

NORTH-CENTRAL REGION

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SUMMARY AND TRENDS

Production continued from three open pit metal mines in the Region – Gibraltar, Mount Polley and Kemess – with all three experiencing productive and profitable years. Cross Lake Minerals' QR mine began underground production from its gold skarn deposit near Likely, phasing out its previous open pit operation. Sable Resources' Shasta underground silver-gold operation in the Toodoggone area continued seasonal production.

The Central Region saw a reduction in exploration after an extraordinary 2007, but activity remained well above that of recent years generally. Following eight years of steady increases in exploration expenditures, the total amount in 2008 was \$80 million, down from \$94.1 million in 2007 but still well above the 2006 amount of \$46.3 million. Likewise, drilling activity, at a total of 259 000 m, was down from 2007 but still high compared to other recent years (Figures 3.1, 3.2).

The principal exploration focus remained upon porphyry copper-gold prospects in the Quesnel and eastern Stikine terranes, with significant new exploration activity in the area covered by Geoscience BC's QUEST (Quesnellia Exploration Strategy) 2007 project. QUEST involved a regional airborne EM and airborne gravity survey extending roughly from Williams Lake to west of MacKenzie with some areas of geochemical sampling and aimed at encouraging further exploration in this heavily drift-covered area. In addition to porphyry deposits, sediment-hosted gold (SHG), volcanogenic massive sulphide (VMS) and sedimentary exhalative (SEDEX) deposits remained important targets.

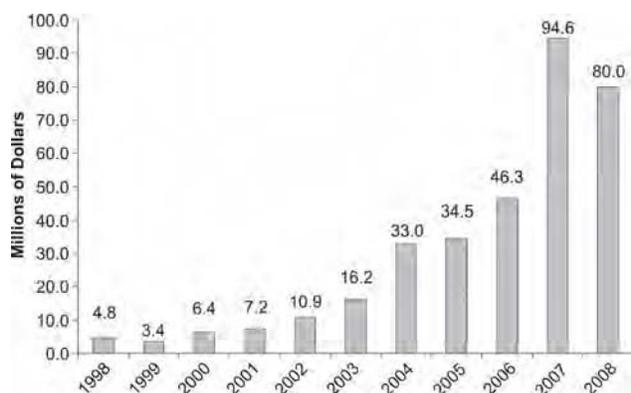


Figure 3.1. 2008 Annual Exploration Expenditures, North-Central Region.

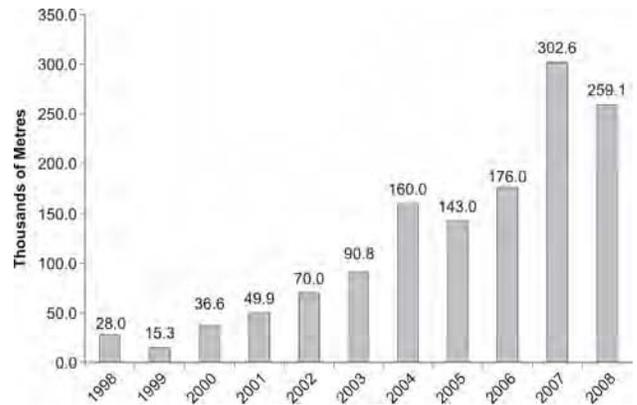


Figure 3.2. 2008 Annual Exploration Drilling, North-Central Region.

Exploration highlights, in alphabetical order of project, included:

- A 2700 m drilling program on Dajin Resources' **Addie 2** mesothermal vein gold prospect;
- An intensive diamond drilling program (over 6000 m) by Canada Zinc Metals Corp (Formerly Mantle Resources) on the **Akie** zinc-lead-silver sedex prospect in the Gataga-Kechika Trough area north of Williston Lake;
- Airborne magnetic, geochemical surveying and 1400 m of diamond drilling on Amarc Resources Ltd's **Bodine-Warren** VMS prospect;
- Continued drilling by International Wayside Gold Mines Ltd on its **Bonanza Ledge** and Cow Mountain projects near Wells to extend potential reserves;
- IP geophysics and a 2300 m drill program on Pacific Cascade Minerals' **Brewster Lake** porphyry molybdenum project;
- Renewed interest in the **Capoose-Silver Quest** prospect, with geochemical and IP exploration and a 1600 m drilling program by Silver Quest Resources Ltd;
- Ground IP and magnetic surveys, geochemistry and 1100 m of drilling by Orestone Mining Corp on its **Captain** porphyry copper-gold prospect;

- A 43 000 m drilling program at the TTM Resources Inc's **Chu** porphyry molybdenum prospect to define the extent of the mineralized zone;
- A drilling program of over 2400 m by Newcrest Mining Ltd at its **Croy-Bloom** prospect;
- Follow-up drilling of almost 3000 m by Geoinformatics Exploration Canada Ltd to help define its **Falcon** project porphyry molybdenum discovery made in 2007;
- Recognition that the **Frank Creek** prospect (Barker Minerals Ltd) is a Kuroko-style VMS deposit, leading to a 2400 m drilling project there;
- Intensive exploration, by over 10 000 m of drilling, of Hawthorne Gold Corp's **FraserGold** project;
- A very active drilling program of over 33 000 m on Taseko Mines' **Gibraltar** mining lease with the aim of further extending reserves;
- Over 2000 m of drilling by Newstrike Resources Ltd on its **Jean** porphyry copper-molybdenum porphyry prospect;
- Geochemical exploration, and continuation a drilling program of over 31 000 m by Serengeti Resources Inc to delineate alkalic porphyry copper-gold mineralization at its **Kwanika** project;
- Almost 6000 m of drilling by Teck on its **Lorraine-Jajay** porphyry copper-gold deposit;
- Continuation by Alpha Gold Corp of diamond drilling on its **Lustdust** property located near Serengeti's Kwanika project;
- An extensive program of geophysical and geochemical exploration, and about 1000 m of drilling, by GGL Diamond Corp on its **McConnell Creek** property;
- A significant drilling program of over 4300 m by Northern Rand Resource Corp on its **Megaton** copper-gold porphyry prospect;
- Completion of a major drilling program (42 holes and over 10 000 m) and preliminary environmental/metallurgical studies by Leeward Capital Corp on its **Nithi Mountain** porphyry molybdenum deposit;
- On and off-lease drilling totalling over 16 000 m by Imperial Metals Corp at its **Mount Polley** mine to extend reserves;
- Completion of a 2100 m drill program begun in 2007 by Starfire Minerals Ltd at its **Porphyry Pearl** project;
- A regional IP and geochemistry survey, with overburden drilling, of some 15 target areas on its **Prince George Porphyry** project area by Xstrata Copper Canada;
- Underground exploration by Cross Lake Minerals Ltd at its **QR** mine;
- IP and geochemical exploration, and an airborne magnetic survey, by a Serengeti Resources Inc/Fjordland Exploration Inc joint venture covering 27 properties in its "QUEST" program;
- Underground exploration by Sable Resources Ltd at its **Shasta** mining operation in the Toodogone area;
- Over 40 000 m of systematic drilling, and geochemistry, by Skygold Ventures Ltd at **Spanish Mountain** to define its SHV gold deposit there;
- Further exploration, by IP and geochemical surveys and over 7000 m of drilling, by Fjordland Exploration Inc of the "Southeast zone" at the **Woodjam** copper-gold-molybdenum porphyry prospect, and discovery of the new "Deerhorn zone."

MINES AND QUARRIES

Estimated production and reserves of operating mines are provided in Table 3.1. Locations of mines and exploration projects discussed in this report and considered to be of regional significance are shown in Figure 3.3. Placer exploration and mining, while a significant traditional activity within this region, is not considered in this report.

METAL MINES

Imperial Metals Corporation's **Mount Polley** alkalic porphyry copper-gold mine, located west of the town of Likely and about 56 km northeast of Williams Lake, increased mill throughput over 2007 levels by about 5 per cent compared to the same period in 2007 (Figure 3.4). At that rate, 2008 production would amount to over 28 million kg Cu, 1311 kg Au and 15 350 kg Ag. Total proven and probable reserves as of January 1, 2008 were 55.6 million tonnes grading 0.36% Cu, 0.32 g/t Au and 0.66 g/t Ag – an increase of 4.3 million tonnes over the January 1, 2007 estimate. This increase extended mine life to May, 2015. About 16 200 m of on-lease diamond drilling were completed in 2008 (see "Exploration Highlights" below), primarily on the Boundary, Springer, Pond and Kidney zones. The Pond zone is the first in which skarn-type mineralization has been encountered. The Bell open pit was mined out in July 2008 and the Wight Pit was to have been mined out by the end of 2008.

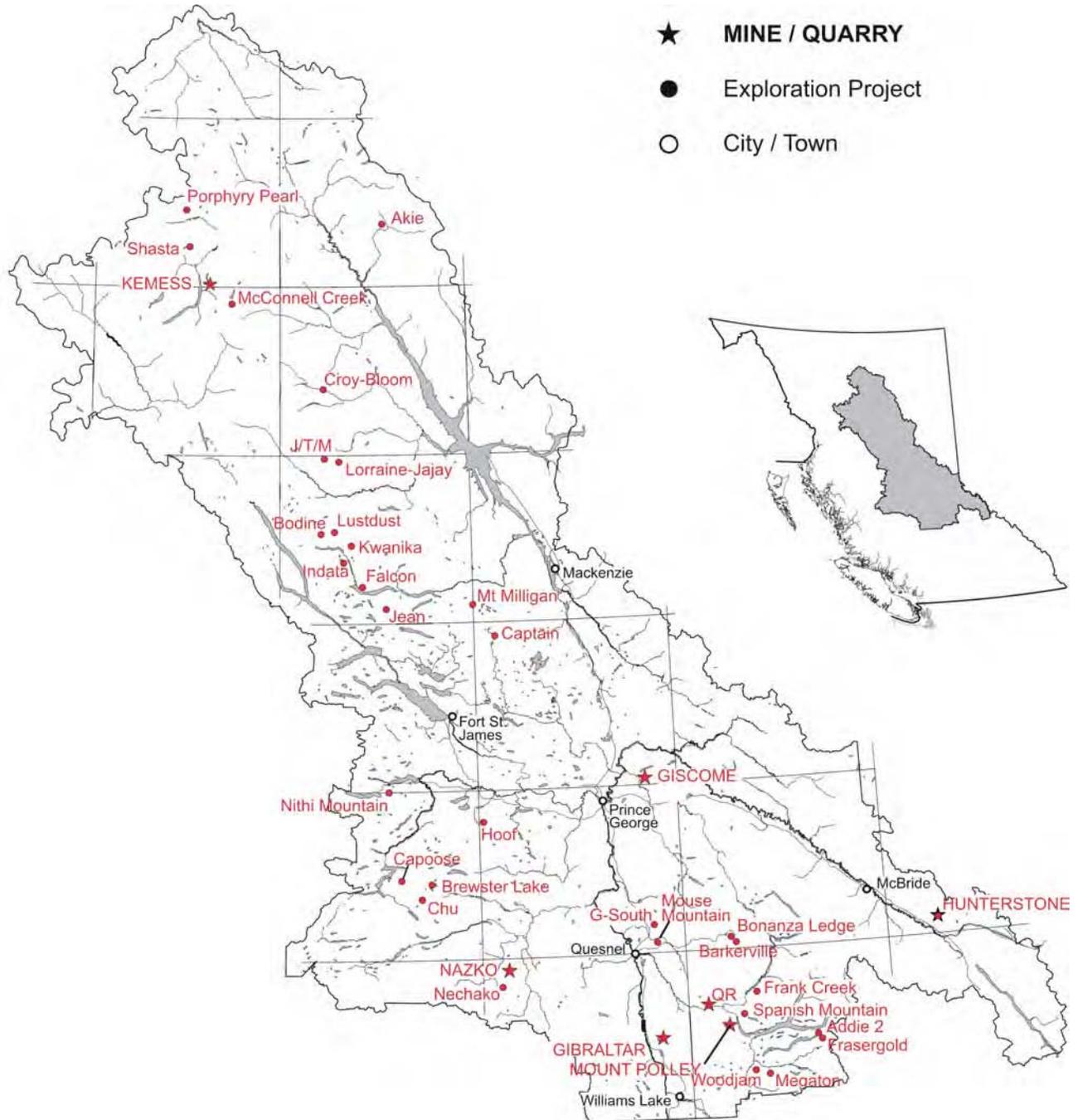


Figure 3.3. Operating mines, major exploration projects and selected smaller projects, North-Central Region, 2008.

TABLE 3.1. FORECAST MINE PRODUCTION, NORTH-CENTRAL REGION, 2008

Mine	Operator	Mine Workforce	Forecast Production (tonnes or kilograms)	Measured and Indicated Resources (effective date)
Metals				
Mount Polley	Imperial Metals Corp	397	38.1 million kg Cu 992 kg of Au 2 260 kg of Ag	104.9 million tonnes grading 0.33% Cu, 0.31 g/t Au, (March 2008)
Gibraltar	Taseko Mines Ltd	~325	26.8 million kg Cu 299 825 kg Mo (fy ending 30 Sept.)	428 million tonnes proven grading 0.32% Cu, 0.008% Mo (December 2008)
QR	Cross Lake Minerals Ltd	46, + 24 contract	539 kg Au	356 000 tonnes grading 5.7 g/t Au (September 2007)
Kemess South	Northgate Minerals Corp	~400	5925 kg Au 27 669 tonnes Cu	51.8 million tonnes (December 2007)
Industrial Minerals				
Giscome	Pacific Lime Products Ltd	2 (seasonal)		
Nazko	Lightweight Advanced Volcanic Aggregates Inc	5 (seasonal)		44 million tonnes "proven resource"
Hunterstone	Hunterstone Quarries	~3 (seasonal)	350 tonnes	
Giscome	Canadian National Railway Company	~5 (seasonal)		

Meanwhile, large scale production was beginning from the Springer Pit (Figure 3.5). Imperial's intent is to begin underground mining beneath the Wight Pit by 2010. In November 2008, in the context of declining metal prices and economic uncertainty, Imperial Metals issued February 2009 layoff notices to 49 of its mine employees.

A 200 000 tonne test heap was operated in 2008 to prove the feasibility of leaching metal from ore from the copper oxide cap that covers the Springer pit sulphide mineralization. Copper recoveries were anticipated to be in the range of 85 per cent, but actual recoveries have not measured up to expectations.

The **Gibraltar** mine, owned and operated by Taseko Mines Ltd, is located about 19 km east of McLeese Lake (Figure 3.6). Production is from a copper-molybdenum calc-alkalic porphyry, the so-called "mine series tonalite." In December 2008, Taseko announced a 28% reserve increase following an intensive on-lease exploration drilling program. That program, in Gibraltar East and an area northwest of Gibraltar West (the Gib West Extension), consisted of over 33 000 m of diamond drilling with the goal of adding to the mine's reserve base.

With the announced additions, reserves stood at 428 million tonnes grading 0.315% Cu and 0.008% Mo, containing an additional 290 000 tonnes of Copper, with the mine life extended to 2035.

The Solvent Extraction and Electrowinning plant at Gibraltar was refurbished by the end of 2006, and in 2007 about 1.1 million kg of copper cathode was produced. The facility has the capability of producing over 3 million kg annually from oxidized copper ore stockpiled on the property.

A first phase of mill expansion was completed in April 2008, with an investment of \$76 million. Phase II modifications, to be complete by the end of 2009, will bring the mill up to its designed capacity of 49 800 tonnes/day; and Phase III will increase that further to 77 100 tonnes/day in 2010. At that point Gibraltar's annual production is expected to be 82 million kg of copper and 1.6 million kg of molybdenum. Concentrate is shipped by rail through the port of North Vancouver. In November 2008, 75 mine workers were laid-off in the context of streamlining operations.



Figure 3.4. Filtration tank, Mount Polley Mine Mill.



Figure 3.5. Blasting in the Springer Pit, Mount Polley Mine.



Figure 3.6. Loading operations in Granite Pit, Gibraltar Mine.

2008 was the first full year of operation for Cross Lake Minerals Ltd's **QR** mine since the property's acquisition from Kinross Gold Corp in 2004 and renewed production in 2007. The QR property is located about 58 km southeast of Quesnel and about 17 km north of the Mount Polley Mine. Open pit mining ended in July 2008 with the exhaustion of the West Pit, and the operation subsequently moved underground in the Midwest Zone. Startup reserves of about 356 000 tonnes at 5.7 g/t Au allowed for a mine life of about two years, but the company was optimistic that this could be extended. In 2008, about 3500 m of drilling supplemented underground exploration to advance understanding of the deposit. Higher than expected mining costs, and mill modification necessitated by Midwest zone ore feed, set production back. In October 2008, Cross Lake set about reorganizing its affairs with a view to improving the efficiency of its operation and increasing its revenues. Central to the adjustment was giving Procon Mining and Tunnelling Ltd, QR's mining contractor and Cross Lake's largest creditor, a management stake in the operation and appointing Procon nominees to the board.

Northgate Minerals Corp continued operations on its **Kemess** copper-gold mine, located in the Toodogone area about 300 km northwest of Mackenzie (Figure 3.7). The East and West lobes of the Kemess South open pit are developed in a porphyry deposit within the late Triassic quartz monzonite "Maple Leaf" pluton, and encounter uniform grades throughout. As of end-December 2007, total reserves stood at 51.8 million tonnes grading 0.17% Cu and 0.47 g/t Au. Projected 2008 production was 27 669 tonnes Cu and 5925 kg Au. Concentrate from the 52 000 tonne/day mill is shipped by road and rail to Rouyn-Noranda, Quebec for smelting. In 2008, mining was concentrated in the West Pit, and the East Pit was completely filled-in. The projected mine life is to third quarter 2011.

QUARRIES

Lightweight Advanced Volcanic Aggregates Inc continued small-scale production of lightweight aggregate and scoria from its **Nazko** quarry about 100 km west of Quesnel. Up to 50 000 tonnes/yr have been removed historically from this quarry, with the product used as fill for construction, concrete blocks, barbecue rock and landscaping.

The Chemical Lime Company of Canada Inc operates a **small limestone quarry** about 5 km southeast of Giscome. The quarry appears to have been inactive in 2008, with any shipments from the quarry being from stockpiled material. Within the community of Giscome itself, Canadian National Railway Company continued



Figure 3.7. Moving low-grade ore at the Kemess Mine.

production from its **Giscome** basalt quarry to supply road ballast requirements for maintenance of its main and spur lines. **Hunterstone** Quarries, near Valemont, continued

low-level production of talus-derived quartzite dimension stone for specialty construction.

EXPLORATION HIGHLIGHTS

Significant exploration projects in the North-Central Region are listed in Table 3.2. The compilation and the information in the text were assembled prior to the end of the calendar year and contain some estimates of the work done. There were 30 major exploration projects (in excess of about \$500,000 in expenditure) – compared to 37 in 2007 – and among that group 19 had 2008 expenditures of \$1,000,000 more.

Figure 3.8 offers an estimated breakdown of 2008 expenditures by category (grassroots, early-stage exploration, advanced-stage exploration/deposit appraisal, mine evaluation, and mine property exploration). Because grassroots exploration commonly does not involve exploration permitting, the proportion assigned to this category is likely to be low. For this discussion, early-

TABLE 3.2. SIGNIFICANT EXPLORATION PROJECTS, NORTH-CENTRAL REGION, 2008

Property	Operator	MINFILE (NTS ref.)	Commodity	Deposit Type	Work Program
Addie 2	Dajin Resources Corp	(093A.043,044)	Au	Mesothermal Vein	A, DD (~2700 m)
Akie	Canada Zinc Metals Corp	094F 031	Zn-Pb-Ag	Sedimentary Exhalative	A, G, DD (6226 m)
Axelgold	Caracle Creek International consulting Inc	093N 096	Au-Sb-Ag-Cu	Epithermal Vein	AB-EM, AB-Mg
Barkerville	Williams Creek Explorations Ltd	(093H.003)	Au	mesothermal vein	DD (~1500 m)
Bodine-Warren	Amarc Resources Ltd	(093N.061,062, 071)	Cu	VMS	A, AB-MG, GC, DD (~1000 m)
Bonanza Ledge/ Cow Mountain	International Wayside Gold Mines Ltd	093H 019	Au	Mesothermal Vein	A, DD (2740 m)
Brewster Lake	Pacific Cascade Minerals Inc	(093F.048)	Mo	Porphyry	IP, DD (2300 m)
Capoose-Silver Trend	Silver Quest Resources Ltd	093F 040	Ag-Au	Disseminated	A, IP, GC, DD (1596 m)
Captain	Orestone Mining Corp	(093J/13)	Cu-Au	Porphyry	IP, MG, DD (1103 m)
Cariboo	Paget Resources Corp	(093A.076,086)	Pb-Zn	Mississippi Valley-type	G, GC, GP
Cariboo Gold	Noble Metal Group Inc	(093A.073,083)	Au	Epithermal Vein	GC
Chu	TTM Resources Ltd	093F 001	Mo	Porphyry	DD (43 000 m)
COL-Magnet	Solomon Resources Ltd	093N 101	Cu-Au	Porphyry	DD (1043 m)
Croy-Bloom	Newcrest Mining Ltd	(094D.050)	Au-Cu-Mo	Porphyry	DD (2473 m)

TABLE 3.2. CONTINUED

Property	Operator	MINFILE (NTS ref.)	Commodity	Deposit Type	Work Program
Falcon (Takla-Redton)	Geoinformatics Exploration Canada Ltd	093N.017	Mo	Porphyry	A, G, DD (2996 m)
Fran	Yankee Hat Minerals Ltd	(093K.099)	Au-Cu	Alkalic Porphyry	IP, GC
Frank Creek	Barker Minerals Ltd	093A 152	Cu-Zn-Pb	Kuroko-style Volcanogenic Massive Sulphide	A, TR, DD (2375 m)
Frasergold	Hawthorne Gold Corp	093A 150	Au	Mesothermal Vein	G, DD (10 405 m)
G-South	Richfield Ventures Corp	(093G.009)	Au-cu	Vein	A, GP, GC DD (1500 m)
Gibraltar	Taseko Mines Ltd	093B 005-008, 011-013	Cu-Mo	Calk-Alkalic Porphyry	DD (33 528 m)
Hen	Swift Resources Inc	093A 048	Au-Ag-Cu	Volcanogenic Massive Sulphide	A, DD (1205 m)
Hixon Creek	Cayenne Gold Mines Ltd	(093G.048)	Au-Ag	Vein	DD (630 m)
Hoof	Porpoise Bay Minerals Ltd	(093G.081)	Ni-Mg	Ultramafic- hosted bulk tonnage	A, DD (1010 m)
Indata	Eastfield Resources Ltd	093N 192	Au-Ag	Vein/Porphyry	DD (1035 m)
Jan/Tam/Misty	Teck Cominco Ltd	093N 001, 093	Cu-Au	Alkalic Porphyry	DD (1187 m)
Jean	Newstrike Resources Ltd	093N 079	Cu-Mo	Porphyry	A, TR, DD (2105 m)
JD	Duran Ventures Inc	094E 171	Au-Ag	Epithermal vein	G, GC, IP
Kemess South	Northgate Minerals Corp	094E 094	Au-Cu	Porphyry	IP
Kwanika	Serengeti Resources Inc	093N 018, 073	Cu-Au-Mo	Alkalic Porphyry	A, GC, IP, MS, DD (31 742 m)
LaForce	Orestone Mining Corp	(094D.099, E099)	Cu-Au	Porphyry	DD (1000 m)
Lorraine-Jajay	Teck Cominco Ltd	093N 002,066, 224	Cu-Au	Porphyry	DD (5 748)
Lustdust	Alpha Gold Corp	093N 044	Au-Ag-Cu- Zn-Pb	Skarn, Manto, Mesothermal Vein	A, DD (~2400 m)
Manson Creek	Skygold Ventures Ltd	(093N.068)	Au	Vein	A, G, GC, DD (1584 m)
McConnell Creek	GGL Diamond Corp	094D 006	Cu-Au-Mo	Porphyry	A, IP, GC, DD (~1000 m)
Megaton	Northern Rand Resource Corp	(093A.024)	Cu-Au	Porphyry	A, DD (4327 m)

TABLE 3.2. CONTINUED

Property	Operator	MINFILE (NTS ref.)	Commodity	Deposit Type	Work Program
Mt. Milligan	Terrane Metals Corp	093N 191,194	Au-Cu	Alkalic Porphyry	GC, AB-EM/MG, EN, GD (408 m)
Mount Polley	Imperial Metals Corp	093A 008, 164	Cu-Au	Alkalic Porphyry	G, IP, TR, DD (1314 m)
Mouse Mountain	Richfield Ventures Corp	093G 003	Cu-Au	Alkalic Porphyry	A, GP, GC, DD (1842 m)
Nithi Mountain	Leeward Capital Corp	093F 006-016	Mo	Calc-Alkalic Porphyry	A, EN, MS, DD (10 500 m)
Pinchi	Lysander Minerals Corp	(093N.082)	Cu-Au	Porphyry	IP
Polymet/Bodine	Amarc Resources Ltd	(093N.002, 061)	Au-Cu	Porphyry	GC, IP, MG
Porphyry Pearl	Starfire Minerals Ltd	094E 084	Au	Porphyry	DD (2130 m)
Prince George Porphyry (15 targeted areas)	Xstrata Copper Canada	(93F,G,J, K)	Cu-Au	Porphyry	IP, GC, OB (3418)
QR	Cross Lake Minerals Ltd	093A 121	Au	Skarn	UG, DD (3545 m)
QUEST (27 properties including Q, ST, MP, Copper, Ping, Mil)	Fjordland Exploration Inc/Serengeti Resources Inc	(093B, G, J, K.)	Cu-Au	Porphyry	G, GC, IP, AB-MG
Shasta	Sable Resources Ltd	094E 050	Ag-Au	Epithermal Vein	UG (450 m)
Sheridan	Copper Ridge Explorations Inc	(093B.050)	Cu-Mo	Calc-Alkalic Porphyry	G, GC, IP, MG, DD (1000 m)
Spanish Mountain	Skygold Ventures Ltd	093A 043	Au	Mesothermal Vein	A, GC, DD (40 447 m)
TSUN	Eagle Peak Resources Inc	(093K.077)	Au-Cu	Porphyry	G, IP
Wicheeda	Spectrum Mining Corp	093J 014	Rare earths	Carbonatite	DD (800 m)
Woodjam (Southeast, Takum and Deerhorn Zones)	Fjordland Exploration Inc./Cariboo Rose Resources Ltd	093A 078	Au-Cu-Mo	Calc-Alkalic Porphyry	A, IP, MG, DD (7691 m)

Exploration Category: G = Grassroots, E = Early-Stage, A = Advanced-Stage, ME = Mine Evaluation, MP = Mine Property

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 totalling 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 (Xm) = X metres of underground development; UG-BU = underground bulk sample; UT = UTEM; VLF; WT = washability test (coal)

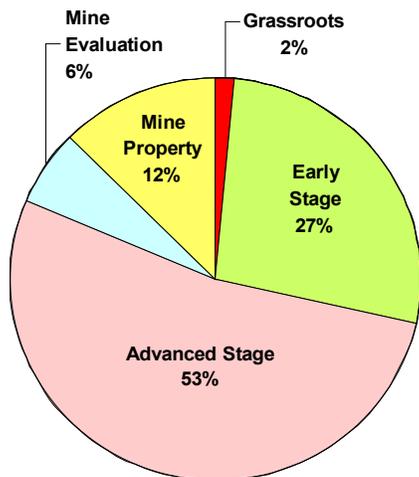


Figure 3.8. 2008 Exploration expenditures by category.

stage exploration is considered as focussed activity based on a deposit model. It may include geophysics, geochemistry, trenching and drilling. Advanced-stage exploration is concerned with resource definition emphasizing drilling, but included may be baseline environmental studies, economic pre-feasibility work, and exploration of secondary targets. Mine evaluation begins with the firm commitment to develop a resource; and concentrates on the environmental, social, engineering and financial assessments of a project. Mine property exploration is on-lease in respect of a producing mine, and is work other than that done within or immediately adjacent to the deposit. Figure 3.3 is a location map of producing mines, major exploration projects, and selected smaller projects in the North-Central Region in 2008.

LIKELY – HORSEFLY AREA

Imperial Metals Corp completed 16 198 m of exploration drilling at and close by its **Mount Polley** mine, supplementing an IP survey, trenching and geological mapping. The on-lease drilling was on the Southeast, Boundary and Northeast (Wight Pit) zones, with a focus on finding high-grade ore in advance of closing the Wight Pit at the end of 2008. One hole, PZ08-22, in the Pond zone (part of the Southeast zone) intersected 75.6 m grading 1.16% Cu, 0.42 g/t Au and 11.70 g/t Ag. This is the only area of skarn mineralization discovered so far at Mount Polley. Within that interval were 8.1 m grading 6.07% Cu, 1.26 g/t Au and 67.32 g/t Ag. Holes in the Boundary zone magnetite breccia were encouraging as well, with hole ND08-51 intersecting 64.5 m grading 1.42% Cu and 1.55 g/t Au. An area adjacent to the Wight Pit, the Kidney zone, also saw rewarding intersections.

Fjordland Exploration Inc, with its 40% partner Cariboo Rose Resources Ltd, concentrated its 2008 activities on the Southeast zone of its **Woodjam** copper-gold-molybdenum porphyry prospect, located about

10 km south of the village of Horsefly. Mineralization is associated with a subvolcanic quartz monzonite intrusion, part of the Triassic-Early Jurassic Takomkane Batholith. Hole WJ-08-84 in the Southeast Zone intersected a high-grade interval, extending for 226.77 m to the end of hole at 356 m, returning 0.93% Cu and 0.40 g/t Au. Indeed, every hole completed to date on the Southeast zone has returned encouraging results, and all have bottomed in mineralization (Figure 3.9). Fjordland also completed reconnaissance drilling on the Takom and newly-discovered Deerhorn zones, with 7400 m being completed in total.

Adjacent to Fjordland’s Woodjam property, Northern Rand Resources Corp completed a drilling program of over 4300 m, on similar targets, on its **Megaton** project. The program targeted the “Landing zone,” in which copper mineralization and native copper were encountered in several boreholes.

Hawthorne Gold Corp continued work on its **FraserGold** property, located about 65 km east of Horsefly (Figure 3.10). FraserGold is an orogenic lode gold deposit hosted within intensely-deformed Quesnel River Group “knotted phyllite.” Particulate gold is described as occurring primarily in quartz segregations of stringers, veins, boudins and mullions. The deposit has been known since the early 1980s, and in 1991 James Askew Associates estimated a resource on the property of 6 million tonnes of mineralized material grading 1.7 g/t Au. In 2008, Hawthorne completed about 10 400 m of diamond drilling, including in-hole geophysics, on the site to define further the resource leading to an expected NI 43-101 compliant estimate. Thirty-one of the 58 holes contained visible gold. Hole 08-330, which intersected 75.29 m grading 0.830 g/t Au, and hole 08-313, which intersected 96.07 m grading 0.771 g/t Au, were particularly impressive.

Nearby and northwest of the FraserGold project Dajin Resources Corp completed about a 2700 m drilling program on its **Addie 2** property. They are exploring a similar gold target to FraserGold.



Figure 3.9. Mineralization in drillhole 08-83, Woodjam property.



Figure 3.10. Marlin Murphy and Kristian Whitehead examine core at the FraserGold project.

Exploration at the **Spanish Mountain** bulk tonnage gold property near Likely, a joint venture of Skygold Ventures Ltd (70%), and Wildrose Resources Ltd (30%), continued at a high level in 2008. Gold mineralization is found as a “sediment-hosted vein” deposit in graphitic argillite-mudstone that has undergone complex deformation locally. Some 40 000 m of drilling were completed on the Main zone to define the resource more accurately (Figure 3.11). Structural controls on mineralization are becoming apparent, and have been used to follow high-grade occurrences along a 1.3 km trend that remains open to the north and south. In April 2008 Skygold released a NI 43-101 compliant resource estimate on a defined “Resource Area” within the Main zone. Within this area, and using a cut off grade of 0.5 g/t gold, an estimated 67.06 million tonnes averaging 0.81 g/t Au in the Measured and Indicated categories, containing 1.75 million ounces of gold, were reported. An updated estimate is expected in early 2009.



Figure 3.11. Drill core grading 33 g Au/tonne, Main Zone, Spanish Mountain.

Barker Minerals Ltd identified its **Frank Creek** prospect as being a Kuroko-style polymetallic sulphide (VMS) deposit, hosted by felsic volcanic rocks. The deposit appears to be on the bottom limb of a large recumbent fold, and consists of veins, disseminations, stringers, semi-massive and massive sulphides that the company interprets as footwall-type stockwork mineralization such that the main deposit would be found at greater depth. In 2008, the company completed a 2375 m drill program to define the deposit more accurately.

MCLEESE LAKE AREA

During 2008 Taseko Mines Ltd conducted extensive on-lease exploration at its **Gibraltar Mine** near McLeese Lake. Some 174 boreholes totalling 33 529 m were completed to test mineralization in East and West pit areas, an area south of the Granite Lake Pit, and also a zone NW of the Gibraltar West Pit (“Gibraltar North”) (Figure 3.12). This drill program, along with the 2007 results, form the basis of a new NI 43-101 reserve estimate that was released in December 2008 (see above).

Copper Ridge Explorations Inc completed a 5-hole, 1000 m program southeast of and adjacent to the Gibraltar Mine lease area on its **Sheridan** property. The program was aimed at evaluating coincident chargeability and soil anomalies for copper, but the results were negative.

QUESNEL AND WELLS – BARKERVILLE AREAS

Richfield Ventures Corp continued work on its **Mouse Mountain** alkalic copper-gold porphyry project east of Quesnel, encompassing mineral occurrences distributed along a 1500 m north-northwest trending area in which have been defined, from north to south, the Rainbow, Valentine and High-Grade zones. Disseminated and fracture-controlled pyrite and chalcopyrite mineralization is typical, with malachite and azurite in weakly to moderately potassic and silica-altered Nicola Group volcanic rocks. In 2008, the company completed its 2007 drill program, continuing in 2008 for a total of 1842 m. One hole, RVC 08-19, was drilled to test Rainbow zone mineralization at depth. It intersected 236 m averaging 0.12% Cu and 0.051 g/t Au, within which a 20 m interval averaged 0.36% Cu. The zone remains open at depth.

Richfield also completed a four-hole, 1818 m drill program on its **G-South** prospect, a gold-bearing massive sulphide vein network located approximately 5 km north of Mouse Mountain. While elevated gold and base metal values were encountered in some sections, more work will be required to determine the economic significance.



Figure 3.12. Drill pad reclamation at Gibraltar. (The barrier is to prevent runoff into the nearby wetland.)

In the Wells-Barkerville area, International Wayside Gold Mines Ltd continued work on its **Bonanza Ledge** mesothermal vein gold deposit, completing some 2740 m of drilling in 10 boreholes on the Goldfinch zone extension and nearby **Cow Mountain**. The company intends to develop a seasonally-operated small open pit mine at Bonanza Ledge. Meanwhile, the Environmental Assessment process for International Wayside's nearby proposed **Cariboo Gold** mine remains underway. Cariboo Gold is a vein and replacement gold deposit also proposed for exploitation by open pit mining.

Just to the southeast of International Wayside's tenure, Williams Creek Explorations Ltd completed a drilling program on the **Barkerville** prospect on its Westport property. The company is seeking a possible continuation of the Bonanza Ledge deposit, or other gold-bearing quartz vein zones.

SOUTHERN NECHAKO PLATEAU

TTM Resources Inc's **Chu** prospect is located about 75 km southeast of the Endako mine and 80 km south-southwest of the community of Vanderhoof. The deposit comprises an area of molybdenite-mineralized sedimentary rock adjacent to a granodiorite intrusive stock, with molybdenum showing as a quartz-molybdenite veinlet stockwork in hornfelsed siltstone (Figure 3.13). The mineralized zone extends for about 2 km in a northwest direction, has been shown by drilling to be about 300 m wide and 650 m in depth, and is open at depth and to the southeast. In February 2008, TTM released a NI 43-101 compliant resource estimate for the deposit, in which an indicated resource of 57.1 million tonnes of 0.104% Mo with a cutoff of 0.08% Mo, and an inferred resource of 44.4 million tonnes of 0.100% Mo with a cutoff of 0.08% Mo, were identified. In October 2008 a Preliminary Economic Assessment indicated a

“viable open pit mineable resource,” and posited a 60 000 tonne/day operation spanning 31 years. During 2008, 99 boreholes were completed totalling about 48 000 m, and also an extensive 3D-IP survey. The Preliminary Assessment recommended continued drilling to upgrade the resource estimated from “inferred” and “indicated” to “indicated” and “measured.”

Silver Quest Resources Ltd completed IP and geochemical surveys and a five-hole, 1596 m diamond drill program on its **Capoose-Silver Trend** property, located about 50 km west of the Chu deposit and 142 km by road from Vanderhoof (Figure 3.14). The company is exploring a potentially large disseminated silver-gold deposit, with minor lead and zinc, hosted by intermediate to acidic garnetiferous volcanic and sedimentary rocks. Results released to date, for two holes, were positive. Hole 89 intersected 16 m grading 57.3 g/t Ag and 0.32 g/t Au, and Hole 97 intersected 88 m grading 40.3 g/t Ag and 0.2 g/t Au. The company plans to complete an updated resource estimate during the first quarter of 2009.

Pacific Cascade Minerals Inc completed an IP survey and followed-up with a 2300 m drill program at its Brewster Lake property, east of the Capoose and north of the Chu projects, but encountered no significant molybdenum mineralization. The company is following up with an analysis of the results to direct further exploration.

In early 2008, Leeward Capital Corp completed an extensive drill program, begun in 2007, on its **Nithi Mountain** porphyry molybdenum deposit. The deposit is located south of the community of Fraser Lake, and about 18 km east of the Endako molybdenum mine. Molybdenite mineralization at Nithi occurs in a potassically-altered quartz monzonite (Nithi Mountain Phase) of the late Jurassic to Early Cretaceous Francois Lake plutonic suite. Several mineralized zones cover an area about 2 by 4 km and are at least 200 m in depth.



Figure 3.13. Molybdenite selvage with quartz in argillite, Chu project.



Figure 3.14. Drill rig at Capoose project, courtesy Silver Quest/David Pawliuk.

The 2008 program, of 42 holes totalling 10 500 m, focussed on the Delta zone, with preparatory work on the Theta and Sigma zones; and succeeded in identifying a new high-grade area within the Delta zone anomaly. A NI 43-101 compliant estimate received in February 2008 for the Gamma zone identified an inferred resource of 84.3 million tonnes grading 0.028% Mo using a 0.020% Mo cutoff. In late September, Leeward published an inferred resource estimate for the combined Gamma and Delta zones of 165.25 million tonnes grading 0.026% Mo with a cutoff at 0.020% Mo.

Porpoise Bay Minerals Ltd followed-up preliminary work in 2007 with a 10-hole, 1000 m drilling program on its **Hoof** project about 20 km south of Vanderhoof. The company is exploring altered ultramafic rocks of the Cache Creek Complex for magnesium and/or nickel in a bulk-tonnage setting.

PRINCE GEORGE AND MACKENZIE AREAS

The Prince George and MacKenzie areas saw two major regional projects in 2008, both of them following-up the results of Geoscience BC's 2007 QUEST (*Quesnellia Exploration Strategy*) project. As a joint venture, Fjordland Exploration Inc and Serengeti

Resources Inc examined 27 properties by airborne magnetics, geochemical sampling, and IP surveys. Six of these, **Q, ST, MP, Copper, Ping** and **Mil**, were selected as priority targets for further work. **Mil**, located about 15 km southwest of Mt. Milligan, in particular was identified as a drill target. Xstrata Copper Canada completed over 100 km of IP survey on 15 properties comprising its **Prince George Porphyry** project, and also nearly 4000 m of Pionjar drilling to sample the regolith just over bedrock.

NORTHERN NECHAKO PLATEAU

Terrane Metals Corp's **Mt. Milligan** project, located about 155 km northwest of Prince George, continued to be the main focus of interest in the northern Nechako Plateau. The deposit is hosted by the Witch Lake succession within the Takla Group, and is characterized by augite-phyric volcanoclastic and coherent basaltic andesites with subordinate epiclastic beds. These in turn are intruded by the Mount Milligan Intrusive Complex of coeval Takla and post-Takla monzonites and related rock types (Figure 3.15). The property comprises an alkaline porphyry copper-gold deposit with measured and indicated resources of 590.8 million tonnes grading

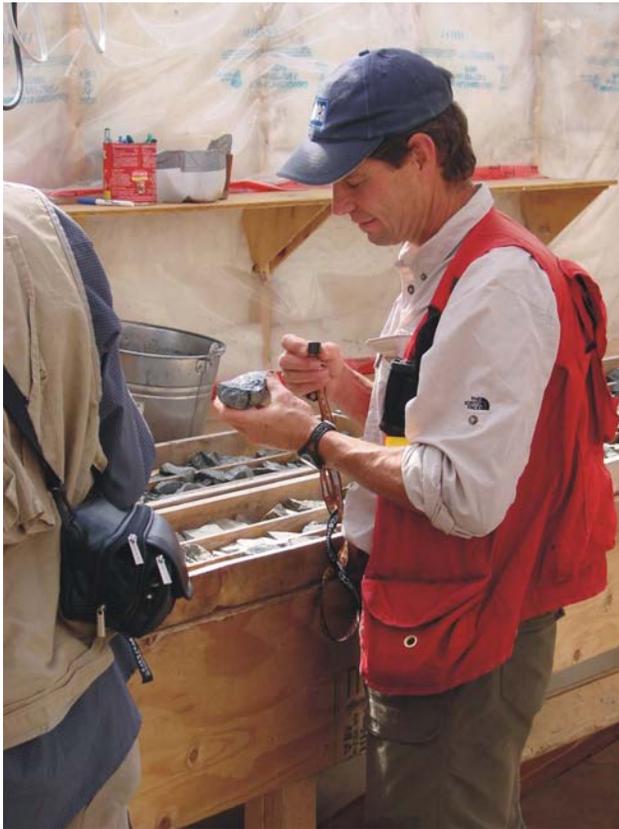


Figure 3.15. Jim Logan examining core at Mt. Milligan.

0.193% Cu and 0.352 g/t Au. Processing ore at a nominal 60 000 tonnes/day, a mine life in excess of 15 years is forecast. The capital cost of the facility is estimated at \$917 million. During the construction phase up to 700 workers could be employed and, after opening, ongoing employment could be about 400. Terrane plans an updated feasibility study report for late 2009, to guide project implementation in the context of the operating and capital costs pertaining at that time. Meanwhile, the Environmental Assessment review process, permitting, and pre-construction activities will continue uninterrupted. During 2008, exploration on the **Mt. Milligan** property was limited to geochemistry and a HeliGEOTEM magnetic-electromagnetic survey.

South of Mt. Milligan, Orestone Mining Corp continued work on its **Captain** copper-gold porphyry prospect, with a program that included extensive IP, magnetic and geochemical surveys supported by over 1000 m of drilling. Holes 08-01 and 08-05 in particular returned encouraging values for both copper and gold.

Newstrike Resources Ltd completed a 2105 m drilling project, begun in 2007, on its **Jean** porphyry copper-molybdenum property located on the southern margin of the Jean-Marie stock about 45 km southwest of the Kwanika project. The property has been the subject of exploration since the discovery of the prospect in 1968, and historical estimates suggest that substantial tonnages

of copper and molybdenum may be present at favourable grades.

Eagle Peak Resources Inc completed an extensive IP survey on its **TSUN (Tas)** gold-copper porphyry prospect about 32 km northwest of Fort St. James.

Amarc Resources Ltd undertook an extensive program of silt and soil sampling, IP, and airborne magnetics on its **Bodine-Warren** and **Rapid** VMS properties (including about 1400 m of diamond drilling at Bodine-Warren), located southwest of Leo Creek near the south end of Takla Lake, and northwest of Stuart Lake respectively. No results have been released as of yet.

OMINECA MOUNTAINS

Teck Cominco Ltd (formally to become “Teck” in April 2009 and now “branded” as Teck) continued drilling on its **Lorraine-Jajay** and **Jan/Tam/Misty** projects northwest of Germansen Landing. The company is exploring alkalic copper-gold porphyry deposits in the Duckling Creek Syenite Complex, with mineralization typically of disseminated chalcopyrite and lesser bornite in the syenitic and biotite pyroxenite phases. During 2008 Teck completed over 5700 m of drilling at Lorraine-Jajay, by way of follow-up on its Lower Main, Bishop and TooGood targets from 2007, and on 6 new targets including All Alone Dome North, Target X and Page Bowl. At Jan/Tam/Misty the company completed about 1200 m of drilling on its 2007 targets Boundary and Slide, and on one new target.

Serengeti Resources Inc continued to delineate its **Kwanika** porphyry copper-gold-molybdenum deposit in the Quesnel terrane, about 40 km east of Takla Landing and 85 km north of Mt. Milligan. In 2008, Serengeti completed some 30 000 m of drilling, along with geochemistry and IP; and results continue to be impressive. Three mineralized zones, South, Central and North, have been investigated so far by over 55 000 m of drilling. The mineralized system is oriented in a north-northwest direction for up to 750 m in length and 200 m across, and is up to 500 m deep. In the Central zone, hole K-114 returned 0.98% Cu and 1.24 g/t Au over an interval of 94 m (Figure 3.16); and hole K-113 intersected 0.5% Cu and 0.9 g/t Au over 483 m. In the South zone, hole K-110 intersected 54 m assaying 0.34% Cu and 0.76 g/t Au. By late 2008, initial metallurgical testing was underway on a representative sample to predict copper-gold recoveries. A resource estimate is expected early in 2009.

Alpha Gold Corp completed about 2400 m of drilling on untested targets within its **Lustdust** property, about 5 km north of Serengeti’s Kwanika deposit. The program was aimed at testing for continuity of gold-copper mineralization from Kwanika. Alpha Gold is still awaiting a NI 43-101 report on the Canyon Creek Skarn and Skarn Extension, which were explored in 2006 and 2007. These complex skarn, replacement zone and vein deposits are

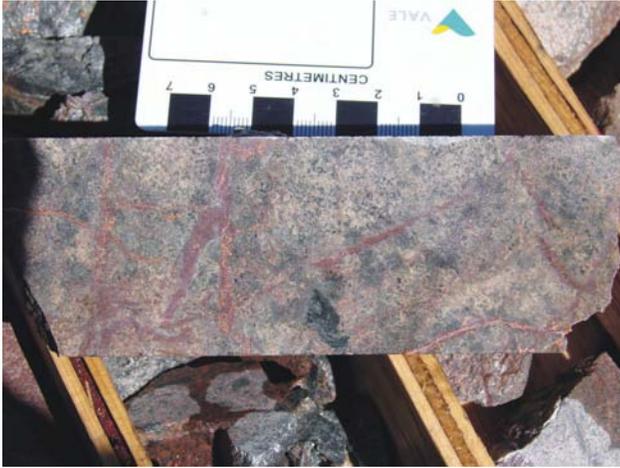


Figure 3.16. Native Copper in drillhole K-08-114, 252 m, Kwanika project.

characterized by gold-copper-silver mineralization hosted in limestone and phyllites of the Cache Creek Terrane proximal to the Pinchi Fault.

Eastfield Resources Ltd completed an IP survey and a 1035 m drilling program on its **Indata** property south of Tsayta Lake. The company is exploring a set of polymetallic (gold-silver) mesothermal veins, and a possible porphyry copper deposit, that has seen sporadic activity over the past 20 years. Recent encouraging soil geochemical and IP results spurred the 2008 program.

In January 2008, Geoinformatics Exploration Inc announced that the first two holes drilled in 2007 on its **Falcon** prospect just north of Tchentlo Lake had encountered encouraging molybdenum values in a “highly-altered and porphyry-related mineralized system” on the west side of the Hazen Batholith. Two holes, drilled 400 m apart in 2007, returned 346 m grading 0.059% MoS₂ in the first, and 144 m grading 0.093% MoS₂ and 137 m grading 0.066% MoS₂ in the second. The company followed-up in 2008 with rock and soil geochemistry on the prospect, and a further 3 000 m of drilling in which visible molybdenite was encountered in all eight holes.

TOODOGGONE – KEMESS AREA

Northgate Minerals Corp scaled its 2008 exploration program back drastically from 2007, when its focus had been in developing prospects related to the proposed Kemess North mine. The 2008 program was entirely related to possibly extending the life of the **Kemess South** mine, which otherwise would be exhausted in mid-2011. The company completed an IP survey on grid north of the tailings dam, which might lead to a 2009 drill program.

Milling of silver-gold ore from Sable Resources’ underground **Shasta** mining/exploration operation,

located about 30 km North of the Kemess Mine, began in early 2008 as a seasonal operation. Most recently, underground development was concentrated in the Creek Zone, in a gently-dipping set of quartz veins and stockwork zone having a strike length of over 800 m. Results on the Creek zone were erratic, however, and better results were obtained in the D and JM zones. Ore is processed at the Baker Mill, about 11 km distant.

During 2008, Starfire Minerals Ltd continued a drilling program on its **Porphyry Pearl** gold property, located about 55 km north of the Kemess South Mine. Starfire completed a six-hole, 2130 m program and released the results of the first of these holes, which intersected 140 m grading 0.67 g/t Au. Porphyry Pearl is underlain principally by Hazleton Group volcanic rocks of the Early Jurassic Hazelton Group and includes two styles of mineralization: porphyry-type gold-copper disseminations and fracture-fillings in an altered granitic host, and epithermal vein and disseminated base and precious metals.

Early in 2008, GGL Diamond Corp completed a VTEM (Versatile Time-domain ElectroMagnetic) airborne survey of its **McConnell Creek** property located about 30 km southeast of the Kemess South mine. This was followed by an extensive IP survey, geochemical sampling, and a diamond drilling program of about 1000 m, aimed at locating possible copper-gold porphyry mineralization.

Newcrest Mining Ltd carried out about 2500 m of diamond drilling on its **Croy-Bloom** gold-copper-molybdenum porphyry deposit prospect, optioned from Serengeti Resources Inc, south of the Kemess Mine and McConnell Creek.

GATAGA – KECHIKA TROUGH

In September 2008, Mantle Resources changed its name to Canada Zinc Metals Corp. The company continued intensive exploration of its **Akie** sedex lead-zinc-silver project, located about 250 km northeast of MacKenzie and 50 km north of the north end of Williston Lake. The property is underlain by folded shales and siltstones of the Upper Devonian Gunsteel Formation. The mineralized zone is up to 30 m thick and is characterized by finely laminated sphalerite, galena and pyrite within a thicker pyrite-barite unit. The 2008 project involved 6226 m of heli-supported drilling, with 12 holes on the Cardiac Creek zone and 2 on the North Lead zone (Figure 3.17). Considerable effort also went into constructing a mainline road almost 9 km in length, and some 3.7 km of trail, in the interest of improving access for future exploration. In June 2008, a NI 43-101 compliant report on the property identified an inferred resource of 23 595 million tonnes grading 7.60% Zn, 1.50% Pb, and 13.0 g/t Ag in a “relatively continuous zone.” The 2008 drill program was an outcome of that report, and confirmed an up-dip extension of the Cardiac



Figure 3.17. Drilling the North Lead deposit, Akie project.

Creek deposit in excess of 100 m, and an extension along strike to the southeast of about 100 m. As currently defined the deposit is now at least 1 km in length and 550 m downdip.

OUTLOOK FOR 2009

The year 2008 was a financially unsettled one for the exploration industry. Some companies curtailed or cancelled their programs on the basis of funding issues, but the major players remained present with high levels of activity. While other metals declined substantially in price, gold remained in excess of \$700 US/oz. Attractive gold prices should make for a continued high level of interest in developing properties in the North-Central Region. In the final analysis, the mineral sector will no doubt do better as the economy recovers.

Government and First Nations are working towards revenue sharing and other agreements that, once in place, could provide a more certain context for exploration and mining activity.

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