

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 407902

**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 30-025-55896
5. Property Name COLUMBUS FEDERAL COM		6. Well No. 504H

**7. Surface Location**

UL - Lot C	Section 34	Township 25S	Range 33E	Lot Idn	Feet From 400	N/S Line N	Feet From 2385	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 2311	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 3330
16. Multiple N	17. Proposed Depth 21066	18. Formation 2nd Bone Spring Sand	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	17.5	13.375	54.5	1149	790	0
Int1	12.25	9.625	40	4800	1290	0
Prod	8.75	5.5	20	21066	2660	3800

**Casing/Cement Program: Additional Comments**

Tapered production hole: 0' - 10350' 8.75", 10350' - 21066' 7.875".
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**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:	<b>OIL CONSERVATION DIVISION</b>		
	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

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

**WELL LOCATION INFORMATION**

API Number <b>30-025- 55896</b>	Pool Code <b>51020</b>	Pool Name <b>Red Hills; Lower Bone Springs</b>
Property Code <b>317530</b>	Property Name <b>COLUMBUS FEDERAL COM</b>	Well Number <b>504H</b>
OGRID No. <b>229137</b>	Operator Name <b>COG OPERATING LLC</b>	Ground Level Elevation <b>3329.9'</b>
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
<b>C</b>	<b>34</b>	<b>25-S</b>	<b>33-E</b>		<b>400 FNL</b>	<b>2385 FWL</b>	<b>32.093166°N</b>	<b>103.561051°W</b>	<b>LEA</b>

**Bottom Hole Location**

UL	Section	Township	Range	Lot	Ft. from N/S	Ft. from E/W	Latitude	Longitude	County
<b>0</b>	<b>3</b>	<b>26-S</b>	<b>33-E</b>		<b>50 FSL</b>	<b>2311 FEL</b>	<b>32.065388°N</b>	<b>103.559133°W</b>	<b>LEA</b>

Dedicated Acres <b>320</b>	Infill or Defining Well <b>Defining</b>	Defining Well API <b>Pending 504H</b>	Overlapping Spacing Unit (Y/N) <b>Yes</b>	Consolidation Code <b>Com</b>
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
<b>C</b>	<b>34</b>	<b>25-S</b>	<b>33-E</b>		<b>400 FNL</b>	<b>2385 FWL</b>	<b>32.093166°N</b>	<b>103.561051°W</b>	<b>LEA</b>

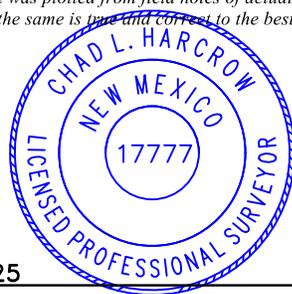
**First Take Point (FTP)**

UL	Section	Township	Range	Lot	Ft. from N/S	Ft. from E/W	Latitude	Longitude	County
<b>B</b>	<b>34</b>	<b>25-S</b>	<b>33-E</b>		<b>100 FNL</b>	<b>2311 FEL</b>	<b>32.093992°N</b>	<b>103.559118°W</b>	<b>LEA</b>

**Last Take Point (LTP)**

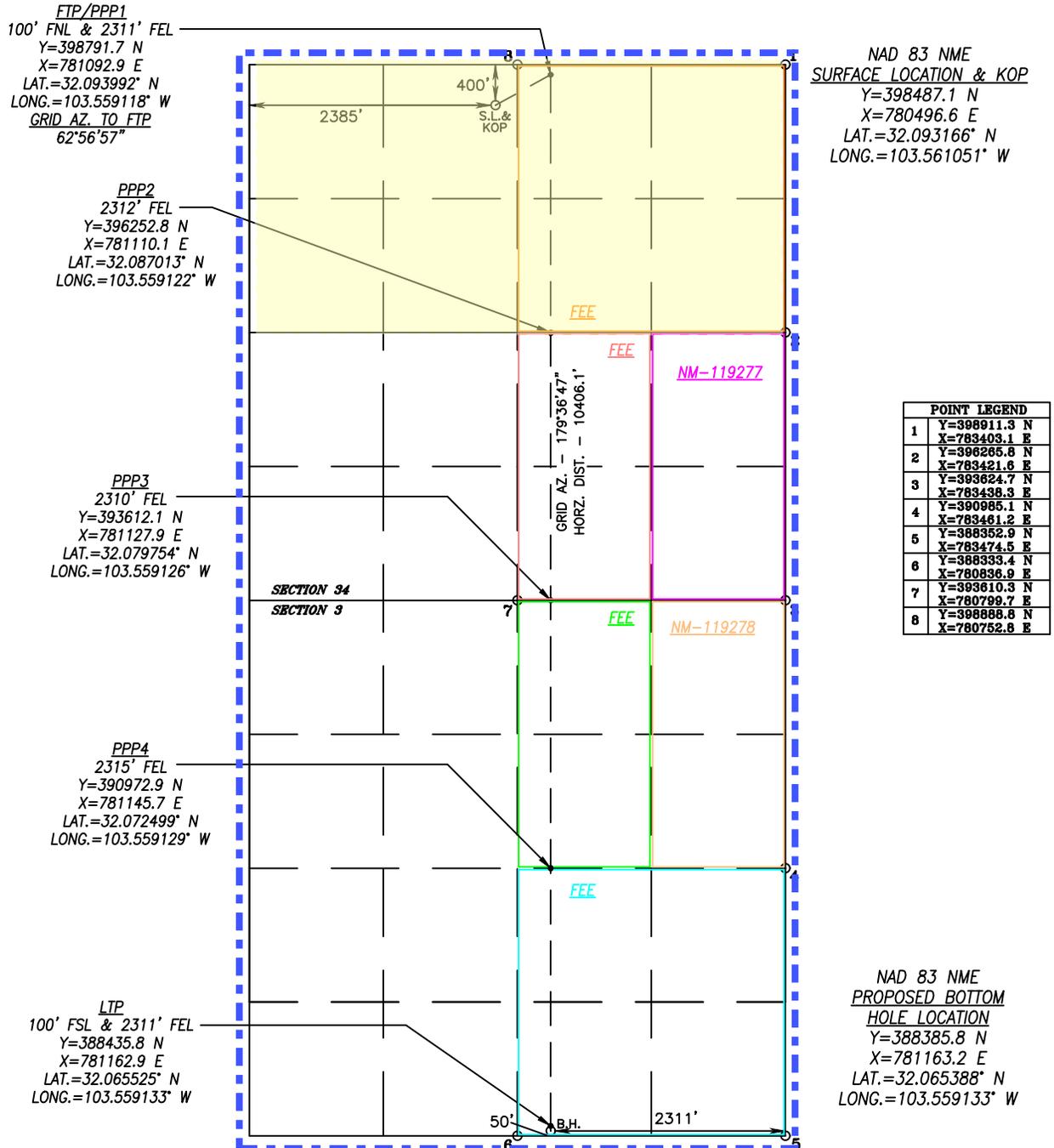
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<b>0</b>	<b>3</b>	<b>26-S</b>	<b>33-E</b>		<b>100 FSL</b>	<b>2311 FEL</b>	<b>32.065525°N</b>	<b>103.559133°W</b>	<b>LEA</b>

Unitized Area or Area of Uniform Interest	Spacing Unit Type <input checked="" type="checkbox"/> Horizontal <input type="checkbox"/> Vertical	Ground Floor Elevation: <b>3329.9'</b>
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<p><b>OPERATOR CERTIFICATIONS</b></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><b>SURVEYOR CERTIFICATIONS</b></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: <b>Stan Wagner</b> Email Address:	Certificate Number: <b>17777</b> Date of Survey: <b>NOVEMBER 10, 2025</b>
W.O.#25-1384    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.



<b>C-102</b>  Submit Electronically Via OCD Permitting	State of New Mexico Energy, Minerals & Natural Resources Department <b>OIL CONSERVATION DIVISION</b>	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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**WELL LOCATION INFORMATION**

API Number <b>30-025- 55896</b>	Pool Code <b>97741</b>	Pool Name <b>WC-025 G-09 S253335K; LWR Bone Spring</b>
Property Code <b>317530</b>	Property Name <b>COLUMBUS FEDERAL COM</b>	Well Number <b>504H</b>
OGRID No. <b>229137</b>	Operator Name <b>COG OPERATING LLC</b>	Ground Level Elevation <b>3329.9'</b>
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 <b>960</b>	Infill or Defining Well <b>Defining</b>	Defining Well API <b>Pending 504H</b>	Overlapping Spacing Unit (Y/N) <b>Yes</b>	Consolidation Code <b>Com</b>
Order Numbers.			Well setbacks are under Common Ownership: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	

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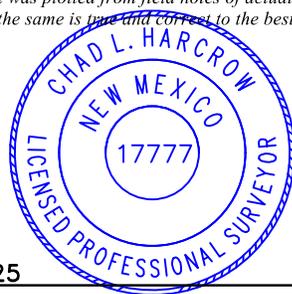
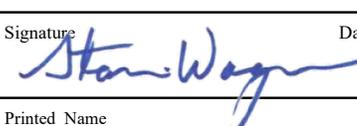
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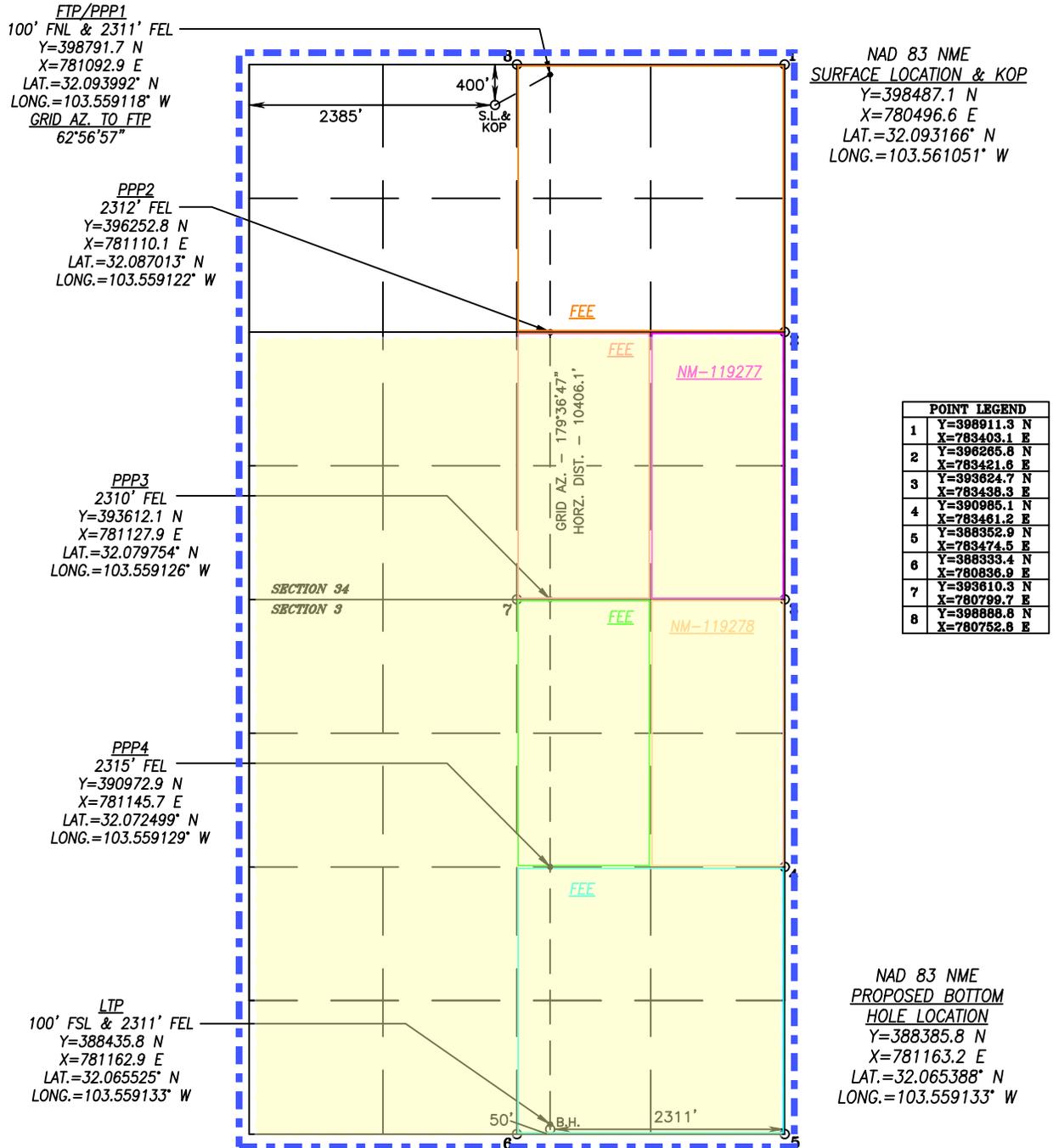
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**Oil Conservation Division**  
**1220 S. St Francis Dr.**  
**Santa Fe, NM 87505**

Form APD Comments

Permit 407902

**PERMIT COMMENTS**

Operator Name and Address: COG OPERATING LLC [229137] 600 W Illinois Ave Midland, TX 79701	API Number: 30-025-55896
	Well: COLUMBUS FEDERAL COM #504H

Created By	Comment	Comment Date
jeffrey.harrison	Submitted as defining well.	2/5/2026

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

General Information  
Phone: (505) 629-6116

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

Form APD Conditions

Permit 407902

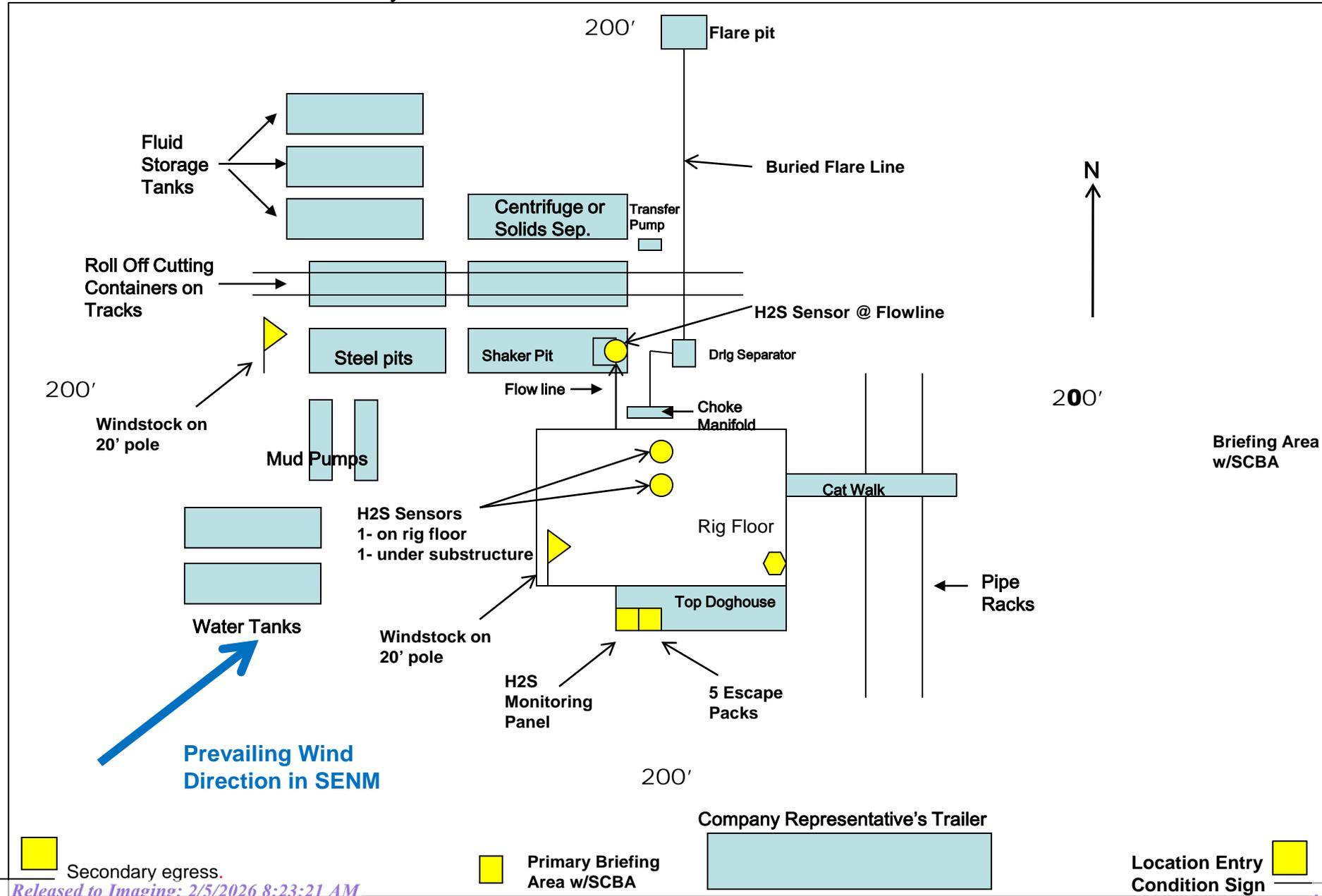
**PERMIT CONDITIONS OF APPROVAL**

Operator Name and Address: COG OPERATING LLC [229137] 600 W Illinois Ave Midland, TX 79701	API Number: 30-025-55896
	Well: COLUMBUS FEDERAL COM #504H

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	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.
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.

# COG Operating LLC H<sub>2</sub>S 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 (H<sub>2</sub>S).
- b. The proper use and maintenance of personal protective equipment and life support systems.
- c. The proper use of H<sub>2</sub>S 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 H<sub>2</sub>S 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 H<sub>2</sub>S Drilling Operations Plan and the Public Protection Plan.

There will be an initial training session just prior to encountering a known or probable H<sub>2</sub>S zone (within 3 days or 500 feet) and weekly H<sub>2</sub>S and well control drills for all personnel in each crew. The initial training session shall include a review of the site specific H<sub>2</sub>S 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. H<sub>2</sub>S SAFETY EQUIPMENT AND SYSTEMS**

Note: All H<sub>2</sub>S 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 H<sub>2</sub>S. If H<sub>2</sub>S greater than 100 ppm is encountered in the gas stream we will shut in and install H<sub>2</sub>S 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 H<sub>2</sub>S 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**

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

## **EMERGENCY RESPONSE NUMBERS**

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

# **DELAWARE BASIN EAST**

**LEA COUNT SOUTH WEST (NM-E)  
COLUMBUS FEDERAL PROJECT  
\_COLUMBUS FEDERAL COM 504H**

**OWB  
PWP0**

## **Anticollision Report**

**14 January, 2026**

### ConocoPhillips Anticollision Report

<b>Company:</b>	DELAWARE BASIN EAST	<b>Local Co-ordinate Reference:</b>	Well _COLUMBUS FEDERAL COM 504H - Slot SLOT 6
<b>Project:</b>	LEA COUNT SOUTH WEST (NM-E)	<b>TVD Reference:</b>	KB @ 3362.00usft
<b>Reference Site:</b>	COLUMBUS FEDERAL PROJECT	<b>MD Reference:</b>	KB @ 3362.00usft
<b>Site Error:</b>	0.00 usft	<b>North Reference:</b>	Grid
<b>Reference Well:</b>	_COLUMBUS FEDERAL COM 504H	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.00 usft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	OWB	<b>Database:</b>	EDT 17 Permian Prod
<b>Reference Design:</b>	PWP0	<b>Offset TVD Reference:</b>	Reference Datum

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

<b>Survey Tool Program</b>	<b>Date</b>	1/13/2026		
<b>From (usft)</b>	<b>To (usft)</b>	<b>Survey (Wellbore)</b>	<b>Tool Name</b>	<b>Description</b>
0.00	21,013.94	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
<b>Summary</b>						
<b>Offset Well - Wellbore - Design</b>						
COLUMBUS FEDERAL PROJECT						
_COLUMBUS FEDERAL COM 503H - OWB - PWP0	1,500.00	1,500.00	20.00	10.18	2.036	Caution - Monitor Closely, CC, ES
_COLUMBUS FEDERAL COM 503H - OWB - PWP0	1,600.00	1,599.98	20.67	10.49	2.031	Caution - Monitor Closely, SF
_COLUMBUS FEDERAL COM 505H - OWB - PWP0	2,004.07	2,002.23	34.08	22.53	2.951	Normal Operations, CC, ES, SF
_COLUMBUS FEDERAL COM 506H - OWB - PWP0	1,500.00	1,500.00	79.94	70.12	8.138	CC, ES
_COLUMBUS FEDERAL COM 506H - OWB - PWP0	1,600.00	1,597.25	81.05	70.80	7.906	SF
_COLUMBUS FEDERAL COM 651H - OWB - PWP0	1,500.00	1,500.00	80.00	70.18	8.144	CC, ES
_COLUMBUS FEDERAL COM 651H - OWB - PWP0	1,700.00	1,699.84	82.69	72.17	7.858	SF
_COLUMBUS FEDERAL COM 652H - OWB - PWP0	1,500.00	1,500.00	40.00	30.18	4.072	CC, ES
_COLUMBUS FEDERAL COM 652H - OWB - PWP0	1,600.00	1,599.98	40.64	30.47	3.994	SF
_COLUMBUS FEDERAL COM 653H - OWB - PWP0	1,699.91	1,699.75	18.75	8.26	1.787	Caution - Monitor Closely, CC
_COLUMBUS FEDERAL COM 653H - OWB - PWP0	1,700.00	1,699.84	18.75	8.26	1.787	Caution - Monitor Closely, ES, SF
_COLUMBUS FEDERAL COM 654H - OWB - PWP0	1,500.00	1,500.00	60.00	50.18	6.108	CC, ES
_COLUMBUS FEDERAL COM 654H - OWB - PWP0	1,600.00	1,597.92	61.11	50.86	5.961	SF
COLUMBUS FEDERAL COM #22H - OWB - AWP						Out of range
COLUMBUS FEDERAL COM #701H - OWB - AWP	13,394.16	10,779.76	812.42	773.65	20.954	CC, ES
COLUMBUS FEDERAL COM #701H - OWB - AWP	13,400.00	10,779.77	812.44	773.65	20.946	SF
COLUMBUS FEDERAL COM #702H - OWB - AWP						Out of range
COLUMBUS FEDERAL COM 501H - OWB - PWP1	1,500.00	1,500.00	99.99	91.47	11.727	CC, ES
COLUMBUS FEDERAL COM 501H - OWB - PWP1	1,700.00	1,699.84	102.63	93.50	11.244	SF
COLUMBUS FEDERAL COM 502H - OWB - PWP1	1,500.00	1,500.00	60.00	51.47	7.037	CC, ES
COLUMBUS FEDERAL COM 502H - OWB - PWP1	1,600.00	1,599.98	60.62	51.79	6.867	SF
COLUMBUS FEE #23H - OWB (PH) - AWP	10,679.20	10,603.40	777.82	735.95	18.581	CC, ES
COLUMBUS FEE #23H - OWB (PH) - AWP	10,700.00	10,618.92	777.94	736.06	18.574	SF
COLUMBUS FEE #23H - ST01 - AWP	10,679.20	10,603.40	777.82	735.95	18.581	CC, ES
COLUMBUS FEE #23H - ST01 - AWP	10,700.00	10,618.92	777.94	736.06	18.574	SF
COLUMBUS FEE #24H - OWB - AWP	10,624.01	10,552.68	86.75	30.48	1.542	Caution - Monitor Closely, CC
COLUMBUS FEE #24H - OWB - AWP	10,625.00	10,553.51	86.75	30.47	1.541	Caution - Monitor Closely, ES, SF
COLUMBUS FEE #2H - OWB - AWP	6,018.13	5,961.11	119.43	101.54	6.677	CC, ES
COLUMBUS FEE #2H - OWB - AWP	8,700.00	8,643.97	137.25	114.77	6.106	SF
RED BULL 35 FEDERAL #1H - OWB - AWP						Out of range
ROJO 7811 34 27 FEDERAL #18H - OWB - AWP	13,284.73	10,788.91	693.97	629.47	10.759	CC, ES, SF
ROJO 7811 34 27 FEDERAL #19H - OWB - AWP						Out of range
ROJO 7811 34 27 FEDERAL #21H - OWB - AWP	13,530.44	10,866.89	682.69	615.60	10.175	CC, ES, SF
ROJO 7811 34 27 FEDERAL #40H - OWB - AWP						Out of range
ROJO 7811 34 27 FEDERAL #40H - OWB - PWP0						Out of range

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

### ConocoPhillips Anticollision Report

<b>Company:</b>	DELAWARE BASIN EAST	<b>Local Co-ordinate Reference:</b>	Well _COLUMBUS FEDERAL COM 504H - Slot SLOT 6
<b>Project:</b>	LEA COUNT SOUTH WEST (NM-E)	<b>TVD Reference:</b>	KB @ 3362.00usft
<b>Reference Site:</b>	COLUMBUS FEDERAL PROJECT	<b>MD Reference:</b>	KB @ 3362.00usft
<b>Site Error:</b>	0.00 usft	<b>North Reference:</b>	Grid
<b>Reference Well:</b>	_COLUMBUS FEDERAL COM 504H	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.00 usft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	OWB	<b>Database:</b>	EDT 17 Permian Prod
<b>Reference Design:</b>	PWP0	<b>Offset TVD Reference:</b>	Reference Datum

Site Name	Reference Measured Depth (usft)	Offset Measured Depth (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Separation Factor	Warning
<b>Offset Well - Wellbore - Design</b>						
COLUMBUS FEDERAL PROJECT						
SALADO DRAW 10 FEDERAL #2H - OWB - AWP	7,113.19	7,040.83	701.90	662.37	17.754	CC
SALADO DRAW 10 FEDERAL #2H - OWB - AWP	7,200.00	7,124.29	702.12	662.19	17.580	ES
SALADO DRAW 10 FEDERAL #2H - OWB - AWP	8,700.00	8,610.79	719.91	673.00	15.345	SF
SALADO DRAW 10 FEDERAL COM #1H - OWB - AWP						Out of range

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
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	-90.37	-0.13	-20.00	20.00				
100.00	100.00	100.00	100.00	0.77	0.77	-90.37	-0.13	-20.00	20.00	18.01	1.99	10.044	
200.00	200.00	200.00	200.00	1.44	1.44	-90.37	-0.13	-20.00	20.00	16.69	3.31	6.040	
300.00	300.00	300.00	300.00	1.88	1.88	-90.37	-0.13	-20.00	20.00	15.81	4.20	4.767	
400.00	400.00	400.00	400.00	2.25	2.25	-90.37	-0.13	-20.00	20.00	15.09	4.91	4.072	
500.00	500.00	500.00	500.00	2.56	2.56	-90.37	-0.13	-20.00	20.00	14.47	5.53	3.615	
600.00	600.00	600.00	600.00	2.84	2.84	-90.37	-0.13	-20.00	20.00	13.91	6.09	3.284	
700.00	700.00	700.00	700.00	3.10	3.10	-90.37	-0.13	-20.00	20.00	13.40	6.60	3.030	
800.00	800.00	800.00	800.00	3.34	3.34	-90.37	-0.13	-20.00	20.00	12.92	7.08	2.826	Normal Operations
900.00	900.00	900.00	900.00	3.57	3.57	-90.37	-0.13	-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	-90.37	-0.13	-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	-90.37	-0.13	-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	-90.37	-0.13	-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	-90.37	-0.13	-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	-90.37	-0.13	-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	-90.37	-0.13	-20.00	20.00	10.18	9.82	2.036	Caution - Monitor Closely, CC, ES
1,600.00	1,599.98	1,599.98	1,599.98	5.01	4.91	-114.90	-0.13	-20.00	20.67	10.49	10.18	2.031	Caution - Monitor Closely, SF
1,700.00	1,699.84	1,699.84	1,699.84	5.27	5.08	-126.57	-0.13	-20.00	23.36	12.81	10.56	2.213	Caution - Monitor Closely
1,750.00	1,749.68	1,749.68	1,749.68	5.32	5.16	-133.51	-0.13	-20.00	25.90	15.19	10.71	2.419	Caution - Monitor Closely
1,800.00	1,799.48	1,799.48	1,799.48	5.36	5.24	-149.84	-0.13	-20.00	29.42	18.57	10.85	2.712	Normal Operations
1,900.00	1,898.97	1,898.97	1,898.97	5.55	5.40	-172.01	-0.13	-20.00	38.98	27.80	11.19	3.485	
2,000.00	1,998.21	1,998.21	1,998.21	5.74	5.55	176.10	-0.13	-20.00	51.24	39.71	11.53	4.444	
2,065.66	2,063.18	2,062.98	2,062.97	5.81	5.70	172.38	0.38	-20.47	60.79	49.08	11.71	5.192	
2,100.00	2,097.11	2,096.72	2,096.70	5.83	5.79	173.80	1.08	-21.10	66.20	54.42	11.77	5.623	
2,200.00	2,195.92	2,194.62	2,194.47	5.99	6.02	178.39	4.76	-24.45	82.67	70.61	12.06	6.854	
2,300.00	2,294.73	2,291.76	2,291.26	6.15	6.27	-176.75	10.85	-29.99	100.58	88.22	12.36	8.139	
2,400.00	2,393.53	2,387.95	2,386.76	6.31	6.54	-171.93	19.26	-37.66	120.33	107.67	12.66	9.502	
2,500.00	2,492.34	2,483.62	2,481.35	6.47	6.72	-167.37	29.89	-47.33	142.18	129.26	12.92	11.004	
2,600.00	2,591.15	2,580.48	2,576.98	6.64	6.94	-163.72	41.25	-57.67	165.14	151.89	13.24	12.470	
2,700.00	2,689.96	2,677.34	2,672.62	6.80	7.19	-160.97	52.61	-68.01	188.57	174.98	13.59	13.875	
2,800.00	2,788.77	2,774.21	2,768.26	6.97	7.46	-158.83	63.97	-78.35	212.33	198.38	13.95	15.218	
2,900.00	2,887.57	2,871.07	2,863.89	7.14	7.74	-157.11	75.33	-88.69	236.31	221.98	14.33	16.494	
3,000.00	2,986.38	2,967.93	2,959.53	7.31	8.04	-155.72	86.69	-99.04	260.46	245.74	14.71	17.703	
3,100.00	3,085.19	3,064.79	3,055.17	7.48	8.34	-154.56	98.05	-109.38	284.73	269.62	15.11	18.843	
3,200.00	3,184.00	3,161.66	3,150.80	7.66	8.66	-153.58	109.41	-119.72	309.09	293.57	15.52	19.918	
3,300.00	3,282.81	3,258.52	3,246.44	7.83	8.99	-152.74	120.77	-130.06	333.52	317.58	15.93	20.931	
3,400.00	3,381.61	3,355.38	3,342.08	8.01	9.33	-152.02	132.13	-140.40	358.01	341.65	16.36	21.883	

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

### ConocoPhillips Anticollision Report

<b>Company:</b>	DELAWARE BASIN EAST	<b>Local Co-ordinate Reference:</b>	Well _COLUMBUS FEDERAL COM 504H - Slot SLOT 6
<b>Project:</b>	LEA COUNT SOUTH WEST (NM-E)	<b>TVD Reference:</b>	KB @ 3362.00usft
<b>Reference Site:</b>	COLUMBUS FEDERAL PROJECT	<b>MD Reference:</b>	KB @ 3362.00usft
<b>Site Error:</b>	0.00 usft	<b>North Reference:</b>	Grid
<b>Reference Well:</b>	_COLUMBUS FEDERAL COM 504H	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.00 usft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	OWB	<b>Database:</b>	EDT 17 Permian Prod
<b>Reference Design:</b>	PWP0	<b>Offset TVD Reference:</b>	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)					
3,500.00	3,480.42	3,452.25	3,437.71	8.19	9.67	-151.39	143.49	-150.74	382.55	365.75	16.79	22.779			
3,600.00	3,579.23	3,549.11	3,533.35	8.37	10.02	-150.84	154.85	-161.09	407.12	389.89	17.24	23.621			
3,700.00	3,678.04	3,645.97	3,628.99	8.55	10.38	-150.35	166.21	-171.43	431.73	414.05	17.68	24.414			
3,800.00	3,776.85	3,742.83	3,724.62	8.73	10.74	-149.91	177.57	-181.77	456.36	438.23	18.14	25.160			
3,900.00	3,875.65	3,839.70	3,820.26	8.91	11.11	-149.52	188.93	-192.11	481.02	462.42	18.60	25.862			
4,000.00	3,974.46	3,936.56	3,915.90	9.09	11.48	-149.16	200.29	-202.45	505.70	486.63	19.07	26.524			
4,100.00	4,073.27	4,033.42	4,011.53	9.28	11.86	-148.84	211.65	-212.79	530.39	510.85	19.54	27.148			
4,200.00	4,172.08	4,130.28	4,107.17	9.46	12.24	-148.55	223.01	-223.14	555.09	535.08	20.01	27.736			
4,300.00	4,270.89	4,227.15	4,202.81	9.65	12.62	-148.28	234.37	-233.48	579.81	559.32	20.49	28.291			
4,400.00	4,369.69	4,324.62	4,299.05	9.83	13.01	-148.03	245.79	-243.88	604.54	583.57	20.97	28.825			
4,500.00	4,468.50	4,430.14	4,403.40	10.02	13.42	-147.86	257.35	-254.40	628.51	607.02	21.50	29.238			
4,600.00	4,567.31	4,536.39	4,508.75	10.21	13.84	-147.81	267.56	-263.69	651.15	629.15	22.01	29.590			
4,700.00	4,666.12	4,643.30	4,614.99	10.40	14.24	-147.88	276.36	-271.71	672.44	649.94	22.50	29.888			
4,800.00	4,764.93	4,750.79	4,722.02	10.59	14.64	-148.07	283.73	-278.42	692.37	669.40	22.97	30.142			
4,900.00	4,863.73	4,858.81	4,829.75	10.77	15.02	-148.35	289.65	-283.80	710.93	687.52	23.42	30.360			
5,000.00	4,962.54	4,967.28	4,938.05	10.96	15.38	-148.73	294.07	-287.83	728.14	704.31	23.84	30.549			
5,100.00	5,061.35	5,076.12	5,046.81	11.15	15.71	-149.20	296.99	-290.49	744.01	719.79	24.22	30.720			
5,200.00	5,160.16	5,185.26	5,155.93	11.34	15.99	-149.76	298.38	-291.75	758.56	734.01	24.55	30.895			
5,300.00	5,258.97	5,288.29	5,258.97	11.54	16.09	-150.35	298.50	-291.86	772.05	747.31	24.74	31.205			
5,400.00	5,357.77	5,387.10	5,357.77	11.73	16.15	-150.90	298.50	-291.86	785.50	760.58	24.93	31.514			
5,500.00	5,456.58	5,485.91	5,456.58	11.92	16.21	-151.44	298.50	-291.86	799.02	773.91	25.12	31.813			
5,600.00	5,555.39	5,584.72	5,555.39	12.11	16.28	-151.95	298.50	-291.86	812.61	787.30	25.31	32.104			
5,663.37	5,618.00	5,647.33	5,618.00	12.22	16.32	-152.27	298.50	-291.86	821.26	795.84	25.42	32.305			
5,700.00	5,654.22	5,683.54	5,654.22	12.27	16.34	-152.47	298.50	-291.86	826.16	800.68	25.48	32.422			
5,800.00	5,753.25	5,782.57	5,753.25	12.46	16.40	-152.97	298.50	-291.86	838.54	812.86	25.69	32.646			
5,900.00	5,852.50	5,881.83	5,852.50	12.65	16.47	-153.39	298.50	-291.86	849.42	823.52	25.89	32.803			
6,000.00	5,951.95	5,981.28	5,951.95	12.83	16.53	-153.74	298.50	-291.86	858.77	832.66	26.11	32.896			
6,100.00	6,051.57	6,080.90	6,051.57	13.00	16.59	-154.03	298.50	-291.86	866.58	840.27	26.32	32.926			
6,200.00	6,151.33	6,180.66	6,151.33	13.17	16.66	-154.26	298.50	-291.86	872.85	846.31	26.53	32.898			
6,300.00	6,251.19	6,280.52	6,251.19	13.34	16.72	-154.43	298.50	-291.86	877.55	850.80	26.74	32.813			
6,400.00	6,351.13	6,380.46	6,351.13	13.49	16.79	-154.54	298.50	-291.86	880.68	853.73	26.95	32.675			
6,500.00	6,451.12	6,480.44	6,451.12	13.63	16.85	-154.59	298.50	-291.86	882.24	855.09	27.15	32.491			
6,548.89	6,500.00	6,529.33	6,500.00	13.66	16.89	-90.38	298.50	-291.86	882.43	855.21	27.22	32.417			
6,600.00	6,551.11	6,580.44	6,551.11	13.68	16.92	-90.38	298.50	-291.86	882.43	855.15	27.28	32.345			
6,700.00	6,651.11	6,680.44	6,651.11	13.76	16.99	-90.38	298.50	-291.86	882.43	855.00	27.43	32.169			
6,800.00	6,751.11	6,780.44	6,751.11	13.83	17.05	-90.38	298.50	-291.86	882.43	854.85	27.58	31.994			
6,900.00	6,851.11	6,880.44	6,851.11	13.90	17.12	-90.38	298.50	-291.86	882.43	854.70	27.73	31.822			
7,000.00	6,951.11	6,980.44	6,951.11	13.98	17.18	-90.38	298.50	-291.86	882.43	854.55	27.88	31.651			
7,100.00	7,051.11	7,080.44	7,051.11	14.05	17.25	-90.38	298.50	-291.86	882.43	854.40	28.03	31.482			
7,200.00	7,151.11	7,180.44	7,151.11	14.12	17.32	-90.38	298.50	-291.86	882.43	854.25	28.18	31.314			
7,300.00	7,251.11	7,280.44	7,251.11	14.20	17.38	-90.38	298.50	-291.86	882.43	854.10	28.33	31.148			
7,400.00	7,351.11	7,380.44	7,351.11	14.27	17.45	-90.38	298.50	-291.86	882.43	853.95	28.48	30.984			
7,500.00	7,451.11	7,480.44	7,451.11	14.34	17.51	-90.38	298.50	-291.86	882.43	853.80	28.63	30.821			
7,600.00	7,551.11	7,580.44	7,551.11	14.42	17.58	-90.38	298.50	-291.86	882.43	853.65	28.78	30.660			
7,700.00	7,651.11	7,680.44	7,651.11	14.49	17.65	-90.38	298.50	-291.86	882.43	853.50	28.93	30.500			
7,800.00	7,751.11	7,780.44	7,751.11	14.56	17.72	-90.38	298.50	-291.86	882.43	853.34	29.08	30.342			
7,900.00	7,851.11	7,880.44	7,851.11	14.64	17.78	-90.38	298.50	-291.86	882.43	853.19	29.23	30.186			
8,000.00	7,951.11	7,980.44	7,951.11	14.71	17.85	-90.38	298.50	-291.86	882.43	853.04	29.38	30.031			
8,100.00	8,051.11	8,080.44	8,051.11	14.79	17.92	-90.38	298.50	-291.86	882.43	852.89	29.54	29.877			
8,200.00	8,151.11	8,180.44	8,151.11	14.86	17.99	-90.38	298.50	-291.86	882.43	852.74	29.69	29.725			
8,300.00	8,251.11	8,280.44	8,251.11	14.94	18.05	-90.38	298.50	-291.86	882.43	852.59	29.84	29.574			

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

### ConocoPhillips Anticollision Report

<b>Company:</b>	DELAWARE BASIN EAST	<b>Local Co-ordinate Reference:</b>	Well _COLUMBUS FEDERAL COM 504H - Slot SLOT 6
<b>Project:</b>	LEA COUNT SOUTH WEST (NM-E)	<b>TVD Reference:</b>	KB @ 3362.00usft
<b>Reference Site:</b>	COLUMBUS FEDERAL PROJECT	<b>MD Reference:</b>	KB @ 3362.00usft
<b>Site Error:</b>	0.00 usft	<b>North Reference:</b>	Grid
<b>Reference Well:</b>	_COLUMBUS FEDERAL COM 504H	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.00 usft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	OWB	<b>Database:</b>	EDT 17 Permian Prod
<b>Reference Design:</b>	PWP0	<b>Offset TVD Reference:</b>	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)					
8,400.00	8,351.11	8,380.44	8,351.11	15.01	18.12	-90.38	298.50	-291.86	882.43	852.44	29.99	29.425			
8,500.00	8,451.11	8,480.44	8,451.11	15.08	18.19	-90.38	298.50	-291.86	882.43	852.29	30.14	29.277			
8,600.00	8,551.11	8,580.44	8,551.11	15.16	18.26	-90.38	298.50	-291.86	882.43	852.14	30.29	29.131			
8,700.00	8,651.11	8,680.44	8,651.11	15.23	18.32	-90.38	298.50	-291.86	882.43	851.98	30.44	28.986			
8,800.00	8,751.11	8,780.44	8,751.11	15.31	18.39	-90.38	298.50	-291.86	882.43	851.83	30.60	28.842			
8,900.00	8,851.11	8,880.44	8,851.11	15.38	18.46	-90.38	298.50	-291.86	882.43	851.68	30.75	28.699			
9,000.00	8,951.11	8,980.44	8,951.11	15.46	18.53	-90.38	298.50	-291.86	882.43	851.53	30.90	28.558			
9,100.00	9,051.11	9,080.44	9,051.11	15.53	18.60	-90.38	298.50	-291.86	882.43	851.38	31.05	28.419			
9,200.00	9,151.11	9,180.44	9,151.11	15.61	18.67	-90.38	298.50	-291.86	882.43	851.22	31.20	28.280			
9,300.00	9,251.11	9,280.44	9,251.11	15.68	18.73	-90.38	298.50	-291.86	882.43	851.07	31.36	28.143			
9,400.00	9,351.11	9,380.44	9,351.11	15.76	18.80	-90.38	298.50	-291.86	882.43	850.92	31.51	28.007			
9,500.00	9,451.11	9,480.44	9,451.11	15.83	18.87	-90.38	298.50	-291.86	882.43	850.77	31.66	27.872			
9,600.00	9,551.11	9,580.44	9,551.11	15.91	18.94	-90.38	298.50	-291.86	882.43	850.61	31.81	27.738			
9,700.00	9,651.11	9,680.44	9,651.11	15.98	19.01	-90.38	298.50	-291.86	882.43	850.46	31.97	27.606			
9,800.00	9,751.11	9,780.44	9,751.11	16.06	19.08	-90.38	298.50	-291.86	882.43	850.31	32.12	27.475			
9,900.00	9,851.11	9,880.44	9,851.11	16.14	19.15	-90.38	298.50	-291.86	882.43	850.16	32.27	27.345			
10,000.00	9,951.11	9,980.44	9,951.11	16.21	19.22	-90.38	298.50	-291.86	882.43	850.00	32.42	27.216			
10,100.00	10,051.11	10,080.44	10,051.11	16.29	19.29	-90.38	298.50	-291.86	882.43	849.85	32.58	27.088			
10,200.00	10,151.11	10,180.44	10,151.11	16.36	19.36	-90.38	298.50	-291.86	882.43	849.70	32.73	26.962			
10,300.00	10,251.11	10,280.44	10,251.11	16.44	19.43	-90.38	298.50	-291.86	882.43	849.55	32.88	26.836			
10,335.43	10,286.54	10,315.87	10,286.54	16.45	19.45	-90.38	298.50	-291.86	882.43	849.51	32.92	26.806			
10,350.00	10,301.11	10,330.49	10,301.16	16.45	19.43	90.04	298.28	-291.86	882.43	849.51	32.92	26.806			
10,375.00	10,326.07	10,355.56	10,326.19	16.44	19.39	90.04	296.85	-291.85	882.43	849.52	32.91	26.816			
10,400.00	10,350.92	10,380.63	10,351.11	16.43	19.34	90.04	294.12	-291.83	882.42	849.53	32.89	26.830			
10,425.00	10,375.59	10,405.71	10,375.85	16.41	19.28	90.04	290.08	-291.79	882.42	849.55	32.87	26.846			
10,450.00	10,400.02	10,430.78	10,400.34	16.39	19.22	90.04	284.74	-291.75	882.42	849.57	32.85	26.865			
10,475.00	10,424.14	10,455.85	10,424.53	16.38	19.16	90.04	278.13	-291.70	882.41	849.59	32.82	26.885			
10,500.00	10,447.88	10,480.92	10,448.32	16.36	19.09	90.04	270.26	-291.63	882.40	849.61	32.80	26.906			
10,525.00	10,471.17	10,505.99	10,471.68	16.34	19.03	90.04	261.15	-291.56	882.39	849.63	32.77	26.929			
10,550.00	10,493.96	10,531.06	10,494.52	16.32	18.96	90.04	250.83	-291.47	882.39	849.65	32.74	26.953			
10,575.00	10,516.19	10,556.12	10,516.78	16.31	18.90	90.04	239.32	-291.38	882.38	849.67	32.71	26.978			
10,600.00	10,537.78	10,581.19	10,538.41	16.29	18.84	90.04	226.67	-291.28	882.36	849.69	32.68	27.003			
10,625.00	10,558.69	10,606.25	10,559.35	16.28	18.78	90.03	212.89	-291.16	882.35	849.71	32.65	27.027			
10,650.00	10,578.85	10,631.31	10,579.53	16.27	18.72	90.03	198.04	-291.04	882.34	849.72	32.62	27.051			
10,675.00	10,598.20	10,656.36	10,598.90	16.26	18.66	90.03	182.16	-290.91	882.33	849.74	32.59	27.073			
10,700.00	10,616.71	10,681.42	10,617.41	16.25	18.61	90.03	165.28	-290.77	882.31	849.75	32.57	27.093			
10,725.00	10,634.31	10,706.47	10,635.01	16.24	18.56	90.03	147.45	-290.63	882.30	849.75	32.54	27.112			
10,750.00	10,650.95	10,731.52	10,651.65	16.24	18.52	90.03	128.73	-290.48	882.28	849.76	32.52	27.127			
10,775.00	10,666.60	10,756.57	10,667.28	16.24	18.48	90.03	109.16	-290.32	882.26	849.75	32.51	27.139			
10,800.00	10,681.20	10,781.61	10,681.86	16.24	18.44	90.02	88.81	-290.15	882.25	849.75	32.50	27.148			
10,825.00	10,694.73	10,806.65	10,695.35	16.24	18.41	90.02	67.72	-289.98	882.23	849.73	32.49	27.152			
10,850.00	10,707.13	10,831.69	10,707.72	16.25	18.38	90.02	45.95	-289.80	882.21	849.72	32.49	27.151			
10,875.00	10,718.38	10,856.72	10,718.93	16.26	18.36	90.02	23.57	-289.61	882.19	849.69	32.50	27.146			
10,900.00	10,728.45	10,881.75	10,728.94	16.28	18.34	90.02	0.64	-289.43	882.17	849.66	32.51	27.135			
10,925.00	10,737.31	10,906.77	10,737.74	16.29	18.33	90.01	-22.79	-289.24	882.15	849.62	32.53	27.118			
10,950.00	10,744.93	10,931.80	10,745.31	16.31	18.33	90.01	-46.63	-289.04	882.13	849.57	32.56	27.096			
10,975.00	10,751.29	10,956.82	10,751.61	16.34	18.33	90.01	-70.84	-288.84	882.11	849.52	32.59	27.068			
11,000.00	10,756.38	10,981.83	10,756.63	16.36	18.33	90.01	-95.34	-288.64	882.09	849.46	32.63	27.034			
11,025.00	10,760.19	11,006.84	10,760.36	16.39	18.34	90.01	-120.07	-288.44	882.06	849.39	32.68	26.995			
11,050.00	10,762.69	11,031.85	10,762.79	16.42	18.36	90.00	-144.96	-288.24	882.04	849.31	32.73	26.950			

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

### ConocoPhillips Anticollision Report

<b>Company:</b>	DELAWARE BASIN EAST	<b>Local Co-ordinate Reference:</b>	Well _COLUMBUS FEDERAL COM 504H - Slot SLOT 6
<b>Project:</b>	LEA COUNT SOUTH WEST (NM-E)	<b>TVD Reference:</b>	KB @ 3362.00usft
<b>Reference Site:</b>	COLUMBUS FEDERAL PROJECT	<b>MD Reference:</b>	KB @ 3362.00usft
<b>Site Error:</b>	0.00 usft	<b>North Reference:</b>	Grid
<b>Reference Well:</b>	_COLUMBUS FEDERAL COM 504H	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.00 usft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	OWB	<b>Database:</b>	EDT 17 Permian Prod
<b>Reference Design:</b>	PWP0	<b>Offset TVD Reference:</b>	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)					
11,075.00	10,763.89	11,056.85	10,763.92	16.46	18.38	90.00	-169.93	-288.03	882.02	849.23	32.79	26.899			
11,085.43	10,764.01	11,067.28	10,764.01	16.47	18.40	90.00	-180.36	-287.95	882.01	849.19	32.82	26.877			
11,100.00	10,764.01	11,081.85	10,764.01	16.50	18.41	90.00	-194.93	-287.83	882.00	849.14	32.86	26.844			
11,200.00	10,764.01	11,181.85	10,764.01	16.67	18.56	90.00	-294.93	-287.01	881.91	848.69	33.22	26.547			
11,300.00	10,764.00	11,281.85	10,764.00	16.87	18.74	90.00	-394.92	-286.19	881.82	848.15	33.68	26.184			
11,400.00	10,764.00	11,381.85	10,764.00	17.10	18.96	90.00	-494.92	-285.37	881.74	847.51	34.23	25.763			
11,500.00	10,764.00	11,481.85	10,764.00	17.36	19.23	90.00	-594.92	-284.56	881.65	846.79	34.86	25.292			
11,600.00	10,764.00	11,581.85	10,764.00	17.65	19.54	90.00	-694.91	-283.74	881.56	845.99	35.57	24.782			
11,700.00	10,764.00	11,681.85	10,764.00	17.98	19.89	90.00	-794.91	-282.92	881.48	845.11	36.36	24.240			
11,800.00	10,764.00	11,781.85	10,764.00	18.33	20.29	90.00	-894.91	-282.10	881.39	844.16	37.23	23.677			
11,900.00	10,764.00	11,881.85	10,764.00	18.72	20.74	90.00	-994.90	-281.28	881.30	843.15	38.15	23.098			
12,000.00	10,764.00	11,981.85	10,764.00	19.13	21.22	90.00	-1,094.90	-280.47	881.22	842.07	39.15	22.512			
12,100.00	10,764.00	12,081.85	10,764.00	19.57	21.74	90.00	-1,194.90	-279.65	881.13	840.94	40.19	21.923			
12,200.00	10,764.00	12,181.85	10,764.00	20.04	22.30	90.00	-1,294.89	-278.83	881.04	839.75	41.29	21.336			
12,300.00	10,764.00	12,281.85	10,764.00	20.54	22.89	90.00	-1,394.89	-278.01	880.96	838.51	42.44	20.757			
12,400.00	10,764.00	12,381.85	10,764.00	21.06	23.51	90.00	-1,494.89	-277.19	880.87	837.23	43.63	20.187			
12,500.00	10,764.00	12,481.85	10,764.00	21.60	24.16	90.00	-1,594.88	-276.38	880.78	835.91	44.87	19.630			
12,600.00	10,764.00	12,581.85	10,764.00	22.16	24.82	90.00	-1,694.88	-275.56	880.69	834.55	46.14	19.087			
12,700.00	10,764.00	12,681.85	10,764.00	22.74	25.52	90.00	-1,794.88	-274.74	880.61	833.16	47.45	18.559			
12,800.00	10,764.00	12,781.85	10,764.00	23.34	26.23	90.00	-1,894.87	-273.92	880.52	831.73	48.79	18.048			
12,900.00	10,764.00	12,881.85	10,764.00	23.96	26.95	90.00	-1,994.87	-273.10	880.43	830.28	50.16	17.554			
13,000.00	10,764.00	12,981.85	10,764.00	24.59	27.70	90.00	-2,094.87	-272.29	880.35	828.80	51.55	17.077			
13,100.00	10,764.00	13,081.85	10,764.00	25.23	28.46	90.00	-2,194.86	-271.47	880.26	827.29	52.97	16.618			
13,200.00	10,764.00	13,181.85	10,764.00	25.89	29.23	90.00	-2,294.86	-270.65	880.17	825.76	54.41	16.176			
13,300.00	10,764.00	13,281.85	10,764.00	26.55	30.01	90.00	-2,394.86	-269.83	880.09	824.21	55.88	15.750			
13,400.00	10,764.00	13,381.85	10,764.00	27.23	30.80	90.00	-2,494.85	-269.01	880.00	822.64	57.36	15.342			
13,500.00	10,764.00	13,481.85	10,764.00	27.92	31.61	90.00	-2,594.85	-268.20	879.91	821.05	58.86	14.949			
13,600.00	10,764.00	13,581.85	10,764.00	28.62	32.42	90.00	-2,694.85	-267.38	879.83	819.45	60.38	14.572			
13,700.00	10,764.00	13,681.85	10,764.00	29.33	33.25	90.00	-2,794.84	-266.56	879.74	817.83	61.91	14.210			
13,800.00	10,764.00	13,781.85	10,764.00	30.05	34.08	90.00	-2,894.84	-265.74	879.65	816.19	63.46	13.862			
13,900.00	10,764.00	13,881.85	10,764.00	30.77	34.91	90.00	-2,994.84	-264.92	879.56	814.55	65.02	13.528			
14,000.00	10,764.00	13,981.85	10,764.00	31.50	35.76	90.00	-3,094.83	-264.11	879.48	812.89	66.59	13.207			
14,100.00	10,764.00	14,081.85	10,764.00	32.24	36.61	90.00	-3,194.83	-263.29	879.39	811.21	68.18	12.899			
14,200.00	10,764.00	14,181.85	10,764.00	32.98	37.47	90.00	-3,294.83	-262.47	879.30	809.53	69.77	12.603			
14,300.00	10,764.00	14,281.85	10,764.00	33.73	38.33	90.00	-3,394.82	-261.65	879.22	807.84	71.38	12.318			
14,400.00	10,764.00	14,381.85	10,764.00	34.48	39.20	90.00	-3,494.82	-260.83	879.13	806.14	72.99	12.045			
14,500.00	10,764.00	14,481.85	10,764.00	35.24	40.07	90.00	-3,594.81	-260.02	879.04	804.43	74.61	11.781			
14,600.00	10,764.00	14,581.85	10,764.00	36.00	40.94	90.00	-3,694.81	-259.20	878.96	802.71	76.24	11.528			
14,700.00	10,764.00	14,681.85	10,764.00	36.77	41.82	90.00	-3,794.81	-258.38	878.87	800.99	77.88	11.285			
14,800.00	10,764.00	14,781.85	10,764.00	37.54	42.71	90.00	-3,894.80	-257.56	878.78	799.26	79.53	11.050			
14,900.00	10,764.00	14,881.85	10,764.00	38.32	43.59	90.00	-3,994.80	-256.74	878.70	797.52	81.18	10.824			
15,000.00	10,764.00	14,981.85	10,764.00	39.09	44.48	90.00	-4,094.80	-255.93	878.61	795.77	82.84	10.606			
15,100.00	10,764.00	15,081.85	10,764.00	39.88	45.38	90.00	-4,194.79	-255.11	878.52	794.02	84.50	10.396			
15,200.00	10,764.00	15,181.85	10,764.00	40.66	46.27	90.00	-4,294.79	-254.29	878.43	792.26	86.17	10.194			
15,300.00	10,764.00	15,281.85	10,764.00	41.45	47.17	90.00	-4,394.79	-253.47	878.35	790.50	87.85	9.999			
15,400.00	10,764.00	15,381.85	10,764.00	42.24	48.08	90.00	-4,494.78	-252.65	878.26	788.73	89.53	9.810			
15,500.00	10,764.00	15,481.85	10,764.00	43.03	48.98	90.00	-4,594.78	-251.84	878.17	786.96	91.21	9.628			
15,600.00	10,764.00	15,581.85	10,764.00	43.83	49.89	90.00	-4,694.78	-251.02	878.09	785.19	92.90	9.452			
15,700.00	10,764.00	15,681.85	10,764.00	44.63	50.80	90.00	-4,794.77	-250.20	878.00	783.41	94.59	9.282			
15,800.00	10,764.00	15,781.85	10,764.00	45.43	51.71	90.00	-4,894.77	-249.38	877.91	781.62	96.29	9.117			
15,900.00	10,764.00	15,881.85	10,764.00	46.23	52.62	90.00	-4,994.77	-248.56	877.83	779.83	97.99	8.958			

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

### ConocoPhillips Anticollision Report

<b>Company:</b>	DELAWARE BASIN EAST	<b>Local Co-ordinate Reference:</b>	Well _COLUMBUS FEDERAL COM 504H - Slot SLOT 6
<b>Project:</b>	LEA COUNT SOUTH WEST (NM-E)	<b>TVD Reference:</b>	KB @ 3362.00usft
<b>Reference Site:</b>	COLUMBUS FEDERAL PROJECT	<b>MD Reference:</b>	KB @ 3362.00usft
<b>Site Error:</b>	0.00 usft	<b>North Reference:</b>	Grid
<b>Reference Well:</b>	_COLUMBUS FEDERAL COM 504H	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.00 usft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	OWB	<b>Database:</b>	EDT 17 Permian Prod
<b>Reference Design:</b>	PWP0	<b>Offset TVD Reference:</b>	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)					
16,000.00	10,764.00	15,981.85	10,764.00	47.04	53.54	90.00	-5,094.76	-247.75	877.74	778.04	99.70	8.804			
16,100.00	10,764.00	16,081.85	10,764.00	47.84	54.45	90.00	-5,194.76	-246.93	877.65	776.25	101.41	8.655			
16,200.00	10,764.00	16,181.85	10,764.00	48.65	55.37	90.00	-5,294.76	-246.11	877.57	774.45	103.12	8.510			
16,300.00	10,764.00	16,281.85	10,764.00	49.46	56.29	90.00	-5,394.75	-245.29	877.48	772.65	104.83	8.370			
16,400.00	10,764.00	16,381.85	10,764.00	50.27	57.21	90.00	-5,494.75	-244.47	877.39	770.84	106.55	8.235			
16,500.00	10,764.00	16,481.85	10,764.00	51.09	58.13	90.00	-5,594.75	-243.66	877.30	769.04	108.27	8.103			
16,600.00	10,764.00	16,581.85	10,764.00	51.90	59.06	90.00	-5,694.74	-242.84	877.22	767.23	109.99	7.975			
16,700.00	10,764.00	16,681.85	10,764.00	52.72	59.98	90.00	-5,794.74	-242.02	877.13	765.42	111.72	7.851			
16,800.00	10,764.00	16,781.85	10,764.00	53.54	60.91	90.00	-5,894.74	-241.20	877.04	763.60	113.44	7.731			
16,900.00	10,764.00	16,881.85	10,764.00	54.35	61.84	90.00	-5,994.73	-240.38	876.96	761.78	115.17	7.614			
17,000.00	10,764.00	16,981.85	10,764.00	55.17	62.77	90.00	-6,094.73	-239.57	876.87	759.97	116.91	7.501			
17,100.00	10,764.00	17,081.85	10,764.00	56.00	63.70	90.00	-6,194.73	-238.75	876.78	758.14	118.64	7.390			
17,200.00	10,764.00	17,181.85	10,764.00	56.82	64.63	90.00	-6,294.72	-237.93	876.70	756.32	120.38	7.283			
17,300.00	10,764.00	17,281.85	10,764.00	57.64	65.56	90.00	-6,394.72	-237.11	876.61	754.50	122.11	7.179			
17,400.00	10,764.00	17,381.85	10,764.00	58.47	66.50	90.00	-6,494.72	-236.29	876.52	752.67	123.85	7.077			
17,500.00	10,764.00	17,481.85	10,764.00	59.29	67.43	90.00	-6,594.71	-235.48	876.44	750.84	125.59	6.978			
17,600.00	10,764.00	17,581.85	10,764.00	60.12	68.36	90.00	-6,694.71	-234.66	876.35	749.01	127.34	6.882			
17,700.00	10,764.00	17,681.85	10,764.00	60.94	69.30	90.00	-6,794.71	-233.84	876.26	747.18	129.08	6.788			
17,800.00	10,764.00	17,781.85	10,764.00	61.77	70.24	90.00	-6,894.70	-233.02	876.17	745.35	130.83	6.697			
17,900.00	10,764.00	17,881.85	10,764.00	62.60	71.17	90.00	-6,994.70	-232.20	876.09	743.51	132.58	6.608			
18,000.00	10,764.00	17,981.85	10,764.00	63.43	72.11	90.00	-7,094.70	-231.39	876.00	741.67	134.33	6.521			
18,100.00	10,764.00	18,081.85	10,764.00	64.26	73.05	90.00	-7,194.69	-230.57	875.91	739.84	136.08	6.437			
18,200.00	10,764.00	18,181.85	10,764.00	65.09	73.99	90.00	-7,294.69	-229.75	875.83	738.00	137.83	6.354			
18,300.00	10,764.00	18,281.85	10,764.00	65.93	74.93	90.00	-7,394.69	-228.93	875.74	736.16	139.58	6.274			
18,400.00	10,764.00	18,381.85	10,764.00	66.76	75.87	90.00	-7,494.68	-228.11	875.65	734.32	141.34	6.196			
18,500.00	10,764.00	18,481.85	10,764.00	67.59	76.81	90.00	-7,594.68	-227.30	875.57	732.47	143.09	6.119			
18,600.00	10,764.00	18,581.85	10,764.00	68.43	77.75	90.00	-7,694.68	-226.48	875.48	730.63	144.85	6.044			
18,700.00	10,764.00	18,681.85	10,764.00	69.26	78.70	90.00	-7,794.67	-225.66	875.39	728.79	146.61	5.971			
18,800.00	10,764.00	18,781.85	10,764.00	70.10	79.64	90.00	-7,894.67	-224.84	875.31	726.94	148.37	5.900			
18,900.00	10,764.00	18,881.85	10,764.00	70.93	80.58	90.00	-7,994.67	-224.02	875.22	725.09	150.13	5.830			
19,000.00	10,764.00	18,981.85	10,764.00	71.77	81.53	90.00	-8,094.66	-223.21	875.13	723.24	151.89	5.762			
19,100.00	10,764.00	19,081.85	10,764.00	72.60	82.47	90.00	-8,194.66	-222.39	875.05	721.40	153.65	5.695			
19,200.00	10,764.00	19,181.85	10,764.00	73.44	83.42	90.00	-8,294.66	-221.57	874.96	719.55	155.41	5.630			
19,300.00	10,764.00	19,281.85	10,764.00	74.28	84.36	90.00	-8,394.65	-220.75	874.87	717.70	157.18	5.566			
19,400.00	10,764.00	19,381.85	10,764.00	75.12	85.31	90.00	-8,494.65	-219.93	874.78	715.84	158.94	5.504			
19,500.00	10,764.00	19,481.85	10,764.00	75.96	86.26	90.00	-8,594.65	-219.12	874.70	713.99	160.71	5.443			
19,600.00	10,764.00	19,581.85	10,764.00	76.79	87.20	90.00	-8,694.64	-218.30	874.61	712.14	162.47	5.383			
19,700.00	10,764.00	19,681.85	10,764.00	77.63	88.15	90.00	-8,794.64	-217.48	874.52	710.28	164.24	5.325			
19,800.00	10,764.00	19,781.85	10,764.00	78.47	89.10	90.00	-8,894.64	-216.66	874.44	708.43	166.01	5.267			
19,900.00	10,764.00	19,881.85	10,764.00	79.31	90.04	90.00	-8,994.63	-215.84	874.35	706.57	167.78	5.211			
20,000.00	10,764.00	19,981.85	10,764.00	80.16	90.99	90.00	-9,094.63	-215.03	874.26	704.72	169.54	5.157			
20,100.00	10,764.00	20,081.85	10,764.00	81.00	91.94	90.00	-9,194.63	-214.21	874.18	702.86	171.31	5.103			
20,200.00	10,764.00	20,181.85	10,764.00	81.84	92.89	90.00	-9,294.62	-213.39	874.09	701.00	173.09	5.050			
20,300.00	10,764.00	20,281.85	10,764.00	82.68	93.84	90.00	-9,394.62	-212.57	874.00	699.15	174.86	4.998			
20,400.00	10,764.00	20,381.85	10,764.00	83.52	94.79	90.00	-9,494.62	-211.75	873.92	697.29	176.63	4.948			
20,500.00	10,764.00	20,481.85	10,764.00	84.36	95.74	90.00	-9,594.61	-210.94	873.83	695.43	178.40	4.898			
20,600.00	10,764.00	20,581.85	10,764.00	85.21	96.69	90.00	-9,694.61	-210.12	873.74	693.57	180.17	4.849			
20,700.00	10,764.00	20,681.85	10,764.00	86.05	97.64	90.00	-9,794.61	-209.30	873.65	691.71	181.95	4.802			
20,800.00	10,764.00	20,781.85	10,764.00	86.89	98.59	90.00	-9,894.60	-208.48	873.57	689.85	183.72	4.755			
20,900.00	10,764.00	20,881.85	10,764.00	87.74	99.54	90.00	-9,994.60	-207.66	873.48	687.98	185.50	4.709			

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

### ConocoPhillips Anticollision Report

<b>Company:</b>	DELAWARE BASIN EAST	<b>Local Co-ordinate Reference:</b>	Well _COLUMBUS FEDERAL COM 504H - Slot SLOT 6
<b>Project:</b>	LEA COUNT SOUTH WEST (NM-E)	<b>TVD Reference:</b>	KB @ 3362.00usft
<b>Reference Site:</b>	COLUMBUS FEDERAL PROJECT	<b>MD Reference:</b>	KB @ 3362.00usft
<b>Site Error:</b>	0.00 usft	<b>North Reference:</b>	Grid
<b>Reference Well:</b>	_COLUMBUS FEDERAL COM 504H	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.00 usft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	OWB	<b>Database:</b>	EDT 17 Permian Prod
<b>Reference Design:</b>	PWP0	<b>Offset TVD Reference:</b>	Reference Datum

<b>Offset Design:</b> COLUMBUS FEDERAL PROJECT - _COLUMBUS FEDERAL COM 503H - OWB - PWP0													<b>Offset Site Error:</b>	0.00 usft
<b>Survey Program:</b> 0-r.5 MWD+IFR1													<b>Offset Well Error:</b>	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)				
21,000.00	10,764.00	20,981.85	10,764.00	88.58	100.49	90.00	-10,094.60	-206.85	873.39	686.12	187.27	4.664		
21,012.70	10,764.00	20,993.80	10,764.00	88.69	100.61	90.00	-10,106.54	-206.75	873.38	685.90	187.49	4.658		
21,013.94	10,764.00	20,993.80	10,764.00	88.70	100.61	90.00	-10,106.54	-206.75	873.38	685.89	187.49	4.658		
21,014.47	10,764.00	20,993.80	10,764.00	88.72	100.61	90.00	-10,106.54	-206.75	873.38	685.89	187.49	4.658		

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

### ConocoPhillips Anticollision Report

<b>Company:</b>	DELAWARE BASIN EAST	<b>Local Co-ordinate Reference:</b>	Well _COLUMBUS FEDERAL COM 504H - Slot SLOT 6
<b>Project:</b>	LEA COUNT SOUTH WEST (NM-E)	<b>TVD Reference:</b>	KB @ 3362.00usft
<b>Reference Site:</b>	COLUMBUS FEDERAL PROJECT	<b>MD Reference:</b>	KB @ 3362.00usft
<b>Site Error:</b>	0.00 usft	<b>North Reference:</b>	Grid
<b>Reference Well:</b>	_COLUMBUS FEDERAL COM 504H	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.00 usft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	OWB	<b>Database:</b>	EDT 17 Permian Prod
<b>Reference Design:</b>	PWP0	<b>Offset TVD Reference:</b>	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	89.58	0.29	39.94	39.94						
100.00	100.00	100.00	100.00	0.77	0.77	89.58	0.29	39.94	39.94	37.95	1.99	20.058			
200.00	200.00	200.00	200.00	1.44	1.44	89.58	0.29	39.94	39.94	36.63	3.31	12.061			
300.00	300.00	300.00	300.00	1.88	1.88	89.58	0.29	39.94	39.94	35.75	4.20	9.520			
400.00	400.00	400.00	400.00	2.25	2.25	89.58	0.29	39.94	39.94	35.03	4.91	8.131			
500.00	500.00	500.00	500.00	2.56	2.56	89.58	0.29	39.94	39.94	34.41	5.53	7.219			
600.00	600.00	600.00	600.00	2.84	2.84	89.58	0.29	39.94	39.94	33.85	6.09	6.558			
700.00	700.00	700.00	700.00	3.10	3.10	89.58	0.29	39.94	39.94	33.34	6.60	6.051			
800.00	800.00	800.00	800.00	3.34	3.34	89.58	0.29	39.94	39.94	32.86	7.08	5.644			
900.00	900.00	900.00	900.00	3.57	3.57	89.58	0.29	39.94	39.94	32.42	7.52	5.309			
1,000.00	1,000.00	1,000.00	1,000.00	3.79	3.79	89.58	0.29	39.94	39.94	31.99	7.95	5.026			
1,100.00	1,100.00	1,100.00	1,100.00	3.99	3.99	89.58	0.29	39.94	39.94	31.59	8.35	4.782			
1,200.00	1,200.00	1,200.00	1,200.00	4.19	4.19	89.58	0.29	39.94	39.94	31.20	8.74	4.570			
1,300.00	1,300.00	1,300.00	1,300.00	4.38	4.38	89.58	0.29	39.94	39.94	30.83	9.11	4.383			
1,400.00	1,400.00	1,400.00	1,400.00	4.56	4.56	89.58	0.29	39.94	39.94	30.47	9.47	4.216			
1,500.00	1,500.00	1,500.00	1,500.00	4.74	4.74	89.58	0.29	39.94	39.94	30.12	9.82	4.066			
1,600.00	1,599.98	1,599.98	1,599.98	5.01	4.91	71.98	0.29	39.94	39.37	29.20	10.17	3.871			
1,700.00	1,699.84	1,699.84	1,699.84	5.27	5.08	79.50	0.29	39.94	38.07	27.58	10.50	3.628			
1,750.00	1,749.68	1,749.68	1,749.68	5.32	5.16	85.39	0.29	39.94	37.55	26.95	10.61	3.540			
1,800.00	1,799.48	1,799.48	1,799.48	5.36	5.24	81.62	0.29	39.94	37.03	26.30	10.73	3.451			
1,900.00	1,898.97	1,898.97	1,898.97	5.55	5.40	80.54	0.29	39.94	35.32	24.18	11.14	3.171			
2,000.00	1,998.21	1,998.21	1,998.21	5.74	5.55	89.34	0.29	39.94	34.09	22.55	11.54	2.954	Normal Operations		
2,004.07	2,002.24	2,002.23	2,002.23	5.74	5.56	89.89	0.29	39.94	34.08	22.53	11.55	2.951	Normal Operations, CC, ES, SF		
2,065.66	2,063.18	2,063.12	2,063.12	5.81	5.70	98.51	0.44	40.62	34.87	23.13	11.74	2.971	Normal Operations		
2,100.00	2,097.11	2,097.17	2,097.15	5.83	5.78	105.29	0.64	41.55	36.00	24.18	11.82	3.045			
2,200.00	2,195.92	2,196.83	2,196.67	5.99	6.00	118.99	1.71	46.55	41.12	28.97	12.14	3.386			
2,300.00	2,294.73	2,297.06	2,296.53	6.15	6.21	125.42	3.53	54.98	46.62	34.16	12.46	3.742			
2,400.00	2,393.53	2,397.62	2,396.35	6.31	6.43	126.93	6.09	66.87	51.08	38.32	12.76	4.003			
2,500.00	2,492.34	2,498.26	2,495.75	6.47	6.64	124.80	9.40	82.19	54.20	41.15	13.05	4.153			
2,600.00	2,591.15	2,598.55	2,594.24	6.64	6.74	119.74	13.37	100.64	56.37	43.12	13.25	4.253			
2,700.00	2,689.96	2,698.37	2,692.14	6.80	6.87	114.39	17.49	119.74	58.80	45.28	13.51	4.351			
2,800.00	2,788.77	2,798.20	2,790.04	6.97	7.02	109.50	21.60	138.83	61.69	47.92	13.77	4.479			
2,900.00	2,887.57	2,898.02	2,887.93	7.14	7.16	105.08	25.72	157.92	65.00	50.97	14.03	4.631			
3,000.00	2,986.38	2,997.85	2,985.83	7.31	7.31	101.11	29.83	177.01	68.66	54.36	14.30	4.801			
3,100.00	3,085.19	3,097.68	3,083.73	7.48	7.46	97.55	33.95	196.10	72.61	58.04	14.57	4.985			
3,200.00	3,184.00	3,197.50	3,181.62	7.66	7.62	94.37	38.06	215.19	76.81	61.97	14.84	5.177			
3,300.00	3,282.81	3,297.33	3,279.52	7.83	7.78	91.53	42.18	234.28	81.22	66.11	15.11	5.375			
3,400.00	3,381.61	3,397.15	3,377.42	8.01	7.94	88.98	46.29	253.38	85.82	70.43	15.39	5.577			
3,500.00	3,480.42	3,496.98	3,475.31	8.19	8.10	86.70	50.41	272.47	90.56	74.89	15.67	5.779			
3,600.00	3,579.23	3,596.80	3,573.21	8.37	8.26	84.65	54.52	291.56	95.44	79.48	15.95	5.982			
3,700.00	3,678.04	3,696.63	3,671.11	8.55	8.43	82.80	58.64	310.65	100.42	84.18	16.24	6.182			
3,800.00	3,776.85	3,796.46	3,769.00	8.73	8.60	81.12	62.75	329.74	105.50	88.96	16.53	6.381			
3,900.00	3,875.65	3,896.28	3,866.90	8.91	8.77	79.60	66.87	348.83	110.66	93.83	16.83	6.576			
4,000.00	3,974.46	3,996.11	3,964.80	9.09	8.95	78.22	70.98	367.92	115.89	98.77	17.13	6.767			
4,100.00	4,073.27	4,095.93	4,062.69	9.28	9.12	76.95	75.10	387.02	121.18	103.76	17.42	6.955			
4,200.00	4,172.08	4,195.76	4,160.59	9.46	9.30	75.80	79.21	406.11	126.53	108.80	17.73	7.138			
4,300.00	4,270.89	4,295.58	4,258.49	9.65	9.48	74.73	83.33	425.20	131.93	113.89	18.03	7.317			
4,400.00	4,369.69	4,395.41	4,356.38	9.83	9.66	73.75	87.45	444.29	137.36	119.02	18.34	7.491			
4,500.00	4,468.50	4,495.24	4,454.28	10.02	9.84	72.85	91.56	463.38	142.83	124.19	18.64	7.661			
4,600.00	4,567.31	4,595.06	4,552.18	10.21	10.02	72.01	95.68	482.47	148.34	129.39	18.95	7.826			
4,700.00	4,666.12	4,694.89	4,650.07	10.40	10.21	71.23	99.79	501.56	153.88	134.61	19.27	7.987			

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

### ConocoPhillips Anticollision Report

<b>Company:</b>	DELAWARE BASIN EAST	<b>Local Co-ordinate Reference:</b>	Well _COLUMBUS FEDERAL COM 504H - Slot SLOT 6
<b>Project:</b>	LEA COUNT SOUTH WEST (NM-E)	<b>TVD Reference:</b>	KB @ 3362.00usft
<b>Reference Site:</b>	COLUMBUS FEDERAL PROJECT	<b>MD Reference:</b>	KB @ 3362.00usft
<b>Site Error:</b>	0.00 usft	<b>North Reference:</b>	Grid
<b>Reference Well:</b>	_COLUMBUS FEDERAL COM 504H	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.00 usft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	OWB	<b>Database:</b>	EDT 17 Permian Prod
<b>Reference Design:</b>	PWP0	<b>Offset TVD Reference:</b>	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)					
4,800.00	4,764.93	4,794.71	4,747.97	10.59	10.39	70.51	103.91	520.66	159.44	139.86	19.58	8.143			
4,900.00	4,863.73	4,894.54	4,845.87	10.77	10.58	69.84	108.02	539.75	165.02	145.13	19.89	8.295			
5,000.00	4,962.54	4,994.36	4,943.76	10.96	10.77	69.21	112.14	558.84	170.63	150.42	20.21	8.443			
5,100.00	5,061.35	5,094.19	5,041.66	11.15	10.95	68.62	116.25	577.93	176.26	155.73	20.53	8.586			
5,200.00	5,160.16	5,194.02	5,139.56	11.34	11.14	68.06	120.37	597.02	181.90	161.05	20.85	8.725			
5,300.00	5,258.97	5,293.84	5,237.45	11.54	11.33	67.54	124.48	616.11	187.56	166.39	21.17	8.861			
5,400.00	5,357.77	5,393.67	5,335.35	11.73	11.53	67.05	128.60	635.20	193.23	171.74	21.49	8.993			
5,500.00	5,456.58	5,493.49	5,433.25	11.92	11.72	66.59	132.71	654.30	198.92	177.11	21.81	9.120			
5,600.00	5,555.39	5,593.32	5,531.14	12.11	11.91	66.15	136.83	673.39	204.62	182.49	22.13	9.245			
5,663.37	5,618.00	5,656.57	5,593.18	12.22	12.03	65.89	139.43	685.49	208.24	185.92	22.32	9.329			
5,700.00	5,654.22	5,693.14	5,629.03	12.27	12.11	65.73	140.94	692.48	210.38	187.95	22.42	9.382			
5,800.00	5,753.25	5,792.90	5,726.86	12.46	12.30	65.04	145.05	711.56	216.73	193.98	22.76	9.524			
5,900.00	5,852.50	5,892.55	5,824.59	12.65	12.50	63.99	149.16	730.61	223.88	200.78	23.10	9.693			
6,000.00	5,951.95	5,992.06	5,922.18	12.83	12.69	62.63	153.26	749.65	231.91	208.46	23.45	9.889			
6,100.00	6,051.57	6,091.41	6,019.61	13.00	12.89	61.02	157.36	768.65	240.91	217.09	23.82	10.115			
6,200.00	6,151.33	6,190.56	6,116.85	13.17	13.08	59.19	161.45	787.61	250.99	226.80	24.19	10.374			
6,300.00	6,251.19	6,289.49	6,213.86	13.34	13.28	57.21	165.52	806.53	262.27	237.69	24.58	10.669			
6,400.00	6,351.13	6,388.15	6,310.62	13.49	13.47	55.11	169.59	825.40	274.85	249.87	24.98	11.003			
6,500.00	6,451.12	6,486.53	6,407.10	13.63	13.67	52.94	173.65	844.21	288.84	263.46	25.38	11.379			
6,548.89	6,500.00	6,534.51	6,454.15	13.66	13.77	116.09	175.62	853.39	296.23	270.67	25.56	11.589			
6,600.00	6,551.11	6,584.64	6,503.31	13.68	13.87	114.93	177.69	862.98	304.20	278.46	25.74	11.818			
6,700.00	6,651.11	6,682.71	6,599.48	13.76	14.06	112.83	181.73	881.73	320.13	294.01	26.12	12.258			
6,800.00	6,751.11	6,780.78	6,695.65	13.83	14.26	110.93	185.78	900.49	336.44	309.95	26.48	12.704			
6,900.00	6,851.11	6,878.84	6,791.83	13.90	14.46	109.20	189.82	919.24	353.08	326.24	26.84	13.153			
7,000.00	6,951.11	6,976.91	6,888.00	13.98	14.66	107.63	193.86	938.00	370.01	342.81	27.20	13.604			
7,100.00	7,051.11	7,074.98	6,984.17	14.05	14.86	106.20	197.90	956.75	387.18	359.64	27.55	14.056			
7,200.00	7,151.11	7,173.05	7,080.34	14.12	15.05	104.89	201.95	975.51	404.58	376.69	27.89	14.507			
7,300.00	7,251.11	7,271.11	7,176.52	14.20	15.25	103.69	205.99	994.26	422.16	393.94	28.23	14.957			
7,400.00	7,351.11	7,369.18	7,272.69	14.27	15.45	102.58	210.03	1,013.02	439.91	411.35	28.56	15.404			
7,500.00	7,451.11	7,467.25	7,368.86	14.34	15.65	101.56	214.07	1,031.77	457.81	428.92	28.89	15.848			
7,600.00	7,551.11	7,565.32	7,465.03	14.42	15.86	100.61	218.12	1,050.53	475.84	446.63	29.21	16.288			
7,700.00	7,651.11	7,663.38	7,561.21	14.49	16.06	99.74	222.16	1,069.28	493.99	464.45	29.54	16.724			
7,800.00	7,751.11	7,761.45	7,657.38	14.56	16.26	98.92	226.20	1,088.04	512.24	482.38	29.86	17.156			
7,900.00	7,851.11	7,859.52	7,753.55	14.64	16.46	98.16	230.24	1,106.79	530.58	500.41	30.18	17.583			
8,000.00	7,951.11	7,957.59	7,849.72	14.71	16.66	97.46	234.29	1,125.55	549.01	518.52	30.49	18.005			
8,100.00	8,051.11	8,055.65	7,945.90	14.79	16.86	96.79	238.33	1,144.30	567.52	536.71	30.81	18.421			
8,200.00	8,151.11	8,153.72	8,042.07	14.86	17.07	96.17	242.37	1,163.06	586.09	554.97	31.12	18.833			
8,300.00	8,251.11	8,251.79	8,138.24	14.94	17.27	95.59	246.41	1,181.81	604.73	573.29	31.43	19.239			
8,400.00	8,351.11	8,349.86	8,234.41	15.01	17.47	95.05	250.46	1,200.57	623.42	591.67	31.74	19.639			
8,500.00	8,451.11	8,447.92	8,330.59	15.08	17.68	94.53	254.50	1,219.33	642.16	610.11	32.05	20.034			
8,600.00	8,551.11	8,545.99	8,426.76	15.16	17.88	94.04	258.54	1,238.08	660.96	628.59	32.36	20.423			
8,700.00	8,651.11	8,644.06	8,522.93	15.23	18.09	93.58	262.58	1,256.84	679.79	647.12	32.67	20.807			
8,800.00	8,751.11	8,742.13	8,619.10	15.31	18.29	93.15	266.63	1,275.59	698.67	665.69	32.98	21.185			
8,900.00	8,851.11	8,840.19	8,715.28	15.38	18.50	92.74	270.67	1,294.35	717.58	684.29	33.29	21.557			
9,000.00	8,951.11	8,938.26	8,811.45	15.46	18.70	92.35	274.71	1,313.10	736.53	702.93	33.59	21.924			
9,100.00	9,051.11	9,036.33	8,907.62	15.53	18.91	91.97	278.75	1,331.86	755.50	721.60	33.90	22.286			
9,200.00	9,151.11	9,134.40	9,003.79	15.61	19.11	91.62	282.80	1,350.61	774.51	740.30	34.21	22.642			
9,300.00	9,251.11	9,235.79	9,103.23	15.68	19.32	91.27	286.97	1,369.95	793.50	758.98	34.52	22.988			
9,400.00	9,351.11	9,349.66	9,215.21	15.76	19.57	90.93	291.32	1,390.17	811.20	776.35	34.85	23.278			
9,500.00	9,451.11	9,464.33	9,328.36	15.83	19.80	90.64	295.24	1,408.33	827.00	791.84	35.16	23.521			

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

### ConocoPhillips Anticollision Report

<b>Company:</b>	DELAWARE BASIN EAST	<b>Local Co-ordinate Reference:</b>	Well _COLUMBUS FEDERAL COM 504H - Slot SLOT 6
<b>Project:</b>	LEA COUNT SOUTH WEST (NM-E)	<b>TVD Reference:</b>	KB @ 3362.00usft
<b>Reference Site:</b>	COLUMBUS FEDERAL PROJECT	<b>MD Reference:</b>	KB @ 3362.00usft
<b>Site Error:</b>	0.00 usft	<b>North Reference:</b>	Grid
<b>Reference Well:</b>	_COLUMBUS FEDERAL COM 504H	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.00 usft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	OWB	<b>Database:</b>	EDT 17 Permian Prod
<b>Reference Design:</b>	PWP0	<b>Offset TVD Reference:</b>	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)					
9,600.00	9,551.11	9,579.70	9,442.56	15.91	20.02	90.39	298.69	1,424.37	840.88	805.41	35.46	23.711			
9,700.00	9,651.11	9,695.70	9,557.69	15.98	20.24	90.18	301.68	1,438.22	852.81	817.05	35.76	23.850			
9,800.00	9,751.11	9,812.24	9,673.62	16.06	20.45	90.01	304.18	1,449.84	862.78	826.74	36.04	23.940			
9,900.00	9,851.11	9,929.21	9,790.20	16.14	20.66	89.88	306.20	1,459.18	870.77	834.46	36.31	23.982			
10,000.00	9,951.11	10,046.53	9,907.29	16.21	20.85	89.78	307.71	1,466.21	876.77	840.20	36.57	23.977			
10,100.00	10,051.11	10,164.09	10,024.75	16.29	21.03	89.71	308.73	1,470.90	880.77	843.96	36.81	23.928			
10,200.00	10,151.11	10,281.80	10,142.43	16.36	21.18	89.68	309.23	1,473.24	882.75	845.72	37.03	23.838			
10,300.00	10,251.11	10,390.48	10,251.11	16.44	21.25	89.68	309.29	1,473.52	882.99	845.84	37.16	23.765			
10,323.27	10,274.39	10,413.75	10,274.39	16.45	21.25	89.68	309.29	1,473.52	882.99	845.82	37.17	23.755			
10,335.43	10,286.54	10,425.90	10,286.54	16.45	21.25	89.68	309.29	1,473.52	882.99	845.82	37.18	23.751			
10,350.00	10,301.11	10,440.43	10,301.06	16.45	21.25	-89.90	309.04	1,473.53	882.99	845.82	37.18	23.750			
10,375.00	10,326.07	10,465.35	10,325.94	16.44	21.25	-89.90	307.58	1,473.54	882.99	845.82	37.17	23.754			
10,400.00	10,350.92	10,490.27	10,350.70	16.43	21.24	-89.90	304.82	1,473.56	882.99	845.83	37.16	23.761			
10,425.00	10,375.59	10,515.18	10,375.28	16.41	21.23	-89.89	300.78	1,473.59	882.99	845.85	37.15	23.769			
10,450.00	10,400.02	10,540.10	10,399.62	16.39	21.22	-89.89	295.46	1,473.63	883.00	845.86	37.13	23.779			
10,475.00	10,424.14	10,565.01	10,423.64	16.38	21.21	-89.89	288.88	1,473.67	883.00	845.88	37.12	23.791			
10,500.00	10,447.88	10,589.92	10,447.29	16.36	21.20	-89.89	281.06	1,473.73	883.00	845.90	37.10	23.803			
10,525.00	10,471.17	10,614.83	10,470.50	16.34	21.19	-89.89	272.01	1,473.80	883.00	845.92	37.07	23.817			
10,550.00	10,493.96	10,639.74	10,493.20	16.32	21.18	-89.89	261.77	1,473.87	883.00	845.94	37.05	23.832			
10,575.00	10,516.19	10,664.64	10,515.33	16.31	21.17	-89.88	250.36	1,473.96	883.00	845.97	37.03	23.847			
10,600.00	10,537.78	10,689.55	10,536.84	16.29	21.16	-89.88	237.81	1,474.05	883.00	845.99	37.00	23.863			
10,625.00	10,558.69	10,714.46	10,557.67	16.28	21.15	-89.88	224.15	1,474.15	883.00	846.02	36.98	23.879			
10,650.00	10,578.85	10,739.37	10,577.76	16.27	21.15	-89.88	209.43	1,474.26	883.00	846.04	36.95	23.895			
10,675.00	10,598.20	10,764.27	10,597.05	16.26	21.14	-89.89	193.68	1,474.37	883.00	846.07	36.93	23.911			
10,700.00	10,616.71	10,789.18	10,615.49	16.25	21.14	-89.89	176.94	1,474.49	883.00	846.09	36.91	23.925			
10,725.00	10,634.31	10,814.09	10,633.04	16.24	21.14	-89.89	159.27	1,474.62	883.00	846.11	36.88	23.939			
10,750.00	10,650.95	10,839.00	10,649.64	16.24	21.14	-89.89	140.70	1,474.76	883.00	846.13	36.87	23.952			
10,775.00	10,666.60	10,863.91	10,665.25	16.24	21.15	-89.89	121.30	1,474.90	883.00	846.15	36.85	23.962			
10,800.00	10,681.20	10,888.82	10,679.83	16.24	21.16	-89.89	101.10	1,475.05	883.00	846.16	36.84	23.971			
10,825.00	10,694.73	10,913.74	10,693.34	16.24	21.17	-89.89	80.17	1,475.20	883.00	846.17	36.83	23.977			
10,850.00	10,707.13	10,938.65	10,705.74	16.25	21.18	-89.90	58.56	1,475.36	883.00	846.17	36.82	23.981			
10,875.00	10,718.38	10,963.57	10,716.99	16.26	21.20	-89.90	36.33	1,475.52	882.99	846.18	36.82	23.982			
10,900.00	10,728.45	10,988.49	10,727.08	16.28	21.23	-89.90	13.54	1,475.69	882.99	846.17	36.82	23.981			
10,925.00	10,737.31	11,013.42	10,735.96	16.29	21.25	-89.91	-9.74	1,475.86	882.99	846.17	36.83	23.975			
10,950.00	10,744.93	11,038.34	10,743.61	16.31	21.28	-89.91	-33.46	1,476.03	882.99	846.15	36.84	23.967			
10,975.00	10,751.29	11,063.27	10,750.01	16.34	21.31	-89.91	-57.55	1,476.21	882.99	846.13	36.86	23.956			
11,000.00	10,756.38	11,088.21	10,755.16	16.36	21.35	-89.92	-81.94	1,476.39	882.99	846.11	36.88	23.941			
11,025.00	10,760.19	11,113.14	10,759.02	16.39	21.39	-89.92	-106.57	1,476.57	882.99	846.08	36.91	23.922			
11,050.00	10,762.69	11,138.08	10,761.59	16.42	21.43	-89.93	-131.38	1,476.75	882.99	846.05	36.94	23.901			
11,075.00	10,763.89	11,163.03	10,762.86	16.46	21.48	-89.93	-156.29	1,476.93	882.99	846.01	36.98	23.876			
11,085.43	10,764.01	11,173.43	10,763.00	16.47	21.50	-89.93	-166.69	1,477.01	882.99	845.99	37.00	23.865			
11,086.62	10,764.01	11,174.62	10,763.00	16.48	21.50	-89.94	-167.88	1,477.01	882.99	845.99	37.00	23.864			
11,100.00	10,764.01	11,188.00	10,763.01	16.50	21.53	-89.94	-181.26	1,477.11	882.99	845.97	37.02	23.849			
11,200.00	10,764.01	11,288.00	10,763.01	16.67	21.76	-89.94	-281.26	1,477.84	882.99	845.72	37.28	23.688			
11,300.00	10,764.00	11,388.00	10,763.00	16.87	22.02	-89.94	-381.25	1,478.57	882.99	845.39	37.60	23.482			
11,400.00	10,764.00	11,488.00	10,763.00	17.10	22.30	-89.94	-481.25	1,479.31	882.99	844.99	38.00	23.235			
11,500.00	10,764.00	11,588.00	10,763.00	17.36	22.60	-89.94	-581.25	1,480.04	882.99	844.52	38.47	22.950			
11,600.00	10,764.00	11,688.00	10,763.00	17.65	22.93	-89.94	-681.25	1,480.77	882.99	843.98	39.01	22.632			
11,700.00	10,764.00	11,788.00	10,763.00	17.98	23.27	-89.94	-781.24	1,481.50	882.99	843.37	39.62	22.286			
11,800.00	10,764.00	11,888.00	10,763.00	18.33	23.64	-89.94	-881.24	1,482.23	882.99	842.70	40.29	21.916			
11,900.00	10,764.00	11,988.00	10,763.00	18.72	24.03	-89.94	-981.24	1,482.96	882.99	841.98	41.02	21.526			

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

### ConocoPhillips Anticollision Report

<b>Company:</b>	DELAWARE BASIN EAST	<b>Local Co-ordinate Reference:</b>	Well _COLUMBUS FEDERAL COM 504H - Slot SLOT 6
<b>Project:</b>	LEA COUNT SOUTH WEST (NM-E)	<b>TVD Reference:</b>	KB @ 3362.00usft
<b>Reference Site:</b>	COLUMBUS FEDERAL PROJECT	<b>MD Reference:</b>	KB @ 3362.00usft
<b>Site Error:</b>	0.00 usft	<b>North Reference:</b>	Grid
<b>Reference Well:</b>	_COLUMBUS FEDERAL COM 504H	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.00 usft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	OWB	<b>Database:</b>	EDT 17 Permian Prod
<b>Reference Design:</b>	PWP0	<b>Offset TVD Reference:</b>	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)				
12,000.00	10,764.00	12,088.00	10,763.00	19.13	24.43	-89.94	-1,081.24	1,483.69	882.99	841.19	41.80	21.122		
12,100.00	10,764.00	12,188.00	10,763.00	19.57	24.85	-89.94	-1,181.23	1,484.42	882.99	840.35	42.64	20.706		
12,200.00	10,764.00	12,288.00	10,763.00	20.04	25.29	-89.94	-1,281.23	1,485.15	883.00	839.46	43.53	20.283		
12,300.00	10,764.00	12,388.00	10,763.00	20.54	25.75	-89.94	-1,381.23	1,485.89	883.00	838.53	44.47	19.856		
12,400.00	10,764.00	12,488.00	10,763.00	21.06	26.23	-89.94	-1,481.22	1,486.62	883.00	837.54	45.45	19.428		
12,500.00	10,764.00	12,588.00	10,763.00	21.60	26.72	-89.94	-1,581.22	1,487.35	883.00	836.52	46.47	19.000		
12,600.00	10,764.00	12,688.00	10,763.00	22.16	27.22	-89.94	-1,681.22	1,488.08	883.00	835.46	47.53	18.576		
12,700.00	10,764.00	12,788.00	10,763.00	22.74	27.74	-89.94	-1,781.22	1,488.81	883.00	834.36	48.63	18.157		
12,800.00	10,764.00	12,888.00	10,763.00	23.34	28.28	-89.94	-1,881.21	1,489.54	883.00	833.23	49.76	17.744		
12,900.00	10,764.00	12,988.00	10,763.00	23.96	28.82	-89.94	-1,981.21	1,490.27	883.00	832.07	50.92	17.339		
13,000.00	10,764.00	13,088.00	10,763.00	24.59	29.38	-89.94	-2,081.21	1,491.00	883.00	830.88	52.12	16.943		
13,100.00	10,764.00	13,188.00	10,763.00	25.23	29.96	-89.94	-2,181.21	1,491.73	883.00	829.66	53.34	16.555		
13,200.00	10,764.00	13,288.00	10,763.00	25.89	30.54	-89.94	-2,281.20	1,492.47	883.00	828.41	54.58	16.178		
13,300.00	10,764.00	13,388.00	10,763.00	26.55	31.14	-89.94	-2,381.20	1,493.20	883.00	827.15	55.85	15.810		
13,400.00	10,764.00	13,488.00	10,763.00	27.23	31.75	-89.94	-2,481.20	1,493.93	883.00	825.85	57.14	15.453		
13,500.00	10,764.00	13,588.00	10,763.00	27.92	32.36	-89.94	-2,581.20	1,494.66	883.00	824.54	58.45	15.106		
13,600.00	10,764.00	13,688.00	10,763.00	28.62	32.99	-89.94	-2,681.19	1,495.39	883.00	823.21	59.78	14.770		
13,700.00	10,764.00	13,788.00	10,763.00	29.33	33.63	-89.94	-2,781.19	1,496.12	883.00	821.86	61.13	14.444		
13,800.00	10,764.00	13,888.00	10,763.00	30.05	34.27	-89.94	-2,881.19	1,496.85	883.00	820.50	62.50	14.128		
13,900.00	10,764.00	13,988.00	10,763.00	30.77	34.93	-89.94	-2,981.18	1,497.58	883.00	819.11	63.88	13.822		
14,000.00	10,764.00	14,088.00	10,763.00	31.50	35.59	-89.94	-3,081.18	1,498.32	883.00	817.72	65.28	13.527		
14,100.00	10,764.00	14,188.00	10,763.00	32.24	36.26	-89.94	-3,181.18	1,499.05	883.00	816.31	66.69	13.241		
14,200.00	10,764.00	14,288.00	10,763.00	32.98	36.94	-89.94	-3,281.18	1,499.78	883.00	814.88	68.11	12.964		
14,300.00	10,764.00	14,388.00	10,763.00	33.73	37.62	-89.94	-3,381.17	1,500.51	883.00	813.45	69.55	12.696		
14,400.00	10,764.00	14,488.00	10,763.00	34.48	38.31	-89.94	-3,481.17	1,501.24	883.00	812.00	71.00	12.437		
14,500.00	10,764.00	14,588.00	10,763.00	35.24	39.01	-89.94	-3,581.17	1,501.97	883.00	810.54	72.45	12.187		
14,600.00	10,764.00	14,688.00	10,763.00	36.00	39.71	-89.94	-3,681.17	1,502.70	883.00	809.08	73.92	11.945		
14,700.00	10,764.00	14,788.00	10,763.00	36.77	40.42	-89.94	-3,781.16	1,503.43	883.00	807.60	75.40	11.711		
14,800.00	10,764.00	14,888.00	10,763.00	37.54	41.14	-89.94	-3,881.16	1,504.16	883.00	806.11	76.89	11.485		
14,900.00	10,764.00	14,988.00	10,763.00	38.32	41.86	-89.94	-3,981.16	1,504.90	883.00	804.62	78.38	11.265		
15,000.00	10,764.00	15,088.00	10,763.00	39.09	42.58	-89.94	-4,081.15	1,505.63	883.00	803.11	79.88	11.053		
15,100.00	10,764.00	15,188.00	10,763.00	39.88	43.31	-89.94	-4,181.15	1,506.36	883.00	801.60	81.39	10.848		
15,200.00	10,764.00	15,288.00	10,763.00	40.66	44.05	-89.94	-4,281.15	1,507.09	883.00	800.08	82.91	10.650		
15,300.00	10,764.00	15,388.00	10,763.00	41.45	44.78	-89.94	-4,381.15	1,507.82	883.00	798.56	84.44	10.457		
15,400.00	10,764.00	15,488.00	10,763.00	42.24	45.53	-89.94	-4,481.14	1,508.55	883.00	797.03	85.97	10.271		
15,500.00	10,764.00	15,588.00	10,763.00	43.03	46.27	-89.94	-4,581.14	1,509.28	883.00	795.49	87.50	10.091		
15,600.00	10,764.00	15,688.00	10,763.00	43.83	47.02	-89.94	-4,681.14	1,510.01	883.00	793.95	89.05	9.916		
15,700.00	10,764.00	15,788.00	10,763.00	44.63	47.78	-89.94	-4,781.14	1,510.74	883.00	792.40	90.60	9.747		
15,800.00	10,764.00	15,888.00	10,763.00	45.43	48.53	-89.94	-4,881.13	1,511.48	883.00	790.85	92.15	9.582		
15,900.00	10,764.00	15,988.00	10,763.00	46.23	49.29	-89.94	-4,981.13	1,512.21	883.00	789.29	93.71	9.423		
16,000.00	10,764.00	16,088.00	10,763.00	47.04	50.06	-89.94	-5,081.13	1,512.94	883.00	787.73	95.27	9.268		
16,100.00	10,764.00	16,188.00	10,763.00	47.84	50.82	-89.94	-5,181.13	1,513.67	883.00	786.16	96.84	9.118		
16,200.00	10,764.00	16,288.00	10,763.00	48.65	51.59	-89.94	-5,281.12	1,514.40	883.00	784.59	98.41	8.973		
16,300.00	10,764.00	16,388.00	10,763.00	49.46	52.37	-89.94	-5,381.12	1,515.13	883.00	783.01	99.98	8.831		
16,400.00	10,764.00	16,488.00	10,763.00	50.27	53.14	-89.94	-5,481.12	1,515.86	883.00	781.44	101.56	8.694		
16,500.00	10,764.00	16,588.00	10,763.00	51.09	53.92	-89.94	-5,581.11	1,516.59	883.00	779.85	103.15	8.561		
16,600.00	10,764.00	16,688.00	10,763.00	51.90	54.70	-89.94	-5,681.11	1,517.33	883.00	778.27	104.73	8.431		
16,700.00	10,764.00	16,788.00	10,763.00	52.72	55.48	-89.94	-5,781.11	1,518.06	883.00	776.68	106.32	8.305		
16,800.00	10,764.00	16,888.00	10,763.00	53.54	56.26	-89.94	-5,881.11	1,518.79	883.00	775.08	107.91	8.182		
16,900.00	10,764.00	16,988.00	10,763.00	54.35	57.05	-89.94	-5,981.10	1,519.52	883.00	773.49	109.51	8.063		

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

### ConocoPhillips Anticollision Report

<b>Company:</b>	DELAWARE BASIN EAST	<b>Local Co-ordinate Reference:</b>	Well _COLUMBUS FEDERAL COM 504H - Slot SLOT 6
<b>Project:</b>	LEA COUNT SOUTH WEST (NM-E)	<b>TVD Reference:</b>	KB @ 3362.00usft
<b>Reference Site:</b>	COLUMBUS FEDERAL PROJECT	<b>MD Reference:</b>	KB @ 3362.00usft
<b>Site Error:</b>	0.00 usft	<b>North Reference:</b>	Grid
<b>Reference Well:</b>	_COLUMBUS FEDERAL COM 504H	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.00 usft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	OWB	<b>Database:</b>	EDT 17 Permian Prod
<b>Reference Design:</b>	PWP0	<b>Offset TVD Reference:</b>	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)					
17,000.00	10,764.00	17,088.00	10,763.00	55.17	57.84	-89.94	-6,081.10	1,520.25	883.00	771.89	111.11	7.947			
17,100.00	10,764.00	17,188.00	10,763.00	56.00	58.63	-89.94	-6,181.10	1,520.98	883.00	770.29	112.71	7.834			
17,200.00	10,764.00	17,288.00	10,763.00	56.82	59.42	-89.94	-6,281.10	1,521.71	883.00	768.68	114.32	7.724			
17,300.00	10,764.00	17,388.00	10,763.00	57.64	60.21	-89.94	-6,381.09	1,522.44	883.00	767.08	115.92	7.617			
17,400.00	10,764.00	17,488.00	10,763.00	58.47	61.01	-89.94	-6,481.09	1,523.17	883.00	765.47	117.53	7.513			
17,500.00	10,764.00	17,588.00	10,763.00	59.29	61.81	-89.94	-6,581.09	1,523.91	883.00	763.86	119.14	7.411			
17,600.00	10,764.00	17,688.00	10,763.00	60.12	62.61	-89.94	-6,681.09	1,524.64	883.00	762.24	120.76	7.312			
17,700.00	10,764.00	17,788.00	10,763.00	60.94	63.41	-89.94	-6,781.08	1,525.37	883.00	760.63	122.37	7.216			
17,800.00	10,764.00	17,888.00	10,763.00	61.77	64.21	-89.94	-6,881.08	1,526.10	883.00	759.01	123.99	7.121			
17,900.00	10,764.00	17,988.00	10,763.00	62.60	65.01	-89.94	-6,981.08	1,526.83	883.00	757.39	125.61	7.030			
18,000.00	10,764.00	18,088.00	10,763.00	63.43	65.82	-89.94	-7,081.07	1,527.56	883.00	755.77	127.23	6.940			
18,100.00	10,764.00	18,188.00	10,763.00	64.26	66.62	-89.94	-7,181.07	1,528.29	883.00	754.14	128.86	6.853			
18,200.00	10,764.00	18,288.00	10,763.00	65.09	67.43	-89.94	-7,281.07	1,529.02	883.00	752.52	130.48	6.767			
18,300.00	10,764.00	18,388.00	10,763.00	65.93	68.24	-89.94	-7,381.07	1,529.75	883.00	750.89	132.11	6.684			
18,400.00	10,764.00	18,488.00	10,763.00	66.76	69.05	-89.94	-7,481.06	1,530.49	883.00	749.26	133.74	6.602			
18,500.00	10,764.00	18,588.00	10,763.00	67.59	69.86	-89.94	-7,581.06	1,531.22	883.00	747.63	135.37	6.523			
18,600.00	10,764.00	18,688.00	10,763.00	68.43	70.67	-89.94	-7,681.06	1,531.95	883.00	746.00	137.00	6.445			
18,700.00	10,764.00	18,788.00	10,763.00	69.26	71.49	-89.94	-7,781.06	1,532.68	883.00	744.36	138.64	6.369			
18,800.00	10,764.00	18,888.00	10,763.00	70.10	72.30	-89.94	-7,881.05	1,533.41	883.00	742.73	140.27	6.295			
18,900.00	10,764.00	18,988.00	10,763.00	70.93	73.12	-89.94	-7,981.05	1,534.14	883.00	741.09	141.91	6.222			
19,000.00	10,764.00	19,088.00	10,763.00	71.77	73.93	-89.94	-8,081.05	1,534.87	883.00	739.45	143.55	6.151			
19,100.00	10,764.00	19,188.00	10,763.00	72.60	74.75	-89.94	-8,181.05	1,535.60	883.00	737.81	145.18	6.082			
19,200.00	10,764.00	19,288.00	10,763.00	73.44	75.57	-89.94	-8,281.04	1,536.34	883.00	736.17	146.83	6.014			
19,300.00	10,764.00	19,388.00	10,763.00	74.28	76.39	-89.94	-8,381.04	1,537.07	883.00	734.53	148.47	5.947			
19,400.00	10,764.00	19,488.00	10,763.00	75.12	77.21	-89.94	-8,481.04	1,537.80	883.00	732.89	150.11	5.882			
19,500.00	10,764.00	19,588.00	10,763.00	75.96	78.03	-89.94	-8,581.03	1,538.53	883.00	731.25	151.75	5.819			
19,600.00	10,764.00	19,688.00	10,763.00	76.79	78.85	-89.94	-8,681.03	1,539.26	883.00	729.60	153.40	5.756			
19,700.00	10,764.00	19,788.00	10,763.00	77.63	79.67	-89.94	-8,781.03	1,539.99	883.00	727.96	155.04	5.695			
19,800.00	10,764.00	19,888.00	10,763.00	78.47	80.49	-89.94	-8,881.03	1,540.72	883.00	726.31	156.69	5.635			
19,900.00	10,764.00	19,988.00	10,763.00	79.31	81.32	-89.94	-8,981.02	1,541.45	883.00	724.66	158.34	5.577			
20,000.00	10,764.00	20,088.00	10,763.00	80.16	82.14	-89.94	-9,081.02	1,542.18	883.00	723.01	159.99	5.519			
20,100.00	10,764.00	20,188.00	10,763.00	81.00	82.97	-89.94	-9,181.02	1,542.92	883.00	721.36	161.64	5.463			
20,200.00	10,764.00	20,288.00	10,763.00	81.84	83.79	-89.94	-9,281.02	1,543.65	883.00	719.71	163.29	5.408			
20,300.00	10,764.00	20,388.00	10,763.00	82.68	84.62	-89.94	-9,381.01	1,544.38	883.00	718.06	164.94	5.353			
20,400.00	10,764.00	20,488.00	10,763.00	83.52	85.45	-89.94	-9,481.01	1,545.11	883.00	716.41	166.59	5.300			
20,500.00	10,764.00	20,588.00	10,763.00	84.36	86.27	-89.94	-9,581.01	1,545.84	883.00	714.75	168.25	5.248			
20,600.00	10,764.00	20,688.00	10,763.00	85.21	87.10	-89.94	-9,681.01	1,546.57	883.00	713.10	169.90	5.197			
20,700.00	10,764.00	20,788.00	10,763.00	86.05	87.93	-89.94	-9,781.01	1,547.30	883.00	711.44	171.56	5.147			
20,800.00	10,764.00	20,888.00	10,763.00	86.89	88.76	-89.94	-9,881.00	1,548.03	883.00	709.79	173.21	5.098			
20,900.00	10,764.00	20,988.00	10,763.00	87.74	89.59	-89.94	-9,981.00	1,548.76	883.00	708.13	174.87	5.050			
21,000.00	10,764.00	21,088.00	10,763.00	88.58	90.42	-89.94	-10,080.99	1,549.50	883.00	706.48	176.53	5.002			
21,013.94	10,764.00	21,101.94	10,763.00	88.70	90.54	-89.94	-10,094.93	1,549.60	883.00	706.24	176.76	4.996			
21,014.47	10,764.00	21,102.47	10,763.00	88.72	90.54	-89.94	-10,095.46	1,549.60	883.00	706.24	176.76	4.995			

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

### ConocoPhillips Anticollision Report

<b>Company:</b>	DELAWARE BASIN EAST	<b>Local Co-ordinate Reference:</b>	Well _COLUMBUS FEDERAL COM 504H - Slot SLOT 6
<b>Project:</b>	LEA COUNT SOUTH WEST (NM-E)	<b>TVD Reference:</b>	KB @ 3362.00usft
<b>Reference Site:</b>	COLUMBUS FEDERAL PROJECT	<b>MD Reference:</b>	KB @ 3362.00usft
<b>Site Error:</b>	0.00 usft	<b>North Reference:</b>	Grid
<b>Reference Well:</b>	_COLUMBUS FEDERAL COM 504H	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.00 usft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	OWB	<b>Database:</b>	EDT 17 Permian Prod
<b>Reference Design:</b>	PWP0	<b>Offset TVD Reference:</b>	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)				
0.00	0.00	0.00	0.00	0.00	0.00	89.63	0.52	79.94	79.94					
100.00	100.00	100.00	100.00	0.77	0.77	89.63	0.52	79.94	79.94	77.95	1.99	40.147		
200.00	200.00	200.00	200.00	1.44	1.44	89.63	0.52	79.94	79.94	76.63	3.31	24.140		
300.00	300.00	300.00	300.00	1.88	1.88	89.63	0.52	79.94	79.94	75.75	4.20	19.055		
400.00	400.00	400.00	400.00	2.25	2.25	89.63	0.52	79.94	79.94	75.03	4.91	16.275		
500.00	500.00	500.00	500.00	2.56	2.56	89.63	0.52	79.94	79.94	74.41	5.53	14.448		
600.00	600.00	600.00	600.00	2.84	2.84	89.63	0.52	79.94	79.94	73.85	6.09	13.126		
700.00	700.00	700.00	700.00	3.10	3.10	89.63	0.52	79.94	79.94	73.34	6.60	12.110		
800.00	800.00	800.00	800.00	3.34	3.34	89.63	0.52	79.94	79.94	72.87	7.08	11.297		
900.00	900.00	900.00	900.00	3.57	3.57	89.63	0.52	79.94	79.94	72.42	7.52	10.625		
1,000.00	1,000.00	1,000.00	1,000.00	3.79	3.79	89.63	0.52	79.94	79.94	71.99	7.95	10.059		
1,100.00	1,100.00	1,100.00	1,100.00	3.99	3.99	89.63	0.52	79.94	79.94	71.59	8.35	9.572		
1,200.00	1,200.00	1,200.00	1,200.00	4.19	4.19	89.63	0.52	79.94	79.94	71.20	8.74	9.147		
1,300.00	1,300.00	1,300.00	1,300.00	4.38	4.38	89.63	0.52	79.94	79.94	70.83	9.11	8.773		
1,400.00	1,400.00	1,400.00	1,400.00	4.56	4.56	89.63	0.52	79.94	79.94	70.47	9.47	8.439		
1,500.00	1,500.00	1,500.00	1,500.00	4.74	4.74	89.63	0.52	79.94	79.94	70.12	9.82	8.138 CC, ES		
1,600.00	1,599.98	1,597.25	1,597.23	5.01	4.99	70.74	0.52	81.59	81.05	70.80	10.25	7.906 SF		
1,700.00	1,699.84	1,694.27	1,694.12	5.27	5.23	73.88	0.52	86.52	84.55	73.91	10.64	7.947		
1,750.00	1,749.68	1,742.63	1,742.34	5.32	5.28	76.06	0.52	90.21	87.33	76.62	10.71	8.155		
1,800.00	1,799.48	1,790.94	1,790.44	5.36	5.32	67.74	0.56	94.70	90.55	79.78	10.77	8.406		
1,900.00	1,898.97	1,887.53	1,886.35	5.55	5.54	54.64	0.96	106.08	97.14	85.99	11.15	8.710		
2,000.00	1,998.21	1,984.05	1,981.75	5.74	5.76	46.05	1.80	120.65	103.74	92.22	11.52	9.007		
2,065.66	2,063.18	2,047.38	2,044.07	5.81	5.91	42.11	2.58	131.94	107.98	96.28	11.70	9.231		
2,100.00	2,097.11	2,080.47	2,076.52	5.83	5.99	42.70	3.06	138.38	110.36	98.58	11.78	9.372		
2,200.00	2,195.92	2,176.57	2,170.32	5.99	6.21	43.80	4.75	159.18	119.36	107.27	12.09	9.871		
2,300.00	2,294.73	2,272.10	2,262.82	6.15	6.43	44.10	6.85	182.93	131.37	118.97	12.40	10.592		
2,400.00	2,393.53	2,367.16	2,354.03	6.31	6.58	43.79	9.36	209.59	146.33	133.68	12.64	11.573		
2,500.00	2,492.34	2,465.83	2,448.30	6.47	6.71	43.31	12.14	238.58	162.56	149.62	12.94	12.564		
2,600.00	2,591.15	2,564.49	2,542.57	6.64	6.87	42.92	14.93	267.58	178.79	165.53	13.26	13.481		
2,700.00	2,689.96	2,663.16	2,636.84	6.80	7.04	42.59	17.71	296.58	195.04	181.45	13.59	14.349		
2,800.00	2,788.77	2,761.83	2,731.10	6.97	7.20	42.31	20.49	325.58	211.29	197.36	13.93	15.172		
2,900.00	2,887.57	2,860.49	2,825.37	7.14	7.37	42.07	23.28	354.57	227.54	213.28	14.26	15.952		
3,000.00	2,986.38	2,959.16	2,919.64	7.31	7.55	41.87	26.06	383.57	243.80	229.19	14.61	16.692		
3,100.00	3,085.19	3,057.82	3,013.91	7.48	7.73	41.69	28.85	412.57	260.06	245.11	14.95	17.393		
3,200.00	3,184.00	3,156.49	3,108.18	7.66	7.91	41.53	31.63	441.56	276.32	261.02	15.30	18.059		
3,300.00	3,282.81	3,255.16	3,202.44	7.83	8.09	41.39	34.41	470.56	292.58	276.93	15.65	18.691		
3,400.00	3,381.61	3,353.82	3,296.71	8.01	8.28	41.26	37.20	499.56	308.85	292.84	16.01	19.292		
3,500.00	3,480.42	3,452.49	3,390.98	8.19	8.47	41.15	39.98	528.56	325.11	308.75	16.37	19.864		
3,600.00	3,579.23	3,551.16	3,485.25	8.37	8.67	41.04	42.77	557.55	341.38	324.65	16.73	20.408		
3,700.00	3,678.04	3,649.82	3,579.51	8.55	8.86	40.95	45.55	586.55	357.65	340.56	17.09	20.926		
3,800.00	3,776.85	3,748.49	3,673.78	8.73	9.06	40.86	48.33	615.55	373.92	356.46	17.46	21.419		
3,900.00	3,875.65	3,847.15	3,768.05	8.91	9.26	40.78	51.12	644.55	390.19	372.37	17.83	21.890		
4,000.00	3,974.46	3,945.82	3,862.32	9.09	9.47	40.71	53.90	673.54	406.46	388.27	18.20	22.339		
4,100.00	4,073.27	4,044.49	3,956.59	9.28	9.68	40.65	56.69	702.54	422.73	404.17	18.57	22.768		
4,200.00	4,172.08	4,143.15	4,050.85	9.46	9.89	40.58	59.47	731.54	439.01	420.06	18.94	23.178		
4,300.00	4,270.89	4,241.82	4,145.12	9.65	10.10	40.53	62.25	760.53	455.28	435.96	19.32	23.570		
4,400.00	4,369.69	4,340.48	4,239.39	9.83	10.32	40.47	65.04	789.53	471.55	451.86	19.69	23.945		
4,500.00	4,468.50	4,439.15	4,333.66	10.02	10.54	40.42	67.82	818.53	487.82	467.75	20.07	24.304		
4,600.00	4,567.31	4,537.82	4,427.93	10.21	10.76	40.38	70.60	847.53	504.10	483.65	20.45	24.649		
4,700.00	4,666.12	4,636.48	4,522.19	10.40	10.98	40.33	73.39	876.52	520.37	499.54	20.83	24.979		
4,800.00	4,764.93	4,735.15	4,616.46	10.59	11.21	40.29	76.17	905.52	536.65	515.43	21.22	25.295		

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

### ConocoPhillips Anticollision Report

<b>Company:</b>	DELAWARE BASIN EAST	<b>Local Co-ordinate Reference:</b>	Well _COLUMBUS FEDERAL COM 504H - Slot SLOT 6
<b>Project:</b>	LEA COUNT SOUTH WEST (NM-E)	<b>TVD Reference:</b>	KB @ 3362.00usft
<b>Reference Site:</b>	COLUMBUS FEDERAL PROJECT	<b>MD Reference:</b>	KB @ 3362.00usft
<b>Site Error:</b>	0.00 usft	<b>North Reference:</b>	Grid
<b>Reference Well:</b>	_COLUMBUS FEDERAL COM 504H	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.00 usft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	OWB	<b>Database:</b>	EDT 17 Permian Prod
<b>Reference Design:</b>	PWP0	<b>Offset TVD Reference:</b>	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)				
4,900.00	4,863.73	4,833.82	4,710.73	10.77	11.44	40.25	78.96	934.52	552.92	531.32	21.60	25.599		
5,000.00	4,962.54	4,932.48	4,805.00	10.96	11.67	40.22	81.74	963.52	569.19	547.21	21.98	25.891		
5,100.00	5,061.35	5,031.15	4,899.26	11.15	11.90	40.18	84.52	992.51	585.47	563.10	22.37	26.172		
5,200.00	5,160.16	5,129.81	4,993.53	11.34	12.13	40.15	87.31	1,021.51	601.74	578.99	22.76	26.442		
5,300.00	5,258.97	5,228.48	5,087.80	11.54	12.37	40.12	90.09	1,050.51	618.02	594.87	23.15	26.702		
5,400.00	5,357.77	5,327.15	5,182.07	11.73	12.60	40.09	92.88	1,079.50	634.30	610.76	23.53	26.952		
5,500.00	5,456.58	5,425.81	5,276.34	11.92	12.84	40.06	95.66	1,108.50	650.57	626.65	23.92	27.193		
5,600.00	5,555.39	5,524.48	5,370.60	12.11	13.08	40.04	98.44	1,137.50	666.85	642.53	24.32	27.425		
5,663.37	5,618.00	5,587.00	5,430.34	12.22	13.23	40.02	100.21	1,155.87	677.16	652.61	24.55	27.586		
5,700.00	5,654.22	5,623.13	5,464.86	12.27	13.31	40.04	101.23	1,166.49	683.21	658.54	24.68	27.687		
5,800.00	5,753.25	5,721.59	5,558.93	12.46	13.55	40.05	104.01	1,195.43	700.63	675.56	25.07	27.949		
5,900.00	5,852.50	5,819.79	5,652.75	12.65	13.79	39.99	106.78	1,224.29	719.37	693.91	25.46	28.255		
6,000.00	5,951.95	5,917.70	5,746.30	12.83	14.03	39.85	109.54	1,253.06	739.43	713.58	25.85	28.605		
6,100.00	6,051.57	6,015.29	5,839.53	13.00	14.27	39.65	112.29	1,281.74	760.82	734.58	26.24	28.997		
6,200.00	6,151.33	6,112.52	5,932.43	13.17	14.51	39.39	115.04	1,310.32	783.55	756.93	26.62	29.432		
6,300.00	6,251.19	6,209.38	6,024.97	13.34	14.75	39.09	117.77	1,338.79	807.64	780.63	27.00	29.907		
6,400.00	6,351.13	6,305.82	6,117.12	13.49	14.99	38.74	120.49	1,367.13	833.09	805.71	27.38	30.424		
6,500.00	6,451.12	6,401.83	6,208.84	13.63	15.22	38.36	123.20	1,395.35	859.93	832.17	27.75	30.985		
6,548.89	6,500.00	6,448.59	6,253.52	13.66	15.34	102.39	124.52	1,409.09	873.55	845.64	27.91	31.300		
6,600.00	6,551.11	6,497.43	6,300.18	13.68	15.46	102.09	125.90	1,423.44	887.99	859.92	28.06	31.642		
6,700.00	6,651.11	6,592.97	6,391.46	13.76	15.70	101.54	128.59	1,451.52	916.28	887.89	28.39	32.271		
6,800.00	6,751.11	6,688.51	6,482.75	13.83	15.93	101.01	131.29	1,479.60	944.66	915.94	28.72	32.889		
6,900.00	6,851.11	6,784.05	6,574.03	13.90	16.17	100.52	133.98	1,507.68	973.10	944.05	29.05	33.496		

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

### ConocoPhillips Anticollision Report

<b>Company:</b>	DELAWARE BASIN EAST	<b>Local Co-ordinate Reference:</b>	Well _COLUMBUS FEDERAL COM 504H - Slot SLOT 6
<b>Project:</b>	LEA COUNT SOUTH WEST (NM-E)	<b>TVD Reference:</b>	KB @ 3362.00usft
<b>Reference Site:</b>	COLUMBUS FEDERAL PROJECT	<b>MD Reference:</b>	KB @ 3362.00usft
<b>Site Error:</b>	0.00 usft	<b>North Reference:</b>	Grid
<b>Reference Well:</b>	_COLUMBUS FEDERAL COM 504H	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.00 usft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	OWB	<b>Database:</b>	EDT 17 Permian Prod
<b>Reference Design:</b>	PWP0	<b>Offset TVD Reference:</b>	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	-0.53	-80.00	80.00					
100.00	100.00	100.00	100.00	0.77	0.77	-90.38	-90.38	-0.53	-80.00	80.00	78.01	1.99	40.177		
200.00	200.00	200.00	200.00	1.44	1.44	-90.38	-90.38	-0.53	-80.00	80.00	76.69	3.31	24.158		
300.00	300.00	300.00	300.00	1.88	1.88	-90.38	-90.38	-0.53	-80.00	80.00	75.81	4.20	19.069		
400.00	400.00	400.00	400.00	2.25	2.25	-90.38	-90.38	-0.53	-80.00	80.00	75.09	4.91	16.287		
500.00	500.00	500.00	500.00	2.56	2.56	-90.38	-90.38	-0.53	-80.00	80.00	74.47	5.53	14.459		
600.00	600.00	600.00	600.00	2.84	2.84	-90.38	-90.38	-0.53	-80.00	80.00	73.91	6.09	13.136		
700.00	700.00	700.00	700.00	3.10	3.10	-90.38	-90.38	-0.53	-80.00	80.00	73.40	6.60	12.119		
800.00	800.00	800.00	800.00	3.34	3.34	-90.38	-90.38	-0.53	-80.00	80.00	72.93	7.08	11.305		
900.00	900.00	900.00	900.00	3.57	3.57	-90.38	-90.38	-0.53	-80.00	80.00	72.48	7.52	10.633		
1,000.00	1,000.00	1,000.00	1,000.00	3.79	3.79	-90.38	-90.38	-0.53	-80.00	80.00	72.05	7.95	10.066		
1,100.00	1,100.00	1,100.00	1,100.00	3.99	3.99	-90.38	-90.38	-0.53	-80.00	80.00	71.65	8.35	9.579		
1,200.00	1,200.00	1,200.00	1,200.00	4.19	4.19	-90.38	-90.38	-0.53	-80.00	80.00	71.26	8.74	9.154		
1,300.00	1,300.00	1,300.00	1,300.00	4.38	4.38	-90.38	-90.38	-0.53	-80.00	80.00	70.89	9.11	8.779		
1,400.00	1,400.00	1,400.00	1,400.00	4.56	4.56	-90.38	-90.38	-0.53	-80.00	80.00	70.53	9.47	8.445		
1,500.00	1,500.00	1,500.00	1,500.00	4.74	4.74	-90.38	-90.38	-0.53	-80.00	80.00	70.18	9.82	8.144 CC, ES		
1,600.00	1,599.98	1,599.98	1,599.98	5.01	4.91	-111.53	-111.53	-0.53	-80.00	80.63	70.45	10.17	7.924		
1,700.00	1,699.84	1,699.84	1,699.84	5.27	5.08	-114.86	-114.86	-0.53	-80.00	82.69	72.17	10.52	7.858 SF		
1,750.00	1,749.68	1,749.68	1,749.68	5.32	5.16	-117.24	-117.24	-0.53	-80.00	84.42	73.77	10.65	7.926		
1,800.00	1,799.48	1,799.48	1,799.48	5.36	5.24	-130.31	-130.31	-0.53	-80.00	86.92	76.14	10.78	8.063		
1,900.00	1,898.97	1,898.97	1,898.97	5.55	5.40	-151.07	-151.07	-0.53	-80.00	94.81	83.68	11.13	8.520		
2,000.00	1,998.21	1,998.21	1,998.21	5.74	5.55	-165.01	-165.01	-0.53	-80.00	106.24	94.76	11.47	9.259		
2,065.66	2,063.18	2,060.99	2,060.99	5.81	5.70	-171.21	-171.21	-0.42	-80.64	116.14	104.46	11.68	9.940		
2,100.00	2,097.11	2,093.59	2,093.59	5.83	5.77	-171.38	-171.38	-0.26	-81.50	122.18	110.40	11.77	10.377		
2,200.00	2,195.92	2,187.82	2,187.68	5.99	5.98	-171.40	-171.40	0.56	-86.06	141.70	129.59	12.10	11.706		
2,300.00	2,294.73	2,280.87	2,280.42	6.15	6.18	-170.91	-170.91	1.91	-93.54	164.05	151.63	12.42	13.205		
2,400.00	2,393.53	2,372.56	2,371.51	6.31	6.37	-170.11	-170.11	3.75	-103.81	189.23	176.50	12.73	14.862		
2,500.00	2,492.34	2,462.75	2,460.74	6.47	6.56	-169.17	-169.17	6.07	-116.70	217.19	204.16	13.03	16.666		
2,600.00	2,591.15	2,551.29	2,547.90	6.64	6.75	-168.16	-168.16	8.83	-132.05	247.92	234.60	13.32	18.610		
2,700.00	2,689.96	2,638.07	2,632.81	6.80	6.89	-167.15	-167.15	12.00	-149.65	281.37	267.81	13.56	20.745		
2,800.00	2,788.77	2,729.78	2,722.14	6.97	6.98	-166.15	-166.15	15.68	-170.10	316.71	302.91	13.80	22.950		
2,900.00	2,887.57	2,823.18	2,813.08	7.14	7.11	-165.34	-165.34	19.44	-190.99	352.18	338.08	14.09	24.990		
3,000.00	2,986.38	2,916.57	2,904.03	7.31	7.25	-164.67	-164.67	23.19	-211.87	387.70	373.31	14.39	26.942		
3,100.00	3,085.19	3,009.96	2,994.98	7.48	7.39	-164.11	-164.11	26.95	-232.76	423.25	408.56	14.69	28.810		
3,200.00	3,184.00	3,103.35	3,085.93	7.66	7.53	-163.64	-163.64	30.71	-253.65	458.84	443.85	15.00	30.596		
3,300.00	3,282.81	3,196.75	3,176.88	7.83	7.67	-163.24	-163.24	34.47	-274.53	494.45	479.15	15.31	32.304		
3,400.00	3,381.61	3,290.14	3,267.83	8.01	7.82	-162.89	-162.89	38.22	-295.42	530.08	514.46	15.62	33.938		
3,500.00	3,480.42	3,383.53	3,358.78	8.19	7.97	-162.59	-162.59	41.98	-316.31	565.72	549.79	15.94	35.500		
3,600.00	3,579.23	3,476.92	3,449.73	8.37	8.12	-162.32	-162.32	45.74	-337.19	601.38	585.13	16.26	36.996		
3,700.00	3,678.04	3,570.32	3,540.68	8.55	8.28	-162.08	-162.08	49.50	-358.08	637.05	620.47	16.58	38.427		
3,800.00	3,776.85	3,663.71	3,631.63	8.73	8.44	-161.87	-161.87	53.25	-378.97	672.72	655.82	16.90	39.797		
3,900.00	3,875.65	3,757.10	3,722.58	8.91	8.60	-161.68	-161.68	57.01	-399.85	708.40	691.17	17.23	41.109		
4,000.00	3,974.46	3,850.49	3,813.53	9.09	8.76	-161.51	-161.51	60.77	-420.74	744.09	726.53	17.56	42.366		
4,100.00	4,073.27	3,943.89	3,904.48	9.28	8.93	-161.35	-161.35	64.53	-441.63	779.79	761.89	17.90	43.571		
4,200.00	4,172.08	4,037.28	3,995.43	9.46	9.09	-161.20	-161.20	68.28	-462.51	815.48	797.25	18.23	44.726		
4,300.00	4,270.89	4,130.67	4,086.37	9.65	9.26	-161.07	-161.07	72.04	-483.40	851.19	832.62	18.57	45.834		
4,400.00	4,369.69	4,224.06	4,177.32	9.83	9.43	-160.95	-160.95	75.80	-504.29	886.89	867.98	18.91	46.897		
4,500.00	4,468.50	4,317.45	4,268.27	10.02	9.60	-160.84	-160.84	79.56	-525.17	922.60	903.35	19.25	47.918		
4,600.00	4,567.31	4,410.85	4,359.22	10.21	9.78	-160.74	-160.74	83.32	-546.06	958.31	938.72	19.60	48.898		
4,700.00	4,666.12	4,504.24	4,450.17	10.40	9.95	-160.64	-160.64	87.07	-566.95	994.03	974.08	19.94	49.840		

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

### ConocoPhillips Anticollision Report

<b>Company:</b>	DELAWARE BASIN EAST	<b>Local Co-ordinate Reference:</b>	Well _COLUMBUS FEDERAL COM 504H - Slot SLOT 6
<b>Project:</b>	LEA COUNT SOUTH WEST (NM-E)	<b>TVD Reference:</b>	KB @ 3362.00usft
<b>Reference Site:</b>	COLUMBUS FEDERAL PROJECT	<b>MD Reference:</b>	KB @ 3362.00usft
<b>Site Error:</b>	0.00 usft	<b>North Reference:</b>	Grid
<b>Reference Well:</b>	_COLUMBUS FEDERAL COM 504H	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.00 usft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	OWB	<b>Database:</b>	EDT 17 Permian Prod
<b>Reference Design:</b>	PWP0	<b>Offset TVD Reference:</b>	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 +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	-90.37	-0.26	-40.00	40.00					
100.00	100.00	100.00	100.00	0.77	0.77	-90.37	-0.26	-40.00	40.00	38.01	1.99	20.088		
200.00	200.00	200.00	200.00	1.44	1.44	-90.37	-0.26	-40.00	40.00	36.69	3.31	12.079		
300.00	300.00	300.00	300.00	1.88	1.88	-90.37	-0.26	-40.00	40.00	35.81	4.20	9.535		
400.00	400.00	400.00	400.00	2.25	2.25	-90.37	-0.26	-40.00	40.00	35.09	4.91	8.144		
500.00	500.00	500.00	500.00	2.56	2.56	-90.37	-0.26	-40.00	40.00	34.47	5.53	7.230		
600.00	600.00	600.00	600.00	2.84	2.84	-90.37	-0.26	-40.00	40.00	33.91	6.09	6.568		
700.00	700.00	700.00	700.00	3.10	3.10	-90.37	-0.26	-40.00	40.00	33.40	6.60	6.060		
800.00	800.00	800.00	800.00	3.34	3.34	-90.37	-0.26	-40.00	40.00	32.92	7.08	5.653		
900.00	900.00	900.00	900.00	3.57	3.57	-90.37	-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	-90.37	-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	-90.37	-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	-90.37	-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	-90.37	-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	-90.37	-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	-90.37	-0.26	-40.00	40.00	30.18	9.82	4.072 CC, ES		
1,600.00	1,599.98	1,599.98	1,599.98	5.01	4.91	-112.67	-0.26	-40.00	40.64	30.47	10.18	3.994 SF		
1,700.00	1,699.84	1,699.84	1,699.84	5.27	5.08	-119.08	-0.26	-40.00	42.93	32.40	10.54	4.075		
1,750.00	1,749.68	1,749.68	1,749.68	5.32	5.16	-123.41	-0.26	-40.00	44.97	34.30	10.67	4.215		
1,800.00	1,799.48	1,799.48	1,799.48	5.36	5.24	-138.16	-0.26	-40.00	47.91	37.10	10.81	4.433		
1,900.00	1,898.97	1,898.97	1,898.97	5.55	5.40	-160.50	-0.26	-40.00	56.65	45.50	11.15	5.080		
2,000.00	1,998.21	1,998.21	1,998.21	5.74	5.55	-174.28	-0.26	-40.00	68.65	57.15	11.50	5.969		
2,065.66	2,063.18	2,062.21	2,062.20	5.81	5.69	-179.62	0.07	-40.59	78.53	66.83	11.69	6.715		
2,100.00	2,097.11	2,095.49	2,095.47	5.83	5.78	-179.13	0.52	-41.39	84.35	72.58	11.77	7.167		
2,200.00	2,195.92	2,191.86	2,191.71	5.99	6.00	-177.02	2.90	-45.59	102.69	90.61	12.08	8.502		
2,300.00	2,294.73	2,287.22	2,286.73	6.15	6.21	-174.38	6.82	-52.52	123.23	110.84	12.39	9.949		
2,400.00	2,393.53	2,382.61	2,381.51	6.31	6.30	-171.60	12.18	-62.01	145.99	133.37	12.61	11.574		
2,500.00	2,492.34	2,479.65	2,477.83	6.47	6.43	-169.38	17.93	-72.18	169.43	156.54	12.89	13.140		
2,600.00	2,591.15	2,576.68	2,574.16	6.64	6.56	-167.71	23.69	-82.36	193.06	179.87	13.19	14.640		
2,700.00	2,689.96	2,673.71	2,670.48	6.80	6.71	-166.39	29.44	-92.53	216.81	203.33	13.48	16.080		
2,800.00	2,788.77	2,770.74	2,766.81	6.97	6.85	-165.34	35.19	-102.71	240.65	226.86	13.78	17.462		
2,900.00	2,887.57	2,867.77	2,863.13	7.14	6.99	-164.47	40.94	-112.89	264.55	250.46	14.08	18.787		
3,000.00	2,986.38	2,964.80	2,959.46	7.31	7.14	-163.75	46.70	-123.06	288.49	274.11	14.38	20.058		
3,100.00	3,085.19	3,061.84	3,055.78	7.48	7.29	-163.14	52.45	-133.24	312.48	297.79	14.69	21.275		
3,200.00	3,184.00	3,158.87	3,152.11	7.66	7.44	-162.62	58.20	-143.41	336.49	321.49	14.99	22.443		
3,300.00	3,282.81	3,255.90	3,248.43	7.83	7.59	-162.17	63.95	-153.59	360.52	345.22	15.30	23.563		
3,400.00	3,381.61	3,352.93	3,344.76	8.01	7.75	-161.77	69.71	-163.76	384.58	368.97	15.61	24.637		
3,500.00	3,480.42	3,449.96	3,441.08	8.19	7.90	-161.42	75.46	-173.94	408.65	392.72	15.92	25.668		
3,600.00	3,579.23	3,546.99	3,537.41	8.37	8.06	-161.11	81.21	-184.11	432.73	416.49	16.23	26.657		
3,700.00	3,678.04	3,644.03	3,633.73	8.55	8.21	-160.83	86.96	-194.29	456.82	440.27	16.55	27.608		
3,800.00	3,776.85	3,741.06	3,730.06	8.73	8.37	-160.58	92.72	-204.47	480.92	464.06	16.86	28.521		
3,900.00	3,875.65	3,838.09	3,826.38	8.91	8.53	-160.35	98.47	-214.64	505.03	487.85	17.18	29.399		
4,000.00	3,974.46	3,935.12	3,922.71	9.09	8.69	-160.15	104.22	-224.82	529.15	511.65	17.50	30.244		
4,100.00	4,073.27	4,032.15	4,019.03	9.28	8.85	-159.96	109.97	-234.99	553.27	535.45	17.82	31.056		
4,200.00	4,172.08	4,129.18	4,115.36	9.46	9.01	-159.78	115.73	-245.17	577.40	559.26	18.14	31.838		
4,300.00	4,270.89	4,226.22	4,211.68	9.65	9.17	-159.63	121.48	-255.34	601.53	583.07	18.46	32.592		
4,400.00	4,369.69	4,323.25	4,308.01	9.83	9.34	-159.48	127.23	-265.52	625.67	606.89	18.78	33.318		
4,500.00	4,468.50	4,420.28	4,404.33	10.02	9.50	-159.34	132.98	-275.70	649.80	630.70	19.10	34.018		
4,600.00	4,567.31	4,517.31	4,500.66	10.21	9.67	-159.22	138.74	-285.87	673.95	654.52	19.43	34.693		
4,700.00	4,666.12	4,614.34	4,596.98	10.40	9.83	-159.10	144.49	-296.05	698.09	678.34	19.75	35.344		
4,800.00	4,764.93	4,711.37	4,693.31	10.59	10.00	-158.99	150.24	-306.22	722.24	702.16	20.08	35.973		

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

### ConocoPhillips Anticollision Report

<b>Company:</b>	DELAWARE BASIN EAST	<b>Local Co-ordinate Reference:</b>	Well _COLUMBUS FEDERAL COM 504H - Slot SLOT 6
<b>Project:</b>	LEA COUNT SOUTH WEST (NM-E)	<b>TVD Reference:</b>	KB @ 3362.00usft
<b>Reference Site:</b>	COLUMBUS FEDERAL PROJECT	<b>MD Reference:</b>	KB @ 3362.00usft
<b>Site Error:</b>	0.00 usft	<b>North Reference:</b>	Grid
<b>Reference Well:</b>	_COLUMBUS FEDERAL COM 504H	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.00 usft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	OWB	<b>Database:</b>	EDT 17 Permian Prod
<b>Reference Design:</b>	PWP0	<b>Offset TVD Reference:</b>	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 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)				
4,900.00	4,863.73	4,808.41	4,789.63	10.77	10.16	-158.89	155.99	-316.40	746.39	725.99	20.40	36.581		
5,000.00	4,962.54	4,905.44	4,885.96	10.96	10.33	-158.79	161.75	-326.57	770.54	749.81	20.73	37.167		
5,100.00	5,061.35	5,002.47	4,982.28	11.15	10.50	-158.70	167.50	-336.75	794.70	773.64	21.06	37.735		
5,200.00	5,160.16	5,099.50	5,078.61	11.34	10.67	-158.62	173.25	-346.93	818.85	797.47	21.39	38.283		
5,300.00	5,258.97	5,196.53	5,174.93	11.54	10.84	-158.54	179.00	-357.10	843.01	821.29	21.72	38.814		
5,400.00	5,357.77	5,293.56	5,271.26	11.73	11.01	-158.46	184.76	-367.28	867.17	845.12	22.05	39.328		
5,500.00	5,456.58	5,399.21	5,376.18	11.92	11.16	-158.40	190.83	-378.02	891.05	868.68	22.37	39.826		
5,600.00	5,555.39	5,511.29	5,487.71	12.11	11.35	-158.41	196.30	-387.69	913.48	890.74	22.74	40.163		
5,663.37	5,618.00	5,582.73	5,558.90	12.22	11.47	-158.46	199.22	-392.87	926.88	903.92	22.96	40.370		
5,700.00	5,654.22	5,624.19	5,600.25	12.27	11.53	-158.52	200.72	-395.52	934.22	911.15	23.08	40.484		
5,800.00	5,753.25	5,738.08	5,713.93	12.46	11.72	-158.71	204.07	-401.45	952.08	928.65	23.43	40.631		
5,900.00	5,852.50	5,852.87	5,828.62	12.65	11.89	-158.91	206.33	-405.44	966.71	942.94	23.78	40.660		
6,000.00	5,951.95	5,968.36	5,944.09	12.83	12.05	-159.13	207.46	-407.43	978.09	953.99	24.10	40.582		
6,100.00	6,051.57	6,075.84	6,051.57	13.00	12.14	-159.34	207.59	-407.67	986.42	962.06	24.36	40.494		
6,200.00	6,151.33	6,175.60	6,151.33	13.17	12.22	-159.51	207.59	-407.67	992.93	968.33	24.60	40.357		
6,300.00	6,251.19	6,275.46	6,251.19	13.34	12.30	-159.63	207.59	-407.67	997.82	972.98	24.84	40.162		
10,550.00	10,493.96	10,518.23	10,493.96	16.32	15.79	87.83	207.59	-407.67	999.78	968.46	31.31	31.928		
10,575.00	10,516.19	10,540.46	10,516.19	16.31	15.81	88.46	207.59	-407.67	999.36	968.05	31.31	31.918		
10,600.00	10,537.78	10,562.05	10,537.78	16.29	15.83	89.12	207.59	-407.67	999.06	967.75	31.31	31.913		
10,625.00	10,558.69	10,582.96	10,558.69	16.28	15.84	89.80	207.59	-407.67	998.90	967.60	31.30	31.915		
10,632.40	10,564.73	10,589.00	10,564.73	16.28	15.85	90.00	207.59	-407.67	998.89	967.60	31.30	31.916		
10,650.00	10,578.85	10,603.12	10,578.85	16.27	15.86	90.48	207.59	-407.67	998.95	967.66	31.29	31.923		
10,675.00	10,598.20	10,622.47	10,598.20	16.26	15.88	91.14	207.59	-407.67	999.24	967.96	31.28	31.941		
10,700.00	10,616.71	10,640.98	10,616.71	16.25	15.89	91.79	207.59	-407.67	999.83	968.55	31.27	31.969		

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

### ConocoPhillips Anticollision Report

<b>Company:</b>	DELAWARE BASIN EAST	<b>Local Co-ordinate Reference:</b>	Well _COLUMBUS FEDERAL COM 504H - Slot SLOT 6
<b>Project:</b>	LEA COUNT SOUTH WEST (NM-E)	<b>TVD Reference:</b>	KB @ 3362.00usft
<b>Reference Site:</b>	COLUMBUS FEDERAL PROJECT	<b>MD Reference:</b>	KB @ 3362.00usft
<b>Site Error:</b>	0.00 usft	<b>North Reference:</b>	Grid
<b>Reference Well:</b>	_COLUMBUS FEDERAL COM 504H	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.00 usft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	OWB	<b>Database:</b>	EDT 17 Permian Prod
<b>Reference Design:</b>	PWP0	<b>Offset TVD Reference:</b>	Reference Datum

Offset Design: COLUMBUS FEDERAL PROJECT - _COLUMBUS FEDERAL COM 653H - 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	89.60	0.14	20.00	20.00				
100.00	100.00	100.00	100.00	0.77	0.77	0.77	89.60	0.14	20.00	20.00	18.01	1.99	10.044	
200.00	200.00	200.00	200.00	1.44	1.44	1.44	89.60	0.14	20.00	20.00	16.69	3.31	6.040	
300.00	300.00	300.00	300.00	1.88	1.88	1.88	89.60	0.14	20.00	20.00	15.81	4.20	4.767	
400.00	400.00	400.00	400.00	2.25	2.25	2.25	89.60	0.14	20.00	20.00	15.09	4.91	4.072	
500.00	500.00	500.00	500.00	2.56	2.56	2.56	89.60	0.14	20.00	20.00	14.47	5.53	3.615	
600.00	600.00	600.00	600.00	2.84	2.84	2.84	89.60	0.14	20.00	20.00	13.91	6.09	3.284	
700.00	700.00	700.00	700.00	3.10	3.10	3.10	89.60	0.14	20.00	20.00	13.40	6.60	3.030	
800.00	800.00	800.00	800.00	3.34	3.34	3.34	89.60	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	3.57	89.60	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	3.79	89.60	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	3.99	89.60	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	4.19	89.60	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	4.38	89.60	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	4.56	89.60	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	4.74	89.60	0.14	20.00	20.00	10.18	9.82	2.036 Caution - Monitor Closely	
1,600.00	1,599.98	1,599.98	1,599.98	5.01	4.91	74.43	89.60	0.14	20.00	19.46	9.29	10.17	1.914 Caution - Monitor Closely	
1,699.91	1,699.75	1,699.75	1,699.75	5.27	5.08	90.00	90.00	0.14	20.00	18.75	8.26	10.49	1.787 Caution - Monitor Closely, CC	
1,700.00	1,699.84	1,699.84	1,699.84	5.27	5.08	90.02	90.02	0.14	20.00	18.75	8.26	10.49	1.787 Caution - Monitor Closely, ES, SF	
1,750.00	1,749.68	1,749.68	1,749.68	5.32	5.16	101.79	89.60	0.14	20.00	19.15	8.54	10.62	1.804 Caution - Monitor Closely	
1,800.00	1,799.48	1,799.48	1,799.48	5.36	5.24	103.91	89.60	0.14	20.00	20.15	9.38	10.77	1.871 Caution - Monitor Closely	
1,900.00	1,898.97	1,898.97	1,898.97	5.55	5.40	112.52	89.60	0.14	20.00	23.25	12.02	11.23	2.070 Caution - Monitor Closely	
2,000.00	1,998.21	1,998.21	1,998.21	5.74	5.55	124.77	89.60	0.14	20.00	29.19	17.57	11.62	2.512 Normal Operations	
2,065.66	2,063.18	2,063.18	2,063.18	5.81	5.65	132.53	89.60	0.14	20.00	35.17	23.39	11.79	2.984 Normal Operations	
2,100.00	2,097.11	2,097.11	2,097.11	5.83	5.70	138.24	89.60	0.14	20.00	38.96	27.11	11.86	3.286	
2,200.00	2,195.92	2,195.92	2,195.92	5.99	5.85	149.68	89.60	0.14	20.00	51.52	39.38	12.14	4.242	
2,300.00	2,294.73	2,294.73	2,294.73	6.15	6.00	156.50	89.60	0.14	20.00	65.31	52.87	12.43	5.252	
2,400.00	2,393.53	2,393.53	2,393.53	6.31	6.14	160.91	89.60	0.14	20.00	79.68	66.96	12.73	6.261	
2,500.00	2,492.34	2,492.34	2,492.34	6.47	6.28	163.97	89.60	0.14	20.00	94.38	81.36	13.02	7.247	
2,600.00	2,591.15	2,591.15	2,591.15	6.64	6.42	166.20	89.60	0.14	20.00	109.27	95.95	13.32	8.202	
2,700.00	2,689.96	2,689.96	2,689.96	6.80	6.56	167.89	89.60	0.14	20.00	124.28	110.66	13.62	9.124	
2,800.00	2,788.77	2,788.77	2,788.77	6.97	6.70	169.22	89.60	0.14	20.00	139.38	125.46	13.92	10.012	
2,900.00	2,887.57	2,887.57	2,887.57	7.14	6.83	170.28	89.60	0.14	20.00	154.53	140.31	14.22	10.866	
3,000.00	2,986.38	2,986.38	2,986.38	7.31	6.96	171.16	89.60	0.14	20.00	169.73	155.21	14.52	11.687	
3,100.00	3,085.19	3,090.63	3,090.62	7.48	7.15	171.77	89.60	0.46	21.40	183.70	168.82	14.88	12.346	
3,200.00	3,184.00	3,196.61	3,196.45	7.66	7.34	171.90	89.60	1.66	26.57	194.30	179.06	15.23	12.755	
3,300.00	3,282.81	3,303.23	3,302.67	7.83	7.53	171.62	89.60	3.75	35.62	201.44	185.87	15.58	12.933	
3,400.00	3,381.61	3,408.42	3,407.06	8.01	7.66	170.98	89.60	6.66	48.21	205.24	189.38	15.86	12.943	
3,500.00	3,480.42	3,508.35	3,506.09	8.19	7.79	170.28	89.60	9.67	61.20	208.09	191.91	16.18	12.861	
3,600.00	3,579.23	3,608.28	3,605.13	8.37	7.91	169.60	89.60	12.67	74.18	210.96	194.48	16.48	12.799	
3,700.00	3,678.04	3,708.21	3,704.16	8.55	8.03	168.94	89.60	15.68	87.17	213.87	197.08	16.79	12.738	
3,800.00	3,776.85	3,808.13	3,803.20	8.73	8.16	168.30	89.60	18.68	100.16	216.81	199.71	17.10	12.680	
3,900.00	3,875.65	3,908.06	3,902.23	8.91	8.28	167.68	89.60	21.68	113.14	219.77	202.36	17.41	12.623	
4,000.00	3,974.46	4,007.99	4,001.26	9.09	8.41	167.07	89.60	24.69	126.13	222.76	205.04	17.72	12.568	
4,100.00	4,073.27	4,107.92	4,100.30	9.28	8.54	166.48	89.60	27.69	139.12	225.77	207.73	18.04	12.515	
4,200.00	4,172.08	4,207.85	4,199.33	9.46	8.68	165.90	89.60	30.69	152.11	228.81	210.45	18.36	12.463	
4,300.00	4,270.89	4,307.77	4,298.37	9.65	8.81	165.34	89.60	33.70	165.09	231.87	213.19	18.68	12.413	
4,400.00	4,369.69	4,407.70	4,397.40	9.83	8.95	164.79	89.60	36.70	178.08	234.95	215.95	19.00	12.365	
4,500.00	4,468.50	4,507.63	4,496.44	10.02	9.09	164.26	89.60	39.70	191.07	238.05	218.72	19.32	12.319	
4,600.00	4,567.31	4,607.56	4,595.47	10.21	9.23	163.74	89.60	42.71	204.05	241.17	221.52	19.65	12.275	
4,700.00	4,666.12	4,707.48	4,694.51	10.40	9.38	163.24	89.60	45.71	217.04	244.31	224.34	19.97	12.232	

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

### ConocoPhillips Anticollision Report

<b>Company:</b>	DELAWARE BASIN EAST	<b>Local Co-ordinate Reference:</b>	Well _COLUMBUS FEDERAL COM 504H - Slot SLOT 6
<b>Project:</b>	LEA COUNT SOUTH WEST (NM-E)	<b>TVD Reference:</b>	KB @ 3362.00usft
<b>Reference Site:</b>	COLUMBUS FEDERAL PROJECT	<b>MD Reference:</b>	KB @ 3362.00usft
<b>Site Error:</b>	0.00 usft	<b>North Reference:</b>	Grid
<b>Reference Well:</b>	_COLUMBUS FEDERAL COM 504H	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.00 usft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	OWB	<b>Database:</b>	EDT 17 Permian Prod
<b>Reference Design:</b>	PWP0	<b>Offset TVD Reference:</b>	Reference Datum

Offset Design: COLUMBUS FEDERAL PROJECT - _COLUMBUS FEDERAL COM 653H - 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)					
4,800.00	4,764.93	4,807.41	4,793.54	10.59	9.52	162.74	48.71	230.03	247.47	227.17	20.30	12.191			
4,900.00	4,863.73	4,907.34	4,892.58	10.77	9.67	162.26	51.72	243.01	250.64	230.02	20.63	12.152			
5,000.00	4,962.54	5,007.27	4,991.61	10.96	9.82	161.80	54.72	256.00	253.84	232.88	20.95	12.114			
5,100.00	5,061.35	5,107.20	5,090.65	11.15	9.97	161.34	57.72	268.99	257.05	235.76	21.28	12.077			
5,200.00	5,160.16	5,207.12	5,189.68	11.34	10.12	160.89	60.73	281.97	260.27	238.66	21.61	12.043			
5,300.00	5,258.97	5,307.05	5,288.72	11.54	10.27	160.46	63.73	294.96	263.51	241.57	21.94	12.009			
5,400.00	5,357.77	5,406.98	5,387.75	11.73	10.43	160.04	66.74	307.95	266.77	244.50	22.27	11.977			
5,500.00	5,456.58	5,506.91	5,486.79	11.92	10.59	159.62	69.74	320.93	270.04	247.44	22.60	11.946			
5,600.00	5,555.39	5,606.83	5,585.82	12.11	10.74	159.22	72.74	333.92	273.32	250.39	22.94	11.917			
5,663.37	5,618.00	5,670.15	5,648.57	12.22	10.84	158.97	74.65	342.15	275.41	252.28	23.13	11.908			
5,700.00	5,654.22	5,706.76	5,684.86	12.27	10.90	158.82	75.75	346.91	276.51	253.28	23.23	11.902			
5,800.00	5,753.25	5,806.72	5,783.92	12.46	11.06	158.33	78.75	359.90	278.42	254.86	23.56	11.818			
5,900.00	5,852.50	5,906.67	5,882.97	12.65	11.22	157.70	81.75	372.89	278.73	254.85	23.88	11.673			
6,000.00	5,951.95	6,006.59	5,982.00	12.83	11.38	156.93	84.76	385.87	277.46	253.28	24.19	11.472			
6,100.00	6,051.57	6,106.45	6,080.97	13.00	11.55	156.00	87.76	398.85	274.66	250.17	24.48	11.219			
6,200.00	6,151.33	6,206.22	6,179.85	13.17	11.71	154.89	90.76	411.82	270.34	245.58	24.76	10.917			
6,300.00	6,251.19	6,305.87	6,278.61	13.34	11.87	153.57	93.75	424.77	264.56	239.54	25.03	10.571			
6,400.00	6,351.13	6,405.37	6,377.22	13.49	12.04	152.01	96.74	437.70	257.39	232.12	25.27	10.187			
6,500.00	6,451.12	6,504.68	6,475.64	13.63	12.21	150.15	99.73	450.61	248.89	223.42	25.48	9.769			
6,548.89	6,500.00	6,553.16	6,523.69	13.66	12.29	-146.66	101.19	456.91	244.29	218.75	25.54	9.565			
6,600.00	6,551.11	6,603.81	6,573.89	13.68	12.37	-147.78	102.71	463.49	239.38	213.80	25.59	9.355			
6,700.00	6,651.11	6,702.92	6,672.11	13.76	12.54	-150.11	105.69	476.37	230.06	204.36	25.70	8.950			
6,800.00	6,751.11	6,802.03	6,770.33	13.83	12.71	-152.63	108.67	489.25	221.15	195.34	25.81	8.570			
6,900.00	6,851.11	6,901.13	6,868.55	13.90	12.87	-155.35	111.65	502.13	212.70	186.81	25.89	8.215			
7,000.00	6,951.11	7,000.24	6,966.77	13.98	13.04	-158.29	114.62	515.01	204.77	178.82	25.96	7.889			
7,100.00	7,051.11	7,099.34	7,064.99	14.05	13.21	-161.45	117.60	527.89	197.43	171.42	26.00	7.592			
7,200.00	7,151.11	7,198.45	7,163.21	14.12	13.38	-164.84	120.58	540.77	190.74	164.70	26.03	7.327			
7,300.00	7,251.11	7,297.56	7,261.43	14.20	13.55	-168.46	123.56	553.65	184.76	158.72	26.05	7.093			
7,400.00	7,351.11	7,396.66	7,359.66	14.27	13.73	-172.31	126.54	566.53	179.59	153.54	26.05	6.894			
7,500.00	7,451.11	7,495.77	7,457.88	14.34	13.90	-176.36	129.52	579.41	175.28	149.23	26.04	6.730			
7,600.00	7,551.11	7,594.88	7,556.10	14.42	14.07	-179.42	132.50	592.29	171.89	145.85	26.04	6.601			
7,700.00	7,651.11	7,693.98	7,654.32	14.49	14.25	-175.05	135.48	605.17	169.50	143.45	26.05	6.506			
7,800.00	7,751.11	7,793.09	7,752.54	14.56	14.42	-170.58	138.46	618.05	168.13	142.04	26.08	6.446			
7,879.98	7,831.10	7,872.36	7,831.10	14.62	14.56	-166.98	140.84	628.35	167.79	141.66	26.13	6.421			
7,900.00	7,851.11	7,892.20	7,850.76	14.64	14.59	-166.07	141.43	630.93	167.81	141.66	26.15	6.418			
8,000.00	7,951.11	7,991.30	7,948.98	14.71	14.77	-161.58	144.41	643.81	168.55	142.30	26.25	6.422			
8,100.00	8,051.11	8,090.41	8,047.20	14.79	14.94	-157.14	147.39	656.69	170.34	143.94	26.39	6.454			
8,200.00	8,151.11	8,189.51	8,145.42	14.86	15.12	-152.83	150.37	669.57	173.13	146.55	26.59	6.512			
8,300.00	8,251.11	8,288.62	8,243.64	14.94	15.30	-148.67	153.35	682.45	176.90	150.07	26.82	6.595			
8,400.00	8,351.11	8,387.73	8,341.86	15.01	15.47	-144.70	156.33	695.33	181.56	154.46	27.10	6.700			
8,500.00	8,451.11	8,486.83	8,440.08	15.08	15.65	-140.94	159.31	708.21	187.06	159.66	27.40	6.826			
8,600.00	8,551.11	8,585.94	8,538.30	15.16	15.83	-137.41	162.29	721.09	193.33	165.60	27.74	6.970			
8,700.00	8,651.11	8,685.05	8,636.52	15.23	16.01	-134.11	165.27	733.97	200.29	172.21	28.09	7.131			
8,800.00	8,751.11	8,784.15	8,734.74	15.31	16.19	-131.04	168.24	746.85	207.88	179.43	28.45	7.306			
8,900.00	8,851.11	8,883.26	8,832.96	15.38	16.37	-128.19	171.22	759.73	216.02	187.20	28.82	7.494			
9,000.00	8,951.11	8,982.37	8,931.19	15.46	16.54	-125.55	174.20	772.61	224.66	195.47	29.20	7.694			
9,100.00	9,051.11	9,081.47	9,029.41	15.53	16.72	-123.11	177.18	785.49	233.75	204.17	29.57	7.904			
9,200.00	9,151.11	9,180.58	9,127.63	15.61	16.90	-120.85	180.16	798.37	243.22	213.28	29.95	8.122			
9,300.00	9,251.11	9,279.68	9,225.85	15.68	17.08	-118.77	183.14	811.25	253.05	222.73	30.32	8.347			
9,400.00	9,351.11	9,378.79	9,324.07	15.76	17.27	-116.84	186.12	824.13	263.18	232.50	30.68	8.578			

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

### ConocoPhillips Anticollision Report

<b>Company:</b>	DELAWARE BASIN EAST	<b>Local Co-ordinate Reference:</b>	Well _COLUMBUS FEDERAL COM 504H - Slot SLOT 6
<b>Project:</b>	LEA COUNT SOUTH WEST (NM-E)	<b>TVD Reference:</b>	KB @ 3362.00usft
<b>Reference Site:</b>	COLUMBUS FEDERAL PROJECT	<b>MD Reference:</b>	KB @ 3362.00usft
<b>Site Error:</b>	0.00 usft	<b>North Reference:</b>	Grid
<b>Reference Well:</b>	_COLUMBUS FEDERAL COM 504H	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.00 usft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	OWB	<b>Database:</b>	EDT 17 Permian Prod
<b>Reference Design:</b>	PWP0	<b>Offset TVD Reference:</b>	Reference Datum

Offset Design: COLUMBUS FEDERAL PROJECT - _COLUMBUS FEDERAL COM 653H - 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)					
9,500.00	9,451.11	9,477.90	9,422.29	15.83	17.45	115.05	189.10	837.01	273.59	242.55	31.04	8.813			
9,600.00	9,551.11	9,577.00	9,520.51	15.91	17.63	113.40	192.08	849.89	284.24	252.85	31.40	9.053			
9,700.00	9,651.11	9,676.11	9,618.73	15.98	17.81	111.87	195.05	862.77	295.12	263.37	31.75	9.295			
9,800.00	9,751.11	9,775.22	9,716.95	16.06	17.99	110.44	198.03	875.65	306.18	274.09	32.09	9.541			
9,900.00	9,851.11	9,878.27	9,819.17	16.14	18.21	109.13	200.99	888.45	316.93	284.46	32.46	9.762			
10,000.00	9,951.11	9,982.67	9,922.93	16.21	18.41	108.05	203.58	899.61	326.29	293.50	32.79	9.952			
10,100.00	10,051.11	10,087.45	10,027.27	16.29	18.59	107.20	205.74	908.97	334.18	301.10	33.08	10.102			
10,200.00	10,151.11	10,192.55	10,132.09	16.36	18.76	106.55	207.48	916.48	340.55	307.19	33.36	10.209			
10,300.00	10,251.11	10,297.90	10,237.27	16.44	18.93	106.07	208.78	922.13	345.35	311.73	33.62	10.273			
10,335.43	10,286.54	10,335.27	10,274.61	16.45	18.98	105.94	209.14	923.68	346.67	312.98	33.69	10.289			
10,350.00	10,301.11	10,350.64	10,289.97	16.45	19.00	-73.67	209.27	924.25	347.09	313.37	33.72	10.293			
10,375.00	10,326.07	10,376.97	10,316.29	16.44	19.04	-73.94	209.48	925.13	347.45	313.67	33.78	10.287			
10,400.00	10,350.92	10,403.19	10,342.49	16.43	19.08	-74.46	209.65	925.89	347.36	313.52	33.85	10.263			
10,425.00	10,375.59	10,429.23	10,368.52	16.41	19.11	-75.24	209.80	926.53	346.86	312.94	33.92	10.225			
10,450.00	10,400.02	10,455.02	10,394.31	16.39	19.15	-76.25	209.92	927.05	346.00	311.98	34.01	10.172			
10,475.00	10,424.14	10,480.49	10,419.77	16.38	19.18	-77.50	210.01	927.45	344.83	310.71	34.12	10.107			
10,500.00	10,447.88	10,505.58	10,444.86	16.36	19.21	-78.97	210.08	927.74	343.44	309.21	34.23	10.033			
10,525.00	10,471.17	10,530.21	10,469.49	16.34	19.23	-80.63	210.12	927.92	341.90	307.56	34.34	9.957			
10,550.00	10,493.96	10,554.33	10,493.61	16.32	19.25	-82.47	210.14	928.00	340.33	305.88	34.46	9.877			
10,575.00	10,516.19	10,576.91	10,516.19	16.31	19.25	-84.38	210.14	928.00	338.87	304.29	34.58	9.800			
10,600.00	10,537.78	10,598.50	10,537.78	16.29	19.26	-86.36	210.14	928.00	337.70	303.00	34.70	9.732			
10,625.00	10,558.69	10,619.41	10,558.69	16.28	19.27	-88.40	210.14	928.00	336.95	302.13	34.83	9.675			
10,644.57	10,574.54	10,635.26	10,574.54	16.27	19.28	-90.00	210.14	928.00	336.76	301.83	34.93	9.641			
10,650.00	10,578.85	10,639.56	10,578.85	16.27	19.28	-90.44	210.14	928.00	336.77	301.82	34.96	9.633			
10,675.00	10,598.20	10,658.92	10,598.20	16.26	19.29	-92.46	210.14	928.00	337.30	302.21	35.09	9.614			
10,700.00	10,616.71	10,677.43	10,616.71	16.25	19.30	-94.41	210.14	928.00	338.67	303.46	35.20	9.620			
10,725.00	10,634.31	10,695.03	10,634.31	16.24	19.31	-96.23	210.14	928.00	341.01	305.70	35.31	9.657			
10,750.00	10,650.95	10,711.67	10,650.95	16.24	19.32	-97.90	210.14	928.00	344.44	309.03	35.40	9.729			
10,775.00	10,666.60	10,727.32	10,666.60	16.24	19.33	-99.37	210.14	928.00	349.05	313.57	35.48	9.838			
10,800.00	10,681.20	10,741.92	10,681.20	16.24	19.34	-100.61	210.14	928.00	354.93	319.39	35.54	9.988			
10,825.00	10,694.73	10,755.45	10,694.73	16.24	19.35	-101.59	210.14	928.00	362.12	326.55	35.57	10.180			
10,850.00	10,707.13	10,767.85	10,707.13	16.25	19.35	-102.28	210.14	928.00	370.65	335.06	35.58	10.416			
10,875.00	10,718.38	10,779.10	10,718.38	16.26	19.36	-102.65	210.14	928.00	380.51	344.93	35.58	10.695			
10,900.00	10,728.45	10,789.17	10,728.45	16.28	19.36	-102.68	210.14	928.00	391.69	356.13	35.56	11.016			
10,925.00	10,737.31	10,798.03	10,737.31	16.29	19.37	-102.34	210.14	928.00	404.12	368.60	35.52	11.377			
10,950.00	10,744.93	10,805.65	10,744.93	16.31	19.37	-101.61	210.14	928.00	417.76	382.29	35.47	11.778			
10,975.00	10,751.29	10,812.01	10,751.29	16.34	19.38	-100.47	210.14	928.00	432.50	397.09	35.41	12.214			
11,000.00	10,756.38	10,817.10	10,756.38	16.36	19.38	-98.89	210.14	928.00	448.26	412.92	35.34	12.683			
11,025.00	10,760.19	10,820.91	10,760.19	16.39	19.38	-96.85	210.14	928.00	464.94	429.67	35.27	13.181			
11,050.00	10,762.69	10,823.41	10,762.69	16.42	19.38	-94.35	210.14	928.00	482.42	447.22	35.20	13.705			
11,075.00	10,763.89	10,824.61	10,763.89	16.46	19.38	-91.38	210.14	928.00	500.61	465.48	35.13	14.252			
11,085.43	10,764.01	10,824.72	10,764.01	16.47	19.38	-90.00	210.14	928.00	508.37	473.27	35.09	14.486			
11,100.00	10,764.01	10,824.72	10,764.01	16.50	19.38	-90.00	210.14	928.00	519.37	484.32	35.05	14.818			
11,200.00	10,764.01	10,824.72	10,764.01	16.67	19.38	-90.00	210.14	928.00	599.03	564.25	34.78	17.224			
11,300.00	10,764.00	10,824.72	10,764.00	16.87	19.38	-90.00	210.14	928.00	684.04	649.49	34.55	19.799			
11,400.00	10,764.00	11,926.40	11,375.00	17.10	20.11	-151.17	-485.45	932.66	697.46	654.65	42.81	16.293			
11,500.00	10,764.00	12,026.40	11,375.00	17.36	20.38	-151.17	-585.45	933.34	697.43	654.51	42.91	16.252			
11,600.00	10,764.00	12,126.40	11,375.00	17.65	20.68	-151.18	-685.45	934.01	697.40	654.35	43.05	16.199			
11,700.00	10,764.00	12,226.40	11,375.00	17.98	21.00	-151.18	-785.45	934.68	697.37	654.15	43.22	16.137			
11,800.00	10,764.00	12,326.40	11,375.00	18.33	21.35	-151.19	-885.44	935.35	697.34	653.93	43.41	16.063			
11,900.00	10,764.00	12,426.40	11,375.00	18.72	21.73	-151.19	-985.44	936.02	697.31	653.67	43.64	15.980			

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

### ConocoPhillips Anticollision Report

<b>Company:</b>	DELAWARE BASIN EAST	<b>Local Co-ordinate Reference:</b>	Well _COLUMBUS FEDERAL COM 504H - Slot SLOT 6
<b>Project:</b>	LEA COUNT SOUTH WEST (NM-E)	<b>TVD Reference:</b>	KB @ 3362.00usft
<b>Reference Site:</b>	COLUMBUS FEDERAL PROJECT	<b>MD Reference:</b>	KB @ 3362.00usft
<b>Site Error:</b>	0.00 usft	<b>North Reference:</b>	Grid
<b>Reference Well:</b>	_COLUMBUS FEDERAL COM 504H	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.00 usft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	OWB	<b>Database:</b>	EDT 17 Permian Prod
<b>Reference Design:</b>	PWP0	<b>Offset TVD Reference:</b>	Reference Datum

Offset Design: COLUMBUS FEDERAL PROJECT - _COLUMBUS FEDERAL COM 653H - 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 +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	No-Go Distance (usft)	Separation Factor	Warning	
12,000.00	10,764.00	12,526.40	11,375.00	19.13	22.12	-151.19	-1,085.44	936.69	697.28	653.39	43.89	15.888		
12,100.00	10,764.00	12,626.40	11,375.00	19.57	22.54	-151.20	-1,185.44	937.36	697.25	653.08	44.17	15.786		
12,200.00	10,764.00	12,726.40	11,375.00	20.04	22.98	-151.20	-1,285.43	938.03	697.22	652.75	44.48	15.676		
12,300.00	10,764.00	12,826.40	11,375.00	20.54	23.45	-151.21	-1,385.43	938.70	697.19	652.38	44.81	15.559		
12,400.00	10,764.00	12,926.40	11,375.00	21.06	23.93	-151.21	-1,485.43	939.37	697.16	651.99	45.17	15.434		
12,500.00	10,764.00	13,026.40	11,375.00	21.60	24.43	-151.22	-1,585.43	940.04	697.13	651.58	45.56	15.303		
12,600.00	10,764.00	13,126.40	11,375.00	22.16	24.94	-151.22	-1,685.42	940.71	697.11	651.14	45.97	15.166		
12,700.00	10,764.00	13,226.40	11,375.00	22.74	25.48	-151.23	-1,785.42	941.38	697.08	650.68	46.40	15.023		
12,800.00	10,764.00	13,326.40	11,375.00	23.34	26.03	-151.23	-1,885.42	942.05	697.05	650.19	46.86	14.875		
12,900.00	10,764.00	13,426.40	11,375.00	23.96	26.59	-151.23	-1,985.42	942.72	697.02	649.68	47.34	14.724		
13,000.00	10,764.00	13,526.40	11,375.00	24.59	27.17	-151.24	-2,085.42	943.39	696.99	649.15	47.84	14.568		
13,100.00	10,764.00	13,626.40	11,375.00	25.23	27.77	-151.24	-2,185.41	944.06	696.96	648.59	48.37	14.410		
13,200.00	10,764.00	13,726.40	11,375.00	25.89	28.37	-151.25	-2,285.41	944.73	696.93	648.02	48.91	14.249		
13,300.00	10,764.00	13,826.40	11,375.00	26.55	28.99	-151.25	-2,385.41	945.41	696.90	647.43	49.48	14.086		
13,400.00	10,764.00	13,926.40	11,375.00	27.23	29.62	-151.26	-2,485.41	946.08	696.87	646.81	50.06	13.921		
13,500.00	10,764.00	14,026.40	11,375.00	27.92	30.26	-151.26	-2,585.40	946.75	696.84	646.18	50.66	13.755		
13,600.00	10,764.00	14,126.40	11,375.00	28.62	30.91	-151.26	-2,685.40	947.42	696.81	645.53	51.28	13.588		
13,700.00	10,764.00	14,226.40	11,375.00	29.33	31.57	-151.27	-2,785.40	948.09	696.78	644.86	51.92	13.420		
13,800.00	10,764.00	14,326.40	11,375.00	30.05	32.24	-151.27	-2,885.40	948.76	696.76	644.18	52.57	13.253		
13,900.00	10,764.00	14,426.40	11,375.00	30.77	32.92	-151.28	-2,985.40	949.43	696.73	643.48	53.24	13.085		
14,000.00	10,764.00	14,526.40	11,375.00	31.50	33.60	-151.28	-3,085.39	950.10	696.70	642.77	53.93	12.919		
14,100.00	10,764.00	14,626.40	11,375.00	32.24	34.30	-151.29	-3,185.39	950.77	696.67	642.04	54.63	12.752		
14,200.00	10,764.00	14,726.40	11,375.00	32.98	35.00	-151.29	-3,285.39	951.44	696.64	641.29	55.34	12.587		
14,300.00	10,764.00	14,826.40	11,375.00	33.73	35.71	-151.30	-3,385.39	952.11	696.61	640.54	56.07	12.423		
14,400.00	10,764.00	14,926.40	11,375.00	34.48	36.42	-151.30	-3,485.38	952.78	696.58	639.77	56.81	12.261		
14,500.00	10,764.00	15,026.40	11,375.00	35.24	37.14	-151.30	-3,585.38	953.45	696.55	638.98	57.57	12.100		
14,600.00	10,764.00	15,126.40	11,375.00	36.00	37.87	-151.31	-3,685.38	954.12	696.52	638.19	58.33	11.940		
14,700.00	10,764.00	15,226.40	11,375.00	36.77	38.60	-151.31	-3,785.38	954.79	696.49	637.38	59.11	11.783		
14,800.00	10,764.00	15,326.40	11,375.00	37.54	39.33	-151.32	-3,885.38	955.46	696.47	636.56	59.90	11.627		
14,900.00	10,764.00	15,426.40	11,375.00	38.32	40.08	-151.32	-3,985.37	956.13	696.44	635.74	60.70	11.473		
15,000.00	10,764.00	15,526.40	11,375.00	39.09	40.82	-151.33	-4,085.37	956.80	696.41	634.90	61.51	11.322		
15,100.00	10,764.00	15,626.40	11,375.00	39.88	41.57	-151.33	-4,185.37	957.48	696.38	634.05	62.33	11.173		
15,200.00	10,764.00	15,726.40	11,375.00	40.66	42.33	-151.33	-4,285.37	958.15	696.35	633.19	63.16	11.026		
15,300.00	10,764.00	15,826.40	11,375.00	41.45	43.08	-151.34	-4,385.36	958.82	696.32	632.32	64.00	10.881		
15,400.00	10,764.00	15,926.40	11,375.00	42.24	43.85	-151.34	-4,485.36	959.49	696.29	631.45	64.84	10.738		
15,500.00	10,764.00	16,026.40	11,375.00	43.03	44.61	-151.35	-4,585.36	960.16	696.26	630.56	65.70	10.598		
15,600.00	10,764.00	16,126.40	11,375.00	43.83	45.38	-151.35	-4,685.36	960.83	696.23	629.67	66.56	10.460		
15,700.00	10,764.00	16,226.40	11,375.00	44.63	46.15	-151.36	-4,785.35	961.50	696.20	628.77	67.43	10.324		
15,800.00	10,764.00	16,326.40	11,375.00	45.43	46.93	-151.36	-4,885.35	962.17	696.17	627.86	68.31	10.191		
15,900.00	10,764.00	16,426.40	11,375.00	46.23	47.70	-151.36	-4,985.35	962.84	696.15	626.95	69.20	10.060		
16,000.00	10,764.00	16,526.40	11,375.00	47.04	48.48	-151.37	-5,085.35	963.51	696.12	626.03	70.09	9.932		
16,100.00	10,764.00	16,626.40	11,375.00	47.84	49.27	-151.37	-5,185.35	964.18	696.09	625.10	70.99	9.806		
16,200.00	10,764.00	16,726.40	11,375.00	48.65	50.05	-151.38	-5,285.34	964.85	696.06	624.16	71.89	9.682		
16,300.00	10,764.00	16,826.40	11,375.00	49.46	50.84	-151.38	-5,385.34	965.52	696.03	623.22	72.81	9.560		
16,400.00	10,764.00	16,926.40	11,375.00	50.27	51.63	-151.39	-5,485.34	966.19	696.00	622.28	73.72	9.441		
16,500.00	10,764.00	17,026.40	11,375.00	51.09	52.42	-151.39	-5,585.34	966.86	695.97	621.33	74.65	9.324		
16,600.00	10,764.00	17,126.40	11,375.00	51.90	53.22	-151.40	-5,685.33	967.53	695.94	620.37	75.57	9.209		
16,700.00	10,764.00	17,226.40	11,375.00	52.72	54.01	-151.40	-5,785.33	968.20	695.91	619.41	76.51	9.096		
16,800.00	10,764.00	17,326.40	11,375.00	53.54	54.81	-151.40	-5,885.33	968.87	695.88	618.44	77.45	8.985		
16,900.00	10,764.00	17,426.40	11,375.00	54.35	55.61	-151.41	-5,985.33	969.55	695.86	617.47	78.39	8.877		

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

### ConocoPhillips Anticollision Report

<b>Company:</b>	DELAWARE BASIN EAST	<b>Local Co-ordinate Reference:</b>	Well _COLUMBUS FEDERAL COM 504H - Slot SLOT 6
<b>Project:</b>	LEA COUNT SOUTH WEST (NM-E)	<b>TVD Reference:</b>	KB @ 3362.00usft
<b>Reference Site:</b>	COLUMBUS FEDERAL PROJECT	<b>MD Reference:</b>	KB @ 3362.00usft
<b>Site Error:</b>	0.00 usft	<b>North Reference:</b>	Grid
<b>Reference Well:</b>	_COLUMBUS FEDERAL COM 504H	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.00 usft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	OWB	<b>Database:</b>	EDT 17 Permian Prod
<b>Reference Design:</b>	PWP0	<b>Offset TVD Reference:</b>	Reference Datum

Offset Design: COLUMBUS FEDERAL PROJECT - _COLUMBUS FEDERAL COM 653H - 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	Separation	Warning		
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Distance (usft)	Factor			
17,000.00	10,764.00	17,526.40	11,375.00	55.17	56.41	-151.41	-6,085.33	970.22	695.83	616.49	79.34	8.770			
17,100.00	10,764.00	17,626.40	11,375.00	56.00	57.21	-151.42	-6,185.32	970.89	695.80	615.51	80.29	8.666			
17,200.00	10,764.00	17,726.40	11,375.00	56.82	58.02	-151.42	-6,285.32	971.56	695.77	614.52	81.25	8.563			
17,300.00	10,764.00	17,826.40	11,375.00	57.64	58.83	-151.43	-6,385.32	972.23	695.74	613.53	82.21	8.463			
17,400.00	10,764.00	17,926.40	11,375.00	58.47	59.63	-151.43	-6,485.32	972.90	695.71	612.54	83.18	8.364			
17,500.00	10,764.00	18,026.40	11,375.00	59.29	60.44	-151.43	-6,585.31	973.57	695.68	611.54	84.14	8.268			
17,600.00	10,764.00	18,126.40	11,375.00	60.12	61.25	-151.44	-6,685.31	974.24	695.65	610.54	85.12	8.173			
17,700.00	10,764.00	18,226.40	11,375.00	60.94	62.07	-151.44	-6,785.31	974.91	695.62	609.53	86.09	8.080			
17,800.00	10,764.00	18,326.40	11,375.00	61.77	62.88	-151.45	-6,885.31	975.58	695.60	608.52	87.07	7.989			
17,900.00	10,764.00	18,426.40	11,375.00	62.60	63.69	-151.45	-6,985.30	976.25	695.57	607.51	88.06	7.899			
18,000.00	10,764.00	18,526.40	11,375.00	63.43	64.51	-151.46	-7,085.30	976.92	695.54	606.49	89.04	7.811			
18,100.00	10,764.00	18,626.40	11,375.00	64.26	65.33	-151.46	-7,185.30	977.59	695.51	605.47	90.03	7.725			
18,200.00	10,764.00	18,726.40	11,375.00	65.09	66.14	-151.47	-7,285.30	978.26	695.48	604.45	91.03	7.640			
18,300.00	10,764.00	18,826.40	11,375.00	65.93	66.96	-151.47	-7,385.30	978.93	695.45	603.43	92.02	7.557			
18,400.00	10,764.00	18,926.40	11,375.00	66.76	67.78	-151.47	-7,485.29	979.60	695.42	602.40	93.02	7.476			
18,500.00	10,764.00	19,026.40	11,375.00	67.59	68.60	-151.48	-7,585.29	980.27	695.39	601.37	94.02	7.396			
18,600.00	10,764.00	19,126.40	11,375.00	68.43	69.42	-151.48	-7,685.29	980.94	695.36	600.34	95.03	7.318			
18,700.00	10,764.00	19,226.40	11,375.00	69.26	70.25	-151.49	-7,785.29	981.62	695.34	599.30	96.03	7.241			
18,800.00	10,764.00	19,326.40	11,375.00	70.10	71.07	-151.49	-7,885.28	982.29	695.31	598.26	97.04	7.165			
18,900.00	10,764.00	19,426.40	11,375.00	70.93	71.89	-151.50	-7,985.28	982.96	695.28	597.22	98.05	7.091			
19,000.00	10,764.00	19,526.40	11,375.00	71.77	72.72	-151.50	-8,085.28	983.63	695.25	596.18	99.07	7.018			
19,100.00	10,764.00	19,626.40	11,375.00	72.60	73.54	-151.51	-8,185.28	984.30	695.22	595.14	100.08	6.946			
19,200.00	10,764.00	19,726.40	11,375.00	73.44	74.37	-151.51	-8,285.28	984.97	695.19	594.09	101.10	6.876			
19,300.00	10,764.00	19,826.40	11,375.00	74.28	75.20	-151.51	-8,385.27	985.64	695.16	593.04	102.12	6.807			
19,400.00	10,764.00	19,926.40	11,375.00	75.12	76.03	-151.52	-8,485.27	986.31	695.13	591.99	103.14	6.740			
19,500.00	10,764.00	20,026.40	11,375.00	75.96	76.85	-151.52	-8,585.27	986.98	695.10	590.94	104.17	6.673			
19,600.00	10,764.00	20,126.40	11,375.00	76.79	77.68	-151.53	-8,685.27	987.65	695.08	589.88	105.19	6.608			
19,700.00	10,764.00	20,226.40	11,375.00	77.63	78.51	-151.53	-8,785.26	988.32	695.05	588.83	106.22	6.543			
19,800.00	10,764.00	20,326.40	11,375.00	78.47	79.34	-151.54	-8,885.26	988.99	695.02	587.77	107.25	6.480			
19,900.00	10,764.00	20,426.40	11,375.00	79.31	80.18	-151.54	-8,985.26	989.66	694.99	586.71	108.28	6.418			
20,000.00	10,764.00	20,526.40	11,375.00	80.16	81.01	-151.54	-9,085.26	990.33	694.96	585.64	109.32	6.357			
20,100.00	10,764.00	20,626.40	11,375.00	81.00	81.84	-151.55	-9,185.26	991.00	694.93	584.58	110.35	6.298			
20,200.00	10,764.00	20,726.40	11,375.00	81.84	82.67	-151.55	-9,285.25	991.67	694.90	583.52	111.39	6.239			
20,300.00	10,764.00	20,826.40	11,375.00	82.68	83.51	-151.56	-9,385.25	992.34	694.87	582.45	112.42	6.181			
20,400.00	10,764.00	20,926.40	11,375.00	83.52	84.34	-151.56	-9,485.25	993.01	694.84	581.38	113.46	6.124			
20,500.00	10,764.00	21,026.40	11,375.00	84.36	85.17	-151.57	-9,585.25	993.69	694.82	580.31	114.50	6.068			
20,600.00	10,764.00	21,126.40	11,375.00	85.21	86.01	-151.57	-9,685.24	994.36	694.79	579.24	115.55	6.013			
20,700.00	10,764.00	21,226.40	11,375.00	86.05	86.84	-151.58	-9,785.24	995.03	694.76	578.17	116.59	5.959			
20,800.00	10,764.00	21,326.40	11,375.00	86.89	87.68	-151.58	-9,885.24	995.70	694.73	577.09	117.63	5.906			
20,900.00	10,764.00	21,426.40	11,375.00	87.74	88.52	-151.58	-9,985.24	996.37	694.70	576.02	118.68	5.854			
21,000.00	10,764.00	21,526.40	11,375.00	88.58	89.35	-151.59	-10,085.23	997.04	694.67	574.94	119.73	5.802			
21,013.64	10,764.00	21,539.67	11,375.00	88.70	89.46	-151.59	-10,098.51	997.13	694.67	574.81	119.86	5.796			
21,013.94	10,764.00	21,539.67	11,375.00	88.70	89.46	-151.59	-10,098.51	997.13	694.67	574.81	119.86	5.796			
21,014.47	10,764.00	21,539.67	11,375.00	88.72	89.46	-151.59	-10,098.51	997.13	694.67	574.81	119.86	5.796			

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

### ConocoPhillips Anticollision Report

<b>Company:</b>	DELAWARE BASIN EAST	<b>Local Co-ordinate Reference:</b>	Well _COLUMBUS FEDERAL COM 504H - Slot SLOT 6
<b>Project:</b>	LEA COUNT SOUTH WEST (NM-E)	<b>TVD Reference:</b>	KB @ 3362.00usft
<b>Reference Site:</b>	COLUMBUS FEDERAL PROJECT	<b>MD Reference:</b>	KB @ 3362.00usft
<b>Site Error:</b>	0.00 usft	<b>North Reference:</b>	Grid
<b>Reference Well:</b>	_COLUMBUS FEDERAL COM 504H	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.00 usft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	OWB	<b>Database:</b>	EDT 17 Permian Prod
<b>Reference Design:</b>	PWP0	<b>Offset TVD Reference:</b>	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	89.62	0.40	60.00	60.00						
100.00	100.00	100.00	100.00	0.77	0.77	89.62	0.40	60.00	60.00	58.01	1.99	30.133			
200.00	200.00	200.00	200.00	1.44	1.44	89.62	0.40	60.00	60.00	56.69	3.31	18.119			
300.00	300.00	300.00	300.00	1.88	1.88	89.62	0.40	60.00	60.00	55.81	4.20	14.302			
400.00	400.00	400.00	400.00	2.25	2.25	89.62	0.40	60.00	60.00	55.09	4.91	12.215			
500.00	500.00	500.00	500.00	2.56	2.56	89.62	0.40	60.00	60.00	54.47	5.53	10.844			
600.00	600.00	600.00	600.00	2.84	2.84	89.62	0.40	60.00	60.00	53.91	6.09	9.852			
700.00	700.00	700.00	700.00	3.10	3.10	89.62	0.40	60.00	60.00	53.40	6.60	9.089			
800.00	800.00	800.00	800.00	3.34	3.34	89.62	0.40	60.00	60.00	52.92	7.08	8.479			
900.00	900.00	900.00	900.00	3.57	3.57	89.62	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	89.62	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	89.62	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	89.62	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	89.62	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	89.62	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	89.62	0.40	60.00	60.00	50.18	9.82	6.108 CC, ES			
1,600.00	1,599.98	1,597.92	1,597.90	5.01	4.99	70.96	0.56	61.67	61.11	50.86	10.25	5.961 SF			
1,700.00	1,699.84	1,695.65	1,695.50	5.27	5.24	74.68	1.04	66.65	64.64	54.00	10.64	6.076			
1,750.00	1,749.68	1,744.38	1,744.08	5.32	5.35	77.20	1.40	70.37	67.46	56.68	10.78	6.260			
1,800.00	1,799.48	1,793.04	1,792.53	5.36	5.47	69.17	1.83	74.91	70.71	59.79	10.91	6.479			
1,900.00	1,898.97	1,890.28	1,889.08	5.55	5.70	56.41	2.94	86.42	77.38	66.08	11.30	6.849			
2,000.00	1,998.21	1,987.42	1,985.07	5.74	5.93	47.94	4.35	101.18	84.06	72.40	11.65	7.213			
2,065.66	2,063.18	2,051.15	2,047.76	5.81	6.07	44.02	5.45	112.61	88.36	76.54	11.83	7.472			
2,100.00	2,097.11	2,084.44	2,080.39	5.83	6.15	44.59	6.08	119.14	90.78	78.88	11.90	7.627			
2,200.00	2,195.92	2,181.10	2,174.71	5.99	6.37	45.54	8.10	140.22	99.89	87.68	12.21	8.181			
2,300.00	2,294.73	2,278.32	2,268.83	6.15	6.49	45.63	10.42	164.41	111.86	99.43	12.44	8.995			
2,400.00	2,393.53	2,377.52	2,364.70	6.31	6.63	45.56	12.86	189.78	124.48	111.75	12.73	9.777			
2,500.00	2,492.34	2,476.72	2,460.57	6.47	6.78	45.50	15.29	215.15	137.10	124.06	13.05	10.509			
2,600.00	2,591.15	2,575.92	2,556.44	6.64	6.94	45.45	17.73	240.53	149.72	136.36	13.36	11.204			
2,700.00	2,689.96	2,675.12	2,652.31	6.80	7.11	45.41	20.16	265.90	162.34	148.66	13.69	11.862			
2,800.00	2,788.77	2,774.32	2,748.18	6.97	7.27	45.37	22.60	291.27	174.97	160.95	14.01	12.487			
2,900.00	2,887.57	2,873.52	2,844.05	7.14	7.45	45.34	25.03	316.65	187.59	173.25	14.34	13.081			
3,000.00	2,986.38	2,972.72	2,939.92	7.31	7.62	45.32	27.47	342.02	200.21	185.53	14.67	13.644			
3,100.00	3,085.19	3,071.92	3,035.79	7.48	7.80	45.29	29.90	367.40	212.83	197.82	15.01	14.180			
3,200.00	3,184.00	3,171.12	3,131.66	7.66	7.98	45.27	32.34	392.77	225.45	210.10	15.35	14.690			
3,300.00	3,282.81	3,270.32	3,227.52	7.83	8.16	45.26	34.77	418.14	238.07	222.38	15.69	15.176			
3,400.00	3,381.61	3,369.52	3,323.39	8.01	8.34	45.24	37.21	443.52	250.69	234.66	16.03	15.638			
3,500.00	3,480.42	3,468.72	3,419.26	8.19	8.53	45.22	39.64	468.89	263.31	246.94	16.38	16.079			
3,600.00	3,579.23	3,567.92	3,515.13	8.37	8.72	45.21	42.08	494.26	275.93	259.21	16.72	16.499			
3,700.00	3,678.04	3,667.12	3,611.00	8.55	8.91	45.20	44.52	519.64	288.56	271.48	17.07	16.900			
3,800.00	3,776.85	3,766.32	3,706.87	8.73	9.10	45.19	46.95	545.01	301.18	283.75	17.43	17.283			
3,900.00	3,875.65	3,865.52	3,802.74	8.91	9.30	45.18	49.39	570.38	313.80	296.02	17.78	17.650			
4,000.00	3,974.46	3,964.72	3,898.61	9.09	9.50	45.17	51.82	595.76	326.42	308.28	18.13	18.000			
4,100.00	4,073.27	4,063.92	3,994.48	9.28	9.70	45.16	54.26	621.13	339.04	320.55	18.49	18.335			
4,200.00	4,172.08	4,163.12	4,090.35	9.46	9.90	45.15	56.69	646.51	351.66	332.81	18.85	18.657			
4,300.00	4,270.89	4,262.32	4,186.22	9.65	10.10	45.14	59.13	671.88	364.28	345.07	19.21	18.964			
4,400.00	4,369.69	4,361.52	4,282.09	9.83	10.30	45.13	61.56	697.25	376.90	357.33	19.57	19.260			
4,500.00	4,468.50	4,460.72	4,377.96	10.02	10.51	45.13	64.00	722.63	389.52	369.59	19.93	19.543			
4,600.00	4,567.31	4,559.93	4,473.83	10.21	10.71	45.12	66.43	748.00	402.15	381.85	20.30	19.815			
4,700.00	4,666.12	4,659.13	4,569.70	10.40	10.92	45.12	68.87	773.37	414.77	394.11	20.66	20.076			
4,800.00	4,764.93	4,758.33	4,665.57	10.59	11.13	45.11	71.30	798.75	427.39	406.36	21.03	20.327			

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

### ConocoPhillips Anticollision Report

<b>Company:</b>	DELAWARE BASIN EAST	<b>Local Co-ordinate Reference:</b>	Well _COLUMBUS FEDERAL COM 504H - Slot SLOT 6
<b>Project:</b>	LEA COUNT SOUTH WEST (NM-E)	<b>TVD Reference:</b>	KB @ 3362.00usft
<b>Reference Site:</b>	COLUMBUS FEDERAL PROJECT	<b>MD Reference:</b>	KB @ 3362.00usft
<b>Site Error:</b>	0.00 usft	<b>North Reference:</b>	Grid
<b>Reference Well:</b>	_COLUMBUS FEDERAL COM 504H	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.00 usft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	OWB	<b>Database:</b>	EDT 17 Permian Prod
<b>Reference Design:</b>	PWP0	<b>Offset TVD Reference:</b>	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)				
4,900.00	4,863.73	4,857.53	4,761.44	10.77	11.34	45.10	73.74	824.12	440.01	418.62	21.39	20.569		
5,000.00	4,962.54	4,956.73	4,857.31	10.96	11.55	45.10	76.17	849.49	452.63	430.87	21.76	20.802		
5,100.00	5,061.35	5,055.93	4,953.18	11.15	11.76	45.09	78.61	874.87	465.25	443.12	22.13	21.026		
5,200.00	5,160.16	5,155.13	5,049.04	11.34	11.97	45.09	81.04	900.24	477.87	455.38	22.50	21.242		
5,300.00	5,258.97	5,254.33	5,144.91	11.54	12.19	45.09	83.48	925.61	490.49	467.63	22.87	21.450		
5,400.00	5,357.77	5,353.53	5,240.78	11.73	12.40	45.08	85.92	950.99	503.12	479.88	23.24	21.650		
5,500.00	5,456.58	5,452.73	5,336.65	11.92	12.62	45.08	88.35	976.36	515.74	492.13	23.61	21.844		
5,600.00	5,555.39	5,551.93	5,432.52	12.11	12.83	45.07	90.79	1,001.74	528.36	504.38	23.98	22.031		
5,663.37	5,618.00	5,614.79	5,493.27	12.22	12.97	45.07	92.33	1,017.81	536.36	512.15	24.20	22.162		
5,700.00	5,654.22	5,651.12	5,528.38	12.27	13.05	45.10	93.22	1,027.11	541.06	516.74	24.32	22.244		
5,800.00	5,753.25	5,750.17	5,624.11	12.46	13.27	45.08	95.65	1,052.44	554.74	530.04	24.70	22.460		
5,900.00	5,852.50	5,849.03	5,719.64	12.65	13.48	44.95	98.08	1,077.73	569.65	544.57	25.07	22.718		
6,000.00	5,951.95	5,947.65	5,814.96	12.83	13.70	44.72	100.50	1,102.95	585.79	560.34	25.45	23.016		
6,100.00	6,051.57	6,046.02	5,910.03	13.00	13.92	44.40	102.92	1,128.12	603.18	577.35	25.83	23.354		
6,200.00	6,151.33	6,144.11	6,004.82	13.17	14.14	44.00	105.32	1,153.20	621.84	595.63	26.20	23.731		
6,300.00	6,251.19	6,241.87	6,099.30	13.34	14.35	43.54	107.72	1,178.21	641.79	615.21	26.58	24.147		
6,400.00	6,351.13	6,339.29	6,193.45	13.49	14.57	43.01	110.12	1,203.13	663.06	636.11	26.95	24.603		
6,500.00	6,451.12	6,436.34	6,287.23	13.63	14.79	42.43	112.50	1,227.95	685.67	658.35	27.32	25.100		
6,548.89	6,500.00	6,483.63	6,332.94	13.66	14.89	106.36	113.66	1,240.05	697.22	669.74	27.47	25.379		
6,600.00	6,551.11	6,533.03	6,380.68	13.68	15.00	105.97	114.87	1,252.68	709.48	681.85	27.63	25.681		
6,700.00	6,651.11	6,629.67	6,474.08	13.76	15.22	105.24	117.24	1,277.40	733.56	705.60	27.96	26.240		
6,800.00	6,751.11	6,726.31	6,567.47	13.83	15.44	104.55	119.62	1,302.12	757.74	729.46	28.28	26.791		
6,900.00	6,851.11	6,822.96	6,660.87	13.90	15.66	103.91	121.99	1,326.84	782.03	753.42	28.61	27.333		
7,000.00	6,951.11	6,919.60	6,754.27	13.98	15.87	103.30	124.36	1,351.56	806.40	777.46	28.94	27.867		
7,100.00	7,051.11	7,016.24	6,847.67	14.05	16.09	102.73	126.73	1,376.28	830.85	801.58	29.26	28.392		
7,200.00	7,151.11	7,112.88	6,941.06	14.12	16.31	102.20	129.11	1,401.00	855.37	825.78	29.59	28.909		
7,300.00	7,251.11	7,209.52	7,034.46	14.20	16.53	101.69	131.48	1,425.72	879.96	850.04	29.91	29.418		
7,400.00	7,351.11	7,306.17	7,127.86	14.27	16.75	101.21	133.85	1,450.44	904.61	874.37	30.24	29.917		
7,500.00	7,451.11	7,402.81	7,221.26	14.34	16.97	100.76	136.22	1,475.16	929.32	898.75	30.56	30.408		
7,600.00	7,551.11	7,499.45	7,314.65	14.42	17.19	100.33	138.60	1,499.88	954.07	923.19	30.88	30.891		
7,700.00	7,651.11	7,596.09	7,408.05	14.49	17.41	99.92	140.97	1,524.59	978.88	947.67	31.21	31.366		

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

### ConocoPhillips Anticollision Report

<b>Company:</b>	DELAWARE BASIN EAST	<b>Local Co-ordinate Reference:</b>	Well _COLUMBUS FEDERAL COM 504H - Slot SLOT 6
<b>Project:</b>	LEA COUNT SOUTH WEST (NM-E)	<b>TVD Reference:</b>	KB @ 3362.00usft
<b>Reference Site:</b>	COLUMBUS FEDERAL PROJECT	<b>MD Reference:</b>	KB @ 3362.00usft
<b>Site Error:</b>	0.00 usft	<b>North Reference:</b>	Grid
<b>Reference Well:</b>	_COLUMBUS FEDERAL COM 504H	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.00 usft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	OWB	<b>Database:</b>	EDT 17 Permian Prod
<b>Reference Design:</b>	PWP0	<b>Offset TVD Reference:</b>	Reference Datum

<b>Offset Design:</b> COLUMBUS FEDERAL PROJECT - COLUMBUS FEDERAL COM #701H - OWB - AWP													<b>Offset Site Error:</b> 0.00 usft
<b>Survey Program:</b> 100-r.5 SDI_KPR_WL_NS-CT, 11663-r.5 MWD+IFR1+MS													<b>Offset Well Error:</b> 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)			
12,900.00	10,764.00	10,779.47	10,773.13	23.96	5.84	90.64	-2,487.76	-201.43	950.91	916.75	34.16	27.837	
13,000.00	10,764.00	10,779.52	10,773.19	24.59	5.84	90.65	-2,487.76	-201.43	902.99	867.62	35.37	25.528	
13,100.00	10,764.00	10,779.58	10,773.24	25.23	5.84	90.65	-2,487.76	-201.43	864.04	827.50	36.53	23.651	
13,200.00	10,764.00	10,779.64	10,773.30	25.89	5.84	90.66	-2,487.76	-201.43	835.30	797.75	37.55	22.245	
13,300.00	10,764.00	10,779.70	10,773.37	26.55	5.84	90.66	-2,487.76	-201.43	817.86	779.53	38.33	21.339	
13,394.16	10,764.00	10,779.76	10,773.43	27.19	5.84	90.66	-2,487.76	-201.43	812.42	773.65	38.77	20.954 CC, ES	
13,400.00	10,764.00	10,779.77	10,773.43	27.23	5.84	90.66	-2,487.76	-201.43	812.44	773.65	38.79	20.946 SF	
13,500.00	10,764.00	10,779.84	10,773.50	27.92	5.84	90.67	-2,487.76	-201.43	819.28	780.39	38.89	21.064	
13,600.00	10,764.00	10,779.90	10,773.57	28.62	5.84	90.67	-2,487.76	-201.43	838.09	799.42	38.66	21.676	
13,700.00	10,764.00	10,779.98	10,773.64	29.33	5.84	90.68	-2,487.76	-201.43	868.08	829.92	38.16	22.751	
13,800.00	10,764.00	10,780.05	10,773.71	30.05	5.84	90.68	-2,487.76	-201.42	908.14	870.69	37.45	24.247	
13,900.00	10,764.00	10,780.13	10,773.79	30.77	5.84	90.69	-2,487.76	-201.42	957.02	920.38	36.64	26.118	

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

### ConocoPhillips Anticollision Report

<b>Company:</b>	DELAWARE BASIN EAST	<b>Local Co-ordinate Reference:</b>	Well _COLUMBUS FEDERAL COM 504H - Slot SLOT 6
<b>Project:</b>	LEA COUNT SOUTH WEST (NM-E)	<b>TVD Reference:</b>	KB @ 3362.00usft
<b>Reference Site:</b>	COLUMBUS FEDERAL PROJECT	<b>MD Reference:</b>	KB @ 3362.00usft
<b>Site Error:</b>	0.00 usft	<b>North Reference:</b>	Grid
<b>Reference Well:</b>	_COLUMBUS FEDERAL COM 504H	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.00 usft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	OWB	<b>Database:</b>	EDT 17 Permian Prod
<b>Reference Design:</b>	PWP0	<b>Offset TVD Reference:</b>	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)	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	0.00	0.00	0.00	-90.38	-0.66	-99.99	99.99						
100.00	100.00	100.00	100.00	0.77	0.52	-90.38	-0.66	-99.99	99.99	98.23	1.76	56.710			
200.00	200.00	200.00	200.00	1.44	1.03	-90.38	-0.66	-99.99	99.99	97.07	2.93	34.170			
300.00	300.00	300.00	300.00	1.88	1.36	-90.38	-0.66	-99.99	99.99	96.30	3.70	27.047			
400.00	400.00	400.00	400.00	2.25	1.64	-90.38	-0.66	-99.99	99.99	95.67	4.32	23.151			
500.00	500.00	500.00	500.00	2.56	1.89	-90.38	-0.66	-99.99	99.99	95.14	4.86	20.589			
600.00	600.00	600.00	600.00	2.84	2.11	-90.38	-0.66	-99.99	99.99	94.65	5.34	18.733			
700.00	700.00	700.00	700.00	3.10	2.31	-90.38	-0.66	-99.99	99.99	94.21	5.78	17.306			
800.00	800.00	800.00	800.00	3.34	2.51	-90.38	-0.66	-99.99	99.99	93.81	6.19	16.164			
900.00	900.00	900.00	900.00	3.57	2.69	-90.38	-0.66	-99.99	99.99	93.42	6.57	15.221			
1,000.00	1,000.00	1,000.00	1,000.00	3.79	2.87	-90.38	-0.66	-99.99	99.99	93.06	6.93	14.425			
1,100.00	1,100.00	1,100.00	1,100.00	3.99	3.04	-90.38	-0.66	-99.99	99.99	92.72	7.28	13.741			
1,200.00	1,200.00	1,200.00	1,200.00	4.19	3.21	-90.38	-0.66	-99.99	99.99	92.38	7.61	13.144			
1,300.00	1,300.00	1,300.00	1,300.00	4.38	3.37	-90.38	-0.66	-99.99	99.99	92.07	7.92	12.618			
1,400.00	1,400.00	1,400.00	1,400.00	4.56	3.53	-90.38	-0.66	-99.99	99.99	91.76	8.23	12.149			
1,500.00	1,500.00	1,500.00	1,500.00	4.74	3.68	-90.38	-0.66	-99.99	99.99	91.47	8.53	11.727 CC, ES			
1,600.00	1,599.98	1,599.98	1,599.98	5.01	3.83	-111.30	-0.66	-99.99	100.61	91.79	8.83	11.397			
1,700.00	1,699.84	1,699.84	1,699.84	5.27	3.98	-113.98	-0.66	-99.99	102.63	93.50	9.13	11.244 SF			
1,750.00	1,749.68	1,749.68	1,749.68	5.32	4.02	-115.92	-0.66	-99.99	104.29	95.09	9.20	11.340			
1,800.00	1,799.48	1,797.77	1,797.77	5.36	4.05	-128.42	-0.60	-100.38	107.09	97.81	9.27	11.547			
1,900.00	1,898.97	1,893.46	1,893.40	5.55	4.22	-147.99	-0.14	-103.54	117.87	108.13	9.73	12.108			
2,000.00	1,998.21	1,987.98	1,987.70	5.74	4.39	-160.70	0.78	-109.76	135.19	125.02	10.18	13.286			
2,065.66	2,063.18	2,049.10	2,048.56	5.81	4.50	-166.30	1.61	-115.42	149.98	139.58	10.40	14.421			
2,100.00	2,097.11	2,080.75	2,080.02	5.83	4.56	-166.27	2.11	-118.86	158.58	148.08	10.50	15.105			
2,200.00	2,195.92	2,171.91	2,170.39	5.99	4.76	-165.99	3.85	-130.67	185.56	174.70	10.86	17.086			
2,300.00	2,294.73	2,261.47	2,258.75	6.15	4.99	-165.50	5.96	-145.04	215.39	204.18	11.21	19.211			
2,400.00	2,393.53	2,349.28	2,344.92	6.31	5.22	-164.91	8.42	-161.78	248.00	236.45	11.55	21.471			
2,500.00	2,492.34	2,435.25	2,428.73	6.47	5.45	-164.27	11.19	-180.69	283.34	271.46	11.88	23.852			
2,600.00	2,591.15	2,519.47	2,510.25	6.64	5.64	-163.63	14.27	-201.62	321.33	309.16	12.17	26.408			
2,700.00	2,689.96	2,611.38	2,598.88	6.80	5.80	-163.00	17.80	-225.69	360.57	348.09	12.48	28.890			
2,800.00	2,788.77	2,703.29	2,687.52	6.97	5.96	-162.49	21.34	-249.76	399.85	387.05	12.80	31.233			
2,900.00	2,887.57	2,795.20	2,776.15	7.14	6.13	-162.08	24.87	-273.82	439.15	426.02	13.13	33.452			
3,000.00	2,986.38	2,887.11	2,864.78	7.31	6.30	-161.73	28.41	-297.89	478.47	465.01	13.46	35.555			
3,100.00	3,085.19	2,979.03	2,953.42	7.48	6.47	-161.43	31.94	-321.96	517.80	504.01	13.79	37.548			
3,200.00	3,184.00	3,070.94	3,042.05	7.66	6.64	-161.18	35.48	-346.03	557.13	543.01	14.13	39.439			
3,300.00	3,282.81	3,162.85	3,130.68	7.83	6.82	-160.96	39.02	-370.10	596.48	582.02	14.47	41.233			
3,400.00	3,381.61	3,254.76	3,219.32	8.01	7.00	-160.77	42.55	-394.17	635.83	621.03	14.81	42.937			
3,500.00	3,480.42	3,346.67	3,307.95	8.19	7.18	-160.60	46.09	-418.24	675.19	660.04	15.15	44.556			
3,600.00	3,579.23	3,438.58	3,396.58	8.37	7.36	-160.45	49.62	-442.31	714.56	699.05	15.50	46.095			
3,700.00	3,678.04	3,530.49	3,485.22	8.55	7.55	-160.31	53.16	-466.38	753.92	738.07	15.85	47.559			
3,800.00	3,776.85	3,622.41	3,573.85	8.73	7.74	-160.19	56.69	-490.45	793.29	777.09	16.20	48.954			
3,900.00	3,875.65	3,714.32	3,662.48	8.91	7.93	-160.08	60.23	-514.52	832.67	816.11	16.56	50.282			
4,000.00	3,974.46	3,806.23	3,751.12	9.09	8.12	-159.98	63.76	-538.59	872.04	855.12	16.92	51.549			
4,100.00	4,073.27	3,898.14	3,839.75	9.28	8.31	-159.89	67.30	-562.66	911.42	894.14	17.28	52.757			
4,200.00	4,172.08	3,990.05	3,928.38	9.46	8.50	-159.80	70.83	-586.73	950.80	933.16	17.64	53.911			
4,300.00	4,270.89	4,081.96	4,017.02	9.65	8.70	-159.73	74.37	-610.80	990.18	972.18	18.00	55.013			

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

### ConocoPhillips Anticollision Report

<b>Company:</b>	DELAWARE BASIN EAST	<b>Local Co-ordinate Reference:</b>	Well _COLUMBUS FEDERAL COM 504H - Slot SLOT 6
<b>Project:</b>	LEA COUNT SOUTH WEST (NM-E)	<b>TVD Reference:</b>	KB @ 3362.00usft
<b>Reference Site:</b>	COLUMBUS FEDERAL PROJECT	<b>MD Reference:</b>	KB @ 3362.00usft
<b>Site Error:</b>	0.00 usft	<b>North Reference:</b>	Grid
<b>Reference Well:</b>	_COLUMBUS FEDERAL COM 504H	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.00 usft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	OWB	<b>Database:</b>	EDT 17 Permian Prod
<b>Reference Design:</b>	PWP0	<b>Offset TVD Reference:</b>	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
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	-90.12	-0.13	-60.00	60.00					
100.00	100.00	100.00	100.00	0.77	0.52	0.52	-90.12	-0.13	-60.00	60.00	58.24	1.76	34.029		
200.00	200.00	200.00	200.00	1.44	1.03	1.03	-90.12	-0.13	-60.00	60.00	57.07	2.93	20.504		
300.00	300.00	300.00	300.00	1.88	1.36	1.36	-90.12	-0.13	-60.00	60.00	56.30	3.70	16.230		
400.00	400.00	400.00	400.00	2.25	1.64	1.64	-90.12	-0.13	-60.00	60.00	55.68	4.32	13.892		
500.00	500.00	500.00	500.00	2.56	1.89	1.89	-90.12	-0.13	-60.00	60.00	55.14	4.86	12.354		
600.00	600.00	600.00	600.00	2.84	2.11	2.11	-90.12	-0.13	-60.00	60.00	54.66	5.34	11.241		
700.00	700.00	700.00	700.00	3.10	2.31	2.31	-90.12	-0.13	-60.00	60.00	54.22	5.78	10.385		
800.00	800.00	800.00	800.00	3.34	2.51	2.51	-90.12	-0.13	-60.00	60.00	53.81	6.19	9.699		
900.00	900.00	900.00	900.00	3.57	2.69	2.69	-90.12	-0.13	-60.00	60.00	53.43	6.57	9.133		
1,000.00	1,000.00	1,000.00	1,000.00	3.79	2.87	2.87	-90.12	-0.13	-60.00	60.00	53.07	6.93	8.656		
1,100.00	1,100.00	1,100.00	1,100.00	3.99	3.04	3.04	-90.12	-0.13	-60.00	60.00	52.72	7.28	8.245		
1,200.00	1,200.00	1,200.00	1,200.00	4.19	3.21	3.21	-90.12	-0.13	-60.00	60.00	52.39	7.61	7.887		
1,300.00	1,300.00	1,300.00	1,300.00	4.38	3.37	3.37	-90.12	-0.13	-60.00	60.00	52.08	7.92	7.571		
1,400.00	1,400.00	1,400.00	1,400.00	4.56	3.53	3.53	-90.12	-0.13	-60.00	60.00	51.77	8.23	7.290		
1,500.00	1,500.00	1,500.00	1,500.00	4.74	3.68	3.68	-90.12	-0.13	-60.00	60.00	51.47	8.53	7.037 CC, ES		
1,600.00	1,599.98	1,599.98	1,599.98	5.01	3.83	3.83	-111.66	-0.13	-60.00	60.62	51.79	8.83	6.867 SF		
1,700.00	1,699.84	1,699.84	1,699.84	5.27	3.98	3.98	-116.06	-0.13	-60.00	62.74	53.61	9.14	6.867		
1,750.00	1,749.68	1,749.68	1,749.68	5.32	4.05	4.05	-119.15	-0.13	-60.00	64.57	55.33	9.24	6.986		
1,800.00	1,799.48	1,799.48	1,799.48	5.36	4.13	4.13	-132.87	-0.13	-60.00	67.21	57.86	9.35	7.186		
1,900.00	1,898.97	1,898.97	1,898.97	5.55	4.27	4.27	-154.40	-0.13	-60.00	75.41	65.74	9.68	7.794		
2,000.00	1,998.21	1,998.21	1,998.21	5.74	4.41	4.41	-168.48	-0.13	-60.00	87.09	77.09	10.00	8.711		
2,065.66	2,063.18	2,061.43	2,061.43	5.81	4.48	4.48	-174.49	0.01	-60.64	97.06	86.87	10.19	9.526		
2,100.00	2,097.11	2,094.27	2,094.25	5.83	4.52	4.52	-174.50	0.20	-61.52	103.09	92.83	10.26	10.046		
2,200.00	2,195.92	2,189.20	2,189.06	5.99	4.68	4.68	-173.96	1.19	-66.10	122.53	111.89	10.64	11.516		
2,300.00	2,294.73	2,282.95	2,282.49	6.15	4.85	4.85	-172.91	2.83	-73.64	144.73	133.71	11.02	13.131		
2,400.00	2,393.53	2,375.34	2,374.27	6.31	5.07	5.07	-171.61	5.07	-84.00	169.70	158.29	11.41	14.871		
2,500.00	2,492.34	2,466.21	2,464.16	6.47	5.34	5.34	-170.22	7.89	-96.99	197.44	185.64	11.81	16.720		
2,600.00	2,591.15	2,555.43	2,551.96	6.64	5.65	5.65	-168.84	11.24	-112.46	227.96	215.74	12.22	18.659		
2,700.00	2,689.96	2,643.23	2,637.84	6.80	5.92	5.92	-167.50	15.10	-130.27	261.20	248.62	12.58	20.770		
2,800.00	2,788.77	2,736.91	2,729.21	6.97	6.19	6.19	-166.28	19.49	-150.51	295.73	282.75	12.99	22.773		
2,900.00	2,887.57	2,830.60	2,820.57	7.14	6.51	6.51	-165.32	23.88	-170.75	330.36	316.91	13.45	24.570		
3,000.00	2,986.38	2,924.28	2,911.94	7.31	6.84	6.84	-164.53	28.27	-190.99	365.05	351.13	13.92	26.217		
3,100.00	3,085.19	3,017.96	3,003.30	7.48	7.18	7.18	-163.88	32.65	-211.22	399.79	385.37	14.42	27.728		
3,200.00	3,184.00	3,111.65	3,094.67	7.66	7.54	7.54	-163.34	37.04	-231.46	434.57	419.64	14.93	29.111		
3,300.00	3,282.81	3,205.33	3,186.03	7.83	7.90	7.90	-162.88	41.43	-251.70	469.38	453.93	15.45	30.380		
3,400.00	3,381.61	3,299.01	3,277.40	8.01	8.28	8.28	-162.48	45.82	-271.94	504.22	488.23	15.98	31.543		
3,500.00	3,480.42	3,392.69	3,368.77	8.19	8.66	8.66	-162.13	50.20	-292.17	539.07	522.54	16.53	32.610		
3,600.00	3,579.23	3,486.38	3,460.13	8.37	9.05	9.05	-161.82	54.59	-312.41	573.93	556.85	17.09	33.592		
3,700.00	3,678.04	3,580.06	3,551.50	8.55	9.44	9.44	-161.55	58.98	-332.65	608.81	591.17	17.65	34.495		
3,800.00	3,776.85	3,673.74	3,642.86	8.73	9.84	9.84	-161.31	63.37	-352.89	643.71	625.48	18.22	35.328		
3,900.00	3,875.65	3,767.43	3,734.23	8.91	10.25	10.25	-161.09	67.75	-373.12	678.61	659.81	18.80	36.096		
4,000.00	3,974.46	3,861.11	3,825.59	9.09	10.65	10.65	-160.90	72.14	-393.36	713.51	694.13	19.39	36.807		
4,100.00	4,073.27	3,954.79	3,916.96	9.28	11.06	11.06	-160.72	76.53	-413.60	748.43	728.45	19.98	37.466		
4,200.00	4,172.08	4,048.48	4,008.33	9.46	11.48	11.48	-160.56	80.92	-433.84	783.35	762.77	20.57	38.077		
4,300.00	4,270.89	4,142.16	4,099.69	9.65	11.90	11.90	-160.41	85.30	-454.08	818.27	797.10	21.17	38.644		
4,400.00	4,369.69	4,235.84	4,191.06	9.83	12.31	12.31	-160.27	89.69	-474.31	853.20	831.42	21.78	39.173		
4,500.00	4,468.50	4,329.52	4,282.42	10.02	12.74	12.74	-160.15	94.08	-494.55	888.13	865.74	22.39	39.665		
4,600.00	4,567.31	4,423.21	4,373.79	10.21	13.16	13.16	-160.03	98.46	-514.79	923.07	900.07	23.01	40.125		
4,700.00	4,666.12	4,516.89	4,465.15	10.40	13.58	13.58	-159.93	102.85	-535.03	958.01	934.39	23.62	40.554		
4,800.00	4,764.93	4,610.57	4,556.52	10.59	14.01	14.01	-159.83	107.24	-555.26	992.95	968.71	24.24	40.957		

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

**ConocoPhillips**  
Anticollision Report

<b>Company:</b>	DELAWARE BASIN EAST	<b>Local Co-ordinate Reference:</b>	Well _COLUMBUS FEDERAL COM 504H - Slot SLOT 6
<b>Project:</b>	LEA COUNT SOUTH WEST (NM-E)	<b>TVD Reference:</b>	KB @ 3362.00usft
<b>Reference Site:</b>	COLUMBUS FEDERAL PROJECT	<b>MD Reference:</b>	KB @ 3362.00usft
<b>Site Error:</b>	0.00 usft	<b>North Reference:</b>	Grid
<b>Reference Well:</b>	_COLUMBUS FEDERAL COM 504H	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.00 usft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	OWB	<b>Database:</b>	EDT 17 Permian Prod
<b>Reference Design:</b>	PWP0	<b>Offset TVD Reference:</b>	Reference Datum

<b>Offset Design:</b>	COLUMBUS FEDERAL PROJECT - COLUMBUS FEDERAL COM 502H - OWB - PWP1										<b>Offset Site Error:</b>	0.00 usft	
<b>Survey Program:</b>	0-r.5 SDI_KPR_WL_NS-CT, 2000-r.5 MWD+IFR1, 10422-r.5 MWD+IFR1+SAG+FDIR										<b>Rule Assigned:</b>	<b>Offset Well Error:</b>	0.00 usft
<b>Reference</b>	<b>Offset</b>	<b>Semi Major Axis</b>		<b>Offset Wellbore Centre</b>		<b>Distance</b>		<b>Rule Assigned:</b>		<b>Warning</b>			
<b>Measured Depth (usft)</b>	<b>Vertical Depth (usft)</b>	<b>Measured Depth (usft)</b>	<b>Vertical Depth (usft)</b>	<b>Reference (usft)</b>	<b>Offset (usft)</b>	<b>Highside Toolface (°)</b>	<b>+N/-S (usft)</b>	<b>+E/-W (usft)</b>	<b>Between Centres (usft)</b>	<b>Between Ellipses (usft)</b>	<b>No-Go Distance (usft)</b>	<b>Separation Factor</b>	

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

### ConocoPhillips Anticollision Report

<b>Company:</b>	DELAWARE BASIN EAST	<b>Local Co-ordinate Reference:</b>	Well _COLUMBUS FEDERAL COM 504H - Slot SLOT 6
<b>Project:</b>	LEA COUNT SOUTH WEST (NM-E)	<b>TVD Reference:</b>	KB @ 3362.00usft
<b>Reference Site:</b>	COLUMBUS FEDERAL PROJECT	<b>MD Reference:</b>	KB @ 3362.00usft
<b>Site Error:</b>	0.00 usft	<b>North Reference:</b>	Grid
<b>Reference Well:</b>	_COLUMBUS FEDERAL COM 504H	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.00 usft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	OWB	<b>Database:</b>	EDT 17 Permian Prod
<b>Reference Design:</b>	PWP0	<b>Offset TVD Reference:</b>	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		Offset Wellbore Centre		Distance		Rule Assigned:		Warning	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	No-Go Distance (usft)	Separation Factor			
5,600.00	5,555.39	5,603.68	5,610.96	12.11	15.40	27.81	244.25	1,504.44	986.09	959.56	26.53	37.169			
5,663.37	5,618.00	5,663.16	5,670.34	12.22	15.54	28.02	245.12	1,501.19	973.99	947.23	26.76	36.391			
5,700.00	5,654.22	5,698.89	5,706.02	12.27	15.62	28.12	245.56	1,499.29	967.17	940.27	26.90	35.957			
5,800.00	5,753.25	5,796.44	5,803.42	12.46	15.84	28.38	246.46	1,494.01	949.51	922.21	27.30	34.780			
5,900.00	5,852.50	5,887.16	5,894.03	12.65	16.04	28.63	246.76	1,489.66	934.01	906.32	27.69	33.728			
6,000.00	5,951.95	5,983.71	5,990.50	12.83	16.24	28.89	246.51	1,485.52	920.61	892.53	28.09	32.780			
6,100.00	6,051.57	6,085.71	6,092.40	13.00	16.45	29.15	246.09	1,481.11	908.72	880.23	28.48	31.903			
6,200.00	6,151.33	6,190.21	6,196.78	13.17	16.68	29.37	245.60	1,476.08	897.88	868.99	28.89	31.079			
6,300.00	6,251.19	6,293.16	6,299.59	13.34	16.91	29.54	245.12	1,470.58	888.05	858.75	29.30	30.312			
6,400.00	6,351.13	6,388.22	6,394.50	13.49	17.12	29.66	244.74	1,465.47	879.70	850.01	29.69	29.633			
6,500.00	6,451.12	6,482.90	6,489.08	13.63	17.34	29.73	244.27	1,461.13	873.66	843.60	30.06	29.063			
6,548.89	6,500.00	6,531.07	6,537.21	13.66	17.44	93.97	243.96	1,459.04	871.38	841.17	30.22	28.836			
6,600.00	6,551.11	6,583.01	6,589.10	13.68	17.56	94.01	243.62	1,456.77	869.18	838.80	30.38	28.613			
6,700.00	6,651.11	6,686.59	6,692.56	13.76	17.79	94.08	242.89	1,451.99	864.63	833.91	30.72	28.142			
6,800.00	6,751.11	6,782.21	6,788.07	13.83	18.00	94.16	241.99	1,447.46	859.98	828.92	31.06	27.689			
6,900.00	6,851.11	6,878.80	6,884.57	13.90	18.21	94.25	240.86	1,443.45	855.91	824.53	31.39	27.270			
7,000.00	6,951.11	6,978.07	6,983.75	13.98	18.41	94.36	239.52	1,439.51	852.06	820.34	31.72	26.865			
7,100.00	7,051.11	7,078.96	7,084.56	14.05	18.62	94.48	238.04	1,435.47	848.18	816.13	32.05	26.464			
7,200.00	7,151.11	7,176.00	7,181.51	14.12	18.82	94.60	236.58	1,431.76	844.48	812.11	32.37	26.085			
7,300.00	7,251.11	7,271.13	7,276.57	14.20	19.02	94.70	235.36	1,428.59	841.26	808.57	32.69	25.735			
7,400.00	7,351.11	7,373.37	7,378.76	14.27	19.24	94.79	234.40	1,425.24	838.08	805.05	33.03	25.376			
7,500.00	7,451.11	7,472.71	7,478.04	14.34	19.46	94.86	233.66	1,421.96	834.85	801.48	33.36	25.022			
7,600.00	7,551.11	7,573.85	7,579.12	14.42	19.69	94.93	232.85	1,418.48	831.48	797.77	33.71	24.666			
7,700.00	7,651.11	7,669.81	7,675.03	14.49	19.92	94.99	232.29	1,415.40	828.34	794.29	34.04	24.332			
7,800.00	7,751.11	7,764.39	7,769.57	14.56	20.12	95.05	231.66	1,412.90	825.77	791.41	34.36	24.034			
7,900.00	7,851.11	7,859.60	7,864.76	14.64	20.31	95.11	230.98	1,411.03	823.87	789.22	34.66	23.772			
8,000.00	7,951.11	7,956.14	7,961.28	14.71	20.49	95.16	230.30	1,409.50	822.35	787.42	34.94	23.538			
8,100.00	8,051.11	8,051.62	8,056.76	14.79	20.64	95.21	229.76	1,408.64	821.50	786.31	35.19	23.346			
8,200.00	8,151.11	8,151.74	8,156.87	14.86	20.79	95.24	229.37	1,407.87	820.77	785.33	35.44	23.159			
8,300.00	8,251.11	8,251.58	8,256.72	14.94	20.94	95.28	228.83	1,407.17	820.12	784.44	35.68	22.983			
8,400.00	8,351.11	8,353.18	8,358.31	15.01	21.08	95.33	228.14	1,406.31	819.34	783.42	35.93	22.805			
8,500.00	8,451.11	8,455.81	8,460.93	15.08	21.24	95.40	227.26	1,405.18	818.33	782.14	36.19	22.612			
8,600.00	8,551.11	8,553.72	8,558.83	15.16	21.39	95.47	226.41	1,403.94	817.16	780.72	36.44	22.426			
8,700.00	8,651.11	8,653.49	8,658.58	15.23	21.52	95.57	225.14	1,402.96	816.30	779.64	36.66	22.266			
8,800.00	8,751.11	8,752.37	8,757.45	15.31	21.64	95.67	223.75	1,401.95	815.42	778.55	36.87	22.116			
8,900.00	8,851.11	8,853.29	8,858.35	15.38	21.76	95.77	222.35	1,401.00	814.62	777.54	37.08	21.969			
9,000.00	8,951.11	8,954.90	8,959.95	15.46	21.96	95.87	221.11	1,399.86	813.63	776.26	37.37	21.771			
9,100.00	9,051.11	9,055.97	9,061.00	15.53	22.15	95.97	219.79	1,398.53	812.46	774.80	37.66	21.573			
9,200.00	9,151.11	9,156.04	9,161.05	15.61	22.31	96.08	218.40	1,397.19	811.27	773.37	37.90	21.403			
9,300.00	9,251.11	9,257.68	9,262.68	15.68	22.48	96.19	216.99	1,395.67	809.93	771.77	38.16	21.223			
9,400.00	9,351.11	9,360.45	9,365.42	15.76	22.68	96.29	215.82	1,393.95	808.39	769.95	38.45	21.026			
9,500.00	9,451.11	9,462.99	9,467.92	15.83	22.89	96.40	214.45	1,391.74	806.40	767.65	38.75	20.811			
9,600.00	9,551.11	9,561.74	9,566.65	15.91	23.11	96.51	213.19	1,389.56	804.35	765.30	39.04	20.601			
9,700.00	9,651.11	9,661.12	9,666.00	15.98	23.32	96.60	212.08	1,387.58	802.49	763.15	39.34	20.398			
9,800.00	9,751.11	9,760.13	9,764.98	16.06	23.54	96.68	211.12	1,385.66	800.68	761.03	39.64	20.197			
9,900.00	9,851.11	9,863.74	9,868.57	16.14	23.77	96.75	210.40	1,383.60	798.79	758.81	39.97	19.983			
10,000.00	9,951.11	9,973.50	9,978.29	16.21	24.05	96.83	209.76	1,380.46	796.02	755.67	40.35	19.727			
10,100.00	10,051.11	10,076.59	10,081.30	16.29	24.34	96.89	209.29	1,376.49	792.25	751.51	40.74	19.447			
10,200.00	10,151.11	10,163.16	10,167.83	16.36	24.56	96.96	208.71	1,373.86	789.31	748.26	41.04	19.231			
10,300.00	10,251.11	10,255.34	10,259.99	16.44	24.75	97.04	207.78	1,372.25	787.70	746.39	41.31	19.069			
10,335.43	10,286.54	10,289.69	10,294.33	16.45	24.80	97.08	207.32	1,371.83	787.32	745.95	41.37	19.030			

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

### ConocoPhillips Anticollision Report

<b>Company:</b>	DELAWARE BASIN EAST	<b>Local Co-ordinate Reference:</b>	Well _COLUMBUS FEDERAL COM 504H - Slot SLOT 6
<b>Project:</b>	LEA COUNT SOUTH WEST (NM-E)	<b>TVD Reference:</b>	KB @ 3362.00usft
<b>Reference Site:</b>	COLUMBUS FEDERAL PROJECT	<b>MD Reference:</b>	KB @ 3362.00usft
<b>Site Error:</b>	0.00 usft	<b>North Reference:</b>	Grid
<b>Reference Well:</b>	_COLUMBUS FEDERAL COM 504H	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.00 usft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	OWB	<b>Database:</b>	EDT 17 Permian Prod
<b>Reference Design:</b>	PWP0	<b>Offset TVD Reference:</b>	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											Rule Assigned:		Offset Well Error:	3.00 usft
Measured Reference Depth (usft)	Vertical Reference Depth (usft)	Measured Offset 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)				
10,350.00	10,301.11	10,303.81	10,308.45	16.45	24.83	-82.52	207.11	1,371.67	787.15	745.76	41.40	19.015		
10,375.00	10,326.07	10,328.03	10,332.66	16.44	24.86	-82.64	206.72	1,371.40	786.75	745.31	41.44	18.987		
10,400.00	10,350.92	10,352.11	10,356.74	16.43	24.90	-82.86	206.28	1,371.16	786.21	744.73	41.47	18.957		
10,425.00	10,375.59	10,375.96	10,380.58	16.41	24.92	-83.18	205.79	1,370.94	785.54	744.04	41.50	18.928		
10,450.00	10,400.02	10,399.61	10,404.23	16.39	24.95	-83.60	205.24	1,370.74	784.76	743.23	41.53	18.895		
10,475.00	10,424.14	10,423.03	10,427.63	16.38	24.97	-84.10	204.63	1,370.56	783.91	742.34	41.57	18.858		
10,500.00	10,447.88	10,446.58	10,451.18	16.36	25.00	-84.70	203.96	1,370.39	782.99	741.39	41.61	18.819		
10,525.00	10,471.17	10,470.57	10,475.15	16.34	25.02	-85.40	203.24	1,370.22	782.03	740.39	41.64	18.780		
10,550.00	10,493.96	10,494.09	10,498.66	16.32	25.04	-86.17	202.51	1,370.03	781.05	739.37	41.68	18.738		
10,575.00	10,516.19	10,517.10	10,521.66	16.31	25.06	-87.01	201.77	1,369.83	780.10	738.39	41.72	18.699		
10,600.00	10,537.78	10,539.28	10,543.83	16.29	25.08	-87.89	201.03	1,369.63	779.24	737.49	41.75	18.663		
10,625.00	10,558.69	10,560.32	10,564.86	16.28	25.10	-88.78	200.33	1,369.44	778.53	736.74	41.79	18.629		
10,650.00	10,578.85	10,580.65	10,585.17	16.27	25.12	-89.68	199.67	1,369.27	778.04	736.21	41.82	18.602		
10,675.00	10,598.20	10,600.20	10,604.71	16.26	25.13	-90.58	199.05	1,369.11	777.82	735.96	41.86	18.583		
10,679.20	10,601.37	10,603.40	10,607.91	16.26	25.14	-90.73	198.95	1,369.09	777.82	735.95	41.86	18.581 CC, ES		
10,700.00	10,616.71	10,618.92	10,623.42	16.25	25.15	-91.46	198.47	1,368.97	777.94	736.06	41.88	18.574 SF		
10,725.00	10,634.31	10,637.64	10,642.13	16.24	25.17	-92.35	197.90	1,368.82	778.46	736.55	41.91	18.575		
10,750.00	10,650.95	10,655.97	10,660.46	16.24	25.19	-93.21	197.33	1,368.66	779.40	737.47	41.93	18.588		
10,775.00	10,666.60	10,673.29	10,677.77	16.24	25.21	-94.01	196.77	1,368.48	780.84	738.90	41.94	18.617		
10,800.00	10,681.20	10,689.55	10,694.02	16.24	25.23	-94.71	196.25	1,368.29	782.82	740.88	41.95	18.662		
10,825.00	10,694.73	10,704.71	10,709.16	16.24	25.25	-95.32	195.75	1,368.09	785.41	743.47	41.94	18.726		
10,850.00	10,707.13	10,718.71	10,723.16	16.25	25.26	-95.80	195.28	1,367.90	788.65	746.72	41.93	18.810		
10,875.00	10,718.38	10,731.28	10,735.72	16.26	25.28	-96.13	194.85	1,367.71	792.58	750.68	41.90	18.915		
10,900.00	10,728.45	10,742.65	10,747.08	16.28	25.30	-96.31	194.46	1,367.54	797.24	755.38	41.87	19.043		
10,925.00	10,737.31	10,752.78	10,757.21	16.29	25.31	-96.33	194.11	1,367.38	802.66	760.84	41.82	19.194		
10,950.00	10,744.93	10,761.66	10,766.07	16.31	25.33	-96.18	193.80	1,367.23	808.85	767.09	41.76	19.370		
10,975.00	10,751.29	10,769.24	10,773.65	16.34	25.34	-95.85	193.53	1,367.10	815.81	774.12	41.68	19.571		
11,000.00	10,756.38	10,775.51	10,779.91	16.36	25.35	-95.32	193.31	1,366.99	823.54	781.94	41.60	19.797		
11,025.00	10,760.19	10,780.44	10,784.84	16.39	25.35	-94.60	193.13	1,366.91	832.02	790.52	41.50	20.047		
11,050.00	10,762.69	10,784.02	10,788.42	16.42	25.36	-93.67	193.00	1,366.84	841.24	799.85	41.40	20.321		
11,075.00	10,763.89	10,786.24	10,790.63	16.46	25.36	-92.54	192.92	1,366.81	851.17	809.88	41.28	20.618		
11,085.43	10,764.01	10,786.75	10,791.15	16.47	25.36	-92.00	192.90	1,366.80	855.50	814.27	41.23	20.748		
11,100.00	10,764.01	10,787.31	10,791.70	16.50	25.36	-92.05	192.88	1,366.79	861.74	820.58	41.16	20.937		
11,200.00	10,764.01	10,791.14	10,795.54	16.67	25.37	-92.33	192.74	1,366.72	909.71	869.07	40.64	22.383		
11,300.00	10,764.00	10,795.01	10,799.40	16.87	25.38	-92.61	192.60	1,366.65	965.67	925.57	40.10	24.079		

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

### ConocoPhillips Anticollision Report

<b>Company:</b>	DELAWARE BASIN EAST	<b>Local Co-ordinate Reference:</b>	Well_COLUMBUS FEDERAL COM 504H - Slot SLOT 6
<b>Project:</b>	LEA COUNT SOUTH WEST (NM-E)	<b>TVD Reference:</b>	KB @ 3362.00usft
<b>Reference Site:</b>	COLUMBUS FEDERAL PROJECT	<b>MD Reference:</b>	KB @ 3362.00usft
<b>Site Error:</b>	0.00 usft	<b>North Reference:</b>	Grid
<b>Reference Well:</b>	_COLUMBUS FEDERAL COM 504H	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.00 usft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	OWB	<b>Database:</b>	EDT 17 Permian Prod
<b>Reference Design:</b>	PWP0	<b>Offset TVD Reference:</b>	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)							
5,600.00	5,555.39	5,603.68	5,610.96	12.11	15.40	27.81	244.25	1,504.44	986.09	959.56	26.53	37.169					
5,663.37	5,618.00	5,663.16	5,670.34	12.22	15.54	28.02	245.12	1,501.19	973.99	947.23	26.76	36.391					
5,700.00	5,654.22	5,698.89	5,706.02	12.27	15.62	28.12	245.56	1,499.29	967.17	940.27	26.90	35.957					
5,800.00	5,753.25	5,796.44	5,803.42	12.46	15.84	28.38	246.46	1,494.01	949.51	922.21	27.30	34.780					
5,900.00	5,852.50	5,887.16	5,894.03	12.65	16.04	28.63	246.76	1,489.66	934.01	906.32	27.69	33.728					
6,000.00	5,951.95	5,983.71	5,990.50	12.83	16.24	28.89	246.51	1,485.52	920.61	892.53	28.09	32.780					
6,100.00	6,051.57	6,085.71	6,092.40	13.00	16.45	29.15	246.09	1,481.11	908.72	880.23	28.48	31.903					
6,200.00	6,151.33	6,190.21	6,196.78	13.17	16.68	29.37	245.60	1,476.08	897.88	868.99	28.89	31.079					
6,300.00	6,251.19	6,293.16	6,299.59	13.34	16.91	29.54	245.12	1,470.58	888.05	858.75	29.30	30.312					
6,400.00	6,351.13	6,388.22	6,394.50	13.49	17.12	29.66	244.74	1,465.47	879.70	850.01	29.69	29.633					
6,500.00	6,451.12	6,482.90	6,489.08	13.63	17.34	29.73	244.27	1,461.13	873.66	843.60	30.06	29.063					
6,548.89	6,500.00	6,531.07	6,537.21	13.66	17.44	93.97	243.96	1,459.04	871.38	841.17	30.22	28.836					
6,600.00	6,551.11	6,583.01	6,589.10	13.68	17.56	94.01	243.62	1,456.77	869.18	838.80	30.38	28.613					
6,700.00	6,651.11	6,686.59	6,692.56	13.76	17.79	94.08	242.89	1,451.99	864.63	833.91	30.72	28.142					
6,800.00	6,751.11	6,782.21	6,788.07	13.83	18.00	94.16	241.99	1,447.46	859.98	828.92	31.06	27.689					
6,900.00	6,851.11	6,878.80	6,884.57	13.90	18.21	94.25	240.86	1,443.45	855.91	824.53	31.39	27.270					
7,000.00	6,951.11	6,978.07	6,983.75	13.98	18.41	94.36	239.52	1,439.51	852.06	820.34	31.72	26.865					
7,100.00	7,051.11	7,078.96	7,084.56	14.05	18.62	94.48	238.04	1,435.47	848.18	816.13	32.05	26.464					
7,200.00	7,151.11	7,176.00	7,181.51	14.12	18.82	94.60	236.58	1,431.76	844.48	812.11	32.37	26.085					
7,300.00	7,251.11	7,271.13	7,276.57	14.20	19.02	94.70	235.36	1,428.59	841.26	808.57	32.69	25.735					
7,400.00	7,351.11	7,373.37	7,378.76	14.27	19.24	94.79	234.40	1,425.24	838.08	805.05	33.03	25.376					
7,500.00	7,451.11	7,472.71	7,478.04	14.34	19.46	94.86	233.66	1,421.96	834.85	801.48	33.36	25.022					
7,600.00	7,551.11	7,573.85	7,579.12	14.42	19.69	94.93	232.85	1,418.48	831.48	797.77	33.71	24.666					
7,700.00	7,651.11	7,669.81	7,675.03	14.49	19.92	94.99	232.29	1,415.40	828.34	794.29	34.04	24.332					
7,800.00	7,751.11	7,764.39	7,769.57	14.56	20.12	95.05	231.66	1,412.90	825.77	791.41	34.36	24.034					
7,900.00	7,851.11	7,859.60	7,864.76	14.64	20.31	95.11	230.98	1,411.03	823.87	789.22	34.66	23.772					
8,000.00	7,951.11	7,956.14	7,961.28	14.71	20.49	95.16	230.30	1,409.50	822.35	787.42	34.94	23.538					
8,100.00	8,051.11	8,051.62	8,056.76	14.79	20.64	95.21	229.76	1,408.64	821.50	786.31	35.19	23.346					
8,200.00	8,151.11	8,151.74	8,156.87	14.86	20.79	95.24	229.37	1,407.87	820.77	785.33	35.44	23.159					
8,300.00	8,251.11	8,251.58	8,256.72	14.94	20.94	95.28	228.83	1,407.17	820.12	784.44	35.68	22.983					
8,400.00	8,351.11	8,353.18	8,358.31	15.01	21.08	95.33	228.14	1,406.31	819.34	783.42	35.93	22.805					
8,500.00	8,451.11	8,455.81	8,460.93	15.08	21.24	95.40	227.26	1,405.18	818.33	782.14	36.19	22.612					
8,600.00	8,551.11	8,553.72	8,558.83	15.16	21.39	95.47	226.41	1,403.94	817.16	780.72	36.44	22.425					
8,700.00	8,651.11	8,653.49	8,658.58	15.23	21.52	95.57	225.14	1,402.96	816.30	779.64	36.66	22.266					
8,800.00	8,751.11	8,752.37	8,757.45	15.31	21.64	95.67	223.75	1,401.95	815.42	778.55	36.87	22.116					
8,900.00	8,851.11	8,853.29	8,858.35	15.38	21.76	95.77	222.35	1,401.00	814.62	777.54	37.08	21.969					
9,000.00	8,951.11	8,954.90	8,959.95	15.46	21.96	95.87	221.11	1,399.86	813.63	776.26	37.37	21.771					
9,100.00	9,051.11	9,055.97	9,061.00	15.53	22.15	95.97	219.79	1,398.53	812.46	774.80	37.66	21.573					
9,200.00	9,151.11	9,156.04	9,161.05	15.61	22.31	96.08	218.40	1,397.19	811.27	773.37	37.90	21.403					
9,300.00	9,251.11	9,257.68	9,262.68	15.68	22.48	96.19	216.99	1,395.67	809.93	771.77	38.16	21.223					
9,400.00	9,351.11	9,360.45	9,365.42	15.76	22.68	96.29	215.82	1,393.95	808.39	769.95	38.45	21.026					
9,500.00	9,451.11	9,462.99	9,467.92	15.83	22.89	96.40	214.45	1,391.74	806.40	767.65	38.75	20.811					
9,600.00	9,551.11	9,561.74	9,566.65	15.91	23.11	96.51	213.19	1,389.56	804.35	765.30	39.04	20.601					
9,700.00	9,651.11	9,661.12	9,666.00	15.98	23.32	96.60	212.08	1,387.58	802.49	763.15	39.34	20.398					
9,800.00	9,751.11	9,760.13	9,764.98	16.06	23.54	96.68	211.12	1,385.66	800.68	761.03	39.64	20.197					
9,900.00	9,851.11	9,863.74	9,868.57	16.14	23.77	96.75	210.40	1,383.60	798.79	758.81	39.97	19.983					
10,000.00	9,951.11	9,973.50	9,978.29	16.21	24.05	96.83	209.76	1,380.46	796.02	755.67	40.35	19.727					
10,100.00	10,051.11	10,076.59	10,081.30	16.29	24.34	96.89	209.29	1,376.49	792.25	751.51	40.74	19.447					
10,200.00	10,151.11	10,163.16	10,167.83	16.36	24.56	96.96	208.71	1,373.86	789.31	748.26	41.04	19.231					
10,300.00	10,251.11	10,255.34	10,259.99	16.44	24.75	97.04	207.78	1,372.25	787.70	746.39	41.31	19.069					
10,335.43	10,286.54	10,289.69	10,294.33	16.45	24.80	97.08	207.32	1,371.83	787.32	745.95	41.37	19.030					

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

### ConocoPhillips Anticollision Report

<b>Company:</b>	DELAWARE BASIN EAST	<b>Local Co-ordinate Reference:</b>	Well _COLUMBUS FEDERAL COM 504H - Slot SLOT 6
<b>Project:</b>	LEA COUNT SOUTH WEST (NM-E)	<b>TVD Reference:</b>	KB @ 3362.00usft
<b>Reference Site:</b>	COLUMBUS FEDERAL PROJECT	<b>MD Reference:</b>	KB @ 3362.00usft
<b>Site Error:</b>	0.00 usft	<b>North Reference:</b>	Grid
<b>Reference Well:</b>	_COLUMBUS FEDERAL COM 504H	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.00 usft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	OWB	<b>Database:</b>	EDT 17 Permian Prod
<b>Reference Design:</b>	PWP0	<b>Offset TVD Reference:</b>	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
Rule Assigned:														
Measured Reference Depth (usft)	Vertical Reference Depth (usft)	Measured Offset Depth (usft)	Vertical Offset 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)				
10,350.00	10,301.11	10,303.81	10,308.45	16.45	24.83	-82.52	207.11	1,371.67	787.15	745.76	41.40	19.015		
10,375.00	10,326.07	10,328.03	10,332.66	16.44	24.86	-82.64	206.72	1,371.40	786.75	745.31	41.44	18.987		
10,400.00	10,350.92	10,352.11	10,356.74	16.43	24.90	-82.86	206.28	1,371.16	786.21	744.73	41.47	18.957		
10,425.00	10,375.59	10,375.96	10,380.58	16.41	24.92	-83.18	205.79	1,370.94	785.54	744.03	41.50	18.928		
10,450.00	10,400.02	10,399.61	10,404.23	16.39	24.95	-83.60	205.24	1,370.74	784.76	743.23	41.53	18.894		
10,475.00	10,424.14	10,423.03	10,427.63	16.38	24.97	-84.10	204.63	1,370.56	783.91	742.34	41.57	18.858		
10,500.00	10,447.88	10,446.58	10,451.18	16.36	25.00	-84.70	203.96	1,370.39	782.99	741.39	41.61	18.819		
10,525.00	10,471.17	10,470.57	10,475.15	16.34	25.02	-85.40	203.24	1,370.22	782.03	740.39	41.64	18.780		
10,550.00	10,493.96	10,494.09	10,498.66	16.32	25.04	-86.17	202.51	1,370.03	781.05	739.37	41.68	18.738		
10,575.00	10,516.19	10,517.10	10,521.66	16.31	25.06	-87.01	201.77	1,369.83	780.10	738.39	41.72	18.699		
10,600.00	10,537.78	10,539.28	10,543.83	16.29	25.08	-87.89	201.03	1,369.63	779.24	737.49	41.75	18.663		
10,625.00	10,558.69	10,560.32	10,564.86	16.28	25.10	-88.78	200.33	1,369.44	778.53	736.74	41.79	18.629		
10,650.00	10,578.85	10,580.65	10,585.17	16.27	25.12	-89.68	199.67	1,369.27	778.04	736.21	41.82	18.602		
10,675.00	10,598.20	10,600.20	10,604.71	16.26	25.14	-90.58	199.05	1,369.11	777.82	735.96	41.86	18.583		
10,679.20	10,601.37	10,603.40	10,607.91	16.26	25.14	-90.73	198.95	1,369.09	777.82	735.95	41.86	18.581 CC, ES		
10,700.00	10,616.71	10,618.92	10,623.42	16.25	25.15	-91.46	198.47	1,368.97	777.94	736.06	41.88	18.574 SF		
10,725.00	10,634.31	10,637.64	10,642.13	16.24	25.17	-92.35	197.90	1,368.82	778.46	736.55	41.91	18.575		
10,750.00	10,650.95	10,655.97	10,660.46	16.24	25.19	-93.21	197.33	1,368.66	779.40	737.47	41.93	18.588		
10,775.00	10,666.60	10,673.29	10,677.77	16.24	25.21	-94.01	196.77	1,368.48	780.84	738.90	41.94	18.617		
10,800.00	10,681.20	10,689.55	10,694.02	16.24	25.23	-94.71	196.25	1,368.29	782.82	740.88	41.95	18.662		
10,825.00	10,694.73	10,704.71	10,709.16	16.24	25.25	-95.32	195.75	1,368.09	785.41	743.47	41.94	18.726		
10,850.00	10,707.13	10,718.71	10,723.16	16.25	25.26	-95.80	195.28	1,367.90	788.65	746.72	41.93	18.810		
10,875.00	10,718.38	10,731.28	10,735.72	16.26	25.28	-96.13	194.85	1,367.71	792.58	750.68	41.90	18.915		
10,900.00	10,728.45	10,742.65	10,747.08	16.28	25.30	-96.31	194.46	1,367.54	797.24	755.38	41.87	19.043		
10,925.00	10,737.31	10,752.78	10,757.21	16.29	25.31	-96.33	194.11	1,367.38	802.66	760.84	41.82	19.194		
10,950.00	10,744.93	10,761.66	10,766.07	16.31	25.33	-96.18	193.80	1,367.23	808.85	767.09	41.76	19.370		
10,975.00	10,751.29	10,769.24	10,773.65	16.34	25.34	-95.85	193.53	1,367.10	815.81	774.12	41.68	19.571		
11,000.00	10,756.38	10,775.51	10,779.91	16.36	25.35	-95.32	193.31	1,366.99	823.54	781.94	41.60	19.797		
11,025.00	10,760.19	10,780.44	10,784.84	16.39	25.35	-94.60	193.13	1,366.91	832.02	790.52	41.50	20.047		
11,050.00	10,762.69	10,784.02	10,788.42	16.42	25.36	-93.67	193.00	1,366.84	841.24	799.85	41.40	20.321		
11,075.00	10,763.89	10,786.24	10,790.63	16.46	25.36	-92.54	192.92	1,366.81	851.17	809.88	41.28	20.618		
11,085.43	10,764.01	10,786.75	10,791.15	16.47	25.36	-92.00	192.90	1,366.80	855.50	814.27	41.23	20.748		
11,100.00	10,764.01	10,787.31	10,791.70	16.50	25.36	-92.05	192.88	1,366.79	861.74	820.58	41.16	20.937		
11,200.00	10,764.01	10,791.14	10,795.54	16.67	25.37	-92.33	192.74	1,366.72	909.71	869.07	40.64	22.383		
11,300.00	10,764.00	10,795.01	10,799.40	16.87	25.38	-92.61	192.60	1,366.65	965.67	925.57	40.10	24.079		

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

### ConocoPhillips Anticollision Report

<b>Company:</b>	DELAWARE BASIN EAST	<b>Local Co-ordinate Reference:</b>	Well _COLUMBUS FEDERAL COM 504H - Slot SLOT 6
<b>Project:</b>	LEA COUNT SOUTH WEST (NM-E)	<b>TVD Reference:</b>	KB @ 3362.00usft
<b>Reference Site:</b>	COLUMBUS FEDERAL PROJECT	<b>MD Reference:</b>	KB @ 3362.00usft
<b>Site Error:</b>	0.00 usft	<b>North Reference:</b>	Grid
<b>Reference Well:</b>	_COLUMBUS FEDERAL COM 504H	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.00 usft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	OWB	<b>Database:</b>	EDT 17 Permian Prod
<b>Reference Design:</b>	PWP0	<b>Offset TVD Reference:</b>	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	74.39	194.99	697.74	724.52						
100.00	100.00	95.27	103.27	0.77	3.00	74.38	194.96	697.53	724.27	719.46	4.80	150.797			
185.56	185.56	177.57	185.57	1.34	3.02	74.37	194.96	697.11	723.86	718.77	5.08	142.371			
200.00	200.00	190.03	198.03	1.44	3.02	74.37	195.03	697.11	723.88	718.73	5.15	140.645			
300.00	300.00	281.06	289.05	1.88	3.08	74.30	196.12	697.84	724.95	719.44	5.51	131.530			
400.00	400.00	379.34	387.31	2.25	3.17	74.23	197.41	699.18	726.62	720.72	5.90	123.144			
500.00	500.00	481.90	489.85	2.56	3.31	74.18	198.55	700.63	728.29	721.98	6.31	115.336			
600.00	600.00	585.12	593.07	2.84	3.48	74.15	199.24	701.64	729.41	722.67	6.75	108.124			
700.00	700.00	687.69	695.63	3.10	3.67	74.15	199.37	702.44	730.20	723.01	7.19	101.584			
800.00	800.00	793.87	801.81	3.34	3.90	74.18	199.10	702.75	730.41	722.77	7.64	95.569			
900.00	900.00	897.15	905.09	3.57	4.13	74.19	198.84	702.30	729.92	721.83	8.10	90.169			
1,000.00	1,000.00	996.86	1,004.80	3.79	4.37	74.19	198.68	701.63	729.23	720.69	8.55	85.318			
1,100.00	1,100.00	1,094.60	1,102.54	3.99	4.63	74.18	198.61	701.16	728.75	719.75	9.00	80.965			
1,200.00	1,200.00	1,193.52	1,201.46	4.19	4.89	74.18	198.55	700.85	728.43	718.96	9.46	76.977			
1,249.06	1,249.06	1,241.12	1,249.06	4.28	5.03	74.18	198.58	700.79	728.38	718.69	9.69	75.185			
1,300.00	1,300.00	1,291.31	1,299.24	4.38	5.17	74.17	198.72	700.79	728.42	718.50	9.93	73.383			
1,400.00	1,400.00	1,393.46	1,401.39	4.56	5.47	74.14	199.02	700.65	728.37	717.96	10.41	69.987			
1,500.00	1,500.00	1,493.65	1,501.58	4.74	5.76	74.11	199.32	700.30	728.11	717.22	10.89	66.887			
1,600.00	1,599.98	1,592.53	1,600.46	5.01	6.07	54.21	199.65	700.09	726.98	715.59	11.39	63.811			
1,700.00	1,699.84	1,692.51	1,700.44	5.27	6.38	54.56	200.10	699.88	723.85	711.95	11.90	60.816			
1,750.00	1,749.68	1,742.34	1,750.27	5.32	6.53	54.83	200.34	699.78	721.54	709.43	12.11	59.590			
1,800.00	1,799.48	1,792.10	1,800.03	5.36	6.69	44.48	200.58	699.67	718.59	706.27	12.32	58.341			
1,900.00	1,898.97	1,891.22	1,899.15	5.55	7.01	28.08	201.06	699.48	710.33	697.52	12.82	55.420			
2,000.00	1,998.21	1,990.95	1,998.88	5.74	7.33	17.01	201.61	699.30	698.91	685.57	13.33	52.415			
2,065.66	2,063.18	2,055.91	2,063.83	5.81	7.54	11.79	202.05	699.12	689.63	676.00	13.63	50.582			
2,100.00	2,097.11	2,089.74	2,097.67	5.83	7.65	11.86	202.31	699.02	684.42	670.65	13.78	49.678			
2,200.00	2,195.92	2,187.31	2,195.23	5.99	7.97	12.06	203.06	698.84	669.36	655.09	14.27	46.918			
2,300.00	2,294.73	2,285.47	2,293.39	6.15	8.30	12.26	203.92	698.79	654.46	639.69	14.76	44.330			
2,400.00	2,393.53	2,383.36	2,391.27	6.31	8.62	12.46	204.94	698.80	639.67	624.40	15.26	41.909			
2,500.00	2,492.34	2,480.05	2,487.96	6.47	8.94	12.65	206.23	699.09	625.23	609.47	15.76	39.667			
2,600.00	2,591.15	2,581.72	2,589.62	6.64	9.29	12.86	207.56	699.25	610.65	594.36	16.28	37.501			
2,700.00	2,689.96	2,680.37	2,688.26	6.80	9.62	13.07	208.78	699.15	595.82	579.02	16.80	35.470			
2,800.00	2,788.77	2,776.66	2,784.54	6.97	9.95	13.27	210.22	699.35	581.35	564.04	17.31	33.593			
2,900.00	2,887.57	2,874.27	2,882.13	7.14	10.28	13.46	211.97	699.83	567.21	549.39	17.82	31.829			
3,000.00	2,986.38	2,971.08	2,978.92	7.31	10.61	13.65	213.74	700.51	553.31	534.98	18.33	30.179			
3,100.00	3,085.19	3,068.55	3,076.37	7.48	10.94	13.87	215.54	701.72	539.93	521.08	18.85	28.643			
3,200.00	3,184.00	3,166.00	3,173.80	7.66	11.27	14.23	216.21	703.24	526.65	507.29	19.36	27.199			
3,300.00	3,282.81	3,266.82	3,274.60	7.83	11.60	14.65	216.71	705.21	513.72	493.83	19.89	25.829			
3,400.00	3,381.61	3,368.46	3,376.24	8.01	11.95	15.06	217.35	706.34	500.03	479.61	20.42	24.484			
3,500.00	3,480.42	3,466.53	3,474.29	8.19	12.29	15.45	218.21	707.30	486.28	465.34	20.95	23.215			
3,600.00	3,579.23	3,564.43	3,572.18	8.37	12.62	15.83	219.34	708.47	472.82	451.35	21.47	22.020			
3,700.00	3,678.04	3,670.97	3,678.71	8.55	12.99	16.26	220.50	709.17	458.85	436.82	22.03	20.828			
3,800.00	3,776.85	3,774.27	3,782.01	8.73	13.34	16.76	221.02	708.31	443.33	420.76	22.57	19.642			
3,900.00	3,875.65	3,864.00	3,871.73	8.91	13.64	17.30	220.99	708.09	428.37	405.30	23.06	18.573			
4,000.00	3,974.46	3,960.28	3,968.00	9.09	13.97	18.02	220.36	709.30	414.82	391.25	23.57	17.599			
4,100.00	4,073.27	4,063.56	4,071.27	9.28	14.32	18.76	220.31	710.32	401.16	377.05	24.11	16.638			
4,200.00	4,172.08	4,164.57	4,172.28	9.46	14.67	19.41	221.01	710.61	386.97	362.32	24.65	15.699			
4,300.00	4,270.89	4,268.89	4,276.59	9.65	15.02	20.32	220.41	709.64	371.48	346.30	25.18	14.752			
4,400.00	4,369.69	4,365.41	4,373.09	9.83	15.34	21.35	219.08	708.32	355.60	329.92	25.69	13.844			
4,500.00	4,468.50	4,460.05	4,467.72	10.02	15.65	22.51	217.54	708.30	341.15	314.97	26.18	13.029			
4,600.00	4,567.31	4,558.10	4,565.76	10.21	15.98	23.80	216.05	708.65	327.25	300.56	26.69	12.262			

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

### ConocoPhillips Anticollision Report

<b>Company:</b>	DELAWARE BASIN EAST	<b>Local Co-ordinate Reference:</b>	Well_COLUMBUS FEDERAL COM 504H - Slot SLOT 6
<b>Project:</b>	LEA COUNT SOUTH WEST (NM-E)	<b>TVD Reference:</b>	KB @ 3362.00usft
<b>Reference Site:</b>	COLUMBUS FEDERAL PROJECT	<b>MD Reference:</b>	KB @ 3362.00usft
<b>Site Error:</b>	0.00 usft	<b>North Reference:</b>	Grid
<b>Reference Well:</b>	_COLUMBUS FEDERAL COM 504H	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.00 usft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	OWB	<b>Database:</b>	EDT 17 Permian Prod
<b>Reference Design:</b>	PWP0	<b>Offset TVD Reference:</b>	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	4,666.12	4,654.46	4,662.09	10.40	16.30	25.32	213.79	709.49	314.03	286.85	27.19	11.552			
4,800.00	4,764.93	4,751.97	4,759.56	10.59	16.63	27.04	211.24	711.13	301.87	274.18	27.68	10.904			
4,900.00	4,863.73	4,852.07	4,859.63	10.77	16.97	28.59	210.45	712.74	289.83	261.63	28.20	10.278			
5,000.00	4,962.54	4,951.29	4,958.85	10.96	17.31	30.11	210.37	714.02	277.66	248.95	28.71	9.671			
5,100.00	5,061.35	5,049.78	5,057.33	11.15	17.65	31.77	210.26	715.42	265.83	236.61	29.22	9.098			
5,200.00	5,160.16	5,148.64	5,156.17	11.34	17.99	33.60	210.02	716.94	254.38	224.66	29.72	8.558			
5,300.00	5,258.97	5,247.99	5,255.51	11.54	18.33	35.62	209.77	718.42	243.17	212.94	30.23	8.045			
5,400.00	5,357.77	5,346.37	5,353.89	11.73	18.67	37.77	209.69	719.91	232.27	201.55	30.72	7.560			
5,500.00	5,456.58	5,445.58	5,453.08	11.92	19.02	40.15	209.52	721.56	221.90	190.69	31.21	7.109			
5,600.00	5,555.39	5,544.99	5,552.47	12.11	19.36	42.78	209.35	723.04	211.78	180.08	31.70	6.680			
5,663.37	5,618.00	5,607.49	5,614.97	12.22	19.58	44.57	209.25	723.94	205.58	173.59	32.00	6.425			
5,700.00	5,654.22	5,643.62	5,651.09	12.27	19.70	45.61	209.17	724.49	202.22	170.06	32.16	6.288			
5,800.00	5,753.25	5,743.12	5,750.58	12.46	20.05	48.40	208.92	725.94	194.14	161.50	32.64	5.948			
5,900.00	5,852.50	5,842.26	5,849.72	12.65	20.39	51.00	208.70	727.41	187.68	154.56	33.12	5.667			
6,000.00	5,951.95	5,942.17	5,949.61	12.83	20.74	53.40	208.40	728.83	182.67	149.07	33.60	5.437			
6,100.00	6,051.57	6,043.10	6,050.53	13.00	21.09	55.46	208.39	729.96	178.59	144.50	34.09	5.239			
6,200.00	6,151.33	6,144.88	6,152.31	13.17	21.45	56.96	209.42	730.55	174.71	140.12	34.58	5.052			
6,300.00	6,251.19	6,245.78	6,253.20	13.34	21.80	58.03	210.88	730.29	170.91	135.84	35.08	4.873			
6,400.00	6,351.13	6,345.81	6,353.22	13.49	22.15	58.73	212.21	729.72	167.90	132.34	35.57	4.721			
6,500.00	6,451.12	6,445.97	6,453.36	13.63	22.50	58.93	213.62	729.08	165.70	129.64	36.06	4.595			
6,548.89	6,500.00	6,494.90	6,502.29	13.66	22.67	123.08	214.30	728.72	164.92	128.63	36.29	4.545			
6,600.00	6,551.11	6,546.03	6,553.42	13.68	22.85	122.96	214.99	728.32	164.21	127.68	36.53	4.496			
6,700.00	6,651.11	6,646.04	6,653.41	13.76	23.19	122.71	216.34	727.51	162.80	125.79	37.01	4.398			
6,800.00	6,751.11	6,746.03	6,753.39	13.83	23.54	122.46	217.69	726.70	161.39	123.89	37.50	4.304			
6,900.00	6,851.11	6,846.35	6,853.69	13.90	23.89	122.23	219.04	725.79	159.91	121.92	37.99	4.209			
7,000.00	6,951.11	6,945.98	6,953.31	13.98	24.24	122.06	220.26	724.75	158.37	119.90	38.47	4.116			
7,100.00	7,051.11	7,045.95	7,053.27	14.05	24.59	121.95	221.23	723.75	157.01	118.05	38.96	4.030			
7,200.00	7,151.11	7,145.97	7,153.29	14.12	24.93	121.90	222.08	722.65	155.62	116.18	39.44	3.946			
7,300.00	7,251.11	7,246.02	7,253.32	14.20	25.28	121.92	222.77	721.43	154.23	114.30	39.92	3.863			
7,400.00	7,351.11	7,346.49	7,353.78	14.27	25.63	121.94	223.59	720.03	152.61	112.20	40.41	3.777			
7,500.00	7,451.11	7,446.47	7,453.75	14.34	25.97	121.96	224.47	718.52	150.87	109.97	40.89	3.689			
7,600.00	7,551.11	7,546.45	7,553.71	14.42	26.32	121.99	225.31	717.00	149.12	107.75	41.38	3.604			
7,700.00	7,651.11	7,646.53	7,653.77	14.49	26.67	122.04	226.15	715.45	147.37	105.51	41.86	3.521			
7,800.00	7,751.11	7,746.64	7,753.87	14.56	27.02	122.14	226.92	713.73	145.50	103.16	42.34	3.436			
7,900.00	7,851.11	7,846.62	7,853.83	14.64	27.36	122.28	227.63	711.94	143.61	100.79	42.83	3.353			
8,000.00	7,951.11	7,946.60	7,953.79	14.71	27.71	122.41	228.36	710.17	141.72	98.41	43.31	3.272			
8,100.00	8,051.11	8,046.58	8,053.75	14.79	28.06	122.55	229.09	708.39	139.84	96.04	43.80	3.193			
8,200.00	8,151.11	8,146.74	8,153.89	14.86	28.41	122.70	229.81	706.57	137.91	93.62	44.28	3.114			
8,300.00	8,251.11	8,246.58	8,253.72	14.94	28.75	122.86	230.58	704.68	135.91	91.14	44.77	3.036			
8,400.00	8,351.11	8,346.28	8,353.39	15.01	29.10	123.05	231.19	702.93	134.10	88.84	45.26	2.963 Normal Operations			
8,500.00	8,451.11	8,446.15	8,453.25	15.08	29.45	123.30	231.60	701.24	132.46	86.71	45.74	2.896 Normal Operations			
8,600.00	8,551.11	8,545.40	8,552.49	15.16	29.79	123.58	231.79	699.76	131.11	84.88	46.22	2.836 Normal Operations			
8,700.00	8,651.11	8,644.96	8,652.04	15.23	30.14	123.84	231.78	698.72	130.25	83.54	46.71	2.789 Normal Operations			
8,800.00	8,751.11	8,745.24	8,752.31	15.31	30.49	124.13	231.72	697.65	129.39	82.20	47.19	2.742 Normal Operations			
8,900.00	8,851.11	8,844.93	8,852.00	15.38	30.83	124.42	231.59	696.66	128.64	80.97	47.68	2.698 Normal Operations			
9,000.00	8,951.11	8,945.21	8,952.27	15.46	31.18	124.73	231.53	695.56	127.77	79.61	48.16	2.653 Normal Operations			
9,100.00	9,051.11	9,045.13	9,052.19	15.53	31.53	125.00	231.48	694.57	127.00	78.35	48.65	2.610 Normal Operations			
9,200.00	9,151.11	9,145.66	9,152.71	15.61	31.88	125.28	231.62	693.30	125.88	76.74	49.14	2.562 Normal Operations			
9,300.00	9,251.11	9,245.76	9,252.80	15.68	32.23	125.49	232.01	691.96	124.56	74.93	49.63	2.510 Normal Operations			
9,400.00	9,351.11	9,345.66	9,352.70	15.76	32.58	125.60	232.59	690.72	123.21	73.09	50.12	2.458 Caution - Monitor Closely			

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

### ConocoPhillips Anticollision Report

<b>Company:</b>	DELAWARE BASIN EAST	<b>Local Co-ordinate Reference:</b>	Well _COLUMBUS FEDERAL COM 504H - Slot SLOT 6
<b>Project:</b>	LEA COUNT SOUTH WEST (NM-E)	<b>TVD Reference:</b>	KB @ 3362.00usft
<b>Reference Site:</b>	COLUMBUS FEDERAL PROJECT	<b>MD Reference:</b>	KB @ 3362.00usft
<b>Site Error:</b>	0.00 usft	<b>North Reference:</b>	Grid
<b>Reference Well:</b>	_COLUMBUS FEDERAL COM 504H	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.00 usft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	OWB	<b>Database:</b>	EDT 17 Permian Prod
<b>Reference Design:</b>	PWP0	<b>Offset TVD Reference:</b>	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)				
9,500.00	9,451.11	9,445.44	9,452.46	15.83	32.93	125.69	233.13	689.64	122.02	71.40	50.62	2.411	Caution - Monitor Closely	
9,600.00	9,551.11	9,545.07	9,552.09	15.91	33.28	125.72	233.65	688.81	121.04	69.93	51.11	2.368	Caution - Monitor Closely	
9,678.45	9,629.56	9,622.54	9,629.56	15.97	33.55	125.75	233.82	688.45	120.64	69.15	51.49	2.343	Caution - Monitor Closely	
9,700.00	9,651.11	9,643.72	9,650.74	15.98	33.62	125.80	233.72	688.42	120.68	69.08	51.59	2.339	Caution - Monitor Closely	
9,800.00	9,751.11	9,743.19	9,750.20	16.06	33.96	126.19	232.67	688.47	121.33	69.26	52.07	2.330	Caution - Monitor Closely	
9,900.00	9,851.11	9,843.83	9,850.84	16.14	34.31	126.65	231.56	688.33	121.88	69.33	52.55	2.319	Caution - Monitor Closely	
10,000.00	9,951.11	9,944.65	9,951.65	16.21	34.65	127.27	230.57	687.45	121.77	68.73	53.04	2.296	Caution - Monitor Closely	
10,100.00	10,051.11	10,044.63	10,051.62	16.29	35.00	128.10	229.44	686.02	121.33	67.81	53.52	2.267	Caution - Monitor Closely	
10,200.00	10,151.11	10,144.73	10,151.69	16.36	35.34	128.94	228.34	684.56	120.88	66.88	54.01	2.238	Caution - Monitor Closely	
10,300.00	10,251.11	10,244.73	10,251.67	16.44	35.69	129.79	227.26	683.05	120.40	65.91	54.49	2.210	Caution - Monitor Closely	
10,335.43	10,286.54	10,280.09	10,287.02	16.45	35.81	130.14	226.80	682.47	120.24	65.59	54.65	2.200	Caution - Monitor Closely	
10,350.00	10,301.11	10,294.63	10,301.57	16.45	35.86	-49.39	226.59	682.22	120.04	65.32	54.72	2.194	Caution - Monitor Closely	
10,375.00	10,326.07	10,319.56	10,326.49	16.44	35.95	-49.72	226.21	681.78	119.03	64.20	54.83	2.171	Caution - Monitor Closely	
10,400.00	10,350.92	10,344.37	10,351.29	16.43	36.03	-50.61	225.81	681.34	117.20	62.25	54.95	2.133	Caution - Monitor Closely	
10,425.00	10,375.59	10,369.01	10,375.93	16.41	36.12	-52.11	225.40	680.91	114.59	59.53	55.06	2.081	Caution - Monitor Closely	
10,450.00	10,400.02	10,393.44	10,400.34	16.39	36.20	-54.26	224.99	680.52	111.29	56.11	55.18	2.017	Caution - Monitor Closely	
10,475.00	10,424.14	10,417.57	10,424.48	16.38	36.29	-57.15	224.58	680.14	107.42	52.11	55.30	1.942	Caution - Monitor Closely	
10,500.00	10,447.88	10,441.58	10,448.47	16.36	36.37	-60.88	224.19	679.77	103.12	47.68	55.43	1.860	Caution - Monitor Closely	
10,525.00	10,471.17	10,465.14	10,472.03	16.34	36.45	-65.50	223.85	679.39	98.61	43.03	55.58	1.774	Caution - Monitor Closely	
10,550.00	10,493.96	10,488.17	10,495.06	16.32	36.53	-71.06	223.54	679.01	94.23	38.50	55.73	1.691	Caution - Monitor Closely	
10,575.00	10,516.19	10,510.62	10,517.50	16.31	36.61	-77.51	223.28	678.61	90.41	34.51	55.90	1.617	Caution - Monitor Closely	
10,600.00	10,537.78	10,532.40	10,539.27	16.29	36.68	-84.67	223.03	678.22	87.72	31.64	56.08	1.564	Caution - Monitor Closely	
10,624.01	10,557.87	10,552.68	10,559.55	16.28	36.75	-91.95	222.79	677.84	86.75	30.48	56.27	1.542	Caution - Monitor Closely, CC	
10,625.00	10,558.69	10,553.51	10,560.38	16.28	36.76	-92.26	222.78	677.83	86.75	30.47	56.28	1.541	Caution - Monitor Closely, ES, SF	
10,650.00	10,578.85	10,573.89	10,580.76	16.27	36.83	-99.88	222.53	677.43	88.07	31.61	56.46	1.560	Caution - Monitor Closely	
10,675.00	10,598.20	10,593.51	10,600.37	16.26	36.90	-107.13	222.28	677.04	92.08	35.45	56.63	1.626	Caution - Monitor Closely	
10,700.00	10,616.71	10,612.23	10,619.08	16.25	36.96	-113.68	222.03	676.67	98.91	42.16	56.75	1.743	Caution - Monitor Closely	
10,725.00	10,634.31	10,629.95	10,636.80	16.24	37.02	-119.32	221.80	676.32	108.50	51.65	56.85	1.909	Caution - Monitor Closely	
10,750.00	10,650.95	10,646.72	10,653.57	16.24	37.08	-124.03	221.58	676.01	120.56	63.65	56.91	2.118	Caution - Monitor Closely	
10,775.00	10,666.60	10,662.51	10,669.35	16.24	37.14	-127.83	221.38	675.73	134.78	77.82	56.96	2.366	Caution - Monitor Closely	
10,800.00	10,681.20	10,677.25	10,684.09	16.24	37.19	-130.78	221.20	675.48	150.82	93.82	57.01	2.646	Normal Operations	
10,825.00	10,694.73	10,690.93	10,697.76	16.24	37.23	-132.94	221.04	675.27	168.41	111.37	57.04	2.952	Normal Operations	
10,850.00	10,707.13	10,703.55	10,710.38	16.25	37.28	-134.38	220.89	675.07	187.31	130.23	57.07	3.282		
10,875.00	10,718.38	10,715.11	10,721.94	16.26	37.32	-135.12	220.75	674.90	207.31	150.21	57.10	3.631		
10,900.00	10,728.45	10,725.50	10,732.33	16.28	37.35	-135.14	220.62	674.75	228.25	171.12	57.13	3.995		
10,925.00	10,737.31	10,734.70	10,741.53	16.29	37.39	-134.38	220.50	674.63	250.00	192.85	57.15	4.374		
10,950.00	10,744.93	10,742.69	10,749.51	16.31	37.41	-132.72	220.39	674.52	272.42	215.25	57.17	4.765		
10,975.00	10,751.29	10,749.42	10,756.24	16.34	37.44	-129.96	220.30	674.43	295.42	238.23	57.19	5.166		
11,000.00	10,756.38	10,754.88	10,761.71	16.36	37.46	-125.81	220.23	674.35	318.89	261.68	57.21	5.574		
11,025.00	10,760.19	10,759.06	10,765.88	16.39	37.47	-119.80	220.17	674.30	342.73	285.52	57.22	5.990		
11,050.00	10,762.69	10,761.94	10,768.76	16.42	37.48	-111.38	220.13	674.26	366.87	309.64	57.22	6.411		
11,075.00	10,763.89	10,763.51	10,770.33	16.46	37.49	-100.09	220.11	674.24	391.20	333.98	57.22	6.837		
11,085.43	10,764.01	10,763.77	10,770.59	16.47	37.49	-94.53	220.10	674.24	401.39	344.17	57.22	7.015		
11,100.00	10,764.01	10,763.98	10,770.80	16.50	37.49	-94.67	220.10	674.23	415.66	358.44	57.22	7.264		
11,200.00	10,764.01	10,765.40	10,772.22	16.67	37.49	-95.65	220.08	674.22	514.02	456.81	57.21	8.985		
11,300.00	10,764.00	10,766.84	10,773.66	16.87	37.50	-96.63	220.06	674.20	612.91	555.70	57.21	10.713		
11,400.00	10,764.00	10,768.29	10,775.11	17.10	37.50	-97.62	220.04	674.18	712.10	654.89	57.21	12.446		
11,500.00	10,764.00	10,769.74	10,776.56	17.36	37.51	-98.60	220.02	674.16	811.49	754.27	57.22	14.182		
11,600.00	10,764.00	10,771.21	10,778.03	17.65	37.51	-99.60	220.00	674.14	911.01	853.78	57.23	15.918		

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

### ConocoPhillips Anticollision Report

<b>Company:</b>	DELAWARE BASIN EAST	<b>Local Co-ordinate Reference:</b>	Well _COLUMBUS FEDERAL COM 504H - Slot SLOT 6
<b>Project:</b>	LEA COUNT SOUTH WEST (NM-E)	<b>TVD Reference:</b>	KB @ 3362.00usft
<b>Reference Site:</b>	COLUMBUS FEDERAL PROJECT	<b>MD Reference:</b>	KB @ 3362.00usft
<b>Site Error:</b>	0.00 usft	<b>North Reference:</b>	Grid
<b>Reference Well:</b>	_COLUMBUS FEDERAL COM 504H	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.00 usft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	OWB	<b>Database:</b>	EDT 17 Permian Prod
<b>Reference Design:</b>	PWP0	<b>Offset TVD Reference:</b>	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)				
0.00	0.00	0.00	8.00	0.00	3.00	71.91	194.29	594.84	625.82					
100.00	100.00	87.32	95.32	0.77	3.00	71.90	194.50	595.11	626.11	621.31	4.80	130.465		
200.00	200.00	185.96	193.96	1.44	3.01	71.88	195.01	595.88	627.01	621.88	5.13	122.321		
300.00	300.00	283.85	291.84	1.88	3.02	71.87	195.47	596.88	628.12	622.68	5.44	115.399		
400.00	400.00	383.43	391.41	2.25	3.04	71.88	195.73	598.21	629.48	623.73	5.75	109.440		
500.00	500.00	483.36	491.33	2.56	3.07	71.93	195.61	599.69	630.85	624.80	6.05	104.230		
600.00	600.00	584.66	592.62	2.84	3.10	71.98	195.50	601.10	632.14	625.79	6.35	99.588		
700.00	700.00	688.71	696.66	3.10	3.14	72.02	195.39	602.10	633.01	626.38	6.64	95.386		
800.00	800.00	785.95	793.90	3.34	3.19	72.05	195.29	602.83	633.70	626.78	6.92	91.611		
900.00	900.00	887.67	895.61	3.57	3.24	72.08	195.21	603.80	634.59	627.39	7.20	88.185		
1,000.00	1,000.00	985.88	993.82	3.79	3.30	72.12	195.08	604.66	635.38	627.91	7.47	85.064		
1,100.00	1,100.00	1,080.19	1,088.13	3.99	3.37	72.13	195.32	605.95	636.76	629.02	7.74	82.255		
1,200.00	1,200.00	1,175.08	1,182.99	4.19	3.44	72.15	195.84	608.05	639.04	631.03	8.01	79.763		
1,300.00	1,300.00	1,272.87	1,280.73	4.38	3.51	72.17	196.42	610.83	641.93	633.64	8.28	77.511		
1,400.00	1,400.00	1,374.56	1,382.38	4.56	3.60	72.24	196.66	613.89	644.86	636.30	8.55	75.400		
1,500.00	1,500.00	1,481.07	1,488.86	4.74	3.69	72.26	197.12	616.30	647.15	638.33	8.83	73.331		
1,600.00	1,599.98	1,586.31	1,594.09	5.01	3.76	52.33	198.17	617.38	647.37	638.24	9.13	70.904		
1,700.00	1,699.84	1,687.75	1,695.52	5.27	3.82	52.65	199.37	617.81	644.94	635.52	9.41	68.517		
1,750.00	1,749.68	1,738.93	1,746.70	5.32	3.84	52.90	200.16	617.88	642.85	633.37	9.48	67.807		
1,800.00	1,799.48	1,790.33	1,798.08	5.36	3.86	42.53	201.09	617.78	640.00	630.45	9.55	67.036		
1,900.00	1,898.97	1,889.39	1,897.12	5.55	3.90	26.02	203.06	617.42	631.83	622.05	9.77	64.642		
2,000.00	1,998.21	1,994.07	2,001.79	5.74	3.92	14.84	204.78	616.81	620.20	610.19	10.01	61.988		
2,065.66	2,063.18	2,059.61	2,067.33	5.81	3.92	9.57	205.45	616.16	610.48	600.39	10.09	60.505		
2,100.00	2,097.11	2,093.66	2,101.37	5.83	3.92	9.61	205.75	615.83	605.03	594.92	10.11	59.817		
2,200.00	2,195.92	2,192.87	2,200.57	5.99	3.92	9.75	206.67	614.79	589.12	578.83	10.29	57.259		
2,300.00	2,294.73	2,292.49	2,300.17	6.15	3.92	9.88	207.68	613.60	573.08	562.62	10.47	54.751		
2,400.00	2,393.53	2,391.80	2,399.47	6.31	3.94	10.00	208.84	612.23	556.92	546.27	10.65	52.285		
2,500.00	2,492.34	2,487.50	2,495.15	6.47	3.97	10.07	210.47	610.95	540.95	530.09	10.85	49.846		
2,600.00	2,591.15	2,584.39	2,592.01	6.64	4.02	10.10	212.56	610.03	525.46	514.40	11.07	47.478		
2,700.00	2,689.96	2,681.73	2,689.32	6.80	4.08	10.13	214.89	609.35	510.29	498.99	11.29	45.187		
2,800.00	2,788.77	2,782.59	2,790.16	6.97	4.15	10.20	216.93	608.76	495.11	483.60	11.52	42.989		
2,900.00	2,887.57	2,882.19	2,889.76	7.14	4.18	10.40	217.81	608.10	479.56	467.84	11.72	40.908		
3,000.00	2,986.38	2,980.27	2,987.83	7.31	4.16	10.75	217.68	607.73	464.03	452.11	11.92	38.933		
3,100.00	3,085.19	3,077.14	3,084.70	7.48	4.15	11.14	217.42	607.67	448.78	436.64	12.14	36.973		
3,200.00	3,184.00	3,173.76	3,181.31	7.66	4.18	11.58	217.09	608.11	434.04	421.65	12.39	35.041		
3,300.00	3,282.81	3,268.28	3,275.83	7.83	4.23	12.07	216.67	609.26	420.02	407.37	12.65	33.205		
3,400.00	3,381.61	3,364.29	3,371.82	8.01	4.30	12.65	216.22	611.46	407.08	394.16	12.92	31.513		
3,500.00	3,480.42	3,466.41	3,473.91	8.19	4.39	13.21	216.34	613.79	394.30	381.11	13.19	29.893		
3,600.00	3,579.23	3,568.50	3,575.99	8.37	4.49	13.77	216.56	614.94	380.45	366.99	13.46	28.255		
3,700.00	3,678.04	3,667.28	3,674.76	8.55	4.59	14.30	216.98	615.65	366.29	352.55	13.74	26.654		
3,800.00	3,776.85	3,765.18	3,772.66	8.73	4.70	14.88	217.34	616.62	352.41	338.39	14.02	25.133		
3,900.00	3,875.65	3,862.08	3,869.55	8.91	4.81	15.48	217.92	617.93	338.97	324.66	14.30	23.697		
4,000.00	3,974.46	3,961.21	3,968.66	9.09	4.92	16.15	218.55	619.78	326.08	311.49	14.59	22.356		
4,100.00	4,073.27	4,063.29	4,070.73	9.28	5.04	16.88	219.23	621.09	312.67	297.81	14.86	21.046		
4,200.00	4,172.08	4,163.16	4,170.60	9.46	5.15	17.62	219.95	621.47	298.44	283.32	15.12	19.740		
4,300.00	4,270.89	4,260.35	4,267.78	9.65	5.26	18.38	220.81	622.06	284.49	269.11	15.38	18.492		
4,400.00	4,369.69	4,356.64	4,364.06	9.83	5.38	19.24	221.66	623.46	271.44	255.79	15.66	17.335		
4,500.00	4,468.50	4,454.23	4,461.62	10.02	5.49	20.28	222.21	625.84	259.40	243.47	15.93	16.283		
4,600.00	4,567.31	4,552.91	4,560.26	10.21	5.59	21.63	221.96	628.58	247.73	231.53	16.19	15.300		
4,700.00	4,666.12	4,653.62	4,660.92	10.40	5.67	23.35	220.83	631.40	236.19	219.76	16.43	14.378		
4,800.00	4,764.93	4,755.70	4,762.97	10.59	5.72	25.48	218.87	633.00	223.65	207.02	16.63	13.450		

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

### ConocoPhillips Anticollision Report

<b>Company:</b>	DELAWARE BASIN EAST	<b>Local Co-ordinate Reference:</b>	Well_COLUMBUS FEDERAL COM 504H - Slot SLOT 6
<b>Project:</b>	LEA COUNT SOUTH WEST (NM-E)	<b>TVD Reference:</b>	KB @ 3362.00usft
<b>Reference Site:</b>	COLUMBUS FEDERAL PROJECT	<b>MD Reference:</b>	KB @ 3362.00usft
<b>Site Error:</b>	0.00 usft	<b>North Reference:</b>	Grid
<b>Reference Well:</b>	_COLUMBUS FEDERAL COM 504H	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.00 usft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	OWB	<b>Database:</b>	EDT 17 Permian Prod
<b>Reference Design:</b>	PWP0	<b>Offset TVD Reference:</b>	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	4,863.73	4,855.29	4,862.52	10.77	5.74	28.00	216.31	633.49	210.39	193.59	16.80	12.521		
5,000.00	4,962.54	4,954.01	4,961.22	10.96	5.75	30.74	214.03	634.04	197.62	180.65	16.97	11.648		
5,100.00	5,061.35	5,053.09	5,060.27	11.15	5.77	33.85	211.83	634.42	185.17	168.06	17.11	10.822		
5,200.00	5,160.16	5,151.93	5,159.08	11.34	5.78	37.41	209.54	634.62	173.19	155.95	17.23	10.050		
5,300.00	5,258.97	5,250.73	5,257.86	11.54	5.80	41.46	207.35	634.77	161.90	144.56	17.33	9.341		
5,400.00	5,357.77	5,349.62	5,356.73	11.73	5.82	46.08	205.19	634.81	151.41	134.00	17.41	8.699		
5,500.00	5,456.58	5,448.41	5,455.50	11.92	5.83	51.31	203.16	634.72	141.88	124.42	17.46	8.127		
5,600.00	5,555.39	5,547.13	5,554.20	12.11	5.86	57.01	201.58	634.81	133.62	116.12	17.50	7.634		
5,663.37	5,618.00	5,609.67	5,616.74	12.22	5.89	60.82	200.88	635.04	129.12	111.61	17.51	7.373		
5,700.00	5,654.22	5,645.57	5,652.63	12.27	5.92	63.04	200.46	635.23	126.91	109.39	17.52	7.246		
5,800.00	5,753.25	5,744.28	5,751.33	12.46	5.98	69.07	198.98	635.95	122.75	105.16	17.59	6.977		
5,900.00	5,852.50	5,843.79	5,850.83	12.65	6.06	74.62	197.73	636.72	120.38	102.67	17.71	6.798		
6,000.00	5,951.95	5,943.13	5,950.16	12.83	6.14	79.49	196.57	637.51	119.45	101.59	17.86	6.689		
6,018.13	5,970.00	5,961.11	5,968.14	12.86	6.15	80.30	196.34	637.67	119.43	101.54	17.89	6.677 CC, ES		
6,100.00	6,051.57	6,042.73	6,049.74	13.00	6.21	83.63	195.22	638.35	119.77	101.73	18.03	6.642		
6,200.00	6,151.33	6,142.77	6,149.77	13.17	6.28	87.10	193.86	638.77	120.59	102.38	18.21	6.621		
6,300.00	6,251.19	6,242.73	6,249.73	13.34	6.34	89.79	192.56	638.94	121.69	103.28	18.41	6.610		
6,400.00	6,351.13	6,342.88	6,349.87	13.49	6.40	91.60	191.36	639.10	122.88	104.28	18.60	6.605		
6,500.00	6,451.12	6,443.26	6,450.25	13.63	6.47	92.45	190.54	639.37	123.80	105.01	18.79	6.590		
6,548.89	6,500.00	6,492.32	6,499.30	13.66	6.50	156.85	190.19	639.34	124.12	105.27	18.85	6.585		
6,600.00	6,551.11	6,543.52	6,550.50	13.68	6.52	156.95	189.86	639.25	124.38	105.47	18.91	6.578		
6,700.00	6,651.11	6,643.48	6,650.46	13.76	6.59	157.02	189.37	639.29	124.85	105.77	19.08	6.544		
6,800.00	6,751.11	6,743.38	6,750.36	13.83	6.67	157.04	188.80	639.48	125.45	106.20	19.25	6.517		
6,900.00	6,851.11	6,843.44	6,850.42	13.90	6.73	157.15	188.19	639.48	126.01	106.59	19.42	6.489		
7,000.00	6,951.11	6,943.37	6,950.34	13.98	6.77	157.43	187.43	639.14	126.58	107.00	19.59	6.462		
7,100.00	7,051.11	7,043.15	7,050.12	14.05	6.82	157.68	186.59	638.87	127.26	107.51	19.75	6.442		
7,200.00	7,151.11	7,142.99	7,149.96	14.12	6.87	158.02	185.48	638.50	128.15	108.22	19.92	6.431		
7,300.00	7,251.11	7,243.19	7,250.15	14.20	6.92	158.33	184.44	638.18	128.99	108.90	20.09	6.419		
7,400.00	7,351.11	7,343.20	7,350.15	14.27	6.96	158.76	183.46	637.53	129.67	109.41	20.26	6.400		
7,500.00	7,451.11	7,443.15	7,450.10	14.34	7.00	159.22	182.30	636.85	130.51	110.08	20.43	6.389		
7,600.00	7,551.11	7,543.12	7,550.05	14.42	7.03	159.92	181.09	635.60	131.21	110.62	20.59	6.373		
7,700.00	7,651.11	7,642.88	7,649.78	14.49	7.07	160.74	179.52	634.14	132.20	111.44	20.75	6.370		
7,800.00	7,751.11	7,743.53	7,750.41	14.56	7.10	161.46	178.18	632.86	133.04	112.13	20.92	6.360		
7,900.00	7,851.11	7,844.12	7,851.00	14.64	7.12	161.85	177.71	632.04	133.23	112.16	21.07	6.322		
8,000.00	7,951.11	7,943.78	7,950.66	14.71	7.16	162.02	177.43	631.71	133.40	112.16	21.23	6.283		
8,100.00	8,051.11	8,043.25	8,050.13	14.79	7.24	162.12	176.83	631.68	133.95	112.55	21.40	6.259		
8,200.00	8,151.11	8,143.15	8,150.02	14.86	7.35	162.02	176.11	632.14	134.78	113.21	21.58	6.246		
8,300.00	8,251.11	8,243.35	8,250.22	14.94	7.47	161.99	175.45	632.44	135.50	113.74	21.76	6.227		
8,400.00	8,351.11	8,343.41	8,350.28	15.01	7.59	161.89	174.93	632.85	136.13	114.19	21.94	6.204		
8,500.00	8,451.11	8,443.61	8,450.48	15.08	7.72	161.79	174.46	633.27	136.71	114.59	22.12	6.180		
8,600.00	8,551.11	8,543.90	8,550.77	15.16	7.84	161.69	174.22	633.60	137.03	114.73	22.30	6.145		
8,700.00	8,651.11	8,643.97	8,650.84	15.23	7.95	161.67	174.02	633.71	137.25	114.77	22.48	6.106 SF		
8,800.00	8,751.11	8,740.88	8,747.74	15.31	8.10	161.67	172.88	634.10	138.50	115.82	22.68	6.107		
8,900.00	8,851.11	8,821.75	8,828.31	15.38	8.19	162.10	167.07	634.86	146.01	122.97	23.04	6.338		
9,000.00	8,951.11	8,896.21	8,900.63	15.46	8.31	163.62	149.63	636.02	168.95	145.09	23.86	7.082		
9,100.00	9,051.11	8,969.53	8,968.95	15.53	8.45	165.69	123.13	636.77	204.24	179.43	24.81	8.232		
9,200.00	9,151.11	9,031.34	9,023.78	15.61	8.61	167.46	94.67	637.17	249.67	223.61	26.07	9.579		
9,300.00	9,251.11	9,088.26	9,070.78	15.68	8.75	168.97	62.61	637.66	305.22	278.02	27.20	11.221		
9,400.00	9,351.11	9,145.00	9,114.40	15.76	8.91	170.56	26.40	636.75	367.97	339.81	28.16	13.066		
9,500.00	9,451.11	9,192.00	9,148.15	15.83	9.04	171.92	-6.24	634.63	436.08	406.98	29.11	14.981		

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

### ConocoPhillips Anticollision Report

<b>Company:</b>	DELAWARE BASIN EAST	<b>Local Co-ordinate Reference:</b>	Well _COLUMBUS FEDERAL COM 504H - Slot SLOT 6
<b>Project:</b>	LEA COUNT SOUTH WEST (NM-E)	<b>TVD Reference:</b>	KB @ 3362.00usft
<b>Reference Site:</b>	COLUMBUS FEDERAL PROJECT	<b>MD Reference:</b>	KB @ 3362.00usft
<b>Site Error:</b>	0.00 usft	<b>North Reference:</b>	Grid
<b>Reference Well:</b>	_COLUMBUS FEDERAL COM 504H	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.00 usft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	OWB	<b>Database:</b>	EDT 17 Permian Prod
<b>Reference Design:</b>	PWP0	<b>Offset TVD Reference:</b>	Reference Datum

<b>Offset Design:</b> COLUMBUS FEDERAL PROJECT - COLUMBUS FEE #2H - OWB - AWP													<b>Offset Site Error:</b>	0.00 usft
<b>Survey Program:</b> 100- VES GyroFlex, 8769-r.5 MWD											<b>Rule Assigned:</b>		<b>Offset Well Error:</b>	3.00 usft
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance		No-Go Distance (usft)	Separation Factor	Warning	
Reference	Offset	Reference	Offset	Between Centres (usft)	Between Ellipses (usft)			Between Centres (usft)	Between Ellipses (usft)					
9,600.00	9,551.11	9,238.00	9,179.52	15.91	9.20	172.99	-39.82	632.84	508.23	478.30	29.93	16.981		
9,700.00	9,651.11	9,259.04	9,192.97	15.98	9.31	173.32	-56.00	632.74	584.38	553.36	31.03	18.835		
9,800.00	9,751.11	9,285.00	9,208.36	16.06	9.45	173.56	-76.88	633.56	664.64	632.75	31.89	20.844		
9,900.00	9,851.11	9,305.71	9,219.77	16.14	9.55	173.68	-94.12	634.65	747.86	715.20	32.66	22.900		
10,000.00	9,951.11	9,332.00	9,233.33	16.21	9.68	173.82	-116.60	636.09	833.34	800.05	33.29	25.033		
10,100.00	10,051.11	9,347.28	9,240.73	16.29	9.76	173.90	-129.94	636.98	920.57	886.62	33.95	27.119		

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

### ConocoPhillips Anticollision Report

<b>Company:</b>	DELAWARE BASIN EAST	<b>Local Co-ordinate Reference:</b>	Well _COLUMBUS FEDERAL COM 504H - Slot SLOT 6
<b>Project:</b>	LEA COUNT SOUTH WEST (NM-E)	<b>TVD Reference:</b>	KB @ 3362.00usft
<b>Reference Site:</b>	COLUMBUS FEDERAL PROJECT	<b>MD Reference:</b>	KB @ 3362.00usft
<b>Site Error:</b>	0.00 usft	<b>North Reference:</b>	Grid
<b>Reference Well:</b>	_COLUMBUS FEDERAL COM 504H	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.00 usft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	OWB	<b>Database:</b>	EDT 17 Permian Prod
<b>Reference Design:</b>	PWP0	<b>Offset TVD Reference:</b>	Reference Datum

Offset Design: COLUMBUS FEDERAL PROJECT - ROJO 7811 34 27 FEDERAL #18H - OWB - AWP													Offset Site Error:	0.00 usft
Survey Program: 157-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)				
12,600.00	10,764.00	10,810.95	10,812.53	22.16	38.06	94.01	-2,376.73	-82.50	974.66	913.56	61.10	15.953		
12,700.00	10,764.00	10,807.75	10,809.32	22.74	38.05	93.74	-2,376.84	-82.62	907.28	845.66	61.62	14.724		
12,800.00	10,764.00	10,804.53	10,806.11	23.34	38.04	93.48	-2,376.94	-82.75	846.35	784.15	62.20	13.606		
12,900.00	10,764.00	10,801.32	10,802.90	23.96	38.03	93.21	-2,377.05	-82.87	793.39	730.56	62.82	12.629		
13,000.00	10,764.00	10,798.10	10,799.69	24.59	38.02	92.95	-2,377.15	-82.99	750.06	686.62	63.44	11.824		
13,100.00	10,764.00	10,794.87	10,796.47	25.23	38.00	92.68	-2,377.26	-83.11	718.12	654.14	63.97	11.225		
13,200.00	10,764.00	10,791.65	10,793.24	25.89	37.99	92.41	-2,377.37	-83.23	699.12	634.77	64.35	10.864		
13,284.73	10,764.00	10,788.91	10,790.51	26.45	37.98	92.19	-2,377.46	-83.34	693.97	629.47	64.50	10.759	CC, ES, SF	
13,300.00	10,764.00	10,788.42	10,790.02	26.55	37.98	92.15	-2,377.47	-83.35	694.14	629.63	64.51	10.761		
13,400.00	10,764.00	10,785.18	10,786.79	27.23	37.97	91.88	-2,377.58	-83.48	703.47	639.06	64.41	10.921		
13,500.00	10,764.00	10,781.94	10,783.55	27.92	37.96	91.61	-2,377.69	-83.60	726.56	662.46	64.10	11.334		
13,600.00	10,764.00	10,780.00	10,781.61	28.62	37.95	91.45	-2,377.75	-83.67	762.16	698.51	63.65	11.974		
13,700.00	10,764.00	10,775.98	10,777.60	29.33	37.94	91.12	-2,377.88	-83.83	808.62	745.50	63.12	12.811		
13,800.00	10,764.00	10,772.05	10,773.67	30.05	37.92	90.80	-2,378.01	-83.98	864.19	801.61	62.58	13.809		
13,900.00	10,764.00	10,768.18	10,769.81	30.77	37.91	90.48	-2,378.14	-84.12	927.23	865.15	62.08	14.937		
14,000.00	10,764.00	10,764.39	10,766.02	31.50	37.90	90.17	-2,378.27	-84.26	996.32	934.69	61.63	16.166		

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

### ConocoPhillips Anticollision Report

<b>Company:</b>	DELAWARE BASIN EAST	<b>Local Co-ordinate Reference:</b>	Well _COLUMBUS FEDERAL COM 504H - Slot SLOT 6
<b>Project:</b>	LEA COUNT SOUTH WEST (NM-E)	<b>TVD Reference:</b>	KB @ 3362.00usft
<b>Reference Site:</b>	COLUMBUS FEDERAL PROJECT	<b>MD Reference:</b>	KB @ 3362.00usft
<b>Site Error:</b>	0.00 usft	<b>North Reference:</b>	Grid
<b>Reference Well:</b>	_COLUMBUS FEDERAL COM 504H	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.00 usft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	OWB	<b>Database:</b>	EDT 17 Permian Prod
<b>Reference Design:</b>	PWP0	<b>Offset TVD Reference:</b>	Reference Datum

Offset Design: COLUMBUS FEDERAL PROJECT - ROJO 7811 34 27 FEDERAL #21H - OWB - AWP													Offset Site Error:	0.00 usft
Survey Program: 169-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)				
12,800.00	10,764.00	10,864.78	10,803.77	23.34	41.58	93.34	-2,623.07	-69.61	999.80	935.26	64.54	15.490		
12,900.00	10,764.00	10,865.07	10,804.06	23.96	41.59	93.36	-2,623.07	-69.59	929.26	864.36	64.90	14.318		
13,000.00	10,764.00	10,865.36	10,804.35	24.59	41.59	93.39	-2,623.07	-69.57	864.54	799.24	65.30	13.239		
13,100.00	10,764.00	10,865.65	10,804.64	25.23	41.59	93.41	-2,623.07	-69.55	807.06	741.32	65.74	12.277		
13,200.00	10,764.00	10,865.94	10,804.92	25.89	41.59	93.44	-2,623.07	-69.53	758.46	692.28	66.18	11.461		
13,300.00	10,764.00	10,866.23	10,805.21	26.55	41.59	93.46	-2,623.07	-69.52	720.53	653.95	66.59	10.821		
13,400.00	10,764.00	10,866.51	10,805.50	27.23	41.59	93.48	-2,623.07	-69.50	695.04	628.13	66.90	10.388		
13,500.00	10,764.00	10,866.80	10,805.79	27.92	41.59	93.51	-2,623.07	-69.48	683.37	616.29	67.08	10.188		
13,530.44	10,764.00	10,866.89	10,805.88	28.14	41.59	93.52	-2,623.07	-69.48	682.69	615.60	67.09	10.175 CC, ES, SF		
13,600.00	10,764.00	10,867.09	10,806.08	28.62	41.59	93.53	-2,623.07	-69.46	686.22	619.16	67.07	10.232		
13,700.00	10,764.00	10,867.38	10,806.36	29.33	41.59	93.56	-2,623.07	-69.45	703.43	636.54	66.89	10.516		
13,800.00	10,764.00	10,867.67	10,806.65	30.05	41.60	93.58	-2,623.08	-69.43	733.98	667.39	66.59	11.023		
13,900.00	10,764.00	10,867.95	10,806.94	30.77	41.60	93.61	-2,623.08	-69.41	776.30	710.08	66.22	11.723		
14,000.00	10,764.00	10,868.24	10,807.22	31.50	41.60	93.63	-2,623.08	-69.39	828.58	762.74	65.84	12.585		
14,100.00	10,764.00	10,868.53	10,807.51	32.24	41.60	93.65	-2,623.08	-69.38	889.08	823.59	65.49	13.577		
14,200.00	10,764.00	10,868.82	10,807.80	32.98	41.60	93.68	-2,623.08	-69.36	956.23	891.05	65.17	14.672		

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

### ConocoPhillips Anticollision Report

<b>Company:</b>	DELAWARE BASIN EAST	<b>Local Co-ordinate Reference:</b>	Well_COLUMBUS FEDERAL COM 504H - Slot SLOT 6
<b>Project:</b>	LEA COUNT SOUTH WEST (NM-E)	<b>TVD Reference:</b>	KB @ 3362.00usft
<b>Reference Site:</b>	COLUMBUS FEDERAL PROJECT	<b>MD Reference:</b>	KB @ 3362.00usft
<b>Site Error:</b>	0.00 usft	<b>North Reference:</b>	Grid
<b>Reference Well:</b>	_COLUMBUS FEDERAL COM 504H	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.00 usft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	OWB	<b>Database:</b>	EDT 17 Permian Prod
<b>Reference Design:</b>	PWP0	<b>Offset TVD Reference:</b>	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 Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre		Distance		No-Go Distance (usft)	Separation Factor	Warning				
		Measured Depth (usft)	Vertical Depth (usft)				+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)							
2,700.00	2,689.96	2,720.58	2,748.41	6.80	10.30	58.11	-442.57	962.27	992.42	974.96	17.46	56.833					
2,800.00	2,788.77	2,821.48	2,849.12	6.97	10.64	58.90	-439.46	957.06	978.28	960.31	17.97	54.434					
2,900.00	2,887.57	2,923.81	2,951.24	7.14	10.99	59.72	-436.05	951.46	963.93	945.44	18.49	52.139					
3,000.00	2,986.38	3,023.77	3,050.97	7.31	11.33	60.54	-432.49	945.75	949.43	930.44	19.00	49.978					
3,100.00	3,085.19	3,121.85	3,148.83	7.48	11.67	61.37	-428.96	940.10	935.08	915.58	19.50	47.950					
3,200.00	3,184.00	3,219.91	3,246.65	7.66	12.01	62.21	-425.29	934.43	920.83	900.82	20.01	46.026					
3,300.00	3,282.81	3,312.23	3,338.78	7.83	12.33	62.99	-421.47	929.86	907.21	886.71	20.49	44.267					
3,400.00	3,381.61	3,411.64	3,437.98	8.01	12.67	63.77	-416.45	925.87	893.97	872.97	21.01	42.559					
3,500.00	3,480.42	3,510.57	3,536.66	8.19	13.01	64.47	-410.27	922.68	880.79	859.27	21.52	40.934					
3,600.00	3,579.23	3,606.10	3,631.92	8.37	13.34	65.09	-403.44	920.51	867.91	845.89	22.02	39.415					
3,700.00	3,678.04	3,702.52	3,728.06	8.55	13.67	65.68	-396.14	919.02	855.44	832.92	22.53	37.976					
3,800.00	3,776.85	3,800.00	3,825.26	8.73	14.00	66.28	-388.84	917.72	843.28	820.24	23.04	36.607					
3,900.00	3,875.65	3,893.58	3,918.60	8.91	14.32	66.90	-382.28	916.58	831.61	808.08	23.53	35.340					
4,000.00	3,974.46	3,991.14	4,015.96	9.09	14.66	67.60	-376.12	915.33	820.47	796.43	24.04	34.128					
4,100.00	4,073.27	4,087.64	4,112.29	9.28	14.99	68.38	-370.79	913.68	809.66	785.11	24.55	32.987					
4,200.00	4,172.08	4,186.01	4,210.53	9.46	15.33	69.23	-365.94	911.72	799.20	774.14	25.06	31.897					
4,300.00	4,270.89	4,281.05	4,305.43	9.65	15.65	70.05	-361.20	910.15	789.12	763.57	25.55	30.880					
4,400.00	4,369.69	4,376.85	4,401.10	9.83	15.98	70.86	-356.29	909.32	779.70	753.64	26.06	29.924					
4,500.00	4,468.50	4,472.69	4,496.83	10.02	16.31	71.68	-351.56	908.83	770.81	744.25	26.56	29.025					
4,600.00	4,567.31	4,566.95	4,590.98	10.21	16.63	72.48	-347.03	908.86	762.57	735.52	27.05	28.190					
4,700.00	4,666.12	4,660.62	4,684.53	10.40	16.95	73.23	-342.48	909.90	755.18	727.64	27.54	27.418					
4,800.00	4,764.93	4,753.72	4,777.51	10.59	17.27	73.95	-338.15	911.75	748.69	720.66	28.03	26.710					
4,900.00	4,863.73	4,847.50	4,871.19	10.77	17.59	74.71	-334.48	914.04	743.16	714.64	28.52	26.058					
5,000.00	4,962.54	4,943.96	4,967.58	10.96	17.92	75.55	-331.65	916.15	738.38	709.36	29.02	25.445					
5,100.00	5,061.35	5,043.67	5,067.27	11.15	18.27	76.55	-329.73	917.37	733.92	704.39	29.53	24.851					
5,200.00	5,160.16	5,142.04	5,165.62	11.34	18.60	77.58	-328.06	918.03	729.53	699.49	30.04	24.284					
5,300.00	5,258.97	5,239.63	5,263.20	11.54	18.94	78.61	-326.61	919.04	725.77	695.23	30.55	23.760					
5,400.00	5,357.77	5,338.91	5,362.46	11.73	19.28	79.67	-325.08	919.86	722.09	691.03	31.06	23.248					
5,500.00	5,456.58	5,435.92	5,459.46	11.92	19.62	80.73	-323.92	920.75	719.00	687.44	31.56	22.780					
5,600.00	5,555.39	5,535.40	5,558.93	12.11	19.96	81.81	-322.57	921.82	716.13	684.05	32.08	22.324					
5,663.37	5,618.00	5,596.79	5,620.30	12.22	20.17	82.49	-321.87	922.42	714.52	682.13	32.39	22.063					
5,700.00	5,654.22	5,633.95	5,657.46	12.27	20.30	82.89	-321.48	922.75	713.67	681.10	32.57	21.914					
5,800.00	5,753.25	5,735.36	5,758.86	12.46	20.65	83.88	-320.18	923.56	711.39	678.30	33.09	21.497					
5,900.00	5,852.50	5,834.14	5,857.63	12.65	20.99	84.77	-319.11	923.75	709.35	675.75	33.60	21.111					
6,000.00	5,951.95	5,930.93	5,954.42	12.83	21.33	85.53	-318.44	923.92	707.95	673.85	34.10	20.763					
6,100.00	6,051.57	6,029.38	6,052.87	13.00	21.67	86.21	-318.18	923.87	707.07	672.47	34.60	20.438					
6,200.00	6,151.33	6,128.65	6,152.15	13.17	22.01	86.76	-318.06	923.78	706.49	671.39	35.10	20.130					
6,300.00	6,251.19	6,228.52	6,252.01	13.34	22.35	87.19	-318.03	923.64	706.13	670.53	35.59	19.838					
6,400.00	6,351.13	6,330.03	6,353.52	13.49	22.70	87.49	-317.93	923.35	705.74	669.64	36.10	19.552					
6,500.00	6,451.12	6,430.42	6,453.91	13.63	23.05	87.66	-317.78	922.73	705.24	668.65	36.59	19.275					
6,548.89	6,500.00	6,478.14	6,501.63	13.66	23.21	151.92	-317.75	922.46	705.08	668.27	36.81	19.155					
6,600.00	6,551.11	6,528.95	6,552.44	13.68	23.39	151.93	-317.76	922.25	704.98	667.94	37.04	19.031					
6,700.00	6,651.11	6,630.75	6,654.24	13.76	23.74	151.95	-317.63	921.91	704.72	667.18	37.54	18.773					
6,800.00	6,751.11	6,733.66	6,757.14	13.83	24.10	151.97	-317.07	921.42	704.01	665.96	38.04	18.507					
6,900.00	6,851.11	6,833.82	6,857.30	13.90	24.45	151.99	-316.45	920.72	703.13	664.60	38.53	18.249					
7,000.00	6,951.11	6,932.40	6,955.88	13.98	24.79	152.02	-315.87	920.03	702.29	663.28	39.01	18.003					
7,100.00	7,051.11	7,028.20	7,051.68	14.05	25.12	152.04	-315.68	919.60	701.91	662.43	39.47	17.781					
7,113.19	7,064.30	7,040.83	7,064.30	14.06	25.16	152.05	-315.70	919.57	701.90	662.37	39.54	17.754 CC					
7,200.00	7,151.11	7,124.29	7,147.77	14.12	25.45	152.07	-316.00	919.45	702.12	662.19	39.94	17.580 ES					
7,300.00	7,251.11	7,222.20	7,245.67	14.20	25.78	152.09	-316.70	919.52	702.79	662.38	40.41	17.392					
7,400.00	7,351.11	7,323.06	7,346.52	14.27	26.13	152.14	-317.67	919.29	703.53	662.63	40.90	17.202					

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

### ConocoPhillips Anticollision Report

<b>Company:</b>	DELAWARE BASIN EAST	<b>Local Co-ordinate Reference:</b>	Well _COLUMBUS FEDERAL COM 504H - Slot SLOT 6
<b>Project:</b>	LEA COUNT SOUTH WEST (NM-E)	<b>TVD Reference:</b>	KB @ 3362.00usft
<b>Reference Site:</b>	COLUMBUS FEDERAL PROJECT	<b>MD Reference:</b>	KB @ 3362.00usft
<b>Site Error:</b>	0.00 usft	<b>North Reference:</b>	Grid
<b>Reference Well:</b>	_COLUMBUS FEDERAL COM 504H	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.00 usft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	OWB	<b>Database:</b>	EDT 17 Permian Prod
<b>Reference Design:</b>	PWP0	<b>Offset TVD Reference:</b>	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											Rule Assigned:		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)				
7,500.00	7,451.11	7,424.55	7,448.01	14.34	26.48	152.21	-318.49	918.81	704.02	662.63	41.39	17.009		
7,600.00	7,551.11	7,522.81	7,546.27	14.42	26.82	152.24	-319.16	918.69	704.57	662.70	41.86	16.830		
7,700.00	7,651.11	7,619.86	7,643.31	14.49	27.15	152.31	-320.32	918.35	705.47	663.14	42.33	16.665		
7,800.00	7,751.11	7,718.07	7,741.51	14.56	27.49	152.38	-321.82	918.20	706.75	663.94	42.81	16.510		
7,900.00	7,851.11	7,820.63	7,844.06	14.64	27.84	152.44	-323.29	918.05	707.95	664.64	43.31	16.347		
8,000.00	7,951.11	7,924.47	7,947.89	14.71	28.20	152.52	-324.40	917.52	708.66	664.84	43.82	16.174		
8,100.00	8,051.11	8,025.34	8,048.75	14.79	28.54	152.60	-325.13	916.76	708.96	664.65	44.31	16.001		
8,200.00	8,151.11	8,120.96	8,144.37	14.86	28.87	152.69	-326.14	916.13	709.59	664.82	44.77	15.849		
8,300.00	8,251.11	8,216.60	8,239.99	14.94	29.20	152.77	-327.72	915.74	710.87	665.64	45.23	15.716		
8,400.00	8,351.11	8,314.07	8,337.45	15.01	29.54	152.87	-329.77	915.43	712.60	666.90	45.70	15.592		
8,500.00	8,451.11	8,410.24	8,433.57	15.08	29.87	152.98	-332.29	915.14	714.80	668.63	46.17	15.483		
8,600.00	8,551.11	8,508.69	8,531.97	15.16	30.21	153.14	-335.45	914.55	717.39	670.74	46.64	15.380		
8,700.00	8,651.11	8,610.79	8,634.01	15.23	30.39	153.34	-338.90	913.44	719.91	673.00	46.92	15.345 SF		
8,800.00	8,751.11	8,671.80	8,694.91	15.31	30.39	153.52	-342.23	912.66	724.52	677.67	46.85	15.466		
8,900.00	8,851.11	8,718.00	8,740.72	15.38	30.39	153.79	-348.12	911.77	735.56	688.94	46.62	15.779		
9,000.00	8,951.11	8,771.49	8,793.15	15.46	30.40	154.21	-358.63	910.85	753.02	706.68	46.34	16.250		
9,100.00	9,051.11	8,813.00	8,833.21	15.53	30.40	154.54	-369.44	911.37	777.40	731.51	45.89	16.941		
9,200.00	9,151.11	8,876.00	8,892.87	15.61	30.42	155.08	-389.59	912.88	807.52	761.90	45.63	17.699		
9,300.00	9,251.11	8,918.95	8,932.64	15.68	30.43	155.53	-405.77	913.65	842.64	797.50	45.13	18.669		
9,400.00	9,351.11	8,961.73	8,971.24	15.76	30.45	156.04	-424.18	914.27	883.06	838.42	44.64	19.780		
9,500.00	9,451.11	9,003.00	9,007.41	15.83	30.48	156.57	-444.06	914.87	928.50	884.34	44.16	21.026		
9,600.00	9,551.11	9,035.00	9,034.67	15.91	30.50	157.00	-460.79	915.37	978.57	934.97	43.60	22.443		

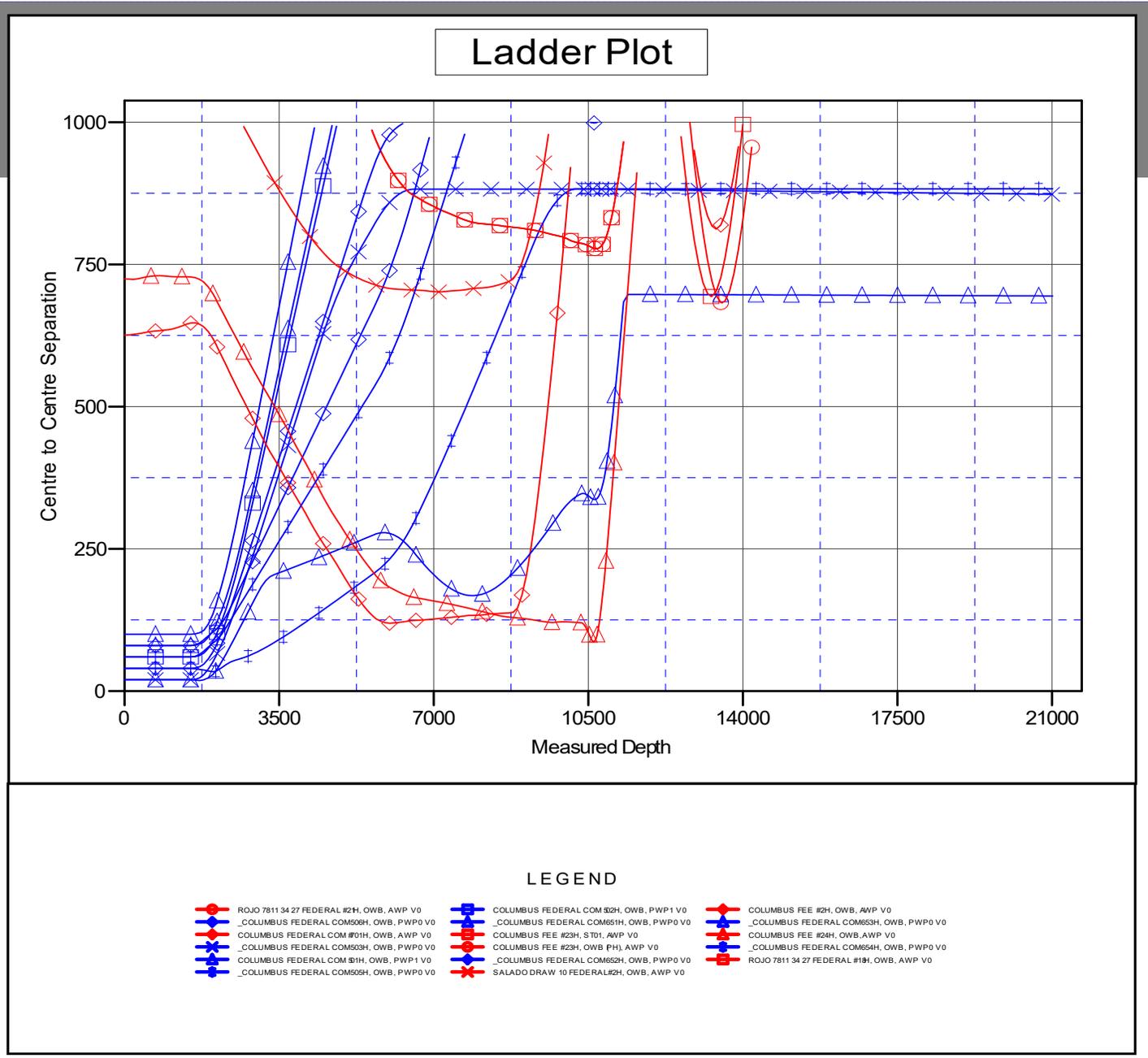
CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation

### ConocoPhillips Anticollision Report

<b>Company:</b>	DELAWARE BASIN EAST	<b>Local Co-ordinate Reference:</b>	Well _COLUMBUS FEDERAL COM 504H - Slot SLOT 6
<b>Project:</b>	LEA COUNT SOUTH WEST (NM-E)	<b>TVD Reference:</b>	KB @ 3362.00usft
<b>Reference Site:</b>	COLUMBUS FEDERAL PROJECT	<b>MD Reference:</b>	KB @ 3362.00usft
<b>Site Error:</b>	0.00 usft	<b>North Reference:</b>	Grid
<b>Reference Well:</b>	_COLUMBUS FEDERAL COM 504H	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.00 usft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	OWB	<b>Database:</b>	EDT 17 Permian Prod
<b>Reference Design:</b>	PWP0	<b>Offset TVD Reference:</b>	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 504H - Slot SLOT 6  
Coordinate System is US State Plane 1927 (Exact solution), New Mexico East 30  
Grid Convergence at Surface is: 0.41°



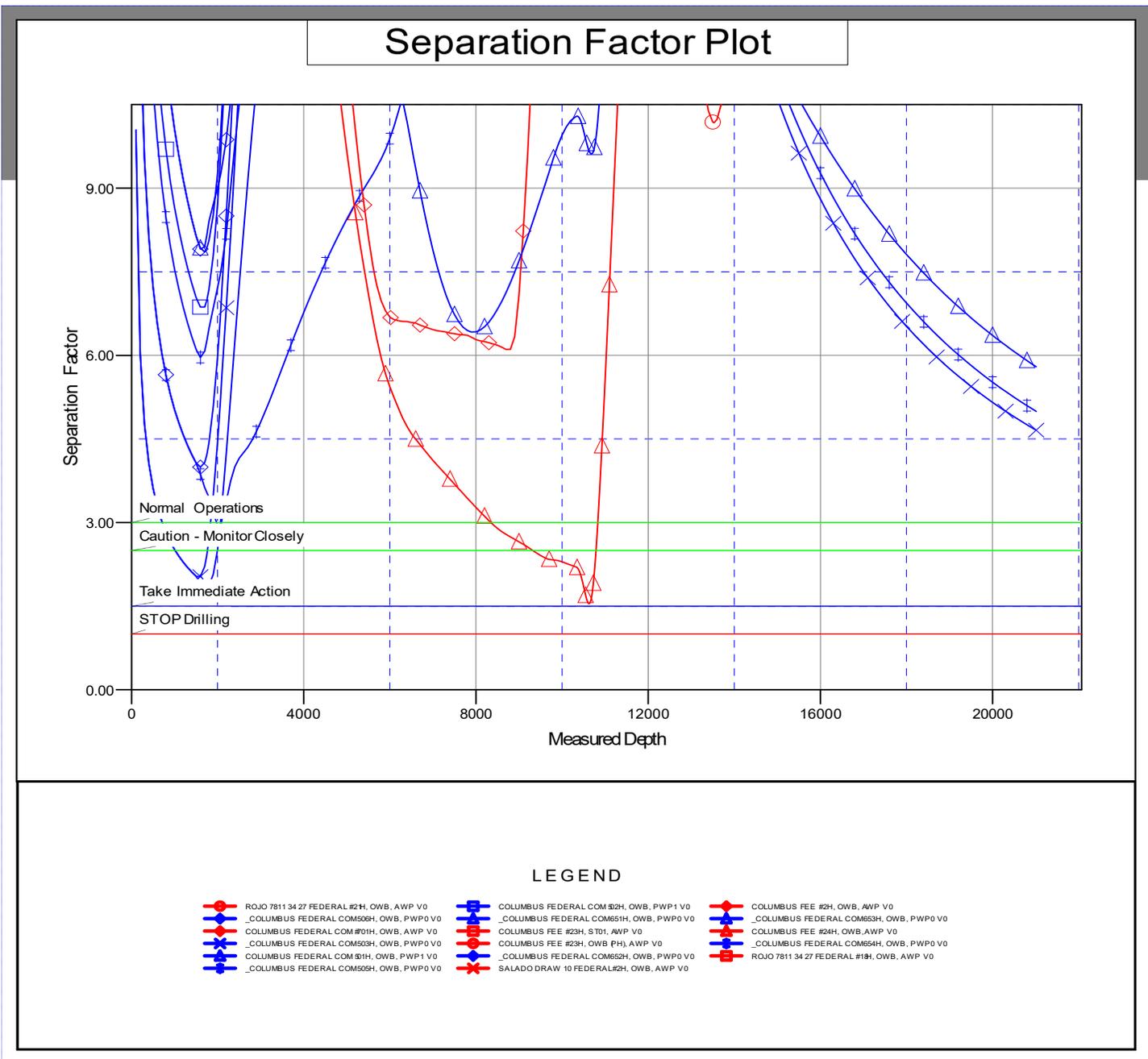
CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation

### ConocoPhillips Anticollision Report

<b>Company:</b>	DELAWARE BASIN EAST	<b>Local Co-ordinate Reference:</b>	Well _COLUMBUS FEDERAL COM 504H - Slot SLOT 6
<b>Project:</b>	LEA COUNT SOUTH WEST (NM-E)	<b>TVD Reference:</b>	KB @ 3362.00usft
<b>Reference Site:</b>	COLUMBUS FEDERAL PROJECT	<b>MD Reference:</b>	KB @ 3362.00usft
<b>Site Error:</b>	0.00 usft	<b>North Reference:</b>	Grid
<b>Reference Well:</b>	_COLUMBUS FEDERAL COM 504H	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.00 usft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	OWB	<b>Database:</b>	EDT 17 Permian Prod
<b>Reference Design:</b>	PWP0	<b>Offset TVD Reference:</b>	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 504H - Slot SLOT 6  
 Coordinate System is US State Plane 1927 (Exact solution), New Mexico East 30  
 Grid Convergence at Surface is: 0.41°



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 504H - Slot SLOT 6**

**OWB**

**Plan: PWP0**

## **Standard Planning Report**

**14 January, 2026**

### ConocoPhillips Planning Report

<b>Database:</b>	EDT 17 Permian Prod	<b>Local Co-ordinate Reference:</b>	Well _ COLUMBUS FEDERAL COM 504H - Slot SLOT 6
<b>Company:</b>	DELAWARE BASIN EAST	<b>TVD Reference:</b>	KB @ 3362.00usft
<b>Project:</b>	LEA COUNT SOUTH WEST (NM-E)	<b>MD Reference:</b>	KB @ 3362.00usft
<b>Site:</b>	COLUMBUS FEDERAL PROJECT	<b>North Reference:</b>	Grid
<b>Well:</b>	_COLUMBUS FEDERAL COM 504H	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	OWB		
<b>Design:</b>	PWP0		

<b>Project</b> LEA COUNT SOUTH WEST (NM-E)			
<b>Map System:</b>	US State Plane 1927 (Exact solution)	<b>System Datum:</b>	Mean Sea Level
<b>Geo Datum:</b>	NAD 1927 (NADCON CONUS)		
<b>Map Zone:</b>	New Mexico East 3001		

<b>Site</b> COLUMBUS FEDERAL PROJECT			
<b>Site Position:</b>		<b>Northing:</b>	398,637.10 usft
<b>From:</b>	Map	<b>Easting:</b>	741,887.40 usft
<b>Position Uncertainty:</b>	0.00 usft	<b>Slot Radius:</b>	13-3/16 "
		<b>Latitude:</b>	32° 5' 36.820 N
		<b>Longitude:</b>	103° 33' 8.116 W

<b>Well</b> _COLUMBUS FEDERAL COM 504H - Slot SLOT 6			
<b>Well Position</b>	<b>+N/-S</b>	0.00 usft	<b>Northing:</b> 398,429.51 usft
	<b>+E/-W</b>	0.00 usft	<b>Easting:</b> 739,310.06 usft
<b>Position Uncertainty</b>		0.00 usft	<b>Wellhead Elevation:</b> usft
<b>Grid Convergence:</b>		0.41 °	<b>Latitude:</b> 32° 5' 34.950 N
			<b>Longitude:</b> 103° 33' 38.092 W
			<b>Ground Level:</b> 3,330.00 usft

<b>Wellbore</b> OWB			
Magnetics	Model Name	Sample Date	Declination (°)
	BGGM2025	10/1/2026	6.10
			Dip Angle (°)
			59.54
			Field Strength (nT)
			46,956.97807096

<b>Design</b> PWP0			
<b>Audit Notes:</b>			
<b>Version:</b>	<b>Phase:</b>	PLAN	<b>Tie On Depth:</b> 0.00
<b>Vertical Section:</b>	<b>Depth From (TVD) (usft)</b>	<b>+N/-S (usft)</b>	<b>+E/-W (usft)</b>
	0.00	0.00	0.00
			<b>Direction (°)</b> 176.22

<b>Plan Survey Tool Program</b>		<b>Date</b> 1/13/2026		
Depth From (usft)	Depth To (usft)	Survey (Wellbore)	Tool Name	Remarks
1	0.00	21,013.94 PWP0 (OWB)	r.5 MWD+IFR1+SAG+FDIR ISCWSA MWD + IFR1 + SAG	

**ConocoPhillips**  
Planning Report

<b>Database:</b>	EDT 17 Permian Prod	<b>Local Co-ordinate Reference:</b>	Well _COLUMBUS FEDERAL COM 504H - Slot SLOT 6
<b>Company:</b>	DELAWARE BASIN EAST	<b>TVD Reference:</b>	KB @ 3362.00usft
<b>Project:</b>	LEA COUNT SOUTH WEST (NM-E)	<b>MD Reference:</b>	KB @ 3362.00usft
<b>Site:</b>	COLUMBUS FEDERAL PROJECT	<b>North Reference:</b>	Grid
<b>Well:</b>	_COLUMBUS FEDERAL COM 504H	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	OWB		
<b>Design:</b>	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	
1,500.00	0.00	0.00	1,500.00	0.00	0.00	0.00	0.00	0.00	0.00	
1,750.00	5.00	20.00	1,749.68	10.24	3.73	2.00	2.00	0.00	20.00	
2,065.66	8.86	64.22	2,063.18	33.76	30.34	2.00	1.22	14.01	77.51	
5,663.37	8.86	64.22	5,618.00	274.61	529.05	0.00	0.00	0.00	0.00	
6,548.89	0.00	0.00	6,500.00	304.31	590.54	1.00	-1.00	0.00	180.00	
10,335.43	0.00	0.00	10,286.54	304.31	590.54	0.00	0.00	0.00	0.00	
11,085.43	90.00	179.58	10,764.01	-173.14	594.04	12.00	12.00	23.94	179.58	
21,013.94	90.00	179.58	10,764.00	-10,101.39	666.62	0.00	0.00	0.00	0.00	

### ConocoPhillips Planning Report

<b>Database:</b>	EDT 17 Permian Prod	<b>Local Co-ordinate Reference:</b>	Well _ COLUMBUS FEDERAL COM 504H - Slot SLOT 6
<b>Company:</b>	DELAWARE BASIN EAST	<b>TVD Reference:</b>	KB @ 3362.00usft
<b>Project:</b>	LEA COUNT SOUTH WEST (NM-E)	<b>MD Reference:</b>	KB @ 3362.00usft
<b>Site:</b>	COLUMBUS FEDERAL PROJECT	<b>North Reference:</b>	Grid
<b>Well:</b>	_COLUMBUS FEDERAL COM 504H	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	OWB		
<b>Design:</b>	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	0.00
15.00	0.00	0.00	15.00	0.00	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	0.00
45.00	0.00	0.00	45.00	0.00	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	0.00
75.00	0.00	0.00	75.00	0.00	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	0.00
105.00	0.00	0.00	105.00	0.00	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	0.00
135.00	0.00	0.00	135.00	0.00	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	0.00
165.00	0.00	0.00	165.00	0.00	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	0.00
195.00	0.00	0.00	195.00	0.00	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	0.00
225.00	0.00	0.00	225.00	0.00	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	0.00
255.00	0.00	0.00	255.00	0.00	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	0.00
285.00	0.00	0.00	285.00	0.00	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	0.00
315.00	0.00	0.00	315.00	0.00	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	0.00
345.00	0.00	0.00	345.00	0.00	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	0.00
375.00	0.00	0.00	375.00	0.00	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	0.00
405.00	0.00	0.00	405.00	0.00	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	0.00
435.00	0.00	0.00	435.00	0.00	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	0.00
465.00	0.00	0.00	465.00	0.00	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	0.00
495.00	0.00	0.00	495.00	0.00	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	0.00
525.00	0.00	0.00	525.00	0.00	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	0.00
555.00	0.00	0.00	555.00	0.00	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	0.00
585.00	0.00	0.00	585.00	0.00	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	0.00
615.00	0.00	0.00	615.00	0.00	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	0.00
645.00	0.00	0.00	645.00	0.00	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	0.00
675.00	0.00	0.00	675.00	0.00	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	0.00
705.00	0.00	0.00	705.00	0.00	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	0.00
735.00	0.00	0.00	735.00	0.00	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	0.00
765.00	0.00	0.00	765.00	0.00	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	0.00

### ConocoPhillips

#### Planning Report

<b>Database:</b>	EDT 17 Permian Prod	<b>Local Co-ordinate Reference:</b>	Well _ COLUMBUS FEDERAL COM 504H - Slot SLOT 6
<b>Company:</b>	DELAWARE BASIN EAST	<b>TVD Reference:</b>	KB @ 3362.00usft
<b>Project:</b>	LEA COUNT SOUTH WEST (NM-E)	<b>MD Reference:</b>	KB @ 3362.00usft
<b>Site:</b>	COLUMBUS FEDERAL PROJECT	<b>North Reference:</b>	Grid
<b>Well:</b>	_ COLUMBUS FEDERAL COM 504H	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	OWB		
<b>Design:</b>	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	
810.00	0.00	0.00	810.00	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	
840.00	0.00	0.00	840.00	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	
870.00	0.00	0.00	870.00	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	
900.00	0.00	0.00	900.00	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	
930.00	0.00	0.00	930.00	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	
960.00	0.00	0.00	960.00	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	
990.00	0.00	0.00	990.00	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	
1,020.00	0.00	0.00	1,020.00	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	
1,050.00	0.00	0.00	1,050.00	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	
1,080.00	0.00	0.00	1,080.00	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	
1,110.00	0.00	0.00	1,110.00	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	
1,140.00	0.00	0.00	1,140.00	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	
1,170.00	0.00	0.00	1,170.00	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	
1,200.00	0.00	0.00	1,200.00	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	
1,230.00	0.00	0.00	1,230.00	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	
1,260.00	0.00	0.00	1,260.00	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	
1,290.00	0.00	0.00	1,290.00	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	
1,320.00	0.00	0.00	1,320.00	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	
1,350.00	0.00	0.00	1,350.00	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	
1,380.00	0.00	0.00	1,380.00	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	
1,410.00	0.00	0.00	1,410.00	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	
1,440.00	0.00	0.00	1,440.00	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	
1,470.00	0.00	0.00	1,470.00	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	
1,500.00	0.00	0.00	1,500.00	0.00	0.00	0.00	0.00	0.00	0.00	
1,515.00	0.30	20.00	1,515.00	0.04	0.01	-0.04	2.00	2.00	0.00	
1,530.00	0.60	20.00	1,530.00	0.15	0.05	-0.14	2.00	2.00	0.00	
1,545.00	0.90	20.00	1,545.00	0.33	0.12	-0.32	2.00	2.00	0.00	
1,560.00	1.20	20.00	1,560.00	0.59	0.21	-0.57	2.00	2.00	0.00	
1,575.00	1.50	20.00	1,574.99	0.92	0.34	-0.90	2.00	2.00	0.00	

### ConocoPhillips

#### Planning Report

<b>Database:</b>	EDT 17 Permian Prod	<b>Local Co-ordinate Reference:</b>	Well _ COLUMBUS FEDERAL COM 504H - Slot SLOT 6
<b>Company:</b>	DELAWARE BASIN EAST	<b>TVD Reference:</b>	KB @ 3362.00usft
<b>Project:</b>	LEA COUNT SOUTH WEST (NM-E)	<b>MD Reference:</b>	KB @ 3362.00usft
<b>Site:</b>	COLUMBUS FEDERAL PROJECT	<b>North Reference:</b>	Grid
<b>Well:</b>	_ COLUMBUS FEDERAL COM 504H	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	OWB		
<b>Design:</b>	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	1.80	20.00	1,589.99	1.33	0.48	-1.29	2.00	2.00	0.00	
1,605.00	2.10	20.00	1,604.98	1.81	0.66	-1.76	2.00	2.00	0.00	
1,620.00	2.40	20.00	1,619.96	2.36	0.86	-2.30	2.00	2.00	0.00	
1,635.00	2.70	20.00	1,634.95	2.99	1.09	-2.91	2.00	2.00	0.00	
1,650.00	3.00	20.00	1,649.93	3.69	1.34	-3.59	2.00	2.00	0.00	
1,665.00	3.30	20.00	1,664.91	4.46	1.62	-4.35	2.00	2.00	0.00	
1,680.00	3.60	20.00	1,679.88	5.31	1.93	-5.17	2.00	2.00	0.00	
1,695.00	3.90	20.00	1,694.85	6.23	2.27	-6.07	2.00	2.00	0.00	
1,710.00	4.20	20.00	1,709.81	7.23	2.63	-7.04	2.00	2.00	0.00	
1,725.00	4.50	20.00	1,724.77	8.30	3.02	-8.08	2.00	2.00	0.00	
1,740.00	4.80	20.00	1,739.72	9.44	3.44	-9.19	2.00	2.00	0.00	
1,750.00	5.00	20.00	1,749.68	10.24	3.73	-9.98	2.00	2.00	0.00	
1,755.00	5.02	21.12	1,754.66	10.65	3.88	-10.37	2.00	0.45	22.31	
1,770.00	5.10	24.40	1,769.61	11.87	4.39	-11.56	2.00	0.53	21.87	
1,785.00	5.20	27.57	1,784.54	13.08	4.98	-12.73	2.00	0.63	21.14	
1,800.00	5.31	30.62	1,799.48	14.28	5.65	-13.88	2.00	0.73	20.33	
1,815.00	5.43	33.53	1,814.42	15.47	6.40	-15.02	2.00	0.83	19.45	
1,830.00	5.57	36.31	1,829.35	16.65	7.22	-16.14	2.00	0.92	18.54	
1,845.00	5.72	38.96	1,844.27	17.82	8.12	-17.24	2.00	1.00	17.60	
1,860.00	5.88	41.46	1,859.20	18.97	9.10	-18.33	2.00	1.08	16.67	
1,875.00	6.05	43.82	1,874.12	20.12	10.16	-19.41	2.00	1.15	15.76	
1,890.00	6.24	46.05	1,889.03	21.26	11.29	-20.47	2.00	1.21	14.86	
1,905.00	6.43	48.15	1,903.94	22.38	12.50	-21.51	2.00	1.27	14.00	
1,920.00	6.62	50.13	1,918.84	23.50	13.79	-22.54	2.00	1.33	13.18	
1,935.00	6.83	51.99	1,933.74	24.60	15.16	-23.55	2.00	1.37	12.41	
1,950.00	7.04	53.74	1,948.63	25.69	16.60	-24.54	2.00	1.42	11.67	
1,965.00	7.26	55.39	1,963.51	26.78	18.12	-25.52	2.00	1.46	10.98	
1,980.00	7.49	56.94	1,978.39	27.85	19.72	-26.49	2.00	1.50	10.33	
1,995.00	7.72	58.39	1,993.26	28.91	21.40	-27.44	2.00	1.53	9.73	
2,010.00	7.95	59.77	2,008.12	29.96	23.15	-28.37	2.00	1.56	9.16	
2,025.00	8.19	61.06	2,022.97	31.00	24.99	-29.29	2.00	1.59	8.64	
2,040.00	8.43	62.29	2,037.81	32.03	26.89	-30.19	2.00	1.62	8.15	
2,055.00	8.68	63.44	2,052.64	33.04	28.88	-31.07	2.00	1.64	7.69	
2,065.66	8.86	64.22	2,063.18	33.76	30.34	-31.69	2.00	1.66	7.33	
2,070.00	8.86	64.22	2,067.47	34.05	30.94	-31.94	0.00	0.00	0.00	
2,085.00	8.86	64.22	2,082.29	35.05	33.02	-32.80	0.00	0.00	0.00	
2,100.00	8.86	64.22	2,097.11	36.06	35.10	-33.67	0.00	0.00	0.00	
2,115.00	8.86	64.22	2,111.93	37.06	37.18	-34.53	0.00	0.00	0.00	
2,130.00	8.86	64.22	2,126.75	38.07	39.26	-35.40	0.00	0.00	0.00	
2,145.00	8.86	64.22	2,141.57	39.07	41.34	-36.26	0.00	0.00	0.00	
2,160.00	8.86	64.22	2,156.39	40.08	43.42	-37.13	0.00	0.00	0.00	
2,175.00	8.86	64.22	2,171.22	41.08	45.49	-38.00	0.00	0.00	0.00	
2,190.00	8.86	64.22	2,186.04	42.08	47.57	-38.86	0.00	0.00	0.00	
2,205.00	8.86	64.22	2,200.86	43.09	49.65	-39.73	0.00	0.00	0.00	
2,220.00	8.86	64.22	2,215.68	44.09	51.73	-40.59	0.00	0.00	0.00	
2,235.00	8.86	64.22	2,230.50	45.10	53.81	-41.46	0.00	0.00	0.00	
2,250.00	8.86	64.22	2,245.32	46.10	55.89	-42.32	0.00	0.00	0.00	
2,265.00	8.86	64.22	2,260.14	47.10	57.97	-43.19	0.00	0.00	0.00	
2,280.00	8.86	64.22	2,274.96	48.11	60.05	-44.05	0.00	0.00	0.00	
2,295.00	8.86	64.22	2,289.78	49.11	62.13	-44.92	0.00	0.00	0.00	
2,310.00	8.86	64.22	2,304.61	50.12	64.21	-45.78	0.00	0.00	0.00	
2,325.00	8.86	64.22	2,319.43	51.12	66.29	-46.65	0.00	0.00	0.00	
2,340.00	8.86	64.22	2,334.25	52.13	68.37	-47.51	0.00	0.00	0.00	

### ConocoPhillips

#### Planning Report

<b>Database:</b>	EDT 17 Permian Prod	<b>Local Co-ordinate Reference:</b>	Well _ COLUMBUS FEDERAL COM 504H - Slot SLOT 6
<b>Company:</b>	DELAWARE BASIN EAST	<b>TVD Reference:</b>	KB @ 3362.00usft
<b>Project:</b>	LEA COUNT SOUTH WEST (NM-E)	<b>MD Reference:</b>	KB @ 3362.00usft
<b>Site:</b>	COLUMBUS FEDERAL PROJECT	<b>North Reference:</b>	Grid
<b>Well:</b>	_ COLUMBUS FEDERAL COM 504H	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	OWB		
<b>Design:</b>	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)	
2,355.00	8.86	64.22	2,349.07	53.13	70.45	-48.38	0.00	0.00	0.00	
2,370.00	8.86	64.22	2,363.89	54.13	72.53	-49.24	0.00	0.00	0.00	
2,385.00	8.86	64.22	2,378.71	55.14	74.60	-50.11	0.00	0.00	0.00	
2,400.00	8.86	64.22	2,393.53	56.14	76.68	-50.97	0.00	0.00	0.00	
2,415.00	8.86	64.22	2,408.35	57.15	78.76	-51.84	0.00	0.00	0.00	
2,430.00	8.86	64.22	2,423.18	58.15	80.84	-52.70	0.00	0.00	0.00	
2,445.00	8.86	64.22	2,438.00	59.16	82.92	-53.57	0.00	0.00	0.00	
2,460.00	8.86	64.22	2,452.82	60.16	85.00	-54.43	0.00	0.00	0.00	
2,475.00	8.86	64.22	2,467.64	61.16	87.08	-55.30	0.00	0.00	0.00	
2,490.00	8.86	64.22	2,482.46	62.17	89.16	-56.16	0.00	0.00	0.00	
2,505.00	8.86	64.22	2,497.28	63.17	91.24	-57.03	0.00	0.00	0.00	
2,520.00	8.86	64.22	2,512.10	64.18	93.32	-57.89	0.00	0.00	0.00	
2,535.00	8.86	64.22	2,526.92	65.18	95.40	-58.76	0.00	0.00	0.00	
2,550.00	8.86	64.22	2,541.75	66.18	97.48	-59.62	0.00	0.00	0.00	
2,565.00	8.86	64.22	2,556.57	67.19	99.56	-60.49	0.00	0.00	0.00	
2,580.00	8.86	64.22	2,571.39	68.19	101.64	-61.35	0.00	0.00	0.00	
2,595.00	8.86	64.22	2,586.21	69.20	103.71	-62.22	0.00	0.00	0.00	
2,610.00	8.86	64.22	2,601.03	70.20	105.79	-63.08	0.00	0.00	0.00	
2,625.00	8.86	64.22	2,615.85	71.21	107.87	-63.95	0.00	0.00	0.00	
2,640.00	8.86	64.22	2,630.67	72.21	109.95	-64.81	0.00	0.00	0.00	
2,655.00	8.86	64.22	2,645.49	73.21	112.03	-65.68	0.00	0.00	0.00	
2,670.00	8.86	64.22	2,660.31	74.22	114.11	-66.54	0.00	0.00	0.00	
2,685.00	8.86	64.22	2,675.14	75.22	116.19	-67.41	0.00	0.00	0.00	
2,700.00	8.86	64.22	2,689.96	76.23	118.27	-68.27	0.00	0.00	0.00	
2,715.00	8.86	64.22	2,704.78	77.23	120.35	-69.14	0.00	0.00	0.00	
2,730.00	8.86	64.22	2,719.60	78.23	122.43	-70.00	0.00	0.00	0.00	
2,745.00	8.86	64.22	2,734.42	79.24	124.51	-70.87	0.00	0.00	0.00	
2,760.00	8.86	64.22	2,749.24	80.24	126.59	-71.73	0.00	0.00	0.00	
2,775.00	8.86	64.22	2,764.06	81.25	128.67	-72.60	0.00	0.00	0.00	
2,790.00	8.86	64.22	2,778.88	82.25	130.75	-73.46	0.00	0.00	0.00	
2,805.00	8.86	64.22	2,793.71	83.26	132.82	-74.33	0.00	0.00	0.00	
2,820.00	8.86	64.22	2,808.53	84.26	134.90	-75.19	0.00	0.00	0.00	
2,835.00	8.86	64.22	2,823.35	85.26	136.98	-76.06	0.00	0.00	0.00	
2,850.00	8.86	64.22	2,838.17	86.27	139.06	-76.92	0.00	0.00	0.00	
2,865.00	8.86	64.22	2,852.99	87.27	141.14	-77.79	0.00	0.00	0.00	
2,880.00	8.86	64.22	2,867.81	88.28	143.22	-78.65	0.00	0.00	0.00	
2,895.00	8.86	64.22	2,882.63	89.28	145.30	-79.52	0.00	0.00	0.00	
2,910.00	8.86	64.22	2,897.45	90.28	147.38	-80.38	0.00	0.00	0.00	
2,925.00	8.86	64.22	2,912.28	91.29	149.46	-81.25	0.00	0.00	0.00	
2,940.00	8.86	64.22	2,927.10	92.29	151.54	-82.11	0.00	0.00	0.00	
2,955.00	8.86	64.22	2,941.92	93.30	153.62	-82.98	0.00	0.00	0.00	
2,970.00	8.86	64.22	2,956.74	94.30	155.70	-83.84	0.00	0.00	0.00	
2,985.00	8.86	64.22	2,971.56	95.31	157.78	-84.71	0.00	0.00	0.00	
3,000.00	8.86	64.22	2,986.38	96.31	159.86	-85.58	0.00	0.00	0.00	
3,015.00	8.86	64.22	3,001.20	97.31	161.93	-86.44	0.00	0.00	0.00	
3,030.00	8.86	64.22	3,016.02	98.32	164.01	-87.31	0.00	0.00	0.00	
3,045.00	8.86	64.22	3,030.85	99.32	166.09	-88.17	0.00	0.00	0.00	
3,060.00	8.86	64.22	3,045.67	100.33	168.17	-89.04	0.00	0.00	0.00	
3,075.00	8.86	64.22	3,060.49	101.33	170.25	-89.90	0.00	0.00	0.00	
3,090.00	8.86	64.22	3,075.31	102.34	172.33	-90.77	0.00	0.00	0.00	
3,105.00	8.86	64.22	3,090.13	103.34	174.41	-91.63	0.00	0.00	0.00	
3,120.00	8.86	64.22	3,104.95	104.34	176.49	-92.50	0.00	0.00	0.00	
3,135.00	8.86	64.22	3,119.77	105.35	178.57	-93.36	0.00	0.00	0.00	

### ConocoPhillips

#### Planning Report

<b>Database:</b>	EDT 17 Permian Prod	<b>Local Co-ordinate Reference:</b>	Well _ COLUMBUS FEDERAL COM 504H - Slot SLOT 6
<b>Company:</b>	DELAWARE BASIN EAST	<b>TVD Reference:</b>	KB @ 3362.00usft
<b>Project:</b>	LEA COUNT SOUTH WEST (NM-E)	<b>MD Reference:</b>	KB @ 3362.00usft
<b>Site:</b>	COLUMBUS FEDERAL PROJECT	<b>North Reference:</b>	Grid
<b>Well:</b>	_ COLUMBUS FEDERAL COM 504H	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	OWB		
<b>Design:</b>	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)	
3,150.00	8.86	64.22	3,134.59	106.35	180.65	-94.23	0.00	0.00	0.00	
3,165.00	8.86	64.22	3,149.41	107.36	182.73	-95.09	0.00	0.00	0.00	
3,180.00	8.86	64.22	3,164.24	108.36	184.81	-95.96	0.00	0.00	0.00	
3,195.00	8.86	64.22	3,179.06	109.36	186.89	-96.82	0.00	0.00	0.00	
3,210.00	8.86	64.22	3,193.88	110.37	188.96	-97.69	0.00	0.00	0.00	
3,225.00	8.86	64.22	3,208.70	111.37	191.04	-98.55	0.00	0.00	0.00	
3,240.00	8.86	64.22	3,223.52	112.38	193.12	-99.42	0.00	0.00	0.00	
3,255.00	8.86	64.22	3,238.34	113.38	195.20	-100.28	0.00	0.00	0.00	
3,270.00	8.86	64.22	3,253.16	114.39	197.28	-101.15	0.00	0.00	0.00	
3,285.00	8.86	64.22	3,267.98	115.39	199.36	-102.01	0.00	0.00	0.00	
3,300.00	8.86	64.22	3,282.81	116.39	201.44	-102.88	0.00	0.00	0.00	
3,315.00	8.86	64.22	3,297.63	117.40	203.52	-103.74	0.00	0.00	0.00	
3,330.00	8.86	64.22	3,312.45	118.40	205.60	-104.61	0.00	0.00	0.00	
3,345.00	8.86	64.22	3,327.27	119.41	207.68	-105.47	0.00	0.00	0.00	
3,360.00	8.86	64.22	3,342.09	120.41	209.76	-106.34	0.00	0.00	0.00	
3,375.00	8.86	64.22	3,356.91	121.41	211.84	-107.20	0.00	0.00	0.00	
3,390.00	8.86	64.22	3,371.73	122.42	213.92	-108.07	0.00	0.00	0.00	
3,405.00	8.86	64.22	3,386.55	123.42	216.00	-108.93	0.00	0.00	0.00	
3,420.00	8.86	64.22	3,401.38	124.43	218.07	-109.80	0.00	0.00	0.00	
3,435.00	8.86	64.22	3,416.20	125.43	220.15	-110.66	0.00	0.00	0.00	
3,450.00	8.86	64.22	3,431.02	126.44	222.23	-111.53	0.00	0.00	0.00	
3,465.00	8.86	64.22	3,445.84	127.44	224.31	-112.39	0.00	0.00	0.00	
3,480.00	8.86	64.22	3,460.66	128.44	226.39	-113.26	0.00	0.00	0.00	
3,495.00	8.86	64.22	3,475.48	129.45	228.47	-114.12	0.00	0.00	0.00	
3,510.00	8.86	64.22	3,490.30	130.45	230.55	-114.99	0.00	0.00	0.00	
3,525.00	8.86	64.22	3,505.12	131.46	232.63	-115.85	0.00	0.00	0.00	
3,540.00	8.86	64.22	3,519.94	132.46	234.71	-116.72	0.00	0.00	0.00	
3,555.00	8.86	64.22	3,534.77	133.46	236.79	-117.58	0.00	0.00	0.00	
3,570.00	8.86	64.22	3,549.59	134.47	238.87	-118.45	0.00	0.00	0.00	
3,585.00	8.86	64.22	3,564.41	135.47	240.95	-119.31	0.00	0.00	0.00	
3,600.00	8.86	64.22	3,579.23	136.48	243.03	-120.18	0.00	0.00	0.00	
3,615.00	8.86	64.22	3,594.05	137.48	245.11	-121.04	0.00	0.00	0.00	
3,630.00	8.86	64.22	3,608.87	138.49	247.18	-121.91	0.00	0.00	0.00	
3,645.00	8.86	64.22	3,623.69	139.49	249.26	-122.77	0.00	0.00	0.00	
3,660.00	8.86	64.22	3,638.51	140.49	251.34	-123.64	0.00	0.00	0.00	
3,675.00	8.86	64.22	3,653.34	141.50	253.42	-124.50	0.00	0.00	0.00	
3,690.00	8.86	64.22	3,668.16	142.50	255.50	-125.37	0.00	0.00	0.00	
3,705.00	8.86	64.22	3,682.98	143.51	257.58	-126.23	0.00	0.00	0.00	
3,720.00	8.86	64.22	3,697.80	144.51	259.66	-127.10	0.00	0.00	0.00	
3,735.00	8.86	64.22	3,712.62	145.52	261.74	-127.96	0.00	0.00	0.00	
3,750.00	8.86	64.22	3,727.44	146.52	263.82	-128.83	0.00	0.00	0.00	
3,765.00	8.86	64.22	3,742.26	147.52	265.90	-129.69	0.00	0.00	0.00	
3,780.00	8.86	64.22	3,757.08	148.53	267.98	-130.56	0.00	0.00	0.00	
3,795.00	8.86	64.22	3,771.91	149.53	270.06	-131.42	0.00	0.00	0.00	
3,810.00	8.86	64.22	3,786.73	150.54	272.14	-132.29	0.00	0.00	0.00	
3,825.00	8.86	64.22	3,801.55	151.54	274.22	-133.16	0.00	0.00	0.00	
3,840.00	8.86	64.22	3,816.37	152.54	276.29	-134.02	0.00	0.00	0.00	
3,855.00	8.86	64.22	3,831.19	153.55	278.37	-134.89	0.00	0.00	0.00	
3,870.00	8.86	64.22	3,846.01	154.55	280.45	-135.75	0.00	0.00	0.00	
3,885.00	8.86	64.22	3,860.83	155.56	282.53	-136.62	0.00	0.00	0.00	
3,900.00	8.86	64.22	3,875.65	156.56	284.61	-137.48	0.00	0.00	0.00	
3,915.00	8.86	64.22	3,890.48	157.57	286.69	-138.35	0.00	0.00	0.00	
3,930.00	8.86	64.22	3,905.30	158.57	288.77	-139.21	0.00	0.00	0.00	

### ConocoPhillips

#### Planning Report

<b>Database:</b>	EDT 17 Permian Prod	<b>Local Co-ordinate Reference:</b>	Well _ COLUMBUS FEDERAL COM 504H - Slot SLOT 6
<b>Company:</b>	DELAWARE BASIN EAST	<b>TVD Reference:</b>	KB @ 3362.00usft
<b>Project:</b>	LEA COUNT SOUTH WEST (NM-E)	<b>MD Reference:</b>	KB @ 3362.00usft
<b>Site:</b>	COLUMBUS FEDERAL PROJECT	<b>North Reference:</b>	Grid
<b>Well:</b>	_ COLUMBUS FEDERAL COM 504H	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	OWB		
<b>Design:</b>	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)	
3,945.00	8.86	64.22	3,920.12	159.57	290.85	-140.08	0.00	0.00	0.00	
3,960.00	8.86	64.22	3,934.94	160.58	292.93	-140.94	0.00	0.00	0.00	
3,975.00	8.86	64.22	3,949.76	161.58	295.01	-141.81	0.00	0.00	0.00	
3,990.00	8.86	64.22	3,964.58	162.59	297.09	-142.67	0.00	0.00	0.00	
4,005.00	8.86	64.22	3,979.40	163.59	299.17	-143.54	0.00	0.00	0.00	
4,020.00	8.86	64.22	3,994.22	164.59	301.25	-144.40	0.00	0.00	0.00	
4,035.00	8.86	64.22	4,009.04	165.60	303.33	-145.27	0.00	0.00	0.00	
4,050.00	8.86	64.22	4,023.87	166.60	305.40	-146.13	0.00	0.00	0.00	
4,065.00	8.86	64.22	4,038.69	167.61	307.48	-147.00	0.00	0.00	0.00	
4,080.00	8.86	64.22	4,053.51	168.61	309.56	-147.86	0.00	0.00	0.00	
4,095.00	8.86	64.22	4,068.33	169.62	311.64	-148.73	0.00	0.00	0.00	
4,110.00	8.86	64.22	4,083.15	170.62	313.72	-149.59	0.00	0.00	0.00	
4,125.00	8.86	64.22	4,097.97	171.62	315.80	-150.46	0.00	0.00	0.00	
4,140.00	8.86	64.22	4,112.79	172.63	317.88	-151.32	0.00	0.00	0.00	
4,155.00	8.86	64.22	4,127.61	173.63	319.96	-152.19	0.00	0.00	0.00	
4,170.00	8.86	64.22	4,142.44	174.64	322.04	-153.05	0.00	0.00	0.00	
4,185.00	8.86	64.22	4,157.26	175.64	324.12	-153.92	0.00	0.00	0.00	
4,200.00	8.86	64.22	4,172.08	176.64	326.20	-154.78	0.00	0.00	0.00	
4,215.00	8.86	64.22	4,186.90	177.65	328.28	-155.65	0.00	0.00	0.00	
4,230.00	8.86	64.22	4,201.72	178.65	330.36	-156.51	0.00	0.00	0.00	
4,245.00	8.86	64.22	4,216.54	179.66	332.44	-157.38	0.00	0.00	0.00	
4,260.00	8.86	64.22	4,231.36	180.66	334.51	-158.24	0.00	0.00	0.00	
4,275.00	8.86	64.22	4,246.18	181.67	336.59	-159.11	0.00	0.00	0.00	
4,290.00	8.86	64.22	4,261.01	182.67	338.67	-159.97	0.00	0.00	0.00	
4,305.00	8.86	64.22	4,275.83	183.67	340.75	-160.84	0.00	0.00	0.00	
4,320.00	8.86	64.22	4,290.65	184.68	342.83	-161.70	0.00	0.00	0.00	
4,335.00	8.86	64.22	4,305.47	185.68	344.91	-162.57	0.00	0.00	0.00	
4,350.00	8.86	64.22	4,320.29	186.69	346.99	-163.43	0.00	0.00	0.00	
4,365.00	8.86	64.22	4,335.11	187.69	349.07	-164.30	0.00	0.00	0.00	
4,380.00	8.86	64.22	4,349.93	188.70	351.15	-165.16	0.00	0.00	0.00	
4,395.00	8.86	64.22	4,364.75	189.70	353.23	-166.03	0.00	0.00	0.00	
4,410.00	8.86	64.22	4,379.58	190.70	355.31	-166.89	0.00	0.00	0.00	
4,425.00	8.86	64.22	4,394.40	191.71	357.39	-167.76	0.00	0.00	0.00	
4,440.00	8.86	64.22	4,409.22	192.71	359.47	-168.62	0.00	0.00	0.00	
4,455.00	8.86	64.22	4,424.04	193.72	361.55	-169.49	0.00	0.00	0.00	
4,470.00	8.86	64.22	4,438.86	194.72	363.62	-170.35	0.00	0.00	0.00	
4,485.00	8.86	64.22	4,453.68	195.72	365.70	-171.22	0.00	0.00	0.00	
4,500.00	8.86	64.22	4,468.50	196.73	367.78	-172.08	0.00	0.00	0.00	
4,515.00	8.86	64.22	4,483.32	197.73	369.86	-172.95	0.00	0.00	0.00	
4,530.00	8.86	64.22	4,498.14	198.74	371.94	-173.81	0.00	0.00	0.00	
4,545.00	8.86	64.22	4,512.97	199.74	374.02	-174.68	0.00	0.00	0.00	
4,560.00	8.86	64.22	4,527.79	200.75	376.10	-175.54	0.00	0.00	0.00	
4,575.00	8.86	64.22	4,542.61	201.75	378.18	-176.41	0.00	0.00	0.00	
4,590.00	8.86	64.22	4,557.43	202.75	380.26	-177.27	0.00	0.00	0.00	
4,605.00	8.86	64.22	4,572.25	203.76	382.34	-178.14	0.00	0.00	0.00	
4,620.00	8.86	64.22	4,587.07	204.76	384.42	-179.01	0.00	0.00	0.00	
4,635.00	8.86	64.22	4,601.89	205.77	386.50	-179.87	0.00	0.00	0.00	
4,650.00	8.86	64.22	4,616.71	206.77	388.58	-180.74	0.00	0.00	0.00	
4,665.00	8.86	64.22	4,631.54	207.77	390.66	-181.60	0.00	0.00	0.00	
4,680.00	8.86	64.22	4,646.36	208.78	392.73	-182.47	0.00	0.00	0.00	
4,695.00	8.86	64.22	4,661.18	209.78	394.81	-183.33	0.00	0.00	0.00	
4,710.00	8.86	64.22	4,676.00	210.79	396.89	-184.20	0.00	0.00	0.00	
4,725.00	8.86	64.22	4,690.82	211.79	398.97	-185.06	0.00	0.00	0.00	

### ConocoPhillips

#### Planning Report

<b>Database:</b>	EDT 17 Permian Prod	<b>Local Co-ordinate Reference:</b>	Well _ COLUMBUS FEDERAL COM 504H - Slot SLOT 6
<b>Company:</b>	DELAWARE BASIN EAST	<b>TVD Reference:</b>	KB @ 3362.00usft
<b>Project:</b>	LEA COUNT SOUTH WEST (NM-E)	<b>MD Reference:</b>	KB @ 3362.00usft
<b>Site:</b>	COLUMBUS FEDERAL PROJECT	<b>North Reference:</b>	Grid
<b>Well:</b>	_ COLUMBUS FEDERAL COM 504H	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	OWB		
<b>Design:</b>	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)	
4,740.00	8.86	64.22	4,705.64	212.80	401.05	-185.93	0.00	0.00	0.00	
4,755.00	8.86	64.22	4,720.46	213.80	403.13	-186.79	0.00	0.00	0.00	
4,770.00	8.86	64.22	4,735.28	214.80	405.21	-187.66	0.00	0.00	0.00	
4,785.00	8.86	64.22	4,750.11	215.81	407.29	-188.52	0.00	0.00	0.00	
4,800.00	8.86	64.22	4,764.93	216.81	409.37	-189.39	0.00	0.00	0.00	
4,815.00	8.86	64.22	4,779.75	217.82	411.45	-190.25	0.00	0.00	0.00	
4,830.00	8.86	64.22	4,794.57	218.82	413.53	-191.12	0.00	0.00	0.00	
4,845.00	8.86	64.22	4,809.39	219.82	415.61	-191.98	0.00	0.00	0.00	
4,860.00	8.86	64.22	4,824.21	220.83	417.69	-192.85	0.00	0.00	0.00	
4,875.00	8.86	64.22	4,839.03	221.83	419.76	-193.71	0.00	0.00	0.00	
4,890.00	8.86	64.22	4,853.85	222.84	421.84	-194.58	0.00	0.00	0.00	
4,905.00	8.86	64.22	4,868.67	223.84	423.92	-195.44	0.00	0.00	0.00	
4,920.00	8.86	64.22	4,883.50	224.85	426.00	-196.31	0.00	0.00	0.00	
4,935.00	8.86	64.22	4,898.32	225.85	428.08	-197.17	0.00	0.00	0.00	
4,950.00	8.86	64.22	4,913.14	226.85	430.16	-198.04	0.00	0.00	0.00	
4,965.00	8.86	64.22	4,927.96	227.86	432.24	-198.90	0.00	0.00	0.00	
4,980.00	8.86	64.22	4,942.78	228.86	434.32	-199.77	0.00	0.00	0.00	
4,995.00	8.86	64.22	4,957.60	229.87	436.40	-200.63	0.00	0.00	0.00	
5,010.00	8.86	64.22	4,972.42	230.87	438.48	-201.50	0.00	0.00	0.00	
5,025.00	8.86	64.22	4,987.24	231.88	440.56	-202.36	0.00	0.00	0.00	
5,040.00	8.86	64.22	5,002.07	232.88	442.64	-203.23	0.00	0.00	0.00	
5,055.00	8.86	64.22	5,016.89	233.88	444.72	-204.09	0.00	0.00	0.00	
5,070.00	8.86	64.22	5,031.71	234.89	446.80	-204.96	0.00	0.00	0.00	
5,085.00	8.86	64.22	5,046.53	235.89	448.87	-205.82	0.00	0.00	0.00	
5,100.00	8.86	64.22	5,061.35	236.90	450.95	-206.69	0.00	0.00	0.00	
5,115.00	8.86	64.22	5,076.17	237.90	453.03	-207.55	0.00	0.00	0.00	
5,130.00	8.86	64.22	5,090.99	238.90	455.11	-208.42	0.00	0.00	0.00	
5,145.00	8.86	64.22	5,105.81	239.91	457.19	-209.28	0.00	0.00	0.00	
5,160.00	8.86	64.22	5,120.64	240.91	459.27	-210.15	0.00	0.00	0.00	
5,175.00	8.86	64.22	5,135.46	241.92	461.35	-211.01	0.00	0.00	0.00	
5,190.00	8.86	64.22	5,150.28	242.92	463.43	-211.88	0.00	0.00	0.00	
5,205.00	8.86	64.22	5,165.10	243.93	465.51	-212.74	0.00	0.00	0.00	
5,220.00	8.86	64.22	5,179.92	244.93	467.59	-213.61	0.00	0.00	0.00	
5,235.00	8.86	64.22	5,194.74	245.93	469.67	-214.47	0.00	0.00	0.00	
5,250.00	8.86	64.22	5,209.56	246.94	471.75	-215.34	0.00	0.00	0.00	
5,265.00	8.86	64.22	5,224.38	247.94	473.83	-216.20	0.00	0.00	0.00	
5,280.00	8.86	64.22	5,239.21	248.95	475.91	-217.07	0.00	0.00	0.00	
5,295.00	8.86	64.22	5,254.03	249.95	477.98	-217.93	0.00	0.00	0.00	
5,310.00	8.86	64.22	5,268.85	250.95	480.06	-218.80	0.00	0.00	0.00	
5,325.00	8.86	64.22	5,283.67	251.96	482.14	-219.66	0.00	0.00	0.00	
5,340.00	8.86	64.22	5,298.49	252.96	484.22	-220.53	0.00	0.00	0.00	
5,355.00	8.86	64.22	5,313.31	253.97	486.30	-221.39	0.00	0.00	0.00	
5,370.00	8.86	64.22	5,328.13	254.97	488.38	-222.26	0.00	0.00	0.00	
5,385.00	8.86	64.22	5,342.95	255.98	490.46	-223.12	0.00	0.00	0.00	
5,400.00	8.86	64.22	5,357.77	256.98	492.54	-223.99	0.00	0.00	0.00	
5,415.00	8.86	64.22	5,372.60	257.98	494.62	-224.85	0.00	0.00	0.00	
5,430.00	8.86	64.22	5,387.42	258.99	496.70	-225.72	0.00	0.00	0.00	
5,445.00	8.86	64.22	5,402.24	259.99	498.78	-226.59	0.00	0.00	0.00	
5,460.00	8.86	64.22	5,417.06	261.00	500.86	-227.45	0.00	0.00	0.00	
5,475.00	8.86	64.22	5,431.88	262.00	502.94	-228.32	0.00	0.00	0.00	
5,490.00	8.86	64.22	5,446.70	263.00	505.02	-229.18	0.00	0.00	0.00	
5,505.00	8.86	64.22	5,461.52	264.01	507.09	-230.05	0.00	0.00	0.00	
5,520.00	8.86	64.22	5,476.34	265.01	509.17	-230.91	0.00	0.00	0.00	

### ConocoPhillips

#### Planning Report

<b>Database:</b>	EDT 17 Permian Prod	<b>Local Co-ordinate Reference:</b>	Well _COLUMBUS FEDERAL COM 504H - Slot SLOT 6
<b>Company:</b>	DELAWARE BASIN EAST	<b>TVD Reference:</b>	KB @ 3362.00usft
<b>Project:</b>	LEA COUNT SOUTH WEST (NM-E)	<b>MD Reference:</b>	KB @ 3362.00usft
<b>Site:</b>	COLUMBUS FEDERAL PROJECT	<b>North Reference:</b>	Grid
<b>Well:</b>	_COLUMBUS FEDERAL COM 504H	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	OWB		
<b>Design:</b>	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)	
5,535.00	8.86	64.22	5,491.17	266.02	511.25	-231.78	0.00	0.00	0.00	
5,550.00	8.86	64.22	5,505.99	267.02	513.33	-232.64	0.00	0.00	0.00	
5,565.00	8.86	64.22	5,520.81	268.03	515.41	-233.51	0.00	0.00	0.00	
5,580.00	8.86	64.22	5,535.63	269.03	517.49	-234.37	0.00	0.00	0.00	
5,595.00	8.86	64.22	5,550.45	270.03	519.57	-235.24	0.00	0.00	0.00	
5,610.00	8.86	64.22	5,565.27	271.04	521.65	-236.10	0.00	0.00	0.00	
5,625.00	8.86	64.22	5,580.09	272.04	523.73	-236.97	0.00	0.00	0.00	
5,640.00	8.86	64.22	5,594.91	273.05	525.81	-237.83	0.00	0.00	0.00	
5,655.00	8.86	64.22	5,609.74	274.05	527.89	-238.70	0.00	0.00	0.00	
5,663.37	8.86	64.22	5,618.00	274.61	529.05	-239.18	0.00	0.00	0.00	
5,670.00	8.79	64.22	5,624.56	275.05	529.96	-239.56	1.00	-1.00	0.00	
5,685.00	8.64	64.22	5,639.38	276.04	532.01	-240.41	1.00	-1.00	0.00	
5,700.00	8.49	64.22	5,654.22	277.01	534.02	-241.25	1.00	-1.00	0.00	
5,715.00	8.34	64.22	5,669.06	277.97	536.00	-242.07	1.00	-1.00	0.00	
5,730.00	8.19	64.22	5,683.90	278.91	537.94	-242.88	1.00	-1.00	0.00	
5,745.00	8.04	64.22	5,698.75	279.83	539.85	-243.67	1.00	-1.00	0.00	
5,760.00	7.89	64.22	5,713.60	280.73	541.72	-244.45	1.00	-1.00	0.00	
5,775.00	7.74	64.22	5,728.47	281.62	543.55	-245.21	1.00	-1.00	0.00	
5,790.00	7.59	64.22	5,743.33	282.49	545.35	-245.96	1.00	-1.00	0.00	
5,805.00	7.44	64.22	5,758.20	283.34	547.12	-246.70	1.00	-1.00	0.00	
5,820.00	7.29	64.22	5,773.08	284.18	548.85	-247.42	1.00	-1.00	0.00	
5,835.00	7.14	64.22	5,787.96	284.99	550.55	-248.12	1.00	-1.00	0.00	
5,850.00	6.99	64.22	5,802.85	285.80	552.21	-248.82	1.00	-1.00	0.00	
5,865.00	6.84	64.22	5,817.74	286.58	553.84	-249.49	1.00	-1.00	0.00	
5,880.00	6.69	64.22	5,832.63	287.35	555.43	-250.15	1.00	-1.00	0.00	
5,895.00	6.54	64.22	5,847.53	288.10	556.98	-250.80	1.00	-1.00	0.00	
5,910.00	6.39	64.22	5,862.44	288.84	558.50	-251.43	1.00	-1.00	0.00	
5,925.00	6.24	64.22	5,877.35	289.55	559.99	-252.05	1.00	-1.00	0.00	
5,940.00	6.09	64.22	5,892.26	290.25	561.44	-252.66	1.00	-1.00	0.00	
5,955.00	5.94	64.22	5,907.18	290.94	562.85	-253.24	1.00	-1.00	0.00	
5,970.00	5.79	64.22	5,922.10	291.60	564.23	-253.82	1.00	-1.00	0.00	
5,985.00	5.64	64.22	5,937.02	292.25	565.58	-254.38	1.00	-1.00	0.00	
6,000.00	5.49	64.22	5,951.95	292.89	566.89	-254.92	1.00	-1.00	0.00	
6,015.00	5.34	64.22	5,966.89	293.50	568.16	-255.45	1.00	-1.00	0.00	
6,030.00	5.19	64.22	5,981.82	294.10	569.40	-255.97	1.00	-1.00	0.00	
6,045.00	5.04	64.22	5,996.76	294.68	570.61	-256.47	1.00	-1.00	0.00	
6,060.00	4.89	64.22	6,011.71	295.25	571.77	-256.96	1.00	-1.00	0.00	
6,075.00	4.74	64.22	6,026.65	295.79	572.91	-257.43	1.00	-1.00	0.00	
6,090.00	4.59	64.22	6,041.60	296.32	574.01	-257.88	1.00	-1.00	0.00	
6,105.00	4.44	64.22	6,056.56	296.84	575.07	-258.33	1.00	-1.00	0.00	
6,120.00	4.29	64.22	6,071.51	297.33	576.10	-258.75	1.00	-1.00	0.00	
6,135.00	4.14	64.22	6,086.47	297.81	577.09	-259.17	1.00	-1.00	0.00	
6,150.00	3.99	64.22	6,101.44	298.27	578.05	-259.57	1.00	-1.00	0.00	
6,165.00	3.84	64.22	6,116.40	298.72	578.97	-259.95	1.00	-1.00	0.00	
6,180.00	3.69	64.22	6,131.37	299.15	579.85	-260.32	1.00	-1.00	0.00	
6,195.00	3.54	64.22	6,146.34	299.56	580.71	-260.67	1.00	-1.00	0.00	
6,210.00	3.39	64.22	6,161.31	299.95	581.52	-261.01	1.00	-1.00	0.00	
6,225.00	3.24	64.22	6,176.29	300.33	582.30	-261.34	1.00	-1.00	0.00	
6,240.00	3.09	64.22	6,191.26	300.69	583.05	-261.65	1.00	-1.00	0.00	
6,255.00	2.94	64.22	6,206.24	301.03	583.76	-261.94	1.00	-1.00	0.00	
6,270.00	2.79	64.22	6,221.22	301.36	584.43	-262.22	1.00	-1.00	0.00	
6,285.00	2.64	64.22	6,236.21	301.67	585.07	-262.49	1.00	-1.00	0.00	
6,300.00	2.49	64.22	6,251.19	301.96	585.68	-262.74	1.00	-1.00	0.00	

### ConocoPhillips

#### Planning Report

<b>Database:</b>	EDT 17 Permian Prod	<b>Local Co-ordinate Reference:</b>	Well _ COLUMBUS FEDERAL COM 504H - Slot SLOT 6
<b>Company:</b>	DELAWARE BASIN EAST	<b>TVD Reference:</b>	KB @ 3362.00usft
<b>Project:</b>	LEA COUNT SOUTH WEST (NM-E)	<b>MD Reference:</b>	KB @ 3362.00usft
<b>Site:</b>	COLUMBUS FEDERAL PROJECT	<b>North Reference:</b>	Grid
<b>Well:</b>	_ COLUMBUS FEDERAL COM 504H	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	OWB		
<b>Design:</b>	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)	
6,315.00	2.34	64.22	6,266.18	302.24	586.25	-262.98	1.00	-1.00	0.00	
6,330.00	2.19	64.22	6,281.17	302.49	586.78	-263.20	1.00	-1.00	0.00	
6,345.00	2.04	64.22	6,296.16	302.73	587.28	-263.41	1.00	-1.00	0.00	
6,360.00	1.89	64.22	6,311.15	302.96	587.74	-263.60	1.00	-1.00	0.00	
6,375.00	1.74	64.22	6,326.14	303.16	588.17	-263.78	1.00	-1.00	0.00	
6,390.00	1.59	64.22	6,341.13	303.35	588.56	-263.94	1.00	-1.00	0.00	
6,405.00	1.44	64.22	6,356.13	303.53	588.92	-264.09	1.00	-1.00	0.00	
6,420.00	1.29	64.22	6,371.13	303.68	589.24	-264.22	1.00	-1.00	0.00	
6,435.00	1.14	64.22	6,386.12	303.82	589.53	-264.34	1.00	-1.00	0.00	
6,450.00	0.99	64.22	6,401.12	303.94	589.78	-264.45	1.00	-1.00	0.00	
6,465.00	0.84	64.22	6,416.12	304.04	589.99	-264.54	1.00	-1.00	0.00	
6,480.00	0.69	64.22	6,431.12	304.13	590.17	-264.61	1.00	-1.00	0.00	
6,495.00	0.54	64.22	6,446.12	304.20	590.32	-264.67	1.00	-1.00	0.00	
6,510.00	0.39	64.22	6,461.11	304.25	590.43	-264.72	1.00	-1.00	0.00	
6,525.00	0.24	64.22	6,476.11	304.29	590.50	-264.75	1.00	-1.00	0.00	
6,540.00	0.09	64.22	6,491.11	304.31	590.54	-264.76	1.00	-1.00	0.00	
6,548.89	0.00	0.00	6,500.00	304.31	590.54	-264.77	1.00	-1.00	0.00	
6,555.00	0.00	0.00	6,506.11	304.31	590.54	-264.77	0.00	0.00	0.00	
6,570.00	0.00	0.00	6,521.11	304.31	590.54	-264.77	0.00	0.00	0.00	
6,585.00	0.00	0.00	6,536.11	304.31	590.54	-264.77	0.00	0.00	0.00	
6,600.00	0.00	0.00	6,551.11	304.31	590.54	-264.77	0.00	0.00	0.00	
6,615.00	0.00	0.00	6,566.11	304.31	590.54	-264.77	0.00	0.00	0.00	
6,630.00	0.00	0.00	6,581.11	304.31	590.54	-264.77	0.00	0.00	0.00	
6,645.00	0.00	0.00	6,596.11	304.31	590.54	-264.77	0.00	0.00	0.00	
6,660.00	0.00	0.00	6,611.11	304.31	590.54	-264.77	0.00	0.00	0.00	
6,675.00	0.00	0.00	6,626.11	304.31	590.54	-264.77	0.00	0.00	0.00	
6,690.00	0.00	0.00	6,641.11	304.31	590.54	-264.77	0.00	0.00	0.00	
6,705.00	0.00	0.00	6,656.11	304.31	590.54	-264.77	0.00	0.00	0.00	
6,720.00	0.00	0.00	6,671.11	304.31	590.54	-264.77	0.00	0.00	0.00	
6,735.00	0.00	0.00	6,686.11	304.31	590.54	-264.77	0.00	0.00	0.00	
6,750.00	0.00	0.00	6,701.11	304.31	590.54	-264.77	0.00	0.00	0.00	
6,765.00	0.00	0.00	6,716.11	304.31	590.54	-264.77	0.00	0.00	0.00	
6,780.00	0.00	0.00	6,731.11	304.31	590.54	-264.77	0.00	0.00	0.00	
6,795.00	0.00	0.00	6,746.11	304.31	590.54	-264.77	0.00	0.00	0.00	
6,810.00	0.00	0.00	6,761.11	304.31	590.54	-264.77	0.00	0.00	0.00	
6,825.00	0.00	0.00	6,776.11	304.31	590.54	-264.77	0.00	0.00	0.00	
6,840.00	0.00	0.00	6,791.11	304.31	590.54	-264.77	0.00	0.00	0.00	
6,855.00	0.00	0.00	6,806.11	304.31	590.54	-264.77	0.00	0.00	0.00	
6,870.00	0.00	0.00	6,821.11	304.31	590.54	-264.77	0.00	0.00	0.00	
6,885.00	0.00	0.00	6,836.11	304.31	590.54	-264.77	0.00	0.00	0.00	
6,900.00	0.00	0.00	6,851.11	304.31	590.54	-264.77	0.00	0.00	0.00	
6,915.00	0.00	0.00	6,866.11	304.31	590.54	-264.77	0.00	0.00	0.00	
6,930.00	0.00	0.00	6,881.11	304.31	590.54	-264.77	0.00	0.00	0.00	
6,945.00	0.00	0.00	6,896.11	304.31	590.54	-264.77	0.00	0.00	0.00	
6,960.00	0.00	0.00	6,911.11	304.31	590.54	-264.77	0.00	0.00	0.00	
6,975.00	0.00	0.00	6,926.11	304.31	590.54	-264.77	0.00	0.00	0.00	
6,990.00	0.00	0.00	6,941.11	304.31	590.54	-264.77	0.00	0.00	0.00	
7,005.00	0.00	0.00	6,956.11	304.31	590.54	-264.77	0.00	0.00	0.00	
7,020.00	0.00	0.00	6,971.11	304.31	590.54	-264.77	0.00	0.00	0.00	
7,035.00	0.00	0.00	6,986.11	304.31	590.54	-264.77	0.00	0.00	0.00	
7,050.00	0.00	0.00	7,001.11	304.31	590.54	-264.77	0.00	0.00	0.00	
7,065.00	0.00	0.00	7,016.11	304.31	590.54	-264.77	0.00	0.00	0.00	
7,080.00	0.00	0.00	7,031.11	304.31	590.54	-264.77	0.00	0.00	0.00	

### ConocoPhillips

#### Planning Report

<b>Database:</b>	EDT 17 Permian Prod	<b>Local Co-ordinate Reference:</b>	Well _COLUMBUS FEDERAL COM 504H - Slot SLOT 6
<b>Company:</b>	DELAWARE BASIN EAST	<b>TVD Reference:</b>	KB @ 3362.00usft
<b>Project:</b>	LEA COUNT SOUTH WEST (NM-E)	<b>MD Reference:</b>	KB @ 3362.00usft
<b>Site:</b>	COLUMBUS FEDERAL PROJECT	<b>North Reference:</b>	Grid
<b>Well:</b>	_COLUMBUS FEDERAL COM 504H	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	OWB		
<b>Design:</b>	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)	
7,095.00	0.00	0.00	7,046.11	304.31	590.54	-264.77	0.00	0.00	0.00	
7,110.00	0.00	0.00	7,061.11	304.31	590.54	-264.77	0.00	0.00	0.00	
7,125.00	0.00	0.00	7,076.11	304.31	590.54	-264.77	0.00	0.00	0.00	
7,140.00	0.00	0.00	7,091.11	304.31	590.54	-264.77	0.00	0.00	0.00	
7,155.00	0.00	0.00	7,106.11	304.31	590.54	-264.77	0.00	0.00	0.00	
7,170.00	0.00	0.00	7,121.11	304.31	590.54	-264.77	0.00	0.00	0.00	
7,185.00	0.00	0.00	7,136.11	304.31	590.54	-264.77	0.00	0.00	0.00	
7,200.00	0.00	0.00	7,151.11	304.31	590.54	-264.77	0.00	0.00	0.00	
7,215.00	0.00	0.00	7,166.11	304.31	590.54	-264.77	0.00	0.00	0.00	
7,230.00	0.00	0.00	7,181.11	304.31	590.54	-264.77	0.00	0.00	0.00	
7,245.00	0.00	0.00	7,196.11	304.31	590.54	-264.77	0.00	0.00	0.00	
7,260.00	0.00	0.00	7,211.11	304.31	590.54	-264.77	0.00	0.00	0.00	
7,275.00	0.00	0.00	7,226.11	304.31	590.54	-264.77	0.00	0.00	0.00	
7,290.00	0.00	0.00	7,241.11	304.31	590.54	-264.77	0.00	0.00	0.00	
7,305.00	0.00	0.00	7,256.11	304.31	590.54	-264.77	0.00	0.00	0.00	
7,320.00	0.00	0.00	7,271.11	304.31	590.54	-264.77	0.00	0.00	0.00	
7,335.00	0.00	0.00	7,286.11	304.31	590.54	-264.77	0.00	0.00	0.00	
7,350.00	0.00	0.00	7,301.11	304.31	590.54	-264.77	0.00	0.00	0.00	
7,365.00	0.00	0.00	7,316.11	304.31	590.54	-264.77	0.00	0.00	0.00	
7,380.00	0.00	0.00	7,331.11	304.31	590.54	-264.77	0.00	0.00	0.00	
7,395.00	0.00	0.00	7,346.11	304.31	590.54	-264.77	0.00	0.00	0.00	
7,410.00	0.00	0.00	7,361.11	304.31	590.54	-264.77	0.00	0.00	0.00	
7,425.00	0.00	0.00	7,376.11	304.31	590.54	-264.77	0.00	0.00	0.00	
7,440.00	0.00	0.00	7,391.11	304.31	590.54	-264.77	0.00	0.00	0.00	
7,455.00	0.00	0.00	7,406.11	304.31	590.54	-264.77	0.00	0.00	0.00	
7,470.00	0.00	0.00	7,421.11	304.31	590.54	-264.77	0.00	0.00	0.00	
7,485.00	0.00	0.00	7,436.11	304.31	590.54	-264.77	0.00	0.00	0.00	
7,500.00	0.00	0.00	7,451.11	304.31	590.54	-264.77	0.00	0.00	0.00	
7,515.00	0.00	0.00	7,466.11	304.31	590.54	-264.77	0.00	0.00	0.00	
7,530.00	0.00	0.00	7,481.11	304.31	590.54	-264.77	0.00	0.00	0.00	
7,545.00	0.00	0.00	7,496.11	304.31	590.54	-264.77	0.00	0.00	0.00	
7,560.00	0.00	0.00	7,511.11	304.31	590.54	-264.77	0.00	0.00	0.00	
7,575.00	0.00	0.00	7,526.11	304.31	590.54	-264.77	0.00	0.00	0.00	
7,590.00	0.00	0.00	7,541.11	304.31	590.54	-264.77	0.00	0.00	0.00	
7,605.00	0.00	0.00	7,556.11	304.31	590.54	-264.77	0.00	0.00	0.00	
7,620.00	0.00	0.00	7,571.11	304.31	590.54	-264.77	0.00	0.00	0.00	
7,635.00	0.00	0.00	7,586.11	304.31	590.54	-264.77	0.00	0.00	0.00	
7,650.00	0.00	0.00	7,601.11	304.31	590.54	-264.77	0.00	0.00	0.00	
7,665.00	0.00	0.00	7,616.11	304.31	590.54	-264.77	0.00	0.00	0.00	
7,680.00	0.00	0.00	7,631.11	304.31	590.54	-264.77	0.00	0.00	0.00	
7,695.00	0.00	0.00	7,646.11	304.31	590.54	-264.77	0.00	0.00	0.00	
7,710.00	0.00	0.00	7,661.11	304.31	590.54	-264.77	0.00	0.00	0.00	
7,725.00	0.00	0.00	7,676.11	304.31	590.54	-264.77	0.00	0.00	0.00	
7,740.00	0.00	0.00	7,691.11	304.31	590.54	-264.77	0.00	0.00	0.00	
7,755.00	0.00	0.00	7,706.11	304.31	590.54	-264.77	0.00	0.00	0.00	
7,770.00	0.00	0.00	7,721.11	304.31	590.54	-264.77	0.00	0.00	0.00	
7,785.00	0.00	0.00	7,736.11	304.31	590.54	-264.77	0.00	0.00	0.00	
7,800.00	0.00	0.00	7,751.11	304.31	590.54	-264.77	0.00	0.00	0.00	
7,815.00	0.00	0.00	7,766.11	304.31	590.54	-264.77	0.00	0.00	0.00	
7,830.00	0.00	0.00	7,781.11	304.31	590.54	-264.77	0.00	0.00	0.00	
7,845.00	0.00	0.00	7,796.11	304.31	590.54	-264.77	0.00	0.00	0.00	
7,860.00	0.00	0.00	7,811.11	304.31	590.54	-264.77	0.00	0.00	0.00	
7,875.00	0.00	0.00	7,826.11	304.31	590.54	-264.77	0.00	0.00	0.00	

### ConocoPhillips Planning Report

<b>Database:</b>	EDT 17 Permian Prod	<b>Local Co-ordinate Reference:</b>	Well _ COLUMBUS FEDERAL COM 504H - Slot SLOT 6
<b>Company:</b>	DELAWARE BASIN EAST	<b>TVD Reference:</b>	KB @ 3362.00usft
<b>Project:</b>	LEA COUNT SOUTH WEST (NM-E)	<b>MD Reference:</b>	KB @ 3362.00usft
<b>Site:</b>	COLUMBUS FEDERAL PROJECT	<b>North Reference:</b>	Grid
<b>Well:</b>	_ COLUMBUS FEDERAL COM 504H	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	OWB		
<b>Design:</b>	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)	
7,890.00	0.00	0.00	7,841.11	304.31	590.54	-264.77	0.00	0.00	0.00	
7,905.00	0.00	0.00	7,856.11	304.31	590.54	-264.77	0.00	0.00	0.00	
7,920.00	0.00	0.00	7,871.11	304.31	590.54	-264.77	0.00	0.00	0.00	
7,935.00	0.00	0.00	7,886.11	304.31	590.54	-264.77	0.00	0.00	0.00	
7,950.00	0.00	0.00	7,901.11	304.31	590.54	-264.77	0.00	0.00	0.00	
7,965.00	0.00	0.00	7,916.11	304.31	590.54	-264.77	0.00	0.00	0.00	
7,980.00	0.00	0.00	7,931.11	304.31	590.54	-264.77	0.00	0.00	0.00	
7,995.00	0.00	0.00	7,946.11	304.31	590.54	-264.77	0.00	0.00	0.00	
8,010.00	0.00	0.00	7,961.11	304.31	590.54	-264.77	0.00	0.00	0.00	
8,025.00	0.00	0.00	7,976.11	304.31	590.54	-264.77	0.00	0.00	0.00	
8,040.00	0.00	0.00	7,991.11	304.31	590.54	-264.77	0.00	0.00	0.00	
8,055.00	0.00	0.00	8,006.11	304.31	590.54	-264.77	0.00	0.00	0.00	
8,070.00	0.00	0.00	8,021.11	304.31	590.54	-264.77	0.00	0.00	0.00	
8,085.00	0.00	0.00	8,036.11	304.31	590.54	-264.77	0.00	0.00	0.00	
8,100.00	0.00	0.00	8,051.11	304.31	590.54	-264.77	0.00	0.00	0.00	
8,115.00	0.00	0.00	8,066.11	304.31	590.54	-264.77	0.00	0.00	0.00	
8,130.00	0.00	0.00	8,081.11	304.31	590.54	-264.77	0.00	0.00	0.00	
8,145.00	0.00	0.00	8,096.11	304.31	590.54	-264.77	0.00	0.00	0.00	
8,160.00	0.00	0.00	8,111.11	304.31	590.54	-264.77	0.00	0.00	0.00	
8,175.00	0.00	0.00	8,126.11	304.31	590.54	-264.77	0.00	0.00	0.00	
8,190.00	0.00	0.00	8,141.11	304.31	590.54	-264.77	0.00	0.00	0.00	
8,205.00	0.00	0.00	8,156.11	304.31	590.54	-264.77	0.00	0.00	0.00	
8,220.00	0.00	0.00	8,171.11	304.31	590.54	-264.77	0.00	0.00	0.00	
8,235.00	0.00	0.00	8,186.11	304.31	590.54	-264.77	0.00	0.00	0.00	
8,250.00	0.00	0.00	8,201.11	304.31	590.54	-264.77	0.00	0.00	0.00	
8,265.00	0.00	0.00	8,216.11	304.31	590.54	-264.77	0.00	0.00	0.00	
8,280.00	0.00	0.00	8,231.11	304.31	590.54	-264.77	0.00	0.00	0.00	
8,295.00	0.00	0.00	8,246.11	304.31	590.54	-264.77	0.00	0.00	0.00	
8,310.00	0.00	0.00	8,261.11	304.31	590.54	-264.77	0.00	0.00	0.00	
8,325.00	0.00	0.00	8,276.11	304.31	590.54	-264.77	0.00	0.00	0.00	
8,340.00	0.00	0.00	8,291.11	304.31	590.54	-264.77	0.00	0.00	0.00	
8,355.00	0.00	0.00	8,306.11	304.31	590.54	-264.77	0.00	0.00	0.00	
8,370.00	0.00	0.00	8,321.11	304.31	590.54	-264.77	0.00	0.00	0.00	
8,385.00	0.00	0.00	8,336.11	304.31	590.54	-264.77	0.00	0.00	0.00	
8,400.00	0.00	0.00	8,351.11	304.31	590.54	-264.77	0.00	0.00	0.00	
8,415.00	0.00	0.00	8,366.11	304.31	590.54	-264.77	0.00	0.00	0.00	
8,430.00	0.00	0.00	8,381.11	304.31	590.54	-264.77	0.00	0.00	0.00	
8,445.00	0.00	0.00	8,396.11	304.31	590.54	-264.77	0.00	0.00	0.00	
8,460.00	0.00	0.00	8,411.11	304.31	590.54	-264.77	0.00	0.00	0.00	
8,475.00	0.00	0.00	8,426.11	304.31	590.54	-264.77	0.00	0.00	0.00	
8,490.00	0.00	0.00	8,441.11	304.31	590.54	-264.77	0.00	0.00	0.00	
8,505.00	0.00	0.00	8,456.11	304.31	590.54	-264.77	0.00	0.00	0.00	
8,520.00	0.00	0.00	8,471.11	304.31	590.54	-264.77	0.00	0.00	0.00	
8,535.00	0.00	0.00	8,486.11	304.31	590.54	-264.77	0.00	0.00	0.00	
8,550.00	0.00	0.00	8,501.11	304.31	590.54	-264.77	0.00	0.00	0.00	
8,565.00	0.00	0.00	8,516.11	304.31	590.54	-264.77	0.00	0.00	0.00	
8,580.00	0.00	0.00	8,531.11	304.31	590.54	-264.77	0.00	0.00	0.00	
8,595.00	0.00	0.00	8,546.11	304.31	590.54	-264.77	0.00	0.00	0.00	
8,610.00	0.00	0.00	8,561.11	304.31	590.54	-264.77	0.00	0.00	0.00	
8,625.00	0.00	0.00	8,576.11	304.31	590.54	-264.77	0.00	0.00	0.00	
8,640.00	0.00	0.00	8,591.11	304.31	590.54	-264.77	0.00	0.00	0.00	
8,655.00	0.00	0.00	8,606.11	304.31	590.54	-264.77	0.00	0.00	0.00	
8,670.00	0.00	0.00	8,621.11	304.31	590.54	-264.77	0.00	0.00	0.00	

### ConocoPhillips

#### Planning Report

<b>Database:</b>	EDT 17 Permian Prod	<b>Local Co-ordinate Reference:</b>	Well _ COLUMBUS FEDERAL COM 504H - Slot SLOT 6
<b>Company:</b>	DELAWARE BASIN EAST	<b>TVD Reference:</b>	KB @ 3362.00usft
<b>Project:</b>	LEA COUNT SOUTH WEST (NM-E)	<b>MD Reference:</b>	KB @ 3362.00usft
<b>Site:</b>	COLUMBUS FEDERAL PROJECT	<b>North Reference:</b>	Grid
<b>Well:</b>	_ COLUMBUS FEDERAL COM 504H	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	OWB		
<b>Design:</b>	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)	
8,685.00	0.00	0.00	8,636.11	304.31	590.54	-264.77	0.00	0.00	0.00	
8,700.00	0.00	0.00	8,651.11	304.31	590.54	-264.77	0.00	0.00	0.00	
8,715.00	0.00	0.00	8,666.11	304.31	590.54	-264.77	0.00	0.00	0.00	
8,730.00	0.00	0.00	8,681.11	304.31	590.54	-264.77	0.00	0.00	0.00	
8,745.00	0.00	0.00	8,696.11	304.31	590.54	-264.77	0.00	0.00	0.00	
8,760.00	0.00	0.00	8,711.11	304.31	590.54	-264.77	0.00	0.00	0.00	
8,775.00	0.00	0.00	8,726.11	304.31	590.54	-264.77	0.00	0.00	0.00	
8,790.00	0.00	0.00	8,741.11	304.31	590.54	-264.77	0.00	0.00	0.00	
8,805.00	0.00	0.00	8,756.11	304.31	590.54	-264.77	0.00	0.00	0.00	
8,820.00	0.00	0.00	8,771.11	304.31	590.54	-264.77	0.00	0.00	0.00	
8,835.00	0.00	0.00	8,786.11	304.31	590.54	-264.77	0.00	0.00	0.00	
8,850.00	0.00	0.00	8,801.11	304.31	590.54	-264.77	0.00	0.00	0.00	
8,865.00	0.00	0.00	8,816.11	304.31	590.54	-264.77	0.00	0.00	0.00	
8,880.00	0.00	0.00	8,831.11	304.31	590.54	-264.77	0.00	0.00	0.00	
8,895.00	0.00	0.00	8,846.11	304.31	590.54	-264.77	0.00	0.00	0.00	
8,910.00	0.00	0.00	8,861.11	304.31	590.54	-264.77	0.00	0.00	0.00	
8,925.00	0.00	0.00	8,876.11	304.31	590.54	-264.77	0.00	0.00	0.00	
8,940.00	0.00	0.00	8,891.11	304.31	590.54	-264.77	0.00	0.00	0.00	
8,955.00	0.00	0.00	8,906.11	304.31	590.54	-264.77	0.00	0.00	0.00	
8,970.00	0.00	0.00	8,921.11	304.31	590.54	-264.77	0.00	0.00	0.00	
8,985.00	0.00	0.00	8,936.11	304.31	590.54	-264.77	0.00	0.00	0.00	
9,000.00	0.00	0.00	8,951.11	304.31	590.54	-264.77	0.00	0.00	0.00	
9,015.00	0.00	0.00	8,966.11	304.31	590.54	-264.77	0.00	0.00	0.00	
9,030.00	0.00	0.00	8,981.11	304.31	590.54	-264.77	0.00	0.00	0.00	
9,045.00	0.00	0.00	8,996.11	304.31	590.54	-264.77	0.00	0.00	0.00	
9,060.00	0.00	0.00	9,011.11	304.31	590.54	-264.77	0.00	0.00	0.00	
9,075.00	0.00	0.00	9,026.11	304.31	590.54	-264.77	0.00	0.00	0.00	
9,090.00	0.00	0.00	9,041.11	304.31	590.54	-264.77	0.00	0.00	0.00	
9,105.00	0.00	0.00	9,056.11	304.31	590.54	-264.77	0.00	0.00	0.00	
9,120.00	0.00	0.00	9,071.11	304.31	590.54	-264.77	0.00	0.00	0.00	
9,135.00	0.00	0.00	9,086.11	304.31	590.54	-264.77	0.00	0.00	0.00	
9,150.00	0.00	0.00	9,101.11	304.31	590.54	-264.77	0.00	0.00	0.00	
9,165.00	0.00	0.00	9,116.11	304.31	590.54	-264.77	0.00	0.00	0.00	
9,180.00	0.00	0.00	9,131.11	304.31	590.54	-264.77	0.00	0.00	0.00	
9,195.00	0.00	0.00	9,146.11	304.31	590.54	-264.77	0.00	0.00	0.00	
9,210.00	0.00	0.00	9,161.11	304.31	590.54	-264.77	0.00	0.00	0.00	
9,225.00	0.00	0.00	9,176.11	304.31	590.54	-264.77	0.00	0.00	0.00	
9,240.00	0.00	0.00	9,191.11	304.31	590.54	-264.77	0.00	0.00	0.00	
9,255.00	0.00	0.00	9,206.11	304.31	590.54	-264.77	0.00	0.00	0.00	
9,270.00	0.00	0.00	9,221.11	304.31	590.54	-264.77	0.00	0.00	0.00	
9,285.00	0.00	0.00	9,236.11	304.31	590.54	-264.77	0.00	0.00	0.00	
9,300.00	0.00	0.00	9,251.11	304.31	590.54	-264.77	0.00	0.00	0.00	
9,315.00	0.00	0.00	9,266.11	304.31	590.54	-264.77	0.00	0.00	0.00	
9,330.00	0.00	0.00	9,281.11	304.31	590.54	-264.77	0.00	0.00	0.00	
9,345.00	0.00	0.00	9,296.11	304.31	590.54	-264.77	0.00	0.00	0.00	
9,360.00	0.00	0.00	9,311.11	304.31	590.54	-264.77	0.00	0.00	0.00	
9,375.00	0.00	0.00	9,326.11	304.31	590.54	-264.77	0.00	0.00	0.00	
9,390.00	0.00	0.00	9,341.11	304.31	590.54	-264.77	0.00	0.00	0.00	
9,405.00	0.00	0.00	9,356.11	304.31	590.54	-264.77	0.00	0.00	0.00	
9,420.00	0.00	0.00	9,371.11	304.31	590.54	-264.77	0.00	0.00	0.00	
9,435.00	0.00	0.00	9,386.11	304.31	590.54	-264.77	0.00	0.00	0.00	
9,450.00	0.00	0.00	9,401.11	304.31	590.54	-264.77	0.00	0.00	0.00	
9,465.00	0.00	0.00	9,416.11	304.31	590.54	-264.77	0.00	0.00	0.00	

### ConocoPhillips

#### Planning Report

<b>Database:</b>	EDT 17 Permian Prod	<b>Local Co-ordinate Reference:</b>	Well _ COLUMBUS FEDERAL COM 504H - Slot SLOT 6
<b>Company:</b>	DELAWARE BASIN EAST	<b>TVD Reference:</b>	KB @ 3362.00usft
<b>Project:</b>	LEA COUNT SOUTH WEST (NM-E)	<b>MD Reference:</b>	KB @ 3362.00usft
<b>Site:</b>	COLUMBUS FEDERAL PROJECT	<b>North Reference:</b>	Grid
<b>Well:</b>	_COLUMBUS FEDERAL COM 504H	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	OWB		
<b>Design:</b>	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)	
9,480.00	0.00	0.00	9,431.11	304.31	590.54	-264.77	0.00	0.00	0.00	
9,495.00	0.00	0.00	9,446.11	304.31	590.54	-264.77	0.00	0.00	0.00	
9,510.00	0.00	0.00	9,461.11	304.31	590.54	-264.77	0.00	0.00	0.00	
9,525.00	0.00	0.00	9,476.11	304.31	590.54	-264.77	0.00	0.00	0.00	
9,540.00	0.00	0.00	9,491.11	304.31	590.54	-264.77	0.00	0.00	0.00	
9,555.00	0.00	0.00	9,506.11	304.31	590.54	-264.77	0.00	0.00	0.00	
9,570.00	0.00	0.00	9,521.11	304.31	590.54	-264.77	0.00	0.00	0.00	
9,585.00	0.00	0.00	9,536.11	304.31	590.54	-264.77	0.00	0.00	0.00	
9,600.00	0.00	0.00	9,551.11	304.31	590.54	-264.77	0.00	0.00	0.00	
9,615.00	0.00	0.00	9,566.11	304.31	590.54	-264.77	0.00	0.00	0.00	
9,630.00	0.00	0.00	9,581.11	304.31	590.54	-264.77	0.00	0.00	0.00	
9,645.00	0.00	0.00	9,596.11	304.31	590.54	-264.77	0.00	0.00	0.00	
9,660.00	0.00	0.00	9,611.11	304.31	590.54	-264.77	0.00	0.00	0.00	
9,675.00	0.00	0.00	9,626.11	304.31	590.54	-264.77	0.00	0.00	0.00	
9,690.00	0.00	0.00	9,641.11	304.31	590.54	-264.77	0.00	0.00	0.00	
9,705.00	0.00	0.00	9,656.11	304.31	590.54	-264.77	0.00	0.00	0.00	
9,720.00	0.00	0.00	9,671.11	304.31	590.54	-264.77	0.00	0.00	0.00	
9,735.00	0.00	0.00	9,686.11	304.31	590.54	-264.77	0.00	0.00	0.00	
9,750.00	0.00	0.00	9,701.11	304.31	590.54	-264.77	0.00	0.00	0.00	
9,765.00	0.00	0.00	9,716.11	304.31	590.54	-264.77	0.00	0.00	0.00	
9,780.00	0.00	0.00	9,731.11	304.31	590.54	-264.77	0.00	0.00	0.00	
9,795.00	0.00	0.00	9,746.11	304.31	590.54	-264.77	0.00	0.00	0.00	
9,810.00	0.00	0.00	9,761.11	304.31	590.54	-264.77	0.00	0.00	0.00	
9,825.00	0.00	0.00	9,776.11	304.31	590.54	-264.77	0.00	0.00	0.00	
9,840.00	0.00	0.00	9,791.11	304.31	590.54	-264.77	0.00	0.00	0.00	
9,855.00	0.00	0.00	9,806.11	304.31	590.54	-264.77	0.00	0.00	0.00	
9,870.00	0.00	0.00	9,821.11	304.31	590.54	-264.77	0.00	0.00	0.00	
9,885.00	0.00	0.00	9,836.11	304.31	590.54	-264.77	0.00	0.00	0.00	
9,900.00	0.00	0.00	9,851.11	304.31	590.54	-264.77	0.00	0.00	0.00	
9,915.00	0.00	0.00	9,866.11	304.31	590.54	-264.77	0.00	0.00	0.00	
9,930.00	0.00	0.00	9,881.11	304.31	590.54	-264.77	0.00	0.00	0.00	
9,945.00	0.00	0.00	9,896.11	304.31	590.54	-264.77	0.00	0.00	0.00	
9,960.00	0.00	0.00	9,911.11	304.31	590.54	-264.77	0.00	0.00	0.00	
9,975.00	0.00	0.00	9,926.11	304.31	590.54	-264.77	0.00	0.00	0.00	
9,990.00	0.00	0.00	9,941.11	304.31	590.54	-264.77	0.00	0.00	0.00	
10,005.00	0.00	0.00	9,956.11	304.31	590.54	-264.77	0.00	0.00	0.00	
10,020.00	0.00	0.00	9,971.11	304.31	590.54	-264.77	0.00	0.00	0.00	
10,035.00	0.00	0.00	9,986.11	304.31	590.54	-264.77	0.00	0.00	0.00	
10,050.00	0.00	0.00	10,001.11	304.31	590.54	-264.77	0.00	0.00	0.00	
10,065.00	0.00	0.00	10,016.11	304.31	590.54	-264.77	0.00	0.00	0.00	
10,080.00	0.00	0.00	10,031.11	304.31	590.54	-264.77	0.00	0.00	0.00	
10,095.00	0.00	0.00	10,046.11	304.31	590.54	-264.77	0.00	0.00	0.00	
10,110.00	0.00	0.00	10,061.11	304.31	590.54	-264.77	0.00	0.00	0.00	
10,125.00	0.00	0.00	10,076.11	304.31	590.54	-264.77	0.00	0.00	0.00	
10,140.00	0.00	0.00	10,091.11	304.31	590.54	-264.77	0.00	0.00	0.00	
10,155.00	0.00	0.00	10,106.11	304.31	590.54	-264.77	0.00	0.00	0.00	
10,170.00	0.00	0.00	10,121.11	304.31	590.54	-264.77	0.00	0.00	0.00	
10,185.00	0.00	0.00	10,136.11	304.31	590.54	-264.77	0.00	0.00	0.00	
10,200.00	0.00	0.00	10,151.11	304.31	590.54	-264.77	0.00	0.00	0.00	
10,215.00	0.00	0.00	10,166.11	304.31	590.54	-264.77	0.00	0.00	0.00	
10,230.00	0.00	0.00	10,181.11	304.31	590.54	-264.77	0.00	0.00	0.00	
10,245.00	0.00	0.00	10,196.11	304.31	590.54	-264.77	0.00	0.00	0.00	
10,260.00	0.00	0.00	10,211.11	304.31	590.54	-264.77	0.00	0.00	0.00	

**ConocoPhillips**  
Planning Report

<b>Database:</b>	EDT 17 Permian Prod	<b>Local Co-ordinate Reference:</b>	Well _ COLUMBUS FEDERAL COM 504H - Slot SLOT 6
<b>Company:</b>	DELAWARE BASIN EAST	<b>TVD Reference:</b>	KB @ 3362.00usft
<b>Project:</b>	LEA COUNT SOUTH WEST (NM-E)	<b>MD Reference:</b>	KB @ 3362.00usft
<b>Site:</b>	COLUMBUS FEDERAL PROJECT	<b>North Reference:</b>	Grid
<b>Well:</b>	_ COLUMBUS FEDERAL COM 504H	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	OWB		
<b>Design:</b>	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)	
10,275.00	0.00	0.00	10,226.11	304.31	590.54	-264.77	0.00	0.00	0.00	
10,290.00	0.00	0.00	10,241.11	304.31	590.54	-264.77	0.00	0.00	0.00	
10,305.00	0.00	0.00	10,256.11	304.31	590.54	-264.77	0.00	0.00	0.00	
10,320.00	0.00	0.00	10,271.11	304.31	590.54	-264.77	0.00	0.00	0.00	
10,335.00	0.00	0.00	10,286.11	304.31	590.54	-264.77	0.00	0.00	0.00	
10,335.43	0.00	0.00	10,286.54	304.31	590.54	-264.77	0.00	0.00	0.00	
10,350.00	1.75	179.58	10,301.11	304.09	590.55	-264.54	12.00	12.00	0.00	
10,365.00	3.55	179.58	10,316.10	303.40	590.55	-263.85	12.00	12.00	0.00	
10,380.00	5.35	179.58	10,331.05	302.23	590.56	-262.69	12.00	12.00	0.00	
10,395.00	7.15	179.58	10,345.96	300.60	590.57	-261.06	12.00	12.00	0.00	
10,410.00	8.95	179.58	10,360.81	298.50	590.59	-258.96	12.00	12.00	0.00	
10,425.00	10.75	179.58	10,375.59	295.93	590.61	-256.40	12.00	12.00	0.00	
10,440.00	12.55	179.58	10,390.28	292.90	590.63	-253.38	12.00	12.00	0.00	
10,455.00	14.35	179.58	10,404.87	289.42	590.65	-249.90	12.00	12.00	0.00	
10,470.00	16.15	179.58	10,419.34	285.47	590.68	-245.96	12.00	12.00	0.00	
10,485.00	17.95	179.58	10,433.68	281.07	590.71	-241.57	12.00	12.00	0.00	
10,500.00	19.75	179.58	10,447.88	276.23	590.75	-236.73	12.00	12.00	0.00	
10,515.00	21.55	179.58	10,461.91	270.94	590.79	-231.45	12.00	12.00	0.00	
10,530.00	23.35	179.58	10,475.77	265.21	590.83	-225.73	12.00	12.00	0.00	
10,545.00	25.15	179.58	10,489.45	259.05	590.88	-219.58	12.00	12.00	0.00	
10,560.00	26.95	179.58	10,502.93	252.46	590.92	-213.01	12.00	12.00	0.00	
10,575.00	28.75	179.58	10,516.19	245.46	590.97	-206.01	12.00	12.00	0.00	
10,590.00	30.55	179.58	10,529.22	238.04	591.03	-198.60	12.00	12.00	0.00	
10,605.00	32.35	179.58	10,542.02	230.21	591.09	-190.79	12.00	12.00	0.00	
10,620.00	34.15	179.58	10,554.56	221.99	591.15	-182.58	12.00	12.00	0.00	
10,635.00	35.95	179.58	10,566.84	213.38	591.21	-173.98	12.00	12.00	0.00	
10,650.00	37.75	179.58	10,578.85	204.38	591.27	-165.00	12.00	12.00	0.00	
10,665.00	39.55	179.58	10,590.56	195.01	591.34	-155.65	12.00	12.00	0.00	
10,680.00	41.35	179.58	10,601.97	185.28	591.41	-145.94	12.00	12.00	0.00	
10,695.00	43.15	179.58	10,613.08	175.20	591.49	-135.87	12.00	12.00	0.00	
10,710.00	44.95	179.58	10,623.86	164.77	591.56	-125.46	12.00	12.00	0.00	
10,725.00	46.75	179.58	10,634.31	154.01	591.64	-114.72	12.00	12.00	0.00	
10,740.00	48.55	179.58	10,644.41	142.92	591.72	-103.65	12.00	12.00	0.00	
10,755.00	50.35	179.58	10,654.16	131.53	591.81	-92.27	12.00	12.00	0.00	
10,770.00	52.15	179.58	10,663.55	119.83	591.89	-80.59	12.00	12.00	0.00	
10,785.00	53.95	179.58	10,672.57	107.84	591.98	-68.63	12.00	12.00	0.00	
10,800.00	55.75	179.58	10,681.20	95.58	592.07	-56.39	12.00	12.00	0.00	
10,815.00	57.55	179.58	10,689.45	83.05	592.16	-43.88	12.00	12.00	0.00	
10,830.00	59.35	179.58	10,697.30	70.27	592.26	-31.12	12.00	12.00	0.00	
10,845.00	61.15	179.58	10,704.74	57.25	592.35	-18.12	12.00	12.00	0.00	
10,860.00	62.95	179.58	10,711.77	44.00	592.45	-4.89	12.00	12.00	0.00	
10,875.00	64.75	179.58	10,718.38	30.53	592.55	8.55	12.00	12.00	0.00	
10,890.00	66.55	179.58	10,724.57	16.87	592.65	22.19	12.00	12.00	0.00	
10,905.00	68.35	179.58	10,730.32	3.02	592.75	36.02	12.00	12.00	0.00	
10,920.00	70.15	179.58	10,735.63	-11.01	592.85	50.02	12.00	12.00	0.00	
10,935.00	71.95	179.58	10,740.50	-25.20	592.95	64.19	12.00	12.00	0.00	
10,950.00	73.75	179.58	10,744.93	-39.53	593.06	78.49	12.00	12.00	0.00	
10,965.00	75.55	179.58	10,748.90	-53.99	593.16	92.93	12.00	12.00	0.00	
10,980.00	77.35	179.58	10,752.41	-68.57	593.27	107.49	12.00	12.00	0.00	
10,995.00	79.15	179.58	10,755.47	-83.26	593.38	122.15	12.00	12.00	0.00	
11,010.00	80.95	179.58	10,758.06	-98.03	593.49	136.90	12.00	12.00	0.00	
11,025.00	82.75	179.58	10,760.19	-112.88	593.59	151.72	12.00	12.00	0.00	
11,040.00	84.55	179.58	10,761.85	-127.79	593.70	166.60	12.00	12.00	0.00	

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#### Planning Report

<b>Database:</b>	EDT 17 Permian Prod	<b>Local Co-ordinate Reference:</b>	Well _COLUMBUS FEDERAL COM 504H - Slot SLOT 6
<b>Company:</b>	DELAWARE BASIN EAST	<b>TVD Reference:</b>	KB @ 3362.00usft
<b>Project:</b>	LEA COUNT SOUTH WEST (NM-E)	<b>MD Reference:</b>	KB @ 3362.00usft
<b>Site:</b>	COLUMBUS FEDERAL PROJECT	<b>North Reference:</b>	Grid
<b>Well:</b>	_COLUMBUS FEDERAL COM 504H	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	OWB		
<b>Design:</b>	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)	
11,055.00	86.35	179.58	10,763.04	-142.74	593.81	181.53	12.00	12.00	0.00	
11,070.00	88.15	179.58	10,763.76	-157.72	593.92	196.48	12.00	12.00	0.00	
11,085.00	89.95	179.58	10,764.00	-172.72	594.03	211.46	12.00	12.00	0.00	
11,085.43	90.00	179.58	10,764.01	-173.14	594.04	211.88	12.00	12.00	0.00	
11,100.00	90.00	179.58	10,764.01	-187.72	594.14	226.43	0.00	0.00	0.00	
11,115.00	90.00	179.58	10,764.01	-202.71	594.25	241.40	0.00	0.00	0.00	
11,130.00	90.00	179.58	10,764.01	-217.71	594.36	256.38	0.00	0.00	0.00	
11,145.00	90.00	179.58	10,764.01	-232.71	594.47	271.35	0.00	0.00	0.00	
11,160.00	90.00	179.58	10,764.01	-247.71	594.58	286.33	0.00	0.00	0.00	
11,175.00	90.00	179.58	10,764.01	-262.71	594.69	301.30	0.00	0.00	0.00	
11,190.00	90.00	179.58	10,764.01	-277.71	594.80	316.28	0.00	0.00	0.00	
11,205.00	90.00	179.58	10,764.01	-292.71	594.91	331.25	0.00	0.00	0.00	
11,220.00	90.00	179.58	10,764.00	-307.71	595.02	346.22	0.00	0.00	0.00	
11,235.00	90.00	179.58	10,764.00	-322.71	595.13	361.20	0.00	0.00	0.00	
11,250.00	90.00	179.58	10,764.00	-337.71	595.24	376.17	0.00	0.00	0.00	
11,265.00	90.00	179.58	10,764.00	-352.71	595.35	391.15	0.00	0.00	0.00	
11,280.00	90.00	179.58	10,764.00	-367.71	595.46	406.12	0.00	0.00	0.00	
11,295.00	90.00	179.58	10,764.00	-382.71	595.57	421.10	0.00	0.00	0.00	
11,310.00	90.00	179.58	10,764.00	-397.71	595.68	436.07	0.00	0.00	0.00	
11,325.00	90.00	179.58	10,764.00	-412.71	595.79	451.04	0.00	0.00	0.00	
11,340.00	90.00	179.58	10,764.00	-427.71	595.90	466.02	0.00	0.00	0.00	
11,355.00	90.00	179.58	10,764.00	-442.71	596.01	480.99	0.00	0.00	0.00	
11,370.00	90.00	179.58	10,764.00	-457.71	596.12	495.97	0.00	0.00	0.00	
11,385.00	90.00	179.58	10,764.00	-472.71	596.23	510.94	0.00	0.00	0.00	
11,400.00	90.00	179.58	10,764.00	-487.71	596.33	525.92	0.00	0.00	0.00	
11,415.00	90.00	179.58	10,764.00	-502.71	596.44	540.89	0.00	0.00	0.00	
11,430.00	90.00	179.58	10,764.00	-517.71	596.55	555.86	0.00	0.00	0.00	
11,445.00	90.00	179.58	10,764.00	-532.71	596.66	570.84	0.00	0.00	0.00	
11,460.00	90.00	179.58	10,764.00	-547.71	596.77	585.81	0.00	0.00	0.00	
11,475.00	90.00	179.58	10,764.00	-562.71	596.88	600.79	0.00	0.00	0.00	
11,490.00	90.00	179.58	10,764.00	-577.70	596.99	615.76	0.00	0.00	0.00	
11,505.00	90.00	179.58	10,764.00	-592.70	597.10	630.74	0.00	0.00	0.00	
11,520.00	90.00	179.58	10,764.00	-607.70	597.21	645.71	0.00	0.00	0.00	
11,535.00	90.00	179.58	10,764.00	-622.70	597.32	660.68	0.00	0.00	0.00	
11,550.00	90.00	179.58	10,764.00	-637.70	597.43	675.66	0.00	0.00	0.00	
11,565.00	90.00	179.58	10,764.00	-652.70	597.54	690.63	0.00	0.00	0.00	
11,580.00	90.00	179.58	10,764.00	-667.70	597.65	705.61	0.00	0.00	0.00	
11,595.00	90.00	179.58	10,764.00	-682.70	597.76	720.58	0.00	0.00	0.00	
11,610.00	90.00	179.58	10,764.00	-697.70	597.87	735.56	0.00	0.00	0.00	
11,625.00	90.00	179.58	10,764.00	-712.70	597.98	750.53	0.00	0.00	0.00	
11,640.00	90.00	179.58	10,764.00	-727.70	598.09	765.50	0.00	0.00	0.00	
11,655.00	90.00	179.58	10,764.00	-742.70	598.20	780.48	0.00	0.00	0.00	
11,670.00	90.00	179.58	10,764.00	-757.70	598.31	795.45	0.00	0.00	0.00	
11,685.00	90.00	179.58	10,764.00	-772.70	598.42	810.43	0.00	0.00	0.00	
11,700.00	90.00	179.58	10,764.00	-787.70	598.53	825.40	0.00	0.00	0.00	
11,715.00	90.00	179.58	10,764.00	-802.70	598.64	840.38	0.00	0.00	0.00	
11,730.00	90.00	179.58	10,764.00	-817.70	598.75	855.35	0.00	0.00	0.00	
11,745.00	90.00	179.58	10,764.00	-832.70	598.86	870.32	0.00	0.00	0.00	
11,760.00	90.00	179.58	10,764.00	-847.70	598.97	885.30	0.00	0.00	0.00	
11,775.00	90.00	179.58	10,764.00	-862.70	599.08	900.27	0.00	0.00	0.00	
11,790.00	90.00	179.58	10,764.00	-877.70	599.19	915.25	0.00	0.00	0.00	
11,805.00	90.00	179.58	10,764.00	-892.70	599.30	930.22	0.00	0.00	0.00	
11,820.00	90.00	179.58	10,764.00	-907.70	599.41	945.19	0.00	0.00	0.00	

### ConocoPhillips

#### Planning Report

<b>Database:</b>	EDT 17 Permian Prod	<b>Local Co-ordinate Reference:</b>	Well _ COLUMBUS FEDERAL COM 504H - Slot SLOT 6
<b>Company:</b>	DELAWARE BASIN EAST	<b>TVD Reference:</b>	KB @ 3362.00usft
<b>Project:</b>	LEA COUNT SOUTH WEST (NM-E)	<b>MD Reference:</b>	KB @ 3362.00usft
<b>Site:</b>	COLUMBUS FEDERAL PROJECT	<b>North Reference:</b>	Grid
<b>Well:</b>	_ COLUMBUS FEDERAL COM 504H	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	OWB		
<b>Design:</b>	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)	
11,835.00	90.00	179.58	10,764.00	-922.70	599.52	960.17	0.00	0.00	0.00	
11,850.00	90.00	179.58	10,764.00	-937.70	599.62	975.14	0.00	0.00	0.00	
11,865.00	90.00	179.58	10,764.00	-952.69	599.73	990.12	0.00	0.00	0.00	
11,880.00	90.00	179.58	10,764.00	-967.69	599.84	1,005.09	0.00	0.00	0.00	
11,895.00	90.00	179.58	10,764.00	-982.69	599.95	1,020.07	0.00	0.00	0.00	
11,910.00	90.00	179.58	10,764.00	-997.69	600.06	1,035.04	0.00	0.00	0.00	
11,925.00	90.00	179.58	10,764.00	-1,012.69	600.17	1,050.01	0.00	0.00	0.00	
11,940.00	90.00	179.58	10,764.00	-1,027.69	600.28	1,064.99	0.00	0.00	0.00	
11,955.00	90.00	179.58	10,764.00	-1,042.69	600.39	1,079.96	0.00	0.00	0.00	
11,970.00	90.00	179.58	10,764.00	-1,057.69	600.50	1,094.94	0.00	0.00	0.00	
11,985.00	90.00	179.58	10,764.00	-1,072.69	600.61	1,109.91	0.00	0.00	0.00	
12,000.00	90.00	179.58	10,764.00	-1,087.69	600.72	1,124.89	0.00	0.00	0.00	
12,015.00	90.00	179.58	10,764.00	-1,102.69	600.83	1,139.86	0.00	0.00	0.00	
12,030.00	90.00	179.58	10,764.00	-1,117.69	600.94	1,154.83	0.00	0.00	0.00	
12,045.00	90.00	179.58	10,764.00	-1,132.69	601.05	1,169.81	0.00	0.00	0.00	
12,060.00	90.00	179.58	10,764.00	-1,147.69	601.16	1,184.78	0.00	0.00	0.00	
12,075.00	90.00	179.58	10,764.00	-1,162.69	601.27	1,199.76	0.00	0.00	0.00	
12,090.00	90.00	179.58	10,764.00	-1,177.69	601.38	1,214.73	0.00	0.00	0.00	
12,105.00	90.00	179.58	10,764.00	-1,192.69	601.49	1,229.71	0.00	0.00	0.00	
12,120.00	90.00	179.58	10,764.00	-1,207.69	601.60	1,244.68	0.00	0.00	0.00	
12,135.00	90.00	179.58	10,764.00	-1,222.69	601.71	1,259.65	0.00	0.00	0.00	
12,150.00	90.00	179.58	10,764.00	-1,237.69	601.82	1,274.63	0.00	0.00	0.00	
12,165.00	90.00	179.58	10,764.00	-1,252.69	601.93	1,289.60	0.00	0.00	0.00	
12,180.00	90.00	179.58	10,764.00	-1,267.69	602.04	1,304.58	0.00	0.00	0.00	
12,195.00	90.00	179.58	10,764.00	-1,282.69	602.15	1,319.55	0.00	0.00	0.00	
12,210.00	90.00	179.58	10,764.00	-1,297.69	602.26	1,334.53	0.00	0.00	0.00	
12,225.00	90.00	179.58	10,764.00	-1,312.69	602.37	1,349.50	0.00	0.00	0.00	
12,240.00	90.00	179.58	10,764.00	-1,327.68	602.48	1,364.47	0.00	0.00	0.00	
12,255.00	90.00	179.58	10,764.00	-1,342.68	602.59	1,379.45	0.00	0.00	0.00	
12,270.00	90.00	179.58	10,764.00	-1,357.68	602.70	1,394.42	0.00	0.00	0.00	
12,285.00	90.00	179.58	10,764.00	-1,372.68	602.80	1,409.40	0.00	0.00	0.00	
12,300.00	90.00	179.58	10,764.00	-1,387.68	602.91	1,424.37	0.00	0.00	0.00	
12,315.00	90.00	179.58	10,764.00	-1,402.68	603.02	1,439.35	0.00	0.00	0.00	
12,330.00	90.00	179.58	10,764.00	-1,417.68	603.13	1,454.32	0.00	0.00	0.00	
12,345.00	90.00	179.58	10,764.00	-1,432.68	603.24	1,469.29	0.00	0.00	0.00	
12,360.00	90.00	179.58	10,764.00	-1,447.68	603.35	1,484.27	0.00	0.00	0.00	
12,375.00	90.00	179.58	10,764.00	-1,462.68	603.46	1,499.24	0.00	0.00	0.00	
12,390.00	90.00	179.58	10,764.00	-1,477.68	603.57	1,514.22	0.00	0.00	0.00	
12,405.00	90.00	179.58	10,764.00	-1,492.68	603.68	1,529.19	0.00	0.00	0.00	
12,420.00	90.00	179.58	10,764.00	-1,507.68	603.79	1,544.17	0.00	0.00	0.00	
12,435.00	90.00	179.58	10,764.00	-1,522.68	603.90	1,559.14	0.00	0.00	0.00	
12,450.00	90.00	179.58	10,764.00	-1,537.68	604.01	1,574.11	0.00	0.00	0.00	
12,465.00	90.00	179.58	10,764.00	-1,552.68	604.12	1,589.09	0.00	0.00	0.00	
12,480.00	90.00	179.58	10,764.00	-1,567.68	604.23	1,604.06	0.00	0.00	0.00	
12,495.00	90.00	179.58	10,764.00	-1,582.68	604.34	1,619.04	0.00	0.00	0.00	
12,510.00	90.00	179.58	10,764.00	-1,597.68	604.45	1,634.01	0.00	0.00	0.00	
12,525.00	90.00	179.58	10,764.00	-1,612.68	604.56	1,648.99	0.00	0.00	0.00	
12,540.00	90.00	179.58	10,764.00	-1,627.68	604.67	1,663.96	0.00	0.00	0.00	
12,555.00	90.00	179.58	10,764.00	-1,642.68	604.78	1,678.93	0.00	0.00	0.00	
12,570.00	90.00	179.58	10,764.00	-1,657.68	604.89	1,693.91	0.00	0.00	0.00	
12,585.00	90.00	179.58	10,764.00	-1,672.68	605.00	1,708.88	0.00	0.00	0.00	
12,600.00	90.00	179.58	10,764.00	-1,687.68	605.11	1,723.86	0.00	0.00	0.00	
12,615.00	90.00	179.58	10,764.00	-1,702.67	605.22	1,738.83	0.00	0.00	0.00	

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#### Planning Report

<b>Database:</b>	EDT 17 Permian Prod	<b>Local Co-ordinate Reference:</b>	Well _ COLUMBUS FEDERAL COM 504H - Slot SLOT 6
<b>Company:</b>	DELAWARE BASIN EAST	<b>TVD Reference:</b>	KB @ 3362.00usft
<b>Project:</b>	LEA COUNT SOUTH WEST (NM-E)	<b>MD Reference:</b>	KB @ 3362.00usft
<b>Site:</b>	COLUMBUS FEDERAL PROJECT	<b>North Reference:</b>	Grid
<b>Well:</b>	_ COLUMBUS FEDERAL COM 504H	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	OWB		
<b>Design:</b>	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)	
12,630.00	90.00	179.58	10,764.00	-1,717.67	605.33	1,753.81	0.00	0.00	0.00	
12,645.00	90.00	179.58	10,764.00	-1,732.67	605.44	1,768.78	0.00	0.00	0.00	
12,660.00	90.00	179.58	10,764.00	-1,747.67	605.55	1,783.75	0.00	0.00	0.00	
12,675.00	90.00	179.58	10,764.00	-1,762.67	605.66	1,798.73	0.00	0.00	0.00	
12,690.00	90.00	179.58	10,764.00	-1,777.67	605.77	1,813.70	0.00	0.00	0.00	
12,705.00	90.00	179.58	10,764.00	-1,792.67	605.88	1,828.68	0.00	0.00	0.00	
12,720.00	90.00	179.58	10,764.00	-1,807.67	605.99	1,843.65	0.00	0.00	0.00	
12,735.00	90.00	179.58	10,764.00	-1,822.67	606.09	1,858.63	0.00	0.00	0.00	
12,750.00	90.00	179.58	10,764.00	-1,837.67	606.20	1,873.60	0.00	0.00	0.00	
12,765.00	90.00	179.58	10,764.00	-1,852.67	606.31	1,888.57	0.00	0.00	0.00	
12,780.00	90.00	179.58	10,764.00	-1,867.67	606.42	1,903.55	0.00	0.00	0.00	
12,795.00	90.00	179.58	10,764.00	-1,882.67	606.53	1,918.52	0.00	0.00	0.00	
12,810.00	90.00	179.58	10,764.00	-1,897.67	606.64	1,933.50	0.00	0.00	0.00	
12,825.00	90.00	179.58	10,764.00	-1,912.67	606.75	1,948.47	0.00	0.00	0.00	
12,840.00	90.00	179.58	10,764.00	-1,927.67	606.86	1,963.45	0.00	0.00	0.00	
12,855.00	90.00	179.58	10,764.00	-1,942.67	606.97	1,978.42	0.00	0.00	0.00	
12,870.00	90.00	179.58	10,764.00	-1,957.67	607.08	1,993.39	0.00	0.00	0.00	
12,885.00	90.00	179.58	10,764.00	-1,972.67	607.19	2,008.37	0.00	0.00	0.00	
12,900.00	90.00	179.58	10,764.00	-1,987.67	607.30	2,023.34	0.00	0.00	0.00	
12,915.00	90.00	179.58	10,764.00	-2,002.67	607.41	2,038.32	0.00	0.00	0.00	
12,930.00	90.00	179.58	10,764.00	-2,017.67	607.52	2,053.29	0.00	0.00	0.00	
12,945.00	90.00	179.58	10,764.00	-2,032.67	607.63	2,068.26	0.00	0.00	0.00	
12,960.00	90.00	179.58	10,764.00	-2,047.67	607.74	2,083.24	0.00	0.00	0.00	
12,975.00	90.00	179.58	10,764.00	-2,062.67	607.85	2,098.21	0.00	0.00	0.00	
12,990.00	90.00	179.58	10,764.00	-2,077.66	607.96	2,113.19	0.00	0.00	0.00	
13,005.00	90.00	179.58	10,764.00	-2,092.66	608.07	2,128.16	0.00	0.00	0.00	
13,020.00	90.00	179.58	10,764.00	-2,107.66	608.18	2,143.14	0.00	0.00	0.00	
13,035.00	90.00	179.58	10,764.00	-2,122.66	608.29	2,158.11	0.00	0.00	0.00	
13,050.00	90.00	179.58	10,764.00	-2,137.66	608.40	2,173.08	0.00	0.00	0.00	
13,065.00	90.00	179.58	10,764.00	-2,152.66	608.51	2,188.06	0.00	0.00	0.00	
13,080.00	90.00	179.58	10,764.00	-2,167.66	608.62	2,203.03	0.00	0.00	0.00	
13,095.00	90.00	179.58	10,764.00	-2,182.66	608.73	2,218.01	0.00	0.00	0.00	
13,110.00	90.00	179.58	10,764.00	-2,197.66	608.84	2,232.98	0.00	0.00	0.00	
13,125.00	90.00	179.58	10,764.00	-2,212.66	608.95	2,247.96	0.00	0.00	0.00	
13,140.00	90.00	179.58	10,764.00	-2,227.66	609.06	2,262.93	0.00	0.00	0.00	
13,155.00	90.00	179.58	10,764.00	-2,242.66	609.17	2,277.90	0.00	0.00	0.00	
13,170.00	90.00	179.58	10,764.00	-2,257.66	609.28	2,292.88	0.00	0.00	0.00	
13,185.00	90.00	179.58	10,764.00	-2,272.66	609.38	2,307.85	0.00	0.00	0.00	
13,200.00	90.00	179.58	10,764.00	-2,287.66	609.49	2,322.83	0.00	0.00	0.00	
13,215.00	90.00	179.58	10,764.00	-2,302.66	609.60	2,337.80	0.00	0.00	0.00	
13,230.00	90.00	179.58	10,764.00	-2,317.66	609.71	2,352.78	0.00	0.00	0.00	
13,245.00	90.00	179.58	10,764.00	-2,332.66	609.82	2,367.75	0.00	0.00	0.00	
13,260.00	90.00	179.58	10,764.00	-2,347.66	609.93	2,382.72	0.00	0.00	0.00	
13,275.00	90.00	179.58	10,764.00	-2,362.66	610.04	2,397.70	0.00	0.00	0.00	
13,290.00	90.00	179.58	10,764.00	-2,377.66	610.15	2,412.67	0.00	0.00	0.00	
13,305.00	90.00	179.58	10,764.00	-2,392.66	610.26	2,427.65	0.00	0.00	0.00	
13,320.00	90.00	179.58	10,764.00	-2,407.66	610.37	2,442.62	0.00	0.00	0.00	
13,335.00	90.00	179.58	10,764.00	-2,422.66	610.48	2,457.60	0.00	0.00	0.00	
13,350.00	90.00	179.58	10,764.00	-2,437.66	610.59	2,472.57	0.00	0.00	0.00	
13,365.00	90.00	179.58	10,764.00	-2,452.65	610.70	2,487.54	0.00	0.00	0.00	
13,380.00	90.00	179.58	10,764.00	-2,467.65	610.81	2,502.52	0.00	0.00	0.00	
13,395.00	90.00	179.58	10,764.00	-2,482.65	610.92	2,517.49	0.00	0.00	0.00	
13,410.00	90.00	179.58	10,764.00	-2,497.65	611.03	2,532.47	0.00	0.00	0.00	

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#### Planning Report

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<b>Site:</b>	COLUMBUS FEDERAL PROJECT	<b>North Reference:</b>	Grid
<b>Well:</b>	_ COLUMBUS FEDERAL COM 504H	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	OWB		
<b>Design:</b>	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)	
13,425.00	90.00	179.58	10,764.00	-2,512.65	611.14	2,547.44	0.00	0.00	0.00	
13,440.00	90.00	179.58	10,764.00	-2,527.65	611.25	2,562.42	0.00	0.00	0.00	
13,455.00	90.00	179.58	10,764.00	-2,542.65	611.36	2,577.39	0.00	0.00	0.00	
13,470.00	90.00	179.58	10,764.00	-2,557.65	611.47	2,592.36	0.00	0.00	0.00	
13,485.00	90.00	179.58	10,764.00	-2,572.65	611.58	2,607.34	0.00	0.00	0.00	
13,500.00	90.00	179.58	10,764.00	-2,587.65	611.69	2,622.31	0.00	0.00	0.00	
13,515.00	90.00	179.58	10,764.00	-2,602.65	611.80	2,637.29	0.00	0.00	0.00	
13,530.00	90.00	179.58	10,764.00	-2,617.65	611.91	2,652.26	0.00	0.00	0.00	
13,545.00	90.00	179.58	10,764.00	-2,632.65	612.02	2,667.24	0.00	0.00	0.00	
13,560.00	90.00	179.58	10,764.00	-2,647.65	612.13	2,682.21	0.00	0.00	0.00	
13,575.00	90.00	179.58	10,764.00	-2,662.65	612.24	2,697.18	0.00	0.00	0.00	
13,590.00	90.00	179.58	10,764.00	-2,677.65	612.35	2,712.16	0.00	0.00	0.00	
13,605.00	90.00	179.58	10,764.00	-2,692.65	612.46	2,727.13	0.00	0.00	0.00	
13,620.00	90.00	179.58	10,764.00	-2,707.65	612.56	2,742.11	0.00	0.00	0.00	
13,635.00	90.00	179.58	10,764.00	-2,722.65	612.67	2,757.08	0.00	0.00	0.00	
13,650.00	90.00	179.58	10,764.00	-2,737.65	612.78	2,772.06	0.00	0.00	0.00	
13,665.00	90.00	179.58	10,764.00	-2,752.65	612.89	2,787.03	0.00	0.00	0.00	
13,680.00	90.00	179.58	10,764.00	-2,767.65	613.00	2,802.00	0.00	0.00	0.00	
13,695.00	90.00	179.58	10,764.00	-2,782.65	613.11	2,816.98	0.00	0.00	0.00	
13,710.00	90.00	179.58	10,764.00	-2,797.65	613.22	2,831.95	0.00	0.00	0.00	
13,725.00	90.00	179.58	10,764.00	-2,812.65	613.33	2,846.93	0.00	0.00	0.00	
13,740.00	90.00	179.58	10,764.00	-2,827.64	613.44	2,861.90	0.00	0.00	0.00	
13,755.00	90.00	179.58	10,764.00	-2,842.64	613.55	2,876.88	0.00	0.00	0.00	
13,770.00	90.00	179.58	10,764.00	-2,857.64	613.66	2,891.85	0.00	0.00	0.00	
13,785.00	90.00	179.58	10,764.00	-2,872.64	613.77	2,906.82	0.00	0.00	0.00	
13,800.00	90.00	179.58	10,764.00	-2,887.64	613.88	2,921.80	0.00	0.00	0.00	
13,815.00	90.00	179.58	10,764.00	-2,902.64	613.99	2,936.77	0.00	0.00	0.00	
13,830.00	90.00	179.58	10,764.00	-2,917.64	614.10	2,951.75	0.00	0.00	0.00	
13,845.00	90.00	179.58	10,764.00	-2,932.64	614.21	2,966.72	0.00	0.00	0.00	
13,860.00	90.00	179.58	10,764.00	-2,947.64	614.32	2,981.70	0.00	0.00	0.00	
13,875.00	90.00	179.58	10,764.00	-2,962.64	614.43	2,996.67	0.00	0.00	0.00	
13,890.00	90.00	179.58	10,764.00	-2,977.64	614.54	3,011.64	0.00	0.00	0.00	
13,905.00	90.00	179.58	10,764.00	-2,992.64	614.65	3,026.62	0.00	0.00	0.00	
13,920.00	90.00	179.58	10,764.00	-3,007.64	614.76	3,041.59	0.00	0.00	0.00	
13,935.00	90.00	179.58	10,764.00	-3,022.64	614.87	3,056.57	0.00	0.00	0.00	
13,950.00	90.00	179.58	10,764.00	-3,037.64	614.98	3,071.54	0.00	0.00	0.00	
13,965.00	90.00	179.58	10,764.00	-3,052.64	615.09	3,086.52	0.00	0.00	0.00	
13,980.00	90.00	179.58	10,764.00	-3,067.64	615.20	3,101.49	0.00	0.00	0.00	
13,995.00	90.00	179.58	10,764.00	-3,082.64	615.31	3,116.46	0.00	0.00	0.00	
14,010.00	90.00	179.58	10,764.00	-3,097.64	615.42	3,131.44	0.00	0.00	0.00	
14,025.00	90.00	179.58	10,764.00	-3,112.64	615.53	3,146.41	0.00	0.00	0.00	
14,040.00	90.00	179.58	10,764.00	-3,127.64	615.64	3,161.39	0.00	0.00	0.00	
14,055.00	90.00	179.58	10,764.00	-3,142.64	615.75	3,176.36	0.00	0.00	0.00	
14,070.00	90.00	179.58	10,764.00	-3,157.64	615.85	3,191.34	0.00	0.00	0.00	
14,085.00	90.00	179.58	10,764.00	-3,172.64	615.96	3,206.31	0.00	0.00	0.00	
14,100.00	90.00	179.58	10,764.00	-3,187.64	616.07	3,221.28	0.00	0.00	0.00	
14,115.00	90.00	179.58	10,764.00	-3,202.63	616.18	3,236.26	0.00	0.00	0.00	
14,130.00	90.00	179.58	10,764.00	-3,217.63	616.29	3,251.23	0.00	0.00	0.00	
14,145.00	90.00	179.58	10,764.00	-3,232.63	616.40	3,266.21	0.00	0.00	0.00	
14,160.00	90.00	179.58	10,764.00	-3,247.63	616.51	3,281.18	0.00	0.00	0.00	
14,175.00	90.00	179.58	10,764.00	-3,262.63	616.62	3,296.15	0.00	0.00	0.00	
14,190.00	90.00	179.58	10,764.00	-3,277.63	616.73	3,311.13	0.00	0.00	0.00	
14,205.00	90.00	179.58	10,764.00	-3,292.63	616.84	3,326.10	0.00	0.00	0.00	

### ConocoPhillips

#### Planning Report

<b>Database:</b>	EDT 17 Permian Prod	<b>Local Co-ordinate Reference:</b>	Well _ COLUMBUS FEDERAL COM 504H - Slot SLOT 6
<b>Company:</b>	DELAWARE BASIN EAST	<b>TVD Reference:</b>	KB @ 3362.00usft
<b>Project:</b>	LEA COUNT SOUTH WEST (NM-E)	<b>MD Reference:</b>	KB @ 3362.00usft
<b>Site:</b>	COLUMBUS FEDERAL PROJECT	<b>North Reference:</b>	Grid
<b>Well:</b>	_ COLUMBUS FEDERAL COM 504H	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	OWB		
<b>Design:</b>	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)	
14,220.00	90.00	179.58	10,764.00	-3,307.63	616.95	3,341.08	0.00	0.00	0.00	
14,235.00	90.00	179.58	10,764.00	-3,322.63	617.06	3,356.05	0.00	0.00	0.00	
14,250.00	90.00	179.58	10,764.00	-3,337.63	617.17	3,371.03	0.00	0.00	0.00	
14,265.00	90.00	179.58	10,764.00	-3,352.63	617.28	3,386.00	0.00	0.00	0.00	
14,280.00	90.00	179.58	10,764.00	-3,367.63	617.39	3,400.97	0.00	0.00	0.00	
14,295.00	90.00	179.58	10,764.00	-3,382.63	617.50	3,415.95	0.00	0.00	0.00	
14,310.00	90.00	179.58	10,764.00	-3,397.63	617.61	3,430.92	0.00	0.00	0.00	
14,325.00	90.00	179.58	10,764.00	-3,412.63	617.72	3,445.90	0.00	0.00	0.00	
14,340.00	90.00	179.58	10,764.00	-3,427.63	617.83	3,460.87	0.00	0.00	0.00	
14,355.00	90.00	179.58	10,764.00	-3,442.63	617.94	3,475.85	0.00	0.00	0.00	
14,370.00	90.00	179.58	10,764.00	-3,457.63	618.05	3,490.82	0.00	0.00	0.00	
14,385.00	90.00	179.58	10,764.00	-3,472.63	618.16	3,505.79	0.00	0.00	0.00	
14,400.00	90.00	179.58	10,764.00	-3,487.63	618.27	3,520.77	0.00	0.00	0.00	
14,415.00	90.00	179.58	10,764.00	-3,502.63	618.38	3,535.74	0.00	0.00	0.00	
14,430.00	90.00	179.58	10,764.00	-3,517.63	618.49	3,550.72	0.00	0.00	0.00	
14,445.00	90.00	179.58	10,764.00	-3,532.63	618.60	3,565.69	0.00	0.00	0.00	
14,460.00	90.00	179.58	10,764.00	-3,547.63	618.71	3,580.67	0.00	0.00	0.00	
14,475.00	90.00	179.58	10,764.00	-3,562.63	618.82	3,595.64	0.00	0.00	0.00	
14,490.00	90.00	179.58	10,764.00	-3,577.62	618.93	3,610.61	0.00	0.00	0.00	
14,505.00	90.00	179.58	10,764.00	-3,592.62	619.04	3,625.59	0.00	0.00	0.00	
14,520.00	90.00	179.58	10,764.00	-3,607.62	619.14	3,640.56	0.00	0.00	0.00	
14,535.00	90.00	179.58	10,764.00	-3,622.62	619.25	3,655.54	0.00	0.00	0.00	
14,550.00	90.00	179.58	10,764.00	-3,637.62	619.36	3,670.51	0.00	0.00	0.00	
14,565.00	90.00	179.58	10,764.00	-3,652.62	619.47	3,685.49	0.00	0.00	0.00	
14,580.00	90.00	179.58	10,764.00	-3,667.62	619.58	3,700.46	0.00	0.00	0.00	
14,595.00	90.00	179.58	10,764.00	-3,682.62	619.69	3,715.43	0.00	0.00	0.00	
14,610.00	90.00	179.58	10,764.00	-3,697.62	619.80	3,730.41	0.00	0.00	0.00	
14,625.00	90.00	179.58	10,764.00	-3,712.62	619.91	3,745.38	0.00	0.00	0.00	
14,640.00	90.00	179.58	10,764.00	-3,727.62	620.02	3,760.36	0.00	0.00	0.00	
14,655.00	90.00	179.58	10,764.00	-3,742.62	620.13	3,775.33	0.00	0.00	0.00	
14,670.00	90.00	179.58	10,764.00	-3,757.62	620.24	3,790.31	0.00	0.00	0.00	
14,685.00	90.00	179.58	10,764.00	-3,772.62	620.35	3,805.28	0.00	0.00	0.00	
14,700.00	90.00	179.58	10,764.00	-3,787.62	620.46	3,820.25	0.00	0.00	0.00	
14,715.00	90.00	179.58	10,764.00	-3,802.62	620.57	3,835.23	0.00	0.00	0.00	
14,730.00	90.00	179.58	10,764.00	-3,817.62	620.68	3,850.20	0.00	0.00	0.00	
14,745.00	90.00	179.58	10,764.00	-3,832.62	620.79	3,865.18	0.00	0.00	0.00	
14,760.00	90.00	179.58	10,764.00	-3,847.62	620.90	3,880.15	0.00	0.00	0.00	
14,775.00	90.00	179.58	10,764.00	-3,862.62	621.01	3,895.13	0.00	0.00	0.00	
14,790.00	90.00	179.58	10,764.00	-3,877.62	621.12	3,910.10	0.00	0.00	0.00	
14,805.00	90.00	179.58	10,764.00	-3,892.62	621.23	3,925.07	0.00	0.00	0.00	
14,820.00	90.00	179.58	10,764.00	-3,907.62	621.34	3,940.05	0.00	0.00	0.00	
14,835.00	90.00	179.58	10,764.00	-3,922.62	621.45	3,955.02	0.00	0.00	0.00	
14,850.00	90.00	179.58	10,764.00	-3,937.62	621.56	3,970.00	0.00	0.00	0.00	
14,865.00	90.00	179.58	10,764.00	-3,952.61	621.67	3,984.97	0.00	0.00	0.00	
14,880.00	90.00	179.58	10,764.00	-3,967.61	621.78	3,999.95	0.00	0.00	0.00	
14,895.00	90.00	179.58	10,764.00	-3,982.61	621.89	4,014.92	0.00	0.00	0.00	
14,910.00	90.00	179.58	10,764.00	-3,997.61	622.00	4,029.89	0.00	0.00	0.00	
14,925.00	90.00	179.58	10,764.00	-4,012.61	622.11	4,044.87	0.00	0.00	0.00	
14,940.00	90.00	179.58	10,764.00	-4,027.61	622.22	4,059.84	0.00	0.00	0.00	
14,955.00	90.00	179.58	10,764.00	-4,042.61	622.32	4,074.82	0.00	0.00	0.00	
14,970.00	90.00	179.58	10,764.00	-4,057.61	622.43	4,089.79	0.00	0.00	0.00	
14,985.00	90.00	179.58	10,764.00	-4,072.61	622.54	4,104.77	0.00	0.00	0.00	
15,000.00	90.00	179.58	10,764.00	-4,087.61	622.65	4,119.74	0.00	0.00	0.00	

### ConocoPhillips

#### Planning Report

<b>Database:</b>	EDT 17 Permian Prod	<b>Local Co-ordinate Reference:</b>	Well _COLUMBUS FEDERAL COM 504H - Slot SLOT 6
<b>Company:</b>	DELAWARE BASIN EAST	<b>TVD Reference:</b>	KB @ 3362.00usft
<b>Project:</b>	LEA COUNT SOUTH WEST (NM-E)	<b>MD Reference:</b>	KB @ 3362.00usft
<b>Site:</b>	COLUMBUS FEDERAL PROJECT	<b>North Reference:</b>	Grid
<b>Well:</b>	_COLUMBUS FEDERAL COM 504H	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	OWB		
<b>Design:</b>	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)	
15,015.00	90.00	179.58	10,764.00	-4,102.61	622.76	4,134.71	0.00	0.00	0.00	
15,030.00	90.00	179.58	10,764.00	-4,117.61	622.87	4,149.69	0.00	0.00	0.00	
15,045.00	90.00	179.58	10,764.00	-4,132.61	622.98	4,164.66	0.00	0.00	0.00	
15,060.00	90.00	179.58	10,764.00	-4,147.61	623.09	4,179.64	0.00	0.00	0.00	
15,075.00	90.00	179.58	10,764.00	-4,162.61	623.20	4,194.61	0.00	0.00	0.00	
15,090.00	90.00	179.58	10,764.00	-4,177.61	623.31	4,209.59	0.00	0.00	0.00	
15,105.00	90.00	179.58	10,764.00	-4,192.61	623.42	4,224.56	0.00	0.00	0.00	
15,120.00	90.00	179.58	10,764.00	-4,207.61	623.53	4,239.53	0.00	0.00	0.00	
15,135.00	90.00	179.58	10,764.00	-4,222.61	623.64	4,254.51	0.00	0.00	0.00	
15,150.00	90.00	179.58	10,764.00	-4,237.61	623.75	4,269.48	0.00	0.00	0.00	
15,165.00	90.00	179.58	10,764.00	-4,252.61	623.86	4,284.46	0.00	0.00	0.00	
15,180.00	90.00	179.58	10,764.00	-4,267.61	623.97	4,299.43	0.00	0.00	0.00	
15,195.00	90.00	179.58	10,764.00	-4,282.61	624.08	4,314.41	0.00	0.00	0.00	
15,210.00	90.00	179.58	10,764.00	-4,297.61	624.19	4,329.38	0.00	0.00	0.00	
15,225.00	90.00	179.58	10,764.00	-4,312.61	624.30	4,344.35	0.00	0.00	0.00	
15,240.00	90.00	179.58	10,764.00	-4,327.60	624.41	4,359.33	0.00	0.00	0.00	
15,255.00	90.00	179.58	10,764.00	-4,342.60	624.52	4,374.30	0.00	0.00	0.00	
15,270.00	90.00	179.58	10,764.00	-4,357.60	624.63	4,389.28	0.00	0.00	0.00	
15,285.00	90.00	179.58	10,764.00	-4,372.60	624.74	4,404.25	0.00	0.00	0.00	
15,300.00	90.00	179.58	10,764.00	-4,387.60	624.85	4,419.22	0.00	0.00	0.00	
15,315.00	90.00	179.58	10,764.00	-4,402.60	624.96	4,434.20	0.00	0.00	0.00	
15,330.00	90.00	179.58	10,764.00	-4,417.60	625.07	4,449.17	0.00	0.00	0.00	
15,345.00	90.00	179.58	10,764.00	-4,432.60	625.18	4,464.15	0.00	0.00	0.00	
15,360.00	90.00	179.58	10,764.00	-4,447.60	625.29	4,479.12	0.00	0.00	0.00	
15,375.00	90.00	179.58	10,764.00	-4,462.60	625.40	4,494.10	0.00	0.00	0.00	
15,390.00	90.00	179.58	10,764.00	-4,477.60	625.51	4,509.07	0.00	0.00	0.00	
15,405.00	90.00	179.58	10,764.00	-4,492.60	625.61	4,524.04	0.00	0.00	0.00	
15,420.00	90.00	179.58	10,764.00	-4,507.60	625.72	4,539.02	0.00	0.00	0.00	
15,435.00	90.00	179.58	10,764.00	-4,522.60	625.83	4,553.99	0.00	0.00	0.00	
15,450.00	90.00	179.58	10,764.00	-4,537.60	625.94	4,568.97	0.00	0.00	0.00	
15,465.00	90.00	179.58	10,764.00	-4,552.60	626.05	4,583.94	0.00	0.00	0.00	
15,480.00	90.00	179.58	10,764.00	-4,567.60	626.16	4,598.92	0.00	0.00	0.00	
15,495.00	90.00	179.58	10,764.00	-4,582.60	626.27	4,613.89	0.00	0.00	0.00	
15,510.00	90.00	179.58	10,764.00	-4,597.60	626.38	4,628.86	0.00	0.00	0.00	
15,525.00	90.00	179.58	10,764.00	-4,612.60	626.49	4,643.84	0.00	0.00	0.00	
15,540.00	90.00	179.58	10,764.00	-4,627.60	626.60	4,658.81	0.00	0.00	0.00	
15,555.00	90.00	179.58	10,764.00	-4,642.60	626.71	4,673.79	0.00	0.00	0.00	
15,570.00	90.00	179.58	10,764.00	-4,657.60	626.82	4,688.76	0.00	0.00	0.00	
15,585.00	90.00	179.58	10,764.00	-4,672.60	626.93	4,703.74	0.00	0.00	0.00	
15,600.00	90.00	179.58	10,764.00	-4,687.60	627.04	4,718.71	0.00	0.00	0.00	
15,615.00	90.00	179.58	10,764.00	-4,702.59	627.15	4,733.68	0.00	0.00	0.00	
15,630.00	90.00	179.58	10,764.00	-4,717.59	627.26	4,748.66	0.00	0.00	0.00	
15,645.00	90.00	179.58	10,764.00	-4,732.59	627.37	4,763.63	0.00	0.00	0.00	
15,660.00	90.00	179.58	10,764.00	-4,747.59	627.48	4,778.61	0.00	0.00	0.00	
15,675.00	90.00	179.58	10,764.00	-4,762.59	627.59	4,793.58	0.00	0.00	0.00	
15,690.00	90.00	179.58	10,764.00	-4,777.59	627.70	4,808.56	0.00	0.00	0.00	
15,705.00	90.00	179.58	10,764.00	-4,792.59	627.81	4,823.53	0.00	0.00	0.00	
15,720.00	90.00	179.58	10,764.00	-4,807.59	627.92	4,838.50	0.00	0.00	0.00	
15,735.00	90.00	179.58	10,764.00	-4,822.59	628.03	4,853.48	0.00	0.00	0.00	
15,750.00	90.00	179.58	10,764.00	-4,837.59	628.14	4,868.45	0.00	0.00	0.00	
15,765.00	90.00	179.58	10,764.00	-4,852.59	628.25	4,883.43	0.00	0.00	0.00	
15,780.00	90.00	179.58	10,764.00	-4,867.59	628.36	4,898.40	0.00	0.00	0.00	
15,795.00	90.00	179.58	10,764.00	-4,882.59	628.47	4,913.38	0.00	0.00	0.00	

### ConocoPhillips

#### Planning Report

<b>Database:</b>	EDT 17 Permian Prod	<b>Local Co-ordinate Reference:</b>	Well _ COLUMBUS FEDERAL COM 504H - Slot SLOT 6
<b>Company:</b>	DELAWARE BASIN EAST	<b>TVD Reference:</b>	KB @ 3362.00usft
<b>Project:</b>	LEA COUNT SOUTH WEST (NM-E)	<b>MD Reference:</b>	KB @ 3362.00usft
<b>Site:</b>	COLUMBUS FEDERAL PROJECT	<b>North Reference:</b>	Grid
<b>Well:</b>	_ COLUMBUS FEDERAL COM 504H	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	OWB		
<b>Design:</b>	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)	
15,810.00	90.00	179.58	10,764.00	-4,897.59	628.58	4,928.35	0.00	0.00	0.00	
15,825.00	90.00	179.58	10,764.00	-4,912.59	628.69	4,943.32	0.00	0.00	0.00	
15,840.00	90.00	179.58	10,764.00	-4,927.59	628.80	4,958.30	0.00	0.00	0.00	
15,855.00	90.00	179.58	10,764.00	-4,942.59	628.90	4,973.27	0.00	0.00	0.00	
15,870.00	90.00	179.58	10,764.00	-4,957.59	629.01	4,988.25	0.00	0.00	0.00	
15,885.00	90.00	179.58	10,764.00	-4,972.59	629.12	5,003.22	0.00	0.00	0.00	
15,900.00	90.00	179.58	10,764.00	-4,987.59	629.23	5,018.20	0.00	0.00	0.00	
15,915.00	90.00	179.58	10,764.00	-5,002.59	629.34	5,033.17	0.00	0.00	0.00	
15,930.00	90.00	179.58	10,764.00	-5,017.59	629.45	5,048.14	0.00	0.00	0.00	
15,945.00	90.00	179.58	10,764.00	-5,032.59	629.56	5,063.12	0.00	0.00	0.00	
15,960.00	90.00	179.58	10,764.00	-5,047.59	629.67	5,078.09	0.00	0.00	0.00	
15,975.00	90.00	179.58	10,764.00	-5,062.59	629.78	5,093.07	0.00	0.00	0.00	
15,990.00	90.00	179.58	10,764.00	-5,077.58	629.89	5,108.04	0.00	0.00	0.00	
16,005.00	90.00	179.58	10,764.00	-5,092.58	630.00	5,123.02	0.00	0.00	0.00	
16,020.00	90.00	179.58	10,764.00	-5,107.58	630.11	5,137.99	0.00	0.00	0.00	
16,035.00	90.00	179.58	10,764.00	-5,122.58	630.22	5,152.96	0.00	0.00	0.00	
16,050.00	90.00	179.58	10,764.00	-5,137.58	630.33	5,167.94	0.00	0.00	0.00	
16,065.00	90.00	179.58	10,764.00	-5,152.58	630.44	5,182.91	0.00	0.00	0.00	
16,080.00	90.00	179.58	10,764.00	-5,167.58	630.55	5,197.89	0.00	0.00	0.00	
16,095.00	90.00	179.58	10,764.00	-5,182.58	630.66	5,212.86	0.00	0.00	0.00	
16,110.00	90.00	179.58	10,764.00	-5,197.58	630.77	5,227.84	0.00	0.00	0.00	
16,125.00	90.00	179.58	10,764.00	-5,212.58	630.88	5,242.81	0.00	0.00	0.00	
16,140.00	90.00	179.58	10,764.00	-5,227.58	630.99	5,257.78	0.00	0.00	0.00	
16,155.00	90.00	179.58	10,764.00	-5,242.58	631.10	5,272.76	0.00	0.00	0.00	
16,170.00	90.00	179.58	10,764.00	-5,257.58	631.21	5,287.73	0.00	0.00	0.00	
16,185.00	90.00	179.58	10,764.00	-5,272.58	631.32	5,302.71	0.00	0.00	0.00	
16,200.00	90.00	179.58	10,764.00	-5,287.58	631.43	5,317.68	0.00	0.00	0.00	
16,215.00	90.00	179.58	10,764.00	-5,302.58	631.54	5,332.66	0.00	0.00	0.00	
16,230.00	90.00	179.58	10,764.00	-5,317.58	631.65	5,347.63	0.00	0.00	0.00	
16,245.00	90.00	179.58	10,764.00	-5,332.58	631.76	5,362.60	0.00	0.00	0.00	
16,260.00	90.00	179.58	10,764.00	-5,347.58	631.87	5,377.58	0.00	0.00	0.00	
16,275.00	90.00	179.58	10,764.00	-5,362.58	631.98	5,392.55	0.00	0.00	0.00	
16,290.00	90.00	179.58	10,764.00	-5,377.58	632.08	5,407.53	0.00	0.00	0.00	
16,305.00	90.00	179.58	10,764.00	-5,392.58	632.19	5,422.50	0.00	0.00	0.00	
16,320.00	90.00	179.58	10,764.00	-5,407.58	632.30	5,437.48	0.00	0.00	0.00	
16,335.00	90.00	179.58	10,764.00	-5,422.58	632.41	5,452.45	0.00	0.00	0.00	
16,350.00	90.00	179.58	10,764.00	-5,437.57	632.52	5,467.42	0.00	0.00	0.00	
16,365.00	90.00	179.58	10,764.00	-5,452.57	632.63	5,482.40	0.00	0.00	0.00	
16,380.00	90.00	179.58	10,764.00	-5,467.57	632.74	5,497.37	0.00	0.00	0.00	
16,395.00	90.00	179.58	10,764.00	-5,482.57	632.85	5,512.35	0.00	0.00	0.00	
16,410.00	90.00	179.58	10,764.00	-5,497.57	632.96	5,527.32	0.00	0.00	0.00	
16,425.00	90.00	179.58	10,764.00	-5,512.57	633.07	5,542.30	0.00	0.00	0.00	
16,440.00	90.00	179.58	10,764.00	-5,527.57	633.18	5,557.27	0.00	0.00	0.00	
16,455.00	90.00	179.58	10,764.00	-5,542.57	633.29	5,572.24	0.00	0.00	0.00	
16,470.00	90.00	179.58	10,764.00	-5,557.57	633.40	5,587.22	0.00	0.00	0.00	
16,485.00	90.00	179.58	10,764.00	-5,572.57	633.51	5,602.19	0.00	0.00	0.00	
16,500.00	90.00	179.58	10,764.00	-5,587.57	633.62	5,617.17	0.00	0.00	0.00	
16,515.00	90.00	179.58	10,764.00	-5,602.57	633.73	5,632.14	0.00	0.00	0.00	
16,530.00	90.00	179.58	10,764.00	-5,617.57	633.84	5,647.11	0.00	0.00	0.00	
16,545.00	90.00	179.58	10,764.00	-5,632.57	633.95	5,662.09	0.00	0.00	0.00	
16,560.00	90.00	179.58	10,764.00	-5,647.57	634.06	5,677.06	0.00	0.00	0.00	
16,575.00	90.00	179.58	10,764.00	-5,662.57	634.17	5,692.04	0.00	0.00	0.00	
16,590.00	90.00	179.58	10,764.00	-5,677.57	634.28	5,707.01	0.00	0.00	0.00	

**ConocoPhillips**

Planning Report

<b>Database:</b>	EDT 17 Permian Prod	<b>Local Co-ordinate Reference:</b>	Well _ COLUMBUS FEDERAL COM 504H - Slot SLOT 6
<b>Company:</b>	DELAWARE BASIN EAST	<b>TVD Reference:</b>	KB @ 3362.00usft
<b>Project:</b>	LEA COUNT SOUTH WEST (NM-E)	<b>MD Reference:</b>	KB @ 3362.00usft
<b>Site:</b>	COLUMBUS FEDERAL PROJECT	<b>North Reference:</b>	Grid
<b>Well:</b>	_ COLUMBUS FEDERAL COM 504H	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	OWB		
<b>Design:</b>	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)	
16,605.00	90.00	179.58	10,764.00	-5,692.57	634.39	5,721.99	0.00	0.00	0.00	
16,620.00	90.00	179.58	10,764.00	-5,707.57	634.50	5,736.96	0.00	0.00	0.00	
16,635.00	90.00	179.58	10,764.00	-5,722.57	634.61	5,751.93	0.00	0.00	0.00	
16,650.00	90.00	179.58	10,764.00	-5,737.57	634.72	5,766.91	0.00	0.00	0.00	
16,665.00	90.00	179.58	10,764.00	-5,752.57	634.83	5,781.88	0.00	0.00	0.00	
16,680.00	90.00	179.58	10,764.00	-5,767.57	634.94	5,796.86	0.00	0.00	0.00	
16,695.00	90.00	179.58	10,764.00	-5,782.57	635.05	5,811.83	0.00	0.00	0.00	
16,710.00	90.00	179.58	10,764.00	-5,797.57	635.16	5,826.81	0.00	0.00	0.00	
16,725.00	90.00	179.58	10,764.00	-5,812.56	635.27	5,841.78	0.00	0.00	0.00	
16,740.00	90.00	179.58	10,764.00	-5,827.56	635.37	5,856.75	0.00	0.00	0.00	
16,755.00	90.00	179.58	10,764.00	-5,842.56	635.48	5,871.73	0.00	0.00	0.00	
16,770.00	90.00	179.58	10,764.00	-5,857.56	635.59	5,886.70	0.00	0.00	0.00	
16,785.00	90.00	179.58	10,764.00	-5,872.56	635.70	5,901.68	0.00	0.00	0.00	
16,800.00	90.00	179.58	10,764.00	-5,887.56	635.81	5,916.65	0.00	0.00	0.00	
16,815.00	90.00	179.58	10,764.00	-5,902.56	635.92	5,931.63	0.00	0.00	0.00	
16,830.00	90.00	179.58	10,764.00	-5,917.56	636.03	5,946.60	0.00	0.00	0.00	
16,845.00	90.00	179.58	10,764.00	-5,932.56	636.14	5,961.57	0.00	0.00	0.00	
16,860.00	90.00	179.58	10,764.00	-5,947.56	636.25	5,976.55	0.00	0.00	0.00	
16,875.00	90.00	179.58	10,764.00	-5,962.56	636.36	5,991.52	0.00	0.00	0.00	
16,890.00	90.00	179.58	10,764.00	-5,977.56	636.47	6,006.50	0.00	0.00	0.00	
16,905.00	90.00	179.58	10,764.00	-5,992.56	636.58	6,021.47	0.00	0.00	0.00	
16,920.00	90.00	179.58	10,764.00	-6,007.56	636.69	6,036.45	0.00	0.00	0.00	
16,935.00	90.00	179.58	10,764.00	-6,022.56	636.80	6,051.42	0.00	0.00	0.00	
16,950.00	90.00	179.58	10,764.00	-6,037.56	636.91	6,066.39	0.00	0.00	0.00	
16,965.00	90.00	179.58	10,764.00	-6,052.56	637.02	6,081.37	0.00	0.00	0.00	
16,980.00	90.00	179.58	10,764.00	-6,067.56	637.13	6,096.34	0.00	0.00	0.00	
16,995.00	90.00	179.58	10,764.00	-6,082.56	637.24	6,111.32	0.00	0.00	0.00	
17,010.00	90.00	179.58	10,764.00	-6,097.56	637.35	6,126.29	0.00	0.00	0.00	
17,025.00	90.00	179.58	10,764.00	-6,112.56	637.46	6,141.27	0.00	0.00	0.00	
17,040.00	90.00	179.58	10,764.00	-6,127.56	637.57	6,156.24	0.00	0.00	0.00	
17,055.00	90.00	179.58	10,764.00	-6,142.56	637.68	6,171.21	0.00	0.00	0.00	
17,070.00	90.00	179.58	10,764.00	-6,157.56	637.79	6,186.19	0.00	0.00	0.00	
17,085.00	90.00	179.58	10,764.00	-6,172.56	637.90	6,201.16	0.00	0.00	0.00	
17,100.00	90.00	179.58	10,764.00	-6,187.55	638.01	6,216.14	0.00	0.00	0.00	
17,115.00	90.00	179.58	10,764.00	-6,202.55	638.12	6,231.11	0.00	0.00	0.00	
17,130.00	90.00	179.58	10,764.00	-6,217.55	638.23	6,246.09	0.00	0.00	0.00	
17,145.00	90.00	179.58	10,764.00	-6,232.55	638.34	6,261.06	0.00	0.00	0.00	
17,160.00	90.00	179.58	10,764.00	-6,247.55	638.45	6,276.03	0.00	0.00	0.00	
17,175.00	90.00	179.58	10,764.00	-6,262.55	638.56	6,291.01	0.00	0.00	0.00	
17,190.00	90.00	179.58	10,764.00	-6,277.55	638.66	6,305.98	0.00	0.00	0.00	
17,205.00	90.00	179.58	10,764.00	-6,292.55	638.77	6,320.96	0.00	0.00	0.00	
17,220.00	90.00	179.58	10,764.00	-6,307.55	638.88	6,335.93	0.00	0.00	0.00	
17,235.00	90.00	179.58	10,764.00	-6,322.55	638.99	6,350.91	0.00	0.00	0.00	
17,250.00	90.00	179.58	10,764.00	-6,337.55	639.10	6,365.88	0.00	0.00	0.00	
17,265.00	90.00	179.58	10,764.00	-6,352.55	639.21	6,380.85	0.00	0.00	0.00	
17,280.00	90.00	179.58	10,764.00	-6,367.55	639.32	6,395.83	0.00	0.00	0.00	
17,295.00	90.00	179.58	10,764.00	-6,382.55	639.43	6,410.80	0.00	0.00	0.00	
17,310.00	90.00	179.58	10,764.00	-6,397.55	639.54	6,425.78	0.00	0.00	0.00	
17,325.00	90.00	179.58	10,764.00	-6,412.55	639.65	6,440.75	0.00	0.00	0.00	
17,340.00	90.00	179.58	10,764.00	-6,427.55	639.76	6,455.73	0.00	0.00	0.00	
17,355.00	90.00	179.58	10,764.00	-6,442.55	639.87	6,470.70	0.00	0.00	0.00	
17,370.00	90.00	179.58	10,764.00	-6,457.55	639.98	6,485.67	0.00	0.00	0.00	
17,385.00	90.00	179.58	10,764.00	-6,472.55	640.09	6,500.65	0.00	0.00	0.00	

### ConocoPhillips

#### Planning Report

<b>Database:</b>	EDT 17 Permian Prod	<b>Local Co-ordinate Reference:</b>	Well _ COLUMBUS FEDERAL COM 504H - Slot SLOT 6
<b>Company:</b>	DELAWARE BASIN EAST	<b>TVD Reference:</b>	KB @ 3362.00usft
<b>Project:</b>	LEA COUNT SOUTH WEST (NM-E)	<b>MD Reference:</b>	KB @ 3362.00usft
<b>Site:</b>	COLUMBUS FEDERAL PROJECT	<b>North Reference:</b>	Grid
<b>Well:</b>	_COLUMBUS FEDERAL COM 504H	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	OWB		
<b>Design:</b>	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)	
17,400.00	90.00	179.58	10,764.00	-6,487.55	640.20	6,515.62	0.00	0.00	0.00	
17,415.00	90.00	179.58	10,764.00	-6,502.55	640.31	6,530.60	0.00	0.00	0.00	
17,430.00	90.00	179.58	10,764.00	-6,517.55	640.42	6,545.57	0.00	0.00	0.00	
17,445.00	90.00	179.58	10,764.00	-6,532.55	640.53	6,560.55	0.00	0.00	0.00	
17,460.00	90.00	179.58	10,764.00	-6,547.55	640.64	6,575.52	0.00	0.00	0.00	
17,475.00	90.00	179.58	10,764.00	-6,562.54	640.75	6,590.49	0.00	0.00	0.00	
17,490.00	90.00	179.58	10,764.00	-6,577.54	640.86	6,605.47	0.00	0.00	0.00	
17,505.00	90.00	179.58	10,764.00	-6,592.54	640.97	6,620.44	0.00	0.00	0.00	
17,520.00	90.00	179.58	10,764.00	-6,607.54	641.08	6,635.42	0.00	0.00	0.00	
17,535.00	90.00	179.58	10,764.00	-6,622.54	641.19	6,650.39	0.00	0.00	0.00	
17,550.00	90.00	179.58	10,764.00	-6,637.54	641.30	6,665.37	0.00	0.00	0.00	
17,565.00	90.00	179.58	10,764.00	-6,652.54	641.41	6,680.34	0.00	0.00	0.00	
17,580.00	90.00	179.58	10,764.00	-6,667.54	641.52	6,695.31	0.00	0.00	0.00	
17,595.00	90.00	179.58	10,764.00	-6,682.54	641.63	6,710.29	0.00	0.00	0.00	
17,610.00	90.00	179.58	10,764.00	-6,697.54	641.74	6,725.26	0.00	0.00	0.00	
17,625.00	90.00	179.58	10,764.00	-6,712.54	641.85	6,740.24	0.00	0.00	0.00	
17,640.00	90.00	179.58	10,764.00	-6,727.54	641.95	6,755.21	0.00	0.00	0.00	
17,655.00	90.00	179.58	10,764.00	-6,742.54	642.06	6,770.18	0.00	0.00	0.00	
17,670.00	90.00	179.58	10,764.00	-6,757.54	642.17	6,785.16	0.00	0.00	0.00	
17,685.00	90.00	179.58	10,764.00	-6,772.54	642.28	6,800.13	0.00	0.00	0.00	
17,700.00	90.00	179.58	10,764.00	-6,787.54	642.39	6,815.11	0.00	0.00	0.00	
17,715.00	90.00	179.58	10,764.00	-6,802.54	642.50	6,830.08	0.00	0.00	0.00	
17,730.00	90.00	179.58	10,764.00	-6,817.54	642.61	6,845.06	0.00	0.00	0.00	
17,745.00	90.00	179.58	10,764.00	-6,832.54	642.72	6,860.03	0.00	0.00	0.00	
17,760.00	90.00	179.58	10,764.00	-6,847.54	642.83	6,875.00	0.00	0.00	0.00	
17,775.00	90.00	179.58	10,764.00	-6,862.54	642.94	6,889.98	0.00	0.00	0.00	
17,790.00	90.00	179.58	10,764.00	-6,877.54	643.05	6,904.95	0.00	0.00	0.00	
17,805.00	90.00	179.58	10,764.00	-6,892.54	643.16	6,919.93	0.00	0.00	0.00	
17,820.00	90.00	179.58	10,764.00	-6,907.54	643.27	6,934.90	0.00	0.00	0.00	
17,835.00	90.00	179.58	10,764.00	-6,922.54	643.38	6,949.88	0.00	0.00	0.00	
17,850.00	90.00	179.58	10,764.00	-6,937.53	643.49	6,964.85	0.00	0.00	0.00	
17,865.00	90.00	179.58	10,764.00	-6,952.53	643.60	6,979.82	0.00	0.00	0.00	
17,880.00	90.00	179.58	10,764.00	-6,967.53	643.71	6,994.80	0.00	0.00	0.00	
17,895.00	90.00	179.58	10,764.00	-6,982.53	643.82	7,009.77	0.00	0.00	0.00	
17,910.00	90.00	179.58	10,764.00	-6,997.53	643.93	7,024.75	0.00	0.00	0.00	
17,925.00	90.00	179.58	10,764.00	-7,012.53	644.04	7,039.72	0.00	0.00	0.00	
17,940.00	90.00	179.58	10,764.00	-7,027.53	644.15	7,054.70	0.00	0.00	0.00	
17,955.00	90.00	179.58	10,764.00	-7,042.53	644.26	7,069.67	0.00	0.00	0.00	
17,970.00	90.00	179.58	10,764.00	-7,057.53	644.37	7,084.64	0.00	0.00	0.00	
17,985.00	90.00	179.58	10,764.00	-7,072.53	644.48	7,099.62	0.00	0.00	0.00	
18,000.00	90.00	179.58	10,764.00	-7,087.53	644.59	7,114.59	0.00	0.00	0.00	
18,015.00	90.00	179.58	10,764.00	-7,102.53	644.70	7,129.57	0.00	0.00	0.00	
18,030.00	90.00	179.58	10,764.00	-7,117.53	644.81	7,144.54	0.00	0.00	0.00	
18,045.00	90.00	179.58	10,764.00	-7,132.53	644.92	7,159.52	0.00	0.00	0.00	
18,060.00	90.00	179.58	10,764.00	-7,147.53	645.03	7,174.49	0.00	0.00	0.00	
18,075.00	90.00	179.58	10,764.00	-7,162.53	645.13	7,189.46	0.00	0.00	0.00	
18,090.00	90.00	179.58	10,764.00	-7,177.53	645.24	7,204.44	0.00	0.00	0.00	
18,105.00	90.00	179.58	10,764.00	-7,192.53	645.35	7,219.41	0.00	0.00	0.00	
18,120.00	90.00	179.58	10,764.00	-7,207.53	645.46	7,234.39	0.00	0.00	0.00	
18,135.00	90.00	179.58	10,764.00	-7,222.53	645.57	7,249.36	0.00	0.00	0.00	
18,150.00	90.00	179.58	10,764.00	-7,237.53	645.68	7,264.34	0.00	0.00	0.00	
18,165.00	90.00	179.58	10,764.00	-7,252.53	645.79	7,279.31	0.00	0.00	0.00	
18,180.00	90.00	179.58	10,764.00	-7,267.53	645.90	7,294.28	0.00	0.00	0.00	

**ConocoPhillips**  
 Planning Report

<b>Database:</b>	EDT 17 Permian Prod	<b>Local Co-ordinate Reference:</b>	Well _ COLUMBUS FEDERAL COM 504H - Slot SLOT 6
<b>Company:</b>	DELAWARE BASIN EAST	<b>TVD Reference:</b>	KB @ 3362.00usft
<b>Project:</b>	LEA COUNT SOUTH WEST (NM-E)	<b>MD Reference:</b>	KB @ 3362.00usft
<b>Site:</b>	COLUMBUS FEDERAL PROJECT	<b>North Reference:</b>	Grid
<b>Well:</b>	_ COLUMBUS FEDERAL COM 504H	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	OWB		
<b>Design:</b>	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)	
18,195.00	90.00	179.58	10,764.00	-7,282.53	646.01	7,309.26	0.00	0.00	0.00	
18,210.00	90.00	179.58	10,764.00	-7,297.53	646.12	7,324.23	0.00	0.00	0.00	
18,225.00	90.00	179.58	10,764.00	-7,312.52	646.23	7,339.21	0.00	0.00	0.00	
18,240.00	90.00	179.58	10,764.00	-7,327.52	646.34	7,354.18	0.00	0.00	0.00	
18,255.00	90.00	179.58	10,764.00	-7,342.52	646.45	7,369.16	0.00	0.00	0.00	
18,270.00	90.00	179.58	10,764.00	-7,357.52	646.56	7,384.13	0.00	0.00	0.00	
18,285.00	90.00	179.58	10,764.00	-7,372.52	646.67	7,399.10	0.00	0.00	0.00	
18,300.00	90.00	179.58	10,764.00	-7,387.52	646.78	7,414.08	0.00	0.00	0.00	
18,315.00	90.00	179.58	10,764.00	-7,402.52	646.89	7,429.05	0.00	0.00	0.00	
18,330.00	90.00	179.58	10,764.00	-7,417.52	647.00	7,444.03	0.00	0.00	0.00	
18,345.00	90.00	179.58	10,764.00	-7,432.52	647.11	7,459.00	0.00	0.00	0.00	
18,360.00	90.00	179.58	10,764.00	-7,447.52	647.22	7,473.98	0.00	0.00	0.00	
18,375.00	90.00	179.58	10,764.00	-7,462.52	647.33	7,488.95	0.00	0.00	0.00	
18,390.00	90.00	179.58	10,764.00	-7,477.52	647.44	7,503.92	0.00	0.00	0.00	
18,405.00	90.00	179.58	10,764.00	-7,492.52	647.55	7,518.90	0.00	0.00	0.00	
18,420.00	90.00	179.58	10,764.00	-7,507.52	647.66	7,533.87	0.00	0.00	0.00	
18,435.00	90.00	179.58	10,764.00	-7,522.52	647.77	7,548.85	0.00	0.00	0.00	
18,450.00	90.00	179.58	10,764.00	-7,537.52	647.88	7,563.82	0.00	0.00	0.00	
18,465.00	90.00	179.58	10,764.00	-7,552.52	647.99	7,578.80	0.00	0.00	0.00	
18,480.00	90.00	179.58	10,764.00	-7,567.52	648.10	7,593.77	0.00	0.00	0.00	
18,495.00	90.00	179.58	10,764.00	-7,582.52	648.21	7,608.74	0.00	0.00	0.00	
18,510.00	90.00	179.58	10,764.00	-7,597.52	648.32	7,623.72	0.00	0.00	0.00	
18,525.00	90.00	179.58	10,764.00	-7,612.52	648.42	7,638.69	0.00	0.00	0.00	
18,540.00	90.00	179.58	10,764.00	-7,627.52	648.53	7,653.67	0.00	0.00	0.00	
18,555.00	90.00	179.58	10,764.00	-7,642.52	648.64	7,668.64	0.00	0.00	0.00	
18,570.00	90.00	179.58	10,764.00	-7,657.52	648.75	7,683.62	0.00	0.00	0.00	
18,585.00	90.00	179.58	10,764.00	-7,672.52	648.86	7,698.59	0.00	0.00	0.00	
18,600.00	90.00	179.58	10,764.00	-7,687.51	648.97	7,713.56	0.00	0.00	0.00	
18,615.00	90.00	179.58	10,764.00	-7,702.51	649.08	7,728.54	0.00	0.00	0.00	
18,630.00	90.00	179.58	10,764.00	-7,717.51	649.19	7,743.51	0.00	0.00	0.00	
18,645.00	90.00	179.58	10,764.00	-7,732.51	649.30	7,758.49	0.00	0.00	0.00	
18,660.00	90.00	179.58	10,764.00	-7,747.51	649.41	7,773.46	0.00	0.00	0.00	
18,675.00	90.00	179.58	10,764.00	-7,762.51	649.52	7,788.44	0.00	0.00	0.00	
18,690.00	90.00	179.58	10,764.00	-7,777.51	649.63	7,803.41	0.00	0.00	0.00	
18,705.00	90.00	179.58	10,764.00	-7,792.51	649.74	7,818.38	0.00	0.00	0.00	
18,720.00	90.00	179.58	10,764.00	-7,807.51	649.85	7,833.36	0.00	0.00	0.00	
18,735.00	90.00	179.58	10,764.00	-7,822.51	649.96	7,848.33	0.00	0.00	0.00	
18,750.00	90.00	179.58	10,764.00	-7,837.51	650.07	7,863.31	0.00	0.00	0.00	
18,765.00	90.00	179.58	10,764.00	-7,852.51	650.18	7,878.28	0.00	0.00	0.00	
18,780.00	90.00	179.58	10,764.00	-7,867.51	650.29	7,893.26	0.00	0.00	0.00	
18,795.00	90.00	179.58	10,764.00	-7,882.51	650.40	7,908.23	0.00	0.00	0.00	
18,810.00	90.00	179.58	10,764.00	-7,897.51	650.51	7,923.20	0.00	0.00	0.00	
18,825.00	90.00	179.58	10,764.00	-7,912.51	650.62	7,938.18	0.00	0.00	0.00	
18,840.00	90.00	179.58	10,764.00	-7,927.51	650.73	7,953.15	0.00	0.00	0.00	
18,855.00	90.00	179.58	10,764.00	-7,942.51	650.84	7,968.13	0.00	0.00	0.00	
18,870.00	90.00	179.58	10,764.00	-7,957.51	650.95	7,983.10	0.00	0.00	0.00	
18,885.00	90.00	179.58	10,764.00	-7,972.51	651.06	7,998.07	0.00	0.00	0.00	
18,900.00	90.00	179.58	10,764.00	-7,987.51	651.17	8,013.05	0.00	0.00	0.00	
18,915.00	90.00	179.58	10,764.00	-8,002.51	651.28	8,028.02	0.00	0.00	0.00	
18,930.00	90.00	179.58	10,764.00	-8,017.51	651.39	8,043.00	0.00	0.00	0.00	
18,945.00	90.00	179.58	10,764.00	-8,032.51	651.50	8,057.97	0.00	0.00	0.00	
18,960.00	90.00	179.58	10,764.00	-8,047.51	651.61	8,072.95	0.00	0.00	0.00	
18,975.00	90.00	179.58	10,764.00	-8,062.50	651.71	8,087.92	0.00	0.00	0.00	

### ConocoPhillips

#### Planning Report

<b>Database:</b>	EDT 17 Permian Prod	<b>Local Co-ordinate Reference:</b>	Well _COLUMBUS FEDERAL COM 504H - Slot SLOT 6
<b>Company:</b>	DELAWARE BASIN EAST	<b>TVD Reference:</b>	KB @ 3362.00usft
<b>Project:</b>	LEA COUNT SOUTH WEST (NM-E)	<b>MD Reference:</b>	KB @ 3362.00usft
<b>Site:</b>	COLUMBUS FEDERAL PROJECT	<b>North Reference:</b>	Grid
<b>Well:</b>	_COLUMBUS FEDERAL COM 504H	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	OWB		
<b>Design:</b>	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)	
18,990.00	90.00	179.58	10,764.00	-8,077.50	651.82	8,102.89	0.00	0.00	0.00	
19,005.00	90.00	179.58	10,764.00	-8,092.50	651.93	8,117.87	0.00	0.00	0.00	
19,020.00	90.00	179.58	10,764.00	-8,107.50	652.04	8,132.84	0.00	0.00	0.00	
19,035.00	90.00	179.58	10,764.00	-8,122.50	652.15	8,147.82	0.00	0.00	0.00	
19,050.00	90.00	179.58	10,764.00	-8,137.50	652.26	8,162.79	0.00	0.00	0.00	
19,065.00	90.00	179.58	10,764.00	-8,152.50	652.37	8,177.77	0.00	0.00	0.00	
19,080.00	90.00	179.58	10,764.00	-8,167.50	652.48	8,192.74	0.00	0.00	0.00	
19,095.00	90.00	179.58	10,764.00	-8,182.50	652.59	8,207.71	0.00	0.00	0.00	
19,110.00	90.00	179.58	10,764.00	-8,197.50	652.70	8,222.69	0.00	0.00	0.00	
19,125.00	90.00	179.58	10,764.00	-8,212.50	652.81	8,237.66	0.00	0.00	0.00	
19,140.00	90.00	179.58	10,764.00	-8,227.50	652.92	8,252.64	0.00	0.00	0.00	
19,155.00	90.00	179.58	10,764.00	-8,242.50	653.03	8,267.61	0.00	0.00	0.00	
19,170.00	90.00	179.58	10,764.00	-8,257.50	653.14	8,282.59	0.00	0.00	0.00	
19,185.00	90.00	179.58	10,764.00	-8,272.50	653.25	8,297.56	0.00	0.00	0.00	
19,200.00	90.00	179.58	10,764.00	-8,287.50	653.36	8,312.53	0.00	0.00	0.00	
19,215.00	90.00	179.58	10,764.00	-8,302.50	653.47	8,327.51	0.00	0.00	0.00	
19,230.00	90.00	179.58	10,764.00	-8,317.50	653.58	8,342.48	0.00	0.00	0.00	
19,245.00	90.00	179.58	10,764.00	-8,332.50	653.69	8,357.46	0.00	0.00	0.00	
19,260.00	90.00	179.58	10,764.00	-8,347.50	653.80	8,372.43	0.00	0.00	0.00	
19,275.00	90.00	179.58	10,764.00	-8,362.50	653.91	8,387.41	0.00	0.00	0.00	
19,290.00	90.00	179.58	10,764.00	-8,377.50	654.02	8,402.38	0.00	0.00	0.00	
19,305.00	90.00	179.58	10,764.00	-8,392.50	654.13	8,417.35	0.00	0.00	0.00	
19,320.00	90.00	179.58	10,764.00	-8,407.50	654.24	8,432.33	0.00	0.00	0.00	
19,335.00	90.00	179.58	10,764.00	-8,422.50	654.35	8,447.30	0.00	0.00	0.00	
19,350.00	90.00	179.58	10,764.00	-8,437.49	654.46	8,462.28	0.00	0.00	0.00	
19,365.00	90.00	179.58	10,764.00	-8,452.49	654.57	8,477.25	0.00	0.00	0.00	
19,380.00	90.00	179.58	10,764.00	-8,467.49	654.68	8,492.23	0.00	0.00	0.00	
19,395.00	90.00	179.58	10,764.00	-8,482.49	654.79	8,507.20	0.00	0.00	0.00	
19,410.00	90.00	179.58	10,764.00	-8,497.49	654.89	8,522.17	0.00	0.00	0.00	
19,425.00	90.00	179.58	10,764.00	-8,512.49	655.00	8,537.15	0.00	0.00	0.00	
19,440.00	90.00	179.58	10,764.00	-8,527.49	655.11	8,552.12	0.00	0.00	0.00	
19,455.00	90.00	179.58	10,764.00	-8,542.49	655.22	8,567.10	0.00	0.00	0.00	
19,470.00	90.00	179.58	10,764.00	-8,557.49	655.33	8,582.07	0.00	0.00	0.00	
19,485.00	90.00	179.58	10,764.00	-8,572.49	655.44	8,597.05	0.00	0.00	0.00	
19,500.00	90.00	179.58	10,764.00	-8,587.49	655.55	8,612.02	0.00	0.00	0.00	
19,515.00	90.00	179.58	10,764.00	-8,602.49	655.66	8,626.99	0.00	0.00	0.00	
19,530.00	90.00	179.58	10,764.00	-8,617.49	655.77	8,641.97	0.00	0.00	0.00	
19,545.00	90.00	179.58	10,764.00	-8,632.49	655.88	8,656.94	0.00	0.00	0.00	
19,560.00	90.00	179.58	10,764.00	-8,647.49	655.99	8,671.92	0.00	0.00	0.00	
19,575.00	90.00	179.58	10,764.00	-8,662.49	656.10	8,686.89	0.00	0.00	0.00	
19,590.00	90.00	179.58	10,764.00	-8,677.49	656.21	8,701.87	0.00	0.00	0.00	
19,605.00	90.00	179.58	10,764.00	-8,692.49	656.32	8,716.84	0.00	0.00	0.00	
19,620.00	90.00	179.58	10,764.00	-8,707.49	656.43	8,731.81	0.00	0.00	0.00	
19,635.00	90.00	179.58	10,764.00	-8,722.49	656.54	8,746.79	0.00	0.00	0.00	
19,650.00	90.00	179.58	10,764.00	-8,737.49	656.65	8,761.76	0.00	0.00	0.00	
19,665.00	90.00	179.58	10,764.00	-8,752.49	656.76	8,776.74	0.00	0.00	0.00	
19,680.00	90.00	179.58	10,764.00	-8,767.49	656.87	8,791.71	0.00	0.00	0.00	
19,695.00	90.00	179.58	10,764.00	-8,782.49	656.98	8,806.69	0.00	0.00	0.00	
19,710.00	90.00	179.58	10,764.00	-8,797.49	657.09	8,821.66	0.00	0.00	0.00	
19,725.00	90.00	179.58	10,764.00	-8,812.48	657.20	8,836.63	0.00	0.00	0.00	
19,740.00	90.00	179.58	10,764.00	-8,827.48	657.31	8,851.61	0.00	0.00	0.00	
19,755.00	90.00	179.58	10,764.00	-8,842.48	657.42	8,866.58	0.00	0.00	0.00	
19,770.00	90.00	179.58	10,764.00	-8,857.48	657.53	8,881.56	0.00	0.00	0.00	

### ConocoPhillips

#### Planning Report

<b>Database:</b>	EDT 17 Permian Prod	<b>Local Co-ordinate Reference:</b>	Well _COLUMBUS FEDERAL COM 504H - Slot SLOT 6
<b>Company:</b>	DELAWARE BASIN EAST	<b>TVD Reference:</b>	KB @ 3362.00usft
<b>Project:</b>	LEA COUNT SOUTH WEST (NM-E)	<b>MD Reference:</b>	KB @ 3362.00usft
<b>Site:</b>	COLUMBUS FEDERAL PROJECT	<b>North Reference:</b>	Grid
<b>Well:</b>	_COLUMBUS FEDERAL COM 504H	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	OWB		
<b>Design:</b>	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)	
19,785.00	90.00	179.58	10,764.00	-8,872.48	657.64	8,896.53	0.00	0.00	0.00	
19,800.00	90.00	179.58	10,764.00	-8,887.48	657.75	8,911.51	0.00	0.00	0.00	
19,815.00	90.00	179.58	10,764.00	-8,902.48	657.86	8,926.48	0.00	0.00	0.00	
19,830.00	90.00	179.58	10,764.00	-8,917.48	657.97	8,941.45	0.00	0.00	0.00	
19,845.00	90.00	179.58	10,764.00	-8,932.48	658.08	8,956.43	0.00	0.00	0.00	
19,860.00	90.00	179.58	10,764.00	-8,947.48	658.18	8,971.40	0.00	0.00	0.00	
19,875.00	90.00	179.58	10,764.00	-8,962.48	658.29	8,986.38	0.00	0.00	0.00	
19,890.00	90.00	179.58	10,764.00	-8,977.48	658.40	9,001.35	0.00	0.00	0.00	
19,905.00	90.00	179.58	10,764.00	-8,992.48	658.51	9,016.33	0.00	0.00	0.00	
19,920.00	90.00	179.58	10,764.00	-9,007.48	658.62	9,031.30	0.00	0.00	0.00	
19,935.00	90.00	179.58	10,764.00	-9,022.48	658.73	9,046.27	0.00	0.00	0.00	
19,950.00	90.00	179.58	10,764.00	-9,037.48	658.84	9,061.25	0.00	0.00	0.00	
19,965.00	90.00	179.58	10,764.00	-9,052.48	658.95	9,076.22	0.00	0.00	0.00	
19,980.00	90.00	179.58	10,764.00	-9,067.48	659.06	9,091.20	0.00	0.00	0.00	
19,995.00	90.00	179.58	10,764.00	-9,082.48	659.17	9,106.17	0.00	0.00	0.00	
20,010.00	90.00	179.58	10,764.00	-9,097.48	659.28	9,121.14	0.00	0.00	0.00	
20,025.00	90.00	179.58	10,764.00	-9,112.48	659.39	9,136.12	0.00	0.00	0.00	
20,040.00	90.00	179.58	10,764.00	-9,127.48	659.50	9,151.09	0.00	0.00	0.00	
20,055.00	90.00	179.58	10,764.00	-9,142.48	659.61	9,166.07	0.00	0.00	0.00	
20,070.00	90.00	179.58	10,764.00	-9,157.48	659.72	9,181.04	0.00	0.00	0.00	
20,085.00	90.00	179.58	10,764.00	-9,172.48	659.83	9,196.02	0.00	0.00	0.00	
20,100.00	90.00	179.58	10,764.00	-9,187.47	659.94	9,210.99	0.00	0.00	0.00	
20,115.00	90.00	179.58	10,764.00	-9,202.47	660.05	9,225.96	0.00	0.00	0.00	
20,130.00	90.00	179.58	10,764.00	-9,217.47	660.16	9,240.94	0.00	0.00	0.00	
20,145.00	90.00	179.58	10,764.00	-9,232.47	660.27	9,255.91	0.00	0.00	0.00	
20,160.00	90.00	179.58	10,764.00	-9,247.47	660.38	9,270.89	0.00	0.00	0.00	
20,175.00	90.00	179.58	10,764.00	-9,262.47	660.49	9,285.86	0.00	0.00	0.00	
20,190.00	90.00	179.58	10,764.00	-9,277.47	660.60	9,300.84	0.00	0.00	0.00	
20,205.00	90.00	179.58	10,764.00	-9,292.47	660.71	9,315.81	0.00	0.00	0.00	
20,220.00	90.00	179.58	10,764.00	-9,307.47	660.82	9,330.78	0.00	0.00	0.00	
20,235.00	90.00	179.58	10,764.00	-9,322.47	660.93	9,345.76	0.00	0.00	0.00	
20,250.00	90.00	179.58	10,764.00	-9,337.47	661.04	9,360.73	0.00	0.00	0.00	
20,265.00	90.00	179.58	10,764.00	-9,352.47	661.15	9,375.71	0.00	0.00	0.00	
20,280.00	90.00	179.58	10,764.00	-9,367.47	661.26	9,390.68	0.00	0.00	0.00	
20,295.00	90.00	179.58	10,764.00	-9,382.47	661.37	9,405.66	0.00	0.00	0.00	
20,310.00	90.00	179.58	10,764.00	-9,397.47	661.47	9,420.63	0.00	0.00	0.00	
20,325.00	90.00	179.58	10,764.00	-9,412.47	661.58	9,435.60	0.00	0.00	0.00	
20,340.00	90.00	179.58	10,764.00	-9,427.47	661.69	9,450.58	0.00	0.00	0.00	
20,355.00	90.00	179.58	10,764.00	-9,442.47	661.80	9,465.55	0.00	0.00	0.00	
20,370.00	90.00	179.58	10,764.00	-9,457.47	661.91	9,480.53	0.00	0.00	0.00	
20,385.00	90.00	179.58	10,764.00	-9,472.47	662.02	9,495.50	0.00	0.00	0.00	
20,400.00	90.00	179.58	10,764.00	-9,487.47	662.13	9,510.48	0.00	0.00	0.00	
20,415.00	90.00	179.58	10,764.00	-9,502.47	662.24	9,525.45	0.00	0.00	0.00	
20,430.00	90.00	179.58	10,764.00	-9,517.47	662.35	9,540.42	0.00	0.00	0.00	
20,445.00	90.00	179.58	10,764.00	-9,532.47	662.46	9,555.40	0.00	0.00	0.00	
20,460.00	90.00	179.58	10,764.00	-9,547.47	662.57	9,570.37	0.00	0.00	0.00	
20,475.00	90.00	179.58	10,764.00	-9,562.46	662.68	9,585.35	0.00	0.00	0.00	
20,490.00	90.00	179.58	10,764.00	-9,577.46	662.79	9,600.32	0.00	0.00	0.00	
20,505.00	90.00	179.58	10,764.00	-9,592.46	662.90	9,615.30	0.00	0.00	0.00	
20,520.00	90.00	179.58	10,764.00	-9,607.46	663.01	9,630.27	0.00	0.00	0.00	
20,535.00	90.00	179.58	10,764.00	-9,622.46	663.12	9,645.24	0.00	0.00	0.00	
20,550.00	90.00	179.58	10,764.00	-9,637.46	663.23	9,660.22	0.00	0.00	0.00	
20,565.00	90.00	179.58	10,764.00	-9,652.46	663.34	9,675.19	0.00	0.00	0.00	

### ConocoPhillips

#### Planning Report

<b>Database:</b>	EDT 17 Permian Prod	<b>Local Co-ordinate Reference:</b>	Well _ COLUMBUS FEDERAL COM 504H - Slot SLOT 6
<b>Company:</b>	DELAWARE BASIN EAST	<b>TVD Reference:</b>	KB @ 3362.00usft
<b>Project:</b>	LEA COUNT SOUTH WEST (NM-E)	<b>MD Reference:</b>	KB @ 3362.00usft
<b>Site:</b>	COLUMBUS FEDERAL PROJECT	<b>North Reference:</b>	Grid
<b>Well:</b>	_COLUMBUS FEDERAL COM 504H	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	OWB		
<b>Design:</b>	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)	
20,580.00	90.00	179.58	10,764.00	-9,667.46	663.45	9,690.17	0.00	0.00	0.00	
20,595.00	90.00	179.58	10,764.00	-9,682.46	663.56	9,705.14	0.00	0.00	0.00	
20,610.00	90.00	179.58	10,764.00	-9,697.46	663.67	9,720.12	0.00	0.00	0.00	
20,625.00	90.00	179.58	10,764.00	-9,712.46	663.78	9,735.09	0.00	0.00	0.00	
20,640.00	90.00	179.58	10,764.00	-9,727.46	663.89	9,750.06	0.00	0.00	0.00	
20,655.00	90.00	179.58	10,764.00	-9,742.46	664.00	9,765.04	0.00	0.00	0.00	
20,670.00	90.00	179.58	10,764.00	-9,757.46	664.11	9,780.01	0.00	0.00	0.00	
20,685.00	90.00	179.58	10,764.00	-9,772.46	664.22	9,794.99	0.00	0.00	0.00	
20,700.00	90.00	179.58	10,764.00	-9,787.46	664.33	9,809.96	0.00	0.00	0.00	
20,715.00	90.00	179.58	10,764.00	-9,802.46	664.44	9,824.94	0.00	0.00	0.00	
20,730.00	90.00	179.58	10,764.00	-9,817.46	664.55	9,839.91	0.00	0.00	0.00	
20,745.00	90.00	179.58	10,764.00	-9,832.46	664.65	9,854.88	0.00	0.00	0.00	
20,760.00	90.00	179.58	10,764.00	-9,847.46	664.76	9,869.86	0.00	0.00	0.00	
20,775.00	90.00	179.58	10,764.00	-9,862.46	664.87	9,884.83	0.00	0.00	0.00	
20,790.00	90.00	179.58	10,764.00	-9,877.46	664.98	9,899.81	0.00	0.00	0.00	
20,805.00	90.00	179.58	10,764.00	-9,892.46	665.09	9,914.78	0.00	0.00	0.00	
20,820.00	90.00	179.58	10,764.00	-9,907.46	665.20	9,929.76	0.00	0.00	0.00	
20,835.00	90.00	179.58	10,764.00	-9,922.46	665.31	9,944.73	0.00	0.00	0.00	
20,850.00	90.00	179.58	10,764.00	-9,937.45	665.42	9,959.70	0.00	0.00	0.00	
20,865.00	90.00	179.58	10,764.00	-9,952.45	665.53	9,974.68	0.00	0.00	0.00	
20,880.00	90.00	179.58	10,764.00	-9,967.45	665.64	9,989.65	0.00	0.00	0.00	
20,895.00	90.00	179.58	10,764.00	-9,982.45	665.75	10,004.63	0.00	0.00	0.00	
20,910.00	90.00	179.58	10,764.00	-9,997.45	665.86	10,019.60	0.00	0.00	0.00	
20,925.00	90.00	179.58	10,764.00	-10,012.45	665.97	10,034.58	0.00	0.00	0.00	
20,940.00	90.00	179.58	10,764.00	-10,027.45	666.08	10,049.55	0.00	0.00	0.00	
20,955.00	90.00	179.58	10,764.00	-10,042.45	666.19	10,064.52	0.00	0.00	0.00	
20,970.00	90.00	179.58	10,764.00	-10,057.45	666.30	10,079.50	0.00	0.00	0.00	
20,985.00	90.00	179.58	10,764.00	-10,072.45	666.41	10,094.47	0.00	0.00	0.00	
21,000.00	90.00	179.58	10,764.00	-10,087.45	666.52	10,109.45	0.00	0.00	0.00	
21,013.94	90.00	179.58	10,764.00	-10,101.39	666.62	10,123.36	0.00	0.00	0.00	

Design Targets										
Target Name	Dip Angle (°)	Dip Dir. (°)	TVD (usft)	+N/-S (usft)	+E/-W (usft)	Northing (usft)	Easting (usft)	Latitude	Longitude	
PBHL_COLUMBUS FEI - hit/miss target - Shape - plan hits target center - Rectangle (sides W100.00 H10,406.00 D20.00)	0.00	359.58	10,764.00	-10,101.39	666.62	388,328.12	739,976.68	32° 3' 54.942 N	103° 33' 31.186 W	
FTP_COLUMBUS FED - plan misses target center by 197.77usft at 10710.00usft MD (10623.86 TVD, 164.77 N, 591.56 E) - Circle (radius 50.00)	0.00	0.00	10,764.00	304.31	590.54	398,733.82	739,900.60	32° 5' 37.919 N	103° 33' 31.202 W	
LTP_COLUMBUS FED - plan hits target center - Circle (radius 50.00)	90.00	179.58	10,764.00	-10,051.39	666.25	388,378.12	739,976.31	32° 3' 55.437 N	103° 33' 31.187 W	

### ConocoPhillips Planning Report

<b>Database:</b>	EDT 17 Permian Prod	<b>Local Co-ordinate Reference:</b>	Well _COLUMBUS FEDERAL COM 504H - Slot SLOT 6
<b>Company:</b>	DELAWARE BASIN EAST	<b>TVD Reference:</b>	KB @ 3362.00usft
<b>Project:</b>	LEA COUNT SOUTH WEST (NM-E)	<b>MD Reference:</b>	KB @ 3362.00usft
<b>Site:</b>	COLUMBUS FEDERAL PROJECT	<b>North Reference:</b>	Grid
<b>Well:</b>	_COLUMBUS FEDERAL COM 504H	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	OWB		
<b>Design:</b>	PWP0		

Casing Points					
Measured Depth (usft)	Vertical Depth (usft)	Name	Casing Diameter (")	Hole Diameter (")	
21,014.47	10,764.00	5-1/2" Production Casing	5-1/2	6	



## ConocoPhillips Company - Columbus Federal Com 504H

### 1. Geologic Formations

TVD of target	10,820' EOL	Pilot hole depth	NA
MD at TD:	21,066'	Deepest expected fresh water:	314'

Formation	Depth (TVD) from KB	Water/Mineral Bearing/ Target Zone?	Hazards*
Quaternary Fill	Surface	Water	
Rustler	1019	Water	
Top of Salt	1378	Salt	
USGS Marker Bed 126	-	Salt	
Base of Salt	4750	Salt Water	
Lamar	4864	Salt Water	
Bell Canyon	5019	Oil/Gas	
Cherry Canyon	6058	Oil/Gas	
Brushy Canyon	7693	Oil/Gas	
Bone Spring	9074	Oil/Gas	
1st Bone Spring Sand	10106	Oil/Gas	
2nd Bone Spring Sand	10734	Target	

### 2. Casing Program

Hole Size	Casing Interval		Csg. Size	Weight (lbs)	Grade	Conn.	SF Collapse	SF Burst	SF Tension
	From	To							
17.5"	0	1149	13.375"	54.5	J55	BTC	2.15	1.35	14.52
12.25"	0	4800	9.625"	40	L80-IC	BTC	1.55	1.35	4.93
8.75"	0	10,350	5.5"	20	P110-ICY	TXP BTC	2.30	3.37	3.37
7.875"	10,350	21,066	5.5"	20	P110-ICY	TXP BTC	2.30	3.37	3.37
BLM Minimum Safety Factor							1.125	1	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. 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" TXP BTC comply the coupling OD clearance is greater than .422" for the cement bond tie in.

**ConocoPhillips Company - Columbus Federal Com 504H**

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

**ConocoPhillips Company - Columbus Federal Com 504H**

**3. Cementing Program**

Casing	# Sks	Wt. lb/ gal	Yld ft3/ sack	H <sub>2</sub> O gal/sk	500# Comp. Strength (hours)	Slurry Description
Surf.	620	13.5	1.75	9.21	12	Lead: Class C
	170	14.8	1.35	6.8	8	Tail: Class C
Inter.	940	12.8	1.8	9.21	12	Lead: Class C
	350	14.8	1.34	6.52	8	Tail: Class C
Prod.	700	10.2	2.98	14.92	72	Lead: Tuned Light
	1960	13.2	1.42	7.45	19	Tail: Class H

Intermediate #1 Salt string cemented to surface. **Intermediate cement job to be performed offline.**  
Drill out to wait for 500PSI compressive strength.

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.

Top of cement for production casing string is planned to be minimum 200 ft overlap with previous Intermediate casing

Casing String	TOC	% Excess
Surface	0'	50%
1 <sup>st</sup> Intermediate	0'	50%
Production	3,800'	0% 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 Federal Com 504H**

**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"	13-5/8"	5M	Annular	x	5M
			Blind Ram		
			Pipe Ram		
			Double Ram		
			Other*		
8-3/4" x 7-7/8"	13-5/8"	10M	Annular	x	50% testing pressure
			Blind Ram	x	10M
			Pipe Ram	x	
			Double Ram		
			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?
N	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 Federal Com 504H

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	9-5/8" Int shoe	Saturated Brine	9 - 10	28-34	N/C
9-5/8" Int shoe	Lateral TD	Cut Brine or OBM	8.6 - 9.5	28-34	N/C

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

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

6. Logging and Testing Procedures

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

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

**ConocoPhillips Company - Columbus Federal Com 504H**

**7. Drilling Conditions**

Condition	Specify what type and where?
BH Pressure at deepest TVD	5350 psi at 10820' TVD
Abnormal Temperature	NO 165 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 Pad Batch Drilled?

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 501H	30-025-	C-34-25S-33E	400 FNL & 2285 FWL	± 473	± 1606	± 1225
Columbus Federal Com 502H	30-025-	C-34-25S-33E	400 FNL & 2325 FWL	± 473	± 1606	± 1225
Columbus Federal Com 503H	30-025-	C-34-25S-33E	400 FNL & 2365 FWL	± 473	± 1606	± 1225
Columbus Federal Com 504H	30-025-	C-34-25S-33E	400 FNL & 2385 FWL	± 473	± 1606	± 1225
Columbus Federal Com 505H	30-025-	C-34-25S-33E	400 FNL & 2425 FWL	± 473	± 1606	± 1225
Columbus Federal Com 506H	30-025-	C-34-25S-33E	400 FNL & 2465 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	Pending	± 07/01/2027	± 25 days from spud	TBD	TBD	TBD
501H, 502H, 503H, 504H, 505H, 506H						

**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

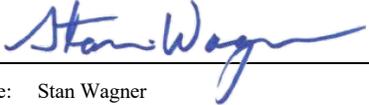
1. If, at any time after Operator submits this Natural Gas Management Plan and before the well is spud:

(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
<b>OIL CONSERVATION DIVISION</b> <b>(Only applicable when submitted as a standalone form)</b>
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

