

Thoar 3D

PROGRAM DESCRIPTION

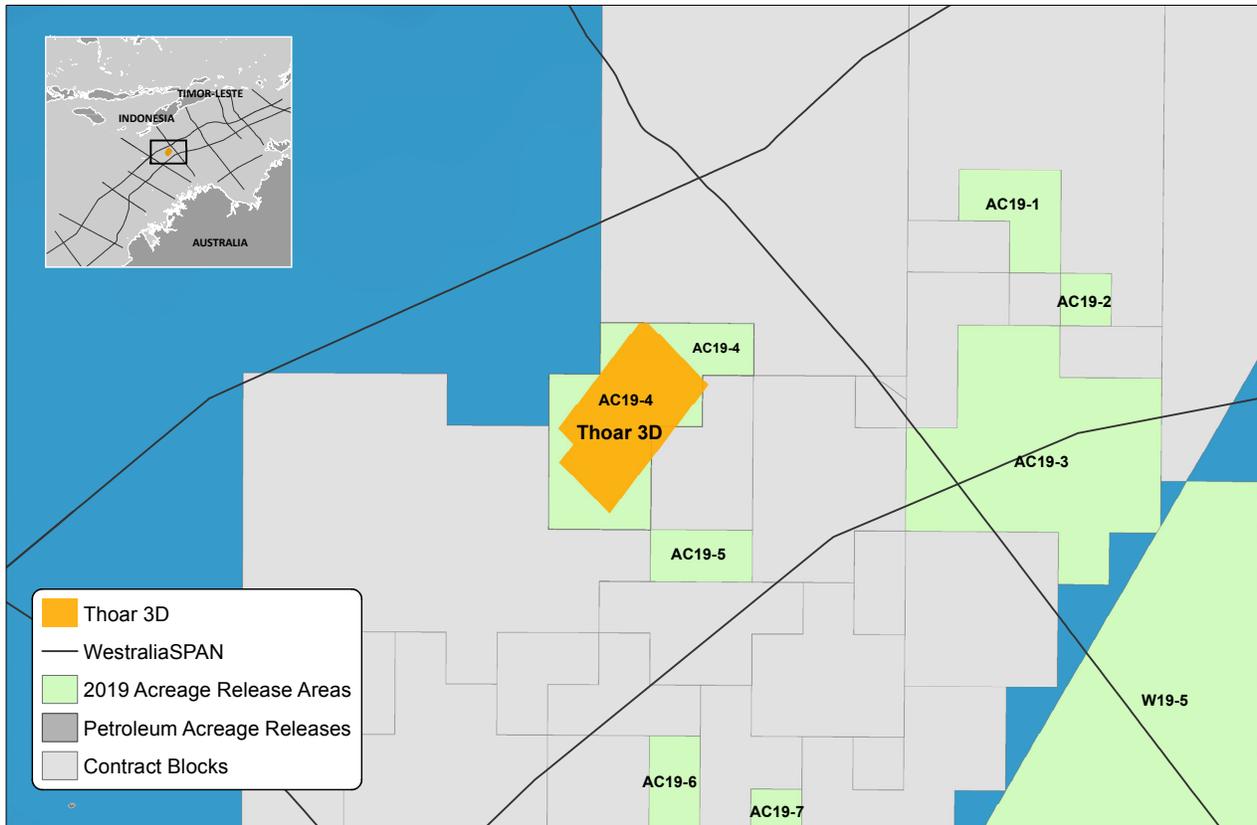
2019 Petroleum Acreage Release area AC19-4 is situated in the Vulcan Sub-basin, part of the Bonaparte Basin, a known petroleum province with significant oily sweet spots. ION leveraged the latest advancements in imaging technology and our proven track record in 3D reimagining to reprocess the Thoar 3D dataset through a PreSDM workflow. Data is available for immediate delivery at attractive rates to enable efficient evaluation of this release area.

COMMERCIAL

With 60% of resources yet undiscovered, Australia remains a huge untapped resource on the world energy market. With established Southeast Asia markets on their doorstep, Australia benefits from established trade markets for LNG and is a major contributor of LNG to the global market. The Westralia Superbasin has had an extremely complex and protracted tectonic history spanning the entire Phanerozoic, resulting in the formation of numerous basins and sub-basins with extremely thick sediment accumulations (up to ~20 km in places). The Vulcan Sub-basin is one of the most prospective parts of the Bonaparte Basin where oils are normally very light.

The Vulcan Sub-basin has proven oil and gas potential, with commercial production and sub-commercial discoveries. It is estimated that the Vulcan Sub-basin contains reserves of 357 MMbbl of oil, 31 MMbbl of Condensate, and 1.3 Tcf of gas. It contains several oil fields including Skua, Swift, Swallow, Montara, Jabiru, Challis, Cassini and Puffin, along with the Cash-Maple, Swan and Crux gas fields. With multiple petroleum systems elements established and numerous well data available, Vulcan is a proven hydrocarbon bearing area that has suffered from poor imaging in the past.

A number of leads at multiple levels have been identified in area AC19-4 and it is adjacent to the Cash-Maple field. This dataset allows evaluation of those leads and others ahead any bid submission decision.



GEOLOGICAL

The Vulcan Sub-basin is a Northeast-Southwest trending Mesozoic extensional depocenter in the western Bonaparte Basin and comprises a complex series of horst, grabens and terraces. The basin has accumulated ~9 km of sediment from Mesozoic – Recent times, with the regional SPAN data revealing an additional ~12 km of Paleozoic strata below the Mesozoic rift. Significant discoveries and shows are found throughout the Mesozoic – Recent sedimentary section. While Paleozoic source intervals are known from the Bonaparte Basin, the majority of discoveries to date within the Vulcan Sub-basin are charged from Mesozoic source intervals. The majority of the discoveries are found in structural traps bounded by rift faults or formed by compressional reactivation of rift faults. The stratigraphic play remains a potentially large prize that has thus far remained elusive, with additional Paleozoic potential yet to be tested.

KEY COMPONENTS

- Reprocessing and reimaging of 400 sq.km. Thoar 3D
- Superior image quality obtained using a detailed anisotropic earth model and high-end PreSDM technology
- Opportunity to Incorporate ION's regional WestraliaSPAN dataset, the premier regional survey off NW Australia, to understand the regional setting
- Cost effective opportunity to quickly evaluate acreage before deciding whether to bid