NAME

SUBJECT CLIPPINGS

SULLIVAN

| 2FNEDS2 | |
|---------|--|
| Sulwar | |

| 82Fr | |
|-------|--|
| 1EDS2 | |
| Sour | |
| Muan | |

GCNL #123

a6 JUNE 1985 COMINCO LTD. (CLT-V,T,M)

ZINC PRODUCTION CUT BY 10% - Cominco Ltd. announces immediate reductions in production to bring zinc concentrate and refined zinc inventories in line with demand. These reductions are the result of current low prices for zinc on world markets. The effect on output of refined zinc at Cominco's Trail, B.C. operations is to reduce production by 15,000 tons, i.e. 10%, between July I and December 31, 1985.

In conjunction with this reduction, the Sullivan mine at Kimberley, B.C., will shut down for the month of August. The cutbacks may be extended further if market conditions warrant.

COMINCO LTD. (CLT-V,T,M)

ZINC PRODUCTION CUT BACK FURTHER - Cominco Metals, a division of Cominco Ltd., announces reductions in paroduction of zinc concentrate and refined zinc at several of its properties as a result of the current depressed prices for zinc on world markets. The low prices have been brought about by continued production of

both zinc concentrate and refined zinc at levels in excess of demand and consumption. BRF (082FNE052)

Production of refined zinc at Cominco's Trail, B.C. operations was reduced by 15,000 tons between July 1 and 31Dec85. This curtailment will effectively be extended through 1986 by cutting production a total of 25,000 tons in the calendar year. Production of zinc and lead concentrates at Cominco's Sullivan mine at Kimberley, B.C. will be cut by 17%, being by 35,000 and 25,000 tons, respectively, in 1986. The Polaris Mine will reduce production of zinc concentrate by 25,000 tons and of lead concentrate by 4,000 tons between now and next shipping season.

Cominco states that, if market conditions continue to be depressed, further cutbacks will be implemented.

Pine Point Mines Limited's curtailments in concentrate production which started in July 1985 will be extended throughout 1986. Production of zinc concentrate will be reduced by 93,000 tons and of lead concentrate by 29,000 ton in 1986. This is a 30% cut from planned production. Cominco Ltd. is Pine Point's major customer.

NM 4MPY 87

ebt reduction key element in plan

- Debt reduction will be a key element in Cominco's 1987 business plan, according to Robert E. Hallbauer, president and chief executive officer. At the annual meeting, he announced plans to "reduce existing debt by a further \$250 million" which would include selling the company's American fertilizer assets.

Cominco lost \$48.2 million last year before extraordinary items but reduced its short and long term debt to \$643.9 million, a drop of \$356 million from the previous year. Among the holdings sold to achieve that debt reduction were: Fording Coal (\$87 million), the Con mine at Yellowknife (\$64 million) and West Kootenay Power and Light (\$80 million).

Regulatory approval is still required for West Kootenay which also assumed \$67 million of Cominco's debt. On a pro forma basis the sale would bring Cominco's year-end debt down further to \$564 million. Cominco recently sold Canada Metal and is negotiating the sale of Transcom Venture, a diamond mine in South

Higher metal prices helped



Robert Hallbauer

Cominco post a \$5.5 million profit in the first quarter compared to a \$26.6 million loss last year, excluding the sale of Fording. Net earnings for the comparable quarter last year were \$14.8 million. In the latest quarter, Cominco's mining and integrated metals business segment earned an operating profit of \$26.8 million compared to a \$6.5 million loss in 1986; but the fertilizers business segment lost \$400,000 against a \$1.2 million profit a year earlier.

He noted that steps were being taken to reduce operating costs including the formation of Cominco Resources International, an exploration and mining subsidiary. It is being formed to conduct exploration and development outside Canada, Alaska and the United States and will reduce Cominco's own exploration expenditures by \$10 million per year, he said.

According to Owen E. Owens, vice-president exploration, public money will be used to finance work on its portfolio of properties. A final prospectus should be completed in early May and the funds would allow it to advance 2-3 properties to a production decision as well as provide for several years of exploration. Cominco Ltd. would effectively control the new exploration entity whose focus would be primarily on gold.

Responding to a question about the future of Cominco's Sullivan mine property at Kimberley, B.C., Mr Hallbauer predicted the mine would produce at its present rate for at least another five years, scaling down thereafter. Planned mine life is about 15 years. He argued that "Cominco has a major investment there" and insisted they want to keep the asset for as long as possible. The company will also be looking at other exploration opportunities in the area, he pointed out.

Noting one portion of the ramp that was particularly wide (24 ft.), The Northern Miner was told that section was designed for an electric haulage system. But the sys-

tem was never installed.

Most development drilling is hydraulic and Mr. Keen claims Atlas Copco hydraulic jumbos have worked out the best because the rock is very hard in the 60,000-90,000 lb.-per-sq.-in. range. A major reason for switching to hydraulic was the fact Sullivan's compressed air plant didn't have the capacity to supply enough air for the equivalent in percussion

The performance for conventional percussion units is sharply lower, meaning more of the units would have to be purchased, increasing the demand on Sullivan's compressed air system. The working environment associated with hydraulic drilling also is much cleaner and productivity is higher another consideration.

The mine services its own hy-

Had to spend considerable time developing hydraulic fluid.

draulic drills in an underground shop and has diagnostic testing equipment which it designed specifically for that application. The shop was spotless, a prerequisite when dealing with hydraulic equipment, and the same standards are maintained in an area allocated for conventional drilling equip-

Because of a provision in the B.C. mining act, Cominco had to spend considerable time and money developing a fire resistant hydraulic fluid. It eventually developed an emulsion consisting of 60% oil and 40% water and Mr. Keen estimates regulations like this add from 6-7% to the cost of purchasing equipment for B.C. mines. Often suppliers are reluctant to adapt their equipment to meet these regulations meaning Cominco has to do it, he adds. There are also some negative aspects associated with using such an emulsion, he confirms. Pumps appear to wear out faster, larger hoses are required and there was some deterioration in the hoses initially, but this has since been overcome, he says.

About 80 pieces of mechanized equipment are used underground and they are serviced by fuel and lubrication trucks which actually visit the various work places.

The company is upgrading its power system underground, which will see transmission voltage increased to 13.8 kilowatts, and the introduction of sub stations on skids. These will be kept close to mining sites to reduce voltage drop problems. The upgrading will also eliminate PCB-type transformers which have been used for years. Under consideration is a program to upgrade the crushing conveyor system, which Mr. Keen admits is a major production bottleneck.

Communications underground

'Hot muck' phenomenon occurs where sulphide ore glows red hot.

are phenomenal and there is one system for producing areas and a separate one for the conveying system. Called a Radiax Slotted Coaxial Cable system, he says you can be 2-300 ft. from the cable "at line of sight" and communicate with different locations in the mine. "There's been a tremendous improvement in communications since we've installed this system,' he points out.

Mobile hydraulic rockbreakers are used underground for oversize which eliminates most secondary blasting, especially in drawpoints which are often damaged by explosive charges used to break up large sized rocks.

In certain areas of the mine a "hot muck" phenomenon occurs where sulphide rich ore glows red hot if it's not removed quickly from draw points. When broken, the pyrrhotite ore begins to oxidize and eventually resembles red hot charcoal, a hazardous situation. So areas with high sulphide content are mucked out as quickly as possible before the phenomenon occurs, says Michael Bapty, superintendent technical services at Sullivan. This occurs in other mines as well.

Ore is transported to the Sullivan mill by a four-mile electric railway. Cominco operates two 40-car trains each of which carries 600 tons and these were originally designed for coal haulage.

According to Mark Freberg, assistant production superinten-dent, Sullivan concentrator, the plant is handling about 8,000 tons per day, five days a week at a feed grade of 4.9% lead, 3.7% zinc and 1.6 oz. silver. Last year the concentrator processed 2.7 million tons of ore at a slightly higher grade (5.1% lead, 4% zinc, 1.7 oz. silver). He says the plant utilizes a first stage heavy media separation similar to coal plants which elimi-nates 35% of the weight coming from the mine. The waste product is sold to the Canadian Pacific Railway for balast.

The sink float plant allowed the mill feed tonnage to be increased substantially without having to

increase the fine grinding or flotation capacity. Depending on the amount of float, the plant can treat up to 12,000 tons per day. In terms of energy consumption, it's mid range and he notes Cominco generates its own power at Kimberley.

Besides lead and zinc concentrates, which are sent to Trail, the plant also produces an iron concentrate which is used to manufacture sulphuric acid. About one ton of tin concentrate is also produced each day averaging approximately 35% tin plus 10 tons of copper sulphate crystals some of which is used as a reagent in the plant. The rest is sold to various companies including Pine Point Mines, a Cominco subsidiary.

level development. In one case it was necessary to blast the whole level to break the ore before access was lost. Thereafter, one sub-level was placed in the middle of the pillar and this practice has since been quite successful, he claims. But the sub-level caving method has its limitations in such stopes, namely a low production capability during the production cycle, often only 8,000-10,000 tons per month.

Vertical crater retreat or slot and shell has been utilized very successfully and he says the emphasis has been towards eliminating in-pillar development which reduces the pillar mass and concentrates already high stresses. Drilling large diameter holes (4½ in.) from the footwall is also being phased out. Several different means of providing a blasting void or slot have also been investigated.

Giving the 2-47 pillar as an example, Mr. Keen says the pillar was developed by driving a hangingwall drill drift from an existing access, then drawpoints from scrams located at 60-ft. vertical intervals in the footwall. The pillar was drilled off with down-thehole equipment using 6-in. holes on a 10x10 pattern from the hangingwall drift and 2-in. drilling for the drawpoint trough.

Three drop raises were used as slots and when the raise and undercut blasting was completed, additional ground was opened up with VCR techniques. The pillar shell was blasted using sequentially-delayed decks, all with the same

System should have the ability to operate by remote control.

delay in each deck. There were also detonating relays at the collars of each hole so they could break separately and towards slot raises for additional relief. Fragmentation was excellent because of the large void and high powder factors, he claims.

A few years ago, the company started experimenting with largesized up holes and the method is still used extensively, The Northern Miner noted on an underground tour.

SALES OF THE PARTY OF THE PARTY

So far as designing equipment for this application is concerned, several factors should be considered, he notes. First, the drill centralizer and rod breakout (uncoupling) system should have the ability to operate by remote control. Second, the mast rotation mechanism must be simple and rugged and the mast should have stingers top and bottom to ensure rigid support during drilling. This prevents drill hole deviation which affects blasting results and also reduces wear on equipment when it is properly aligned.

Mr. Keen claims that 4½-in. up holes can be drilled 90 ft. with 1% accuracy and loaded easily with ammonium nitrate and fuel oil (ANFO) which is inexpensive compared to water gels and gives

excellent fragmentation. Large 1,000-lb. ANFO loaders have been used quite successfully to blow the explosive into the hole at the proper density with minimum blowback, he adds.

High pressure 250-lb.-per-sq.-in. compressors are used with in-the-hole hammers to increase penetration, the result being drill cuttings exit the hole at very high velocity. This proved to be unacceptable environmentally, especially in dead-end headings, so several measures were tested to resolve the problem.

The most promising was a reduction in the diameter of the drill pipe which reduced exit velocities. Combined with good ventilation, the problem has largely been resolved, he says. But there is now greater drill hole deviation past the 80-ft. mark. Holes have been drilled to 120 ft. with these units, he adds.

In the long term, the company wants to change all drilling to $3\frac{1}{2}$ - $4\frac{1}{2}$ in. to improve fragmenta-

Reserves sufficient for 20 more years of operation at present production rates.

tion and reduce the incidence of hole caving. Small holes tend to be affected more by movements in the pillar, making loading more cumbersome.

The Sullivan orebody is a large, gently dipping iron-lead-zinc deposit often compared to an inverted saucer. Located on the

western edge of the Rocky Mountain trench, the deposit varies in thickness from 10-300 ft. and dips to the east at 10-45°. Plan dimensions are roughly 7,000x5,000 ft. and footwall rocks range from hard, blocky chert to soft argillites. Hangingwall rocks vary from soft argillites to competent silt-stones.

The lead-zinc ratio changes with depth in favor of zinc which is important given the relative strength of zinc prices today in comparison to lead. At the end of 1984 the mine had measured and indicated reserves totaling 44 million tons grading 6.38% zinc, 4.4% lead and 1.0 oz. silver per ton, sufficient for 20 more years of oeration at the present production rate.

The ore is essentially a replacement deposit in argillaceous quartzite of Precambrian age. The ore bodies are massive deposits consisting of fine strained mixtures of sulphides, sometimes interbanded with the country rock and varying widely in their content of lead, zinc, iron and silicates. The principal economic minerals are galena and marmatite. Iron is mainly present as pyrrhotite, and to a much lesser extent as pyrite. The intimate association of these sulphides necessitated the development of a successful differential flotation process before the ore could be processed profitably.

Silver is closely associated with the galena and serves as an important by-product. Tin is a significant accessory metal and is present as cassiterite. Other metals of minor importance, which are recovered as by-products include bismuth, cadmium, antimony and indium. The iron sulphides are a source from which sulphur is obtained for the Kimberley fertilizer plant. The country rock in the form of a coarse mill reject or float is used locally as fill and sold as railway ballast to the CPR.

There is no ore hoisting underground and the mine's inclined shaft is the only one in service. All internal shafts have been decommissioned and the inclined shaft is used for waste handling but there is track haulage on the 3,700-ft. level to the portal for ore handling. Sullivan has two vehicle access routes into the mine and it's a few hundred yards from the administration office to the portal entrance and down into the underground workings. Rampways are well maintained to reduce tire wear on vehicles.

In production for 72 years

Sullivan opts for flexible mining system

by David Duval

KIMBERLEY, B.C. — Old mines like old soldiers tend to fade away, but not Cominco's famous Sullivan mine which is still producing at record levels and probably will be for the next 20 years or more. The mine is referred to with some degree of reverence by Cominco which was incorporated just seven years before Sullivan produced its first ore in 1913.

Modern, technologically innovative, with a working environment that would certainly be the envy of many new mines in Canada, Cominco's desire to remain competitive prompted a shift to mechanization in 1975 and later an upgrading of surface facilities.

According to A. J. (Tony) Keen, underground superintendent, who was moving to Cominco's Con mine at the time of The Northern Miner's visit, several factors prompted the changeover. The company wanted to have the ability to attract and maintain a satisfactory work force, reduce labor costs through productivity improvements and have a flexible mining system that was adaptable to changing mining methods and equipment.

Citing "a strong natural resistance to change within the mine organization," Mr. Keen admits it "has not been easy." Major items involved in the switch to mechanization include: driving a 2,200-ft. decline from surface to the 3,900-level, installation of new office-dry and warehouse facilities at the decline collar, completing a footwall access system, installing major maintenance facilities on the 3,900-level, plus the purchase of the necessary mining and surface equipment.

At present, about 55% of the mine's output is from mechanized draw points, he states, adding that

Production currently averages 10,000 tpd from the lower part of the mine. about 75% of underground production is related to mechanization. Noting that production currently averages about 10,000 tons per day or 2.5 million tons per year, he says the bulk of it comes from the lower part of the mine, not all of which is mechanized. An effort was made to mechanize the upper levels, but "it wasn't any better", he points out.

All mine production is from pillars. However, there is some virgin ore on the fringes of the massive orebody which is flatter and thinner than pillar ore. Lower level pillars are narrow (50-70 ft. wide) and dipping at an average of 30°, he says. They are usually mined in blocks of 70,000-150,000 tons and are surrounded by old blast hole



Photo by The Northern Mine

Standing by the portal into the Sullivan mine are: Michael Bapty, superintendent. technical development (left): Stien Vander-Maaten, general mine foreman; and A.J. (Tony) Keen, former underground superntendent who is now at Con mine.

stopes that are filled with waste rock float from the heavy medium plant in the concentrator. The mixture was either weakly cemented with pyrrhotite tailings or unconsolidated and free running.

Pillar mining is nothing new at Sullivan and a basic method, with some variations, has been established over the years. Because of their depth, remaining pillars are under significant pressure so a slot raise is driven into each one and the ore is blasted simultaneously into it. The slot is opened first and then parallel rings are drilled off and blasted into the void. This has been known as the slot and shell method, he adds.

Although mechanization in the upper levels met with mixed success, several important things were learned from the program, says Mr. Keen. For one thing, Cominco found that mechanized access led to significant productivity improvements. Also, that transportation of bulk and other explosives into the blast area was much easier and so was supervision. Installing drop raises with large diameter holes also proved successful as was fragmentation which caused little or no damage to drawpoints, he adds.

In narrow stopes, Mr. Keen notes that poor ground conditions often resulted from too much subGENL #19 28-77-10 1985

COMINCO LTD. (CLT-T,M,V)

CONTINUED FROM PAGE ONE - The Corporation's Electronic Materials Division continues to expand its production capacity.

Operating profit from this division increased \$1,200,000 over the comparable year. While the results from Western Canada Steel Limited improved over last year's levels, reduced construction activity and lower sales volumes continue to prevent this subsidiary from operating at a profit.

Cominco's share of earnings from associated companies was \$14,000,000 compared to \$2,300,000 last year. Increased earnings by Exploracion Minera Interacional Espana, S.A. resulted from improved productivity and higher zinc and lead prices. Although coal prices did not increase, Fording Coal Limited achieved higher earnings principally from increased sales volumes and lower operating costs.

On January 18, 1985 Cominco announced it will raise approximately \$15,000,000 for Canadian Mineral exploration in 1985 by the sale of common shares to a limited partnership which will pay the exploration expenses of the program. The price of the shares will include a premium which reflects the value of the tax deductions and all benefits of the exploration program will remain with the Corporation.

Cominco is also planning the sale of further common shares in 1985 to provide for a flow through of an aggregate of approximately \$5 million of scientific resarch expenditures.

The outlook for zinc and lead in 1985 is for improved consumption consistent with gradual strengthening of Western World economies. Sales volumes are expected to be slightly higher than in 1984 and at improved prices.

Volumes of gold and silver sales and production are expected to increase over 1984 levels. Prices, however, are not forecast to increase substantially due to reduced investor interest in precious metals as the threat of inflation recedes.

Increased fertilizer sales volumes consistent with world demand are forcast for 1985. Fertilizer sales in the first half of the year are expected to benefit from the carry over of demand resulting from the early winter conditions which curtailed fertilizer applications in the fall of 1984.

Prices for nitrogen and phosphate fertilizers are expected to remain at near present levels. Prices for potash weakened in the fourth quarter due to oversupply conditions in the United States markets and this weakness may persist in North American markets into the first quarter of 1985.

| | STATE OF THE PERSON NAMED IN COLUMN TWO IS NOT THE PERSON NAMED IN COLUMN TWO IS NAMED IN CO | TD.(CLT-T,M,V) THS ENDED | TWELVE M | IONTHS ENDED |
|--------------------------------|--|--------------------------|---------------|-----------------|
| | DECEMB | | | MBER 31 |
| | 1984 | 1983 | 1984 | 1983 |
| Revenues | \$376,500,000 | \$394,100,000 | 1,589,800,000 | \$1,379,300,000 |
| Costs of Products | 275,900,000 | 273,300,000 | 1,105,500,000 | 1,015,200,000 |
| Distribution | 42,900,000 | 50,400,000 | 176,400,000 | 161,800,000 |
| General Admin. | 20,100,000 | 18,500,000 | 76,800,000 | 72,500,000 |
| Mineral Exploration | 4,100,000 | 4,400,000 | 17,400,000 | 15,600,000 |
| Interest | 24,800,000 | 19,000,000 | 91,900,000 | 81,400,000 |
| Deprec'n., Depl'n., Amortiz'n. | 30,000,000 | 29,400,000 | 115,600,000 | 100,100,000 |
| | 397,800,000 | 395,000,000 | 1,583,600,000 | 1,446,600,000 |
| EARNINGS (LOSS) BEFORE | (21,300,000) | (900,000) | 6,200,000 | (67,300,000) |
| Income Taxes: Current | (5,400,000) | 2,800,000 | 8,700,000 | 5,900,000 |
| Non Current | (11,400,000) | (5,500,000) | (13,900,000) | (32,600,000) |
| Minority Interest | 800,000 | 400,000 | 5,100,000 | 1,300,000 |
| Associated Companies Result | 600,000 | (100,000) | 14,000,000 | 2,300,000 |
| Foreign Loss | (400,000) | (200,000) | (1,300,000) | (2,300,000) |
| Extraordinary Gain | - | | 5,200,000 | |
| Net Earnings (Loss) | \$(5,100,000) | \$1,100,000 | \$24,200,000 | \$(39,300,000) |
| Net Earnings (Loss) Per Share | (14¢) | (3¢) | (17¢) | (87£) |

GRADUAL LEAD ZINC - M.N. Anderson, chairman of Cominco has reported earnings per share of 17¢ for the year CONSUMPTION INCREASE FORCAST ended Dec.31,1984 including 8¢ per share as extraordinary gain on the sale of an interest in an oil recovery project in Texas. All per share amounts are adjusted to

reflect the 3-for-1 share subdivision on May 4, 1984

Cominco's mining and integrated metals business segment incurred an operating loss of \$4,300,000 compared to a profit of \$5,200,000 in the comparable quarter. The principal factors contributing to the loss were lower prices received for zinc, silver and gold.

The fourth quarter operating profit from the chemicals and fertilizers business segment was \$11,000,000 compared to an operating profit of \$15,400,000 in the comparable quarter. Sales volumes of fertilizers in the period were substantially reduced and prices weakened as a result of early snow storms which covered the western Canadian praries and mid-western farming regions of the United States.

In 1984 the mining and integrated metals business segment earned an operating profit of \$48,800,000, compared to an operating loss of \$5,800,000 in 1983. The improved operating results are attributed to higher profit margins on sales of refined zinc, zinc concentrate and gold which were offset in part by lower profits on copper concentrate and silver. Sales volumes of all major metals and metal concentrates were higher in 1984 with the exception of lead and lead concentrate. For the first nine months in 1984, zinc and lead prices improved over those of the comparable period but in the fourth quarter prices for these products fell below last year's levels. For the year, zinc and lead prices were, on average, higher than those in 1983 while silver, gold, and copper prices were substantially lower.

The chemicals and fertilizers business segment earned an operating profit of \$63,600,000 compared to \$33,600,000 in 1983. While fertilizer markets in the first mine months of the year were substantially improved over the comparable period with higher sales volumes and prices for all major products, sales volumes and prices in the fourth quarter were adversely affected by early winter conditions. For the year, sales volumes of chemicals and fertilizers were slightly higher than 1983 levels. Potash sales tonnage increased 12% over 1983 levels to a record of 1,250,000 tons. CONTINUED ON PAGE TWO.

BRIEF SHUTDOWN AT - Cominco Ltd. will shut down the Sullivan mine and concentrator at Kimberley, B.C., during the period 21Dec84 - 2Jan85. The shutdown is due to zinc concentrate oversupply and current low prices KIMBERLEY PLANNED for zinc and lead in the markets. The Kimberley fertilizer operation is not affected.

Concentrate inventories will be adequate to maintain production at Cominco's Trail, B.C. smelter operations.

Cominco planning two-week closing of Sullivan mine

Cominco Ltd.'s Sullivan mine and concentrator at Kimberley, B.C., will be shut down from Dec. 21 to Jan. 2, the company says.

Low zinc and lead prices in addition to an oversupply of zinc con-centrates in European markets have combined to force the temporary closure, which comes on the heels of the company's announcement to close its Polaris mine on Little Cornwallis Island and another producer in Green-land as well as the Pine Point mine's concentrator.

All these temporary production cuts (some for as long as a month) will not be enough to affect Cominco's Trail, B.C., smelter opera-

COMINCO LTD. 82 9

NO.141(1983) JULY 22,1983

GCNL #141 225ULY1983

* After preferred dividends

| | age of the same of | A STATE OF THE PERSON NAMED IN COLUMN TWO IS NOT THE PERSON NAMED IN COLUMN TWO IS NAMED IN THE PERSON NAMED IN COLUMN TWO IS NAME |
|------------------------------|--|--|
| SIX MONTHS ENDED 30 JUNE | 1983 | 1982 |
| Revenue | , | 651,900,000; |
| Costs And Expenses | 719,700,000 | 682,700,000; |
| Income Tax, Current | 2,600,000 | 2,600,000; |
| Deferred (Reduction) | 16,900,000 | 15,000,000; |
| Minority Interest | 1,900,000 | 1,000,000; |
| Equity in Associate's Profit | 2,700,000 | 2,400,000; |
| Foreign Exchange Gain (Loss) | (1,200,000) | 600,000; |
| Loss Bef.Extra.Item | 22,700,000 | 14,400,000; |
| -Per Common Share * | (\$1.50) | (\$1.00) |
| Oil/Gas Asset Sale Gain | _ | 18,100,000 |
| Net (Loss) | \$(22,700,000)\$ | 3,700,000 |
| -Per Common Share * | (\$1.50) | (4¢) |

LOSS SHARPLY REDUCED IN SECOND QUARTER

Cominco Ltd.'s loss for the second quarter of 1983 was \$3,700,090 or 30¢ per common share on sales of \$412,500,000 compared with a profit of \$600,000 before the extraordinary gain of \$18,100,000 for the same quarter last year on sales of \$383,200,000.

Reporting this and the first half results, see table, chairman M.N. Anderson says the corporation's mining and integrated metals business

segment incurred a second quarter operating loss of \$800,000 this year vs \$7,500,000 in 1982. The principal factors contributing to the improvement in results were substantially higher silver and gold prices and also earnings from sale of copper concentrates from the Valley Mine. Operations during the quarter were adversely affected by the temporary closure of Pine Point Mines and an 8-day strike at the Corporation's Trail and Kimberley operations.

Operating profit from chemicals and fertilizers fell to \$21,700,000 from \$32,300,000 in the second quarter 1982 due to reduced sales volumes and substantially lower sales prices.

Cominco's share of earnings of associated companies was a loss of \$300,000 vs a profit of \$2,400,000 in second quarter 1982.

GCN (COMINCO LTD. SULLIVAN YEAR ENDED 31 DECEMBER 1982 RECOVERY CONTINUES Sales \$1,374,700,000 \$1,234,700,000 In 1983, Cominco Ltd. incurred Investments 4,600,000 5,900,000 a loss which, before the Total Revenue 1,379,300,000 extraordinary gain recorded in 1,240,600,000 Loss Bef. Extra Item 39,300,000 49,300,000 1982, was \$10,000,000 less than Extraordinary Gain that previous year's loss. 18,100,000 In the Net Earnings (Loss) (39,300,000) (31,200,000) fourth quarter of 1983, Cominco (Loss)Per Common Share* \$2.20 Ltd. recorded net earnings of *After Preferred Share Dividends \$1,100,000 on sales of \$392,700,000. ----- However, after preferred share

dividends this amounted to a loss of 8¢ per common share. This compares with a loss of \$15,100,000 on sales of \$309,800,000 in fourth quarter 1982. M.N. Anderson, chairman, notes that the Mining and Integrated Metals segment earned a fourth quarter operating profit of \$5,200,000 compared to \$1,100,000 a year before. This improvement he attributes to higher profits on zinc offset in part by lower earnings on silver and gold. Sales volumes of refined zinc and lead, and zinc, lead and copper concentrates exceeded those in fourth quarter 1982; silver and gold sales volumes were lower. Operating profit from the Chemicals and Fertilizers segment was \$15,400,000, up sharply from \$700,000 in the comparable quarter, sales volumes of ammonia, phosphate fertilizers and potash being higher, but, partially offset by lower prices for ammonia and potash and lower sales volumes of urea.

In January 1984, wholly owned Cominco American Incorporated, agreed to sell its interest in a small tertiary oil recovery project in Texas for \$9,500,000. Net profit of some \$5,000,000 after taxes will be reflected in the accounts upon closing.

As for the outlook, Mr. Anderson says economic growth in North America is exxpected to continue througout 1984 and other Western World economies are likely to improve. The fourth quarter 1983 upturn in zinc prices is expected to continue into 1984. Volume of lead sales has been heavy in North America due to severe winter conditions which have accelerated battery sales. It is uncertain whether this increase in demand will lead to further price increases. World inventories of zinc and lead are near normal levels. The outlook for copper is for continuing weak prices until Western World inventories are reduced by increased consumption. Due to the seasonal pattern of shipments from Cominco's mines in the Arctic, sales volumes of zinc and lead concentrates in first quarter 1984 will be lower than a year before. There are positive signs that demand for chemicals and fertilizers in the U.S. market will improve in 1984 at increased prices and, due to the seasonal pattern of sales, the beneficial results are likely to be realized in the second and fourth quarters.

animaley's float pile

of to good use.

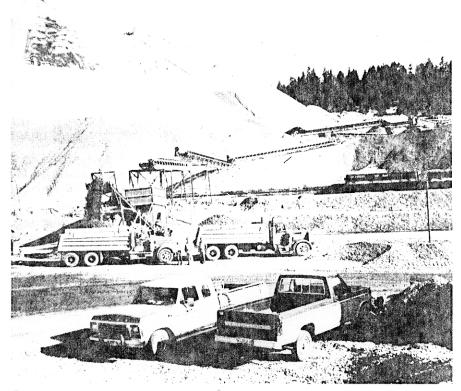


One of Kimberley's most visible landmarks is the float pile at the east end of Cominco's Sullivan concentrator, developed since 1949 with commencement of the Sink/Float Plant.

In this plant, Sullivan ore is first washed clean of fines and passed into a large tank of lead concentrate slurry. The waste rock, being the lighter material, floats on the surface of the slurry, and the heavier ore sinks to the bottom of the tank. Both the 'float' and 'sink' are separately removed from the tank, washed free of the concentrate material and then respectively sent out to the float pile and to the sink bin. The 'sink' material becomes feed for the concentrator grinding circuit, while the float, which was used as mine backfill up to the 1960's, is stored in a huge stockpile.

Since 1960, over 15,000,000 tons of float has been produced, and this constitutes a small mountain.

CP Rail became interested in the float rock when they realised it could serve as ballast for their rail bed. To date, CPR have moved over 6,500,000 tons, using it



East end of float pile looking north. Rock from the float pile at the Kimberley concentrator is sized and sold as railway ballast; the material dumped along the tracks to fill the spaces around the ties

on their rail systems as far east as Winnipeg. The float, when screened of fines, produces an excellent ballast, being a very hard and angular rock. During summer months, CPR screen, stockpile and ship train loads of ballast.

1982 is by far the largest operation to date, requiring construction of a new ballast train-loading site at 'Blackjack Spur', east of the Cominco's concentrator.

Here CP Rail, Kootenay Division.

contracted Markin Brothers Contracting Ltd to screen up to 800,000 tons of float. Approximately 620,000yd³ of screened ballast; 75,000yd³ of unscreened ballast; and 20,000yd³ of reject ballast was loaded into CPR cars and transferred to points in southern BC and Alberta. Markin Brothers Contracting Ltd were responsible to screen ballast to specified grading requirements so that the CPR will be assured that newly-laid trackage will maintain adequate drainage and support trains.

A temporary mobile screening plant was set up close to the toe of the present float pile. It consisted of a twin screening plant, capable of producing 1300 tons/hour. When installed it had to be located in such a position that it permitted CPR to continue to use the present three tracks.

At times, two D-8 Cats were required to push the material to feed the screening plant.

Markin Bros used a crew of up to 20 men for this six-month operation and finished the project well before the end of the shipping season.

CPR loads up to 60 rail cars each day for shipment to new railway construction sites or for track upgrading programs, presently they ship to the Revelstoke area.

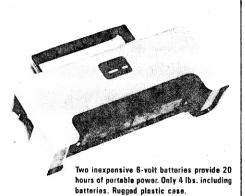
Even with CPR's ballast program, Cominco's float pile still continues to grow and will continue to be a landmark for some years to come.

RAYTECTOR III THE CORDLESS, LIGHTWEIGHT "GO ANYWHERE" ULTRAVIOLET LIGHT.

If you're a prospector, you need a lightweight, rugged field lamp which can help locate and identify tungsten, mercury, uranium, petroleum and other valuable deposits.

For industrial work — you want a reliable, powerful, portable lamp for on-the-spot detection of contamination, leakage and fluorescent tracers. If you're a rockhound, stamp collector, antique dealer or criminologist who needs cordless convenience — you want the best lamp at the best price.

ULTRAVIOLET LIGHT



LANGRIDGE-MARSHALL

7 Labatt Avenue, Toronto, Ontario M5A 3P2. Tel.: (416) 366-1168 Tlx,: 065-24190

Division of Northern Miner Press Limited

NMENER 16 THNE 1983

80+19E (089FNE052)

Strike shuts big Cominco operation

Cominco workers have done what even union members considered unthinkable, given the present economic situation. They have struck the company's Kootenay smelting and mining operation. It's a move both entities admit could be disastrous for the economy of the region and follows Cominco's refusal to

and follows Cominco's refusal to accede to union demands for a 6% wage increase, better cost of living protection and improved fringe benefits. The union claims it hasn't any other choice but to strike until Cominco comes up with what the union considers an acceptable offer.

A Cominco spokesman told The Northern Miner early Monday that picket lines had gone up at 7 a.m., although negotiations to resolve the dispute were continuing. He said an orderly shutdown of the company's Trail smelter and Kimberley mining operations took place last week and it would take about a week to get back on stream when an agreement is reached.

Cominco, after losing \$31.2 million last year and another \$19 million in the first quarter of 1983, has asked for no wage increase in the first year, and a reduction in the cost-of-living clause in the second part of a 2-year contract. Early this year, the company demanded and obtained a 10% wage rollback, a freeze on the cost of living allowance, and a 6-month guaranteed period of operation at its Pine Point mines division, which led to its reopening.

The company hasn't said what

The company hasn't said what effect the Trail shutdown will have on Pine Point, which supplies approximately 50% of the zinc feed-stock for the smelter. A prolonged strike could put Cominco in a position where it would have to reduce production levels at Pine Point eventually. Most of the operation's lead production goes to Japan.

The political ramifications of such a move, given the concessions from the union there, appear enormous, industry sources conclude. In any event, unless the strike drags on until year-end, the guaranteed period of the operations part of the Pine Point agreement would preclude any shutdown.

82FAE 082FNE052) SULLIVAN HINE NMINER 23 JUNE 1983

Cominco strike over

A short-lived strike at Cominco Limited's Trail smelter and Kimberley mining operations ended earlier this week. It began June 13. A new contract, retroactive to

A new contract, retroactive to Apr. 30, includes an innovative "metal-prices trigger" clause, which would allow workers' wages to increase with the rising cost of lead, zinc and silver.

Under the new contract, the average hourly rate of \$13.63 would rise to \$14.58 at the end of a 2-year pact, if inflation rose 6% in both years. The increase could rise or fall in account the inflation rate.

Cominco warns Trail may close

Signalling the harsh economic realities of today, Cominco has requested contract concessions from the union at its massive smelter complex at Trail, B.C. — the world's largest. Citing the fact that the mining industry is involved in the worst downturn in 30 years, Cominco Executive Vice-President Harold T.

Fargey said in a recent speech that contract concessions were necessary by May 1, 1983 if the complex was to continue operating. The smelter is the mainstay of the community and close to 4,000 people work there meaning a prolonged shutdown or work stoppage could be disastrous to the town.

Sources report Cominco is seeking concessions estimated to cost about \$8,000 per man over two years and they note the union has asked for wage and benefit considerations totalling 15% in the first year of a new contract.

Similar negotiations are under way with the United Steel Workers of America to reopen the Pine Point Mines operation which supplies about 50% of the feed stock to the Trail smelter. An earlier offer by the union to provide a \$2 million loan at 4% below prime-was rejected by Cominco with the company noting "major" concessions would have to be given to reopen the mine.

A vote on the Cominco request taken late last week was solidly rejected by union members but Ken Geogetti, union president, told The Northern Miner his members plan to continue bargaining and are "not contemplating a strike vote."

In the event of a shutdown Cominco admits it would be impractical to close Trail completely, not-

ing the complex might operate on an intermittent basis, possibly three months on, three off. But the previously announced closure for three weeks this summer is definitely going ahead, the company points out regardless of the course of events.

Cominco recorded an operating loss of \$48 million last year compared to an operating profit of \$78.5 million in 1981 and the company feels its competitive position on world markets is being eroded by wage costs which are higher than those of the competition.

STANTE

03FEB 1983 NMINER

Cominco is uncertain on metal price recovery

While several indicators supporting optimism for the economy have recently been observed, the realization of increased prices for Cominco's principal products remains uncertain pending a sustained increase in consumption levels, says Chairman and Chief Executive Officer M. N. Anderson.

Presenting the financial results of the company for last year when it suffered a net loss of \$2.20 per share, Mr. Anderson said that Cominco is continuing to pursue its cost containment, capital spending and

restraint programs. And, true to its policy, Cominco has closed down "temporarily" the mining and milling operations of its 69.1%-owned subsidiary Pine Point Mines effective January 2. The shutdown, said Mr. Anderson and President R. P. Douglas of Pine Point, was due to "continuing low prices for zinc and lead, coupled

with increasing costs."

The Pine Point shutdown will be reviewed on a monthly basis and operations will resume when economic conditions permit, the offi-

cials said.

In the meantime, Cominco has brought back into production its Lake Zone copper mine in the Highland Valley near Ashcroft, B.C. effective Jan. 17. Operations are

SULLIVAN' 82F/9E) 082FNE052

now producing at the rate of 20,000 tonnes of ore per day.

For the year 1982, Cominco sustained a net loss of \$31.2 million or \$2.20 a share on sales of \$1,234.7 million. The net loss includes an extraordinary gain of \$18.1 million or 96¢ a share realized from the sale of oil and gas properties of a subsidiary company.

In 1981, Cominco reported a net profit of \$70.3 million or \$3.35 a share on sales of \$1,416.9 million.

Lower prices
Throughout 1982, Cominco operated under severe economic pressures and, with few exceptions, prices realized for principal metal, fertilizer and chemical products were lower than those in 1981, Mr. Anderson reports. Operating costs, particularly for labor and energy, continued to escalate. Cost containment and restraint programs implemented late in 1981 and continued throughout the year helped to reduce losses.

Cominco's Mining and Integrated Metals business segment incurred a 1982 operating loss of \$48 million compared to an operating profit of \$78.5 million in 1981. The principal factors responsible for this loss were reduced zinc and lead prices which in terms of constant dollars, reached

lows during the year reminiscent of the 1930s, increased production costs and reduced sales volumes.

A 30% increase in zinc and lead concentrates sales volumes resulting from the successful start-up of the Polaris mine was not sufficient to offset these negative factors.

Sales volumes of refined silver and gold increased over those of the same period last year. The beneficial effect on earnings of increased volumes was partially offset by the substantially lower prices for each of these metals resulting in their earnings contribution increasing approximately 9%.

The fertilizers and chemicals

business segment earned an operating profit of \$37.8 million compared to \$97.6 million in 1981.

Pine Point net

Cominco's subsidiary Pine Point Mines in 1982 sustained a net loss of \$9 million or \$1.99 a share on sales of \$87.9 million. This compares with net earnings of \$22.4 million or \$4.97 a share on sales of \$126.1 million in 1981.

Last year the Pine Point concentrator treated 2.4 million tons of ore averaging 3% lead and 7.3% zinc. Lead concentrate production was 85,000 tons and zinc concentrate production was 287,000 tons.

Vestgron shows profit

But, unlike Cominco and Pine Point, Vestgron Mines (62.5% owned by Cominco) posted a ner gain of \$4.4 million or \$1.03 per share on sales of \$65.2 million during 1982. These figures, however, were lower than 1981 when Vestgron had an income of \$7.8 million or \$1.85 a share on sales of \$73.9 million.

Vestgron's 1982 revenues from zinc concentrate and zinc metal sales were \$3.1 million greater than 1981 levels while 1982 revenues from lead concentrate were \$11.8 million lower due to lower volumes and significantly lower price levels.



Regional a speculative buy

Regional Resources is recommended as a speculative buy for investors seeking participation in an exciting silver and base metals discovery with the potential to create additional news as drilling commences again in the spring of 1983." This confident statement, made by Raymond Goldie of Richardson Greenshields of Canada. summarizes a recent report on Regional, which made a silver-leadzinc discovery in 1981 on its Midway property on the B.C. Yukon border.

Calling the property one of the Red Dog deposit. The lowermost

two most exciting exploration areas in Canada during 1981 (along with of the mudstones and sandstones the Hemlo area), Mr. Goldie esti-

Regional owns the property, al-Feb. 1984. They also have an option gram and leave the management to buy a further 11% equity by Regional. paying Regional \$2.6 million and granting it 4% net smelter return as royalty. Mr. Goldie does not feel this option will be exercised.

The two uppermost mineralized horizons at Midway are interbedded mudstones and sandstones of the Sylvester group, thus having resemblances in geology (though not in size) to other shale-hosted deposits such as Cyprus Anvil's Faro orebody and Cominco's Sullivan mine and

19E

where it overlies carbonate rocks of mates the Midway property has 2.78 the McDame formation, and has the million tons of reserves grading 13.3 characteristics both of shale-hosted oz. silver, 12% zinc and 6.1% lead. and carbonate-hosted deposits.

Mr. Goldie emphasizes that Regional owns the property, although Amax of Canada and Procan Regional is managed by "experi-Exploration together have an option enced professional mining personto earn a 49% interest. The two commenced professional mining the panies have spent \$2.8 million on exploration and development pro-the property, and can earn the 49% gram" and that the partners in the by spending a total of \$4 million by project are content to fund the program and leave the management to Regional. The report goes as far as estimat-

ing the earnings per share should the property see production -\$2.40, based on \$C15 silver, 50¢ zinc and 30¢ lead, with a 1,500 ton-perday operation. Although Mr. Goldie admits it will take five or more years to put the deposit into production, he believes reserves will be extended significantly and the mine could have a life of 12 years. Drilling will start again next June.

02FEB1983

COMINCO LTD.

82 F/9E

082 FNE 052

33 ULLIVAN 1982 1981 YEAR ENDED 31 DECEMBER \$1,436,800,000 \$1,240,600,000 Revenue 86,400,000 83,600,000 Deprec'n.Depl'n.Amoritiz'n. 1,226,500,000 1,251,800,000 Other Expenses 6,800,000 11,900,000 Income & Resource Tax, Current (49,900,000) 38,900,000 Not Current (Recover) (10,200,000)Minority Interest 700,000 5,200,000 Equity in Associates' Profits 3,800,000 4,800,000 700,000 Foreign Exchange Loss (49,300,000)64,700,000 Profit (Loss)Bef.Extra.Item (\$3.16)\$3.05 -Per Common Share 18,100,000 5,600,000 Extraordinary Item Net Earnings (Loss) 31,200,000 70,300,000 \$3.35 (\$2.20)-Per Common Share

In presenting a preliminary report of results of Cominco Ltd. in 1982, chairman M.N.Anderson notes that the extraordinary gain of \$18,100,000 was realized from the sale of the oil and gas properties of a subsidiary company.

Throughout 1982, Cominco operated under severe economic pressures and, with few exceptions, prices realized for principal metal, fertilizer and chemical products were lower than those in 1981. Operating costs,

particularly for labour and energy, continued to escalate.

Mr. Anderson says their mining and integrated metals business segment incurred a 1982 operating loss of \$40,000,000 compared to an operating profit of \$78,500,000 in 1981, the loss being mainly due to zinc and lead prices which, in terms of constant dollars, reached lows during the year reminiscent of the 1930's. A 30% increase in zinc and lead concentrated sales volumes resulting from the successful start-up of the Polaris Mine was not sufficient to offset the negative factors. Sales volumes of refined silver and gold were greater in 1981, but, substantially lower prices for these metals held their earnings increase to only 9%. The fertilizers and chemicals segment earned an operating profit of \$37,000,000 vs \$97,600,000. Other operations, chiefly metal products and electric power distribution, earned an operating profit of \$18,400,000 vs \$27,700,000 in 1981. Interest expense charged to earnings increased \$28,000,000 due to greater borrowings and inclusion of interest associated with the Polaris Mine project after commercial operations started.

After being shut down since 30Jun82, Cominco's copper division resumed operations on 17Jan83 at the new Lake Zone mine in the Highland Valley near Ashcroft, B.C. where production is now at a rate of 20,000 metric tons of ore per day. With continuing low prices for zinc and lead and increasing costs, Pine Point Mines Limited temporarily shut down their operat-

ions on 2Jan83.

#206

Cominco 5,800 get work again

VANCOUVER (CP) — Cominco Ltd. has called back 5,800 workers to start work next Monday at its Trail and Kimberley works and end a five-week shutdown.

Most of the workers called back were covered by accrued vacation time during the July 1 to Aug. 3 shutdown, Cominco spokesman Richard Fish said.

Fish said another shutdown could occur in the fall

Cominco chief executive Norman Anderson told the company's annual meeting in April the shutdown might be extended.

Cominco had a \$14.4-million loss in the first six months of 1982. But after an extraordinary gain of \$17 million on the sale of some U.S. oil and gas properties, it posted a profit of \$2.6 million in the first half.

SULLIVAN BaF/9E OBAFNEO52

> NO.206(1982) OCTOBER 27, 1982

> > MINE

270 CT82 COMINCO LTD NINE MONTHS ENDED SEPT.30, 1982 M.N. Anderson, chairman, says Revenue \$929,900,000 \$1,099,000,000 Cominco Ltd.'s loss in the 9 months Cost & Expenses 986,100,000 ended 30Sep82 reflects the depressed 28,800,000 state of the entire non-ferrous metal 1,001,000,000 Income Tax, Current 2,100,000 Deferred 20,800,000 industry which continues to operate (33,800,000) Minority Interest 8,700,000 under severe economic pressures. Sales (1,100,000)Equity in Associates! Prof. 4,300,000 2,100,000 of refined zinc at 189,400 tons were Foreign Exchange Gain(Loss) (200,000) (3,900,000)11% lower than in the comparable Net Bef.Extradrdinary Item (34,200,000) 53,600,000 period while sales of refined lead Per Common Share (\$2.16)\$2.60 at 107,700 tons were 9% lower. Sales 17,000,000 Extraordinary Item of zinc and lead concentrates remain-Net Earnings (Loss) (\$17,200,000) \$53,600,000 ed at about the same levels as the Per Common Share (\$1.26)\$2.60 comparable period. Lower zinc prices

ating loss of this business segment. Sales volumes of refined silver and gold rose 37% and 19% respectively over the like 1981 period but substantially lower prices cut their earnings contributions about 15.5%.

and severely depressed lead prices were the principal factors resulting in \$41,800,000 oper-

Chemicals and fertilizers' operating profit at \$36,300,000 was down \$40,500,000 from the like prior period. Sales prices were generally up but volumes were down 10%. Potash sales tonnages dropped 14% and prices dropped 17%. These factors, substantially higher costs of natural gas and higher operating expenses all combined to lower the operating profit. Other operations, mainly metal products and electric power distribution, earned an operating profit of \$15,600,000, down \$2,300,000 on the year. Interest charges rose by \$20,900,000 over the prior period to \$64,600,000.

23 APR 82

SULLYAN MUNE MO. 78(1982) COMINCO LTD. GRAFNEUS 2 APRIL 23, 1982 82F/9E

TURNAROUND PROBABLY NOT UNTIL YEAREND - M.N. Inderson, chairman of Cominco Ltd., told the 22Apr82 annual meeting that company calculations

indicate that the lead prices today, when adjusted by applying the U.S. implicit price deflator are about the same as they were in 1931, when the all time low price for lead was set. Zinc prices today, when adjusted the same way are within 2¢ of the 1934 price; and today's copper prices are only slightly better. They are at a 35 year low point.

The demand for the metals is down approximately 15%-20% from levels that existed only 24 months ago. Fertilizer prices and profits, although somewhat better, are still quite insufficient. They do not offset metal losses.

Interest rates continue high increasing the cost of corporate debt. Power earning, which often carried Cominco through tough times in the past are non-existent today, he said. "Without doubt inflation is our number one problem."

"I think we, as a society, have spent too large a part of the past 15 years creating new parks, enlarging our welfare systems, increasing the size of our environmental staffs and increasing our government boreaucracies. We have in turn spent too little of our time and resources creating new wealth."

"To fight inflation governments must modernize. During the prosperous early 1970's, all levels of government in Canada developed spending habits that we cannot afford. Governments must go through the same hoops that the private sector is going through. They must curb their spending, curb their programs, become more productive and most important, make government smaller."

As to the future, the chairman said, "In 1931, one year ago, I said that metal prices appear to have bottomed (again), that world inventories of finished metal had not shown any appreciable rise and we had cause for optimism. Today, we are at that exact same spot. The elusive turnaround keeps fading into the future and we'll likely not see any significant change soon, probably not until near year end.

"The products we make are all essential in the world economy. Our competitive position, although strained is above average, and we intend to keep it that way. The opportunities for the future are excellent. We expect a 2-3% increase in demand per year for our products in the long term. This is a much more modest increase than those experienced the past 25 or 30 years but it still represents a 20-30% increase in 10 years. That's a terrific potential for those companies and countries that meet today's challenges most creatively, and we at Cominco intend to win a substantial share of that potential."

W.G. Wilson, president, told the annual meeting that there is no longer any doubt this recession will produce the most severe setback since World War II. What is especially distressing is that there is great uncertainty as to when the contraction will end and the recovery will begin. The company has implemented stringent measures at all operations to control inventory levels, to reduce costs and to critically evaluate capital expenditure programmes with a view to deferment where practicable. Trail metallurgical operations operated at a loss for 1981. Losses are likely to persist in 1982 exacerbated by the dramatic rise in water rental tax rates from \$1,000,000 in 1980 to over \$12,000,000 in 1982. Representation has been made to the government to alleviate this distressing situation.

Virtually all company activity at Trail and at Kimberley will be closed down for at least five weeks. The curtailment will affect nearly all of the 6,300 employees at these operations. It is planned to complete the zinc electrolytic and melting phase of the modernization project at Trail as expeditiously as possible. Currently, 132 cells out of 528 are in operation, a further 132 cells are planned to be operational by late August this year with the remainder by the end of the year. On this basis the old electrolytic plant will be shut down around the end of 1982. Other mcdernization projects, however, are likely to be delayed until economic conditions improve. The lead modernization feasibility study showed the Russian Kivcet direct smelting process offers the best alternative but with the uncertain outlook for lead consumption in the medium term it makes no economic sense to build the smelter at this The existing plant is amongst the cleanest in the industry anywhere in the world.

In 1981, Cominco acquired 100% of the shares of Bethlehem Copper and Valley Copper. A proposal to build a mine and concentrator capable of processing 88,000 metric tons of ore per day at a cost of approximately \$900,000,000 (excluding financing) has been developed and several international mining companies have been invited to participate. Their interest, if any, will not be known for a few weeks. The possibility of supplying ore from the Lake Zone to the existing mill at Bethlehem is under study since this operation is likely to exhaust its developed reserves by mid 1983. Bethlehem's operations are not profitable at current 70¢ U.S. per pound copper prices.

GCNL#76 21APR82

mine.

COMINCO LTD.

1982 1931 3 MONTHS ENDED MARCH 31, \$266,900,000 \$343,000,000 Revenue 293,200,000, 305,900,000 Costs & Expenses Inc.& Res.Tax:Current 700,000 9,800,000 (11,100,000)5,600,000 -Deferred 1,500,000 (700,000) Minority Interest

200,000 (3,400,000)

Per Common Share (92¢) 84¢

On translation of accounts of foreign subsidian pared to an operating profit of \$20,700 contraction of the subsidian tories represent about pared to an operating profit of \$20,700,000 last year. Cominco's refined lead and zinc inven-

tories represent about two months sales. Concentrate inventories are in balance with contractual demand. Chemical and fertilizer operating profit at \$6,800,000 was \$16,300,000 lower than a year ago. Sales were substantially lower due to poor weather and reduced advance buying by farmers. Several cost control programs, including temporary plant closures to control inventory levels, are being implemented. Capital projects, when practicable, are being postponed.

NO.76(1982) APRIL 21,1982 SULLTUANTINE BZF LOSS REPORTED

Reporting the first loss by Cominco Ltd. since 1932, M.N.Anderson, chairman, says the principal causes were weak metal and fertilizer markets and depressed prices for . lead, copper, silver, gold and potash coupled with higher operating costs particularly for labour and energy.

The mining and integrated metals segment 84c The mining and integrated metals segme subsidiar, had an operating loss of \$19,000,000 com-Bankeno Mines Limited exercised their option to acquire 25% royalty interest in the Polaris

SARPR BY NMINER Cominco achievements impressive despite economic downturn in 1981

VANCOUVER - Even though 1981 was a difficult year for Cominco, M. N. Anderson, chairman and chief executive officer, notes somewhat modestly in the annual report that there "were a number of achievements."

Singling out record high production and sales of chemicals and fertilizers he also pointed out that refined zinc production at Trail was at record levels. Just as noteworthy, the company completed the world's most northerly base-metal mine on Little Cornwallis Island near the

magnetic north pole.

Cominco had consolidated net earnings for 1981 of \$70.3 millionless than half the \$171.1 million recorded a year earlier. On a pershare basis, and taking into account a 10% dilution because of a stock issue, earnings were \$3.35 per share compared to \$9.54 the previous year. A total of \$83.7 million was paid in dividends and \$4.10 per share was allotted for holders of common shares.

Citing improved prices for chemicals and fertilizers, which partly offset reduced earnings from the minerals division Mr. Anderson also noted that zinc "showed considerable strength" despite the recession. Any improvement in the economy and the subsequent effect on zinc prices would likely prove highly beneficial to Cominco, the world's largest mine producer of zinc and lead.

Indicative of its desire to have complete control of the massive Valley Copper deposit in the Highland Valley, Cominco increased to 100% its equity in Bethlehem Copper which had an interest in the deposit.

Depressed copper prices have forced Cominco to take a more cautious look at Valley but even though the recently announced high grade Red Dog zinc-lead-silver discovery in Alaska seems to have overshadowed the project for the moment, Mr. Anderson contends they are both possible in the correct sequence.

Evaluation of the Red Dog is now under way and will take nearly three years and if feasible the project could come on stream about two years following this.

The company reports a loss of \$15 million or 92¢ a share for the three months ended Mar. 31 compared with net earnings of \$16.3 million or 84¢ a share in the yearprevious period. The loss was the first reported by Cominco since 1932. Increased borrowings during 1981 caused interest costs to increase \$6.1 million over the same quarter last year.

1982 GCN1

.50.48(1982)

MARCH 10, 1982

10 MAR 82 GCNL #48

COMINCO LED.

ecession and its impact

C MINE AND SYBLET to the internation WILL CEASE PRODUCTION ALL JULY on metal markets, Comi will shut down their openstions at Trail and Kimberley, B.C., for at least the month of July. In announcing this, we against state that replicarket changes in recent weeks therees its significant change in previous plans. The shutdown will include all oper-

ating plants, the Sullivan mine, construction projects and support services.

Virtually all of the 6,300 employees at the two locations will be affected. Market

conditions will be closely monitored from now until the end of July to determine the ecopany's action beyond that point. Present planning is for a shutdown period beginning June 30 to resume August 3 at the earliest,

Comingo will continue to supply customers [page accumulated metal and fertilizer inventories.

Together with the zinc production cutback presently in effect, the July shutdown will reduce annual production by 18,000 tons of lead, 40,000 tons of zinc, 15,000 tons of lead consentrate and 13,000 tons of zinc concentrate in 1982,

NMINER IIMAR82 Cominco to close tor a month

Cominco, one of the largest producers of refined lead and zinc metals in the world, will be closing down its operations at Trail and Kimberley, B.C., "for at least the month of July.

Referring to the international economic recession and its impact on metal markets, Cominco said that the rapid market changes in recent weeks have necessitated "this significant change in previous plans.

The closedown will include all operating plants, the Sullivan mine, construction projects and support services.

Cominco said market conditions will be closely monitored from now until the end of July to determine action beyond that point. Present planning is for a closedown begining June 30 to resume Aug. 3 at the earliest.

Cominco will continue to supply customers from accumulated metal and fertilizer inventories.

Together with the zinc production cutback presently in effect the July closedown will reduce annual production by 18,000 tons of lead, 40,000 tons of zinc, 15,000 tons of lead concentrate and 13,000 tons of zinc concentrate in 1982, Cominco

JE052

Times-Colonist

Victoria, British Columbia, Tuesday, March 9, 1982

Cominco shutdown hits 6,000 in June

TRAIL (CP) — Comince Ltd. will shut down its mining and smelting operations in southeastern B.C. for at least five weeks, starting June 30, the company announced Monday.

Citing the international recession and its impact on demand and prices for company metal products, Cominco spokesman Jim Cameron said the closure will affect virtually all 6,300 Cominco employees in Trail and Kimberley.

The four-month lead time for the closure was scheduled to allow for in-

ventory planning to ensure a continued supply to customers during the summer, he said.

Production is scheduled to resume

Aug. 3 at the earliest:
"Market conditions will be monitored from now until the end of July to determine the company's actions beyond that point," a company news release said.

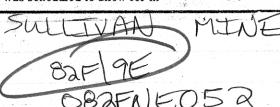
The shutdown will reduce 1982 production by 18,000 tons for lead and 40,000 tons for zinc.

In 1981, Cominco reported a drop in operating profits (earnings before

taxes and extraordinary items) in its metal operations of 67 per cent to \$68.5 million from \$210 million in 1980.

In the Trail area, where Cominco accounts for one of every two jobs, a community spokesman predicted economic disaster if the closure lasts more than a month.

"I think a lot of the guys have holidays so it won't be too bad for the first month," said Vince Profili, Trail chamber of commerce president. "If it goes longer than that it will be devastating."



11

A Southarn Business Publication Vol 102, No 10 October 1981

and the second second

CMJ Capital Spending Report

| BRITISHE | OEUMBIA | \$2 | (99) | 演句 | On | |
|---------------------------------|---|--------------------|---------|--------|---------------|--|
| | | \$000s to be spent | | | | |
| Company | Purpose of expenditure | 1981 | 1982 | 1983 | eyond 1983 | |
| Afton Operating | Mobile equipment for open pit copper mine | 3,500 | 3,500 | • | • | |
| Corporation | Systems improvements at mill | 750 | 750 | | ···· | |
| SOI/ICE | Systems improvements at smelter | 750 | 750 | | | |
| 092110003 | Total: \$5 million | | | | • | |
| BC Coal Ltd | The S278 million Greenhills coal mine is expected to begin production in mid-1983 at a rate of 1.8 million tonnes/year. | 63,000 | 100,000 | 60,000 | | |
| | Expenditures at Sparwood include \$17.6 million for pit equipment, \$13 million for land acquisition and residential construction and \$1.6 million for a new lab. | 53,000 | 46,000 | 28,000 | 10,000 | |
| | Construction at the Harmer mine includes a new dry and office and maintenance shop extension. | 9,458 | 7,635 | | | |
| | Cost of increasing the throughput of Westshore terminals and upkeep. | 43,000 | 74,000 | 38,000 | | |
| | Total: \$472.093 million | | | | - | |
| BC Hydro | The price tag of the Hat Creek coal mine and generating plant due to come on stream in 1988 has risen to S5 billion, with roughly 45 per cent of the cost being for the mine. | 32,000 | 32,000 | 32,000 | 129,000 | |
| | Total: \$2.25 billion | | | | | |
| Bethlehem Copper Corporation | Spending at this open pit copper mine has nearly doubled this year over last. | | | | | |
| Pat 17W | Replace mining equipment | 4,554 | | 1,468 | | |
| - do te = (Or) | Construct tailings dam | 7,316 | 2,376 | | | |
| 0102300 | Total: \$17.831 million | | | | | |
| Brenda Mines Ltd | A new mining shovel and mill equipment were added at this copper-moly producer. New mining shovel | 2,000 | | | | |
| OPAHNEOUT | Classifying and flotation equipment | 4,250 | | | | |
| CATIVE | Normal equipment replacement | 3.500 | 4.000 | | | |

Normal equipment replacement

Total: \$13.75 million

| | A DAMES A BANGARAN BANGARAN <u>-</u> | \$000s to be spent | | | |
|----------------------------------|---|---------------------------|-----------------------------|--|--------------|
| Company | Purpose of expenditure | 1981 | 1982 | 1983 | Beyon 198 |
| BP Canada | Plans are being made for the Sukunka coal mine development near Chetwynd, BC. | | | 400,000 | |
| | Total: \$400 million | | | | |
| Carolin Mines Ltd | The Ladner Creek gold mine development was completed this year. | 10,000 | | | |
| 924/11W 0924/1W003 | Total: S10 million | | | | |
| Cominco Ltd | The modernization and associated metallurgical projects at the Trail smelter will receive the bulk of spending — \$355 million. | | | | |
| OBAFNEODA | Trail modernization Sullivan mine and mill Minor projects | 85,000 7,000 12,000 | 105,000 10,000 12,000 | 160,000 40,000 12,000 | |
| | Total: \$443 million | | | | |
| Crows Nest Resources Ltd | The Line Creek coal mine at Sparwood is nearing production set for next year. | 70,000 | 50,000 | | |
| | Total: \$120 million | • | | | |
| Dankoe Mines Ltd | Spending is modest at the silver mine near Keremeos, BC Total: \$750,000 | 250 | 250 | 250 | |
| 08AESWOOD |) Total Creeques | | | | |
| Denison Mines Ltd | With the promise of a rail line to northeastern BC, development of the Quintette coal deposit is planned by 1985. | | 100,000 | 100,000 | 500,00 |
| | Total: \$700 million | | | | |
| Dickenson Mines Limited KAM-KOUT | Conversion to central diesel plant for mine and mill plus upgrading and increasing hydro plant | 100 | 300 | | |
| 086F11,175 | Replacing mill equipment and upgrading capacity 60 per cent to 200 tpd | | 150 | | |
| Dimac Resource Corporation | This small tungsten mine was recently placed in production near Clearwater, BC | 2,500 | | | |
| 82M 35 082M 36 | Total: \$2.5 million GOTCHA MAX ST | LEWE | LAK | And the second s | |
| DuPont Canada Inc | The Baker gold mine at Chappelle, BC, is in production. | 6,000 | | | |
| OHE OX | Total: \$6 million CHAPPELLE | | | | |
| Equity Silver Mines Ltd | This newly-opened silver mine is planning expenditures of about S7 million for mining and S3 million for milling. | | | j | |
| 93L W | | | | | |

(9)

| | | \$000s to be spent | | | |
|-------------------------------|---|--|----------------|----------------|---------------|
| Company | Purpose of expenditure | 1981 | 1982 | | eyond 1983 |
| Equity Silver (continued) | Regional exploration Replace mill equipment Buy on-stream analyzer Additions to flotation | 155 200 200 | 100 | | 11 |
| | Mill expansion Replace plant equipment Move carpenter shop | 121 55 | 300 | 70 | 2,50 28 |
| | Replace misc. equipment New warehouse storage | 41 50 | 177 | 39 | 36 |
| | Buy computer facilities Replace telephone system Total: \$11.64 million | 20 | 75 | 75 | |
| Esso Minerals | Having just bought the Byron Creek colliery in | 25.000 | 25,000 | | |
| Canada | southeastern BC, Esso plans to expand it. Total: \$70 million | 35,000 | 35,000 | | |
| Fording Coal Ltd | The S115 million coal mine expansion at Elkford is | ate to the second secon | | • • | |
| | well under way. Total: \$84 million | 38,000 | 26,000 | 20,000 | |
| Lornex Mining | The \$160 million expansion of the copper mine at | | | | |
| Corp Ltd | Logan Lake, BC, is complete. Project included | | | | |
| 92I/7W | upping the milling rate to 80,000 tpd and purchasing additional pit equipment. | 78,300 | | | |
| OTATSE008 | Total: \$78.3 million HIGHLAND VALLE | | | | |
| Noranda Mines Ltd | The Goldstream copper-zinc mine near Revelstoke is scheduled to be in production late in 1982 at a rate of 1350 tpd. Total cost of the project is | | | | |
| 08am 141 | estimated at S62 million. Studies have started on modifications to the ore | 27,600 | 16,300 | | |
| 0001 | handling and processing systems at the Granisle mine. | 300 | 300 | | |
| | Total: S44.5 million | | | | |
| Norco Resources | A hydraulic and longwall coal mine is planned at Bowron River, near Prince George, BC. Output will be sold to Taiwan Power Co. | 40,000 | 41,000 | | |
| | Total: \$81 million | | | | |
| Placer Development Limited | The bulk of spending at the Endako moly mine will be for upgrading the mill. Replace mobile equipment Upgrade and replace process equipment | 50 536 185 | 1,291 1,815 | 1,511 1,040 | |
| 093K, 000 | Complete flotation expansion Complete roaster expansion Total: \$8.125 million | 1,697 | | | |
| Ruth Vermont Mine Limited | This silver-lead-zinc producer was reopened this summer in southeastern BC. | 4,000 | | | |
| 88415W | Total: S4 million | | | | |

| | | \$000s to be spent | | | | |
|------------------------------------|---|--------------------|---------|---------|----------------|--|
| Company | Purpose of expenditure | 1981 | 1982 | 1983 | Beyond 1983 | |
| Scottie Gold Mines 104B/16 104B 07 | The company's gold-silver mine was recently placed in production. Total: \$7.5 million | 7,500 | | | | |
| Teck Corp | Construction is slated to begin on the Bullmoose coking coal mine in northeast BC in the spring of 1982. It is designed to supply 1.7 million tons of coal annually, beginning in late-1983. | | 110,000 | 110,000 | - | |
| | Total: \$220 million | | | | | |
| Westmin Resources ?aFlac | The shaft is being sunk for development of the Creek zone copper-lead-zinc deposit near the Myra and Lynx mines at Buttle Lake, BC. Production is expected by 1983 and ore will be milled at the existing concentrator. | 5,000 | 5,000 | 5,000 | | |
| 072 | Total: \$15 million | | | | | |

COMINCO LTD. 82F NE 052 SULLIVAN

12 MONTHS ENDED DECEMBER 31 1980
Sales Revenue \$1,442,700,000 \$1,273,900,000 chief executive of Cominco Ltd.,

Investments Income 13,400,000 17,900,000 has reported that in the fourth

 Investments Income
 13,400,000
 17,900,000

 Total Revenues
 1,456,100,000
 1,291,800,000

 Costs and Expenses
 1,167,500,000
 942,000,000

 Taxes: Current
 78,900,000
 103,800,000

 Deferred
 38,700,000
 29,300,000

 Minority Interests
 14,100,000
 23,100,000

 Minority Interests
 14,100,000
 23,100,000

 Equity in Assoc. Earnings
 13,900,000
 10,700,000

 Foreign Exchange Loss
 1,500,000
 600,000

 Net Earnings
 169,300,000
 203,700,000

 Earnings Per Common Share
 9,44
 11.52

M.N. Anderson, chairman and chief executive of Cominco Ltd., has reported that in the fourth quarter a dividend of \$1.10 per share was paid on common shares with the common share dividends for the year amounting to \$75.2 million or \$4.40 per share. Preferred share dividends paid in the year amounted to \$8.1 million. Earnings for the fourth quarter were \$45.4 million on sales of \$397.0 million compared to \$65.3

million for the same quarter last year on sales of \$375.7 million. The reduced earnings for the quarter resulted from significantly lower lead prices, and a lower sales volume of lead and zinc concentrates. Refined zinc sales were greater than last year, while sales of refined lead showed a slight decrease. Earnings from silver were also lower than the comparable period last year when significant inventory gains were realized as a result of the sudden rise in price. Earnings from gold increased reflecting higher realized prices. Earnings from chemicals and fertilizers were similar to those of the comparable period while potash earnings

continued to improve as a result of higher prices and sales volumes.

For the year, the downturn in the U.S. economy had a significant impact on earnings from the mining and refining of metals. 1980 lead prices averaged U.S. 10¢ per pound lower than in 1979 and were a significant factor in the decrease in earnings. Sales volume of refined lead was lower than last year reflecting the production difficulties encountered at the Trail lead smelter. These problems have been partially corrected with remedial actions continuing. Lower volumes of zinc concentrate were partially offset by higher sales of refined zinc. Prices for zinc were marginally higher than last year.

Potash production and sales volume were substantially higher than last year at improved prices. Other chemical and fertilizer sales volumes were virtually unchanged but prices throughout the year were generally higher. Earnings from this segment were substantially

ahead of last year.

1980 capital expenditures totalled \$280.3 million. All major construction and modernization projects are progressing satisfactorily.

COMINCO LID. BaFIGE GCNL #135 13-07-79 1978 6 MONTHS ENDED 30JUNE 1979 Sales of Products, Services \$635, 400,000 \$460,300,000 6,500,000 2,900,000 Investment Income 641,900,000 463,200,000 Total Revenue 293,500,000 54,300,000 11,400,000 341,400,000 Cost of Sales 56,400,000 Distribution Costs Selling Expenses 12,900,000 15,200,000 14,500,000 General, Admin. Exp, 4,400,000 3,200,000 Mineral Exploration Costs 12,500,000 12,600,000 Interest Expense 31,900,000 57,400,000 Deprec'n., Depl'n., Amortiz'n. 30,900,000 15,300,000 Income Tax, Current 6,700,000 -Deferred 7,800,000 1,100,000 12,700,000 Minority Interests Equity in Associates' Profits 3,100,000 5,400,000 1,000,000 700,000 Foreign Exchange Gain \$26,100,000 \$93,100,000 Net Earnings \$1.37 \$5.25 -Per Common Share

4368 082 FNEOS SALES ROSE 39% 04368 PROFIT ROSE 269%

On a 39% rise in first half sales, a $3\frac{1}{2}$ -fold rise in earnings was achieved by Cominco Ltd. this year over last.

In the second quarter ended 30Jun79 Cominco's total revenue was \$362,200,000 net earnings \$54,800,000 and earnings per share \$3.11. M.N.Anderson, president, comments, "Increased earnings were largely the result of continued improvement in base metal markets, which began to strengthen during the second half of 1978. Strong demand and tight supply for both lead and lead concentrates resulted in significantly improved prices over the same period -last year. Zinc prices also improved

as world zinc markets began to feel the effect of gradually increasing demand and declining inventories after several years of low prices and oversupply. Prices for gold and silver, as well as most other metals, also strengthened. The relationship of the Canadian dollar to other currencies continued to have a beneficial effect on earnings. Sales of chemicals and fertilizers, as well as potash, were brisk, at slightly improved prices."

Labor settlements were concluded at Pine Point, Trail and Kimberley and at the Vade

Potash operations in Saskatchewan after a 6-week work stoppage. All these agreements expire

O MONTHE ENTIRED TO CEDITION

COMINCO LID.

| 1.0 |
|-----------|
| =7 |
| У |
| d |
| * |
| *A-0.5 |
| 2 |
| |
| 1 |
| , |
| S |
| |
| į |
| |
| |
| as |
| es |
| |
| e ive. |
| rve. |
| 2 |
| |

In Australia, Aberfoyle Limited, owned 47.1% by Cominco, announced a decision to develop the Que River zinc-lead-silver ore deposit in Tasmania at a cost of \$19,000,000 Cdn. Production is expected to start in 1981. GCNL # 201

on is expected to start in 1981. GCNL #201 18-10-79
The major program of expansion and modernization of the Trail metallurgical plants and the Sullivan Mine is proceeding well. Plans have been implemented to advance completion of the 300,000 ton-per-year zinc facilities from 1984 to 1982 82 F NEO52 B2F9E

On total revenue of \$268,100,000 in the third quarter, Cominco achieved net earnings of

\$42,400,000, being \$2,38 per common share.

82 F | 3E

in Greenland, and the HB mine in BC prior to its closure in August 1978.

The major expansion project begun in 1977 at the metallurgical plants at Trail and the Sullivan mine at Kimberley is proceeding on schedule. By the end of 1978 over \$170-million had been committed to the project which will increase the annual capacity of refined zinc to 300,000 tons and of refined lead to 200,000 tons.

The newly expanded facilities at the Con operations at Yellowknife produced 114,500 oz of gold compared to 92,900 oz in 1977. Total gold production was 133,200 oz, a 23% increase from the

previous year.

The company's fertilizer and chemical operations in Alberta, BC, and the US manufactured 1,758,000 tons of product, compared to 1,484,000 tons in 1977. The increased production came mainly from the fertilizer complex at Carseland, Alberta, which completed its first year of operation.

Earnings from associated companies were \$9.5-million. The principal contribution, \$7.8-million compared to \$4.9-million in 1977, came from Fording Coal Limited. Fording's production of 3.1-million tons of coal was approximately the same as in 1977 but sales

improved significantly. Exploration expenditures totalled \$33.9-million including \$4.8-million for associated companies. Work at existing mines continued to add to existing ore reserves and some new areas were identified where further development will be pursued. In the Burkesville, Kentucky, completed in 1979 and in addition to zinc and lead, increased emphasis will be placed on the search for uranium, molybdenum, tungsten, tin and gold.

For the first quarter of 1979, net earnings rose to \$38.3-million, or \$2.14/ share, compared to \$9.5-million, or 49¢/ share in 1978.

Lead, zinc and silver sales increased and a strong demand enabled full operation of all facilities. Fertilizer and potash sales increased significantly and prices improved.

□COMINCO LIMITED: In 1978, net earnings amounted to \$65.2-million from sales of \$901.2-million compared to 1977 earnings of \$62.2-million from sales of \$759.2-million.

Production of lead concentrate in 1978 was 362,800 tons compared to 301,300 tons in 1977, while zinc concentrate production was reduced slightly to 618,200 tons from 636,700 tons in 1977. The Pine Point mine in the Northwest 82 F/zinc area underground work will be Territories and the Sullivan mine in BC 9E produced most of the concentrates with the remainder coming from the Magmont mine in Missouri, the Black Angel Mine

82 F/NE-52
(04368)



COMINCO LTD.

92 PPFile,

ZINC PRODUCTION CUT 30% - Cominco Ltd. is cutting its refined zinc production at the Trail, B.C. refinery as an inventory control measure. Effective immediately production is reduced by approximately 30%. The duration of the curtailment will depend on market conditions.

NO.124(JUNE 28,1977) +Owned, Published and Copyrighted by George Cross News Letter Ltd.

(082F09E) (082FNE052)

THE NORTHERN MINER February 9, 1978

43

Sales, profits rise

Cominco has a good year

VANCOUVER — Consolidated net earnings of Cominco for 1977 are reported at \$62.2 million, or \$3.43 per common share, up from \$47.7 million, or \$2.66 per share for 1976. Sales increased to \$759.2 million from \$725 million.

Lead production was increased to meet strong demand at prices significantly higher than in 1976. Prices for gold, silver, tin and electrical power were above 1976 levels. Zinc production continued to be curtailed because of weak demand, high world inventories and low prices.

Fertilizer production and sales volumes were significantly higher. Prices were relatively stable during most of year, showing some weakness in the fourth quarter. Most of the increase in sales volume was from the new Carseland ammonia/ urea complex.

Sales volume and prices for potash improved over 1976 levels, however, earnings of \$3.4 million before taxes were subjected to \$6.7 million in resource and income taxes resulting in an after tax loss of \$3.3 million. Discussions with government have so far been unsuccessful in obtaining relief.

The decline in value of the Canadian dollar relative to U.S. currency had a beneficial impact on earnings from export sales.

The annual report will be distributed to shareholders late in March. The annual meeting will be held at Vancouver Apr. 20, 1978.



CRONEAT COMINCO -- orine. Mr. Burnet reported that the political uncertainties of a few years ago seriously called into question the wisdom of investing in B.C. the massive sums which would be necessary to bring the Trail metallurgical plants up to the most efficient operating standards. Now, with an improved economic environment in B.C., he announced a program of expansion and modernization for the Trail metallurgical plants and the Sullivan mine. It will progress in a series of logical steps, each of which will be conditional upon prevailing federal-provincial policies, wage and salary costs, and will require the continuing demonstration that Cominco remain competitive in the market place. It will take up to 8 years to complete at a cost of some \$425,000,000. The refined lead-zinc production capacity will be expanded to a half-million tons of metal annually - 300,000 tons of zinc and 200,000 tons of lead. The \$125,000,000 first phase has already started. It will take three years to complete.

Noting that Cominco's fortunes are affected not just by the economic health of Canada but by that of the whole western world, G.H.D.Hobbs, president, pointed out to the annual meeting that, for most nations, 1976 was a painful year of transition as they struggled to achieve stability following one of the sharpest economic swings of our generation. The inflation impelled commodity boom which began in 1973 peaked in 1974. It was followed in 1975 by depressed markets, low prices and substantial unused capacity for many of Cominco's commodities. The liquidation of consumer inventories which accompanied the slump ceased in the first quarter of 1976, and during the remainder of the year an uneasy equiphibrium prevailed in commodity markets. Unfortunately, said Mr. Hobbs, governments maintained taxation rates and social expenditures at levels established kn the boom years, levels which can no longer be sustained. These burdens ensure inexorable inflation.

The inflationary increases in Cominco's cost of doing business caused a decline in net earnings, even though 1976 sales figures were marginally higher than those of the

previous year.
In the first months of 1977, diverse trends have been affecting the commodities produced by Cominco. Zinc is weak but strengthening, copper is in over supply, lead is strong. Fertilizers are similarly varied, nitrogenous products being stable, phosphates uncertain, while potash is about the same as last year. Gold and silver are excellent. Steel continues to have a difficult time. In contrast, tin and tungsten are much improved.

Cominco's diversity in both product and market moderates the impact of sharp swings in product demand. For example, this past winter's 2 months of extreme cold in the eastern half of our continent shut down many zinc consuming plants. Zinc shipments to the North American market were sharply curtailed. Coincidentally, the cold weather caused many thousands of batteries to fail, and lead shipments to the same market increased dramatically.

Fertilizer sales are not only seasonal, they are particularly susceptible to early or late spring planting conditions. At this time, sales of nitrogen, phosphate and potash pro-

ducts are well ahead of the same period last year.

Commissioning of the various components of the new \$150,000,000 ammonia-urea complex at Carseland in southern Alberta has proceeded in an orderly manner. Production of ammonia began in mid-March and urea followed in April. Initial shipments have reached the market. In the U.S., the severe winter diverted natural gas from ammonia production so that Cominco's new output is a most welcome addition to the available supply required by the rapidly expanding market for nitrogenous products.

Phosphate fertilizer prices, although slightly stronger than last year, are still low and supply exceeds demand. At Trail, production of these commodities is integrated with metallurgical operations, and will continue but the future of the Kimberley production is

less certain.

Mr. Hobbs said, "We hope that new mineral legislation will be introduced at this sitting of the B.C. Legislature. The removal of the remaining discretionary powers would be helpful in the restoration of confidence in the mining industry and would eliminate much of the uncertainty which has made mine financing so difficult. We sincerely hope that 1977 will also see a resolution of the federal-provincial conflict over resource taxation which would be an important step towards the re-establishment of a stable climate for the mining industry."

Concerning the outlook, Mr. Hobbs said, "While the world's economic recovery is taking longer than expected, markets for our products are generally improving and the future is encouraging. Results for the first quarter reflect this improving trend. (See GCNL 78(77). Also, earnings from sales in the U.S. and Europe have been beneficially affected by the rise in the U.S. dollar." He added, "Although 1977 is clearly off to a better start than 1976, earnings are still inadequate when related to invested capital."

FOR THE RECORD

FOR THE RECORD

FOR THE RECORD

FOCUS Resources Ltd. share trading was suspended 25Apr77 by Vancouver Stock Exchange.

Mabee Hinerals Incorporated shs. are out of primary distribution, effective 22Apr77.

Canadian Cellulose Company, Limited will pay a dividend of 8¢ per common share on 20Jun77, record 3Jun77.

NO.80(APRIL 26,1977) + GEORGE CROSS NEWS LETTER LTD. + THIRTIETH YEAR OF PUBLICATION

THREE MONTHS ENDED MARCH 31, 9219612 COMINCO LTD. Sales 1976 PROD FIRST QUARTER PROFIT DOUBLED. \$425,000 OF EXPANSION AND \$147,140,000; MODERNIZATION AT TRAIL 1,500,000 1,400,000! AND KIMBERLEY ANNOUNCED Investment Income \$192,200,000 \$148,500,000! Total Revenue At Cominco Ltd.'s annual meeting 28,600,000 on 2lApr77, chairman F.E.Burnet dis-42,400,000 Earnings Bef. Following 11,600,000 cussed a number of broad issues. Depreciation, Depletion 14,900,000 11,800,000 11,000,000 Concerning exploration on which a Income & Resource Taxes 600,000 mining company's long-term future Minority Interest Subsid's. Profits 1,900,000 1,900,000 depends, he noted that a total of \$7,300,000 \$30,000,000 was spent in 1976 by Cominco as to \$16,000,000 directly 1,800,000 Equity in Associates' Profits \$15,600,000 NET EARNINGS Earnings Per Common Share

86¢

43¢ Cominco as to \$16,000,000 directly and associated companies as to \$14,000,000. Last year, the major areas in which these companies were active Earnings Per Common Share were the Burkesville, Kentucky development shaft, the Que River shaft in Australia & the La Troya adit in Spain. Each of these three potential mines is well along in its development phase. Those developments are reinforced by progress on the Rubiales mine of Exminesa in Spain & at the Navan mine of fara Mines Limited in Ireland which mines will be in operation before summer. The \$21,000,00 expansion of Cominco's Con gold mine at Yellowknife will also be in operation by summer and, with the strength now being exhibited by gold, will add an additional cash flow.

Noting that ome negative influences on exploration have grown in recent years, Mr. Burnet said, "There is a popular misconception that DEVELOPED mineral resources belong to the people. Those who espose this cause appear to forget that a mineral occurrence is valueless until someone has dent the money required to find it and define it." This often takes many years and much money. The theorists who readily claim ownership are not nearly so ready to put at risk the sarge sums required for the defining process. The impediments they put in the way of

the propector have had an adverse effect on exploration activity.

Meir impact is demonstrated by reports of the Department of Energy, Mines and Resources.

In the years 1970 to 1972, following the favorable and stable climate of the 1960's,

the Canadian base metal mining industry brought into production 25 new mines with a total

capacity of 170,000 tons of ore per day. In contrast, in the last three years, there were 11 new mines with a total capacity of less than 15,000 tons per day. Obviously something is wrong, he said. The fact that some governments in Canada are now addressing themselves to these problems gives promise that the trend may be reversed.

NO.78(APRIL 22,1977)) Owned, published and copyrighted by George Cross News Letter Ltd.

1977 GCNL