June 22, 1966

Mr. J.V. Boys,
Indian Commissioner for B.C.,
P.O. Box 70,
Postal Station A,
Vancouver, B.C.

Dear Sir:

Re: Domestic Water Supply Masset Indian Reserve #1

In reply to your letter of June 15th, 1966, (your file 983/8-2-1 (Eng 4)), concerning the domestic water supply for Masset Indian Reserve #1, we would advise you that our investigation of the groundwater potential in the Masset area was carried out at the request of the Village of New Masset and was necessarily confined mainly to that area.

Masset Indian Reserve #1 appears, however, to be underlain by sands and gravels from beach sediments and dune sands, and it should be possible to obtain a supply of fresh groundwater at shallow depth in these deposits. Adequate rainfall and permeable surface deposits would also suggest favourable groundwater conditions in the area.

An earlier report by Mr. E.C. Halstead, Geological Survey of Canada, on the groundwater possibilities at Masset Indian Village mentions that a supply of potable water sufficient for the village is likely to be available in beach deposits near the community hall, or in the low area occupied by the playing field at the school. Mr. Halstead reported that he found the water encountered in wells in the beach sands deposits appeared to be of better quality than groundwater encountered in wells that penetrate the dunes and higher ridges.

Although a well located within the village itself would be cheaper for power and pipe line connection costs, there is also, particularly in a shallow well in this area, more likelihood of pollution.

An inspection of the air photos of Masset Indian Village show both

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depressions and dune ridges located immediately north and east of the built-up area. We suggest that the groundwater quality should first be checked at several points both in these dune sands and in these depressions situated immediately outside the built-up area. This investigation could be carried out quickly and cheaply by washing down several sand points and fitting a hand pump to the installations. The final well site for the village could then be selected on the result of this investigation.

Drilling costs are likely to be high for drilling a well in the Queen Charlotte Islands and because the depth to groundwater is probably in the order of 20-40 feet, it would be less expensive to dig a well and line it with pre-cast concrete pipe, or alternatively, well points could be used and driven or washed down into the water-bearing formations. Attached is a booklet prepared by the Groundwater Division which gives some practical information on groundwater development and well construction.

We would be pleased to advise you further, by phone if necessary, if you should require further assistance, particularly on sand point and well construction techniques.

Yours very truly,

E. Livingston, Chief,
Groundwater Division

Per: J.C.F.

JF:jac

Encl.