

Schroeter, Tom EM:EX

884004

TFS → HVC

From: Schroeter, Tom EM:EX
Sent: Wednesday, September 22, 2004 11:21 AM
To: Cathro, Mike EM:EX
Subject: RE: HVC Mo Conc. to Endako?

Thanks, I thought they had stopped shipping their moly conc. to endako a year or so ago.

Tom

Tom Schroeter, P.Eng./P.Geo.
Senior Regional Geologist
Geological Survey and Development Branch
Mining and Minerals Division
Ministry of Energy and Mines

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-----Original Message-----

From: Cathro, Mike EM:EX
Sent: Wednesday, September 22, 2004 11:07 AM
To: Schroeter, Tom EM:EX
Subject: RE: HVC Mo Conc. to Endako?

Hi Tom, No idea whether any of it goes to Endako, nor who to talk to out there.

There was a talk at CIM on the upgrades to the HVC moly circuit. Sounded to me like HVC has its own leach plant to treat the moly con. Their overall Mo recoveries have been climbing from about 49 to 57%. Combined with the grade improvement in the pit, they are now producing about 1 million lbs of MoS₂ per month (versus 300-400,000 lbs per month a few years ago). At \$18/lb they are making huge money on moly right now.

Mike

Mike Cathro, P.Geo
Regional Geologist, Mining Operations Branch
B.C. Ministry of Energy and Mines
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From: Schroeter, Tom EM:EX
Sent: Wednesday, September 22, 2004 9:25 AM
To: Cathro, Mike EM:EX
Subject: HVC Mo Conc. to Endako?

Mike, is HVC still shipping its moly concentrate to Endako? If so, any idea of how much (3314 tonnes?) - more importantly, how much were/are they getting paid for from Endako (i.e. treatment charges?) (is this something that someone at HVC might share with you?). A client is asking about a place to send/treat moly.

Tom

Tom Schroeter, P.Eng./P.Geo.

* June 2006: HVC = World's 5th largest Cu operator
@ 175,000 t Cu concentrate/year

Schroeter, Tom EM:EX

VGB → HVC

From: Ostle, Bob EM:EX
Sent: Tuesday, November 04, 2003 8:23 AM
To: Lefebure, Dave EM:EX; Hermann, Fred EM:EX; Carter, Michael EM:EX; Schroeter, Tom EM:EX
Cc: Pardy, Jamie EM:EX
Subject: Highland Valley Copper News - FYI

Dow Jones Business News

Contract Talks Continue At BC's Highland Valley Copper
Monday November 3, 5:38 pm ET

VANCOUVER -(Dow Jones)- Contract negotiations continue at the Highland Valley Copper mine in British Columbia, company and union officials say.

The sides haven't yet progressed to talking about monetary issues, but have dealt with many non-monetary items, both sides said.

The latest collective agreement with United Steelworkers of America Local 7619, representing more than 700 mine workers, expired Sept. 30.

Mine spokesman Trevor Phelps said the parties have made progress but declined to provide details.

Richard Boyce, president of USWA Local 7619, said one remaining non-monetary issue is hours of work, and he called it contentious. The company wants to reduce the number of employee breaks, but the union is concerned with safety aspects of that, Boyce said.

The previous five-year contract tied mine workers' wages to the price of copper on the London Metals Exchange, but this year workers are looking to achieve gains. The union feels that "we're in the driver's seat this time around," Boyce said.

Copper prices recently moved above 90 cents a pound. In 1999, when the previous mine contract was approved by workers - and was retroactive to Oct. 1998 - copper averaged 71 cents a pound.

The Highland Valley open-pit mine, one of the world's largest copper operations, is located south of Kamloops, B.C., or about 200 kilometers northeast of Vancouver.

Teck Cominco Ltd. , with 63.9%, and BHP Billiton Ltd. , with 33.6%, are the mine's major owners. Japanese and Korean copper smelters are big customers of the mine.

In 2002, the mine produced 385.9 million pounds of copper and it's on track to produce about 350 million pounds in 2003.

-Lynne Olver, Dow Jones Newswires; 604-669-1595

Bob Ostle
External Relations Branch
(604) 660-3378

Schroeter, Tom EM:EX

VOS → HVC

From: Schroeter, Tom EM:EX
Sent: Wednesday, November 06, 2002 10:36 AM
To: Cathro, Mike EM:EX; Wojdak, Paul EM:EX; Lane, Bob EM:EX; Terry, David EM:EX; Houle, Jacques EM:EX
Cc: Lefebure, Dave EM:EX; Grant, Brian EM:EX
Subject: RE: BC Mineral Expl'n review 2002 - 'Schedule' Deadlines

Mike - that's what I'm looking for (+ # of major (>\$100K) projects). An updated/revised Exploration Spending Table would also be helpful. Thanks.

Tom

Tom Schroeter, P.Eng./P.Geo.
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Ministry of Energy and Mines

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-----Original Message-----

From: Cathro, Mike EM:EX
Sent: Wednesday, November 06, 2002 9:57 AM
To: Schroeter, Tom EM:EX; Wojdak, Paul EM:EX; Lane, Bob EM:EX; Terry, David EM:EX; Houle, Jacques EM:EX
Cc: Lefebure, Dave EM:EX; Grant, Brian EM:EX
Subject: RE: BC Mineral Expl'n review 2002 - 'Schedule' Deadlines

Tom, In the previous conference call I think we agreed to give you Table 1 and Table 2 on Wed Nov 13th, and I'm just refining my contribution for those. At this point I see no reason to change the figures for spending and drilling that I gave you on Oct 04 (about \$6 m in spending and 40,000 m of drilling).

For highlight mine developments I would give HVC (dewatering plan approved by EAO - production to 2009 confirmed; possible 30 month extension beyond 2009 to be decided in 2003?), Ashcroft (first full year of production, and expansion to 500k t throughput), and Tulameen Coal (purchase and installation of wash plant, mining of 10,000 tonnes; listing of company)

For highlight exploration projects I would count Afton area (especially DRC's Afton deposit, which is becoming a very significant resource), Elk (new reserve figure expected - small mine permit application soon?), CBM drilling (Princeton) and interest in CBM generally, and perhaps Tulameen, Fir, Elizabeth, Ann North, depending on results which have yetto be released.

As for new discoveries, the only one I would mention would be Bright Star's DP Zone at Tulameen, and it's importance can only be determined when drilling results are released.

cheers,

Mike

Mike Cathro, P.Geo
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-----Original Message-----

From: Schroeter, Tom EM:EX

Schroeter, Tom EM:EX

From: Cathro, Mike EM:EX
Sent: Friday, August 30, 2002 4:18 PM
To: Adams, Rick EM:EX
Cc: Britton, Jim; Brown, Derek; Grant, Brian EM:EX; Lefebure, Dave; Logan, Jim EM:EX; Ludwig, Allan; Madu, Bruce; McArthur, Gib; Schroeter, Tom; Simandl, George EM:EX; Smith, Don; David Terry; Houle, Jacques; Lane, Bob; Wojdak, Paul
Subject: Cathro Weekly to 8/30/02

Similco
HIGHLIGHTS

Basin (Tulameen) Coal Property (Compliance Energy Corp.) - Meeting today to approve the merger between Compliance Coal Corp. and Beanstalk Capital. Both companies are controlled by Jim O'Rourke and associates. This would be the "qualifying transaction" for Beanstalk, effecting a reverse takeover and TSX Venture exchange listing for Compliance Coal, creating a new company to be called Compliance Energy Corp. The company is apparently now arranging purchase of the entire Similco copper mine property, not including the real estate holdings and major mining equipment (Imperial Metals has also announced that they have sold the Similco property to an unnamed buyer for \$450 K). In addition, Compliance has been discussing trucking contracts to transport raw coal from the Basin site to the proposed wash plant location at the former Similco truck shop. Mining expected this fall.

Highland Valley Copper - The EAO announced approval of the Basal Aquifer Dewatering Project. This involves removing groundwater to stabilize the Valley pit slopes. Without this approval, the mine would be forced to shut in 2005 rather than 2009.

Elk-Siwash North (Almaden Minerals) - released results for first 16 holes (2600 m) of a 4500 m planned program on this gold vein deposit east of Aspen Grove. Drilling is targeting the WD vein, Bullion Creek structure, Gold Creek West vein and the DeepB shoot on the Siwash B vein, the latter directly beneath the existing Siwash North mine workings. Most of the holes intersected narrow, moderate- to high-grade vein intersections similar to previous results. The best (and deepest) hole on the WD vein cut an encouraging 19.23 g/t Au over 2.15 m. Drilling continues.

OTHER EXPLORATION AND MINING NEWS

Blackdome (J-Pacific Gold Inc.) - \$520K in financing arranged. The company also announced staking of 283 claims south of the mine, extending all the way to Red and French Mountains.

Rainbow & Gold (Doublestar Resources) - Notice of work filed for 5 holes (\$25,000 program) on this recently acquired gold property near Okanagan Falls. Murray Morrison is the vendor and project manager. Recent work has located a 200 by 400 m zone of silicified breccia with assays ranging from 430 to 5380 ppb Au.

Sadim (Toby Ventures) - released results for drilling on the Sadim gold vein and Rum copper-gold porphyry targets near Aspen Grove. Results were poor with the best intersection being 15 cm grading 48 g/t Au.

Afton-Rainbow (Abacus Mining) - announced a financing of \$480K (at \$0.012) which replaces an earlier announced financing for \$540K (at \$0.18). Another sign that raising funds is becoming more difficult for junior companies.

Afton Mine (DRC Resources) - No news on the ongoing \$1.1 m 2002 drilling program or the rumoured autumn underground project. The last release with drill results was on June 6th. DRC recently raised \$2.1 million and says it now has about \$5 m in the bank. They are also spending about \$1m this year buying back their own stock, which seems a bit strange....

Christmas Lake (Nustar Resources) - released middling gold results from chip sampling of this skarn prospect located near Canim Lake.

Mike

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Ministry of Energy and Mines

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Schroeter, Tom EM:EX

WBS → Ray,
— Kamle

From: Adams, Rick EM:EX

Sent: Friday, February 08, 2002 4:34 PM

To: Anderson, Duane; Beckett, Carla; Beswick, Ed; Booth, Richard; Braidwood, Brian; Carr, Chris; Carter, Tom; Cheetham, Pat; Curtis, Ross; Errington, John; Ferguson, Susan; German, Gerakd; Hall, Ted; Hermann, Fred; Hoffman, Al; John Clancy (E-mail); Jorgensen, Sharon; Lewis, Jim; Lieutard, Denis; McArthur, Gib; McKillop, Greg; McLaren, Graeme EM:EX; Murphy, Maureen; Nash, Laurel; O'Rourke, Patrick; Rennie, Loma; Rick Conte (E-mail); Roberts, Steve; Schmitt, Rolf EM:EX; Schroeter, Tom; Shelley Guthrie (E-mail); Smyth, Ron; Starkes, Terri; Stewart, Linda; Walter Poohachoff (E-mail); Whale, Andrew

Cc: Allan Ludwig (E-mail); Britton, Jim; Cathro, Mike; Heistad, Ray; Horton, Russ; Madu, Bruce; Mehr, Eugene; Patricia Murton (E-mail); Rothman, Stephen; Seguin, Joe; Wallis, Yvonne; Worsfold, Joyce

Subject: South Central Region to February 8, 2002

Issues:

Brookfield Road Pit (Gudeit Bros. Contracting Ltd.), Lumby- public meeting is scheduled for Tuesday, February 12. A number of phone calls from opponents to the pit have been received by our office this week.

Lillooet LRMP - BCYCM and MABC reportedly met with MSRM Minister Hagen on Feb 4 to voice their concern that the draft Lillooet plan does not properly address economic certainty, particularly with regard to the "two-zone" concept. In their opinion, there is an apparent "disconnect" between Minister Hagen's goal of economic development and the direction of the Lillooet plan. KEG and BCYCM are scheduled to meet with local MSRM process leaders on Feb 12 to provide additional comments.

Cayoosh Creek Placer Designation Request, (McIntyre Associates)- following initial opposition from FOC and MWLAP, MEM attempted to arrange a meeting to allow our client to address FOC and MWLAP concerns. FOC, after initially identifying suitable meeting dates, phoned back indicating we would likely be meeting with FOC legal counsel, rather than operational field staff, if we or our client were to push this issue further. Apparently there are unresolved issues around court ordered remediation works associated with the upstream power generation facility, and concerns about cumulative impacts. MEM is consulting with sr. mgmt. staff in FOC further clarify their position before responding to our client.

FYI:

Highland Valley Copper - in stats supplied for the 2001 Exploration and Mining Review, Frank Amon reports 48.89 million tonnes of ore were mined in 2001 to produce 180,530 tonnes Cu (vs. record of 190,600 tonnes in 2000), plus 1850.8 tonnes Mo, 449 kg Au, and 97,539 kg Ag. Proven and probable reserves total 345.1 mt grading 0.414 Cu and 0.0081% Mo, sufficient for about seven years at current throughput. On a related note, **BHP Billiton** is apparently considering selling their 34% interest in the mine.

Ashcroft Quarry (IG Machine & Fibre)- following an unsuccessful conclusion to last week's offer, the mediator remained involved and a collective agreement was ratified with a vote of 79% in favour of the mediator's recommendations. Wages for tradesmen will now be \$24.50/hr., comparing reasonably to Highland Valley Copper tradesman wages of \$26.91/hr. (\$25.30/hr. currently with the 6% JPA reduction). Entry level positions at the two mines are further apart at \$14.42 and \$19.59/hr. respectively.

Colored granule production at the plant has increased steadily as start up glitches were overcome. Recently produced 650 tonnes of product in a 24 hr. period. A reconditioning shutdown of the older sister plant in Madoc, Ontario was planned, contingent on successful conclusion of labour negotiations at the Ashcroft plant. The Ashcroft plant will now have a market for all the product it can produce over the next few months. Most product is shipped by rail to Calgary, with smaller quantities going to Sumas, Washington by truck.

KEG Conference (March 9-10) - The 15th annual Kamloops Exploration Conference will be **100% focused on BC projects** this year. The organizers finalized and distributed their registration form this week, and posted it on their website (www.keg.bc.ca). Invitations have been sent to Ministers Neufeld and Hagen and ADM Ebbels. Kamloops MEM staff are less involved in the conference this year, although Cathro is involved in the Technical Program, Cathro, Lett and Levson are organizing the Geochemical Workshop (April 11-12), and Madu is in charge of audiovisual needs. Registration form attached below.

Schroeter, Tom EM:EX

From: Adams, Rick EM:EX

Sent: Friday, February 15, 2002 4:38 PM

To: Anderson, Duane; Beckett, Carla; Beswick, Ed; Booth, Richard; Braidwood, Brian; Carr, Chris; Carter, Tom; Cheetham, Pat; Curtis, Ross; Errington, John; Ferguson, Susan; German, Gerald; Hall, Ted; Hermann, Fred; Hoffman, Al; John Clancy (E-mail); Jorgensen, Sharon; Lewis, Jim; Lieutard, Denis; McArthur, Gib; McKillop, Greg; McLaren, Graeme EM:EX; Murphy, Maureen; Nash, Laurel; O'Rourke, Patrick; Rennie, Lorna; Rick Conte (E-mail); Roberts, Steve; Schmitt, Rolf EM:EX; Schroeter, Tom; Shelley Guthrie (E-mail); Smyth, Ron; Starkes, Terri; Stewart, Linda; Walter Poohachoff (E-mail); Whale, Andrew

Cc: Allan Ludwig (E-mail); Britton, Jim; Cathro, Mike; Heistad, Ray; Horton, Russ; Madu, Bruce; Mehr, Eugene; Patricia Murton (E-mail); Rothman, Stephen; Seguin, Joe; Wallis, Yvonne; Worsfold, Joyce

Subject: South Central Region to February 15, 2002

FYI:

Highland Valley Copper- media reports BC Hydro has invested \$900,000 to extend a one metre pipeline at HVC by 2.6 km. The resulting change in pumping regime will allow HVC mine to save 23 million kilowatt hours of energy- enough to power 2,300 homes for a year. It will also result in tailings dam construction savings. HVC responded to a RFP from BC Hydro last April under the Industrial Power Smart program. BC Hydro indicated over 10 years the project will cost them 1/10 the cost of an equivalent amount of new power generation.

Brookfield Road Pit (Gudeit Bros. Contracting Ltd.), Lumby- 34 people attended the public meeting on Tuesday night, with only about 6 of those vociferously opposed. The operator of this small 6,000 tonne/year pit has agreed to limit his activity to 30 days/year, work only on weekdays from 0800 to 1600 hrs, and move his screening plant offsite.

Red Rock Farms Pit (Robert Talbot dba Red Rock Aggregates), Westwold- ordered shut down this week due to numerous H&S infractions and non-compliance with previous orders.

Panorama Ridge (Goldcliff Resource Corp) - results released for this grassroots skarn gold property located 2 km east of the Nickel Plate mine. 899 samples (mainly rock and soil) were collected in the summer and fall. The best results came from the Nordic zone (e.g. channel samples of 9 m grading 1.085 g/t and 11 m grading 0.765 g/t). Individual high values (9-18 g/t) came from the Skar, York and Spar showings. A NoW is in place for trenching or drilling in 2002, assuming funds can be raised.

Wildlife Habitat Areas- in addition to the 19 American white pelican (20,889 ha) and the 6 snake (1,650 ha) WHA proposals currently being reviewed, MWLAP advises an additional 2 Brewers Sparrow and 12 snake proposals are on the way. The Southern Okanagan will soon be a matrix of private land, protected areas, Indian Reserves and WHAs, with little or no unconstrained low elevation Crown land remaining, due to a combination of the fastest human population growth in the province, and the wide variety of red and blue listed species present there. MWLAP has been asked to provide a summary table and overview map at next Tuesday's meeting so MEM and other agencies can determine the "cumulative effect" of these proposals. Provincially, MWLAP's website indicates 46 WHAs have been approved totaling 8713 ha, with 261 WHA proposals pending.

Regional District of Kootenay Boundary- it is refreshing to see the Zoning Bylaw for Big White includes the wording:

"Mineral, Coal and Gravel Extraction

A number of Provincial Acts pertaining to resource extraction activities supersede the authority of the Regional District of Kootenay Boundary over both Crown and private land. These include the Mines Act, the Coal Act, and the Mineral Tenure Act. In view of this fact, mineral, gravel and coal exploration and/or mining activities cannot be in any way restricted by this Zoning Bylaw. The Energy and Minerals Division (Ministry of Employment and Investment (sic)) has a review process used to address the public interest in such matters."

First Nations- Shuswap Chiefs have reportedly forced an early review of Shuswap Nation Tribal Council

Schroeter, Tom EM:EX

From: Adams, Rick EM:EX

Sent: Friday, March 01, 2002 3:42 PM

To: Anderson, Duane; Beckett, Carla; Beswick, Ed; Booth, Richard; Braidwood, Brian; Carr, Chris; Carter, Tom; Cheetham, Pat; Curtis, Ross; deleted - 020215 - McLaren, Graeme EM:EX; deleted - 020215 - Schmitt, Rolf EM:EX; Errington, John; Ferguson, Susan; German, Gerald; Hall, Ted; Hermann, Fred; Hoffman, Al; John Clancy (E-mail); Jorgensen, Sharon; Lewis, Jim; Lieutard, Denis; McArthur, Gib; McKillop, Greg; Murphy, Maureen; Nash, Laurel; O'Rourke, Patrick; Rennie, Lorna; Rick Conte (E-mail); Roberts, Steve; Schroeter, Tom; Shelley Guthrie (E-mail); Smyth, Ron; Starkes, Terri; Stewart, Linda; Walter Poohachoff (E-mail); Whale, Andrew

Cc: Allan Ludwig (E-mail); Britton, Jim; Cathro, Mike; Heistad, Ray; Horton, Russ; Madu, Bruce; Mehr, Eugene; Patricia Murton (E-mail); Rothman, Stephen; Seguin, Joe; Wallis, Yvonne; Worsfold, Joyce

Subject: South Central Region to March 1, 2002

Issues:

Highland Valley Copper- DO when another moose was shot within the No Shooting area at HVC. RCMP and CO were notified. Even though a security guard had passed by the area 15 minutes before the shooting, the poacher was not apprehended.

DO when a shovel digging on the outside of a bench caused some loose rocks to roll down five benches onto a primed blast pattern. The holes were primed but not loaded with slurry. Three holes were covered by the rock. There were no injuries and the explosives did not detonate. Investigation is ongoing.

Coincidentally, a previously planned mini safety audit of blasting procedures was conducted this week by Insp. Mehr and Berdusco. No major issues were identified but some minor changes to procedures were implemented. The audit was also used to discuss pending changes to the 'Use and Handling of Explosives' which the Feds are pursuing.

South Canoe Gravel Pit (District of Salmon Arm)- DO on February 14, when a worker working alone was caught in a conveyor roller. He was able to extricate himself only after remaining caught for about 1/2 hour. His hand was badly injured and he has undergone 3 surgical procedures to try to save his hand. MEM was not notified of the accident. Insp. Rothman became aware of the accident only through conversation with another operator. Investigation is ongoing. This is the first known lost time accident in a gravel pit in this Region in 4 years.

FYI:

Highland Valley Copper has submitted their application for a Project Approval Certificate to the EAO for their Basal Aquifer Dewatering Project. They propose to increase their extraction rate from all aquifers from the current 6,000 US gpm to up to 15,000 US gpm as pit development encounters the basal aquifer. Approval is required to allow access to 177 million tonnes of 0.43% Cu ore, and avoid closing the mine 3.5 years prematurely.

In a media response to the interim report of the government's task force on energy, HVC states electricity increases of 60 percent would result in a best case scenario of the mine running as a swing operation- opening and closing according to the price of Cu- and a worst case scenario of permanent closure, resulting in the loss of 950 jobs. The joint industry steering committee, representing companies like HVC and Weyerhaeuser, is warning of thousands of layoffs if the task force's interim recommendations are adopted by government.

Afton Area (Abacus Mining and Exploration Corp), Kamloops- closed \$550K financing which will be spent on the seven properties optioned from Teck Cominco et al. The Rainbow property hosting the Rainbow #2 and #17 zones will be the main focus. Previous work by Teck indicated locally enriched palladium values in the Rainbow deposits (hole 95-22 hit 33m grading 0.74% Cu, 0.18 g/t Au, and 0.62 g/t Pd).

Kettle Valley Stone Co., Kelowna- demand appears strong and sales are growing again after a sharp post-Sept. 11 slowdown. Product for several large projects in California is being manufactured. Unfortunately the company is suffering cash flow problems, and is urgently seeking new investors. KVS sold \$1.6 million in product in 2001 and recently purchased a \$110K 36" circular saw to cut large blocks. Several new products are being tested including tumbled paving stones made from dacite and basalt.

Schroeter, Tom EM:EX

TGS → AG
- Kamloops

From: Cathro, Mike EM:EX
Sent: Friday, February 08, 2002 12:45 PM
To: Adams, Rick EM:EX
Cc: Britton, Jim; Brown, Derek; Lefebure, Dave; Ludwig, Allan; Madu, Bruce; McArthur, Gib; Payie, Garry; Schroeter, Tom; Smith, Don; Smyth, Ron EM:EX; David Terry; Houle, Jacques; Lane, Bob; Wojdak, Paul
Subject: Cathro Weekly to 2/8/02

HIGHLIGHTS:

Lillooet LRMP - BCYCM and MABC reportedly met with MSRM Minister Hagen on Feb 4 to voice their concern that the draft Lillooet plan does not properly address economic certainty, particularly with regard to the "two-zone" concept. In their opinion, the plan suggests a serious "disconnect" between Minister Hagen's goal of economic development, and what his Ministry is advancing in the plan. KEG and BCYCM are scheduled to meet with local MSRM process leaders on Feb 12 to provide additional comments.

Lillooet & Chilcotin Area Gold Targets - (CONFIDENTIAL) Following up on discussions at Roundup, some geochemical and geological information on grassroots gold targets in the Lillooet and Chilcotin areas was sent to Wojtek Jakubowski and Ed Balon of **Almaden Minerals** (formed by the recent merger of Fairfield Minerals and Almaden Resources). Unfortunately, we had to advise them to exercise caution because one of the better targets is partially compromised by an **unresolved Lillooet LRMP park proposal**. Almaden is a well-funded, aggressive, Vancouver-based junior company that is interested in acquiring additional grassroots gold targets in BC, but which also works in Yukon, Alaska and Mexico. In November they announced an exciting new gold discovery in the **Prospect Valley area (west of Merritt)**, which was found by following up a BCGS regional geochemical anomaly.

Highland Valley Copper - Received 2001 operating stats from F. Amon for **Exploration and Mining in BC** review paper. ~~48.89 million tonnes~~ of ore were mined in 2001 to produce 180,530 tonnes Cu (vs. record of 190,600 tonnes in 2000), plus 1850.8 tonnes Mo, 449 kg Au, and 97,539 kg Ag. Proven and probable reserves total 345.1 mt grading 0.414 Cu and 0.0081% Mo, sufficient for about seven years at current throughput. On a related note, **BHP Billiton** is apparently considering selling their 34% interest in the mine.

Waverly & Tangier Mines (Bill Murray) - Madu and Cathro assisted Mr. Murray in obtaining copies of mine plans and literature from our files. This high-grade **Ag-Au-Pb-Zn-Cu vein/replacement prospect** is located at the head of **Downie Creek, NE of Revelstoke**, and is only currently accessible by helicopter. It produced a small amount of ore in the early part of the century. Several adits and shafts exist. Crown-granted claims lapsed recently and were restaked by Mr. Murray, who plans exploration when silver prices improve.

OTHER:

KEG Conference (March 9-10) - The 15th annual Kamloops Exploration Conference will be **100% focused on BC projects** this year. The organizers finalized and distributed their registration form this week, and posted it on their website (www.keg.bc.ca). Invitations have been sent to Ministers Neufeld and Hagen and ADM Ebbels. Kamloops MEM staff are less involved in the conference this year, although Cathro is involved in the **Technical Program**, Cathro, Lett and Levson are organizing the **Geochemical Workshop** (April 11-12), and Madu is in charge of audiovisual needs.

Toronto PDAC (March 10-14) - Received travel approval and made final bookings for flights. I will now leave on Mar 8 and will supervise booth set-up on the 9th. Tom Schroeter and I are arranging for rock displays.

Exploration and Mining in BC - Editorial comments and updates being incorporated into Cathro review paper. Comments received from G. Simandl on Commerce Resources' (Dahrouge) paper on **Blue River tantalum-niobium**, and these will be forwarded to the author.

Prospectors Assistance Final Reports - 7-8 reports awaiting review before cheques can be issued.

Gold - closed the week at US \$303.20 in New York, up about 10% in last 10 days. Rise said due to Enron and other financial problems in US. Can it keep going this time around?

Mike

Mike Cathro

Schroeter, Tom EM:EX

TBS → RG
- Kamloop

From: Cathro, Mike EM:EX
Sent: Friday, January 04, 2002 4:27 PM
To: Adams, Rick EM:EX; Britton, Jim; Brown, Derek; Lefebure, Dave; Ludwig, Allan; Madu, Bruce; McArthur, Gib; Payie, Garry; Schroeter, Tom; Smith, Don; Smyth, Ron EM:EX
Subject: Cathro Weekly to 1/4/2002

HIGHLIGHTS

Highland Valley Copper - announced a wage cut of 6% and an undisclosed hydro rate cut effective Jan 1 as per the Job Protection Agreement. A newspaper report said that, because of low copper prices, it is "unlikely" that the mine life will be extended beyond 2009. The decision to proceed with the extension, which would involve a pushback of the SW corner of the Valley pit and relocation of the in pit crushers and conveyors, must be made within a year for the plan to be viable.

Afton (DRC Resources Corp) - released results of an updated Mineral Resource Study by J.J. McDougall, based on all DRC drilling up to November 2001. The previous (Jan 2001) resource estimate totaled 22.5 million tonnes at 3.0% Cu equivalent. According to the company, the drilling to date "indicates a continuous mineral zone 850 m in length, with a depth of 775 m below the upper contact of the primary mineral zone" Although very poorly presented in the news release, the mineral resource estimate can be summarized as follows:

Indicated Resource

Zone	Million tonnes	Grade (Cu equivalent)
Afton Main	22.5	3.0
Southwest	10.01	2.3
Northeast	1.56	1.36
Total Indicated	34.2	2.7

Inferred Resource

Zone	Million tonnes	Grade (Cu equivalent)
Southwest	3.98	2.0
Northeast	1.93	1.0
Total Inferred	5.9	1.7

Total Resource (Indicated plus Inferred)

Zone	Million tonnes	Grade (Cu equivalent)
All zones	40.1	2.6

Afton mine area (Teck Cominco Ltd.) - Abacus Mining and Exploration Corp., a company headed by Steve Todoruk, is in negotiations with Teck Cominco to acquire Teck's interests in seven mineral properties surrounding the Afton Mine. Although not stated in the news release, these properties include the Ajax pits where uneconomic Cu-Au reserves remain, as well as the Rainbow, Galaxy, Big Onion, and DM-Audra deposits. It is not known if this agreement includes the mill and tailings pond, which would be of interest to **DRC Resources**. Abacus also announced a \$550K financing.

Mike

Mike Cathro
Regional Geologist, Kamloops
BC Ministry of Energy and Mines

Note new telephone numbers

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Autotel: (250) 372-6757
Fax: (250) 554-5384
Email: mike.cathro@gems2.gov.bc.ca

Schroeter, Tom EM:EX

TBS → RG
- Kamloops

From: Cathro, Mike EM:EX
Sent: Friday, October 26, 2001 2:12 PM
To: Adams, Rick EM:EX; Britton, Jim MSRM:EX; Brown, Derek EM:EX; Lefebure, Dave EM:EX; Ludwig, Allan EM:EX; Madu, Bruce EM:EX; McArthur, Gib EM:EX; Payie, Garry EM:EX; Schroeter, Tom EM:EX; Smith, Don EM:EX
Subject: Cathro Weekly to 10/26/2001

EXPLORATION AND MINING NEWS

Highland Valley Copper - production in 2000 should be close to last year's record metal output according to Q3 financials released by Teck Cominco. For Q3 their 63.9% portion of the mine turned a profit of C\$8 million on revenue of C\$69 million, with copper prices averaging US\$0.68. With the recent drop in the price of copper to US\$0.62, very low strip ratios, and a 2% wage cut due to the Job Protection Agreement, the break-even copper price for HVC is rumoured to be down to the US\$0.57/lb range. A pit expansion to the northeast, which would extend mine life by three years beyond 2009, has not yet been ruled out, but has to be considered unlikely given the current market.

Pimainus (Highland Valley Copper) - three hole totalling 877.1 m were drilled on this copper prospect SW of the Lornex pit. Results were apparently not very promising, although the "right rocks" were encountered.

Verity (Commerce Resources Corp.) - results released for the first five holes "not only confirm...but upgrade known tantalum mineralization" at this deposit north of Blue River. Most holes were infill or small stepouts from the known reserve, and intersected the sill over approx. true thicknesses of 6.25 to 38 m, with grades ranging from 138 to 172 ppm Ta₂O₅, 456 to 900 ppm Nb₂O₅ and 2.87 to 3.63% P₂O₅. The drill will now be moved to the Fir property for three holes before returning to Verity. Previous drilling of four holes at Fir suggests that grades of Ta, Nb and P should be higher.

Vault (Aqua Regia Minerals Inc.) - a five hole program began on Oct 23 on this epithermal gold property located NW of Okanagan Falls.

Fox (Gitennes Exploration Inc) - Gitennes announced that it has sold its Virgen property in Peru for US\$1.5 million and a 2% NSR. This should (hopefully) allow them to focus on the Fox Zn-Cu-Pb-Ag-Au property near Merritt. A large property payment was due recently on Fox and the company is rumoured to have asked for an extension until the Peru deal has closed.

Blackdome (J-Pacific Gold Inc.) - raised \$1.16 million through a private placement of 5.8 million shares with Jipangu Inc.

OTHER

Exploration Review - currently canvassing mine and exploration operators for details of their 2001 work. Preparing slides and writing text for presentations and papers. Invited paper for "Exploration and Mining in BC" on the Spire Zn-Cu prospect from Steve Robertson of Imperial Metals Corp.

Limestone/dolomite - assisted prospector Chuck Marlow with library/computer work to locate sources of limestone/dolomite for sale to agricultural markets in the Prince George area.

Advanced Prospecting Course - completed follow-up of logistics regarding lodging and field sites in the Merritt area.

Open shafts - provided Steve Rothman with info on potentially hazardous open shafts at the Cinderella and Comstock prospects near Merritt.

Mike

Mike Cathro
Regional Geologist, Kamloops
BC Ministry of Energy and Mines

Note new telephone numbers

Mike Direct Line: (250) 554-5377
General Inquiries/Messages: (250) 554-5370
Autotel: (250) 372-6757
Fax: (250) 554-5384

Schroeter, Tom EM:EX

From: Cathro, Mike EM:EX
Sent: Friday, September 01, 2000 11:59 AM
To: Adams, Rick EM:EX
Cc: Britton, Jim; Brown, Derek; Lefebure, Dave; Ludwig, Allan; Madu, Bruce; McArthur, Gib; Payie, Garry; Schroeter, Tom; Houle, Jacques; Lane, Bob; Wilton, Paul; Wojdak, Paul
Subject: Cathro Weekly to

HIGHLIGHTS

Highland Valley Copper - Mine announced today that further exploration is unlikely before the scheduled closure of the mine in Spring, 2009. A three year extension (deepening of Valley pit) is possible depending on the price of copper nearer to the closure date. A large IP survey has recently been completed south of the mine property. 33.6% owner Rio Algom is currently the target of a takeover battle between Noranda and Billiton. This takeover will likely affect the grassroots copper exploration program that Rio has been conducting in our region for several years, particularly if Noranda is the successful bidder.

Tulameen Coal (Pacific West Coal) - Permit issued this week for 100,000 tonne per year mine. Logging of site (Folke) to begin in October. Bulk sample this fall depending on results of marketing efforts.

Similco Mines - Leader Mining International Inc. made the second payment of \$150,000 to Imperial Metals on Aug 31 as part of their purchase of the Simlco and Invermay properties. The final payment of \$700,000 is due on Dec 1, 2000. Geological compilation is underway and the company is evaluating how to restart the mine.

Elk (Fairfield Minerals Ltd.) - released results for 14 ddh (1400 m) on three quartz vein targets (WD, Gold Creek West, and B) in the Siwash Mine area. High-grade gold-silver values over narrow widths (e.g. 0.5 m grading 34.76 g/t Au and 147.69 g/t Ag) were encountered in most holes. The purpose of the work was to define additional near-surface resources for future small-scale open pit mining.

Afton (DRC Resources Corp.) - released results for holes 6-8 with all holes intersecting significant mineralization including a narrow, very high-grade section in hole 8 (10 ft grading 13.7% Cu, 0.636 opt Au, 0.064 opt Pd). The company finally released some drill sections and plans. A second drill has been added.

Fox (Lloyd Addie/Bob Bourdon) - Cassidy Gold Corp. has optioned this 23 unit property 10 km north of Little Fort. The target is Sedex or VMS deposits in a heavily till-covered area which is underlain by Triassic or Jurassic mafic volcanics and shale (Nicola Group?). The property was staked in 1998 following the release of Bobrowsky et al.'s Open File 1998-6, which identified a strong linear till anomaly for Zn, Cu, Cd, As, Sb and Co. Addie and Bourdon, as part of their 1999 PAP project, subsequently traced this anomaly to the north and staked another long linear anomaly which is now optioned to Inmet Mining who plan to drill three holes this fall (CONFIDENTIAL).

KEG Golf Tournery planned for Sat Sept 30. Sign-up with this office now! We may also run a field trip to Big Kidd and Elk on Aug 29.

FIELD VISITS:

Golden Loan
Clearwater Platinum (Cusac Gold Mines Ltd.) - brief visit to this property SW of Little Fort on Aug 30. An IP survey was underway (4 lines) to test for disseminated sulphides in the ultramafic rocks. Geological mapping, 700 soil, humus and biogeochem samples, and excavator trenching have also been done in order to define targets for drilling. This work is attempting to find the source of a high-grade float sample which ran 13.7 g/t Pt. In addition, the company has staked an additional 23 units to cover an occurrence of millerite (nickel sulphide). Mapping by GSB (Schiarizza) and the company have detailed a 5-7 km long multiphase intrusion containing pyroxenite, gabbro and peridotite/dunite.

Fox 1-6 Claims (Dave Ridley, PAP) - On Aug 31 I visited this new molybdenum-tungsten-zinc skarn prospect

Schroeter, Tom EM:EX

VOS → RG
- Kamloops

From: Cathro, Mike EM:EX
Sent: Friday, April 14, 2000 11:48 AM
To: Adams, Rick EM:EX
Cc: Britton, Jim; Brown, Derek; Houle, Jacques; Lefebure, Dave; Ludwig, Allan; Madu, Bruce; McArthur, Gib; Payie, Garry; Schroeter, Tom; Lane, Bob; Wilton, Paul; Wojdak, Paul
Subject: Cathro Weekly to April 14, 2000

Lac La Hache
HIGHLIGHTS:

Ophir Copper-Ann Claims (GWR Resources Inc) - I visited the core shack in Lac La Hache on Wed. April 12th with Dave Blann (geological consultant), Irvin Eisler (President), Scott Burke (field manager?) and other investors, employees and assorted hangers on. There is a lot of rumour and hype on internet "chat rooms" about a big copper-gold discovery here, and the stock has shot up from \$0.10 in January to the \$1.30-\$1.80 range lately. A \$400K financing is pending and the company principals say they would like to continue drilling through the summer. Although the company has been drilling since November, '99 (14 holes, approx 1500 m), they have not released any results yet. I guess the term "timely disclosure" means different things to different people.

The work is focused on the "NK Zone", a new area of mineralization located SE of the Peach-Melba zone and N of the Miracle zone which were drilled between '94-'98 by GWR and Regional Resources. The target is alkalic porphyry Cu-Au mineralization which appears to occur around an unmapped(?) syenitic, crowded feldspar porphyry stock intruding the Nicola Group. Mineralization mainly occurs in dark grey, hornfelsed or biotite-altered(?) andesite/basalt, microdiorite or less commonly, breccia with mineralized intrusive clasts. Very fine-grained chalcopryite and rare bornite and native copper are associated with epidote-chlorite altered fractures and local patches of k-spar and albite. The rock is very magnetic throughout.

HVC
Highland Valley Copper - visited on April 4th with KEG field trip. Very good production lately. During the month of March the mill processed an average of 147,500 tonnes per day. Strip ratio was only 0.78:1. Average grade was 0.45% Cu for record daily production of 1.2 million pounds of copper.

Prospectors Assistance Program - Numerous enquiries about the program in general and specific proposals. Lots of interest in platinum-palladium and intrusion-hosted gold.

Lumby (Quinto Mining) - Court case this week over ownership of mill buildings. Surface owner Wally Chaput claiming the buildings are his. Will this ever end?

Other - Responded to request for information on Cariboo Gold Quartz project from Dan McCoy, Placer Dome, Fairbanks. Nice to see PDI showing an interest in BC again. Renewed interest (and staking?) in the Twin Mountain-Kamad-Acacia area in the Eagle Bay Assemblage (near Samatosum and Homestake mines) due to open ground. Interest from several parties in staking the Newhykslton Creek gold anomaly highlighted by myself and Ray Lett at KEG conference. Several calls regarding mafic-alkalic palladium potential (e.g. Dobbin, Iron Mask, Copper Mountain, Lorraine etc).

Mike

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Schroeter, Tom EM:EX

TS → Reg. Mgr
Kamloops

From: Adams, Rick EM:EX
Sent: Friday, January 07, 2000 2:18 PM
To: Anderson, Duane; Bergen, Wally; Beswick, Ed; Booth, Richard; Braidwood, Brian; Carter, Tom; Cheetham, Pat; Clancy, John; Conte, Rick; Eaton, Tim; Emery, Kristy; Errington, John; Ferguson, Susan; German, Gerald; Guthrie, Shelley; Hall, Ted; Harris, Grace; Hermann, Fred; Hesketh, Joan; Hoffman, Al; Jorgensen, Sharon; Lewis, Jim; Lieutard, Denis; McArthur, Gib; McKillop, Greg; McLaren, Graeme; Readshaw, Kerry; Rennie, Lorna; Schroeter, Tom; Smyth, Ron; Stewart, Linda; Whale, Andrew
Cc: Barrett, Bev; Beresford, Eric; Britton, Jim; Cathro, Mike; Heistad, Ray; Horton, Russ; Madu, Bruce; Mehr, Eugene; Murton, Patricia; Rothman, Stephen; Seguin, Joe; Worsfold, Joyce
Subject: South Central Region to January 7, 2000

Issues:

Stewart Road West Pit, Kelowna- a 160 name petition, and other opposition is mounting, against a proposed gravel pit near Crawford Estates which recently received ALC approval.

Barisoff/McIntyre Pit, Oliver- Judicial Review of the permit on Dec. 15-17 resulted in a further court date set for Feb. 7/2000, to clarify two anomalies in the testimony/permit issuance process. The concerns are: quantities of material removed from the site prior to change in zoning bylaw; and defining when 'mining' actually commenced on site.

FYI:

Mission Ridge Pit, Kelowna- Stop Work Order has been lifted. Owners are working with City of Kelowna to obtain a Development Permit before proceeding with removal of surplus material from the site. Also, owners are seeking an extension of their Mine Permit due to time required to secure a Development Permit. Regional Mines staff will suggest a further extension to spread out the on-site work, and the haul truck traffic- which was a key issue with the City.

Candorado, Hedley- has contacted Safety-Kleen waste disposal company to conduct a preliminary assessment of chemicals and hazardous materials on site, on Tuesday, Jan. 11/2000, and develop a disposal plan.

Highland Valley Copper- on Dec. 20 an employee died of a heart attack while operating a haul truck. He managed to shift into neutral and apply the retarder brake before passing out. The truck stopped on the travelway in its own driving lane, so it appears no other employees were endangered by this unfortunate incident.

HVC expects to report losses of \$8 million in 1999. The mine is more optimistic for 2000, and has increased their production target for copper concentrate from 400,000 tonnes to 480,000 tonnes by Jan. 1/2001. In 2000, HVC will begin replacing their 33 190 tonne trucks with 240 tonne trucks. The new trucks are expected to last until end of mine life in 2009. HVC plans to conduct a "faint-hope" exploration of the valley in 2000 to examine the possibility of extending its life.

HVC is happy to see tentative resolution of the BC Rail lockout. HVC still has an accumulation of concentrate in storage from the pre-Christmas strike at the Vancouver wharves. All of their rail cars at Ashcroft will be full by this weekend, and the hiring of B-train trucks as an alternative has added significantly to production costs. HVC has taken a number of short term contracts to make up for customers lost due to these labour disputes and their shutdown last year.

KEG 2000- conference planning has begun. Scheduled for April 5-7 at Best Western Towne Lodge in Kamloops.

Basic Prospecting Course- advertised for March 4-26 (4 Saturdays and 1 Sunday). To be taught by Linda Dandy at UCC, and subsidized by KEG.

Schroeter, Tom EM:EX

TGS → Ray, Mgr.
- Kam loops

From: Adams, Rick EM:EX
Sent: Friday, October 01, 1999 2:30 PM
To: Anderson, Duane; Bergen, Wally; Beswick, Ed; Booth, Richard; Braidwood, Brian; Carter, Tom; Castillo, Talitha; Cheetham, Pat; Clancy, John; Cranston, Charene; Eaton, Tim; Emery, Kristy; Errington, John; Ferguson, Susan; German, Gerald; Guthrie, Shelley; Hall, Ted; Hermann, Fred; Hesketh, Joan; Hoffman, Al; Jorgensen, Sharon; Lewis, Jim; McArthur, Gib; McKillop, Greg; McLaren, Graeme; Rennie, Lorna; Schroeter, Tom; Smyth, Ron; Stewart, Linda; Whale, Andrew
Cc: Barrett, Bev; Beresford, Eric; Britton, Jim; Cathro, Mike; Heistad, Ray; Horton, Russ; Inkster, Patricia; Madu, Bruce; Mehr, Eugene; Rothman, Stephen; Seguin, Joe; Worsfold, Joyce
Subject: South Central Region to Oct 1/99

Issues:

Highland Valley Copper- Oct. 12 is now target date for full production. A D.O. occurred when a blasthole drill dropped a 32' long drill steel from the upper derrick while lifting the steel out of the hole. The drill steel, weighing approximately one ton, narrowly missed the driller's compartment and pierced the decking of the drill. Fortunately no injuries. The incident is under investigation. Significant re-org. following the retirement of former Pres. & Gen. Mgr., Dave Johnston- replaced by Ron Simkus. Also, the retirement of Terry Delany, Super. Safety & Public Affairs- replaced by Trevor Phelps. New structure has a Mgr., Operations (Mill & Mine); Mgr., Maintenance; and Mgr., Human Resources. Our H&S Insp. has concerns with the new org. as Super. Safety & Public Affairs no longer reports directly to the Pres. & Gen. Mgr. - to follow up with Ron Simkus.

Milkyway Placer Claim- MEM issued a Cease and Desist Order to the operators of this property located on the Fraser River NW of Clinton. This followed a meeting with Clinton RCMP, and Chiefs of High Bar and Canoe Creek Bands, who raised concerns that an archeological site (petroglyphs & pit houses) was being impacted by the operation. The operators must conduct an Archeological Impact Assessment prior to proceeding with further placer operations.

Candorado (Hedley)- Byard MacLean pled guilty to charges of failure to supply reports required under their Waste Management Permit and was fined \$15,000.

First Nations- a total of 5 Bands- 3 Shuswap and 2 Okanagan- are now logging without authority from MOF. MOF issued a Stop Work Order against Westbank Band. Westbank Band refused to comply. MOF sought a Compliance Order from Kelowna Supreme court. The Court did not grant a Compliance Order, citing unresolved, underlying, Constitutional and Aboriginal Rights issues, and asked Westbank Band to voluntarily stop logging instead. Stop Work Orders now issued against the 3 Shuswap Bands as well, who are also ignoring the Provincial directives. Statements by FN in the media that the Delgamuukw decision gives them the right to extract resources. The Province has launched a media campaign in the Okanagan informing the public that these activities are illegal, and providing clarification on Delgamuukw. FN also met at McGillivray Lake, near Sun Peaks, to flesh out a strategy to be more visible to the public, and get out onto the land in their traditional territory. Fifty-eight Interior FN are meeting today to discuss conducting a lobbying effort in Washington, D.C., and possibly Europe.

FYI:

Craigmont (Merritt)- will re-start its magnetite processing operation next week for 2 months due to increased demand for this material used by coal mines.

Goldstrike-Bizar (Cassidy Gold Corp)- NOW received for an 8 hole drill program on this gold property near Blue River. Sept/98 discovery by Leo Lindinger funded under a PAP grant.

Ladybug (Cross Lake Minerals)- 3 holes totaling 330 m. will be drilled soon on this Zn-Pb-Ag property near Shuswap Lake. Another Leo Lindinger property from the 1998 PAP.

TGS → RG
- Kamloops

Schroeter, Tom EM:EX

From: Cathro, Mike EM:EX
Sent: Thursday, April 22, 1999 4:31 PM
To: Adams, Rick EM:EX
Cc: Britton, Jim; Brown, Derek; Lefebure, Dave; Madu, Bruce; McArthur, Gib; McMillan, Bill; Pinsent, Robert; Schroeter, Tom; Lane, Bob; Wilton, Paul; Wojdak, Paul
Subject: Weekly Report to 4/22/99

HIGHLIGHTS

*Claim staking is taking place as a result of the Pogo short course (April 9), mainly in the North Columbia (Goldstream-Kirbyville) and Adams Lake areas. I know of about 100 units which have been staked so far (but are not yet recorded), and at least several hundred more units are underway or planned. I wouldn't call it a "staking rush" yet, but individuals are covering the obvious Pogo-Ft Knox targets. (Due to the 20 day grace period for recording claims and the snow conditions, we probably won't know until mid May how much activity there has actually been.)

*Applied for \$35,000 budget from the CIDA-Peru board for Pogo/Ft Knox deposit study. Working with Jim Logan and Dave Lefebure on field plans.

*Highland Valley reported a net loss of \$10 million for the first quarter (Cominco's portion was \$5m). A slight profit was made when hedging gains on copper are taken into account. On our tour on Monday we found out that HVC milled a record 176,000 tonnes on Sat April 17th due to improvements in the mill and softer ore (by comparison, Freeport McMoran-Indonesia mills about 200,000 tonnes per day and is expanding to 300,000 tpd).

*International Geochemical Symposium Field Trip (April 17-19) - I helped Bobrowsky et al. lead this interesting field trip through the Okanagan-Adams Lake areas.

*on vacation until next Wed.

Mike

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Schroeter, Tom EM:EX

VGS → RG
- Kamloops

From: Cathro, Mike EM:EX
Sent: Friday, February 05, 1999 2:10 PM
To: Beresford, Eric EM:EX
Cc: Britton, Jim; Brown, Derek; Lefebure, Dave; Madu, Bruce; McArthur, Gib; McMillan, Bill; Pinsent, Robert; Schroeter, Tom; Lane, Bob; Wilton, Paul; Wojdak, Paul
Subject: Weekly Report to 2/5/99

HIGHLIGHTS

Highland Valley Copper - In discussions with Job Protection Commissioner this week. Cominco (50% owner) announced full year 1998 financial results yesterday (Feb 4). "HVC contributed a \$3 million operating loss and \$1 million of interest and exploration expenses to Cominco's results in 1998." After hedging gains the operating profit was \$16 million. The mine produced 172,400 tonnes of copper, 2400 tonnes of moly, 14,000 ounces of gold and 2,092,800 ounces of silver in concentrate. These are probably record amounts.

KEG (April 7-8) - Invitations going out to speakers. Letter of invitation to potential GSB speakers and Minister Miller to go out next week. Working on scheduling, field trips etc.

KEG Intrusion-Related Gold Short Course (Fri April 9) - Confirmed main speaker Dan McCoy of Placer Dome, Anchorage. Invitations are out to several others.

Geochemical Methods Field Trip (Assoc. Expl. Geochem., April 17-19) - Working with Peter Bobrowsky regarding field trip stops at Big Kidd property and Highland Valley Copper. 40 people expected. I'm to prepare guidebook sections for these stops.

Boundary Mining Association - Prospecting course. I'm to lecture in Greenwood on Sun Feb 14 on the topics of tectonics and mineral deposit models. Preparation underway.

Shuswap intrusion-hosted gold compilation - copies of our draft (unpublished) 1:250K maps sent to two prospectors who plan to apply for PAP grants. There may even be more prospectors out there next summer than Forest Renewal road deactivation contractors.

Shuswap staking - A Vernon stake is rumoured to have a contract to stake 700 claim units for a major company; exact location and target unknown. Let's hope it is true.

1998 Exploration and Mining in BC - 1998 - South-Central Region paper sent to John Newell for editing. Expected to be published in early April in time for KEG. Draft version handed out at roundup (8 pages).

Intrusion-related gold in BC paper - working on a review paper with D. Lefebure to go into Exploration and Mining in BC - 1998 as a "Part B" article. Draft to Newell by next Fri.

Mike

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Schroeter, Tom EM:EX

From: Cathro, Mike EM:EX
Sent: Friday, September 18, 1998 4:24 PM
To: Meyers, Rick EM:EX
Cc: Britton, Jim; Lane, Bob; Lefebure, Dave; Madu, Bruce; McArthur, Gib; McMillan, Bill; Pinsent, Robert; Schroeter, Tom; Wilton, Paul; Wojdak, Paul
Subject: Weekly Report to Sept 18

HIGHLIGHTS

Highland Valley Copper formally announced that Cominco will not proceed with a hydrometallurgical smelter. The project was deemed to be uneconomic. In addition, the deepening of the Valley pit to extend the mine life is considered to be uneconomic at current metal prices. The Premier announced that the province was still negotiating a Power for Jobs accord with the mine to extend the life of the mine. (Current reserves will last until 2008)

Pellaire (Int. Jaguar Equities) - Drilling of 11 holes (approx 600 m) is complete and the camp has been closed for the season. Approx \$750K has been spent on their Taseko area properties this year. I talked with Andy Smith (Pres. of Jaguar) this week and he is very excited about their new discovery, the Charlie NW zone, a weathered porphyry copper target with good tonnage and grade potential. It is located NW of the Pellaire site, in ruined terrain next to T'sy-los Park (in the Taseko (Special) Management Area). It is near a showing described by G. McLaren in his Chilco Lake paper. A major company has been "all over it" this week, evaluating Charlie NW for possible joint venture.

Limestone - Two local individuals, representing a US limestone producer, were in last week. They are looking for geological info on limestone in southern BC. I was able to deduce that they are interested in high purity, high brightness calcite for paper and pigment uses.

Cross Lake Minerals - Jim Miller-Tait is actively hunting for BC properties for this well-financed, Henry Ewan chuck-led company. I suggested he talk to L. Lindinger, C. Berube, A. Savjord, and R. Durfeld about their properties. Jim would welcome suggestions from other RGs or GSB staff. Call him at (604 688-5448) if you have any ideas.

Ft. Knox/Pogo gold compilation project - This week Dave Lefebure and I visited several prospects which have some similarities to intrusion-hosted, mesothermal gold vein deposits (Ft. Knox type) or associated deposits types such as gold skarns, W skarns etc. It was an excellent opportunity to test how our literature search for these deposits is working. It is clear that we need a better understanding of the Alaska-Yukon deposits, as well as more chemical data for BC intrusions, and RGS geochemical data for Bi, Te, the unusual pathfinder elements that go with the gold.

The Bonaparte gold (92P 050) deposit, located about 40 kms NW of Kamloops is perhaps the best example we have found so far. At least 8 large (1-3 m), moderate to steeply east dipping, subparallel quartz veins contain erratic high grade gold values associated with 1-3% pyrite and lesser pyrrhotite, chalcopyrite, highly anomalous bismuth and tellurium values, and anomalous to spotty molybdenum, arsenic, antimony and tungsten values.

The veins are hosted by a small (approx 4 km wide) unaltered to weakly altered quartz diorite of Jurassic age(?). Adjacent to several of the larger veins are 2-10 m wide, dark grey, hornblende-plagioclase porphyry dikes which are locally biotite altered. The quartz diorite stock is surrounded by brown to black, pyritic, hornfelsed argillite which is reported to carry Mo values. The quartz diorite also contains some stockwork or sheeted, narrow (to 1 cm) quartz veins which locally carry minor pyrite or pyrrhotite. There are a very few reference to gold values coming from these narrow veins, however, it appears that most of the old core has not been sampled. Given the presence of these narrow veins and other characteristics of the mineralization, the bulk tonnage (Ft Knox style) gold potential of this property should be carefully investigated. (NOTE - about 18 holes were drilled here earlier in the summer: results are expected shortly).

YFS → Reg. Mgr.
- Kamloops

Schroeter, Tom EM:EX

From: Meyers, Rick E EI:A1
Sent: Friday, July 24, 1998 11:41 AM
To: Hermann, Fred EM:EX; Hall, Ted J EI:A1; Whale, Andrew EM:EX; Bergen, Wally EM:EX; Smyth, Ron EM:EX; Lefebure, Dave EM:EX; Errington, John EM:EX; INKSTER, PATRICIA E EI:A1; Lieutard, Denis EM:EX; Cathro, Mike EI:A1; Beswick, Ed EM:EX; McKillop, Greg EM:EX; Britton, Jim EI:A1; Schroeter, Tom EM:EX; Madu, Bruce EI:A1; Beresford, Eric EI:A1; Mehr, Eugene EI:A1; Heistad, Ray EI:A1; Seguin, Joe EI:A1; McArthur, Gib EM:EX; Conte, Rick EM:EX; Booth, Richard EM:EX; Hoffman, Al EM:EX; Carter, Tom EM:EX; Rothman, Steve EI:A1; MacCulloch, Lola EI:A1; Worsfold, Joyce M EI:A1; Eaton, Tim EM:EX; Schmitt, Rolf EM:EX; Stewart, Linda EM:EX; McLaren, Graeme EM:EX; Cheetham, Pat EI:EX; Phelan, Bill EM:EX; Starks, Terri EM:EX; German, Gerald EM:EX; Marsman, Talitha EM:EX; Robertson, Sheila EM:EX
Subject: Kamloops Summary to July 24/98

Issues

HVC - By virtue of an appeal to the Ministry of Labour, first line supervisors at HVC now have the right to join the union (USW). The company intends to appeal this decision. I have also heard indirectly that because of this decision, HVC is putting the proposed hydrometallurgical copper refinery project on hold until it is resolved.

Tulameen Coal - Pacific West Coal is proceeding with baseline environmental studies to meet BCE requirements. In their referral response, which was done at the last minute, BCE has given us the impression that they have misunderstood some of the project details. E&M staff will meet with BCE and the proponent in August, when more baseline data has been collected.

Getty Copper - This project has been put on hold due, in part, to dismissal of the project manager and to difficulty in raising financing.

Lawrence Pit, Lake Country - following the applicant's decision to withdraw his application, we are still receiving calls that he is still hauling material. Inspection was done this week.

Red Lake Quarry - Western Industrial Clay Products has advised Eric Beresford that he may be called to an Arbitration Board hearing regarding access to mineral claims on private property.

Blackdome - project is underway with plans to hire u/g miners in the near future.

Admin

Vacations: R.Heistad until Sept.
E. Mehr until Aug 10
Meyers Aug 4-14

Rick Meyers
Kamloops