COOLBAIR STATION

FIELD INSPECTION REPORT

This report covers the original inspection of Bradshaw Springs Area, 25/6/62, and King Hillabong, 6 mile crossing and Angalwirri River on 28/29-7-64, relating to surface storages for stock watering.

SITE (1) BRADSHAW SPRINGS.

A perennial spring, located approximately 440' above the plain level at the base of Yambaara Range escarpment 4800' N.W. of Bradshaw Cattle Camp, has a minimum estimated discharge of 12,000 C.P.D. This discharge may vary from time to time by piezometric fluctuations.

The water is lost through the porous river bed prior to reaching the lower limits of the range.

At the time of the visit, water supply to the cattle camp was through a 1½" G.I. pipe which was in a poor condition. The water though good quality is very soft and slightly acid and may have a tendency to corrode G.I. pipe.

SOWNBA SPRING.

A perennial spring, located approximately 1 mile E.N.E. of Bradshaw Spring at the base of the escarpment. It is approximately 410' above plain level and has an estimated minimum flow of 80,000 C.P.D. which may vary from time to time by piezometric fluctuations. Water quality is similar to Bradshaw Spring.

CAMERON SPRING.

A perennial spring, situated approximately 1½ mile N.E. of Sownba at the base of the escarpment.

It is approximately 370' above plain level and approximately 5½ mile upstream of Angalwirri River. The estimated minimum discharge is 60,000 C.P.D. and like the previously mentioned spring may be subject to piezometric fluctuations. While a perennial spring the water is soon lost through the bed of the creek. Water quality is similar to Bradshaw Spring.

This spring could be used as a stock water supply through polythene or P.V.C. pipe to Marrayl pool paddock to the south east.

Note: for location of above springs refer to drawing No. W354 attached.

RECOMMENDATIONS.

Sownba and Cameron Spring offer good stock water supplies and could be used up to 40,000' feet away through 2" R.D. Polythene or P.V.C. pipe buried in the ground to a minimum advisable depth of 10'.

BRADSHAW SPRING.

The recommended utilisation of this spring, shown on attached drawing, is designed to enable the total discharge to be used as required.

It should be noted that it is important to ensure that the pipe is laid 10' underground and the excess valves be placed at low points. If it is intended to discharge into a trough, through a hall valve then the elevation of the tank should be 3½' of the elevation shown to prevent damage to the pipe through wearer damage. (See plan W.354). The trough should be constructed of concrete.

I understand the station has 2 mile of 2" polythene pipe on hand, and this has been included in the layout.

A pipeline for water supply for the cattle camp or future buildings has been included.
Due to mechanical faults of the Pilaris Lager no test holes were drilled in the inspected area, however it is strongly recommended that test holes be drilled prior to any proposed construction program to ensure soil types have adequate depth and are of a suitable impervious material.

**SITE (2) JAMBOE BILLABONG.**

An inspection of this billabong indicated the possibilities of increasing the stock water capacity with the construction of an excavated tank within the confines of the banks on the S.W. side of the main billabong. The section of the river bank to the south west indicated suitable material. The situation from a physical point of view is good as the area is sheltered by timber on all sides. At the time of the visit the billabong was approximately 1400' long 150' wide with an estimated capacity of 11 million gallons, however I feel that evaporation would account for most of this storage by early September.

Maximum water level marks (drowned) are 7' above the river level of 23.7.54 with estimated capacity of 25 million gallons, the top 4' would probably be lost through evaporation in the early years which would leave the black soil of the billabong.

**SITE (3) TEST OF TINBER TRAP - WARRAVA TRACT.**

An area approximately 3 mile S.W. of the Amageri 6 mile crossing and 6 mile west of the above road was inspected for a possible excavated tank site.

The area is clay alluvium on the natural surface and Wask Branch. Geologists suggested this alluvium should have a depth in excess of 15 feet and 20' would be expected, indicating this site should be suitable. However this should be confirmed by test hole drilling.

**SITE (4) JABARCO BILLABONG.**

Located approximately 12 mile upstream of the 6 mile crossing near Amageri River. It has an estimated storage to flow capacity of 3 million gallons and 750,000 gallons on 23.7.54. The soil type is impervious yellow clay alluvium and the banks cover an area of about 1200' x 200'. An excavated tank site could be constructed on either or both sides of the track subject to sub-surface soil being suitably impervious and the required depth.

**GENERAL.**

During the inspection between Amageri 6 mile crossing to Coweeilla yards several water holes in the channels of the river and other smaller billabongs were investigated. These storages were of varying small capacities useful for stock watering in the early dry season but have little scope for commercial improvement or enlargement.

Should excavated tanks be constructed they should be fenced to protect earthworks and fittings from damage by stock. Water extraction could be by windmill and tank or fenced fenced with a protected ramp into the tanks.

The attached plans indicate the location of the pipeline and sites.