

January 23, 1974

Mr. E.D. Anthony  
 District Engineer  
 Water Rights Branch  
 Court House  
 Kelowna, British Columbia V1Y 1J2

Dear Mr. Anthony:

Re: Okanagan Falls Irrigation District Groundwater Wells

In regard to the questions raised in your letter of January 11, 1974, it is concluded that there is a favourable possibility of developing a new 500-750 U.S. gallons per minute groundwater source within the Okanagan Falls Irrigation District.

Outlined on the relevant portion of Groundwater Division well location map Similkameen 20 which is enclosed, are:

- 1) the boundaries (in red) of the irrigation districts of Okanagan Falls and Shuttleworth Creek;
- 2) present production wells (marked in red) of the Irrigation District of Okanagan Falls;
- 3) the boundary (in green) of the area where a groundwater supply is desired and area preferred (green hatched);
- 4) the surficial deposits (after H. Nasmith: "Late Glacial History and Surficial Deposits of the Okanagan Valley, British Columbia");
- 5) location of relevant wells.

There is an excellent chance of developing a groundwater source anywhere within the fan deposits along Shuttleworth Creek. The well record for Well #3 (Z4X8Y36) shows very thick permeable deposits of sand, gravel and boulders to about 800 feet. This test hole was drilled for the Groundwater Division to evaluate the depth to bedrock as had been shown by a seismic survey. Although no test was conducted at this particular site, drawdown data for Well #3 (Z4X8Y36) completed for Northwood Mills at a depth of 202 feet indicated a specific capacity of 29.3 gallons per minute per foot of drawdown.

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The possibility of obtaining 500-750 U.S. gallons per minute in the preferred area is somewhat less certain but still highly likely and well-worth the risk of exploration. No test holes have been drilled to any great depth in the area but available seismic data shows that the thickness of the fan deposits steadily decreases to the southwest: the depth to bedrock is reported at 16 feet in Well #3 (Z4X8Y26).

For obvious reasons of possible well interference, future development away from the present production well is desirable.

If further information is desired, please feel free to contact the Groundwater Division at any time.

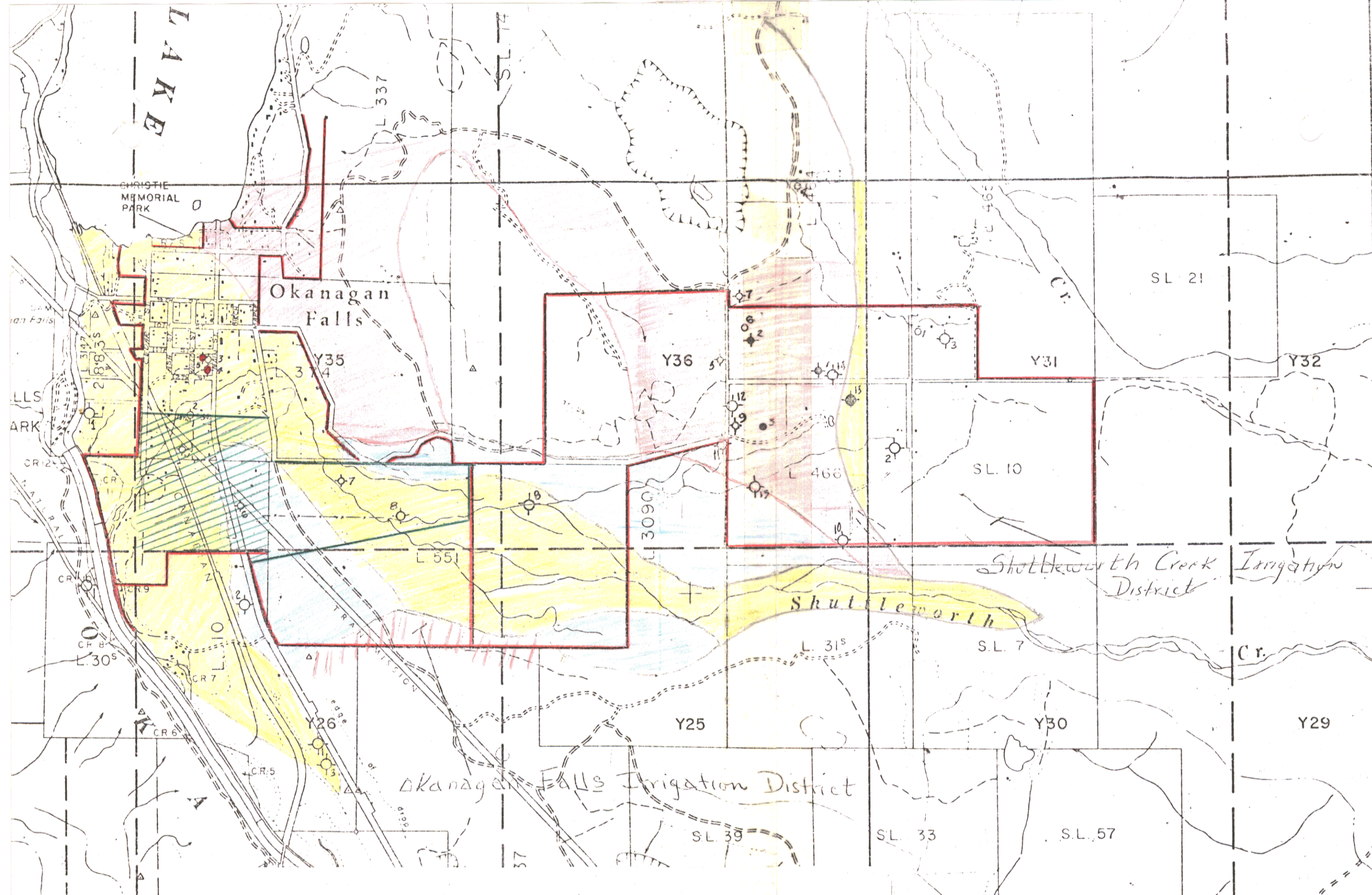
Yours very truly

J.C. Foweraker, Chief  
Groundwater Division

Per: *A. Babey*

AB/lr  
encls.

cc: Mr. J.W. Webber  
Water Rights Branch



LEGEND

- Alluvial fans and deltas
- Raised alluvial fans and terraces
- Kettled outwash
- Outwash Terraces
- Boundary of irrigation districts
- Boundary of area for which development is desired
- Area of preferred groundwater development
- Wells presently owned by Okanagan Falls Irrigation District S.L. 35

- DRILLED WELL
- DRILLED WELL (DRY)
- DUG WELL
- DUG WELL (DRY)
- ARTESIAN (FLOWING)
- ARTESIAN (NON FLOWING)
- SPRING