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M E M O R A N D U M

STATE OF ALASKA


Department of Revenue

Petroleum Research Section

January 27, 1987

To: Vincent D. Bright, Chief of Research

From: Charles Loosdon, Petroleum Economist



Subject: Reevaluation of the Revenue Impact of Removing the Ban on ANS Exports

Per your request I have reevaluated the revenue potential of allowing the export of ANS crude oil by looking at the impact on severance tax and royalty income. This represents a modest revision of the analysis done July 18, 1986 to reflect more current information on transportation costs and market deliveries. The key assumptions, method, and estimates are as follows.

ASSUMPTIONS:

1. Alaska would sell 100,000 bbl/day of its royalty oil to Far East purchasers. Current production of ANS is 1,800,000 bbl/day of which Alaska's royalty share is roughly 225,000 bbl/day. Alaska is currently committed to sales of roughly 107,000 bbl/day royalty crude oil on long term contract. This leaves approximately 118,000 bbl/day available for other disposal.
2. Other Alaska producers would sell an additional 200,000 bbl/day to Far East purchasers. This is an arbitrary assumption which may be too high or too low.
3. The price paid by Far East purchasers could not be substantially different than what would have been received if the oil were sold by the U.S. Gulf.

- 1. The transportation cost savings due to avoiding the U.S. Gulf Gulf would be roughly \$1.90/bbl if shipped in Jones Act tankers or \$2.95/bbl if shipped in foreign tankers.
- 2. All exports are assumed to be barrels diverted from the U.S. Gulf and all the cost savings are assumed to translate directly into higher wellhead values. Currently 40% or roughly 650,000 bbl/day of the AAS marketed in the lower 48 goes to the U.S. Gulf. All royalty revenue impacts are prorated on this basis.
- 3. Although exports to the Far East could have direct effects on the AAS price on the U.S. West Coast, no DATA is made to estimate this impact because of uncertainty over the willingness of major AAS producers to export. Market theory suggests that competition would drive the West Coast price up. Further analysis would be needed to attempt to estimate this effect.

Method:

1. Increased Royalties = State Royalty Direct Sales - In-state Royalties - Sales to In-state Refineries at In-state Prices.

2. State Royalty Direct Sales

Jones Act Tankers	=	100,000 bbls	x	\$1.90	x	1
	=	\$27.74	million/yr.			
Foreign Tankers	=	100,000 bbls	x	\$2.95	x	1
	=	\$29.50	million/yr.			

There is the proportion of total royalties realized from the Gulf Coast now earning higher wellhead value.

3. In-Value Royalties and

Direct Sales at In-value Prices

Jones Act Tankers =  $200,000 \times 365 \times 1.90 \times (.125 + .222)$   
 = \$3.45 million/yr

Foreign Tankers =  $200,000 \times 365 \times 2.35 \times (.125 + .222)$   
 = \$5.98 million/yr

Where .125 is the royalty percentage of gross ANS production and .222 is the percentage of ANS royalties taken in-value or taken in-kind and sold at in-value prices after the 100,000 bbls. are sold to Japan adjusted for the amount displaced from the Gulf Coast, i.e.  $1 - 100 \times 225 \times .1$

4. Increased

Severance Tax

Jones Act Tankers = Taxable bbl \* Value \* Tax Rate  
 =  $200,000 \times 365 \times 1.90 \times .12 \times (1 - (.125 \times .222))$   
 = \$16.18 million/yr

Foreign Tankers =  $200,000 \times 365 \times 2.35 \times .12 \times (1 - (.125 \times .222))$   
 = \$25.12 million/yr

Where .12 is the tax rate after ELF kicks in for Prudhoe in July 1987.

Summary:

	State of Alaska Gross Production Revenue Effect	Less State of Alaska Permanent Fund Effect	State of Alaska Net Revenue Effect to General Fund
Jones Act Tankers	\$17.77 million/yr	\$7.33 million/yr	\$10.44 million/yr
Foreign Tankers	\$25.17 million/yr	\$2.36 million/yr	\$22.81 million/yr