

INTERNAL OFFICE MEMORANDUM

Created: 07-Mar-1997 02:22pm PST
Sent: 07-Mar-1997 02:56pm PST
From: Mike Cathro of EI
MCATHRO
Title: Regional Geologist
Dept: Employment & Investment
Tel No: 828-4566

YBS → RG
- Kamloop
New Afton
886014

TO: Rick Meyers of EI (RMEYERS)
CC: Tom Schroeter of EI (TSCHROETER)
Subject: Weekly Report

Highlights:

NOTE: Teck is very concerned about security and insider trading in Getchell Resources - do not spread the following info around. A news release is several weeks away.

Rainbow #2 (VERY CONFIDENTIAL - VISITED TODAY) Teck/Getchell are on the fourth deep hole of a 5 hole program. The first four holes are designed to drill a box around the breccia pipe and intersect the pipe at 300-400 m. Hole 4 has hit strong alteration, breccia and mineralization from 70 m to 400 m (and still in it). Up to 5-10% cpy over several metres in places. Could be zones of 5% Cu and overall, perhaps 2% Cu over 100-200 m. This could be a real zinger! Very strong albite-biotite alteration of the breccia in places. Local zones of heavy, fine grained disseminated cpy (no py) in Nicola Volc.

The pipe is thought to plunge at about 80 deg. to the SE. Hole 4 is drilled at -80 - obliquely across the zone. Previous assays (20 samples?) of the breccia by Teck (last year) showed good correlation of Au, Pt and Pd. For Cu grades of 1.5% they got Pd of 6-10 ppm, 1 ppm Pt and 1 ppm Au - e.g. very significant by product values that have to be fully evaluated yet.

***Coquihalla zone** - 7 holes drilled. So far poor results (< 1ppm Au) on 50 m offsets from last years good holes (e.g. 6 m @ 1.03 opt Au and 12 m @ 0.21 opt Au. The 1.03 opt intesection is strange in that all there is is serpentinized nicola with minor chlorite and epidote alteration and some fault zones. No significant veining, no py and only trace cpy. Metalics assays showed lots of free gold from this zone. Still waiting for assays on most holes. May be a nugget problem too.

***Big Onion** - Teck management has decided to cancel the program due to concerns over minability next to the TCH #1. This is after receiving permits to drill in only 2 wks and budget approval to drill.

***Short Course on Exploration Success in Mature Mining Districts is cancelled** - difficulty in getting speakers and minimal registration. There are just too many conferences going on in Mar-Apr-May.

***Conference organization is going better.** Talks lined up for Eskay, Mac, Mt. Polley, Watson Bar, Tshacha, Prosperity, Fyre Lake, Niblack, Campo Morado, Peru (Gitennes), Las Cristinas, & Petaquilla. Waiting on Huckelberry, Kemess, Getty, Ice, Marte-Lobo, Tambo Grande (Peru), El Sauzal. Panel includes Mike Clarke, Gerry Carlson, Bill Wolfe so far.

INTEROFFICE MEMORANDUM

TBS → RG
- Kamloops

Created: 13-Dec-1996 09:38am PST
Sent: 13-Dec-1996 10:03am PST
From: Mike Cathro of EI
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Title: Regional Geologist
Dept: Employment & Investment
Tel No: 828-4566

TO: Rick Meyers of EI (RMEYERS)
CC: Bruce Madu of EI (BMADU)
CC: Eric Beresford of EI (EBERESFORD)
CC: Eugene Mehr of EI (EMEHR)
CC: Tom Schroeter of EI (TSCHROETER)

Ajax
Big Onion

Subject: Weekly Report

Rainbow

* Teck has filed a NoW to drill 10 holes on the Big Onion deposit in the Iron Mask batholith. Existing reserves stand at 3.27 m tonnes grading 0.71% Cu and 0.4 g/t Au (Afton Operating Co.). This will be a sensitive deposit to drill and mine due to its visibility and location 200 m south of the Trans Canada Highway, 300-400 m north of the Iron Mask Trailer Park and 500 m SE of the new Mt. Dufferin Park. I believe it is within the Kamloops city limits too. Nevertheless it has excellent grades and good potential for expansion. Teck Expl. also says a spring deep drilling campaign on the Rainbow is likely.

* Mad Property (First Point Minerals) - A 400 m long by up to 200 wide As+Cu +/-Au soil anomaly has been defined. An oxidized rock sample from this zone assayed 10.9 g/t Au. The zone appears to be near the boundary with Stirrup Creek's Watson Bar property. Possible drilling in '97.

* Taught fossils, minerals and rocks to two classes (Gr. 8&9) at JL Jackson Jr. Secondary, Salmon Arm yesterday.

* Preparing geology and mineral deposits slides/diagrams for OSLRMP mining day presentations, Jan 20 in Vernon. Bruce helping with the MDBC work.

Mike

INTEROFFICE MEMORANDUM

TGS → RG
- Kaminberg

Created: 28-Jun-1996 04:40pm PDT
Sent: 28-Jun-1996 04:52pm PDT
From: Mike Cathro of EI
MCATHRO
Title: Regional Geologist
Dept: Employment & Investment
Tel No: 828-4566

TO: See Below

Subject: Regional Geology Monthly Report

HIGHLIGHTS:

*Expl/Dev. spending estimated at \$16-18 million for the region this year, up by perhaps 30-40% from last year. Number of large projects appears to be ahead of last year.

*Getty North (Krain). The long awaited resource calculation by Watts, Griffis and McQuat was included in an investors handout (no news release). Indicated resources total 21 m tonnes averaging 0.44% Cu including 5 m tonnes of oxide averaging 0.45% Cu. Additional inferred resources amount to about 7 million tonnes (oxide + sulphide) averaging 0.4% Cu. These figures are not much different than those reported in the '60s and '70s. Disappointing results given the huge amount of drilling done in the last year.

*Getty South (Trojan-South Seas). Getty Copper Corp released assays from first hole on this zone (18 m of 1.63% Cu). Mineralization consists of specularite-chalcopyrite-chalcocite as matrix to a polymictic breccia. 10 more holes to be drilled on three fences. A further 10 holes will test other IP and soil targets on the large Getty property including the Transvaal area.

*Afton - New copper zone discovered between the Pothook pit and the Coquihalla highway. I will review project on July 2 with Teck and Vic Preto. Teck has drilled about 14,000 m on various Iron Mask projects this year! Rumours are that the mine has not sold forward much of its copper production. They may be in trouble with the low copper prices.

*Similco - Princeton reported a \$10 million financing in early June (good timing!). The company has sold forward about 70% of production at over \$1.00/lb. They are reviewing options to cut costs and source new mill feed.

*Also visited the Feline diatomite/opal property (no MINFILE #) of Gordon Bried and the Basin bentonite prospect (No MINFILE #) of Chuck Marlow with Dan Hora.

*Compiling information on existing or potential BC producers of volcanic glass, perlite, zeolite, and wollastonite for Recon Building Products of Abbotsford. They produce high-end, fireproof imitation cedar shakes, mainly for the California market. Some imported perlite is used as a lightweight aggregate in the product. Dan Hora provided some good suggestions and names.

OTHER EXPLORATION AND DEVELOPMENT NEWS:

*Crow-Rea (Lori). Two drills now testing this moly project.

*Au & Wen properties - George Resource Co. Ltd. reported interesting Au and Cu values in surface samples from this property near Merritt. 1600 m drilling

I N T E R O F F I C E M E M O R A N D U M

Created: 14-Jun-1996 10:58am PDT
Sent: 14-Jun-1996 11:18am PDT
From: Mike Cathro of EI
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Tel No: 828-4566

TO: Rick Meyers of EI (RMEYERS)
CC: Jim Britton of EI (JBRITTON)
CC: Bruce Madu of EI (BMADU)
CC: Tom Schroeter of EI (TSCHROETER)
Subject: Weekly Report

Issues:

- *Final prep of 1995 review article should go to B Grant today.
- *Prosperity project rumoured to have gotten a big NO on their fish habitat compensation plan from DFO (from Art O'Bryan)
- *Discovery of a new copper zone at Afton - between Pothook and the Coq. Highway (from Fred Daley). Only 5 holes into it now.
- *Fossil sites in K-LRMP being reviewed by BC Paleontological Alliance for Sept. decision. Unlikely that they will want many protected.
- *Bentonite - Dan Hora and I visited Chuck Marlow's new bentonite occurrence near Afton. It looks interesting and is the only Na bentonite showing in the province - the rest are mainly Ca. Good location for engineering uses at city dump, pulp mill and Afton.
- *Now received for drilling 15 holes at Westpine's Taseko property.
- *Fieldwork paper - met with Robin W. to get this going - he is writing up local geology, geochron, geochem etc.
- *Vacation - I'm off June 17-21.

Mike

INTEROFFICE MEMORANDUM

VOS → RC
-Kamb

Created: 06-Sep-1996 09:55am PDT
Sent: 06-Sep-1996 11:13am PDT
From: Mike Cathro of EI
MCATHRO
Title: Regional Geologist
Dept: Employment & Investment
Tel No: 828-4566

TO: See Below

Subject: Monthly Report to Sept 6/96

HIGHLIGHTS:

Interest is high for the upcoming Eagle Bay field trip being led by Vic Preto, Peter Bobrowsky, Steve Sibbick, Trygve Hoy and myself. So far 55 people have signed up for 40 spots. We will try to accomodate everyone by splitting into two groups.

Lac La Hache porphyry Cu-Au project. The recent takeover of Regional Resources by Imperial Metals should benefit this project due to Imperial's experience with Mt. Polley.

DOT claims, Highland Valley. Prospector Larry Ovington tells me that optionee Alhambra Resources has intersected some interesting (new?) bornite-rich hypogene porphyry mineralization in a recently completed drill program. Larry spotted several successful holes for them by witching! The property was previously known to host a small resource of oxide mineralization.

Pellaire (Int. Jaguar Equities). E. Mehr visited the property and reports that mining is underway and that the bridge work on the access road is nearing completion. The contractor is VERY frustrated with the hassles provided by Forests with regard to the road. It is planned that 1000 to 1200 tonnes of high grade gold ore will be trucked out before the snow starts to pile up. *Mini - NEI - expl*

Ajax mine to close in June '97 with layoffs beginning in December. Mine geologist Scott Smith told me that, so far, they have backfilled the Ajax East pit with 7 million tonnes of waste from the West pit. This could be a good reclamation story to promote.

Similco mine to shut in December due to low copper prices. A 40K ft drill program is underway on the Alabama zone to locate new millfeed that can be produced at \$0.80 per pound copper.

Elk (Siwash North Mine). Aurizon Mines completed their due diligence on this gold project and announced they will NOT proceed with further work. Andy Smith, VP of Exploration advised us that Fairfield's ore reserve estimate was fine; the problem was the ground conditions. Fairfield announced the discovery of a new vein similar to the North vein.

Sapphires at Taseko Lake? Westpine Metals consultant Ellen Lambert says GSB geologists George Simandl and Kirk Hancock were beside themselves over the bluish black corundum on Westpine's Taseko property during a recent visit. I'm looking forward to hearing more from George and Kirk.

FIELDWORK:

Visited Mariko and Golden Eagle properties north of Shuswap Lake with L. and M. Lutjen, PAP grantees. Soil sampling and prospecting are underway.

OTHER ACTIVITIES:

VOS → RG
- Kam logs

I N T E R O F F I C E M E M O R A N D U M

Created: 09-Aug-1996 03:45pm PDT
 Sent: 09-Aug-1996 04:49pm PDT
 From: Mike Cathro of EI
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TO: Rick Meyers of EI (RMEYERS)
 CC: Jim Britton of EI (JBRIITON)
 CC: Bruce Madu of EI (BMADU)
 CC: Tom Schroeter of EI (TSCHROETER)
 CC: Eric Beresford of EI (EBERESFORD)

Subject: Weekly Report

- 1) ^{Awt} Afton announced it will begin downsizing its workforce in Nov with full shutdown planned for April '97.
- 2) Teck Exploration is reviewing the potential economics of underground bulk mining at Rainbow, adjacent to Afton. A decision on whether to proceed on a \$1m deep drilling program to define deep, higher grade reserves will be made in the fall (confidential from Jim Gillis, President of Getchell Resources). The deep high grade mineralization (1 to 5% Cu with Au, Pd, Mo in a breccia) may be the best hope there is for new, long term ore reserves to keep Afton going. Other new zones (e.g. near Pothook pit) may be drilled in the fall also.
- 3) Similco announced it will stop mining on Nov 10 and stop milling in mid-Dec. Drilling at Alabama will proceed this summer. That makes it Nickel Plate, Goldstream, Afton, Similco and the Hedley Tailings operation all going down in about an 18 month period.
- 4) ^{IF} Fairfield has discovered a new vein (WD Vein) 200 m north of the Siwash North vein. Grade and width appear similar. It is interesting that the new Fairfield management is also beginning to report some wider intercepts such as 69.5 ft grading .039 opt Au and 29.3 ft grading .117 opt Au. This suggests to me that they are evaluating the idea of bulk mining zones where there are multiple, parallel narrow quartz veins - a good thing to try.
- 5) Stirrup Creek Gold reported two more decent holes from the Watson Bar project. The best, #96-08, hit nearly 68 ft grading .042 opt Au - another good bulk tonnage type result. I understand the project will soon shut down to allow the results to be evaluated.
- 6) John Bissett of Canquest was in and indicated that financing is nearly ~~complete~~. Approx. \$250K will be spent on drilling at each of Microgold and Cottonbelt. IP will be done at Microgold first.
- 7) Kingfisher Marble. The Co. has purchased a 64 inch saw allowing them to produce about 20 tonnes/day of ashlar. Saw is in Enderby. Margranite is taking some samples of their leocogranite (pegmatite) for testing. If suitable, it would be cut into slabs for tables and counters (high-end products).
- 8) Truck work done for about \$1000. New tires to go on next week.

INTEROFFICE MEMORANDUM

Created: 31-Jul-1996 02:48pm PDT
Sent: 02-Aug-1996 12:10pm PDT
From: Mike Cathro of EI
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Dept: Employment & Investment
Tel No: 828-4566

TO: See Below

Subject: Regional Geology Monthly Report

HIGHLIGHTS

*Exploration spending in this region still appears to be up strongly from last year. Still not much grassroots work though. There is a definite shortage of geologists for the available work.

FIELD VISITS

*Reviewed the Comet-Davenport (Afton) exploration results with Teck geologists and Vic Preto. Teck has drilled 5 targets in the mine area called the Coquihalla E & W, Supergene, DM-Audra and Galaxy North. Several of these deserve follow-up; drilling will probably continue in the fall. A new style of mineralization was discovered at the "Coquihalla zone" (near the Pothook Pit) consisting of high Au and Low Cu in heavily pyritized rock. At the "Supergene zone", native copper, chalcocite and possible cuprite occur in heavily pyritized Cherry Creek rocks - a similar setting to the Afton orebody.

*Spent two days in the field with the Eagle Bay crew, Tryg Hoy and Vic Preto reviewing deposits and stratigraphy. A very useful exercise. Field trip is planned for Sept 19 in conjunction with CIM conference.

*The Rose-Munro Lake project (Almaden Resources) near Summerland was visited on July 19 with Leo King, consultant. They were drilling on hole 4 and had intersected weak Cu-Mo porphyry-style mineralization in all holes at that point. Alteration is mainly sericitic with minor K feldspar veining. There is potential for significant Au-Ag values here due to soil anomalies. This is a large, poorly explored property and the current phase of drilling (1800 m) will not test all the anomalies. A large part of the claim group was removed from a proposed study area last year through our efforts at IAMC.

*Crow-Rea (Lori). This moly property of Verdstone/Molycor is also located west of Summerland and was visited on July 20 with new site geologist Owen Peer. Coarse moly rosettes occur in a 2-3 m thick felsite vein/breccia

AGS → RG
- Kam/boop

INTEROFFICE MEMORANDUM

VB → Reg. 6
- Kamlay

Created: 05-Jul-1996 09:36am PDT
 Sent: 05-Jul-1996 10:22am PDT
 From: Mike Cathro of EI
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 Title. Regional Geologist
 Dept: Employment & Investment
 Tel No: 828-4566

TO: Rick Meyers of EI (RMEYERS)
 CC: Bruce Madu of EI (BMADU)
 CC: Jim Britton of EI (JBRITTON)
 CC: Eugene Mehr of EI (EMEHR)
 CC: Tom Schroeter of EI (TSCHROETER)

Subject: Weekly Report to 7/5/96

FIELD VISITS:

*Eagle Bay Project: Spent two days in the field reviewing geology and deposits with the Eagle Bay crew, Vic Preto and Tryg Hoy. We visited a number of prospects including Spar, Homestake, Sam and others. Overall a very valuable exercise for everyone. Vic and Tryg were to meet with Mike Sanguinetti today to discuss Harper Creek and Tryg's proposal to do a deposit study on it.

Homestake Mine: (NOTE TO E. MEHR) The upper portal is not properly sealed and it is easy to get into the workings. In addition, it appears that a sinkhole may be forming about 100' uphill from the portal (near the old blue truck). Looks to me like there may be a stope below here and the crown pillar is collapsing...but I'm no mining engineer!

*Afton: (CONFIDENTIAL) The ~~Comet-Davenport~~ project of Teck Exploration was reviewed on July 2 with Vic Preto, Graeme Evans and Hugh Stewart. Teck has discovered new mineralization on a number of targets.

Perhaps the most interesting is high gold, low copper mineralization located due south of the Pothook pit (called the "Coquihalla zone"). Gold occurs with heavy disseminated pyrite near the contact between picrite and sugarloaf dikes. There appears to be potential for both high grade zones and low grade bulk tonnage gold here. The zone trends southeasterly across Pothook lake to the Coquihalla highway and the copper values pick up in this direction.

Another new discovery is called the "Supergene" and is located north of Highway 1. A few holes have intersected up to 200 m of strong hematitic alteration in Cherry Creek breccia. Native copper, chalcocite and possible cuprite are present. No assays yet.

Teck has also had encouragement from 11 holes drilled on the DM-Audra trend (near Crescent pit) and 8 holes on "Galaxy North" (between Galaxy and Iron Mask).

Teck/Afton will review the results shortly and are expected to approve a second phase of drilling on at least some of these targets, and perhaps Rainbow too.

OTHER EXPLORATION NEWS:

Rose-Munro Lake: Drilling underway on this promising Au-Ag-Cu-Mo target in

I N T E R O F F I C E M E M O R A N D U M

Date: 01-Mar-1996 12:45pm PST
From: Mike Cathro of EI
MCATHRO
Dept: Employment & Investment
Tel No: 828-4566

TO: (see below)

Subject: Monthly Report, South-Central Region, February, 1996

HIGHLIGHTS:

*Afton-Ajax. Afton Operating Corp announced on Feb 29 that it will cease production within 12 to 14 months. Remaining ore reserves have been revised downward due to higher costs and lower copper prices. Discussions with mine and exploration staff indicate that the company will not proceed with pre-stripping of the W3 phase of the Ajax West pit, which would have allowed operation until late 1998. Two exploration holes totalling about 325 m were drilled within the West pit in February.

*Galaxy. Afton also reported that exploration success at Galaxy could extend the life of the Afton operation by about a year. On Feb 27 I visited this deposit with Graeme Evans of Teck Exploration. Teck recently completed a 32 hole, 4400 m drilling program designed to test the deposit on a 50 m spacing for a new ore reserve calculation. Previous operators had calculated ore reserves of roughly 3.2 mt grading 0.65% Cu. Geologically, the deposit is hosted by a complex fault-bounded panel of Nicola + Sugarloaf + Hybrid + Pothook rocks surrounded by Cherry Creek intrusive rocks. Alteration is weak, mainly comprising propylitic with minor albite and K-spar. Teck feels that there is negligible potential for size expansion and gold values will probably be lower than other Iron Mask deposits. Nevertheless, it appears that Galaxy should be minable as it has a favourable location, a low stripping ratio and low work index.

*KEG. Organization on track for KEG Conference, April 2 & 3. 90% of talks confirmed. So far 16 people have signed up for the short course; 23 for the field trip.

*GSB mapping projects. Two local projects may get approval for the upcoming field season: 1) Completion of the Selkirks mapping (Logan) and 2) Eagle Bay and area VMS targets, till mapping and geochemistry.

*Mineral Data BC. Computer arrived and was set up. Madu/Seguin/Cathro/Britton have been putting it through its paces. So far it looks like it should be very useful. Training would be helpful.

EXPLORATION AND DEVELOPMENT NEWS

*Lumby. D. Drummond and P. Schiller of Quinto Mining presented a conceptual plan for a 24,000 tonne per year operation to Kamloops office staff. The proposal is an improvement over their previous submission, however, certain details are still lacking. More work is required before it can be presented to the regional mine development committee.

*CanQuest Resource Corp plans drilling at Cottonbelt (Sedex Pb-Zn) and Microgold (Epithermal Au) in 1996. The company has signed an agreement to raise up to \$3.3 million to fund this work.

*Elk (Siwash North). Fairfield Minerals has announced a \$1.2 million budget for drilling on three targets on the property.

VGS → UG
- Kamloops

I N T E R O F F I C E M E M O R A N D U M

Date: 17-Feb-1995 01:55pm PST
From: EMP Kamloops
EMP_KAMLOOPS
Dept: Energy, Mines & Petroleum Res.
Tel No: 828-4566

TO: (see below)

Subject: Monthly Report - South-central Region

MONTHLY REPORT for JANUARY 3 - FEBRUARY 17, 1995

MIKE CATHRO, REGIONAL GEOLOGIST, SOUTH-CENTRAL REGION

Ajax
X

HIGHLIGHTS:

- Afton has announced it will re-open the Ajax West pit, extending the mine life from Dec 1996 to about Dec 1998 (Ajax East is already in full production). Pushback stripping of the West pit is underway, and limited ore is now being processed. Workforce is now up to about 170.

- The atmosphere at Roundup was more upbeat than the last few years. Comments were generally favourable at our poster, although there is still a lot of concern over land use and protected areas. Talks presented were of excellent quality, particularly those from the GSB. Congratulations to those who participated.

- Planning for the KEG conference (April 10-11) is going well. Rick, Moira and I are all heavily involved in organizing talks, posters and advertising. We have tentatively confirmed Prof. Dick Hutchinson of Colorado School of Mines as a special guest speaker to give two talks. He is a well known Canadian mineral deposits researcher. Minister Edwards has also been invited and will likely attend.

EXPLORATION ACTIVITIES

- Liquid Gold reports that bulk sampling is underway from the Bonanza zone at the Brett property near Vernon.

- The Goldstream mine had a decent core display at Roundup. Reserves as of Nov 94 were reported as 700,000 tonnes grading 4.20% Cu and 2.30% Zn. This is sufficient for production until Oct '96 at current rates. Goldstream plans aggressive exploration in the general area in '95, including the C-1, Rain and other properties.

- Lac la Hache. Rumours abound of good results from drilling by Regional Resources. Very little information has been released recently due to a dispute between partners GWR and Regional. This now appears to be settled. (See plans for field work below).

OFFICE AND OTHER ACTIVITIES

- Helped organize and participated in RG's meeting Jan 25-27. Presented talk on regional highlights to GSB/LMPB. Good meeting.

TGS -> DG
- Kamloops

I N T E R O F F I C E M E M O R A N D U M

Date: 02-Dec-1994 10:25am PST
From: EMP Kamloops
EMP_KAMLOOPS
Dept: Energy, Mines & Petroleum Res.
Tel No: 828-4566

TO: Distribution List suppressed (Current User: Marjorie Hunter)

Subject: Kamloops RG Monthly Report

MONTHLY REPORT - NOVEMBER 1994

MIKE CATHRO, REGIONAL GEOLOGIST, SOUTH-CENTRAL REGION

HIGHLIGHTS:

max
AFTON: The operation resumed production from the Ajax East pit in late September and is now operating at about 8,700 tonnes per day. Reserves in the East pit are sufficient for about 15 months, but mine geologist Scott Smith says the company is considering some exploration on the edge of the pit in an area of wide-spaced drilling. He says the company is also considering taking ore from the Ajax Main pit.

SIMILCO: The mine is reported to be operating at reduced capacity dueto a planned maintenance program. A reserve calculation for the Ingerbelle East zone is expected shortly (Explore BC project). Drilling continues on the Alabama zone.

GOLDSTREAM MINE: Excellent results from drilling down plunge of current mining, including nearly 4m grading 6.59% Cu. This should help extend the life of the mine. (Explore BC project)

COTTON BELT: Bethlehem Resource has taken an option on this zinc-lead property from Canquest Resources and plans an extensive drill program for spring 1995.

RAINBOW PROPERTY - "NEW ZONE" (Getchell/Teck): Results from the third phase of drilling are rumoured to be disappointing. (Explore BC project)

BLACKDOME - Good drilling results rumoured.

EXPLORATION AND MINESITE ACTIVITY:

GOLDSTREAM: Bethlehem Resources and Goldnev Resources reported excellent intersections from exploration drill holes # 7 (3.94m @ 6.594% Cu and 1.67% Zn) and #8 (5.15 m @ 4.345% Cu and 1.65% Zn). The drill program is now complete and assays are pending for ho) 9, 10 and 11 (originally only 6 holes were planned in the Explore BC application). The drilling was designed to test the down plunge extension of the ore zone. Mine geologist Chris Wild says the drill'

TGS → AJAX

I N T E R O F F I C E M E M O R A N D U M

Date: 13-Jul-1994 09:12am PDT
From: Rick Meyers
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Dept: Energy, Mines & Petroleum Res.
Tel No: 828-4566

TO: Brian Parrott (BPARROTT)
TO: Irwin Henderson (IHENDERSON)
TO: Ron Smyth - Min. of EMPR (RSMYTH)
TO: EMP Kamloops (EMP_KAMLOOPS)
TO: Norm Ringstad (NRINGSTAD)
Subject: Afton - News

On local radio this morning it was announced that a (tentative) agreement between Teck and union has been reached; strong rumours that company may reopen Ajax operation; 4-5years life remain.

Rick

environments. The presence of an alkali feldspar alteration core is therefore probably of critical importance for the deposition of ^{molybdenum} Mo and the delineation of such zones is a useful guide in exploration (Boyle and Leitch, 1983).

One of the greatest divergences between ^{fluorine} F-rich and ^{fluorine} F-deficient deposits is that of metal association. While ^{fluorine, tin} F, Sn and rare-earth elements may be useful pathfinder elements for ^{fluorine} F-rich deposits, in ^{fluorine} F-deficient deposits, ^{molybdenum} Mo is the only element that has been demonstrated to be useful in geochemical exploration.

Economics

Drill-indicated, geological reserves for the four zones comprising the Trout Lake deposit are estimated at 48,700,000 tonnes grading 0.193% MoS₂ at the 0.10% cutoff, or 11,700,000 tonnes grading 0.362% MoS₂ at the 0.20% cutoff, calculated manually on sections 30 m apart. In bulk sampling of 128 drift rounds having a pilot diamond drill hole for comparison, bulk sample grades varied from 85 to 137% of drill hole grades, and averaged slightly greater than the grades of the drill hole. Continuity of mineralization at 0.10% to 0.20% MoS₂ is good; at higher cutoff grades it is more difficult to estimate tonnages, since the estimation involves fewer drill holes and fewer samples. The potential for increasing reserves lies mainly at depth.

A mining study based on reserves at the 0.20% cutoff envisaged open stoping with delayed cemented backfill, utilizing the existing adit as a haulage level. The adit intersects the deposit at its midpoint, 500 m below surface. Further studies aimed at extracting higher grades with more selective mining methods have been recommended. Initial metallurgical testing of drill core indicated a 90% recovery of molybdenite in a 90 to 92% MoS₂ concentrate. Tests on some

TOS -> AFTON

I N T E R O F F I C E M E M O R A N D U M

Date: 13-Apr-1993 08:25am PDT
From: Vic Preto
VPRETO
Dept: Energy, Mines & Petroleum Res.
Tel No: 356-2833

TO: Rick Meyers (RMEYERS)
TO: Tom Schroeter (TSCHROETER)
Subject: Your Enquiry re Financial Assistance for Afton Smelter

Information provided by Doug Stangeland of Mineral Revenue. Doug obviously went to a lot of trouble to get this, and it is not easy information to get. Keep it handy. Vic

I N T E R O F F I C E M E M O R A N D U M

Date: 08-Apr-1993 04:17pm PDT
From: Doug Stangeland
DSTANGELAND
Dept: Energy, Mines & Petroleum Res.
Tel No: 387-6986

TO: Vic Preto (VPRETO)
Subject: Your Enquiry re Financial Assistance for Afton Smelter

I have looked at what old Mineral Resource Tax returns we have left to see what I could find about assistance from the Province for the copper smelter that was built at the Afton mine. The first return filed was for 1976. Unfortunately the files for 1976, 1977 and 1978 have been disposed of under the Document Disposal Act. We only have files for the returns from 1979 and later.

For 1979 and later years there was no assistance given to Afton Mining in the form of a credit against the mine's Mineral Resource Tax liability. However, from the notes to the financial statements that Afton Mines Ltd. provided with their Mineral Resource Tax returns, it appears that there was some direct assistance paid to Afton under the Copper Smelting and Refining Act. The particular note in question qualifies the "concentrate and ,blister production" expense in the statements. For 1979 the note reads as follows:

"In accordance with the Copper Smelting and Refining Act the Province of British Columbia has entered into an agreement with the company to pay until 1983 five cents per kilo of copper smelted, up to a maximum of \$500,000 in any government fiscal year ending March 31. During the company's fiscal year ended September 30, 1979 the company received \$758,000 under the agreement which has been applied to reduce the cost of concentrate and blister production."

"The company" was Afton Mining Ltd. until Aug 14, 1981. After that the mine and smelter were operated by a partnership called the Afton Mining Company. The same note qualifies the concentrate and blister production expense in each of the financial statements up to 1982. The amounts the company received from the Province of B.C. were as follows:

- Oct 1, 1978 to Sept 30, 1979	- \$ 758,000
- Oct 1, 1979 to Sept 30, 1980	- 500,000
- Oct 1, 1980 to Aug 14, 1981	- 500,000 (estimate)
- Aug 15, 1981 to Oct 31, 1981	- 115,190
- Nov 1, 1981 to Oct 31, 1982	- 156,615

Although we no longer have the Mineral Resource Tax return files for periods prior to Oct 1, 1978, our general information file on the Afton mine indicates that production of copper blister by the smelter began in April, 1978, and about 500 tons of copper blister was produced in April, 1978. The smelter operated quite successfully in its first year and exceeded its rated capacity of 7000 tons per year. A rough estimate of copper production from April to September, 1978, inclusive, would be about 3000 tons. In accordance with its agreement with the Province, Afton probably received about \$120,000 for this period.

Finally, there is one brief mention of this assistance in a George Cross Newsletter dated October 22, 1975 that might be worth noting. It says,

"In conjunction with the announcement of production at Afton the B.C. Government announced legislat' n whereunder the Governner~ will pay a 2 cent per pound of copper produced incentive to any smelt. g operation in B.C. In addition the B.C. Government is to have an option to buy at cost a 5% equity in the smelter at any time until the end of the first year of operation of the smelter. The 2 cent per pound incentive is to be paid for only the first four years of production."

I hope this is some assistance to you. Please let me know if you have any questions.

Regards,

Doug S.

INTEROFFICE MEMORANDUM

Date: 20-Aug-1991 04:01pm PDT
From: GMCKILLOP
GMCKILLOP@MRGATE@GALAXY
Dept:
Tel No:

TO: RSMYTH@A1
TO: BPARROTT@A1
TO: BMCRAE@A1
Subject: Afton closure

Ralph:

Ed sadar tells me that there was a press release last week in kamloops stating that Afton's union employees will be laid off August 23. Staff will be kept on until Sept 10 to 20 to mothball the operation. A total of 190 employees will be affected.

afton management has stated that \$1.10 copper and constant gold prices will be required to make the mine economic.

Greg.

*VAA To Tom S
FHI*

LOG NO: AUG 27 1991 VAN 3
ACTION:
<i>YGS</i>
FILE NO: AFTON