Province of British Columbia
Ministry of Mines and Petroleum Resources

LEGEND

AREA CLASS

1 Area containing orebodies in production or about to go into production; geologic environment highly favourable; 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 favourable; 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 favourable; 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.

D Sand, gravel, clay, alluvium, till, or drift which cover areas of varied mineral potential.

LOCATION AND SIZE

Small ○ 2 · Medium ◒ 5 · Large ● 8 — 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	Mo — molybdenum
Ag — silver	Pb — lead
Cu — copper	Sb — antimony
Cr — chromium	U — uranium
Fe — iron	W — tungsten
Hg — mercury	Zn — zinc
Mn — manganese	

Listed adjacent to deposit symbol in order of dollar value for individual deposits.

OTHER DEPOSITS

Placer area or locality. Gold placer unless designated as: Pt — platinum, U — radioactive minerals.

Location of industrial mineral deposit.

Symbols:

agg — aggregate	mg — magnesite
alu — alumina	m — marl
asb — asbestos	mic — mica
ash — volcanic ash	nal — natro-alunite
ba — barite	och — ochre
be — beryl	perl — perlite
bls — bloating shale	pyo — pyrophyllite
cly — clay	rho — rhodonite
diat — diatomite	salt — sodium chloride
fl — fluorite	sha — shale
gnl — granules	si — silica
gr — graphite	sl — saline lake deposits
gyp — gypsum	stn — building stone
ja — jade	t — talc
ls — limestone	trav — travertine

Boundary of probability area: approximate, assumed

Extent of coal-bearing formations; coal shaft (C)

Coal licences

Petroleum and natural gas fields

Pipelines

Estimated area of potential petroleum or natural gas reserves

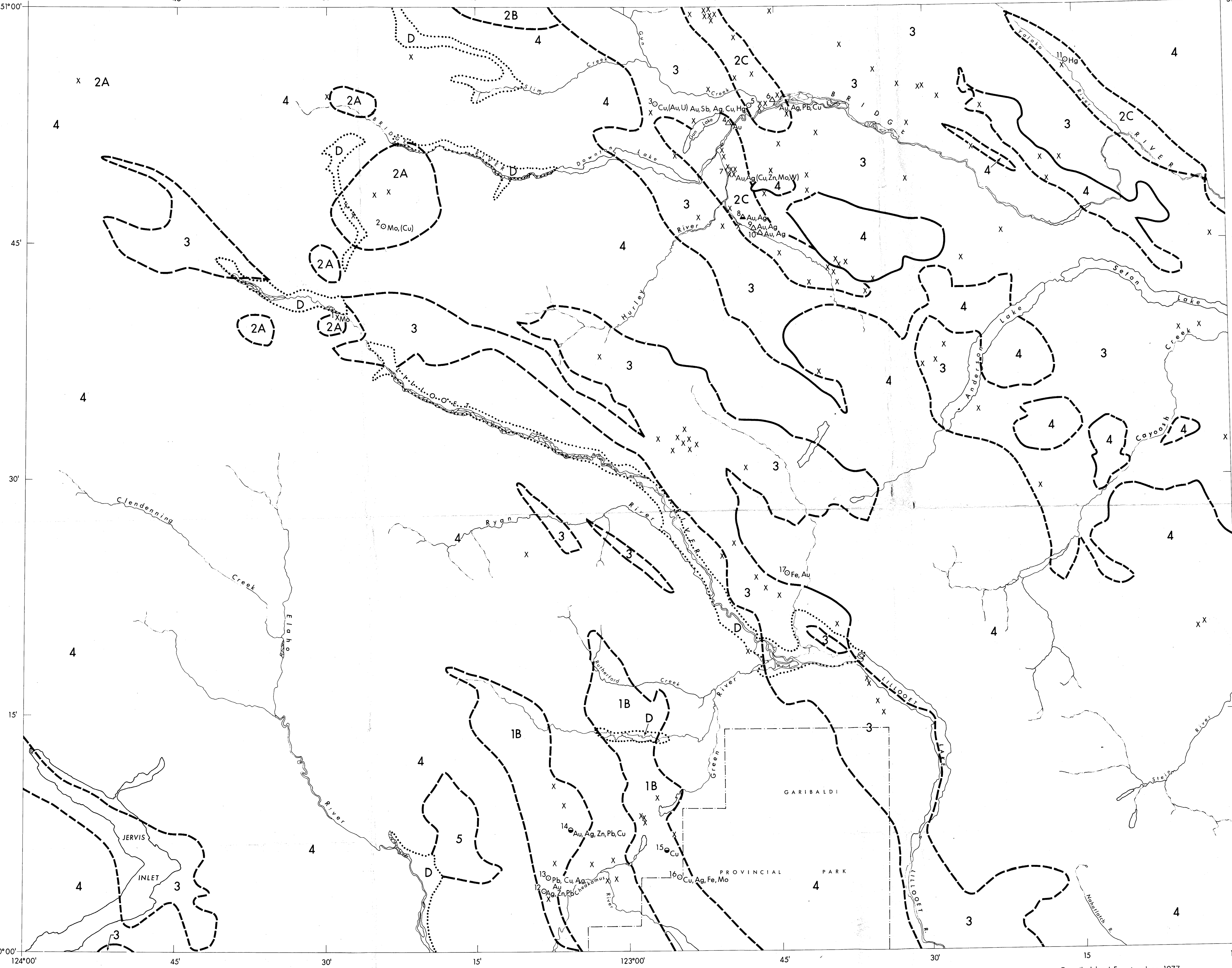
Abandoned hole drilled for petroleum or natural gas

Producing petroleum well

Producing natural gas well

PROPERTY FILE

MINERAL DEPOSIT — LAND USE MAP



92 J PEMBERTON

Scale 1:250,000 or approximately 1 Inch to 4 Miles

Miles 5 0 5 10 15 20 Miles

Kilometres 5 0 5 10 15 20 25 30 Kilometres

Compiled by J. Forester, June, 1977

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, 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 areal distribution, geological type, and number of mines and prospects a given area contains. A basic assumption is that areas of favourable geology containing the greatest density of mineral deposits or extensions of such areas based on similar geology have the highest probability of containing economically viable deposits.

In areas of no known deposits, an evaluation of the geological environment alone (i.e., rock type, structure, age, extent, etc.) is used to estimate the probability and size parameter.

Areas of class 1 probability are based on deposits of known value, normally producing or past producing mines or properties at an advanced stage of evaluation or development. The boundaries are based on the known or most likely geological factors which control ore distribution, such as fault or shear zones; specific plutonic rock types and in some cases their age and lithologic subdivisions; the type, composition structural complexity, and age of the intruded rocks; and the degree of regional or localized thermal metamorphism.

Areas of class 2 probability are based on the same parameters although details of the geology of the mineral deposits are normally far less complete.

Areas of class 3 and class 4 probability are delimited on the basis of geological boundaries. Usually class 3 areas contain localized areas of higher potential or are adjacent to similar environments or higher potential. Class 4 areas are confined to geologically less promising terrains.

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 underlying bedrock by geophysical or geochemical methods. Placer deposits are enclosed in alluvial material, and such material may provide sand and gravel for local construction needs.

Size is based on the total amount of metal in or removed from the ground portrayed as a dollar value using the following prices. These are not normally the prices received by producers or past producers, but they yield comparative values for geological extrapolation.

copper, 50 cents, per pound	mercury, $6.58 per pound	silver, $2.00 per ounce
gold, $100.00 per ounce	molybdenum, $1.50 per pound MoS_2	tungsten, $2.15 per pound WO_3
lead and zinc, 15 cents per pound	nickel, $1.35 per pound	iron ore, $8.00 per ton with 60 per cent Fe

Cut-off grades 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 cut-off grades 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 occurrences in comparable geological terrains. This method is more commonly used in elevating partially investigated occurrences to the small size category.

inches 0 1 2
0 1 2 3 4 5 centimetres

BRITISH COLUMBIA GEOLOGICAL SURVEY

This reference scale bar has been added to the original image. It will scale at the same rate as the image, therefore it can be used as a reference for the original size.

92J — PEMBERTON

MAP NO. MD/LU	NAME	ELEMENTS	TYPE	COMMENTS	SELECTED REFERENCES
1	FALL	Mo	Porphyry	Miocene quartz monzonite stock and dyke system.	BC Mineral Inventory 92J/W-94; BCMM&PR, GEM, 1974, p. 204
2	SALAL CREEK (EE, R)	Mo, (Cu)	Porphyry	The host rock is a Miocene, composite, quartz monzonite stock.	BC Mineral Inventory 92J/W-70; BCMM&PR, Exploration, 1975, p. E108
3	LITTLE GEM	Co, (Au, U)	Pegmatite	Uraninite and allanite occur with cobalt-gold mineralization in pegmatite lenses.	BC Mineral Inventory 92J/NE-107; MMAR, 1958, p. 15; GSC, Paper 43-15, pp. 20, 21
4	WAYSIDE	Au	Vein	Shear zone in 'Bralorne' augite diorite.	BC Mineral Inventory 92J/NE-30; GSC, Mem. 213, pp. 132-136; BCMM&PR, Exploration, 1975, p. E109
5	CONGRESS (STIBNITE, ACE)	Au, Sb, Ag, Cu, Hg	Vein and replacement	Pyrite, stibnite, and cinnabar occur in veins and replacement bodies in greenstone.	BC Mineral Inventory 92J/NE-29; GSC, Mem. 213, pp. 102-105; BCMM&PR, GEM, 1972, p. 283
6	MINTO MINE	Au, Ag, Pb, Cu	Vein	Adjacent to feldspar porphyry dyke cutting volcanic rocks, argillite, and chert of the Bridge River Group. Production 1934-1940 — 88,902 tons; Au, 17,558 oz.; Ag, 50,584 oz.; Cu, 21,327 lb.; Pb, 124,421 lb.	BC Mineral Inventory 92J/NE-114; MMAR, 1936, pp. F3-F6; GSC, Paper 43-15, pp. 15-17
7	CALIFORNIA	Au, Ag, (Cu, Zn Mo, W)	Vein	Underlain by volcanic and sedimentary rocks of the Bridge River Group, Bralorne augite-diorite, and other intrusive rocks.	BC Mineral Inventory 92J/NE-20; MMAR, 1950, p. 109; BCMM&PR, Bull. 10, p. 105
8	BRALORNE	Au, Ag	Vein	Ore occurs in quartz-filled fractures in diorite. Very similar to Pioneer. Production 1899-1971 — 5,486,785 tons; Au, 2,828,221 oz.; Ag, 706,876 oz.	BC Mineral Inventory 92J/NE-1; MMAR, 1899-1968; BCMM&PR, GEM, 1971, p. 308
9	CORONATION (BEND'OR)	Au, Ag	Vein	The veins lie near the southern border of the augite-diorite stock, which is in contact with serpentine and calcareous schist members of the Cadwallader series.	BC Mineral Inventory 92J/NE-7; GSC Mem. 213, pp. 76, 77, 86, 87; GSC, Sum. Rpt., 1912, pp. 196-198; MMAR, 1926, p. 190
10	PIONEER	Au, Ag	Vein	The vein deposits occur mainly in Early Tertiary Bralorne soda granite and Late Triassic Pioneer greenstone. Productin 1908-1960, 2,746,693 tons; Au, 1,331,593 oz.; Ag, 244,648 oz.	BC Mineral Inventory 92J/NE-4; GSC, Mem. 213, pp. 115-124; MMAR 1899-1960.
11	EAGLE (GOLDEN EAGLE)	Hg	Hydrothermal	Along fault zones and fractures in intercalated volcanic and sedimentary rock.	BC Mineral Inventory 92J/NE-95; MMAR, 1971, p. 312; BBMM&PR, Bull. 5, pp. 64-68; BCMM&PR, Bull. 32, pp. 52, 53
12	BLUE JACK (SUNNY CAVE)	Ag, Zn, Pb	Massive sulphide	In chloritized and epidotized metadiorite related to Early Cretaceous volcanic rocks.	BC Mineral Inventory 92J/W-51; MMAR, 1936, pp. F56-F58; BCMM&PR, 1974, p. 198
13	ASTRA-CAMBRIA (TEDI, CALLAGHAN)	Pb, Cu, Ag, Au	Massive sulphide	The underlying rocks are mainly roof pendant rocks of Late Jurassic to Early Cretaceous age. Production 1970 — 90 tons; Pb, 17,780 lb.; Cu, 3,645 lb.; Ag, 373 oz.; Au, 5 oz.	BC Mineral Inventory 92J/W-45; BCMM&PR, 1974, p. 199
14	WARMAN (NORTHAIR)	Au, Ag, Zn, Pb, Cu	Remobilized massive sulphide	Ore occurs in quartz-carbonate veins in silicified and carbonated andesite. Production began in 1975.	BC Mineral Inventory 92J/W-89; BCMM&PR, 1974, p. 200
15	AZURE	Cu	Disseminated	Chalcopyrite and pyrite associated with quartz in schists.	BC Mineral Inventory 92J/SE-49; BCMM&PR, 1970, p. 232
16	LONDON (GREEN LAKE, AXE)	Cu, Ag, Fe, Mo	Skarn	Chalcopyrite occurs in sheared crystal tuff or granodiorite intrusive rock adjoining a contact with greenstone and sedimentary rocks.	BC Mineral Inventory 92J/SE-42; BCMM&PR, 1971, pp. 305, 306
17	OWL MOUNTAIN (NORTH STAR)	Fe, Au	Massive sulphide ?	Magnetite is mainly massive, as veins or irregular-shaped deposits. Usually occurs in brown heterogeneous rock near contacts with granodiorite.	BC Mineral Inventory 92J/SE-69; Assessment Report 361

MAP REFERENCES

Sheets 92J/NE, SE, Mineral Inventory Map, *British Columbia Ministry of Mines and Petroleum Resources,* Scale — 1 inch = 2 miles.
Sheet 92J (West Half), Mineral Inventory Map, *British Columbia Ministry of Mines and Petroleum Resources,* Scale — 1 inch = 4 miles.
Woodsworth, G.J., *Geological Survey of Canada,* Open File 482, Map, 1977, Pemberton, Scale 1:250,000.