

Wintershall Noordzee B.V.

Ovation brings exhaustive quality control to remastering seismic data

Industry: Oil & Gas

Wintershall Noordzee B.V. is an international exploration and production company that operates nine offshore production installations and four subsea completions, producing gas from the Dutch sector of the North Sea. In recent years, it has expanded its operating portfolio to the continental shelves of Germany, the United Kingdom and Denmark.

Challenge

Wintershall's seismic data inventory plays an important role in providing key insights for exploration and production decisions. The company places a high priority on maintaining this valuable resource and ensuring its data quality and accessibility for further processing and interpretation.

When Wintershall needed to remaster a large inventory of its seismic data originally stored on 31,800 cartridges of various types, and 3,000 9-track open reel tapes, it relied on experience with Ovation during previous successful projects. Ovation has been performing large-scale tape transcription and data recovery services for the oil and gas industry since 1976, transcribing more than 500,000 tapes and cartridges every year. Its team of experts and an extensive inventory of equipment and proprietary software bring exhaustive quality control to ensure the highest quality output.

Solution

Wintershall awarded the transcription project to Ovation, the top specialists in re-mastering seismic data and transcription. To meet the project's storage requirements, the scope of work required processes for migrating the data to high-density IBM® 3592 cartridges.

The Ovation team received the full inventory of media along with Wintershall's standard tape storage boxes and generated a run-list for each box. Employing specialised software, experts copied the data on internal disk space. Using the legacy inventory, they identified all datasets, located the data in virtual boxes and organised it into products. Then they executed strategic processes to achieve quality requirements for various types of data.

Field Data

- Concatenated the data to ensure that no line was split across outputs on the 3592 media
- Produced shot record displays for each line at 500 shotpoint intervals.
- Checked the shotpoint line range against P1/90 navigation data to verify that the complete survey was transcribed

Processed data sets

- Generated time slices and the root mean square (RMS) amplitude value displays
- Using these displays, validated data integrity and identified discrepancies in transcription data to be restored

Gathers data and gathers data sets

- Binned the data
- Generated near, mid and far trace cubes together with time slices and fold coverage displays

P1/90 navigation data and other data types

- Created sail line maps and coverage plots
- Created coverage plots for all BIN data sets
- For other data types, such as interpretation and raw navigation, encapsulated in RODE format to preserve the native formats

Results

Ovation successfully completed the project in accordance with the highest standards, transcribing the large volume field and gathers data to IBM® 3592 cartridges and producing a back-up copy. Experts wrote the processed data to TAR format at one megabyte (1MB) block lengths to IBM® 3592 cartridges also.

Wintershall can now be confident that its valuable geophysical data assets are preserved and transcribed into current technology formats, and will remain accessible for exploration and production decisions now and in the future.

Book a consultation

Find out how Ovation can help you transform your data assets from difficult problems to valued and usable resources.

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Subsurface and seismic data management is the key to smarter decision-making in the oil and gas industry.

- For more than forty years, Ovation has helped energy companies unlock and protect valuable information hidden within huge data volumes stored on all kinds of media formats.
- Ovation discovers, enhances, and preserves the value of your data – no matter its age or description.
- Using strict quality control, Ovation can duplicate your geophysical data for a second site, joint venture sharing, disaster recovery, risk management initiatives or any other purpose.