

OUTLINE FORM FOR MINERAL OCCURRENCES

HVC  
884005 (1988)

NAME T.C. EXPLORATIONS PIMANUS LAKE PROPERTY (NORTH PART)  
LOCATION 50° 24', 121° 05' KAMLOOPS MINING DIVISION 9213

MAIN <sup>Minerals</sup> ~~METALS~~ hornite, molybdenite, ~~chalcocopyrite~~

MINOR METALS specularite, ~~pyrite~~

TYPE OF DEPOSIT - Fissure Vein or Veins   
 Massive Sulphides \_\_\_\_\_  
 Cross Cutting \_\_\_\_\_  
 Strata Bound \_\_\_\_\_  
 Stockwork \_\_\_\_\_  
 Breccia \_\_\_\_\_  
 Contact Metasomatic \_\_\_\_\_  
 Pegmatitic \_\_\_\_\_  
 Dissemination \_\_\_\_\_  
 Magmatic \_\_\_\_\_  
 Strata Bound \_\_\_\_\_  
 Solution Cavity Filling \_\_\_\_\_  
 Placer \_\_\_\_\_  
 Other \_\_\_\_\_

HOST ROCK OR ROCKS 4bcetx (BETHSAIDA) ~~and~~  
~~Zacc (GUREMAN)~~

AGE OF HOST ROCK \_\_\_\_\_

INTRUSIVE ROCKS (Types and location relative to mineralization) \_\_\_\_\_  
4bcetx close to contact with 3a (~2000 ft) from contact).  
~~Zacc directly at contact with 3a~~

AGE OF INTRUSIVE ROCKS \_\_\_\_\_

INTRUSIVE ROCK MOST CLOSELY RELATED TO MINERALIZATION \_\_\_\_\_  
4bcetx and ~~Zacc~~

MAJOR STRUCTURES (Types, attitudes and location relative to mineralization) Jointing (~120° most prominent) - mineralization in areas of intense jointing (chloritization, epidotization + silicification)

ALTERATION Strong chloritization and epidotization along contact "zones". Mineralization (bn, sp, mal) in (4) is associated with a highly silicified + sericitized zone ~ 60ft in width and ~ 300ft long.

SIZE AND GRADE OF DEPOSIT 300ft long and ~ 60ft wide - non-economical

REMARKS: Mineralization is mainly bn. - minor sp  
 REFERENCES: Mineralization in (4) exists in shear zone ~ 60ft wide and trending ~~to~~ E ~ 160°/90° → bn, mal, and sp. Shear zone is highly cext. Bn and mal + sp. occur in irregular qtz. veins also // ~~fract in 2a shows py, ~~qtz~~ and mal~~

*check pg.*

REFERENCES ① 1968 PROPERTY EXAM. T.C. EXPL. PIMANUS LAKE PROPERTY  
KAMLOOPS MINING DIVISION 9213 - AMAX VANCOUVER OFFICE

JULY 1968 H.W. SELLMER [LAKE-LAKEN GROUPS]

② 1966 B.C. MINISTER OF MINES REPORT pg. 159-160: ASSESSMENT REPORTS Nos. 853 and 855. ③ GEORGE CROSS NEWS LETTER No. 116 - June 7, 1988

ALAX  
A definition drilling program at the **Ajax mine (Afton Operating Corp.)** has returned good results according to mine geologist Scott Smith. Good assays have come from holes on the SE side of the Ajax west pit, within phase P3 and P4 of the mine plan. This may allow Afton to redesign and enlarge the final pit. In addition, massive albite alteration has been encountered in new drill holes on the south side of the Ajax east pit.

Blackdome  
Claimstaker Resources and Aurizon Mines are busy at the **Blackdome mine** SW of Williams Lake. Aurizon geologist Andy Smith indicates they have done some underground rehab and are preparing to drift on veins identified by previous drilling. Soil sampling has been done to better locate nearby veins in preparation for a possible surface drilling program this fall. Aurizon must spend \$500K by January and then will make a decision to proceed with a \$1.5M program next year. They seem confident the mine can be put back into production next year. Aurizon is interested in looking at other gold prospects in BC.

HVC  
**Highland Valley Copper** has nearly completed about 30 km of IP survey, mainly in the deep overburden-covered portions of the valley east of the mine gate (in the vicinity of the JA deposit). Overburden ranges from 130 m to over 300 m! The company is using a very high powered, Chilean-designed IP transmitter to get deeper penetration. HVC has also done limited drilling in the Valley pit and around JA.

Industrial Minerals  
**Pacific Bentonite** has applied to the regional mine development committee for two bulk sample permits for their property near Hat Creek Coal. They propose mining 10,000 tonnes of red shale for sale as landscape rock and another 10,000 tonnes of bentonite. Proceeds from the sale of the shale will go to financing ongoing R&D on a bentonite-based geosynthetic liner that they are developing.

Craigmont  
**Craigmont Mines (M. Seven Industries)** continues to produce about 60,000 tonnes per year of magnetite by processing old Craigmont tailings. They have filed a conceptual design to create a new tailings storage dam (on top of the old) which will allow the operation to continue for at least another 15 years.

Crow-Rea  
Verdstone Gold/Amcorp Industries seem encouraged by sampling results from the **Crow-Rea (Lori)** moly property near Summerland. A Notice to do trenching has been received. Discovery Consultants is managing the project and has been staking up other nearby moly targets.

Spokane Resources has completed a drill program on the **Spokane-Rex Mountain** property near Lillooet. The program was successful in locating the vein structures. I will visit this property on Oct. 4.

#### LAND USE

On Sept. 13 Rick Meyers and I convinced IAMC to amend two proposed Study Area boundaries to exclude important exploration projects. About 1100 Ha of the **Rose-Munro Lake** property, owned by Almaden Resources Corp., were removed from the Darke-

MC - MR, Sep. 1995

**Fax Cover Sheet**

DATE: Mar. 18/98 TIME: 4:00pm

TO: Lorne Bond  
Highland Valley Copper

PHONE: \_\_\_\_\_ FAX: 250-523-3302

FROM: Tom Schroeter PHONE: \_\_\_\_\_  
FAX: 604-775.0313

RE: 1997/98 Production/Reserves Data

CC:

Number of pages including cover sheet: 1

**REMARKS:**

Urgent  For Your Review  Reply ASAP  Please Comment

**Message**

Lorne, Thanks for the note to  
Mike Cathro re- '97/'98 stats.  
You're right - I usually ask for them.  
I'm behind time - so thanks!  
See you at KEG?  
P.S. Any planned EXPLORATION for '98?

Tom

Ministry of Employment  
and Investment  
Kamloops, B.C.

Rec'd **MAR 9 - 1998**

**Highland Valley Copper P.O. Box 1600 Logan Lake, B.C. V0K 1W0**

# F A X

Date: March 9, 1998

Number of pages including cover sheet: 2

To: Mich. Cathro  
 Phone: 250-828-1566  
 Fax phone: 250-828-4726

From: Lorne Bond  
 Phone: 250-523-3370  
 Fax phone: 250-523-3302

REMARKS:  Urgent  For your review  Reply ASAP  Please comment

*Production and Ore Reserves numbers  
 you wanted - most of the senior  
 people were away - took a while to get clearance.  
 If they are too late for you to  
 use, perhaps you could forward  
 them to Tom Schuster; he usually  
 asks for them around this time.*

*Cheers,  
 Lorne.*

*TOS to  
 Fax  
 "Thank You"  
 to Lorne*

H:\home\lcb\Fax.doc

March 9, 1998

**Highland Valley Copper**

Ministry of Employment and Investment Kamloops, B.C.  Rec'd <b>MAR 9 - 1998</b>
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**1997 Production**

**Ore Mined:**

44,969,000 tonnes @ 0.394 % Cu 0.009 % Mo

Copper 346,480,000 lbs 157,162 tonnes

Molybdenum 4,339,000 lbs 1,968 tonnes

Silver 1,928,000 ozs

Gold 12,600 ozs

*) in concentrate?*

**1998 Ore Reserves (Measured and Indicated)**

457.1 million tonnes @ 0.419 % Cu 0.0085 % Mo

JOS → 1) HVC  
2) Copper Refining  
3) POST



## NEWS RELEASE

For Immediate Release  
May 27, 1998

Office of the Premier

### **PROVINCE, HIGHLAND VALLEY COPPER SIGN MOU TO EXTEND MINE LIFE, BUILD NEW COPPER REFINERY AND CREATE JOBS**

VICTORIA—The provincial government and Highland Valley Copper Mine have signed a memorandum of understanding that could lead to a mine life extension and the development of a copper refinery at the Highland Valley Copper Mine at Logan Lake near Kamloops, Premier Glen Clark and Highland Valley Copper Mine President David Johnston said today.

“The government’s Power for Jobs initiative provides for the negotiation of competitively priced power for new investment projects,” said Clark. “This potential mine expansion and new copper refinery are examples of the type of projects we are encouraging; and at the same time, it demonstrates how we are undertaking with the mining industry to attract new job-creating investment to B.C.”

“These joint industry-government initiatives are part of the B.C. government’s overall strategy to draw job-creating investment to the province, along with Power for Jobs, the Oil and Gas Initiative and other programs under the Jobs for BC strategy,” said Harry Lali, minister of transportation and highways and MLA for Yale-Lillooet.

Highland Valley Copper Mine is a large tonnage, low-grade porphyry copper-molybdenum deposit, with reserves of 457 million tonnes grading 0.42 per cent copper. The mine employs 1,100 people and processes approximately 125,000 tonnes of ore daily.

“The new technology, piloted by Cominco Ltd., is an environmental breakthrough because it enables Highland Valley Copper Mine to produce pure copper from the ore without generating any hazardous emissions,” said Cathy McGregor, minister of environment, lands and parks and MLA for Kamloops. “The new plant would produce 100,000 tonnes of copper metal a year.”

The copper refinery would process concentrates from the Highland Valley Copper operation, owned by partners Cominco Ltd., Rio Algom Limited, Teck Corporation and Highmont Mining Company. Several other B.C. copper mines have also been identified as potential suppliers to the refinery. The plant would create 500 person-years of construction employment, 110 full-time jobs, plus protect existing jobs representing an investment of \$200 million. With the extension of mine life to year 2012, investment would be nearly half a billion dollars and support more than 1,200 potential jobs.

- more -

- 2 -

"The mine extension and new technology ensures that value-added jobs stay in B.C.," said Clark. "This project supports our strategy to diversify our economy, while creating jobs and economic opportunities for all British Columbians."

"We are examining scenarios which could see the mine life extended to the year 2012," said Johnston. "If the refinery is considered feasible, it would represent a major technological breakthrough which could significantly improve the economics of the existing operation and development of known ore reserves."

"This technological development could underpin a major revival in the B.C. mining industry similar to which occurred in the 1960s and early 1970s," added Clark. "If successful, the process could substantially improve the economics for several other B.C. copper deposits whose grades and transportation costs currently make them marginal."

Last month, Clark and Minister of Energy and Mines Dan Miller announced new mining initiatives to attract investment and create jobs in the sector, including legislation recognizing the right to mine.

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**(Backgrounders)**

Contact: Jean Wolff  
Press Secretary  
Office of the Premier  
(250) 812-2849

Theresa Lumsdon  
Manager  
Communications  
Ministry of Energy and Mines  
(250) 952-0152

Trevor Phelps  
Supervisor  
Public Affairs  
Highland Valley Copper Mine  
(250) 523-3210



Highland Valley Copper

VG → HVC

## MINI FACT SHEET

- OWNERSHIP:** Highland Valley Copper is a partnership between Cominco Ltd. 50%, Rio Algom Limited 33.6%, Teck Corporation 13.9% (includes 2.5% from Highmont Mining Company) and Highmont Mining Company 2.5% (excluding Teck's 2.5%).
- LOCATION:** Highland Valley Copper is located on Highway 97C, 17 kilometers west of the town of Logan Lake and 75 kilometers south west of Kamloops.
- TYPE OF MINE:** Highland Valley Copper is one of the larger open pit copper mines in the world in terms of tonnage mined and milled.
- END PRODUCTS:** Highland Valley Copper produced 391,951 tonnes of copper sulphide concentrates containing 346 million pounds of copper and 3,711 tonnes of molybdenum sulphide concentrates containing 4.3 million pounds of molybdenum in 1997.
- SALES:** Sales for 1997 were \$380.4 million. Most of the copper concentrates are sold under long term frame contracts to smelters in Japan and other Far East countries, Spain and elsewhere. The molybdenum is sold to traders who currently ship it to Europe and China.
- EMPLOYEES:** Highland Valley Copper currently employs approximately 1,100 people. Employees reside in Kamloops, Logan Lake, Ashcroft, Merritt, Cache Creek and Lower Nicola. Wage/salary and benefit costs totalled \$98 million in 1997.
- PROPERTY TAXES:** Property taxes paid to regional and provincial governments amounted to \$1.7 million.
- SAFETY:** Highland Valley Copper operates a Provincially recognized safety program and has received the award for being the safest large mine in B.C. for seven of the last eight years.
- ENVIRONMENT:** Highland Valley Copper has an active environmental management program covering waste management, land and water reclamation as well as site decommissioning. At the end of 1997, approximately 1,488 hectares had been revegetated for one or more years out of a total disturbed area of 6,184 hectares.
- MANAGEMENT:** David L. Johnston - President, General Manager  
George F. Reynard - Vice-President, Marketing  
Bob E. Caines - Manager, Mining  
Ron S. Simkus - Manager, Milling  
Terry D. Marsten - Manager, Administration  
Rod J. Killough - Manager, Industrial Relations & Personnel
- OFFICES:** **MARKETING:** Highland Valley Copper, 3rd Floor, 200 Burrard Street. Vancouver, B. C., V6C 3L6, Telephone No. 688-2211, Fax No. 688-0646.
- CORPORATE and OPERATIONS:** Highland Valley Copper, P.O. Box 1500, Logan Lake, B. C. V0K 1W0, Telephone No. 523-2443, Fax No. 523-3290.

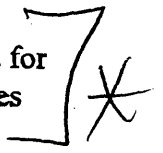




## Cominco Engineering Services Ltd.

Cominco Engineering Services Ltd. (CESL) develops and markets proprietary Cominco metallurgical technology from facilities in Vancouver, B.C. and Calgary, Alberta.

CESL engineers have recently invented and patented two entirely new processes for the hydrometallurgical extraction of copper and nickel from sulphide concentrates based on pressure leaching, solvent extraction and electrowinning.



A pilot plant has been operating successfully for more than two years to recover both copper and gold. Nickel, cobalt, copper and zinc recovery from complex nickel concentrates has also been piloted successfully during 1996. A 500-tonne-per-year demonstration plant for copper will start up in the first quarter of 1997 and a gold recovery demonstration plant will start up later in the year.

These developments are seen as breakthroughs that affect the economic and environmental feasibility of copper and nickel deposits. Both processes are distinguished by:

- the innovative adaptation of existing technology;
- low capital and operating costs, and;
- almost total recovery of the metal values and zero effluents or emissions other than storage of non-hazardous gypsum and hematite residuals.

Both processes are being made available to interested parties on a non-exclusive licensing basis.

*Background*

→ STAFF



# Facts and Stats About Mining in B.C.

Background

Mining is a major contributor to B.C.'s economy, especially outside the Lower Mainland. The province continues to foster its mining sector to encourage investment and employment.

- Total mining-related employment\* is approximately 58,000.
  - direct employment approximately 16,700
  - indirect employment approximately 25,000
  - induced employment approximately 16,300
- There are 22 major operating mines and five smelters in B.C.
  - 14 metal
  - eight coal
- In addition, there are
  - 30 industrial minerals mines
  - 1,100 construction aggregate operations
  - 500 placer exploration programs and mines annually
- 300 metal and coal exploration projects annually
- There are nine projects in the environmental assessment process
  - seven new mining operations
  - two mine expansions
- The value of minerals produced in 1996 was \$3.11 billion (including construction materials)
  - metals \$1.54 billion
  - coal \$1.09 billion
  - industrial minerals \$44 million
- Mineral exports accounted for 13.2 per cent of all B.C. exports in 1996.
- Exploration expenditure in 1997 is estimated at \$90 million. Average annual expenditures in B.C. over the previous five years has been \$84 million.
- Clean coal production values in 1996 increased by 13 per cent.

\*Total mining-related employment includes exploration for and production of metals, coal, industrial minerals, aggregate, placer minerals and smelters.



## Power For Jobs

Government recognizes that for British Columbians, new jobs and economic opportunities are a central priority. Power for Jobs is part of government's overall Jobs for BC strategy, and is aimed at using the province's valuable electricity and power resources from the Columbia River Treaty downstream benefits (DSBs), to maximize the value and benefits for British Columbians. These benefits will be in the form of job creation, new investment, regional economic development and increasing revenue to the province.

The Power for Jobs Development Act enables government to use hydroelectric power, including DSBs, to stimulate investment and job-creating industrial activity in B.C.

### History of the Columbia River Treaty and Downstream Benefits

The Columbia River Treaty was set up to provide for and share flood control and power production benefits between Canada and the United States arising from regulating flows of the Columbia River. The treaty, signed in 1961 and ratified in 1964, runs for a minimum of 60 years.

Canada built three large storage dams in B.C. that capture spring run-off to control flooding and generate additional power in both countries. For this, Canada received payment for flood control, and is entitled to half the additional power that can be generated at dams downstream in the U.S.

This power, known as the Canadian entitlement to downstream power benefits (DSBs), is approximately 1,400 MW of peak capacity, and more than 4,500 gigawatt-hours of electrical energy per year—enough power to meet the needs of close to 500,000 B.C. households. In a separate 1963 agreement with Canada, B.C. assumed rights to the DSBs and was obliged to ensure that the storage dams were constructed and operated as required by the treaty.

In 1964, B.C. sold its share of the DSBs to a group of American utilities for US\$254 million. The money received from the sale of DSBs helped to fund construction of the three treaty dams in B.C.: Duncan, Keenleyside and Mica. The DSB sale agreements expire 30 years from the scheduled completion date of each of the three dams.

### Return of DSBs to British Columbia

For the past few years, B.C. has pursued strategies to maximize the value of the DSBs—a key provincial asset. The approach adopted in negotiations has been to resolve issues, such as the size and return of the DSBs, and access to U.S. markets individually.

Agreements have been reached that give B.C. free return of 1,400 MW of DSBs over existing lines, with 1,100 MW delivered directly to the Lower Mainland where demand is highest. Through its membership in regional transmission associations, B.C. also has open, non-discriminatory access to Bonneville Power Administration's and other U.S. transmission facilities.

Background

# B.C. refinery called an economic long shot

Highland Valley president says new technology would produce pure copper without hazardous emissions.

long shot." However, he said a mine-life extension would be assured with competitive hydro rates.

If built, the copper refinery would process concentrates from the Highland Valley Copper mine at Logan Lake near Kamloops as well as concentrate from other copper producers in the province.

Currently, all copper mined in British Columbia is refined offshore, mostly in Japan and other Far Eastern countries and Europe.

Johnston said the refinery, based on new technology developed by Cominco Ltd. subsidiary Cominco Engineering Services Ltd., would produce pure copper from ore without

generating hazardous emissions.

"If the refinery is considered feasible it would represent a major technological breakthrough that could significantly improve the economics of the existing operation and development of known ore reserves," Johnston said.

The plant would produce about 100,000 tonnes of copper metal a year.

Cominco Engineering Services recently patented two

new process for the hydrometallurgical extraction of copper and nickel from sulphide concentrates based on pressure leaching, solvent extraction and electro-winning.

The company successfully operated a one-tonne-a-day pilot copper refinery, based on hydrometallurgical technology, in 1997.

The Highland Valley mine is one of the world's biggest open-pit copper mines processing 125,000 tonnes of ore a

day and employing 1,100 workers.

Last year it produced 346 million pounds of copper and 4.3 million pounds of molybdenum, generating \$380 million in revenues.

Highland Valley Copper is 50-per-cent owned by Cominco Ltd., Vancouver, 34-per-cent by Rio Algom Ltd., Toronto, and the rest by Teck Corp. and subsidiary Highmont Mining Co., both also of Vancouver.

THURSDAY, MAY 28, 1998

## Kamloops copper smelter considered

ROD NUTT

SUN BUSINESS REPORTER

Highland Valley Copper said Wednesday it is contemplating a \$200-million copper refinery at its mine site near Kamloops if it can cut a deal with the provincial government on electricity rates.

The Vancouver-based company also said a break on the price of power would extend the life of its copper mine by an extra four years to 2012, boosting total investment to \$500 million.

"The government's Power for Jobs initiative provides for the negotiation of competitively-priced power for new investment projects," Premier Glen Clark said in a release.

"This potential mine expansion and new copper refinery are examples of the type of projects we are encouraging and at the same time it demonstrates how we are undertaking with the mining industry to attract new job-creating investment to B.C."

But Highland Valley Copper president David Johnston conceded in an interview that the copper refinery is an "economic

→HRC

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MEM Weekly: to Oct. 9/98

### Engineering and Operations

- Amoco Monteith: expect judicial pronouncement before October 16.
- SYD Road:
  - BCTFA still targeting October 21 as date for submission for approval of Order in Council for road use charges. If Approved Partnership implementation by November 1.
  - preparing finalized road use charges and well list for BCTFA.
- Forest Practices Code: no issues to report over previous week.
- OGC- NEB regulated pipelines: assembled work group team members, draft plan of action, draft final product outline

### OPERATIONAL ISSUES

#### Mines Branch

- Kemess - inspection on site discussion of tailings dam short term requirements. The mine faces a significant uphill battle to catch up and get ahead of the construction schedule to satisfy freeboard requirements for safety and mill production. Another visit planned for November. Announced October 7 that Commercial Production has been achieved. Mill availability continues to rise from 84% in August to 92% in September. Charges by DFO for sediment release during construction are still being contemplated while investigators continue to gather evidence. Tim Eaton at site for inspection.
- Myra Falls Mine - A major fall of ground occurred October 8 in the 18-level of the Battle-Gap Zone. No injuries reported. Bryan Good and George Headley are investigating.
- Royal Scott Minerals - sent a letter to the Minister requesting a decision be made on their application to mine a 100,000 tonne/year bulk coal sample at their Tulameen Coal Project.
- Town of Ashcroft - has written a letter to the Minister in support of the application to operate a quarry. The town is anticipating an estimated 75 jobs will be created at this quarry. The Mayor of Ashcroft has written to the Premier bringing his attention to the discrepancy in production threshold levels for the same material having different end uses. MEM has asked that proposed changes to the EA threshold for industrial minerals be fast-tracked.
- Highland Valley Copper - publicly announced they will proceed with the layoff of 50 employees on December 8. These employees will be employees with the least job seniority. The union has stated this announcement was not a surprise to them and they were expecting it.
- Land use - A new type of park is in the wings "Wilderness Retreat". 525 hectares area near Williams lake being referred through Lands.
- Misty Mountain Gold - a mineral exploration property, has applied for a surety bond to replace their present security. It will not be accepted. Sureties are now only being accepted for major mines and only for those with limited long term ARD issues.
- Gibraltar Mine - Continued operation of this mine will depend upon successful purchase from Boliden. The completion of this purchase, in turn, will depend on the technical review of the proposed closure, the expected closure liabilities and the placement of security by both Boliden and the new company. Victoria and regional staff will be working to an end of October deadline.

#### Mineral Titles

- Converting of expiring placer leases to "lease of placer minerals (LPM)" continues to use the bulk of Vancouver staff time, to the exclusion of other tasks. The LPM task is a priority due to certain placer tenures coming up for statutory termination.



TFS → HVC  
→ POST

## NEWS RELEASE

For Immediate Release  
021  
Feb. 26, 1999

Ministry of Employment and Investment  
Ministry of Energy and Mines

### **FIRM HIRED TO LOOK AT HIGHLAND VALLEY MINE VIABILITY**

VICTORIA—The Job Protection Commission has retained Rescan Engineering Ltd. to look into the viability of Highland Valley Copper mine, Employment and Investment Minister Mike Farnworth and Energy and Mines Minister Dan Miller said today.

“Highland Valley Copper mine is one of the most important players in the local economy of Kamloops,” said Farnworth. “Government recognizes that the closure planned for May would seriously affect the community. The role of the commission is to find ways for companies that are viable over the long-term to work through short-term challenges.”

“Record low commodity prices have hurt B.C.’s mining industry,” said Miller. “Government is committed, through the Job Protection Commission, to work with business, stakeholders, communities and workers to preserve jobs and ensure economic stability.”

Rescan Engineering Ltd., an internationally renowned independent consulting firm, which provides engineering services to the mining and steel industries, will review all aspects of mine operations and propose measures the company, government, suppliers and other stakeholders could undertake to keep the mine viable.

“Government recognizes the challenges the mining industry is facing,” added Miller. “In addition to efforts of the Job Protection Commission, we have, through the B.C. Mining Initiative, introduced financial incentives for mineral exploration and development, cut red tape and worked to create greater certainty for the mining industry.”

In January, Cominco Ltd. announced it would close Highland Valley Copper mine operations at Logan Lake, near Kamloops, effective May 15 because of drastically low world copper prices. The mine employs about 1,100 people and is a major contributor to the economies of Kamloops and British Columbia. The mine opened in 1986 and is the largest open-pit mine in North America, producing about 380 million pounds of copper concentrate and four million pounds of molybdenum.

- more -

MEM (Mines) weekly - ending June 4/99

### Legislation/Regulations:

- Initial regulatory review/business streamlining meeting with representatives of the Canadian Association of Petroleum Landmen and the Canadian Association of Petroleum Land Administration identified standardized forms and improved industry communication as first items to be addressed. The Drilling Licence Regulation is noted as an area for early review. (PLA)
- Two Regulations: First: establishes a no staking mineral and placer reserve over the Fort St. James LRMP Goal 2 sites. Second: rescinds an OIC which establishes a reserve over the entire Province against locating and recording placer mining claims. (MTL)
- The Ministry and the Oil and Gas Commission are undertaking a review and update of the policy for resource administration in areas of coincident coal and petroleum and natural gas tenure and development potential. A coal company concern about resource conflicts in the Burnt River area southwest of Chetwynd provided the impetus for review. (PLA)
- Working with LUCO and MAG to establish consistent process for Tatshenshini claim settlements. (Mines)

### Mapping:

- Mineral Titles needs additional TRIM map data to further the title reference mapping upgrade. Purchase of 82J map block will be initiated. (MTL)

### Mines:

#### HVC Highland Valley Copper:

- Mediated bargaining began Thursday June 3 after a 3-week break; talks broke off after only a few hours.
- HVC position is they are in a market crisis situation, due to the low price of copper.
- JPC has called for a cost savings of 15%, or \$32 million, consisting of \$14 million in electricity costs, \$4 million from suppliers, and \$14 million in wages and benefits.
- HVC wants to cut employee wages directly by 15%, while the union wants a combination of savings, including wages, vacation time, overtime and elimination of one coffee break. HVC's position is that cost savings proposed by the union are intangible, or deferrals, not real savings

#### Kemess:

- Dam construction progressing but slower than required, manager notified. Tailings pond rate of rise increasing in response to warmer weather and spring freshet. (Mines)
- Stage 3 approval ready once company submits proof of equipment acquisition for dam construction. (Mines)

#### Mt. Polley

- Review of standards for waste dump operating procedures completed with mine operator and crews  
Variance for dumping reissued on trial basis. (Mines)

#### Myra Falls:

- Further detailed review of rip rap specifications and stability sensitivity analyses. Waiting for comments/approvals from MELP/DFO. Approval ready. (Mines)

#### Red Mountain:

- Significant discharge of tailings material from the Jumbo Creek tailings facility took place on June 5, 1999. Infobaek has been prepared. Three senior MEM staff are on site. Testing is ongoing to determine any long-term impacts that may have occurred as a result of the discharge.

#### Revenue:

- Petroleum Lands Branch revenue for May 1999 was \$14,541,721, an increase of \$3,685,611 over May 1998. The fiscal year-to-date amount is \$11,070,407 ahead of last year, entirely due to increased tender bonus amounts. (PLA)

VGS → MEM  
Weekly

**CONFIDENTIAL**  
**ENERGY AND MINERALS DIVISION**  
**REPORT FOR SEPTEMBER, 2000**

**Oil and Gas Rights Sale:**

- September sale of oil and gas rights brought \$51.7 million, the largest sale amount in 15 years. Focus of the sale was a very lightly explored area 70 kilometres southeast of Fort Nelson. Fiscal year-to-date bonus revenue now stands at \$145.3 million. (PLA)

**Industry News:**

- Unocal has ended its efforts to block development of the North Aitken underground storage project by purchasing the facility from Canadian Hunter. The storage facility will now be operated in conjunction with Unocal's Aitken Creek facility (PLA).
- The joint venture of ZincOx Resources Ltd. and Redhawk Resources Inc. has completed about half of a 2600m reverse circulation drilling program at the Remac property south of Salmo. (MB)
- *Black Crystal* IMP Industrial Mineral Park's (soon to be Crystal Graphite Corp.) have been refinanced and have reactivated their proposed 200,000 to 300,000 ton/year graphite mine on the Black Crystal property on Hoder Creek (near Valhalla Park). A pre-application EA meeting with staff from the EA office and all interested agencies was planned to take place on September 22<sup>nd</sup>. (MB)
- *HVC* Highland Valley Copper - Mine announced on September 1<sup>st</sup> that further exploration is unlikely before the scheduled closure of the mine in Spring of 2009. A three year extension (deepening of Valley pit) is possible depending on the price of copper nearer to the closure date. (MB)
- *Tulamee* Tulameen Coal (Pacific West Coal) - Permit issued this week for 100,000 tonne per year mine. Logging of site (Tolko) to begin in October. Bulk sample this fall depending on results of marketing efforts. (MB)
- Leader Mining International Inc. made the second payment of \$150,000 to Imperial Metals on August 31 as part of their purchase of the Similco and Invermay properties. The final payment of \$700,000 is due on December 1, 2000. Geological compilation is underway and the company is evaluating how to restart the mine. (MB)
- August 17<sup>th</sup> was the last day of production from the Quintette Coal Plant. (MB)
- Mt. Polley - West Rock Disposal Site Public Meeting was attended by Prince George and Victoria Inspectors. Minimum public interest was expressed. (MB)
- Eskay Creek is proceeding with construction of the pipeline to carry tails to Tom McKay Lake. Much of the bed for the pipe to rest on is now in place and work is underway installing the pipeline. The mine received EA approval 3 months ago and is moving quickly to get maximum work completed prior to winter. (MB)
- Slate Creek Group is threatening litigation against MEM after they were ordered to stop work at Tulameen. Survey and design information for the temporary access road is required under the MX Code. (MB)
- Afton, Teck Corp (Kamloops) - a company from Sudbury, Ontario is inquiring about establishing an explosives plant warehouse in the Ajax East Pit (which is partially filled with waste rock). MEM concerns it may impact access to remaining undeveloped ore reserves in the nearby Ajax West Pit and ground between the two pits. Discussions ongoing with Teck regarding removal of this area from their permit. (MB)
- Approximately 350 CAW workers walked off the job at Myra Falls operations at midnight on September 20<sup>th</sup> when they were unable to conclude a collective agreement with Boliden-Westmin by the strike deadline. Workers were out for a total of 40 hours before accepting the agreement. (MB)
- Cassiar resumed production on August 2 after a four week forced shutdown due to a cash flow problem. (MB)
- On July 31<sup>st</sup> Wheaton River Minerals advised Boliden Ltd. that they would not proceed with the acquisition of an interest in the Premier Mill and Tailings storage system. They felt that the degree of uncertainty associated with both the technical and cost issues would expose the company to an imprudent degree of unquantifiable liability. Pond capacity, dam integrity, acid generating potential of existing tailings, the potential for intervention during the permit amendment stage, the necessity of adding another (downstream) lift on the dam, a new water reclaim system and holding costs were among factors considered. (MB)