

Form 3160-5
(June 2019)UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENTFORM APPROVED
OMB No. 1004-0137
Expires: October 31, 2021**SUNDRY NOTICES AND REPORTS ON WELLS**
Do not use this form for proposals to drill or to re-enter an abandoned well. Use Form 3160-3 (APD) for such proposals.

5. Lease Serial No. NMNM106909

6. If Indian, Allottee or Tribe Name

SUBMIT IN TRIPLICATE - Other instructions on page 2

1. Type of Well

☒ Oil Well ☐ Gas Well ☐ Other2. Name of Operator
COG OPERATING LLC

3a. Address 600 West Illinois Ave, Midland, TX 79701

3b. Phone No. (include area code)
(432) 683-74434. Location of Well (Footage, Sec., T., R., M., or Survey Description)
SEC 35/T26S/R28E/NMP

7. If Unit of CA/Agreement, Name and/or No.

8. Well Name and No. KEG SHELL FEDERAL COM/706H

9. API Well No. 3001548250

10. Field and Pool or Exploratory Area
Purple Sage/Wolfcamp11. Country or Parish, State
EDDY/NM

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

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

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

COG Operating requests a change to our approved APD for this well to reflect changes in BHL and dedicated acres.

Change BHL from 200' FNL & 444' FWL 23-26S-28E TO: 200' FNL & 550' FWL 23-26S-28E

Change dedicated acres to 1547.18 ac.

14. I hereby certify that the foregoing is true and correct. Name (Printed/Typed)

STAN WAGNER / Ph: (432) 253-9685

Regulatory Advisor

Title

Signature

Date

05/18/2023

THE SPACE FOR FEDERAL OR STATE OFFICE USE

Approved by

ZOTA M STEVENS / Ph: (575) 234-5998 / Approved

Petroleum Engineer

Title

07/13/2023

Date

Conditions of approval, if any, are attached. Approval of this notice does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.

Office CARLSBAD

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

(Instructions on page 2)

Additional Information

Location of Well

0. SHL: LOT 1 / 460 FSL / 1340 FWL / TWSP: 26S / RANGE: 28E / SECTION: 35 / LAT: 32.001283 / LONG: -104.062483 (TVD: 0 feet, MD: 0 feet)

PPP: LOT 1 / 330 FSL / 550 FWL / TWSP: 26S / RANGE: 28E / SECTION: 35 / LAT: 32.000921 / LONG: -104.065032 (TVD: 9512 feet, MD: 9680 feet)

PPP: SWSW / 1 FSL / 550 FWL / TWSP: 26S / RANGE: 28E / SECTION: 26 / LAT: 32.00612 / LONG: -104.065032 (TVD: 9572 feet, MD: 11991 feet)

PPP: NWSW / 1321 FSL / 444 FWL / TWSP: 26S / RANGE: 28E / SECTION: 23 / LAT: 32.024356 / LONG: -104.065578 (TVD: 9594 feet, MD: 18591 feet)

BHL: NWNW / 200 FNL / 444 FWL / TWSP: 26S / RANGE: 28E / SECTION: 23 / LAT: 32.034613 / LONG: -104.065352 (TVD: 9606 feet, MD: 21896 feet)

CONFIDENTIAL

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) 746-1283 Fax: (575) 746-9720

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 30-015-48250	Pool Code 98220	Pool Name Purple Sage; Wolfcamp (Gas)
Property Code 330693	Property Name KEG SHELL FEDERAL COM	Well Number 706H
OGRID No. 229137	Operator Name COG OPERATING, LLC	Elevation 3030.2'

Surface Location

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
2	35	26-S	28-E		460	SOUTH	1340	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
D	23	26-S	28-E		200	NORTH	550	WEST	EDDY
Dedicated Acres 1547.18	Joint or Infill	Consolidation Code Com	Order No.						

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
PROPOSED BOTTOM
HOLE LOCATION
Y=376435.5 N
X=624483.4 E
LAT.=32.034617° N
LONG.=104.065010° W

POINT LEGEND	
1	Y=376625.4 N X=623933.6 E
2	Y=371372.5 N X=623895.0 E
3	Y=368720.0 N X=623950.1 E
4	Y=366069.6 N X=623952.4 E
5	Y=363845.3 N X=623957.9 E
6	Y=363857.5 N X=626664.9 E
7	Y=366066.4 N X=626603.9 E
8	Y=371365.3 N X=626543.8 E
9	Y=376674.4 N X=626590.4 E

NAD 83 NME
SURFACE LOCATION
Y=364311.4 N
X=625296.7 E
LAT.=32.001283° N
LONG.=104.062483° W

LTP
330' FNL & 550' FWL
Y=376305.5 N
X=624483.6 E
LAT.=32.034260° N
LONG.=104.065010° W

PPP5
2657' FSL & 557' FWL
Y=374027.6 N
X=624488.0 E
LAT.=32.027998° N
LONG.=104.065014° W

PPP4
1334' FSL & 577' FWL
Y=372704.9 N
X=624490.6 E
LAT.=32.024362° N
LONG.=104.065017° W

PPP3
598' FWL
Y=371370.9 N
X=624493.2 E
LAT.=32.020695° N
LONG.=104.065019° W

PPP2
598' FWL
Y=366068.9 N
X=624503.4 E
LAT.=32.006120° N
LONG.=104.065029° W

PPP1/FTP
330' FSL & 550' FWL
Y=364177.9 N
X=624507.0 E
LAT.=32.000921° N
LONG.=104.065032° W
GRID AZ. TO FTP
260°24'08"

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.

5/18/23

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.

OCTOBER 13, 2020

Date of Survey

Signature & Seal of Professional Surveyor

3/16/23

Certificate No. CHAD HARCROW 17777

W.O. # 23-162 DRAWN BY: WN

DELAWARE BASIN WEST

ATLAS PROSPECT (NM-E)

KEG SHELL FED COM PROJECT

KEG SHELL FEDERAL COM #706H

300154825000

OWB

PWP2

Anticollision Report

17 May, 2023

ConocoPhillips

Anticollision Report

Company:	DELAWARE BASIN WEST	Local Co-ordinate Reference:	Well KEG SHELL FEDERAL COM #706H
Project:	ATLAS PROSPECT (NM-E)	TVD Reference:	KB=32 @ 3062.2usft
Reference Site:	KEG SHELL FED COM PROJECT	MD Reference:	KB=32 @ 3062.2usft
Site Error:	3.0 usft	North Reference:	Grid
Reference Well:	KEG SHELL FEDERAL COM #706H	Survey Calculation Method:	Minimum Curvature
Well Error:	3.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDT 17 Central Planning Prod
Reference Design:	PWP2	Offset TVD Reference:	Reference Datum

Reference	PWP2
Filter type:	NO GLOBAL FILTER: Using user defined selection & filtering criteria
Interpolation Method:	MD Interval 100.0usft
Depth Range:	Unlimited
Results Limited by:	Maximum centre distance of 1,000.0usft
Warning Levels Evaluated at:	2.79 Sigma
Error Model:	ISCWSA
Scan Method:	Closest Approach 3D
Error Surface:	Combined Pedal Curve
Casing Method:	Added to Error Values

Survey Tool Program		Date	5/16/2023		
From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description	
0.0	1,506.0	PWP2 (OWB)	r.5 SDI_KPR_WL_NS-CT	SDI Keeper Wireline Gyrocomp.-Initalzd Cont. rev.5	
1,506.0	9,167.4	PWP2 (OWB)	r.5 MWD+IFR1+MS	OWSG MWD + IFR1 + Multi-Station Correction rev.5	
9,167.4	22,105.4	PWP2 (OWB)	r.5 MWD+IFR1+MS	OWSG MWD + IFR1 + Multi-Station Correction rev.5	

Summary						
Site Name	Reference Measured Depth (usft)	Offset Measured Depth (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Separation Factor	Warning
Offset Well - Wellbore - Design						
KEG SHELL FED COM PROJECT						
KEG SHELL FEDERAL COM #704H - OWB - PWP2	1,500.0	1,499.3	59.9	50.6	6.442	CC, ES, SF
KEG SHELL FEDERAL COM #705H - OWB - PWP2	1,500.0	1,499.7	29.9	20.6	3.215	CC, ES, SF
KEG SHELL FEDERAL COM #906H - OWB - PWP1	3,172.5	3,151.8	128.1	113.0	8.435	CC, ES
KEG SHELL FEDERAL COM #906H - OWB - PWP1	3,300.0	3,267.2	139.1	122.3	8.290	SF
KEG SHELL FEDERAL COM #907H - OWB - PWP1	3,304.4	3,275.0	92.3	76.1	5.688	CC, ES
KEG SHELL FEDERAL COM #907H - OWB - PWP1	3,400.0	3,366.7	96.2	79.1	5.617	SF
KEG SHELL FEDERAL COM #908H - OWB - PWP1	3,675.0	3,637.6	119.1	101.4	6.752	CC
KEG SHELL FEDERAL COM #908H - OWB - PWP1	3,700.0	3,661.9	119.2	101.3	6.652	ES
KEG SHELL FEDERAL COM #908H - OWB - PWP1	22,105.4	22,710.1	885.2	689.5	4.524	SF
KEG SHELL FEDERAL COM #909H - OWB - PWP1	6,290.5	6,249.7	218.4	178.1	5.422	CC
KEG SHELL FEDERAL COM #909H - OWB - PWP1	9,400.0	9,358.4	219.0	176.0	5.100	ES
KEG SHELL FEDERAL COM #909H - OWB - PWP1	22,105.4	22,943.9	958.7	761.1	4.851	SF

ConocoPhillips

Anticollision Report

Company:	DELAWARE BASIN WEST	Local Co-ordinate Reference:	Well KEG SHELL FEDERAL COM #706H
Project:	ATLAS PROSPECT (NM-E)	TVD Reference:	KB=32 @ 3062.2usft
Reference Site:	KEG SHELL FED COM PROJECT	MD Reference:	KB=32 @ 3062.2usft
Site Error:	3.0 usft	North Reference:	Grid
Reference Well:	KEG SHELL FEDERAL COM #706H	Survey Calculation Method:	Minimum Curvature
Well Error:	3.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDT 17 Central Planning Prod
Reference Design:	PWP2	Offset TVD Reference:	Reference Datum

TD Summary

Site Name	Reference Measured Depth (usft)	Offset Measured Depth (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Separation Factor	Warning
Offset Well - Wellbore - Design						
KEG SHELL FED COM PROJECT						
KEG SHELL FEDERAL COM #704H - OWB - PWP2	22,105.4	21,935.1				Out of Range @TD
KEG SHELL FEDERAL COM #705H - OWB - PWP2	22,105.4	21,768.9	861.1	672.1	4.555	
KEG SHELL FEDERAL COM #906H - OWB - PWP1	22,105.4	22,881.8				Out of Range @TD
KEG SHELL FEDERAL COM #907H - OWB - PWP1	22,105.4	22,799.1				Out of Range @TD
KEG SHELL FEDERAL COM #908H - OWB - PWP1	22,105.4	22,710.1	885.2	689.5	4.524	SF
KEG SHELL FEDERAL COM #909H - OWB - PWP1	22,105.4	22,943.9	958.7	761.1	4.851	SF

Offset Design: KEG SHELL FED COM PROJECT - KEG SHELL FEDERAL COM #704H - OWB - PWP2													Offset Site Error:	3.0 usft	
Survey Program: 0-r.5 SDI_KPR_WL_NS-CT, 1506-r.5 MWD+IFR1+MS, 9300-r.5 MWD+IFR1+MS				Reference		Offset		Semi Major Axis		Offset Wellbore Centre		Rule Assigned:		Offset Well Error:	3.0 usft
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning		
0.0	0.0	0.0	0.7	3.0	3.0	89.71	0.3	59.9	59.9						
100.0	100.0	99.3	100.0	3.0	3.0	89.71	0.3	59.9	59.9	53.4	6.51	9.197			
200.0	200.0	199.3	200.0	3.2	3.2	89.71	0.3	59.9	59.9	53.1	6.75	8.870			
300.0	300.0	299.3	300.0	3.3	3.3	89.71	0.3	59.9	59.9	52.9	6.98	8.576			
400.0	400.0	399.3	400.0	3.4	3.4	89.71	0.3	59.9	59.9	52.7	7.21	8.310			
500.0	500.0	499.3	500.0	3.5	3.5	89.71	0.3	59.9	59.9	52.5	7.42	8.068			
600.0	600.0	599.3	600.0	3.7	3.7	89.71	0.3	59.9	59.9	52.3	7.63	7.847			
700.0	700.0	699.3	700.0	3.8	3.8	89.71	0.3	59.9	59.9	52.1	7.84	7.643			
800.0	800.0	799.3	800.0	3.9	3.9	89.71	0.3	59.9	59.9	51.9	8.04	7.454			
900.0	900.0	899.3	900.0	4.0	4.0	89.71	0.3	59.9	59.9	51.7	8.23	7.279			
1,000.0	1,000.0	999.3	1,000.0	4.2	4.2	89.71	0.3	59.9	59.9	51.5	8.42	7.116			
1,100.0	1,100.0	1,099.3	1,100.0	4.3	4.3	89.71	0.3	59.9	59.9	51.3	8.60	6.964			
1,200.0	1,200.0	1,199.3	1,200.0	4.4	4.4	89.71	0.3	59.9	59.9	51.1	8.78	6.822			
1,300.0	1,300.0	1,299.3	1,300.0	4.5	4.5	89.71	0.3	59.9	59.9	50.9	8.96	6.687			
1,400.0	1,400.0	1,399.3	1,400.0	4.6	4.6	89.71	0.3	59.9	59.9	50.8	9.13	6.561			
1,500.0	1,500.0	1,499.3	1,500.0	4.7	4.7	89.71	0.3	59.9	59.9	50.6	9.30	6.442 CC, ES, SF			
1,600.0	1,600.0	1,597.2	1,597.9	4.9	4.9	-152.98	-0.1	61.5	63.1	53.4	9.64	6.542			
1,700.0	1,699.8	1,694.6	1,695.1	5.1	5.0	-153.67	-1.4	66.3	72.6	62.5	10.14	7.160			
1,800.0	1,799.5	1,790.7	1,790.9	5.3	5.2	-154.47	-3.5	74.1	88.5	77.9	10.66	8.303			
1,900.0	1,898.7	1,885.1	1,884.6	5.6	5.5	-155.17	-6.4	84.9	110.7	99.5	11.20	9.884			
2,000.0	1,997.5	1,977.2	1,975.7	5.9	5.8	-155.69	-10.0	98.2	138.9	127.1	11.74	11.824			
2,100.0	2,095.6	2,066.6	2,063.6	6.3	6.1	-156.03	-14.2	113.8	173.0	160.7	12.30	14.058			
2,200.0	2,193.1	2,156.6	2,151.7	6.6	6.4	-156.30	-18.9	131.7	212.2	199.4	12.87	16.485			
2,300.0	2,290.1	2,247.8	2,240.9	6.9	6.7	-156.89	-23.9	150.0	253.2	239.8	13.41	18.874			
2,400.0	2,387.1	2,339.0	2,330.1	7.3	7.0	-157.31	-28.8	168.4	294.1	280.2	13.98	21.039			

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

ConocoPhillips
Anticollision Report

Company:	DELAWARE BASIN WEST	Local Co-ordinate Reference:	Well KEG SHELL FEDERAL COM #706H
Project:	ATLAS PROSPECT (NM-E)	TVD Reference:	KB=32 @ 3062.2usft
Reference Site:	KEG SHELL FED COM PROJECT	MD Reference:	KB=32 @ 3062.2usft
Site Error:	3.0 usft	North Reference:	Grid
Reference Well:	KEG SHELL FEDERAL COM #706H	Survey Calculation Method:	Minimum Curvature
Well Error:	3.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDT 17 Central Planning Prod
Reference Design:	PWP2	Offset TVD Reference:	Reference Datum

Offset Design: KEG SHELL FED COM PROJECT - KEG SHELL FEDERAL COM #704H - OWB - PWP2												Offset Site Error:	3.0 usft
Survey Program: 0-r.5 SDI_KPR_WL_NS-CT, 1506-r.5 MWD+IFR1+MS, 9300-r.5 MWD+IFR1+MS												Offset Well Error:	3.0 usft
Reference		Offset		Semi Major Axis		Offset Wellbore Centre		Rule Assigned:					
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
2,500.0	2,484.1	2,430.2	2,419.3	7.6	7.3	-157.63	-33.7	186.7	335.1	320.5	14.57	22.994	
2,600.0	2,581.2	2,521.4	2,508.5	8.0	7.6	-157.88	-38.6	205.0	376.1	360.9	15.19	24.756	
2,700.0	2,678.2	2,612.6	2,597.7	8.4	7.9	-158.08	-43.5	223.3	417.1	401.2	15.83	26.345	
2,800.0	2,775.2	2,703.8	2,686.9	8.7	8.2	-158.25	-48.4	241.6	458.1	441.6	16.49	27.779	
2,900.0	2,872.3	2,795.0	2,776.1	9.1	8.6	-158.39	-53.3	259.9	499.1	481.9	17.16	29.074	
3,000.0	2,969.3	2,886.2	2,865.4	9.5	8.9	-158.50	-58.2	278.3	540.0	522.2	17.85	30.247	
3,100.0	3,066.3	2,977.4	2,954.6	10.0	9.3	-158.60	-63.1	296.6	581.0	562.5	18.56	31.309	
3,200.0	3,163.4	3,068.6	3,043.8	10.4	9.7	-158.69	-68.0	314.9	622.0	602.8	19.27	32.275	
3,300.0	3,260.4	3,159.8	3,133.0	10.8	10.0	-158.77	-72.9	333.2	663.0	643.0	20.00	33.155	
3,400.0	3,357.4	3,251.0	3,222.2	11.2	10.4	-158.84	-77.8	351.5	704.0	683.3	20.73	33.958	
3,500.0	3,454.4	3,342.3	3,311.4	11.7	10.8	-158.90	-82.8	369.8	745.0	723.6	21.47	34.693	
3,600.0	3,551.5	3,433.5	3,400.6	12.1	11.2	-158.95	-87.7	388.2	786.0	763.8	22.23	35.366	
3,700.0	3,648.5	3,524.7	3,489.9	12.5	11.6	-159.00	-92.6	406.5	827.0	804.0	22.98	35.986	
3,800.0	3,745.5	3,615.9	3,579.1	13.0	12.0	-159.04	-97.5	424.8	868.0	844.3	23.75	36.556	
3,900.0	3,842.6	3,707.1	3,668.3	13.4	12.3	-159.08	-102.4	443.1	909.0	884.5	24.51	37.082	
4,000.0	3,939.6	3,798.3	3,757.5	13.9	12.7	-159.12	-107.3	461.4	950.0	924.7	25.29	37.569	
4,100.0	4,036.6	3,889.5	3,846.7	14.4	13.1	-159.15	-112.2	479.7	991.0	965.0	26.07	38.020	

ConocoPhillips

Anticollision Report

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Reference Wellbore	OWB	Database:	EDT 17 Central Planning Prod
Reference Design:	PWP2	Offset TVD Reference:	Reference Datum

Offset Design: KEG SHELL FED COM PROJECT - KEG SHELL FEDERAL COM #705H - OWB - PWP2													Offset Site Error:	3.0 usft
Survey Program: 0-r.5 SDI_KPR_WL_NS-CT, 1506-r.5 MWD+IFR1+MS, 9101-r.5 MWD+IFR1+MS													Offset Well Error:	3.0 usft
Reference		Offset		Semi Major Axis		Offset Wellbore Centre			Rule Assigned: Distance				Warning	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor		
0.0	0.0	0.0	0.3	3.0	3.0	89.81	0.1	29.9	29.9					
100.0	100.0	99.7	100.0	3.0	3.0	89.81	0.1	29.9	29.9	23.4	6.51	4.591		
200.0	200.0	199.7	200.0	3.2	3.2	89.81	0.1	29.9	29.9	23.1	6.75	4.427		
300.0	300.0	299.7	300.0	3.3	3.3	89.81	0.1	29.9	29.9	22.9	6.99	4.281		
400.0	400.0	399.7	400.0	3.4	3.4	89.81	0.1	29.9	29.9	22.7	7.21	4.148		
500.0	500.0	499.7	500.0	3.5	3.5	89.81	0.1	29.9	29.9	22.5	7.42	4.027		
600.0	600.0	599.7	600.0	3.7	3.7	89.81	0.1	29.9	29.9	22.3	7.63	3.916		
700.0	700.0	699.7	700.0	3.8	3.8	89.81	0.1	29.9	29.9	22.1	7.84	3.815		
800.0	800.0	799.7	800.0	3.9	3.9	89.81	0.1	29.9	29.9	21.9	8.04	3.721		
900.0	900.0	899.7	900.0	4.0	4.0	89.81	0.1	29.9	29.9	21.7	8.23	3.633		
1,000.0	1,000.0	999.7	1,000.0	4.2	4.2	89.81	0.1	29.9	29.9	21.5	8.42	3.552		
1,100.0	1,100.0	1,099.7	1,100.0	4.3	4.3	89.81	0.1	29.9	29.9	21.3	8.60	3.476		
1,200.0	1,200.0	1,199.7	1,200.0	4.4	4.4	89.81	0.1	29.9	29.9	21.1	8.78	3.405		
1,300.0	1,300.0	1,299.7	1,300.0	4.5	4.5	89.81	0.1	29.9	29.9	20.9	8.96	3.338		
1,400.0	1,400.0	1,399.7	1,400.0	4.6	4.6	89.81	0.1	29.9	29.9	20.8	9.13	3.275		
1,500.0	1,500.0	1,499.7	1,500.0	4.7	4.7	89.81	0.1	29.9	29.9	20.6	9.30	3.215 CC, ES, SF		
1,600.0	1,600.0	1,599.5	1,599.7	4.9	4.9	-150.96	-1.6	30.2	31.8	22.2	9.55	3.328		
1,700.0	1,699.8	1,699.0	1,699.1	5.1	5.2	-147.03	-6.7	31.2	37.6	27.6	9.96	3.772		
1,800.0	1,799.5	1,798.0	1,797.7	5.3	5.5	-142.61	-15.1	32.9	47.4	37.1	10.38	4.572		
1,900.0	1,898.7	1,896.8	1,895.9	5.6	5.6	-139.56	-26.0	35.0	61.1	50.4	10.73	5.696		
2,000.0	1,997.5	1,995.4	1,993.9	5.9	5.9	-139.19	-36.9	37.1	77.6	66.4	11.16	6.953		
2,100.0	2,095.6	2,093.6	2,091.5	6.3	6.1	-140.21	-47.8	39.2	96.6	85.0	11.60	8.329		
2,200.0	2,193.1	2,191.1	2,188.4	6.6	6.4	-141.86	-58.7	41.3	118.4	106.3	12.08	9.805		
2,300.0	2,290.1	2,288.3	2,284.9	6.9	6.6	-143.63	-69.5	43.4	141.6	129.1	12.52	11.311		
2,400.0	2,387.1	2,385.5	2,381.5	7.3	6.9	-144.90	-80.3	45.5	164.9	152.0	12.98	12.706		
2,500.0	2,484.1	2,482.7	2,478.1	7.6	7.2	-145.86	-91.1	47.6	188.3	174.9	13.46	13.994		
2,600.0	2,581.2	2,579.9	2,574.6	8.0	7.5	-146.60	-101.9	49.7	211.7	197.8	13.95	15.181		
2,700.0	2,678.2	2,677.1	2,671.2	8.4	7.8	-147.20	-112.7	51.8	235.2	220.7	14.45	16.275		
2,800.0	2,775.2	2,774.2	2,767.7	8.7	8.2	-147.69	-123.5	53.9	258.6	243.7	14.96	17.283		
2,900.0	2,872.3	2,871.4	2,864.3	9.1	8.5	-148.09	-134.3	56.0	282.1	266.6	15.49	18.211		
3,000.0	2,969.3	2,968.6	2,960.9	9.5	8.8	-148.44	-145.1	58.1	305.6	289.6	16.03	19.069		
3,100.0	3,066.3	3,065.8	3,057.4	10.0	9.2	-148.73	-155.9	60.2	329.1	312.5	16.57	19.860		
3,200.0	3,163.4	3,163.0	3,154.0	10.4	9.5	-148.99	-166.7	62.3	352.6	335.4	17.12	20.592		
3,300.0	3,260.4	3,260.2	3,250.6	10.8	9.9	-149.21	-177.5	64.4	376.1	358.4	17.68	21.270		
3,400.0	3,357.4	3,357.6	3,347.3	11.2	10.2	-149.41	-188.3	66.5	399.6	381.4	18.22	21.932		
3,500.0	3,454.4	3,456.4	3,445.6	11.7	10.5	-149.74	-198.2	68.4	422.9	404.1	18.79	22.508		
3,600.0	3,551.5	3,555.3	3,544.2	12.1	10.9	-150.25	-206.4	70.0	445.8	426.4	19.38	22.997		
3,700.0	3,648.5	3,654.2	3,642.9	12.5	11.2	-150.92	-213.0	71.3	468.4	448.4	19.99	23.427		
3,800.0	3,745.5	3,753.1	3,741.6	13.0	11.5	-151.73	-217.9	72.3	490.7	470.1	20.61	23.807		
3,900.0	3,842.6	3,851.9	3,840.3	13.4	11.8	-152.65	-221.2	72.9	512.9	491.6	21.24	24.142		
4,000.0	3,939.6	3,950.5	3,939.0	13.9	12.0	-153.69	-222.8	73.2	534.9	513.0	21.87	24.452		
4,100.0	4,036.6	4,048.2	4,036.6	14.4	12.2	-154.77	-222.9	73.2	556.8	534.3	22.53	24.718		
4,200.0	4,133.6	4,145.2	4,133.6	14.8	12.2	-155.79	-222.9	73.2	578.9	555.7	23.18	24.971		
4,300.0	4,230.7	4,242.2	4,230.7	15.3	12.3	-156.73	-222.9	73.2	601.1	577.3	23.81	25.251		
4,400.0	4,327.7	4,339.3	4,327.7	15.7	12.3	-157.61	-222.9	73.2	623.5	599.1	24.44	25.515		
4,500.0	4,424.7	4,436.3	4,424.7	16.2	12.4	-158.42	-222.9	73.2	646.1	621.0	25.07	25.766		
4,600.0	4,521.8	4,533.3	4,521.8	16.7	12.4	-159.18	-222.9	73.2	668.7	643.0	25.72	26.004		
4,700.0	4,618.8	4,630.3	4,618.8	17.1	12.5	-159.89	-222.9	73.2	691.4	665.1	26.36	26.230		
4,800.0	4,715.8	4,727.4	4,715.8	17.6	12.5	-160.55	-222.9	73.2	714.3	687.3	27.01	26.446		
4,900.0	4,812.9	4,824.5	4,812.9	18.0	12.6	-161.22	-222.9	73.2	736.9	709.2	27.63	26.665		
5,000.0	4,910.4	4,922.0	4,910.4	18.5	12.6	-161.83	-222.9	73.2	758.0	729.7	28.28	26.807		
5,100.0	5,008.3	5,019.9	5,008.3	19.0	12.7	-162.36	-222.9	73.2	777.5	748.6	28.91	26.897		

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

ConocoPhillips

Anticollision Report

Company:	DELAWARE BASIN WEST	Local Co-ordinate Reference:	Well KEG SHELL FEDERAL COM #706H
Project:	ATLAS PROSPECT (NM-E)	TVD Reference:	KB=32 @ 3062.2usft
Reference Site:	KEG SHELL FED COM PROJECT	MD Reference:	KB=32 @ 3062.2usft
Site Error:	3.0 usft	North Reference:	Grid
Reference Well:	KEG SHELL FEDERAL COM #706H	Survey Calculation Method:	Minimum Curvature
Well Error:	3.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDT 17 Central Planning Prod
Reference Design:	PWP2	Offset TVD Reference:	Reference Datum

Offset Design: KEG SHELL FED COM PROJECT - KEG SHELL FEDERAL COM #705H - OWB - PWP2													Offset Site Error: 3.0 usft
Survey Program: 0-r.5 SDI_KPR_WL_NS-CT, 1506-r.5 MWD+IFR1+MS, 9101-r.5 MWD+IFR1+MS													Offset Well Error: 3.0 usft
Reference	Offset	Semi Major Axis	Highside	Offset Wellbore Centre		Distance		Minimum	Separation	Warning			
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Toolface (°)	+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Separation (usft)	Factor	
5,200.0	5,106.5	5,118.1	5,106.5	19.4	12.7	-162.82	-222.9	73.2	795.5	765.9	29.53	26.938	
5,300.0	5,205.1	5,216.6	5,205.1	19.9	12.8	-163.22	-222.9	73.2	811.8	781.7	30.14	26.935	
5,400.0	5,303.9	5,315.4	5,303.9	20.3	12.8	-163.57	-222.9	73.2	826.6	795.8	30.74	26.891	
5,500.0	5,402.9	5,414.5	5,402.9	20.7	12.9	-163.87	-222.9	73.2	839.6	808.3	31.32	26.808	
5,600.0	5,502.2	5,513.8	5,502.2	21.1	12.9	-164.13	-222.9	73.2	851.1	819.2	31.89	26.691	
5,700.0	5,601.7	5,613.3	5,601.7	21.5	13.0	-164.34	-222.9	73.2	860.9	828.4	32.43	26.543	
5,800.0	5,701.4	5,712.9	5,701.4	21.9	13.0	-164.51	-222.9	73.2	869.0	836.0	32.96	26.366	
5,900.0	5,801.1	5,812.7	5,801.1	22.3	13.1	-164.64	-222.9	73.2	875.4	842.0	33.46	26.165	
6,000.0	5,901.0	5,912.6	5,901.0	22.6	13.1	-164.74	-222.9	73.2	880.2	846.3	33.93	25.945	
6,100.0	6,001.0	6,012.5	6,001.0	22.9	13.2	-164.80	-222.9	73.2	883.3	848.9	34.35	25.713	
6,200.0	6,100.9	6,112.5	6,100.9	23.1	13.2	-164.83	-222.9	73.2	884.7	850.0	34.71	25.490	
6,300.0	6,200.9	6,212.5	6,200.9	23.2	13.3	77.57	-222.9	73.2	884.8	850.0	34.80	25.427	
6,400.0	6,300.9	6,312.5	6,300.9	23.2	13.4	77.57	-222.9	73.2	884.8	849.9	34.87	25.374	
6,500.0	6,400.9	6,412.5	6,400.9	23.2	13.4	77.57	-222.9	73.2	884.8	849.8	34.94	25.320	
6,600.0	6,500.9	6,512.5	6,500.9	23.3	13.5	77.57	-222.9	73.2	884.8	849.7	35.02	25.267	
6,700.0	6,600.9	6,612.5	6,600.9	23.3	13.5	77.57	-222.9	73.2	884.8	849.7	35.09	25.213	
6,800.0	6,700.9	6,712.5	6,700.9	23.3	13.6	77.57	-222.9	73.2	884.8	849.6	35.17	25.159	
6,900.0	6,800.9	6,812.5	6,800.9	23.3	13.6	77.57	-222.9	73.2	884.8	849.5	35.24	25.105	
7,000.0	6,900.9	6,912.5	6,900.9	23.4	13.7	77.57	-222.9	73.2	884.8	849.4	35.32	25.051	
7,100.0	7,000.9	7,012.5	7,000.9	23.4	13.7	77.57	-222.9	73.2	884.8	849.4	35.40	24.996	
7,200.0	7,100.9	7,112.5	7,100.9	23.4	13.8	77.57	-222.9	73.2	884.8	849.3	35.47	24.942	
7,300.0	7,200.9	7,212.5	7,200.9	23.5	13.9	77.57	-222.9	73.2	884.8	849.2	35.55	24.887	
7,400.0	7,300.9	7,312.5	7,300.9	23.5	13.9	77.57	-222.9	73.2	884.8	849.1	35.63	24.832	
7,500.0	7,400.9	7,412.5	7,400.9	23.5	14.0	77.57	-222.9	73.2	884.8	849.1	35.71	24.777	
7,600.0	7,500.9	7,512.5	7,500.9	23.5	14.0	77.57	-222.9	73.2	884.8	849.0	35.79	24.722	
7,700.0	7,600.9	7,612.5	7,600.9	23.6	14.1	77.57	-222.9	73.2	884.8	848.9	35.87	24.666	
7,800.0	7,700.9	7,712.5	7,700.9	23.6	14.1	77.57	-222.9	73.2	884.8	848.8	35.95	24.611	
7,900.0	7,800.9	7,812.5	7,800.9	23.6	14.2	77.57	-222.9	73.2	884.8	848.7	36.03	24.555	
8,000.0	7,900.9	7,912.5	7,900.9	23.7	14.3	77.57	-222.9	73.2	884.8	848.7	36.11	24.500	
8,100.0	8,000.9	8,012.5	8,000.9	23.7	14.3	77.57	-222.9	73.2	884.8	848.6	36.20	24.444	
8,200.0	8,100.9	8,112.5	8,100.9	23.7	14.4	77.57	-222.9	73.2	884.8	848.5	36.28	24.388	
8,300.0	8,200.9	8,212.5	8,200.9	23.8	14.4	77.57	-222.9	73.2	884.8	848.4	36.36	24.332	
8,400.0	8,300.9	8,312.5	8,300.9	23.8	14.5	77.57	-222.9	73.2	884.8	848.3	36.45	24.276	
8,500.0	8,400.9	8,412.5	8,400.9	23.8	14.6	77.57	-222.9	73.2	884.8	848.2	36.53	24.219	
8,600.0	8,500.9	8,512.5	8,500.9	23.8	14.6	77.57	-222.9	73.2	884.8	848.1	36.62	24.163	
8,700.0	8,600.9	8,612.5	8,600.9	23.9	14.7	77.57	-222.9	73.2	884.8	848.1	36.70	24.107	
8,800.0	8,700.9	8,712.5	8,700.9	23.9	14.7	77.57	-222.9	73.2	884.8	848.0	36.79	24.050	
8,900.0	8,800.9	8,812.5	8,800.9	23.9	14.8	77.57	-222.9	73.2	884.8	847.9	36.87	23.994	
9,000.0	8,900.9	8,912.5	8,900.9	24.0	14.9	77.57	-222.9	73.2	884.8	847.8	36.96	23.937	
9,100.0	9,000.9	9,012.5	9,000.9	24.0	14.9	77.57	-222.9	73.2	884.8	847.7	37.05	23.881	
9,200.0	9,100.9	9,112.5	9,100.9	24.0	15.0	77.57	-222.9	73.2	884.8	847.6	37.13	23.827	
9,300.0	9,200.9	9,193.9	9,182.3	24.1	15.0	77.52	-220.6	73.2	885.4	848.3	37.10	23.868	
9,400.0	9,300.1	9,264.8	9,252.0	24.1	15.1	77.11	-208.5	73.2	886.7	849.8	36.95	23.996	
9,500.0	9,394.8	9,335.4	9,319.1	24.1	15.1	77.14	-186.3	73.2	886.6	849.9	36.74	24.133	
9,600.0	9,480.7	9,406.3	9,382.3	24.1	15.2	77.59	-154.4	73.1	885.2	848.7	36.49	24.258	
9,700.0	9,554.3	9,475.0	9,438.3	24.2	15.2	78.44	-114.8	73.0	882.6	846.4	36.21	24.375	
9,800.0	9,612.2	9,550.0	9,492.4	24.2	15.3	79.73	-63.0	72.9	879.0	843.0	35.99	24.422	
9,900.0	9,652.0	9,625.0	9,537.7	24.3	15.4	81.36	-3.3	72.8	875.0	839.2	35.82	24.429	
10,000.0	9,671.8	9,700.0	9,573.1	24.3	15.5	83.25	62.8	72.6	870.9	835.2	35.71	24.389	
10,100.0	9,674.1	9,780.7	9,599.1	24.4	15.5	85.03	139.1	72.5	867.7	831.9	35.75	24.273	
10,200.0	9,674.4	9,867.1	9,612.3	24.5	15.6	85.89	224.3	72.3	866.4	830.6	35.87	24.154	
10,300.0	9,674.7	9,963.4	9,613.6	24.7	15.6	85.95	320.6	72.1	866.3	830.2	36.12	23.984	

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

ConocoPhillips

Anticollision Report

Company:	DELAWARE BASIN WEST	Local Co-ordinate Reference:	Well KEG SHELL FEDERAL COM #706H
Project:	ATLAS PROSPECT (NM-E)	TVD Reference:	KB=32 @ 3062.2usft
Reference Site:	KEG SHELL FED COM PROJECT	MD Reference:	KB=32 @ 3062.2usft
Site Error:	3.0 usft	North Reference:	Grid
Reference Well:	KEG SHELL FEDERAL COM #706H	Survey Calculation Method:	Minimum Curvature
Well Error:	3.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDT 17 Central Planning Prod
Reference Design:	PWP2	Offset TVD Reference:	Reference Datum

Offset Design: KEG SHELL FED COM PROJECT - KEG SHELL FEDERAL COM #705H - OWB - PWP2												Offset Site Error:	3.0 usft
Survey Program: 0-r.5 SDI_KPR_WL_NS-CT, 1506-r.5 MWD+IFR1+MS, 9101-r.5 MWD+IFR1+MS												Offset Well Error:	3.0 usft
Reference	Offset	Semi Major Axis		Offset Wellbore Centre		Distance		Warning					
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	
10,400.0	9,675.0	10,063.4	9,614.0	24.8	15.6	85.96	420.6	71.9	866.3	829.8	36.47	23.755	
10,500.0	9,675.3	10,163.4	9,614.4	25.0	15.6	85.97	520.6	71.7	866.2	829.4	36.87	23.491	
10,600.0	9,675.6	10,263.4	9,614.9	25.2	15.7	85.98	620.6	71.4	866.2	828.9	37.34	23.198	
10,700.0	9,675.9	10,363.4	9,615.3	25.4	15.7	85.99	720.6	71.2	866.1	828.3	37.86	22.879	
10,800.0	9,676.2	10,463.4	9,615.7	25.6	15.8	86.00	820.6	71.0	866.1	827.7	38.43	22.538	
10,900.0	9,676.5	10,563.4	9,616.2	25.8	15.8	86.01	920.6	70.8	866.1	827.0	39.05	22.178	
11,000.0	9,676.8	10,663.4	9,616.6	26.1	15.9	86.02	1,020.6	70.6	866.0	826.3	39.72	21.802	
11,100.0	9,677.1	10,763.4	9,617.0	26.3	16.0	86.02	1,120.6	70.4	866.0	825.5	40.44	21.415	
11,200.0	9,677.4	10,863.4	9,617.5	26.6	16.2	86.03	1,220.6	70.2	865.9	824.7	41.20	21.020	
11,300.0	9,677.7	10,963.4	9,617.9	26.9	16.5	86.04	1,320.6	69.9	865.9	823.9	42.00	20.618	
11,400.0	9,677.9	11,063.4	9,618.3	27.3	17.0	86.05	1,420.6	69.7	865.8	823.0	42.83	20.214	
11,500.0	9,678.2	11,163.4	9,618.8	27.6	17.4	86.06	1,520.6	69.5	865.8	822.1	43.71	19.808	
11,600.0	9,678.5	11,263.4	9,619.2	27.9	18.0	86.07	1,620.6	69.3	865.7	821.1	44.62	19.404	
11,700.0	9,678.8	11,363.4	9,619.6	28.3	18.5	86.08	1,720.6	69.1	865.7	820.1	45.56	19.002	
11,800.0	9,679.1	11,463.4	9,620.1	28.7	19.1	86.09	1,820.6	68.9	865.6	819.1	46.53	18.605	
11,900.0	9,679.4	11,563.4	9,620.5	29.1	19.7	86.10	1,920.6	68.7	865.6	818.1	47.53	18.213	
12,000.0	9,679.7	11,663.4	9,620.9	29.5	20.3	86.11	2,020.6	68.5	865.6	817.0	48.55	17.827	
12,100.0	9,680.0	11,763.4	9,621.4	29.9	20.9	86.12	2,120.6	68.2	865.5	815.9	49.60	17.449	
12,200.0	9,680.3	11,863.4	9,621.8	30.3	21.5	86.12	2,220.6	68.0	865.5	814.8	50.68	17.078	
12,300.0	9,680.6	11,963.4	9,622.2	30.8	22.2	86.13	2,320.6	67.8	865.4	813.7	51.77	16.716	
12,400.0	9,680.9	12,063.4	9,622.7	31.3	22.8	86.14	2,420.6	67.6	865.4	812.5	52.89	16.362	
12,500.0	9,681.2	12,163.4	9,623.1	31.7	23.5	86.15	2,520.6	67.4	865.3	811.3	54.02	16.018	
12,600.0	9,681.5	12,263.4	9,623.5	32.2	24.1	86.16	2,620.6	67.2	865.3	810.1	55.18	15.682	
12,700.0	9,681.8	12,363.4	9,624.0	32.7	24.8	86.17	2,720.6	67.0	865.2	808.9	56.35	15.356	
12,800.0	9,682.1	12,463.4	9,624.4	33.2	25.5	86.18	2,820.6	66.7	865.2	807.7	57.53	15.039	
12,900.0	9,682.3	12,563.4	9,624.8	33.7	26.1	86.19	2,920.6	66.5	865.2	806.4	58.73	14.731	
13,000.0	9,682.6	12,663.4	9,625.3	34.3	26.8	86.20	3,020.6	66.3	865.1	805.2	59.95	14.432	
13,100.0	9,682.9	12,763.4	9,625.7	34.8	27.5	86.21	3,120.6	66.1	865.1	803.9	61.17	14.141	
13,200.0	9,683.2	12,863.4	9,626.1	35.3	28.2	86.22	3,220.6	65.9	865.0	802.6	62.41	13.860	
13,300.0	9,683.5	12,963.4	9,626.6	35.9	28.9	86.23	3,320.6	65.7	865.0	801.3	63.66	13.587	
13,400.0	9,683.8	13,063.4	9,627.0	36.4	29.6	86.23	3,420.6	65.5	864.9	800.0	64.93	13.322	
13,500.0	9,684.1	13,163.4	9,627.4	37.0	30.3	86.24	3,520.6	65.2	864.9	798.7	66.20	13.065	
13,600.0	9,684.4	13,263.4	9,627.9	37.6	31.0	86.25	3,620.6	65.0	864.8	797.4	67.48	12.816	
13,700.0	9,684.7	13,363.4	9,628.3	38.2	31.7	86.26	3,720.6	64.8	864.8	796.0	68.77	12.575	
13,800.0	9,685.0	13,463.4	9,628.7	38.8	32.4	86.27	3,820.6	64.6	864.8	794.7	70.07	12.341	
13,900.0	9,685.3	13,563.4	9,629.2	39.4	33.1	86.28	3,920.6	64.4	864.7	793.3	71.38	12.114	
14,000.0	9,685.6	13,663.4	9,629.6	40.0	33.8	86.29	4,020.6	64.2	864.7	792.0	72.70	11.894	
14,100.0	9,685.9	13,763.4	9,630.1	40.6	34.6	86.30	4,120.6	64.0	864.6	790.6	74.02	11.681	
14,200.0	9,686.2	13,863.4	9,630.5	41.2	35.3	86.31	4,220.6	63.8	864.6	789.2	75.35	11.474	
14,300.0	9,686.5	13,963.4	9,630.9	41.8	36.0	86.32	4,320.6	63.5	864.5	787.8	76.69	11.274	
14,400.0	9,686.8	14,063.4	9,631.4	42.4	36.7	86.33	4,420.6	63.3	864.5	786.5	78.03	11.079	
14,500.0	9,687.0	14,163.4	9,631.8	43.1	37.4	86.33	4,520.6	63.1	864.4	785.1	79.38	10.890	
14,600.0	9,687.3	14,263.4	9,632.2	43.7	38.2	86.34	4,620.6	62.9	864.4	783.7	80.73	10.707	
14,700.0	9,687.6	14,363.4	9,632.7	44.3	38.9	86.35	4,720.6	62.7	864.4	782.3	82.09	10.529	
14,800.0	9,687.9	14,463.4	9,633.1	45.0	39.6	86.36	4,820.6	62.5	864.3	780.9	83.46	10.356	
14,900.0	9,688.2	14,563.4	9,633.5	45.6	40.4	86.37	4,920.6	62.3	864.3	779.4	84.83	10.189	
15,000.0	9,688.5	14,663.4	9,634.0	46.3	41.1	86.38	5,020.6	62.0	864.2	778.0	86.20	10.026	
15,100.0	9,688.8	14,763.4	9,634.4	46.9	41.8	86.39	5,120.6	61.8	864.2	776.6	87.58	9.867	
15,200.0	9,689.1	14,863.4	9,634.8	47.6	42.5	86.40	5,220.6	61.6	864.1	775.2	88.96	9.714	
15,300.0	9,689.4	14,963.4	9,635.3	48.2	43.3	86.41	5,320.6	61.4	864.1	773.7	90.35	9.564	
15,400.0	9,689.7	15,063.4	9,635.7	48.9	44.0	86.42	5,420.6	61.2	864.0	772.3	91.74	9.419	
15,500.0	9,690.0	15,163.4	9,636.1	49.6	44.8	86.43	5,520.6	61.0	864.0	770.9	93.13	9.277	

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

ConocoPhillips

Anticollision Report

Company:	DELAWARE BASIN WEST	Local Co-ordinate Reference:	Well KEG SHELL FEDERAL COM #706H
Project:	ATLAS PROSPECT (NM-E)	TVD Reference:	KB=32 @ 3062.2usft
Reference Site:	KEG SHELL FED COM PROJECT	MD Reference:	KB=32 @ 3062.2usft
Site Error:	3.0 usft	North Reference:	Grid
Reference Well:	KEG SHELL FEDERAL COM #706H	Survey Calculation Method:	Minimum Curvature
Well Error:	3.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDT 17 Central Planning Prod
Reference Design:	PWP2	Offset TVD Reference:	Reference Datum

Offset Design: KEG SHELL FED COM PROJECT - KEG SHELL FEDERAL COM #705H - OWB - PWP2												Offset Site Error:	3.0 usft
Survey Program: 0-r.5 SDI_KPR_WL_NS-CT, 1506-r.5 MWD+IFR1+MS, 9101-r.5 MWD+IFR1+MS												Offset Well Error:	3.0 usft
Reference												Rule Assigned:	
Offset												Warning	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	
15,600.0	9,690.3	15,263.4	9,636.6	50.2	45.5	86.44	5,620.6	60.8	864.0	769.4	94.53	9.139	
15,700.0	9,690.6	15,363.4	9,637.0	50.9	46.2	86.44	5,720.6	60.5	863.9	768.0	95.93	9.006	
15,800.0	9,690.9	15,463.4	9,637.4	51.6	47.0	86.45	5,820.6	60.3	863.9	766.5	97.34	8.875	
15,900.0	9,691.2	15,563.4	9,637.9	52.3	47.7	86.46	5,920.6	60.1	863.8	765.1	98.74	8.748	
16,000.0	9,691.5	15,663.4	9,638.3	52.9	48.4	86.47	6,020.5	59.9	863.8	763.6	100.15	8.625	
16,100.0	9,691.7	15,763.4	9,638.7	53.6	49.2	86.48	6,120.5	59.7	863.7	762.2	101.56	8.504	
16,200.0	9,692.0	15,863.4	9,639.2	54.3	49.9	86.49	6,220.5	59.5	863.7	760.7	102.98	8.387	
16,300.0	9,692.3	15,963.4	9,639.6	55.0	50.7	86.50	6,320.5	59.3	863.7	759.3	104.40	8.273	
16,400.0	9,692.6	16,063.4	9,640.0	55.7	51.4	86.51	6,420.5	59.0	863.6	757.8	105.82	8.161	
16,500.0	9,692.9	16,163.4	9,640.5	56.4	52.2	86.52	6,520.5	58.8	863.6	756.3	107.24	8.053	
16,600.0	9,693.2	16,263.4	9,640.9	57.1	52.9	86.53	6,620.5	58.6	863.5	754.9	108.67	7.947	
16,700.0	9,693.5	16,363.4	9,641.3	57.8	53.6	86.54	6,720.5	58.4	863.5	753.4	110.09	7.843	
16,800.0	9,693.8	16,463.4	9,641.8	58.5	54.4	86.55	6,820.5	58.2	863.4	751.9	111.52	7.742	
16,900.0	9,694.1	16,563.4	9,642.2	59.2	55.1	86.55	6,920.5	58.0	863.4	750.4	112.95	7.644	
17,000.0	9,694.4	16,663.4	9,642.6	59.9	55.9	86.56	7,020.5	57.8	863.3	749.0	114.39	7.548	
17,100.0	9,694.7	16,763.4	9,643.1	60.6	56.6	86.57	7,120.5	57.6	863.3	747.5	115.82	7.454	
17,200.0	9,695.0	16,863.4	9,643.5	61.3	57.4	86.58	7,220.5	57.3	863.3	746.0	117.26	7.362	
17,300.0	9,695.3	16,963.4	9,643.9	62.0	58.1	86.59	7,320.5	57.1	863.2	744.5	118.70	7.272	
17,400.0	9,695.6	17,063.4	9,644.4	62.7	58.9	86.60	7,420.5	56.9	863.2	743.0	120.14	7.185	
17,500.0	9,695.9	17,163.4	9,644.8	63.4	59.6	86.61	7,520.5	56.7	863.1	741.5	121.58	7.099	
17,600.0	9,696.2	17,263.4	9,645.2	64.1	60.4	86.62	7,620.5	56.5	863.1	740.1	123.02	7.016	
17,700.0	9,696.4	17,363.4	9,645.7	64.8	61.1	86.63	7,720.5	56.3	863.0	738.6	124.47	6.934	
17,800.0	9,696.7	17,463.4	9,646.1	65.5	61.9	86.64	7,820.5	56.1	863.0	737.1	125.91	6.854	
17,900.0	9,697.0	17,563.4	9,646.5	66.2	62.6	86.65	7,920.5	55.8	863.0	735.6	127.36	6.776	
18,000.0	9,697.3	17,663.4	9,647.0	66.9	63.4	86.66	8,020.5	55.6	862.9	734.1	128.81	6.699	
18,100.0	9,697.6	17,763.4	9,647.4	67.7	64.1	86.66	8,120.5	55.4	862.9	732.6	130.26	6.624	
18,200.0	9,697.9	17,863.4	9,647.9	68.4	64.9	86.67	8,220.5	55.2	862.8	731.1	131.71	6.551	
18,300.0	9,698.2	17,963.4	9,648.3	69.1	65.6	86.68	8,320.5	55.0	862.8	729.6	133.17	6.479	
18,400.0	9,698.5	18,063.4	9,648.7	69.8	66.4	86.69	8,420.5	54.8	862.7	728.1	134.62	6.409	
18,500.0	9,698.8	18,163.4	9,649.2	70.5	67.1	86.70	8,520.5	54.6	862.7	726.6	136.07	6.340	
18,600.0	9,699.1	18,263.4	9,649.6	71.2	67.9	86.71	8,620.5	54.3	862.6	725.1	137.53	6.272	
18,700.0	9,699.4	18,363.4	9,650.0	72.0	68.6	86.72	8,720.5	54.1	862.6	723.6	138.99	6.206	
18,800.0	9,699.7	18,463.4	9,650.5	72.7	69.4	86.73	8,820.5	53.9	862.6	722.1	140.45	6.142	
18,900.0	9,700.0	18,563.4	9,650.9	73.4	70.1	86.74	8,920.5	53.7	862.5	720.6	141.91	6.078	
19,000.0	9,700.3	18,663.4	9,651.3	74.1	70.9	86.75	9,020.5	53.5	862.5	719.1	143.37	6.016	
19,100.0	9,700.6	18,763.4	9,651.8	74.9	71.6	86.76	9,120.5	53.3	862.4	717.6	144.83	5.955	
19,200.0	9,700.8	18,863.4	9,652.2	75.6	72.4	86.77	9,220.5	53.1	862.4	716.1	146.29	5.895	
19,300.0	9,701.1	18,963.4	9,652.6	76.3	73.1	86.77	9,320.5	52.8	862.3	714.6	147.75	5.836	
19,400.0	9,701.4	19,063.4	9,653.1	77.0	73.9	86.78	9,420.5	52.6	862.3	713.1	149.22	5.779	
19,500.0	9,701.7	19,163.4	9,653.5	77.8	74.6	86.79	9,520.5	52.4	862.3	711.6	150.68	5.722	
19,600.0	9,702.0	19,263.4	9,653.9	78.5	75.4	86.80	9,620.5	52.2	862.2	710.1	152.15	5.667	
19,700.0	9,702.3	19,363.4	9,654.4	79.2	76.2	86.81	9,720.5	52.0	862.2	708.6	153.61	5.613	
19,800.0	9,702.6	19,463.4	9,654.8	80.0	76.9	86.82	9,820.5	51.8	862.1	707.0	155.08	5.559	
19,900.0	9,702.9	19,563.4	9,655.2	80.7	77.7	86.83	9,920.5	51.6	862.1	705.5	156.55	5.507	
20,000.0	9,703.2	19,663.4	9,655.7	81.4	78.4	86.84	10,020.5	51.4	862.0	704.0	158.02	5.455	
20,100.0	9,703.5	19,763.4	9,656.1	82.2	79.2	86.85	10,120.5	51.1	862.0	702.5	159.48	5.405	
20,200.0	9,703.8	19,863.4	9,656.5	82.9	79.9	86.86	10,220.5	50.9	862.0	701.0	160.95	5.355	
20,300.0	9,704.1	19,963.4	9,657.0	83.6	80.7	86.87	10,320.5	50.7	861.9	699.5	162.43	5.307	
20,400.0	9,704.4	20,063.4	9,657.4	84.4	81.4	86.88	10,420.5	50.5	861.9	698.0	163.90	5.259	
20,500.0	9,704.7	20,163.4	9,657.8	85.1	82.2	86.88	10,520.5	50.3	861.8	696.5	165.37	5.212	
20,600.0	9,705.0	20,263.4	9,658.3	85.8	82.9	86.89	10,620.5	50.1	861.8	694.9	166.84	5.165	
20,700.0	9,705.3	20,363.4	9,658.7	86.6	83.7	86.90	10,720.5	49.9	861.7	693.4	168.31	5.120	

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

ConocoPhillips

Anticollision Report

Company:	DELAWARE BASIN WEST	Local Co-ordinate Reference:	Well KEG SHELL FEDERAL COM #706H
Project:	ATLAS PROSPECT (NM-E)	TVD Reference:	KB=32 @ 3062.2usft
Reference Site:	KEG SHELL FED COM PROJECT	MD Reference:	KB=32 @ 3062.2usft
Site Error:	3.0 usft	North Reference:	Grid
Reference Well:	KEG SHELL FEDERAL COM #706H	Survey Calculation Method:	Minimum Curvature
Well Error:	3.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDT 17 Central Planning Prod
Reference Design:	PWP2	Offset TVD Reference:	Reference Datum

Offset Design: KEG SHELL FED COM PROJECT - KEG SHELL FEDERAL COM #705H - OWB - PWP2													Offset Site Error: 3.0 usft
Survey Program: 0-r.5 SDI_KPR_WL_NS-CT, 1506-r.5 MWD+IFR1+MS, 9101-r.5 MWD+IFR1+MS													Offset Well Error: 3.0 usft
Reference		Offset		Semi Major Axis		Offset Wellbore Centre		Distance				Rule Assigned:	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
20,800.0	9,705.5	20,463.4	9,659.1	87.3	84.5	86.91	10,820.5	49.6	861.7	691.9	169.79	5.075	
20,900.0	9,705.8	20,563.4	9,659.6	88.0	85.2	86.92	10,920.5	49.4	861.7	690.4	171.26	5.031	
21,000.0	9,706.1	20,663.4	9,660.0	88.8	86.0	86.93	11,020.5	49.2	861.6	688.9	172.74	4.988	
21,100.0	9,706.4	20,763.4	9,660.4	89.5	86.7	86.94	11,120.5	49.0	861.6	687.4	174.21	4.946	
21,200.0	9,706.7	20,863.4	9,660.9	90.2	87.5	86.95	11,220.5	48.8	861.5	685.8	175.69	4.904	
21,300.0	9,707.0	20,963.4	9,661.3	91.0	88.2	86.96	11,320.5	48.6	861.5	684.3	177.16	4.863	
21,400.0	9,707.3	21,063.4	9,661.7	91.7	89.0	86.97	11,420.5	48.4	861.4	682.8	178.64	4.822	
21,500.0	9,707.6	21,163.4	9,662.2	92.5	89.8	86.98	11,520.5	48.1	861.4	681.3	180.12	4.782	
21,600.0	9,707.9	21,263.4	9,662.6	93.2	90.5	86.99	11,620.5	47.9	861.4	679.8	181.60	4.743	
21,700.0	9,708.2	21,363.4	9,663.0	93.9	91.3	87.00	11,720.5	47.7	861.3	678.2	183.07	4.705	
21,800.0	9,708.5	21,463.4	9,663.5	94.7	92.0	87.00	11,820.5	47.5	861.3	676.7	184.55	4.667	
21,900.0	9,708.8	21,563.4	9,663.9	95.4	92.8	87.01	11,920.5	47.3	861.2	675.2	186.03	4.629	
22,000.0	9,709.1	21,663.4	9,664.3	96.2	93.5	87.02	12,020.5	47.1	861.2	673.7	187.51	4.593	
22,100.0	9,709.4	21,763.4	9,664.8	96.9	94.3	87.03	12,120.4	46.9	861.1	672.2	188.99	4.557	
22,105.4	9,709.4	21,768.9	9,664.8	96.9	94.3	87.03	12,125.9	46.9	861.1	672.1	189.07	4.555	

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

ConocoPhillips

Anticollision Report

Company:	DELAWARE BASIN WEST	Local Co-ordinate Reference:	Well KEG SHELL FEDERAL COM #706H
Project:	ATLAS PROSPECT (NM-E)	TVD Reference:	KB=32 @ 3062.2usft
Reference Site:	KEG SHELL FED COM PROJECT	MD Reference:	KB=32 @ 3062.2usft
Site Error:	3.0 usft	North Reference:	Grid
Reference Well:	KEG SHELL FEDERAL COM #706H	Survey Calculation Method:	Minimum Curvature
Well Error:	3.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDT 17 Central Planning Prod
Reference Design:	PWP2	Offset TVD Reference:	Reference Datum

Offset Design: KEG SHELL FED COM PROJECT - KEG SHELL FEDERAL COM #906H - OWB - PWP1												Offset Site Error:	3.0 usft
Survey Program: 0-r.5 SDI_KPR_WL_NS-CT, 1500-r.5 MWD+IFR1+MS, 10245-r.5 MWD+IFR1+MS												Offset Well Error:	3.0 usft
Reference	Offset	Semi Major Axis	Offset Wellbore Centre	Distance	Rule Assigned:								
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
0.0	0.0	0.0	1.8	3.0	3.0	-90.26	-1.7	-370.1	370.1				
100.0	100.0	98.2	100.0	3.0	3.1	-90.26	-1.7	-370.1	370.1	363.6	6.52	56.728	
200.0	200.0	198.2	200.0	3.2	3.2	-90.26	-1.7	-370.1	370.1	363.3	6.76	54.723	
300.0	300.0	298.2	300.0	3.3	3.3	-90.26	-1.7	-370.1	370.1	363.1	6.99	52.912	
400.0	400.0	398.2	400.0	3.4	3.4	-90.26	-1.7	-370.1	370.1	362.9	7.22	51.276	
500.0	500.0	498.2	500.0	3.5	3.6	-90.26	-1.7	-370.1	370.1	362.7	7.43	49.786	
600.0	600.0	598.2	600.0	3.7	3.7	-90.26	-1.7	-370.1	370.1	362.5	7.64	48.422	
700.0	700.0	698.2	700.0	3.8	3.8	-90.26	-1.7	-370.1	370.1	362.3	7.85	47.167	
800.0	800.0	798.2	800.0	3.9	3.9	-90.26	-1.7	-370.1	370.1	362.1	8.04	46.006	
900.0	900.0	898.2	900.0	4.0	4.0	-90.26	-1.7	-370.1	370.1	361.9	8.24	44.929	
1,000.0	1,000.0	998.2	1,000.0	4.2	4.2	-90.26	-1.7	-370.1	370.1	361.7	8.43	43.926	
1,100.0	1,100.0	1,098.2	1,100.0	4.3	4.3	-90.26	-1.7	-370.1	370.1	361.5	8.61	42.988	
1,200.0	1,200.0	1,198.2	1,200.0	4.4	4.4	-90.26	-1.7	-370.1	370.1	361.3	8.79	42.109	
1,300.0	1,300.0	1,298.2	1,300.0	4.5	4.5	-90.26	-1.7	-370.1	370.1	361.1	8.97	41.283	
1,400.0	1,400.0	1,398.2	1,400.0	4.6	4.6	-90.26	-1.7	-370.1	370.1	361.0	9.14	40.504	
1,500.0	1,500.0	1,498.2	1,500.0	4.7	4.8	-90.26	-1.7	-370.1	370.1	360.8	9.31	39.769	
1,600.0	1,600.0	1,598.2	1,600.0	4.9	4.9	27.48	-1.7	-370.1	368.6	358.9	9.64	38.225	
1,700.0	1,699.8	1,698.0	1,699.8	5.1	5.1	27.90	-1.7	-370.1	363.9	353.9	10.05	36.220	
1,800.0	1,799.5	1,797.7	1,799.5	5.3	5.2	28.63	-1.7	-370.1	356.2	345.8	10.46	34.062	
1,900.0	1,898.7	1,896.9	1,898.7	5.6	5.4	29.70	-1.7	-370.1	345.6	334.7	10.88	31.773	
2,000.0	1,997.5	1,995.7	1,997.5	5.9	5.5	31.17	-1.7	-370.1	332.0	320.7	11.30	29.385	
2,100.0	2,095.6	2,093.8	2,095.6	6.3	5.6	33.14	-1.7	-370.1	315.8	304.1	11.72	26.936	
2,200.0	2,193.1	2,191.3	2,193.1	6.6	5.8	35.71	-1.7	-370.1	297.1	284.9	12.14	24.467	
2,300.0	2,290.1	2,288.3	2,290.1	6.9	5.9	38.59	-1.7	-370.1	277.6	265.1	12.50	22.211	
2,400.0	2,387.1	2,385.3	2,387.1	7.3	6.0	41.89	-1.7	-370.1	258.9	246.1	12.84	20.163	
2,500.0	2,484.1	2,482.3	2,484.1	7.6	6.2	45.67	-1.7	-370.1	241.2	228.0	13.16	18.324	
2,600.0	2,581.2	2,586.1	2,587.9	8.0	6.3	50.37	-2.0	-368.9	223.5	210.0	13.50	16.558	
2,700.0	2,678.2	2,689.8	2,691.4	8.4	6.4	56.07	-3.4	-364.1	203.9	190.1	13.78	14.796	
2,800.0	2,775.2	2,791.7	2,793.0	8.7	6.6	63.17	-5.7	-355.8	183.1	169.1	13.99	13.087	
2,900.0	2,872.3	2,891.5	2,892.1	9.1	6.8	72.27	-8.9	-344.4	162.5	148.3	14.14	11.491	
3,000.0	2,969.3	2,989.1	2,988.5	9.5	7.1	84.11	-13.0	-330.0	144.1	129.8	14.28	10.090	
3,100.0	3,066.3	3,084.3	3,082.1	10.0	7.4	99.04	-17.8	-312.9	131.3	116.7	14.62	8.980	
3,172.5	3,136.7	3,151.8	3,148.0	10.3	7.6	111.38	-21.7	-299.0	128.1	113.0	15.19	8.435 CC, ES	
3,200.0	3,163.4	3,177.0	3,172.6	10.4	7.6	116.20	-23.2	-293.4	128.6	113.1	15.49	8.305	
3,300.0	3,260.4	3,267.2	3,260.1	10.8	7.9	132.88	-29.1	-272.5	139.1	122.3	16.78	8.290 SF	
3,400.0	3,357.4	3,357.1	3,347.3	11.2	8.1	146.61	-35.0	-251.6	161.2	143.1	18.03	8.940	
3,500.0	3,454.4	3,447.0	3,434.5	11.7	8.4	156.98	-40.9	-230.6	190.9	171.8	19.07	10.010	
3,600.0	3,551.5	3,536.9	3,521.8	12.1	8.7	164.63	-46.8	-209.7	225.3	205.3	19.96	11.290	
3,700.0	3,648.5	3,626.8	3,609.0	12.5	9.0	170.32	-52.7	-188.8	262.5	241.7	20.75	12.650	
3,800.0	3,745.5	3,716.7	3,696.2	13.0	9.3	174.64	-58.6	-167.8	301.5	280.0	21.50	14.022	
3,900.0	3,842.6	3,806.6	3,783.4	13.4	9.6	177.99	-64.4	-146.9	341.7	319.4	22.23	15.367	
4,000.0	3,939.6	3,896.5	3,870.6	13.9	9.9	-179.35	-70.3	-126.0	382.6	359.7	22.96	16.667	
4,100.0	4,036.6	3,986.3	3,957.8	14.4	10.3	-177.19	-76.2	-105.0	424.2	400.5	23.68	17.912	
4,200.0	4,133.6	4,076.2	4,045.1	14.8	10.6	-175.42	-82.1	-84.1	466.1	441.7	24.41	19.097	
4,300.0	4,230.7	4,166.1	4,132.3	15.3	10.9	-173.93	-88.0	-63.2	508.4	483.2	25.14	20.223	
4,400.0	4,327.7	4,256.0	4,219.5	15.7	11.3	-172.67	-93.9	-42.2	550.9	525.0	25.88	21.290	
4,500.0	4,424.7	4,345.9	4,306.7	16.2	11.7	-171.58	-99.7	-21.3	593.6	567.0	26.62	22.301	
4,600.0	4,521.8	4,435.8	4,393.9	16.7	12.0	-170.65	-105.6	-0.4	636.5	609.1	27.37	23.258	
4,700.0	4,618.8	4,525.7	4,481.1	17.1	12.4	-169.82	-111.5	20.6	679.4	651.3	28.12	24.163	
4,800.0	4,715.8	4,615.6	4,568.4	17.6	12.8	-169.10	-117.4	41.5	722.5	693.6	28.88	25.020	
4,900.0	4,812.9	4,705.6	4,655.7	18.0	13.2	-168.51	-123.3	62.5	765.3	735.7	29.62	25.839	
5,000.0	4,910.4	4,796.3	4,743.7	18.5	13.5	-168.00	-129.2	83.6	806.8	776.4	30.38	26.553	

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

ConocoPhillips
Anticollision Report

Company:	DELAWARE BASIN WEST	Local Co-ordinate Reference:	Well KEG SHELL FEDERAL COM #706H
Project:	ATLAS PROSPECT (NM-E)	TVD Reference:	KB=32 @ 3062.2usft
Reference Site:	KEG SHELL FED COM PROJECT	MD Reference:	KB=32 @ 3062.2usft
Site Error:	3.0 usft	North Reference:	Grid
Reference Well:	KEG SHELL FEDERAL COM #706H	Survey Calculation Method:	Minimum Curvature
Well Error:	3.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDT 17 Central Planning Prod
Reference Design:	PWP2	Offset TVD Reference:	Reference Datum

Offset Design: KEG SHELL FED COM PROJECT - KEG SHELL FEDERAL COM #906H - OWB - PWP1													Offset Site Error: 3.0 usft	
Survey Program: 0-r.5 SDI_KPR_WL_NS-CT, 1500-r.5 MWD+IFR1+MS, 10245-r.5 MWD+IFR1+MS													Offset Well Error: 3.0 usft	
Reference		Offset		Semi Major Axis		Offset Wellbore Centre			Rule Assigned:					
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning	
5,100.0	5,008.3	4,887.7	4,832.4	19.0	13.9	-167.51	-135.2	104.9	846.7	815.6	31.15	27.184		
5,200.0	5,106.5	4,979.6	4,921.6	19.4	14.3	-167.05	-141.2	126.3	885.1	853.2	31.91	27.738		
5,300.0	5,205.1	5,072.2	5,011.5	19.9	14.7	-166.61	-147.3	147.9	922.1	889.4	32.67	28.221		
5,400.0	5,303.9	5,165.4	5,101.9	20.3	15.2	-166.18	-153.4	169.6	957.5	924.1	33.43	28.640		
5,500.0	5,402.9	5,259.1	5,192.8	20.7	15.6	-165.76	-159.5	191.4	991.4	957.2	34.19	29.000		

ConocoPhillips

Anticollision Report

Company:	DELAWARE BASIN WEST	Local Co-ordinate Reference:	Well KEG SHELL FEDERAL COM #706H
Project:	ATLAS PROSPECT (NM-E)	TVD Reference:	KB=32 @ 3062.2usft
Reference Site:	KEG SHELL FED COM PROJECT	MD Reference:	KB=32 @ 3062.2usft
Site Error:	3.0 usft	North Reference:	Grid
Reference Well:	KEG SHELL FEDERAL COM #706H	Survey Calculation Method:	Minimum Curvature
Well Error:	3.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDT 17 Central Planning Prod
Reference Design:	PWP2	Offset TVD Reference:	Reference Datum

Offset Design: KEG SHELL FED COM PROJECT - KEG SHELL FEDERAL COM #907H - OWB - PWP1													Offset Site Error: 3.0 usft
Survey Program: 0-r.5 SDI_KPR_WL_NS-CT, 1500-r.5 MWD+IFR1+MS, 9958-r.5 MWD+IFR1+MS													Offset Well Error: 3.0 usft
Reference	Offset	Semi Major Axis	Distance	Rule Assigned:									
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
0.0	0.0	0.0	0.6	3.0	3.0	-90.26	-1.8	-400.0	400.0				
100.0	100.0	99.4	100.0	3.0	3.1	-90.26	-1.8	-400.0	400.0	393.5	6.53	61.299	
200.0	200.0	199.4	200.0	3.2	3.2	-90.26	-1.8	-400.0	400.0	393.2	6.77	59.128	
300.0	300.0	299.4	300.0	3.3	3.3	-90.26	-1.8	-400.0	400.0	393.0	7.00	57.174	
400.0	400.0	399.4	400.0	3.4	3.4	-90.26	-1.8	-400.0	400.0	392.8	7.22	55.408	
500.0	500.0	499.4	500.0	3.5	3.6	-90.26	-1.8	-400.0	400.0	392.6	7.44	53.799	
600.0	600.0	599.4	600.0	3.7	3.7	-90.26	-1.8	-400.0	400.0	392.4	7.64	52.325	
700.0	700.0	699.4	700.0	3.8	3.8	-90.26	-1.8	-400.0	400.0	392.2	7.85	50.969	
800.0	800.0	799.4	800.0	3.9	3.9	-90.26	-1.8	-400.0	400.0	392.0	8.05	49.716	
900.0	900.0	899.4	900.0	4.0	4.0	-90.26	-1.8	-400.0	400.0	391.8	8.24	48.552	
1,000.0	1,000.0	999.4	1,000.0	4.2	4.2	-90.26	-1.8	-400.0	400.0	391.6	8.43	47.468	
1,100.0	1,100.0	1,099.4	1,100.0	4.3	4.3	-90.26	-1.8	-400.0	400.0	391.4	8.61	46.455	
1,200.0	1,200.0	1,199.4	1,200.0	4.4	4.4	-90.26	-1.8	-400.0	400.0	391.2	8.79	45.505	
1,300.0	1,300.0	1,299.4	1,300.0	4.5	4.5	-90.26	-1.8	-400.0	400.0	391.0	8.97	44.613	
1,400.0	1,400.0	1,399.4	1,400.0	4.6	4.6	-90.26	-1.8	-400.0	400.0	390.9	9.14	43.772	
1,500.0	1,500.0	1,499.4	1,500.0	4.7	4.8	-90.26	-1.8	-400.0	400.0	390.7	9.31	42.977	
1,600.0	1,600.0	1,599.4	1,600.0	4.9	4.9	27.47	-1.8	-400.0	398.5	388.8	9.64	41.317	
1,700.0	1,699.8	1,699.2	1,699.8	5.1	5.1	27.87	-1.8	-400.0	393.8	383.8	10.05	39.188	
1,800.0	1,799.5	1,798.9	1,799.5	5.3	5.2	28.54	-1.8	-400.0	386.1	375.7	10.46	36.912	
1,900.0	1,898.7	1,898.1	1,898.7	5.6	5.4	29.54	-1.8	-400.0	375.5	364.6	10.88	34.511	
2,000.0	1,997.5	1,996.9	1,997.5	5.9	5.5	30.89	-1.8	-400.0	361.9	350.6	11.30	32.015	
2,100.0	2,095.6	2,104.6	2,105.2	6.3	5.7	32.66	-3.1	-398.7	344.3	332.5	11.79	29.206	
2,200.0	2,193.1	2,211.0	2,211.4	6.6	5.9	34.61	-7.3	-394.5	321.2	309.0	12.26	26.211	
2,300.0	2,290.1	2,310.4	2,310.4	6.9	6.0	36.30	-13.2	-388.6	294.8	282.2	12.59	23.423	
2,400.0	2,387.1	2,406.4	2,406.1	7.3	6.2	38.23	-19.1	-382.7	268.5	255.5	12.99	20.660	
2,500.0	2,484.1	2,502.5	2,501.8	7.6	6.4	40.56	-25.1	-376.7	242.5	229.0	13.41	18.080	
2,600.0	2,581.2	2,598.5	2,597.4	8.0	6.6	43.45	-31.0	-370.8	216.9	203.1	13.83	15.688	
2,700.0	2,678.2	2,694.5	2,693.1	8.4	6.8	47.08	-36.9	-364.9	192.0	177.8	14.23	13.493	
2,800.0	2,775.2	2,790.5	2,788.8	8.7	7.0	51.74	-42.8	-359.0	168.1	153.5	14.61	11.507	
2,900.0	2,872.3	2,886.6	2,884.4	9.1	7.3	57.85	-48.7	-353.1	145.6	130.7	14.94	9.745	
3,000.0	2,969.3	2,982.6	2,980.1	9.5	7.5	65.97	-54.7	-347.1	125.3	110.1	15.21	8.240	
3,100.0	3,066.3	3,078.6	3,075.8	10.0	7.8	76.78	-60.6	-341.2	108.4	93.0	15.41	7.033	
3,200.0	3,163.4	3,174.7	3,171.4	10.4	8.1	90.62	-66.5	-335.3	96.8	81.1	15.67	6.175	
3,300.0	3,260.4	3,270.7	3,267.1	10.8	8.3	106.75	-72.4	-329.4	92.4	76.1	16.20	5.700	
3,304.4	3,264.7	3,275.0	3,271.3	10.8	8.4	107.49	-72.7	-329.1	92.3	76.1	16.24	5.688 CC, ES	
3,400.0	3,357.4	3,366.7	3,362.8	11.2	8.6	122.97	-78.3	-323.5	96.2	79.1	17.12	5.617 SF	
3,500.0	3,454.4	3,462.8	3,458.4	11.7	8.9	137.02	-84.2	-317.6	107.4	89.2	18.22	5.894	
3,600.0	3,551.5	3,558.8	3,554.1	12.1	9.2	148.04	-90.2	-311.6	124.0	104.7	19.27	6.434	
3,700.0	3,648.5	3,654.8	3,649.7	12.5	9.5	156.34	-96.1	-305.7	144.1	123.9	20.20	7.132	
3,800.0	3,745.5	3,750.8	3,745.4	13.0	9.8	162.57	-102.0	-299.8	166.5	145.4	21.04	7.911	
3,900.0	3,842.6	3,846.9	3,841.1	13.4	10.2	167.32	-107.9	-293.9	190.3	168.5	21.82	8.721	
4,000.0	3,939.6	3,942.9	3,936.7	13.9	10.5	171.01	-113.8	-288.0	215.1	192.6	22.56	9.534	
4,100.0	4,036.6	4,038.9	4,032.4	14.4	10.8	173.94	-119.8	-282.0	240.6	217.3	23.28	10.335	
4,200.0	4,133.6	4,135.0	4,128.1	14.8	11.1	176.31	-125.7	-276.1	266.6	242.6	23.99	11.115	
4,300.0	4,230.7	4,231.0	4,223.7	15.3	11.5	178.26	-131.6	-270.2	292.9	268.2	24.68	11.867	
4,400.0	4,327.7	4,325.5	4,317.9	15.7	11.8	179.87	-137.4	-264.3	319.6	294.2	25.36	12.600	
4,500.0	4,424.7	4,413.0	4,404.9	16.2	12.1	-178.66	-143.2	-257.1	348.0	322.0	25.95	13.409	
4,600.0	4,521.8	4,500.0	4,491.1	16.7	12.5	-177.15	-149.5	-247.4	378.9	352.4	26.55	14.270	
4,700.0	4,618.8	4,583.1	4,573.1	17.1	12.8	-175.70	-155.9	-235.7	412.4	385.3	27.11	15.210	
4,800.0	4,715.8	4,665.4	4,653.9	17.6	13.2	-174.27	-162.8	-221.8	448.4	420.7	27.68	16.201	
4,900.0	4,812.9	4,746.0	4,732.6	18.0	13.5	-172.94	-169.9	-206.0	486.5	458.3	28.20	17.251	
5,000.0	4,910.4	4,827.4	4,811.7	18.5	13.9	-171.63	-177.6	-187.8	525.6	496.8	28.76	18.276	

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

ConocoPhillips

Anticollision Report

Company:	DELAWARE BASIN WEST	Local Co-ordinate Reference:	Well KEG SHELL FEDERAL COM #706H
Project:	ATLAS PROSPECT (NM-E)	TVD Reference:	KB=32 @ 3062.2usft
Reference Site:	KEG SHELL FED COM PROJECT	MD Reference:	KB=32 @ 3062.2usft
Site Error:	3.0 usft	North Reference:	Grid
Reference Well:	KEG SHELL FEDERAL COM #706H	Survey Calculation Method:	Minimum Curvature
Well Error:	3.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDT 17 Central Planning Prod
Reference Design:	PWP2	Offset TVD Reference:	Reference Datum

Offset Design: KEG SHELL FED COM PROJECT - KEG SHELL FEDERAL COM #907H - OWB - PWP1													Offset Site Error: 3.0 usft
Survey Program: 0-r.5 SDI_KPR_WL_NS-CT, 1500-r.5 MWD+IFR1+MS, 9958-r.5 MWD+IFR1+MS													Offset Well Error: 3.0 usft
Reference		Offset		Semi Major Axis		Offset Wellbore Centre		Distance				Rule Assigned:	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
5,100.0	5,008.3	4,918.9	4,900.2	19.0	14.3	-170.30	-186.4	-166.7	564.1	534.6	29.49	19.130	
5,200.0	5,106.5	5,010.9	4,989.3	19.4	14.6	-169.12	-195.2	-145.4	601.2	571.0	30.21	19.905	
5,300.0	5,205.1	5,103.6	5,079.0	19.9	15.0	-168.06	-204.1	-123.9	637.0	606.1	30.92	20.600	
5,400.0	5,303.9	5,196.8	5,169.3	20.3	15.4	-167.08	-213.0	-102.4	671.4	639.8	31.64	21.220	
5,500.0	5,402.9	5,290.5	5,260.0	20.7	15.8	-166.17	-222.0	-80.7	704.4	672.1	32.35	21.772	
5,600.0	5,502.2	5,384.7	5,351.2	21.1	16.2	-165.32	-231.0	-58.9	736.0	702.9	33.06	22.260	
5,700.0	5,601.7	5,479.4	5,442.9	21.5	16.6	-164.51	-240.1	-37.0	766.1	732.4	33.76	22.691	
5,800.0	5,701.4	5,574.5	5,535.0	21.9	17.1	-163.72	-249.2	-15.0	794.8	760.4	34.46	23.068	
5,900.0	5,801.1	5,670.1	5,627.5	22.3	17.5	-162.96	-258.3	7.1	822.1	786.9	35.13	23.399	
6,000.0	5,901.0	5,766.0	5,720.3	22.6	17.9	-162.22	-267.5	29.3	847.9	812.1	35.79	23.687	
6,100.0	6,001.0	5,862.2	5,813.5	22.9	18.3	-161.48	-276.8	51.5	872.2	835.8	36.43	23.943	
6,200.0	6,100.9	5,958.8	5,907.0	23.1	18.8	-160.75	-286.0	73.9	895.2	858.1	37.02	24.182	
6,300.0	6,200.9	6,055.6	6,000.7	23.2	19.2	82.42	-295.3	96.3	917.0	879.6	37.40	24.519	
6,400.0	6,300.9	6,152.4	6,094.4	23.2	19.7	83.18	-304.6	118.7	938.9	901.1	37.78	24.850	
6,500.0	6,400.9	6,249.2	6,188.2	23.2	20.1	83.90	-313.8	141.1	961.0	922.8	38.18	25.169	
6,600.0	6,500.9	6,346.0	6,281.9	23.3	20.5	84.59	-323.1	163.5	983.2	944.6	38.59	25.477	

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

ConocoPhillips

Anticollision Report

Company:	DELAWARE BASIN WEST	Local Co-ordinate Reference:	Well KEG SHELL FEDERAL COM #706H
Project:	ATLAS PROSPECT (NM-E)	TVD Reference:	KB=32 @ 3062.2usft
Reference Site:	KEG SHELL FED COM PROJECT	MD Reference:	KB=32 @ 3062.2usft
Site Error:	3.0 usft	North Reference:	Grid
Reference Well:	KEG SHELL FEDERAL COM #706H	Survey Calculation Method:	Minimum Curvature
Well Error:	3.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDT 17 Central Planning Prod
Reference Design:	PWP2	Offset TVD Reference:	Reference Datum

Offset Design: KEG SHELL FED COM PROJECT - KEG SHELL FEDERAL COM #908H - OWB - PWP1												Offset Site Error:	3.0 usft
Survey Program: 0-r.5 SDI_KPR_WL_NS-CT, 1500-r.5 MWD+IFR1+MS, 10095-r.5 MWD+IFR1+MS												Offset Well Error:	3.0 usft
Reference	Offset	Semi Major Axis	Distance	Rule Assigned:									
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
0.0	0.0	0.0	0.6	3.0	3.0	-90.27	-2.0	-430.1	430.1				
100.0	100.0	99.4	100.0	3.0	3.1	-90.27	-2.0	-430.1	430.1	423.6	6.53	65.912	
200.0	200.0	199.4	200.0	3.2	3.2	-90.27	-2.0	-430.1	430.1	423.3	6.77	63.577	
300.0	300.0	299.4	300.0	3.3	3.3	-90.27	-2.0	-430.1	430.1	423.1	7.00	61.477	
400.0	400.0	399.4	400.0	3.4	3.4	-90.27	-2.0	-430.1	430.1	422.9	7.22	59.577	
500.0	500.0	499.4	500.0	3.5	3.6	-90.27	-2.0	-430.1	430.1	422.7	7.44	57.847	
600.0	600.0	599.4	600.0	3.7	3.7	-90.27	-2.0	-430.1	430.1	422.5	7.64	56.263	
700.0	700.0	699.4	700.0	3.8	3.8	-90.27	-2.0	-430.1	430.1	422.3	7.85	54.805	
800.0	800.0	799.4	800.0	3.9	3.9	-90.27	-2.0	-430.1	430.1	422.1	8.05	53.457	
900.0	900.0	899.4	900.0	4.0	4.0	-90.27	-2.0	-430.1	430.1	421.9	8.24	52.206	
1,000.0	1,000.0	999.4	1,000.0	4.2	4.2	-90.27	-2.0	-430.1	430.1	421.7	8.43	51.040	
1,100.0	1,100.0	1,099.4	1,100.0	4.3	4.3	-90.27	-2.0	-430.1	430.1	421.5	8.61	49.951	
1,200.0	1,200.0	1,199.4	1,200.0	4.4	4.4	-90.27	-2.0	-430.1	430.1	421.3	8.79	48.930	
1,300.0	1,300.0	1,299.4	1,300.0	4.5	4.5	-90.27	-2.0	-430.1	430.1	421.1	8.97	47.970	
1,400.0	1,400.0	1,399.4	1,400.0	4.6	4.6	-90.27	-2.0	-430.1	430.1	421.0	9.14	47.066	
1,500.0	1,500.0	1,499.4	1,500.0	4.7	4.8	-90.27	-2.0	-430.1	430.1	420.8	9.31	46.211	
1,600.0	1,600.0	1,599.4	1,600.0	4.9	4.9	27.45	-2.0	-430.1	428.6	418.9	9.64	44.438	
1,700.0	1,699.8	1,699.2	1,699.8	5.1	5.1	27.82	-2.0	-430.1	423.9	413.9	10.05	42.183	
1,800.0	1,799.5	1,798.9	1,799.5	5.3	5.2	28.46	-2.0	-430.1	416.2	405.8	10.46	39.787	
1,900.0	1,898.7	1,898.1	1,898.7	5.6	5.4	29.38	-2.0	-430.1	405.5	394.7	10.88	37.272	
2,000.0	1,997.5	1,996.9	1,997.5	5.9	5.5	30.64	-2.0	-430.1	392.0	380.6	11.31	34.666	
2,100.0	2,095.6	2,095.0	2,095.6	6.3	5.6	32.29	-2.0	-430.1	375.6	363.9	11.74	32.002	
2,200.0	2,193.1	2,192.5	2,193.1	6.6	5.8	34.42	-2.0	-430.1	356.7	344.5	12.16	29.319	
2,300.0	2,290.1	2,289.5	2,290.1	6.9	5.9	36.73	-2.0	-430.1	336.8	324.2	12.53	26.869	
2,400.0	2,387.1	2,386.5	2,387.1	7.3	6.0	39.31	-2.0	-430.1	317.5	304.6	12.90	24.617	
2,500.0	2,484.1	2,483.5	2,484.1	7.6	6.2	42.21	-2.0	-430.1	298.9	285.7	13.25	22.562	
2,600.0	2,581.2	2,585.0	2,585.6	8.0	6.3	45.41	-3.2	-429.8	280.6	267.0	13.59	20.646	
2,700.0	2,678.2	2,687.6	2,688.0	8.4	6.5	48.46	-7.9	-428.5	261.2	247.2	13.92	18.760	
2,800.0	2,775.2	2,787.9	2,788.1	8.7	6.6	51.29	-15.7	-426.3	240.5	226.3	14.18	16.966	
2,900.0	2,872.3	2,885.0	2,884.8	9.1	6.8	54.41	-23.9	-424.1	220.1	205.6	14.47	15.213	
3,000.0	2,969.3	2,982.1	2,981.5	9.5	6.9	58.15	-32.0	-421.8	200.4	185.7	14.74	13.598	
3,100.0	3,066.3	3,079.2	3,078.3	10.0	7.1	62.65	-40.2	-419.6	181.8	166.8	14.98	12.134	
3,200.0	3,163.4	3,176.4	3,175.0	10.4	7.3	68.11	-48.3	-417.3	164.5	149.3	15.20	10.822	
3,300.0	3,260.4	3,273.5	3,271.8	10.8	7.5	74.74	-56.5	-415.1	149.0	133.6	15.41	9.666	
3,400.0	3,357.4	3,370.6	3,368.5	11.2	7.8	82.71	-64.7	-412.8	136.0	120.3	15.69	8.665	
3,500.0	3,454.4	3,467.7	3,465.2	11.7	8.0	92.07	-72.8	-410.6	126.2	110.0	16.14	7.818	
3,600.0	3,551.5	3,564.8	3,562.0	12.1	8.3	102.58	-81.0	-408.3	120.4	103.5	16.87	7.136	
3,675.0	3,624.3	3,637.6	3,634.5	12.4	8.4	110.90	-87.1	-406.7	119.1	101.4	17.63	6.752 CC	
3,700.0	3,648.5	3,661.9	3,658.7	12.5	8.5	113.68	-89.1	-406.1	119.2	101.3	17.92	6.652 ES	
3,800.0	3,745.5	3,759.0	3,755.4	13.0	8.8	124.58	-97.3	-403.9	122.7	103.6	19.18	6.401	
3,900.0	3,842.6	3,856.1	3,852.2	13.4	9.0	134.56	-105.5	-401.6	130.6	110.2	20.46	6.383	
4,000.0	3,939.6	3,953.2	3,948.9	13.9	9.3	143.23	-113.6	-399.4	142.1	120.5	21.65	6.564	
4,100.0	4,036.6	4,050.3	4,045.6	14.4	9.6	150.52	-121.8	-397.1	156.4	133.7	22.70	6.891	
4,200.0	4,133.6	4,147.4	4,142.4	14.8	9.9	156.54	-129.9	-394.9	172.9	149.3	23.63	7.318	
4,300.0	4,230.7	4,244.5	4,239.1	15.3	10.2	161.50	-138.1	-392.6	190.9	166.5	24.46	7.807	
4,400.0	4,327.7	4,341.6	4,335.9	15.7	10.5	165.60	-146.2	-390.4	210.1	184.9	25.22	8.333	
4,500.0	4,424.7	4,438.7	4,432.6	16.2	10.8	169.01	-154.4	-388.1	230.2	204.3	25.93	8.877	
4,600.0	4,521.8	4,535.8	4,529.3	16.7	11.1	171.87	-162.6	-385.9	251.0	224.3	26.62	9.429	
4,700.0	4,618.8	4,632.9	4,626.1	17.1	11.5	174.29	-170.7	-383.6	272.2	244.9	27.28	9.979	
4,800.0	4,715.8	4,730.1	4,722.8	17.6	11.8	176.37	-178.9	-381.4	293.9	266.0	27.93	10.522	
4,900.0	4,812.9	4,827.2	4,819.6	18.0	12.1	178.16	-187.1	-379.1	315.5	286.9	28.54	11.052	
5,000.0	4,910.4	4,924.8	4,916.8	18.5	12.4	179.73	-195.2	-376.9	335.7	306.6	29.17	11.508	

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

ConocoPhillips

Anticollision Report

Company:	DELAWARE BASIN WEST	Local Co-ordinate Reference:	Well KEG SHELL FEDERAL COM #706H
Project:	ATLAS PROSPECT (NM-E)	TVD Reference:	KB=32 @ 3062.2usft
Reference Site:	KEG SHELL FED COM PROJECT	MD Reference:	KB=32 @ 3062.2usft
Site Error:	3.0 usft	North Reference:	Grid
Reference Well:	KEG SHELL FEDERAL COM #706H	Survey Calculation Method:	Minimum Curvature
Well Error:	3.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDT 17 Central Planning Prod
Reference Design:	PWP2	Offset TVD Reference:	Reference Datum

Offset Design: KEG SHELL FED COM PROJECT - KEG SHELL FEDERAL COM #908H - OWB - PWP1													Offset Site Error: 3.0 usft	
Survey Program: 0-r.5 SDI_KPR_WL_NS-CT, 1500-r.5 MWD+IFR1+MS, 10095-r.5 MWD+IFR1+MS													Offset Well Error: 3.0 usft	
Reference		Offset		Semi Major Axis		Offset Wellbore Centre			Rule Assigned:				Warning	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor		
5,100.0	5,008.3	5,023.0	5,014.6	19.0	12.8	-178.88	-203.5	-374.6	354.5	324.7	29.80	11.897		
5,200.0	5,106.5	5,123.3	5,114.4	19.4	13.1	-177.25	-214.1	-371.7	371.3	340.9	30.40	12.213		
5,300.0	5,205.1	5,222.6	5,212.7	19.9	13.5	-175.31	-227.7	-367.9	386.3	355.3	30.96	12.478		
5,400.0	5,303.9	5,320.8	5,309.8	20.3	13.9	-173.41	-241.7	-364.1	399.9	368.4	31.49	12.699		
5,500.0	5,402.9	5,419.2	5,407.1	20.7	14.3	-171.61	-255.7	-360.2	412.1	380.2	31.98	12.886		
5,600.0	5,502.2	5,517.8	5,504.6	21.1	14.7	-169.88	-269.7	-356.4	423.1	390.7	32.45	13.039		
5,700.0	5,601.7	5,616.5	5,602.2	21.5	15.1	-168.19	-283.8	-352.5	432.8	399.9	32.89	13.158		
5,800.0	5,701.4	5,715.3	5,699.9	21.9	15.5	-166.53	-297.9	-348.6	441.1	407.8	33.29	13.248		
5,900.0	5,801.1	5,814.2	5,797.7	22.3	15.9	-164.86	-312.0	-344.7	448.1	414.4	33.66	13.312		
6,000.0	5,901.0	5,913.2	5,895.6	22.6	16.2	-163.19	-326.1	-340.8	453.8	419.8	33.99	13.353		
6,100.0	6,001.0	6,012.1	5,993.5	22.9	16.6	-161.49	-340.2	-337.0	458.3	424.0	34.26	13.378		
6,200.0	6,100.9	6,111.9	6,092.3	23.1	17.0	-159.81	-353.9	-333.2	461.4	427.0	34.45	13.395		
6,300.0	6,200.9	6,212.4	6,191.9	23.2	17.4	84.13	-366.0	-329.8	463.5	429.0	34.42	13.463		
6,400.0	6,300.9	6,313.3	6,292.2	23.2	17.8	85.46	-376.6	-326.9	465.4	431.0	34.41	13.523		
6,500.0	6,400.9	6,414.5	6,393.0	23.2	18.2	86.56	-385.4	-324.5	467.2	432.7	34.43	13.568		
6,600.0	6,500.9	6,516.0	6,494.3	23.3	18.5	87.45	-392.5	-322.5	468.7	434.3	34.48	13.596		
6,700.0	6,600.9	6,617.8	6,595.9	23.3	18.9	88.12	-397.9	-321.0	470.0	435.5	34.54	13.606		
6,800.0	6,700.9	6,719.7	6,697.7	23.3	19.2	88.57	-401.6	-320.0	470.9	436.3	34.63	13.597		
6,900.0	6,800.9	6,821.7	6,799.7	23.3	19.4	88.80	-403.6	-319.5	471.4	436.6	34.73	13.571		
7,000.0	6,900.9	6,922.9	6,900.9	23.4	19.5	88.84	-403.9	-319.4	471.5	436.7	34.81	13.544		
7,100.0	7,000.9	7,022.9	7,000.9	23.4	19.6	88.84	-403.9	-319.4	471.5	436.6	34.88	13.516		
7,200.0	7,100.9	7,122.9	7,100.9	23.4	19.6	88.84	-403.9	-319.4	471.5	436.5	34.95	13.491		
7,300.0	7,200.9	7,222.9	7,200.9	23.5	19.6	88.84	-403.9	-319.4	471.5	436.5	35.01	13.467		
7,400.0	7,300.9	7,322.9	7,300.9	23.5	19.6	88.84	-403.9	-319.4	471.5	436.4	35.07	13.442		
7,500.0	7,400.9	7,422.9	7,400.9	23.5	19.7	88.84	-403.9	-319.4	471.5	436.3	35.14	13.417		
7,600.0	7,500.9	7,522.9	7,500.9	23.5	19.7	88.84	-403.9	-319.4	471.5	436.3	35.21	13.392		
7,700.0	7,600.9	7,622.9	7,600.9	23.6	19.7	88.84	-403.9	-319.4	471.5	436.2	35.27	13.366		
7,800.0	7,700.9	7,722.9	7,700.9	23.6	19.8	88.84	-403.9	-319.4	471.5	436.1	35.34	13.341		
7,900.0	7,800.9	7,822.9	7,800.9	23.6	19.8	88.84	-403.9	-319.4	471.5	436.1	35.41	13.315		
8,000.0	7,900.9	7,922.9	7,900.9	23.7	19.8	88.84	-403.9	-319.4	471.5	436.0	35.48	13.290		
8,100.0	8,000.9	8,022.9	8,000.9	23.7	19.8	88.84	-403.9	-319.4	471.5	435.9	35.54	13.264		
8,200.0	8,100.9	8,122.9	8,100.9	23.7	19.9	88.84	-403.9	-319.4	471.5	435.8	35.61	13.238		
8,300.0	8,200.9	8,222.9	8,200.9	23.8	19.9	88.84	-403.9	-319.4	471.5	435.8	35.68	13.212		
8,400.0	8,300.9	8,322.9	8,300.9	23.8	19.9	88.84	-403.9	-319.4	471.5	435.7	35.76	13.186		
8,500.0	8,400.9	8,422.9	8,400.9	23.8	20.0	88.84	-403.9	-319.4	471.5	435.6	35.83	13.159		
8,600.0	8,500.9	8,522.9	8,500.9	23.8	20.0	88.84	-403.9	-319.4	471.5	435.6	35.90	13.133		
8,700.0	8,600.9	8,622.9	8,600.9	23.9	20.0	88.84	-403.9	-319.4	471.5	435.5	35.97	13.106		
8,800.0	8,700.9	8,722.9	8,700.9	23.9	20.1	88.84	-403.9	-319.4	471.5	435.4	36.05	13.080		
8,900.0	8,800.9	8,822.9	8,800.9	23.9	20.1	88.84	-403.9	-319.4	471.5	435.3	36.12	13.053		
9,000.0	8,900.9	8,922.9	8,900.9	24.0	20.1	88.84	-403.9	-319.4	471.5	435.3	36.19	13.026		
9,100.0	9,000.9	9,022.9	9,000.9	24.0	20.2	88.84	-403.9	-319.4	471.5	435.2	36.27	12.999		
9,200.0	9,100.9	9,122.9	9,100.9	24.0	20.2	88.84	-403.9	-319.4	471.5	435.1	36.34	12.972		
9,300.0	9,200.9	9,222.9	9,200.9	24.1	20.2	88.95	-403.9	-319.4	471.5	435.0	36.41	12.947		
9,386.7	9,287.1	9,309.1	9,287.1	24.1	20.3	90.00	-403.9	-319.4	471.4	435.0	36.36	12.964		
9,400.0	9,300.1	9,322.1	9,300.1	24.1	20.3	90.32	-403.9	-319.4	471.4	435.1	36.34	12.972		
9,500.0	9,394.8	9,416.8	9,394.8	24.1	20.3	93.80	-403.9	-319.4	472.6	436.6	36.03	13.117		
9,600.0	9,480.7	9,502.7	9,480.7	24.1	20.3	98.26	-403.9	-319.4	479.0	443.5	35.54	13.478		
9,700.0	9,554.3	9,576.3	9,554.3	24.2	20.4	102.10	-403.9	-319.4	495.5	460.5	34.96	14.171		
9,800.0	9,612.2	9,634.2	9,612.2	24.2	20.4	103.72	-403.9	-319.4	526.2	491.8	34.47	15.267		
9,900.0	9,652.0	9,674.0	9,652.0	24.3	20.4	101.71	-403.9	-319.4	572.8	538.7	34.18	16.760		
10,000.0	9,671.8	9,693.8	9,671.8	24.3	20.4	94.89	-403.9	-319.4	633.6	599.5	34.10	18.578		
10,100.0	9,674.1	9,696.1	9,674.1	24.4	20.4	90.19	-403.9	-319.4	704.3	670.1	34.16	20.614		

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

ConocoPhillips

Anticollision Report

Company:	DELAWARE BASIN WEST	Local Co-ordinate Reference:	Well KEG SHELL FEDERAL COM #706H
Project:	ATLAS PROSPECT (NM-E)	TVD Reference:	KB=32 @ 3062.2usft
Reference Site:	KEG SHELL FED COM PROJECT	MD Reference:	KB=32 @ 3062.2usft
Site Error:	3.0 usft	North Reference:	Grid
Reference Well:	KEG SHELL FEDERAL COM #706H	Survey Calculation Method:	Minimum Curvature
Well Error:	3.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDT 17 Central Planning Prod
Reference Design:	PWP2	Offset TVD Reference:	Reference Datum

Offset Design: KEG SHELL FED COM PROJECT - KEG SHELL FEDERAL COM #908H - OWB - PWP1													Offset Site Error: 3.0 usft	
Survey Program: 0-r.5 SDI_KPR_WL_NS-CT, 1500-r.5 MWD+IFR1+MS, 10095-r.5 MWD+IFR1+MS													Offset Well Error: 3.0 usft	
Reference		Offset		Semi Major Axis		Offset Wellbore Centre			Rule Assigned: Distance				Warning	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor		
10,200.0	9,674.4	9,696.4	9,674.4	24.5	20.4	90.22	-403.9	-319.4	781.4	747.1	34.31	22.775		
10,300.0	9,674.7	10,904.7	10,371.4	24.7	21.2	145.92	314.2	-320.8	841.1	800.5	40.65	20.694		
10,400.0	9,675.0	11,004.7	10,372.1	24.8	21.3	145.94	414.2	-321.0	841.5	800.4	41.05	20.498		
10,500.0	9,675.3	11,104.7	10,372.9	25.0	21.3	145.96	514.2	-321.1	841.9	800.3	41.51	20.280		
10,600.0	9,675.6	11,204.7	10,373.6	25.2	21.4	145.98	614.2	-321.3	842.2	800.2	42.02	20.041		
10,700.0	9,675.9	11,304.7	10,374.4	25.4	21.4	145.99	714.2	-321.5	842.6	800.0	42.59	19.786		
10,800.0	9,676.2	11,404.7	10,375.1	25.6	21.5	146.01	814.2	-321.7	843.0	799.8	43.20	19.515		
10,900.0	9,676.5	11,504.7	10,375.9	25.8	21.6	146.03	914.2	-321.9	843.3	799.5	43.85	19.232		
11,000.0	9,676.8	11,604.7	10,376.6	26.1	21.6	146.05	1,014.2	-322.1	843.7	799.2	44.55	18.938		
11,100.0	9,677.1	11,704.7	10,377.3	26.3	21.7	146.06	1,114.2	-322.3	844.1	798.8	45.29	18.637		
11,200.0	9,677.4	11,804.7	10,378.1	26.6	21.8	146.08	1,214.2	-322.5	844.4	798.4	46.07	18.329		
11,300.0	9,677.7	11,904.7	10,378.8	26.9	21.9	146.10	1,314.2	-322.7	844.8	797.9	46.89	18.017		
11,400.0	9,677.9	12,004.7	10,379.6	27.3	22.0	146.12	1,414.2	-322.8	845.2	797.4	47.74	17.703		
11,500.0	9,678.2	12,104.7	10,380.3	27.6	22.1	146.14	1,514.2	-323.0	845.6	796.9	48.63	17.387		
11,600.0	9,678.5	12,204.7	10,381.1	27.9	22.3	146.15	1,614.2	-323.2	845.9	796.4	49.55	17.072		
11,700.0	9,678.8	12,304.7	10,381.8	28.3	22.4	146.17	1,714.1	-323.4	846.3	795.8	50.50	16.758		
11,800.0	9,679.1	12,404.7	10,382.6	28.7	22.6	146.19	1,814.1	-323.6	846.7	795.2	51.48	16.447		
11,900.0	9,679.4	12,504.7	10,383.3	29.1	22.8	146.21	1,914.1	-323.8	847.0	794.5	52.48	16.139		
12,000.0	9,679.7	12,604.7	10,384.1	29.5	23.1	146.22	2,014.1	-324.0	847.4	793.9	53.51	15.835		
12,100.0	9,680.0	12,704.7	10,384.8	29.9	23.4	146.24	2,114.1	-324.2	847.8	793.2	54.57	15.536		
12,200.0	9,680.3	12,804.7	10,385.6	30.3	23.8	146.26	2,214.1	-324.4	848.1	792.5	55.65	15.242		
12,300.0	9,680.6	12,904.7	10,386.3	30.8	24.2	146.28	2,314.1	-324.5	848.5	791.8	56.74	14.953		
12,400.0	9,680.9	13,004.7	10,387.0	31.3	24.7	146.29	2,414.1	-324.7	848.9	791.0	57.86	14.671		
12,500.0	9,681.2	13,104.7	10,387.8	31.7	25.2	146.31	2,514.1	-324.9	849.3	790.3	59.00	14.394		
12,600.0	9,681.5	13,204.7	10,388.5	32.2	25.7	146.33	2,614.1	-325.1	849.6	789.5	60.16	14.124		
12,700.0	9,681.8	13,304.7	10,389.3	32.7	26.3	146.35	2,714.1	-325.3	850.0	788.7	61.33	13.860		
12,800.0	9,682.1	13,404.7	10,390.0	33.2	26.9	146.36	2,814.1	-325.5	850.4	787.8	62.52	13.602		
12,900.0	9,682.3	13,504.7	10,390.8	33.7	27.5	146.38	2,914.1	-325.7	850.7	787.0	63.72	13.352		
13,000.0	9,682.6	13,604.7	10,391.5	34.3	28.1	146.40	3,014.1	-325.9	851.1	786.2	64.94	13.107		
13,100.0	9,682.9	13,704.7	10,392.3	34.8	28.8	146.42	3,114.1	-326.1	851.5	785.3	66.17	12.869		
13,200.0	9,683.2	13,804.7	10,393.0	35.3	29.4	146.43	3,214.1	-326.3	851.8	784.4	67.41	12.637		
13,300.0	9,683.5	13,904.7	10,393.8	35.9	30.1	146.45	3,314.1	-326.4	852.2	783.6	68.66	12.412		
13,400.0	9,683.8	14,004.7	10,394.5	36.4	30.7	146.47	3,414.1	-326.6	852.6	782.7	69.93	12.192		
13,500.0	9,684.1	14,104.7	10,395.3	37.0	31.4	146.49	3,514.1	-326.8	853.0	781.8	71.21	11.979		
13,600.0	9,684.4	14,204.7	10,396.0	37.6	32.1	146.50	3,614.1	-327.0	853.3	780.8	72.49	11.771		
13,700.0	9,684.7	14,304.7	10,396.7	38.2	32.8	146.52	3,714.1	-327.2	853.7	779.9	73.79	11.569		
13,800.0	9,685.0	14,404.7	10,397.5	38.8	33.5	146.54	3,814.1	-327.4	854.1	779.0	75.10	11.373		
13,900.0	9,685.3	14,504.7	10,398.2	39.4	34.2	146.56	3,914.1	-327.6	854.4	778.0	76.41	11.182		
14,000.0	9,685.6	14,604.7	10,399.0	40.0	34.8	146.57	4,014.1	-327.8	854.8	777.1	77.73	10.997		
14,100.0	9,685.9	14,704.7	10,399.7	40.6	35.6	146.59	4,114.1	-328.0	855.2	776.1	79.06	10.817		
14,200.0	9,686.2	14,804.7	10,400.5	41.2	36.3	146.61	4,214.0	-328.1	855.6	775.2	80.40	10.641		
14,300.0	9,686.5	14,904.7	10,401.2	41.8	37.0	146.62	4,314.0	-328.3	855.9	774.2	81.74	10.471		
14,400.0	9,686.8	15,004.7	10,402.0	42.4	37.7	146.64	4,414.0	-328.5	856.3	773.2	83.10	10.305		
14,500.0	9,687.0	15,104.7	10,402.7	43.1	38.4	146.66	4,514.0	-328.7	856.7	772.2	84.45	10.144		
14,600.0	9,687.3	15,204.7	10,403.5	43.7	39.1	146.68	4,614.0	-328.9	857.1	771.2	85.82	9.987		
14,700.0	9,687.6	15,304.7	10,404.2	44.3	39.8	146.69	4,714.0	-329.1	857.4	770.2	87.19	9.834		
14,800.0	9,687.9	15,404.7	10,405.0	45.0	40.5	146.71	4,814.0	-329.3	857.8	769.2	88.56	9.686		
14,900.0	9,688.2	15,504.7	10,405.7	45.6	41.2	146.73	4,914.0	-329.5	858.2	768.2	89.94	9.541		
15,000.0	9,688.5	15,604.7	10,406.4	46.3	42.0	146.75	5,014.0	-329.7	858.5	767.2	91.33	9.401		
15,100.0	9,688.8	15,704.7	10,407.2	46.9	42.7	146.76	5,114.0	-329.9	858.9	766.2	92.72	9.264		
15,200.0	9,689.1	15,804.7	10,407.9	47.6	43.4	146.78	5,214.0	-330.0	859.3	765.2	94.11	9.131		
15,300.0	9,689.4	15,904.7	10,408.7	48.2	44.1	146.80	5,314.0	-330.2	859.7	764.1	95.51	9.001		

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

ConocoPhillips

Anticollision Report

Company:	DELAWARE BASIN WEST	Local Co-ordinate Reference:	Well KEG SHELL FEDERAL COM #706H
Project:	ATLAS PROSPECT (NM-E)	TVD Reference:	KB=32 @ 3062.2usft
Reference Site:	KEG SHELL FED COM PROJECT	MD Reference:	KB=32 @ 3062.2usft
Site Error:	3.0 usft	North Reference:	Grid
Reference Well:	KEG SHELL FEDERAL COM #706H	Survey Calculation Method:	Minimum Curvature
Well Error:	3.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDT 17 Central Planning Prod
Reference Design:	PWP2	Offset TVD Reference:	Reference Datum

Offset Design: KEG SHELL FED COM PROJECT - KEG SHELL FEDERAL COM #908H - OWB - PWP1												Offset Site Error:	3.0 usft
Survey Program: 0-r.5 SDI_KPR_WL_NS-CT, 1500-r.5 MWD+IFR1+MS, 10095-r.5 MWD+IFR1+MS												Offset Well Error:	3.0 usft
Reference		Offset		Semi Major Axis		Offset Wellbore Centre		Distance				Warning	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	
15,400.0	9,689.7	16,004.7	10,409.4	48.9	44.9	146.81	5,414.0	-330.4	860.0	763.1	96.91	8.874	
15,500.0	9,690.0	16,104.7	10,410.2	49.6	45.6	146.83	5,514.0	-330.6	860.4	762.1	98.32	8.751	
15,600.0	9,690.3	16,204.7	10,410.9	50.2	46.3	146.85	5,614.0	-330.8	860.8	761.0	99.73	8.631	
15,700.0	9,690.6	16,304.7	10,411.7	50.9	47.1	146.87	5,714.0	-331.0	861.1	760.0	101.15	8.514	
15,800.0	9,690.9	16,404.7	10,412.4	51.6	47.8	146.88	5,814.0	-331.2	861.5	759.0	102.56	8.400	
15,900.0	9,691.2	16,504.7	10,413.2	52.3	48.5	146.90	5,914.0	-331.4	861.9	757.9	103.98	8.289	
16,000.0	9,691.5	16,604.7	10,413.9	52.9	49.3	146.92	6,014.0	-331.6	862.3	756.9	105.41	8.180	
16,100.0	9,691.7	16,704.7	10,414.7	53.6	50.0	146.93	6,114.0	-331.7	862.6	755.8	106.84	8.074	
16,200.0	9,692.0	16,804.7	10,415.4	54.3	50.7	146.95	6,214.0	-331.9	863.0	754.7	108.27	7.971	
16,300.0	9,692.3	16,904.7	10,416.1	55.0	51.5	146.97	6,314.0	-332.1	863.4	753.7	109.70	7.870	
16,400.0	9,692.6	17,004.7	10,416.9	55.7	52.2	146.98	6,414.0	-332.3	863.8	752.6	111.14	7.772	
16,500.0	9,692.9	17,104.7	10,417.6	56.4	52.9	147.00	6,514.0	-332.5	864.1	751.6	112.58	7.676	
16,600.0	9,693.2	17,204.7	10,418.4	57.1	53.7	147.02	6,614.0	-332.7	864.5	750.5	114.02	7.582	
16,700.0	9,693.5	17,304.7	10,419.1	57.8	54.4	147.04	6,713.9	-332.9	864.9	749.4	115.46	7.491	
16,800.0	9,693.8	17,404.7	10,419.9	58.5	55.2	147.05	6,813.9	-333.1	865.3	748.3	116.91	7.401	
16,900.0	9,694.1	17,504.7	10,420.6	59.2	55.9	147.07	6,913.9	-333.3	865.6	747.3	118.36	7.314	
17,000.0	9,694.4	17,604.7	10,421.4	59.9	56.6	147.09	7,013.9	-333.5	866.0	746.2	119.81	7.228	
17,100.0	9,694.7	17,704.7	10,422.1	60.6	57.4	147.10	7,113.9	-333.6	866.4	745.1	121.26	7.145	
17,200.0	9,695.0	17,804.7	10,422.9	61.3	58.1	147.12	7,213.9	-333.8	866.8	744.0	122.72	7.063	
17,300.0	9,695.3	17,904.7	10,423.6	62.0	58.9	147.14	7,313.9	-334.0	867.1	743.0	124.17	6.983	
17,400.0	9,695.6	18,004.7	10,424.4	62.7	59.6	147.15	7,413.9	-334.2	867.5	741.9	125.63	6.905	
17,500.0	9,695.9	18,104.7	10,425.1	63.4	60.4	147.17	7,513.9	-334.4	867.9	740.8	127.09	6.829	
17,600.0	9,696.2	18,204.7	10,425.8	64.1	61.1	147.19	7,613.9	-334.6	868.2	739.7	128.56	6.754	
17,700.0	9,696.4	18,304.7	10,426.6	64.8	61.9	147.20	7,713.9	-334.8	868.6	738.6	130.02	6.681	
17,800.0	9,696.7	18,404.7	10,427.3	65.5	62.6	147.22	7,813.9	-335.0	869.0	737.5	131.49	6.609	
17,900.0	9,697.0	18,504.7	10,428.1	66.2	63.3	147.24	7,913.9	-335.2	869.4	736.4	132.95	6.539	
18,000.0	9,697.3	18,604.7	10,428.8	66.9	64.1	147.25	8,013.9	-335.3	869.7	735.3	134.42	6.470	
18,100.0	9,697.6	18,704.7	10,429.6	67.7	64.8	147.27	8,113.9	-335.5	870.1	734.2	135.89	6.403	
18,200.0	9,697.9	18,804.7	10,430.3	68.4	65.6	147.29	8,213.9	-335.7	870.5	733.1	137.37	6.337	
18,300.0	9,698.2	18,904.6	10,431.1	69.1	66.3	147.30	8,313.9	-335.9	870.9	732.0	138.84	6.273	
18,400.0	9,698.5	19,004.6	10,431.8	69.8	67.1	147.32	8,413.9	-336.1	871.2	730.9	140.31	6.209	
18,500.0	9,698.8	19,104.6	10,432.6	70.5	67.8	147.34	8,513.9	-336.3	871.6	729.8	141.79	6.147	
18,600.0	9,699.1	19,204.6	10,433.3	71.2	68.6	147.35	8,613.9	-336.5	872.0	728.7	143.27	6.086	
18,700.0	9,699.4	19,304.6	10,434.1	72.0	69.3	147.37	8,713.9	-336.7	872.4	727.6	144.75	6.027	
18,800.0	9,699.7	19,404.6	10,434.8	72.7	70.1	147.39	8,813.9	-336.9	872.7	726.5	146.23	5.968	
18,900.0	9,700.0	19,504.6	10,435.6	73.4	70.8	147.40	8,913.9	-337.1	873.1	725.4	147.71	5.911	
19,000.0	9,700.3	19,604.6	10,436.3	74.1	71.6	147.42	9,013.9	-337.2	873.5	724.3	149.19	5.855	
19,100.0	9,700.6	19,704.6	10,437.0	74.9	72.3	147.44	9,113.9	-337.4	873.9	723.2	150.67	5.800	
19,200.0	9,700.8	19,804.6	10,437.8	75.6	73.1	147.45	9,213.8	-337.6	874.2	722.1	152.16	5.746	
19,300.0	9,701.1	19,904.6	10,438.5	76.3	73.8	147.47	9,313.8	-337.8	874.6	721.0	153.64	5.693	
19,400.0	9,701.4	20,004.6	10,439.3	77.0	74.6	147.49	9,413.8	-338.0	875.0	719.9	155.13	5.640	
19,500.0	9,701.7	20,104.6	10,440.0	77.8	75.3	147.50	9,513.8	-338.2	875.4	718.8	156.62	5.589	
19,600.0	9,702.0	20,204.6	10,440.8	78.5	76.1	147.52	9,613.8	-338.4	875.8	717.6	158.11	5.539	
19,700.0	9,702.3	20,304.6	10,441.5	79.2	76.8	147.54	9,713.8	-338.6	876.1	716.5	159.60	5.490	
19,800.0	9,702.6	20,404.6	10,442.3	80.0	77.6	147.55	9,813.8	-338.8	876.5	715.4	161.09	5.441	
19,900.0	9,702.9	20,504.6	10,443.0	80.7	78.3	147.57	9,913.8	-338.9	876.9	714.3	162.58	5.394	
20,000.0	9,703.2	20,604.6	10,443.8	81.4	79.1	147.59	10,013.8	-339.1	877.3	713.2	164.07	5.347	
20,100.0	9,703.5	20,704.6	10,444.5	82.2	79.9	147.60	10,113.8	-339.3	877.6	712.1	165.56	5.301	
20,200.0	9,703.8	20,804.6	10,445.3	82.9	80.6	147.62	10,213.8	-339.5	878.0	711.0	167.06	5.256	
20,300.0	9,704.1	20,904.6	10,446.0	83.6	81.4	147.64	10,313.8	-339.7	878.4	709.8	168.55	5.211	
20,400.0	9,704.4	21,004.6	10,446.7	84.4	82.1	147.65	10,413.8	-339.9	878.8	708.7	170.04	5.168	
20,500.0	9,704.7	21,104.6	10,447.5	85.1	82.9	147.67	10,513.8	-340.1	879.1	707.6	171.54	5.125	

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

ConocoPhillips

Anticollision Report

Company:	DELAWARE BASIN WEST	Local Co-ordinate Reference:	Well KEG SHELL FEDERAL COM #706H
Project:	ATLAS PROSPECT (NM-E)	TVD Reference:	KB=32 @ 3062.2usft
Reference Site:	KEG SHELL FED COM PROJECT	MD Reference:	KB=32 @ 3062.2usft
Site Error:	3.0 usft	North Reference:	Grid
Reference Well:	KEG SHELL FEDERAL COM #706H	Survey Calculation Method:	Minimum Curvature
Well Error:	3.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDT 17 Central Planning Prod
Reference Design:	PWP2	Offset TVD Reference:	Reference Datum

Offset Design: KEG SHELL FED COM PROJECT - KEG SHELL FEDERAL COM #908H - OWB - PWP1													Offset Site Error:	3.0 usft
Survey Program:		0-r.5 SDI_KPR_WL_NS-CT, 1500-r.5 MWD+IFR1+MS, 10095-r.5 MWD+IFR1+MS								Rule Assigned:			Offset Well Error:	3.0 usft
Reference		Offset		Semi Major Axis		Offset Wellbore Centre			Distance		Minimum Separation (usft)	Separation Factor	Warning	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)				
20,600.0	9,705.0	21,204.6	10,448.2	85.8	83.6	147.68	10,613.8	-340.3	879.5	706.5	173.04	5.083		
20,700.0	9,705.3	21,304.6	10,449.0	86.6	84.4	147.70	10,713.8	-340.5	879.9	705.4	174.54	5.041		
20,800.0	9,705.5	21,404.6	10,449.7	87.3	85.1	147.72	10,813.8	-340.6	880.3	704.2	176.03	5.001		
20,900.0	9,705.8	21,504.6	10,450.5	88.0	85.9	147.73	10,913.8	-340.8	880.6	703.1	177.53	4.960		
21,000.0	9,706.1	21,604.6	10,451.2	88.8	86.6	147.75	11,013.8	-341.0	881.0	702.0	179.03	4.921		
21,100.0	9,706.4	21,704.6	10,452.0	89.5	87.4	147.77	11,113.8	-341.2	881.4	700.9	180.53	4.882		
21,200.0	9,706.7	21,804.6	10,452.7	90.2	88.1	147.78	11,213.8	-341.4	881.8	699.7	182.03	4.844		
21,300.0	9,707.0	21,904.6	10,453.5	91.0	88.9	147.80	11,313.8	-341.6	882.2	698.6	183.53	4.806		
21,400.0	9,707.3	22,004.6	10,454.2	91.7	89.7	147.82	11,413.8	-341.8	882.5	697.5	185.04	4.770		
21,500.0	9,707.6	22,104.6	10,455.0	92.5	90.4	147.83	11,513.8	-342.0	882.9	696.4	186.54	4.733		
21,600.0	9,707.9	22,204.6	10,455.7	93.2	91.2	147.85	11,613.8	-342.2	883.3	695.2	188.04	4.697		
21,700.0	9,708.2	22,304.6	10,456.4	93.9	91.9	147.86	11,713.7	-342.4	883.7	694.1	189.55	4.662		
21,800.0	9,708.5	22,404.6	10,457.2	94.7	92.7	147.88	11,813.7	-342.5	884.0	693.0	191.05	4.627		
21,900.0	9,708.8	22,504.6	10,457.9	95.4	93.4	147.90	11,913.7	-342.7	884.4	691.9	192.55	4.593		
22,000.0	9,709.1	22,604.6	10,458.7	96.2	94.2	147.91	12,013.7	-342.9	884.8	690.7	194.06	4.559		
22,100.0	9,709.4	22,704.6	10,459.4	96.9	94.9	147.93	12,113.7	-343.1	885.2	689.6	195.56	4.526		
22,105.4	9,709.4	22,710.1	10,459.5	96.9	95.0	147.93	12,119.2	-343.1	885.2	689.5	195.65	4.524 SF		

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

ConocoPhillips

Anticollision Report

Company:	DELAWARE BASIN WEST	Local Co-ordinate Reference:	Well KEG SHELL FEDERAL COM #706H
Project:	ATLAS PROSPECT (NM-E)	TVD Reference:	KB=32 @ 3062.2usft
Reference Site:	KEG SHELL FED COM PROJECT	MD Reference:	KB=32 @ 3062.2usft
Site Error:	3.0 usft	North Reference:	Grid
Reference Well:	KEG SHELL FEDERAL COM #706H	Survey Calculation Method:	Minimum Curvature
Well Error:	3.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDT 17 Central Planning Prod
Reference Design:	PWP2	Offset TVD Reference:	Reference Datum

Offset Design: KEG SHELL FED COM PROJECT - KEG SHELL FEDERAL COM #909H - OWB - PWP1												Offset Site Error:	3.0 usft
Survey Program: 0-r.5 SDI_KPR_WL_NS-CT, 1500-r.5 MWD+IFR1+MS, 9931-r.5 MWD+IFR1+MS												Offset Well Error:	3.0 usft
Reference	Offset	Semi Major Axis	Highside Toolface	Offset Wellbore Centre	Distance	Between Centres	Between Ellipses	Minimum Separation	Separation Factor	Warning			
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	
0.0	0.0	0.0	0.5	3.0	3.0	-90.25	-2.0	-460.1	460.1				
100.0	100.0	99.5	100.0	3.0	3.1	-90.25	-2.0	-460.1	460.1	453.6	6.53	70.508	
200.0	200.0	199.5	200.0	3.2	3.2	-90.25	-2.0	-460.1	460.1	453.3	6.77	68.010	
300.0	300.0	299.5	300.0	3.3	3.3	-90.25	-2.0	-460.1	460.1	453.1	7.00	65.764	
400.0	400.0	399.5	400.0	3.4	3.4	-90.25	-2.0	-460.1	460.1	452.9	7.22	63.732	
500.0	500.0	499.5	500.0	3.5	3.6	-90.25	-2.0	-460.1	460.1	452.7	7.44	61.881	
600.0	600.0	599.5	600.0	3.7	3.7	-90.25	-2.0	-460.1	460.1	452.5	7.64	60.186	
700.0	700.0	699.5	700.0	3.8	3.8	-90.25	-2.0	-460.1	460.1	452.3	7.85	58.627	
800.0	800.0	799.5	800.0	3.9	3.9	-90.25	-2.0	-460.1	460.1	452.1	8.05	57.185	
900.0	900.0	899.5	900.0	4.0	4.0	-90.25	-2.0	-460.1	460.1	451.9	8.24	55.846	
1,000.0	1,000.0	999.5	1,000.0	4.2	4.2	-90.25	-2.0	-460.1	460.1	451.7	8.43	54.599	
1,100.0	1,100.0	1,099.5	1,100.0	4.3	4.3	-90.25	-2.0	-460.1	460.1	451.5	8.61	53.434	
1,200.0	1,200.0	1,199.5	1,200.0	4.4	4.4	-90.25	-2.0	-460.1	460.1	451.3	8.79	52.342	
1,300.0	1,300.0	1,299.5	1,300.0	4.5	4.5	-90.25	-2.0	-460.1	460.1	451.1	8.97	51.315	
1,400.0	1,400.0	1,399.5	1,400.0	4.6	4.6	-90.25	-2.0	-460.1	460.1	451.0	9.14	50.348	
1,500.0	1,500.0	1,499.5	1,500.0	4.7	4.8	-90.25	-2.0	-460.1	460.1	450.8	9.31	49.434	
1,600.0	1,600.0	1,588.2	1,588.6	4.9	4.9	27.34	-2.8	-461.2	459.8	450.2	9.61	47.862	
1,700.0	1,699.8	1,676.8	1,677.2	5.1	5.1	27.31	-5.3	-464.5	458.8	448.8	10.05	45.658	
1,800.0	1,799.5	1,765.4	1,765.5	5.3	5.3	27.26	-9.4	-469.9	457.3	446.8	10.52	43.480	
1,900.0	1,898.7	1,854.0	1,853.6	5.6	5.5	27.18	-15.1	-477.5	455.1	444.1	11.01	41.352	
2,000.0	1,997.5	1,942.7	1,941.4	5.9	5.8	27.08	-22.5	-487.4	452.3	440.8	11.52	39.260	
2,100.0	2,095.6	2,032.2	2,029.6	6.3	6.0	26.96	-31.7	-499.5	448.9	436.8	12.02	37.331	
2,200.0	2,193.1	2,132.0	2,127.8	6.6	6.3	26.94	-42.6	-514.0	443.4	430.8	12.58	35.237	
2,300.0	2,290.1	2,231.8	2,225.9	6.9	6.6	26.96	-53.5	-528.5	436.4	423.3	13.13	33.230	
2,400.0	2,387.1	2,331.5	2,324.0	7.3	6.9	26.99	-64.5	-543.0	429.4	415.7	13.71	31.316	
2,500.0	2,484.1	2,431.3	2,422.0	7.6	7.2	27.03	-75.4	-557.5	422.4	408.1	14.32	29.501	
2,600.0	2,581.2	2,531.0	2,520.1	8.0	7.5	27.06	-86.4	-572.1	415.4	400.5	14.95	27.791	
2,700.0	2,678.2	2,630.8	2,618.2	8.4	7.9	27.09	-97.3	-586.6	408.4	392.8	15.60	26.184	
2,800.0	2,775.2	2,730.5	2,716.3	8.7	8.3	27.12	-108.2	-601.1	401.4	385.1	16.27	24.679	
2,900.0	2,872.3	2,830.3	2,814.4	9.1	8.6	27.16	-119.2	-615.6	394.4	377.5	16.95	23.271	
3,000.0	2,969.3	2,930.0	2,912.5	9.5	9.0	27.20	-130.1	-630.1	387.4	369.8	17.64	21.955	
3,100.0	3,066.3	3,029.8	3,010.5	10.0	9.4	27.23	-141.1	-644.6	380.4	362.0	18.35	20.726	
3,200.0	3,163.4	3,129.6	3,108.6	10.4	9.8	27.27	-152.0	-659.2	373.4	354.3	19.07	19.578	
3,300.0	3,260.4	3,229.3	3,206.7	10.8	10.2	27.31	-162.9	-673.7	366.4	346.6	19.80	18.505	
3,400.0	3,357.4	3,329.1	3,304.8	11.2	10.6	27.36	-173.9	-688.2	359.4	338.9	20.54	17.501	
3,500.0	3,454.4	3,428.8	3,402.9	11.7	11.0	27.40	-184.8	-702.7	352.4	331.1	21.28	16.561	
3,600.0	3,551.5	3,528.6	3,501.0	12.1	11.4	27.45	-195.8	-717.2	345.4	323.4	22.03	15.680	
3,700.0	3,648.5	3,628.3	3,599.0	12.5	11.8	27.49	-206.7	-731.8	338.4	315.6	22.78	14.854	
3,800.0	3,745.5	3,728.1	3,697.1	13.0	12.3	27.54	-217.6	-746.3	331.4	307.9	23.54	14.077	
3,900.0	3,842.6	3,827.8	3,795.2	13.4	12.7	27.59	-228.6	-760.8	324.4	300.1	24.30	13.347	
4,000.0	3,939.6	3,927.6	3,893.3	13.9	13.1	27.65	-239.5	-775.3	317.4	292.3	25.07	12.660	
4,100.0	4,036.6	4,027.3	3,991.4	14.4	13.5	27.71	-250.5	-789.8	310.4	284.6	25.84	12.012	
4,200.0	4,133.6	4,127.1	4,089.5	14.8	14.0	27.76	-261.4	-804.3	303.4	276.8	26.61	11.400	
4,300.0	4,230.7	4,226.8	4,187.5	15.3	14.4	27.83	-272.4	-818.9	296.4	269.0	27.39	10.823	
4,400.0	4,327.7	4,326.6	4,285.6	15.7	14.8	27.89	-283.3	-833.4	289.4	261.2	28.16	10.276	
4,500.0	4,424.7	4,426.4	4,383.7	16.2	15.3	27.96	-294.2	-847.9	282.4	253.5	28.94	9.758	
4,600.0	4,521.8	4,526.1	4,481.8	16.7	15.7	28.03	-305.2	-862.4	275.4	245.7	29.72	9.267	
4,700.0	4,618.8	4,625.9	4,579.9	17.1	16.1	28.11	-316.1	-876.9	268.4	237.9	30.50	8.800	
4,800.0	4,715.8	4,725.6	4,678.0	17.6	16.6	28.19	-327.1	-891.5	261.4	230.1	31.28	8.357	
4,900.0	4,812.9	4,825.4	4,776.1	18.0	17.0	28.21	-338.0	-906.0	254.8	222.7	32.04	7.951	
5,000.0	4,910.4	4,925.3	4,874.3	18.5	17.4	28.05	-348.9	-920.5	249.6	216.7	32.86	7.594	
5,100.0	5,008.3	5,025.8	4,973.1	19.0	17.9	27.70	-360.0	-935.1	245.9	212.2	33.72	7.291	

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

ConocoPhillips

Anticollision Report

Company:	DELAWARE BASIN WEST	Local Co-ordinate Reference:	Well KEG SHELL FEDERAL COM #706H
Project:	ATLAS PROSPECT (NM-E)	TVD Reference:	KB=32 @ 3062.2usft
Reference Site:	KEG SHELL FED COM PROJECT	MD Reference:	KB=32 @ 3062.2usft
Site Error:	3.0 usft	North Reference:	Grid
Reference Well:	KEG SHELL FEDERAL COM #706H	Survey Calculation Method:	Minimum Curvature
Well Error:	3.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDT 17 Central Planning Prod
Reference Design:	PWP2	Offset TVD Reference:	Reference Datum

Offset Design: KEG SHELL FED COM PROJECT - KEG SHELL FEDERAL COM #909H - OWB - PWP1													Offset Site Error:	3.0 usft
Survey Program: 0-r.5 SDI_KPR_WL_NS-CT, 1500-r.5 MWD+IFR1+MS, 9931-r.5 MWD+IFR1+MS													Offset Well Error:	3.0 usft
Reference		Offset		Semi Major Axis			Offset Wellbore Centre		Rule Assigned: Distance					
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning	
5,200.0	5,106.5	5,129.2	5,075.0	19.4	18.3	27.31	-370.6	-949.2	242.8	208.2	34.57	7.024		
5,300.0	5,205.1	5,232.7	5,177.3	19.9	18.8	26.98	-380.1	-961.8	239.9	204.5	35.39	6.778		
5,400.0	5,303.9	5,336.1	5,279.8	20.3	19.2	26.71	-388.5	-972.9	237.0	200.9	36.17	6.554		
5,500.0	5,402.9	5,439.5	5,382.5	20.7	19.6	26.51	-395.7	-982.6	234.3	197.4	36.90	6.349		
5,600.0	5,502.2	5,542.9	5,485.3	21.1	20.0	26.37	-401.9	-990.8	231.6	194.0	37.59	6.162		
5,700.0	5,601.7	5,646.2	5,588.3	21.5	20.4	26.31	-406.9	-997.4	229.1	190.9	38.22	5.993		
5,800.0	5,701.4	5,749.5	5,691.4	21.9	20.8	26.31	-410.8	-1,002.6	226.7	187.9	38.80	5.841		
5,900.0	5,801.1	5,852.8	5,794.6	22.3	21.1	26.39	-413.6	-1,006.4	224.3	185.0	39.31	5.706		
6,000.0	5,901.0	5,956.0	5,897.8	22.6	21.4	26.55	-415.3	-1,008.6	222.1	182.3	39.74	5.588		
6,100.0	6,001.0	6,059.2	6,001.0	22.9	21.6	26.78	-415.9	-1,009.3	219.9	179.9	40.02	5.495		
6,200.0	6,100.9	6,159.2	6,100.9	23.1	21.6	26.94	-415.9	-1,009.3	218.6	178.4	40.23	5.435		
6,290.5	6,191.4	6,249.7	6,191.4	23.2	21.7	26.98	-415.9	-1,009.3	218.4	178.1	40.28	5.422 CC		
6,300.0	6,200.9	6,259.2	6,200.9	23.2	21.7	-90.64	-415.9	-1,009.3	218.6	178.3	40.29	5.424		
6,400.0	6,300.9	6,359.2	6,300.9	23.2	21.7	-90.64	-415.9	-1,009.3	218.6	178.2	40.35	5.417		
6,500.0	6,400.9	6,459.2	6,400.9	23.2	21.7	-90.64	-415.9	-1,009.3	218.6	178.2	40.40	5.410		
6,600.0	6,500.9	6,559.2	6,500.9	23.3	21.7	-90.64	-415.9	-1,009.3	218.6	178.1	40.46	5.402		
6,700.0	6,600.9	6,659.2	6,600.9	23.3	21.8	-90.64	-415.9	-1,009.3	218.6	178.0	40.51	5.395		
6,800.0	6,700.9	6,759.2	6,700.9	23.3	21.8	-90.64	-415.9	-1,009.3	218.6	178.0	40.57	5.387		
6,900.0	6,800.9	6,859.2	6,800.9	23.3	21.8	-90.64	-415.9	-1,009.3	218.6	177.9	40.63	5.380		
7,000.0	6,900.9	6,959.2	6,900.9	23.4	21.9	-90.64	-415.9	-1,009.3	218.6	177.9	40.69	5.372		
7,100.0	7,000.9	7,059.2	7,000.9	23.4	21.9	-90.64	-415.9	-1,009.3	218.6	177.8	40.74	5.364		
7,200.0	7,100.9	7,159.2	7,100.9	23.4	21.9	-90.64	-415.9	-1,009.3	218.6	177.8	40.80	5.357		
7,300.0	7,200.9	7,259.2	7,200.9	23.5	21.9	-90.64	-415.9	-1,009.3	218.6	177.7	40.86	5.349		
7,400.0	7,300.9	7,359.2	7,300.9	23.5	22.0	-90.64	-415.9	-1,009.3	218.6	177.6	40.92	5.341		
7,500.0	7,400.9	7,459.2	7,400.9	23.5	22.0	-90.64	-415.9	-1,009.3	218.6	177.6	40.98	5.333		
7,600.0	7,500.9	7,559.2	7,500.9	23.5	22.0	-90.64	-415.9	-1,009.3	218.6	177.5	41.04	5.325		
7,700.0	7,600.9	7,659.2	7,600.9	23.6	22.1	-90.64	-415.9	-1,009.3	218.6	177.5	41.10	5.317		
7,800.0	7,700.9	7,759.2	7,700.9	23.6	22.1	-90.64	-415.9	-1,009.3	218.6	177.4	41.17	5.309		
7,900.0	7,800.9	7,859.2	7,800.9	23.6	22.1	-90.64	-415.9	-1,009.3	218.6	177.3	41.23	5.301		
8,000.0	7,900.9	7,959.2	7,900.9	23.7	22.2	-90.64	-415.9	-1,009.3	218.6	177.3	41.29	5.293		
8,100.0	8,000.9	8,059.2	8,000.9	23.7	22.2	-90.64	-415.9	-1,009.3	218.6	177.2	41.36	5.285		
8,200.0	8,100.9	8,159.2	8,100.9	23.7	22.2	-90.64	-415.9	-1,009.3	218.6	177.1	41.42	5.277		
8,300.0	8,200.9	8,259.2	8,200.9	23.8	22.2	-90.64	-415.9	-1,009.3	218.6	177.1	41.48	5.268		
8,400.0	8,300.9	8,359.2	8,300.9	23.8	22.3	-90.64	-415.9	-1,009.3	218.6	177.0	41.55	5.260		
8,500.0	8,400.9	8,459.2	8,400.9	23.8	22.3	-90.64	-415.9	-1,009.3	218.6	176.9	41.62	5.252		
8,600.0	8,500.9	8,559.2	8,500.9	23.8	22.3	-90.64	-415.9	-1,009.3	218.6	176.9	41.68	5.243		
8,700.0	8,600.9	8,659.2	8,600.9	23.9	22.4	-90.64	-415.9	-1,009.3	218.6	176.8	41.75	5.235		
8,800.0	8,700.9	8,759.2	8,700.9	23.9	22.4	-90.64	-415.9	-1,009.3	218.6	176.7	41.82	5.227		
8,900.0	8,800.9	8,859.2	8,800.9	23.9	22.4	-90.64	-415.9	-1,009.3	218.6	176.7	41.88	5.218		
9,000.0	8,900.9	8,959.2	8,900.9	24.0	22.5	-90.64	-415.9	-1,009.3	218.6	176.6	41.95	5.210		
9,100.0	9,000.9	9,059.2	9,000.9	24.0	22.5	-90.64	-415.9	-1,009.3	218.6	176.5	42.02	5.201		
9,200.0	9,100.9	9,159.2	9,100.9	24.0	22.5	-90.64	-415.9	-1,009.3	218.6	176.5	42.09	5.193		
9,209.6	9,110.5	9,168.8	9,110.5	24.0	22.5	-90.54	-415.9	-1,009.3	218.6	176.5	42.10	5.192		
9,300.0	9,200.9	9,259.2	9,200.9	24.1	22.6	-90.55	-415.9	-1,009.3	218.6	176.4	42.16	5.184		
9,304.4	9,205.4	9,263.7	9,205.4	24.1	22.6	-90.56	-415.9	-1,009.3	218.6	176.4	42.16	5.184		
9,400.0	9,300.1	9,358.4	9,300.1	24.1	22.6	-93.44	-415.9	-1,009.3	219.0	176.0	42.93	5.100 ES		
9,500.0	9,394.8	9,453.0	9,394.8	24.1	22.6	-100.65	-415.9	-1,009.3	223.2	178.5	44.66	4.997		
9,600.0	9,480.7	9,539.0	9,480.7	24.1	22.7	-109.42	-415.9	-1,009.3	238.7	192.4	46.25	5.160		
9,700.0	9,554.3	9,612.6	9,554.3	24.2	22.7	-116.33	-415.9	-1,009.3	272.9	226.3	46.58	5.858		
9,800.0	9,612.2	9,670.5	9,612.2	24.2	22.7	-118.84	-415.9	-1,009.3	328.1	282.4	45.65	7.186		
9,900.0	9,652.0	9,710.2	9,652.0	24.3	22.7	-114.79	-415.9	-1,009.3	401.0	356.8	44.24	9.064		
10,000.0	9,671.8	9,730.1	9,671.8	24.3	22.7	-100.71	-415.9	-1,009.3	486.0	443.1	42.89	11.332		

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

ConocoPhillips

Anticollision Report

Company:	DELAWARE BASIN WEST	Local Co-ordinate Reference:	Well KEG SHELL FEDERAL COM #706H
Project:	ATLAS PROSPECT (NM-E)	TVD Reference:	KB=32 @ 3062.2usft
Reference Site:	KEG SHELL FED COM PROJECT	MD Reference:	KB=32 @ 3062.2usft
Site Error:	3.0 usft	North Reference:	Grid
Reference Well:	KEG SHELL FEDERAL COM #706H	Survey Calculation Method:	Minimum Curvature
Well Error:	3.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDT 17 Central Planning Prod
Reference Design:	PWP2	Offset TVD Reference:	Reference Datum

Offset Design: KEG SHELL FED COM PROJECT - KEG SHELL FEDERAL COM #909H - OWB - PWP1												Offset Site Error:	3.0 usft
Survey Program: 0-r.5 SDI_KPR_WL_NS-CT, 1500-r.5 MWD+IFR1+MS, 9931-r.5 MWD+IFR1+MS												Offset Well Error:	3.0 usft
Reference		Offset		Semi Major Axis		Highside Toolface (°)	Offset Wellbore Centre		Distance		Minimum Separation (usft)	Separation Factor	Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)		+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)			
10,100.0	9,674.1	9,732.4	9,674.1	24.4	22.7	-90.41	-415.9	-1,009.3	577.0	535.2	41.76	13.815	
10,200.0	9,674.4	9,732.7	9,674.4	24.5	22.7	-90.49	-415.9	-1,009.3	670.6	629.7	40.89	16.401	
10,300.0	9,674.7	9,733.0	9,674.7	24.7	22.7	-90.57	-415.9	-1,009.3	765.8	725.6	40.20	19.050	
10,400.0	9,675.0	9,733.3	9,675.0	24.8	22.7	-90.64	-415.9	-1,009.3	862.1	822.5	39.66	21.740	
10,500.0	9,675.3	11,338.5	10,560.7	25.0	23.7	-166.13	511.8	-1,011.1	912.0	871.3	40.69	22.415	
10,600.0	9,675.6	11,438.5	10,561.4	25.2	23.9	-166.13	611.8	-1,011.3	912.4	871.1	41.25	22.118	
10,700.0	9,675.9	11,538.5	10,562.1	25.4	24.1	-166.14	711.8	-1,011.5	912.8	870.9	41.86	21.803	
10,800.0	9,676.2	11,638.5	10,562.8	25.6	24.3	-166.14	811.8	-1,011.6	913.2	870.7	42.53	21.473	
10,900.0	9,676.5	11,738.5	10,563.5	25.8	24.5	-166.15	911.8	-1,011.8	913.6	870.3	43.23	21.131	
11,000.0	9,676.8	11,838.5	10,564.2	26.1	24.7	-166.15	1,011.8	-1,012.0	914.0	870.0	43.99	20.779	
11,100.0	9,677.1	11,938.5	10,564.9	26.3	24.9	-166.16	1,111.8	-1,012.2	914.4	869.6	44.78	20.420	
11,200.0	9,677.4	12,038.5	10,565.6	26.6	25.2	-166.17	1,211.8	-1,012.4	914.8	869.2	45.61	20.056	
11,300.0	9,677.7	12,138.5	10,566.3	26.9	25.5	-166.17	1,311.8	-1,012.6	915.2	868.7	46.48	19.690	
11,400.0	9,677.9	12,238.5	10,567.0	27.3	25.8	-166.18	1,411.8	-1,012.8	915.6	868.2	47.38	19.323	
11,500.0	9,678.2	12,338.5	10,567.7	27.6	26.1	-166.18	1,511.8	-1,013.0	916.0	867.7	48.32	18.956	
11,600.0	9,678.5	12,438.5	10,568.4	27.9	26.4	-166.19	1,611.8	-1,013.2	916.4	867.1	49.29	18.592	
11,700.0	9,678.8	12,538.5	10,569.1	28.3	26.8	-166.19	1,711.8	-1,013.4	916.8	866.5	50.29	18.232	
11,800.0	9,679.1	12,638.5	10,569.8	28.7	27.2	-166.20	1,811.8	-1,013.5	917.2	865.9	51.31	17.875	
11,900.0	9,679.4	12,738.5	10,570.5	29.1	27.6	-166.20	1,911.8	-1,013.7	917.6	865.2	52.36	17.524	
12,000.0	9,679.7	12,838.5	10,571.2	29.5	28.0	-166.21	2,011.8	-1,013.9	918.0	864.6	53.44	17.179	
12,100.0	9,680.0	12,938.5	10,571.9	29.9	28.4	-166.21	2,111.8	-1,014.1	918.4	863.9	54.54	16.841	
12,200.0	9,680.3	13,038.5	10,572.6	30.3	28.8	-166.22	2,211.8	-1,014.3	918.8	863.2	55.65	16.509	
12,300.0	9,680.6	13,138.5	10,573.3	30.8	29.3	-166.23	2,311.8	-1,014.5	919.2	862.4	56.79	16.185	
12,400.0	9,680.9	13,238.5	10,574.1	31.3	29.7	-166.23	2,411.8	-1,014.7	919.6	861.7	57.95	15.868	
12,500.0	9,681.2	13,338.5	10,574.8	31.7	30.2	-166.24	2,511.8	-1,014.9	920.0	860.9	59.13	15.559	
12,600.0	9,681.5	13,438.5	10,575.5	32.2	30.7	-166.24	2,611.8	-1,015.1	920.4	860.1	60.32	15.258	
12,700.0	9,681.8	13,538.5	10,576.2	32.7	31.2	-166.25	2,711.8	-1,015.3	920.8	859.3	61.53	14.965	
12,800.0	9,682.1	13,638.5	10,576.9	33.2	31.7	-166.25	2,811.8	-1,015.4	921.2	858.5	62.76	14.679	
12,900.0	9,682.3	13,738.5	10,577.6	33.7	32.2	-166.26	2,911.8	-1,015.6	921.6	857.6	64.00	14.401	
13,000.0	9,682.6	13,838.5	10,578.3	34.3	32.8	-166.26	3,011.8	-1,015.8	922.0	856.8	65.25	14.131	
13,100.0	9,682.9	13,938.5	10,579.0	34.8	33.3	-166.27	3,111.8	-1,016.0	922.4	855.9	66.51	13.869	
13,200.0	9,683.2	14,038.5	10,579.7	35.3	33.9	-166.27	3,211.8	-1,016.2	922.8	855.1	67.79	13.614	
13,300.0	9,683.5	14,138.5	10,580.4	35.9	34.4	-166.28	3,311.7	-1,016.4	923.2	854.2	69.08	13.366	
13,400.0	9,683.8	14,238.5	10,581.1	36.4	35.0	-166.28	3,411.7	-1,016.6	923.6	853.3	70.37	13.125	
13,500.0	9,684.1	14,338.5	10,581.8	37.0	35.6	-166.29	3,511.7	-1,016.8	924.0	852.4	71.68	12.891	
13,600.0	9,684.4	14,438.5	10,582.5	37.6	36.2	-166.30	3,611.7	-1,017.0	924.5	851.5	73.00	12.664	
13,700.0	9,684.7	14,538.5	10,583.2	38.2	36.8	-166.30	3,711.7	-1,017.2	924.9	850.5	74.32	12.444	
13,800.0	9,685.0	14,638.5	10,583.9	38.8	37.4	-166.31	3,811.7	-1,017.3	925.3	849.6	75.66	12.229	
13,900.0	9,685.3	14,738.5	10,584.6	39.4	38.0	-166.31	3,911.7	-1,017.5	925.7	848.7	77.00	12.021	
14,000.0	9,685.6	14,838.5	10,585.3	40.0	38.6	-166.32	4,011.7	-1,017.7	926.1	847.7	78.35	11.819	
14,100.0	9,685.9	14,938.5	10,586.0	40.6	39.2	-166.32	4,111.7	-1,017.9	926.5	846.8	79.71	11.623	
14,200.0	9,686.2	15,038.5	10,586.7	41.2	39.9	-166.33	4,211.7	-1,018.1	926.9	845.8	81.07	11.433	
14,300.0	9,686.5	15,138.5	10,587.5	41.8	40.5	-166.33	4,311.7	-1,018.3	927.3	844.8	82.44	11.247	
14,400.0	9,686.8	15,238.5	10,588.2	42.4	41.1	-166.34	4,411.7	-1,018.5	927.7	843.9	83.82	11.068	
14,500.0	9,687.0	15,338.5	10,588.9	43.1	41.8	-166.34	4,511.7	-1,018.7	928.1	842.9	85.20	10.893	
14,600.0	9,687.3	15,438.5	10,589.6	43.7	42.4	-166.35	4,611.7	-1,018.9	928.5	841.9	86.59	10.723	
14,700.0	9,687.6	15,538.5	10,590.3	44.3	43.1	-166.35	4,711.7	-1,019.1	928.9	840.9	87.98	10.557	
14,800.0	9,687.9	15,638.5	10,591.0	45.0	43.7	-166.36	4,811.7	-1,019.3	929.3	839.9	89.38	10.397	
14,900.0	9,688.2	15,738.5	10,591.7	45.6	44.4	-166.36	4,911.7	-1,019.4	929.7	838.9	90.79	10.240	
15,000.0	9,688.5	15,838.5	10,592.4	46.3	45.1	-166.37	5,011.7	-1,019.6	930.1	837.9	92.19	10.088	
15,100.0	9,688.8	15,938.5	10,593.1	46.9	45.7	-166.37	5,111.7	-1,019.8	930.5	836.9	93.61	9.940	
15,200.0	9,689.1	16,038.5	10,593.8	47.6	46.4	-166.38	5,211.7	-1,020.0	930.9	835.9	95.02	9.797	

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

ConocoPhillips

Anticollision Report

Company:	DELAWARE BASIN WEST	Local Co-ordinate Reference:	Well KEG SHELL FEDERAL COM #706H
Project:	ATLAS PROSPECT (NM-E)	TVD Reference:	KB=32 @ 3062.2usft
Reference Site:	KEG SHELL FED COM PROJECT	MD Reference:	KB=32 @ 3062.2usft
Site Error:	3.0 usft	North Reference:	Grid
Reference Well:	KEG SHELL FEDERAL COM #706H	Survey Calculation Method:	Minimum Curvature
Well Error:	3.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDT 17 Central Planning Prod
Reference Design:	PWP2	Offset TVD Reference:	Reference Datum

Offset Design: KEG SHELL FED COM PROJECT - KEG SHELL FEDERAL COM #909H - OWB - PWP1													Offset Site Error: 3.0 usft
Survey Program: 0-r.5 SDI_KPR_WL_NS-CT, 1500-r.5 MWD+IFR1+MS, 9931-r.5 MWD+IFR1+MS													Offset Well Error: 3.0 usft
Reference		Offset		Semi Major Axis		Highside Toolface		Offset Wellbore Centre		Distance		Rule Assigned:	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
15,300.0	9,689.4	16,138.5	10,594.5	48.2	47.1	-166.39	5,311.7	-1,020.2	931.3	834.9	96.44	9.656	
15,400.0	9,689.7	16,238.5	10,595.2	48.9	47.8	-166.39	5,411.7	-1,020.4	931.7	833.8	97.87	9.520	
15,500.0	9,690.0	16,338.5	10,595.9	49.6	48.4	-166.40	5,511.7	-1,020.6	932.1	832.8	99.30	9.387	
15,600.0	9,690.3	16,438.5	10,596.6	50.2	49.1	-166.40	5,611.7	-1,020.8	932.5	831.8	100.73	9.258	
15,700.0	9,690.6	16,538.5	10,597.3	50.9	49.8	-166.41	5,711.7	-1,021.0	932.9	830.7	102.16	9.132	
15,800.0	9,690.9	16,638.5	10,598.0	51.6	50.5	-166.41	5,811.7	-1,021.2	933.3	829.7	103.60	9.009	
15,900.0	9,691.2	16,738.5	10,598.7	52.3	51.2	-166.42	5,911.7	-1,021.3	933.7	828.7	105.04	8.889	
16,000.0	9,691.5	16,838.5	10,599.4	52.9	51.9	-166.42	6,011.7	-1,021.5	934.1	827.6	106.49	8.772	
16,100.0	9,691.7	16,938.5	10,600.1	53.6	52.6	-166.43	6,111.7	-1,021.7	934.5	826.6	107.94	8.658	
16,200.0	9,692.0	17,038.5	10,600.8	54.3	53.3	-166.43	6,211.6	-1,021.9	934.9	825.5	109.39	8.547	
16,300.0	9,692.3	17,138.5	10,601.6	55.0	54.0	-166.44	6,311.6	-1,022.1	935.3	824.5	110.84	8.439	
16,400.0	9,692.6	17,238.5	10,602.3	55.7	54.7	-166.44	6,411.6	-1,022.3	935.7	823.4	112.29	8.333	
16,500.0	9,692.9	17,338.5	10,603.0	56.4	55.4	-166.45	6,511.6	-1,022.5	936.1	822.4	113.75	8.230	
16,600.0	9,693.2	17,438.5	10,603.7	57.1	56.1	-166.45	6,611.6	-1,022.7	936.5	821.3	115.21	8.129	
16,700.0	9,693.5	17,538.5	10,604.4	57.8	56.8	-166.46	6,711.6	-1,022.9	936.9	820.3	116.67	8.030	
16,800.0	9,693.8	17,638.5	10,605.1	58.5	57.5	-166.46	6,811.6	-1,023.1	937.3	819.2	118.14	7.934	
16,900.0	9,694.1	17,738.5	10,605.8	59.2	58.2	-166.47	6,911.6	-1,023.2	937.7	818.1	119.60	7.840	
17,000.0	9,694.4	17,838.5	10,606.5	59.9	58.9	-166.47	7,011.6	-1,023.4	938.1	817.1	121.07	7.749	
17,100.0	9,694.7	17,938.5	10,607.2	60.6	59.6	-166.48	7,111.6	-1,023.6	938.5	816.0	122.54	7.659	
17,200.0	9,695.0	18,038.5	10,607.9	61.3	60.3	-166.48	7,211.6	-1,023.8	939.0	814.9	124.02	7.571	
17,300.0	9,695.3	18,138.5	10,608.6	62.0	61.1	-166.49	7,311.6	-1,024.0	939.4	813.9	125.49	7.486	
17,400.0	9,695.6	18,238.5	10,609.3	62.7	61.8	-166.49	7,411.6	-1,024.2	939.8	812.8	126.97	7.402	
17,500.0	9,695.9	18,338.5	10,610.0	63.4	62.5	-166.50	7,511.6	-1,024.4	940.2	811.7	128.44	7.320	
17,600.0	9,696.2	18,438.5	10,610.7	64.1	63.2	-166.50	7,611.6	-1,024.6	940.6	810.6	129.92	7.239	
17,700.0	9,696.4	18,538.5	10,611.4	64.8	63.9	-166.51	7,711.6	-1,024.8	941.0	809.6	131.40	7.161	
17,800.0	9,696.7	18,638.5	10,612.1	65.5	64.6	-166.52	7,811.6	-1,025.0	941.4	808.5	132.88	7.084	
17,900.0	9,697.0	18,738.5	10,612.8	66.2	65.4	-166.52	7,911.6	-1,025.1	941.8	807.4	134.37	7.009	
18,000.0	9,697.3	18,838.5	10,613.5	66.9	66.1	-166.53	8,011.6	-1,025.3	942.2	806.3	135.85	6.935	
18,100.0	9,697.6	18,938.5	10,614.2	67.7	66.8	-166.53	8,111.6	-1,025.5	942.6	805.2	137.34	6.863	
18,200.0	9,697.9	19,038.5	10,615.0	68.4	67.5	-166.54	8,211.6	-1,025.7	943.0	804.2	138.83	6.792	
18,300.0	9,698.2	19,138.5	10,615.7	69.1	68.3	-166.54	8,311.6	-1,025.9	943.4	803.1	140.32	6.723	
18,400.0	9,698.5	19,238.5	10,616.4	69.8	69.0	-166.55	8,411.6	-1,026.1	943.8	802.0	141.81	6.655	
18,500.0	9,698.8	19,338.5	10,617.1	70.5	69.7	-166.55	8,511.6	-1,026.3	944.2	800.9	143.30	6.589	
18,600.0	9,699.1	19,438.5	10,617.8	71.2	70.4	-166.56	8,611.6	-1,026.5	944.6	799.8	144.79	6.524	
18,700.0	9,699.4	19,538.5	10,618.5	72.0	71.2	-166.56	8,711.6	-1,026.7	945.0	798.7	146.29	6.460	
18,800.0	9,699.7	19,638.5	10,619.2	72.7	71.9	-166.57	8,811.6	-1,026.9	945.4	797.6	147.78	6.397	
18,900.0	9,700.0	19,738.5	10,619.9	73.4	72.6	-166.57	8,911.6	-1,027.0	945.8	796.5	149.28	6.336	
19,000.0	9,700.3	19,838.5	10,620.6	74.1	73.4	-166.58	9,011.5	-1,027.2	946.2	795.4	150.77	6.276	
19,100.0	9,700.6	19,938.4	10,621.3	74.9	74.1	-166.58	9,111.5	-1,027.4	946.6	794.3	152.27	6.217	
19,200.0	9,700.8	20,038.4	10,622.0	75.6	74.8	-166.59	9,211.5	-1,027.6	947.0	793.2	153.77	6.159	
19,300.0	9,701.1	20,138.4	10,622.7	76.3	75.6	-166.59	9,311.5	-1,027.8	947.4	792.1	155.27	6.102	
19,400.0	9,701.4	20,238.4	10,623.4	77.0	76.3	-166.60	9,411.5	-1,028.0	947.8	791.0	156.77	6.046	
19,500.0	9,701.7	20,338.4	10,624.1	77.8	77.0	-166.60	9,511.5	-1,028.2	948.2	789.9	158.27	5.991	
19,600.0	9,702.0	20,438.4	10,624.8	78.5	77.8	-166.61	9,611.5	-1,028.4	948.6	788.8	159.78	5.937	
19,700.0	9,702.3	20,538.4	10,625.5	79.2	78.5	-166.61	9,711.5	-1,028.6	949.0	787.7	161.28	5.884	
19,800.0	9,702.6	20,638.4	10,626.2	80.0	79.2	-166.62	9,811.5	-1,028.8	949.4	786.6	162.78	5.832	
19,900.0	9,702.9	20,738.4	10,626.9	80.7	80.0	-166.62	9,911.5	-1,028.9	949.8	785.5	164.29	5.781	
20,000.0	9,703.2	20,838.4	10,627.6	81.4	80.7	-166.63	10,011.5	-1,029.1	950.2	784.4	165.79	5.731	
20,100.0	9,703.5	20,938.4	10,628.3	82.2	81.4	-166.63	10,111.5	-1,029.3	950.6	783.3	167.30	5.682	
20,200.0	9,703.8	21,038.4	10,629.1	82.9	82.2	-166.64	10,211.5	-1,029.5	951.0	782.2	168.81	5.634	
20,300.0	9,704.1	21,138.4	10,629.8	83.6	82.9	-166.64	10,311.5	-1,029.7	951.4	781.1	170.32	5.586	
20,400.0	9,704.4	21,238.4	10,630.5	84.4	83.7	-166.65	10,411.5	-1,029.9	951.8	780.0	171.83	5.540	

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

ConocoPhillips

Anticollision Report

Company:	DELAWARE BASIN WEST	Local Co-ordinate Reference:	Well KEG SHELL FEDERAL COM #706H
Project:	ATLAS PROSPECT (NM-E)	TVD Reference:	KB=32 @ 3062.2usft
Reference Site:	KEG SHELL FED COM PROJECT	MD Reference:	KB=32 @ 3062.2usft
Site Error:	3.0 usft	North Reference:	Grid
Reference Well:	KEG SHELL FEDERAL COM #706H	Survey Calculation Method:	Minimum Curvature
Well Error:	3.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDT 17 Central Planning Prod
Reference Design:	PWP2	Offset TVD Reference:	Reference Datum

Offset Design: KEG SHELL FED COM PROJECT - KEG SHELL FEDERAL COM #909H - OWB - PWP1												Offset Site Error:	3.0 usft
Survey Program: 0-r.5 SDI_KPR_WL_NS-CT, 1500-r.5 MWD+IFR1+MS, 9931-r.5 MWD+IFR1+MS												Offset Well Error:	3.0 usft
Reference		Offset		Semi Major Axis		Highside Toolface (°)	Offset Wellbore Centre		Distance		Separation Factor	Warning	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)		+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)			
20,500.0	9,704.7	21,338.4	10,631.2	85.1	84.4	-166.65	10,511.5	-1,030.1	952.3	778.9	173.34	5.494	
20,600.0	9,705.0	21,438.4	10,631.9	85.8	85.1	-166.66	10,611.5	-1,030.3	952.7	777.8	174.85	5.449	
20,700.0	9,705.3	21,538.4	10,632.6	86.6	85.9	-166.66	10,711.5	-1,030.5	953.1	776.7	176.36	5.404	
20,800.0	9,705.5	21,638.4	10,633.3	87.3	86.6	-166.67	10,811.5	-1,030.7	953.5	775.6	177.87	5.361	
20,900.0	9,705.8	21,738.4	10,634.0	88.0	87.4	-166.67	10,911.5	-1,030.8	953.9	774.5	179.38	5.318	
21,000.0	9,706.1	21,838.4	10,634.7	88.8	88.1	-166.68	11,011.5	-1,031.0	954.3	773.4	180.89	5.275	
21,100.0	9,706.4	21,938.4	10,635.4	89.5	88.8	-166.68	11,111.5	-1,031.2	954.7	772.3	182.41	5.234	
21,200.0	9,706.7	22,038.4	10,636.1	90.2	89.6	-166.69	11,211.5	-1,031.4	955.1	771.2	183.92	5.193	
21,300.0	9,707.0	22,138.4	10,636.8	91.0	90.3	-166.69	11,311.5	-1,031.6	955.5	770.0	185.43	5.153	
21,400.0	9,707.3	22,238.4	10,637.5	91.7	91.1	-166.70	11,411.5	-1,031.8	955.9	768.9	186.95	5.113	
21,500.0	9,707.6	22,338.4	10,638.2	92.5	91.8	-166.70	11,511.5	-1,032.0	956.3	767.8	188.46	5.074	
21,600.0	9,707.9	22,438.4	10,638.9	93.2	92.6	-166.71	11,611.5	-1,032.2	956.7	766.7	189.98	5.036	
21,700.0	9,708.2	22,538.4	10,639.6	93.9	93.3	-166.71	11,711.5	-1,032.4	957.1	765.6	191.50	4.998	
21,800.0	9,708.5	22,638.4	10,640.3	94.7	94.1	-166.72	11,811.5	-1,032.6	957.5	764.5	193.01	4.961	
21,900.0	9,708.8	22,738.4	10,641.0	95.4	94.8	-166.72	11,911.4	-1,032.8	957.9	763.4	194.53	4.924	
22,000.0	9,709.1	22,838.4	10,641.8	96.2	95.5	-166.73	12,011.4	-1,032.9	958.3	762.3	196.05	4.888	
22,100.0	9,709.4	22,938.4	10,642.5	96.9	96.3	-166.73	12,111.4	-1,033.1	958.7	761.1	197.56	4.853	
22,105.4	9,709.4	22,943.9	10,642.5	96.9	96.3	-166.73	12,116.9	-1,033.1	958.7	761.1	197.65	4.851 SF	

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

ConocoPhillips

Anticollision Report

Company:	DELAWARE BASIN WEST	Local Co-ordinate Reference:	Well KEG SHELL FEDERAL COM #706H
Project:	ATLAS PROSPECT (NM-E)	TVD Reference:	KB=32 @ 3062.2usft
Reference Site:	KEG SHELL FED COM PROJECT	MD Reference:	KB=32 @ 3062.2usft
Site Error:	3.0 usft	North Reference:	Grid
Reference Well:	KEG SHELL FEDERAL COM #706H	Survey Calculation Method:	Minimum Curvature
Well Error:	3.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDT 17 Central Planning Prod
Reference Design:	PWP2	Offset TVD Reference:	Reference Datum

Reference Depths are relative to KB=32 @ 3062.2usft

Offset Depths are relative to Offset Datum

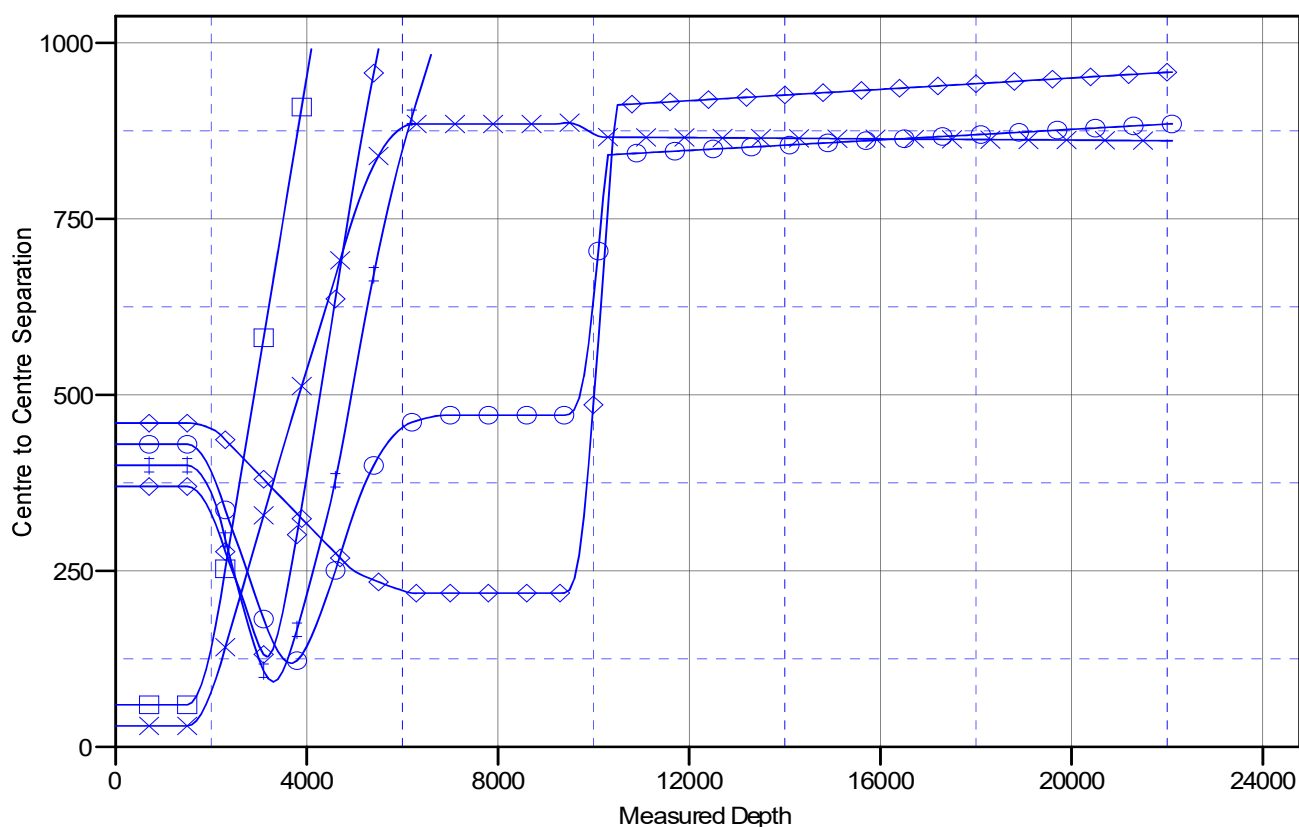
Central Meridian is 104° 20' 0.000 W

Coordinates are relative to: KEG SHELL FEDERAL COM #706H

Coordinate System is US State Plane 1927 (Exact solution), New Mexico East 30

Grid Convergence at Surface is: 0.14°

Ladder Plot



LEGEND

KEG SHELL FEDERAL COM#907H, OWB, PWP1 V0
 KEG SHELL FEDERAL COM#908H, OWB, PWP1 V0
 KEG SHELL FEDERAL COM#704H, OWB, PWP2 V0
 KEG SHELL FEDERAL COM#909H, OWB, PWP1 V0
 KEG SHELL FEDERAL COM#705H, OWB, PWP2 V0
 KEG SHELL FEDERAL COM#908H, OWB, PWP1 V0

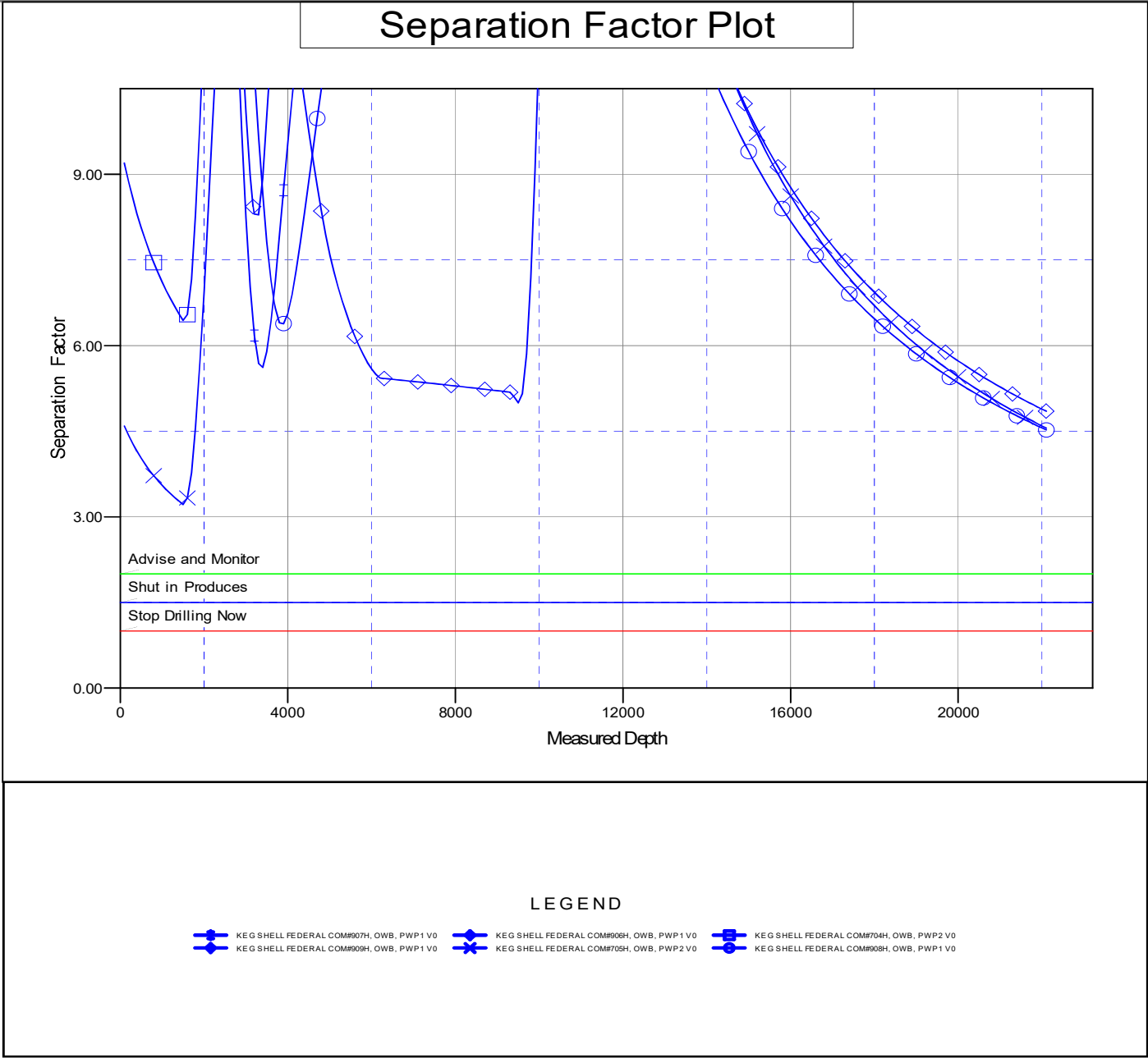
CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation

ConocoPhillips
Anticollision Report

Company:	DELAWARE BASIN WEST	Local Co-ordinate Reference:	Well KEG SHELL FEDERAL COM #706H
Project:	ATLAS PROSPECT (NM-E)	TVD Reference:	KB=32 @ 3062.2usft
Reference Site:	KEG SHELL FED COM PROJECT	MD Reference:	KB=32 @ 3062.2usft
Site Error:	3.0 usft	North Reference:	Grid
Reference Well:	KEG SHELL FEDERAL COM #706H	Survey Calculation Method:	Minimum Curvature
Well Error:	3.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDT 17 Central Planning Prod
Reference Design:	PWP2	Offset TVD Reference:	Reference Datum

Reference Depths are relative to KB=32 @ 3062.2usft
Offset Depths are relative to Offset Datum
Central Meridian is 104° 20' 0.000 W

Coordinates are relative to: KEG SHELL FEDERAL COM #706H
Coordinate System is US State Plane 1927 (Exact solution), New Mexico East 30
Grid Convergence at Surface is: 0.14°



DELAWARE BASIN WEST

ATLAS PROSPECT (NM-E)

KEG SHELL FED COM PROJECT

KEG SHELL FEDERAL COM #706H

300154825000

OWB

Plan: PWP2

Standard Planning Report

17 May, 2023

ConocoPhillips

Planning Report

Database:	EDT 17 Central Planning Prod	Local Co-ordinate Reference:	Well KEG SHELL FEDERAL COM #706H
Company:	DELAWARE BASIN WEST	TVD Reference:	KB=32 @ 3062.2usft
Project:	ATLAS PROSPECT (NM-E)	MD Reference:	KB=32 @ 3062.2usft
Site:	KEG SHELL FED COM PROJECT	North Reference:	Grid
Well:	KEG SHELL FEDERAL COM #706H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OWB		
Design:	PWP2		

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		

Site	KEG SHELL FED COM PROJECT				
Site Position:		Northing:	363,843.46 usft	Latitude:	32° 0' 0.003 N
From:	Map	Easting:	588,090.89 usft	Longitude:	104° 2' 56.993 W
Position Uncertainty:	3.0 usft	Slot Radius:	13-3/16 "		

Well	KEG SHELL FEDERAL COM #706H					
Well Position	+N/-S	0.0 usft	Northing:	364,254.30 usft	Latitude:	32° 0' 4.170 N
	+E/-W	0.0 usft	Easting:	584,111.50 usft	Longitude:	104° 3' 43.194 W
Position Uncertainty		3.0 usft	Wellhead Elevation:	usft	Ground Level:	3,030.2 usft
Grid Convergence:		0.14 °				

Wellbore	OWB				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	BGGM2022	12/1/2023	6.56	59.52	47,286.87233137

Design	PWP2				
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	356.16	

Plan Survey Tool Program	Date	5/16/2023			
Depth From (usft)	Depth To (usft)	Survey (Wellbore)	Tool Name	Remarks	
1	0.0	1,506.0 PWP2 (OWB)	r.5 SDI_KPR_WL_NS-CT SDI Keeper Wireline Gyrocomp		
2	1,506.0	9,167.4 PWP2 (OWB)	r.5 MWD+IFR1+MS OWSG MWD + IFR1 + Multi-St		
3	9,167.4	22,105.4 PWP2 (OWB)	r.5 MWD+IFR1+MS OWSG MWD + IFR1 + Multi-St		

ConocoPhillips
Planning Report

Database:	EDT 17 Central Planning Prod	Local Co-ordinate Reference:	Well KEG SHELL FEDERAL COM #706H
Company:	DELAWARE BASIN WEST	TVD Reference:	KB=32 @ 3062.2usft
Project:	ATLAS PROSPECT (NM-E)	MD Reference:	KB=32 @ 3062.2usft
Site:	KEG SHELL FED COM PROJECT	North Reference:	Grid
Well:	KEG SHELL FEDERAL COM #706H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OWB		
Design:	PWP2		

Plan Sections										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	TFO (°)	Target
0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.00	0.00	
1,500.0	0.00	0.00	1,500.0	0.0	0.0	0.00	0.00	0.00	0.00	
2,200.0	14.00	242.40	2,193.1	-39.4	-75.4	2.00	2.00	0.00	242.40	
4,833.2	14.00	242.40	4,748.0	-334.6	-639.9	0.00	0.00	0.00	0.00	
6,233.2	0.00	0.00	6,134.1	-413.4	-790.8	1.00	-1.00	0.00	180.00	
9,295.6	0.00	0.00	9,196.5	-413.4	-790.8	0.00	0.00	0.00	0.00	
10,044.1	89.83	359.90	9,674.0	62.7	-791.6	12.00	12.00	-0.01	359.90	
21,975.5	89.83	359.90	9,709.0	11,993.9	-812.9	0.00	0.00	0.00	0.00	
22,105.4	89.83	359.90	9,709.4	12,123.9	-813.1	0.00	0.00	0.00	0.00	

ConocoPhillips

Planning Report

Database:	EDT 17 Central Planning Prod	Local Co-ordinate Reference:	Well KEG SHELL FEDERAL COM #706H
Company:	DELAWARE BASIN WEST	TVD Reference:	KB=32 @ 3062.2usft
Project:	ATLAS PROSPECT (NM-E)	MD Reference:	KB=32 @ 3062.2usft
Site:	KEG SHELL FED COM PROJECT	North Reference:	Grid
Well:	KEG SHELL FEDERAL COM #706H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OWB		
Design:	PWP2		

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
1,500.0	0.00	0.00	1,500.0	0.0	0.0	0.0	0.00	0.00	0.00
Start Build 2.00									
1,600.0	2.00	242.40	1,600.0	-0.8	-1.5	-0.7	2.00	2.00	0.00
1,700.0	4.00	242.40	1,699.8	-3.2	-6.2	-2.8	2.00	2.00	0.00
1,800.0	6.00	242.40	1,799.5	-7.3	-13.9	-6.3	2.00	2.00	0.00
1,900.0	8.00	242.40	1,898.7	-12.9	-24.7	-11.2	2.00	2.00	0.00
2,000.0	10.00	242.40	1,997.5	-20.2	-38.6	-17.5	2.00	2.00	0.00
2,100.0	12.00	242.40	2,095.6	-29.0	-55.5	-25.2	2.00	2.00	0.00
2,200.0	14.00	242.40	2,193.1	-39.4	-75.4	-34.3	2.00	2.00	0.00
Start 2633.2 hold at 2200.0 MD									
2,300.0	14.00	242.40	2,290.1	-50.6	-96.9	-44.0	0.00	0.00	0.00
2,400.0	14.00	242.40	2,387.1	-61.8	-118.3	-53.8	0.00	0.00	0.00
2,500.0	14.00	242.40	2,484.1	-73.0	-139.7	-63.5	0.00	0.00	0.00
2,600.0	14.00	242.40	2,581.2	-84.3	-161.2	-73.3	0.00	0.00	0.00
2,700.0	14.00	242.40	2,678.2	-95.5	-182.6	-83.0	0.00	0.00	0.00
2,800.0	14.00	242.40	2,775.2	-106.7	-204.0	-92.8	0.00	0.00	0.00
2,900.0	14.00	242.40	2,872.3	-117.9	-225.5	-102.5	0.00	0.00	0.00
3,000.0	14.00	242.40	2,969.3	-129.1	-246.9	-112.3	0.00	0.00	0.00
3,100.0	14.00	242.40	3,066.3	-140.3	-268.4	-122.0	0.00	0.00	0.00
3,200.0	14.00	242.40	3,163.4	-151.5	-289.8	-131.8	0.00	0.00	0.00
3,300.0	14.00	242.40	3,260.4	-162.7	-311.2	-141.5	0.00	0.00	0.00
3,400.0	14.00	242.40	3,357.4	-173.9	-332.7	-151.3	0.00	0.00	0.00
3,500.0	14.00	242.40	3,454.4	-185.1	-354.1	-161.0	0.00	0.00	0.00
3,600.0	14.00	242.40	3,551.5	-196.3	-375.6	-170.8	0.00	0.00	0.00
3,700.0	14.00	242.40	3,648.5	-207.5	-397.0	-180.5	0.00	0.00	0.00
3,800.0	14.00	242.40	3,745.5	-218.8	-418.4	-190.3	0.00	0.00	0.00
3,900.0	14.00	242.40	3,842.6	-230.0	-439.9	-200.0	0.00	0.00	0.00
4,000.0	14.00	242.40	3,939.6	-241.2	-461.3	-209.8	0.00	0.00	0.00
4,100.0	14.00	242.40	4,036.6	-252.4	-482.8	-219.5	0.00	0.00	0.00
4,200.0	14.00	242.40	4,133.6	-263.6	-504.2	-229.3	0.00	0.00	0.00
4,300.0	14.00	242.40	4,230.7	-274.8	-525.6	-239.0	0.00	0.00	0.00
4,400.0	14.00	242.40	4,327.7	-286.0	-547.1	-248.8	0.00	0.00	0.00
4,500.0	14.00	242.40	4,424.7	-297.2	-568.5	-258.5	0.00	0.00	0.00
4,600.0	14.00	242.40	4,521.8	-308.4	-590.0	-268.3	0.00	0.00	0.00
4,700.0	14.00	242.40	4,618.8	-319.6	-611.4	-278.0	0.00	0.00	0.00
4,800.0	14.00	242.40	4,715.8	-330.8	-632.8	-287.7	0.00	0.00	0.00
4,833.2	14.00	242.40	4,748.0	-334.6	-639.9	-291.0	0.00	0.00	0.00
Start Drop -1.00									

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Planning Report

Database:	EDT 17 Central Planning Prod	Local Co-ordinate Reference:	Well KEG SHELL FEDERAL COM #706H
Company:	DELAWARE BASIN WEST	TVD Reference:	KB=32 @ 3062.2usft
Project:	ATLAS PROSPECT (NM-E)	MD Reference:	KB=32 @ 3062.2usft
Site:	KEG SHELL FED COM PROJECT	North Reference:	Grid
Well:	KEG SHELL FEDERAL COM #706H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OWB		
Design:	PWP2		

Planned Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
4,900.0	13.33	242.40	4,812.9	-341.9	-653.9	-297.3	1.00	-1.00	0.00
5,000.0	12.33	242.40	4,910.4	-352.2	-673.6	-306.3	1.00	-1.00	0.00
5,100.0	11.33	242.40	5,008.3	-361.7	-691.8	-314.6	1.00	-1.00	0.00
5,200.0	10.33	242.40	5,106.5	-370.4	-708.4	-322.1	1.00	-1.00	0.00
5,300.0	9.33	242.40	5,205.1	-378.3	-723.6	-329.0	1.00	-1.00	0.00
5,400.0	8.33	242.40	5,303.9	-385.4	-737.2	-335.2	1.00	-1.00	0.00
5,500.0	7.33	242.40	5,402.9	-391.7	-749.3	-340.7	1.00	-1.00	0.00
5,600.0	6.33	242.40	5,502.2	-397.2	-759.8	-345.5	1.00	-1.00	0.00
5,700.0	5.33	242.40	5,601.7	-401.9	-768.8	-349.6	1.00	-1.00	0.00
5,800.0	4.33	242.40	5,701.4	-405.8	-776.3	-353.0	1.00	-1.00	0.00
5,900.0	3.33	242.40	5,801.1	-408.9	-782.2	-355.7	1.00	-1.00	0.00
6,000.0	2.33	242.40	5,901.0	-411.2	-786.6	-357.7	1.00	-1.00	0.00
6,100.0	1.33	242.40	6,001.0	-412.7	-789.4	-358.9	1.00	-1.00	0.00
6,200.0	0.33	242.40	6,100.9	-413.4	-790.7	-359.5	1.00	-1.00	0.00
6,233.2	0.00	0.00	6,134.1	-413.4	-790.8	-359.6	1.00	-1.00	0.00
Start 3062.4 hold at 6233.2 MD									
6,300.0	0.00	0.00	6,200.9	-413.4	-790.8	-359.6	0.00	0.00	0.00
6,400.0	0.00	0.00	6,300.9	-413.4	-790.8	-359.6	0.00	0.00	0.00
6,500.0	0.00	0.00	6,400.9	-413.4	-790.8	-359.6	0.00	0.00	0.00
6,600.0	0.00	0.00	6,500.9	-413.4	-790.8	-359.6	0.00	0.00	0.00
6,700.0	0.00	0.00	6,600.9	-413.4	-790.8	-359.6	0.00	0.00	0.00
6,800.0	0.00	0.00	6,700.9	-413.4	-790.8	-359.6	0.00	0.00	0.00
6,900.0	0.00	0.00	6,800.9	-413.4	-790.8	-359.6	0.00	0.00	0.00
7,000.0	0.00	0.00	6,900.9	-413.4	-790.8	-359.6	0.00	0.00	0.00
7,100.0	0.00	0.00	7,000.9	-413.4	-790.8	-359.6	0.00	0.00	0.00
7,200.0	0.00	0.00	7,100.9	-413.4	-790.8	-359.6	0.00	0.00	0.00
7,300.0	0.00	0.00	7,200.9	-413.4	-790.8	-359.6	0.00	0.00	0.00
7,400.0	0.00	0.00	7,300.9	-413.4	-790.8	-359.6	0.00	0.00	0.00
7,500.0	0.00	0.00	7,400.9	-413.4	-790.8	-359.6	0.00	0.00	0.00
7,600.0	0.00	0.00	7,500.9	-413.4	-790.8	-359.6	0.00	0.00	0.00
7,700.0	0.00	0.00	7,600.9	-413.4	-790.8	-359.6	0.00	0.00	0.00
7,800.0	0.00	0.00	7,700.9	-413.4	-790.8	-359.6	0.00	0.00	0.00
7,900.0	0.00	0.00	7,800.9	-413.4	-790.8	-359.6	0.00	0.00	0.00
8,000.0	0.00	0.00	7,900.9	-413.4	-790.8	-359.6	0.00	0.00	0.00
8,100.0	0.00	0.00	8,000.9	-413.4	-790.8	-359.6	0.00	0.00	0.00
8,200.0	0.00	0.00	8,100.9	-413.4	-790.8	-359.6	0.00	0.00	0.00
8,300.0	0.00	0.00	8,200.9	-413.4	-790.8	-359.6	0.00	0.00	0.00
8,400.0	0.00	0.00	8,300.9	-413.4	-790.8	-359.6	0.00	0.00	0.00
8,500.0	0.00	0.00	8,400.9	-413.4	-790.8	-359.6	0.00	0.00	0.00
8,600.0	0.00	0.00	8,500.9	-413.4	-790.8	-359.6	0.00	0.00	0.00
8,700.0	0.00	0.00	8,600.9	-413.4	-790.8	-359.6	0.00	0.00	0.00
8,800.0	0.00	0.00	8,700.9	-413.4	-790.8	-359.6	0.00	0.00	0.00
8,900.0	0.00	0.00	8,800.9	-413.4	-790.8	-359.6	0.00	0.00	0.00
9,000.0	0.00	0.00	8,900.9	-413.4	-790.8	-359.6	0.00	0.00	0.00
9,100.0	0.00	0.00	9,000.9	-413.4	-790.8	-359.6	0.00	0.00	0.00
9,200.0	0.00	0.00	9,100.9	-413.4	-790.8	-359.6	0.00	0.00	0.00
9,295.6	0.00	0.00	9,196.5	-413.4	-790.8	-359.6	0.00	0.00	0.00
Start DLS 12.00 TFO 359.90									
9,300.0	0.53	359.90	9,200.9	-413.4	-790.8	-359.5	12.00	12.00	0.00
9,400.0	12.53	359.90	9,300.1	-402.0	-790.8	-348.2	12.00	12.00	0.00
9,500.0	24.53	359.90	9,394.8	-370.3	-790.8	-316.5	12.00	12.00	0.00
9,600.0	36.53	359.90	9,480.7	-319.6	-790.9	-265.9	12.00	12.00	0.00
9,700.0	48.53	359.90	9,554.3	-252.1	-791.1	-198.6	12.00	12.00	0.00
9,800.0	60.53	359.90	9,612.2	-170.8	-791.2	-117.5	12.00	12.00	0.00

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Planning Report

Database:	EDT 17 Central Planning Prod	Local Co-ordinate Reference:	Well KEG SHELL FEDERAL COM #706H
Company:	DELAWARE BASIN WEST	TVD Reference:	KB=32 @ 3062.2usft
Project:	ATLAS PROSPECT (NM-E)	MD Reference:	KB=32 @ 3062.2usft
Site:	KEG SHELL FED COM PROJECT	North Reference:	Grid
Well:	KEG SHELL FEDERAL COM #706H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OWB		
Design:	PWP2		

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)
9,900.0	72.53	359.90	9,652.0	-79.2	-791.4	-26.1	12.00	12.00	0.00
10,000.0	84.53	359.90	9,671.8	18.6	-791.5	71.5	12.00	12.00	0.00
10,044.1	89.83	359.90	9,674.0	62.7	-791.6	115.5	12.00	12.00	0.00
Start 11931.3 hold at 10044.1 MD									
10,100.0	89.83	359.90	9,674.1	118.5	-791.7	171.2	0.00	0.00	0.00
10,200.0	89.83	359.90	9,674.4	218.5	-791.9	271.0	0.00	0.00	0.00
10,300.0	89.83	359.90	9,674.7	318.5	-792.1	370.8	0.00	0.00	0.00
10,400.0	89.83	359.90	9,675.0	418.5	-792.3	470.6	0.00	0.00	0.00
10,500.0	89.83	359.90	9,675.3	518.5	-792.4	570.4	0.00	0.00	0.00
10,600.0	89.83	359.90	9,675.6	618.5	-792.6	670.2	0.00	0.00	0.00
10,700.0	89.83	359.90	9,675.9	718.5	-792.8	769.9	0.00	0.00	0.00
10,800.0	89.83	359.90	9,676.2	818.5	-793.0	869.7	0.00	0.00	0.00
10,900.0	89.83	359.90	9,676.5	918.5	-793.1	969.5	0.00	0.00	0.00
11,000.0	89.83	359.90	9,676.8	1,018.5	-793.3	1,069.3	0.00	0.00	0.00
11,100.0	89.83	359.90	9,677.1	1,118.5	-793.5	1,169.1	0.00	0.00	0.00
11,200.0	89.83	359.90	9,677.4	1,218.5	-793.7	1,268.9	0.00	0.00	0.00
11,300.0	89.83	359.90	9,677.7	1,318.5	-793.9	1,368.7	0.00	0.00	0.00
11,400.0	89.83	359.90	9,677.9	1,418.5	-794.0	1,468.5	0.00	0.00	0.00
11,500.0	89.83	359.90	9,678.2	1,518.5	-794.2	1,568.2	0.00	0.00	0.00
11,600.0	89.83	359.90	9,678.5	1,618.5	-794.4	1,668.0	0.00	0.00	0.00
11,700.0	89.83	359.90	9,678.8	1,718.5	-794.6	1,767.8	0.00	0.00	0.00
11,800.0	89.83	359.90	9,679.1	1,818.5	-794.7	1,867.6	0.00	0.00	0.00
11,900.0	89.83	359.90	9,679.4	1,918.5	-794.9	1,967.4	0.00	0.00	0.00
12,000.0	89.83	359.90	9,679.7	2,018.5	-795.1	2,067.2	0.00	0.00	0.00
12,100.0	89.83	359.90	9,680.0	2,118.5	-795.3	2,167.0	0.00	0.00	0.00
12,200.0	89.83	359.90	9,680.3	2,218.5	-795.5	2,266.8	0.00	0.00	0.00
12,300.0	89.83	359.90	9,680.6	2,318.5	-795.6	2,366.5	0.00	0.00	0.00
12,400.0	89.83	359.90	9,680.9	2,418.5	-795.8	2,466.3	0.00	0.00	0.00
12,500.0	89.83	359.90	9,681.2	2,518.5	-796.0	2,566.1	0.00	0.00	0.00
12,600.0	89.83	359.90	9,681.5	2,618.5	-796.2	2,665.9	0.00	0.00	0.00
12,700.0	89.83	359.90	9,681.8	2,718.5	-796.4	2,765.7	0.00	0.00	0.00
12,800.0	89.83	359.90	9,682.1	2,818.5	-796.5	2,865.5	0.00	0.00	0.00
12,900.0	89.83	359.90	9,682.3	2,918.5	-796.7	2,965.3	0.00	0.00	0.00
13,000.0	89.83	359.90	9,682.6	3,018.5	-796.9	3,065.1	0.00	0.00	0.00
13,100.0	89.83	359.90	9,682.9	3,118.5	-797.1	3,164.8	0.00	0.00	0.00
13,200.0	89.83	359.90	9,683.2	3,218.5	-797.2	3,264.6	0.00	0.00	0.00
13,300.0	89.83	359.90	9,683.5	3,318.5	-797.4	3,364.4	0.00	0.00	0.00
13,400.0	89.83	359.90	9,683.8	3,418.5	-797.6	3,464.2	0.00	0.00	0.00
13,500.0	89.83	359.90	9,684.1	3,518.5	-797.8	3,564.0	0.00	0.00	0.00
13,600.0	89.83	359.90	9,684.4	3,618.5	-798.0	3,663.8	0.00	0.00	0.00
13,700.0	89.83	359.90	9,684.7	3,718.5	-798.1	3,763.6	0.00	0.00	0.00
13,800.0	89.83	359.90	9,685.0	3,818.5	-798.3	3,863.3	0.00	0.00	0.00
13,900.0	89.83	359.90	9,685.3	3,918.5	-798.5	3,963.1	0.00	0.00	0.00
14,000.0	89.83	359.90	9,685.6	4,018.5	-798.7	4,062.9	0.00	0.00	0.00
14,100.0	89.83	359.90	9,685.9	4,118.5	-798.9	4,162.7	0.00	0.00	0.00
14,200.0	89.83	359.90	9,686.2	4,218.5	-799.0	4,262.5	0.00	0.00	0.00
14,300.0	89.83	359.90	9,686.5	4,318.5	-799.2	4,362.3	0.00	0.00	0.00
14,400.0	89.83	359.90	9,686.8	4,418.5	-799.4	4,462.1	0.00	0.00	0.00
14,500.0	89.83	359.90	9,687.0	4,518.5	-799.6	4,561.9	0.00	0.00	0.00
14,600.0	89.83	359.90	9,687.3	4,618.5	-799.7	4,661.6	0.00	0.00	0.00
14,700.0	89.83	359.90	9,687.6	4,718.5	-799.9	4,761.4	0.00	0.00	0.00
14,800.0	89.83	359.90	9,687.9	4,818.5	-800.1	4,861.2	0.00	0.00	0.00
14,900.0	89.83	359.90	9,688.2	4,918.5	-800.3	4,961.0	0.00	0.00	0.00
15,000.0	89.83	359.90	9,688.5	5,018.5	-800.5	5,060.8	0.00	0.00	0.00

ConocoPhillips

Planning Report

Database:	EDT 17 Central Planning Prod	Local Co-ordinate Reference:	Well KEG SHELL FEDERAL COM #706H
Company:	DELAWARE BASIN WEST	TVD Reference:	KB=32 @ 3062.2usft
Project:	ATLAS PROSPECT (NM-E)	MD Reference:	KB=32 @ 3062.2usft
Site:	KEG SHELL FED COM PROJECT	North Reference:	Grid
Well:	KEG SHELL FEDERAL COM #706H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OWB		
Design:	PWP2		

Planned Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
15,100.0	89.83	359.90	9,688.8	5,118.5	-800.6	5,160.6	0.00	0.00	0.00
15,200.0	89.83	359.90	9,689.1	5,218.5	-800.8	5,260.4	0.00	0.00	0.00
15,300.0	89.83	359.90	9,689.4	5,318.5	-801.0	5,360.2	0.00	0.00	0.00
15,400.0	89.83	359.90	9,689.7	5,418.5	-801.2	5,459.9	0.00	0.00	0.00
15,500.0	89.83	359.90	9,690.0	5,518.5	-801.3	5,559.7	0.00	0.00	0.00
15,600.0	89.83	359.90	9,690.3	5,618.5	-801.5	5,659.5	0.00	0.00	0.00
15,700.0	89.83	359.90	9,690.6	5,718.5	-801.7	5,759.3	0.00	0.00	0.00
15,800.0	89.83	359.90	9,690.9	5,818.5	-801.9	5,859.1	0.00	0.00	0.00
15,900.0	89.83	359.90	9,691.2	5,918.5	-802.1	5,958.9	0.00	0.00	0.00
16,000.0	89.83	359.90	9,691.5	6,018.5	-802.2	6,058.7	0.00	0.00	0.00
16,100.0	89.83	359.90	9,691.7	6,118.5	-802.4	6,158.5	0.00	0.00	0.00
16,200.0	89.83	359.90	9,692.0	6,218.5	-802.6	6,258.2	0.00	0.00	0.00
16,300.0	89.83	359.90	9,692.3	6,318.5	-802.8	6,358.0	0.00	0.00	0.00
16,400.0	89.83	359.90	9,692.6	6,418.5	-803.0	6,457.8	0.00	0.00	0.00
16,500.0	89.83	359.90	9,692.9	6,518.5	-803.1	6,557.6	0.00	0.00	0.00
16,600.0	89.83	359.90	9,693.2	6,618.5	-803.3	6,657.4	0.00	0.00	0.00
16,700.0	89.83	359.90	9,693.5	6,718.5	-803.5	6,757.2	0.00	0.00	0.00
16,800.0	89.83	359.90	9,693.8	6,818.5	-803.7	6,857.0	0.00	0.00	0.00
16,900.0	89.83	359.90	9,694.1	6,918.5	-803.8	6,956.8	0.00	0.00	0.00
17,000.0	89.83	359.90	9,694.4	7,018.5	-804.0	7,056.5	0.00	0.00	0.00
17,100.0	89.83	359.90	9,694.7	7,118.5	-804.2	7,156.3	0.00	0.00	0.00
17,200.0	89.83	359.90	9,695.0	7,218.5	-804.4	7,256.1	0.00	0.00	0.00
17,300.0	89.83	359.90	9,695.3	7,318.5	-804.6	7,355.9	0.00	0.00	0.00
17,400.0	89.83	359.90	9,695.6	7,418.5	-804.7	7,455.7	0.00	0.00	0.00
17,500.0	89.83	359.90	9,695.9	7,518.5	-804.9	7,555.5	0.00	0.00	0.00
17,600.0	89.83	359.90	9,696.2	7,618.5	-805.1	7,655.3	0.00	0.00	0.00
17,700.0	89.83	359.90	9,696.4	7,718.5	-805.3	7,755.1	0.00	0.00	0.00
17,800.0	89.83	359.90	9,696.7	7,818.5	-805.5	7,854.8	0.00	0.00	0.00
17,900.0	89.83	359.90	9,697.0	7,918.5	-805.6	7,954.6	0.00	0.00	0.00
18,000.0	89.83	359.90	9,697.3	8,018.5	-805.8	8,054.4	0.00	0.00	0.00
18,100.0	89.83	359.90	9,697.6	8,118.5	-806.0	8,154.2	0.00	0.00	0.00
18,200.0	89.83	359.90	9,697.9	8,218.5	-806.2	8,254.0	0.00	0.00	0.00
18,300.0	89.83	359.90	9,698.2	8,318.5	-806.3	8,353.8	0.00	0.00	0.00
18,400.0	89.83	359.90	9,698.5	8,418.5	-806.5	8,453.6	0.00	0.00	0.00
18,500.0	89.83	359.90	9,698.8	8,518.5	-806.7	8,553.3	0.00	0.00	0.00
18,600.0	89.83	359.90	9,699.1	8,618.5	-806.9	8,653.1	0.00	0.00	0.00
18,700.0	89.83	359.90	9,699.4	8,718.5	-807.1	8,752.9	0.00	0.00	0.00
18,800.0	89.83	359.90	9,699.7	8,818.5	-807.2	8,852.7	0.00	0.00	0.00
18,900.0	89.83	359.90	9,700.0	8,918.5	-807.4	8,952.5	0.00	0.00	0.00
19,000.0	89.83	359.90	9,700.3	9,018.5	-807.6	9,052.3	0.00	0.00	0.00
19,100.0	89.83	359.90	9,700.6	9,118.5	-807.8	9,152.1	0.00	0.00	0.00
19,200.0	89.83	359.90	9,700.8	9,218.5	-807.9	9,251.9	0.00	0.00	0.00
19,300.0	89.83	359.90	9,701.1	9,318.5	-808.1	9,351.6	0.00	0.00	0.00
19,400.0	89.83	359.90	9,701.4	9,418.5	-808.3	9,451.4	0.00	0.00	0.00
19,500.0	89.83	359.90	9,701.7	9,518.5	-808.5	9,551.2	0.00	0.00	0.00
19,600.0	89.83	359.90	9,702.0	9,618.5	-808.7	9,651.0	0.00	0.00	0.00
19,700.0	89.83	359.90	9,702.3	9,718.5	-808.8	9,750.8	0.00	0.00	0.00
19,800.0	89.83	359.90	9,702.6	9,818.5	-809.0	9,850.6	0.00	0.00	0.00
19,900.0	89.83	359.90	9,702.9	9,918.5	-809.2	9,950.4	0.00	0.00	0.00
20,000.0	89.83	359.90	9,703.2	10,018.5	-809.4	10,050.2	0.00	0.00	0.00
20,100.0	89.83	359.90	9,703.5	10,118.5	-809.6	10,149.9	0.00	0.00	0.00
20,200.0	89.83	359.90	9,703.8	10,218.5	-809.7	10,249.7	0.00	0.00	0.00
20,300.0	89.83	359.90	9,704.1	10,318.4	-809.9	10,349.5	0.00	0.00	0.00
20,400.0	89.83	359.90	9,704.4	10,418.4	-810.1	10,449.3	0.00	0.00	0.00

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Planning Report

Database:	EDT 17 Central Planning Prod	Local Co-ordinate Reference:	Well KEG SHELL FEDERAL COM #706H
Company:	DELAWARE BASIN WEST	TVD Reference:	KB=32 @ 3062.2usft
Project:	ATLAS PROSPECT (NM-E)	MD Reference:	KB=32 @ 3062.2usft
Site:	KEG SHELL FED COM PROJECT	North Reference:	Grid
Well:	KEG SHELL FEDERAL COM #706H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OWB		
Design:	PWP2		

Planned Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
20,500.0	89.83	359.90	9,704.7	10,518.4	-810.3	10,549.1	0.00	0.00	0.00
20,600.0	89.83	359.90	9,705.0	10,618.4	-810.4	10,648.9	0.00	0.00	0.00
20,700.0	89.83	359.90	9,705.3	10,718.4	-810.6	10,748.7	0.00	0.00	0.00
20,800.0	89.83	359.90	9,705.5	10,818.4	-810.8	10,848.5	0.00	0.00	0.00
20,900.0	89.83	359.90	9,705.8	10,918.4	-811.0	10,948.2	0.00	0.00	0.00
21,000.0	89.83	359.90	9,706.1	11,018.4	-811.2	11,048.0	0.00	0.00	0.00
21,100.0	89.83	359.90	9,706.4	11,118.4	-811.3	11,147.8	0.00	0.00	0.00
21,200.0	89.83	359.90	9,706.7	11,218.4	-811.5	11,247.6	0.00	0.00	0.00
21,300.0	89.83	359.90	9,707.0	11,318.4	-811.7	11,347.4	0.00	0.00	0.00
21,400.0	89.83	359.90	9,707.3	11,418.4	-811.9	11,447.2	0.00	0.00	0.00
21,500.0	89.83	359.90	9,707.6	11,518.4	-812.1	11,547.0	0.00	0.00	0.00
21,600.0	89.83	359.90	9,707.9	11,618.4	-812.2	11,646.8	0.00	0.00	0.00
21,700.0	89.83	359.90	9,708.2	11,718.4	-812.4	11,746.5	0.00	0.00	0.00
21,800.0	89.83	359.90	9,708.5	11,818.4	-812.6	11,846.3	0.00	0.00	0.00
21,900.0	89.83	359.90	9,708.8	11,918.4	-812.8	11,946.1	0.00	0.00	0.00
21,975.5	89.83	359.90	9,709.0	11,993.9	-812.9	12,021.4	0.00	0.00	0.00
Start 130.0 hold at 21975.5 MD									
22,000.0	89.83	359.90	9,709.1	12,018.4	-812.9	12,045.9	0.00	0.00	0.00
22,100.0	89.83	359.90	9,709.4	12,118.4	-813.1	12,145.7	0.00	0.00	0.00
22,105.4	89.83	359.90	9,709.4	12,123.9	-813.1	12,151.1	0.00	0.00	0.00
TD at 22105.4									

ConocoPhillips
Planning Report

Database:	EDT 17 Central Planning Prod	Local Co-ordinate Reference:	Well KEG SHELL FEDERAL COM #706H
Company:	DELAWARE BASIN WEST	TVD Reference:	KB=32 @ 3062.2usft
Project:	ATLAS PROSPECT (NM-E)	MD Reference:	KB=32 @ 3062.2usft
Site:	KEG SHELL FED COM PROJECT	North Reference:	Grid
Well:	KEG SHELL FEDERAL COM #706H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OWB		
Design:	PWP2		

Design Targets										
Target Name										
- hit/miss target	Dip Angle	Dip Dir.	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	
- Shape	(°)	(°)	(usft)	(usft)	(usft)	(usft)	(usft)			
(706H) TNGNT LIMITER	14.00	62.40	4,746.0	-333.6	-638.2	363,920.70	583,473.30	32° 0' 0.885 N	104° 3' 50.615 W	
- plan misses target center by 1.4usft at 4830.7usft MD (4745.7 TVD, -334.3 N, -639.4 E)										
- Rectangle (sides W40.0 H30.0 D2,546.9)										
(706H) KOP BOX: 50' N	0.00	179.86	8,999.0	-412.5	-789.0	363,841.80	583,322.50	32° 0' 0.107 N	104° 3' 52.369 W	
- plan misses target center by 2.0usft at 9098.1usft MD (8999.0 TVD, -413.4 N, -790.8 E)										
- Rectangle (sides W100.0 H50.0 D2,866.9)										
FTP (KEG SHELL FED C	0.00	0.00	9,674.0	-133.5	-789.7	364,120.80	583,321.80	32° 0' 2.869 N	104° 3' 52.369 W	
- plan misses target center by 39.3usft at 9858.9usft MD (9638.0 TVD, -117.8 N, -791.3 E)										
- Circle (radius 50.0)										
PPP2 (KEG SHELL 706I	0.00	0.00	9,676.0	1,757.5	-793.3	366,011.80	583,318.20	32° 0' 21.583 N	104° 3' 52.356 W	
- plan misses target center by 3.2usft at 11739.0usft MD (9678.9 TVD, 1757.5 N, -794.6 E)										
- Point										
PPP3 (KEG SHELL 706I	0.00	0.00	9,700.0	7,059.4	-803.4	371,313.70	583,308.10	32° 1' 14.054 N	104° 3' 52.320 W	
- plan misses target center by 5.5usft at 17040.9usft MD (9694.5 TVD, 7059.4 N, -804.1 E)										
- Point										
PPP4 (KEG SHELL 706I	0.00	0.00	9,700.0	8,393.3	-806.0	372,647.60	583,305.50	32° 1' 27.255 N	104° 3' 52.312 W	
- plan misses target center by 1.6usft at 18374.8usft MD (9698.4 TVD, 8393.3 N, -806.5 E)										
- Point										
PPP5 (KEG SHELL 706I	0.00	0.00	9,703.0	9,716.0	-808.5	373,970.30	583,303.00	32° 1' 40.346 N	104° 3' 52.302 W	
- plan misses target center by 0.8usft at 19697.5usft MD (9702.3 TVD, 9716.0 N, -808.8 E)										
- Point										
LTP (KEG SHELL FED C	90.00	359.86	9,709.0	11,993.9	-812.9	376,248.20	583,298.60	32° 2' 2.889 N	104° 3' 52.288 W	
- plan hits target center										
- Circle (radius 50.0)										
PBHL (KEG SHELL FED	-0.17	179.90	9,709.0	12,123.9	-813.1	376,378.20	583,298.40	32° 2' 4.176 N	104° 3' 52.286 W	
- plan misses target center by 0.4usft at 22105.4usft MD (9709.4 TVD, 12123.9 N, -813.1 E)										
- Rectangle (sides W100.0 H12,123.9 D20.0)										

Casing Points					
Measured Depth (usft)	Vertical Depth (usft)	Name	Casing Diameter (")	Hole Diameter (")	
22,105.5	9,709.4	5-1/2" Production Casing	5-1/2	6-3/4	

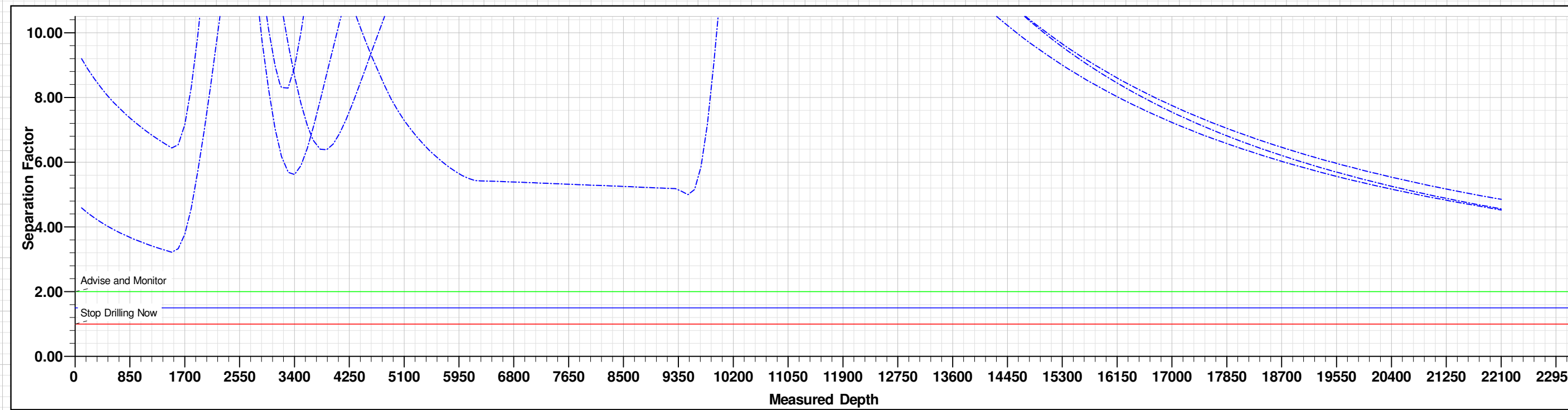
Plan Annotations					
Measured Depth (usft)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Comment	
1,500.0	1,500.0	0.0	0.0	Start Build 2.00	
2,200.0	2,193.1	-39.4	-75.4	Start 2633.2 hold at 2200.0 MD	
4,833.2	4,748.0	-334.6	-639.9	Start Drop -1.00	
6,233.2	6,134.1	-413.4	-790.8	Start 3062.4 hold at 6233.2 MD	
9,295.6	9,196.5	-413.4	-790.8	Start DLS 12.00 TFO 359.90	
10,044.1	9,674.0	62.7	-791.6	Start 11931.3 hold at 10044.1 MD	
21,975.5	9,709.0	11,993.9	-812.9	Start 130.0 hold at 21975.5 MD	
22,105.4	9,709.4	12,123.9	-813.1	TD at 22105.4	

WELL DETAILS: KEG SHELL FEDERAL COM #706H

+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
0.0	0.0	364254.30	584111.50	32° 0' 4.170 N	104° 3' 43.194 W

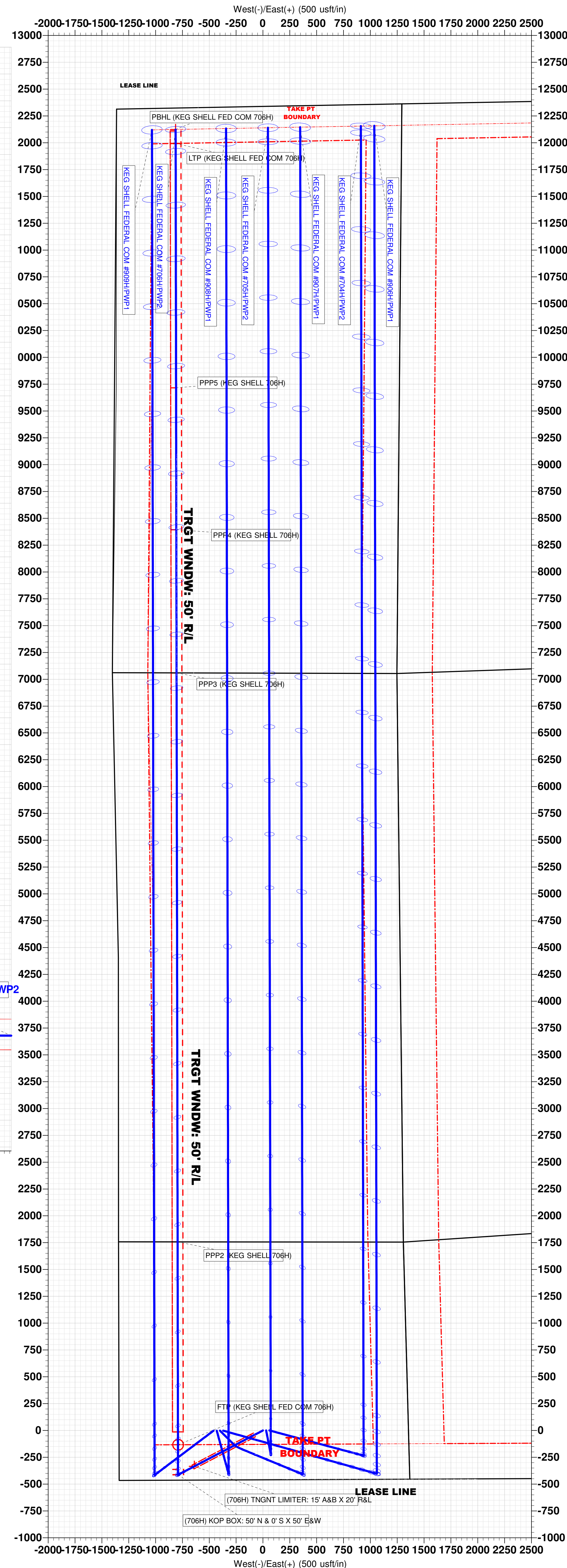
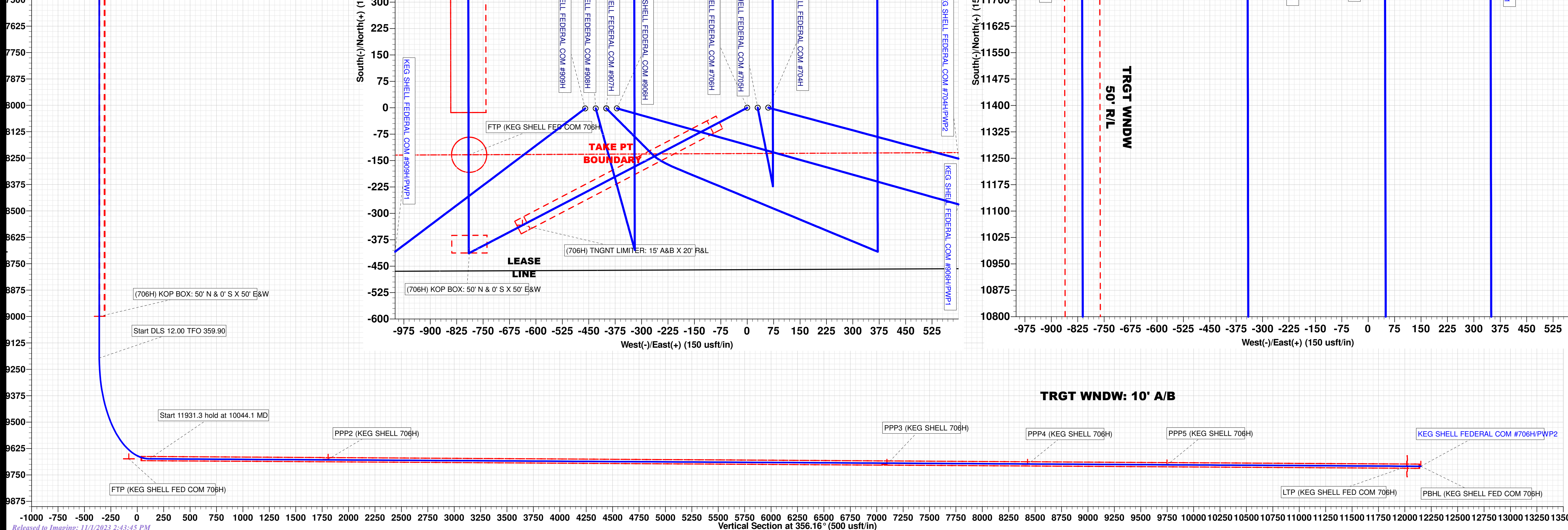
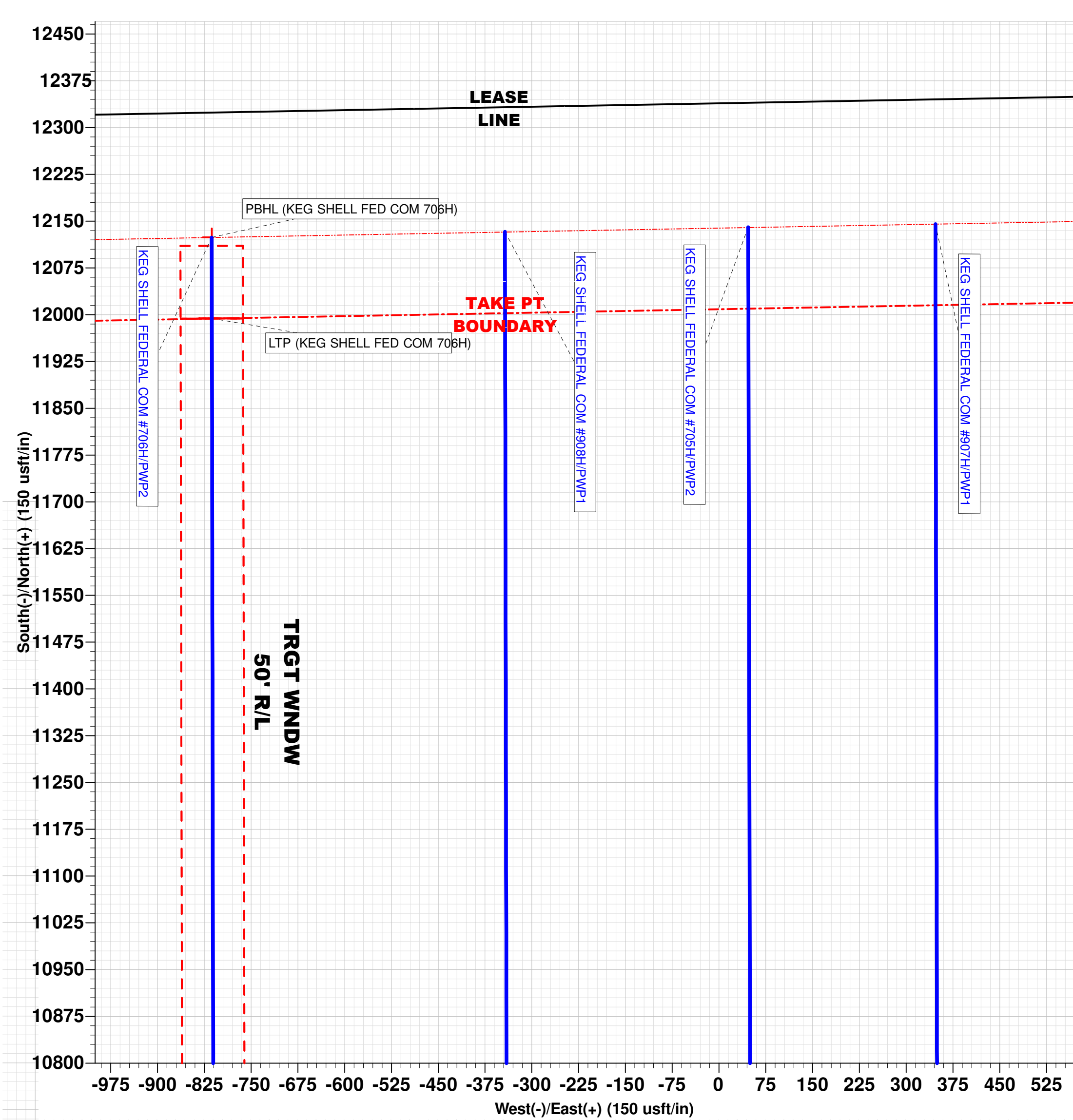
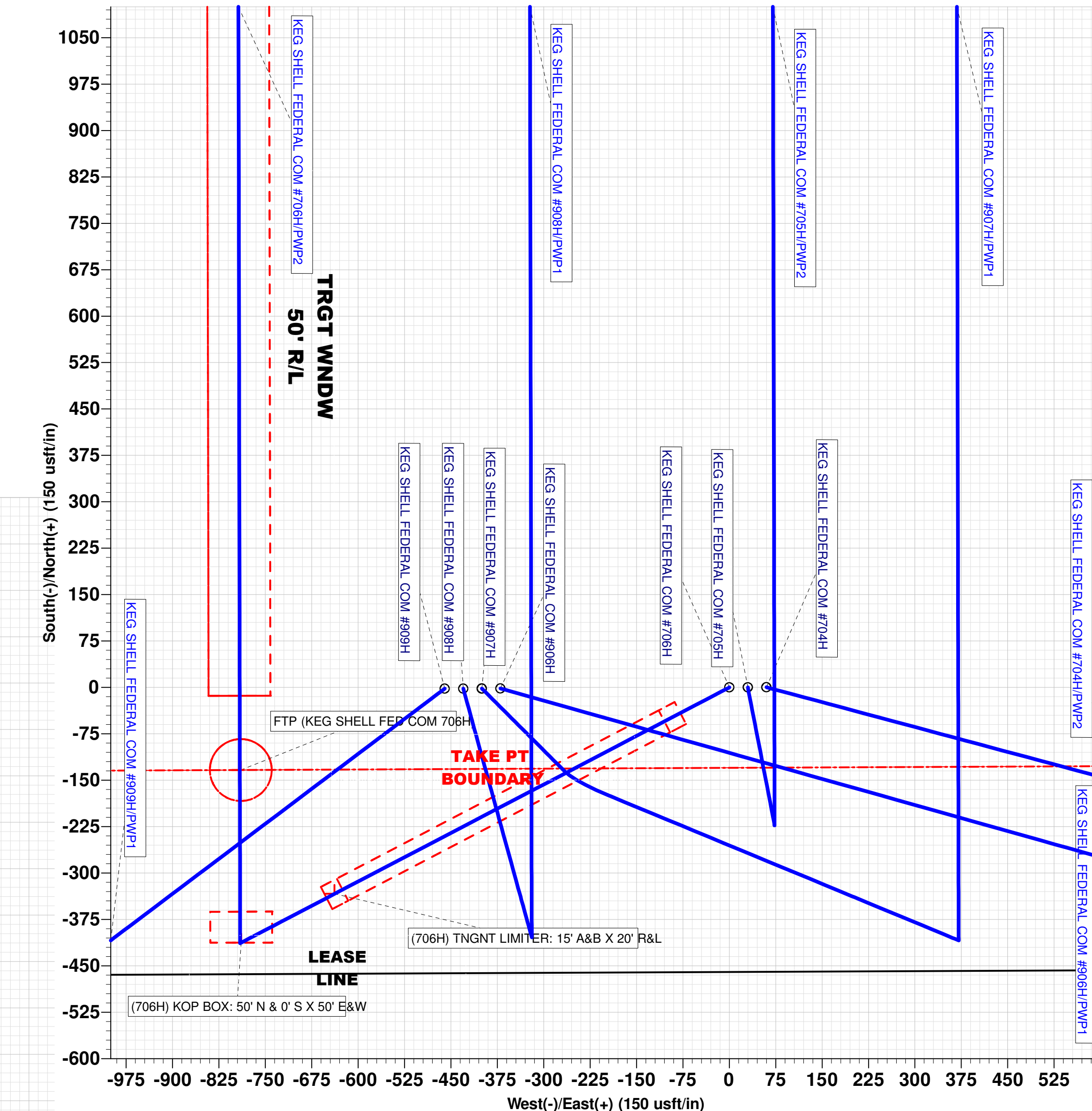
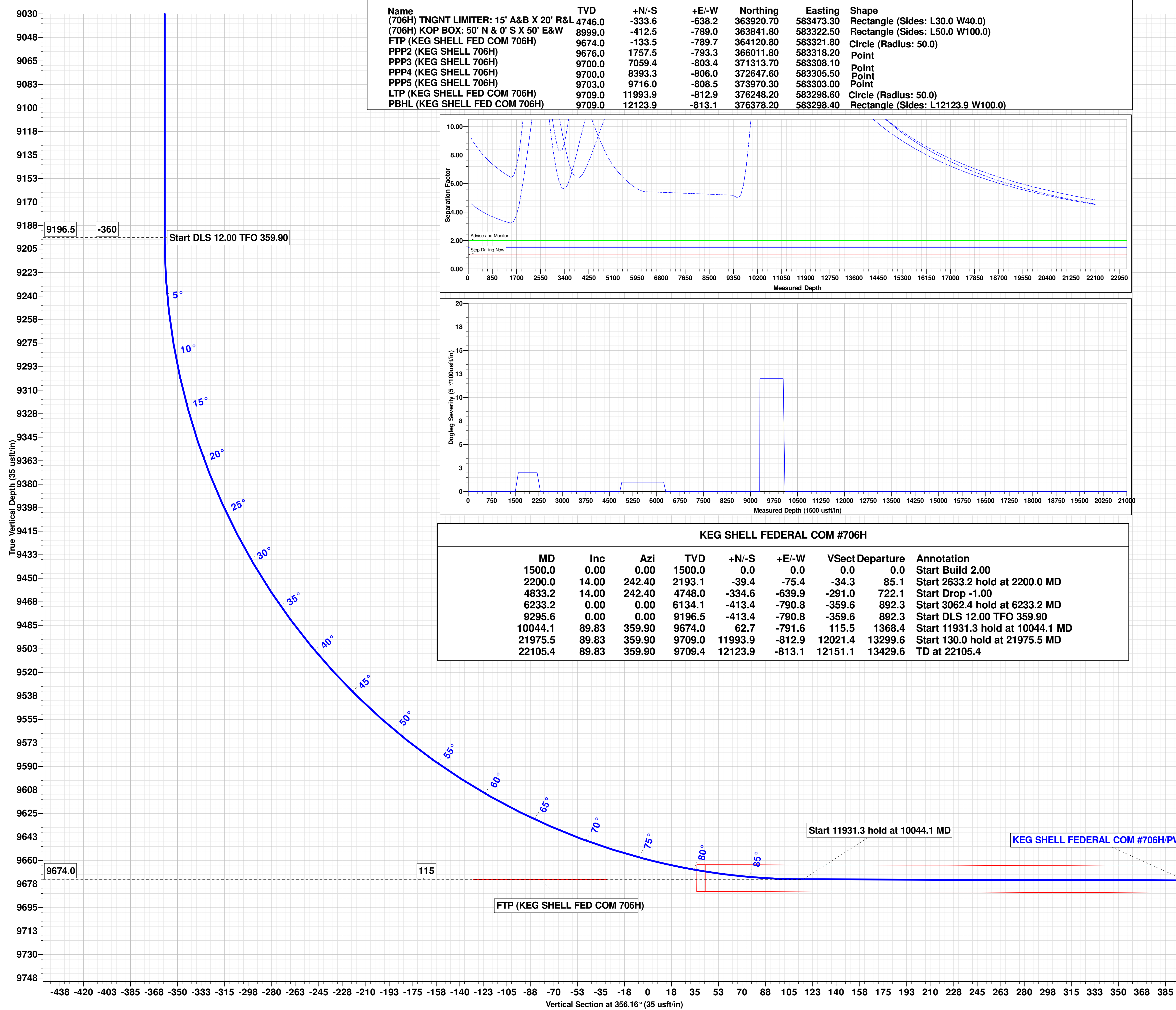
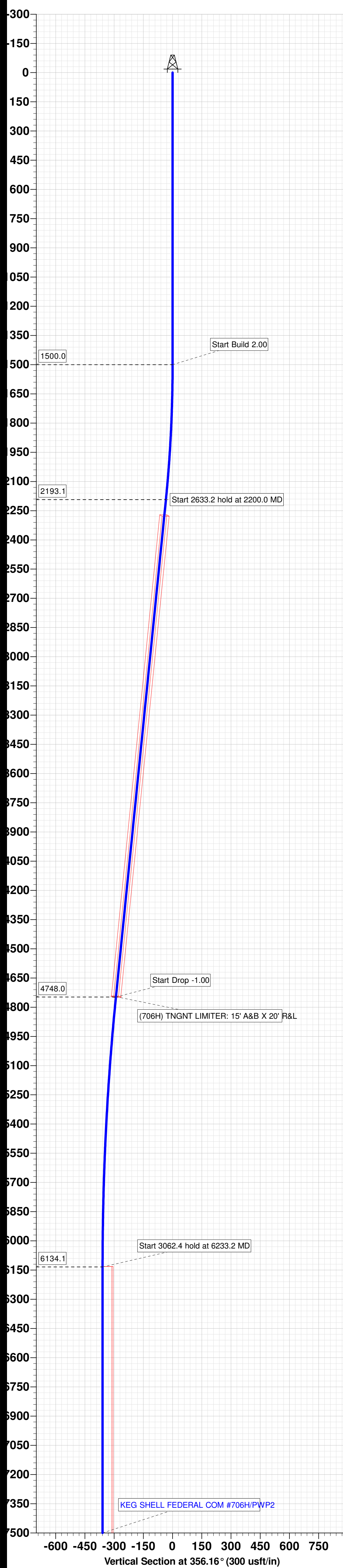
DESIGN TARGET DETAILS

Name	TVD	+N/-S	+E/-W	Northing	Easting	Shape
(706H) TNGNT LIMITER: 15' A&B X 20' R&L	4746.0	-333.6	-638.2	363920.70	583473.30	Rectangle (Sides: L30.0 W40.0)
FTP (KEG SHELL FED COM 706H)	8999.0	-412.5	-789.0	363841.80	583322.50	Rectangle (Sides: L50.0 W100.0)
PPP2 (KEG SHELL 706H)	9674.0	-133.5	-789.7	364120.80	583321.80	Circle (Radius: 50.0)
PPP3 (KEG SHELL 706H)	9676.0	1757.5	-793.3	366011.80	583318.20	Point
PPP4 (KEG SHELL 706H)	9700.0	7059.4	-803.4	371131.70	583308.10	Point
PPP5 (KEG SHELL 706H)	9703.0	8393.3	-806.0	372647.60	583305.50	Point
LTP (KEG SHELL FED COM 706H)	9709.0	9716.0	-808.5	373970.30	583303.00	Point
PBHL (KEG SHELL FED COM 706H)	9709.0	11993.9	-812.9	376248.20	583298.60	Circle (Radius: 50.0)
PBHL (KEG SHELL FED COM 706H)	9709.0	12123.9	-813.1	376378.20	583298.40	Rectangle (Sides: L12123.9 W100.0)



KEG SHELL FEDERAL COM #706H

MD	Inc	Azi	TVD	+N/-S	+E/-W	Vsect	Departure	Annotation
1500.0	0.00	0.00	1500.0	0.0	0.0	0.0	0.0	Start Build 2.00
2200.0	14.00	242.40	2193.1	-39.4	-75.4	-34.3	85.1	Start 2633.2 hold at 2200.0 MD
4833.2	14.00	242.40	4748.0	-334.6	-639.9	-291.0	722.1	Start Drop -1.00
6233.2	0.00	0.00	6134.1	-413.4	-790.8	-359.6	892.3	Start 3062.4 hold at 6233.2 MD
9295.6	0.00	0.00	9196.5	-413.4	-790.8	-359.6	892.3	Start DLS 12.00 TFO 359.90
10044.1	89.83	359.90	9674.0	62.7	-791.6	115.5	1368.4	Start 11931.3 hold at 10044.1 MD
21975.5	89.83	359.90	9709.0	11993.9	-812.9	12021.4	13299.6	Start 130.0 hold at 21975.5 MD
22105.4	89.83	359.90	9709.4	12123.9	-813.1	12151.1	13429.6	TD at 22105.4



Azimuths to Grid North
True North: -0.14°
Magnetic North: 6.42°
Magnetic Field
Strength: 47286.9nT
Dip Angle: 59.52°
Date: 12/1/2023
Model: BGGM2022

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

CONDITIONS

Action 240845

CONDITIONS

Operator: COG OPERATING LLC 600 W Illinois Ave Midland, TX 79701	OGRID: 229137
	Action Number: 240845
	Action Type: [C-103] NOI Change of Plans (C-103A)

CONDITIONS

Created By	Condition	Condition Date
ward.rikala	Original COA's still apply.	11/1/2023