

practically complete, the tramway being in working order, while some 2,000 tons of ore are now in the bins, a daily output of 100 tons a day being maintained from the mine. It is proposed to enlarge the Crofton smelter to treat 1,000 tons daily, and reverberatory furnaces and Edwards reasters would be added to the plant. In addition, the Anaconda type of briquetting machine for handling the fine concentrates was about to be installed. It is expected that the plant will be in readiness to commence operations early in October; meanwhile Mr. Geo. H. Robinson, managing director, has succeeded in securing the tonnage of the Mount Andrews group of mines, Prince of Wales Island, for this smelter.

**Hastings (British Columbia) Exploration Syndicate.**—The directors, in submitting the seventh annual statement of accounts, for the year ending May 31st, 1905, show a balance of cash on hand of £6,572, 19s. 1d. The ore shipped to smelters realized £10,099, 16s. 10d. net after the deduction of freight and treatment. No account has been taken of the value of the ore in bin at the mine. The board has recommended the distribution of a dividend at the rate of 5 per cent., which was payable on the 5th of August.

Following are extracts of the report of Mr. Leslie Hill, the company's local representative and consulting engineer:—

**"Arlington Mine.**—During the year 1,088 feet of development work was done, consisting of drifts, cross-cuts, raises and winzes, the total cost of which for labour was \$10,324.11, equal to \$6.12 per foot, which compares favourably with previous years.

"During the year 1903-04, I followed up a small streak of high-grade ore which had been exposed above the No. 1 or Main Tunnel, and which assayed well, but was considered too small to work. This streak enlarged and spread, and finally developed most of the ore which was shipped during this year. This new ore body extended to within 5 feet of the ore previously mined in the large stope known as the 'Bull-pen,' and was only separated from it by a thin layer of barren slate.

"During the year returns were received from the smelter on 1,128.75 tons of ore, the gross value of the contents being \$66,140.00, and the net smelter returns, after deducting the cost of freight and treatment, and the usual smelter deductions, \$52,700.57. The average gross value was \$58.60 per ton, and the average net smelter value, \$46.70. 112 tons of this ore shipped were taken from the head Arlington workings, the average net smelter value of this ore being \$59.33 per ton, and 1,016 tons were from the Arlington workings, the average net smelter value of which was \$45.30. These values were slightly higher than those obtained last year.

"In addition, a sum of \$1,200.12 was received from the Dominion Government as a bounty on the lead contents of the ore, making a total received from ore of \$53,900.69.

"The total cost of mining and hauling to Erie was \$34,746.08, leaving a gross profit of \$19,154.61, equal to 36.34 per cent. of the net smelter returns.

"The detailed mining costs per ton of sorted ore were as follows:—

	Per ton.
Development (labour) .....	\$ 9.15
Stoping (labour) .....	9.04
Sorting and tramming .....	3.98
Timbering .....	.40
Supplies .....	2.25
Surface and general expenses, including assaying and surveys .....	1.93
Hauling to Erie and loading on cars....	2.77
Ore tax .....	.87
Insurance .....	.40
	<hr/> \$30.79

The cost per ton for development has been increased, owing to the greater amount of development necessitated by the opening up of fresh ground, and the cost per ton

for stoping is greater than that for the previous year, caused chiefly by the extra expense of stoping small high-grade sheets of ore in the Head Arlington. The total cost per ton of sorted ore is 20 cents higher than in the previous year; the average net smelter value, however, was greater by \$2.38 per ton, which is further increased by \$1.06 per ton lead bounty, making a total increase of value per ton of \$3.44.

"The total quantities of rock mined and of ore shipped would be in proportions of eleven to one, and the cost of mining, tramming, sorting and timbering, including supplies, would be \$2.25 per ton of rock mined.

"The above costs include all the expenses incurred at the mine, and in connection with mining and shipping, but do not include the expense of the Nelson office and of the general manager.

"The development of this new ground on the 770 feet north level is of very great importance to the future of the mine, as it opens up large possibilities. There is a large block of ground belonging to the company lying to the north of the present workings, and if the vein carries ore throughout the ground lying between the present stopes and the old Micawber workings, it will be seen that there is a large area of the vein to be developed. The ore shoots now exposed are narrow, but more continuous than in the portion of the vein already stoped. It is impossible to give any estimate of the quantity of ore in sight; the shoots are only exposed on one side, and also they generally turn out more ore in stoping than the exposed side would indicate, but there is more ore now exposed than at any previous time during my management, and there is a large block of ground in which it would be reasonable to expect development to find fresh ore shoots.

"The Head Arlington workings, while worked by the company, have turned out 112,113 tons of ore, which realized net smelter returns of \$6,652.00, and the total amount expended on these workings has been \$4,225.50. The vein as shown in these workings is very difficult to understand. The ore shoots have been dipping at a much greater angle than the regular dip of the vein. The streak of ore has usually been very narrow, but the ore has been high-grade. The ore shoot which we have been following has been stoped out, and I have not been able to connect it with the other vein worked by Muffett during his lease. From the present development it would appear that it is a spur or slip that we have been following, and in which we have found the ore shoots, and I believe that the main vein continues on the other side of the porphyry dyke which cut it off. I am in hopes that the seam which we are now following will prove to be the main vein."

With regard to the East Kootenay and other mineral claims, Mr. Hill advises as follows:—

"No work has been done during the year on your mineral claims in East Kootenay, or on the 'Sunlight' fraction mineral claim in the Slocan district. With regard to the claims in East Kootenay, I am informed that the North Star Mining Company is now doing development work on its claim called the 'Midnight.' This is the most northerly of their claims, and adjoins your claims 'Melton' fraction and 'Big Chief.' Some ore has been shipped from the 'Midnight' claim, and some float ore has been found in the wash on your claims, and any ore body developed in the 'Midnight' will increase the value of your claims. The smelter at Marysville is now in operation, and treating ore from the Sullivan group, which adjoins your property on the other side."

**Elk River Coal & Oil Company.**—The annual general meeting of the Elk River Coal & Oil Company was held in Fernie last month. The president, Mr. W. A. Bleasdel, presented a report of the directors, which showed the company to be in a strong financial position. The company own 45 coal claims in the Upper Elk Valley, which are now being developed. The following directors were elected for the ensuing year: Messrs. W. A. Bleasdel (president), J. R. Lawry (vice-president), Chas. Klingensmith, and W. S. Fairfield. The latter was re-elected secretary-treasurer.