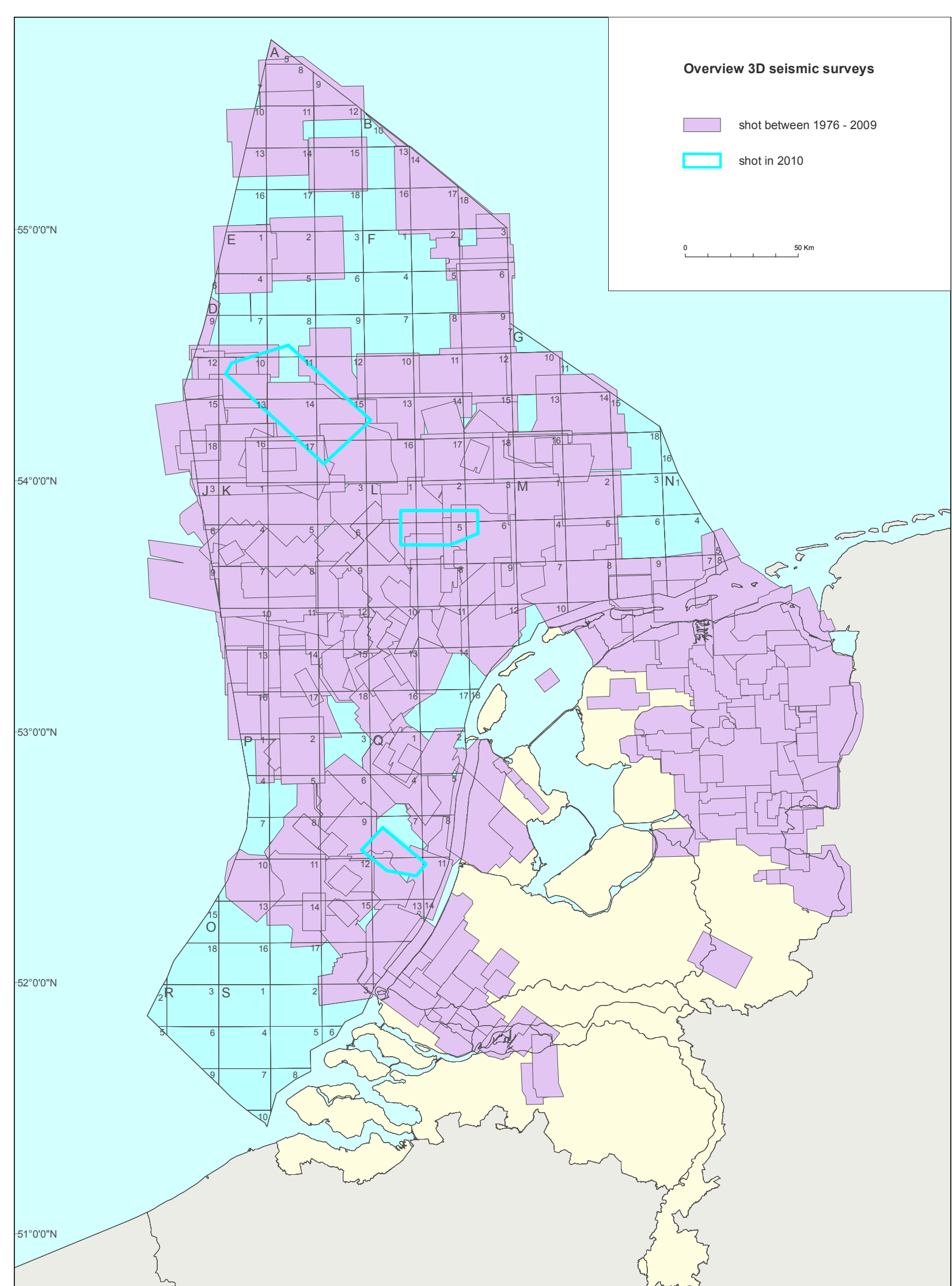


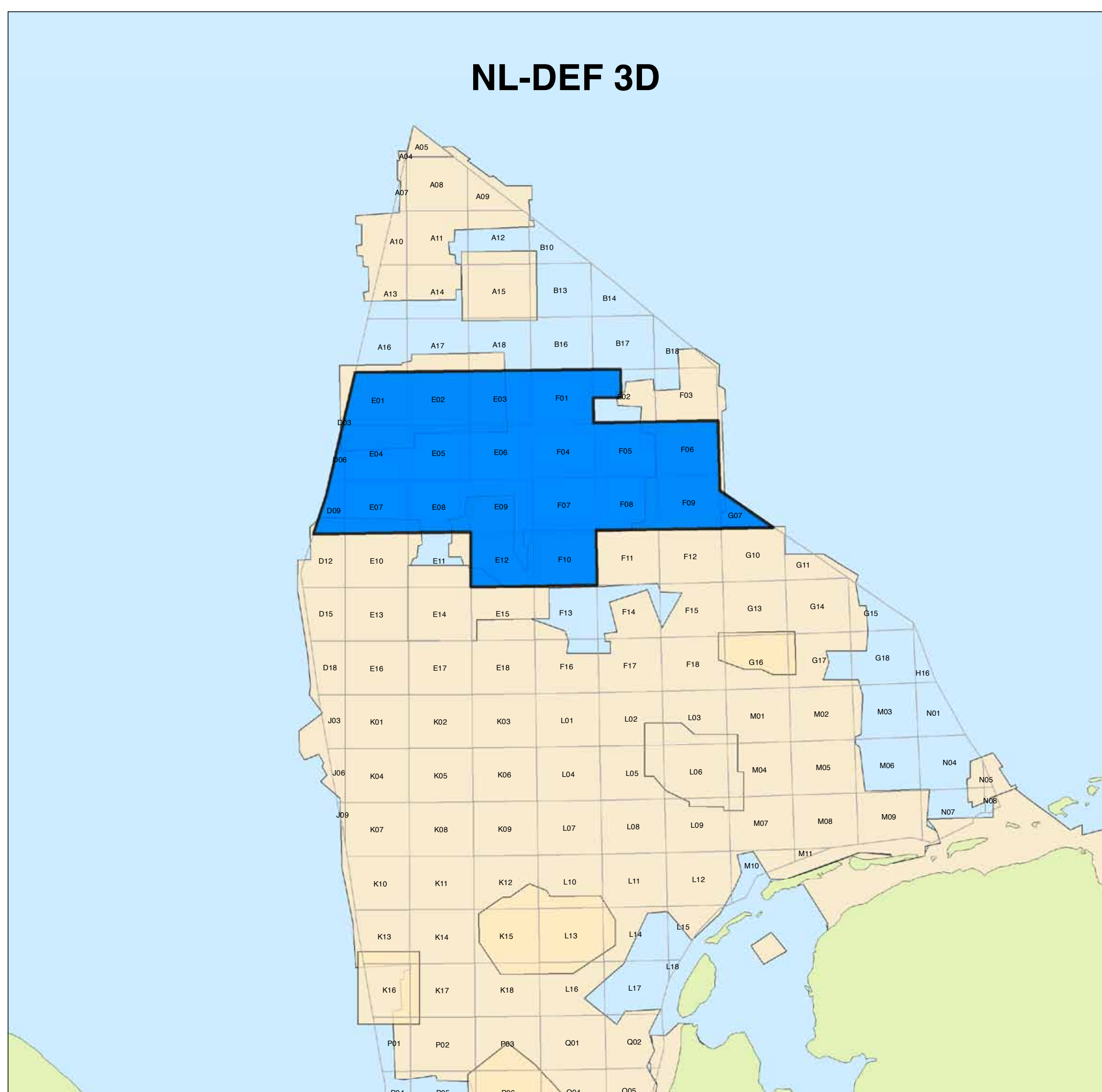
3D-seismic data position

3D seismic data coverage of the Netherlands



2011 Fugro, long cable, spec 3D-survey

3D seismic survey coverage onshore and offshore the Netherlands. Seismic data becomes public after 5 years in the Netherlands. Public data (post-stack) can be purchased at TNO (www.nlog.nl). Various vendors offer large, regional merges of the public seismic data.



Pre-view of Fugro's new long cable 3D spec survey

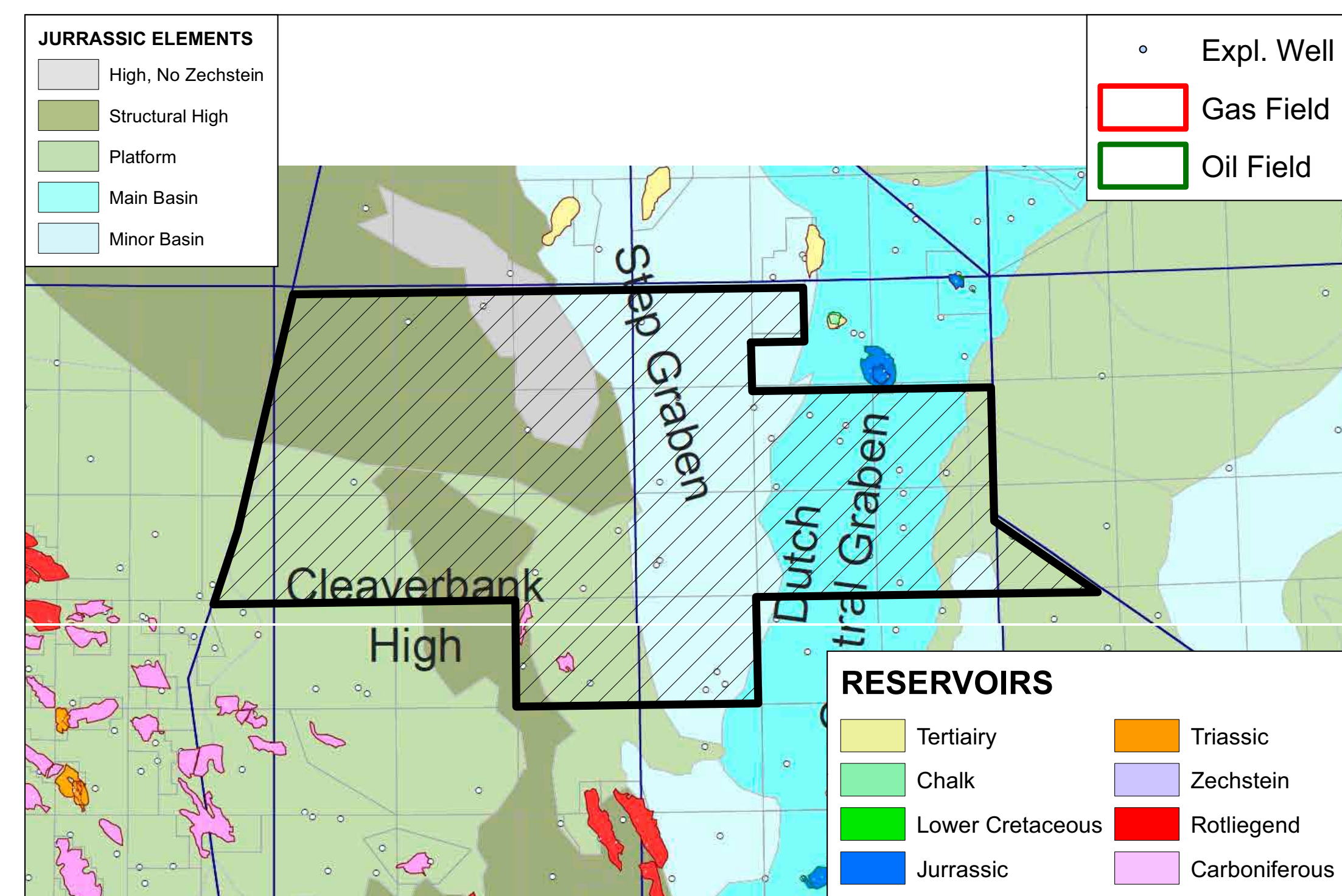
The NL-DEF-3D long cable spec survey area covers some 8000km². It is amongst the largest speculative 3D survey in Europe. It fills one of the last large gaps in the Dutch offshore 3D-coverage. The survey is located in an under-explored part of the Dutch offshore where 3D long cable seismic is lacking. Interpretation of the new survey will provide new geological information and hydrocarbon concepts that might reduce exploration risks in the area. EBN is the first company that purchased a license for the entire survey. The survey is to be completed in 2012.

The survey is to be completed in 2012.

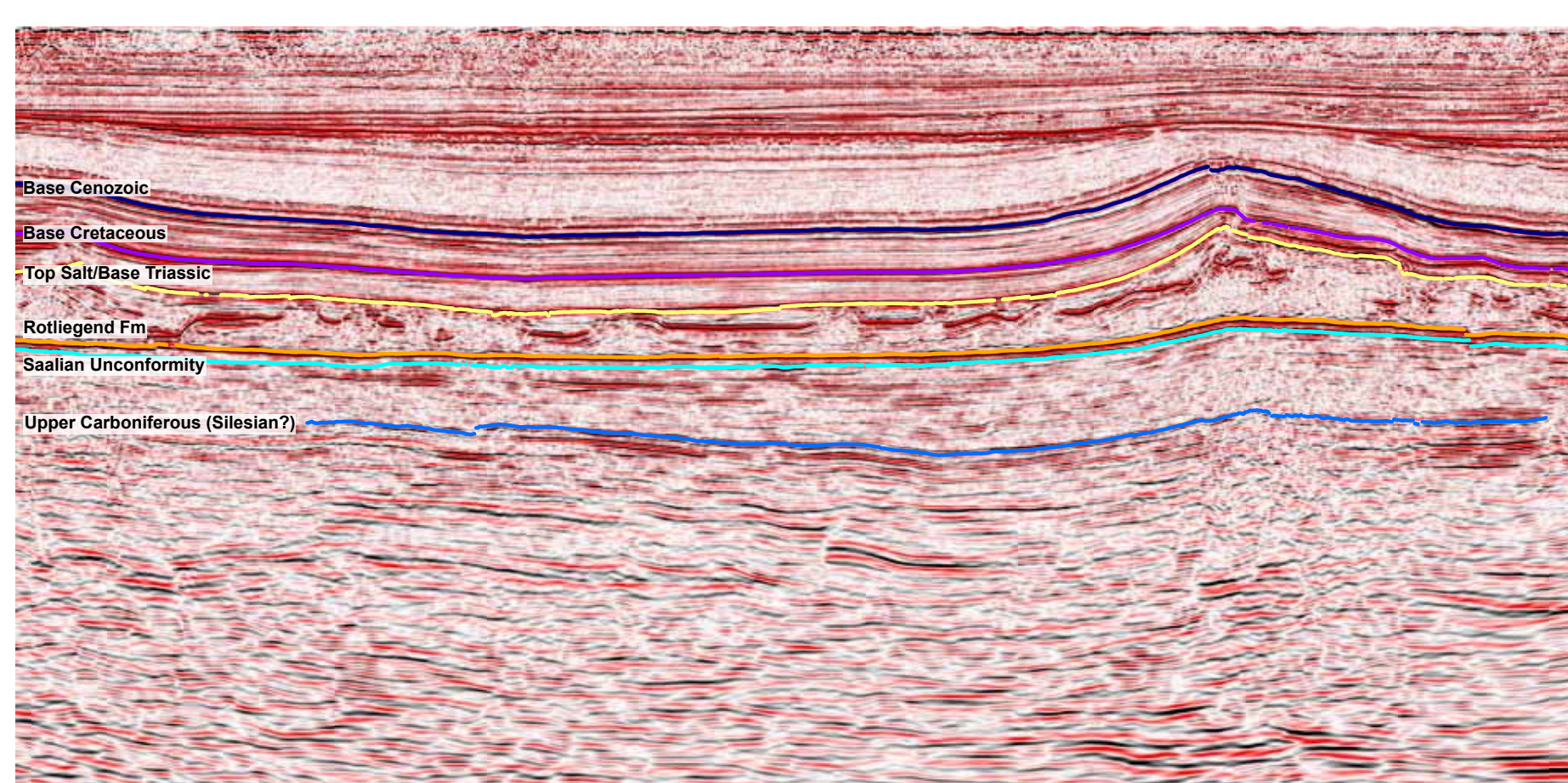
The acquisition details are:

- 3 modern seismic vessels
- 8 to 12 streamer
- 7500 to 8100 meter streamer length
- Streamer separation: 100m
- Number of sources: 2
- Source separation: 50 m
- Shot point interval: 25 m

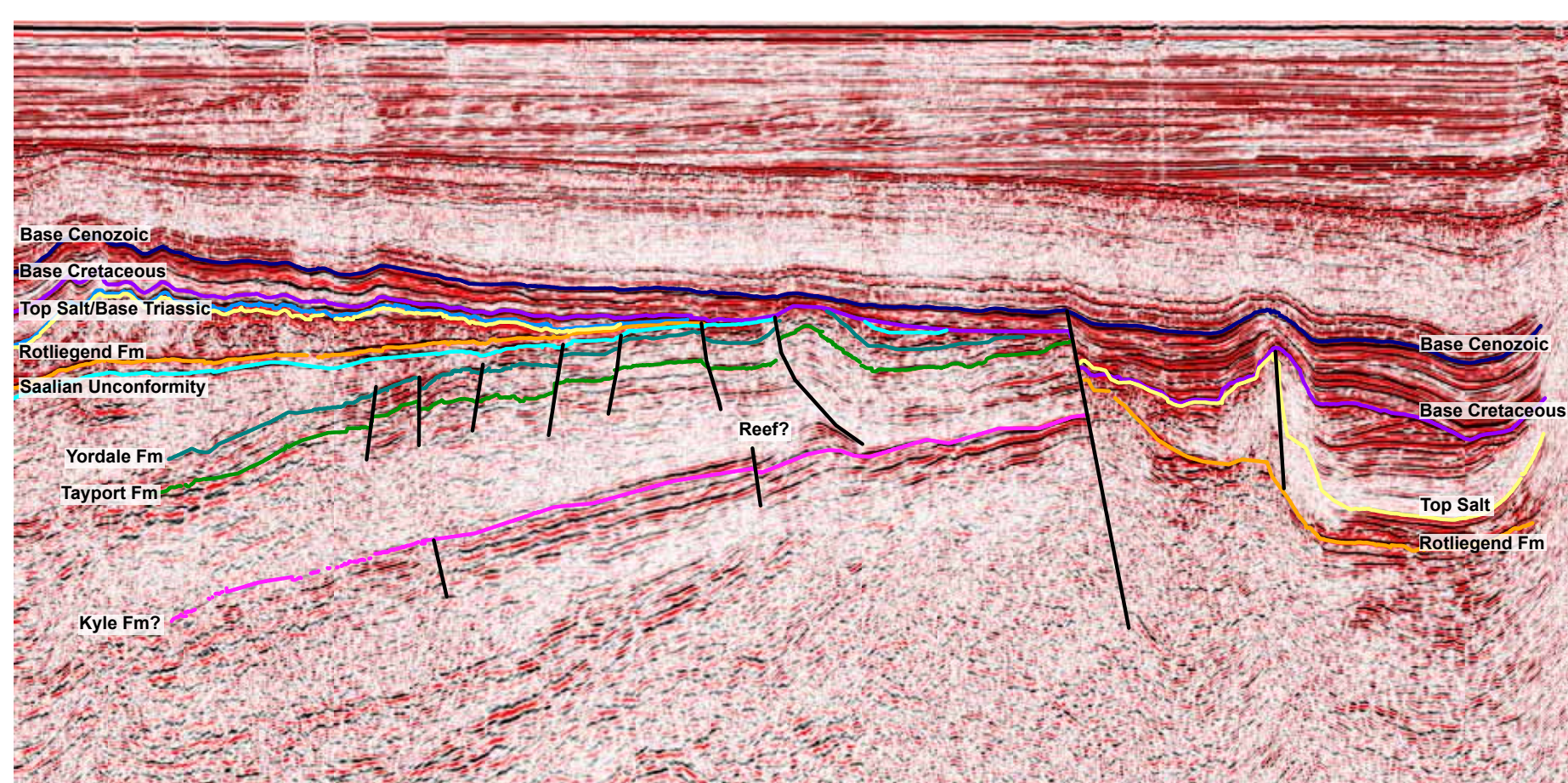
The data are processed through a modern time processing flow including the latest updated 3D SRME programs, advanced de-noise methods, Kirchhoff time migration and the most recent binning, interpolation and fold harmonization methods developed by Fugro Seismic Imaging. Deliverables will include velocity volumes and angle stacks and gathers.



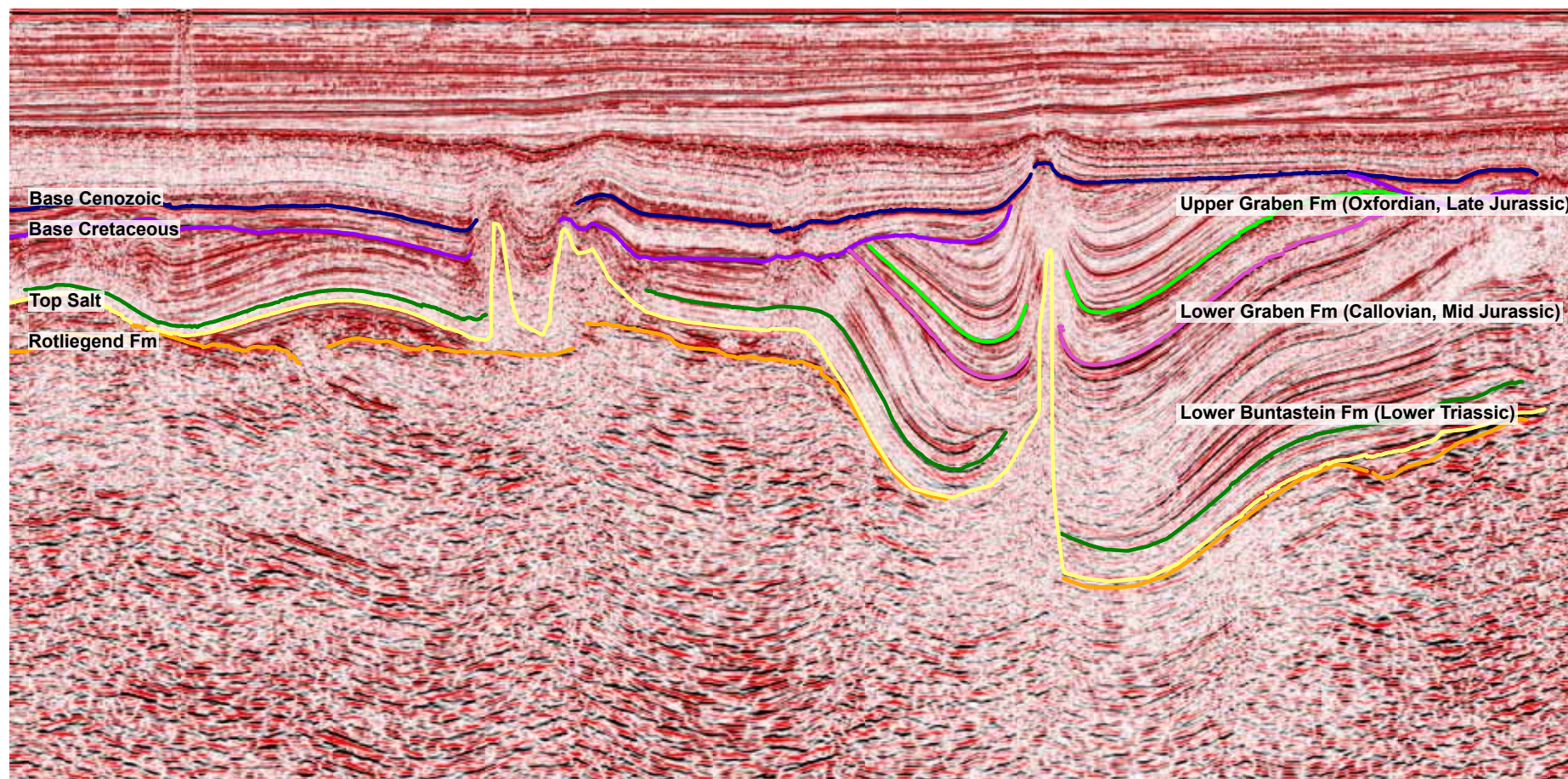
Regional structural geology of the area indicating the Cleaver Bank High, Elbow Spit high as well as the Step and Central Graben



Seismic line over the Cleaverbank High



Seismic line from the Cleaverbank High towards the Elbow Spit High



E-W line through Central Graben and Step Graben

On the first preliminary processing results the various structural domains already become evident. The onlap of Devonian and Carboniferous series onto the Elbow Spit High can be seen. The asymmetric configuration of the Central Graben with the thick Upper Jurassic - Lower Cretaceous series in the rim synclines of prominent salt domes is clear. More advanced processing will further enhance the image of the deep strata providing the material for generating robust play and prospect evaluation maps.



For information on Exploration and Production issues and E&P data see the Netherlands Oil and Gas Portal www.nlog.nl & www.ebn.nl

