Calgary's Aurun Mines Strikes Big With Massive Perlite Discovery 920/8 680400

by Desmond Bachelor

Perlite: An acid, igneous glassy rock of the composition of obsidian, usually occuring in masses of small globules.

Trading on the Alberta Stock Exchange for little more than four months, Calgary-based Aurun Mines has brought into production a perlite mine at Clinton, British Columbia and is operating a test plant at Aldergrove, B.C. processing perlite, a little known but highly in demand product, especially in agriculture. Perlite is one of the finest sterile growth mediums available.

To produce commercially usuable perlite, the rock is crushed and sieved to the desired size, then run through a furnace. Each perlite granule contains moisture, the furnace turns this moisture to steam and the granules burst in the same way as popcorn, changing the heavy granules into a product so light it floats on water.

Perlite deposits are the product of recent volcanic action, the only known Canadian deposits occuring in British Columbia. Prior to Aurun's development all perlite came from New Mexico. According to Patrick Murray, president of Norwich, Ontario-based Shamrock Industries, Aurun's product is considerably higher in quality and consistency than previously available. Shamrock has signed a joint venture agreement with Aurun to construct a perlite expander plant in Ontario with a capacity of 3300 tons per year. This plant will be operated by a newly formed company, Atlantic Perlite Ltd. which will be owned equally by the two companies.

Aurun's president, Jed Dagenais, says that they have not yet established the total reserves on the property. There are two known deposits, both open along strike and at depth. Because of the size of the deposit the decision was made to proceed with mining at once rather than prove up the entire property. Even so, the relatively small area that is now being mined has a life of some 60 to 70 years.

Aurun is planning work programs on three other mineral properties; the 127 claim Huntington Gold Project, 80 kilometres southeast of Elko, Nevada, on which an option agreement has been signed with the owners, Golden Triangle Exploration Co. of Pioche, Nevada; a joint venture with Calgary-based Comaplex Resources on a rare earth property 22 kilometres south of Revelstoke, B.C. and a joint venture with Vancouver-based Ark Energy on the Groundhog Basin Project at Revelstoke, B.C.

The Groundhog is located 8.5 kilometres north of Noranda's Goldstream massive sulphide copper-zinc mine, hosting the same geological characteristics. Chip samples from three quartz veins assayed 0.104, 0.244 ounces of gold per ton and 10.82 ounces silver per ton. Aurun Mines Ltd. trades on the Alberta

Stock Exchange under the symbol AUZ.



Rear of Aurun's pilot plant showing converter furnace



Perlite "popcorning" under influence of propane torch



Official ribbon cutting, left to right, Jed Dagenais, Aurun President, the Hon. William Ritchie, B.C. Minister of Municipal Affairs

Goldrich Looks To Be Gold Rich With **Early Production From Bayonne Mine**

by David O'Keefe



Columbia.

Goldrich President Paul Frigstad

place in the stopes or recovery was poor at the straight cyanidation circuit mill that had a 60 ton per day capacity. Metallurgical tests by Goldrich have determined that a 98.5 percent gold recovery can be expected from the Bayonne ore which will be processed at the David Minerals HB Mill at Salmo, British With our diverse readership we try to

simplify the sometimes complex geological terminology that is part and parcel of reporting on mineral properties. The Bayonne Mine is an unusual property so I feel justified in quoting an excerpt from Engineer Phendler's 1982 report.

"The Bayonne Mine is unique in British Columbia in that the veins are heavily oxidized to a maximum depth of 135 metres. In this zone the sulphides have largely disappeared, their place being taken by limonite and minor amounts of secondary level and zinc minerals. The bottom of this zone is characterized by a rather abrupt transition zone to fresh sulphides. Conclusions are that the area has suffered from deep preglacial weathering that escaped removal

Now is that a vein, or is that a vein!

by continental glaciation, a rather suprising condition, considering the high elevation and exposed location but not unheard of. The oxidized zone consists of limonite and rusty, honey combed quartz that often assayed one to two ounces of gold across narrow widths. Dilution brought this grade down to the half ounce range. Below the oxidized zone is a 50 foot thick zone of apparently enriched material that assayed between 0.50 and 1.0 ounce of gold per ton and below this in primary material assays are closer to the 0.40 gold average. However, stopable lengths of vein material continue to average close to 1.0 ounce of gold per ton - see east end of 8A level."

The Bayonne property, which now covers some 11,000 acres, had been developed on eight levels, one hundred feet apart vertically. Levels 1,2,3,4,5,6 and 8 were driven from surface on the main vein with crosscuts to the mines "A" vein driven on the 4,5,6 and 8 levels. Access to level 7 is by internal raises. An additional level - No.9 - was developed for 420 feet from the No.1 shaft sunk vertically from level 8.

By the middle of the summer of '83

New techniques, new geology and a still attractive gold price are the spur. There are many old gold camps in British Columbia, among them is the Sheep Creek Mining Camp in the southeast of the province, near the city of Nelson. It is here, in the very heart of this old Camp that Goldrich has returned the Bayonne Mine to production. Goldrich president Paul Frigstad plans to have production at 150 tons by early summer rising to 250 tons per day by early next year. The Bayonne property first received atten-

Once more the pattern of re-opening old pro-

ducers continues. From Canada to the United

States old mines are getting a new lease on life.

tion as early as 1901 but actual production didn't begin until 1936, closing in 1942 due to war shortages. In its first production life the mine yielded 85,000 tons of material averaging 0.47 ounces of gold and 1.12 ounces of silver per ton. In his October 1982 report, Professional Engineer Roy Phendler noted that from the one to two ounce gold enriched zone of the mine the average production grade of 0.47 suggests that either excessive dilution took