

1937

BRITISH COLUMBIA DEPARTMENT OF MINES

HON. GEORGE S. PEARSON, Minister.

JOHN F. WALKER, Deputy Minister and Provincial Mineralogist.

J. DICKSON, Chief Inspector of Mines.

D. E. WHITTAKER, Provincial Assayer and Analyst.

P. B. FREELAND, Chief Mining Engineer.

R. J. STEENSON, Chief Gold Commissioner.

NOTES ON
PLACER-MINING IN BRITISH COLUMBIA

FOR THE

INFORMATION OF THE INDIVIDUAL MINER

BY

OFFICERS OF THE DEPARTMENT



PRINTED BY
AUTHORITY OF THE LEGISLATIVE ASSEMBLY.

VICTORIA, B.C. :

Printed by CHARLES F. BANFIELD, Printer to the King's Most Excellent Majesty.

1937.

BRITISH COLUMBIA DEPARTMENT OF MINES

HON. GEORGE S. PEARSON, Minister.

JOHN F. WALKER, Deputy Minister and Provincial Mineralogist.

J. DICKSON, Chief Inspector of Mines.

D. E. WHITTAKER, Provincial Assayer and Analyst.

P. B. FREELAND, Chief Mining Engineer.

R. J. STEENSON, Chief Gold Commissioner.

NOTES ON PLACER-MINING IN BRITISH COLUMBIA

FOR THE
INFORMATION OF THE INDIVIDUAL MINER

BY
OFFICERS OF THE DEPARTMENT



PRINTED BY
AUTHORITY OF THE LEGISLATIVE ASSEMBLY.

VICTORIA, B.C. :
Printed by CHARLES F. BANFIELD, Printer to the King's Most Excellent Majesty.
1937.

BRITISH COLUMBIA.

PHYSIOGRAPHY.

The Province of British Columbia lies almost wholly within the Western Cordillera. The Western Cordillera includes all the mountain systems and Interior Plateaux bordering the western side of the North American Continent. The extreme north-easterly corner of the Province lies to the east of the Cordillera and is a part of the great inland plains region of Canada.

The Rocky Mountains form the southern part of the eastern boundary of the Province, continuing in a north-westerly direction to the Yukon. They form a rugged barrier averaging 50 miles in width and over 900 miles long, and are separated from the mountain systems immediately to the west by a remarkably long intermontane valley occupied from south to north by the Kootenay, Columbia, Canoe, Fraser, Parsnip, Finlay, and Kachika (Fox) Rivers. The mountain systems to the west are, from south to north, the Selkirk, Monashee, Cariboo, and Stikine (Omineca and Cassiar). The Cariboo and Stikine Mountains are separated by part of the Nechako Plateau, which abuts directly against the Rocky Mountains east of Prince George. These mountain systems, varying from 60 to 125 miles in width, merge into the Interior Plateaux stretching north-westerly from the International Boundary throughout the central part of the Province. The Interior Plateaux country has been formed by the deepening of the river-valleys in an area originally of plains and low hills lying between the mountain systems aforementioned and the Coast Mountains. The result is that the Interior Plateaux present a variety of land forms, from comparatively level country to that which is mountainous, but lacking the rugged alpine character of the bordering mountains. They average 60 to 125 miles in width.

To the west of the Interior Plateaux lies the 150-mile-wide belt of mountains forming the Coast Mountains. The coast-line is deeply indented and long fiords reach into the heart of the mountains.

Beyond the mainland are Vancouver and Queen Charlotte Islands, in part mountainous, belonging to what is considered a mountain system westerly and distinct from the Coast Mountains.

British Columbia lies within the belt of prevailing westerly winds, which, coming from the great area of the Pacific Ocean, are mild and laden with moisture. Encountering the colder areas of the mountains, they are chilled and precipitate a great part of their moisture, producing a luxuriant forest-growth on the western slopes of the Coast Mountains. Passing eastward, the air-currents, deprived of most of their moisture, take up moisture over the eastern slopes of the Coast Mountains and the Interior Plateaux, causing the arid to semi-arid conditions prevailing throughout the interior. Once again encountering high, colder land in the Selkirk and other mountain systems, precipitation is great on the western slopes, and once again the air-currents collect moisture as they pass eastward toward the Rockies, producing the dry belts found in some of the larger intermontane valleys such as the Upper Columbia. In the northern part of the Province the changes are not as marked as in the southern part. The climate varies accordingly with moderate temperatures and heavy precipitation along the coastal region, and more extreme temperatures, with greater seasonal variations, in the interior and eastern parts of the Province.

Physiographic and climatic conditions exerted a great influence on the early exploration and development of the Province. The natural routes of travel follow the Interior Plateaux system and the great intermontane valleys which trend from south-east to north-west and from south to north. Only a few passes suited to all-year transportation exist between the interior of the Province and the coast, and the great plains region of Canada to the east of the Rockies.

GEOLOGY.

The north-east corner of the Province, east of the Cordillera, belongs to the great plains region and is underlain chiefly by sedimentary rocks of Mesozoic age. Fine deposits of coal are known to occur in this area and it is possible that gas and oil may be discovered. Igneous rocks are not known to occur and therefore it is not to be expected that metalliferous deposits

