

WATERHOUSE CLUB – DRILL CORE LIBRARY VISIT, WEDNESDAY 14TH JULY 2021.

A group of 16 Club members were treated to a fascinating tour of the SA Drill Core Library, ranging from the extraordinary storage facility with cores from 130 years of exploration to the high tech scanning and analysis equipment now employed to investigate every aspect of the samples.

The Drill Core Library (DCL) opened in 2016, and is housed in an impressive award winning, weathered steel-clad building at Tonsley, purpose built to house collections which were previously stored at sites around the State. It is internationally recognised as a leader in its class.

David Groom, Manager of the DCL, provided an introduction, and emphasised the public nature of the facility, where access is available free of charge for research and analysis. Exploration is encouraged and supported in SA; the trade-off is the requirement that drill samples are publicly available.

We then delved into SARIG (South Australia Resource Information Gateway, which you can explore here <https://map.sarig.sa.gov.au/>), another publicly available resource, with hundreds of “layers” of geoscientific and spatial data, covering everything from water pipes and electricity cables to mineral deposits and soil analysis.

This then came to life in the 3D-room, where the Roxby Downs formations were presented as a revolving 3D structure, highlighting the many drill locations, rock layers and surface features of the site, before we moved into the storage room. Hundreds of tonnes and hundreds of kilometres of samples, accessed by a drive-by-wire forklift, picking trays of samples weighing over 1 tonne each. Even Indiana Jones would have been impressed!

Analysis of samples is now possible online, with a growing proportion of the core samples at the site now scanned with HyLogger, converting tubes of rock into highly detailed photographic records with mineral analysis on a millimetre by millimetre basis. This is housed in its own room at the side of the DCL and continues the monumental task of logging all the samples.

But you have to really get your hands on the samples to know what you are dealing with, and we were treated to a tour-de-force by Club member Trevor Ireland, who took us through a detailed analysis of several hundred meters of rock samples from Carapateena, laid out on rollers in the spacious examination room. We were also shown operation of the hand-held XRF which provides x-ray analysis in the field.

This is a very impressive facility, providing comprehensive data on exploration and research carried out in SA over the last 100 years and more. The economic potential, both public and private is self-evident.

Thank you to David Groom and all the staff at the DCL who contributed to a fascinating morning.

Mark Mackintosh
EVENT ORGANISER

