

EXPLORATION AND MINING IN OMINECA REGION, BRITISH COLUMBIA

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SUMMARY AND TRENDS

In 2011, significant management changes, takeovers and acquisitions affected the Omineca Region. Having met the terms and conditions of an option/joint venture agreement entered with First Point Minerals Corp in 2009, Cliffs Natural Resources Corp acquired controlling interest in First Point's **Decar** nickel project and became the exploration program manager. Eastfield Resources' **Km 26** project was sold to OroAndes Resource Corp in September, with Eastfield to continue for the time being as "Control Person" in respect of the project. In October, Aurico Gold Inc acquired Northgate Minerals Corp and, along with that, Northgate's **Kemess** mine and **Kemess Underground** project. Paget Minerals transferred its interest in its **Buck** property to Silver Quest Resources, and Silver Quest in turn was sold to New Gold Inc. New Gold also acquired Richfield Ventures Corp, and with it Richfield's important **Blackwater** gold project. By the end of the year, New Gold had further consolidated its holdings in the area through its acquisition of Geo Minerals Ltd, holder of the nearby West Blackwater property.

Construction was underway throughout 2011, leading to production from Thompson Creek Metals' **Mt Milligan** mine planned for late 2013. Northgate Minerals Corp's **Kemess** mine ceased production in January 2011, and the permitting process for its nearby **Kemess Underground** mine project was underway. Sable Resources' **Shasta** underground silver-gold operation in the Toodoggone area continued seasonal production.

The Omineca Region saw an apparent doubling in exploration activity after a strong 2010, continuing the rebound that followed the 2008 recession. Total exploration expenditures in 2011 were an estimated \$71.5 million. This substantial increase from \$33 million in 2010 certainly demonstrates the busy year, but may in part reflect limited reporting due to a lengthy absence without a regional geologist in this region. Likewise drilling activity, at a total of about 162 000 m, compared to about 83 000 m in 2010.

The principal exploration focus remained upon porphyry and epithermal copper-gold prospects in the Quesnel and eastern Stikine terranes. In addition to porphyry deposits, sedimentary exhalative (SEDEX), rare-earth elements, ultramafic-hosted nickel, and vein-hosted gold deposits remained important targets. The

main focus of industrial mineral exploration was high-purity sandstone for processing into frac sand.

Exploration highlights, in alphabetical order of project, included:

- Continued exploration and site preparation for underground workings by Canada Zinc Metals Corp on its **Akie** and related prospects northeast of Williston Lake;
- Renewed exploration by Taseko Mines Ltd. of its carbonatite-hosted **Aley** niobium deposit;
- Drilling and pilot plant testing by Stikine energy Corp of its **Angus** silica deposit southeast of Bear Lake;
- Continued extensive drilling by New Gold Inc on its **Blackwater** gold project (acquired from Richfield Ventures Ltd) and, its Capoose silver project (acquired from Silver Quest Resources Ltd);
- Exploration by Canadian International Minerals Inc on its **Carbo** rare earth element project east of Bear Lake;
- Extensive drilling by Cliffs Natural Resources Inc on its **Decar** serpentinite-hosted Ni deposit;
- Further diamond drilling by Serengeti Resources Inc on its **Kwanika** deposit, and regional exploration work the Quesnel trough;
- The discovery by Leeward Capital Corp of a high-grade porphyry molybdenum zone on its **Nithi Mountain** property;
- Diamond drilling and extensive IP surveying by XStrata Copper Canada as part of its ongoing evaluation of the southern **Quesnel trough**.

Locations of projects discussed in this report and considered to be of regional significance are shown in Figure 1. The approximate allocation of expenditures among greenfield, early phase, advanced phase, and mine development expenditures is set out in Figure 2. Placer exploration and mining, while a significant traditional activity within this Region, is not considered in this report.

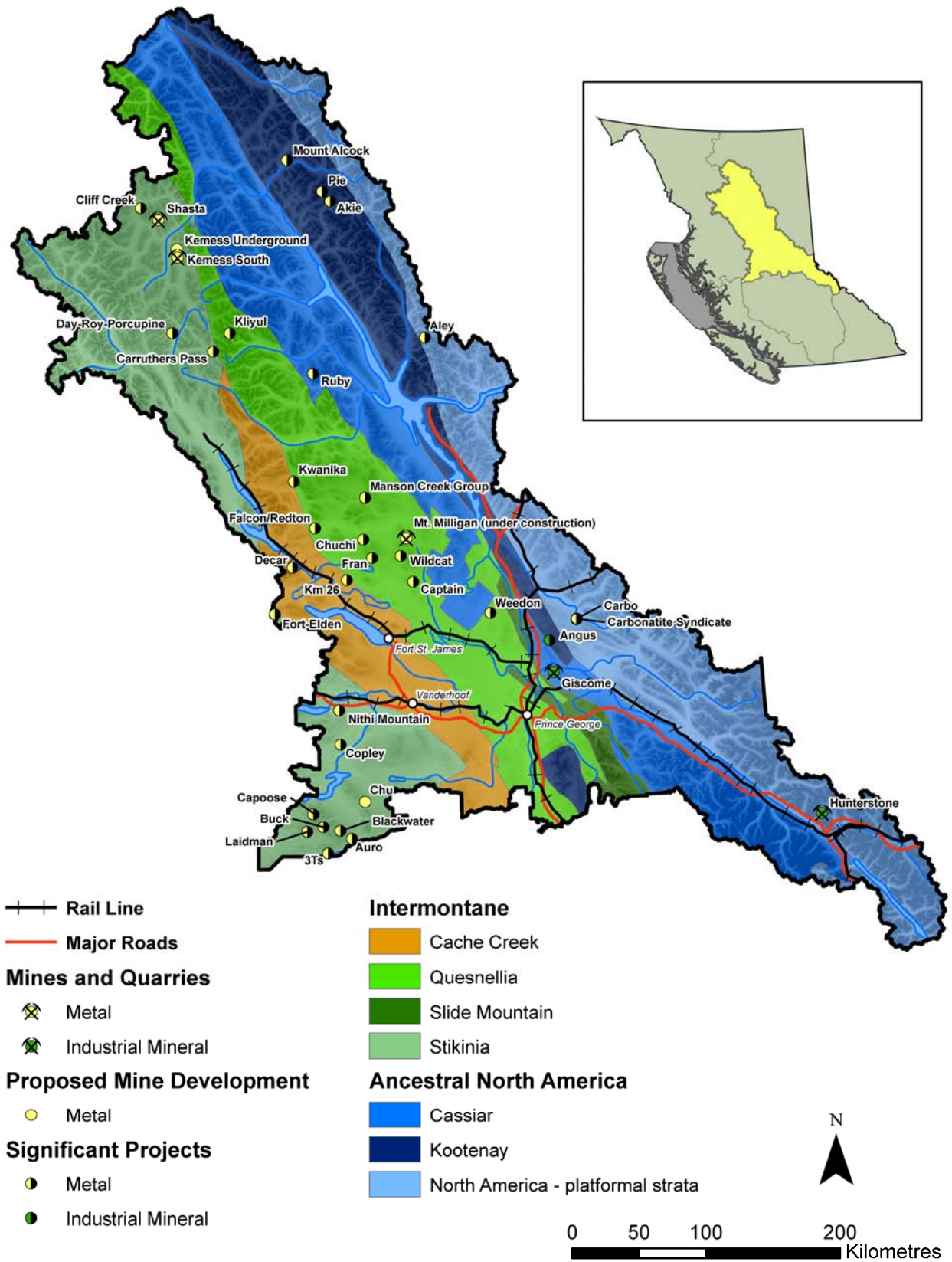


Figure 1. Mines and Major Exploration Projects, Omineca Region.

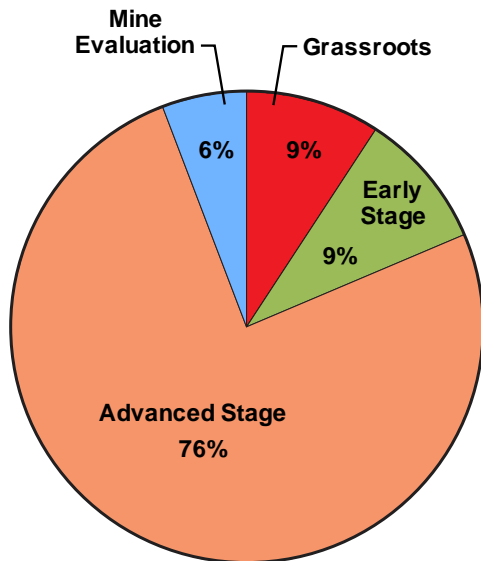


Figure 2. 2011 exploration expenditures, by exploration stage (Grassroots: search for an exploration target; Early Stage: focused initial work on a target; Advanced Stage: resource delineation; Mine Evaluation: Focus on EA certificate, community acceptance and government approval).

MINES, MINE DEVELOPMENT AND MINE RECLAMATION PROJECTS

Since acquiring Terrane Metals Corp in late 2010, Thompson Creek Metals Co Inc has continued to move aggressively towards development of its **Mt Milligan** copper-gold porphyry deposit. Completion of mine development, at a total cost of \$1 265 million, is anticipated in 4th quarter 2013 (Figure 3). As of November, more than 13 000 m³ of concrete had been poured, and engineering design was more than 75% complete. Mine development expenditures in 2011 have



Figure 3. Mine development at Mt. Milligan (courtesy Thompson Creek Metals).

not been published but, based on early 2011 expenditures, the estimated total cost, and the timing of mine development, these may amount to at least \$200 million. Once in operation, production will ramp up to 60 000 tonnes per day over an expected mine life of 22 years. During construction, employment is expected to peak at over 600; and the mine production labour force – all of whom will commute from Fort St. James and Mackenzie – will be about 400. Reserves stand at 952.5 million kg Cu and 170 000 kg Au.

In October 2011 Northgate Minerals Corp was acquired by Aurico Gold, and with it Northgate’s Kemess Projects. Kemess South mining activity ended in late 2010, although mill production continued until March 2011. In 2011, 3.04 Mt of ore were processed to produce 2 947 million kg of Cu and 410 kg of Au from the old workings.

Meanwhile in 2011, the **Kemess Underground** (formerly “Kemess North”) project was in the permitting process leading to production. Kemess Underground will use the same concentrator and tailings facility as Kemess South, and ore will be extracted by a block/panel cave operation over an approximate 12-year mine life. A preliminary economic assessment for the project was completed in 2011 and, based on its positive recommendation, a full feasibility study is to be completed in 2012. Over 6000 m of drilling were completed as part of the engineering, geotechnical and environmental phases of the project.

Indicated Resources at Kemess Underground are 136.5 Mt containing 73 710 kg Au and 390.4 million kg Cu. Within this is located a 10.3 million tonne “high-grade sector” containing 12 760 kg Au and 54 million kg Cu grading 1.35 grams per tonne Au and 0.52% Cu, respectively.” The projected annual production from Kemess Underground is expected to average 2700 kg of Au and 18.8 million kg Cu, using the existing facilities from the Kemess Mine to process ore and impound tailings. The mine will exploit what Aurico describes as a “classic calc-alkaline porphyry” copper-gold deposit hosted by Lower- to Mid-Jurassic monzonitic intrusions.

TTM Resources’ **Chu** porphyry Molybdenum project south of Vanderhoof, still undergoing environmental baseline studies, saw a limited drilling program to check the probable mining conditions in its “starter pit” east and west zones. In addition, a 6-10 tonne bulk sample is being sent to SGS Lakefield for pilot plant-scale metallurgical testing to determine whether Mo recoveries can be improved. The Chu project to date has been tested by about 70 000 m of diamond drilling, that has defined a low-fluorine molybdenum porphyry hosted by a quartz stockwork, mostly in hornfelsed siltstone. The deposit contains measured plus indicated resources of 371 Mt at a cutoff grade of 0.04% Mo, and an inferred resource of 257 Mt at the same cutoff.

Sable Resources Ltd's **Shasta** mine continued to be an intermittent gold and silver producer, with the ore processed at the nearby Baker mill.

Reclamation efforts at old mine sites are an ongoing activity. In 2011, SNC Lavalin was site contractor in respect of the former Ingenika and Onward mines, located on Tse Keh Nay traditional territory near Delkluz Lake. Work included redeveloping road access (for later decommissioning), removing mining refuse and debris, decommissioning old buildings, recontouring disturbed areas and revegetating as applicable, and environmental studies. Late in 2011, Northgate Minerals/Aurico was recognized by the BC Technical Committee on Reclamation by the conferral of the Jake MacDonald award for outstanding reclamation achievements at the Kemess South mine. Some 250 hectares, out of approximately 600 disturbed, were in the final stages of reclamation, including the decommissioning of mine infrastructure, recontouring and developing drainage control, and revegetating using native species.

QUARRIES

Chemical Lime Company of Canada Inc operates a small limestone quarry about 5 km southeast of **Giscome**. Activity has been minimal in recent years, with most shipments from the quarry being from stockpiled material. Within the community of Giscome itself, Canadian National Railway Company continued 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

Mineral exploration in the Omineca region was extremely active in 2011, with some 105 approved Notices of Work for 2011 issued to 50 operators – 11 of whom spent in excess of \$1 million on their projects. Much of this work was centred on the Quesnel and Stikine terranes, where both porphyry and epithermal projects were important; but SEDEX, rare earth element and ultramafic-hosted deposits captured much interest as well. Activities on major projects in 2011 are summarized in Table 1.

Porphyry Copper, Gold and Molybdenum Projects

Porphyry projects in the Omineca Region are located within the Quesnel and Stikine volcanic terranes. Generally they may be grouped into copper-gold porphyry deposits and prospects in the Quesnel terrane,

and gold and molybdenum porphyries in the southeastern Stikine terrane.

Goldreach Resources Ltd, working southeast of Blackwater on its **Auro** project, completed a roughly 3 000 m drilling program with disappointing results, along with an airborne ZTEM survey.

Leeward Capital Corp, continuing its exploration of its **Nithi Mountain** porphyry molybdenum project just south of Fraser Lake, completed a 7000 m drilling program. The 2011 project identified a high-grade molybdenum phase within its Delta Zone, about 1 km in length and open in both directions. By way of example, D-11-60 included 24.38 m grading 0.122% Mo, D-11-61 includes 6.1 m grading 0.188% Mo, and D-11-54 included 62.69 m grading 0.119% Mo. Excluding the 2011 discovery, the resource estimate as of August 2011 was of 148 Mt total indicated resources grading 0.023% Mo, and inferred resources of 240 Mt grading 0.20% Mo. The Nithi Mountain deposit bears strong geologic resemblance to the nearby Endako mine.

Well to the north of these projects, Kiska Metals continued evaluation of its **Falcon/Redton** copper-gold and molybdenum porphyry prospects. The original Falcon molybdenum discovery had been made in 2007; and other targets were developed subsequently – including in particular the “Red Zone” copper-gold porphyry. In 2011, these two targets were the particular focus of a substantial IP and geochemical exploration program. Follow-up drilling is expected in 2012.

Several projects were underway in the general vicinity of the Mt. Milligan mine development. Teck Resources Ltd completed an extensive IP survey, and soil geochemistry, on its **Weedon** Project. Orestone Mining's **Captain** porphyry copper-gold project, about 65 km northeast of Fort St. James, was explored by a modest IP program and about 1200 m of diamond drilling. To the north of Captain, Cayden resources conducted a diamond drilling program on the same scale in order to expand its known resource and to test additional targets on its **Wildcat** copper-gold monzonite-hosted porphyry deposit. About 30 km west of Mt. Milligan, Yankee Hat Minerals Ltd completed about a 1100 m drilling program on its **Fran** copper-gold porphyry property. Also to the west of Mt. Milligan, Logan Resources Ltd undertook mapping, IP and geochemical exploration on its **Chuchi** porphyry copper-gold target.

To the east of Fort St. James, Torch River Resources Ltd completed a 150 m drilling program aimed at evaluating “the extent of porphyry style Cu-Mo-Ag-bearing mineralization located on **Fort-Elden** breccia zone.”

Further to the North, Serengeti Resources Ltd continued exploration on its **Kwanika** copper-gold porphyry deposits, completing a 1320 m drilling program to test new targets and an extensive geochemistry program to support future targeting. Activities on Kwanika to date have defined two closely-separated

TABLE 1. MAJOR EXPLORATION PROJECTS, OMINECA REGION, 2011

Property	Operator	MINFILE (NTS ref)	Commodity	Deposit Type	Work Program
3Ts	Silver Quest Resources Ltd	093F 055, 068	Ag, Au	low-sulphidation epithermal	GC, DD (1645 m)
Akie	Canada Zinc Metals Corp	094F 031	Zn, Pb, Ag	SEDEX	A, GC, EN, DD (6028 m), GD (444 m)
Aley	Taseko Mines Ltd	094B 027	Nb	carbonatite	DD (20 000 m)
Angus	Stikine energy Corp	(093J 042)	sandstone	sedimentary	G, DD, GC (rock), PP, DD (1850 m)
Auro	Goldreach Resources Ltd	(093F/2)	Au	low-sulphidation epithermal	A, AB-EM, DD (3003 m)
Blackwater	New Gold Inc	093F 037	Au, Ag	low-sulphidation epithermal	A, IP, GC (rock), DD (60 000 m)
Blackwater East & West	RJK Explorations Ltd	093F 037	Au, Ag	low-sulphidation epithermal	P, IP, AB-EM, GC (soil & silt, rock)
Capoose	New Gold Inc	093F 040	Ag, Au	vein	A, IP, AB-EM, AB-MG, GC, EN, DD (4759 m)
Captain	Orestone Mining Corp	093J 026	Cu, Au	porphyry	IP, DD (2000 m)
Carruthers Pass	Cariboo Rose Resources Ltd	094D 172	Au, Ag, Pb, Zn	VMS	IP, DD (801 m)
Carbo	Canadian International Minerals Inc	093J 014	REE	carbonatite	GC (rock), DD (3090 m)
Carbonatite Syndicate	Bolero Resources Corp	093J 014	REE	carbonatite	GC (soil), DD (2000 m)
Chu	TTM Resources Inc	093F 001	Mo	porphyry	EN, DD (2000 m)
Chuchi	Logan Resources Ltd	093N 159	Cu, Au	porphyry	IP, GC (soil, silt, rock)
Cliff Creek	Guardsmen Resources Inc	094E 066	Au, Ag	low-sulphidation epithermal	UG (dewatering)
Copley	Kootenay Gold Inc	(093F 076)	Au	low-sulphidation epithermal	A, GC, DD (1008 m)
Day-Roy-Porcupine	Equitas Resources Corp	094D 065	Cu, Au	Porphyry	AB-MG, GC (soil, rock), DD (280 m)
Decar	Cliffs Natural Resources Inc	093K 041	Ni	ultramafic	GC (rock), BU (250t), MS, EN, DD (12 000 m)
Falcon/Redton	Kiska Metals Corp	(093N 017)	Cu, Au, Mo	alkalic porphyry	P, G, IP, GC (soil, silt, rock)
Fort-Elden	Torch River Resources Ltd	093K 093	Cu, Au, Mo	porphyry	DD (1500 m)
Fran	Yankee Hat Minerals Ltd	093K 108	Cu, Au	porphyry	DD (1100 m)
Laidman	National Gold Corp	093F 067	Au, Ag	vein	TR, IP, GC (rock)

TABLE 1. CONTINUED

Property	Operator	MINFILE (NTS ref)	Commodity	Deposit Type	Work Program
Kemess Underground	Aurico Gold Inc	094E 021	Cu, Au	calc-alkalic porphyry	GDS (6 166 m)
Kliyul	Kiska Metals corp	094D 023	Cu, Au	porphyry	IP
Km 26	Oroandes Resource Corp	(093K 027)	Ni, Au	ultramafic	IP
Kwanika	Serengeti Resources Inc	093N 019	Cu, Au	alkalic porphyry	A, GC (soil), DD (1320 m)
Manson Creek group	Angel Jade Mines	(093N 068)	Au	vein	TR, GC (rock)
Mount Alcock/Pie	Canada Zinc Metals Corp	094F 023	Zn, Pb, Ag	SEDEX	G, GC (soil, silt, rock)
Nithi Mountain	Leeward Capital Corp	093F 006- 016	Mo	porphyry	A, EN, DD (7000 m)
Ruby	Brocade Metals Corp	094C 022	Au, Ag	vein	A, P, G, AB-MG, AB- RD, TR, GC (soil, silt, rock)
Quesnel Trough	Xstrata Copper Canada	(093J, K)	Cu, Au	porphyry	A, IP, GC (soil, rock), DD (7563 m)
Weedon	Teck Resources Ltd	093J 062, 072	Cu, Au	alkaline porphyry	IP, GC (Soil)
Wildcat	Cayden Resources Inc	093N 228	Cu, Au	porphyry	GC (rock), DD (2000 m)

Work Program Abbreviations:

A = access (trail, road construction on claims; AB-EM = airborne electromagnetics; AB-MG = airborne magnetics; AB-RD = airborne radiometrics; BU (X tonnes) = bulk sample (weight in tonnes if known); CD = condemnation drilling; CQ = coal quality testing; CT = carbonization test (coal); DD (Xm) = diamond drilling 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 = geotechnical drilling; GP = geophysics (general); IP = induced polarization; 3D-IP; MG = magentics; 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; PP = pilot plant; 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)

deposits, designated the Central (Cu-Au) and South (Cu-Au-Mo-Ag) Zones. The Central Zone is hosted in and around a potassically-altered monzonite stock, and contains a combined indicated and inferred resource of 96.1 Mt of “open pit resource” containing an estimated 355 Mkg Cu and 31 185 kg Au. The South Zone is in a fault-bounded sequence of strongly altered alkali to intermediate intrusive rocks and contains an inferred resource of 74.3 Mt containing 248 Mkg Cu and 8 220 kg Au. Work was begun on a preliminary economic assessment of the higher-grade Cu-Au resource. In addition to work at Kwanika, IP surveys were completed on several other properties in the same vicinity.

As part of its ongoing **Quesnel trough** project, and partly in joint venture with Serengeti, XStrata Copper Canada completed a total of almost 300 line km of IP survey, about 7500 m of diamond drilling, and geochemical exploration across some 19 claim blocks.

Farther to the north, Kiska Metals Corp completed a significant IP exploration program on its **Kliyul** copper-gold porphyry project. Equitas Resources began an early-stage evaluation of its **Day-Roy-Porcupine** copper-gold porphyry property about 50 km south of Kemess. An airborne magnetic survey was flown, rock and soil samples collected, and one initial diamond drill hole completed. Continuation of the program is planned for 2012.

Epithermal and Vein-type Projects

The extreme southeast corner of the Omineca region saw intense activity by New Gold Inc on its **Blackwater** bulk tonnage Au project, based out of its 100-person camp. By 2012 the company expects to have 12 drills in operation on the property.

New Gold has chosen to classify Blackwater as a “low-sulphidation epithermal gold-silver deposit,” hosted within Jurassic Hazleton Group volcanic rocks and developed above (and coeval with) Cretaceous rhyolitic intrusions. There appears to be regional structural control. The deposit remains open in all directions and at depth; and as of September 2011 resources stood at 165 Mt indicated, averaging 1.01 g/t containing 153 000 kg Au; and 39 Mt inferred, averaging 0.94 g/t containing 34 000 kg Au. These estimates were made using a cutoff grade of 0.4 g/t of Au. Very intensive diamond drilling on the project, totaling about 60 000 m, continued throughout 2011, and plans are for a much more extensive program in 2012. The 2011 drilling program was supplemented by IP and by rock and soil geochemical surveys.

In related activities, Silver Quest/New Gold completed some 4 500 m of drilling on the **Capoose** project, a Titan 24 IP program, and an airborne EM/Magnetic survey. Capoose is a disseminated silver-gold deposit, with minor lead and zinc, hosted by intermediate to acidic garnetiferous volcanic and sedimentary rocks. Silver Quest also completed a drilling and geochemical reconnaissance of its **3Ts** property. Located between Capoose and Blackwater, Parlance Resources completed a significant stream sediment and soil geochemical program on its **Big Bear** project (Figure 4).

Close by Blackwater, RJK Explorations conducted an IP survey, an extensive Digem V Ztem airborne survey, and geochemical prospecting to define areas for future drilling on its **Blackwater East** and **Blackwater West** holdings. A short distance to the west of Blackwater, Global Geological Services (for National Gold Corp) completed a program of trenching, IP and geochemical surveys on its **Laidman** property (Figure 5).

South of Fraser Lake, Kootenay Gold Inc (Joint Venture with Northern Vertex Capital Inc) completed a drilling and trenching program on its **Copley** project, which it considers to be in a low sulphidation epithermal gold setting similar to Blackwater.

In the **Manson Creek** area, Angel Jade Mines completed extensive trenching and sampling across five potential epithermal gold prospects in a well-established placer gold area.

Brocade Metals Corp undertook detailed mapping and sampling of its **Ruby** prospect trench area first examined by Cominco in the 1940s (Figure 6). This detailed examination was supplemented by airborne



Figure 4. Silt Sampling at the Big Bear project (courtesy Parlance Resources).



Figure 5. Trenching at the Laidman Project (courtesy National Gold Corp).

magnetic and radiometric surveys across the entire property area, and by extensive soil and silt geochemistry. Ruby is a silver +/- gold (minor lead and zinc) vein complex prospect hosted within the Upper Proterozoic Ingenika Group of metasedimentary rocks.

In the far north of the Region, Guardsmen Resources began the process of re-accessing its **Cliff Creek** underground workings by dewatering the old test mine. The mine opening had exploited a low-sulphidation epithermal vein system developed by Cheni Gold Mines Inc in the 1980s and 1990s.



Figure 6. Channel sampling at Brocade Metals' Ruby Project (courtesy Brocade Metals).

SEDEX and Massive Sulphide Projects

Cariboo Rose Resources Ltd followed-up with drilling in tantalizing indications of volcanogenic (Cu, Zn, Ag, Au) massive sulphides at its **Carruthers Pass** project about 70 km south of the Kemess Mine. Additional massive sulphides were encountered, and further work is planned.

To the north of Williston Lake, Canada Zinc Metals Corp continued developing its advanced-stage **Akie** zinc-lead SEDEX deposit and the nearby **Pie** and **Mount Alcock** prospects. The project is located geologically within the Paleozoic Selwyn Basin, a prolific sedimentary environment for this type of deposit, in the Kechika Trough at its southernmost extent. In 2011, over 6000 m of drilling were completed on the Cardiac Creek Zone at Akie, including extensions to the southeast and northwest (Figure 7). Geotechnical drilling in support of a planned access portal were completed, along with trail



Figure 7. Diamond drilling on the Northwest extension of the Akie SEDEX project (courtesy Canada Zinc Metals).

improvements leading to the site. Environmental baseline studies continued as well. Exploration on Pie and Mount Alcock (together the Kechika Project) consisted of geological mapping; and soil, silt and rock geochemistry.

Rare Earth Metal Projects

Bolero Resources Corp continued exploration on its “**Carbonatite Syndicate**” project northeast of Prince George and close by Spectrum Mining’s Wicheeda project. Drilling on the project targeted coincident geophysical and cerium-lanthanum-in-soil anomalies identified in previous programs.

Carbonatite-hosted rare earth elements were also the subject of Canadian International Minerals Inc’s exploration of its **Carbo** project, about 80 km NE of Prince George and 50 km east of Bear Lake, and also adjoining the Wicheeda project. Carbonatite intrusions in that area have been identified as hosting niobium and light rare earth elements (La, Ce, Pr, Nd). Following-up encouraging 2010 results, over 3000 m of drilling were completed on three targets in 2011, with carbonatite encountered in four out of six holes (Figure 8). In addition, a 250 tonne bulk sample was taken for metallurgical testing, and environmental studies on the property were begun.

Taseko Mines continued work on its **Aley** niobium (carbonatite) deposit, located about 140 km north of Mackenzie, completing a substantial diamond drilling program that is expected to allow conversion of the current inferred resource estimate to that of indicated and measured. The inferred resource consists of 159 Mt grading 0.43% Nb₂O₅, with a cutoff at 0.20% Nb₂O₅. The niobium mineralization is highly continuous and close to surface, and the deposit (based on 2010 results) remains open in three directions and at depth.



Figure 8. Drill on-site at the Carbo REE project (courtesy Canadian International Minerals).

Ultramafic-hosted Projects

In June 2011 Cliffs Natural Resources Inc became project manager of First Point Minerals Corp’s **Decar** project, and began a very active field season. At Decar, the rare mineral Awaruite is targeted in an ultramafic host. Awaruite is an alloy of 75% Ni and 25% Fe (Ni₃Fe), which at Decar comprises between 0.1% and 0.15% of its host rock. In July, Cliffs began drilling in the “Baptiste and “Sydney” zones, and a total of 11 166 m were completed. Metallurgical testing was initiated on this very unusual resource, and an environmental baseline study begun. Studies to date, using a composite sample from 2010 core, indicated a head grade of 0.22% total Ni, of which 0.14% appeared to be potentially recoverable.

OroAndes Resource Corp, with Eastfield Resources as operator, completed a significant IP survey of a similar target, **Km 26**, about 30 km to the east of Decar.

Industrial Mineral Projects

In 2011, Stikine Energy Corp changed the focus of its exploration for sources of bedrock-sourced frac sand from the high-purity **Nonda** deposit not far from the Yukon border to the **Angus** project, located about 12 km southeast of Bear Lake in the southern part of the Region.

At Nonda, A bulk sample collected the previous season was evaluated and an environmental baseline study begun. A conservative inferred resource of 625 Mt was identified. At Angus Ridge, a diamond drilling evaluation consisting of 11 boreholes totaling 1850 m was completed, along with mapping, petrographic studies, and rock geochemistry (Figure 9). Work was begun on an environmental baseline study. In addition to work on Nonda and Angus, Stikine undertook a broad-based reconnaissance of other possible frac sand sources in Northern BC.



Figure 9. Drilling blast holes for bulk sample at the Angus property (courtesy Stikine Energy).

Stikine Energy also established a pilot plant in Abbotsford, BC, to test crushing and scrubbing the sandstone product from the Nonda and Angus projects to ensure that an acceptable frac sand product can be generated at low cost.

2012 OUTLOOK

2011 was a year which saw a resurgence of confidence and investment in mineral exploration and development and that was certainly reflected by the level of activity in the Omineca Region. As long as metal prices hold, there is every reason to expect a very active season in 2012. Global economic circumstances as they developed in 2011 have introduced a level of uncertainty that may mitigate against greatly expanded activity, however. Work will continue to bring Mt. Milligan into production, and Kemess Underground is in the wings as a new producer.

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