

dominantly of carbonate, minor quartz and wallrock fragments.

The Wintrip workings are located 4 kilometres southwest of the Cork Province mine within the sedimentary re-entrant. The first shipment of hand-sorted ore was recorded in 1895 as 13 tonnes averaging 228 grams silver per tonne and 78 per cent lead. Over the life of the mine, a total of 613 tonnes of ore yielded 62 grams gold, 367 kilograms silver, 104 tonnes lead and 57 tonnes zinc. Most production occurred from 1926 to 1928. The workings have since collapsed and are inaccessible.

Six or seven adits were driven to explore two parallel structures, the "A" and "B" lodes. A third unexplored lode "C" is reported 75 metres southeast of the "B" lode (Cairnes, 1935). The "A" and "B" lodes are about 100 metres apart, strike 225 degrees and dip 75 degrees northwest, conformable with the enclosing metasediments. The metasediments comprise abundant recrystallized limestone, biotite schist and, in places, thinly bedded argillite and quartzite. The lodes are sheared and brecciated zones, 0.6 to 1.5 metres wide, comprised of cataclasite and fault gouge. Mineralization is composed of disseminated sphalerite, galena and pyrite associated with siderite and minor quartz.

**ALPINE MINE (MINFILE 82FNW127),
KING SOLOMON (MINFILE 82FNW257)**

The Alpine property is located at the head of Sitkum Creek along the divide that marks the southern edge of the park. Initial development of the vein was done in 1896 and 1897. Production commenced with a small shipment of ore in 1915 and continued sporadically until 1948. During this period 15 551 tonnes was mined and yielded 356 162 grams gold, 221 453 grams silver, 49 tonnes lead, and 17 tonnes zinc. Granges Exploration Ltd. drilled the vein in October and November, 1987.

The quartz vein strikes 255 degrees and dips moderately north, is traceable over 400 metres on surface and projects into the park. Contacts with hangingwall and footwall monzonite are sharp and variably sericitized. Vein width averages 1.1 metres. The vein is hosted by fine to medium-grained quartz monzonite (Phase 5; Figure 2). Pre-mineralization aplite and pegmatite dikes are common; post-mineralization lamprophyre dikes are less abundant. Mineralization comprises electrum, silver minerals, pyrite and lesser galena and sphalerite. Rare clots of molybdenum were identified in altered potassium-feldspar granite from the mine dump. The vein is limonitic weathering and highly jointed and fractured. Vein textures are massive crystalline, ribboned, or

banded and vuggy. Quartz is variably milky, white, grey and colourless, suggesting episodic deposition. Analytical results are listed in Table 8. The Alpine and King Solomon contain anomalous gold values with coincident zinc.

TABLE 8
ALPINE MINE ANALYTICAL RESULTS

Sample	Au (g/t)	Ag (g/t)	Cu (ppm)	Pb (%)	Zn (ppm)	Mo (ppm)
391A	19.2	6	6	0.10	221	<10
394A	50.0	7	<2	0.68	2000	<10
395A	19.8	1	<2	0.01	47	176
397A	1.6	3	<2	0.07	53	78
404B	2.8	8	<2	0.86	60	<10
406B	150.0	55	<2	3.00	11000	<10

Analytical results for grab samples. Locations: A = Alpine and B = King Solomon.

The King Solomon is situated 2 kilometres southwest of the Alpine. Published references to this property are unknown and it was Eric Denny (prospector from Nelson, B.C.) who identified the workings to the authors. The quartz vein occupies a shear zone 0.15 metre wide cutting quartz monzonite. The vein has sharply defined hangingwall and footwall contacts and strikes east with a shallow north dip. Vein mineralogy is similar to the Alpine vein with slightly more galena and sphalerite.

**ENTERPRISE (MINFILE 82FNW148),
WESTMONT (MINFILE 82FNW145)**

The Enterprise property is located 4 kilometres west of the park, on the south side of Enterprise Creek; the Westmont/Eastmont property is on the north side of the creek. Enterprise production occurred over 81 years, the first shipments were made in 1896. From 10 687 tonnes of ore mined, 217 grams gold, 32 676 kilograms silver, 1675 tonnes lead and 1057 tonnes zinc were recovered. At the Westmont 3149 tonnes of ore was produced which yielded 2 046 grams gold, 11 084 kilograms silver, 200 tonnes lead and 66 tonnes zinc. Arctex Engineering Ltd. has carried out continuous exploration on the Enterprise property since 1983. Diamond-drilling programs were completed in 1986 and 1987.

Two parallel veins outcrop on the Enterprise property. The western vein has received recent drilling exploration, the main vein 115 metres to the east is historically more important having produced the bulk of past production. It is continuous over 680 metres horizontal distance and developed over a vertical distance of 300 metres. Country rock is potassium-

grade, large-tonnage porphyry deposit. The property is underlain by hornblende diorite, Elise Formation tuffa, agglomerate and feldspar porphyry. Alteration is variably propylitic, pyritic, silicic and potassic. The mineralogy consists of pyrite, chalcopyrite and magnetite but magnetite is not coincident with sulphides. Chalcopyrite occurs in stringers and disseminations, often with calcite or quartz. Further drilling is expected to test the extent of low-grade mineralization.

VEIN

At the southern border of Kokanee Glacier Park Cove Resources Corporation drilled the eastern extension of the Alpine vein and a subparallel vein, the Gold Crown, to the south. Immediately west of Nelson, Winchester Developments drilled the Nevada vein.

Quartz veins related to shears were also drilled on the Clearwater and Joe properties. One hole on the Clearwater returned 13.4 grams per tonne gold over 2.3 metres.

On the Clubine Comstock property on the east side of the Hall syncline, north of Salmo, Yellowjack Resources Ltd. exposed a 0.3-metre vein in trenches; the best assay ran 55 per cent lead and 2185 grams per tonne silver. This high-grade vein, hosted by the Hall Formation, will be drilled in 1991. Earlier drilling had followed a quartz vein.

On the Rely property, between Nelson and Castlegar, gold occurs with pyrite and pyrrhotite in erratic vein-like zones within a section of hornfelsed Archibald Formation siltstones and interbedded felsic to intermediate volcanics. Pegasus Gold Inc. drilled an induced polarization anomaly but with less encouraging results than in 1989 when up to 8.74 grams per tonne gold was intercepted over 6.1 metres.

On the Whitewater property, Teck Corporation drilled a breccia in Rossland Group rocks, near the contact with Nelson intrusive rocks, with inconclusive results.

In the Rossland camp Antelope Resources renewed drilling on the Rossland claims late in the year, focusing on the Bluebird and New North areas in the south belt. A large (62-metre) interval of lead-zinc mineralization was intersected in one hole and a narrow high-grade gold-silver zone in another (0.37 metres of 376 grams per tonne silver, 14.5 per cent lead, 7.5 per cent zinc and 10.3 grams per tonne gold). Traditional mineralization on this claim block consists of massive pyrrhotite-chalcopyrite shoots in altered monzonite and Elise Formation vol-

canics. Interestingly, gold occurs with arsenopyrite but not necessarily with the massive sulphide content.

Southwest of Rossland, at the Midnight mine, underground development continued on quartz veins and about 1500 tonnes of ore was hauled to a mill in Northport, Washington.

SKARN

North of Nancy Greene Park, in an area underlain by Mount Roberts Formation CAMECO drill-tested two areas in which trenching had exposed massive pyrite-pyrrhotite mineralization with elevated gold values in skarn.

OTHER

In the Salmo camp, Yellowjack Resources Ltd. pursued gold in Lower Paleozoic limestones and phyllites on the Ore Hill-Summit property. Sulphides, including sphalerite, galena, and chalcopyrite (minor), and free gold are present in crackle zones confined to the more carbonate-rich facies. Results of drilling in three holes returned values of 6.24 to 12.48 grams per tonne gold in intervals of 2 to 3 metres. Old mine workings nearby exploited a rich polymetallic quartz-siderite vein.

SLOCAN AREA (KASLO-NEW DENVER-SLOCAN)

At the Silvana silver-lead-zinc mine, drilling from surface and underground pursued the faulted western extension of the lode structure and tested the ground between the Silvana mine and Carnation workings without much success.

Avril Explorations Ltd. opened up, mapped and sampled levels 2, 3, 5 and 5A on the Grey Copper vein (a high-grade zinc vein) located near the former mining town of Cody.

Kokanee Explorations Ltd. drilled the Hope prospect which consists of a skarned pendant of the Slocan Group within the Nelson plutonic suite. Potential for extension of modest reserves is limited.

The Millie Mack property, site of an extensive program in 1989 by Dragoon Resources Ltd., underwent limited drilling without much success.

The True Blue massive sulphide prospect, hosted by the Upper Paleozoic Milford Group, was tested by a single hole by QPX Minerals Inc. This prospect of banded massive pyrite-pyrrhotite-chalcopyrite up to 1.2 metres thick warrants further work.