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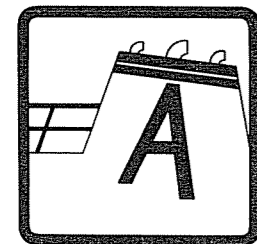


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Resource Review

Resource Development Council for Alaska, Inc. Box 100516, Anchorage, AK 99510

May 1987



Massive Quartz Hill project reaches a critical point

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Top executives from U.S. Borax are seeking the support of the Resource Development Council and other organizations in Alaska to help secure approval of the long-proposed Quartz Hill molybdenum mine near Ketchikan.

The manner in which Borax will be allowed to develop the project will have a profound effect on its cost structure and potential profitability. The development and operating constraints currently favored by the U.S. Forest Service and the Environmental Protection Agency (EPA) are expressed in the preferred alternative section of the just released Revised Draft Environmental Impact State-

ment (RDEIS).

The public is being asked to comment on the RDEIS and the preferred alternative. Borax officials told the Council that public comments and preferences will have an important influence on the final decisions of the Forest Service and the EPA.

The revised draft, consisting of three volumes totalling over 1,800 pages, has been nearly three years in preparation. Borax has paid over \$1.2 million for EIS preparation. Since 1977 Borax also spent over \$15 million in collecting and providing the data for it.

Quartz Hill is a big, long-term opera-

tion surrounded by Misty Fjords National Monument. Its four-year development will provide about 1,000 construction jobs. When completed it will provide 800 to 1,000 permanent jobs, a healthy economic transfusion into the Southeast Alaska region.

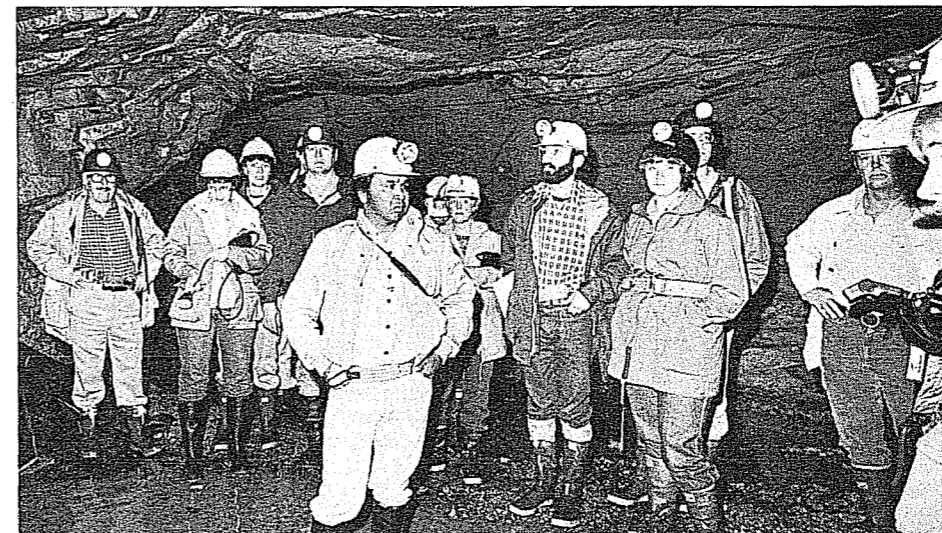
The company has already invested more than \$100 million into the project, with nearly a quarter of those costs going toward environmental studies and protection. A 10-mile access road to the site from saltwater was completed over three years ago in an "environmentally sound manner under extremely difficult conditions," according to the Forest Service. Borax expects to spend \$800 million to complete the project.

By developing a major molybdenum deposit of great mineral value, "we believe we are helping Alaska develop its resource base and its economic potential," said Robert E. Kendall, president of Borax. "Yet we now face a major challenge."

The challenge is how to construct and operate a mine that will produce molybdenum for the world market at a competitive price.

In addressing a breakfast gathering of the Resource Development Council in April, Kendall said the engineering, permitting and construction phase is the most important step because the decisions made during this period will determine the competitiveness and cost effectiveness of Quartz Hill.

(continued to page 4)



Ketchikan area local government officials tour inside an adit during height of operations in 1984. (Fjord Photo, Ketchikan)

Message from the executive director

By Paula P. Easley



"First, I suggest that you blank your mind of everything you have heard about economic development." That was the statement of Bill Schott, who spoke at RDC's recent Great Opportunities Conference, but it could have been made by any of the 14 economic development professionals who came to Anchorage for the event.

Old assumptions about economic development were challenged by every speaker, but the new assumptions were not so clear. What has become clear, as the passage of time has allowed new economic development programs around the country to be independently studied, is the change in focus they have taken.

In the past the major focus has been on luring new firms to relocate to a specific area, but that has changed. The new focus is on building a broader economic base by using the people, companies and resources that already exist in a particular community or state.

Why this change in direction? Some revealing statistics that show:

- Eighty percent of new jobs come from businesses that start up or expand in-state.

- Fifty percent of new jobs created over the past 15 years have come from independent businesses under four years old.

- More than two-thirds of all new jobs are generated by firms with fewer than 20 employees.

And, with regard to these small operations:

- Small firms give two out of three Americans their first job, and, therefore, basic workforce training.

- Women start new businesses at a rate three to five times faster than men despite greater obstacles, and

- Small businesses created most of the innovative ideas and inventions in the last decade.

With these statistics in mind, a good question to ask is: If 80% of new jobs come from businesses that start up or expand in-state, is that where we ought to put 80% of our economic development investment?

As several conference speakers advised, we must give priority to investing in the foundations upon which an emerging economy depends, namely:

- A capable and adaptable workforce, which translates to investing in human resource development

- Adequate physical infrastructure

- Well-managed natural resources

- Up-to-date knowledge and technology

- Access to capital

- Improved government and regulations

- An equitable, efficient tax code

- An attractive quality of life, and

- A sound fiscal base.

There are some useful implications for Alaska in the research gained from the last decade of growth and study of local and state economic development programs. For a resource document that provides the strategic tools we need to guide our economic future, we have published the Great Opportunities Conference Proceedings. I strongly urge that you have your own copy available for use and reference.

Cost of the Proceedings is \$35.00. Also available for the first time this year are videotapes of speaker presentations which will be copied on an as-requested basis. Call RDC for additional information.

RDC director defends Tongass fund

In reply to an effort in Congress to scrap the critically-needed Tongass Timber Supply Fund, RDC's Richard Tindall, director of the Renewable Resources Division, has warned Senator William Proxmire that "Alaska cannot carry its share for the benefit of the commonwealth if it continues to be considered as just a natural history museum or a wildlife zoo."

Backed by a strong environmental lobby, Proxmire has introduced legislation to repeal an annual payment of \$40 million to help industry reach targeted harvest levels and maintain timber industry employment in Southeast Alaska.

Known as the Tongass Timber Reform Act, Proxmire's legislation would repeal key elements of a compromise approach to managing the Tongass National Forest.

Industry believes the reform effort would drastically reduce the amount of timber available to the dominant resource industry of Southeast Alaska.

"If you feel that the Forest Service is wasting public funds on the Tongass, then you've been misinformed," Tindall wrote in recent correspondence to Proxmire. "The sin of the Forest Service is in maintaining an inappropriate accounting system."

Tindall explained that the federal agency has been charging a wide variety of expenses to the timber program. He said programs ranging from recreation enhancement and wildlife protection to public information and fish ladder construction have been charged against the timber harvest.

Future economic prospects look good

by David Parish

There are three large-scale economic opportunities available to Alaska which can be realized before the year 2000. Should we as a state be able to move forward with these projects, the benefits will be immense. Not only will we pull out of the current slowdown, Alaska will achieve new heights in social and economic opportunity.

The first opportunity is oil and gas exploration and development in the Coastal Plain of the Arctic National Wildlife Refuge (ANWR). Should exploration and development be allowed, the potential levels of oil production will help offset the reduction from Prudhoe Bay. The results of such additional production include potential tax and royalty revenue to State government, employment opportunities for the trained Alaskan workforce, and the inevitable increases in our critical level of expertise as we move further along the learning curve of arctic technology.

To see the realization of energy exploration and development in the Coastal Plain, Alaska must speak in unity. The private sector, Governor, legislature, governmental agencies, academic institutions, and individual citizens all must work together in convincing the Congress that development is in the national interest.

The second major opportunity is the construction of a natural gas pipeline from the North Slope to tidewater. This would allow development of the huge deposits of natural gas found in the Arctic, including utilization of potential natural gas deposits in ANWR. This project would provide significant employment opportunities within our State.

To facilitate the development of a natural gas pipeline, the State should proceed forward with the approval of a right-of-way and all necessary permits, as well as working with the BLM and other federal agencies to see that all necessary federal permits and rights-of-way are issued in a timely fashion.

The third economic opportunity for Alaska is the 1994 Winter Olympics. Should we be able to host the event, the economic, social, and psychological benefits will be immense. Many of the necessary facilities are already in place, which gives us a tremendous advantage in terms of costs, and there will also be significant employment oppor-

tunities involved in constructing some additional facilities. This construction, combined with the necessary preparation and conversion of existing facilities, will provide much needed jobs in addition to the tremendous number of local residents who will be needed to facilitate and coordinate the production of the games.

One needs only to look at the timeframe of these three projects to realize that Alaska has the chance to reach new levels of economic development, provided we don't drag our feet and miss the boat.

The lead times involved in moving from exploration to development in ANWR are ten to fifteen years. Should Congress make an affirmative determination within the next two years, the move from exploration to development could culminate between 1999 and 2004.

If the appropriate State and federal agencies approve the plans for a natural gas pipeline from the North Slope to tidewater, construction could begin between 1992 and 1995. If the International Olympic Committee selects Anchorage as the host city then we would see the Winter Olympics in 1994.

These are three long-term opportunities. Alaska must focus its efforts on these long-term projects which will provide significant benefits for future generations, rather than working toward short-run solutions which don't last. In addition to these larger prospects, we should work toward improving the regulatory and development environment in Alaska. This would stimulate economic diversification and development in the mining, timber, and fishing industries. The economic benefits from these industries have the potential to surpass any one of the three larger projects I have mentioned.

Consider the possibilities for Alaska: large scale improvements in the timber, mining, and fishing industries due to regulatory changes and economic diversification, the Natural Gas Pipeline in 1992, the Winter Olympics in 1994, and energy production from the Coastal Plain of ANWR in 1999! If we allow these things to happen, Alaska will be an exciting place where its citizens will discover new heights in economic development and social opportunity.

(David Parish served as an intern for RDC)

Miners receive partial victory in lawsuit

by James S. Burling, Pacific Legal Foundation

The holders of state mining claims were recently handed a partial victory by the Alaska Supreme Court in a lawsuit brought by the Trustees for Alaska. The decision interprets one of the key provisions of the Alaska Statehood Act.

This case, which is not to be confused with the efforts of the Sierra Club to shut down mining on *federal* lands, was engineered by the Trustees as a vehicle to drive the state land mining industry into chaos. Specifically the Trustees asked the Superior Court to halt all state land mining for an indefinite period during which the Trustees, courts, and Legislature would wrangle over how much should be charged of miners in rents and royalties. Although the Trustees were always vague as to what amount of royalty would satisfy them, such an amount presumably fell somewhere between extraordinary and outrageous.

The Trustees initially lost in Superior Court on the technical ground that they had no right to bring suit since the Trustees had no significant interest in the outcome. The Supreme Court reversed and held that the Trustees should be allowed to sue essentially because no one else would bother.

The Court also ruled that the Statehood Act required rents or royalties for its leases, and that the existing requirement that miners perform annual labor worth \$200 on their claims was not technically a rent or

royalty. No hint was made that such rents or royalties need be extremely high, or even much different from what is presently charged with the labor system. Most significantly, however, the Court ruled that the lease system applied only to those lands "known to have been of mineral character" at the time the state took title to the land from the federal government. By most readings of this test, very few lands were then definitely known to have been of "mineral character" and most state mining will be totally unaffected by the Court's decision.

The Supreme Court also declined to rule on the Trustee's fanciful theory of a "public trust" in minerals that would require the state to end its leasing practices. In their place the Trustees favor an ill-defined system where the state would receive compensation vaguely described as "full fair market value" in exchange for the right to mine. Such a "public trust" holding could have had profound consequences on all resource developers on state lands, whether they be timber, wildlife, oil and gas, or minerals.

This case will now go back to the Superior Court which will direct the legislature to make whatever modifications are necessary to charge rents or royalties in accordance with the Supreme Court's order. The Legislature should easily be able to fashion relief that will both comply with the court and continue to encourage a strong state mining policy.

Resource Development Council, Inc.

The Resource Development Council (RDC) is Alaska's largest privately funded nonprofit economic development organization working to develop Alaska's natural resources in an orderly manner and to create a broad-based, diversified economy while protecting and enhancing the environment.

RDC invites members and the general public to its weekly breakfast meeting featuring local and nationally-known speakers on economic and resource development issues. The meetings are held on Thursday at 7:30 a.m. in the Northern Lights Inn. Reservations are requested by calling 276-0700.

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Resource Review is the official monthly publication of the Resource Development Council, Box 100516, Anchorage, Alaska 99510 — (907) 276-0700.

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Carl Portman
Editor & Advertising Manager

Resource Review encourages its readers to submit articles, announcements and letters to the editor for publication. Send all correspondence to Resource Development Council, Resource Review, Box 100516, Anchorage, Alaska 99510.

Congressional ANWR hearings set for June

Hearing dates have been set by the Senate for review of the Department of Interior's report on the Arctic National Wildlife Refuge.

The Senate Committee on Energy and Natural Resources will hold hearings on June 2, 4, 8 and 11. The hearings will be held in Washington, D.C.

The Resource Development Council encourages Alaskans and firms with business interests here to support Secretary Donald Hodel's recommendation that the entire 1.5-million acre coastal plain be leased for oil and gas development.

The final report to Congress included some significant changes over the earlier draft, especially in regard to highly-speculative environmental impacts which were clearly not supported by ongoing experience at Prudhoe Bay and Kuparuk. After additional information was provided by the Fish and Wildlife Service, some impact estimates could not be justified and were dropped from the final report.

The new report also clarified that the draft did not predict a 20 to 40 percent decrease in the size of the Porcupine caribou herd, but that the percentage was related to distribution changes and an editing error.

The report to Congress did not give preferential treatment to what had been identified as the "core calving area" of the Porcupine herd. It noted that the herd has heavily used other areas for calving purposes without adverse impacts on its size.

The report said that the herd would likely **not** be affected by pipelines and roads. It also pointed out that the long lag time between leasing and actual oil production will provide "ample" opportunity to come up with additional solutions, if needed.

Notable Quote

"I believe in the future. He who holds Alaska will hold the world, and I think it is the most important strategic place in the world."

—General Billy Mitchell

Council's legislative agenda gets attention

The Resource Development Council's legislative agenda is receiving broad support and attention in Juneau as legislators scramble to adjourn the first session of the 15th Alaska Legislature.

Designed to support actions identified in **New Strategies for Advancing Alaska's Economy, 1986-1990**, the legislation ranges from the refinement of state water quality standards to new approaches to enhance forestry and fisheries development. Other bills include measures directed at encouraging oil and gas development, international trade and coastal zone management oversight and permitting.

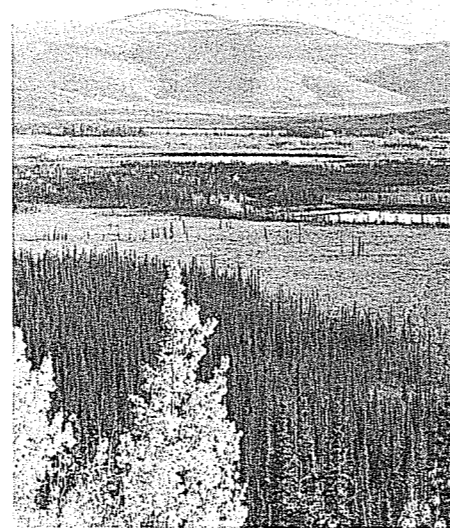
Proposed by RDC's Minerals Division, Senate Bill 114 allows legislative review of Coastal Zone Management Plans.

"We believe the potential for legislative disapproval will bring about the development of better coastal resource planning and management," said Mike Abbott, the Council's Projects Coordinator. Abbott noted that the Alaska Coastal Management Program (ACMP) has developed into a program with substantial statewide impacts without appropriate statewide review of its contents or impacts.

At present, in the absence of legislative review steps, the ACMP plans are ratified without any opportunity for substantive action by anyone except the Coastal Policy Council, an organization made up of delegates of only coastal areas. The re-creation of the legislative review procedure that was originally built into the ACMP would vastly improve the credibility of the program.

Legislation providing for the assignment of lead agencies for coastal zone consistency determinations has also been introduced in the House and Senate. Presently these permits are administered by the Division of Government Coordination, whose basic purpose is to organize the response of various agencies to a permit application. Abbott pointed out that this function could easily be fulfilled by the primary resource agency and DGC's role could be eliminated. Permits would still receive multi-agency review, but the final decisions would be made by the appropriate resource agency.

Legislation allowing for Forest Management Agreements has passed the



Legislation allowing for Forest Management Agreements would help boost timber production on state lands.

Senate and was being considered by the House at press time. The FMA system would allow for more efficient forest land management with greater emphasis on private operators, according to Richard Tindall, director of the Council's Renewable Resources Division. The agreements would also allow Alaska to cut more timber off of its lands at less cost to state government.

Bills providing a framework for the development of a mariculture industry have been introduced and will receive additional attention during the interim; while a bill allowing the Alaska Industrial Development Authority to work on trade-related projects has passed the Senate. AIDA currently does not have authorization to take part in export matters. SB 64 would allow the public corporation to assist Alaska traders in accessing the international market.

Other legislation either proposed or strongly supported by RDC includes a bill to streamline the oil and gas leasing process and a joint resolution supporting oil and gas development in the Arctic National Wildlife Refuge.

In addition, a bill revising the state's water quality standards for miners and other water users has been considered. The legislation is being held by the legislature while Governor Steve Cowper attempts an administrative solution to the controversy surrounding water quality regulations.

Thoughts from the president

by Joseph Henri



Educating Americans

RDC is activating its Education Foundation to perform critical education functions which hold the key to Alaska's future. The Foundation operates under a 501(C)(3) IRS code which allows tax deductible memberships and funding from other foundations.

People throughout the United States, and even people living in Alaska, need to be educated regarding the great value of Alaska for resource development, military affairs and the vast economic contribution the state can make to the well-being of the United States. We have created our Education Foundation to help accomplish the task of instructing and familiarizing. We now begin the job of attracting significant contributions nationwide, so that the work can go forward.

From the day Secretary of State William Henry Seward announced the U.S. purchase of Russian America some 120 years ago, the majority of people in our country have had deep misconceptions about the nature, value, geography and location of Alaska. For those Americans trying to develop the territory, it has been an uphill struggle during the entire epoch of United States ownership. Secretary Seward and Senator Charles Sumner of Massachusetts were simply the first duo in a long line of distinguished though scarce Americans trying valiantly to educate the country as to the worth of what has

now become the 49th State. The speeches of Seward and Sumner still sound the leitmotif of Alaska's unfolding.

The passage of the Statehood Act in the summer of 1958 followed the discovery of oil on the Kenai Peninsula a year earlier. Unquestionably, oil promoted statehood, and there is a serious question whether full stature amongst the states of the Union would have been accorded Alaska without the discovery of "Black Gold."

The present struggle in the Congress of the United States to open the coastal plain of the Arctic National Wildlife Refuge to oil exploration is symptomatic of the continuing difficulty that has been plaguing oil men and the oil industry since before the 1957 Kenai discovery; prior to that first discovery, the government, some thirty years ago, had to be persuaded to allow oil drilling on one-half of the Kenai Moose Range. There was a great struggle between "developers" and "conservationists," and the grant of permission to drill for oil was very uncertain. Now three decades of hindsight provide proof that the moose of the Kenai Peninsula have done nothing but prosper with a little oil drilling on their once exclusive premises.

We have other resource treasures, but their utilization in a number of cases depends upon the concurrence of the federal government.

So that Alaska may come into its own and be accorded a place of prominence and respect in the world of resource development, as well as the world of beautiful scenery, the attitude of many Americans and even many Alaskans, must be changed — their eyes must be opened. A first rate educating program must be launched so that the majority of Americans realize the developmental importance of Alaska. If the people firmly and finally understand this point, their elected representatives will make the right decisions, and they will be made without the tremendous struggle which has accompanied most of the government actions affecting Alaska in its first century and a quarter.

Educating people about the importance of Alaska is what the Resource Development Council Education Foundation was formed to do.

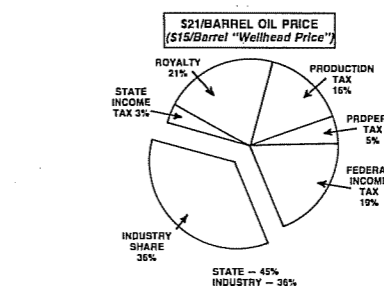
State's "share" increases as oil prices fall

With the fall in oil prices to \$15 a barrel, the State of Alaska's "share" of North Slope oil revenues has increased to 94 percent while the industry share has fallen to 3 percent, according to figures released by the Alaska Department of Revenue.

An analysis of the numbers show that when oil prices were near \$30 per barrel, oil producers received about one-third of overall North Slope production revenues after costs. The state received about one-third of revenues in the form of severance income, property taxes and royalties. The federal government received one-third in corporate income taxes and federal windfall profit taxes.

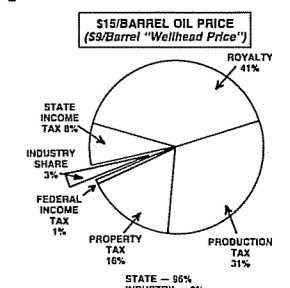
As oil prices started to fall in early 1986, the shares received by industry and the federal government fell sharply.

If oil prices were to average \$26 a



barrel for four years, the state's share would be 37 percent, industry's about 41 percent and the federal government 22 percent. If prices were to average \$21 a barrel over the same time period, the state's share would be 45 percent, industry's about 35 percent with some 19.2 percent going to the federal treasury.

As the price falls to \$15, the state's share increases to 96 percent. This happens because revenues rapidly shrink,



while operating and capital costs increase in relation to revenues, which sharply reduces industry net revenues.

The change occurs because state taxes and royalties are levied on gross revenues, rather than net income. Moreover, industry absorbs the costs of production operations, many of which are fixed and become larger in overall proportion as revenues shrink.

(continued to page 5)

Quartz Hill:

Annual economic benefits

1,000 New Employees
\$37,000,000 Annual Mine Payroll
\$19,000,000 Annual Service Industry Payroll
\$12,000,000 Annual Alaska Taxes
\$4,000,000 Annual Transportation Costs
\$72,000,000 Annual Benefits to Alaska

Quartz Hill

(continued from page 1)

"If Quartz Hill is to become a reality, all our efforts must focus on making it competitive, and keeping it among the lowest cost producers," Kendall said.

Molybdenum is a commodity traded all over the world, and in the global market the price is determined by the break-even cost of the lowest cost producers. Any company unfortunate enough to be in a higher bracket has to face the choice of losing money by continued operation or shutting down. With the enormous investment required to bring Quartz Hill on line, U.S. Borax says it cannot afford to put itself in that position.

The Quartz Hill ore deposit contains an estimated 1.5 billion tons of mineable ore. Located on the surface, it can become a large-scale, low-cost operation under the right conditions.

Two key conditions are necessary in order to achieve costs comparable to the existing low-cost producers. First, the company must be granted submarine tailings disposal in Wilson Arm rather than Boca de Quadra. It also needs a low-cost, reliable water supply for the project.

"If we are to have confidence that Quartz Hill will be a long-term competitive mine, these issues must be accommodated in the final EIS and attendant permits," Kendall told RDC.

However, the preferred alternative contains opposing points of view expressed by the two key permitting agencies on the location of mill tailings. The Forest Service prefers tailings disposal in the Wilson Arm. The Forest Service believes with appropriate mitigation, there is little difference in the environmental effects of tailings disposal between the Wilson and Boca de Quadra Fjords, including the effects of disposal on anadromous fish, other food fish and fish habitat.

The EPA concurs with the Forest Service on marine disposal, but concludes that the middle basin of Boca de Quadra is the environmentally preferred location. EPA considers that because of the greater depth and volume of Boca de Quadra, the risks of affecting marine life would be reduced there, as compared to Wilson Arm.

Agreeing with the Forest Service, Borax cites a great deal of scientific work over the past decade by some of the world's most foremost experts that shows the risks to fisheries very small in either case. On the other hand, the differences in environmental impacts in other areas, apart from marine effects, are considerable.

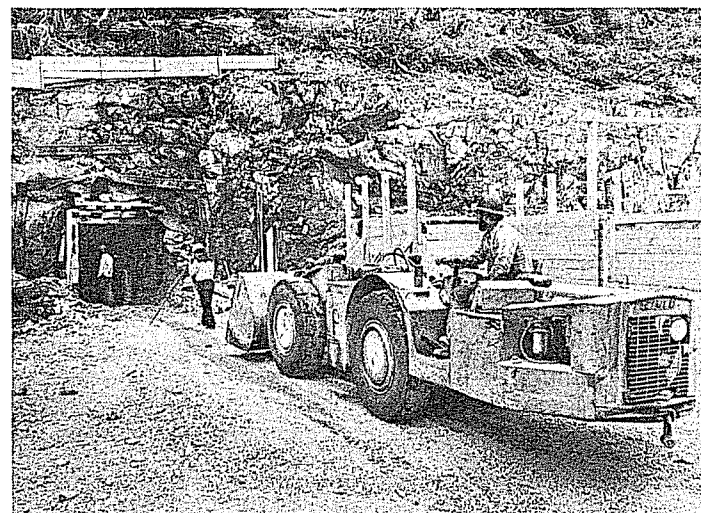
Disposal in Boca de Quadra at EPA's location would require a 7.25-mile long tunnel under mountains. Disposal in Wilson

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Decision time has come!

Public comments critical, help diversify our economy

Public comments will be very important in the decision and may well be the deciding factor. The Forest Service and EPA are particularly interested in receiving comments which would help assess the socioeconomic impacts of Boca de Quadra tailings disposal and the visual aesthetic impacts of the Boca de Quadra tunnel portal facilities in the wilderness. U.S. Borax needs your support for Wilson Arm tailings disposal and for a secondary water supply source during Phase I. **Comments should be sent to Win Green, Forest Supervisor, U.S. Forest Service, United States Department of Agriculture, Federal Building, Ketchikan, Alaska 99901.**



Ore loader prepares to enter tunnel from which bulk samples were taken in 1983. (Fjord Photo, Ketchikan)

Arm would only require a surface pipeline about two miles long.

A major advantage of utilizing Wilson Arm for tailings disposal is the confinement of mine development to a single drainage. This avoids spreading the impacts to a second drainage basin of about 18 square miles, most of which is in the national monument wilderness.

Using Wilson Arm also eliminates the need to construct tailings disposal facilities in the wilderness at the Boca de Quadra tunnel portal. These would occupy about 25 acres, stretching from tidewater to an elevation of about 100 feet.

But most far reaching are the socioeconomic advantages of using Wilson Arm.

"Alaska needs new industry, but the benefits may be only fleeting if the industry is not economically strong," said Chris Hesse, Vice President and Project Manager of Quartz Hill.

The Capital cost difference between tailings disposal in Wilson Arm and in Boca de Quadra is approximately \$59 million, plus increased costs for pumping and other operations of \$1.6 million annually. Hesse said these costs taken together are

(continued to page 5)

Quartz Hill

(continued from page 4)

equivalent to increasing molybdenum production costs by about 55 cents per pound. To put it into perspective, he said this would be the same as increasing the annual payroll cost by 50 percent.

"The inevitable result of adding such a cost burden would be to delay the start of the project," Hesse said. "Once started, it would sap the economic strength needed to operate through the molybdenum price dips which we know will occur."

In its arguments for selecting Boca de Quadra, EPA raises a possibility of acutely toxic levels of copper in the discharge. EPA's basis for this are very conservative "worst case" assumptions, Hesse pointed out. He said the tailings are very similar to the rock flour from glacial action which reaches the fjords every summer.

From the pilot plant testing Borax did on bulk ore samples, it is satisfied that the copper levels in the tailings at the end of the pipeline will be below EPA's requirements.

"U.S. Borax is prepared to do whatever is reasonably necessary to assure protection of water quality standards and fisheries," Hesse said.

EPA has also argued that because of the size of Wilson Arm, containment of the tailings there would not be assured. However, studies have shown that the tailings would only reach to about 600 feet of the water surface.

In any case, Borax believes EPA has not shown there are any adverse effects from minor amounts of fines which might escape into Behm Canal. National Marine Fisheries has considered this and has given an opinion that this "would not likely result in a discernible impact to the fishery resources of Behm Canal."

Regarding effects on salmon, the experts have agreed that disposal of tailings will not pose a threat since the tailings material will stay below the upper part of the water column used by the salmon. This is confirmed in the RDEIS, which states that "all tailings impacts to salmon would be insignificant."

EPA has also raised questions about the environmental effects of the tailings deposited in Wilson Arm eventually rising to above the 100 meter depth at the outfall. Hesse said the environmental risks in this happening is not apparent, but if it is regarded as a problem, "it can be avoided simply by moving the outfall down the fjord about ten years before the end of the mine life."

State's "Share" . . .

(continued from page 3)

State severance taxes and royalties are paid as a percentage of the wellhead price. Oil transportation costs from the well to market are allowed as a deduction in arriving at the wellhead price. But production operations in the field are not, allowing severance taxes and royalties to be applied to gross revenues, rather than net income.

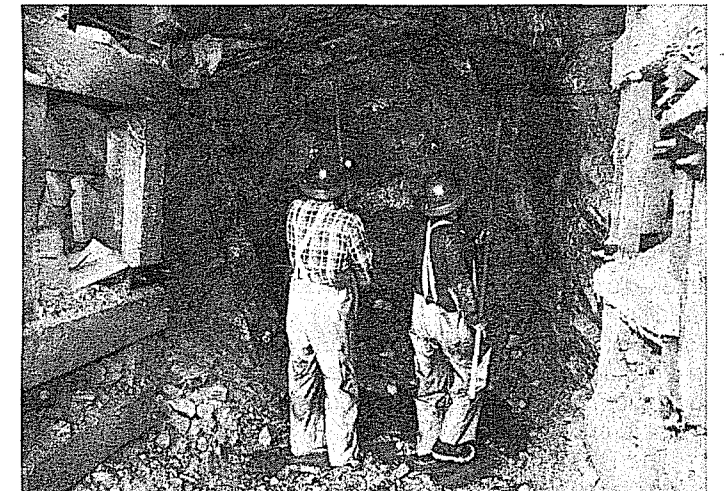
If the legislature were to enact a bill deferring application of the Economic

Limit Factor to North Slope oil production, the additional state taxes would wipe out industry's share at the \$15 a barrel price.

According to an article authored by Tim Bradner in the Juneau Report, published by Standard Alaska Production Company, that doesn't mean Alaska oil producers would run out of money and close production at the \$15 a barrel range since depreciation allowances for

capital recovery insures cash flow for the short term. However, Bradner warned that investment decisions are made on the basis of net return, after capital recovery and taxes.

"This is a vivid illustration of why it will be difficult for companies to make major new capital investments in Alaska until prices substantially recover, and how new state taxes could make the situation even worse, Bradner wrote.



Miners remove loose ore after a blast in adit during removal of 5,000 ton bulk sample. 1983 (Fjord Photo, Ketchikan)

Hesse stressed that any suspected impacts are long term and will be seen long in advance. He noted that permits can provide for mitigation and there would be ample time to put mitigating measures into effect.

"We think that in looking only at the marine impacts, as it has done so far, EPA has taken too narrow a view," Hesse said. "We believe that EPA must consider all of the impacts before making its final selection."

Regarding water supply, the Forest Service's preferred alternative is to get all process water during the first phase of operations from a dam in the Tunnel Creek Valley, supplemented only when the plant is expanded in Phase II from a secondary source near the mouth of the Blossom River.

The Forest Service plan would cost Borax \$30 million in additional expenses to build a dam 110 feet high to provide the storage needed. Borax proposes to build a dam only half that height, but to supplement this source during Phase I with wells near the Wilson River.

"We need the added reliability of a supplementary water source during Phase I to lessen the risk of plant shutdowns during dry days," said Hesse. "To avoid possible environmental disadvantages of the Wilson River wells, we're willing to use the Blossom River source preferred by the Forest Service."

Hesse said that during the course of Phase I there would be plenty of time to look into possible tertiary sources to assure a low cost and reliable water supply for Phase II.