

Braeside Borefield, Nebo, QLD

CLIENT BHP Mitsui Coal Pty Ltd

YEAR 2006 - Ongoing

SCOPE OF WORK

- Groundwater exploration
- Borefield performance review
- Bore rehabilitation advice
- Design & installation of borefield



Braeside borefield comprises 16 production bores and provides ~3,000 ML/a of water to a number of coal mining operations, towns and rural properties in the Northern Bowen Basin

Monitoring and maintenance programs are key elements in borefield management. Since 2006, the Douglas Partners' Groundwater Team has been regularly reviewing the monitoring data for Braeside Borefield near Nebo, North Queensland. The borefield comprises 16 production bores.

Since 2006, Douglas Partners has been undertaking performance reviews for the Braeside Borefield, located 120 km southwest of Mackay, and owned by BHP Mitsui Coal Pty Ltd (BMC). The borefield supplies approximately 3,000 ML/a of water to a number of townships and coal mining operations in the northern portion of the Bowen Basin. Water is sourced from alluvial sediments at the confluence of Nebo and Denison Creeks, and transferred a distance of almost 100 km to Riverside Mine and other users.

Monitoring data for Braeside Borefield operations are regularly reviewed by the Douglas Partners Groundwater Team to assess the performance of the borefield. Reviewed data includes: meteorological data from the Bureau of Meteorology (BoM); streamflow data from the Department of Natural Resources & Mines (DNRM); pumping data for the 16 Braeside production bores; groundwater level data for production bores, associated monitoring bores and regional monitoring bores; and water quality data for the production bores, a subset of borefield monitoring bores, the

treatment plant and the pipeline.

Monitoring and maintenance programs are key elements in borefield management. Douglas Partners not only conducts detailed bi-annual reviews of borefield performance but also provides advice for bore rehabilitation programs and the design and installation of replacement bores.

"Douglas Partners provides
a range of services to BHP
Mitsui Coal in order to maintain
production of water from the
Braeside Borefield. Services
include advice and design of
replacement bores and bi-annual
reviews. The reviews are required
as a condition of the Licence
which allows BHP Mitsui Coal to
continue to draw from this valuable
resource."

lain Hair Principal Hydrogeologist



