



MEMORANDUM

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Re: **Update April 2009 – Broke Water Monitoring Program**

This is a project progress summary of the works undertaken as part of the groundwater and surface water monitoring program associated with Broke coal seam gas exploration program.

Six groundwater monitoring boreholes were constructed during mid March by Impax Drilling. Two drilling rigs were used and the drilling took place over a two week period from 9 March through to 20 March 2009. The groundwater monitoring boreholes were drilled and constructed to intersect the major groundwater bearing zones in the local area.

The monitoring boreholes were installed at three locations in the shallow alluvium, at moderate depth (60-80m below ground level) sandstone aquifer and in deep coal / sandstone aquifer.

The water quality was monitored during drilling, and field parameters (including salinity, pH, dissolved oxygen (DO) and temperature) of each of the intersected aquifers were recorded. The water quality of the aquifers within the deep sandstone layers and coal seams were slightly saline. The shallow sandstone and the shallow alluvial aquifer were generally of good quality (with one exception being BMO1A).

The boreholes were cleaned and completed which included installation of lockable steel protector covers were then cemented into place over each of the boreholes.

Baseline monitoring program - groundwater and surface water

PB expects to commence the first round of baseline groundwater and surface water monitoring in mid April over a 3 day time period. The monitoring will include pumping and collecting a water sample from each of the newly installed boreholes and from within Monkey Place Creek. A water level from within each of the boreholes will also be monitored on a continuous basis using dataloggers. The samples will be sent to a NATA certified laboratory for analysis.