

SOUTH-CENTRAL REGION

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SUMMARY AND TRENDS

For the seventh straight year, exploration activity increased in South-Central BC. Spending on exploration is estimated at about \$46 million, up sharply from the \$35 million spent in 2005 (Figure 5.1). These spending levels reflect strong commodity prices, numerous financings, an overall robust exploration climate, and two very large projects at Kamloops which accounted for about 40% of the total. This level of expenditure sets a new all-time high for exploration in the South-Central Region.

Exploration activity continues to be led by junior companies which were responsible for virtually all of the region's investment. These companies are primarily targeting bulk-mineable copper-gold, copper-molybdenum and molybdenum porphyry deposits, high-grade gold-silver veins, and stratiform polymetallic massive sulphide deposits. Junior companies experienced a dramatic improvement in their ability to raise capital in various financings. Notable examples include New Gold Inc (\$75 million raised) and Abacus Mining and Exploration Corp (\$14.5 million).

Drilling activity was up substantially at about 175 000 metres (Figure 5.2). The number of major projects, *i.e.*, those with drilling or trenching and over \$100 000 in spending, is estimated at 43, compared with 33 in 2005 (Figures 5.3 and 5.4, Table 5.2).

Several projects are undergoing advanced exploration, environmental review, permitting and feasibility studies and could enter production in the future. The most advanced are **New Afton** (copper-gold), **Elk** (gold) and **Prosperity** (gold-copper).

Several programs targeted relatively recent discoveries or significant extensions to known deposits. Recent discoveries that saw aggressive programs included **Skoonka Creek** (gold-silver), **Prospect Valley** (gold-silver), **Ruddock Creek** (Creek zone) (zinc-lead-silver), **Jake** (gold), **Blue River** (Upper Fir) (tantalum and niobium) and **LJ** (zinc-lead-silver). Known deposits such as the **Bralorne Mine** (gold), **Ajax West** (copper-gold), **Crazy Fox** (molybdenum-tungsten), **Ruddock Creek** (E-Zone) (zinc-lead-silver), **Panorama Ridge** (gold) and **Harper Creek** (copper-zinc) saw large programs aimed at expanding and discovering new resources.

Amongst the operating mines, the highlight of the year was the decision to extend the mine life to 2013 at **Highland Valley Copper**. In addition, the company is conducting engineering and feasibility studies on a

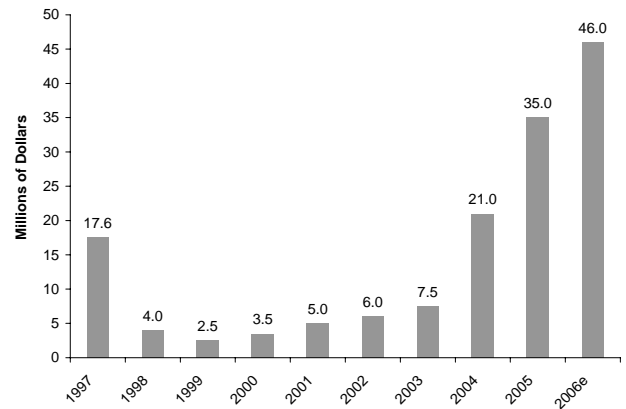


Figure 5.1. Annual exploration spending, in millions of dollars, South-Central Region.

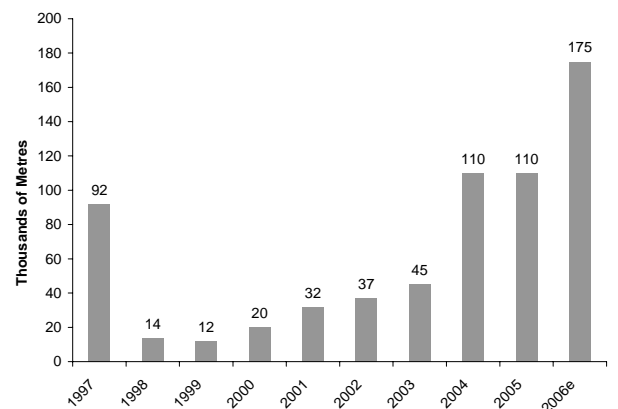


Figure 5.2. Annual exploration and development drilling, in thousands of metres, South-Central Region.

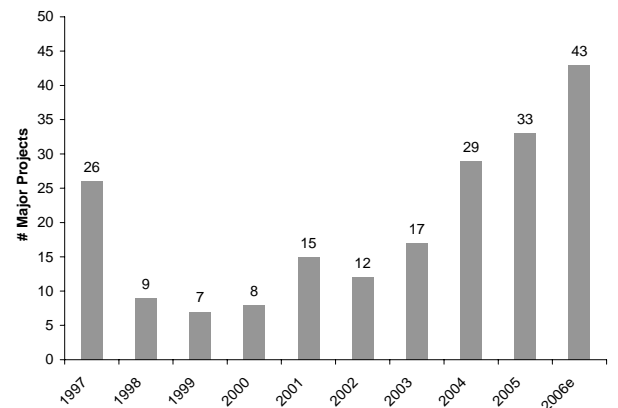


Figure 5.3. Number of major exploration projects per year, South-Central Region.

hydrometallurgical copper refinery which could further extend the mine life.

All of the operating mines in the region are listed in Table 5.1 and shown on the map (Figure 5.4). In addition, the major exploration projects are listed in Table 5.2.

MINES AND QUARRIES

METALS

Highland Valley Copper (HVC; Figure 5.5), a partnership of Teck Cominco Ltd (97.5%) and Highmont Mining Company Ltd (2.5%), benefited from exceptional copper and molybdenum prices in 2006. Employing about 900 people, the operation is forecast to produce close to

\$1.4 billion in revenue and \$1 billion in operating profit for 2006. A decision was made to extend the mine life from 2009 to 2013, and further extensions are also being considered.

In October, the company and its unionized employees settled a collective agreement which covers a five-year period to September 30, 2011. Pre-stripping to allow a push-back of the Valley pit east wall has commenced and approximately 90 million tonnes of overburden and low-grade ore is expected to be mined mainly in 2008-2009. The re-location of the in pit crusher and conveyor is reported to be nearing completion.

Average daily mill throughput was slightly lower than the average of about 136 000 tonnes per day (or 50 million tonnes per year) in recent years due to harder ore and other operational issues. Copper production at HVC in 2006 is forecast to be about 161 000 tonnes, slightly

TABLE 5.1. SOUTH-CENTRAL REGION FORECAST MINE PRODUCTION, 2006

Mine	Operator	Deposit Type / Commodity	Forecast Production in 2006 (tonnes or kilograms)	Number of Employees	Proven and Probable Reserves (at Jan. 1, 2006)
Metals					
Highland Valley Copper	Teck Cominco Ltd / Highmont Mining Company Ltd	Calc-alkalic porphyry Cu-Mo	161 000 t Cu, 2000 t Mo, minor Au, and Ag	~900	318 700 000 t at 0.43% Cu and 0.008% Mo
Coal					
Basin	Compliance Energy Corp	Thermal coal	42 000 t	~20	
Industrial Minerals					
Ashcroft	IG Machine and Fiber Ltd (IKO Industries Ltd)	Basalt (roofing granules)		55 (plant & quarry)	
Bud	Absorbant Products Ltd	Bentonite		see Red Lake	
Buse Lake	Lafarge Canada Inc	Volcanic ash (alumina-silica)		see Harper Ranch	
Craigmont	Craigmont Mines Joint Venture	Magnetite tailings	90 000 t	~30 (plant; seasonal)	
Decor	Pacific Bentonite Ltd	Alumina, landscape rock		~2 (including trucking)	
Falkland	Lafarge Canada Inc	Gypsum		see Harper Ranch	
Harper Ranch	Lafarge Canada Inc	Limestone		32 (plant & 3 quarries)	
Kettle Valley quarries	Kettle Valley Stone Company	Ashlar, flagstone, thin veneer		~40 (plant & quarries)	
Pavilion	Graymont Western Canada Inc	Limestone		~34 (plant & quarry)	
Red Lake	Absorbant Products Ltd	Diatomaceous earth, leonardite		40 (plant & 3 quarries)	
Z-2	Industrial Minerals Processors	Zeolite		~3 (plant and quarry; intermittent)	

TABLE 5.2. MAJOR EXPLORATION PROJECTS, SOUTH-CENTRAL REGION, 2006

Property	Operator	MINFILE (or NTS)	Commodities	Deposit Type	Work Program
Afton Area (West Ajax, East Ajax, DM, Audra)	Abacus Mining and Exploration Corp	92INE012, 013, 030	Cu, Au, Ag, Pd	Alkalic Porphyry	DD (~35 000 m)
Kamloops Gold	Williams Creek Explorations Limited / New Gold Inc	92I.086	Cu, Au	Alkalic Porphyry	DD (4048 m)
Ajax	New Gold Inc	92INE012, 013	Cu, Au	Alkalic Porphyry	DD (~2500 m)
Axe	Westar Resources Corp / Bearclaw Capital Corp	92HNE143, 040, 142	Cu, Au, Ag	Alkalic Porphyry	DD (1700 m)
Barnes Creek	Columbia Yukon Explorations Inc	82L/01W	Au, Ag	Epithermal Vein	DD (~800 m); TR (~1200 m)
Blackdome Mine (No 1 and 2 veins)	J-Pacific Gold Inc	92O 053	Au, Ag	Epithermal Vein	DD (~4000 m)
Blue River Tantalum/Niobium (Upper Fir, Fir and Verity)	Commerce Resources Corp	83D 005, 035	Ta, Nb, Phosphate	Carbonatite	DD (3400 m); EN; FS; G; MS; PF
Bralorne (New Vein - Noelton Vein, Shaft, Maud, Pioneer)	Bralorne Gold Mines Ltd	92JNE001	Au, Ag	Mesothermal Vein	DD (~10 000 m); FS
Congress (Lou, Howard, Golden Ledge)	Levon Resources Ltd	92JNE029, 131, 132	Au, Ag, Cu, Sb	Mesothermal Vein	DD (~2000 m)
Crazy Fox	Newmac Resources Inc	092P 014, 015, 016	Mo, W	Porphyry	DD (7490 m), TR (~1200 m)
Dobbin	Molycor Gold Corp / Goldrea Resources Corp	82LSW005	Cu, Pt, Pd	Magmatic; porphyry?	DD (1750 m)
Empire	American Creek Resources Ltd		Au, Ag	Vein, porphyry	AB-MG; AB-RD (1070 km); P; GP; G
Elk (Siwash North)	Almaden Minerals Ltd	92HNE096	Au, Ag	Mesothermal Vein	DD (8874 m); TR (300 m); GC; EN; PF
Fox 1-21 (Deception)	Happy Creek Minerals Ltd	none	W, Mo, Zn, Au	Skarn	GC; G; TR (~1650 m)
Galaxy	Discovery-Corp Enterprises Inc	92INE007	Cu, Au	Alkalic Porphyry	G; GC; DD (286 m)
Harper Creek	Yellowhead Mining Inc	82M 009	Cu, Ag, Au, Zn, Mo	Stratiform disseminated	DD (~5000 m); GP-IP (45 km); GC; G
Highland Valley Mine	Highland Valley Copper	92ISW012, 045, 92ISE013	Cu, Mo	Porphyry	DD (6482 m)
Iron Lake	Argent Mining Corp / Eastfield Resources Ltd	92P 132	Cu, Au, Pd, Pt	Magmatic PGE	UT; DD (680 m)
Irony	Jasper Mining Corp			Sedex	DD (400 m); AB-EM; AB-MG (564 km); GC
Isintok Lake	Jasper Mining Corp.	82ENW093	Ag, Cu, Mo	Porphyry	DD (~5000 m); IP (16 km); GC
Jake, CLO	Rimfire Minerals Corp		Au	Porphyry / Mesothermal vein	GP-EM; VLF; GC; TR (~1000 m)
Jamieson - Bullion	American Creek Resources Ltd				DD (~1000 m)
Tulox (Joe)	Amarc Resources Ltd		Au	Vein?	GC; IP (36.5 km)

TABLE 5.2. CONTINUED

Property	Operator	MINFILE (or NTS)	Commodities	Deposit Type	Work Program
Ketchan	Copper Belt Resources Ltd	92HNE115, 118	Cu, Au, Ag	Alkalic Porphyry	DD (~2000 m)
Lac La Hache (Aurizon, Peach Lake, Peach Melba, Ann North, Spout Lake, North and South Zones)	GWR Resources Inc	092P 001, 002, 034, 035, 108, 120, 153			TR; DD (~6000 m)
LJ	Consolidated Venturex Holdings Ltd	82M 264	Zn, Pb, Cu, Au, Ag	Besshi VMS	G; DD (1500 m)
Murphy Lake	Candorado Operating Co Ltd	93A 044, 073, 113, 063, 92P 004	Cu, Au	Alkalic Porphyry	DD (800 m); IP, AB-RD; AB-MG, GC
New Afton	New Gold Inc	92INE023	Cu, Au, Pd, Ag	Alkalic Porphyry	CD; FS; EN; GD; MS; PF; DD (~30 000 m)
Newmac, Bluff	Newmac Resources Inc	92N 030, 054, 055, 021?	Cu, Ag, Au	Porphyry, vein	DD; IP
Newton Mountain	High Ridge Resources Inc	092O050	Cu, Au	Porphyry	DD (2019 m); TR (3000 m)
Nicoamen River	Tanqueray Resources Ltd / Almaden Minerals Ltd		Au, Ag	Epithermal vein	GC; TR (425 m)
Panorama Ridge	Goldcliff Resource Corp	82ESW052, 259	Au	Skarn	DD (2213 m); TR (1450 m)
Princeton Project	Anglo-Canadian Uranium Corp	092HSE033	Cu, Au, Pd, Ag	Porphyry	DD (~1500 m)
Prospect Valley (NIC)	Consolidated Spire Ventures Ltd / Almaden Minerals Ltd	none	Au, Ag	Epithermal Vein	GP; DD (1500 m)
Prospect Valley (RM, RMX)	Consolidated Spire Ventures Ltd	92ISW105(?)	Au, Ag	Epithermal Vein	GP (48 km); DD (3734 m)
Prosperity	Taseko Mines Ltd	92O 041	Cu, Mo, Au	Porphyry	FS; EN;
Rain (Sorcerer)	International Bethlehem Mining Corp	82M 156	Cu, Mo, W	Skarn	AB-EM; AB-MG (590 km); DD (800 m)
Rateria	Happy Creek Minerals Ltd	92ISE092, 150, 060	Cu, Mo	Calc-alkalic porphyry	DD (~3000 m)
Red Hill	Avalon Ventures Ltd	92INW042	Cu, Zn, Au, Ag	VMS	DD (1120 m); G; GP
Ruddock Creek (E Zone, Creek Zone)	Selkirk Metals Corp / Doublestar Resources Ltd	082M 084	Zn, Pb, Ag	Stratiform	DD (14 551 m); AB-EM; AB-MG; GP; GC
Scoonka (JJ, Discovery)	Strongbow Exploration Inc / Almaden Minerals Ltd	92ISW104, 105	Au, Ag	Epithermal Vein	DD (4500 m); AB-GP; GP; GC; G; TR
Spences Bridge (Mag/LP, Silk, Southern Belle, Inn, Shovelnose)	Strongbow Exploration Inc		Au, Ag	Epithermal Vein	GC, G, Prosp.
Stirrup	Anglo-Canadian Uranium Corp		Au	Epithermal Vein	DD (~3000 m)

Work Program Abbreviations:

A = access; trail, road construction on claims; AB-EM = airborne electromagnetics; AB-MG = airborne magnetics; AB-RD = airborne radiometrics; BU (X tonnes) = bulk sample (weight in tonnes if known); CD = condemnation drilling; CQ = coal quality testing; CT = carbonization test (coal); DD (Xm) = diamond drilling totaling X metres; EN = environmental baseline studies/monitoring, remediation work; FS = feasibility studies; G = geology, mapping, etc; GC = geochemical sampling (rock, soil, silt, etc); GD = geotech drilling; GP = geophysics (general); IP = Induced Polarization; 3D-IP; MG = magnetics; MK = marketing-primarily for industrial mineral products; MS = metallurgical studies; OB = overburden drilling; OP-BU = open-pit bulk sample; P = prospecting; PD = percussion drilling; PF = pre-feasibility studies; R = reclamation; RC = reverse circulation drilling; TR = trenching, UG (X m) = X metres of underground development; UG-BU = underground bulk sample; UT = UTEM; VLF; WT = washability test (coal)



Figure 5.5. A shovel in the Valley pit, Highland Valley Copper.

lower than 2005, while molybdenum production will be about 2000 tonnes which is down almost 1/3 from 2005 due to lower ore grades realized during the year. The mine also produces minor by-product gold and silver.

Most ore comes from the **Valley** pit, augmented by a small amount from the **Lornex** pit. The **Highmont East** pit re-opened in 2005 due to its higher molybdenum content and elevated metal prices. It is expected to contribute important production during the 2008-2009 transition period in the Valley pit when higher strip ratios and lower grades are anticipated.

A proposed push back of the Valley pit west wall (2017 mine-life extension) and development of a \$500 million onsite hydrometallurgical copper refinery are the subject of feasibility studies. The refinery study is expected to be concluded at the end of 2006. The copper refinery proposal is currently in the pre-application stage of the Environmental Assessment process, and an application is expected to be presented in July, 2007.

Several other mine-mill complexes remain on care-and-maintenance status. Many of these have been closed since the mid-1990s, awaiting higher metal prices and/or discovery of additional ore. They have permits and substantial infrastructure in place and represent excellent opportunities for renewed mining or custom milling. These complexes include the **Goldstream** copper-zinc, **Blackdome** gold-silver, **Bralorne** gold and **Similco**

copper-gold mines. Efforts at bringing these mines back into production are discussed in latter sections.

COAL

Located near the town of Coalmont, the small **Basin** thermal coal mine of Compliance Energy Corporation produced about 42 000 tonnes in 2006. The site was placed on seasonal care and maintenance status in early September. The high volatile, bituminous B and C rank coal is sold mainly to cement plants and other niche markets in southern BC. The company's subsidiary, Compliance Power Corporation, was awarded a 30 year electricity purchase agreement in July from BC Hydro and is proposing a 56-megawatt coal and wood-waste fired generating station at the former Similco mine site. Called the Princeton Power project, the thermal generating station would burn coal from the Basin mine along with wood waste from a variety of forest industry sources. The reported project development costs are \$200 million with 30-40 full time jobs created on an ongoing basis. The project entered the pre-application stage of the Environmental Assessment process in March 2006.

INDUSTRIAL MINERALS

There are more than fifteen industrial mineral quarries and processing plants employing over 250 people in the region. These operations provide stable jobs in many small to medium-sized communities including Kamloops, Kelowna, Lillooet, Cache Creek, Ashcroft, Princeton and Merritt. There are very good opportunities for additional growth in this sector due to the wide variety of rock types and deposits in the region, excellent transportation infrastructure, proximity to growing markets in western North America, and the relative ease of permitting.

The **Kamloops** cement plant and **Harper Ranch** limestone quarry of Lafarge Canada Inc continue to supply cement to meet due to strong demand in western Canada. Lafarge also draws materials from the **Falkland** and **Buse Lake** quarries, which provide gypsum and alumina-silica rock respectively.

The **Decor** pit of Pacific Bentonite Ltd supplies alumina-rich burnt shale to the Lafarge cement plant in Kamloops (Figure 5.6). The shale beds occur directly above the Hat Creek coal deposit, located west of Cache Creek. Although most of the material is sold to Lafarge, a few thousand tonnes were also sold for surfacing of baseball diamonds. The property is also known to host a large bentonite deposit which is being investigated for municipal engineering and tile manufacture applications.

Also near Cache Creek, Graymont Western Canada Inc operates the **Pavilion** limestone quarry and lime plant on the Pavilion Indian Reserve. Graymont recently signed a forty-year lease extension with the Ts'kw'aylaxw First Nation who form the bulk of the employees at the mine.



Figure 5.6. The Decor alumina shale pit of Pacific Bentonite Ltd.

The company is studying the feasibility of a change in the mining system to permit long term mining at the site.

East of Ashcroft, IG Machine and Fiber Ltd, a subsidiary of IKO Industries Ltd, operates the **Ashcroft** basalt quarry and roofing granule plant (Figure 5.7). The granules are sized and coated with one of several distinct colours on site, and then shipped by rail and truck to IKO asphalt shingle plants in Calgary, Alberta; Sumas, Washington; Chicago, Illinois and elsewhere in North America.

Craigmont Mines Joint Venture operates the **Craigmont** magnetite operation located near Merritt where tailings from the old Craigmont copper mine are processed. The plant normally operates on a seasonal basis (March to December), however, due to strong demand, processing may continue through the winter months. The magnetite is used in coal washing plants in western Canada and the Centralia mine in Washington State. Remaining tailings are forecast to be exhausted in just over two years, and the company is evaluating several other possible feed sources.

At its plant in Kamloops, Absorbant Products Ltd manufactures cat litter, barn deodorizer, industrial absorbents, and carriers for agricultural products. These are prepared from diatomaceous earth mined from the **Red Lake** quarry northwest of Kamloops, and bentonite mined from the Bud quarry at Princeton.

The **Z1** (Ranchlands) zeolite quarry near Cache Creek is a small intermittent producer. Heemskirk Canada Ltd continues to market agricultural and absorbent products, produced from stockpiled zeolite at its plant in Lethbridge, Alberta.

Zeolite was mined from the nearby **Z2** quarry for processing at a plant in Ashcroft. The quarry and plant are owned by Industrial Mineral Processors, a private company based in Calgary. The plant produces industrial absorbents for oil field clean-up, soil conditioner, barn deodorizers, feed binders, and cat litter. The company plans to relocate the plant from Cache Creek to the mine site.



Figure 5.7. The roofing granule plant of IG Machine and Fiber Ltd at Ashcroft.

At Princeton, Zeo-Tech Enviro Corp optioned the **Zeo-Tech/Bromley Creek** zeolite quarry to Heemskirk Canada Ltd who will operate the quarry for the next four years. Zeolite will be transported to Lethbridge and prepared for use as a lightweight cement for oil and gas wells. This agreement will allow Zeo-Tech Enviro Corp to advance its efforts at the nearby **Sun** zeolite deposit.

Opal Resources Canada Inc produces attractive fire opal gemstones and jewelry from the **Klinker** property, located west of Vernon. Opal occurs as fracture and vesicle-fillings in andesitic to basaltic laharic breccia of the basal Kamloops Group (Eocene). Presently the gemstone jewelry is marketed from a retail store in Vernon and is aimed at the BC tourist market; however, the company aims to develop other North American markets (Figure 5.8).

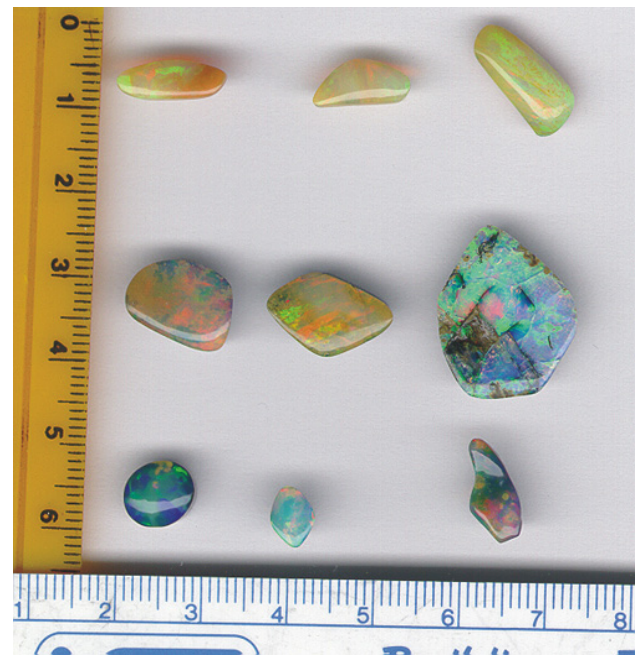


Figure 5.8. A variety of opal specimens from the Klinker deposit (photo courtesy of Opal Resources Canada Ltd).

Decorative rock and dimension stone are produced at numerous small quarries throughout the region. The best known producer is the Kettle Valley Stone Company of Kelowna which sells flagstone, ashlar, facing stone and landscape rock mined from the **Nipple Mountain, Kettle Valley, Canyon** and **Gemini** quarries. Kettle Valley's workforce has grown to about 40 people year round, mainly employed in the Kelowna processing facility. The products include dacite ash, gneiss and basalt, and are mainly used in high-end residential and commercial developments in the western U.S.A. and in the Vancouver-Whistler area.

South of Revelstoke, D.G. Olsson produces, by hand, small amounts of micaceous-quartzite flagstone and facing stone at the **Begbie** quarry. Other small, hand-operated flagstone quarries exploit micaceous quartzite in the North Thompson area.

EXPLORATION HIGHLIGHTS

KAMLOOPS-HIGHLAND VALLEY

Strong prices for copper, molybdenum and gold have focused exploration interest on the productive porphyry-hosting districts of southern BC, particularly the Guichon Creek and Iron Mask batholiths.

Iron Mask Batholith

The largest exploration project in the region was the **New Afton** porphyry copper-gold project of New Gold Inc (Figure 5.9). New Afton is located on the northwestern end of the Iron Mask Batholith and centered on the former Afton open-pit mine site, ten kilometres west of Kamloops. New Gold Inc raised over \$75 million in February, providing a sizeable treasury for advancing this project. A large contingent of staff and contractors worked on the site throughout the year and about \$14 million will be spent. Approximately 30 000 metres of surface and underground drilling was completed.

In the third quarter the results of a mining method study were released that indicated the optimal mining method to be underground block caving. As well, a new resource estimation was completed that increased the company's confidence in the nature and grade of the deposit with 70% of the tonnage being placed in the measured category. The resource now stands at 65.66 million tonnes grading 1.02% copper, 0.77 g/t gold and 2.59 g/t silver at a cash cutoff of \$10 cdn/tonne. This estimate did not incorporate some of the significant deep drilling results attained from the "C-Zone" during the 2006 exploration season. This new area of mineralization has been identified vertically below the current resource, with intersections of up to 1.70% copper, and 1.47g/t gold, or 2.70% copper equivalent, over a core length of 112 metres as reported in hole UA-69.



Figure 5.9. Geologists discussing the underground mine development for the proposed New Afton mine.

The company is quickly advancing the project towards a decision on whether to construct a large underground mine, perhaps as early as 2009. Much of the work this year was aimed at the completion of a full feasibility study by the end of year. This will include capital and operational costs, an economic model, metallurgical test work, infrastructure engineering, reserve calculation and permitting. The proposed mine would achieve a full production rate of 11 000 tonnes per day after mill commissioning in 2009. De-watering of the Afton pit is proposed to begin in 2007 in preparation for underground development which would be completed in 2008. A 5 kilometre decline would access the ore body and conveyor that would bring the ore to the surface. The capital investment is estimated at \$250 million and would provide 400 jobs during construction and 200 during operation. The mine life is predicted to be 12 years with the present resources. An application for a Mines Act permit was made to the Regional Mine Development Review Committee in December. Environmental review and permitting is expected to be complete in early to mid 2007.

New Gold Inc was also active in the central region of the Iron Mask Batholith where they drilled several thousand metres around the **Ajax** pits and the recently optioned **Magnum** property. The **Ajax** East and West pits provided mill-feed to the Afton concentrator prior to

closure in 1997 and are located about 10 kilometres southeast of the Afton mine site.

Abacus Mining and Exploration Corp also holds a large property position in the **Afton area** of the Iron Mask Batholith and conducted a very large drill program during the year. The company is implementing a deal to purchase milling and processing facilities, a tailings storage facility, and certain surface and subsurface rights, permits and infrastructure from Afton Operating Corp, a subsidiary of Teck Cominco Ltd. These aggressive undertakings have been made possible in part by two very successful financings in February whereby the company raised \$14.5 million dollars.

Throughout the year Abacus continued drilling beneath the past-producing **Ajax West** and **East** pits bringing the total drilling at the pits to well in excess of 30 000 metres since late 2005 (Figure 5.10). Select highlights from 2006 drilling at the Ajax West included drillholes AW-06-025 which intercepted 291 metres of 0.47% copper and 0.52 g/t gold and AW-06-039 which intercepted 492 metres of 0.34% copper and 0.30 g/t gold. Utilizing information from this program the company is proceeding with a resource estimation for the Ajax West pit which should be completed before the end of the year.

Continued drilling is underway at the Ajax East pit in order to provide enough information for a resource estimate to be completed.

Abacus Mining and Exploration Corp also drilled the and **DM-Audra-Crescent** zones, which are located between the Afton and Ajax deposits, with the intention of expanding the preliminary resources below and on strike to the known mineralization. Existing indicated resources in these zones total 28.5 million tonnes grading 0.30% copper and 0.15 g/t gold and an inferred resource of 15.8 million tonnes grading 0.28% copper and 0.124 g/t gold.

The small **Kamloops Gold** property of Williams Creek Exploration Ltd was also explored in a joint venture with New Gold Inc and saw a five long holes drilled to test geophysical anomalies identified by a natural audio frequency magnetotellurics (“NSAMT”) survey conducted in 2005. The Company encountered short intersections of mineralization and is reviewing the program results in order to better understand their significance in anticipation of further drilling.

The **Galaxy** property held by Discovery-Corp Enterprises Inc was explored by a modest program of three shallow drillholes totaling 286 metres. Within this property the Galaxy copper-gold zone is a northwest-trending, fault-bounded dioritic pendant of the Iron Mask batholith. A selection of reported near surface intercepts from limited sampling include 12.47 metres of 0.72% copper and 0.46 g/t gold from hole GX06-1 and 6.08 metres of 0.83 % copper and 0.23 g/t gold from hole GX06-2. An historical resource estimate for this deposit totals 3.2 million tonnes grading 0.65% copper and 0.34 g/t gold.



Figure 5.10. A “deep porphyry” mine tour examining Ajax West core at the Afton project of Abacus Mining and Exploration Corp.

Guichon Creek Batholith

In the Highland Valley, Getty Copper Inc continued its evaluation of the potential for on-site leaching of oxide ore at the **Getty North** porphyry copper deposit. The company reported a successful pilot plant test of the ore utilizing a proprietary Continuous Vat Leaching process at SGS Lakefield Research. The results of the test will provide the design parameters for a full-scale plant. As well, the company is working toward bringing the stated resources for the deposits it owns in the area into compliance with new reporting standards. Getty North has a historic drill indicated and inferred resource of 72.1 million tonnes grading 0.31% copper, including 10.0 million tonnes of oxide grading 0.40% copper.

South of the Highland Valley Copper mine, Happy Creek Minerals Ltd drilled the **Rateria** property to test a porphyry copper-molybdenum target generated by three-dimensional induced polarization survey completed in 2005. At the time of writing analytical results were not available; however, the company has reported encountering quartz diorite to granodiorite and various dikes believed to be the Bethlehem and Skeena phases of the Guichon Creek Batholith which are the host rocks at the Lornex and Bethlehem mines to the north.

North of Kamloops on the southern Bonaparte plateau, American Creek Resources Ltd has acquired a very large land holding on the **Jamieson-Bullion** and **Empire** properties. This land package is underlain largely by Devonian to Triassic Harper Ranch and Upper Triassic Nicola Group rocks that have been intruded by Late Triassic to Jurassic granodiorite to quartz diorite plugs. A ten-hole program is underway at the Jamieson-Bullion property where historically the targets have been multi-element quartz veins in shear zones developed within intrusive rocks. The Empire property was over-flown by an airborne radiometric and magnetic survey covering a total of 1070 line kilometres and follow-up ground magnetic and geological surveys were completed.

NORTH THOMPSON

South of Blue River near the headwaters of the North Thompson River, Commerce Resources Corp undertook a large program at its Blue River tantalum-niobium properties (Figure 5.11). Bolstered by two financings in 2006 that raised over \$4.8 million the company is aggressively advancing this project. The company drilled 17 holes at the **Upper Fir** carbonatite intersecting it over intervals of 12.53 to 105.87 metres in thickness over a strike length of 750 metres. Results are pending but the first hole reportedly intersected 81.61 metres grading 220 g/t Ta₂O₅ and 1,603 g/t Nb₂O₅. The company has begun environmental and economic scoping studies and intends to apply for a bulk sample in early 2007 in order to provide material for metallurgical and marketing studies. Commerce Resource Corp also owns the nearby **Fir** deposit, with an indicated resource of 5.65 million tonnes grading 203 g/t Ta₂O₅ and 1047 g/t Nb₂O₅ and the **Verity** deposit, located 10 kilometres north, with a resource of 3.06 million tonnes grading 196 g/t Ta₂O₅, 646 g/t Nb₂O₅ and 3.2% P₂O₅.

Newmac Resources Inc completed a large trenching and drilling program on the **Crazy Fox (Anticlimax)** porphyry molybdenum-tungsten property north of Little Fort (Figure 5.12). The program was aimed at defining the controls on mineralization and demonstrating its continuity. Select reported intersections include a lengthy 353 metres of 0.02% molybdenum and 0.071% tungsten in hole 06-19 and high-grade intersections such as 45.4 metres of 0.067% molybdenum and 0.040% tungsten in hole 06-31. These long intersections suggest the potential for a large, low-grade bulk-mineable deposit.

There was a substantive program at the **Harper Creek** copper deposit located 10 kilometres southwest of Vavenby, by private company Yellowhead Mining Inc. Tabular shaped zones of volcanogenic sulphide mineralization are hosted within highly deformed Late Devonian metavolcanic rocks of the Eagle Bay assemblage. The company's objective was to confirm the results of earlier Noranda/US Steel work through re-drilling of previously explored areas as well as step-out and infill drilling. Historic geological resources were



Figure 5.11. Hand specimen showing tantalum and niobium-bearing pyrochlore within carbonatite at the Blue River Tantalum-Niobium project (courtesy of Commerce Resource Corp).



Figure 5.12. Unidirectional Solidification Texture quartz or "brain rock" from the Crazy Fox porphyry molybdenum-tungsten project (courtesy of Newmac Resources Inc).

estimated at 96 million tonnes of 0.41% copper and 0.05 g/t gold. Precious metals were only sampled on a limited basis in the past, so that is an important component of the current program and the company is re-sampling available core to confirm grades and mineralogy.

Rimfire Minerals Corporation conducted a VLF-EM survey followed up by trenching at the **Jake** property, a 2005 gold discovery located west of Clearwater. Trenching of the original showing revealed a series of gold-bearing quartz-sulphide veins and stringers hosted by sheared andesite tuffs of the Devonian to Permian Fennell Formation. Mineralization consists of quartz with pyrrhotite, chalcopyrite, pyrite and bismuthinite. Composite samples across the veining in the trench averaged 9.9 g/t gold over an average of 0.8 metre (4 samples), 7.3 g/t gold over 2.67 metres, 6.3 g/t gold over 2.09 metres, 11.7 g/t over 0.45 metre and 11.4 g/t gold over 0.60 metre. Further trenching is planned. The company has recently acquired the adjacent Clearwater Peak property to cover the northerly extension of the VLF-EM conductor associated with the Jake showing.

SOUTHERN CARIBOO-CHILCOTIN

Exploration for porphyry copper-gold deposits was the focus of most work in the Cariboo-Chilcotin in 2006. Several initiatives were launched aimed at identifying new opportunities in this region including: an airborne multi-parameter geophysical survey covering a 8900 square kilometre part of the Bonaparte Plateau south of Canim Lake (092P East 1/2) coordinated by Geoscience BC (Figure 5.13); regional geoscience studies in areas affected by Mountain Pine Beetle by the BC Geological Survey; a July 7, 2006 release of drainage sediment and water sampling program results (NTS Sheets 93C and 93F) by Geoscience BC; and studies at the University of British Columbia aimed at characterizing the Chilcotin flood basalts which obscure much prospective geology of



Figure 5.13. Helicopter at Little Fort ready to start airborne multi-parameter geophysical surveys over the Bonaparte Plateau.

the region. Cumulatively, the vast quantities of information gathered and released in 2006 and 2007 should provide a significant step toward a better understanding of the mineral opportunities in this part of the province.

The most significant deposit in this area is the **Prosperity** porphyry gold-copper deposit of Taseko Mines Limited, located southwest of Williams Lake. The most recent information from the company gives an estimated measured and indicated resource of 491 million tonnes grading 0.43 g/t Au and 0.22% copper. The company reports the update of the feasibility study for the project is progressing with the completion of scoping level studies for the mill redesign and operating costs as well as optimal designs of the tailings impoundment system and mining and other infrastructure costs. Discussions with area First Nations are underway and the Environmental Assessment process has been re-started with a focus on updating baseline studies in the biophysical, socio-economic, archeological, and traditional use fields.

Approximately 40 kilometres north of the Prosperity deposit, High Ridge Resources Inc completed a drill program on the **Newton Hill** porphyry gold-copper prospect. Notable intersections of gold mineralization were encountered in oxidized felsic rocks with reported intersections such as 2.33 g/t gold and 0.15% copper over 49 metres in hole DDH 06-12 and 1.07 g/t gold over 10 metres found almost at the surface in hole DDH 06-11. Follow-up trenching and drilling of the near-surface gold mineralization is planned.

Near Bluff Lake, further west in the Chilcotin, Newmac Resources Inc drilled the **Newmac** porphyry copper-silver-gold prospect. Results from that program have not been released yet. Adjoining the Newmac property is a recent discovery by a local rancher of copper-stained outcrops on what is now called the **Bluff** property. The company optioned the property and reports that malachite and azurite-stained and tourmaline-altered subvolcanic rocks have been discovered over an area of

900 by 600 metres. Grab samples yielded highly anomalous values with up to 5.46% copper, 8.75 g/t gold and 0.30% molybdenum. An IP program has been quickly arranged to provide some early direction on potential follow-up targets on this property.

The **Blackdome** gold-silver mine and mill of J-Pacific Gold Inc is located northwest of Clinton and remains on care and maintenance. This underground mine operated in the 1980s and again briefly from October 1998 to May 1999. Mineralization consists of narrow, high-grade epithermal quartz veins. The 200 tonne-per-day mill is intact and the property has a historic inferred mineral resource of 124 120 tonnes grading 12.8 g/t gold and 33.7 g/t silver. The property was drilled late in 2006 in a program aimed at identifying more resources and re-opening the operation. Much of the drilling was planned to test the No. 1 and 2 veins' continuity to depth, along strike and in an area where they may intersect. Drilling was also planned underneath Blackdome Mountain (a basalt cap rock) to intersect the No.1 and 17 veins in an area not previously tested. The final target is the Giant Vein which was drilled to test its down dip potential. Results of the program are pending.

West of Clinton at the **Stirrup** property, Anglo-Canadian Uranium Corp proposed a late fall program to drill test epithermal gold-sulfide-quartz veins hosted within marine sedimentary rocks of the Lower Cretaceous Jackass Mountain group. Previous drilling in the area by Chevron Minerals intersected 14.99 g/t gold over 1.1 metres.

At the **Lac La Hache** porphyry copper-gold property of GWR Resources Inc the main focus was to drill test identified priority targets generated by a 2005 airborne magnetic-radiometric survey that covered the property. Early in the year the Peach Lake, Peach Melba, Ann North and Spout Lake (North and South) zones were drilled. The fall portion of the drilling program began at the Aurizon zone of the Ann property where several holes targeted native copper mineralization exposed in trenches. The company reported its first hole AZ-06-01 intercepted 0.439 g/t gold and 0.223% copper over 257 metres with a high-grade section of 0.563 g/t gold and 0.28% copper over 80 metres. The company is well-financed to continue drilling and trenching into the winter season.

Further east, the **Iron Lake** magmatic copper-nickel-platinum prospect was drilled by Argent Mining Corp after targets were refined with a ground-based UTEM geophysical survey. The most successful hole was IL-06-05 which intersected 2.2 metres of nearly massive pyrrhotite-chalcopyrite mineralization grading 0.54% copper and 31.8% iron with anomalous nickel and cobalt. No economically significant intersections of gold or platinum were reported in this program.

Happy Creek Minerals Ltd was active on their portfolio of properties in the south Cariboo region. At the **Silverboss** property adjacent to the former Boss Mountain molybdenum mine, the company explored gold and

silver-bearing, fracture-controlled and sheeted quartz veins within the Takomkane batholith. East of Boss Mountain the **Fox** property, which contains the **Nightcrawler-Creek** tungsten skarn zone, was evaluated by property wide grassroots exploration for molybdenum, tungsten and gold.

There are some very large tenure holdings in the Bonaparte plateau that may benefit from the Geoscience BC airborne survey flown in the fall of 2006, with data scheduled for release in Spring 2007. These include the **Tulox** property of Amarc Resources Ltd and the **Murphy/Canim/South Canim Lakes** and **Rayfield** properties of Candorado Operating Company Ltd. These properties saw grassroots level exploration programs this year.

GOLD BRIDGE

The most advanced project in the famous Gold Bridge mesothermal gold-quartz vein camp is at the **Bralorne** mine of Bralorne Gold Mines Ltd which operated continuously from 1928 to 1971 and was the dominant contributor to the approximately 4.15 million ounces of gold that came from this camp. The mine received a Mine Development Certificate in 1995 and has completed some limited test milling in recent years. In addition to the underground workings, infrastructure on the property includes an assay lab, mine offices and dry, a partially completed tailings pond and a small gravity/flotation pilot mill with a capacity of about 100 tonne-per-day. The company recently commissioned an updated technical report to outline the necessary path for delineating reserves with the goal of identifying an optimized mining and mill configuration and reopening the mine.

In 2006 the company undertook a 10 000 metre surface and underground drill program aimed at confirming and extending geological structures and establishing guides for subsequent drifting and raising to increase tonnage and grade. Encouraging results are reported from work on Maud's structure, located 1000 feet southwest of the Peter Vein, and a previously undrilled target. Eight of 14 holes returned results that were greater than 5.3 g/t which are thought to be better than those from historical drilling of the Peter Vein. Holes also targeted the "New Vein-Noelton Vein" and extensions of structures from the King Mine area. Hole SB-06-109B intersected 15.87 g/t over 0.61 metres on an eastern projection of the "Shaft Vein" which included bonanza-grade sections of 402.58 g/t over 0.34 metres and 246.99 g/t over 0.37 metres further down-hole. These intersections are considered by the company as very significant as they occur in the King-Bralorne Mine gap: an area which hosts favorable Bralorne Intrusive rock and seen only limited previous exploration.

Work will continue through the winter at the property with the next phase involving rehabilitation of the King drift to allow underground drilling to further test the area

around hole SB-06-109B. Drilling is also expected in the Pioneer area in the new year.

The **Congress** gold property of Levon Resources Ltd is located 11 kilometres north of the Bralorne mine and on the north side of Carpenter Lake. The property has had some mining and substantial exploration between 1913 and 1989 including six adits with over 2300 metres of underground workings. The 2006 drilling program was aimed at increasing the known resources at the **Lou** and **Howard Zones** to a minimum of 500 000 contained ounces of gold. The **Golden Ledge** zone, discovered by trenching in 2005, was drilled and early reports indicate the mineralized target was successfully intersected in all planned holes. Trenching had previously exposed a 1 to 1.5 metre wide silicified fault-zone with up to 26.4 g/t gold over 1.2 metres.

Near the Congress property, Avino Silver & Gold Mines Ltd drilled a few holes on the **Minto** property. The targets were generated from a previous year's trenching program which returned up to 14.76 g/t gold over an estimated true width of 4.5 metres in trench #827 on the Minto North Zone.

OKANAGAN-SOUTHERN MONASHEES

Porphyry molybdenum deposits and gold-quartz vein deposits were the main exploration targets in the Okanagan in 2006.

The **Elk** (Siwash North) mesothermal gold-quartz vein project of Almaden Minerals Ltd is located 45 kilometres southeast of Merritt, and just 2 kilometres south of Highway 97 (Figure 5.14). Between 1992 and 1995 the mine produced 1609.6 kilograms gold (51 750 ounces) from 16 700 tonnes of direct-shipping ore from open-pit and underground workings on the **Siwash North Vein (B Zone)**. Grades averaged about 96 g/t gold. Almaden Minerals Ltd owns a 110 tonne-per-day, modular, gravity-flotation mill and is aggressively working toward expanding the known resource on the property and putting the project into commercial production in the next few years.

The busy year at the Elk property started with the release of an updated resource estimate for the **B Zone** and **WD Vein** property. Global (bulk open pit and vein) measured and indicated resources totaled 846 000 tonnes grading 10.48 g/t gold (285 100 ounces) plus an additional 1.0945 million tonnes grading 5.36 g/t gold (188 400 ounces) in the inferred category. The bulk of the 2006 program was focused on infill drilling at the WD Vein which is located 200 metres north of the Siwash Vein. Four holes were drilled in the **Siwash East Zone** and 17 into the B Zone. There are eight known mesothermal vein structures on the property many of which are recent discoveries that warrant further exploration.

Molycor Gold Corp and Goldrea Resources Corp were active on their properties around the Whiterocks



Figure 5.14. Aerial view of the Elk property showing the various zones, open pit and portal locations (courtesy of Almaden Minerals Ltd).

Mountain alkaline complex, located 23 kilometres northeast of the Brenda mine and west of Kelowna. At the **Tadpole Lake** (Dobbin II) prospect, results from a 2005 winter drill program were released that intersected molybdenum-bearing veins in granitic rocks with some significant intersections such as 10.7 metres of 0.095% molybdenum in hole 05-01 and 16.8 metres of 0.106% molybdenum in hole 05-10. Just to the southeast, the companies drilled the **Dobbin I** copper-platinum-palladium property. The aim of this program was to drill northeast of the “Central Zone” and test the depths of the ultramafic complex which is thought to contain platinum group elements. Previous drilling in this area intercepted 111 metres of 0.19% copper, 0.410 g/t platinum and 0.352 g/t palladium.

Jasper Mining Corp drilled the **Isintok** molybdenum-copper-silver prospect, located southwest of Summerland, in two campaigns in 2006. The initial program of ten holes reportedly confirmed near surface, consistent low-grade porphyry mineralization that was previously drilled by Anaconda Canada Exploration Ltd and Canex Aerial Exploration Ltd. Long intervals such as 120.08 metres of 0.127% copper, 0.012% molybdenum and 1.414 g/t silver close to surface in hole ISIN-06-06, and 220.33 metres of 0.072% copper and 0.003% Mo in hole ISIN-06-03 have provided the company with encouragement. The company reports there are indications of additional deeper zones of mineralization that may not have been fully explored over the property’s history.

At the **Barnes Creek** property, located near the Monashee Pass and 70 kilometres southeast of Vernon, Columbia Yukon Explorations Inc trenched and drilled several promising gold-arsenic anomalies on the Holmes Lake grid. Despite a history of placer gold mining, this area has had little bedrock exploration. The target is

structurally controlled gold-silver vein or shear-hosted mineralization within subvolcanic intrusive rock. In 2005, trench 31N uncovered quartz veins within feldspar porphyry diorites and andesitic flows that assayed up to 16.6 g/t gold over 0.15 metre; however, the fractured wall rocks are also reported to carry anomalous gold values to widths of over 2 metres.

FRASER RIVER-MERRITT-ASHCROFT

Several large programs were aimed at low-sulphidation epithermal gold-silver targets in the maturing Spences Bridge gold belt, located between Merritt, Spences Bridge and Lytton. Preliminary estimates suggest that \$4 to 4.5 million will be spent in this belt alone in 2006. Exploration in the region began in 2001 when prospector Ed Balon of Almaden Minerals Ltd began following up Regional Geochemical Survey anomalies.

On the large **Skoonka Creek** project, partners Strongbow Exploration Inc and Almaden Minerals Ltd continue to piece together a very encouraging regional play (Figure 5.15). The property is located southwest of Spences Bridge and accessed by roads from Lytton. Mineralization consists of delicately banded, low-sulphidation epithermal quartz veins surrounded by clay alteration zones. Strongbow Exploration Inc, as the operator, collected over 1500 rock and 4500 soil geochemical samples across the property and completed detailed bedrock mapping. The **JJ** prospect was drill tested by 12 holes in the spring which extended the mineralization to a length of 750 metres and down dip 140 metres from the surface. This work was designed to follow-up excellent drill results from 2005 including 20.2



Figure 5.15. A trench across the JJ Zone at the Skoonka property.

g/t gold over 12.8 metres on hole SC-008. Some of the best assays from recent campaign returned 5.79 g/t gold and 28.2 g/t silver over 1.73 metres in hole SC-012 and 7.25 g/t gold over 0.92 metre in hole SC-015. Structural re-interpretation and an IP survey led to a fall drill program of six holes. Visual examination of the core indicates the mineralized system exists down dip to at least 250 metres below the surface and assays are pending.

Approximately three kilometres northeast of the JJ prospect, the company was also very active in advancing prospects within the **Discovery-Backburn** trend. In January an airborne magnetic /electromagnetic survey was flown over this three kilometre long gold-in-soil anomaly. Four bedrock gold showings have been identified. At the **Deadwood** showing rock grab samples have returned up to 13.8 g/t gold. The **Discovery** showing was tested with three drillholes which intersected similar grades to the surface exposure with the best intersection of 0.36 g/t gold over 11.33 metres from hole SC-024.

The **Prospect Valley** property is located 30 kilometres west of Merritt and was the subject of a substantial program by Consolidated Spire Ventures Ltd. The bulk of work was centered on the **RM/RMX Zone** where 23 holes tested near-surface epithermal gold-silver mineralization. The company reports that the strongest mineralization appears to be associated with a northwest-dipping horizon of silicified amygdaloidal andesitic

basalts overlying an interpreted thrust fault contact with unaltered andesites, basalts, and ash and lapilli tuffs. An intersection of 1.57 g/t gold over 45.7 metres was returned in hole RM2006-21, which included several high-grade intervals such as 9.541 g/t gold over 1.5 metres. A fall program of a detailed magnetometer survey identified two new zones of interest near the outer extents of the 1.5 kilometre-long strike length of the RM/RMX Zone. These will be pursued in an upcoming field program.

At the **NIC** vein zone of the Prospect Valley property, Consolidated Spire Ventures Ltd drilled five holes to explore outcrop showings of gold-bearing epithermal quartz veining.

A large number of regional grass roots exploration programs were undertaken within the Spences Bridge Gold Belt with several companies actively prospecting, rock, soil and silt sampling at levels unseen in recent times. The large tenure holdings of Almaden Minerals Ltd were largely optioned to other companies either active in the belt or trying to secure some prospective ground. A selection of active companies include: Strongbow Exploration Inc (**LP, Southern Belle, Silk, Inn, and Shovelnose**), Tanqueray Resources Ltd (**Pima, Goldpan, Nicoamen, Otter, and McCaffrey**), Williams Creek Exploration Ltd (**Merit, Brookemere**), Anglo-Canadian Uranium Corp (**Skoonka-Boothanie, B4 B5 B6**) and Almaden Minerals Ltd (**Ponderosa**). On the latter, the **Axe Ridge** showing produced a series of bulk channel samples that were reported to have returned 2.43 g/t of gold over 10.5 metres.

Goldcliff Resource Corporation has reported a new discovery at the **Plug** project, located twelve kilometres east of Logan Lake. The company has actively explored in the Nicola Group for epithermal gold-silver mineralization along the Clapperton fault system for several years, primarily around the Plug and **Meadow** showings. The new showing has been called the **Logan** showing and is reportedly a pervasively carbonate altered and brecciated outcrop which is mineralized with pyrite, chalcopyrite and malachite. Grab samples have reported up to 0.23% copper and 70 ppb gold.

Avalon Ventures Ltd was active again on the **Red Hill** massive sulphide copper-zinc-silver property near Ashcroft. The company continued to test its new structural model as well as a time-domain electromagnetic (TEM) geophysical conductor detected in a down hole survey of hole 05-23. Four drillholes were completed and all intersected pyrrhotite-pyrite massive sulfide mineralization with minor chalcopyrite over intervals of up to twenty metres. Hole 06-25 intersected a chalcopyrite-dominated massive sulphide zone that produced 10.15% copper, 5.45% zinc, 1.41 g/t gold over 1.74 metres. The company reports the intersection in hole 06-25 appears to be fault-bounded and may represent a faulted slice from a larger massive sulfide body. Further down-hole geophysics were completed on hole 06-25 and a strong Pulse EM conductor has been reported in the

vicinity. The company is planning an airborne EM survey followed by further drilling.

Just outside of Merritt, Christopher James Gold Corp drilled a single deep hole on the **Betty** claims located three kilometres west of the past producing **Craigmont** copper mine. The hole was aimed at testing for Craigmont-style skarn mineralization at the contact between limestone rocks and the Guichon Creek batholith.

REVELSTOKE-SHUSWAP-NORTHERN MONASHEES

This area is best known for its stratiform base-metal deposits hosted in cover sequences of the Monashee Complex. The deposits in this area have many characteristics of “Broken Hill-type” deposits although some more closely resemble classic Besshi and sedex deposits. International Bethlehem Mining Corporation (formerly Orphan Boy Resources Inc) through a wholly owned subsidiary owns the **Goldstream** copper-zinc mine-mill complex north of Revelstoke. The company is currently evaluating the viability of processing the zinc and copper contained within the mill tailings pond. Metallurgical studies have recently been completed and results are pending. This custom mineral processing plant lies in the heart of this mineralized region with a 1350 dry metric tons per day capacity to process off-site mineral deposits as well.

Selkirk Metals Corp undertook a very aggressive program at the **Ruddock Creek** property located within the Script Ranges about 100 kilometres north of Revelstoke (Figure 5.16). The program was focused on the southern edge of an interpreted basin which is defined by 12 known stratiform massive sulphide zinc-lead deposits and prospects that occur over 5.5 kilometres. The relationship between the showings continues to include an element of discovery due to structural complexity and a general absence of marker horizons. The best known deposit in the area is the **E-Zone** which was the principal focus of the 2006 program and 25 holes were drilled to test its continuity. Previous work by Falconbridge Ltd and Cominco Ltd had defined an inferred mineral resource of 1.5 million tonnes grading 8.4% zinc and 1.6% lead. The company reports that it has confirmed the continuity of the zone from its surface expression to a distance of 1.2 kilometres to the west. As well, drilling on the western extents seems to confirm a thickened portion of the zone with hole RD-06-152 intersecting 11.7% zinc and 2.27% lead over 22.6 metres. This hole pierced the E-Zone 25 metres up dip from hole RD-05-113 which intersected 19.12 metres grading 15.79% zinc and 3.33% lead. Approximately 900 metres southwest of the western extents of the E-Zone, the company completed ten holes at the newly discovered **Creek Zone**, postulated to be an offset of the E-Zone. A

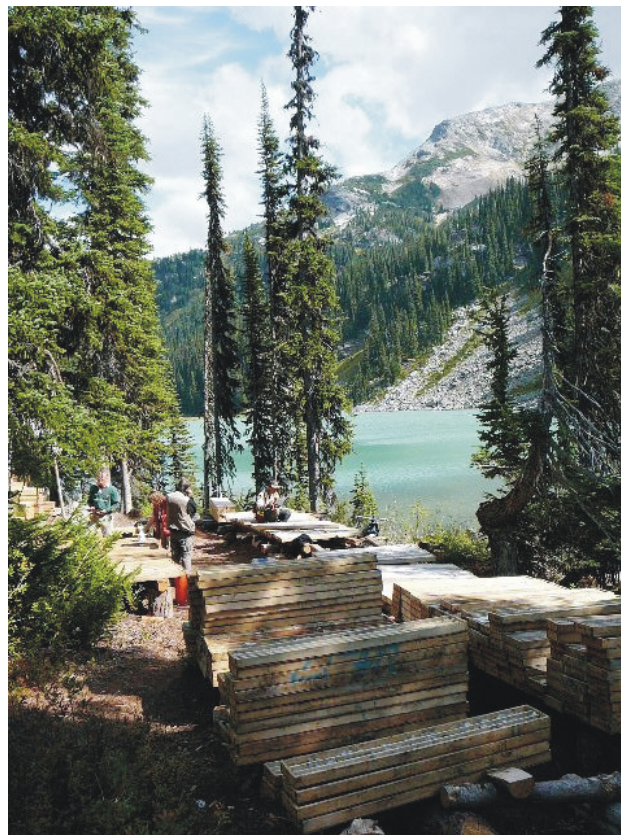


Figure 5.16. The core logging facility overlooking Light Lake at the Ruddock Creek property.

two-metre composite channel sample from outcrop averaged 22.5% zinc and 6.2% lead. The best hole from this program intersected 11.21% zinc and 2.65% lead over 6.23 metres in hole RD-06-144.

Buoyed by a successful program this year Selkirk Metals Corp has initiated planning for the development of a decline to facilitate underground delineation drilling and bulk sampling of the E-Zone.

Contiguous to the Ruddock Creek property, Jasper Mining Corporation flew a 564 line-kilometre airborne electromagnetic and magnetic survey and drilled four holes at the **Irony** property. The company believes that the massive sulfide horizon known at the Ruddock Creek property has western extensions onto ground they hold. The holes drilled did not intersect the horizon; however, the targets were chosen using information previous to the airborne survey results which were not delivered in time for the program.

Located approximately 15 kilometres west of Ruddock Creek and northeast of Avola, Inlet Resources Ltd undertook a small trenching program at the **Broken Hill-Leo** property. Numerous zinc-lead-silver showings are reported in carbonate stratigraphy over a strike length of nine kilometres.

Consolidated Venturix Holdings Ltd optioned Selkirk Metals Holdings Corp’s **LJ** property, located 35 kilometres north of Revelstoke. The company completed

ten holes in the **Carnes Creek zone** as a follow up to 2005 drilling which intersected zinc-lead-silver mineralization in a similar stratigraphic horizon as the Goldstream deposit to the north. Preliminary results suggest the mineralization is hosted within the limbs and hinge-zone of a reclined synform and is more akin to sedex-style mineralization. Some select intersections include 3.22% zinc and 1.52% lead over 6.85 metres in hole LJ06-03 and 3.35% zinc and 2.34% lead over 6.11 metres in hole LJ06-06. Further work is planned to test the hinge-zone along its strike to the southeast.

International Bethlehem Mining Corp was active on its **Rain** property which it includes in its "Big Bend Metals Project" a collection of properties it holds in the area of the Goldstream mine. A 700-kilometre airborne survey was completed over the property as well as a regional silt sampling program. The **Sorcerer** tungsten-copper skarn was tested with four holes and produced an unexpected intersection that averaged 0.372% molybdenum over 5 metres in hole RN06-27.

ASPEN GROVE-PRINCETON-KEREMEOS

This part of the region was increasingly active during 2006 with exploration interest being mainly focused on porphyry copper-gold-molybdenum prospects. The **Similco** (Copper Mountain-Ingerbelle) copper-gold mine at Princeton remains on care and maintenance. When it shut down in 1996, the Similco mine was reported to have a resource of 142 million tonnes grading 0.397% copper (plus unreported gold) in the area of Pits 2 and 3 on the Copper Mountain side of the property. The property was sold in 2002 to Envirogreen Technologies Ltd, a company involved in the remediation of special wastes. An option agreement regarding the mineral rights, some of the mine infrastructure and private land holdings has recently been signed with a new private company called Copper Mountain Mining Corporation who plan to drill in early 2007.

A few kilometres east of the historic Nickel Plate gold mine at Hedley, the **Panorama Ridge** gold skarn project of Goldcliff Resources Corp was active again in 2006. The property has numerous showings with wide zones of near-surface low-grade gold mineralization. Most work was focused on the Nordic and York-Viking zones but the company also completed trenching and drilling at the Spar, Tower and Thor zones. Early trench results from the York-Viking zone include 1.138 g/t gold over 27.5 metres in trench YK-98 with high-grade intervals such as 3.417 g/t over 3 metres.

During 2006, the Upper Similkameen Indian Band signed separate Memorandum of Understanding Agreements regarding consultation and information sharing with both Goldcliff Resources Corp and the Ministry of Energy, Mines and Petroleum Resources. These progressive agreements provide certainty to all

parties that their interests will be recognized as projects are advanced.

Copper Belt Resources Ltd conducted a late season drill program on the **Ketchan** porphyry copper-gold prospect near Aspen Grove. Drilling in 2005 produced some promising results including 0.42% copper and 0.12 g/t gold over 54.9 metres and 0.46% copper and 0.36 g/t gold over 19.2 metres in hole K05-8.

Approximately 12 kilometres south of Princeton and five kilometres south of the Ingerbelle Mine, Anglo-Canadian Uranium Corp drilled the **Princeton Copper** project to test the contact of the Copper Mountain intrusions with Nicola Group volcanic and sedimentary rocks for copper-gold-palladium mineralization.

Weststar Resources Corp and partner Bearclaw Capital Corp drilled the **Axe** porphyry copper-gold prospect located 20 kilometres north of Princeton. Large programs by previous operators in the 1970s and early 1980s have tested four zones of mineralization with some 14 000 metres of drilling. Historic resources total 39.0 million tonnes grading 0.38% copper (indicated) plus 32 million tonnes of 0.38% copper (inferred).

Southwest of the village of Tulameen, along the Tulameen River, Huldra Silver Inc undertook baseline studies at various sites aimed at developing a tailings pond at the **Treasure Mountain** vein silver-lead-zinc project. The company is working toward submitting an application for a underground mine permit in the spring of 2007. The proposed plan would mine 33 000 tonnes over an eight month period each year. Historical resources at the property are reported to be 133 000 tonnes grading 870 g/t silver, 4.5% lead and 5.3% zinc.

OUTLOOK FOR 2007

With many companies unable to complete their programs in 2006 as a result of shortages of drills, field crews and a quick onset of winter this should bode well for the continuation of many programs into 2007. The varied geology of the South-Central Region hosts many favorable environments for exploration including porphyry, high-grade vein and stratiform deposits. With continued high metal prices the outlook is very promising for any of these deposit types.

A busy year is expected in 2007 with the New Afton project moving through the permitting process and proceeding through to construction planning and early development of the site. Environmental assessments and feasibility studies are anticipated to be completed on the Prosperity project and Highland Valley Copper mine expansion. Scoping and pre-feasibility supporting work is anticipated at the Bralorne, Blackdome and Goldstream mines and at the Ruddock Creek, Elk, Ajax, Getty Copper, and Blue River Carbonatite projects.

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