Review of Monitoring at Iwupataka, 2005

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1. Introduction
Six bores have been monitored at Iwupataka, and three are currently monitored (Table 1).

Table 1 Monitoring bores at Iwupataka

<table>
<thead>
<tr>
<th>RN</th>
<th>East</th>
<th>North</th>
<th>First Read</th>
<th>Last Read</th>
<th>Aquifer</th>
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</table>

(1) Ca, Arumbera Sandstone
     Cj, Jay Creek Limestone

At present Iwupataka (or Jay Creek) is abandoned and there is no groundwater extraction.
Hydrographs are shown in Appendix A.

2. Hydrogeology
The aquifers monitored, and formerly used for are in the Arumbera Sandstone, and Jay Creek Limestone, both fairly steep-dipping and roughly perpendicular to the course of Jay Creek. Aquifers in both units show bounded responses to pumping and relatively rapid long term drawdowns (Read, 1978).

3. Discussion
Water levels over the period of record have shown a fluctuation of up to 8 m (RN 11747). There is a regular pattern of rapid rises, presumably after flows in Jay Creek, followed by periods of slow decline until the next significant flow. This can be most clearly seen in the hydrograph for RN 11748, which was formerly equipped with a logger.

The aquifers monitored are relatively minor, and have little connection with major regional aquifers in the Amadeus Basin. There seems little point in continuing monitoring at this stage.

Continued monitoring will not add anything to our knowledge of the regional aquifer system.

There is a possibility of a tourist development at this location. If this was to happen, and the rate of pumping was significantly higher than in the past, the borefield operator might be required to monitor water levels.

4. Recommendation
Monitoring of bores at Iwupataka can be discontinued.
5. Reference

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