Submit 1 Copy To Appropriate District Office
District I – (575) 393-6161
1625 N French Dr , Hobbs, NM 88240
District II – (575) 748-1283
811 S. First St., Artesia, NM 88210
District III – (505) 334-6178
1000 Rio Brazos Rd , Aztec, NM 87410
District IV – (505) 476-3460
1220 S St. Francis Dr , Santa Fe, NM 87505

State of New Mexico
Energy, Minerals and Natural Resources

OIL CONSERVATION DIVISION
1220 South St. Francis Dr.
Santa Fe, NM 87505

Form C-103
Revised July 18, 2013

WELL API NO. 30-015-47350
5. Indicate Type of Lease STATE ■ FEE ☐
6. State Oil & Gas Lease No.

SUNDRY NOTICES AND REPORTS ON WELLS
(DO NOT USE THIS FORM FOR PROPOSALS TO DRILL OR TO DEEPEN OR PLUG BACK TO A DIFFERENT RESERVOIR USE "APPLICATION FOR PERMIT" (FORM C-101) FOR SUCH PROPOSALS)

7. Lease Name or Unit Agreement Name: Boo Radley Com
1. Type of Well: Oil Well ■ Gas Well ☐ Other
8. Well Number 706H
2. Name of Operator: COG Operating LLC
9. OGRID Number 229137
3. Address of Operator: 600 West Illinois Ave. Midland, TX 79701
10. Pool name or Wildcat: Purple Sage; Wolfcamp (Gas)

4. Well Location
Unit Letter N : 400 feet from the South line and 1430 feet from the West line
Section 16 Township 26S Range 28E NMPM County Eddy

11. Elevation *(Show whether DR, RKB, RT, GR, etc.)* 3034' GL

12. Check Appropriate Box to Indicate Nature of Notice, Report or Other Data

NOTICE OF INTENTION TO:				SUBSEQUENT REPORT OF:			
PERFORM REMEDIAL WORK	☐	PLUG AND ABANDON	☐	REMEDIAL WORK	☐	ALTERING CASING	☐
TEMPORARILY ABANDON	☐	CHANGE PLANS	☒	COMMENCE DRILLING OPNS.	☐	P AND A	☐
PULL OR ALTER CASING	☐	MULTIPLE COMPL	☐	CASING/CEMENT JOB	☐		
DOWNHOLE COMMINGLE	☐						
CLOSED-LOOP SYSTEM	☐						
OTHER:	☐			OTHER. Change SHL	☒		

13. Describe proposed or completed operations. (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work). SEE RULE 19.15.7.14 NMAC. For Multiple Completions: Attach wellbore diagram of proposed completion or recompletion.

COG Operating LLC requests an amendment to our approved APD for this well to reflect changes in SHL due to encountered surface issues.

Change SHL to: 400' FSL & 1430' FWL N-16-26S-28E Eddy County

Revised C-102 and Directional Plan attached.

Spud Date: Rig Release Date:

I hereby certify that the information above is true and complete to the best of my knowledge and belief.

SIGNATURE Stan Wagner TITLE Regulatory Advisor DATE 04/13/2021

Type or print name Stan Wagner E-mail address: PHONE: 432-253-9685

For State Use Only

APPROVED BY: John Garcia TITLE Petroleum Specialist DATE 5/12/2021

Conditions of Approval (if any):

DISTRICT I
1625 N. FRENCH DR., HOBBS, NM 88240
Phone: (575) 393-6161 Fax: (575) 393-0720
DISTRICT II
811 S. FIRST ST., ARTESIA, NM 88210
Phone: (575) 748-1283 Fax: (575) 748-9720
DISTRICT III
1000 RIO BRAZOS RD., AZTEC, NM 87410
Phone: (505) 334-6178 Fax: (505) 334-6170
DISTRICT IV
1220 S. ST. FRANCIS DR., SANTA FE, NM 87505
Phone: (505) 476-3460 Fax: (505) 476-3462

State of New Mexico
Energy, Minerals & Natural Resources Department
OIL CONSERVATION DIVISION
1220 SOUTH ST. FRANCIS DR.
Santa Fe, New Mexico 87505

Form C-102
Revised August 1, 2011
Submit one copy to appropriate
District Office

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

API Number	Pool Code	Pool Name
30-015-47350	98220	Purple Sage; Wolfcamp (Gas)

Property Code	Property Name	Well Number
328970	BOO RADLEY COM	706H

OGRID No.	Operator Name	Elevation
229137	COG OPERATING, LLC	3034.6'

Surface Location

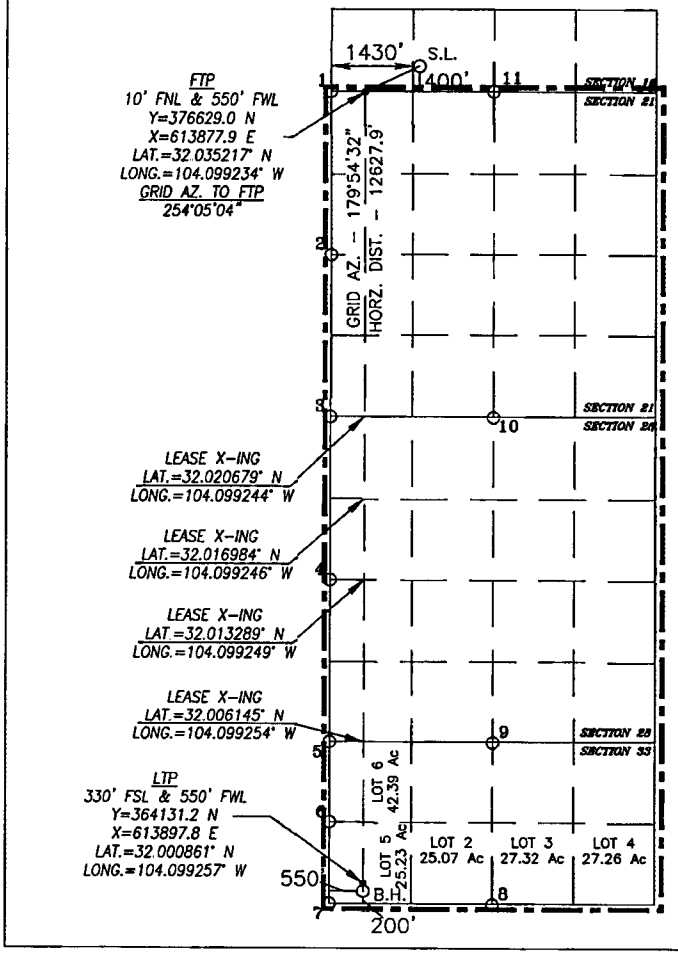
UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
N	16	26-S	28-E		400	SOUTH	1430	WEST	EDDY

Bottom Hole Location If Different From Surface

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
5	33	26-S	28-E		200	SOUTH	550	WEST	EDDY

Dedicated Acres	Joint or Infill	Consolidation Code	Order No.
1538.88			

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



NAD 83 NME
SURFACE LOCATION
Y=377036.1 N
X=614754.3 E
LAT.=32.036331° N
LONG.=104.096403° W

POINT LEGEND	
1	Y=376640.8 N X=613327.9 E
2	Y=373994.3 N X=613329.4 E
3	Y=371341.9 N X=613334.9 E
4	Y=368648.2 N X=613339.0 E
5	Y=366056.4 N X=613343.5 E
6	Y=364641.9 N X=613346.7 E
7	Y=363800.2 N X=613348.4 E
8	Y=363811.4 N X=615965.2 E
9	Y=366042.7 N X=615960.0 E
10	Y=371335.2 N X=616078.1 E
11	Y=376631.8 N X=616063.7 E

NAD 83 NME
PROPOSED BOTTOM
HOLE LOCATION
Y=364001.2 N
X=613898.0 E
LAT.=32.000503° N
LONG.=104.099257° W

OPERATOR CERTIFICATION

I hereby certify that the information herein is true and complete to the best of my knowledge and belief, and 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 such mineral or working interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division.

Stan Wagner 4/12/2021
Signature Date

Stan Wagner
Printed Name

E-mail Address

SURVEYOR CERTIFICATION

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.

MARCH 10, 2021
Date of Survey

Signature & Seal of Professional Surveyor

CHAD L. HARCROW NEW MEXICO 17777 LICENSED PROFESSIONAL SURVEYOR

Chad Harcrow 3/16/21

Certificate No. CHAD HARCROW 17777

W.O. # 21-248 DRAWN BY: DS

Boo Radley Com 706H

Casing and Cement

String	Hole Size	Csg OD	PPF	Depth	Sx Cement	TOC
Surface	14 3/4”	10 3/4”	45.5#	610’	510	0’
Intermediate	9-7/8”	7-5/8”	29.7#	8,830’	1,050	0’
Production	6-3/4”	5-1/2”	23#	22,273’	1,750	8,330’

Well Plan

Drill 14-3/4” hole to ~610’ w/ fresh water. Run 10-3/4” 45.5# J-55 BTC casing to TD and cement to surface in one stage.

Drill 9-7/8” hole to ~8,830’ with cut brine emulsion. Run 7-5/8 29.7# L-80 BTC to TD and cement to surface in one stage.

Drill 6-3/4” vertical hole, curve & lateral to 22,273’ with OBM. Run 5-1/2” 23# P110 Talon HTQ casing from TD to surface and cement to 8,230’ in one stage.

Well Control

Type	Working Pressure	Test Pressure	Manufacture
Double Ram	5000 psi	5000 psi	Cameron

DELAWARE BASIN WEST

ATLAS PROSPECT (NM-E)
BOO RADLEY COM PROJECT
BOO RADLEY COM #706H

OWB

Plan: PWP4

Standard Survey Report

08 April, 2021

ConocoPhillips

Survey Report

Company:	DELAWARE BASIN WEST	**Local Co-ordinate Reference:**	Well BOO RADLEY COM #706H
Project:	ATLAS PROSPECT (NM-E)	**TVD Reference:**	KB=25' @ 3059.6usft (PIONEER 84)
Site:	BOO RADLEY COM PROJECT	**MD Reference:**	KB=25' @ 3059.6usft (PIONEER 84)
Well:	BOO RADLEY COM #706H	**North Reference:**	Grid
Wellbore:	OWB	**Survey Calculation Method:**	Minimum Curvature
Design:	PWP4	**Database:**	edm

Project	ATLAS PROSPECT (NM-E)		
Map System:	US State Plane 1927 (Exact solution)	**System Datum:**	Mean Sea Level
Geo Datum:	NAD 1927 (NADCON CONUS)		
Map Zone:	New Mexico East 3001		

Well	BOO RADLEY COM #706H				
Well Position	**+N/-S**	0.0 usft	**Northing:**	376,978.90 usft	**Latitude:**	32° 2' 10.346 N
	+E/-W	0.0 usft	**Easting:**	573,569.60 usft	**Longitude:**	104° 5' 45.294 W
Position Uncertainty		3.0 usft	**Wellhead Elevation:**	usft	**Ground Level:**	3,034.6 usft

Wellbore	OWB				
Magnetics	**Model Name**	**Sample Date**	**Declination (°)**	**Dip Angle (°)**	**Field Strength (nT)**
	IGRF2020	4/8/2021	6.79	59.66	47,350.16961490

Design	PWP4				
Audit Notes:					
Version:		**Phase:**	PLAN	**Tie On Depth:**	0.0
Vertical Section:	**Depth From (TVD) (usft)**	**+N/-S (usft)**	**+E/-W (usft)**	**Direction (°)**	
	0.0	0.0	0.0	183.76	

Survey Tool Program **Date** 4/8/2021

From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description
0.0	9,032.0	PWP4 (OWB)	Standard Keeper 104	Standard Wireline Keeper ver 1.0.4
9,032.0	22,273.6	PWP4 (OWB)	MWD+IFR1+FDIR	OWSG MWD + IFR1 + FDIR Correction

Planned Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
0.0	0.00	0.00	0.0	0.0	0.0	0.0	0.00	0.00	0.00
100.0	0.00	0.00	100.0	0.0	0.0	0.0	0.00	0.00	0.00
200.0	0.00	0.00	200.0	0.0	0.0	0.0	0.00	0.00	0.00
300.0	0.00	0.00	300.0	0.0	0.0	0.0	0.00	0.00	0.00
400.0	0.00	0.00	400.0	0.0	0.0	0.0	0.00	0.00	0.00
500.0	0.00	0.00	500.0	0.0	0.0	0.0	0.00	0.00	0.00
600.0	0.00	0.00	600.0	0.0	0.0	0.0	0.00	0.00	0.00
700.0	0.00	0.00	700.0	0.0	0.0	0.0	0.00	0.00	0.00
800.0	0.00	0.00	800.0	0.0	0.0	0.0	0.00	0.00	0.00
900.0	0.00	0.00	900.0	0.0	0.0	0.0	0.00	0.00	0.00
1,000.0	0.00	0.00	1,000.0	0.0	0.0	0.0	0.00	0.00	0.00
1,100.0	0.00	0.00	1,100.0	0.0	0.0	0.0	0.00	0.00	0.00
1,200.0	0.00	0.00	1,200.0	0.0	0.0	0.0	0.00	0.00	0.00
1,300.0	0.00	0.00	1,300.0	0.0	0.0	0.0	0.00	0.00	0.00
1,400.0	0.00	0.00	1,400.0	0.0	0.0	0.0	0.00	0.00	0.00

ConocoPhillips

Survey Report

Company:	DELAWARE BASIN WEST	**Local Co-ordinate Reference:**	Well BOO RADLEY COM #706H
Project:	ATLAS PROSPECT (NM-E)	**TVD Reference:**	KB=25' @ 3059.6usft (PIONEER 84)
Site:	BOO RADLEY COM PROJECT	**MD Reference:**	KB=25' @ 3059.6usft (PIONEER 84)
Well:	BOO RADLEY COM #706H	**North Reference:**	Grid
Wellbore:	OWB	**Survey Calculation Method:**	Minimum Curvature
Design:	PWP4	**Database:**	edm

Planned Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
1,500.0	0.00	0.00	1,500.0	0.0	0.0	0.0	0.00	0.00	0.00
1,600.0	0.00	0.00	1,600.0	0.0	0.0	0.0	0.00	0.00	0.00
1,700.0	0.00	0.00	1,700.0	0.0	0.0	0.0	0.00	0.00	0.00
1,800.0	0.00	0.00	1,800.0	0.0	0.0	0.0	0.00	0.00	0.00
1,900.0	0.00	0.00	1,900.0	0.0	0.0	0.0	0.00	0.00	0.00
2,000.0	0.00	0.00	2,000.0	0.0	0.0	0.0	0.00	0.00	0.00
2,100.0	0.00	0.00	2,100.0	0.0	0.0	0.0	0.00	0.00	0.00
2,200.0	0.00	0.00	2,200.0	0.0	0.0	0.0	0.00	0.00	0.00
2,300.0	0.00	0.00	2,300.0	0.0	0.0	0.0	0.00	0.00	0.00
2,400.0	0.00	0.00	2,400.0	0.0	0.0	0.0	0.00	0.00	0.00
2,500.0	0.00	0.00	2,500.0	0.0	0.0	0.0	0.00	0.00	0.00
Start Build 2.00									
2,600.0	2.00	259.51	2,600.0	-0.3	-1.7	0.4	2.00	2.00	0.00
2,700.0	4.00	259.51	2,699.8	-1.3	-6.9	1.7	2.00	2.00	0.00
2,745.8	4.92	259.51	2,745.5	-1.9	-10.4	2.6	2.00	2.00	0.00
Start 6286.4 hold at 2745.8 MD									
2,800.0	4.92	259.51	2,799.5	-2.8	-14.9	3.7	0.00	0.00	0.00
2,900.0	4.92	259.51	2,899.1	-4.3	-23.4	5.8	0.00	0.00	0.00
3,000.0	4.92	259.51	2,998.8	-5.9	-31.8	8.0	0.00	0.00	0.00
3,100.0	4.92	259.51	3,098.4	-7.4	-40.2	10.1	0.00	0.00	0.00
3,200.0	4.92	259.51	3,198.0	-9.0	-48.6	12.2	0.00	0.00	0.00
3,300.0	4.92	259.51	3,297.7	-10.6	-57.1	14.3	0.00	0.00	0.00
3,400.0	4.92	259.51	3,397.3	-12.1	-65.5	16.4	0.00	0.00	0.00
3,500.0	4.92	259.51	3,496.9	-13.7	-73.9	18.5	0.00	0.00	0.00
3,600.0	4.92	259.51	3,596.6	-15.2	-82.3	20.6	0.00	0.00	0.00
3,700.0	4.92	259.51	3,696.2	-16.8	-90.8	22.7	0.00	0.00	0.00
3,800.0	4.92	259.51	3,795.8	-18.4	-99.2	24.8	0.00	0.00	0.00
3,900.0	4.92	259.51	3,895.5	-19.9	-107.6	26.9	0.00	0.00	0.00
4,000.0	4.92	259.51	3,995.1	-21.5	-116.0	29.0	0.00	0.00	0.00
4,100.0	4.92	259.51	4,094.7	-23.0	-124.5	31.2	0.00	0.00	0.00
4,200.0	4.92	259.51	4,194.4	-24.6	-132.9	33.3	0.00	0.00	0.00
4,300.0	4.92	259.51	4,294.0	-26.2	-141.3	35.4	0.00	0.00	0.00
4,400.0	4.92	259.51	4,393.6	-27.7	-149.7	37.5	0.00	0.00	0.00
4,500.0	4.92	259.51	4,493.2	-29.3	-158.2	39.6	0.00	0.00	0.00
4,600.0	4.92	259.51	4,592.9	-30.8	-166.6	41.7	0.00	0.00	0.00
4,700.0	4.92	259.51	4,692.5	-32.4	-175.0	43.8	0.00	0.00	0.00
4,800.0	4.92	259.51	4,792.1	-34.0	-183.4	45.9	0.00	0.00	0.00
4,900.0	4.92	259.51	4,891.8	-35.5	-191.9	48.0	0.00	0.00	0.00
5,000.0	4.92	259.51	4,991.4	-37.1	-200.3	50.1	0.00	0.00	0.00
5,100.0	4.92	259.51	5,091.0	-38.6	-208.7	52.3	0.00	0.00	0.00
5,200.0	4.92	259.51	5,190.7	-40.2	-217.1	54.4	0.00	0.00	0.00
5,300.0	4.92	259.51	5,290.3	-41.8	-225.6	56.5	0.00	0.00	0.00
5,400.0	4.92	259.51	5,389.9	-43.3	-234.0	58.6	0.00	0.00	0.00

ConocoPhillips

Survey Report

Company:	DELAWARE BASIN WEST	**Local Co-ordinate Reference:**	Well BOO RADLEY COM #706H
Project:	ATLAS PROSPECT (NM-E)	**TVD Reference:**	KB=25' @ 3059.6usft (PIONEER 84)
Site:	BOO RADLEY COM PROJECT	**MD Reference:**	KB=25' @ 3059.6usft (PIONEER 84)
Well:	BOO RADLEY COM #706H	**North Reference:**	Grid
Wellbore:	OWB	**Survey Calculation Method:**	Minimum Curvature
Design:	PWP4	**Database:**	edm

Planned Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
5,500.0	4.92	259.51	5,489.6	-44.9	-242.4	60.7	0.00	0.00	0.00
5,600.0	4.92	259.51	5,589.2	-46.5	-250.8	62.8	0.00	0.00	0.00
5,700.0	4.92	259.51	5,688.8	-48.0	-259.3	64.9	0.00	0.00	0.00
5,800.0	4.92	259.51	5,788.5	-49.6	-267.7	67.0	0.00	0.00	0.00
5,900.0	4.92	259.51	5,888.1	-51.1	-276.1	69.1	0.00	0.00	0.00
6,000.0	4.92	259.51	5,987.7	-52.7	-284.5	71.2	0.00	0.00	0.00
6,100.0	4.92	259.51	6,087.4	-54.3	-293.0	73.3	0.00	0.00	0.00
6,200.0	4.92	259.51	6,187.0	-55.8	-301.4	75.5	0.00	0.00	0.00
6,300.0	4.92	259.51	6,286.6	-57.4	-309.8	77.6	0.00	0.00	0.00
6,400.0	4.92	259.51	6,386.3	-58.9	-318.2	79.7	0.00	0.00	0.00
6,500.0	4.92	259.51	6,485.9	-60.5	-326.7	81.8	0.00	0.00	0.00
6,600.0	4.92	259.51	6,585.5	-62.1	-335.1	83.9	0.00	0.00	0.00
6,700.0	4.92	259.51	6,685.2	-63.6	-343.5	86.0	0.00	0.00	0.00
6,800.0	4.92	259.51	6,784.8	-65.2	-351.9	88.1	0.00	0.00	0.00
6,900.0	4.92	259.51	6,884.4	-66.7	-360.4	90.2	0.00	0.00	0.00
7,000.0	4.92	259.51	6,984.1	-68.3	-368.8	92.3	0.00	0.00	0.00
7,100.0	4.92	259.51	7,083.7	-69.9	-377.2	94.4	0.00	0.00	0.00
7,200.0	4.92	259.51	7,183.3	-71.4	-385.6	96.5	0.00	0.00	0.00
7,300.0	4.92	259.51	7,282.9	-73.0	-394.1	98.7	0.00	0.00	0.00
7,400.0	4.92	259.51	7,382.6	-74.5	-402.5	100.8	0.00	0.00	0.00
7,500.0	4.92	259.51	7,482.2	-76.1	-410.9	102.9	0.00	0.00	0.00
7,600.0	4.92	259.51	7,581.8	-77.7	-419.3	105.0	0.00	0.00	0.00
7,700.0	4.92	259.51	7,681.5	-79.2	-427.8	107.1	0.00	0.00	0.00
7,800.0	4.92	259.51	7,781.1	-80.8	-436.2	109.2	0.00	0.00	0.00
7,900.0	4.92	259.51	7,880.7	-82.3	-444.6	111.3	0.00	0.00	0.00
8,000.0	4.92	259.51	7,980.4	-83.9	-453.0	113.4	0.00	0.00	0.00
8,100.0	4.92	259.51	8,080.0	-85.5	-461.5	115.5	0.00	0.00	0.00
8,200.0	4.92	259.51	8,179.6	-87.0	-469.9	117.6	0.00	0.00	0.00
8,300.0	4.92	259.51	8,279.3	-88.6	-478.3	119.8	0.00	0.00	0.00
8,400.0	4.92	259.51	8,378.9	-90.1	-486.7	121.9	0.00	0.00	0.00
8,500.0	4.92	259.51	8,478.5	-91.7	-495.2	124.0	0.00	0.00	0.00
8,600.0	4.92	259.51	8,578.2	-93.3	-503.6	126.1	0.00	0.00	0.00
8,700.0	4.92	259.51	8,677.8	-94.8	-512.0	128.2	0.00	0.00	0.00
8,800.0	4.92	259.51	8,777.4	-96.4	-520.4	130.3	0.00	0.00	0.00
8,900.0	4.92	259.51	8,877.1	-97.9	-528.9	132.4	0.00	0.00	0.00
9,000.0	4.92	259.51	8,976.7	-99.5	-537.3	134.5	0.00	0.00	0.00
9,032.1	4.92	259.51	9,008.7	-100.0	-540.0	135.2	0.00	0.00	0.00
Start DLS 12.00 TFO -60.98									
9,100.0	11.37	220.57	9,075.9	-105.6	-547.2	141.3	12.00	9.51	-57.37
9,200.0	22.92	208.86	9,171.3	-130.3	-563.1	166.9	12.00	11.55	-11.71
9,300.0	34.77	204.84	9,258.8	-173.3	-584.5	211.3	12.00	11.85	-4.02
9,400.0	46.69	202.68	9,334.4	-233.0	-610.6	272.5	12.00	11.92	-2.15
9,500.0	58.63	201.25	9,395.0	-306.6	-640.3	348.0	12.00	11.95	-1.44
9,600.0	70.59	200.14	9,437.8	-391.0	-672.1	434.2	12.00	11.96	-1.11

ConocoPhillips

Survey Report

Company:	DELAWARE BASIN WEST	**Local Co-ordinate Reference:**	Well BOO RADLEY COM #706H
Project:	ATLAS PROSPECT (NM-E)	**TVD Reference:**	KB=25' @ 3059.6usft (PIONEER 84)
Site:	BOO RADLEY COM PROJECT	**MD Reference:**	KB=25' @ 3059.6usft (PIONEER 84)
Well:	BOO RADLEY COM #706H	**North Reference:**	Grid
Wellbore:	OWB	**Survey Calculation Method:**	Minimum Curvature
Design:	PWP4	**Database:**	edm

Planned Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
9,700.0	82.56	199.19	9,460.9	-482.4	-704.7	527.6	12.00	11.96	-0.95
9,764.7	90.30	198.60	9,465.0	-543.5	-725.6	589.9	12.00	11.97	-0.90
Start DLS 2.00 TFO -89.95									
9,800.0	90.30	197.89	9,464.8	-577.0	-736.7	624.1	2.00	0.00	-2.00
9,900.0	90.30	195.89	9,464.3	-672.7	-765.7	721.5	2.00	0.00	-2.00
10,000.0	90.30	193.89	9,463.7	-769.3	-791.4	819.6	2.00	0.00	-2.00
10,100.0	90.30	191.89	9,463.2	-866.8	-813.7	918.3	2.00	0.00	-2.00
10,200.0	90.30	189.89	9,462.7	-965.0	-832.6	1,017.5	2.00	0.00	-2.00
10,300.0	90.30	187.89	9,462.1	-1,063.8	-848.1	1,117.1	2.00	0.00	-2.00
10,400.0	90.30	185.89	9,461.6	-1,163.0	-860.1	1,216.9	2.00	0.00	-2.00
10,500.0	90.30	183.89	9,461.1	-1,262.7	-868.6	1,316.9	2.00	0.00	-2.00
10,600.0	90.30	181.89	9,460.6	-1,362.5	-873.7	1,416.9	2.00	0.00	-2.00
10,699.3	90.30	179.91	9,460.0	-1,461.8	-875.2	1,516.1	2.00	0.00	-2.00
Start 3700.0 hold at 10699.3 MD									
10,700.0	90.30	179.91	9,460.0	-1,462.5	-875.2	1,516.8	0.00	0.00	0.00
10,800.0	90.30	179.91	9,459.5	-1,562.5	-875.1	1,616.5	0.00	0.00	0.00
10,900.0	90.30	179.91	9,459.0	-1,662.5	-874.9	1,716.3	0.00	0.00	0.00
11,000.0	90.30	179.91	9,458.5	-1,762.5	-874.8	1,816.1	0.00	0.00	0.00
11,100.0	90.30	179.91	9,457.9	-1,862.5	-874.6	1,915.9	0.00	0.00	0.00
11,200.0	90.30	179.91	9,457.4	-1,962.5	-874.4	2,015.6	0.00	0.00	0.00
11,300.0	90.30	179.91	9,456.9	-2,062.5	-874.3	2,115.4	0.00	0.00	0.00
11,400.0	90.30	179.91	9,456.4	-2,162.5	-874.1	2,215.2	0.00	0.00	0.00
11,500.0	90.30	179.91	9,455.8	-2,262.5	-874.0	2,315.0	0.00	0.00	0.00
11,600.0	90.30	179.91	9,455.3	-2,362.5	-873.8	2,414.7	0.00	0.00	0.00
11,700.0	90.30	179.91	9,454.8	-2,462.5	-873.6	2,514.5	0.00	0.00	0.00
11,800.0	90.30	179.91	9,454.3	-2,562.5	-873.5	2,614.3	0.00	0.00	0.00
11,900.0	90.30	179.91	9,453.7	-2,662.5	-873.3	2,714.0	0.00	0.00	0.00
12,000.0	90.30	179.91	9,453.2	-2,762.5	-873.2	2,813.8	0.00	0.00	0.00
12,100.0	90.30	179.91	9,452.7	-2,862.5	-873.0	2,913.6	0.00	0.00	0.00
12,200.0	90.30	179.91	9,452.2	-2,962.5	-872.8	3,013.4	0.00	0.00	0.00
12,300.0	90.30	179.91	9,451.6	-3,062.5	-872.7	3,113.1	0.00	0.00	0.00
12,400.0	90.30	179.91	9,451.1	-3,162.5	-872.5	3,212.9	0.00	0.00	0.00
12,500.0	90.30	179.91	9,450.6	-3,262.5	-872.3	3,312.7	0.00	0.00	0.00
12,600.0	90.30	179.91	9,450.1	-3,362.5	-872.2	3,412.5	0.00	0.00	0.00
12,700.0	90.30	179.91	9,449.6	-3,462.5	-872.0	3,512.2	0.00	0.00	0.00
12,800.0	90.30	179.91	9,449.0	-3,562.5	-871.9	3,612.0	0.00	0.00	0.00
12,900.0	90.30	179.91	9,448.5	-3,662.5	-871.7	3,711.8	0.00	0.00	0.00
13,000.0	90.30	179.91	9,448.0	-3,762.5	-871.5	3,811.5	0.00	0.00	0.00
13,100.0	90.30	179.91	9,447.5	-3,862.5	-871.4	3,911.3	0.00	0.00	0.00
13,200.0	90.30	179.91	9,446.9	-3,962.5	-871.2	4,011.1	0.00	0.00	0.00
13,300.0	90.30	179.91	9,446.4	-4,062.5	-871.1	4,110.9	0.00	0.00	0.00
13,400.0	90.30	179.91	9,445.9	-4,162.5	-870.9	4,210.6	0.00	0.00	0.00
13,500.0	90.30	179.91	9,445.4	-4,262.5	-870.7	4,310.4	0.00	0.00	0.00

ConocoPhillips

Survey Report

Company:	DELAWARE BASIN WEST	**Local Co-ordinate Reference:**	Well BOO RADLEY COM #706H
Project:	ATLAS PROSPECT (NM-E)	**TVD Reference:**	KB=25' @ 3059.6usft (PIONEER 84)
Site:	BOO RADLEY COM PROJECT	**MD Reference:**	KB=25' @ 3059.6usft (PIONEER 84)
Well:	BOO RADLEY COM #706H	**North Reference:**	Grid
Wellbore:	OWB	**Survey Calculation Method:**	Minimum Curvature
Design:	PWP4	**Database:**	edm

Planned Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
13,600.0	90.30	179.91	9,444.8	-4,362.5	-870.6	4,410.2	0.00	0.00	0.00
13,700.0	90.30	179.91	9,444.3	-4,462.5	-870.4	4,510.0	0.00	0.00	0.00
13,800.0	90.30	179.91	9,443.8	-4,562.5	-870.3	4,609.7	0.00	0.00	0.00
13,900.0	90.30	179.91	9,443.3	-4,662.5	-870.1	4,709.5	0.00	0.00	0.00
14,000.0	90.30	179.91	9,442.7	-4,762.5	-869.9	4,809.3	0.00	0.00	0.00
14,100.0	90.30	179.91	9,442.2	-4,862.5	-869.8	4,909.0	0.00	0.00	0.00
14,200.0	90.30	179.91	9,441.7	-4,962.5	-869.6	5,008.8	0.00	0.00	0.00
14,300.0	90.30	179.91	9,441.2	-5,062.5	-869.4	5,108.6	0.00	0.00	0.00
14,399.3	90.30	179.91	9,440.7	-5,161.8	-869.3	5,207.7	0.00	0.00	0.00
Start DLS 2.00 TFO -90.00									
14,400.0	90.30	179.89	9,440.7	-5,162.5	-869.3	5,208.4	2.00	0.00	-2.00
14,499.0	90.30	177.91	9,440.1	-5,261.4	-867.4	5,307.0	2.00	0.00	-2.00
Start 1019.2 hold at 14499.0 MD									
14,500.0	90.30	177.91	9,440.1	-5,262.4	-867.4	5,308.0	0.00	0.00	0.00
14,600.0	90.30	177.91	9,439.6	-5,362.4	-863.7	5,407.5	0.00	0.00	0.00
14,700.0	90.30	177.91	9,439.1	-5,462.3	-860.1	5,507.0	0.00	0.00	0.00
14,800.0	90.30	177.91	9,438.6	-5,562.2	-856.4	5,606.4	0.00	0.00	0.00
14,900.0	90.30	177.91	9,438.0	-5,662.2	-852.8	5,705.9	0.00	0.00	0.00
15,000.0	90.30	177.91	9,437.5	-5,762.1	-849.2	5,805.4	0.00	0.00	0.00
15,100.0	90.30	177.91	9,437.0	-5,862.0	-845.5	5,904.9	0.00	0.00	0.00
15,200.0	90.30	177.91	9,436.5	-5,962.0	-841.9	6,004.3	0.00	0.00	0.00
15,300.0	90.30	177.91	9,435.9	-6,061.9	-838.2	6,103.8	0.00	0.00	0.00
15,400.0	90.30	177.91	9,435.4	-6,161.8	-834.6	6,203.3	0.00	0.00	0.00
15,500.0	90.30	177.91	9,434.9	-6,261.8	-831.0	6,302.8	0.00	0.00	0.00
15,518.1	90.30	177.91	9,434.8	-6,279.9	-830.3	6,320.8	0.00	0.00	0.00
Start DLS 2.00 TFO 89.99									
15,600.0	90.30	179.55	9,434.4	-6,361.7	-828.5	6,402.4	2.00	0.00	2.00
15,700.0	90.30	181.55	9,433.8	-6,461.7	-829.5	6,502.2	2.00	0.00	2.00
15,740.4	90.30	182.36	9,433.6	-6,502.1	-830.8	6,542.6	2.00	0.00	2.00
Start 800.0 hold at 15740.4 MD									
15,800.0	90.30	182.36	9,433.3	-6,561.6	-833.3	6,602.2	0.00	0.00	0.00
15,900.0	90.30	182.36	9,432.8	-6,661.6	-837.4	6,702.1	0.00	0.00	0.00
16,000.0	90.30	182.36	9,432.3	-6,761.5	-841.5	6,802.1	0.00	0.00	0.00
16,100.0	90.30	182.36	9,431.8	-6,861.4	-845.6	6,902.1	0.00	0.00	0.00
16,200.0	90.30	182.36	9,431.2	-6,961.3	-849.8	7,002.0	0.00	0.00	0.00
16,300.0	90.30	182.36	9,430.7	-7,061.2	-853.9	7,102.0	0.00	0.00	0.00
16,400.0	90.30	182.36	9,430.2	-7,161.1	-858.0	7,202.0	0.00	0.00	0.00
16,500.0	90.30	182.36	9,429.7	-7,261.0	-862.1	7,301.9	0.00	0.00	0.00
16,540.4	90.30	182.36	9,429.4	-7,301.4	-863.8	7,342.4	0.00	0.00	0.00
Start DLS 2.00 TFO -90.13									
16,600.0	90.30	181.17	9,429.1	-7,361.0	-865.6	7,401.9	2.00	0.00	-2.00
16,663.3	90.29	179.90	9,428.8	-7,424.3	-866.2	7,465.1	2.00	0.00	-2.00
Start 5610.5 hold at 16663.3 MD									
16,700.0	90.29	179.90	9,428.6	-7,461.0	-866.1	7,501.7	0.00	0.00	0.00
16,800.0	90.29	179.90	9,428.1	-7,561.0	-866.0	7,601.5	0.00	0.00	0.00

ConocoPhillips

Survey Report

Company:	DELAWARE BASIN WEST	**Local Co-ordinate Reference:**	Well BOO RADLEY COM #706H
Project:	ATLAS PROSPECT (NM-E)	**TVD Reference:**	KB=25' @ 3059.6usft (PIONEER 84)
Site:	BOO RADLEY COM PROJECT	**MD Reference:**	KB=25' @ 3059.6usft (PIONEER 84)
Well:	BOO RADLEY COM #706H	**North Reference:**	Grid
Wellbore:	OWB	**Survey Calculation Method:**	Minimum Curvature
Design:	PWP4	**Database:**	edm

Planned Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
16,900.0	90.29	179.90	9,427.6	-7,661.0	-865.8	7,701.3	0.00	0.00	0.00
17,000.0	90.29	179.90	9,427.1	-7,761.0	-865.6	7,801.0	0.00	0.00	0.00
17,100.0	90.29	179.90	9,426.6	-7,861.0	-865.5	7,900.8	0.00	0.00	0.00
17,200.0	90.29	179.90	9,426.1	-7,961.0	-865.3	8,000.6	0.00	0.00	0.00
17,300.0	90.29	179.90	9,425.5	-8,061.0	-865.1	8,100.3	0.00	0.00	0.00
17,400.0	90.29	179.90	9,425.0	-8,161.0	-864.9	8,200.1	0.00	0.00	0.00
17,500.0	90.29	179.90	9,424.5	-8,261.0	-864.8	8,299.9	0.00	0.00	0.00
17,600.0	90.29	179.90	9,424.0	-8,361.0	-864.6	8,399.7	0.00	0.00	0.00
17,700.0	90.29	179.90	9,423.5	-8,461.0	-864.4	8,499.4	0.00	0.00	0.00
17,800.0	90.29	179.90	9,423.0	-8,561.0	-864.3	8,599.2	0.00	0.00	0.00
17,900.0	90.29	179.90	9,422.5	-8,661.0	-864.1	8,699.0	0.00	0.00	0.00
18,000.0	90.29	179.90	9,421.9	-8,761.0	-863.9	8,798.7	0.00	0.00	0.00
18,100.0	90.29	179.90	9,421.4	-8,860.9	-863.7	8,898.5	0.00	0.00	0.00
18,200.0	90.29	179.90	9,420.9	-8,960.9	-863.6	8,998.3	0.00	0.00	0.00
18,300.0	90.29	179.90	9,420.4	-9,060.9	-863.4	9,098.1	0.00	0.00	0.00
18,400.0	90.29	179.90	9,419.9	-9,160.9	-863.2	9,197.8	0.00	0.00	0.00
18,500.0	90.29	179.90	9,419.4	-9,260.9	-863.1	9,297.6	0.00	0.00	0.00
18,600.0	90.29	179.90	9,418.9	-9,360.9	-862.9	9,397.4	0.00	0.00	0.00
18,700.0	90.29	179.90	9,418.4	-9,460.9	-862.7	9,497.1	0.00	0.00	0.00
18,800.0	90.29	179.90	9,417.8	-9,560.9	-862.5	9,596.9	0.00	0.00	0.00
18,900.0	90.29	179.90	9,417.3	-9,660.9	-862.4	9,696.7	0.00	0.00	0.00
19,000.0	90.29	179.90	9,416.8	-9,760.9	-862.2	9,796.5	0.00	0.00	0.00
19,100.0	90.29	179.90	9,416.3	-9,860.9	-862.0	9,896.2	0.00	0.00	0.00
19,200.0	90.29	179.90	9,415.8	-9,960.9	-861.9	9,996.0	0.00	0.00	0.00
19,300.0	90.29	179.90	9,415.3	-10,060.9	-861.7	10,095.8	0.00	0.00	0.00
19,400.0	90.29	179.90	9,414.8	-10,160.9	-861.5	10,195.6	0.00	0.00	0.00
19,500.0	90.29	179.90	9,414.2	-10,260.9	-861.3	10,295.3	0.00	0.00	0.00
19,600.0	90.29	179.90	9,413.7	-10,360.9	-861.2	10,395.1	0.00	0.00	0.00
19,700.0	90.29	179.90	9,413.2	-10,460.9	-861.0	10,494.9	0.00	0.00	0.00
19,800.0	90.29	179.90	9,412.7	-10,560.9	-860.8	10,594.6	0.00	0.00	0.00
19,900.0	90.29	179.90	9,412.2	-10,660.9	-860.7	10,694.4	0.00	0.00	0.00
20,000.0	90.29	179.90	9,411.7	-10,760.9	-860.5	10,794.2	0.00	0.00	0.00
20,100.0	90.29	179.90	9,411.2	-10,860.9	-860.3	10,894.0	0.00	0.00	0.00
20,200.0	90.29	179.90	9,410.6	-10,960.9	-860.1	10,993.7	0.00	0.00	0.00
20,300.0	90.29	179.90	9,410.1	-11,060.9	-860.0	11,093.5	0.00	0.00	0.00
20,400.0	90.29	179.90	9,409.6	-11,160.9	-859.8	11,193.3	0.00	0.00	0.00
20,500.0	90.29	179.90	9,409.1	-11,260.9	-859.6	11,293.0	0.00	0.00	0.00
20,600.0	90.29	179.90	9,408.6	-11,360.9	-859.5	11,392.8	0.00	0.00	0.00
20,700.0	90.29	179.90	9,408.1	-11,460.9	-859.3	11,492.6	0.00	0.00	0.00
20,800.0	90.29	179.90	9,407.6	-11,560.9	-859.1	11,592.4	0.00	0.00	0.00
20,900.0	90.29	179.90	9,407.1	-11,660.9	-859.0	11,692.1	0.00	0.00	0.00
21,000.0	90.29	179.90	9,406.5	-11,760.9	-858.8	11,791.9	0.00	0.00	0.00
21,100.0	90.29	179.90	9,406.0	-11,860.9	-858.6	11,891.7	0.00	0.00	0.00

ConocoPhillips
Survey Report

Company:	DELAWARE BASIN WEST	**Local Co-ordinate Reference:**	Well BOO RADLEY COM #706H
Project:	ATLAS PROSPECT (NM-E)	**TVD Reference:**	KB=25' @ 3059.6usft (PIONEER 84)
Site:	BOO RADLEY COM PROJECT	**MD Reference:**	KB=25' @ 3059.6usft (PIONEER 84)
Well:	BOO RADLEY COM #706H	**North Reference:**	Grid
Wellbore:	OWB	**Survey Calculation Method:**	Minimum Curvature
Design:	PWP4	**Database:**	edm

Planned Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
21,200.0	90.29	179.90	9,405.5	-11,960.9	-858.4	11,991.5	0.00	0.00	0.00
21,300.0	90.29	179.90	9,405.0	-12,060.9	-858.3	12,091.2	0.00	0.00	0.00
21,400.0	90.29	179.90	9,404.5	-12,160.9	-858.1	12,191.0	0.00	0.00	0.00
21,500.0	90.29	179.90	9,404.0	-12,260.9	-857.9	12,290.8	0.00	0.00	0.00
21,600.0	90.29	179.90	9,403.5	-12,360.9	-857.8	12,390.5	0.00	0.00	0.00
21,700.0	90.29	179.90	9,402.9	-12,460.9	-857.6	12,490.3	0.00	0.00	0.00
21,800.0	90.29	179.90	9,402.4	-12,560.9	-857.4	12,590.1	0.00	0.00	0.00
21,900.0	90.29	179.90	9,401.9	-12,660.9	-857.2	12,689.9	0.00	0.00	0.00
22,000.0	90.29	179.90	9,401.4	-12,760.9	-857.1	12,789.6	0.00	0.00	0.00
22,100.0	90.29	179.90	9,400.9	-12,860.9	-856.9	12,889.4	0.00	0.00	0.00
22,200.0	90.29	179.90	9,400.4	-12,960.9	-856.7	12,989.2	0.00	0.00	0.00
22,273.8	90.29	179.90	9,400.0	-13,034.7	-856.6	13,062.8	0.00	0.00	0.00
TD at 22273.8									

Design Targets

Target Name - hit/miss target - Shape	Dip Angle (°)	Dip Dir. (°)	TVD (usft)	+N/-S (usft)	+E/-W (usft)	Northing (usft)	Easting (usft)	Latitude	Longitude
LTP (BOO RADLEY C	0.00	0.00	9,400.0	-12,904.7	-856.8	364,074.20	572,712.80	32° 0' 2.652 N	104° 5' 55.573 W
- plan misses target center by 0.7usft at 22143.8usft MD (9400.7 TVD, -12904.7 N, -856.8 E)									
- Point									
PBHL (BOO RADLEY	0.30	359.91	9,400.0	-13,034.7	-856.6	363,944.20	572,713.00	32° 0' 1.365 N	104° 5' 55.574 W
- plan hits target center									
- Rectangle (sides W100.0 H12,628.0 D20.0)									
T2 (BOO RADLEY CC	0.28	355.26	9,434.8	-6,279.9	-830.3	370,699.00	572,739.30	32° 1' 8.215 N	104° 5' 55.098 W
- plan hits target center									
- Point									
FTP (BOO RADLEY C	0.00	0.00	9,465.0	-407.1	-876.4	376,571.80	572,693.20	32° 2' 6.336 N	104° 5' 55.486 W
- plan misses target center by 187.0usft at 9688.1usft MD (9459.2 TVD, -471.3 N, -700.8 E)									
- Circle (radius 50.0)									

Plan Annotations

Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates +N/-S (usft)	Local Coordinates +E/-W (usft)	Comment
2500	2500	0	0	Start Build 2.00
2746	2745	-2	-10	Start 6286.4 hold at 2745.8 MD
9032	9009	-100	-540	Start DLS 12.00 TFO -60.98
9765	9465	-544	-726	Start DLS 2.00 TFO -89.95
10,699	9460	-1462	-875	Start 3700.0 hold at 10699.3 MD
14,399	9441	-5162	-869	Start DLS 2.00 TFO -90.00
14,499	9440	-5261	-867	Start 1019.2 hold at 14499.0 MD
15,518	9435	-6280	-830	Start DLS 2.00 TFO 89.99
15,740	9434	-6502	-831	Start 800.0 hold at 15740.4 MD
16,540	9429	-7301	-864	Start DLS 2.00 TFO -90.13
16,663	9429	-7424	-866	Start 5610.5 hold at 16663.3 MD
22,274	9400	-13,035	-857	TD at 22273.8

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Survey Report

Company:	DELAWARE BASIN WEST	**Local Co-ordinate Reference:**	Well BOO RADLEY COM #706H
Project:	ATLAS PROSPECT (NM-E)	**TVD Reference:**	KB=25' @ 3059.6usft (PIONEER 84)
Site:	BOO RADLEY COM PROJECT	**MD Reference:**	KB=25' @ 3059.6usft (PIONEER 84)
Well:	BOO RADLEY COM #706H	**North Reference:**	Grid
Wellbore:	OWB	**Survey Calculation Method:**	Minimum Curvature
Design:	PWP4	**Database:**	edm

Checked By: _____ Approved By: _____ Date: _____

DELAWARE BASIN WEST

ATLAS PROSPECT (NM-E)
BOO RADLEY COM PROJECT
BOO RADLEY COM #706H

OWB
PWP4

Anticollision Report

08 April, 2021

ConocoPhillips

ConocoPhillips
Anticollision Report

Company:	DELAWARE BASIN WEST	**Local Co-ordinate Reference:**	Well BOO RADLEY COM #706H
Project:	ATLAS PROSPECT (NM-E)	**TVD Reference:**	KB=25' @ 3059.6usft (PIONEER 84)
Reference Site:	BOO RADLEY COM PROJECT	**MD Reference:**	KB=25' @ 3059.6usft (PIONEER 84)
Site Error:	3.0 usft	**North Reference:**	Grid
Reference Well:	BOO RADLEY COM #706H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	3.0 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	OWB	**Database:**	edm
Reference Design:	PWP4	**Offset TVD Reference:**	Offset Datum

Reference PWP4

Filter type:	NO GLOBAL FILTER: Using user defined selection & filtering criteria		
Interpolation Method:	Stations	**Error Model:**	ISCWSA
Depth Range:	Unlimited	**Scan Method:**	Closest Approach 3D
Results Limited by:	Maximum ellipse separation of 2,000.0 usft	**Error Surface:**	Pedal Curve
Warning Levels Evaluated at:	2.00 **Sigma**	**Casing Method:**	Not applied

Survey Tool Program **Date** 4/8/2021

From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description
0.0	9,032.0	PWP4 (OWB)	Standard Keeper 104	Standard Wireline Keeper ver 1.0.4
9,032.0	22,273.6	PWP4 (OWB)	MWD+IFR1+FDIR	OWSG MWD + IFR1 + FDIR Correction

Summary

Site Name / Offset Well - Wellbore - Design	Reference Measured Depth (usft)	Offset Measured Depth (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Separation Factor	Warning
BOO RADLEY COM PROJECT						
BOO RADLEY COM #704H - OWB - PWP4	2,500.0	2,499.5	60.1	47.4	4.738	CC, ES, SF
BOO RADLEY COM #705H - OWB - PWP4	2,500.0	2,499.8	30.1	23.2	4.364	CC, ES
BOO RADLEY COM #705H - OWB - PWP4	22,273.8	22,045.7	880.9	658.7	3.964	SF
SKEEN 21 DM STATE 1H - OWB - AWP	7,446.1	7,400.5	717.0	684.0	21.744	CC, ES
SKEEN 21 DM STATE 1H - OWB - AWP	14,700.0	12,525.0	1,504.7	1,419.4	17.623	SF
HONEY GRAHAM STATE PROJECT (ATLAS 2628)						
GRAHAM CRACKER 16 STATE #1H - OWB - ACTUAL \	8,033.4	12,477.0	226.6	136.0	2.502	CC, ES, SF
GRAHAM CRACKER 16 STATE #9H - OWB - ACTUAL \	9,175.0	13,611.0	366.5	279.6	4.216	SF
GRAHAM CRACKER 16 STATE #9H - OWB - ACTUAL \	9,200.0	13,611.0	364.7	278.3	4.222	ES
GRAHAM CRACKER 16 STATE #9H - OWB - ACTUAL \	9,217.9	13,611.0	364.3	278.5	4.245	CC
GRAHAM NASH STATE COM #1H - OWB - AWP	15,590.4	9,382.8	260.0	15.7	1.064	Shut in Produces, CC, ES
GRAHAM NASH STATE COM #1H - ST01 - ST01-MWD						Out of range
MYOX 4 28 & 16 ST COM PROJECT						
MYOX 4 16 ST COM #705H - OWB - PWP3	9,288.3	22,724.0	612.3	485.4	4.825	CC, ES
MYOX 4 16 ST COM #705H - OWB - PWP3	9,300.0	22,729.9	612.4	485.4	4.822	SF

Offset Design BOO RADLEY COM PROJECT - BOO RADLEY COM #704H - OWB - PWP4 — **Offset Site Error:** 3.0 usft

Survey Program: 0-MWD+IFR1+FDIR — **Offset Well Error:** 3.0 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
0.0	0.0	0.0	0.0	3.0	3.0	90.19	-0.2	60.1	60.1				
100.0	100.0	99.5	99.5	3.0	3.0	90.19	-0.2	60.1	60.1	54.1	6.00	10.012	
200.0	200.0	199.5	199.5	3.0	3.0	90.19	-0.2	60.1	60.1	54.1	6.04	9.948	
300.0	300.0	299.5	299.5	3.0	3.1	90.19	-0.2	60.1	60.1	54.0	6.12	9.816	
400.0	400.0	399.5	399.5	3.0	3.2	90.19	-0.2	60.1	60.1	53.9	6.24	9.626	
500.0	500.0	499.5	499.5	3.1	3.4	90.19	-0.2	60.1	60.1	53.7	6.40	9.391	
600.0	600.0	599.5	599.5	3.1	3.6	90.19	-0.2	60.1	60.1	53.5	6.59	9.123	
700.0	700.0	699.5	699.5	3.1	3.8	90.19	-0.2	60.1	60.1	53.3	6.80	8.834	
800.0	800.0	799.5	799.5	3.2	4.0	90.19	-0.2	60.1	60.1	53.1	7.04	8.535	
900.0	900.0	899.5	899.5	3.2	4.2	90.19	-0.2	60.1	60.1	52.8	7.30	8.234	
1,000.0	1,000.0	999.5	999.5	3.2	4.5	90.19	-0.2	60.1	60.1	52.5	7.57	7.935	

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

ConocoPhillips

Anticollision Report

Company:	DELAWARE BASIN WEST	**Local Co-ordinate Reference:**	Well BOO RADLEY COM #706H
Project:	ATLAS PROSPECT (NM-E)	**TVD Reference:**	KB=25' @ 3059.6usft (PIONEER 84)
Reference Site:	BOO RADLEY COM PROJECT	**MD Reference:**	KB=25' @ 3059.6usft (PIONEER 84)
Site Error:	3.0 usft	**North Reference:**	Grid
Reference Well:	BOO RADLEY COM #706H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	3.0 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	OWB	**Database:**	edm
Reference Design:	PWP4	**Offset TVD Reference:**	Offset Datum

Offset Design BOO RADLEY COM PROJECT - BOO RADLEY COM #704H - OWB - PWP4 — **Offset Site Error:** 3.0 usft

Survey Program: 0-MWD+IFR1+FDIR — **Offset Well Error:** 3.0 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
1,100.0	1,100.0	1,099.5	1,099.5	3.3	4.8	90.19	-0.2	60.1	60.1	52.2	7.86	7.643	
1,200.0	1,200.0	1,199.5	1,199.5	3.4	5.1	90.19	-0.2	60.1	60.1	51.9	8.16	7.361	
1,300.0	1,300.0	1,299.5	1,299.5	3.4	5.4	90.19	-0.2	60.1	60.1	51.6	8.48	7.091	
1,400.0	1,400.0	1,399.5	1,399.5	3.5	5.7	90.19	-0.2	60.1	60.1	51.3	8.80	6.833	
1,500.0	1,500.0	1,499.5	1,499.5	3.5	6.0	90.19	-0.2	60.1	60.1	51.0	9.12	6.587	
1,600.0	1,600.0	1,599.5	1,599.5	3.6	6.3	90.19	-0.2	60.1	60.1	50.6	9.46	6.353	
1,700.0	1,700.0	1,699.5	1,699.5	3.7	6.6	90.19	-0.2	60.1	60.1	50.3	9.80	6.132	
1,800.0	1,800.0	1,799.5	1,799.5	3.8	6.9	90.19	-0.2	60.1	60.1	50.0	10.15	5.923	
1,900.0	1,900.0	1,899.5	1,899.5	3.9	7.2	90.19	-0.2	60.1	60.1	49.6	10.50	5.724	
2,000.0	2,000.0	1,999.5	1,999.5	3.9	7.6	90.19	-0.2	60.1	60.1	49.2	10.85	5.537	
2,100.0	2,100.0	2,099.5	2,099.5	4.0	7.9	90.19	-0.2	60.1	60.1	48.9	11.21	5.359	
2,200.0	2,200.0	2,199.5	2,199.5	4.1	8.2	90.19	-0.2	60.1	60.1	48.5	11.58	5.191	
2,300.0	2,300.0	2,299.5	2,299.5	4.2	8.6	90.19	-0.2	60.1	60.1	48.2	11.94	5.032	
2,400.0	2,400.0	2,399.5	2,399.5	4.3	8.9	90.19	-0.2	60.1	60.1	47.8	12.31	4.881	
2,500.0	2,500.0	2,499.5	2,499.5	4.4	9.2	90.19	-0.2	60.1	60.1	47.4	12.69	4.738	CC, ES, SF
2,600.0	2,600.0	2,597.5	2,597.5	4.5	9.6	-169.06	-0.8	61.6	63.4	50.4	13.04	4.863	
2,700.0	2,699.8	2,694.8	2,694.7	4.5	9.9	-168.42	-2.6	66.3	73.3	59.9	13.38	5.480	
2,745.8	2,745.5	2,739.0	2,738.7	4.5	10.0	-168.06	-3.8	69.4	80.0	66.5	13.53	5.915	
2,800.0	2,799.5	2,792.2	2,791.7	4.5	10.2	-167.67	-5.4	73.7	89.0	75.3	13.72	6.483	
2,900.0	2,899.1	2,890.8	2,889.9	4.5	10.5	-167.11	-8.5	81.7	105.5	91.4	14.10	7.487	
3,000.0	2,998.8	2,989.4	2,988.2	4.6	10.8	-166.70	-11.5	89.8	122.1	107.6	14.48	8.435	
3,100.0	3,098.4	3,088.0	3,086.4	4.6	11.2	-166.39	-14.6	97.8	138.7	123.8	14.86	9.331	
3,200.0	3,198.0	3,186.6	3,184.6	4.6	11.5	-166.14	-17.7	105.8	155.2	140.0	15.25	10.179	
3,300.0	3,297.7	3,285.2	3,282.9	4.7	11.8	-165.95	-20.8	113.9	171.8	156.2	15.65	10.981	
3,400.0	3,397.3	3,383.8	3,381.1	4.7	12.1	-165.78	-23.8	121.9	188.4	172.3	16.05	11.739	
3,500.0	3,496.9	3,482.5	3,479.4	4.8	12.5	-165.65	-26.9	129.9	205.0	188.5	16.45	12.458	
3,600.0	3,596.6	3,581.1	3,577.6	4.8	12.8	-165.53	-30.0	137.9	221.5	204.7	16.86	13.139	
3,700.0	3,696.2	3,679.7	3,675.8	4.9	13.1	-165.43	-33.0	146.0	238.1	220.8	17.27	13.784	
3,800.0	3,795.8	3,778.3	3,774.1	4.9	13.5	-165.34	-36.1	154.0	254.7	237.0	17.69	14.397	
3,900.0	3,895.5	3,876.9	3,872.3	5.0	13.8	-165.27	-39.2	162.0	271.3	253.2	18.11	14.978	
4,000.0	3,995.1	3,975.5	3,970.6	5.0	14.2	-165.20	-42.2	170.1	287.8	269.3	18.53	15.530	
4,100.0	4,094.7	4,074.2	4,068.8	5.1	14.5	-165.14	-45.3	178.1	304.4	285.5	18.96	16.056	
4,200.0	4,194.4	4,172.8	4,167.0	5.2	14.8	-165.09	-48.4	186.1	321.0	301.6	19.39	16.555	
4,300.0	4,294.0	4,271.4	4,265.3	5.2	15.2	-165.04	-51.5	194.1	337.6	317.8	19.82	17.031	
4,400.0	4,393.6	4,370.0	4,363.5	5.3	15.5	-164.99	-54.5	202.2	354.2	333.9	20.26	17.484	
4,500.0	4,493.2	4,468.6	4,461.8	5.4	15.9	-164.95	-57.6	210.2	370.7	350.0	20.69	17.916	
4,600.0	4,592.9	4,567.2	4,560.0	5.5	16.2	-164.92	-60.7	218.2	387.3	366.2	21.13	18.328	
4,700.0	4,692.5	4,665.8	4,658.2	5.6	16.6	-164.88	-63.7	226.3	403.9	382.3	21.57	18.721	
4,800.0	4,792.1	4,764.5	4,756.5	5.6	16.9	-164.85	-66.8	234.3	420.5	398.5	22.02	19.097	
4,900.0	4,891.8	4,863.1	4,854.7	5.7	17.2	-164.82	-69.9	242.3	437.1	414.6	22.46	19.457	
5,000.0	4,991.4	4,961.7	4,953.0	5.8	17.6	-164.80	-73.0	250.3	453.6	430.7	22.91	19.801	
5,100.0	5,091.0	5,060.3	5,051.2	5.9	17.9	-164.77	-76.0	258.4	470.2	446.9	23.36	20.130	
5,200.0	5,190.7	5,158.9	5,149.4	6.0	18.3	-164.75	-79.1	266.4	486.8	463.0	23.81	20.445	
5,300.0	5,290.3	5,257.5	5,247.7	6.1	18.6	-164.73	-82.2	274.4	503.4	479.1	24.26	20.748	
5,400.0	5,389.9	5,356.2	5,345.9	6.2	19.0	-164.71	-85.2	282.5	520.0	495.2	24.72	21.038	
5,500.0	5,489.6	5,454.8	5,444.2	6.3	19.3	-164.69	-88.3	290.5	536.5	511.4	25.17	21.316	
5,600.0	5,589.2	5,553.4	5,542.4	6.3	19.7	-164.67	-91.4	298.5	553.1	527.5	25.63	21.583	
5,700.0	5,688.8	5,652.0	5,640.6	6.4	20.0	-164.65	-94.4	306.5	569.7	543.6	26.09	21.840	
5,800.0	5,788.5	5,750.6	5,738.9	6.5	20.4	-164.64	-97.5	314.6	586.3	559.7	26.54	22.087	
5,900.0	5,888.1	5,849.2	5,837.1	6.6	20.7	-164.62	-100.6	322.6	602.9	575.9	27.00	22.325	
6,000.0	5,987.7	5,947.9	5,935.4	6.7	21.1	-164.61	-103.7	330.6	619.4	592.0	27.47	22.554	
6,100.0	6,087.4	6,046.5	6,033.6	6.8	21.4	-164.60	-106.7	338.7	636.0	608.1	27.93	22.774	

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

ConocoPhillips

Anticollision Report

Company:	DELAWARE BASIN WEST	**Local Co-ordinate Reference:**	Well BOO RADLEY COM #706H
Project:	ATLAS PROSPECT (NM-E)	**TVD Reference:**	KB=25' @ 3059.6usft (PIONEER 84)
Reference Site:	BOO RADLEY COM PROJECT	**MD Reference:**	KB=25' @ 3059.6usft (PIONEER 84)
Site Error:	3.0 usft	**North Reference:**	Grid
Reference Well:	BOO RADLEY COM #706H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	3.0 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	OWB	**Database:**	edm
Reference Design:	PWP4	**Offset TVD Reference:**	Offset Datum

Offset Design BOO RADLEY COM PROJECT - BOO RADLEY COM #704H - OWB - PWP4 — **Offset Site Error:** 3.0 usft

Survey Program: 0-MWD+IFR1+FDIR — **Offset Well Error:** 3.0 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
6,200.0	6,187.0	6,145.1	6,131.8	6.9	21.8	-164.58	-109.8	346.7	652.6	624.2	28.39	22.986	
6,300.0	6,286.6	6,243.7	6,230.1	7.0	22.1	-164.57	-112.9	354.7	669.2	640.3	28.86	23.191	
6,400.0	6,386.3	6,342.3	6,328.3	7.1	22.5	-164.56	-115.9	362.7	685.8	656.4	29.32	23.389	
6,500.0	6,485.9	6,440.9	6,426.6	7.3	22.8	-164.55	-119.0	370.8	702.4	672.6	29.79	23.579	
6,600.0	6,585.5	6,539.5	6,524.8	7.4	23.2	-164.54	-122.1	378.8	718.9	688.7	30.25	23.763	
6,700.0	6,685.2	6,638.2	6,623.0	7.5	23.5	-164.53	-125.1	386.8	735.5	704.8	30.72	23.941	
6,800.0	6,784.8	6,736.8	6,721.3	7.6	23.9	-164.52	-128.2	394.9	752.1	720.9	31.19	24.113	
6,900.0	6,884.4	6,835.4	6,819.5	7.7	24.2	-164.51	-131.3	402.9	768.7	737.0	31.66	24.279	
7,000.0	6,984.1	6,934.0	6,917.8	7.8	24.6	-164.50	-134.4	410.9	785.3	753.1	32.13	24.440	
7,100.0	7,083.7	7,032.6	7,016.0	7.9	25.0	-164.49	-137.4	418.9	801.8	769.2	32.60	24.595	
7,200.0	7,183.3	7,131.2	7,114.2	8.0	25.3	-164.48	-140.5	427.0	818.4	785.3	33.07	24.746	
7,300.0	7,282.9	7,229.9	7,212.5	8.1	25.7	-164.48	-143.6	435.0	835.0	801.5	33.55	24.892	
7,400.0	7,382.6	7,328.5	7,310.7	8.2	26.0	-164.47	-146.6	443.0	851.6	817.6	34.02	25.033	
7,500.0	7,482.2	7,427.1	7,409.0	8.3	26.4	-164.46	-149.7	451.1	868.2	833.7	34.49	25.170	
7,600.0	7,581.8	7,525.7	7,507.2	8.4	26.7	-164.46	-152.8	459.1	884.7	849.8	34.97	25.303	
7,700.0	7,681.5	7,624.3	7,605.5	8.6	27.1	-164.45	-155.8	467.1	901.3	865.9	35.44	25.431	
7,800.0	7,781.1	7,722.9	7,703.7	8.7	27.4	-164.44	-158.9	475.1	917.9	882.0	35.92	25.556	
7,900.0	7,880.7	7,821.6	7,801.9	8.8	27.8	-164.44	-162.0	483.2	934.5	898.1	36.39	25.677	
8,000.0	7,980.4	7,920.2	7,900.2	8.9	28.1	-164.43	-165.1	491.2	951.1	914.2	36.87	25.795	
8,100.0	8,080.0	8,018.8	7,998.4	9.0	28.5	-164.42	-168.1	499.2	967.6	930.3	37.35	25.910	
8,200.0	8,179.6	8,117.4	8,096.7	9.1	28.8	-164.42	-171.2	507.3	984.2	946.4	37.82	26.021	
8,300.0	8,279.3	8,216.0	8,194.9	9.2	29.2	-164.41	-174.3	515.3	1,000.8	962.5	38.30	26.129	
8,400.0	8,378.9	8,314.6	8,293.1	9.4	29.6	-164.41	-177.3	523.3	1,017.4	978.6	38.78	26.234	
8,500.0	8,478.5	8,413.2	8,391.4	9.5	29.9	-164.40	-180.4	531.3	1,034.0	994.7	39.26	26.336	
8,600.0	8,578.2	8,511.9	8,489.6	9.6	30.3	-164.40	-183.5	539.4	1,050.6	1,010.8	39.74	26.435	
8,700.0	8,677.8	8,610.5	8,587.9	9.7	30.6	-164.39	-186.5	547.4	1,067.1	1,026.9	40.22	26.532	
8,800.0	8,777.4	8,709.1	8,686.1	9.8	31.0	-164.39	-189.6	555.4	1,083.7	1,043.0	40.70	26.626	
8,900.0	8,877.1	8,807.7	8,784.3	10.0	31.3	-164.39	-192.7	563.5	1,100.3	1,059.1	41.18	26.717	
9,000.0	8,976.7	8,906.3	8,882.6	10.1	31.7	-164.38	-195.8	571.5	1,116.9	1,075.2	41.66	26.806	
9,032.1	9,008.7	8,938.0	8,914.1	10.1	31.8	-164.38	-196.7	574.1	1,122.2	1,080.3	41.87	26.805	
9,050.0	9,026.5	8,955.6	8,931.7	10.1	31.9	-146.60	-197.3	575.5	1,125.2	1,083.3	41.93	26.835	
9,075.0	9,051.3	8,980.2	8,956.1	10.1	32.0	-132.41	-198.1	577.5	1,129.7	1,087.7	42.03	26.883	
9,100.0	9,075.9	9,004.5	8,980.4	10.1	32.0	-124.51	-198.8	579.5	1,134.5	1,092.4	42.12	26.937	
9,125.0	9,100.3	9,028.7	9,004.5	10.1	32.1	-119.57	-199.6	581.4	1,139.6	1,097.4	42.21	26.998	
9,150.0	9,124.4	9,050.0	9,025.7	10.1	32.2	-116.15	-200.2	583.2	1,145.0	1,102.7	42.30	27.069	
9,175.0	9,148.1	9,063.2	9,038.9	10.1	32.3	-113.49	-200.8	584.3	1,150.7	1,108.4	42.37	27.158	
9,200.0	9,171.3	9,075.0	9,050.6	10.1	32.3	-111.32	-201.7	585.4	1,157.0	1,114.6	42.44	27.259	
9,225.0	9,194.1	9,087.7	9,063.1	10.2	32.3	-109.49	-202.9	586.7	1,163.8	1,121.2	42.52	27.371	
9,250.0	9,216.3	9,100.0	9,075.3	10.2	32.4	-107.85	-204.4	588.1	1,171.0	1,128.4	42.59	27.494	
9,275.0	9,237.9	9,111.6	9,086.7	10.2	32.4	-106.35	-206.0	589.4	1,178.7	1,136.0	42.66	27.628	
9,300.0	9,258.8	9,125.0	9,099.8	10.2	32.5	-104.97	-208.3	591.1	1,186.8	1,144.1	42.74	27.769	
9,325.0	9,278.9	9,134.9	9,109.4	10.2	32.5	-103.58	-210.2	592.4	1,195.3	1,152.5	42.81	27.923	
9,350.0	9,298.3	9,150.0	9,124.0	10.2	32.6	-102.35	-213.4	594.5	1,204.2	1,161.4	42.89	28.079	
9,375.0	9,316.8	9,157.7	9,131.4	10.3	32.6	-100.97	-215.3	595.6	1,213.5	1,170.6	42.95	28.252	
9,400.0	9,334.4	9,168.8	9,142.0	10.3	32.6	-99.69	-218.1	597.3	1,223.2	1,180.2	43.03	28.429	
9,425.0	9,351.1	9,175.0	9,147.9	10.3	32.7	-98.28	-219.8	598.3	1,233.2	1,190.1	43.09	28.619	
9,450.0	9,366.8	9,190.5	9,162.5	10.3	32.7	-97.13	-224.3	600.8	1,243.5	1,200.3	43.17	28.802	
9,475.0	9,381.4	9,200.0	9,171.3	10.4	32.8	-95.80	-227.3	602.4	1,254.1	1,210.8	43.24	28.999	
9,500.0	9,395.0	9,211.4	9,181.9	10.4	32.8	-94.54	-231.2	604.4	1,264.9	1,221.6	43.32	29.199	
9,525.0	9,407.4	9,225.0	9,194.3	10.5	32.8	-93.34	-236.1	606.9	1,276.0	1,232.6	43.40	29.401	
9,550.0	9,418.7	9,231.4	9,200.2	10.5	32.9	-91.91	-238.5	608.1	1,287.4	1,243.9	43.47	29.617	
9,575.0	9,428.8	9,241.1	9,208.9	10.6	32.9	-90.58	-242.3	609.9	1,298.9	1,255.4	43.54	29.833	

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

ConocoPhillips

Anticollision Report

Company:	DELAWARE BASIN WEST	**Local Co-ordinate Reference:**	Well BOO RADLEY COM #706H
Project:	ATLAS PROSPECT (NM-E)	**TVD Reference:**	KB=25' @ 3059.6usft (PIONEER 84)
Reference Site:	BOO RADLEY COM PROJECT	**MD Reference:**	KB=25' @ 3059.6usft (PIONEER 84)
Site Error:	3.0 usft	**North Reference:**	Grid
Reference Well:	BOO RADLEY COM #706H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	3.0 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	OWB	**Database:**	edm
Reference Design:	PWP4	**Offset TVD Reference:**	Offset Datum

Offset Design BOO RADLEY COM PROJECT - BOO RADLEY COM #704H - OWB - PWP4 — **Offset Site Error:** 3.0 usft

Survey Program: 0-MWD+IFR1+FDIR — **Offset Well Error:** 3.0 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
9,600.0	9,437.8	9,250.0	9,216.8	10.6	32.9	-89.22	-245.9	611.7	1,310.6	1,267.0	43.61	30.054	
9,625.0	9,445.4	9,259.8	9,225.4	10.7	33.0	-87.89	-250.1	613.6	1,322.5	1,278.8	43.68	30.276	
9,650.0	9,451.9	9,268.7	9,233.2	10.8	33.0	-86.54	-254.0	615.5	1,334.5	1,290.7	43.75	30.503	
9,675.0	9,457.1	9,275.0	9,238.7	10.8	33.0	-85.09	-256.9	616.8	1,346.6	1,302.8	43.81	30.737	
9,700.0	9,460.9	9,285.7	9,247.8	10.9	33.1	-83.82	-261.9	619.1	1,358.8	1,314.9	43.88	30.965	
9,725.0	9,463.5	9,293.8	9,254.7	11.0	33.1	-82.47	-265.9	620.9	1,371.1	1,327.1	43.94	31.201	
9,750.0	9,464.8	9,300.0	9,259.9	11.1	33.1	-81.05	-269.0	622.2	1,383.4	1,339.4	44.00	31.442	
9,764.7	9,465.0	9,305.9	9,264.8	11.1	33.1	-80.32	-272.0	623.6	1,390.7	1,346.6	44.04	31.580	
9,800.0	9,464.8	9,316.7	9,273.6	11.3	33.2	-80.84	-277.6	626.0	1,408.2	1,364.0	44.12	31.918	
9,900.0	9,464.3	9,353.0	9,302.4	11.6	33.3	-82.43	-298.0	634.7	1,458.6	1,414.2	44.39	32.858	
10,000.0	9,463.7	9,400.0	9,337.0	12.1	33.4	-84.23	-327.4	646.7	1,509.8	1,465.1	44.72	33.762	
10,100.0	9,463.2	9,461.9	9,377.5	12.6	33.6	-86.19	-370.9	663.7	1,560.8	1,515.7	45.12	34.591	
10,200.0	9,462.7	9,542.5	9,420.6	13.1	33.9	-88.14	-434.6	687.5	1,610.5	1,564.9	45.63	35.296	
10,300.0	9,462.1	9,644.5	9,457.9	13.6	34.1	-89.70	-524.0	719.1	1,657.6	1,611.3	46.27	35.825	
10,400.0	9,461.6	9,764.5	9,474.9	14.2	34.4	-90.37	-636.3	756.8	1,700.6	1,653.5	47.03	36.157	
10,500.0	9,461.1	9,989.7	9,474.0	14.8	34.9	-90.37	-852.8	818.5	1,736.2	1,687.9	48.31	35.942	
10,600.0	9,460.6	10,238.7	9,472.9	15.4	35.5	-90.37	-1,097.0	866.7	1,760.5	1,710.8	49.76	35.380	
10,699.3	9,460.0	10,495.9	9,471.7	16.0	36.3	-90.38	-1,352.7	894.0	1,772.7	1,721.4	51.27	34.576	
10,800.0	9,459.5	10,703.0	9,470.8	16.6	36.9	-90.38	-1,559.7	899.5	1,774.6	1,722.0	52.60	33.739	
10,900.0	9,459.0	10,803.0	9,470.3	17.2	37.2	-90.38	-1,659.7	899.7	1,774.6	1,721.0	53.59	33.114	
11,000.0	9,458.5	10,903.0	9,469.9	17.9	37.6	-90.38	-1,759.7	899.8	1,774.6	1,720.0	54.62	32.492	
11,100.0	9,457.9	11,003.0	9,469.4	18.6	37.9	-90.39	-1,859.7	900.0	1,774.6	1,719.0	55.67	31.875	
11,200.0	9,457.4	11,103.0	9,468.9	19.3	38.3	-90.39	-1,959.7	900.2	1,774.6	1,717.9	56.76	31.265	
11,300.0	9,456.9	11,203.0	9,468.5	20.0	38.7	-90.39	-2,059.7	900.3	1,774.6	1,716.8	57.88	30.663	
11,400.0	9,456.4	11,303.0	9,468.0	20.7	39.1	-90.39	-2,159.7	900.5	1,774.6	1,715.6	59.02	30.071	
11,500.0	9,455.8	11,403.0	9,467.6	21.5	39.5	-90.40	-2,259.7	900.6	1,774.6	1,714.5	60.18	29.489	
11,600.0	9,455.3	11,503.0	9,467.1	22.2	39.9	-90.40	-2,359.7	900.8	1,774.7	1,713.3	61.37	28.919	
11,700.0	9,454.8	11,603.0	9,466.7	23.0	40.4	-90.40	-2,459.7	901.0	1,774.7	1,712.1	62.57	28.361	
11,800.0	9,454.3	11,703.0	9,466.2	23.7	40.8	-90.40	-2,559.7	901.1	1,774.7	1,710.9	63.80	27.815	
11,900.0	9,453.7	11,803.0	9,465.8	24.5	41.3	-90.41	-2,659.7	901.3	1,774.7	1,709.6	65.05	27.282	
12,000.0	9,453.2	11,903.0	9,465.3	25.2	41.8	-90.41	-2,759.7	901.5	1,774.7	1,708.4	66.31	26.761	
12,100.0	9,452.7	12,003.0	9,464.9	26.0	42.3	-90.41	-2,859.6	901.6	1,774.7	1,707.1	67.60	26.254	
12,200.0	9,452.2	12,103.0	9,464.4	26.8	42.8	-90.41	-2,959.6	901.8	1,774.7	1,705.8	68.90	25.759	
12,300.0	9,451.6	12,203.0	9,464.0	27.6	43.3	-90.41	-3,059.6	902.0	1,774.7	1,704.5	70.21	25.277	
12,400.0	9,451.1	12,303.0	9,463.5	28.4	43.8	-90.42	-3,159.6	902.1	1,774.7	1,703.1	71.54	24.808	
12,500.0	9,450.6	12,403.0	9,463.1	29.2	44.4	-90.42	-3,259.6	902.3	1,774.7	1,701.8	72.88	24.351	
12,600.0	9,450.1	12,503.0	9,462.6	30.0	44.9	-90.42	-3,359.6	902.4	1,774.7	1,700.5	74.24	23.906	
12,700.0	9,449.6	12,603.0	9,462.2	30.8	45.5	-90.42	-3,459.6	902.6	1,774.7	1,699.1	75.60	23.473	
12,800.0	9,449.0	12,703.0	9,461.7	31.6	46.1	-90.43	-3,559.6	902.8	1,774.7	1,697.7	76.99	23.052	
12,900.0	9,448.5	12,803.0	9,461.3	32.4	46.6	-90.43	-3,659.6	902.9	1,774.7	1,696.3	78.38	22.643	
13,000.0	9,448.0	12,903.0	9,460.8	33.2	47.2	-90.43	-3,759.6	903.1	1,774.7	1,694.9	79.78	22.245	
13,100.0	9,447.5	13,003.0	9,460.4	34.0	47.8	-90.43	-3,859.6	903.3	1,774.7	1,693.5	81.19	21.858	
13,200.0	9,446.9	13,103.0	9,459.9	34.8	48.4	-90.44	-3,959.6	903.4	1,774.7	1,692.1	82.62	21.481	
13,300.0	9,446.4	13,203.0	9,459.5	35.6	49.0	-90.44	-4,059.6	903.6	1,774.7	1,690.7	84.05	21.115	
13,400.0	9,445.9	13,303.0	9,459.0	36.5	49.6	-90.44	-4,159.6	903.8	1,774.7	1,689.2	85.49	20.759	
13,500.0	9,445.4	13,403.0	9,458.6	37.3	50.3	-90.44	-4,259.6	903.9	1,774.7	1,687.8	86.94	20.412	
13,600.0	9,444.8	13,503.0	9,458.1	38.1	50.9	-90.44	-4,359.6	904.1	1,774.7	1,686.3	88.40	20.075	
13,700.0	9,444.3	13,603.0	9,457.7	38.9	51.5	-90.45	-4,459.6	904.3	1,774.7	1,684.9	89.87	19.748	
13,800.0	9,443.8	13,703.0	9,457.2	39.7	52.2	-90.45	-4,559.6	904.4	1,774.7	1,683.4	91.35	19.429	
13,900.0	9,443.3	13,803.0	9,456.8	40.6	52.8	-90.45	-4,659.6	904.6	1,774.7	1,681.9	92.83	19.118	
14,000.0	9,442.7	13,903.0	9,456.3	41.4	53.5	-90.45	-4,759.6	904.7	1,774.7	1,680.4	94.32	18.816	
14,100.0	9,442.2	14,003.0	9,455.9	42.2	54.1	-90.46	-4,859.6	904.9	1,774.7	1,678.9	95.81	18.523	

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

ConocoPhillips

Anticollision Report

Company:	DELAWARE BASIN WEST	**Local Co-ordinate Reference:**	Well BOO RADLEY COM #706H
Project:	ATLAS PROSPECT (NM-E)	**TVD Reference:**	KB=25' @ 3059.6usft (PIONEER 84)
Reference Site:	BOO RADLEY COM PROJECT	**MD Reference:**	KB=25' @ 3059.6usft (PIONEER 84)
Site Error:	3.0 usft	**North Reference:**	Grid
Reference Well:	BOO RADLEY COM #706H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	3.0 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	OWB	**Database:**	edm
Reference Design:	PWP4	**Offset TVD Reference:**	Offset Datum

Offset Design BOO RADLEY COM PROJECT - BOO RADLEY COM #704H - OWB - PWP4 — **Offset Site Error:** 3.0 usft

Survey Program: 0-MWD+IFR1+FDIR — **Offset Well Error:** 3.0 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
14,200.0	9,441.7	14,103.0	9,455.4	43.1	54.8	-90.46	-4,959.6	905.1	1,774.7	1,677.4	97.32	18.237	
14,300.0	9,441.2	14,203.0	9,455.0	43.9	55.5	-90.46	-5,059.6	905.2	1,774.7	1,675.9	98.83	17.958	
14,399.3	9,440.7	14,302.3	9,454.5	44.7	56.1	-90.46	-5,158.9	905.4	1,774.7	1,674.4	100.33	17.689	
14,499.0	9,440.1	14,402.0	9,454.1	45.5	56.8	-90.48	-5,258.6	905.6	1,773.0	1,671.2	101.85	17.409	
14,500.0	9,440.1	14,403.0	9,454.1	45.6	56.8	-90.48	-5,259.6	905.6	1,773.0	1,671.1	101.86	17.406	
14,600.0	9,439.6	14,502.9	9,453.6	46.4	57.5	-90.48	-5,359.5	905.7	1,769.5	1,666.1	103.39	17.115	
14,700.0	9,439.1	14,602.9	9,453.2	47.2	58.2	-90.48	-5,459.5	905.9	1,766.0	1,661.1	104.92	16.832	
14,800.0	9,438.6	14,702.8	9,452.7	48.1	58.9	-90.49	-5,559.4	906.1	1,762.6	1,656.1	106.46	16.556	
14,900.0	9,438.0	14,802.7	9,452.2	48.9	59.6	-90.49	-5,659.4	906.2	1,759.1	1,651.1	108.00	16.288	
15,000.0	9,437.5	14,902.7	9,451.8	49.7	60.3	-90.49	-5,759.3	906.4	1,755.6	1,646.1	109.55	16.026	
15,100.0	9,437.0	15,002.6	9,451.3	50.6	61.0	-90.50	-5,859.2	906.5	1,752.1	1,641.0	111.10	15.771	
15,200.0	9,436.5	15,102.6	9,450.9	51.4	61.7	-90.50	-5,959.2	906.7	1,748.7	1,636.0	112.65	15.522	
15,300.0	9,435.9	15,202.5	9,450.4	52.2	62.4	-90.50	-6,059.1	906.9	1,745.2	1,631.0	114.21	15.280	
15,400.0	9,435.4	15,302.4	9,450.0	53.1	63.1	-90.51	-6,159.0	907.0	1,741.7	1,625.9	115.78	15.043	
15,500.0	9,434.9	15,402.4	9,449.5	53.9	63.9	-90.51	-6,259.0	907.2	1,738.2	1,620.9	117.35	14.813	
15,518.1	9,434.8	15,420.5	9,449.5	54.1	64.0	-90.51	-6,277.1	907.2	1,737.6	1,620.0	117.63	14.771	
15,600.0	9,434.4	15,502.3	9,449.1	54.8	64.6	-90.50	-6,359.0	907.4	1,735.9	1,617.0	118.92	14.598	
15,617.7	9,434.3	15,520.1	9,449.0	54.9	64.7	-90.50	-6,376.7	907.4	1,735.9	1,616.7	119.20	14.563	
15,700.0	9,433.8	15,602.3	9,448.6	55.6	65.3	-90.50	-6,458.9	907.5	1,737.1	1,616.6	120.49	14.416	
15,740.4	9,433.6	15,642.7	9,448.5	56.0	65.6	-90.49	-6,499.3	907.6	1,738.5	1,617.4	121.13	14.352	
15,800.0	9,433.3	15,702.2	9,448.2	56.5	66.0	-90.49	-6,558.9	907.7	1,741.1	1,619.0	122.07	14.263	
15,900.0	9,432.8	15,802.2	9,447.7	57.3	66.8	-90.49	-6,658.8	907.9	1,745.3	1,621.7	123.65	14.115	
16,000.0	9,432.3	15,902.1	9,447.3	58.1	67.5	-90.50	-6,758.7	908.0	1,749.6	1,624.4	125.23	13.971	
16,100.0	9,431.8	16,002.0	9,446.8	59.0	68.3	-90.50	-6,858.6	908.2	1,753.9	1,627.1	126.82	13.830	
16,200.0	9,431.2	16,101.9	9,446.4	59.8	69.0	-90.50	-6,958.5	908.4	1,758.2	1,629.8	128.40	13.692	
16,300.0	9,430.7	16,201.8	9,445.9	60.7	69.7	-90.50	-7,058.4	908.5	1,762.5	1,632.5	130.00	13.558	
16,400.0	9,430.2	16,301.7	9,445.5	61.5	70.5	-90.50	-7,158.3	908.7	1,766.7	1,635.2	131.59	13.426	
16,500.0	9,429.7	16,401.6	9,445.0	62.4	71.2	-90.50	-7,258.2	908.8	1,771.0	1,637.8	133.19	13.297	
16,540.4	9,429.4	16,442.0	9,444.9	62.7	71.5	-90.50	-7,298.6	908.9	1,772.8	1,638.9	133.83	13.246	
16,600.0	9,429.1	16,501.5	9,444.6	63.2	72.0	-90.51	-7,358.1	909.0	1,774.7	1,639.9	134.79	13.167	
16,663.3	9,428.8	16,564.9	9,444.3	63.7	72.5	-90.52	-7,421.5	909.1	1,775.4	1,639.6	135.80	13.073	
16,700.0	9,428.6	16,601.5	9,444.1	64.0	72.8	-90.52	-7,458.1	909.2	1,775.4	1,639.0	136.39	13.017	
16,800.0	9,428.1	16,701.5	9,443.7	64.9	73.5	-90.52	-7,558.1	909.3	1,775.4	1,637.4	138.00	12.865	
16,900.0	9,427.6	16,801.5	9,443.2	65.7	74.3	-90.52	-7,658.1	909.5	1,775.4	1,635.8	139.61	12.716	
17,000.0	9,427.1	16,901.5	9,442.8	66.6	75.0	-90.52	-7,758.1	909.7	1,775.4	1,634.1	141.23	12.571	
17,100.0	9,426.6	17,001.5	9,442.3	67.4	75.8	-90.52	-7,858.1	909.8	1,775.4	1,632.5	142.84	12.429	
17,200.0	9,426.1	17,101.5	9,441.9	68.3	76.6	-90.53	-7,958.1	910.0	1,775.3	1,630.9	144.46	12.290	
17,300.0	9,425.5	17,201.5	9,441.4	69.1	77.3	-90.53	-8,058.1	910.2	1,775.3	1,629.3	146.08	12.153	
17,400.0	9,425.0	17,301.5	9,441.0	70.0	78.1	-90.53	-8,158.1	910.3	1,775.3	1,627.6	147.70	12.020	
17,500.0	9,424.5	17,401.5	9,440.5	70.8	78.9	-90.53	-8,258.1	910.5	1,775.3	1,626.0	149.33	11.889	
17,600.0	9,424.0	17,501.5	9,440.1	71.7	79.6	-90.53	-8,358.1	910.6	1,775.3	1,624.4	150.95	11.761	
17,700.0	9,423.5	17,601.5	9,439.6	72.5	80.4	-90.54	-8,458.1	910.8	1,775.3	1,622.7	152.58	11.635	
17,800.0	9,423.0	17,701.5	9,439.2	73.4	81.2	-90.54	-8,558.1	911.0	1,775.3	1,621.1	154.21	11.512	
17,900.0	9,422.5	17,801.5	9,438.7	74.2	82.0	-90.54	-8,658.1	911.1	1,775.3	1,619.5	155.84	11.392	
18,000.0	9,421.9	17,901.5	9,438.3	75.1	82.8	-90.54	-8,758.1	911.3	1,775.3	1,617.8	157.47	11.274	
18,100.0	9,421.4	18,001.5	9,437.8	75.9	83.5	-90.54	-8,858.1	911.5	1,775.3	1,616.2	159.11	11.158	
18,200.0	9,420.9	18,101.5	9,437.4	76.8	84.3	-90.55	-8,958.1	911.6	1,775.3	1,614.5	160.75	11.044	
18,300.0	9,420.4	18,201.5	9,436.9	77.6	85.1	-90.55	-9,058.1	911.8	1,775.3	1,612.9	162.38	10.933	
18,400.0	9,419.9	18,301.5	9,436.5	78.5	85.9	-90.55	-9,158.1	912.0	1,775.3	1,611.2	164.02	10.823	
18,500.0	9,419.4	18,401.5	9,436.0	79.3	86.7	-90.55	-9,258.1	912.1	1,775.3	1,609.6	165.67	10.716	
18,600.0	9,418.9	18,501.5	9,435.6	80.2	87.5	-90.55	-9,358.1	912.3	1,775.3	1,607.9	167.31	10.611	
18,700.0	9,418.4	18,601.5	9,435.1	81.0	88.3	-90.56	-9,458.1	912.4	1,775.3	1,606.3	168.95	10.507	

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

ConocoPhillips
Anticollision Report

Company:	DELAWARE BASIN WEST	**Local Co-ordinate Reference:**	Well BOO RADLEY COM #706H
Project:	ATLAS PROSPECT (NM-E)	**TVD Reference:**	KB=25' @ 3059.6usft (PIONEER 84)
Reference Site:	BOO RADLEY COM PROJECT	**MD Reference:**	KB=25' @ 3059.6usft (PIONEER 84)
Site Error:	3.0 usft	**North Reference:**	Grid
Reference Well:	BOO RADLEY COM #706H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	3.0 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	OWB	**Database:**	edm
Reference Design:	PWP4	**Offset TVD Reference:**	Offset Datum

Offset Design BOO RADLEY COM PROJECT - BOO RADLEY COM #704H - OWB - PWP4 — **Offset Site Error:** 3.0 usft

Survey Program: 0-MWD+IFR1+FDIR — **Offset Well Error:** 3.0 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
18,800.0	9,417.8	18,701.5	9,434.7	81.9	89.1	-90.56	-9,558.1	912.6	1,775.2	1,604.6	170.60	10.406	
18,900.0	9,417.3	18,801.5	9,434.2	82.7	89.8	-90.56	-9,658.1	912.8	1,775.2	1,603.0	172.25	10.306	
19,000.0	9,416.8	18,901.5	9,433.7	83.6	90.6	-90.56	-9,758.1	912.9	1,775.2	1,601.3	173.89	10.209	
19,100.0	9,416.3	19,001.5	9,433.3	84.4	91.4	-90.56	-9,858.1	913.1	1,775.2	1,599.7	175.54	10.113	
19,200.0	9,415.8	19,101.5	9,432.8	85.3	92.2	-90.57	-9,958.1	913.3	1,775.2	1,598.0	177.20	10.018	
19,300.0	9,415.3	19,201.5	9,432.4	86.1	93.0	-90.57	-10,058.1	913.4	1,775.2	1,596.4	178.85	9.926	
19,400.0	9,414.8	19,301.5	9,431.9	87.0	93.8	-90.57	-10,158.1	913.6	1,775.2	1,594.7	180.50	9.835	
19,500.0	9,414.2	19,401.5	9,431.5	87.9	94.6	-90.57	-10,258.1	913.8	1,775.2	1,593.0	182.16	9.746	
19,600.0	9,413.7	19,501.5	9,431.0	88.7	95.4	-90.57	-10,358.1	913.9	1,775.2	1,591.4	183.81	9.658	
19,700.0	9,413.2	19,601.5	9,430.6	89.6	96.2	-90.58	-10,458.1	914.1	1,775.2	1,589.7	185.47	9.571	
19,800.0	9,412.7	19,701.5	9,430.1	90.4	97.0	-90.58	-10,558.1	914.3	1,775.2	1,588.1	187.13	9.487	
19,900.0	9,412.2	19,801.5	9,429.7	91.3	97.8	-90.58	-10,658.1	914.4	1,775.2	1,586.4	188.78	9.403	
20,000.0	9,411.7	19,901.5	9,429.2	92.1	98.6	-90.58	-10,758.1	914.6	1,775.2	1,584.7	190.44	9.321	
20,100.0	9,411.2	20,001.5	9,428.8	93.0	99.4	-90.58	-10,858.1	914.7	1,775.2	1,583.1	192.10	9.241	
20,200.0	9,410.6	20,101.5	9,428.3	93.8	100.3	-90.59	-10,958.1	914.9	1,775.2	1,581.4	193.77	9.161	
20,300.0	9,410.1	20,201.5	9,427.9	94.7	101.1	-90.59	-11,058.1	915.1	1,775.1	1,579.7	195.43	9.083	
20,400.0	9,409.6	20,301.5	9,427.4	95.5	101.9	-90.59	-11,158.1	915.2	1,775.1	1,578.0	197.09	9.007	
20,500.0	9,409.1	20,401.5	9,427.0	96.4	102.7	-90.59	-11,258.1	915.4	1,775.1	1,576.4	198.76	8.931	
20,600.0	9,408.6	20,501.5	9,426.5	97.2	103.5	-90.59	-11,358.1	915.6	1,775.1	1,574.7	200.42	8.857	
20,700.0	9,408.1	20,601.5	9,426.1	98.1	104.3	-90.60	-11,458.1	915.7	1,775.1	1,573.0	202.09	8.784	
20,800.0	9,407.6	20,701.5	9,425.6	98.9	105.1	-90.60	-11,558.1	915.9	1,775.1	1,571.4	203.76	8.712	
20,900.0	9,407.1	20,801.5	9,425.2	99.8	105.9	-90.60	-11,658.1	916.1	1,775.1	1,569.7	205.42	8.641	
21,000.0	9,406.5	20,901.5	9,424.7	100.7	106.7	-90.60	-11,758.1	916.2	1,775.1	1,568.0	207.09	8.572	
21,100.0	9,406.0	21,001.5	9,424.3	101.5	107.5	-90.61	-11,858.1	916.4	1,775.1	1,566.3	208.76	8.503	
21,200.0	9,405.5	21,101.5	9,423.8	102.4	108.4	-90.61	-11,958.1	916.5	1,775.1	1,564.7	210.43	8.435	
21,300.0	9,405.0	21,201.5	9,423.4	103.2	109.2	-90.61	-12,058.1	916.7	1,775.1	1,563.0	212.10	8.369	
21,400.0	9,404.5	21,301.5	9,422.9	104.1	110.0	-90.61	-12,158.1	916.9	1,775.1	1,561.3	213.77	8.303	
21,500.0	9,404.0	21,401.5	9,422.5	104.9	110.8	-90.61	-12,258.1	917.0	1,775.1	1,559.6	215.45	8.239	
21,600.0	9,403.5	21,501.5	9,422.0	105.8	111.6	-90.62	-12,358.1	917.2	1,775.1	1,557.9	217.12	8.175	
21,700.0	9,402.9	21,601.5	9,421.6	106.6	112.4	-90.62	-12,458.1	917.4	1,775.1	1,556.3	218.79	8.113	
21,800.0	9,402.4	21,701.5	9,421.1	107.5	113.3	-90.62	-12,558.1	917.5	1,775.0	1,554.6	220.47	8.051	
21,900.0	9,401.9	21,801.5	9,420.7	108.3	114.1	-90.62	-12,658.1	917.7	1,775.0	1,552.9	222.14	7.991	
22,000.0	9,401.4	21,901.5	9,420.2	109.2	114.9	-90.62	-12,758.1	917.9	1,775.0	1,551.2	223.82	7.931	
22,100.0	9,400.9	22,001.5	9,419.8	110.1	115.7	-90.63	-12,858.1	918.0	1,775.0	1,549.5	225.50	7.872	
22,200.0	9,400.4	22,101.5	9,419.3	110.9	116.5	-90.63	-12,958.1	918.2	1,775.0	1,547.9	227.17	7.814	
22,265.5	9,400.0	22,167.1	9,419.0	111.5	116.9	-90.63	-13,023.6	918.3	1,775.0	1,546.9	228.12	7.781	
22,273.8	9,400.0	22,169.4	9,419.0	111.5	117.0	-90.63	-13,025.9	918.3	1,775.0	1,546.8	228.21	7.778	

ConocoPhillips

Anticollision Report

Company:	DELAWARE BASIN WEST	**Local Co-ordinate Reference:**	Well BOO RADLEY COM #706H
Project:	ATLAS PROSPECT (NM-E)	**TVD Reference:**	KB=25' @ 3059.6usft (PIONEER 84)
Reference Site:	BOO RADLEY COM PROJECT	**MD Reference:**	KB=25' @ 3059.6usft (PIONEER 84)
Site Error:	3.0 usft	**North Reference:**	Grid
Reference Well:	BOO RADLEY COM #706H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	3.0 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	OWB	**Database:**	edm
Reference Design:	PWP4	**Offset TVD Reference:**	Offset Datum

Offset Design BOO RADLEY COM PROJECT - BOO RADLEY COM #705H - OWB - PWP4 — **Offset Site Error:** 3.0 usft

Survey Program: 0-Standard Keeper 104, 8943-MWD+IFR1+FDIR — **Offset Well Error:** 3.0 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
0.0	0.0	0.0	0.0	3.0	3.0	90.19	-0.1	30.1	30.1				
100.0	100.0	99.8	99.8	3.0	3.0	90.19	-0.1	30.1	30.1	24.1	6.00	5.017	
200.0	200.0	199.8	199.8	3.0	3.0	90.19	-0.1	30.1	30.1	24.1	6.00	5.014	
300.0	300.0	299.8	299.8	3.0	3.0	90.19	-0.1	30.1	30.1	24.1	6.01	5.009	
400.0	400.0	399.8	399.8	3.0	3.0	90.19	-0.1	30.1	30.1	24.1	6.02	5.001	
500.0	500.0	499.8	499.8	3.1	3.1	90.19	-0.1	30.1	30.1	24.1	6.03	4.991	
600.0	600.0	599.8	599.8	3.1	3.1	90.19	-0.1	30.1	30.1	24.1	6.05	4.978	
700.0	700.0	699.8	699.8	3.1	3.1	90.19	-0.1	30.1	30.1	24.0	6.07	4.962	
800.0	800.0	799.8	799.8	3.2	3.2	90.19	-0.1	30.1	30.1	24.0	6.09	4.944	
900.0	900.0	899.8	899.8	3.2	3.2	90.19	-0.1	30.1	30.1	24.0	6.11	4.924	
1,000.0	1,000.0	999.8	999.8	3.2	3.2	90.19	-0.1	30.1	30.1	24.0	6.14	4.901	
1,100.0	1,100.0	1,099.8	1,099.8	3.3	3.3	90.19	-0.1	30.1	30.1	23.9	6.17	4.877	
1,200.0	1,200.0	1,199.8	1,199.8	3.4	3.4	90.19	-0.1	30.1	30.1	23.9	6.21	4.850	
1,300.0	1,300.0	1,299.8	1,299.8	3.4	3.4	90.19	-0.1	30.1	30.1	23.9	6.24	4.821	
1,400.0	1,400.0	1,399.8	1,399.8	3.5	3.5	90.19	-0.1	30.1	30.1	23.8	6.28	4.790	
1,500.0	1,500.0	1,499.8	1,499.8	3.5	3.5	90.19	-0.1	30.1	30.1	23.8	6.33	4.758	
1,600.0	1,600.0	1,599.8	1,599.8	3.6	3.6	90.19	-0.1	30.1	30.1	23.7	6.37	4.723	
1,700.0	1,700.0	1,699.8	1,699.8	3.7	3.7	90.19	-0.1	30.1	30.1	23.7	6.42	4.688	
1,800.0	1,800.0	1,799.8	1,799.8	3.8	3.8	90.19	-0.1	30.1	30.1	23.6	6.47	4.651	
1,900.0	1,900.0	1,899.8	1,899.8	3.9	3.9	90.19	-0.1	30.1	30.1	23.6	6.53	4.613	
2,000.0	2,000.0	1,999.8	1,999.8	3.9	3.9	90.19	-0.1	30.1	30.1	23.5	6.58	4.573	
2,100.0	2,100.0	2,099.8	2,099.8	4.0	4.0	90.19	-0.1	30.1	30.1	23.5	6.64	4.533	
2,200.0	2,200.0	2,199.8	2,199.8	4.1	4.1	90.19	-0.1	30.1	30.1	23.4	6.70	4.492	
2,300.0	2,300.0	2,299.8	2,299.8	4.2	4.2	90.19	-0.1	30.1	30.1	23.3	6.76	4.450	
2,400.0	2,400.0	2,399.8	2,399.8	4.3	4.3	90.19	-0.1	30.1	30.1	23.3	6.83	4.407	
2,500.0	2,500.0	2,499.8	2,499.8	4.4	4.4	90.19	-0.1	30.1	30.1	23.2	6.90	4.364	CC, ES
2,600.0	2,600.0	2,599.9	2,599.9	4.5	4.4	-166.77	-1.8	29.9	31.6	24.6	6.98	4.533	
2,700.0	2,699.8	2,699.7	2,699.6	4.5	4.4	-160.43	-7.0	29.2	36.5	29.4	7.12	5.127	
2,745.8	2,745.5	2,745.3	2,745.0	4.5	4.4	-157.03	-10.5	28.7	40.0	32.8	7.21	5.548	
2,800.0	2,799.5	2,799.2	2,798.7	4.5	4.4	-153.32	-15.2	28.1	44.7	37.4	7.33	6.106	
2,900.0	2,899.1	2,898.7	2,897.8	4.5	4.3	-148.23	-23.7	26.9	53.9	46.4	7.54	7.147	
3,000.0	2,998.8	2,998.2	2,996.9	4.6	4.3	-144.64	-32.3	25.7	63.3	55.6	7.73	8.195	
3,100.0	3,098.4	3,097.7	3,096.1	4.6	4.3	-141.98	-40.9	24.6	73.0	65.1	7.90	9.239	
3,200.0	3,198.0	3,197.2	3,195.2	4.6	4.3	-139.95	-49.5	23.4	82.7	74.7	8.05	10.273	
3,300.0	3,297.7	3,296.7	3,294.3	4.7	4.3	-138.35	-58.1	22.3	92.5	84.3	8.20	11.292	
3,400.0	3,397.3	3,396.1	3,393.4	4.7	4.2	-137.05	-66.7	21.1	102.4	94.1	8.33	12.293	
3,500.0	3,496.9	3,495.6	3,492.5	4.8	4.2	-135.99	-75.3	19.9	112.4	103.9	8.46	13.273	
3,600.0	3,596.6	3,595.1	3,591.6	4.8	4.2	-135.09	-83.9	18.8	122.3	113.7	8.59	14.231	
3,700.0	3,696.2	3,694.6	3,690.7	4.9	4.2	-134.34	-92.5	17.6	132.3	123.6	8.72	15.167	
3,800.0	3,795.8	3,794.1	3,789.8	4.9	4.2	-133.68	-101.1	16.5	142.3	133.5	8.85	16.078	
3,900.0	3,895.5	3,893.6	3,888.9	5.0	4.3	-133.12	-109.7	15.3	152.3	143.3	8.98	16.965	
4,000.0	3,995.1	3,993.1	3,988.0	5.0	4.3	-132.62	-118.3	14.1	162.4	153.3	9.11	17.827	
4,100.0	4,094.7	4,092.6	4,087.1	5.1	4.3	-132.18	-126.9	13.0	172.4	163.2	9.24	18.664	
4,200.0	4,194.4	4,192.0	4,186.2	5.2	4.3	-131.79	-135.5	11.8	182.5	173.1	9.37	19.476	
4,300.0	4,294.0	4,291.5	4,285.3	5.2	4.3	-131.44	-144.0	10.7	192.5	183.0	9.50	20.262	
4,400.0	4,393.6	4,391.0	4,384.4	5.3	4.4	-131.13	-152.6	9.5	202.6	192.9	9.64	21.024	
4,500.0	4,493.2	4,490.5	4,483.6	5.4	4.4	-130.84	-161.2	8.3	212.7	202.9	9.77	21.761	
4,600.0	4,592.9	4,590.0	4,582.7	5.5	4.5	-130.58	-169.8	7.2	222.7	212.8	9.91	22.474	
4,700.0	4,692.5	4,689.5	4,681.8	5.6	4.5	-130.35	-178.4	6.0	232.8	222.8	10.05	23.162	
4,800.0	4,792.1	4,791.2	4,783.2	5.6	4.6	-130.30	-186.3	5.0	242.5	232.3	10.19	23.786	
4,900.0	4,891.8	4,893.1	4,884.9	5.7	4.6	-130.62	-192.5	4.1	251.2	240.8	10.33	24.310	
5,000.0	4,991.4	4,995.0	4,986.7	5.8	4.7	-131.26	-196.8	3.5	259.0	248.5	10.47	24.739	

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

ConocoPhillips

Anticollision Report

Company:	DELAWARE BASIN WEST	**Local Co-ordinate Reference:**	Well BOO RADLEY COM #706H
Project:	ATLAS PROSPECT (NM-E)	**TVD Reference:**	KB=25' @ 3059.6usft (PIONEER 84)
Reference Site:	BOO RADLEY COM PROJECT	**MD Reference:**	KB=25' @ 3059.6usft (PIONEER 84)
Site Error:	3.0 usft	**North Reference:**	Grid
Reference Well:	BOO RADLEY COM #706H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	3.0 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	OWB	**Database:**	edm
Reference Design:	PWP4	**Offset TVD Reference:**	Offset Datum

Offset Design BOO RADLEY COM PROJECT - BOO RADLEY COM #705H - OWB - PWP4 — **Offset Site Error:** 3.0 usft

Survey Program: 0-Standard Keeper 104, 8943-MWD+IFR1+FDIR — **Offset Well Error:** 3.0 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
5,100.0	5,091.0	5,097.0	5,088.7	5.9	4.8	-132.20	-199.3	3.2	266.0	255.4	10.61	25.073	
5,200.0	5,190.7	5,198.8	5,190.5	6.0	4.8	-133.42	-200.1	3.1	272.2	261.4	10.75	25.312	
5,300.0	5,290.3	5,298.4	5,290.1	6.1	4.9	-134.70	-200.1	3.1	278.1	267.2	10.90	25.515	
5,400.0	5,389.9	5,398.1	5,389.7	6.2	4.9	-135.93	-200.1	3.1	284.2	273.2	11.05	25.720	
5,500.0	5,489.6	5,497.7	5,489.4	6.3	5.0	-137.10	-200.1	3.1	290.5	279.3	11.20	25.927	
5,600.0	5,589.2	5,597.3	5,589.0	6.3	5.0	-138.23	-200.1	3.1	296.8	285.4	11.36	26.134	
5,700.0	5,688.8	5,697.0	5,688.6	6.4	5.1	-139.30	-200.1	3.1	303.3	291.7	11.51	26.342	
5,800.0	5,788.5	5,796.6	5,788.3	6.5	5.1	-140.34	-200.1	3.1	309.8	298.1	11.67	26.550	
5,900.0	5,888.1	5,896.2	5,887.9	6.6	5.2	-141.32	-200.1	3.1	316.5	304.6	11.83	26.758	
6,000.0	5,987.7	5,995.9	5,987.5	6.7	5.3	-142.27	-200.1	3.1	323.2	311.2	11.99	26.965	
6,100.0	6,087.4	6,095.5	6,087.2	6.8	5.4	-143.18	-200.1	3.1	330.0	317.9	12.15	27.172	
6,200.0	6,187.0	6,195.1	6,186.8	6.9	5.4	-144.05	-200.1	3.1	336.9	324.6	12.31	27.378	
6,300.0	6,286.6	6,294.8	6,286.4	7.0	5.5	-144.89	-200.1	3.1	343.9	331.5	12.47	27.582	
6,400.0	6,386.3	6,394.4	6,386.1	7.1	5.6	-145.69	-200.1	3.1	351.0	338.3	12.63	27.785	
6,500.0	6,485.9	6,494.0	6,485.7	7.3	5.7	-146.47	-200.1	3.1	358.1	345.3	12.80	27.985	
6,600.0	6,585.5	6,593.7	6,585.3	7.4	5.8	-147.21	-200.1	3.1	365.3	352.3	12.96	28.185	
6,700.0	6,685.2	6,693.3	6,685.0	7.5	5.8	-147.92	-200.1	3.1	372.5	359.4	13.13	28.381	
6,800.0	6,784.8	6,792.9	6,784.6	7.6	5.9	-148.61	-200.1	3.1	379.8	366.5	13.29	28.576	
6,900.0	6,884.4	6,892.6	6,884.2	7.7	6.0	-149.27	-200.1	3.1	387.2	373.7	13.46	28.768	
7,000.0	6,984.1	6,992.2	6,983.9	7.8	6.1	-149.90	-200.1	3.1	394.6	380.9	13.62	28.958	
7,100.0	7,083.7	7,091.8	7,083.5	7.9	6.2	-150.51	-200.1	3.1	402.0	388.2	13.79	29.146	
7,200.0	7,183.3	7,191.5	7,183.1	8.0	6.3	-151.10	-200.1	3.1	409.5	395.5	13.96	29.330	
7,300.0	7,282.9	7,291.1	7,282.7	8.1	6.4	-151.67	-200.1	3.1	417.0	402.9	14.13	29.512	
7,400.0	7,382.6	7,390.7	7,382.4	8.2	6.5	-152.22	-200.1	3.1	424.6	410.3	14.30	29.692	
7,500.0	7,482.2	7,490.3	7,482.0	8.3	6.6	-152.75	-200.1	3.1	432.2	417.7	14.47	29.868	
7,600.0	7,581.8	7,590.0	7,581.6	8.4	6.7	-153.26	-200.1	3.1	439.8	425.2	14.64	30.042	
7,700.0	7,681.5	7,689.6	7,681.3	8.6	6.8	-153.75	-200.1	3.1	447.5	432.7	14.81	30.213	
7,800.0	7,781.1	7,789.2	7,780.9	8.7	6.9	-154.23	-200.1	3.1	455.2	440.2	14.98	30.381	
7,900.0	7,880.7	7,888.9	7,880.5	8.8	7.0	-154.69	-200.1	3.1	462.9	447.8	15.16	30.546	
8,000.0	7,980.4	7,988.5	7,980.2	8.9	7.1	-155.14	-200.1	3.1	470.7	455.4	15.33	30.708	
8,100.0	8,080.0	8,088.1	8,079.8	9.0	7.2	-155.57	-200.1	3.1	478.5	463.0	15.50	30.868	
8,200.0	8,179.6	8,187.8	8,179.4	9.1	7.3	-155.98	-200.1	3.1	486.3	470.6	15.68	31.024	
8,300.0	8,279.3	8,287.4	8,279.1	9.2	7.4	-156.39	-200.1	3.1	494.2	478.3	15.85	31.178	
8,400.0	8,378.9	8,387.0	8,378.7	9.4	7.5	-156.78	-200.1	3.1	502.0	486.0	16.02	31.329	
8,500.0	8,478.5	8,486.7	8,478.3	9.5	7.6	-157.16	-200.1	3.1	509.9	493.7	16.20	31.478	
8,600.0	8,578.2	8,586.3	8,578.0	9.6	7.7	-157.53	-200.1	3.1	517.8	501.5	16.38	31.623	
8,700.0	8,677.8	8,685.9	8,677.6	9.7	7.9	-157.88	-200.1	3.1	525.8	509.2	16.55	31.766	
8,800.0	8,777.4	8,785.6	8,777.2	9.8	8.0	-158.23	-200.1	3.1	533.7	517.0	16.73	31.906	
8,900.0	8,877.1	8,885.2	8,876.9	10.0	8.1	-158.57	-200.1	3.1	541.7	524.8	16.90	32.044	
9,000.0	8,976.7	8,977.4	8,969.0	10.1	8.1	-158.74	-201.4	3.1	550.0	532.9	17.08	32.202	
9,032.1	9,008.7	9,003.6	8,995.1	10.1	8.1	-158.56	-204.0	3.1	553.1	536.0	17.16	32.229	
9,050.0	9,026.5	9,018.1	9,009.4	10.1	8.2	-140.75	-206.0	3.1	555.1	537.9	17.18	32.302	
9,075.0	9,051.3	9,038.2	9,029.2	10.1	8.2	-126.49	-209.6	3.1	558.1	540.9	17.22	32.413	
9,100.0	9,075.9	9,058.2	9,048.8	10.1	8.2	-118.47	-214.0	3.1	561.6	544.3	17.26	32.536	
9,125.0	9,100.3	9,078.2	9,068.0	10.1	8.2	-113.35	-219.2	3.1	565.3	548.0	17.30	32.670	
9,150.0	9,124.4	9,100.0	9,088.8	10.1	8.2	-109.75	-225.7	3.1	569.4	552.1	17.34	32.837	
9,175.0	9,148.1	9,117.7	9,105.5	10.1	8.2	-107.03	-231.8	3.2	573.8	556.4	17.41	32.966	
9,200.0	9,171.3	9,137.4	9,123.7	10.1	8.2	-104.84	-239.2	3.2	578.6	561.1	17.46	33.128	
9,225.0	9,194.1	9,157.0	9,141.5	10.2	8.2	-103.01	-247.3	3.2	583.6	566.1	17.53	33.299	
9,250.0	9,216.3	9,175.0	9,157.6	10.2	8.3	-101.43	-255.4	3.2	588.9	571.3	17.60	33.458	
9,275.0	9,237.9	9,195.8	9,175.8	10.2	8.3	-100.02	-265.6	3.2	594.5	576.8	17.66	33.666	
9,300.0	9,258.8	9,215.2	9,192.3	10.2	8.3	-98.75	-275.7	3.2	600.3	582.5	17.73	33.861	

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

ConocoPhillips

Anticollision Report

Company:	DELAWARE BASIN WEST	**Local Co-ordinate Reference:**	Well BOO RADLEY COM #706H
Project:	ATLAS PROSPECT (NM-E)	**TVD Reference:**	KB=25' @ 3059.6usft (PIONEER 84)
Reference Site:	BOO RADLEY COM PROJECT	**MD Reference:**	KB=25' @ 3059.6usft (PIONEER 84)
Site Error:	3.0 usft	**North Reference:**	Grid
Reference Well:	BOO RADLEY COM #706H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	3.0 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	OWB	**Database:**	edm
Reference Design:	PWP4	**Offset TVD Reference:**	Offset Datum

Offset Design BOO RADLEY COM PROJECT - BOO RADLEY COM #705H - OWB - PWP4 — **Offset Site Error:** 3.0 usft

Survey Program: 0-Standard Keeper 104, 8943-MWD+IFR1+FDIR — **Offset Well Error:** 3.0 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
9,325.0	9,278.9	9,234.5	9,208.3	10.2	8.3	-97.58	-286.4	3.2	606.3	588.5	17.80	34.064	
9,350.0	9,298.3	9,253.7	9,223.8	10.2	8.4	-96.49	-297.8	3.3	612.6	594.7	17.87	34.276	
9,375.0	9,316.8	9,275.0	9,240.5	10.3	8.4	-95.48	-311.1	3.3	619.0	601.1	17.93	34.525	
9,400.0	9,334.4	9,292.0	9,253.3	10.3	8.4	-94.49	-322.2	3.3	625.6	607.6	18.02	34.721	
9,425.0	9,351.1	9,311.1	9,267.3	10.3	8.4	-93.56	-335.2	3.3	632.4	614.3	18.09	34.954	
9,450.0	9,366.8	9,330.2	9,280.7	10.3	8.5	-92.68	-348.8	3.3	639.3	621.2	18.17	35.195	
9,475.0	9,381.4	9,350.0	9,294.1	10.4	8.5	-91.84	-363.4	3.4	646.4	628.2	18.24	35.449	
9,500.0	9,395.0	9,368.3	9,305.9	10.4	8.5	-91.02	-377.5	3.4	653.6	635.3	18.31	35.690	
9,525.0	9,407.4	9,387.4	9,317.6	10.5	8.5	-90.24	-392.5	3.4	660.9	642.5	18.39	35.944	
9,550.0	9,418.7	9,406.5	9,328.7	10.5	8.6	-89.49	-408.1	3.4	668.2	649.8	18.46	36.201	
9,575.0	9,428.8	9,425.0	9,338.8	10.6	8.6	-88.77	-423.6	3.5	675.7	657.1	18.53	36.456	
9,600.0	9,437.8	9,444.8	9,349.0	10.6	8.6	-88.09	-440.6	3.5	683.1	664.5	18.61	36.716	
9,625.0	9,445.4	9,464.1	9,358.2	10.7	8.7	-87.44	-457.5	3.5	690.7	672.0	18.68	36.971	
9,650.0	9,451.9	9,483.4	9,366.8	10.8	8.7	-86.81	-474.8	3.5	698.2	679.4	18.76	37.222	
9,675.0	9,457.1	9,502.9	9,374.7	10.8	8.7	-86.22	-492.6	3.6	705.7	686.9	18.84	37.468	
9,700.0	9,460.9	9,522.4	9,381.9	10.9	8.7	-85.66	-510.7	3.6	713.3	694.3	18.92	37.706	
9,725.0	9,463.5	9,542.1	9,388.4	11.0	8.8	-85.13	-529.3	3.6	720.8	701.8	19.00	37.932	
9,750.0	9,464.8	9,561.9	9,394.1	11.1	8.8	-84.64	-548.2	3.7	728.2	709.1	19.09	38.146	
9,764.7	9,465.0	9,575.0	9,397.5	11.1	8.8	-84.39	-560.9	3.7	732.6	713.4	19.15	38.258	
9,800.0	9,464.8	9,602.3	9,403.4	11.3	8.8	-84.97	-587.6	3.7	743.0	723.7	19.30	38.504	
9,900.0	9,464.3	9,687.3	9,411.9	11.6	8.9	-85.89	-672.1	3.8	771.3	751.4	19.91	38.745	
10,000.0	9,463.7	9,783.1	9,411.6	12.1	8.9	-86.07	-767.8	4.0	797.1	776.4	20.76	38.403	
10,100.0	9,463.2	9,880.6	9,411.2	12.6	9.3	-86.23	-865.3	4.2	819.5	797.8	21.71	37.746	
10,200.0	9,462.7	9,978.7	9,410.8	13.1	9.9	-86.36	-963.4	4.3	838.5	815.8	22.76	36.849	
10,300.0	9,462.1	10,077.5	9,410.4	13.6	10.5	-86.46	-1,062.2	4.5	854.1	830.3	23.88	35.769	
10,400.0	9,461.6	10,176.7	9,409.9	14.2	11.1	-86.54	-1,161.5	4.6	866.3	841.2	25.07	34.556	
10,500.0	9,461.1	10,276.4	9,409.5	14.8	11.8	-86.61	-1,261.1	4.8	874.9	848.6	26.31	33.249	
10,600.0	9,460.6	10,376.2	9,409.1	15.4	12.5	-86.65	-1,360.9	4.9	880.1	852.5	27.61	31.877	
10,699.3	9,460.0	10,475.5	9,408.7	16.0	13.2	-86.67	-1,460.2	5.1	881.8	852.9	28.94	30.475	
10,800.0	9,459.5	10,576.2	9,408.3	16.6	13.9	-86.68	-1,560.9	5.3	881.8	851.5	30.32	29.086	
10,900.0	9,459.0	10,676.2	9,407.8	17.2	14.7	-86.69	-1,660.9	5.4	881.8	850.1	31.72	27.797	
11,000.0	9,458.5	10,776.2	9,407.4	17.9	15.4	-86.69	-1,760.9	5.6	881.8	848.6	33.16	26.594	
11,100.0	9,457.9	10,876.2	9,407.0	18.6	16.2	-86.70	-1,860.9	5.7	881.8	847.2	34.62	25.472	
11,200.0	9,457.4	10,976.2	9,406.6	19.3	17.0	-86.71	-1,960.9	5.9	881.8	845.7	36.10	24.426	
11,300.0	9,456.9	11,076.2	9,406.1	20.0	17.8	-86.71	-2,060.9	6.0	881.8	844.2	37.60	23.450	
11,400.0	9,456.4	11,176.2	9,405.7	20.7	18.6	-86.72	-2,160.9	6.2	881.8	842.6	39.12	22.539	
11,500.0	9,455.8	11,276.2	9,405.3	21.5	19.4	-86.73	-2,260.9	6.4	881.8	841.1	40.66	21.688	
11,600.0	9,455.3	11,376.2	9,404.9	22.2	20.2	-86.73	-2,360.9	6.5	881.7	839.5	42.21	20.892	
11,700.0	9,454.8	11,476.2	9,404.5	23.0	21.0	-86.74	-2,460.9	6.7	881.7	838.0	43.77	20.146	
11,800.0	9,454.3	11,576.2	9,404.0	23.7	21.8	-86.75	-2,560.9	6.8	881.7	836.4	45.34	19.447	
11,900.0	9,453.7	11,676.2	9,403.6	24.5	22.6	-86.75	-2,660.9	7.0	881.7	834.8	46.92	18.791	
12,000.0	9,453.2	11,776.2	9,403.2	25.2	23.4	-86.76	-2,760.9	7.2	881.7	833.2	48.51	18.175	
12,100.0	9,452.7	11,876.2	9,402.8	26.0	24.2	-86.77	-2,860.9	7.3	881.7	831.6	50.11	17.594	
12,200.0	9,452.2	11,976.2	9,402.4	26.8	25.1	-86.77	-2,960.9	7.5	881.7	830.0	51.72	17.047	
12,300.0	9,451.6	12,076.2	9,401.9	27.6	25.9	-86.78	-3,060.9	7.6	881.7	828.4	53.34	16.531	
12,400.0	9,451.1	12,176.2	9,401.5	28.4	26.7	-86.79	-3,160.9	7.8	881.7	826.7	54.96	16.043	
12,500.0	9,450.6	12,276.2	9,401.1	29.2	27.5	-86.79	-3,260.9	7.9	881.7	825.1	56.58	15.582	
12,600.0	9,450.1	12,376.2	9,400.7	30.0	28.4	-86.80	-3,360.9	8.1	881.7	823.4	58.21	15.145	
12,700.0	9,449.6	12,476.2	9,400.3	30.8	29.2	-86.81	-3,460.9	8.3	881.7	821.8	59.85	14.731	
12,800.0	9,449.0	12,576.2	9,399.8	31.6	30.0	-86.81	-3,560.9	8.4	881.6	820.2	61.49	14.338	
12,900.0	9,448.5	12,676.2	9,399.4	32.4	30.9	-86.82	-3,660.9	8.6	881.6	818.5	63.13	13.964	
13,000.0	9,448.0	12,776.2	9,399.0	33.2	31.7	-86.83	-3,760.9	8.7	881.6	816.8	64.78	13.609	

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

ConocoPhillips

Anticollision Report

Company:	DELAWARE BASIN WEST	**Local Co-ordinate Reference:**	Well BOO RADLEY COM #706H
Project:	ATLAS PROSPECT (NM-E)	**TVD Reference:**	KB=25' @ 3059.6usft (PIONEER 84)
Reference Site:	BOO RADLEY COM PROJECT	**MD Reference:**	KB=25' @ 3059.6usft (PIONEER 84)
Site Error:	3.0 usft	**North Reference:**	Grid
Reference Well:	BOO RADLEY COM #706H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	3.0 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	OWB	**Database:**	edm
Reference Design:	PWP4	**Offset TVD Reference:**	Offset Datum

Offset Design BOO RADLEY COM PROJECT - BOO RADLEY COM #705H - OWB - PWP4 — **Offset Site Error:** 3.0 usft

Survey Program: 0-Standard Keeper 104, 8943-MWD+IFR1+FDIR — **Offset Well Error:** 3.0 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
13,100.0	9,447.5	12,876.2	9,398.6	34.0	32.5	-86.83	-3,860.9	8.9	881.6	815.2	66.44	13.270	
13,200.0	9,446.9	12,976.2	9,398.2	34.8	33.4	-86.84	-3,960.9	9.1	881.6	813.5	68.09	12.948	
13,300.0	9,446.4	13,076.2	9,397.7	35.6	34.2	-86.85	-4,060.9	9.2	881.6	811.9	69.75	12.640	
13,400.0	9,445.9	13,176.2	9,397.3	36.5	35.1	-86.85	-4,160.9	9.4	881.6	810.2	71.41	12.346	
13,500.0	9,445.4	13,276.2	9,396.9	37.3	35.9	-86.86	-4,260.9	9.5	881.6	808.5	73.07	12.064	
13,600.0	9,444.8	13,376.2	9,396.5	38.1	36.7	-86.87	-4,360.9	9.7	881.6	806.8	74.74	11.795	
13,700.0	9,444.3	13,476.2	9,396.1	38.9	37.6	-86.87	-4,460.9	9.8	881.6	805.2	76.41	11.538	
13,800.0	9,443.8	13,576.2	9,395.6	39.7	38.4	-86.88	-4,560.9	10.0	881.6	803.5	78.08	11.291	
13,900.0	9,443.3	13,676.2	9,395.2	40.6	39.3	-86.89	-4,660.9	10.2	881.6	801.8	79.75	11.054	
14,000.0	9,442.7	13,776.2	9,394.8	41.4	40.1	-86.89	-4,760.9	10.3	881.5	800.1	81.43	10.826	
14,100.0	9,442.2	13,876.2	9,394.4	42.2	41.0	-86.90	-4,860.9	10.5	881.5	798.4	83.10	10.608	
14,200.0	9,441.7	13,976.2	9,393.9	43.1	41.8	-86.91	-4,960.9	10.6	881.5	796.7	84.78	10.398	
14,300.0	9,441.2	14,076.2	9,393.5	43.9	42.7	-86.91	-5,060.9	10.8	881.5	795.1	86.46	10.196	
14,399.3	9,440.7	14,175.5	9,393.1	44.7	43.5	-86.92	-5,160.2	10.9	881.5	793.4	88.13	10.002	
14,499.0	9,440.1	14,275.2	9,392.7	45.5	44.3	-86.93	-5,259.8	11.1	879.8	790.0	89.81	9.796	
14,500.0	9,440.1	14,276.2	9,392.7	45.6	44.4	-86.93	-5,260.9	11.1	879.7	789.9	89.82	9.794	
14,600.0	9,439.6	14,376.1	9,392.3	46.4	45.2	-86.92	-5,360.8	11.3	876.3	784.7	91.51	9.576	
14,700.0	9,439.1	14,476.0	9,391.8	47.2	46.1	-86.92	-5,460.7	11.4	872.8	779.6	93.19	9.365	
14,800.0	9,438.6	14,576.0	9,391.4	48.1	46.9	-86.91	-5,560.7	11.6	869.3	774.4	94.88	9.162	
14,900.0	9,438.0	14,675.9	9,391.0	48.9	47.8	-86.91	-5,660.6	11.7	865.8	769.2	96.56	8.966	
15,000.0	9,437.5	14,775.9	9,390.6	49.7	48.6	-86.90	-5,760.5	11.9	862.3	764.1	98.25	8.777	
15,100.0	9,437.0	14,875.8	9,390.2	50.6	49.5	-86.90	-5,860.5	12.1	858.8	758.9	99.94	8.593	
15,200.0	9,436.5	14,975.7	9,389.7	51.4	50.3	-86.89	-5,960.4	12.2	855.4	753.7	101.63	8.416	
15,300.0	9,435.9	15,075.7	9,389.3	52.2	51.2	-86.88	-6,060.4	12.4	851.9	748.6	103.32	8.245	
15,400.0	9,435.4	15,175.6	9,388.9	53.1	52.0	-86.88	-6,160.3	12.5	848.4	743.4	105.02	8.079	
15,500.0	9,434.9	15,275.6	9,388.5	53.9	52.9	-86.87	-6,260.2	12.7	844.9	738.2	106.71	7.918	
15,518.1	9,434.8	15,293.7	9,388.4	54.1	53.0	-86.87	-6,278.4	12.7	844.3	737.3	107.02	7.889	
15,600.0	9,434.4	15,375.5	9,388.1	54.8	53.7	-86.86	-6,360.2	12.8	842.6	734.2	108.40	7.773	
15,618.1	9,434.3	15,393.6	9,388.0	54.9	53.9	-86.86	-6,378.3	12.9	842.5	733.8	108.71	7.751	
15,700.0	9,433.8	15,475.5	9,387.6	55.6	54.6	-86.86	-6,460.2	13.0	843.7	733.6	110.10	7.663	
15,740.4	9,433.6	15,515.9	9,387.5	56.0	54.9	-86.87	-6,500.6	13.1	845.2	734.4	110.78	7.629	
15,800.0	9,433.3	15,575.4	9,387.2	56.5	55.4	-86.88	-6,560.1	13.2	847.7	735.9	111.79	7.583	
15,900.0	9,432.8	15,675.3	9,386.8	57.3	56.3	-86.90	-6,660.0	13.3	852.0	738.5	113.48	7.508	
16,000.0	9,432.3	15,775.3	9,386.4	58.1	57.1	-86.93	-6,759.9	13.5	856.2	741.0	115.17	7.434	
16,100.0	9,431.8	15,875.2	9,386.0	59.0	58.0	-86.95	-6,859.8	13.6	860.5	743.6	116.87	7.363	
16,200.0	9,431.2	15,975.1	9,385.5	59.8	58.8	-86.97	-6,959.7	13.8	864.7	746.2	118.56	7.294	
16,300.0	9,430.7	16,075.0	9,385.1	60.7	59.7	-86.99	-7,059.6	14.0	869.0	748.8	120.26	7.226	
16,400.0	9,430.2	16,174.9	9,384.7	61.5	60.5	-87.01	-7,159.6	14.1	873.3	751.3	121.95	7.161	
16,500.0	9,429.7	16,274.8	9,384.3	62.4	61.4	-87.03	-7,259.5	14.3	877.5	753.9	123.65	7.097	
16,540.4	9,429.4	16,315.2	9,384.1	62.7	61.7	-87.04	-7,299.9	14.3	879.3	754.9	124.33	7.072	
16,600.0	9,429.1	16,374.7	9,383.9	63.2	62.2	-87.06	-7,359.4	14.4	881.2	755.8	125.35	7.030	
16,663.3	9,428.8	16,438.1	9,383.6	63.7	62.8	-87.07	-7,422.7	14.5	881.9	755.5	126.42	6.976	
16,700.0	9,428.6	16,474.7	9,383.4	64.0	63.1	-87.08	-7,459.4	14.6	881.9	754.8	127.04	6.941	
16,800.0	9,428.1	16,574.7	9,383.0	64.9	63.9	-87.08	-7,559.4	14.7	881.9	753.1	128.75	6.850	
16,900.0	9,427.6	16,674.7	9,382.6	65.7	64.8	-87.09	-7,659.4	14.9	881.8	751.4	130.45	6.760	
17,000.0	9,427.1	16,774.7	9,382.2	66.6	65.6	-87.09	-7,759.4	15.1	881.8	749.7	132.15	6.673	
17,100.0	9,426.6	16,874.7	9,381.8	67.4	66.5	-87.10	-7,859.4	15.2	881.8	748.0	133.85	6.588	
17,200.0	9,426.1	16,974.7	9,381.3	68.3	67.3	-87.11	-7,959.4	15.4	881.8	746.2	135.55	6.505	
17,300.0	9,425.5	17,074.7	9,380.9	69.1	68.2	-87.11	-8,059.4	15.5	881.8	744.5	137.26	6.424	
17,400.0	9,425.0	17,174.7	9,380.5	70.0	69.1	-87.12	-8,159.4	15.7	881.7	742.8	138.96	6.345	
17,500.0	9,424.5	17,274.7	9,380.1	70.8	69.9	-87.12	-8,259.4	15.9	881.7	741.1	140.66	6.268	
17,600.0	9,424.0	17,374.7	9,379.7	71.7	70.8	-87.13	-8,359.4	16.0	881.7	739.3	142.37	6.193	

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

ConocoPhillips
Anticollision Report

Company:	DELAWARE BASIN WEST	**Local Co-ordinate Reference:**	Well BOO RADLEY COM #706H
Project:	ATLAS PROSPECT (NM-E)	**TVD Reference:**	KB=25' @ 3059.6usft (PIONEER 84)
Reference Site:	BOO RADLEY COM PROJECT	**MD Reference:**	KB=25' @ 3059.6usft (PIONEER 84)
Site Error:	3.0 usft	**North Reference:**	Grid
Reference Well:	BOO RADLEY COM #706H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	3.0 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	OWB	**Database:**	edm
Reference Design:	PWP4	**Offset TVD Reference:**	Offset Datum

Offset Design BOO RADLEY COM PROJECT - BOO RADLEY COM #705H - OWB - PWP4 — **Offset Site Error:** 3.0 usft

Survey Program: 0-Standard Keeper 104, 8943-MWD+IFR1+FDIR — **Offset Well Error:** 3.0 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
17,700.0	9,423.5	17,474.7	9,379.2	72.5	71.6	-87.14	-8,459.4	16.2	881.7	737.6	144.07	6.120	
17,800.0	9,423.0	17,574.7	9,378.8	73.4	72.5	-87.14	-8,559.4	16.3	881.7	735.9	145.78	6.048	
17,900.0	9,422.5	17,674.7	9,378.4	74.2	73.3	-87.15	-8,659.4	16.5	881.7	734.2	147.48	5.978	
18,000.0	9,421.9	17,774.7	9,378.0	75.1	74.2	-87.15	-8,759.4	16.6	881.6	732.5	149.19	5.910	
18,100.0	9,421.4	17,874.7	9,377.5	75.9	75.0	-87.16	-8,859.4	16.8	881.6	730.7	150.89	5.843	
18,200.0	9,420.9	17,974.7	9,377.1	76.8	75.9	-87.17	-8,959.4	17.0	881.6	729.0	152.60	5.777	
18,300.0	9,420.4	18,074.7	9,376.7	77.6	76.8	-87.17	-9,059.4	17.1	881.6	727.3	154.31	5.713	
18,400.0	9,419.9	18,174.7	9,376.3	78.5	77.6	-87.18	-9,159.4	17.3	881.6	725.6	156.01	5.651	
18,500.0	9,419.4	18,274.7	9,375.9	79.3	78.5	-87.18	-9,259.4	17.4	881.6	723.8	157.72	5.589	
18,600.0	9,418.9	18,374.7	9,375.4	80.2	79.3	-87.19	-9,359.4	17.6	881.5	722.1	159.43	5.529	
18,700.0	9,418.4	18,474.7	9,375.0	81.0	80.2	-87.20	-9,459.4	17.8	881.5	720.4	161.13	5.471	
18,800.0	9,417.8	18,574.7	9,374.6	81.9	81.0	-87.20	-9,559.4	17.9	881.5	718.7	162.84	5.413	
18,900.0	9,417.3	18,674.7	9,374.2	82.7	81.9	-87.21	-9,659.4	18.1	881.5	716.9	164.55	5.357	
19,000.0	9,416.8	18,774.7	9,373.8	83.6	82.7	-87.21	-9,759.4	18.2	881.5	715.2	166.26	5.302	
19,100.0	9,416.3	18,874.7	9,373.3	84.4	83.6	-87.22	-9,859.4	18.4	881.5	713.5	167.97	5.248	
19,200.0	9,415.8	18,974.7	9,372.9	85.3	84.5	-87.23	-9,959.4	18.5	881.4	711.8	169.67	5.195	
19,300.0	9,415.3	19,074.7	9,372.5	86.1	85.3	-87.23	-10,059.4	18.7	881.4	710.0	171.38	5.143	
19,400.0	9,414.8	19,174.7	9,372.1	87.0	86.2	-87.24	-10,159.4	18.9	881.4	708.3	173.09	5.092	
19,500.0	9,414.2	19,274.7	9,371.7	87.9	87.0	-87.24	-10,259.4	19.0	881.4	706.6	174.80	5.042	
19,600.0	9,413.7	19,374.7	9,371.2	88.7	87.9	-87.25	-10,359.4	19.2	881.4	704.9	176.51	4.993	
19,700.0	9,413.2	19,474.7	9,370.8	89.6	88.7	-87.26	-10,459.4	19.3	881.3	703.1	178.22	4.945	
19,800.0	9,412.7	19,574.7	9,370.4	90.4	89.6	-87.26	-10,559.4	19.5	881.3	701.4	179.93	4.898	
19,900.0	9,412.2	19,674.7	9,370.0	91.3	90.5	-87.27	-10,659.4	19.6	881.3	699.7	181.64	4.852	
20,000.0	9,411.7	19,774.7	9,369.6	92.1	91.3	-87.27	-10,759.4	19.8	881.3	697.9	183.35	4.807	
20,100.0	9,411.2	19,874.7	9,369.1	93.0	92.2	-87.28	-10,859.4	20.0	881.3	696.2	185.06	4.762	
20,200.0	9,410.6	19,974.7	9,368.7	93.8	93.0	-87.29	-10,959.3	20.1	881.3	694.5	186.77	4.718	
20,300.0	9,410.1	20,074.7	9,368.3	94.7	93.9	-87.29	-11,059.3	20.3	881.2	692.8	188.48	4.676	
20,400.0	9,409.6	20,174.7	9,367.9	95.5	94.7	-87.30	-11,159.3	20.4	881.2	691.0	190.19	4.633	
20,500.0	9,409.1	20,274.7	9,367.5	96.4	95.6	-87.30	-11,259.3	20.6	881.2	689.3	191.90	4.592	
20,600.0	9,408.6	20,374.7	9,367.0	97.2	96.4	-87.31	-11,359.3	20.8	881.2	687.6	193.61	4.551	
20,700.0	9,408.1	20,474.7	9,366.6	98.1	97.3	-87.32	-11,459.3	20.9	881.2	685.9	195.32	4.511	
20,800.0	9,407.6	20,574.7	9,366.2	98.9	98.2	-87.32	-11,559.3	21.1	881.2	684.1	197.03	4.472	
20,900.0	9,407.1	20,674.7	9,365.8	99.8	99.0	-87.33	-11,659.3	21.2	881.1	682.4	198.74	4.434	
21,000.0	9,406.5	20,774.7	9,365.3	100.7	99.9	-87.33	-11,759.3	21.4	881.1	680.7	200.46	4.396	
21,100.0	9,406.0	20,874.7	9,364.9	101.5	100.7	-87.34	-11,859.3	21.5	881.1	678.9	202.17	4.358	
21,200.0	9,405.5	20,974.7	9,364.5	102.4	101.6	-87.35	-11,959.3	21.7	881.1	677.2	203.88	4.322	
21,300.0	9,405.0	21,074.7	9,364.1	103.2	102.4	-87.35	-12,059.3	21.9	881.1	675.5	205.59	4.286	
21,400.0	9,404.5	21,174.7	9,363.7	104.1	103.3	-87.36	-12,159.3	22.0	881.1	673.8	207.30	4.250	
21,500.0	9,404.0	21,274.7	9,363.2	104.9	104.2	-87.36	-12,259.3	22.2	881.0	672.0	209.01	4.215	
21,600.0	9,403.5	21,374.7	9,362.8	105.8	105.0	-87.37	-12,359.3	22.3	881.0	670.3	210.73	4.181	
21,700.0	9,402.9	21,474.7	9,362.4	106.6	105.9	-87.38	-12,459.3	22.5	881.0	668.6	212.44	4.147	
21,800.0	9,402.4	21,574.7	9,362.0	107.5	106.7	-87.38	-12,559.3	22.7	881.0	666.8	214.15	4.114	
21,900.0	9,401.9	21,674.7	9,361.6	108.3	107.6	-87.39	-12,659.3	22.8	881.0	665.1	215.86	4.081	
22,000.0	9,401.4	21,774.7	9,361.1	109.2	108.4	-87.39	-12,759.3	23.0	881.0	663.4	217.58	4.049	
22,100.0	9,400.9	21,874.7	9,360.7	110.1	109.3	-87.40	-12,859.3	23.1	880.9	661.6	219.29	4.017	
22,200.0	9,400.4	21,974.7	9,360.3	110.9	110.2	-87.41	-12,959.3	23.3	880.9	659.9	221.00	3.986	
22,272.0	9,400.0	22,045.7	9,360.0	111.5	110.8	-87.41	-13,030.3	23.4	880.9	658.7	222.22	3.964	
22,273.8	9,400.0	22,045.7	9,360.0	111.5	110.8	-87.41	-13,030.3	23.4	880.9	658.7	222.23	3.964	SF

ConocoPhillips

Anticollision Report

Company:	DELAWARE BASIN WEST	**Local Co-ordinate Reference:**	Well BOO RADLEY COM #706H
Project:	ATLAS PROSPECT (NM-E)	**TVD Reference:**	KB=25' @ 3059.6usft (PIONEER 84)
Reference Site:	BOO RADLEY COM PROJECT	**MD Reference:**	KB=25' @ 3059.6usft (PIONEER 84)
Site Error:	3.0 usft	**North Reference:**	Grid
Reference Well:	BOO RADLEY COM #706H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	3.0 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	OWB	**Database:**	edm
Reference Design:	PWP4	**Offset TVD Reference:**	Offset Datum

Offset Design BOO RADLEY COM PROJECT - SKEEN 21 DM STATE 1H - OWB - AWP — **Offset Site Error:** 3.0 usft

Survey Program: 100-GYRO-NS, 7413-MWD — **Offset Well Error:** 3.0 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
0.0	0.0	18.7	18.7	3.0	3.0	-120.54	-546.7	-926.7	1,075.9				
100.0	100.0	116.2	116.2	3.0	3.0	-120.55	-547.0	-926.8	1,076.2	1,070.1	6.02	178.731	
200.0	200.0	217.6	217.6	3.0	3.1	-120.56	-547.3	-926.7	1,076.3	1,070.2	6.12	175.790	
300.0	300.0	307.7	307.7	3.0	3.3	-120.57	-547.7	-927.2	1,076.9	1,070.7	6.25	172.440	
400.0	400.0	404.5	404.5	3.0	3.4	-120.56	-548.1	-928.3	1,078.2	1,071.8	6.40	168.517	
500.0	500.0	509.1	509.1	3.1	3.6	-120.54	-548.5	-929.5	1,079.3	1,072.7	6.58	163.941	
600.0	600.0	612.7	612.7	3.1	3.9	-120.52	-548.5	-930.5	1,080.2	1,073.4	6.78	159.297	
700.0	700.0	724.1	724.0	3.1	4.1	-120.52	-548.6	-930.6	1,080.2	1,073.2	7.01	154.088	
800.0	800.0	831.0	831.0	3.2	4.4	-120.55	-548.7	-929.5	1,079.4	1,072.1	7.26	148.709	
900.0	900.0	929.8	929.8	3.2	4.7	-120.59	-548.6	-928.2	1,078.3	1,070.8	7.51	143.560	
1,000.0	1,000.0	1,024.7	1,024.7	3.2	4.9	-120.63	-549.0	-927.3	1,077.6	1,069.9	7.77	138.684	
1,100.0	1,100.0	1,124.0	1,124.0	3.3	5.2	-120.69	-549.8	-926.3	1,077.2	1,069.1	8.06	133.588	
1,200.0	1,200.0	1,223.7	1,223.6	3.4	5.5	-120.76	-550.8	-925.2	1,076.8	1,068.4	8.37	128.575	
1,300.0	1,300.0	1,321.1	1,321.0	3.4	5.8	-120.82	-551.6	-924.4	1,076.5	1,067.8	8.70	123.801	
1,331.5	1,331.5	1,351.0	1,350.9	3.4	5.9	-120.84	-551.8	-924.3	1,076.4	1,067.6	8.80	122.323	
1,400.0	1,400.0	1,416.3	1,416.3	3.5	6.1	-120.85	-552.1	-924.2	1,076.5	1,067.5	9.03	119.211	
1,500.0	1,500.0	1,512.9	1,512.9	3.5	6.4	-120.85	-552.3	-924.5	1,077.0	1,067.6	9.37	114.902	
1,600.0	1,600.0	1,610.2	1,610.1	3.6	6.7	-120.83	-552.4	-925.5	1,077.8	1,068.1	9.70	111.064	
1,700.0	1,700.0	1,733.6	1,733.6	3.7	7.0	-120.77	-551.2	-925.9	1,077.7	1,067.5	10.19	105.774	
1,800.0	1,800.0	1,857.3	1,857.2	3.8	7.4	-120.65	-547.7	-924.3	1,075.1	1,064.3	10.75	100.027	
1,900.0	1,900.0	1,981.2	1,980.9	3.9	7.8	-120.53	-543.0	-920.6	1,070.6	1,059.4	11.24	95.245	
2,000.0	2,000.0	2,117.0	2,116.3	3.9	8.4	-120.41	-535.9	-913.1	1,063.2	1,051.4	11.87	89.608	
2,100.0	2,100.0	2,219.7	2,218.6	4.0	8.8	-120.32	-529.7	-905.8	1,054.0	1,041.7	12.28	85.818	
2,200.0	2,200.0	2,300.0	2,298.5	4.1	9.1	-120.27	-525.3	-899.9	1,045.0	1,032.4	12.60	82.911	
2,300.0	2,300.0	2,386.7	2,384.9	4.2	9.4	-120.26	-521.8	-894.4	1,037.5	1,024.5	13.00	79.809	
2,400.0	2,400.0	2,475.9	2,474.1	4.3	9.8	-120.26	-519.3	-889.9	1,031.8	1,018.4	13.40	77.005	
2,500.0	2,500.0	2,568.5	2,566.5	4.4	10.1	-120.28	-517.2	-885.8	1,026.9	1,013.1	13.77	74.598	
2,600.0	2,600.0	2,663.6	2,661.5	4.5	10.4	-19.87	-515.4	-882.2	1,020.9	1,006.8	14.10	72.421	
2,700.0	2,699.8	2,757.2	2,755.0	4.5	10.8	-20.04	-513.7	-879.0	1,012.1	997.7	14.40	70.281	
2,745.8	2,745.5	2,800.0	2,797.8	4.5	10.9	-20.14	-512.9	-877.7	1,007.3	992.7	14.54	69.262	
2,800.0	2,799.5	2,849.2	2,847.0	4.5	11.1	-20.22	-512.2	-876.5	1,001.3	986.6	14.71	68.078	
2,900.0	2,899.1	2,942.2	2,940.0	4.5	11.4	-20.37	-510.9	-874.6	990.8	975.7	15.02	65.956	
3,000.0	2,998.8	3,037.6	3,035.4	4.6	11.7	-20.54	-509.9	-873.0	980.8	965.5	15.35	63.913	
3,100.0	3,098.4	3,134.3	3,132.0	4.6	12.0	-20.71	-509.2	-871.6	971.2	955.5	15.68	61.929	
3,200.0	3,198.0	3,230.0	3,227.7	4.6	12.4	-20.88	-508.5	-870.6	961.9	945.9	16.02	60.057	
3,300.0	3,297.7	3,328.6	3,326.3	4.7	12.7	-21.07	-508.1	-869.7	952.9	936.5	16.36	58.230	
3,400.0	3,397.3	3,425.5	3,423.2	4.7	13.0	-21.25	-507.6	-869.0	944.0	927.3	16.71	56.478	
3,500.0	3,496.9	3,520.6	3,518.3	4.8	13.3	-21.42	-507.2	-868.8	935.6	918.6	17.07	54.803	
3,600.0	3,596.6	3,619.6	3,617.3	4.8	13.7	-21.59	-506.9	-868.8	927.5	910.0	17.44	53.176	
3,700.0	3,696.2	3,717.0	3,714.7	4.9	14.0	-21.78	-506.8	-868.9	919.5	901.8	17.79	51.689	
3,800.0	3,795.8	3,821.4	3,819.1	4.9	14.3	-21.99	-506.6	-868.7	911.3	893.2	18.17	50.157	
3,900.0	3,895.5	3,918.2	3,915.9	5.0	14.6	-22.19	-506.6	-868.4	903.1	884.6	18.53	48.746	
4,000.0	3,995.1	4,014.0	4,011.7	5.0	15.0	-22.39	-506.6	-868.5	895.3	876.4	18.88	47.416	
4,100.0	4,094.7	4,109.7	4,107.4	5.1	15.3	-22.58	-506.8	-869.0	887.9	868.7	19.24	46.145	
4,200.0	4,194.4	4,209.1	4,206.8	5.2	15.6	-22.79	-507.1	-869.7	880.8	861.2	19.62	44.886	
4,300.0	4,294.0	4,312.6	4,310.3	5.2	16.0	-23.01	-507.3	-870.2	873.4	853.4	20.02	43.626	
4,400.0	4,393.6	4,408.6	4,406.3	5.3	16.3	-23.20	-507.3	-870.9	866.1	845.7	20.39	42.476	
4,500.0	4,493.2	4,504.6	4,502.3	5.4	16.6	-23.40	-507.8	-871.7	859.2	838.4	20.76	41.378	
4,600.0	4,592.9	4,605.3	4,603.0	5.5	17.0	-23.65	-508.6	-872.6	852.5	831.3	21.17	40.267	
4,700.0	4,692.5	4,700.0	4,697.7	5.6	17.3	-23.89	-509.6	-873.5	846.0	824.5	21.55	39.253	
4,800.0	4,792.1	4,797.2	4,794.9	5.6	17.6	-24.16	-511.1	-874.7	840.1	818.1	21.95	38.272	
4,900.0	4,891.8	4,897.7	4,895.3	5.7	18.0	-24.47	-513.0	-875.8	834.2	811.9	22.36	37.301	

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

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Anticollision Report

Company:	DELAWARE BASIN WEST	**Local Co-ordinate Reference:**	Well BOO RADLEY COM #706H
Project:	ATLAS PROSPECT (NM-E)	**TVD Reference:**	KB=25' @ 3059.6usft (PIONEER 84)
Reference Site:	BOO RADLEY COM PROJECT	**MD Reference:**	KB=25' @ 3059.6usft (PIONEER 84)
Site Error:	3.0 usft	**North Reference:**	Grid
Reference Well:	BOO RADLEY COM #706H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	3.0 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	OWB	**Database:**	edm
Reference Design:	PWP4	**Offset TVD Reference:**	Offset Datum

Offset Design BOO RADLEY COM PROJECT - SKEEN 21 DM STATE 1H - OWB - AWP — **Offset Site Error:** 3.0 usft

Survey Program: 100-GYRO-NS, 7413-MWD — **Offset Well Error:** 3.0 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
5,000.0	4,991.4	4,997.0	4,994.7	5.8	18.3	-24.77	-514.7	-876.9	828.3	805.6	22.78	36.371	
5,100.0	5,091.0	5,097.5	5,095.1	5.9	18.7	-25.05	-516.2	-878.2	822.5	799.3	23.19	35.467	
5,200.0	5,190.7	5,194.4	5,192.0	6.0	19.0	-25.32	-517.6	-879.6	816.7	793.2	23.59	34.622	
5,300.0	5,290.3	5,298.8	5,296.4	6.1	19.4	-25.64	-519.3	-880.8	811.0	786.9	24.03	33.752	
5,400.0	5,389.9	5,395.7	5,393.3	6.2	19.7	-25.95	-521.0	-881.8	805.0	780.6	24.43	32.948	
5,500.0	5,489.6	5,500.7	5,498.3	6.3	20.1	-26.31	-522.9	-882.6	799.0	774.2	24.88	32.118	
5,600.0	5,589.2	5,599.2	5,596.7	6.3	20.4	-26.68	-524.8	-882.9	792.8	767.5	25.30	31.340	
5,700.0	5,688.8	5,701.9	5,699.4	6.4	20.8	-27.10	-527.1	-882.9	786.4	760.7	25.73	30.563	
5,800.0	5,788.5	5,800.0	5,797.5	6.5	21.1	-27.51	-529.2	-882.7	780.0	753.9	26.15	29.829	
5,900.0	5,888.1	5,898.9	5,896.3	6.6	21.4	-27.93	-531.4	-882.7	773.7	747.2	26.57	29.121	
6,000.0	5,987.7	5,993.6	5,991.0	6.7	21.7	-28.37	-534.0	-882.8	768.0	741.0	26.97	28.470	
6,100.0	6,087.4	6,089.4	6,086.8	6.8	22.1	-28.82	-537.0	-883.2	762.8	735.4	27.38	27.857	
6,200.0	6,187.0	6,186.6	6,183.8	6.9	22.4	-29.28	-540.4	-884.0	758.1	730.3	27.80	27.273	
6,300.0	6,286.6	6,283.1	6,280.3	7.0	22.7	-29.75	-544.0	-885.0	753.8	725.6	28.21	26.723	
6,400.0	6,386.3	6,376.9	6,374.1	7.1	23.1	-30.20	-547.8	-886.4	750.2	721.6	28.61	26.224	
6,500.0	6,485.9	6,471.9	6,468.9	7.3	23.4	-30.65	-551.9	-888.6	747.3	718.3	29.01	25.762	
6,600.0	6,585.5	6,570.7	6,567.5	7.4	23.8	-31.12	-556.5	-891.1	745.0	715.6	29.43	25.313	
6,700.0	6,685.2	6,674.5	6,671.2	7.5	24.1	-31.63	-561.3	-893.5	742.5	712.6	29.88	24.851	
6,800.0	6,784.8	6,779.4	6,776.1	7.6	24.5	-32.10	-565.2	-895.8	739.4	709.0	30.33	24.376	
6,900.0	6,884.4	6,885.0	6,881.6	7.7	24.8	-32.49	-567.8	-898.4	735.5	704.7	30.79	23.891	
7,000.0	6,984.1	6,978.9	6,975.4	7.8	25.2	-32.72	-568.9	-901.6	731.6	700.4	31.19	23.457	
7,100.0	7,083.7	7,078.9	7,075.3	7.9	25.5	-32.84	-569.4	-906.6	728.4	696.7	31.62	23.032	
7,200.0	7,183.3	7,178.6	7,174.9	8.0	25.9	-32.93	-569.4	-911.8	724.9	692.9	32.06	22.615	
7,300.0	7,282.9	7,280.8	7,276.9	8.1	26.2	-33.05	-569.6	-916.8	721.5	689.0	32.50	22.199	
7,400.0	7,382.6	7,379.8	7,375.8	8.2	26.6	-33.19	-570.0	-921.3	717.8	684.9	32.93	21.800	
7,446.1	7,428.5	7,400.5	7,396.5	8.3	26.6	-33.22	-570.3	-922.4	717.0	684.0	32.97	21.744	CC, ES
7,500.0	7,482.2	7,413.0	7,408.9	8.3	26.6	-33.24	-570.8	-923.4	718.3	685.4	32.95	21.802	
7,600.0	7,581.8	7,466.7	7,462.0	8.4	26.7	-33.45	-576.4	-929.2	726.7	693.7	32.96	22.049	
7,700.0	7,681.5	7,521.7	7,515.5	8.6	26.8	-33.95	-587.7	-935.3	741.9	709.0	32.96	22.513	
7,800.0	7,781.1	7,603.0	7,592.6	8.7	26.8	-35.37	-612.6	-939.6	761.3	728.2	33.03	23.045	
7,900.0	7,880.7	7,655.5	7,640.7	8.8	26.9	-36.68	-633.7	-939.3	784.9	751.9	33.01	23.781	
8,000.0	7,980.4	7,710.0	7,688.7	8.9	26.9	-38.26	-659.5	-937.6	814.2	781.2	32.97	24.695	
8,100.0	8,080.0	7,762.0	7,732.7	9.0	26.9	-39.90	-687.1	-935.0	849.0	816.0	32.93	25.782	
8,200.0	8,179.6	7,794.0	7,758.8	9.1	27.0	-40.93	-705.5	-933.4	889.5	856.7	32.82	27.102	
8,300.0	8,279.3	7,826.0	7,784.2	9.2	27.0	-41.95	-724.9	-932.3	935.8	903.1	32.73	28.594	
8,400.0	8,378.9	7,858.0	7,808.6	9.4	27.0	-42.97	-745.6	-931.4	987.4	954.8	32.65	30.239	
8,500.0	8,478.5	7,889.0	7,831.1	9.5	27.1	-43.96	-766.9	-930.6	1,044.1	1,011.5	32.61	32.023	
8,600.0	8,578.2	7,921.0	7,852.7	9.6	27.1	-45.00	-790.5	-929.9	1,105.7	1,073.1	32.60	33.916	
8,700.0	8,677.8	7,921.0	7,852.7	9.7	27.1	-45.00	-790.5	-929.9	1,171.2	1,138.8	32.42	36.124	
8,800.0	8,777.4	7,952.0	7,872.3	9.8	27.2	-45.98	-814.5	-929.6	1,240.1	1,207.6	32.47	38.194	
8,900.0	8,877.1	7,967.8	7,881.8	10.0	27.2	-46.48	-827.2	-929.5	1,312.2	1,279.8	32.45	40.436	
9,000.0	8,976.7	7,983.0	7,890.4	10.1	27.3	-46.94	-839.6	-929.6	1,387.2	1,354.7	32.46	42.732	
9,032.1	9,008.7	7,983.0	7,890.4	10.1	27.3	-46.94	-839.6	-929.6	1,411.8	1,379.3	32.47	43.481	
9,050.0	9,026.5	7,983.0	7,890.4	10.1	27.3	-30.11	-839.6	-929.6	1,425.4	1,393.0	32.45	43.926	
9,075.0	9,051.3	7,983.0	7,890.4	10.1	27.3	-17.12	-839.6	-929.6	1,443.9	1,411.5	32.42	44.540	
9,100.0	9,075.9	7,998.9	7,899.0	10.1	27.3	-10.69	-853.0	-929.6	1,461.4	1,428.9	32.49	44.984	
9,125.0	9,100.3	8,015.0	7,907.4	10.1	27.4	-7.05	-866.8	-929.7	1,478.5	1,446.0	32.55	45.425	
9,150.0	9,124.4	8,015.0	7,907.4	10.1	27.4	-4.50	-866.8	-929.7	1,494.6	1,462.1	32.51	45.980	
9,175.0	9,148.1	8,015.0	7,907.4	10.1	27.4	-2.78	-866.8	-929.7	1,509.9	1,477.4	32.46	46.518	
9,200.0	9,171.3	8,015.0	7,907.4	10.1	27.4	-1.57	-866.8	-929.7	1,524.4	1,492.0	32.41	47.038	
9,225.0	9,194.1	8,015.0	7,907.4	10.2	27.4	-0.68	-866.8	-929.7	1,538.1	1,505.8	32.36	47.539	
9,250.0	9,216.3	8,026.9	7,913.3	10.2	27.4	-0.21	-877.1	-929.7	1,550.9	1,518.5	32.37	47.908	

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

ConocoPhillips

Anticollision Report

Company:	DELAWARE BASIN WEST	**Local Co-ordinate Reference:**	Well BOO RADLEY COM #706H
Project:	ATLAS PROSPECT (NM-E)	**TVD Reference:**	KB=25' @ 3059.6usft (PIONEER 84)
Reference Site:	BOO RADLEY COM PROJECT	**MD Reference:**	KB=25' @ 3059.6usft (PIONEER 84)
Site Error:	3.0 usft	**North Reference:**	Grid
Reference Well:	BOO RADLEY COM #706H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	3.0 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	OWB	**Database:**	edm
Reference Design:	PWP4	**Offset TVD Reference:**	Offset Datum

Offset Design BOO RADLEY COM PROJECT - SKEEN 21 DM STATE 1H - OWB - AWP — **Offset Site Error:** 3.0 usft

Survey Program: 100-GYRO-NS, 7413-MWD — **Offset Well Error:** 3.0 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
9,275.0	9,237.9	8,031.7	7,915.6	10.2	27.4	0.23	-881.4	-929.7	1,562.8	1,530.5	32.34	48.318	
9,300.0	9,258.8	8,046.0	7,922.1	10.2	27.4	0.42	-894.0	-929.7	1,574.0	1,541.6	32.38	48.611	
9,325.0	9,278.9	8,046.0	7,922.1	10.2	27.4	0.76	-894.0	-929.7	1,584.0	1,551.7	32.32	49.013	
9,350.0	9,298.3	8,046.0	7,922.1	10.2	27.4	1.04	-894.0	-929.7	1,593.2	1,560.9	32.26	49.393	
9,375.0	9,316.8	8,046.0	7,922.1	10.3	27.4	1.27	-894.0	-929.7	1,601.5	1,569.3	32.19	49.748	
9,400.0	9,334.4	8,046.0	7,922.1	10.3	27.4	1.46	-894.0	-929.7	1,608.9	1,576.8	32.13	50.079	
9,425.0	9,351.1	8,062.8	7,929.4	10.3	27.5	1.42	-909.2	-929.6	1,615.0	1,582.9	32.17	50.199	
9,450.0	9,366.8	8,078.0	7,935.4	10.3	27.5	1.37	-923.1	-929.4	1,620.5	1,588.3	32.21	50.312	
9,475.0	9,381.4	8,078.0	7,935.4	10.4	27.5	1.51	-923.1	-929.4	1,624.8	1,592.7	32.15	50.546	
9,500.0	9,395.0	8,078.0	7,935.4	10.4	27.5	1.63	-923.1	-929.4	1,628.2	1,596.1	32.08	50.752	
9,525.0	9,407.4	8,078.0	7,935.4	10.5	27.5	1.75	-923.1	-929.4	1,630.6	1,598.6	32.02	50.928	
9,550.0	9,418.7	8,078.0	7,935.4	10.5	27.5	1.85	-923.1	-929.4	1,632.2	1,600.2	31.96	51.075	
9,575.0	9,428.8	8,094.4	7,941.4	10.6	27.6	1.76	-938.3	-929.2	1,632.4	1,600.4	32.01	51.004	
9,600.0	9,437.8	8,110.0	7,946.7	10.6	27.7	1.68	-953.1	-929.0	1,632.0	1,600.0	32.05	50.918	
9,625.0	9,445.4	8,110.0	7,946.7	10.7	27.7	1.77	-953.1	-929.0	1,630.3	1,598.3	32.00	50.956	
9,650.0	9,451.9	8,110.0	7,946.7	10.8	27.7	1.87	-953.1	-929.0	1,627.7	1,595.8	31.94	50.961	
9,675.0	9,457.1	8,110.0	7,946.7	10.8	27.7	1.96	-953.1	-929.0	1,624.2	1,592.4	31.89	50.934	
9,700.0	9,460.9	8,110.0	7,946.7	10.9	27.7	2.06	-953.1	-929.0	1,619.8	1,588.0	31.84	50.874	
9,725.0	9,463.5	8,124.6	7,951.1	11.0	27.7	1.99	-967.0	-928.8	1,614.2	1,582.3	31.89	50.615	
9,750.0	9,464.8	8,142.0	7,955.8	11.1	27.8	1.89	-983.7	-928.7	1,608.0	1,576.0	31.96	50.305	
9,764.7	9,465.0	8,142.0	7,955.8	11.1	27.8	1.95	-983.7	-928.7	1,603.6	1,571.7	31.94	50.206	
9,800.0	9,464.8	8,142.0	7,955.8	11.3	27.8	2.17	-983.7	-928.7	1,593.2	1,561.3	31.88	49.970	
9,900.0	9,464.3	8,160.1	7,959.9	11.6	27.9	2.51	-1,001.4	-928.7	1,567.3	1,535.4	31.88	49.160	
10,000.0	9,463.7	8,173.0	7,962.5	12.1	27.9	2.81	-1,014.0	-928.7	1,546.3	1,514.4	31.93	48.427	
10,100.0	9,463.2	8,205.0	7,967.5	12.6	28.1	2.86	-1,045.6	-928.8	1,530.0	1,497.8	32.16	47.574	
10,200.0	9,462.7	8,247.6	7,971.7	13.1	28.3	2.78	-1,088.0	-928.5	1,518.4	1,485.8	32.55	46.643	
10,300.0	9,462.1	8,313.0	7,975.4	13.6	28.6	2.54	-1,153.3	-928.0	1,510.9	1,477.8	33.18	45.540	
10,400.0	9,461.6	8,337.3	7,975.9	14.2	28.8	2.51	-1,177.6	-927.8	1,506.7	1,473.1	33.66	44.760	
10,448.5	9,461.4	8,357.6	7,975.9	14.5	28.9	2.44	-1,197.9	-927.8	1,506.3	1,472.3	33.98	44.331	
10,500.0	9,461.1	8,377.0	7,975.5	14.8	29.0	2.37	-1,217.3	-928.0	1,506.8	1,472.5	34.31	43.917	
10,600.0	9,460.6	8,472.0	7,972.5	15.4	29.6	2.18	-1,312.2	-929.3	1,509.3	1,474.3	35.05	43.060	
10,699.3	9,460.0	8,548.1	7,969.2	16.0	30.2	2.08	-1,388.3	-930.2	1,513.1	1,477.4	35.67	42.413	
10,800.0	9,459.5	8,769.2	7,966.1	16.6	32.0	2.10	-1,609.2	-930.5	1,514.5	1,477.7	36.82	41.136	
10,900.0	9,459.0	8,853.0	7,968.2	17.2	32.8	2.16	-1,692.9	-931.7	1,511.5	1,473.9	37.59	40.214	
11,000.0	9,458.5	8,960.0	7,969.9	17.9	33.8	2.23	-1,799.9	-933.4	1,509.6	1,471.1	38.50	39.207	
11,100.0	9,457.9	9,066.2	7,974.2	18.6	34.9	2.28	-1,906.1	-934.4	1,505.0	1,465.5	39.48	38.124	
11,200.0	9,457.4	9,195.0	7,978.4	19.3	36.3	2.26	-2,034.7	-933.5	1,501.3	1,460.7	40.63	36.955	
11,300.0	9,456.9	9,232.0	7,979.9	20.0	36.7	2.24	-2,071.7	-932.9	1,497.6	1,456.2	41.42	36.159	
11,353.5	9,456.6	9,268.6	7,980.4	20.4	37.1	2.24	-2,108.2	-932.6	1,496.8	1,454.8	41.95	35.684	
11,400.0	9,456.4	9,295.0	7,979.9	20.7	37.4	2.24	-2,134.7	-932.6	1,497.3	1,454.9	42.38	35.331	
11,500.0	9,455.8	9,395.1	7,976.7	21.5	38.6	2.26	-2,234.7	-933.1	1,499.9	1,456.4	43.50	34.484	
11,600.0	9,455.3	9,521.7	7,977.6	22.2	40.1	2.29	-2,361.3	-933.7	1,498.4	1,453.6	44.73	33.497	
11,614.1	9,455.2	9,529.2	7,977.5	22.3	40.2	2.29	-2,368.8	-933.8	1,498.3	1,453.5	44.86	33.399	
11,700.0	9,454.8	9,592.1	7,976.5	23.0	40.9	2.30	-2,431.7	-934.0	1,499.2	1,453.5	45.72	32.789	
11,795.5	9,454.3	9,710.7	7,975.8	23.7	42.4	2.27	-2,550.3	-933.0	1,499.1	1,452.2	46.91	31.960	
11,800.0	9,454.3	9,713.5	7,975.7	23.7	42.5	2.27	-2,553.1	-932.9	1,499.1	1,452.2	46.95	31.930	
11,900.0	9,453.7	9,828.3	7,974.9	24.5	43.9	2.24	-2,667.8	-931.8	1,499.4	1,451.2	48.17	31.126	
12,000.0	9,453.2	9,927.0	7,975.3	25.2	45.3	2.15	-2,766.5	-929.5	1,498.4	1,449.1	49.32	30.378	
12,023.9	9,453.1	9,939.1	7,975.2	25.4	45.4	2.14	-2,778.7	-929.1	1,498.3	1,448.8	49.56	30.234	
12,100.0	9,452.7	9,996.8	7,974.5	26.0	46.2	2.08	-2,836.3	-927.5	1,498.8	1,448.4	50.38	29.751	
12,200.0	9,452.2	10,073.3	7,972.6	26.8	47.2	1.99	-2,912.7	-925.0	1,500.7	1,449.3	51.47	29.159	
12,300.0	9,451.6	10,193.5	7,968.5	27.6	48.9	1.86	-3,032.8	-921.5	1,503.6	1,450.8	52.80	28.475	

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

ConocoPhillips
Anticollision Report

Company:	DELAWARE BASIN WEST	**Local Co-ordinate Reference:**	Well BOO RADLEY COM #706H
Project:	ATLAS PROSPECT (NM-E)	**TVD Reference:**	KB=25' @ 3059.6usft (PIONEER 84)
Reference Site:	BOO RADLEY COM PROJECT	**MD Reference:**	KB=25' @ 3059.6usft (PIONEER 84)
Site Error:	3.0 usft	**North Reference:**	Grid
Reference Well:	BOO RADLEY COM #706H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	3.0 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	OWB	**Database:**	edm
Reference Design:	PWP4	**Offset TVD Reference:**	Offset Datum

Offset Design BOO RADLEY COM PROJECT - SKEEN 21 DM STATE 1H - OWB - AWP — **Offset Site Error:** 3.0 usft

Survey Program: 100-GYRO-NS, 7413-MWD — **Offset Well Error:** 3.0 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
12,400.0	9,451.1	10,281.0	7,965.9	28.4	50.1	1.81	-3,120.2	-920.2	1,506.0	1,452.0	54.00	27.887	
12,500.0	9,450.6	10,387.9	7,963.1	29.2	51.6	1.86	-3,227.1	-921.3	1,508.1	1,452.8	55.31	27.268	
12,600.0	9,450.1	10,521.7	7,962.4	30.0	53.5	2.01	-3,360.9	-925.0	1,508.0	1,451.2	56.80	26.549	
12,700.0	9,449.6	10,645.7	7,962.9	30.8	55.3	2.11	-3,484.9	-927.4	1,507.3	1,449.0	58.24	25.883	
12,793.8	9,449.1	10,709.4	7,963.4	31.5	56.2	2.14	-3,548.5	-928.2	1,506.1	1,446.8	59.33	25.387	
12,800.0	9,449.0	10,712.7	7,963.4	31.6	56.2	2.14	-3,551.8	-928.2	1,506.2	1,446.8	59.39	25.358	
12,900.0	9,448.5	10,825.0	7,962.0	32.4	57.9	2.10	-3,664.0	-926.9	1,506.9	1,446.1	60.81	24.781	
12,931.0	9,448.3	10,846.7	7,961.9	32.6	58.2	2.07	-3,685.7	-926.0	1,506.8	1,445.7	61.18	24.630	
13,000.0	9,448.0	10,931.2	7,961.2	33.2	59.4	1.87	-3,770.1	-920.7	1,507.0	1,444.8	62.17	24.239	
13,100.0	9,447.5	11,037.8	7,963.0	34.0	61.0	1.69	-3,876.5	-915.8	1,504.5	1,441.0	63.56	23.671	
13,200.0	9,446.9	11,182.3	7,965.8	34.8	63.2	1.64	-4,021.0	-914.0	1,502.3	1,437.1	65.16	23.054	
13,300.0	9,446.4	11,272.9	7,969.4	35.6	64.6	1.57	-4,111.5	-912.0	1,497.8	1,431.3	66.49	22.528	
13,400.0	9,445.9	11,355.1	7,971.7	36.5	65.8	1.52	-4,193.7	-910.6	1,494.5	1,426.7	67.77	22.051	
13,500.0	9,445.4	11,426.4	7,972.5	37.3	66.9	1.52	-4,264.9	-910.3	1,492.8	1,423.8	69.01	21.630	
13,529.8	9,445.2	11,446.0	7,972.5	37.5	67.2	1.53	-4,284.5	-910.6	1,492.7	1,423.3	69.37	21.516	
13,600.0	9,444.8	11,495.4	7,971.9	38.1	67.9	1.57	-4,334.0	-911.5	1,493.1	1,422.9	70.24	21.258	
13,700.0	9,444.3	11,591.4	7,969.6	38.9	69.4	1.64	-4,429.9	-913.2	1,495.1	1,423.5	71.61	20.879	
13,800.0	9,443.8	11,725.3	7,969.1	39.7	71.4	1.70	-4,563.7	-914.5	1,494.7	1,421.5	73.20	20.419	
13,833.7	9,443.6	11,750.0	7,969.1	40.0	71.8	1.68	-4,588.4	-914.1	1,494.6	1,421.0	73.63	20.300	
13,900.0	9,443.3	11,806.9	7,968.5	40.6	72.7	1.63	-4,645.3	-912.7	1,494.9	1,420.4	74.50	20.065	
14,000.0	9,442.7	11,907.5	7,967.3	41.4	74.2	1.46	-4,745.8	-908.1	1,495.4	1,419.5	75.90	19.703	
14,100.0	9,442.2	11,998.0	7,965.8	42.2	75.6	1.28	-4,836.1	-903.4	1,496.4	1,419.2	77.24	19.373	
14,200.0	9,441.7	12,142.0	7,966.0	43.1	77.9	1.15	-4,980.1	-899.6	1,495.5	1,416.6	78.90	18.954	
14,265.1	9,441.4	12,181.7	7,966.1	43.6	78.5	1.14	-5,019.7	-899.4	1,494.9	1,415.2	79.70	18.757	
14,300.0	9,441.2	12,205.0	7,965.9	43.9	78.8	1.14	-5,043.1	-899.2	1,495.1	1,415.0	80.14	18.657	
14,399.3	9,440.7	12,269.0	7,963.6	44.7	79.8	1.09	-5,107.0	-897.8	1,497.7	1,416.4	81.36	18.409	
14,499.0	9,440.1	12,377.2	7,959.4	45.5	81.5	0.96	-5,215.1	-894.4	1,501.1	1,418.2	82.86	18.116	
14,500.0	9,440.1	12,378.2	7,959.4	45.6	81.5	0.96	-5,216.1	-894.3	1,501.1	1,418.2	82.88	18.113	
14,600.0	9,439.6	12,511.8	7,957.5	46.4	83.6	1.05	-5,349.7	-891.6	1,501.9	1,417.3	84.52	17.768	
14,700.0	9,439.1	12,525.0	7,957.4	47.2	83.8	1.06	-5,362.8	-891.4	1,504.7	1,419.4	85.38	17.623	SF
14,800.0	9,438.6	12,525.0	7,957.4	48.1	83.8	1.06	-5,362.8	-891.4	1,514.2	1,428.3	85.90	17.628	
14,900.0	9,438.0	12,525.0	7,957.4	48.9	83.8	1.06	-5,362.8	-891.4	1,530.1	1,444.0	86.14	17.763	
15,000.0	9,437.5	12,525.0	7,957.4	49.7	83.8	1.06	-5,362.8	-891.4	1,552.4	1,466.2	86.13	18.023	
15,100.0	9,437.0	12,525.0	7,957.4	50.6	83.8	1.06	-5,362.8	-891.4	1,580.6	1,494.7	85.89	18.403	
15,200.0	9,436.5	12,525.0	7,957.4	51.4	83.8	1.06	-5,362.8	-891.4	1,614.6	1,529.2	85.45	18.895	
15,300.0	9,435.9	12,525.0	7,957.4	52.2	83.8	1.06	-5,362.8	-891.4	1,653.9	1,569.1	84.84	19.495	
15,400.0	9,435.4	12,525.0	7,957.4	53.1	83.8	1.06	-5,362.8	-891.4	1,698.2	1,614.2	84.09	20.195	
15,500.0	9,434.9	12,525.0	7,957.4	53.9	83.8	1.06	-5,362.8	-891.4	1,747.2	1,663.9	83.24	20.989	
15,518.1	9,434.8	12,525.0	7,957.4	54.1	83.8	1.06	-5,362.8	-891.4	1,756.5	1,673.4	83.08	21.142	
15,600.0	9,434.4	12,525.0	7,957.4	54.8	83.8	2.10	-5,362.8	-891.4	1,800.3	1,718.0	82.31	21.871	
15,700.0	9,433.8	12,525.0	7,957.4	55.6	83.8	3.49	-5,362.8	-891.4	1,857.2	1,775.9	81.32	22.838	
15,740.4	9,433.6	12,525.0	7,957.4	56.0	83.8	4.09	-5,362.8	-891.4	1,881.2	1,800.2	80.91	23.251	
15,800.0	9,433.3	12,525.0	7,957.4	56.5	83.8	4.09	-5,362.8	-891.4	1,917.5	1,837.2	80.29	23.881	
15,900.0	9,432.8	12,525.0	7,957.4	57.3	83.8	4.09	-5,362.8	-891.4	1,981.0	1,901.7	79.26	24.994	

ConocoPhillips

Anticollision Report

Company:	DELAWARE BASIN WEST	**Local Co-ordinate Reference:**	Well BOO RADLEY COM #706H
Project:	ATLAS PROSPECT (NM-E)	**TVD Reference:**	KB=25' @ 3059.6usft (PIONEER 84)
Reference Site:	BOO RADLEY COM PROJECT	**MD Reference:**	KB=25' @ 3059.6usft (PIONEER 84)
Site Error:	3.0 usft	**North Reference:**	Grid
Reference Well:	BOO RADLEY COM #706H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	3.0 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	OWB	**Database:**	edm
Reference Design:	PWP4	**Offset TVD Reference:**	Offset Datum

Offset Design HONEY GRAHAM STATE PROJECT (ATLAS 2628) - GRAHAM CRACKER 16 STATE #1H - OWB - AC — **Offset Site Error:** 0.0 usft

Survey Program: 100-GYRO-NS, 7477-MWD — **Offset Well Error:** 0.0 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
6,100.0	6,087.4	12,477.0	8,016.8	7.5	82.5	20.06	-46.6	-678.6	1,946.6	1,895.8	50.78	38.333	
6,200.0	6,187.0	12,477.0	8,016.8	7.6	82.5	20.06	-46.6	-678.6	1,847.3	1,796.2	51.13	36.130	
6,300.0	6,286.6	12,477.0	8,016.8	7.7	82.5	20.06	-46.6	-678.6	1,748.1	1,696.6	51.50	33.943	
6,400.0	6,386.3	12,477.0	8,016.8	7.8	82.5	20.06	-46.6	-678.6	1,649.0	1,597.1	51.90	31.772	
6,500.0	6,485.9	12,477.0	8,016.8	7.8	82.5	20.06	-46.6	-678.6	1,550.0	1,497.7	52.33	29.618	
6,600.0	6,585.5	12,477.0	8,016.8	7.9	82.5	20.06	-46.6	-678.6	1,451.2	1,398.4	52.81	27.481	
6,700.0	6,685.2	12,477.0	8,016.8	8.0	82.5	20.06	-46.6	-678.6	1,352.5	1,299.2	53.33	25.361	
6,800.0	6,784.8	12,477.0	8,016.8	8.1	82.5	20.06	-46.6	-678.6	1,254.0	1,200.1	53.92	23.258	
6,900.0	6,884.4	12,477.0	8,016.8	8.2	82.5	20.06	-46.6	-678.6	1,155.8	1,101.2	54.59	21.174	
7,000.0	6,984.1	12,477.0	8,016.8	8.3	82.5	20.06	-46.6	-678.6	1,057.9	1,002.6	55.36	19.109	
7,100.0	7,083.7	12,477.0	8,016.8	8.4	82.5	20.06	-46.6	-678.6	960.5	904.2	56.28	17.066	
7,200.0	7,183.3	12,477.0	8,016.8	8.5	82.5	20.06	-46.6	-678.6	863.6	806.2	57.40	15.046	
7,300.0	7,282.9	12,477.0	8,016.8	8.7	82.5	20.06	-46.6	-678.6	767.6	708.8	58.80	13.054	
7,400.0	7,382.6	12,477.0	8,016.8	8.8	82.5	20.06	-46.6	-678.6	672.7	612.1	60.60	11.100	
7,500.0	7,482.2	12,477.0	8,016.8	8.9	82.5	20.06	-46.6	-678.6	579.5	516.5	63.01	9.197	
7,600.0	7,581.8	12,477.0	8,016.8	9.0	82.5	20.06	-46.6	-678.6	489.1	422.7	66.34	7.372	
7,700.0	7,681.5	12,477.0	8,016.8	9.1	82.5	20.06	-46.6	-678.6	403.1	332.1	71.04	5.674	
7,800.0	7,781.1	12,477.0	8,016.8	9.2	82.5	20.06	-46.6	-678.6	325.3	247.7	77.60	4.192	
7,900.0	7,880.7	12,477.0	8,016.8	9.3	82.5	20.06	-46.6	-678.6	263.0	177.5	85.52	3.075	
8,000.0	7,980.4	12,477.0	8,016.8	9.4	82.5	20.06	-46.6	-678.6	229.1	138.4	90.70	2.526	
8,033.4	8,013.6	12,477.0	8,016.8	9.4	82.5	20.06	-46.6	-678.6	226.6	136.0	90.59	2.502	CC, ES, SF
8,100.0	8,080.0	12,477.0	8,016.8	9.5	82.5	20.06	-46.6	-678.6	236.2	149.0	87.22	2.709	
8,200.0	8,179.6	12,477.0	8,016.8	9.6	82.5	20.06	-46.6	-678.6	281.3	203.2	78.07	3.603	
8,300.0	8,279.3	12,477.0	8,016.8	9.7	82.5	20.06	-46.6	-678.6	349.9	280.0	69.89	5.007	
8,400.0	8,378.9	12,477.0	8,016.8	9.8	82.5	20.06	-46.6	-678.6	431.0	366.6	64.46	6.687	
8,500.0	8,478.5	12,477.0	8,016.8	9.9	82.5	20.06	-46.6	-678.6	518.7	457.6	61.14	8.485	
8,600.0	8,578.2	12,477.0	8,016.8	10.1	82.5	20.06	-46.6	-678.6	610.3	551.1	59.14	10.318	
8,700.0	8,677.8	12,477.0	8,016.8	10.2	82.5	20.06	-46.6	-678.6	704.1	646.1	57.96	12.148	
8,800.0	8,777.4	12,477.0	8,016.8	10.3	82.5	20.06	-46.6	-678.6	799.4	742.2	57.27	13.960	
8,900.0	8,877.1	12,477.0	8,016.8	10.4	82.5	20.06	-46.6	-678.6	895.8	838.9	56.89	15.747	
9,000.0	8,976.7	12,477.0	8,016.8	10.5	82.5	20.06	-46.6	-678.6	992.8	936.1	56.71	17.508	
9,032.1	9,008.7	12,477.0	8,016.8	10.5	82.5	20.06	-46.6	-678.6	1,024.1	967.3	56.80	18.031	
9,050.0	9,026.5	12,477.0	8,016.8	10.5	82.5	28.40	-46.6	-678.6	1,041.6	984.8	56.79	18.341	
9,075.0	9,051.3	12,477.0	8,016.8	10.6	82.5	30.69	-46.6	-678.6	1,065.9	1,009.1	56.77	18.775	
9,100.0	9,075.9	12,477.0	8,016.8	10.6	82.5	28.66	-46.6	-678.6	1,090.1	1,033.3	56.75	19.207	
9,125.0	9,100.3	12,477.0	8,016.8	10.6	82.5	25.61	-46.6	-678.6	1,114.1	1,057.3	56.74	19.636	
9,150.0	9,124.4	12,477.0	8,016.8	10.6	82.5	22.61	-46.6	-678.6	1,137.9	1,081.1	56.72	20.062	
9,175.0	9,148.1	12,477.0	8,016.8	10.6	82.5	19.99	-46.6	-678.6	1,161.4	1,104.7	56.70	20.483	
9,200.0	9,171.3	12,477.0	8,016.8	10.6	82.5	17.76	-46.6	-678.6	1,184.5	1,127.9	56.68	20.898	
9,225.0	9,194.1	12,477.0	8,016.8	10.6	82.5	15.89	-46.6	-678.6	1,207.4	1,150.7	56.66	21.308	
9,250.0	9,216.3	12,477.0	8,016.8	10.6	82.5	14.33	-46.6	-678.6	1,229.8	1,173.1	56.64	21.710	
9,275.0	9,237.9	12,477.0	8,016.8	10.6	82.5	13.01	-46.6	-678.6	1,251.7	1,195.1	56.62	22.106	
9,300.0	9,258.8	12,477.0	8,016.8	10.6	82.5	11.89	-46.6	-678.6	1,273.2	1,216.6	56.60	22.493	
9,325.0	9,278.9	12,477.0	8,016.8	10.6	82.5	10.92	-46.6	-678.6	1,294.2	1,237.6	56.58	22.872	
9,350.0	9,298.3	12,477.0	8,016.8	10.7	82.5	10.10	-46.6	-678.6	1,314.6	1,258.0	56.56	23.243	
9,375.0	9,316.8	12,477.0	8,016.8	10.7	82.5	9.38	-46.6	-678.6	1,334.4	1,277.9	56.53	23.604	
9,400.0	9,334.4	12,477.0	8,016.8	10.7	82.5	8.75	-46.6	-678.6	1,353.6	1,297.1	56.51	23.956	
9,425.0	9,351.1	12,477.0	8,016.8	10.7	82.5	8.20	-46.6	-678.6	1,372.3	1,315.8	56.48	24.297	
9,450.0	9,366.8	12,477.0	8,016.8	10.8	82.5	7.71	-46.6	-678.6	1,390.2	1,333.8	56.45	24.629	
9,475.0	9,381.4	12,477.0	8,016.8	10.8	82.5	7.27	-46.6	-678.6	1,407.5	1,351.1	56.41	24.950	
9,500.0	9,395.0	12,477.0	8,016.8	10.9	82.5	6.89	-46.6	-678.6	1,424.0	1,367.7	56.37	25.261	
9,525.0	9,407.4	12,477.0	8,016.8	10.9	82.5	6.54	-46.6	-678.6	1,439.9	1,383.6	56.33	25.560	

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

ConocoPhillips
Anticollision Report

Company:	DELAWARE BASIN WEST	**Local Co-ordinate Reference:**	Well BOO RADLEY COM #706H
Project:	ATLAS PROSPECT (NM-E)	**TVD Reference:**	KB=25' @ 3059.6usft (PIONEER 84)
Reference Site:	BOO RADLEY COM PROJECT	**MD Reference:**	KB=25' @ 3059.6usft (PIONEER 84)
Site Error:	3.0 usft	**North Reference:**	Grid
Reference Well:	BOO RADLEY COM #706H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	3.0 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	OWB	**Database:**	edm
Reference Design:	PWP4	**Offset TVD Reference:**	Offset Datum

Offset Design HONEY GRAHAM STATE PROJECT (ATLAS 2628) - GRAHAM CRACKER 16 STATE #1H - OWB - AC — **Offset Site Error:** 0.0 usft

Survey Program: 100-GYRO-NS, 7477-MWD — **Offset Well Error:** 0.0 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
9,550.0	9,418.7	12,477.0	8,016.8	10.9	82.5	6.22	-46.6	-678.6	1,455.0	1,398.7	56.29	25.849	
9,575.0	9,428.8	12,477.0	8,016.8	11.0	82.5	5.94	-46.6	-678.6	1,469.4	1,413.1	56.24	26.125	
9,600.0	9,437.8	12,477.0	8,016.8	11.1	82.5	5.68	-46.6	-678.6	1,482.9	1,426.7	56.19	26.391	
9,625.0	9,445.4	12,477.0	8,016.8	11.1	82.5	5.44	-46.6	-678.6	1,495.7	1,439.6	56.14	26.644	
9,650.0	9,451.9	12,477.0	8,016.8	11.2	82.5	5.23	-46.6	-678.6	1,507.7	1,451.6	56.08	26.885	
9,675.0	9,457.1	12,477.0	8,016.8	11.3	82.5	5.03	-46.6	-678.6	1,518.9	1,462.9	56.02	27.115	
9,700.0	9,460.9	12,477.0	8,016.8	11.3	82.5	4.84	-46.6	-678.6	1,529.2	1,473.3	55.95	27.331	
9,725.0	9,463.5	12,477.0	8,016.8	11.4	82.5	4.67	-46.6	-678.6	1,538.7	1,482.8	55.88	27.536	
9,750.0	9,464.8	12,477.0	8,016.8	11.5	82.5	4.51	-46.6	-678.6	1,547.3	1,491.5	55.81	27.728	
9,764.7	9,465.0	12,477.0	8,016.8	11.5	82.5	4.42	-46.6	-678.6	1,552.0	1,496.3	55.76	27.835	
9,800.0	9,464.8	12,477.0	8,016.8	11.6	82.5	4.18	-46.6	-678.6	1,563.3	1,507.6	55.65	28.091	
9,900.0	9,464.3	12,477.0	8,016.8	12.0	82.5	3.41	-46.6	-678.6	1,599.1	1,543.8	55.34	28.896	
10,000.0	9,463.7	12,477.0	8,016.8	12.4	82.5	2.49	-46.6	-678.6	1,640.5	1,585.4	55.01	29.820	
10,100.0	9,463.2	12,477.0	8,016.8	12.9	82.5	1.43	-46.6	-678.6	1,686.9	1,632.2	54.66	30.860	
10,200.0	9,462.7	12,477.0	8,016.8	13.4	82.5	0.23	-46.6	-678.6	1,737.8	1,683.6	54.29	32.013	
10,300.0	9,462.1	12,477.0	8,016.8	13.9	82.5	-1.10	-46.6	-678.6	1,793.0	1,739.1	53.89	33.272	
10,400.0	9,461.6	12,477.0	8,016.8	14.5	82.5	-2.56	-46.6	-678.6	1,851.8	1,798.3	53.47	34.630	
10,500.0	9,461.1	12,477.0	8,016.8	15.1	82.5	-4.16	-46.6	-678.6	1,914.0	1,860.9	53.04	36.082	
10,600.0	9,460.6	12,477.0	8,016.8	15.6	82.5	-5.88	-46.6	-678.6	1,979.0	1,926.4	52.61	37.619	

ConocoPhillips

Anticollision Report

Company:	DELAWARE BASIN WEST	**Local Co-ordinate Reference:**	Well BOO RADLEY COM #706H
Project:	ATLAS PROSPECT (NM-E)	**TVD Reference:**	KB=25' @ 3059.6usft (PIONEER 84)
Reference Site:	BOO RADLEY COM PROJECT	**MD Reference:**	KB=25' @ 3059.6usft (PIONEER 84)
Site Error:	3.0 usft	**North Reference:**	Grid
Reference Well:	BOO RADLEY COM #706H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	3.0 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	OWB	**Database:**	edm
Reference Design:	PWP4	**Offset TVD Reference:**	Offset Datum

Offset Design HONEY GRAHAM STATE PROJECT (ATLAS 2628) - GRAHAM CRACKER 16 STATE #9H - OWB - AC — **Offset Site Error:** 0.0 usft

Survey Program: 100- VES GyroFlex, 7922-MWD — **Offset Well Error:** 3.0 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
7,300.0	7,282.9	13,611.0	9,158.9	8.7	78.1	16.08	-66.2	-920.7	1,929.8	1,874.4	55.34	34.871	
7,400.0	7,382.6	13,611.0	9,158.9	8.8	78.1	16.08	-66.2	-920.7	1,831.7	1,775.9	55.83	32.807	
7,500.0	7,482.2	13,611.0	9,158.9	8.9	78.1	16.08	-66.2	-920.7	1,733.9	1,677.5	56.36	30.762	
7,600.0	7,581.8	13,611.0	9,158.9	9.0	78.1	16.08	-66.2	-920.7	1,636.3	1,579.4	56.94	28.737	
7,700.0	7,681.5	13,611.0	9,158.9	9.1	78.1	16.08	-66.2	-920.7	1,539.1	1,481.5	57.58	26.731	
7,800.0	7,781.1	13,611.0	9,158.9	9.2	78.1	16.08	-66.2	-920.7	1,442.2	1,384.0	58.28	24.747	
7,900.0	7,880.7	13,611.0	9,158.9	9.3	78.1	16.08	-66.2	-920.7	1,345.8	1,286.8	59.06	22.786	
8,000.0	7,980.4	13,611.0	9,158.9	9.4	78.1	16.08	-66.2	-920.7	1,250.0	1,190.0	59.95	20.850	
8,100.0	8,080.0	13,611.0	9,158.9	9.5	78.1	16.08	-66.2	-920.7	1,154.9	1,093.9	60.97	18.941	
8,200.0	8,179.6	13,611.0	9,158.9	9.6	78.1	16.08	-66.2	-920.7	1,060.6	998.5	62.16	17.064	
8,300.0	8,279.3	13,611.0	9,158.9	9.7	78.1	16.08	-66.2	-920.7	967.5	904.0	63.55	15.224	
8,400.0	8,378.9	13,611.0	9,158.9	9.8	78.1	16.08	-66.2	-920.7	876.0	810.7	65.22	13.431	
8,500.0	8,478.5	13,611.0	9,158.9	9.9	78.1	16.08	-66.2	-920.7	786.5	719.2	67.24	11.696	
8,600.0	8,578.2	13,611.0	9,158.9	10.1	78.1	16.08	-66.2	-920.7	699.8	630.1	69.71	10.039	
8,700.0	8,677.8	13,611.0	9,158.9	10.2	78.1	16.08	-66.2	-920.7	617.2	544.5	72.72	8.487	
8,800.0	8,777.4	13,611.0	9,158.9	10.3	78.1	16.08	-66.2	-920.7	540.5	464.2	76.34	7.080	
8,900.0	8,877.1	13,611.0	9,158.9	10.4	78.1	16.08	-66.2	-920.7	472.6	392.2	80.44	5.875	
9,000.0	8,976.7	13,611.0	9,158.9	10.5	78.1	16.08	-66.2	-920.7	417.8	333.4	84.48	4.946	
9,032.1	9,008.7	13,611.0	9,158.9	10.5	78.1	16.08	-66.2	-920.7	403.9	318.2	85.73	4.712	
9,050.0	9,026.5	13,611.0	9,158.9	10.5	78.1	34.39	-66.2	-920.7	397.0	310.8	86.23	4.604	
9,075.0	9,051.3	13,611.0	9,158.9	10.6	78.1	49.21	-66.2	-920.7	388.4	301.6	86.79	4.474	
9,100.0	9,075.9	13,611.0	9,158.9	10.6	78.1	57.61	-66.2	-920.7	380.9	293.7	87.17	4.370	
9,125.0	9,100.3	13,611.0	9,158.9	10.6	78.1	62.91	-66.2	-920.7	374.7	287.4	87.33	4.291	
9,150.0	9,124.4	13,611.0	9,158.9	10.6	78.1	66.50	-66.2	-920.7	369.9	282.6	87.26	4.239	
9,175.0	9,148.1	13,611.0	9,158.9	10.6	78.1	69.02	-66.2	-920.7	366.5	279.6	86.94	4.216	SF
9,200.0	9,171.3	13,611.0	9,158.9	10.6	78.1	70.82	-66.2	-920.7	364.7	278.3	86.38	4.222	ES
9,217.9	9,187.7	13,611.0	9,158.9	10.6	78.1	71.76	-66.2	-920.7	364.3	278.5	85.82	4.245	CC
9,225.0	9,194.1	13,611.0	9,158.9	10.6	78.1	72.06	-66.2	-920.7	364.3	278.8	85.56	4.258	
9,250.0	9,216.3	13,611.0	9,158.9	10.6	78.1	72.87	-66.2	-920.7	365.5	281.0	84.51	4.326	
9,275.0	9,237.9	13,611.0	9,158.9	10.6	78.1	73.31	-66.2	-920.7	368.3	285.0	83.22	4.425	
9,300.0	9,258.8	13,611.0	9,158.9	10.6	78.1	73.43	-66.2	-920.7	372.4	290.7	81.73	4.557	
9,325.0	9,278.9	13,611.0	9,158.9	10.6	78.1	73.27	-66.2	-920.7	378.0	298.0	80.05	4.722	
9,350.0	9,298.3	13,611.0	9,158.9	10.7	78.1	72.85	-66.2	-920.7	384.9	306.7	78.22	4.921	
9,375.0	9,316.8	13,611.0	9,158.9	10.7	78.1	72.20	-66.2	-920.7	393.1	316.8	76.27	5.154	
9,400.0	9,334.4	13,611.0	9,158.9	10.7	78.1	71.34	-66.2	-920.7	402.4	328.2	74.23	5.422	
9,425.0	9,351.1	13,611.0	9,158.9	10.7	78.1	70.28	-66.2	-920.7	412.8	340.7	72.13	5.723	
9,450.0	9,366.8	13,611.0	9,158.9	10.8	78.1	69.04	-66.2	-920.7	424.1	354.1	70.00	6.058	
9,475.0	9,381.4	13,611.0	9,158.9	10.8	78.1	67.64	-66.2	-920.7	436.2	368.4	67.87	6.428	
9,500.0	9,395.0	13,611.0	9,158.9	10.9	78.1	66.10	-66.2	-920.7	449.1	383.4	65.75	6.831	
9,525.0	9,407.4	13,611.0	9,158.9	10.9	78.1	64.43	-66.2	-920.7	462.7	399.0	63.66	7.268	
9,550.0	9,418.7	13,611.0	9,158.9	10.9	78.1	62.66	-66.2	-920.7	476.7	415.1	61.61	7.738	
9,575.0	9,428.8	13,611.0	9,158.9	11.0	78.1	60.80	-66.2	-920.7	491.3	431.7	59.61	8.242	
9,600.0	9,437.8	13,611.0	9,158.9	11.1	78.1	58.87	-66.2	-920.7	506.2	448.6	57.67	8.779	
9,625.0	9,445.4	13,611.0	9,158.9	11.1	78.1	56.90	-66.2	-920.7	521.5	465.7	55.78	9.348	
9,650.0	9,451.9	13,611.0	9,158.9	11.2	78.1	54.90	-66.2	-920.7	537.0	483.0	53.96	9.952	
9,675.0	9,457.1	13,611.0	9,158.9	11.3	78.1	52.89	-66.2	-920.7	552.7	500.5	52.20	10.588	
9,700.0	9,460.9	13,611.0	9,158.9	11.3	78.1	50.89	-66.2	-920.7	568.5	518.0	50.50	11.258	
9,725.0	9,463.5	13,611.0	9,158.9	11.4	78.1	48.90	-66.2	-920.7	584.4	535.6	48.86	11.962	
9,750.0	9,464.8	13,611.0	9,158.9	11.5	78.1	46.95	-66.2	-920.7	600.4	553.1	47.27	12.701	
9,764.7	9,465.0	13,611.0	9,158.9	11.5	78.1	45.82	-66.2	-920.7	609.8	563.4	46.36	13.152	
9,800.0	9,464.8	13,611.0	9,158.9	11.6	78.1	45.39	-66.2	-920.7	632.9	588.6	44.31	14.283	
9,900.0	9,464.3	13,611.0	9,158.9	12.0	78.1	43.88	-66.2	-920.7	705.2	665.7	39.53	17.839	

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

ConocoPhillips
Anticollision Report

Company:	DELAWARE BASIN WEST	**Local Co-ordinate Reference:**	Well BOO RADLEY COM #706H
Project:	ATLAS PROSPECT (NM-E)	**TVD Reference:**	KB=25' @ 3059.6usft (PIONEER 84)
Reference Site:	BOO RADLEY COM PROJECT	**MD Reference:**	KB=25' @ 3059.6usft (PIONEER 84)
Site Error:	3.0 usft	**North Reference:**	Grid
Reference Well:	BOO RADLEY COM #706H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	3.0 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	OWB	**Database:**	edm
Reference Design:	PWP4	**Offset TVD Reference:**	Offset Datum

Offset Design HONEY GRAHAM STATE PROJECT (ATLAS 2628) - GRAHAM CRACKER 16 STATE #9H - OWB - AC — **Offset Site Error:** 0.0 usft

Survey Program: 100- VES GyroFlex, 7922-MWD — **Offset Well Error:** 3.0 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
10,000.0	9,463.7	13,611.0	9,158.9	12.4	78.1	41.93	-66.2	-920.7	785.0	748.9	36.11	21.741	
10,100.0	9,463.2	13,611.0	9,158.9	12.9	78.1	39.44	-66.2	-920.7	870.2	836.4	33.74	25.787	
10,200.0	9,462.7	13,611.0	9,158.9	13.4	78.1	36.34	-66.2	-920.7	959.2	927.0	32.14	29.846	
10,300.0	9,462.1	13,611.0	9,158.9	13.9	78.1	32.50	-66.2	-920.7	1,051.0	1,019.9	31.04	33.861	
10,400.0	9,461.6	13,611.0	9,158.9	14.5	78.1	27.80	-66.2	-920.7	1,144.8	1,114.5	30.26	37.828	
10,500.0	9,461.1	13,611.0	9,158.9	15.1	78.1	22.11	-66.2	-920.7	1,240.0	1,210.3	29.69	41.764	
10,600.0	9,460.6	13,611.0	9,158.9	15.6	78.1	15.32	-66.2	-920.7	1,336.3	1,307.1	29.25	45.691	
10,699.3	9,460.0	13,611.0	9,158.9	16.2	78.1	7.50	-66.2	-920.7	1,432.7	1,403.8	28.89	49.597	
10,800.0	9,459.5	13,611.0	9,158.9	16.9	78.1	7.50	-66.2	-920.7	1,530.8	1,502.2	28.59	53.553	
10,900.0	9,459.0	13,611.0	9,158.9	17.5	78.1	7.50	-66.2	-920.7	1,628.6	1,600.3	28.34	57.460	
11,000.0	9,458.5	13,611.0	9,158.9	18.2	78.1	7.50	-66.2	-920.7	1,726.6	1,698.5	28.15	61.342	
11,100.0	9,457.9	13,611.0	9,158.9	18.8	78.1	7.50	-66.2	-920.7	1,824.9	1,796.9	27.99	65.195	
11,200.0	9,457.4	13,611.0	9,158.9	19.5	78.1	7.50	-66.2	-920.7	1,923.3	1,895.5	27.87	69.019	

ConocoPhillips
Anticollision Report

Company:	DELAWARE BASIN WEST	**Local Co-ordinate Reference:**	Well BOO RADLEY COM #706H
Project:	ATLAS PROSPECT (NM-E)	**TVD Reference:**	KB=25' @ 3059.6usft (PIONEER 84)
Reference Site:	BOO RADLEY COM PROJECT	**MD Reference:**	KB=25' @ 3059.6usft (PIONEER 84)
Site Error:	3.0 usft	**North Reference:**	Grid
Reference Well:	BOO RADLEY COM #706H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	3.0 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	OWB	**Database:**	edm
Reference Design:	PWP4	**Offset TVD Reference:**	Offset Datum

Offset Design HONEY GRAHAM STATE PROJECT (ATLAS 2628) - GRAHAM NASH STATE COM #1H - OWB - AWP — **Offset Site Error:** 0.0 usft

Survey Program: 9400-INC-ONLY — **Offset Well Error:** 3.0 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
13,700.0	9,444.3	9,392.7	9,392.7	39.0	189.8	92.56	-6,355.0	-1,088.6	1,905.1	1,702.5	202.51	9.407	
13,800.0	9,443.8	9,392.2	9,392.2	39.9	189.8	92.43	-6,355.0	-1,088.6	1,805.8	1,603.1	202.67	8.910	
13,900.0	9,443.3	9,391.7	9,391.7	40.7	189.8	92.29	-6,355.0	-1,088.6	1,706.6	1,503.7	202.84	8.413	
14,000.0	9,442.7	9,391.1	9,391.1	41.5	189.8	92.16	-6,355.0	-1,088.6	1,607.5	1,404.4	203.03	7.917	
14,100.0	9,442.2	9,390.6	9,390.6	42.3	189.8	92.02	-6,355.0	-1,088.6	1,508.5	1,305.2	203.25	7.422	
14,200.0	9,441.7	9,390.1	9,390.1	43.2	189.8	91.89	-6,355.0	-1,088.6	1,409.6	1,206.1	203.50	6.927	
14,300.0	9,441.2	9,389.6	9,389.6	44.0	189.7	91.75	-6,355.0	-1,088.6	1,311.0	1,107.2	203.80	6.433	
14,399.3	9,440.7	9,389.1	9,389.1	44.8	189.7	91.62	-6,355.0	-1,088.6	1,213.2	1,009.0	204.15	5.943	
14,499.0	9,440.1	9,388.5	9,388.5	45.6	189.7	91.25	-6,355.0	-1,088.6	1,115.7	911.1	204.62	5.453	
14,500.0	9,440.1	9,388.5	9,388.5	45.7	189.7	91.25	-6,355.0	-1,088.6	1,114.7	910.1	204.62	5.448	
14,600.0	9,439.6	9,388.0	9,388.0	46.5	189.7	91.13	-6,355.0	-1,088.6	1,017.8	812.5	205.26	4.959	
14,700.0	9,439.1	9,387.5	9,387.5	47.3	189.7	91.02	-6,355.0	-1,088.6	921.5	715.4	206.09	4.471	
14,800.0	9,438.6	9,387.0	9,387.0	48.2	189.7	90.90	-6,355.0	-1,088.6	826.1	618.9	207.19	3.987	
14,900.0	9,438.0	9,386.4	9,386.4	49.0	189.7	90.79	-6,355.0	-1,088.6	731.9	523.2	208.70	3.507	
15,000.0	9,437.5	9,385.9	9,385.9	49.8	189.7	90.67	-6,355.0	-1,088.6	639.4	428.6	210.78	3.034	
15,100.0	9,437.0	9,385.4	9,385.4	50.7	189.7	90.56	-6,355.0	-1,088.6	549.6	335.9	213.72	2.572	
15,200.0	9,436.5	9,384.9	9,384.9	51.5	189.6	90.44	-6,355.0	-1,088.6	464.1	246.2	217.88	2.130	
15,300.0	9,435.9	9,384.3	9,384.3	52.3	189.6	90.33	-6,355.0	-1,088.6	385.5	161.7	223.74	1.723	Advise and Monitor
15,400.0	9,435.4	9,383.8	9,383.8	53.2	189.6	90.21	-6,355.0	-1,088.6	319.1	87.6	231.52	1.378	Shut in Produces
15,500.0	9,434.9	9,383.3	9,383.3	54.0	189.6	90.10	-6,355.0	-1,088.6	274.0	34.1	239.85	1.142	Shut in Produces
15,518.1	9,434.8	9,383.2	9,383.2	54.2	189.6	90.08	-6,355.0	-1,088.6	269.0	27.9	241.12	1.116	Shut in Produces
15,590.4	9,434.4	9,382.8	9,382.8	54.8	189.6	90.00	-6,355.0	-1,088.6	260.0	15.7	244.29	1.064	Shut in Produces, CC, ES, SF
15,600.0	9,434.4	9,382.8	9,382.8	54.9	189.6	89.99	-6,355.0	-1,088.6	260.2	15.8	244.44	1.064	Shut in Produces
15,700.0	9,433.8	9,382.2	9,382.2	55.7	189.6	89.89	-6,355.0	-1,088.6	280.3	38.1	242.20	1.157	Shut in Produces
15,740.4	9,433.6	9,382.0	9,382.0	56.0	189.6	89.84	-6,355.0	-1,088.6	296.8	56.9	239.88	1.237	Shut in Produces
15,800.0	9,433.3	9,381.7	9,381.7	56.5	189.6	89.78	-6,355.0	-1,088.6	328.5	92.5	235.92	1.392	Shut in Produces
15,900.0	9,432.8	9,381.2	9,381.2	57.4	189.6	89.66	-6,355.0	-1,088.6	396.3	166.8	229.52	1.727	Advise and Monitor
16,000.0	9,432.3	9,380.7	9,380.7	58.2	189.6	89.55	-6,355.0	-1,088.6	475.7	251.2	224.43	2.119	
16,100.0	9,431.8	9,380.2	9,380.2	59.1	189.5	89.44	-6,355.0	-1,088.6	561.7	341.0	220.66	2.545	
16,200.0	9,431.2	9,379.6	9,379.6	59.9	189.5	89.32	-6,355.0	-1,088.6	651.6	433.7	217.90	2.991	
16,300.0	9,430.7	9,379.1	9,379.1	60.7	189.5	89.21	-6,355.0	-1,088.6	744.2	528.3	215.87	3.447	
16,400.0	9,430.2	9,378.6	9,378.6	61.6	189.5	89.09	-6,355.0	-1,088.6	838.5	624.1	214.35	3.912	
16,500.0	9,429.7	9,378.1	9,378.1	62.4	189.5	88.98	-6,355.0	-1,088.6	933.9	720.7	213.21	4.380	
16,540.4	9,429.4	9,377.8	9,377.8	62.8	189.5	88.93	-6,355.0	-1,088.6	972.8	759.9	212.83	4.571	
16,600.0	9,429.1	9,377.5	9,377.5	63.3	189.5	88.78	-6,355.0	-1,088.6	1,030.4	818.0	212.36	4.852	
16,663.3	9,428.8	9,377.2	9,377.2	63.8	189.5	88.57	-6,355.0	-1,088.6	1,092.2	880.2	211.97	5.153	
16,700.0	9,428.6	9,377.0	9,377.0	64.1	189.5	88.52	-6,355.0	-1,088.6	1,128.1	916.3	211.79	5.327	
16,800.0	9,428.1	9,376.5	9,376.5	65.0	189.5	88.39	-6,355.0	-1,088.6	1,226.3	1,015.0	211.36	5.802	
16,900.0	9,427.6	9,376.0	9,376.0	65.8	189.5	88.26	-6,355.0	-1,088.6	1,324.8	1,113.8	211.04	6.278	
17,000.0	9,427.1	9,375.5	9,375.5	66.7	189.5	88.12	-6,355.0	-1,088.6	1,423.5	1,212.7	210.79	6.753	
17,100.0	9,426.6	9,375.0	9,375.0	67.5	189.4	87.99	-6,355.0	-1,088.6	1,522.4	1,311.8	210.60	7.229	
17,200.0	9,426.1	9,374.5	9,374.5	68.4	189.4	87.86	-6,355.0	-1,088.6	1,621.4	1,411.0	210.45	7.704	
17,300.0	9,425.5	9,373.9	9,373.9	69.2	189.4	87.73	-6,355.0	-1,088.6	1,720.5	1,510.2	210.35	8.180	
17,400.0	9,425.0	9,373.4	9,373.4	70.0	189.4	87.59	-6,355.0	-1,088.6	1,819.8	1,609.5	210.27	8.654	
17,500.0	9,424.5	9,372.9	9,372.9	70.9	189.4	87.46	-6,355.0	-1,088.6	1,919.1	1,708.8	210.23	9.128	

ConocoPhillips

Anticollision Report

Company:	DELAWARE BASIN WEST	**Local Co-ordinate Reference:**	Well BOO RADLEY COM #706H
Project:	ATLAS PROSPECT (NM-E)	**TVD Reference:**	KB=25' @ 3059.6usft (PIONEER 84)
Reference Site:	BOO RADLEY COM PROJECT	**MD Reference:**	KB=25' @ 3059.6usft (PIONEER 84)
Site Error:	3.0 usft	**North Reference:**	Grid
Reference Well:	BOO RADLEY COM #706H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	3.0 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	OWB	**Database:**	edm
Reference Design:	PWP4	**Offset TVD Reference:**	Offset Datum

Offset Design MYOX 4 28 & 16 ST COM PROJECT - MYOX 4 16 ST COM #705H - OWB - PWP3 — **Offset Site Error:** 3.0 usft

Survey Program: 0-Standard Keeper 104, 8829-MWD+IFR1+FDIR — **Offset Well Error:** 3.0 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
7,500.0	7,482.2	22,634.1	9,367.3	8.9	116.2	-171.12	-89.5	11.2	1,971.5	1,853.0	118.42	16.649	
7,600.0	7,581.8	22,635.5	9,367.3	9.0	116.2	-170.98	-90.9	11.2	1,876.2	1,757.5	118.71	15.805	
7,700.0	7,681.5	22,637.0	9,367.3	9.1	116.3	-170.83	-92.4	11.2	1,781.4	1,662.4	119.00	14.969	
7,800.0	7,781.1	22,638.5	9,367.3	9.2	116.3	-170.69	-93.8	11.2	1,687.2	1,567.9	119.31	14.141	
7,900.0	7,880.7	22,639.9	9,367.3	9.3	116.3	-170.55	-95.3	11.1	1,593.7	1,474.1	119.64	13.322	
8,000.0	7,980.4	22,641.4	9,367.3	9.4	116.3	-170.40	-96.8	11.1	1,501.1	1,381.1	119.97	12.512	
8,100.0	8,080.0	22,642.8	9,367.3	9.5	116.3	-170.26	-98.2	11.1	1,409.5	1,289.2	120.33	11.714	
8,200.0	8,179.6	22,644.3	9,367.3	9.6	116.3	-170.12	-99.7	11.0	1,319.1	1,198.4	120.70	10.929	
8,300.0	8,279.3	22,645.7	9,367.3	9.7	116.3	-169.97	-101.1	11.0	1,230.2	1,109.1	121.10	10.158	
8,400.0	8,378.9	22,647.2	9,367.3	9.8	116.3	-169.83	-102.6	11.0	1,143.1	1,021.6	121.53	9.406	
8,500.0	8,478.5	22,648.7	9,367.3	9.9	116.4	-169.69	-104.0	11.0	1,058.3	936.3	121.99	8.675	
8,600.0	8,578.2	22,650.1	9,367.3	10.1	116.4	-169.55	-105.5	10.9	976.4	853.8	122.50	7.970	
8,700.0	8,677.8	22,651.6	9,367.3	10.2	116.4	-169.40	-106.9	10.9	898.1	775.0	123.06	7.298	
8,800.0	8,777.4	22,653.0	9,367.2	10.3	116.4	-169.26	-108.4	10.9	824.5	700.9	123.67	6.667	
8,900.0	8,877.1	22,654.5	9,367.2	10.4	116.4	-169.12	-109.9	10.8	757.1	632.8	124.32	6.090	
9,000.0	8,976.7	22,655.9	9,367.2	10.5	116.4	-168.97	-111.3	10.8	697.5	572.5	125.00	5.580	
9,032.1	9,008.7	22,656.4	9,367.2	10.5	116.4	-168.93	-111.8	10.8	680.3	555.2	125.13	5.437	
9,050.0	9,026.5	22,657.0	9,367.2	10.5	116.4	-152.61	-112.4	10.8	671.4	546.1	125.24	5.361	
9,075.0	9,051.3	22,658.9	9,367.2	10.6	116.4	-140.19	-114.2	10.8	659.7	534.4	125.39	5.261	
9,100.0	9,075.9	22,662.0	9,367.2	10.6	116.5	-133.71	-117.4	10.7	649.3	523.7	125.55	5.172	
9,125.0	9,100.3	22,666.3	9,367.2	10.6	116.5	-129.86	-121.7	10.6	640.1	514.4	125.71	5.092	
9,150.0	9,124.4	22,671.9	9,367.2	10.6	116.6	-127.27	-127.3	10.5	632.1	506.3	125.88	5.022	
9,175.0	9,148.1	22,678.7	9,367.2	10.6	116.6	-125.29	-134.1	10.4	625.5	499.5	126.05	4.962	
9,200.0	9,171.3	22,686.7	9,367.2	10.6	116.7	-123.60	-142.0	10.2	620.3	494.0	126.23	4.914	
9,225.0	9,194.1	22,695.8	9,367.1	10.6	116.8	-122.04	-151.2	10.0	616.3	489.9	126.41	4.876	
9,250.0	9,216.3	22,706.1	9,367.1	10.6	116.9	-120.51	-161.4	9.8	613.7	487.1	126.60	4.848	
9,275.0	9,237.9	22,717.5	9,367.1	10.6	116.9	-118.94	-172.8	9.6	612.5	485.7	126.79	4.830	
9,288.3	9,249.1	22,724.0	9,367.1	10.6	117.0	-118.08	-179.3	9.5	612.3	485.4	126.90	4.825	CC, ES
9,300.0	9,258.8	22,729.9	9,367.0	10.6	117.1	-117.31	-185.3	9.4	612.4	485.4	126.99	4.822	SF
9,325.0	9,278.9	22,743.4	9,367.0	10.6	117.2	-115.60	-198.8	9.1	613.6	486.4	127.20	4.824	
9,350.0	9,298.3	22,745.2	9,367.0	10.7	117.2	-114.75	-200.6	9.1	615.9	488.7	127.26	4.840	
9,375.0	9,316.8	22,745.2	9,367.0	10.7	117.2	-113.95	-200.6	9.1	619.7	492.5	127.23	4.871	
9,400.0	9,334.4	22,745.2	9,367.0	10.7	117.2	-113.03	-200.6	9.1	624.9	497.7	127.13	4.915	
9,425.0	9,351.1	22,745.2	9,367.0	10.7	117.2	-111.99	-200.6	9.1	631.3	504.4	126.95	4.973	
9,450.0	9,366.8	22,745.2	9,367.0	10.8	117.2	-110.82	-200.6	9.1	639.1	512.4	126.68	5.045	
9,475.0	9,381.4	22,745.2	9,367.0	10.8	117.2	-109.51	-200.6	9.1	648.0	521.7	126.32	5.130	
9,500.0	9,395.0	22,745.2	9,367.0	10.9	117.2	-108.05	-200.6	9.1	658.1	532.2	125.88	5.228	
9,525.0	9,407.4	22,745.2	9,367.0	10.9	117.2	-106.45	-200.6	9.1	669.2	543.8	125.34	5.339	
9,550.0	9,418.7	22,745.2	9,367.0	10.9	117.2	-104.70	-200.6	9.1	681.2	556.5	124.73	5.462	
9,575.0	9,428.8	22,745.2	9,367.0	11.0	117.2	-102.80	-200.6	9.1	694.2	570.1	124.04	5.597	
9,600.0	9,437.8	22,745.2	9,367.0	11.1	117.2	-100.74	-200.6	9.1	707.9	584.6	123.27	5.743	
9,625.0	9,445.4	22,745.2	9,367.0	11.1	117.2	-98.55	-200.6	9.1	722.4	599.9	122.44	5.900	
9,650.0	9,451.9	22,745.2	9,367.0	11.2	117.2	-96.21	-200.6	9.1	737.5	615.9	121.56	6.067	
9,675.0	9,457.1	22,745.2	9,367.0	11.3	117.2	-93.75	-200.6	9.1	753.1	632.5	120.62	6.244	
9,700.0	9,460.9	22,745.2	9,367.0	11.3	117.2	-91.18	-200.6	9.1	769.3	649.6	119.64	6.430	
9,725.0	9,463.5	22,745.2	9,367.0	11.4	117.2	-88.51	-200.6	9.1	785.8	667.2	118.63	6.624	
9,750.0	9,464.8	22,745.2	9,367.0	11.5	117.2	-85.77	-200.6	9.1	802.7	685.2	117.59	6.827	
9,764.7	9,465.0	22,745.2	9,367.0	11.5	117.2	-84.13	-200.6	9.1	812.8	695.9	116.97	6.949	
9,800.0	9,464.8	22,745.2	9,367.0	11.6	117.2	-84.21	-200.6	9.1	837.3	721.9	115.46	7.252	
9,900.0	9,464.3	22,745.2	9,367.0	12.0	117.2	-84.42	-200.6	9.1	909.1	797.9	111.14	8.180	
10,000.0	9,463.7	22,745.2	9,367.0	12.4	117.2	-84.64	-200.6	9.1	983.6	876.7	106.85	9.205	
10,100.0	9,463.2	22,745.2	9,367.0	12.9	117.2	-84.87	-200.6	9.1	1,060.2	957.5	102.68	10.325	

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

ConocoPhillips
Anticollision Report

Company:	DELAWARE BASIN WEST	**Local Co-ordinate Reference:**	Well BOO RADLEY COM #706H
Project:	ATLAS PROSPECT (NM-E)	**TVD Reference:**	KB=25' @ 3059.6usft (PIONEER 84)
Reference Site:	BOO RADLEY COM PROJECT	**MD Reference:**	KB=25' @ 3059.6usft (PIONEER 84)
Site Error:	3.0 usft	**North Reference:**	Grid
Reference Well:	BOO RADLEY COM #706H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	3.0 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	OWB	**Database:**	edm
Reference Design:	PWP4	**Offset TVD Reference:**	Offset Datum

Offset Design MYOX 4 28 & 16 ST COM PROJECT - MYOX 4 16 ST COM #705H - OWB - PWP3 — **Offset Site Error:** 3.0 usft

Survey Program: 0-Standard Keeper 104, 8829-MWD+IFR1+FDIR — **Offset Well Error:** 3.0 usft

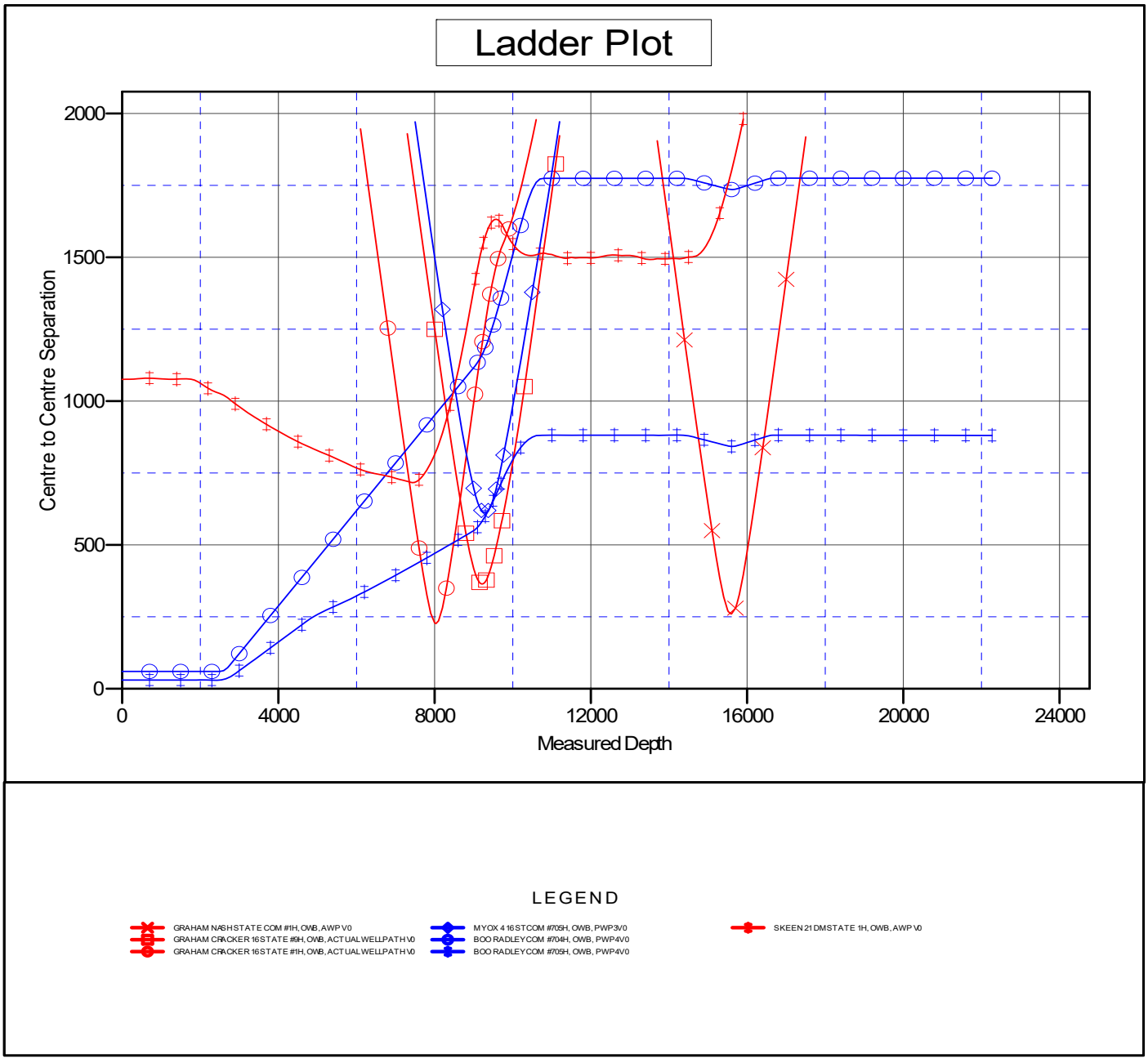
Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
10,200.0	9,462.7	22,745.2	9,367.0	13.4	117.2	-85.10	-200.6	9.1	1,138.4	1,039.7	98.66	11.539	
10,300.0	9,462.1	22,745.2	9,367.0	13.9	117.2	-85.33	-200.6	9.1	1,217.7	1,122.9	94.80	12.845	
10,400.0	9,461.6	22,745.2	9,367.0	14.5	117.2	-85.55	-200.6	9.1	1,298.0	1,206.9	91.11	14.246	
10,500.0	9,461.1	22,745.2	9,367.0	15.1	117.2	-85.77	-200.6	9.1	1,378.9	1,291.3	87.59	15.743	
10,600.0	9,460.6	22,745.2	9,367.0	15.6	117.2	-85.99	-200.6	9.1	1,460.2	1,376.0	84.21	17.340	
10,699.3	9,460.0	22,745.2	9,367.0	16.2	117.2	-86.19	-200.6	9.1	1,541.3	1,460.3	81.00	19.029	
10,800.0	9,459.5	22,745.2	9,367.0	16.9	117.2	-86.19	-200.6	9.1	1,624.6	1,546.6	77.96	20.840	
10,900.0	9,459.0	22,745.2	9,367.0	17.5	117.2	-86.19	-200.6	9.1	1,709.2	1,634.0	75.21	22.724	
11,000.0	9,458.5	22,745.2	9,367.0	18.2	117.2	-86.19	-200.6	9.1	1,795.4	1,722.7	72.72	24.689	
11,100.0	9,457.9	22,745.2	9,367.0	18.8	117.2	-86.19	-200.6	9.1	1,882.9	1,812.5	70.46	26.725	
11,200.0	9,457.4	22,745.2	9,367.0	19.5	117.2	-86.19	-200.6	9.1	1,971.7	1,903.3	68.40	28.827	

ConocoPhillips
Anticollision Report

Company:	DELAWARE BASIN WEST	**Local Co-ordinate Reference:**	Well BOO RADLEY COM #706H
Project:	ATLAS PROSPECT (NM-E)	**TVD Reference:**	KB=25' @ 3059.6usft (PIONEER 84)
Reference Site:	BOO RADLEY COM PROJECT	**MD Reference:**	KB=25' @ 3059.6usft (PIONEER 84)
Site Error:	3.0 usft	**North Reference:**	Grid
Reference Well:	BOO RADLEY COM #706H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	3.0 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	OWB	**Database:**	edm
Reference Design:	PWP4	**Offset TVD Reference:**	Offset Datum

Reference Depths are relative to KB=25' @ 3059.6usft (PIONEER 84)
Offset Depths are relative to Offset Datum
Central Meridian is 104° 20' 0.000 W

Coordinates are relative to: BOO RADLEY COM #706H
Coordinate System is US State Plane 1927 (Exact solution), New Mexico East 30
Grid Convergence at Surface is: 0.13°

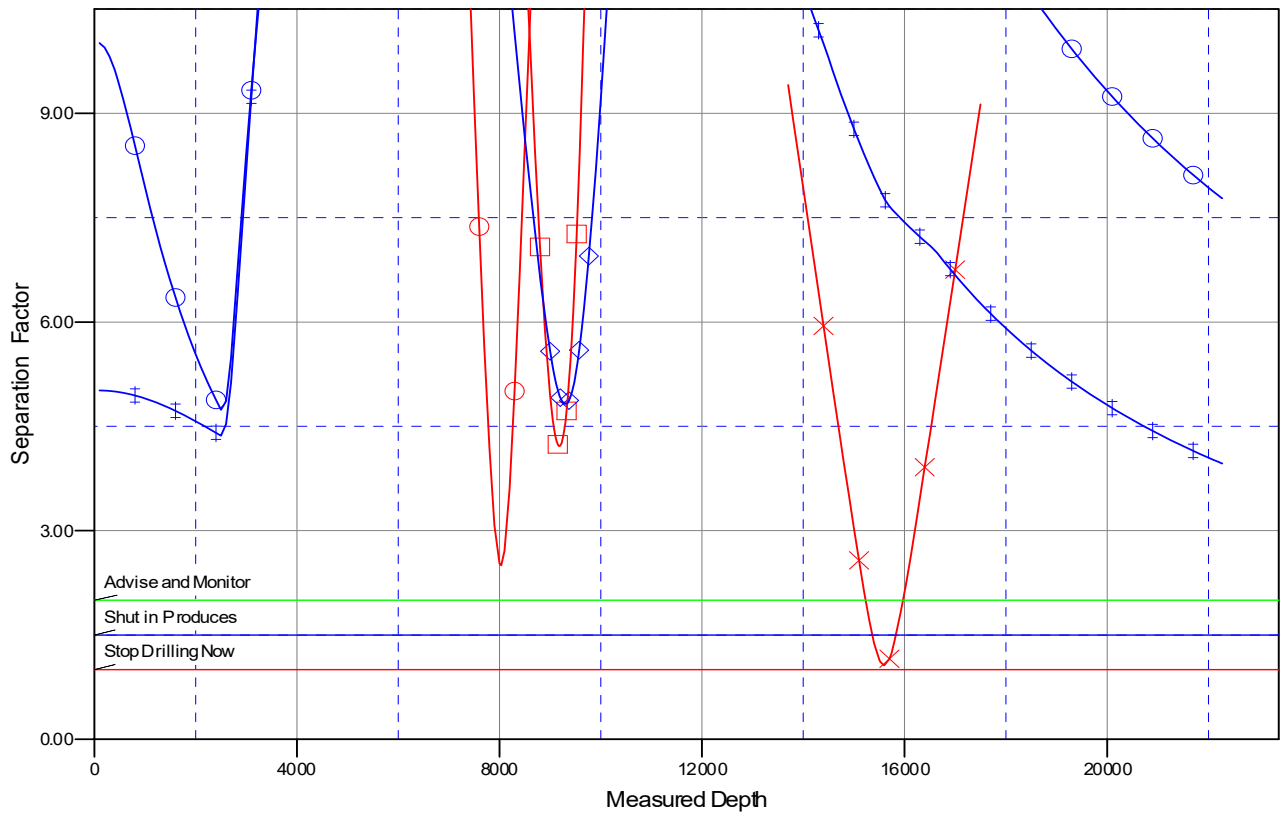


ConocoPhillips
Anticollision Report

Company:	DELAWARE BASIN WEST	**Local Co-ordinate Reference:**	Well BOO RADLEY COM #706H
Project:	ATLAS PROSPECT (NM-E)	**TVD Reference:**	KB=25' @ 3059.6usft (PIONEER 84)
Reference Site:	BOO RADLEY COM PROJECT	**MD Reference:**	KB=25' @ 3059.6usft (PIONEER 84)
Site Error:	3.0 usft	**North Reference:**	Grid
Reference Well:	BOO RADLEY COM #706H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	3.0 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	OWB	**Database:**	edm
Reference Design:	PWP4	**Offset TVD Reference:**	Offset Datum

Reference Depths are relative to KB=25' @ 3059.6usft (PIONEER 84)
Offset Depths are relative to Offset Datum
Central Meridian is 104° 20' 0.000 W
Coordinates are relative to: BOO RADLEY COM #706H
Coordinate System is US State Plane 1927 (Exact solution), New Mexico East 30
Grid Convergence at Surface is: 0.13°

Separation Factor Plot



LEGEND

GRAHAM NASH STATE COM #1H, OWB, AWP V0
GRAHAM CRACKER 16 STATE #9H, OWB, ACTUAL WELLPATH V0
GRAHAM CRACKER 16 STATE #1H, OWB, ACTUAL WELLPATH V0
MYOX 4 16 ST COM #705H, OWB, PWP3V0
BOO RADLEY COM #704H, OWB, PWP4V0
BOO RADLEY COM #705H, OWB, PWP4V0
SKEEN 21 DM STATE 1H, OWB, AWP V0

ConocoPhillips

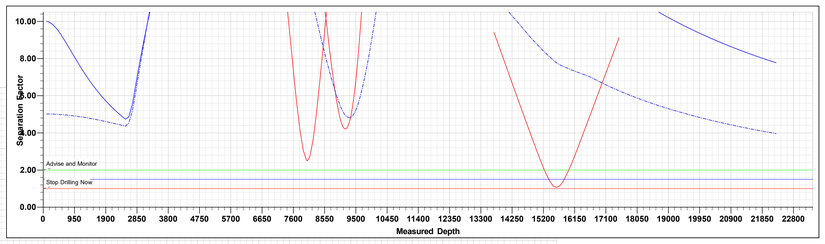
Project:	ATLAS PROSPECT (NM-E)
Site:	BOO RADLEY COM PROJECT
Well:	BOO RADLEY COM #706H
Wellbore:	OWB
Design:	PWP4
GL:	3034.6
KB=25' @ 3059.6usft (PIONEER 84)	

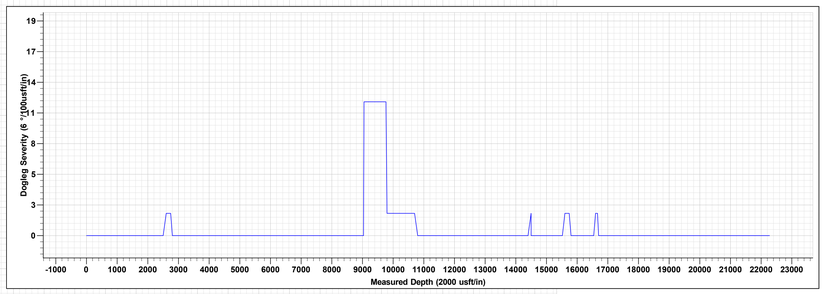
WELL DETAILS: BOO RADLEY COM #706H

+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
0.0	0.0	376978.90	573569.60	32° 2' 10.346 N	104° 5' 45.294 W

DESIGN TARGET DETAILS

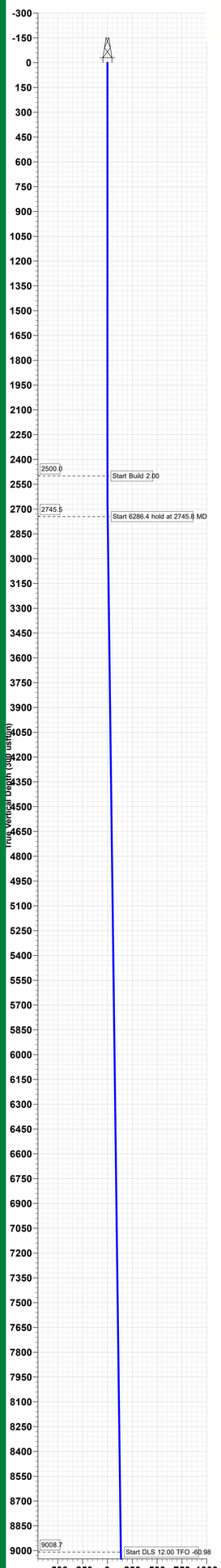
Name	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
LTP (BOO RADLEY COM #706H)	9400.0	-12904.7	-856.8	364074.20	572712.80	32° 0' 2.652 N	104° 5' 55.573 W
PBHL (BOO RADLEY COM #706H)	9400.0	-13034.7	-856.6	363944.20	572713.00	32° 0' 1.365 N	104° 5' 55.574 W
T2 (BOO RADLEY COM #706H)	9434.8	-6279.9	-830.3	370699.00	572739.30	32° 1' 8.215 N	104° 5' 55.098 W
FTP (BOO RADLEY COM #706H)	9465.0	-407.1	-876.4	376571.80	572693.20	32° 2' 6.336 N	104° 5' 55.486 W

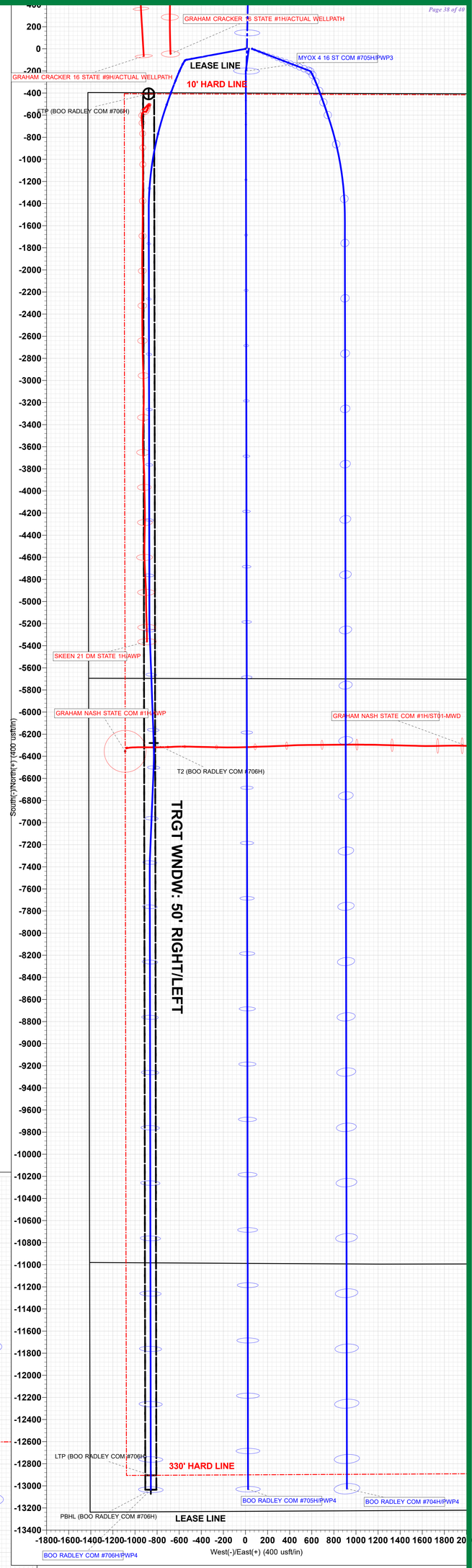


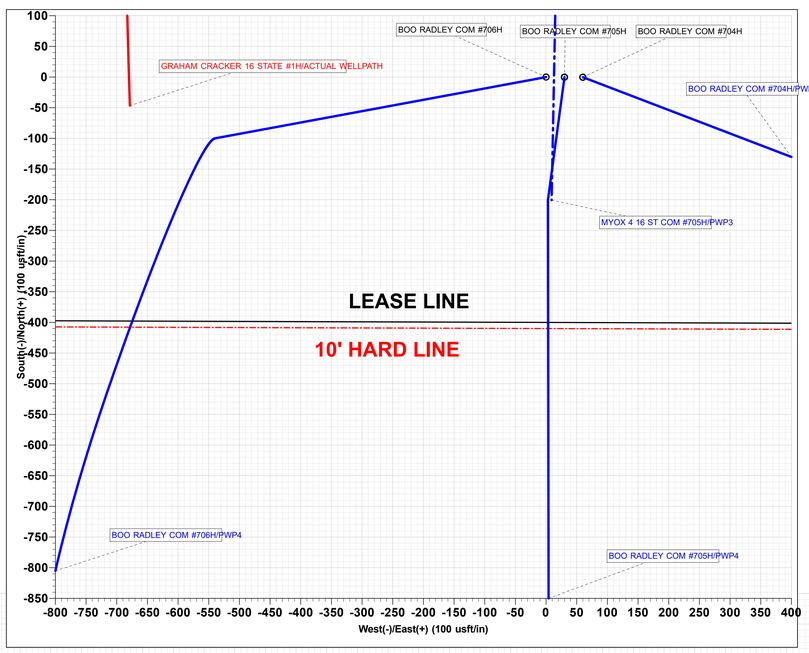


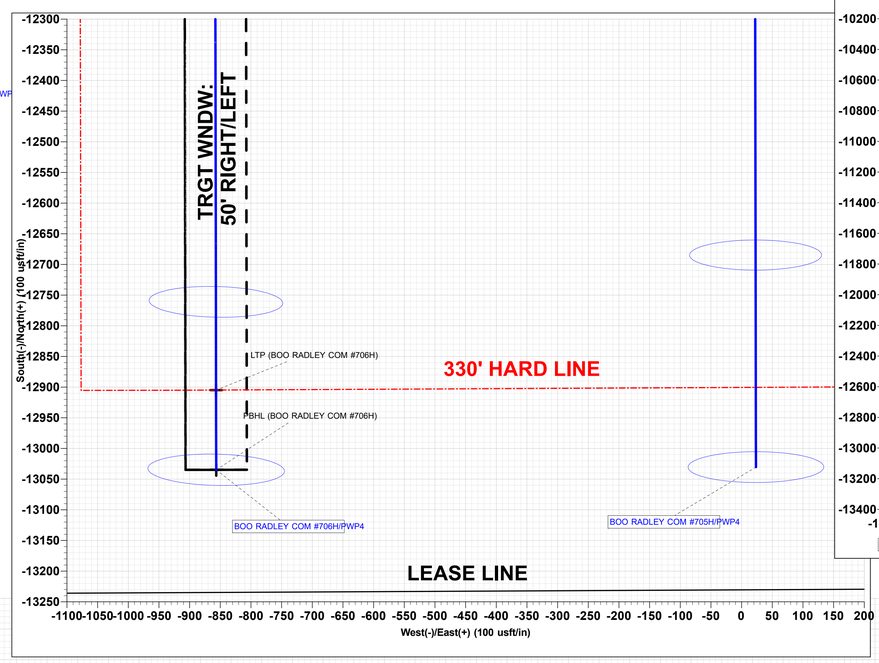
BOO RADLEY COM #706H

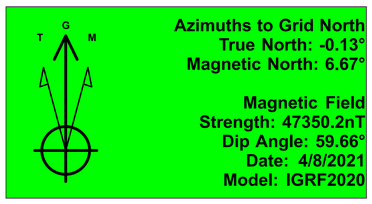
MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	VSect	Annotation
0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.0	
2500.0	0.00	0.00	2500.0	0.0	0.0	0.00	0.00	0.0	Start Build 2.00
2745.8	4.92	259.51	2745.5	-1.9	-10.4	2.00	259.51	2.6	Start 6286.4 hold at 2745.8 MD
9032.1	4.92	259.51	9008.7	-100.0	-540.0	0.00	0.00	135.2	Start DLS 12.00 TFO -60.98
9764.7	90.30	198.60	9465.0	-543.5	-725.6	12.00	-60.98	589.9	Start DLS 2.00 TFO -89.95
10699.3	90.30	179.91	9460.0	-1461.8	-875.2	2.00	-89.95	1516.1	Start 3700.0 hold at 10699.3 MD
14399.3	90.30	179.91	9440.7	-5161.8	-869.3	0.00	0.00	5207.7	Start DLS 2.00 TFO -90.00
14499.0	90.30	177.91	9440.1	-5261.4	-867.4	2.00	-90.00	5307.0	Start 1019.2 hold at 14499.0 MD
15518.1	90.30	177.91	9434.8	-6279.9	-830.3	0.00	0.00	6320.8	Start DLS 2.00 TFO 89.99
15740.4	90.30	182.36	9433.6	-6502.1	-830.8	2.00	89.99	6542.6	Start 800.0 hold at 15740.4 MD
16540.4	90.30	182.36	9429.4	-7301.4	-863.8	0.00	0.00	7342.4	Start DLS 2.00 TFO -90.13
16663.3	90.29	179.90	9428.8	-7424.3	-866.2	2.00	-90.13	7465.1	Start 5610.5 hold at 16663.3 MD
22273.8	90.29	179.90	9400.0	-13034.7	-856.6	0.00	0.00	13062.8	TD at 22273.8











Azimuths to Grid North
True North: -0.13°
Magnetic North: 6.67°

Magnetic Field
Strength: 47350.2nT
Dip Angle: 59.66°
Date: 4/8/2021
Model: IGRF2020

District I
1625 N. French Dr., Hobbs, NM 88240
Phone:(575) 393-6161 Fax:(575) 393-0720
District II
811 S. First St., Artesia, NM 88210
Phone:(575) 748-1283 Fax:(575) 748-9720
District III
1000 Rio Brazos Rd., Aztec, NM 87410
Phone:(505) 334-6178 Fax:(505) 334-6170
District IV
1220 S. St Francis Dr., Santa Fe, NM 87505
Phone:(505) 476-3470 Fax:(505) 476-3462

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

COMMENTS

Action 23941

COMMENTS

Operator:			OGRID:	Action Number:	Action Type:
COG OPERATING LLC	600 W Illinois Ave	Midland, TX79701	229137	23941	C-103A

Created By	Comment	Comment Date
kpickford	KP GEO Review 4/18/2021	04/18/2021

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

CONDITIONS

Action 23941

CONDITIONS OF APPROVAL

Operator:	OGRID:	Action Number:	Action Type:
COG OPERATING LLC 600 W Illinois Ave Midland, TX79701	229137	23941	C-103A

OCD Reviewer	Condition
kpickford	Surface casing must be set 25' below top of Rustler Anhydrite or salt in order to seal off protectable water
kpickford	Adhere to previous NMOCD Conditions of Approval