

CANADA
DEPARTMENT OF ENERGY, MINES AND RESOURCES

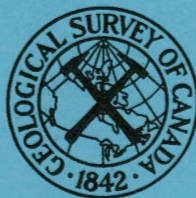
GEOLOGICAL SURVEY OF CANADA
TOPICAL REPORT NO. 123

271
YUKON RIVER DRAINAGE BASIN
DAM SITE INVESTIGATION

SITE No. 29

PREVOST CANYON DAM SITE
(MAP AND NOTES)

E. B. OWEN



OTTAWA
1967

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Prevost Canyon Dam Site

General Description

The examination of Prevost Canyon dam site is part of an investigation by the Water Resources Branch, Department of Energy, Mines and Resources of the hydroelectric power potential in the Yukon River drainage basin. Prevost Canyon dam site is situated on Ross River about 53 air miles northeast of the community of Ross River, Yukon Territory. Ross River is one of the larger tributaries of Pelly River which is an important tributary of Yukon River. It is a rapid-flowing stream and this along with numerous boulders and patches of shallow water make it an extremely difficult stream to ascend by boat. The easiest way to reach Prevost Canyon dam site is to fly to the southeast end of Dragon Lake and walk about 3 miles south; part of the latter distance is along the Canol Road which passes about a mile west of the site. Prevost Canyon dam site is included on National Topographic Series sheet No. 105 J (Sheldon Lake), scale 1:250,000 and on Royal Canadian Air Force aerial photograph A12186-73. The geology is described on Geological Survey of Canada map No. 12-1961.¹

The chief purpose of constructing a dam at Prevost Canyon is to provide storage for larger dams on Pelly River. Ross River valley upstream from the proposed dam site is narrow and would provide little storage for reservoir water. However, about 10 miles above the site, the valley widens into a series of lakes, the largest of which is Sheldon Lake. The elevation of the water in Sheldon Lake is about 2,850 feet above sea level which is about 100 feet higher than Ross River at Prevost Canyon. Consequently any dam constructed at Prevost Canyon should be greater than 100 feet in height to take advantage of the greatly increased reservoir capacity.

¹ Roddick, J.A. and Green, L.H.; Geology, Sheldon Lake, Yukon Territory, Geol. Surv., Can., map 12-1961, 1961.



Plate 1

View looking downstream toward upstream end of Prevost Canyon dam site; Δ - survey station E.1; bedrock exposed in 35-foot bluffs along right side is massive, thick-bedded quartzite.

G.S.C. 1-3-66

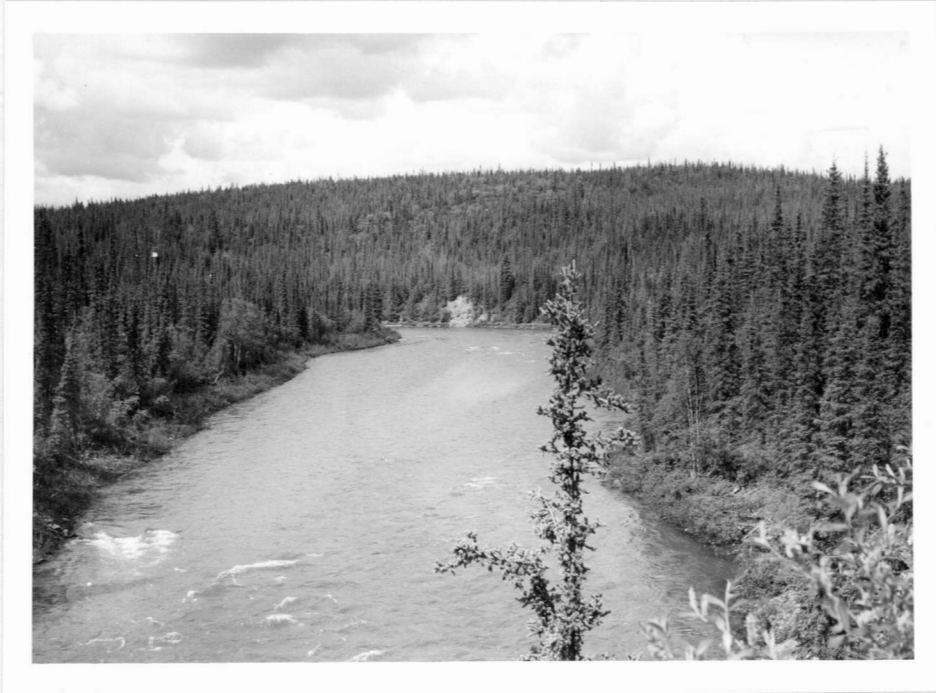
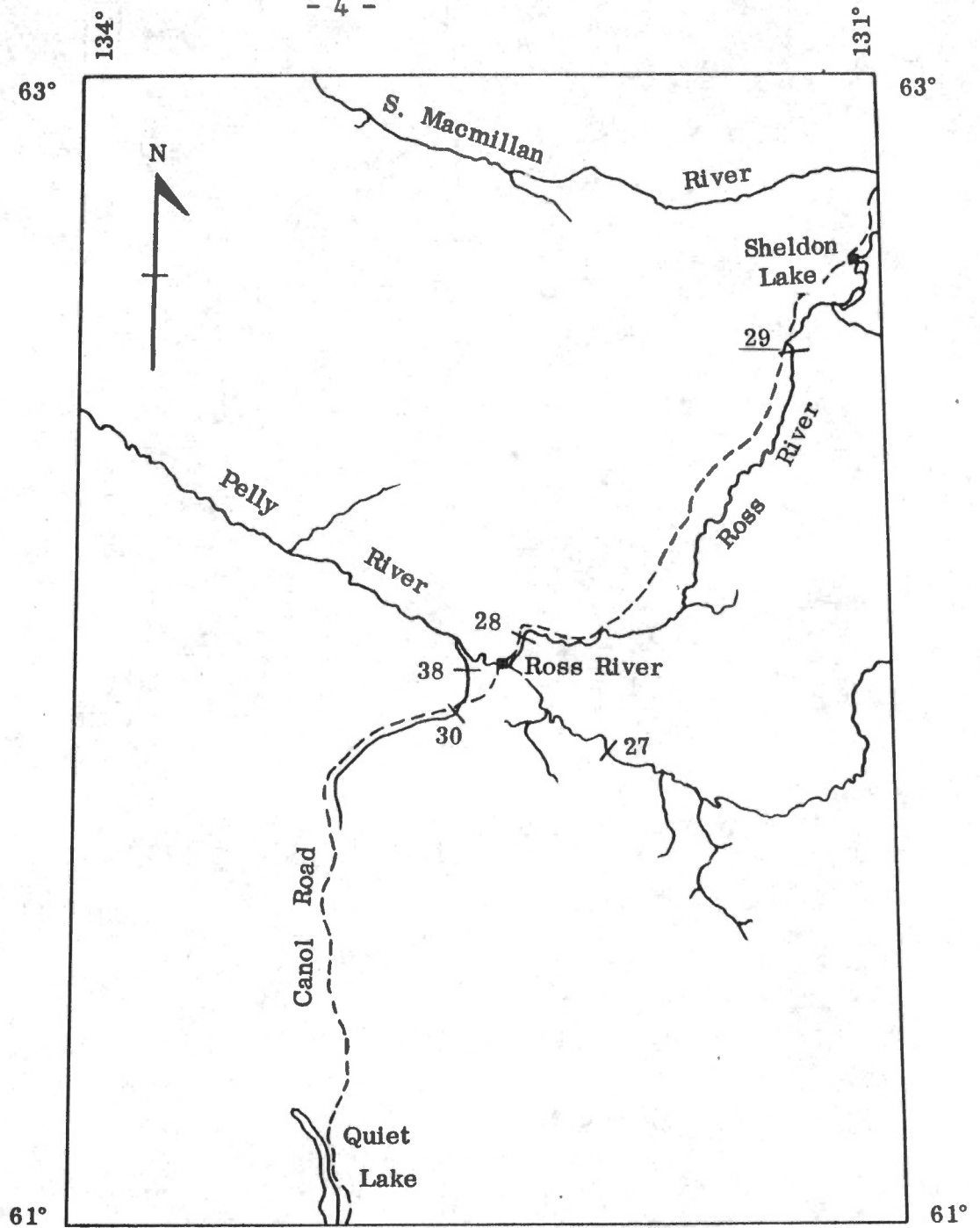


Plate 2

View looking upstream through Prevost Canyon dam
site from survey station H.9

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LOCATION OF PROPOSED DAM SITES
YUKON RIVER DRAINAGE BASIN
Scale: 1 inch = 20 miles

<u>Site No.</u>	<u>Name</u>	<u>River</u>
27	Hoole Canyon	Pelly
28	Ross Canyon	Ross
29	<u>Prevost Canyon</u>	Ross
30	Upper Lapie Canyon	Lapie
38	Lower Lapie Canyon	Lapie