

LEGEND
MINERAL DEPOSIT - LAND USE MAP

- AREA CLASS**
- 1** Area containing orebodies in production or about to go into production; geologic environment highly favorable area of intensive exploration.
 - 1A large deposits known or probable
 - 1B medium deposits known or probable
 - 1C small deposits known or probable
 - 2** Some deposits known, type of occurrence and geological environment favorable, some exploration at advanced stages, continued exploration.
 - 2A large deposits possible
 - 2B medium deposits possible
 - 2C small deposits possible
 - 3** No significant deposits known; geological environment favorable; present and future exploration likely.
 - 3A large deposits possible
 - 3B medium deposits possible
 - 3C small deposits possible
 - 4** Some indication of mineral potential; geological status indeterminate at present; exploration possible.
 - 5** No indication of mineral potential; exploration unlikely.

- LOCATION AND SIZE**
- Small Medium Large
 - ● ● Mineral deposit of known significance. Number refers to descriptive notes.
 - ▲ Former mine. Known reserves depleted.
 - X6 Location of mineral deposit of unknown or minor significance. A few deposits are numbered and described in notes.

- LODE METAL DEPOSITS**
- Metal symbols
- Au gold
 - Ag silver
 - Cu copper
 - Cr chromium
 - Fe iron
 - Hg mercury
 - Mn manganese
 - Nb niobium
 - Mo molybdenum
 - Pb lead
 - Sb antimony
 - U uranium
 - W tungsten
 - Zn zinc
 - V vanadium

- OTHER DEPOSITS**
- Placer area or locality. Gold placer unless designated as Pt-platinum, U-uraniferous minerals.
 - Location of industrial mineral deposit.
 - Symbols:
 - asb - Asbestos
 - ash - Volcanic ash
 - ba - Barite
 - bs - Blasting shale
 - di - Diatomite
 - fl - Fluorite
 - gn - Gneiss
 - gr - Granite
 - sp - Sphalerite
 - jd - Jade
 - ls - Limestone
 - mg - Manganese
 - m - Marl
 - na - Natro-chalite
 - pe - Perlite
 - py - Pyrophyllite
 - sc - Soda chloride
 - si - Silica
 - sl - Saline lake deposits
 - st - Building stone
 - tr - Travertine
 - l - Limestone

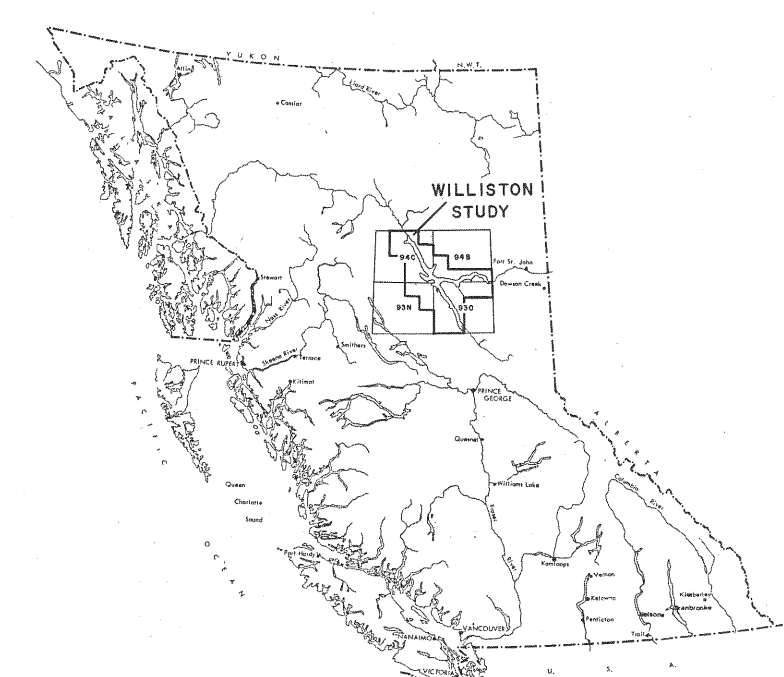
MO-LU	NAME	ELEMENT	TYPE	COMMENTS	REFERENCES
1	FERGUSON	Pb, Zn, Ag	REPLACEMENT	Silicified limestone - Lower Cambrian. Large tonnages of Pb, Zn, Ag ore.	OSC Mem. 274 pp. 204-208
2	OSWALD (CBS)	Pb, Zn, Ag	REPLACEMENT	Silicified limestone - Lower Cambrian.	OSC Mem. 274 pp. 208
3	SHANDEL	Pb, Zn, Ag	VEIN AND REPLACEMENT	In limestone.	OSC Mem. 274 pp. 209-211
4	CHILWOOD CREEK	Pb, Zn	SHEAR - REPLACEMENT	In dolomitic limestone - Lower Cambrian.	MMAR 1952 p. 103
5	ELIZABETH I	Pb, Zn	VEIN AND REPLACEMENT	In limestone - Cache Creek.	MMAR 1952 pp. 98, 103
6	DONNA (GORDON)	Pb, Zn, Ag	REPLACEMENT	In fault breccia - In limestone.	MMAR 1952 pp. 98, 103
7	DONNA 23 (ONLY)	Pb, Zn, Ag	REPLACEMENT	In limestone - Cache Creek.	MMAR 1952 pp. 98, 103
8	DONNA 21 (ONLY)	Pb	VEIN AND REPLACEMENT	In limestone - Cache Creek.	MMAR 1952 pp. 98, 103
9	W.L.	Cu	UNKNOWN	Pyrite network with trace chalcopyrite in sand, Ordovician age dolomite. Sphalerite occur in Paleozoic age dolomite. Mineralized areas are 25' by 175' and 500' by 160'. A sample across 41' assayed 8.5 Zn and 3.42 Pb.	GM 1972 p. 461, Assessment Reports 4141, 5246 Exploration Form, 1974 OSC 1972 p. 460
10	POOD NORTH, POOD SOUTH	Pb, Zn	STRATIFORM	Disseminated galena and sphalerite in siliceous to massive limestone with dolomitic zones, overlain by Middle Cambrian slate. Geology, geochemistry, 1973.	Exploration Form, 1973 GM 1973 - in preparation
11	OSI	Pb, Zn, (Ag)	STOCKWORK	Disseminated galena and sphalerite in siliceous to massive limestone with dolomitic zones, overlain by Middle Cambrian slate. Geology, geochemistry, 1973.	MMAR 1952 pp. 98, 104, 109
12	S.V.D. (VERNON)	Zn, Pb, Ag	REPLACEMENT	Replacement of limestone of Cache Creek group by sphalerite, galena, some barite, silver. Dolomitization.	GM 1973 - in preparation
13	SHEILA	Zn, Pb	REPLACEMENT	Sphalerite and galena in dolomitized limestone near shale contact. Geology, 1973.	GM 1973 - in preparation

- Maximum extent of limestone-bearing formations where considered economically significant.
- Maximum extent of coal-bearing formations.
- Cool exposure.
- Boundary of probability area.
- Approximate boundary of Regional District.
- Estimated area of potential petroleum or natural gas reserves.
- Abandoned hole drilled for petroleum or natural gas.

MO-LU	NAME	ELEMENT	TYPE	COMMENTS	REFERENCES
14	CARSON CREEK (CUM MINE LTD.)	COAL	BEDDED, IN BROAD STEADY	14 holes totalling 9,296' in 1972. In many of 12 seams with seams exceeding 4' in thickness.	GM 1972 - in preparation; 1971 p. 300
15	UTAH MINES COMPLETED	COAL SEAMS	BEDDED, IN BROAD SMALL STEADY	At least 5 seams over 4' thick in bedding formation. Coal in low to medium volatile high grade coking material.	G.S.C. Mem. 259, 1950 S.C. Bulletin 21, 1946 G.S.C. Paper 60-11, 1950 G.S.C. Paper 60-11, 1950
16	ROW RIVER RESOURCES LTD. BAINIER BRIDLE RESOURCES INC. (ISSUE PENDING)	COAL	BEDDED, IN BROAD STEADY	5 holes totalling 1,791' in 1971; 1 hole of 1,828' in 1972. As may as 7 coal seams, two of which exceed 5' in thickness.	GM 1971 p. 409, 1971 in preparation
17	CINBAR PEAK MINES LTD.	COAL	BEDDED SEAMS	20 seams, 2.5 to more than 8' thick. 4 holes totalling 1,059' in 1972.	GM 1971 p. 498; 1972 - in preparation
18	GERMANEN VENTURES	Au	PLACER	(These two operations were largest in view since gold was discovered in 1870.)	OSC Mem. 252 pp. 144-147
19	KEN (LOWIE)	Pb, V	DISSEMINATED	Disseminated pyrochlore and zircon in carbonaceous slaked by grades of Wolverine complex.	GM 1970 p. 181
20	ASB (VITER, BOY) (SERTIUD)	Ag, Pb	VEINS CONFORMABLE ?	Two veins up to 15' wide southern of which is old Serthold prospect. Also mineralized quartzite 50' minimum thickness. Best sample over 1' gave Ag-15.5 oz/ton, Pb-3.22.	Assessment Reports 1659, 1968, OSC Mem. 252 p. 180
21	BLACKJACK	Mo	VEINS, JOINT FILLINGS	Molybdenite in veins and joint fillings and disseminated in hornfels adjacent to some joints. Shear control on significant alterations.	MMAR 1965 p. 106
22	NATION RIVER	Au	PLACER	Post-glacial gravel on bars, 180 or more recorded prospect, 1931-1940.	MMAR 1941 p. 240
23	FORTUNE'S EYE	Pb, Zn, Ag	POORLY ?	Molybdenite in quartzite near old Triangulation Station "HARDEY" and along ridge for five miles north.	Pacific Great Eastern Railway Survey of Resources 1930 (see further references)
24	JACK, HART	Pb, Zn, Ag	POORLY ?	Molybdenite in quartz porphyry sill. 7 10 holes total 2,000' in 1972.	GM 1971 pp. 219-220

COMPILED BY: DEPT. OF MINES AND PETROLEUM RESOURCES

WILLISTON STUDY



Scale 1:500,000 or approximately 1 inch to 8 Miles
Scale of Kilometres

EXPLANATION

PURPOSE: The map is an appraisal of mineral potential to be used as an aid in evaluation and overall land use studies. It shows the location and extent of regions in which mining activities exist or can be expected.

The map is based on research using available files (particularly the B.C. Mineral Inventory File), publications, and geological maps.

CLASSIFICATION: The two parameters used to classify regions on this map are probability and size.

Probability: is the likelihood of finding an orebody. It is estimated on the basis of an evaluation of the geological environment (including geophysical and geochemical data where available) and the aerial distribution, geological type, and number of mines and prospects available and the aerial distribution, geological type, and number of mines and prospects available and the known or most likely geological factors which control their distribution, such as fault or shear zones; specific plutonic rock types and in some cases their age and the lithologic subdivisions; the type, composition, structural complexity, and age of the intruded rocks; and the degree of regional or localized thermal metamorphism.

Size: is based on the total amount of metal in or removed from the ground portrayed as a placer or past producer, but they yield comparative values for geological extrapolation. Usually class 3 areas contain localized areas of higher potential or are adjacent to similar environments of higher potential. Class 4 areas are confined to geologically less promising areas.

Areas of class 5 probability may be poorly defined with no discrete boundaries. They generally include regions which are geologically unlikely (although in some cases capable of being mineralized). Because they may have received little attention from exploration companies, the amount of information available on possible mineral occurrences is very limited. They are not considered, at present, worthy of more than reconnaissance mineral exploration.

Areas of alluvium, sand, gravel, or till of Recent or Pleistocene age mask bedrock geology and deposits, yet some mineral deposits may be discerned in alluvial material, and such material may provide sand and gravel for local construction needs.

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Out-of-grade generally applicable in 1972 are used when possible, yet some calculations for deposits in a preliminary exploration stage are based on 1972 sub-marginal grades. Future out-of-grade of large tonnage properties will likely decrease, a factor which should be considered in terms of future land use.

THE SIZE CATEGORIES ARE:

- A - Large - equivalent value more than \$500 million
- B - Medium - equivalent value \$25 million to \$500 million
- C - Small - equivalent value \$0.5 million to \$25 million

In most instances, insufficient information is available to make valid calculations and the size must be estimated from comparisons with similar types of occurrence in comparable geological terrain. This method is more commonly used in assessing partially investigated occurrences to the small size category.

ENVIRONMENT AND LAND USE COMMITTEE
SECRETARIAT
VICTORIA, B.C.

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