



**DEEP EXPLORATION
TECHNOLOGIES CRC**
Uncovering the future

Project 1.4: Brukunga Drilling Research & Training Facility



PROGRAM 1: DRILLING

Program Leader	Soren Soe (DET CRC)
Project 1.4	Brukunga Drilling Research & Training Facility
Project Leader	Darren Caldwell (Boart Longyear)
Key Researchers	Alex Hardy (Boart Longyear)
Participants	Boart Longyear
Timing	1 November 2013 – 31 October 2017
Cash Funding	\$1,812,000
In Kind Funding	\$6,434,600
Review Panel Chair	Ielca Torok (Vale)

“The Drilling Research & Training Facility gives an unprecedented opportunity to conduct research and training in real world environment without the plethora of issues normally involved in getting on an operational drill site.” Darren Caldwell, Boart Longyear

OBJECTIVES

To continue to provide an accessible facility for field testing of new drilling and logging technologies and for Vocational Education & Training (VET) for the drilling industry.

BACKGROUND AND AIMS

The Drilling Research & Training Facility (DRTF) has been established at the disused Brukunga Mine site in the Adelaide Hills. The DRTF provides excellent field laboratory for the R&D on drilling and logging techniques being developed by DET CRC.

It is critical that such testing be available as it is extremely problematic to undertake such, in operating mines due to the expense of interruptions to mining operations, and the safety and logistical issues that arise.

The Brukunga Mine site is the ideal location for the DRTF.

- Sulphides in the host rocks at Brukunga make it suitable for R&D on drillhole logging equipment designed to detect sulphide ores.
- Brukunga is located conveniently to metropolitan Adelaide for access by researchers (44 km from CBD).
- The adjacent CFS training facility offers meeting rooms, full communications, accommodation and meals.
- Convenient location for Boart Longyear which has its regional HQ in Adelaide, who supply both equipment and personnel.

SERVICE SECTOR ENGAGEMENT AND COMMERCIALISATION

The DRTF continues its close alignment with the service providers who use the facility as a testing and evaluation site for equipment and technologies developed within the CRC. The engagement with the VET sector continues to grow and develop with new training courses being regularly held at the DRTF by several training providers.

LINKAGES TO OTHER DET CRC PROJECTS

The DRTF is intimately linked with all CRC projects that develop technologies that require on site testing, most notably Projects 1.1, 1.2, 2.2, 2.3, and 3.2.

YEAR 2 MILESTONES

- Collaborate with 3rd party training provider in provision of onsite vocational training.
- Training conducted on newly developed technology as required.
- Independent audit of compliance with the Brukunga Mine Safety Plan (MSP) and Operations and Risk Management Plan (ORMP).
- Lab-at-Rig® integration at Brukunga as required by the Lab-at-Rig® schedule.
- Coiled tubing drilling using composite tubing as required by the Project 1.1 schedule.

COMMONWEALTH AGREEMENT OUTPUT AND MILESTONES

- Facility used for training operators in use of new technologies as they are rolled out.
- First stages of a comprehensive database of mineralogical, geological, and petrophysical data are completed.