

ALASKA LEGISLATURE SPECIAL COMMITTEE / SUBJECT FILES 8672
2601 SCOMM 113: HOUSE SPEC. COMM ON ECON. DEV. & TOURISM, 1999-2000

Produced, in cooperation with the 13 ARDORs, by the State Department of Community and Economic Development, Municipal and Regional Assistance Division, 550 W. 7th Avenue, Suite 1770, Anchorage, AK 99501.

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**ECONOMIC
DEVELOPMENT
COUNCIL**

February 8, 2000

Representative Alan Austerman
State Capitol
Juneau, AK 99801-1182

REF: House Bill 265

Dear Representative Austerman:

Prince William Sound Economic Development Council, an ARDOR since 1991, has been instrumental in over \$5.5 million for our region. These projects have been extremely beneficial to the quality of life and economic growth of the area.

As president of PWSEDC board of directors, I would like to express my support for the ARDOR organizations and HB 265.

Thank you for providing leadership in this matter.

Sincerely,

David A. Dengel
President

SCOMM

113:7

Alaska State Legislature



Official Business

State Capitol
Juneau AK
99801-1182

Economic Development and Tourism Committee
Representative Gail Phillips, Chair

(907) 465-2689; (800) 665-2689

Fax: (907) 465-3472

Email: Representative_Gail_Phillips@legis.state.ak.us

Economic Development & Tourism Committee

Wednesday, Feb 23rd, 2000 – 5:00 to 6:30pm

House Resources Room 124

Meeting Notice: The Economic Development and Tourism Committee will hold a regularly scheduled meeting on Wednesday, February 23rd at 5:00pm

We will be hearing a series of updates on the mining industry in Alaska.

Presentations will include:

Frankie Pillifant - (DCED-DOT) Mining Opportunities in Alaska.

Dr. Lance Miller – (Red diamond Mining Co.) Gold in Alaska and World Comparisons.

Carl Hanneman – (Teck Resources) Pogo Mine update.

June McAtee - (Calista) Socio-economic Benefits of the Development of the Donlin Creek Deposit

This will be an excellent meeting. Please try to attend.

GP:sp

Chair: Representative Gail Phillips

Committee Members: Representatives Ramona Barnes • Fred Dyson
Norman Rokeburg • Andrew Halcro • Sharon Cissna • Beth Kertula

February 22, 2000

Mining Industry update for
House Special Committee on Tourism and Economic Development
By Frankie Pillifant

Thank you for inviting me to talk with you about the mining industry in Alaska. My name is Frankie Pillifant and I work as a Minerals and Mining Development Specialist for the Department of Community and Economic Development, Division of Trade and Development. Today I will help set the stage for the other invitees to discuss in more details the points brought up by myself.

Despite record low prices for metals and coal, the preliminary estimates for 1999 mineral industry are \$45 million invested in exploration; \$18 million invested in development projects and \$986 million in production valued overall at \$1.049 billion. Several medium sized mines, Illinois Creek, Nixon Fork, Alaska Gold (Nome Placer) and a number of small placer mines were closed in 1999. Red Dog near Kotzebue increased production and continues to be the world's largest producer of zinc. Greens Creek mine on Admiralty Island remains one of the largest producers of silver in the U.S. Fort Knox mine near Fairbanks is Alaska's largest gold producer with an average daily production of approximately 1,000 ounces of gold. The Pogo gold deposit north of Delta spurred 60% (approximately \$30 million dollars) of the exploration conducted in Alaska this year.

Opportunities for mineral development rely on the geology, gold price and infrastructure/access.

Map of selected mines, coalfields and significant mineral resources of Alaska (by Swainbank and Szumigala, October 1998)

Coal: Point Lay, world class quality and quantity but no access (bituminous: coal containing 15-20% volatile matter)

Healy-Usibelli

Wishbone Hill (Matanuska Valley, subbituminous: higher carbon, lower moisture)

Beluga (Cook Inlet)

Bering River (Cordova)

Gold: Tintina Gold belt

POGO: Southeast Yukon, ending at Donlin Creek

Fort Knox

Illinois Creek (Viceroy Resources has completed some drilling and is due to decide what role if any they will have with this property soon)

Nixon Fork

Platinum: prices recently hit record highs and there is increased interest in locating these resources in Alaska.

Volcanic Massive Sulfides:

Zinc, Lead, Gold, Silver
Zinc, lead, silver

Greens Creek
Red Dog (60% of the industry in Alaska Includes
deep new -1999-discovery)
North side Alaska range, Richardson district

Uranium: Bokan Mountain, Southeast

DGGS-Geophysical surveys of the Fortymile and Livengood areas were released, and they also participated in a joint Federal-State survey of part of Prince of Wales Island. The release of these surveys is greatly anticipated and are seen as encouragers of exploration.

Cost of survey to the expenditure of exploration dollars in Alaska

DGGS-DMLW working on gathering baseline data for ambient water quality

This information and more can be found in the Annual Minerals Industry report, summaries and tip sheets put out by DCED and DGGS. This information can also be found on the DCED and DGGS websites.

Generally optimistic on the mining industry in Alaska

- Metal prices are increasing
- London Financial Times: showed Alaska dropped only 20% in exploration compared to much higher percentages for other countries, states,
- Net increase of 11,000 new claims last year, meaning new exploration is an indicator of the future, not present health of the mining industry in a region.
- Continuing to remove uncertainty in permitting equals an improved business environment.

Part of my job is fielding questions and providing information on Alaska and the opportunities here, either through the various trade shows in Vancouver and Toronto, Canada and in Alaska and Washington states and via direct inquiries fielded from many locales such as Africa, Australia, Poland, the lower 48 states.

Further, Dick Swainbank in Fairbanks and I provide staff support for the Alaska Minerals Commission members when necessary. This years report was well received and you may have visited personally with AMC members last week during their annual report visit.

This years report of the Alaska Minerals Commission:

Finding A: A crisis in Alaska's ability to issue permits

The loss of DEC funding for a core group of competent, institutionally knowledgeable perimeters *is leaving mining, seafood processors, rural and municipal sewage plant operators and oil field developers at risk.* The ability of the private and public sector to

foster economic development, improve infrastructure and enhance the quality of life in Alaska has been reduced as well.

Essentially, the shift of DEC's water quality program from a General Fund program to a User Pay program coupled with policy direction and the postponement, cancellation or completion of projects has reduced fees to DEC and therefore reduced the ability to continue employing an institutionally knowledgeable core permitting staff.

The mining industry has readily demonstrated its willingness to support the user pay system but this has proved to be an inappropriate system for Alaska. Alaska's industrial sector is not large enough to support ADEC's permitting program through fees on a sustaining basis. A core group of knowledgeable perimeters is necessary to challenge the EPA, other Agencies and environmental groups.

That concludes my presentation. Please call me at 465-5463 with any questions. Thank you for your attention.

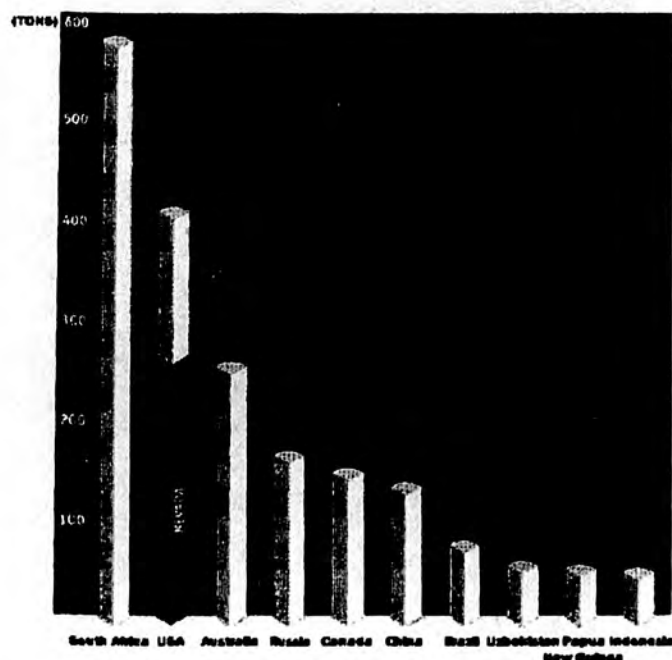
Dr. Lance Miller

Red Diamond Mining Co.

Economic Development and Tourism Committee - February 23, 2000

Report on mineral deposits in Alaska and the global perspective - Lance Miller

- Metal prices, world class mineral deposits (definition) and why companies are working (or at least looking) in Alaska (Fraser Institute Report)
- Mining companies in the late 1990's recognized the need for profits/revenues rather than resources - this resulted in more rigorous project evaluation criteria (grade, size, access)
- The exploration process, why many companies want advanced projects (desire for shareholder equity and return) and the challenges in Alaska
- Alaska in a global perspective & why we need to be competitive (e.g. gold resources in Nevada, Canada, South Africa [1.45 billion ounces of gold], China, Uzbekistan, Australia, Russia)
- Alaska's rich metallogenic framework, where & why different deposit types occur (geologic/deposit history over 400 million years)
- Deposits occur in Alaska of gold, lead, zinc, molybdenum, copper, silver, platinum/palladium, nickel, tin, mercury and rare earth elements
- World class deposits in Alaska (e.g. present/past operations = Red Dog, Greens Cr., Kennecott; undeveloped resources = Quartz Hill, Brady Glacier, Bokan Mountain)
- Sustainable development of Alaska's mineral deposits will be critical for the economic strength of the state
- Future development of mining in Alaska, especially in SE, is severely threatened by impending moratoriums on road construction on national forest lands

PREV**1994 WORLD GOLD PRODUCTION (Top Ten Producers)****WORLD'S TOP GOLD PRODUCING COUNTRIES**

COUNTRY	1984 PRODUCTION TONS	1994 PRODUCTION TONS	% CHANGE 1984-1994
South Africa	683.3	583.9	-10%
USA			
Nevada	66.0	401.6	510%
All Other States	27.4	144.6	430%
Australia	39.1	256.2	560%
Russia	269.0	164.7	-10%
Canada	86.0	146.1	70%
China	59.0	130.0	120%
Brazil	61.5	75.4	20%
Uzbekistan	N/A	64.4	
Papua New Guinea	18.7	60.6	220%
Indonesia	3.6	55.3	1440%



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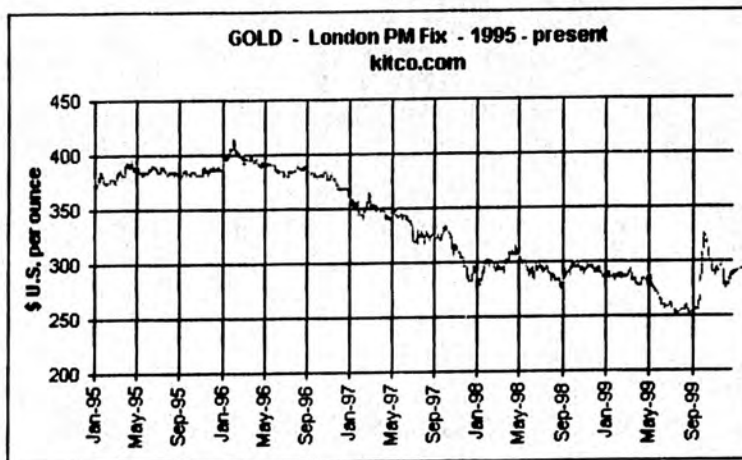
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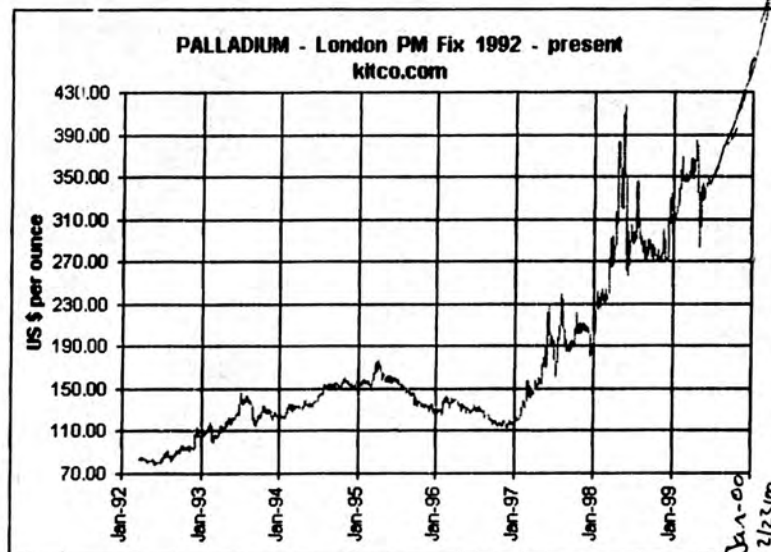
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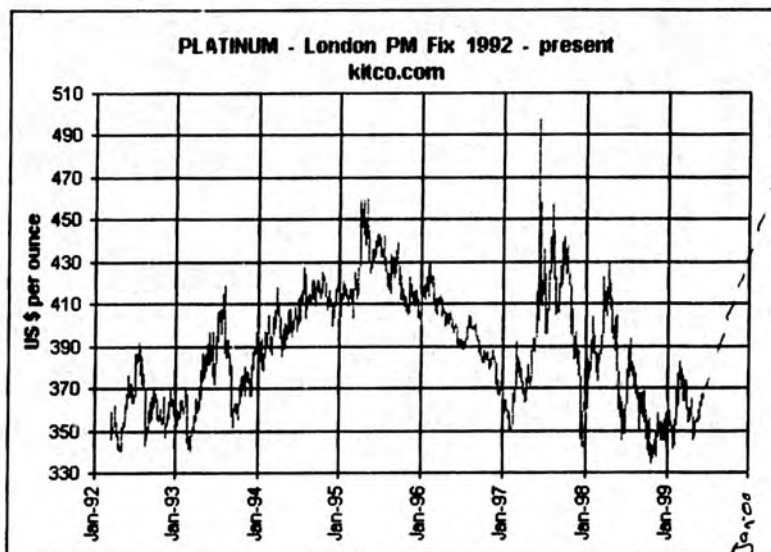
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Annual Survey of Mining Companies 1999/2000:

Executive Summary

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In 1997 the Fraser Institute launched its annual survey of mining companies to assess how various public policy factors such as taxation and regulation affect exploration investment in Canada. The 1998 survey was expanded to include 17 US states, Mexico, and Chile. This year, we have added Nunavut, Texas, Argentina, Australia, and Peru. We look forward to further expanding the survey in the years ahead.

Policy Potential Index: A "Report Card" to Governments

While geological and economic evaluations are always requirements for exploration, increasingly it is a region's policy climate that drives investment decisions.

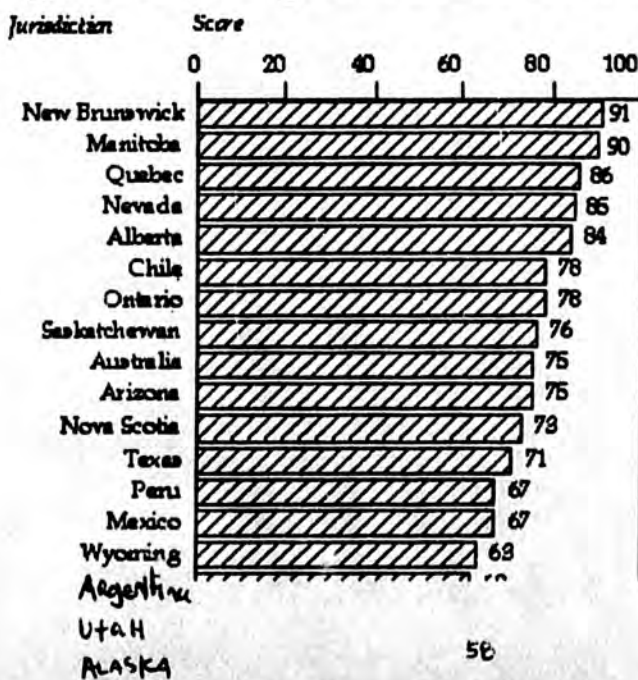
The Policy Potential Index is a composite index that measures the effects on exploration of government policies, including taxation, environmental regulations, duplication and administration of regulations, native land claims, protected areas, infrastructure, labour, and socioeconomic agreements. The highest possible score on this index is 100. The five regions with top ratings for their policy climates include New Brunswick (91), Manitoba (90), Quebec (86), Nevada (85), and Alberta (84). Quebec increased its score dramatically from 59 on last year's survey. The improvement is a result of more favourable ratings in every possible policy category. The worst performing jurisdictions, based on policy, are British Columbia (6), California (17), Wisconsin (18), Montana (23), and Washington, Colorado and Nunavut (tied at 30). British Columbia has been rated the worst jurisdiction for each of the 3 years that the survey has been conducted.

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Figure 1: Policy Potential Index



AK = 19 OF 35

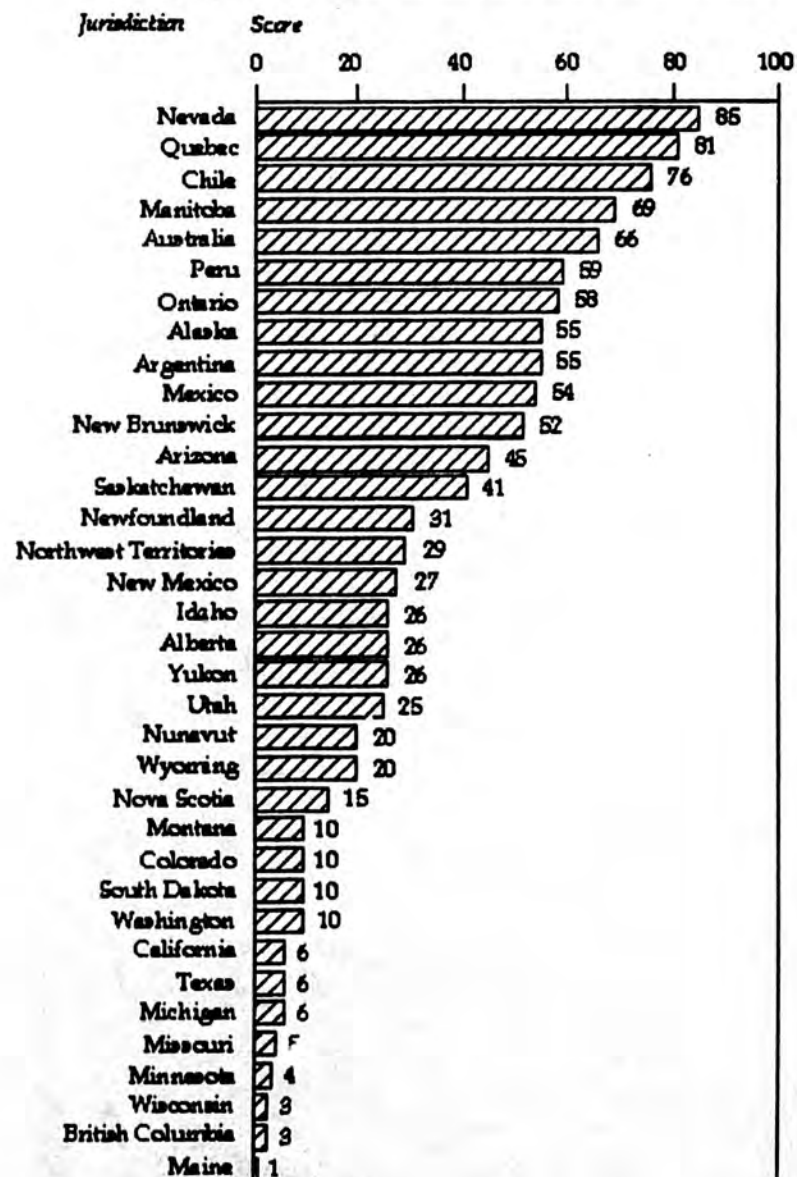
AT BOTTOM
- CAI = 17
= BC = 6

place contenders Chile and Australia in terms of investment attractiveness, even though the two latter countries have reputations of attracting high levels of exploration investment based on mineral potential and favourable investment environments.

Also placing in the top ten jurisdictions for overall investment attractiveness are Peru (59), Ontario (58), Argentina and Alaska (tied at 55), and Mexico (54).

On the other end of the scale, Maine (1), Wisconsin and British Columbia (tied at 3), Minnesota (4), and Missouri (5), were rated the least attractive areas for new mining investment. British Columbia's low rating on the investment attractiveness index is mainly due to its abysmal performance on the policy potential index. Wisconsin's low investment attractiveness score suggests the results of its moratorium on mining and well-publicized anti-mining attitude as well as its low score on the mineral potential index. Maine did poorly because of its bottom rating on the mineral potential index and its mediocre performance on policy. Other low scoring jurisdictions include Michigan, Texas and California (tied at 6).

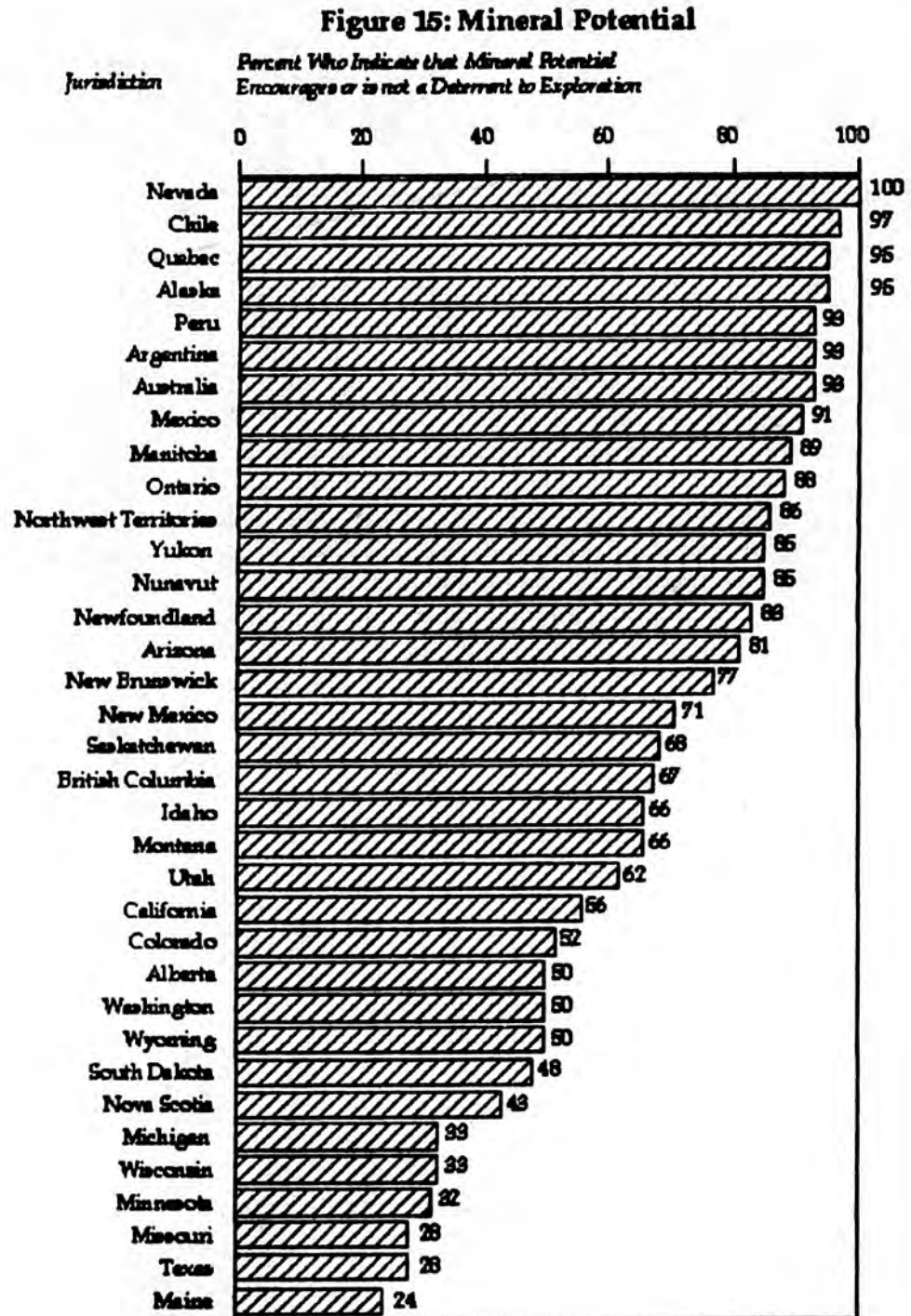
Figure 3: Investment Attractiveness Index



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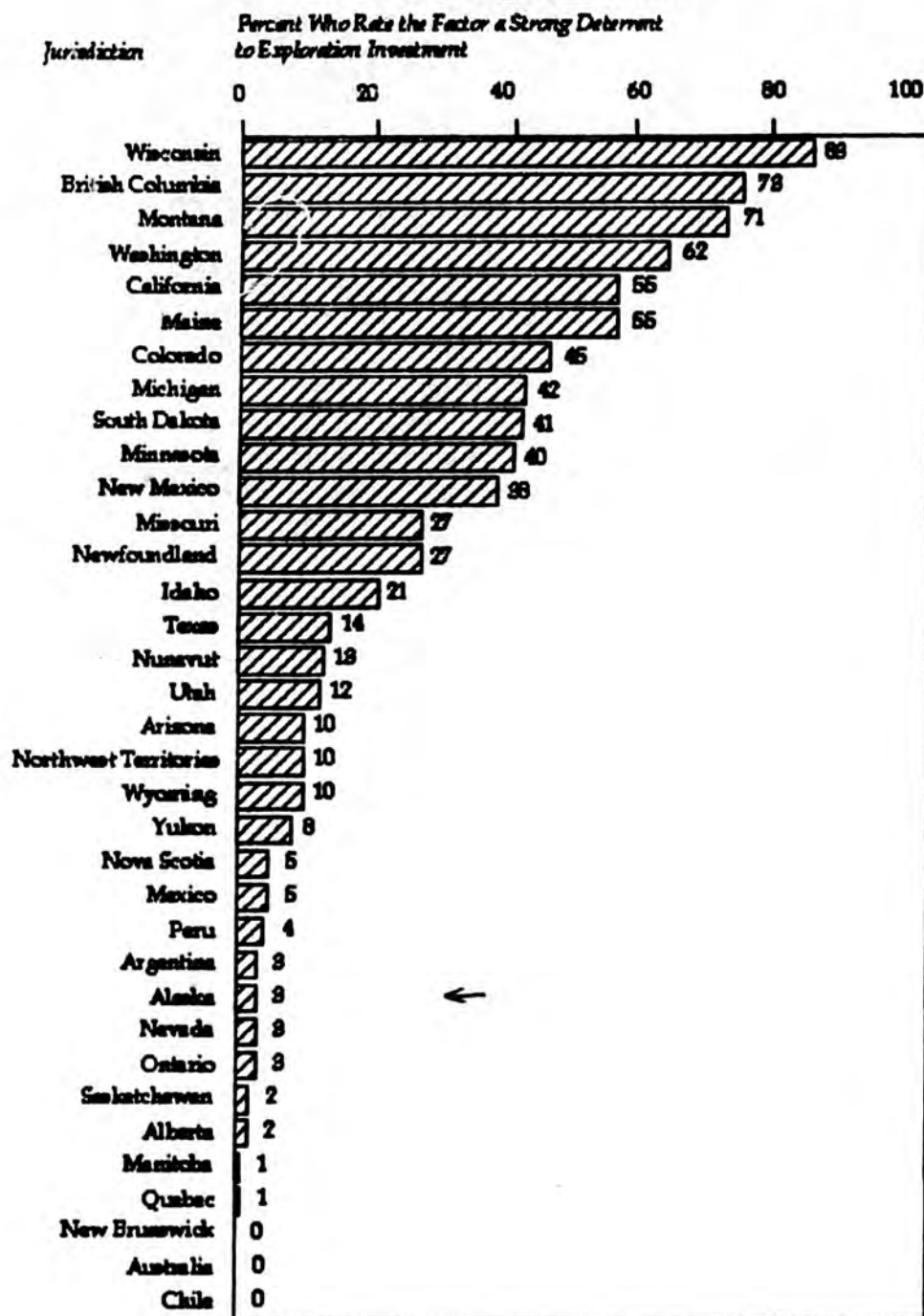
Uncertainty Concerning the Administration, Interpretation and Enforcement of Existing Regulations

"... I was heavily involved in the permitting of a lead, zinc project in British Columbia. This project was the first to go through the new permitting process. The time taken was far and above the set timetable, new issues were constantly tabled after documents were submitted and the costs were far and above those budgeted. This must change or exploration in BC will cease."

- President & CEO of a junior mining company

"Alberta and Nevada show a genuine regard for those persons or companies

Figure 16: Uncertainty Concerning the Administration, Interpretation, and Enforcement of Existing Regulations



Environmental Regulations

"BC must reverse its position/policies on land use. Miners, loggers, ranchers, etc. must be allowed to use the land instead of being legislated and regulated off it."
- Director of a junior mining company

"British Columbia['s] [m]ining policies (moratorium on uranium) and park boundaries (Windy-Craggy) change after the discovery of a deposit." You need "[c]onsistency. Set the rules and guidelines and keep them, so mining companies

will know what to expect."

- Senior Geologist of a senior mining company

"Quebec" has the most favourable policies. "The province is very pro-mining offering incentives and realistic environmental practices."

- Exploration Manager of a junior mining company

"British Columbia's 'Environmental Review Process' is misnamed; in reality it is a 'political review process.' Serious environmental issues and good science take a back seat to political grandstanding and generalized public opinion."

- Vice President of a junior mining company

Figure 17: Environmental Regulations

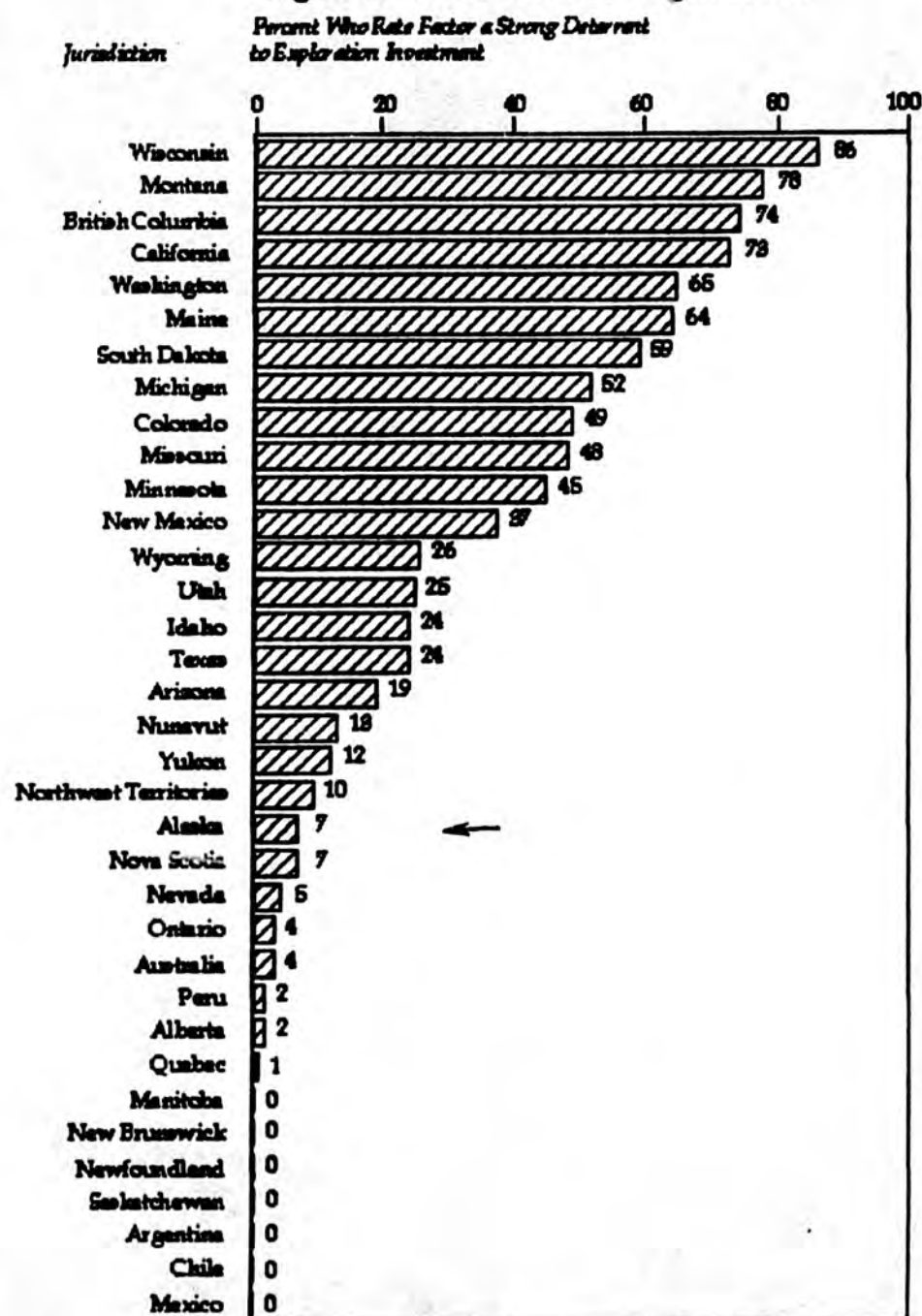
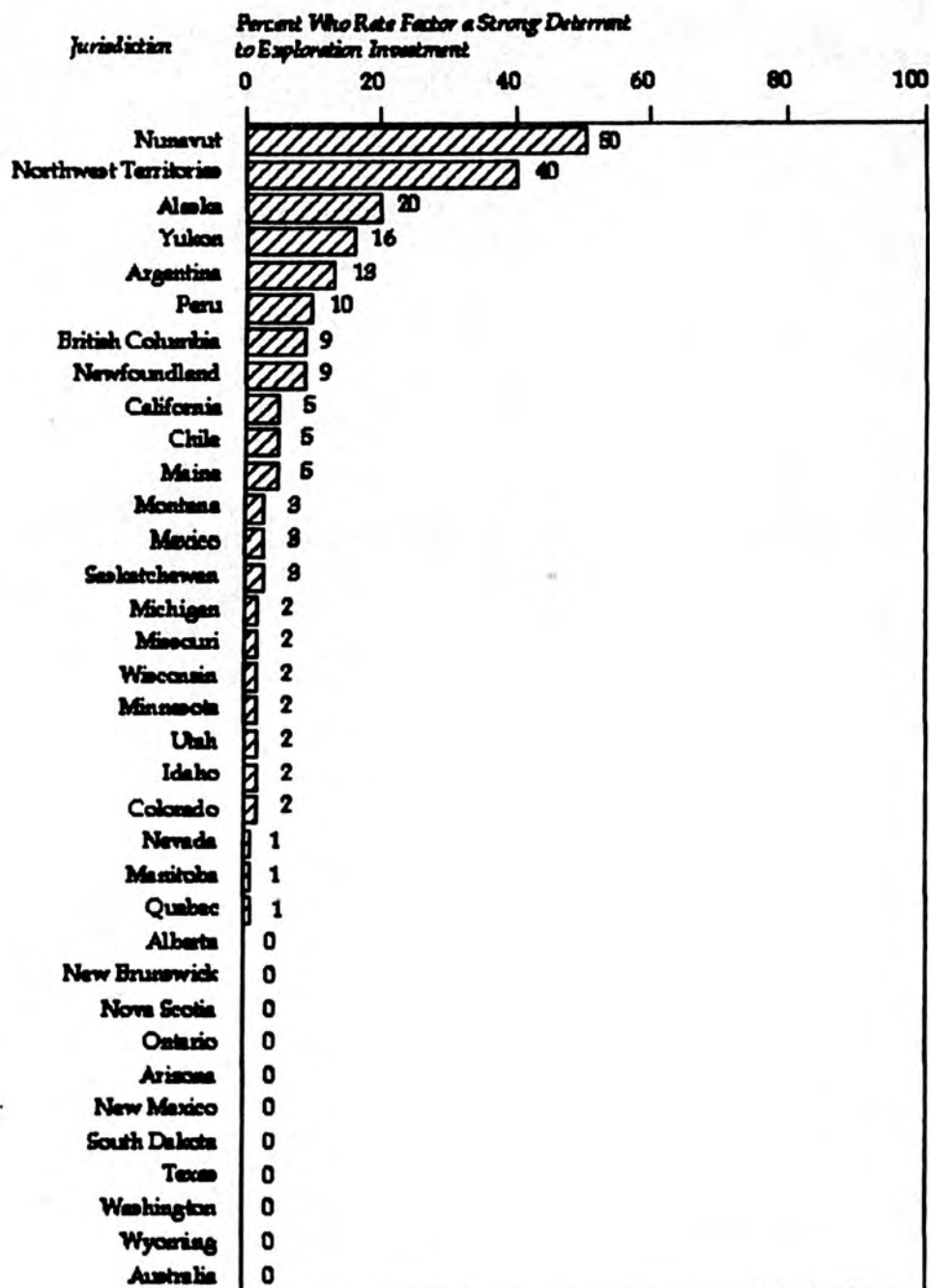


Figure 24: Infrastructure



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EXPLORATION REVIEWS

ALASKA

Regional Correspondent: **Curtis J. Freeman** (SEG 1996)

Avalon Development Corp.

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For the fourth straight year, the value of the Alaska mineral industry has topped the \$1 billion mark. However, mineral exploration expenditures dropped for the first time since 1992, coming in at approximately \$46 million, a decrease of 20% from 1998. The most active region of Alaska was the Eastern Interior, where 72% of total Alaska exploration expenditures was invested on 48 separate prospects. Total gold resources increased 6%, to approximately 60.2 million ounces.

WESTERN ALASKA

Cominco American's as-yet unnamed new discovery, located 6 miles north of the **Red Dog** mine, intersected significant lead-zinc-silver mineralization below a barite cap. That is, if you call intercepts such as 240 feet grading 20% Zn, 5% Pb and 4 opt Ag "significant"!

Viceroy Alaska, a subsidiary of **Viceroy Resources Corp.**, has reached an agreement with the state of Alaska to take over mining and decommissioning of the **Illinois Creek** heap leach gold mine. The two-phase program outlined by Viceroy includes confirmation drilling of the existing reserve base followed by mining and reclamation plans to be submitted by January 31, 2000. Due diligence drilling has been completed and the Tundra Telegraph says the results support continued mining of the deposit.

Placer Dome has reported that its summer drilling efforts confirmed the grade of the 11.5-million-ounce **Donlin Creek** gold deposit.

NovaGold Resources has signed a deal with **Viceroy Resources** on NovaGold's 50 square mile **Rock Creek** project near Nome. Viceroy can earn a 65% interest in the project by expending \$8 million on property exploration, making cash payments totaling \$2 million and completing of a pre-feasibility study. The primary target area encompasses the 720,000-ounce Rock Creek deposit. Viceroy completed minimal work in 1999. NovaGold will act as operator until Viceroy has expended \$5 million on the project.

EASTERN INTERIOR

Kinross Gold's Fort Knox mine produced 97,256 ounces of gold in the third quarter and 265,685 ounces of gold through the first nine months of 1999. Total production for 1999 is expected to reach 60,000 ounces. In late September, Fort Knox produced its one-millionth ounce of gold. The company continued its efforts to evaluate its **Ryan Lode** and **True North** deposits with the goal of bringing their Fairbanks district production to the 500,000-ounce-per-year level by 2001.

Kinross Gold has entered a joint venture agreement with **Teryl Resources Corp.** on Teryl's **Westridge** claims south of the **True**

North deposit. Kinross can earn a 70% interest in the deposit by expending \$1.5 million on exploration and making cash payments to Teryl totaling \$285,000 over 5 years. Minimal work was completed on the **Westridge** claims in 1999.

Tri-Valley Corporation has staked a 10-square-mile area covering a newly identified gold trend on its **Richardson** project in the Richardson district.

The State of Alaska **Division of Geological and Geophysical Surveys** completed its planned airborne geophysical program over about 950 square miles of the **Salcha** and **Goodpaster** mining districts. These surveys are scheduled to be released to the public in early 2000.

Camnor Resources and partner **Oromin Exploration** announced results from their initial work program on the **South Salcha** property in the Caribou district. Three east-west-trending gold-in-soil anomalies were delineated by grid-controlled soil sampling. These anomalies measure 200 meters wide and range from 800 meters to 1,400 meters in length. Altered gneiss and intrusive rocks contain variable amounts of quartz veining with up to 3% disseminated pyrite and 1% disseminated arsenopyrite.

Great American Minerals has joint ventured its **Uncle Sam** properties in the Richardson district to **Kennecott Exploration**. Kennecott can earn a 51% interest in the project by expending \$1.5 million on exploration and making cash payments of \$260,000 over six years. Kennecott can earn additional interest in the property through a series of optional cash payments and work expenditures. Preliminary work on the Uncle Sam prospect revealed gold in rock grab samples up to 0.16 ounces per ton and anomalous gold in soil samples up to 430 parts per billion. The northwest trend of mineralization on the Uncle Sam prospect is parallel to that of the nearby **Pogo** trend.

Teck Corp. and partner **Sumitomo Metal Mining** reported that their 1999 surface exploration drilling program intercepted auriferous quartz bodies in two new areas of the property, one at relatively shallow depths in a water monitoring well in lower **Liese Creek** and another in a shaft pilot hole at depths below previously known mineralization. In addition, two north-trending, steeply east-dipping shear-hosted quartz veins were discovered in the **North Zone**. Updated reserves should be announced before year-end. Drilling also was conducted at the **Sonora Creek** prospect southeast of the main deposit where east-west trending quartz veins along a strike length of several hundred feet have returned some values in excess of 1 ounce per ton gold. A soil grid in this area is reported to be substantially better than the original **Liese** soil anomaly.

Western Keltic Mines and joint owner **Rimfire Minerals** announced additional results from rock samples on the **Boundary** and **Southeast Surf** prospects. The Boundary prospect returned gold in excess of 100 ppb in 20 of 54 rock samples collected with the highest value being 0.72 opt Au. Anomalous gold is associated with bismuthinite and arsenopyrite. The results of 472 soil samples collected in Phase 2 defined a 1,400 by 700 meter gold anomaly with values ranging from 10 to 240 ppb within a broader arsenic and bismuth halo measuring 3,000 by 5,000 meters. Work on the Southeast Surf consisted of collection of 349 soil and 42 rock samples which defined three separate gold anomalies ranging from

700 by 2,500 meters to 300 by 1,500 meters, with gold values ranging from 10 to 90 ppb. Sixteen of 42 rock samples collected returned gold values greater than 100 ppb, with values ranging up to 0.13 opt Au. Most of the anomalous samples were from the **Spur** zone, located directly uphill from one of the newly identified soil anomalies. Gold is associated with up to 4% arsenopyrite in milky to vuggy quartz veins hosted by altered granitic rocks. Anomalous gold also was discovered in the **Ol' Timer** prospect, where it occurs in association with arsenopyrite-bearing quartz veins hosted in sericite-altered augen orthogneiss.

Copper Ridge Exploration announced the results from 325 soil samples collected during its Phase 2 field program on its **Goodpaster** claims north of **Pogo**. Anomalous metals include gold (up to 273 ppb), arsenic, bismuth, lead, antimony, and tellurium. Three anomalous areas were defined, including an area measuring approximately 1.5 by 1.5 miles on the western end of the project, where gold values show a close association with bismuth, arsenic, tellurium, and lead. The target overlies gneissic rocks which are similar to those hosting the Pogo deposit, as well as rocks of the Goodpaster batholith.

Hyder Gold and joint venture partner **Rimfire Minerals** announced the results of Phase 2 soil and rock sampling on their **Eagle** and **Bou** prospects in the southern Goodpaster district. Work on the Eagle prospect consisted of collection of 548 soil samples which returned gold values up to 320 ppb over a 3,000 by 1,500 meter area. Anomalous gold is associated with anomalous bismuth, arsenic and antimony. Gold in rocks returned values up to 615 ppb from quartz veins in Cretaceous granite. The company also announced discovery of two new showings, the **Thunder** and **Cairn** prospects on their Bou property. Rock samples from the Thunder showing returned gold values up to 2.16 grams per tonne over a 300 meter long northeast trending rubble-crop zone. The Cairn showing, located 1,500 meters south of the Thunder showing, returned gold values up to 2.92 g/t over a 700 meter long east-west-trending rubble-crop zone. Grab samples with values up to 3.96 g/t were found elsewhere on the Bou property.

Almaden Resources and **Williams Creek Exploration** announced that initial stream sediment sampling on their **Sonora** claim block south of the **Pogo** deposit has outlined anomalous gold in four streams draining a common ridge in one area of the property and anomalous gold in two other drainages. Additional work is being planned for next season.

Ventures Resource Corp. and **Teck Corp.** announced preliminary results from their **Veta** property joint venture. Their joint venture completed 8,000 feet of core drilling in 10 holes on the **North Veta** and **Serpentine** prospects in 1999. The best intercept from the five drill holes on which assays have been released was 23 feet grading 0.03opt Au. Results are pending on the other drill holes. Extensive stream sediment and pan concentrate sampling returned anomalous gold values over a widespread area of the North Veta property.

Cusac Gold Mines Ltd. announced acquisition of the 8,000-acre **Moran dome** prospect in the Melozitna district. Cusac can earn an 80% interest in the property from **Cariboo Drilling Co.** by paying US\$10,000 and issuing 400,000 Cusac common shares. Previous work on the property indicated anomalous tin, tungsten, and lead in alluvial gold concentrates and anomalous gold in stream silts from five areas of the property.



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- consulting
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... from 31 EXPLORATION REVIEWS, CONT.

ALASKA RANGE

Atna Resources and **Grayd Resources** announced results from their 10,260-foot, 14-hole diamond core drilling program on the **Dry Creek** volcanogenic massive sulfide deposit in the Bonfield district. Significant widths of massive to semi-massive sulfide mineralization were encountered, however base metal grades were generally lower than drilling results in 1998. With the results from three holes still pending, the best intercept to date graded 3.37% Zn and 1.09% Pb over 14 feet in hole DC99-66. The results prompted **Atna** to terminate its interest in the **Dry Creek** and **Anderson Mt.** projects.

Diamond drilling by **Camnor Resources** and partner **Oromin Resources** on the **Discovery** zone at the **Cirque** volcanogenic massive sulfide prospect in the Bonfield district intercepted 5.5 meters grading 2.84 g/t Au, 74.5 g/t Ag, and 8.08% Zn, 2.11% Pb and 1.36% Cu. The **Discovery** zone has been traced for 700 meters along strike to the west to the **JA** prospect and remains open along strike and down dip to the north. Additional lower grade mineralization was intercepted at the **Dol** zone located 500 meters north of the **Discovery** zone and 250 meters lower in elevation.

Atna Resources diamond drilled three holes totaling 2,442 feet on the **Caribou Dome** stratiform copper project in the Valdez Creek district. Drill intercepts include 5 feet of 5.9% Cu and 5 feet of 1.9% Cu. Geophysical surveys indicate the mineralized horizons extend for up to 700 feet west of the **No. 2 zone** and also identified a 600-foot-long anomaly south of, and parallel to, the eastern mineralized zone.

Additional high-grade gold was discovered by **Grayd Resources** on their **White Gold Trend** on the **Rumble Creek JV** in the Delta District. Results included 61.4 g/t Au in a grab sample at the **Low Showing**, 19.7 g/t Au from a pit sample near the **Goldberg Saddle** and 1.6 g/t Au over 15 meters in a hand trench on the **Low Showing**. Mineralization is associated with low-sulfide quartz-sericite alteration and is part of an 8-kilometer-long trend.

Fort Knox Gold Resources has signed an agreement with **American Copper and Nickel Company (ACNC)** to acquire 100% interest in ACNC's **Nikolai** property in the central Alaska Range. **Fort Knox** intends to focus on the platinum and palladium potential of the property rather than the copper-nickel potential, which was the subject of previous exploration. Values up to 1.8 g/t Pd were recovered on the **Canwell** prospect, while values up to 15.6 g/t Pt and 2.6 g/t Pd were collected on the **Odle** prospect.

SOUTHEAST ALASKA

Kennecott (70.3%) and **Hecla** (29.7%) reported that the **Greens Creek** mine produced 2,575,718 ounces of silver at a cash cost of \$1.89 per ounce during the third quarter of 1999. Total production costs were \$4.33 per ounce of silver. The mine also produced 20,423 ounces of gold, 6,824 tons of lead and 18,193 tons of zinc in the quarter.

Rubicon Minerals announced additional results for the newly discovered **RW** massive sulfide showing at its **Palmer** volcanogenic massive sulfide project near Haines. Hole **RMC99-13** intersected 7.2 feet grading 13.48% Zn, 0.21% Cu and 0.37 opt Ag. This intersection extends mineralization 260 feet downdip below previous drilling.

Mineral Deposits of Alaska

Preface

LANCE D. MILLER

Echo Bay Mines, 3100 Channel Drive, Juneau, Alaska 99801

AND RICHARD J. GOLDFARB

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Mineral resources have been important to the Alaskan economy for hundreds of years. The Indians, Eskimos, and Aleuts used gold, copper, and other metals for jewelry, utensils, and weapons and as items of trade. The Russians, who arrived in 1728, showed only minor interest in minerals, focusing instead on furs. Nonetheless, records show that they mined iron ore on the Kenai Peninsula in 1793 and located gold there in 1834. In addition, the Russians were aware of copper-rich occurrences in the Copper River basin.

The mining industry grew rapidly in Alaska after the United States purchased the region from Russia in 1867. By 1870, gold was being mined near Windham Bay and near Sitka, in southeastern Alaska. The first major hard-rock gold mining began at the Alaska-Juneau, Perseverance, and Treadwell mines near present-day Juneau following the discovery of placer gold near tidewater in 1880. Significant placer mining operations for gold soon spread northward into districts such as Fairbanks, Nome, Iditarod, and Circle.

The exploitation of mineral resources, particularly gold, influenced the settlement and development of much of the state. Major cities such as Nome, Fairbanks, and Juneau, the capital, were originally built around early mining camps. By 1996, more than 33 million oz of gold, as well as significant amounts of copper, lead, zinc, silver, and platinum-group elements, had been produced. In addition, there has been minor production of nickel, tin, mercury, and uranium.

Alaska is presently experiencing a renaissance in mining on federal, state, private, and native lands. From 1990 to 1996, the minerals industry had an annual value of approximately \$600 million, with a record 1 billion in 1996. Nearly 3,500 year-round jobs were directly attributed to the minerals industry. Looking forward into the twenty-first century, the outlook is even better. Major mines such as Red Dog are in production. Recently completed exploration at the Red Dog sedimentary exhalative deposit has significantly expanded the reserve base and major mine expansion is contemplated. The Nixon Fork gold skarn deposit was put into production in 1995, with the first ore poured in November. The Greens Creek mine resumed production in late 1996, following renewed exploration and development of the volcanogenic massive sulfide deposit. The Fort Knox gold mine, near Fairbanks, is under construction and is scheduled to yield ore by late 1996. In southwest Alaska exploration success has yielded a significant gold resource at Donlin Creek. In addition, the Kensington-Jualin project is at an advanced stage. Recent actions by the state of Alaska with regard to government-sponsored geophysical mapping, land-use priorities, environ-

mental regulations, taxation, and mineral exploration incentives suggest that responsible growth of the minerals industry will be favored there as projected oil-based revenues decline sharply throughout the remainder of the decade.

Alaska clearly remains elephant country, as evidenced by the discovery of four world-class ore deposits (Greens Creek, Red Dog, Fort Knox, and Quartz Hill) in the past twenty years. Because of the great mineral potential of the state, we believe this monograph will serve as a useful guide to the economic geology of the many and varied mineral deposit types within Alaska. Much of the description will remain useful well into the future. Some of the interpretations may indeed change as more information becomes available about specific deposit types; however, the genetic models presented here reflect our geologic understanding of these mineral systems in the 1990s. In addition to being a useful reference for mineral deposits in the state, the metallogenic setting of Alaska's deposit is similar to other parts of the Pacific Rim, where much exploration and mining is presently being focused. Therefore, this monograph should also be a useful reference for geologists working in cordilleran-type settings that extend beyond the borders of Alaska.

This monograph contains 15 papers. The first is an overview describing the metallogenic evolution of Alaska. Goldfarb (1997) takes us forward in time and synthesizes the tectonic development of Alaska and associated ore formation in oceanic environments between 700 and 150 Ma. Deposits associated with oceanic settings include shale-hosted Zn-Pb-Ag, carbonate-hosted copper, and polymetallic volcanogenic massive sulfide deposits. The last 150 m.y. are characterized by collisional tectonics, voluminous calc-alkaline magmatism, and the formation of epigenetic Cu and Mo porphyry deposits, skarn deposits, epithermal precious metal systems, Fe-rich Alaska-type zoned ultramafic bodies, and mesothermal gold lodes.

Among the world-class ore deposits in production in Alaska, the Red Dog mine stands out. In the paper on shale-hosted Zn-Pb-Ag and barite deposits of Alaska, Schmidt (1997a) describes Red Dog as a vent-dominated end member of the shale-hosted type of massive sulfide deposits. Most of the significant shale-hosted mineralization in northern Alaska is shown to be within Carboniferous rocks that are mainly associated with restricted basins proximal to extensional faults. In a related chapter, Schmidt (1997b) describes two types of strata-bound carbonate rock-hosted deposits in nearby platform environments that represent additional base metal-rich exploration targets developed along the passive

North American Paleozoic continental margin. The first type, which she favors as being similar to Mississippi Valley-type or Irish-type deposits, includes Zn-Pb $\pm$ Ag stockworks, lenses, breccias, and disseminations; the second deposit type includes epigenetic stockworks of Cu-Co $\pm$ Zn. Schmidt synthesizes and presents the available information on both the shale- and carbonate-hosted deposit types, concluding each chapter with a discussion of the potential for favorable host rocks in Alaska.

It takes a rare deposit to make a major mining company, such as the replacement copper ores in the Wrangell Mountains did for Kennecott. In the paper on the Kennecott deposits, MacKevett, Cox, Potter, and Silberman (1997) describe and evaluate the unique setting of these deposits and propose a model of ore genesis in which oxidized copper-bearing brines circulated through the Nikolai greenstone. The copper was deposited at low temperatures in karst-type openings that exploited a series of northeast-striking joints. Although this type of deposit is not widely recognized, its characteristics serve as a reminder that not all deposit styles fit established models. Hence, the explorationist should beware.

Ninety percent of the gold production in Alaska has been derived from Cretaceous and early Tertiary lode deposits and associated placers in metamorphosed terranes. In the paper on gold deposits in metamorphic rocks of Alaska, Goldfarb, Miller, Leach, and Snee (1997) present the regional setting as well as the geochemical, structural, and mineralogical characteristics of the major lode systems in the state. These deposits all formed under mesothermal pressure-temperature conditions in greenschist facies rocks. Mass balance work supports the hypothesis that gold was mobilized from background concentrations in midcrustal rocks and that the ore-transporting fluids have a metamorphic signature. Goldfarb and the others summarize their paper with a genetic model in which the lode deposits are shown to have commonly formed in second- and third-order structures in convergent tectonic settings. Although their paper is an overview, much specific deposit information is introduced that will help the explorationist.

Three other papers are concerned with epigenetic gold-bearing lodes in Alaska. Two of these discuss the auriferous ore settings in east-central and southwestern Alaska, where data from fissure-type veins and stockwork systems are interpreted as showing distinct genetic relationships with magmatism. In a paper on precious metals associated with Late Cretaceous-early Tertiary igneous rocks of southwestern Alaska, Bundtzen and Miller (1997) describe the deposits in the Kuskokwim mineral belt and define a metallogenic model for the development of the gold-silver-polymetallic deposits of the region. This paper is an excellent descriptive summary of an underexplored region in Alaska that has recently been the focus of widespread exploration efforts, with recent exploration success at Donlin Creek. With the discovery and development of the Fort Knox deposit during the past few years, there has been a boom in exploration and development in the Yukon-Tanana terrane in east-central Alaska and adjacent Yukon Territory. Recent exploration successes at the True North and Stone Boy projects have highlighted the need for reassessment of exploration models. The magmatic origin for mid-Cretaceous gold systems in this area is explored and

discussed in the paper by McCoy, Newberry, Layer, DiMarchi, Bakke, Masterman, and Minehane (1997). The authors integrate new $^{40}\text{Ar}/^{39}\text{Ar}$ ages with fluid inclusion and stable isotope data to support a model in which low-salinity, CO_2 -rich, gold-bearing fluids were derived from the evolving magmas of host intrusions.

The paper by Gray, Gent, Snee, and Wilson (1997) describes the geologic and geochemical setting of epithermal Hg-Sb veins of southwestern Alaska and epithermal gold veins of the Alaska Peninsula and the Aleutian Islands. These regions represent parts of the state where shallow crustal rocks are still preserved and are therefore favorable for epithermal ore deposits. New geochronologic data from the Hg-Sb vein deposits temporally link ore formation to Late Cretaceous magmatism. Significant precious metal exploration targets may exist at depth in these systems, with Au-As-W-rich mineralization occurring below exposed Hg-Sb ores. Perhaps more intriguing, from the standpoint of exploration, is the potential for large epithermal lode gold systems associated with Tertiary volcanic rocks on the Alaska Peninsula. Gray and the others forward the hypothesis that the gold-bearing systems may be associated with arc-related Cu porphyry systems. Between the remoteness of the region described in this paper and the extensive magmatic activity of the Aleutian arc, the potential for discovery of significant new ore systems is high.

The voluminous information on Alaskan volcanogenic massive sulfide deposits is brought together in the paper by Newberry, Crafford, Newkirk, Young, Nelson, and Duke (1997b). Spatially distributed throughout much of Alaska, such deposits provide exciting exploration opportunities for precious and base metals. Past development of Late Cretaceous, Tertiary Cyprus-type, and Besshi-type ores characterizes much of the Prince William Sound area. The Late Triassic belt of mainly kuroko-type systems within rocks of the Alexander terrane in southeastern Alaska and British Columbia includes the huge Windy Craggy deposit and the extremely precious metal-rich Greens Creek ores. Early Paleozoic massive sulfides in the southern part of southeastern Alaska have been the focus of consistent industry attention during the past few years, and middle to late Paleozoic ores of the Ambler district in northwestern Alaska are again being evaluated. The paper by Newberry and the others describes and catalogs these deposits in addition to presenting interesting models for exploration.

Young, St. George, and Bouley (1997) address the tectonic association of porphyry copper occurrences through time in Alaska. Over the geologic history of the state, the authors identify ten distinct episodes of porphyry copper formation. Computer-generated palinspastic reconstructions are used to place these episodes in appropriate tectonic settings. The most abundant and the most economically significant occurrences are associated with Cretaceous intermediate igneous rocks. In the paper on molybdenum porphyry occurrences, Ashleman, Taylor, and Smith (1997) present the most detailed geologic description to date on Quartz Hill, one of the largest porphyry molybdenum deposits in the world. They tie a detailed understanding of the local deposit geology to the current models of porphyry systems to develop an improved genetic model for Quartz Hill. Development of such a local

model has been a long-term problem, because Quartz Hill shows features characteristic of both typical subduction-related ore systems and Climax-like, rift-related porphyry bodies.

The paper on skarn deposits of Alaska by Newberry, Allegro, Cutler, Hagen-Levelle, Adams, Nicholson, Weglarz, Bakke, Clautice, Coulter, Ford, Meyers, and Szumigala (1997a) describes over 300 skarn deposits and occurrences throughout Alaska. This paper is an extensive compilation of published material as well as recent research by the authors. As an interesting exploration guide, the authors suggest that although the host terrane seems to have little influence on the type of skarn, it may influence pluton composition, which will in turn control the skarn oxidation state. Additionally, Newberry and the others forward a model whereby the metals are derived from the plutons. After presenting all their descriptions and data, the authors point out how pluton characteristics should be used in skarn exploration.

Mafic and ultramafic complexes account for the production and existing resources of platinum-group elements, asbestos, and iron in Alaska. In the paper on mineral occurrences associated with these complexes, Foley, Light, Nelson, and Harris (1997) classify these igneous rock types based upon age, lithology, tectonic setting, structural and petrologic features, and metallogeny and identify five distinct types of related ore deposits. For the precious and base metal explorationist, this paper will provide some intriguing ideas for targets, since many of the platinum-group element placer and lode deposits also have yielded by-products of gold, silver, and copper.

Tin has not received the same attention that precious metals have in Alaska; however, Hudson and Reed (1997) forward the suggestion, based upon their geologic models, that under the right economic conditions, the state could be a significant producer of tin. They describe tin deposits associated with placers, veins, skarns, and greisens. Their optimistic view of the potential for significant discovery of tin is based upon the link between widespread Middle Cretaceous crustal melting in central and western Alaska and their new recognition of a broad regional tin belt.

Uranium, thorium, and rare metal deposits are uncommon in Alaska, but minor production of uranium has occurred from Bokan Mountain, in southeastern Alaska. In the paper on rare metal deposits, Thompson (1997) describes the igneous-hosted uraniferous Bokan Granite Complex and the sedimentary rock-hosted Death Valley deposit on the Seward Peninsula. Although the economic outlook for uranium is bleak, this paper presents some important geologic characteristics of unique mineral deposits that may provide economically valuable minerals in the future.

The metallic minerals industry has figured significantly in the economics of Alaska and the future looks bright, but few all-encompassing geologic references are available that detail the numerous and varied mineral deposit types of the state. The lack of a comprehensive, up-to-date reference on the economic geology of Alaska has spurred the idea of this mono-

graph. Such an effort was deemed timely given the resurgence of exploration and mining in the 1980s and 1990s, both in the state and internationally. Three years of work has culminated in this volume.

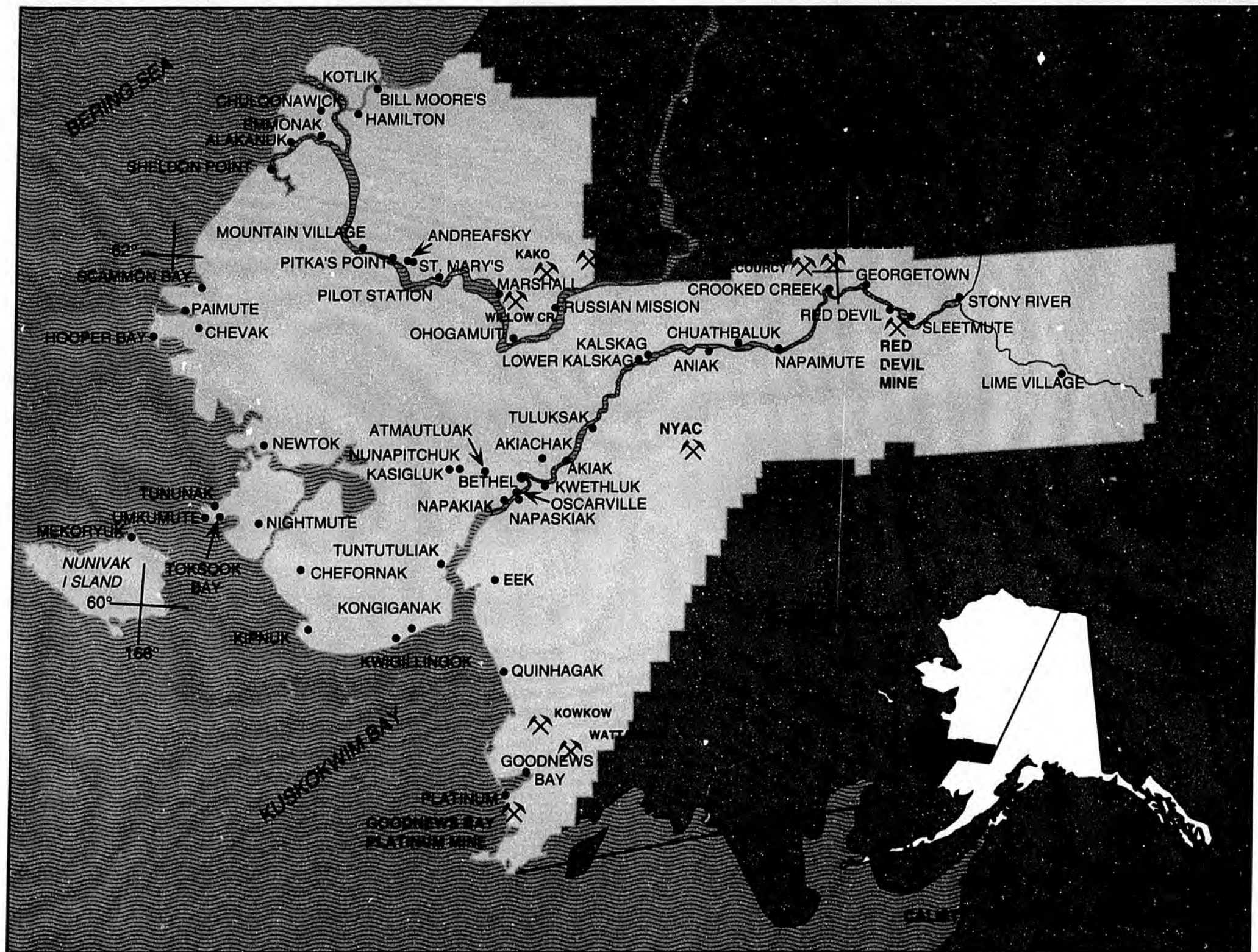
This monograph is a team effort representing the work of 48 authors and some 35 *Economic Geology* reviewers, each of whom devoted much free time to this project. In addition, various companies and organizations have generously contributed money to help defray printing costs. The contributors include Cominco Exploration, Cyprus Metals, Echo Bay Mines, Kennecott Exploration, Placer Dome U.S., Inc., and Sealaska Corporation. We thank the numerous people and companies who have been connected with this project.

We hope the reader will find this to be a useful volume on the geology of Alaska's mineral deposits. We are excited about what the future holds for the development of mineral resources in Alaska. Clearly, a sound knowledge of the economic geology of Alaska's mineral deposit types is integral to successful exploration and development of these resources.

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June McAtee
Calista Corporation
Donlin Creek Project



Donlin Creek Project

- Placer Dome has been actively exploring since 1995 and has spent approx. \$30 Million to date on a camp supported exploratory drilling effort (More than 400 drill holes completed)
- Results indicate a measured, indicated and inferred gold resource of 11.5 million ounces (about 360 tons of gold) in the ground.
- Region lacks infrastructure resulting in high capital cost (power, roads, river port, etc...)
- Remote location - May require 400 barge trips per year during operation of mine.
- Seasonal shipping window is 100 days - Requires significant inventory of materials.

zero tolerance drug free zone w/mandatory drug testing
Banking Capabilities



Shareholder overview

Donlin Creek Project

●	Year	95	96	97	98	99
● Employed		20	172	91	55	28-40
● Wages (in thou)	\$122	1,174	976	664	700	
● % of Workforce	50	51	56	55	50-70	
● % Turnover	20	250	22	22	8.2	



**REQUEST FOR FUNDING
PRELIMINARY ENGINEERING AND DESIGN
CROOKED CREEK DONLIN CREEK MINE ROAD**

PROJECT BACKGROUND

The Donlin Creek mine is a lode-gold exploration project located 15 miles north of the village of Crooked Creek (population 144). Small placer mining operations (total production 35,000 oz.) have been present in the area since 1915. In the mid-1980's, Calista geologists determined that a significant lode source could exist in the uplands above the existing placer mining operations near Snow Gulch.

In 1988 and 1989 Western Gold Mining and Exploration Ltd. (WestGold) spent \$2 million drilling and trenching the Donlin Creek deposit. Based on their fieldwork they estimated the Donlin Creek gold reserve to be over 400,000 ounces. In 1995, Placer-Dome North America (PDNA) operated a \$2 million exploration and drilling program. In 1996 and 1997 they extended \$18 million on additional drilling and exploration work at Donlin Creek, delineating a 3.6 million-ounce gold resource. Successful field results in 1998 produced an estimated 11.5 million ounces of resource which could lead to a preliminary mine feasibility determination by the end of 1999.

The level of exploration and financial investment PDNA is making at the Donlin Creek Project is a sign this area is considered a very advanced exploration property. The actual development cost for a mine facility will require an outlay of more than \$600 million dollars. The construction of an access road is just one of the costs associated with developing a producing mine. It is in the best interest of the mining industry that the State of Alaska encourages the development of remote mines.

An airstrip suitable for Hercules and DC-6 type aircraft was constructed at American Creek. Although it was expensive, Placer-Dome and Calista believed the expenditure was necessary to conduct advanced exploration. The airstrip will meet this project's needs for exploration support, but it will not be sufficient for use during actual construction and development of a mine. Long-term mine development will require access to the mine site over land. Over the next two years, it is essential to link the mine site with the Kuskokwim River via a road.

There is minimal road access to the Donlin Creek area. A pioneer road is in place from the placer mine sites at Snow Gulch and Queen Gulch. PDNA constructed an additional one and one half miles of road during 1997 from Queen Gulch to American Creek. The road provides access to the general location of the exploration camp, which was constructed in 1996. The road project and campsite represent a very high level of commitment by PDNA to undertake a viable exploration program to prove up the gold reserve in the area.

PROJECT DESCRIPTION:

Road access from the Kuskokwim River is required to move equipment, supplies and materials into the Donlin Creek area. Engineering studies to design and site a 24-mile road from Donlin Creek South, down the Crooked Creek valley, which terminates on the Kuskokwim River about 0.5 miles South of the Jungjuk Creek confluence, along with construction cost estimates, are required before actual road construction can begin.

Work which needs to be completed as soon possible includes; a) a preliminary engineering analysis, including the delineation of alternative and initial cost estimates and; b) soil borings at critical points along the proposed road alignment and at potential material sites to determine soil suitability. A field program can be completed using locally available equipment and manpower during late winter and early spring. It is estimated that the preliminary engineering and design work will cost \$500,000 for engineering services and field studies. An engineering study will identify a suitable road alignment and determine construction costs. Other work needed is an examination of available mapping and further investigation into the environmental issues so the cost estimate can be finalized.

SUMMARY OF DESIGN STUDY SCOPE OF WORK BY TASK

1. Establish Land Ownership for route area
2. Control Survey GPS
3. Air Photo Mapping
4. Route Engineering
5. Geotech Field Work
6. Bridge, Drainage and Alignment Refinement
7. Environmental and Assessment
8. Cost Estimating

PROJECT JUSTIFICATION

The Kuskokwim Corporation, representing 10 villages in the upper Kuskokwim River, are in favor of this project. They will be sending in a resolution or letter of support for this project. Immediate benefits will be to employment of local residents during the construction of the road. It is estimated that during construction of the road it could employ in the neighborhood of 30-50 employees. The road will provide a critical link between the Kuskokwim River, and the mine and campsite at American Creek and Snow Gulch. Without a road, it will be difficult to move equipment and materials to the mine site for the construction and operation of a producing mine. The development of a mine in the region will provide a significant amount of employment opportunities for many years to come. Provided the exploration site does become a mine it is anticipated that 600 employees will be needed during the construction phase, and thereafter for operations an estimated 400 permanent jobs will be needed.

Unappropriated Federal Lands	7.3 Miles
State Selected	6 Miles
ANCSA Selected	1 Mile
ANCSA Conveyed	7.47 Miles
	24.8 Miles (estimate)

**Carl Hanneman
Teck Resources
Pogo Project**

POGO PROJECT UPDATE

Karl Hanneman, Alaska Regional Manager, Teck Resources, Inc.

House Economic Development Committee

February 23, 2000

Pogo: Gold deposit containing 5.6 million ounces, gross value of \$1.5 billion.
Owners: Sumitomo 60%, Teck 40%
Operator: Teck Resources, Inc.
Location: On State land 35 miles northeast of Delta Junction.
Status: Phase I. Surface Exploration, *(This phase began in 1981, drilling began in 1994, and is ongoing each summer season).*
Phase II. Underground Exploration *(This phase began on March 5, 1999 expected duration, 12-18 months)*
Phase III. Environmental Assessment and Feasibility Study, 1-2 years *(This phase is underway)*
Phase IV. Permitting, 1-2 years
Phase V. Mine Construction, 1-2 years
Phase VI. Operating Life of Mine, 10-15 years
Phase VII. Reclamation

Phase II work is proceeding well. Work began March 5, 1999 with a crew of 35-40 and the tunnel being excavated toward the underground deposit is now 3,500 feet long. This tunnel will provide access to the deposit in order to obtain engineering data about the underground rock strength, projected water inflows, uniformity and extent of mineralization, and practicality of potential mining methods. This information will be used in the upcoming project design and feasibility study that is central to the determination of the economic viability of the deposit. As of February 23, there remain several hundred more feet of tunnel to complete before the deposit is reached.

The heavy equipment necessary to complete the tunnel was hauled to the site over a winter road along an existing RS2477 trail up the Goodpaster River valley during the winter of 1997-1998. Additional fuel and supplies required since that time have been flown to the site via a 1,500 foot airstrip.

Environmental baseline information is being collected in many disciplines, including water quality, air quality, wetlands, fisheries and wildlife. This information will be used to better understand the local environment and to help project designers minimize impacts of any development.

The infrastructure options available to support a future mining operation will have a critical impact on the economic viability of the operation. On-site versus off-site electric power generation and access alternatives of air support, annual winter road, or all-season road are being studied.

PROJECT POTENTIAL

- \$200-250 million construction cost
- 350-450 construction jobs during peak of 2 year construction
- \$125 million annual production
- 10-15 year project life
- 200-300 year round high quality private sector jobs

**Frankie Pillifant
Divison of Trade (DCED)
& Ak. Minerals
Commission**

February 22, 2000

**Mining Industry update for
House Special Committee on Tourism and Economic Development
By Frankie Pillifant**

Thank you for inviting me to talk with you about the mining industry in Alaska. My name is Frankie Pillifant and I work as a Minerals and Mining Development Specialist for the Department of Community and Economic Development, Division of Trade and Development. Today I will help set the stage for the other invitees to discuss in more details the points brought up by myself.

Despite record low prices for metals and coal, the preliminary estimates for 1999 mineral industry are \$45 million invested in exploration; \$18 million invested in development projects and \$986 million in production valued overall at \$1.049 billion. Several medium sized mines, Illinois Creek, Nixon Fork, Alaska Gold (Nome Placer) and a number of small placer mines were closed in 1999. Red Dog near Kotzebue increased production and continues to be the world's largest producer of zinc. Greens Creek mine on Admiralty Island remains one of the largest producers of silver in the U.S. Fort Knox mine near Fairbanks is Alaska's largest gold producer with an average daily production of approximately 1,000 ounces of gold. The Pogo gold deposit north of Delta spurred 60% (approximately \$30 million dollars) of the exploration conducted in Alaska this year.

Opportunities for mineral development rely on the geology, gold price and infrastructure/access.

Map of selected mines, coalfields and significant mineral resources of Alaska (by Swainbank and Szumigala, October 1998)

Coal: Point Lay, world class quality and quantity but no access (bituminous: coal containing 15-20% volatile matter)

Healy-Usibelli

Wishbone Hill (Matanuska Valley, subbituminous: higher carbon, lower moisture)

Beluga (Cook Inlet)

Bering River (Cordova)

Gold: Tintina Gold belt

POGO: Southeast Yukon, ending at Donlin Creek

Fort Knox

Illinois Creek (Viceroy Resources has completed some drilling and is due to decide what role if any they will have with this property soon)

Nixon Fork

Platinum: prices recently hit record highs and there is increased interest in locating these resources in Alaska.

Volcanic Massive Sulfides:

Zinc, Lead, Gold, Silver

Greens Creek

Zinc, lead, silver

Red Dog (60% of the industry in Alaska Includes
deep new -1999-discovery)

North side Alaska range, Richardson district

Uranium: Bokan Mountain, Southeast

DGGS-Geophysical surveys of the Fortymile and Livengood areas were released, and they also participated in a joint Federal-State survey of part of Prince of Wales Island. The release of these surveys is greatly anticipated and are seen as encouragers of exploration.

Cost of survey to the expenditure of exploration dollars in Alaska

DGGS-DMLW working on gathering baseline data for ambient water quality

This information and more can be found in the Annual Minerals Industry report, summaries and tip sheets put out by DCED and DGGS. This information can also be found on the DCED and DGGS websites.

Generally optimistic on the mining industry in Alaska

- Metal prices are increasing
- London Financial Times: showed Alaska dropped only 20% in exploration compared to much higher percentages for other countries, states,
- Net increase of 11,000 new claims last year, meaning new exploration is an indicator of the future, not present health of the mining industry in a region.
- Continuing to remove uncertainty in permitting equals an improved business environment.

Part of my job is fielding questions and providing information on Alaska and the opportunities here, either through the various trade shows in Vancouver and Toronto, Canada and in Alaska and Washington states and via direct inquiries fielded from many locales such as Africa, Australia, Poland, the lower 48 states.

Further, Dick Swainbank in Fairbanks and I provide staff support for the Alaska Minerals Commission members when necessary. This years report was well received and you may have visited personally with AMC members last week during their annual report visit.

This years report of the Alaska Minerals Commission:

Finding A: A crisis in Alaska's ability to issue permits

The loss of DEC funding for a core group of competent, institutionally knowledgeable perimeters *is leaving mining, seafood processors, rural and municipal sewage plant operators and oil field developers at risk.* The ability of the private and public sector to

foster economic development, improve infrastructure and enhance the quality of life in Alaska has been reduced as well.

Essentially, the shift of DEC's water quality program from a General Fund program to a User Pay program coupled with policy direction and the postponement, cancellation or completion of projects has reduced fees to DEC and therefore reduced the ability to continue employing an institutionally knowledgeable core permitting staff.

The mining industry has readily demonstrated its willingness to support the user pay system but this has proved to be an inappropriate system for Alaska. Alaska's industrial sector is not large enough to support ADEC's permitting program through fees on a sustaining basis. A core group of knowledgeable perimeters is necessary to challenge the EPA, other Agencies and environmental groups.

That concludes my presentation. Please call me at 465-5463 with any questions. Thank you for your attention.

SCOMM

113:8

Alaska State Legislature



Official Business

State Capitol
Juneau AK
99801-1182

Economic Development and Tourism Committee
Representative Gail Phillips, Chair

(907) 465-2689; (800) 665-2689

Fax: (907) 465-3472

Email: Representative_Gail_Phillips@legis.state.ak.us

Economic Development & Tourism Committee

Tuesday, March 7th, 2000 – 5:00 to 6:30pm

House Resources Room 124

Meeting Notice: The Economic Development and Tourism Committee will hold a specially scheduled meeting on Tuesday, March 7th at 5:00pm.

The Committee will be hearing HB384. "An Act establishing the Legislative Road Development Task force; and providing for an effective date.

This bill will be the only thing on the scheduled.

The meeting will be held in House Resources Room 124.

GP:sp

Chair: Representative Gail Phillips

Committee Members: Representatives Ramona Barnes • Fred Dyson
Norman Rokeburg • Andrew Halcro • Sharon Cissna • Beth Kertula

ALASKA STATE LEGISLATURE

House of Representatives

COMMITTEE ASSIGNMENTS:

LABOR & COMMERCE COMMITTEE, CHAIRMAN
JUDICIARY COMMITTEE, MEMBER
LEGISLATIVE COUNCIL, MEMBER
SPECIAL COMMITTEE ON UTILITY RESTRUCTURING, MEMBER
SPECIAL COMMITTEE ON ECONOMIC DEVELOPMENT & TOURISM, MEMBER

e-mail: Representative_Norman_Rokeberg@legis.state.ak.us



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716 WEST 4TH AVENUE, SUITE 640
ANCHORAGE, AK 99501
PHONE: (907) 269-0117
FAX: (907) 269-0119

SESSION:
ALASKA STATE CAPITOL
JUNEAU, AK 99801-1182
PHONE: (907) 465-4968
FAX: (907) 465-2040

Representative Norman Rokeberg

SPONSOR STATEMENT HOUSE BILL 384

An Act establishing the Legislative Road Development Task Force; and providing for an effective date.

House Bill 384 establishes a Legislative Task Force whose duties would include: research existing plans for road development in the state, identify roads that are important to Alaska's future economic development, study feasibility of developing or upgrading roads in order to promote future economic development, determine availability and source of funds to develop or upgrade those roads, and establish a priority ranking for project to develop or upgrade the roads identified by the Task Force. The Task Force would include 2 legislators (one from each body) to serve as co-chairs; and one member from: Alaska Trucking Association; International Union of Operating Engineers, Local 302; State Board of Architects, Engineers and Land Surveyors; Alaska State Chamber of Commerce; Associated General Contractors of Alaska; and a member designed by Teamsters Local 959 (NOTE: The Teamster member will be added in a Committee Substitute). Two public members would round out the Task Force. The Commissioners of the Department of Transportation and Public Facilities, and the Department of Community and Economic Development would serve as nonvoting members.

Without a better transportation infrastructure, many areas in Alaska cannot be developed to their full potential. Among the roads the Task Force should consider is: Williamsport Road from Iliamna Bay to Pile Bay, road to Pogo Mine; Rock Creek Road in the Nome area; Tazlina Lake road; road from Wasilla to Bethel; road from Wasilla to Tyonek; road along west shore of Cook Inlet; road to Nome; road to Cordova; road to Ruby; road to Fort Yukon; Donlin Creek Road; road to Dillingham; road around northern end of Lake Iliamna; road from Rampart to Eurkea; upgrading the Dalton Highway and any other roads that the Task Force feels are important to develop.

Many of the roads listed above have been discussed by the House Special Committee on Economic Development and Tourism, upon which I serve. These discussions have impressed on me the need for some forward thinking when it comes to road projects. We need to get roads up and going to benefit all areas of the state. Besides natural resource projects, tourism could benefit from roads to all points of the state, thus offering smaller areas more economic opportunities. While new roads could be viewed as interrupting the way of life in rural areas, it is important to remember that if those rural areas want to remain viable, they need a transportation access for business, industry, or tourists.

The Task Force would complete its work and make recommendations on the first day of the 22nd Alaska State Legislature (January 2001).

ED1:02/25/00

ALASKA STATE LEGISLATURE

House of Representatives

COMMITTEE ASSIGNMENTS:

LABOR & COMMERCE COMMITTEE, CHAIRMAN
JUDICIARY COMMITTEE, MEMBER
LEGISLATIVE COUNCIL, MEMBER
SPECIAL COMMITTEE ON UTILITY RESTRUCTURING, MEMBER
SPECIAL COMMITTEE ON ECONOMIC DEVELOPMENT &
TOURISM, MEMBER

e-mail: Representative_Norman_Rokeberg@legis.state.ak.us



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FAX: (907) 465-2040

Representative Norman Rokeberg

SECTIONAL ANALYSIS HOUSE BILL 384

An Act establishing the Legislative Road Development Task Force; and providing for an effective date.

Section 1: Creates the Legislative Road Development Task Force. Sets forth membership and objectives of the Task Force. Lists some roads that should be considered with particular emphasis. Task Force is to meet as frequently as it desires and may meet and vote by teleconference. Compensation not to be paid to Task Force members but per diem and travel may be paid for all except legislative and commissioner members. A written report is to be presented to the Legislature and the Governor before the 22nd Alaska State Legislature convenes in January 2001.

Section 2: Act is repealed on first day of 2001 legislative session.

Section 3: Immediate effective date.

2

AMENDMENT

OFFERED IN THE HOUSE

BY REP. ROKEBERG

OFFERED TO CS HB 384 (), LS1452\G

Page 3, line 12:

After "to", DELETE "Delta." and INSERT "Richardson Highway;"

INSERT NEW subsection (19) as follows:

"a road from Ruby to Takotna; and"

INSERT NEW subsection (20) as follows:

"a road from Takotna to Flat to Crooked Creek."

AMENDMENT

OFFERED IN THE HOUSE

BY REP. ROKEBERG

OFFERED TO CS HB 384 (), LS1452\G

Page 2, line 3:

INSERT NEW subsection (7) as follows:

one member designated by the Alaska Miners Association;

INSERT NEW subsection (8) as follows:

one member designated by the Alaska Federation of Natives

Renumber remaining subsections accordingly

AMENDMENT

Offered In House Special Committee on Economic Development & Tourism

BY REPRESENTATIVE CISSNA

To: CS for HB 384, Draft Version "G"

Page 1, line 8

Delete "[11]"

Insert "13"

Page 1, line 9:

Delete all material and insert:

"(1) two members appointed by the President of the Alaska Federation of Natives;"

Page 2, following line 7

Insert a new subsection to read:

"(9) one member from an Alaskan environmental organization appointed by the Governor; "

Re-number following paragraphs accordingly.

Page 2, lines 12-14

Delete all material and insert:

(b) The commissioners of transportation and public facilities, community and economic development, and environmental conservation, or the commissioners' designees, shall serve as nonvoting members of the task force.

Page 3, line 15

Delete "[8]"

Insert "9"

1-LS1452AG
Utermohle
2/24/00

CS FOR HOUSE BILL NO. 384()
IN THE LEGISLATURE OF THE STATE OF ALASKA
TWENTY-FIRST LEGISLATURE - SECOND SESSION

BY

Offered:
Referred:

Sponsor(s): REPRESENTATIVE ROKEBERG

A BILL

FOR AN ACT ENTITLED

1 **"An Act establishing the Legislative Road Development Task Force; and providing**
2 **for an effective date."**

3 **BE IT ENACTED BY THE LEGISLATURE OF THE STATE OF ALASKA:**

4 *** Section 1. The uncoded law of the State of Alaska is amended by adding a new**
5 **section to read:**

6 **LEGISLATIVE ROAD DEVELOPMENT TASK FORCE. (a) There is established**
7 **in the legislative branch of state government the Legislative Road Development Task Force.**
8 **The task force shall consist of 11 voting members, as follows:**

9 **(1) one member designated by the Alaska Trucking Association, Inc.;**

10 **(2) one member designated by the International Union of Operating Engineers,**
11 **Local 302;**

12 **(3) one member designated by Teamsters Union Local 959;**

13 **(4) one member who is a civil engineer designated by the State Board of**
14 **Registration for Architects, Engineers and Land Surveyors;**

- 1 (5) one member designated by the Alaska State Chamber of Commerce;
2 (6) one member designated by the Associated General Contractors of Alaska;
3 (7) two public members jointly appointed by the President of the Senate and
4 the Speaker of the House of Representatives;
5 (8) one public member jointly appointed by the President of the Senate and the
6 Speaker of the House of Representatives who resides in a rural area outside the area that is
7 directly connected to Anchorage by road;
8 (9) one member appointed by the President of the Senate from among the
9 members of the Senate;
10 (10) one member appointed by the Speaker of the House of Representatives
11 from among the members of the House of Representatives.
12 (b) The commissioner of transportation and public facilities or the commissioner's
13 designee and the commissioner of community and economic development or the
14 commissioner's designee shall serve as nonvoting members of the task force.
15 (c) The legislator members of the task force shall serve as co-chairs of the task force.
16 The staff of the legislator members of the task force shall serve as staff to the task force.
17 (d) The task force shall identify roads that are important to the future economic
18 development of the state, study the feasibility of developing or upgrading those roads in order
19 to promote the future economic development of the state, research existing plans to develop
20 or upgrade those roads, determine the availability and source of funds to develop or upgrade
21 those roads, and establish a priority ranking for projects to develop or upgrade roads identified
22 by the task force.
23 (e) The task force shall place particular emphasis on reviewing the following road
24 projects to determine whether the road projects should be identified as important to the future
25 economic development of the state:
26 (1) Williamsport Road from Illiamna Bay to Pile Bay;
27 (2) a road to the Pogo Mine;
28 (3) Rock Creek Road in the Nome area;
29 (4) a road to Tazlina Lake;
30 (5) a road from Wasilla to Bethel;
31 (6) a road from Wasilla to Tyonek;

- 1 (7) a road along the west shore of Cook Inlet;
- 2 (8) a road to Nome;
- 3 (9) a road to Cordova;
- 4 (10) a road to Ruby;
- 5 (11) a road to Fort Yukon;
- 6 (12) Donlin Creek Road;
- 7 (13) a road to Dillingham;
- 8 (14) a road around the northern end of Lake Iliamna;
- 9 (15) upgrading the Dalton Highway;
- 10 (16) a road from Rampart to Eureka;
- 11 (17) a road from Ruby to McGrath;
- 12 (18) a road from Healy to Delta.

13 (f) The task force shall meet as frequently as its members determine necessary to
14 perform its work. The task force may meet and vote by teleconference.

15 (g) The members of the task force appointed under (a)(1) - (8) of this section are not
16 eligible for compensation but are entitled to per diem and travel expenses authorized for
17 boards and commissions under AS 39.20.180.

18 (h) The task force shall submit a written report of its findings and recommendations
19 to the legislature and the governor before the Twenty-Second Alaska State Legislature
20 convenes.

21 * Sec. 2. This Act is repealed on the first legislative day of the Twenty-Second Alaska
22 State Legislature.

23 * Sec. 3. This Act takes effect immediately under AS 01.10.070(c).

FISCAL NOTE

STATE OF ALASKA
2000 LEGISLATIVE SESSION

NO. _____
BILL VERSION: HB 384
PUBLISH DATE: _____

Revision Date: _____
Title: "An Act establishing the Legislative Road Development Task Force; and providing...."
Sponsor: Representative Rokeberg
Requestor: Hse Spec Comm on Economic Dev...

Department Affected: Legislative Affairs Agency
BRU: -Legislative Council
Component: Council and Subcommittees

COMPONENT SERIAL NO:

Expenditures/Revenues: (Thousands of Dollars)

OPERATING	FY 01	FY 02	FY 03	FY 04	FY 05	FY 06
PERSONAL SERVICES	0	0	0	0	0	0.0
TRAVEL	5.8	0	0	0	0	0.0
CONTRACTUAL	1.5	0	0	0	0	0.0
SUPPLIES	2.3	0	0	0	0	0.0
EQUIPMENT	0	0	0	0	0	0.0
LAND & STRUCTURES						
GRANTS, CLAIMS						
MISCELLANEOUS						
TOTAL OPERATING	9.6	0	0	0	0	0.0

CAPITAL	0	0	0	0	0	0.0
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REVENUE FUND SOURCE	0	0	0	0	0	0.0
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FUNDING: (Thousands of Dollars)

GENERAL FUND	9.6	0	0	0	0	0.0
FEDERAL FUNDS						
OTHER FUND SOURCE						
TOTAL	9.6	0	0	0	0	0.0

POSITIONS:

FULL-TIME	0	0	0	0	0	0.0
PART-TIME	0	0	0	0	0	0.0
TEMPORARY	0	0	0	0	0	0.0

Estimate of current year impact: _____

ANALYSIS: (Attach a separate page if necessary)

HB 384 establishes an eleven member Legislative Road Development Task Force. The task force will be composed of 7 public members, 2 Legislators, and 2 state officials. The task force shall identify roads that are important to the future economic development of the state, study and research the feasibility of upgrading roads, and establish a priority ranking for projects to develop or upgrade those roads. The task force shall submit a report of its findings to the Legislature and the Governor before the 22nd Alaska State Legislature convenes.

Prepared By: Karla Schofield, Deputy Director
Division: Administrative Services

Phone: 465-3852
Date: 3/3/00

Approved By: Pamela A. Varni, Executive Director
Agency: Legislative Affairs Agency

Pamela A. Varni
Date: 3/3/00

Distribution (by preparer): Leg. Finance, Legislative Sponsor, Requestor, OMB, Gov. , & Impacted Agency(ies).

Personal Services

The existing staff of the Senator and Representative Co-Chairs of the task force will serve as staff to the task force.

0.0

Travel

It is anticipated that the task force will conduct most of their meetings by teleconference. One 2 day trip is anticipated to Anchorage in FY01. For the purposes of this fiscal note the 7 public members are assumed to be 2 from Fairbanks, 2 from Anchorage, 1 from Juneau, 1 from Kotzebue, and 1 from Ketchikan.

Travel costs for the DOTPF and DCED Commissioners or their designees will be paid for by the Executive Branch.

		Airfare	Per Diem		
<u>Public Members</u>					
Fairbanks	2	488	916		
Anchorage	2	0	0		
Juneau	1	470	458		
Kotzebue	1	621	458		
Ketchikan	1	756	458		
<u>Legislators</u>					
Anchorage	1	0	458		
Fairbanks	1	244	458		
		2,579	3,206	5,785	
				Total Travel	5.8

Contractual

Phone expenses for public members of the task force	500		
Postage expenses to mail out task force report	200		
Map and geological reproduction services	800		
	1,500	Total Contractual	1.5

The cost of printing the task force report will be absorbed within the Legislature's budget.

Supplies

It is anticipated that the task force will need to purchase geological information and maps. 2.3

Equipment

The task force will not need to purchase any equipment. 0.0

9.6

FISCAL NOTE

STATE OF ALASKA
2000 LEGISLATIVE SESSION

NO. _____
BILL VERSION: HB 384
PUBLISH DATE: _____

Revision Date: _____
Title: "An Act establishing the Legislative Road Development Task Force; and providing...."
Sponsor: Representative Rokeberg
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Department Affected: Legislative Affairs Agency
BRU: Legislative Council
Component: Council and Subcommittees

COMPONENT SERIAL NO:

Expenditures/Revenues: (Thousands of Dollars)

OPERATING	FY 01	FY 02	FY 03	FY 04	FY 05	FY 06
PERSONAL SERVICES	0	0	0	0	0	0.0
TRAVEL	5.8	0	0	0	0	0.0
CONTRACTUAL	1.5	0	0	0	0	0.0
SUPPLIES	2.3	0	0	0	0	0.0
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GRANTS, CLAIMS						
MISCELLANEOUS						
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CAPITAL	0	0	0	0	0	0.0
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FEDERAL FUNDS						
OTHER FUND SOURCE						
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POSITIONS:

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PART-TIME	0	0	0	0	0	0.0
TEMPORARY	0	0	0	0	0	0.0

Estimate of current year impact: _____

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Prepared By: Karla Schofield, Deputy Director *Karla Schofield* Phone: 465-3852
Division: Administrative Services Date: 3/3/00

Approved By: Pamela A. Varni, Executive Director *Pamela A. Varni*
Agency: Legislative Affairs Agency Date: 3/3/00

Distribution (by preparer): Leg. Finance, Legislative Sponsor, Requestor, OMB, Gov. , & Impacted Agency(ies).

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Equipment

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HB 384
Legislative Road Development
Task Force

Information Packet



ALASKA MINERS ASSOCIATION, INC.

3305 Arctic #202, Anchorage, Alaska 99503 • (907) 563-9229 • FAX: (907) 563-9225 • www.alaskaminers.org

March 6, 2000

Honorable Norman Rokeberg
Alaska State House
Capitol Building
Juneau, AK 99801

RE: House Bill 384, Legislative Road Development Task Force

Dear Representative Rokeberg,

Thank you for the opportunity to comment on House Bill 384 which would establish a Legislative Road Development Task Force. This bill will provide a venue for discussing alternatives for new roads that are needed. The State planning process has focused on repair and maintenance of existing roads but has not effectively addressed the need for new roads.

We would recommend some additions to HB-384. The first is to add other routes into Section 1 that would be considered and these would be added in (e) as follows:

(16) a road from Ruby to Takoma;

(17) a road from Takotna to Flat to Crooked Creek;

These two roads would provide improved surface access via marginal and unimproved roads and RS-2477s that already exist and would connect the village of Ruby on the Yukon River with the village of Crooked Creek on the Kuskokwim River. In doing so the road would provide access for the villages and for various mining areas along the route which include Ruby, Long, Poorman, Colorado Creek, Ganes Creek, Yankee Creek, Ophir, Flat- Iditarod, and Donlin Creek.

(18) a road from Icaly to the Richardson Highway;

This road will provide a "loop" route for tourism based in Fairbanks and access to many streams that can provide tremendous float-trip opportunities from the road down to the Tanana River. The road would also provide access to some of the mineralized lands along the north flank of the Alaska Range.

The other changes we suggest involve the make-up of the Task Force. We suggest that the Alaska Miners Association be included as a voting member. Mining is often the first industry to utilize new roads and thereby add to the economy of the local areas where the roads are built. We also suggest that the respective Native Regional Corporations be included whenever roads are being discussed that access their private lands. These Native Corporations and their villages have much to gain if roads are developed and they also have concerns and views that should be raised in the Task Force.

Thank you for the opportunity to comment on this bill. We look forward to working with you as it moves forward.

Sincerely,

Steven C. Borell, P.E.
Executive Director

EUREKA TO RAMPART ROAD LOCATION STUDY

I. PURPOSE AND NEED

The citizens of Rampart desire year-round surface access to improve their social and economic conditions. There is no reliable road access linking Rampart to the State highway system. Community activism placed the project on the State's 20-year transportation plan. The community lies on the south bank of the Yukon River, approximately 161 kilometers (km) (100 miles [mi]) northwest of Fairbanks (Fig. 1).

The road would extend 40 km (25 mi) northward from Eureka on the Elliott Highway to Rampart. It would follow the approximate route of the wagon trail constructed in 1906 by the Alaska Road Commission to transport mail and supplies to gold miners at Rampart. In 1963, the Alaska Department of Highways converted 12 km (7 mi) of trail into a gravel road from the Elliott Highway to Joseph Creek. Further work was suspended when construction funds were diverted to repair roads in southern Alaska damaged by the 1964 "Good Friday" earthquake. A portion of the 1963 road and an additional 3 km (2 mi) up to Lost Creek were rebuilt by ADOT&PF in 1983, and another 3 km (2 mi) at the north end has been improved over the years by Rampart residents. Beginning at Eureka, ADOT&PF maintains the first 3 km (2 mi) of the existing road. The remaining 22 km (14 mi) of trail has not been upgraded. Local residents provide minimal maintenance on the rest of the roadway and the trail.

When the ground is frozen and road conditions permit, snow machines, four-wheel-drive trucks, or heavy equipment can travel on the trail from Lost Creek to Rampart. All-terrain vehicles use the trail during the summer, but severe rutting and sinkholes force operators to use adjacent lands that are classified as wetlands. Destruction of wildlife and anadromous fish habitat is occurring.

Barges and aircraft are the only commercial transportation to and from Rampart. Barges deliver freight, except fuel, three or four times each summer. (Fuel is not shipped by barge due to exorbitant costs but is delivered by airplane). Air service is the only year-round means for transporting people and perishable goods. Air transport is expensive and unreliable due to frequent fog and wind conditions along the Yukon River.

A reliable, year-round road will provide Rampart residents with a lower cost of living and increase employment opportunities, and protect wetlands, wildlife, and fisheries resources.

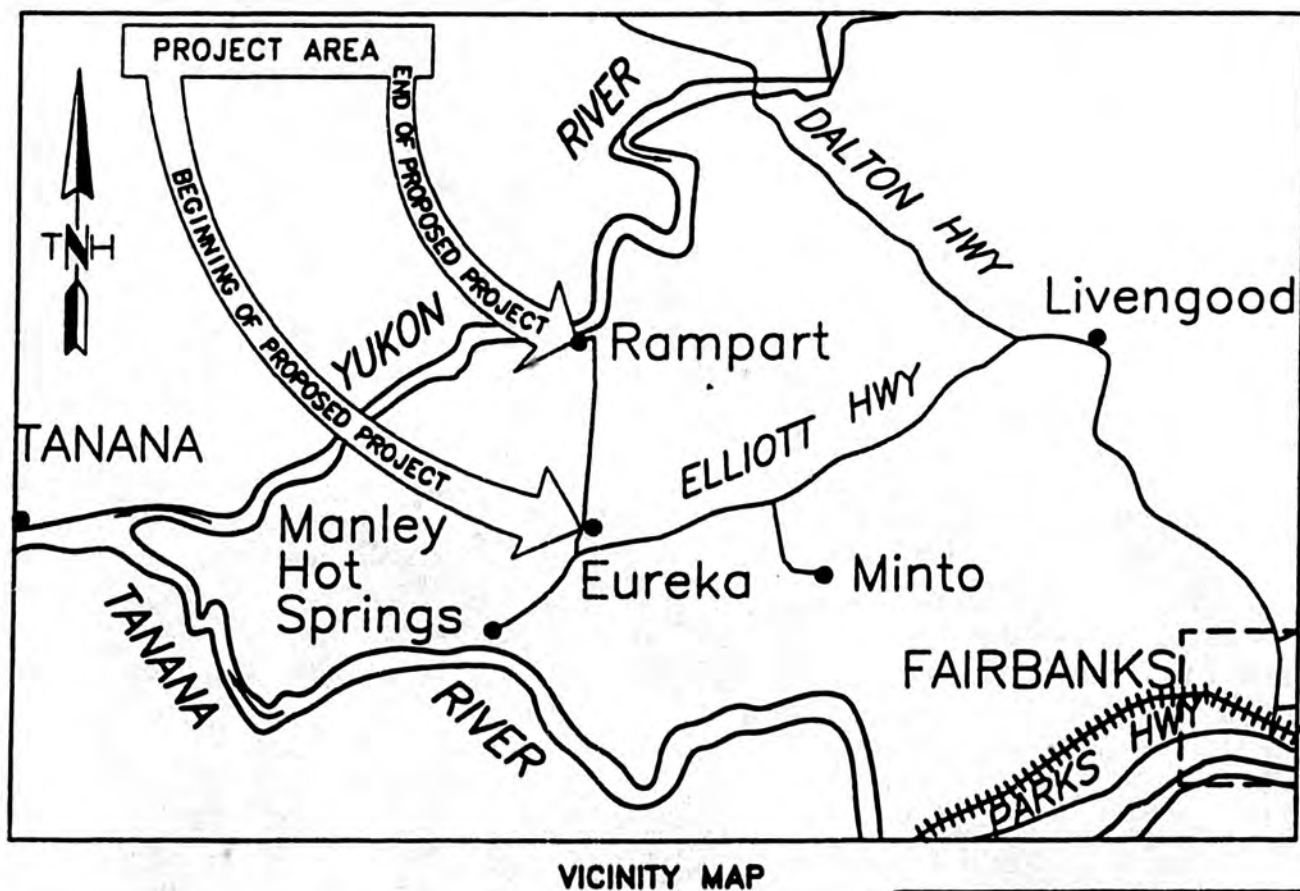
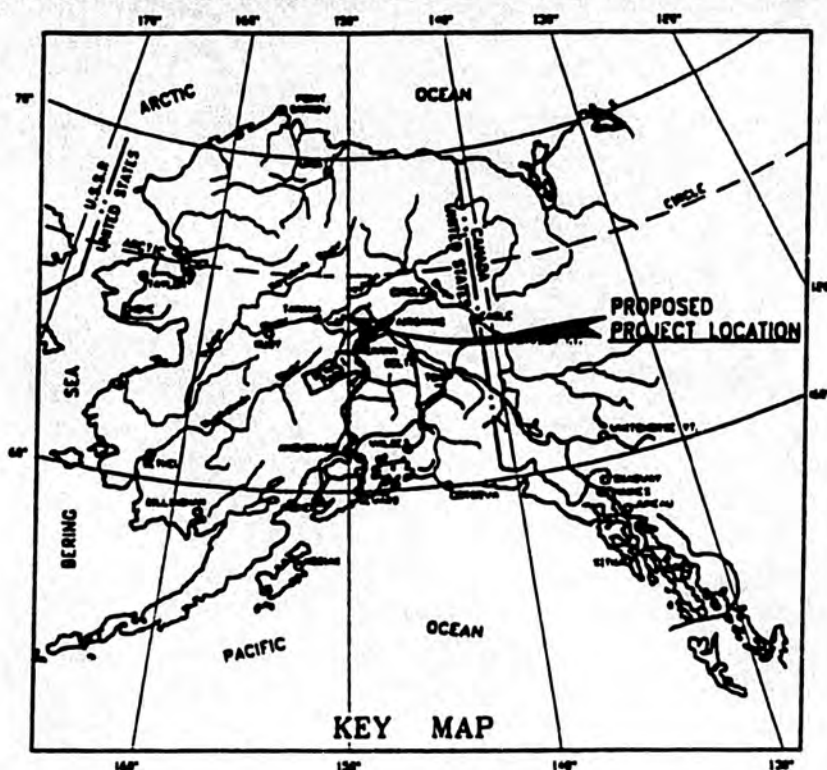


FIGURE 1

STATE OF ALASKA
DEPARTMENT OF PUBLIC TRANSPORTATION
AND
PUBLIC FACILITIES

EUREKA TO RAMPART ROAD
VICINITY AND KEY MAPS



TANANA CHIEFS CONFERENCE, INC.

**Yukon Tanana Subregion
1302 21st Avenue
Fairbanks, Alaska 99701
(907)459-3930**

9-15-96 11:02

November 11, 1996

**State of Alaska Department of Transportation & Public Facilities
Division of Design & Construction
2301 Peger Road
Fairbanks, Alaska 99709-5399**

Dear Mr. John Rezek, P.E.

Enclosed is a copy of Tanana Chiefs Conference/Yukon Tanana Subregional Advisory Board resolution 96-07. Resolution 96-07-*'Continued Support of the Rampart-Eureka Road'* was passed and approved by the Advisory Board on Oct. 23, 1996.

The Subregional Board consists of the villages of Alatna, Allakaket, Evansville, Fairbanks, Hughes, Lake Minchumina, Manley, Minto, Nenana, Rampart and Tanana. The road has been supported by the villages of the subregion for almost ten years.

The proposed Eureka-Rampart Road has been a community goal of Rampart since the early 80's; and was submitted to the State Transportation Improvement Plan (STIP) for several years for consideration as a road project.

Our Subregional Office looks forward to the proceeding of the location study and environmental analysis. We want to be involved and will attend the Scoping meeting scheduled for Fairbanks.

Thank you.

Sincerely,

TANANA CHIEFS CONFERENCE, INC.

**Oscar Frank, Jr.
Community Resource Coordinator**

cc: Rampart Village Council

UNORGANIZED BOROUGH

RAMPART

Project Name	Description	Cost	Need ID	GIP	Priority	Score
Airport Improvements	Reconstruct the runway and safety area.		5134	AV		
Eureka to Rampart Road	Construct approx. 14 miles of two lane, gravel road to complete connection between Eureka, on the Elliott Highway, and Rampart, on the Yukon River. The entire route is approx. 26 miles long. The project entails construction of the center section and localized improvements on previously improved sections.	12,600,000	3705	CTP	2	76

RED DEVIL

Project Name	Description	Cost	Need ID	GIP	Priority	Score
Airport Improvements	Reconstruct the airport to meet current standards. Construct a new apron and taxiway, snow removal equipment building, and purchase a new grader.	1,500,000	5657	AV	1	80

RUBY

Project Name	Description	Cost	Need ID	GIP	Priority	Score
Ruby to McGrath Road	New road construction to connect Ruby and McGrath.		3696	CTP	3	

RUSSIAN MISSION

Project Name	Description	Cost	Need ID	GIP	Priority	Score
Landfill Road	Construct 3/4 mile long road to the new landfill.	450,000	9918	CTP	1	124
Local Streets	Repair/rehabilitate approximately 2 miles of local streets. Improvements include application of dust palliative.	330,000	3697	CTP	3	
New Housing Roads	New roads for upcoming housing.	200,000	3698	CTP	3	
Runway Rehabilitation	Realign and extend the runway; reconstruct apron, taxiway and access road; raise grade to mitigate flooding problems.	2,700,000	5136	AV		112

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2019. 2020. 2021. 2022. 2023. 2024. 2025. 2026. 2027. 2028. 2029. 2030. 2031. 2032. 2033. 2034

Tanana Tribal Council
P.O. Box 130
Tanana, Alaska 99777
Ph: (907) 366-7160
Fax: (907) 366-7195

JAN 28 2000

January 7, 2000

Rampart Village Council
Rampart Alaska

Dear Council Members,

The Tanana Tribal Council discussed the Rampart - Eureka Road and has decided to support your efforts in having the road built to Rampart. When the initial request for support came in, we did not realize or understand how important it was for the village of Rampart to have this road in place. Now, based on facts that your village has provided to us, we realize the very existence of your community is at stake here and we cannot stand by and allow your community to become extinct. Without reliable transportation into a small community, such as Rampart, services only become fewer and fewer. The State of Alaska has an obligation to protect and promote the viability of our village residents, regardless of their size. Without access into the rural areas of Alaska, our State will never live up to its potential.

A resolution of support is enclosed and if you need us to testify on your behalf, please give us a call and we will provide support for your village. Our very best in your endeavor.

Sincerely,

Julie M. Roberts
Executive Director

Cc: Department of Transportation

Tanana Tribal Council
P.O. Box 130
Tanana, Alaska 99777
Ph: (907) 366-7160
Fax: (907) 366-7195

Resolution 01-00
Titles: Resolution of Support for the Village of Rampart

Whereas: the Tanana Tribal Council is the duly constituted and legal governing body of the federally recognized Indian Tribe organized as the Native Village of Tanana; and

Whereas: the Rampart Village Council has requested our support in having the proposed Rampart - Eureka Road built; and

Whereas: tribal members of the Tanana Tribal Council currently resides in the village of Rampart and strong family ties have existed for many years; and

Whereas: the safety and general welfare of the people of Rampart is of the utmost importance to the Tanana Tribal Council; and

Now Therefore Be it Resolved that the Tanana Tribal Council hereby requested the State of Alaska; the Bureau of Indian Affairs and Congress to fully support funding to build the Rampart - Eureka Road for the General well being and existence of the village of Rampart Alaska.

Passed and Approved this 20 day of January, 2000, by the Tanana Tribal Council seated in Quorum.

Signed: Eith M. Peter
Chairwoman

Date: 1/20/2000

Attest: Maria E. Anderson
Secretary

Among the largest of land rushes in Alaska's rich and varied mining history, it seems that the Pogo area play has been appropriately nicknamed the "Goldpaster," even though that name was first coined as a typographical mistake in a newspaper headline.



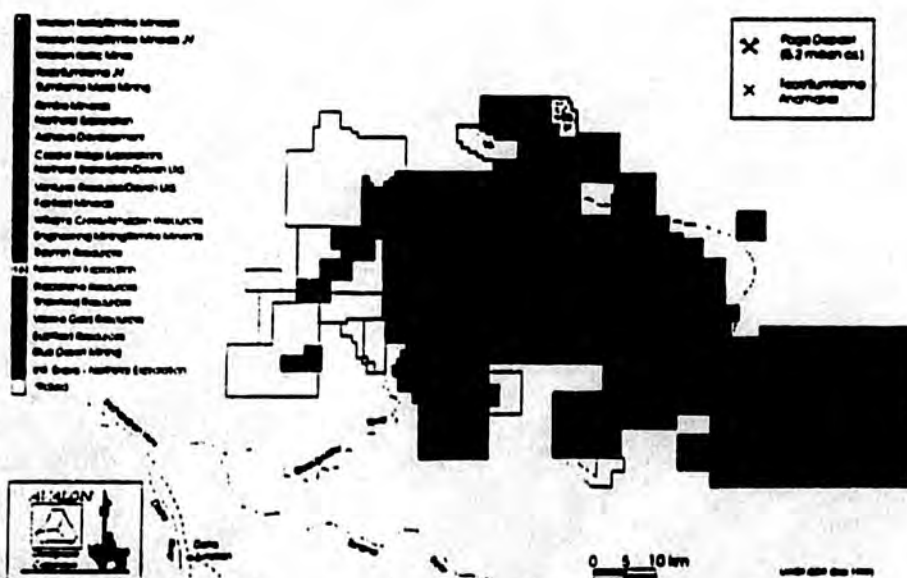
Tom Howard, left, and Ron Hanson, drillers working for Tonto Drilling, take diamond core samples in July 1998 at the Badlands hole at the Pogo prospect. Such drilling work helped spark a land rush in the upper Goodpastor River Valley.

BY PATRICIA JONES

Less than three years ago, the upper Goodpaster River valley was considered mineral-poor moose pasture by most gold prospectors. Only a handful of old-timers working placer claims and a Japanese-financed hard-rock exploration team considered the area as a prospective mining district.

But one single discovery—a 5 million ounce-plus gold deposit called Pogo—has dramatically changed geological opinion of the rolling, spruce-covered hills and river valley located about 40 miles northeast of Delta Junction in Alaska's Interior.

Now, it's the hottest place in Alaska to prospect for gold and interest in the area has sparked a virtual land rush. More than a half million acres of state



LAND STATUS OF THE GOODPASTER MINING DISTRICT

land was staked the last 18 months by prospectors hoping to find another Pogo, according to Erik Hansen, a land status consultant based in Fairbanks.

"Some Canadian junior mining companies decided to go in and stake all around Pogo," Hansen said. "That caused other people to wake up and smell the coffee."

Sumitomo Metal Mining Co., which holds the claims to the 72-square-mile claim block called Pogo, also has some surrounding and nearby land staked, compiling a considerable property package. And North Star Exploration, which signed an exploration property deal to work on Doyon Ltd. land in the area, also staked a sizeable position in the Goodpaster area.

In all, more than 700,000 acres—equal to about 1,100 square miles of land in the Goodpaster area—has been claimed for mineral exploration and development by gold prospectors.

"They've pretty much saturated the whole country with claims, so the Pogo land rush is coming to an end," Hansen said. "Next will be to see who keeps the claims and who drops them."

Prospectors are now looking at potential sites both to the northwest and the southeast of Pogo, he said. On a weekly basis, Hansen tracks claim filings and has produced a land status map of the Goodpaster mining district.

Staking the Goodpaster

During the Pogo area play, prospectors used both existing geologic data for the Goodpaster as well as the theory of closeness to make their land selections.

"It was a combination," Hansen said. "Anything in proximity of Pogo is fair game for the staking, but a lot of companies used existing public geological data to delineate targets for their staking."

Copper Ridge Explorations Inc., a recently formed junior exploration company, used both theories to select its 24,000-acre claim block located just north of the Pogo deposit, according to company president Gerald Carlson.

"By the time we decided to look for ground in the area, most of the prospective ground on the east-west trend had been taken up," he said.

Prior geological surveys conducted by the U.S. Geological Survey and

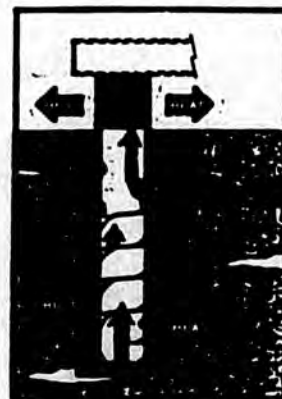
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recent stream sedimentation samples that produced trends similar to Pogo-style mineralization caused the company to select its property, called Ogopogo, he said.

"I think it is also quite significant that we were able to acquire this ground within only a few miles of the Pogo deposit itself—the 'closeology' factor," Carlson said.

Most agree that news about Pogo created this land rush. But the relatively unexplored land of the Goodpaster also made the district attractive, said Curt Freeman, a Fairbanks-based consulting geologist.

"Part of it was the fact that Pogo was unknown ... in a district that had absolutely nothing else going for it during the last 100 years. It was a dope-slap for geologists, telling us that we really don't understand what we think we do," said Freeman.

The land rush, which peaked about a year ago, was so great that junior-sized exploration firms were looking to hire claim-stakers to work on Christmas Day. Freeman was one who turned down such holiday pay.

"I don't think I could have hired a (helicopter) pilot then," he said. "The first real bunch of claim-staking started in June and July last year; then it ramped up to complete madness."

Because of the rough terrain and lack of road access, most of the land rush occurred with the help of helicopters, which were used to drop off claim-staking crews. That increased the initial land acquisition costs, as well as the first stage of exploration work conducted this past summer.

Exploration Spending

Two years ago, only Sumitomo and Teck Exploration (Sumitomo's joint venture partner on the Pogo project), were spending time and money in the Goodpaster area.

Now, about 20 companies are actively exploring the area, according to Richard Swainbank, the state's mineral development specialist headquartered in Fairbanks.

"There's a lot of interest around Pogo, but not a lot of money," Swainbank said. "If the price of gold was in the \$330 to \$380 (per ounce) range, the amount of activity in the Pogo area would

be double or triple. It's very, very hard to fund exploration programs right now."

When gold prices dropped to the \$250 per ounce range this summer, exploration crews found that funding also decreased. No matter what prospectors turned up on their properties, exploration firms couldn't seem to escape the financial drag of the slumping gold market.

"The fall in the price of gold couldn't have come at a worse time for the state of Alaska," Swainbank said. (Note: Gold prices rose in late September.)

Freeman, who has several clients holding claims in the Goodpaster area, estimates that \$3 million to \$5 million was spent during the 1999 summer season by prospectors working around Pogo.

That number does not include about \$15 million in developmental expenses incurred by Teck Exploration to start construction of a mile-long tunnel that will access the Pogo deposit.

"If you would have asked me in March how much would be spent in the area, I would have estimated two to three times that which was spent,"

said Freeman. "With the drop off in interest in gold, money for the high-risk stuff has been that much harder to come."

There's one small consolation for such tight exploration funding, Swainbank said. Less money means that prospecting work has been more carefully planned and paced, rather than a willy-nilly process that can often accompany the start of such an exciting exploration area.

"Claims will get looked at more generally, instead of bringing in drill rigs prematurely," Swainbank said. "Nothing can kill a project quicker than a dry drill hole."

"Goldpaster" District's Future

Most in the industry expect to see in upcoming months some changes in land status surrounding Pogo. Temporary prospecting sites will be converted into more tangible mining claims while less prospective land will be dropped.

"A whole bunch (of prospecting sites) are being converted and some land has been windrowed out," Freeman said.

"There's a sifting process going on right now and by the end of the year, the Hansen map will look different with checkerboard holes where land has been dropped."

In addition to land changes, Swainbank expects to see continued partnerships and consolidation of efforts between junior exploration firms and major mining companies that have money to invest in prospecting and development.

"Major companies that have cash on hand will be shopping in the bargain basement because even the cost of maintaining the claim rent on those properties has to be a pretty good-sized burden on some of the juniors," he said.

Finally, some companies are pressing on with exploration on their properties after a successful start with their ground exploration efforts earlier this summer.

"We will be soil sampling and prospecting in the area of the anomalous gold results to try to localize the bedrock source of the gold," Carlson said in early September, about his company's Ogopogo property. "We are very excited by the results of the program so far." □

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Teck begins tunnel work on Pogo Ridge gold deposit near Delta

By Tim Bradner
Journal Reporter



Teck Resources crews are busy digging into Pogo Ridge at the company's big Pogo gold prospect 35 miles northeast of Delta.

The company also has initiated prefeasibility studies of development of a mine that, if positive, will be followed by environmental studies and the start of a long permitting process, Karl Hanneman, Teck's Alaska Regional Manager, told the Resource Development Council May 5.

More than 50 feet of a planned 5,500-foot underground exploration access tunnel is completed, he said. Tunnel work will pause 200 feet into the mountain to allow installation of a treatment facility to process drainage water and then resume, he said.

Teck received final clearance on permits from state agencies March 1 and federal agencies March 4. Work on a 2,000-foot

MINING

road began the same day from the present camp near the Goodpaster River, 200 feet up the side of Pogo Ridge to the portal, or entrance, to the tunnel.

Tunnel work began after heavy equipment was moved up the road. The tunnel is being built at a 15-degree downslope and upslope to come up under the ore body.

Configuration of the tunnel allows water to drain to the low point in the tunnel for treatment, with no chance of draining out with a risk of contamination of the Goodpaster River.

Teck now has about 45 people at work on the project, Hanneman said. About 30 will be employed over the next 12 to 18 months on the tunnel and test work.

Teck also plans an additional 50 test holes drilled from the surface in 1999 and a similar number in 2000 and 2001. These are mainly "in fill" holes

to obtain ore samples between the holes drilled earlier, which are at 50-foot intervals.

Once the tunnel is completed, drilling also will be done from underground to test suspected ore deposits that are too deep to reach from the surface.

Pogo has an identified gold resource of 5.5 million ounces in

10 million tons of ore grading an average of 0.5 ounce per ton, Hanneman told the RDC.

By way of comparison, Hanneman said, at this early stage of exploration, the Fort Knox Mine near Fairbanks had about 4 million ounces of identified gold resource in a lower-grade ore body.

Pogo is a higher-grade gold deposit and will be mined with a smaller, more compact underground project than the type of larger, open-pit mine used at Fort Knox, he said.

Over the next 12 to 18 months Teck will do additional exploration drilling, both from surface and from the underground tunnel, to further define the ore body.

The company will also carry out tests on strength of the rock, gain information on potential water drainage problems, and mine bulk ore samples

to test underground mining methods and procedures to extract gold from the ore.

The flat-lying orientation of the gold deposit poses a serious engineering challenge to the mining — how to "hold up the roof" — and the tests of rock strength are particularly important. About 30 people will be employed through this phase of exploration, Hanneman said.

The presence of the Pogo gold deposit was first detected in 1981 during a regional mineral reconnaissance. It wasn't until

1991 that Sumitomo Metal Mining Arizona Inc., a subsidiary of Japanese-owned Sumitomo Metals, staked claims on state lands in the area and began serious exploration.

Teck, a long-established U.S. minerals company, bought 40 percent of the project and became its operator. The discovery was announced in 1997.

Teck has become active in Alaska in recent years, but the company owns 35 percent of Cominco, which operates the big Red Dog Mine in Northwest Alaska, and 15 percent of Abacus Minerals, which is exploring, with Teck as a partner, the Niblack base metals prospect in Southeast Alaska.

Teck, which operates mines in the U.S., Canada, Chile and Australia, had \$713 million in revenues and \$193 million in profits last year. Sumitomo Metals is a subsidiary of Japan's Sumitomo Corp., a 300-year-old company that, among all subsidiaries, had \$95 billion in revenues last year.

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BUSINESS

Al Slavin, Business Editor; 459-7593

Sunday, October 17, 1999

Teck weighs Pogo Mine route options

By AL SLAVIN
Business Editor

One route is by air.

Another combines a little flying and a winter trail.

A third scenario involves building an all-season road in the Goodpastor River valley. All three lead to a remote parcel of land that is about to become Pogo Mine, a lucrative gold deposit located 40 miles from Delta Junction.

The choice is one of the more delicate ones from both a financial and environmental standpoint. It will define the permanent access through a relatively undeveloped section of wilderness to a deposit containing 5.2 million ounces of gold.

"We've got to come to grips with what's best for the project, what's best for the community and what we can get permitted," said Karl Hanneman, the project manager for the joint venture between Teck Resources and Summit Mining.

Hanneman spelled out the options last week to the Greater Fairbanks Chamber of Commerce's transportation committee. Some consideration is being given to a fly-in operation, which would leave the smallest footprint but bring a noise problem.

Equipment and supplies could be flown to the mine from a staging area at Fort Greely's airstrip, Hanneman said. But the flight path for the eight to 10 daily flights by DC-6s would be over Delta Junction.

The cost of a fly-in operation—\$8 million to bolster the one-mile airstrip and \$12 million to \$14 million in annual operating expenses—could also prove too much, Hanneman said.

A second option has fewer flights by adding a winter road. That option has three scenarios, one of which involves using the existing winter trail that crosses 11 streams.



POGO DEPOSIT—Teck Resources is currently mulling over the best way into the Pogo Deposit, a remote parcel of land in the Goodpastor River Valley containing 5.2 million ounces of gold. The possible scenarios include a fly-in operation, building a new winter trail or constructing an all-season road.

Two other trail routes have been identified, traversing the north or south border of the Shaw Creek Flats, Hanneman said. This would take the burden off a winter trail that already receives substantial recreational use.

A new trail would cost an estimated \$15 million to build and \$8 million to \$9 million each year to operate and maintain.

The final option involves building a \$35 million all-season road. Annual operating and maintenance costs could reach \$6 million. An additional \$3 million would be needed to remove the road at end of the mine's life, estimated at 10 to 12 years.

While the scenarios differ in approach, they all share one common thread. Each is certain to leave someone unhappy.

The promise of a \$250 million construction project and 500 year-round jobs is certain to rally support from the business sector. But it won't be enough to stave off environmentalists and property owners who fear that the Goodpastor River valley may get trampled along the way to development.

"A big project like that is going to include a lot of change and a lot of impact," said Sylvia Ward, executive director of the Northern Alaska Environmental Center. "There's some concerns. Everybody is going to keep an eye on protecting the Goodpastor River from contamination."

"That's an absolute," she said. "The river's got to be protected."

She also worries that an all-season road will harm the Fortymile Caribou Herd.

"We'll be doing all we can to stop an all-season road," Ward said.

Hanneman has spelled out one option that may appease everyone, including environmentalists like Ward. It requires running a power line to the remote project. This would reduce the amount of fuel needed on site, reducing the amount of traffic on the selected path. It would also eliminate regulations concerning air emissions.

"It's a great example of doing something for the environment that turns out to be the right thing for the business sector as well," Ward said.

Whether a power line will be cost effective is unclear. Golden Valley Electric Association has informed Teck Resources that it would cost \$18 million to upgrade GVEA's power system between North Pole and Eielson Air Force Base.

There would also be \$16 million in expenses to run power from that point back to the project. Both of these costs, which are subject to negotiation, would fall to the project's developers if GVEA cannot find a wider customer base in the area.

Hanneman is still gathering information and hopes to complete this feasibility study within 24 months. The analysis of underground exploration work is under way along with the environmental assessment.

This information will be used as a basis for a future permit application. But Hanneman is still awaiting one more component: comment from trappers, loggers, fish and game officers and anyone familiar with the section of backcountry.

"We want to tap into the knowledge of the community to help us make a good decision," Hanneman said.

ROCK CREEK - NOME AREA

The Rock Creek Nome Area Road
January 27, 2000

The Rock Creek Road will help to encourage potential economic development of the hard rock mineral resources in the Nome area currently under investigation by a group of companies including Novagold, Alaska Gold, Sitnasuak, and the Bering Straights Corp.

The existing road is built along existing contours and is seasonal in nature. The road could not be used for transport of construction material during potential mine start-up due to it's windy nature, gradient and narrowness.

The new rerouted road would shorten the haul distance by two miles and be built across a flat plain that would make maintenance and use possible year round.

The City of Nome fully supports the road project for the potential economic benefit it could provide.

The City has recently lost 70 jobs due to the temporary shut down of mining operations in the Placer mining fields. The job loss is due to the current low prices of gold. Hard rock mining may still be viable at the current prices due to the higher tenor of the gold present. It must be remembered that the potential for sustained mining operations are speculative.

Currently, The rock creek gold deposit contains an estimated 500,000 ounces of gold.

GP:sp

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RE: GLACIER CREEK RD.

Note: Alternative 3 is the Preferred Route.
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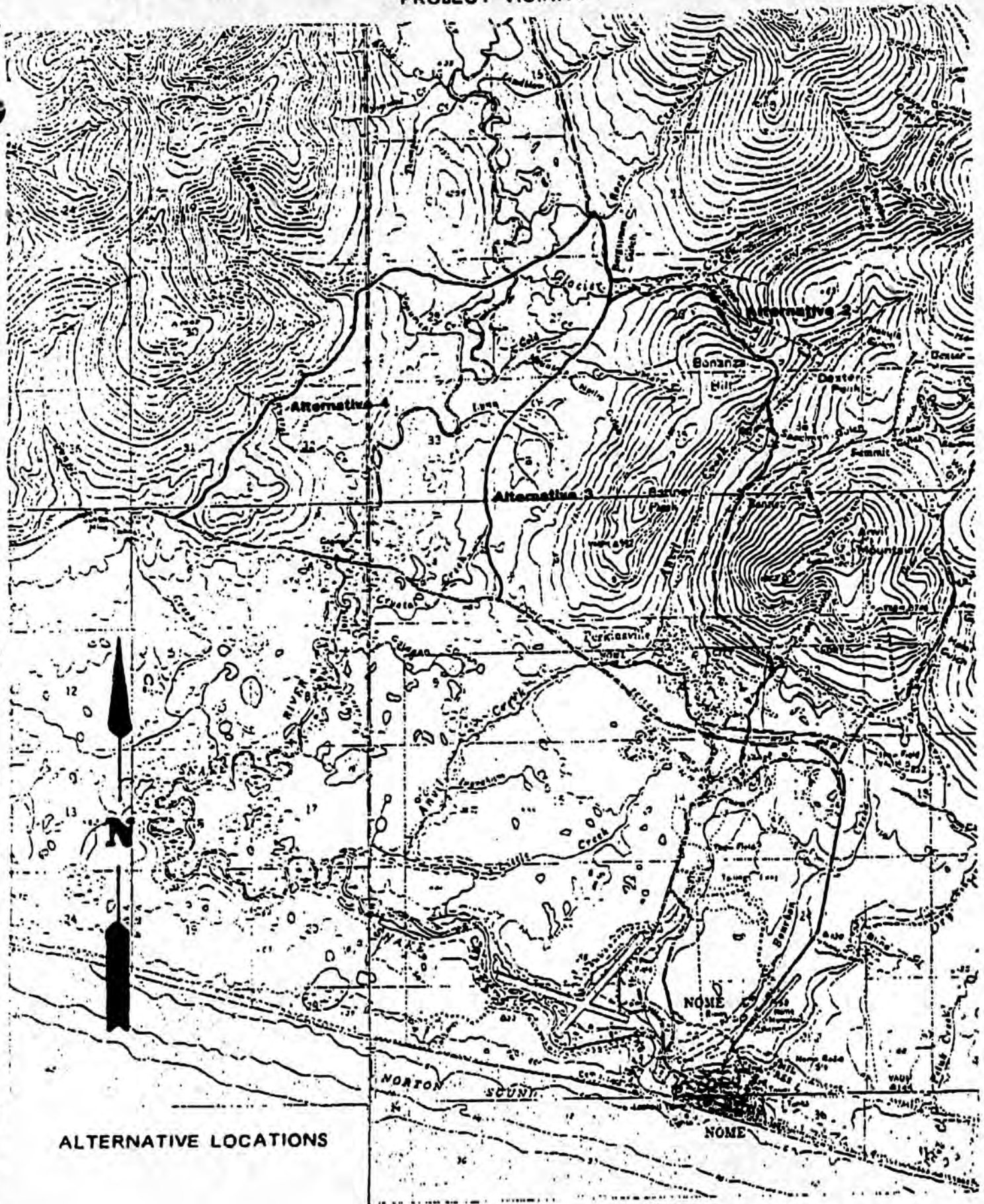
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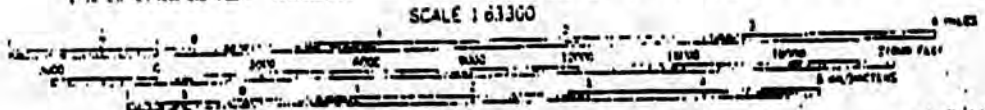
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PROJECT VICINITY



ALTERNATIVE LOCATIONS

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GLACIER CREEK ROAD

CHAPTER I

PURPOSE AND NEED

The Alaska Department of Transportation and Public Facilities (ADOT&PF) in cooperation with the Federal Highway Administration (FHWA) is proposing to either upgrade or reroute Glacier Creek Road in Nome Alaska. The proposed project's objective is to enhance economic development. Glacier Creek Road accesses numerous gold mining operations with new development and exploration expected during the next several years.

The proposed project would provide an all-season, year-round¹ access road to areas that are believed to contain large mineral deposits. The existing road was originally constructed as a sidehill cut for much of its length and is therefore susceptible to early and lengthy closure due to snow accumulation.

Glacier Creek Road has major deficiencies, especially for heavy equipment. Grades on the existing road are severe, and when combined with the many sharp curves sight distance becomes severely limited. The existing road is approximately 4.3 meters (14 feet) wide, is gravel surfaced, and without shoulders. There is very little room for maneuverability or passing. These aspects are a hinderance for drivers, especially when a vehicle breaks down, becoming more extreme when operating larger equipment.

Several large gold deposits have been identified in the vicinity of Glacier Creek Road by private sector exploration firms. Reports from both federal and state agencies have also documented the potential for economic lode gold deposits in this area. Additionally, there are several gold mines currently in production. However, the

¹ Currently, Glacier Creek Road is not maintained during the winter.

NOME, ALASKA

GLACIER CREEK ROAD

operation of these current mining ventures are sometimes hindered by the length of time the existing road is open to traffic.

Currently, mining companies are in the process of defining the Rock Creek ore body, in the anticipation of bringing it into production. (Rock Creek crosses the existing Glacier Creek Road at about 1 kilometer [$\frac{3}{4}$ mile]) beyond Glacier Creek. Exploration of the entire area is under the "Rock Creek" designation and encompasses nearly 13,760 hectares [34,000 acres]. An adjacent 14,165 hectares [35,000 acres] tract is also being explored. Until recently, these two tracts were being explored by separate companies. The Kennicott Mining Company has assumed Newmont Exploration's 13,760 hectare [34,000 acres] tract.

It is estimated that between 100-200 jobs would be created if a new mine were to begin production. This is a significant economic boost to an area which has a labor force of about 3,000 and an unemployment rate typically near 10 percent.

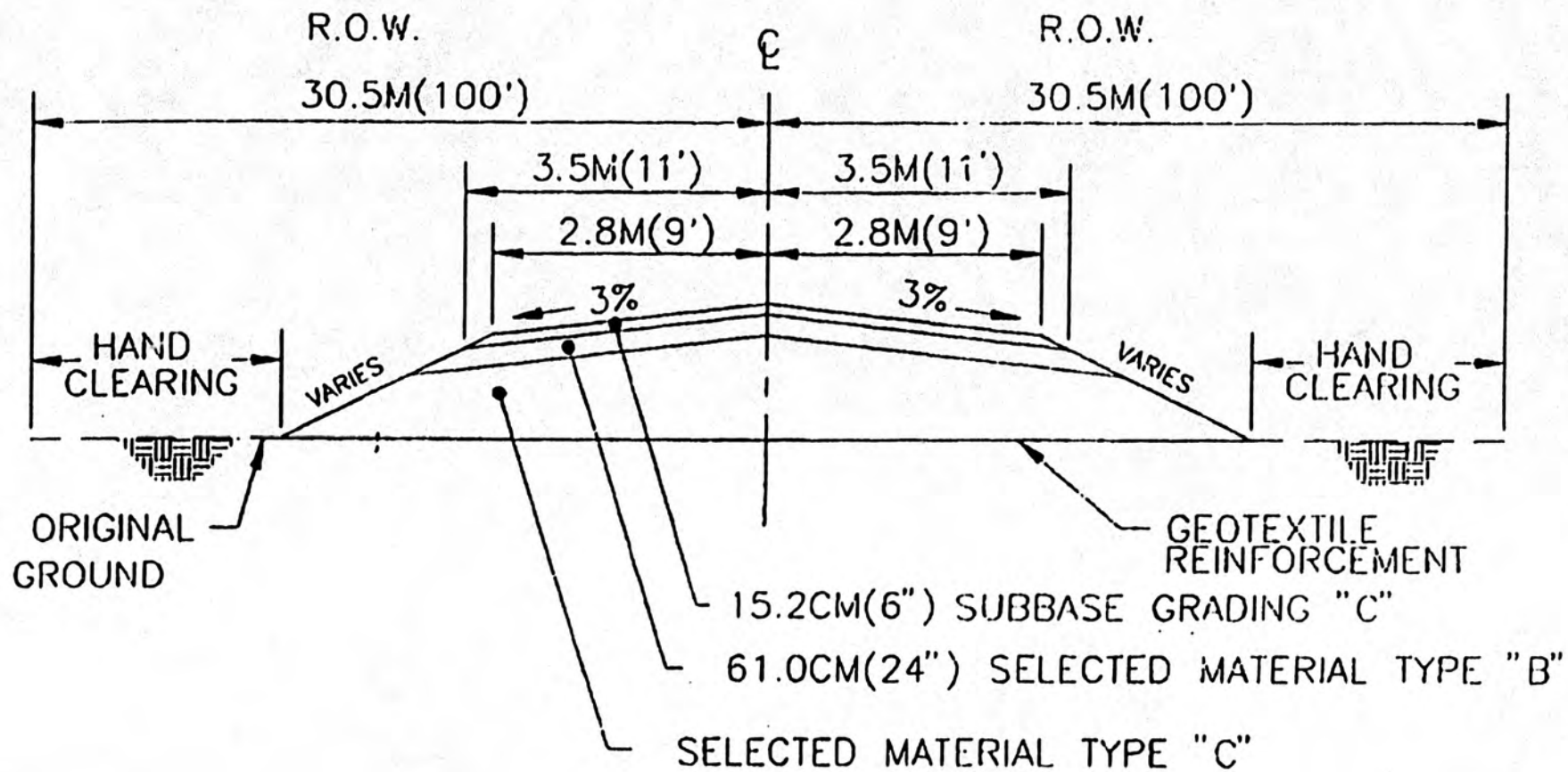
CHAPTER II

ALTERNATIVES

Four alternatives have been evaluated for this proposal. They are the no-action (or no-build), upgrade the existing roadway alignment, and two options to re-route the road.

All of the build alternatives would have a finished road width of 5.5 meters [eighteen feet] including shoulders. The typical section for the build alternatives would have foreslopes varying from 1:4 to 1:1 $\frac{1}{2}$ [4:1 to 1 $\frac{1}{2}$:1]. Design criteria recommended with all build versions would result in horizontal curves at or above the minimums. Other recommendations include flatter grades, and hand clearing alders and willows out of the right-of-way to help facilitate snow removal. The proposed facility would require additional right-of-way to establish a corridor width of approximately 30.5 meters [100 feet].

NOME, ALASKA



TYPICAL SECTION

GLACIER CREEK ROAD

Alternatives 3 & 4

Re-route Glacier Creek Road

Two locations were considered for realignment. An alternate route on the west side of the Snake River (Alternative 4) was investigated and discarded because of its longer length and higher cost; and a greater potential for environmental impacts, particularly with regard to crossing the Snake River. Because of its width, crossing the Snake would entail a bridge structure substantially increasing construction costs.

The recommended route, Alternative 3, starts on the east side of the Snake River, approximately 10 kilometers [6.3 miles] on the Bob Blodgett Nome-Teller Highway traversing into the Snake River valley and intersecting into the existing Glacier Creek Road near Kilometer 9 [Mile 5.6]. From this point, the existing Glacier Creek Road would be upgraded to Rock Creek. The approximate length would be 6 kilometers [3.6 miles].

A spur road connecting the new alignment with the existing Glacier Creek Road south of Glacier Creek is also proposed to access the area to eliminate the need for a new and additional crossing of Glacier Creek. This spur road would be about one-quarter mile long (approximately 400 meters). Two 3.7-meter [12-foot] culverts would replace the existing road crossing at Glacier Creek.

The topography along this alignment is flat, open terrain with sparse vegetation consisting of a combination of alpine tundra/barren ground system, with alders and willows lining the numerous drainage channels. Underlying soils are primarily undisturbed tundra consisting of fine material with a high moisture content that is interspersed with ice lenses.

The major advantage of this alternative is that it allows the desired all-season capability with minimal maintenance efforts. Another cost saving would be realized by incorporating an overlay throughout the proposed alignment and hand-clearing alders

NOME, ALASKA

GLACIER CREEK ROAD

and willows to the right-of-way limits. This in turn would reduce snow drift accumulation on the road's surface enhancing vehicle safety and minimizing maintenance costs.

A potential disadvantage with this alternative is possible differential settlement of the embankment placed over undisturbed tundra. Although eventually this type of problem generally reaches a point of equilibrium.

Right-of-way costs would be increased with this alternative. Land ownership along the proposed route is primarily native corporation lands.² This alternative's alignment would for the most part, avoid the numerous patented mining claims, except near the end of the project where the many claims cannot be avoided.

Alternative 3**Preferred Alternative**

The department is recommending re-routing the road to the east of the Snake River, as described above. This alternative is preferred because it offers the best means to satisfy the purpose and need for the proposed project. It would provide users with a safe, all-season driving surface at minimum costs; and with minimal social, economic and physical environmental impacts.

²The Bering Straits Native Corporation has passed Resolution #2-4-94-2 granting a perpetual subsurface easement and restrictive covenant to the ADOT&PF to facilitate the Glacier Creek Road proposal. However, it is the village corporations who have been granted surface rights to the land.

NOME, ALASKA

GLACIER CREEK ROAD**TABLE 1
ESTIMATED COST****Alternative 1: No-Build**

| | |
|-----------------------|-----------------|
| Phase 2: Design | \$ 0 |
| Phase 3: Right-of-Way | \$ 0 |
| Phase 4: Construction | \$ 0 |
| Maintenance: Summer | \$ 8,105 |
| Maintenance: Winter | \$ 0 |
| TOTAL | \$ 8,105 |

Alternative 2: Upgrade Existing Route

| | |
|-----------------------|--------------------|
| Phase 2: Design | \$ 300,000 |
| Phase 3: Right-of-Way | \$ 521,909 |
| Phase 4: Construction | \$4,054,334 |
| Maintenance: Summer | \$ 8,105 |
| Maintenance: Winter | \$ 390,184 |
| TOTAL | \$5,265,532 |

Alternative 3: Re-route road

| | |
|-----------------------|--------------------|
| Phase 2: Design | \$ 300,000 |
| Phase 3: Right-of-Way | \$ 159,770 |
| Phase 4: Construction | \$2,947,854 |
| Maintenance: Summer | \$ 4,053 |
| Maintenance: Winter | \$ 8,105 |
| TOTAL | \$3,419,782 |

Alternative 4: Re-route road

| | |
|-----------------------|--------------------|
| Phase 2: Design | \$ 400,000 |
| Phase 3: Right-of-Way | \$ 234,013 |
| Phase 4: Construction | \$4,866,526 |
| Maintenance: Summer | \$ 4,053 |
| Maintenance: Winter | \$ 130,061 |
| TOTAL | \$5,634,053 |

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GLACIER CREEK ROAD

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ESTIMATED COST

| | |
|---------------------------------------|--------------------|
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| Phase 3: Right-of-Way | \$ 0 |
| Phase 4: Construction | \$ 0 |
| Maintenance: Summer | \$ 8,105 |
| Maintenance: Winter | \$ 0 |
| TOTAL | <u>\$ 8,105</u> |
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| Phase 2: Design | \$ 300,000 |
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| Alternative 3: Re-route road | |
| Phase 2: Design | \$ 300,000 |
| Phase 3: Right-of-Way | \$ 159,770 |
| Phase 4: Construction | \$2,947,854 |
| Maintenance: Summer | \$ 4,053 |
| Maintenance: Winter | <u>\$ 8,105</u> |
| TOTAL | <u>\$3,419,782</u> |
| Alternative 4: Re-route road | |
| Phase 2: Design | \$ 400,000 |
| Phase 3: Right-of-Way | \$ 234,013 |
| Phase 4: Construction | \$4,866,526 |
| Maintenance: Summer | \$ 4,053 |
| Maintenance: Winter | <u>\$ 130,061</u> |
| TOTAL | <u>\$5,634,053</u> |

NOME, ALASKA

**REQUEST FOR FUNDING
PRELIMINARY ENGINEERING AND DESIGN
CROOKED CREEK DONLIN CREEK MINE ROAD**

PROJECT BACKGROUND

The Donlin Creek mine is a lode-gold exploration project located 15 miles north of the village of Crooked Creek (population 144). Small placer mining operations (total production 35,000 oz.) have been present in the area since 1915. In the mid-1980's, Calista geologists determined that a significant lode source could exist in the uplands above the existing placer mining operations near Snow Gulch.

In 1988 and 1989 Western Gold Mining and Exploration Ltd. (WestGold) spent \$2 million drilling and trenching the Donlin Creek deposit. Based on their fieldwork they estimated the Donlin Creek gold reserve to be over 400,000 ounces. In 1995, Placer-Dome North America (PDNA) operated a \$2 million exploration and drilling program. In 1996 and 1997 they extended \$18 million on additional drilling and exploration work at Donlin Creek, delineating a 3.6 million-ounce gold resource. Successful field results in 1998 produced an estimated 11.5 million ounces of resource which could lead to a preliminary mine feasibility determination by the end of 1999.

The level of exploration and financial investment PDNA is making at the Donlin Creek Project is a sign this area is considered a very advanced exploration property. The actual development cost for a mine facility will require an outlay of more than \$600 million dollars. The construction of an access road is just one of the costs associated with developing a producing mine. It is in the best interest of the mining industry that the State of Alaska encourages the development of remote mines.

An airstrip suitable for Hercules and DC-6 type aircraft was constructed at American Creek. Although it was expensive, Placer-Dome and Calista believed the expenditure was necessary to conduct advanced exploration. The airstrip will meet this project's needs for exploration support, but it will not be sufficient for use during actual construction and development of a mine. Long-term mine development will require access to the mine site over land. Over the next two years, it is essential to link the mine site with the Kuskokwim River via a road.

There is minimal road access to the Donlin Creek area. A pioneer road is in place from the placer mine sites at Snow Gulch and Queen Gulch. PDNA constructed an additional one and one half miles of road during 1997 from Queen Gulch to American Creek. The road provides access to the general location of the exploration camp, which was constructed in 1996. The road project and campsite represent a very high level of commitment by PDNA to undertake a viable exploration program to prove up the gold reserve in the area.