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- Finally, closure of the Agrium plant would represent a major step back in Alaska's effort to add value to its natural resources before shipping to outside markets. Economic development efforts in Alaska are all about adding value to resources, creating family-wage jobs for Alaskans, and providing a local tax base to support essential public services. Agrium brings all of these to Alaska.

Scope of Work

The purpose of this study is to measure the economic role of Agrium's production of urea and anhydrous ammonia at its Kenai plant on the economies of the Kenai Peninsula Borough and Alaska in 2003 and the potential economic impact if production at the plant were to close. The study includes:

The Role in Alaska's Economy

- A brief overview of Agrium's activities in Alaska
- Agrium direct spending for goods and services in Alaska
- Borough government revenues from Agrium
- Direct employment and annual payroll
- Agrium's donations to charities and membership organizations
- Indirect and induced payroll and employment from Agrium direct spending.

Closure Impacts

- A brief overview of socioeconomic impacts on employment, government revenue, export markets, and other components of the economy.

Methodology

Several methodologies were used to produce this study, including primary research, secondary data collection, interviews with Agrium representatives and borough government officials, and use of predictive econometric models. The economic data was collected from several official sources.

Agrium Expenditures

In order to estimate Agrium spending, the study team utilized data on Alaska vendor spending by location and by industrial classification.

The vendor data was reviewed and aggregated into 10 sectors:

- Natural Resources (including natural gas production)
- Manufacturing
- Trade, Transportation and Utilities
- Information

- Financial Activities
- Professional and Business Services
- Educational and Health Services
- Leisure and Hospitality
- Construction
- Other Services
- Government

Donations to charitable causes and payments to membership organizations were provided by Agrium U.S.

Government Revenue

Agrium U.S. provided information concerning tax and fee revenue paid to the Borough government, and 2003 corporate tax filings and other fees to the state. The Kenai Peninsula Borough provided additional supporting data on property and sales taxes.

Employment and Payroll

Direct employment and aggregate payroll data were derived from official Alaska Department of Labor and Workforce Development reports that Agrium files with the state and data provided directly by Agrium. Use of the state database allows for direct comparisons to all other official employment and payroll data for the Kenai Peninsula Borough and for accurate econometric modeling results. Full-time, part-time, and seasonal employment is accounted for in this database.

Indirect and Induced Economic Impacts

The study team used the IMPLAN econometric models for the nitrogenous and phosphatic fertilizer manufacture sector in the Kenai Peninsula Borough to estimate indirect impacts from Agrium output at the Borough and statewide level. To verify the relevancy of the IMPLAN model, the study team used the known direct expenditures provided by Agrium to evaluate the relationships between Agrium-related activities and other businesses in Kenai Peninsula Borough. The direct, indirect, and induced impacts on output, employment, and payroll were aggregated to obtain total impact. Dividing total impact by direct impact produces a multiplier.

Background on Agrium Kenai Nitrogen Operations

Agrium contributes to Alaska's economy by adding value to Cook Inlet natural gas production. In September 2000, Unocal completed the sale of its agricultural products business, including its subsidiary, Alaska Nitrogen Products LLC (ANP) to Calgary-based Agrium Inc. Unocal's Alaska oil and gas business unit continues to supply natural gas to Agrium from Cook Inlet fields and onshore production facilities as part of a 1998 agreement. The agreement expires in 2009. The Agrium Kenai Nitrogen Operations complex is located near Nikiski, 10 miles north of Kenai. When it was built in 1968, it consisted of one urea and one ammonia plant. Production started in 1969. In 1977, the complex doubled in size, adding another urea and ammonia plant with supporting utilities.

Currently, the Kenai plant is the United States' second largest producer of ammonia and urea (after CF Industries' Louisiana operations). The Agrium Kenai Nitrogen Operations complex has an annual production capacity of nearly 2 million metric tons. In 2003, the Kenai plants produced 1.6 metric tons of anhydrous ammonia and urea. For feedstock, the plant uses approximately 110 million cubic feet of natural gas daily. In 2003, Agrium's sales totaled $220 million.

Virtually all of Agrium's Kenai production is destined for overseas markets, including South Korea, Mexico, Taiwan, Thailand, Australia, Chile, New Zealand, and the Philippines. Within Alaska, product is distributed and sold in small quantities. In 2003, Agrium's exports represented 7.3 percent of all Alaska exports for all products.

Agrium spent $101 million in Alaska in 2003. Direct impacts include the money actually spent by Agrium in its normal business activity for payroll for Agrium's direct employees, goods and services, government taxes and fees, and charitable contributions. The components of these four types of direct spending, including direct employment, are described in the following sections.

Direct Employment and Payroll

All of Agrium's Alaska employees live on the Kenai Peninsula. In 2003, Agrium employed an annual average of 264 workers in the Kenai Peninsula, earning an annual $21.8 million in wages. When adding employee benefits, total payroll and benefits expenditures are $29.5 million. While it is beyond the scope of this study to capture the economic impacts of employee benefits, it is assumed that some portion of the $7.6 million Agrium spends on employee benefits remains in Alaska. For example, Agrium's employee benefit expenditures circulate in the Alaska economy when employees' health care and retirement payments are made locally to those retirees remaining in the area.

According to the Alaska Department of Labor and Workforce Development, in 2002, Agrium was the third largest private employer in the Kenai Peninsula Borough. Peak Oilfield Service Company is the largest private employer. Safeway/Eagle Stores' employment was the second highest employer, but their payroll would be substantially smaller than Agrium's payroll (payroll data by individual company is not publicly available). When public employers are included, Agrium Kenai Nitrogen Operations was the seventh largest employer.

With the June 2003 restructure of Agrium and the loss of positions, it is expected that Alaska Department of Labor and Workforce Development 2003 data may show that Agrium has fallen to fourth or fifth largest private employer in the Kenai Peninsula Borough.

Table 3
The Top 10 Private Employers in the Kenai Peninsula Borough, 2002

Company	Annual Average Employment
Peak Oilfield Services Company	349
Safeway/Eagle Stores	331
Agrium Kenai Nitrogen Operations	**297**
Frontier Community Services	278
Fred Meyer	225
Alaska Petroleum Contractors	209
Union Oil of California	177
Tesoro Alaskan Petroleum Company	176
Veco Alaska	161
South Peninsula Behavior Health Services Inc.	143

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section

In 2002, Alaska Department of Labor and Workforce Development data shows that Agrium's employment peaked in March and April (302 and 301 positions, respectively). 2003 data shows the drop from June employment of 283 to July's employment of 241 positions, resulting from the restructure. Full-year data for 2003 was not available at the time this study was produced.

Approximately two-thirds of Agrium employees are assigned to maintenance and operations, while the remaining third are technical, supervisory, and management staff. Maintenance employees include: millwrights and machinists, welders and pipe fitters, general craftsman, instrument and electrical technicians, and warehouse supply workers.

As shown in the table below, Agrium employees are among the highest paid workers in the Kenai Peninsula, making two and half times higher the average wage paid in the Borough.

Table 4
Agrium Kenai Nitrogen Operations, 2003 and Kenai Peninsula Borough Annual Average Monthly Employment and Earnings, by Industry, 2002

Industry	Annual Average Monthly Employment	Average Monthly Earnings*	Average Annual Earnings*
Agrium Kenai Nitrogen Operations	**264**	**$6,882**	**$82,582**
Natural resource and mining	1149	5,717	68,604
Oil and gas extraction	239	9,943	119,316
Construction	1,200	3,395	40,740
Manufacturing	1077	4,080	48,960
Trade, transportation and utilities	3,579	2,463	29,556
Information	262	3,071	36,852
Financial activities	445	2,351	28,212
Professional and business services	830	2,141	25,692
Health and education services	1,346	1,959	23,508
Leisure and hospitality	2,191	1,175	14,100
Other services	772	1,316	15,792
Federal government	428	4,273	51,276
State government	1,085	3,113	37,356
Local government	3,025	2,988	35,856
All industries average	**17,628***	**$2,798**	**$33,576**

*Subtotals do not add up to total because not all subtotals for every industry categories available are presented
Source: Agrium Kenai Nitrogen Operations, Alaska Department of Labor and Workforce Development

In the process of manufacturing urea and ammonia, Agrium spent approximately $77.1 million on Alaska goods and services during 2003.

This spending was distributed among 384 Alaska businesses from nearly all sectors of the economy. Eighty-four percent of the Alaska vendor spending occurred in the Kenai Peninsula Borough. The single largest category ($60.9 million) was purchases of natural gas used in feedstock and power generation. Purchases of trade, transportation and utilities (new construction and maintenance) represent a distant second largest expenditure category ($6.6 million). Third in line are purchases for construction and oilfield services ($6.0 million). The table below provides total direct purchases of Alaska goods and services by expenditure category.

Table 5
Agrium Expenditures on Goods and Services in Alaska, by Expenditure Category, 2003

Category	Spending ($)
Natural Gas	$60,930,559
Trade, transportation and utilities	6,627,139
Construction	6,015,497
Other natural resources	1,720,003
Professional and business services	1,133,596
Manufacturing	454,401
Information	158,582
Educational and health services	31,499
Leisure and hospitality	30,738
Financial activities	18,530
Total Local Purchases of Goods and Services	**$77,120,545**

Figures do not include charitable spending, membership organizations or payment to governments.
Source: Agrium Kenai Nitrogen Operations, McDowell Group compilations

Taxes

Agrium pays taxes and fees directly to the Kenai Peninsula Borough. Local borough taxes paid by Agrium include property tax for facilities owned and operated by Agrium to manufacture urea and ammonia; that is, their production facilities and transportation facilities. The total tax revenues paid to the Kenai Peninsula Borough in 2003 based on the assessed value of Agrium's plant and equipment was $2.2 million, representing 5 percent of Kenai Peninsula Borough's total property tax receipts ($41.7 million).

Agrium also paid $221,000 in 2003 estimated corporation tax payments and $111,800 for other services to the State of Alaska.[1]

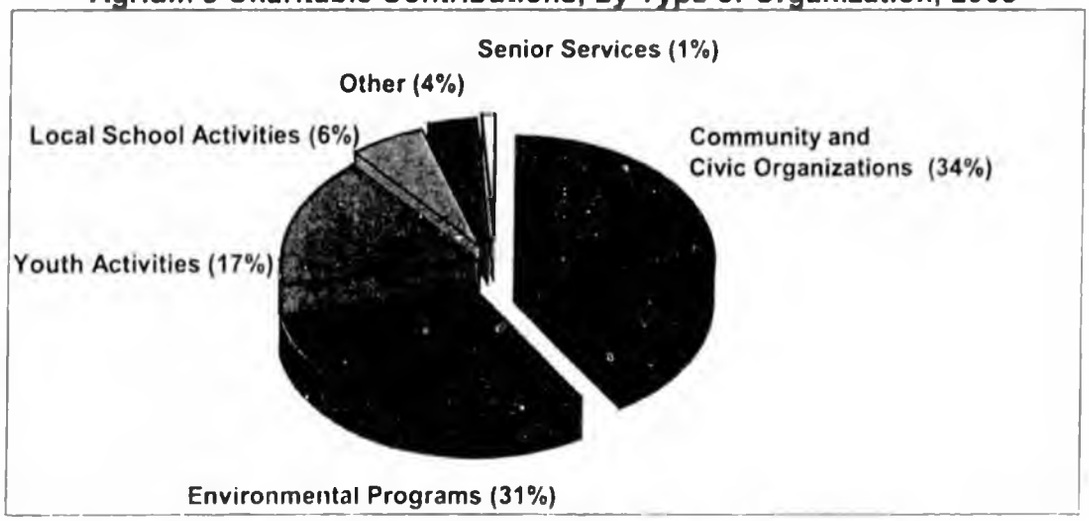
[1] Final corporation tax figure to be finalized in the summer of 2004.

Charitable Contributions and Membership Organizations

Agrium had an additional impact of $194,740 on the local and Alaska economies through its charitable donations paid to local organizations. In 2003, Agrium made cash contributions to 43 non-profit charitable organizations in Nikiski, Kenai, Soldotna, Sterling, and Anchorage. Agrium also provided in-kind support to seven organizations on the Kenai Peninsula.

These non-profit organizations ranged from local school programs (in 22 different sports and academic activities), youth athletic and academic programs (17 activities), community services and civic organizations (16), environmental programs (1), senior services (2), and a variety of other health, sport, and economic development programs (9).

Figure 1
Agrium's Charitable Contributions, by Type of Organization, 2003



Source: Agrium Kenai Nitrogen Operations

Agrium Kenai Nitrogen Operations matched dollar-to-dollar its employees' contributions to the United Way of Kenai. In 2003, the total contribution to United Way, including employee contributions, was $59,700. Agrium is also a co-sponsor of the *Caring for the Kenai* program. This program challenges high schools students to create, invent, or improve ways to better care for the Kenai Peninsula's environment.

While it is unclear how these charitable donations are distributed within the state, it is likely that a significant portion remains in the Kenai Peninsula. In-kind donations made by Agrium and its employees were not captured in this study, but it is known that some employees are actively giving back to their community, through volunteering and provision of skills, equipment, and material.

Agrium supported 17 membership organizations located in Kenai, Soldotna, North Pole, and Anchorage by giving $20,100 in membership support.

As Agrium-related spending circulates through the economy, it creates additional jobs and income for Kenai Peninsula and Alaska residents. These indirect output, employment, and earnings impacts are discussed in the following section.

Summary of Direct Spending

Agrium's total 2003 direct spending in Alaska was $101 million. This amount was used to pay its employee's payroll, local property taxes, purchases of Alaska goods and services, and charitable contributions.

Table 6
Summary of Direct Spending in Alaska by Agrium, 2003

Category	Value
Total employee payroll	$22 million
Total Agrium payments to Kenai Peninsula Borough	$2.2 million
Purchases of goods and services	$77 million
Charitable giving	$195,000
Total Direct Spending	**$101 million**

INDIRECT AND INDUCED IMPACTS

In addition to the $220 million in gross sales of Agrium's 2003 production, an average of 264 jobs and $21.8 million in total annual payroll resulting from direct employment, Agrium Kenai Nitrogen Operations also indirectly creates sales, jobs and earnings through the Kenai Peninsula and Alaska support sectors. This activity is often referred to as a "ripple effect" or a "multiplier impact."

Using the example of employment impacts, additional jobs are created in two ways. First, local spending by Agrium on services and supplies creates jobs in the businesses providing those services and supplies. These jobs are termed "indirect" jobs. Second, spending by Agrium employees in local stores and with local service providers (i.e., banks, doctors, auto repair shops, etc.) also creates jobs. These are termed "induced" jobs. Commonly, indirect and induced impacts are lumped together under the label of indirect employment.

Indirect employment (including induced) can be estimated using multipliers. By applying a multiplier to known direct employment, total employment (direct plus indirect) can be calculated. In Alaska, multipliers are typically between 1.5 and 2.5, meaning that the total (direct and indirect) employment impact of a business that employs 100 workers is between 150 and 250 jobs. In other words, for every direct job, one-half to 1.5 additional jobs are created in the support sector. Payroll impacts are estimated in the same way.

As Agrium spends money locally on goods and services, new earnings are created. Multipliers reflect the fact that money circulates through an economy at different rates depending upon the type of business at which money is spent and the economy in question. The magnitude of the output, employment, and earnings multipliers depends on, first, how much money the employer spends locally on goods and services, the average salary of employees, and the residency of those employees. Because Agrium spends over $85 million in the Alaska economy and supports high-paying jobs located in the Kenai Peninsula, the multiplier impact of Agrium is higher than the multiplier for most of Alaska's industries, with the notable exception of oil and gas production.

Calculating multipliers that apply specifically to Agrium Kenai Nitrogen Operations would require complex econometric modeling of the Kenai Peninsula Borough that is far beyond the scope of this study. However, using IMPLAN, a predictive model of local and state economies, it is possible to calculate reasonable estimates of multiplier impacts.

For the Kenai Peninsula Borough, IMPLAN produces multipliers for more than 500 industrial categories. For the nitrogenous fertilizer manufacturing sector in the Kenai Peninsula Borough, IMPLAN reports an output multiplier of 1.5, and employment and earnings multipliers of 2.2 and 1.6, respectively. Statewide multipliers are 1.7 for output, 2.6 for employment, and 1.9 for earnings.

Indirect and Induced Output Impacts

In 2003, Agrium's gross sales were $220 million. The gross sales of Agrium's production plus the indirect and induced impacts of spending in support of Agrium's operations -- an additional $154 million -- results in a total estimated statewide economic output of $374 million.

In 2003, Agrium purchased 40 billion cubic feet of Cook Inlet natural gas. For every thousand cubic feet (Mcf) of Cook Inlet natural gas used by Agrium for feedstock and power generation, $9.35 in total economic output is generated.

Indirect and Induced Employment and Earning Impacts

Applying a statewide employment multiplier of 2.6 and an earnings multiplier of 1.9 to Agrium's 264 direct jobs and $22 million in annual payroll, Agrium's total employment and payroll impact on the Alaska economy is estimated at 685 direct, indirect and induced jobs and $42 million in direct, indirect, and induced payroll (including 421 indirect and induced jobs, and $20 million indirect and induced payroll).

In the Kenai Peninsula Borough alone, Agrium creates a total of 580 jobs and $35 million in annual payroll, based on the multipliers described above. When factoring in the total direct, indirect, and induced employment and payroll impacts, Agrium's total payroll supports 5.9 percent of total Kenai Peninsula Borough payroll, and 3.2 percent of total Kenai Peninsula Borough employment.

Socioeconomic Impacts

Population

Based on the relationship between the employment and population on the Kenai Peninsula Borough, the 580 Agrium-related jobs support a population of 1,250.[2] This population impact accounts for 2.4 percent of the Kenai Peninsula Borough's total population (51,187).

Student Enrollment and Kenai Peninsula Borough School District Revenue

Agrium employees have 244 school-age dependents (between the years of 5 and 18). Assuming most of these dependents are enrolled in public schools in the Kenai Peninsula, Agrium's families accounted for 2.5 percent of Kenai Peninsula Borough School District school enrollment (9,697) in the 2002/2003 school year.

[2] 580 total jobs divided by the labor participation rate for Kenai Peninsula Borough (46.5 percent).

According to the School District, the State of Alaska provided $44.1 million to the District in FY03. On average, the District received $4,549 per student from the State of Alaska. Thus, Agrium school-age dependents accounted for $1.1 million in state revenue to the Kenai Peninsula Borough School District. When including Borough revenue ($30.7 million), federal revenue ($0.2 million), and other revenue ($0.1 million), the average per student contribution is $7,827. Therefore, Agrium school-age dependents could account for up to $1.9 million in Kenai Peninsula Borough School District General Fund revenue.

Property Tax Revenue

Property tax on employees' homes is not specifically calculated in this study. Several methods for evaluating property tax impacts were considered. Without specific data on number of homes owned or rented by Agrium employees, the study team used a more general measure. Using average taxable value for single-family units ($115,153) at the Borough mill rate of 6.5, and assuming that all Agrium employees own their own home, Agrium families pay at least $200,000 in Borough property taxes exclusive of additional service area and city taxes on residential property. Because of the high average wage for Agrium employees and the propensity of higher income earners to own higher valued homes, the actual figure, if known, could be significantly higher. In addition, this figure does not include property tax contributions by the population of homeowners affected indirectly by Agrium's activity.

Sales Tax Revenue

It is not possible to precisely calculate the Borough's sales tax collection that is due to all of Agrium's economic impacts on the Peninsula. Borough sales tax collections result from a complex system of variable taxation depending on specific location of the expenditure, per invoice limit of $500 regardless of the total value of the product purchased, expenditures by both residents and non-residents, and expenditures by Peninsula businesses and industries that are not exempt from sales taxation due to the resale provision of the sales tax code.

However, given that Agrium's total impacts account for 3 percent of total Borough employment, 6 percent of total Borough payroll and 2 percent of the Borough's population, it can be assumed that there are significant direct and indirect sales tax revenue impacts from Agrium's spending.

This section addresses the potential economic impacts of closure of the Agrium plant. The preceding chapters identified what is at stake - hundreds of jobs and millions of dollars in direct and indirect payroll, and property tax revenues. This chapter describes how the loss of the Agrium facility would ripple through the Kenai Peninsula Borough economy both in the near-term and over the long-term. It also considers the economic impact of plant closure throughout the state

The discussion begins with two case studies - profiles of communities elsewhere in Alaska that have experienced the closure of large manufacturing facilities. The case study discussion is followed by an analysis of the likely impacts in the Kenai Peninsula Borough, and elsewhere in the state, from Agrium plant closure.

Case Studies

Ketchikan

In 1996, Ketchikan Pulp Company was Ketchikan's single largest employer, with 450 employees earning $20 million in annual payroll. The mill closed in 1997, and the community entered a period of economic decline that continues today. Since the mill closed, Ketchikan's population has declined by 1,200 residents, approximately 8 percent of the community's total population. Six years after mill closure, Ketchikan's population decline continues. Between 2002 and 2003, Ketchikan lost another 150 residents.

Employment in Ketchikan in 2003 was approximately 1,000 jobs below the pre-mill closure level. The average inflation-adjusted monthly wage in Ketchikan fell from $3,050 in 1996 to $2,680 in 2002 (the latest available data). Real (inflation adjusted) payroll fell from $290 million in 1996 to approximately $215 million in 2002, a loss of 25 percent.

Gross sales have fallen from $525 million to $400 million annually, a decline of nearly 25 percent.

While Ketchikan continues to suffer significant economic fall-out from mill closure, growth in other sectors of the economy has prevented even greater decline. For example, cruise ship passenger traffic to Ketchikan increased from 500,000 passengers in 1997 to over 700,000 passengers in 2003. These 200,000 additional passengers spent $20 million in Ketchikan in 2003, providing important business sales and sales tax revenues for the community. Without this offsetting economic activity, the impact of mill closure would have been much more severe.

Other effects of mill closure in Ketchikan include declining sales and property tax revenues, declining school enrollment, increased seasonality in the local economy, and other effects.

What is noteworthy is the timing of the economic losses in Ketchikan. It has been six years since the mill closed, yet the economy continues to struggle. Further, the community has still not found the bottom of an economic downturn brought on by mill closure.

Wrangell

Until 1994, the Alaska Pulp Corporation's sawmill was Wrangell's single largest employer. The mill employed 200 workers, one-fifth of the community's wage and salary employment. Mill closure in 1994 precipitated a steady and dramatic decline in the local economy. Wrangell's population in 1994 stood at 2,754 residents. In 2005, after nine years of almost continuous decline, Wrangell's population totaled 2,113 residents. Since the mill closed the community has lost over 600 residents – 23 percent of Wrangell's population. Following are several other indicators of Wrangell's economic condition, following mill closure:

- Wage and salary employment remains 17 percent below the pre-mill closure level. The most recent data shows continuing annual decline.
- Total annual payroll remains $7 million below the pre-mill closure level, a loss of 20 percent, with continuing annual decline.
- School enrollment declined from 555 students in 1995 to approximately 400 students in the 2003-04 school year.
- Wrangell's average wage, in inflation-adjusted dollars, is 20 percent below the pre-mill closure level. The average monthly wage is $600, in terms of real purchasing power, below the 1994 level.

In summary, Wrangell's economy has yet to recover from an economic shock that occurred a decade ago. Unlike Ketchikan, Wrangell has very little economic activity to offset the continuing decline stemming from mill closure.

Case Study Summary

These case studies illustrate how plant closures can impact local economies. To summarize, a community that experiences the loss of an important manufacturing facility can expect some or all of the following:

- Immediate loss of some of the community's highest paid jobs – and year-round jobs
- Some immediate population loss, but also gradual, long-term population decline
- Declining average wages as plant jobs are not replaced in the local economy or are replaced by lower-paying service sector jobs
- Declining business sales and sales tax revenues

- Declining property tax base (manufacturing facilities typically require high levels of investment in taxable plant and equipment) which results in declining tax revenues

- Increased tax burden on residents and businesses that remain and/or cuts in local government services.

In the absence of growth elsewhere in the economy to offset the affects of plant closure, the economic consequences can be much greater than the loss of jobs at the plant.

Kenai Peninsula Borough Impacts from Agrium Plant Closure

Direct Borough Impacts

In June 2003, the Borough lost 65 jobs and nearly $5 million in annual payroll as a result of Agrium restructuring its operations. With the full closure of the Agrium plant, the Borough would immediately lose 230 jobs and $19 million in annual payroll. Borough-wide employment would drop by 1.3 percent and payroll by 3.2 percent.

With the loss of 230 jobs averaging over $80,000 in annual payroll, the Borough economy will lose some of its highest paying jobs. Plant closure will result in a decline of 1.9 percent in the Borough's average monthly wage.

The Kenai Peninsula Borough would immediately lose $2 million in property tax revenues. The assessed value of Agrium's assets includes approximately $1.4 million for the 225 acres the plant sits on and $170 million for the plant itself. While the land may retain most of its assessed value, the plant will be worth no more than its salvage value, which would likely be less than 10 percent of its operational value. The loss of $2 million in property tax revenues would represent approximately 5 percent of the Borough's total property tax revenues. Either the Borough would be forced to make significant cuts in services or other property owners would make up for the Agrium-related loss through higher tax payments.

With closure of the Agrium plant, 43 non-profit organizations would lose a combined total of $195,000 in contributions. These and other non-profits may also lose contributions made directly by Agrium employees.

Direct impacts associated with plant closure would also include lost sales for businesses that provide goods and services to Agrium. In 2003, Agrium purchased $77 million in goods and services from 384 Alaska businesses. A majority of this spending was on natural gas purchases (the impact of the loss of Agrium as a gas market is described below).

Indirect Borough Impacts

Support sector employment: Indirect impacts of plant closure could include loss of jobs in the support sector. The likelihood, timing and magnitude of these potential losses would depend on a variety of factors. The condition of the Borough economy overall is one critical factor. If the area economy is weak, the employment losses associated with plant closure could include all of the indirect and induced employment linked with Agrium. As described earlier, using employment and payroll multipliers for the Kenai Peninsula Borough, Agrium accounts for an estimated 510 jobs in the Borough economy. This figure includes direct (230 jobs), and indirect and induced employment. It would also account for $30 million in total payroll. This figure includes direct ($19 million), and indirect and induced payroll. That means that about 280 support sector jobs are at stake, along with $11 million in annual support sector payroll. These are jobs in stores, schools, doctor's offices, construction companies - jobs throughout the economy.

On the other hand, if other sectors of the economy are growing and generating additional business and personal income, employment losses in the support sector might not materialize.

According to Alaska Department of Labor data, employment in the Borough's economy has been growing slowly, at a rate of approximately 1.5 percent annually over the past five years. This slow growth trend, if it were to continue, would suggest that the Kenai Peninsula Borough might avoid the worst-case scenario associated with Agrium plant closure.

While growth elsewhere in the economy might prevent layoffs of workers in the support sector, it is nevertheless true that the economy would experience a significant opportunity cost. Suppose, for example, five years after plant closure, total borough employment is about 250 jobs below its current level. This would suggest that the economy would suffer the loss of direct Agrium jobs, but would be able to absorb the potential indirect Agrium-related losses through growth elsewhere in the economy. However, if Agrium's plant had not closed, the Borough economy would have 560 jobs more jobs than it would without Agrium. This is an important opportunity cost for the Kenai Peninsula Borough.

Housing and real estate markets: Closure of the plant and layoffs of 230 workers would result in some weakening of the local housing market. The impact on the housing market would depend on many factors, including the number of homes that would ultimately be placed on the market, interest rates (low mortgage interest rates would support home sales), and trends in sectors of the economy unrelated to Agrium. Job growth elsewhere in the economy would offset impacts on housing and real estate.

Borough taxes: As the housing and real estate market shifts in the Borough, it may also experience a loss in its residential property tax base. With a loss in payroll and spending within the Borough, it can be expected that sales tax receipts would also decrease.

Statewide Impacts of Agrium Plant Closure

Employment: Closure of the Agrium plant would have a range of statewide impacts. In terms of employment (and using statewide multipliers), at risk are the 600 jobs and $36 million in payroll dollars that are directly or indirectly linked to Agrium operations in Alaska. As described above, while the state's economy may not experience a drop in employment of 600 jobs if the Agrium plant closes, over the long-term the state's economy without Agrium would be 600 jobs smaller.

Impacts on Cook Inlet Gas Production and Markets: Overall, Cook Inlet gas production is declining. Today's production is approximately two-thirds the 300 Bcf highs of the 1980s and early 1990s. Without exploration and development of significant new fields in Cook Inlet, the Alaska Department of Natural Resources forecasts gas production to decline to just 22.5 Bcf by 2022.[3]

Marathon and Unocal are the major players in the Cook Inlet oil and gas fields. These two companies were the operators for 29 of the 42 fields and pools in 2002. Other companies operating in Cook Inlet include Forest Oil Company, Aurora Gas, LLC, Conoco/Phillips, and XTO Energy.

As part of its agreement when it sold its plant to Agrium, Unocal supplies Agrium with most of its natural gas feed stock.[4] Unocal also supplies gas to Enstar, a gas utility company, through a long-term service contract.

As the primary supplier to Agrium, Unocal would be the player most greatly affected by Agrium's closure. If Agrium were to close, Unocal's gas production would be affected. The full extent of those effects is unknown. However, if there were no immediate demand for the newly available supply, Unocal would defer its production of this gas. This would lead to deferred state royalties and production taxes (see below).

The utility markets made up largely by Enstar, Municipal Light and Power, and Chugach Electric are holding stable and currently served by long-term contracts held with Cook Inlet gas producers. It is not expected that these long-term contracts will be affected by Agrium's closure.

Currently there is no industrial market outlet for Agrium's gas supply from Unocal. The Kenai LNG plant is producing at capacity served by Marathon and ConocoPhillips production.

State revenues: Of particular importance is the impact of plant closure on State of Alaska gas production royalties and severance taxes associated with gas production for Agrium's feedstock. Determining the precise royalty and severance tax value of Agrium's gas would require a complex analysis beyond the scope of this study. It is known that Cook Inlet gas production will generate approximately $51 million in royalties and severance tax revenues to the State in 2004.

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[3] Alaska Department of Natural Resources, Division of Oil and Gas, *Alaska Oil and Gas Annual Report December 2003*, for historical years 1960 through 1987 and forecast years 2004 through 2022.

[4] Unocal Corporation – 2002 Annual Report on Form 10-K - http://www.unocal.com/annualreport/02-10-k.htm.

Using 2003 gas volumes purchased by Agrium (40 bcf) as a base and given that there is no other existing market for this volume of gas, the state would lose as much as $11.6 million in future annual state revenues from royalties and severance taxes (at a time when the State is struggling to balance its budget).[5]

In the long term, assuming Unocal deferred its production with the intention of selling this supply to another buyer at a higher price than what Agrium currently pays, the revenues to the state may be the same (in terms of present value) than what it currently receives. This, however, does nothing to mitigate the immediate loss to the state treasury.

In addition to gas royalty and production taxes, the state would also lose any future corporate tax revenue collected from Agrium.

Alaska exports: With the closure of the Agrium plant, total Alaska exports would decline by approximately 7 percent. The total value of Alaska exports of all products in 2003 was approximately $2.7 billion. That year fertilizer exports were valued at $200 million, representing 7.3 percent of total Alaska exports.

Economic development and adding value to Alaska's natural resources: Finally, closure of the Agrium plant would represent a major step back in Alaska's effort to add value to its natural resources before shipping to outside markets. Economic development efforts in Alaska are focusing on adding value to resources, creating family-wage jobs for Alaskans, and providing a local tax base to support essential public services. Agrium brings all of these to Alaska.

[5] Estimate was provided by Agrium. Assumptions include: royalties based on Unocal's reported actual royalties paid from July 2002 to June 30, 2003, Beluga royalty rate of 7 percent based on DNR data, Beluga royalty price of $1.20/mcf based on GSA pricing, price and royalty rate of "other gas" assumed to be the same as Unocal's gas, severance rate of 5 percent based on estimates of daily production rates per well and severance tax price based on GSA pricing.

Agrium

NEWS RELEASE
& Q4 INTERIM REPORT

Agrium sets new fourth quarter earnings record

05-005
Date: February 10, 2005

Contact:
Investor/Media Relations:
Richard Downey
Director, Investor Relations
Phone (403) 225-7357

Christine Gillespie
Investor Relations Manager
Phone (403) 225-7437

Contact us at: www.agrium.com

ALL AMOUNTS ARE STATED IN U.S.$

CALGARY, Alberta -- Agrium Inc. (TSX and NYSE: AGU) announced today that net earnings for the fourth quarter were $102-million ($0.71 diluted earnings per share). Net earnings for the year were $276-million ($1.91 diluted earnings per share).

"We delivered strong results in 2004. EBITDA was over $600-million; our cash position doubled from the previous year; and our revenues exceeded $3-billion. Our Retail operations achieved record EBIT and EBITDA in 2004, with revenues reaching a record $1.1-billion. Fourth quarter 2004 margins for all of our wholesale product groups increased both over the previous quarter and on a year-over-year basis," said Mike Wilson, Agrium's President and CEO.

"Our U.S. retail business is anticipating a good spring season based on feedback from customers. The fundamentals continue to be favorable for both our wholesale and retail operations, and we are looking forward to strong financial performance in 2005."

"We recently announced we are redeeming $175-million in preferred securities with cash. This provides a number of financial benefits, such as reduced security charges and reduced dilution in our earnings per share, while maintaining our financial capability to pursue opportunities that add value for shareholders," said Mr. Wilson.

KEY DEVELOPMENTS

Pricing and gross margin improved in the fourth quarter of 2004 for all three major product groups both year-over-year and as compared to the third quarter of 2004. Strong urea and other nitrogen sales more than offset a weak fall ammonia application season in North America due to weather. Average nitrogen margins reached $82 per tonne, representing an eight percent increase compared to the third quarter and a 28 percent increase over the same quarter last year. These higher margins were realized in spite of our effective gas cost increasing by $1.23 /MMBtu from the fourth quarter of 2003 to $4.54 /MMBtu for fourth quarter 2004 production. The AECO basis averaged $1.06 /MMBtu for the fourth quarter and $0.86 /MMBtu for the year. Agrium's average potash price continued to strengthen, increasing eight dollars per tonne over the third quarter, and Agrium's fourth quarter average phosphate margins increased by seven dollars per tonne over the previous quarter.

- Our Retail results were excellent, with total Retail EBITDA of $21-million for the quarter and $99-million for the year. Our U.S.-based retail operations delivered an eighth consecutive year of record earnings and our South American-based operations contributed $11-million in EBITDA for the year. In February, Agrium announced the acquisition of additional retail operations in Argentina, Chile and Bolivia.
- Cash provided by operating activities was $191-million in the fourth quarter, bringing the total cash provided by operating activities to $449-million for 2004. In January, we announced the redemption of our eight percent preferred securities. In 2004, these preferred securities diluted our earnings per share by $0.11.
- Moody's rating agency announced this week they have affirmed the senior unsecured debt rating of Baa2 for Agrium, and raised their outlook from negative to stable due to improved financial conditions and a solid industry outlook.
- In February, we announced plans to complete the engineering work to expand our production capability for our patented-process controlled release urea products. One of these products, ESN®, recently received two separate awards, one in Canada and one in the U.S., for best new farm technologies.

Excluding Special Items, consisting of the Kenai-related award and settlement in 2004 and the write-down of our Kenai facility in 2003, net earnings for the fourth quarter of 2004 set a new record at $75-million ($0.52 diluted earnings per share), more than double net earnings of $31-million ($0.22 diluted earnings per share) for the same period in 2003. Excluding Special Items, net earnings for the year 2004 were $224-million ($1.56 diluted earnings per share), a significant improvement over 2003 net earnings of $119-million ($0.82 diluted earnings per share).

MANAGEMENT'S DISCUSSION AND ANALYSIS

February 9, 2005

The following Management's Discussion and Analysis (MD&A) contained in this interim report updates our annual MD&A included in our 2003 Annual Report to Shareholders, to which readers are referred. No update is provided where an item is not material or there has been no material change from the discussion in our annual MD&A.

OVERVIEW OF CONSOLIDATED FINANCIAL HIGHLIGHTS

Net Earnings

Agrium's fourth quarter consolidated net earnings were $102-million, up $211-million from the $109-million net loss reported for the same quarter of 2003. Diluted earnings per share were $0.71 compared to a loss of $0.89 for the same quarter last year. While earnings continue to benefit from the tight supply and demand fertilizer market fundamentals, our fourth quarter results were improved by the recognition of liquidated damages in the quarter under the Arbitration Panel award and a $36-million gain recognized from the settlement of litigation, both related to our Kenai, Alaska nitrogen facility.

The Kenai litigation settlement resolved our long-standing dispute with Union Oil Company of California (Unocal) over obligations under the Purchase and Sales Agreement, associated Earn-out obligations and gas supply issues. The settlement agreement establishes a definitive gas supply obligation from Unocal to the Kenai facility up until October 31, 2005. Agrium intends to close the Kenai facility in November of 2005 unless alternate economic gas supplies can be obtained.

For the year, consolidated net earnings were $276-million, or $1.91 diluted earnings per share. This is a $297-million improvement over the prior year consolidated net loss of $21-million or $0.25 diluted loss per share. The 2003 year included a $140-million after-tax asset impairment on our Kenai operations, while the 2004 results included $86-million ($52-million after-tax) Kenai award and settlement. Excluding all Kenai related items in both years, net earnings would have been $224-million, or $1.56 diluted earnings per share in 2004 compared to $119-million, or $0.82 diluted earnings per share in 2003.

The growth in both quarterly and full year net earnings is largely attributed to Wholesale operations in both North and South America, which have benefited from the tight supply and demand fertilizer market fundamentals.

Cash Provided by Operating Activities

Operating activities provided cash of $191-million in the fourth quarter of 2004 compared $70-million for the same quarter of 2003. The increase of $121-million is due to improved earnings and the Kenai award and settlement.

Financial Position

Cash balances increased $225-million to end the year at $425-million, largely attributable to cash provided by operating activities.

Consolidated inventories have increased by $79-million compared to the prior year. The majority of this increase is comprised of an additional 175-thousand tonnes of ammonia inventory resulting from the late harvest and early winter in Western Canada and the Northern Plains. Lower application rates in the fall 2004 season should result in strong application demand in the 2005 spring season.

Other liabilities are up largely due to shutdown costs accrued for the intended closure of the Kenai, Alaska nitrogen facility in November 2005.

BUSINESS SEGMENT PERFORMANCE

Retail

- In the fourth quarter of 2004, we integrated our North and South America Retail segments into one Retail segment. The change was a reflection of organizational and operational changes that aligned and integrated our South America Retail segment with North America Retail.
- Fourth quarter 2004 Retail EBIT was up $11-million over the same period last year. The increase is attributable to both growth in fertilizer sales prices and volumes.
- Lower expenses relative to liability claims and accounts receivable write-offs also contributed to the EBIT increase.

North America Wholesale

- Wholesale EBIT for the fourth quarter of 2004 was $140-million, up $313-million from a negative EBIT of $173-million for the same period last year. Excluding Kenai related items from both years, Wholesale EBIT for the fourth quarter was $95-million in 2004 and $62-million in 2003.
- Gross profit in the fourth quarter of 2004 was up by $41-million over the same quarter last year, with increased margin per tonne in every product category. In the quarter, Potash experienced the largest increase in gross profit of $17-million, primarily due to higher prices. The growth in Potash earnings is a reflection of continued tight supply/demand balance, both internationally and in North America. Phosphate gross margins were up $11-million due to

higher prices for Monoammonium Phosphate (MAP) driven by higher ammonia prices. Total nitrogen increase in gross profit of $13-million was largely attributed to a $21-million growth in urea gross profit, a reflection of tight supply/demand fundamentals both internationally and in North America. This was partially offset by a $13-million decrease in ammonia gross profit comprised of lower demand due to poor weather conditions in North America and increased cost of product attributable to higher gas costs.

- Expenses (income) in the fourth quarter of 2004 include $45-million of Kenai related income, comprised of liquidated damages from the Arbitration Panel award and a gain from the settlement of litigation. The prior year fourth quarter includes a Kenai asset impairment pre-tax expense of $235-million. Excluding these Kenai related items from both years, expenses (income) for Wholesale were up by $8-million in the fourth quarter of 2004 compared to the same period of 2003, largely relating to Kenai Earn-out accrued prior to our settlement with Unocal in December, 2004.

South America Wholesale

- Wholesale EBIT was $23-million and gross profit was $28-million for the fourth quarter in 2004, up $7-million and $6-million respectively from the same period last year. The increase is primarily attributable to higher urea international prices which impacted both domestic and export selling prices, consistent with tightened supply/demand balance.

Other

- EBIT for our Other non-operating business segment for the fourth quarter of 2004 was up $5-million over the same period last year. This increase is largely related to foreign exchange gains on the translation of U.S. dollar working capital in our Canadian parent company.

SELECTED QUARTERLY INFORMATION

(Unaudited, in millions of U.S. dollars, except per share information)

	2004				2003			
	Q4	Q3	Q2	Q1	Q4	Q3	Q2	Q1
Net sales	**720**	672	1,011	435	637	561	929	372
Gross Profit	**254**	231	283	142	204	172	252	111
Net earnings (loss)	**102**	87	75	12	(109)	25	69	(6)
Earnings (loss) per share								
-basic	**0.76**	0.65	0.56	0.07	(0.89)	0.18	0.53	(0.07)
-diluted	**0.71**	0.60	0.52	0.07	(0.89)	0.17	0.47	(0.07)

The fertilizer business is seasonal in nature. Consequently, quarter-to-quarter results are not directly comparable.

NON-GAAP MEASURES

In the discussion of our performance for the quarter, in addition to the primary measures of earnings and earnings per share, we make reference to EBIT (earnings before interest expense and income taxes) and EBITDA (earnings before interest expense, income taxes, depreciation, amortization and asset impairment). We consider EBIT and EBITDA to be useful measures of performance because income tax jurisdictions and business segments are not synonymous, and we believe that allocation of income tax charges distorts the comparability of historical performance for the different business segments. Similarly, financing and related interest charges cannot be allocated to all business segments on a basis that is meaningful for comparison with other companies. EBIT and EBITDA measures are also used extensively in the covenants relating to our financing arrangements.

EBIT and EBITDA are not recognized measures under GAAP, and our method of calculation may not be comparable to other companies. EBIT should therefore not be used as an alternative to net earnings (loss) determined in accordance with GAAP as an indicator of our performance. Similarly, EBITDA should not be used as an alternative to cash provided by (used in) operating activities as determined in accordance with GAAP.

KEY RISKS AND UNCERTAINTIES

Looking Forward to the First Half of 2005

As Agrium looks forward to the First Half of 2005, there are a number of factors that may positively impact our future results:

- In 2004, above average Canadian grain production and record U.S. corn and soybean production increased soil nutrient removal and boosted U.S. farm income to record high levels.
- Western Canadian moisture conditions are significantly improved compared to this time last year. In addition, fall application in Western Canada and several regions of the U.S. was cut short in 2004 as a result of weather-related constraints. These factors should support strong nutrient demand during the upcoming spring season.
- North American potash inventories are down as of December 2004 compared to December 2003. For urea, the pace of offshore imports has significantly lagged behind last year, while producer inventories remain similar on a year-over-year basis.
- The Chinese government has announced the elimination of the 11 percent Value Added Tax rebate on Chinese urea exports and imposed the equivalent of a $31.50 per tonne tax on Chinese exports effective January 1, 2005. Both measures should limit Chinese urea exports.
- The recent finding of Asian rust in the U.S. could support more corn and cotton acreage at the expense of soybeans. This would be positive for fertilizer use, especially nitrogen. Asian rust also has the potential to increase chemical application on soybeans, which would be positive for chemical revenues in our U.S.-based retail operations.

Offsetting these positive indicators are some negative factors that may adversely impact future results:

- North American crop prices are lower than last year at this time due to the significant increase in global and U.S. grain and oilseed production during 2004. Despite this increased production, global grain stocks remain well below historical levels.
- International ammonia prices declined in January 2005 in part due to a build up of supplies in key exporting regions.
- North American producer inventories of phosphate and ammonia were higher as of December 2004 compared to December 2003.
- High and volatile North American natural gas prices could negatively impact North America Wholesale's margins.
- The Canadian dollar remains strong relative to the U.S. dollar, which negatively impacts Agrium's Canadian dollar-denominated costs.

OTHER

Agrium Inc. is a leading global producer and marketer of agricultural nutrients and industrial products and a major retail supplier of agricultural products and services in both North and South America. Agrium produces and markets three primary groups of nutrients: nitrogen, phosphate and potash as well as micronutrients. Agrium's strategy is to grow through incremental

expansion of its existing operations and acquisitions as well as the development, commercialization and marketing of new products and international opportunities.

Certain statements in this press release constitute forward-looking statements. Such forward-looking statements involve known and unknown risks and uncertainties, including those referred to in the management discussion and analysis section of the Corporation's most recent annual report to shareholders, which may cause the actual results, performance or achievements of the Corporation to be materially different from any future results, performance or achievements expressed or implied by such forward-looking statements. A number of factors could cause actual results to differ materially from those in the forward-looking statements, including, but not limited to, weather conditions, the future supply, demand, price level and volatility of natural gas, future prices of nitrogen, phosphate and potash, the differential pricing of natural gas in various markets, the future gas prices and availability at Kenai, the exchange rates for U.S., Canadian, Argentine, and Chilean currencies, South American government policy, South American domestic fertilizer consumption, future fertilizer inventory levels, future nitrogen, potassium and phosphate consumption in North America, future crop prices, future levels of nitrogen imports into North America and future additional fertilizer capacity and operating rates. Agrium disclaims any intention or obligation to update or revise any forward-looking information as a result of new information or future events.

A WEBSITE SIMULCAST of the 2004 4th Quarter Conference Call will be available in a listen-only mode beginning Thursday, February 10th at 9:30 a.m. MT (11:30 a.m. ET). Please visit the following website: www.agrium.com

AGRIUM INC.
Consolidated Statements of Operations and Retained Earnings
(Millions of U.S. dollars, except per share information)
(Unaudited)

	Three months ended December 31.		Twelve months ended December 31.	
	2004	2003	**2004**	2003
Sales	**$ 766**	$ 677	**$ 3,001**	$ 2,630
Direct freight	**46**	40	**163**	131
Net sales	**720**	637	**2,838**	2,499
Cost of product	**466**	433	**1,928**	1,760
Gross profit	**254**	204	**910**	739
Expenses (income)				
Selling, general and administrative	**83**	82	**301**	286
Depreciation and amortization	**39**	39	**156**	140
Kenai award and settlement (note 2)	**(45)**	-	**(86)**	-
Asset impairment	**-**	235	**-**	235
Royalties and other taxes	**6**	4	**29**	17
Other expenses	**3**	12	**43**	40
	86	372	**443**	718
Earnings (loss) before interest expense and income taxes	**168**	(168)	**467**	21
Interest on long-term debt	**13**	14	**51**	58
Other interest	**3**	1	**4**	5
Earnings (loss) before income taxes	**152**	(183)	**412**	(42)
Current income taxes (recovery)	**24**	(13)	**99**	22
Future income taxes (reduction)	**26**	(61)	**37**	(43)
Income taxes	**50**	(74)	**136**	(21)
Net earnings (loss)	**102**	(109)	**276**	(21)
Retained earnings - beginning of period	**305**	264	**145**	191
Common share dividends declared	**(7)**	(7)	**(14)**	(14)
Preferred securities charges	**(2)**	(3)	**(9)**	(11)
Retained earnings - end of period	**$ 398**	$ 145	**$ 398**	$ 145
Earnings (loss) per share (note 7)				
Basic	**$ 0.76**	$ (0.89)	**$ 2.04**	$ (0.25)
Diluted	**$ 0.71**	$ (0.89)	**$ 1.91**	$ (0.25)

AGRIUM INC.
Consolidated Statements of Cash Flows
(Millions of U.S. dollars)
(Unaudited)

	Three months ended December 31,		Twelve months ended December 31,	
	2004	2003	2004	2003
Operating				
Net earnings (loss)	$ 102	$ (109)	$ 276	$ (21)
Items not affecting cash				
Depreciation and amortization	39	39	156	140
Asset impairment	-	235	-	235
Kenai award and settlement (note 2)	(36)	-	(36)	-
Proceeds on settlement (note 2)	25	-	25	-
Gain on disposal of assets	(4)	-	(6)	(5)
Future income taxes (reduction)	26	(61)	37	(43)
Foreign exchange	(1)	(3)	(5)	(8)
Net change in non-cash working capital	39	(32)	(8)	(114)
Other operating	1	1	10	2
Cash provided by operating activities	191	70	449	186
Investing				
Capital expenditures	(33)	(32)	(82)	(99)
Decrease (increase) in other assets	(7)	5	(14)	3
Proceeds from disposal of assets and investments	7	-	10	12
Net change in non-cash working capital	-	8	-	26
Other	3	-	7	10
Cash used in investing activities	(30)	(19)	(79)	(48)
Financing				
Common shares	4	5	12	6
Bank indebtedness repayment	(1)	-	-	(1)
Long-term debt repayment	(36)	(24)	(134)	(27)
Common share dividends paid	-	-	(14)	(14)
Preferred securities charges paid	(2)	(3)	(9)	(11)
Cash used in financing activities	(35)	(22)	(145)	(47)
Increase in cash and cash equivalents	126	29	225	91
Cash and cash equivalents - beginning of period	299	171	200	109
Cash and cash equivalents - end of period	$ 425	$ 200	$ 425	$ 200

AGRIUM INC.
Consolidated Balance Sheet
(Millions of U.S. dollars)
(Unaudited)

	As at December 31, 2004	2003
ASSETS		
Current assets		
Cash and cash equivalents	$ 425	$ 200
Accounts receivable	388	314
Inventories	447	368
Prepaid expenses	56	60
	1,316	942
Capital assets	1,239	1,260
Other assets	77	71
Future income tax assets	24	-
	$ 2,656	$ 2,273
LIABILITIES AND SHAREHOLDERS' EQUITY		
Current liabilities		
Accounts payable and accrued liabilities	$ 472	$ 404
Current portion of long-term debt	60	121
	532	525
Long-term debt		
Recourse debt	471	503
Non-recourse debt	69	111
	540	614
Other liabilities	257	181
Future income tax liabilities	201	132
	1,530	1,452
Shareholders' equity		
Share capital		
Authorized: unlimited common shares and preferred securities		
Issued:		
Common shares: 2004 – 132-million (2003 – 127-million)	553	490
Preferred securities:		
8% Redeemable: 2004 – seven million (2003 – seven million) (note 5)	172	172
6% Convertible, redeemable: 2004 – nil (2003 – two million) (note 5)	-	50
Contributed surplus	2	1
Retained earnings	398	145
Cumulative translation adjustment	1	(37)
	1,126	821
	$ 2,656	$ 2,273

AGRIUM INC.
Summarized Notes to the Consolidated Financial Statements
For the twelve months ended December 31, 2004
(Millions of U.S. dollars, except per share amounts)
(Unaudited)

1. SIGNIFICANT ACCOUNTING POLICIES

The Corporation's accounting policies are in accordance with accounting principles generally accepted in Canada and are consistent with those outlined in the annual audited financial statements except where stated below. These interim consolidated financial statements do not include all disclosures normally provided in annual financial statements and should be read in conjunction with the Corporation's audited consolidated financial statements for the year ended December 31, 2003. In management's opinion, the interim consolidated financial statements include all adjustments necessary to present fairly such information.

Certain comparative figures have been reclassified to conform to the current year's presentation.

2. KENAI AWARD AND SETTLEMENT

The following amounts were recorded during 2004 relating to the arbitration award and settlement of legal claims in our dispute with Union Oil Company of California (Unocal):

	2004	
	Three months ended December 31	Twelve months ended December 31
Arbitration award (a)	$ 9	$ 50
Settlement of legal claims (b)	36	36
	$ 45	$ 86

(a) Arbitration award
During 2004, the Corporation was awarded liquidated damages with respect to a dispute with Unocal over gas supply obligations to our Kenai, Alaska nitrogen facility. The Arbitration Panel awarded the Corporation $37-million plus interest for damages up to April 2004. An additional $4-million was received for the period May to September 2004 and $9-million for the period October to December 2004. The total liquidated damages recorded for the year totaled $50-million.

(b) Settlement of legal claims
In December of 2004, the Corporation settled its dispute with Unocal over obligations under the Purchase and Sale Agreement, pursuant to which the Corporation acquired its Kenai, Alaska nitrogen facility. The settlement agreement establishes a definitive gas supply obligation from Unocal to the Kenai facility up until October 31, 2005.

The net gain of $36-million recorded in the fourth quarter of 2004 was comprised of the following:

	Three and twelve months ended December 31
	2004
Net cash received	$ 25
Earn-out adjustment (2001 – 2004)	81
Adjustments related to termination of gas supply	(70)
Net gain	$ 36

3. BANK INDEBTEDNESS

In May 2004, Agrium Inc. and its wholly owned subsidiary, Agrium U.S. Inc., entered into a $450-million three-year syndicated revolving unsecured credit facility. The new credit agreement replaced Agrium Inc.'s $225-million credit facility due in May 2004 and Agrium U.S. Inc.'s $56-million credit facility due in December 2004.

Under the terms of the agreement, Agrium Inc. and Agrium U.S. Inc. may borrow a maximum principal amount of $325-million and $125-million respectively. Interest rates are at either Canadian prime rate plus a variable margin, U.S. base rate established by a bank plus a variable margin, LIBOR plus a variable margin or bankers' acceptance rate plus a variable margin, at the election of the borrower.

The credit facility requires that Agrium Inc. maintain certain financial ratios and other covenants.

4. EMPLOYEE FUTURE BENEFITS

The total net employee future benefits expense for the Corporation's pension and post-retirement benefit plans are computed as follows:

	Three months ended December 31,		Twelve months ended December 31,	
	2004	2003	2004	2003
Defined benefit pension plans	$ 4	$ 1	$ 10	$ 7
Post-retirement benefit plans	3	2	7	5
Defined contribution pension plans	3	3	11	10
Total expense	$ 10	$ 6	$ 28	22

This expense is reflected in our cost of product and general and administrative expenses.

5. SHARE CAPITAL

In January 2005, the Corporation announced its intention to redeem the $175-million, eight percent redeemable preferred securities for cash on February 14, 2005. The redemption price will equal the principal amount of the securities plus accrued and unpaid interest to the date of redemption.

In January 2004, pursuant to the Corporation's plan to redeem the six percent preferred securities, all holders of the convertible, redeemable preferred securities elected to convert the securities into common shares at the stated conversion price of $11.9677 per share, resulting in the issuance of an additional 4.18 million common shares.

6. STOCK BASED COMPENSATION

The Corporation began prospectively expensing the fair value of stock options granted in 2003 over their vesting period. In accordance with the prospective method of adoption, the Corporation has recorded no compensation expense for stock options granted prior to January 1, 2003 and will continue to provide pro forma disclosure of the effect on net earnings (loss) and earnings (loss) per share had the fair value been expensed. The following table summarizes the pro forma disclosure for stock options granted prior to 2003 that have not been expensed.

	Three months ended December 31,			
	2004		2003	
	As Reported	Pro forma	As Reported	Pro forma
Net earnings (loss)	$ 102	$ 101	$ (109)	$ (109)
Earnings (loss) per share				
Basic	$ 0.76	$ 0.75	$ (0.89)	$ (0.89)
Diluted	$ 0.71	$ 0.70	$ (0.89)	$ (0.89)

	Twelve months ended December 31,			
	2004		2003	
	As Reported	Pro forma	As Reported	Pro forma
Net earnings (loss)	$ 276	$ 272	$ (21)	$ (26)
Earnings (loss) per share				
Basic	$ 2.04	$ 2.01	$ (0.25)	$ (0.29)
Diluted	$ 1.91	$ 1.89	$ (0.25)	$ (0.29)

7. EARNINGS (LOSS) PER SHARE

The following table summarizes the computation of net earnings (loss) per share:

	Three months ended December 31,		Twelve months ended December 31,	
	2004	2003	**2004**	2003
Numerator:				
Net earnings (loss)	**$ 102**	$ (109)	**$ 276**	$ (21)
Preferred securities charges (net of tax)	**(2)**	(3)	**(9)**	(11)
Numerator for basic earnings (loss) per share	**100**	(112)	**267**	(32)
Preferred securities charges (net of tax) (a)	**2**	-	**9**	-
Numerator for diluted earnings (loss) per share	**$ 102**	$ (112)	**$ 276**	$ (32)
Denominator:				
Weighted average denominator for basic earnings (loss) per share	**132**	126	**131**	126
Dilutive instruments:				
Stock options (a)	**2**	-	**1**	-
Preferred securities converted to common shares				
$175-million, eight percent (a)	**10**	-	**12**	-
$50-million, six percent (note 5)(a)	**-**	-	**-**	-
Denominator for diluted earnings per share	**144**	126	**144**	126
Basic earnings (loss) per share	**$ 0.76**	$ (0.89)	**$ 2.04**	$ (0.25)
Diluted earnings (loss) per share	**$ 0.71**	$ (0.89)	**$ 1.91**	$ (0.25)

(a) For diluted earnings per share, these dilutive instruments are added back only when the impact of the instrument is dilutive to basic earnings per share

There were 132 million common shares outstanding at December 31, 2004 (2003 – 127 million). As at December 31, 2004, the Corporation has outstanding approximately eight million options to acquire common shares.

8. SEASONALITY

The fertilizer business is seasonal in nature. Sales are concentrated in the spring and fall planting seasons while produced inventories are accumulated throughout the year. Cash collections generally occur after the planting seasons in North and South America.

9. SEGMENTED INFORMATION

The Corporation's primary activity is the production and wholesale marketing of nitrogen, potash and phosphate and the retail sales of fertilizers, chemicals and other agricultural inputs and services. The Corporation operates principally in Canada, the United States and Argentina.

Net sales between segments are accounted for at prices, which approximate fair market value and are eliminated on consolidation. The reportable segment entitled "Other" includes Corporate functions and inter-segment eliminations.

In the fourth quarter of 2004, we integrated our North and South America Retail segments into one Retail segment. Prior periods have been restated for comparative purposes.

Schedule 1

AGRIUM INC.
Segmentation
(unaudited – millions of U.S. dollars)

Three Months Ended December 31

	Retail		Wholesale				Other		Total	
			North America		South America					
	2004	2003	2004	2003	2004	2003	2004	2003	2004	2003
Net sales - external	$ 219	$ 206	$ 464	$ 401	$ 37	$ 30	$ -	$ -	$ 720	$ 637
- inter-segment	-	-	36	29	2	1	(38)	(30)	-	-
Total net sales	219	206	500	430	39	31	(38)	(30)	720	637
Cost of product	146	135	349	320	11	9	(40)	(31)	466	433
Gross profit	73	71	151	110	28	22	2	1	254	204
Gross profit %	33%	34%	30%	26%	72%	71%	5%	3%	35%	32%
Selling Expenses	$ 58	$ 61	$ 5	$ 4	$ -	$ -	$ (1)	$ (2)	$ 62	$ 63
EBITDA (1)	$ 21	$ 11	$ 169	$ 91	$ 27	$ 20	$ (10)	$ (16)	$ 207	$ 106
EBIT (2)	$ 17	$ 6	$ 140	$ (173)	$ 23	$ 16	$ (12)	$ (17)	$ 168	$ (168)

Twelve Months Ended December 31

	Retail		Wholesale				Other		Total	
			North America		South America					
	2004	2003	2004	2003	2004	2003	2004	2003	2004	2003
Net sales - external	$ 1,114	$ 1,015	$ 1,594	$ 1,377	$ 130	$ 107	$ -	$ -	$ 2,838	$ 2,499
- inter-segment	-	-	109	88	13	9	(122)	(97)	-	-
Total net sales	1,114	1,015	1,703	1,465	143	116	(122)	(97)	2,838	2,499
Cost of product	798	717	1,211	1,106	41	34	(122)	(97)	1,928	1,760
Gross profit	316	298	492	359	102	82	-	-	910	739
Gross profit %	28%	29%	29%	25%	71%	71%	0%	0%	32%	30%
Selling Expenses	$ 222	$ 214	$ 17	$ 15	$ 1	$ 1	$ (3)	$ (3)	$ 237	$ 227
EBITDA (2)	$ 99	$ 85	$ 465	$ 285	$ 98	$ 78	$ (39)	$ (52)	$ 623	$ 396
EBIT (1)	$ 81	$ 66	$ 349	$ (49)	$ 83	$ 63	$ (46)	$ (59)	$ 467	$ 21

(1) Earnings (loss) before interest expense, income taxes, depreciation, amortization and asset impairment.
(2) Earnings (loss) before interest expense and income taxes.

Schedule 2 (a)

AGRIUM INC.
Product Lines
Three Months Ended December 31
(unaudited – millions of U.S. dollars)

	2004					2003				
	Net Sales	Gross Profit	Sales Tonnes (000's)	Selling Price ($/Tonne)	Margin ($/Tonne)	Net Sales	Gross Profit	Sales Tonnes (000's)	Selling Price ($/Tonne)	Margin ($/Tonne)
North America Wholesale										
Nitrogen (1)										
Ammonia	$ 100	$ 24	325	$ 308	$ 74	$ 130	$ 37	485	$ 268	$ 76
Urea	166	53	649	256	82	123	32	623	197	51
Nitrate, Sulphate and Other	71	17	352	202	48	59	12	358	165	34
Total Nitrogen	337	94	1,326	254	71	312	81	1,466	213	55
Phosphate	101	23	370	273	62	74	12	313	236	38
Potash (2)	62	34	464	134	73	44	17	436	101	39
	500	151	2,160	231	70	430	110	2,215	194	50
South America Wholesale (1)	39	28	149	262	188	31	22	160	194	138
Retail (3)										
Fertilizers	131	28				120	26			
Chemicals	62	32				61	32			
Other	26	13				25	13			
	219	73				206	71			
Inter-segment	(38)	2				(30)	1			
Total	$ 720	$ 254				$ 637	$ 204			

(1) International nitrogen sales were 437,000 tonnes (2003 – 500,000) net sales were $110-million (2003 – $90-million) and gross profit was $62-million (2003 – $47-million) for the three months ended December 31.
(2) International potash sales were 200,000 tonnes (2003 – 138,000) net sales were $22-million (2003 – $10-million) and gross profit was $14-million (2003 – $5-million) for the three months ended December 31.
(3) International Retail net sales were $37-million (2003 – $30-million) and gross profit was $5-million (2003 – $7-million) for the three months ended December 31.

Schedule 2 (b)

AGRIUM INC.
Product Lines
Twelve Months Ended December 31
(unaudited – millions of U.S. dollars)

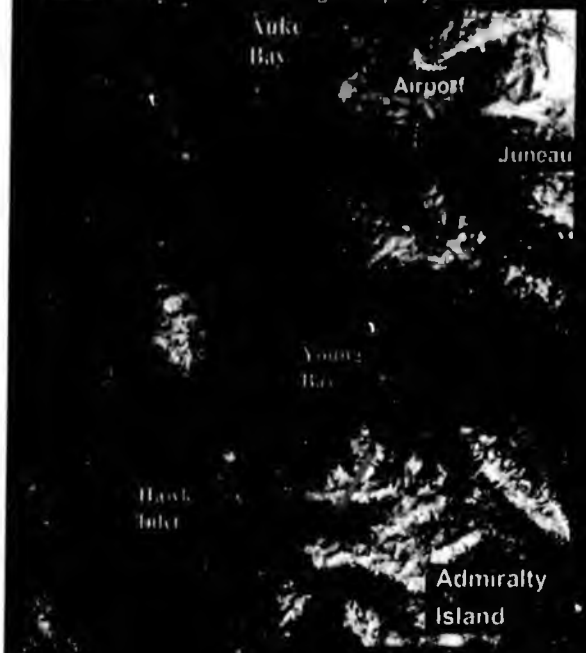
	2004					2003				
	Net Sales	Gross Profit	Sales Tonnes (000's)	Selling Price ($/Tonne)	Margin ($/Tonne)	Net Sales	Gross Profit	Sales Tonnes (000's)	Selling Price ($/Tonne)	Margin ($/Tonne)
North America Wholesale										
Nitrogen (1)										
Ammonia	$ 397	$ 113	1,438	$ 276	$ 79	$ 382	$ 96	1,555	$ 246	$ 62
Urea	499	134	2,211	226	61	423	100	2,220	191	45
Nitrate, Sulphate and Other	284	68	1,510	189	45	239	58	1,381	173	42
Total Nitrogen	1,180	315	5,159	229	61	1,044	254	5,156	202	49
Phosphate	309	71	1,181	262	60	261	44	1,090	239	40
Potash (2)	214	106	1,796	119	59	160	61	1,662	96	37
	1,703	492	8,136	209	60	1,465	359	7,908	185	45
South America Wholesale (1)	143	102	634	226	161	116	82	653	178	126
Retail (3)										
Fertilizers	556	131				468	117			
Chemicals	416	118				416	119			
Other	142	67				131	62			
	1,114	316				1,015	298			
Inter-segment	(122)	-				(97)	-			
Total	$ 2,838	$ 910				$ 2,499	$ 739			

(1) International nitrogen sales were 1,881,000 tonnes (2003 – 1,991,000) net sales were $393-million (2003 – $319-million) and gross profit was $206-million (2003 – $155- million) for twelve months ended December 31.
(2) International potash sales were 730,000 tonnes (2003 – 570,000) net sales were $71-million (2003 - $43-million) and gross profit was $42-million (2003 – $22-million) for twelve months ended December 31.
(3) International Retail net sales were $118-million (2003 – $92-million) and gross profit was $22-million (2003 – $17-million) for twelve months ended December 31.

PRESENT-ATION: MINING INDUSTRY, 2/2/05

Alaska State Legislature
Senate/House Resources Committees
February 2, 2005

Greens Creek Mining Company



BACKGROUND

- 18 miles south of Juneau
- 1975 Initial drill hole discovery
- 1987 Pre-production development
- 1989 Full Production
- 1993 Cessation - depressed metal prices
- 1995 Pre-Production development
- 1997 Full Production

Kennecott Minerals Company

Hecla

Greens Creek Mining Company

Greens Creek at a Glance

- Joint Venture – Kennecott Minerals Company / Hecla Mining Company (70/30 Ownership)
- Underground mine and surface concentrator
- Approximately 265 employees
- Pristine environmental locale (National Monument)
- Polymetallic ore body (zinc, silver, lead & gold)
- Dore' and three types of concentrate produced (lead, zinc & bulk)
- Concentrate sold to smelter customers – Japan, Korea, Europe, Canada, and Mexico

Kennecott Minerals Company

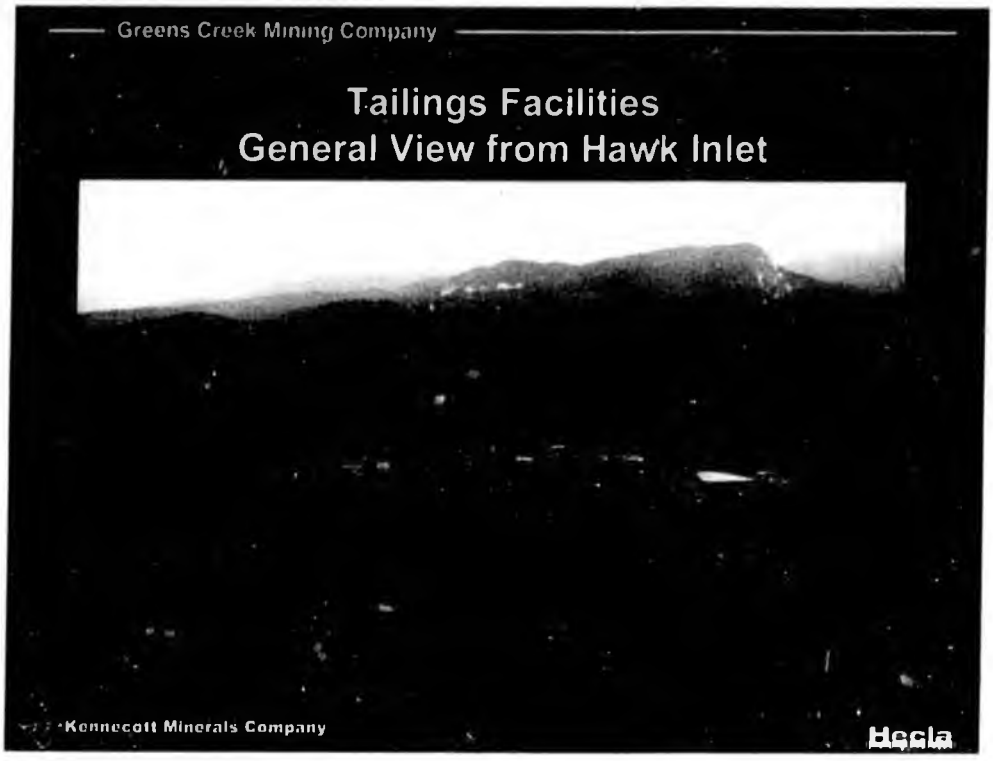
Hecla


Greens Creek Mining Company
Underground Ore Zones
Portal
-Kennecott Minerals Company
Hecla


Greens Creek Mining Company
LHD Loading Haul Truck
-Kennecott Minerals Company
Hecla


Greens Creek Mining Company
Mine and Mill Site
Kennecott Minerals Company
Hecla


Greens Creek Mining Company
SAG Mill
Kennecott Minerals Company
Hecla


Greens Creek Mining Company
Tailings Facilities
General View from Hawk Inlet
Kennecott Minerals Company
Hecla


Greens Creek Mining Company
Loading a Concentrate Ship
Kennecott Minerals Company
Hecla

Greens Creek; Historically ...

Some 7 million tons of ore mined; containing –

- ~ 150 million ounces of silver
- ~ 820,000 tons of zinc
- ~ 1.2 million ounces of gold.

2004 Overview

- Finalized all aspects of EIS for tailings expansion; Federal, State and CBJ permits
- First year of tailings expansion completed
- Record production of 803,000 tons ore
- Continued efficiency improvements underground and surface
- Improved financial performance due to higher metal prices
- Increased ore reserves through geological model improvements
- ISO14001 Certified Environmental Management System
- Safest underground metal mine in US in 2003; Sentinels of Safety Award

Greens Creek Mining Company

Greens Creek Environmental Overview

- 334 Acres of Associated Surface Use (45% Road Access)
- $2M Annual Environmental Budget
- Regulatory:
  - 10 Federal Agencies, 14 Departments: 25 Permits/Leases, Plus 8 Compliance Programs
  - 4 State Departments, 15 Divisions, 23 Permits/Leases
  - City & Borough of Juneau; Large Mine Permit, Building Permits, Construction Inspections
  - Two Multi-Agency Memoranda of Agreement
  - Continuous Monitoring and Reporting of Air, Fresh & Marine Waters, Soil/Rock, Weather, Wastes, Fuel, Facility Operation

Kennecott Minerals Company

Hecla

Greens Creek Mining Company

Annual Effect on the Alaska Economy

- The largest private sector employer in SE
- 265 Employees, 527 total direct and indirect jobs
  - 75% Live in Juneau
  - 85% Live in Alaska
  - 15% Live in Lower 48
- Economic Impact
  - $26M pay and benefits
  - $20M purchases and contracted services
- $26,000 in philanthropic contributions
- $21,000 in local/UAF educational scholarships
- Property taxes of +$600,000
- Alaska Minerals License Tax
- Employees
  - ~4,000 hours volunteer time
  - ~150,000 charitable contributions

Kennecott Minerals Company

Hecla

Greens Creek Mining Company

Greens Creek – The Future

- Life of Mine Plan of ~10 years; 8.0M tons reserves
- Continued aggressive exploration plan
- Continued expansion of tailings facilities
- Production rates to 2,300 t/d; continuous improvements
- SE Alaska Intertie possibility
- Remain ISO 14001 Certified in Environmental Management System

Kennecott Minerals Company

Hecla


Greens Creek Mining Company
Kennecott Minerals Company
Hecla


Greens Creek Mining Company
The Greens Creek Mine
Kennecott Minerals Company
Hecla

Usibelli Coal Mine Inc. – Established in 1943 by Emil Usibelli. Emil was killed in a mining accident in 1964.

Joseph Usibelli was president of UCM until 1987

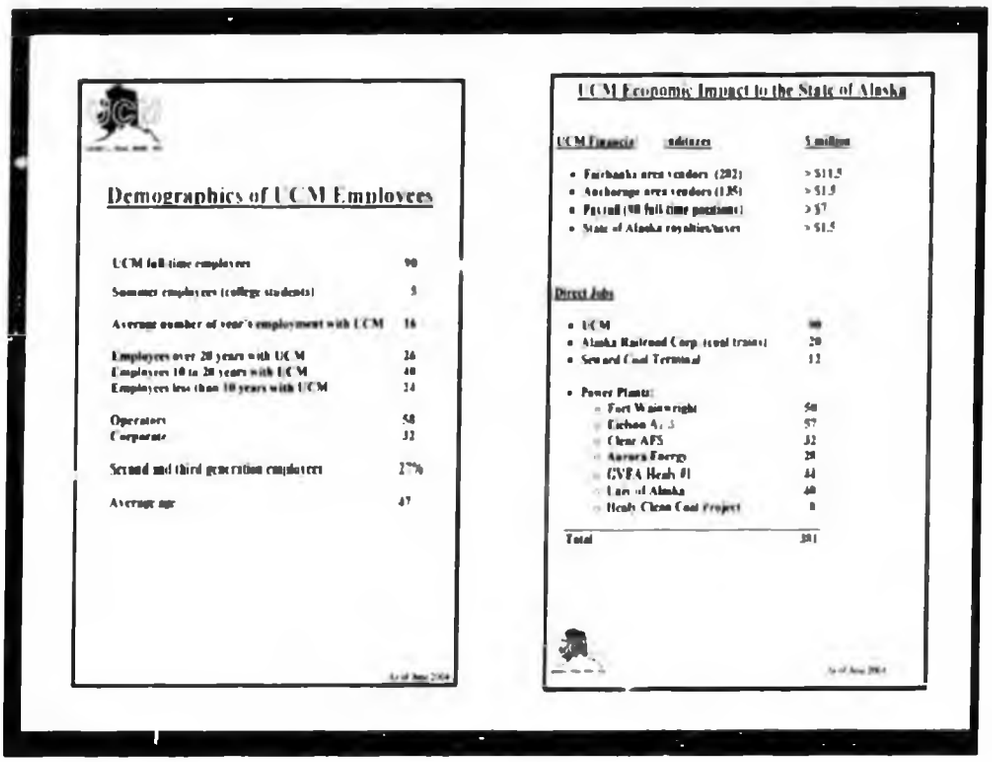
Joseph Usibelli Jr. is the current president of the company.

Main offices located at Mile 249 Parks Highway at Healy on the east side of the Nenana River on State and Railroad leased land.

Phone 683-2226

Marketing office in Fairbanks, Alaska.

Phone 452-2625



Demographics of UCM Employees

UCM full time employees	90
Summer employees (college students)	5
Average number of year's employment with UCM	16
Employees over 20 years with UCM	26
Employees 10 to 20 years with UCM	40
Employees less than 10 years with UCM	24
Operators	58
Corporate	32
Second and third generation employees	27%
Average age	47

UCM Economic Impact to the State of Alaska

UCM Financial [illegible]	$ million
• Fairbanks area vendors (202)	> $11.5
• Anchorage area vendors (135)	> $1.5
• Payroll (90 full time positions)	> $7
• State of Alaska royalties/taxes	> $1.5
Direct Jobs	
• UCM	90
• Alaska Railroad Corp. (coal trains)	20
• Seward Coal Terminal	12
• Power Plants:	
○ Fort Wainwright	50
○ Eielson A.F.B.	57
○ Clear AFS	32
○ Aurora Energy	28
○ GVEA Healy #1	44
○ Univ. of Alaska	40
○ Healy Clean Coal Project	8
Total	381

These numbers are averages.

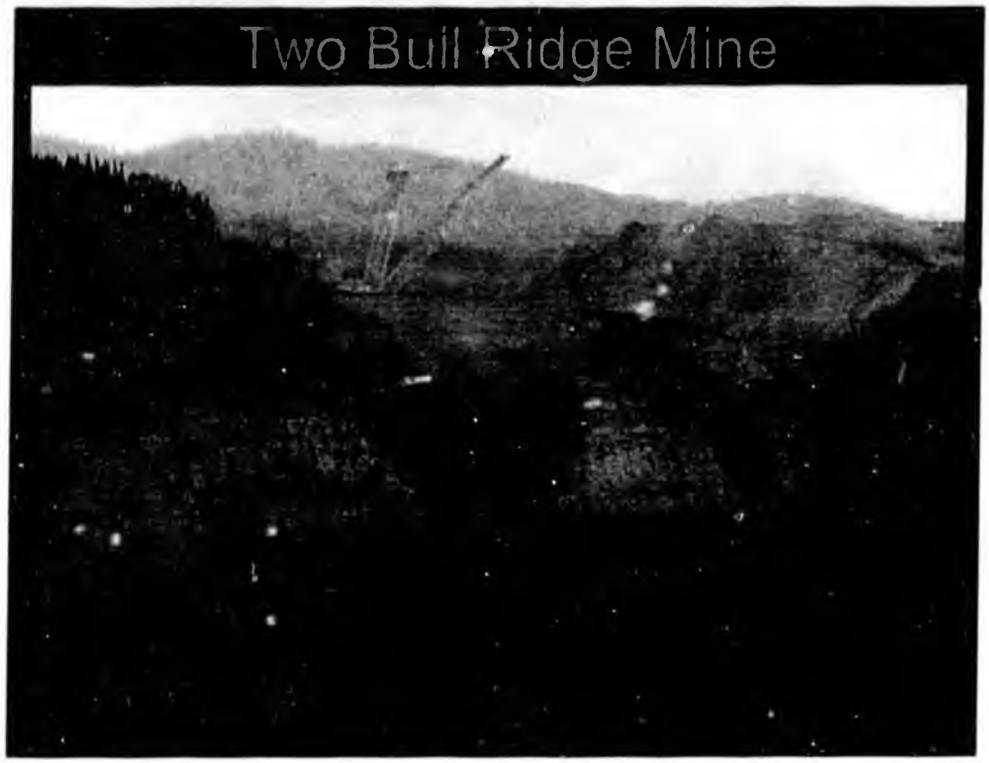
During the winter we may sometimes add 5 to 10 people to our operations crew.

Our sales in the winter sometimes reach 50,000 short tons per week (22,000 tons to Seward for export and 28,000 tons to Alaska power plants and the railroad)- or the equivalent of 2.5 million tons per year if it was done year round at that pace!

When it is warm in the summer and sales drop off to our Alaska customers we may reduce to skeleton crews. We traditionally schedule the July 4th week off and the first week of hunting season off.

We begin gearing up for winter sales by mid September and try to keep a coal surge of about one month winter coal sales available.

We have an exemplary safety record: We passed 365 days with no lost time on 1-26-05. That is somewhat over 200,000 man-hours without a lost time injury.



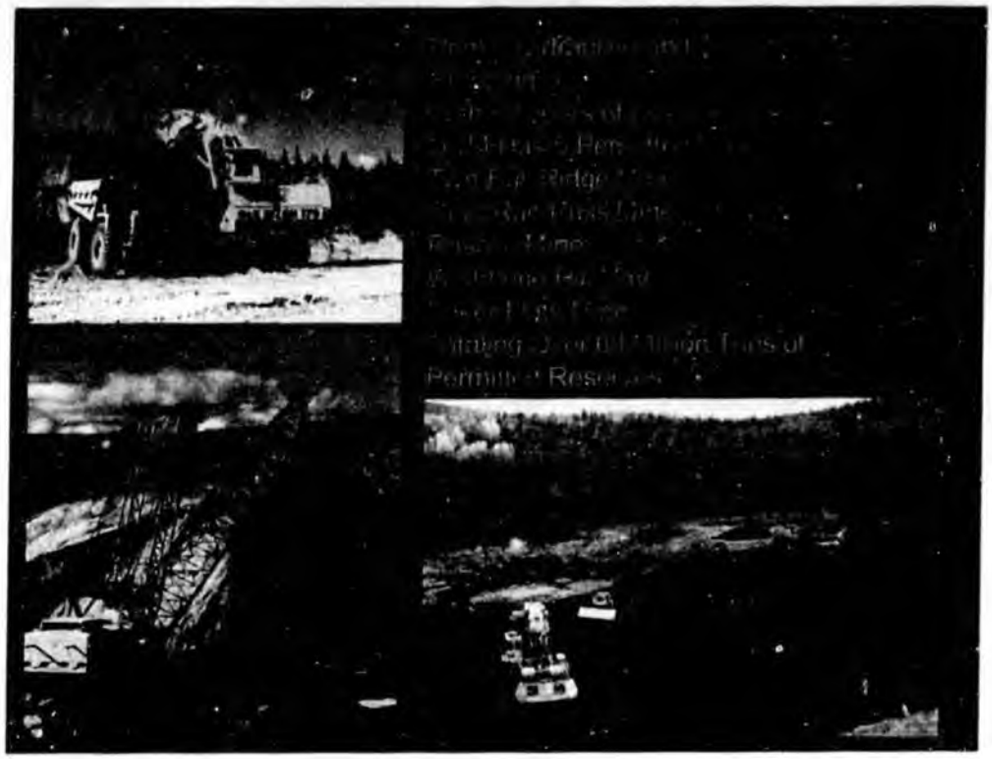
Two Bull Ridge- 40 million tons of coal permitted at this time at about 4.5 to 1 Strip Ratio

Our current production level is at about 1.4 million tons per year.

We are capable of producing 1.8M tons/ year out of this pit with existing equipment and some additional labor.

Three, four and six seams will be mined from the Suntrana Formation.

Typical thickness for three seam is 18 feet, four seam is 32 feet and six seam is 21 feet.



We are concentrating our mining efforts at this time in the Hoseana Creek Valley in the Two Bull Ridge Mine. Our satellite pits in the Healy Valley and at Gold Run Pass are withir 10 miles of our main operations.

We are in the preliminary exploratory stages in the Jumbo Dome leases northeast of the Two Bull Ridge Mine.

We have leases in the Healy area that hold possibly 100's of millions of tons of mineable coal.

Our main stripping tool is our 33 yard, 1300W B.E walking dragline. We have an O&K 170- 26 BCY shovel for backup and dragline prepping.

We mine the coal with a shovel, backhoe or large loader depending on floor conditions.

850,000 to 1,000,000 short tons to Alaskan customers.

All of these customers except GVEA are running coal fired power plants for heat production and electricity production. The railroad heats their Fairbanks complexes with coal. GVEA is producing electricity only at Healy with a coal fired plant.

450,000 tons export to Korea and 95,000 tons of spot sales to Chile- for use in coal fired power plants..

We have been supplying Alaska Clean Coal to Korea for almost 20 years.

Usibelli coal stats:

7800 BTU/Lb.

27% moisture

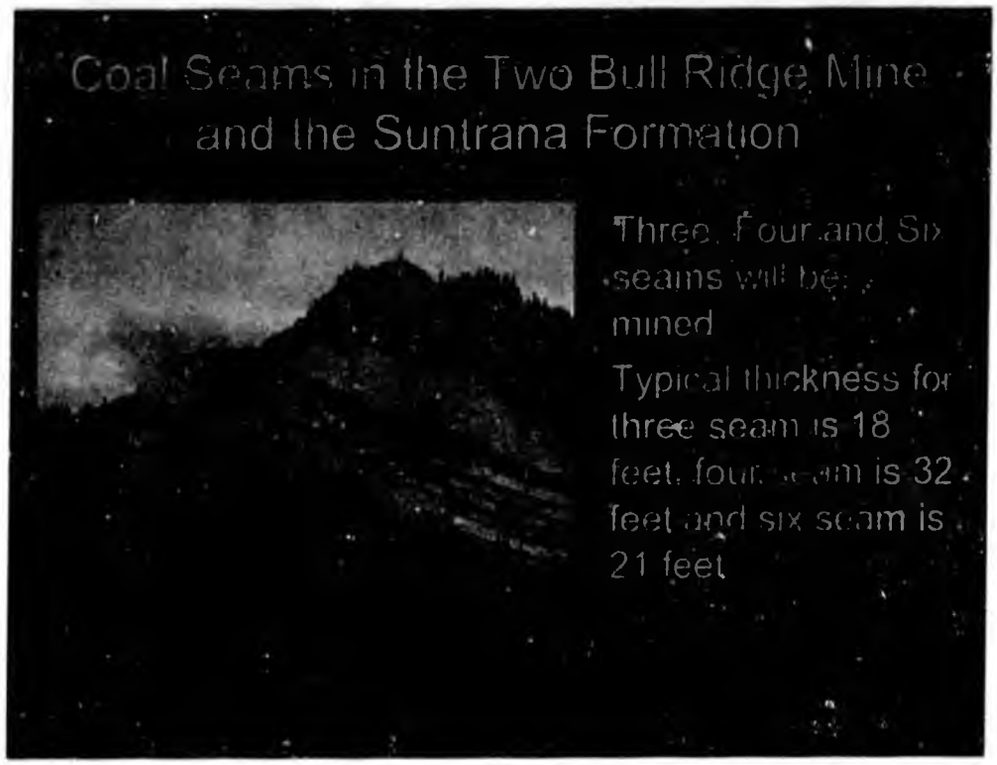
8.5 % ash

0.15% to 0.2 % Sulfur

This coal at UCM is considered ultra low sulfur and is some of the lowest sulfur coal in the U.S and the world.

Some of the attractiveness of the Usibelli coal is for blending down sulfur for power plants whose main fuel feed is high sulfur coal or pet coke as is being used in Chile.

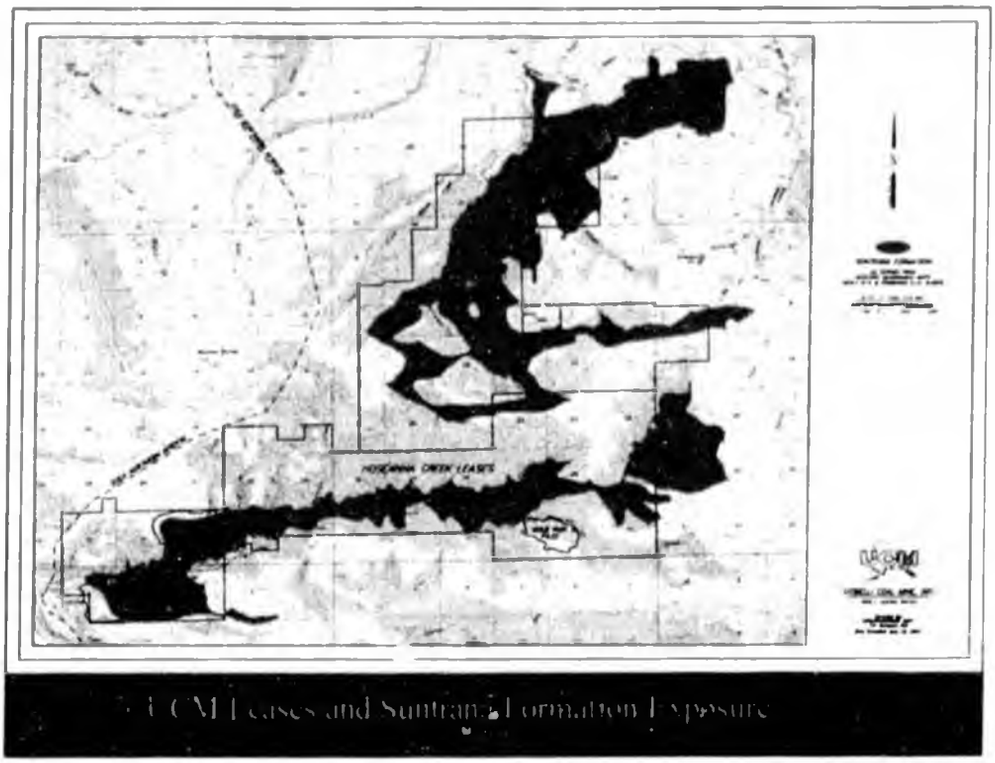
The picture in the slide is the Chilean customer power plant.



We have the coal-

This picture shows a natural outcropping of the Suntrana formation in the Hoseana Creek valley east of our Two Bull Ridge mine.

This is a typical section of the Suntrana formation, the main coal bearing group in the area.



All of the orange area is the Suntrana Formation where the mineable section is exposed at the surface.

In the lower left hand corner notice the Poker Flats Mine and the Two Bull Ridge Mine- this gives a size reference to how much coal is left in the area. We mined 25 million tons from Poker Flats in 25 years and expect to mine 40 million tons from Two Bull Ridge.

Note the route of the Northern Intertie and the proximity to the Jumbo Dome leases- this makes a Mine Mouth power plant very attractive near all that coal!

Exploration has already begun.

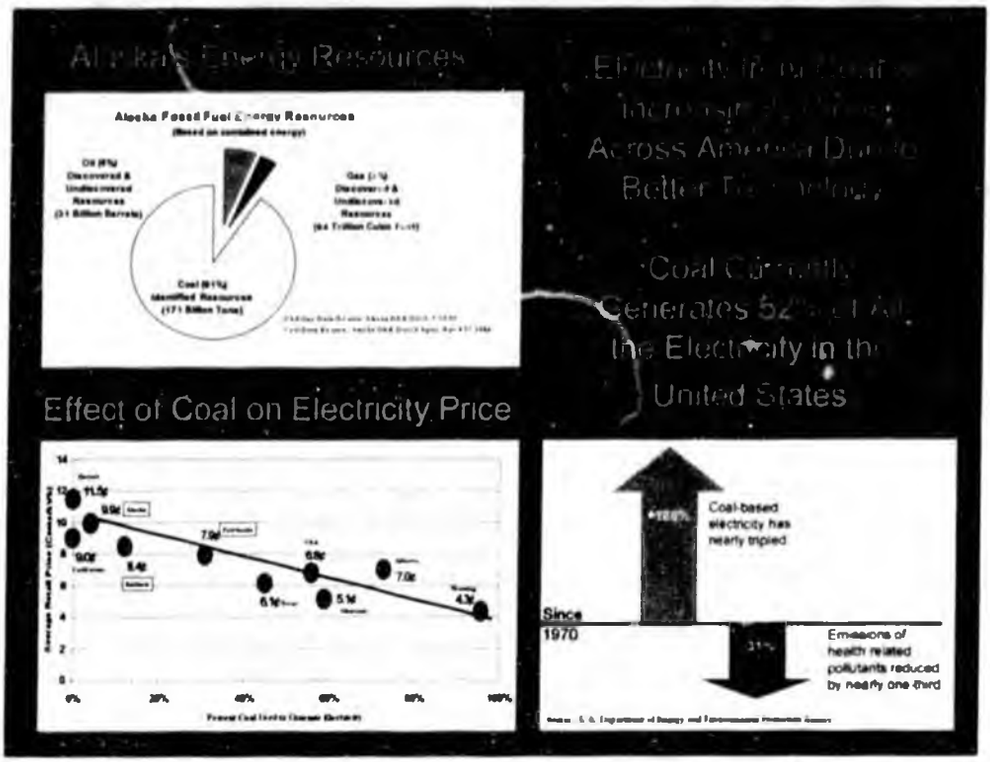
Sample access road is built and a bulk sample has been taken.

With all of the coal available at low strip ratio a mine in the Jumbo Dome leases that supplies a Mine Mouth Plant is very attractive.

$1.00 /MBTU is the expected mining cost in the most likely mining areas in the Jumbo Dome leases.

2 to 1 strip ratio on at least 50 million tons- *Strip ratio is the amount of dirt that has to be moved per ton of coal- cubic yards per ton.*

Scale- 10 miles from Poker to Gold Run Pass.



•Alaska is a Coal State

•Usibelli has over 100 year supply at current demand.

•Add up the energy in identified coal resources – they equal over 1000 times the discovered and undiscovered energy in oil/gas resource.

•The U.S. states that have higher percentages of coal fired electrical power have lower per kw costs of electricity. These states sell their oil and gas to others and make a lot of money doing it!

•Over 50% of all electrical generation in the U.S. comes from coal fired plants.

UCM has a lot of coal and the ambition to mine it.

We are a proven viable company with a large impact on the economy of the State Of Alaska.

We are in the process of selling coal in the export market and plan to continue to do so.

We believe that a larger coal fired electrical capability is a must in the Rail belt in Alaska for a better economic future for all of Alaska.

FORT KNOX
Gold Mine of Alaska

Fairbanks Gold Mining, Inc.
A Wholly Owned Subsidiary of Kinross Gold Corporation

KINROSS

#1 Fort Knox Road, Fairbanks, Alaska 99712
Mailing: P.O. Box 73726, Fairbanks, Alaska 99707-3726
Phone: (907) 488-4653 Fax: (907) 490-2290

History of Fairbanks Gold Mining, Inc.

1901	Felix Pedro discovered gold near Fish Creek
1902	Felix Pedro Discovered gold on Pedro Creek
1902-1903	Fairbanks gold rush begins
1910-1930	Small scale drift and placer mining along Fish Creek and intermittent load mining in Fish Creek Valley
1916	Approximately 200 tons of stibnite shipped from the Hindenburg prospect
1920s	Tanana Valley Gold Dredging Co. (Old English Co.), moderate-scale dredge operations
1929	90-mile Davidson Ditch completed, diverting 80,000,000 gallons of water each day for dredging
1930s	Fairbanks Exploration Co. (F.E. Co.), large-scale dredge operations
1942	Federal government closes all non-strategic mining
1960s	Placer mining resumes in Fish Creek
1984	Geologist discovers visible gold on Fort Knox claims
1987-1991	Fairbanks Gold Ltd. and Gilmore Gold Inc. progress with exploration and pre-development programs
1990	AMAX acquires Hindenburg prospect
1991-1992	Initial drilling on the Hindenburg (True North) property began
1992	AMAX purchases 100% of Fort Knox project, Fairbanks Gold Mining, Inc. (FGMI, a subsidiary of AMAX) is formed and is responsible for exploring, developing, and operating Fort Knox
1992-1995	Further exploration, engineering, environmental, and feasibility studies
1993-1994	57,557 feet of drilling completed at True North, La Teko acquires 100% interest in the property
1994	State and Federal environmental review completed and permits issued
1995	Construction begins along with pre-strip mining
1996	First gold pour (December)
1997	FGMI declares commercial production
1998	Kinross Gold Corp. and AMAX merge
1998	Fort Knox is awarded Sentinels of Safety Award by US Dept. of Labor
1999	One million ounces of gold produced at Fort Knox
1999	1,000,000 man-hours worked without a lost time accident
1999	Kinross acquires La Teko and 35% interest in True North
1999	Kinross purchases the remaining 65% interest in the True North claims from Newmont
2001	True North mine begins
2001	1,000,000 man-hours worked without a lost time accident achieved a second time
2002	Two million ounces of gold produced at Fort Knox
2002	True North is awarded Sentinels of Safety Award by US Dept. of Labor
2003	Kinross merges with TVX and Echo Bay, making Kinross the 4th largest gold producer in North America and the 7th largest gold producer in the world
2004	Three million ounces of gold produced at Fort Knox

Fairbanks Gold Mining, Inc.
A Wholly Owned Subsidiary of Kinross Gold Corporation

#1 Fort Knox Road, Fairbanks, Alaska 99712
Mailing: P.O. Box 73726, Fairbanks, Alaska 99707-3726
Phone: (907) 488-4653 Fax: (907) 490-2290

Fort Knox Gold Mine
Fairbanks, Alaska

Daily Averages
- 45 tons of explosives used
- 21 tons of lime used
- 25 tons of grinding balls added
- 27,000 gallons of diesel fuel consumed
- $54,300 in electric power used
- $9,590 in property taxed paid
- 360,000,000 pounds of rock mined
- 86,000,000 pounds of rock milled
- 64 pounds of gold produced

Start Up
- Project construction began in 1995
- Construction costs exceeded $375 million
- First gold pour: December 1996
- 3,000,000 ounces produced through December 2004

Work Force
- 450 employees
- Fort Knox employees are among the highest paid workers in Fairbanks

Crushing/Conveying
- Gyratory Crusher, 60 in x 102 in
- Crusher run by one 700 hp electric motor
- Capacity: 55,000 tons/day
- Conveyor: 54 in wide x ½ mile long
- Conveyor: two 800 hp electric motors
- Stockpile: 300,000 ton capacity

2004 Spending:
- $22.4 million on wages
- $18.4 million on electricity
- $8.1 million on fuel
- $3.5 million on property taxes

Operating Period
- 24 hours per day
- 365 days per year mining and milling Projected mine life: 2011, but always looking to extend
- Projected mill life: 2 years beyond the mine

Milling
- SAG mill: 34 ft diameter x 15 ft long, driven be two 6,500 hp electric motors
- Ball mills: two, 20 ft diameter x 30 ft long, each driven by a 7,000 hp electric motor
- 2 gravity concentrators
- High capacity thickener, 110 ft diameter
- 7 leach tanks
- 6 Carbon-in-Pulp (CIP) tanks
- Tailings thickener

Equipment
- 2 Hydraulic shovels – 27.5 yard (Hitachi EX 3600)
- 2 Hydraulic shovels – 23 yard (Hitachi EX 3500 and Cat 5230)
- 1 Loader – 23 yard (Cat 994)
- 2 Loaders – 16 yard (Cat 992)
- 10 Haul trucks – 200 ton (Cat 789 and Lectra Haul MT3700)
- 10 Haul trucks – 150 ton (Cat 785)
- 5 Haul trucks – 90 ton (Cat 777)
- 7 Blast hole drills – 45,000 lb pulldown class
- Support equipment: track dozers, rubber-tired dozers, motor graders, water trucks, backhoes, loaders

Electrical Requirements
- 33.5 megawatts supplied by Golden Valley Electric Association via a 29-mile, 138 kV powerline
- 250 million kWh/yr consumption
- $1.7 million spent on electricity per month
- Power spending increased in excess of 20% in 2004

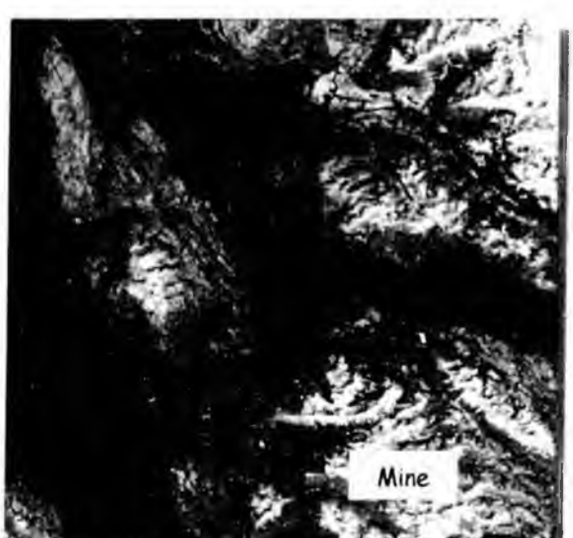
Updated 12/29/2004

Brief History of the Mine

Mineralized outcrops near Greens Creek were first sighted by geologists in early 1975 and preliminary core drilling followed soon after. Between 1978 and 1980 an exploratory tunnel was driven to allow underground drilling and inspection of the ore body. Full scale mine development began in 1987 and full production was reached early in 1989. Production was temporarily halted in 1993 due to low metal prices but re-opened in July 1997. Since re-opening the mine has steady increased its productive capacity from an initial production rate of 1320 tons per day (tpd) to over 2140tpd in 2003.

General Information

Greens Creek is a polymetallic(silver, zinc, gold and lead) underground mining operation with a concentrator (or mill) and a 100 bed camp. The mine and the mill are located about three miles up the Greens Creek Valley and the camp is located at Hawk Inlet. The mine is expected to operate until 2012 based upon 7.4Mt of reserves and excellent exploration potential.



North Admiralty Island

Mine Operations

There are three main phases to the mining process:

- Development
- Production
- Backfilling

Development is the tunneling or accessing phase. Using plans from the geology and engineering departments miners drive tunnels 15ft high by 15ft wide to access the various ore zones to be mined.

Production is the extraction phase. The method of extraction depends upon the geological nature of the orebody involved. Some of the smaller more contorted orebodies are extracted using the same tunneling procedure as the development phase. In other more massive orebodies larger scale extraction methods are used, sometimes producing voids of up to 150ft long, 25ft wide and 120ft deep.

Backfilling is the replacement phase. The voids created during the production phase are filled up with a combination of mill waste (tailings) and cement. This "backfilling" process stabilizes the production voids and allows extraction of the ore beside, above, and even below the backfilled area.

Mill Operations

There are three main phases to the milling process

- Grinding
- Flotation
- Filtering

Grinding is the reduction of the mined ore from an average size of 9" (225mm) to an average size less than 50μm (50microns or .05mm). The main purpose of the grinding process is to liberate the various components of the ore. A 9" lump of ore is a combination of some rock, some zinc, some lead, some silver and some gold. By grinding that lump down to particles of 50μm we aim to produce particles of either rock, zinc, lead, silver, or gold.

Water is added during the grinding phase to suppress dust and to help pump the material around the mill.

Flotation is the separation of the particles produced during the grinding phase. The ground ore and water is passed through a series of cells which selectively float the zinc particles and the lead particles to produce a zinc concentrate and a lead concentrate. The silver and gold particles are more difficult to isolate and some silver and gold ends up in each of the concentrates as well as in a gold/silver concentrate which is smelted on site to produce a doré bar.

Filtration is the extraction of the water from the concentrates and tailings. All of the mill products are filtered to produce a dry cake with a moisture content of around 12%. The dried concentrate is easy to handle and ready to be shipped off to smelters around the world to be turned into metal. The dried tailings material is trucked to Hawk Inlet where it is placed in an engineered and regulated tailings impoundment, or sent underground as backfill.

Maxhaul in the snow

Surface Impacts

The whole philosophy behind the Greens Creek mining operation is to minimize the impact upon the National Monument. The total surface disturbance is only 350 acres, including all of the impoundments for waste rock and tailings. All discharges to the environment are regulated by independent state and federal agencies. The discharges to land are the waste rock from development and the mill tailings. The discharges to the air are the exhaust gases produced from our power generation plant. The discharges to water are the minerals contained in our water outfall pipe in Hawk Inlet. All of our water is cleaned at one of two water treatment plants to ensure that it meets Alaska State water quality standards prior to discharge.

Closure and Reclamation

Part of the General Plan of Operations is an Agency approved reclamation plan. This plan details all the steps required to return the Greens Creek Operation back to a pristine wilderness, through a process of building removal, re-contouring and capping. The plan also requires bond or guarantee for $26M, held by the regulating agencies, which can be used to employ a reclamation contractor should Greens Creek default on its reclamation responsibilities.

Hawk Inlet

Community Involvement

The Greens Creek Mine is the largest private employer in the Juneau area and as such plays an important role in helping to diversify the local economy. The mine employs 260 people with an average payroll, including burden, of $26M.

The successful operation of the Greens Creek Mine demonstrates that mining, with all its associated economic benefits; local jobs; diversification of the local economy; strategic national importance, can be undertaken in a environmentally compliant manner without sacrificing responsible stewardship of the land.

The city of Juneau developed initially as a mining town and has a history rich in mining folk lore. At the turn of the last century Juneau boasted three mines, the Alaska-Juneau at the south end of Juneau, the Alaska-Gastineau at Thane and on Douglas Island was the world-renowned Treadwell Mine. The Kennecott Greens Creek Mine is proud to be the latest chapter in the city's rich mining history.

GENERAL CONTACT INFORMATION
KENNECOTT GREENS CREEK MINE

P. O. Box 32199
Juneau, Alaska 99803

Phone: 907-789-8114
Fax: 907-789-8128

Email: ron.plantz@greenscreek.com

Kennecott Greens Creek Mine

TOURIST INFORMATION

920 Mine Site

Welcome to the Kennecott Greens Creek Mine

Greens Creek is considered by many to be the environmental role model for the mine of the 21st Century. Located at the North end of Admiralty Island, in a pristine environmental area, the mine continues to operate within strict standards of environmental compliance. Working closely in an atmosphere of mutual respect with community leaders, regulatory agencies and environmental groups, Greens Creek has developed a General Plan of Operations incorporating many stewardship activities recognized as best practice. All the activities undertaken at the operation take into account sustainability, with the goal of leaving Admiralty Island as beautiful as it was prior to existence of the mine.

Kennecott Minerals

PRESENT-ATION: MINING INDUSTRY, 2/8/06

ALASKA MINERS ASSOCIATION, INC.

Joint Senate/House Resources Committees
Annual Mining Industry Briefing

Wednesday, February 8, 2006, 12 noon

AGENDA

1. Overview – Steve Borell

Operating Mines

2. Usibelli Coal Mine – (Bartly Coiley)

3. Greens Creek – (Rich Heig)

4. Red Dog – (Karl Hanneman)

5. Fort Knox & True North – (Lorna Shaw)

Development

6. Pogo – (Karl Hanneman)

7. Kensington – (Tim Arnold)

Major Exploration Projects

8. Nixon Fork - (Bill Burnett)

9. Rock Creek – (Doug Nicholson)

10. Chutina Coal - (Bob Stiles)

11. Donlin Creek – (James Fueg)

12. Pebble – (Michelle Brunner)

The Economic Impact of Alaska's Mining Industry

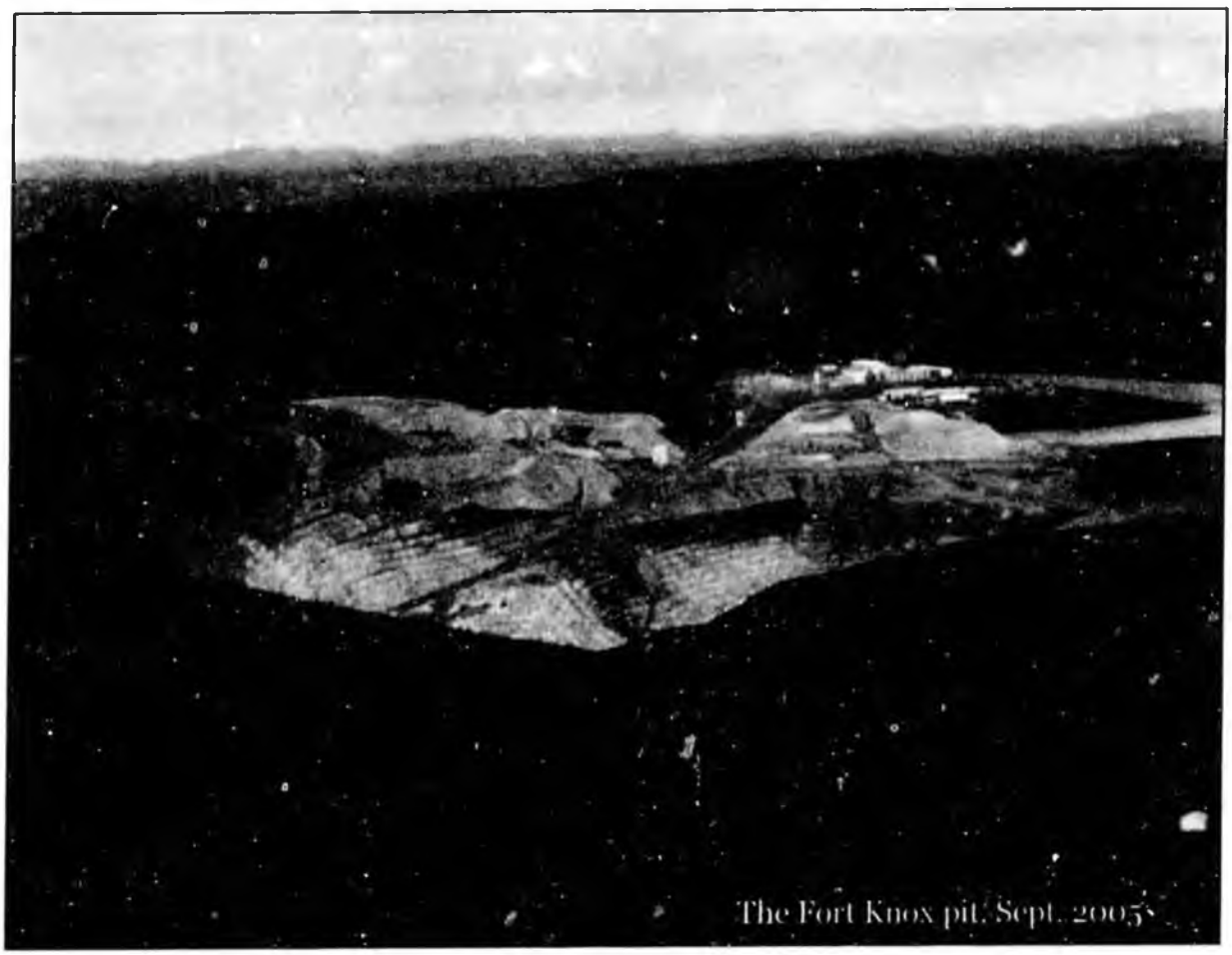
13. McDowell Report - By Jim Calvin of the McDowell Group

FORT KNOX

Gold Mine • Alaska

Fairbanks Gold Mining, Inc.

Fort Knox Fact Book



The Fort Knox pit, Sept. 2005

December 2005

Table of Contents

People

Human Resources

Priority number one is people – their safety and their livelihood. The success of Fort Knox is the product of the dedication and hard work of 400 full time employees. The mine is fortunate to have employees who are highly motivated self-starters eager to grow within the mining industry.

The Fort Knox team stems from a diversity of backgrounds. Some employees have been in the mining industry for most of their professional careers and display a willingness to share their expertise. Others are experienced employees who have learned their trades on the job, through electrical, mechanical, milling, crushing, and mining operations. And still others are newcomers to the industry whose past experience has been in construction, fishing, timbering and other businesses in Alaska.

Fort Knox employees live in the Fairbanks North Star Borough and lend their talents to improving community life for all citizens. Mine employees are concerned about the environment, are sensitive to its preservation, and work towards maintaining its quality. They hunt, camp, fish, and hike while enjoying the beauty of a state highlighted by contrast and color. Fort Knox employees want to ensure their children and other children have an opportunity to derive as much pleasure from outdoor activities as they themselves have experienced over the years.

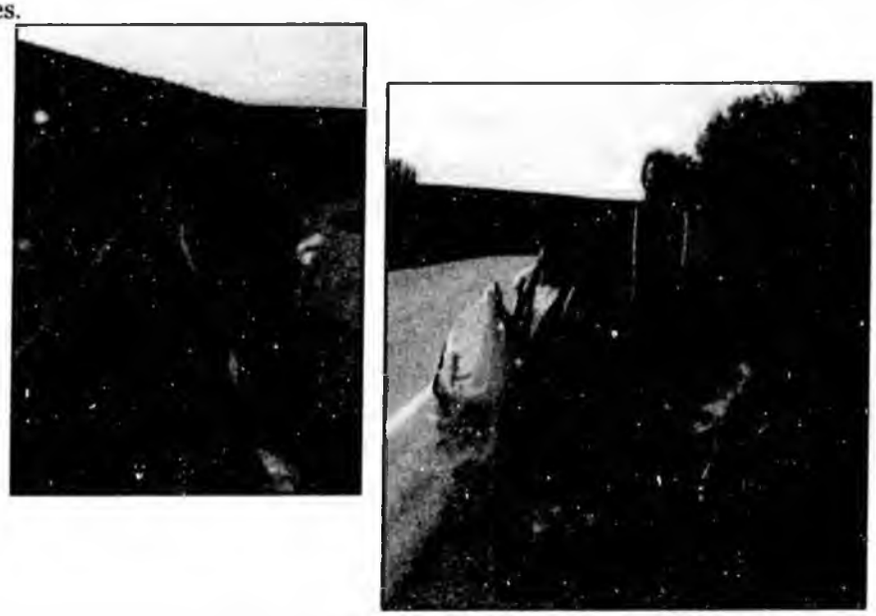
Left to right, top row: Jeff Jackovich, Jeff Rankin, Gaylon Shoemaker
Middle row: Archi Tirado, Kent Franklin, Randy Garcia
Bottom row: Randy Wilson, Randy Wood, Kristy Brower

The Fort Knox team ranges in age from 18 to 70 years. The workforce is 90% male and 10% female, and women are represented in all departments of the mine. The average wage of a Fort Knox employee is $57,897 annually, or $23.82 per hour. All Fort Knox employees live in the Fairbanks area and drive to the mine each day for their scheduled shifts.

Fort Knox is committed to hiring locally whenever possible, and the company is seeking opportunities to partner industry and education to bridge the skill gap that exists in Alaska.

Commitment to the Community

Fort Knox participates in many local events and activities like Golden Days, the Tanana Valley Fair, and Clean Up Day. In addition to volunteering to clean up in town, Fort Knox was recently recognized for supporting our employees who serve in the military with the Employee Support Guard and Reserve award. The mine works with The University of Alaska, participating in Engineering Week, job fairs, and lending classroom expertise. Several members of the management team serve on local education advisory committees.



Fort Knox employees and their families participating in Clean Up Day 2005. (L-R) Emily and Bobby Organ (Security); Willow, Dave (Environmental) and Walker Stewart.

2005 Projected Spending

$117 million total spending
$36 million on wages and benefits
$21 on electricity
$8.8 million on fuel
$3.4 million on property taxes

Mining and processing at Fort Knox have a positive impact on the local and state economies by providing technically demanding jobs for professionals with an annual payroll of over $36 million. The mine also creates an additional 510 support sector jobs in Fairbanks. Working with over 500 companies in the Fairbanks area, more than $70 million is expected to be spent in direct purchases and over $7 million dollars on contract labor in support of mine operations in 2005. On average, Fort Knox's total spending exceeds $100,000,000 annually.

Fort Knox is a dedicated member of both the Interior and Alaskan communities.

CORRECTION

THE FOLLOWING DOCUMENT(S)
HAVE BEEN REFILMED TO
ASSURE LEGIBILITY OR PAGINATION

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Safety

At Fort Knox health and safety of our employees truly more important than the production of gold. The company's goal is to make every day a safe day both accident and incident free. The mine has a comprehensive tracking system for incidents, action plans and training documentation and all of our employees participate in an incentive program rewarding positive progress towards safety milestones on an individual, departmental and site-wide basis.

(L-R) Stacy Staley (Environmental), Charlie Wells (Mill), Brad Morris (Welder), Larry Jackson (Environmental), Michelle Steel (Human Resources), Yvonne Pimentel (Human Resources).

Three times the Fort Knox workforce has achieved 1,000,000 manhours worked without a lost time accident; first in 1999, again in 2001, and most recently in 2004. The site's last LTA was in April 2005 and crews are working hard to reach this safety milestone again.

FGMI has twice been awarded the prestigious Sentinels of Safety award by the US Department of Labor. The first award was received in 1997 for Fort Knox and the second in 2001 for True North.

In the case of an emergency, Fort Knox has both an Emergency Response Plan and a Crisis Communications Plan. The mine's Emergency Response Team participates in monthly training focusing on various topics from high angle rescue and fire suppression to Hazmat response and emergency medical treatment. At Fort Knox safety will not be compromised.

Well stocked first aid kits are located throughout the mine site.

Fort Knox

Where safety is more precious than GOLD

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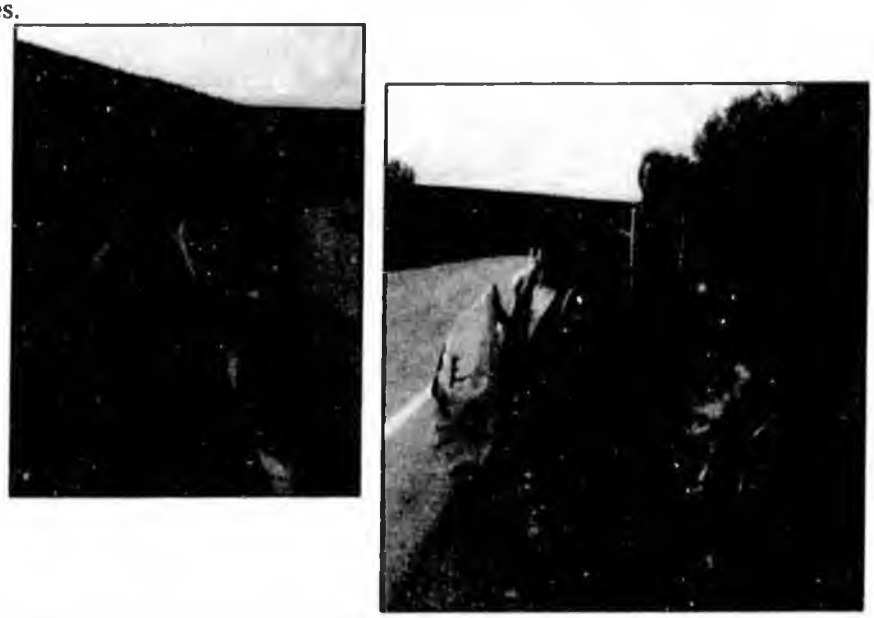

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(L-R) Mine Manager Dan Snodgress and HR Manager Caroline Sandel pose with Hutchison High School principal Bill McLeod and Tanana Valley Campus Director Rick Caulfield . Fort Knox has a School to Business partnership with the new vocational high school.

Tours and Education

For many years, Fort Knox has worked with AMEREF to teach Alaskan teachers and students about mining and resources. As well as welcoming classes at the mine site, mine employees visit local schools to teach lessons like cookie mining or cake core drilling.

Fort Knox is proud to offer free mine tours to educational groups from May to September. These tours are scheduled through the Community Affairs Department and are led by mine employees trained to lead tours. Tours are limited to 30 participants and all guests must be of at least third grade standing.

Employees may also lead tours for their family and friends. Such tours must be approved by the employee's supervisor and scheduled through the Security Office at least 24 hours in advance.

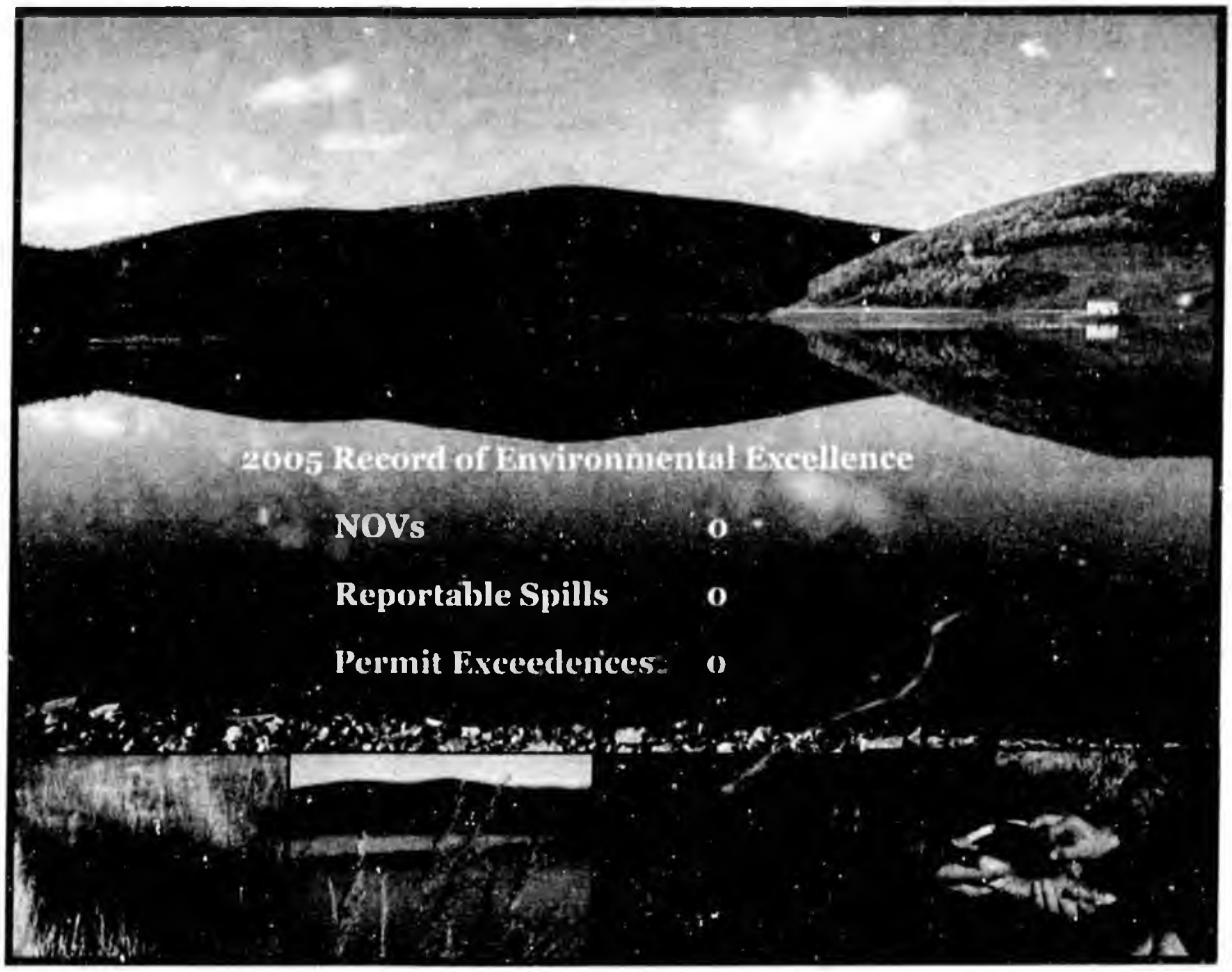
In addition to sponsoring Kids Day at the fair when all kids receive free admission, Fort Knox hosts a booth at the Tanana Valley State Fair every year, staffed by employee volunteers .

Fort Knox engineers David Quandt and Bill Angell (in the white hard hats) lead a tour of visiting professors from a Russian university.

Artwork from an elementary school student depicting what he learned when he toured Fort Knox. Most classes send a packet of letters or drawings as a thank you following a Fort Knox tour.

A group of elementary school children watch a haul truck back up to the crusher while on a school tour.

The Environment



Environmental Compliance

As important as safety is the environment. Thanks to the environmental department staff and all of the mine's employees, Fort Knox enjoys commendable environmental performance.

Every year has been a great year for Fort Knox and in the history of the site only one notice of violation was ever received. Just after mining commenced in 1997, Fort Knox was issued a citation for an improperly labeled used oil container. Throughout the years and through many inspections and audits, the mine's environmental compliance has been stellar. In fact, in August 2005, Stephan Johnson, the EPA Administrator from Washington DC, visited Fort Knox. This was his first visit to a mine and he was clearly impressed with the company's environmental stewardship.

Arctic Grayling (left) and Burbot (right) spawn in the developed wetlands in the valley below the Fort Knox mine. The Fort Knox spawning grounds provide many of the fish found in Fairbanks streams and rivers.

Concurrent Reclamation

Fort Knox is located in the heart of the gold rush boom area of the early 1900's. Continuing Fort Knox's commitment to the community, the mine has embarked on reclamation in the Fish Creek Valley. The historic placer mining left the Fish Creek Valley heavily impacted with extensive erosion. As Fort Knox was built, voluntary reclamation took place in the valley. Isolated pools became connected wetlands as the area was recontoured. Seeding native grasses stopped erosion and sediment movement into streams. The Water Supply Reservoir was built and the small fish populations increased, Arctic Grayling and Burbot are the most common fish species in the valley. A was channel built from the reservoir to the wetlands that increased Grayling spawning habitat. Fish population numbers hit target goals in 2 years rather than the expected 10 years. The reclamation efforts of Fort Knox greatly increased the high quality value of the wetlands. It is now home to moose, wolves, small mammals, birds of prey, and more.

The developed wetlands created through voluntary reclamation in the Fish Creek Valley.

A Functional Analysis of the Developed Wetlands was completed in 2004. This study evaluated all of the land within the Fort Knox claims and rated its value for habitat. A similar study was done during the permitting stage of the mine. Results from the 2004 study show that 88% of the value of the wetlands Fort Knox has disturbed for the entire minesite have been replaced by just the developed wetlands created through voluntary concurrent reclamation.

In 2004 FGMI received approval from the State Department of Environmental Conservation that the cleanup and reclamation efforts at Ryan Lode were successful. The Ryan Lode property was purchased in 1999 with the intent of developing the project. FGMI never developed the project but the company's comprehensive cleanup and reclamation efforts totaled nearly $800,000 and included removal of historic contamination, closure of the remaining process components including a leach pad, and reclamation of the disturbed areas. The company will continue to monitor water quality in the vicinity for years to come.

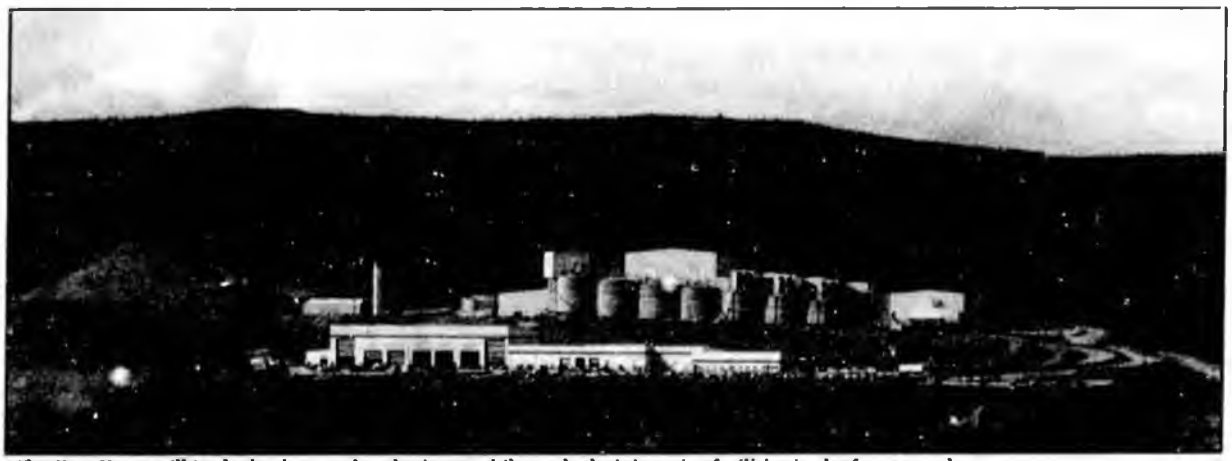
Most recently, this summer FGMI began reclamation at the True North property in areas that won't be disturbed by future mining activities. To date 124 acres have been recontoured and reseeded.

Like the area pictured, a total of 124 acres at True North were recontoured and reseeded over the summer of 2005.

Post Mining Reclamation

Closure and reclamation of the Fort Knox tailings impoundment will create a series of streams, pools and shallow wetlands by selective disposition of tailings during the final years of operation. The ore at Fort Knox is relatively free of sulfides and other problem metals that typically require water treatment during closure. Based on models developed to predict the post-reclamation water quality, treatment of water will not be required. However, no water will be discharged unless the water quality conforms with the discharge standards specified by permits approved by the agencies.

Making Gold



The Fort Knox mill in the background and mine, mobile, and administrative facilities in the foreground.

Facilities

One large building houses the administrative offices, the warehouse, and the mobile equipment shop.

The ambulance bay contains an emergency response vehicle and a fire wagon. The FGMI Emergency Response Team is trained to use these vehicles in the case of an emergency. Back up is provided by the Steese Area Volunteer Fire Department, located in Fairbanks.

The main warehouse and cold storage building (across the road) contain approximately $11 million inventory in support of Fort Knox operations.

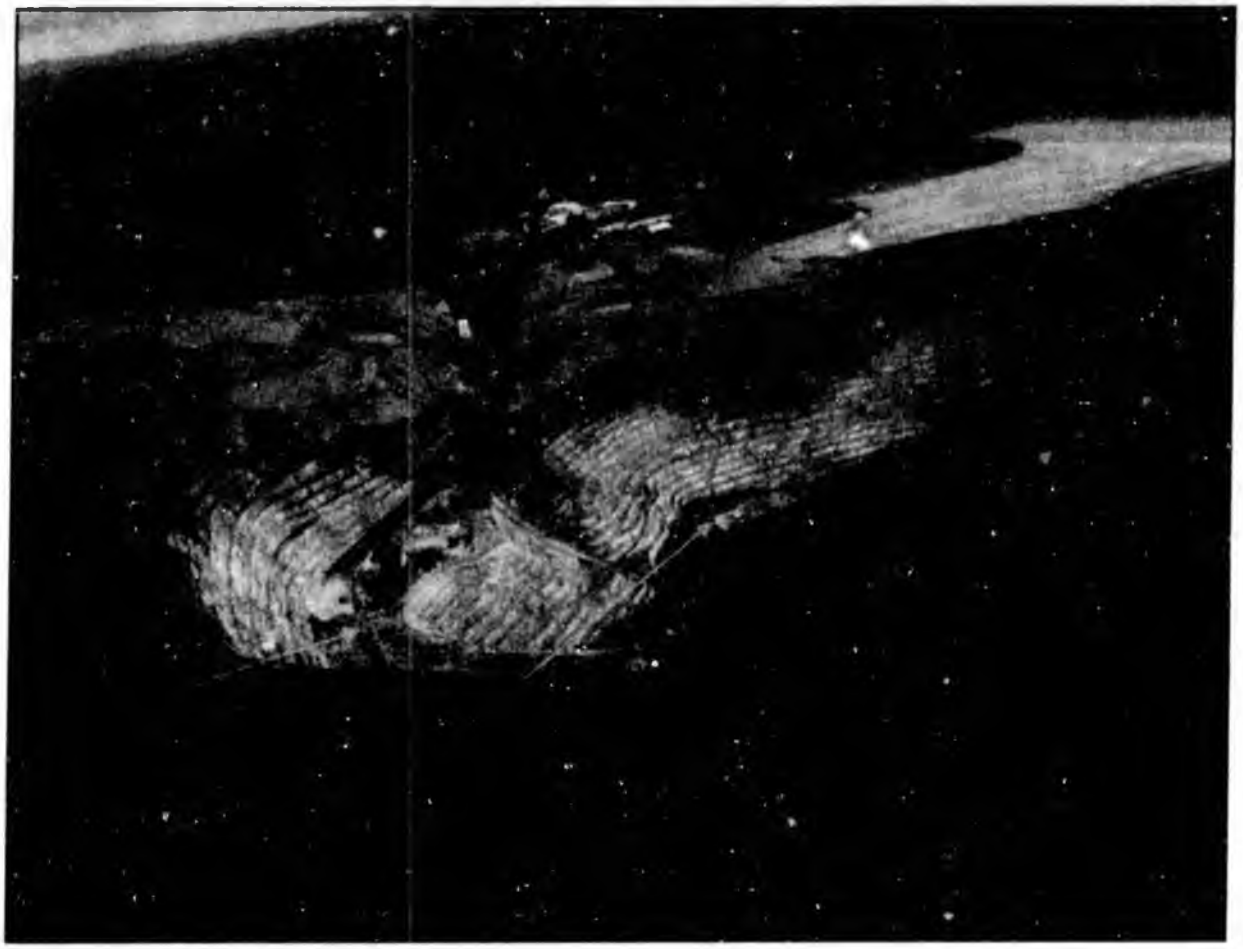
The cold storage building is located across the road from the main warehouse

The mobile equipment maintenance shop has two main areas, one for small vehicle and one for larger equipment. Two bays are dedicated to light duty vehicle maintenance. Vehicles ranging from pick-ups to crew vans to stemming trucks and fuel trucks are serviced in this shop.

Most major equipment is brought to the main shop for preventative maintenance (PMs) and repairs where it will be serviced in one of six heavy duty bays. With a tram time of only 1 mile per hour, the shovels are serviced in the pit. The local Caterpillar dealership has a maintenance and repair contract for 9 haul trucks, 2 loaders and 1 grader. Fort Knox mechanics are trained and responsible for maintaining all other equipment. The shop also features a large wash bay the site's wash bay where vehicles can be cleaned before servicing.

Left: The main shop where large equipment is serviced

Right: Light duty mechanic Luis Pimentel services a crew van in the light duty shop.



The Fort Knox pit from the air looking back at the mill and tailings facilities.

Pit Geology

When complete, the Fort Knox pit is planned to be 1 mile long by ½ mile wide and ½ mile deep. The hilltop elevation is 2,200 feet, and from the top of the tallest hill, the pit is 1,100 feet deep. The walls are lined with 30 ft tall stair-step side walls called benches. The bench slopes are angled at approximately 45 degrees. The brown metamorphic rock towards the top of the pit is called Fairbanks Schist. There is very little gold in the schist and when moved out of the pit, it is taken to a rock dump on the mine site. The white or gray rock beneath the schist is granite, and this is where the Fort Knox gold is found. Gold occurs along quartz veins, fractures and shear zones in the granite. Most of the gold found at Fort Knox is microscopic (less than 100 microns, or 0.1 millimeters) and cannot be seen with the naked eye. However, some gold is visible (up to 2 millimeters).

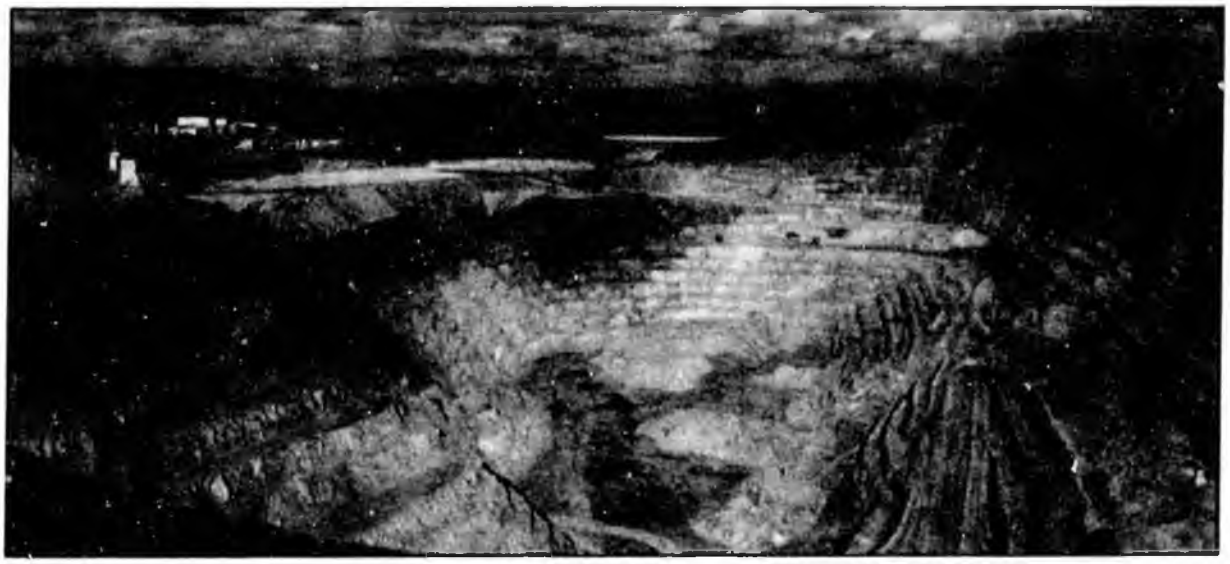
Three types of material are excavated from the pit. The A grade ore has a gold content higher than 0.015 ounces per ton (opt) or 0.017 opt, depending on the hardness of the material. This ore goes directly to the crusher for processing. B grade ore contains at least 0.012 opt and is stockpiled. This ore will be processed in the mill after mining is complete. The 30 million ton stockpile is expected to feed the mill for two years beyond the mine life. Material with less than 0.012 opt is considered waste and goes to the rock dumps.

Production

Mining is currently taking place in three different areas of the pit. Phase 4 is the area at the bottom of the pit. Because the pit narrows at the bottom, in order to go deeper mining must begin at the very top bench to make the entire pit bigger. The west end of the pit is growing with Phase 5, currently mid-way down the wall. Both ore and waste rock are being taken out of Phases 4 and 5. The south side of the pit is also growing. Phase 6 began in April 2004 and 60 million tons of waste rock are being moved before sustained ore will be reached in 2007.

Fort Knox has changed and grown over the years. In 2003 mining averaged approximately 83,000 tons per day. In March of 2004 the mining equipment from True North was brought over to Fort Knox. Work in the Phase 6 section of the pit began in April and by mid-year 2004 mine production had increased to 130,000 tons per day (tpd). By October, 6 of the 8 new 190-ton haul trucks were in service. In January of 2005 the mine's dispatch system went live. This system uses GPS to track and assign trucks to loading units optimizing production. A new production record was set in March, moving over 200,000 tons each day.

The combination of new equipment and the improved efficiency of the dispatch system have increased average production in 2005 to 180,000 tpd.



Looking across the pit from Phase 5 it is easy to see the contact between the granite and schist.

Dewatering

It is important to keep the pit dry while mining. Currently water is pumped out at a rate of up to 800 gallons per minute. The water table is 250 feet below the pit floor and water taken from the pit is used to fill water trucks and drills for dust suppression. Excess water is pumped into the tailings impoundment and used in the milling process. Additional wells are drilled every year to keep up with pit expansion.

DR7 drills holes on a new blast pattern at Fort Knox.

Drilling

In order to get each of the 30 ft benches in the pit, Fort Knox's 7 drills and 28 drillers are kept busy. Each grid pattern has 200 to 600 holes. The holes are 33 feet deep, and anywhere from 16 to 20 feet apart. The distance between holes depends on the material. Ore is drilled on 16 foot centers with a 6.75 in. bit while holes in waste, or non gold bearing material, are drilled 17 to 20 feet apart with a 7.5 in. bit.

Seven drillers work at a time, rotating on the same schedules as the four mine crews. The eight blasters work four ten-hour days each week. Drill and blast coverage spans 7 days per week.

Blasting

The drill patterns are blasted once daily, Monday through Friday at 11 AM or 3 PM. Fort Knox uses ANFO (ammonium nitrate (fertilizer) and diesel fuel). The blasts are set using a nonel (non electric) system for ignition that ignites at a rate of 10,000 feet per second. Each hole has a blast cap. The det cord moves at 26,000 ft per second, and there are surface delays of 67 milliseconds row to row, 25 milliseconds hole to hole, and 350 milliseconds "downhole."

By design, the blasts at Fort Knox are rather anti-climactic. Unlike the movies, there are no cars that burst into flames and no equipment gets turned upside down. The goal of the blast crew is to keep material movement consistent so zoned ore and non-gold bearing rock stay relative to each other as assayed from the drilled holes. The material is fractured just enough for loading units to maintain floor grade and achieve a high bucket fill factor with minimal effort. In layman terms, the ground is fluffed just enough for easy loading without disturbing the relative location of the ore and non-gold bearing rock.

Holes are drilled and filled with explosives prior to blasting.

Blasts at Fort Knox loosen the rock just enough for a loader or shovel to load the material into trucks.