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NORTHERN TERRITORY ADMINISTRATION
WATER RESOURCES BRANCH

FIELD TRIP REPORT
WATER RESOURCES SURVEY - OENPELLI MISSION.

K. Henderson, Chairman

This report is supplementary to the report by the Senior Planning Engineer issued in February 1960 and mainly covers work completed as suggested in the above report.

1. A detailed survey of the mission was completed with all relevant contours, a copy of which is attached to this report.

2. Measuring points were levelled in on all wells plus one on the channel into the billabong so that the water table can be compared.

3. The wells are all situated in ironstone stained laterite with the top soil varying from a few inches to approx. 18" deep.

4. A few shallow reefs of ironstone are scattered through the highest contours.

5. Water analysis were completed on all wells and the billabong and the results are on the attached chart with other relevant data.

6. On climbing the hill near the mission by the name of Arguluk mentioned in the previous report, it was found that to put a large tank on the side of this hill would be a major job. The grade up to about the 300' level is very steep and it was very hard to climb, even on the top, which is about 400' high, there are no suitable natural sites and the hill is of solid granite. Also it is at least 600 yds west of the extreme western hut shown on the attached plan.

7. An inspection was made of the waterfall which is about 4 miles S.E. of the mission. It is also one of the two creeks which feed the billabong at the mission. It is quite an imposing sight, having a fall of slightly more than 200'.

   An inspection of the top revealed that although the left hand bank rose quite steeply the right hand bank had a long sloping incline and to even put in a wall of 10' to 12' would probably require almost 300' or more of wall. The verbal information is that it generally flows till at least August.

   At a rough estimate at the time I saw it, the flow would be between 6 and 8 cusecs. Although I was not able to go further....2/
up the creek, owing to lack of time I noticed a few depressions in the hill on the left hand bank which could be low saddles. The Mission has been toying with the idea of using this creek for a hydro scheme, but it would require much more detailed work to either prove or disprove this possibility.

(P. AUGUSTINE)
TECHNICAL OFFICER.

SURVEY OF WELLS AT OENPELLI MISSION.

<table>
<thead>
<tr>
<th>Well Description</th>
<th>Well Depth (feet)</th>
<th>Measuring Point R.I.</th>
<th>Standing W.L. 11/4/60</th>
<th>Sodium Chloride (Na Cl) in P.P.M.</th>
<th>Hardness as CaCO3 in P.P.M.</th>
<th>Carbonate as CaCO3 in P.P.M.</th>
</tr>
</thead>
<tbody>
<tr>
<td>A. Near Superintendent's house, main supply equipped with mill.</td>
<td>27'</td>
<td>117.50</td>
<td>11'</td>
<td>50</td>
<td>40</td>
<td>10</td>
</tr>
<tr>
<td>B. Rear of Single Women's quarters, equipped with mill.</td>
<td>25'</td>
<td>116.86</td>
<td>10'</td>
<td>60</td>
<td>20</td>
<td>10</td>
</tr>
<tr>
<td>C. Near the house on stilts, equipped with 1/2&quot; centr. pump</td>
<td>17'</td>
<td>114.05</td>
<td>8'</td>
<td>60</td>
<td>20</td>
<td>20</td>
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<tr>
<td>D. Situated west of house on stilts, not equipped.</td>
<td>18'</td>
<td>113.21</td>
<td>7'</td>
<td>50</td>
<td>21</td>
<td>20</td>
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<tr>
<td>E. Situated near the Banya Camp, North of Mission Houses.</td>
<td>13'2&quot;</td>
<td>111.32</td>
<td>8'3&quot;</td>
<td>50</td>
<td>15</td>
<td>30</td>
</tr>
<tr>
<td>Lagoon</td>
<td>107.74</td>
<td>4'</td>
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(P. AUGUSTINE)
TECHNICAL OFFICER.
Northern Territory Administration
Water Resources Branch

Field Trip Report
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Party: P. Augustine, Technical Officer
      K. Henderson, Chairman


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