

**PROGRESS**

**REPORT:**

**OIL**

**INDUSTRY**



Official Business

# ALASKA STATE LEGISLATURE

## SENATE RESOURCES COMMITTEE

State Capitol  
Juneau, AK 99801

Chairman: Senator Rick Halford  
Vice Chair: Senator Lyda Green  
Senator Loren Leman  
Senator Bert Sharp  
Senator Robin Taylor  
Senator John Torgerson  
Senator Georgianna Lincoln

### AGENDA

3:30 to 5:00 p.m.

Monday, February 24, 1997

**OIL INDUSTRY PROGRESS REPORT:** Joint with House Resources

- I. ARCO Alaska Inc - Alpine Project  
Martin Thurlow, Project Manager - Alpine, ARCO Alaska, Inc.  
George From, Manager - Materials, Purchasing & Contracts, ARCO
- II. BP Exploration Inc - Northstar and Badami Projects  
Eric Luttrell, Vice President, BP Exploration Inc.

Department of Labor available for questions:  
Dwight Perkins, Special Assistant  
Chris Miller, Research and Analysis

### NEXT MEETING

Wednesday, February 26 Joint meeting with House Resources

Briefing: Citizens Advisory Committee on Federal Areas

\* Bills previously scheduled

**ADJOURN**



Northstar Project

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# BP Northstar Project

Presentation to the

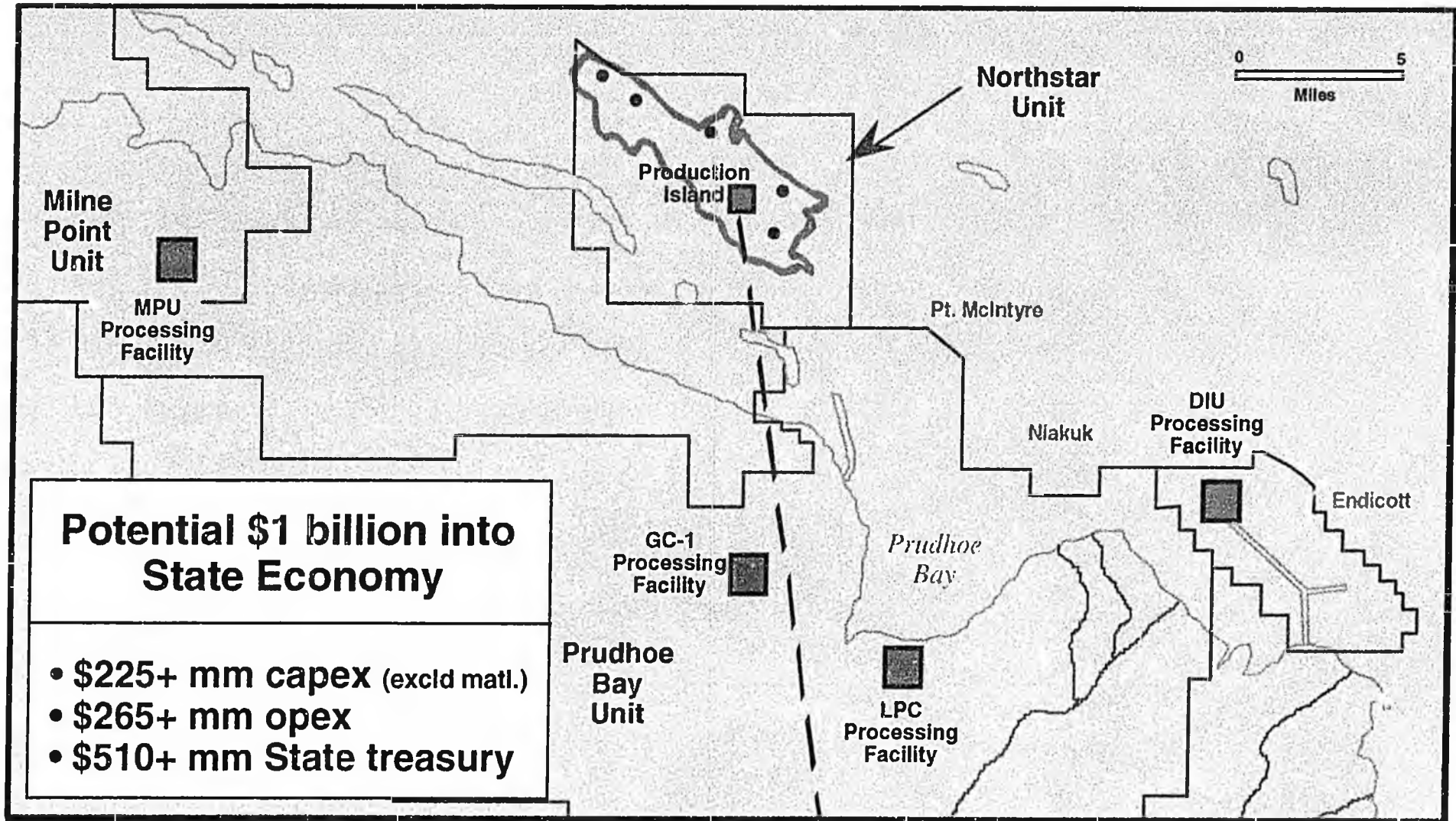
Senate Resource Committee

February 24, 1997



Northstar Project

# Location Map



## Potential \$1 billion into State Economy

- \$225+ mm capex (excl. matl.)
- \$265+ mm opex
- \$510+ mm State treasury



Northstar Project

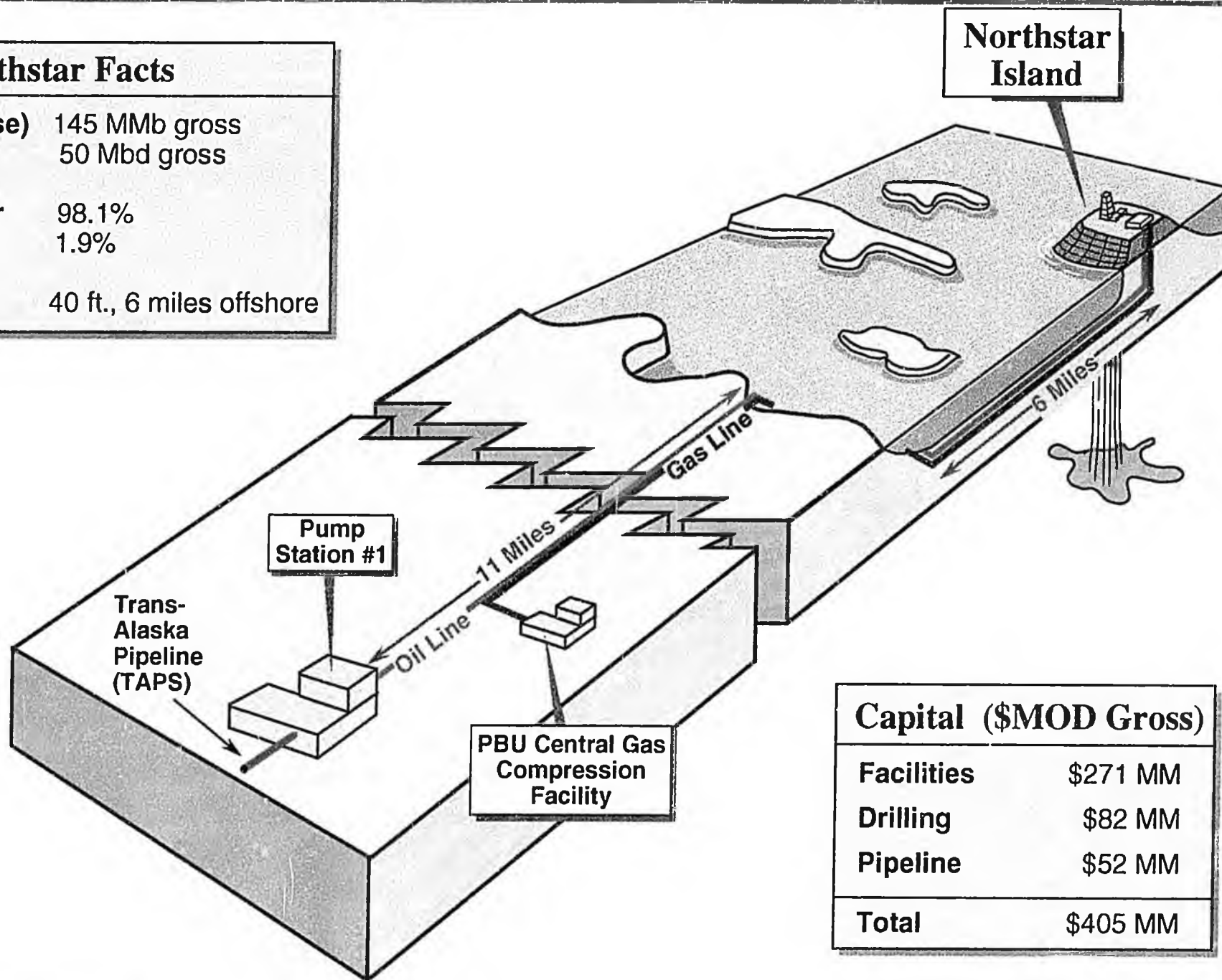
# Schematic Overview

## Northstar Facts

**Reserves (Base)** 145 MMb gross  
**Production** 50 Mbd gross

**BPX: Operator** 98.1%  
**Murphy** 1.9%

**Water Depth** 40 ft., 6 miles offshore



Northstar Island

Pump Station #1

Trans-Alaska Pipeline (TAPS)

PBU Central Gas Compression Facility

## Capital (\$MOD Gross)

Facilities	\$271 MM
Drilling	\$82 MM
Pipeline	\$52 MM
<b>Total</b>	<b>\$405 MM</b>



Northstar Project

## **Statutory Requirements**

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- **Project Sanction by May 1997**
  - BP Board approved Northstar funding on October 3, 1996
- **Report Quarterly Alaskan Residency and Hire Statistics**
  - First report is currently being filed with the Department of Labor
- **Supplemental Royalty**
  - @ current price of West Coast ANS Northstar Royalty is 26.41%



Northstar Project

## **Voluntary Public Commitments**

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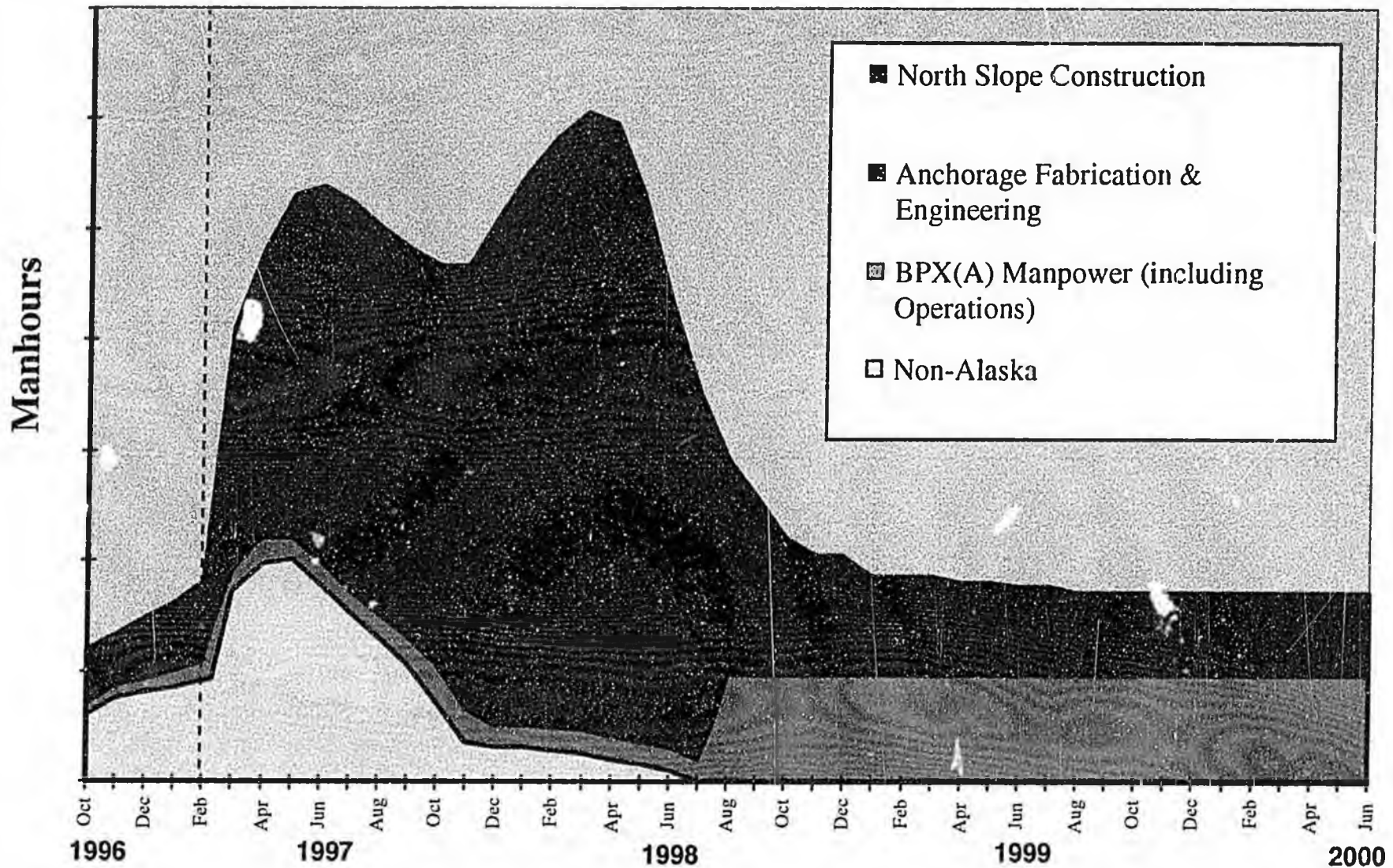
- **Alaskan Module Fabrication**
  - Contracted to fabricate in Anchorage (Veco/APC)
  - Upgrades to Port of Anchorage fab site nearly complete
  - Fabrication work began 1/10/97 (APC)
  
- **Alaskan Hire**
  - Contractors have joined in BP's commitment to Alaskan Hire.
  - Working closely with contractors and vocational schools to grow the workforce.
  
- **Use Alaskan Firms**
  - Veco, Nabors, AIC, APC, HCC and numerous Ak subcontractors
  - Using Alaskan vendors/agents to acquire specialized materials
  
- **Alaskan Spend**
  - Over \$225+ million will be spent in Alaska
  - Alaskan content of Northstar is greater than 85% (excluding specialized materials)



Northstar Project

# Northstar Manpower

## Alaskans Working on Northstar

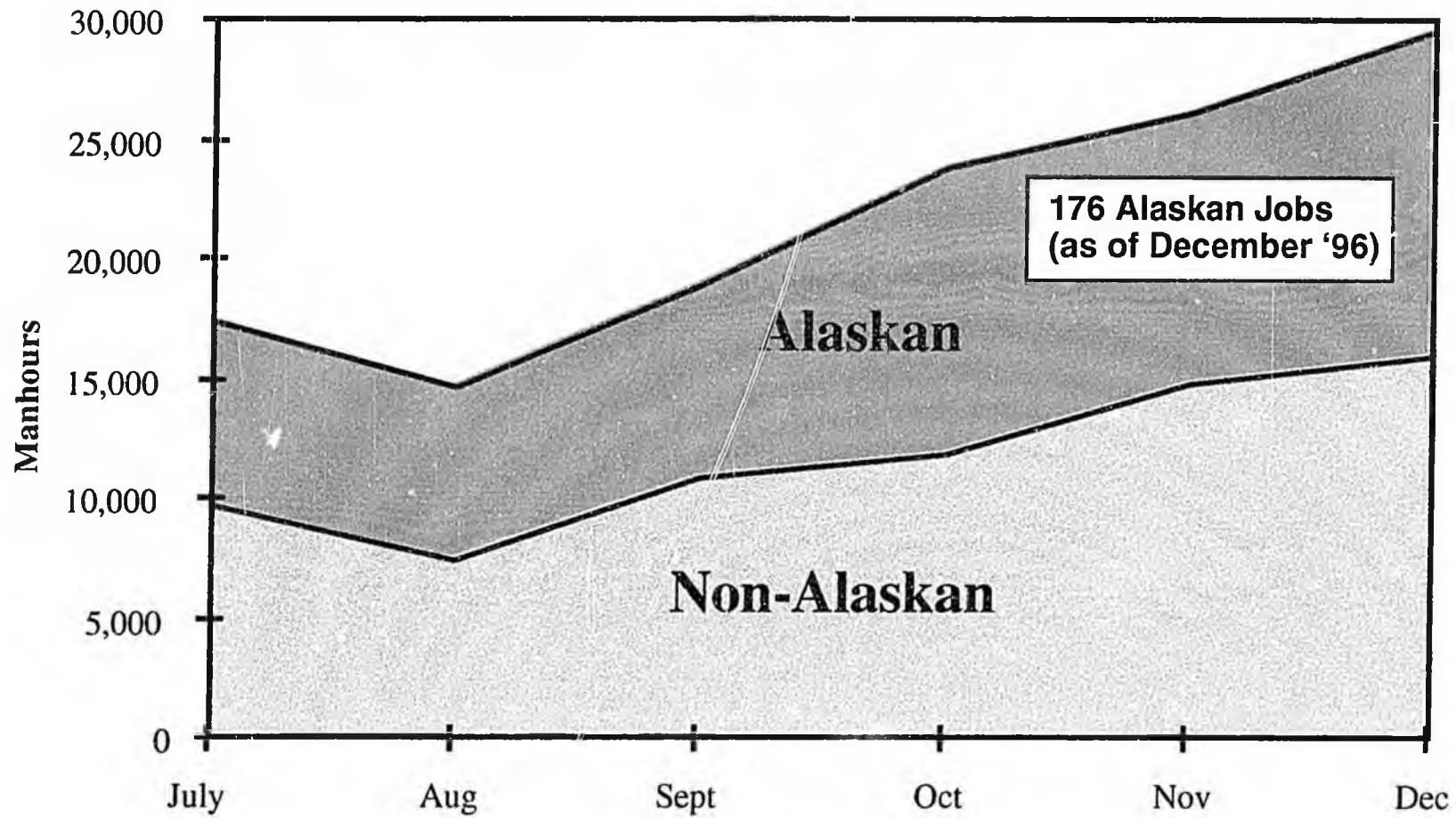




Northstar Project

# Alaskan Resident Manhours/Jobs

## Northstar Actuals (thru 12/96)





Northstar Project

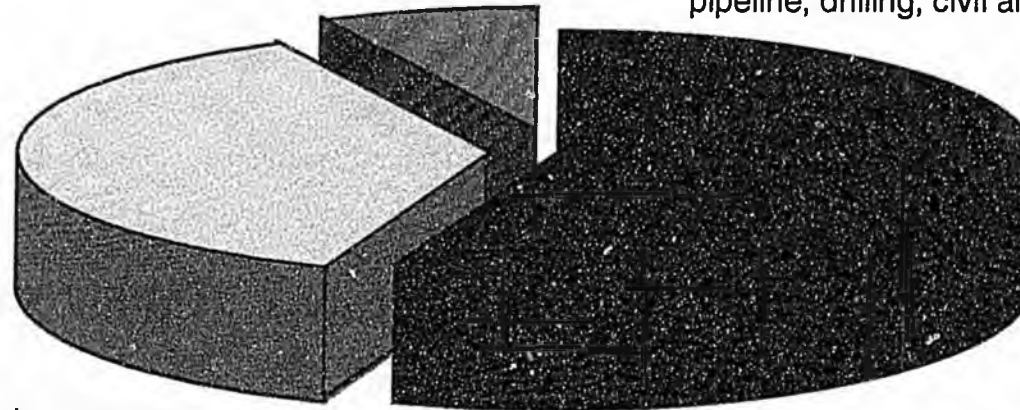
# Alaskan Content

## Engineering

Includes L-48 engineering and vessel fabrication

## Alaskan Spend (~\$225m)

Includes Anchorage fabrication, engineering, pipeline, drilling, civil and installation work



## Materials (~\$150m)

Over 75% of the orders have been placed through Alaskan vendors/agents.

**Total Project Cost ~\$405 million**

**(Greater than 85% Alaskan Spend excluding specialized materials)**



Northstar Project

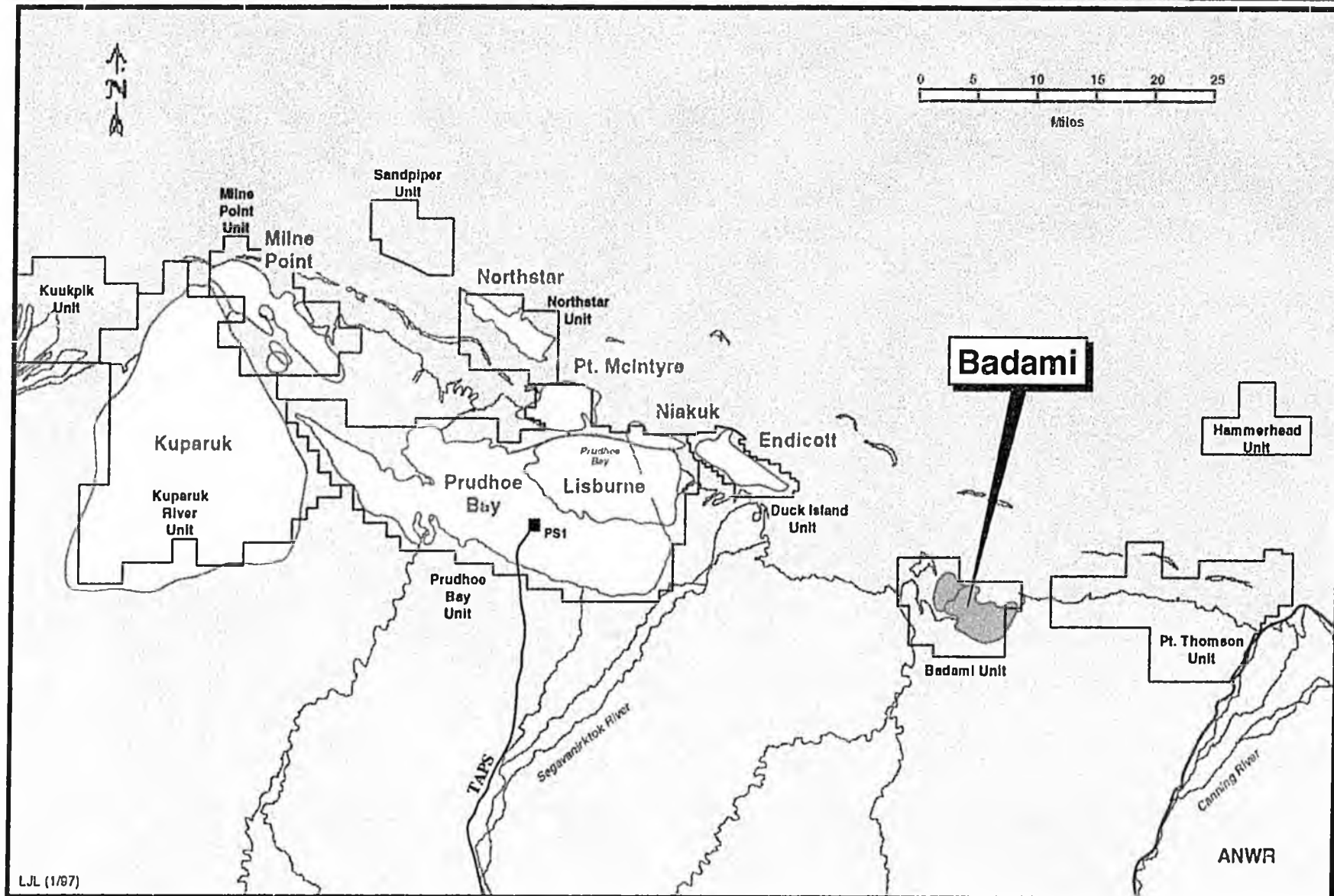
## **Current Project Status**

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- **Lawsuit filed 1/29/97**
- **BP aligned with State in the litigation**
  - BP filed motion to intervene - 2/10/97
- **Decision to defer fabrication - 2/13/97**
- **Continuing with EIS and permitting to allow for efficient project ramp-up**
- **BP remains committed to Northstar**



# North Slope Oil Fields





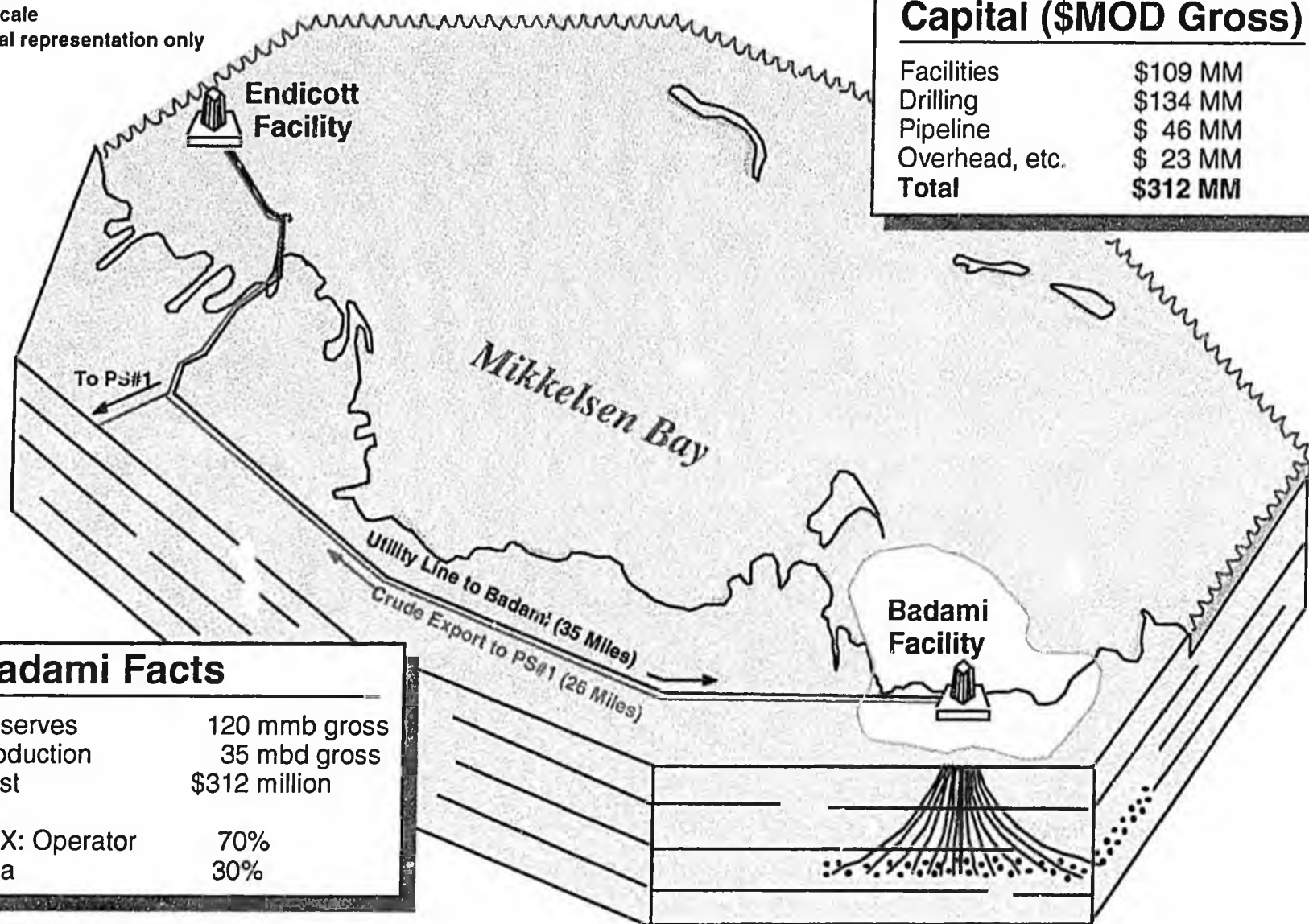
# Badami Project

## Proposed Facility and Pipelines

Not to Scale  
Graphical representation only

Capital (\$MOD Gross)	
Facilities	\$109 MM
Drilling	\$134 MM
Pipeline	\$ 46 MM
Overhead, etc.	\$ 23 MM
<b>Total</b>	<b>\$312 MM</b>

Badami Facts	
Reserves	120 mmb gross
Production	35 mbd gross
Cost	\$312 million
BPX: Operator	70%
Fina	30%





Badami Project

## **Benefits to Alaska**

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- **Working through local firms**
  - Construction jobs (~200)
    - » AIC, VECO, HCC
  - Drilling jobs (~100)
- **Operations Jobs**
- **\$200 million into State economy during construction**
- **\$300 million+ in royalty and taxes during production**
  - no HB-207 royalty relief being sought
- **Expansion of North Slope infrastructure**
- **A new partner in the Alaskan oil industry**





Badami Project

# Alaskan Content

Specialized materials  
not available in Alaska

**Engineering**

Includes Anchorage fabrication,  
engineering, pipeline, drilling,  
civil, and installation work

**Materials**

**Alaskan  
Spend  
(~\$210m)**

**Fabrication**

**Total Project Cost ~\$310 million**  
**(greater than 85% Alaskan spend excluding specialized materials)**

**DEPARTMENT OF LABOR**

**OFFICE OF THE COMMISSIONER**

P.O. BOX 21149  
 JUNEAU, ALASKA 99802-1149  
 PHONE: (907) 465-2700  
 FAX: (907) 465-2784

February 21, 1997

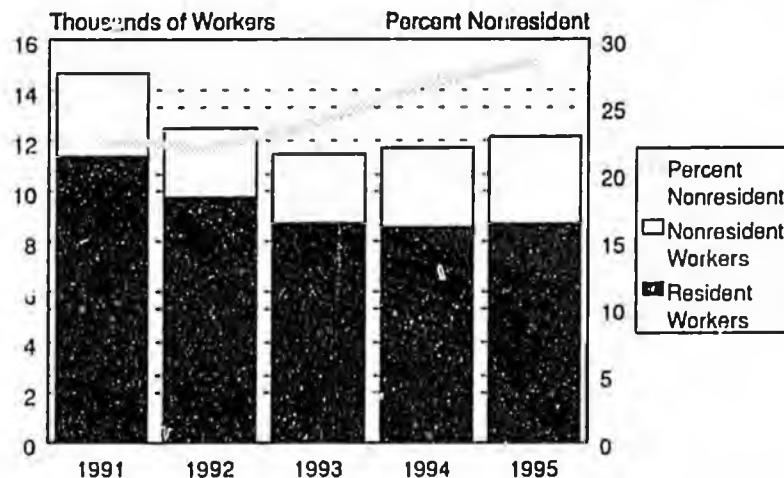
The Honorable Rick Halford  
 Chair, Senate Resources Committee  
 Alaska State Legislature  
 State Capitol, Room 121  
 Juneau, AK 99801-1182

Dear Senator Halford:

Alaska's oil industry including major oil companies and oil field service firms, increased the total number of workers employed at any time during the year by 5.8 percent from 1993 to 1995, but the total number of nonresident workers increased by 25 percent during the same period. The percentage of nonresident workers has increased steadily since 1992, rising from 22.0 percent to 28.4 percent of total workers in 1995. This increase in nonresident workers has occurred in tandem with the downsizing of major oil firms and a shifting of work to oilfield service companies.

Alaska's oil industry paid \$167 million to nonresidents in 1995, nearly 25 percent of total oil industry wages and about 20 percent of all private sector nonresident earnings in Alaska. On average, oil industry workers (part year and year round) earned more than \$58,400, while workers employed by major oil companies (excluding oilfield service firms) in Alaska in all four quarters had average earnings of \$102,682 in 1995. These are among the highest paying, year-round jobs in Alaska and are considered a high priority for placement of Alaskan workers. Faced with expected

**Oil Industry Number and Percent Nonresident Workers-Alaska 1991 to 1995**



Source: Alaska Department of Labor, Research and Analysis Section.

declines in total workers and continued shift of work to contractors with relatively high nonresident workers, improvements in resident hire performance will require coordination with training agencies and a strong commitment to resident hire.

In April of 1996, as a result of discussions between the Governor and principals in the Alaska oil industry, a task force of administration and oil industry officials was established to address the need for increased utilization of Alaskan workers and Alaskan companies in existing operations and in the development of new projects.

The **Governor's Joint Industry Task Force on Local Hire** consists of representatives selected by the oil industry, and representatives appointed by the Governor. The members are:

<u>Industry</u>	<u>State</u>
- Jamie Slack, VECO	- Ron Clarke, Special Staff Assistant to the Governor
- Bob Reynolds, BP Exploration	- William Hensley, Commissioner Department of Commerce
- Jane Crane, ARCO	- Mark Boyer, Commissioner, Department of Administration
- Janet Reiser, NANA Test	- Tom Cashen, Commissioner Department of Labor
- Ken Langel, HC Price	- Joyce Helens, UofA Anchorage
- Bill Cheek, Alaska Petroleum Contractors	

The primary focus of the task force is to:

- ▶ Ensure an adequately trained, available Alaska workforce;
- ▶ Actively recruit and hire Alaska residents and encourage non-Alaska hires to become Alaska residents within the boundaries of maintaining a safe, competitive and long-term workforce; and
- ▶ Track performance and report on the success of initiatives to increase Alaska employment performance.

Recommendations and strategies have been developed jointly to achieve these goals.

The task force has held several meetings over the past ten months, and have produced the following products:

- ▶ A matrix of all known industry-related training programs in the state delivered by private and public sectors which includes over 60 programs through over 25 providers;

February 21, 1997

- ▶ An Alaska employment plan measurement schedule appointing leaders for each task, time lines, completion dates, a tracking mechanism, and needs to accomplish tasks based on the goal strategies;
- ▶ An industry and state workforce survey to identify estimated workforce availability;
- ▶ A projection of employment opportunities based on known projects over the next five years; and
- ▶ A pilot project to measure Alaska hire.

The **Pilot Project** to measure Alaska hire has been developed to assist employers in the oil industry track new hires through additional residency benchmarks established from data the state collects at this time, such as physical addresses, Permanent Fund Dividend records, voter registrations, vehicle registrations, fishing and hunting licenses, and other information available through cooperative arrangements with other departments' data systems.

The pilot is designed to make reporting as simple as possible by employers, and to quantify the value of the additional data in terms of establishing Alaska residency. This will assist employers with record keeping and reports to the state by requiring employers to collect only one additional piece of data for quarterly payroll reports (instead of verifying several data submitted by the employee and asking questions that may be deemed discriminatory) and linking them with existing state data bases that are not linked at this time. The oil industry employers are very pleased with the simplicity of the system designed through cooperation between the state and employers. The pilot will allow the Department of Labor to benchmark the residency data today, and monitor the improvements in local hire across employers and the industry. A systems test is now underway with the state and industry to refine the mechanism for reporting.

Future plans for the task force will be to:

- ▶ Issue an annual report by April, 1997, on the work, progress and direction of the industry and state;
- ▶ Implement the pilot project on an industry basis, and monitor employment trends by company involved in North Slope oil development;

The Honorable Rick Halford      -4-  
Chair, Senate Resources Committee

February 21, 1997

- ▶ Work directly with the state's workforce development system and local employment service providers to improve recruitment and training of Alaskans for industry work; and
- ▶ Continue to hold public meetings and follow the planning and measurement schedule.

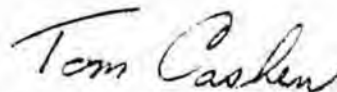
The task force has agreed to use 1996 year-ending data as the initial benchmark to gauge improvements by the industry, contractors and oil field service providers in Alaska hire. Future reports will be graded against that benchmark.

In 1996, there was no significant improvement in increasing the number of Alaska residents employed by the industry. However, employment opportunities are at a minimum until new projects come on line.

An oil industry workforce development consortium will be developed to work directly with public and private employment education entities to create more information for employers on how to access quality industry training, and how to utilize federal and state resources for future and existing employees to advance the careers of individuals, and the needs of the industry.

Thank you for allowing me the opportunity to comment on this most important topic. Enclosed for your information is a report on the nonresident workers in the oilfield industry.

Sincerely,



Tom Cashen  
Commissioner

Enclosure

cc: Governor Tony Knowles  
Mike Andrews, Executive Director, AHRIC  
Dwight Perkins, Legislative Liaison, DOL  
Members of the Governor's Joint Industry  
Task Force on Local Hire

Largest Alaska Oil and Oilfield Service Companies  
Nonresident and Resident Workers-1995

Employer	Nonresident Workers	Resident Workers	Percent Nonresident
AK PETROLEUM CONTRACTORS INC	810	1,673	32.6
ARCO AK INC	304	1,656	15.5
VECO OPERATIONS INC	394	1,020	27.9
VECO CONSTRUCTION INC	580	785	42.5
BP EXPLORATION ALASKA INC	398	924	30.1
PEAK OILFIELD SVC CO	288	719	28.6
NORCON INC	217	557	28.0
QWICK CONSTRUCTION CO INC	121	484	20.0
NABORS ALASKA DRILLING INC	148	456	24.5
SCHLUMBERGER TECHNOLOGY CORP	142	274	34.1
DOYON DRILLING INC	78	329	19.2
ATLANTIC RICHFIELD COMPANY	36	309	10.4
POOL ARCTIC ALASKA INC	61	242	20.1
WSTN ATLAS INTERNATIONAL	56	194	22.4
CTI INC	37	159	18.9
HALLIBURTON COMPANY	18	148	10.8
CAMCO INTERNATIONAL INC	15	150	9.1
RAVEN CONTRACTORS INC	14	126	10.0
CCI INC	39	94	29.3
ARCTIC SLOPE INSPECTION SVCS	42	85	33.1
PARKER DRILLING CO ALASKAN BR	31	52	37.3

Note: Includes workers employed at any time during 1995 with each firm.

**Alpine**

**ARCO** *Low Cost*  
**Safe** *& Long Term*

**ARCO Alaska, Inc.**



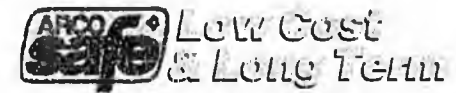
**Anadarko**



***Union Texas Petroleum***

# Alpine Development Overview

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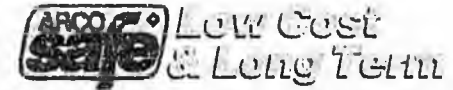


- New “Green Field” development, 30 miles west of Kuparuk
- First NS wildcat discovery since 1990
- First NS discovery on Native Lands
- 250 to 300 MMB reserves
- 60,000 BPD
- Demands 30% cost reduction from traditional NS paradigm
- \$700 to \$800 million development cost

# Alpine Development

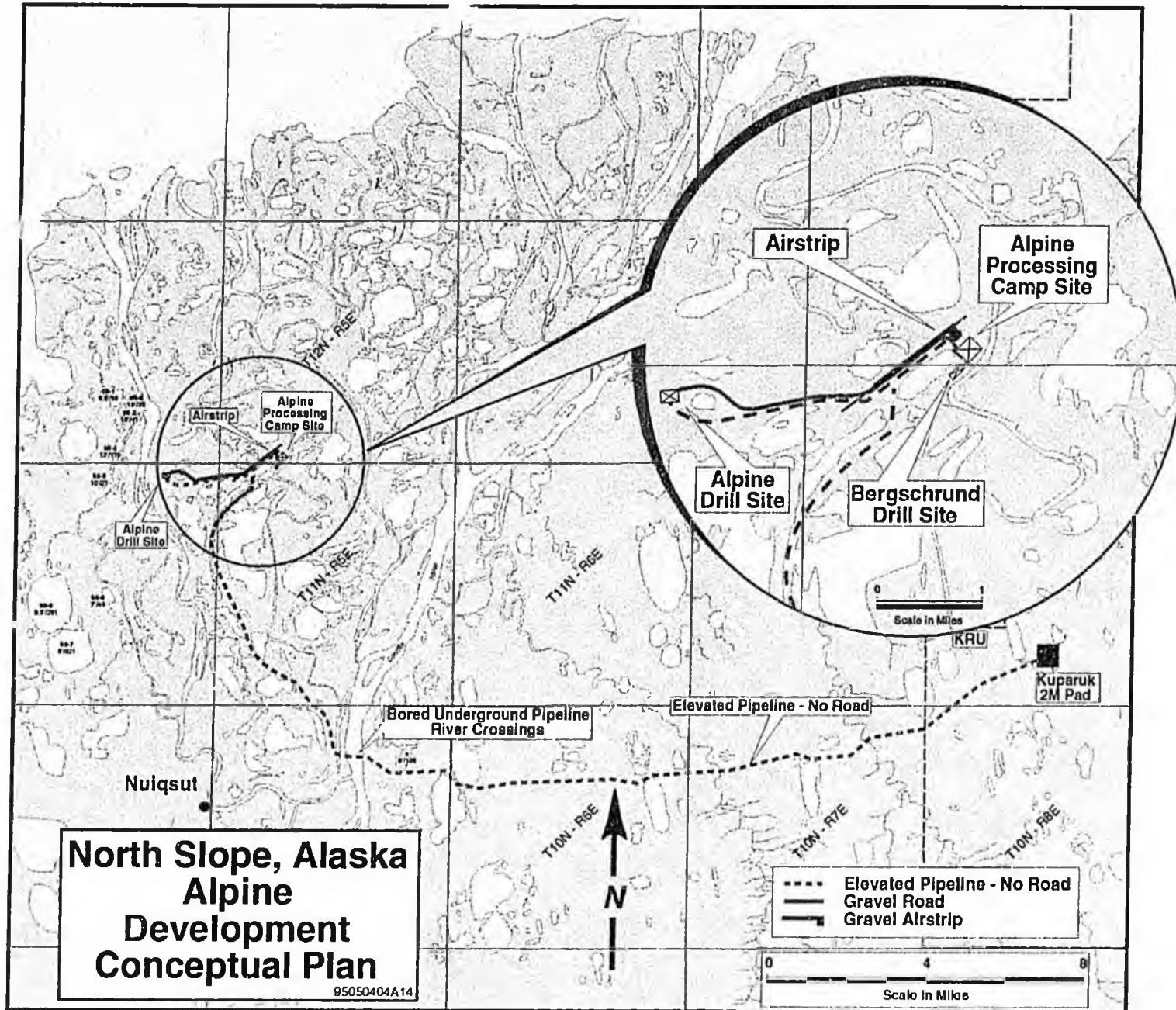
## Project Scope

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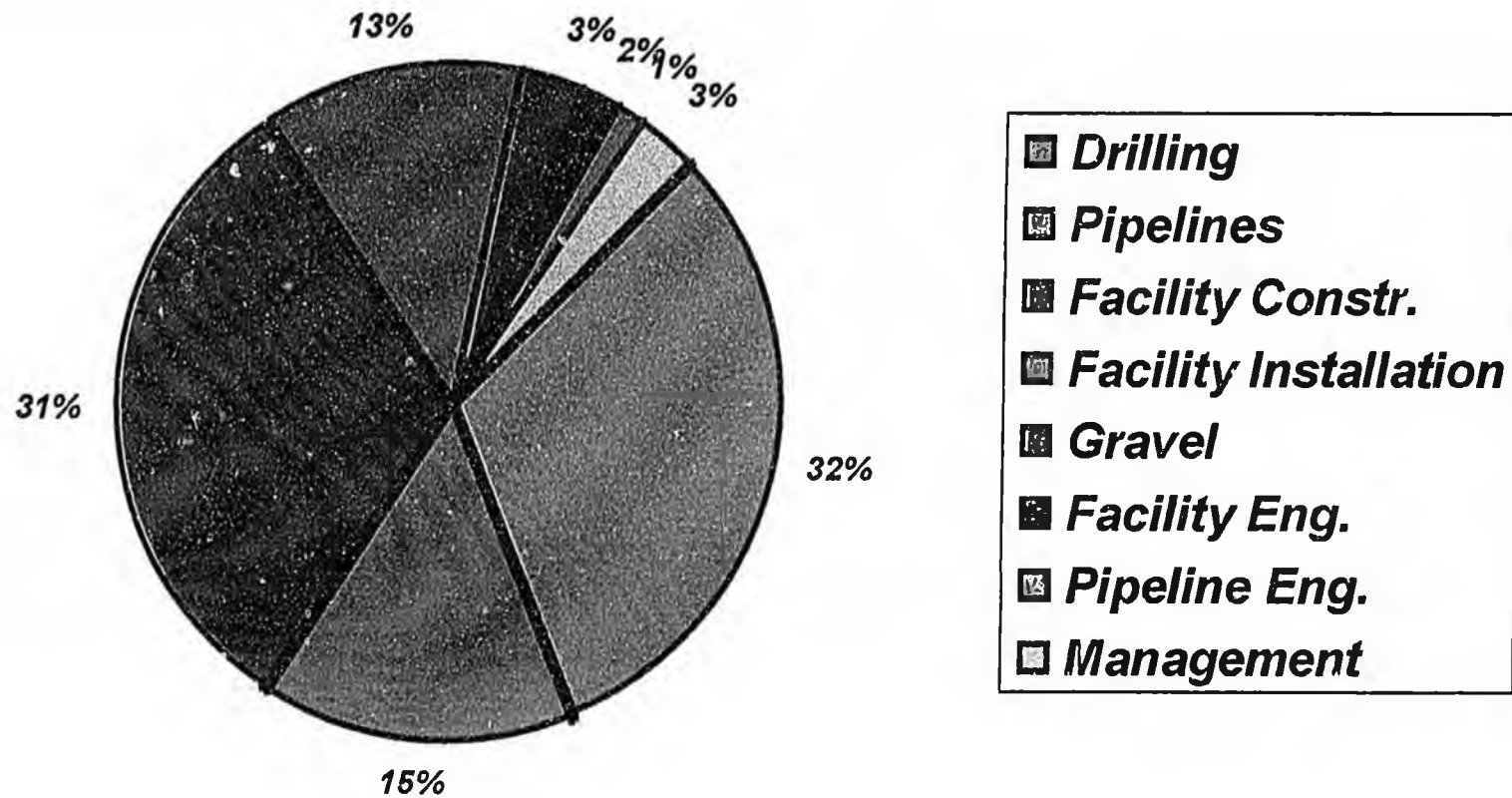


- **2 drill pads + 1 process pad - stand alone**
- **airstrip**
- **approx. 85 acres/1,000,000 cubic yards gravel**
- **approx. 7000 tons of new facilities, including camps**
- **approx. 70 miles of new cross country pipelines**
- **HDD river crossing**
- **100 to 150 wells**
- **no permanent road access**

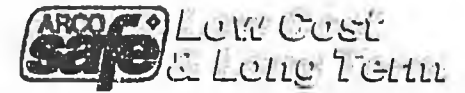
# Alpine



# Alpine Development Major Cost Categories

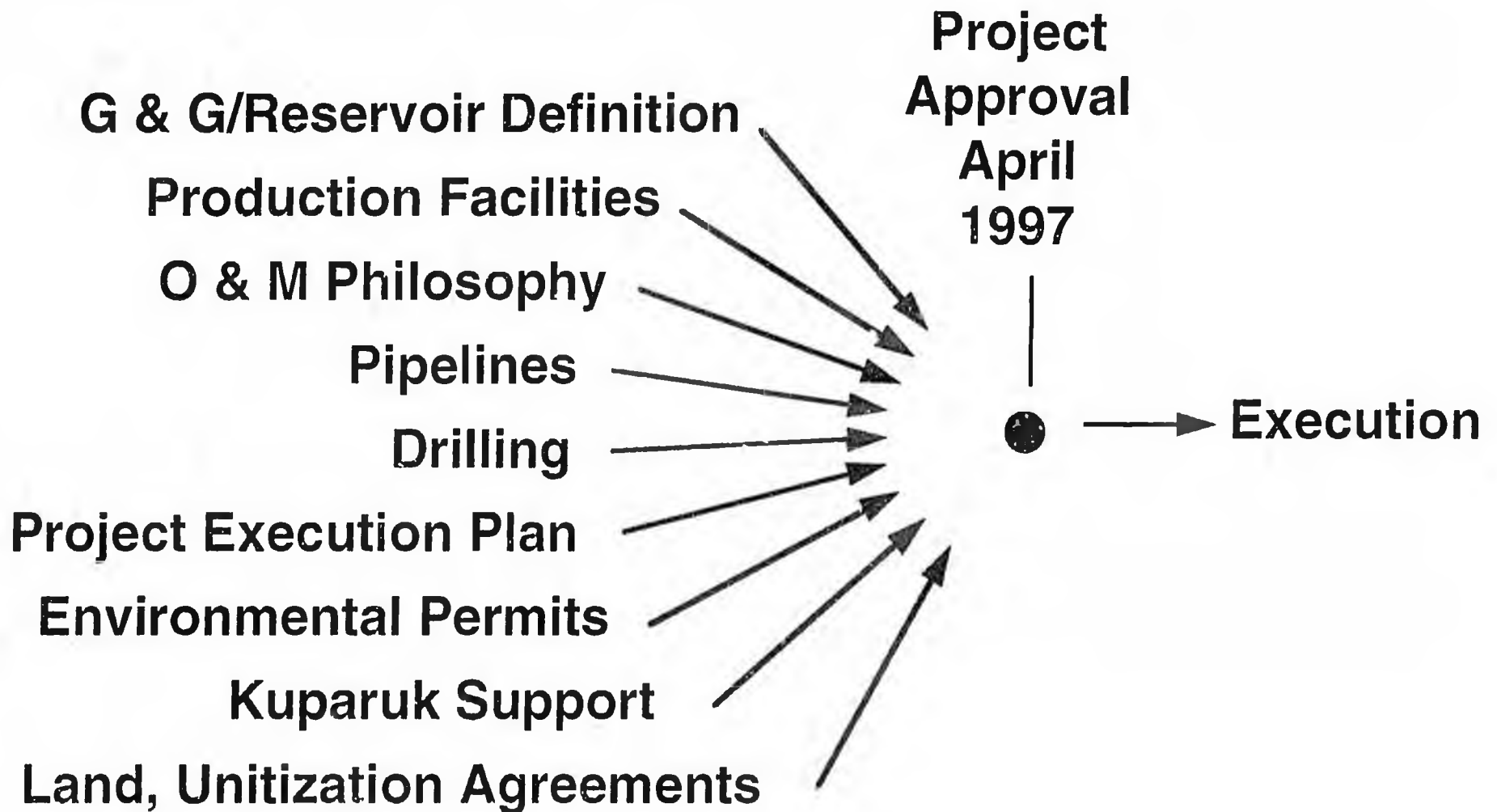
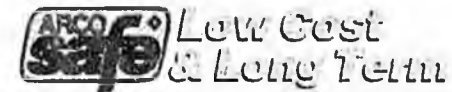


# Alpine Development Summary Schedule



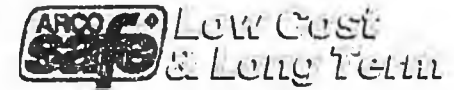
ACTIVITY	1997	1998	1999	2000
<i>Engineering</i>	[Solid bar spanning 1997, 1998, and 1999]			
<i>Project Approval</i>	[Small square]			
<i>Permit Approval</i>	[Small square]			
<i>Pad Construction</i>		[Solid bar]		
<i>P/L River Crossings</i>		[Solid bar]		
<i>Install Pipelines</i>			[Solid bar]	
<i>Fabricate Modules</i>		[Solid bar]	[Solid bar]	
<i>Install Facilities</i>			[Solid bar]	[Solid bar]
<i>Dev Drilling</i>			[Solid bar]	[Solid bar]
<i>Start Up</i>				[Small square]

# Alpine Development Conceptual Phase



# Alpine Development Major Challenges

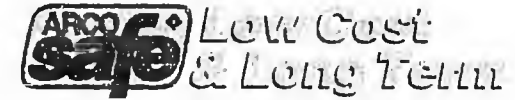
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- **Proximity to Nuiqsut**
- **River crossing**
- **Achieving cost reduction targets**
- **Environmental protection of Colville River Delta**
- **Facility transportation**
- **Drilling and Operational support**

# **ALPINE** - Native Considerations

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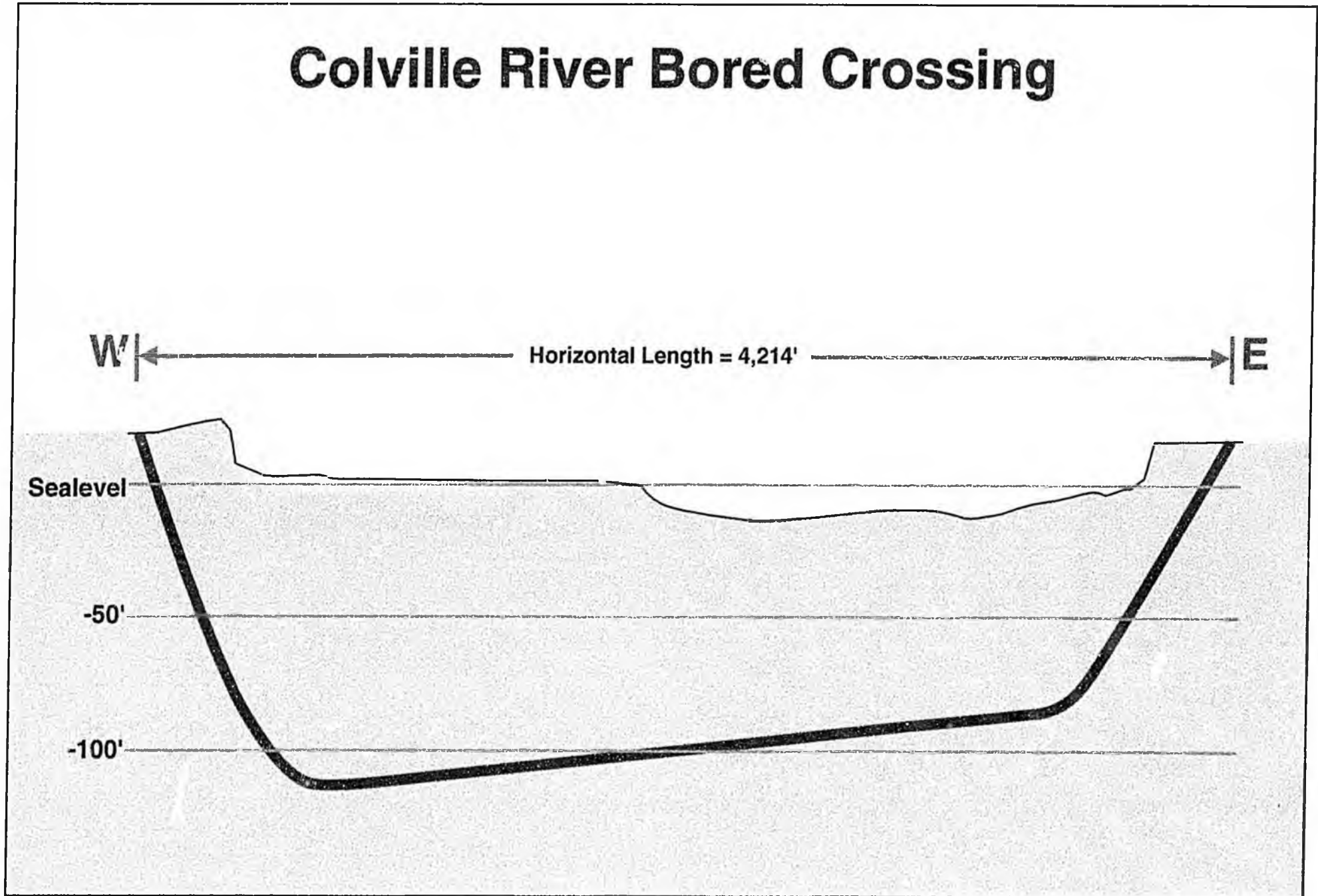


- **Designs intends to minimize impact on Native population**
  - **Minimal footprint**
  - **No road and bridges**
  - **No impact to subsistence activities**
  - **Zero waste discharge development**
- **Intent is to help where we can**
  - **Gas or electricity to village**
  - **Jobs**
  - **Subsistence oversight panel**
  - **Scholarship funds**

# Alpine

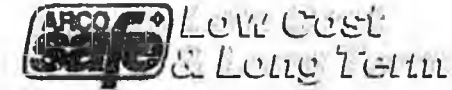
**ARCO safe** Low Cost  
& Long Term

## Colville River Bored Crossing



# Alpine Development Permit Status

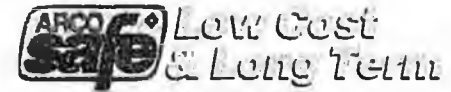
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- **JPO & COE permits filed 3Q 1996**
- **Agency discussions initiated 6/95**
- **Comprehensive EED prepared to support application**
  - **significant preinvestment in environmental studies**
  - **50 years of Colville research reviewed**
  - **5 years of detailed environmental data collected**
  - **concepts shared/early input sought on plan**
- **Plans recognize and mitigate impact to Nuiqsut**

# Alpine Development Execution Strategy

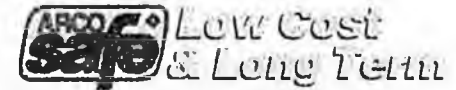
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- **Form an alliance of companies to execute the project scope**
- **Small ARCO Management Team**
- **Generate alignment between all participants**
- **Employ incentives to stimulate innovation**
- **Maximize Alaskan content recognizing:**
  - **capacity**
  - **capability**
  - **competitiveness**

# **Alpine Development Alliance Companies**

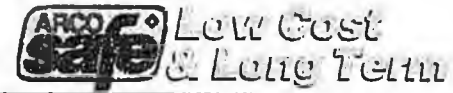
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- **ARCO**
- **ASRC/Parsons Engineering Ltd.**
- **Alaska Petroleum Contractors**
- **Houston Contracting Company**
- **Nuiqsut Constructors**
- **Michael Baker**
- **Tri-Ocean Engineering Ltd.**

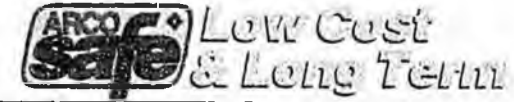
# Alpine Development Purchasing Strategy

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- **Sourcing Construction Material and Equipment**
  - Procurement accomplished by a combined AAI/Alliance team located in Alaska
  - Alaska suppliers will compete for major orders
  - Utilize current AAI/Alaskan Supplier Agreements
  - Distributors selected for Preferred Manufacturer Lines
  - 28 Master Agreements with Alaska Suppliers
  
- **Sourcing Processing and Mechanical Equipment**
  - Major Equipment spend directly with L-48 Manufacturers  
Turbines, Compressors, Control Systems,  
Engineered Process Equipment, etc.

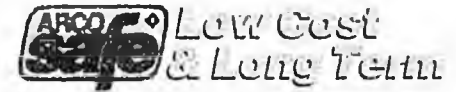
# **ALPINE** - Impact on the participants



- **ARCO**
  - **Key to long term future and “No decline after ‘99”**
  - **Gateway to the West**
  - **Opportunity for a new development concept**
- **Anadarko and Union Texas Petroleum**
  - **Entry in Alaska**
  - **Arctic experience**
- **ASRC / Kuukpik / North Slope Borough**
  - **First production from native lands**
  - **Jobs**
  - **Contracting opportunities**
- **State of Alaska**
  - **Additional revenue source**
  - **Jobs**
  - **Critical to Alaska’s future in attracting additional investment**

# Alpine Development Benefits to Alaska

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- approx. 850 construction jobs
- approx. 50 full time jobs
- approx. 50 drilling jobs for first 5 years
- \$1 Billion in state, local revenues



Official Business

# ALASKA STATE LEGISLATURE

## SENATE RESOURCES COMMITTEE

State Capitol  
Juneau, AK 99801

Chairman: Senator Rick Halford  
Vice Chair: Senator Lyda Green  
Senator Loren Leman  
Senator Bert Sharp  
Senator Robin Taylor  
Senator John Torgerson  
Senator Georgianna Lincoln

### MEMORANDUM

TO: Senate Resource Committee Members

FROM: Senator Rick Halford, Chairman  
Senate Resources

DATE: 3 April 1997

SUBJECT: Oil Industry Progress Report Follow-up Materials

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Attached is information provided to me by ARCO Alaska, Inc. in response to questions raised during the briefing on February 24, 1997.

**Alpine Development  
Preliminary Tax & Royalty Estimates**

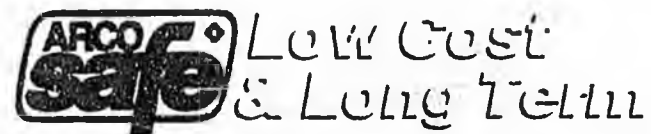
	<u>\$MM Total</u>	<u>State Receives</u>
Royalty	\$860	All, Some or None
Severance Tax	\$150	All
Ad Valorem Tax	\$200	1.5/20 of Total
State Income Tax	\$150	All
<b>Total</b>	<u>\$1,360</u>	

	<u>All State Land</u>	<u>All Native Land</u>
State Revenues	\$1,175	\$315

**Notes:**

- Undiscounted Dollars Over Project Life
- Based on DOR Fall'96 Volumes & Prices
- Royalty Split Dependant on Ultimate Tract Allocation

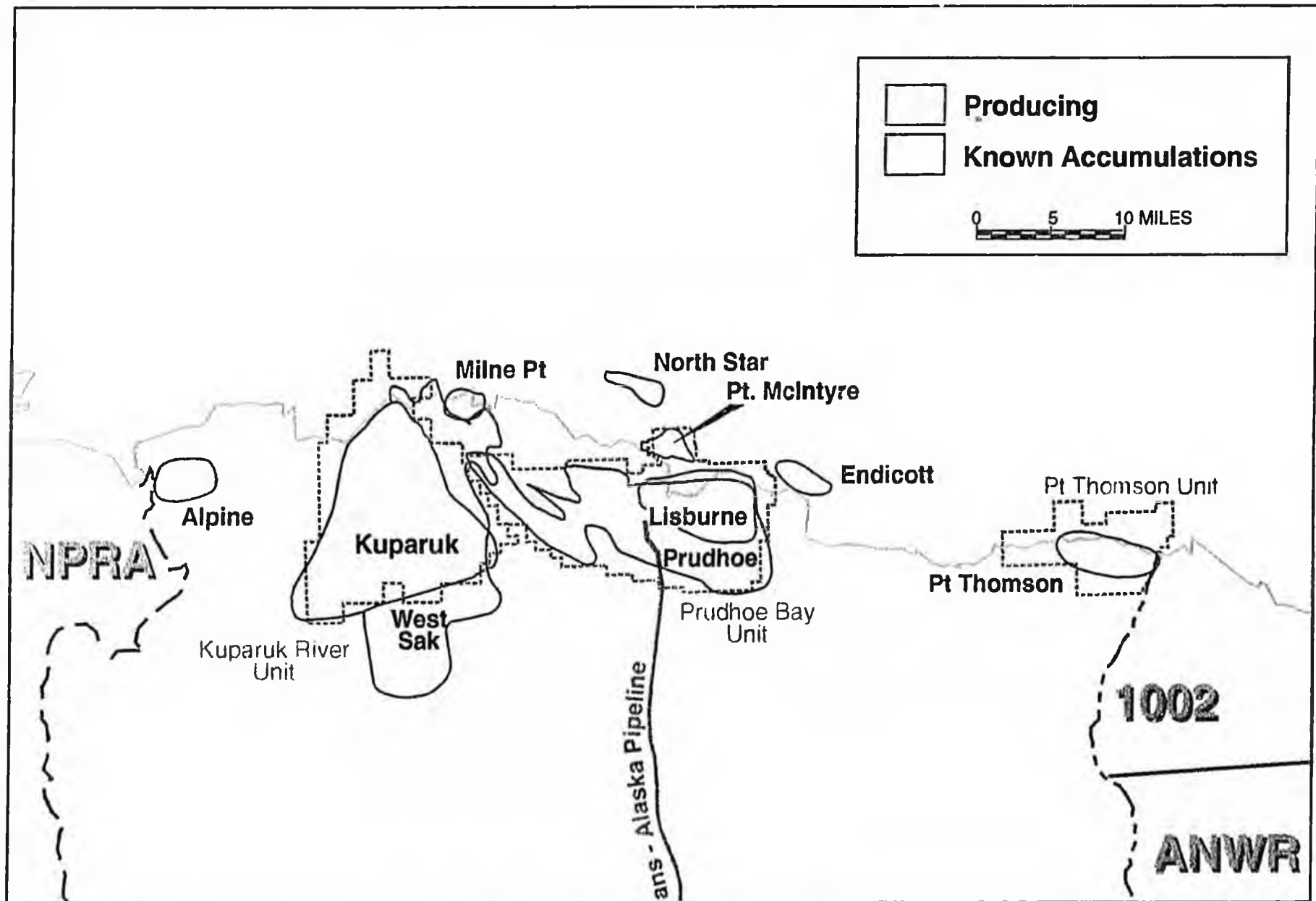
# Alpine





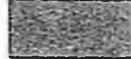
	<u>ALPINE</u>	<u>PT. McINTYRE</u>	<u>NORTHSTAR</u>
<b>Reserves - MMBO</b>	<b>250 - 300</b>	<b>400</b>	<b>130</b>
<b>Area - square miles</b>	<b>45</b>	<b>10</b>	<b>16</b>
<b>Depth - feet subsea</b>	<b>7000</b>	<b>8800</b>	<b>11000</b>
<b>Avg. Net Pay - feet</b>	<b>50</b>	<b>170</b>	<b>200</b>
<b>Oil Gravity - °API</b>	<b>40</b>	<b>27</b>	<b>42</b>

# Alaska - North Slope

**ARCO** *Safe* **Low Cost & Long Term**



# Legend

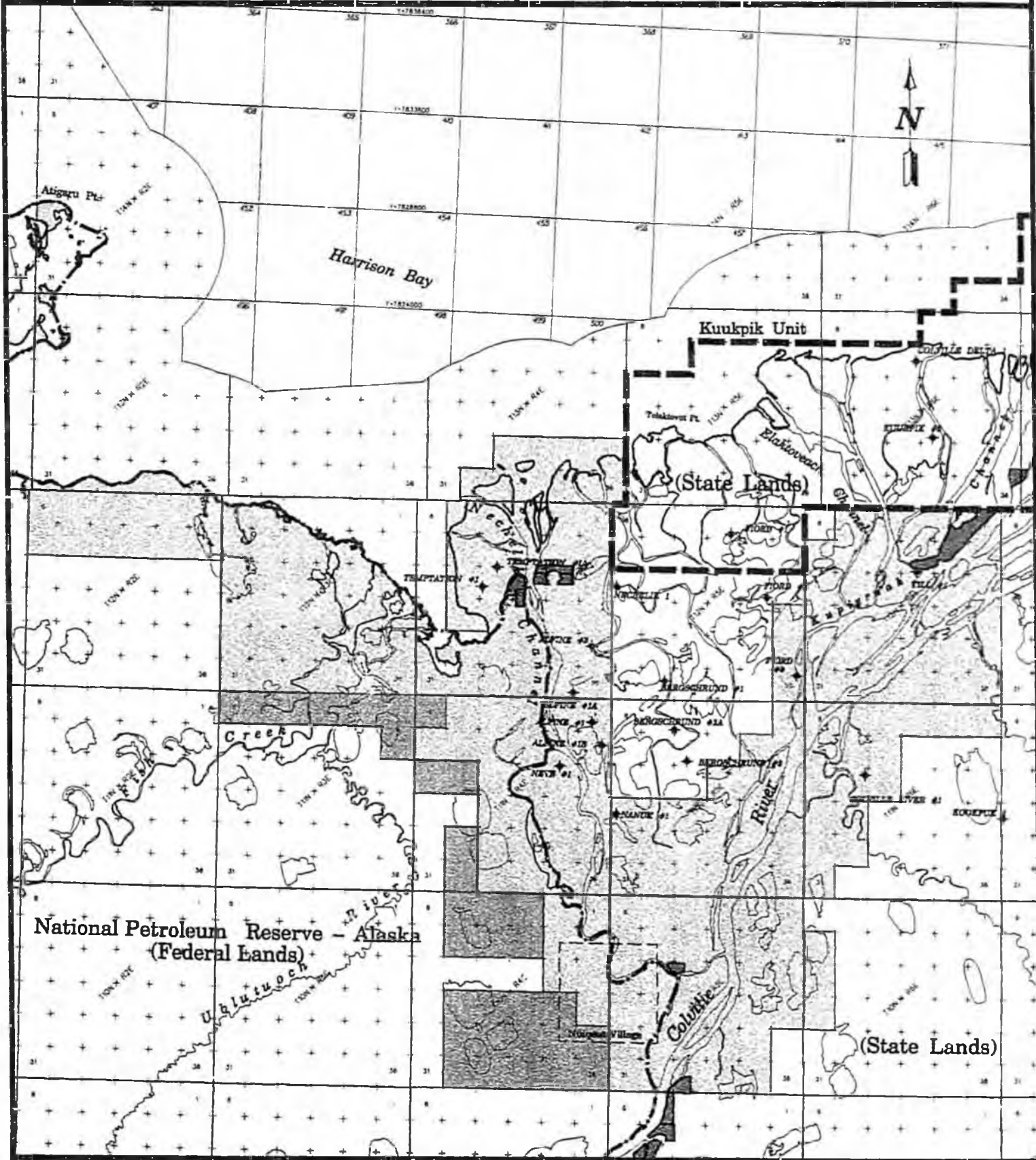
-  Kuukpik Corporation Selections /ASRC Subsurface
-  Kuukpik Corporation Conveyed Lands /ASRC Subsurface
-  Native Allotments

ARCO Alaska, Inc.   
Subsidiary of Amoco Production Company

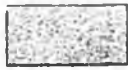
# Land Tenure

Scale: 1" = 4 Miles

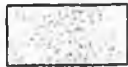
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Legend



Kuukpik Corporation Selections /ASRC Subsurface



Kuukpik Corporation Conveyed Lands /ASRC Subsurface



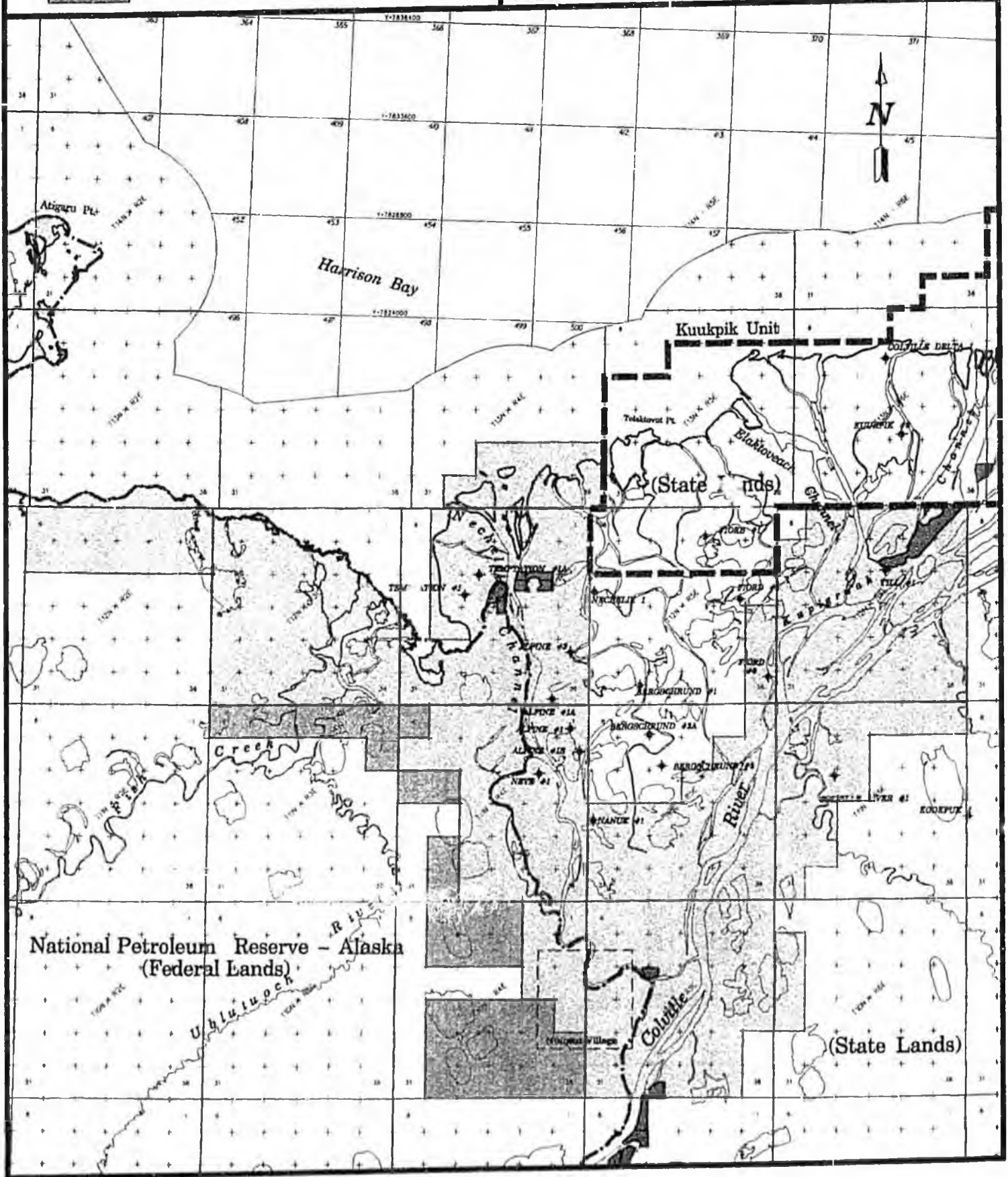
Native Allotments

ARCO Alaska, Inc.   
Subsidiary of Amoco Petroleum Company

# Land Tenure

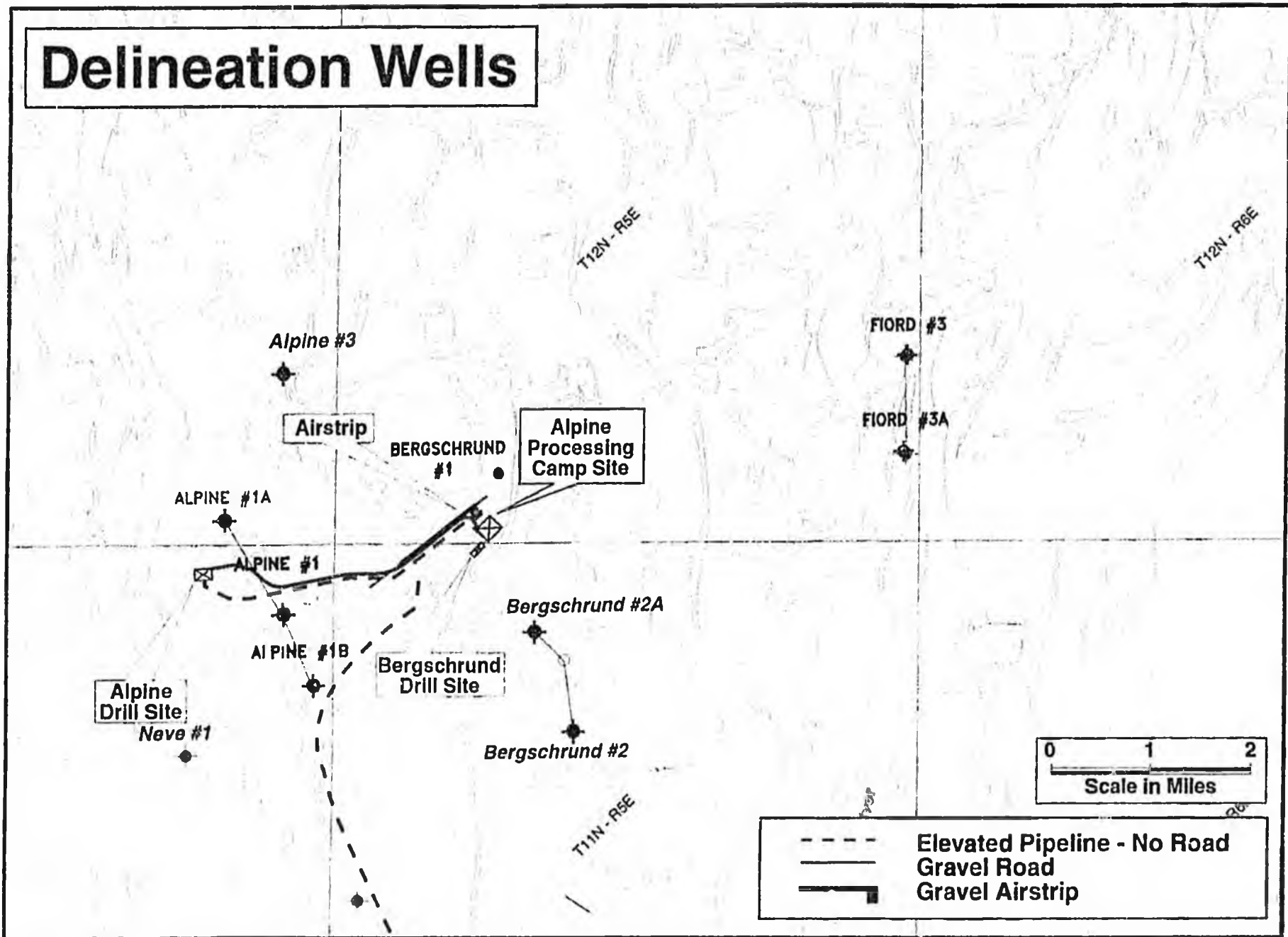
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96032701C00



# Alpine

## Delineation Wells



# Alpine

