



The Chandler Proposal - Geology

Geology is a fundamental factor in site selection for geological repositories. Therefore, both regional and local geological investigations were completed for the proposed Chandler Facility. The investigations were undertaken to confirm the suitability of the location selected for the proposed Chandler Facility met 'best practice' site selection criteria.

Regional geology

Tellus' exploration leases are located within the Amadeus Basin in the southern region of the NT. The Amadeus Basin is an asymmetrical, east-west trending depression covering approximately 155,000 square kilometres of central Australia.

The Chandler Formation is located within the Amadeus Basin and is a world class salt deposit. The 500 million-year old Chandler salt bed at the site of the proposed Chandler Facility is approximately eight kilometres wide, 800 metres below ground level, and 250 to 300 metres thick.

Local geology

The geology at and around the site of the proposed Chandler Facility is dominated by sandstone and siltstone, before reaching the Chandler Formation at a depth of about 800 metres below ground level. The identified salt resource is a large bed of rock salt (halite) split into an upper 35-metre layer and lower 200-metre layer. The proposed storage and permanent isolation horizon would be located in the upper layer.

Seismic activity

The proposed Chandler Facility would be located within a tectonically stable plate interior, thousands of kilometres from the nearest tectonic plate boundaries. There have been no recorded large earthquakes within the immediate vicinity of the proposed Chandler Facility.

Suitability as an ideal location for a geological repository

Investigations undertaken over the past four years have confirmed that, from a geological perspective, the current location of the proposed Chandler Facility is ideal for a geological repository. This has been confirmed by independent international experts.



Drilling has confirmed the geology and salt resource at the site of the proposed Chandler Facility

