Viking Graben – UK/Norway – 2009-2013

PGS16910VIK 3D GeoStreamer®

Derisk future exploration and extend production of existing fields with GeoStreamer PURE

Get a unique insight into the structural geology and petroleum system of the Norwegian Sea with this large scale GeoStreamer dataset. The survey comprises MC3D-Q162013 and LN0902.

Late Jurassic rifting led to the formation of numerous horsts and rotated fault blocks along the margins of the Viking Graben. This area is known for its high-quality hydrocarbon reservoirs.

Coverage has been built up over several years of consistent acquisition using GeoStreamer technology. Earlier data vintages have been reprocessed and imaged in depth from original field data, using the same modern workflows to allow a unified interpretation approach through the entire volume.
SURVEY SUMMARY

Type: 3D
Geostreamer: Yes
Size: 3600.1 sq. km
Acquisition year: 2009-2013
Completion of processing: 2017
Water depth: 90 / 140 m
Shooting direction: 90 / 270 & 45 / 225
Vessels: PGS Apollo, Atlantic Explorer

ACQUISITION PARAMETERS

Number of streamers: 6/10
Streamer length: 5 100 / 6 000 m
Streamer separation: 75 / 100 m
Shot interval: 18.75 m
Record length: 7 000 / 7 168 / 5 120 ms
Source depth: 6-7 m
Sample rate: 2 ms
Bin dimensions (Acquisition): 6.25 x 18.75 m
Bin dimensions (Processing): 12.5 x 12.5 m
Fold: 80/64

PROCESSING AND DELIVERABLES

Processing: P-UP generation, Full source deghosting, Full source and receiver deghosting (conventional data), 3D surface related multiple elimination (SRME), Convolutional 3D SRME, Wave equation 3D SRME, High resolution radon demultiple, Internal multiple attenuation, HyperTomo velocity model building, Full waveform inversion (FWI), Kirchhoff prestack depth migration (PSDM), Beam depth migration, Q-migration, Separated wavefield imaging (SWIM), Least squares imaging (WEI)

Depth products: Final Kirchhoff PSDM stack, Final beam PSDM stack, Final SWIM stack, PSDM gathers, Anisotropy and velocity models, Velocity model, Final Kirchhoff PSDM angle stacks, Final beam PSDM angle stacks, PSDM angle stacks

Time products: Final post-stack time migration, Final Kirchhoff PSTM Stack, PSTM gathers, Stacking velocity, Migration velocity, Angle stacks

Seismic line stretching from the Utsira High (right) NW across the Gudrun Terrace and into the Vana sub-basin

For all enquires please contact Email: europe.info@pgs.com