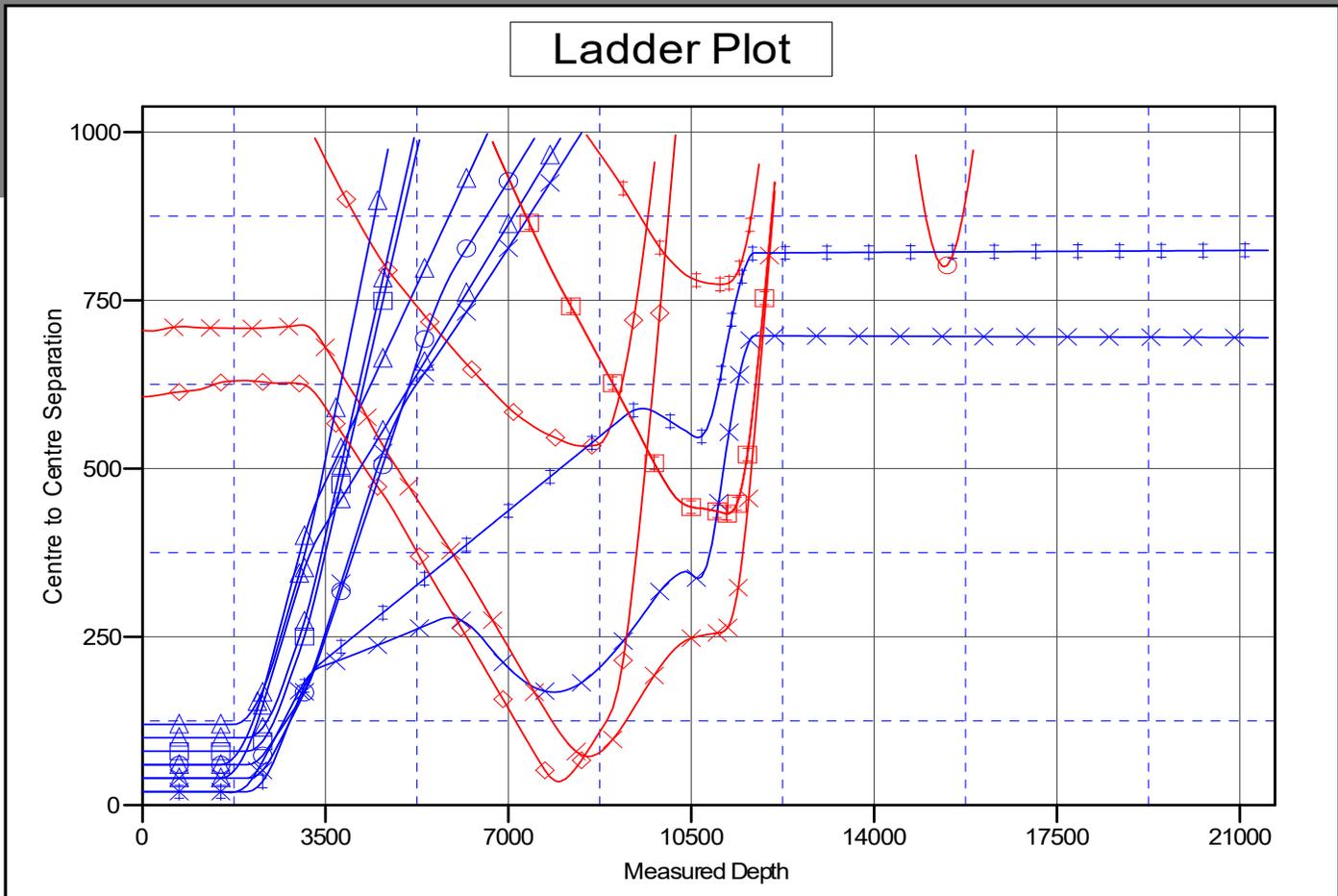
CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation

ConocoPhillips Anticollision Report

Company:	DELAWARE BASIN EAST	Local Co-ordinate Reference:	Well _COLUMBUS FEDERAL COM 653H - Slot SLOT 7
Project:	LEA COUNT SOUTH WEST (NM-E)	TVD Reference:	KB @ 3362.00usft
Reference Site:	COLUMBUS FEDERAL PROJECT	MD Reference:	KB @ 3362.00usft
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	_COLUMBUS FEDERAL COM 653H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDT 17 Permian Prod
Reference Design:	PWP0	Offset TVD Reference:	Reference Datum

Reference Depths are relative to KB @ 3362.00usft
 Offset Depths are relative to Offset Datum
 Central Meridian is 104° 20' 0.000 W

Coordinates are relative to: _COLUMBUS FEDERAL COM 653H - Slot SLOT 7
 Coordinate System is US State Plane 1927 (Exact solution), New Mexico East 30
 Grid Convergence at Surface is: 0.41°



LEGEND

- | | | |
|--|---|---|
| <ul style="list-style-type: none"> ✕ _COLUMBUS FEDERAL COM504H, OWB, PWP0 V0 ▲ _COLUMBUS FEDERAL COM506H, OWB, PWP0 V0 ✕ COLUMBUS FEDERAL COM #2H, OWB, AWP V0 ✕ COLUMBUS FEE #24H, OWB, AWP V0 ▲ COLUMBUS FEDERAL COM #2H, OWB, PWP1 V0 ● RED BULL 35 FEDERAL #1H, OWB, AWP V0 | <ul style="list-style-type: none"> ▲ _COLUMBUS FEDERAL COM651H, OWB, PWP0 V0 ✕ SALADO DRAW 10 FEDERAL #2H, OWB, AWP V0 ✕ COLUMBUS FEE #2H, OWB, AWP V0 ✕ _COLUMBUS FEDERAL COM503H, OWB, PWP0 V0 ▲ COLUMBUS FEDERAL COM #1H, OWB, PWP1 V0 ▲ _COLUMBUS FEDERAL COM505H, OWB, PWP0 V0 | <ul style="list-style-type: none"> ▲ _COLUMBUS FEDERAL COM654H, OWB, PWP0 V0 ✕ COLUMBUS FEE #23H, ST01, AWP V0 ● COLUMBUS FEE #23H, OWB (H), AWP V0 ● _COLUMBUS FEDERAL COM652H, OWB, PWP0 V0 |
|--|---|---|

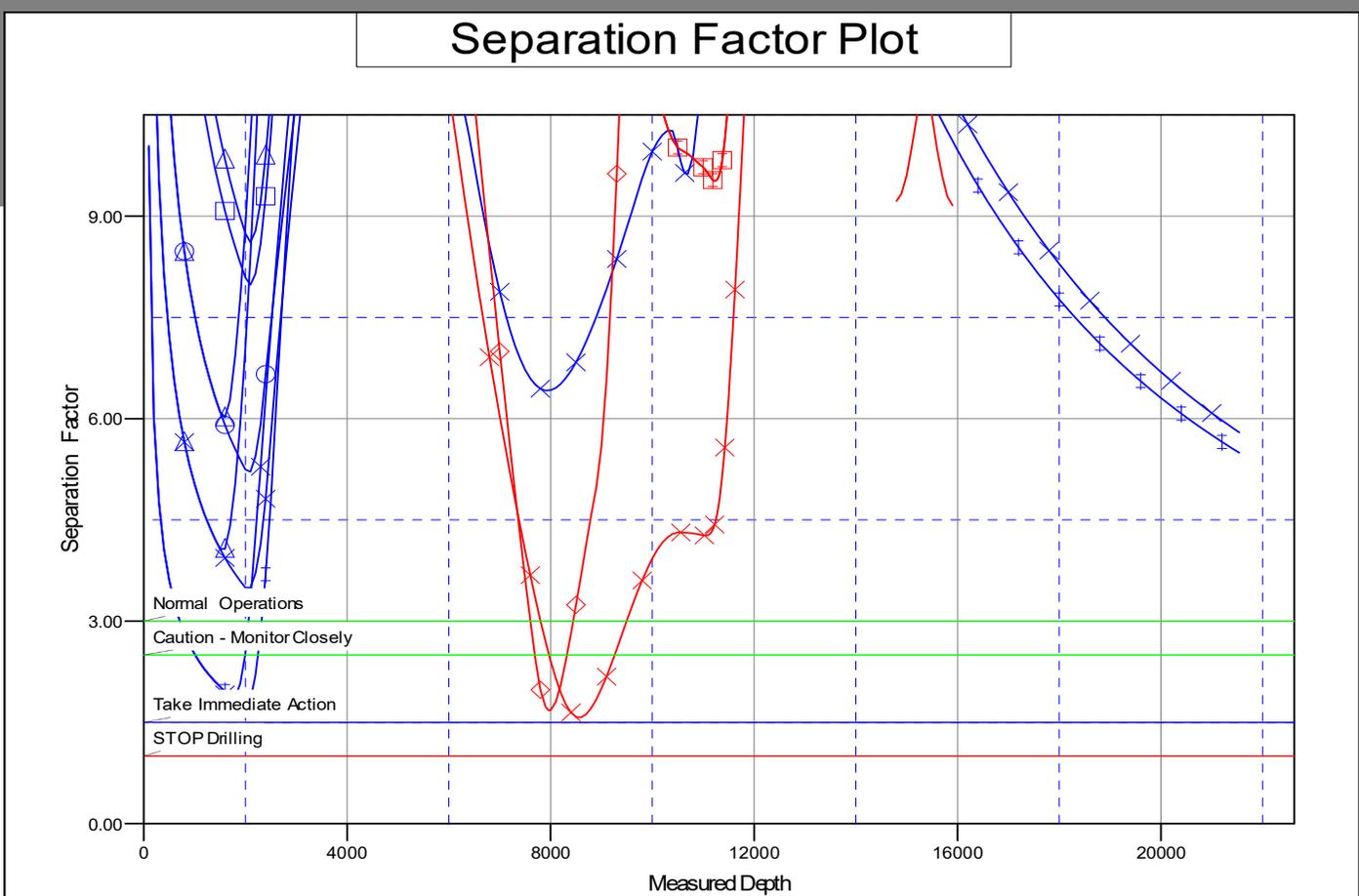
CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation

ConocoPhillips Anticollision Report

Company:	DELAWARE BASIN EAST	Local Co-ordinate Reference:	Well _COLUMBUS FEDERAL COM 653H - Slot SLOT 7
Project:	LEA COUNT SOUTH WEST (NM-E)	TVD Reference:	KB @ 3362.00usft
Reference Site:	COLUMBUS FEDERAL PROJECT	MD Reference:	KB @ 3362.00usft
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	_COLUMBUS FEDERAL COM 653H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDT 17 Permian Prod
Reference Design:	PWP0	Offset TVD Reference:	Reference Datum

Reference Depths are relative to KB @ 3362.00usft
 Offset Depths are relative to Offset Datum
 Central Meridian is 104° 20' 0.000 W

Coordinates are relative to: _COLUMBUS FEDERAL COM 653H - Slot SLOT 7
 Coordinate System is US State Plane 1927 (Exact solution), New Mexico East 30
 Grid Convergence at Surface is: 0.41°



LEGEND

- | | | |
|--|--|---|
| <ul style="list-style-type: none"> ✕ _COLUMBUS FEDERAL COM504H, OWB, PWP0 V0 ▲ _COLUMBUS FEDERAL COM506H, OWB, PWP0 V0 ✕ COLUMBUS FEDERAL COM #2H, OWB, AWP V0 ◆ COLUMBUS FEE #24H, OWB, AWP V0 □ COLUMBUS FEDERAL COM #2H, OWB, PWP1 V0 ● RED BULL 35 FEDERAL #1H, OWB, AWP V0 | <ul style="list-style-type: none"> ▲ _COLUMBUS FEDERAL COM651H, OWB, PWP0 V0 ✕ SALADO DRAW 10 FEDERAL#2H, OWB, AWP V0 ◆ COLUMBUS FEE #2H, OWB, AWP V0 ✕ _COLUMBUS FEDERAL COM503H, OWB, PWP0 V0 ▲ COLUMBUS FEDERAL COM #1H, OWB, PWP1 V0 ▲ _COLUMBUS FEDERAL COM505H, OWB, PWP0 V0 | <ul style="list-style-type: none"> ▲ _COLUMBUS FEDERAL COM654H, OWB, PWP0 V0 ✕ COLUMBUS FEE #23H, ST01, AWP V0 ◆ COLUMBUS FEE #23H, OWB (H), AWP V0 ● _COLUMBUS FEDERAL COM652H, OWB, PWP0 V0 |
|--|--|---|

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

DELAWARE BASIN EAST

LEA COUNT SOUTH WEST (NM-E)

COLUMBUS FEDERAL PROJECT

_COLUMBUS FEDERAL COM 653H - Slot SLOT 7

OWB

Plan: PWP0

Standard Planning Report

14 January, 2026

ConocoPhillips Planning Report

Database:	EDT 17 Permian Prod	Local Co-ordinate Reference:	Well _ COLUMBUS FEDERAL COM 653H - Slot SLOT 7
Company:	DELAWARE BASIN EAST	TVD Reference:	KB @ 3362.00usft
Project:	LEA COUNT SOUTH WEST (NM-E)	MD Reference:	KB @ 3362.00usft
Site:	COLUMBUS FEDERAL PROJECT	North Reference:	Grid
Well:	_ COLUMBUS FEDERAL COM 653H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OWB		
Design:	PWP0		

Project LEA COUNT SOUTH WEST (NM-E)			
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 COLUMBUS FEDERAL PROJECT			
Site Position:		Northing:	398,637.10 usft
From:	Map	Easting:	741,887.40 usft
Position Uncertainty:	0.00 usft	Slot Radius:	13-3/16 "
		Latitude:	32° 5' 36.820 N
		Longitude:	103° 33' 8.116 W

Well _ COLUMBUS FEDERAL COM 653H - Slot SLOT 7			
Well Position	+N/-S	0.00 usft	Northing: 398,429.65 usft
	+E/-W	0.00 usft	Easting: 739,330.06 usft
Position Uncertainty		0.00 usft	Wellhead Elevation: usft
Grid Convergence:		0.41 °	Latitude: 32° 5' 34.950 N
			Longitude: 103° 33' 37.859 W
			Ground Level: 3,330.00 usft

Wellbore OWB					
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	BGGM2025	1/12/2026	6.15	59.57	47,043.09596756

Design PWP0				
Audit Notes:				
Version:	Phase:	PLAN	Tie On Depth:	0.00
Vertical Section:	Depth From (TVD) (usft)	+N/-S (usft)	+E/-W (usft)	Direction (°)
	0.00	0.00	0.00	174.47

Plan Survey Tool Program		Date 1/13/2026		
Depth From (usft)	Depth To (usft)	Survey (Wellbore)	Tool Name	Remarks
1	0.00	21,539.67 PWP0 (OWB)	r.5 MWD+IFR1+SAG+FDIR ISCWSA MWD + IFR1 + SAG	

ConocoPhillips
 Planning Report

Database:	EDT 17 Permian Prod	Local Co-ordinate Reference:	Well _COLUMBUS FEDERAL COM 653H - Slot SLOT 7
Company:	DELAWARE BASIN EAST	TVD Reference:	KB @ 3362.00usft
Project:	LEA COUNT SOUTH WEST (NM-E)	MD Reference:	KB @ 3362.00usft
Site:	COLUMBUS FEDERAL PROJECT	North Reference:	Grid
Well:	_COLUMBUS FEDERAL COM 653H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OWB		
Design:	PWP0		

Plan Sections										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	TFO (°)	Target
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
3,000.00	0.00	0.00	3,000.00	0.00	0.00	0.00	0.00	0.00	0.00	
3,383.28	7.67	76.98	3,382.14	5.77	24.94	2.00	2.00	0.00	76.98	
9,794.15	7.67	76.98	9,735.72	198.46	858.11	0.00	0.00	0.00	0.00	
10,560.72	0.00	0.00	10,500.00	210.00	908.00	1.00	-1.00	0.00	180.00	
10,958.26	0.00	0.00	10,897.54	210.00	908.00	0.00	0.00	0.00	0.00	
11,708.26	90.00	179.62	11,375.01	-267.45	911.20	12.00	12.00	23.95	179.62	
21,539.67	90.00	179.62	11,375.00	-10,098.65	977.13	0.00	0.00	0.00	0.00	

ConocoPhillips

Planning Report

Database:	EDT 17 Permian Prod	Local Co-ordinate Reference:	Well _ COLUMBUS FEDERAL COM 653H - Slot SLOT 7
Company:	DELAWARE BASIN EAST	TVD Reference:	KB @ 3362.00usft
Project:	LEA COUNT SOUTH WEST (NM-E)	MD Reference:	KB @ 3362.00usft
Site:	COLUMBUS FEDERAL PROJECT	North Reference:	Grid
Well:	_COLUMBUS FEDERAL COM 653H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OWB		
Design:	PWP0		

Planned Survey										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
15.00	0.00	0.00	15.00	0.00	0.00	0.00	0.00	0.00	0.00	
30.00	0.00	0.00	30.00	0.00	0.00	0.00	0.00	0.00	0.00	
45.00	0.00	0.00	45.00	0.00	0.00	0.00	0.00	0.00	0.00	
60.00	0.00	0.00	60.00	0.00	0.00	0.00	0.00	0.00	0.00	
75.00	0.00	0.00	75.00	0.00	0.00	0.00	0.00	0.00	0.00	
90.00	0.00	0.00	90.00	0.00	0.00	0.00	0.00	0.00	0.00	
105.00	0.00	0.00	105.00	0.00	0.00	0.00	0.00	0.00	0.00	
120.00	0.00	0.00	120.00	0.00	0.00	0.00	0.00	0.00	0.00	
135.00	0.00	0.00	135.00	0.00	0.00	0.00	0.00	0.00	0.00	
150.00	0.00	0.00	150.00	0.00	0.00	0.00	0.00	0.00	0.00	
165.00	0.00	0.00	165.00	0.00	0.00	0.00	0.00	0.00	0.00	
180.00	0.00	0.00	180.00	0.00	0.00	0.00	0.00	0.00	0.00	
195.00	0.00	0.00	195.00	0.00	0.00	0.00	0.00	0.00	0.00	
210.00	0.00	0.00	210.00	0.00	0.00	0.00	0.00	0.00	0.00	
225.00	0.00	0.00	225.00	0.00	0.00	0.00	0.00	0.00	0.00	
240.00	0.00	0.00	240.00	0.00	0.00	0.00	0.00	0.00	0.00	
255.00	0.00	0.00	255.00	0.00	0.00	0.00	0.00	0.00	0.00	
270.00	0.00	0.00	270.00	0.00	0.00	0.00	0.00	0.00	0.00	
285.00	0.00	0.00	285.00	0.00	0.00	0.00	0.00	0.00	0.00	
300.00	0.00	0.00	300.00	0.00	0.00	0.00	0.00	0.00	0.00	
315.00	0.00	0.00	315.00	0.00	0.00	0.00	0.00	0.00	0.00	
330.00	0.00	0.00	330.00	0.00	0.00	0.00	0.00	0.00	0.00	
345.00	0.00	0.00	345.00	0.00	0.00	0.00	0.00	0.00	0.00	
360.00	0.00	0.00	360.00	0.00	0.00	0.00	0.00	0.00	0.00	
375.00	0.00	0.00	375.00	0.00	0.00	0.00	0.00	0.00	0.00	
390.00	0.00	0.00	390.00	0.00	0.00	0.00	0.00	0.00	0.00	
405.00	0.00	0.00	405.00	0.00	0.00	0.00	0.00	0.00	0.00	
420.00	0.00	0.00	420.00	0.00	0.00	0.00	0.00	0.00	0.00	
435.00	0.00	0.00	435.00	0.00	0.00	0.00	0.00	0.00	0.00	
450.00	0.00	0.00	450.00	0.00	0.00	0.00	0.00	0.00	0.00	
465.00	0.00	0.00	465.00	0.00	0.00	0.00	0.00	0.00	0.00	
480.00	0.00	0.00	480.00	0.00	0.00	0.00	0.00	0.00	0.00	
495.00	0.00	0.00	495.00	0.00	0.00	0.00	0.00	0.00	0.00	
510.00	0.00	0.00	510.00	0.00	0.00	0.00	0.00	0.00	0.00	
525.00	0.00	0.00	525.00	0.00	0.00	0.00	0.00	0.00	0.00	
540.00	0.00	0.00	540.00	0.00	0.00	0.00	0.00	0.00	0.00	
555.00	0.00	0.00	555.00	0.00	0.00	0.00	0.00	0.00	0.00	
570.00	0.00	0.00	570.00	0.00	0.00	0.00	0.00	0.00	0.00	
585.00	0.00	0.00	585.00	0.00	0.00	0.00	0.00	0.00	0.00	
600.00	0.00	0.00	600.00	0.00	0.00	0.00	0.00	0.00	0.00	
615.00	0.00	0.00	615.00	0.00	0.00	0.00	0.00	0.00	0.00	
630.00	0.00	0.00	630.00	0.00	0.00	0.00	0.00	0.00	0.00	
645.00	0.00	0.00	645.00	0.00	0.00	0.00	0.00	0.00	0.00	
660.00	0.00	0.00	660.00	0.00	0.00	0.00	0.00	0.00	0.00	
675.00	0.00	0.00	675.00	0.00	0.00	0.00	0.00	0.00	0.00	
690.00	0.00	0.00	690.00	0.00	0.00	0.00	0.00	0.00	0.00	
705.00	0.00	0.00	705.00	0.00	0.00	0.00	0.00	0.00	0.00	
720.00	0.00	0.00	720.00	0.00	0.00	0.00	0.00	0.00	0.00	
735.00	0.00	0.00	735.00	0.00	0.00	0.00	0.00	0.00	0.00	
750.00	0.00	0.00	750.00	0.00	0.00	0.00	0.00	0.00	0.00	
765.00	0.00	0.00	765.00	0.00	0.00	0.00	0.00	0.00	0.00	
780.00	0.00	0.00	780.00	0.00	0.00	0.00	0.00	0.00	0.00	

ConocoPhillips

Planning Report

Database:	EDT 17 Permian Prod	Local Co-ordinate Reference:	Well _COLUMBUS FEDERAL COM 653H - Slot SLOT 7
Company:	DELAWARE BASIN EAST	TVD Reference:	KB @ 3362.00usft
Project:	LEA COUNT SOUTH WEST (NM-E)	MD Reference:	KB @ 3362.00usft
Site:	COLUMBUS FEDERAL PROJECT	North Reference:	Grid
Well:	_COLUMBUS FEDERAL COM 653H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OWB		
Design:	PWP0		

Planned Survey										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	
795.00	0.00	0.00	795.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
810.00	0.00	0.00	810.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
825.00	0.00	0.00	825.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
840.00	0.00	0.00	840.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
855.00	0.00	0.00	855.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
870.00	0.00	0.00	870.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
885.00	0.00	0.00	885.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
900.00	0.00	0.00	900.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
915.00	0.00	0.00	915.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
930.00	0.00	0.00	930.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
945.00	0.00	0.00	945.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
960.00	0.00	0.00	960.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
975.00	0.00	0.00	975.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
990.00	0.00	0.00	990.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1,005.00	0.00	0.00	1,005.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1,020.00	0.00	0.00	1,020.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1,035.00	0.00	0.00	1,035.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1,050.00	0.00	0.00	1,050.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1,065.00	0.00	0.00	1,065.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1,080.00	0.00	0.00	1,080.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1,095.00	0.00	0.00	1,095.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1,110.00	0.00	0.00	1,110.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1,125.00	0.00	0.00	1,125.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1,140.00	0.00	0.00	1,140.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1,155.00	0.00	0.00	1,155.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1,170.00	0.00	0.00	1,170.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1,185.00	0.00	0.00	1,185.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1,200.00	0.00	0.00	1,200.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1,215.00	0.00	0.00	1,215.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1,230.00	0.00	0.00	1,230.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1,245.00	0.00	0.00	1,245.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1,260.00	0.00	0.00	1,260.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1,275.00	0.00	0.00	1,275.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1,290.00	0.00	0.00	1,290.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1,305.00	0.00	0.00	1,305.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1,320.00	0.00	0.00	1,320.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1,335.00	0.00	0.00	1,335.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1,350.00	0.00	0.00	1,350.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1,365.00	0.00	0.00	1,365.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1,380.00	0.00	0.00	1,380.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1,395.00	0.00	0.00	1,395.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1,410.00	0.00	0.00	1,410.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1,425.00	0.00	0.00	1,425.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1,440.00	0.00	0.00	1,440.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1,455.00	0.00	0.00	1,455.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1,470.00	0.00	0.00	1,470.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1,485.00	0.00	0.00	1,485.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1,500.00	0.00	0.00	1,500.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1,515.00	0.00	0.00	1,515.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1,530.00	0.00	0.00	1,530.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1,545.00	0.00	0.00	1,545.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1,560.00	0.00	0.00	1,560.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1,575.00	0.00	0.00	1,575.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

ConocoPhillips

Planning Report

Database:	EDT 17 Permian Prod	Local Co-ordinate Reference:	Well _COLUMBUS FEDERAL COM 653H - Slot SLOT 7
Company:	DELAWARE BASIN EAST	TVD Reference:	KB @ 3362.00usft
Project:	LEA COUNT SOUTH WEST (NM-E)	MD Reference:	KB @ 3362.00usft
Site:	COLUMBUS FEDERAL PROJECT	North Reference:	Grid
Well:	_COLUMBUS FEDERAL COM 653H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OWB		
Design:	PWP0		

Planned Survey										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	
1,590.00	0.00	0.00	1,590.00	0.00	0.00	0.00	0.00	0.00	0.00	
1,605.00	0.00	0.00	1,605.00	0.00	0.00	0.00	0.00	0.00	0.00	
1,620.00	0.00	0.00	1,620.00	0.00	0.00	0.00	0.00	0.00	0.00	
1,635.00	0.00	0.00	1,635.00	0.00	0.00	0.00	0.00	0.00	0.00	
1,650.00	0.00	0.00	1,650.00	0.00	0.00	0.00	0.00	0.00	0.00	
1,665.00	0.00	0.00	1,665.00	0.00	0.00	0.00	0.00	0.00	0.00	
1,680.00	0.00	0.00	1,680.00	0.00	0.00	0.00	0.00	0.00	0.00	
1,695.00	0.00	0.00	1,695.00	0.00	0.00	0.00	0.00	0.00	0.00	
1,710.00	0.00	0.00	1,710.00	0.00	0.00	0.00	0.00	0.00	0.00	
1,725.00	0.00	0.00	1,725.00	0.00	0.00	0.00	0.00	0.00	0.00	
1,740.00	0.00	0.00	1,740.00	0.00	0.00	0.00	0.00	0.00	0.00	
1,755.00	0.00	0.00	1,755.00	0.00	0.00	0.00	0.00	0.00	0.00	
1,770.00	0.00	0.00	1,770.00	0.00	0.00	0.00	0.00	0.00	0.00	
1,785.00	0.00	0.00	1,785.00	0.00	0.00	0.00	0.00	0.00	0.00	
1,800.00	0.00	0.00	1,800.00	0.00	0.00	0.00	0.00	0.00	0.00	
1,815.00	0.00	0.00	1,815.00	0.00	0.00	0.00	0.00	0.00	0.00	
1,830.00	0.00	0.00	1,830.00	0.00	0.00	0.00	0.00	0.00	0.00	
1,845.00	0.00	0.00	1,845.00	0.00	0.00	0.00	0.00	0.00	0.00	
1,860.00	0.00	0.00	1,860.00	0.00	0.00	0.00	0.00	0.00	0.00	
1,875.00	0.00	0.00	1,875.00	0.00	0.00	0.00	0.00	0.00	0.00	
1,890.00	0.00	0.00	1,890.00	0.00	0.00	0.00	0.00	0.00	0.00	
1,905.00	0.00	0.00	1,905.00	0.00	0.00	0.00	0.00	0.00	0.00	
1,920.00	0.00	0.00	1,920.00	0.00	0.00	0.00	0.00	0.00	0.00	
1,935.00	0.00	0.00	1,935.00	0.00	0.00	0.00	0.00	0.00	0.00	
1,950.00	0.00	0.00	1,950.00	0.00	0.00	0.00	0.00	0.00	0.00	
1,965.00	0.00	0.00	1,965.00	0.00	0.00	0.00	0.00	0.00	0.00	
1,980.00	0.00	0.00	1,980.00	0.00	0.00	0.00	0.00	0.00	0.00	
1,995.00	0.00	0.00	1,995.00	0.00	0.00	0.00	0.00	0.00	0.00	
2,010.00	0.00	0.00	2,010.00	0.00	0.00	0.00	0.00	0.00	0.00	
2,025.00	0.00	0.00	2,025.00	0.00	0.00	0.00	0.00	0.00	0.00	
2,040.00	0.00	0.00	2,040.00	0.00	0.00	0.00	0.00	0.00	0.00	
2,055.00	0.00	0.00	2,055.00	0.00	0.00	0.00	0.00	0.00	0.00	
2,070.00	0.00	0.00	2,070.00	0.00	0.00	0.00	0.00	0.00	0.00	
2,085.00	0.00	0.00	2,085.00	0.00	0.00	0.00	0.00	0.00	0.00	
2,100.00	0.00	0.00	2,100.00	0.00	0.00	0.00	0.00	0.00	0.00	
2,115.00	0.00	0.00	2,115.00	0.00	0.00	0.00	0.00	0.00	0.00	
2,130.00	0.00	0.00	2,130.00	0.00	0.00	0.00	0.00	0.00	0.00	
2,145.00	0.00	0.00	2,145.00	0.00	0.00	0.00	0.00	0.00	0.00	
2,160.00	0.00	0.00	2,160.00	0.00	0.00	0.00	0.00	0.00	0.00	
2,175.00	0.00	0.00	2,175.00	0.00	0.00	0.00	0.00	0.00	0.00	
2,190.00	0.00	0.00	2,190.00	0.00	0.00	0.00	0.00	0.00	0.00	
2,205.00	0.00	0.00	2,205.00	0.00	0.00	0.00	0.00	0.00	0.00	
2,220.00	0.00	0.00	2,220.00	0.00	0.00	0.00	0.00	0.00	0.00	
2,235.00	0.00	0.00	2,235.00	0.00	0.00	0.00	0.00	0.00	0.00	
2,250.00	0.00	0.00	2,250.00	0.00	0.00	0.00	0.00	0.00	0.00	
2,265.00	0.00	0.00	2,265.00	0.00	0.00	0.00	0.00	0.00	0.00	
2,280.00	0.00	0.00	2,280.00	0.00	0.00	0.00	0.00	0.00	0.00	
2,295.00	0.00	0.00	2,295.00	0.00	0.00	0.00	0.00	0.00	0.00	
2,310.00	0.00	0.00	2,310.00	0.00	0.00	0.00	0.00	0.00	0.00	
2,325.00	0.00	0.00	2,325.00	0.00	0.00	0.00	0.00	0.00	0.00	
2,340.00	0.00	0.00	2,340.00	0.00	0.00	0.00	0.00	0.00	0.00	
2,355.00	0.00	0.00	2,355.00	0.00	0.00	0.00	0.00	0.00	0.00	
2,370.00	0.00	0.00	2,370.00	0.00	0.00	0.00	0.00	0.00	0.00	

ConocoPhillips

Planning Report

Database:	EDT 17 Permian Prod	Local Co-ordinate Reference:	Well _ COLUMBUS FEDERAL COM 653H - Slot SLOT 7
Company:	DELAWARE BASIN EAST	TVD Reference:	KB @ 3362.00usft
Project:	LEA COUNT SOUTH WEST (NM-E)	MD Reference:	KB @ 3362.00usft
Site:	COLUMBUS FEDERAL PROJECT	North Reference:	Grid
Well:	_ COLUMBUS FEDERAL COM 653H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OWB		
Design:	PWP0		

Planned Survey										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	
2,385.00	0.00	0.00	2,385.00	0.00	0.00	0.00	0.00	0.00	0.00	
2,400.00	0.00	0.00	2,400.00	0.00	0.00	0.00	0.00	0.00	0.00	
2,415.00	0.00	0.00	2,415.00	0.00	0.00	0.00	0.00	0.00	0.00	
2,430.00	0.00	0.00	2,430.00	0.00	0.00	0.00	0.00	0.00	0.00	
2,445.00	0.00	0.00	2,445.00	0.00	0.00	0.00	0.00	0.00	0.00	
2,460.00	0.00	0.00	2,460.00	0.00	0.00	0.00	0.00	0.00	0.00	
2,475.00	0.00	0.00	2,475.00	0.00	0.00	0.00	0.00	0.00	0.00	
2,490.00	0.00	0.00	2,490.00	0.00	0.00	0.00	0.00	0.00	0.00	
2,505.00	0.00	0.00	2,505.00	0.00	0.00	0.00	0.00	0.00	0.00	
2,520.00	0.00	0.00	2,520.00	0.00	0.00	0.00	0.00	0.00	0.00	
2,535.00	0.00	0.00	2,535.00	0.00	0.00	0.00	0.00	0.00	0.00	
2,550.00	0.00	0.00	2,550.00	0.00	0.00	0.00	0.00	0.00	0.00	
2,565.00	0.00	0.00	2,565.00	0.00	0.00	0.00	0.00	0.00	0.00	
2,580.00	0.00	0.00	2,580.00	0.00	0.00	0.00	0.00	0.00	0.00	
2,595.00	0.00	0.00	2,595.00	0.00	0.00	0.00	0.00	0.00	0.00	
2,610.00	0.00	0.00	2,610.00	0.00	0.00	0.00	0.00	0.00	0.00	
2,625.00	0.00	0.00	2,625.00	0.00	0.00	0.00	0.00	0.00	0.00	
2,640.00	0.00	0.00	2,640.00	0.00	0.00	0.00	0.00	0.00	0.00	
2,655.00	0.00	0.00	2,655.00	0.00	0.00	0.00	0.00	0.00	0.00	
2,670.00	0.00	0.00	2,670.00	0.00	0.00	0.00	0.00	0.00	0.00	
2,685.00	0.00	0.00	2,685.00	0.00	0.00	0.00	0.00	0.00	0.00	
2,700.00	0.00	0.00	2,700.00	0.00	0.00	0.00	0.00	0.00	0.00	
2,715.00	0.00	0.00	2,715.00	0.00	0.00	0.00	0.00	0.00	0.00	
2,730.00	0.00	0.00	2,730.00	0.00	0.00	0.00	0.00	0.00	0.00	
2,745.00	0.00	0.00	2,745.00	0.00	0.00	0.00	0.00	0.00	0.00	
2,760.00	0.00	0.00	2,760.00	0.00	0.00	0.00	0.00	0.00	0.00	
2,775.00	0.00	0.00	2,775.00	0.00	0.00	0.00	0.00	0.00	0.00	
2,790.00	0.00	0.00	2,790.00	0.00	0.00	0.00	0.00	0.00	0.00	
2,805.00	0.00	0.00	2,805.00	0.00	0.00	0.00	0.00	0.00	0.00	
2,820.00	0.00	0.00	2,820.00	0.00	0.00	0.00	0.00	0.00	0.00	
2,835.00	0.00	0.00	2,835.00	0.00	0.00	0.00	0.00	0.00	0.00	
2,850.00	0.00	0.00	2,850.00	0.00	0.00	0.00	0.00	0.00	0.00	
2,865.00	0.00	0.00	2,865.00	0.00	0.00	0.00	0.00	0.00	0.00	
2,880.00	0.00	0.00	2,880.00	0.00	0.00	0.00	0.00	0.00	0.00	
2,895.00	0.00	0.00	2,895.00	0.00	0.00	0.00	0.00	0.00	0.00	
2,910.00	0.00	0.00	2,910.00	0.00	0.00	0.00	0.00	0.00	0.00	
2,925.00	0.00	0.00	2,925.00	0.00	0.00	0.00	0.00	0.00	0.00	
2,940.00	0.00	0.00	2,940.00	0.00	0.00	0.00	0.00	0.00	0.00	
2,955.00	0.00	0.00	2,955.00	0.00	0.00	0.00	0.00	0.00	0.00	
2,970.00	0.00	0.00	2,970.00	0.00	0.00	0.00	0.00	0.00	0.00	
2,985.00	0.00	0.00	2,985.00	0.00	0.00	0.00	0.00	0.00	0.00	
3,000.00	0.00	0.00	3,000.00	0.00	0.00	0.00	0.00	0.00	0.00	
3,015.00	0.30	76.98	3,015.00	0.01	0.04	-0.01	2.00	2.00	0.00	
3,030.00	0.60	76.98	3,030.00	0.04	0.15	-0.02	2.00	2.00	0.00	
3,045.00	0.90	76.98	3,045.00	0.08	0.34	-0.05	2.00	2.00	0.00	
3,060.00	1.20	76.98	3,060.00	0.14	0.61	-0.08	2.00	2.00	0.00	
3,075.00	1.50	76.98	3,074.99	0.22	0.96	-0.13	2.00	2.00	0.00	
3,090.00	1.80	76.98	3,089.99	0.32	1.38	-0.18	2.00	2.00	0.00	
3,105.00	2.10	76.98	3,104.98	0.43	1.87	-0.25	2.00	2.00	0.00	
3,120.00	2.40	76.98	3,119.96	0.57	2.45	-0.33	2.00	2.00	0.00	
3,135.00	2.70	76.98	3,134.95	0.72	3.10	-0.41	2.00	2.00	0.00	
3,150.00	3.00	76.98	3,149.93	0.88	3.83	-0.51	2.00	2.00	0.00	
3,165.00	3.30	76.98	3,164.91	1.07	4.63	-0.62	2.00	2.00	0.00	

ConocoPhillips

Planning Report

Database:	EDT 17 Permian Prod	Local Co-ordinate Reference:	Well _COLUMBUS FEDERAL COM 653H - Slot SLOT 7
Company:	DELAWARE BASIN EAST	TVD Reference:	KB @ 3362.00usft
Project:	LEA COUNT SOUTH WEST (NM-E)	MD Reference:	KB @ 3362.00usft
Site:	COLUMBUS FEDERAL PROJECT	North Reference:	Grid
Well:	_COLUMBUS FEDERAL COM 653H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OWB		
Design:	PWP0		

Planned Survey										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	
3,180.00	3.60	76.98	3,179.88	1.27	5.51	-0.74	2.00	2.00	0.00	
3,195.00	3.90	76.98	3,194.85	1.49	6.46	-0.87	2.00	2.00	0.00	
3,210.00	4.20	76.98	3,209.81	1.73	7.50	-1.00	2.00	2.00	0.00	
3,225.00	4.50	76.98	3,224.77	1.99	8.60	-1.15	2.00	2.00	0.00	
3,240.00	4.80	76.98	3,239.72	2.26	9.79	-1.31	2.00	2.00	0.00	
3,255.00	5.10	76.98	3,254.66	2.56	11.05	-1.48	2.00	2.00	0.00	
3,270.00	5.40	76.98	3,269.60	2.86	12.39	-1.66	2.00	2.00	0.00	
3,285.00	5.70	76.98	3,284.53	3.19	13.80	-1.85	2.00	2.00	0.00	
3,300.00	6.00	76.98	3,299.45	3.54	15.29	-2.05	2.00	2.00	0.00	
3,315.00	6.30	76.98	3,314.37	3.90	16.86	-2.26	2.00	2.00	0.00	
3,330.00	6.60	76.98	3,329.27	4.28	18.50	-2.48	2.00	2.00	0.00	
3,345.00	6.90	76.98	3,344.17	4.68	20.22	-2.71	2.00	2.00	0.00	
3,360.00	7.20	76.98	3,359.05	5.09	22.01	-2.95	2.00	2.00	0.00	
3,375.00	7.50	76.98	3,373.93	5.52	23.88	-3.20	2.00	2.00	0.00	
3,383.28	7.67	76.98	3,382.14	5.77	24.94	-3.34	2.00	2.00	0.00	
3,390.00	7.67	76.98	3,388.80	5.97	25.82	-3.46	0.00	0.00	0.00	
3,405.00	7.67	76.98	3,403.66	6.42	27.77	-3.72	0.00	0.00	0.00	
3,420.00	7.67	76.98	3,418.53	6.87	29.72	-3.98	0.00	0.00	0.00	
3,435.00	7.67	76.98	3,433.40	7.32	31.66	-4.24	0.00	0.00	0.00	
3,450.00	7.67	76.98	3,448.26	7.77	33.61	-4.50	0.00	0.00	0.00	
3,465.00	7.67	76.98	3,463.13	8.23	35.56	-4.76	0.00	0.00	0.00	
3,480.00	7.67	76.98	3,477.99	8.68	37.51	-5.02	0.00	0.00	0.00	
3,495.00	7.67	76.98	3,492.86	9.13	39.46	-5.28	0.00	0.00	0.00	
3,510.00	7.67	76.98	3,507.73	9.58	41.41	-5.54	0.00	0.00	0.00	
3,525.00	7.67	76.98	3,522.59	10.03	43.36	-5.81	0.00	0.00	0.00	
3,540.00	7.67	76.98	3,537.46	10.48	45.31	-6.07	0.00	0.00	0.00	
3,555.00	7.67	76.98	3,552.32	10.93	47.26	-6.33	0.00	0.00	0.00	
3,570.00	7.67	76.98	3,567.19	11.38	49.21	-6.59	0.00	0.00	0.00	
3,585.00	7.67	76.98	3,582.05	11.83	51.16	-6.85	0.00	0.00	0.00	
3,600.00	7.67	76.98	3,596.92	12.28	53.11	-7.11	0.00	0.00	0.00	
3,615.00	7.67	76.98	3,611.79	12.73	55.06	-7.37	0.00	0.00	0.00	
3,630.00	7.67	76.98	3,626.65	13.18	57.01	-7.63	0.00	0.00	0.00	
3,645.00	7.67	76.98	3,641.52	13.64	58.96	-7.89	0.00	0.00	0.00	
3,660.00	7.67	76.98	3,656.38	14.09	60.91	-8.15	0.00	0.00	0.00	
3,675.00	7.67	76.98	3,671.25	14.54	62.86	-8.42	0.00	0.00	0.00	
3,690.00	7.67	76.98	3,686.12	14.99	64.80	-8.68	0.00	0.00	0.00	
3,705.00	7.67	76.98	3,700.98	15.44	66.75	-8.94	0.00	0.00	0.00	
3,720.00	7.67	76.98	3,715.85	15.89	68.70	-9.20	0.00	0.00	0.00	
3,735.00	7.67	76.98	3,730.71	16.34	70.65	-9.46	0.00	0.00	0.00	
3,750.00	7.67	76.98	3,745.58	16.79	72.60	-9.72	0.00	0.00	0.00	
3,765.00	7.67	76.98	3,760.45	17.24	74.55	-9.98	0.00	0.00	0.00	
3,780.00	7.67	76.98	3,775.31	17.69	76.50	-10.24	0.00	0.00	0.00	
3,795.00	7.67	76.98	3,790.18	18.14	78.45	-10.50	0.00	0.00	0.00	
3,810.00	7.67	76.98	3,805.04	18.59	80.40	-10.77	0.00	0.00	0.00	
3,825.00	7.67	76.98	3,819.91	19.05	82.35	-11.03	0.00	0.00	0.00	
3,840.00	7.67	76.98	3,834.78	19.50	84.30	-11.29	0.00	0.00	0.00	
3,855.00	7.67	76.98	3,849.64	19.95	86.25	-11.55	0.00	0.00	0.00	
3,870.00	7.67	76.98	3,864.51	20.40	88.20	-11.81	0.00	0.00	0.00	
3,885.00	7.67	76.98	3,879.37	20.85	90.15	-12.07	0.00	0.00	0.00	
3,900.00	7.67	76.98	3,894.24	21.30	92.10	-12.33	0.00	0.00	0.00	
3,915.00	7.67	76.98	3,909.11	21.75	94.05	-12.59	0.00	0.00	0.00	
3,930.00	7.67	76.98	3,923.97	22.20	96.00	-12.85	0.00	0.00	0.00	
3,945.00	7.67	76.98	3,938.84	22.65	97.95	-13.11	0.00	0.00	0.00	

ConocoPhillips Planning Report

Database:	EDT 17 Permian Prod	Local Co-ordinate Reference:	Well _ COLUMBUS FEDERAL COM 653H - Slot SLOT 7
Company:	DELAWARE BASIN EAST	TVD Reference:	KB @ 3362.00usft
Project:	LEA COUNT SOUTH WEST (NM-E)	MD Reference:	KB @ 3362.00usft
Site:	COLUMBUS FEDERAL PROJECT	North Reference:	Grid
Well:	_COLUMBUS FEDERAL COM 653H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OWB		
Design:	PWP0		

Planned Survey										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	
3,960.00	7.67	76.98	3,953.70	23.10	99.89	-13.38	0.00	0.00	0.00	
3,975.00	7.67	76.98	3,968.57	23.55	101.84	-13.64	0.00	0.00	0.00	
3,990.00	7.67	76.98	3,983.44	24.01	103.79	-13.90	0.00	0.00	0.00	
4,005.00	7.67	76.98	3,998.30	24.46	105.74	-14.16	0.00	0.00	0.00	
4,020.00	7.67	76.98	4,013.17	24.91	107.69	-14.42	0.00	0.00	0.00	
4,035.00	7.67	76.98	4,028.03	25.36	109.64	-14.68	0.00	0.00	0.00	
4,050.00	7.67	76.98	4,042.90	25.81	111.59	-14.94	0.00	0.00	0.00	
4,065.00	7.67	76.98	4,057.77	26.26	113.54	-15.20	0.00	0.00	0.00	
4,080.00	7.67	76.98	4,072.63	26.71	115.49	-15.46	0.00	0.00	0.00	
4,095.00	7.67	76.98	4,087.50	27.16	117.44	-15.72	0.00	0.00	0.00	
4,110.00	7.67	76.98	4,102.36	27.61	119.39	-15.99	0.00	0.00	0.00	
4,125.00	7.67	76.98	4,117.23	28.06	121.34	-16.25	0.00	0.00	0.00	
4,140.00	7.67	76.98	4,132.10	28.51	123.29	-16.51	0.00	0.00	0.00	
4,155.00	7.67	76.98	4,146.96	28.96	125.24	-16.77	0.00	0.00	0.00	
4,170.00	7.67	76.98	4,161.83	29.42	127.19	-17.03	0.00	0.00	0.00	
4,185.00	7.67	76.98	4,176.69	29.87	129.14	-17.29	0.00	0.00	0.00	
4,200.00	7.67	76.98	4,191.56	30.32	131.09	-17.55	0.00	0.00	0.00	
4,215.00	7.67	76.98	4,206.42	30.77	133.03	-17.81	0.00	0.00	0.00	
4,230.00	7.67	76.98	4,221.29	31.22	134.98	-18.07	0.00	0.00	0.00	
4,245.00	7.67	76.98	4,236.16	31.67	136.93	-18.33	0.00	0.00	0.00	
4,260.00	7.67	76.98	4,251.02	32.12	138.88	-18.60	0.00	0.00	0.00	
4,275.00	7.67	76.98	4,265.89	32.57	140.83	-18.86	0.00	0.00	0.00	
4,290.00	7.67	76.98	4,280.75	33.02	142.78	-19.12	0.00	0.00	0.00	
4,305.00	7.67	76.98	4,295.62	33.47	144.73	-19.38	0.00	0.00	0.00	
4,320.00	7.67	76.98	4,310.49	33.92	146.68	-19.64	0.00	0.00	0.00	
4,335.00	7.67	76.98	4,325.35	34.37	148.63	-19.90	0.00	0.00	0.00	
4,350.00	7.67	76.98	4,340.22	34.83	150.58	-20.16	0.00	0.00	0.00	
4,365.00	7.67	76.98	4,355.08	35.28	152.53	-20.42	0.00	0.00	0.00	
4,380.00	7.67	76.98	4,369.95	35.73	154.48	-20.68	0.00	0.00	0.00	
4,395.00	7.67	76.98	4,384.82	36.18	156.43	-20.94	0.00	0.00	0.00	
4,410.00	7.67	76.98	4,399.68	36.63	158.38	-21.21	0.00	0.00	0.00	
4,425.00	7.67	76.98	4,414.55	37.08	160.33	-21.47	0.00	0.00	0.00	
4,440.00	7.67	76.98	4,429.41	37.53	162.28	-21.73	0.00	0.00	0.00	
4,455.00	7.67	76.98	4,444.28	37.98	164.23	-21.99	0.00	0.00	0.00	
4,470.00	7.67	76.98	4,459.15	38.43	166.18	-22.25	0.00	0.00	0.00	
4,485.00	7.67	76.98	4,474.01	38.88	168.12	-22.51	0.00	0.00	0.00	
4,500.00	7.67	76.98	4,488.88	39.33	170.07	-22.77	0.00	0.00	0.00	
4,515.00	7.67	76.98	4,503.74	39.79	172.02	-23.03	0.00	0.00	0.00	
4,530.00	7.67	76.98	4,518.61	40.24	173.97	-23.29	0.00	0.00	0.00	
4,545.00	7.67	76.98	4,533.48	40.69	175.92	-23.55	0.00	0.00	0.00	
4,560.00	7.67	76.98	4,548.34	41.14	177.87	-23.82	0.00	0.00	0.00	
4,575.00	7.67	76.98	4,563.21	41.59	179.82	-24.08	0.00	0.00	0.00	
4,590.00	7.67	76.98	4,578.07	42.04	181.77	-24.34	0.00	0.00	0.00	
4,605.00	7.67	76.98	4,592.94	42.49	183.72	-24.60	0.00	0.00	0.00	
4,620.00	7.67	76.98	4,607.81	42.94	185.67	-24.86	0.00	0.00	0.00	
4,635.00	7.67	76.98	4,622.67	43.39	187.62	-25.12	0.00	0.00	0.00	
4,650.00	7.67	76.98	4,637.54	43.84	189.57	-25.38	0.00	0.00	0.00	
4,665.00	7.67	76.98	4,652.40	44.29	191.52	-25.64	0.00	0.00	0.00	
4,680.00	7.67	76.98	4,667.27	44.74	193.47	-25.90	0.00	0.00	0.00	
4,695.00	7.67	76.98	4,682.14	45.20	195.42	-26.17	0.00	0.00	0.00	
4,710.00	7.67	76.98	4,697.00	45.65	197.37	-26.43	0.00	0.00	0.00	
4,725.00	7.67	76.98	4,711.87	46.10	199.32	-26.69	0.00	0.00	0.00	
4,740.00	7.67	76.98	4,726.73	46.55	201.27	-26.95	0.00	0.00	0.00	

ConocoPhillips

Planning Report

Database:	EDT 17 Permian Prod	Local Co-ordinate Reference:	Well _COLUMBUS FEDERAL COM 653H - Slot SLOT 7
Company:	DELAWARE BASIN EAST	TVD Reference:	KB @ 3362.00usft
Project:	LEA COUNT SOUTH WEST (NM-E)	MD Reference:	KB @ 3362.00usft
Site:	COLUMBUS FEDERAL PROJECT	North Reference:	Grid
Well:	_COLUMBUS FEDERAL COM 653H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OWB		
Design:	PWP0		

Planned Survey										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	
4,755.00	7.67	76.98	4,741.60	47.00	203.21	-27.21	0.00	0.00	0.00	
4,770.00	7.67	76.98	4,756.46	47.45	205.16	-27.47	0.00	0.00	0.00	
4,785.00	7.67	76.98	4,771.33	47.90	207.11	-27.73	0.00	0.00	0.00	
4,800.00	7.67	76.98	4,786.20	48.35	209.06	-27.99	0.00	0.00	0.00	
4,815.00	7.67	76.98	4,801.06	48.80	211.01	-28.25	0.00	0.00	0.00	
4,830.00	7.67	76.98	4,815.93	49.25	212.96	-28.51	0.00	0.00	0.00	
4,845.00	7.67	76.98	4,830.79	49.70	214.91	-28.78	0.00	0.00	0.00	
4,860.00	7.67	76.98	4,845.66	50.15	216.86	-29.04	0.00	0.00	0.00	
4,875.00	7.67	76.98	4,860.53	50.61	218.81	-29.30	0.00	0.00	0.00	
4,890.00	7.67	76.98	4,875.39	51.06	220.76	-29.56	0.00	0.00	0.00	
4,905.00	7.67	76.98	4,890.26	51.51	222.71	-29.82	0.00	0.00	0.00	
4,920.00	7.67	76.98	4,905.12	51.96	224.66	-30.08	0.00	0.00	0.00	
4,935.00	7.67	76.98	4,919.99	52.41	226.61	-30.34	0.00	0.00	0.00	
4,950.00	7.67	76.98	4,934.86	52.86	228.56	-30.60	0.00	0.00	0.00	
4,965.00	7.67	76.98	4,949.72	53.31	230.51	-30.86	0.00	0.00	0.00	
4,980.00	7.67	76.98	4,964.59	53.76	232.46	-31.12	0.00	0.00	0.00	
4,995.00	7.67	76.98	4,979.45	54.21	234.41	-31.39	0.00	0.00	0.00	
5,010.00	7.67	76.98	4,994.32	54.66	236.35	-31.65	0.00	0.00	0.00	
5,025.00	7.67	76.98	5,009.19	55.11	238.30	-31.91	0.00	0.00	0.00	
5,040.00	7.67	76.98	5,024.05	55.57	240.25	-32.17	0.00	0.00	0.00	
5,055.00	7.67	76.98	5,038.92	56.02	242.20	-32.43	0.00	0.00	0.00	
5,070.00	7.67	76.98	5,053.78	56.47	244.15	-32.69	0.00	0.00	0.00	
5,085.00	7.67	76.98	5,068.65	56.92	246.10	-32.95	0.00	0.00	0.00	
5,100.00	7.67	76.98	5,083.52	57.37	248.05	-33.21	0.00	0.00	0.00	
5,115.00	7.67	76.98	5,098.38	57.82	250.00	-33.47	0.00	0.00	0.00	
5,130.00	7.67	76.98	5,113.25	58.27	251.95	-33.73	0.00	0.00	0.00	
5,145.00	7.67	76.98	5,128.11	58.72	253.90	-34.00	0.00	0.00	0.00	
5,160.00	7.67	76.98	5,142.98	59.17	255.85	-34.26	0.00	0.00	0.00	
5,175.00	7.67	76.98	5,157.85	59.62	257.80	-34.52	0.00	0.00	0.00	
5,190.00	7.67	76.98	5,172.71	60.07	259.75	-34.78	0.00	0.00	0.00	
5,205.00	7.67	76.98	5,187.58	60.52	261.70	-35.04	0.00	0.00	0.00	
5,220.00	7.67	76.98	5,202.44	60.98	263.65	-35.30	0.00	0.00	0.00	
5,235.00	7.67	76.98	5,217.31	61.43	265.60	-35.56	0.00	0.00	0.00	
5,250.00	7.67	76.98	5,232.18	61.88	267.55	-35.82	0.00	0.00	0.00	
5,265.00	7.67	76.98	5,247.04	62.33	269.50	-36.08	0.00	0.00	0.00	
5,280.00	7.67	76.98	5,261.91	62.78	271.44	-36.34	0.00	0.00	0.00	
5,295.00	7.67	76.98	5,276.77	63.23	273.39	-36.61	0.00	0.00	0.00	
5,310.00	7.67	76.98	5,291.64	63.68	275.34	-36.87	0.00	0.00	0.00	
5,325.00	7.67	76.98	5,306.51	64.13	277.29	-37.13	0.00	0.00	0.00	
5,340.00	7.67	76.98	5,321.37	64.58	279.24	-37.39	0.00	0.00	0.00	
5,355.00	7.67	76.98	5,336.24	65.03	281.19	-37.65	0.00	0.00	0.00	
5,370.00	7.67	76.98	5,351.10	65.48	283.14	-37.91	0.00	0.00	0.00	
5,385.00	7.67	76.98	5,365.97	65.94	285.09	-38.17	0.00	0.00	0.00	
5,400.00	7.67	76.98	5,380.83	66.39	287.04	-38.43	0.00	0.00	0.00	
5,415.00	7.67	76.98	5,395.70	66.84	288.99	-38.69	0.00	0.00	0.00	
5,430.00	7.67	76.98	5,410.57	67.29	290.94	-38.95	0.00	0.00	0.00	
5,445.00	7.67	76.98	5,425.43	67.74	292.89	-39.22	0.00	0.00	0.00	
5,460.00	7.67	76.98	5,440.30	68.19	294.84	-39.48	0.00	0.00	0.00	
5,475.00	7.67	76.98	5,455.16	68.64	296.79	-39.74	0.00	0.00	0.00	
5,490.00	7.67	76.98	5,470.03	69.09	298.74	-40.00	0.00	0.00	0.00	
5,505.00	7.67	76.98	5,484.90	69.54	300.69	-40.26	0.00	0.00	0.00	
5,520.00	7.67	76.98	5,499.76	69.99	302.64	-40.52	0.00	0.00	0.00	
5,535.00	7.67	76.98	5,514.63	70.44	304.58	-40.78	0.00	0.00	0.00	

ConocoPhillips

Planning Report

Database:	EDT 17 Permian Prod	Local Co-ordinate Reference:	Well _ COLUMBUS FEDERAL COM 653H - Slot SLOT 7
Company:	DELAWARE BASIN EAST	TVD Reference:	KB @ 3362.00usft
Project:	LEA COUNT SOUTH WEST (NM-E)	MD Reference:	KB @ 3362.00usft
Site:	COLUMBUS FEDERAL PROJECT	North Reference:	Grid
Well:	_ COLUMBUS FEDERAL COM 653H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OWB		
Design:	PWP0		

Planned Survey										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	
5,550.00	7.67	76.98	5,529.49	70.89	306.53	-41.04	0.00	0.00	0.00	
5,565.00	7.67	76.98	5,544.36	71.35	308.48	-41.30	0.00	0.00	0.00	
5,580.00	7.67	76.98	5,559.23	71.80	310.43	-41.57	0.00	0.00	0.00	
5,595.00	7.67	76.98	5,574.09	72.25	312.38	-41.83	0.00	0.00	0.00	
5,610.00	7.67	76.98	5,588.96	72.70	314.33	-42.09	0.00	0.00	0.00	
5,625.00	7.67	76.98	5,603.82	73.15	316.28	-42.35	0.00	0.00	0.00	
5,640.00	7.67	76.98	5,618.69	73.60	318.23	-42.61	0.00	0.00	0.00	
5,655.00	7.67	76.98	5,633.56	74.05	320.18	-42.87	0.00	0.00	0.00	
5,670.00	7.67	76.98	5,648.42	74.50	322.13	-43.13	0.00	0.00	0.00	
5,685.00	7.67	76.98	5,663.29	74.95	324.08	-43.39	0.00	0.00	0.00	
5,700.00	7.67	76.98	5,678.15	75.40	326.03	-43.65	0.00	0.00	0.00	
5,715.00	7.67	76.98	5,693.02	75.85	327.98	-43.91	0.00	0.00	0.00	
5,730.00	7.67	76.98	5,707.89	76.30	329.93	-44.18	0.00	0.00	0.00	
5,745.00	7.67	76.98	5,722.75	76.76	331.88	-44.44	0.00	0.00	0.00	
5,760.00	7.67	76.98	5,737.62	77.21	333.83	-44.70	0.00	0.00	0.00	
5,775.00	7.67	76.98	5,752.48	77.66	335.78	-44.96	0.00	0.00	0.00	
5,790.00	7.67	76.98	5,767.35	78.11	337.73	-45.22	0.00	0.00	0.00	
5,805.00	7.67	76.98	5,782.22	78.56	339.67	-45.48	0.00	0.00	0.00	
5,820.00	7.67	76.98	5,797.08	79.01	341.62	-45.74	0.00	0.00	0.00	
5,835.00	7.67	76.98	5,811.95	79.46	343.57	-46.00	0.00	0.00	0.00	
5,850.00	7.67	76.98	5,826.81	79.91	345.52	-46.26	0.00	0.00	0.00	
5,865.00	7.67	76.98	5,841.68	80.36	347.47	-46.52	0.00	0.00	0.00	
5,880.00	7.67	76.98	5,856.55	80.81	349.42	-46.79	0.00	0.00	0.00	
5,895.00	7.67	76.98	5,871.41	81.26	351.37	-47.05	0.00	0.00	0.00	
5,910.00	7.67	76.98	5,886.28	81.72	353.32	-47.31	0.00	0.00	0.00	
5,925.00	7.67	76.98	5,901.14	82.17	355.27	-47.57	0.00	0.00	0.00	
5,940.00	7.67	76.98	5,916.01	82.62	357.22	-47.83	0.00	0.00	0.00	
5,955.00	7.67	76.98	5,930.87	83.07	359.17	-48.09	0.00	0.00	0.00	
5,970.00	7.67	76.98	5,945.74	83.52	361.12	-48.35	0.00	0.00	0.00	
5,985.00	7.67	76.98	5,960.61	83.97	363.07	-48.61	0.00	0.00	0.00	
6,000.00	7.67	76.98	5,975.47	84.42	365.02	-48.87	0.00	0.00	0.00	
6,015.00	7.67	76.98	5,990.34	84.87	366.97	-49.13	0.00	0.00	0.00	
6,030.00	7.67	76.98	6,005.20	85.32	368.92	-49.40	0.00	0.00	0.00	
6,045.00	7.67	76.98	6,020.07	85.77	370.87	-49.66	0.00	0.00	0.00	
6,060.00	7.67	76.98	6,034.94	86.22	372.82	-49.92	0.00	0.00	0.00	
6,075.00	7.67	76.98	6,049.80	86.67	374.76	-50.18	0.00	0.00	0.00	
6,090.00	7.67	76.98	6,064.67	87.13	376.71	-50.44	0.00	0.00	0.00	
6,105.00	7.67	76.98	6,079.53	87.58	378.66	-50.70	0.00	0.00	0.00	
6,120.00	7.67	76.98	6,094.40	88.03	380.61	-50.96	0.00	0.00	0.00	
6,135.00	7.67	76.98	6,109.27	88.48	382.56	-51.22	0.00	0.00	0.00	
6,150.00	7.67	76.98	6,124.13	88.93	384.51	-51.48	0.00	0.00	0.00	
6,165.00	7.67	76.98	6,139.00	89.38	386.46	-51.74	0.00	0.00	0.00	
6,180.00	7.67	76.98	6,153.86	89.83	388.41	-52.01	0.00	0.00	0.00	
6,195.00	7.67	76.98	6,168.73	90.28	390.36	-52.27	0.00	0.00	0.00	
6,210.00	7.67	76.98	6,183.60	90.73	392.31	-52.53	0.00	0.00	0.00	
6,225.00	7.67	76.98	6,198.46	91.18	394.26	-52.79	0.00	0.00	0.00	
6,240.00	7.67	76.98	6,213.33	91.63	396.21	-53.05	0.00	0.00	0.00	
6,255.00	7.67	76.98	6,228.19	92.08	398.16	-53.31	0.00	0.00	0.00	
6,270.00	7.67	76.98	6,243.06	92.54	400.11	-53.57	0.00	0.00	0.00	
6,285.00	7.67	76.98	6,257.93	92.99	402.06	-53.83	0.00	0.00	0.00	
6,300.00	7.67	76.98	6,272.79	93.44	404.01	-54.09	0.00	0.00	0.00	
6,315.00	7.67	76.98	6,287.66	93.89	405.96	-54.35	0.00	0.00	0.00	
6,330.00	7.67	76.98	6,302.52	94.34	407.90	-54.62	0.00	0.00	0.00	

ConocoPhillips Planning Report

Database:	EDT 17 Permian Prod	Local Co-ordinate Reference:	Well _ COLUMBUS FEDERAL COM 653H - Slot SLOT 7
Company:	DELAWARE BASIN EAST	TVD Reference:	KB @ 3362.00usft
Project:	LEA COUNT SOUTH WEST (NM-E)	MD Reference:	KB @ 3362.00usft
Site:	COLUMBUS FEDERAL PROJECT	North Reference:	Grid
Well:	_COLUMBUS FEDERAL COM 653H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OWB		
Design:	PWP0		

Planned Survey										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	
6,345.00	7.67	76.98	6,317.39	94.79	409.85	-54.88	0.00	0.00	0.00	
6,360.00	7.67	76.98	6,332.26	95.24	411.80	-55.14	0.00	0.00	0.00	
6,375.00	7.67	76.98	6,347.12	95.69	413.75	-55.40	0.00	0.00	0.00	
6,390.00	7.67	76.98	6,361.99	96.14	415.70	-55.66	0.00	0.00	0.00	
6,405.00	7.67	76.98	6,376.85	96.59	417.65	-55.92	0.00	0.00	0.00	
6,420.00	7.67	76.98	6,391.72	97.04	419.60	-56.18	0.00	0.00	0.00	
6,435.00	7.67	76.98	6,406.59	97.50	421.55	-56.44	0.00	0.00	0.00	
6,450.00	7.67	76.98	6,421.45	97.95	423.50	-56.70	0.00	0.00	0.00	
6,465.00	7.67	76.98	6,436.32	98.40	425.45	-56.97	0.00	0.00	0.00	
6,480.00	7.67	76.98	6,451.18	98.85	427.40	-57.23	0.00	0.00	0.00	
6,495.00	7.67	76.98	6,466.05	99.30	429.35	-57.49	0.00	0.00	0.00	
6,510.00	7.67	76.98	6,480.92	99.75	431.30	-57.75	0.00	0.00	0.00	
6,525.00	7.67	76.98	6,495.78	100.20	433.25	-58.01	0.00	0.00	0.00	
6,540.00	7.67	76.98	6,510.65	100.65	435.20	-58.27	0.00	0.00	0.00	
6,555.00	7.67	76.98	6,525.51	101.10	437.15	-58.53	0.00	0.00	0.00	
6,570.00	7.67	76.98	6,540.38	101.55	439.10	-58.79	0.00	0.00	0.00	
6,585.00	7.67	76.98	6,555.24	102.00	441.05	-59.05	0.00	0.00	0.00	
6,600.00	7.67	76.98	6,570.11	102.45	442.99	-59.31	0.00	0.00	0.00	
6,615.00	7.67	76.98	6,584.98	102.91	444.94	-59.58	0.00	0.00	0.00	
6,630.00	7.67	76.98	6,599.84	103.36	446.89	-59.84	0.00	0.00	0.00	
6,645.00	7.67	76.98	6,614.71	103.81	448.84	-60.10	0.00	0.00	0.00	
6,660.00	7.67	76.98	6,629.57	104.26	450.79	-60.36	0.00	0.00	0.00	
6,675.00	7.67	76.98	6,644.44	104.71	452.74	-60.62	0.00	0.00	0.00	
6,690.00	7.67	76.98	6,659.31	105.16	454.69	-60.88	0.00	0.00	0.00	
6,705.00	7.67	76.98	6,674.17	105.61	456.64	-61.14	0.00	0.00	0.00	
6,720.00	7.67	76.98	6,689.04	106.06	458.59	-61.40	0.00	0.00	0.00	
6,735.00	7.67	76.98	6,703.90	106.51	460.54	-61.66	0.00	0.00	0.00	
6,750.00	7.67	76.98	6,718.77	106.96	462.49	-61.92	0.00	0.00	0.00	
6,765.00	7.67	76.98	6,733.64	107.41	464.44	-62.19	0.00	0.00	0.00	
6,780.00	7.67	76.98	6,748.50	107.87	466.39	-62.45	0.00	0.00	0.00	
6,795.00	7.67	76.98	6,763.37	108.32	468.34	-62.71	0.00	0.00	0.00	
6,810.00	7.67	76.98	6,778.23	108.77	470.29	-62.97	0.00	0.00	0.00	
6,825.00	7.67	76.98	6,793.10	109.22	472.24	-63.23	0.00	0.00	0.00	
6,840.00	7.67	76.98	6,807.97	109.67	474.19	-63.49	0.00	0.00	0.00	
6,855.00	7.67	76.98	6,822.83	110.12	476.13	-63.75	0.00	0.00	0.00	
6,870.00	7.67	76.98	6,837.70	110.57	478.08	-64.01	0.00	0.00	0.00	
6,885.00	7.67	76.98	6,852.56	111.02	480.03	-64.27	0.00	0.00	0.00	
6,900.00	7.67	76.98	6,867.43	111.47	481.98	-64.53	0.00	0.00	0.00	
6,915.00	7.67	76.98	6,882.30	111.92	483.93	-64.80	0.00	0.00	0.00	
6,930.00	7.67	76.98	6,897.16	112.37	485.88	-65.06	0.00	0.00	0.00	
6,945.00	7.67	76.98	6,912.03	112.82	487.83	-65.32	0.00	0.00	0.00	
6,960.00	7.67	76.98	6,926.89	113.28	489.78	-65.58	0.00	0.00	0.00	
6,975.00	7.67	76.98	6,941.76	113.73	491.73	-65.84	0.00	0.00	0.00	
6,990.00	7.67	76.98	6,956.63	114.18	493.68	-66.10	0.00	0.00	0.00	
7,005.00	7.67	76.98	6,971.49	114.63	495.63	-66.36	0.00	0.00	0.00	
7,020.00	7.67	76.98	6,986.36	115.08	497.58	-66.62	0.00	0.00	0.00	
7,035.00	7.67	76.98	7,001.22	115.53	499.53	-66.88	0.00	0.00	0.00	
7,050.00	7.67	76.98	7,016.09	115.98	501.48	-67.14	0.00	0.00	0.00	
7,065.00	7.67	76.98	7,030.96	116.43	503.43	-67.41	0.00	0.00	0.00	
7,080.00	7.67	76.98	7,045.82	116.88	505.38	-67.67	0.00	0.00	0.00	
7,095.00	7.67	76.98	7,060.69	117.33	507.33	-67.93	0.00	0.00	0.00	
7,110.00	7.67	76.98	7,075.55	117.78	509.28	-68.19	0.00	0.00	0.00	
7,125.00	7.67	76.98	7,090.42	118.23	511.22	-68.45	0.00	0.00	0.00	

ConocoPhillips

Planning Report

Database:	EDT 17 Permian Prod	Local Co-ordinate Reference:	Well _COLUMBUS FEDERAL COM 653H - Slot SLOT 7
Company:	DELAWARE BASIN EAST	TVD Reference:	KB @ 3362.00usft
Project:	LEA COUNT SOUTH WEST (NM-E)	MD Reference:	KB @ 3362.00usft
Site:	COLUMBUS FEDERAL PROJECT	North Reference:	Grid
Well:	_COLUMBUS FEDERAL COM 653H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OWB		
Design:	PWP0		

Planned Survey										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	
7,140.00	7.67	76.98	7,105.28	118.69	513.17	-68.71	0.00	0.00	0.00	
7,155.00	7.67	76.98	7,120.15	119.14	515.12	-68.97	0.00	0.00	0.00	
7,170.00	7.67	76.98	7,135.02	119.59	517.07	-69.23	0.00	0.00	0.00	
7,185.00	7.67	76.98	7,149.88	120.04	519.02	-69.49	0.00	0.00	0.00	
7,200.00	7.67	76.98	7,164.75	120.49	520.97	-69.76	0.00	0.00	0.00	
7,215.00	7.67	76.98	7,179.61	120.94	522.92	-70.02	0.00	0.00	0.00	
7,230.00	7.67	76.98	7,194.48	121.39	524.87	-70.28	0.00	0.00	0.00	
7,245.00	7.67	76.98	7,209.35	121.84	526.82	-70.54	0.00	0.00	0.00	
7,260.00	7.67	76.98	7,224.21	122.29	528.77	-70.80	0.00	0.00	0.00	
7,275.00	7.67	76.98	7,239.08	122.74	530.72	-71.06	0.00	0.00	0.00	
7,290.00	7.67	76.98	7,253.94	123.19	532.67	-71.32	0.00	0.00	0.00	
7,305.00	7.67	76.98	7,268.81	123.65	534.62	-71.58	0.00	0.00	0.00	
7,320.00	7.67	76.98	7,283.68	124.10	536.57	-71.84	0.00	0.00	0.00	
7,335.00	7.67	76.98	7,298.54	124.55	538.52	-72.10	0.00	0.00	0.00	
7,350.00	7.67	76.98	7,313.41	125.00	540.47	-72.37	0.00	0.00	0.00	
7,365.00	7.67	76.98	7,328.27	125.45	542.42	-72.63	0.00	0.00	0.00	
7,380.00	7.67	76.98	7,343.14	125.90	544.37	-72.89	0.00	0.00	0.00	
7,395.00	7.67	76.98	7,358.01	126.35	546.31	-73.15	0.00	0.00	0.00	
7,410.00	7.67	76.98	7,372.87	126.80	548.26	-73.41	0.00	0.00	0.00	
7,425.00	7.67	76.98	7,387.74	127.25	550.21	-73.67	0.00	0.00	0.00	
7,440.00	7.67	76.98	7,402.60	127.70	552.16	-73.93	0.00	0.00	0.00	
7,455.00	7.67	76.98	7,417.47	128.15	554.11	-74.19	0.00	0.00	0.00	
7,470.00	7.67	76.98	7,432.34	128.60	556.06	-74.45	0.00	0.00	0.00	
7,485.00	7.67	76.98	7,447.20	129.06	558.01	-74.71	0.00	0.00	0.00	
7,500.00	7.67	76.98	7,462.07	129.51	559.96	-74.98	0.00	0.00	0.00	
7,515.00	7.67	76.98	7,476.93	129.96	561.91	-75.24	0.00	0.00	0.00	
7,530.00	7.67	76.98	7,491.80	130.41	563.86	-75.50	0.00	0.00	0.00	
7,545.00	7.67	76.98	7,506.67	130.86	565.81	-75.76	0.00	0.00	0.00	
7,560.00	7.67	76.98	7,521.53	131.31	567.76	-76.02	0.00	0.00	0.00	
7,575.00	7.67	76.98	7,536.40	131.76	569.71	-76.28	0.00	0.00	0.00	
7,590.00	7.67	76.98	7,551.26	132.21	571.66	-76.54	0.00	0.00	0.00	
7,605.00	7.67	76.98	7,566.13	132.66	573.61	-76.80	0.00	0.00	0.00	
7,620.00	7.67	76.98	7,581.00	133.11	575.56	-77.06	0.00	0.00	0.00	
7,635.00	7.67	76.98	7,595.86	133.56	577.51	-77.32	0.00	0.00	0.00	
7,650.00	7.67	76.98	7,610.73	134.01	579.45	-77.59	0.00	0.00	0.00	
7,665.00	7.67	76.98	7,625.59	134.47	581.40	-77.85	0.00	0.00	0.00	
7,680.00	7.67	76.98	7,640.46	134.92	583.35	-78.11	0.00	0.00	0.00	
7,695.00	7.67	76.98	7,655.33	135.37	585.30	-78.37	0.00	0.00	0.00	
7,710.00	7.67	76.98	7,670.19	135.82	587.25	-78.63	0.00	0.00	0.00	
7,725.00	7.67	76.98	7,685.06	136.27	589.20	-78.89	0.00	0.00	0.00	
7,740.00	7.67	76.98	7,699.92	136.72	591.15	-79.15	0.00	0.00	0.00	
7,755.00	7.67	76.98	7,714.79	137.17	593.10	-79.41	0.00	0.00	0.00	
7,770.00	7.67	76.98	7,729.65	137.62	595.05	-79.67	0.00	0.00	0.00	
7,785.00	7.67	76.98	7,744.52	138.07	597.00	-79.93	0.00	0.00	0.00	
7,800.00	7.67	76.98	7,759.39	138.52	598.95	-80.20	0.00	0.00	0.00	
7,815.00	7.67	76.98	7,774.25	138.97	600.90	-80.46	0.00	0.00	0.00	
7,830.00	7.67	76.98	7,789.12	139.43	602.85	-80.72	0.00	0.00	0.00	
7,845.00	7.67	76.98	7,803.98	139.88	604.80	-80.98	0.00	0.00	0.00	
7,860.00	7.67	76.98	7,818.85	140.33	606.75	-81.24	0.00	0.00	0.00	
7,875.00	7.67	76.98	7,833.72	140.78	608.70	-81.50	0.00	0.00	0.00	
7,890.00	7.67	76.98	7,848.58	141.23	610.65	-81.76	0.00	0.00	0.00	
7,905.00	7.67	76.98	7,863.45	141.68	612.60	-82.02	0.00	0.00	0.00	
7,920.00	7.67	76.98	7,878.31	142.13	614.54	-82.28	0.00	0.00	0.00	

ConocoPhillips

Planning Report

Database:	EDT 17 Permian Prod	Local Co-ordinate Reference:	Well _COLUMBUS FEDERAL COM 653H - Slot SLOT 7
Company:	DELAWARE BASIN EAST	TVD Reference:	KB @ 3362.00usft
Project:	LEA COUNT SOUTH WEST (NM-E)	MD Reference:	KB @ 3362.00usft
Site:	COLUMBUS FEDERAL PROJECT	North Reference:	Grid
Well:	_COLUMBUS FEDERAL COM 653H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OWB		
Design:	PWP0		

Planned Survey										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	
7,935.00	7.67	76.98	7,893.18	142.58	616.49	-82.54	0.00	0.00	0.00	
7,950.00	7.67	76.98	7,908.05	143.03	618.44	-82.81	0.00	0.00	0.00	
7,965.00	7.67	76.98	7,922.91	143.48	620.39	-83.07	0.00	0.00	0.00	
7,980.00	7.67	76.98	7,937.78	143.93	622.34	-83.33	0.00	0.00	0.00	
7,995.00	7.67	76.98	7,952.64	144.38	624.29	-83.59	0.00	0.00	0.00	
8,010.00	7.67	76.98	7,967.51	144.84	626.24	-83.85	0.00	0.00	0.00	
8,025.00	7.67	76.98	7,982.38	145.29	628.19	-84.11	0.00	0.00	0.00	
8,040.00	7.67	76.98	7,997.24	145.74	630.14	-84.37	0.00	0.00	0.00	
8,055.00	7.67	76.98	8,012.11	146.19	632.09	-84.63	0.00	0.00	0.00	
8,070.00	7.67	76.98	8,026.97	146.64	634.04	-84.89	0.00	0.00	0.00	
8,085.00	7.67	76.98	8,041.84	147.09	635.99	-85.16	0.00	0.00	0.00	
8,100.00	7.67	76.98	8,056.71	147.54	637.94	-85.42	0.00	0.00	0.00	
8,115.00	7.67	76.98	8,071.57	147.99	639.89	-85.68	0.00	0.00	0.00	
8,130.00	7.67	76.98	8,086.44	148.44	641.84	-85.94	0.00	0.00	0.00	
8,145.00	7.67	76.98	8,101.30	148.89	643.79	-86.20	0.00	0.00	0.00	
8,160.00	7.67	76.98	8,116.17	149.34	645.74	-86.46	0.00	0.00	0.00	
8,175.00	7.67	76.98	8,131.04	149.79	647.68	-86.72	0.00	0.00	0.00	
8,190.00	7.67	76.98	8,145.90	150.25	649.63	-86.98	0.00	0.00	0.00	
8,205.00	7.67	76.98	8,160.77	150.70	651.58	-87.24	0.00	0.00	0.00	
8,220.00	7.67	76.98	8,175.63	151.15	653.53	-87.50	0.00	0.00	0.00	
8,235.00	7.67	76.98	8,190.50	151.60	655.48	-87.77	0.00	0.00	0.00	
8,250.00	7.67	76.98	8,205.37	152.05	657.43	-88.03	0.00	0.00	0.00	
8,265.00	7.67	76.98	8,220.23	152.50	659.38	-88.29	0.00	0.00	0.00	
8,280.00	7.67	76.98	8,235.10	152.95	661.33	-88.55	0.00	0.00	0.00	
8,295.00	7.67	76.98	8,249.96	153.40	663.28	-88.81	0.00	0.00	0.00	
8,310.00	7.67	76.98	8,264.83	153.85	665.23	-89.07	0.00	0.00	0.00	
8,325.00	7.67	76.98	8,279.69	154.30	667.18	-89.33	0.00	0.00	0.00	
8,340.00	7.67	76.98	8,294.56	154.75	669.13	-89.59	0.00	0.00	0.00	
8,355.00	7.67	76.98	8,309.43	155.21	671.08	-89.85	0.00	0.00	0.00	
8,370.00	7.67	76.98	8,324.29	155.66	673.03	-90.11	0.00	0.00	0.00	
8,385.00	7.67	76.98	8,339.16	156.11	674.98	-90.38	0.00	0.00	0.00	
8,400.00	7.67	76.98	8,354.02	156.56	676.93	-90.64	0.00	0.00	0.00	
8,415.00	7.67	76.98	8,368.89	157.01	678.88	-90.90	0.00	0.00	0.00	
8,430.00	7.67	76.98	8,383.76	157.46	680.83	-91.16	0.00	0.00	0.00	
8,445.00	7.67	76.98	8,398.62	157.91	682.77	-91.42	0.00	0.00	0.00	
8,460.00	7.67	76.98	8,413.49	158.36	684.72	-91.68	0.00	0.00	0.00	
8,475.00	7.67	76.98	8,428.35	158.81	686.67	-91.94	0.00	0.00	0.00	
8,490.00	7.67	76.98	8,443.22	159.26	688.62	-92.20	0.00	0.00	0.00	
8,505.00	7.67	76.98	8,458.09	159.71	690.57	-92.46	0.00	0.00	0.00	
8,520.00	7.67	76.98	8,472.95	160.16	692.52	-92.72	0.00	0.00	0.00	
8,535.00	7.67	76.98	8,487.82	160.62	694.47	-92.99	0.00	0.00	0.00	
8,550.00	7.67	76.98	8,502.68	161.07	696.42	-93.25	0.00	0.00	0.00	
8,565.00	7.67	76.98	8,517.55	161.52	698.37	-93.51	0.00	0.00	0.00	
8,580.00	7.67	76.98	8,532.42	161.97	700.32	-93.77	0.00	0.00	0.00	
8,595.00	7.67	76.98	8,547.28	162.42	702.27	-94.03	0.00	0.00	0.00	
8,610.00	7.67	76.98	8,562.15	162.87	704.22	-94.29	0.00	0.00	0.00	
8,625.00	7.67	76.98	8,577.01	163.32	706.17	-94.55	0.00	0.00	0.00	
8,640.00	7.67	76.98	8,591.88	163.77	708.12	-94.81	0.00	0.00	0.00	
8,655.00	7.67	76.98	8,606.75	164.22	710.07	-95.07	0.00	0.00	0.00	
8,670.00	7.67	76.98	8,621.61	164.67	712.02	-95.33	0.00	0.00	0.00	
8,685.00	7.67	76.98	8,636.48	165.12	713.97	-95.60	0.00	0.00	0.00	
8,700.00	7.67	76.98	8,651.34	165.58	715.91	-95.86	0.00	0.00	0.00	
8,715.00	7.67	76.98	8,666.21	166.03	717.86	-96.12	0.00	0.00	0.00	

ConocoPhillips

Planning Report

Database:	EDT 17 Permian Prod	Local Co-ordinate Reference:	Well _ COLUMBUS FEDERAL COM 653H - Slot SLOT 7
Company:	DELAWARE BASIN EAST	TVD Reference:	KB @ 3362.00usft
Project:	LEA COUNT SOUTH WEST (NM-E)	MD Reference:	KB @ 3362.00usft
Site:	COLUMBUS FEDERAL PROJECT	North Reference:	Grid
Well:	_ COLUMBUS FEDERAL COM 653H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OWB		
Design:	PWP0		

Planned Survey										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	
8,730.00	7.67	76.98	8,681.08	166.48	719.81	-96.38	0.00	0.00	0.00	
8,745.00	7.67	76.98	8,695.94	166.93	721.76	-96.64	0.00	0.00	0.00	
8,760.00	7.67	76.98	8,710.81	167.38	723.71	-96.90	0.00	0.00	0.00	
8,775.00	7.67	76.98	8,725.67	167.83	725.66	-97.16	0.00	0.00	0.00	
8,790.00	7.67	76.98	8,740.54	168.28	727.61	-97.42	0.00	0.00	0.00	
8,805.00	7.67	76.98	8,755.41	168.73	729.56	-97.68	0.00	0.00	0.00	
8,820.00	7.67	76.98	8,770.27	169.18	731.51	-97.94	0.00	0.00	0.00	
8,835.00	7.67	76.98	8,785.14	169.63	733.46	-98.21	0.00	0.00	0.00	
8,850.00	7.67	76.98	8,800.00	170.08	735.41	-98.47	0.00	0.00	0.00	
8,865.00	7.67	76.98	8,814.87	170.53	737.36	-98.73	0.00	0.00	0.00	
8,880.00	7.67	76.98	8,829.74	170.99	739.31	-98.99	0.00	0.00	0.00	
8,895.00	7.67	76.98	8,844.60	171.44	741.26	-99.25	0.00	0.00	0.00	
8,910.00	7.67	76.98	8,859.47	171.89	743.21	-99.51	0.00	0.00	0.00	
8,925.00	7.67	76.98	8,874.33	172.34	745.16	-99.77	0.00	0.00	0.00	
8,940.00	7.67	76.98	8,889.20	172.79	747.11	-100.03	0.00	0.00	0.00	
8,955.00	7.67	76.98	8,904.06	173.24	749.06	-100.29	0.00	0.00	0.00	
8,970.00	7.67	76.98	8,918.93	173.69	751.00	-100.56	0.00	0.00	0.00	
8,985.00	7.67	76.98	8,933.80	174.14	752.95	-100.82	0.00	0.00	0.00	
9,000.00	7.67	76.98	8,948.66	174.59	754.90	-101.08	0.00	0.00	0.00	
9,015.00	7.67	76.98	8,963.53	175.04	756.85	-101.34	0.00	0.00	0.00	
9,030.00	7.67	76.98	8,978.39	175.49	758.80	-101.60	0.00	0.00	0.00	
9,045.00	7.67	76.98	8,993.26	175.94	760.75	-101.86	0.00	0.00	0.00	
9,060.00	7.67	76.98	9,008.13	176.40	762.70	-102.12	0.00	0.00	0.00	
9,075.00	7.67	76.98	9,022.99	176.85	764.65	-102.38	0.00	0.00	0.00	
9,090.00	7.67	76.98	9,037.86	177.30	766.60	-102.64	0.00	0.00	0.00	
9,105.00	7.67	76.98	9,052.72	177.75	768.55	-102.90	0.00	0.00	0.00	
9,120.00	7.67	76.98	9,067.59	178.20	770.50	-103.17	0.00	0.00	0.00	
9,135.00	7.67	76.98	9,082.46	178.65	772.45	-103.43	0.00	0.00	0.00	
9,150.00	7.67	76.98	9,097.32	179.10	774.40	-103.69	0.00	0.00	0.00	
9,165.00	7.67	76.98	9,112.19	179.55	776.35	-103.95	0.00	0.00	0.00	
9,180.00	7.67	76.98	9,127.05	180.00	778.30	-104.21	0.00	0.00	0.00	
9,195.00	7.67	76.98	9,141.92	180.45	780.25	-104.47	0.00	0.00	0.00	
9,210.00	7.67	76.98	9,156.79	180.90	782.20	-104.73	0.00	0.00	0.00	
9,225.00	7.67	76.98	9,171.65	181.36	784.15	-104.99	0.00	0.00	0.00	
9,240.00	7.67	76.98	9,186.52	181.81	786.09	-105.25	0.00	0.00	0.00	
9,255.00	7.67	76.98	9,201.38	182.26	788.04	-105.51	0.00	0.00	0.00	
9,270.00	7.67	76.98	9,216.25	182.71	789.99	-105.78	0.00	0.00	0.00	
9,285.00	7.67	76.98	9,231.12	183.16	791.94	-106.04	0.00	0.00	0.00	
9,300.00	7.67	76.98	9,245.98	183.61	793.89	-106.30	0.00	0.00	0.00	
9,315.00	7.67	76.98	9,260.85	184.06	795.84	-106.56	0.00	0.00	0.00	
9,330.00	7.67	76.98	9,275.71	184.51	797.79	-106.82	0.00	0.00	0.00	
9,345.00	7.67	76.98	9,290.58	184.96	799.74	-107.08	0.00	0.00	0.00	
9,360.00	7.67	76.98	9,305.45	185.41	801.69	-107.34	0.00	0.00	0.00	
9,375.00	7.67	76.98	9,320.31	185.86	803.64	-107.60	0.00	0.00	0.00	
9,390.00	7.67	76.98	9,335.18	186.31	805.59	-107.86	0.00	0.00	0.00	
9,405.00	7.67	76.98	9,350.04	186.77	807.54	-108.12	0.00	0.00	0.00	
9,420.00	7.67	76.98	9,364.91	187.22	809.49	-108.39	0.00	0.00	0.00	
9,435.00	7.67	76.98	9,379.78	187.67	811.44	-108.65	0.00	0.00	0.00	
9,450.00	7.67	76.98	9,394.64	188.12	813.39	-108.91	0.00	0.00	0.00	
9,465.00	7.67	76.98	9,409.51	188.57	815.34	-109.17	0.00	0.00	0.00	
9,480.00	7.67	76.98	9,424.37	189.02	817.29	-109.43	0.00	0.00	0.00	
9,495.00	7.67	76.98	9,439.24	189.47	819.23	-109.69	0.00	0.00	0.00	
9,510.00	7.67	76.98	9,454.10	189.92	821.18	-109.95	0.00	0.00	0.00	

ConocoPhillips

Planning Report

Database:	EDT 17 Permian Prod	Local Co-ordinate Reference:	Well _ COLUMBUS FEDERAL COM 653H - Slot SLOT 7
Company:	DELAWARE BASIN EAST	TVD Reference:	KB @ 3362.00usft
Project:	LEA COUNT SOUTH WEST (NM-E)	MD Reference:	KB @ 3362.00usft
Site:	COLUMBUS FEDERAL PROJECT	North Reference:	Grid
Well:	_ COLUMBUS FEDERAL COM 653H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OWB		
Design:	PWP0		

Planned Survey										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	
9,525.00	7.67	76.98	9,468.97	190.37	823.13	-110.21	0.00	0.00	0.00	
9,540.00	7.67	76.98	9,483.84	190.82	825.08	-110.47	0.00	0.00	0.00	
9,555.00	7.67	76.98	9,498.70	191.27	827.03	-110.73	0.00	0.00	0.00	
9,570.00	7.67	76.98	9,513.57	191.72	828.98	-111.00	0.00	0.00	0.00	
9,585.00	7.67	76.98	9,528.43	192.18	830.93	-111.26	0.00	0.00	0.00	
9,600.00	7.67	76.98	9,543.30	192.63	832.88	-111.52	0.00	0.00	0.00	
9,615.00	7.67	76.98	9,558.17	193.08	834.83	-111.78	0.00	0.00	0.00	
9,630.00	7.67	76.98	9,573.03	193.53	836.78	-112.04	0.00	0.00	0.00	
9,645.00	7.67	76.98	9,587.90	193.98	838.73	-112.30	0.00	0.00	0.00	
9,660.00	7.67	76.98	9,602.76	194.43	840.68	-112.56	0.00	0.00	0.00	
9,675.00	7.67	76.98	9,617.63	194.88	842.63	-112.82	0.00	0.00	0.00	
9,690.00	7.67	76.98	9,632.50	195.33	844.58	-113.08	0.00	0.00	0.00	
9,705.00	7.67	76.98	9,647.36	195.78	846.53	-113.34	0.00	0.00	0.00	
9,720.00	7.67	76.98	9,662.23	196.23	848.48	-113.61	0.00	0.00	0.00	
9,735.00	7.67	76.98	9,677.09	196.68	850.43	-113.87	0.00	0.00	0.00	
9,750.00	7.67	76.98	9,691.96	197.14	852.38	-114.13	0.00	0.00	0.00	
9,765.00	7.67	76.98	9,706.83	197.59	854.32	-114.39	0.00	0.00	0.00	
9,780.00	7.67	76.98	9,721.69	198.04	856.27	-114.65	0.00	0.00	0.00	
9,794.15	7.67	76.98	9,735.72	198.46	858.11	-114.90	0.00	0.00	0.00	
9,795.00	7.66	76.98	9,736.56	198.49	858.22	-114.91	1.00	-1.00	0.00	
9,810.00	7.51	76.98	9,751.43	198.93	860.15	-115.17	1.00	-1.00	0.00	
9,825.00	7.36	76.98	9,766.30	199.37	862.04	-115.42	1.00	-1.00	0.00	
9,840.00	7.21	76.98	9,781.18	199.80	863.89	-115.67	1.00	-1.00	0.00	
9,855.00	7.06	76.98	9,796.06	200.22	865.71	-115.91	1.00	-1.00	0.00	
9,870.00	6.91	76.98	9,810.95	200.63	867.49	-116.15	1.00	-1.00	0.00	
9,885.00	6.76	76.98	9,825.85	201.03	869.22	-116.38	1.00	-1.00	0.00	
9,900.00	6.61	76.98	9,840.74	201.43	870.92	-116.61	1.00	-1.00	0.00	
9,915.00	6.46	76.98	9,855.65	201.81	872.59	-116.83	1.00	-1.00	0.00	
9,930.00	6.31	76.98	9,870.55	202.19	874.21	-117.05	1.00	-1.00	0.00	
9,945.00	6.16	76.98	9,885.47	202.55	875.80	-117.26	1.00	-1.00	0.00	
9,960.00	6.01	76.98	9,900.38	202.91	877.35	-117.47	1.00	-1.00	0.00	
9,975.00	5.86	76.98	9,915.30	203.26	878.86	-117.67	1.00	-1.00	0.00	
9,990.00	5.71	76.98	9,930.22	203.60	880.33	-117.87	1.00	-1.00	0.00	
10,005.00	5.56	76.98	9,945.15	203.93	881.76	-118.06	1.00	-1.00	0.00	
10,020.00	5.41	76.98	9,960.08	204.26	883.16	-118.25	1.00	-1.00	0.00	
10,035.00	5.26	76.98	9,975.02	204.57	884.52	-118.43	1.00	-1.00	0.00	
10,050.00	5.11	76.98	9,989.96	204.87	885.84	-118.61	1.00	-1.00	0.00	
10,065.00	4.96	76.98	10,004.90	205.17	887.12	-118.78	1.00	-1.00	0.00	
10,080.00	4.81	76.98	10,019.84	205.46	888.36	-118.95	1.00	-1.00	0.00	
10,095.00	4.66	76.98	10,034.79	205.74	889.57	-119.11	1.00	-1.00	0.00	
10,110.00	4.51	76.98	10,049.75	206.01	890.74	-119.26	1.00	-1.00	0.00	
10,125.00	4.36	76.98	10,064.70	206.27	891.87	-119.42	1.00	-1.00	0.00	
10,140.00	4.21	76.98	10,079.66	206.52	892.96	-119.56	1.00	-1.00	0.00	
10,155.00	4.06	76.98	10,094.62	206.76	894.01	-119.70	1.00	-1.00	0.00	
10,170.00	3.91	76.98	10,109.58	207.00	895.03	-119.84	1.00	-1.00	0.00	
10,185.00	3.76	76.98	10,124.55	207.23	896.00	-119.97	1.00	-1.00	0.00	
10,200.00	3.61	76.98	10,139.52	207.44	896.94	-120.09	1.00	-1.00	0.00	
10,215.00	3.46	76.98	10,154.49	207.65	897.84	-120.22	1.00	-1.00	0.00	
10,230.00	3.31	76.98	10,169.46	207.85	898.70	-120.33	1.00	-1.00	0.00	
10,245.00	3.16	76.98	10,184.44	208.04	899.53	-120.44	1.00	-1.00	0.00	
10,260.00	3.01	76.98	10,199.42	208.22	900.31	-120.55	1.00	-1.00	0.00	
10,275.00	2.86	76.98	10,214.40	208.40	901.06	-120.65	1.00	-1.00	0.00	
10,290.00	2.71	76.98	10,229.38	208.56	901.77	-120.74	1.00	-1.00	0.00	

ConocoPhillips

Planning Report

Database:	EDT 17 Permian Prod	Local Co-ordinate Reference:	Well _ COLUMBUS FEDERAL COM 653H - Slot SLOT 7
Company:	DELAWARE BASIN EAST	TVD Reference:	KB @ 3362.00usft
Project:	LEA COUNT SOUTH WEST (NM-E)	MD Reference:	KB @ 3362.00usft
Site:	COLUMBUS FEDERAL PROJECT	North Reference:	Grid
Well:	_COLUMBUS FEDERAL COM 653H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OWB		
Design:	PWP0		

Planned Survey										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	
10,305.00	2.56	76.98	10,244.37	208.71	902.44	-120.83	1.00	-1.00	0.00	
10,320.00	2.41	76.98	10,259.35	208.86	903.07	-120.92	1.00	-1.00	0.00	
10,335.00	2.26	76.98	10,274.34	209.00	903.67	-121.00	1.00	-1.00	0.00	
10,350.00	2.11	76.98	10,289.33	209.13	904.23	-121.07	1.00	-1.00	0.00	
10,365.00	1.96	76.98	10,304.32	209.25	904.74	-121.14	1.00	-1.00	0.00	
10,380.00	1.81	76.98	10,319.31	209.36	905.22	-121.20	1.00	-1.00	0.00	
10,395.00	1.66	76.98	10,334.30	209.46	905.67	-121.26	1.00	-1.00	0.00	
10,410.00	1.51	76.98	10,349.30	209.55	906.07	-121.32	1.00	-1.00	0.00	
10,425.00	1.36	76.98	10,364.29	209.64	906.43	-121.37	1.00	-1.00	0.00	
10,440.00	1.21	76.98	10,379.29	209.71	906.76	-121.41	1.00	-1.00	0.00	
10,455.00	1.06	76.98	10,394.29	209.78	907.05	-121.45	1.00	-1.00	0.00	
10,470.00	0.91	76.98	10,409.28	209.84	907.30	-121.48	1.00	-1.00	0.00	
10,485.00	0.76	76.98	10,424.28	209.89	907.51	-121.51	1.00	-1.00	0.00	
10,500.00	0.61	76.98	10,439.28	209.93	907.69	-121.53	1.00	-1.00	0.00	
10,515.00	0.46	76.98	10,454.28	209.96	907.82	-121.55	1.00	-1.00	0.00	
10,530.00	0.31	76.98	10,469.28	209.98	907.92	-121.57	1.00	-1.00	0.00	
10,545.00	0.16	76.98	10,484.28	210.00	907.98	-121.57	1.00	-1.00	0.00	
10,560.00	0.01	76.98	10,499.28	210.00	908.00	-121.58	1.00	-1.00	0.00	
10,560.72	0.00	0.00	10,500.00	210.00	908.00	-121.58	1.00	-1.00	0.00	
10,575.00	0.00	0.00	10,514.28	210.00	908.00	-121.58	0.00	0.00	0.00	
10,590.00	0.00	0.00	10,529.28	210.00	908.00	-121.58	0.00	0.00	0.00	
10,605.00	0.00	0.00	10,544.28	210.00	908.00	-121.58	0.00	0.00	0.00	
10,620.00	0.00	0.00	10,559.28	210.00	908.00	-121.58	0.00	0.00	0.00	
10,635.00	0.00	0.00	10,574.28	210.00	908.00	-121.58	0.00	0.00	0.00	
10,650.00	0.00	0.00	10,589.28	210.00	908.00	-121.58	0.00	0.00	0.00	
10,665.00	0.00	0.00	10,604.28	210.00	908.00	-121.58	0.00	0.00	0.00	
10,680.00	0.00	0.00	10,619.28	210.00	908.00	-121.58	0.00	0.00	0.00	
10,695.00	0.00	0.00	10,634.28	210.00	908.00	-121.58	0.00	0.00	0.00	
10,710.00	0.00	0.00	10,649.28	210.00	908.00	-121.58	0.00	0.00	0.00	
10,725.00	0.00	0.00	10,664.28	210.00	908.00	-121.58	0.00	0.00	0.00	
10,740.00	0.00	0.00	10,679.28	210.00	908.00	-121.58	0.00	0.00	0.00	
10,755.00	0.00	0.00	10,694.28	210.00	908.00	-121.58	0.00	0.00	0.00	
10,770.00	0.00	0.00	10,709.28	210.00	908.00	-121.58	0.00	0.00	0.00	
10,785.00	0.00	0.00	10,724.28	210.00	908.00	-121.58	0.00	0.00	0.00	
10,800.00	0.00	0.00	10,739.28	210.00	908.00	-121.58	0.00	0.00	0.00	
10,815.00	0.00	0.00	10,754.28	210.00	908.00	-121.58	0.00	0.00	0.00	
10,830.00	0.00	0.00	10,769.28	210.00	908.00	-121.58	0.00	0.00	0.00	
10,845.00	0.00	0.00	10,784.28	210.00	908.00	-121.58	0.00	0.00	0.00	
10,860.00	0.00	0.00	10,799.28	210.00	908.00	-121.58	0.00	0.00	0.00	
10,875.00	0.00	0.00	10,814.28	210.00	908.00	-121.58	0.00	0.00	0.00	
10,890.00	0.00	0.00	10,829.28	210.00	908.00	-121.58	0.00	0.00	0.00	
10,905.00	0.00	0.00	10,844.28	210.00	908.00	-121.58	0.00	0.00	0.00	
10,920.00	0.00	0.00	10,859.28	210.00	908.00	-121.58	0.00	0.00	0.00	
10,935.00	0.00	0.00	10,874.28	210.00	908.00	-121.58	0.00	0.00	0.00	
10,950.00	0.00	0.00	10,889.28	210.00	908.00	-121.58	0.00	0.00	0.00	
10,958.26	0.00	0.00	10,897.54	210.00	908.00	-121.58	0.00	0.00	0.00	
10,965.00	0.81	179.62	10,904.28	209.95	908.00	-121.53	12.00	12.00	0.00	
10,980.00	2.61	179.62	10,919.27	209.51	908.00	-121.08	12.00	12.00	0.00	
10,995.00	4.41	179.62	10,934.24	208.59	908.01	-120.17	12.00	12.00	0.00	
11,010.00	6.21	179.62	10,949.18	207.20	908.02	-118.79	12.00	12.00	0.00	
11,025.00	8.01	179.62	10,964.06	205.34	908.03	-116.94	12.00	12.00	0.00	
11,040.00	9.81	179.62	10,978.88	203.02	908.05	-114.62	12.00	12.00	0.00	
11,055.00	11.61	179.62	10,993.62	200.23	908.07	-111.85	12.00	12.00	0.00	

ConocoPhillips

Planning Report

Database:	EDT 17 Permian Prod	Local Co-ordinate Reference:	Well _COLUMBUS FEDERAL COM 653H - Slot SLOT 7
Company:	DELAWARE BASIN EAST	TVD Reference:	KB @ 3362.00usft
Project:	LEA COUNT SOUTH WEST (NM-E)	MD Reference:	KB @ 3362.00usft
Site:	COLUMBUS FEDERAL PROJECT	North Reference:	Grid
Well:	_COLUMBUS FEDERAL COM 653H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OWB		
Design:	PWP0		

Planned Survey										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	
11,070.00	13.41	179.62	11,008.26	196.98	908.09	-108.61	12.00	12.00	0.00	
11,085.00	15.21	179.62	11,022.80	193.28	908.11	-104.92	12.00	12.00	0.00	
11,100.00	17.01	179.62	11,037.21	189.12	908.14	-100.78	12.00	12.00	0.00	
11,115.00	18.81	179.62	11,051.48	184.50	908.17	-96.18	12.00	12.00	0.00	
11,130.00	20.61	179.62	11,065.60	179.45	908.20	-91.14	12.00	12.00	0.00	
11,145.00	22.41	179.62	11,079.56	173.95	908.24	-85.67	12.00	12.00	0.00	
11,160.00	24.21	179.62	11,093.33	168.01	908.28	-79.75	12.00	12.00	0.00	
11,175.00	26.01	179.62	11,106.91	161.65	908.32	-73.42	12.00	12.00	0.00	
11,190.00	27.81	179.62	11,120.29	154.86	908.37	-66.65	12.00	12.00	0.00	
11,205.00	29.61	179.62	11,133.44	147.65	908.42	-59.48	12.00	12.00	0.00	
11,220.00	31.41	179.62	11,146.37	140.04	908.47	-51.89	12.00	12.00	0.00	
11,235.00	33.21	179.62	11,159.04	132.02	908.52	-43.91	12.00	12.00	0.00	
11,250.00	35.01	179.62	11,171.46	123.61	908.58	-35.53	12.00	12.00	0.00	
11,265.00	36.81	179.62	11,183.61	114.81	908.64	-26.77	12.00	12.00	0.00	
11,280.00	38.61	179.62	11,195.48	105.64	908.70	-17.63	12.00	12.00	0.00	
11,295.00	40.41	179.62	11,207.05	96.10	908.76	-8.13	12.00	12.00	0.00	
11,310.00	42.21	179.62	11,218.32	86.20	908.83	1.73	12.00	12.00	0.00	
11,325.00	44.01	179.62	11,229.27	75.95	908.90	11.94	12.00	12.00	0.00	
11,340.00	45.81	179.62	11,239.89	65.36	908.97	22.49	12.00	12.00	0.00	
11,355.00	47.61	179.62	11,250.18	54.44	909.04	33.36	12.00	12.00	0.00	
11,370.00	49.41	179.62	11,260.11	43.20	909.12	44.55	12.00	12.00	0.00	
11,385.00	51.21	179.62	11,269.69	31.66	909.20	56.05	12.00	12.00	0.00	
11,400.00	53.01	179.62	11,278.91	19.83	909.28	67.84	12.00	12.00	0.00	
11,415.00	54.81	179.62	11,287.74	7.71	909.36	79.91	12.00	12.00	0.00	
11,430.00	56.61	179.62	11,296.19	-4.69	909.44	92.25	12.00	12.00	0.00	
11,445.00	58.41	179.62	11,304.25	-17.34	909.52	104.85	12.00	12.00	0.00	
11,460.00	60.21	179.62	11,311.90	-30.24	909.61	117.70	12.00	12.00	0.00	
11,475.00	62.01	179.62	11,319.15	-43.37	909.70	130.78	12.00	12.00	0.00	
11,490.00	63.81	179.62	11,325.98	-56.72	909.79	144.08	12.00	12.00	0.00	
11,505.00	65.61	179.62	11,332.39	-70.28	909.88	157.59	12.00	12.00	0.00	
11,520.00	67.41	179.62	11,338.37	-84.04	909.97	171.29	12.00	12.00	0.00	
11,535.00	69.21	179.62	11,343.91	-97.98	910.07	185.17	12.00	12.00	0.00	
11,550.00	71.01	179.62	11,349.02	-112.08	910.16	199.22	12.00	12.00	0.00	
11,565.00	72.81	179.62	11,353.67	-126.34	910.26	213.42	12.00	12.00	0.00	
11,580.00	74.61	179.62	11,357.88	-140.73	910.35	227.75	12.00	12.00	0.00	
11,595.00	76.41	179.62	11,361.63	-155.26	910.45	242.22	12.00	12.00	0.00	
11,610.00	78.21	179.62	11,364.93	-169.89	910.55	256.79	12.00	12.00	0.00	
11,625.00	80.01	179.62	11,367.76	-184.62	910.65	271.46	12.00	12.00	0.00	
11,640.00	81.81	179.62	11,370.13	-199.43	910.75	286.21	12.00	12.00	0.00	
11,655.00	83.61	179.62	11,372.04	-214.31	910.85	301.03	12.00	12.00	0.00	
11,670.00	85.41	179.62	11,373.47	-229.24	910.95	315.90	12.00	12.00	0.00	
11,685.00	87.21	179.62	11,374.44	-244.20	911.05	330.81	12.00	12.00	0.00	
11,700.00	89.01	179.62	11,374.93	-259.20	911.15	345.74	12.00	12.00	0.00	
11,708.26	90.00	179.62	11,375.01	-267.45	911.20	353.97	12.00	12.00	0.00	
11,715.00	90.00	179.62	11,375.01	-274.19	911.25	360.68	0.00	0.00	0.00	
11,730.00	90.00	179.62	11,375.01	-289.19	911.35	375.62	0.00	0.00	0.00	
11,745.00	90.00	179.62	11,375.01	-304.19	911.45	390.56	0.00	0.00	0.00	
11,760.00	90.00	179.62	11,375.01	-319.19	911.55	405.50	0.00	0.00	0.00	
11,775.00	90.00	179.62	11,375.01	-334.19	911.65	420.44	0.00	0.00	0.00	
11,790.00	90.00	179.62	11,375.01	-349.19	911.75	435.38	0.00	0.00	0.00	
11,805.00	90.00	179.62	11,375.01	-364.19	911.85	450.32	0.00	0.00	0.00	
11,820.00	90.00	179.62	11,375.01	-379.19	911.95	465.26	0.00	0.00	0.00	
11,835.00	90.00	179.62	11,375.01	-394.19	912.05	480.20	0.00	0.00	0.00	

ConocoPhillips

Planning Report

Database:	EDT 17 Permian Prod	Local Co-ordinate Reference:	Well _COLUMBUS FEDERAL COM 653H - Slot SLOT 7
Company:	DELAWARE BASIN EAST	TVD Reference:	KB @ 3362.00usft
Project:	LEA COUNT SOUTH WEST (NM-E)	MD Reference:	KB @ 3362.00usft
Site:	COLUMBUS FEDERAL PROJECT	North Reference:	Grid
Well:	_COLUMBUS FEDERAL COM 653H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OWB		
Design:	PWP0		

Planned Survey										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	
11,850.00	90.00	179.62	11,375.01	-409.19	912.15	495.14	0.00	0.00	0.00	
11,865.00	90.00	179.62	11,375.01	-424.19	912.25	510.08	0.00	0.00	0.00	
11,880.00	90.00	179.62	11,375.00	-439.19	912.35	525.02	0.00	0.00	0.00	
11,895.00	90.00	179.62	11,375.00	-454.19	912.45	539.96	0.00	0.00	0.00	
11,910.00	90.00	179.62	11,375.00	-469.19	912.55	554.90	0.00	0.00	0.00	
11,925.00	90.00	179.62	11,375.00	-484.19	912.66	569.84	0.00	0.00	0.00	
11,940.00	90.00	179.62	11,375.00	-499.19	912.76	584.77	0.00	0.00	0.00	
11,955.00	90.00	179.62	11,375.00	-514.19	912.86	599.71	0.00	0.00	0.00	
11,970.00	90.00	179.62	11,375.00	-529.19	912.96	614.65	0.00	0.00	0.00	
11,985.00	90.00	179.62	11,375.00	-544.19	913.06	629.59	0.00	0.00	0.00	
12,000.00	90.00	179.62	11,375.00	-559.19	913.16	644.53	0.00	0.00	0.00	
12,015.00	90.00	179.62	11,375.00	-574.19	913.26	659.47	0.00	0.00	0.00	
12,030.00	90.00	179.62	11,375.00	-589.19	913.36	674.41	0.00	0.00	0.00	
12,045.00	90.00	179.62	11,375.00	-604.19	913.46	689.35	0.00	0.00	0.00	
12,060.00	90.00	179.62	11,375.00	-619.19	913.56	704.29	0.00	0.00	0.00	
12,075.00	90.00	179.62	11,375.00	-634.19	913.66	719.23	0.00	0.00	0.00	
12,090.00	90.00	179.62	11,375.00	-649.19	913.76	734.17	0.00	0.00	0.00	
12,105.00	90.00	179.62	11,375.00	-664.19	913.86	749.11	0.00	0.00	0.00	
12,120.00	90.00	179.62	11,375.00	-679.19	913.96	764.05	0.00	0.00	0.00	
12,135.00	90.00	179.62	11,375.00	-694.18	914.06	778.99	0.00	0.00	0.00	
12,150.00	90.00	179.62	11,375.00	-709.18	914.16	793.93	0.00	0.00	0.00	
12,165.00	90.00	179.62	11,375.00	-724.18	914.26	808.87	0.00	0.00	0.00	
12,180.00	90.00	179.62	11,375.00	-739.18	914.36	823.81	0.00	0.00	0.00	
12,195.00	90.00	179.62	11,375.00	-754.18	914.47	838.75	0.00	0.00	0.00	
12,210.00	90.00	179.62	11,375.00	-769.18	914.57	853.69	0.00	0.00	0.00	
12,225.00	90.00	179.62	11,375.00	-784.18	914.67	868.63	0.00	0.00	0.00	
12,240.00	90.00	179.62	11,375.00	-799.18	914.77	883.57	0.00	0.00	0.00	
12,255.00	90.00	179.62	11,375.00	-814.18	914.87	898.51	0.00	0.00	0.00	
12,270.00	90.00	179.62	11,375.00	-829.18	914.97	913.45	0.00	0.00	0.00	
12,285.00	90.00	179.62	11,375.00	-844.18	915.07	928.39	0.00	0.00	0.00	
12,300.00	90.00	179.62	11,375.00	-859.18	915.17	943.33	0.00	0.00	0.00	
12,315.00	90.00	179.62	11,375.00	-874.18	915.27	958.27	0.00	0.00	0.00	
12,330.00	90.00	179.62	11,375.00	-889.18	915.37	973.21	0.00	0.00	0.00	
12,345.00	90.00	179.62	11,375.00	-904.18	915.47	988.14	0.00	0.00	0.00	
12,360.00	90.00	179.62	11,375.00	-919.18	915.57	1,003.08	0.00	0.00	0.00	
12,375.00	90.00	179.62	11,375.00	-934.18	915.67	1,018.02	0.00	0.00	0.00	
12,390.00	90.00	179.62	11,375.00	-949.18	915.77	1,032.96	0.00	0.00	0.00	
12,405.00	90.00	179.62	11,375.00	-964.18	915.87	1,047.90	0.00	0.00	0.00	
12,420.00	90.00	179.62	11,375.00	-979.18	915.97	1,062.84	0.00	0.00	0.00	
12,435.00	90.00	179.62	11,375.00	-994.18	916.07	1,077.78	0.00	0.00	0.00	
12,450.00	90.00	179.62	11,375.00	-1,009.18	916.18	1,092.72	0.00	0.00	0.00	
12,465.00	90.00	179.62	11,375.00	-1,024.18	916.28	1,107.66	0.00	0.00	0.00	
12,480.00	90.00	179.62	11,375.00	-1,039.18	916.38	1,122.60	0.00	0.00	0.00	
12,495.00	90.00	179.62	11,375.00	-1,054.18	916.48	1,137.54	0.00	0.00	0.00	
12,510.00	90.00	179.62	11,375.00	-1,069.18	916.58	1,152.48	0.00	0.00	0.00	
12,525.00	90.00	179.62	11,375.00	-1,084.18	916.68	1,167.42	0.00	0.00	0.00	
12,540.00	90.00	179.62	11,375.00	-1,099.18	916.78	1,182.36	0.00	0.00	0.00	
12,555.00	90.00	179.62	11,375.00	-1,114.18	916.88	1,197.30	0.00	0.00	0.00	
12,570.00	90.00	179.62	11,375.00	-1,129.18	916.98	1,212.24	0.00	0.00	0.00	
12,585.00	90.00	179.62	11,375.00	-1,144.17	917.08	1,227.18	0.00	0.00	0.00	
12,600.00	90.00	179.62	11,375.00	-1,159.17	917.18	1,242.12	0.00	0.00	0.00	
12,615.00	90.00	179.62	11,375.00	-1,174.17	917.28	1,257.06	0.00	0.00	0.00	
12,630.00	90.00	179.62	11,375.00	-1,189.17	917.38	1,272.00	0.00	0.00	0.00	

ConocoPhillips

Planning Report

Database:	EDT 17 Permian Prod	Local Co-ordinate Reference:	Well _COLUMBUS FEDERAL COM 653H - Slot SLOT 7
Company:	DELAWARE BASIN EAST	TVD Reference:	KB @ 3362.00usft
Project:	LEA COUNT SOUTH WEST (NM-E)	MD Reference:	KB @ 3362.00usft
Site:	COLUMBUS FEDERAL PROJECT	North Reference:	Grid
Well:	_COLUMBUS FEDERAL COM 653H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OWB		
Design:	PWP0		

Planned Survey										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	
12,645.00	90.00	179.62	11,375.00	-1,204.17	917.48	1,286.94	0.00	0.00	0.00	
12,660.00	90.00	179.62	11,375.00	-1,219.17	917.58	1,301.88	0.00	0.00	0.00	
12,675.00	90.00	179.62	11,375.00	-1,234.17	917.68	1,316.82	0.00	0.00	0.00	
12,690.00	90.00	179.62	11,375.00	-1,249.17	917.78	1,331.76	0.00	0.00	0.00	
12,705.00	90.00	179.62	11,375.00	-1,264.17	917.89	1,346.70	0.00	0.00	0.00	
12,720.00	90.00	179.62	11,375.00	-1,279.17	917.99	1,361.64	0.00	0.00	0.00	
12,735.00	90.00	179.62	11,375.00	-1,294.17	918.09	1,376.58	0.00	0.00	0.00	
12,750.00	90.00	179.62	11,375.00	-1,309.17	918.19	1,391.51	0.00	0.00	0.00	
12,765.00	90.00	179.62	11,375.00	-1,324.17	918.29	1,406.45	0.00	0.00	0.00	
12,780.00	90.00	179.62	11,375.00	-1,339.17	918.39	1,421.39	0.00	0.00	0.00	
12,795.00	90.00	179.62	11,375.00	-1,354.17	918.49	1,436.33	0.00	0.00	0.00	
12,810.00	90.00	179.62	11,375.00	-1,369.17	918.59	1,451.27	0.00	0.00	0.00	
12,825.00	90.00	179.62	11,375.00	-1,384.17	918.69	1,466.21	0.00	0.00	0.00	
12,840.00	90.00	179.62	11,375.00	-1,399.17	918.79	1,481.15	0.00	0.00	0.00	
12,855.00	90.00	179.62	11,375.00	-1,414.17	918.89	1,496.09	0.00	0.00	0.00	
12,870.00	90.00	179.62	11,375.00	-1,429.17	918.99	1,511.03	0.00	0.00	0.00	
12,885.00	90.00	179.62	11,375.00	-1,444.17	919.09	1,525.97	0.00	0.00	0.00	
12,900.00	90.00	179.62	11,375.00	-1,459.17	919.19	1,540.91	0.00	0.00	0.00	
12,915.00	90.00	179.62	11,375.00	-1,474.17	919.29	1,555.85	0.00	0.00	0.00	
12,930.00	90.00	179.62	11,375.00	-1,489.17	919.39	1,570.79	0.00	0.00	0.00	
12,945.00	90.00	179.62	11,375.00	-1,504.17	919.49	1,585.73	0.00	0.00	0.00	
12,960.00	90.00	179.62	11,375.00	-1,519.17	919.60	1,600.67	0.00	0.00	0.00	
12,975.00	90.00	179.62	11,375.00	-1,534.17	919.70	1,615.61	0.00	0.00	0.00	
12,990.00	90.00	179.62	11,375.00	-1,549.17	919.80	1,630.55	0.00	0.00	0.00	
13,005.00	90.00	179.62	11,375.00	-1,564.17	919.90	1,645.49	0.00	0.00	0.00	
13,020.00	90.00	179.62	11,375.00	-1,579.17	920.00	1,660.43	0.00	0.00	0.00	
13,035.00	90.00	179.62	11,375.00	-1,594.16	920.10	1,675.37	0.00	0.00	0.00	
13,050.00	90.00	179.62	11,375.00	-1,609.16	920.20	1,690.31	0.00	0.00	0.00	
13,065.00	90.00	179.62	11,375.00	-1,624.16	920.30	1,705.25	0.00	0.00	0.00	
13,080.00	90.00	179.62	11,375.00	-1,639.16	920.40	1,720.19	0.00	0.00	0.00	
13,095.00	90.00	179.62	11,375.00	-1,654.16	920.50	1,735.13	0.00	0.00	0.00	
13,110.00	90.00	179.62	11,375.00	-1,669.16	920.60	1,750.07	0.00	0.00	0.00	
13,125.00	90.00	179.62	11,375.00	-1,684.16	920.70	1,765.01	0.00	0.00	0.00	
13,140.00	90.00	179.62	11,375.00	-1,699.16	920.80	1,779.94	0.00	0.00	0.00	
13,155.00	90.00	179.62	11,375.00	-1,714.16	920.90	1,794.88	0.00	0.00	0.00	
13,170.00	90.00	179.62	11,375.00	-1,729.16	921.00	1,809.82	0.00	0.00	0.00	
13,185.00	90.00	179.62	11,375.00	-1,744.16	921.10	1,824.76	0.00	0.00	0.00	
13,200.00	90.00	179.62	11,375.00	-1,759.16	921.20	1,839.70	0.00	0.00	0.00	
13,215.00	90.00	179.62	11,375.00	-1,774.16	921.31	1,854.64	0.00	0.00	0.00	
13,230.00	90.00	179.62	11,375.00	-1,789.16	921.41	1,869.58	0.00	0.00	0.00	
13,245.00	90.00	179.62	11,375.00	-1,804.16	921.51	1,884.52	0.00	0.00	0.00	
13,260.00	90.00	179.62	11,375.00	-1,819.16	921.61	1,899.46	0.00	0.00	0.00	
13,275.00	90.00	179.62	11,375.00	-1,834.16	921.71	1,914.40	0.00	0.00	0.00	
13,290.00	90.00	179.62	11,375.00	-1,849.16	921.81	1,929.34	0.00	0.00	0.00	
13,305.00	90.00	179.62	11,375.00	-1,864.16	921.91	1,944.28	0.00	0.00	0.00	
13,320.00	90.00	179.62	11,375.00	-1,879.16	922.01	1,959.22	0.00	0.00	0.00	
13,335.00	90.00	179.62	11,375.00	-1,894.16	922.11	1,974.16	0.00	0.00	0.00	
13,350.00	90.00	179.62	11,375.00	-1,909.16	922.21	1,989.10	0.00	0.00	0.00	
13,365.00	90.00	179.62	11,375.00	-1,924.16	922.31	2,004.04	0.00	0.00	0.00	
13,380.00	90.00	179.62	11,375.00	-1,939.16	922.41	2,018.98	0.00	0.00	0.00	
13,395.00	90.00	179.62	11,375.00	-1,954.16	922.51	2,033.92	0.00	0.00	0.00	
13,410.00	90.00	179.62	11,375.00	-1,969.16	922.61	2,048.86	0.00	0.00	0.00	
13,425.00	90.00	179.62	11,375.00	-1,984.16	922.71	2,063.80	0.00	0.00	0.00	

ConocoPhillips

Planning Report

Database:	EDT 17 Permian Prod	Local Co-ordinate Reference:	Well _ COLUMBUS FEDERAL COM 653H - Slot SLOT 7
Company:	DELAWARE BASIN EAST	TVD Reference:	KB @ 3362.00usft
Project:	LEA COUNT SOUTH WEST (NM-E)	MD Reference:	KB @ 3362.00usft
Site:	COLUMBUS FEDERAL PROJECT	North Reference:	Grid
Well:	_ COLUMBUS FEDERAL COM 653H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OWB		
Design:	PWP0		

Planned Survey										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	
13,440.00	90.00	179.62	11,375.00	-1,999.16	922.81	2,078.74	0.00	0.00	0.00	
13,455.00	90.00	179.62	11,375.00	-2,014.16	922.91	2,093.68	0.00	0.00	0.00	
13,470.00	90.00	179.62	11,375.00	-2,029.16	923.02	2,108.62	0.00	0.00	0.00	
13,485.00	90.00	179.62	11,375.00	-2,044.15	923.12	2,123.56	0.00	0.00	0.00	
13,500.00	90.00	179.62	11,375.00	-2,059.15	923.22	2,138.50	0.00	0.00	0.00	
13,515.00	90.00	179.62	11,375.00	-2,074.15	923.32	2,153.44	0.00	0.00	0.00	
13,530.00	90.00	179.62	11,375.00	-2,089.15	923.42	2,168.38	0.00	0.00	0.00	
13,545.00	90.00	179.62	11,375.00	-2,104.15	923.52	2,183.31	0.00	0.00	0.00	
13,560.00	90.00	179.62	11,375.00	-2,119.15	923.62	2,198.25	0.00	0.00	0.00	
13,575.00	90.00	179.62	11,375.00	-2,134.15	923.72	2,213.19	0.00	0.00	0.00	
13,590.00	90.00	179.62	11,375.00	-2,149.15	923.82	2,228.13	0.00	0.00	0.00	
13,605.00	90.00	179.62	11,375.00	-2,164.15	923.92	2,243.07	0.00	0.00	0.00	
13,620.00	90.00	179.62	11,375.00	-2,179.15	924.02	2,258.01	0.00	0.00	0.00	
13,635.00	90.00	179.62	11,375.00	-2,194.15	924.12	2,272.95	0.00	0.00	0.00	
13,650.00	90.00	179.62	11,375.00	-2,209.15	924.22	2,287.89	0.00	0.00	0.00	
13,665.00	90.00	179.62	11,375.00	-2,224.15	924.32	2,302.83	0.00	0.00	0.00	
13,680.00	90.00	179.62	11,375.00	-2,239.15	924.42	2,317.77	0.00	0.00	0.00	
13,695.00	90.00	179.62	11,375.00	-2,254.15	924.52	2,332.71	0.00	0.00	0.00	
13,710.00	90.00	179.62	11,375.00	-2,269.15	924.62	2,347.65	0.00	0.00	0.00	
13,725.00	90.00	179.62	11,375.00	-2,284.15	924.73	2,362.59	0.00	0.00	0.00	
13,740.00	90.00	179.62	11,375.00	-2,299.15	924.83	2,377.53	0.00	0.00	0.00	
13,755.00	90.00	179.62	11,375.00	-2,314.15	924.93	2,392.47	0.00	0.00	0.00	
13,770.00	90.00	179.62	11,375.00	-2,329.15	925.03	2,407.41	0.00	0.00	0.00	
13,785.00	90.00	179.62	11,375.00	-2,344.15	925.13	2,422.35	0.00	0.00	0.00	
13,800.00	90.00	179.62	11,375.00	-2,359.15	925.23	2,437.29	0.00	0.00	0.00	
13,815.00	90.00	179.62	11,375.00	-2,374.15	925.33	2,452.23	0.00	0.00	0.00	
13,830.00	90.00	179.62	11,375.00	-2,389.15	925.43	2,467.17	0.00	0.00	0.00	
13,845.00	90.00	179.62	11,375.00	-2,404.15	925.53	2,482.11	0.00	0.00	0.00	
13,860.00	90.00	179.62	11,375.00	-2,419.15	925.63	2,497.05	0.00	0.00	0.00	
13,875.00	90.00	179.62	11,375.00	-2,434.15	925.73	2,511.99	0.00	0.00	0.00	
13,890.00	90.00	179.62	11,375.00	-2,449.15	925.83	2,526.93	0.00	0.00	0.00	
13,905.00	90.00	179.62	11,375.00	-2,464.15	925.93	2,541.87	0.00	0.00	0.00	
13,920.00	90.00	179.62	11,375.00	-2,479.14	926.03	2,556.81	0.00	0.00	0.00	
13,935.00	90.00	179.62	11,375.00	-2,494.14	926.13	2,571.75	0.00	0.00	0.00	
13,950.00	90.00	179.62	11,375.00	-2,509.14	926.23	2,586.68	0.00	0.00	0.00	
13,965.00	90.00	179.62	11,375.00	-2,524.14	926.33	2,601.62	0.00	0.00	0.00	
13,980.00	90.00	179.62	11,375.00	-2,539.14	926.44	2,616.56	0.00	0.00	0.00	
13,995.00	90.00	179.62	11,375.00	-2,554.14	926.54	2,631.50	0.00	0.00	0.00	
14,010.00	90.00	179.62	11,375.00	-2,569.14	926.64	2,646.44	0.00	0.00	0.00	
14,025.00	90.00	179.62	11,375.00	-2,584.14	926.74	2,661.38	0.00	0.00	0.00	
14,040.00	90.00	179.62	11,375.00	-2,599.14	926.84	2,676.32	0.00	0.00	0.00	
14,055.00	90.00	179.62	11,375.00	-2,614.14	926.94	2,691.26	0.00	0.00	0.00	
14,070.00	90.00	179.62	11,375.00	-2,629.14	927.04	2,706.20	0.00	0.00	0.00	
14,085.00	90.00	179.62	11,375.00	-2,644.14	927.14	2,721.14	0.00	0.00	0.00	
14,100.00	90.00	179.62	11,375.00	-2,659.14	927.24	2,736.08	0.00	0.00	0.00	
14,115.00	90.00	179.62	11,375.00	-2,674.14	927.34	2,751.02	0.00	0.00	0.00	
14,130.00	90.00	179.62	11,375.00	-2,689.14	927.44	2,765.96	0.00	0.00	0.00	
14,145.00	90.00	179.62	11,375.00	-2,704.14	927.54	2,780.90	0.00	0.00	0.00	
14,160.00	90.00	179.62	11,375.00	-2,719.14	927.64	2,795.84	0.00	0.00	0.00	
14,175.00	90.00	179.62	11,375.00	-2,734.14	927.74	2,810.78	0.00	0.00	0.00	
14,190.00	90.00	179.62	11,375.00	-2,749.14	927.84	2,825.72	0.00	0.00	0.00	
14,205.00	90.00	179.62	11,375.00	-2,764.14	927.94	2,840.66	0.00	0.00	0.00	
14,220.00	90.00	179.62	11,375.00	-2,779.14	928.04	2,855.60	0.00	0.00	0.00	

ConocoPhillips

Planning Report

Database:	EDT 17 Permian Prod	Local Co-ordinate Reference:	Well _ COLUMBUS FEDERAL COM 653H - Slot SLOT 7
Company:	DELAWARE BASIN EAST	TVD Reference:	KB @ 3362.00usft
Project:	LEA COUNT SOUTH WEST (NM-E)	MD Reference:	KB @ 3362.00usft
Site:	COLUMBUS FEDERAL PROJECT	North Reference:	Grid
Well:	_COLUMBUS FEDERAL COM 653H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OWB		
Design:	PWP0		

Planned Survey										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	
14,235.00	90.00	179.62	11,375.00	-2,794.14	928.14	2,870.54	0.00	0.00	0.00	
14,250.00	90.00	179.62	11,375.00	-2,809.14	928.25	2,885.48	0.00	0.00	0.00	
14,265.00	90.00	179.62	11,375.00	-2,824.14	928.35	2,900.42	0.00	0.00	0.00	
14,280.00	90.00	179.62	11,375.00	-2,839.14	928.45	2,915.36	0.00	0.00	0.00	
14,295.00	90.00	179.62	11,375.00	-2,854.14	928.55	2,930.30	0.00	0.00	0.00	
14,310.00	90.00	179.62	11,375.00	-2,869.14	928.65	2,945.24	0.00	0.00	0.00	
14,325.00	90.00	179.62	11,375.00	-2,884.14	928.75	2,960.18	0.00	0.00	0.00	
14,340.00	90.00	179.62	11,375.00	-2,899.14	928.85	2,975.11	0.00	0.00	0.00	
14,355.00	90.00	179.62	11,375.00	-2,914.14	928.95	2,990.05	0.00	0.00	0.00	
14,370.00	90.00	179.62	11,375.00	-2,929.13	929.05	3,004.99	0.00	0.00	0.00	
14,385.00	90.00	179.62	11,375.00	-2,944.13	929.15	3,019.93	0.00	0.00	0.00	
14,400.00	90.00	179.62	11,375.00	-2,959.13	929.25	3,034.87	0.00	0.00	0.00	
14,415.00	90.00	179.62	11,375.00	-2,974.13	929.35	3,049.81	0.00	0.00	0.00	
14,430.00	90.00	179.62	11,375.00	-2,989.13	929.45	3,064.75	0.00	0.00	0.00	
14,445.00	90.00	179.62	11,375.00	-3,004.13	929.55	3,079.69	0.00	0.00	0.00	
14,460.00	90.00	179.62	11,375.00	-3,019.13	929.65	3,094.63	0.00	0.00	0.00	
14,475.00	90.00	179.62	11,375.00	-3,034.13	929.75	3,109.57	0.00	0.00	0.00	
14,490.00	90.00	179.62	11,375.00	-3,049.13	929.85	3,124.51	0.00	0.00	0.00	
14,505.00	90.00	179.62	11,375.00	-3,064.13	929.96	3,139.45	0.00	0.00	0.00	
14,520.00	90.00	179.62	11,375.00	-3,079.13	930.06	3,154.39	0.00	0.00	0.00	
14,535.00	90.00	179.62	11,375.00	-3,094.13	930.16	3,169.33	0.00	0.00	0.00	
14,550.00	90.00	179.62	11,375.00	-3,109.13	930.26	3,184.27	0.00	0.00	0.00	
14,565.00	90.00	179.62	11,375.00	-3,124.13	930.36	3,199.21	0.00	0.00	0.00	
14,580.00	90.00	179.62	11,375.00	-3,139.13	930.46	3,214.15	0.00	0.00	0.00	
14,595.00	90.00	179.62	11,375.00	-3,154.13	930.56	3,229.09	0.00	0.00	0.00	
14,610.00	90.00	179.62	11,375.00	-3,169.13	930.66	3,244.03	0.00	0.00	0.00	
14,625.00	90.00	179.62	11,375.00	-3,184.13	930.76	3,258.97	0.00	0.00	0.00	
14,640.00	90.00	179.62	11,375.00	-3,199.13	930.86	3,273.91	0.00	0.00	0.00	
14,655.00	90.00	179.62	11,375.00	-3,214.13	930.96	3,288.85	0.00	0.00	0.00	
14,670.00	90.00	179.62	11,375.00	-3,229.13	931.06	3,303.79	0.00	0.00	0.00	
14,685.00	90.00	179.62	11,375.00	-3,244.13	931.16	3,318.73	0.00	0.00	0.00	
14,700.00	90.00	179.62	11,375.00	-3,259.13	931.26	3,333.67	0.00	0.00	0.00	
14,715.00	90.00	179.62	11,375.00	-3,274.13	931.36	3,348.61	0.00	0.00	0.00	
14,730.00	90.00	179.62	11,375.00	-3,289.13	931.46	3,363.55	0.00	0.00	0.00	
14,745.00	90.00	179.62	11,375.00	-3,304.13	931.56	3,378.48	0.00	0.00	0.00	
14,760.00	90.00	179.62	11,375.00	-3,319.13	931.67	3,393.42	0.00	0.00	0.00	
14,775.00	90.00	179.62	11,375.00	-3,334.13	931.77	3,408.36	0.00	0.00	0.00	
14,790.00	90.00	179.62	11,375.00	-3,349.13	931.87	3,423.30	0.00	0.00	0.00	
14,805.00	90.00	179.62	11,375.00	-3,364.13	931.97	3,438.24	0.00	0.00	0.00	
14,820.00	90.00	179.62	11,375.00	-3,379.12	932.07	3,453.18	0.00	0.00	0.00	
14,835.00	90.00	179.62	11,375.00	-3,394.12	932.17	3,468.12	0.00	0.00	0.00	
14,850.00	90.00	179.62	11,375.00	-3,409.12	932.27	3,483.06	0.00	0.00	0.00	
14,865.00	90.00	179.62	11,375.00	-3,424.12	932.37	3,498.00	0.00	0.00	0.00	
14,880.00	90.00	179.62	11,375.00	-3,439.12	932.47	3,512.94	0.00	0.00	0.00	
14,895.00	90.00	179.62	11,375.00	-3,454.12	932.57	3,527.88	0.00	0.00	0.00	
14,910.00	90.00	179.62	11,375.00	-3,469.12	932.67	3,542.82	0.00	0.00	0.00	
14,925.00	90.00	179.62	11,375.00	-3,484.12	932.77	3,557.76	0.00	0.00	0.00	
14,940.00	90.00	179.62	11,375.00	-3,499.12	932.87	3,572.70	0.00	0.00	0.00	
14,955.00	90.00	179.62	11,375.00	-3,514.12	932.97	3,587.64	0.00	0.00	0.00	
14,970.00	90.00	179.62	11,375.00	-3,529.12	933.07	3,602.58	0.00	0.00	0.00	
14,985.00	90.00	179.62	11,375.00	-3,544.12	933.17	3,617.52	0.00	0.00	0.00	
15,000.00	90.00	179.62	11,375.00	-3,559.12	933.27	3,632.46	0.00	0.00	0.00	
15,015.00	90.00	179.62	11,375.00	-3,574.12	933.38	3,647.40	0.00	0.00	0.00	

ConocoPhillips

Planning Report

Database:	EDT 17 Permian Prod	Local Co-ordinate Reference:	Well _ COLUMBUS FEDERAL COM 653H - Slot SLOT 7
Company:	DELAWARE BASIN EAST	TVD Reference:	KB @ 3362.00usft
Project:	LEA COUNT SOUTH WEST (NM-E)	MD Reference:	KB @ 3362.00usft
Site:	COLUMBUS FEDERAL PROJECT	North Reference:	Grid
Well:	_ COLUMBUS FEDERAL COM 653H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OWB		
Design:	PWP0		

Planned Survey										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	
15,030.00	90.00	179.62	11,375.00	-3,589.12	933.48	3,662.34	0.00	0.00	0.00	
15,045.00	90.00	179.62	11,375.00	-3,604.12	933.58	3,677.28	0.00	0.00	0.00	
15,060.00	90.00	179.62	11,375.00	-3,619.12	933.68	3,692.22	0.00	0.00	0.00	
15,075.00	90.00	179.62	11,375.00	-3,634.12	933.78	3,707.16	0.00	0.00	0.00	
15,090.00	90.00	179.62	11,375.00	-3,649.12	933.88	3,722.10	0.00	0.00	0.00	
15,105.00	90.00	179.62	11,375.00	-3,664.12	933.98	3,737.04	0.00	0.00	0.00	
15,120.00	90.00	179.62	11,375.00	-3,679.12	934.08	3,751.98	0.00	0.00	0.00	
15,135.00	90.00	179.62	11,375.00	-3,694.12	934.18	3,766.92	0.00	0.00	0.00	
15,150.00	90.00	179.62	11,375.00	-3,709.12	934.28	3,781.85	0.00	0.00	0.00	
15,165.00	90.00	179.62	11,375.00	-3,724.12	934.38	3,796.79	0.00	0.00	0.00	
15,180.00	90.00	179.62	11,375.00	-3,739.12	934.48	3,811.73	0.00	0.00	0.00	
15,195.00	90.00	179.62	11,375.00	-3,754.12	934.58	3,826.67	0.00	0.00	0.00	
15,210.00	90.00	179.62	11,375.00	-3,769.12	934.68	3,841.61	0.00	0.00	0.00	
15,225.00	90.00	179.62	11,375.00	-3,784.12	934.78	3,856.55	0.00	0.00	0.00	
15,240.00	90.00	179.62	11,375.00	-3,799.12	934.88	3,871.49	0.00	0.00	0.00	
15,255.00	90.00	179.62	11,375.00	-3,814.11	934.98	3,886.43	0.00	0.00	0.00	
15,270.00	90.00	179.62	11,375.00	-3,829.11	935.09	3,901.37	0.00	0.00	0.00	
15,285.00	90.00	179.62	11,375.00	-3,844.11	935.19	3,916.31	0.00	0.00	0.00	
15,300.00	90.00	179.62	11,375.00	-3,859.11	935.29	3,931.25	0.00	0.00	0.00	
15,315.00	90.00	179.62	11,375.00	-3,874.11	935.39	3,946.19	0.00	0.00	0.00	
15,330.00	90.00	179.62	11,375.00	-3,889.11	935.49	3,961.13	0.00	0.00	0.00	
15,345.00	90.00	179.62	11,375.00	-3,904.11	935.59	3,976.07	0.00	0.00	0.00	
15,360.00	90.00	179.62	11,375.00	-3,919.11	935.69	3,991.01	0.00	0.00	0.00	
15,375.00	90.00	179.62	11,375.00	-3,934.11	935.79	4,005.95	0.00	0.00	0.00	
15,390.00	90.00	179.62	11,375.00	-3,949.11	935.89	4,020.89	0.00	0.00	0.00	
15,405.00	90.00	179.62	11,375.00	-3,964.11	935.99	4,035.83	0.00	0.00	0.00	
15,420.00	90.00	179.62	11,375.00	-3,979.11	936.09	4,050.77	0.00	0.00	0.00	
15,435.00	90.00	179.62	11,375.00	-3,994.11	936.19	4,065.71	0.00	0.00	0.00	
15,450.00	90.00	179.62	11,375.00	-4,009.11	936.29	4,080.65	0.00	0.00	0.00	
15,465.00	90.00	179.62	11,375.00	-4,024.11	936.39	4,095.59	0.00	0.00	0.00	
15,480.00	90.00	179.62	11,375.00	-4,039.11	936.49	4,110.53	0.00	0.00	0.00	
15,495.00	90.00	179.62	11,375.00	-4,054.11	936.59	4,125.47	0.00	0.00	0.00	
15,510.00	90.00	179.62	11,375.00	-4,069.11	936.69	4,140.41	0.00	0.00	0.00	
15,525.00	90.00	179.62	11,375.00	-4,084.11	936.80	4,155.35	0.00	0.00	0.00	
15,540.00	90.00	179.62	11,375.00	-4,099.11	936.90	4,170.28	0.00	0.00	0.00	
15,555.00	90.00	179.62	11,375.00	-4,114.11	937.00	4,185.22	0.00	0.00	0.00	
15,570.00	90.00	179.62	11,375.00	-4,129.11	937.10	4,200.16	0.00	0.00	0.00	
15,585.00	90.00	179.62	11,375.00	-4,144.11	937.20	4,215.10	0.00	0.00	0.00	
15,600.00	90.00	179.62	11,375.00	-4,159.11	937.30	4,230.04	0.00	0.00	0.00	
15,615.00	90.00	179.62	11,375.00	-4,174.11	937.40	4,244.98	0.00	0.00	0.00	
15,630.00	90.00	179.62	11,375.00	-4,189.11	937.50	4,259.92	0.00	0.00	0.00	
15,645.00	90.00	179.62	11,375.00	-4,204.11	937.60	4,274.86	0.00	0.00	0.00	
15,660.00	90.00	179.62	11,375.00	-4,219.11	937.70	4,289.80	0.00	0.00	0.00	
15,675.00	90.00	179.62	11,375.00	-4,234.11	937.80	4,304.74	0.00	0.00	0.00	
15,690.00	90.00	179.62	11,375.00	-4,249.11	937.90	4,319.68	0.00	0.00	0.00	
15,705.00	90.00	179.62	11,375.00	-4,264.10	938.00	4,334.62	0.00	0.00	0.00	
15,720.00	90.00	179.62	11,375.00	-4,279.10	938.10	4,349.56	0.00	0.00	0.00	
15,735.00	90.00	179.62	11,375.00	-4,294.10	938.20	4,364.50	0.00	0.00	0.00	
15,750.00	90.00	179.62	11,375.00	-4,309.10	938.30	4,379.44	0.00	0.00	0.00	
15,765.00	90.00	179.62	11,375.00	-4,324.10	938.40	4,394.38	0.00	0.00	0.00	
15,780.00	90.00	179.62	11,375.00	-4,339.10	938.51	4,409.32	0.00	0.00	0.00	
15,795.00	90.00	179.62	11,375.00	-4,354.10	938.61	4,424.26	0.00	0.00	0.00	
15,810.00	90.00	179.62	11,375.00	-4,369.10	938.71	4,439.20	0.00	0.00	0.00	

ConocoPhillips

Planning Report

Database:	EDT 17 Permian Prod	Local Co-ordinate Reference:	Well _ COLUMBUS FEDERAL COM 653H - Slot SLOT 7
Company:	DELAWARE BASIN EAST	TVD Reference:	KB @ 3362.00usft
Project:	LEA COUNT SOUTH WEST (NM-E)	MD Reference:	KB @ 3362.00usft
Site:	COLUMBUS FEDERAL PROJECT	North Reference:	Grid
Well:	_COLUMBUS FEDERAL COM 653H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OWB		
Design:	PWP0		

Planned Survey										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	
15,825.00	90.00	179.62	11,375.00	-4,384.10	938.81	4,454.14	0.00	0.00	0.00	
15,840.00	90.00	179.62	11,375.00	-4,399.10	938.91	4,469.08	0.00	0.00	0.00	
15,855.00	90.00	179.62	11,375.00	-4,414.10	939.01	4,484.02	0.00	0.00	0.00	
15,870.00	90.00	179.62	11,375.00	-4,429.10	939.11	4,498.96	0.00	0.00	0.00	
15,885.00	90.00	179.62	11,375.00	-4,444.10	939.21	4,513.90	0.00	0.00	0.00	
15,900.00	90.00	179.62	11,375.00	-4,459.10	939.31	4,528.84	0.00	0.00	0.00	
15,915.00	90.00	179.62	11,375.00	-4,474.10	939.41	4,543.78	0.00	0.00	0.00	
15,930.00	90.00	179.62	11,375.00	-4,489.10	939.51	4,558.72	0.00	0.00	0.00	
15,945.00	90.00	179.62	11,375.00	-4,504.10	939.61	4,573.65	0.00	0.00	0.00	
15,960.00	90.00	179.62	11,375.00	-4,519.10	939.71	4,588.59	0.00	0.00	0.00	
15,975.00	90.00	179.62	11,375.00	-4,534.10	939.81	4,603.53	0.00	0.00	0.00	
15,990.00	90.00	179.62	11,375.00	-4,549.10	939.91	4,618.47	0.00	0.00	0.00	
16,005.00	90.00	179.62	11,375.00	-4,564.10	940.01	4,633.41	0.00	0.00	0.00	
16,020.00	90.00	179.62	11,375.00	-4,579.10	940.11	4,648.35	0.00	0.00	0.00	
16,035.00	90.00	179.62	11,375.00	-4,594.10	940.21	4,663.29	0.00	0.00	0.00	
16,050.00	90.00	179.62	11,375.00	-4,609.10	940.32	4,678.23	0.00	0.00	0.00	
16,065.00	90.00	179.62	11,375.00	-4,624.10	940.42	4,693.17	0.00	0.00	0.00	
16,080.00	90.00	179.62	11,375.00	-4,639.10	940.52	4,708.11	0.00	0.00	0.00	
16,095.00	90.00	179.62	11,375.00	-4,654.10	940.62	4,723.05	0.00	0.00	0.00	
16,110.00	90.00	179.62	11,375.00	-4,669.10	940.72	4,737.99	0.00	0.00	0.00	
16,125.00	90.00	179.62	11,375.00	-4,684.10	940.82	4,752.93	0.00	0.00	0.00	
16,140.00	90.00	179.62	11,375.00	-4,699.10	940.92	4,767.87	0.00	0.00	0.00	
16,155.00	90.00	179.62	11,375.00	-4,714.09	941.02	4,782.81	0.00	0.00	0.00	
16,170.00	90.00	179.62	11,375.00	-4,729.09	941.12	4,797.75	0.00	0.00	0.00	
16,185.00	90.00	179.62	11,375.00	-4,744.09	941.22	4,812.69	0.00	0.00	0.00	
16,200.00	90.00	179.62	11,375.00	-4,759.09	941.32	4,827.63	0.00	0.00	0.00	
16,215.00	90.00	179.62	11,375.00	-4,774.09	941.42	4,842.57	0.00	0.00	0.00	
16,230.00	90.00	179.62	11,375.00	-4,789.09	941.52	4,857.51	0.00	0.00	0.00	
16,245.00	90.00	179.62	11,375.00	-4,804.09	941.62	4,872.45	0.00	0.00	0.00	
16,260.00	90.00	179.62	11,375.00	-4,819.09	941.72	4,887.39	0.00	0.00	0.00	
16,275.00	90.00	179.62	11,375.00	-4,834.09	941.82	4,902.33	0.00	0.00	0.00	
16,290.00	90.00	179.62	11,375.00	-4,849.09	941.92	4,917.27	0.00	0.00	0.00	
16,305.00	90.00	179.62	11,375.00	-4,864.09	942.03	4,932.21	0.00	0.00	0.00	
16,320.00	90.00	179.62	11,375.00	-4,879.09	942.13	4,947.15	0.00	0.00	0.00	
16,335.00	90.00	179.62	11,375.00	-4,894.09	942.23	4,962.09	0.00	0.00	0.00	
16,350.00	90.00	179.62	11,375.00	-4,909.09	942.33	4,977.02	0.00	0.00	0.00	
16,365.00	90.00	179.62	11,375.00	-4,924.09	942.43	4,991.96	0.00	0.00	0.00	
16,380.00	90.00	179.62	11,375.00	-4,939.09	942.53	5,006.90	0.00	0.00	0.00	
16,395.00	90.00	179.62	11,375.00	-4,954.09	942.63	5,021.84	0.00	0.00	0.00	
16,410.00	90.00	179.62	11,375.00	-4,969.09	942.73	5,036.78	0.00	0.00	0.00	
16,425.00	90.00	179.62	11,375.00	-4,984.09	942.83	5,051.72	0.00	0.00	0.00	
16,440.00	90.00	179.62	11,375.00	-4,999.09	942.93	5,066.66	0.00	0.00	0.00	
16,455.00	90.00	179.62	11,375.00	-5,014.09	943.03	5,081.60	0.00	0.00	0.00	
16,470.00	90.00	179.62	11,375.00	-5,029.09	943.13	5,096.54	0.00	0.00	0.00	
16,485.00	90.00	179.62	11,375.00	-5,044.09	943.23	5,111.48	0.00	0.00	0.00	
16,500.00	90.00	179.62	11,375.00	-5,059.09	943.33	5,126.42	0.00	0.00	0.00	
16,515.00	90.00	179.62	11,375.00	-5,074.09	943.43	5,141.36	0.00	0.00	0.00	
16,530.00	90.00	179.62	11,375.00	-5,089.09	943.53	5,156.30	0.00	0.00	0.00	
16,545.00	90.00	179.62	11,375.00	-5,104.09	943.63	5,171.24	0.00	0.00	0.00	
16,560.00	90.00	179.62	11,375.00	-5,119.09	943.74	5,186.18	0.00	0.00	0.00	
16,575.00	90.00	179.62	11,375.00	-5,134.09	943.84	5,201.12	0.00	0.00	0.00	
16,590.00	90.00	179.62	11,375.00	-5,149.08	943.94	5,216.06	0.00	0.00	0.00	
16,605.00	90.00	179.62	11,375.00	-5,164.08	944.04	5,231.00	0.00	0.00	0.00	

ConocoPhillips

Planning Report

Database:	EDT 17 Permian Prod	Local Co-ordinate Reference:	Well _ COLUMBUS FEDERAL COM 653H - Slot SLOT 7
Company:	DELAWARE BASIN EAST	TVD Reference:	KB @ 3362.00usft
Project:	LEA COUNT SOUTH WEST (NM-E)	MD Reference:	KB @ 3362.00usft
Site:	COLUMBUS FEDERAL PROJECT	North Reference:	Grid
Well:	_COLUMBUS FEDERAL COM 653H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OWB		
Design:	PWP0		

Planned Survey										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	
16,620.00	90.00	179.62	11,375.00	-5,179.08	944.14	5,245.94	0.00	0.00	0.00	
16,635.00	90.00	179.62	11,375.00	-5,194.08	944.24	5,260.88	0.00	0.00	0.00	
16,650.00	90.00	179.62	11,375.00	-5,209.08	944.34	5,275.82	0.00	0.00	0.00	
16,665.00	90.00	179.62	11,375.00	-5,224.08	944.44	5,290.76	0.00	0.00	0.00	
16,680.00	90.00	179.62	11,375.00	-5,239.08	944.54	5,305.70	0.00	0.00	0.00	
16,695.00	90.00	179.62	11,375.00	-5,254.08	944.64	5,320.64	0.00	0.00	0.00	
16,710.00	90.00	179.62	11,375.00	-5,269.08	944.74	5,335.58	0.00	0.00	0.00	
16,725.00	90.00	179.62	11,375.00	-5,284.08	944.84	5,350.52	0.00	0.00	0.00	
16,740.00	90.00	179.62	11,375.00	-5,299.08	944.94	5,365.45	0.00	0.00	0.00	
16,755.00	90.00	179.62	11,375.00	-5,314.08	945.04	5,380.39	0.00	0.00	0.00	
16,770.00	90.00	179.62	11,375.00	-5,329.08	945.14	5,395.33	0.00	0.00	0.00	
16,785.00	90.00	179.62	11,375.00	-5,344.08	945.24	5,410.27	0.00	0.00	0.00	
16,800.00	90.00	179.62	11,375.00	-5,359.08	945.34	5,425.21	0.00	0.00	0.00	
16,815.00	90.00	179.62	11,375.00	-5,374.08	945.45	5,440.15	0.00	0.00	0.00	
16,830.00	90.00	179.62	11,375.00	-5,389.08	945.55	5,455.09	0.00	0.00	0.00	
16,845.00	90.00	179.62	11,375.00	-5,404.08	945.65	5,470.03	0.00	0.00	0.00	
16,860.00	90.00	179.62	11,375.00	-5,419.08	945.75	5,484.97	0.00	0.00	0.00	
16,875.00	90.00	179.62	11,375.00	-5,434.08	945.85	5,499.91	0.00	0.00	0.00	
16,890.00	90.00	179.62	11,375.00	-5,449.08	945.95	5,514.85	0.00	0.00	0.00	
16,905.00	90.00	179.62	11,375.00	-5,464.08	946.05	5,529.79	0.00	0.00	0.00	
16,920.00	90.00	179.62	11,375.00	-5,479.08	946.15	5,544.73	0.00	0.00	0.00	
16,935.00	90.00	179.62	11,375.00	-5,494.08	946.25	5,559.67	0.00	0.00	0.00	
16,950.00	90.00	179.62	11,375.00	-5,509.08	946.35	5,574.61	0.00	0.00	0.00	
16,965.00	90.00	179.62	11,375.00	-5,524.08	946.45	5,589.55	0.00	0.00	0.00	
16,980.00	90.00	179.62	11,375.00	-5,539.08	946.55	5,604.49	0.00	0.00	0.00	
16,995.00	90.00	179.62	11,375.00	-5,554.08	946.65	5,619.43	0.00	0.00	0.00	
17,010.00	90.00	179.62	11,375.00	-5,569.08	946.75	5,634.37	0.00	0.00	0.00	
17,025.00	90.00	179.62	11,375.00	-5,584.08	946.85	5,649.31	0.00	0.00	0.00	
17,040.00	90.00	179.62	11,375.00	-5,599.07	946.95	5,664.25	0.00	0.00	0.00	
17,055.00	90.00	179.62	11,375.00	-5,614.07	947.05	5,679.19	0.00	0.00	0.00	
17,070.00	90.00	179.62	11,375.00	-5,629.07	947.16	5,694.13	0.00	0.00	0.00	
17,085.00	90.00	179.62	11,375.00	-5,644.07	947.26	5,709.07	0.00	0.00	0.00	
17,100.00	90.00	179.62	11,375.00	-5,659.07	947.36	5,724.01	0.00	0.00	0.00	
17,115.00	90.00	179.62	11,375.00	-5,674.07	947.46	5,738.95	0.00	0.00	0.00	
17,130.00	90.00	179.62	11,375.00	-5,689.07	947.56	5,753.89	0.00	0.00	0.00	
17,145.00	90.00	179.62	11,375.00	-5,704.07	947.66	5,768.82	0.00	0.00	0.00	
17,160.00	90.00	179.62	11,375.00	-5,719.07	947.76	5,783.76	0.00	0.00	0.00	
17,175.00	90.00	179.62	11,375.00	-5,734.07	947.86	5,798.70	0.00	0.00	0.00	
17,190.00	90.00	179.62	11,375.00	-5,749.07	947.96	5,813.64	0.00	0.00	0.00	
17,205.00	90.00	179.62	11,375.00	-5,764.07	948.06	5,828.58	0.00	0.00	0.00	
17,220.00	90.00	179.62	11,375.00	-5,779.07	948.16	5,843.52	0.00	0.00	0.00	
17,235.00	90.00	179.62	11,375.00	-5,794.07	948.26	5,858.46	0.00	0.00	0.00	
17,250.00	90.00	179.62	11,375.00	-5,809.07	948.36	5,873.40	0.00	0.00	0.00	
17,265.00	90.00	179.62	11,375.00	-5,824.07	948.46	5,888.34	0.00	0.00	0.00	
17,280.00	90.00	179.62	11,375.00	-5,839.07	948.56	5,903.28	0.00	0.00	0.00	
17,295.00	90.00	179.62	11,375.00	-5,854.07	948.66	5,918.22	0.00	0.00	0.00	
17,310.00	90.00	179.62	11,375.00	-5,869.07	948.76	5,933.16	0.00	0.00	0.00	
17,325.00	90.00	179.62	11,375.00	-5,884.07	948.87	5,948.10	0.00	0.00	0.00	
17,340.00	90.00	179.62	11,375.00	-5,899.07	948.97	5,963.04	0.00	0.00	0.00	
17,355.00	90.00	179.62	11,375.00	-5,914.07	949.07	5,977.98	0.00	0.00	0.00	
17,370.00	90.00	179.62	11,375.00	-5,929.07	949.17	5,992.92	0.00	0.00	0.00	
17,385.00	90.00	179.62	11,375.00	-5,944.07	949.27	6,007.86	0.00	0.00	0.00	
17,400.00	90.00	179.62	11,375.00	-5,959.07	949.37	6,022.80	0.00	0.00	0.00	

ConocoPhillips

Planning Report

Database:	EDT 17 Permian Prod	Local Co-ordinate Reference:	Well _ COLUMBUS FEDERAL COM 653H - Slot SLOT 7
Company:	DELAWARE BASIN EAST	TVD Reference:	KB @ 3362.00usft
Project:	LEA COUNT SOUTH WEST (NM-E)	MD Reference:	KB @ 3362.00usft
Site:	COLUMBUS FEDERAL PROJECT	North Reference:	Grid
Well:	_ COLUMBUS FEDERAL COM 653H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OWB		
Design:	PWP0		

Planned Survey										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	
17,415.00	90.00	179.62	11,375.00	-5,974.07	949.47	6,037.74	0.00	0.00	0.00	
17,430.00	90.00	179.62	11,375.00	-5,989.07	949.57	6,052.68	0.00	0.00	0.00	
17,445.00	90.00	179.62	11,375.00	-6,004.07	949.67	6,067.62	0.00	0.00	0.00	
17,460.00	90.00	179.62	11,375.00	-6,019.07	949.77	6,082.56	0.00	0.00	0.00	
17,475.00	90.00	179.62	11,375.00	-6,034.07	949.87	6,097.50	0.00	0.00	0.00	
17,490.00	90.00	179.62	11,375.00	-6,049.06	949.97	6,112.44	0.00	0.00	0.00	
17,505.00	90.00	179.62	11,375.00	-6,064.06	950.07	6,127.38	0.00	0.00	0.00	
17,520.00	90.00	179.62	11,375.00	-6,079.06	950.17	6,142.32	0.00	0.00	0.00	
17,535.00	90.00	179.62	11,375.00	-6,094.06	950.27	6,157.26	0.00	0.00	0.00	
17,550.00	90.00	179.62	11,375.00	-6,109.06	950.37	6,172.19	0.00	0.00	0.00	
17,565.00	90.00	179.62	11,375.00	-6,124.06	950.47	6,187.13	0.00	0.00	0.00	
17,580.00	90.00	179.62	11,375.00	-6,139.06	950.58	6,202.07	0.00	0.00	0.00	
17,595.00	90.00	179.62	11,375.00	-6,154.06	950.68	6,217.01	0.00	0.00	0.00	
17,610.00	90.00	179.62	11,375.00	-6,169.06	950.78	6,231.95	0.00	0.00	0.00	
17,625.00	90.00	179.62	11,375.00	-6,184.06	950.88	6,246.89	0.00	0.00	0.00	
17,640.00	90.00	179.62	11,375.00	-6,199.06	950.98	6,261.83	0.00	0.00	0.00	
17,655.00	90.00	179.62	11,375.00	-6,214.06	951.08	6,276.77	0.00	0.00	0.00	
17,670.00	90.00	179.62	11,375.00	-6,229.06	951.18	6,291.71	0.00	0.00	0.00	
17,685.00	90.00	179.62	11,375.00	-6,244.06	951.28	6,306.65	0.00	0.00	0.00	
17,700.00	90.00	179.62	11,375.00	-6,259.06	951.38	6,321.59	0.00	0.00	0.00	
17,715.00	90.00	179.62	11,375.00	-6,274.06	951.48	6,336.53	0.00	0.00	0.00	
17,730.00	90.00	179.62	11,375.00	-6,289.06	951.58	6,351.47	0.00	0.00	0.00	
17,745.00	90.00	179.62	11,375.00	-6,304.06	951.68	6,366.41	0.00	0.00	0.00	
17,760.00	90.00	179.62	11,375.00	-6,319.06	951.78	6,381.35	0.00	0.00	0.00	
17,775.00	90.00	179.62	11,375.00	-6,334.06	951.88	6,396.29	0.00	0.00	0.00	
17,790.00	90.00	179.62	11,375.00	-6,349.06	951.98	6,411.23	0.00	0.00	0.00	
17,805.00	90.00	179.62	11,375.00	-6,364.06	952.08	6,426.17	0.00	0.00	0.00	
17,820.00	90.00	179.62	11,375.00	-6,379.06	952.18	6,441.11	0.00	0.00	0.00	
17,835.00	90.00	179.62	11,375.00	-6,394.06	952.28	6,456.05	0.00	0.00	0.00	
17,850.00	90.00	179.62	11,375.00	-6,409.06	952.39	6,470.99	0.00	0.00	0.00	
17,865.00	90.00	179.62	11,375.00	-6,424.06	952.49	6,485.93	0.00	0.00	0.00	
17,880.00	90.00	179.62	11,375.00	-6,439.06	952.59	6,500.87	0.00	0.00	0.00	
17,895.00	90.00	179.62	11,375.00	-6,454.06	952.69	6,515.81	0.00	0.00	0.00	
17,910.00	90.00	179.62	11,375.00	-6,469.06	952.79	6,530.75	0.00	0.00	0.00	
17,925.00	90.00	179.62	11,375.00	-6,484.05	952.89	6,545.69	0.00	0.00	0.00	
17,940.00	90.00	179.62	11,375.00	-6,499.05	952.99	6,560.62	0.00	0.00	0.00	
17,955.00	90.00	179.62	11,375.00	-6,514.05	953.09	6,575.56	0.00	0.00	0.00	
17,970.00	90.00	179.62	11,375.00	-6,529.05	953.19	6,590.50	0.00	0.00	0.00	
17,985.00	90.00	179.62	11,375.00	-6,544.05	953.29	6,605.44	0.00	0.00	0.00	
18,000.00	90.00	179.62	11,375.00	-6,559.05	953.39	6,620.38	0.00	0.00	0.00	
18,015.00	90.00	179.62	11,375.00	-6,574.05	953.49	6,635.32	0.00	0.00	0.00	
18,030.00	90.00	179.62	11,375.00	-6,589.05	953.59	6,650.26	0.00	0.00	0.00	
18,045.00	90.00	179.62	11,375.00	-6,604.05	953.69	6,665.20	0.00	0.00	0.00	
18,060.00	90.00	179.62	11,375.00	-6,619.05	953.79	6,680.14	0.00	0.00	0.00	
18,075.00	90.00	179.62	11,375.00	-6,634.05	953.89	6,695.08	0.00	0.00	0.00	
18,090.00	90.00	179.62	11,375.00	-6,649.05	953.99	6,710.02	0.00	0.00	0.00	
18,105.00	90.00	179.62	11,375.00	-6,664.05	954.10	6,724.96	0.00	0.00	0.00	
18,120.00	90.00	179.62	11,375.00	-6,679.05	954.20	6,739.90	0.00	0.00	0.00	
18,135.00	90.00	179.62	11,375.00	-6,694.05	954.30	6,754.84	0.00	0.00	0.00	
18,150.00	90.00	179.62	11,375.00	-6,709.05	954.40	6,769.78	0.00	0.00	0.00	
18,165.00	90.00	179.62	11,375.00	-6,724.05	954.50	6,784.72	0.00	0.00	0.00	
18,180.00	90.00	179.62	11,375.00	-6,739.05	954.60	6,799.66	0.00	0.00	0.00	
18,195.00	90.00	179.62	11,375.00	-6,754.05	954.70	6,814.60	0.00	0.00	0.00	

ConocoPhillips

Planning Report

Database:	EDT 17 Permian Prod	Local Co-ordinate Reference:	Well _ COLUMBUS FEDERAL COM 653H - Slot SLOT 7
Company:	DELAWARE BASIN EAST	TVD Reference:	KB @ 3362.00usft
Project:	LEA COUNT SOUTH WEST (NM-E)	MD Reference:	KB @ 3362.00usft
Site:	COLUMBUS FEDERAL PROJECT	North Reference:	Grid
Well:	_ COLUMBUS FEDERAL COM 653H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OWB		
Design:	PWP0		

Planned Survey										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	
18,210.00	90.00	179.62	11,375.00	-6,769.05	954.80	6,829.54	0.00	0.00	0.00	
18,225.00	90.00	179.62	11,375.00	-6,784.05	954.90	6,844.48	0.00	0.00	0.00	
18,240.00	90.00	179.62	11,375.00	-6,799.05	955.00	6,859.42	0.00	0.00	0.00	
18,255.00	90.00	179.62	11,375.00	-6,814.05	955.10	6,874.36	0.00	0.00	0.00	
18,270.00	90.00	179.62	11,375.00	-6,829.05	955.20	6,889.30	0.00	0.00	0.00	
18,285.00	90.00	179.62	11,375.00	-6,844.05	955.30	6,904.24	0.00	0.00	0.00	
18,300.00	90.00	179.62	11,375.00	-6,859.05	955.40	6,919.18	0.00	0.00	0.00	
18,315.00	90.00	179.62	11,375.00	-6,874.05	955.50	6,934.12	0.00	0.00	0.00	
18,330.00	90.00	179.62	11,375.00	-6,889.05	955.60	6,949.06	0.00	0.00	0.00	
18,345.00	90.00	179.62	11,375.00	-6,904.05	955.70	6,963.99	0.00	0.00	0.00	
18,360.00	90.00	179.62	11,375.00	-6,919.05	955.81	6,978.93	0.00	0.00	0.00	
18,375.00	90.00	179.62	11,375.00	-6,934.04	955.91	6,993.87	0.00	0.00	0.00	
18,390.00	90.00	179.62	11,375.00	-6,949.04	956.01	7,008.81	0.00	0.00	0.00	
18,405.00	90.00	179.62	11,375.00	-6,964.04	956.11	7,023.75	0.00	0.00	0.00	
18,420.00	90.00	179.62	11,375.00	-6,979.04	956.21	7,038.69	0.00	0.00	0.00	
18,435.00	90.00	179.62	11,375.00	-6,994.04	956.31	7,053.63	0.00	0.00	0.00	
18,450.00	90.00	179.62	11,375.00	-7,009.04	956.41	7,068.57	0.00	0.00	0.00	
18,465.00	90.00	179.62	11,375.00	-7,024.04	956.51	7,083.51	0.00	0.00	0.00	
18,480.00	90.00	179.62	11,375.00	-7,039.04	956.61	7,098.45	0.00	0.00	0.00	
18,495.00	90.00	179.62	11,375.00	-7,054.04	956.71	7,113.39	0.00	0.00	0.00	
18,510.00	90.00	179.62	11,375.00	-7,069.04	956.81	7,128.33	0.00	0.00	0.00	
18,525.00	90.00	179.62	11,375.00	-7,084.04	956.91	7,143.27	0.00	0.00	0.00	
18,540.00	90.00	179.62	11,375.00	-7,099.04	957.01	7,158.21	0.00	0.00	0.00	
18,555.00	90.00	179.62	11,375.00	-7,114.04	957.11	7,173.15	0.00	0.00	0.00	
18,570.00	90.00	179.62	11,375.00	-7,129.04	957.21	7,188.09	0.00	0.00	0.00	
18,585.00	90.00	179.62	11,375.00	-7,144.04	957.31	7,203.03	0.00	0.00	0.00	
18,600.00	90.00	179.62	11,375.00	-7,159.04	957.41	7,217.97	0.00	0.00	0.00	
18,615.00	90.00	179.62	11,375.00	-7,174.04	957.52	7,232.91	0.00	0.00	0.00	
18,630.00	90.00	179.62	11,375.00	-7,189.04	957.62	7,247.85	0.00	0.00	0.00	
18,645.00	90.00	179.62	11,375.00	-7,204.04	957.72	7,262.79	0.00	0.00	0.00	
18,660.00	90.00	179.62	11,375.00	-7,219.04	957.82	7,277.73	0.00	0.00	0.00	
18,675.00	90.00	179.62	11,375.00	-7,234.04	957.92	7,292.67	0.00	0.00	0.00	
18,690.00	90.00	179.62	11,375.00	-7,249.04	958.02	7,307.61	0.00	0.00	0.00	
18,705.00	90.00	179.62	11,375.00	-7,264.04	958.12	7,322.55	0.00	0.00	0.00	
18,720.00	90.00	179.62	11,375.00	-7,279.04	958.22	7,337.49	0.00	0.00	0.00	
18,735.00	90.00	179.62	11,375.00	-7,294.04	958.32	7,352.43	0.00	0.00	0.00	
18,750.00	90.00	179.62	11,375.00	-7,309.04	958.42	7,367.36	0.00	0.00	0.00	
18,765.00	90.00	179.62	11,375.00	-7,324.04	958.52	7,382.30	0.00	0.00	0.00	
18,780.00	90.00	179.62	11,375.00	-7,339.04	958.62	7,397.24	0.00	0.00	0.00	
18,795.00	90.00	179.62	11,375.00	-7,354.04	958.72	7,412.18	0.00	0.00	0.00	
18,810.00	90.00	179.62	11,375.00	-7,369.04	958.82	7,427.12	0.00	0.00	0.00	
18,825.00	90.00	179.62	11,375.00	-7,384.03	958.92	7,442.06	0.00	0.00	0.00	
18,840.00	90.00	179.62	11,375.00	-7,399.03	959.02	7,457.00	0.00	0.00	0.00	
18,855.00	90.00	179.62	11,375.00	-7,414.03	959.12	7,471.94	0.00	0.00	0.00	
18,870.00	90.00	179.62	11,375.00	-7,429.03	959.23	7,486.88	0.00	0.00	0.00	
18,885.00	90.00	179.62	11,375.00	-7,444.03	959.33	7,501.82	0.00	0.00	0.00	
18,900.00	90.00	179.62	11,375.00	-7,459.03	959.43	7,516.76	0.00	0.00	0.00	
18,915.00	90.00	179.62	11,375.00	-7,474.03	959.53	7,531.70	0.00	0.00	0.00	
18,930.00	90.00	179.62	11,375.00	-7,489.03	959.63	7,546.64	0.00	0.00	0.00	
18,945.00	90.00	179.62	11,375.00	-7,504.03	959.73	7,561.58	0.00	0.00	0.00	
18,960.00	90.00	179.62	11,375.00	-7,519.03	959.83	7,576.52	0.00	0.00	0.00	
18,975.00	90.00	179.62	11,375.00	-7,534.03	959.93	7,591.46	0.00	0.00	0.00	
18,990.00	90.00	179.62	11,375.00	-7,549.03	960.03	7,606.40	0.00	0.00	0.00	

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Planning Report

Database:	EDT 17 Permian Prod	Local Co-ordinate Reference:	Well _COLUMBUS FEDERAL COM 653H - Slot SLOT 7
Company:	DELAWARE BASIN EAST	TVD Reference:	KB @ 3362.00usft
Project:	LEA COUNT SOUTH WEST (NM-E)	MD Reference:	KB @ 3362.00usft
Site:	COLUMBUS FEDERAL PROJECT	North Reference:	Grid
Well:	_COLUMBUS FEDERAL COM 653H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OWB		
Design:	PWP0		

Planned Survey										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	
19,005.00	90.00	179.62	11,375.00	-7,564.03	960.13	7,621.34	0.00	0.00	0.00	
19,020.00	90.00	179.62	11,375.00	-7,579.03	960.23	7,636.28	0.00	0.00	0.00	
19,035.00	90.00	179.62	11,375.00	-7,594.03	960.33	7,651.22	0.00	0.00	0.00	
19,050.00	90.00	179.62	11,375.00	-7,609.03	960.43	7,666.16	0.00	0.00	0.00	
19,065.00	90.00	179.62	11,375.00	-7,624.03	960.53	7,681.10	0.00	0.00	0.00	
19,080.00	90.00	179.62	11,375.00	-7,639.03	960.63	7,696.04	0.00	0.00	0.00	
19,095.00	90.00	179.62	11,375.00	-7,654.03	960.73	7,710.98	0.00	0.00	0.00	
19,110.00	90.00	179.62	11,375.00	-7,669.03	960.83	7,725.92	0.00	0.00	0.00	
19,125.00	90.00	179.62	11,375.00	-7,684.03	960.94	7,740.86	0.00	0.00	0.00	
19,140.00	90.00	179.62	11,375.00	-7,699.03	961.04	7,755.79	0.00	0.00	0.00	
19,155.00	90.00	179.62	11,375.00	-7,714.03	961.14	7,770.73	0.00	0.00	0.00	
19,170.00	90.00	179.62	11,375.00	-7,729.03	961.24	7,785.67	0.00	0.00	0.00	
19,185.00	90.00	179.62	11,375.00	-7,744.03	961.34	7,800.61	0.00	0.00	0.00	
19,200.00	90.00	179.62	11,375.00	-7,759.03	961.44	7,815.55	0.00	0.00	0.00	
19,215.00	90.00	179.62	11,375.00	-7,774.03	961.54	7,830.49	0.00	0.00	0.00	
19,230.00	90.00	179.62	11,375.00	-7,789.03	961.64	7,845.43	0.00	0.00	0.00	
19,245.00	90.00	179.62	11,375.00	-7,804.03	961.74	7,860.37	0.00	0.00	0.00	
19,260.00	90.00	179.62	11,375.00	-7,819.02	961.84	7,875.31	0.00	0.00	0.00	
19,275.00	90.00	179.62	11,375.00	-7,834.02	961.94	7,890.25	0.00	0.00	0.00	
19,290.00	90.00	179.62	11,375.00	-7,849.02	962.04	7,905.19	0.00	0.00	0.00	
19,305.00	90.00	179.62	11,375.00	-7,864.02	962.14	7,920.13	0.00	0.00	0.00	
19,320.00	90.00	179.62	11,375.00	-7,879.02	962.24	7,935.07	0.00	0.00	0.00	
19,335.00	90.00	179.62	11,375.00	-7,894.02	962.34	7,950.01	0.00	0.00	0.00	
19,350.00	90.00	179.62	11,375.00	-7,909.02	962.44	7,964.95	0.00	0.00	0.00	
19,365.00	90.00	179.62	11,375.00	-7,924.02	962.54	7,979.89	0.00	0.00	0.00	
19,380.00	90.00	179.62	11,375.00	-7,939.02	962.65	7,994.83	0.00	0.00	0.00	
19,395.00	90.00	179.62	11,375.00	-7,954.02	962.75	8,009.77	0.00	0.00	0.00	
19,410.00	90.00	179.62	11,375.00	-7,969.02	962.85	8,024.71	0.00	0.00	0.00	
19,425.00	90.00	179.62	11,375.00	-7,984.02	962.95	8,039.65	0.00	0.00	0.00	
19,440.00	90.00	179.62	11,375.00	-7,999.02	963.05	8,054.59	0.00	0.00	0.00	
19,455.00	90.00	179.62	11,375.00	-8,014.02	963.15	8,069.53	0.00	0.00	0.00	
19,470.00	90.00	179.62	11,375.00	-8,029.02	963.25	8,084.47	0.00	0.00	0.00	
19,485.00	90.00	179.62	11,375.00	-8,044.02	963.35	8,099.41	0.00	0.00	0.00	
19,500.00	90.00	179.62	11,375.00	-8,059.02	963.45	8,114.35	0.00	0.00	0.00	
19,515.00	90.00	179.62	11,375.00	-8,074.02	963.55	8,129.29	0.00	0.00	0.00	
19,530.00	90.00	179.62	11,375.00	-8,089.02	963.65	8,144.23	0.00	0.00	0.00	
19,545.00	90.00	179.62	11,375.00	-8,104.02	963.75	8,159.16	0.00	0.00	0.00	
19,560.00	90.00	179.62	11,375.00	-8,119.02	963.85	8,174.10	0.00	0.00	0.00	
19,575.00	90.00	179.62	11,375.00	-8,134.02	963.95	8,189.04	0.00	0.00	0.00	
19,590.00	90.00	179.62	11,375.00	-8,149.02	964.05	8,203.98	0.00	0.00	0.00	
19,605.00	90.00	179.62	11,375.00	-8,164.02	964.15	8,218.92	0.00	0.00	0.00	
19,620.00	90.00	179.62	11,375.00	-8,179.02	964.25	8,233.86	0.00	0.00	0.00	
19,635.00	90.00	179.62	11,375.00	-8,194.02	964.36	8,248.80	0.00	0.00	0.00	
19,650.00	90.00	179.62	11,375.00	-8,209.02	964.46	8,263.74	0.00	0.00	0.00	
19,665.00	90.00	179.62	11,375.00	-8,224.02	964.56	8,278.68	0.00	0.00	0.00	
19,680.00	90.00	179.62	11,375.00	-8,239.02	964.66	8,293.62	0.00	0.00	0.00	
19,695.00	90.00	179.62	11,375.00	-8,254.02	964.76	8,308.56	0.00	0.00	0.00	
19,710.00	90.00	179.62	11,375.00	-8,269.01	964.86	8,323.50	0.00	0.00	0.00	
19,725.00	90.00	179.62	11,375.00	-8,284.01	964.96	8,338.44	0.00	0.00	0.00	
19,740.00	90.00	179.62	11,375.00	-8,299.01	965.06	8,353.38	0.00	0.00	0.00	
19,755.00	90.00	179.62	11,375.00	-8,314.01	965.16	8,368.32	0.00	0.00	0.00	
19,770.00	90.00	179.62	11,375.00	-8,329.01	965.26	8,383.26	0.00	0.00	0.00	
19,785.00	90.00	179.62	11,375.00	-8,344.01	965.36	8,398.20	0.00	0.00	0.00	

ConocoPhillips

Planning Report

Database:	EDT 17 Permian Prod	Local Co-ordinate Reference:	Well _COLUMBUS FEDERAL COM 653H - Slot SLOT 7
Company:	DELAWARE BASIN EAST	TVD Reference:	KB @ 3362.00usft
Project:	LEA COUNT SOUTH WEST (NM-E)	MD Reference:	KB @ 3362.00usft
Site:	COLUMBUS FEDERAL PROJECT	North Reference:	Grid
Well:	_COLUMBUS FEDERAL COM 653H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OWB		
Design:	PWP0		

Planned Survey										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	
19,800.00	90.00	179.62	11,375.00	-8,359.01	965.46	8,413.14	0.00	0.00	0.00	
19,815.00	90.00	179.62	11,375.00	-8,374.01	965.56	8,428.08	0.00	0.00	0.00	
19,830.00	90.00	179.62	11,375.00	-8,389.01	965.66	8,443.02	0.00	0.00	0.00	
19,845.00	90.00	179.62	11,375.00	-8,404.01	965.76	8,457.96	0.00	0.00	0.00	
19,860.00	90.00	179.62	11,375.00	-8,419.01	965.86	8,472.90	0.00	0.00	0.00	
19,875.00	90.00	179.62	11,375.00	-8,434.01	965.96	8,487.84	0.00	0.00	0.00	
19,890.00	90.00	179.62	11,375.00	-8,449.01	966.06	8,502.78	0.00	0.00	0.00	
19,905.00	90.00	179.62	11,375.00	-8,464.01	966.17	8,517.72	0.00	0.00	0.00	
19,920.00	90.00	179.62	11,375.00	-8,479.01	966.27	8,532.66	0.00	0.00	0.00	
19,935.00	90.00	179.62	11,375.00	-8,494.01	966.37	8,547.59	0.00	0.00	0.00	
19,950.00	90.00	179.62	11,375.00	-8,509.01	966.47	8,562.53	0.00	0.00	0.00	
19,965.00	90.00	179.62	11,375.00	-8,524.01	966.57	8,577.47	0.00	0.00	0.00	
19,980.00	90.00	179.62	11,375.00	-8,539.01	966.67	8,592.41	0.00	0.00	0.00	
19,995.00	90.00	179.62	11,375.00	-8,554.01	966.77	8,607.35	0.00	0.00	0.00	
20,010.00	90.00	179.62	11,375.00	-8,569.01	966.87	8,622.29	0.00	0.00	0.00	
20,025.00	90.00	179.62	11,375.00	-8,584.01	966.97	8,637.23	0.00	0.00	0.00	
20,040.00	90.00	179.62	11,375.00	-8,599.01	967.07	8,652.17	0.00	0.00	0.00	
20,055.00	90.00	179.62	11,375.00	-8,614.01	967.17	8,667.11	0.00	0.00	0.00	
20,070.00	90.00	179.62	11,375.00	-8,629.01	967.27	8,682.05	0.00	0.00	0.00	
20,085.00	90.00	179.62	11,375.00	-8,644.01	967.37	8,696.99	0.00	0.00	0.00	
20,100.00	90.00	179.62	11,375.00	-8,659.01	967.47	8,711.93	0.00	0.00	0.00	
20,115.00	90.00	179.62	11,375.00	-8,674.01	967.57	8,726.87	0.00	0.00	0.00	
20,130.00	90.00	179.62	11,375.00	-8,689.01	967.67	8,741.81	0.00	0.00	0.00	
20,145.00	90.00	179.62	11,375.00	-8,704.01	967.77	8,756.75	0.00	0.00	0.00	
20,160.00	90.00	179.62	11,375.00	-8,719.00	967.88	8,771.69	0.00	0.00	0.00	
20,175.00	90.00	179.62	11,375.00	-8,734.00	967.98	8,786.63	0.00	0.00	0.00	
20,190.00	90.00	179.62	11,375.00	-8,749.00	968.08	8,801.57	0.00	0.00	0.00	
20,205.00	90.00	179.62	11,375.00	-8,764.00	968.18	8,816.51	0.00	0.00	0.00	
20,220.00	90.00	179.62	11,375.00	-8,779.00	968.28	8,831.45	0.00	0.00	0.00	
20,235.00	90.00	179.62	11,375.00	-8,794.00	968.38	8,846.39	0.00	0.00	0.00	
20,250.00	90.00	179.62	11,375.00	-8,809.00	968.48	8,861.33	0.00	0.00	0.00	
20,265.00	90.00	179.62	11,375.00	-8,824.00	968.58	8,876.27	0.00	0.00	0.00	
20,280.00	90.00	179.62	11,375.00	-8,839.00	968.68	8,891.21	0.00	0.00	0.00	
20,295.00	90.00	179.62	11,375.00	-8,854.00	968.78	8,906.15	0.00	0.00	0.00	
20,310.00	90.00	179.62	11,375.00	-8,869.00	968.88	8,921.09	0.00	0.00	0.00	
20,325.00	90.00	179.62	11,375.00	-8,884.00	968.98	8,936.03	0.00	0.00	0.00	
20,340.00	90.00	179.62	11,375.00	-8,899.00	969.08	8,950.96	0.00	0.00	0.00	
20,355.00	90.00	179.62	11,375.00	-8,914.00	969.18	8,965.90	0.00	0.00	0.00	
20,370.00	90.00	179.62	11,375.00	-8,929.00	969.28	8,980.84	0.00	0.00	0.00	
20,385.00	90.00	179.62	11,375.00	-8,944.00	969.38	8,995.78	0.00	0.00	0.00	
20,400.00	90.00	179.62	11,375.00	-8,959.00	969.48	9,010.72	0.00	0.00	0.00	
20,415.00	90.00	179.62	11,375.00	-8,974.00	969.59	9,025.66	0.00	0.00	0.00	
20,430.00	90.00	179.62	11,375.00	-8,989.00	969.69	9,040.60	0.00	0.00	0.00	
20,445.00	90.00	179.62	11,375.00	-9,004.00	969.79	9,055.54	0.00	0.00	0.00	
20,460.00	90.00	179.62	11,375.00	-9,019.00	969.89	9,070.48	0.00	0.00	0.00	
20,475.00	90.00	179.62	11,375.00	-9,034.00	969.99	9,085.42	0.00	0.00	0.00	
20,490.00	90.00	179.62	11,375.00	-9,049.00	970.09	9,100.36	0.00	0.00	0.00	
20,505.00	90.00	179.62	11,375.00	-9,064.00	970.19	9,115.30	0.00	0.00	0.00	
20,520.00	90.00	179.62	11,375.00	-9,079.00	970.29	9,130.24	0.00	0.00	0.00	
20,535.00	90.00	179.62	11,375.00	-9,094.00	970.39	9,145.18	0.00	0.00	0.00	
20,550.00	90.00	179.62	11,375.00	-9,109.00	970.49	9,160.12	0.00	0.00	0.00	
20,565.00	90.00	179.62	11,375.00	-9,124.00	970.59	9,175.06	0.00	0.00	0.00	
20,580.00	90.00	179.62	11,375.00	-9,139.00	970.69	9,190.00	0.00	0.00	0.00	

ConocoPhillips

Planning Report

Database:	EDT 17 Permian Prod	Local Co-ordinate Reference:	Well _COLUMBUS FEDERAL COM 653H - Slot SLOT 7
Company:	DELAWARE BASIN EAST	TVD Reference:	KB @ 3362.00usft
Project:	LEA COUNT SOUTH WEST (NM-E)	MD Reference:	KB @ 3362.00usft
Site:	COLUMBUS FEDERAL PROJECT	North Reference:	Grid
Well:	_COLUMBUS FEDERAL COM 653H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OWB		
Design:	PWP0		

Planned Survey										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	
20,595.00	90.00	179.62	11,375.00	-9,153.99	970.79	9,204.94	0.00	0.00	0.00	
20,610.00	90.00	179.62	11,375.00	-9,168.99	970.89	9,219.88	0.00	0.00	0.00	
20,625.00	90.00	179.62	11,375.00	-9,183.99	970.99	9,234.82	0.00	0.00	0.00	
20,640.00	90.00	179.62	11,375.00	-9,198.99	971.09	9,249.76	0.00	0.00	0.00	
20,655.00	90.00	179.62	11,375.00	-9,213.99	971.19	9,264.70	0.00	0.00	0.00	
20,670.00	90.00	179.62	11,375.00	-9,228.99	971.30	9,279.64	0.00	0.00	0.00	
20,685.00	90.00	179.62	11,375.00	-9,243.99	971.40	9,294.58	0.00	0.00	0.00	
20,700.00	90.00	179.62	11,375.00	-9,258.99	971.50	9,309.52	0.00	0.00	0.00	
20,715.00	90.00	179.62	11,375.00	-9,273.99	971.60	9,324.46	0.00	0.00	0.00	
20,730.00	90.00	179.62	11,375.00	-9,288.99	971.70	9,339.40	0.00	0.00	0.00	
20,745.00	90.00	179.62	11,375.00	-9,303.99	971.80	9,354.33	0.00	0.00	0.00	
20,760.00	90.00	179.62	11,375.00	-9,318.99	971.90	9,369.27	0.00	0.00	0.00	
20,775.00	90.00	179.62	11,375.00	-9,333.99	972.00	9,384.21	0.00	0.00	0.00	
20,790.00	90.00	179.62	11,375.00	-9,348.99	972.10	9,399.15	0.00	0.00	0.00	
20,805.00	90.00	179.62	11,375.00	-9,363.99	972.20	9,414.09	0.00	0.00	0.00	
20,820.00	90.00	179.62	11,375.00	-9,378.99	972.30	9,429.03	0.00	0.00	0.00	
20,835.00	90.00	179.62	11,375.00	-9,393.99	972.40	9,443.97	0.00	0.00	0.00	
20,850.00	90.00	179.62	11,375.00	-9,408.99	972.50	9,458.91	0.00	0.00	0.00	
20,865.00	90.00	179.62	11,375.00	-9,423.99	972.60	9,473.85	0.00	0.00	0.00	
20,880.00	90.00	179.62	11,375.00	-9,438.99	972.70	9,488.79	0.00	0.00	0.00	
20,895.00	90.00	179.62	11,375.00	-9,453.99	972.80	9,503.73	0.00	0.00	0.00	
20,910.00	90.00	179.62	11,375.00	-9,468.99	972.90	9,518.67	0.00	0.00	0.00	
20,925.00	90.00	179.62	11,375.00	-9,483.99	973.01	9,533.61	0.00	0.00	0.00	
20,940.00	90.00	179.62	11,375.00	-9,498.99	973.11	9,548.55	0.00	0.00	0.00	
20,955.00	90.00	179.62	11,375.00	-9,513.99	973.21	9,563.49	0.00	0.00	0.00	
20,970.00	90.00	179.62	11,375.00	-9,528.99	973.31	9,578.43	0.00	0.00	0.00	
20,985.00	90.00	179.62	11,375.00	-9,543.99	973.41	9,593.37	0.00	0.00	0.00	
21,000.00	90.00	179.62	11,375.00	-9,558.99	973.51	9,608.31	0.00	0.00	0.00	
21,015.00	90.00	179.62	11,375.00	-9,573.99	973.61	9,623.25	0.00	0.00	0.00	
21,030.00	90.00	179.62	11,375.00	-9,588.99	973.71	9,638.19	0.00	0.00	0.00	
21,045.00	90.00	179.62	11,375.00	-9,603.98	973.81	9,653.13	0.00	0.00	0.00	
21,060.00	90.00	179.62	11,375.00	-9,618.98	973.91	9,668.07	0.00	0.00	0.00	
21,075.00	90.00	179.62	11,375.00	-9,633.98	974.01	9,683.01	0.00	0.00	0.00	
21,090.00	90.00	179.62	11,375.00	-9,648.98	974.11	9,697.95	0.00	0.00	0.00	
21,105.00	90.00	179.62	11,375.00	-9,663.98	974.21	9,712.89	0.00	0.00	0.00	
21,120.00	90.00	179.62	11,375.00	-9,678.98	974.31	9,727.83	0.00	0.00	0.00	
21,135.00	90.00	179.62	11,375.00	-9,693.98	974.41	9,742.76	0.00	0.00	0.00	
21,150.00	90.00	179.62	11,375.00	-9,708.98	974.51	9,757.70	0.00	0.00	0.00	
21,165.00	90.00	179.62	11,375.00	-9,723.98	974.61	9,772.64	0.00	0.00	0.00	
21,180.00	90.00	179.62	11,375.00	-9,738.98	974.72	9,787.58	0.00	0.00	0.00	
21,195.00	90.00	179.62	11,375.00	-9,753.98	974.82	9,802.52	0.00	0.00	0.00	
21,210.00	90.00	179.62	11,375.00	-9,768.98	974.92	9,817.46	0.00	0.00	0.00	
21,225.00	90.00	179.62	11,375.00	-9,783.98	975.02	9,832.40	0.00	0.00	0.00	
21,240.00	90.00	179.62	11,375.00	-9,798.98	975.12	9,847.34	0.00	0.00	0.00	
21,255.00	90.00	179.62	11,375.00	-9,813.98	975.22	9,862.28	0.00	0.00	0.00	
21,270.00	90.00	179.62	11,375.00	-9,828.98	975.32	9,877.22	0.00	0.00	0.00	
21,285.00	90.00	179.62	11,375.00	-9,843.98	975.42	9,892.16	0.00	0.00	0.00	
21,300.00	90.00	179.62	11,375.00	-9,858.98	975.52	9,907.10	0.00	0.00	0.00	
21,315.00	90.00	179.62	11,375.00	-9,873.98	975.62	9,922.04	0.00	0.00	0.00	
21,330.00	90.00	179.62	11,375.00	-9,888.98	975.72	9,936.98	0.00	0.00	0.00	
21,345.00	90.00	179.62	11,375.00	-9,903.98	975.82	9,951.92	0.00	0.00	0.00	
21,360.00	90.00	179.62	11,375.00	-9,918.98	975.92	9,966.86	0.00	0.00	0.00	
21,375.00	90.00	179.62	11,375.00	-9,933.98	976.02	9,981.80	0.00	0.00	0.00	

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Planning Report

Database:	EDT 17 Permian Prod	Local Co-ordinate Reference:	Well _ COLUMBUS FEDERAL COM 653H - Slot SLOT 7
Company:	DELAWARE BASIN EAST	TVD Reference:	KB @ 3362.00usft
Project:	LEA COUNT SOUTH WEST (NM-E)	MD Reference:	KB @ 3362.00usft
Site:	COLUMBUS FEDERAL PROJECT	North Reference:	Grid
Well:	_COLUMBUS FEDERAL COM 653H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OWB		
Design:	PWP0		

Planned Survey										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	
21,390.00	90.00	179.62	11,375.00	-9,948.98	976.12	9,996.74	0.00	0.00	0.00	
21,405.00	90.00	179.62	11,375.00	-9,963.98	976.22	10,011.68	0.00	0.00	0.00	
21,420.00	90.00	179.62	11,375.00	-9,978.98	976.32	10,026.62	0.00	0.00	0.00	
21,435.00	90.00	179.62	11,375.00	-9,993.98	976.43	10,041.56	0.00	0.00	0.00	
21,450.00	90.00	179.62	11,375.00	-10,008.98	976.53	10,056.50	0.00	0.00	0.00	
21,465.00	90.00	179.62	11,375.00	-10,023.98	976.63	10,071.44	0.00	0.00	0.00	
21,480.00	90.00	179.62	11,375.00	-10,038.98	976.73	10,086.38	0.00	0.00	0.00	
21,495.00	90.00	179.62	11,375.00	-10,053.97	976.83	10,101.32	0.00	0.00	0.00	
21,510.00	90.00	179.62	11,375.00	-10,068.97	976.93	10,116.26	0.00	0.00	0.00	
21,525.00	90.00	179.62	11,375.00	-10,083.97	977.03	10,131.20	0.00	0.00	0.00	
21,539.67	90.00	179.62	11,375.00	-10,098.65	977.13	10,145.81	0.00	0.00	0.00	

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	
PBHL_COLUMBUS FEI - plan hits target center - Rectangle (sides W100.00 H10,406.00 D20.00)	0.00	359.62	11,375.00	-10,098.65	977.13	388,331.00	740,307.18	32° 3' 54.947 N	103° 33' 27.346 W	
LTP_COLUMBUS FED () - plan misses target center by 0.07usft at 21489.67usft MD (11375.00 TVD, -10048.65 N, 976.79 E) - Circle (radius 50.00)	90.00	179.62	11,375.00	-10,048.65	976.87	388,381.00	740,306.92	32° 3' 55.442 N	103° 33' 27.345 W	
FTP_COLUMBUS FED () - plan misses target center by 269.96usft at 11290.04usft MD (11203.26 TVD, 99.29 N, 908.74 E) - Circle (radius 50.00)	0.00	0.00	11,375.00	307.57	907.30	398,737.22	740,237.36	32° 5' 37.929 N	103° 33' 27.287 W	

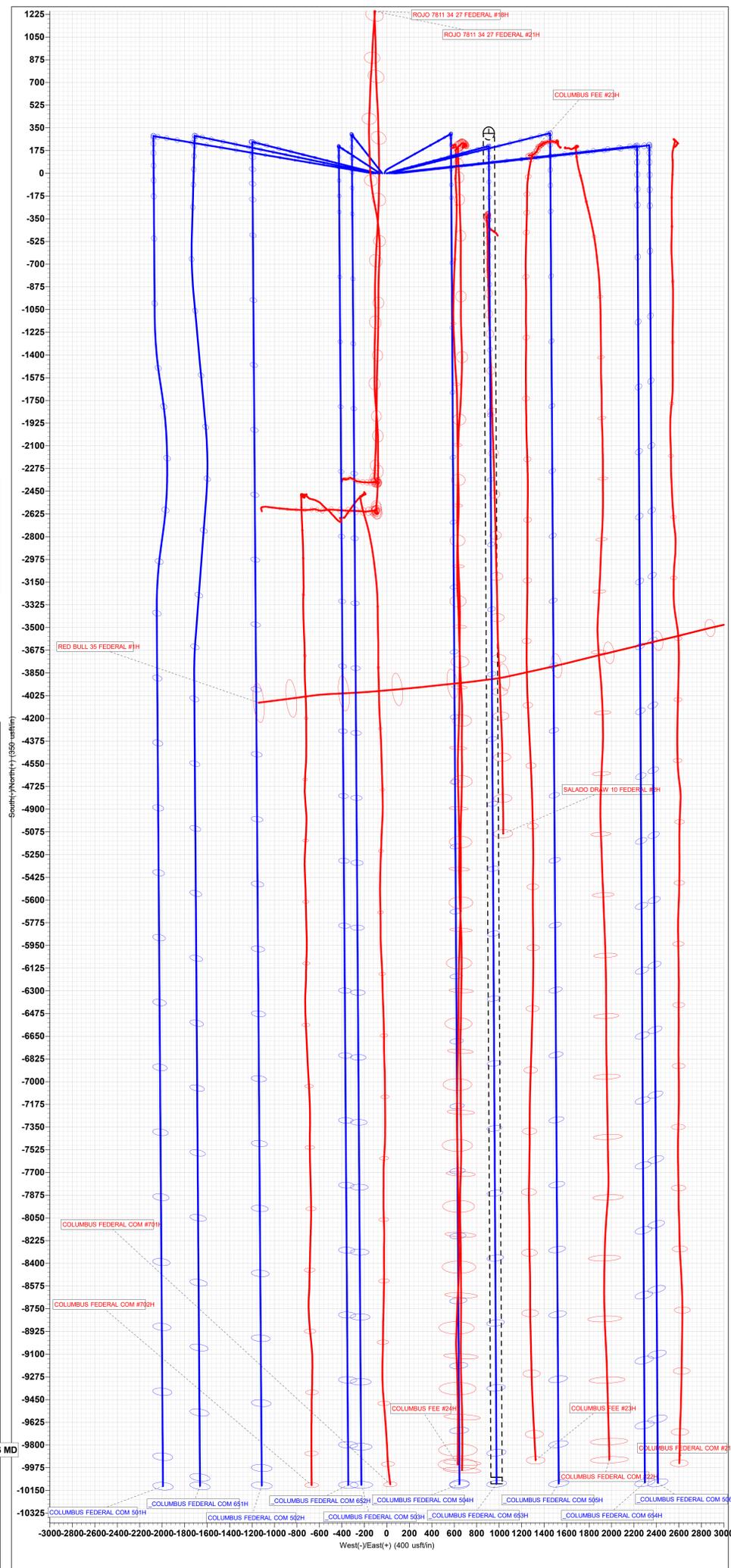
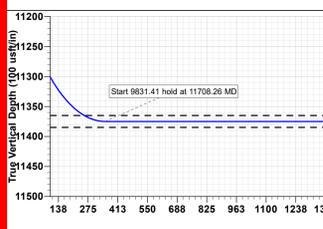
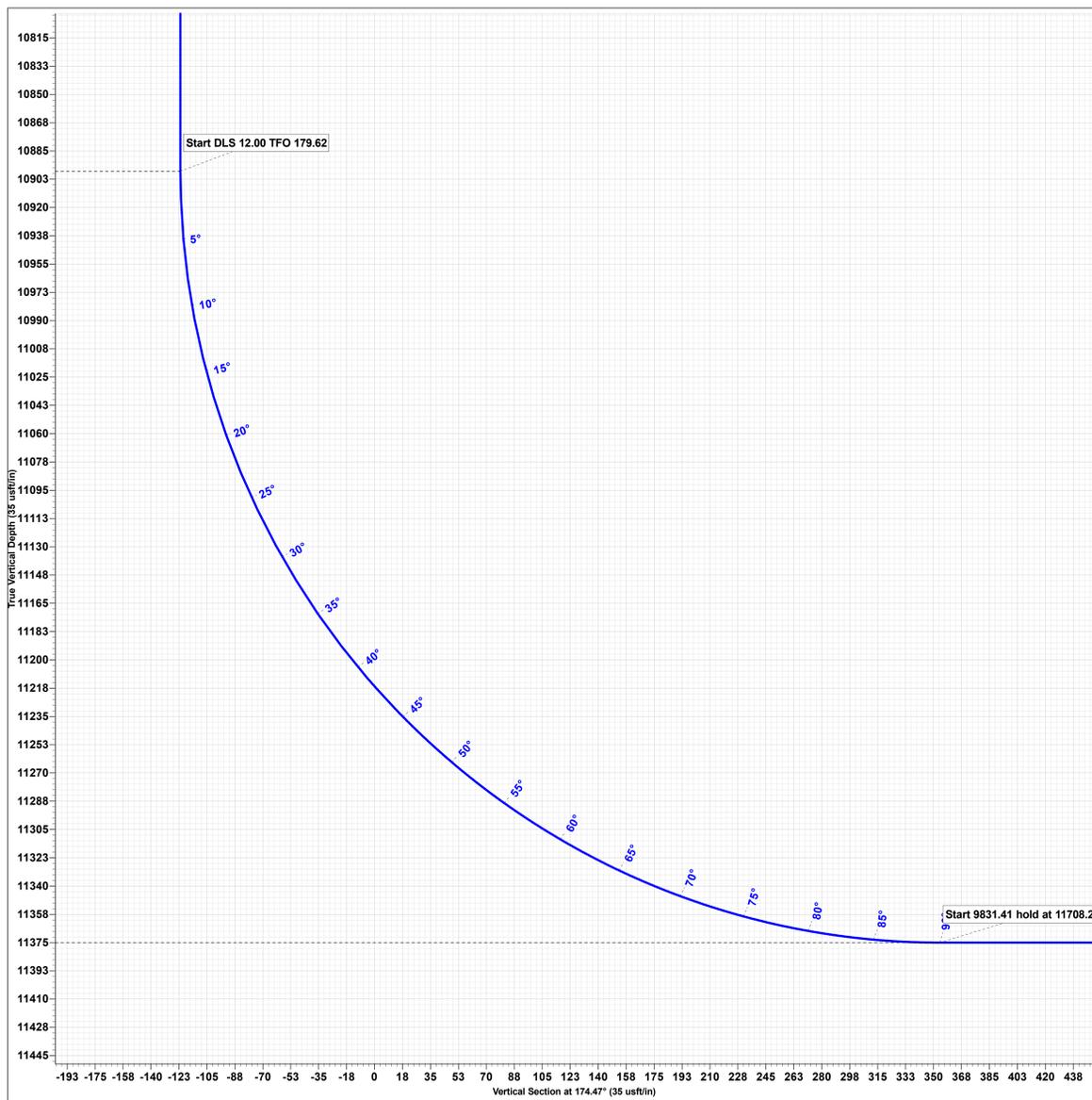
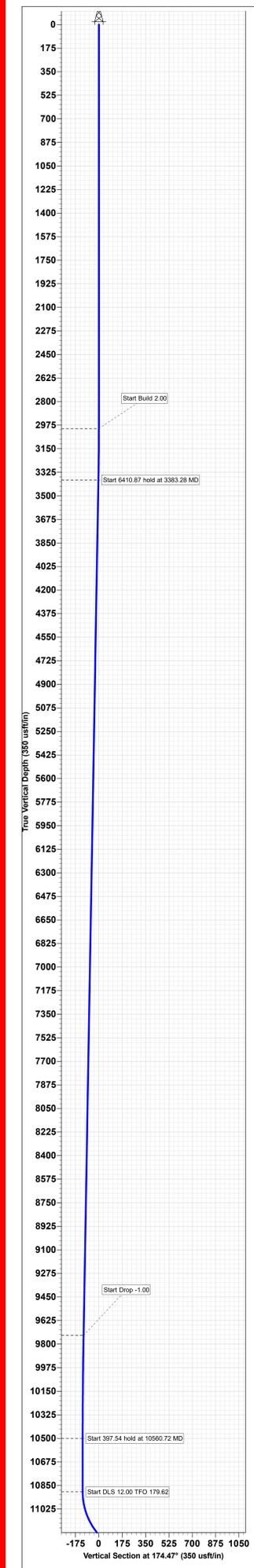
Casing Points						
Measured Depth (usft)	Vertical Depth (usft)	Name	Casing Diameter (")	Hole Diameter (")		
21,539.68	11,375.00	5-1/2" Production Casing	5-1/2	6		



Project: LEA COUNT SOUTH WEST (NM-E)
 Site: COLUMBUS FEDERAL PROJECT
 Well: COLUMBUS FEDERAL COM 653H
 Wellbore: OWB
 Design: PWPO

SECTION DETAILS

MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	Vsect
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3000.00	0.00	0.00	3000.00	0.00	0.00	0.00	0.00	0.00
3383.28	7.67	76.98	3382.14	5.77	24.94	2.00	76.98	-3.34
9794.15	7.67	76.98	9735.72	198.46	858.11	0.00	0.00	-114.90
10560.72	0.00	0.00	10500.00	210.00	908.00	1.00	180.00	-121.58
10958.26	0.00	0.00	10897.54	210.00	908.00	0.00	0.00	-121.58
11708.26	90.00	179.62	11375.00	-267.45	911.20	12.00	179.62	353.97
21539.67	90.00	179.62	11375.00	-10096.65	977.13	0.00	0.00	10145.81



ConocoPhillips Company - COLUMBUS FED COM 653H

1. Geologic Formations

TVD of target	11,375' EOL	Pilot hole depth	NA
MD at TD:	21,540'	Deepest expected fresh water:	0'

Formation	Depth (TVD) from KB	Water/Mineral Bearing/ Target Zone?	Hazards*
Quaternary Fill	Surface	Water	
Rustler	1019	Water	
Top of Salt	1378	Salt	
Base of Salt	4751	Salt	
Lamar	4864	Salt Water	
Bell Canyon	5019	Salt Water	
Cherry Canyon	6059	Oil/Gas	
Brushy Canyon	7694	Oil/Gas	
Bone Spring	9075	Oil/Gas	
1st Bone Spring Sand	10106	Oil/Gas	
2nd Bone Spring Sand	10735	Oil/Gas	
3rd Bone Spring Carb	11169	Target	

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	1230	10.75"	45.5	J55	BTC	3.71	1.14	12.78	14.22
9.875"	0	7500	7.625"	29.7	L80-ICY	BTC	1.51	1.07	3.26	3.29
8.750"	7500	10900	7.625"	29.7	P110-ICY	W513	1.30	1.62	3.30	1.98
6.75"	0	10700	5.5"	23	P110-CY	BTC	1.94	2.26	2.96	2.96
6.75"	10700	21,540	5.5"	23	P110-CY	W441	1.82	2.12	2.79	2.53
BLM Minimum Safety Factor							1.125	1	1.6 Dry 1.8 Wet	1.6 Dry 1.8 Wet

2b. Contingency Casing Program

Hole Size	Casing Interval		Csg. Size	Weight (lbs)	Grade	Conn.	SF Collapse	SF Burst	SF Body	SF Joint
	From	To								
17.50"	0	1230	13.375"	54.5	J55	BTC	2.01	1.36	12.72	13.56
12.25"	0	4770	9.625"	40	L80-IC	BTC	1.56	1.35	4.80	4.96
8.75"	4570	10900	7.625"	29.7	P110-ICY	W513	1.30	1.62	3.30	1.98
6.75"	0	10700	5.5"	23	P110-CY	BTC	1.94	2.26	2.96	2.96
6.75"	10700	21,540	5.5"	23	P110-CY	W441	1.82	2.12	2.79	2.53
BLM Minimum Safety Factor							1.125	1	1.6 Dry 1.8 Wet	1.6 Dry 1.8 Wet

Intermediate casing will be kept at least 1/3 full while running casing to mitigate collapse. Surface burst based on 0.7 frac gradient at the shoe with Gas Gradient 0.1 psi/ft to surface and

All casing strings will be tested in accordance with 43 CFR Part 3170 Subpart 3172

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

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

ConocoPhillips Company - COLUMBUS FED COM 653H

	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? If yes, does production casing cement tie back a minimum of 50' above the Reef? Is well within the designated 4 string boundary?	N
Is well located in SOPA but not in R-111-P? If yes, are the first 2 strings cemented to surface and 3 rd string cement tied back 500' into previous casing?	N
Is well located in R-111-P and SOPA? If yes, are the first three strings cemented to surface? Is 2 nd string set 100' to 600' below the base of salt?	N
Is well located in high Cave/Karst? If yes, are there two strings cemented to surface? (For 2 string wells) If yes, is there a contingency casing if lost circulation occurs?	N
Is well located in critical Cave/Karst? If yes, are there three strings cemented to surface?	N

ConocoPhillips Company - COLUMBUS FED COM 653H

3. Cementing Program

Casing	# Sks	Wt. lb/ gal	Yld ft3/ sack	H ₂ O gal/sk	500# Comp. Strength (hours)	Slurry Description
Surf.	590	12.8	1.75	9	12	Lead: Class C + 4% Gel + 1% CaCl ₂
	250	14.8	1.34	6.34	8	Tail: Class C + 2% CaCl ₂
Inter. Stage 1	760	10.3	3.3	22	24	Halliburton tuned light
	250	14.8	1.35	6.6	8	Tail: Class H
Prod	680	12.5	1.48	10.7	72	Lead: 50:50:10 H Blend
	820	13.2	1.34	5.7	19	Tail: 50:50:2 Class H Blend

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

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

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

Casing String	TOC	% Excess
Surface	0'	50%
1 st Intermediate	0'	50%
Production	10,400'	20% OH in Lateral (KOP to EOL)

3b. Contingency Cementing Program

Casing	# Sks	Wt. lb/ gal	Yld ft3/ sack	H ₂ O gal/sk	500# Comp. Strength (hours)	Slurry Description
Surf.	740	13.5	1.75	9	12	Lead: Class C + 4% Gel + 1% CaCl ₂
	250	14.8	1.34	6.34	8	Tail: Class C + 2% CaCl ₂
Int. #1	720	12.8	1.75	9.21	12	Lead: Class C + 4% Gel + 1% CaCl ₂
	390	14.8	1.35	6.6	8	Tail: Class C + 2% CaCl ₂
Inter. #2 (Liner)	200	10.5	3.3	22	24	Tuned light
	90	14.8	1.35	6.6	8	Tail: Class H
Prod	880	12.5	1.48	10.7	72	Lead: 50:50:10 H Blend
	820	13.2	1.34	5.7	19	Tail: 50:50:2 Class H Blend

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

Casing String	TOC	% Excess
Surface	0'	50%
1 st Intermediate	0'	50%
2 nd Intermediate	4,570'	20%
Production	10,650'	20% OH in Lateral (KOP to EOL)

If conditions dictate, an offline bradenhead cement job will be performed to ensure cement to surface. A CBL will be ran Offline to verify TOC after 2nd Stage Bradenhead.

ConocoPhillips Company - COLUMBUS FED COM 653H

4. Pressure Control Equipment

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

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

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

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

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

ConocoPhillips Company - COLUMBUS FED COM 653H

5. Mud Program

Depth		Type	Weight (ppg)	Viscosity	Water Loss
From	To				
0	Surf. Shoe	FW Gel	8.6 - 8.8	28-34	N/C
Surf csg	7-5/8" Int shoe	Brine Diesel Emulsion	8.4 - 10	28-34	N/C
7-5/8" Int shoe	Lateral TD	OBM	9.6 - 13.5	35-45	<20

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

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

5b. Contingency Mud Program

Depth		Type	Weight (ppg)	Viscosity	Water Loss
From	To				
0	Surf. Shoe	FW Gel	8.6 - 8.8	28-34	N/C
Surf csg	9-5/8" Int shoe	Brine	8.4 - 10	28-34	N/C
9-5/8" Int shoe	7-5/8" Int shoe	Brine	8.4 - 10	28-34	N/C
7-5/8" Int shoe	Lateral TD	OBM	9.6 - 13.5	35-45	<20

6. Logging and Testing Procedures

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

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

ConocoPhillips Company - COLUMBUS FED COM 653H

7. Drilling Conditions

Condition	Specify what type and where?
BH Pressure at deepest TVD	7990 psi at 11375' TVD
Abnormal Temperature	NO 170 Deg. F.

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

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

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

8. Other Facets of Operation

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

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

State of New Mexico
 Energy, Minerals and Natural Resources Department

Submit Electronically
 Via E-permitting

Oil Conservation Division
 1220 South St. Francis Dr.
 Santa Fe, NM 87505

NATURAL GAS MANAGEMENT PLAN

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

Section 1 – Plan Description Effective May 25, 2021

I. Operator: COG Operating LLC **OGRID:** 229137 **Date:** 01/20/2026

II. Type: Original Amendment due to 19.15.27.9.D(6)(a) NMAC 19.15.27.9.D(6)(b) NMAC Other.

If Other, please describe: _____

III. Well(s): Provide the following information for each new or recompleted well or set of wells proposed to be drilled or proposed to be recompleted from a single well pad or connected to a central delivery point.

Well Name	API	ULSTR	Footages	Anticipated Oil BBL/D	Anticipated Gas MCF/D	Anticipated Produced Water BBL/D
Columbus Federal Com 653H	30-025-	C-34-25S-33E	400 FNL & 2405 FWL	± 473	± 1606	± 1225

IV. Central Delivery Point Name: 34 C CTB 350' FNL & 1785' FWL 34-25S-33E [See 19.15.27.9(D)(1) NMAC]

V. Anticipated Schedule: Provide the following information for each new or recompleted well or set of wells proposed to be drilled or proposed to be recompleted from a single well pad or connected to a central delivery point.

Well Name	API	Spud Date	TD Reached Date	Completion Commencement Date	Initial Flow Back Date	First Production Date
Columbus Federal Com 653H	Pending	± 07/01/2027	± 25 days from spud	TBD	TBD	TBD

VI. Separation Equipment: Attach a complete description of how Operator will size separation equipment to optimize gas capture.

VII. Operational Practices: Attach a complete description of the actions Operator will take to comply with the requirements of Subsection A through F of 19.15.27.8 NMAC.

VIII. Best Management Practices: Attach a complete description of Operator's best management practices to minimize venting during active and planned maintenance.

Section 2 – Enhanced Plan
EFFECTIVE APRIL 1, 2022

Beginning April 1, 2022, an operator that is not in compliance with its statewide natural gas capture requirement for the applicable reporting area must complete this section.

Operator certifies that it is not required to complete this section because Operator is in compliance with its statewide natural gas capture requirement for the applicable reporting area.

IX. Anticipated Natural Gas Production:

Well	API	Anticipated Average Natural Gas Rate MCF/D	Anticipated Volume of Natural Gas for the First Year MCF

X. Natural Gas Gathering System (NGGS):

Operator	System	ULSTR of Tie-in	Anticipated Gathering Start Date	Available Maximum Daily Capacity of System Segment Tie-in

XI. Map. Attach an accurate and legible map depicting the location of the well(s), the anticipated pipeline route(s) connecting the production operations to the existing or planned interconnect of the natural gas gathering system(s), and the maximum daily capacity of the segment or portion of the natural gas gathering system(s) to which the well(s) will be connected.

XII. Line Capacity. The natural gas gathering system will will not have capacity to gather 100% of the anticipated natural gas production volume from the well prior to the date of first production.

XIII. Line Pressure. Operator does does not anticipate that its existing well(s) connected to the same segment, or portion, of the natural gas gathering system(s) described above will continue to meet anticipated increases in line pressure caused by the new well(s).

Attach Operator’s plan to manage production in response to the increased line pressure.

XIV. Confidentiality: Operator asserts confidentiality pursuant to Section 71-2-8 NMSA 1978 for the information provided in Section 2 as provided in Paragraph (2) of Subsection D of 19.15.27.9 NMAC, and attaches a full description of the specific information for which confidentiality is asserted and the basis for such assertion.

Section 3 - Certifications

Effective May 25, 2021

Operator certifies that, after reasonable inquiry and based on the available information at the time of submittal:

Operator will be able to connect the well(s) to a natural gas gathering system in the general area with sufficient capacity to transport one hundred percent of the anticipated volume of natural gas produced from the well(s) commencing on the date of first production, taking into account the current and anticipated volumes of produced natural gas from other wells connected to the pipeline gathering system; or

Operator will not be able to connect to a natural gas gathering system in the general area with sufficient capacity to transport one hundred percent of the anticipated volume of natural gas produced from the well(s) commencing on the date of first production, taking into account the current and anticipated volumes of produced natural gas from other wells connected to the pipeline gathering system.

If Operator checks this box, Operator will select one of the following:

Well Shut-In. Operator will shut-in and not produce the well until it submits the certification required by Paragraph (4) of Subsection D of 19.15.27.9 NMAC; or

Venting and Flaring Plan. Operator has attached a venting and flaring plan that evaluates and selects one or more of the potential alternative beneficial uses for the natural gas until a natural gas gathering system is available, including:

- (a) power generation on lease;
- (b) power generation for grid;
- (c) compression on lease;
- (d) liquids removal on lease;
- (e) reinjection for underground storage;
- (f) reinjection for temporary storage;
- (g) reinjection for enhanced oil recovery;
- (h) fuel cell production; and
- (i) other alternative beneficial uses approved by the division.

Section 4 - Notices

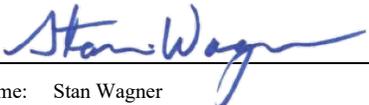
1. If, at any time after Operator submits this Natural Gas Management Plan and before the well is spud:

(a) Operator becomes aware that the natural gas gathering system it planned to connect the well(s) to has become unavailable or will not have capacity to transport one hundred percent of the production from the well(s), no later than 20 days after becoming aware of such information, Operator shall submit for OCD's approval a new or revised venting and flaring plan containing the information specified in Paragraph (5) of Subsection D of 19.15.27.9 NMAC; or

(b) Operator becomes aware that it has, cumulatively for the year, become out of compliance with its baseline natural gas capture rate or natural gas capture requirement, no later than 20 days after becoming aware of such information, Operator shall submit for OCD's approval a new or revised Natural Gas Management Plan for each well it plans to spud during the next 90 days containing the information specified in Paragraph (2) of Subsection D of 19.15.27.9 NMAC, and shall file an update for each Natural Gas Management Plan until Operator is back in compliance with its baseline natural gas capture rate or natural gas capture requirement.

2. OCD may deny or conditionally approve an APD if Operator does not make a certification, fails to submit an adequate venting and flaring plan which includes alternative beneficial uses for the anticipated volume of natural gas produced, or if OCD determines that Operator will not have adequate natural gas takeaway capacity at the time a well will be spud.

I certify that, after reasonable inquiry, the statements in and attached to this Natural Gas Management Plan are true and correct to the best of my knowledge and acknowledge that a false statement may be subject to civil and criminal penalties under the Oil and Gas Act.

Signature: 
Printed Name: Stan Wagner
Title: Regulatory Advisor
E-mail Address: stan.s.wagner@conocophillips.com
Date: 01/20/2026
Phone: 432-253-9685
OIL CONSERVATION DIVISION (Only applicable when submitted as a standalone form)
Approved By:
Title:
Approval Date:
Conditions of Approval:

VI. Separation Equipment

How Operator will size separation equipment to optimize gas capture:

All ConocoPhillips production facility equipment will be sized per industry standards (API 12J) with adequate retention time to effectively separate all phases of production. Each project will take into consideration the number of wells and type curves for each formation pool to ensure adequate facility capacity. Design considerations will also include review of all piping, tanks, VRU's and associated equipment to ensure optimized gas capture minimized risk of release.

VII. Operational Practices

Actions Operator will take to comply with the requirements below:

B. Drilling Operations

- During drilling, flare stacks will be located a minimum of 100 feet from the nearest surface hole location. All gas is captured or combusted. If an emergency or malfunction occurs, gas will be flared or vented for public health, safety, and the environment and be properly reported to the NMOCD pursuant to 19.15.27.8.G.
- Measure or estimate the volume of natural gas that is vented, flared or beneficially used during drilling, completion and production operations, regardless of the reason or authorization for such venting or flaring.

C. Completion Operations

- During completion operations, operator does not produce oil or gas but maintains adequate well control through completion operations.
- Individual well test separators will be set to properly separate gas and liquids. A temporary test separator will be utilized initially to process volumes. In addition, separators will be tied into flowback tanks which will be tied into the gas processing equipment for sales down a pipeline.

D. Venting and flaring during production operations

- During each phase of well life (drilling, completion and production) of a ConocoPhillips well, COP personnel will follow all necessary procedures to ensure both the operation and the equipment are within the NMAC 19.15.27.8 Subsection D guidelines.
- During well operations that require unloading of the well to atmospheric pressure, all reasonable actions will be taken to minimize vented gas
- Through the life of the well all flaring shall be measured, and venting events quantified using the data available and industry best practice.

E. Performance standards for separation, storage tank and flare equipment

- All storage tanks and separation equipment are designed minimize risk of liquid or vapor release and optimize gas capture. This includes automation for automatic gauging and pressure monitoring.

- F. All flare stacks are equipped with auto ignition devices and/or continuous pilots and are designed to operate at maximum combustion efficiency pursuant NMAC 19.15.27.8 Subsection E. Flares will follow COP spacing guidelines to ensure they are a safe distance from combustibles and operations equipment.
- G. COP personnel will conduct routine AVO inspections on a regular basis per NMAC 19.15.27.8 Subsection E guidelines.

F. Measurement of vented and flared natural gas.

- Measurement equipment will be installed to quantify gas flared during drilling, completion and production of the well.
- All measurement devices installed will meet accuracy ratings per AGA and API standards.
- Measurement devices will be installed without manifolds that allow diversion of gas around the metering element, except for the sole purpose of inspection of servicing the measurement device.

VIII. Best Management Practices

- Operator will curtail or shut in production, within reasonable limits, during upset conditions to minimize venting and flaring.
- When feasible, Operator will use equipment to capture gas that would otherwise be vented or flared.
- During completions and production operations Operator will minimize blowdowns to atmosphere
- When feasible, Operator will use electric or air actuated equipment to reduce bleed emissions

Waste Minimization Plan

Per § 3162.3-1 Drilling applications and plans. Part J:

B. The anticipated initial oil production rate from the oil well and the anticipated production decline over the first 3 years of production.

- See attached Anticipated Production & Decline Curve

C. The anticipated initial oil-well gas production rate from the oil well and the anticipated production decline over the first 3 years of production.

- See attached Anticipated Production & Decline Curve

D. Certification that the operator has a valid, executed gas sales contract to sell to a purchaser 100 percent of the produced oil-well gas, less gas anticipated for use on-lease pursuant to 43 CFR subpart 3178.

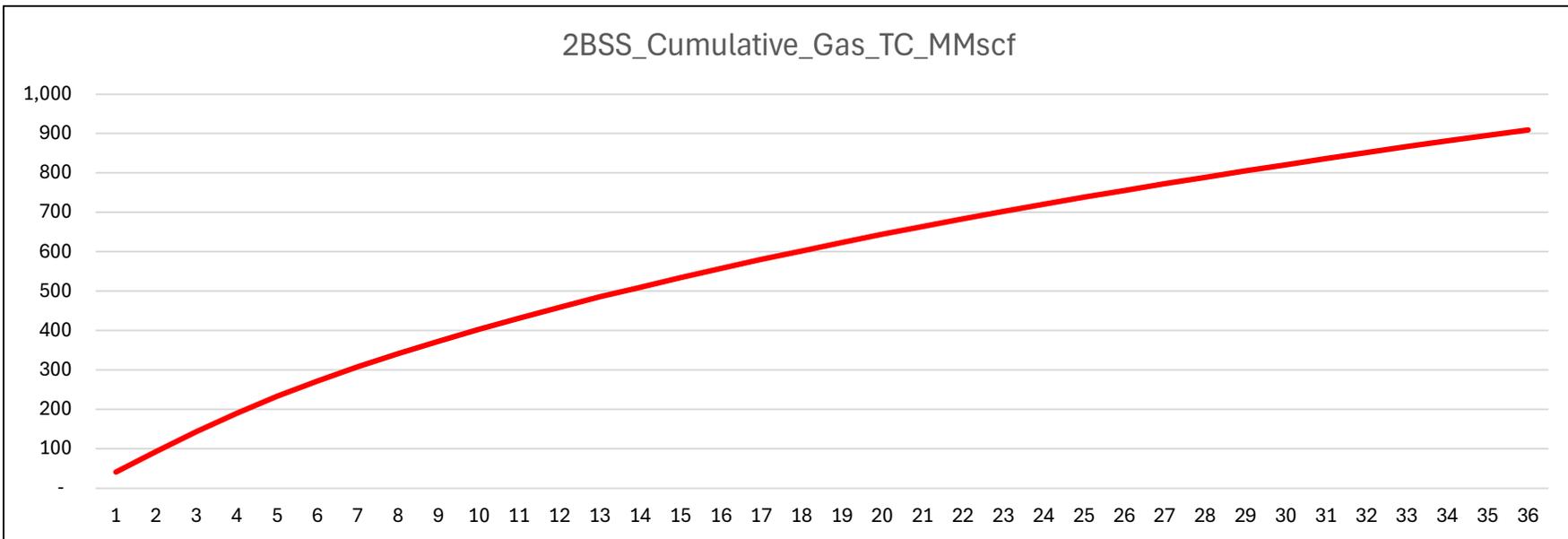
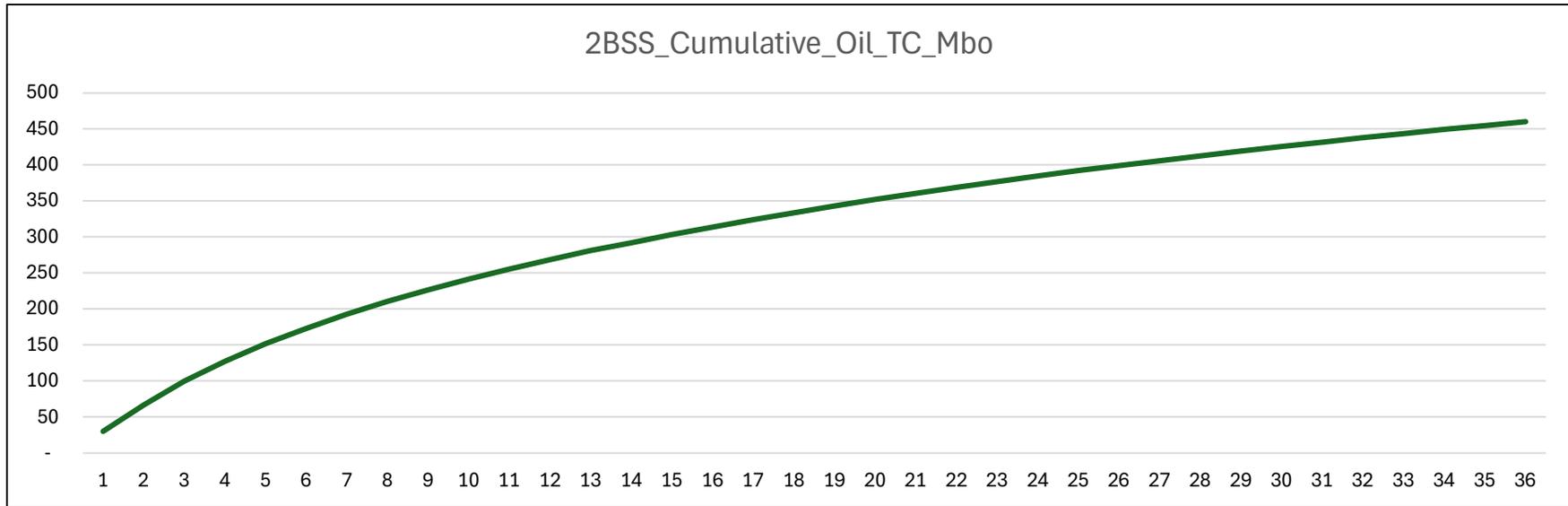
- See attached NMOCD – Natural Gas Management Plan

E. Any other information demonstrating the operator's plans to avoid the waste of gas production from any source, including, as appropriate, from pneumatic equipment, storage tanks, and leaks.

- This location will comply with NSPS OOOOb which will include reduced associated gas flaring, non-emitting pneumatic equipment, storage tanks that are controlled and a rigorous leak detection and repair program. In addition, this facility complies with 20.2.50 NMAC (Ozone Precursor Pollutants) which also imposes standards on pneumatic equipment, tank controls, and leak detection and repair. Finally, this facility must comply with 19.15.27 NMAC (Venting and Flaring of Natural Gas) which

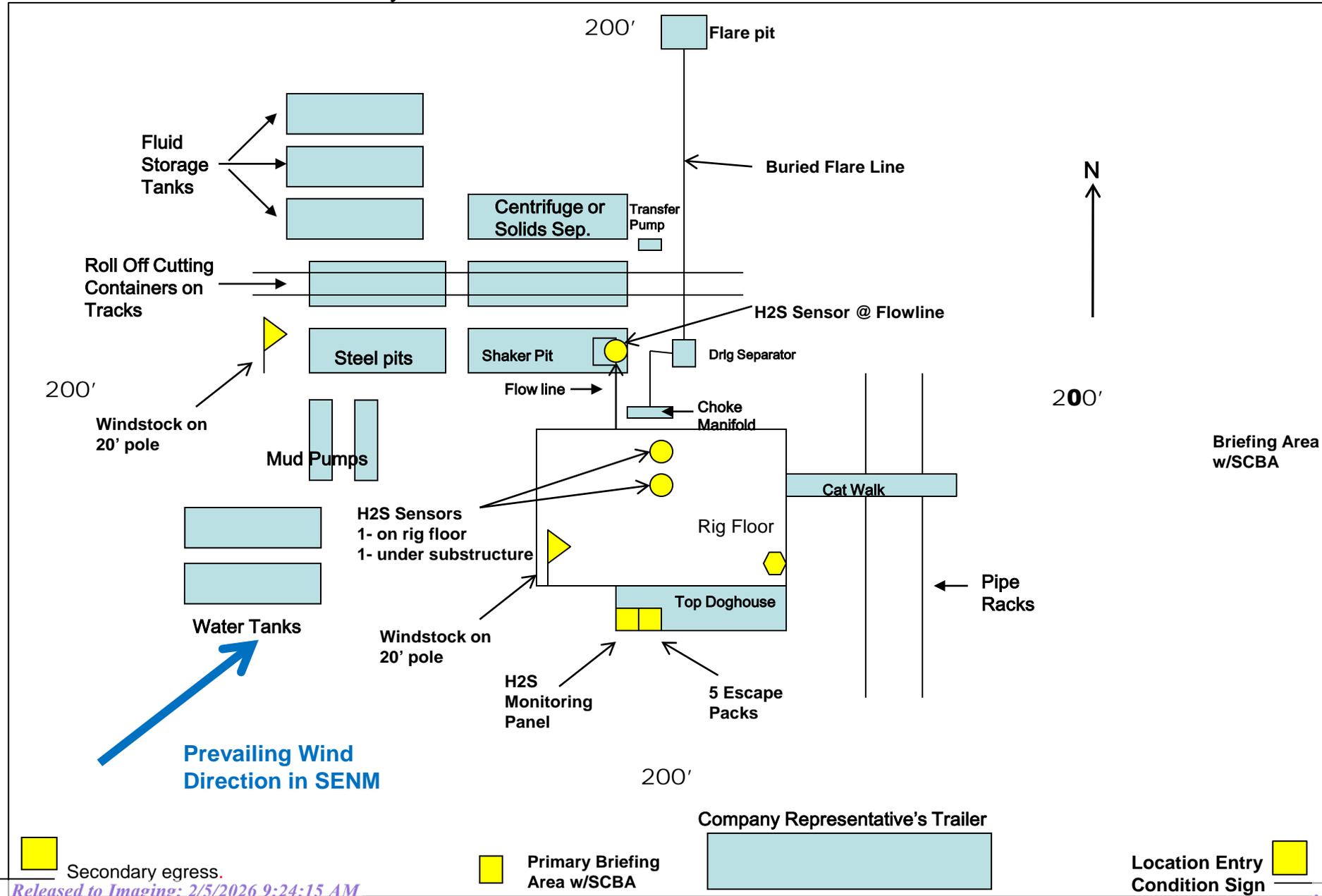
significantly reduces instances of flaring.

Anticipated Production Decline Curve



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

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



COG OPERATING LLC
HYDROGEN SULFIDE DRILLING OPERATIONS PLAN

1. HYDROGEN SULFIDE TRAINING

All personnel, whether regularly assigned, contracted, or employed on an unscheduled basis, will receive training from a qualified instructor in the following areas prior to commencing drilling operations on this well:

- a. The hazards and characteristics of hydrogen sulfide (H₂S).
- b. The proper use and maintenance of personal protective equipment and life support systems.
- c. The proper use of H₂S detectors, alarms, warning systems, briefing areas, evacuation procedures, and prevailing winds.
- d. The proper techniques for first aid and rescue procedures.

In addition, supervisory personnel will be trained in the following areas:

- a. The effects of H₂S on metal components. If high tensile tubulars are to be used, personnel will be trained in their special maintenance requirements.
- b. Corrective action and shut-in procedures when drilling or reworking a well and blowout prevention and well control procedures.
- c. The contents and requirements of the H₂S Drilling Operations Plan and the Public Protection Plan.

There will be an initial training session just prior to encountering a known or probable H₂S zone (within 3 days or 500 feet) and weekly H₂S and well control drills for all personnel in each crew. The initial training session shall include a review of the site specific H₂S Drilling Operations Plan and the Public Protection Plan. This plan shall be available at the well site. All personnel will be required to carry documentation that they have received the proper training.

2. H₂S SAFETY EQUIPMENT AND SYSTEMS

Note: All H₂S safety equipment and systems will be installed, tested, and operational when drilling reaches a depth of 500 feet above, or three days prior to penetrating the first zone containing or reasonably expected to contain H₂S. If H₂S greater than 100 ppm is encountered in the gas stream we will shut in and install H₂S equipment.

- a. Well Control Equipment:
 - Flare line.
 - Choke manifold with remotely operated choke.
 - Blind rams and pipe rams to accommodate all pipe sizes with properly sized closing unit.
 - Auxiliary equipment to include: annular preventer, mud-gas separator, rotating head.

- b. Protective equipment for essential personnel:
Mark II Surviveair 30-minute units located in the dog house and at briefing areas.
- c. H2S detection and monitoring equipment:
2 - portable H2S monitor positioned on location for best coverage and response. These units have warning lights and audible sirens when H2S levels of 20 ppm are reached.
- d. Visual warning systems:
Caution/Danger signs shall be posted on roads providing direct access to location. Signs will be painted a high visibility yellow with black lettering of sufficient size to be readable at a reasonable distance from the immediate location. Bilingual signs will be used, when appropriate. See example attached.
- e. Mud Program:
The mud program has been designed to minimize the volume of H2S circulated to the surface.
- f. Metallurgy:
All drill strings, casings, tubing, wellhead, blowout preventers, drilling spool, kill lines, choke manifold and lines, and valves shall be suitable for H2S service.
- g. Communication:
Company vehicles equipped with cellular telephone.

COG OPERATING LLC has conducted a review to determine if an H2S contingency plan is required for the above referenced well. We were able to conclude that any potential hazardous volume would be minimal. H2S concentrations of wells in this area from surface to TD are low enough; therefore, we do not believe that an H2S contingency plan is necessary.

W A R N I N G

**YOU ARE ENTERING AN H₂S AREA
AUTHORIZED PERSONNEL ONLY**

- 1. BEARDS OR CONTACT LENSES NOT ALLOWED**
- 2. HARD HATS REQUIRED**
- 3. SMOKING IN DESIGNATED AREAS ONLY**
- 4. BE WIND CONSCIOUS AT ALL TIMES**
- 5. CK WITH COG OPERATING LLC FOREMAN AT MAIN OFFICE**

COG OPERATING LLC

1-575-748-6940

EMERGENCY CALL LIST

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

EMERGENCY RESPONSE NUMBERS

	<u>OFFICE</u>
STATE POLICE	575-748-9718
EDDY COUNTY SHERIFF	575-746-2701
EMERGENCY MEDICAL SERVICES (AMBULANCE)	911 or 575-746-2701
EDDY COUNTY EMERGENCY MANAGEMENT (HARRY BURGESS)	575-887-9511
STATE EMERGENCY RESPONSE CENTER (SERC)	575-476-9620
CARLSBAD POLICE DEPARTMENT	575-885-2111
CARLSBAD FIRE DEPARTMENT	575-885-3125
NEW MEXICO OIL CONSERVATION DIVISION	575-748-1283
INDIAN FIRE & SAFETY	800-530-8693
HALLIBURTON SERVICES	800-844-8451