



# MOTHER LODE

## CHAMBER OF MINES OF EASTERN BRITISH COLUMBIA

A bureau of information providing authentic, reliable data to the general public and the mining industry of Eastern British Columbia

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NEWSLETTER

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## COMINCO SMELTER TOUR AN EXCEPTIONAL EDUCATIONAL EXPERIENCE

### President's Report

"Hello, I'm Bob Fletcher, your tour guide" says the long time dedicated Cominco employee as he glances at the clock to ensure a prompt 10:00 A.M. start. "Yesterday we had 36 people but looks like there'll only be 8 today so I'll be able to handle it alone. You know, we get 2500 visitors and another 1500 students a year on this tour...it will take about 2½ hours...make sure you keep your safety glasses on in the buildings." And so the enthusiastic group was quickly ushered into a room to sign the guest registry, followed by a fascinating historical overview of this mega-complex. Few, if any of us, realized that a smaller smelter was first established at this location in 1895 to process the gold-copper ores from the Rossland mining camp. Now it is the largest lead-zinc-silver smelter in the world, and the major sources of concentrates are from the Sullivan mine in Kimberley and the Red Dog mine in Alaska. A short film was presented entitled "The Greening of Trail" which demonstrates Cominco's reclamation and environmental monitoring commitment in the area.

On the first stage of the walking tour, Bob explained step-by-step the process of treating the lead concentrate with a silica-lime flux at 800°C where it is nodulized and sintered to form a lead oxide feed to the blast furnace. Here it

reacts with coke to produce metallic lead bullion which is poured into 5-ton pots. Impurities are removed in the electrolytic refining process, leaving a final product of 99.99% lead pigs or jumbos which are ready for shipment to markets. Sounds simple doesn't it! Actually, I probably missed a few steps along the way. The last time I heard words like anodes and cathodes was in a chemistry class at least 25 years ago!

Our adventure into the zinc processing facility was just about as easy to comprehend. After peering from a visitors gallery into the electrolytic plant the size of three football fields, we watched as 210 lb sheets of zinc were stripped from each aluminum cathode before melting and casting into slabs for market.

A very informative aspect of the tour was discovering the number of metals which are recovered and of their uses: These include: lead - radiation shields; antimony lead - car batteries, silver - photography (42% is purchased by Kodak), gold - space program, bismuth - pharmaceutical industry, indium - fire sprinklers, cadmium - dry cell batteries and zinc-galvanizing. The tour serves as a reminder of the important role that the mining industry plays in the B.C. economy and our everyday life. For instance, sales value for all products from this operation exceed \$1.5 million

daily and total wages paid out approximate \$100 million per year.

Just a quick tip if you plan on taking the tour - pick a day with a pleasant temperature forecast. By the time I arrived back at my vehicle at 12:30 P.M., it was 36° C in Trail!

Great news! Higher copper prices and a lower Canadian dollar has resulted in decisions to re-open three B.C. mining operations. These include Princeton Mining's Similco copper mine near Princeton, Teck Corporation's Afton Ajax copper-gold mine near Kamloops and Gibraltar Mine Ltd's McLeese copper mine near Williams Lake. Together these operations will employ more than 400 people and generate several tens of millions of dollars of economic activity.

In Chamber-related news, several members have expressed concern about the government's plan to remove and replant 60 roads in the Nelson Forest Region. Road access is considered critical in order to assess the geological potential of non-protected lands and this issue will be actively pursued by the Chamber.

We encourage you to bring your queries and concerns to our next executive meeting on Thursday, August 18 at 7:00 P.M.

Terry Turner, P. Geol. ■