

of oil and gas is a matter within the authority of the states. 1969 Op. Att'y Gen., No. 6.

The royalty provisions of a mineral leasing act are related to conservation of natural resources. 1969 Op. Att'y Gen., No. 6.

The United States, under the 10th amendment to the Constitution of the United States, has no authority to legislate on state royalty provisions and state oil and gas leases. 1969 Op. Att'y Gen., No. 6.

An overriding gross royalty of 2% of all proceeds from any state and federal lands conflicts with the Statehood Act and the province of the Alaska state legislature. 1969 Op. Att'y Gen., No. 6.

A 2% overriding gross royalty cannot apply to a federal lease on public lands within the State of Alaska. 1969 Op. Att'y Gen., No. 6.

A 2% overriding gross royalty cannot apply to a State of Alaska oil and gas lease

issued pursuant to this section. 1969 Op. Att'y Gen., No. 6.

Commissioner empowered to grant royalty reduction. — This section empowers the commissioner of the Department of Natural Resources, not the director, division of lands, to grant the specified royalty reduction. *Union Oil Co. v. State Dep't of Natural Resources*, Sup. Ct. Op. No. 1087 (File No. 2025), 526 P.2d 1357 (1974).

Cited in *Shell Oil Co. v. Pan American Petroleum Corp.*, 5 Alas. L.J. No. 11, p. 230 (Nov., 1967).

ALR reference. — Validity of compulsory pooling or unitization statute or ordinance requiring owners or lessees of oil and gas lands to develop their holdings as a single drilling unit and the like, 37 ALR2d 434.

**Sec. 38.05.181. Geothermal resources. (a) Purpose.** The legislature finds and declares that

(1) the people of Alaska have an interest in the development of the state's geothermal resources potential for

(A) use in the generation of electrical power that may reduce the state's dependence on fossil fuel power plants that seriously pollute the atmosphere in a number of areas;

(B) the production of geothermal steam that may provide central heat for urban areas close to geothermal areas;

(C) the production of valuable minerals and other byproducts associated with geothermal steam and accompanying brines; and

(D) the distillation of fresh water;

(2) the state, through the Department of Natural Resources and its division of lands, should exercise its authority to encourage the exploration for, discovery and production of, geothermal resources in the public interest to

(A) encourage maximum economic recovery of this potentially important natural resource and prevent its waste;

(B) ensure that the exploration for, and production of, geothermal resources, and the disposal of wastes from them, are carried on in a way that will safeguard life, health, property, public welfare and the environment; and

(C) preserve the state's natural, scenic values especially in those areas where geothermal resources are or may be found; although the need to develop new sources of energy rapidly is becoming urgent, every effort also must be made to protect those hot springs and geysers that are among nature's scenic wonders.

HB

878

A Note on  
PROPOSED CHANGES IN ALASKA'S OIL PRODUCTION TAX

W. J. Levy Consultants Corp.  
New York, N. Y.  
March, 1978

AGO 547695

A Note on  
PROPOSED CHANGES IN ALASKA'S OIL PRODUCTION TAX

1. In this Report for the Alaskan Legislature, we review changes in Alaska's oil production tax recommended by the Department of Revenue and incorporated in Senate Bill No. 532 and House Bill No. 878.

2. In 1977, Alaska's production tax was amended to eliminate automatic escalation in cents-per-barrel tax rates.\* At the same time, the amended law provided for annual review of cents-per-barrel and cents-per-MCF tax rates by the Department of Revenue, with a written report and recommendations for changes to be submitted to the Governor. The Governor, then, submits the proposed changes to the Legislature.

3. The Department of Revenue's Report for 1978 recommended (and SB532/HB878 incorporate) the following changes --

An increase in the cents-per-barrel tax rate for other-than-old crude oil from 80 to 96.8 cents, which corresponds to raising the floor price (i.e., the price below which the cents-per-barrel rather than the percent-of-value tax applies) from \$6.53 to \$7.90 per barrel;

An increase in the cents-per-barrel tax rate on old crude oil from 60 to 63.4 cents per barrel, raising the floor price from \$4.90 to \$5.18 per barrel; and

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\* Prior to this change, cents-per-barrel tax rates had increased or decreased with percentage changes in the Wholesale Price Index for crude petroleum published by the Bureau of Labor Statistics of the U.S. Department of Labor.

Re-introduction of automatic escalation in cents-per-barrel tax rates, tying rates to percentage changes in the Gross National Product Deflator published by the Bureau of Economic Analysis of the U. S. Department of Commerce. \*

4. In reviewing these proposed changes in the oil production tax rates, the Legislature will want to consider carefully two things. First, the reasoning behind the Department of Revenue's recommendations, as set out in the Department's report to the Governor. \*\* Second, that any changes in production taxes be reviewed in conjunction with proposed changes in other taxes that the State assesses on the oil and gas industry, notably the corporate income tax.

The Floor Price  
for Prudhoe Bay Crude

5. The Department of Revenue report finds that the current floor price (and thus also the cents-per-barrel tax rate) is "inadequate." The Department calculates that the "market value" of Prudhoe Bay oil on the North Slope is significantly above the prices being reported by the companies for severance tax (or royalty) purposes. Furthermore, the floor price, which is designed to protect the State's severance tax revenues in the event that prices reported by companies are artificially depressed, is also below the computed market value. The conclusion: the floor price is too low to do its intended job of protecting revenues. The recommendation: raise the floor price for other-than-old oil to the level calculated by the Department as the market value (\$7.90) of Prudhoe Bay crude on the North Slope.

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\* Changes in tax rates would be based on changes in the Deflator from the First Quarter of 1978.

\*\* Recommended Changes in Alaska's Oil and Gas Production Tax Rates for 1978, a Report to Governor Jay S. Hammond by the Alaskan Department of Revenue.

6. Our firm has always regarded increasing the severance tax as the ultimate recourse for the State in the event that wellhead values are artificially depressed by the actions of tax-paying companies. The question the Legislature must consider now is whether the current circumstances of wellhead pricing warrant taking such a major step at the present time in the light of available evidence. This can best be judged by looking, as the Department has, at the various elements that enter into Prudhoe Bay oil prices -- i. e., pipeline tariff rates, tanker charges, and prices in markets to which the oil moves.

#### TAPS Tariff

7. The major factor serving to lower wellhead values below earlier expectations is the high level of TAPS pipeline tariffs filed by the companies with the ICC (now FERC) and used by the companies in their netback calculations. These tariff rates average out to some \$6.20 per barrel.\* In contrast, the interim tariffs allowed by the ICC average some \$4.83 per barrel, or \$1.37 per barrel less. The State of Alaska, in its protest to the ICC, set out tariff rates that averaged around \$3.96. FERC is now in the process of conducting an investigation (with Alaska Pipeline Commission participating) into TAPS rates in order to establish lawful permanent tariffs. Pending the final outcome, the Courts have allowed the companies to continue to charge their initial filed tariffs.

8. Thus, the question of what are reasonable interstate tariff rates for TAPS is being reviewed and will eventually be resolved by the appropriate regulatory body. Whatever rates are eventually approved by the FERC will be those actually charged for transportation of the bulk of oil moved via TAPS and will thus bear on the value of oil on the North Slope. These rates would be appropriate to the calculation of oil values for severance tax and royalty purposes.

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\* A weighted average calculated by the Department of Revenue based upon pipeline ownership.

9. If finally approved TAPS rates are below the initially filed company rates -- and lower ICC interim rates would certainly point in this direction -- the effect would be to raise North Slope values and severance taxes to which the State was entitled. The State would obviously want to take whatever steps are necessary to ensure that it is in a position to collect back taxes in the event that this were to happen. Assuming that the State does have this protection, it would seem inappropriate for the State now to raise the floor price for production tax purposes to reflect what the State judges will be the (lower) tariff finally approved. This puts the State in the position of prejudging a complicated issue which is being subject to extensive hearings, later careful regulatory consideration, and probably also eventually review in the Courts.\*

### Tanker Charges

10. The Department of Revenue's report also takes issue with the tanker charges being submitted by the companies. The Department points out that the reported charges (e.g., \$.81-\$1.08 to the West Coast) are substantially above what had been estimated by many third-party observers and by company spokesmen themselves earlier on. In contrast to pipeline tariff rates, tanker charges are not regulated. Thus, the State will not have regulated rates to provide guidelines.

11. In the circumstances, we certainly feel that Legislative inquiry into the question of tanker charges is warranted, in course of hearings on the proposed changes in Alaska's production (severance) tax. Many factors affect tanker costs -- e.g., tanker size, timing of charters, bunker costs,

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\* Note that the proposed increase in floor price from \$6.53 to \$7.90 (+\$1.37) is the same as the difference between average ICC interim (\$4.83) and company posted tariffs (\$6.20). Thus, although other aspects of wellhead valuation are at issue, the pipeline tariff is pivotal.

safety and environmental standards, etc. Thus, ocean transportation costs may have increased substantially since earlier estimates were made. However, the companies transporting North Slope crude via tanker should explain how they arrive at the charges they are reporting to the State. With a better understanding of the factors underlying those charges, the State should be in a better position to judge their reasonableness for purposes of valuation.

12. The State might also want to consider the possibility of establishing some norm for transportation rates at which North Slope crude could be moved in substantial and continuous volume to major markets -- rather than continuously monitoring charges for each and every company's transportation. This rate would presumably be one which a company could match on the basis of prudent transportation commitments. Companies who are particularly astute in their tanker operations could hope to do better -- and would benefit therefrom by not having North Slope oil values and thus production taxes raised by their lower-than-average tanker costs. Other companies who make less astute business decisions on tanker coverage would have to bear the consequence without the State picking up part of higher-than-average costs through lower severance taxes.

13. In this connection, we note that the average transportation cost of oil moving in international trade in foreign flag tankers has been calculated since 1954 by an independent London Tanker Brokers' Panel. Their estimates, Average Freight Rate Assessment (AFRA), are widely used as proxy for companies' actual transportation costs both in commercial contracts where delivered prices require a freight component and in c. i. f. values for Government administration and tax purposes. Some such approach might be considered for tanker movements of North Slope crude. This could avoid potential conflicts over tanker charges. In the event, companies would be completely free to make their own decisions as to how they cover their tonnage requirements, but tanker charges for purposes of wellhead valuation would reflect objective criteria as to ocean transportation costs.

## Market Prices

14. The Department has also questioned the companies' data on market prices received for oil, particularly on the West Coast. The Department calculates a value for North Slope oil at a refinery destination in Los Angeles. This estimate of \$13.44 is based on the Official Government Selling Price for Saudi Arabian Medium (31<sup>0</sup>) crude f.o.b. plus LR2 (80,000-159,999 dwt.) AFRA tanker transportation. It finds this estimate to be at the upper end of the range of West Coast market prices reported by the companies (\$13.16-\$13.44).

15. The problem, here, is that there are many factors that bear on market prices and it is difficult to come up with a precise objective estimate. First, there are questions of crude quality. The Department's estimate of refinery value, for example, is based on a 31<sup>0</sup> Saudi crude, when North Slope crude is in fact around 27<sup>0</sup>. If Saudi Heavy crude (27<sup>0</sup>) were used, the Department's estimate would have been \$13.14 -- or below the low end of the companies' range. On the other hand, Saudi Heavy crude (as also Saudi Medium crude) contains substantially more sulphur than North Slope crude, which enhances the value of North Slope relative to these crudes.\* Furthermore, the relative value of various crude qualities varies from refiner to refiner, depending on his processing facilities, market requirements, etc. At least as important, there are other aspects to crude sales than selling price that also affect the value to the buyer and seller - e.g., credit terms, obligations for the seller to offtake crude from the buyer,\*\* etc.

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\* As against 1-percent sulphur for North Slope, Saudi Heavy is 2.8 percent and Medium 2.4 percent.

\*\* The major third-party purchaser of North Slope crude is Socal for its Los Angeles and San Francisco refineries. Press reports indicate that at least some of Socal's contractual purchases of North Slope crude involve commitments by sellers to lift Middle East crude that Socal would have otherwise processed on the West Coast. Sellers of North Slope crudes are reportedly moving this Middle East crude to East-of-Rockies refineries.

16. The State will obviously want to continue to monitor whatever relevant information it can obtain on sales prices for North Slope oil. However, given the range of difficulties in assessing an appropriate market price, the selling prices reported by the companies, in our judgment, do not look to be obviously out of line.

17. Finally, we note that companies have calculated severance tax values by netting back from the markets to which North Slope oil actually moves. Owing to much higher transport costs, netbacks from Gulf Coast shipments are obviously significantly lower than from the West Coast. The Department of Revenue, in its assessment of a market price netback for a severance tax floor price, has used only the West Coast as a reference point. On this basis, companies forced to ship North Slope crude to the Gulf Coast would have to pay a severance tax based on a higher netback calculated by the Department for the West Coast rather than actual netback from the market to which their crude moves.

18. In a report we prepared for the Legislature in 1970 on valuation of Alaskan crude oil, \* we took the position that limited volume shipments of Alaskan crude to distant markets, which may reflect individual company economics, would not normally bear on the valuation of Alaskan crude. Valuation should be based on market prices in refining centers "where there is a substantial and continuous movement of Alaskan oil by the industry in general." At present, substantial volumes of North Slope crude move to the Gulf Coast; when production reaches 1.2 million barrels daily, approximately two fifths (500,000 barrels daily) is likely to be moving to the Gulf Coast. In these circumstances, it is not inappropriate that the value of Alaskan crude on the North Slope takes into account the fact that a substantial portion of production cannot realize the higher netback values obtainable on the West Coast, owing to limitations on the absorptive capacity of West Coast refineries for North Slope crude.

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\* Economic Considerations Bearing on Valuation of Alaskan Crude Oil and State Policy on Pipelines, December, 1970.

## Cents-per-Barrel Escalation

19. In addition to raising floor prices, the Department has also recommended re-introduction of automatic escalation in floor prices with an index of inflation. Escalation with the GNP deflator would almost inevitably result in progressive increases in severance taxes where cents-per-barrel and not percent-of-value is the operative tax.

20. Last year's severance tax revision was presumably designed to establish schedules of severance taxation appropriate to the producing circumstances of Alaska and with regard also to rates of severance taxation in other producing states. No doubt wellhead values and hence severance tax revenues have worked out below expectations; and we discussed above whether an increase in floor prices ought now to be considered as offset to protect Alaska's interests.

21. Escalation of floor prices with inflation, however, could have the effect of increasing producing companies' effective severance tax rates without regard to wellhead values. We have noted in the past that previous escalation with the Wholesale Price Index for crude petroleum imposed a progressively increasing severance tax burden on Cook Inlet producers whose old oil prices were held down by Federal price ceilings whilst average crude prices and hence their cents-per-barrel tax moved upward. The adverse effect (i. e., rising cents-per-barrel severance taxes relative to wellhead values) could be even more incongruous when escalation is triggered by a GNP deflator that reflects price behavior for the U. S. economy as a whole.

22. To the extent that crude oil prices advance in the future -- notably foreign oil prices into Alaska's Lower 48 markets, but also domestic oil prices that directly or indirectly affect the competitive evaluation of North Slope crude -- that would tend to raise wellhead values and severance tax revenues. Similarly, changes in transportation charges would be reflected in wellhead values and severance tax revenues. And to the extent that percent-of-wellhead value is the operative severance tax, there is a meaningful relationship between severance tax liability and production values.

23. Cents-per-barrel may be a necessary floor for protection of Alaska's interests in appropriate circumstances. Escalation of cents-per-barrel would not seem to be an appropriate device to raise severance taxes or severance tax income. If that is at issue, the Legislature could more cogently address the question whether established percents-of-value ought to be raised.

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March 23, 1978

The Honorable Alvin Osterback  
Chairman  
House Resources Committee  
Alaska State Legislature  
Pouch V - State Capitol  
Juneau, AK 99811

Dear Alvin:

Enclosed please find our Notes on Proposed Changes in Alaska's Oil Production Tax. Again, I am sorry that we were unable to testify before your House Resources Committee on this matter last week, but I expect that you may want to have actual testimony and an opportunity for your Committee members to ask questions on the occasion of our next visit.

I am taking this opportunity to make our Notes available to other interested persons as indicated below.

Cordially,

  
Milton Lipton  
Executive Vice President

/pt  
enclosure

Distribution to:

The Hon. John Rader  
The Hon. Hugh Malone  
The Hon. Kay Poland  
The Hon. John Sackett  
The Hon. Steve Cowper  
Mr. Jack Doyle  
Mr. Gregg Erickson  
Mr. John Messenger

AGO 547705

TO: CHAIRMAN, HOUSE RESOURCES COMMITTEE  
AND ALL COMMITTEE MEMBERS

FROM: SUB-COMMITTEE ON OIL & GAS

During the week of march 21 - 26 the Joint Senate and House Resources Committees met to hear testimony relating to the various oil and gas taxation bills currently before us. Some of the bills under discussion, have not been refered to this committee.

Of the ones that have been, the Sub-committee on Oil and Gas recommends that H.B. 321, H.B. 322, C.S.H.B. 323, H.B. 328, and S.B. 274 be brought to the full committee's attention for consideration and that they be acted upon and passed out of committee no later than April 7.

Each of these bills have a further referral to House Finance and the Finance Committee has scheduled hearings and work sessions on these bills beginning early next week. Representatives from the oil companies and several nationally recognized economists will be present. We urge all members, who are able, to attend.

#### RECOMMENDED BILLS

##### H.B. 321 - SEVERENCE TAX

This tax, in our opinion, rates highest in priorities. It's timeliness is dependant upon the actions undertaken by the Federal Energy Administration in setting a recommended "well head" price by April 15, 1977, and further by actions later taken by the I.C.C. in recommending the transportation cost of North Slope crude. For other features of the bill, we refer the committee's attention to the Governor's transmittal letter for H.B. 321, included with this report.

##### H.B. 322 - ALASKA NET INCOME TAX OR FRANCHISE TAX

This tax bill, in our opinion, has several advantages over our present income tax collection system. It is easy to administer, is based upon the amount earned within the state, including OCS development, and would provide the State and the industry with a stable taxation policy for years to come. For other features, we refer you to the Governor's transmittal letter for H.B. 322, included in this report.

H.B. 323 - PROPERTIES AD VALOREM TAX

This tax bill, in our opinion, is premature. It would increase the scope of taxable property to include refining, liquefaction, and marine transportation. We believe that it would act as a "disincentive", at this time, for future development within our state, and of all the tax bills before us, meet with the most resistance. Accordingly, we have asked the Department of Revenue to place before this committee, a committee substitute for H.B. 323 which would reduce the bill to a "house-keeping" measure. This has been done and is before the committee for consideration.

H.B. 328 - RESERVE TAX

This tax bill amends the reserves tax bill to allow a credit reduction of tax levied 12 [20] if the oil flow through the Trans-Alaska Pipeline by October 1, 1977 has reached at least 600,000 barrels of oil on a daily average. Otherwise, the bill extends the reserve tax beyond the December 31, 1977 effective date of the original act. We urge its passage.

S.B. 274 - THE TAKING OF OIL AND GAS ROYALTY IN KIND

This bill requires that royalty oil and gas be taken "in kind" rather than in money unless deemed otherwise by the commissioner, the Alaska Royalty Oil and Gas Development Advisory Board, and the the Legislature. As an encouragement for future development within our state, we urge the passage of this bill.

CONCLUSION:

The Sub-committee believes that the passage of these tax proposals, taken in conjunction with the desire to have the Alaskan Permanent Fund replace the eventual and inevitable passage of our nonrenewable resources, will produce a desired benefit for the State of Alaska. We further believe that they will not act as a disincentive for the oil industry and that their passage will ensure Alaska's "fair share" in the wealth of our state. Regarding this aspect, we urge committee members to read the Tanzer Report, "IMPACT OF INCREASED TAXATION ON OIL EXPLORATION AND DEVELOPMENT IN ALASKA", submitted to all members of the Alaskan State Legislature on March 25, 1977.

We have asked that Mr. John Messenger from the Department of Revenue be present to assist committee members in answering their questions and would, as this time, like to highly commend the staff of Senate and House Resources for providing the back-up material needed for the committee's deliberations.

Rep. Merle G. Snider  
Rep. Hugh Malone  
Rep. William Akers.

HOUSE BILL NO. 321 by the Rules Committee by request of  
the Governor, entitled:

HB  
321

"An Act relating to the oil and gas  
properties production tax; and providing  
for an effective date."

was introduced, read the first time and referred to the  
Committees on Resources and Finance.

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HOUSE JOURNAL

March 9, 1977

The Governor's transmittal letters appear following the  
bill to which it pertains; fiscal notes appear in House  
Supplement No. 31 to today's journal.

"March 8, 1977

HB  
321

The Honorable Hugh Malone  
Speaker of the House  
Alaska State Legislature  
Juneau, Alaska 99811

Dear Mr. Speaker:

Under the authority of art. III, sec. 18 of the Alaska  
Constitution, and in accordance with AS 24.30.060(b)  
and the Uniform Rules of the Alaska State Legislature,  
I am transmitting a bill relating to the oil and gas  
properties production tax.

As a result of a recent study of Alaska's oil and gas  
tax structure, the Department of Revenue has recom-  
mended several changes in the state's production or  
"severance" tax. This bill incorporates those specific  
recommendations.

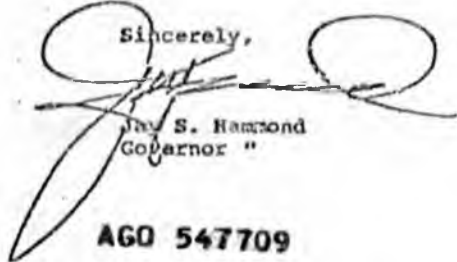
Currently the state's oil production tax is calculated  
according to "stair stepped" rates depending upon the  
level of production for the lease or property. As  
currently structured the tax may have an adverse impact  
upon a particular property as it reaches its economic  
limit. The "stair step" approach may not alleviate  
this adverse effect since the economic limit may vary  
substantially from one part of the state to another.  
This is because it may be more costly to produce and  
transport the oil in the more remote areas of the  
state. Accordingly, the bill contains an economic  
limit mechanism which automatically scales the tax rate  
down as the production nears its economic limit. This  
will insure that the tax will not unduly inhibit oil  
production as it reaches its economic limit.

One of the immediate dangers which face the state's  
revenue picture is the potential for artificially  
depressed pricing of the state's North Slope oil. This  
could result from federal pricing decisions or excessive  
tariff costs from the wellhead to the refinery. To  
insulate the state's petroleum revenues from these  
forces, the bill provides for a mechanism which would  
raise the cents-per-barrel floor to correspond to a  
mid-range market value for North Slope oil and tie that  
floor to an index which will let the floor keep pace  
with inflation.

One of the Department of Revenue's recommendations --  
the oil and gas surtax -- which was designed to offset  
revenue losses due to depressed pricing of North Slope  
oil and which was to be imposed only on holders of  
state-owned leaseholds was deleted on the advice of  
this department because of the substantial legal  
problems involved.

The bill places the tax on gas at a parity with the tax  
on oil. Currently gas is taxed at only 4 percent while  
oil is taxed from 5 to 8 percent. The bill would tax  
both oil and gas at 10 percent. In addition, the bill  
sets a cents-per-Mcf floor for the gas tax similar to  
the cents-per-barrel floor for oil. This new floor for  
gas corresponds to the highest market price in the  
state, and it too is tied to an index to keep pace with  
inflation.

Sincerely,

  
Jay S. Hammond  
Governor "

AGO 547709

HOUSE BILL NO. 322 by the Rules Committee by request of  
the Governor, entitled:

H3  
322

"An Act establishing an oil and gas corporate  
franchise tax; and providing for an effective  
date."

was introduced, read the first time and referred to the  
Committees on Resources and Finance.

"March 8, 1977

The Honorable Hugh Malone  
Speaker of the House  
Alaska State Legislature  
Juneau, Alaska 99811

Dear Mr. Speaker:

Under the authority of art. III, sec. 18 of the Alaska  
Constitution, and in accordance with AS 24.50.060(b)  
and the Uniform Rules of the Alaska State Legislature,  
I am transmitting a bill establishing an oil and gas  
corporate franchise tax.

The Department of Revenue, in its oil and gas tax  
study, found two basic deficiencies with the corporate  
income tax as it relates to oil and gas corporations.  
This bill would correct those deficiencies.

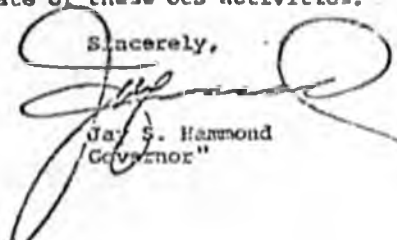
HB  
322

The first problem is the eroded federal tax base. The  
department found that the federal corporate tax base  
which Alaska has adopted has been substantially eroded  
by special exemptions, deductions, credits and other  
accounting devices. The result has been that oil and  
gas corporations pay an effective tax rate much smaller  
than the statutory 48 percent. Accordingly, the bill  
would enact a separate franchise tax on a corporation's  
"book income." "Book income" is the net income which  
the corporation reports to its stockholders. This  
would eliminate all the special Congressional tax  
provisions.

In addition, the department found that the present  
apportionment formula does not fully represent the oil  
and gas corporate activity in the state. The present  
formula of property, payroll, and sales generally  
measures corporate business activity in the state. For  
natural resource companies, however, it does not. No  
reflection in the present formula is made for the  
scarcity value of the oil and gas produced. Accord-  
ingly, the bill will substitute for the present sales  
factor an extraction factor which will give weight  
specifically to oil and gas production activity.

One of the advantages of this franchise tax is that it  
will take into account elements of property, payroll,  
and extraction located on the Outer Continental Shelf  
which causes a resulting impact on the adjoining state.  
Thus property, payroll, and extraction not located in  
any state but which are located off the shores of an  
adjoining state which is impacted by the oil and gas  
production activity will be allocated to that state  
suffering the impact. Although this latter provision  
may raise some constitutional law questions, we believe  
that the proposal comes within the limits of the state's  
taxing powers given the impact on the coastal com-  
munities of our state of these OCS activities.

Sincerely,

  
Jay S. Hammond  
Governor

AGO 547710

HOUSE BILL NO. 328 by the Rules Committee by request of  
the Governor, entitled:

HB  
328

"An Act amending the oil and gas reserves  
ad valorem tax; and providing for an  
effective date."

was introduced, read the first time and referred to the  
Committees on Resources and Finance.

" March 9, 1977

The Honorable Hugh Malone  
Speaker of the House  
Alaska State Legislature  
Juneau, Alaska 99811

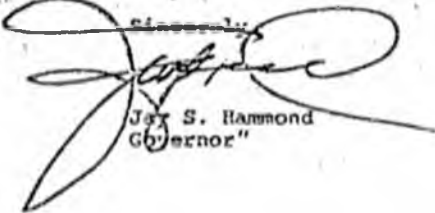
Dear Mr. Speaker:

Under the authority of art. III, sec. 18 of the Alaska  
Constitution, and in accordance with AS 24.50.060(b)  
and the Uniform Rules of the Alaska State Legislature,  
I am transmitting a bill amending the oil and gas re-  
serves ad valorem tax.

Section 1 of this bill proposes that the reserve tax  
levy be reduced from 20 mills to 12 mills this year  
with the condition that an additional levy will be  
made if there is a delay in the start-up of the Trans-  
Alaska Pipeline.

This amendment is proposed because the state has a  
budget surplus for FY 1977. This surplus is somewhat  
illusory, however, since the reserve tax payments may  
be recouped by oil and gas producers by credits  
against future severance tax. Accordingly, the adoption  
of this measure would reduce the surplus for 1977 and  
also reduce the amount "borrowed" from future revenues.

Section 2 provides for a contingent 1979 assessment  
at a rate to be determined by that year's legislature.



Jay S. Hammond  
Governor"

AGO 547711

"An Act relating to the oil and gas exploration, production, and pipeline and marine transportation property tax; and providing for an effective date"

introduced, read the first time and referred to the Committee on Resources and Finance.

March 8, 1977

HB  
323

The Honorable Hugh Malone  
Speaker of the House  
Alaska State Legislature  
Juneau, Alaska 99811

Dear Mr. Speaker:

Under the authority of art. III, sec. 18 of the Alaska Constitution, and in accordance with AS 24.30.050(b) and the Uniform Rules of the Alaska State Legislature, I am transmitting a bill relating to the oil and gas exploration, production, and pipeline and marine transportation property tax.

The Department of Revenue has recently completed its study of Alaska's oil and gas tax structure and has made several recommendations. One set of recommendations dealt with the state's 20-mill property tax imposed by AS 43.56. This bill would implement that set of recommendations.

The bill corrects four problem areas in the current property tax: the omission of certain important kinds of oil-and-gas-related properties from the definition of taxable property; present uncertainty about how pipelines should be valued; the static nature of the \$1500 per-capita limitation on municipal taxation, and the extent to which municipal property tax payments should be allowed as credits against the state tax. The bill's features are described below:

Section 1 of the bill makes clear that taxes paid to municipalities which exceed the statutory limitations in AS 29.53.045 and 29.53.050 are not creditable against the state tax.

Section 3 of the bill removes the current uncertainty on pipeline valuation by ensuring that pipelines will be valued on the basis of their full and true value with due regard to their economic value. This will eliminate the possibility of pipelines being valued under the depressed valuation method of actual cost depreciated.

Section 4 of the bill defines full and true value of property used in refining or liquefying of gas or oil as replacement cost less depreciation. It also defines the value of taxable marine transportation property.

Section 7 adds new categories of taxable property including oil refineries, gas processing plants and liquefied natural gas facilities. This will mean greater revenues to the state from these important oil and gas properties.

Section 8 and 9 of the bill tie the \$1500 per capita municipal limitation to the Anchorage cost-of-living index in order that the limitation would increase over time as inflation raises the cost to municipalities of providing services to its residents.

HB  
323 In addition, Sections 2, 4, 5, 6, and 7 are aimed at amending the relevant provisions of AS 43.56 to provide for the taxation of marine transportation property (i.e. tankers) on an apportioned basis determined by the number of days spent on parts loading and unloading gas and unrefined oil divided by the total number of days-spent-in-ports everywhere. Although these provisions raise close and difficult questions of constitutional law regarding the ability of the state and municipalities to impose an ad valorem property tax on such vessels in light of the traditional application of the "home port" doctrine, it is the view of the Department of Law that these vessels have sufficient nexus with the state to bring them within the constitutional parameters of the state's taxing power.

Sincerely,

Jay S. Hammond  
Governor

AGO 547712



STATE OF ALASKA  
THE LEGISLATURE

POUCH Y - STATE CAPITOL  
JUNEAU, ALASKA 99811  
907 465 3800

LEGISLATIVE AFFAIRS AGENCY

March 22, 1978

MEMORANDUM

SUBJECT: Revenue Effects of HB 878

TO: The Honorable Al Osterback, Chairman  
House Resources Committee

The Honorable Hugh Malone

FROM: Richard G. Haggart *RGH*  
Research Analyst

This memorandum is in response to your request that we prepare an analysis of the longer-term revenue impacts associated with HB 878. Tables I and II attached detail the revenue impacts of this legislation at varying inflation rates through 1990 for both Prudhoe Bay and Cook Inlet.

As can be seen from the tables, the major effect of the legislation would be felt in terms of Prudhoe Bay oil. The increase in the floor price alone (without accounting for inflation increases in the floor price as specified in the bill) would increase state revenues by approximately \$750 million through 1990. Since the floor price would escalate at the same rate as the Gross National Product Deflator (a general measure of inflation within the U.S. economy), actual revenue increases over present law would be substantially greater. Based on an assumed annual inflation rate of between 4% and 6%, HB 878 would generate between \$1.5 billion and \$2.2 billion more in additional severance tax revenues through 1990 than would the current law (after deducting approximately \$386 million in remaining Early Development Incentive Credits held by Prudhoe Bay oil producers). Under the same assumptions, revenues from Cook Inlet production would increase between \$19.9 and \$29.7 million over the same period.

If you have any further questions regarding this legislation or its associated effects we will be happy to answer them.

RGH:dh  
Attachment

AGO 547716

TABLE I PRUDHOE BAY REVENUE EFFECTS UNDER HOUSE BILL 878<sup>1</sup>  
(\$ Million)

Fiscal Year	(no floor price inflation)	Floor Price no inflation	Floor Price 4% inflation	Floor Price 6% inflation	Floor Price 8% inflation
1978 <sup>2</sup>	\$ 70.9	\$ 86.2	\$ 86.2	\$ 86.2	\$ 86.2
1979	276.0	334.9	348.4	355.1	361.8
1980	349.4	423.8	458.6	476.5	494.8
1981	348.3	422.4	475.6	503.8	533.0
1982	368.4	446.8	523.3	565.0	609.1
1983	369.5	448.1	545.9	600.8	660.0
1984	390.0	472.9	599.4	672.4	752.7
1985	379.3	460.0	606.5	693.5	791.0
1986	350.7	425.4	583.4	680.0	790.2
1987	276.7	335.7	478.9	568.9	673.6
1988	207.1	251.3	372.9	451.6	544.8
1989	146.5	177.9	274.6	338.9	416.6
1990	98.0	119.1	191.3	240.6	301.4
TOTALS:	\$3,475	\$4,220	\$5,357	\$6,047	\$6,827

<sup>1</sup> Figures in Table I are not adjusted to reflect the EDIC.

<sup>2</sup> 1978 estimate includes only last six months of fiscal year.

Prepared by:  
Legislative Affairs Agency  
Research Division  
22 March 1978

TABLE II COOK INLET REVENUE EFFECTS UNDER HOUSE BILL 878<sup>1</sup>  
(\$ Million)

Fiscal Year	(no floor price inflation)	Floor Price no inflation	Floor Price 4% inflation	Floor Price 6% inflation	Floor Price 8% inflation
1978 <sup>2</sup>	\$ 8.0	\$ 8.4	\$ 8.4	\$ 8.4	\$ 8.4
1979	13.3	13.9	14.4	14.7	14.9
1980	11.1	11.6	12.5	12.9	13.3
1981	9.3	9.7	10.8	11.4	12.1
1982	7.8	8.2	9.5	10.2	10.9
1983	6.7	7.1	8.5	9.4	10.2
1984	5.9	6.3	7.8	8.7	9.7
1985	5.2	5.5	7.2	8.1	9.2
1986	4.5	4.8	6.4	7.4	8.6
1987	4.0	4.2	5.8	6.9	8.1
1988	3.4	3.6	5.3	6.3	7.6
1989	2.9	3.0	4.6	5.6	6.9
1990	2.5	2.6	4.1	5.1	6.3
TOTALS:	\$68.6	\$72.1	\$88.5	\$98.3	\$109.4

<sup>1</sup> Figures in Table II are not adjusted to reflect the EDIC.

<sup>2</sup> 1978 estimate includes only last six months of fiscal year.

Prepared by:  
Legislative Affairs Agency  
Research Division  
22 March 1978

Mr. Chairman and members of the House Resources Committee:

I want to thank you for the opportunity to testify today on HB 878. HG 878 represents in bill form the Department of Revenue's recommendations for changes in the state's cents-per-barrel tax rates under the production tax statute.

These recommendations and our reasons are contained in a recent report to Governor Hammond.

The bottom line of our recommendation is that the cents-per-barrel floor needs to be adjusted upwards to prevent further erosion of the state's production tax revenues which have resulted from spiralling transportation charges.

As you know our production tax is an alternative tax. A producer of new oil like that produced at Prudhoe Bay pays either 12.25 percent of the wellhead value or .80 per barrel of the oil produced, whichever is greater. The cents-per-barrel tax acts as a floor since if the wellhead value falls below a certain level the cents-per-barrel becomes applicable and the producer pays the certain enumerated cents-per-barrel regardless how far the well head value declines.

As I mentioned the present cents-per-barrel rate for all oil other than old oil is set at .80 per barrel and establishes an effective production tax floor of \$6.53. That is, 12.25 percent of \$6.53 is 80 cents. At wellhead values above

\$6.53, 12.25 percent of that value equals a greater tax per barrel than .80 and at well head values below \$6.53, 12.25 percent of the well head value gives a tax amount less than .80.

It is our position that a floor of \$6.53 is not sufficient to protect the revenues of the state since the true value of our oil is much higher than that assuming fair and reasonable transportation charges.

Last year we recommended a cents-per-barrel floor of \$7.50. We considered this a conservative mid-range estimate of a Prudhoe Bay wellhead value assuming no puffed tariffs or other corporate manipulations.

The oil industry did not dispute this figure of \$7.50. In fact their public statements showed likely wellhead values ranging from \$7.00 to \$8.00. For example, the public statements of the industry last year are summarized in our report.

Third party estimates of likely wellhead values also fell in the \$7.00 to \$8.00 range and are summarized in our report.

Unfortunately for Alaska, when the oil industry filed its production tax and royalty returns a few months later when Prudhoe Bay production began in June, they reported wellhead values \$1.00 to \$3.00 below their public statements.

This reduction in the wellhead values - below what the industry stated - below what third parties stated - and below what the department stated - can be directly traced to the claimed transportation costs of the companies. These transportation costs we believe are both inflated and unreasonable.

For example, during the month of June the TAPS owners filed unprecedented tariffs in the range of \$6.04 to \$6.44, in some cases over a dollar more than the companies stated only three to four months earlier. These tariffs were subsequently protested as unreasonable by the United States Justice Department, the State of Alaska, the Arctic Slope Native Corporation and the Interstate Commerce Commission staff. The matter is now pending in court litigation and administrative adjudication.

Another example is the claimed tanker transportation costs. These costs have ranged from 81 cents to a \$1.08 to the West Coast and \$3.61 to the Gulf Coast. These reported charges are also substantially above what the companies stated earlier in the year. Unlike pipeline tariffs, however, which are now regulated by the Federal Energy Regulatory Commission, these tanker charges are not regulated by any public regulatory agency. Instead the transportation costs are set by negotiation between the shipper and the tanker company which in some cases may actually be between affiliated companies.

These inflated pipeline tariffs and tanker charges have reduced Alaska's wellhead values substantially and resulted in Alaska royalty and production tax revenues to plummet.

Again we are not talking about a difference of a few cents in the wellhead value and a loss of a few million dollars, but a difference of dollars in the wellhead value resulting in a loss of hundreds of millions of dollars.

Just to show how bad the situation has gotten, Shoio has managed to reduce the wellhead value for the oil which it is transporting to the Gulf Coast, to \$2.87. This is from \$2.00 to \$3.00 below what it publically stated would be the case only three months prior to production.

For example in February of last year the Department estimated gross royalty revenues in FY 79 of \$520 million. In January of this year after the companies had reported their first few months of wellhead values, our estimates of gross royalty revenues for FY 79 had dropped to \$358 million. And in a continual spiral downward this month we are now projecting gross royalty revenues in FY 79 of \$300 million. It also should be noted that it is not only the state's general fund that is affected by these reduced wellhead values, but the permanent fund and the payments into the Alaska Native Fund have been reduced substantially as well

since 16 percent of the state's royalty revenues are paid to the Native Fund and 25 percent are paid into the permanent fund.

Although the legislature cannot now correct the royalty reduction since they are set by prior statute and leases, the legislature does have the power to prevent further erosion of the state's production tax revenues by adjusting the cents-per-barrel floor.

We recommend putting a stop to the further decline of our production tax revenues by setting the cents-per-barrel floor at its true market value of \$7.90 and escalating that amount over time based upon inflation.

We have arrived at that figure in two different ways. First of all, we have taken comparable market refinery prices on the West Coast and subtracted reasonable transportation costs (determined from third party sources) to arrive at an objective market wellhead value of \$7.91.

A second way of looking at it is to take last year's estimate of wellhead value which was consistent with the public statements of the oil companies and numerous consulting firms and add to that figure the changes in inflation or oil prices since that time. As such \$7.50 plus 5.7 percent inflation as measured by the G.N.P. deflator would yield a value of \$7.93.

This action would bring our severance tax revenues back into line with what they should be absent inflated transportation charges. For example in FY 79 it would protect an additional \$32 million in net production tax revenues over what we are now projecting under present law.

I ask for your favorable consideration of this important piece of legislation.

OS

1 IN THE HOUSE

BY THE RULES COMMITTEE BY  
REQUEST OF THE GOVERNOR

2 HOUSE BILL NO. 878

3 IN THE LEGISLATURE OF THE STATE OF ALASKA

4 TENTH LEGISLATURE - SECOND SESSION

5 A BILL

6 For an Act entitled: "An Act relating to oil and gas taxes; and providing  
7 for an effective date."

8 BE IT ENACTED BY THE LEGISLATURE OF THE STATE OF ALASKA:

9 \* Section 1. AS 43.55.011(c) is amended to read:

10 (c) The cents-per-barrel amount equals \$0.634 [\$0.60] per barrel  
11 of taxable old crude oil produced from the lease or property, and  
12 \$0.968 [\$0.80] per barrel for all other taxable oil produced from the  
13 lease or property, both as adjusted by sec. 12 of this chapter.

14 \* Sec. 2. AS 43.55.012(a) is repealed and re-enacted to read:

15 (a) The amounts set out in sec. 11(c) and sec. 16(c) of this  
16 chapter shall be increased or decreased by a percentage equal to the  
17 percentage of change in the Gross National Product Deflator published  
18 by the Bureau of Economic Analysis of the United States Department of  
19 Commerce, using 1972 as the base period for the deflator (1972 = 100).  
20 Changes in tax rates will be computed based on changes in the Gross  
21 National Product Deflator from the First Quarter 1978 Gross National  
22 Product Deflator. The department shall post the changes in the tax  
23 rates periodically and shall send notice of the changes to every  
24 person producing oil within the state.

25 \* Sec. 3. AS 43.55.016(c) is amended to read:

26 (c) The cents-per-Mcf amount equals \$0.068 [\$0.064] per thousand  
27 cubic feet of taxable gas produced from the lease or property as  
28 adjusted by sec. 12 of this chapter.

29 \* Sec. 4. This Act is retroactive to include production occurring

1 at any time after December 31, 1977.

2 \* Sec. 5. This Act takes effect immediately in accordance with AS  
3 01.10.070(c).

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ALASKAN TESTIMONY - JOE T. McMILLAN

MARINE TRANSPORTATION COSTS FOR NORTH SLOPE CRUDE

My name is Joe T. McMillan. I am General Manager of the Supply Department for Exxon USA. We appreciate the opportunity to appear today and discuss the marine transportation costs associated with moving North Slope crude to the West Coast. The basis Exxon is using in determining these costs is market-oriented and is consistent with the requirements of the severance tax statutes.

The payment of severance taxes requires the determination of a value for Prudhoe Bay crude at the inlet to the Trans Alaska Pipeline (TAPS). Since the crude must compete with other alternative crudes that can be delivered to a refiner, our prices for North Slope crude on the West Coast are based on market factors, primarily the landed cost of foreign crude imports adjusted for quality. The various increments of cost for moving the Prudhoe Bay crude from the North Slope to the refiner are deducted from the West Coast price of the crude to determine the TAPS inlet value.

In the attachment, I have shown how we determined the value for the crude that was produced in December 1977 and moved to the West Coast. The marine costs reported to the State include the Federal Oil Spill Fund payment, an allowance for marine losses, casualty insurance and tanker repositioning costs, as well as ocean freight costs from Valdez to the West Coast market. Let me discuss each of these components.

The Federal Oil Spill charge amounts to \$0.05/B on North Slope crude shipped from Valdez. This is paid to the U.S. Government to build up the \$100MM fund provided for in the TAPS Authorization Act. The fund will be available, if necessary, to pay for spill cleanup and administrative costs. The costs currently exclude the State of Alaska risk avoidance assessment which is presently being litigated. This could add another 2-3¢/B to the transportation costs.

The marine losses are to cover evaporation and other handling of the crude while in transit and were initially based on our experience in moving significant volumes of crude on a worldwide basis. It is not uncommon in the marine industry for a loss factor of .5% to be employed for this purpose. However, our operating experience in this service has been lower. In January we adjusted the loss factor to .25% to reflect our actual experience in shipping the North Slope crude during the August-December 1977 period.

The charge for casualty insurance is based on actual quotes from outside insurance companies. The insurance cost is for the complete move from the North Slope to the West Coast and would cover casualty losses from the pipeline and the terminal at Valdez, as well as any marine casualty losses.

The freight costs and the tanker repositioning costs are also governed by market conditions. In the foreign marine trade a panel of London brokers publish a monthly market rate for various sized tankers. The rate is representative of the actual mix of long and short-term charters and spot voyages currently in use in the foreign market. The Average Freight Rate Assessment, or AFRA, rates are widely used by industry and are accepted by a number of governments in assessing foreign marine costs. However, there is no such outside information available for U.S. Flag or Jones Act ships in West Coast trade. For this reason,

we have used our actual charter rates for ships in North Slope service to develop the marine freight from Valdez for both the chartered and our own ships. These charter rates are set by arm's-length negotiations between a third party ship owner and the company chartering the vessel. The repositioning costs are required to reflect the expense of moving the ships from their original service to the West Coast trade. These costs are not included on the charter costs and are a one-time expense that is being amortized over an 18-month period.

In addition, a 2.5% management fee is added to cover the cost of market solicitations, charter negotiations and administration, schedule coordination, and other services provided by Exxon Marine Department. The fee is composed of (1) the normal brokerage fee (1-1/4%) associated with market solicitation and charter negotiations and (2) an estimate of the costs for the remaining items.

The charter costs negotiated by Exxon represent a true measure of the value of term coverage of North Slope crude movements. However, West Coast transportation rates will vary due to different charter costs, discharge ports, and size of ship. For example, at San Francisco, the terminals are not capable of accepting ships with greater than a 34-foot draft. As a result, a charge must be added to partially unload, or lighter, a portion of the cargo into barges or smaller ships for movement to the refineries in that area. The alternative would be the use of much smaller ships and increased costs. However, most ships calling at Los Angeles can be accepted fully laden, thereby saving lightering costs. These and other variations explain why marine costs reported for an individual month or for different companies are not the same.

In conclusion, the marine transportation charges used by Exxon to determine the value of Alaska North Slope crude reflect third-party commercial market conditions. We believe this to be a proper and fair basis for determining the severance tax value for North Slope crude oil.

BASIS FOR EXXON'S NORTH SLOPE CRUDE PRICE NETBACK FOR SEVERANCE TAX

	December 1977 \$/B	Basis/Comments
West Coast Market Price	13.16	Negotiated West Coast sales price. Represents parity price with imported crude adjusted for quality/other factors.
Federal Oil Spill Fund	(0.05)	5¢/B levied on each barrel loaded at Valdez until a \$100 MM fund is established.
Marine Losses	(0.03)	0.2% losses based on previous Exxon experience. Actual North Slope experience indicates a higher loss of 0.25%.
Casualty Insurance	(0.01)	Crude casualty loss insurance for pipeline and Marine moves. Rate based on quotes from outside insurance companies.
Marine Freight from Valdez	(0.90)	Tanker rates for both owned and period chartered tonnage are based on third party charter rates plus a 2-1/2% management fee.
Tanker Repositioning	(0.09)	18-month amortization of positioning ships from Gulf Coast to West Coast (via Cape Horn) based on third party market charter cost.
Marine Subtotal	<u>(1.08)</u>	
TAPS Tarriff/Losses	<u>(6.27)</u>	Exxon Pipeline Company's ICC interim tariff
TAPS Inlet	5.81	

AGD 547729

TESTIMONY BEFORE THE HOUSE RESOURCES COMMITTEE  
OF THE ALASKA STATE LEGISLATURE  
BY K. E. SHOWALTER  
DIRECTOR, ALASKA GOVERNMENT AFFAIRS  
SOHIO PETROLEUM COMPANY  
MARCH 24, 1978  
3

Chairman Osterback and members of the Committee:

I am K. E. Showalter, Director of Alaskan Government Affairs for Sohio Petroleum. My remarks are directed to House Bill 878, a proposed amendment to the oil and gas production tax laws. This bill would do two things; it would increase the production tax floor from \$.80 to \$.968, a 21% increase on top of an approximate 50% increase just last year, and it would escalate the floor tax by means of the Gross National Product Deflator index.

The recommendation for the increase in the floor is justified on the basis that the Prudhoe Bay Producers are somehow "manipulating" or "managing" transportation costs in such a way as to reduce well head values to the detriment of the State of Alaska and to the benefit of the producers.

The current well head values are no doubt somewhat below the expectations of the state and I can also tell you they are disappointing to Sohio and its stockholders.

It has been charged that Sohio and others deliberately gave misleading estimates of transportation costs last year that resulted in the production tax floor being set too low. I can categorically state that we were trying to make the best good faith, estimates we could with the information available at the time and I also believe that the other companies were doing the same.

In the short time that the Department of Revenue recommendation has been available we have not yet been able to do all the research necessary to give a comprehensive reply to their charges. However, we have done some preliminary work and would like to examine more closely some of the evidence presented in the recommendation.

First let's take a look at TAPS tariffs. The Department of Revenue cites a Sohio estimate by Mr. R. M. Donaldson on March 21, 1977 of \$5.00 to \$6.00 as one of the "misleading" estimates. Some three months later we filed a tariff of \$6.16 -- less than 3% above the estimated range. Hardly a gross deception when the range given was 20%.

The recommendation also cites estimated tariffs from a Wainwright Securities report dated April 1, 1977. On page 42 of that report is a table showing three tariff levels using different assumptions as to how the ICC might rule on final tariffs for the TAPS pipeline. The tariffs listed were:

\$3.32	per barrel	(ICC 8% return)
\$4.23	" "	(ICC 10% return)
\$6.25	" "	(Elkins Act 7% return)

An additional 5¢ per barrel has to be added for the TAPS spill fund.

On page 47, the Wainwright report goes on to say:

"As matters now stand, the TAPS owners are apparently moving forward to post initial tariffs on an Elkins Act basis, in the belief that past practice affords good justification for continuing to use this tariff setting approach."

The Elkins Act 7% rate of return basis was listed by Wainwright at \$6.25, remarkably close to the middle of the range of tariffs filed of \$6.04 to \$6.44.

On page 49 of the Wainwright report points out the difficulties of estimating final TAPS tariffs:

"It should be fairly obvious from the preceding discussion that any attempt to accurately forecast pipeline tariffs and earnings is fraught with major imponderables. While an endless number of permutations and combinations can be constructed as a means of defining sensitivities, in the end a useful earnings estimate must rest on a limited number of possibilities. Thus, in developing our 1977-1980 North Slope earnings estimates, we used only two alternatives for deriving TAPS tariffs and pipeline earnings: (1) the traditional Elkins Act consent Decree method, the basis on which the companies (with the possible exception of Ameranda Hess) apparently intend to file, at least initially; and (2) the return on equity approach outlined by the ICC in the WBPL proceeding. These two cases can also be viewed as bracketing the eventual outcome."

Thus, this report estimated that the final tariffs will be somewhere between \$4.23 and \$6.25. We fail to see how this report could "mislead" anyone.

But the real issue on tariffs is that the extensive hearings required before the Federal Energy Regulatory Commission and the Alaska Pipeline Commission are now far from complete and it will be several months until final tariffs are determined. Should the State of Alaska and the other protestants prevail, with the tariffs finally set at a rate lower than we are now charging, our filed tariffs require that the pipeline companies refund the difference to the shippers. In that eventuality Sohio, as a producer, would then be required to pay the State of Alaska any difference in taxes and royalties attributed to such lower tariff on every barrel of oil shipped at the higher rate, regardless of when it was shipped.

The industry is also accused of shifting profits to tanker affiliates and away from the well head. Sohio has no affiliate in the tanker business since the Jones Act precludes us from owning or operating intercoastal vessels in the U.S. because B.P., Ltd., owns over 25% of our stock. All the tankers transporting our oil are owned by others and are on time charters of various lengths. The large newly built tankers are backed financially by Sohio long term charters. There would be no advantage for Sohio to shift profits away from the well head, where the profits are ours, to tanker transportation, where someone else gets the dollars.

Our estimate of \$2.75 for shipments to the Gulf Coast was lower than the actual cost turned out to be. This \$2.75 estimate was made in March, 1977. Since we do not own the tankers we can not set rates, we must negotiate the best deal possible and we believe we have done so.

The use of the \$3.61 from our December reports is, in itself, misleading. As the Department of Revenue must know, we have agreed with the State of Alaska that since actual tanker costs cannot be determined on a monthly basis in time to make our tax payments we estimate tanker costs on a quarterly basis and pay taxes based on the estimate. Sixty days after the end of the quarter a determination of actual costs is made and tax adjustments made accordingly.

During December our tax payments were based on an estimate of \$3.61. However, we have since determined that the actual costs were \$3.31 for December and the extra tax due has been paid to the Department of Revenue.

Our people have estimated and have used for January, a tanker cost of \$.99 to the West Coast and \$3.05 to the Gulf Coast. These estimates may be high or low and will be adjusted on the first of June to the actual costs. So right now it looks as though our estimate was off about \$.30 (11%) rather than the reported \$.86, not really a bad estimate.

In addition, we note that FCCS CSHB 118 has an appropriation of \$35,000 for a study of tanker costs by Legislative Affairs. We are confident that an objective study will show that the tanker rates we are charging are proper.

I would also like to point out that Sohio has been working for about 4 years and has spent over \$35,000,000 to date in an attempt to secure permits and do engineering work on the PAC-TEX pipeline project from Long Beach California to Midland, Texas. We do not have all the permits but we are getting closer. This line will, if built, reduce the cost of shipments to the Gulf Coast substantially, to the benefit of both the producers and the State. I believe this massive effort indicates that we are working hard to get the most reasonable transportation costs possible for Prudhoe Bay crude oil, even while we are accused of "manipulating" in the other direction.

I'm not quite sure why royalty oil was brought up in the Department's recommendations and in their testimony but since it was I would like to comment briefly on that subject. On page 16, of the Department's recommendations they point out:

"The purpose of mentioning all these prices is not to set the ground for any possible legislative resolution of these royalty matters, since the royalty questions are already being litigated."

This is a fact. When we read our leases they say that we are to pay royalty "at the well" and that certain cleaning and dehydrating costs are deducible from the royalty value. The state believes that royalty value should be determined at the LACT meter with no deductions. These and other matters are the subject of the current litigation and their resolution should properly be left with the courts.

To sum up these three issues:

- (1) The pipeline tariffs will be set at a level that the FERC and APC determine is proper. If they are lower than we have charged we will have to pay adjusted taxes and royalties.
- (2) Tanker costs are above estimates but not nearly as much as indicated earlier and it appears you are about to make a study to determine whether or not these charges are reasonable.
- (3) Royalty disputes (which have no bearing on this bill) are properly being decided in the courts.

I wish this committee could have also had the benefit of testimony on this bill from legislative consultant Milton Lipton. He did review the Senate companion bill with the Senate Resources Committee and you might want to get a transcript of that hearing. Since his testimony has not been transcribed I hesitate to quote him, but the essence of his testimony could be summarized, I believe accurately, as follows:

- (1) Crude oil has no inherent value on the North Slope, therefore it is not proper to set any value such as \$7.93 at the well head for tax purpose.
- (2) Tariffs are being set by FERC and APC and Alaska should be prepared to accept whatever level they set. Lipton expects that the final tariffs will be significantly lower than those filed.
- (3) The state should examine tanker charges and ~~corridor~~ <sup>CONSIDER</sup> setting up an independent board of ship brokers that would meet periodically and determine reasonable tanker charges for the future, based on recent past history.

The bill also would change the floor annually using the GNP Deflator Index. We believe, as we stated last year, that this is a totally inappropriate index and that it is wrong to use any index to automatically change the tax. Recent experience in Cook Inlet with indexing certainly should show the inequities created by this mechanism when the Federal Government is controlling the price of crude oil. The GNP Deflator Index is a very broad index with no relationship to the price of crude oil and is inappropriate for this purpose.

If my notes are correct, the Department of Revenue estimates that this tax increase will produce about \$32 million in FY 79. Our calculations show that at 1.1 million barrels per day the additional tax will be about \$54 million. Perhaps the difference is that the Department subtracted out the reserves tax credit. In any case it is an additional \$54 million burden since we would get the credits under current law at a later date.

PRODHOE  
BAY  
OIL  
ONLY

I want to end my remarks by pointing out that the State of Alaska and the oil producers operating here do have many interests in common. I believe that efficient transportation of oil to market is one of those common interests, as I have explained about on the PAC-TEX line. There are many other examples that can be made. The point is, we would like to someday arrive at a milestone where the State and the producers could spend some time and effort working together on constructive things that will benefit both, rather than seemingly always being at odds on one subject or another. May be it isn't possible but we would certainly like to try.

Thank you.

TESTIMONY OF HARLAM MARTENS OF EXXON COMPANY, U.S.A.  
BEFORE HOUSE RESOURCES COMMITTEE  
H.B. 878  
March 23, 1978  
Juneau, Alaska

JKE

I am Harlan Martens, an attorney in the Anchorage office of Exxon Company, U.S.A. My comments today will be in three general areas -- on the overall implications of H.B. 878 as we see them, the Department of Revenue's report to Governor Hammond, upon which H.B. 878 is based, and the inequity of the cents-per-barrel minimum severance tax, in general.

The Department of Revenue report alleges that oil prices, pipeline tariff and tanker transportation costs are being manipulated so as to artificially lower oil values for severance tax purposes. When critically examined, the allegations made are based entirely on unwarranted assumptions and unjustified conclusions. The report fails to substantiate any of the charges. Further, the report fails to emphasize that the matters of transportation costs and TAPs tariffs being questioned are currently all subjects of either appropriate administration hearings or pending litigation. These proceedings shall shed light upon the reasonableness of all transportation costs from the North Slope.

Exxon categorically denies the allegations in the Department of Revenue's report and dismisses the report out of hand because of its baseless charges.

The remainder of my comments will be addressed to House Bill 878.

House Bill 878

House Bill 878 would increase the cents-per-barrel minimum tax classified as "old oil" from 60 cents to 63.4 cents and other oil

from 80 cents to 96.8 cents. The minimum cents per MCS tax for gas would be increased from 6.4 cents to 6.8 cents. H.B. 878 also provides for a periodic adjustment to these amounts according to the percentage change in the Gross National Product Deflator. It would be retroactive to the first of 1978. Exxon believes this proposed legislation is unnecessary, untimely and inappropriate:

- 1) because it is being proposed not on the basis of any demonstrated need for more tax revenues, but on the bases of a report with unsubstantiated allegations which makes the proposed Bill look like a punitive measure;
- 2) because it deals with matters which are currently the subjects of regulatory agency hearings or litigation; and
- 3) because the Bill seeks to have the State participate in increases in oil values but have the oil producers bear all the impact when values drop below the established floor level.

With respect to this third point, on January 25, 1978, Dr. Milton Lipton, Consultant to the Legislature, addressed this committee and said:

"The establishment of the floor...says...that the State abstracts itself from the realities of the environment in which the oil companies are operating, that come hell or high water, whether the industry... is able to get the wellhead value on which the State's per cent-of-value tax is calculated, the State would get at least (the floor amount)...."

In essence House Bill 878 is nothing more than an additional and retroactive 21 percent severance tax increase in Prudhoe Bay oil production, effective a mere 6 months after the effective date of the 50 percent severance tax increase enacted last session.

In the last legislative session, the severance tax rate for oil was set by statute at 12.25 percent of realization, or a minimum of 80 cents per barrel. Of course, when the minimum floor takes effect, the actual severance tax rate exceeds the normal statutory tax rate. For instance, in December 1977, the average severance tax rate actually paid by Prudhoe Bay producers was 13.8 percent.

House Bill 878 would compound this inequity by taxing about half of the Prudhoe Bay production, which must be marketed on the Gulf Coast, at a rate more than double the existing severance tax rate! Any company which must transport its North Slope oil to the Gulf Coast would be hit hard by this proposed legislation because of the reduction of field realization due to the high transportation costs. Regardless of the intent of H.B. 878 the effect of the double tax rate for oil delivered to the Gulf Coast or beyond is to create discrimination against those parties that cannot market their Alaska oil on the West Coast.

The future of Alaska is dependent on development of its resources which, according to the USGS, includes vast undiscovered oil and gas reserves. Any new oil production which must be moved beyond the West Coast could be taxed at rates far above the statutory rate, as is the case for oil moving through the Panama Canal to the U.S. Gulf Coast. It seems obvious that the necessary inclusion of such a severance tax burden in producer's economic analyses will have severe negative impact on future development decisions.

## Summary

In summary, Exxon believes this proposed legislation is both inappropriate and inequitable. It is premature in view of the orderly regulatory and legal proceedings now underway and would place unnecessary burdens on industry. Its enactment would be a further disincentive to future development in Alaska and counter-productive to the best interests of Alaskans.



**Marathon  
Oil Company**

P.O. Box 2380  
Anchorage, Alaska 99510  
Telephone 907/274-1511

March 30, 1978

The Honorable Alvin Osterback  
Chairman, House Resources Committee  
Alaska State House of Representatives  
Pouch V State Capitol Building  
Juneau AK 99811

Dear Representative Osterback:

On behalf of Marathon Oil Company, I would like to present our views on House Bill 878: "An Act relating to oil and gas taxes; and providing for an effective date".

Prior to the OPEC embargo in 1973, it might have been logical to set floor prices on hydrocarbons to protect State revenues derived from production (severance) taxes. However, today with the market price stability created by a strong demand for a scarce commodity, it certainly appears to be unwarranted.

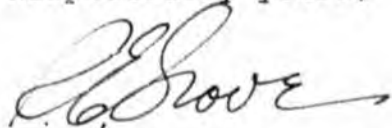
The severance tax statute enacted last session established floor prices on "old oil" (lower-tier), "other oil" and natural gas. The basis for these floor prices is somewhat obscure, but certainly they exceed the actual controlled prices for lower-tier oil and natural gas in the Cook Inlet Basin. Now, HB 878 proposes to inflate these artificially high floor prices by the Gross National Product Deflator (GNPD) which reportedly increased 5.7% during 1977. In the first place, the current law which established the floor prices did not become effective until July 1, 1977; thus, the reason for applying an annual inflation rate to amend these prices cannot be (logically) explained. Secondly, this inflation factor is being applied to hydrocarbon prices which are regulated by the Federal Government. For example, the lower-tier oil price that Marathon receives in the Cook Inlet was permitted by the Federal Energy Administration (Department of Energy) to increase only seven cents or 1.5% during all of 1977. I believe this conclusively exhibits the impracticality of applying the GNPD to an artificially priced commodity which is not permitted by law to reflect its true market value.

Representative Osterback  
March 30, 1978  
Page 2

In conclusion, Marathon respectfully recommends that your Committee reject completely HB 878. Conversely, if you believe that the current severance tax statute is in need of improvement, we recommend the deletion of the floor price concept. If this was eliminated, the questionable practice of manipulating floor prices by the introduction of unrelated inflators would become unnecessary. The tax computation would then revert back to a simple percent-of-value calculation based strictly on actual prices received for the hydrocarbons. This concept is used by many other oil and gas producing states.

I thank you for your time and consideration.

Respectfully yours,



R. E. Grove

copy to Members of House Resources Committee

AGO 547740

ATLANTIC RICHFIELD COMPANY STATEMENT  
STATE OF ALASKA  
HB 878

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Atlantic Richfield Company, as a major producer of crude oil in the State of Alaska, objects to the proposal made in HB 878 which would increase the taxes paid on oil and gas production. Our objections are based on a view that the proposed increase is unreasonable and inequitable. It is unreasonable to change the tax almost immediately after establishing the present tax rate. It is inequitable to base the tax on values which are substantially above the market value. We further believe it is not in the long term interest of the State of Alaska to continue increasing oil and gas taxes -- already the highest of any state in the Union -- since it will signal a worsening of the tax climate to investors and potential developers of Alaska resources.

Support for the tax proposal contained in HB 878 seems to be based not on need for revenue but on the argument that the actual market price of North Slope crude is less than had been anticipated. In respect to the marketing of North Slope crude, Atlantic Richfield Company and the State of Alaska have a common interest -- both would like to sell their crude oil in the market at the highest competitive value. In fact, we each worked hard to avoid having an entitlement burden added under federal regulations which threatened to drastically reduce wellhead price less than a year

ago. We felt an entitlement burden would have been completely inappropriate. Similarly, Atlantic Richfield Company considers it grossly unfair to tax on the basis of a price which is significantly above the present value of the item being taxed. In reality the minimum tax proposed under HB 878 means the effective tax rate on Prudhoe Bay oil would be not 12 1/4% but nearly 15% for Atlantic Richfield Company at today's crude prices.

The Department of Revenue supports this tax proposal by suggesting that the true market value of North Slope crude is \$7.91 per barrel at the wellhead. Atlantic Richfield Company bases its sales of North Slope crude on a substantially lower estimate of its market value. Although we do not know in detail how the Department of Revenue estimate was derived, it should be possible to identify differences by comparison with the following itemization for reporting production taxes.

	<u>\$/BBL</u>
Los Angeles Market for North Slope Crude	13.44
Less: Vessel Transportation	0.88
Pipeline Transportation	6.05
State and Federal Spill Funds	0.11
North Slope Gathering	0.25
Sub Total Expenses	<u>7.29</u>
Net Value for Tax Base	6.15

The tanker rate above is the one actually used by Atlantic Richfield Company in establishing its wellhead price. At times actual cost to the Company could vary both above and below the 88¢ per barrel figure depending on the tanker market, the vessel used and the many other expenses which can fluctuate on a short term basis. In fact, we have paid more than 88¢ for our movements involving chartered vessels, but the wellhead price was not correspondingly lowered for tax and royalty purposes.

The pipeline tariff is currently being reviewed and is in litigation. Obviously, any change here would affect the wellhead price.

In additional argument, the Department of Revenue offers support for the tax proposal by stating the earlier oil company estimates of anticipated wellhead price were higher than are now actually being realized. However, it would be inappropriate to ascribe the difference solely to transportation costs. For instance, one important additional factor in the wellhead price of North Slope crude is the competing price of imported crude oil. A year ago it seemed quite reasonable to expect that OPEC would carry out its announced intention of raising crude oil price substantially. There was also hope then that Alaskan crude would be allowed better access to markets through alternatives proposed by the oil companies to reduce transportation costs. These anticipated

changes did not take place. However, significant efforts were made and some options are still open.

In summary, we believe it is most unreasonable to establish floor price for tax purposes which is substantially above market price. If the present floor price is to be maintained, we suggest it be pegged to the market price of oil and not to the GNP deflator. Use of the Gross National Product deflator could eventually lead to additional distortion since oil price and GNP deflator do not necessarily have any relationship to each other. It seems more reasonable either to leave the floor price at a set figure as it is today, or to provide a market mechanism such as the one suggested.

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March 23, 1978

The Honorable Alvin Osterback  
Chairman  
House Resources Committee  
Alaska State Legislature  
Pouch V - State Capitol  
Juneau, AK 99811

Dear Alvin:

Enclosed please find our Notes on Proposed Changes in Alaska's Oil Production Tax. Again, I am sorry that we were unable to testify before your House Resources Committee on this matter last week, but I expect that you may want to have actual testimony and an opportunity for your Committee members to ask questions on the occasion of our next visit.

I am taking this opportunity to make our Notes available to other interested persons as indicated below.

Cordially,

  
Milton Lipton  
Executive Vice President

/pt  
enclosure

Distribution to:

The Hon. John Rader  
The Hon. Hugh Malone  
The Hon. Kay Poland  
The Hon. John Sackett  
The Hon. Steve Cowper  
Mr. Jack Doyle  
Mr. Gregg Erickson  
Mr. John Messenger

AGO 547745 +

A Note on  
PROPOSED CHANGES IN ALASKA'S OIL PRODUCTION TAX

J

W. J. Levy Consultants Corp.  
New York, N. Y.  
March, 1978

AGO 547746

A Note on  
PROPOSED CHANGES IN ALASKA'S OIL PRODUCTION TAX

1. In this Report for the Alaskan Legislature, we review changes in Alaska's oil production tax recommended by the Department of Revenue and incorporated in Senate Bill No. 532 and House Bill No. 878.

2. In 1977, Alaska's production tax was amended to eliminate automatic escalation in cents-per-barrel tax rates.\* At the same time, the amended law provided for annual review of cents-per-barrel and cents-per-MCF tax rates by the Department of Revenue, with a written report and recommendations for changes to be submitted to the Governor. The Governor, then, submits the proposed changes to the Legislature.

3. The Department of Revenue's Report for 1978 recommended (and SB532/HB878 incorporate) the following changes --

An increase in the cents-per-barrel tax rate for other-than-old crude oil from 80 to 96.8 cents, which corresponds to raising the floor price (i.e., the price below which the cents-per-barrel rather than the percent-of-value tax applies) from \$6.53 to \$7.90 per barrel;

An increase in the cents-per-barrel tax rate on old crude oil from 60 to 63.4 cents per barrel, raising the floor price from \$4.90 to \$5.18 per barrel; and

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\* Prior to this change, cents-per-barrel tax rates had increased or decreased with percentage changes in the Wholesale Price Index for crude petroleum published by the Bureau of Labor Statistics of the U.S. Department of Labor.

Re-introduction of automatic escalation in cents-per-barrel tax rates, tying rates to percentage changes in the Gross National Product Deflator published by the Bureau of Economic Analysis of the U. S. Department of Commerce.\*

4. In reviewing these proposed changes in the oil production tax rates, the Legislature will want to consider carefully two things. First, the reasoning behind the Department of Revenue's recommendations, as set out in the Department's report to the Governor.\*\* Second, that any changes in production taxes be reviewed in conjunction with proposed changes in other taxes that the State assesses on the oil and gas industry, notably the corporate income tax.

The Floor Price  
for Prudhoe Bay Crude

5. The Department of Revenue report finds that the current floor price (and thus also the cents-per-barrel tax rate) is "inadequate." The Department calculates that the "market value" of Prudhoe Bay oil on the North Slope is significantly above the prices being reported by the companies for severance tax (or royalty) purposes. Furthermore, the floor price, which is designed to protect the State's severance tax revenues in the event that prices reported by companies are artificially depressed, is also below the computed market value. The conclusion: the floor price is too low to do its intended job of protecting revenues. The recommendation: raise the floor price for other-than-old oil to the level calculated by the Department as the market value (\$7.90) of Prudhoe Bay crude on the North Slope.

\* Changes in tax rates would be based on changes in the Deflator from the First Quarter of 1978.

\*\* Recommended Changes in Alaska's Oil and Gas Production Tax Rates for 1978, a Report to Governor Jay S. Hammond by the Alaskan Department of Revenue.

6. Our firm has always regarded increasing the severance tax as the ultimate recourse for the State in the event that wellhead values are artificially depressed by the actions of tax-paying companies. The question the Legislature must consider now is whether the current circumstances of wellhead pricing warrant taking such a major step at the present time in the light of available evidence. This can best be judged by looking, as the Department has, at the various elements that enter into Prudhoe Bay oil prices -- i. e., pipeline tariff rates, tanker charges, and prices in markets to which the oil moves.

#### TAPS Tariff

7. The major factor serving to lower wellhead values below earlier expectations is the high level of TAPS pipeline tariffs filed by the companies with the ICC (now FERC) and used by the companies in their netback calculations. These tariff rates average out to some \$6.20 per barrel.\* In contrast, the interim tariffs allowed by the ICC average some \$4.83 per barrel, or \$1.37 per barrel less. The State of Alaska, in its protest to the ICC, set out tariff rates that averaged around \$3.96. FERC is now in the process of conducting an investigation (with Alaska Pipeline Commission participating) into TAPS rates in order to establish lawful permanent tariffs. Pending the final outcome, the Courts have allowed the companies to continue to charge their initial filed tariffs.

8. Thus, the question of what are reasonable interstate tariff rates for TAPS is being reviewed and will eventually be resolved by the appropriate regulatory body. Whatever rates are eventually approved by the FERC will be those actually charged for transportation of the bulk of oil moved via TAPS and will thus bear on the value of oil on the North Slope. These rates would be appropriate to the calculation of oil values for severance tax and royalty purposes.

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\* A weighted average calculated by the Department of Revenue based upon pipeline ownership.

9. If finally approved TAPS rates are below the initially filed company rates -- and lower ICC interim rates would certainly point in this direction -- the effect would be to raise North Slope values and severance taxes to which the State was entitled. The State would obviously want to take whatever steps are necessary to ensure that it is in a position to collect back taxes in the event that this were to happen. Assuming that the State does have this protection, it would seem inappropriate for the State now to raise the floor price for production tax purposes to reflect what the State judges will be the (lower) tariff finally approved. This puts the State in the position of prejudging a complicated issue which is being subject to extensive hearings, later careful regulatory consideration, and probably also eventually review in the Courts.\*

#### Tanker Charges

10. The Department of Revenue's report also takes issue with the tanker charges being submitted by the companies. The Department points out that the reported charges (e.g., \$.81-\$1.08 to the West Coast) are substantially above what had been estimated by many third-party observers and by company spokesmen themselves earlier on. In contrast to pipeline tariff rates, tanker charges are not regulated. Thus, the State will not have regulated rates to provide guidelines.

11. In the circumstances, we certainly feel that Legislative inquiry into the question of tanker charges is warranted, in course of hearings on the proposed changes in Alaska's production (severance) tax. Many factors affect tanker costs -- e.g., tanker size, timing of charters, bunker costs,

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\* Note that the proposed increase in floor price from \$6.53 to \$7.90 (+\$1.37) is the same as the difference between average ICC interim (\$4.83) and company posted tariffs (\$6.20). Thus, although other aspects of wellhead valuation are at issue, the pipeline tariff is pivotal.

safety and environmental standards, etc. Thus, ocean transportation costs may have increased substantially since earlier estimates were made. However, the companies transporting North Slope crude via tanker should explain how they arrive at the charges they are reporting to the State. With a better understanding of the factors underlying those charges, the State should be in a better position to judge their reasonableness for purposes of valuation.

12. The State might also want to consider the possibility of establishing some norm for transportation rates at which North Slope crude could be moved in substantial and continuous volume to major markets -- rather than continuously monitoring charges for each and every company's transportation. This rate would presumably be one which a company could match on the basis of prudent transportation commitments. Companies who are particularly astute in their tanker operations could hope to do better -- and would benefit therefrom by not having North Slope oil values and thus production taxes raised by their lower-than-average tanker costs. Other companies who make less astute business decisions on tanker coverage would have to bear the consequence without the State picking up part of higher-than-average costs through lower severance taxes.

13. In this connection, we note that the average transportation cost of oil moving in international trade in foreign flag tankers has been calculated since 1954 by an independent London Tanker Brokers' Panel. Their estimates, Average Freight Rate Assessment (AFRA), are widely used as proxy for companies' actual transportation costs both in commercial contracts where delivered prices require a freight component and in c. i. f. values for Government administration and tax purposes. Some such approach might be considered for tanker movements of North Slope crude. This could avoid potential conflicts over tanker charges. In the event, companies would be completely free to make their own decisions as to how they cover their tonnage requirements, but tanker charges for purposes of wellhead valuation would reflect objective criteria as to ocean transportation costs.

## Market Prices

14. The Department has also questioned the companies' data on market prices received for oil, particularly on the West Coast. The Department calculates a value for North Slope oil at a refinery destination in Los Angeles. This estimate of \$13.44 is based on the Official Government Selling Price for Saudi Arabian Medium (31<sup>o</sup>) crude f.o.b. plus LR2 (80,000-159,999 dwt.) AFRA tanker transportation. It finds this estimate to be at the upper end of the range of West Coast market prices reported by the companies (\$13.16-\$13.44).

15. The problem, here, is that there are many factors that bear on market prices and it is difficult to come up with a precise objective estimate. First, there are questions of crude quality. The Department's estimate of refinery value, for example, is based on a 31<sup>o</sup> Saudi crude, when North Slope crude is in fact around 27<sup>o</sup>. If Saudi Heavy crude (27<sup>o</sup>) were used, the Department's estimate would have been \$13.14 -- or below the low end of the companies' range. On the other hand, Saudi Heavy crude (as also Saudi Medium crude) contains substantially more sulphur than North Slope crude, which enhances the value of North Slope relative to these crudes.\* Furthermore, the relative value of various crude qualities varies from refiner to refiner, depending on his processing facilities, market requirements, etc. At least as important, there are other aspects to crude sales than selling price that also affect the value to the buyer and seller -- e.g., credit terms, obligations for the seller to offtake crude from the buyer,\*\* etc.

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\* As against 1-percent sulphur for North Slope, Saudi Heavy is 2.8 percent and Medium 2.4 percent.

\*\* The major third-party purchaser of North Slope crude is Socal for its Los Angeles and San Francisco refineries. Press reports indicate that at least some of Socal's contractual purchases of North Slope crude involve commitments by sellers to lift Middle East crude that Socal would have otherwise processed on the West Coast. Sellers of North Slope crudes are reportedly moving this Middle East crude to East-of-Rockies refineries.

16. The State will obviously want to continue to monitor whatever relevant information it can obtain on sales prices for North Slope oil. However, given the range of difficulties in assessing an appropriate market price, the selling prices reported by the companies, in our judgment, do not look to be obviously out of line.

17. Finally, we note that companies have calculated severance tax values by netting back from the markets to which North Slope oil actually moves. Owing to much higher transport costs, netbacks from Gulf Coast shipments are obviously significantly lower than from the West Coast. The Department of Revenue, in its assessment of a market price netback for a severance tax floor price, has used only the West Coast as a reference point. On this basis, companies forced to ship North Slope crude to the Gulf Coast would have to pay a severance tax based on a higher netback calculated by the Department for the West Coast rather than actual netback from the market to which their crude moves.

18. In a report we prepared for the Legislature in 1970 on valuation of Alaskan crude oil, \* we took the position that limited volume shipments of Alaskan crude to distant markets, which may reflect individual company economics, would not normally bear on the valuation of Alaskan crude. Valuation should be based on market prices in refining centers "where there is a substantial and continuous movement of Alaskan oil by the industry in general." At present, substantial volumes of North Slope crude move to the Gulf Coast; when production reaches 1.2 million barrels daily, approximately two fifths (500,000 barrels daily) is likely to be moving to the Gulf Coast. In these circumstances, it is not inappropriate that the value of Alaskan crude on the North Slope takes into account the fact that a substantial portion of production cannot realize the higher netback values obtainable on the West Coast, owing to limitations on the absorptive capacity of West Coast refineries for North Slope crude.

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\* Economic Considerations Bearing on Valuation of Alaskan Crude Oil and State Policy on Pipelines, December, 1970.

## Cents-per-Barrel Escalation

19. In addition to raising floor prices, the Department has also recommended re-introduction of automatic escalation in floor prices with an index of inflation. Escalation with the GNP deflator would almost inevitably result in progressive increases in severance taxes where cents-per-barrel and not percent-of-value is the operative tax.

20. Last year's severance tax revision was presumably designed to establish schedules of severance taxation appropriate to the producing circumstances of Alaska and with regard also to rates of severance taxation in other producing states. No doubt wellhead values and hence severance tax revenues have worked out below expectations; and we discussed above whether an increase in floor prices ought now to be considered as offset to protect Alaska's interests.

21. Escalation of floor prices with inflation, however, could have the effect of increasing producing companies' effective severance tax rates without regard to wellhead values. We have noted in the past that previous escalation with the Wholesale Price Index for crude petroleum imposed a progressively increasing severance tax burden on Cook Inlet producers whose old oil prices were held down by Federal price ceilings whilst average crude prices and hence their cents-per-barrel tax moved upward. The adverse effect (i. e., rising cents-per-barrel severance taxes relative to wellhead values) could be even more incongruous when escalation is triggered by a GNP deflator that reflects price behavior for the U.S. economy as a whole.

22. To the extent that crude oil prices advance in the future -- notably foreign oil prices into Alaska's Lower 48 markets, but also domestic oil prices that directly or indirectly affect the competitive evaluation of North Slope crude -- that would tend to raise wellhead values and severance tax revenues. Similarly, changes in transportation charges would be reflected in wellhead values and severance tax revenues. And to the extent that percent-of-wellhead value is the operative severance tax, there is a meaningful relationship between severance tax liability and production values.

23. Cents-per-barrel may be a necessary floor for protection of Alaska's interests in appropriate circumstances. Escalation of cents-per-barrel would not seem to be an appropriate device to raise severance taxes or severance tax income. If that is at issue, the Legislature could more cogently address the question whether established percents-of-value ought to be raised.

David Nelson

RECOMMENDED CHANGES

IN

ALASKA'S OIL AND GAS PRODUCTION TAX RATES

FOR 1978

A Report to Governor Jay S. Hammond  
by the Alaska Department of Revenue

"At the present level of cents-per-barrel rates, the State's production tax income would have to suffer considerable reduction as the result of oil prices artificially lowered below the free-market price before the cents-per-barrel tax would begin working . . . ."

--State of Alaska, Department of Revenue,  
Alaska's Oil and Gas Tax Structure  
(February 1977), p. VI-21

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## INTRODUCTION AND BACKGROUND

Concern over very low wellhead prices for Alaska's nonrenewable oil and gas resources is not a recent development. In 1972, faced with spiralling costs for the Trans Alaska Pipeline and correspondingly, rapidly sinking wellhead values for the oil wealth at Prudhoe Bay, Alaska turned to a cents-per-barrel production tax as a means to protect its revenues from that field, as well as others. By allowing a credit against the cents-per-barrel tax for royalty payments, the net effect of that legislation was to set a floor on the State's combined royalty and tax revenues, regardless how low the wellhead price might have gone. This floor corresponded to the combined revenues that would have been received with a wellhead price of \$2.65 a barrel. The specific cents-per-barrel rates were: 45.8 cents-per-barrel, 51.1 cents-per-barrel, 53.8 cents-per-barrel and 59.1 cents-per-barrel and applied to oil production at specified incremental amounts.

During the First Special Session of 1973, the cents-per-barrel rates were changed, raising the effective floor for production tax income to a level corresponding to a wellhead price of \$3.375 for Prudhoe-type oil (27° API gravity). This floor increased and decreased, depending on whether the API gravity was above or below 27°. In addition the entire cents-per-barrel mechanism was tied to an escalator -- the

Wholesale Price Index for crude oil published by the Bureau of Labor Statistics of the U. S. Department of Labor.

In that 1973 session the cents-per-barrel rates were set at: 16.875 cents-per-barrel for the first 300 barrels of oil production, 20.25 cents-per-barrel for the next 700 barrels, and 27 cents-per-barrel for oil production over 1,000 barrels. These rates corresponded to percentage rates of 5 percent, 6 percent and 8 percent. The continuing concerns over low wellhead prices during 1973 were so strong that the House Finance Committee during the special session went so far as to propose a production tax based solely upon a cents-per-barrel basis with an escalation feature (CS HB4). The major proponent of this approach was the then Speaker of the House of Representatives, Tom Fink. He and others were concerned about the continued reduction of projected Prudhoe Bay wellhead values and the then current price discrepancies in reported royalty and production tax values in Cook Inlet. These price discrepancies were the multiple wellhead values assigned to the oil of the same quality produced in the Cook Inlet area.

After the 1973 change in the production tax statute, several changes occurred in Wholesale Price Index for crude petroleum so that at the beginning of 1977 the basic cents-per-barrel tax rates set out in the statute had escalated to become: 30.51 cents, 36.62 cents and 48.83 cents. At percentage

rates of 5 percent, 6 percent and 8 percent the cents-per-barrel tax set an equivalent cents-per-barrel floor of \$6.10 for 27° crude oil.

In a voluminous review and critique of Alaska's tax laws as applied to the oil and gas industry, the Department of Revenue last year pointed out the following danger in the then-existing production tax:

". . . the focus here is on the effectiveness of the tax as a reliable source of revenue for the State and on its safeguards against possible actions that would jeopardize that revenue. The greatest of those dangers is the manipulation of oil price, especially in regard to North Slope oil. There are basically two parties that might want to manipulate the price of Prudhoe oil. One is the oil companies themselves, by inflating transportation costs and similar charges in order to lower the field price of the oil on which the tax is based. The other is the federal government, through price controls.

\* \* \* \* \*

"The Department of Revenue recommends raising the 'floor' from its present level, which corresponds to \$6.10 a barrel for Prudhoe Bay oil, to a level more

closely reflecting the full market value of that oil.

At the present level of cents-per-barrel rates, the State's production tax income would have to suffer considerable reduction as the result of oil prices artificially lowered below the free-market price before cents-per-barrel tax would begin working to prevent any further reduction.

State of Alaska Department of Revenue, Alaska's Oil and Gas Tax Structure (February 1977) pp. V-31 and VI-21 (emphasis added).

Acting on the Department's recommendations, Governor Hammond submitted bills (SB 238 and HB 321) to both Houses that would have raised the cents-per-barrel floor to correspond to a \$7.50 wellhead price, escalating on the basis of the gauge of national inflation (the deflator for the Gross National Product). While many of the production tax proposals in the Governor's bills were eventually enacted, those relating to rates and the cents-per-barrel floor for oil were not. Instead, the version finally passed and presently in effect specifies a 12.25% rate or \$0.80 a barrel for all oil except "old oil", both to be scaled down by the Economic Limit Factor. This sets a cents-per-barrel floor corresponding to a wellhead price of \$6.53 -- higher than the old \$6.10 floor but still almost a dollar below the \$7.50 "full market value" of Prudhoe Bay oil. This floor does not escalate under the new law.

For "old oil" (like the majority of production from Cook Inlet), the cents-per-barrel floor is at a \$5.18 price level (for 34° API gravity).

## EXPECTATIONS VS. FULFILLMENT

### Federal Pricing Actions.

In its study, Alaska's Oil and Gas Tax Structure (February 1977), the Department of Revenue expressed in some length (at pp. V-37 to V-48) grave concerns about federal intentions and actions and their potential adverse effects on Alaska's price-related revenues from oil and gas, particularly with respect to Prudhoe Bay. By law (15 U.S.C. Sec. 757(g)) North Slope production was (and is) singled out for separate pricing consideration from that of the rest of the country. For reasons set out in that study, the chance that federal price controls could be used to depress the price of Prudhoe Bay crude oil below market levels was a real and ominous possibility.

At hearings before the Federal Energy Administration (FEA) in Washington, D.C. and Anchorage, in March and again in May, the State testified strongly to the need for the marketplace, not price controls, to determine the wellhead price of North Slope oil. In meetings with the Administrator of FEA John O'Leary, and in the White House with James Schlesinger, Governor Hammond brought the State's message home to the federal decision-makers on a personal level.

Fortunately these vigorous efforts were successful.

On August 17, 1977 FEA adopted a rule-making which sets a price ceiling significantly above the anticipated wellhead price level for North Slope oil. At the same time FEA chose to treat North Slope oil the same as high-cost imported oil for purposes of the special "entitlements" program, which is intended to equalize costs between refiners buying less expensive, price-controlled oil and those buying expensive uncontrolled or imported oil. As FEA said at the time,

" . . . by providing [North Slope] crude oil with wellhead prices that are as high as possible (consistent with . . . the cost of the imported oil it is replacing), the maximum monetary and psychological incentives are provided for these and other producers to explore aggressively elsewhere in the Arctic and in other frontier regions."

[Emphasis added]

42 Federal Register 41567 (August 17, 1977).

#### Actions by the Oil Companies.

Last year the Department of Revenue also expressed concern about actions by the oil companies themselves that would understate the wellhead value of Prudhoe Bay production. As the Department wrote then,

"A [major] vertically integrated company can, in a very real sense, choose which of its integrated operations -- producing, transportation, refining, or marketing -- will be carried on the books as break-even or losing operations and which will be the sources of the profits of the overall enterprise.

". . . Another influence [on where the company books its profits] can be royalty and production tax payments. If the field price of an integrated producer's production can be lowered as the result of shifting booked profits from production to some downstream phase of operations, the overall enterprise would lose nothing by doing so since it is merely moving money from one pocket to another. In fact it would actually have a net gain since the lowered field price means that less royalty and production tax have to be paid . . . .

"There seem to be three possible opportunities for some . . . companies owning interests in the Prudhoe Bay field to realize most or all of the benefits from the prevailing prices in the world oil market so dominated by OPEC while holding the line, so to speak, on production tax and royalty for that oil. These are in setting the TAPS tariff (or tariffs), in marine transportation costs and in marketing the oil to refiners outside the West Coast area."

Alaska's Oil and Gas Tax Structure, pp. V-32 and V-33.

The bills submitted by Governor Hammond contained a cents-per-barrel floor corresponding to a wellhead price of \$7.50, which was in accord with the statements of the oil companies themselves and of other experts. The \$6.53 floor in the bill that passed represented an open invitation to the companies to shift profits at least to the extent of the difference between \$7.50 and \$6.53. As we now see from the record, the companies more than accepted that invitation and, in doing so, belied their own statements. It is worth comparing their actions and their words here to reveal the magnitude by which the companies have altered the expectations they led Alaska and others to believe.

In January 1977 -- the month before the Department of Revenue recommended a cents-per-barrel floor of \$7.50 -- Atlantic Richfield Company (ARCO) projected a wellhead price of \$7.58, using a TAPS tariff of \$5.24 and tanker costs from Valdez to the West Coast of \$0.70. ARCO, Crude Oil Postings District V, 1977 Prices, Entitlements Variations (January 3, 1977) cited in University of Alaska Institute of Social and Economic Research, Federal Policies Affecting the Wellhead Value of Prudhoe Bay Crude Oil (March 22, 1977), p. 33.

In a statement presented February 7, 1977 to James R. Schlesinger (then the President's chief energy advisor and now Secretary of Energy), the chairman of the board of The Standard Oil Company (Ohio) Charles E. Spahr said,

"Assuming for a moment that Prudhoe Bay oil sold at the well for the upper tier average price of \$11.63, its delivered price in California would be about \$17.50, including about \$5.00 for the Alaska pipeline tariff and \$.75 for tanker costs from Alaska to California. Obviously, no one would buy Alaskan oil at that price when foreign oil can be purchased at the same place for a little over \$13.00. To be competitive, the wellhead price at Prudhoe Bay would have to go down to something on the order of \$7.25."

On March 9, 1977 FEA issued a "Notice of Inquiry" about the pricing of North Slope oil and announced hearings in Washington, D.C., San Francisco and Anchorage on March 21, 22, and 23, respectively. At those hearings the following testimony was given:

If North Slope crude does not have an entitlement burden and thus is treated . . . like exempt stripper, or Naval Petroleum Reserves oil, we would expect the wellhead price to be about \$7.20 per barrel."

--Herbert H. Zachow, Manager of Crude  
and Product Supply, ARCO (March 21, 1977)

"We currently estimate that the TAPS tariff will be approximately \$5.60. This tariff is calculated using traditional ICC methodology."

--Atlantic Richfield Company Responses  
To Questions 1 - 14, Alaska North Slope  
Crude Oil Pricing and Entitlements  
Treatment (March 21, 1977, p.2

"Assuming a \$5.60 tariff and \$.70 vessel cost from Valdez to Los Angeles the following prices would be expected:

TABLE II  
ANTICIPATED PRICES

<u>Location</u>	<u>Dec 77</u>	
Wellhead	7.20	. . .
Valdez	12.80	. . .
Puget Sound	13.70	. . .
San Francisco	13.50	. . .
Los Angeles	13.50	. . . "

--Atlantic Richfield Company Responses  
to Questions 1 - 14, Alaska North Slope  
Crude Oil Pricing and Entitlements  
Treatment (March 21, 1977), p. 4

"Until pipelines are in place, the cost to move oil by tanker from Los Angeles to the Gulf Coast through the Panama Canal will be in the range of \$2.00 per barrel."

--Richard M. Donaldson, Vice President SOHIO (March 23, 1977); also Frank E. Mosier, Senior Vice President, SOHIO (March 21, 1977)

"Our expectation is that the TAPS tariff will be in the range of \$5.00 to \$6.00 per barrel from the Prudhoe Bay field to Valdez . . . . The costs of tanker movement of the oil from Valdez to Puget Sound, San Francisco, Los Angeles, and the Gulf Coast are expected to average as follows:

Valdez to Puget Sound : 0.50 per barrel  
 Valdez to San Francisco \$0.75 per barrel  
 Valdez to Long Beach \$0.75 per barrel  
 Valdez to Gulf Coast \$2.75 per barrel"

--SOHIO, Responses to Fourteen Questions Raised by the Federal Energy Administration Notice of Inquiry Dated March 7, 1977 (March 21, 1977), p. 2

"If the present price of oil imported on the West Coast and Gulf Coast is \$13.75 per barrel for quality similar to Alaskan North Slope, then the equivalent prices for North Slope crude are as follows:

	<u>Dollars per Barrel</u>			
	<u>Puget Sound</u>	<u>San Francisco</u>	<u>Los Angeles</u>	<u>Gulf Coast</u>
Delivered	\$13.75	\$13.75	\$13.75	\$13.75
Valdez	\$13.25	\$13.00	\$13.00	\$11.00
Wellhead	\$7.25-\$8.25	\$7.00-\$8.00	\$7.00-\$8.00	\$5.00-\$6.00"

--Sohio, Responses to Fourteen Questions Raised by the Federal Energy Administration Notice of Inquiry Dated March 7, 1977 (March 21, 1977), pp. 6-7

Later, in hearings at Washington, D.C., San Francisco and Anchorage on May 25, 26 and 27, respectively, the oil companies basically repeated these messages to FEA:

"under this rulemaking, a North Slope crude producer will receive about \$7/bbl. at the wellhead for his production."

--Herbert H. Zachow, Vice President, Crude and Product Supply, ARCO (May 25, 1977)

"It is anticipated that when production starts this year, North Slope prices will be entering the market at a wellhead price of around \$7/bbl."

--William E. Wade, Manager of Resources Planning, Corporate Planning Division, ARCO (May 26, 1977)

"With such pricing and entitlement treatment [as ARCO had proposed to FEA in March 1977], we expected North Slope wellhead prices initially to be only about \$7 per barrel. [Actually, ARCO had said \$7.20.] While we continue to favor our recommended pricing and entitlement treatment for North Slope crude, we support the FEA's proposals in the rulemaking under consideration today. These proposals . . . should permit the same initial wellhead price as our earlier recommendations."

--Howard A. Slack, Vice President and Resident Manager, Alaska Division, ARCO (May 27, 1977)

During the question and answer period at the San Francisco hearing, Mr. Wade (quoted above) told Mr. John Muller of FEA that the TAPS tariff was expected to be \$5.50 to \$6.00, and he told Mr. Boldt of FEA that tankers from Valdez to West Coast ports would be \$0.75 to \$0.90. Mr. Steve Donaldson, Manager of Regulatory Reports & Analysis for Powerine Oil Company, disagreed with Mr. Wade's tanker figure, suggesting \$0.45 instead.

This disagreement is nothing compared to the one between the figures quoted above that were given in the first half of last year and the ones the oil companies were reporting for royalty purposes during the second half. The following table summarizes this abrupt change and speaks for itself.

CONTRADICTIONS  
 BETWEEN THE OIL COMPANIES' PUBLIC STATEMENTS  
 AND THE FIGURES THEY REPORTED FOR ROYALTY  
 PURPOSES TO THE STATE

(Based on December 1977 reports)

	<u>As Stated</u>	<u>As Reported</u>	<u>Difference</u>
1/3/77, ARCO			
Wellhead Price	\$7.58	\$6.41	(1.71)
TAPS Tariff	5.24	6.15	.91
Tanker to West Coast	.70	.88	.18
2/7/77, SOHIO			
Wellhead Price	7.25	6.14	(1.11)
TAPS Tariff	5.00	6.27	1.27
Tanker to West Coast	.75	.89	.14
3/21/77, ARCO			
Wellhead Price	7.20	6.41	(.79)
TAPS Tariff	5.60	6.15	.55
Tanker to West Coast	.70	.88	.18
3/21 and 23/77, SOHIO			
TAPS Tariff	5.00-6.00	6.25-6.28	0.25-1.28
Tanker to San Francisco or L.A.	.75	.89	.14
Wellhead (net back from San Fran. or L.A.)	7.00-8.00	6.14	(1.86) - (.86)
Tanker to Gulf Coast	2.75	3.61	.86
Wellhead (netback from Gulf Coast)	5.00-6.00	3.53	(2.47) - (1.47)
5/26/77, ARCO			
Wellhead Price	"about 7.00"	6.41	(.59)
TAPS Tariff	5.50-6.00	6.15	.15-.65
Tanker to West Coast	.75-.90	.88	(.02) - .13

For all Prudhoe Bay owners, the weighted average TAPS tariff (based on volume) reported in December was \$6.24 (as opposed to a weighted average tariff based on pipeline ownership percentages, of \$6.20), the weighted average tanker cost reported (based on volume) was \$1.12, and the weighted average wellhead price was only \$5.44. However, the companies did not pay royalties on the basis of that \$5.44; instead, they are claiming further deductions for "field costs," which the State believes are unauthorized. These deductions average 61.4 cents a barrel, reducing the average price actually paid for royalty purposes to \$4.79.

The purpose of mentioning all these prices and deductions is not to set the ground for any possible legislative resolution of these royalty matters, since the royalty questions are already being litigated. Rather, the point to be made is that the industry's interests and those of the State of Alaska do not always coincide; where they do not coincide, the industry has shown that it will readily part company to advance its own purposes. In royalty and in production tax, the industry's interests are served by low wellhead prices and so it has parted company on this matter, not only from the State, but also from its spokesman who scant months before were unabashedly predicting prices from one to two dollars a barrel higher.

## ELEMENTS AFFECTING FIELD VALUE

Earlier in this report it was mentioned generally how the wellhead value of our oil for production tax and royalty is affected by market prices and transportation charges. This section will describe in greater detail how the projected wellhead value of Prudhoe Bay oil has been affected by pricing decisions and transportation charges.

In general, the value of oil for purposes of computing production tax and royalty is determined by taking the market sales price or value for the oil and netting back any transportation charges from the point of sale to the field. Thus the market prices and transportation costs have an important and direct bearing on wellhead values.

### Price Ceilings

In the department's oil and gas tax study, possible effects of federal ceilings for North Slope oil were discussed. Alaska's Oil and Gas Tax Structure (February 1977), pp. V-37 to V-48. At that time the President had not yet recommended to Congress what price ceilings would be applicable to North Slope oil. The danger existed at that time that the federal government could establish a wellhead price ceiling substantially below that of imported crude or even other categories of new oil. That in itself apart from corporate price manipulation

could have substantially reduced severance tax and royalty revenues over time.

Subsequently, however, as stated earlier in this report, the FEA adopted regulations which placed North Slope oil under upper tier price ceilings and gave it exempt entitlement's treatment. 42 Federal Register 41567 (August 17, 1977). This essentially gave favorable pricing and entitlement treatment to North Slope production since the beginning price ceilings would be substantially above what was projected to be a wellhead value for North Slope oil and no entitlement penalties would be assessed against North Slope oil.

#### Market Prices

The starting point in any determination of wellhead value is market price received for the oil, which is then reduced by the transportation charges between the place of sale and the field where the oil is produced.

In the case of North Slope oil, some oil has been sold right at the mouth of the Trans Alaska Pipeline system (LACT meter) so that no net back of transportation charges is necessary. The market price of that oil in the field, in fact, becomes a value for computation of severance tax purposes assuming that the prices are truly arms-length

sales. Those sales taking place at the wellhead as reported in December Royalty reports are as follows:

<u>Company</u>	<u>Sales Price</u>
Getty	\$6.38
Mobil	6.23

Other companies have made sales at Valdez which include tariff charges on the transportation of the oil from the North Slope to Valdez. These sales are as follows:

<u>Company</u>	<u>Sales Price</u>
Amerada Hess	\$12.60
Exxon	12.30
Hunt Group	12.62
Sohio	12.53

The majority of the oil, however, has been transported by the producing companies and marketed in various locations outside the state. These sales prices and their destinations are:

<u>Company</u>	<u>Sales Price</u>	<u>Destination</u>
ARCO	\$13.44	West Coast
Exxon	13.16	West Coast
Phillips	13.38	West Coast
Sohio	13.30	West Coast
Sohio	13.42	Gulf Coast

#### Pipeline Tariffs

The largest element of transportation cost, and therefore the one having the biggest effect on wellhead value is the tariff charge of the Trans Alaska Pipeline System (TAPS)

which transports the oil from Prudhoe Bay, where it is produced, to Valdez, where it is loaded onto tankers and transported out of state.

During the months of May and June of 1977 the eight owner companies of the Trans Alaska Pipeline System filed with the Interstate Commerce Commission (ICC) initial tariffs for the transportation of oil from Prudhoe Bay to Valdez. Those initial tariffs ranged from \$6.04 to \$6.44 per barrel and taken together computed a weighted average tariff per barrel of \$6.20 based upon pipeline ownership.

Those initial filed tariffs were:

<u>Pipeline Carrier</u>	<u>Filed Tariff</u>
Amerada Hess	\$6.44
ARCO	6.04
BP	6.35
Exxon	6.27
Mobil	6.31
Phillips	6.22
Sohio	6.16
Union	6.09

Subsequent to the initial filing of pipeline tariffs, the ICC's Bureau of Investigations and Enforcement, the U.S. Department of Justice, the State of Alaska and Arctic Slope Regional Corporation all filed protests against the initial tariffs [Protest and Petitions For Suspension by the United States Department of Justice, June 15, 1977; Protest/Complaint of the State of Alaska Seeking the Suspension and Investigaiton

of Initial Rates and Tariff Provisions, June 15, 1977;  
Protest and Petition of The Bureau of Investigation and  
Enforcement for Suspension and Investigation, June 15, 1977;  
Protest and Petition for Suspension of Initial Rates and  
Tariffs by the Arctic Slope Regional Corporation, June 13, 1977].

The protests sought suspension and institution of a formal investigation of the rates published by the TAPS carriers. In its protest the State of Alaska set forth what it considered reasonable interim tariffs for TAPS as follows:

<u>Pipeline Carrier</u>	<u>Rate</u>
Amerada Hess	(Insufficient information)
ARCO	\$3.74
BP	4.42
Exxon	3.80
Mobil	3.59
Phillips	(Tariff had not been filed)
Sohio	4.04
Union	3.85

Protest/Complaint of the State of Alaska Seeking the Suspension and Investigation of Initial Rates and Tariff Provision, June 15, 1977 (p. 4).

On June 28, 1977, the Interstate Commerce Commission (ICC) suspended the initial filed rates for a seven-month statutory period and ordered an immediate investigation of the rates. At the same time that the ICC suspended the filed rates it stated that it would accept for filing a lower schedule of interim rates pending the outcome of the investigation.

That schedule was as follows:

<u>Pipeline Carrier</u>	<u>Interim Rate</u>
Amerada Hess	\$4.85
ARCO	4.91
BP	4.68
Exxon	5.10
Mobil	4.84
Phillips	4.83
Sohio	4.70
Union	4.84

Order of the Interstate Commerce Commission in Investigation and Suspension Docket No. 9164, Trans Alaska Pipeline System (Rate Filings) and No. 36611, Trans Alaska Pipeline System (Rules and Regulations), June 28, 1977.

Thus the initial tariffs, the proposed tariffs by the State of Alaska and the Interim Tariffs allowed by the ICC looked as follows:

<u>Pipeline Carrier</u>	<u>Filed Tariff</u>	<u>Alaska's Proposed Tariff</u>	<u>Interim Tariff</u>
Amerada Hess	\$6.44	--	\$4.85
ARCO	6.04	\$3.74	4.91
BP	6.35	4.42	4.68
Exxon	6.27	3.80	5.10
Mobil	6.31	3.59	4.84
Phillips	6.22	--	4.83
Sohio	6.16	4.04	4.70
Union	6.09	3.83	4.84

Several of the pipeline companies petitioned the Fifth Circuit Court of Appeals contending that the ICC was without authority to suspend the initial tariffs or to suggest maximum interim tariffs. Mobil Alaska Pipeline Company v United States,

No. 77-2392, (July 6, 1977); BP Pipeline Inc. v United States,  
No. 77-2412 (July 8, 1977); Exxon Pipeline Co. v United States,  
No. 77-2421 (July 11, 1977); ARCO Pipe Line Co. v United States,  
No. 77-2437 (July 14, 1977).

The Fifth Circuit Court, however, dismissed the pipeline carriers petitions concluding that the ICC had acted lawfully. Mobil Alaskan Pipeline Company v United States, 557 P2d 775 (1977).

Some of the companies then filed motions in the U.S. Supreme Court for a stay of the Fifth Circuit decision. Four of the carriers also filed petitions for certiorori. The Supreme Court granted a stay of the Fifth Circuit decision and the certiorori petitions, and at the present time a decision on the seven month suspension and interim rates is pending before the Supreme Court. Order of November 28, 1977 Granting Certiorori in Mobil Alaska Pipeline Co. v United States, No. 77-452; Exxon Pipeline Co. v United States, No. 77-457; BP Pipeline, Inc. v United States, No. 77-551; ARCO Pipe Line Co. v United States, No. 602.

Concurrently with the litigation over interim rates the ICC and now its successor the Federal Energy Regulatory Commission (FERC) has been conducting its investigation of TAPS rates in order to set lawful permanent tariffs.

The investigation proceedings have separated into two phases. The first phase of the proceedings deals with such issues as the allowable rate base and the appropriate rate of return while the second phase of the investigation will deal with the amount of costs which may be claimed by the carriers as a part of the rate base.

All of the protestants, including the State of Alaska, argue that the TAPS tariffs filed by the pipeline companies are too high for several reasons. Joint Pre Hearing Brief of the United States Department of Justice, The State of Alaska and The Arctic Slope Regional Corporation, (December 30, 1977).

First, for example, it is being argued that the pipeline companies should earn a rate of return on the actual investment in the pipeline system rather than upon an inflated valuation of replacement cost. This approach would be consistent with rate bases used for most public utilities and would insure that pipeline owners would not receive a return on their investment more than once.

It is also being argued that the rate of return allowed to the pipeline companies on TAPS for the debt and equity portions of the pipeline should be no higher than that needed to reflect the relative risks involved and to compensate for the costs of servicing the debt.

In addition, the protestants have argued that the pipeline owners should be allowed only a return on prudent investments and not be allowed to include any costs due to mismanagement or inefficiency.

All of the arguments are aimed at the extremely excessive nature of the tariffs. One illustration of how the tariffs were "pumped-up" as high as they were is shown by the double counting of a rate of return on the pipeline owners debt. In the initial filing, the pipeline carriers computed their proposed tariffs high enough to cover their operating costs (including interest) plus a rate of return on the total valuation of the pipeline. In essence, the pipeline companies were claiming a double rate of return on that portion of the pipeline financed through debt. They were first recovering their interest expense on their debt in addition to a rate of return on the borrowed money itself. The ICC, however, in its order suspending the rates, eliminated the double counting for purposes of setting interim rates by specifying that it would accept, on an interim basis, tariffs based upon a 10 percent rate of return on valuation with interest cost to be paid out of company's rate of return.

The effect of the excessive tariffs for the pipeline companies was extremely high rates of return and substantial profits for the pipeline companies. For example the degree of profit that would be yielded by the pipeline companies using

their originally filed tariffs was illustrated by the Commission as follows:

<u>Pipeline Carrier</u>	<u>on Equity</u>	<u>on Total Investment</u>	<u>on Valuation</u>
Amerada Hess	31.5%	13.8%	13.3%
ARCO	86.2%	13.1%	12.4%
BP	42.5%	14.2%	13.5%
Exxon	31.4%	13.2%	12.5%
Mobil	(no equity)	13.8%	13.1%
Phillips	38.2%	14.0%	13.1%
Sohio	40.6%	13.6%	13.1%
Union	71.1%	13.8%	12.7%
Average	46.0%	13.6%	12.9%

These inflated tariffs substantially reduced severance tax and royalty values and resulted in considerably reduced revenues. For example, shortly after the initial tariffs were filed the Department of Revenue estimated the loss of revenues would be as shown in the following table:

<u>Duration of High Tariffs</u>	<u>Reduced Royalty and Prod. Tax Revenue</u>
6 months	15.6
12 months	41.7
18 months	70.5

These initial tariffs were way beyond what others expected the pipeline companies would claim. Those third party estimates are shown on the following table.

<u>Date</u>	<u>Source</u>	<u>Amount</u>
11/76	Mortada International, <u>The Determination of Equitable Pricing Levels for North Slope Alaskan Crude</u> , pp. II-18, III-10, III-12, IV-24, VII-6 VII-7	4.20-4.50
4/76	Drexel Burnham & Co., <u>The North Slope: Paradise Lost?</u> pp. IV-11	4.60
1/7/77	Washington Analysis Corp., <u>Entitlements Program Impact on North Slope Profits</u>	5.00
2/28/77	Merrill, Lynch, Pierce, Fenner & Smith, Inc., <u>Institutional Report "Petroleum Notes, Prudhoe Bay Crude Oil, Entitlements Program</u> , p. 4	5.40
4/1/77	Wainright Securities Inc., <u>Industry Review, "Petroleum Industry, North Slope Oil and Gas,"</u> pp. 25 (Table 7), 43 (Table 10).	4.28*
	*includes 5¢ for TAPS liability fund	
4/15/77	The President of the United States, <u>Report to Congress on the Pricing of Alaska North Slope (ANS) Crude Oil</u> , pp. 63-64 (Table IX-3).	5.10

Even the Department of Revenue's extremely conservative estimate of \$5.54 (worst case scenario) of what the companies might claim fell substantially below what was actually filed. As shown earlier in this report the filed tariffs also exceeded substantially the public pronouncements of the companies themselves.

## Tanker Tariffs

Another item having a direct impact on the wellhead value for calculation of the severance tax is the cost of marine transportation from Valdez to various points on the West Coast and Gulf Coast of the United States.

Unlike pipeline tariffs, the oil tanker transportation costs are not regulated by any government regulatory body since the tankers are not operating as common carriers. Instead the transportation charges are set by negotiation between the tanker company and the shipper, which in some cases may be between affiliated companies.

Since production began in June of 1977 tankers have been loading oil at Valdez and transporting it to various locations in the states of California, Washington and on the Gulf of Mexico. The charges claimed for this transportation have varied considerably between shippers and far exceed the expectation of third parties who estimated the amount of the charge.

Those tanker charges that have been claimed during the month of December are as follows:

<u>Company</u>	<u>Charge</u>	<u>Destination</u>
ARCO	\$ .88	West Coast
Exxon	1.08	West Coast
Phillips	.81	West Coast
Sohio	.89	West Coast
Sohio	3.61	Gulf Coast

These tanker charges that have ranged from \$.88 to \$3.61 are substantially greater than what other third parties thought the charges would be. These estimates were as follows:

<u>Date</u>	<u>Source</u>	<u>Tanker Cost</u>
11/76	<u>Mortada International, The Determination of Equitable Pricing Levels for North Slope Alaskan Crude, pp. II-18, III-10, III-12, IV-24, VII-6 and VII-7</u>	
	Delivered to Los Angeles	.671*
	Delivered to Puget Sound	.459*
*Figures in 1976 dollars		
4/76	<u>Drexel Burnham &amp; Co., The North Slope: Paradise Lost?, pp. IV-11</u>	.50
1/7/77	<u>Washington Analysis Corp., Entitlements Program Impact on North Slope Profits</u>	
	Delivered to West Coast	.60
2/28/77	<u>Merrill, Lynch, Pierce, Fenner &amp; Smith, Inc., Institutional Report, "Petroleum Notes, Prudhoe Bay Crude Oil, Entitlements Program," p. 4.</u>	.55
4/1/77	<u>Wainwright Securities Inc., Industry Review, "Petroleum Industry, North Slope Oil and Gas," pp. 25 (Table 7), 43 (Table 10)</u>	
	Delivered to Puget Sound	.50
	Delivered to San Francisco	.80
	Delivered to Long Beach	.70
	Delivered to Houston	2.45
4/15/77	<u>The President of the United States, Report to Congress on the Pricing of Alaska North Slope (ANS) Crude Oil pp. 63-64 (Table IX-3)</u>	
	Delivered to Puget Sound (120 MB/D)	.74
	Delivered to San Francisco (250 MB/D)	.96
	Delivered to Los Angeles (340 MB/D)	1.01
	Delivered to Gulf Coast (490 MB/D)	2.98

The Department of Revenue predicted a weighted average tanker charge of \$.59 to the West Coast and it too was much below the tanker charges claimed.

### Transportation to more Distant Markets

Another factor complicating the determination of wellhead value is the West Coast surplus. When the new production from Prudhoe Bay combined with imports and California production, the amount of crude oil exceeded the physical capacity of the refineries on the West Coast to process it. As a result the surplus oil had to be, and still must be transported to other areas of the United States in order to be sold.

Currently, the North Slope surplus oil is being transported by Sohio through the Panama Canal by tanker to market destinations on the Gulf Coast. As production from Prudhoe Bay increases to 1.2 million barrels a day in March of this year, the surplus situation will worsen.

Several possible pipelines to transport surplus oil from the West Coast to eastern markets are on the drawing board, including: The Sohio Pipeline, Atlantic Richfield's proposed "Yoyo" of the Trans-Mountain line, the Kitimat line and the Northern Tier Pipeline. For the short term, however, no relief from the problem is in sight except the costly transshipment through the Panama Canal.

The extra transportation charge claimed by Sohio for shipment through the Panama Canal has been \$2.72 per barrel. This in

itself has greatly reduced the wellhead value on a major portion of the North Slope production.

## FIELD VALUE

In taking the market prices received for Prudhoe Bay oil and netting back actual claimed transportation charges from the point of sale to the point of production, the producers are reporting wellhead values ranging from \$3.53 to \$7.70.

The lowest value is reported by Sohio for the oil which it is marketing on the Gulf Coast. Sohio begins with a market price on the Gulf Coast of \$13.42. From that amount it is deducting \$3.61 for tanker transportation from Valdez to the Gulf Coast and a \$6.28 TAPS pipeline charge from Prudhoe Bay to Valdez.

A schedule showing the various reported values for each of the producers follows. These reported values are taken from the December royalty reports as filed by the North Slope producers, and as stated earlier these values taken together produce a weighted average wellhead value for severance tax purposes of \$5.44.

Producer	Quantity	Sale	Market Price	Tanker Cost	TAPS Tariff	Reported Value*
Amerada Hess	119,585	Valdez	\$12.60	--	\$6.44	\$6.16
ARCO	4,507,962	West Coast	13.44	.88	6.16	6.40
Chevron	187,488	--	--	--	--	7.70
EXXON	3,913,000	West Coast	13.16	1.08	6.27	5.81
EXXON	514,699	Valdez	12.30	.15	6.27	5.88
EXXON	41,736	Fairbanks	12.30	--	6.274	6.026
Getty	121,920	Prudhoe Bay	6.38	--	--	6.38
Hunt Group	21,191	Valdez	12.62	--	6.14	6.48
Louisiana Land & Expl.	8,839	Valdez	11.89	--	6.04	5.85
Marathon	11,094	--	--	--	--	6.35
Mobil	465,495	Prudhoe Bay	6.23	--	--	6.23
Phillips	454,632	West Coast	13.38	.81	6.22	6.35
Placid	9,415	Valdez	12.62	--	6.14	6.48
Sohio	4,550,000	West Coast	13.30	.89	6.27	6.14
Sohio	6,097,000	Gulf Coast	13.42	3.61	6.28	3.53
Sohio	1,170,000	Valdez	12.53	--	6.25	6.28

\*Not including field cost deductions

Although clearly not deductible under AS 43.55.140 for severance tax purposes in determining wellhead value, the producers have deducted so called "field costs" in determining wellhead value for royalty payments. These costs or deductions represent the costs of gathering, cleaning and dehydrating the oil from the point where the oil comes out of the ground to the point where it is metered into the Trans Alaska Pipeline. The state has taken issue with these deductions as well as all other producer calculations of wellhead value for royalty purposes in a lawsuit entitled State v Amerada Hess et. al., Superior Ct., No. 77-847, First Judicial District.

The amount of field costs deducted for royalty purposes have varied in amount among the producers and for December those deductions ranged as follows:

<u>Producer</u>	<u>Field Cost Deductions</u>
Amerada Hess	.68
ARCO	.64
Exxon	.53
Getty	.78
Mobil	1.11
Phillips	1.03
Placid	.77
Sohio	.60

Thus for royalty purposes the producers during the month of December reported values as follows:

<u>Producer</u>	<u>Royalty Value</u>
Amerada Hess	\$5.48
ARCO	5.77
Chevron	7.70
Exxon (West Coast)	5.28
Exxon (Valdez)	5.35
Exxon (Fairbanks)	5.50
Getty	5.60
Hunt Group	6.48
Louisiana Land & Exploration	5.85
Marathon	6.35
Mobil	5.12
Phillips	5.32
Placid	5.71
Sohio (West Coast)	5.48
Sohio (Gulf Coast)	2.87
Sohio (Valdez)	5.62

Thus with claimed field costs, Sohio for example, is claiming a wellhead value of \$2.87 for the oil which it is shipping to the Gulf Coast. The weighted average wellhead value of Prudhoe Bay oil for royalty purposes for all producers during the month of December is \$4.79 per barrel.

In contrast to the values being reported to the State of Alaska for severance tax and royalty purposes, an objective comparison of the value of North Slope oil using comparable market refining prices on the West Coast and reasonable transportation charges from the market to the North Slope oil field yields a value substantially above the reported values.

First of all, in computing a comparative market wellhead value, we begin with a free market price of oil of like quality to that of North Slope oil. That market price of oil, most comparable to North Slope oil is the price of oil imported to the West Coast and is computed as follows.

VALUE OF 27° ALASKA NORTH SLOPE (ANS) OIL  
AT REFINERY DESTINATION

	<u>Los Angeles</u>
Saudi sales price FOB Ras Tanura	\$12.32
Class 2 tanker tariff (AFRA)	1.12
Import fee	-0-
Price for Saudi FOB refinery	13.44
Entitlement for Saudi	-2.37
Refiner's acquisition cost for Saudi	11.07
Entitlement given for ANS oil	2.37
VALUE (Max. price refiners would pay for ANS oil)	13.44

Thus the free market value at the refinery of Prudhoe Bay oil is \$13.44.

Secondly, reasonable transportation charges need to be computed and subtracted from the market price at the refinery. Again we have used third party bench marks in computing a comparison of wellhead value.

All the TAPS protestants including the State of Alaska, the U.S. Justice Department, the Arctic Slope Native Corporation, and the ICC staff have recommended TAPS tariffs substantially below what the companies originally filed. All of the TAPS

protestants except the ICC staff recommended TAPS tariffs below even the ICC interim tariffs. For purposes of this report, however, we have chosen the ICC interim rates as a bench mark for reasonable pipeline transportation costs even though these tariffs may in fact still be too high as permanent tariffs.

Those interim tariffs were:

<u>Pipeline Carrier</u>	<u>Interim Rate</u>
Amerada Hess	4.85
ARCO	4.91
BP	4.68
Exxon	5.10
Mobil	4.84
Phillips	4.83
Sohio	4.70
Union	4.84

Using the weighted average of these tariffs results in a pipeline transportation cost of \$4.85 per barrel.

For tanker transportation to the West Coast we have chosen a conservative estimate of .70 based upon third party calculations of average tanker costs to the West Coast.

Using these third party bench mark figures of refinery prices and transportation costs results in a market price net back to the field of \$7.91.

Also in contrast to the reported wellhead values are the projections of values by third parties as shown in the following table. Interestingly enough, however, these third party estimates coincide closely with our construction of an objective determination of a Prudhoe Bay wellhead value.

<u>Date</u>	<u>Source</u>	<u>Delivered Price</u>	<u>Tanker</u>	<u>TAPS Tariff</u>	<u>Wellhead Price</u>
4/76	Drexel Burnham & Co., <u>The North Slope: Paradise Lost?</u> pp. IV-11	13.00	.50	4.60	7.90
11/76	Mortada International, <u>The Determination of Equitable Pricing Levels for North Slope Alaskan Crude</u> , pp. II-18 III-10, III-12, IV-24, VII-6 and VII-7				
	Delivered to Los Angeles	13.05*	0.671*	4.20-4.50	7.83-8.18
	Delivered to Puget Sound		0.459*	4.20-4.50*	
	Average Case				7.90*
	*Figures in 1976 dollars.				
1/7/77	Washington Analysis Corp., <u>Entitlements Program Impact on North Slope Profits</u>				
	Delivered to West Coast	13.52	0.60	5.00	7.92
2/28/77	Merrill, Lynch, Pierce, Fenner & Smith, Inc., <u>Institutional Report, "Petroleum Notes, Prudhoe Bay Crude Oil, Entitlements Program,"</u> p.4				
	Delivered to West Coast	13.40	0.55	5.40	7.45
4/1/77	Wainwright Securities, Inc., <u>Industry Review, "Petroleum Industry, North Slope Oil and Gas,"</u> pp. 25 (Table 7), 43 (Table 10)				
	Delivered to Puget Sound	13.27	0.50	4.28*	8.49
	Delivered to San Francisco	13.38	0.80	4.28*	8.30
	Delivered to Long Beach	13.32	0.70	4.28*	8.34
	Delivered to Houston	13.57	2.45	4.28*	6.84
	*includes 5¢ for TAPS liability fund				
4/15/77	The President of the United States, <u>Report to Congress on the Pricing of Alaska North Slope (ANS) Crude Oil</u> , pp. 63-64 (Table IX-3)				
	Delivered to Puget Sound (120 MB/D)	14.53	0.74	5.10	8.69
	Delivered to San Francisco (250 MB/D)	14.53	0.96	5.10	8.47
	Delivered to Los Angeles (340 MB/D)	14.53	1.01	5.10	8.42
	Delivered to Gulf Coast (490 MB/D)	14.83	2.98	5.10	6.75
	Weighted Average	---	--	---	7.77

## INFLATION AND CHANGES IN WORLD OIL PRICES

In Alaska's Oil and Gas Tax Structure (p. VI-22), the Department of Revenue recommended last year that

"[t]o prevent the 'floor' from losing value through time it should escalate"

Suggested escalators then were the Gross National Product (GNP) deflator, which is the primary index of U.S. inflation, and the world market price of similar foreign oil. The GNP deflator during the last year has changed as follows:

<u>Index Period</u>	<u>Index Amount</u>	<u>Change from 3rd Quarter 1976</u>
3rd Quarter 1976	134.56	--
4th Quarter 1976	136.35	+1.3%
1st Quarter 1977	138.13	+2.7%
2nd Quarter 1977	140.52	+4.4%
3rd Quarter 1977	142.25	+5.7%

With respect to world oil market prices, 1977 saw a period of two-tier pricing within OPEC come to an end. The split in OPEC developed when Saudi Arabia and the United Arab Emirates (UAE) refused to go along with the rest of OPEC in December 1976 in raising their State Sales Prices by 10 percent. Instead, Saudi Arabia and the UAE raised prices by only about 5 percent. In midyear this breach was closed, when the two nations raised their prices while the rest of OPEC forewent its previously announced increase scheduled

for that time. Since Saudi Arabian crudes are of all imports, most like Prudhoe Bay crude in refining characteristics, the midyear increase in price for those crudes is relevant to the appropriate cents-per-barrel floor for Alaskan oil production. Accordingly, the exact prices and percentages of change follow:

Changes in State Sales Prices (FOB)  
by Saudi Arabia and the U.A.E.  
During 1977

Crude Type	1-1-77 \$/B	1-9-78 \$/B	%	
			Change	
Saudi Arabia				
Berri (39°)	12.48	13.22	+5.9]	
Light (34°)	12.09	12.70	+5.0]	+5.5% average
Medium (31°)	11.69	12.32	+5.4]	
Heavy (27°)	11.37	12.02	+5.7]	
U.A.E. (39°)	12.514	13.26	+6.0	

Source: Platt's OILGRAM Price Service

Besides these indicators, other indices are available and could be used. For example, a Consumer Price Index is calculated for the entire United States, and another one for Anchorage. Their changes are given below.

Changes in Consumer Prices Indices  
for the United States and for Anchorage

Index Month	Anchorage Index		United States Index	
	Index Amount (1967 = 100)	% Change from 10/76	Index Amount (1967 = 100)	% Change from 10/76
Oct. '76	167.6	--	173.3	--
Jan. '77	169.4	+1.1	175.3	+1.2
Apr. '77	172.6	+3.0	179.6	+3.6
Jul. '77	177.4	+5.8	182.6	+5.4
Oct. '77	177.3	+5.8	184.5	+6.5

The table on the following page provides a comparison of U.S. price indices for crude petroleum and refined petroleum products, which the Bureau of Labor Statistics of the U.S. Department of Labor prepares and maintains.

A Comparison of U.S. Price Indices for Crude Petroleum  
and Petroleum Refined Products, December 1976 and  
December 1977 (1967 = 100 unless otherwise indicated)

	<u>Index</u> 12-76	<u>Index</u> 12-77	<u>%</u> Change
Crude Petroleum	264.4	288.1	8.96
Petroleum Products, Refined	287.6	313.7	9.08
Gasoline	263.4	279.5	6.11
REGULAR	242.2	255.8	5.62*
Dealer Tank-wagon to Retail Outlets	225.8	238.6	5.67*
Sales to Jobbers	267.1	283.3	6.07*
Commercial Consumers	256.4	267.9	4.49*
PREMIUM	214.9	229.8	6.98*
Dealer tank-wagon to Retail Outlets	204.9	218.7	6.73*
Sales to Jobbers	237.1	254.9	7.51*
Commercial Consumers	242.3	260.0	7.30*
UNLEADED	100.0	99.7	-.3
Dealer tank-wagon to Retail Outlets	100.0	99.9	-.1*
Sales to Jobbers	100.0	99.6	-.4*
Commercial Consumers	100.0	98.6	-1.4*
Light Distillate	323.2	381.2	17.95
Kerosene to Resellers	266.1	303.7	14.13*
Commercial Jet Fuel, Kerosene base	269.9	320.0	18.96*
Middle Distillate	349.8	394.2	12.69
Fuel Oil No. 2 to Resellers	282.0	319.9	13.44*
Diesel to Commercial Consumers	281.6	314.2	11.58*
Residual Fuels	480.4	510.5	6.27
Cargo shipments to Resellers	305.6	328.3	7.43*
Steam Electric Utilities	100.0	103.4	3.40*
Lubricating Oil Materials	274.3	333.4	21.55
Bright Stock	169.5	203.6	20.11*
Neutral Stock	152.6	192.8	26.34*
Pale Stock	98.0	115.8	18.16*
Finished Lubricants	178.6	197.5	10.58
Automotive Motor Oils	156.5	170.8	9.14
Industrial Oils	167.7	190.9	13.83*
Petroleum Grease	126.5	130.2	2.92*
Petroleum Wax	200.2	247.5	23.63

Source: U.S. Department of Labor  
Bureau of Labor Statistics

\*base year different than 1967

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## RECOMMENDATIONS

The present \$6.53 floor for "other oil" is inadequate.

As shown earlier (p. 38) an objective computation of the market value of Prudhoe Bay oil using comparable refinery market prices and reasonable transportation costs (determined from third party sources) yields a wellhead value of \$7.91.

Additionally, at the same time as the Department recommended a \$7.50 floor, the oil companies were speaking publicly of wellhead prices near and above that level. Numerous informed consulting firms were forecasting prices in this range, too (see p. 40). Aside from inflation and the price increases of Saudi Arabia and the UAE, nothing else has changed during 1977 that would alter the appropriateness of that figure. As such, \$7.50 plus 5.7 inflation as measured by the G.N.P. deflator yields a value of \$7.93.

Accordingly, the Department of Revenue recommends a floor of \$7.90. The cents-per-barrel amount that corresponds to this floor at a 12.25 percent rate is .96775 which, when rounded, is \$.968. AS 43.55.011(c) should be amended so that \$.968 replaces the \$.80 figure that is there now.

The Department also believes it is appropriate at this time to adjust the cents-per-barrel rate for "old oil" and the cents-per-Mcf rate only to the extent necessary to offset

the 5.7 percent inflation. Thus the \$0.60 figure in AS 43.55.011(c) should be changed to \$0.634, and the \$0.064 figure in AS 43.55.016(c) should be changed to \$0.068.

While AS 43.55.012(a) requires only that Department of Revenue make the recommendations above, the Department will further recommend a change in AS 43.55.012(a) itself so that a greater degree of stability may be incorporated into the production tax. As that statute reads now, the cents-per-barrel tax rates must come under review each and every year. This needlessly creates an uncertainty from one year to the next, which can eventually harm the investment climate for further oil and gas development. The Department therefore recommends tying the cents-per-barrel and cents-per-Mcf rates to an index to offset the adverse effects of inflation on the meaningfulness of these floors. This would be done by repealing AS 43.55.012(a) in its entirety and enacting the following provision to replace it:

(a) The amounts set out in sec. 11(c) and sec. 16(c) of this chapter shall be increased or decreased by a percentage equal to the percentage of change in the Gross National Product Deflator published by the Bureau of Economic Analysis of the United States Department of Commerce, using 1972 as the base period for the deflator (1972 = 100). Changes in tax rates will be computed based on changes in the Gross National

Product Deflator from the First Quarter 1978 Gross National Product Deflator. The department shall post the changes in the tax rates periodically and shall notify every person producing oil within the state of the changes.