



Benguela Basin – Angola – 1999

ANG Blk 25 Reprocessed 3D

Multi-azimuth depth reprocessing gives a clearer image of pre and postsalt targets

The generation of a multi-azimuth image with reprocessing to depth provides new insight in this West African exploration hot spot. Increased resolution of syn-rift faulting through multi-azimuth reprocessing gives explorers a greater understanding of basin structure and prospectivity.

In partnership with:



Angola offshore acreage has world-class potential, with a proven petroleum system within both the syn-rift and post-rift sections. This is analogous to the proven producing systems along the conjugate margin of Brazil, Campos and Santos Basins.

Multi-azimuth reprocessing combined with a comprehensive depth imaging flow provides a broader frequency bandwidth for enhanced presalt illumination.

SURVEY SUMMARY

Type: 3D
Geometry: Standard
Size: 4 906 sq. km
Acquisition year: 1999
Completion of processing: 2013
Reprocessed: Yes
Water depth: 200 – 2 200 m
Shooting direction: 90/270
Vessel: Ramform Valiant
In partnership with: ANPG

ACQUISITION PARAMETERS

Number of streamers: 12
Streamer length: 4 800 m
Streamer separation: 104 m
Shot interval: 25 m
Record length: 8 000 ms
Source depth: 5 m
Sample rate: 2 ms
Bin dimensions (Acquisition): 12.5 x 12.5 m
Bin dimensions (Processing): 12.5 x 12.5 m
Fold: 48

PROCESSING AND DELIVERABLES

Processing: 3D surface related multiple elimination (SRME), High resolution radon demultiple, Kirchhoff prestack depth migration (PSDM)

Depth products: Final Kirchhoff PSDM stack, Final beam PSDM stack, PSDM gathers, Velocity model, Angle Stacks

Additional products: Gravity, Magnetics