



Culture: IHS Markit



Straits of Tartar, NW coast of Sakhalin Island – Russia – 1998

## Astrakhanov 3D

The 545 sq km survey reveals the prospect potential of the Astrakhanov structure

The survey was acquired over the Astrakhanov prospect North Sakhalin Island, believed to have significant hydrocarbon potential. The survey covers a very large Upper Miocene-Pliocene compressional anticline, which is heavily compartmentalized. The well, drilled on 2D data, missed the prospect.

The Astrakhanov structure represents a complicated compressional anticline of Pliocene age. In contrast to most of the other discoveries along the Sakhalin shelf, the reservoir comprises of thick and homogenous shallow marine sandstones of Early Miocene age.

The dataset was reprocessed in 2007 using modern pre-stack imaging to reveal the complexity of the fault system, with emphasis on evaluating the remaining hydrocarbon potential. A detailed interpretation report is available.

**SURVEY SUMMARY**

Type: 3D  
Geometry: Standard  
Size: 545 sq. km  
Acquisition year: 1998  
Completion of processing: 2007  
Reprocessed: Yes  
Water depth: 9-35 m  
Shooting direction: NE/SW (73/253)  
Vessel: Orient  
In partnership with: DMNG

**ACQUISITION PARAMETERS**

Number of streamers: 4  
Streamer length: 3 600 m  
Streamer separation: 100 m  
Shot interval: 25 m  
Record length: 6 000 ms  
Source depth: 5 m  
Sample rate: 2 ms  
Bin dimensions (Acquisition): 6.25x25 m  
Bin dimensions (Processing): 12.5x12.5 m  
Fold: 36

**PROCESSING AND DELIVERABLES**

Processing: 2D surface related multiple elimination (SRME), XT / Tau-P Deconvolution, Kirchhoff prestack time migration (PSTM)

Time products: Final Kirchhoff PSTM Stack, Angle stack near, Angle stack mid, Angle stack far

Additional products: Interpretation