

Form 3160-5  
(June 2019)

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

FORM APPROVED  
OMB No. 1004-0137  
Expires: October 31, 2021

**SUNDRY NOTICES AND REPORTS ON WELLS**  
**Do not use this form for proposals to drill or to re-enter an abandoned well. Use Form 3160-3 (APD) for such proposals.**

5. Lease Serial No.	NMNM138836
6. If Indian, Allottee or Tribe Name	

<b>SUBMIT IN TRIPLICATE - Other instructions on page 2</b>		7. If Unit of CA/Agreement, Name and/or No.
1. Type of Well <input checked="" type="checkbox"/> Oil Well <input type="checkbox"/> Gas Well <input type="checkbox"/> Other		8. Well Name and No. RIVERWALK FEDERAL COM/503H
2. Name of Operator COG OPERATING LLC		9. API Well No.
3a. Address 600 West Illinois Ave, Midland, TX 79701	3b. Phone No. (include area code) (432) 683-7443	10. Field and Pool or Exploratory Area CORRAL Canyon/BONE SPRING, SOUTH
4. Location of Well (Footage, Sec., T.,R.,M., or Survey Description) SEC 29/T26S/R29E/NMP		11. Country or Parish, State EDDY/NM

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

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

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

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

BHL Change From: 1270' FSL & 1980' FWL Section 8. T26S. R29E.  
To: 1065' FSL & 1610' FWL. Section 8.T26S. R29E.

Dedicated Acres: From: 360  
To: 719.78

Casing and Cement Changes: The proposed changes reflect downsizing the surface, intermediate and production open hole sections to 14-3/4, 9-7/8 and 6-3/4 respectively. Cement blends are the same as the approved APD, and volumes have been adjusted to reflect the change in wellbore design.

Continued on page 3 additional information

14. I hereby certify that the foregoing is true and correct. Name (Printed/Typed) MAYTE REYES / Ph: (281) 293-1000	Title Regulatory Analyst
Signature (Electronic Submission)	Date 07/14/2023

**THE SPACE FOR FEDERAL OR STATE OFFICE USE**

Approved by CHRISTOPHER WALLS / Ph: (575) 234-2234 / Approved	Title Petroleum Engineer	Date 01/29/2024
Conditions of approval, if any, are attached. Approval of this notice does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.	Office CARLSBAD	

Title 18 U.S.C Section 1001 and Title 43 U.S.C Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

(Instructions on page 2)

## GENERAL INSTRUCTIONS

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

## SPECIFIC INSTRUCTIONS

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

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

## NOTICES

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

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

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

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

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

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

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

Response to this request is mandatory.

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

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

## Additional Information

### Additional Remarks

Drill 14-3/4 hole to 876. Run and cement 10-3/4 45.5# J-55 BTC casing  
420 sacks of 13.5 ppg lead (1.73 ft<sup>3</sup>/sack yield and 9.22 gal/sack mix water)  
250 sacks of 14.8 ppg tail (1.35 ft<sup>3</sup>/sack yield and 6.45 gal/sack mix water)

Drill 9-7/8 hole to 8,000. Run and cement 7-5/8 29.7# L80-ICY TXP-BTC casing  
420 sacks of 10.5 ppg lead (3.6 ft<sup>3</sup>/sack yield and 22.81 gal/sack mix water)  
180 sacks of 15.6 ppg tail (1.20 ft<sup>3</sup>/sack yield and 5.40 gal/sack mix water)

Drill 6-3/4 hole to TD of 19,870. Run and cement 5-1/2 20# P110-CY TXP-BTC from 0-7,500 and 5-1/2 20# P110-CY W441 from 7,500-19,870 (crossover 500 inside intermediate casing for cement bond tie in)  
220 sacks of 11.0 ppg lead (3.22 ft<sup>3</sup>/sack yield and 9.32 gal/sack mix water)  
940 sacks of 13.2 ppg tail (1.48 ft<sup>3</sup>/sack yield and 7.49 gal/sack mix water)

API# 30-015-53824

See attached.

### Location of Well

0. SHL: NENW / 250 FNL / 1750 FWL / TWSP: 26S / RANGE: 29E / SECTION: 29 / LAT: 32.020136 / LONG: -104.00955 ( TVD: 0 feet, MD: 0 feet )  
PPP: SESW / 100 FSL / 1980 FWL / TWSP: 26S / RANGE: 29E / SECTION: 20 / LAT: 32.021094 / LONG: -104.008805 ( TVD: 8527 feet, MD: 8649 feet )  
PPP: NENW / 1319 FNL / 1980 FWL / TWSP: 26S / RANGE: 29E / SECTION: 20 / LAT: 32.031863 / LONG: -104.008736 ( TVD: 8570 feet, MD: 12245 feet )  
PPP: NESW / 1321 FSL / 1980 FWL / TWSP: 26S / RANGE: 29E / SECTION: 17 / LAT: 32.038992 / LONG: -104.008691 ( TVD: 8570 feet, MD: 14875 feet )  
PPP: SESW / 1 FSL / 1980 FWL / TWSP: 26S / RANGE: 29E / SECTION: 17 / LAT: 32.035475 / LONG: -104.008713 ( TVD: 8570 feet, MD: 13565 feet )  
BHL: SESW / 1270 FSL / 1980 FWL / TWSP: 26S / RANGE: 29E / SECTION: 8 / LAT: 32.053195 / LONG: -104.008601 ( TVD: 8550 feet, MD: 20403 feet )

<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 type="checkbox"/> Initial Submittal <input checked="" type="checkbox"/> Amended Report <input type="checkbox"/> As Drilled

**WELL LOCATION INFORMATION**

API Number <b>30-015-53824</b>	Pool Code <b>13354</b>	Pool Name <b>Corral Canyon; Bone Spring, South</b>
Property Code <b>40009</b>	Property Name <b>RIVERWALK FEDERAL COM</b>	Well Number <b>503H</b>
OGRID No. <b>229137</b>	Operator Name <b>COG OPERATING LLC</b>	Ground Level Elevation <b>2922.2'</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 type="checkbox"/> Fee <input type="checkbox"/> Tribal <input checked="" 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>29</b>	<b>26-S</b>	<b>29-E</b>		<b>250 FNL</b>	<b>1750 FWL</b>	<b>32.020136°N</b>	<b>104.009550°W</b>	<b>EDDY</b>

**Bottom Hole Location**

UL	Section	Township	Range	Lot	Ft. from N/S	Ft. from E/W	Latitude	Longitude	County
<b>N</b>	<b>8</b>	<b>26-S</b>	<b>29-E</b>		<b>1065 FSL</b>	<b>1610 FWL</b>	<b>32.052659°N</b>	<b>104.009783°W</b>	<b>EDDY</b>

Dedicated Acres <b>719.78'</b>	Infill or Defining Well <b>Defining</b>	Defining Well API <b>30-015-53824</b>	Overlapping Spacing Unit (Y/N) <b>N</b>	Consolidation Code
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>29</b>	<b>26-S</b>	<b>29-E</b>		<b>250 FNL</b>	<b>1750 FWL</b>	<b>32.020136°N</b>	<b>104.009550°W</b>	<b>EDDY</b>

**First Take Point (FTP)**

UL	Section	Township	Range	Lot	Ft. from N/S	Ft. from E/W	Latitude	Longitude	County
<b>N</b>	<b>7</b>	<b>26-S</b>	<b>29-E</b>		<b>100 FSL</b>	<b>1610 FWL</b>	<b>32.021101°N</b>	<b>104.009999°W</b>	<b>EDDY</b>

**Last Take Point (LTP)**

UL	Section	Township	Range	Lot	Ft. from N/S	Ft. from E/W	Latitude	Longitude	County
<b>N</b>	<b>8</b>	<b>26-S</b>	<b>29-E</b>		<b>1015 FSL</b>	<b>1609 FWL</b>	<b>32.052522°N</b>	<b>104.009784°W</b>	<b>EDDY</b>

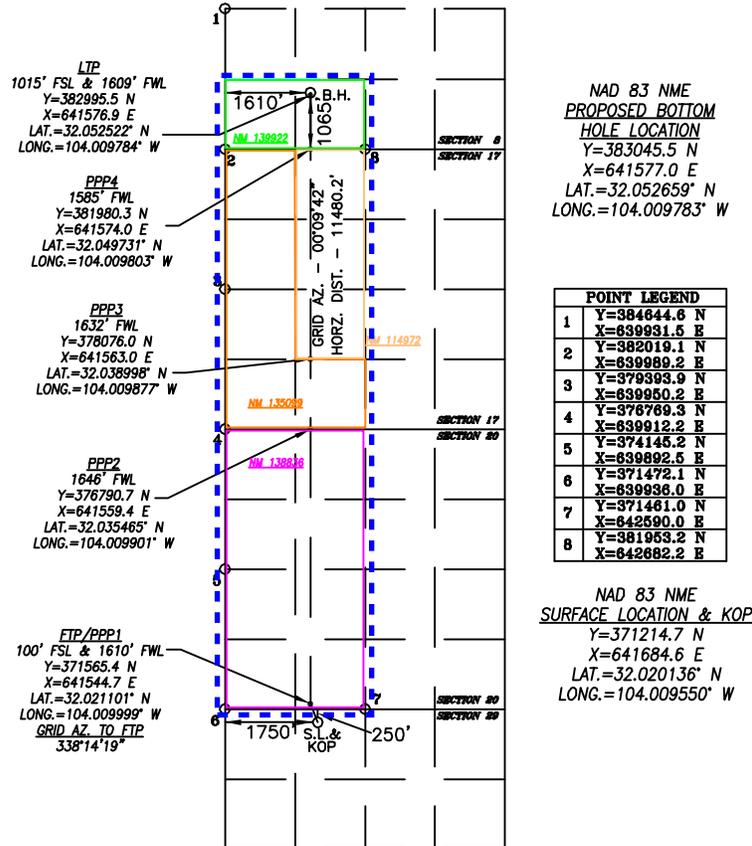
Unitized Area or Area of Uniform Interest <b>COM</b>	Spacing Unit Type <input checked="" type="checkbox"/> Horizontal <input type="checkbox"/> Vertical	Ground Floor Elevation: <b>2922.2'</b>
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<p><b>OPERATOR CERTIFICATIONS</b></p> <p><i>I hereby certify 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>
Signature: <b>Mayte Reyes</b> Date: <b>8/13/2025</b>	Signature and Seal of Professional Surveyor: <b>Chad Hargrow</b> <b>8/13/25</b>
Printed Name: <b>Mayte Reyes</b> Email Address: <b>mayte.x.reyes@cop.com</b>	Certificate Number: <b>17777</b> Date of Survey: <b>JULY 17, 2019</b>
W.O.#25-1018   DRAWN BY: WN   PAGE 1 OF 2	

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

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

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



# **DELAWARE BASIN WEST**

**ATLAS PROSPECT (DBW)**

**RIVERWALK FEDERAL PROJECT (ATLAS 2629)**

**RIVERWALK FEDERAL COM #503H**

**OWB**

**PWP1**

## **Anticollision Report**

**10 July, 2023**

### ConocoPhillips Anticollision Report

<b>Company:</b>	DELAWARE BASIN WEST	<b>Local Co-ordinate Reference:</b>	Well RIVERWALK FEDERAL COM #503H
<b>Project:</b>	ATLAS PROSPECT (DBW)	<b>TVD Reference:</b>	KB=26 @ 2948.0usft
<b>Reference Site:</b>	RIVERWALK FEDERAL PROJECT (ATLAS 2629)	<b>MD Reference:</b>	KB=26 @ 2948.0usft
<b>Site Error:</b>	0.0 usft	<b>North Reference:</b>	Grid
<b>Reference Well:</b>	RIVERWALK FEDERAL COM #503H	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	3.0 usft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	OWB	<b>Database:</b>	EDT 17 Central Planning Prod
<b>Reference Design:</b>	PWP1	<b>Offset TVD Reference:</b>	Offset Datum

<b>Reference</b>	PWP1		
<b>Filter type:</b>	NO GLOBAL FILTER: Using user defined selection & filtering criteria		
<b>Interpolation Method:</b>	MD + Stations Interval 100.0usft	<b>Error Model:</b>	ISCWSA
<b>Depth Range:</b>	Unlimited	<b>Scan Method:</b>	Closest Approach 3D
<b>Results Limited by:</b>	Maximum centre distance of 1,000.0usft	<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>	7/10/2023		
<b>From (usft)</b>	<b>To (usft)</b>	<b>Survey (Wellbore)</b>	<b>Tool Name</b>	<b>Description</b>
0.0	1,500.0	PWP1 (OWB)	r.5 SDI_KPR_WL_NS-CT	SDI Keeper Wireline Gyrocomp.-Initalzd Cont. rev.5
1,500.0	8,110.5	PWP1 (OWB)	r.5 MWD+IFR1	OWSG MWD + IFR1 rev.5
8,110.5	19,870.0	PWP1 (OWB)	r.5 MWD+IFR1+MS	OWSG MWD + IFR1 + Multi-Station Correction rev.5

<b>Summary</b>						
Site Name	Reference Measured Depth (usft)	Offset Measured Depth (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Separation Factor	Warning
HAMBONE FEDERAL PROJECT (ATLAS 2629)						
HAMBONE FEDERAL COM #704H - OWB - AWP	19,687.9	8,553.6	465.0	339.9	3.718	CC
HAMBONE FEDERAL COM #704H - OWB - AWP	19,700.0	8,552.7	465.2	339.9	3.714	ES, SF
HAMBONE FEDERAL COM #705H - OWB - AWP	19,870.0	8,553.4	131.7	48.2	1.578	Advise and Monitor, CC, ES,
RIVERWALK FEDERAL PROJECT (ATLAS 2629)						
RIVERWALK FEDERAL COM #903H - OWB - PWP1	1,500.0	1,500.0	30.1	20.2	3.051	CC, ES, SF

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 WEST	<b>Local Co-ordinate Reference:</b>	Well RIVERWALK FEDERAL COM #503H
<b>Project:</b>	ATLAS PROSPECT (DBW)	<b>TVD Reference:</b>	KB=26 @ 2948.0usft
<b>Reference Site:</b>	RIVERWALK FEDERAL PROJECT (ATLAS 2629)	<b>MD Reference:</b>	KB=26 @ 2948.0usft
<b>Site Error:</b>	0.0 usft	<b>North Reference:</b>	Grid
<b>Reference Well:</b>	RIVERWALK FEDERAL COM #503H	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	3.0 usft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	OWB	<b>Database:</b>	EDT 17 Central Planning Prod
<b>Reference Design:</b>	PWP1	<b>Offset TVD Reference:</b>	Offset 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>						
HAMBONE FEDERAL PROJECT (ATLAS 2629)						
HAMBONE FEDERAL COM #704H - OWB - AWP	19,870.0	8,539.3	499.2	378.6	4.139	
HAMBONE FEDERAL COM #705H - OWB - AWP	19,870.0	8,553.4	131.7	48.2	1.578	Advise and Monitor, CC, ES,
RIVERWALK FEDERAL PROJECT (ATLAS 2629)						
RIVERWALK FEDERAL COM #903H - OWB - PWP1	19,870.0	20,101.4				Out of Range @TD

Offset Design: HAMBONE FEDERAL PROJECT (ATLAS 2629) - HAMBONE FEDERAL COM #704H - OWB - AWP														Offset Site Error:	0.0 usft
Survey Program: 100-Standard Keeper 104, 9241-MWD+IFR1+FDIR														Offset Well Error:	3.0 usft
Measured Reference Depth (usft)	Vertical Depth (usft)	Measured Offset Depth (usft)	Vertical Offset Depth (usft)	Reference	Semi Major Axis Offset (usft)	Azimuth from North (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning		
18,804.9	8,570.0	8,616.4	8,586.6	82.3	9.1	26.85	11,653.1	364.2	996.8	934.2	62.59	15.927			
18,900.0	8,570.0	8,609.3	8,579.6	83.0	9.1	29.53	11,653.7	363.8	913.1	846.5	66.57	13.717			
18,910.7	8,570.0	8,608.5	8,578.8	83.1	9.1	29.87	11,653.8	363.8	903.9	836.8	67.08	13.475			
19,000.0	8,570.0	8,601.9	8,572.1	83.8	9.1	33.03	11,654.3	363.4	828.8	757.0	71.80	11.544			
19,100.0	8,570.0	8,594.7	8,565.0	84.5	9.1	37.30	11,654.8	363.1	748.4	670.2	78.15	9.576			
19,200.0	8,570.0	8,587.9	8,558.3	85.3	9.1	42.57	11,655.4	362.7	673.1	587.3	85.76	7.849			
19,300.0	8,570.0	8,581.3	8,551.7	86.0	9.1	49.09	11,655.9	362.5	604.9	510.3	94.62	6.393			
19,400.0	8,570.0	8,575.0	8,545.4	86.8	9.1	57.14	11,656.3	362.2	546.5	442.2	104.37	5.237			
19,500.0	8,570.0	8,567.8	8,538.2	87.6	9.1	66.85	11,656.9	361.9	501.4	387.4	113.97	4.399			
19,600.0	8,570.0	8,560.3	8,530.8	88.3	9.0	78.08	11,657.4	361.6	473.2	351.6	121.61	3.891			
19,687.9	8,570.0	8,553.6	8,524.1	89.0	9.0	88.73	11,657.9	361.4	465.0	339.9	125.09	3.718 CC			
19,700.0	8,570.0	8,552.7	8,523.2	89.1	9.0	90.21	11,658.0	361.3	465.2	339.9	125.27	3.714 ES, SF			
19,800.0	8,570.0	8,544.9	8,515.4	89.8	9.0	102.22	11,658.6	361.0	478.3	354.3	124.00	3.857			
19,870.0	8,570.0	8,539.3	8,509.8	90.4	9.0	110.03	11,659.0	360.8	499.2	378.6	120.60	4.139			

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 WEST	<b>Local Co-ordinate Reference:</b>	Well RIVERWALK FEDERAL COM #503H
<b>Project:</b>	ATLAS PROSPECT (DBW)	<b>TVD Reference:</b>	KB=26 @ 2948.0usft
<b>Reference Site:</b>	RIVERWALK FEDERAL PROJECT (ATLAS 2629)	<b>MD Reference:</b>	KB=26 @ 2948.0usft
<b>Site Error:</b>	0.0 usft	<b>North Reference:</b>	Grid
<b>Reference Well:</b>	RIVERWALK FEDERAL COM #503H	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	3.0 usft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	OWB	<b>Database:</b>	EDT 17 Central Planning Prod
<b>Reference Design:</b>	PWP1	<b>Offset TVD Reference:</b>	Offset Datum

<b>Offset Design:</b> HAMBONE FEDERAL PROJECT (ATLAS 2629) - HAMBONE FEDERAL COM #705H - OWB - AWP												<b>Offset Site Error:</b>	0.0 usft
<b>Survey Program:</b> 100-Standard Keeper 104, 9240-MWD+IFR1+FDIR												<b>Offset Well Error:</b>	3.0 usft
<b>Reference</b>												<b>Rule Assigned:</b>	
<b>Measured Reference</b>		<b>Offset</b>		<b>Semi Major Axis</b>		<b>Azimuth from North (°)</b>	<b>Offset Wellbore Centre</b>		<b>Distance</b>		<b>Minimum Separation (usft)</b>	<b>Separation Factor</b>	<b>Warning</b>
<b>Depth (usft)</b>	<b>Depth (usft)</b>	<b>Depth (usft)</b>	<b>Depth (usft)</b>	<b>Reference (usft)</b>	<b>Offset (usft)</b>		<b>+N/-S (usft)</b>	<b>+E/-W (usft)</b>	<b>Between Centres (usft)</b>	<b>Between Ellipses (usft)</b>			
19,000.0	8,570.0	8,601.6	8,589.1	83.8	8.5	-5.99	11,932.6	-190.1	979.2	937.2	42.00	23.315	
19,100.0	8,570.0	8,594.1	8,581.7	84.5	8.5	-6.49	11,933.0	-189.5	879.7	837.3	42.44	20.730	
19,200.0	8,570.0	8,587.2	8,574.8	85.3	8.5	-7.11	11,933.4	-188.9	780.3	737.3	42.99	18.150	
19,300.0	8,570.0	8,580.9	8,568.5	86.0	8.5	-7.92	11,933.7	-188.3	681.0	637.2	43.72	15.574	
19,400.0	8,570.0	8,575.0	8,562.7	86.8	8.5	-9.00	11,934.0	-187.8	581.8	537.1	44.75	13.000	
19,500.0	8,570.0	8,570.5	8,558.2	87.6	8.5	-10.55	11,934.3	-187.5	483.0	436.6	46.34	10.422	
19,600.0	8,570.0	8,565.9	8,553.6	88.3	8.5	-12.90	11,934.5	-187.1	384.7	335.7	48.97	7.855	
19,700.0	8,570.0	8,561.3	8,549.1	89.1	8.5	-16.83	11,934.7	-186.7	287.4	233.5	53.93	5.330	
19,800.0	8,570.0	8,556.7	8,544.4	89.8	8.5	-24.70	11,935.0	-186.3	193.0	127.8	65.21	2.959	
19,870.0	8,570.0	8,553.4	8,541.1	90.4	8.5	-36.77	11,935.1	-186.1	131.7	48.2	83.45	1.578	Advise and Monitor, CC, ES, SF

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 WEST	<b>Local Co-ordinate Reference:</b>	Well RIVERWALK FEDERAL COM #503H
<b>Project:</b>	ATLAS PROSPECT (DBW)	<b>TVD Reference:</b>	KB=26 @ 2948.0usft
<b>Reference Site:</b>	RIVERWALK FEDERAL PROJECT (ATLAS 2629)	<b>MD Reference:</b>	KB=26 @ 2948.0usft
<b>Site Error:</b>	0.0 usft	<b>North Reference:</b>	Grid
<b>Reference Well:</b>	RIVERWALK FEDERAL COM #503H	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	3.0 usft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	OWB	<b>Database:</b>	EDT 17 Central Planning Prod
<b>Reference Design:</b>	PWP1	<b>Offset TVD Reference:</b>	Offset Datum

Offset Design: RIVERWALK FEDERAL PROJECT (ATLAS 2629) - RIVERWALK FEDERAL COM #903H - OWB - PWP1													Offset Site Error:	0.0 usft
Survey Program: 0-r.5 SDI_KPR_WL_NS-CT, 1500-r.5 MWD+IFR1, 8273-r.5 MWD+IFR1+MS													Offset Well Error:	3.0 usft
Rule Assigned:														
Measured Reference Depth (usft)	Vertical Depth (usft)	Measured Offset Depth (usft)	Vertical Offset Depth (usft)	Semi Major Axis Reference (usft) / Offset (usft)		Azimuth from North (°)	Offset Wellbore Centre +N/-S (usft) / +E/-W (usft)		Distance Between Centres (usft) / Between Ellipses (usft)		Minimum Separation (usft)	Separation Factor	Warning	
0.0	0.0	0.0	0.0	3.0	3.0	-89.80	0.1	-30.1	30.1					
100.0	100.0	100.0	100.0	3.1	3.1	-89.80	0.1	-30.1	30.1	23.0	7.09	4.247		
200.0	200.0	200.0	200.0	3.2	3.2	-89.80	0.1	-30.1	30.1	22.8	7.33	4.109		
300.0	300.0	300.0	300.0	3.3	3.3	-89.80	0.1	-30.1	30.1	22.5	7.56	3.983		
400.0	400.0	400.0	400.0	3.4	3.4	-89.80	0.1	-30.1	30.1	22.3	7.78	3.869		
500.0	500.0	500.0	500.0	3.6	3.6	-89.80	0.1	-30.1	30.1	22.1	8.00	3.765		
600.0	600.0	600.0	600.0	3.7	3.7	-89.80	0.1	-30.1	30.1	21.9	8.20	3.669		
700.0	700.0	700.0	700.0	3.8	3.8	-89.80	0.1	-30.1	30.1	21.7	8.41	3.580		
800.0	800.0	800.0	800.0	3.9	3.9	-89.80	0.1	-30.1	30.1	21.5	8.61	3.498		
900.0	900.0	900.0	900.0	4.0	4.0	-89.80	0.1	-30.1	30.1	21.3	8.80	3.421		
1,000.0	1,000.0	1,000.0	1,000.0	4.2	4.2	-89.80	0.1	-30.1	30.1	21.1	8.99	3.350		
1,100.0	1,100.0	1,100.0	1,100.0	4.3	4.3	-89.80	0.1	-30.1	30.1	20.9	9.17	3.283		
1,200.0	1,200.0	1,200.0	1,200.0	4.4	4.4	-89.80	0.1	-30.1	30.1	20.8	9.35	3.220		
1,300.0	1,300.0	1,300.0	1,300.0	4.5	4.5	-89.80	0.1	-30.1	30.1	20.6	9.52	3.160		
1,400.0	1,400.0	1,400.0	1,400.0	4.6	4.6	-89.80	0.1	-30.1	30.1	20.4	9.70	3.104		
1,500.0	1,500.0	1,500.0	1,500.0	4.8	4.8	-89.80	0.1	-30.1	30.1	20.2	9.87	3.051	CC, ES, SF	
1,600.0	1,600.0	1,599.2	1,599.2	4.9	4.9	-91.64	0.3	-31.4	30.9	21.2	9.74	3.172		
1,700.0	1,699.9	1,698.3	1,698.2	5.1	5.0	-96.62	1.0	-35.2	33.5	23.4	10.11	3.312		
1,800.0	1,799.7	1,797.3	1,797.0	5.3	5.2	-103.36	2.1	-41.5	38.2	27.7	10.48	3.644		
1,900.0	1,899.3	1,895.9	1,895.2	5.6	5.3	-110.34	3.7	-50.3	45.5	34.6	10.86	4.184		
2,000.0	1,998.7	1,994.2	1,992.9	5.8	5.6	-115.21	5.7	-61.5	55.3	44.1	11.25	4.922		
2,100.0	2,098.2	2,092.2	2,089.8	6.0	5.9	-117.29	8.1	-75.2	67.5	55.9	11.62	5.810		
2,200.0	2,197.6	2,189.7	2,185.9	6.3	6.2	-117.68	10.9	-91.3	81.8	69.8	12.01	6.810		
2,300.0	2,297.1	2,286.5	2,281.0	6.6	6.5	-117.10	14.1	-109.6	98.0	85.6	12.40	7.902		
2,400.0	2,396.5	2,382.6	2,374.8	6.8	6.9	-116.02	17.7	-130.1	116.3	103.5	12.82	9.071		
2,500.0	2,496.0	2,477.9	2,467.2	7.1	7.2	-114.70	21.7	-152.7	136.6	123.4	13.26	10.306		
2,600.0	2,595.4	2,572.4	2,558.3	7.5	7.5	-113.29	26.1	-177.4	159.1	145.4	13.68	11.633		
2,700.0	2,694.9	2,669.5	2,651.7	7.8	7.9	-111.92	30.7	-203.7	182.6	168.4	14.17	12.886		
2,800.0	2,794.3	2,766.6	2,745.1	8.1	8.3	-110.86	35.4	-230.1	206.1	191.4	14.70	14.023		
2,900.0	2,893.8	2,863.8	2,838.4	8.4	8.7	-110.01	40.0	-256.5	229.7	214.5	15.24	15.070		
3,000.0	2,993.2	2,960.9	2,931.8	8.8	9.1	-109.33	44.7	-282.8	253.3	237.5	15.80	16.033		
3,100.0	3,092.7	3,058.0	3,025.2	9.1	9.5	-108.76	49.3	-309.2	277.0	260.6	16.37	16.920		
3,200.0	3,192.1	3,155.1	3,118.5	9.5	9.9	-108.28	54.0	-335.6	300.7	283.7	16.95	17.739		
3,300.0	3,291.6	3,252.3	3,211.9	9.8	10.3	-107.87	58.6	-361.9	324.4	306.8	17.54	18.494		
3,400.0	3,391.1	3,349.4	3,305.3	10.2	10.7	-107.51	63.3	-388.3	348.1	330.0	18.14	19.192		
3,500.0	3,490.5	3,446.5	3,398.6	10.6	11.2	-107.20	67.9	-414.7	371.8	353.1	18.74	19.839		
3,600.0	3,590.0	3,543.6	3,492.0	10.9	11.6	-106.93	72.6	-441.0	395.5	376.2	19.35	20.438		
3,700.0	3,689.4	3,640.8	3,585.3	11.3	12.1	-106.69	77.2	-467.4	419.3	399.3	19.97	20.995		
3,800.0	3,788.9	3,737.9	3,678.7	11.7	12.5	-106.47	81.9	-493.8	443.0	422.4	20.59	21.514		
3,900.0	3,888.3	3,835.0	3,772.1	12.0	13.0	-106.28	86.5	-520.1	466.8	445.6	21.22	21.997		
4,000.0	3,987.8	3,932.1	3,865.4	12.4	13.4	-106.10	91.2	-546.5	490.5	468.7	21.85	22.447		
4,100.0	4,087.2	4,029.3	3,958.8	12.8	13.9	-105.94	95.8	-572.8	514.3	491.8	22.49	22.869		
4,200.0	4,186.7	4,126.4	4,052.2	13.2	14.3	-105.80	100.5	-599.2	538.1	514.9	23.13	23.263		
4,300.0	4,286.1	4,223.5	4,145.5	13.5	14.8	-105.67	105.1	-625.6	561.8	538.1	23.77	23.633		
4,400.0	4,385.6	4,320.7	4,238.9	13.9	15.2	-105.55	109.8	-651.9	585.6	561.2	24.42	23.981		
4,500.0	4,485.0	4,417.8	4,332.3	14.3	15.7	-105.43	114.4	-678.3	609.4	584.3	25.07	24.308		
4,600.0	4,584.5	4,514.9	4,425.6	14.7	16.2	-105.33	119.1	-704.7	633.2	607.4	25.72	24.616		
4,643.8	4,628.0	4,557.4	4,466.5	14.8	16.4	-105.29	121.1	-716.2	643.6	617.6	25.99	24.759		
4,700.0	4,683.9	4,612.0	4,519.0	15.0	16.6	-105.22	123.7	-731.0	657.0	630.6	26.35	24.934		
4,800.0	4,783.5	4,709.1	4,612.3	15.4	17.1	-105.05	128.3	-757.4	680.9	653.9	27.01	25.206		
4,900.0	4,883.1	4,806.1	4,705.6	15.8	17.6	-104.82	133.0	-783.7	704.9	677.2	27.69	25.461		

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 WEST	<b>Local Co-ordinate Reference:</b>	Well RIVERWALK FEDERAL COM #503H
<b>Project:</b>	ATLAS PROSPECT (DBW)	<b>TVD Reference:</b>	KB=26 @ 2948.0usft
<b>Reference Site:</b>	RIVERWALK FEDERAL PROJECT (ATLAS 2629)	<b>MD Reference:</b>	KB=26 @ 2948.0usft
<b>Site Error:</b>	0.0 usft	<b>North Reference:</b>	Grid
<b>Reference Well:</b>	RIVERWALK FEDERAL COM #503H	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	3.0 usft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	OWB	<b>Database:</b>	EDT 17 Central Planning Prod
<b>Reference Design:</b>	PWP1	<b>Offset TVD Reference:</b>	Offset Datum

<b>Offset Design:</b> RIVERWALK FEDERAL PROJECT (ATLAS 2629) - RIVERWALK FEDERAL COM #903H - OWB - PWP1												<b>Offset Site Error:</b>	0.0 usft
<b>Survey Program:</b> 0-r.5 SDI_KPR_WL_NS-CT, 1500-r.5 MWD+IFR1, 8273-r.5 MWD+IFR1+MS												<b>Offset Well Error:</b>	3.0 usft
Measured Depth (usft)	Vertical Depth (usft)	Offset		Semi Major Axis		Azimuth from North (°)	Offset Wellbore Centre		Distance		Minimum Separation (usft)	Separation Factor	Warning
		Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)		+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)			
5,000.0	4,982.8	4,903.1	4,798.8	16.2	18.0	-104.54	137.6	-810.0	729.1	700.7	28.37	25.702	
5,100.0	5,082.6	5,000.0	4,891.9	16.5	18.5	-104.21	142.3	-836.4	753.4	724.3	29.06	25.929	
5,200.0	5,182.4	5,096.8	4,985.0	16.9	19.0	-103.83	146.9	-862.6	777.9	748.1	29.75	26.144	
5,300.0	5,282.3	5,193.6	5,078.0	17.2	19.5	-103.41	151.5	-888.9	802.5	772.1	30.46	26.348	
5,400.0	5,382.2	5,290.3	5,170.9	17.5	19.9	-102.96	156.2	-915.1	827.4	796.2	31.17	26.542	
5,500.0	5,482.1	5,386.8	5,263.8	17.8	20.4	-102.47	160.8	-941.4	852.4	820.5	31.89	26.728	
5,600.0	5,582.1	5,483.3	5,356.5	18.1	20.9	-101.96	165.4	-967.5	877.6	845.0	32.62	26.906	
5,700.0	5,682.1	5,579.7	5,449.1	18.4	21.3	-101.41	170.0	-993.7	903.1	869.7	33.35	27.079	
5,800.0	5,782.0	5,675.9	5,541.7	18.6	21.8	-100.85	174.6	-1,019.8	928.7	894.7	34.09	27.248	
5,843.8	5,825.8	5,718.0	5,582.1	18.7	22.0	-100.59	176.6	-1,031.2	940.1	905.7	34.40	27.331	
5,900.0	5,882.0	5,772.0	5,634.1	18.7	22.3	-100.27	179.2	-1,045.9	954.7	919.9	34.80	27.435	
6,000.0	5,982.0	5,868.2	5,726.5	18.7	22.8	-99.71	183.8	-1,072.0	980.7	945.1	35.53	27.602	

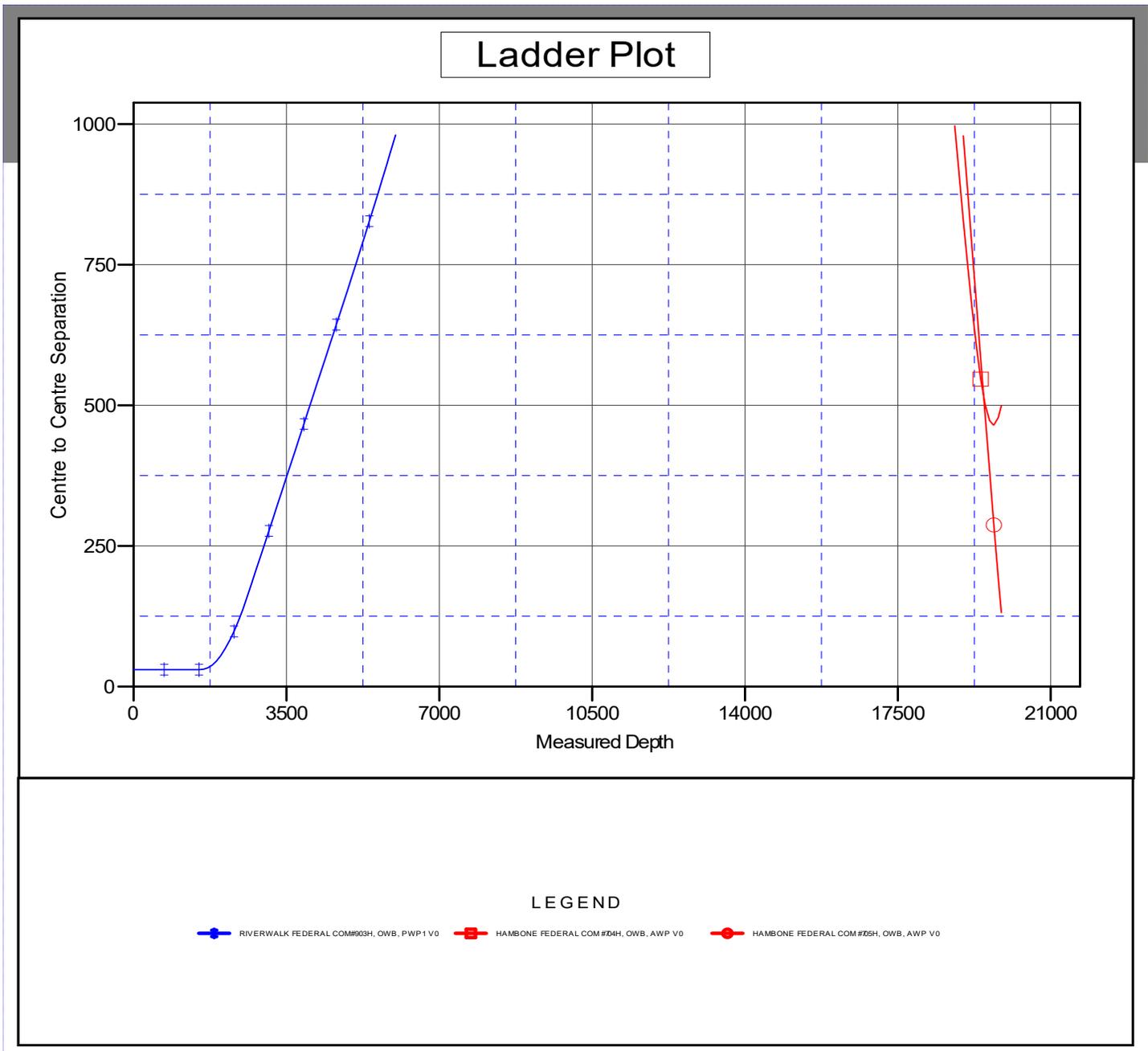
CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation

### ConocoPhillips Anticollision Report

<b>Company:</b>	DELAWARE BASIN WEST	<b>Local Co-ordinate Reference:</b>	Well RIVERWALK FEDERAL COM #503H
<b>Project:</b>	ATLAS PROSPECT (DBW)	<b>TVD Reference:</b>	KB=26 @ 2948.0usft
<b>Reference Site:</b>	RIVERWALK FEDERAL PROJECT (ATLAS 2629)	<b>MD Reference:</b>	KB=26 @ 2948.0usft
<b>Site Error:</b>	0.0 usft	<b>North Reference:</b>	Grid
<b>Reference Well:</b>	RIVERWALK FEDERAL COM #503H	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	3.0 usft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	OWB	<b>Database:</b>	EDT 17 Central Planning Prod
<b>Reference Design:</b>	PWP1	<b>Offset TVD Reference:</b>	Offset Datum

Reference Depths are relative to KB=26 @ 2948.0usft  
 Offset Depths are relative to Offset Datum  
 Central Meridian is 104° 20' 0.000 W

Coordinates are relative to: RIVERWALK FEDERAL COM #503H  
 Coordinate System is US State Plane 1927 (Exact solution), New Mexico East 30  
 Grid Convergence at Surface is: 0.17°



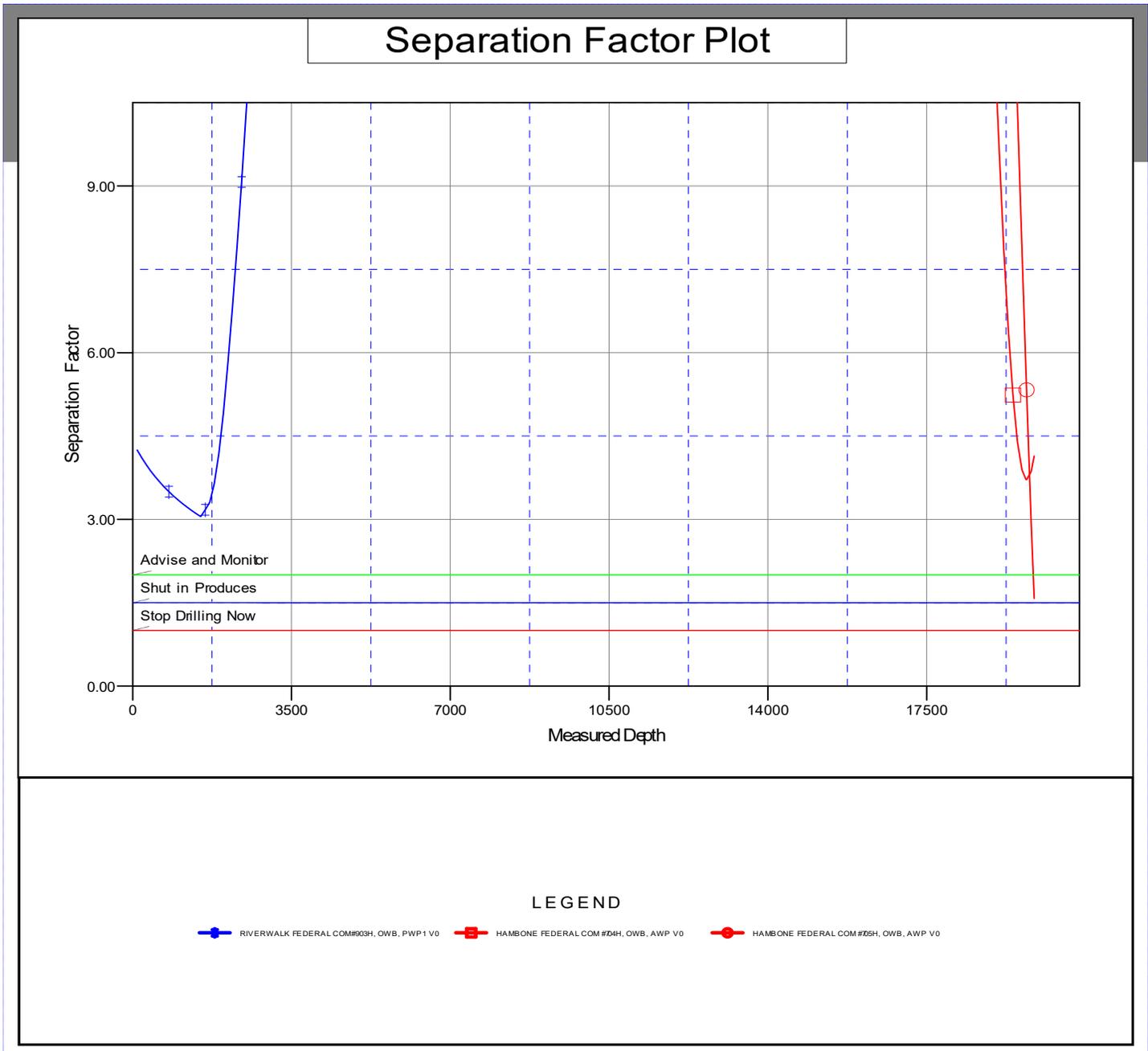
CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation

### ConocoPhillips Anticollision Report

<b>Company:</b>	DELAWARE BASIN WEST	<b>Local Co-ordinate Reference:</b>	Well RIVERWALK FEDERAL COM #503H
<b>Project:</b>	ATLAS PROSPECT (DBW)	<b>TVD Reference:</b>	KB=26 @ 2948.0usft
<b>Reference Site:</b>	RIVERWALK FEDERAL PROJECT (ATLAS 2629)	<b>MD Reference:</b>	KB=26 @ 2948.0usft
<b>Site Error:</b>	0.0 usft	<b>North Reference:</b>	Grid
<b>Reference Well:</b>	RIVERWALK FEDERAL COM #503H	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	3.0 usft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	OWB	<b>Database:</b>	EDT 17 Central Planning Prod
<b>Reference Design:</b>	PWP1	<b>Offset TVD Reference:</b>	Offset Datum

Reference Depths are relative to KB=26 @ 2948.0usft  
 Offset Depths are relative to Offset Datum  
 Central Meridian is 104° 20' 0.000 W

Coordinates are relative to: RIVERWALK FEDERAL COM #503H  
 Coordinate System is US State Plane 1927 (Exact solution), New Mexico East 30  
 Grid Convergence at Surface is: 0.17°



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

# **DELAWARE BASIN WEST**

**ATLAS PROSPECT (DBW)**

**RIVERWALK FEDERAL PROJECT (ATLAS 2629)**

**RIVERWALK FEDERAL COM #503H**

**OWB**

**Plan: PWP1**

## **Standard Planning Report**

**10 July, 2023**

### ConocoPhillips Planning Report

<b>Database:</b>	EDT 17 Central Planning Prod	<b>Local Co-ordinate Reference:</b>	Well RIVERWALK FEDERAL COM #503H
<b>Company:</b>	DELAWARE BASIN WEST	<b>TVD Reference:</b>	KB=26 @ 2948.0usft
<b>Project:</b>	ATLAS PROSPECT (DBW)	<b>MD Reference:</b>	KB=26 @ 2948.0usft
<b>Site:</b>	RIVERWALK FEDERAL PROJECT (ATLAS 2629)	<b>North Reference:</b>	Grid
<b>Well:</b>	RIVERWALK FEDERAL COM #503H	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	OWB		
<b>Design:</b>	PWP1		

<b>Project</b>	ATLAS PROSPECT (DBW)		
<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>	RIVERWALK FEDERAL PROJECT (ATLAS 2629)				
<b>Site Position:</b>		<b>Northing:</b>	371,129.30 usft	<b>Latitude:</b>	32° 1' 11.776 N
<b>From:</b>	Map	<b>Easting:</b>	600,033.00 usft	<b>Longitude:</b>	104° 0' 38.058 W
<b>Position Uncertainty:</b>	0.0 usft	<b>Slot Radius:</b>	13-3/16 "		

<b>Well</b>	RIVERWALK FEDERAL COM #503H					
<b>Well Position</b>	<b>+N/-S</b>	0.0 usft	<b>Northing:</b>	371,157.29 usft	<b>Latitude:</b>	32° 1' 12.040 N
	<b>+E/-W</b>	0.0 usft	<b>Easting:</b>	600,499.10 usft	<b>Longitude:</b>	104° 0' 32.643 W
<b>Position Uncertainty</b>		3.0 usft	<b>Wellhead Elevation:</b>	usft	<b>Ground Level:</b>	2,922.0 usft
<b>Grid Convergence:</b>		0.17 °				

<b>Wellbore</b>	OWB				
<b>Magnetics</b>	<b>Model Name</b>	<b>Sample Date</b>	<b>Declination (°)</b>	<b>Dip Angle (°)</b>	<b>Field Strength (nT)</b>
	BGGM2022	12/1/2023	6.51	59.54	47,302.40724302

<b>Design</b>	PWP1				
<b>Audit Notes:</b>					
<b>Version:</b>	<b>Phase:</b>	PLAN	<b>Tie On Depth:</b>	0.0	
<b>Vertical Section:</b>	<b>Depth From (TVD) (usft)</b>	<b>+N/-S (usft)</b>	<b>+E/-W (usft)</b>	<b>Direction (°)</b>	
	0.0	0.0	0.0	359.47	

Plan Survey Tool Program		Date	7/10/2023		
Depth From (usft)	Depth To (usft)	Survey (Wellbore)	Tool Name	Remarks	
1	0.0	1,500.0 PWP1 (OWB)	r.5 SDI_KPR_WL_NS-CT SDI Keeper Wireline Gyrocom		
2	1,500.0	8,110.5 PWP1 (OWB)	r.5 MWD+IFR1 OWSG MWD + IFR1 rev.5		
3	8,110.5	19,870.0 PWP1 (OWB)	r.5 MWD+IFR1+MS OWSG MWD + IFR1 + Multi-St		

**ConocoPhillips**  
Planning Report

<b>Database:</b>	EDT 17 Central Planning Prod	<b>Local Co-ordinate Reference:</b>	Well RIVERWALK FEDERAL COM #503H
<b>Company:</b>	DELAWARE BASIN WEST	<b>TVD Reference:</b>	KB=26 @ 2948.0usft
<b>Project:</b>	ATLAS PROSPECT (DBW)	<b>MD Reference:</b>	KB=26 @ 2948.0usft
<b>Site:</b>	RIVERWALK FEDERAL PROJECT (ATLAS 2629)	<b>North Reference:</b>	Grid
<b>Well:</b>	RIVERWALK FEDERAL COM #503H	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	OWB		
<b>Design:</b>	PWP1		

Plan Sections										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	TFO (°)	Target
0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.00	0.00	
1,500.0	0.00	0.00	1,500.0	0.0	0.0	0.00	0.00	0.00	0.00	
1,900.0	6.00	338.00	1,899.3	19.4	-7.8	1.50	1.50	0.00	338.00	
4,643.8	6.00	338.00	4,628.0	285.3	-115.3	0.00	0.00	0.00	0.00	
5,843.8	0.00	0.00	5,825.8	343.5	-138.8	0.50	-0.50	0.00	180.00	
8,110.5	0.00	0.00	8,092.5	343.5	-138.8	0.00	0.00	0.00	0.00	
8,860.5	90.00	359.75	8,570.0	821.0	-140.9	12.00	12.00	-0.03	359.75	
13,614.9	90.00	359.75	8,570.0	5,575.4	-161.9	0.00	0.00	0.00	0.00	
13,669.9	90.00	0.85	8,570.0	5,630.4	-161.6	2.00	0.00	2.00	90.00	
18,804.9	90.00	0.85	8,570.0	10,764.7	-85.6	0.00	0.00	0.00	0.00	
18,910.7	90.00	358.73	8,570.0	10,870.6	-86.0	2.00	0.00	-2.00	-90.00	
19,870.0	90.00	358.73	8,570.0	11,829.6	-107.3	0.00	0.00	0.00	0.00	

### ConocoPhillips

#### Planning Report

<b>Database:</b>	EDT 17 Central Planning Prod	<b>Local Co-ordinate Reference:</b>	Well RIVERWALK FEDERAL COM #503H
<b>Company:</b>	DELAWARE BASIN WEST	<b>TVD Reference:</b>	KB=26 @ 2948.0usft
<b>Project:</b>	ATLAS PROSPECT (DBW)	<b>MD Reference:</b>	KB=26 @ 2948.0usft
<b>Site:</b>	RIVERWALK FEDERAL PROJECT (ATLAS 2629)	<b>North Reference:</b>	Grid
<b>Well:</b>	RIVERWALK FEDERAL COM #503H	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	OWB		
<b>Design:</b>	PWP1		

Planned Survey										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	
0.0	0.00	0.00	0.0	0.0	0.0	0.0	0.00	0.00	0.00	0.00
100.0	0.00	0.00	100.0	0.0	0.0	0.0	0.00	0.00	0.00	0.00
200.0	0.00	0.00	200.0	0.0	0.0	0.0	0.00	0.00	0.00	0.00
300.0	0.00	0.00	300.0	0.0	0.0	0.0	0.00	0.00	0.00	0.00
400.0	0.00	0.00	400.0	0.0	0.0	0.0	0.00	0.00	0.00	0.00
500.0	0.00	0.00	500.0	0.0	0.0	0.0	0.00	0.00	0.00	0.00
600.0	0.00	0.00	600.0	0.0	0.0	0.0	0.00	0.00	0.00	0.00
700.0	0.00	0.00	700.0	0.0	0.0	0.0	0.00	0.00	0.00	0.00
800.0	0.00	0.00	800.0	0.0	0.0	0.0	0.00	0.00	0.00	0.00
900.0	0.00	0.00	900.0	0.0	0.0	0.0	0.00	0.00	0.00	0.00
1,000.0	0.00	0.00	1,000.0	0.0	0.0	0.0	0.00	0.00	0.00	0.00
1,100.0	0.00	0.00	1,100.0	0.0	0.0	0.0	0.00	0.00	0.00	0.00
1,200.0	0.00	0.00	1,200.0	0.0	0.0	0.0	0.00	0.00	0.00	0.00
1,300.0	0.00	0.00	1,300.0	0.0	0.0	0.0	0.00	0.00	0.00	0.00
1,400.0	0.00	0.00	1,400.0	0.0	0.0	0.0	0.00	0.00	0.00	0.00
1,500.0	0.00	0.00	1,500.0	0.0	0.0	0.0	0.00	0.00	0.00	0.00
<b>Start Build 1.50</b>										
1,600.0	1.50	338.00	1,600.0	1.2	-0.5	1.2	1.50	1.50	0.00	0.00
1,700.0	3.00	338.00	1,699.9	4.9	-2.0	4.9	1.50	1.50	0.00	0.00
1,800.0	4.50	338.00	1,799.7	10.9	-4.4	11.0	1.50	1.50	0.00	0.00
1,900.0	6.00	338.00	1,899.3	19.4	-7.8	19.5	1.50	1.50	0.00	0.00
<b>Start 2743.8 hold at 1900.0 MD</b>										
2,000.0	6.00	338.00	1,998.7	29.1	-11.8	29.2	0.00	0.00	0.00	0.00
2,100.0	6.00	338.00	2,098.2	38.8	-15.7	38.9	0.00	0.00	0.00	0.00
2,200.0	6.00	338.00	2,197.6	48.5	-19.6	48.7	0.00	0.00	0.00	0.00
2,300.0	6.00	338.00	2,297.1	58.2	-23.5	58.4	0.00	0.00	0.00	0.00
2,400.0	6.00	338.00	2,396.5	67.9	-27.4	68.1	0.00	0.00	0.00	0.00
2,500.0	6.00	338.00	2,496.0	77.6	-31.3	77.8	0.00	0.00	0.00	0.00
2,600.0	6.00	338.00	2,595.4	87.2	-35.2	87.6	0.00	0.00	0.00	0.00
2,700.0	6.00	338.00	2,694.9	96.9	-39.2	97.3	0.00	0.00	0.00	0.00
2,800.0	6.00	338.00	2,794.3	106.6	-43.1	107.0	0.00	0.00	0.00	0.00
2,900.0	6.00	338.00	2,893.8	116.3	-47.0	116.7	0.00	0.00	0.00	0.00
3,000.0	6.00	338.00	2,993.2	126.0	-50.9	126.5	0.00	0.00	0.00	0.00
3,100.0	6.00	338.00	3,092.7	135.7	-54.8	136.2	0.00	0.00	0.00	0.00
3,200.0	6.00	338.00	3,192.1	145.4	-58.7	145.9	0.00	0.00	0.00	0.00
3,300.0	6.00	338.00	3,291.6	155.1	-62.7	155.7	0.00	0.00	0.00	0.00
3,400.0	6.00	338.00	3,391.1	164.8	-66.6	165.4	0.00	0.00	0.00	0.00
3,500.0	6.00	338.00	3,490.5	174.5	-70.5	175.1	0.00	0.00	0.00	0.00
3,600.0	6.00	338.00	3,590.0	184.2	-74.4	184.8	0.00	0.00	0.00	0.00
3,700.0	6.00	338.00	3,689.4	193.9	-78.3	194.6	0.00	0.00	0.00	0.00
3,800.0	6.00	338.00	3,788.9	203.5	-82.2	204.3	0.00	0.00	0.00	0.00
3,900.0	6.00	338.00	3,888.3	213.2	-86.2	214.0	0.00	0.00	0.00	0.00
4,000.0	6.00	338.00	3,987.8	222.9	-90.1	223.8	0.00	0.00	0.00	0.00
4,100.0	6.00	338.00	4,087.2	232.6	-94.0	233.5	0.00	0.00	0.00	0.00
4,200.0	6.00	338.00	4,186.7	242.3	-97.9	243.2	0.00	0.00	0.00	0.00
4,300.0	6.00	338.00	4,286.1	252.0	-101.8	252.9	0.00	0.00	0.00	0.00
4,400.0	6.00	338.00	4,385.6	261.7	-105.7	262.7	0.00	0.00	0.00	0.00
4,500.0	6.00	338.00	4,485.0	271.4	-109.6	272.4	0.00	0.00	0.00	0.00
4,600.0	6.00	338.00	4,584.5	281.1	-113.6	282.1	0.00	0.00	0.00	0.00
4,643.8	6.00	338.00	4,628.0	285.3	-115.3	286.4	0.00	0.00	0.00	0.00
<b>Start Drop -0.50</b>										
4,700.0	5.72	338.00	4,683.9	290.6	-117.4	291.7	0.50	-0.50	0.00	0.00
4,800.0	5.22	338.00	4,783.5	299.5	-121.0	300.6	0.50	-0.50	0.00	0.00

### ConocoPhillips

#### Planning Report

<b>Database:</b>	EDT 17 Central Planning Prod	<b>Local Co-ordinate Reference:</b>	Well RIVERWALK FEDERAL COM #503H
<b>Company:</b>	DELAWARE BASIN WEST	<b>TVD Reference:</b>	KB=26 @ 2948.0usft
<b>Project:</b>	ATLAS PROSPECT (DBW)	<b>MD Reference:</b>	KB=26 @ 2948.0usft
<b>Site:</b>	RIVERWALK FEDERAL PROJECT (ATLAS 2629)	<b>North Reference:</b>	Grid
<b>Well:</b>	RIVERWALK FEDERAL COM #503H	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	OWB		
<b>Design:</b>	PWP1		

Planned Survey										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	
4,900.0	4.72	338.00	4,883.1	307.5	-124.2	308.6	0.50	-0.50	0.00	
5,000.0	4.22	338.00	4,982.8	314.7	-127.2	315.9	0.50	-0.50	0.00	
5,100.0	3.72	338.00	5,082.6	321.2	-129.8	322.3	0.50	-0.50	0.00	
5,200.0	3.22	338.00	5,182.4	326.8	-132.0	328.0	0.50	-0.50	0.00	
5,300.0	2.72	338.00	5,282.3	331.6	-134.0	332.8	0.50	-0.50	0.00	
5,400.0	2.22	338.00	5,382.2	335.6	-135.6	336.8	0.50	-0.50	0.00	
5,500.0	1.72	338.00	5,482.1	338.7	-136.9	340.0	0.50	-0.50	0.00	
5,600.0	1.22	338.00	5,582.1	341.1	-137.8	342.4	0.50	-0.50	0.00	
5,700.0	0.72	338.00	5,682.1	342.7	-138.5	344.0	0.50	-0.50	0.00	
5,800.0	0.22	338.00	5,782.0	343.4	-138.8	344.7	0.50	-0.50	0.00	
5,843.8	0.00	0.00	5,825.8	343.5	-138.8	344.8	0.50	-0.50	0.00	
<b>Start 2266.7 hold at 5843.8 MD</b>										
5,900.0	0.00	0.00	5,882.0	343.5	-138.8	344.8	0.00	0.00	0.00	
6,000.0	0.00	0.00	5,982.0	343.5	-138.8	344.8	0.00	0.00	0.00	
6,100.0	0.00	0.00	6,082.0	343.5	-138.8	344.8	0.00	0.00	0.00	
6,200.0	0.00	0.00	6,182.0	343.5	-138.8	344.8	0.00	0.00	0.00	
6,300.0	0.00	0.00	6,282.0	343.5	-138.8	344.8	0.00	0.00	0.00	
6,400.0	0.00	0.00	6,382.0	343.5	-138.8	344.8	0.00	0.00	0.00	
6,500.0	0.00	0.00	6,482.0	343.5	-138.8	344.8	0.00	0.00	0.00	
6,600.0	0.00	0.00	6,582.0	343.5	-138.8	344.8	0.00	0.00	0.00	
6,700.0	0.00	0.00	6,682.0	343.5	-138.8	344.8	0.00	0.00	0.00	
6,800.0	0.00	0.00	6,782.0	343.5	-138.8	344.8	0.00	0.00	0.00	
6,900.0	0.00	0.00	6,882.0	343.5	-138.8	344.8	0.00	0.00	0.00	
7,000.0	0.00	0.00	6,982.0	343.5	-138.8	344.8	0.00	0.00	0.00	
7,100.0	0.00	0.00	7,082.0	343.5	-138.8	344.8	0.00	0.00	0.00	
7,200.0	0.00	0.00	7,182.0	343.5	-138.8	344.8	0.00	0.00	0.00	
7,300.0	0.00	0.00	7,282.0	343.5	-138.8	344.8	0.00	0.00	0.00	
7,400.0	0.00	0.00	7,382.0	343.5	-138.8	344.8	0.00	0.00	0.00	
7,500.0	0.00	0.00	7,482.0	343.5	-138.8	344.8	0.00	0.00	0.00	
7,600.0	0.00	0.00	7,582.0	343.5	-138.8	344.8	0.00	0.00	0.00	
7,700.0	0.00	0.00	7,682.0	343.5	-138.8	344.8	0.00	0.00	0.00	
7,800.0	0.00	0.00	7,782.0	343.5	-138.8	344.8	0.00	0.00	0.00	
7,900.0	0.00	0.00	7,882.0	343.5	-138.8	344.8	0.00	0.00	0.00	
8,000.0	0.00	0.00	7,982.0	343.5	-138.8	344.8	0.00	0.00	0.00	
8,100.0	0.00	0.00	8,082.0	343.5	-138.8	344.8	0.00	0.00	0.00	
8,110.5	0.00	0.00	8,092.5	343.5	-138.8	344.8	0.00	0.00	0.00	
<b>Start DLS 12.00 TFO 359.75</b>										
8,125.0	1.74	359.75	8,107.0	343.7	-138.8	345.0	12.00	12.00	0.00	
8,150.0	4.74	359.75	8,132.0	345.2	-138.8	346.4	12.00	12.00	0.00	
8,175.0	7.74	359.75	8,156.9	347.9	-138.8	349.1	12.00	12.00	0.00	
8,200.0	10.74	359.75	8,181.5	351.9	-138.8	353.2	12.00	12.00	0.00	
8,225.0	13.74	359.75	8,206.0	357.2	-138.9	358.5	12.00	12.00	0.00	
8,250.0	16.74	359.75	8,230.1	363.8	-138.9	365.0	12.00	12.00	0.00	
8,275.0	19.74	359.75	8,253.8	371.6	-138.9	372.9	12.00	12.00	0.00	
8,300.0	22.74	359.75	8,277.1	380.6	-139.0	381.9	12.00	12.00	0.00	
8,325.0	25.74	359.75	8,299.9	390.9	-139.0	392.2	12.00	12.00	0.00	
8,350.0	28.74	359.75	8,322.1	402.3	-139.1	403.6	12.00	12.00	0.00	
8,375.0	31.74	359.75	8,343.7	414.9	-139.1	416.2	12.00	12.00	0.00	
8,400.0	34.74	359.75	8,364.6	428.6	-139.2	429.9	12.00	12.00	0.00	
8,425.0	37.74	359.75	8,384.8	443.4	-139.2	444.7	12.00	12.00	0.00	
8,450.0	40.74	359.75	8,404.2	459.2	-139.3	460.5	12.00	12.00	0.00	
8,475.0	43.74	359.75	8,422.7	476.0	-139.4	477.3	12.00	12.00	0.00	
8,500.0	46.74	359.75	8,440.3	493.8	-139.5	495.1	12.00	12.00	0.00	

ConocoPhillips

Planning Report

<b>Database:</b>	EDT 17 Central Planning Prod	<b>Local Co-ordinate Reference:</b>	Well RIVERWALK FEDERAL COM #503H
<b>Company:</b>	DELAWARE BASIN WEST	<b>TVD Reference:</b>	KB=26 @ 2948.0usft
<b>Project:</b>	ATLAS PROSPECT (DBW)	<b>MD Reference:</b>	KB=26 @ 2948.0usft
<b>Site:</b>	RIVERWALK FEDERAL PROJECT (ATLAS 2629)	<b>North Reference:</b>	Grid
<b>Well:</b>	RIVERWALK FEDERAL COM #503H	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	OWB		
<b>Design:</b>	PWP1		

Planned Survey										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/S (usft)	+E/W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	
8,525.0	49.74	359.75	8,456.9	512.4	-139.5	513.7	12.00	12.00	0.00	
8,550.0	52.74	359.75	8,472.6	531.9	-139.6	533.2	12.00	12.00	0.00	
8,575.0	55.74	359.75	8,487.2	552.2	-139.7	553.5	12.00	12.00	0.00	
8,600.0	58.74	359.75	8,500.7	573.2	-139.8	574.5	12.00	12.00	0.00	
8,625.0	61.74	359.75	8,513.1	594.9	-139.9	596.2	12.00	12.00	0.00	
8,650.0	64.74	359.75	8,524.3	617.2	-140.0	618.5	12.00	12.00	0.00	
8,675.0	67.74	359.75	8,534.4	640.1	-140.1	641.4	12.00	12.00	0.00	
8,700.0	70.74	359.75	8,543.3	663.5	-140.2	664.8	12.00	12.00	0.00	
8,725.0	73.74	359.75	8,550.9	687.3	-140.3	688.6	12.00	12.00	0.00	
8,750.0	76.74	359.75	8,557.3	711.5	-140.4	712.8	12.00	12.00	0.00	
8,775.0	79.74	359.75	8,562.4	736.0	-140.5	737.2	12.00	12.00	0.00	
8,800.0	82.74	359.75	8,566.2	760.7	-140.6	761.9	12.00	12.00	0.00	
8,825.0	85.74	359.75	8,568.7	785.5	-140.7	786.8	12.00	12.00	0.00	
8,850.0	88.74	359.75	8,569.9	810.5	-140.9	811.8	12.00	12.00	0.00	
8,860.5	90.00	359.75	8,570.0	821.0	-140.9	822.3	12.00	12.00	0.00	
<b>Start 4754.4 hold at 8860.5 MD</b>										
8,900.0	90.00	359.75	8,570.0	860.5	-141.1	861.8	0.00	0.00	0.00	
9,000.0	90.00	359.75	8,570.0	960.5	-141.5	961.8	0.00	0.00	0.00	
9,100.0	90.00	359.75	8,570.0	1,060.5	-142.0	1,061.8	0.00	0.00	0.00	
9,200.0	90.00	359.75	8,570.0	1,160.5	-142.4	1,161.8	0.00	0.00	0.00	
9,300.0	90.00	359.75	8,570.0	1,260.5	-142.8	1,261.8	0.00	0.00	0.00	
9,400.0	90.00	359.75	8,570.0	1,360.5	-143.3	1,361.8	0.00	0.00	0.00	
9,500.0	90.00	359.75	8,570.0	1,460.5	-143.7	1,461.8	0.00	0.00	0.00	
9,600.0	90.00	359.75	8,570.0	1,560.5	-144.2	1,561.8	0.00	0.00	0.00	
9,700.0	90.00	359.75	8,570.0	1,660.5	-144.6	1,661.8	0.00	0.00	0.00	
9,800.0	90.00	359.75	8,570.0	1,760.5	-145.0	1,761.8	0.00	0.00	0.00	
9,900.0	90.00	359.75	8,570.0	1,860.5	-145.5	1,861.8	0.00	0.00	0.00	
10,000.0	90.00	359.75	8,570.0	1,960.5	-145.9	1,961.8	0.00	0.00	0.00	
10,100.0	90.00	359.75	8,570.0	2,060.5	-146.4	2,061.8	0.00	0.00	0.00	
10,200.0	90.00	359.75	8,570.0	2,160.5	-146.8	2,161.8	0.00	0.00	0.00	
10,300.0	90.00	359.75	8,570.0	2,260.5	-147.2	2,261.8	0.00	0.00	0.00	
10,400.0	90.00	359.75	8,570.0	2,360.5	-147.7	2,361.7	0.00	0.00	0.00	
10,500.0	90.00	359.75	8,570.0	2,460.5	-148.1	2,461.7	0.00	0.00	0.00	
10,600.0	90.00	359.75	8,570.0	2,560.5	-148.6	2,561.7	0.00	0.00	0.00	
10,700.0	90.00	359.75	8,570.0	2,660.5	-149.0	2,661.7	0.00	0.00	0.00	
10,800.0	90.00	359.75	8,570.0	2,760.5	-149.4	2,761.7	0.00	0.00	0.00	
10,900.0	90.00	359.75	8,570.0	2,860.5	-149.9	2,861.7	0.00	0.00	0.00	
11,000.0	90.00	359.75	8,570.0	2,960.5	-150.3	2,961.7	0.00	0.00	0.00	
11,100.0	90.00	359.75	8,570.0	3,060.5	-150.8	3,061.7	0.00	0.00	0.00	
11,200.0	90.00	359.75	8,570.0	3,160.5	-151.2	3,161.7	0.00	0.00	0.00	
11,300.0	90.00	359.75	8,570.0	3,260.5	-151.6	3,261.7	0.00	0.00	0.00	
11,400.0	90.00	359.75	8,570.0	3,360.5	-152.1	3,361.7	0.00	0.00	0.00	
11,500.0	90.00	359.75	8,570.0	3,460.5	-152.5	3,461.7	0.00	0.00	0.00	
11,600.0	90.00	359.75	8,570.0	3,560.5	-153.0	3,561.7	0.00	0.00	0.00	
11,700.0	90.00	359.75	8,570.0	3,660.5	-153.4	3,661.7	0.00	0.00	0.00	
11,800.0	90.00	359.75	8,570.0	3,760.5	-153.9	3,761.7	0.00	0.00	0.00	
11,900.0	90.00	359.75	8,570.0	3,860.5	-154.3	3,861.7	0.00	0.00	0.00	
12,000.0	90.00	359.75	8,570.0	3,960.5	-154.7	3,961.7	0.00	0.00	0.00	
12,100.0	90.00	359.75	8,570.0	4,060.5	-155.2	4,061.7	0.00	0.00	0.00	
12,200.0	90.00	359.75	8,570.0	4,160.5	-155.6	4,161.7	0.00	0.00	0.00	
12,300.0	90.00	359.75	8,570.0	4,260.5	-156.1	4,261.7	0.00	0.00	0.00	
12,400.0	90.00	359.75	8,570.0	4,360.5	-156.5	4,361.7	0.00	0.00	0.00	
12,500.0	90.00	359.75	8,570.0	4,460.5	-156.9	4,461.7	0.00	0.00	0.00	

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Planning Report

<b>Database:</b>	EDT 17 Central Planning Prod	<b>Local Co-ordinate Reference:</b>	Well RIVERWALK FEDERAL COM #503H
<b>Company:</b>	DELAWARE BASIN WEST	<b>TVD Reference:</b>	KB=26 @ 2948.0usft
<b>Project:</b>	ATLAS PROSPECT (DBW)	<b>MD Reference:</b>	KB=26 @ 2948.0usft
<b>Site:</b>	RIVERWALK FEDERAL PROJECT (ATLAS 2629)	<b>North Reference:</b>	Grid
<b>Well:</b>	RIVERWALK FEDERAL COM #503H	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	OWB		
<b>Design:</b>	PWP1		

Planned Survey										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	
12,600.0	90.00	359.75	8,570.0	4,560.5	-157.4	4,561.7	0.00	0.00	0.00	
12,700.0	90.00	359.75	8,570.0	4,660.5	-157.8	4,661.7	0.00	0.00	0.00	
12,800.0	90.00	359.75	8,570.0	4,760.5	-158.3	4,761.7	0.00	0.00	0.00	
12,900.0	90.00	359.75	8,570.0	4,860.5	-158.7	4,861.7	0.00	0.00	0.00	
13,000.0	90.00	359.75	8,570.0	4,960.5	-159.1	4,961.7	0.00	0.00	0.00	
13,100.0	90.00	359.75	8,570.0	5,060.5	-159.6	5,061.7	0.00	0.00	0.00	
13,200.0	90.00	359.75	8,570.0	5,160.5	-160.0	5,161.7	0.00	0.00	0.00	
13,300.0	90.00	359.75	8,570.0	5,260.5	-160.5	5,261.7	0.00	0.00	0.00	
13,400.0	90.00	359.75	8,570.0	5,360.4	-160.9	5,361.7	0.00	0.00	0.00	
13,500.0	90.00	359.75	8,570.0	5,460.4	-161.3	5,461.7	0.00	0.00	0.00	
13,600.0	90.00	359.75	8,570.0	5,560.4	-161.8	5,561.7	0.00	0.00	0.00	
13,614.9	90.00	359.75	8,570.0	5,575.4	-161.9	5,576.6	0.00	0.00	0.00	
<b>Start DLS 2.00 TFO 90.00</b>										
13,669.9	90.00	0.85	8,570.0	5,630.4	-161.6	5,631.6	2.00	0.00	2.00	
<b>Start 5134.9 hold at 13669.9 MD</b>										
13,700.0	90.00	0.85	8,570.0	5,660.4	-161.1	5,661.7	0.00	0.00	0.00	
13,800.0	90.00	0.85	8,570.0	5,760.4	-159.6	5,761.7	0.00	0.00	0.00	
13,900.0	90.00	0.85	8,570.0	5,860.4	-158.2	5,861.6	0.00	0.00	0.00	
14,000.0	90.00	0.85	8,570.0	5,960.4	-156.7	5,961.6	0.00	0.00	0.00	
14,100.0	90.00	0.85	8,570.0	6,060.4	-155.2	6,061.6	0.00	0.00	0.00	
14,200.0	90.00	0.85	8,570.0	6,160.4	-153.7	6,161.6	0.00	0.00	0.00	
14,300.0	90.00	0.85	8,570.0	6,260.4	-152.2	6,261.5	0.00	0.00	0.00	
14,400.0	90.00	0.85	8,570.0	6,360.4	-150.8	6,361.5	0.00	0.00	0.00	
14,500.0	90.00	0.85	8,570.0	6,460.4	-149.3	6,461.5	0.00	0.00	0.00	
14,600.0	90.00	0.85	8,570.0	6,560.3	-147.8	6,561.4	0.00	0.00	0.00	
14,700.0	90.00	0.85	8,570.0	6,660.3	-146.3	6,661.4	0.00	0.00	0.00	
14,800.0	90.00	0.85	8,570.0	6,760.3	-144.8	6,761.4	0.00	0.00	0.00	
14,900.0	90.00	0.85	8,570.0	6,860.3	-143.4	6,861.3	0.00	0.00	0.00	
15,000.0	90.00	0.85	8,570.0	6,960.3	-141.9	6,961.3	0.00	0.00	0.00	
15,100.0	90.00	0.85	8,570.0	7,060.3	-140.4	7,061.3	0.00	0.00	0.00	
15,200.0	90.00	0.85	8,570.0	7,160.3	-138.9	7,161.3	0.00	0.00	0.00	
15,300.0	90.00	0.85	8,570.0	7,260.3	-137.5	7,261.2	0.00	0.00	0.00	
15,400.0	90.00	0.85	8,570.0	7,360.3	-136.0	7,361.2	0.00	0.00	0.00	
15,500.0	90.00	0.85	8,570.0	7,460.2	-134.5	7,461.2	0.00	0.00	0.00	
15,600.0	90.00	0.85	8,570.0	7,560.2	-133.0	7,561.1	0.00	0.00	0.00	
15,700.0	90.00	0.85	8,570.0	7,660.2	-131.5	7,661.1	0.00	0.00	0.00	
15,800.0	90.00	0.85	8,570.0	7,760.2	-130.1	7,761.1	0.00	0.00	0.00	
15,900.0	90.00	0.85	8,570.0	7,860.2	-128.6	7,861.1	0.00	0.00	0.00	
16,000.0	90.00	0.85	8,570.0	7,960.2	-127.1	7,961.0	0.00	0.00	0.00	
16,100.0	90.00	0.85	8,570.0	8,060.2	-125.6	8,061.0	0.00	0.00	0.00	
16,200.0	90.00	0.85	8,570.0	8,160.2	-124.1	8,161.0	0.00	0.00	0.00	
16,300.0	90.00	0.85	8,570.0	8,260.2	-122.7	8,260.9	0.00	0.00	0.00	
16,400.0	90.00	0.85	8,570.0	8,360.1	-121.2	8,360.9	0.00	0.00	0.00	
16,500.0	90.00	0.85	8,570.0	8,460.1	-119.7	8,460.9	0.00	0.00	0.00	
16,600.0	90.00	0.85	8,570.0	8,560.1	-118.2	8,560.9	0.00	0.00	0.00	
16,700.0	90.00	0.85	8,570.0	8,660.1	-116.7	8,660.8	0.00	0.00	0.00	
16,800.0	90.00	0.85	8,570.0	8,760.1	-115.3	8,760.8	0.00	0.00	0.00	
16,900.0	90.00	0.85	8,570.0	8,860.1	-113.8	8,860.8	0.00	0.00	0.00	
17,000.0	90.00	0.85	8,570.0	8,960.1	-112.3	8,960.7	0.00	0.00	0.00	
17,100.0	90.00	0.85	8,570.0	9,060.1	-110.8	9,060.7	0.00	0.00	0.00	
17,200.0	90.00	0.85	8,570.0	9,160.1	-109.3	9,160.7	0.00	0.00	0.00	
17,300.0	90.00	0.85	8,570.0	9,260.0	-107.9	9,260.7	0.00	0.00	0.00	
17,400.0	90.00	0.85	8,570.0	9,360.0	-106.4	9,360.6	0.00	0.00	0.00	

ConocoPhillips

Planning Report

<b>Database:</b>	EDT 17 Central Planning Prod	<b>Local Co-ordinate Reference:</b>	Well RIVERWALK FEDERAL COM #503H
<b>Company:</b>	DELAWARE BASIN WEST	<b>TVD Reference:</b>	KB=26 @ 2948.0usft
<b>Project:</b>	ATLAS PROSPECT (DBW)	<b>MD Reference:</b>	KB=26 @ 2948.0usft
<b>Site:</b>	RIVERWALK FEDERAL PROJECT (ATLAS 2629)	<b>North Reference:</b>	Grid
<b>Well:</b>	RIVERWALK FEDERAL COM #503H	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	OWB		
<b>Design:</b>	PWP1		

Planned Survey										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	
17,500.0	90.00	0.85	8,570.0	9,460.0	-104.9	9,460.6	0.00	0.00	0.00	
17,600.0	90.00	0.85	8,570.0	9,560.0	-103.4	9,560.6	0.00	0.00	0.00	
17,700.0	90.00	0.85	8,570.0	9,660.0	-102.0	9,660.5	0.00	0.00	0.00	
17,800.0	90.00	0.85	8,570.0	9,760.0	-100.5	9,760.5	0.00	0.00	0.00	
17,900.0	90.00	0.85	8,570.0	9,860.0	-99.0	9,860.5	0.00	0.00	0.00	
18,000.0	90.00	0.85	8,570.0	9,960.0	-97.5	9,960.4	0.00	0.00	0.00	
18,100.0	90.00	0.85	8,570.0	10,060.0	-96.0	10,060.4	0.00	0.00	0.00	
18,200.0	90.00	0.85	8,570.0	10,160.0	-94.6	10,160.4	0.00	0.00	0.00	
18,300.0	90.00	0.85	8,570.0	10,259.9	-93.1	10,260.4	0.00	0.00	0.00	
18,400.0	90.00	0.85	8,570.0	10,359.9	-91.6	10,360.3	0.00	0.00	0.00	
18,500.0	90.00	0.85	8,570.0	10,459.9	-90.1	10,460.3	0.00	0.00	0.00	
18,600.0	90.00	0.85	8,570.0	10,559.9	-88.6	10,560.3	0.00	0.00	0.00	
18,700.0	90.00	0.85	8,570.0	10,659.9	-87.2	10,660.2	0.00	0.00	0.00	
18,804.9	90.00	0.85	8,570.0	10,764.7	-85.6	10,765.1	0.00	0.00	0.00	
<b>Start DLS 2.00 TFO -90.00</b>										
18,900.0	90.00	358.94	8,570.0	10,859.9	-85.8	10,860.2	2.00	0.00	-2.00	
18,910.7	90.00	358.73	8,570.0	10,870.6	-86.0	10,871.0	2.00	0.00	-2.00	
<b>Start 959.3 hold at 18910.7 MD</b>										
19,000.0	90.00	358.73	8,570.0	10,959.9	-88.0	10,960.2	0.00	0.00	0.00	
19,100.0	90.00	358.73	8,570.0	11,059.8	-90.2	11,060.2	0.00	0.00	0.00	
19,200.0	90.00	358.73	8,570.0	11,159.8	-92.4	11,160.2	0.00	0.00	0.00	
19,300.0	90.00	358.73	8,570.0	11,259.8	-94.6	11,260.2	0.00	0.00	0.00	
19,400.0	90.00	358.73	8,570.0	11,359.8	-96.8	11,360.2	0.00	0.00	0.00	
19,500.0	90.00	358.73	8,570.0	11,459.7	-99.1	11,460.2	0.00	0.00	0.00	
19,600.0	90.00	358.73	8,570.0	11,559.7	-101.3	11,560.1	0.00	0.00	0.00	
19,700.0	90.00	358.73	8,570.0	11,659.7	-103.5	11,660.1	0.00	0.00	0.00	
19,800.0	90.00	358.73	8,570.0	11,759.7	-105.7	11,760.1	0.00	0.00	0.00	
19,870.0	90.00	358.73	8,570.0	11,829.6	-107.3	11,830.1	0.00	0.00	0.00	
<b>TD at 19870.0</b>										

Design Targets										
Target Name	Dip Angle (°)	Dip Dir. (°)	TVD (usft)	+N/-S (usft)	+E/-W (usft)	Northing (usft)	Easting (usft)	Latitude	Longitude	
PBHL (RIVERWALK FEI - hit/miss target - Shape)	0.00	178.73	8,570.0	12,035.8	-111.8	383,193.07	600,387.28	32° 3' 11.155 N	104° 0' 33.522 W	- plan misses target center by 206.2usft at 19870.0usft MD (8570.0 TVD, 11829.6 N, -107.3 E) - Rectangle (sides W100.0 H1,271.3 D20.0)
FTP (RIVERWALK FED - plan misses target center by 192.8usft at 8489.7usft MD (8433.1 TVD, 486.4 N, -139.4 E) - Circle (radius 50.0)	0.00	0.01	8,570.0	350.6	-140.0	371,507.92	600,359.14	32° 1' 15.514 N	104° 0' 34.256 W	
LTP (RIVERWALK FED - plan misses target center by 156.1usft at 19870.0usft MD (8570.0 TVD, 11829.6 N, -107.3 E) - Point	0.00	0.00	8,570.0	11,985.7	-110.7	383,143.03	600,388.38	32° 3' 10.660 N	104° 0' 33.511 W	
POI #1 (RIVERWALK FE - plan hits target center - Rectangle (sides W100.0 H5,224.8 D20.0)	0.00	179.75	8,570.0	5,575.4	-161.9	376,732.67	600,337.25	32° 2' 7.221 N	104° 0' 34.329 W	
POI #2 (RIVERWALK FE - plan hits target center - Rectangle (sides W100.0 H5,189.9 D20.0)	0.00	180.86	8,570.0	10,764.8	-85.6	381,922.05	600,413.50	32° 2' 58.576 N	104° 0' 33.262 W	

**ConocoPhillips**  
Planning Report

<b>Database:</b>	EDT 17 Central Planning Prod	<b>Local Co-ordinate Reference:</b>	Well RIVERWALK FEDERAL COM #503H
<b>Company:</b>	DELAWARE BASIN WEST	<b>TVD Reference:</b>	KB=26 @ 2948.0usft
<b>Project:</b>	ATLAS PROSPECT (DBW)	<b>MD Reference:</b>	KB=26 @ 2948.0usft
<b>Site:</b>	RIVERWALK FEDERAL PROJECT (ATLAS 2629)	<b>North Reference:</b>	Grid
<b>Well:</b>	RIVERWALK FEDERAL COM #503H	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	OWB		
<b>Design:</b>	PWP1		

Plan Annotations				
Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment
		+N/-S (usft)	+E/-W (usft)	
1,500.0	1,500.0	0.0	0.0	Start Build 1.50
1,900.0	1,899.3	19.4	-7.8	Start 2743.8 hold at 1900.0 MD
4,643.8	4,628.0	285.3	-115.3	Start Drop -0.50
5,843.8	5,825.8	343.5	-138.8	Start 2266.7 hold at 5843.8 MD
8,110.5	8,092.5	343.5	-138.8	Start DLS 12.00 TFO 359.75
8,860.5	8,570.0	821.0	-140.9	Start 4754.4 hold at 8860.5 MD
13,614.9	8,570.0	5,575.4	-161.9	Start DLS 2.00 TFO 90.00
13,669.9	8,570.0	5,630.4	-161.6	Start 5134.9 hold at 13669.9 MD
18,804.9	8,570.0	10,764.7	-85.6	Start DLS 2.00 TFO -90.00
18,910.7	8,570.0	10,870.6	-86.0	Start 959.3 hold at 18910.7 MD
19,870.0	8,570.0	11,829.6	-107.3	TD at 19870.0

Project: ATLAS PROSPECT (DBW)  
 Site: RIVERWALK FEDERAL PROJECT (ATLAS 2629)  
 Well: RIVERWALK FEDERAL COM #503H  
 Wellbore: OWB  
 Design: PWP1  
 GL: 2922.0  
 KB=26 @ 2948.0usft

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WELL DETAILS: RIVERWALK FEDERAL COM #503H

+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
0.0	0.0	371157.29	600499.10	32° 1' 12.040 N	104° 0' 32.643 W

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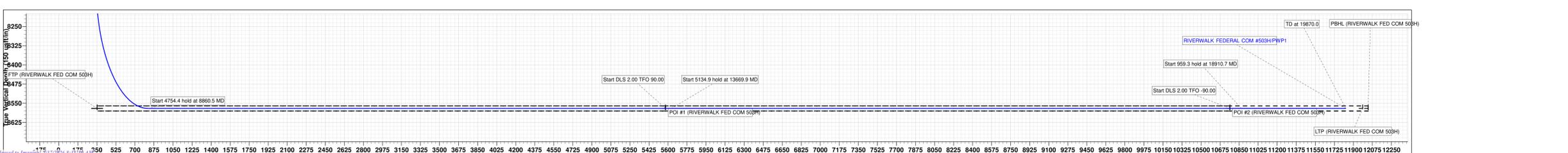
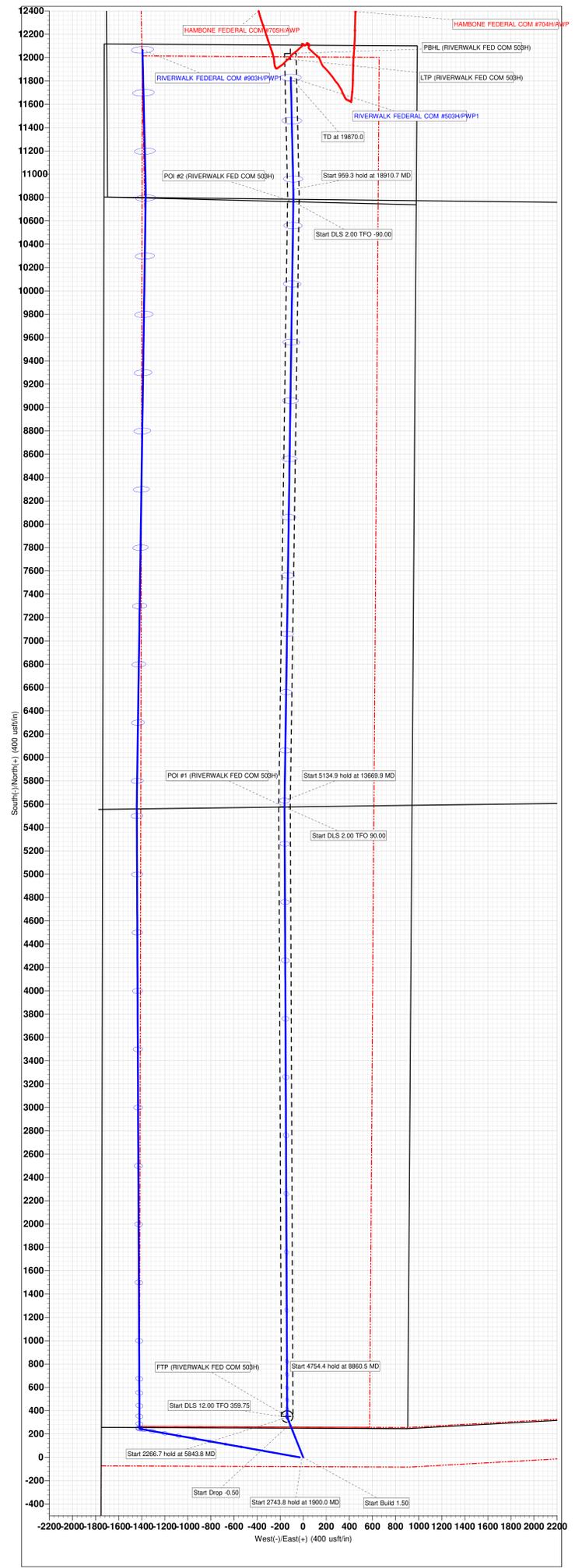
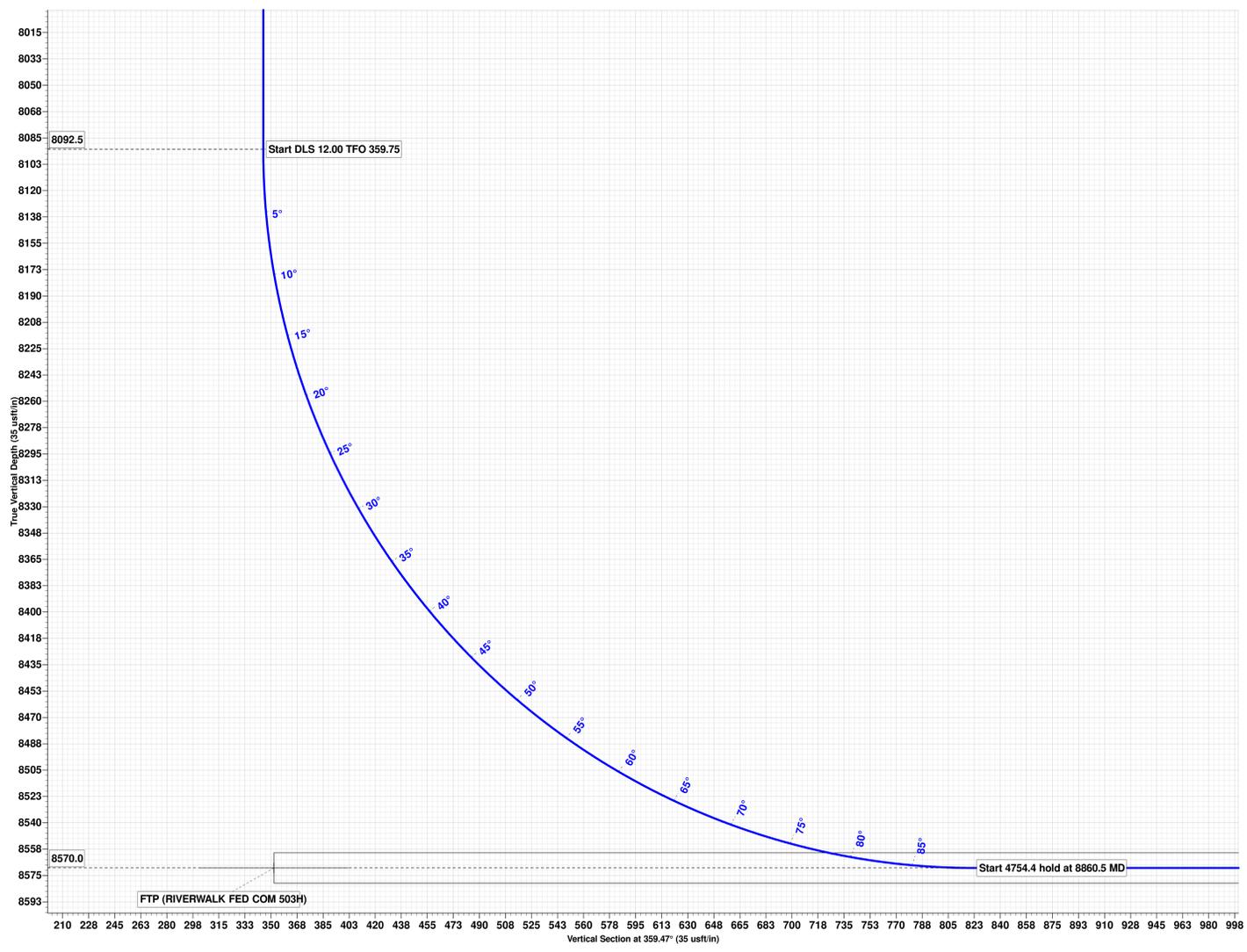
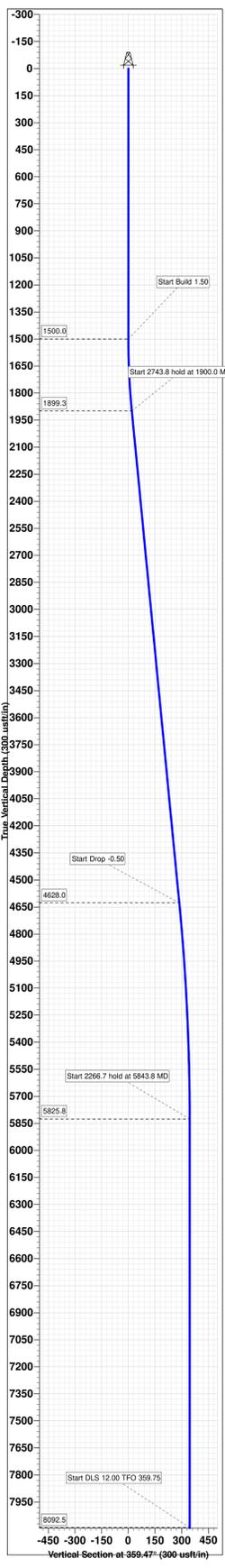
DESIGN TARGET DETAILS

Name	TVD	+N/-S	+E/-W	Northing	Easting
FTP (RIVERWALK FED COM 503H)	8570.0	350.6	-140.0	371507.92	600359.13
LTP (RIVERWALK FED COM 503H)	8570.0	11985.7	-110.7	383143.03	600388.38
PBHL (RIVERWALK FED COM 503H)	8570.0	12035.8	-111.8	383193.07	600387.28
POI #1 (RIVERWALK FED COM 503H)	8570.0	5575.4	-161.9	376732.67	600337.25
POI #2 (RIVERWALK FED COM 503H)	8570.0	10764.8	-85.6	381922.05	600413.49

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SECTION DETAILS

MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	Vsect
0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.0
1500.0	0.00	0.00	1500.0	0.0	0.0	0.00	0.00	0.0
1900.0	6.00	338.00	1899.3	19.4	-7.8	1.50	338.00	19.5
4643.8	6.00	338.00	4628.0	285.3	-115.3	0.00	0.00	286.4
5843.8	0.00	0.00	5825.8	343.5	-138.8	0.50	180.00	344.8
8110.5	0.00	0.00	8092.5	343.5	-138.8	0.00	0.00	344.8
8860.5	90.00	359.75	8570.0	621.0	-140.9	12.00	359.75	822.3
13614.9	90.00	359.75	8570.0	5575.4	-161.9	0.00	0.00	5576.8
13669.9	90.00	0.85	8570.0	5530.4	-161.6	2.00	90.00	5631.5
18804.9	90.00	0.85	8570.0	10764.7	-85.6	0.00	0.00	10765.1
18910.7	90.00	358.73	8570.0	10870.6	-86.0	2.00	-90.00	10871.0
19870.0	90.00	358.73	8570.0	11829.6	-107.3	0.00	0.00	11830.1



Form 3160-5  
(June 2019)

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

FORM APPROVED  
OMB No. 1004-0137  
Expires: October 31, 2021

**SUNDRY NOTICES AND REPORTS ON WELLS**  
**Do not use this form for proposals to drill or to re-enter an abandoned well. Use Form 3160-3 (APD) for such proposals.**

5. Lease Serial No.	NMNM138836
6. If Indian, Allottee or Tribe Name	

<b>SUBMIT IN TRIPLICATE - Other instructions on page 2</b>		7. If Unit of CA/Agreement, Name and/or No.
1. Type of Well <input checked="" type="checkbox"/> Oil Well <input type="checkbox"/> Gas Well <input type="checkbox"/> Other		8. Well Name and No. RIVERWALK FEDERAL COM/503H
2. Name of Operator COG OPERATING LLC		9. API Well No.
3a. Address 600 West Illinois Ave, Midland, TX 79701	3b. Phone No. (include area code) (432) 683-7443	10. Field and Pool or Exploratory Area CORRAL Canyon/BONE SPRING, SOUTH
4. Location of Well (Footage, Sec., T.,R.,M., or Survey Description) SEC 29/T26S/R29E/NMP		11. Country or Parish, State EDDY/NM

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

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

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

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

BHL Change From: 1270' FSL & 1980' FWL Section 8. T26S. R29E.  
To: 1065' FSL & 1610' FWL. Section 8.T26S. R29E.

Dedicated Acres: From: 360  
To: 719.78

Casing and Cement Changes: The proposed changes reflect downsizing the surface, intermediate and production open hole sections to 14-3/4, 9-7/8 and 6-3/4 respectively. Cement blends are the same as the approved APD, and volumes have been adjusted to reflect the change in wellbore design.

Continued on page 3 additional information

14. I hereby certify that the foregoing is true and correct. Name (Printed/Typed) MAYTE REYES / Ph: (281) 293-1000	Title Regulatory Analyst
Signature (Electronic Submission)	Date 07/14/2023

**THE SPACE FOR FEDERAL OR STATE OFFICE USE**

Approved by CHRISTOPHER WALLS / Ph: (575) 234-2234 / Approved	Title Petroleum Engineer	Date 01/29/2024
Conditions of approval, if any, are attached. Approval of this notice does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.	Office CARLSBAD	

Title 18 U.S.C Section 1001 and Title 43 U.S.C Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

(Instructions on page 2)

## GENERAL INSTRUCTIONS

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

## SPECIFIC INSTRUCTIONS

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

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

## NOTICES

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

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

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

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

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

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

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

Response to this request is mandatory.

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

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

## Additional Information

### Additional Remarks

Drill 14-3/4 hole to 876. Run and cement 10-3/4 45.5# J-55 BTC casing  
420 sacks of 13.5 ppg lead (1.73 ft<sup>3</sup>/sack yield and 9.22 gal/sack mix water)  
250 sacks of 14.8 ppg tail (1.35 ft<sup>3</sup>/sack yield and 6.45 gal/sack mix water)

Drill 9-7/8 hole to 8,000. Run and cement 7-5/8 29.7# L80-ICY TXP-BTC casing  
420 sacks of 10.5 ppg lead (3.6 ft<sup>3</sup>/sack yield and 22.81 gal/sack mix water)  
180 sacks of 15.6 ppg tail (1.20 ft<sup>3</sup>/sack yield and 5.40 gal/sack mix water)

Drill 6-3/4 hole to TD of 19,870. Run and cement 5-1/2 20# P110-CY TXP-BTC from 0-7,500 and 5-1/2 20# P110-CY W441 from  
7,500-19,870 (crossover 500 inside intermediate casing for cement bond tie in)  
220 sacks of 11.0 ppg lead (3.22 ft<sup>3</sup>/sack yield and 9.32 gal/sack mix water)  
940 sacks of 13.2 ppg tail (1.48 ft<sup>3</sup>/sack yield and 7.49 gal/sack mix water)

API# 30-015-53824

See attached.

### Location of Well

0. SHL: NENW / 250 FNL / 1750 FWL / TWSP: 26S / RANGE: 29E / SECTION: 29 / LAT: 32.020136 / LONG: -104.00955 ( TVD: 0 feet, MD: 0 feet )  
PPP: SESW / 100 FSL / 1980 FWL / TWSP: 26S / RANGE: 29E / SECTION: 20 / LAT: 32.021094 / LONG: -104.008805 ( TVD: 8527 feet, MD: 8649 feet )  
PPP: NENW / 1319 FNL / 1980 FWL / TWSP: 26S / RANGE: 29E / SECTION: 20 / LAT: 32.031863 / LONG: -104.008736 ( TVD: 8570 feet, MD: 12245 feet )  
PPP: NESW / 1321 FSL / 1980 FWL / TWSP: 26S / RANGE: 29E / SECTION: 17 / LAT: 32.038992 / LONG: -104.008691 ( TVD: 8570 feet, MD: 14875 feet )  
PPP: SESW / 1 FSL / 1980 FWL / TWSP: 26S / RANGE: 29E / SECTION: 17 / LAT: 32.035475 / LONG: -104.008713 ( TVD: 8570 feet, MD: 13565 feet )  
BHL: SESW / 1270 FSL / 1980 FWL / TWSP: 26S / RANGE: 29E / SECTION: 8 / LAT: 32.053195 / LONG: -104.008601 ( TVD: 8550 feet, MD: 20403 feet )

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

<b>Well Name:</b> RIVERWALK FEDERAL COM	<b>Well Location:</b> T26S / R29E / SEC 29 / NENW / 32.020136 / -104.00955	<b>County or Parish/State:</b> EDDY / NM
<b>Well Number:</b> 503H	<b>Type of Well:</b> OIL WELL	<b>Allottee or Tribe Name:</b>
<b>Lease Number:</b> NMNM138836	<b>Unit or CA Name:</b>	<b>Unit or CA Number:</b>
<b>US Well Number:</b>	<b>Operator:</b> COG OPERATING LLC	

**Notice of Intent**

**Sundry ID:** 2741008

**Type of Submission:** Notice of Intent

**Type of Action:** APD Change

**Date Sundry Submitted:** 07/14/2023

**Time Sundry Submitted:** 09:30

**Date proposed operation will begin:** 07/14/2023

**Procedure Description:** COG Operating LLC respectfully requests approval for the following changes to the original approved APD. BHL Change From: 1270' FSL & 1980' FWL Section 8. T26S. R29E. To: 1065' FSL & 1610' FWL. Section 8.T26S. R29E. Dedicated Acres: From: 360 To: 719.78 Casing and Cement Changes: The proposed changes reflect downsizing the surface, intermediate and production open hole sections to 14-3/4", 9-7/8" and 6-3/4" respectively. Cement blends are the same as the approved APD, and volumes have been adjusted to reflect the change in wellbore design. Drill 14-3/4" hole to 876'. Run and cement 10-3/4" 45.5# J-55 BTC casing 420 sacks of 13.5 ppg lead (1.73 ft<sup>3</sup>/sack yield and 9.22 gal/sack mix water) 250 sacks of 14.8 ppg tail (1.35 ft<sup>3</sup>/sack yield and 6.45 gal/sack mix water) Drill 9-7/8" hole to 8,000'. Run and cement 7-5/8" 29.7# L80-ICY TXP-BTC casing 420 sacks of 10.5 ppg lead (3.6 ft<sup>3</sup>/sack yield and 22.81 gal/sack mix water) 180 sacks of 15.6 ppg tail (1.20 ft<sup>3</sup>/sack yield and 5.40 gal/sack mix water) Drill 6-3/4" hole to TD of 19,870'. Run and cement 5-1/2" 20# P110-CY TXP-BTC from 0'-7,500' and 5-1/2" 20# P110-CY W441 from 7,500'-19,870' (crossover 500' inside intermediate casing for cement bond tie in) 220 sacks of 11.0 ppg lead (3.22 ft<sup>3</sup>/sack yield and 9.32 gal/sack mix water) 940 sacks of 13.2 ppg tail (1.48 ft<sup>3</sup>/sack yield and 7.49 gal/sack mix water) API# 30-015-53824 See attached.

**NOI Attachments**

**Procedure Description**

RIVERWALK\_FED\_COM\_503H\_PWP1\_WPLOT\_20230714092903.pdf

RIVERWALK\_FED\_COM\_503H\_PWP1\_AC\_RPT\_20230714092900.pdf

RIVERWALK\_FED\_COM\_503H\_C102\_NAD83\_20230714092856.pdf

TXP\_BTC\_7.625\_0.375\_L80\_ICY\_06152023\_20230714092856.pdf

**Well Name:** RIVERWALK FEDERAL COM

**Well Location:** T26S / R29E / SEC 29 / NENW / 32.020136 / -104.00955

**County or Parish/State:** EDDY / NM

**Well Number:** 503H

**Type of Well:** OIL WELL

**Allottee or Tribe Name:**

**Lease Number:** NMNM138836

**Unit or CA Name:**

**Unit or CA Number:**

**US Well Number:**

**Operator:** COG OPERATING LLC

Wedge\_441\_5.500\_0.361\_P110\_CY\_06152023\_20230714092856.pdf

COG\_Riverwalk\_503H\_Directional\_Plan\_20230714092851.pdf

API\_BTC\_10.750\_0.400\_J55\_Casing\_06152023\_20230714092855.pdf

TXP\_BTC\_5.500\_0.361\_P110\_CY\_06152023\_20230714092855.pdf

### Conditions of Approval

#### Additional

Riverwalk\_Fed\_Com\_503H\_COA\_20231205110248.pdf

### Operator

*I certify that the foregoing is true and correct. Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction. Electronic submission of Sundry Notices through this system satisfies regulations requiring a*

**Operator Electronic Signature:** MAYTE REYES

**Signed on:** JUL 14, 2023 09:29 AM

**Name:** COG OPERATING LLC

**Title:** Regulatory Analyst

**Street Address:** 925 N ELDRIDGE PARKWAY

**City:** HOUSTON **State:** TX

**Phone:** (281) 293-1000

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

### Field

**Representative Name:** Gerald Herrera

**Street Address:** 2208 West Main Street

**City:** Artesia **State:** NM **Zip:** 88210

**Phone:** (575)748-6940

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

### BLM Point of Contact

**BLM POC Name:** CHRISTOPHER WALLS

**BLM POC Title:** Petroleum Engineer

**BLM POC Phone:** 5752342234

**BLM POC Email Address:** cwalls@blm.gov

**Disposition:** Approved

**Disposition Date:** 01/29/2024

**Signature:** Chris Walls

## PECOS DISTRICT DRILLING CONDITIONS OF APPROVAL

<b>OPERATOR'S NAME:</b>	COG
<b>LEASE NO.:</b>	NMNM138836
<b>LOCATION:</b>	Section 29, T.26 S, R.29 E., NMPM
<b>COUNTY:</b>	Eddy County, New Mexico
<b>WELL NAME &amp; NO.:</b>	Riverwalk Fed Com 503H
<b>SURFACE HOLE FOOTAGE:</b>	250'/N & 1750'/W
<b>BOTTOM HOLE FOOTAGE:</b>	1065'/S & 1610'/W

*Changes approved through engineering via **Sundry 2741008** on 12-5-2023\_. Any previous COAs not addressed within the updated COAs still apply.*

COA

<b>H<sub>2</sub>S</b>	<input checked="" type="radio"/> Yes	<input type="radio"/> No		
<b>Potash / WIPP</b>	<input checked="" type="radio"/> None	<input type="radio"/> Secretary	<input type="radio"/> R-111-P	<input type="checkbox"/> WIPP
<b>Cave / Karst</b>	<input type="radio"/> Low	<input checked="" type="radio"/> Medium	<input type="radio"/> High	<input type="radio"/> Critical
<b>Wellhead</b>	<input type="radio"/> Conventional	<input checked="" type="radio"/> Multibowl	<input type="radio"/> Both	<input type="radio"/> Diverter
<b>Cementing</b>	<input type="checkbox"/> Primary Squeeze	<input type="checkbox"/> Cont. Squeeze	<input type="checkbox"/> EchoMeter	<input type="checkbox"/> DV Tool
<b>Special Req</b>	<input type="checkbox"/> Break Testing	<input type="checkbox"/> Water Disposal	<input checked="" type="checkbox"/> COM	<input type="checkbox"/> Unit
<b>Variance</b>	<input checked="" type="checkbox"/> Flex Hose	<input type="checkbox"/> Casing Clearance	<input type="checkbox"/> Pilot Hole	<input type="checkbox"/> Capitan Reef
<b>Variance</b>	<input type="checkbox"/> Four-String	<input type="checkbox"/> Offline Cementing	<input type="checkbox"/> Fluid-Filled	<input type="checkbox"/> Open Annulus
<input type="checkbox"/> <b>Batch APD / Sundry</b>				

### A. HYDROGEN SULFIDE

A Hydrogen Sulfide (H<sub>2</sub>S) Drilling Plan shall be activated 500 feet prior to drilling into the **Delaware Group** formation. As a result, the Hydrogen Sulfide area must meet all requirements from **43 CFR 3176**, which includes equipment and personnel/public protection items. If Hydrogen Sulfide is encountered, please provide measured values and formations to the BLM.

### B. CASING

1. The **10-3/4** inch surface casing shall be set at approximately **450** feet (a minimum of **70 feet (Eddy County)** into the Rustler Anhydrite, above the salt, and below usable fresh water) and cemented to the surface.
  - a. If cement does not circulate to the surface, the appropriate BLM office shall be notified and a temperature survey utilizing an electronic type temperature survey with surface log readout will be used or a cement bond log shall be run to verify the top of the cement. Temperature survey will be run a minimum of six hours after pumping cement and ideally between 8-10 hours after completing the cement job.
  - b. Wait on cement (WOC) time for a primary cement job will be a minimum of **8**

- hours** or 500 pounds compressive strength, whichever is greater. (This is to include the lead cement)
- c. Wait on cement (WOC) time for a remedial job will be a minimum of 4 hours after bringing cement to surface or 500 pounds compressive strength, whichever is greater.
  - d. If cement falls back, remedial cementing will be done prior to drilling out that string.
2. The minimum required fill of cement behind the **9-5/8** inch intermediate casing is:
- Cement to surface. If cement does not circulate see B.1.a, c-d above. **Excess calculates to .4% Additional cement maybe required.**
- Wait on cement (WOC) time for a primary cement job is to include the lead cement slurry due to cave/karst.**
- ❖ In Medium Cave/Karst Areas if cement does not circulate to surface on the first two casing strings, the cement on the 3rd casing string must come to surface.
3. The minimum required fill of cement behind the **5-1/2** inch production casing is:
- Cement should tie-back at least **200 feet** into previous casing string. Operator shall provide method of verification.
- Wait on cement (WOC) time for a primary cement job is to include the lead cement slurry due to cave/karst.**

### C. PRESSURE CONTROL

1. Variance approved to use flex line from BOP to choke manifold. Manufacturer's specification to be readily available. No external damage to flex line. Flex line to be installed as straight as possible (no hard bends).
  2. Operator has proposed a multi-bowl wellhead assembly. This assembly will only be tested when installed on the surface casing. Minimum working pressure of the blowout preventer (BOP) and related equipment (BOPE) required for drilling below the casing shoe shall be **5000 (5M)** psi.
    - a. Wellhead shall be installed by manufacturer's representatives, submit documentation with subsequent sundry.
    - b. If the welding is performed by a third party, the manufacturer's representative shall monitor the temperature to verify that it does not exceed the maximum temperature of the seal.
    - c. Manufacturer representative shall install the test plug for the initial BOP test.
    - d. If the cement does not circulate and one-inch operations would have been possible with a standard wellhead, the well head shall be cut off, cementing operations performed and another wellhead installed.
    - e. Whenever any seal subject to test pressure is broken, all the tests in 43 CFR 3172 must be followed.

**D. SPECIAL REQUIREMENT (S)****Communitization Agreement**

- The operator will submit a Communitization Agreement to the Santa Fe Office, 301 Dinosaur Trail Santa Fe, New Mexico 87508, at least 90 days before the anticipated date of first production from a well subject to a spacing order issued by the New Mexico Oil Conservation Division. The Communitization Agreement will include the signatures of all working interest owners in all Federal and Indian leases subject to the Communitization Agreement (i.e., operating rights owners and lessees of record), or certification that the operator has obtained the written signatures of all such owners and will make those signatures available to the BLM immediately upon request.
- The operator will submit an as-drilled survey well plat of the well completion, but are not limited to, those specified in 43 CFR 3171 and 3172.
- If the operator does not comply with this condition of approval, the BLM may take enforcement actions that include, but are not limited to, those specified in 43 CFR 3163.1.
- In addition, the well sign shall include the surface and bottom hole lease numbers. When the Communitization Agreement number is known, it shall also be on the sign.

**GENERAL REQUIREMENTS**

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

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

Eddy County

Email **or** call the Carlsbad Field Office, 620 East Greene St., Carlsbad, NM 88220, [BLM\\_NM\\_CFO\\_DrillingNotifications@BLM.GOV](mailto:BLM_NM_CFO_DrillingNotifications@BLM.GOV)  
(575) 361-2822

Lea County

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

1. Unless the production casing has been run and cemented or the well has been properly plugged, the drilling rig shall not be removed from over the hole without prior approval.
  - a. In the event the operator has proposed to drill multiple wells utilizing a skid/walking rig. Operator shall secure the wellbore on the current well, after installing and testing the wellhead, by installing a blind flange of like pressure

- rating to the wellhead and a pressure gauge that can be monitored while drilling is performed on the other well(s).
- b. When the operator proposes to set surface casing with Spudder Rig
    - Notify the BLM when moving in and removing the Spudder Rig.
    - Notify the BLM when moving in the 2<sup>nd</sup> Rig. Rig to be moved in within 90 days of notification that Spudder Rig has left the location.
    - BOP/BOPE test to be conducted per **43 CFR part 3170 Subpart 3172** as soon as 2nd Rig is rigged up on well.
  2. Floor controls are required for 3M or Greater systems. These controls will be on the rig floor, unobstructed, readily accessible to the driller and will be operational at all times during drilling and/or completion activities. Rig floor is defined as the area immediately around the rotary table; the area immediately above the substructure on which the draw works are located, this does not include the dog house or stairway area.
  3. The record of the drilling rate along with the GR/N well log run from TD to surface (horizontal well – vertical portion of hole) shall be submitted to the BLM office as well as all other logs run on the borehole 30 days from completion. If available, a digital copy of the logs is to be submitted in addition to the paper copies. The Rustler top and top and bottom of Salt are to be recorded on the Completion Report.

#### A. CASING

1. Changes to the approved APD casing program need prior approval if the items substituted are of lesser grade or different casing size or are Non-API. The Operator can exchange the components of the proposal with that of superior strength (i.e. changing from J-55 to N-80, or from 36# to 40#). Changes to the approved cement program need prior approval if the altered cement plan has less volume or strength or if the changes are substantial (i.e. Multistage tool, ECP, etc.). The initial wellhead installed on the well will remain on the well with spools used as needed.
2. Wait on cement (WOC) for Potash Areas: After cementing but before commencing any tests, the casing string shall stand cemented under pressure until both of the following conditions have been met: 1) cement reaches a minimum compressive strength of 500 psi for all cement blends, 2) until cement has been in place at least 24 hours. WOC time will be recorded in the driller's log. The casing integrity test can be done (prior to the cement setting up) immediately after bumping the plug.
3. Wait on cement (WOC) for Water Basin: After cementing but before commencing any tests, the casing string shall stand cemented under pressure until both of the following conditions have been met: 1) cement reaches a minimum compressive strength of 500 psi at the shoe, 2) until cement has been in place at least 8 hours. WOC time will be recorded in the driller's log. See individual casing strings for details regarding lead cement slurry requirements. The casing integrity test can be done (prior to the cement setting up) immediately after bumping the plug.

4. Provide compressive strengths including hours to reach required 500 pounds compressive strength prior to cementing each casing string. Have well specific cement details onsite prior to pumping the cement for each casing string.
5. No pea gravel permitted for remedial or fall back remedial without prior authorization from the BLM engineer.
6. On that portion of any well approved for a 5M BOPE system or greater, a pressure integrity test of each casing shoe shall be performed. Formation at the shoe shall be tested to a minimum of the mud weight equivalent anticipated to control the formation pressure to the next casing depth or at total depth of the well. This test shall be performed before drilling more than 20 feet of new hole.
7. If hardband drill pipe is rotated inside casing, returns will be monitored for metal. If metal is found in samples, drill pipe will be pulled and rubber protectors which have a larger diameter than the tool joints of the drill pipe will be installed prior to continuing drilling operations.
8. Whenever a casing string is cemented in the R-111-P potash area, the NMOCD requirements shall be followed.

#### B. PRESSURE CONTROL

1. All blowout preventer (BOP) and related equipment (BOPE) shall comply with well control requirements as described in **43 CFR part 3170 Subpart 3172** and **API STD 53 Sec. 5.3**.
2. If a variance is approved for a flexible hose to be installed from the BOP to the choke manifold, the following requirements apply: The flex line must meet the requirements of API 16C. Check condition of flexible line from BOP to choke manifold, replace if exterior is damaged or if line fails test. Line to be as straight as possible with no hard bends and is to be anchored according to Manufacturer's requirements. The flexible hose can be exchanged with a hose of equal size and equal or greater pressure rating. Anchor requirements, specification sheet and hydrostatic pressure test certification matching the hose in service, to be onsite for review. These documents shall be posted in the company man's trailer and on the rig floor.
3. 5M or higher system requires an HCR valve, remote kill line and annular to match. The remote kill line is to be installed prior to testing the system and tested to stack pressure.
4. If the operator has proposed a multi-bowl wellhead assembly in the APD. The following requirements must be met:

- a. Wellhead shall be installed by manufacturer's representatives, submit documentation with subsequent sundry.
  - b. If the welding is performed by a third party, the manufacturer's representative shall monitor the temperature to verify that it does not exceed the maximum temperature of the seal.
  - c. Manufacturer representative shall install the test plug for the initial BOP test.
  - d. Whenever any seal subject to test pressure is broken, all the tests in **43 CFR part 3170 Subpart 3172** must be followed.
  - e. If the cement does not circulate and one inch operations would have been possible with a standard wellhead, the well head shall be cut off, cementing operations performed and another wellhead installed.
5. The appropriate BLM office shall be notified a minimum of 4 hours in advance for a representative to witness the tests.
- a. In a water basin, for all casing strings utilizing slips, these are to be set as soon as the crew and rig are ready and any fallback cement remediation has been done. The casing cut-off and BOP installation can be initiated four hours after installing the slips, which will be approximately six hours after bumping the plug. For those casing strings not using slips, the minimum wait time before cut-off is eight hours after bumping the plug. BOP/BOPE testing can begin after cut-off or once cement reaches 500 psi compressive strength (including lead cement), whichever is greater. However, if the float does not hold, cut-off cannot be initiated until cement reaches 500 psi compressive strength (including lead when specified).
  - b. In potash areas, for all casing strings utilizing slips, these are to be set as soon as the crew and rig are ready and any fallback cement remediation has been done. For all casing strings, casing cut-off and BOP installation can be initiated at twelve hours after bumping the cement plug. The BOPE test can be initiated after bumping the cement plug with the casing valve open. (only applies to single stage cement jobs, prior to the cement setting up.)
  - c. The tests shall be done by an independent service company utilizing a test plug not a cup or J-packer and can be initiated immediately with the casing valve open. The operator also has the option of utilizing an independent tester to test without a plug (i.e. against the casing) pursuant to **43 CFR part 3170 Subpart 3172** with the pressure not to exceed 70% of the burst rating for the casing. Any test against the casing must meet the WOC time for water basin (8 hours) or potash (24 hours) or 500 pounds compressive strength, whichever is greater, prior to initiating the test (see casing segment as lead cement may be critical item).
  - d. The test shall be run on a 5000 psi chart for a 2-3M BOP/BOP, on a 10000 psi chart for a 5M BOP/BOPE and on a 15000 psi chart for a 10M BOP/BOPE.

If a linear chart is used, it shall be a one hour chart. A circular chart shall have a maximum 2 hour clock. If a twelve hour or twenty-four hour chart is used, tester shall make a notation that it is run with a two hour clock.

- e. The results of the test shall be reported to the appropriate BLM office.
- f. All tests are required to be recorded on a calibrated test chart. A copy of the BOP/BOPE test chart and a copy of independent service company test will be submitted to the appropriate BLM office.
- g. The BOP/BOPE test shall include a low pressure test from 250 to 300 psi. The test will be held for a minimum of 10 minutes if test is done with a test plug and 30 minutes without a test plug. This test shall be performed prior to the test at full stack pressure.
- h. BOP/BOPE must be tested by an independent service company within 500 feet of the top of the Wolfcamp formation if the time between the setting of the intermediate casing and reaching this depth exceeds 20 days. This test does not exclude the test prior to drilling out the casing shoe as per **43 CFR part 3170 Subpart 3172**.

#### C. DRILLING MUD

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

#### D. WASTE MATERIAL AND FLUIDS

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

Porto-johns and trash containers will be on-location during fracturing operations or any other crew-intensive operations.

**ZS 12/5/2023**

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

General Information  
Phone: (505) 629-6116

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

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

CONDITIONS

Action 495819

**CONDITIONS**

Operator: COG OPERATING LLC 600 W Illinois Ave Midland, TX 79701	OGRID: 229137
	Action Number: 495819
	Action Type: [C-103] NOI Change of Plans (C-103A)

**CONDITIONS**

Created By	Condition	Condition Date
ward.rikala	Any previous COA's not addressed within the updated COA's still apply.	2/17/2026