92 G/2.

GOVERNMENT OF BRITISH COLUMBIA

MEMORANDUM

TO V. Raudsepp,
Chief Engineer

FROM E. Livingston

January 15th 19 64

SUBJECT Well at Haney Correctional Institute

OUR FILE 0239016

YOUR FILE

At the request of Mr. R. Simpson, Chief Structural Engineer of Dept. of Public Works, I looked into the chances of getting more water for the Haney Institution.

The present source is a well which was drilled under the supervision of Val Gwyther in the spring of 1954. This is described in Gwyther's report called Ground water investigation for proposed Maple Ridge Vocational Training Institution in our report library as No. 484. This report describes test drilling of an 8" hole and a preliminary pump test carried out using a 6" perforated pipe instead of a screen. The report mentions that this test "screen" was removed and recommends that the well be completed as a permanent source with a proper screen.

Our well record card showed only a log for the hole so I wrote to Pacific Water Wells to get details of construction. Rainsford replied that all records were kept by Gwyther so I contacted Mr. Simpson who referred me to Mr. Jack Leask who is looking after the Haney project. Mr. Leask had a later report which has not yet been sent here; this describes the final well construction and a final pumping test. I got some of the information from Mr. Leask on the phone.

The well is equipped with a turbine pump set at 80'. This can pump about 150 gpm but has been throttled back as it is supposed to overheat when running wide open. The present pump rate is therefore unknown.

Mr Livingston
File
Feb 4/64.

Pumping at the time of completion of the well showed the following.

Pumping at 115 gpm caused 6.1' drawdown
" " 200 " " 11.1' "
" " 315 " " 18.1' "
Static level is 22½ feet

Mr. Gwyther concluded that the capacity was at least 400 gpm; I think that this is very conservative.

The problem here is that the Institution needs more water although no one so far has been able to say how much. Mr. Leask wanted to know whether they should drill another well and if so whether a well drilled 50' away would interfere with the present well. I said that I thought that answers to these questions should be based on the amount of water required, economic considerations, and the value which could be assigned to the advantage of having 2 pumps instead of one. I said that I thought it would not be wise to locate another well only 50' away because if future demand became very high ~~that~~ the capacity of the combined wells would be lower than that of 2 wells located 300' apart.

I also suggested that if a pump of increased capacity is to be installed in the present well that the drawdown in the well with the present pump should be checked at a given pumping rate to make sure that it is in the same order as the figures listed above. Higher drawdown probably would indicate encrustation of the screen or some other type of clogging.

As far as cost is concerned I said that I thought a new well would probably cost about as much as the existing one as the extra pumping etc. on the existing well would just about balance the increase in costs since 1954.

I think this is about all we can say about this until someone furnishes more information on requirements etc.

E Livingston

E. Livingston,
Chief, Ground Water Division

EL/ms