

SOUTHWEST REGION

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SUMMARY

The Southwest Region of British Columbia holds some of the greatest challenges and opportunities for exploration and mining in Canada. Many portions of the region are covered by dense vegetation, carved by rugged coastlines, virtually unmapped and inaccessible; other portions are blessed with an excellent infrastructure network of logging roads, highways and communities connecting numerous MINFILE occurrences hosted by highly favourable and well documented geology. It has been a source of great joy to be able to re-discover some of the geological wonders of the Southwest Region over the past three years as Regional Geologist based in Nanaimo. As a result of downsizing within the Mining Division of the Ministry of Energy and Mines, the Nanaimo Office will close and the position of Regional Geologist, Southwest Region will no longer exist as of April 2003. All regional functions and selected personnel will be relocated to the Victoria Office.

The year 2002 brought a tremendous increase in the diversity of target commodities being sought by explorationists in the Region. Several exploration projects stand out as possible candidates for new mining and quarrying operations in the next few years. Leader Mining International Ltd.'s Cogburn Magnesium project near Hope may well become the province's next metal mine. SYMC Resources Ltd.'s Dauntless and Macktush Cu-Ag-Au projects near Port Alberni made considerable progress towards advanced exploration status. Staking campaigns targeting magmatic Ni-Cu-Co-PGE deposits, and grass roots exploration projects by both Emerald Field Resource Ltd. near Port Renfrew and Garex International Exploration and funding partners near Harrison Lake helped breath new life into the local exploration communities. Exploration funding was very difficult to find in 2002, but the best projects always seemed to find a way to get funding.

Mining operations in the region continued to display economic stability for their owners, employees, suppliers and shareholders, in the case of public company owners, during 2002. Boliden-Westmin (Canada) Ltd.'s Myra Falls Operation established modest profitability after a difficult period. Together with Hillsborough Resources Ltd.'s improving Quinsam Mine, the two operations generated positive spin-off benefits felt in the shared primary service community of Campbell River. At Texada Island, strong growth in the export limestone market helped Texada Quarrying Ltd.'s Gillies Bay Quarry and Ash Grove Cement Ltd.'s Blubber Bay Quarry increase production in 2002 by almost

one third. Dimension Stone producers were also successful in helping to meet growing domestic markets in residential construction. Mining is a cornerstone industry in British Columbia, and will always be important in the Southwest Region.

EXPLORATION TRENDS

In 2002, there were eight major (>\$100 000) exploration projects undertaken in the Southwest Region (Table 1) the same as in the previous year. These major projects targeted a wide variety of commodities and deposit models, and consisted of grass roots to bulk sampling projects. They are dominated, however, by exploration projects targeting ultramafic-hosted magmatic deposits containing either Mg or Ni-Cu-Co-PGE's, which together account for about two-thirds of total exploration expenditures in the region. Exploration projects targeting metallic hydrothermal deposits containing Au, Cu and Ag in veins, skarns and porphyries also increased dramatically in 2002. Exploration and development for industrial minerals such as limestone, silica, kaolin, wollastonite, garnet and dolomite, as well as for dimension stone, also increased. In contrast, traditionally significant massive sulphide and coal exploration project expenditures were negligible in 2002. Figure 1 illustrates exploration expenditures by target deposit type in the Southwest Region in 2002. Several mineral exploration projects were funded through the new Super Flow-through

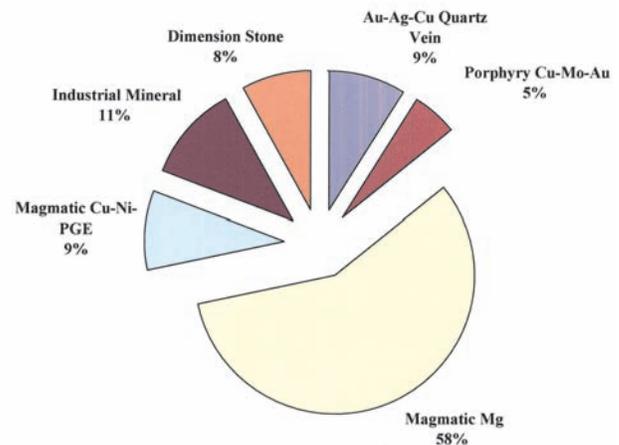


Figure 1. Exploration expenditures by target deposit type in the Southwest Region, 2002.

**TABLE 1
MAJOR EXPLORATION PROJECTS, SOUTHWEST REGION - 2002**

| Property | Operator | MINFILE | NTS | Commodity | Deposit Type | Work Done |
|--------------------------|--|------------------------------------|--------------------|-----------------------|---------------------------------|-----------------------------------|
| Valentine Mountain | Beau Pre Explorations Ltd. | 092B012, -075 | 092B12W | Au, Ag | Au Quartz Veins | Prospecting, Trenching |
| Pearson | Emerald Field Resources Ltd. | 092C025,-68,-91,-92,-141,-142,-147 | 092C050,-59,-68,-9 | Ni, Cu, Co, PGE | Magmatic Ni-Cu-PGE | Staking, Geochemistry Petrography |
| Dauntless | SYMC Resources Ltd. | 092F155,-168,-383 | 092F02W | Cu, Ag, Au | Cu-Ag Quartz Veins | Access, Trenching |
| Mineral Hill | Clearview Mineral Resource Corp. | 092GNW052,-53 | 092G12W | Wollast., Garn., Dol. | Wollastonite Skarn | D. Drilling (5h., 705m.) |
| Whistler Area Properties | Huckleberry Stone Supply Ltd. | | 092G14E, 092J03E | Dimension Stone | Volcanic (basalt) | Access, Bulk Sampling |
| Cogburn | Leader Mining International Ltd. | 092HSW041,-81 | 092H05E,-12E | Magnesium | Ultramafic-hosted Mg | Access, D.D. (38h., 2152m.) |
| Harrison Lake | Int'l. Millennium Mining Inc. / Garex | 092HSW076 | 092H05,-12,-13 | Ni, Cu, Co, PGE | Magmatic Ni-Cu-PGE | Geol., Geoch. Geophysics |
| Apple Bay | Electra Gold Ltd. / Ash Grove Cement Ltd. / Homegold | 092L087,-88,-89,-150,-269,-308 | 092L12 | Silica, Kaolin | Hydrothermal Alt'n. Clays Al-Si | D.D. (550m.), Enviro. Work |

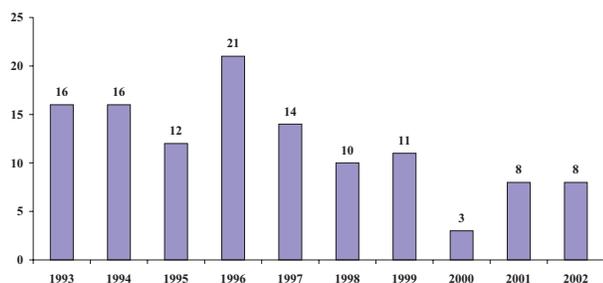


Figure 2. Annual number of major exploration projects in the Southwest Region

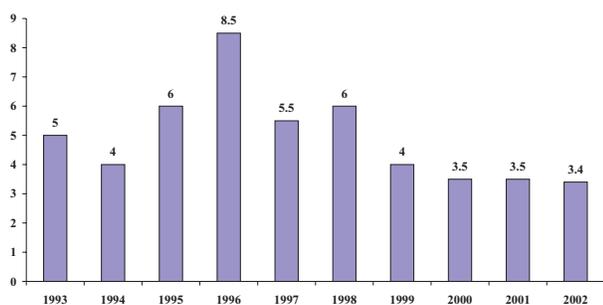


Figure 3. Annual exploration expenditures in the Southwest Region (in C\$ millions).

Share program initiated by the British Columbia government in late 2000, primarily through private placements.

Estimated total exploration expenditures in the region are \$3.4 million, just slightly less than in each of the two previous years. Estimated total exploration drilling in 2002 is 4 360 meters, a reduction of 81% from 2001 drilling. This is primarily due to the lack of mine site exploration drilling at both the Myra Falls Operation and the Quinsam Mine; traditionally these dominate regional statistics. Figures 2, 3 and 4 show key exploration indicators for the region over the past ten years: annual major exploration projects, annual exploration projects, and annual exploration drilling. These indicators clearly show that exploration activity in the Southwest Region reached a low point in 2000 and recovery is still pending after three lean years. Increases in exploration activity during the past two years in the northern regions have not yet been felt in this region. With the wide diversity of exploration projects and increasing commodity prices for Au,

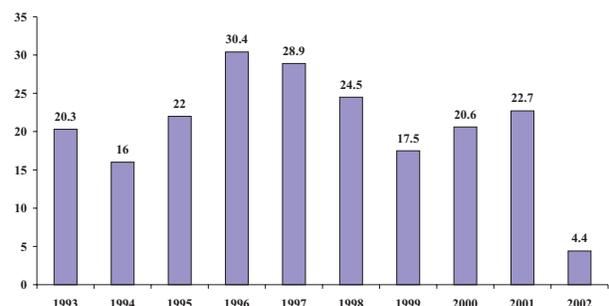


Figure 4. Annual exploration drilling in the Southwest Region (in thousands of metres).

Cu, and Ni, which are being targeted by many of those projects, it is expected that the recovery of exploration activity in the Southwest Region will finally begin in 2003.

MINES AND QUARRIES

The same nine major mines and quarries (>100 000 tonnes annual production) operated in the Southwest Region in 2002 as in the previous year. At the request of the owners, two industrial mineral quarries (Sumas Mountain and Clayburn) shown separately in 2001 are reported as a combined operation in 2002. Figure 5 illustrates names, locations, owners, and commodities produced by these mines and quarries. There are also many large sand and gravel operations in the region, plus several small dimension stone and industrial mineral producers. In general, both tonnages and values of 2002 mineral production from mining operations in the region increased significantly relative to 2001. In particular, limestone producers increased limestone and crushed aggregate production tonnages by about one third. These products are exported from quarries on Texada Island to U.S. west coast markets. Major mines and quarries, major exploration projects (Figure 6) and new discoveries (Figure 7) demonstrate the diversity of mineral deposit types and potential, as well as the innovation of operators and explorationists working in the region.

MYRA FALLS OPERATION

The Myra Falls Operation, located on central Vancouver Island west of Campbell River, is owned and operated by Boliden-Westmin (Canada) Ltd. This underground metal mine is centered on a large, geologically complex cluster of volcanogenic massive sulphide deposits hosted in a northwest-trending horst of the Paleozoic Sicker Group. These deposits include MINFILE's Lynx 092F071, Myra 092F072, Price 092F073 and H-W 092F330. Since production began in 1966, over 22 million tonnes of Cu-Zn-Pb-Ag-Au ore have been mined and milled. As of January 1, 2002, Myra Falls had a mining reserve of 8.40 million tonnes at 1.28% Cu, 6.99% Zn, 0.54% Pb, 1.4 g/t Au, 45.5 g/t Ag and 2.17% Ba. Geological resources as of January 1, 2002 are 4.73 million tonnes at 1.33% Cu, 7.40% Zn, 0.68% Pb, 1.80 g/t Au, 64.4 g/t Ag and 2.92% Ba.

Mining and milling operations were resumed in late March 2002 after a four-month shutdown that began in late November 2002. Since April 2002, the mine has employed 380 people and operated at a nominal milling rate of 2925 tonnes per day. Both are substantially less than levels of recent years, which are part of Boliden's action plan to improve operating efficiency. Total estimated production for the year was 773 858 tonnes at 1.22% Cu, 0.45% Pb, 7.29% Zn, 1.49g/t Au and 46.55g/t Ag, reflecting relatively higher grades of Zn and Ag in the ores mined and milled. These were primarily from the 43 Block and Gap Zones. Selected long-term capital projects were completed through the shutdown period and through 2002, including the production ramp from 18th to 22nd Levels, and maintenance of the hoist and crushers. The paste tailings fill plant project was

started during the shutdown as well and continued through 2002; completion is expected in 2003.

During the shutdown period and through 2002, all exploration activity including mine site exploration drilling was curtailed, and Boliden Exploration Geologists based at Myra Falls left the company. In 2002, definition diamond drilling at the mine totaled 23 000 meters, down from 51 000 meters in 2001. The future of the Myra Falls Operation remains uncertain, with commodity prices for Zn and Ag at historically low levels. However, Boliden Ltd., the parent company of the current owner, removed Myra Falls from the selling block and implemented its aggressive action plan because it values the operation as high-grade ore producer. A modest resumption of exploration activity is planned at Myra Falls in 2003. Possibilities for increasing future revenues include establishment of high-grade sulphide mill feed from external sources, and improving mill recovery for precious metals. Reduced costs could be achieved by connecting the operation to the provincial electrical power grid, thereby reducing dependence on costly diesel generators for supplementary power. Such improvements, combined with a recovery of base metal prices and continued exploration success, would keep the Myra Falls Operation viable for decades to come.



Photo 1. Lynx pit and underground portal at Boliden-Westmin (Canada) Ltd.'s Myra.

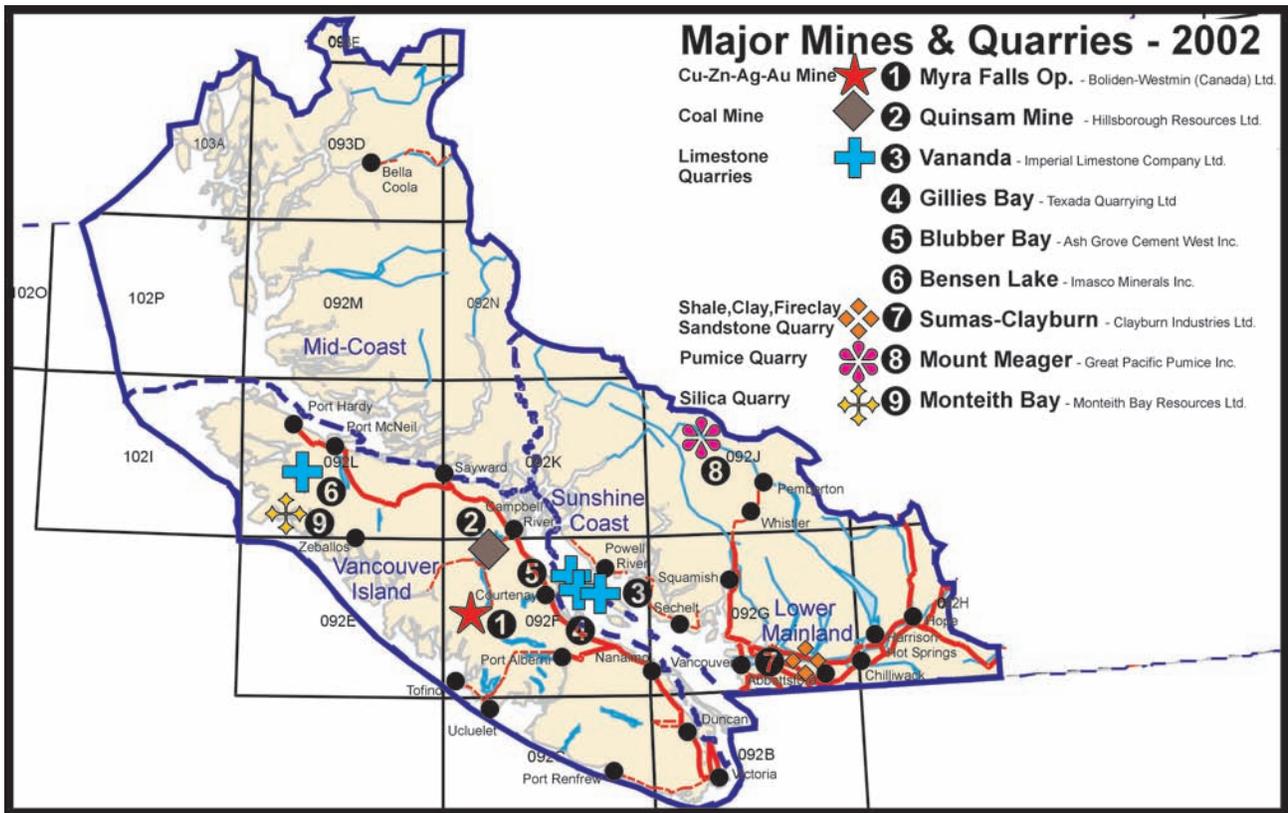


Figure 5. Major mines and quarries (>10 000 tonnes) in the Southwest Region, 2002.

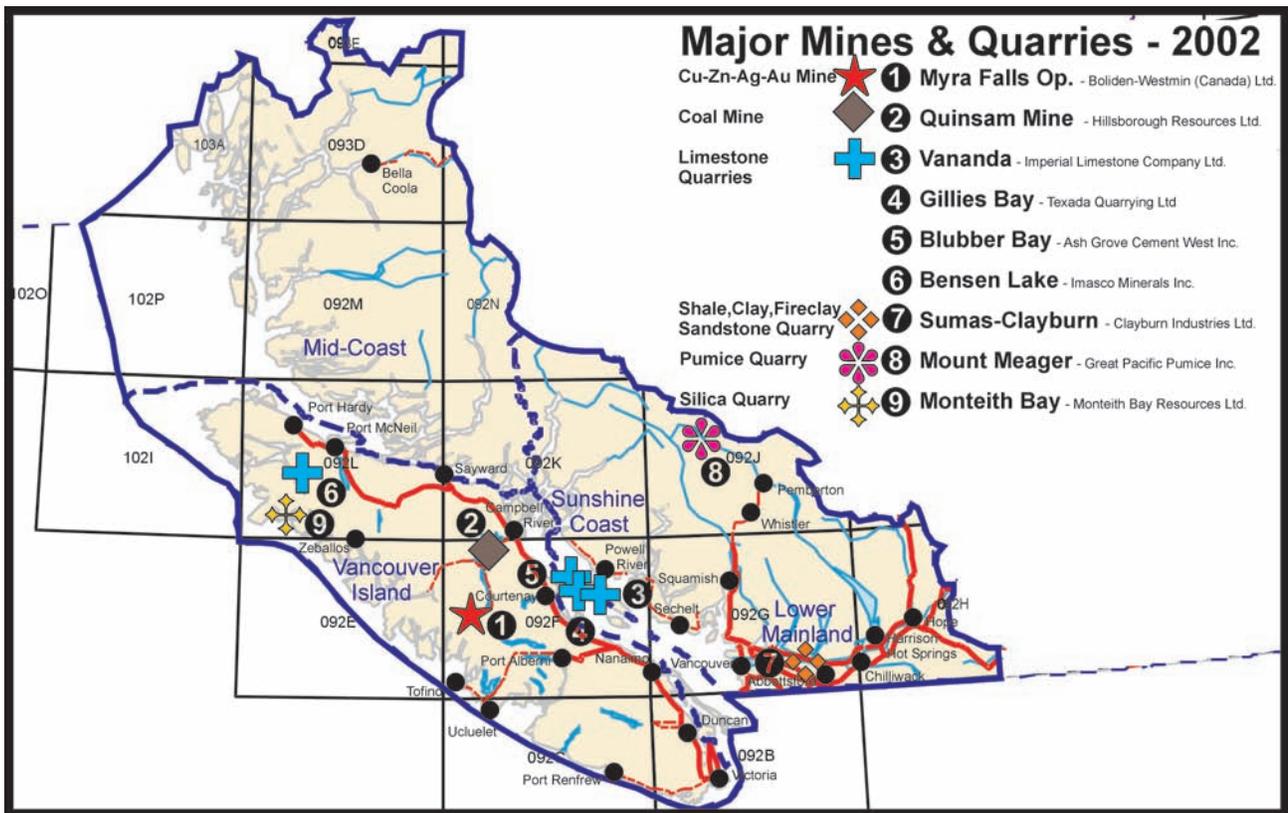


Figure 6. Major exploration projects (>\$100 000) in the Southwest Region, 2002.

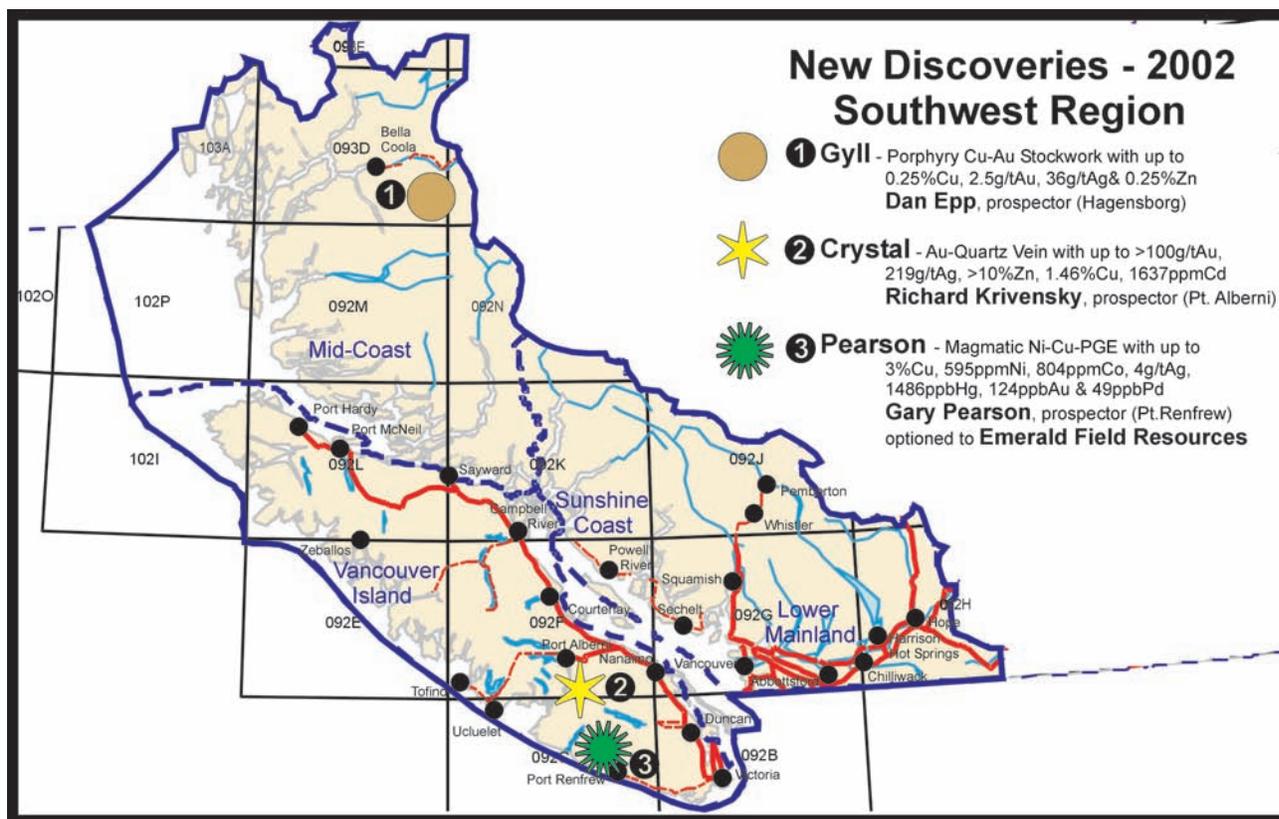


Figure 7. New discoveries in the Southwest Region, 2002.

QUINSAM COAL MINE

Hillsborough Resources Ltd. owns 100% of Quinsam Coal Corporation, which in turn owns and operates the underground Quinsam Coal Mine near Campbell River on central Vancouver Island near Campbell River. Coal at the Quinsam Mine is hosted in numerous, shallow, flat-lying seams within Cretaceous Nanaimo Group sedimentary rocks. The seams are accessed by ramps from surface. Proven and probable reserves at Quinsam are 30 million tonnes. During 2002, the mine increased personnel to 52 to operate multiple shifts. They produced 341 432 tonnes of clean bituminous grade thermal coal for markets in the western North America. Relative to 2001, revenues from the mining operations for Hillsborough at Quinsam increased by about 60% through the first 9 months of 2002, due primarily to the sale of 240 000 tonnes in four shipments to AMCI of Pennsylvania, a new customer.

During 2002, a trial burn of thermal coal from the Quinsam Mine was successfully completed at the nearby Elk Falls Pulp Mill at Campbell River; this could increase future sales. Hillsborough also completed a joint venture with Texas Canadian Ventures (TCV) of Texas for evaluating the coal bed methane resource on all of its freehold and lease deposits in the Campbell River area. Also in 2002, Hillsborough Resources Ltd. and Weldwood of Canada Ltd. were unsuccessful in renegotiating their agreement for the T'Sable River Coal project and allowed the agreement to lapse. Hillsborough applied for a permit for a 49.9 mega-watt coal-fired power plant at the Quinsam Mine un-

der the provincial government's Customer Generation Program. However, the permit application was not approved; it will be re-submitted in 2003.

LIMESTONE QUARRIES

Extensive flat-lying exposures of the Triassic Quatsino Formation, a prime source of limestone, underlie much of northern Vancouver Island and several of the northern islands in Georgia Strait in the Southwest Region. On northern Texada Island, three operators quarry this unit, and two of these are the largest suppliers of cement-grade limestone in western North America. In 2002 Lafarge Canada Inc. (through Texada Quarrying Ltd.) shipped 4.19 million tonnes from its Gillies Bay Quarry, and Ash Grove Cement Corporation shipped 1.83 million tonnes from its Blubber Bay Quarry, representing increases of about one third over 2001 levels for each operation. Imperial Limestone Company Ltd. shipped 223 188 tonnes of limestone from its Gillies Bay Quarry on Texada Island, an increase of 23% from 2001.

Chemical-grade limestone was also shipped from a portion of Lafarge's production at Gillies Bay. Lafarge invested \$10 million in an aggregate crushing plant in 2002, to help increase its total production and maintain its rank in the top five quarries in Canada. Proximity of the Texada Island quarries to sheltered ports on Georgia Strait enables highly efficient and inexpensive barge transportation of their products, which helps these operations ship to as far away as southern California. On northern Vancouver Is-

land, International Marble and Stone Company Ltd. (IMASCO) produced 28 970 tonnes of chemical grade limestone from its Benson Lake Quarry near Port Hardy, an increase of 3% from 2001.

INDUSTRIAL MINERAL QUARRIES

The wide variety of industrial minerals in the Southwest Region continually opens new opportunities for exploration and exploitation by innovative operators. Producers of both natural and crushed aggregate in the region are too numerous and poorly documented to report, but provide essential products for construction, particularly near major urban areas. Seven major (>10 000 tonne per year) non-aggregate quarries continued operations in 2002. The Sumas Mountain & Clayburn Quarry near Abbotsford is centered on altered sediments of the Eocene Huntington Formation. Lafarge Canada Inc., Lehigh Norwest Cement Ltd. (formerly Tilbury Cement Ltd.) and Clayburn Industries Ltd. together produced 535 910 tonnes of shale, sandstone and fireclay from the quarry in 2002. The products were used for cement, aggregate, refractory bricks, flue line pipes, and both ornamental and facing bricks.

In remote parts of the region, summer quarrying operations extract and transport specialty resources. On northwest Vancouver Island, Monteith Bay Resources Ltd. (an affiliate of Lehigh Northwest Cement Ltd.) produced and barged 43 199 tonnes of hot spring silica from its Monteith Bay Quarry to its Delta cement plant during 2002. This operation, which mines a paleo-hot spring replacement silica, or chalky geyserite deposit in Jurassic Bonanza Group volcanics, is located along tidewater. On the mainland northwest of Pemberton, Great Pacific Pumice Ltd. produced and trucked 13 000 cubic meters (10 500 tonnes) of volcanic pumice from its Mount Meager Quarry to processing and sorting yards near Meager Creek Hot Springs and Squamish. The material is used for lightweight concrete, as stone washing media and for cosmetics. The operation exploits a stratified deposit of rhyodacitic breccia and ash of the Pliocene to Recent Garibaldi Group volcanics.

DIMENSION STONE QUARRIES

Several small (<10 000 tonne per year), seasonal dimension stone quarries operate in the Southwest Region, providing a wide variety of mainly granitic and volcanic products for dimension stone processors in the lower mainland and on Vancouver Island. Stone processing plants are operated by Westcoast Manufacturing Inc. in Delta, Margranite Industry Ltd. in Surrey, Garibaldi Granite Group Inc. in Squamish, Mountain High Properties Ltd. in Pemberton and Matrix Marble Ltd. in Duncan. These operations market products to local and international markets. The new Mountain High plant in Pemberton was constructed and began producing primarily local basalt in 2002, focusing on fast-growing markets in the nearby resort community of Whistler as well as in Vancouver.

Market conditions for dimension stone improved dramatically as new housing developments increased in 2002. There was a strong demand for natural stone products for



Photo 2. Palletized basalt column segments and gang saw at Mountain High Properties Inc.'s dimension stone plant, Pemberton.



Photo 3. Gang saw cutting granite slabs at Garibaldi Granite Group Inc.'s dimension stone plant, Squamish.



Photo 4. Beau Pre Exploration Ltd.'s consultant Andris Kikauka at Valentine Mountain project Discovery Zone, Victoria area.

both interior and exterior applications. Hardy Island Granite Quarries Ltd. produced 3700 tonnes of light grey granodiorite from its Hardy Island Quarry in Jervis Inlet near Powell River. In the Squamish and Whistler areas, Huckleberry Stone Supply Ltd. produced a total of 6700 tonnes of basalt from five quarries on its Spumoni, Cabin, Freeman, Rubble and Huckleberry claims. Nearby, Garibaldi Granite Group Inc. produced about 3000 tonnes of granitic and volcanic dimension stone products from its Squamish, Ashlu River and Leo quarries. Mountain High Properties Ltd. produced about 900 tonnes of basalt and 140 tonnes of phyllite from the Spike and Gunsight Quarries respectively in the Whistler area, and about 30 tonnes of slate from the Brian Quarry near Jervis Inlet. Matrix Marble Ltd. produced 120 tonnes of limestone from its Hisnet Quarry near Tahsis on western Vancouver Island.

EXPLORATION ACTIVITY

VANCOUVER ISLAND

VALENTINE MOUNTAIN (MINFILE NOS. 092B012,-075,-111)

Beau Pre Exploration Ltd.'s Valentine Mountain project near Victoria has been active intermittently for over twenty-five years; the year 2002 saw a renewed effort on two fronts. Joint venture partner First American Scientific Corp. continued modifications to the KDS Micronex dry gravity milling machine in preparation for its proposed installation at Valentine Mountain near the Discovery Zone. This Zone hosts an indicated mineral resource of 30 660 tonnes at 14.7 g/t Au. Beau Pre Exploration continued to explore the Discovery Zone West and Log Dam West Zones on the project. Chip sample results from new trenches yielded up to 100 g/t Au across 0.5 metres and at 32.0 g/t Au across 0.4 meters, from the respective zones.

The Valentine Mountain project consists of 261 mineral claim units and covers several clustered zones of narrow, locally high-grade Au-Ag quartz veins hosted in highly metamorphosed sedimentary-volcanic rocks of the Cretaceous Leech River Formation. Mineralization may be related to Tertiary intrusive activity associated with tectonic plate subduction. Beau Pre Exploration Ltd. owns 100% of the Valentine Mountain project, and is actively seeking an additional joint venture partner to fund both installation of the KDS plant including test mining/milling at the Discovery Zone, and further exploration trenching, mapping and drilling throughout the property planned for 2003.

PEARSON (MINFILE NOS. 092C025,-068,-091,-094,-110,-141,-142,-146)

Gary Pearson prospected for Au quartz veins and dimension stone marble for several years in the Port Renfrew area but more recently he has focused on magmatic Cu-Ni-PGE (platinum group element) deposits. In 2002 he staked claims to cover several lapsed Cu and/or Fe Skarn MINFILE occurrences in the Westcoast Intrusive Complex



Photo 5. Quartz-pyrite-arsenopyrite-gold vein at Valentine Mountain Discovery Zone.

of southern Wrangellia just north of Port Renfrew. Through prospecting and sampling, he subsequently discovered anomalous PGE values in the skarns. During a property visit in May, 2002 the Regional Geologist collected grab samples of outcropping skarn and/or magmatic sulphide mineralization on Mr. Pearson's claims. Samples located near the Sirdar (MINFILE 092C025) and Reko 3 (MINFILE 092C090) showings yielded anomalous values in Cu, Ni, Co, Mn, Fe, Ag, Au, Hg, and Pd. Although the potentially significant PGE mineralization was discovered on existing MINFILE occurrences, it is regarded as a new discovery for 2002.

Also in 2002, Gary Pearson secured an option agreement with private company Emerald Field Resource Corporation of Kenora Ontario to fund exploration in the Port Renfrew area. Emerald Field subsequently staked additional claims in two blocks that, together with Mr. Pearson's previous claims, total 685 mineral claim units as of November 2002. The smaller 64-unit claim block just north of the village of River Jordan, which is underlain by rocks of the Eocene Metchosin Volcanics and Sooke Gab-



Photo 6. Massive pyrrhotite-chalcopyrite pods at Emerald Field Resource Corporation's Pearson project, Port Renfrew area.

bros of the Crescent Terrain, covers the Wolf (MINFILE 092C094) occurrence. The larger 621-unit claim block is located just north of Port Renfrew and covers the remaining MINFILE occurrences listed in the paragraph header. Soil and rock sampling, geochemical sampling and petrographic work were conducted during 2002. An airborne geophysical survey planned for late in the year was deferred until 2003.

DAUNTLESS (MINFILE NOS. 092F155,-168,-383,-549,-551)

SYMC Resources Ltd. has explored and gradually increased its land position south of Port Alberni and along the west shore of Alberni Inlet for almost twenty years. SYMC has targeted multiple occurrences and styles of porphyry copper-molybdenum-gold-silver and related vein mineralization that occur within and adjacent to northwest trending stocks and dikes of the Jurassic Island Plutonic Suite granodiorite that intrude Triassic Karmutsen Formation basalt flows. Exploration continued in 2002 primarily at the Dauntless project, where historic mine workings on several clusters of parallel, steeply dipping, north-east trending Cu-rich sulphide-quartz-calcite veins cut altered basalt. The showings were relocated, trenched and sampled by SYMC. Dauntless, which is contiguous to and located ten kilometers north of SYMC's Macktush (MINFILE 092F012) project, is immediately above tidewater. Interim access to some of the occurrences at Dauntless was established by using a barge from Port Alberni to move the heavy equipment that was used for access trail construction and trenching.

In 2002, SYMC submitted notice of work applications for extensive bulk sampling programs centered on its two project areas at Macktush and Dauntless. Neither was completed as the programs were deferred to 2003. In order to process the bulk samples, SYMC also plans to install a small gravity and sulphide flotation milling plant between the Dauntless site and Port Alberni. It may be possible to ship some of the high-grade chalcopryite/bornite mineralization from Dauntless directly to smelters. In 2003, continued prospecting, trenching and diamond drilling is planned on various MINFILE occurrences on the property, including Holk 092F155, Bell 092F383, Stamp 092F549 and Devil's Den 092F551, and work will continue on Dauntless 092F068.

APPLE BAY (MINFILE NOS. 092L150,-269,-308)

South of Port Hardy along the north shore of Holberg Inlet, Homegold Resources Ltd., with funding from Ash Grove Cement Ltd. and Electra Gold Ltd., completed 550 meters of diamond drilling to further test its Apple Bay project for silica and kaolin potential. Environmental and product testing of the material was also completed. Ash Grove is targeting the silica as cement feedstock, and Electra is targeting the kaolin for applications in the pulp, paper, paint and ceramics industries.

The Apple Bay project is centred on a series of ten or more intense zones of acid sulphate and advanced argillic

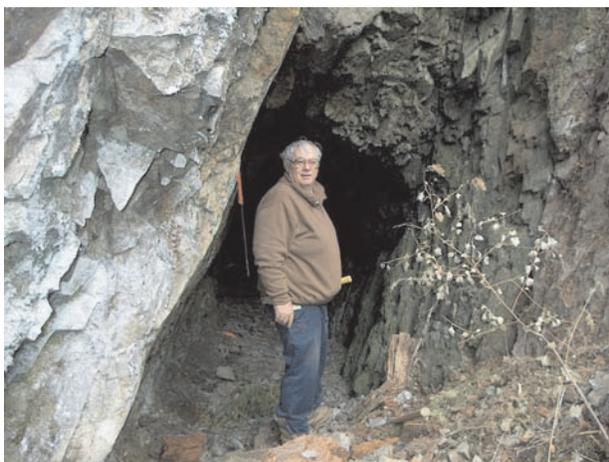


Photo 7. SYMC Resources Ltd. president Herb McMaster at c. 100 year old adit on Dauntless project, Port Alberni area.

alteration developed within a northwest trending flow banded and pyroclastic rhyolite unit of the Jurassic Bonanza Group. Two areas in one of the zones (Pem 100) contain geological resources of four and one million tonnes respectively, averaging 83.3% SiO₂, 12.9% Al₂O₃ and 0.08% SO₃. The region and property also hold potential for porphyry and related Cu-Mo-Au-Ag deposits similar to the nearby past producing Island Copper mine (MINFILE 092L158) and Hushamu (MINFILE 092L240) and Red Dog (MINFILE 092L200) developed prospects. There is also potential for high sulphidation epithermal deposits, like the Knob Hill prospect (MINFILE 102I005) further to the northwest.

OTHER EXPLORATION ACTIVITY

During 2002, several prospectors and mining companies either resumed dormant projects or started new ones that could easily become major projects in the region next year. In contrast to prior years, only about 30% of explora-



Photo 8. Massive chalcopryite-pyrrhotite-bornite vein in adit on SYMC's Dauntless project, Port Alberni area.

tion projects and expenditures in the Southwest Region occurred on Vancouver Island. In order to help stimulate mineral exploration interest on Vancouver Island, the Regional Geologist started the Vancouver Island Exploration (VIX) Group. At the inaugural meeting on October 30, 2002 at Malaspina University College in Nanaimo, Jacques Houle gave a presentation on the Mineral Deposits of Vancouver Island that was attended by about 30 people. The VIX Group met again on December 4, 2002 for technical presentations by Ray Lett and Dani Alldrick of the B.C. Geological Survey. Membership in the VIX grew to about 50 by year-end; meetings are scheduled every month or so in 2003.

On southern Vancouver Island near Port Renfrew, Tim Henneberry mapped, sampled and successfully optioned the Hemm project to Southern Pacific Development Corp., who planned but failed to complete diamond drilling and bulk sampling in 2002. They are targeting CaCO_3 in marbles of the Paleozoic to Jurassic Westcoast Complex for specialty aggregates. Both the Hemm project and several large claim blocks staked by partners Norman Rooke, Robin Rooke and Ray Oshust are completely surrounded by claims of Emerald Field's Pearson project described previously. East of Alberni Inlet along Corrigan Creek, Richard Krivensky staked claims near the Crystal project to cover the Rodeo Cu-Ag Quartz vein (MINFILE 092F217). In 2002 the Regional Geologist grab sampled a narrow quartz-sulphide vein in Triassic Karmutsen volcanics in a roadcut near the Rodeo. The sample yielded >100g/t Au, 219 g/t Ag, >10% Zn, 1.46% Cu and anomalous Pb, Cd, Co, Bi and Hg; this is considered a new discovery in the Southwest Region.

On central Vancouver Island east of Port Alberni, numerous MINFILE occurrences occur within the largest exposure of the metal-rich Paleozoic Sicker Group volcano-sedimentary rocks. Three groups looking for polymetallic deposits have targeted this area. In 2002, Michael Becherer successfully completed prolonged negotiations with Boliden-Westmin (Canada) Ltd. to acquire an interest in the Debbie project, which covers MINFILE's Linda 092F079, Grizzly 092F152, 900 092F343, Debbie 3 092F445 and Pat 3 092F458 showings. Barry Hanslit staked several properties covering MINFILE's Regina 092F078, Bank Group 092F167, Lizard Lake 092F285, McQuillan 092F444 and Debeaux Creek 092F565 occurrences. Herb McMaster, on behalf of SYMC Resources Ltd., staked the Cameron Creek project that covers MINFILE's High Grade 092F143, Monkey 092F544, Spring 092F552 and Peak Lake 092F564 showings. All three groups plan exploration work in 2003.

In the Cretaceous Nanaimo Group Sedimentary Basin of eastern Vancouver Island between Nanaimo and Port Hardy, several groups acquired new coal licenses in 2002. These cover developed coal prospects and presumably target coal bed methane potential. Among these Trent River Coal acquired the Hamilton Lake occurrence (MINFILE 092F313) near Cumberland, 634284 B.C. Ltd. acquired the Anderson Lake prospect (MINFILE 092F317) near Courtenay, Briden Holdings Inc. acquired the Chute Creek

property (MINFILE 092F316) near Campbell River, and Priority Ventures Ltd. acquired the Suquash prospect (MINFILE 092L067) near Port McNeil. As well, both Hillsborough Resources Ltd. and Priority Ventures Ltd. were active in acquiring new coal licenses near their existing projects. Exploration plans for 2003 are not known.

On northern Vancouver Island near Campbell River, Better Resources Ltd. completed a 255-meter drilling program on the Blue Grouse project (MINFILE 092F358), which they optioned from private company Minland Resource Inc. The second and last hole yielded an intercept of 1.5 meters at 3.33% Cu, 0.356 g/t Au and 10.7 g/t Ag in Cu Skarn mineralization developed within Triassic Karmutsen basalt associated with Jurassic Island intrusives. Near Sayward, Hillsborough Resources Ltd. acquired an interest in the Iron Ross project, which covers the Iron Mike (MINFILE 092K043) Fe Skarn, from Homegold Resources Ltd. They completed trenching, a 454-meter drilling program, and a 160 tonne bulk sampling program. Hillsborough is seeking a source of local magnetite for coal processing at its nearby Quinsam Coal Mine. Near Zeballos, Adolf Aichmeier continued minor underground exploration work at the Privateer Au-Ag Quartz Vein project (MINFILE 092L012 and others) on behalf of Newmex Minerals Ltd., which underwent a change in management in 2002. Mr. Aichmeier also staked two large claim groups in the area, one of which covers several MINFILE occurrences, including the King Midas No.1 Au-Ag Quartz vein 092F020. Graymont Western Canada Inc. completed geological work at the Var (MINFILE 092L044) Limestone project on Rupert Inlet near Port Hardy.

HARRISON LAKE - HOPE AREA

COGBURN (NEAR 092HSW081)

In 2002, Leader Mining International Inc. accelerated its production feasibility study and expanded exploration of the Cogburn Mg project area. It was the dominant exploration project by far in the Southwest Region. The 2002 diamond drilling program of 2152 meters in 38 holes helped



Photo 9. Gold-sulphide vein at Richard Krivensky's Crystal project near Rodeo showing, Port Alberni area.

define a measured mineral resource of 25.5 million tonnes at 40.5% MgO within a portion of the Emory Zone, with measured ore reserve status pending completion of the feasibility study by March 2003. This resource is considered adequate to support a mine life of 37 years at an annual production rate of 120,000 metric tonnes of Mg metal. The Emory Zone is within a 2 km by 10 km body of serpentinized ultramafic intrusives (peridotite or dunite) of probable Paleozoic-Mesozoic age assigned to the Bridge River Terrain. The Zone contains consistently high values of Mg (25 to 30%, that is 40 to 50% MgO) and Ni (2000 to 2500 ppm) in silicates, as well as consistently low values of deleterious elements such as sulphur and boron. If successful, the Cogburn project will lead to a new open pit Mg metal mine and plant near the town of Hope by 2004, and a potential showcase operation for the British Columbia mining industry within a two hour drive of downtown Vancouver.

HARRISON LAKE (MINFILE 092HNW040, -045, -076)

Garex International Exploration continued its exploration activities in the Harrison Lake to Hope area. In early 2002, Garex optioned its extensive 1396 mineral claim unit property position to four separate companies: International Millennium Mining Ltd. (964 units), Stellar Pacific Ventures Inc. (355 units), Goldnev Resources Inc. (47 units), and Harrison Holdings (30 units). Garex, an exploration consulting company operated by Nicholson and Associates, continued to manage exploration work on all the properties on behalf of the optionees throughout 2002. Grass roots prospecting, geological mapping, geochemical sampling and ground geophysics were completed, and target areas selected for airborne geophysics planned for early 2003. Garex targeted magmatic Ni-Cu-Co-PGE sulphide mineralization associated with discontinuous and deformed exposures of ultramafic rocks of probable Paleozoic-Mesozoic age. They explored the property around the AL (092HNW040), Settler Creek (092HNW045), Jason (092HSW076) and Swede (092HSW082) MINFILE showings. They also checked areas proximal to Murray McClaren's Sable (092HNW077) showing immediately to the northwest, and Barrick Gold Corporation's past producing Giant Nickel Mine immediately to the southeast. At Giant Nickel, production of Ni-Cu-Cr-Co-Au-Ag-PGE ore came from the Pride of Emory (092HSW004), Star of Emory (092HSW093) and Giant Mascot (092HSW125) deposits.

OTHER EXPLORATION ACTIVITY

Also in the Harrison Lake to Hope area in 2002, Eagle Plains Resources Ltd. successfully optioned its Harrison Gold (Abo) project, covering MINFILE 092HSW092, to Northern Continental Resources Inc. The Harrison Gold (Abo) property hosts several quartz diorite stocks of Tertiary age that locally contain zones of sheeted, gold-bearing quartz-sulphide veins and stockworks that have bulk open pit potential. Northern Continental is planning a surface drilling program in early 2003 to delineate and augment



Photo 10. Leader Mining International Ltd.'s consultants David Makepeace and Craig Payne at Cogburn project drill site on Emory Zone, Hope area.

some of the five known gold zones. One zone in the Jenner Stock contains an inferred resource of 2.2 million tonnes at 3.2 g/t Au. Along the Chilliwack River south of Harrison Lake, I.G. Machine and Fiber Ltd. and Homegold Resources Ltd. completed a 5000 tonne bulk sample on its Slesse Limestone project, near MINFILE occurrences 092HSW088 and 092HSW089.

COASTAL MAINLAND AREA

MINERAL HILL (092GNW052, -053, -066)

Tri-Sil Minerals Inc. successfully secured a 50/50 joint venture agreement with Clearview Mineral Resource Corporation for its Mineral Hill Wollastonite-Garnet Skarn project near Sechelt. Clearview funded a 5 hole, 705 meter drilling program on the Snake Bay Deposit (MINFILE 092GNW052) in early 2002. The drilling program intersected mineralization in every hole; the second hole cut 66.5 meters at 50% wollastonite and 50% garnet within an



Photo 11. Wollastonite-garnet skarn at Snake Bay deposit on Mineral Hill J.V. project of Clearview Mineral Resource Corp. and Tri-Sil Minerals Inc., Sechelt area.

area with a mineral inventory of 560 000 tonnes at 52% wollastonite. Both Snake Bay and the Wormy Lake occurrence (MINFILE 092GNW053) 2 kilometers to the north-west may be segments of an exoskarn that was offset by the NW-trending Wormy Lake Fault. The exoskarns formed within roof pendants of probable Triassic Quatsino Formation limestone within Jurassic plutons of granodiorite to gabbro composition.

The Mineral Hill project also has significant potential for dolomite, limestone and marble as well as other industrial minerals. Gabbro associated with Sechelt Granite occurrence (MINFILE 092GNW066) has dimension stone potential. Clearview intends to pursue further development of the property and marketing research in 2003. Also in 2002, Tri-Sil Minerals Inc. undertook minor exploration work at its contiguous Sechelt Carbonate project centered on MINFILE occurrence 092GSW031, and also covering the MC (MINFILE 092GSW035) and SN (MINFILE 092GSW048) showings. Tri-Sil is targeting Porphyry Cu-Mo-Au and related Cu Skarn and Zn Skarn mineralization, as well as sedimentary dolomite and limestone. Homegold Resources Ltd. also undertook minor exploration work in 2002 in the Alexis project area, adjacent to and east of Tri-Sil's Sechelt Carbonate project.

OTHER EXPLORATION ACTIVITY

The rocks of the Jurassic to Tertiary Coast Plutonic Complex largely underlie the Coastal Mainland portion of the Southwest Region, which covers the Sunshine Coast and Mid-Coast Forest Districts. The area saw a dramatic increase in exploration activity in 2002. Selected precious metal rich porphyry and related metallic mineral projects were reactivated, as the prices of Au and Cu increased. One new metallic mineral discovery was made in the Bella Coola area.

At the Jon project north Pemberton, International Silver Ridge Resources Ltd. completed a 4 hole, 242 meter drilling program in 2002. The program targeted gold rich Porphyry Cu-Mo-Au and related skarn or other intrusive related mineralization proximal to MINFILE's Texas 092JSE002, Sylvan 092JSE020, Lizard 092JSE029 and Bank 092JSE031 showings. North of Powell River, Bob Meikle and Jon Stewart undertook exploration work at the OK Porphyry Cu-Mo-Ag-Rhenium (Re) project (MINFILES 092K008 and 092K057), previously held under option by Canquest Resource Corp.

Along the east side of the Klinaklini River north of Knight Inlet, Saxony Explorations Ltd. completed preliminary exploration late in 2002 on their Redbreast project, acquired early in the year. Saxony targeted gold rich Porphyry Cu-Mo-Au and related mineralization in three claim blocks



Photo 12. Dan Epp and Bob Lenci at Milica project on Bella Coola Chief showing, Bella Coola area.

covering MINFILE's Hannah 8-10-11 092N028, Hoodoo North 092N029, Lancers Mountain 092N051 and Darlene 092N063 occurrences. Chip sample results from trenches on the Saffron claim block near the Hannah prospect yielded up to 12.41 g/t Au, 10.3 g/t Ag and 1.5% Cu.

East of Bella Coola along the west shore of the Talchako River, Dan Epp and Robert Lenci, two of the few active prospectors working in the area, staked and discovered new quartz-sulphide stockwork mineralization possibly of the Porphyry Cu-Mo-Au type at the Gyll project. A grab sample of a roadcut taken by the Regional Geologist while visiting the property yielded 0.25% Cu, 0.254% Zn, 36.2 g/t Ag, 2.5 g/t Au and 145 ppm Cr. The B.C. Geological Survey released results of a Regional Geochemical Survey for the Bella Coola area on August 14, 2002. The survey covered NTS sheets 093D and portions of 093C and 103A. The B.C. Geological Survey and the Geological Survey of Canada collaborated on the second and final year of fieldwork at the Bella Coola regional mapping project, led in part by Larry Diakow of the B.C. Geological Survey.

ACKNOWLEDGEMENTS

The author gratefully acknowledges the contributions of the dedicated and skilled prospectors, explorationists, and the personnel of the British Columbia Geological Survey and the Southwest Region Mines Branch to this report. Editing by Bill McMillan improved this paper, and his sharing of skill and expertise with all the contributors to this publication is greatly appreciated. Desktop publishing efforts by Janet Holland are gratefully acknowledged.

