

Form 3160-5 (June 2019)	UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT	FORM APPROVED OMB No. 1004-0137 Expires: October 31, 2021
SUNDRY NOTICES AND REPORTS ON WELLS <i>Do not use this form for proposals to drill or to re-enter an abandoned well. Use Form 3160-3 (APD) for such proposals.</i>		5. Lease Serial No. NMNM106909
		6. If Indian, Allottee or Tribe Name

SUBMIT IN TRIPLICATE - Other instructions on page 2		7. If Unit of CA/Agreement, Name and/or No.
1. Type of Well ☒ Oil Well ☐ Gas Well ☐ Other		8. Well Name and No. KEG SHELL FEDERAL COM/704H
2. Name of Operator COG OPERATING LLC		9. API Well No. 3001548248
3a. Address 600 West Illinois Ave, Midland, TX 79701	3b. Phone No. (include area code) (432) 683-7443	10. Field and Pool or Exploratory Area Purple Sage/Wolfcamp
4. Location of Well (Footage, Sec., T.,R.,M., or Survey Description) SEC 35/T26S/R28E/NMP		11. Country or Parish, State EDDY/NM

12. CHECK THE APPROPRIATE BOX(ES) TO INDICATE NATURE OF NOTICE, REPORT OR OTHER DATA				
TYPE OF SUBMISSION	TYPE OF ACTION			
☒ 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 recompleate 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 perfonned or provide the Bond No. on file with BLM/BIA. Required subsequent reports must be filed within 30 days following completion of the involved operations. If the operation results in a multiple completion or recompletion in a new interval, a Form 3160-4 must be filed once testing has been completed. Final Abandonment Notices must be filed only after all requirements, including reclamation, have been completed and the operator has detennined that the site is ready for final inspection.)

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

Change BHL from 200' FNL & 2204' FWL 23-26S-28E TO: 200' FNL & 2275' 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	Title Regulatory Advisor
Signature	Date 06/05/2023

THE SPACE FOR FEDERAL OR STATE OFFICE USE		
Approved by GAVIN MICKWEE / Ph: (575) 234-5972 / Approved	Title Land Law Examiner	Date 06/05/2023
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 2 / 460 FSL / 1400 FWL / TWSP: 26S / RANGE: 28E / SECTION: 35 / LAT: 32.001283 / LONG: -104.06229 (TVD: 0 feet, MD: 0 feet)

PPP: LOT 2 / 330 FSL / 2310 FWL / TWSP: 26S / RANGE: 28E / SECTION: 35 / LAT: 32.000931 / LONG: -104.059354 (TVD: 9550 feet, MD: 9748 feet)

PPP: SESW / 1 FSL / 2310 FWL / TWSP: 26S / RANGE: 28E / SECTION: 26 / LAT: 32.0006102 / LONG: -104.059354 (TVD: 9591 feet, MD: 12059 feet)

PPP: SESW / 1 FSL / 2161 FWL / TWSP: 26S / RANGE: 28E / SECTION: 23 / LAT: 32.020672 / LONG: -104.059978 (TVD: 9608 feet, MD: 17339 feet)

BHL: NENW / 200 FNL / 2204 FWL / TWSP: 26S / RANGE: 28E / SECTION: 23 / LAT: 32.03469 / LONG: -104.059672 (TVD: 9626 feet, MD: 21977 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 30-015-48248	Pool Code 98220	Pool Name Purple Sage; Wolfcamp (Gas)
Property Code 330693	Property Name KEG SHELL FEDERAL COM	Well Number 704H
OGRID No. 229137	Operator Name COG OPERATING, LLC	Elevation 3029.5'

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	1400	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
C	23	26-S	28-E		200	NORTH	2275	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=376467.3 N
X=626208.4 E
LAT.=32.034693° N
LONG.=104.059443° 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=364311.7 N
X=625356.7 E
LAT.=32.001283° N
LONG.=104.062290° W

LTP
330' FSL & 2275' FWL
Y=376337.3 N
X=626208.7 E
LAT.=32.034335° N
LONG.=104.059443° W

PPP4
2684' FSL & 2282' FWL
Y=374050.6 N
X=626213.1 E
LAT.=32.028049° N
LONG.=104.059448° W

PPP3
2323' FWL
Y=371366.2 N
X=626218.2 E
LAT.=32.020670° N
LONG.=104.059453° W

PPP2
2276' FWL
Y=366066.9 N
X=626228.4 E
LAT.=32.006102° N
LONG.=104.059463° W

PPP1/FTP
330' FSL & 2275' FWL
Y=364185.6 N
X=626232.0 E
LAT.=32.000931° N
LONG.=104.059467° W
GRID AZ. TO FTP
98°11'49"

OPERATOR CERTIFICATION

I hereby certify that the information herein is true and complete to the best of my knowledge and belief, and that this organization either owns a working interest or unleased mineral interest in the land including the proposed bottom hole location or has a right to drill this well at this location pursuant to a contract with an owner of such mineral or working interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division.

Stan Wagner 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

Chad Harcrow 3/16/23
Certificate No. CHAD HARCROW 17777
W.O. # 23-164 DRAWN BY: WN

DELAWARE BASIN WEST

ATLAS PROSPECT (NM-E)

KEG SHELL FED COM PROJECT

KEG SHELL FEDERAL COM #704H

300154824800

OWB

PWP2

Anticollision Report

17 May, 2023

ConocoPhillips

Anticollision Report

Company:	DELAWARE BASIN WEST	Local Co-ordinate Reference:	Well KEG SHELL FEDERAL COM #704H
Project:	ATLAS PROSPECT (NM-E)	TVD Reference:	KB=32 @ 3061.5usft
Reference Site:	KEG SHELL FED COM PROJECT	MD Reference:	KB=32 @ 3061.5usft
Site Error:	3.0 usft	North Reference:	Grid
Reference Well:	KEG SHELL FEDERAL COM #704H	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:	ISCSWA
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.-Initilzd Cont. rev.5	
1,506.0	9,300.0	PWP2 (OWB)	r.5 MWD+IFR1+MS	OWSG MWD + IFR1 + Multi-Station Correction rev.5	
9,300.0	21,963.5	PWP2 (OWB)	r.5 MWD+IFR1+MS	OWSG MWD + IFR1 + Multi-Station Correction rev.5	

Summary						
Site Name	Reference	Offset	Distance		Separation	Warning
	Measured	Measured	Between	Between		
Offset Well - Wellbore - Design	Depth	Depth	Centres	Ellipses	Factor	
	(usft)	(usft)	(usft)	(usft)		
KEG SHELL FED COM PROJECT						
KEG SHELL FEDERAL COM #705H - OWB - PWP2	1,500.0	1,500.4	30.0	20.7	3.226	CC
KEG SHELL FEDERAL COM #705H - OWB - PWP2	1,504.4	1,504.9	30.0	20.7	3.222	ES, SF
KEG SHELL FEDERAL COM #706H - OWB - PWP2	1,466.4	1,467.1	59.9	50.7	6.481	CC
KEG SHELL FEDERAL COM #706H - OWB - PWP2	1,500.0	1,500.0	59.9	50.6	6.442	ES, SF
KEG SHELL FEDERAL COM #906H - OWB - PWP1	8,243.4	8,312.2	129.4	99.7	4.364	CC, ES
KEG SHELL FEDERAL COM #906H - OWB - PWP1	8,700.0	8,763.3	158.3	116.5	3.792	SF
KEG SHELL FEDERAL COM #907H - OWB - PWP1	1,500.0	1,500.1	459.9	450.6	49.410	CC, ES
KEG SHELL FEDERAL COM #907H - OWB - PWP1	21,963.7	22,825.4	933.6	737.2	4.754	SF
KEG SHELL FEDERAL COM #908H - OWB - PWP1	1,500.0	1,500.1	490.0	480.7	52.643	CC, ES
KEG SHELL FEDERAL COM #908H - OWB - PWP1	4,500.0	4,472.1	990.0	964.9	39.482	SF

ConocoPhillips

Anticollision Report

Company:	DELAWARE BASIN WEST	Local Co-ordinate Reference:	Well KEG SHELL FEDERAL COM #704H
Project:	ATLAS PROSPECT (NM-E)	TVD Reference:	KB=32 @ 3061.5usft
Reference Site:	KEG SHELL FED COM PROJECT	MD Reference:	KB=32 @ 3061.5usft
Site Error:	3.0 usft	North Reference:	Grid
Reference Well:	KEG SHELL FEDERAL COM #704H	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 #705H - OWB - PWP2	21,963.7	21,783.2	869.9	680.5	4.593	
KEG SHELL FEDERAL COM #706H - OWB - PWP2	21,963.7	22,105.4				Out of Range @TD
KEG SHELL FEDERAL COM #906H - OWB - PWP1	21,963.7	22,910.9	754.7	558.1	3.838	
KEG SHELL FEDERAL COM #907H - OWB - PWP1	21,963.7	22,825.4	933.6	737.2	4.754	SF
KEG SHELL FEDERAL COM #908H - OWB - PWP1	21,963.7	22,724.0				Out of Range @TD

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:					
Measured	Vertical	Measured	Vertical	Reference	Offset	Highside			Distance				Warning	
Depth (usft)	Depth (usft)	Depth (usft)	Depth (usft)	(usft)	(usft)	Toolface (°)	+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor		
0.0	0.0	0.4	0.0	3.0	3.0	-90.38	-0.2	-30.0	30.0					
100.0	100.0	100.4	100.0	3.0	3.0	-90.38	-0.2	-30.0	30.0	23.5	6.51	4.606		
200.0	200.0	200.4	200.0	3.2	3.2	-90.38	-0.2	-30.0	30.0	23.2	6.75	4.442		
300.0	300.0	300.4	300.0	3.3	3.3	-90.38	-0.2	-30.0	30.0	23.0	6.99	4.294		
400.0	400.0	400.4	400.0	3.4	3.4	-90.38	-0.2	-30.0	30.0	22.8	7.21	4.161		
500.0	500.0	500.4	500.0	3.5	3.5	-90.38	-0.2	-30.0	30.0	22.6	7.43	4.040		
600.0	600.0	600.4	600.0	3.7	3.7	-90.38	-0.2	-30.0	30.0	22.4	7.64	3.929		
700.0	700.0	700.4	700.0	3.8	3.8	-90.38	-0.2	-30.0	30.0	22.2	7.84	3.827		
800.0	800.0	800.4	800.0	3.9	3.9	-90.38	-0.2	-30.0	30.0	22.0	8.04	3.733		
900.0	900.0	900.4	900.0	4.0	4.0	-90.38	-0.2	-30.0	30.0	21.8	8.23	3.645		
1,000.0	1,000.0	1,000.4	1,000.0	4.2	4.2	-90.38	-0.2	-30.0	30.0	21.6	8.42	3.564		
1,100.0	1,100.0	1,100.4	1,100.0	4.3	4.3	-90.38	-0.2	-30.0	30.0	21.4	8.60	3.488		
1,200.0	1,200.0	1,200.4	1,200.0	4.4	4.4	-90.38	-0.2	-30.0	30.0	21.2	8.78	3.416		
1,300.0	1,300.0	1,300.4	1,300.0	4.5	4.5	-90.38	-0.2	-30.0	30.0	21.0	8.96	3.349		
1,400.0	1,400.0	1,400.4	1,400.0	4.6	4.6	-90.38	-0.2	-30.0	30.0	20.9	9.13	3.286		
1,500.0	1,500.0	1,500.4	1,500.0	4.7	4.7	-90.38	-0.2	-30.0	30.0	20.7	9.30	3.226 CC		
1,504.4	1,504.4	1,504.9	1,504.5	4.8	4.8	164.61	-0.2	-30.0	30.0	20.7	9.31	3.222 ES, SF		
1,600.0	1,600.0	1,600.6	1,600.1	4.9	4.9	162.29	-1.9	-29.7	31.4	21.8	9.57	3.281		
1,700.0	1,699.8	1,700.5	1,699.9	5.0	5.2	156.47	-7.1	-28.7	35.8	25.8	9.99	3.585		
1,800.0	1,799.5	1,800.1	1,799.1	5.3	5.5	149.52	-15.6	-27.0	43.7	33.3	10.40	4.202		
1,900.0	1,898.7	1,899.2	1,897.7	5.6	5.6	144.21	-26.5	-24.9	55.3	44.5	10.77	5.136		
2,000.0	1,997.5	1,998.1	1,995.9	5.9	5.9	142.38	-37.5	-22.7	69.9	58.7	11.19	6.248		
2,100.0	2,095.6	2,096.6	2,093.8	6.2	6.1	142.54	-48.5	-20.6	87.3	75.7	11.63	7.506		
2,200.0	2,193.4	2,194.8	2,191.4	6.5	6.4	143.37	-59.4	-18.5	106.0	94.0	12.03	8.811		
2,300.0	2,291.3	2,293.1	2,289.0	6.8	6.7	143.95	-70.3	-16.4	124.8	112.3	12.45	10.021		
2,400.0	2,389.1	2,391.3	2,386.5	7.2	6.9	144.38	-81.2	-14.3	143.6	130.7	12.89	11.138		

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 #704H
Project:	ATLAS PROSPECT (NM-E)	TVD Reference:	KB=32 @ 3061.5usft
Reference Site:	KEG SHELL FED COM PROJECT	MD Reference:	KB=32 @ 3061.5usft
Site Error:	3.0 usft	North Reference:	Grid
Reference Well:	KEG SHELL FEDERAL COM #704H	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 Toolface		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	
2,500.0	2,486.9	2,489.5	2,484.1	7.5	7.2	144.71	-92.1	-12.1	162.3	149.0	13.34	12.171	
2,600.0	2,584.7	2,587.7	2,581.7	7.9	7.6	144.97	-103.0	-10.0	181.1	167.3	13.80	13.124	
2,700.0	2,682.5	2,685.9	2,679.3	8.2	7.9	145.18	-113.9	-7.9	199.9	185.6	14.27	14.006	
2,800.0	2,780.3	2,784.1	2,776.9	8.6	8.2	145.36	-124.9	-5.8	218.7	203.9	14.76	14.820	
2,900.0	2,878.1	2,882.4	2,874.5	9.0	8.5	145.51	-135.8	-3.6	237.5	222.2	15.25	15.573	
3,000.0	2,976.0	2,980.6	2,972.1	9.4	8.9	145.63	-146.7	-1.5	256.3	240.5	15.75	16.271	
3,100.0	3,073.8	3,078.8	3,069.6	9.8	9.2	145.74	-157.6	0.6	275.1	258.8	16.26	16.919	
3,200.0	3,171.6	3,177.0	3,167.2	10.2	9.6	145.84	-168.5	2.7	293.8	277.1	16.77	17.519	
3,300.0	3,269.4	3,275.2	3,264.8	10.6	9.9	145.92	-179.4	4.8	312.6	295.3	17.29	18.078	
3,400.0	3,367.2	3,373.7	3,362.6	11.0	10.2	146.01	-190.3	7.0	331.4	313.6	17.79	18.634	
3,500.0	3,465.0	3,472.6	3,461.1	11.5	10.6	146.30	-200.0	8.8	350.0	331.7	18.32	19.107	
3,600.0	3,562.8	3,571.6	3,559.7	11.9	10.9	146.83	-207.9	10.4	368.5	349.6	18.88	19.513	
3,700.0	3,660.7	3,670.5	3,658.4	12.3	11.3	147.57	-214.3	11.6	386.8	367.3	19.46	19.872	
3,800.0	3,758.5	3,769.3	3,757.1	12.8	11.6	148.48	-218.9	12.5	404.9	384.9	20.06	20.188	
3,900.0	3,856.3	3,867.9	3,855.7	13.2	11.9	149.54	-221.9	13.1	423.1	402.4	20.67	20.466	
4,000.0	3,954.1	3,966.3	3,954.0	13.6	12.1	150.74	-223.1	13.3	441.3	420.0	21.29	20.729	
4,100.0	4,051.9	4,064.2	4,051.9	14.1	12.2	151.99	-223.2	13.3	459.6	437.7	21.95	20.938	
4,200.0	4,149.7	4,162.0	4,149.7	14.5	12.2	153.16	-223.2	13.3	478.2	455.6	22.60	21.158	
4,300.0	4,247.5	4,259.8	4,247.5	15.0	12.3	154.23	-223.2	13.3	496.9	473.7	23.23	21.394	
4,400.0	4,345.4	4,357.6	4,345.4	15.4	12.3	155.23	-223.2	13.3	515.8	491.9	23.86	21.620	
4,500.0	4,443.2	4,455.4	4,443.2	15.9	12.4	156.16	-223.2	13.3	534.8	510.3	24.49	21.836	
4,600.0	4,541.0	4,553.2	4,541.0	16.3	12.4	157.03	-223.2	13.3	554.0	528.8	25.13	22.043	
4,700.0	4,638.8	4,651.1	4,638.8	16.8	12.5	157.84	-223.2	13.3	573.2	547.4	25.77	22.242	
4,800.0	4,736.6	4,748.9	4,736.6	17.2	12.5	158.60	-223.2	13.3	592.6	566.2	26.41	22.433	
4,900.0	4,834.4	4,846.7	4,834.4	17.7	12.6	159.30	-223.2	13.3	612.0	585.0	27.06	22.617	
5,000.0	4,932.3	4,944.5	4,932.3	18.1	12.6	159.97	-223.2	13.3	631.6	603.9	27.71	22.794	
5,100.0	5,030.1	5,042.3	5,030.1	18.6	12.7	160.59	-223.2	13.3	651.2	622.8	28.36	22.965	
5,200.0	5,127.9	5,140.1	5,127.9	19.0	12.7	161.18	-223.2	13.3	670.9	641.9	29.01	23.129	
5,300.0	5,225.7	5,237.9	5,225.7	19.5	12.8	161.74	-223.2	13.3	690.6	661.0	29.66	23.287	
5,400.0	5,323.5	5,335.8	5,323.5	20.0	12.8	162.26	-223.2	13.3	710.5	680.2	30.31	23.440	
5,500.0	5,421.3	5,433.6	5,421.3	20.4	12.9	162.76	-223.2	13.3	730.3	699.4	30.96	23.588	
5,600.0	5,519.2	5,531.4	5,519.2	20.9	12.9	163.25	-223.2	13.3	750.2	718.6	31.59	23.745	
5,700.0	5,617.3	5,629.5	5,617.3	21.3	13.0	163.71	-223.2	13.3	768.7	736.5	32.24	23.848	
5,800.0	5,715.7	5,728.0	5,715.7	21.8	13.0	164.12	-223.2	13.3	785.7	752.8	32.86	23.907	
5,900.0	5,814.4	5,826.7	5,814.4	22.2	13.1	164.47	-223.2	13.3	801.1	767.6	33.48	23.927	
6,000.0	5,913.4	5,925.7	5,913.4	22.6	13.1	164.78	-223.2	13.3	814.8	780.7	34.08	23.908	
6,100.0	6,012.6	6,024.9	6,012.6	23.0	13.2	165.04	-223.2	13.3	826.8	792.1	34.66	23.854	
6,200.0	6,112.0	6,124.3	6,112.0	23.5	13.3	165.25	-223.2	13.3	837.2	801.9	35.22	23.768	
6,300.0	6,211.6	6,223.9	6,211.6	23.8	13.3	165.43	-223.2	13.3	845.9	810.1	35.76	23.653	
6,400.0	6,311.4	6,323.6	6,311.4	24.2	13.4	165.57	-223.2	13.3	852.9	816.6	36.28	23.511	
6,500.0	6,411.2	6,423.5	6,411.2	24.6	13.4	165.67	-223.2	13.3	858.2	821.5	36.76	23.347	
6,600.0	6,511.1	6,523.4	6,511.1	24.9	13.5	165.74	-223.2	13.3	861.9	824.7	37.20	23.167	
6,700.0	6,611.1	6,623.4	6,611.1	25.1	13.5	165.78	-223.2	13.3	863.9	826.3	37.59	22.980	
6,800.0	6,711.1	6,723.4	6,711.1	25.2	13.6	-89.21	-223.2	13.3	864.2	826.5	37.74	22.902	
6,900.0	6,811.1	6,823.4	6,811.1	25.3	13.6	-89.21	-223.2	13.3	864.2	826.4	37.81	22.858	
7,000.0	6,911.1	6,923.4	6,911.1	25.3	13.7	-89.21	-223.2	13.3	864.2	826.4	37.88	22.814	
7,100.0	7,011.1	7,023.4	7,011.1	25.3	13.7	-89.21	-223.2	13.3	864.2	826.3	37.95	22.770	
7,200.0	7,111.1	7,123.4	7,111.1	25.3	13.8	-89.21	-223.2	13.3	864.2	826.2	38.03	22.726	
7,300.0	7,211.1	7,223.4	7,211.1	25.4	13.9	-89.21	-223.2	13.3	864.2	826.1	38.10	22.682	
7,400.0	7,311.1	7,323.4	7,311.1	25.4	13.9	-89.21	-223.2	13.3	864.2	826.1	38.18	22.637	
7,500.0	7,411.1	7,423.4	7,411.1	25.4	14.0	-89.21	-223.2	13.3	864.2	826.0	38.25	22.593	
7,600.0	7,511.1	7,523.4	7,511.1	25.4	14.0	-89.21	-223.2	13.3	864.2	825.9	38.33	22.548	

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 #704H
Project:	ATLAS PROSPECT (NM-E)	TVD Reference:	KB=32 @ 3061.5usft
Reference Site:	KEG SHELL FED COM PROJECT	MD Reference:	KB=32 @ 3061.5usft
Site Error:	3.0 usft	North Reference:	Grid
Reference Well:	KEG SHELL FEDERAL COM #704H	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 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
7,700.0	7,611.1	7,623.4	7,611.1	25.5	14.1	-89.21	-223.2	13.3	864.2	825.8	38.41	22.503	
7,800.0	7,711.1	7,723.4	7,711.1	25.5	14.2	-89.21	-223.2	13.3	864.2	825.8	38.48	22.458	
7,900.0	7,811.1	7,823.4	7,811.1	25.5	14.2	-89.21	-223.2	13.3	864.2	825.7	38.56	22.413	
8,000.0	7,911.1	7,923.4	7,911.1	25.6	14.3	-89.21	-223.2	13.3	864.2	825.6	38.64	22.367	
8,100.0	8,011.1	8,023.4	8,011.1	25.6	14.3	-89.21	-223.2	13.3	864.2	825.5	38.72	22.322	
8,200.0	8,111.1	8,123.4	8,111.1	25.6	14.4	-89.21	-223.2	13.3	864.2	825.4	38.80	22.276	
8,300.0	8,211.1	8,223.4	8,211.1	25.6	14.4	-89.21	-223.2	13.3	864.2	825.4	38.88	22.231	
8,400.0	8,311.1	8,323.4	8,311.1	25.7	14.5	-89.21	-223.2	13.3	864.2	825.3	38.96	22.185	
8,500.0	8,411.1	8,423.4	8,411.1	25.7	14.6	-89.21	-223.2	13.3	864.2	825.2	39.04	22.139	
8,600.0	8,511.1	8,523.4	8,511.1	25.7	14.6	-89.21	-223.2	13.3	864.2	825.1	39.12	22.093	
8,700.0	8,611.1	8,623.4	8,611.1	25.8	14.7	-89.21	-223.2	13.3	864.2	825.0	39.20	22.047	
8,800.0	8,711.1	8,723.4	8,711.1	25.8	14.7	-89.21	-223.2	13.3	864.2	825.0	39.28	22.001	
8,900.0	8,811.1	8,823.4	8,811.1	25.8	14.8	-89.21	-223.2	13.3	864.2	824.9	39.36	21.955	
9,000.0	8,911.1	8,923.4	8,911.1	25.9	14.9	-89.21	-223.2	13.3	864.2	824.8	39.45	21.909	
9,100.0	9,011.1	9,023.4	9,011.1	25.9	14.9	-89.21	-223.2	13.3	864.2	824.7	39.53	21.862	
9,200.0	9,111.1	9,123.4	9,111.1	25.9	15.0	-89.21	-223.2	13.3	864.2	824.6	39.61	21.819	
9,210.0	9,121.1	9,133.4	9,121.1	25.9	15.0	-89.21	-223.2	13.3	864.2	824.6	39.61	21.816	
9,300.0	9,211.1	9,220.7	9,208.1	25.9	15.0	-88.84	-217.6	13.3	864.3	824.7	39.68	21.780	
9,400.0	9,310.4	9,314.3	9,298.6	26.0	15.1	-87.75	-194.3	13.3	864.8	825.1	39.73	21.768	
9,500.0	9,405.4	9,405.5	9,380.9	26.0	15.2	-86.88	-155.1	13.2	865.4	825.7	39.71	21.794	
9,600.0	9,491.8	9,494.9	9,452.8	26.0	15.3	-86.14	-102.2	13.1	866.1	826.5	39.64	21.848	
9,700.0	9,566.1	9,582.9	9,512.7	26.0	15.4	-85.55	-38.0	13.0	866.8	827.2	39.55	21.914	
9,800.0	9,624.8	9,669.8	9,559.4	26.0	15.4	-85.14	35.2	12.8	867.3	827.8	39.47	21.973	
9,900.0	9,665.5	9,756.1	9,591.8	26.1	15.5	-84.91	115.0	12.6	867.6	828.2	39.42	22.008	
10,000.0	9,686.3	9,842.1	9,609.4	26.2	15.6	-84.88	199.1	12.4	867.6	828.2	39.43	22.005	
10,094.8	9,691.8	9,928.3	9,612.7	26.3	15.6	-84.77	285.2	12.3	867.8	828.2	39.53	21.953	
10,100.0	9,689.2	9,933.6	9,612.7	26.3	15.6	-84.94	290.4	12.3	867.5	828.0	39.56	21.932	
10,200.0	9,689.8	10,033.6	9,613.2	26.4	15.6	-84.93	390.4	12.0	867.6	827.7	39.83	21.780	
10,300.0	9,690.3	10,133.6	9,613.6	26.5	15.6	-84.92	490.4	11.8	867.6	827.4	40.17	21.600	
10,400.0	9,690.9	10,233.6	9,614.0	26.7	15.7	-84.92	590.4	11.6	867.6	827.0	40.55	21.395	
10,500.0	9,691.5	10,333.6	9,614.5	26.9	15.7	-84.91	690.4	11.4	867.6	826.6	40.99	21.167	
10,600.0	9,692.0	10,433.6	9,614.9	27.1	15.7	-84.90	790.4	11.2	867.6	826.2	41.48	20.918	
10,700.0	9,692.6	10,533.6	9,615.3	27.3	15.8	-84.89	890.4	11.0	867.7	825.6	42.02	20.651	
10,800.0	9,693.1	10,633.6	9,615.8	27.5	15.9	-84.89	990.4	10.8	867.7	825.1	42.60	20.368	
10,900.0	9,693.7	10,733.5	9,616.2	27.8	16.0	-84.88	1,090.4	10.5	867.7	824.5	43.23	20.071	
11,000.0	9,694.2	10,833.5	9,616.6	28.1	16.2	-84.87	1,190.4	10.3	867.7	823.8	43.90	19.764	
11,100.0	9,694.8	10,933.5	9,617.1	28.4	16.4	-84.86	1,290.4	10.1	867.7	823.1	44.62	19.448	
11,200.0	9,695.3	11,033.5	9,617.5	28.7	16.8	-84.86	1,390.4	9.9	867.7	822.4	45.37	19.126	
11,300.0	9,695.9	11,133.5	9,617.9	29.0	17.3	-84.85	1,490.4	9.7	867.8	821.6	46.16	18.798	
11,400.0	9,696.4	11,233.5	9,618.4	29.3	17.8	-84.84	1,590.4	9.5	867.8	820.8	46.99	18.468	
11,500.0	9,697.0	11,333.5	9,618.8	29.7	18.3	-84.83	1,690.4	9.3	867.8	819.9	47.85	18.137	
11,600.0	9,697.5	11,433.5	9,619.2	30.0	18.9	-84.82	1,790.4	9.0	867.8	819.1	48.74	17.806	
11,700.0	9,698.1	11,533.5	9,619.7	30.4	19.5	-84.82	1,890.4	8.8	867.8	818.2	49.66	17.476	
11,800.0	9,698.6	11,633.5	9,620.1	30.8	20.1	-84.81	1,990.4	8.6	867.8	817.2	50.61	17.148	
11,900.0	9,699.2	11,733.5	9,620.5	31.2	20.7	-84.80	2,090.4	8.4	867.9	816.3	51.59	16.824	
12,000.0	9,699.7	11,833.5	9,621.0	31.6	21.3	-84.79	2,190.4	8.2	867.9	815.3	52.59	16.504	
12,100.0	9,700.3	11,933.5	9,621.4	32.1	22.0	-84.79	2,290.4	8.0	867.9	814.3	53.61	16.188	
12,200.0	9,700.8	12,033.5	9,621.8	32.5	22.6	-84.78	2,390.4	7.8	867.9	813.3	54.66	15.878	
12,300.0	9,701.4	12,133.5	9,622.3	33.0	23.3	-84.77	2,490.4	7.5	867.9	812.2	55.73	15.574	
12,400.0	9,701.9	12,233.5	9,622.7	33.4	23.9	-84.76	2,590.4	7.3	868.0	811.1	56.82	15.276	
12,500.0	9,702.5	12,333.5	9,623.1	33.9	24.6	-84.75	2,690.4	7.1	868.0	810.0	57.93	14.984	
12,600.0	9,703.0	12,433.5	9,623.6	34.4	25.3	-84.75	2,790.4	6.9	868.0	808.9	59.05	14.699	

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 #704H
Project:	ATLAS PROSPECT (NM-E)	TVD Reference:	KB=32 @ 3061.5usft
Reference Site:	KEG SHELL FED COM PROJECT	MD Reference:	KB=32 @ 3061.5usft
Site Error:	3.0 usft	North Reference:	Grid
Reference Well:	KEG SHELL FEDERAL COM #704H	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 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)			
12,700.0	9,703.6	12,533.5	9,624.0	34.9	25.9	-84.74	2,890.4	6.7	868.0	807.8	60.20	14.420	
12,800.0	9,704.1	12,633.5	9,624.4	35.4	26.6	-84.73	2,990.4	6.5	868.0	806.7	61.35	14.148	
12,900.0	9,704.7	12,733.5	9,624.9	35.9	27.3	-84.72	3,090.4	6.3	868.0	805.5	62.53	13.883	
13,000.0	9,705.2	12,833.5	9,625.3	36.4	28.0	-84.72	3,190.4	6.1	868.1	804.4	63.71	13.624	
13,100.0	9,705.8	12,933.5	9,625.7	37.0	28.7	-84.71	3,290.4	5.8	868.1	803.2	64.91	13.373	
13,200.0	9,706.4	13,033.5	9,626.2	37.5	29.4	-84.70	3,390.4	5.6	868.1	802.0	66.13	13.128	
13,300.0	9,706.9	13,133.5	9,626.6	38.1	30.1	-84.69	3,490.4	5.4	868.1	800.8	67.35	12.889	
13,400.0	9,707.5	13,233.5	9,627.1	38.6	30.8	-84.69	3,590.4	5.2	868.1	799.5	68.59	12.657	
13,500.0	9,708.0	13,333.5	9,627.5	39.2	31.5	-84.68	3,690.4	5.0	868.2	798.3	69.84	12.431	
13,600.0	9,708.6	13,433.5	9,627.9	39.7	32.2	-84.67	3,790.4	4.8	868.2	797.1	71.09	12.212	
13,700.0	9,709.1	13,533.5	9,628.4	40.3	32.9	-84.66	3,890.4	4.6	868.2	795.8	72.36	11.998	
13,800.0	9,709.7	13,633.5	9,628.8	40.9	33.6	-84.65	3,990.4	4.3	868.2	794.6	73.64	11.790	
13,900.0	9,710.2	13,733.5	9,629.2	41.5	34.3	-84.65	4,090.4	4.1	868.2	793.3	74.92	11.589	
14,000.0	9,710.8	13,833.5	9,629.7	42.1	35.1	-84.64	4,190.4	3.9	868.2	792.0	76.21	11.392	
14,100.0	9,711.3	13,933.5	9,630.1	42.7	35.8	-84.63	4,290.4	3.7	868.3	790.8	77.51	11.201	
14,200.0	9,711.9	14,033.5	9,630.5	43.3	36.5	-84.62	4,390.4	3.5	868.3	789.5	78.82	11.016	
14,300.0	9,712.4	14,133.5	9,631.0	43.9	37.2	-84.62	4,490.4	3.3	868.3	788.2	80.14	10.835	
14,400.0	9,713.0	14,233.5	9,631.4	44.5	38.0	-84.61	4,590.4	3.1	868.3	786.9	81.46	10.660	
14,500.0	9,713.5	14,333.5	9,631.8	45.1	38.7	-84.60	4,690.4	2.8	868.3	785.6	82.79	10.489	
14,600.0	9,714.1	14,433.5	9,632.3	45.7	39.4	-84.59	4,790.4	2.6	868.4	784.2	84.12	10.323	
14,700.0	9,714.6	14,533.5	9,632.7	46.4	40.1	-84.59	4,890.4	2.4	868.4	782.9	85.46	10.161	
14,800.0	9,715.2	14,633.5	9,633.1	47.0	40.9	-84.58	4,990.4	2.2	868.4	781.6	86.81	10.004	
14,900.0	9,715.7	14,733.5	9,633.6	47.6	41.6	-84.57	5,090.4	2.0	868.4	780.3	88.16	9.851	
15,000.0	9,716.3	14,833.5	9,634.0	48.3	42.3	-84.56	5,190.4	1.8	868.4	778.9	89.51	9.702	
15,100.0	9,716.8	14,933.5	9,634.4	48.9	43.1	-84.55	5,290.4	1.6	868.5	777.6	90.87	9.557	
15,200.0	9,717.4	15,033.5	9,634.9	49.6	43.8	-84.55	5,390.4	1.3	868.5	776.2	92.24	9.416	
15,300.0	9,717.9	15,133.5	9,635.3	50.2	44.5	-84.54	5,490.4	1.1	868.5	774.9	93.60	9.278	
15,400.0	9,718.5	15,233.5	9,635.7	50.9	45.3	-84.53	5,590.4	0.9	868.5	773.5	94.98	9.144	
15,500.0	9,719.0	15,333.5	9,636.2	51.5	46.0	-84.52	5,690.4	0.7	868.5	772.2	96.36	9.014	
15,600.0	9,719.6	15,433.5	9,636.6	52.2	46.7	-84.52	5,790.4	0.5	868.5	770.8	97.74	8.887	
15,700.0	9,720.2	15,533.5	9,637.0	52.8	47.5	-84.51	5,890.4	0.3	868.6	769.4	99.12	8.763	
15,800.0	9,720.7	15,633.5	9,637.5	53.5	48.2	-84.50	5,990.4	0.1	868.6	768.1	100.51	8.642	
15,900.0	9,721.3	15,733.5	9,637.9	54.2	49.0	-84.49	6,090.4	-0.1	868.6	766.7	101.90	8.524	
16,000.0	9,721.8	15,833.5	9,638.3	54.8	49.7	-84.49	6,190.4	-0.4	868.6	765.3	103.30	8.409	
16,100.0	9,722.4	15,933.5	9,638.8	55.5	50.4	-84.48	6,290.4	-0.6	868.6	763.9	104.69	8.297	
16,200.0	9,722.9	16,033.5	9,639.2	56.2	51.2	-84.47	6,390.4	-0.8	868.7	762.6	106.09	8.188	
16,300.0	9,723.5	16,133.5	9,639.6	56.9	51.9	-84.46	6,490.4	-1.0	868.7	761.2	107.50	8.081	
16,400.0	9,724.0	16,233.5	9,640.1	57.5	52.7	-84.46	6,590.4	-1.2	868.7	759.8	108.90	7.977	
16,500.0	9,724.6	16,333.5	9,640.5	58.2	53.4	-84.45	6,690.4	-1.4	868.7	758.4	110.31	7.875	
16,600.0	9,725.1	16,433.5	9,640.9	58.9	54.2	-84.44	6,790.4	-1.6	868.7	757.0	111.73	7.776	
16,700.0	9,725.7	16,533.5	9,641.4	59.6	54.9	-84.43	6,890.4	-1.9	868.8	755.6	113.14	7.679	
16,800.0	9,726.2	16,633.5	9,641.8	60.3	55.7	-84.42	6,990.4	-2.1	868.8	754.2	114.56	7.584	
16,900.0	9,726.8	16,733.5	9,642.2	61.0	56.4	-84.42	7,090.4	-2.3	868.8	752.8	115.97	7.491	
17,000.0	9,727.3	16,833.5	9,642.7	61.7	57.2	-84.41	7,190.4	-2.5	868.8	751.4	117.40	7.401	
17,100.0	9,727.9	16,933.5	9,643.1	62.3	57.9	-84.40	7,290.4	-2.7	868.8	750.0	118.82	7.312	
17,200.0	9,728.4	17,033.5	9,643.5	63.0	58.6	-84.39	7,390.4	-2.9	868.8	748.6	120.24	7.226	
17,300.0	9,729.0	17,133.5	9,644.0	63.7	59.4	-84.39	7,490.4	-3.1	868.9	747.2	121.67	7.141	
17,400.0	9,729.5	17,233.5	9,644.4	64.4	60.1	-84.38	7,590.4	-3.4	868.9	745.8	123.10	7.058	
17,500.0	9,730.1	17,333.5	9,644.9	65.1	60.9	-84.37	7,690.4	-3.6	868.9	744.4	124.53	6.977	
17,600.0	9,730.6	17,433.5	9,645.3	65.8	61.6	-84.36	7,790.4	-3.8	868.9	743.0	125.96	6.898	
17,700.0	9,731.2	17,533.5	9,645.7	66.5	62.4	-84.36	7,890.4	-4.0	868.9	741.5	127.40	6.821	
17,800.0	9,731.7	17,633.5	9,646.2	67.2	63.1	-84.35	7,990.4	-4.2	869.0	740.1	128.83	6.745	

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 #704H
Project:	ATLAS PROSPECT (NM-E)	TVD Reference:	KB=32 @ 3061.5usft
Reference Site:	KEG SHELL FED COM PROJECT	MD Reference:	KB=32 @ 3061.5usft
Site Error:	3.0 usft	North Reference:	Grid
Reference Well:	KEG SHELL FEDERAL COM #704H	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 Toolface		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	
17,900.0	9,732.3	17,733.5	9,646.6	67.9	63.9	-84.34	8,090.4	-4.4	869.0	738.7	130.27	6.671	
18,000.0	9,732.8	17,833.5	9,647.0	68.6	64.6	-84.33	8,190.4	-4.6	869.0	737.3	131.71	6.598	
18,100.0	9,733.4	17,933.5	9,647.5	69.3	65.4	-84.32	8,290.3	-4.8	869.0	735.9	133.15	6.527	
18,200.0	9,733.9	18,033.5	9,647.9	70.1	66.1	-84.32	8,390.3	-5.1	869.0	734.4	134.59	6.457	
18,300.0	9,734.5	18,133.5	9,648.3	70.8	66.9	-84.31	8,490.3	-5.3	869.1	733.0	136.04	6.388	
18,400.0	9,735.1	18,233.5	9,648.8	71.5	67.6	-84.30	8,590.3	-5.5	869.1	731.6	137.48	6.321	
18,500.0	9,735.6	18,333.5	9,649.2	72.2	68.4	-84.29	8,690.3	-5.7	869.1	730.2	138.93	6.256	
18,600.0	9,736.2	18,433.5	9,649.6	72.9	69.1	-84.29	8,790.3	-5.9	869.1	728.7	140.37	6.191	
18,700.0	9,736.7	18,533.5	9,650.1	73.6	69.9	-84.28	8,890.3	-6.1	869.1	727.3	141.82	6.128	
18,800.0	9,737.3	18,633.5	9,650.5	74.3	70.7	-84.27	8,990.3	-6.3	869.1	725.9	143.27	6.066	
18,900.0	9,737.8	18,733.5	9,650.9	75.0	71.4	-84.26	9,090.3	-6.6	869.2	724.4	144.72	6.006	
19,000.0	9,738.4	18,833.5	9,651.4	75.8	72.2	-84.26	9,190.3	-6.8	869.2	723.0	146.17	5.946	
19,100.0	9,738.9	18,933.5	9,651.8	76.5	72.9	-84.25	9,290.3	-7.0	869.2	721.6	147.63	5.888	
19,200.0	9,739.5	19,033.5	9,652.2	77.2	73.7	-84.24	9,390.3	-7.2	869.2	720.1	149.08	5.831	
19,300.0	9,740.0	19,133.5	9,652.7	77.9	74.4	-84.23	9,490.3	-7.4	869.2	718.7	150.54	5.774	
19,400.0	9,740.6	19,233.5	9,653.1	78.6	75.2	-84.22	9,590.3	-7.6	869.3	717.3	151.99	5.719	
19,500.0	9,741.1	19,333.5	9,653.5	79.4	75.9	-84.22	9,690.3	-7.8	869.3	715.8	153.45	5.665	
19,600.0	9,741.7	19,433.5	9,654.0	80.1	76.7	-84.21	9,790.3	-8.1	869.3	714.4	154.91	5.612	
19,700.0	9,742.2	19,533.5	9,654.4	80.8	77.4	-84.20	9,890.3	-8.3	869.3	713.0	156.37	5.560	
19,800.0	9,742.8	19,633.5	9,654.8	81.5	78.2	-84.19	9,990.3	-8.5	869.3	711.5	157.83	5.508	
19,900.0	9,743.3	19,733.5	9,655.3	82.2	78.9	-84.19	10,090.3	-8.7	869.4	710.1	159.29	5.458	
20,000.0	9,743.9	19,833.5	9,655.7	83.0	79.7	-84.18	10,190.3	-8.9	869.4	708.6	160.75	5.408	
20,100.0	9,744.4	19,933.5	9,656.1	83.7	80.5	-84.17	10,290.3	-9.1	869.4	707.2	162.21	5.360	
20,200.0	9,745.0	20,033.5	9,656.6	84.4	81.2	-84.16	10,390.3	-9.3	869.4	705.7	163.67	5.312	
20,300.0	9,745.5	20,133.5	9,657.0	85.1	82.0	-84.16	10,490.3	-9.6	869.4	704.3	165.14	5.265	
20,400.0	9,746.1	20,233.5	9,657.4	85.9	82.7	-84.15	10,590.3	-9.8	869.5	702.9	166.60	5.219	
20,500.0	9,746.6	20,333.5	9,657.9	86.6	83.5	-84.14	10,690.3	-10.0	869.5	701.4	168.07	5.173	
20,600.0	9,747.2	20,433.5	9,658.3	87.3	84.2	-84.13	10,790.3	-10.2	869.5	700.0	169.53	5.129	
20,700.0	9,747.7	20,533.5	9,658.7	88.1	85.0	-84.12	10,890.3	-10.4	869.5	698.5	171.00	5.085	
20,800.0	9,748.3	20,633.5	9,659.2	88.8	85.7	-84.12	10,990.3	-10.6	869.5	697.1	172.47	5.042	
20,900.0	9,748.8	20,733.5	9,659.6	89.5	86.5	-84.11	11,090.3	-10.8	869.6	695.6	173.94	4.999	
21,000.0	9,749.4	20,833.5	9,660.0	90.2	87.3	-84.10	11,190.3	-11.0	869.6	694.2	175.41	4.957	
21,100.0	9,750.0	20,933.5	9,660.5	91.0	88.0	-84.09	11,290.3	-11.3	869.6	692.7	176.88	4.916	
21,200.0	9,750.5	21,033.5	9,660.9	91.7	88.8	-84.09	11,390.3	-11.5	869.6	691.3	178.35	4.876	
21,300.0	9,751.1	21,133.5	9,661.3	92.4	89.5	-84.08	11,490.3	-11.7	869.6	689.8	179.82	4.836	
21,400.0	9,751.6	21,233.5	9,661.8	93.2	90.3	-84.07	11,590.3	-11.9	869.7	688.4	181.29	4.797	
21,500.0	9,752.2	21,333.5	9,662.2	93.9	91.0	-84.06	11,690.3	-12.1	869.7	686.9	182.76	4.759	
21,600.0	9,752.7	21,433.5	9,662.6	94.6	91.8	-84.06	11,790.3	-12.3	869.7	685.5	184.23	4.721	
21,700.0	9,753.3	21,533.5	9,663.1	95.4	92.6	-84.05	11,890.3	-12.5	869.7	684.0	185.71	4.683	
21,800.0	9,753.8	21,633.5	9,663.5	96.1	93.3	-84.04	11,990.3	-12.8	869.7	682.6	187.18	4.647	
21,900.0	9,754.4	21,733.5	9,664.0	96.8	94.1	-84.03	12,090.3	-13.0	869.7	681.1	188.65	4.610	
21,900.5	9,754.4	21,734.1	9,664.0	96.8	94.1	-84.03	12,090.8	-13.0	869.7	681.1	188.66	4.610	
21,963.7	9,754.7	21,783.2	9,664.2	97.3	94.4	-84.03	12,140.0	-13.1	869.9	680.5	189.38	4.593	

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 #704H
Project:	ATLAS PROSPECT (NM-E)	TVD Reference:	KB=32 @ 3061.5usft
Reference Site:	KEG SHELL FED COM PROJECT	MD Reference:	KB=32 @ 3061.5usft
Site Error:	3.0 usft	North Reference:	Grid
Reference Well:	KEG SHELL FEDERAL COM #704H	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 #706H - OWB - PWP2												Offset Site Error:	3.0 usft
Survey Program: 0-r.5 SDI_KPR_WL_NS-CT, 1506-r.5 MWD+IFR1+MS, 9167-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	0.7	0.0	3.0	3.0	-90.29	-0.3	-59.9	59.9				
100.0	100.0	100.7	100.0	3.0	3.0	-90.29	-0.3	-59.9	59.9	53.4	6.51	9.195	
200.0	200.0	200.7	200.0	3.2	3.2	-90.29	-0.3	-59.9	59.9	53.1	6.75	8.868	
300.0	300.0	300.7	300.0	3.3	3.3	-90.29	-0.3	-59.9	59.9	52.9	6.99	8.574	
400.0	400.0	400.7	400.0	3.4	3.4	-90.29	-0.3	-59.9	59.9	52.7	7.21	8.308	
500.0	500.0	500.7	500.0	3.5	3.5	-90.29	-0.3	-59.9	59.9	52.5	7.43	8.067	
600.0	600.0	600.7	600.0	3.7	3.7	-90.29	-0.3	-59.9	59.9	52.3	7.64	7.845	
700.0	700.0	700.7	700.0	3.8	3.8	-90.29	-0.3	-59.9	59.9	52.1	7.84	7.641	
800.0	800.0	800.7	800.0	3.9	3.9	-90.29	-0.3	-59.9	59.9	51.9	8.04	7.453	
900.0	900.0	900.7	900.0	4.0	4.0	-90.29	-0.3	-59.9	59.9	51.7	8.23	7.278	
1,000.0	1,000.0	1,000.7	1,000.0	4.2	4.2	-90.29	-0.3	-59.9	59.9	51.5	8.42	7.115	
1,100.0	1,100.0	1,100.7	1,100.0	4.3	4.3	-90.29	-0.3	-59.9	59.9	51.3	8.60	6.963	
1,200.0	1,200.0	1,200.7	1,200.0	4.4	4.4	-90.29	-0.3	-59.9	59.9	51.1	8.78	6.821	
1,300.0	1,300.0	1,300.7	1,300.0	4.5	4.5	-90.29	-0.3	-59.9	59.9	50.9	8.96	6.687	
1,400.0	1,400.0	1,400.7	1,400.0	4.6	4.6	-90.29	-0.3	-59.9	59.9	50.8	9.13	6.560	
1,466.4	1,466.4	1,467.1	1,466.4	4.7	4.7	-90.29	-0.3	-59.9	59.9	50.7	9.24	6.481 CC	
1,500.0	1,500.0	1,500.0	1,499.3	4.7	4.7	-90.29	-0.3	-59.9	59.9	50.6	9.30	6.442 ES, SF	
1,600.0	1,600.0	1,598.8	1,598.0	4.9	4.9	164.40	-1.1	-61.4	63.1	53.5	9.65	6.545	
1,700.0	1,699.8	1,696.2	1,695.4	5.0	5.1	163.63	-3.4	-65.9	72.7	62.6	10.15	7.166	
1,800.0	1,799.5	1,792.5	1,791.3	5.3	5.3	162.70	-7.2	-73.1	88.7	78.0	10.67	8.313	
1,900.0	1,898.7	1,887.0	1,885.1	5.6	5.6	161.83	-12.4	-83.0	110.9	99.7	11.21	9.898	
2,000.0	1,997.5	1,979.2	1,976.3	5.9	5.9	161.08	-18.8	-95.3	139.2	127.4	11.76	11.841	
2,100.0	2,095.6	2,068.8	2,064.3	6.2	6.2	160.45	-26.4	-109.8	173.4	161.1	12.32	14.079	
2,200.0	2,193.4	2,155.7	2,149.3	6.5	6.5	160.04	-34.9	-126.1	211.7	198.9	12.82	16.516	
2,300.0	2,291.3	2,243.9	2,235.0	6.8	6.8	159.51	-44.7	-144.7	252.4	239.0	13.35	18.907	
2,400.0	2,389.1	2,335.2	2,323.5	7.2	7.1	159.08	-54.9	-164.3	293.3	279.4	13.91	21.084	
2,500.0	2,486.9	2,426.4	2,412.0	7.5	7.4	158.76	-65.1	-183.8	334.3	319.8	14.50	23.047	
2,600.0	2,584.7	2,517.6	2,500.5	7.9	7.7	158.51	-75.3	-203.4	375.3	360.1	15.12	24.817	
2,700.0	2,682.5	2,608.8	2,589.0	8.2	8.0	158.31	-85.5	-223.0	416.3	400.5	15.76	26.411	
2,800.0	2,780.3	2,700.0	2,677.5	8.6	8.4	158.14	-95.8	-242.5	457.2	440.8	16.42	27.849	
2,900.0	2,878.1	2,791.2	2,766.0	9.0	8.7	158.01	-106.0	-262.1	498.2	481.1	17.09	29.146	
3,000.0	2,976.0	2,882.4	2,854.5	9.4	9.1	157.89	-116.2	-281.6	539.2	521.4	17.78	30.320	
3,100.0	3,073.8	2,973.6	2,943.0	9.8	9.4	157.79	-126.4	-301.2	580.2	561.7	18.49	31.384	
3,200.0	3,171.6	3,064.8	3,031.5	10.2	9.8	157.70	-136.7	-320.7	621.2	602.0	19.20	32.350	
3,300.0	3,269.4	3,156.0	3,120.0	10.6	10.2	157.62	-146.9	-340.3	662.2	642.3	19.93	33.229	
3,400.0	3,367.2	3,247.2	3,208.5	11.0	10.6	157.56	-157.1	-359.8	703.2	682.5	20.66	34.032	
3,500.0	3,465.0	3,338.4	3,297.0	11.5	11.0	157.50	-167.3	-379.4	744.2	722.8	21.41	34.765	
3,600.0	3,562.8	3,429.6	3,385.5	11.9	11.4	157.44	-177.5	-398.9	785.2	763.0	22.16	35.438	
3,700.0	3,660.7	3,520.8	3,474.0	12.3	11.8	157.39	-187.8	-418.5	826.2	803.3	22.91	36.056	
3,800.0	3,758.5	3,612.0	3,562.5	12.8	12.2	157.35	-198.0	-438.0	867.2	843.5	23.68	36.625	
3,900.0	3,856.3	3,703.3	3,651.0	13.2	12.6	157.31	-208.2	-457.6	908.2	883.8	24.45	37.150	
4,000.0	3,954.1	3,794.5	3,739.5	13.6	13.0	157.27	-218.4	-477.2	949.2	924.0	25.22	37.635	
4,100.0	4,051.9	3,885.7	3,828.0	14.1	13.4	157.24	-228.7	-496.7	990.2	964.2	26.00	38.085	

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 #704H
Project:	ATLAS PROSPECT (NM-E)	TVD Reference:	KB=32 @ 3061.5usft
Reference Site:	KEG SHELL FED COM PROJECT	MD Reference:	KB=32 @ 3061.5usft
Site Error:	3.0 usft	North Reference:	Grid
Reference Well:	KEG SHELL FEDERAL COM #704H	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:				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	1.1	3.0	3.0	-90.27	-2.0	-430.0	430.0				
100.0	100.0	98.9	100.0	3.0	3.1	-90.27	-2.0	-430.0	430.0	423.5	6.52	65.902	
200.0	200.0	198.9	200.0	3.2	3.2	-90.27	-2.0	-430.0	430.0	423.2	6.76	63.570	
300.0	300.0	298.9	300.0	3.3	3.3	-90.27	-2.0	-430.0	430.0	423.0	7.00	61.468	
400.0	400.0	398.9	400.0	3.4	3.4	-90.27	-2.0	-430.0	430.0	422.8	7.22	59.568	
500.0	500.0	498.9	500.0	3.5	3.6	-90.27	-2.0	-430.0	430.0	422.6	7.43	57.838	
600.0	600.0	598.9	600.0	3.7	3.7	-90.27	-2.0	-430.0	430.0	422.4	7.64	56.254	
700.0	700.0	698.9	700.0	3.8	3.8	-90.27	-2.0	-430.0	430.0	422.2	7.85	54.796	
800.0	800.0	798.9	800.0	3.9	3.9	-90.27	-2.0	-430.0	430.0	422.0	8.05	53.448	
900.0	900.0	898.9	900.0	4.0	4.0	-90.27	-2.0	-430.0	430.0	421.8	8.24	52.197	
1,000.0	1,000.0	998.9	1,000.0	4.2	4.2	-90.27	-2.0	-430.0	430.0	421.6	8.43	51.031	
1,100.0	1,100.0	1,098.9	1,100.0	4.3	4.3	-90.27	-2.0	-430.0	430.0	421.4	8.61	49.942	
1,200.0	1,200.0	1,198.9	1,200.0	4.4	4.4	-90.27	-2.0	-430.0	430.0	421.2	8.79	48.921	
1,300.0	1,300.0	1,298.9	1,300.0	4.5	4.5	-90.27	-2.0	-430.0	430.0	421.0	8.97	47.961	
1,400.0	1,400.0	1,398.9	1,400.0	4.6	4.6	-90.27	-2.0	-430.0	430.0	420.9	9.14	47.057	
1,500.0	1,500.0	1,498.9	1,500.0	4.7	4.8	-90.27	-2.0	-430.0	430.0	420.7	9.31	46.203	
1,600.0	1,600.0	1,598.9	1,600.0	4.9	4.9	164.79	-2.0	-430.0	431.7	422.0	9.66	44.695	
1,700.0	1,699.8	1,698.7	1,699.8	5.0	5.1	164.94	-2.0	-430.0	436.7	426.7	10.08	43.315	
1,800.0	1,799.5	1,798.4	1,799.5	5.3	5.2	165.19	-2.0	-430.0	445.2	434.6	10.52	42.321	
1,900.0	1,898.7	1,897.6	1,898.7	5.6	5.4	165.52	-2.0	-430.0	457.0	446.0	10.97	41.653	
2,000.0	1,997.5	1,996.4	1,997.5	5.9	5.5	165.92	-2.0	-430.0	472.1	460.7	11.44	41.267	
2,100.0	2,095.6	2,094.5	2,095.6	6.2	5.6	166.37	-2.0	-430.0	490.7	478.7	11.93	41.125	
2,200.0	2,193.4	2,192.3	2,193.4	6.5	5.8	166.92	-2.0	-430.0	510.9	498.6	12.36	41.324	
2,300.0	2,291.3	2,290.2	2,291.3	6.8	5.9	167.43	-2.0	-430.0	531.2	518.4	12.81	41.454	
2,400.0	2,389.1	2,388.0	2,389.1	7.2	6.0	167.90	-2.0	-430.0	551.6	538.3	13.28	41.518	
2,500.0	2,486.9	2,485.8	2,486.9	7.5	6.2	168.33	-2.0	-430.0	571.9	558.1	13.77	41.528	
2,600.0	2,584.7	2,604.8	2,605.8	7.9	6.3	168.79	-2.5	-428.2	590.8	576.4	14.38	41.081	
2,700.0	2,682.5	2,729.1	2,729.9	8.2	6.5	169.12	-4.5	-421.2	605.6	590.6	15.02	40.318	
2,800.0	2,780.3	2,854.8	2,855.0	8.6	6.8	169.35	-7.9	-408.9	616.2	600.5	15.68	39.289	
2,900.0	2,878.1	2,981.4	2,980.3	9.0	7.1	169.46	-12.9	-391.1	622.5	606.1	16.37	38.022	
3,000.0	2,976.0	3,108.6	3,105.1	9.4	7.4	169.48	-19.4	-368.0	624.4	607.3	17.08	36.554	
3,100.0	3,073.8	3,228.1	3,221.4	9.8	7.8	169.40	-26.9	-341.5	622.1	604.4	17.80	34.958	
3,200.0	3,171.6	3,328.0	3,318.3	10.2	8.1	169.32	-33.4	-318.3	618.8	600.3	18.49	33.458	
3,300.0	3,269.4	3,427.9	3,415.3	10.6	8.4	169.23	-39.9	-295.0	615.4	596.2	19.21	32.029	
3,400.0	3,367.2	3,527.9	3,512.3	11.0	8.7	169.14	-46.5	-271.7	612.0	592.1	19.95	30.671	
3,500.0	3,465.0	3,627.8	3,609.3	11.5	9.0	169.05	-53.0	-248.4	608.7	587.9	20.71	29.386	
3,600.0	3,562.8	3,727.8	3,706.2	11.9	9.3	168.96	-59.6	-225.2	605.3	583.8	21.49	28.170	
3,700.0	3,660.7	3,827.7	3,803.2	12.3	9.7	168.87	-66.1	-201.9	601.9	579.6	22.28	27.021	
3,800.0	3,758.5	3,927.6	3,900.2	12.8	10.0	168.78	-72.7	-178.6	598.6	575.5	23.08	25.937	
3,900.0	3,856.3	4,027.6	3,997.1	13.2	10.4	168.69	-79.2	-155.3	595.2	571.3	23.89	24.914	
4,000.0	3,954.1	4,127.5	4,094.1	13.6	10.8	168.59	-85.7	-132.1	591.8	567.1	24.71	23.948	
4,100.0	4,051.9	4,227.4	4,191.1	14.1	11.2	168.50	-92.3	-108.8	588.5	562.9	25.54	23.037	
4,200.0	4,149.7	4,327.4	4,288.1	14.5	11.6	168.40	-98.8	-85.5	585.1	558.7	26.38	22.177	
4,300.0	4,247.5	4,427.3	4,385.0	15.0	12.0	168.30	-105.4	-62.2	581.8	554.5	27.23	21.364	
4,400.0	4,345.4	4,527.3	4,482.0	15.4	12.4	168.20	-111.9	-39.0	578.4	550.3	28.08	20.595	
4,500.0	4,443.2	4,627.2	4,579.0	15.9	12.8	168.10	-118.5	-15.7	575.1	546.1	28.94	19.868	
4,600.0	4,541.0	4,727.1	4,675.9	16.3	13.2	168.00	-125.0	7.6	571.7	541.9	29.81	19.180	
4,700.0	4,638.8	4,827.1	4,772.9	16.8	13.7	167.90	-131.5	30.9	568.4	537.7	30.68	18.527	
4,800.0	4,736.6	4,927.0	4,869.9	17.2	14.1	167.80	-138.1	54.1	565.0	533.5	31.55	17.908	
4,900.0	4,834.4	5,027.0	4,966.8	17.7	14.5	167.69	-144.6	77.4	561.7	529.2	32.43	17.321	
5,000.0	4,932.3	5,126.9	5,063.8	18.1	15.0	167.59	-151.2	100.7	558.3	525.0	33.31	16.763	
5,100.0	5,030.1	5,226.8	5,160.8	18.6	15.4	167.48	-157.7	124.0	555.0	520.8	34.19	16.232	

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 #704H
Project:	ATLAS PROSPECT (NM-E)	TVD Reference:	KB=32 @ 3061.5usft
Reference Site:	KEG SHELL FED COM PROJECT	MD Reference:	KB=32 @ 3061.5usft
Site Error:	3.0 usft	North Reference:	Grid
Reference Well:	KEG SHELL FEDERAL COM #704H	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				Rule Assigned:						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		
5,200.0	5,127.9	5,326.8	5,257.8	19.0	15.9	167.37	-164.3	147.2	551.6	516.6	35.08	15.727		
5,300.0	5,225.7	5,426.7	5,354.7	19.5	16.3	167.26	-170.8	170.5	548.3	512.3	35.96	15.245		
5,400.0	5,323.5	5,526.6	5,451.7	20.0	16.8	167.15	-177.3	193.8	545.0	508.1	36.85	14.787		
5,500.0	5,421.3	5,626.6	5,548.7	20.4	17.2	167.04	-183.9	217.1	541.6	503.9	37.75	14.349		
5,600.0	5,519.2	5,726.5	5,645.6	20.9	17.7	166.92	-190.4	240.3	538.2	499.6	38.62	13.935		
5,700.0	5,617.3	5,826.4	5,742.5	21.3	18.1	166.76	-197.0	263.6	533.4	493.9	39.50	13.503		
5,800.0	5,715.7	5,926.2	5,839.3	21.8	18.6	166.54	-203.5	286.8	527.0	486.6	40.37	13.054		
5,900.0	5,814.4	6,025.8	5,936.0	22.2	19.1	166.27	-210.0	310.0	518.9	477.6	41.22	12.587		
6,000.0	5,913.4	6,125.3	6,032.6	22.6	19.5	165.95	-216.5	333.2	509.1	467.0	42.05	12.106		
6,100.0	6,012.6	6,224.6	6,128.9	23.0	20.0	165.55	-223.0	356.3	497.6	454.7	42.86	11.610		
6,200.0	6,112.0	6,323.6	6,225.0	23.5	20.4	165.08	-229.5	379.4	484.5	440.8	43.63	11.103		
6,300.0	6,211.6	6,422.5	6,320.9	23.8	20.9	164.53	-236.0	402.4	469.7	425.3	44.38	10.583		
6,400.0	6,311.4	6,521.0	6,416.5	24.2	21.4	163.87	-242.4	425.4	453.3	408.2	45.09	10.054		
6,500.0	6,411.2	6,619.2	6,511.8	24.6	21.8	163.09	-248.9	448.2	435.3	389.6	45.74	9.517		
6,600.0	6,511.1	6,717.1	6,606.8	24.9	22.3	162.17	-255.3	471.0	415.8	369.5	46.34	8.973		
6,700.0	6,611.1	6,814.6	6,701.4	25.1	22.7	161.08	-261.7	493.7	394.8	347.9	46.85	8.426		
6,800.0	6,711.1	6,911.7	6,795.6	25.2	23.2	-95.20	-268.0	516.4	372.3	325.2	47.12	7.901		
6,900.0	6,811.1	7,008.7	6,889.7	25.3	23.6	-96.61	-274.4	539.0	349.8	302.5	47.29	7.396		
7,000.0	6,911.1	7,105.7	6,983.9	25.3	24.1	-98.21	-280.7	561.6	327.4	280.0	47.40	6.908		
7,100.0	7,011.1	7,202.8	7,078.0	25.3	24.6	-100.04	-287.1	584.2	305.3	257.9	47.42	6.439		
7,200.0	7,111.1	7,299.8	7,172.2	25.3	25.0	-102.15	-293.4	606.8	283.6	236.3	47.33	5.992		
7,300.0	7,211.1	7,396.8	7,266.3	25.4	25.5	-104.60	-299.8	629.3	262.3	215.2	47.10	5.570		
7,400.0	7,311.1	7,493.9	7,360.5	25.4	26.0	-107.47	-306.1	651.9	241.6	194.9	46.67	5.176		
7,500.0	7,411.1	7,590.9	7,454.6	25.4	26.4	-110.86	-312.5	674.5	221.5	175.5	45.97	4.818		
7,600.0	7,511.1	7,687.9	7,548.8	25.4	26.9	-114.90	-318.8	697.1	202.4	157.4	44.93	4.504		
7,700.0	7,611.1	7,785.0	7,642.9	25.5	27.3	-119.72	-325.2	719.7	184.4	141.0	43.42	4.247		
7,800.0	7,711.1	7,882.0	7,737.1	25.5	27.8	-125.50	-331.5	742.3	168.0	126.7	41.34	4.065		
7,900.0	7,811.1	7,979.0	7,831.2	25.5	28.3	-132.39	-337.9	764.9	153.7	115.1	38.60	3.983		
8,000.0	7,911.1	8,076.0	7,925.4	25.6	28.7	-140.49	-344.2	787.5	142.1	106.8	35.32	4.024		
8,100.0	8,011.1	8,173.1	8,019.5	25.6	29.2	-149.74	-350.6	810.1	133.9	101.9	32.04	4.180		
8,200.0	8,111.1	8,270.1	8,113.7	25.6	29.7	-159.82	-356.9	832.7	129.8	99.9	29.89	4.342		
8,243.4	8,154.5	8,312.2	8,154.5	25.6	29.9	-164.30	-359.7	842.5	129.4	99.7	29.65	4.364 CC, ES		
8,300.0	8,211.1	8,367.3	8,208.1	25.6	30.1	-169.97	-363.2	854.9	130.1	100.0	30.08	4.324		
8,400.0	8,311.1	8,465.3	8,303.7	25.7	30.6	-179.20	-369.0	875.6	134.1	101.7	32.38	4.141		
8,500.0	8,411.1	8,564.0	8,400.3	25.7	31.1	172.86	-374.4	894.9	140.8	105.2	35.61	3.954		
8,600.0	8,511.1	8,663.3	8,497.9	25.7	31.5	166.26	-379.4	912.8	149.1	110.3	38.86	3.838		
8,700.0	8,611.1	8,763.3	8,596.5	25.8	32.0	160.89	-384.0	929.1	158.3	116.5	41.73	3.792 SF		
8,800.0	8,711.1	8,863.9	8,695.9	25.8	32.4	156.58	-388.2	943.8	167.5	123.3	44.14	3.794		
8,900.0	8,811.1	8,965.0	8,796.0	25.8	32.8	153.13	-391.8	956.9	176.3	130.2	46.12	3.823		
9,000.0	8,911.1	9,066.5	8,896.9	25.9	33.2	150.40	-395.1	968.3	184.5	136.8	47.72	3.865		
9,100.0	9,011.1	9,168.5	8,998.3	25.9	33.6	148.27	-397.8	978.1	191.7	142.7	49.02	3.911		
9,200.0	9,111.1	9,270.7	9,100.2	25.9	34.0	146.63	-400.1	986.1	197.8	147.7	50.05	3.952		
9,300.0	9,211.1	9,373.3	9,202.5	25.9	34.4	145.42	-401.8	992.4	202.7	151.8	50.87	3.984		
9,400.0	9,310.4	9,475.2	9,304.3	26.0	34.7	145.52	-403.1	997.0	214.7	164.0	50.72	4.234		
9,500.0	9,405.4	9,572.7	9,401.8	26.0	35.0	147.42	-403.9	999.6	242.9	193.7	49.18	4.939		
9,600.0	9,491.8	9,661.9	9,491.0	26.0	35.2	149.69	-404.2	1,000.7	287.8	240.9	46.88	6.139		
9,700.0	9,566.1	9,736.9	9,566.1	26.0	35.2	150.70	-404.2	1,000.8	349.3	304.7	44.61	7.830		
9,800.0	9,624.8	9,795.7	9,624.8	26.0	35.2	148.95	-404.2	1,000.8	425.8	383.0	42.80	9.949		
9,900.0	9,665.5	9,836.4	9,665.5	26.1	35.3	141.50	-404.2	1,000.8	513.8	472.3	41.44	12.399		
10,000.0	9,686.3	9,857.2	9,686.3	26.2	35.3	117.07	-404.2	1,000.8	609.0	568.6	40.44	15.059		
10,100.0	9,689.2	9,860.1	9,689.2	26.3	35.3	91.79	-404.2	1,000.8	707.2	667.5	39.70	17.812		
10,200.0	9,689.8	11,147.2	10,394.0	26.4	35.7	170.09	385.9	999.3	714.9	675.4	39.44	18.127		

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 #704H
Project:	ATLAS PROSPECT (NM-E)	TVD Reference:	KB=32 @ 3061.5usft
Reference Site:	KEG SHELL FED COM PROJECT	MD Reference:	KB=32 @ 3061.5usft
Site Error:	3.0 usft	North Reference:	Grid
Reference Well:	KEG SHELL FEDERAL COM #704H	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
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
10,300.0	9,690.3	11,247.2	10,394.9	26.5	35.8	170.09	485.9	999.1	715.2	675.3	39.89	17.932	
10,400.0	9,690.9	11,347.2	10,395.8	26.7	36.0	170.10	585.9	998.9	715.6	675.2	40.39	17.717	
10,500.0	9,691.5	11,447.2	10,396.7	26.9	36.1	170.10	685.9	998.7	715.9	674.9	40.94	17.484	
10,600.0	9,692.0	11,547.2	10,397.5	27.1	36.3	170.10	785.9	998.5	716.2	674.7	41.55	17.237	
10,700.0	9,692.6	11,647.2	10,398.4	27.3	36.5	170.11	885.9	998.3	716.6	674.4	42.21	16.978	
10,800.0	9,693.1	11,747.2	10,399.3	27.5	36.7	170.11	985.9	998.1	716.9	674.0	42.91	16.708	
10,900.0	9,693.7	11,847.2	10,400.2	27.8	36.9	170.11	1,085.9	997.9	717.2	673.6	43.65	16.430	
11,000.0	9,694.2	11,947.2	10,401.1	28.1	37.1	170.12	1,185.9	997.7	717.6	673.1	44.44	16.147	
11,100.0	9,694.8	12,047.2	10,402.0	28.4	37.4	170.12	1,285.9	997.6	717.9	672.7	45.27	15.859	
11,200.0	9,695.3	12,147.2	10,402.9	28.7	37.6	170.12	1,385.9	997.4	718.3	672.1	46.13	15.570	
11,300.0	9,695.9	12,247.2	10,403.8	29.0	37.9	170.13	1,485.9	997.2	718.6	671.6	47.03	15.279	
11,400.0	9,696.4	12,347.2	10,404.7	29.3	38.2	170.13	1,585.9	997.0	718.9	671.0	47.97	14.989	
11,500.0	9,697.0	12,447.2	10,405.6	29.7	38.5	170.13	1,685.8	996.8	719.3	670.3	48.93	14.700	
11,600.0	9,697.5	12,547.2	10,406.5	30.0	38.8	170.14	1,785.8	996.6	719.6	669.7	49.92	14.414	
11,700.0	9,698.1	12,647.2	10,407.4	30.4	39.1	170.14	1,885.8	996.4	720.0	669.0	50.95	14.132	
11,800.0	9,698.6	12,747.2	10,408.3	30.8	39.4	170.14	1,985.8	996.2	720.3	668.3	51.99	13.853	
11,900.0	9,699.2	12,847.2	10,409.1	31.2	39.7	170.15	2,085.8	996.0	720.6	667.6	53.07	13.580	
12,000.0	9,699.7	12,947.2	10,410.0	31.6	40.1	170.15	2,185.8	995.9	721.0	666.8	54.16	13.311	
12,100.0	9,700.3	13,047.2	10,410.9	32.1	40.4	170.15	2,285.8	995.7	721.3	666.0	55.28	13.048	
12,200.0	9,700.8	13,147.2	10,411.8	32.5	40.8	170.16	2,385.8	995.5	721.6	665.2	56.42	12.791	
12,300.0	9,701.4	13,247.2	10,412.7	33.0	41.2	170.16	2,485.8	995.3	722.0	664.4	57.58	12.540	
12,400.0	9,701.9	13,347.2	10,413.6	33.4	41.6	170.16	2,585.8	995.1	722.3	663.6	58.75	12.295	
12,500.0	9,702.5	13,447.2	10,414.5	33.9	42.0	170.17	2,685.8	994.9	722.7	662.7	59.94	12.056	
12,600.0	9,703.0	13,547.2	10,415.4	34.4	42.4	170.17	2,785.8	994.7	723.0	661.8	61.15	11.823	
12,700.0	9,703.6	13,647.2	10,416.3	34.9	42.8	170.17	2,885.8	994.5	723.3	661.0	62.38	11.597	
12,800.0	9,704.1	13,747.2	10,417.2	35.4	43.2	170.18	2,985.8	994.3	723.7	660.1	63.61	11.376	
12,900.0	9,704.7	13,847.2	10,418.1	35.9	43.7	170.18	3,085.8	994.1	724.0	659.2	64.86	11.162	
13,000.0	9,705.2	13,947.2	10,419.0	36.4	44.1	170.18	3,185.8	994.0	724.4	658.2	66.13	10.954	
13,100.0	9,705.8	14,047.2	10,419.9	37.0	44.6	170.19	3,285.8	993.8	724.7	657.3	67.40	10.752	
13,200.0	9,706.4	14,147.2	10,420.8	37.5	45.0	170.19	3,385.8	993.6	725.0	656.3	68.69	10.555	
13,300.0	9,706.9	14,247.2	10,421.6	38.1	45.5	170.19	3,485.8	993.4	725.4	655.4	69.99	10.364	
13,400.0	9,707.5	14,347.2	10,422.5	38.6	46.0	170.20	3,585.8	993.2	725.7	654.4	71.29	10.179	
13,500.0	9,708.0	14,447.2	10,423.4	39.2	46.4	170.20	3,685.8	993.0	726.0	653.4	72.61	9.999	
13,600.0	9,708.6	14,547.2	10,424.3	39.7	46.9	170.20	3,785.7	992.8	726.4	652.5	73.94	9.824	
13,700.0	9,709.1	14,647.2	10,425.2	40.3	47.4	170.20	3,885.7	992.6	726.7	651.5	75.27	9.655	
13,800.0	9,709.7	14,747.2	10,426.1	40.9	47.9	170.21	3,985.7	992.4	727.1	650.5	76.61	9.490	
13,900.0	9,710.2	14,847.2	10,427.0	41.5	48.4	170.21	4,085.7	992.3	727.4	649.4	77.96	9.330	
14,000.0	9,710.8	14,947.2	10,427.9	42.1	48.9	170.21	4,185.7	992.1	727.7	648.4	79.32	9.175	
14,100.0	9,711.3	15,047.2	10,428.8	42.7	49.5	170.22	4,285.7	991.9	728.1	647.4	80.68	9.024	
14,200.0	9,711.9	15,147.2	10,429.7	43.3	50.0	170.22	4,385.7	991.7	728.4	646.4	82.06	8.877	
14,300.0	9,712.4	15,247.2	10,430.6	43.9	50.5	170.22	4,485.7	991.5	728.8	645.3	83.43	8.735	
14,400.0	9,713.0	15,347.2	10,431.5	44.5	51.1	170.23	4,585.7	991.3	729.1	644.3	84.81	8.596	
14,500.0	9,713.5	15,447.2	10,432.4	45.1	51.6	170.23	4,685.7	991.1	729.4	643.2	86.20	8.462	
14,600.0	9,714.1	15,547.2	10,433.3	45.7	52.2	170.23	4,785.7	990.9	729.8	642.2	87.60	8.331	
14,700.0	9,714.6	15,647.2	10,434.1	46.4	52.7	170.24	4,885.7	990.7	730.1	641.1	88.99	8.204	
14,800.0	9,715.2	15,747.2	10,435.0	47.0	53.3	170.24	4,985.7	990.5	730.5	640.1	90.40	8.080	
14,900.0	9,715.7	15,847.2	10,435.9	47.6	53.8	170.24	5,085.7	990.4	730.8	639.0	91.81	7.960	
15,000.0	9,716.3	15,947.2	10,436.8	48.3	54.4	170.25	5,185.7	990.2	731.1	637.9	93.22	7.843	
15,100.0	9,716.8	16,047.2	10,437.7	48.9	55.0	170.25	5,285.7	990.0	731.5	636.8	94.64	7.729	
15,200.0	9,717.4	16,147.2	10,438.6	49.6	55.6	170.25	5,385.7	989.8	731.8	635.8	96.06	7.619	
15,300.0	9,717.9	16,247.2	10,439.5	50.2	56.2	170.26	5,485.7	989.6	732.1	634.7	97.48	7.511	
15,400.0	9,718.5	16,347.2	10,440.4	50.9	56.7	170.26	5,585.7	989.4	732.5	633.6	98.91	7.406	

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 #704H
Project:	ATLAS PROSPECT (NM-E)	TVD Reference:	KB=32 @ 3061.5usft
Reference Site:	KEG SHELL FED COM PROJECT	MD Reference:	KB=32 @ 3061.5usft
Site Error:	3.0 usft	North Reference:	Grid
Reference Well:	KEG SHELL FEDERAL COM #704H	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
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference	Offset	Highside Toolface (°)	+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning	
15,500.0	9,719.0	16,447.2	10,441.3	51.5	57.3	170.26	5,685.7	989.2	732.8	632.5	100.34	7.303		
15,600.0	9,719.6	16,547.2	10,442.2	52.2	57.9	170.27	5,785.7	989.0	733.2	631.4	101.78	7.204		
15,700.0	9,720.2	16,647.2	10,443.1	52.8	58.5	170.27	5,885.6	988.8	733.5	630.3	103.21	7.107		
15,800.0	9,720.7	16,747.2	10,444.0	53.5	59.1	170.27	5,985.6	988.7	733.8	629.2	104.66	7.012		
15,900.0	9,721.3	16,847.2	10,444.9	54.2	59.8	170.28	6,085.6	988.5	734.2	628.1	106.10	6.920		
16,000.0	9,721.8	16,947.2	10,445.7	54.8	60.4	170.28	6,185.6	988.3	734.5	627.0	107.55	6.830		
16,100.0	9,722.4	17,047.2	10,446.6	55.5	61.0	170.28	6,285.6	988.1	734.9	625.9	109.00	6.742		
16,200.0	9,722.9	17,147.2	10,447.5	56.2	61.6	170.29	6,385.6	987.9	735.2	624.7	110.45	6.656		
16,300.0	9,723.5	17,247.2	10,448.4	56.9	62.2	170.29	6,485.6	987.7	735.5	623.6	111.91	6.573		
16,400.0	9,724.0	17,347.2	10,449.3	57.5	62.8	170.29	6,585.6	987.5	735.9	622.5	113.36	6.491		
16,500.0	9,724.6	17,447.2	10,450.2	58.2	63.5	170.30	6,685.6	987.3	736.2	621.4	114.82	6.412		
16,600.0	9,725.1	17,547.2	10,451.1	58.9	64.1	170.30	6,785.6	987.1	736.5	620.3	116.29	6.334		
16,700.0	9,725.7	17,647.2	10,452.0	59.6	64.7	170.30	6,885.6	986.9	736.9	619.1	117.75	6.258		
16,800.0	9,726.2	17,747.2	10,452.9	60.3	65.4	170.30	6,985.6	986.8	737.2	618.0	119.22	6.184		
16,900.0	9,726.8	17,847.2	10,453.8	61.0	66.0	170.31	7,085.6	986.6	737.6	616.9	120.69	6.111		
17,000.0	9,727.3	17,947.2	10,454.7	61.7	66.7	170.31	7,185.6	986.4	737.9	615.7	122.16	6.041		
17,100.0	9,727.9	18,047.2	10,455.6	62.3	67.3	170.31	7,285.6	986.2	738.2	614.6	123.63	5.971		
17,200.0	9,728.4	18,147.2	10,456.5	63.0	67.9	170.32	7,385.6	986.0	738.6	613.5	125.10	5.904		
17,300.0	9,729.0	18,247.2	10,457.4	63.7	68.6	170.32	7,485.6	985.8	738.9	612.3	126.58	5.838		
17,400.0	9,729.5	18,347.2	10,458.2	64.4	69.2	170.32	7,585.6	985.6	739.3	611.2	128.06	5.773		
17,500.0	9,730.1	18,447.2	10,459.1	65.1	69.9	170.33	7,685.6	985.4	739.6	610.1	129.54	5.710		
17,600.0	9,730.6	18,547.2	10,460.0	65.8	70.6	170.33	7,785.6	985.2	739.9	608.9	131.02	5.648		
17,700.0	9,731.2	18,647.2	10,460.9	66.5	71.2	170.33	7,885.6	985.0	740.3	607.8	132.50	5.587		
17,800.0	9,731.7	18,747.2	10,461.8	67.2	71.9	170.34	7,985.5	984.9	740.6	606.6	133.98	5.528		
17,900.0	9,732.3	18,847.2	10,462.7	67.9	72.5	170.34	8,085.5	984.7	741.0	605.5	135.47	5.470		
18,000.0	9,732.8	18,947.2	10,463.6	68.6	73.2	170.34	8,185.5	984.5	741.3	604.3	136.95	5.413		
18,100.0	9,733.4	19,047.2	10,464.5	69.3	73.9	170.35	8,285.5	984.3	741.6	603.2	138.44	5.357		
18,200.0	9,733.9	19,147.2	10,465.4	70.1	74.5	170.35	8,385.5	984.1	742.0	602.0	139.93	5.302		
18,300.0	9,734.5	19,247.2	10,466.3	70.8	75.2	170.35	8,485.5	983.9	742.3	600.9	141.42	5.249		
18,400.0	9,735.1	19,347.2	10,467.2	71.5	75.9	170.35	8,585.5	983.7	742.6	599.7	142.91	5.197		
18,500.0	9,735.6	19,447.2	10,468.1	72.2	76.6	170.36	8,685.5	983.5	743.0	598.6	144.41	5.145		
18,600.0	9,736.2	19,547.2	10,469.0	72.9	77.2	170.36	8,785.5	983.3	743.3	597.4	145.90	5.095		
18,700.0	9,736.7	19,647.1	10,469.8	73.6	77.9	170.36	8,885.5	983.2	743.7	596.3	147.39	5.045		
18,800.0	9,737.3	19,747.1	10,470.7	74.3	78.6	170.37	8,985.5	983.0	744.0	595.1	148.89	4.997		
18,900.0	9,737.8	19,847.1	10,471.6	75.0	79.3	170.37	9,085.5	982.8	744.3	594.0	150.39	4.949		
19,000.0	9,738.4	19,947.1	10,472.5	75.8	79.9	170.37	9,185.5	982.6	744.7	592.8	151.89	4.903		
19,100.0	9,738.9	20,047.1	10,473.4	76.5	80.6	170.38	9,285.5	982.4	745.0	591.6	153.38	4.857		
19,200.0	9,739.5	20,147.1	10,474.3	77.2	81.3	170.38	9,385.5	982.2	745.4	590.5	154.88	4.812		
19,300.0	9,740.0	20,247.1	10,475.2	77.9	82.0	170.38	9,485.5	982.0	745.7	589.3	156.39	4.768		
19,400.0	9,740.6	20,347.1	10,476.1	78.6	82.7	170.39	9,585.5	981.8	746.0	588.1	157.89	4.725		
19,500.0	9,741.1	20,447.1	10,477.0	79.4	83.4	170.39	9,685.5	981.6	746.4	587.0	159.39	4.683		
19,600.0	9,741.7	20,547.1	10,477.9	80.1	84.1	170.39	9,785.5	981.4	746.7	585.8	160.89	4.641		
19,700.0	9,742.2	20,647.1	10,478.8	80.8	84.8	170.40	9,885.5	981.3	747.1	584.7	162.40	4.600		
19,800.0	9,742.8	20,747.1	10,479.7	81.5	85.4	170.40	9,985.5	981.1	747.4	583.5	163.90	4.560		
19,900.0	9,743.3	20,847.1	10,480.6	82.2	86.1	170.40	10,085.4	980.9	747.7	582.3	165.41	4.521		
20,000.0	9,743.9	20,947.1	10,481.5	83.0	86.8	170.40	10,185.4	980.7	748.1	581.2	166.91	4.482		
20,100.0	9,744.4	21,047.1	10,482.3	83.7	87.5	170.41	10,285.4	980.5	748.4	580.0	168.42	4.444		
20,200.0	9,745.0	21,147.1	10,483.2	84.4	88.2	170.41	10,385.4	980.3	748.7	578.8	169.93	4.406		
20,300.0	9,745.5	21,247.1	10,484.1	85.1	88.9	170.41	10,485.4	980.1	749.1	577.6	171.44	4.369		
20,400.0	9,746.1	21,347.1	10,485.0	85.9	89.6	170.42	10,585.4	979.9	749.4	576.5	172.95	4.333		
20,500.0	9,746.6	21,447.1	10,485.9	86.6	90.3	170.42	10,685.4	979.7	749.8	575.3	174.46	4.298		
20,600.0	9,747.2	21,547.1	10,486.8	87.3	91.0	170.42	10,785.4	979.6	750.1	574.1	175.97	4.263		

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 #704H
Project:	ATLAS PROSPECT (NM-E)	TVD Reference:	KB=32 @ 3061.5usft
Reference Site:	KEG SHELL FED COM PROJECT	MD Reference:	KB=32 @ 3061.5usft
Site Error:	3.0 usft	North Reference:	Grid
Reference Well:	KEG SHELL FEDERAL COM #704H	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
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
20,700.0	9,747.7	21,647.1	10,487.7	88.1	91.7	170.43	10,885.4	979.4	750.4	573.0	177.48	4.228	
20,800.0	9,748.3	21,747.1	10,488.6	88.8	92.4	170.43	10,985.4	979.2	750.8	571.8	178.99	4.194	
20,900.0	9,748.8	21,847.1	10,489.5	89.5	93.1	170.43	11,085.4	979.0	751.1	570.6	180.50	4.161	
21,000.0	9,749.4	21,947.1	10,490.4	90.2	93.8	170.44	11,185.4	978.8	751.5	569.4	182.02	4.128	
21,100.0	9,750.0	22,047.1	10,491.3	91.0	94.6	170.44	11,285.4	978.6	751.8	568.3	183.53	4.096	
21,200.0	9,750.5	22,147.1	10,492.2	91.7	95.3	170.44	11,385.4	978.4	752.1	567.1	185.05	4.065	
21,300.0	9,751.1	22,247.1	10,493.1	92.4	96.0	170.44	11,485.4	978.2	752.5	565.9	186.56	4.033	
21,400.0	9,751.6	22,347.1	10,494.0	93.2	96.7	170.45	11,585.4	978.0	752.8	564.7	188.08	4.003	
21,500.0	9,752.2	22,447.1	10,494.8	93.9	97.4	170.45	11,685.4	977.8	753.2	563.6	189.59	3.973	
21,600.0	9,752.7	22,547.1	10,495.7	94.6	98.1	170.45	11,785.4	977.7	753.5	562.4	191.11	3.943	
21,700.0	9,753.3	22,647.1	10,496.6	95.4	98.8	170.46	11,885.4	977.5	753.8	561.2	192.62	3.913	
21,800.0	9,753.8	22,747.1	10,497.5	96.1	99.5	170.46	11,985.4	977.3	754.2	560.0	194.14	3.885	
21,900.0	9,754.4	22,847.1	10,498.4	96.8	100.2	170.46	12,085.4	977.1	754.5	558.9	195.66	3.856	
21,963.7	9,754.7	22,910.9	10,499.0	97.3	100.7	170.46	12,149.1	977.0	754.7	558.1	196.62	3.838	

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 #704H
Project:	ATLAS PROSPECT (NM-E)	TVD Reference:	KB=32 @ 3061.5usft
Reference Site:	KEG SHELL FED COM PROJECT	MD Reference:	KB=32 @ 3061.5usft
Site Error:	3.0 usft	North Reference:	Grid
Reference Well:	KEG SHELL FEDERAL COM #704H	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	0.1	0.0	3.0	3.0	-90.26	-2.1	-459.9	459.9				
100.0	100.0	100.1	100.0	3.0	3.1	-90.26	-2.1	-459.9	459.9	453.4	6.53	70.470	
200.0	200.0	200.1	200.0	3.2	3.2	-90.26	-2.1	-459.9	459.9	453.1	6.77	67.972	
300.0	300.0	300.1	300.0	3.3	3.3	-90.26	-2.1	-459.9	459.9	452.9	7.00	65.728	
400.0	400.0	400.1	400.0	3.4	3.4	-90.26	-2.1	-459.9	459.9	452.7	7.22	63.698	
500.0	500.0	500.1	500.0	3.5	3.6	-90.26	-2.1	-459.9	459.9	452.5	7.44	61.849	
600.0	600.0	600.1	600.0	3.7	3.7	-90.26	-2.1	-459.9	459.9	452.3	7.65	60.155	
700.0	700.0	700.1	700.0	3.8	3.8	-90.26	-2.1	-459.9	459.9	452.1	7.85	58.597	
800.0	800.0	800.1	800.0	3.9	3.9	-90.26	-2.1	-459.9	459.9	451.9	8.05	57.156	
900.0	900.0	900.1	900.0	4.0	4.0	-90.26	-2.1	-459.9	459.9	451.7	8.24	55.818	
1,000.0	1,000.0	1,000.1	1,000.0	4.2	4.2	-90.26	-2.1	-459.9	459.9	451.5	8.43	54.572	
1,100.0	1,100.0	1,100.1	1,100.0	4.3	4.3	-90.26	-2.1	-459.9	459.9	451.3	8.61	53.408	
1,200.0	1,200.0	1,200.1	1,200.0	4.4	4.4	-90.26	-2.1	-459.9	459.9	451.1	8.79	52.316	
1,300.0	1,300.0	1,300.1	1,300.0	4.5	4.5	-90.26	-2.1	-459.9	459.9	450.9	8.97	51.290	
1,400.0	1,400.0	1,400.1	1,400.0	4.6	4.6	-90.26	-2.1	-459.9	459.9	450.8	9.14	50.323	
1,500.0	1,500.0	1,500.1	1,500.0	4.7	4.8	-90.26	-2.1	-459.9	459.9	450.6	9.31	49.410 CC, ES	
1,600.0	1,600.0	1,600.1	1,600.0	4.9	4.9	164.79	-2.1	-459.9	461.6	451.9	9.66	47.780	
1,700.0	1,699.8	1,699.9	1,699.8	5.0	5.1	164.93	-2.1	-459.9	466.6	456.6	10.08	46.272	
1,800.0	1,799.5	1,799.6	1,799.5	5.3	5.2	165.16	-2.1	-459.9	475.1	464.5	10.52	45.156	
1,900.0	1,898.7	1,898.8	1,898.7	5.6	5.4	165.47	-2.1	-459.9	486.9	475.9	10.97	44.373	
2,000.0	1,997.5	1,997.6	1,997.5	5.9	5.5	165.84	-2.1	-459.9	502.0	490.6	11.44	43.875	
2,100.0	2,095.6	2,110.2	2,110.1	6.2	5.7	166.18	-3.6	-458.4	519.2	507.2	12.00	43.285	
2,200.0	2,193.4	2,224.1	2,223.8	6.5	5.9	166.30	-8.3	-453.7	535.3	522.8	12.46	42.944	
2,300.0	2,291.3	2,326.6	2,325.9	6.8	6.0	166.19	-14.5	-447.5	549.3	536.5	12.88	42.652	
2,400.0	2,389.1	2,425.7	2,424.6	7.2	6.2	166.08	-20.6	-441.4	563.3	550.0	13.37	42.127	
2,500.0	2,486.9	2,524.7	2,523.2	7.5	6.4	165.98	-26.7	-435.3	577.3	563.4	13.89	41.562	
2,600.0	2,584.7	2,623.7	2,621.8	7.9	6.6	165.88	-32.8	-429.2	591.3	576.9	14.43	40.974	
2,700.0	2,682.5	2,722.7	2,720.5	8.2	6.8	165.79	-38.9	-423.1	605.3	590.3	14.99	40.374	
2,800.0	2,780.3	2,821.7	2,819.1	8.6	7.1	165.70	-45.0	-417.0	619.3	603.7	15.57	39.773	
2,900.0	2,878.1	2,920.7	2,917.7	9.0	7.4	165.62	-51.1	-410.9	633.3	617.1	16.16	39.177	
3,000.0	2,976.0	3,019.7	3,016.4	9.4	7.6	165.54	-57.2	-404.8	647.3	630.5	16.77	38.591	
3,100.0	3,073.8	3,118.7	3,115.0	9.8	7.9	165.46	-63.3	-398.7	661.3	643.9	17.39	38.019	
3,200.0	3,171.6	3,217.7	3,213.6	10.2	8.2	165.39	-69.4	-392.6	675.3	657.2	18.02	37.465	
3,300.0	3,269.4	3,316.8	3,312.3	10.6	8.5	165.32	-75.6	-386.4	689.3	670.6	18.66	36.928	
3,400.0	3,367.2	3,415.8	3,410.9	11.0	8.8	165.25	-81.7	-380.3	703.3	684.0	19.31	36.411	
3,500.0	3,465.0	3,514.8	3,509.6	11.5	9.1	165.18	-87.8	-374.2	717.3	697.3	19.97	35.914	
3,600.0	3,562.8	3,613.8	3,608.2	11.9	9.4	165.12	-93.9	-368.1	731.3	710.6	20.64	35.436	
3,700.0	3,660.7	3,712.8	3,706.8	12.3	9.7	165.06	-100.0	-362.0	745.3	724.0	21.31	34.978	
3,800.0	3,758.5	3,811.8	3,805.5	12.8	10.0	165.00	-106.1	-355.9	759.3	737.3	21.98	34.539	
3,900.0	3,856.3	3,910.8	3,904.1	13.2	10.4	164.94	-112.2	-349.8	773.3	750.6	22.66	34.119	
4,000.0	3,954.1	4,009.8	4,002.7	13.6	10.7	164.89	-118.3	-343.7	787.3	763.9	23.35	33.716	
4,100.0	4,051.9	4,108.9	4,101.4	14.1	11.0	164.84	-124.4	-337.6	801.3	777.2	24.04	33.331	
4,200.0	4,149.7	4,207.9	4,200.0	14.5	11.4	164.79	-130.5	-331.5	815.3	790.6	24.73	32.961	
4,300.0	4,247.5	4,306.9	4,298.6	15.0	11.7	164.74	-136.6	-325.4	829.3	803.9	25.44	32.599	
4,400.0	4,345.4	4,445.3	4,436.3	15.4	12.3	164.63	-145.8	-313.7	841.0	814.7	26.31	31.961	
4,500.0	4,443.2	4,585.5	4,574.8	15.9	12.8	164.42	-156.4	-295.2	848.0	820.8	27.21	31.169	
4,600.0	4,541.0	4,726.2	4,712.7	16.3	13.4	164.12	-168.4	-269.9	850.2	822.1	28.09	30.269	
4,700.0	4,638.8	4,850.7	4,833.5	16.8	14.0	163.78	-180.1	-242.3	848.0	819.0	28.92	29.324	
4,800.0	4,736.6	4,950.6	4,930.2	17.2	14.4	163.49	-189.7	-219.2	844.9	815.2	29.72	28.433	
4,900.0	4,834.4	5,050.5	5,026.9	17.7	14.8	163.20	-199.3	-196.1	841.8	811.3	30.51	27.594	
5,000.0	4,932.3	5,150.3	5,123.6	18.1	15.2	162.90	-208.8	-173.0	838.8	807.5	31.30	26.797	
5,100.0	5,030.1	5,250.2	5,220.3	18.6	15.7	162.60	-218.4	-149.9	835.8	803.7	32.10	26.039	

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 #704H
Project:	ATLAS PROSPECT (NM-E)	TVD Reference:	KB=32 @ 3061.5usft
Reference Site:	KEG SHELL FED COM PROJECT	MD Reference:	KB=32 @ 3061.5usft
Site Error:	3.0 usft	North Reference:	Grid
Reference Well:	KEG SHELL FEDERAL COM #704H	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:		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	
5,200.0	5,127.9	5,350.0	5,316.9	19.0	16.1	162.30	-228.0	-126.8	832.9	800.0	32.90	25.318	
5,300.0	5,225.7	5,449.9	5,413.6	19.5	16.5	162.00	-237.6	-103.7	829.9	796.2	33.69	24.632	
5,400.0	5,323.5	5,549.8	5,510.3	20.0	17.0	161.70	-247.1	-80.6	827.0	792.5	34.49	23.978	
5,500.0	5,421.3	5,649.6	5,607.0	20.4	17.4	161.39	-256.7	-57.5	824.1	788.8	35.28	23.355	
5,600.0	5,519.2	5,749.5	5,703.6	20.9	17.8	161.08	-266.3	-34.4	821.1	785.0	36.06	22.771	
5,700.0	5,617.3	5,849.3	5,800.3	21.3	18.3	160.72	-275.8	-11.3	816.8	780.0	36.84	22.175	
5,800.0	5,715.7	5,948.9	5,896.8	21.8	18.7	160.31	-285.4	11.7	811.0	773.4	37.59	21.574	
5,900.0	5,814.4	6,048.5	5,993.1	22.2	19.2	159.85	-294.9	34.7	803.5	765.2	38.32	20.969	
6,000.0	5,913.4	6,147.8	6,089.3	22.6	19.6	159.33	-304.4	57.7	794.5	755.5	39.02	20.361	
6,100.0	6,012.6	6,247.0	6,185.3	23.0	20.1	158.74	-313.9	80.7	783.9	744.2	39.69	19.752	
6,200.0	6,112.0	6,345.9	6,281.1	23.5	20.5	158.09	-323.4	103.5	771.8	731.5	40.32	19.143	
6,300.0	6,211.6	6,444.6	6,376.6	23.8	21.0	157.36	-332.9	126.4	758.2	717.3	40.90	18.536	
6,400.0	6,311.4	6,539.9	6,468.9	24.2	21.4	156.57	-342.0	148.4	743.1	701.7	41.43	17.936	
6,500.0	6,411.2	6,628.4	6,554.9	24.6	21.8	155.79	-350.0	167.8	727.6	685.7	41.91	17.360	
6,600.0	6,511.1	6,717.2	6,641.4	24.9	22.2	154.99	-357.6	186.2	711.9	669.6	42.33	16.819	
6,700.0	6,611.1	6,806.1	6,728.4	25.1	22.6	154.15	-364.7	203.3	696.2	653.5	42.67	16.315	
6,800.0	6,711.1	6,895.4	6,816.0	25.2	23.0	-101.69	-371.3	219.2	680.4	637.6	42.79	15.899	
6,900.0	6,811.1	6,985.1	6,904.2	25.3	23.4	-102.46	-377.4	233.9	665.7	622.8	42.85	15.537	
7,000.0	6,911.1	7,075.3	6,993.2	25.3	23.8	-103.21	-383.0	247.4	652.4	609.5	42.89	15.211	
7,100.0	7,011.1	7,165.9	7,082.9	25.3	24.2	-103.90	-388.1	259.7	640.5	597.6	42.93	14.919	
7,200.0	7,111.1	7,256.9	7,173.1	25.3	24.6	-104.55	-392.6	270.7	630.0	587.0	42.98	14.659	
7,300.0	7,211.1	7,348.3	7,263.9	25.4	24.9	-105.14	-396.6	280.4	620.8	577.8	43.02	14.431	
7,400.0	7,311.1	7,440.0	7,355.1	25.4	25.3	-105.66	-400.1	288.8	613.0	569.9	43.07	14.232	
7,500.0	7,411.1	7,532.0	7,446.8	25.4	25.6	-106.10	-403.1	295.8	606.5	563.3	43.13	14.060	
7,600.0	7,511.1	7,624.2	7,538.8	25.4	26.0	-106.47	-405.4	301.6	601.2	558.0	43.20	13.916	
7,700.0	7,611.1	7,716.5	7,631.0	25.5	26.3	-106.76	-407.2	305.9	597.3	554.0	43.29	13.798	
7,800.0	7,711.1	7,809.0	7,723.5	25.5	26.6	-106.95	-408.5	308.9	594.6	551.2	43.38	13.705	
7,900.0	7,811.1	7,900.0	7,814.4	25.5	26.8	-107.06	-409.1	310.5	593.1	549.7	43.46	13.647	
8,000.0	7,911.1	7,996.7	7,911.1	25.6	26.9	-107.08	-409.3	310.8	592.8	549.3	43.51	13.626	
8,100.0	8,011.1	8,096.7	8,011.1	25.6	26.9	-107.08	-409.3	310.8	592.8	549.3	43.57	13.608	
8,200.0	8,111.1	8,196.7	8,111.1	25.6	26.9	-107.08	-409.3	310.8	592.8	549.2	43.63	13.589	
8,300.0	8,211.1	8,296.7	8,211.1	25.6	26.9	-107.08	-409.3	310.8	592.8	549.2	43.69	13.571	
8,400.0	8,311.1	8,396.7	8,311.1	25.7	27.0	-107.08	-409.3	310.8	592.8	549.1	43.75	13.552	
8,500.0	8,411.1	8,496.7	8,411.1	25.7	27.0	-107.08	-409.3	310.8	592.8	549.0	43.81	13.533	
8,600.0	8,511.1	8,596.7	8,511.1	25.7	27.0	-107.08	-409.3	310.8	592.8	549.0	43.87	13.514	
8,700.0	8,611.1	8,696.7	8,611.1	25.8	27.0	-107.08	-409.3	310.8	592.8	548.9	43.93	13.495	
8,800.0	8,711.1	8,796.7	8,711.1	25.8	27.1	-107.08	-409.3	310.8	592.8	548.8	43.99	13.476	
8,900.0	8,811.1	8,896.7	8,811.1	25.8	27.1	-107.08	-409.3	310.8	592.8	548.8	44.05	13.457	
9,000.0	8,911.1	8,996.7	8,911.1	25.9	27.1	-107.08	-409.3	310.8	592.8	548.7	44.12	13.437	
9,100.0	9,011.1	9,096.7	9,011.1	25.9	27.1	-107.08	-409.3	310.8	592.8	548.7	44.18	13.418	
9,200.0	9,111.1	9,196.7	9,111.1	25.9	27.1	-107.08	-409.3	310.8	592.8	548.6	44.25	13.399	
9,300.0	9,211.1	9,296.7	9,211.1	25.9	27.2	-107.08	-409.3	310.8	592.8	548.5	44.31	13.379	
9,400.0	9,310.4	9,396.0	9,310.4	26.0	27.2	-107.55	-409.3	310.8	595.9	552.0	43.99	13.548	
9,500.0	9,405.4	9,490.9	9,405.4	26.0	27.2	-109.04	-409.3	310.8	606.1	563.2	42.96	14.110	
9,600.0	9,491.8	9,577.4	9,491.8	26.0	27.2	-110.64	-409.3	310.8	625.5	584.2	41.29	15.148	
9,700.0	9,566.1	9,651.7	9,566.1	26.0	27.3	-111.33	-409.3	310.8	656.4	617.2	39.17	16.757	
9,800.0	9,624.8	9,710.4	9,624.8	26.0	27.3	-109.96	-409.3	310.8	700.6	663.6	36.90	18.983	
9,900.0	9,665.5	9,751.1	9,665.5	26.1	27.3	-105.35	-409.3	310.8	757.7	722.9	34.80	21.774	
10,000.0	9,686.3	9,771.9	9,686.3	26.2	27.3	-96.36	-409.3	310.8	825.7	792.6	33.07	24.968	
10,100.0	9,689.2	9,774.8	9,689.2	26.3	27.3	-90.39	-409.3	310.8	900.9	869.1	31.78	28.347	
10,200.0	9,689.8	11,064.5	10,392.8	26.4	28.0	-141.12	384.6	309.3	903.1	854.9	48.25	18.718	
10,300.0	9,690.3	11,164.5	10,393.7	26.5	28.1	-141.13	484.6	309.1	903.4	854.8	48.59	18.593	

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 #704H
Project:	ATLAS PROSPECT (NM-E)	TVD Reference:	KB=32 @ 3061.5usft
Reference Site:	KEG SHELL FED COM PROJECT	MD Reference:	KB=32 @ 3061.5usft
Site Error:	3.0 usft	North Reference:	Grid
Reference Well:	KEG SHELL FEDERAL COM #704H	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		Highside Toolface		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	9,690.9	11,264.5	10,394.6	26.7	28.3	-141.15	584.6	308.9	903.7	854.7	48.97	18.453	
10,500.0	9,691.5	11,364.5	10,395.5	26.9	28.4	-141.16	684.6	308.7	903.9	854.5	49.40	18.298	
10,600.0	9,692.0	11,464.5	10,396.4	27.1	28.6	-141.18	784.6	308.5	904.2	854.3	49.87	18.129	
10,700.0	9,692.6	11,564.5	10,397.3	27.3	28.8	-141.19	884.6	308.4	904.4	854.0	50.39	17.949	
10,800.0	9,693.1	11,664.5	10,398.2	27.5	29.0	-141.20	984.6	308.2	904.7	853.7	50.95	17.757	
10,900.0	9,693.7	11,764.5	10,399.1	27.8	29.2	-141.22	1,084.6	308.0	904.9	853.4	51.54	17.557	
11,000.0	9,694.2	11,864.5	10,400.0	28.1	29.5	-141.23	1,184.6	307.8	905.2	853.0	52.18	17.347	
11,100.0	9,694.8	11,964.5	10,400.8	28.4	29.7	-141.25	1,284.6	307.6	905.4	852.6	52.85	17.131	
11,200.0	9,695.3	12,064.5	10,401.7	28.7	30.0	-141.26	1,384.6	307.4	905.7	852.1	53.56	16.909	
11,300.0	9,695.9	12,164.5	10,402.6	29.0	30.3	-141.28	1,484.6	307.2	906.0	851.6	54.31	16.683	
11,400.0	9,696.4	12,264.5	10,403.5	29.3	30.6	-141.29	1,584.5	307.0	906.2	851.1	55.08	16.452	
11,500.0	9,697.0	12,364.5	10,404.4	29.7	30.9	-141.30	1,684.5	306.8	906.5	850.6	55.89	16.219	
11,600.0	9,697.5	12,464.5	10,405.3	30.0	31.2	-141.32	1,784.5	306.6	906.7	850.0	56.73	15.984	
11,700.0	9,698.1	12,564.5	10,406.2	30.4	31.6	-141.33	1,884.5	306.5	907.0	849.4	57.60	15.747	
11,800.0	9,698.6	12,664.5	10,407.1	30.8	31.9	-141.35	1,984.5	306.3	907.2	848.7	58.49	15.511	
11,900.0	9,699.2	12,764.5	10,408.0	31.2	32.3	-141.36	2,084.5	306.1	907.5	848.1	59.41	15.275	
12,000.0	9,699.7	12,864.5	10,408.9	31.6	32.7	-141.38	2,184.5	305.9	907.7	847.4	60.36	15.039	
12,100.0	9,700.3	12,964.5	10,409.8	32.1	33.1	-141.39	2,284.5	305.7	908.0	846.7	61.33	14.806	
12,200.0	9,700.8	13,064.5	10,410.7	32.5	33.5	-141.40	2,384.5	305.5	908.3	845.9	62.32	14.574	
12,300.0	9,701.4	13,164.5	10,411.6	33.0	33.9	-141.42	2,484.5	305.3	908.5	845.2	63.34	14.344	
12,400.0	9,701.9	13,264.5	10,412.5	33.4	34.3	-141.43	2,584.5	305.1	908.8	844.4	64.37	14.117	
12,500.0	9,702.5	13,364.5	10,413.4	33.9	34.8	-141.45	2,684.5	304.9	909.0	843.6	65.43	13.894	
12,600.0	9,703.0	13,464.5	10,414.2	34.4	35.2	-141.46	2,784.5	304.7	909.3	842.8	66.50	13.673	
12,700.0	9,703.6	13,564.5	10,415.1	34.9	35.7	-141.48	2,884.5	304.6	909.5	841.9	67.60	13.456	
12,800.0	9,704.1	13,664.5	10,416.0	35.4	36.2	-141.49	2,984.5	304.4	909.8	841.1	68.70	13.242	
12,900.0	9,704.7	13,764.5	10,416.9	35.9	36.7	-141.50	3,084.5	304.2	910.1	840.2	69.83	13.033	
13,000.0	9,705.2	13,864.5	10,417.8	36.4	37.2	-141.52	3,184.5	304.0	910.3	839.3	70.97	12.827	
13,100.0	9,705.8	13,964.5	10,418.7	37.0	37.7	-141.53	3,284.5	303.8	910.6	838.4	72.13	12.625	
13,200.0	9,706.4	14,064.5	10,419.6	37.5	38.2	-141.55	3,384.5	303.6	910.8	837.5	73.30	12.427	
13,300.0	9,706.9	14,164.5	10,420.5	38.1	38.7	-141.56	3,484.5	303.4	911.1	836.6	74.48	12.233	
13,400.0	9,707.5	14,264.5	10,421.4	38.6	39.3	-141.57	3,584.5	303.2	911.3	835.7	75.68	12.043	
13,500.0	9,708.0	14,364.5	10,422.3	39.2	39.8	-141.59	3,684.4	303.0	911.6	834.7	76.88	11.857	
13,600.0	9,708.6	14,464.5	10,423.2	39.7	40.3	-141.60	3,784.4	302.8	911.9	833.8	78.10	11.675	
13,700.0	9,709.1	14,564.5	10,424.1	40.3	40.9	-141.62	3,884.4	302.6	912.1	832.8	79.33	11.497	
13,800.0	9,709.7	14,664.5	10,425.0	40.9	41.5	-141.63	3,984.4	302.5	912.4	831.8	80.57	11.323	
13,900.0	9,710.2	14,764.5	10,425.9	41.5	42.0	-141.65	4,084.4	302.3	912.6	830.8	81.82	11.153	
14,000.0	9,710.8	14,864.5	10,426.8	42.1	42.6	-141.66	4,184.4	302.1	912.9	829.8	83.09	10.987	
14,100.0	9,711.3	14,964.5	10,427.6	42.7	43.2	-141.67	4,284.4	301.9	913.1	828.8	84.36	10.825	
14,200.0	9,711.9	15,064.5	10,428.5	43.3	43.8	-141.69	4,384.4	301.7	913.4	827.8	85.63	10.666	
14,300.0	9,712.4	15,164.5	10,429.4	43.9	44.4	-141.70	4,484.4	301.5	913.7	826.7	86.92	10.511	
14,400.0	9,713.0	15,264.5	10,430.3	44.5	45.0	-141.72	4,584.4	301.3	913.9	825.7	88.22	10.360	
14,500.0	9,713.5	15,364.5	10,431.2	45.1	45.6	-141.73	4,684.4	301.1	914.2	824.7	89.52	10.212	
14,600.0	9,714.1	15,464.5	10,432.1	45.7	46.2	-141.74	4,784.4	300.9	914.4	823.6	90.83	10.068	
14,700.0	9,714.6	15,564.5	10,433.0	46.4	46.8	-141.76	4,884.4	300.7	914.7	822.5	92.14	9.927	
14,800.0	9,715.2	15,664.5	10,433.9	47.0	47.4	-141.77	4,984.4	300.6	915.0	821.5	93.47	9.789	
14,900.0	9,715.7	15,764.5	10,434.8	47.6	48.1	-141.79	5,084.4	300.4	915.2	820.4	94.80	9.654	
15,000.0	9,716.3	15,864.5	10,435.7	48.3	48.7	-141.80	5,184.4	300.2	915.5	819.3	96.13	9.523	
15,100.0	9,716.8	15,964.5	10,436.6	48.9	49.3	-141.81	5,284.4	300.0	915.7	818.3	97.48	9.394	
15,200.0	9,717.4	16,064.5	10,437.5	49.6	50.0	-141.83	5,384.4	299.8	916.0	817.2	98.82	9.269	
15,300.0	9,717.9	16,164.5	10,438.4	50.2	50.6	-141.84	5,484.4	299.6	916.2	816.1	100.18	9.146	
15,400.0	9,718.5	16,264.5	10,439.3	50.9	51.3	-141.86	5,584.4	299.4	916.5	815.0	101.53	9.026	
15,500.0	9,719.0	16,364.5	10,440.2	51.5	51.9	-141.87	5,684.4	299.2	916.8	813.9	102.90	8.909	

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 #704H
Project:	ATLAS PROSPECT (NM-E)	TVD Reference:	KB=32 @ 3061.5usft
Reference Site:	KEG SHELL FED COM PROJECT	MD Reference:	KB=32 @ 3061.5usft
Site Error:	3.0 usft	North Reference:	Grid
Reference Well:	KEG SHELL FEDERAL COM #704H	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		Highside Toolface		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	
15,600.0	9,719.6	16,464.5	10,441.0	52.2	52.6	-141.88	5,784.3	299.0	917.0	812.8	104.27	8.795	
15,700.0	9,720.2	16,564.5	10,441.9	52.8	53.2	-141.90	5,884.3	298.8	917.3	811.6	105.64	8.683	
15,800.0	9,720.7	16,664.5	10,442.8	53.5	53.9	-141.91	5,984.3	298.7	917.5	810.5	107.02	8.574	
15,900.0	9,721.3	16,764.5	10,443.7	54.2	54.6	-141.93	6,084.3	298.5	917.8	809.4	108.40	8.467	
16,000.0	9,721.8	16,864.5	10,444.6	54.8	55.2	-141.94	6,184.3	298.3	918.1	808.3	109.78	8.362	
16,100.0	9,722.4	16,964.5	10,445.5	55.5	55.9	-141.95	6,284.3	298.1	918.3	807.1	111.17	8.260	
16,200.0	9,722.9	17,064.5	10,446.4	56.2	56.6	-141.97	6,384.3	297.9	918.6	806.0	112.57	8.160	
16,300.0	9,723.5	17,164.5	10,447.3	56.9	57.2	-141.98	6,484.3	297.7	918.8	804.9	113.96	8.063	
16,400.0	9,724.0	17,264.5	10,448.2	57.5	57.9	-142.00	6,584.3	297.5	919.1	803.7	115.36	7.967	
16,500.0	9,724.6	17,364.5	10,449.1	58.2	58.6	-142.01	6,684.3	297.3	919.3	802.6	116.77	7.873	
16,600.0	9,725.1	17,464.5	10,450.0	58.9	59.3	-142.02	6,784.3	297.1	919.6	801.4	118.17	7.782	
16,700.0	9,725.7	17,564.5	10,450.9	59.6	59.9	-142.04	6,884.3	296.9	919.9	800.3	119.58	7.692	
16,800.0	9,726.2	17,664.5	10,451.8	60.3	60.6	-142.05	6,984.3	296.8	920.1	799.1	121.00	7.604	
16,900.0	9,726.8	17,764.5	10,452.7	61.0	61.3	-142.06	7,084.3	296.6	920.4	798.0	122.41	7.519	
17,000.0	9,727.3	17,864.5	10,453.5	61.7	62.0	-142.08	7,184.3	296.4	920.6	796.8	123.83	7.435	
17,100.0	9,727.9	17,964.5	10,454.4	62.3	62.7	-142.09	7,284.3	296.2	920.9	795.6	125.26	7.352	
17,200.0	9,728.4	18,064.5	10,455.3	63.0	63.4	-142.11	7,384.3	296.0	921.2	794.5	126.68	7.272	
17,300.0	9,729.0	18,164.5	10,456.2	63.7	64.1	-142.12	7,484.3	295.8	921.4	793.3	128.11	7.193	
17,400.0	9,729.5	18,264.5	10,457.1	64.4	64.8	-142.13	7,584.3	295.6	921.7	792.1	129.54	7.115	
17,500.0	9,730.1	18,364.5	10,458.0	65.1	65.5	-142.15	7,684.3	295.4	921.9	791.0	130.97	7.039	
17,600.0	9,730.6	18,464.5	10,458.9	65.8	66.2	-142.16	7,784.3	295.2	922.2	789.8	132.40	6.965	
17,700.0	9,731.2	18,564.5	10,459.8	66.5	66.9	-142.18	7,884.2	295.0	922.5	788.6	133.84	6.892	
17,800.0	9,731.7	18,664.4	10,460.7	67.2	67.6	-142.19	7,984.2	294.9	922.7	787.4	135.28	6.821	
17,900.0	9,732.3	18,764.4	10,461.6	67.9	68.3	-142.20	8,084.2	294.7	923.0	786.3	136.72	6.751	
18,000.0	9,732.8	18,864.4	10,462.5	68.6	69.0	-142.22	8,184.2	294.5	923.2	785.1	138.16	6.682	
18,100.0	9,733.4	18,964.4	10,463.4	69.3	69.7	-142.23	8,284.2	294.3	923.5	783.9	139.61	6.615	
18,200.0	9,733.9	19,064.4	10,464.3	70.1	70.4	-142.24	8,384.2	294.1	923.8	782.7	141.06	6.549	
18,300.0	9,734.5	19,164.4	10,465.2	70.8	71.1	-142.26	8,484.2	293.9	924.0	781.5	142.50	6.484	
18,400.0	9,735.1	19,264.4	10,466.1	71.5	71.8	-142.27	8,584.2	293.7	924.3	780.3	143.96	6.421	
18,500.0	9,735.6	19,364.4	10,466.9	72.2	72.5	-142.29	8,684.2	293.5	924.5	779.1	145.41	6.358	
18,600.0	9,736.2	19,464.4	10,467.8	72.9	73.2	-142.30	8,784.2	293.3	924.8	777.9	146.86	6.297	
18,700.0	9,736.7	19,564.4	10,468.7	73.6	74.0	-142.31	8,884.2	293.1	925.1	776.7	148.32	6.237	
18,800.0	9,737.3	19,664.4	10,469.6	74.3	74.7	-142.33	8,984.2	293.0	925.3	775.5	149.78	6.178	
18,900.0	9,737.8	19,764.4	10,470.5	75.0	75.4	-142.34	9,084.2	292.8	925.6	774.3	151.23	6.120	
19,000.0	9,738.4	19,864.4	10,471.4	75.8	76.1	-142.35	9,184.2	292.6	925.8	773.1	152.70	6.063	
19,100.0	9,738.9	19,964.4	10,472.3	76.5	76.8	-142.37	9,284.2	292.4	926.1	771.9	154.16	6.007	
19,200.0	9,739.5	20,064.4	10,473.2	77.2	77.5	-142.38	9,384.2	292.2	926.4	770.7	155.62	5.953	
19,300.0	9,740.0	20,164.4	10,474.1	77.9	78.3	-142.40	9,484.2	292.0	926.6	769.5	157.09	5.899	
19,400.0	9,740.6	20,264.4	10,475.0	78.6	79.0	-142.41	9,584.2	291.8	926.9	768.3	158.55	5.846	
19,500.0	9,741.1	20,364.4	10,475.9	79.4	79.7	-142.42	9,684.2	291.6	927.1	767.1	160.02	5.794	
19,600.0	9,741.7	20,464.4	10,476.8	80.1	80.4	-142.44	9,784.2	291.4	927.4	765.9	161.49	5.743	
19,700.0	9,742.2	20,564.4	10,477.7	80.8	81.1	-142.45	9,884.2	291.2	927.7	764.7	162.96	5.693	
19,800.0	9,742.8	20,664.4	10,478.6	81.5	81.9	-142.46	9,984.1	291.1	927.9	763.5	164.43	5.643	
19,900.0	9,743.3	20,764.4	10,479.5	82.2	82.6	-142.48	10,084.1	290.9	928.2	762.3	165.90	5.595	
20,000.0	9,743.9	20,864.4	10,480.3	83.0	83.3	-142.49	10,184.1	290.7	928.4	761.1	167.38	5.547	
20,100.0	9,744.4	20,964.4	10,481.2	83.7	84.0	-142.50	10,284.1	290.5	928.7	759.9	168.85	5.500	
20,200.0	9,745.0	21,064.4	10,482.1	84.4	84.8	-142.52	10,384.1	290.3	929.0	758.6	170.33	5.454	
20,300.0	9,745.5	21,164.4	10,483.0	85.1	85.5	-142.53	10,484.1	290.1	929.2	757.4	171.80	5.409	
20,400.0	9,746.1	21,264.4	10,483.9	85.9	86.2	-142.55	10,584.1	289.9	929.5	756.2	173.28	5.364	
20,500.0	9,746.6	21,364.4	10,484.8	86.6	87.0	-142.56	10,684.1	289.7	929.7	755.0	174.76	5.320	
20,600.0	9,747.2	21,464.4	10,485.7	87.3	87.7	-142.57	10,784.1	289.5	930.0	753.8	176.24	5.277	
20,700.0	9,747.7	21,564.4	10,486.6	88.1	88.4	-142.59	10,884.1	289.3	930.3	752.6	177.72	5.234	

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 #704H
Project:	ATLAS PROSPECT (NM-E)	TVD Reference:	KB=32 @ 3061.5usft
Reference Site:	KEG SHELL FED COM PROJECT	MD Reference:	KB=32 @ 3061.5usft
Site Error:	3.0 usft	North Reference:	Grid
Reference Well:	KEG SHELL FEDERAL COM #704H	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		Highside Toolface (°)	Offset Wellbore Centre		Rule Assigned: Distance				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)	Minimum Separation (usft)	Separation Factor	
20,800.0	9,748.3	21,664.4	10,487.5	88.8	89.1	-142.60	10,984.1	289.2	930.5	751.3	179.20	5.193	
20,900.0	9,748.8	21,764.4	10,488.4	89.5	89.9	-142.61	11,084.1	289.0	930.8	750.1	180.69	5.151	
21,000.0	9,749.4	21,864.4	10,489.3	90.2	90.6	-142.63	11,184.1	288.8	931.1	748.9	182.17	5.111	
21,100.0	9,750.0	21,964.4	10,490.2	91.0	91.3	-142.64	11,284.1	288.6	931.3	747.7	183.65	5.071	
21,200.0	9,750.5	22,064.4	10,491.1	91.7	92.1	-142.65	11,384.1	288.4	931.6	746.4	185.14	5.032	
21,300.0	9,751.1	22,164.4	10,492.0	92.4	92.8	-142.67	11,484.1	288.2	931.8	745.2	186.63	4.993	
21,400.0	9,751.6	22,264.4	10,492.9	93.2	93.5	-142.68	11,584.1	288.0	932.1	744.0	188.11	4.955	
21,500.0	9,752.2	22,364.4	10,493.7	93.9	94.3	-142.69	11,684.1	287.8	932.4	742.8	189.60	4.918	
21,600.0	9,752.7	22,464.4	10,494.6	94.6	95.0	-142.71	11,784.1	287.6	932.6	741.5	191.09	4.881	
21,700.0	9,753.3	22,564.4	10,495.5	95.4	95.7	-142.72	11,884.1	287.4	932.9	740.3	192.58	4.844	
21,800.0	9,753.8	22,664.4	10,496.4	96.1	96.5	-142.73	11,984.1	287.3	933.1	739.1	194.07	4.808	
21,900.0	9,754.4	22,764.4	10,497.3	96.8	97.2	-142.75	12,084.0	287.1	933.4	737.9	195.56	4.773	
21,963.7	9,754.7	22,825.4	10,497.9	97.3	97.6	-142.76	12,145.0	287.0	933.6	737.2	196.39	4.754 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 #704H
Project:	ATLAS PROSPECT (NM-E)	TVD Reference:	KB=32 @ 3061.5usft
Reference Site:	KEG SHELL FED COM PROJECT	MD Reference:	KB=32 @ 3061.5usft
Site Error:	3.0 usft	North Reference:	Grid
Reference Well:	KEG SHELL FEDERAL COM #704H	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	0.1	0.0	3.0	3.0	-90.27	-2.3	-490.0	490.0				
100.0	100.0	100.1	100.0	3.0	3.1	-90.27	-2.3	-490.0	490.0	483.5	6.53	75.083	
200.0	200.0	200.1	200.0	3.2	3.2	-90.27	-2.3	-490.0	490.0	483.2	6.77	72.421	
300.0	300.0	300.1	300.0	3.3	3.3	-90.27	-2.3	-490.0	490.0	483.0	7.00	70.030	
400.0	400.0	400.1	400.0	3.4	3.4	-90.27	-2.3	-490.0	490.0	482.8	7.22	67.867	
500.0	500.0	500.1	500.0	3.5	3.6	-90.27	-2.3	-490.0	490.0	482.6	7.44	65.897	
600.0	600.0	600.1	600.0	3.7	3.7	-90.27	-2.3	-490.0	490.0	482.4	7.65	64.092	
700.0	700.0	700.1	700.0	3.8	3.8	-90.27	-2.3	-490.0	490.0	482.2	7.85	62.432	
800.0	800.0	800.1	800.0	3.9	3.9	-90.27	-2.3	-490.0	490.0	482.0	8.05	60.896	
900.0	900.0	900.1	900.0	4.0	4.0	-90.27	-2.3	-490.0	490.0	481.8	8.24	59.471	
1,000.0	1,000.0	1,000.1	1,000.0	4.2	4.2	-90.27	-2.3	-490.0	490.0	481.6	8.43	58.144	
1,100.0	1,100.0	1,100.1	1,100.0	4.3	4.3	-90.27	-2.3	-490.0	490.0	481.4	8.61	56.903	
1,200.0	1,200.0	1,200.1	1,200.0	4.4	4.4	-90.27	-2.3	-490.0	490.0	481.2	8.79	55.740	
1,300.0	1,300.0	1,300.1	1,300.0	4.5	4.5	-90.27	-2.3	-490.0	490.0	481.0	8.97	54.647	
1,400.0	1,400.0	1,400.1	1,400.0	4.6	4.6	-90.27	-2.3	-490.0	490.0	480.9	9.14	53.617	
1,500.0	1,500.0	1,500.1	1,500.0	4.7	4.8	-90.27	-2.3	-490.0	490.0	480.7	9.31	52.643 CC, ES	
1,600.0	1,600.0	1,600.1	1,600.0	4.9	4.9	164.78	-2.3	-490.0	491.7	482.0	9.66	50.896	
1,700.0	1,699.8	1,699.9	1,699.8	5.0	5.1	164.91	-2.3	-490.0	496.7	486.7	10.08	49.257	
1,800.0	1,799.5	1,799.6	1,799.5	5.3	5.2	165.12	-2.3	-490.0	505.2	494.6	10.52	48.018	
1,900.0	1,898.7	1,898.8	1,898.7	5.6	5.4	165.41	-2.3	-490.0	517.0	506.0	10.97	47.117	
2,000.0	1,997.5	1,997.6	1,997.5	5.9	5.5	165.76	-2.3	-490.0	532.1	520.7	11.44	46.507	
2,100.0	2,095.6	2,095.7	2,095.6	6.2	5.6	166.16	-2.3	-490.0	550.6	538.7	11.93	46.151	
2,200.0	2,193.4	2,193.5	2,193.4	6.5	5.8	166.65	-2.3	-490.0	570.9	558.5	12.36	46.175	
2,300.0	2,291.3	2,291.4	2,291.3	6.8	5.9	167.12	-2.3	-490.0	591.1	578.3	12.81	46.135	
2,400.0	2,389.1	2,389.2	2,389.1	7.2	6.0	167.55	-2.3	-490.0	611.5	598.2	13.28	46.034	
2,500.0	2,486.9	2,487.0	2,486.9	7.5	6.2	167.96	-2.3	-490.0	631.8	618.0	13.77	45.884	
2,600.0	2,584.7	2,591.5	2,591.4	7.9	6.4	168.24	-3.7	-489.6	651.7	637.4	14.28	45.634	
2,700.0	2,682.5	2,697.7	2,697.4	8.2	6.6	168.19	-8.9	-488.2	670.5	655.7	14.80	45.308	
2,800.0	2,780.3	2,800.0	2,799.4	8.6	6.6	167.88	-17.0	-485.9	688.2	673.0	15.26	45.115	
2,900.0	2,878.1	2,898.4	2,897.4	9.0	6.8	167.57	-25.3	-483.7	705.9	690.1	15.78	44.743	
3,000.0	2,976.0	2,996.7	2,995.4	9.4	7.0	167.26	-33.5	-481.4	723.5	707.2	16.31	44.364	
3,100.0	3,073.8	3,095.1	3,093.4	9.8	7.2	166.98	-41.8	-479.1	741.2	724.4	16.85	43.983	
3,200.0	3,171.6	3,193.4	3,191.3	10.2	7.4	166.70	-50.1	-476.8	758.9	741.5	17.40	43.605	
3,300.0	3,269.4	3,291.8	3,289.3	10.6	7.6	166.44	-58.3	-474.6	776.6	758.6	17.96	43.231	
3,400.0	3,367.2	3,390.2	3,387.3	11.0	7.8	166.19	-66.6	-472.3	794.3	775.8	18.53	42.864	
3,500.0	3,465.0	3,488.5	3,485.3	11.5	8.1	165.95	-74.9	-470.0	812.1	793.0	19.10	42.505	
3,600.0	3,562.8	3,586.9	3,583.3	11.9	8.3	165.73	-83.1	-467.7	829.8	810.1	19.68	42.156	
3,700.0	3,660.7	3,685.2	3,681.3	12.3	8.6	165.51	-91.4	-465.5	847.6	827.3	20.27	41.817	
3,800.0	3,758.5	3,783.6	3,779.2	12.8	8.8	165.30	-99.7	-463.2	865.3	844.5	20.86	41.488	
3,900.0	3,856.3	3,882.0	3,877.2	13.2	9.1	165.09	-107.9	-460.9	883.1	861.7	21.45	41.170	
4,000.0	3,954.1	3,980.3	3,975.2	13.6	9.4	164.90	-116.2	-458.6	900.9	878.9	22.05	40.863	
4,100.0	4,051.9	4,078.7	4,073.2	14.1	9.7	164.71	-124.5	-456.4	918.7	896.1	22.65	40.567	
4,200.0	4,149.7	4,177.0	4,171.2	14.5	10.0	164.54	-132.7	-454.1	936.5	913.3	23.25	40.280	
4,300.0	4,247.5	4,275.4	4,269.2	15.0	10.3	164.36	-141.0	-451.8	954.4	930.5	23.86	40.004	
4,400.0	4,345.4	4,373.8	4,367.2	15.4	10.6	164.20	-149.2	-449.5	972.2	947.7	24.46	39.739	
4,500.0	4,443.2	4,472.1	4,465.1	15.9	10.9	164.04	-157.5	-447.2	990.0	964.9	25.08	39.482 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 #704H
Project:	ATLAS PROSPECT (NM-E)	TVD Reference:	KB=32 @ 3061.5usft
Reference Site:	KEG SHELL FED COM PROJECT	MD Reference:	KB=32 @ 3061.5usft
Site Error:	3.0 usft	North Reference:	Grid
Reference Well:	KEG SHELL FEDERAL COM #704H	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 @ 3061.5usft

Offset Depths are relative to Offset Datum

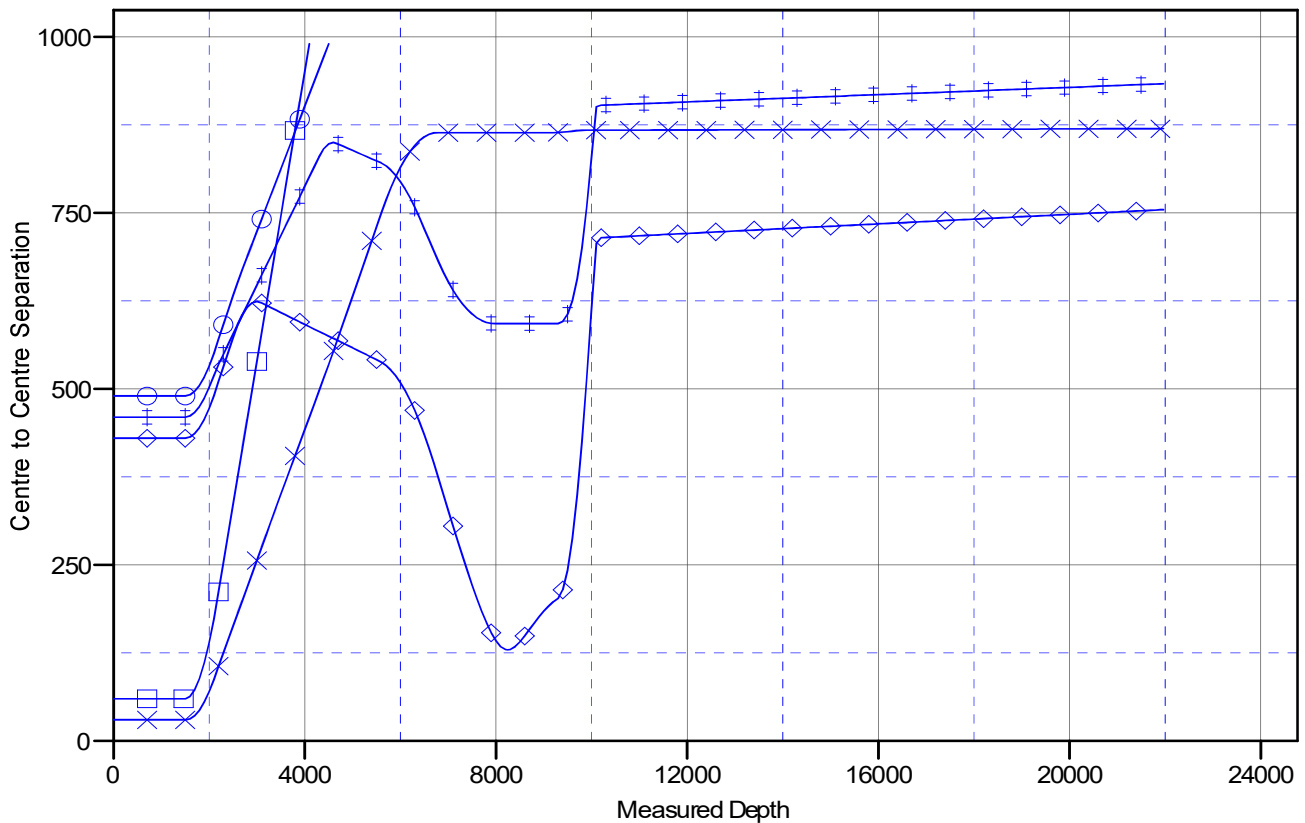
Central Meridian is 104° 20' 0.000 W

Coordinates are relative to: KEG SHELL FEDERAL COM #704H

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

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

ConocoPhillips

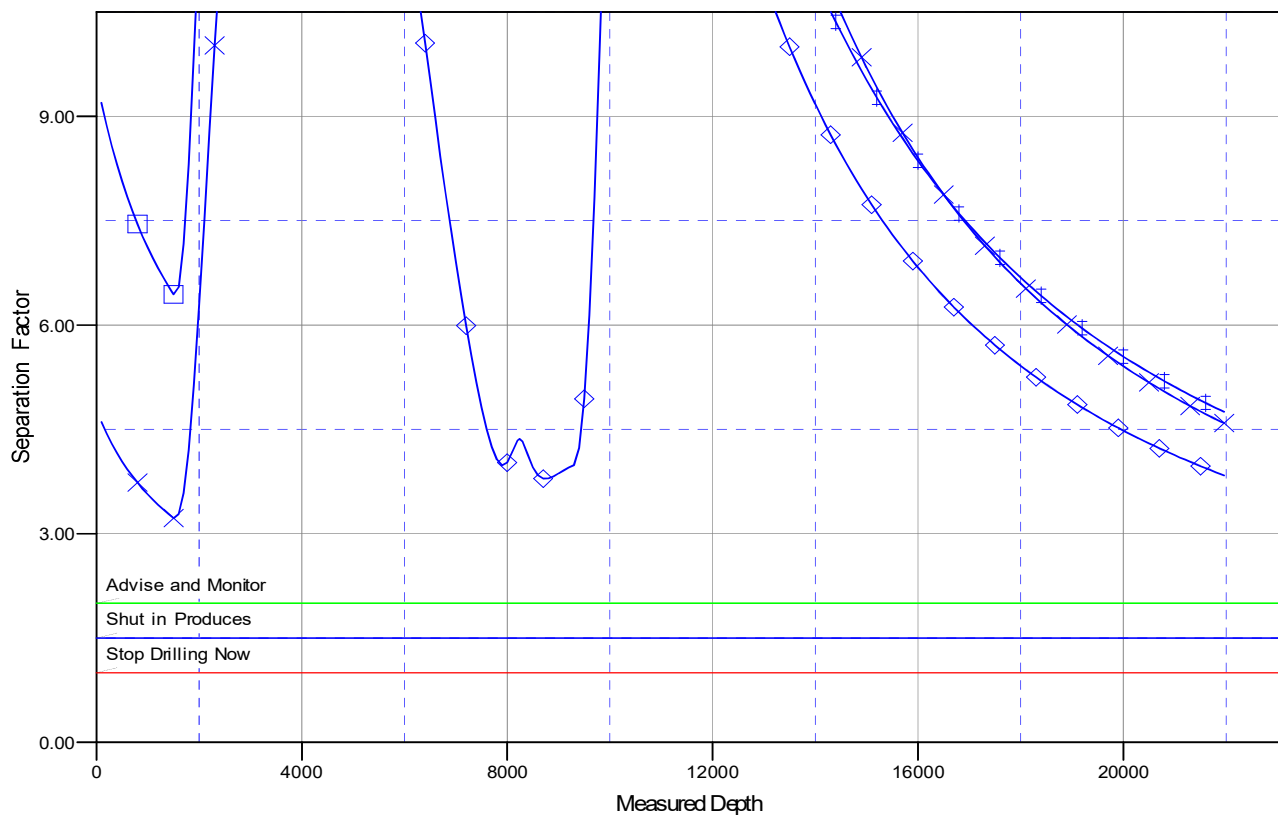
Anticollision Report

Company:	DELAWARE BASIN WEST	Local Co-ordinate Reference:	Well KEG SHELL FEDERAL COM #704H
Project:	ATLAS PROSPECT (NM-E)	TVD Reference:	KB=32 @ 3061.5usft
Reference Site:	KEG SHELL FED COM PROJECT	MD Reference:	KB=32 @ 3061.5usft
Site Error:	3.0 usft	North Reference:	Grid
Reference Well:	KEG SHELL FEDERAL COM #704H	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 @ 3061.5usft
 Offset Depths are relative to Offset Datum
 Central Meridian is 104° 20' 0.000 W

Coordinates are relative to: KEG SHELL FEDERAL COM #704H
 Coordinate System is US State Plane 1927 (Exact solution), New Mexico East 30
 Grid Convergence at Surface is: 0.14°

Separation Factor Plot



LEGEND

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

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

DELAWARE BASIN WEST

ATLAS PROSPECT (NM-E)

KEG SHELL FED COM PROJECT

KEG SHELL FEDERAL COM #704H

300154824800

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 #704H
Company:	DELAWARE BASIN WEST	TVD Reference:	KB=32 @ 3061.5usft
Project:	ATLAS PROSPECT (NM-E)	MD Reference:	KB=32 @ 3061.5usft
Site:	KEG SHELL FED COM PROJECT	North Reference:	Grid
Well:	KEG SHELL FEDERAL COM #704H	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
From:	Map	Easting:	588,090.89 usft
Position Uncertainty:	3.0 usft	Slot Radius:	13-3/16 "
		Latitude:	32° 0' 0.003 N
		Longitude:	104° 2' 56.993 W

Well	KEG SHELL FEDERAL COM #704H					
Well Position	+N/-S	0.0 usft	Northing:	364,254.60 usft	Latitude:	32° 0' 4.172 N
	+E/-W	0.0 usft	Easting:	584,171.40 usft	Longitude:	104° 3' 42.498 W
Position Uncertainty		3.0 usft	Wellhead Elevation:	usft	Ground Level:	3,029.5 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	47,286.88820633

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	4.01	

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	9,300.0 PWP2 (OWB)	r.5 MWD+IFR1+MS OWSG MWD + IFR1 + Multi-St		
3	9,300.0	21,963.5 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 #704H
Company:	DELAWARE BASIN WEST	TVD Reference:	KB=32 @ 3061.5usft
Project:	ATLAS PROSPECT (NM-E)	MD Reference:	KB=32 @ 3061.5usft
Site:	KEG SHELL FED COM PROJECT	North Reference:	Grid
Well:	KEG SHELL FEDERAL COM #704H	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	
2,100.0	12.00	105.00	2,095.6	-16.2	60.5	2.00	2.00	0.00	105.00	
5,566.1	12.00	105.00	5,486.0	-202.7	756.6	0.00	0.00	0.00	0.00	
6,766.1	0.00	0.00	6,677.2	-235.1	877.5	1.00	-1.00	0.00	180.00	
9,300.4	0.00	0.00	9,211.5	-235.1	877.5	0.00	0.00	0.00	0.00	
10,047.7	89.68	359.88	9,689.0	239.7	876.5	12.00	12.00	-0.02	359.88	
21,833.6	89.68	359.88	9,754.0	12,025.4	852.2	0.00	0.00	0.00	0.00	
21,963.7	89.68	359.88	9,754.7	12,155.5	851.9	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 #704H
Company:	DELAWARE BASIN WEST	TVD Reference:	KB=32 @ 3061.5usft
Project:	ATLAS PROSPECT (NM-E)	MD Reference:	KB=32 @ 3061.5usft
Site:	KEG SHELL FED COM PROJECT	North Reference:	Grid
Well:	KEG SHELL FEDERAL COM #704H	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	105.00	1,600.0	-0.5	1.7	-0.3	2.00	2.00	0.00
1,700.0	4.00	105.00	1,699.8	-1.8	6.7	-1.3	2.00	2.00	0.00
1,800.0	6.00	105.00	1,799.5	-4.1	15.2	-3.0	2.00	2.00	0.00
1,900.0	8.00	105.00	1,898.7	-7.2	26.9	-5.3	2.00	2.00	0.00
2,000.0	10.00	105.00	1,997.5	-11.3	42.0	-8.3	2.00	2.00	0.00
2,100.0	12.00	105.00	2,095.6	-16.2	60.5	-11.9	2.00	2.00	0.00
Start 3466.1 hold at 2100.0 MD									
2,200.0	12.00	105.00	2,193.4	-21.6	80.6	-15.9	0.00	0.00	0.00
2,300.0	12.00	105.00	2,291.3	-27.0	100.6	-19.9	0.00	0.00	0.00
2,400.0	12.00	105.00	2,389.1	-32.3	120.7	-23.8	0.00	0.00	0.00
2,500.0	12.00	105.00	2,486.9	-37.7	140.8	-27.8	0.00	0.00	0.00
2,600.0	12.00	105.00	2,584.7	-43.1	160.9	-31.8	0.00	0.00	0.00
2,700.0	12.00	105.00	2,682.5	-48.5	181.0	-35.7	0.00	0.00	0.00
2,800.0	12.00	105.00	2,780.3	-53.9	201.0	-39.7	0.00	0.00	0.00
2,900.0	12.00	105.00	2,878.1	-59.3	221.1	-43.6	0.00	0.00	0.00
3,000.0	12.00	105.00	2,976.0	-64.6	241.2	-47.6	0.00	0.00	0.00
3,100.0	12.00	105.00	3,073.8	-70.0	261.3	-51.6	0.00	0.00	0.00
3,200.0	12.00	105.00	3,171.6	-75.4	281.4	-55.5	0.00	0.00	0.00
3,300.0	12.00	105.00	3,269.4	-80.8	301.5	-59.5	0.00	0.00	0.00
3,400.0	12.00	105.00	3,367.2	-86.2	321.5	-63.5	0.00	0.00	0.00
3,500.0	12.00	105.00	3,465.0	-91.5	341.6	-67.4	0.00	0.00	0.00
3,600.0	12.00	105.00	3,562.8	-96.9	361.7	-71.4	0.00	0.00	0.00
3,700.0	12.00	105.00	3,660.7	-102.3	381.8	-75.4	0.00	0.00	0.00
3,800.0	12.00	105.00	3,758.5	-107.7	401.9	-79.3	0.00	0.00	0.00
3,900.0	12.00	105.00	3,856.3	-113.1	422.0	-83.3	0.00	0.00	0.00
4,000.0	12.00	105.00	3,954.1	-118.4	442.0	-87.2	0.00	0.00	0.00
4,100.0	12.00	105.00	4,051.9	-123.8	462.1	-91.2	0.00	0.00	0.00
4,200.0	12.00	105.00	4,149.7	-129.2	482.2	-95.2	0.00	0.00	0.00
4,300.0	12.00	105.00	4,247.5	-134.6	502.3	-99.1	0.00	0.00	0.00
4,400.0	12.00	105.00	4,345.4	-140.0	522.4	-103.1	0.00	0.00	0.00
4,500.0	12.00	105.00	4,443.2	-145.4	542.5	-107.1	0.00	0.00	0.00
4,600.0	12.00	105.00	4,541.0	-150.7	562.5	-111.0	0.00	0.00	0.00
4,700.0	12.00	105.00	4,638.8	-156.1	582.6	-115.0	0.00	0.00	0.00
4,800.0	12.00	105.00	4,736.6	-161.5	602.7	-119.0	0.00	0.00	0.00
4,900.0	12.00	105.00	4,834.4	-166.9	622.8	-122.9	0.00	0.00	0.00
5,000.0	12.00	105.00	4,932.3	-172.3	642.9	-126.9	0.00	0.00	0.00
5,100.0	12.00	105.00	5,030.1	-177.6	663.0	-130.8	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 #704H
Company:	DELAWARE BASIN WEST	TVD Reference:	KB=32 @ 3061.5usft
Project:	ATLAS PROSPECT (NM-E)	MD Reference:	KB=32 @ 3061.5usft
Site:	KEG SHELL FED COM PROJECT	North Reference:	Grid
Well:	KEG SHELL FEDERAL COM #704H	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)
5,200.0	12.00	105.00	5,127.9	-183.0	683.0	-134.8	0.00	0.00	0.00
5,300.0	12.00	105.00	5,225.7	-188.4	703.1	-138.8	0.00	0.00	0.00
5,400.0	12.00	105.00	5,323.5	-193.8	723.2	-142.7	0.00	0.00	0.00
5,500.0	12.00	105.00	5,421.3	-199.2	743.3	-146.7	0.00	0.00	0.00
5,566.1	12.00	105.00	5,486.0	-202.7	756.6	-149.3	0.00	0.00	0.00
Start Drop -1.00									
5,600.0	11.66	105.00	5,519.2	-204.5	763.3	-150.6	1.00	-1.00	0.00
5,700.0	10.66	105.00	5,617.3	-209.5	782.0	-154.3	1.00	-1.00	0.00
5,800.0	9.66	105.00	5,715.7	-214.1	799.0	-157.7	1.00	-1.00	0.00
5,900.0	8.66	105.00	5,814.4	-218.2	814.4	-160.7	1.00	-1.00	0.00
6,000.0	7.66	105.00	5,913.4	-221.9	828.1	-163.4	1.00	-1.00	0.00
6,100.0	6.66	105.00	6,012.6	-225.1	840.1	-165.8	1.00	-1.00	0.00
6,200.0	5.66	105.00	6,112.0	-227.9	850.5	-167.9	1.00	-1.00	0.00
6,300.0	4.66	105.00	6,211.6	-230.2	859.2	-169.6	1.00	-1.00	0.00
6,400.0	3.66	105.00	6,311.4	-232.1	866.2	-171.0	1.00	-1.00	0.00
6,500.0	2.66	105.00	6,411.2	-233.5	871.5	-172.0	1.00	-1.00	0.00
6,600.0	1.66	105.00	6,511.1	-234.5	875.2	-172.7	1.00	-1.00	0.00
6,700.0	0.66	105.00	6,611.1	-235.0	877.1	-173.1	1.00	-1.00	0.00
6,766.1	0.00	0.00	6,677.2	-235.1	877.5	-173.2	1.00	-1.00	0.00
Start 2534.3 hold at 6766.1 MD									
6,800.0	0.00	0.00	6,711.1	-235.1	877.5	-173.2	0.00	0.00	0.00
6,900.0	0.00	0.00	6,811.1	-235.1	877.5	-173.2	0.00	0.00	0.00
7,000.0	0.00	0.00	6,911.1	-235.1	877.5	-173.2	0.00	0.00	0.00
7,100.0	0.00	0.00	7,011.1	-235.1	877.5	-173.2	0.00	0.00	0.00
7,200.0	0.00	0.00	7,111.1	-235.1	877.5	-173.2	0.00	0.00	0.00
7,300.0	0.00	0.00	7,211.1	-235.1	877.5	-173.2	0.00	0.00	0.00
7,400.0	0.00	0.00	7,311.1	-235.1	877.5	-173.2	0.00	0.00	0.00
7,500.0	0.00	0.00	7,411.1	-235.1	877.5	-173.2	0.00	0.00	0.00
7,600.0	0.00	0.00	7,511.1	-235.1	877.5	-173.2	0.00	0.00	0.00
7,700.0	0.00	0.00	7,611.1	-235.1	877.5	-173.2	0.00	0.00	0.00
7,800.0	0.00	0.00	7,711.1	-235.1	877.5	-173.2	0.00	0.00	0.00
7,900.0	0.00	0.00	7,811.1	-235.1	877.5	-173.2	0.00	0.00	0.00
8,000.0	0.00	0.00	7,911.1	-235.1	877.5	-173.2	0.00	0.00	0.00
8,100.0	0.00	0.00	8,011.1	-235.1	877.5	-173.2	0.00	0.00	0.00
8,200.0	0.00	0.00	8,111.1	-235.1	877.5	-173.2	0.00	0.00	0.00
8,300.0	0.00	0.00	8,211.1	-235.1	877.5	-173.2	0.00	0.00	0.00
8,400.0	0.00	0.00	8,311.1	-235.1	877.5	-173.2	0.00	0.00	0.00
8,500.0	0.00	0.00	8,411.1	-235.1	877.5	-173.2	0.00	0.00	0.00
8,600.0	0.00	0.00	8,511.1	-235.1	877.5	-173.2	0.00	0.00	0.00
8,700.0	0.00	0.00	8,611.1	-235.1	877.5	-173.2	0.00	0.00	0.00
8,800.0	0.00	0.00	8,711.1	-235.1	877.5	-173.2	0.00	0.00	0.00
8,900.0	0.00	0.00	8,811.1	-235.1	877.5	-173.2	0.00	0.00	0.00
9,000.0	0.00	0.00	8,911.1	-235.1	877.5	-173.2	0.00	0.00	0.00
9,100.0	0.00	0.00	9,011.1	-235.1	877.5	-173.2	0.00	0.00	0.00
9,200.0	0.00	0.00	9,111.1	-235.1	877.5	-173.2	0.00	0.00	0.00
9,300.0	0.00	0.00	9,211.1	-235.1	877.5	-173.2	0.00	0.00	0.00
9,300.4	0.00	0.00	9,211.5	-235.1	877.5	-173.2	0.00	0.00	0.00
Start DLS 12.00 TFO 359.88									
9,400.0	11.96	359.88	9,310.4	-224.8	877.5	-162.9	12.00	12.00	0.00
9,500.0	23.96	359.88	9,405.4	-194.0	877.4	-132.2	12.00	12.00	0.00
9,600.0	35.96	359.88	9,491.8	-144.2	877.3	-82.5	12.00	12.00	0.00
9,700.0	47.96	359.88	9,566.1	-77.4	877.2	-15.9	12.00	12.00	0.00
9,800.0	59.96	359.88	9,624.8	3.3	877.0	64.6	12.00	12.00	0.00

ConocoPhillips

Planning Report

Database:	EDT 17 Central Planning Prod	Local Co-ordinate Reference:	Well KEG SHELL FEDERAL COM #704H
Company:	DELAWARE BASIN WEST	TVD Reference:	KB=32 @ 3061.5usft
Project:	ATLAS PROSPECT (NM-E)	MD Reference:	KB=32 @ 3061.5usft
Site:	KEG SHELL FED COM PROJECT	North Reference:	Grid
Well:	KEG SHELL FEDERAL COM #704H	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	71.96	359.88	9,665.5	94.4	876.8	155.5	12.00	12.00	0.00
10,000.0	83.96	359.88	9,686.3	192.1	876.6	252.9	12.00	12.00	0.00
10,047.7	89.68	359.88	9,689.0	239.7	876.5	300.4	12.00	12.00	0.00
Start 11785.9 hold at 10047.7 MD									
10,100.0	89.68	359.88	9,689.2	292.0	876.4	352.5	0.00	0.00	0.00
10,200.0	89.68	359.88	9,689.8	392.0	876.2	452.3	0.00	0.00	0.00
10,300.0	89.68	359.88	9,690.3	492.0	876.0	552.0	0.00	0.00	0.00
10,400.0	89.68	359.88	9,690.9	592.0	875.8	651.7	0.00	0.00	0.00
10,500.0	89.68	359.88	9,691.5	692.0	875.6	751.5	0.00	0.00	0.00
10,600.0	89.68	359.88	9,692.0	792.0	875.4	851.2	0.00	0.00	0.00
10,700.0	89.68	359.88	9,692.6	892.0	875.2	951.0	0.00	0.00	0.00
10,800.0	89.68	359.88	9,693.1	992.0	875.0	1,050.7	0.00	0.00	0.00
10,900.0	89.68	359.88	9,693.7	1,092.0	874.8	1,150.4	0.00	0.00	0.00
11,000.0	89.68	359.88	9,694.2	1,191.9	874.6	1,250.2	0.00	0.00	0.00
11,100.0	89.68	359.88	9,694.8	1,291.9	874.3	1,349.9	0.00	0.00	0.00
11,200.0	89.68	359.88	9,695.3	1,391.9	874.1	1,449.7	0.00	0.00	0.00
11,300.0	89.68	359.88	9,695.9	1,491.9	873.9	1,549.4	0.00	0.00	0.00
11,400.0	89.68	359.88	9,696.4	1,591.9	873.7	1,649.1	0.00	0.00	0.00
11,500.0	89.68	359.88	9,697.0	1,691.9	873.5	1,748.9	0.00	0.00	0.00
11,600.0	89.68	359.88	9,697.5	1,791.9	873.3	1,848.6	0.00	0.00	0.00
11,700.0	89.68	359.88	9,698.1	1,891.9	873.1	1,948.4	0.00	0.00	0.00
11,800.0	89.68	359.88	9,698.6	1,991.9	872.9	2,048.1	0.00	0.00	0.00
11,900.0	89.68	359.88	9,699.2	2,091.9	872.7	2,147.8	0.00	0.00	0.00
12,000.0	89.68	359.88	9,699.7	2,191.9	872.5	2,247.6	0.00	0.00	0.00
12,100.0	89.68	359.88	9,700.3	2,291.9	872.3	2,347.3	0.00	0.00	0.00
12,200.0	89.68	359.88	9,700.8	2,391.9	872.1	2,447.0	0.00	0.00	0.00
12,300.0	89.68	359.88	9,701.4	2,491.9	871.9	2,546.8	0.00	0.00	0.00
12,400.0	89.68	359.88	9,701.9	2,591.9	871.7	2,646.5	0.00	0.00	0.00
12,500.0	89.68	359.88	9,702.5	2,691.9	871.5	2,746.3	0.00	0.00	0.00
12,600.0	89.68	359.88	9,703.0	2,791.9	871.3	2,846.0	0.00	0.00	0.00
12,700.0	89.68	359.88	9,703.6	2,891.9	871.0	2,945.7	0.00	0.00	0.00
12,800.0	89.68	359.88	9,704.1	2,991.9	870.8	3,045.5	0.00	0.00	0.00
12,900.0	89.68	359.88	9,704.7	3,091.9	870.6	3,145.2	0.00	0.00	0.00
13,000.0	89.68	359.88	9,705.2	3,191.9	870.4	3,245.0	0.00	0.00	0.00
13,100.0	89.68	359.88	9,705.8	3,291.9	870.2	3,344.7	0.00	0.00	0.00
13,200.0	89.68	359.88	9,706.4	3,391.9	870.0	3,444.4	0.00	0.00	0.00
13,300.0	89.68	359.88	9,706.9	3,491.9	869.8	3,544.2	0.00	0.00	0.00
13,400.0	89.68	359.88	9,707.5	3,591.9	869.6	3,643.9	0.00	0.00	0.00
13,500.0	89.68	359.88	9,708.0	3,691.9	869.4	3,743.7	0.00	0.00	0.00
13,600.0	89.68	359.88	9,708.6	3,791.9	869.2	3,843.4	0.00	0.00	0.00
13,700.0	89.68	359.88	9,709.1	3,891.9	869.0	3,943.1	0.00	0.00	0.00
13,800.0	89.68	359.88	9,709.7	3,991.9	868.8	4,042.9	0.00	0.00	0.00
13,900.0	89.68	359.88	9,710.2	4,091.9	868.6	4,142.6	0.00	0.00	0.00
14,000.0	89.68	359.88	9,710.8	4,191.9	868.4	4,242.4	0.00	0.00	0.00
14,100.0	89.68	359.88	9,711.3	4,291.9	868.2	4,342.1	0.00	0.00	0.00
14,200.0	89.68	359.88	9,711.9	4,391.9	868.0	4,441.8	0.00	0.00	0.00
14,300.0	89.68	359.88	9,712.4	4,491.9	867.7	4,541.6	0.00	0.00	0.00
14,400.0	89.68	359.88	9,713.0	4,591.9	867.5	4,641.3	0.00	0.00	0.00
14,500.0	89.68	359.88	9,713.5	4,691.9	867.3	4,741.0	0.00	0.00	0.00
14,600.0	89.68	359.88	9,714.1	4,791.9	867.1	4,840.8	0.00	0.00	0.00
14,700.0	89.68	359.88	9,714.6	4,891.9	866.9	4,940.5	0.00	0.00	0.00
14,800.0	89.68	359.88	9,715.2	4,991.9	866.7	5,040.3	0.00	0.00	0.00
14,900.0	89.68	359.88	9,715.7	5,091.9	866.5	5,140.0	0.00	0.00	0.00
15,000.0	89.68	359.88	9,716.3	5,191.9	866.3	5,239.7	0.00	0.00	0.00

ConocoPhillips

Planning Report

Database:	EDT 17 Central Planning Prod	Local Co-ordinate Reference:	Well KEG SHELL FEDERAL COM #704H
Company:	DELAWARE BASIN WEST	TVD Reference:	KB=32 @ 3061.5usft
Project:	ATLAS PROSPECT (NM-E)	MD Reference:	KB=32 @ 3061.5usft
Site:	KEG SHELL FED COM PROJECT	North Reference:	Grid
Well:	KEG SHELL FEDERAL COM #704H	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	89.68	359.88	9,716.8	5,291.9	866.1	5,339.5	0.00	0.00	0.00
15,200.0	89.68	359.88	9,717.4	5,391.9	865.9	5,439.2	0.00	0.00	0.00
15,300.0	89.68	359.88	9,717.9	5,491.9	865.7	5,539.0	0.00	0.00	0.00
15,400.0	89.68	359.88	9,718.5	5,591.9	865.5	5,638.7	0.00	0.00	0.00
15,500.0	89.68	359.88	9,719.0	5,691.9	865.3	5,738.4	0.00	0.00	0.00
15,600.0	89.68	359.88	9,719.6	5,791.9	865.1	5,838.2	0.00	0.00	0.00
15,700.0	89.68	359.88	9,720.2	5,891.9	864.9	5,937.9	0.00	0.00	0.00
15,800.0	89.68	359.88	9,720.7	5,991.9	864.7	6,037.7	0.00	0.00	0.00
15,900.0	89.68	359.88	9,721.3	6,091.9	864.4	6,137.4	0.00	0.00	0.00
16,000.0	89.68	359.88	9,721.8	6,191.9	864.2	6,237.1	0.00	0.00	0.00
16,100.0	89.68	359.88	9,722.4	6,291.9	864.0	6,336.9	0.00	0.00	0.00
16,200.0	89.68	359.88	9,722.9	6,391.9	863.8	6,436.6	0.00	0.00	0.00
16,300.0	89.68	359.88	9,723.5	6,491.9	863.6	6,536.4	0.00	0.00	0.00
16,400.0	89.68	359.88	9,724.0	6,591.9	863.4	6,636.1	0.00	0.00	0.00
16,500.0	89.68	359.88	9,724.6	6,691.9	863.2	6,735.8	0.00	0.00	0.00
16,600.0	89.68	359.88	9,725.1	6,791.9	863.0	6,835.6	0.00	0.00	0.00
16,700.0	89.68	359.88	9,725.7	6,891.8	862.8	6,935.3	0.00	0.00	0.00
16,800.0	89.68	359.88	9,726.2	6,991.8	862.6	7,035.0	0.00	0.00	0.00
16,900.0	89.68	359.88	9,726.8	7,091.8	862.4	7,134.8	0.00	0.00	0.00
17,000.0	89.68	359.88	9,727.3	7,191.8	862.2	7,234.5	0.00	0.00	0.00
17,100.0	89.68	359.88	9,727.9	7,291.8	862.0	7,334.3	0.00	0.00	0.00
17,200.0	89.68	359.88	9,728.4	7,391.8	861.8	7,434.0	0.00	0.00	0.00
17,300.0	89.68	359.88	9,729.0	7,491.8	861.6	7,533.7	0.00	0.00	0.00
17,400.0	89.68	359.88	9,729.5	7,591.8	861.3	7,633.5	0.00	0.00	0.00
17,500.0	89.68	359.88	9,730.1	7,691.8	861.1	7,733.2	0.00	0.00	0.00
17,600.0	89.68	359.88	9,730.6	7,791.8	860.9	7,833.0	0.00	0.00	0.00
17,700.0	89.68	359.88	9,731.2	7,891.8	860.7	7,932.7	0.00	0.00	0.00
17,800.0	89.68	359.88	9,731.7	7,991.8	860.5	8,032.4	0.00	0.00	0.00
17,900.0	89.68	359.88	9,732.3	8,091.8	860.3	8,132.2	0.00	0.00	0.00
18,000.0	89.68	359.88	9,732.8	8,191.8	860.1	8,231.9	0.00	0.00	0.00
18,100.0	89.68	359.88	9,733.4	8,291.8	859.9	8,331.7	0.00	0.00	0.00
18,200.0	89.68	359.88	9,733.9	8,391.8	859.7	8,431.4	0.00	0.00	0.00
18,300.0	89.68	359.88	9,734.5	8,491.8	859.5	8,531.1	0.00	0.00	0.00
18,400.0	89.68	359.88	9,735.1	8,591.8	859.3	8,630.9	0.00	0.00	0.00
18,500.0	89.68	359.88	9,735.6	8,691.8	859.1	8,730.6	0.00	0.00	0.00
18,600.0	89.68	359.88	9,736.2	8,791.8	858.9	8,830.4	0.00	0.00	0.00
18,700.0	89.68	359.88	9,736.7	8,891.8	858.7	8,930.1	0.00	0.00	0.00
18,800.0	89.68	359.88	9,737.3	8,991.8	858.5	9,029.8	0.00	0.00	0.00
18,900.0	89.68	359.88	9,737.8	9,091.8	858.3	9,129.6	0.00	0.00	0.00
19,000.0	89.68	359.88	9,738.4	9,191.8	858.0	9,229.3	0.00	0.00	0.00
19,100.0	89.68	359.88	9,738.9	9,291.8	857.8	9,329.0	0.00	0.00	0.00
19,200.0	89.68	359.88	9,739.5	9,391.8	857.6	9,428.8	0.00	0.00	0.00
19,300.0	89.68	359.88	9,740.0	9,491.8	857.4	9,528.5	0.00	0.00	0.00
19,400.0	89.68	359.88	9,740.6	9,591.8	857.2	9,628.3	0.00	0.00	0.00
19,500.0	89.68	359.88	9,741.1	9,691.8	857.0	9,728.0	0.00	0.00	0.00
19,600.0	89.68	359.88	9,741.7	9,791.8	856.8	9,827.7	0.00	0.00	0.00
19,700.0	89.68	359.88	9,742.2	9,891.8	856.6	9,927.5	0.00	0.00	0.00
19,800.0	89.68	359.88	9,742.8	9,991.8	856.4	10,027.2	0.00	0.00	0.00
19,900.0	89.68	359.88	9,743.3	10,091.8	856.2	10,127.0	0.00	0.00	0.00
20,000.0	89.68	359.88	9,743.9	10,191.8	856.0	10,226.7	0.00	0.00	0.00
20,100.0	89.68	359.88	9,744.4	10,291.8	855.8	10,326.4	0.00	0.00	0.00
20,200.0	89.68	359.88	9,745.0	10,391.8	855.6	10,426.2	0.00	0.00	0.00
20,300.0	89.68	359.88	9,745.5	10,491.8	855.4	10,525.9	0.00	0.00	0.00
20,400.0	89.68	359.88	9,746.1	10,591.8	855.2	10,625.7	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 #704H
Company:	DELAWARE BASIN WEST	TVD Reference:	KB=32 @ 3061.5usft
Project:	ATLAS PROSPECT (NM-E)	MD Reference:	KB=32 @ 3061.5usft
Site:	KEG SHELL FED COM PROJECT	North Reference:	Grid
Well:	KEG SHELL FEDERAL COM #704H	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	89.68	359.88	9,746.6	10,691.8	855.0	10,725.4	0.00	0.00	0.00	
20,600.0	89.68	359.88	9,747.2	10,791.8	854.7	10,825.1	0.00	0.00	0.00	
20,700.0	89.68	359.88	9,747.7	10,891.8	854.5	10,924.9	0.00	0.00	0.00	
20,800.0	89.68	359.88	9,748.3	10,991.8	854.3	11,024.6	0.00	0.00	0.00	
20,900.0	89.68	359.88	9,748.8	11,091.8	854.1	11,124.4	0.00	0.00	0.00	
21,000.0	89.68	359.88	9,749.4	11,191.8	853.9	11,224.1	0.00	0.00	0.00	
21,100.0	89.68	359.88	9,750.0	11,291.8	853.7	11,323.8	0.00	0.00	0.00	
21,200.0	89.68	359.88	9,750.5	11,391.8	853.5	11,423.6	0.00	0.00	0.00	
21,300.0	89.68	359.88	9,751.1	11,491.8	853.3	11,523.3	0.00	0.00	0.00	
21,400.0	89.68	359.88	9,751.6	11,591.8	853.1	11,623.0	0.00	0.00	0.00	
21,500.0	89.68	359.88	9,752.2	11,691.8	852.9	11,722.8	0.00	0.00	0.00	
21,600.0	89.68	359.88	9,752.7	11,791.8	852.7	11,822.5	0.00	0.00	0.00	
21,700.0	89.68	359.88	9,753.3	11,891.8	852.5	11,922.3	0.00	0.00	0.00	
21,800.0	89.68	359.88	9,753.8	11,991.8	852.3	12,022.0	0.00	0.00	0.00	
21,833.6	89.68	359.88	9,754.0	12,025.4	852.2	12,055.6	0.00	0.00	0.00	
Start 130.1 hold at 21833.6 MD										
21,900.0	89.68	359.88	9,754.4	12,091.8	852.1	12,121.7	0.00	0.00	0.00	
21,963.7	89.68	359.88	9,754.7	12,155.5	851.9	12,185.3	0.00	0.00	0.00	
TD at 21963.7										

Design Targets										
Target Name										
- hit/miss target	Dip Angle (°)	Dip Dir. (°)	TVD (usft)	+N/-S (usft)	+E/-W (usft)	Northing (usft)	Easting (usft)	Latitude	Longitude	
- Shape										
(704H)TNGNT LIMITER: - plan misses target center by 125.9usft at 6742.1usft MD (6653.3 TVD, -235.1 N, 877.5 E) - Rectangle (sides W50.0 H50.0 D3,552.4)	12.00	285.00	6,654.0	-202.0	756.0	364,052.60	584,927.40	32° 0' 2.154 N	104° 3' 33.725 W	
(704H) KOP BOX: 50' N: - plan misses target center by 0.5usft at 9108.6usft MD (9019.7 TVD, -235.1 N, 877.5 E) - Rectangle (sides W80.0 H100.0 D2,174.5)	0.00	179.86	9,019.7	-235.0	877.0	364,019.60	585,048.40	32° 0' 1.824 N	104° 3' 32.320 W	
FTP (KEG SHELL FED C - plan misses target center by 125.7usft at 9733.0usft MD (9587.3 TVD, -52.1 N, 877.1 E) - Circle (radius 50.0)	0.00	0.00	9,689.0	-126.1	875.3	364,128.50	585,046.70	32° 0' 2.902 N	104° 3' 32.337 W	
PPP2 (KEG SHELL 704I - plan misses target center by 3.2usft at 11563.2usft MD (9697.3 TVD, 1755.1 N, 873.4 E) - Point	0.00	0.00	9,700.0	1,755.1	871.7	366,009.70	585,043.10	32° 0' 21.520 N	104° 3' 32.323 W	
PPP3 (KEG SHELL 704I - plan misses target center by 0.9usft at 16862.6usft MD (9726.6 TVD, 7054.4 N, 862.5 E) - Point	0.00	0.01	9,727.0	7,054.4	861.7	371,309.00	585,033.10	32° 1' 13.965 N	104° 3' 32.283 W	
PPP4 (KEG SHELL 704I - plan misses target center by 0.7usft at 19546.9usft MD (9741.4 TVD, 9738.7 N, 856.9 E) - Point	0.00	0.00	9,742.0	9,738.7	856.6	373,993.30	585,028.00	32° 1' 40.530 N	104° 3' 32.263 W	
PBHL (KEG SHELL FED - plan misses target center by 0.7usft at 21963.6usft MD (9754.7 TVD, 12155.4 N, 851.9 E) - Rectangle (sides W100.0 H12,155.5 D20.0)	-0.32	179.88	9,754.0	12,155.4	852.0	376,410.00	585,023.40	32° 2' 4.448 N	104° 3' 32.245 W	
LTP (KEG SHELL FED C - plan hits target center - Circle (radius 50.0)	90.00	359.86	9,754.0	12,025.4	852.2	376,280.00	585,023.60	32° 2' 3.161 N	104° 3' 32.247 W	

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Planning Report

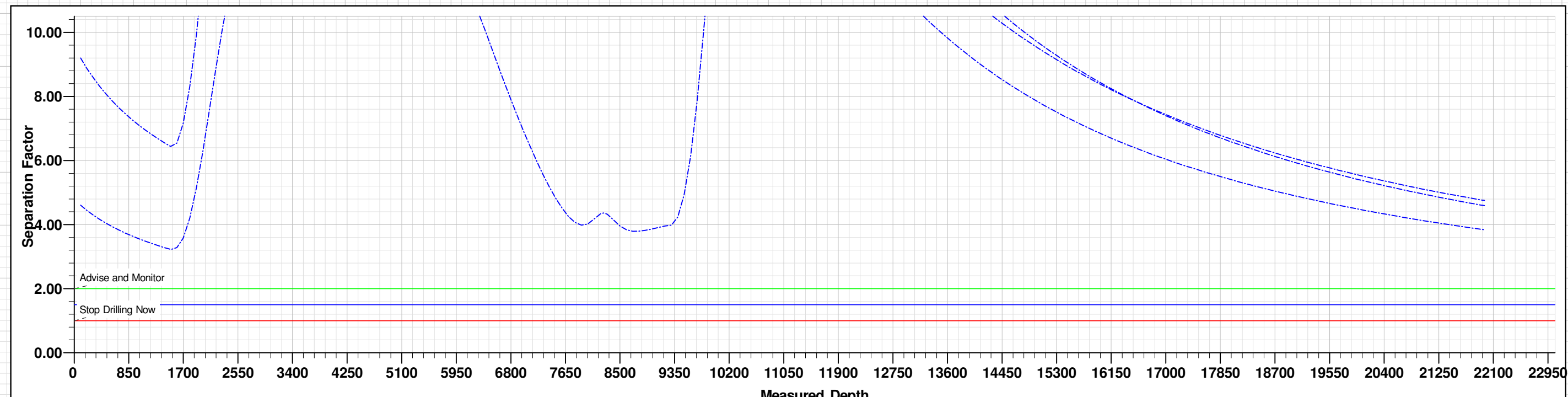
Database:	EDT 17 Central Planning Prod	Local Co-ordinate Reference:	Well KEG SHELL FEDERAL COM #704H
Company:	DELAWARE BASIN WEST	TVD Reference:	KB=32 @ 3061.5usft
Project:	ATLAS PROSPECT (NM-E)	MD Reference:	KB=32 @ 3061.5usft
Site:	KEG SHELL FED COM PROJECT	North Reference:	Grid
Well:	KEG SHELL FEDERAL COM #704H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OWB		
Design:	PWP2		

Casing Points					
Measured Depth (usft)	Vertical Depth (usft)	Name	Casing Diameter (")	Hole Diameter (")	
21,963.8	9,754.7	5-1/2" Production Casing	5-1/2	6-3/4	

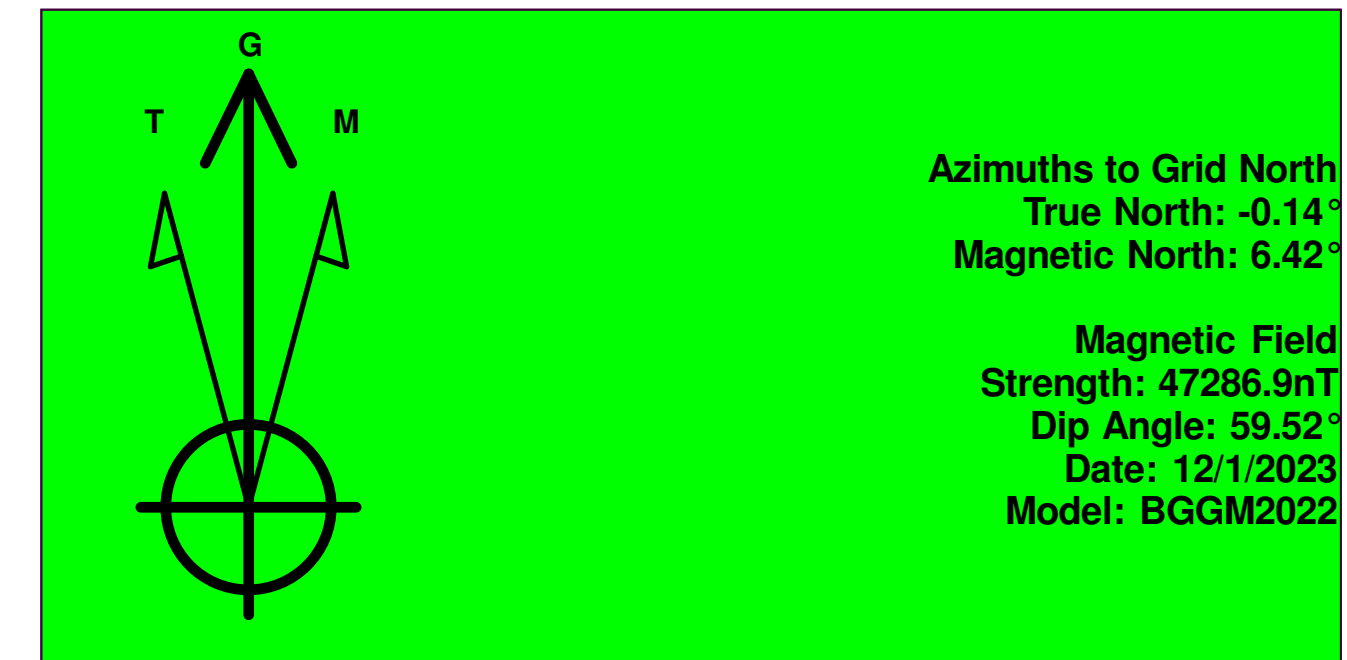
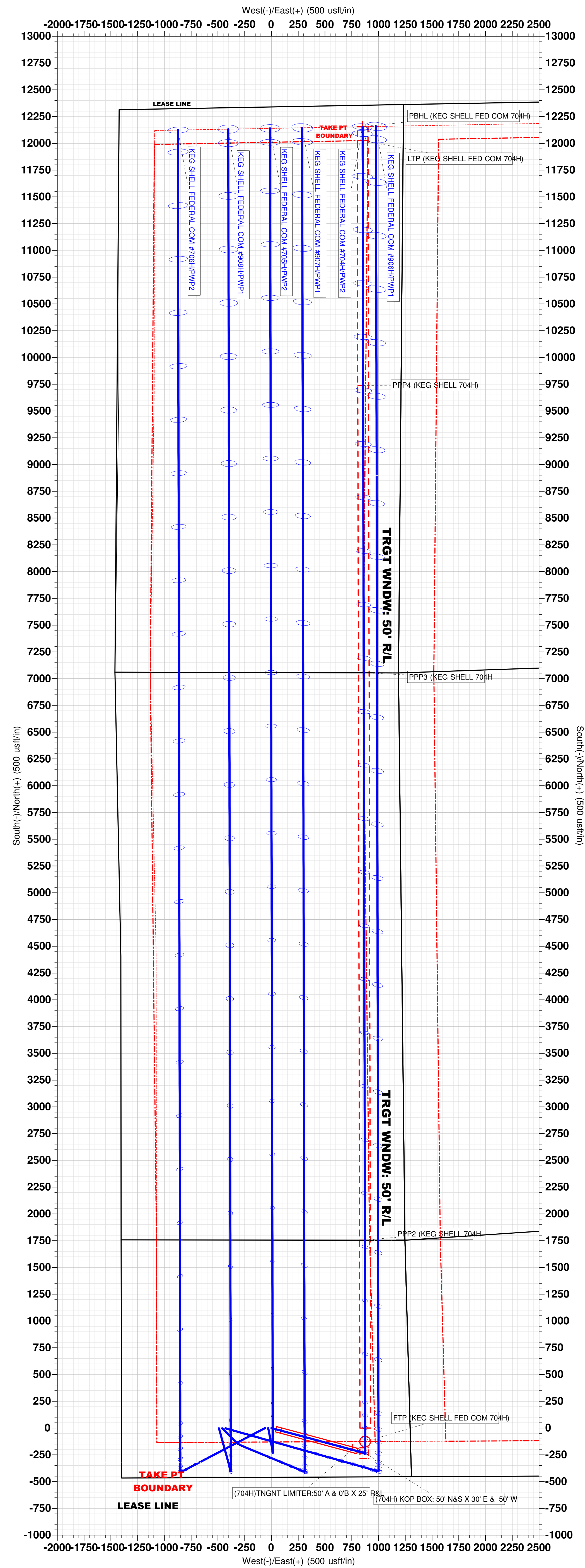
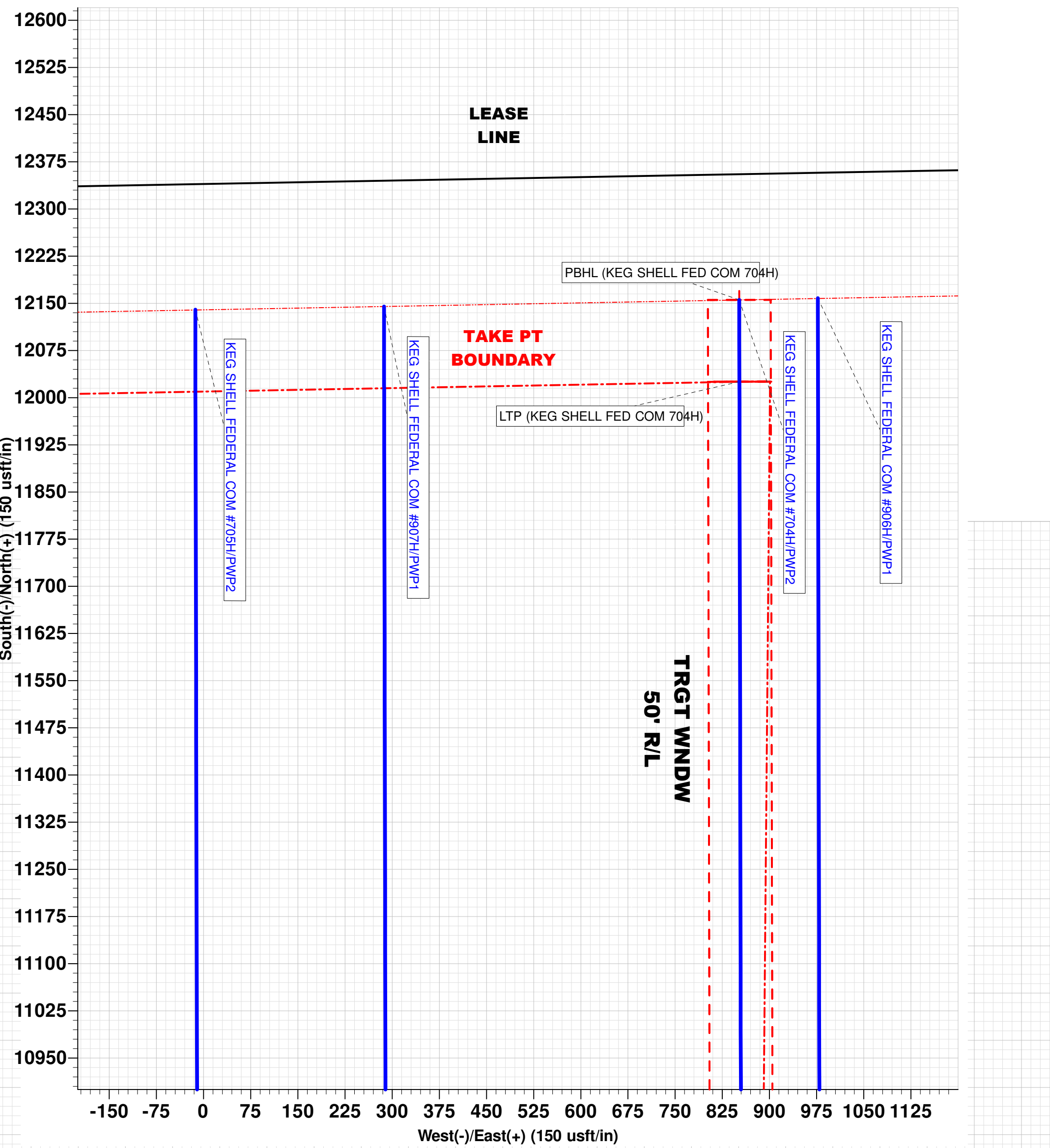
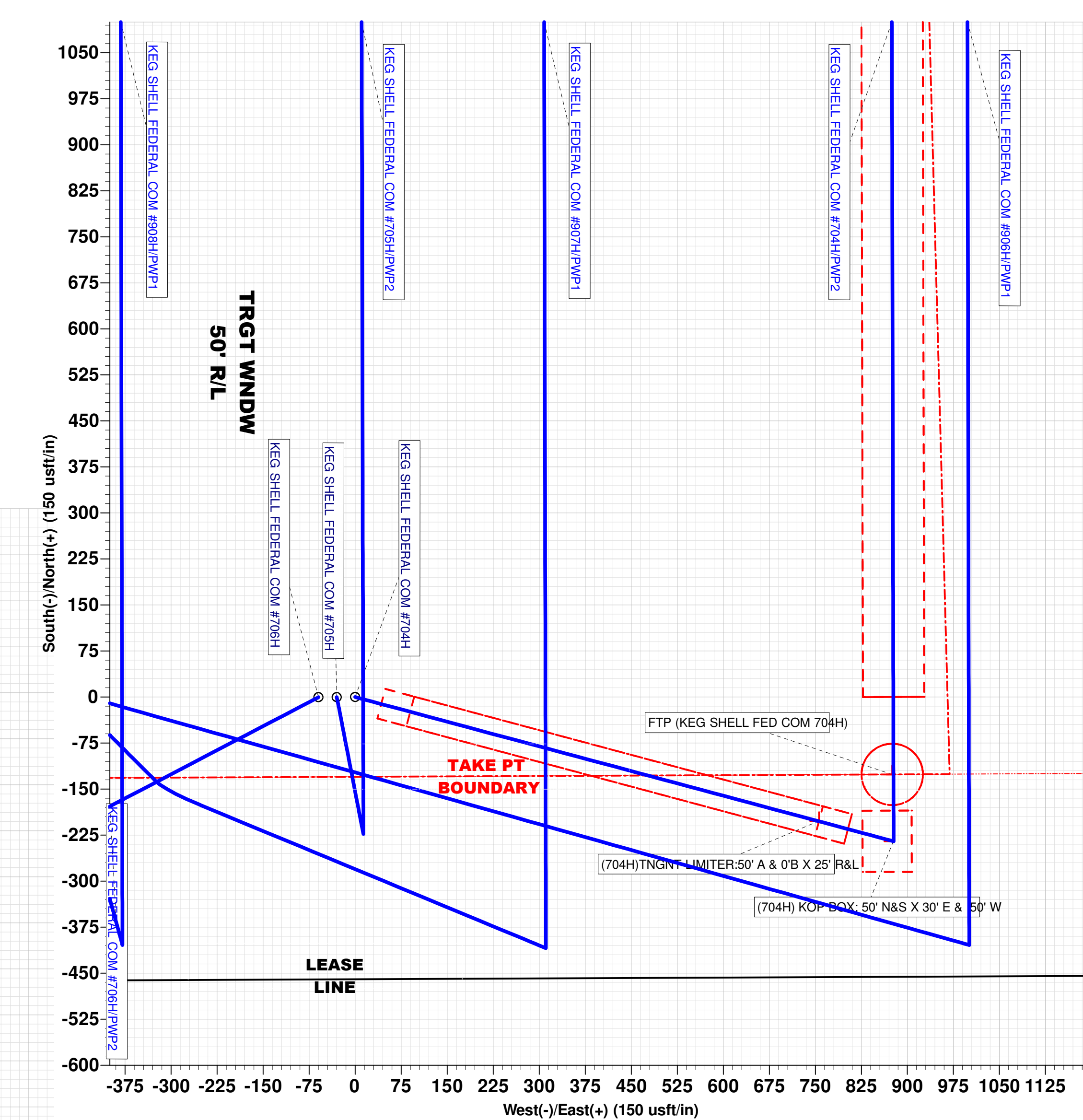
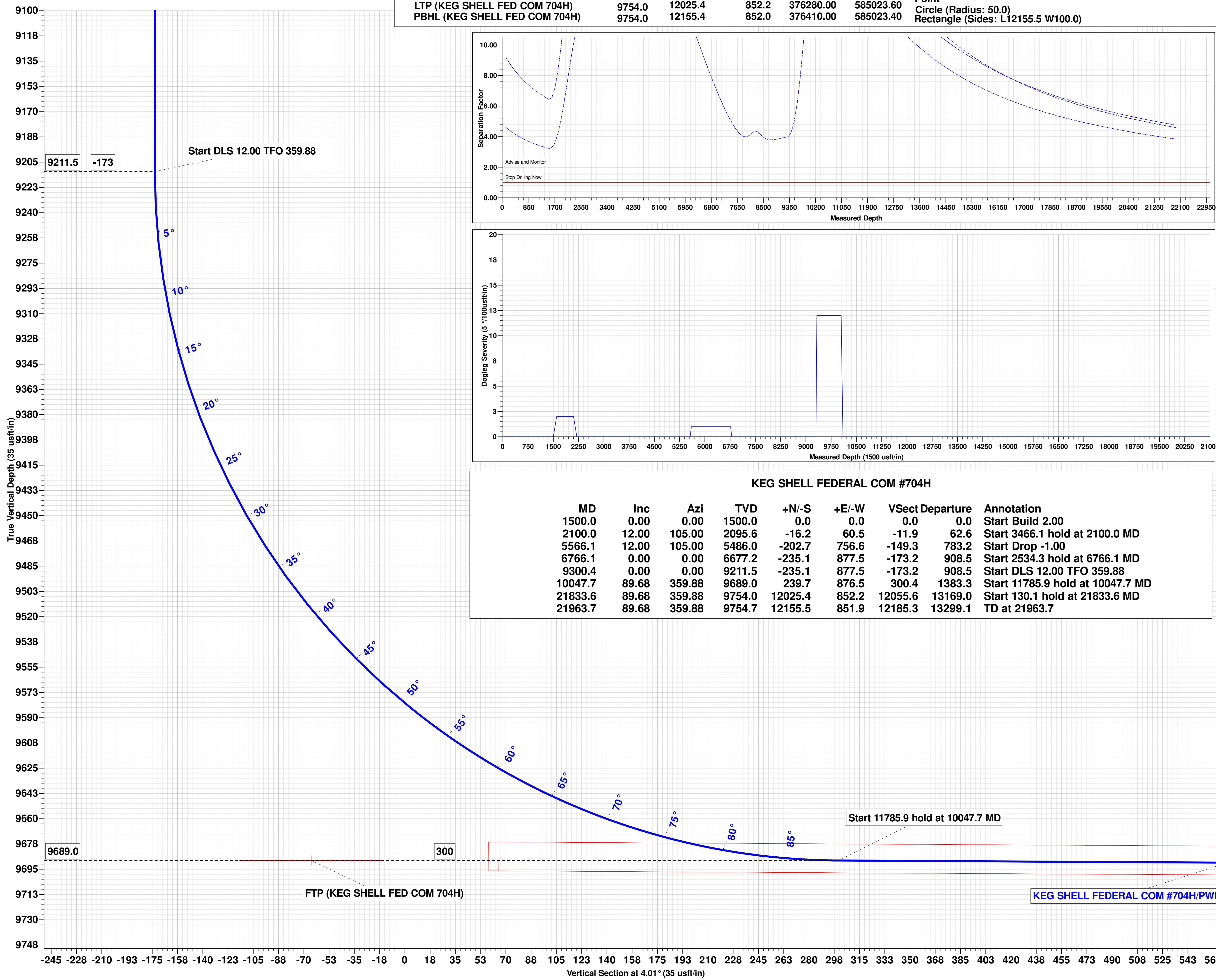
Plan Annotations					
Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates			
		+N/-S (usft)	+E/-W (usft)	Comment	
1,500.0	1,500.0	0.0	0.0	Start Build 2.00	
2,100.0	2,095.6	-16.2	60.5	Start 3466.1 hold at 2100.0 MD	
5,566.1	5,486.0	-202.7	756.6	Start Drop -1.00	
6,766.1	6,677.2	-235.1	877.5	Start 2534.3 hold at 6766.1 MD	
9,300.4	9,211.5	-235.1	877.5	Start DLS 12.00 TFO 359.88	
10,047.7	9,689.0	239.7	876.5	Start 11785.9 hold at 10047.7 MD	
21,833.6	9,754.0	12,025.4	852.2	Start 130.1 hold at 21833.6 MD	
21,963.7	9,754.7	12,155.5	851.9	TD at 21963.7	

WELL DETAILS: KEG SHELL FEDERAL COM #704H					
+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
0.0	0.0	364254.60	584171.40	32° 0' 4.172 N	104° 3' 42.498 W

DESIGN TARGET DETAILS					
Name	TVD	+N/-S	+E/-W	Northing	Easting
(704H)TNGNT LIMITER:50' A & 0'B X 25' R&L	6654.0	-202.0	756.0	364052.60	584927.40
(704H) KOP BOX: 50' N&S X 30' E & 50' W	9019.7	-235.0	877.0	364019.60	585048.40
FTP (KEG SHELL FED COM 704H)	9689.0	-126.1	875.3	364128.50	585046.70
PPP2 (KEG SHELL 704H)	9700.0	1755.1	871.7	366009.70	585043.10
PPP3 (KEG SHELL 704H)	9727.0	7054.4	861.7	371309.00	585033.10
PPP4 (KEG SHELL 704H)	9742.0	9738.7	856.6	373993.30	585028.00
LTP (KEG SHELL FED COM 704H)	9754.0	12025.4	852.2	376280.00	585023.60
PBHL (KEG SHELL FED COM 704H)	9754.0	12155.4	852.0	376410.00	585023.40
Shape					
(704H)TNGNT LIMITER:50' A & 0'B X 25' R&L					Rectangle (Sides: L50.0 W50.0)
(704H) KOP BOX: 50' N&S X 30' E & 50' W					Rectangle (Sides: L100.0 W80.0)
FTP (KEG SHELL FED COM 704H)					Circle (Radius: 50.0)
PPP2 (KEG SHELL 704H)					Point
PPP3 (KEG SHELL 704H)					Point
PPP4 (KEG SHELL 704H)					Point
LTP (KEG SHELL FED COM 704H)					Circle (Radius: 50.0)
PBHL (KEG SHELL FED COM 704H)					Rectangle (Sides: L12155.5 W100.0)



KEG SHELL FEDERAL COM #704H									
MD	Inc	Azi	TVD	+N/-S	+E/-W	V Sect	Departure	Annotation	
1500.0	0.00	0.00	1500.0	0.0	0.0	0.0	0.0	Start Build 2.00	
2100.0	12.00	105.00	2095.6	-16.2	60.5	-11.9	62.6	Start 3466.1 hold at 2100.0 MD	
5566.1	12.00	105.00	5486.0	-202.7	756.6	-149.3	783.2	Start Drop -1.00	
6766.1	0.00	0.00	6677.2	-235.1	877.5	-173.2	908.5	Start 2534.3 hold at 6766.1 MD	
9300.4	0.00	0.00	9211.5	-235.1	877.5	-173.2	908.5	Start DLS 12.00 TFO 359.88	
10047.7	89.68	359.88	9689.0	239.7	876.5	300.4	1383.3	Start 11785.9 hold at 10047.7 MD	
21833.6	89.68	359.88	9754.0	12025.4	852.2	12055.6	13169.0	Start 130.1 hold at 21833.6 MD	
21963.7	89.68	359.88	9754.7	12155.5	851.9	12185.3	13299.1	TD at 21963.7	



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 240842

CONDITIONS

Operator: COG OPERATING LLC 600 W Illinois Ave Midland, TX 79701	OGRID: 229137
	Action Number: 240842
	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