SCOMM
79:21

(7) ..OUSE COMMITTEE REPC..T

Date Referred: March 11, 1992 FURTHER REFERRALS: Resources, Finance

Date of Committee Action: 3/16/92

The HOUSE SPECIAL COMMITTEE ON OIL AND GAS Committee considered: HB 559

HOUSE BILL NO. 559 APPROVE KUPARUK RIVER UNIT ROYALTY SALE

"An Act approving the sale of Kuparuk River Unit royalty oil by the State of Alaska to Petro Star Valdez Refinery Joint Venture: and providing for an effective date."

RECOMMENDATIONS: [ ] the same title
be replaced with _____ [ ] a new title

[ ] have attached amendments(s)
[X] do pass
[ ] do not pass
[ ] no recommendations
[ ] individual recommendations
[ ] additional referral to the _____ Committee

ADOPTS: _____ letter of Intent

ATTACHES NEW FISCAL NOTE(s): (Dept) APPROVES PREVIOUS: (Dept/Date)

[ ] fiscal impact _____ [ ] fiscal note(s) _____

[ ] zero fiscal note _____ [ ] zero fiscal note(s) Dept. Revenue, Dept Natural Resources

SIGNING DO PASS	DP	OTHER RECOMMENDATIONS	DNP	NR	AM
Tom Brown	✓	Mike Navarre		✓	
	✓				
Gail Phillips	✓				
Bill Hudson	✓				
Rep Choquette	✓				

Bill Hudson
CHAIRMAN'S SIGNATURE

FISCAL NOTE

STATE OF ALASKA
1992 LEGISLATIVE SESSION

BILL NO. HB 559

Revision Date: _____ **Department Affected:** Natural Resources

Title: Petro Star Royalty Oil Contract **BRU:** Petroleum Management

Component: Petroleum Management

Sponsor: House Rules for Governor

Requestor: House Oil and Gas **COMPONENT SERIAL NO.** [ ] [.4] [3] [9]

EXPENDITURES/REVENUES: (Thousands of Dollars)

OPERATING	FY 93	FY 94	FY 95	FY 96	FY 97	FY 98
PERSONAL SERVICES						
TRAVEL						
CONTRACTUAL						
SUPPLIES						
EQUIPMENT						
LAND & STRUCTURES						
GRANTS, CLAIMS						
MISCELLANEOUS						
TOTAL OPERATING	-0-	-0-	-0-	-0-	-0-	-0-
CAPITAL	-0-	-0-	-0-	-0-	-0-	-0-
REVENUE FUND SOURCE:						

FUNDING: (Thousands of Dollars)

GENERAL FUND						
FEDERAL FUNDS						
OTHER FUND SOURCE:						
TOTAL	-0-	-0-	-0-	-0-	-0-	-0-

POSITIONS:

FULL-TIME						
PART-TIME						
TEMPORARY						

Estimate of current year impact: -0-

ANALYSIS: (Attach a separate page if necessary.)

Division of Oil and Gas staff handles a number of royalty-in-kind contracts. Existing staff will handle the proposed contract with Petro Star Valdez Refinery Joint Venture.

Prepared By: Bob Loeffler **Phone:** 762-2578

Division: Division of Oil and Gas **Date:** 2-27-92

Approved by Commissioner: Harold C. Heinze CJW for

Agency: Department of Natural Resources **Date:** 4/12/92

Distribution (by preparer): Leg. Fin., Legislative Sponsor, Requestor, OMB/DBR, Gov. Legis. Ofc., & Impacted Agency(ies).

Rev 10/7/91

FISCAL NOTE

No. 1

STATE OF ALASKA
1992 LEGISLATIVE SESSION

Bill Version: HB 559
(H) Publish Date: 3-11-92

Revision Date: _____ **Department Affected:** Natural Resources

Title: Petro Star Royalty Oil Contract **BRU:** ~~Petroleum Management~~

Component: Petroleum Management

Sponsor: ~~Rules Committee for Governor~~

Requestor: _____ **COMPONENT SERIAL NO.** 4 3 9

EXPENDITURES/REVENUES: (Thousands of Dollars)

OPERATING	FY 93	FY 94	FY 95	FY 96	FY 97	FY 98
PERSONAL SERVICES	-0-	-0-	-0-	-0-	-0-	-0-
TRAVEL	-0-	-0-	-0-	0	0	-0-
CONTRACTUAL	-0-	-0-	-0-	-0-	-0-	-0-
SUPPLIES						
EQUIPMENT						
LAND & STRUCTURES						
GRANTS, CLAIMS						
MISCELLANEOUS						
TOTAL OPERATING	-0-	-0-	-0-	-0-	-0-	-0-
CAPITAL						
REVENUE FUND SOURCE:						

FUNDING: (Thousands of Dollars)

GENERAL FUND						
FEDERAL FUNDS						
OTHER FUND SOURCE:						
TOTAL	-0-	-0-	-0-	-0-	-0-	-0-

POSITIONS:

FULL-TIME						
PART-TIME						
TEMPORARY						

Estimate of current year impact: _____

ANALYSIS: (Attach a separate page if necessary.)

Division of Oil and Gas staff handles a number of royalty-in-kind contracts. Existing staff will handle the proposed contract with Petro Star Valdez Refinery Joint Venture.

Prepared By: Bob Loeffler **Phone:** ~~762-2578~~

Division: ~~Oil and Gas~~ **Date:** 2-27-92

Approved by Commissioner: Harold C. Heinze 2/27/92

Agency: Natural Resources **Date:** 2-27-92

Distribution (by preparer): Leg. Fin., Legislative Sponsor, Requestor, OMB/DBR, Gov. Legis. Ofc., & Impacted Agency(ies).

Rev 10/7/91

COMMITTEE COPY

FISCAL NOTE

No. 2
Bill Version: HB 559
(H) Publish Date: 3-11-92

STATE OF ALASKA
1992 LEGISLATIVE SESSION

Revision Date: _____

Title: Approving the Sale of Kuparuk River Unit Royalty Oil by the State of Alaska to Petro Star Valdez Refinery

Department Affected: Revenue

BRU: Revenue Operations

Component: Oil & Gas Audit

Sponsor: _____

Requestor: _____

Component Serial No.

0	1	1	5

Expenditures/Revenues: (Thousands of Dollars)

OPERATING	FY 93	FY 94	FY 95	FY 96	FY 97	FY 98
PERSONAL SERVICES						
TRAVEL						
CONTRACTUAL						
SUPPLIES						
EQUIPMENT						
LAND & STRUCTURES						
GRANTS, CLAIMS						
MISCELLANEOUS						
TOTAL OPERATING	0	0	0	0	0	0
CAPITAL						
REVENUE FUND SOURCE						

FUNDING: (Thousands of Dollars)

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

POSITIONS·

FULL-TIME						
PART-TIME						
TEMPORARY						

Estimate of current year impact: _____

ANALYSIS:

Prepared by: Robert L. Doss, Director
Phone: 276-1363 ext. 225
Division: Oil & Gas Audit Division
Date: Feb. 27, 1992
Approved by Commissioner: _____
Agency: Revenue
Distribution (by preparer): Legislative Finance, Legislative Sponsor, Requestor, OMB, & Impacted Agency(ies).

Rev 10/7/91

COMMITTEE COPY

HB 559

WALTER J. HICKEL
GOVERNOR

STATE OF ALASKA
OFFICE OF THE GOVERNOR
JUNEAU

March 11, 1992

The Honorable Ben Grussendorf
Speaker of the House
Alaska State Legislature
State Capitol
Juneau, AK 99801-1182

Dear Speaker Grussendorf:

Under the authority of art. III, sec. 18, of the Alaska Constitution, I am transmitting a bill that provides for legislative approval of a royalty oil contract between the state and Petro Star Valdez Refinery Joint Venture for the sale of Kuparuk River Unit royalty oil. Also transmitted with this bill is a copy of the resolution of the Alaska Royalty Oil and Gas Development Advisory Board recommending approval of that contract in accordance with AS 38.06.040(a)(3) and 38.06.050(a), and providing the report required by AS 38.06.070(c).

The contract is also described in the finding issued by the Commissioner of Department of Natural Resources on March 4, 1992. Copies of the Commissioner's preliminary finding and the draft contract have been sent to the Legislature and made available to the public for review. The Commissioner's final finding and the signed contract are attached.

A bill approving the contract is being introduced for legislative approval for two reasons. First, as a matter of comity, I respect the Legislature's desire to have a direct voice in major disposals of royalty oil. Therefore, although this and previous Administrations have consistently taken the position that the statutory requirement of legislative approval of royalty oil contracts (AS 38.06.055) is unconstitutional, the contract itself contains provisions requiring approval by the Legislature before it takes effect.

Second, this legislation would ratify the royalty oil contract. This ratification would cure any procedural defect that might have occurred in the process of entering into this contract.

I urge your prompt consideration and passage of this bill.

Sincerely,

Walter J. Hickel

Walter J. Hickel
Governor

STATE OF ALASKA

WALTER J. HICKEL, GOVERNOR

DEPT. OF NATURAL RESOURCES

DIVISION OF OIL AND GAS

P.O. BOX 107034
ANCHORAGE, ALASKA 99510-7034
PHONE: (907) 762-2553

Briefing Packet

Proposed Royalty Oil Sale

House Oil and Gas Commitee

March 16, 1992

SUMMARY OF PROPOSED PETRO STAR CONTRACT

THE REFINERY

- 30,000 barrel per day refinery to be built on private land in Valdez.

- Expected products, approximately 110 million gallons per year (¼ of the purchased oil volume):
  - at least 20 million gallons per year of jet fuel for Mark Air;
  - approximately 10 million gallons per year heating fuel and marine diesel, available in Valdez for Prince William Sound consumers; and
  - the balance will be marine diesel sold to Petro Marine Services, a marine fuel distributor servicing south central Alaska. Most of this fuel will be sold in Seward, Kodiak, and Dutch Harbor.

- $30 million capital investment; $25 million of which will be in Alaska. 16-20 permanent jobs with an annual payroll of approximately $1.7 million. Approximately $400,000 per year in property taxes.

- Construction could start as early as this spring; operation, as early as next winter.

SALE OF IN-KIND ROYALTY OIL

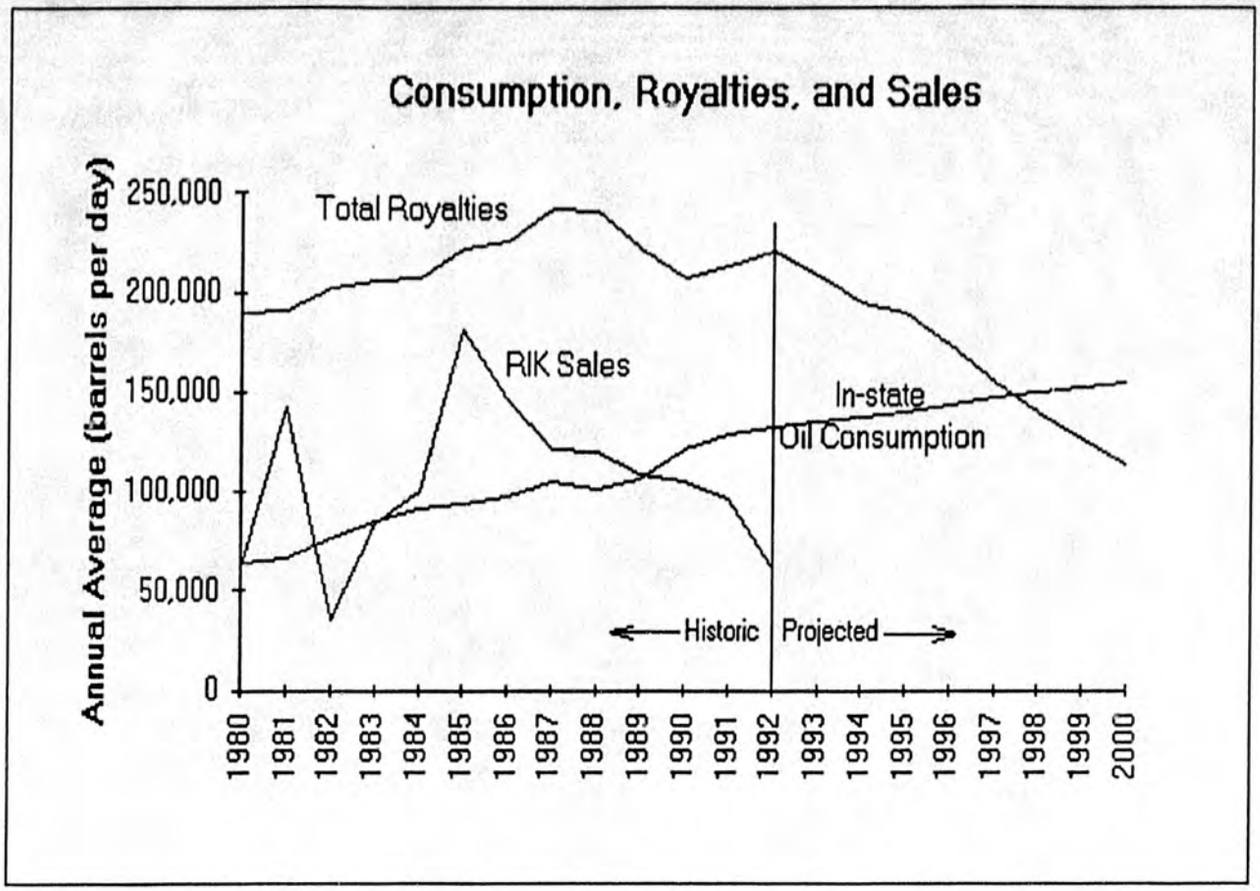
- 30,000 barrels per day from the Kuparuk River Unit (approximately 80% of Kuparuk's Royalty Oil); amount is expressed as a percentage of production, and will decline as Kuparuk production declines.

- 10-year contract beginning seven months after the legislature approves the sale, or when the refinery is ready to process the oil (whichever is later).

- Price would be the weighted-average per-barrel value paid to the state by ARCO and BP. These two companies own approximately 95% of production from the Kuparuk field.

WHO IS PETRO STAR VALDEZ REFINERY JOINT VENTURE? A joint venture of three Alaskan Companies:

- Petro Star Valdez Inc, a subsidiary of the Arctic Slope Regional Corporation;
- Alaska Refinery Inc, a wholly owned subsidiary of Neil Bergt Trust; and
- Harbor Enterprises which operates Petro Star Marine Services.



Recent Developments: Cancelled Contracts

Comparison of recent with last summer's deliveries
(Figures in barrels/day)

	Jul-91	Feb-92	Date of Last Delivery
GVEA	4,610	0	Jan. 31, 1992
Chevron	21,145	0	Larger contract: August 31, 1991; Chevron-Petro Star contract: December 31, 1992
Petro-Star	2,864	0	December 31, 1991
Mapco	29,082	19,459	Continuing (Contract expires 2004)
Tesoro	50,817	41,184	Continuing (Contract expires 1995)
Total	108,517	60,642	
Avail Royalties:	210,990	204,404	

SUMMARY OF DIFFERENCES
Between
PROPOSED AND TYPICAL PREVIOUS CONTRACTS

PRICE TERM, ***Previous Contracts.*** Price = (RIV weighted-average netback value) + (Field Cost). Interim price is the producer-reported price with provision for retroactive revision based on the outcome of ANS Royalty Litigation. (The 1985 Petro Star-Chevron contract also required an escrow).

Proposed Contract. Same price except that the netback value is not all Kuparuk producers; it is the volume-weighted average of ARCO's and BP's Kuparuk netback. BP and ARCO are the only Kuparuk lessees to have settled their ANS Royalty Litigation obligations. Together they own 94.5% of Kuparuk production. As there is an agreed-to methodology for valuing the netback of these two companies, there is no need for an escrow, and no need for retroactive ANS Royalty Litigation adjustments. The value of the 94.5% should be an adequate proxy for the remaining 5.5%.

PRICE PREMIUM, ***Previous Contracts.*** Negotiated contracts executed after December 1984 have included a price premium above the average netback value. The premium was primarily intended to compensate the state for selling "west-coast oil" at an average of the west-coast and gulf netbacks.

Proposed Contract. The small and decreasing proportion of gulf sales, and the small volume proposed to be sold to Petro Star JV mean that the proposed contract will not noticeably displace the lessees' west-coast sales. For these reasons, and to encourage the jobs, income, tax, and consumption benefits from in-state refining, the proposed contract does not include a premium.

SECURITY, ***Previous Contracts:*** Letter of credit worth 90-days of oil (and the value of the RIK company). ***Proposed Contract:*** Letter of credit worth 90-days of oil (and the value of the RIK company). However, for the first time we have required a parent company to be a signatory: ASRC.

NGL FIELD COST, ***Previous Contracts.*** Not specified in previous contracts. The state is currently in dispute with some north slope lessees (including ARCO and BP) concerning the field cost for NGLs. If a field cost for NGLs is established that is different from field costs for oil, the RIK purchasers receive a retroactive adjustment to previous bills.

Proposed Contract. NGLs are not currently exported from Kuparuk; thus, there is no current problem for NGL field costs at Kuparuk. If NGLs are exported, the contract specifies that Petro Star will pay its share of the producer-reported field costs and will receive a credit if a separate NGL field cost (or any field cost different from the current) is established.

LATE PAYMENT PENALTY. Previous contracts have required 1% late payment penalty after one business day. The proposed contract requires 5% after 10 business days. The new term is more in line with current commercial business practices.

INTEREST. The previous Petro Star contract specified an annual interest rate of prime rate plus 1.25%. The proposed contract specifies the statutory rate required by Cha 23 SLA 91. If Petro Star JV overpays, the state will have to credit back the amount of the overpayment plus interest to Petro Star JV, just as Petro Star JV will have to pay the amount of any underpayment plus interest to the state.

BEST EFFORTS. Previous contracts required best efforts to market product in Alaska (equal to at least 23% of amount processed). This has been omitted from the proposed contract. It is virtually impossible to enforce, and it is unneeded given the requirement to process 80% of purchased oil in refinery, and given the contractual arrangements of joint venture to sell in-state.

SUMMARY OF PUBLIC PROCESS

PRELIMINARY FINDING & DRAFT CONTRACT. Notice of the preliminary finding and draft contract was mailed to the division's 450-person mailing list. (Approximately 100 individuals and agencies received copies). Notice and Royalty Board meeting was the subject of a display advertisement in the two Anchorage Papers, and papers in Fairbanks, Juneau, and Valdez.

FEBRUARY 6, 1992: MEETING OF THE ALASKA ROYALTY OIL AND GAS DEVELOPMENT ADVISORY BOARD. Board met in part to consider proposed royalty sale. Approximately 50 people attended the meeting. When Commissioner Heinze called for public testimony, no one asked to testify. The board adopted the department's finding, and recommended the legislature take appropriate action to effectuate the sale.

PUBLIC COMMENT RECEIVED. In response to the mailing and advertisements, the department received four letters commenting on the proposed sale. Two letters were received from one respondent (Prince William Sound Conservation Alliance). The letters and the department's response are contained in Appendix B of the Final Finding.

FINAL FINDING & CONTRACT. Mailed to same list as preliminary finding.

The Alaska Royalty Oil and Gas Development Advisory Board

Resolution 92-1

On January 23, 1992, the director of the division of oil and gas ("director") provided the Alaska Royalty Oil and Gas Development Advisory Board ("board") with preliminary findings and proposed contract for a long-term sale of up to about 30,000 barrels per day of Kuparuk River Unit royalty oil to Petro Star Valdez Refinery Joint Venture, a joint venture comprised of Petro Star Valdez, Inc., (a subsidiary of Arctic Slope Regional Corporation), Harbor Enterprises, Inc., and Alaska Refining, Inc. (collectively "joint venture"). The joint venture will process the oil in a refinery proposed for Valdez.

The proposed contract was discussed between representatives of the division of oil and gas (DOG) and the joint venture over the past year culminating in a draft contract. On January 23, 1992, the director made public the proposed contract and the Preliminary Finding and determination of the Commissioner of the Department of Natural Resources. The director notified the public that the proposed sale would be discussed at the board's meeting on February 6, 1992 and invited them to attend.

On February 6, 1992, the board met to discuss the sale and to take public comment on it. The meeting was attended by representatives of the DOG, representatives of the joint venture, and members of the public. The board received a presentation from the DOG staff regarding the proposed sale and contract, questioned the staff about them, and made several suggestions. The staff will implement those suggestions. At the conclusion of the discussion, the voting members of the board, who attended the meeting, unanimously approved the proposed sale and recommended that the proposed contract be approved by the legislature.

Based on the board's review of the contract for the sale and purchase of royalty oil between the State of Alaska and the joint venture, the Commissioner's findings and determinations regarding the proposed sale, and the information presented at public meeting of the board, the board is of the opinion that the proposed disposition of Kuparuk River Unit royalty oil to the joint venture meets the requirements of AS 38.06 and 11 AAC 26. The board adopts the Commissioner's finding and determinations, and recommends that the Seventeenth Alaska Legislature approve the agreement for the sale and purchase of royalty oil from the Kuparuk River Unit to Petro Star Valdez Refinery Joint Venture.

_____

L. Frank DeLong

_____

Charles Logsdon

Glenn A. Olds

Glenn A. Olds

The Alaska Royalty Oil and Gas Development Advisory Board

Resolution 92-1

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L. Frank DeLong.

L. Frank DeLong

Charles Logsdon

Glenn A. Olds

STATE OF ALASKA

DEPARTMENT OF NATURAL RESOURCES

OFFICE OF THE COMMISSIONER

WALTER J. HICKEL, GOVERNOR

400 WILLOUGHBY AVENUE
JUNEAU, ALASKA 99801-1796
PHONE: (907) 465-2400
FACSIMILE: (907) 586-2754

March 11, 1992

The Honorable Bill Hudson, Chair
House Special Committee for Oil and Gas
State Capitol
Juneau, AK 99811-1182

Dear Representative Hudson:

Subject: HB 559, which provides for legislative approval of a contract between the state and Petro Star Valdez Refinery Joint Venture for the sale of Kuparuk River Unit royalty oil.

Position: The Department of Natural Resources supports this bill.

Background: Petro Star Valdez Refinery Joint Venture (Petro Star JV) wants to build and operate a refinery in Valdez. Petro Star JV has asked to purchase 30,000 barrels per day of the state's north slope royalty oil to refine into jet fuel, marine diesel, and heating fuel. The refinery will be located on private land, adjacent to Dayville Road east of the Trans Alaska Pipeline terminal. Petro Star JV will sell approximately 20-40 million gallons per year of jet fuel to MarkAir Inc., and approximately 10 million gallons per year of heating and marine diesel fuels to local communities.

The contract contains a local hire clause which states in part that Petro Star JV "agrees to employ Alaska residents and Alaska companies to the extent they are available, willing and qualified for all work performed in Alaska in connection with the Agreement."

On March 4, 1992, the Department of Natural Resources made a written finding that this disposal of state royalty oil is in the best interest of the state and maximizes the benefits to Alaska citizens. The Alaska Royalty Oil and Gas Development Advisory Board unanimously approved this royalty oil sale and recommended the Petro Star JV contract be approved by the Legislature.

Please let me or Oil and Gas Director James Eason know if you have questions about the Petro Star JV contract.

Sincerely,

Harold C. Heinze
Commissioner

10-J9LH

printed on recycled paper by C.D

cc: Committee Members
Paul Fuhs, Legislative Liaison, Office of the Governor
James Eason, Director, Division of Oil and Gas

STATE OF ALASKA

WALTER J. HICKEL, GOVERNOR

DEPT. OF NATURAL RESOURCES

DIVISION OF OIL AND GAS

P.O. BOX 107034
ANCHORAGE, ALASKA 99510-7034
PHONE: (907) 762-2553

March 11, 1992

Dear Alaskan:

The State of Alaska proposes to sell 30,000 barrels per day of the state's royalty oil to the Petro Star Valdez Refinery Joint Venture. A draft of the contract and the preliminary finding was distributed for a month-long public comment period in late January. The proposed sale was discussed at a meeting of the Alaska Royalty Oil and Gas Development Advisory Board on February 6, 1992. Public comments were solicited through letters to a 450-person mailing list, and through display advertisements in five newspapers in Juneau, Anchorage, Fairbanks, and Valdez. Only three comments were received from the public.

After considering the comments received from the public, agencies, and the Royalty Board, the department prepared the Final Contract, and Final Finding and Determination for the proposed sale. The sale will not take effect unless approved by the legislature. A bill approving the sale is expected to be introduced into both houses of the legislature this week.

A copy of the contract, and the Commissioner's Final Finding and Determination are enclosed. If you have any questions on the matter, please contact Bob Loeffler of my staff at 762-2578. Thank you for your interest.

Sincerely,

James E. Eason
Director

Enclosures

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Summary of Proposed Royalty In-kind Sale
Petro Star Valdez Refinery Joint Venture

March 11, 1992

THE REFINERY

- A 30,000 barrel per day refinery to be built on private land in Valdez.

- The refinery is expected to produce approximately 110 million gallons per year (¼ of the purchased oil volume). These products are expected to include:
  - at least 20 million gallons per year of jet fuel for Mark Air;
  - approximately 10 million gallons per year of heating fuel and marine diesel, available in Valdez for Prince William Sound consumers; and
  - the balance will be marine diesel sold to Petro Marine Services, a marine fuel distributor servicing south central Alaska. Most of this fuel will be sold in Seward, Kodiak, and Dutch Harbor.

- $30 million capital investment; $25 million in Alaska. 16-20 permanent jobs with an annual payroll of approximately $1.7 million. Approximately $400,000 per year in property taxes.

- Construction could start as early as this spring; operation, as early as next winter.

SALE OF IN-KIND ROYALTY OIL

- 30,000 barrels per day from the Kuparuk River Unit (approximately 80% of Kuparuk's Royalty Oil).

- 10-year contract beginning seven months after the legislature approves the sale, or when the refinery is ready to process the oil (whichever is later).

- Price would be the weighted-average per-barrel value paid to the state by ARCO and BP. These two companies own approximately 95% of production from the Kuparuk field.

WHO IS PETRO STAR VALDEZ REFINERY JOINT VENTURE? A joint venture of three Alaskan Companies:

- Petro Star Inc, a subsidiary of the Arctic Slope Regional Corporation;
- Alaska Refinery, a wholly owned subsidiary of Neil Bergt Trust; and
- Harbor Enterprises which operates Petro Star Marine Services.

WHAT HAPPENS NEXT? A bill approving the proposed contract is expected to be introduced into both houses of the Alaska legislature during this week (March 9-13). Hearings and public testimony will be scheduled by the legislative committees.

WHERE TO GO FOR MORE INFORMATION? For more information or copies of the proposed contract or preliminary finding, please contact Bob Loeffler at Box 107034; 3601 "C" Street, Suite 1380; Anchorage, Alaska 99510. Telephone: (907) 762-2578. Fax: (907) 562-3852.

AGREEMENT FOR THE SALE AND PURCHASE

OF

STATE ROYALTY OIL

to

PETRO STAR VALDEZ REFINERY JOINT VENTURE
PETRO STAR VALDEZ, INC.
ARCTIC SLOPE REGIONAL CORPORATION
HARBOR ENTERPRISES, INC.
ALASKA REFINING, INC.

THE STATE OF ALASKA
Department of Natural Resources

March 4, 1992

TABLE OF CONTENTS

ARTICLE			PAGE
I	DEFINITIONS		1
	1.1	Commissioner	1
	1.2	Daily Royalty Oil	1
	1.3	Day	1
	1.4	Effective Date	1
	1.5	Field Cost Agreement	1
	1.6	Leases	2
	1.7	Lessee	2
	1.8	Month	2
	1.9	Oil	2
	1.10	Point of Delivery	2
	1.11	Royalty Oil	2
	1.12	Royalty Settlement Agreement	2
	1.13	Royalty Value	2
	1.14	TAPS	3
	1.15	Unit Agreement	3
II	SALE OF ROYALTY OIL		3
	2.1	Quantity	3
	2.2	Quality	4
	2.3	Price of the Royalty Oil	5
	2.4	Purchase Price Reopener	6
	2.5	No Third-Party Intervention	7
	2.6	Point and Time of Delivery	8
	2.7	Passage of Title and Risk of Loss	8
	2.8	Petro Star JV's Responsibility	8
	2.9	Transportation Arrangements	8
	2.10	Absolute Obligations	9
	2.11	Date of First Delivery	9
	2.12	Performance Guaranty and Reservation Fee	10
	2.13	In-State Processing	10
III	REPRESENTATION AND OBLIGATIONS OF PETRO STAR JV		11
	3.1	Good Standing and Due Authorization	11
	3.2	Financial Condition	12
	3.3	Financial Statements	12
IV	MEASUREMENTS AND TESTS		13
V	PAYMENTS AND ACCOUNTING		14

	5.1	Billing	14
	5.2	Initial Adjustment	14
	5.3	Payment	15
	5.4	Payment to Lessee	16
	5.5	Subsequent Adjustments	16
	5.6	Interest	17
	5.7	Late Payment Penalty	17
	5.8	Payment to Third Parties	18
VI	TERM		18
VII	DEFAULT OR TERMINATION		19
	7.1	Default	19
	7.2	Failure to Pay Debts	21
	7.3	State's Remedies	21
	7.4	Petro Star JV's Exclusive Remedies	23
VIII	DISPOSITION OF OIL		23
	8.1	Disposition of Oil Upon Default or Termination	23
	8.2	Inability to Receive Oil	24
	8.3	No Right to Storage or Underlift	24
IX	WAIVER		25
X	VALIDITY		25
XI	FORCE MAJEURE AND CHANGE IN CONDITION		25
	11.1	Effect of Force Majeure	25
	11.2	Responsibility	26
XII	NOTICES		27
	12.1	Method	27
	12.2	Change of Address	28
XIII	RULES AND REGULATIONS		28
XIV	SOVEREIGN POWER OF THE STATE		28
XV	SECURITY		29
XVI	PREFERENTIAL HIRING AND NON-DISCRIMINATION		31
XVII	APPLICABLE LAW		32
	17.1	Alaska Law	32
	17.2	Submission to Jurisdiction	32

XVIII	WARRANTIES	32
XIX	AMENDMENT	32
XX	SUCCESSORS AND ASSIGNS	33
XXI	HEADINGS	33
XXII	RECORDS	33
	22.1 Preservation of Records	33
	22.2 Inspection of Records of Parties	34
XXIII	INTERPRETATION OF TERMS AND CONDITIONS	35
XXIV	COUNTERPARTS	35
	SIGNATURES	36
	ACKNOWLEDGMENT	37
	EXHIBIT A	
	EXHIBIT B	

AGREEMENT FOR THE SALE AND PURCHASE OF ROYALTY OIL

THIS AGREEMENT is entered into as of March 4, 1992 by and between the State Of Alaska ("the State") and Petro Star Valdez Refinery Joint Venture, Petro Star Valdez, Inc., Alaska Refining, Inc., Arctic Slope Regional Corporation, and Harbor Enterprises, Inc. (collectively hereinafter referred to as "Petro Star JV").

ARTICLE I

DEFINITIONS

As used in this Agreement, the following terms shall have the following respective meanings:

1.1 "Commissioner" means the Commissioner of the Alaska Department of Natural Resources or his designee.

1.2 "Daily Royalty Oil" means the quantity of Royalty Oil available from the Lessees of the Kuparuk River Unit each day.

1.3 "Day" means a period of twenty-four (24) consecutive hours, beginning at 12:01 a.m., Alaska Standard Time.

1.4 "Effective Date" shall have the meaning set out in Article VI.

1.5 "Field Cost Agreement" means the Agreement for Settlement of Cleaning, Dehydration and Transportation Charges Applicable to Royalty Oil Taken from the Kuparuk River Unit,

effective as of December 13, 1981, and attached to the Kuparuk River Unit Agreement of December 1, 1981 as Appendix I.

1.6 "Leases" means the Oil and Gas Leases which are subject to the terms of the Kuparuk River Unit Agreement.

1.7 "Lessee" means any person owning a working interest in any of the Leases.

1.8 "Month" means the period beginning at 12:01 a.m., Alaska Standard Time, on the first Day of the calendar Month and ending at the same time on the first Day of the next succeeding calendar Month.

1.9 "Oil" shall have the same meaning as the word "Oil" under the Leases and the Kuparuk River Unit Agreement, except where inconsistent with Section 2.2 of this Agreement, in which case Section 2.2 shall control.

1.10 "Point of Delivery" shall have the meaning set out in Section 2.5.

1.11 "Royalty Oil" means the Oil which the State may take in-kind (in amount) as its royalty under the Leases whether or not the State has elected to take or is taking that royalty in-kind.

1.12 "Royalty Settlement Agreement" means the written royalty settlement agreements between the State and BP Exploration (Alaska) Inc. ("BP") dated December 31, 1991, and the State and Atlantic Richfield Company and Arco Alaska, Inc., ("ARCO") dated September 12, 1990.

1.13 "Royalty Value" means, with respect to each

Royalty Settlement Agreement, the royalty value calculated in accordance with BP's and Arco's Royalty Settlement Agreement for Kuparuk River Oil.

1.14 "TAPS" means the Trans Alaska Pipeline System.

1.15 "Unit Agreement" means the Kuparuk River Unit Agreement effective December 1, 1981, by and between the Lessees, as amended from time to time.

ARTICLE II

SALE OF ROYALTY OIL

2.1 Quantity. The State agrees to sell to Petro Star JV and Petro Star JV agrees to buy from the State that amount of Oil equal to **76.18%** of the Daily Royalty Oil ("Maximum Quantity"). Petro Star JV may permanently decrease the Maximum Quantity only twice: (1) once by giving the State written notice seven months before the date of first delivery and (2) once thereafter by giving the State six Months and ten Days written notice.

Petro Star JV may at any time decrease or increase the amount of Oil to be tendered but not the Maximum Quantity except as provided above. To increase or decrease the amount of oil to be tendered, Petro Star JV must give the State at least six Months and ten Days written notice. If, however, the increase or decrease is less than ten percent of the then current nomination, Petro Star JV must give at least one hundred Days written notice. In addition, the new tendering will take effect on the first day

of the first month after the applicable notice period expires.

It is understood and agreed that the volume of Daily Royalty Oil available to the State will vary and may be interrupted from time to time, and depends upon a variety of factors, including the rate of production from the Leases. The State disclaims and Petro Star JV waives any representation, covenant or warranty, expressed or implied, as to the specific quantity or the total or daily, Monthly, average, or aggregate volume of Royalty Oil to be sold or tendered under this Agreement. The State warrants that it has good title to the Oil tendered under this Agreement.

If the State underlifts or stores Royalty Oil at Kuparuk River Unit, or if the State recovers underlifted or stored Royalty Oil, the quantity of Oil tendered under this Agreement shall be calculated as if no Royalty Oil was underlifted or stored or recovered.

2.2 Quality. The Oil sold shall be the same quality as the Royalty Oil delivered by the Lessees to the State at the Point of Delivery. It is understood and agreed that the quality of the Oil sold may vary from time to time. The State disclaims, and Petro Star JV waives, any guarantee, representation, or warranty, either expressed or implied, of the merchantability, fitness for use, or suitability for any particular use or purpose, or otherwise, of any of the Oil delivered under this Agreement or as to any specific, average, or overall quality or characteristic of Oil to be sold or tendered under this

Agreement. Petro Star JV expressly waives any claim that any liquid hydrocarbons made available to the State by the Lessees, including such substances as crude oil, condensate, natural gas liquids, or return oil from the Kuparuk River Unit Crude Oil Topping Plant, that may be blended with crude by the Lessees before the Point of Delivery and tendered as a common stream by the Lessees to the State as Royalty Oil are not Oil, for purposes of this Agreement.

2.3 Price of the Royalty Oil. The price each Month for Oil purchased under this Agreement shall be the average Royalty Value (weighted by production volume) for that Month of all Oil delivered from the Kuparuk River Unit production for which the Royalty Value is determined by the Royalty Settlement Agreements plus field costs. See examples attached as Exhibits A and B.

Field costs are those costs as defined in the Field Cost Agreement. If a field cost different from that in the existing Field Cost Agreement is established through future written agreement, or settlement or final resolution of any litigation, then that new field cost shall apply to the portion of the liquid hydrocarbons deemed not to be covered by the now existing Field Cost Agreement. In the interim, Petro Star JV agrees to pay the State the field costs claimed by the Lessees for any Royalty Oil taken by Petro Star JV. Any future field cost adjustments shall bear interest as provided in Section 5.6.

If any applicable law of the United States of America or any rule or regulation promulgated by a federal agency will,

in the judgment of the State, operate to prohibit or prevent the State from receiving the full amount due under the above provision, Petro Star JV's obligation to pay the amount of the purchase price in excess of the amount permitted will be suspended or adjusted to the minimum extent required for the State to comply with that law, rule or regulation.

2.4 Purchase Price Reopener. The State and Petro Star JV shall have the right to reopen this Agreement as to purchase price only. At any time after Petro Star JV receives Oil for two years from the Date of First Delivery (as defined in Section 2.11), the State or Petro Star JV may exercise the right to reopen by giving the other party one Month prior written notice. Upon issuance and receipt of a notice to reopen, Petro Star JV and the State will promptly commence good faith negotiations in an attempt to establish a new purchase price. If a new purchase price is not agreed to by Petro Star JV and the State within three Months after giving the notice to reopen, either Petro Star JV or the State may terminate this Agreement upon nine Months written notice to the other. The purchase price for Oil tendered during any period pending termination shall be determined in accordance with the price term in effect immediately before giving the notice of intent to reopen. If a new purchase-price provision is agreed to by Petro Star JV and the State, the new purchase-price provision shall become effective for Oil tendered in the Month following the written Agreement on the new purchase-price provision. Not less than two years after the conclusion of

the purchase-price reopener process described above, either Petro Star JV or the State again may reopen this Agreement, as to purchase price only, by giving notice of intent to exercise the right to reopen. At that time, the purchase-price reopener process described above may again be followed and every two years thereafter.

2.5 No Third-Party Intervention. Petro Star JV shall not voluntarily intervene or otherwise participate in any way regarding litigation, styled **State of Alaska v. Exxon, et.al., Case No. 1-JU-77-847**, ("ANS Royalty Litigation"), any future Royalty Settlement Agreements, or any reopeners or other discussions under or pertaining to Royalty Settlement Agreements. Any judgment resulting from the ANS Royalty Litigation, any future Royalty Settlement Agreements, or any reopener under any Royalty Settlement Agreement shall be conclusively binding upon Petro Star JV whether or not Petro Star JV agrees with or consents to the terms of any such judgment, settlement, or reopener. Furthermore, Petro Star JV has no independent right to invoke any of the provisions of any Royalty Settlement Agreement. If the Royalty Value is modified in the future as a result of a modification of any Royalty Settlement Agreement, a corresponding retroactive modification will be made to the price term of this Agreement and interest will apply to the modification, whether resulting in an overpayment or underpayment, as set forth in Section 5.6. Petro Star JV agrees to be conclusively bound by any such modification agreed to by

the State and BP or ARCO.

2.6 Point and Time of Delivery. Simultaneously with receipt of its Royalty Oil from its Lessees, the State shall tender the Oil to Petro Star JV at the point at which the State receives the Royalty Oil from its Lessees. That point as presently agreed to by the State and its Lessees in Section 2.3 of the Field Cost Agreement is the Central Production Facility Meter into the Kuparuk Pipeline.

2.7 Passage of Title and Risk of Loss. Title and risk of loss to the Oil sold under this Agreement shall pass from the State to Petro Star JV for all purposes when the State tenders the Oil at the Point of Delivery.

2.8 Petro Star JV's Responsibility. Petro Star JV shall be responsible for the Oil after passage of title. Petro Star JV will indemnify and hold the State harmless from and against any and all claims, costs, damages (including reasonably foreseeable consequential damages), expenses, or causes of action arising from or in connection with any transaction or event which relates to the Oil after title has passed to Petro Star JV.

2.9 Transportation Arrangements. Petro Star JV shall make all necessary arrangements for transporting the Oil sold under this Agreement from the Point of Delivery, including satisfaction of line fill obligations and storage tank bottom requirements of the Kuparuk Pipeline and of TAPS, if any. If requested by the State, Petro Star JV shall submit specific information concerning its arrangement for transportation of the

Oil sold under this Agreement through and away from the Kuparuk Pipeline and the TAPS and for the resale or other disposal of the Oil. Such information may include the specific tenders of Oil made to the Kuparuk Pipeline and TAPS and identification of tankers, if any, which will transport the Oil. In addition, Petro Star JV will provide the State, if requested by the State, with satisfactory evidence or reasonable assurance of the existence and continuing validity of adequate arrangements for the transportation or disposal of the Oil subject to this Agreement. Failure to provide information, evidence, or assurances requested will, at the State's election by notice to Petro Star JV, be a material default under this Agreement.

2.10 Absolute Obligations. The obligations of Petro Star JV to accept, pay for, and arrange for the transportation of the Oil tendered or sold under this Agreement are absolute and will not be excused or discharged by the operation of any disability of Petro Star JV, event of force majeure, impracticability of performance, change in conditions, or any other reason or cause.

2.11 Date of First Delivery. The date of First Delivery will be the first Day of the first Month that is the later of (i) seven Months after the Effective Date or (ii) seven Months after Petro Star JV certifies that within seven Months the refinery will be ready to accept and process Oil. If requested by Petro Star JV, the State, in its sole discretion, may set an earlier date of First Delivery.

2.12 Performance Guaranty and Reservation Fee. If at any time, Petro Star JV does not take the Maximum Quantity, Petro Star JV shall pay to the State, in addition to the purchase price on the actual quantity taken, an amount equal to .75% of the purchase price per barrel per Day on the difference between the Maximum Quantity and the actual quantity tendered to and accepted by Petro Star JV for each Day Petro Star JV does not take the Maximum Quantity.

2.13 In-state Processing. Petro Star JV agrees that not less than 80% of the Royalty Oil sold under this Agreement, averaged on a quarterly basis, shall be processed through Petro Star JV's refinery near Valdez, Alaska, except as provided below. "Process" means producing refined petroleum products from the Oil in quantities not less than 20% of the volume of Royalty Oil run through Petro Star JV's refinery pursuant to this Agreement.

Petro Star JV's obligation to process Royalty Oil in-state may only be suspended or excused under (1) the provisions of Articles VIII and XI, or (2) during refinery maintenance.

The State may, at its sole option, waive the in-state processing requirement in whole or in part, if the State is satisfied that Petro Star JV is using its best efforts to process the Royalty Oil sold under this Agreement at Petro Star JV's Valdez refinery and that the waiver would not be contrary to the underlying intent of the other provisions of this Agreement.

ARTICLE III

REPRESENTATION AND OBLIGATIONS OF PETRO STAR JV

Petro Star JV warrants, represents, and agrees:

3.1 Good Standing and Due Authorization. Petro Star Valdez, Inc., Alaska Refining Inc., Arctic Slope Regional Corporation, and Harbor Enterprises, Inc. are and at all times during the operation of this Agreement shall remain, corporations organized and existing under and by virtue of the laws of the United States or of any state, territory or the District of Columbia, and qualified to do business in, and in good standing with, the State of Alaska. Petro Star Valdez, Inc., Alaska Refining Inc., Arctic Slope Regional Corporation, and Harbor Enterprises, Inc. each have all necessary corporate power to enter into this Agreement and to perform the covenants and obligations under this Agreement. All necessary corporate action has been taken to authorize Petro Star Valdez, Inc., Alaska Refining Inc., Arctic Slope Regional Corporation, and Harbor Enterprises, Inc. entering into this Agreement and performing its covenants and obligations under this Agreement.

Petro Star Valdez Refinery Joint Venture is, and at all times during the operation of the Agreement, shall remain a joint venture consisting of Petro Star Valdez, Inc., Alaska Refining Inc., and Harbor Enterprises, Inc. Petro Star Valdez Refinery Joint Venture is organized and exists under and by virtue of the laws of the State of Alaska, and is qualified to do business in, and in good standing with, the State of Alaska. Petro Star

Valdez Refinery Joint Venture is authorized by and on behalf of Petro Star Valdez, Inc., Alaska Refining Inc., and Harbor Enterprises, Inc., to enter into this Agreement and to perform its covenants and obligations under this Agreement. All necessary acts have been taken to authorize Petro Star Valdez Refinery's entering into this Agreement and performing its covenants and obligations under this Agreement.

3.2 Financial Condition. The financial information submitted to the State is complete and correct and fairly presents Petro Star JV's financial condition at the time the information was submitted to the State. The financial information was prepared in accordance with generally accepted accounting principles consistently applied. Since the date the information was submitted, the condition, business, and properties of Petro Star JV have not been materially adversely affected in any way. Petro Star JV agrees to inform the State immediately if there is any material adverse change in its condition, business, or properties which may have an appreciable adverse effect on its ability to perform under this Agreement. Petro Star JV, in addition, will immediately inform the State of any significant change in ownership of Petro Star JV, affiliates, parent company, and of any change in Petro Star JV's operations or Agreements, which may appreciably affect Petro Star JV's performance under this Agreement.

3.3 Financial Statements. As soon as possible after the end of each fiscal year of Petro Star JV, and in any event

within one hundred twenty Days thereafter, Petro Star JV will furnish to the State, at Petro Star JV's sole cost and expense, a report or a complete copy of a report in a form to be prescribed from time to time by the State which will include each of Petro Star JV's balance sheet as of the close of the fiscal year and the income statement for that year, prepared in each case in accordance with generally accepted accounting principles consistently applied by certified public accountants of recognized standing. For purposes of complying with this article in the first year of this Agreement, Petro Star JV may submit, and the State will accept, the annual report of the corporate parties to this agreement filed with the United States Securities and Exchange Commission pursuant to Sec. 13 or 15(d) of the Security Exchange Act of 1934.

ARTICLE IV

MEASUREMENTS AND TESTS

The quantity and quality of Oil sold under this Agreement shall be determined at the Point of Delivery. Procedures and methods for measuring and metering the Oil sold under this Agreement shall be in accordance with the practices then in effect at Kuparuk River Unit, Alaska, between the Lessees and the operators of Kuparuk Pipeline.

ARTICLE V

PAYMENTS AND ACCOUNTING

5.1 Billing. The State will send to Petro Star JV, on or before the tenth business Day of each Month after delivery of Oil, an invoice statement of account of all Oil estimated to have been measured at the Central Production Facility Meter into the Kuparuk Pipeline and tendered to Petro Star JV under this Agreement during the immediately preceding Month according to the best information available to the State, the estimated purchase prices applicable to those deliveries, and the total amount due ("Initial Billing"). The estimates will be made by the State according to the best information reasonably available to the State. The State may render its Initial Billing to Petro Star JV based in part upon information reported by the Lessees to the State, information published by the U.S. Government, and information published in Platt's Oilgram Price Report or any other publicly available report. The State shall thereafter adjust its Initial Billing under this Article as soon as more accurate information concerning the quantity and purchase price of Oil delivered each Month is available. The State, however, shall not be required to adjust the Initial Billing before the sending of the next Month's invoice statement of account.

5.2 Initial Adjustment. After the Initial Billing under Section 5.1, the next Monthly invoice will also state the State's initial adjustments to be made, if any, to the invoice rendered in the immediately preceding Month, in accordance with

any additional or more accurate information which may have become available to the State. Whether or not initial adjustments are made, however, subsequent adjustments may be made under Section 5.5.

5.3 Payment. Petro Star JV will make payment of each amount billed under this Article within ten Days after receipt of the invoice statement of account. Payment shall be made without any deduction, set off, or withholding, by wire transfer of immediately available funds to the State's account at the following address:

State Street Bank & Trust Company
Boston, Massachusetts
ABA #011000028
For credit to the State of Alaska
General Investment Fund, AY01
Account #00657189
Attn: Kim Chan, Public Funds

Payment may be made in such other manner or to such other address as the State may specify in the invoice statement of account or by other written notice. All other payments to be made under this Agreement shall be paid in the same manner. If payment is due on a Saturday, Sunday, or legal holiday of the place where payment is to be received, payment shall be made on the next following business Day. It is recognized that the State may bill, and that Petro Star JV will pay, amounts that are based upon confidential information held or received by the State. If confidential information is used as the basis for a billing, then upon request, the State will furnish Petro Star JV with the certified statement of the Commissioner that the amounts billed

are correct based upon the best information available to the State. If a dispute concerning a bill arises, Petro Star JV agrees to pay the full amount billed by the State, except for obvious clerical mistakes, pending final resolution of the dispute.

5.4 Payment to Lessee. Petro Star JV, at the request of the State in the invoice statement of account or otherwise in writing, shall pay all or any portion designated by the State of that payment required to be made to one or more of the Lessees at an address or addresses and in the manner designated by the State. The payment will be made within the time limit specified in Section 5.3. The State may authorize and designate a third party to make the request and designate the amount, manner and place of payment under this provision. Unless otherwise specified, the balance of the payment due, if any, and payment for subsequent Months, shall be made in accordance with Section 5.3.

5.5 Subsequent Adjustments. Petro Star JV acknowledges that after the Initial Billing and initial adjustment, more accurate information concerning the quantity of or purchase price for Royalty Oil tendered may become available to the State. If any such information should later become available to the State, it shall promptly furnish a corrected invoice statement of account to Petro Star JV and the State will adjust the amount billed; and Petro Star JV will pay, or the State will credit or refund the amount of those adjustments. If

the State should render a corrected invoice to Petro Star JV, any amount to be credited or refunded from the State to Petro Star JV or paid from Petro Star JV to the State will be refunded or paid within thirty Days after the date of the corrected invoice. The provisions of this Section 5.5 will survive any termination of this Agreement.

5.6 Interest. The amount of all sums, which are not paid when due under this Agreement or which are later determined to be due as an adjustment, shall bear interest from the date accrued until paid in full at the rate as provided in AS 38.05.135(d) or as may later be amended. Currently, that interest rate in a calendar quarter is at the rate of five percentage points above the annual rate charged member banks for advances by the 12th Federal Reserve District as of the first Day of that calendar quarter, or at the annual rate of 11 percent, whichever is greater, compounded quarterly as of the last Day of that quarter. The term "date accrued" means the date of the receipt of the "Initial Billing plus ten Days." Interest shall apply to both adjustments for overpayments and underpayments.

5.7 Late Payment Penalty. If Petro Star JV fails to make a full payment within ten business Days of the date that payment is due, then in addition to the amount due plus interest from the date that payment was due until the date of actual payment, Petro Star JV will pay an amount equal to five percent of the amount owed. The late payment penalty is due at the time of the next Month's payment.

5.8 Payment to Third Parties. The State may direct that Petro Star JV pay any amount due or which may become due directly to a third party in a manner and time as may be directed by the State in written notice to Petro Star JV if, in the State's sole discretion, the payment to the third party will assist State in monitoring or enforcing this Agreement.

ARTICLE VI

TERM

This Agreement shall become effective upon execution by the parties and after enactment of legislation by the State of Alaska (including approval by the Governor) approving this Agreement. This Agreement shall be null and void if it is not so approved by

December 31, 1993, or if Petro Star JV does not certify that it will within seven Months be ready and able to accept and process the Oil as required by Section 2.11 before December 31, 1993. Subject to the other provisions contained in this Agreement, State's obligation to sell and Petro Star JV's obligation to buy Royalty Oil shall begin as provided above, and shall end December 31, 2003. As used in this Article, "enactment of legislation" is as defined in AS 01.10.070(f)(4).

ARTICLE VII

DEFAULT OR TERMINATION

7.1 Default. If any one or more of the following events ("Events of Default") occur, then at the State's sole option, the State may terminate or suspend its obligation to tender and sell Royalty Oil and proceed to exercise any one or more of the rights and remedies provided in this Agreement:

(i) At any time, Petro Star JV (a) repudiates any of its covenants or obligations under this Agreement, or (b) fails, within five Days, after written request from the State to provide the State with written affirmation of this Agreement and of Petro Star JV's intention to perform under this Agreement (together with evidence or assurances of transportation arrangements pursuant to Section 2.9 reasonably satisfactory to the State); or

(ii) Petro Star JV does not pay in full any sum owed under this Agreement at the time when payment is due; or

(iii) Petro Star JV fails to observe or perform any of its other covenants and obligations under Article II; or

(iv) Petro Star JV does not perform any act required or contemplated under this Agreement

and: (a) the nonperformance cannot be cured; (b) the nonperformance continues for more than thirty Days after the State has notified Petro Star JV of Petro Star JV's nonperformance; or (c) Petro Star JV had failed to perform the same or any other act required or contemplated under this Agreement during the immediately preceding twelve Month period; or

(v) There is a material adverse change in Petro Star JV's condition, business, or property which may appreciably affect its ability to perform any of their obligations under this Agreement and Petro Star JV is unable or unwilling to give the State adequate assurance of continued performance either within five Days of a request for such an assurance or within such other shorter time period as the State may request under the circumstances; or

(vi) Any representation or warranty made by Petro Star JV in this Agreement was materially false or incorrect when made.

(vii) Petro Star JV's failure or inability for any reason (including reasons beyond Petro Star JV's control) to maintain the Security

described in Article XV, notwithstanding Petro Star JV's continuing willingness and ability to perform its other obligations and covenants under the Agreement.

7.2 Failure to Pay Debts. If Petro Star JV becomes unable to pay any of its debts when due, or should otherwise become insolvent (without regard to how that insolvency may be evidenced), Petro Star JV will immediately give notice of that fact to the State. Whether that notice is given, if Petro Star JV becomes unable to pay any of its debts when due or should otherwise become insolvent, the State's obligation to tender and sell Oil under this Agreement will automatically and immediately terminate without any requirement of notice or other action by the State; however, Petro Star JV will nevertheless be and remain liable for payment and performance of all its obligations and covenants under this Agreement with respect to Oil actually tendered by the State to and after any such termination. Within thirty Days after receipt of Petro Star JV's notice or, if no notice is given, after the State otherwise becomes aware (as determined in the State's sole discretion) of Petro Star JV's insolvency, the State will have the right, upon written notice to Petro Star JV, to reinstate all of the State's and Petro Star JV's obligations under this Agreement retroactively to the date of termination.

7.3 State's Remedies. If any Event of Default occurs or if the State's obligation to tender and sell Oil under this

Agreement is terminated or suspended, all Petro Star JV's obligations accrued but not otherwise due and payable under this Agreement will immediately be due and payable in full. In addition, Petro Star JV will indemnify and hold the State harmless from and against all other liability, damages (including reasonably foreseeable consequential damages), costs, losses and expenses (including reasonable attorney's fees and disbursements) incurred by the State and arising out of the Event of Default, termination, or suspension. The State shall have the right cumulatively to exercise any and all other rights and remedies and to obtain all other relief available under applicable law or at equity, including mandatory injunction and specific performance.

Additionally, in its sole discretion, the State, upon occurrence of any Event of Default: (1) may dispose to third parties Royalty Oil to be tendered and sold under this Agreement and (2) may release Petro Star JV from the in-state processing obligations set forth in Article 2.13 until the Event of Default no longer exists or the obligation of Petro Star JV to take Oil under this Agreement expires. If the State disposes Oil to third parties, or if Petro Star JV is released from Article 2.13, whether or not this Agreement is terminated, Petro Star JV will nevertheless remain liable for the difference between the purchase price for that Oil under this Agreement and the price received by the State by disposition, including all of the expenses (including reasonable attorneys' fees and costs), and

losses incurred by the State arising out of the Event of Default or disposition.

7.4 Petro Star JV's Exclusive Remedies. Upon any breach of, or default in performance of any of the State's covenants or obligations under this Agreement, Petro Star JV agrees that its remedies will not include a temporary restraining order or preliminary injunction preventing the State from taking any action with regard to the Royalty Oil which is the subject of this Agreement.

ARTICLE VIII

DISPOSITION OF OIL

8.1 Disposition of Oil Upon Default or Termination. Petro Star JV recognizes that the State may be required to give six Months notice under the Unit Agreement (or ninety Days if the amount increased or decreased is less than ten percent of the then current nominations) to increase or decrease the amount of Daily Royalty Oil to be taken in-kind. Petro Star JV agrees that the State's election to invoke its rights to return to taking its Royalty Oil in-value on less than six Month's prior notice, or to attempt to secure a waiver of any condition or requirement, is at the State's sole discretion. Notwithstanding termination of this Agreement for any reason, Petro Star JV shall continue to take and purchase the State's Royalty Oil in the amount and for the price set forth in this Agreement for up to six Months following termination if the State, in its sole discretion, so requires.

8.2 Inability to Receive Oil. If for any reason Petro Star JV is unable or refuses to accept or receive any Oil tendered under this Agreement, Petro Star JV shall nevertheless be and remain responsible for the disposal of that Oil and for paying the State for the Oil as though it had been received and accepted by Petro Star JV unless the State, in its sole discretion, elects to waive this requirement. In order to secure the obligations of Petro Star JV under Section 8.2 and Section 2.10, Petro Star JV shall, if the State requests, assign to the State all right, title and interest of Petro Star JV under any nominations, Leases, Agreements, contracts, charter parties and other arrangements for the transportation of the Oil sold under this Agreement through and away from the Kuparuk Pipeline and the Trans Alaska Pipeline System; provided, that the State shall not have any liability or obligations under any such nominations, Leases, Agreements, contracts, charter parties or other arrangements unless, and to the extent that, the State shall actually exercise its rights to succeed to Petro Star JV's interest under them and shall obtain the benefits of them.

8.3 No Right to Storage or Underlift. Petro Star JV waives and disclaims any interest or right that it may assert to storage of Royalty Oil, including by underlift or other means, to which the State is or may come to be entitled under the Leases or any other agreement.

ARTICLE IX

WAIVER

The failure of either party to insist upon strict performance of any provision of this Agreement shall not constitute a waiver of, or estoppel against, asserting the right to require that performance in the future. A waiver or estoppel in any one instance shall not constitute a waiver or estoppel with respect to a later breach of a similar nature or otherwise. A course of performance established by a party shall also not estop the other party from complaining of a later breach similar in nature.

ARTICLE X

VALIDITY

If any provision or clause of this Agreement or application of this Agreement is held invalid, that invalidity shall not affect other provisions or applications of this Agreement which can be given effect without the invalid provision or application. If, however, an invalidity should operate to impair any material right or remedy of a party to this Agreement, that party may terminate this Agreement by notice to the other.

ARTICLE XI

FORCE MAJEURE AND CHANGE IN CONDITION

11.1 Effect of Force Majeure. Except for Petro Star JV's obligations to pay for Oil tendered and to accept and

dispose of Royalty Oil, neither party shall be liable for any failure to perform when the failure is caused in whole or in substantial part, by force majeure. The term "force majeure" shall mean Acts of God, strikes, lockouts and industrial disputes or disturbances, civil disturbances, arrests and restraints from rulers or people, interruptions by government or court orders or by present or future orders of any regulatory body having or asserting jurisdiction, acts of the public enemy, wars, riots, blockades, insurrections, inability to secure materials by reasons of allocations promulgated by authorized governmental agencies, epidemics, landslides, lightning, earthquakes, fires, storms, floods, washouts, explosions, breakage or accident to machinery or lines of pipe, freezing of wells or pipelines, or any other event or condition, whether of the kind herein enumerated or otherwise, not within the reasonable control of the party claiming the benefit of this excuse. If, however, any material obligation of Petro Star JV is excused or suspended by a force majeure for three hundred sixty-five successive Days or more, the State will have the right to terminate this Agreement. Before the State exercises its right to terminate, the State and Petro Star JV shall in good faith negotiate to restore the benefits and obligations that existed under this Agreement before the occurrence of the force majeure condition.

11.2 Responsibility. If a party believes that force majeure has occurred, the party shall immediately notify the other party of its claim of force majeure. If force majeure

occurs, that occurrence shall, so far as possible, be remedied with reasonable diligence. Except for Petro Star JV's obligations to pay for Oil tendered and to accept and dispose of Oil, the disabled party's obligations to perform that are affected by the force majeure shall be suspended from the time that notification occurs until the disability should have been remedied with reasonable diligence, and for no longer. But, the settlement of strikes, lockouts, or industrial disputes or disturbances will be entirely within the sole discretion of the party having the difficulty.

ARTICLE XII

NOTICES

12.1 Method. All notices, requests, demands or statements shall be in writing, and may be delivered personally, telecopied, or sent by registered or certified United States mail, postage prepaid, with a return receipt requested, to the party to be notified. Notice deposited in the mail in this manner shall be effective upon the expiration of seven Days after it is so deposited. Notice given in any other manner shall be effective only if and when received by the addressee. For the purposes of notice, the addresses of the parties shall be as follows:

If to the State: State of Alaska
Commissioner of Natural Resources
400 Willoughby Avenue
Juneau, AK 99801

and

Commissioner of Revenue
P.O. Box S
Juneau, AK 99811-0400

and

Director, Division of Oil and Gas
P.O. Box 107034
Anchorage, AK 99510-0734

If to Petro Star JV: Attn: Stephen T. Lewis
Petro Star Valdez Refinery Joint Venture
P.O. Box 61030
Fairbanks, Alaska 99706
Telecopy Number: (907) 474-9503

12.2 Change of Address. Each party may change its address for notice by giving written notice of the change.

ARTICLE XIII

RULES AND REGULATIONS

This Agreement is subject to all present and future valid laws, orders, rules and regulations of the United States, the State of Alaska, and any duly constituted of the State of Alaska.

ARTICLE XIV

SOVEREIGN POWER OF THE STATE

This Agreement shall not be interpreted as a limit on the State of Alaska's exercise of any of its sovereign or regulatory powers, whether conferred by constitution, statute or regulation, including, but not limited to, its regulatory power over the Leases. Its exercise of any sovereign or regulatory power will not operate or be deemed to enlarge any rights of

Petro Star JV or to limit or impair any obligations or liability of Petro Star JV under this Agreement.

ARTICLE XV

SECURITY

One hundred ninety Days before the Date of First Delivery, Petro Star JV shall cause to be issued and delivered to the State an irrevocable stand-by letter of credit, with an effective date no later than the Date of First Delivery, issued for the benefit of the State by a state or national banking institution of the United States ("Issuer"), which is insured by the Federal Deposit Insurance Corporation and has an aggregate capital and surplus of not less than One Hundred Million Dollars ($100,000,000), or other banking institution acceptable to the State in its sole discretion. The principal face amount of such letter of credit shall be a sum estimated by the Commissioner to be equal to the aggregate purchase price for the approximate total amount of Oil to be tendered by the State to Petro Star JV during the first ninety Days following the Date of First Delivery. The letter of credit shall be in a form satisfactory to the Commissioner, but in any event shall not require any documents to be submitted in support of drafts drawn against this letter of credit other than the certified statement of the Commissioner or his designee and the Attorney General of the State of Alaska or his designee that Petro Star JV is liable to

the State for a sum equal to the amount of such draft, and that sum is due and payable in full and has not been timely paid. The letter of credit must be renewed ninety Days before its expiration so that a letter of credit is continuously valid for ninety Days after the date of the last delivery of Royalty Oil. If a replacement letter of credit, in a form satisfactory to the Commissioner in his sole discretion, is not received ninety Days before the expiration of the existing letter of credit, then Petro Star JV shall be deemed to have materially breached this Agreement, there shall have occurred an event of default under Article 7.1, and all obligations of Petro Star JV accrued, but not otherwise due and payable under this Agreement, will immediately become due and payable in full.

If the State has reasonable grounds for asserting any claims against Petro Star JV and does assert those claims in an aggregate amount in excess of the aggregate principal face amount of the letter of credit then in effect, Petro Star JV shall upon the State's request (whether or not Petro Star JV may deny, reject or otherwise resist such claims) cause the principal face amount to be increased by an amount equal to the excess. Petro Star JV shall also automatically increase the principal face amount, without request from the State, whenever the face amount is less than the expected purchase price of ninety Days of Oil tenders, to an amount equal to the expected purchase price of ninety Days of Oil tenders. Petro Star JV may decrease the principal face amount upon approval of the State, if the face

amount is more than the expected purchase price of ninety Days of Oil tenders to an amount equal to the expected purchase price of ninety Days of Oil tenders.

The letter of credit must allow drafts to be drawn and presented to the Issuer up to and including the 90th Day after the last delivery of Royalty Oil to Petro Star JV under this Agreement. The Commissioner may accept such other or additional security as he, in his sole discretion, considers adequate to protect the State.

ARTICLE XVI

PREFERENTIAL HIRING AND NON-DISCRIMINATION

Petro Star JV agrees to employ Alaska residents and Alaska companies to the extent they are available, willing and qualified for all work performed in Alaska in connection with the Agreement. "Alaska resident" means an individual who has resided in Alaska for one year at the time of employment and "Alaska companies" means companies incorporated in Alaska or whose principal place of business is in Alaska.

If this provision is determined to be unconstitutional, then Petro Star JV agrees to employ Alaska residents and Alaska companies to the extent such preferential hiring is determined to be constitutional.

ARTICLE XVII

APPLICABLE LAW

17.1 Alaska Law. This Agreement shall be governed by and construed in accordance with the laws of the State of Alaska, excluding any conflict-of-law rule or principle which might refer such construction to the laws of another state or country.

17.2 Submission to Jurisdiction. Any legal action or proceeding arising out of or relating to this Agreement or for the enforcement of the covenants or obligation of either party must be instituted in a state court of general jurisdiction sitting in the State of Alaska, and Petro Star JV hereby irrevocably submits to the jurisdiction of that court in any such action or proceeding.

ARTICLE XVIII

WARRANTIES

The purchase and sale of Royalty Oil is subject only to the warranties of the State expressly set forth in this Agreement and the State disclaims and Petro Star JV waives all other warranties, express or implied in law, whatsoever.

ARTICLE XIX

AMENDMENT

This Agreement may be supplemented, amended, or modified only by written instrument duly executed by the parties. Any amendment which appreciably reduces the

consideration received by the State requires prior approval of the Legislature of the State of Alaska.

ARTICLE XX

SUCCESSORS AND ASSIGNS

No assignment, pledge, or encumbrance of this Agreement shall be made by either party without the written consent of the other party. The Commissioner or his designee may grant or deny such consent in his sole discretion. Subject to the above requirements in this Article, this Agreement will be binding upon and inure to the benefit of each of the parties and its successors and permitted assignees.

ARTICLE XXI

HEADINGS

Headings used in this Agreement are for convenience only and shall not affect its construction.

ARTICLE XXII

RECORDS

22.1 Preservation of Records. Petro Star JV will preserve and maintain all books, accounts, and records relating to or arising out of the performance of this Agreement including, but not limited to, the purchase or sale of Royalty Oil and its refined products, for a period of no less than six years from the date of transaction or last adjustment relating to the

transaction. Petro Star JV will also maintain and preserve all similar books, accounts, and records of which it has possession belonging to those third parties with whom it contracts for the performance of various parts of this Agreement. Neither Petro Star JV nor the State shall be required to retain any records for more than six years unless retention of such records is specifically required by applicable law or regulation, or this Agreement. Petro Star JV shall either maintain its records within the State of Alaska or make such records available to the State at Petro Star JV's principal office in the State of Alaska within thirty Days after written request by the State.

22.2 Inspection of Records of Parties. Petro Star JV and the State will accord to each other and to their authorized agents, attorneys, and auditors during reasonable business hours access to any and all property, records, books, documents, and indexes directly relating to Petro Star JV's or the State's performance of this Agreement and which are under the control of the party from which access is desired so that the other party may inspect, photograph and make copies of that property, records, books, documents and indexes. The State shall not be required to disclose any information, data, or records which are required to be held confidential by state or federal law or regulation. If the information obtained by the State may be held confidential under state or federal law or regulation, Petro Star JV may request that information be held confidential by the State and the State will keep this information confidential.

ARTICLE XXIII

INTERPRETATION OF TERMS AND CONDITIONS

In the event that there is a disagreement about the meaning or application of a word, term, or condition in this Agreement, Petro Star JV will present the arguments supporting its view in writing to the Commissioner for his consideration. The Commissioner will subsequently issue a finding on the meaning or application of the disputed word, term, or condition, setting forth the basis for his conclusions. Petro Star JV agrees to accept findings by the Commissioner under this Article are supported by substantial evidence.

ARTICLE XXIV

COUNTERPARTS

This Agreement may be executed in multiple counterparts, it not being necessary for all parties to sign the same counterpart. Each counterpart shall be deemed to be an original and all of which taken together shall be one and the same instrument.

SIGNATURES

the State: THE STATE OF ALASKA

Harold C Heinze

Commissioner
Department of Natural Resources

Date: 3/4/92

Petro Star Valdez Refinery Joint Venture

By: _____

_____

Date: _____

Petro Star Valdez, Inc.

By: _____

_____

Date: _____

Alaska Refining, Inc.

By: _____

_____

Date: _____

Arctic Slope Regional Corp.

By: _____

_____

Date: _____

Harbor Enterprises, Inc.

By: _____

_____

Date: _____

SIGNATURES

the State: THE STATE OF ALASKA

_____
Commissioner
Department of Natural Resources

Date: _____

Petro Star Valdez Refinery
Joint Venture

By: [signature]
Chairman of the Management Committee

Date: 3/5/92

Petro Star Valdez, Inc.

By: [signature]
President

Date: 3/5/92

Alaska Refining, Inc.

By: _____

_____

Date: _____

Arctic Slope Regional Corp.

By: [signature]
ANS

Date: 3/5/92

Harbor Enterprises, Inc.

By: _____

_____

Date: _____

SIGNATURES

the State: THE STATE OF ALASKA

_____
Commissioner
Department of Natural Resources

Date: _____

Petro Star Valdez Refinery
Joint Venture

By: _____

_____

Date: _____

Petro Star Valdez, Inc.

By: _____

_____

Date: _____

Alaska Refining, Inc.

By: [signature]
Chairman

Date: 3/5 92

Arctic Slope Regional Corp.

By: _____

_____

Date: _____

Harbor Enterprises, Inc.

By: _____

_____

Date: _____

SIGNATURES

the State: THE STATE OF ALASKA

_____
Commissioner
Department of Natural Resources

Date: _____

Petro Star Valdez Refinery
Joint Venture

By: _____

_____

Date: _____

Petro Star Valdez, Inc.

By: _____

_____

Date: _____

Alaska Refining, Inc.

By: _____

_____

Date: _____

Arctic Slope Regional Corp.

By: _____

_____

Date: _____

Harbor Enterprises, Inc.

By: [signature]

SR VP MARKETING

Date: June 5, 1992

ACKNOWLEDGMENT

STATE of Alaska)
) ss.
Third Judicial District)

THIS IS TO CERTIFY that on the 4th day of March, 1992, before me, appeared Harold C. Heinze, the Commissioner, Department of Natural Resources, State of Alaska; that Harold C. Heinze executed that document under legal authority and with knowledge of its contents; and that this act was performed freely and voluntarily upon the premises and for the purposes state in the document.

Witness my hand and official seal the day and year in this Agreement first above written.

Sherry Hoewes
Notary Public in and for Alaska
My commission expires: 7/10/94

State of Alaska)
) ss.
Third Judicial District)

THIS IS TO CERTIFY that on the 5th day of March, 1992, before me appeared Stephen T. Lewis, the person who has been lawfully authorized as the Chairman of mktg C. Comm. of Petro Star Valdez Refinery JV to execute this document; that Stephen T. Lewis executed that document under legal authority and with knowledge of its contents; and that this act was performed freely and voluntarily upon the premises and for the purposes stated in the document.

Witness my hand and official seal the day and year in this Agreement first above written.

Carol Bagwell
Notary Public in and for Alaska

My commission expires: 10-3-94

State of Alaska)
) ss.
Third Judicial District)

THIS IS TO CERTIFY that on the 5th day of March 1992, before appeared Stephen T. Lewis, the person who has been lawfully authorized as the President of Petro Star Valdez, Inc to execute this document; that Stephen T. Lewis executed that document under legal authority and with knowledge of its contents; and that this act was performed freely and voluntarily upon the premises and for the purposes stated in the document.

Witness my hand and official seal this day and year in this Agreement first above written.

Carol Boque
Notary Public in and for Alaska

My commission expires: 10-3-94

State of Alaska)
) ss.
Third Judicial District)

THIS IS TO CERTIFY that on the 5th day of March 1992, before appeared Neil Bergt, the person who has been lawfully authorized as the Chairman of Alaska Peninsula Corp to execute this document; that _____ executed that document under legal authority and with knowledge of its contents; and that this act was performed freely and voluntarily upon the premises and for the purposes stated in the document.

Witness my hand and official seal this day and year in this Agreement first above written.

Dolores A. Keegan
Notary Public in and for Alaska

My commission expires: 4-18-94

State of Alaska)
) ss.
Third Judicial District)

THIS IS TO CERTIFY that on the 5 day of March 1992, before me appeared Jacob Adams, the person who has been lawfully authorized as the President of Arctic Slope Reg'l Corp. to execute this document; that Jacob Adams executed that document under legal authority and with knowledge of its contents; and that this act was performed freely and voluntarily upon the premises and for the purposes stated in the document.

Witness my hand and official seal the day and year in this Agreement first above written.

Carol Bagne
Notary Public in and for Alaska

My commission expires: 10-3-94

State of Alaska)
) ss.
Third Judicial District)

THIS IS TO CERTIFY that on the 5th day of March, 1992, before me appeared James S. Burns, the person who has been lawfully authorized as the Senior V.P. of Harbor Ent. to execute this document; that James S. Burns executed that document under legal authority and with knowledge of its contents; and that this act was performed freely and voluntarily upon the premises and for purposes stated in the document.

Witness my hand and official seal the day and year in this Agreement first above written.

Donna L Wardwell
Notary Public in and for Alaska

My commission expires: 7/29/94

EXHIBIT A. INTEREST CALCULATION EXAMPLE

Numbers in this exhibit are illustrative. They do not represent accurate values that may have existed in the past or are forecasted for any time in the future. Companies A and B represent the illustrative Kuparuk netback values for ARCO and BP. Consistent with Section 2.3, the average monthly Kuparuk Netback of other lessees are not included in the price calculation.

Mechanics of the calculations include:

1. The annual interest rate specified in legislation is converted to a daily rate for calculations.
2. Credits are applied to the next monthly payment. Payment for an underpayment is due within 10 days of the time the bill is received, and interest on underpayments stops accruing when payment is received.

Example 1. Initial Billing

Assumptions

1. Month is February
2. Royalty Oil delivered to Petro Star JV in January = 800,000 bbls
3. Bill Received by Petro Star JV on February 10th; Payment due to State on February 20th.

Offtake for Calculating Price to Petro Star JV:

Lessee	Monthly Reported Offtake		Average Monthly Kuparuk Netback plus Field Costs
Company A (Arco or BP)	3,000,000 bbls		$10.5000/bbl
Company B (other of ARCO or BP)	4,500,000 bbls		$10.7575/bbl
Total for Calculating Price:	7,500,000 bbls	Weighted Average:	$10.6545/bbl

Notes and Calculations

There are other lessees in the Kuparuk Unit, but their offtake is not used for calculating the price to Petro Star JV.

Volume-weighted average price under Section 2.3 of the Agreement =

$$= \frac{(\$10.5000/\text{bbl} \times 3{,}000{,}000\ \text{bbls}) + (\$10.7575/\text{bbl} \times 4{,}500{,}000\ \text{bbls})}{7{,}500{,}000\ \text{bbls}} = \$10.6545/\text{bbl}$$

Billing

If billing received Feb. 10th; payment due Feb. 20th = 800,000 bbls x $10.6545/bbl = $8,523,600.00

Example 2. Initial Adjustment

Assumptions

1. Month is March.
2. Royalty Oil delivered to Petro Star JV during January = 800,000 bbls
3. Annual interest rate charged member banks for advances by 12th Federal Reserve District as of January 1 rate assumed to be 5%. Annual interest rate for contract = 11%
4. Petro Star receives notice of credit as of March 3rd.

***Revised* Offtake for Calculating January Price to Petro Star JV:**

Lessee	*Revised* Monthly Reported Offtake		*Revised* Average Monthly Kuparuk Netback plus Field Costs
Company A (Arco or BP)	*3,200,000 bbls*		$10.5000/bbl
Company B (other of ARCO or BP)	4,500,000 bbls		*$10.7500/bbl*
Total for Calculating Price:	7,700,000 bbls	Weighted Average:	$10.6461/bbl

Notes and Calculations

Volume-weighted average price under Section 2.3 of the Agreement =

$$= \frac{(\$10.5000/\text{bbl} \times 3{,}200{,}000\ \text{bbls}) + (\$10.7500/\text{bbl} \times 4{,}500{,}000\ \text{bbls})}{7{,}700{,}000\ \text{bbls}} = \$10.6461/\text{bbl}$$

Billing

Revised January bill = 800,000 bbls x $10.6461/bbl =	$8,516,880.00
Amount paid =	$8,523,600.00
Overpayment for January =	($6,720.00)
Difference between date when Petro Star notified of credit (March 3rd) and original due date (February 20th) = 12 days	
Interest due = $6,720.00 x (11%/366)*12 =	($24.24)
Credit due Petro Star for next month's billing =	($6,744.24)

Example 3. Subsequent Adjustment

This adjustment is assumed to occur after true-up of BP expenses, a reopener for one of the Royalty Settlement Agreements, or for some other reason. It is assumed to occur in June 5th.

Assumptions

1. Month is June.
2. Royalty Oil delivered to Petro Star JV during January = 800,000 bbls
3. Annual interest rate charged member banks for advances by 12th Federal Reserve District as of January 1 assumed to be 5%; as of April 1, 7%. Annual interest rate for contract = 11% for first quarter; 12% for second quarter
4. Petro Star JV receives notice of underpayment on June 5th.

***Revised* Offtake for Calculating January Price to Petro Star JV:**

Lessee	*Revised* Monthly Reported Offtake		*Revised* Average Monthly Kuparuk Netback plus Field Costs
Company A (Arco or BP)	3,200,000 bbls		*$10.6005/bbl*
Company B (other of ARCO or BP)	4,500,000 bbls		$10.7500/bbl
Total for Calculating Price:	7,700,000 bbls	Weighted Average:	$10.6879/bbl

Notes and Calculations

Volume-weighted average price under Section 2.3 of the Agreement =

$$= \frac{(\$10.6005/\text{bbl} \times 3{,}200{,}000\ \text{bbls}) + (\$10.7500/\text{bbl} \times 4{,}500{,}000\ \text{bbls})}{7{,}700{,}000\ \text{bbls}} = \$10.6879/\text{bbl}$$

Billing

Revised January bill = 800,000 bbls x $10.6879/bbl =	$8,550,320.00
Amount paid =	$8,516,880.00
Underpayment for January =	$ 33,440.00
Days of interest in first quarter (Feb. 20th through March 31st) = 40	
Days of interest in second quarter (April 1 through June 5th) = 66	
Interest for first quarter = $33,440.00 x (11%/366) x 40 =	$402.01
Interest for second quarter = ($33,440.00 + $402.01) x (12%/366) x 66 =	$732.32
Payment from Petro Star due state within 10 days of receiving bill =	$34,574.33

EXHIBIT B. CALCULATION OF PRICE

This exhibit shows the mechanics of the price calculation and data sources. Average Royalty Value and production volumes for BP and ARCO are taken from the Royalty Reports filed by those lessees.

Royalty Value (before field costs deduction) is taken from Column H of these reports; Royalty Volume is taken from Column C. An example calculation using the information from November 1991, from the attached reports is shown below.

The format of these reports may change from time to time. However, the information will remain available.

(1)	(2)	(3)	(4)
	Production Volume (Column C)	Royalty Value Before field costs (Column H)	Production times Value [Col 2] x [Col 3]
Lessee	Barrels	$/barrel	Dollars
ARCO	4,904,813.86	$11.360	$55,718,685.4496
BP	3,835,974.69	$10.1400	$38,896,783.3566
	Total: 8,740,788.55		Total: $94,615,468.8062

$$\text{Monthly Price} = \frac{\text{Total of Column (4)}}{\text{Total of Column (2)}}$$

$$\text{Monthly Price} = \frac{\$94,615,468.8062}{8,740,788.55 \text{ barrels}}$$

Monthly Price = $10.82/barrel

OIL ROY RPT SUM
REVISED 1/86
DO&G # 3-86
DNR 10-4030

STATE OF ALASKA
DEPARTMENT OF NATURAL RESOURCES
OIL OR GAS ROYALTY REPORT SUMMARY

UNIT KUPARUK RIVER UNIT
FIELD
ZONE
LEASE

COMPANY NAME ARCO ALASKA, INC. A Subsidiary
ADDRESS of Atlantic Richfield Company
CITY, STATE, ZIP P. O. Box 100360
Anchorage, Alaska 99510

REPORT FOR MONTH OF November 1991
REVISION NUMBER
DATE OF REVISION

(a)	(b)	(c)	(d)	(e)		(g)	(h)	(i)	(j)
Gross unit or Lease Production (Bbls) or (MCF)	Working Interest Ownership %	(a) x (b) (Bbls) or (MCF)	Royalty Rate (%)	(c) x (d) (Bbls) or (MCF)	Royalty In-Kind (Bbls) or (MCF)	Royalty In-Value (e) - (f) (Bbls) or (MCF)	Royalty Value $ per Bbl or MCF	Field Costs per Bbl or MCF	(h) - (i) Reported Royalty per Bbl or MCF	(g) x (j) Royalty In-Value Dollars
CRUDE		CRUDE NPSL								
9,456,439	51.74%	94,934.29	12.50030%	11,867.07	2,410.44	9,456.63	$11.36000	$0.000	$11.360	$107,427.33
		CRUDE NON-NPSL								
		4,797,630.04	12.50030%	599,718.15	121,814.75	477,903.40	$11.36000	$0.418	$10.942	$5,229,218.98
KRUTP NPSL		237.69	12.50030%	29.71	0.00	29.71	$11.36000	$0.000	$11.360	$337.52
KRUTP NON-NPSL		12,011.84	12.50030%	1,501.52	0.00	1,501.52	$11.36000	$0.418	$10.942	$16,429.59
NGL'S	NGL'S ARE INCLUDED ON THIS REPORT FOR CONVENIENCE ONLY.									
NON-NPSL		0.00	12.50030%	0.00	0.00	0.00	$0.000	$0.000	$0.000	$0.00
NPSL		0.00	12.50030%	0.00	0.00	0.00	$0.000	$0.000	$0.000	$0.00
(1) TOTALS		4,904,813.86	12.50030%	613,116.45	124,225.19	488,891.26	$11.360	$0.410	$10.950	$5,353,413.42

* WEIGHTED AVERAGE VALUE

(3) KRUTP	$3,667.75
(4) Less Field Costs for RIK	($50,918.57)
Lease/Plant Split Costs for RIK	$0.00
(5) Revisions (attach amended returns) See Below	($594.13)
NPSL	
(6) Amount Due (3) through (5)	$5,305,568.48

I declare that I have examined this report, including accompanying schedules and statements, and to the best of my knowledge and belief it is true, correct, and complete.

SIGNED Devery L. Prince

Title: Analysis Accountant TYPED NAME Devery L. Prince

PHONE NO: 265-6045

DATE 19-Dec-91

AMENDMENTS:

9/91 ROYALTY ON NPSL	($594.13)

	($594.13)
	==========

Mail With Applicable Attachments To:
State of Alaska
Department of Natural Resources
Division of Oil and Gas
Royalty Accounting Section
P. O. Box 7034
Anchorage, Alaska 99510-7034

GAS ROYALTY: ATTACH FORM 10-422
OIL ROYALTY: ATTACH FORM 10-405
OIL AND/OR
GAS ROYALTY: VERIFIFICATION OF WIRE TRANSFER AMOUNTS OR A COPY OF THE CHECK MADE IN PAYMENT OF ITEM (5) MUST BE ATTACHED.

AR5550M 88

STATE OF ALASKA
OIL ROYALTY REPORT SUMMARY

12/23/91
17:31:01

STATE OF ALASKA
DEPT. OF NATURAL RESOURCES
DIVISION OF OIL AND GAS
ROYALTY ACCOUNTING SECTION
P.O. BOX 107034
ANCHORAGE, AK 99510-7034

AMENDMENT: 00
ROYALTY PAYER: BP EXPLORATION (ALASKA)
P.O. BOX 196612
ANCHORAGE, AK 99519-6612

FIELD, POOL OR LEASE: KUPARUK RIVER UNIT
PRODUCTION MONTH: NOVEMBER 1991
FILING DATE: 12/31/91
PAGE: 1 OF 2

	(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)	(K)
PROD TYPE	GROSS UNIT OR LEASE PRODUCTION (BBLS)	WORKING INTEREST OWNERSHIP (%)	(A) X (B) (BBLS)	ROYALTY RATE	(C) X (D) (BBLS)	ROYALTY IN-KIND (BBLS)	(E) - (F) ROYALTY IN-VALUE (BBLS)	ROYALTY VALUE $/BBL	FIELD COSTS $/BBL	(H-I) RPTD ROYALTY $/BBL	(G) X (J) ROYALTY IN-VALUE DOLLARS
OILCN	9,427,869.80	40.5145000	3,819,653.99	012.500	477,456.75	96,981.01	380,475.74	010.1400	0.4180	009.7220	3,698,985.14
OILTP	28,570.23	57.1248464	16,320.70	012.500	2,040.09		2,040.09	010.1400	0.4180	009.7220	19,833.75
(1) TOTALS	9,456,439.23		3,835,974.69		479,496.84	96,981.01	382,515.83				(2) 3,718,818.89

(3)	TOPPING PLANT	$ 4,886.62
(4)	LESS FIELDS COSTS RIK-OIL	$ -40,538.06
	PROCESSING FEES RIK-NGLS	$ 00.00
(5)	REVISIONS (ATTACH AMENDED RETURNS OR RECONCILIATION)	$ 00.00
(6)	AMOUNT DUE ($)	$ 3,683,167.45

I DECLARE THAT I HAVE EXAMINED THIS REPORT, INCLUDING ACCOMPANYING SCHEDULES AND STATEMENTS, AND TO THE BEST OF MY KNOWLEDGE AND BELIEF IT IS TRUE, CORRECT, AND COMPLETE.

SIGNED: _____

TITLE: Manager, Commercial Function

DATE: 12/31/91

OIL ROYALTY: ATTACH FORM 10-405

VERIFICATION OF WIRE TRANSFER AMOUNTS OR A COPY OF THE CHECK MADE IN PAYMENT OF ITEM (6) MUST BE ATTACHED. MAIL APPLICABLE ATTACHMENTS TO DEPARTMENT OF NATURAL RESOURCES AT ABOVE ADDRESS.

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Final Finding and Determination

To Sell Royalty Oil

to

Petro Star Valdez Refinery Joint Venture

Division of Oil and Gas
3601 "C" Street; Suite 1380
Box 107034
Anchorage, Alaska 99510-7034

March 4, 1992

Final Finding and Determination To Sell Royalty Oil to Petro Star Valdez Refinery Joint Venture

March 4, 1992

Table of Contents

Summary 3

Background 3

Summary of Previous North Slope Royalty Oil Sales 5
- Volumes 5
- Price 6
- Recent Development - Canceled Contracts 7

Summary of Proposed Contract Terms 8
- Price 8
- Point of Delivery 8
- Purchase-price Reopener 8
- Quantity and Source 8
- Term 9
- In-state Processing 9
- Security 9

Discussion of Specific Contract Provisions 9
- Price 9
- Purchase-price Reopener 11
- Field Cost 11
- Quality 12
- Best Efforts 12
- Late Payment Penalty 13
- Interest 13
- Security 13
- Local Hire 14

In-state Benefit Analysis 15
- Construction and Operation Benefits 15
- Consumption Benefits 16
- Environmental Impacts 16
- Social Impacts 17

Findings and Determinations 18
Competitive Bidding is Waived 18
The Sale is in the Best Interest of the State 18
Criteria Weights 19
Contract Prices Are Acceptable 19
Conclusion 20

Appendices
Appendix A: AS 38.05.183(e) and AS 38.06.070(a)
Appendix B: Comments and Responses on the Preliminary Finding and Draft Contract
Appendix C: Changes to the Preliminary Finding and Draft Contract

Summary

The Commissioner of the Department of Natural Resources, on behalf of the state, proposes a long-term sale of 30,000 barrels per day of the state's royalty oil to Petro Star Valdez Refinery Joint Venture ("Petro Star JV"). Petro Star JV proposes to build and operate a refinery in Valdez. This document provides the finding and recommendation required under AS 38.05.183 for the proposed sale.

The department distributed the preliminary finding and draft contract on January 23, 1992. The public comment period ended one month later on February 24, 1992. The department advertised the finding and contract by sending a notice or copies to a 450-person mailing list, and through display advertisements in the Anchorage Times, Anchorage Daily News, Juneau Empire, Fairbanks News-Miner, and the Valdez Vanguard. The mailing and advertisements also notified the public of the Alaska Royalty Oil and Gas Development Advisory Board meeting on February 6, 1992 in Anchorage which discussed the proposed sale.

Though approximately 50 people attended the Alaska Royalty Oil and Gas Development Advisory Board meeting, no one chose to testify. The department received four letters commenting on the finding and contract. The letters and the department's responses are included as Appendix C to this finding.

This finding and the signed contract are being forwarded to the legislature. The sale will not take effect unless it is approved by the legislature; nor will oil be delivered to Petro Star JV before the refinery is ready to process the oil.

Background

The State of Alaska receives as royalty 12-1/2% of the oil and gas sold from the Kuparuk River oil field. The state may take its royalty either in-kind or in-value. When the state takes its royalty share of oil production in-kind, it takes ownership of the oil, and the commissioner acting on behalf of the state, disposes of the oil through either competitive or non-competitive sales. When royalties are taken in money (in-value), the state's lessees that produce the oil also market the state's share of production, and they are obligated to pay the state the value of its royalty share. The commissioner administers the state's oil and gas lands and royalty program.

In mid-1991, Petro Star JV contacted the Department of Natural Resources with a request to purchase a portion of the state's royalty production. In response to that request and after negotiation with the company, the department proposes the contract which accompanies this finding.

Petro Star JV is a joint venture of three Alaskan companies: Petro Star Valdez, Inc., a subsidiary of the Arctic Slope Regional Corporation; Alaska Refinery, wholly-owned subsidiary of Neil Bergt Trust; and Harbor Enterprises. The joint venture proposes to build a facility to refine

30,000 barrels per day of north slope crude oil into jet fuel, marine diesel, and heating fuel. The refinery will be constructed on private land purchased by Petro Star JV. The land is located adjacent to Dayville Road east of the Trans Alaska Pipeline terminal in Valdez.

The refinery expects to produce approximately 110 million gallons per year of the products listed in Table 1. One hundred and ten million gallons per year is equal to 7,200 barrels per day, or approximately one-quarter of the amount being delivered. The remaining three-fourths will be returned to the Trans-Alaska Pipeline System and sold by Petro Star JV.

Table 1. Expected Refinery Products

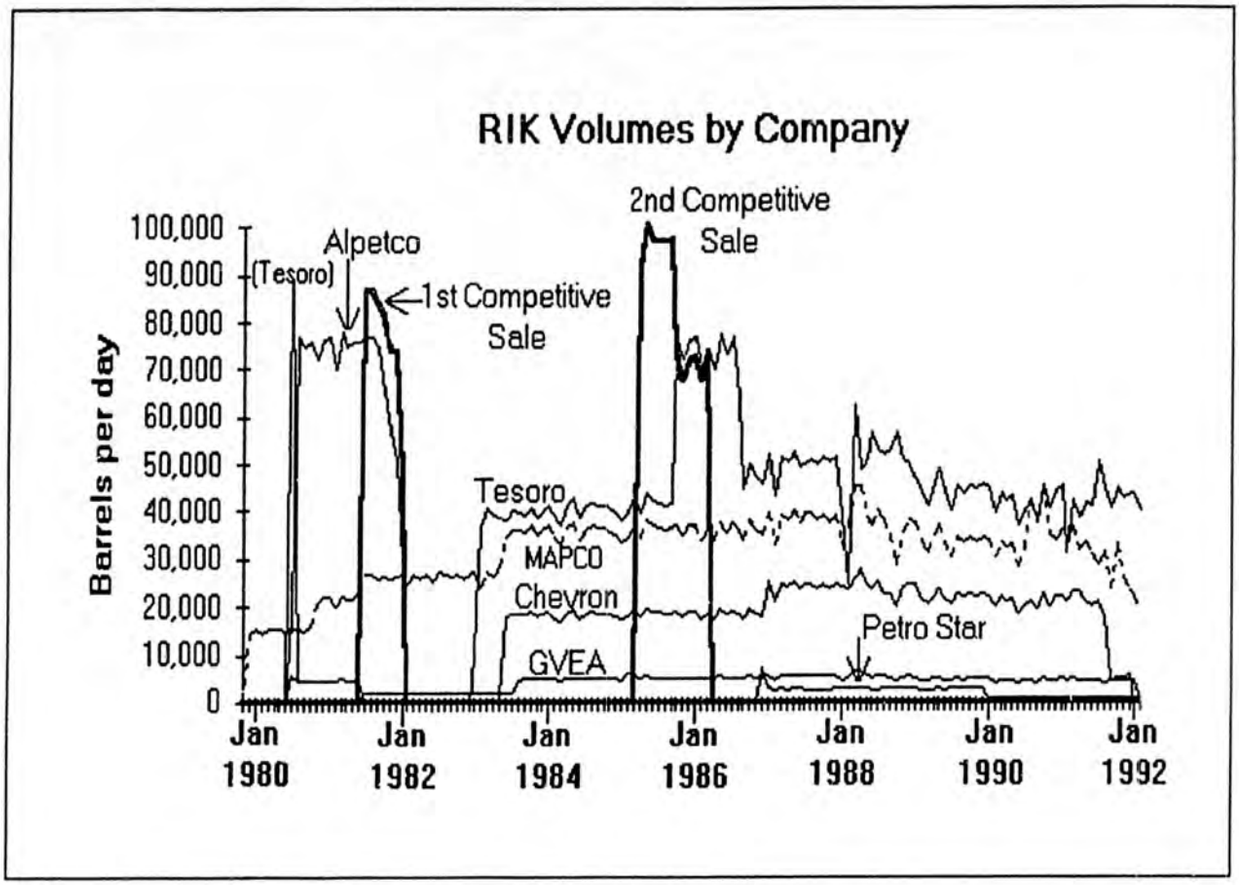
Product	Approximate Volume
Jet A	105,00 gallons per day
Heating Fuel #1	20,000 gallons per day
Marine Diesel (summer weight)	130,000 gallons per day
Marine Diesel (winter weight)	45,000 gallons per day
Total (approximate)	300 thousand gallons per day (110 million gallons per year)

The product mix outlined in Table 1 is expected to change after the refinery begins operation and the demand becomes clear. Petro Star JV has executed two sales contracts for its products. The joint venture will sell jet fuel to MarkAir Inc., an Alaska-based airline. It will sell 20 - 40 million gallons per year of jet fuel, depending on the outcome of the airline's current expansion. Approximately 10 million gallons per year of heating and marine diesel fuels will be available locally in Valdez for Prince William Sound communities. The balance of the products will be sold to Petro Marine Services, a subsidiary of Harbor Enterprises and a marine fuel distributor servicing southcentral Alaska. Petro Marine Services is expected to use most of the purchased fuel in Seward, Kodiak, and Dutch Harbor.

Petro Star JV has purchased private land for the facility, has received a conditional use permit from the City of Valdez, and has initiated the required air quality permitting process. Construction may begin as early as April 1992, and the refinery may be ready to begin operation as early as October 1992.

This finding and best interest determination *does not* decide whether construction and operation of the proposed refinery is in the best interests of the state. The refinery is a private facility built on private land. The refinery is not dependent on this proposed royalty oil sale. The proposed refinery, like others operating in the state, has the option of purchasing north slope crude oil directly from the north slope producers. While the proposed royalty oil sale may help the financial viability of the refinery by providing a long-term source of crude oil at a competitive price, the decision on whether to construct the proposed refinery is rightly made by the private owners, and not by the state. This best interest determination decides whether the proposed royalty oil sale is in the state's best interest.

Summary of Previous North Slope Royalty Oil Sales

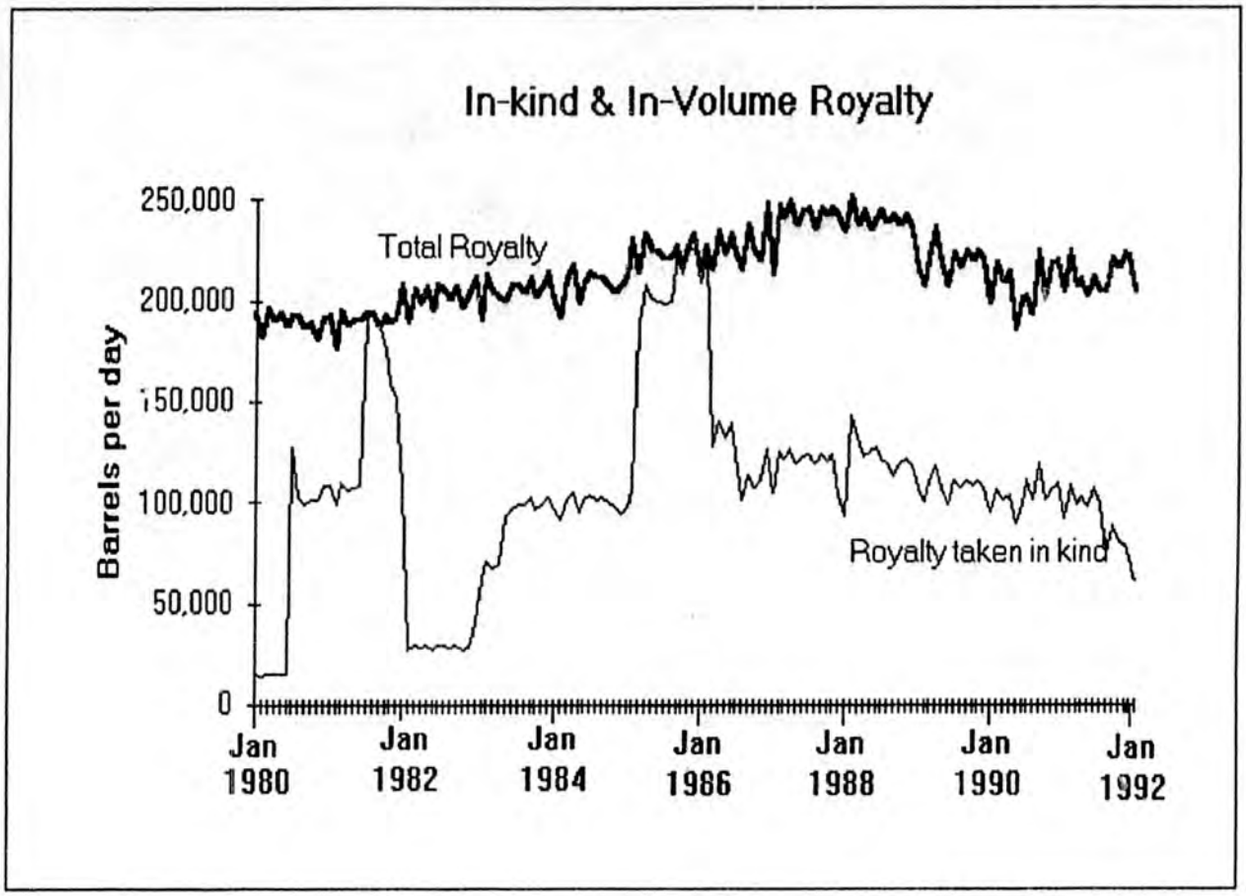


Volumes. Beginning in November 1979 and continuing to the present, the state has delivered royalty-in-kind north slope crude oil to fourteen companies in sixteen negotiated contracts, two competitive sales, and one quasi-competitive sale. Through September 1991, the state had delivered 475 million barrels or approximately 50% of its north slope royalty oil in these sales.

Figure 1 shows the amount of royalty oil sold to each company since the north slope production began. The graph shows that the amount of oil sold to each company has varied over the years, but that Tesoro and MAPCO have been the state's two most consistent customers. Most crude purchased by Tesoro is refined at its facility in Nikiski (capacity 80,000 barrels per day). Chevron's in-state refining was at its 18,000 barrel-per-day plant in Kenai, which ceased production in June 1991. The MAPCO and GVEA purchases are refined at the MAPCO refinery in North Pole (capacity 113,000 barrels per day). The Petro Star purchase is refined at its 7,000 barrel-per-day plant in North Pole. (Capacity figures are taken from *Historical and Projected Oil and Gas Consumption, June 1991* published by DNR, Division of Oil and Gas.)

The competitive and quasi-competitive sales were purchased by a mixture of companies. Some of the crude purchased in these sales was refined at the in-state refiners, some was exported from Alaska. The Alpetco purchases were also exported.

Figure 2 shows the total amount of royalty oil due the state, and the amount of that oil taken in-kind and sold by the state. The volumes of royalty sales have remained approximately constant since 1986 until the recent decline.



Price. Since the first royalty oil sale, the state's policy has been that it would not necessarily maximize revenues from royalty in-kind sales, but that it would not receive less for the people's royalty when taken in-kind and sold than the state would otherwise have received had it left the oil with the lessees and taken its royalty in-value. Consistent with this policy, each of the state's previous non-competitive royalty contracts have had a similar conceptual price: the value that the state would have received if it had left the oil in-value (plus field costs, and in some cases plus a premium). However, the value that the state receives for its in-value royalty has been in litigation as part of the ANS Royalty Litigation (1-JU-77-847 Civil, Superior Court for the State of Alaska, First Judicial District at Juneau)[1]. Thus, the price term for former royalty in-kind contracts have included interim pricing formulae to be used until the final monthly values are known, and a mechanism for retroactive adjustment of the interim price based on the outcome

[1] This case was originally titled State of Alaska, et al v. Amerada Hess Corp., et al and has been frequently been referred to as the Amerada Hess litigation.

of the litigation. The price term for every former negotiated state royalty-in-kind contract has had essentially this form. The substantive differences have been in the interim payment method, and sometimes the addition of a premium.

During the last two years, seven companies representing approximately 80% of north slope oil production have settled their ANS Royalty Litigation obligations with the state. Two of these companies, ARCO and BP, own leases in the Kuparuk River Unit. These two companies represent 94.5% of production from the Kuparuk River Unit. These settlements provide an agreed-upon valuation method that did not exist when any of the previous royalty oil contracts were signed. As a result, the price term in the proposed contract to Petro Star JV differs from previous royalty in-kind contracts. This contract relies upon the agreed-upon valuation methods in the ARCO and BP settlements to establish a contract price. Except for certail related adjustments contemplated under the settlement agreements with ARCO and BP, the Petro Star JV contract will not require a retroactive adjustment or an interim pricing method.

Competitive and quasi-competitive contracts have been priced differently. The department felt that strong bidder aversion to retroactive ANS Royalty Litigation adjustments would depress bids, and the competitive sales have required bidders to offer premiums over a base price without retroactive ANS Royalty Litigation adjustments.

Recent Development - Canceled Contracts. In the first half of 1991, the state's in-kind deliveries of north slope crude averaged approximately half of the state's total royalties, or approximately 103,000 barrels per day. The state delivered north slope crude to five companies under six contracts. Recently, however, the state's purchasers have canceled four of the six contracts. By March 1992, in-kind deliveries of north slope crude are expected to decline to less than 60,000 barrels per day (less than 30% of the state's royalty share of north slope production). Table 2 shows the average volume delivered from January through June 1991 to each company. It also shows the last delivery date for the four canceled contracts.

Table 2. Current Royalty Contracts

Company	Average Deliver Volume (barrels per day) January -- June, 1991	Date of Last Delivery
GVEA[1]	4,730	January 31, 1992
Chevron[2]	22,148	December 31, 1991
Petro Star[3]	1,104	December 31, 1991
MAPCO	34,283	Continuing
Tesoro	40,567	Continuing

[1] GVEA will continue to pay the state its 30¢ per barrel premium through June 30, 1992.
[2] Chevron had two contracts. The last delivery under the larger contract occurred August 31, 1991.
[3] Petro Star continued to pay its 35¢ per barrel premium through February 29, 1992.

As a result of the cancellations, the state is taking less of its oil in-kind than it has at any time since early 1983. Beginning in February 1992, the state will be taking less than 29% of its royalty in-kind. Except for Chevron which shut down its Kenai refinery last June, the state's former in-kind customers are still refining north slope oil, but they are buying less oil from the state. While the crude supplier(s) for each company is confidential (and not known by the department), it appears that the companies are now purchasing more of their oil directly from north slope producers.

Summary of Proposed Contract Terms

1. **Price.** The state will receive a total price per barrel that is the sum of two components: netback value and field cost.
   (a) *Netback Component.* The netback component is the volume-weighted-average netback value at the delivery point (the inlet of the Kuparuk Pipeline) of royalty barrels produced by ARCO and BP from the Kuparuk River Unit. These two lessees have settled their ANS Royalty Litigation obligation with the state, and together they produce 94.5% of the oil from Kuparuk. Production volumes of companies for which the state is still in litigation under ANS Royalty Litigation will not be included in the volume-weighted average netback.

   (b) *Field Cost Component.* Per barrel Kuparuk River field costs as described in the agreement that is Appendix I to the December 1981 Kuparuk River Unit Agreement.

2. **Point of Delivery.** The state will deliver the oil to Petro Star JV at the time and place when it receives its royalty oil from its lessees. At present, that is the custody transfer meters into the Kuparuk Pipeline at the Kuparuk Central Production Facility.

3. **Purchase-price Reopener.** At any time after two years following the date oil is first delivered under the contract, the state or Petro Star JV may reopen the contract to begin negotiations to establish a new purchase price. If, after negotiating, the state and Petro Star JV do not reach agreement, either party may cancel the contract, subject to notice requirements. If agreement is reached, either party may re-open after a further two years.

4. **Quantity and Source.** The contract allows Petro Star JV to purchase a maximum quantity of 30,000 barrels per day expressed as a percentage of daily royalty oil from the Kuparuk River Unit. Because the maximum quantity is expressed as a percentage of the Kuparuk River Unit production, it will decline as production from the Kuparuk River Unit declines. Petro Star JV may elect to purchase less oil, subject to notice requirements (required by the Kuparuk River Unit Agreement). Petro Star JV may make a permanent decrease in the maximum quantity (subject to notice requirements) before the first delivery of oil, and at one time after that date. Petro Star may also elect to purchase less than the maximum quantity, but it must pay a per-barrel reservation fee on each barrel less than the maximum quantity that it elects not to purchase. The per-barrel reservation

fee is 0.75% of the full purchase price.

5. **Term.** Delivery of the oil will begin the first day of the first month that is the later of: 1) seven months after the contract is approved by the Legislature and the Governor, or 2) seven months after Petro Star Valdez Refinery certifies that within seven months it will be ready to accept oil. The contract terminates on December 31, 2003. The contract is expected to be approved during the 1992 legislative session, and the first oil delivery is expected to occur at the end of 1992 or the beginning of 1993. Thus, the contact term is expected to be approximately 10 years.

6. **In-state Processing.** Petro Star JV agrees to process at least 80% of the royalty oil delivered under this contract at the proposed refinery in Valdez. The state may waive this requirement if it is satisfied that Petro Star JV is using its best efforts to process the royalty oil and that the waiver would not be contrary to the underlying intent of other provisions of the contract.

7. **Security.** Beginning 190 days before oil is first delivered, Petro Star JV will provide an irrevocable letter of credit equal to the Commissioner's estimate of the value of 90-days delivery of oil. The term of the letter of credit must be renewed 90-days before it expires (so that the letter of credit is continuously valid for 90-days beyond any date oil is delivered). In addition, Arctic Slope Regional Corporation, an Alaskan Native corporation with significant in-state assets, is a signatory to the contract.

Discussion of Specific Contract Provisions

This section of the finding explains differences between this and typical provisions in recent royalty-in-kind contracts. The most recent contract was signed in December 1985. That was a two-company sale from the state to Petro Star, Inc. and Chevron (differences due to the unique two-company sale of that contact are not discussed). The most recent one-company contract, the GVEA-3 contract, was signed in October 1985.

Price: *No Retro Active ANS Royalty Litigation price readjustment; no escrow.* Previous non-competitive contracts have been designed to net the state no less than the value it would have received had it left the oil with the lessees and taken its royalty in value. (Sometimes with the addition of a premium). However, implementing this design has had a practical problem. Until the recent settlements, the state and the north slope lessees have not agreed on how to compute the lessees' royalty in-value liability, and there has been no accepted methodology to compute a dollars-and-cents price-per-barrel for a royalty in-kind sale. Thus, every negotiated contract has included provisions for retroactive price adjustments based on the outcome of the ANS Royalty Litigation.

The requirement for ANS Royalty Litigation retroactive price adjustments provided significant problems both for the purchaser and for the state. It meant the purchaser is buying oil (and must

price its refined oil) based on an alternative purchase price for the crude that may not be known for years. The state is only now nearing completion of its first ANS Royalty Litigation adjustment for royalty-in-kind oil though the first oil was delivered in 1979.

The amount of the price readjustment and the potentially long time lag may result in a large liability. The state's first ANS Royalty Litigation rebilling will total significantly more than $100 million to five companies. The large rebillings also provide problems for the state. The delay in providing a final bill means that disputes over the final bill may not be identified until long after the oil is delivered. It may be difficult for some companies to pay a potentially large amount long after the refined products have been sold. And at least one in-kind purchaser, Alpetco, has gone bankrupt.

To avoid these problems, the 1985 Petro Star contract required the company to escrow $1.12 per barrel of royalty oil purchased as a deposit against its ultimate ANS Royalty Litigation liability. Although Petro Star's ultimate liability has not been determined, Petro Star has assured the department it will pay its retroactive ANS Royalty Litigation obligation.

As mentioned previously, based on recent settlements of ANS Royalty Litigation price litigation with seven companies, there is now an agreed-upon price method for 94.5% of the state's royalty production from Kuparuk River. Agreed-to methods for valuing the vast majority of the state's in-value production from the Kuparuk River Unit now exist.

The proposed contract requires Petro Star JV to pay the volume-weighted average netback value for those Kuparuk lessees that have settled: ARCO and BP. As 94.5% of Kuparuk's production is accounted for by the ARCO and BP ANS Royalty Litigation settlements, there is no need for a retroactive price adjustment based on royalty settlement for the remaining production. The value of the 94.5% should be an adequate proxy for the remaining 5.5%.

By establishing a firm value based on agreed-to methodologies, there is no need for an escrow, and no need for retroactive ANS Royalty Litigation adjustments. Petro Star JV has a firm purchase price, subject to certain subsequent adjustments which may be occassioned by the mechanics of the settlement agreements between the state, and ARCO and BP, and the state is certain of being paid the final value.

Price Premium. Many of the previous royalty-in-kind contracts have included a premium above the average netback value for in-value royalty oil. This premium was intended to compensate the state for the so-called "displacement effect" and "competitive effec "

The "displacement effect" theorizes that in-kind sales by the state replace west-coast sales by the lessees. For example, once the sale is in place, a west-coast refiner in California or Washington may no longer purchase crude to make jet fuel to sell in Alaska. While the amount of west-coast sales (including Alaska) would remain the same, some of these sales would be state in-kind sales and less would be made by the lessees. If this occurs, the lessees' average monthly netback value would reflect a lower proportion of west-coast sales and a higher proportion of gulf-coast

sales. The effect is diminished by the fact that the state's royalty share is only one-eighth of the lessees' production. Therefore, only one-eighth of the displacement effect is borne by the state. The displacement effect was much larger a few years ago when half of Alaska's crude oil was transported to the U.S. Gulf Coast.

In 1985, almost half of the state's royalty in-value oil was sold to refiners in the US Gulf (including the Virgin Islands). That amount has been decreasing. Between May and August of this year, it had decreased to 11%, and according to the Department of Revenue's Spring 1991 Revenue Forecast, it will continue to decrease until 1996, when the last gulf sale is projected to occur.

The "competitive effect" is more difficult to explain than the "displacement effect." At the risk of oversimplification, one can maintain that the actual market price on the west coast is above the competitive market-price due to the decision of producers, primarily BP, to transport oil to the gulf coast that might be sold on the west coast, but at a lower price. If the state were to sell significant oil in competitive sales, it might undermine the market power of the producers and lower the market price.

This effect was a larger concern during 1985 and 1986 than it has been after that time because of the large negotiated and competitive in-kind sales that were then occurring. Between May 1985 and April 1986, the state sold approximately 90% of its royalty oil in-kind, up to an average of approximately 210,000 barrels per day during January 1986. There was some concern that this amount of state sales would affect the west-coast market power of the lessees.

The proposed sale to Petro Star JV will not generate this effect. Thirty thousand barrels per day is less than 2% of the north slope production and will not affect operation of the west-coast oil markets.

The small and decreasing proportion of gulf sales, and the small volume proposed to be sold to Petro Star JV mean that the proposed contract will not noticeably displace the lessees' west-coast sales nor generate competitive effects on the west-coast oil markets. For these reasons, and to encourage the jobs, income, tax, and consumption benefits from in-state refining, the proposed contract does not include a premium.

Purchase-price Reopener. The two-year purchase-price reopener is a standard component of most in-kind royalty contacts. Day-to-day fluctuations in the netback value are built into the state's royalty oil settlements and are a part of the contract price to Petro Star JV. The reopener provides additional flexibility to respond to unforseen changes.

Field Cost. Previous royalty-in-kind contracts do not specify a separate field cost for Natural Gas Liquids (NGLs). While the field cost for crude oil was established in a 1980 field cost agreement (that was made part of the Kuparuk River Unit Agreement), the NGL field cost is still in dispute with the lessees of the Kuparuk River and Prudhoe Bay Units.

NGLs are approximately 3% of the total oil volume produced from the north slope. Some lessees recognize NGLs as part of the crude oil stream and report the agreed-upon crude-oil field cost. Others report a separate field cost for NGLs. That cost varies considerably by lessee and by field -- up to $13.60 per barrel from one Prudhoe Bay lessee.

Between April 1985 and March 1988, lessees from Kuparuk River oil field sold NGLs with the remainder of Kuparuk's crude oil stream. The field cost for those NGLs is still in dispute. Since March 1988, the lessees have re-injected all NGLs as part of Kuparuk's enhanced oil recovery program. At present, Kuparuk lessees do not take a field cost deduction for NGLs, and disputed NGL field costs are not a problem for the proposed contract. However, NGLs may be sold from the field in the future, and the proposed contract provides a method for resolving the problem, should it occur.

The contract requires that if NGLs are sold from the Kuparuk River Unit, Petro Star JV will pay the full producer-reported field cost for NGLs (or for any other field cost in dispute). It also requires a retroactive adjustment for over- or underpayment after a final, field cost has been determined. Specifically, the contract provides that if a field cost different from the existing field cost agreement is established, the state will rebill (or provide a credit) for field costs not covered by the existing agreement. This provision was added to ensure that Petro Star JV would pay the state's liability for the full NGL field costs if the Kuparuk River lessees begin selling NGLs, and if NGLs are ultimately determined to have a different field cost than that of the remaining crude.

Quality. The 1985 contracts did not distinguish between crude oil, condensate, or natural gas liquids. In the proposed contract, Petro Star JV waives any claim that either condensate or NGLs blended with the crude by the lessees and tendered to the state as royalty oil is not oil for the purpose of the contract. If NGLs are once again sold from the Kuparuk River Unit, this waiver will protect the state against a future claim that Petro Star JV did not receive its full volume of crude oil or more oil than it contracted for by asserting that condensate or NGLs are not crude oil under the contract.

Best Efforts. In its 1985 contract, Petro Star agreed to use its "best efforts" to market its refined products in Alaska. It agreed to its "best efforts" to market a volume of at least 23% of the royalty oil sold under the contract.

This "best efforts" provision is not included in the draft contract. The contact requires that 80% of the royalty oil be processed at the proposed Valdez refinery; it no longer requires "best efforts" in-state marketing of the product.

The provision is omitted because assessing "best efforts" is difficult if not impossible to enforce. In addition, given the incentives to market refined product in Alaska, the history of in-state refiners marketing in Alaska, and contractual provisions of the joint-venture owners of the refinery to market the refined product to MarkAir and to Petro Marine Services, the "best efforts" requirement is unnecessary.

Late Payment Penalty. The 1985 Petro Star contract required a monthly 1% penalty fee to all late royalty payments except for those caused by unintentional clerical errors. This contract changes the fee to 5% per month to be more in line with current commercial practices.

Interest. This contract uses a different interest rate for under- and over-payments than previous contracts. It uses the statutory rate that the legislature established during its last session. Chapter 23 SLA 91 establishes the interest rate to be "five percentage points above the annual rate charged member banks for advances by the 12th Federal Reserve District as of the first day of that calendar quarter, compounded quarterly as of the last day of that quarter." It is important to recognize that if Petro Star JV overpays, the state will have to credit back the amount of the overpayment plus interest to Petro Star JV, just as Petro Star JV will have to pay the amount of any underpayment plus interest to the state.

Security. The proposed contract requires an irrevocable letter of credit equal to 90 days' worth of oil deliveries. The letter of credit is intended to protect the state from any inability of Petro Star JV to pay its bills to the state or to take delivery of the oil. The 90-day requirement has been a feature of all royalty oil disposals since the competitive sale of December 11, 1984 with two exceptions. The Prudhoe Bay royalty oil offered in that competitive sale included a "put call" option which enabled the letter of credit requirement of that oil to be reduced to 60 days (see The Findings and Determination to Conduct a Competitive Sale of Prudhoe Bay and Kuparuk River Royalty Oil, of October 17, 1984). In addition, in the 1985 Petro Star-Chevron sale, Chevron agreed to a "backup" arrangement to accept delivery of any volume of royalty oil upon which Petro Star might default. That "backup" agreement allowed Petro Star's letter of credit requirement to be reduced to 60 days.

The 90-day requirement provides protection for the state. Understanding the risk, however, requires an understanding of the "denomination" process.

The Kuparuk River Unit Agreement and the recent ANS Royalty Litigation settlements effectively give the state the ability to "denominate" most of its oil (change its take of royalty oil from in-kind to in-value) with specified notice to the producers. In the Kuparuk River Unit, there is what amounts to a 90-day notice requirement for 95% of production, and a six-month notice requirement for the remaining 5%. Thus, if the state were notified that Petro Star JV was unable to meet its obligations under the contract -- either that the joint venture was unable to process the oil or unable to pay for it -- the state would have to dispose of the equivalent of 93½-days worth of in-kind deliveries before it could return to taking its royalty in-value. (The 93½ days equals 95% of in-kind deliveries with 90-days notice plus 5% with a six month notice.)

In the unlikely event that Petro Star JV were to become bankrupt, the state may not receive notice until it fails to receive timely payment. By that time, the joint venture may have received approximately 70 days worth of oil:

30 days for the production month
+ 10 days for billing (the state bills 10 days after the end of each month)
+ 7 days for Petro Star to receive the bill
+ 10 days for payment (payment is required 10 days day after the bill is received)
+ 13 days for decision (a decision to declare the contract in default and denominate the oil would undoubtedly take some time)

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70 days of oil

The letter of credit would have to make the state whole for non-payment for 70-days worth of oil, and to make up the discount in selling the additional 93½-days worth of oil that would be the state's responsibility before the state's royalty reverted to in-value production. The 90-day letter of credit would make up the difference to the state as long as the state received 80% of its royalty-in-value revenue for the 93½-days of in-kind oil it was forced to sell. That is, neglecting fluctuations in oil prices, the value of a 90-day letter of credit is approximately equal to the value of 70-days in-kind deliveries plus 80% of the value of 93½-days of in-kind oil.

In the two cases where the state was forced to dispose of in-kind production because of bankruptcy, it sold the oil to ARCO and Sohio for only a slight discount from the full price. These experiences and knowledge of the oil markets indicate that the state would be able to sell as an "emergency sale" three months of production at more than 80% of the in-value revenue.

In addition to the 90-day letter of credit, additional security is provided by the fact that Arctic Slope Regional Corporation is a signatory to the contract. Arctic Slope Regional Corporation is a regional Native Corporation representing the north slope. The corporation is and will remain an Alaska corporation with significant assets in Alaska. The corporation's assets provide security for the state in case of bankruptcy by Petro Star JV, and if retroactive billings exceed the value of the 90-day letter of credit or if billings occur after the last delivery of oil. The corporation's commitment to the contract along with the 90-day letter of credit should provide adequate protection for the state.

Local Hire. Like the state's other long-term royalty oil contracts with in-state refiners, the proposed contract contains a provision concerning local hire. The preferential hiring clause states in part that Petro Star JV "agrees to employ Alaska residents and Alaska companies to the extent they are available, willing and qualified for all work performed in Alaska in connection with the Agreement." An "Alaska resident" is defined as an "individual who has resided in the state for one year at the time of employment." If this provision is determined to be unconstitutional, then, Petro Star JV agrees to employ Alaskan residents and Alaska companies to the extent such preferential hiring is determined to be constitutional.

In-state Benefit Analysis

The primary bases for this long-term negotiated sale are: 1) to receive a fair market value for royalty oil; and 2) to encourage in-state processing of royalty oil and the attendant benefits (primarily jobs, taxes, and competition between refined product suppliers that may lead to lower product prices for consumers.)

Construction and Operation Benefits. Even without this contract, the Petro Star Valdez Refinery may build and operate the refinery with crude oil purchased from the north slope lessees rather than from the state. Therefore, most or all of the benefits of constructing and operating the refinery cannot be ascribed to the proposed contract. It is possible, however, that this proposed royalty oil contract may increase the financial viability of the refinery. If so, an unknown portion of these benefits should be ascribed to the contract.

The direct benefits from refinery construction and operation occur through payroll, property taxes, state corporate taxes, and profits if held in-state. All of the joint venture profits are expected to be held in state. These cash infusions are multiplied as they are spent and recycled throughout the economy. However, actual project specific multiplier effects can only be ascertained by extensive surveys or actual development.

Table 3. Direct Construction and Operation Benefits
(thousand dollars; figures are approximate)

Construction Benefits		Operation Benefits	
Capital Investment	$30,000	Payroll	$1,700 (16-20 jobs)
Capital Investment in Alaska	$25,000	Property Taxes	$ 400
		Profits	Unknown
		State Income Tax	Unknown
		Known Total	$2,100

Tables 3 provides some measures of in-state benefits for the Petro Star JV. The table shows estimates of potential direct benefits from operation and construction of the refinery. The direct operation-benefits to the state are approximately $2.1 million dollars per year plus whatever benefits exist from in-state profits and state income taxes and from multiplier effects. The facility will also provide approximately 100 construction jobs and 16-20 permanent jobs once the refinery begins operation. In addition, it will pay approximately $400,000 in taxes to the City of Valdez. (The jobs and taxes do not include any created by downstream employment such as additional dock workers.)

The addition of another in-state refinery might have the effect of decreasing a small proportion of production at an existing refinery -- either the existing Tesoro facility at Nikiski (capacity of 80,000 barrels per day), or at MAPCO facility at North Pole (capacity of 113,000 barrels per day). If this decrease occurs, then the tables may overstate the operation benefits of the refinery.

All of the products that Petro Star Valdez Refinery expects to produce are also produced in-state by other refiners. The current in-state refining output does not provide all of Alaska's needs for these products. A portion of Alaska's supply of these fuels is imported from outside the state, and that proportion appears to be larger than the expected output of the refinery. While pricing and supply patterns may change in the state, there appears to be in-state demand to accommodate the proposed production from Valdez without provoking idle refining capacity elsewhere in Alaska.

According to the Army Corps of Engineers publication "Waterborne Commerce of the United States, 1989" (the most recent year published), approximately 52 million gallons of jet fuel and 60 million gallons of kerosene was imported into Anchorage from outside the region. It appears that the amount of jet fuel imported by Alaskans is in excess of the amount that the Valdez refinery will produce. Similar figures are not easily available for marine diesel, but it is expected that the proposed refinery output will not displace all marine diesel imports into Alaska.

Consumption Benefits. Consumers may benefit from the proposed sale through lower product prices. Oil products refined in Alaska may be priced lower than those imported from outside the state. In addition, an increase in competition resulting from the addition of another refinery may result in lower product prices. If either of these situations occur, consumers will benefit through lower prices. There is certainly no reason to believe that construction or operation of the refinery could have the effect of increasing overall consumer prices.

The proposed Petro Star JV has sales agreement to sell most of its Jet Fuel to MarkAir Inc., and most of the remaining product to Petro Marine Services. MarkAir Inc., is an airline company based and operated in Alaska. Presumably, MarkAir will purchase the fuel for less than its current cost. The extent to which the lower prices result in lower airline fares is unknown.

Petro Marine Services, is a fuel distributor which markets its products throughout coastal southcentral Alaska, though mostly in Kodiak, Dutch Harbor, and Seward. Presumably, it has signed the purchase agreement to decrease costs, though the extent, if any, to which consumer fuel prices will be lowered in those communities is unknown.

Environmental Impacts. The impacts of the royalty sale itself are expected to be minimal. The impacts of constructing and operating the refinery may be somewhat greater. Previous analysis indicated that the economic benefits of constructing and operating the refinery cannot be ascribed to the state's royalty sale. The same is true of the environmental impacts.

The Petro Star JV has received a conditional use permit from the City of Valdez. The City of Valdez is the appropriate authority to consider whether such a facility is compatible with the land use requirements of the city. Approval by the City of Valdez indicates that the conversion of the vacant land to a refinery will cause no unacceptable land-use impacts. Similarly, the refinery has begun the process to apply for an air quality permit from the Department of Environmental Conservation. Air quality impacts are best considered by the Department of Environmental Conservation in that process. Operation of the refinery requires compliance with the applicable

permits. That compliance will be evidence of acceptable environmental impacts.

Social Impacts. The refinery will pay property taxes to the City of Valdez, and its employees will use city services. The tax base in the City of Valdez is decreasing approximately $90 million per year (as depreciation lowers the assessed value of the Trans Alaska Pipeline System). This decrease has severe impacts on the city's tax receipts. This year's property tax rate is expected to increase by three mills to make up for the smaller tax base. The $30-million refinery is expected to pay approximately $400,000 in property taxes. It will be a welcome addition to the city's tax base.

The additional employment may also affect services in the City of Valdez. The Community Development Director for the City of Valdez reports that while vacancy rates in Valdez are currently low, there is an ample supply of vacant land suitable for residential housing. In addition, he reports that the addition of children to the Valdez school system brought by new employment is unlikely to overtax the school system; in any case it will not cause any unacceptable social impacts.

Findings and Determinations

Competitive Bidding is Waived. I have determined in accordance with AS 38.05.183(a) and 11 AAC 03.030 that the best interest of the state does not require competitive bidding, and that competition does not exist for state in-kind royalty oil. During the last few years, the state has been delivering royalty oil to in-state refiners under six contracts. Four of the six contracts have been canceled over the last few months. Contracts were canceled by Chevron (two contracts), GVEA, and Petro Star. Once all of the deliveries under the canceled contracts cease, the state will be taking less than 30% of its royalty oil as in-kind deliveries. This is the lowest percentage of royalty oil taken in-kind since February 1983. The only in-state refiners who are being supplied with royalty oil are MAPCO and Tesoro, both of which purchase additional fuel from north slope producers. As the state has more royalty oil available than it has purchasers, a competitive bid would not result in a higher value to the state. The state retains enough royally oil to be able to sell to future in-state purchasers should they become interested.

The Sale is in the Best Interest of the State. Under AS 38.05.183(e), a non-competitive sale, exchange, or other disposal of royalty oil or gas taken in-kind by the state may be awarded by the commissioner to the prospective buyer whose proposal offers maximum benefits to the citizens of the state.

In accordance with AS 38.05.183(a),(c), and (e), and 11 AAC 03.010(b) and (d), I find that taking royalty oil in-kind and selling that oil to Petro Star Valdez Refinery Joint Venture ("Petro Star JV") for use at the proposed refinery in Valdez is in the best interests of the state and that it will maximize benefits to state citizens. According to AS 38.05.183(e) and AS 38.06.070(a), before making a non-competitive sale of state royalty oil, the commissioner must consider the criteria listed in AS 38.05.183(e) and AS 38.06.070(a) and listed in the appendix to this finding.

1. The state is now highly dependent on oil revenues and will continue to depend on oil revenues in the future. The price term of the sale protects the state's interest by ensuring that revenues from this sale will equal the in-value alternative.

2. Petro Star JV will make an initial investment of approximately $25 million dollars within Alaska. The direct annual benefits to local payroll and to the purchase of local goods and services is more than $2.1 million. While the proposed sale may increase the financial viability of the refinery, the extent to which these benefits can be ascribed to the proposed contract is unknown.

3. The existence of the refinery may increase competition in fuel sales in the state and may provide for lower consumer product prices. A one cent decrease in the price of each gallon of refined product that could be made from 1,000 barrels per day translates to an annual consumer saving of approximately $153,000. The two companies that will purchase most of the refinery's products are MarkAir Inc., and Petro Marine Services which will almost certainly benefit from lower prices.

4. The proposed refinery would add 16-20 permanent, new jobs in the City of Valdez, and pay property taxes of approximately $400,000 per year to the city. The addition of new employment and a larger tax base for Valdez are expected to be welcome benefits to that city's declining property tax revenues and outweigh whatever additional social costs and responsibilities, if any, that they impose. As with construction and operation benefits, however, the extent to which these benefits can be ascribed to the proposed sale contract is unknown.

5. Any environmental effects will result from construction and operation of the refinery, not from the proposed royalty sale. The sale itself has little or no environmental effects. The major permanent construction and operation impacts are the land-use and air-quality impacts. The fact that the refinery has received a conditional use permit from the City of Valdez and is consistent with that city's coastal zone plan shows that the land-use impacts are acceptable. Similarly, the proposed refinery will not operate without receiving an air quality permit from DEC. Those impacts are best considered by the Department of Environmental Conservation during that process.

6. To the extent that the sale helps provide a long-term crude oil supply to the proposed Petro Star JV, the sale will help provide new in-state investments. It will provide increased competition for existing in-state refineries.

Criteria Weights. According to 11 AAC 03.060(b), "In considering the criteria described in AS 38.05.183(e), the commissioner will state which criteria apply to the proposed disposition, and discuss the weight given to the applicable criteria in determining the maximum benefit to the state..."

In making this finding, the department first determined that the state would not lower the total royalty oil revenue due the state by making a disposal to Petro Star JV. The department next looked at whether the disposal would increase the amount of in-state refining and has the potential to lower product prices. Finally, the department examined the criteria to determine that the sale would not create any unacceptable environmental or social impacts.

Contract Prices Are Acceptable. Under 11 AAC 03.091(b), I find that in establishing the price of this royalty oil contract, the department has obtained a price that is equal to the volume-weighted average of settled royalty netback value applicable to the oil that is being sold, plus field costs incurred by the royalty share. The 94.5% of Kuparuk production that is based on settled claims with the state under ANS Royalty Litigation provide the agreed-upon values and methodology for the in-kind sale of Kuparuk River oil. A price based on the volume-weighted average netback of that production is an acceptable benchmark for final value due the state. Therefore, I find there is no need for a retroactive adjustment upon resolution of further ANS Royalty Litigation claims.

Conclusion. Under the terms of the proposed contact, the state would receive a market price for the royalty oil, while fostering in-state processing, potentially lowering product prices, and providing attendant benefits. The satisfactory price terms, coupled with the associated direct and secondary benefits for Alaska citizens, supports the decision to waive competitive bidding.

The foregoing facts and analysis support the finding that this disposal is in the best interest of the state and that it maximizes the benefits to Alaska citizens.

Harold C Heinze — 3/4/92

Harold C. Heinze, Commissioner — Date

Appenendix A: AS 38.05.183(e) and AS 38.06.070(a)

AS 38.05.183(e) When a sale, exchange or other disposal of oil or gas taken in kind by the state as its royalty share, or a sale, exchange or other disposal in whole or in part of a right to receive future royalty oil or gas, under a state lease under this chapter is made other than by competitive bid, the sale, exchange or other disposal shall be awarded by the commissioner to the prospective buyer whose proposal offers the maximum benefits to citizens of the state. The commissioner shall consider:

(1) the cash value offered;
(2) the projected effects of the sale, exchange or other disposal on the economy of the state;
(3) the projected benefits of refining or processing the oil or gas in the state;
(4) the ability of the prospective buyer to provide refined products or by-products for distribution and sale in the state with price or supply benefits to the citizens of the state; and
(5) the criteria listed in AS 38.06.070(a).

AS 38.06.070. Criteria. (a) In the exercise of its powers under AS 38.06.040(a) and 38.06.050 the board shall consider

(1) the revenue needs and projected fiscal condition of the state;
(2) the existence and extent of present and projected local and regional needs for oil and gas products and by-products, the effect of state of federal commodity allocation requirements which might be applicable to those products and by-products, and the priorities among competing needs;
(3) the desirability of localized capital investment, increased payroll, secondary development and other possible effects of the sale, exchange or other disposition of oil and gas or both;
(4) the projected social impacts of the transaction;
(5) the projected additional costs and responsibilities which could be imposed on the state and affected political subdivisions by development related to the transaction;
(6) the existence of specific local or regional labor or consumption markets or both which should be met by the transaction;
(7) the projected positive and negative environmental effects related to the transaction; and
(8) the projected effects of the proposed transaction upon existing private commercial enterprise and patterns of investments.

Appendix B: Comments and Responses on the Preliminary Finding and Draft Contract

The department sent either a copy of the preliminary finding and draft contract, or a notice announcing its availability to a 450-person mailing list. In addition, display advertisements were published in the Anchorage Times, Anchorage Daily News, Juneau Empire, Fairbanks News-Miner, and the Valdez Vanguard.

The department received four letters commenting on the proposed sale. Two letters were received from one respondent (Prince William Sound Conservation Alliance). These two letters are answered together. The letters and responses follow.

ALASKA LEGAL RESEARCH

Joseph A. Sonneman, B.S., M.A., Ph.D., J.D., Esq.
324 Willoughby, Juneau, Alaska 99801
PH: (907) 463-2624 FAX: (907) 463-3802

Director
Division of Oil & Gas
Box 107034
Anchorage, AK 99510

February 15, 1992

Dear Director Eason: re: **Royalty Oil Sales**

Here are my comments on the proposed sale of royalty oil to Petro Star Valdez Refinery [or to anyone else, for that matter].

1. During the ALPETCO [a Hammond-era refinery project] days, I was a cab driver and once took to their private jet a trio of ALPETCO executives or lawyers or lobbyists [one was Cathy Chandler, now Sen. Stevens' wife]. They talked about their legislative game plan en route: it was to delay and do nothing. Nothing is what they did. ALPETCO built no refinery, but I think ALPETCO did make substantial profits off the State's royalty oil until its contract was finally cancelled.

2. Therefore, in any other royalty oil sale:

a. The refinery must be built BEFORE the oil is sold to it! (OR, RELEASED BY REFINERY)

b. There must be a COMPLETION BOND to ensure that the refinery is indeed built.

3. Refineries--and their following petrochemical industries--are wonderful examples of value-added processing that Alaska should do much more of. Great!

4. However, the State of Alaska should keep at least 50% of the oil that is run through such a refinery and petrochemical plant, just BECAUSE of the value added by that processing. At the time of ALPETCO, the value of plastics from one barrel of oil was said to be about $3500. I don't know what it is now, but if Alaska sells the oil for $15-20 and the products made from that oil sell for $3500 or more, Alaska is getting the short end of the stick!

Much better for Alaska to CONTRACT with Petro Star or other refineries and petrochemical operators to PROCESS State of Alaska oil, than for Alaska to SELL the oil outright and let other folks make all the profit off resources that belong to all Alaskans. In other words, **THE STATE OF ALASKA SHOULD SELL PETROCHEMICAL PRODUCTS, NOT CRUDE OIL.** The terms of trade favor producers of manufactured goods, not extractors of natural resources.

Thank you for your attention.

Sincerely & cordially,

Joe Sonneman

RECEIVED
FEB 2[illegible] 1992
DIV. OF OIL & GAS

WALTER J. HICKEL, GOVERNOR

DEPT. OF NATURAL RESOURCES

P.O. BOX 107034
ANCHORAGE, ALASKA 99510-7034
PHONE: (907) 762-2553

DIVISION OF OIL AND GAS

March 3, 1992

Joseph A. Sonneman
324 Willoughby
Juneau, Alaska 99801

Dear Mr. Sonneman:

Thank you for your letter concerning the proposed royalty oil sale to Petro Star Valdez Refinery Joint Venture. We received only four comments on the proposed sale and so we have the luxury to respond to the comments individually.

Your letter asked that we ensure that the refinery is built before the state sells its oil. The proposed contract has this insurance. The contract does not take effect until Petro Star certifies that the refinery will be ready to accept and process oil within seven months. The seven month lead time is included because under the Kuparuk River Unit agreement, the state is required to give lead time to alert the producers that it wishes to take its oil in-kind rather than leave it for the producers to market. In addition, the proposed contract includes an 80% in-state processing requirement. Thus, Petro Star is not pe[illegible]tted to take the oil with building a refinery.

Your letter also suggests that the state retain title to half of the produced high-value petrochemical products such as plastics. You mention that some chemicals made from one-barrel of oil may sell for $3,500. The proposed refinery does not produce these products. Rather, it will produce lower-value fuels such as jet-fuel, and marine diesel. The large profits that you foresee are unlikely to exist. During the last year, the Chevron refinery in Kenai closed and three other companies canceled their royalty oil contracts with the state. Rather than the possibility of large profits, there is now lower demand for in-state royalty oil purchases than at any time since 1983.

Under separate cover we will be sending you a copy of the Final Finding and Determination and the final contract for the royalty oil sale. The contract will not take effect unless approved by the legislature (and unless the Petro Star builds the refinery). Thank you for your comments. If you have questions, please let me know.

Sincerely,

James E. Eason
Director

WALTER J. HICKEL, GOVERNOR

DEPARTMENT OF LABOR

OFFICE OF THE COMMISSIONER

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

FAX: (907) 465-2784

February 14, 1992

James E. Eason, Director
Alaska Department of Natural Resources
Division of Oil and Gas
P.O. Box 107034
Anchorage, AK 99510

RECEIVED
FEB 24 1992
DIV. OF OIL & GAS

Dear Mr. Eason:

Re: Proposed Royalty Oil Sale to Petro Valdez Refinery Joint Venture

We have received and reviewed the Preliminary Finding and Determination regarding the above referenced royalty oil sale proposal. While we have no recommended corrections or additions to the report, we applaud your efforts to maintain the State's revenue while simultaneously promoting in-state processing of our natural resources. We understand from your report that the refinery project is not dependent on the proposed sale, but that a long-term source may be attractive to the joint venture from a business planning perspective.

Success in your efforts will lead to increased direct and indirect employment and a better life style for our citizens. As we pointed out in our January 17, 1992, news release, the December unemployment rate in Alaska was 10.1% compared to 7.5% a year earlier. In the Valdez-Cordova census area, the December unemployment rate was 12.2%, up from 11.2% in December 1990. It is our hope that projects such as this will successfully lead to increased employment of Alaska residents who will benefit from greater in-state processing of our natural resources.

Thank you for giving us the opportunity to comment on the proposed royalty oil sale.

Sincerely,

John A. Abshire
Acting Commissioner

07-G9LH

WALTER J. HICKEL, GOVERNOR

DEPT. OF NATURAL RESOURCES

DIVISION OF OIL AND GAS

P.O. BOX 107034
ANCHORAGE, ALASKA 99510-7034
PHONE: (907) 762-2553

March 3, 1992

John A. Abshire, Acting Commissioner
Department of Labor
P.O. Box 21149
Juneau, Alaska 99802

Dear Mr. Abshire:

Thank you for your letter supporting the Preliminary Finding and Determination for the proposed royalty oil sale to Petro Star Valdez Refinery Joint Venture. We received only four comments on the proposed sale and so we have the luxury to respond to the comments individually.

Under separate cover we will be sending you a copy of the Final Finding and Determination and the final contract. The contract will not take effect unless approved by the legislature.

Sincerely,

James E. Eason
Director

Prince William Sound Conservation Alliance

P.O. Box 1697
Valdez, AK 99686
(907) 835-2799
Fax (907) 835-5395

Board Members

Vince Kelly
President

Nancy R. Lethcoe
Vice-President

JoAnn Lundfelt
Secretary/Treasurer

Kim McCarty

Stan Stephens

Executive Director

David P. Janka

Administrative Assistant

Nancy Phelps

February 24, 1992

James E. Eason, Director
Alaska Dept. of Natural Resources
Division of Oil and Gas
Box 107034
Anchorage, Alaska 99510

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FEB 27 1992
DIV. OF OIL & GAS

Ted Moninski, Project Review Coordinator
Alaska Division of Governmental Coordination
Southcentral Regional Office
3601 C Street, Suite 370
Anchorage, Alaska 99503-5930

Svend Brandt-Erichsen, Regional Administrator
Alaska Dept. of Environmental Conservation
Southcentral Regional Office
3601 C Street, Suite 1334
Anchorage, Alaska 99503-5930

Re: Petro Star Refinery JV; State of Alaska Royalty Oil Contract.
Air Control Permit.
Coastal Consistency.

Prince William Sound Conservation Alliance (PWSCA) has concern that your agencies are failing to take the problems related to the Petro Star Refinery JV (Petro Star) project as described in our comments dated January 15,1992 seriously. State and Local Coastal Management Program (CMP) as well as state and federal permit requirements are being undermined with the result being a loss of safety to workers, the public and the environment. The problems we cited are still unresolved, despite the fact that the Alaska Department of Environmental Conservation (ADEC) has issued their air permit and the Alaska Division of Governmental Coordination has issued a ruling in favor of coastal consistency. The proposed sale contract for Alaska royalty oil should not proceed.

COASTAL CONSISTENCY:

Zoning decisions and permits were made by the City of Valdez on October 7, 1991 without any site specific geological/seismic studies at hand. Now the State Division of Governmental Coordination is using those city decisions to support their coastal consistency findings.

Nearly 3 months after the City of Valdez made those decisions and after the end of the public comment period (which itself was flawed—see PWSCA comments of 1/15/92), Dowl Engineers of Anchorage under contract with Petro Star released nothing more

than a summary of what they have stated are their "...findings and opinions regarding the seismic stability of the planned refinery in Valdez, as well as our assessment of the potential for other natural hazards to impact the site."

Findings, opinions and assessments fall far short of a site specific geotechnical/seismic study. Without such a study, no credibility can be given to the siting of this facility. In fact, when PWSCA did a literature search and contacted experts in the field of geological hazards related to the area in question, we found nothing but extreme and obvious problems related to ground stability, seismic wave runup and river flooding. The full study (if there is one), and not a press release, on the geotechnical and seismic hazard aspects of this project must be issued and made available for review. Until this is done, neither the public nor the government agencies whose responsibility it is to protect the public and the environment can be sure what is fact and what is the opinion of a paid contractor.

PWSCA discovered errors in calculations done by CH2M Hill, the company contracted to work out Petro Star's Air Permit Application. Possible errors or omissions in Dowl Engineers' work cannot be known, as there are no calculations or study available for review. However, there are statements made in their summary which contradict our findings, although both were taken from many of the same sources. (see PWSCA comments 1/15/92)

NPDES PERMIT:

There is no City wastewater system for Petro Star to connect into in the vicinity of the proposed refinery site for disposition of stormwater discharges. There has been nothing to date that has shown that Petro Star will not be discharging into waters of the United States. This would require them to obtain a National Pollution Discharge Elimination System (NPDES) Permit. PWSCA wonders how many times this fact must be stated before someone catches on that Petro Star is trying to undermine the permitting process. Or are we again seeing agencies and government following some hidden agenda?

AIR PERMIT:

When PWSCA discovered errors in CH2M Hill's calculations in Petro Star's Air Permit, there were additional errors discovered by the Alaska Department of Environmental Conservation (ADEC) and/or CH2M Hill within that particular part of the permit. The additional errors were worked into the calculations by CH2M Hill and it turned out that they still had not brought emissions over a 100 tons/year permit threshold. These errors, and the manner in which paid contractors are left to their own reviewing and editing, put the reliability of the permit calculations in question. PWSCA had requested that an independent review of the application be initiated by ADEC or the City of Valdez. No such review has taken place. Until such a review takes place and proves that Petro Star is meeting all permit requirements this project should not be allowed to proceed. This review must also take into account parts of this project which are being left out.

INCOMPLETE PLANS:

Petro Star has failed to give full information on the distribution of their product. PWSCA is still adamant that all aspects of this project be taken into consideration when permits and rulings are being made. Petro Star already has plans for additional tank farms and very different plans for transportation of their product than those stated in their permit applications. (see PWSCA comments 1/15/92)

SPILL CONTINGENCY PLAN:

At this time PWSCA asks that an Oil Spill Contingency Plan (C-Plan) be formulated for this project as soon as possible. Before State Royalty Contracts are signed or any other aspect of this project is allowed to proceed, the C-Plan must be put together and approved. PWSCA feels that this is important in that the site for this facility lies within a rich biological area and that because of the expansive tidal flats, river

deltas, salmon spawning and rearing habitat and wetlands that lie adjacent to the site, a responsible and effective C-Plan is not likely to be achievable. To wait until Petro Star is ready to start up their refinery for an approved C-Plan again fails to adequately protect the environment. (see PWSCA comments 1/15/92)

Prince William Sound Conservation Alliance wishes to again stress our concern over the complacency to earthquake hazards that is pervasive throughout state and local government as well as industry. Of any place on the face of this Earth, Alaska should be the most aware and prepared for the inevitable occurrence of a major earthquake. Unfortunately, this is not so. The responsibility for the safety of the public and the environment falls into your hands. We hope that you will take our concerns seriously, back up a few steps, and reconsider this project as presented.

Thank you. Please feel free to contact us with any questions or for any further information.

Sincerely,

David P. Janka
Executive Director

cc: ADEC Valdez; ADF&G; ADNR; EPA; USF&WS; Army Corps of Engineers: City of Valdez; Petro Star, Alaska Representative Gene Kubina; State Senators Jay Kerttula and Curt Menard; House and Senate Resource Committee; Regional Citizens Advisory Council; Valdez Fisheries Development Association; Jeff Sauer, attorney & Sierra Club Legal Defense Fund; Trustees for Alaska; Alaska Center for the Environment; KCHU radio; *Valdez Vanguard*; KVAK radio and *The Pioneer*; *Anchorage Daily News*; *Anchorage Times*

Prince William Sound Conservation Alliance

P.O. Box 1697
Valdez, AK 99686
(907) 835-2799
Fax (907) 835-5395

James E. Eason
Director
ADNR/Division of Oil and Gas
Box 107034
Anchorage, Alaska 99501

January 30, 1992

Dear Mr. Eason,

I received information concerning the sale of state royalty oil to Petro Star Valdez Refinery IV today. Prince William Sound Conservation Alliance (PWSCA) will submit comments on the proposed sale before the February 24, 1992 deadline. At this time though we wish to share with you our comments concerning this project submitted earlier this month to ADEC and ADGC in reference to the air permit and coastal consistency review. (Document attached)

To summarize our comments at this time: PWSCA with a membership of nearly 300, with approximately 100 of those living here in Valdez, feel strongly that this project has been misrepresented, poorly engineered, and shows a lack of responsibility to the safety and well being of the community and the environment. In short this project should not be allowed to proceed.

Also at this time PWSCA wishes to request that the February 6,1992 meeting of the Alaska Royalty Oil and Gas Advisory Board be teleconferenced through the Legislative Information Office system to at least Valdez and Juneau.

Thank you and please feel free to contact PWSCA for any further information or questions.

Sincerely,

David P. Janka
Executive Director

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JAN 5 1992
DIV. OF OIL & GAS

Prince William Sound Conservation Alliance

P.O. Box 1697
Valdez, AK 99686
(907) 835-2799
Fax (907) 835-5395

Board Members

Vince Kelly
President

Nancy R. Lethcoe
Vice-President

JoAnn Lundfelt
Secretary/Treasurer

Kim McCarty

Stan Stephens

January 15, 1991

Svend Brandt-Erichsen
Regional Administrator
Alaska Dept. of Environmental Conservation
Southcentral Regional Office
3601 C Street, St. 1334
Anchorage, AK 99503-5930

Ted Moninski
Project Review Coordinator
Alaska Division of Governmental Coordination
Southcentral Regional Office
3601 C Street, St. 370
Anchorage, AK 99503-5930

Re: Public Comment for Air Quality Control Permit Application (ADEC File No. 9124-AA001) and Consistency with the Alaska/Valdez Coastal Management Program (State I.D. No. AK 011223-12A) from Petro Star Refinery JV.

To whom it may concern:

The Prince William Sound Conservation Alliance (PWSCA) will provide arguments that the Petro Star Valdez Refinery JV (Petro Star) has submitted incomplete plans for their project including insufficient data on which to base a determination of airborne particulates and incomplete plans for the total project. In particular, we will argue that this is an inappropriate activity for placement directly in a coastal habitat which is susceptible to a number of geophysical hazards. For the reasons explained below and supported by the Appendices and accompanying bibliography, we strongly urge you to refuse Petro Star's application for an Air Quality Control Permit to Operate, ADEC File No. 9124-AA001, and rule on the projects inconsistency with the Alaska/Valdez Coastal Management Programs State I.D. No. AK 011223-12A.

INCOMPLETE PLANS:

Failure to include plans for distribution of product: The project as it is presented primarily covers the facility itself and not the transportation of its

product or other plans discussed by Petro Star. These excluded elements include both immediate and future additions of off-site storage, product loading facilities and product pipelines. Without this information, neither the total impacts of the project on the area nor the total air emissions can be adequately reviewed or assessed as required by the Coastal Zone Consistency review process and the Alaska Department of Environmental Conservation's (ADEC) permit review process.

Petro Star's application is incomplete, because it does not discuss product transportation, but attempts to separate permitting for the facility from permitting for the distribution system. For example, Petro Star's application does not mention locating a tank farm on Mineral Creek Loop Road (Loop Rd.), product pipelines from there to the Valdez Container Terminal Dock, oil product loading facilities on the Container Dock, or product pipelines running the approximately 11 km. (7 mi.) from the refinery site to the proposed Loop Rd. tank farm. These facilities would cross and/or be adjacent to wetlands, salmon spawning/rearing habitats, three major waterways and the Valdez Old Town site (condemned because of earthquake hazards after the March 27, 1964 Earthquake). They would also create additional emissions in respect to the air permit.

However, Petro Star has described its distribution plans in local newspapers, and they were discussed at meetings on the Valdez Duck Flats Area Meriting Special Attention (AMSA) and at a joint meeting sponsored by the City of Valdez to address concerns about the proposed Petro Star Refinery project held November 5, 1991 (Joint Meeting). They are detailed further in a City of Valdez memo of December 2, 1991 (Appendix 1). It is the position of the Prince William Sound Conservation Alliance that the Coastal Zone Consistency Review Process requires the applicant to provide complete information both on the facility and on the proposed distribution process or on alternative distribution plans, if no final plan has been selected.

At the Joint Meeting Mr. Al Ewing of the United States Environmental Protection Agency (EPA) indicated that the EPA was concerned that the project did not consider how the product would be transported noting that the EPA would prefer to see the project as a whole, that is, from the time product leaves the Trans-Alaska Pipeline System until it is delivered to the market. Mr. Ewing indicated that an Army Corps of Engineers permit might be necessary depending on the method of transportation (Joint Meeting, tapes). PWSCA encourages the EPA, ADEC and Coastal Zone Consistency review to require consideration of the Petro Star project as a whole.

Incomplete information on the total cumulative effects from project: The cumulative impact upon the air quality of Port Valdez air containment area from the total Petro Star Project must also be addressed. The Petro Star permit application provides incomplete information on the cumulative effects of emissions from trucks, tankers, tugs or barges themselves and on the safety concerns of additional truck traffic on the Richardson Highway and the narrow, residential Loop Road. If the proposed Loop Road tank farm is used, there would be three transfers of product creating additional emissions during loading as well as additional tank losses. It is the position of PWSCA that all emissions and aspects of this project must be taken into consideration during the Coastal Zone review process and ADEC Air Quality Permit.

Incomplete information on the total air emissions in the Valdez Air Containment District: Air pollution has been a major problem with the Alyeska Pipeline Service Company (Alyeska) facility operations that has taken ADEC and EPA too many years to resolve. PWSCA is very concerned about the health and environmental effects of the total air emissions from Alyeska, Petro Star, municipal and other sources.

Incomplete information on the disposal of wastewater: Petro Star's permit application is also incomplete in that it fails to address what will become of the facility's stormwater runoff following preliminary on-site treatment. At the Joint Meeting Mr. Ewing stated that no National Pollution Discharge Elimination System (NPDES) permit would be required as long as the stormwater runoff does not enter waters of Port Valdez. Petro Star had informally indicated an intention to use the Valdez Municipal Sewer System. There are three major problems with this proposal:

1) There is no municipal system in the area, so a 9.5 km. (6 mi.) extension to the Valdez wastewater treatment system would need to be constructed. No funds are allocated in the City of Valdez budget for either a feasibility or engineering study for the extension or for its construction.

2) Even if the sewer system were constructed in time, according to Mr. Ewing there is a legal question concerning whether stipulations associated with a federal grant to the City of Valdez for construction of its sewer treatment plant will permit it to process stormwater runoff from Petro Star. The system was not constructed to handle this type of waste and it is questionable whether it can handle the additional volume (Joint Meeting, tapes).

3) The other possibility is to treat the stormwater runoff on site. Although the applicant expressed a possible intention to treat all wastewater on site (Joint Meeting, tapes), no design plans have been presented demonstrating that this is either possible or feasible.

Petro Star indicated at the Joint Meeting that they would not be discharging waste water to surface waters. However, the facility clearly possesses the possibility of discharging stormwater runoff to adjacent surface waters. It is PWSCA's understanding that EPA regulations state that any facility that may discharge wastes into surface waters, regardless of its design, must undergo an NPDES permit review. At this time Petro Star has not demonstrated that wastewater will not be entering U.S. surface waters and has not applied for an NPDES permit. PWSCA believes there is sufficient evidence to indicate that an NPDES review is required and that it should be a part of the Coastal Zone Constituency Review process. If Petro Star fails to obtain a permit, EPA has the power to delay startup of the refinery, to shut it down until compliance is obtained or to issue a waiver. Issuing a waiver would mean water based resources on which Valdez's existing fisheries and tourism industries depend could be jeopardized. This is a scenario that would be difficult on Petro Star, the EPA and the community of Valdez. If Petro Star wishes to show their ability to be an environmentally responsible Alaskan business and a good addition to the Valdez business community, then PWSCA encourages Petro Star to apply for all permits in a timely manner.

Incomplete information on compliance to the National Emissions Standards for Hazardous Air Pollutants requirements for refineries. Mr. Ewing indicated at the Joint Meeting that the Na-

tional Emissions Standards for Hazardous Air Pollutants (section on refineries) might apply to Petro Star's activities and suggested they look at pertinent sections of the law (Joint Meeting, tapes). The application does not address this question.

ADEC AIR QUALITY PERMIT APPLICATION

PWSCA found the Air Quality Permit Application to contain gross errors in the calculations for emission tank losses for the fixed-roof tanks. The calculations for product throughput used a barrel size of 5.6 gallons per barrel. This should be 42 gallons per barrel. PWSCA figured that these errors put Petro Star's figure for Volatile Organic Compounds (VOC) emissions off by a factor of 7.5. This it seemed would have brought their VOC losses from their fixed roof tanks alone to 90 tons per year, which when added to the product loading losses of 2.8 tons/year and the internal floating-roof tank losses of 15.6 tons/year brings the total VOC losses of 108.4 tons/year. These errors were brought to the attention of ADEC and others in a letter from PWSCA dated January 7, 1992. An additional 4 errors were discovered by ADEC and/or CH2M Hill (Petro Star's contractor) but the new total VOC emmision figure is not what PWSCA expected. At this time it appears that no one has done or is planning on doing a detailed independent review of this application. PWSCA wonders what other errors of this nature are yet to be found in the document? Therefore PWSCA stongly requests an independant review be initiated by ADEC and made available for public review before a decision is made on Petro Star's permit.

PSD review required: According to federal law, if Petro Star emits more than 100 tons per year or has the capability of emitting more than 100 tons per year, it is required to undertake a Point Source Determination (PSD) review. PWSCA believes Petro Star's application when corrected as indicated in the proceeding comment, requires a PSD review under federal law.

Alaska State regulations are more stringent than federal law and require any facility that processes more than five tons per hour of any material to complete a PSD review. It is PWSCA's position that DEC is required by law to evaluate Petro Star's permit application using both the federal and state standards. It is uncertain at this time whether this has been done.

Modelling for the dispersion of air pollutants and field-testing of models: PWSCA remains concerned about where pollutants will go after they leave the stack. PWSCA encourages ADEC to model the dispersion and field test their modelling against actual conditions in Port Valdez.

GEOPHYSICAL HAZARDS:

The siting of the refinery is of concern to the residents of Valdez because it lies within the 100 year flood plain on the outwash delta of the Lowe River, which raises unanswered questions concerning the site's geological suitability for this type of use. In brief, the site is unsuitable for the following eight reasons:

1) It is on unconsolidated sediments in a known mass wasting zone (downslope movement

of rock, soil and other debris), (cf. Valdez Coastal Zone Management Plan).

2) It is on the flood fringe of a braided outwash plain of the glacier fed Lowe River system, (cf. Valdez Coastal Zone Management Plan) which has been, and may in the future continue to be subject to catastrophic floods from the breakage of ice dammed lakes.

3) It is within 0.8 km (0.5 mi.) of a lineament (i.e., a linear surface feature that may be an indicator of earthquake faulting) (1972, Seismology and Geodesy).

4) It is within an area that has experienced seiches (seismic induced sea waves) caused by the sliding of the unconsolidated sediments into Port Valdez during at least four earthquakes in the past 90 years (Coulter, 1966, pp. C7-C9).

5) It is in an area that subsided during the 1964 Earthquake (Tectonics).

6) There are no publicly available core samples and geotechtonic engineering analysis showing the nature of the underlying sediments and their ability to bear the weight of the proposed structures in the event of subsidence induced by either erosion from flooding or lateral movement from mass wasting of adjacent areas during an earthquake.

7) The site is within an Alaska Department of Natural Resources (DNR) recognized crucial rated habitat area and adjacent to a Valdez Coastal Zone AMSA area which is highly productive of salmon, bird, and marine life that would be adversely affected in the event of an oil spill (DNR, *Prince William Sound Area Plan*, Unit 21, Map 1: 3-175) .

8) The shoreline adjacent to the proposed site is mudflats and salt marsh. At this time, NOAA and other oil spill cleanup authorities do not recommend any oil spill cleanup technologies for use on mudflats or in salt marshes (Prince William Sound Area Plan: ISCC Shoreline Cleanup Manual). A spill on these low energy mudflats would have long-term adverse biological effects on the Port's primary and secondary productivity and on commercial enterprises dependent upon fisheries, wildlife viewing and scenic qualities.

IMPORTANCE OF THE LACK OF DETAILED GEOTECHNICAL ENGINEERING STUDY FOR SITE:

The Valdez Coastal Management Program section on geophysical hazards was not followed by the Valdez City Council when the area was rezoned and a conditional use permit issued, because the required detailed geotechnical analysis did not accompany the permit request, was not available to the Valdez Planning and Zoning Commission when they recommended approval of a Conditional Use Permit on September 11, 1991 and was not available on October 7, 1991 when the Valdez City Council rezoned the area from Unclassified to Heavy Industrial and approved the permit. At the Joint Meeting, Mayor Pro Tempore Lynn Chrystal requested Petro Star's geotechnical study be made available to the City. Petro Star's attorney indicated he would provide this (Joint Meeting, tapes). However, no study has been received by the City of Valdez or made available for public review as of January 7, 1992. In a phone conversation on January 6, 1992 Petro Star indicated that the engineering study was not yet complete. The Petro Star spokesperson indicated that when the study was completed that for the most part only the results and not the body of the study would be released. It is PWSCA's position that the results plus supporting data must be made available for peer and public review before a Coastal Consistency review can commence. This position is based on the statement at the Joint Meeting made by Ms. Benson

from the Division of Governmental Coordination (DGC) that the geological suitability of the site would be considered as part of the Coastal Consistency Review. (Joint Meeting, tapes and p. 10).

PWSCA Literature Search: In the absence of a formal geotechnical study that is available for peer review, PWSCA conducted a literature search for information pertinent to the site's geophysical suitability for a refinery. The following comments are based on this literature search as indicated by references and supported by the professional judgements of recognized authorities.

The permit application and previous public and written comments by Petro Star indicate a lack of information regarding the load bearing capacity of the soils and their stability during a seismic event. Bedrock is the best local substrate for construction purposes (Combellick and Updike, 1987 passim.). The Alyeska Marine Terminal site was blasted out of bedrock and the proposed Trans-Alaska Gas Pipeline facility at Anderson Bay in Port Valdez would be located on bedrock. These sites were chosen for their stability during an earthquake and for protection from seismic induced waves as the elevation gained reduces the risk from wave damage.

Pros and cons of siting the refinery on an alleuvial fan: The proposed site lies on an alleuvial fan which may overlay Lowe River delta sediments and finer grained marine sediments. PWSCA found some disagreement between geologists on the suitability of the site for construction.

Suitability of surface soils: Combellick maps surface deposits on the site as alleuvial fan material consisting of 57.5% gravel, 42.4% sand and 0.1% silt (Combellick, 1987). No borings were taken. However, estimated thickness is less than 20 m; the water table depth is estimated at less than 20 m.; permeability is rated at low to moderate; and susceptibility to frost is considered moderate. Combellick rates the susceptibility to an earthquake induced ground failure for alleuvial fan material in general as low and its suitability as foundation material as very good. The map is a general surface geological map for the Valdez area and does not discuss other characteristics of specific sites.

Disadvantages of specific site: According to Coulter (1966), unconsolidated alleuvial fan sediments are an acceptable alternative *when held in place by bedrock islands* as in the case of new town Valdez (Coulter, 1966, p. C35). Coulter and other US Geological Survey scientists and engineers consulted by PWSCA indicated that because of the area's seismic activity, there is a significant risk that substantial marine landslides of the adjacent delta material would permit a lateral movement of the unconsolidated alleuvial fan sediments, creating significant ground breakage as occurred in the old Valdez town site. Map 16 in the Earthquake Tectonic Studies indicates that this area moved laterally 16 to 19 feet in 1964.

Summary: The difference between Combellick and Coulter lies in their scope: Combellick is discussing only the suitability of the surface soils in general without regard to their specific location and other factors; Coulter is considering the soils plus their location and other geological factors. Since the question is not whether the soils at the proposed site are suitable in general for foundations, but whether the soils in this specific location adjacent to an overly steepened delta are suitable, PWSCA believes that Coulter's observation on the importance of the bedrock

islands as a restraining wall is significant. There is no such restraining bedrock formation to hold the alleuvial fan in place at the proposed Petro Star site.

Risks associated with fine-grained sediments: Soils with the greatest risk of instability and potential liquefaction are fine grained sediments, such as those at the eastern end of Port Valdez (Coulter, p. C 14ff, C 35). The risk is also substancially increased in areas were a high water table exists. Soils in the vicinity of old town and between Old Town and the Lowe River are known to belong to this high risk from surveys and core samples taken immediately after the 1964 Earthquake (Coulter, p. C14-15). No core samples were taken on the south side of the Lowe River following the earthquake, nor were visual investigations made according to geologists who participated in the survey, because the Mineral Creek Alleuvial Fan with its restraining bedrock formation was clearly a better site for the City of Valdez. However, as indicated above, USGS scientists did determine that mass wasting at the Valdez Old Town site caused some local subsidence due to lateral movement (16 to 19 ft. lateral movement). USGS surveys show subsidence at the east end of Port Valdez ranging from 0.6 ft. near the Petro Star site to 3.5 ft. at the Old Town site (Ferrains, personal communication).

Because information on the proposed site is limited, PWSCA consulted several geologists concerning the possibility of ground breakage associated with either subsidence or lateral movement in the event of a major earthquake. Studies of similar alleuvial fans and deltas in the Copper River Basin following the Earthquake indicated that almost every active flood plain had ground breakage. Thus, the geologists PWSCA consulted believed ground breakage probably would have been found on the south side of the Lowe River if a geologist had been available to look for it in 1964.

Possibility of subsurface fine-grained sediments at the Petro Star site: Although no core samples were taken along the delta on the south side of the Lowe River (proposed Petro Star site), Coulter noted: "Inasmuch as materials carried by the Lowe River have been transported much farther than those on the rest of the delta, presumably they would generally have a finer grain or particle size. (Coulter, p. C15)." Because subsurface soils at the proposed Petro Star site may have a greater portion of fine grain sediments, the risk of potential liquefaction may be even higher. The Valdez Coastal Zone Management Plan probably did not classify this as a potential liquefaction area because of the lack of specific geotechnical information. Absence of information cannot be used as an argument for or against the area's susceptibility to liquefaction; however, it is a good reason to require that geotechnical information be provided for review prior to permitting the construction of the proposed facility. There is clearly sufficient evidence of potential geological hazards to require that the applicant complete a geotechnical engineering study and release it for peer and public review prior to receiving a Coastal Zone Consistency determination.

Absence of site-specific information on subsurface sediments: Although Coulter thought there might be more fine grained sediments near the Lowe River than at Old Town, no subsurface studies have been done of the area. PWSCA has been unable to find any State or Federal agency which has taken core samples on the Petro Star site. No cores have been taken by the U.S. Geological Survey's Alaska Geological Survey Branch or by the Menlo Park Branch. The State

of Alaska's Division of Geology has not taken any core samples. Furthermore, despite requests for information, Petro Star has not released any information regarding private surveys or core samples they may have taken. United States Geological Survey (USGS) seismologists warn that without these site specific core samples a shaking amplification model for a non-bedrock area would also be impossible (Page, personal communication).

Risks from tsunamis: The Petro Star alleuvial fan, unlike the Valdez City location, has no bedrock outcropings to hold the unconsolidated alleuvial sediments in place or to protect the site from being devastated by a tsunami. At least five times in the last 90 years, unconsolidated sediments at the east end of Port Valdez have undergone mass wasting during earthquakes (Coulter, p. C7-C18) creating turbidity currents. Some of these have generated local tsunamis or seiches as happened in 1964. According to USGS reports, the 1964 seiches generated a water surge of 6-9 m. (20-30 ft.) in the eastern end of Port Valdez. The Petro Star site is located only 13 ft. above mean sea level. According to the USGS, this is a normal, not abnormal, event: "Thus, the record shows that on at least five occasions in the past 70 years, submarine slides — and associated turbidity currents — have accompanied earthquakes at Valdez. To this extent, the combined effects of the earthquake of March 27 were in no way abnormal. Instead, they typify a reaction pattern under seismic conditions that may be expected in the prism of saturated fine-grained deposits that make up the Valdez delta (Coulter, p. C9)."

Risk of earthquake during lifetime of refinery: The U.S.G.S. predicts that a major earthquake will occur in the Yakataga fault sometime within the next 25 years. The last time a large Earthquake occurred in the Yakataga area, unconsolidated sediments on the Valdez Delta (including those ajacent to the proposed Petro Star site) slid into Port Valdez (Coulter, C7-9).

Risks from streambank erosion and flooding: In addition to earthquake associated risks, the site is also exposed to the risks of meanderings of the Lowe River and from a 100 year flood. According to the Federal Emergency Management Agency (1983), "The risk of experiencing a rare flood increases when periods greater than one year are considered. For example, the risk of having a flood which equals or exceeds the 100-year flood (one-percent chance of annual occurrence) in any 50-year periods is about 40 percent (four in ten) and, for any 90-year period, the risk increases to about 60 percent (six in ten). The analyses reported here reflect flooding potentials based on conditions existing in the community at the time of completion of this study. (p. 6)." The areas in Texas that have been flooded for the past month were in the 100 year flood plain. This is the second time in three years that some of these communities have been flooded. Let us not now create a problem similar to those in Texas or those that occured at the Drift River oil facility in Cook Inlet.

Recently, the Lowe River, a braided glacial stream has moved from along the northern edge of the valley to the southern side and is causing erosion of alleuvial fans upstream from the Petro Star site. If the river continues its present course, there is a possibility that river bank erosion will become a problem in the vicinity of the Dayville Road bridges near the Petro Star alleuvial fan. Such activity is normal for a braided stream. It can be controlled to a limited degree by instream gravel mining and placement of riprap, but according to a hydrologist consulted by the City of

Valdez "there is no practical way to obtain stable streams in those areas where glacial sediment loading is occuring (GEOMAX,1989, p. 19).

Risk from breakage of an ice-dammed lake: In the past, the Lowe River has experienced catastrophic floods from the breakage of ice-dammed lakes that have caused sudden and dramatic changes in the river's course. At the present, there are no ice-dammed lakes in the Lowe River drainage. However, during conversations with glaciologists of the USGS, the current absence of ice-dammed lakes does not mean they will not reappear in the future, since the glaciers, themselves, are still active (Post, personal communication).

Risk of flooding from mass wasting of slopes as a result of logging: The City of Valdez has requested that DNR offer state land on tributaries feeding the Lowe River for timber harvest. Experience in Southeast Alaska and other areas throughout the world show that logging on steep slopes in areas of high precipitation can lead to serious mass wasting and flooding when streams are blocked and temporary lakes form.

As our testimony indicates, various branches of the State and Federal government and the City of Valdez have conducted surveys and studies indicating the multiple geological hazards of the proposed site. In conclusion, we quote again from the U.S. Geological Survey's "Lessons and Conclusions," which was written after the 1964 Earthquake.

> Provision of good geologic maps alone is not enough, of course, to insure that the facts they show will be used effectively in reducing earthquake hazards. This lesson was forcefully taught by the Alaska experience of 1964. Modern geologic maps of Anchorage were available, and geologists had warned in print that one of the map units, the Bootlegger Cove Clay, would be unstable in the event of future earthquakes. The warnings went unheeded, however, because civic authorities, builders and others either were unaware of the existence of the geologic information or ignored its implications.
>
> Disastrous translatory landslides initiated by the earthquake of 1964 amply proved the correctness of the warnings.
>
> Obviously, means must be sought to acquaint city planners, engineers, builders and the populace with the existence of useful geologic information and with its implications in terms of earthquake hazards and land use. (Eckler, p. 39).

What the writer did not mention is that five people died in the Bootlegger Cove slides, because City and State planners did not heed the geologists' warnings. As residents of Valdez whose lives and livelihoods will be adversely affected by the environmental and economic consequences of a major containment failure and spill at the Petro Star refinery, we urge you as planners and regulators to heed the warnings of geologists. Complacency was at the root of the EXXON-VALDEZ Oil Spill. The information and concerns presentec here go beyond this project and this community and need to be in the forefront of planning throughout Southcentral Alaska. Let us not now become complace about the realities of earthquake hazards and then learn the hard way as we did in 1989 about the transportation of North Slope Crude oil through Alaska's waters.

Following the 1964 Earthquake, the U.S. Geological Survey stated:

> "Ports, docks, and canneries obviously have to be built close to the shore. But the Alaskan experience indicates that *the hazards are enormously compounded if such facilities are built on steep-faced deltas or other deposits of unconsolidated materials that are marginally stable under seismic conditions*. At many places, such deposits offer the only level surfaces near tidewater for easy or economical construction. If they must be utilized, advance knowledge that they are vulnerable to future earthquakes may stimulate planning to minimize the hazards. (Eckel, p. 38, italics added)."

Since the proposed refinery has not submitted a plan to utilize the waterfront for docks, it is not an economic development that requires positioning on a hazardous site and does not meet the requirements of the Valdez Coastal Zone Plan. The only reason justifying the site's selection appears to be that it is owned by one of the applicants. This is a good reason for the applicant, but it is not a good reason for the City of Valdez or the Coastal Zone Planning Commission to permit siting of the refinery in an area of known geological and hence, economic and environmental risk.

With the exception of some losses experienced by commercial fishermen, U.S. courts do not hold companies responsible for the economic losses caused by their oil spills (Gibbon, 1991). Processors, canneries, cannery workers, suppliers, tour and charter boat operators and many others are excluded from making economic claims against a spiller. Although construction of the Petro Star refinery on this site has a high risk of a major oil spill, the economic costs of that risk will be borne by those who have no economic interest in Petro Star. It is important to note here that Mapso stations sell fuel at higher prices in Fairbanks than in Anchorage despite the fact that a Mapco refinery is located in the Fairbanks area. Location of a refinery in Valdez does not necessarily mean that fuel prices will be lower in the Valdez area. Thus, unless there is a contractual agreement with Petro Star guaranteeing lower price fuels to the Valdez area, it is premature to count on increased business in the transportation and tourism sectors as a result of the availability lower priced fuels in Valdez.

In the event of an earthquake damaging the Petro Star refinery, the City of Valdez through its issuance of a Conditional Use Permit and rezoning of the area and the State of Alaska if it issues a Coastal Zone Consistency determination could be liable for damages to Petro Star for property losses and for compensation to the survivors of any victims. Although the decision to deny or issue Petro Star a permit or consistency determination should be based on a commitment by government to protect the lives, property and environment within their jurisdictions, PWSCA recognizes that legal obligations are often a stronger argument. Recently, courts in California have held that cities which issue building permits for sites with known geologic hazards are liable for damages to property and life resulting from structural failures during an earthquake.

FAILURE TO FOLLOW ADMINISTRATIVE PROCEDURES ACT:

Inadequate and insufficient public notice for comment period: There has also been an inadequate and insufficient notice for the public comment announcements about this proposed project. The first notice in the local Valdez paper was in the January 9, 1992 isssue of the *Valdez Vanguard* for the Air Permit. This was just 8 days from the original deadline date and the incorrect date for the new deadline. A second notice published in the *Valdez Vanguard* appeared after the deadline for comments that appeared in the ad. Additionally, there has been no notice on the request for public comment on the Coastal Consistency review from the Division of Governmental Coordination for this project.

PWSCA has been informed that the deadline has been extended to January 30, 1992. However, this does not meet the requirements of the Administrative Procedures Act for public notice. PWSCA has been told that lawyers areholding that publication of a notice in the *Anchorage Daily News* fulfills the requirement for public notification. The *Anchorage Daily News* is not a local Valdez paper. According to a spokesperson at the *Anchorage Daily News*, they have a circulation in Valdez of 325 households. The *Valdez Vanguard*, a weekly, reaches approximately 1000 households. Most Valdez residents do not look for public notices regarding local Valdez events in the *Anchorage Daily News*. They look for them in the *Valdez Vanguard*. Failure to publish the notification in the *Valdez Vanguard* with complete information about the public comment period for both the Air Quality Permit and the Coastal Zone Consistency determination with the correct comment dates consitutes inadequate notification of the affected publics. PWSCA requests that the comment period be restarted when proper public notice has been given to the people of Valdez.

CONCLUSIONS

The potential risk of loss of life and an oil spill occuring as the result of structural failure during an earthquake, tsunami or flooding appears high. PWSCA recommends that before a Coastal Consistency determination is made that the applicant be required to do a detailed geophysical analysis, seismic engineering study including borings to 100 feet (as DOT does for bridges and should also include a shaking amplification model), do an oil spill risk assessment, and make all studies available for peer and public review.

PWSCA requests that Petro Star be required to undergo a PSD review as we feel this would settle many of the air quality concerns we have. Without a PSD review Petro Star would not be required to utilize best available pollution prevention technology in their facility. Petro Star has indicated that they have been purchasing pieces of refineries over the past 10 years and that this is what they would use to construct a refinery here in Valdez. The EPA requires the best available technology.

The time table publicized by Petro Star for the facility to come on line (fall 1992) with the above mentioned design and engineering aspects either missing or misrepresented, makes it evident that Petro Star cannot be expected to construct and operate a refinery in Valdez in a safe and responsible manner. PWSCA therefore urges you to refuse Petro Star's Air Quality Control Permit to Operate (ADEC File No. 9124-AA001) and rule that this project is inconsistent with the Alaska/ Valdez Coastal Management Program and Consistency review (State I.D. No. AK911223-12A).

If it has not become obvious that this project should not be allowed to proceed, then PWSCA requests that public hearings be held in Valdez before a final decision on their permit application and coastal consistency is made.

OBSERVATION:

There is a recognized value in having industry and environmental organizations work together. PWSCA believes that the problems that have accumulated with this proposed project could have been minimized if Petro Star had tried to involve the public in a constructive pre-planning role. For example, in March of 1991, Yukon Pacific Corporation agreed to made a special grant to the Alaska Conservation Foundation to administer the Trans-Alaska Gas System Environmental Review Committee. PWSCA is a participant on this Committee which brings together a sharing of concerns, issues, plans and knowledge. The goal is to save time and money by minimizing such things as lawsuits and re-engineering costs that result from the confrontational approach that too often characterizes the relationship between industry and environmental groups. PWSCA suggested the Joint Meeting that was sponsored by the City of Valdez as an attempt to begin a constructive dialog with Petro Star. Unfortunately, Petro Star did not follow up on concerns raised at the meeting.

At this point in time, the Yukon Pacific Review Committee is working out well, although it is still too early to tell how well the environmental community's input will be utilized. The Yukon Pacific approach does not necessarily guarantee that a project will receive full support from the environmental community nor does it mean that input from the environmental community will be used in a meaningful manner. However, PWSCA is committed to the idea of working together with industry to try to constructively identify potential problem areas in a project at an early stage, so that the company has the opportunity to respond in a timely manner and the risk of litigation delaying a project is reduced. We regret that Petro Star did not wish to pursue such an approach. We expect that the experience with Yukon Pacific will continue to be positive and productive and hope that in the future other companies will follow Yukon Pacific's lead (Appendix II).

Thank you for this opportunity to comment and feel free to contact us with any questions or for any further information.

Respectfully submitted by,

David P. Janka
Executive Director

Attached:
Bibliography.
Appendices 1&2 (addressee only).

cc: ADEC Valdez; Alaska Dept. of Fish and Game; ADNR; EPA; Army Corps of Engineers; City of Valdez; Petro Star; Alaska Representatives: Gene Kubina; State Senators Jay Kerttula and Curt Menard; Regional Citizens Advisory Council; Valdez Fisheries Development Association; Jeff Sauer, attorney & Sierra Club Legal Defense Fund; Trustees for Alaska; Alaska Center for the Environment; Northern Alaska Environmental Center; Alaska Conservation Foundation; Cordova District Fisherman United; Oil Reform Alliance; Marine Advisory Program; Public Awareness Committee for the Environment; Greenpeace, Anchorage; Sierra Club, Anchorage; KCHU radio; APRN radio; *Valdez Vanguard*; KVAK radio and *The Pioneer*; *Anchorage Daily News*; *Anchorage Times*.

Bibliography of Works Consulted

1. Circulation Department (Anchorage Daily News). Phone Conversation on Circulation in Valdez. ; 1992 Jan 10.

2. City of Valdez. Joint Meeting: Petro Star Refinery (abstract from tapes). ; 1991 Nov 5. City of Valdez.

3. City of Valdez. Joint Meeting: Petro Star Refinery (tapes of meeting). ; 1991 Nov 5. City of Valdez, Valdez, AK 99686.

4. The Committee on the Alaska Earthquake of the Division of Earth Sciences National Research Council. The Great Alaska Earthquake of 1964: SEISMOLOGY AND GEODESY. Washington, D.C.: National Academy of Sciences; 1972.

5. Committee on the Alaska Earthquake of the Division of Earth Sciences, National Research Council. The Great Alaska Earthquake of 1964: TECTONICS. Washington, D.C.: National Academy of Sciences; 1972.

6. Committee on the Alaska Earthquake of the Division of Earth Sciences, National Research Council. The Great Alaska Earthquake of 1964: ENGINEERING. Washington, D.C.: National Academy of Sciences; 1973.

7. Coulter Henry W.; Migliaccio, Ralph R. Effects of the Earthquake of March 27, 1964 at Valdez, Alaska. Washington, D.C.: U.S. Government Printing Office; 1966; Geological Survey Professional Paper 542-C.

8. David Dengel (Director of Community Development). [Letter to City Manager, P.O.C., City Engineer, City Attorney, Fire Chief]. Valdez; 1991 Dec 2. Petro Star loading facility proposal.

9. David Dengel (Valdez Director of Community Development). [Letter to Mayor and City Council]. Valdez; 1991 Dec 12. Update on Petro Star Project.

10. Eckel, Edwin B. The Alaska earthquake March 27, 1964: Lessons and Conclusions. Washington, D.C.: U.S. Government Printing Office; 1970; Geological Survey Professional Paper 546. 57.

11. Federal Emergency Management Agency. City of Valdez, Alaska unorganized borough. Flood Insurance Study. ; 1982 Dec 1; Community Number: 020094.

12. Ferrains, Oscar (USGS, Engineering). Phone conversation. ; 1992 Jan 5.

13. Lisa K. Reinhart, Committee Communications Coordinator (Trans-Alaska Gas System Environmental Review Committee). Report. Anchorage, AK; 1991 Sep 16.

14. Page, Bob (USGS, Seismology). Phone conversation. ; 1992 Jan 9.

15. Post, Austin (USGS, Hydrology & Glaciology). Phone conversation. ; 1992 Jan 7.

16. Reichmuth, Donald R. (GEOMAX, P.C.). Evaluation of Stream Stability in the Valdez, Alaska Area. Bozeman, Montana: GEOMAX; 1989 Jul 27.

17. Valdez Vanguard. Circulation. ; 1992 Jan 14.

STATE OF ALASKA

WALTER J. HICKEL, GOVERNOR

DEPT. OF NATURAL RESOURCES

P.O. BOX 107034
ANCHORAGE, ALASKA 99510-7034
PHONE: (907) 762-2553

DIVISION OF OIL AND GAS

March 3, 1992

David P. Janka, Executive Director
Prince William Sound Conservation Alliance
P.O. Box 1697
Valdez, Alaska 99686

Dear Mr. Janka:

Thank you for your letter concerning the proposed royalty oil sale to Petro Star Valdez Refinery Joint Venture. We received only four comments on the proposed sale (including your two letters) and so we have the luxury to respond to the comments individually.

Your letters are addressed jointly to this department concerning the proposed royalty oil sale; to the Department of Environmental Conservation concerning the air quality permit; and to the Division of Governmental Coordination concerning the Coastal Consistency Permit. However, the concerns outlined in your letters are within the jurisdiction of other agencies, not of DNR.

For example, your letters include concerns with the spill contingency plans (the authority of DEC), air quality permits (DEC), NPDES permits (DEC and EPA). The Department of Natural Resources has neither the expertise nor the statutory authority to rule on those concerns. They are rightfully under the jurisdiction of other agencies. This department takes no positions on the deliberations of those agencies, and we do not expect that the proposed contract will bias their decisions. The decision on the proposed royalty oil sale should not be used to review or appeal the decisions of other agencies. If you wish to appeal their decisions, you should do so directly using the processes than exist in those agencies.

Your concerns are focused on whether the refinery is constructed and if so how it will operate. They do not focus on whether the oil used by the refinery is purchased from the state or from another source. This latter question, along with the question of whether the state is receiving a price is equal to the in-value alternative is the main focus of the finding.

Under separate cover we will be sending you a copy of the Final Finding and Determination and the final contract for the royalty oil sale. The contract, however, will not become effective until approved by the legislature and until the refinery certifies that it will be ready to process the oil. Without the required permits, the refinery cannot operate (and the contract will not take effect).

Thank you for your comments. If you have any further questions, please let me know.

Sincerely,

James E. Eason
Director

Appendix C: Changes to the Preliminary Finding and Draft Contract

The draft contract was changed in response to a request made by the Alaska Royalty Oil and Gas Development Advisory Board. The board pointed out that the draft contract may have been ambiguous with respect to when late payment penalties are due. To clarify the due date for late payment penalties, the following sentence was added to Section 5.7: "The late payment penalty is due at the time of the next Month's payment."

Section 2.1 of the draft contract was changed to simply and clarify the process by which Petro Star JV could change the amount of oil to be tendered under the contract. It standardized the notice requirements (to at least six months and ten days written notice unless the increase or decrease is less than ten percent of the then current nomination, then at least 100 Days written notice). In addition, it clarified the process to ensure that the new tendering will take effect on the first day of the first month after the applicable notice period expires (i.e., the state will not change nominations in mid-month).

No comments requested changes to individual provisions of the preliminary finding and none of the individual provisions were significantly changed.

VALDEZ FISHERIES DEVELOPMENT ASSOCIATION, INC.

P.O. BOX 126
VALDEZ, ALASKA 99686

Admin. 835-4874
Fax 835-4831
Hatchery 835-5947
Fax 835-5951

March 16, 1992

Rep. Bill Hudson, Chair
House Oil and Gas Committee
Alaska Legislature

Dear Rep. Hudson,

I am writing to support the application of Petro Star Valdez Refinery Joint Venture to buy state royalty oil for its new refinery in Valdez. (HB 559)

Valdez Fisheries Development Association, Inc. operates a hatchery at Solomon Gulch, just two miles down Dayville Road from Petro Star's refinery site -- between Petro Star and the TAPS terminal. The hatchery is permitted to take and incubate 250 million eggs a year.

The hatchery hopes to use waste heat from the refinery to either freeze or dry fish products. Talks are ongoing with the refinery's management as we work together to develop a method for using Petro Star's waste heat to accommodate potential new products and markets for the salmon industry.

Petro Star Valdez Refinery's willingness to explore such innovative technology with the Valdez Fisheries Development Association speaks highly of the owners' commitment to being a good corporate citizen in Valdez. We look forward to having the refinery as a neighbor.

Thank you for your consideration.

Sincerely,

Paul McCollum
Executive Director

First National Bank
of Anchorage

March 16, 1992

Rep. Bill Hudson, Chair
House Oil and Gas Committee
Fax # 465-2299

Dear Rep. Hudson,

I have learned that your committee is taking up the issue of selling state royalty oil to the Petro Star Valdez Refinery Joint Venture for its new refinery in Valdez. (HB 559)

I am writing to lend my unqualified support to the refinery. At a time of unemployment and declining revenues Valdez looks forward to the 20 to 30 new jobs and increased property tax revenues created by the project.

In-state processing of our North Slope oil resources has long been a goal of all Alaskans. The Petro Star project will keep the jobs in Alaska rather than sending them out of state on tankers, while providing a local source for marine diesel and home heating fuel.

I hope the members of the Oil and Gas Committee will agree with me that the Petro Star Valdez Refinery is a project worth supporting.

Sincerely,

Jim Shirrell

Jim Shirrell, Vice President & Valdez Branch Manager
First National Bank of Anchorage

March 13, 1992

Representative Bill Hudson, Chairman
Special House Committee on Oil and Gas
Alaska House of Representatives
Post Office Box V
Juneau, Alaska 99801

FAX: 465-2864
Original mailed

RE: CITY OF VALDEZ SUPPORT FOR PETRO STAR PROJECT

Dear Representative Hudson:

Enclosed is a letter from Valdez Mayor John Harris to Commissioner Harold Heinze supporting the sale of State royalty oil to the Petro Star Valdez Refinery Joint Venture. Please accept this as evidence of the formal position of the City of Valdez as it pertains to legislation pending before your committee.

I reiterate that the City of Valdez believes it is in the best interests of the State of Alaska and this community to add value to raw products leaving this State. This processing enriches and diversifies our economy and provides petroleum products to Alaskan markets at competitive prices.

Please make this letter and the attached letter from Mayor Harris a part of the record for legislation approving the royalty sale of oil to Petro Star.

Thank you for your assistance.

Sincerely,

Doug Griffin
City Manager

DG:blp

cc: Senator Jalmar Kerttula
Senator Curt Menard
Representative Gene Kubina

Office of the Mayor
February 12, 1992

Mr. Harold Heinze, Commissioner
Alaska Department of Natural Resources
P.O. Box 107034
Anchorage, Alaska 99510-7034

Re: Proposed Sale of State Royalty Oil to Petro Star Valdez Refinery Joint Venture

Dear Mr. Heinze:

The City of Valdez has reviewed the preliminary findings and determination to sell royalty oil to Petro Star Valdez Refinery Joint Venture. The City is very supportive of this contract in that it will allow the state to use a portion of its oil from the North Slope to create jobs for Alaskans.

The Petro Star Refinery Joint Venture is proposing to construct a 30,000 barrel per day topping unit in Valdez. This project will create between 20 and 25 jobs for Valdez residents. The products which are produced will be made available to Alaskan markets. This will help to reduce the cost of fuel to Alaskan purchasers.

The City of Valdez is supportive of the Petro Star Project and strongly urges you to determine that the proposed sale of state royalty oil to the Petro Star Valdez Refinery Joint Venture is in the state's best interest and forward the contract along with the final findings and determinations to the Alaska Legislature so that the Legislature may take action as soon as possible to allow this project to move forward.

Sincerely,

John L. Harris
Mayor

CC: Representative Gene Kubina
Senator Kurt Menard
Senator Jay Kertulla

#51Petro&r.212

VALDEZ CHAMBER OF COMMERCE

March 16, 1992

Rep. Bill Hudson, Chair
House Oil and Gas Committee
Alaska Legislature
Fax # 465-2299

Dear Rep. Hudson,

On behalf of the Valdez Chamber of Commerce, I am writing to let you know of our organization's support for the Petro Star Valdez Refinery Joint Venture's new refinery in Valdez. In House Bill 559, your committee is taking up the issue of selling state royalty oil to the new refinery.

Petro Star's commercial development will add an economic boost to Valdez while creating employment opportunities from construction through operations.

As a state, Alaska is growing in many avenues. The Valdez Chamber is pleased to have our city as the site of a new refinery operation. We have offered Petro Star our support in the hopes of setting an example for future business growth and economic development in our fine community.

Thank you for considering our point of view.

Sincerely,

VALDEZ CHAMBER OF COMMERCE

V. E. Collins jm

V. E. Collins
President

VEC:jm

LETTERS\LEGIS.LTR

WEL-ASKA CORPORATION

P.O. BOX 982
VALDEZ, AK 99686
PHONE: (907) 835-2424
FAX: (907) 835-5170

TELEFAX TRANSMITTAL COVER SHEET

Date: March 16, 1992

Please Deliver To:

Name: Rep. Bill Hudson, Chair

Firm: House Oil and Gas Commitee

Location: Juneau

Telecopier No.: 465-2299

From: Del and Virginia Welch

Total number of pages this transmittal - including cover sheet: 2

Remarks: Letter in support of the Petro Star Valdez Refinery Joint Venture.

Sent By: SB

Time Sent: 11:20 AM

WEL-ASKA CORPORATION

P.O. BOX 962
VALDEZ, AK 99686
PHONE: (907) 835-2424
FAX: (907) 835-5170

March 16, 1992

Rep. Bill Hudson, Chair
House Oil and Gas Committee
Alaska Legislature
Fax# 465-2299

Dear Rep. Hudson,

We are writing to lend our support for selling state royalty oil to the Petro Star Valdez Refinery Joint Venture for its new refinery in Valdez. (HB 559)

Through our mother firm, Wel-Aska Corporation and a number of other companies, we have been in the construction business here in Valdez for more than 20 years. In 1981 we bought the best of the Native corporation timber in the area, and over the next years sold millions of board feet to Japan. More recently, we have purchased Katalla, Alaska's first oil field. We are looking at the possibility of both preserving the site and developing there again.

We welcome the establishment of a new industry in Valdez. Assessed property values in Valdez are declining, and our community needs the additional revenues that the refinery will generate. Also, we need the two dozen year-round jobs that the refinery will bring.

We also like the fact that the refinery's owners are Alaskans instead of outsiders. We have known Petro Star's Walt Schlotfeldt for years, and we know him to be a responsible, prudent businessman who makes it a point to give something back to the community. The MarkAir people and the Lindseys of Seward are also real Alaskans. Their joint venture refinery will be a fine addition to Valdez.

Sincerely,

Virginia Welch
President
Wel-Aska Corporation

Del Welch
President
Ocean Green Alaska, Inc.

Valdez Realty

"The Dirt Merchant"

DATE: 3/16/92 A.M.

TO: Rep Bill Hudson - chair
House Oil & Gas Committee
AK. Legislature

FAX NO. - 907-465-2299

Phone -

FROM: Walter M. Wood
VALDEZ REALTY
P.O. Box 868
Valdez, Alaska 99686

FAX NO. - 835-5462

Phone - 835-2408

COVER PAGE PLUS (1)

MESSAGE -

My Views on Petro-Star Valdez Refinery.
Please Consider Favorably.

Walter M. Wood

Valdez Realty

"The Dirt Merchant"

March 16, 1992

Rep. Bill Hudson, Chair
House Oil and Gas Committee
Alaska Legislature
Fax #465-2299

Dear Rep. Hudson,

I am writing to ask your favorable vote on HB 559, which calls for selling state royalty oil to the Petro Star Valdez Refinery Joint Venture for use in its new refinery in Valdez.

I have been in the real estate business in Valdez since July 1, 1976. Before that, my wife and I homesteaded in the Big Lake area north of Anchorage, beginning in 1958, where we voted in the Alaska Statehood Election. We later moved to Anchorage. Over the years I have lived through the ups and downs of our local economy, the boom years and the slow times.

I support the Petro Star refinery because our ecomony is strengthened by the establishment of a new small business such as this one. My experience has been that a number of small businesses lead to better local employment than one huge new industry. Petro Star's 20 to 30 new jobs, once the refinery comes on line next fall, will have positive impacts throughout the community.

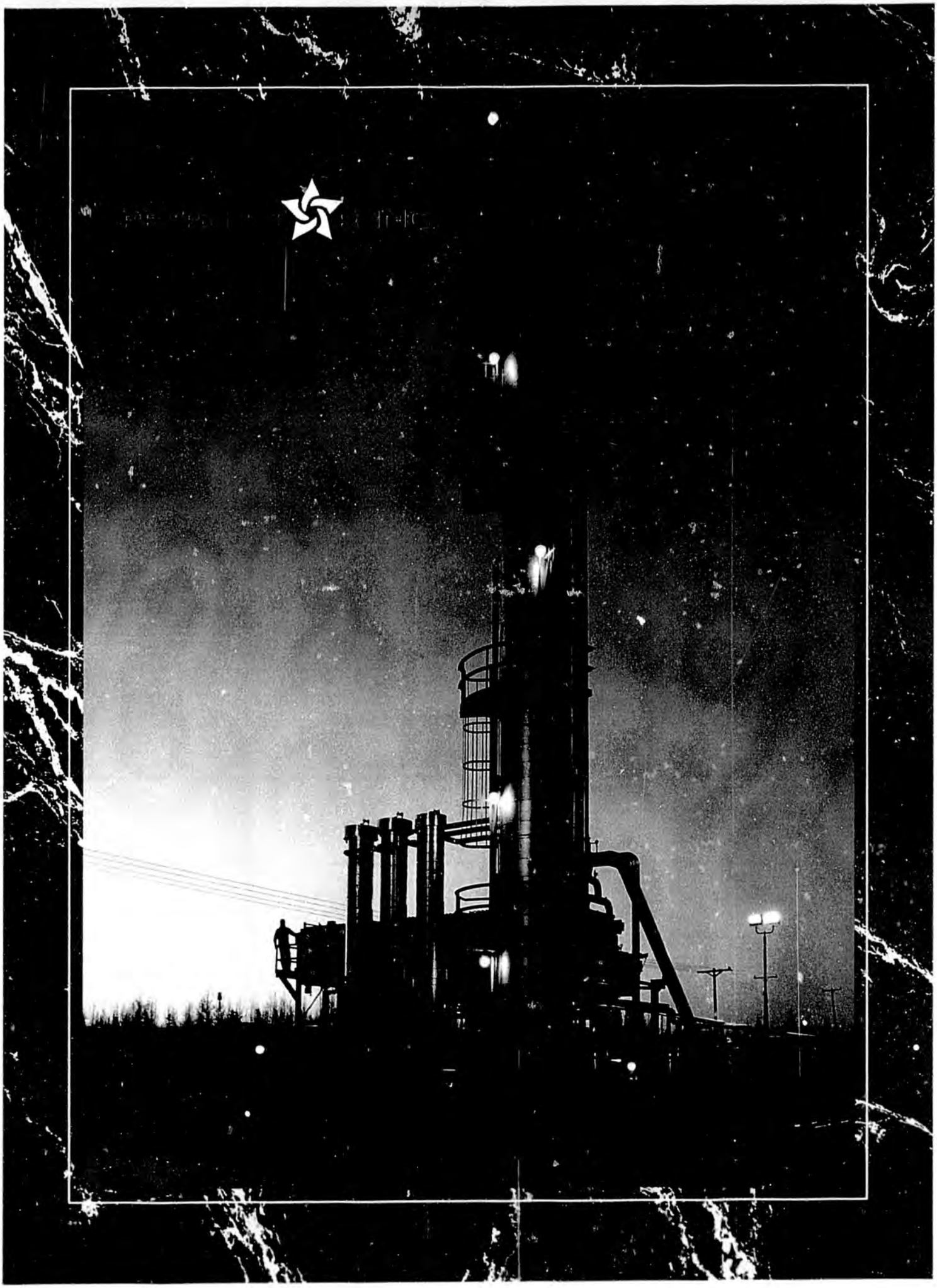
Thank you for your consideration.

Sincerely,

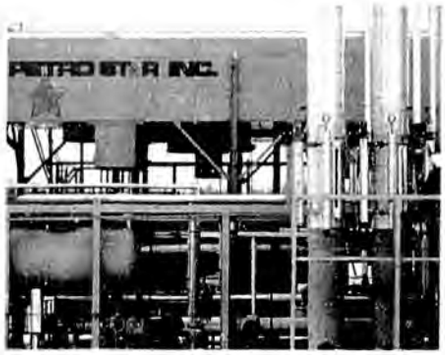
Walter M. Wood

Walter M. Wood, Broker

P. O. BOX 888/VALDEZ, AK 99686/(907)835-2408



An Alaska Success Story



Petro Star Inc. was formed in 1984 to fill a unique role in Alaska's petroleum market. While other Alaska refineries were processing a wide variety of petroleum products, Petro Star's founders recognized the need for a refinery that would process only light fuels — fuels critical to heating homes and operating businesses in rural Alaska.

Moving quickly to meet the market need, Petro Star Inc. built its refinery at North Pole within a matter of months. This location placed the company next to the commercial and transportation hub of Fairbanks and close to the trans-Alaska pipeline, a direct source of crude oil. Petro Star soon acquired fuel distribution companies and began to distribute its products throughout interior Alaska and the Arctic Slope, including Prudhoe Bay.

Petro Star was immediately recognized as a success for its ability to serve a targeted market segment. Less than a decade later, Petro Star Inc. has grown into a family of vertically integrated companies that serves a larger Alaska market. Petro Star is the only Alaska-owned, independent refining and fuel marketing operation in the state.

The Petro Star Family

The following companies make up the Petro Star family:

Petro Star's North Pole Refinery is a small-scale, efficient operation that produces kerosene, diesel and jet fuel for Alaska markets. This 8,000 barrel-per-day refinery processes crude oil directly from the trans-Alaska pipeline and returns the unused portion back to the pipeline with virtually no waste. The refinery operates in the extreme weather conditions of interior Alaska, which can range from 95° F (35° C) in summer to minus 65° F (minus 54° C) in winter.

Petro Star Valdez, Inc. was formed in 1991 to construct and operate a refinery in Valdez, Alaska. Petro Star Valdez Refinery, a 30,000 barrel-per-day refinery is designed to produce marine, jet, diesel and heating fuel. Like Petro Star's North Pole refinery, the Valdez refinery will draw its supply directly from the trans-Alaska pipeline. Valdez, the southern terminus of the pipeline, is the farthest north ice-free port in the western hemisphere.

Sourdough Fuel, a subsidiary of Petro Star since 1986, is the oldest and largest heating fuel distributorship in interior Alaska. With roots dating from Alaska's 1898 gold rush, Sourdough Fuel serves more than 6,000 commercial and residential customers directly from Petro Star's North Pole Refinery. Sourdough Fuel's operations include convenience stores and service stations in Fairbanks and North Pole.

Alaska Lube and Fuel is an Anchorage-based petroleum lubricant distributor with customers throughout Alaska. Its products include all the various lubricant lines of Mobil, Shell and Exxon products, including engine oils, hydraulic oils and greases. Alaska Lube and Fuel operates the only fully equipped bulk lube oil repackaging facility in Alaska.

Coldfoot Services offers the only public lodge on the North Slope Haul Road between the Yukon River bridge and Prudhoe Bay. Located in a picturesque setting on the south side of the Brooks Range, Coldfoot serves the oil support industry and summer tourists. Coldfoot offers travellers a hospitable motel and restaurant, as well as mechanical repair, automotive fuels and propane.

An Arctic Slope Regional Corporation Subsidiary

Petro Star Inc. is a wholly owned subsidiary of Arctic Slope Regional Corporation (ASRC), which was formed by Congress in 1971 under terms of the Alaska Native Claims Settlement Act. ASRC manages the land and business interests of its more than 6,500 Inupiat Eskimo shareholders.

Arctic Slope Regional Corporation is a major resource developer and prominent business investor. In 1991, the corporation ranked as the third largest Alaska owned and operated company based on gross revenues and employment. Its land holdings include five million acres across the North Slope of Alaska.

Arctic Slope Regional Corporation acquired Petro Star in 1989 to strengthen its vertical integration. ASRC is fully integrated in downstream petroleum operations including oilfield services, pipeline construction and maintenance, surveying, pipeline corrosion detection, oil spill prevention and clean up operations. Petro Star Inc. allows ASRC to add petroleum refining and distribution to the services offered to customers.

Petro Star's Mission

Our mission is to be a vertically integrated, environmentally concerned manufacturer and distributor of quality petroleum products and related services. In order to fulfill our mission, and thereby maximize our shareholders' return, our skilled employees will safely manufacture and deliver a high-value product and provide quality service to satisfied customers.

Experienced Personnel

Petro Star Inc. takes pride in the expertise, dedication and abilities of its employees. At the helm of Petro Star is a strong management team with more than 50 years of experience in Alaska's petroleum industry.

Before co-founding Petro Star Inc., Chairman of the Board Stephen Lewis (seated) developed valuable management skills in the petroleum industry and worked hands-on in the refinery business. Company President Walt Schlotfeldt was raised in the Alaska fuel distribution business. His family owned and operated Sourdough Fuel, which Schlotfeldt managed for 12 years before joining Petro Star in 1987.

Petro Star's employees are also veterans in the petroleum industry. The company's personnel are skilled in their trades and offer the company solid knowledge and proven experience. Petro Star employs more than 100 Alaskans.

Products and Markets

Petro Star is dedicated to meeting the unique challenges of producing and distributing fuel in the Arctic. Many of Petro Star's customers live and work in remote areas where temperatures plunge to dangerous levels. For these people, access to quality fuel is a life or death issue. Petro Star tests all its fuel in a state-of-the-art laboratory to ensure that the fuels meet a consistently high standard. Petro Star offers fuels with one of the lowest pour points in Alaska, allowing use of these fuel even in severe arctic conditions.

Petro Star's customers include residential consumers, military installations and industrial customers throughout interior and northern Alaska. The company is one of the largest distributors of petroleum, oil and lubricants to North Slope communities and the Prudhoe Bay oilfields.

PSI North Pole Refinery

Description: Petro Star's North Pole refinery, built in 1985, is a 8,000 barrel-per-day refinery that processes kerosene, diesel and jet fuels. The refinery is unique compared to refineries outside Alaska because of its immediate proximity to a crude oil source. By tapping directly into the trans-Alaska pipeline, the North Pole refinery is able to process light fuels for a targeted market. This arrangement keeps the refinery small, efficient and profitable. Petro Star operates the North Pole refinery according to strict environmental safeguards.

Operations: The North Pole refinery draws its crude oil directly from the trans-Alaska pipeline. The crude oil enters the refinery at a temperature of 100° F (38° C), where it is heated to 600° F (316° C) and becomes a boiling mass of vapor. The oil then enters the distillation tower, where the light fuels rise to the top and the heavier fuels remain at the bottom. Petro Star separates the fuels, tests their quality and pumps them into holding tanks for distribution at a later time.

The refinery's heater is fired by fuel taken from the distillation tower. In total, the refinery retains approximately 25 percent of each barrel for fuel and product. The remaining crude oil is cooled down to 100° F (38° C) and returned to the trans-Alaska pipeline with no waste in the process.

Quality: Petro Star's customers require fuel they can use year-round — through severe arctic winters as well as mild summers. For this reason, Petro Star tests its fuels to ensure consistently high quality standards. The fuels are tested at a minimum of every four hours in a state-of-the-art laboratory for their cloud and pour points, gravity, and flash level. Additional tests are performed on jet fuels to ensure a safe and high quality fuel.

Markets: Petro Star distributes its products throughout interior and northern Alaska. Its customers include rural Alaska communities, such as Anaktuvuk Pass and Wiseman; military bases such as Ft. Wainwright, Ft. Greely and Eielson Air Force Base; commercial customers such as Usibelli Coal Mine and Alyeska Pipeline; and the North Slope industrial market.

Efficiency: Operating a small-scale refinery allows Petro Star to keep overhead down and productivity up. The entire refinery is operated by seven Alaskans, most of whom have been with the refinery since its inception. In addition to being trained in refinery operations, all employees have also been cross-trained in other fields such as welding, engineering, oilfield construction and chemistry. This cross-training contributes to the refinery's overall efficiency. As a fully automated refinery, the plant can be run by a single operator. The North Pole refinery operates 24 hours a day, 365 days a year.

SOURDOUGH FUEL

Description: Sourdough Fuel is the oldest and largest fuel distributor in interior Alaska. Its origins date back to "Sourdough" Ellis, who distributed goods during the gold rush of 1898. Today, Sourdough Fuel distributes diesel and heating fuel, provides furnace repair and maintenance services, and operates gas stations with convenience stores. Sourdough Fuel was acquired by Petro Star in 1986 and maintains offices in Fairbanks and North Pole.

Markets: Because natural gas is generally unavailable and electricity too costly, most residents of Fairbanks and other interior communities depend on petroleum for their heating needs. Sourdough Fuel provides interior Alaska with locally-produced heating and diesel fuel directly from the Petro Star refinery. Sourdough Fuel distributes throughout the Fairbanks area and to communities as far away as Eagle, located 380 miles from North Pole.

Operations: Sourdough Fuel maintains a fleet of 10 heating fuel trucks and three large tanker trucks. The tanker trucks bring fuel from the refinery to a bulk plant at Sourdough's headquarters, from which the heating fuel trucks are loaded. The heating fuel trucks then deliver fuel directly to homes and businesses. Sourdough serves more than 5,000 customers on an automatic delivery basis and delivers fuel "on call" via their radio dispatch trucks to several thousand additional customers.

Customer Service: Customers are loyal to Sourdough Fuel because of the company's history of excellent service and high quality of product. Petro Star's fuels have one of the lowest pour points in Alaska, allowing customers to use their fuel even if temperatures plunge below minus 60° F (minus 51° C). To provide the most convenient service possible, Sourdough offers 24-hour furnace repair, a budget payment plan, and "prompt payment," senior citizen and military discounts. Sourdough Fuel also operates gas stations with convenience stores in Fairbanks and North Pole. Sourdough Fuel employs approximately 40 Alaskans, most of whom are long-time Alaskans and active community members.

Alaska Lube and Fuel

Background: Established in Anchorage in 1987 and acquired by Petro Star Inc. in 1991, Alaska Lube and Fuel is a bulk lube repackaging company. The company imports lubricating oils to Alaska in bulk, repackages them in its plant, then distributes the finished product to industrial customers from Kenai to Barrow. In addition, Alaska Lube and Fuel distributes refined products such as gasoline, jet fuels and diesel in the Anchorage area.

Operations: Alaska Lube and Fuel purchases bulk lubricants from Mobil and Shell and transports them to Anchorage. The lubricants are stored in 12 indoor 15,000 gallon tanks at the Port of Anchorage and packaged according to manufacturers' specifications. The lubricants are then sold under the respective manufacturers' brand names and distributed throughout the state. Alaska Lube and Fuel also imports and distributes pre-packaged lubricants from Exxon.

Markets: Alaska Lube and Fuel serves a diverse cross-section of markets, including the petroleum, mining, aviation, marine and fishing industries. Through local distributors in Valdez and Cordova, the company supplies lubricating oils in those communities for logging operations and fishing fleets. One of Alaska Lube's largest markets is the oil support industry on the North Slope. The light fuels (aviation gas, diesel and gasoline) are distributed to service stations, air carriers and other commercial end users, allowing Alaska Lube and Fuel to market a complete package of petroleum products to its customers.

Efficiency: Alaska Lube and Fuel, with a work force of 10 Alaskans, is a small-scale, efficient operation serving a specialized segment of the market. Because of the cost savings in importing bulk quantities of lubricating oils, Alaska Lube is able to offer its customers throughout the state the best value for this essential commodity.

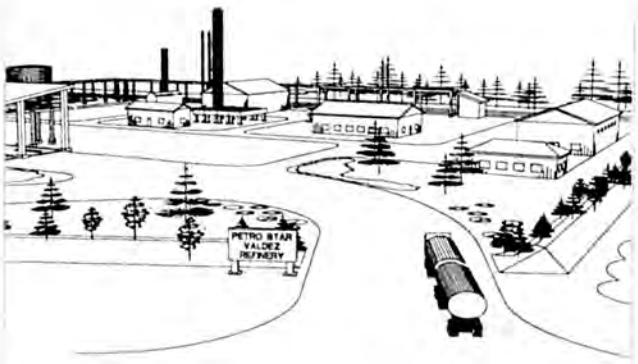
Customer service: A young, aggressive company, Alaska Lube and Fuel provides technical services for its multiple lines of products. Lube oil seminars for large customers are a standard feature, and Alaska Lube's specially trained staff are able to match the right product with each customer's equipment and operating conditions. Because choice of lubricant is critical when temperatures drop far below zero, this technical service is particularly welcomed by our customers. The combination of superior service and competitive pricing is helping Alaska Lube and Fuel become the premier lube oil and petroleum products distributor in Alaska.

PETRO STAR VALDEZ REFINERY, A JOINT VENTURE

Description: Scheduled for completion in the late fall of 1992, the Petro Star Valdez Refinery is a 30,000 barrel-per-day refinery that will produce jet fuel, diesel fuel and a marine diesel oil. Like Petro Star's North Pole refinery, the Valdez refinery will obtain its crude oil directly from the trans-Alaska pipeline and will return the residual crude oil back to the pipeline. This refinery has been developed to meet the needs of military and civilian jet aircraft, shipping companies, and homes and businesses in the Valdez area, as well as coastal Alaska. As one of the newest refineries in the United States, the Petro Star Valdez Refinery will be built according to strict environmental regulations.

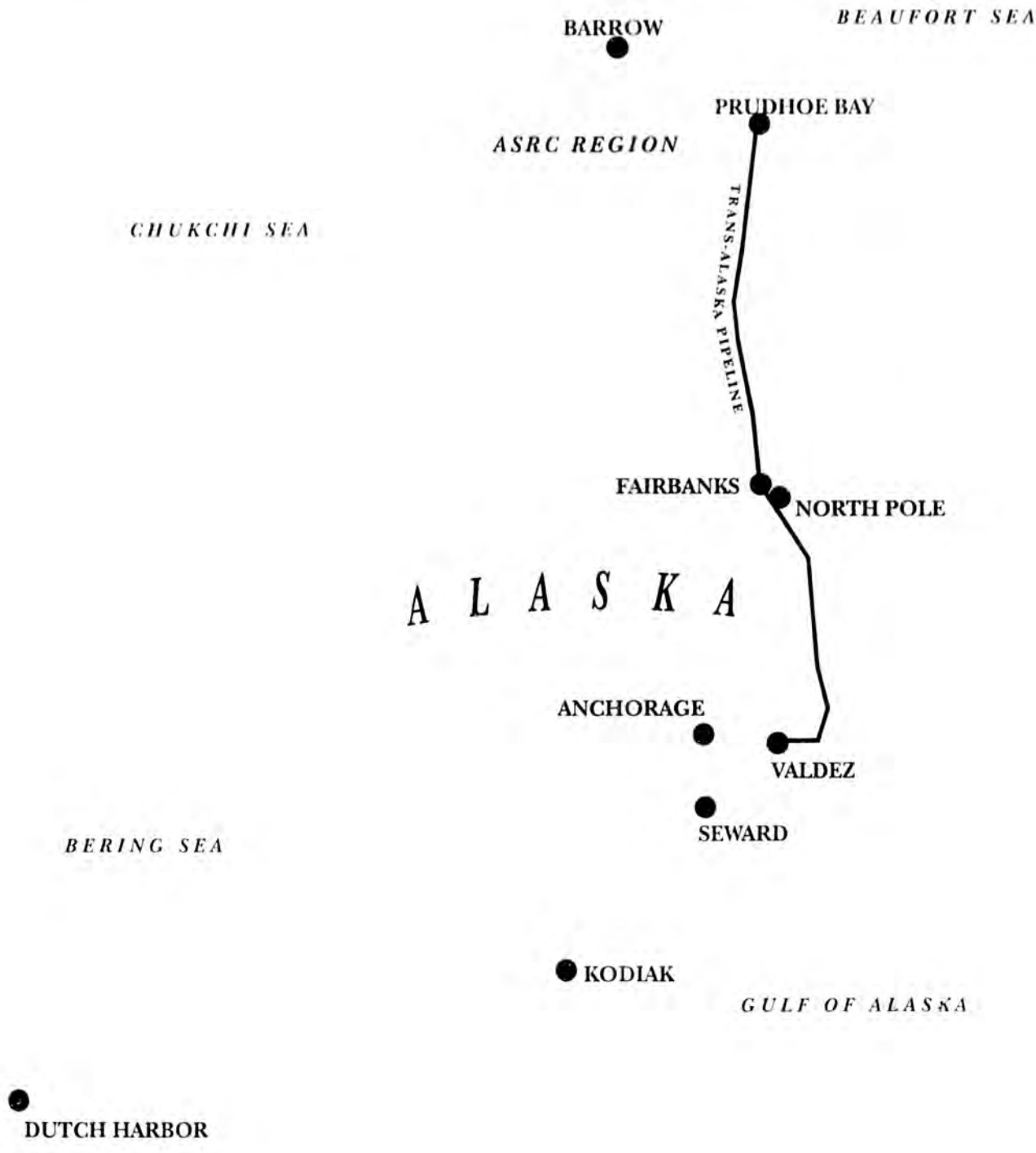
Partners: The Petro Star Valdez Refinery is a joint venture of Petro Star Valdez Inc., a wholly-owned subsidiary of Arctic Slope Regional Corporation; Alaska Refining, Inc., a wholly-owned subsidiary of the Neil Bergt Trust; and Harbor Enterprises, Inc., dba Petro Marine Services, owned by Dale and Carol Ann Lindsey of Seward. Neil Bergt, of Anchorage, is owner and chairman of the board of MarkAir, Alaska's largest in-state air carrier. The joint venture combines the capital strength and business capabilities of the third, fifth and ninth ranked Alaska-owned companies. (Ranking by Alaska Business Monthly in its "New 49ers" list for 1991.)

Operations: The mid-size refinery will be located on the south side of the Port of Valdez opposite the city itself. The 50-acre site is adjacent to Dayville Road, about 4.5 miles from the Alyeska terminal. The Valdez refinery will process crude oil drawn directly from the trans-Alaska pipeline. The crude oil enters the refinery at a temperature of 100° F (38° C), where it is heated to 600° F (316° C) and becomes a boiling mass of vapor. The oil then enters the distillation tower, where the light fuels rise to the top and the heavier fuels remain at the bottom. Petro Star separates the fuels, tests their quality and pumps them into holding tanks for distribution at a later time. The remaining crude oil is cooled down to 100°F (38° C) and returned to the trans-Alaska pipeline with no waste in the process.



Markets: The refinery will supply MarkAir with jet fuel and the Valdez area with diesel and heating oil. The balance of the production will be marketed by Petro Marine Services, primarily in Seward, Kodiak and Dutch Harbor. MarkAir's fleet of more than 70 aircraft consumes nearly 25 million gallons of jet fuel each year, and the Valdez refinery will provide the carrier with a stable source of aviation fuel.

Efficiency: The Petro Star Valdez Refinery will be fully automated and will be in operation 24 hours a day, 365 days a year. An important addition to the local tax base, the refinery will create full-time jobs for about 25 Alaskans. The refinery will supply a broad segment of Alaska's market with a high-value, locally-produced product.


BARROW
BEAUFORT SEA
PRUDHOE BAY
ASRC REGION
CHUKCHI SEA
TRANS-ALASKA PIPELINE
FAIRBANKS
NORTH POLE
ALASKA
ANCHORAGE
VALDEZ
SEWARD
BERING SEA
KODIAK
GULF OF ALASKA
DUTCH HARBOR

PETRO ST R INC.

P.O. Box 61030
Fairbanks, Alaska 99706
Telephone (907) 474-8210
Fax (907) 474-9503

HARBOR ENTERPRISES, INC.

Dale Lindsey, owner and president of Harbor Enterprises, Inc., surveys his Petro Marine Services bulk plant at Dutch Harbor. Photo by David Predeger

The term full service has special meaning for fishermen whose work often takes them hundreds of stormy miles from the nearest fuel terminal. When boats return to remote harbors, the crews seek efficient, comprehensive service-and premium quality, competitively priced fuel.

In 1984 Harbor Enterprises, Inc. one of Alaska's oldest heating oil distributorships, began expanding to meet the fishing industry's growing demand for fuel and service. During the next three years the small, Seward-based operation owned by Dale Lindsey became one of the state's major revenue-producing companies.

Harbor Enterprises was founded in Seward in 1936 as Andy's Oil Delivery. Andy's, named after founder Andy Novak, delivered heating oils to area businesses and residents. Lindsey joined Andy's as a truck driver in 1956 and purchased the company three years later.

"In one respect, it was a matter of being in the right place at the right time," says Lindsey. "Still going into business for myself was the single most significant career milestone in my life. My grandfather, father, and brother all worked for the Alaska Railroad, so becoming an entrepreneur was a major shift away from family tradition.

I had to borrow the money to make the down payment, but I learned early on that indebtedness is a great motivator. I also came to the understand the importance of accurately assessing risk and perceiving opportunity."

For the next 25 years the company provided stable and profitable service to the Seward area. The firm's real growth curve, however, began in 1984, when Lindsey built a 3-million-gallon bulk fuel plant at Dutch Harbor, the key port for fleets fishing the lucrative North Pacific Ocean and Bering Sea.

Lindsey named the facility Petro Marine Services, reflecting the company's primary function of marketing petroleum products to Alaska's fishing industry.

Within two years Harbor Enterprises expanded the Dutch Harbor operation to 6 million gallons, acquired a bulk plant in Kodiak, and rebuilt another in Nikiski.

By 1987 Petro Marine was barging petroleum products to communities along the south-central coast, Kodiak Island, Alaska Peninsula, and the Aleutians. In 1988 the company chartered a second barge and extended its service to Prince Williams Sound, Bristol Bay, and the Kuskokwim Delta.

The results of this expansion were dramatic: Company sales jumped from 6.2 million gallons in 1984 to 89.9 million gallons four years later. During the same period revenues increased from $6.1 million to $68.2 million. The revenue increase in 1985 alone amounted to an astronomical 330 percent. Revenues increased another 47 percent in 1986, 37 percent in 1987, and an additional 53 percent in 1988.

The company's major capital expansion during the mid-1980's is particularly noteworthy because the growth occurred during a severe economic downturn; the global

oil price collapse of 1986 curtailed almost all development throughout Alaska.

The move into Dutch Harbor reflected a critical decision for Lindsey. Investing a significant amount of dollars to construct a plant at such a remote port to serve a volatile market is a risk. Still, Lindsey says, "As an owner of two crab fishing vessels, I knew the area's potential. Also, I wanted to expand geographically and not be so dependent on the Seward market."

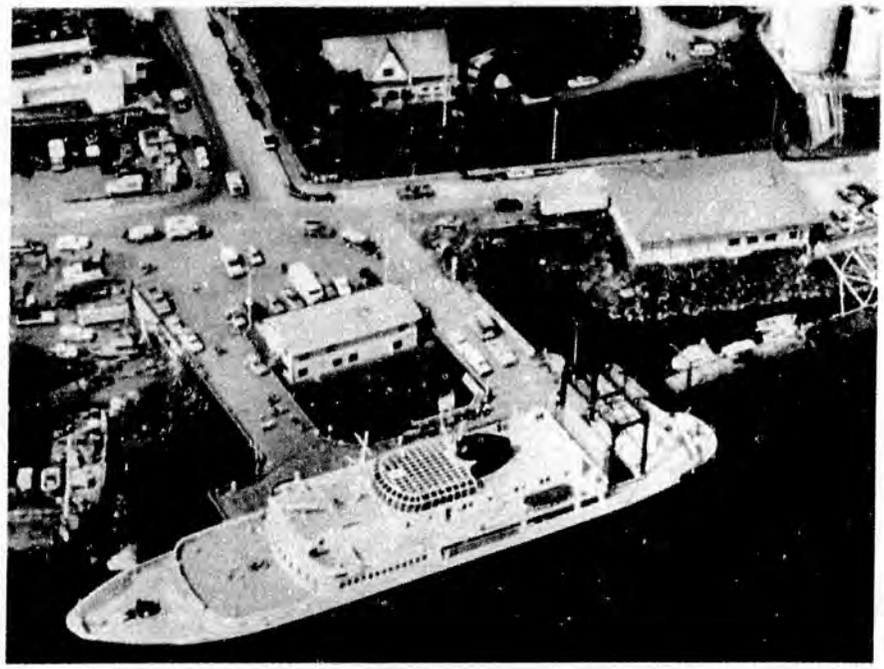
"I have always pushed for internal growth, but I also wanted to keep the business expanding through acquisitions," he continues. "This dual expansion has increased our overall volume to the point where we could achieve significant benefits through purchasing power and other economies of scale."

Harbor Enterprises' growth can be attributed to two factors. First, a tremendous upswing began to occur in Alaska's commercial fishing industry in 1985; second, Chevron, traditionally the major petroleum marketer in Alaska, sold its wholesale bulk plant operations between 1984 and 1986. This divestiture provided Harbor Enterprises with the opportunity to acquire Chevron facilities in Seward and Kodiak and at the same time assume a portion of Chevron's barge distribution system.

Harbor Enterprises' capital expansion program was carried out with a strong consideration for efficiency. In 1988, when sales from the five bulk plants and the barge operation shot above $68 million, the company had just 43 employees. "It's significant to note that each employee's efforts generated more than $1.5 million in revenues," says Lindsey. The enterprise's shoreside plant's are situated so that none competes with another. Rather, each plant complements the others by providing convenient, consistent, and efficient service to the predominantly marine clientele.

"Consistency is the bottom line for continued success," says Lindsey. "First and foremost, Petro Marine is a petroleum marketing company that is in the service business. While increasing volume has been our consistent strategic goal, we also have focused on learning what customers expect in terms of products and services."

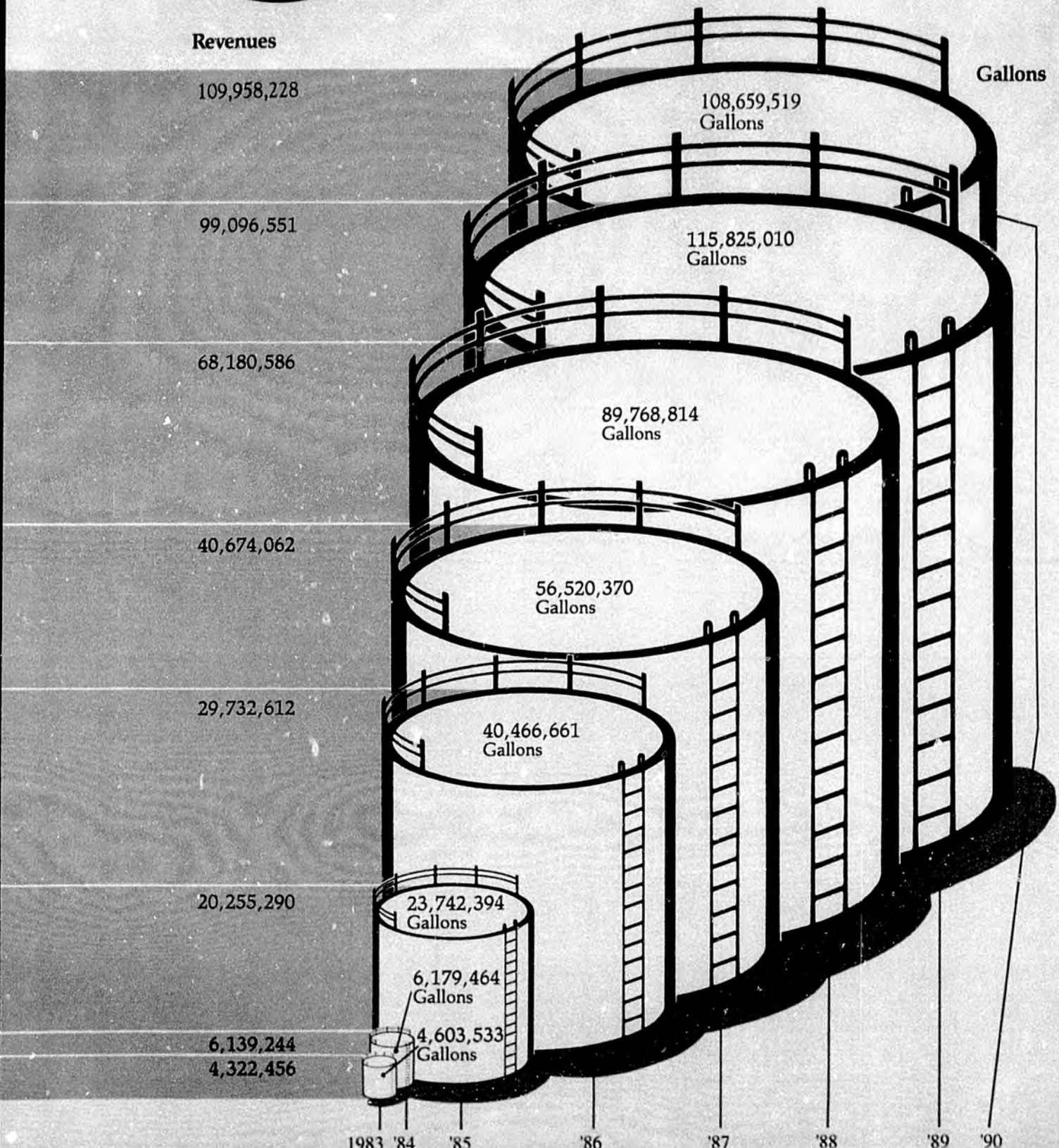
"As a company, we constantly try to enhance our level of service by paying attention to details, the little things that win customer loyalty. The essence of successful marketing, whether marine or otherwise, is to consistently offer quality products and premium service at competitive prices. This is the course we intend to maintain."



Petro Marine's Kodiak bulk plant was acquired in 1986.

PETRO MARINE

Growing up in Alaska



Latitude: Between 47° and 68°
Longitude: Between 128° and 173°

The Petro Marine barges are our floating marketing operation. From our Nikiski Terminal our barges ply Alaska waters supplying petroleum products to coastal communities in South-central Alaska, Kodiak Island, the Alaska Peninsula, the Aleutian Chain, Western Alaska and the Bering Sea.

PETRO BARGE

With up to 3 million gallons of cargo capacity, customers have learned they can depend on us to supply the fuels needed for heat and to power their electric generators, processing plants, industrial equipment, autos, airplanes, and vessels. Our schedules are frequent and flexible and, as always, quality and personal service is a top priority with us.

Within the Petro Marine barge concept the only limits are customer needs. So if you have a special requirement, please call our Anchorage Marketing office for prices and schedule information and we'll chart our next course to you!

Products Available:

- **Aviation, automotive, heating and marine fuels**
- **Lube oils and greases**
- **Cleaners and absorbents**
- **Filters and anti-freeze**
- **Additives and petroleum handling equipment**

Telephone:	(907) 278-7856
Toll Free:	(800) 478-5823
Telefax:	(907) 258-2362
Telex:	9102404067
Radio:	Marine VHF Radio Channel 16 Side Band 4125.2

See reverse side for more information.

EQUIPMENT SCHEDULE & SPECIFICATIONS

TUG NAME	*BARGE NUMBER*	*DIMENSIONS*	*GALLONS*	*BULK PRODUCT CAPABILITY*	*PUMPING SYSTEMS*	*PACKAGE PRODUCT CAPABILITY*	*RADIO CALL LETTERS*
PETRO MARINER*	FNT-180*	180'X54'X13'	632,000	5 GRADES/ 14 COMPARTMENTS	3	2-20'CONEX VANS PLUS 120 DRUMS	WAQ 2746
PETRO CHALLENGER*	FNT-340*	330'X86'X21'	3,000,000	5 GRADES/ 18 COMPARTMENTS	3	1-20' CONEX VAN PLUS 160 DRUMS	WAQ 2746
VARIOUS FOSS TUGS	FOSS-255	250'X76'X17'	1,600,00	5 GRADES/ 11 COMPARTMENTS	4	2-20' CONEX VANS PLUS 200 DRUMS	

NOTE: IN ADDITION TO THE ABOVE REFERENCED EQUIPMENT WE PERIODICALLY CHARTER OTHER TUGS AND BARGES AS NECESSARY TO MEET CUSTOMER NEEDS.

* DENOTES COMPANY OWNED EQUIPMENT.

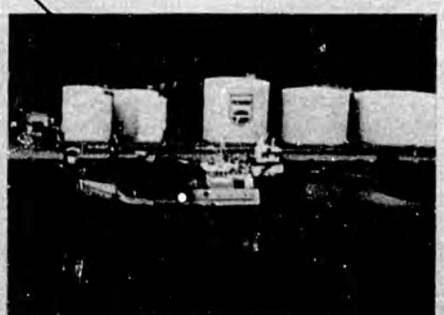
Latitude: 54°
Longitude: 167°

Dutch Harbor is the supply and transportation hub for Western Alaska, servicing the Aleutian Islands and north into the Bering Sea.

DUTCH HARBOR

Petro Marine provides fuel and services to the vast Bering Sea domestic fishing fleet, foreign fishing vessels, aircraft, tow boats, construction companies and the seismic and oil exploration activity in the area.

Our bulk fuel capacity at Dutch Harbor is nearly 6 million gallons. With our large storage capability, we realize better barge transportation rates and these savings are passed directly on to our customers.



Services and products available:

- **Aviation, heating and marine fuels**
- **Lube oils and greases**
- **Cleaners and absorbents**
- **Filters and anti-freeze**
- **Additives and petroleum handling equipment**
- **Water supply**
- **Marine radio and radar repair**
- **Vessel and engine repair**
- **Hospital, medical, dental and ambulance services**
- **Refuse service**
- **Moorage**
- **Mail and parcel post service**
- **Public telephone room**

Telephone: (907) 581-1350 or
(907) 581-1351
Telefax: (907) 581-1431
Radio: Marine VHF Radio
Channel 6

Longitude: 152°

Petro Marine Services/ Kodiak is located 180 nautical miles from Seward, 220 nautical miles from Nikiski and 510 nautical miles from Dutch Harbor.

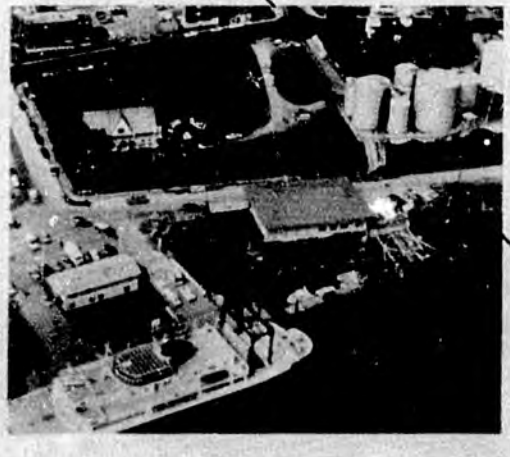
KODIAK

Fuel is barged into Kodiak's year-round, ice-free port from the Kenai Peninsula refineries and onto Kodiak Island, Alaska Peninsula, Aleutian and Bering Sea communities including Dutch Harbor.

Domestic and foreign fishing vessels, tow boats, service stations, heating fuel distributors, airport dealers, and shoreside processors are regular customers.

We sometimes act as postal courier for our customers or pick up spare parts at the airport. Our employees deliver this additional service because they're used to serving a marine oriented community.

Kodiak's bulk plant has a two-million-gallon capacity.



Services and products available:

- **Aviation, automotive, heating and marine fuels**
- **Lube oils and greases**
- **Cleaners and absorbents**
- **Filters and anti-freeze**
- **Additives and petroleum handling equipment**
- **Water supply**
- **Marine radio and radar repair**
- **Vessel and engine repair**
- **Hospital, medical, dental and ambulance services**
- **Refuse service**
- **Moorage**
- **Mail and parcel post service**

Telephone: (907) 486-3421
Telefax: (907) 486-6833
Radio: Marine VHF Radio Channel 10

SEWARD

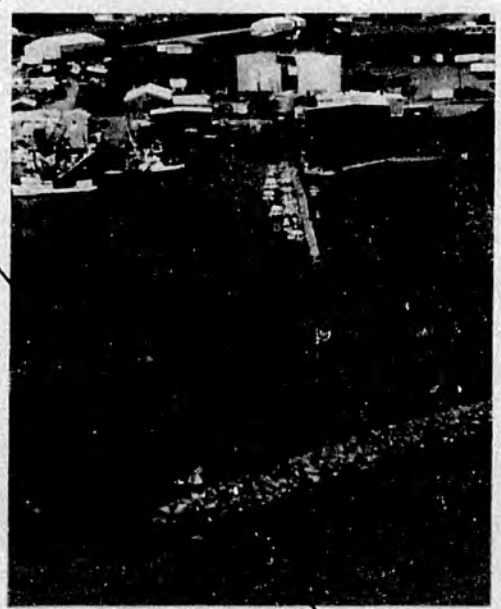
Latitude: 60°
Longitude: 149°

Located on the shore of Resurrection Bay, this port is considered to be one of the best ice-free, deep water harbors in the state and is centrally located near the lucrative fishing grounds of the Gulf of Alaska.

The Seward plant is Petro Marine's first bulk terminal facility and is adjacent to shipping lanes that serve Southcentral Alaska, the Pacific Northwest and the Orient.

With its supply link to the Alaska Railroad and the trans-Alaska pipeline, our Seward plant provides high-quality fuels and petroleum products for foreign and U.S. flag vessels.

We have a joint marketing arrangement in Seward with Harbor Fuel Service.



Services and products available:

- **Aviation, automotive, heating and marine fuels**
- **Lube oils and greases**
- **Cleaners and absorbents**
- **Filters and anti-freeze**
- **Additives and petroleum handling equipment**
- **Water supply**
- **Marine radio and radar repair**
- **Vessel and engine repair**
- **Hospital, medical, dental and ambulance services**
- **Refuse service**
- **Moorage**

Telephone: (907) 224-3190
Telefax: (907) 224-3937
Radio: Marine VHF Radio Channel 16

Latitude: 60°
Longitude: 151°

NIKISKI

Located at the Old Arness Dock in Nikiski, this terminal is the northernmost refueling facility in the Petro Marine network.

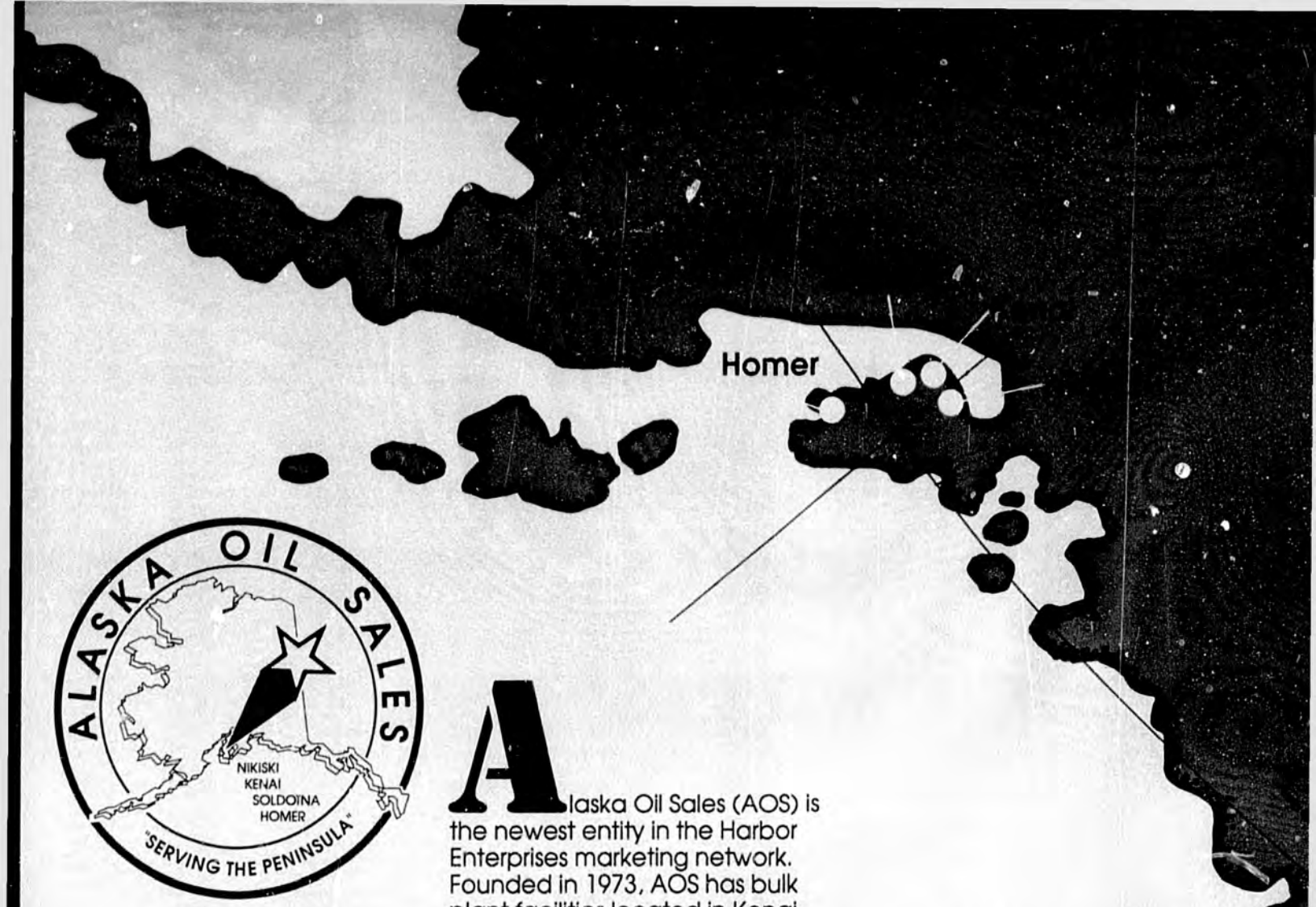
Nikiski provides convenient access to Cook Inlet shipping lanes and is 60 miles south of Anchorage.

The Nikiski plant has the capacity to service oil platforms and transportation vessels.

Services and products available:

- **Aviation, automotive, heating and marine fuels**
- **Lube oils and greases**
- **Cleaners and absorbents**
- **Filters and anti-freeze**
- **Additives and petroleum handling equipment**
- **Water supply**
- **Marine radio and radar repair**
- **Vessel and engine repair**
- **Hospital, medical, dental and ambulance services**
- **Refuse services**

Telephone: (907) 776-8000
Telefax: (907) 776-8088
Radio: Marine VHF Radio Channel 16



ALASKA OIL SALES

NIKISKI
KENAI
SOLDOTNA
HOMER

"SERVING THE PENINSULA"

Alaska Oil Sales (AOS) is the newest entity in the Harbor Enterprises marketing network. Founded in 1973, AOS has bulk plant facilities located in Kenai, Nikiski and Homer, plus a warehouse/shop and offices in Soldotna.

AOS provides a wide range of Chevron, Mobil, Shell and Unocal lubricants and related petroleum products to the following industries:

- **Fishing**
- **Transportation**
- **Timber**
- **Petro chemical**
- **Oil exploration**
- **Aviation**
- **Construction**
- **Oil production**

AOS supplies retail service stations, marine distributors and airport dealers with motor and aviation gasolines, diesel and jet fuels plus heating fuels for business, industrial and home use.

We operate a complete fleet of tank truck and tractor trailer equipment. If you need a delivery and there's a road to get there, give AOS a call and we'll provide you with an exceptional level of service.

Telephone: **(907) 262-2250**

Telefax: **(907) 262-7180**

Soldotna: 35235 K-Beach Road
Kenai: 608 Bridge Access Road
Homer: 1566 Ocean Drive
Nikiski: Mile 25 Spur Highway

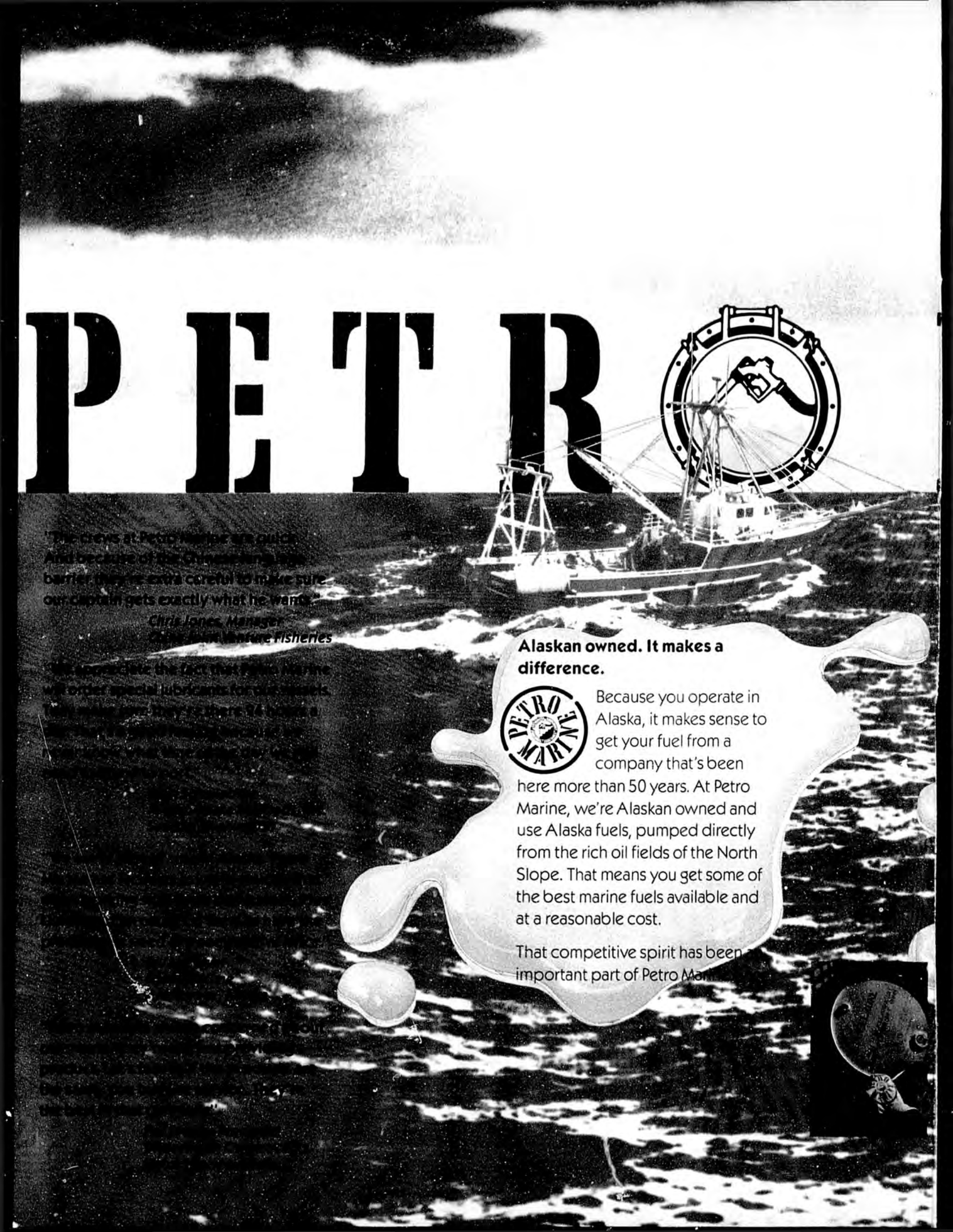
DUTCH
HARBOR
NIKISKI
KODIAK
Set a course
for Petro Marin
Your oasis in
Alaskan waters

DELTA

If you work Alaska's waters, you need a fuel service company that knows as much about your vessel as you do. That's us, Petro Marine Services.

All of us understand the special needs of the marine industry. Fact is, some of us have worked on vessels ourselves. So we know that you won't make a dime if you're stuck at the dock waiting for fuel and supplies. That's why we keep our tanks full, our pumps primed and our people on the job round the clock to get you back on the water fast. All at the most competitive prices going.

After all, your vessel doesn't run from 9 to 5. And neither do we. When it's time to come in from the sea, pull into a Petro Marine facility. It's your fueling oasis in Alaskan waters.


PETR
"The crews at Petro Marine are quick.
And because of the Chinese language
barrier, they're extra careful to make sure
our captain gets exactly what he wants."
Chris Jones, Manager
Fisheries
Alaskan owned. It makes a
difference.
PETRO MARINE
Because you operate in
Alaska, it makes sense to
get your fuel from a
company that's been
here more than 50 years. At Petro
Marine, we're Alaskan owned and
use Alaska fuels, pumped directly
from the rich oil fields of the North
Slope. That means you get some of
the best marine fuels available and
at a reasonable cost.
That competitive spirit has been
important part of Petro Ma

MARINE

we began as Andy's Oil Service back in 1936. And it's a commitment we're not about to change.

All the products you need.
Sure you need fuel to keep your engines running, but as vessel owners ourselves, we know how important all the extras can be. Like anti-freeze, lubricants, filters, cleaners and absorbents. Plus, if you need a certain brand or an unusual product, we'll order it for you and even keep a special supply on hand for you.

Service that proves we mean business.
We didn't become the largest independent petroleum marketing firm based in Alaska and the state's fastest growing Alaskan-owned company in 1986 by just talking about service. Our philosophy is this: we want to be your fuel supplier and we'll work extra hard to keep your business. We promise that you'll always find our crews to be experienced and our docks open seven days a week for refuelings that are fast, efficient and competitively priced.

Terminals strategically located.
Our four plants — Seward, Nikiski, Dutch Harbor and Kodiak — are networked into many of Alaska's shipping lanes and most productive fishing grounds. This means that we're right on course when you're ready to fuel up. And there's no minimum delivery like some of the big guys around. Plus, with our dependable fuel delivery chain via highway, rail and water, you'll get the quality petroleum and supplies you need whenever you ask. Guaranteed.

We can come to you.
We recognize there are times you simply can't come into our facility to re-fuel. Don't worry, we now barge directly to your location so you can keep your course and maintain productivity. This added dimension to our shoreside operation allows us to effectively serve Southcentral Alaska, Kodiak Island, Alaska Peninsula, Aleutian Islands and Bering Sea locations.

Credit Program.
Consolidated Bill
Once you establish credit, simply chart a course for the Petro Marine Dock and express your fuel purchases will appear on one billing. No [illegible] Marine.

"At one time I was a commercial fisherman myself. I got into the oil business as a winter time driver for Andy's Oil Service. Over the years I've had an interest in several boats. In fact, I still have two. As a result, I know what it means to work hard for months at a time out on the water. Back in 1959, when Andy's came up for sale, I jumped at the opportunity to buy it. No doubt about it, I've been fortunate. But, from the beginning, I've stuck with one basic philosophy. Always deliver the very best service at a fair and reasonable price. Whenever you pull up to a Petro Marine dock, that's what you'll find — good service and fair prices. You had my word on it in 1959. The same goes for today."

Dale Lindsey
President,
Petro Marine Services

MARKETING OFFICE
ANCHORAGE, AK 99503
1600 "A" Street, Suite 307
(907) 278-7586
Telefax (907) 258-2362
Telex 9102404067

CORPORATE OFFICE
SEWARD, AK 99664
P.O. Box 389
(907) 224-3190
Telefax (907) 224-3937