

NORTHWEST REGION

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SUMMARY AND TRENDS

Mineral exploration activity in 2006 increased for the fourth successive year due to robust prices for copper, molybdenum, gold and silver. Exploration spending in the Northwest is estimated at \$128 million, a 25% increase over 2005 (*see* Figure 2.1). There were 66 large projects, 63 of which included drilling. Many dormant prospects were reactivated and required confirmation drilling to bring historic resources into line with current Security Exchange standards. This contributed to the large upsurge in exploration drilling to about 310 000 metres (*see* Figure 2.2).

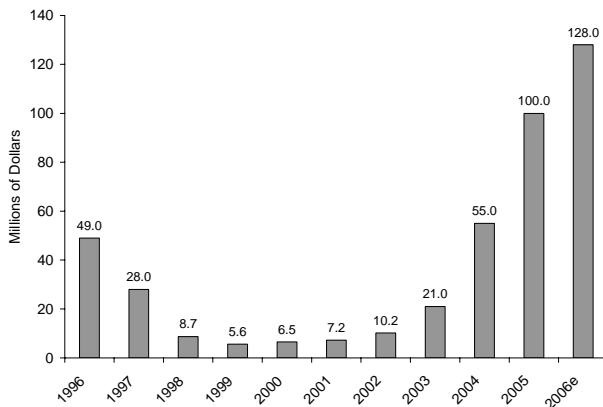


Figure 2.1. Exploration expenditures in Northwest British Columbia.

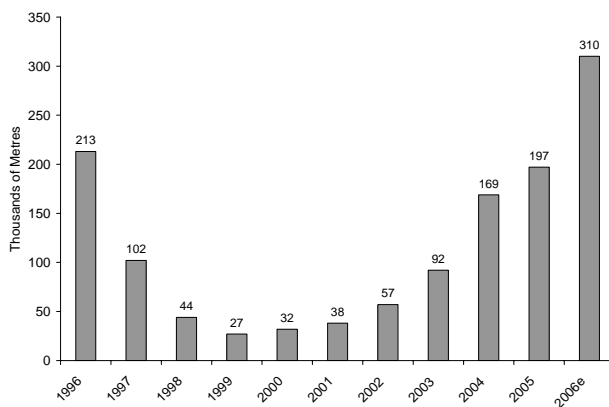


Figure 2.2. Exploration drilling in Northwest British Columbia.

The three major mines in the region, Endako, Eskay Creek and Huckleberry, operated very profitably in 2006. The Endako open pit molybdenum mine was acquired by Blue Pearl Mining Ltd. No changes to the operation are expected which is estimated to have a 7-year mine life. Gold and silver production from the rich Eskay Creek mine decreased. Owned by Barrick Gold Corporation, ore reserves will be exhausted in early 2008. Huckleberry Mines Ltd. applied to government agencies to mine an extension of ore at its open pit copper mine that would extend mine life to 2010. Table Mountain, a small underground gold mine, resumed operation late in the year. Seasonal production of barite continued at the Fireside mine. The Swamp Point aggregate project obtained an Environmental Assessment Certificate and a Mines Act permit and the site was prepared for production in 2007.

Environmental Assessment (EA) project reports were submitted for the Galore Creek copper-gold and Ruby Creek molybdenum projects. Five other mine developments are in the EA process: Kutcho copper-zinc, Mount Klappan coal, Schaft Creek copper-molybdenum-gold, Davidson molybdenum and Morrison copper-gold projects. The Tulsequah Chief copper-zinc-silver-gold and Red Chris copper-gold projects hold development certificates. Asian metal refining companies have a growing interest to invest in development projects in exchange for assured supply of metal concentrate.

Porphyry copper, gold and molybdenum deposits were the most popular exploration targets followed by volcanogenic massive sulphide deposits. As of the end of the year assay results were incomplete or not available. Results disclosed to date point to several promising discoveries or significant extensions of known deposits including (in the order they appear in the text):

- Tulsequah (new gold-silver rich massive sulphide zone)
- Galore Creek (deep drilling on the Bountiful copper-gold zone)
- Davidson (delineation of a second molybdenum zone)
- New Polaris (in-fill drilling on C-vein gold deposit)
- GJ (enhanced copper and gold grade near surface)
- Kerr-Sulphurets (extensive bulk-tonnage gold in the Mitchell zone)

- Snowfields (drill delineation of a major gold resource)
- Barbara (new lead-zinc-silver showing near Stewart)
- Shan (potentially significant molybdenum discovery)
- Lucky Ship (large increase in molybdenum resource)
- Seel (high copper grade breccia zone)

All of the operating mines in the region are listed in Table 2.1 and shown on the map (Figure 2.3). Major exploration projects are listed in Table 2.2.

MINES AND QUARRIES

METAL MINES

The **Eskay Creek** mine, owned by Barrick Gold Corporation, produced 5350 kg (172 000 oz) of gold and 323 350 kg of silver in 2005. The total amount mined was 181 869 tonnes of which 78 377 tonnes was direct-to-smelter ore. Production for 2006 is projected from third quarter data to be 3500 kg gold and 170 000 kg of silver. The supply of high-grade, direct-to-smelter ore has decreased and contributed to lower gold and silver production. Since start-up in 1995 ore grade has diminished and at the beginning of 2006 the average reserve grade was 27.8 g/t gold and 1435 g/t silver. The mine is an underground trackless operation which utilizes a drift-and-fill mining method with cemented rock backfill. The gravity and flotation mill has a capacity to treat 330 tonnes of ore per day. Direct-to-smelter ore contains high levels of mercury and arsenic.

Eskay Creek is a volcanogenic massive sulphide deposit with exceptional gold and silver content and occurs at the top of the early Jurassic Hazelton Group. Higher-grade ore is stratabound and occurs in a contact mudstone bounded below by a rhyolite flow-dome complex and overlain by basalt and sedimentary rocks in the west limb of a north-plunging fold. Lower grade ore occurs in discordant zones in the underlying rhyolite and dacite. Sphalerite, pyrite, tetrahedrite and galena are the most abundant ore minerals. Gold occurs mainly as microscopic grains between and within sulphide minerals, or locked in pyrite.

Majority ownership of the **Endako** open-pit molybdenum mine was acquired in 2006 by Blue Pearl Mining Ltd. which purchased the 75% interest held by Thompson Creek Mining Ltd. Estimated molybdenum production for 2006 is 5480 tonnes from about 10 million tonnes of ore with an average grade of 0.069% molybdenum. Reserves of 66.9 million tonnes grading 0.062% molybdenum are sufficient until 2013. The mill normally processes 30 000 tonnes per day and recovers about 78% of the molybdenum sulphide, all of which is

converted to molybdc oxide in an on-site roaster. In 2004 Endako halted co-production of Ultrasure, its trademarked molybdenum sulphide lubricant, in favour of producing more oxide, which is more profitable. Stripping continued in 2006 in order to stabilize the south wall of the pit and to expose more ore (Figure 2.4). The mine employs 260 people.

Endako is a porphyry molybdenum deposit within the early Cretaceous Francois Lake granite batholith. Mineralization is related to an aplitic phase that intrudes an older coarse-grained variety. The ore body is a 3.5-kilometre long stockwork zone that is elongated to the west-northwest and dips about 50° south to a depth of 330 metres. The hanging wall of the ore zone is delineated by the South Basalt fault. Exploration drilling (5941 m in 39 holes) focused 500-1000 m east of the plant site, south of the tailings impoundment, and secondarily near the West Denak pit. Further work is planned in both areas in 2007.

The **Huckleberry** copper mine is operated by Huckleberry Mines Ltd. and owned 50% by Imperial Metals Corp. and 32% by Mitsubishi Material Corp. The remaining 18% is shared equally among Dowa Mining Ltd., Furakawa Company Ltd. and Marubeni Corp. The mine is located 123 kilometres by road south of Houston at the foot of Huckleberry Mountain (Figure 2.5) and employs 260 people including contractors. Copper production for 2006 is forecast at 34 000 tonnes, similar to 2005. In 2005 the mill processed 6 951 000 tonnes of ore grading 0.552% copper and 0.014% Mo. Copper recovery in 2005 averaged 87.4% but molybdenum recovery was just 24.8%. Copper concentrate is trucked to the port of Stewart for shipment to Japan and molybdenum concentrate is trucked to Vancouver. Huckleberry mine repaid \$120.9 million of debt in 2006, including a \$9.8M loan from the British Columbia government, and is now debt-free. Subject to permit approval, Huckleberry will mine an extension of the Main ore zone. Work over the past 2 years defined reserves of 17.4 million tonnes at 0.366% copper, above a cut-off grade of 0.22%. This will increase mine life by two years to 2010.



Figure 2.4. Benching the south wall of the Endako Pit.

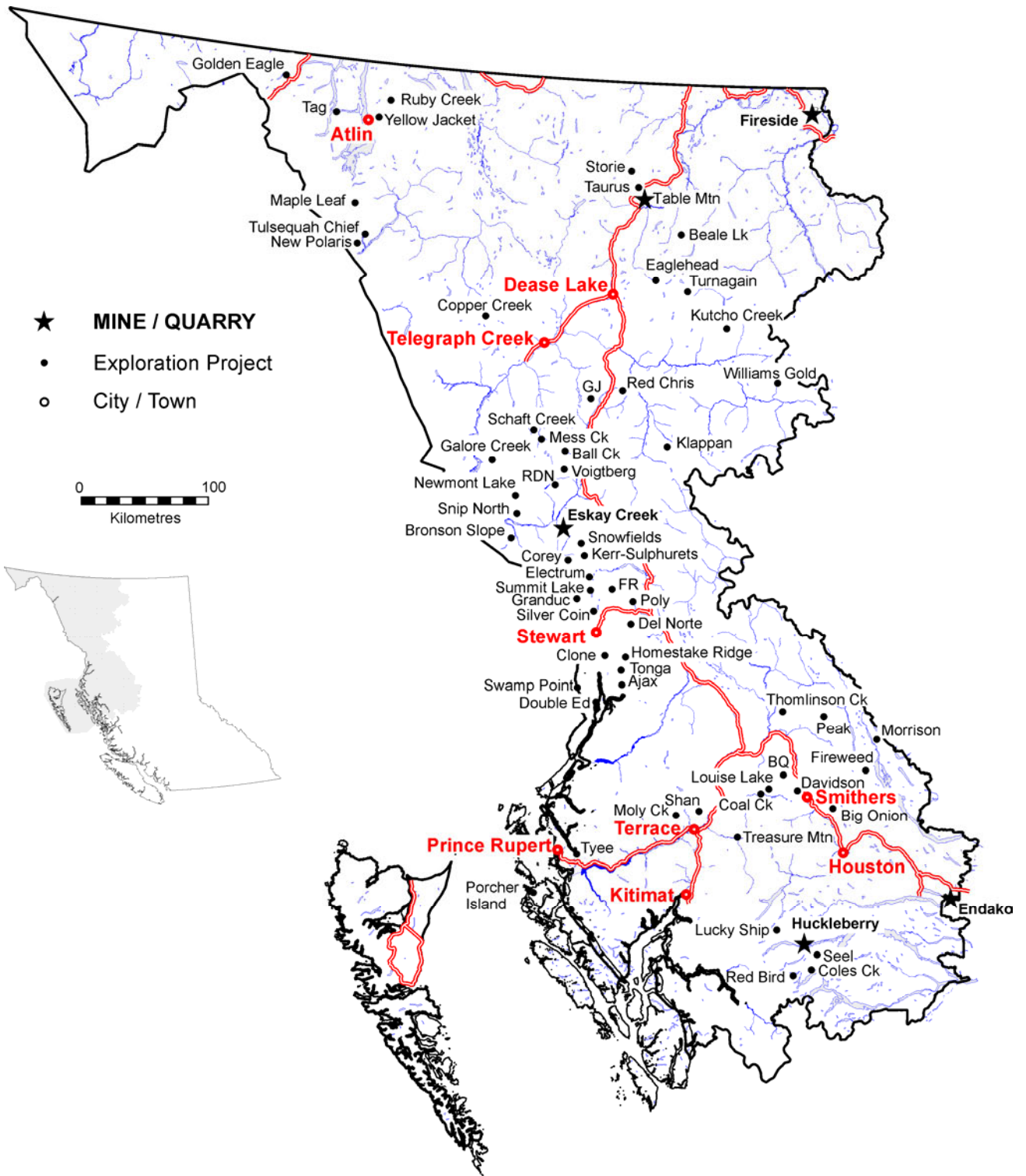


Figure 2.3. Location map, Mines and Exploration Projects in Northwest British Columbia, 2006.

TABLE 2.1. MINE PRODUCTION AND RESERVES, NORTHWEST REGION

Mine	Operator	Employment	2006 Production (Unofficial, approx)	Reserves (effective date)
Endako	Blue Pearl Mining Ltd. & Sojitz Moly Resources Inc.	260	5480 t molybdenum	Endako Pit, 21.7 mt at 0.069% Mo; Denak Pit, 22.7 mt at 0.069% Mo; Stockpile, 22.5 mt at 0.046% Mo (Oct. 1, 2006)
Eskay Creek	Barrick Gold Corp.	295	3500 kg gold, 170 000 kg silver	243 000 t at 27.8 g/t Au, 1435 g/t Ag (Dec 31, 2005)
Huckleberry	Huckleberry Mines Ltd. (50% Imperial Metals Corp.)	260	34 000 t copper 270 t molybdenum	12.25 mt at 0.526% Cu, 0.015% Mo (Dec 31, 2005)
Table Mountain	Cusac Gold Mines Ltd.	30	December start-up	40 000 t at 16.9 g/t Au
Fireside	Fireside Minerals Inc.	25 (seasonal)	12 000 t barite	Not available

TABLE 2.2. MAJOR EXPLORATION PROJECTS IN NORTHWEST REGION

Property	Operator	MINFILE	Commodity	Deposit Type	Work Program
Ajax	Tenajon Resources Corp.	103P 223	Mo	Porphyry	DD (~3400 m, 6 holes)
Ball Creek	Paget Resources Corp.	104G 018, 042	Cu, Au	Porphyry	Geol; DD (~900 m, 4 holes)
Barbara	Mountain Boy Minerals Ltd.		Ag, Pb, Zn	VMS ?	DD (1183 m, 14 holes)
Beale Lake	Sutcliffe Resources Inc.	104I 098	Au	Intrusion-related	DD (1928 m, 10 holes)
Big Onion	Eagle Peak Resources Ltd.	93L 124	Cu, Mo, Au	Porphyry	DD (2700 m, 11 holes)
BQ	Endurance Gold Corp.		Au	Epithermal	G; IP; DD (2017 m, 11 holes)
Bronson Slope	Skyline Gold Corp.	104B 077	Au, Cu	Porphyry	DD (700 m)
Clone	Canasia Industries Corp.	103P 251	Au	Shear Vein	AB-EM; DD (988 m, 7 holes)
Coal Creek	West Hawk Development Corp.	93L 147	Thermal coal	Coal	RC (1474 m, 15 holes)
Coles Creek	Callinan Mines Ltd.	93E 042	Cu, Mo	Porphyry	GC; IP; DD (4495 m, 8 holes)
Copper Creek	Firesteel Resources Inc	104J 035	Cu, Au	Porphyry	TR (1700 m)
Corey	Kenrich Eskay Mining Corp.	104B 240, 387	Au, Ag	Epithermal VMS	DD (12 914 m, 54 holes)
Davidson (Yorke-Hardy)	Blue Pearl Mining Ltd.	93L 110	Mo	Porphyry	EN; UG (50 m); DD (7568 m, 30 holes)
Del Norte	Sabina Resources Limited	104A 176, 161	Au, Ag	Epithermal Vein	DD (3060 m)
Double Ed	Kenrich Eskay Mining Corp.	103P 025	Cu, Zn	VMS	AB-EM; DD (13 000 m, 51 holes)
Eaglehead	Carmax Explorations Ltd.	104I 008	Cu, Au	Porphyry	DD (3076 m, 10 holes)
Electrum	American Creek Resources Ltd.	104B 033	Au, Ag	Vein	TR; DD (2797 m, 21 holes)
Endako	Blue Pearl Mining Ltd.	93K 006	Mo	Porphyry	DD (5941 m, 35 holes)
Fireweed	Argentor Resources	93M 151	Ag, Pb, Zn	Manto, Replacement	DD (937 m)
FR	Mountain Boy Minerals		Ag	Vein	DD (1300 m)
Galore Creek	NovaGold Inc.	104G 090	Cu, Au	Skarn, Alkalic Porphyry	DD (36 208 m, 67 holes); FS
GJ	Canadian Gold Hunter Corp.	104G 086	Cu, Au	Porphyry	DD (18 133 m, 62 holes)

TABLE 2.2. CONTINUED

Property	Operator	MINFILE	Commodity	Deposit Type	Work Program
Golden Eagle	Signet Minerals Inc.	104M 057, 074, 085	Au	Epithermal Vein; VMS	DD (945 m, 6 holes)
Granduc	Bell Resources Corp.	104B 021	Cu, Ag, Au	VMS	G; DD (3927 m, 12 holes)
Homestake Ridge	Bravo Venture Group Inc.	103P 216	Au, Ag	Vein	DD (6532 m, 28 holes)
Kerr-Sulphurets	Seabridge Gold Inc.	104B 103, 182	Cu, Au	Porphyry	DD (9100 m, 29 holes)
Klappan	Fortune Minerals Limited	104H 021	Anthracite	Coal	EN; FS
Kutcho Creek	Western Keltic Mines Inc.	104I 060	Cu, Zn, Ag, Au	VMS	EN; DD
Louise Lake	North American Gem Inc.	93L 079	Cu, Au, Mo	Porphyry	DD(3387 m, 12 holes)
Lucky Ship	New Cantech Ventures Inc.	093L 053	Mo	Porphyry	DD (~6000 m)
Maple Leaf	Saturn Minerals Inc.	104K 117	Cu, Zn, Ag, Au	VMS	DD (1346 m, 7 holes)
Mess Creek	Paget Resources Corp.	104G 040	Cu, Au	Porphyry	DD (~800 m)
Molybdenum Creek	BCM Resources Corp.	103I 016	Mo	Porphyry	DD (~1000 m)
Newmont Lake	Romios Gold Resources Inc.	104B 281, 282	Au, Cu	Skarn	IP; DD (771 m, 10 holes)
New Polaris	Canarc Resource Corp.	104K 003	Au	Mesothermal Vein	DD (24 394 m, 69 holes)
Peak	Grizzly Diamonds Ltd.	93M 015	Au, Ag	Vein	AB-EM; DD (1445 m, 7 holes)
Poly	Lateegra Resources Corp.	104A 026, 128	Au	Shear Vein	DD (~700 m)
Porcher Island	Cross Lake Minerals Ltd.	103J 017	Au	Vein	DD
RDN	Northgate Minerals Corp.	104G 144	Au, Ag, Pb, Zn	VMS	AB-EM; DD (~1300 m)
Red Bird	Torch River Resources Ltd.	93E 026	Mo	Porphyry	DD (2134 m, 7 holes)
Red Chris	bcMetals Corporation	104H 005	Cu, Au	Porphyry	DD (4676 m, 14 holes)
Ruby Creek	Adanac Molybdenum Corp.	104N 052	Mo	Porphyry	DD (2688 m, 13 holes)
Schaft Creek	Copper Fox Metals Inc.	104G 015	Cu, Mo, Au	Porphyry	DD (9008 m, 42 holes); EN
Seel	Gold Reach Resources Ltd..	93E 105	Cu, Au	Porphyry	DD (6046 m, 25 holes)
Shan	BCM Resources Corp.	103I 114	Mo	Porphyry	DD (3550 m in 20 holes)
Silver Coin	Pinnacle Mines Ltd.	104B 095	Au, Ag, Pb, Zn	Epithermal	DD (24 206 m, 115 holes)
Snip North	Newcastle Minerals Ltd.	104B 089	Au, Cu	Porphyry	DD (1095 m, 5 holes)
Snowfield	Silver Standard Resources Inc.	104B 179	Au	Porphyry	DD (6141 m, 27 holes)
Storie	Columbia Yukon Explorations Inc.	104P 069	Mo	Porphyry	DD (5000 m, 20 holes)
Summit Lake	Tenajon Resources Corp.	104B 034	Au	Intrusion- related vein	UG (110 m); DD 3650 m, 26 holes)
Tag	CZM Capital Corp.	104M 079, 080	Au, Ag	Epithermal Vein	DD (3108 m, 23 holes)
Taurus	Cusac Gold Mines Ltd.	104P 016, 077	Au	Orogenic gold	G; GC; TR; DD (3300 m, 21 holes)
Thomlinson Creek	Dentonia Resources Ltd.	93M 122	Mo	Porphyry	DD (837 m, 3 holes)
Todd Creek	Goldeye Exploration Ltd.	104A 001	Cu, Au	Vein	DD (1331 m, 8 holes)

TABLE 2.2. CONTINUED

Property	Operator	Minfile	Commodity	Deposit Type	Work Program
Tonga	Teuton Resources Corp.	103P 156	Ag, Au	Vein	AB-EM; DD (1372 m, 7 holes)
Tulsequah Chief	Redfern Resources Ltd.	104K 001, 002	Cu, Zn, Ag, Au	VMS	DD (~24 000 m, 67 holes) FS
Turnagain	Hard Creek Nickel Corp.	104I 051, 119, 120	Ni, Pd, Pt	Magmatic	DD (19 122 m, 68 holes)
Voigtberg	BC Gold Corp.	104G 146	Au	Intrusion-related	G; DD (717 m, 4 holes)
Williams Gold	Arcus Development Group Inc.	94E 028	Cu, Mo, Au	Porphyry	DD (864 m, 5 holes)
Yellow Jacket	Prize Mining Corp.	104N 043	Au	Orogenic gold	DD (750 m, 10 holes)

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 2.5. Huckleberry Mine as seen from the southeast.

Huckleberry is a porphyry copper deposit related to the late Cretaceous Bulkley intrusions. Copper mineralization, which occurs in two zones (Main and East) one kilometre apart, is developed within a granodiorite stock and in the adjacent hornfelsed and fractured volcanic rocks. The ore is a stockwork of quartz, pyrite and chalcopyrite, crosscut by gypsum-filled fractures. The Main and East zones are disrupted by the 105 Fault which resulted in 100 m of right lateral offset. The East zone is also disrupted by a younger structure, the 150 Fault which resulted in 200 m right lateral displacement. The Main Zone Extension, outlined by drilling in 2004 and 2005, represents the faulted portion of the Main zone north of the 105 Fault.

Cusac Gold Mines Ltd. prepared to reopen the **Table Mountain** gold mine, closed since 1997. Reserves in the Rory and Bain veins are 40 000 tonnes grading 16.9 g/t gold. The Fourteen level of the formerly tracked mine was slashed to accommodate

mechanized equipment to access the Rory vein. Milling was scheduled to begin in December.

INDUSTRIAL MINERAL QUARRIES

At **Fireside**, 125 km east of Watson Lake, Fireside Minerals Ltd. of Calgary produced 12 000 tonnes of barite. Mining and trucking were contracted to Jedway Enterprises Ltd. of Watson Lake. Run-of-mine material was concentrated using jigs at the mine site then crushed and bagged at a plant in Watson Lake. Fireside employs 25 people on a seasonal basis. The product is used in the very active western Canadian oil and gas drilling industry where the current demand for barite drilling mud is strong. Fireside barite occurs in two coarse-grained, fault-controlled veins within rocks of the lower Paleozoic Kechika Group.

Four jade properties were active in the Dease Lake and Cassiar areas; Cassiar, Polar Jade, Provencher Lake and TJ. Nephrite jade is found at the contact between tectonically emplaced serpentinite and argillite within the Cache Creek and Slide Mountain oceanic terranes. Cassiar Jade Contracting Ltd. continued to produce high-quality jade by sorting rock in the waste dump at the closed **Cassiar** chrysotile asbestos mine (MINFILE 104P 005), employing up to 5 people. Jedway Enterprises Ltd. carried out a small exploration drilling program at **Polar Jade** (MINFILE 104I 083) near Serpentine Lake. At **Provencher Lake** (MINFILE 104I 073, 092), Glenpark Resources Ltd. hauled boulders of mid-quality jade to Dease Lake for transshipment to Washington state for use in the building industry. King Mountain Jade Mines Inc. recovered jade boulders from the **TJ** claims (MINFILE 104I 064) near Provencher Lake area for sale in Dease Lake and Jade City.

MINE DEVELOPMENT PROJECTS

Adanac Moly Corp. announced proven and probable open pit reserves for the **Ruby Creek** molybdenum project (104N 052) to be 113.4 million tonnes grading 0.066% Mo at a cut-off grade of 0.04% Mo. The calculation was based on vertical holes; 13 new angle holes were drilled to provide material for a metallurgical study and to intersect steep molybdenite veins (Figure 2.6) not incorporated in the resource estimate. Optical and acoustic televiwers were lowered down some holes to investigate the orientation of veins. The deposit is a quartz-molybdenite stockwork that occurs near the top of a multi-phase satellite of the highly differentiated Surprise Lake granite batholith. Molybdenite veins are predominantly sub-horizontal and are preferentially located in a flat-lying aplite body. The 150 to 200 metre thick, blanket-shaped molybdenum zone lies near the surface in the broad valley of upper Ruby Creek, and is rooted in the steeply dipping, north-trending Boulder Creek fault. The project report was submitted to the BC Environmental Assessment office.

Redfern Resources Ltd. completed 24 000 metres of core drilling at the **Tulsequah Chief** and **Big Bull** volcanogenic massive sulphide deposits (MINFILE 104K 002, 003) and identified two areas where mineral resources may be increased. At Tulsequah Chief, mineralization was discovered west of the 4400 fault, a structure that formed the western boundary of past mine production. The A-zone Extension was intersected by five holes, the best of which returned 1.69 g/t gold, 177.6 g/t silver, 0.98% copper, 0.85% lead and 5.24% zinc over a core length of 11.85 m. A high-grade discovery was made southwest of Big Bull where a drillhole intersected 20.0 g/t gold, 253.4 g/t silver, 11.6% lead and 26.6% zinc over an estimated true width of 5.0 metres. This is a top priority for follow-up drilling in 2007. Drilling along strike north of Big Bull obtained narrow intercepts of low grade mineralization. Measured and indicated resources on the Tulsequah



Figure 2.6. Steep angle molybdenite vein in Surprise Lake granite at Ruby Creek.

deposit stand at 5.38 million tonnes at a grade of 1.41% copper, 1.32% lead, 6.73% zinc, 2.73 g/t gold and 100.8 g/t silver. A new resource estimate will be prepared once all 2006 results are available, and incorporated in a new feasibility study for mine development. The project has Canadian and Provincial environmental approval.

Western Keltic Mines Inc. continued to fulfill requirements of the Environmental Assessment process for the **Kutcho Creek** project and also commissioned a pre-feasibility study. The Kutcho Creek volcanogenic massive sulphide deposit (MINFILE 104I 060) is located 100 km east of Dease Lake. Three elongate sulphide lenses are arranged en echelon over a strike length of 3.5 km within folded felsic volcanic rocks of early Triassic age. Western Keltic completed a 2200 metre in-fill drilling program on the Main deposit which has an open-pit resource of 14.2 million tonnes grading 1.86% copper, 2.44% zinc and 33 g/t silver.

Fortune Minerals Limited advanced the **Klappan** anthracite coal project through requirements of the Environmental Assessment process toward approval of a 1.5 to 3 million tonne per year open pit mine. This included an engineering study of a direct road route from the site to Highway 37 that would reduce the proposed haulage distance to the port of Stewart to 250 km. Fortune Minerals is also conducting a pre-feasibility study of building a 300 megawatt coal-fired power plant at the mine site that would be linked to the BC power grid. The Klappan-Groundhog coalfield is in the northern Bowser Basin, a mid to late Jurassic marine basin filled with clastic sediments that culminated in a deltaic environment including coal measures. Anthracite is a premium coal with the highest rank, carbon and energy content, and lowest moisture and volatile content of all coals. It can be used in a wide variety of specialty applications including water purification, briquettes and as a metallurgical reductant and steel manufacture as an ultra-low volatile PCI coal (pulverized coal injection). Coal resources at Mount Klappan (MINFILE 104H 021) occur in four deposits: Lost Fox, Hobbit-Broatch, Summit and Nass. They contain 107.9 million tonnes classified as measured, 123 million tonnes as indicated and 2.572 billion tonnes classified as inferred and speculative. These are compliant with NI 43-101.

bcMetals Corporation announced an agreement with Global International Jiangxi Copper Mining Company Limited to form a limited partnership to develop the **Red Chris** project (MINFILE 104H 005). The deal is subject to approval by shareholders and to satisfactory results from verification drillholes in the Main and East zones. Drilling was also carried out in the Gully zone aimed at extending resources but the 7000 m program was curtailed by winter conditions. Mineable reserves at Red Chris, exclusive of low grade stockpile material, are estimated at 185.4 million tonnes at 0.414% copper and 0.325 g/t gold. The project has been approved for development by the Environmental Assessment office. Late in 2006 Imperial Metals

Corporation and Taseko Mines Limited made competitive bids to acquire majority ownership of bcMetals Corp.

Copper Fox Metals Inc. continued drilling to confirm grades and to collect material for metallurgical study from the **Schaft Creek** porphyry copper deposit (MINFILE 104G 015). The program amounted to 5300 m of P-size core in 25 holes and 3708 m of H-size core in 17 holes (Figure 2.7). The property, located 50 km south of Telegraph Creek, is estimated from historic drilling to contain a combined measured and indicated resource of 626 million tonnes grading 0.35% copper, 0.026% molybdenum and 0.21 g/t gold, at a 0.3% copper equivalent cut-off. Chalcopyrite and bornite occur in narrow, structurally disrupted veinlets within volcanic rocks adjacent to the Hickman granodiorite batholith. In 2006 an unusual occurrence of free gold was reported that gave rise to an intercept of 19.5 g/t gold over 15.1 m with an associated copper grade of 0.34%. Though very encouraging, the occurrence underscores the challenge of accurate estimation of gold grade for the deposit. Copper Fox began the Environmental Assessment process to seek approval for mine development.

On the **Galore Creek** project, NovaGold Inc. completed the project report required by the Environmental Assessment office, signed a participation agreement with the Tahltan First Nation and completed a feasibility study. The latter is based on proven and probable reserves totaling 540.7 million tonnes grading 0.557% copper and 0.303 g/t gold, which in turn are contained within a measured and indicated resource of 748.9 million tonnes at 0.52% copper, 0.30 g/t gold and 4.9 g/t silver, at a 0.25% copper equivalent cut-off. Exploration drilling focused on the Bountiful zone, which lies at depth beneath and to the east of the proposed Central zone pit. About 20 holes spaced 150-200 m apart were completed, and some returned long copper-gold intercepts. For example, hole GC06-0712 cut 292.9 m that assayed 0.63% copper and 0.47 g/t gold.



Figure 2.7. Logging P-size drill core with Schaft Creek copper deposit in the background.

The Bountiful zone is now known to be 1000 m long by 700 m wide and averages more than 200 m in thickness. Four holes tested for a connection between the Bountiful and West Fork zones. On the adjoining Grace claims, under option from Pioneer Metals Corporation, NovaGold drilled six condemnation holes (Figure 2.8) that augmented 16 exploration holes (3123 m) drilled in 2004 and 2005. These did not intersect significant mineralization.



Figure 2.8. Danette Schwab views stacked drill core at Galore Creek.

Blue Pearl Mining Ltd. continued work on the **Davidson** molybdenum deposit (MINFILE 93L 110) which has a NI 43-101 compliant resource of 75.3 million tonnes grading 0.177% molybdenum based on exploration between 1965 and 1980. The deposit is located 10 km west of Smithers and current mine development plans are to truck ore to the Endako mine for processing. A 2 km-long adit on Hudson Bay Mountain at the 1066 m elevation provides access to the deposit and was utilized to complete 2658 metres of in-fill drilling to better define the high grade portion of the deposit. The Davidson deposit occurs in silicified granodiorite 300 m above a small quartz porphyry intrusion. A poorly known lower mineralized zone at the top of quartz porphyry plug was tested by 14 holes (4910 m) in 2006. These delineated a flat-lying zone at the top of the quartz porphyry plug that is about 45 m thick and averages about 0.24% Mo. A follow-up drilling program began late in 2006 to further delineate the lower molybdenum zone. Drilling of a pilot hole for a new adit at 700 m elevation (Figure 2.9) was halted and will re-commence in early 2007.

MINERAL EXPLORATION

ATLIN AREA

On the extensive **Golden Eagle** property located 60 km northwest of Atlin, Signet Minerals Inc. followed up



Figure 2.9. Jim Hutter at the collar of a flat drillhole - the pilot for a proposed lower adit for the Davidson deposit.

on significant gold drill intercepts from 2005 and tested a possible volcanogenic massive sulphide target with a six drillhole (945 m) program. In the Tannis zone (MINFILE 104M 074) quartz-arsenopyrite veins fill joints and fractures in a north-striking, steep dipping rhyolite dike that is more than 100 m wide. In 2005, two vein intervals 50 m apart returned 12.0 g/t gold over 3.5 m and 10.7 g/t gold over 5.5 m. The first hole in the 2006 program intersected similar material but no results were available at time of writing. Three drillholes cored altered mafic volcanic rocks in the Carbonate zone (MINFILE 104M 057) where a quartz-carbonate stockwork was postulated to underlie a VMS deposit, and two other holes tested the Skarn and Plateau zones.

In the heart of the Atlin placer gold camp, Prize Mining Corporation commenced a bulk sampling program on the **Yellow Jacket** gold prospect (MINFILE 104N 043). Pine Creek was diverted to enable stripping of 10 metre-thick surface gravel and excavation of a 30 by 90 metre pit. Hydrologic and metallurgical investigations were carried out earlier in the year. Native gold at Yellow Jacket occurs in quartz-filled dilational structures adjacent to the Pine Creek shear zone which places sheared serpentinite against more competent mafic volcanic rocks. Prize Mining also carried out an extensive soil geochemical survey of the **LD** property (MINFILE 104N 098, 100) 15 km southwest of Yellow Jacket, targeting another potential bedrock source of placer gold. Samples were collected at one metre depth using an auger mounted on a bobcat. Two strong gold anomalies were identified.

CZM Capital Corp. drilled 23 core holes to test epithermal gold-silver mineralization on the **Tag** property (MINFILE 104M 079) located on the Taku Arm of Tagish Lake 35 km west of Atlin. The 025 fault is a 6 km long steeply dipping, splay structure off the regional-scale Llewellyn fault and forms a pronounced topographic depression. Banded and vuggy quartz with sparse pyrite fill open space in a fault breccia of Laberge Group greywacke. Drilling focused in two

areas 400 metres apart and tested to 200 metre below surface. Assays from 12 holes were available at time of writing and a typical intercept graded 2.7 g/t gold and 15.1 g/t silver over 12.45 m. Previous work indicates true width of the fault zone is 5-10 metres.

TULSEQUAH-TAKU AREA

At the **New Polaris** gold property (MINFILE 104K 003), across the Tulsequah River from the Tulsequah Chief project, Canarc Resource Corp. completed 65 core holes (24 000 m) of an in-fill drilling program intended to upgrade a historic resource of 3.26 million tonnes grading 12.3 g/t gold to a mining reserve. The current program reduces the spacing between drill intercepts from 60 to 30 metres, beginning down dip of two stopes in the former Polaris-Taku mine. Gold is associated with disseminated arsenopyrite and pyrite in conjugate, shear-controlled quartz-ankerite vein stockworks and listwanite alteration developed within Devonian mafic volcanic rocks. Drilling in 2006 traced the C-vein to 350 m below surface and returned consistently positive results. The first recorded sighting of visible gold, in association with stibnite, was made in core from three holes along the western margin of the in-fill grid and returned exceptional intercepts, such as 44.7 g/t gold over 6.2 m. In addition the C-vein was found to thicken to the northeast beyond the area of previous drilling. All holes were collared on the flood plain of the Tulsequah River (Figure 2.10) and typically penetrate 10 m of river gravel, 75 m of varved glacial clay and 15 m of basal till before entering bedrock. Boulders in the basal till caused drilling deviation that required numerous holes to be re-collared and also resulted in less precise spacing of ore-zone intercepts than was sought. Consequently, Canarc will pump water from the mine workings and begin underground drilling in 2007.

Saturn Minerals Inc. explored its **Maple Leaf** (MINFILE 104K 117) volcanogenic massive sulphide



Figure 2.10. Richard Cote aligns a diamond drill at New Polaris.

property located 73 km south of Atlin and 20 km northwest of Tulsequah Chief. Polymetallic sulphide boulders were discovered in 1990, below an intense gossan developed in a cliff-face of Paleozoic felsic volcanic rocks. The 2006 seven-hole, 1346 metre diamond drilling program was the first drilling completed on the property.

CASSIAR-RANCHERIA AREA

Cusac Gold Mines Ltd. explored for new gold veins on the **Taurus II** property using LIDAR imagery, soil geochemistry (2700 samples), geological mapping and trenching, prior to diamond drilling. LIDAR is a high resolution optical imaging system used to detect rock structures by mapping topography below surface vegetation. Gold occurs in quartz-sulphide veins in mafic volcanic rocks with the highest sulphide content and gold grade being found immediately below capping listwanite-altered serpentinite and argillite that do not sustain open fractures. Less than half of planned 8000 metre drilling program was completed at time of writing. The Oro vein, part of the Backyard-Newcoast system (MINFILE 104P 016), was delineated beneath an argillite cap and returned up to 7.3 g/t gold over 2.25 m. A quartz stringer zone on strike with the Oro vein returned 1.04 g/t gold over 28.35 m.

Columbia Yukon Resources Inc. acquired the **Storie** molybdenum deposit (MINFILE 104P 069) near Cassiar and completed 5000 metres of drilling in 20 holes, as a first step toward validating historic work. In 1981 Shell Canada Resources Inc. calculated a resource of 100.5 million tonnes containing 0.077% molybdenum. Quartz-molybdenite veins occur in coarse-grained granite near the border of the Cassiar batholith and form a flat, 150-200 metre thick zone lying within and extending outward from the Crone fault (Figure 2.11). The first drillhole returned 0.080% molybdenum over 165 metres.



Figure 2.11. Drill area on the Storie molybdenum property, the Crone fault corresponds to the prominent notch on the skyline.

TURNAGAIN-UPPER STIKINE AREA

Hard Creek Nickel Corporation continued exploration for a bulk-tonnage nickel deposit on the **Turnagain** property, 70 kilometres east of Dease Lake. The Turnagain serpentinitized ultramafic body contains zones of disseminated, net-textured pyrrhotite with minor pentlandite and rare chalcopyrite. Prior to the field program, the company announced the Horsetrail zone (MINFILE 104I 119) contains a measured and indicated resource of 105.7 million tonnes grading 0.21% nickel contained in sulphide minerals. Sulphide nickel grades are based on selective leach analyses that constitute 60-90% of the total nickel determined by the standard analytic method and correlate with recoveries in metallurgical testwork. The 2006 program comprised 68 drillholes totaling 19 122 metres and focused on identification of near surface areas with greater than 0.3% nickel to expand the resource, and evaluation of platinum and palladium content of the DJ zone located 3 km northwest of the Horsetrail zone.

At the **Eaglehead** porphyry copper prospect (MINFILE 104I 008), Carmax Explorations Ltd. tested IP anomalies up to 1800 m east of previous drilling with 10 drillholes totaling 3076 m (Figure 2.12). Bornite and chalcopyrite veins are associated with potassium feldspar and secondary biotite in non-porphyrific granodiorite. Carmax reported results mainly as copper equivalent grades. For example, hole 69A returned 0.319% copper equivalent over 421 m, which is weighted by a narrow extremely high-grade interval – 0.67 m that graded 21.3% copper, 1.76% molybdenum, 3.98 g/t gold and 138 g/t silver.

Sutcliffe Resources Ltd. completed 10 diamond drillholes on its **Beale Lake** property (MINFILE 104I 098) northeast of Dease Lake. The target was gold veins related to intrusive activity and associated with anomalous arsenic, bismuth and tungsten. The best intercept was 6.58 g/t gold over 0.35 m in hole BL06-09. Two prime targets, the Upper Beale vein and the Yurso vein (MINFILE 104I 121), were not tested by



Figure 2.12. Eaglehead exploration camp.

drilling due to logistical problems associated with winter conditions.

Arcus Development Group Inc. drilled a porphyry copper-gold target (MINFILE 94E 028) on the **Williams** property located 140 km east of Dease Lake with a five-hole program. Drilling tested IP and soil geochemical anomalies. Pyrite, minor chalcopyrite, molybdenite, magnetite and specularite were encountered in monzonite and sericite-altered Takla Group volcanic rocks north of a major east-trending fault.

TELEGRAPH CREEK AREA

At **Mess Creek** (MINFILE 104G 040), south of Schaft Creek, Paget Resources cored 4 diamond-drill holes to test chalcopyrite-bornite showings and associated copper soil anomalies. Alkalic intrusive rocks, syenite to monzonite, are emplaced on a north-south structure on the east margin of the Hickman batholith. Pervasive hematite and magnetite are associated with copper mineralization.

At **Copper Creek**, Firesteel Resources Inc. completed 1700 lineal metres of trenching to explore the extent of the supergene zone on the DK porphyry copper prospect (104J 035). Trench 2006-01 returned 0.24% copper and 0.26 g/t gold over 279 m (Figure 2.13). Monzonite, probably an apophysis of the Kaketsa pluton, intrudes mafic volcanic rocks and bedded tuffs of the Stuhini Group. Quartz stockwork, with chalcopyrite more abundant than pyrite, is developed across the intensely fractured intrusive contact over a 700 m distance. Secondary copper minerals (malachite, azurite and sooty chalcocite) predominate in the upper 30-60 metres from the surface. An access trail to the Pyrrhotite Creek zone (MINFILE 104J 018) was reopened to facilitate exploration in 2007. The property is 50 km northwest of Telegraph Creek and 8 km from the Golden Bear mine road.



Figure 2.13. Trench sampling at Copper Creek.

Forty-five kilometres west of Telegraph Creek, St. Eugene Mining Corporation conducted geological mapping and hand-trenching on the **Poker** property (MINFILE 104G 149) aimed at locating the unexposed source of gold-bearing quartz-sulphide boulders near the retreating margin of the Limpoke glacier.

KINASKAN AREA

The highlights of Canadian Gold Hunter Corp. 62 hole (18 230 m) drilling program on the **GJ** property are delineation of shallow high grade copper-gold mineralization in the Donnelly zone (MINFILE 104G 086) and discovery of the Donnelly North zone. Porphyry copper-gold mineralization is related to the poorly exposed Groat monzonite stock, located 25 km southwest of Iskut. In the Donnelly zone, hole CGH06-128 intersected 1.49% copper and 1.80 g/t gold over 39.3 m from the sub-crop surface. Material often grading more than 0.5% copper and 0.5 g/t gold is thought to occur over a 30-100 m width and extend over the 1500 m length of the Donnelly zone. An independent resource estimate prior to the 2006 program determined an inferred resource of 28 million tonnes grading 0.354% copper and 0.369 g/t gold and an indicated resource of 91.7 million tonnes grading 0.373% copper and 0.381 g/t gold, both at a 0.2% copper cut-off. Hole CGH06-099 in the Donnelly North zone intersected 189 m grading 0.22% copper and 0.42 g/t gold. Other intercepts are lower grade but the zone is open for exploration to the east and west.

ISKUT DISTRICT

Seabridge Gold Inc. followed up 2005 exploration by Falconbridge Limited for a bulk-tonnage gold-copper deposit on the **Kerr-Sulphurets** property, 40 km north of Stewart. Twenty-four holes were completed in the Mitchell zone, on a 200 m grid, and five targeted extension of the Sulphurets gold zone for a total of 9100 metres. Both zones comprise a deformed quartz stockwork (Figure 2.14) in strongly foliated rocks in the footwall of the closely paired Mitchell and Sulphurets thrust faults. The Mitchell zone (MINFILE 104B 176, 275) is 800 m wide and 2000 m long with the western limit covered by talus and the eastern limit covered by the Mitchell glacier. True thickness is at least 300-400 m as many holes are uniformly mineralized over their full depth. Results from 10 of the first 15 holes show consistent grade of approximately 0.8 g/t gold and 0.15% copper. These dimensions and grade indicate a very large gold resource potential on the property, augmented by historic resources in the Kerr (141 million tonnes grading 0.75% copper and 0.36 g/t gold) and Sulphurets (54.8 million tonnes grading 1.02 g/t gold) deposits. Rugged topography with ice-capped ridges and glacier-filled valleys are challenges to resource development. The Mitchell glacier has receded



Figure 2.14. Intense quartz stockwork in drill core from the Mitchell zone, Kerr-Sulphurets property.

1 km since 1992 and reduced 100 m in height (M. Savell, personal communication).

Silver Standard Resources Inc. reactivated exploration of the **Snowfields** gold prospect (MINFILE 104B 179). The Snowfields zone is 2 km southeast of the Mitchell zone (see above) and also in the footwall of the Sulphurets thrust fault. Gold is associated with pyrite and molybdenite in quartz veinlets in quartz-sericite schist, which are likely derived from intermediate volcanic rocks. Drilling of 27 core holes (6141 m) over an area of 450 by 300 metres delineated a flat lying gold-bearing zone that averages 150 m thick. The gold intercepts demonstrate a high level of consistency between holes, all but three returned from 1.0 to 2.0 g/t gold over lengths of 100 to 250 m. Measured plus indicated resources were calculated at 49.4 million tonnes at a grade of 1.48 g/t gold and 0.012% molybdenum, at a cut-off of 0.05 g/t gold, with a further 14.7 million tonnes of Inferred resource at a slightly lower grade.

On the **Corey** property, Kenrich-Eskay Mining Corporation a 1000 square km airborne EM survey identified new geophysical targets in the Salmon River rhyolite and mudstone sequence to explore for a gold and silver-rich volcanogenic massive sulphide deposit.

Fifty-four drillholes recovered nearly 13 000 metres of core. Work focused on the C-10 zone (MINFILE 104B 355) where sericite alteration and stockwork veining is interpreted to be a footwall feeder zone to a massive sulphide deposit. Geochemically anomalous base and precious metals were reported over intervals of up to 20 m. Prospecting on the TM (MINFILE 104B 354) and GFJ (MINFILE 104B 233) prospects identified targets for further work in 2007.

Paget Resources Corporation, a private company, acquired the **Ball Creek** porphyry copper prospect developed in a quartz monzonite stock northwest of Bob Quinn. One hole was drilled into the Mary zone (MINFILE 104G 018) and another into the Cliff zone (MINFILE 104G 042). Two holes in the previously

untested DM zone, near the north end of the stock, intersected a quartz stockwork with chalcopyrite and pyrite that assayed 0.21% copper and 0.29 g/t gold over 219.6 m (J. Bradford, personal communication). Prospecting on the Rainbow epithermal system located 5 km west of Ball Creek identified silicified Stuhini Group limestone containing up to 11 g/t gold in grab samples.

Strong gold and molybdenum soil anomalies on the **Voigtberg** property (MINFILE 104G 146) located 140 km northwest of Stewart were explored by BC Gold Corporation and Kaminak Gold Corporation. Extensive hydrothermal alteration is developed in Stuhini Group volcanic and sedimentary rocks in proximity to feldspar porphyry intrusions (Figure 2.15). A drillhole in the core of a 700 by 400 metre gold in soil anomaly intersected 1.03 g/t gold over 51.1 m. A hole outside the gold anomaly cut 22.5 metres grading 1.02% zinc. Follow-up of a molybdenum soil anomaly led to discovery of disseminated molybdenite but a drillhole beneath the outcrop did not intersect significant mineralization.

At the **RDN** property, Equity Engineering conducted a four-hole drill program on behalf of Northgate Minerals Corporation. The property (MINFILE 104G 144) is located 40 km north of the Eskay Creek mine. The holes cored mudstone and rhyolite breccia that are correlative with Eskay Creek strata. No results were released.

Skyline Gold Corporation resumed work on the **Bronson Slope** gold-copper porphyry deposit (MINFILE 104B 077) adjacent to the reclaimed Snip gold mine. A historic resource of 67 million tonnes grading 0.53 g/t gold and 0.20% copper must be brought into compliance with current standards. Only 700 m of a planned 4700 m in-fill drilling program was completed, owing to winter conditions and inability of the drill to core the hard quartz-magnetite rock in the mineralized zone. Pyrite, chalcopyrite and specularite occur in a quartz-magnetite replacement and stockwork zone at the



Figure 2.15. Adam Simmons mapping an outcrop within the gold geochemical anomaly at Voigtberg.

top of the Red Bluff K-feldspar porphyry syenite stock.

Newcastle Minerals Ltd. drilled five core holes on its **Snip North** property, 3 km north from the closed Snip gold mine. Disseminations and stringer veins of pyrite, chalcopyrite and molybdenite occur near the margin of a sub-alkalic intrusion (MINFILE 104B 089).

At **Newmont Lake**, 30 km southeast of Galore Creek, Romios Gold Resources Inc. conducted a drilling program to test an IP anomaly 600 metre northwest of the McClymont zone (MINFILE 104B 281). Andesite and thin-bedded turbidite beds were intersected; no mineralization was reported by the company.

On the **Porc** claims south of Galore Creek, Romios Gold Resources Inc. traced a quartz vein, locally six metres wide, over a distance of 400 metres by prospecting and geological mapping. The vein contains minor base metal sulphides and anomalous levels of gold and silver. A coincident silver geochemical soil was delineated that extends the possible length of the vein to 1200 m. The property is underlain by Paleozoic felsic volcanic rocks that contain chalcopyrite-bearing sulphide lenses and stringers.

Spirit Bear Minerals Ltd. evaluated gold targets on the **Iskut River** property that includes the former Johnny Mountain mine, with a program of geological mapping, geochemical sampling and prospecting. Drilling was postponed until 2007.

STEWART NORTH TO GRANDUC

Bell Resources Corporation continued to drill the southern extension of the **Granduc** deposit (MINFILE 104B 021), 40 km north of Stewart. Granduc is a volcanogenic massive sulphide deposit with a total mineral inventory of 29.03 million tonnes grading 1.83% copper, which includes 15.4 million tonnes of production (Bell Resources website). The copper deposit is part of a sulphide facies banded iron formation that occurs near the top of the Hazelton Group at the stratigraphic contact between mafic pillow lava and tuff with overlying sedimentary rocks that include chert, argillite and tuff. The 2006 program extended the mineral horizon 770 metres with four holes intersecting, on average, 2.0% copper over true widths of 3-6 metres (Figure 2.16). Two holes deviated off-target and another that targeted a magnetic anomaly intersected gabbro rich in magnetite. Prospecting led to discovery of magnetite iron formation with minor chalcopyrite in the JK zone north of the Granduc deposit.

Tenajon Resources Corporation undertook surface and underground diamond drilling at the closed **Summit Lake** gold mine (MINFILE 104B 034). Gold occurs in a series of en echelon quartz-pyrrhotite-pyrite-calcite veins near the margin of the Summit Lake granodiorite stock. An underground drift on the 3000 level was advanced 100 m and 17 holes were collared



Figure 2.16. Drilling at Granduc, workings of the former copper mine underlie the mountain in the background.

underground to explore the M zone northwest of where it was stoped. Two holes explored the M zone to the east, six holes tested the L zone and one targeted the N zone. Results from the L zone were disappointing, returning low gold grade over narrow intervals. Gold assays from the M zone were generally low grade, though one highlight drillhole returned 11.3 g/t gold across a true thickness of 1.40 m. A new zone of gold-bearing quartz-sulphide veining, named the R zone, was intersected 100 m south of the M zone. Surface drilling tested the Blueberry vein (MINFILE 104B 133) along strike north and down-dip of a 2005 drillhole that returned 21.3 g/t gold over 4.97 m. The Summit Lake mine closed in 1984 due to high maintenance cost associated with the access road following closure of the nearby Granduc copper mine. It produced 183 000 tonnes of ore at an average grade of 16.2 g/t gold and, at shutdown, geological resources were estimated at 120 000 tonnes at an average grade of 19.1 g/t gold (prior to NI 43-101).

The **Electrum** property of American Creek Resources Ltd. covers the former East Gold mine (MINFILE 104B 033), a small producer of gold from a very rich vein of electrum. The deposit occurs within an extensive quartz-sericite-pyrite alteration zone on the margin of the Summit Lake stock that includes the Tide property (*EMBC – 2004, p. 31-32*). American Creek conducted a program of soil geochemistry, ground geophysics and diamond drilling of 21 holes (2797 m). Highlights from the first ten holes include 10.5 g/t gold, 89.7 g/t silver and 5.34% zinc over 1.4 m and 2.98 g/t gold and 501 g/t silver over 0.6 m. The second phase of drilling continued to test gold-bearing quartz-sulphide veins but results were not available.

Pinnacle Mines Ltd., under an agreement with Mountain Boy Minerals Ltd, continued to drill on the **Silver Coin** property (also known as Silver Butte, MINFILE 104B 150) located 24 km northwest of Stewart. In total, 115 holes (24 000 m) was completed. The property includes the Kansas claim that was

acquired from Tenajon Resources Corp. Based on work to the end of 2005, MineFill Services calculated an inferred resource of 11.3 million tonnes grading 1.60 g/t gold, 6.64 g/t silver and 0.41% zinc without using a cut-off grade. Drilling in 2006 (Figure 2.17) focused outside this resource and returned sporadic high grade gold. Previous operators identified five irregular vein-stockwork and breccia zones on the property that contain gold, silver and base metals. Mining in the 35 zone by Westmin Resources Ltd. in 1991 produced 105 000 tonnes of ore grading 7.86 g/t gold and 23.4 g/t silver. In 1995 (prior to NI 43-101) Westmin calculated resources in the Kansas/West Kansas (KWK) zone to be 1 774 000 tonnes grading 2.20 g/t gold based on drilling, underground development and three bulk samples.

Pinnacle Mines Ltd. and Mountain Boy Minerals Ltd. completed 14 drillholes from 3 sites to test a newly-discovered lead-zinc-silver showing on the **Barbara** property. The claims are located south of Bear Pass and 30 km from Stewart. Mineralization appears to be stratabound within chert and siltstone that overlies massive dacite (D. Alldrick, personal communication, 2006). The best drillhole intersected 4.67% lead, 4.05% zinc and 152 g/t silver over a true thickness of 6-7 metres. Pinnacle and Mountain Boy also cored 15 holes (1300 m) on the **FR** claims, 20 kilometres to the north, which returned a best intercept of 231 g/t silver across 3 m.

Goldeye Explorations Ltd. and Polar Explorations Ltd. tested the northern extension of a gold-bearing quartz breccia vein, the South zone, with eight drillholes on the **Todd Creek** property (MINFILE 104A 001). Gold is associated with chalcopyrite, specularite and barite. Five holes targeted the Mext zone and three tested Fall Creek East (MINFILE 104A 007) but no results were released.

A diamond-drilling program was carried out on the **Poly** claims, 42 kilometres northeast of Stewart, by Lategra Resources Corp. and Cypress Development



Figure 2.17. Drilling at Silver Coin, overlooking Granduc road and Salmon glacier.

Corp. Seven holes totaling 908 metres tested a series of gold and silver-bearing veins, associated base metal sulphides and related IP anomalies. No significant assays were reported.

STEWART SOUTH TO ALICE ARM

Sabina Silver Corporation drilled the K-LG vein on the **Del Norte** property 34 km east of Stewart. About 3000 metres of drilling was completed on the narrow, discontinuous gold-silver veins (MINFILE 104A 161). Geological mapping determined that EM anomalies are derived from graphite in argillaceous sedimentary rocks and from glacier margins (T. Baressi, personal communication, 2006).

Canasia Industries Ltd. completed 7 drillholes southeast of Stewart on the **Clone** gold prospect (MINFILE 103P 251) previously explored by Teuton Resources Corporation and described in *EMBC – 1996, page B-9*. The holes were within the known extent of the paired, 2-4 metre-wide; hematite and sulphide shear zones and returned grades ranging from 4-25 g/t gold.

Tenajon Resources Corporation explored for a high grade molybdenum deposit with a deep drilling program on the **Ajax** prospect (MINFILE 103P 223). Ajax is 14 km north of Alice Arm town site in the Kitsault valley. It was explored in 1965-1967 by 8100 metres of A-size core that was used to derive a resource estimate of 175 million tonnes grading 0.074% Mo. The 2006 program encountered technical difficulties and completed less drilling than planned. Five holes extended the mineralized zone 100 to 300 metre below historic drilling and Tenajon will prepare a new resource estimate.

Kenrich-Eskay Mining Corporation flew a 1000 line-kilometre EM and magnetic survey in search of new copper massive sulphide deposits on its Coastal Copper property in the **Anyox** district. Diamond drilling (54 holes, 13 000 m) focused on the **Double Ed** deposit (MINFILE 103P 025) and also tested EM anomalies north of the Hidden Creek and Redwing deposits. At Double Ed, Cominco Ltd between 1952 and 1960 delineated a resource of 2 million tonnes grading 1.3% copper, 0.6% zinc and, from incomplete data, about 60 g/t silver. The vertically dipping, pyrite and pyrrhotite-rich zone consists of two stacked lenses (or one folded body) and measures 150 metre in length by 300 metres downdip, with a true thickness of 2-15 metres. The deposit lies near the top of a pillow basalt sequence several hundred metres stratigraphically below Salmon River Formation argillite. The objective of the drill program was to establish a NI 43-101 compliant resource at Double Ed and to test for extensions to the deposit. Initial drill intercepts show strong zoning of copper and zinc grade. For example, hole DE06-02 intersected 2.20% copper and 0.37% zinc over 11.9 m (upper horizon, true thickness) and hole DE06-23

intersected 0.38% copper and 5.51% zinc over 8.0 m (also upper horizon, true thickness).

Bravo Venture Group Inc. returned to the **Homestake Ridge** gold-silver prospect (MINFILE 103P 216) 35 km southeast of Stewart to complete 6532 metres of drilling in 28 holes. Significant gold values were intersected. Mineralization occurs as a quartz-chalcopyrite vein and breccia zone that is interpreted to lie in a consistent stratigraphic interval between massive andesite and an overlying debris flow consisting of diverse volcanic clasts in a greywacke matrix. Drilling focused along a 300-metre strike length with the highest grade gold intersections occurring 250 m below historic trenches and open cuts (Figure 2.18). Hole HR06-24 intersected 14.8 metres grading 15.7 g/t gold and hole HR06-27 cut 8.5 metres grading 25.3 g/t gold. True thickness of these intercepts, located 70 m apart, is unknown. Subsequent holes extended the zone but returned lower gold grade assays. More drilling is planned in 2007.

Immediately west of Homestake Ridge, Teuton Resources drilled 7 holes (1372 m) on the **Tonga** property to test gold and silver geochemical anomalies. The holes cored black mudstone and argillite. A gold and silver-bearing quartz vein occurs nearby (MINFILE 103P 156).

TERRACE-PRINCE RUPERT AREA

Trade Wind Ventures Inc. explored the **Treasure Mountain** property (MINFILE 103I 090) located, 35 km east of Terrace. Disseminated and fracture controlled bornite and chalcocite occur in maroon andesite breccia of the Hazelton Group. Similar mineralization occurs over a 5 km strike length in the north-striking, east-dipping maroon and green volcanic strata. Work comprised improvement to an access trail from the Copper River, geological mapping and sampling.



Figure 2.18. Marcus Vanwermskerken leads a tour of old rock trenches at Homestake Ridge.

BCM Resources Ltd. intersected 0.118% molybdenum over 59.65 metres in its first drillhole on the **Shan** property (MINFILE 103I 114) 20 km northeast of Terrace. The program was increased and 20 holes were completed. Drilling nearby in 1969 by Kokanee Moly Mines Ltd. also intersected significant mineralization, including 0.131% Mo over 15 m. A soil survey in 1971 enlarged the area of interest to 800 m by 500 m area but was not investigated until 2006. Mapping and sampling by BCM identified new surface showings in the northeast part of the soil anomaly and guided the BCM drilling program. Molybdenite occurs in quartz-pyrite veins in equigranular granodiorite and in adjacent Hazelton Group volcanic rocks. In drill core (Figure 2.19), molybdenite occurs with magnetite, specularite and minor sphalerite and chalcopyrite. Six holes were completed at **Molybdenum Creek** (MINFILE 103I 016) earlier in the year but no significant molybdenum was intersected.

Jet Gold Corp. began a trenching and geological program on the Cretaceous-age **Naskeena** coal deposit (MINFILE 103I 002) located 50 km north of Terrace but work was curtailed by heavy snowfall in November. Three new coal occurrences were found 4-5 km to the north, northwest and southeast of the known locality. Further work is planned.

Cross Lake Minerals Ltd. began a deep drill program late in the year at the past-producing gold mine on **Porcher Island** (MINFILE 103J 017), located 35 km southwest of Prince Rupert. Intrusion-hosted quartz veins are rarely more than 120 m long but are gold bearing to more than 400 metres below surface.

SMITHERS-HAZELTON AREA

Exploration of the **Big Onion** porphyry copper prospect (MINFILE 93L 124) east of Smithers was reactivated by Eagle Peak Resources, a private company. Mineralization is developed in a composite

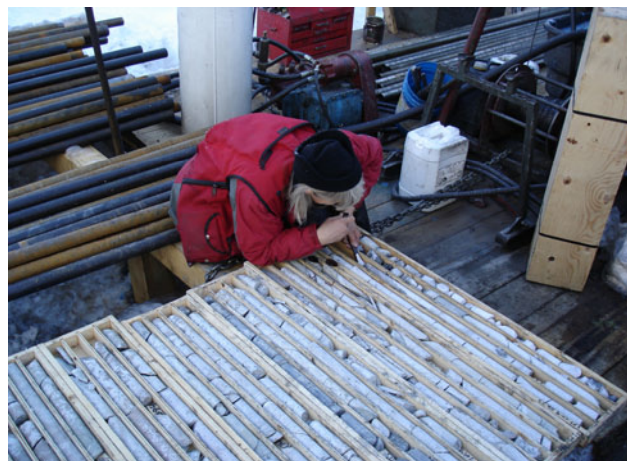


Figure 2.19. Margaret Venables inspects granodiorite core for molybdenite at Shan.

quartz diorite and quartz-feldspar porphyry intrusion. In 1977 a resource of 94 million tonnes grading 0.42% copper was calculated by Canadian Superior Explorations Ltd. In the current program eleven previous holes were twinned with the aim to calculate a 43-101 compliant resource (Figure 2.20). Eight of the holes returned better than historic intercepts (L. Tattersall, personal communication).

The **BQ** property located 50 km northwest of Smithers contains newly recognized epithermal gold mineralization that was explored by Endurance Gold Corp. Coincident anomalies in IP chargeability and gold-silver-zinc-arsenic in soil were tested by 11 core holes (2017 m). The property is underlain by gently, north dipping felsic volcanic tuff and breccia intercalated with fossiliferous sandstone and mudstone, which are cut by dikes of quartz-feldspar porphyry. Mineralization occurs as stringer veins and disseminations of pyrite, arsenopyrite, pyrrhotite, sphalerite and chalcopyrite. Gold is most closely associated with arsenopyrite. Locally, bivalve fossils are replaced by pyrite, pyrrhotite and sphalerite. A broad zone of pervasive sericite-quartz-carbonate-clay alteration surrounds the 400 metre-long mineralized zone. Hole BQ-03 intersected 33 metres grading 0.77 g/t gold and hole BQ-07 intersected 2.1 metres grading 3.47 g/t gold and 2.64% zinc.



Figure 2.20. Lloyd Tattersall inspects new core for chalcopyrite at Big Onion.

North American Gem Inc. continued to drill the **Louise Lake** copper-gold porphyry prospect (MINFILE 93L 079), completing 12 core holes (3387 m) that expanded the a tabular, gently dipping mineral zone along strike and down-dip. The property has been explored by 25 holes drilled in 2004-2006 and 34 holes between 1970 and 1992. The deposit is 170 m thick and has a strike length of 950 m. An independent study determined an indicated resource of 6 million tonnes grading 0.214% copper, 0.006% molybdenum and 0.20 g/t gold and an inferred resource of 141 million tonnes grading 0.234% copper, 0.009% molybdenum and 0.23 g/t gold. A metallurgical study determined that copper occurs as chalcopyrite and enargite, not tennantite as previously reported, which would result in a high-arsenic concentrate. In-fill drilling is scheduled to commence in early 2007.

Dentonia Resources Ltd. completed three of five planned core holes on the **Thomlinson Creek** molybdenum prospect (MINFILE 93M 122) located 42 km northeast of Hazelton. Dentonia reported intersecting molybdenite in biotite granodiorite and particularly near the contact with hornfelsed sedimentary rocks; results were not available yet. Drilling in 1981 failed to account for a strong 5-kilometre long molybdenum soil anomaly although one hole returned 0.236% molybdenum and 0.17% copper from the bottom 6 metres of core.

Endurance Gold acquired the **Virginia Silver** (MINFILE 93M 021) property from David Hayward; it is 30 km northwest of Smithers. After surface sampling confirmed the tenor of the silver vein, Endurance Gold drilled five holes to test its southwest extension. The gently dipping, fault-controlled vein comprises quartz and ankerite with base metal and silver-bearing sulphide minerals. Underground sampling by Silver Standard Mines in 1968-1969 determined an average grade of 2950 g/t silver across a width of 0.5 to 2 metres. The vein lies within folded Skeena Group sandstone and is associated with a latite dike. Results of drilling were not available.

BABINE AREA

Exploration of the **Fireweed** silver-lead-zinc prospect (MINFILE 93M 151) was conducted by Jantar Resources Ltd. The property is near Babine Lake, 50 km northeast of Smithers. Fireweed is a massive and disseminated sulphide deposit that is stratabound within Skeena Group sedimentary rocks and associated with rhyolite dikes and sills. An historic resource is not compliant with NI 43-101; 580 000 tonnes grading 342 g/t silver, 1.34% lead and 2.22% zinc across an average width of 4.75 metres. Jantar completed 5 core drillholes that totaled 937 m.

Near French Peak located 65 km northeast of Smithers, Grizzly Diamonds Ltd. explored the Ute and Rio silver-gold-copper-lead-zinc veins on the **Peak**

claims (MINFILE 93M 015) with a 1445 m diamond drilling program. Seven holes on the Ute vein and its western extension determined that sulphide veining is associated with an east-trending fault. Drillhole PK06-02 intersected 340 g/t silver and 1.91% copper across 2.1 m. At the Rio vein, surface exposures and four drillholes show pyrite-chalcopyrite veins are associated with a zone of semi-massive sulphide and siliceous replacement that is conformable within felsic tuff. The volcanic host rocks are correlated with the Cretaceous Rocky Ridge Formation.

Bard Ventures Ltd. acquired the Lone Pine claims located 35 km south of Smithers from Daniel and William Merkley. Several molybdenum showings on the property (MINFILE 93L 027, 028) were assessed by a three-dimensional IP survey in anticipation of a diamond drilling program.

HOUSTON-TAHTSA AREA

New Cantech Ventures Inc. carried out a 5600 metre in-fill drilling program on the **Lucky Ship** molybdenum prospect (MINFILE 93L 053), located near the Nanika River 65 km southwest of Houston. Broadly positive results from the drill program (Figure 2.21) led to a substantial increase in the indicated resource which now stands at 29.1 million tonnes grading 0.090% molybdenum at a cut-off grade of 0.06%. Mineralization is associated with a 150-metre diameter granite plug that is within a larger, irregularly shaped body of quartz-feldspar porphyritic rhyolite. A high silica zone and an outer molybdenum zone occur as concentric shells surrounding the granite plug. In plan-view, the molybdenum zone is about 35 metres wide and the shape of a donut. At the time of writing this report, an exploration hole was in progress to test for a deep molybdenum deposit up to 1100 m below surface. Late in 2006, New Cantech struck an agreement with Palm Clean Energy Inc. of Korea which will finance on-going exploration and development through to production in exchange for a 60% interest in the project.

At the **Seel** property (MINFILE 93E 105), Gold Reach Resources Ltd. completed 10 drillholes in January and 15 more holes in October 2006 for a total of 6046 metres. The claims are 110 km south of Houston, and just 7 km from the Huckleberry copper mine. Porphyry copper mineralization is developed in a medium grained Bulkley granodiorite stock about 1 km long by 500 m wide, elongate to the northeast. Hole S06-24, the best hole of the first program, intersected 0.35% copper and 0.38 g/t gold over 113.5 metres (Figure 2.22). In the second program, six holes penetrated a previously-known breccia zone. An exceptional hole in a variably mineralized breccia returned 0.845% copper and 23 g/t silver over 138 m. Gold Reach reported the breccia contains intrusive and hornfelsed volcanic fragments surrounded by



Figure 2.21. A diamond drill mounted on dozer at Lucky Ship.



Figure 2.22. Cutting drill core with a diamond saw at the Seel property.

pyrite-marcasite, chalcopyrite, sphalerite, tetrahedrite, quartz and siderite.

Callinan Mines Limited explored the **Coles Creek** porphyry copper prospect (MINFILE 93E 042) with a 5000 metre drilling program. Eight holes tested IP and soil geochemical targets and intersected hornfelsed volcanic rocks and granodiorite locally containing disseminated and fracture-controlled chalcopyrite. In drill core, gypsum-healed fractures are common and a strongly broken zone that extends up to 100 m from surface may result from gypsum dissolution. Anhydrite

occurs locally below 100 m with pyrite and chalcopyrite. Outcrop in a canyon along Coles Creek shows malachite is developed at a depth of 30 m below surface. Results of drilling were not available.

Torch River Resources Ltd. completed 7 core holes (2134 m) to extend mineralized zones on the **Red Bird** molybdenum property located 125 km south of Houston (MINFILE 93E 026). The holes were distributed among three zones which are located around the margin of a quartz monzonite stock and returned up to 0.094% molybdenum over 205 m. An inferred resource of 75 million tonnes grading 0.065% molybdenum was calculated in 2006 from historic drilling.

Manson Creek Resources drilled a single 254-metre core hole on the **Palomino** (MINFILE 93L 019) claims to evaluate a magnetic anomaly in an area with potential for porphyry copper mineralization. A feldspar-quartz porphyry dike was encountered, similar to other bodies on the property that contain sparse disseminated chalcopyrite.

COAL EXPLORATION

West Hawk Development Corporation was disappointed with results of 15 reverse circulation holes in the **Coal Creek** thermal coal deposit (MINFILE 93L 147), located 40 km west of Smithers. No further information was released and the property was returned to the vendor. Coal is contained in the Lower Cretaceous Skeena Group which hosts significant coal resources near Telkwa.

EXPLORATION FOR INDUSTRIAL MINERALS AND GEMSTONES

Ascot Resources Ltd. received project approval from the Environmental Assessment Office and, in October, began construction of the **Swamp Point** aggregate mine. Swamp Point (MINFILE 103O 017) is located on the Portland Canal, 50 km south of Stewart. Initial deliveries of crushed and screened material will be made by barge to Prince Rupert for the port expansion project. The company has targeted the export market for the majority of its production.

Arthon Construction Ltd. proposes to develop a large gravel operation on the Sandhill property near the port of Kitimat, for barge or ship loading to local and off-shore markets.

A private company, 24/7 Timber Limited, began site work on a granite rock quarry at **Tyee**, 25 km east of Prince Rupert on the Skeena River. Rock from the Ecstall hornblende quartz diorite pluton would be used as ballast for harbour protection and in high-strength asphalt required for the port expansion in Prince Rupert.

ACKNOWLEDGMENTS

The author is very thankful for the contributions made by mine staff, exploration geologists and prospectors working in northwest B.C. This report would not be possible without their input. Also, their hospitality while visiting projects is greatly appreciated. Special thanks also to Doug Flynn, Jill Pardoe, Butch Morningstar, Janice Girling and Elaine Kenschuh for their help in the Smithers office of Energy, Mines and Petroleum Resources. However, errors or omissions remain the responsibility of the author.