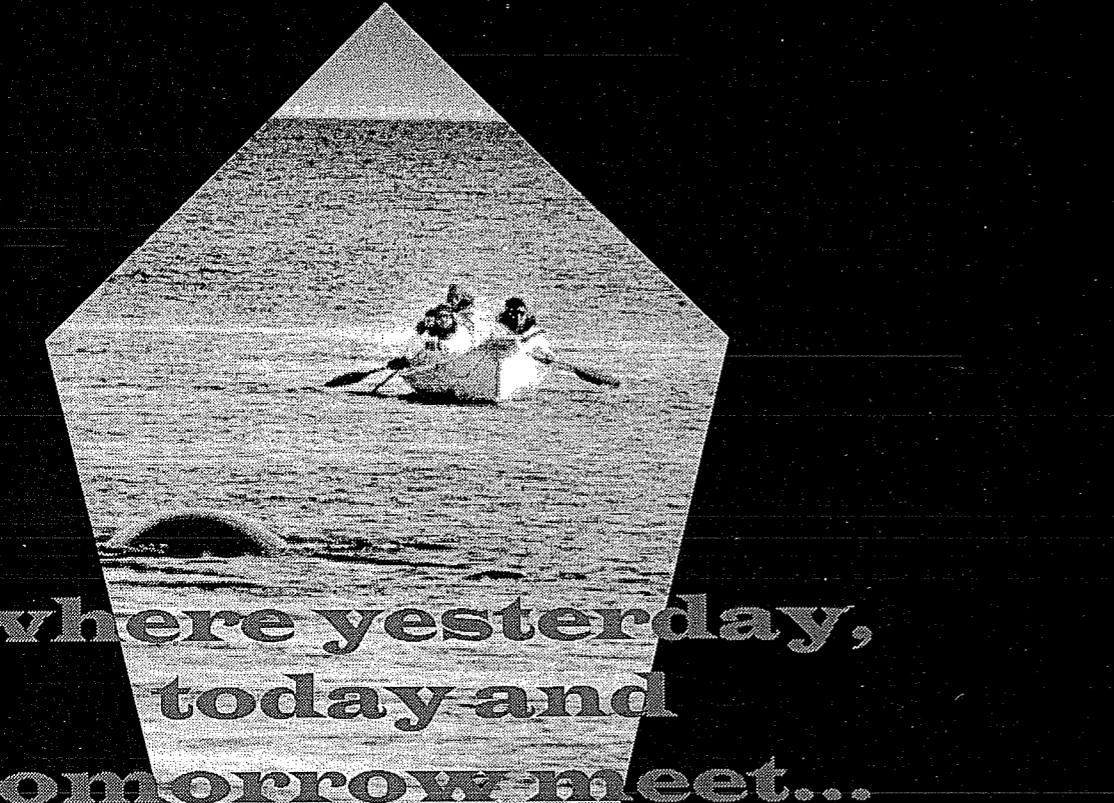
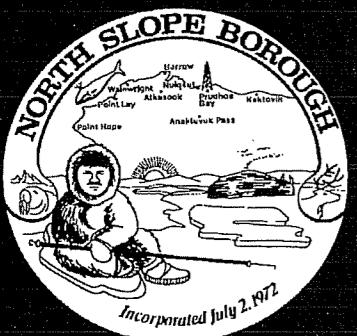


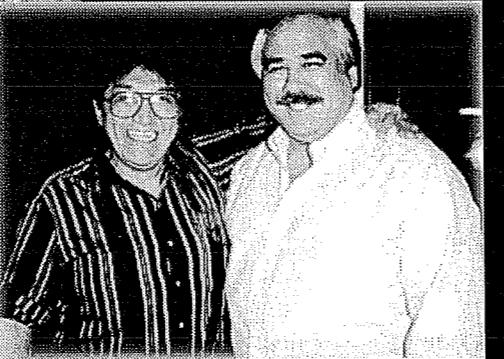
# The North Slope Borough



Where yesterday,  
today and  
tomorrow meet...



Preserving tradition

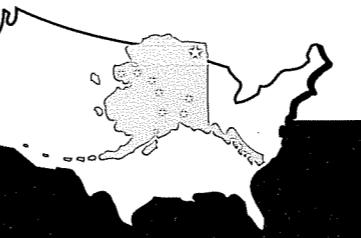


Encouraging responsible development

Committed to partnership with private enterprise

Resource Development Council  
121 W. Fireweed, Suite 250  
Anchorage, AK 99503  
ADDRESS CORRECTION REQUESTED

Bulk Rate  
U.S. Postage  
PAID  
Anchorage, AK  
Permit No. 377



This edition  
sponsored by

North Slope Borough

## Resource Review

April 1997 A periodic publication of the Resource Development Council, Inc.

# North Slope producers aim to reverse decline

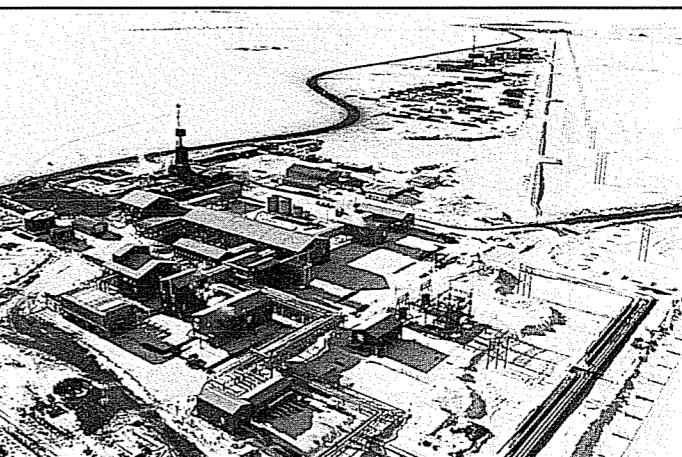
*End of decline,  
new growth  
foreseen*

It was only four years ago when the state was projecting a sharp decline in North Slope oil production to 900,000 barrels a day by the year 2001, bad news for a state where "black gold" funds more than 80 percent of the government's budget and is the foundation of the state's economy.

But recent advances in technology, lower costs and new state laws encouraging development of economically marginal oil fields provide new hope that the steady downturn in oil production can be halted and perhaps reversed early in the next century.

The two companies that operate all of the North Slope oil fields, ARCO Alaska Inc., and BP Exploration (Alaska) Inc., are planning a series of projects that will halt the decline and bring new fields on line.

"We call it 'No Decline After '99,'" says ARCO's



North Slope production is expected to level off around 1999, then increase slightly after the turn of the century.

President Ken Thompson.

ARCO sees its share of oil production declining from its current level of 390,000 barrels a day to approximately 340,000 barrels in 1999, then remaining steady until at least 2005. BP is projecting its daily production will increase from today's 525,000 barrels to 600,000 barrels a day by 2002.

In the past fiscal year, North Slope oil fields produced an average of just under 1.5 million barrels a day. Updated projections now call for production to continue falling through 1999, then begin to move

upwards to 1.3 million barrels a day in 2001.

The two major North Slope producers contend that internal cost-cutting and development of new cost-reducing technology have made it profitable to pump oil that was previously uneconomic to produce.

New technology is now being applied to squeeze more oil from the older fields at Prudhoe Bay and Kuparuk, as well as develop new fields like ARCO's Alpine and BP's Badami, the fourth new oil field development announced in the last six months. Even West Sak,

the North Slope's huge reservoir of heavy oil that has previously been considered uneconomic to produce, is now expected to yield up to 300 million barrels of crude from one core area.

"Thanks to a friendlier investment climate created by cooperation between the industry and the state and our own technological advances that have enhanced our ability to produce oil once considered inaccessible, we see a number of significant investment opportunities in Alaska that can bring substantial benefits to Alaskans," said Richard Campbell, President of BP Exploration (Alaska) Inc.

Continuing production decline, however, adds an element of urgency to industry's task, Campbell noted.

Prudhoe Bay is now producing just under 900,000 barrels a day, down 45 percent from its 1988 peak. Kuparuk production has fallen by more than 10 percent from its 1993 peak.

(Continued to page 4)

# RDC board meets in Juneau

More than 20 RDC board members from across Alaska converged on Juneau in mid-February to meet with Governor Knowles, the Legislature and local community officials to advance the Council's legislative and administrative priorities for 1997.

The RDC delegation broke into small groups for one-on-one meetings with legislators, but met as a whole in meetings with Governor Knowles and the leaders of the House and Senate.

The two-day visit began with an extensive briefing by Juneau Mayor Dennis Egan on local development projects and major issues facing Alaska's booming capital city.

More than 33 meetings occurred during the visit to address a wide range of land, water, transportation, access and other legislative issues.

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

## Executive Committee Officers

President ..... Scott L. Thorson  
Sr. Vice President ..... Allen Bingham  
Vice President ..... John Sturgeon  
Secretary ..... Gerald G. Booth  
Treasurer ..... Michael E. Stone  
Past President ..... Elizabeth Rensch  
Staff

Executive Director ..... Becky L. Gay  
Communications Director ..... Carl R. Portman  
Admin. Assistant/Finance ..... Judie Schneiter  
Special Assistant ..... Craig Lyon

RDC is located at 121 W. Fireweed, Suite 250, Anchorage, AK 99503, (907) 276-0700, Fax: 276-3887.

Material in the publication may be reprinted without permission provided appropriate credit is given.

RDC's e-mail address:  
[rdc@aonline.com](mailto:rdc@aonline.com)  
Writer & Editor  
Carl Portman



RDC board members discuss legislative priorities with Governor Tony Knowles.



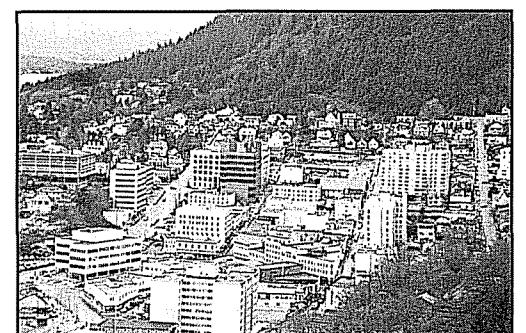
RDC delegates pose with House Speaker Gail Phillips and Senate President Mike Miller.



Juneau Mayor Dennis Egan briefs RDC board members on new development projects in Alaska's capital city.



House Speaker Gail Phillips and RDC President Scott Thorson share a laugh.



The new Mt. Roberts tramway gives visitors a birds-eye view of downtown Juneau. Goldbelt, Inc., has invested more than \$20 million into the tram and a visitor/community center complex high on the mountain. Expect full operations this summer.



## Guest Opinion

by Mayor Ben Nageak, North Slope Borough

# Diversity is key to healthy North Slope economy

It is often said that the business of America is business. America was built on a foundation of free enterprise and a belief that what is good for private enterprise is ultimately good for America.

While there is some debate about whether business needs more or less government regulation, there is really very little debate over the fact that a healthy business climate means a healthy economy and that benefits all of us.

One of the things that strikes people who travel to "hub" communities in the Bush, such as Kotzebue, is the difference in the amount of small businesses available in those communities as opposed to Barrow.

Kotzebue, which has a smaller economic base than Barrow, has traditionally had many more successful small businesses. One of the main differences between Kotzebue and Barrow is the presence of the North Slope Borough with its extensive revenues and employment possibilities.

The North Slope Borough has been the driving force in the economy of both Barrow and other North Slope villages since its inception. There was little incentive to begin a private business when government jobs were easily available

that provided security, health benefits and retirement plans.

However, the boom or bust history of the State of Alaska's economy provides ample evidence of the inherent problems in an economy dependent on only one source. The borough's financial support of the Arctic Development Council is one of the ways in which we are trying to assist our local economy in diversifying its base so that it is not so completely dependent on the borough.

This will become more and more important as the borough's revenues continue to decline in the future.

I believe that there are two ways in which the borough can support the diversification of our economy while encouraging the creation and long term viability of many small businesses.

One of the ways the borough can help accomplish this is by spending its money locally whenever possible and encouraging all its employees to do the same. When our employees travel to various North Slope villages, I encourage them to stay in local hotels instead of at borough facilities. I encourage all the departments to use local goods and services when possible so that borough dollars continue to circulate within the borough.

I think the borough best serves the needs of its residents when it provides them with a means of providing for themselves. Dependency on government, either federal, state or borough, is never a healthy thing to do whether you are depending on it for health care or jobs. Diversity in the economy is critical

to an economy's ability to survive the ups and downs of the marketplace.

I am excited at the idea of working with the private sector, the Arctic Development Council and RDC to create a strong, healthy economy in which private businesses can thrive. I ask all borough residents to join with me in this effort by patronizing local businesses when possible. Spend your money locally and our economy will have a much brighter outlook.

## Reclamation regs could hurt small miners

Alaska miners are expressing alarm over new federal regulations that will force them to post bonds covering 100 percent of reclamation costs before mining even begins.

The new regulations, which took effect in March, are intended to raise the funds necessary to restore abandoned sites.

Miners, however, warn that the new requirements will make it virtually impossible for small operators to develop their claims because of high up-front costs.

In 1990, the Alaska Legislature passed a bonding law applying to operations on both state and federal land. Under that law, miners pay an up-front reclamation charge of \$12.50 an acre. Miners also pay \$37.50 an acre annually into a reclamation pool for abandoned sites. The new rules could increase bonding to at least \$1,000 an acre, perhaps much higher, depending on reclamation estimates submitted by an engineer.

## brief review

### EPA withdraws arsenic standard

The Environmental Protection Agency (EPA) has agreed to withdraw a federal arsenic standard forced on Alaska and allow the state to use regulations already on the books.

The decision to withdraw the National Toxics Rule (NTR) came in a letter to Governor Knowles from the EPA last month.

RDC supported the Governor's efforts to remove Alaska from the NTR. RDC's Becky Gay met with top EPA officials earlier this winter in Seattle to discuss a number of water quality issues, including the arsenic standards.

In 1992, the EPA imposed an arsenic standard on discharged water in Alaska that was 277 times more stringent than the state's drinking water standard of 50 parts per billion.

Naturally occurring arsenic is present in many Alaska waters at levels higher than the federal standard. The relaxed standard will help municipal water treatment plants, miners and seafood processors meet permit requirements.

The EPA decision to withdraw its standard is good news for Alaska, said Knowles.

The Governor noted Alaska's arsenic standards fully protect human health and fisheries.

### Sitka voters support logging

In a recent special election, Sitka voters rejected an initiative calling for a city policy against clear-cutting old growth forest near town while approving a second measure asking the Forest Service to supply a reliable amount of timber to support industry jobs.

Former Mayor Dan Keck said the clear-cut initiative would have discouraged companies considering doing business in Sitka.

"Our economy is hurting right now," Keck said. "We need to look at something to stabilize the economy."

### North access study

The National Park Service is conducting a study of the feasibility and cost to construct and maintain either a road or a railroad from Healy to the Wonder Lake area of Denali National Park. The route to be studied follows the Stampede Trail corridor. The report will be completed by the end of March and submitted to Congress.

The northern route covers gentler terrain and offers more opportunities for distant views of Mt. McKinley than the existing park road, but wildlife viewing opportunities would be less.

The northern route would provide visitors with a more convenient means to access the park's interior. The shuttle bus transportation system along the existing route is operating near capacity.

RDC supports the new route, which it says will provide new visitor experiences and meet projected growth.

### Moving in the right direction



RDC President Scott Thorson recently commended National Park Service Field Director Robert D. Barbee for his leadership in securing a successful partnership between the state, federal and private sectors in planning for new visitor facility development on the South Side of Denali National Park. Thorson also recognized Sally Gibert of the Governor's Office, as well as Steve Martin and Nancy Swanton of the Park Service.

### Denali plans are finalized

sents a unique partnership of state, federal, borough, local and private sector enterprises in developing a plan to guide visitor facility developments on the South Side of Mt. McKinley in Denali State Park.

The Proposed Action includes a visitor center in the Tokositna area, upgrading and extension of the Petersville Road, new campgrounds, public use cabins, and trails. The plan also calls for visitor facilities in Talkeetna, Broad Pass and in the central development zone of the park.

### Christmas trees will not come from Tongass

The U.S. Forest Service is dropping its plan to use trees from the Tongass National Forest for Christmas decorations in Washington, D.C., after the Alaska Legislature passed a resolution opposing the idea.

Alaska lawmakers say it is hypocritical for the Clinton administration to take 60 Christmas trees from the forest when its policies in the Tongass have closed pulp mills and other facilities.



### Thoughts from the President by Scott Thorson

## Water quality bill would help solve long-standing problems

There is a lot of confusion surrounding the water quality legislation that is now working its way through the Alaska Legislature. HB 51, sponsored by Rep. Norm Rokeberg, addresses a number of problems that have not been solved by other means over a very long period of time. Some of these problems date back 20 years. Some people I have known have died of old age waiting for these problems to be solved.

HB 51 is one of the most important pieces of legislation to come before the Legislature in many years. Remember last year's House Bill 342? HB 51 includes many provisions from HB 342, which passed the Legislature, but was vetoed by Governor Knowles.

This is good legislation, and RDC is still working with the Legislature, the Governor, the Department of Environmental Conservation (DEC) and industry to make it as good a bill as possible. Since RDC is non-partisan, it's trying to avoid the bill's political minefield. RDC is committed to getting the best possible legislation on the books. In the entire time I have been involved with RDC, this is the closest we have come to the goal of solving long standing water quality issues. Below are some of the more important points contained in this bill:

• HB 51 for the first time will give DEC statutory authority to create mixing zones.

In its present state, HB 51 does not dictate what the permit limits for mixing zones will be or the size of a mixing zone. The DEC is currently working on regulations that will define how mixing zones will be implemented. Providing statutory support will hopefully keep both the regulated community and the DEC out of court on third party lawsuits

challenging legality.

- HB 51 will task DEC to follow federal water quality regulations when a federal standard is relaxed. Currently the federal government requires states to follow federal guidelines when these guidelines are made stricter, but there is no provision on federal or state books to allow for the reverse.

- HB 51 has a provision which allows the DEC to set standards that are stricter than the federal standards, provided there is scientific reasoning to support stricter DEC recommendations. This will allow Alaska to have as much discretion in setting water quality standards as the federal government will allow.

- HB 51 solves a long-standing problem small placer miners have faced for years by allowing discharge water used in their operations to be as clean or cleaner than the receiving waters. Since many operators get their water from turbid and muddy water sources and return it to the same source, effectively they can put it back the same way they got it. Currently, placer miners have to clean the water they plan to discharge to drinking-water standards, despite the quality of the receiving waters. This is unworkable and unreasonable, particularly for Alaska's historic placer mining industry.

There are other provisions in this bill, but these are the major points. This is not draconian legislation, nor will it allow industry to pollute Alaska's waters. HB 51 provides clear statutory guidance to the regulators and the regulated on the reasonable use of water in Alaska. This bill keeps Alaska open for business, which is good for all of us.

## Tongass plan delayed, gets more review

The U.S. Forest Service is reevaluating proposed logging levels in its revision of the Tongass Land Management Plan (TLMP). As a result, federal foresters do not expect to release the long-awaited revisions until late spring.

Saying Southeast Alaska communities need a foundation on which to build its future, Governor Tony Knowles said the continuing delay in releasing the completed TLMP would hurt Southeast Alaska businesses and families.

"Southeast communities need stability; they need some certainty on which to move forward," Knowles said.

Federal foresters had planned to have the TLMP revisions completed by last summer, but the date has been pushed back several times.

The Forest Service says the new review will examine how various logging levels will affect the region's wildlife habitats.

A draft plan released last April would have reduced annual timber harvests to about 300 million board feet (MMBF), compared to 450 MMBF allowed by the current plan. But despite the higher levels allowed, actual timber harvests have been less than 350 MMBF.

When it released the draft plan last April, the Forest Service said the plan was based on the most exhaustive scientific analysis of the forest ever done.

Government and industry sources have heard that the final plan now under review would drastically cut annual harvests to somewhere between 100 and 200 MMBF.

"That will actually finish off the industry that operates in the Tongass," warned Jack Phelps, Executive Director of the Alaska Forest Association.

The Governor's Timber Task Force has determined that an annual harvest of 300 MMBF is the minimum level necessary to sustain an integrated timber industry in Southeast Alaska.

Adoption of a final TLMP incapable of providing for a minimum of 300 MMBF harvest level will almost certainly cause additional job loss and economic dislocation throughout Southeast Alaska.

The April 1996 draft called for taking 500,000 acres out of timber production, reducing the areas open to logging to about 1.2 million acres. More than 8 million acres of forested lands in the Tongass are now closed to logging.

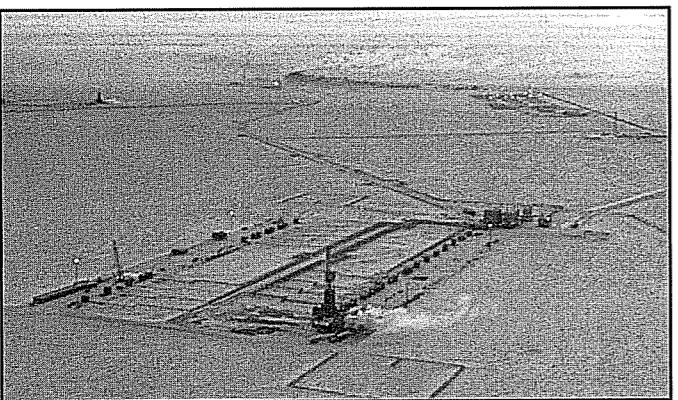
# Halting the decline

*Industry investing in and developing technology to capture new North Slope reserves*

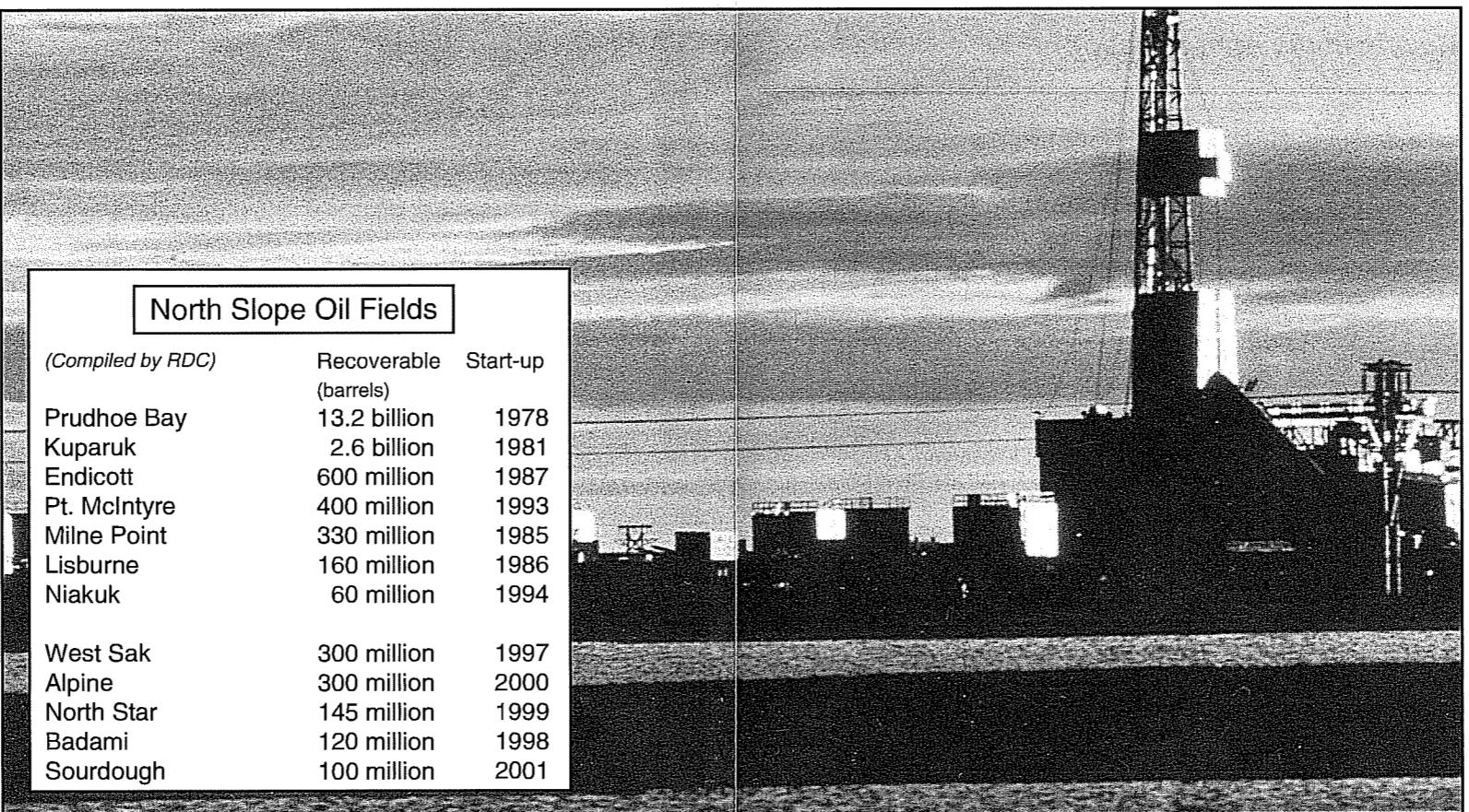
(Continued from page 1)

While North Slope oil production has always been dominated by Prudhoe Bay and Kuparuk, which today produce about 80 percent of all North Slope crude, total North Slope production from outside these two mammoth fields — 333,000 barrels a day, has nearly tripled in the past ten years. The increase, however, has not been enough to offset declines at Prudhoe and Kuparuk.

As a result, the first objective for ARCO and BP in reversing the downward curve is to stabilize production at Prudhoe and Kuparuk. Utilizing new technology,



Thanks to a new spirit of cooperation between the state and the oil industry and new technological advances that enhance the industry's ability to produce oil once considered inaccessible, BP and ARCO believe the potential exists to add four to six billion barrels to North Slope reserves over the next decade.



North Slope Oil Fields

| (Compiled by RDC) | Recoverable<br>(barrels) | Start-up |
|-------------------|--------------------------|----------|
| Prudhoe Bay       | 13.2 billion             | 1978     |
| Kuparuk           | 2.6 billion              | 1981     |
| Endicott          | 600 million              | 1987     |
| Pt. McIntyre      | 400 million              | 1993     |
| Milne Point       | 330 million              | 1985     |
| Lisburne          | 160 million              | 1986     |
| Niakuk            | 60 million               | 1994     |
| West Sak          | 300 million              | 1997     |
| Alpine            | 300 million              | 2000     |
| North Star        | 145 million              | 1999     |
| Badami            | 120 million              | 1998     |
| Sourdough         | 100 million              | 2001     |

techniques in existing fields.

The industry is also aggressively targeting other opportunities, including "satellite" accumulations of un-tapped pools in and around fields already in production.

Over the next ten years, the industry believes it has the potential to add an additional four to six billion barrels to its Alaska reserves. Sixty percent of those added reserves are expected to come from the application of enhanced oil recovery

An example of a satellite accumulation is the Tarn prospect, a pool of high quality crude on the Kuparuk oil field's southwestern edge.

Tarn could contain as much as 200 million barrels of oil.

In the four new development prospects announced over the past six months, plus new work underway at Kuparuk, more than one billion barrels have been added to the North Slope's total reserves, not including the oil that is likely to be produced from the satellite accumulations yet to be tapped.

As ARCO and BP pursue new Alaska opportunities, they have put their money on the line, substantially increasing their capital budgets for Alaska projects. BP itself plans to increase capital spending by \$1 billion, to \$3.5 billion over the next five years to extend its infrastructure outward from the existing oil province and develop new prospects. ARCO has increased its spending by \$500 million.

In early March, BP announced plans to develop the 120-million barrel Badami oil deposit, 35 miles east of Prudhoe Bay. The \$300 million project should be in production by late next year. BP will build a 26-mile pipeline to carry Badami crude west to the Endicott field, where it will connect into existing infrastructure.

Shortly after the Badami announcement, BP and Chevron confirmed an oil discovery on their

Sourdough prospect at ANWR's western border. Current information indicates Sourdough may contain at least 100 million barrels of oil.

Last fall ARCO announced it will develop the 300-million barrel Alpine

field, about 60 miles west of Prudhoe Bay. At the same time, BP announced it would proceed with its Northstar field, but a lawsuit has delayed that project.

The industry is also looking toward the National Petroleum Reserve-Alaska with renewed

interest. Leasing could begin in the area by August 1998 pending completion of environmental studies.

All this activity bodes well for Alaska and its economy over the long haul, even though downsizing in the industry continues today to reflect continuing declines in production at Prudhoe and Kuparuk. Over the next few years, the industry will be consolidating facilities and reducing staff and the contractor work force at Prudhoe.

"These are painful but necessary steps that will help enable us to generate competitive returns at lower production levels and provide access to the investment capital we need in order to pursue new development opportunities on the North Slope," explained BP's Campbell.

"While there will be fewer BP staff and direct contractors, we project a net increase in the number of people working on BP business in Alaska because of new investments and new projects made possible by our initiatives."

## Ketchikan pulp mill closes

The U.S. Forest Service signed off on its agreement with Ketchikan Pulp Company to supply enough timber to the company's two Southeast Alaska sawmills to keep them open for three more years. The agreement, however, signals the end to the Ketchikan pulp mill, which shuts down this month.

The recent agreement saves several hundred jobs at KPC's sawmills at Ward Cove and Metlakatla, but some 500 Alaskans will lose their means of earning a living when the pulp mill closes.

Timber employment has plummeted throughout the region as federal foresters have closed more than two-thirds of the commercial timber base in the Tongass to logging. Alaska Pulp Corporation closed its pulp mill in Sitka and a large sawmill in Wrangell several years ago, putting hundreds out of work.

As part of the KPC sawmill agreement, parent company Louisiana Pacific Corporation will get \$140 million from the government to settle litigation by KPC. The company said the federal government unilaterally altered its long-term timber contract, tying up wood from the Tongass and contributing to the closure of the pulp mill. KPC could not justify costly upgrades to the pulp mill without assurances of a stable timber supply.

KPC President Ralph Lewis said the sawmill agreement gives the company time to start over following the shut down of Alaska's last pulp mill.

Total Potential BP North Slope Production: 1997-2006

