

Syria

IS-SYRIA-05 - Offshore 2D Survey



CGGVeritas acquired 5,000 km of long-offset multi-client 2D seismic data offshore Syria in 2005 ahead of the first offshore licensing round in 2007, to give oil companies an opportunity to assess the hydrocarbon potential of this promising region. Following renewed interest and a series of major gas discoveries in the Levantine Basin a second offshore licensing round was announced on 24th March 2011.

Offshore Syria is a geologically complex area, situated above the plate tectonic boundary between the African and Eurasian plates. This was initially a zone of compression but since the early Pliocene has been reactivated under a sinistral strike-slip regime resulting in the overprinting of earlier compressional features by trans-pressureal flower and pop-up structures. Three distinct sedimentary basins, Levantine, Cyprian and Latakia, are present offshore Syria subdivided by the prominent Latakia Ridge System.

PETROLEUM SYSTEM

Both thermogenic and biogenic source rocks likely exist within Triassic-Jurassic lagoonal marls and late Cretaceous and Cenozoic deepwater shales. Supporting evidence comes from recent offshore gas discoveries, onshore well data, satellite-imaged oil seeps, and DHI's observed on seismic including gas chimneys, bright-spots, and flat-spots.

Prospective reservoirs will likely include Triassic-Jurassic carbonates and Cenozoic deepwater turbidite sands sourced from the Levant Margin. A thick early Miocene section is interpreted to be present, analogous to the one encountered in the southern Levantine Basin.

There are several potential structural and stratigraphic trapping mechanisms recognised on seismic data including thrust fault anticlines, tilted fault blocks, salt diapir-related traps, roll-over anticlines, carbonate reefs, and basin-margin onlaps/pinchouts. Reservoirs are often stacked as a result of late-stage uplift and compression.

2011 REPROCESSING

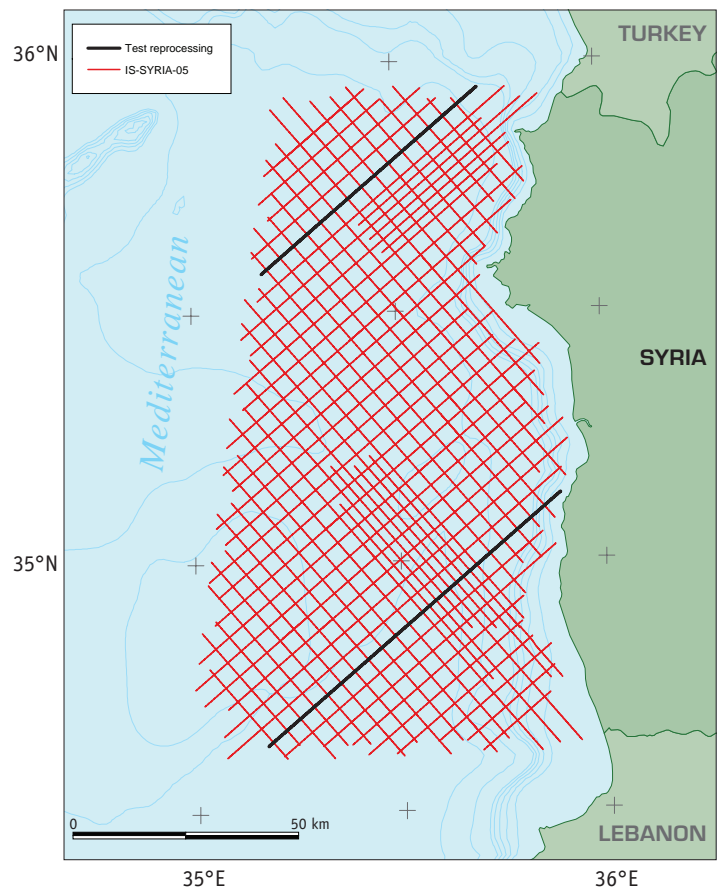
Following successful reprocessing test results, CGGVeritas is currently reprocessing the entire 2005 data set. The latest processing techniques have been applied with the aim of attenuating multiples, increasing the signal-to-noise ratio, enhancing reflector continuity, and improving imaging of steeply dipping reflectors.

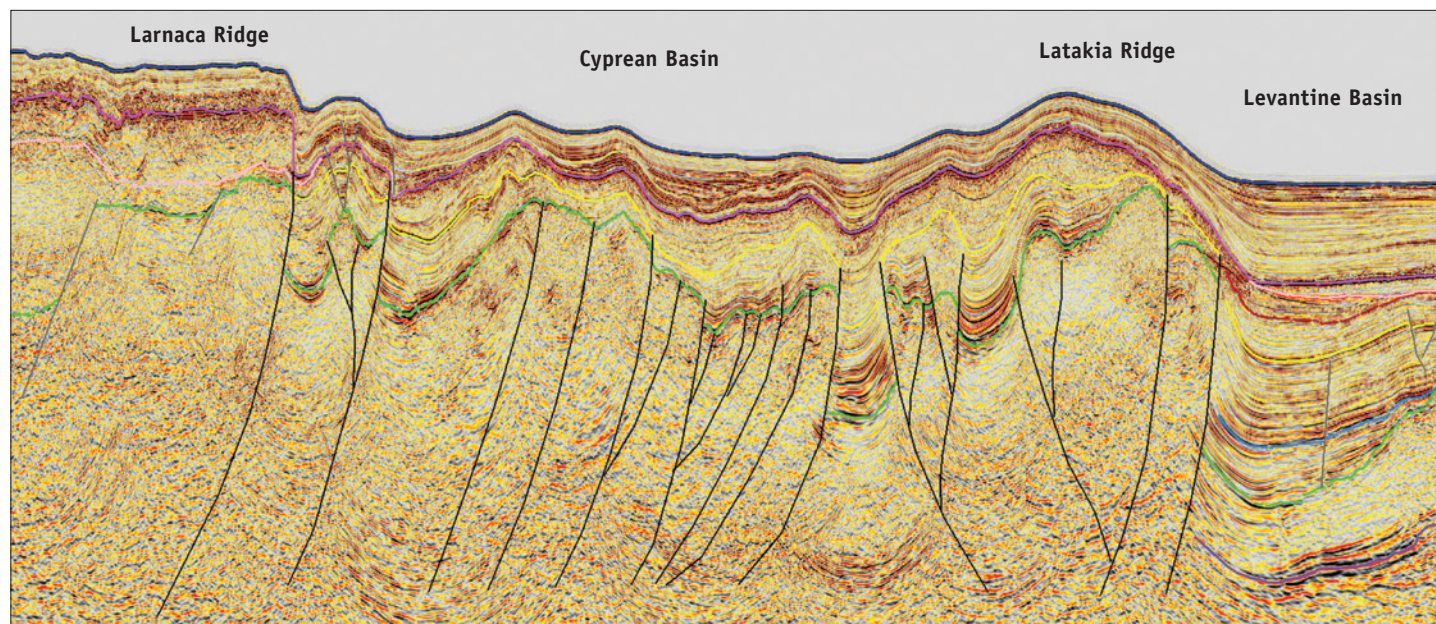
The results are extremely encouraging and provide a much clearer and more easily interpretable image. Similar results are expected to be achieved across the whole survey with significant uplift in the imaging of DHI's and sub-Messinian salt structures and stratigraphy.

IS-SYRIA-05

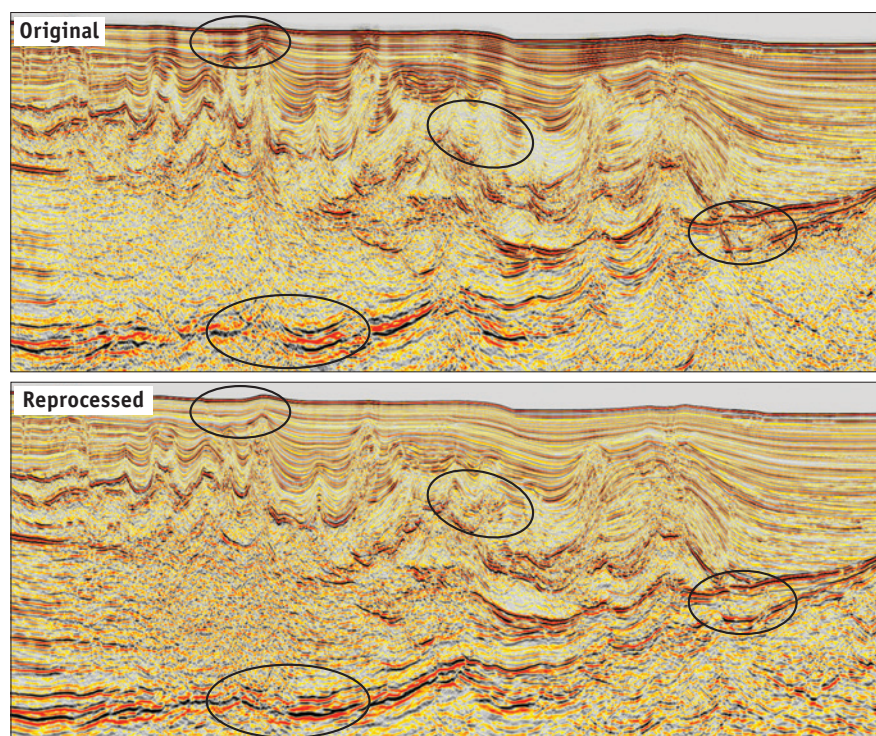
Survey size: 5,000 km

- Full regional long-offset coverage
- Interpretation report available





Regional 2D seismic line across the Cyprean Basin, bounded on either side by the Larnaca and Latakia Ridges. Multiple structural and stratigraphic trapping mechanisms are present, often with the potential for stacked reservoirs.



The reprocessed line shows improved imaging and continuity of reflectors with the removal of diffractions and shallow artefacts above salt diapirs. It provides a much clearer image with greater clarity of structures and stratigraphy.

*(Display 2005 processing and 2011 reprocessing one above the other, original on top).

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