ALASKA LEGISLATURE COMMITTEE FILES 1987-1988 8672
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12. What employment and revenue impacts may be generated by LEAP? Pending verification with econometric models, the state may expect that for every increase of 200 exploratory wells as a result of LEAP, over one program year, may provide 10,000 new jobs, $15.2 million in increased revenues to the state and $360 million in increased personal income in Louisiana during the program year.

13. How will the proposed program affect the state's business image? It will send a clear message that "Louisiana wants you and your dollars doing business in Louisiana". Equally important, it will send a message that Louisiana has the willpower and the ingenuity to effectively deal with its problems.

14. Have other governments taken similar steps? No other state has undertaken a program similar to LEAP. However, the Canadian government, along with its oil and gas producing provinces, has embarked on a related program. Changes in Canadian energy policies brought about a 21 percent increase in oil sales to the U.S. and a 27 percent increase in gas sales over a six month period. Additionally, active rig counts have increased markedly.

15. What can Louisiana do about national and international factors influencing the oil and gas market? There is nothing Louisiana can do to affect the world market. Other factors, like FERC regulatory controls and proposed congressional tax law changes, are subject to state pressure. Louisiana's story must be told at every opportunity.

16. Is this proposal a final one? This proposal is by no means a final one. This proposal is presented as such, in the belief that public discussion and recommendations can only strengthen it. Construtive criticism and suggestions are, by means of this proposal paper, actively solicited from the citizens of Louisiana, as well as those who presently, or may in the future, do business in our state.

total foregone revenue - oil - $6.3m - 1

Buck & Neff

REVIEW OF DIRECT REVENUE IMPACT OF LEAP AND STEP FOR FISCAL YEAR 1986-87

PREPARED FOR

B. Jim Porter
Secretary of Natural Resources

By
Manuel Lam
Principal Analyst
with
T. Michael French, P.E.
Manager

DEPARTMENT OF NATURAL RESOURCES
Energy Division
Technology Assessment Section
Baton Rouge
December 11, 1987

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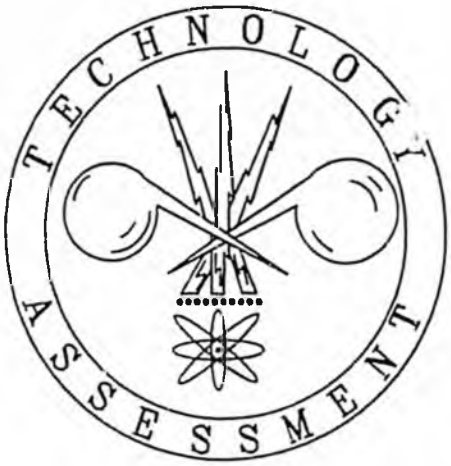

DEPARTMENT OF NATURAL RESOURCES
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(This material has been compiled by the Technology Assessment Section for analysis purposes and is dependent on the accuracy of data supplied by other offices of the Department of Natural Resources and other governmental agencies.)

ACKNOWLEDGEMENT

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Special thanks is given to Ethel Pierce and Randy Felder for their great effort gathering the production and royalty data; to Scott Miller and Richard Rush for their thoughtful suggestions on royalties, and oil and gas prices; and to Marlene Bateman for reviewing the accuracy of the production data.

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EXECUTIVE SUMMARY

This report presents the results of an analysis of the impact on drilling activity and on the direct revenue foregone by the state of Louisiana from the implementation of the "Severance Tax Exemption Plan" (STEP), the 1987 amendment to STEP and the "Louisiana Economic Acceleration Plan" (LEAP) bills enacted by the Louisiana Legislature. The theory behind LEAP and STEP is that an economic incentive created by not collecting certain oil and gas revenue will stimulate new oil and gas industry exploration and drilling activity; and that will stimulate the state's economy and generate greater revenue than the direct mineral revenue foregone.

This report does not address the potential indirect revenue generated. However, an analysis of the drilling activity is provided in an attempt to indicate to what extent any indirect revenue may have been stimulated. Recent developments in drilling suggest that statistical treatment of Louisiana historical data may be inadequate for predicting the effect of STEP and LEAP beyond the period for which reported data exists. If the long term trend in drilling changes, as could be expected, the drilling results and projected revenue effects may be significantly higher than now shown for fiscal year 1987/88 and beyond.

The initial STEP act, discussed in Chapter 1, involved 646 wells producing 4,650,622 barrels of crude oil of which 3,693,610 barrels were exempted from severance taxes. It forgave 2.6 million dollars in severance taxes in fiscal year 1986/87 and over the life of this act is estimated to forgive state revenues of 16.2 to 21.6 million dollars, depending on the price of oil.

The STEP Amendment, discussed in Chapter 2, enacted during the 1987 Regular Session extends the period for STEP qualification by one year. It will forego additional state revenues at least equal to that mentioned above, but it is expected to be even more since drilling activity is higher this year than last.

The LEAP Act, examined in Chapter 3, to date encompasses 72 wells, 269,515 barrels of crude oil and 1,536,308 MCF of natural gas. In its lifetime, LEAP is projected to forgo 2.5 to 6.3 million dollars in crude oil severance, and 4.9 to 10.5 million dollars in natural gas severance and royalty. The total potential revenue forgiven by the state by this Act is estimated between 7.4 and 16.8 million dollars over its lifetime, depending on the prices of oil and gas, drilling activities, and production restrictions.

The effects of LEAP, STEP and the STEP Amendment are difficult to demonstrate conclusively because of time lags in data reporting and an overall shortage of data. However comparisons of Louisiana's performance with that of Texas, a major oil producing state without comparable STEP and LEAP programs in place, so far shows little measurable direct STEP and LEAP induced drilling of extra wells. Additional historical and projected data is shown in Chapter 4.

Oil and gas prices, which are key determinant factors in today's energy market, are discussed in Chapter 5.

CHAPTER 1

REVENUE IMPACT OF SEVERANCE TAX EXEMPTION PLAN (STEP) FOR FISCAL YEAR 1986/87

The Severance Tax Exemption Plan, Act 673 of the 1986 Regular Session (House Bill 1083) is also known as STEP. This Act exempts from the collection of severance tax, oil produced from a well drilled between July 15, 1986 and July 15, 1987. The 1987 Legislature extended this period to July 15, 1988. The following discussion addresses the initial STEP period. The extension period is addressed in Chapter 2 of this report.

Oil Severance Tax Exemption

STEP exempts severance tax for the first 50 barrels per day during the production of the first 10,000 barrels of oil removed from the ground annually for a well drilled between July 15, 1986 and July 15, 1987.

The exemption may be claimed from the date of first production from each well until July 15, 1990, except for months when the value of oil, as reported to the Department of Revenue and Taxation under R.S. 47:633(7), exceeds $21 per barrel.

Definitions Limiting Qualifying Wells

Since initial passage of the STEP legislation, the Department of Natural Resources has promulgated regulations clarifying when a well qualifies for the STEP incentives as follows:

The tax exemption does not apply to:

(1) Condensate, distillate, or similar natural resources produced from a well classified as a gas well by the Assistant Secretary of the Office of Conservation.
(2) Casinghead gas produced with oil, from a well drilled between July 15, 1986 and July 15, 1987.
(3) Oil from a well on which drilling began prior to July 15, 1986.
(4) Oil from a well on which drilling is done after July 15, 1987.
(5) Oil from a well with a price per barrel greater than $21 as reported under R.S. 47:633(7).

(6) Oil from a well following, or in excess of, the first fifty barrels produced on any day.
(7) Oil from a well following, or in excess of, the first ten thousand barrels produced in any year.

Severance Tax Rates

The various Louisiana severance tax rates are provided in the Appendix.

Total crude oil production from all STEP classified wells for fiscal year 1986/87 was approximately 3.7 million barrels. The average monthly number of drilling permits issued in fiscal year 1986/87 was 161. From the 3.7 million barrels of crude oil produced, only 1.8 million barrels are expected to be exempted from severance tax, based on data reported by Department of Natural Resources (DNR), Office of Conservation. As a back-up check of the validity of this exempted production figure, we used our new well production model to project the volume of exempted production that would be expected to be obtained from extension wells evolving from an average of 161 drilling permits per month (assuming successful wildcats would preferentially produce under LEAP and only extension wells would produce under STEP). The resulting projection indeed showed that exempted STEP production should be 1.8 million barrels. Projected production volumes exempted from severance tax for the other years covered by the Act are shown in Table I, a comparison of actual versus projected is shown in Figure 1, and Table II shows projected revenue losses at different crude oil prices.

The Department of Revenue and Taxation (DRT) reported 1.4 million barrels of crude oil claimed exemption, totaling 2.6 million dollars in taxes exempted. The difference between DNR and DRT reported volumes is due to the lead time between dates of production reports submitted to DNR and dates of sales and tax reports submitted to DRT. If time had allowed for us to delay this analysis until the time lag for the DRT data had past, it is expected that the DNR and DRT data would be in close agreement. This is a point that will need examination in the future.

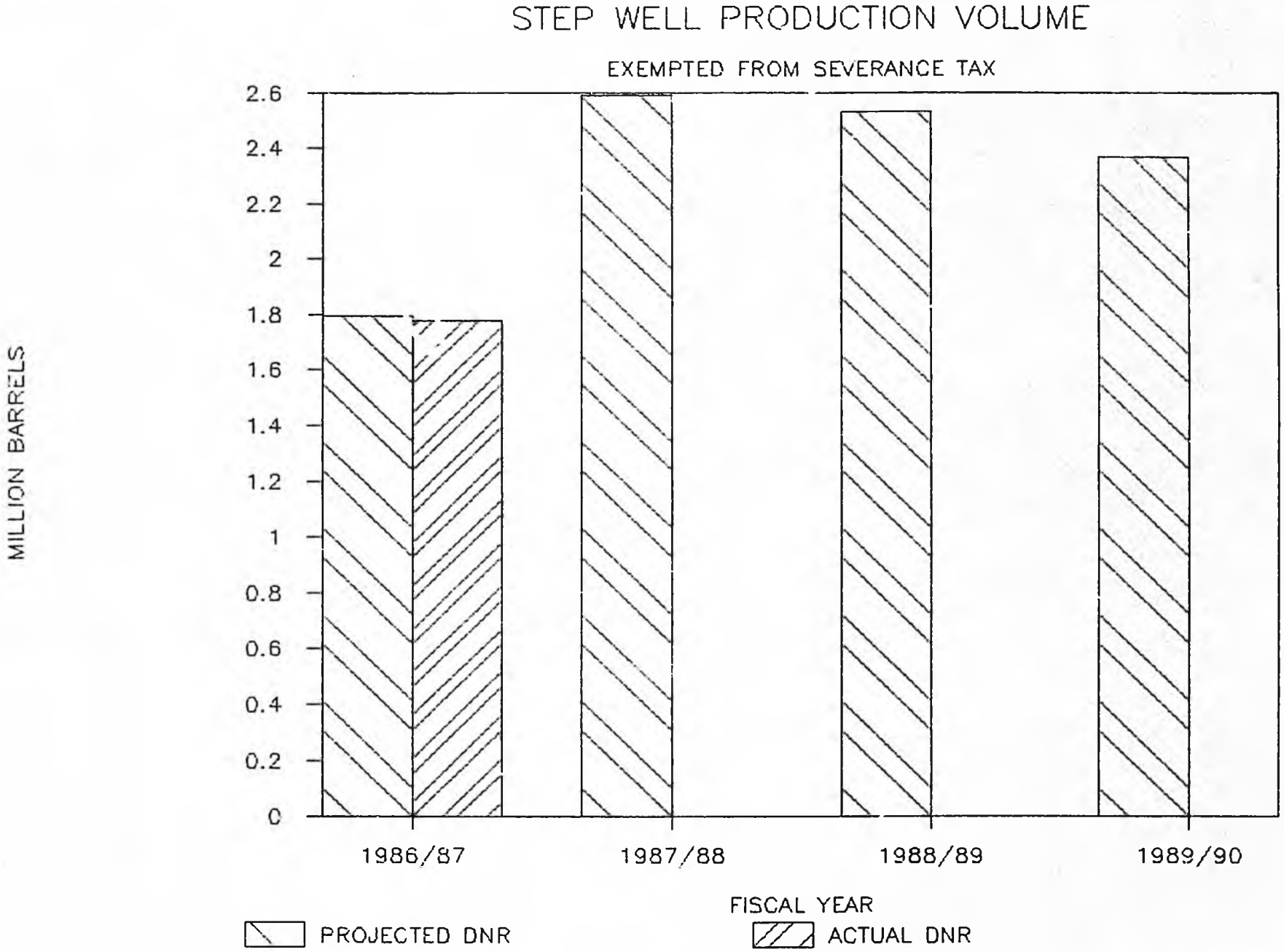
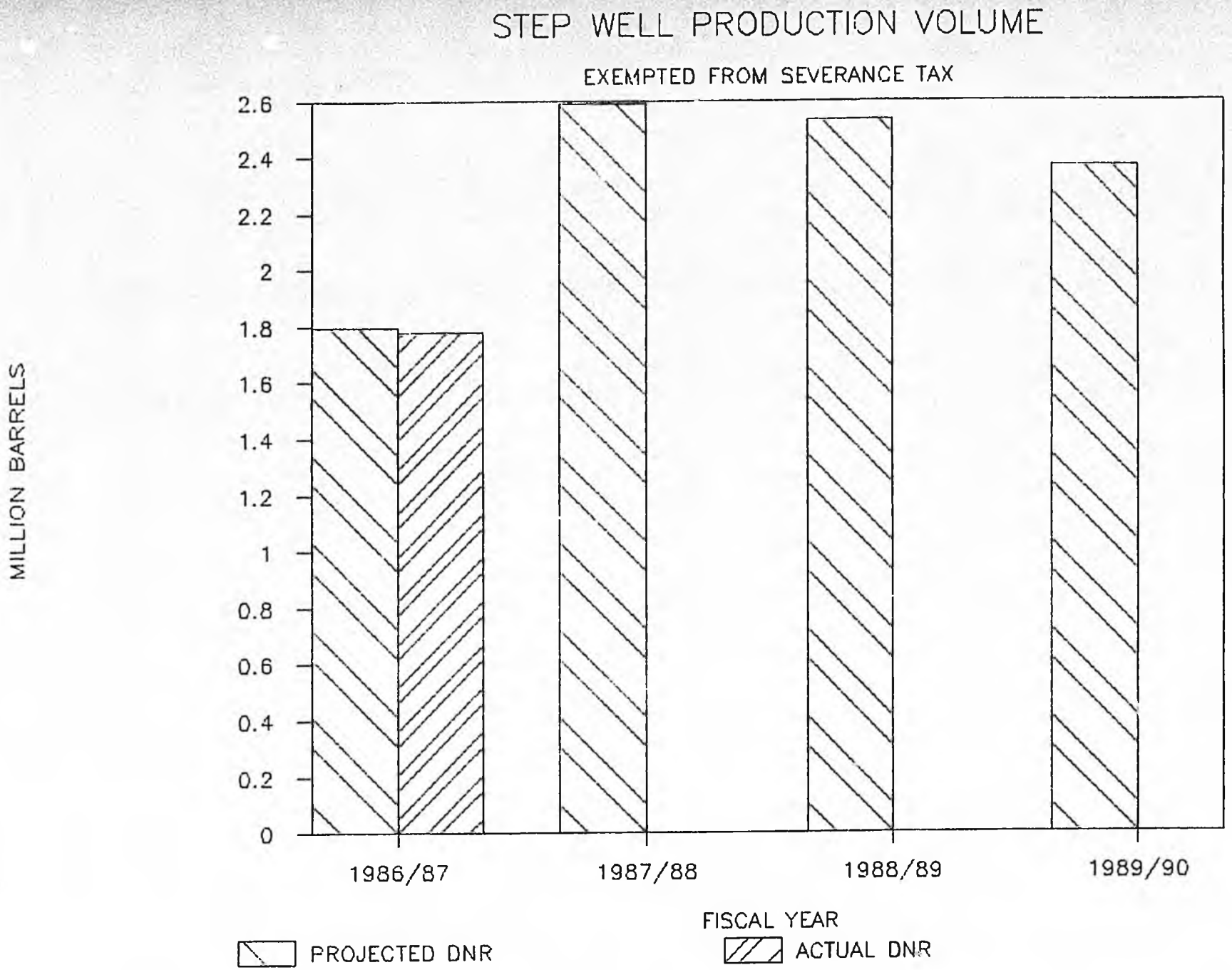

STEP WELL PRODUCTION VOLUME
EXEMPTED FROM SEVERANCE TAX
MILLION BARRELS
2.6
2.4
2.2
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
1986/87
1987/88
1988/89
1989/90
FISCAL YEAR
PROJECTED DNR
ACTUAL DNR

FIGURE 1

CORRECTION

THIS DOCUMENT
HAS BEEN REPHOTOGRAPHED
TO ASSURE LEGIBILITY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0.4
0.2
0
1986/87
1987/88
1988/89
1989/90
FISCAL YEAR
PROJECTED DNR
ACTUAL DNR

FIGURE 1

TABLE I

PROJECTIONS OF EXEMPTED CRUDE OIL PRODUCTION FROM NEW EXTENSION WELLS, DRILLED BETWEEN JULY 15, 1986 AND JULY 15, 1987 AS DEFINED UNDER STEP (Act 573)

EXEMPTED CRUDE OIL PRODUCTION[2]
(Barrels)

Fiscal Year	NORTH	SOUTH	OFFSHORE	TOTAL
1986/87	1,008,102	707,022	79,698	1,794,823
1987/88	1,373,383	1,088,938	130,956	2,593,277
1988/89	1,324,390	1,077,317	129,803	2,531,510
1989/90	1,240,852	1,005,789	121,747	2,368,388
1990/91[1]	101,457	82,179	9,962	193,598

[1] The 1990/91 revenues account for the 15 day period, July 1 through July 15, 1990 that the STEP program extends beyond the 1989/90 fiscal year. A fiscal year runs from July 1 through June 30.

[2] Volumes shown are only the portions that fall under the 50 barrels per day / 10,000 barrels per year exemption limit.

The formula used to calculate the loss of revenues from crude oil severance taxes is as follow:

Oil Severance = (Full Oil Tax Rate x Its Average % Oil Production Volume + Incapable Tax Rate x Its Average % Oil Production Volume + Stripper Tax Rate x Its Average % Oil Production Volume) x Average Oil Price x Total State Oil Production Volume.

TABLE II

PROJECTED REVENUE LOSS DEPENDING ON THE PRICE OF CRUDE OIL FROM PRODUCTION OF NEW EXTENSION WELLS, DRILLED BETWEEN JULY 15, 1986 AND JULY 15, 1987 UNDER STEP (Act 673)

REVENUE LOST
(Million Dollars)

PRICE	FISCAL YEAR					TOTAL[2] REVENUE
$/BBL	1986/87*	1987/88	1988/89	1989/90	1990/91[1]	LOSSES
8.00	2.63	2.47	2.41	2.25	0.09	9.85
9.00	2.63	2.78	2.71	2.53	0.10	10.75
10.00	2.63	3.08	3.01	2.82	0.12	11.65
11.00	2.63	3.39	3.31	3.10	0.13	12.56
12.00	2.63	3.70	3.61	3.38	0.14	13.46
13.00	2.63	4.01	3.91	3.66	0.15	14.36
14.00	2.63	4.32	4.21	3.94	0.16	15.26
15.00	2.63	4.63	4.51	4.22	0.17	16.17
16.00	2.63	4.93	4.82	4.51	0.18	17.07
17.00	2.63	5.24	5.12	4.79	0.20	17.97
18.00	2.63	5.55	5.42	5.07	0.21	18.87
19.00	2.63	5.86	5.72	5.35	0.22	19.78
20.00	2.63	6.17	6.02	5.63	0.23	20.68
21.00	2.63	6.48	6.32	5.91	0.24	21.58
22.00	2.63	0.00	0.00	0.00	0.00	2.63

NOTE: * Actual Data

[1] The 1990/91 revenues account for the 15 day period, July 1 through July 15, 1990 that the STEP program extends beyond the 1989/90 fiscal year. A fiscal year runs from July 1 through June 30.

[2] For the entire life of the STEP program July 15, 1986 to July 15, 1990.

CHAPTER 2

SEVERANCE TAX EXEMPTION PLAN AMENDMENT (STEP AMENDMENT)

The Severance Tax Exemption Plan Amendment, Act 430 of the 1987 Regular Session (Senate Bill 274) is also known as "STEP Amendment" extends the STEP drilling period by one year, thereby exempting from the collection of severance tax oil produced from a qualified well drilled between July 15, 1986 and July 15, 1988.

This Act carries all the restrictions mentioned in the preceding STEP chapter but additionally requires a certification that at least ten percent of the service contracts related to the well drilling have been made available to minority-owned businesses and at least five percent of the service contracts have been made available to women-owned businesses.

Whereas the analysis of STEP production in the preceding chapter was based on a known number of qualified STEP wells that were drilled during the first year of STEP, this chapter estimates the impact of an unknown number of wells that are currently or are yet to be drilled under the second year of STEP. The STEP Amendment (Act 430) production volume is projected, therefore, using the following assumptions:

1 Eighty five percent (85%) of the new wells drilled will meet the requirement of minority- and women-owned business participation.

2 The producing life of an oil and gas well in Louisiana ranges from 3 to 50 years. In this study all new permitted wells are assigned a producing life of 20 years, and have a straight line decay.

3 The mean average day for issuing permits from July 15, 1986 through July 15, 1988 is the 30th of each month.

4 The historical drilling success rate, production average, and lead time between permit issue to first production is representative of the future.

5 The monthly average number of drilling permits issued in fiscal year 1987/88 is going to be 250 permits for the calculation of revenue loss.

Projections of STEP Amendment production volumes of crude oil that will be exempted from severance taxes are shown in Table III for the

average of 250 drilling permits per month assumed in this report as well as at several other drilling permit issue rates. Table IV shows possible revenue losses at different crude oil prices. The revenues loss was calculated using the formula listed in previous chapter.

TABLE III

CRUDE OIL PRODUCTION FROM NEW EXTENSION WELLS, DRILLED AFTER JULY 1, 1987 AS DEFINED UNDER THE STEP AMENDMENT

	FISCAL YEAR	ASSUMED MONTHLY AVERAGE DRILLING PERMITS ISSUED 150	200	250	300	350
		CRUDE OIL PRODUCTION (Barrels)				
N	1987/88	737,752	983,670	1,229,587	1,475,505	1,721,422
O	1988/89	977,987	1,303,983	1,629,979	1,955,974	2,281,970
R	1989/90	905,562	1,207,416	1,509,269	1,811,183	2,112,977
T	JULY 90	90,965	121,287	151,608	181,930	212,252
H		---	---	---	---	---
	SUM	2,712,266	3,616,355	4,520,444	5,424,532	6,328,621
S	1987/88	559,934	746,579	933,224	1,119,868	1,306,513
O	1988/89	866,153	1,154,871	1,443,589	1,732,307	2,021,025
U	1989/90	826,479	1,102,238	1,377,798	1,653,358	1,920,917
T	JULY 90	83,088	110,783	138,479	166,175	193,871
H		---	---	---	---	---
	SUM	2,335,854	3,114,472	3,893,090	4,671,708	5,450,326
S	1987/88	63,115	84,153	105,191	126,230	147,268
OH	1988/89	104,154	138,872	173,590	208,308	243,026
FO	1989/90	99,593	132,791	165,989	179,187	232,385
FR	JULY 90	10,011	13,348	16,685	20,022	23,359
E		---	---	---	---	---
	SUM	276,873	365,827	461,455	553,746	646,037
		=========	=========	=========	=========	=========
T	1987/88	1,360,801	1,814,402	2,268,002	2,721,603	3,175,203
O	1988/89	1,948,295	2,597,726	3,247,158	3,896,589	4,546,021
T	1989/90	1,831,834	2,442,445	3,053,056	3,663,668	4,274,269
A	JULY 90	184,063	245,417	306,772	368,127	429,481
L		---	---	---	---	---
	SUM	5,324,993	7,096,654	8,874,989	10,649,986	12,424,984

TABLE IV

PROJECTED REVENUE LOSSES DEPENDING ON THE PRICE OF CRUDE OIL FROM PRODUCTION OF NEW EXTENSION WELLS, DRILLED BETWEEN JULY 1, 1987 AND JULY 15, 1988 UNDER STEP AMENDMENT (Act 430) (ASSUMING THAT THE AVERAGE MONTHLY PERMIT RATE IS 250)

REVENUE LOST
(Million Dollars)

PRICE	FISCAL YEAR				TOTAL[2] REVENUE
$/BBL	1987/88	1988/89	1989/90	1990/91[1]	LOSSES
8.00	2.16	3.09	2.93	0.15	8.32
9.00	2.43	3.47	3.32	0.16	9.39
10.00	2.70	3.86	3.71	0.18	10.45
11.00	2.97	4.25	4.04	0.20	11.45
12.00	3.24	4.63	4.43	0.22	12.32
13.00	3.51	5.02	4.76	0.24	13.52
14.00	3.78	5.41	5.15	0.26	14.58
15.00	4.04	5.79	5.53	0.27	15.54
16.00	4.31	6.18	5.86	0.29	16.65
17.00	4.58	6.56	6.25	0.31	17.71
18.00	4.85	6.95	6.58	0.33	18.71
19.00	5.12	7.34	6.97	0.35	19.78
20.00	5.39	7.72	7.36	0.36	20.84
21.00	5.66	8.11	7.69	0.38	21.84
22.00	0.00	0.00	0.00	0.00	0.00

[1] The 1990/91 revenues account for the 15 day period, July 1 through July 15, 1990 that the STEP program extends beyond the 1989/90 fiscal year. A fiscal year runs from July 1 through June 30.

[2] For the entire life of the STEP program July 15, 1986 to July 15, 1990.

CHAPTER 3

LOUISIANA ECONOMIC ACCELERATION PLAN (LEAP)

The Louisiana Economic Acceleration Plan, Act 763 from 1986 Regular Session (Senate Bill 590) is also known as LEAP. This Act exempts the collection of oil and natural gas severance tax and natural gas royalties under the following constraints and definitions:

Oil and Gas Severance Tax Exemption and Forgiveness of Gas Royalty

LEAP exempts total production from severance tax for oil and gas produced from qualified wildcat and developmental wells completed between July 1, 1986 and January 1, 1990 from the date of first production through January 1, 1990, or until the date on which the posted price of West Texas Intermediate equals or exceeds $29.50 per barrel, whichever occur first.

Additionally for natural gas wells drilled on state leases, royalty payments are forgiven under the same qualifying requirements as the severance tax exemption.

Definitions of Wildcat and Developmental Wells

Since initial passage of the LEAP legislation, the Department of Natural Resources has promulgated regulations clarifying the definitions of wildcat well and developmental well as follow:

> A "wildcat well" is a well that is drilled, completed, and produced during the time period provided for herein from a pool which has not produced or known to have been capable of producing hydrocarbons in commercial quantities. A well drilled in a contiguous fault segment of a sand that was either producing or capable of production prior to July 1, 1986, or which is subsequently recompleted in a sand previously penetrated from a well that was drilled, completed, and/or produced prior to July 1, 1986, is not considered a wildcat well. Upon successful completion, the "wildcat well" is then recognized as a "discovery well."
>
> A "developmental well" must be drilled and completed to a pool previously discovered by a "wildcat well."

Table V shows projected gas production for the first four years from wells drilled each year in areas that do not have a previous history

of production. Table VI shows projected oil production for the first four years from wells drilled each year in areas that do not have a previous history of production. Since there is very little available data for production of wildcat wells from a new sand level under existing producing fields, extrapolations were used to calculate the oil and gas production for LEAP wells in this category. The results of these extrapolations are shown on Table VII for wells drilled in a year's time, and on Table VIII the total production of all classified LEAP wells drilled in a year's time.

To calculate approximate revenues foregone, in dollars, to the state treasury caused by LEAP, the following empirical equations can be used:

a) Oil Severance = 0.1189 x Total State Oil Production (barrels) x Average State Oil Wellhead Price.

b) Gas Severance = 0.0680 x Gas Production (MCF)

c) Gas Royalty = 0.1402 x Gas Production (MCF) x Average State Gas Wellhead Price.

The above empirical equations are generated using historical data, statistic approximations and assuming that future production patterns will be similar to the past.

FISCAL YEAR 1986/87 LEAP STATISTICS

- Fifty five (55) producing wells were classified as LEAP wells.
- LEAP wells produced around 1.0 billion cubic feet of natural gas and 170 thousand barrels of crude oil.
- LEAP, Act 763, exempted around $300,000 in oil severance tax and another $300,000 in royalty and severance tax from natural gas production.

TABLE V

PROJECTED ANNUAL CRUDE OIL PRODUCTION FROM NEW WELLS, DRILLED IN YEAR 1 IN AREAS THAT DO NOT HAVE A PREVIOUS HISTORY OF OIL PRODUCTION

		ASSUMED MONTHLY AVERAGE DRILLING PERMITS ISSUED				
		150	200	250	300	350
	YEAR	CRUDE OIL PRODUCTION (Barrels)				
N	YR #1	9,324	12,432	15,540	18,648	21,756
O	YR #2	10,519	14,025	17,531	21,038	24,544
R	YR #3	9,781	13,042	16,302	19,563	22,823
T	YR #4	8,658	11,544	14,430	17,316	20,202
H						
	SUM	32,737	43,649	54,561	65,474	76,386
S	YR #1	6,311	8,415	10,519	12,623	14,727
O	YR #2	9,557	12,742	15,928	19,114	22,299
U	YR #3	9,791	13,055	16,319	19,583	22,847
T	YR #4	8,683	11,577	14,471	17,365	20,260
H						
	SUM	30,808	41,078	51,347	61,617	71,886
S	YR #1	69,518	92,690	115,863	139,035	162,208
OH	YR #2	79,710	106,280	132,850	159,420	185,990
FO	YR #3	80,098	106,797	133,497	160,196	186,896
FR	YR #4	71,073	94,764	118,455	142,146	165,837
E						
	SUM	250,300	333,733	417,166	500,600	584,033
T	YR #1	85,153	113,538	141,922	170,307	198,691
O	YR #2	99,786	133,047	166,309	199,571	232,833
T	YR #3	99,671	132,894	166,118	199,342	232,565
A	YR #4	95,273	127,031	158,788	190,546	222,304
L						
	SUM	313,845	418,460	523,075	627,690	732,305

TABLE VI

PROJECTED ANNUAL NATURAL GAS PRODUCTION FROM NEW WELLS, DRILLED IN YEAR 1 IN AREAS THAT DO NOT HAVE A PREVIOUS HISTORY OF GAS PRODUCTION

		ASSUMED MONTHLY AVERAGE DRILLING PERMITS ISSUED				
		150	200	250	300	350
	YEAR	NATURAL GAS PRODUCTION (MCF)				
NORTH	YR #1	137,749	183,665	229,581	275,498	321,414
	YR #2	186,404	248,539	310,674	372,809	434,944
	YR #3	175,801	234,401	293,001	351,601	410,202
	YR #4	154,762	206,349	257,937	309,524	361,111
	SUM	654,716	872,955	1,091,193	1,309,432	1,527,671
SOUTH	YR #1	67,448	89,931	112,414	134,897	157,379
	YR #2	151,570	202,093	252,616	303,139	353,663
	YR #3	163,814	218,419	273,024	327,629	382,234
	YR #4	144,868	193,157	241,447	289,736	338,035
	SUM	527,700	703,600	879,501	1,055,401	1,231,301
SOHFOFRE	YR #1	823,081	1,097,441	1,371,801	1,646,162	1,920,522
	YR #2	1,798,796	2,398,395	2,997,994	3,597,593	4,197,191
	YR #3	1,833,883	2,445,178	3,056,472	3,667,767	4,279,061
	YR #4	1,627,249	2,169,665	2,712,081	3,254,497	3,796,914
	SUM	6,083,009	8,110,679	10,138,349	12,166,019	14,193,689
TOTAL	YR #1	1,028,278	1,371,037	1,713,797	2,056,556	2,399,315
	YR #2	2,136,770	2,849,027	3,561,284	4,273,541	4,985,798
	YR #3	2,173,499	2,897,998	3,622,498	4,346,997	5,071,497
	YR #4	1,926,879	2,569,172	3,211,465	3,853,758	4,496,050
	SUM	7,265,426	9,687,234	12,109,043	14,530,851	16,952,660

TABLE VII

PROJECTED ANNUAL LEAP WELLS PRODUCTION FROM NEW SAND LEVEL, DRILLED IN YEAR 1 IN EXISTING PRODUCTION FIELDS

	ASSUMED MONTHLY AVERAGE DRILLING PERMITS ISSUED				
	150	200	250	300	350
YEAR	CRUDE OIL PRODUCTION (Barrels)				
YR #1	127,730	170,307	212,883	255,460	298,037
YR #2	139,700	186,266	232,833	279,400	325,966
YR #3	129,572	172,763	215,953	259,144	302,335
YR #4	114,328	152,437	190,546	228,655	266,765
SUM	511,330	681,773	852,216	1,022,659	1,193,102
	NATURAL GAS PRODUCTION (MCF)				
YR #1	308,483	411,311	514,139	616,967	719,795
YR #2	641,031	854.708	1,068,385	1,282,062	1,495,739
YR #3	652,050	869,399	1,086,749	1,304,099	1,521,449
YR #4	578,064	770,752	963,439	1,156,127	1,348,815
SUM	2,179,628	2,906,170	3,632,713	4,359,255	5,085,798

TABLE VIII

PROJECTED TOTAL ANNUAL LEAP WELLS PRODUCTION FROM WELLS DRILLED IN YEAR 1 IN ALL FIELDS

YEAR	ASSUMED MONTHLY AVERAGE DRILLING PERMITS ISSUED				
	150	200	250	300	350
	CRUDE OIL PRODUCTION (Barrels)				
YR #1	212,883	283,845	354,806	425,767	496,728
YR #2	239,485	319,314	399,142	478,971	558,798
YR #3	229,243	305,657	382,071	458,486	534,900
YR #4	209,601	279,468	349,335	419,201	489,068
SUM	825,175	1,100,233	1,375,291	1,650,349	1,925,407
	NATURAL GAS PRODUCTION (MCF)				
YR #1	1,336,761	1,782,348	2,227,935	2,673,523	3,119,110
YR #2	2,777,802	3,703,735	4,629,669	5,555,603	6,481,537
YR #3	2,825,548	3,767,398	4,709,247	5,651,096	6,592,946
YR #4	2,504,942	3,339,923	4,174,904	5,009,885	5,844,866
SUM	9,445,053	12,593,405	15,741,756	18,890,107	22,038,458

CHAPTER 4

DRILLING IMPACT ANALYSIS

We analyzed the effects of STEP and LEAP on drilling, but no demonstratively conclusive results were possible. There are several possible reasons for this. Most of these causes were beyond the control of the state incentive programs as well as beyond the scope of this study. One major reason was a lack of statistically significant data for that time period. Another possible reason was that one fundamental basis for drilling investment decisions was a stable or increasing price for oil. Price stability currently appears to be a more significant factor in making drilling decisions and in raising capital than the current price of price of oil, with or without incentives.

The incentives provided in STEP and LEAP were designed to provide roughly a 12 1/2% price increase to the price of oil to encourage drilling. With a stable price for oil at $14 for example this means an investor could make a profit if, before STEP or LEAP, a project took $15.25 per barrel oil to pay out. With oil prices falling, however the investors just stayed out of the market until the price, supply and demand stabilized enough so they could make reasonable investment decisions and make a profit. If the financial community was relatively confident that the price of oil would remain at or above the example $14 per barrel they would be willing to invest in projects which would not have been economic without the incentives of STEP and LEAP. If on the other hand the prevailing reasoning was that oil is $14 per barrel and the price will possibly drop to $12 or $10 per barrel next week, or next month, the investor would decide to not participate in the project.

Drilling activity by its nature is cyclic; therefore, the most promising approach to detect a change in drilling trend (resulting from the incentive programs) in noisy short term data is to compare Louisiana data to that of other areas that do not have the incentive (i.e. Texas and rest of U.S.). Using preliminary data and projected values from World Oil magazine and Oil and Gas Journal, such as projected wells to be drilled, active rigs, and prices for oil and gas, and if we assume Texas is a control group that did not have equivalent STEP and LEAP acts in effect, and that their drilling activity is similar to Louisiana, one might conclude:

a) There was little measurable direct STEP and LEAP induced drilling of extra wells, based on data available for the past fiscal year.

b) Future effects for the second and subsequent years of drilling under STEP Amendment or LEAP cannot be accurately predicted from the available data.

There were 590 producing wells classified as STEP wells and 55 producing wells classified as LEAP wells in fiscal year 1986/87. This level of drilling is consistent with what would have been expected in Louisiana without incentives based on (a) recent Louisiana trends, (b) drilling projections as a function of oil price prior to incentives passage and (c) direct comparison to actual drilling without incentives in Texas and the rest of the U.S.

For fiscal year 1986/87 the oil wells from STEP and LEAP were forgiven $2.0 million dollars from severance, and the LEAP gas wells were forgiven around $0.3 million dollars in severance tax and royalties

Historical wells drilled and drilled-percentage changes for Louisiana, Texas and the other states are shown in Figures 2 to 7. Figure 8 shows a comparison of wildcat wells drilled in the United States to the average wellhead price of crude oil in the United States. Figure 9 shows a comparison of extension wells drilled in the United States to the United States average wellhead price for crude oil. Figure 10 shows a comparison of total wells drilled in Louisiana compared to the average wellhead price in Louisiana. Figure 11 shows a comparison of total wells drilled in Texas compared to the average wellhead price in Texas.

FIGURE 2

TOTAL WILDCAT WELLS DRILLED

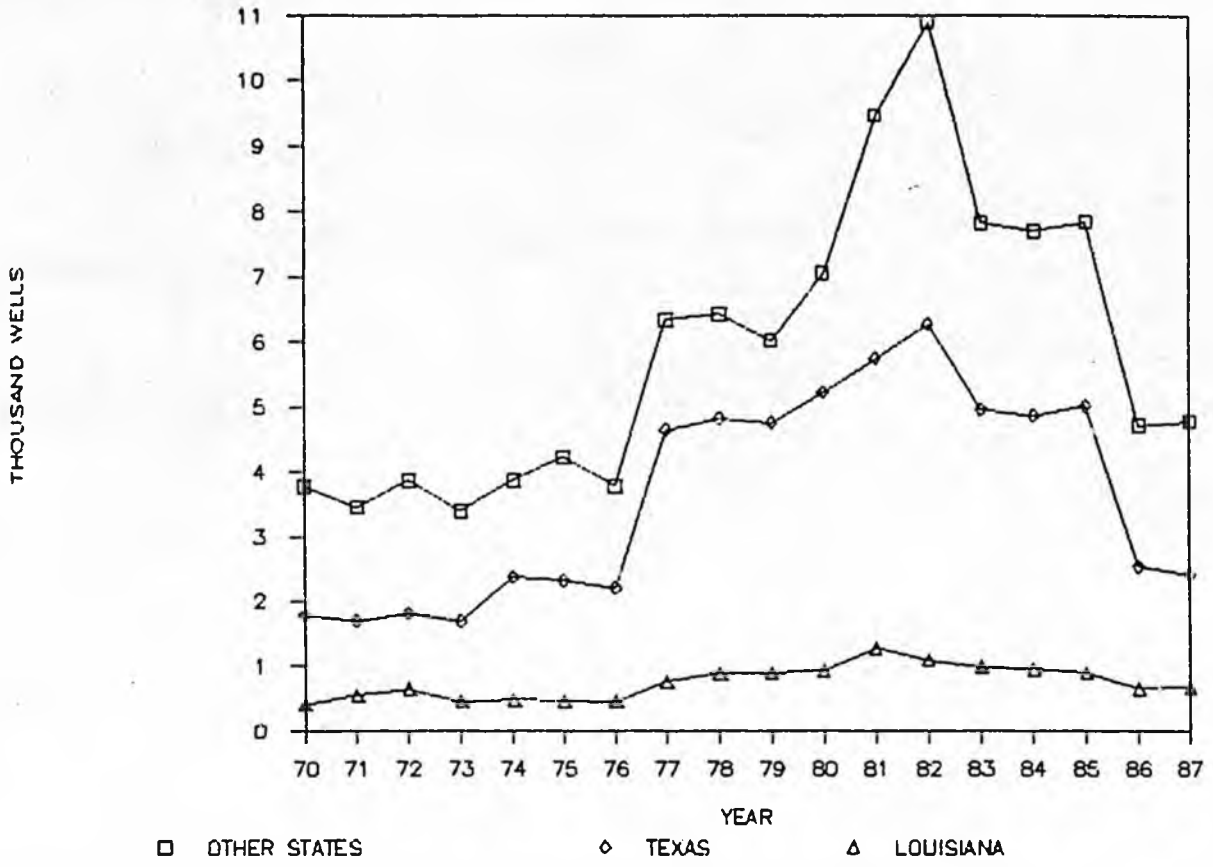


FIGURE 3

WILDCAT WELLS DRILLED—PERCENTAGE CHANGES

FROM YEAR TO YEAR

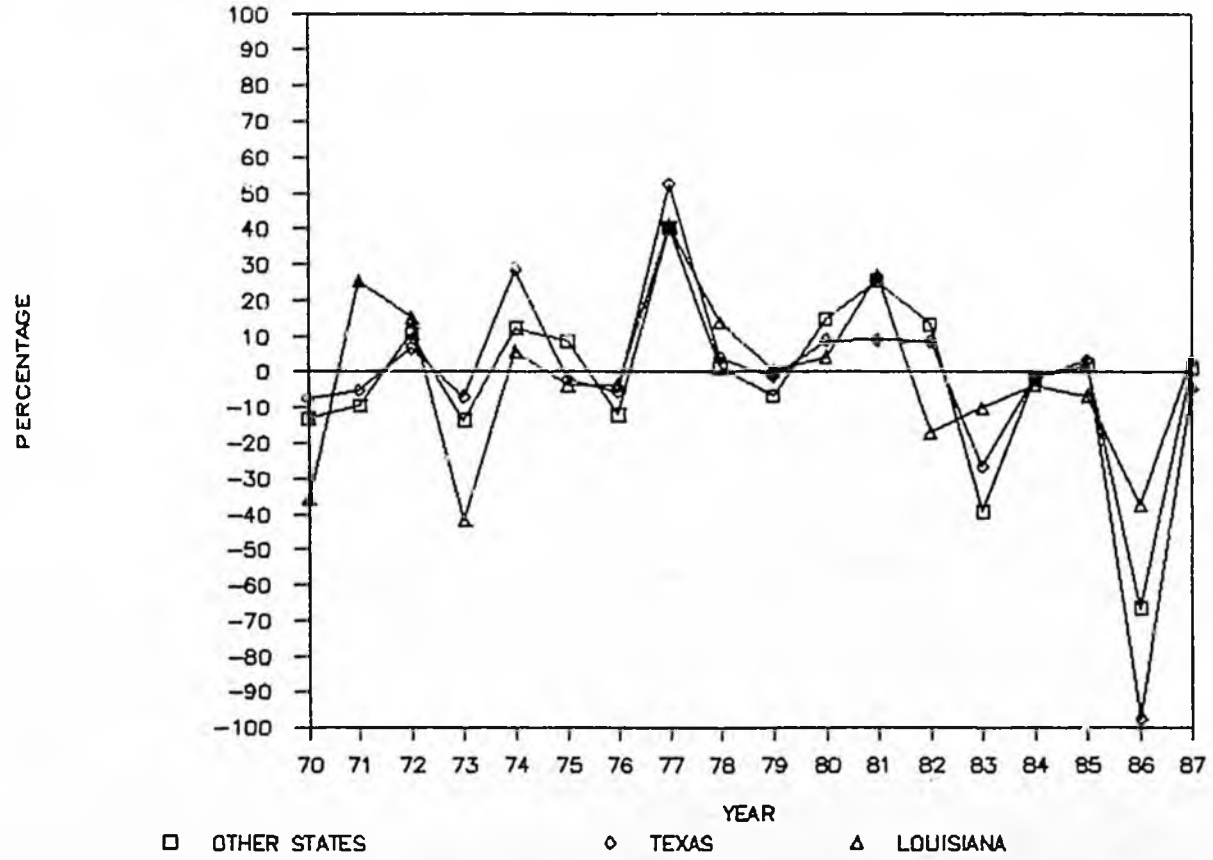


FIGURE 4

TOTAL WELLS DRILLED

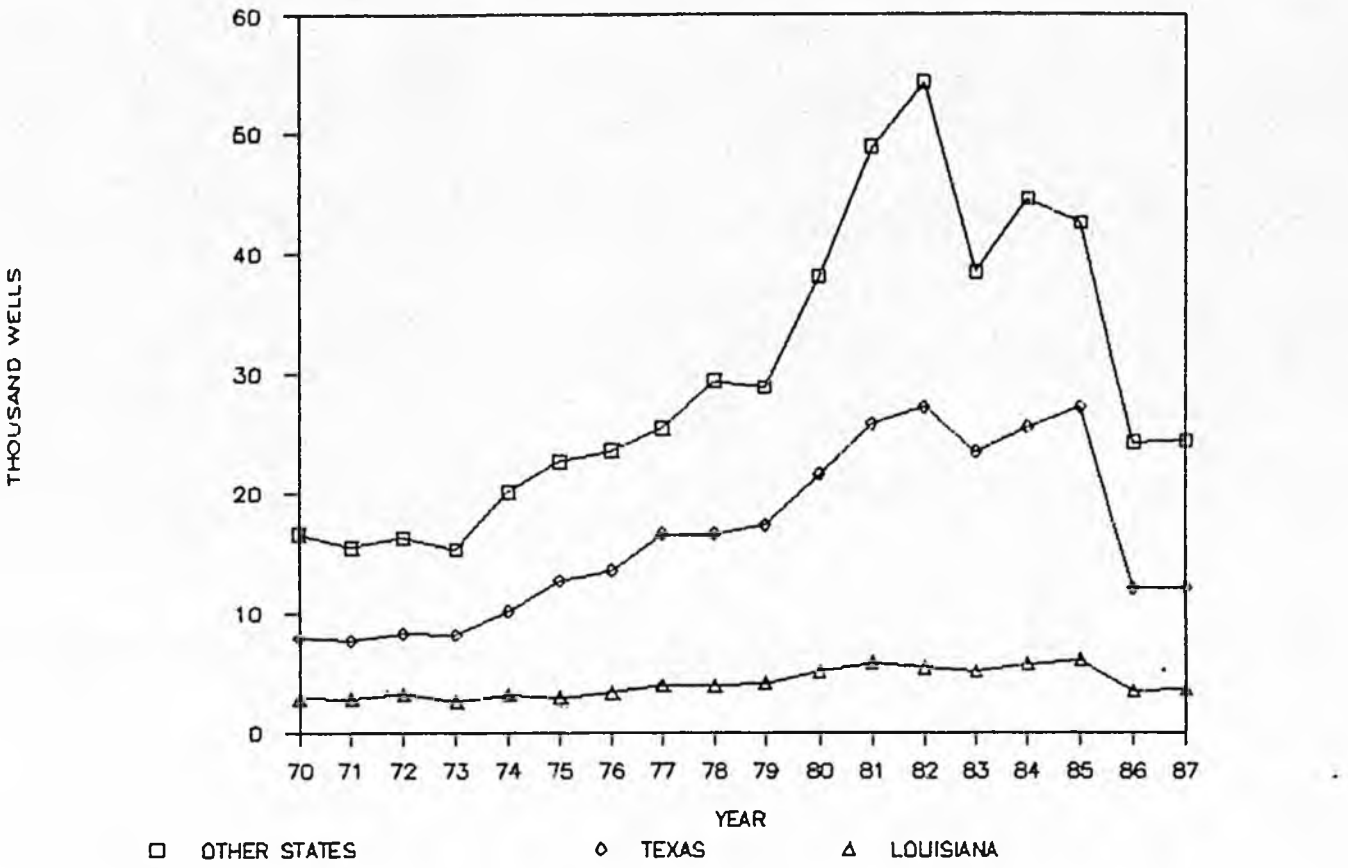


FIGURE 5

WELL COMPLETIONS—PERCENTAGE CHANGES

FROM YEAR TO YEAR

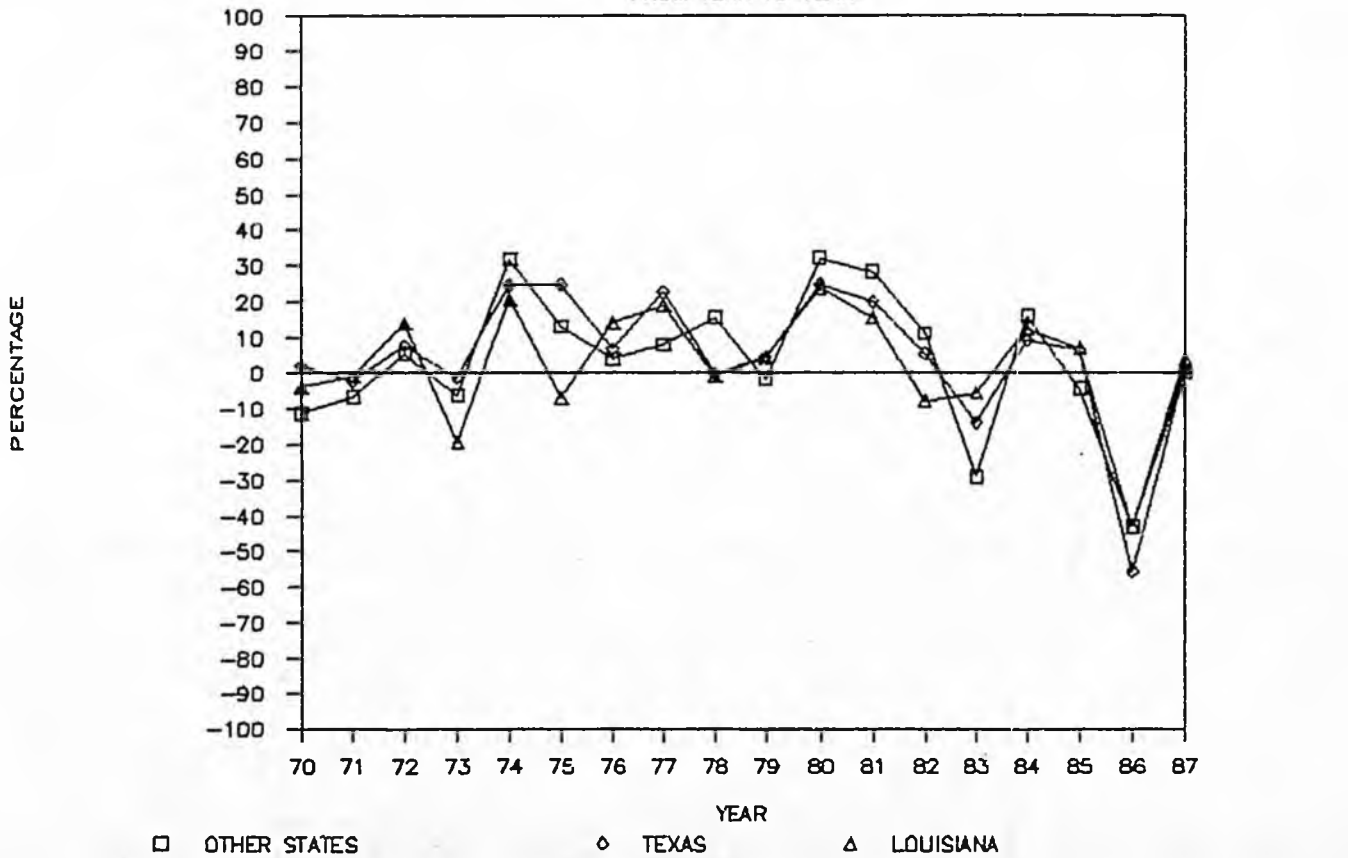


FIGURE 6

TOTAL FOOTAGE DRILLED

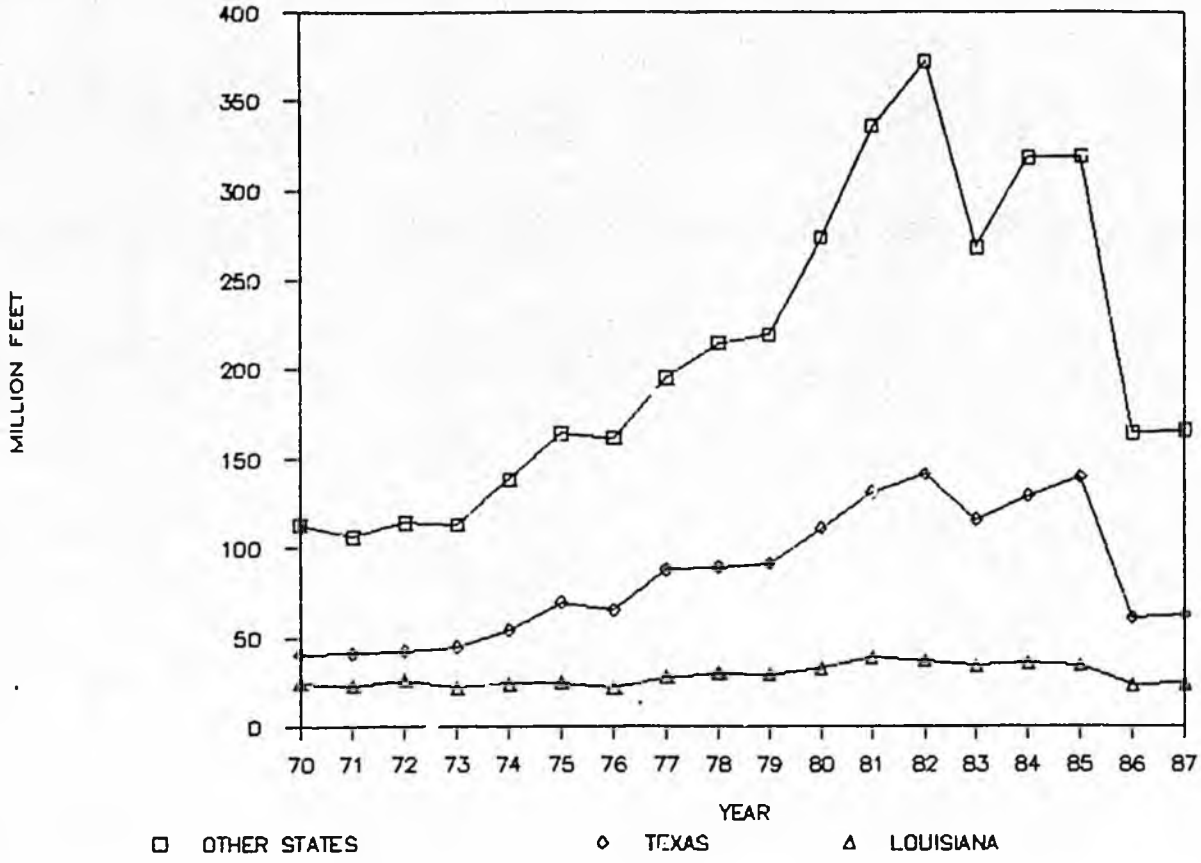


FIGURE 7

TOTAL FOOTAGE DRILLED—PERCENTAGE CHANGES

FROM YEAR TO YEAR

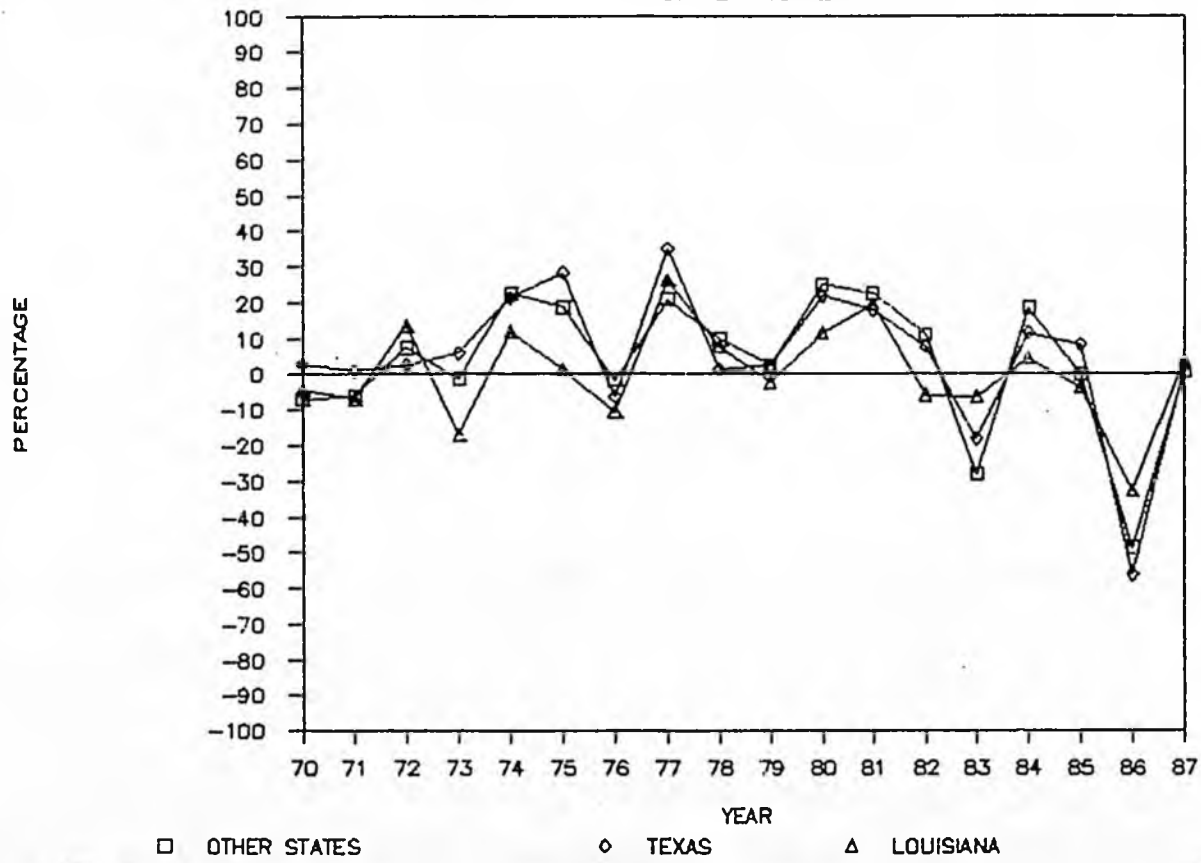


FIGURE 8

UNITED STATES WILDCAT WELLS

WELLS DRILLED & OIL WELLHEAD PRICES

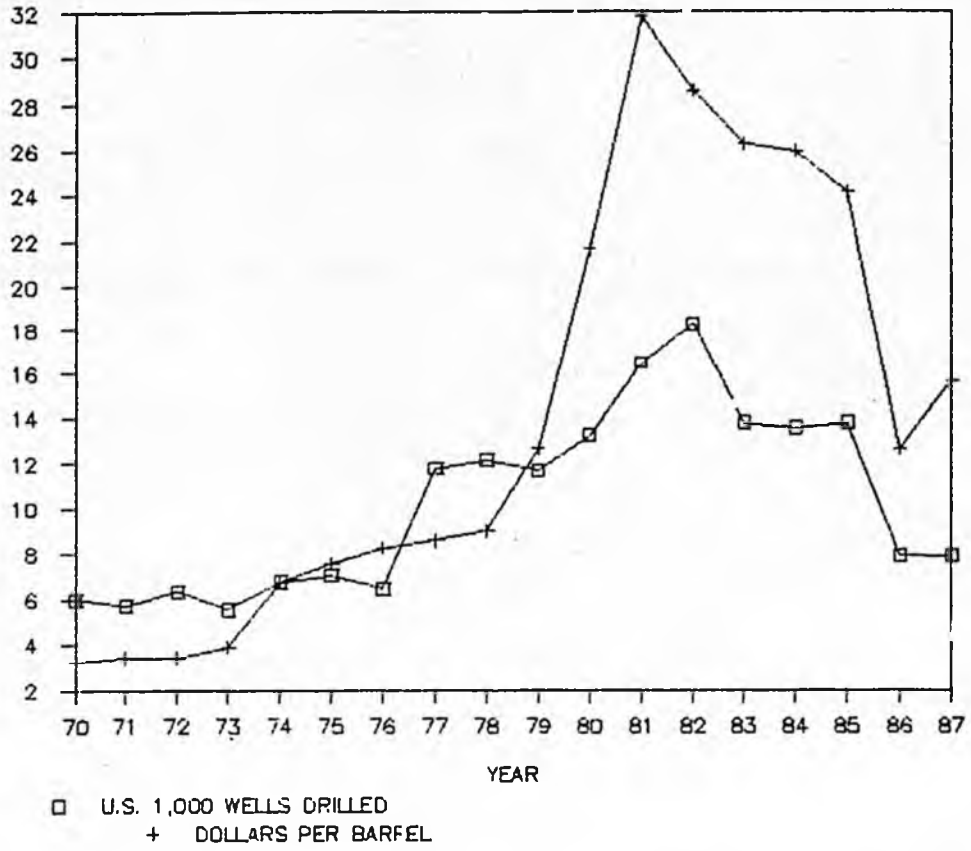


FIGURE 9

UNITED STATES EXTENSION WELLS

WELLS DRILLED & OIL WELLHEAD PRICES

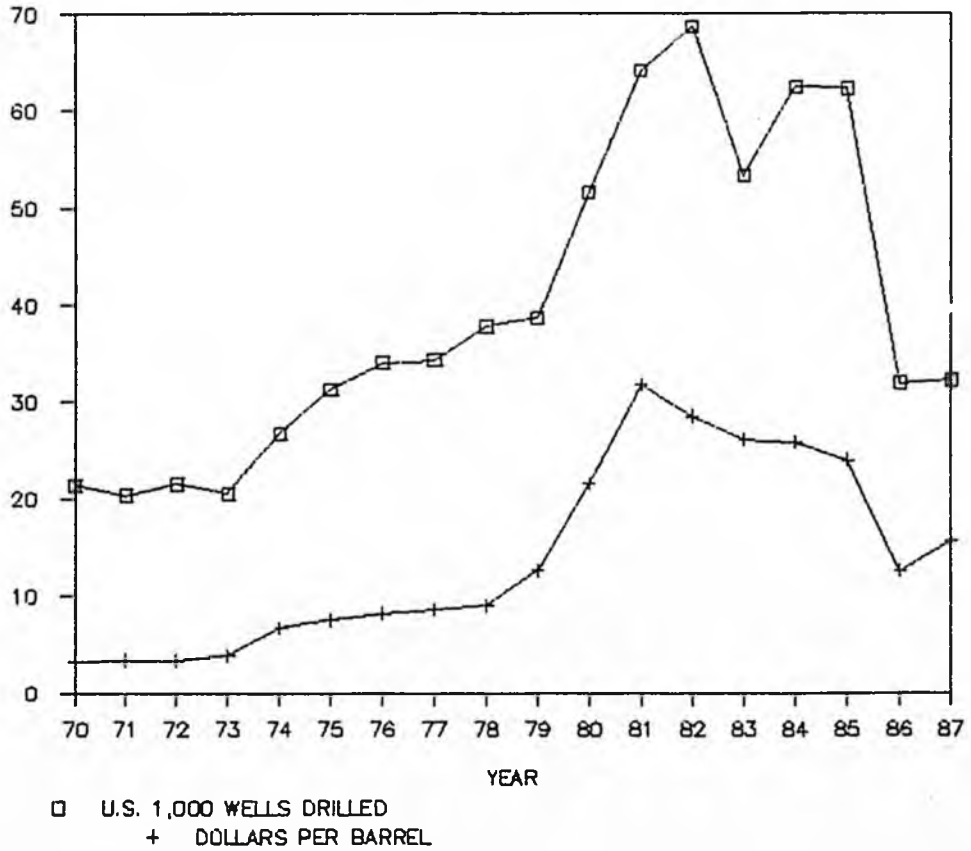


FIGURE 10

LOUISIANA

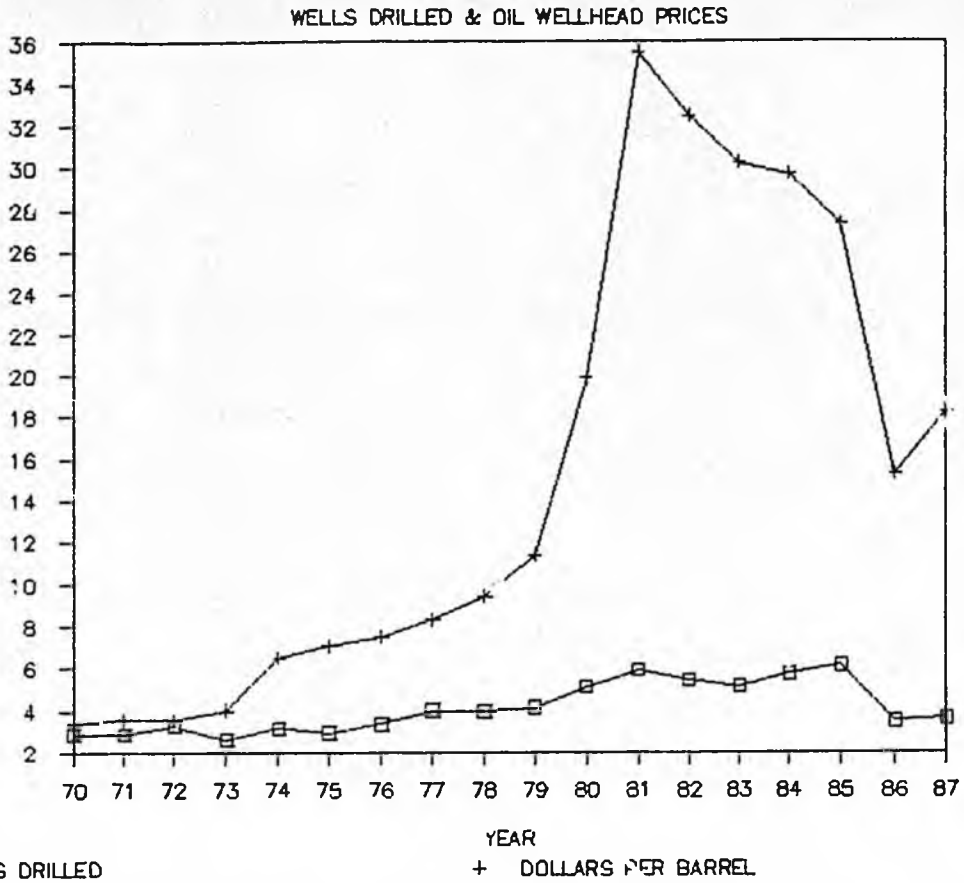
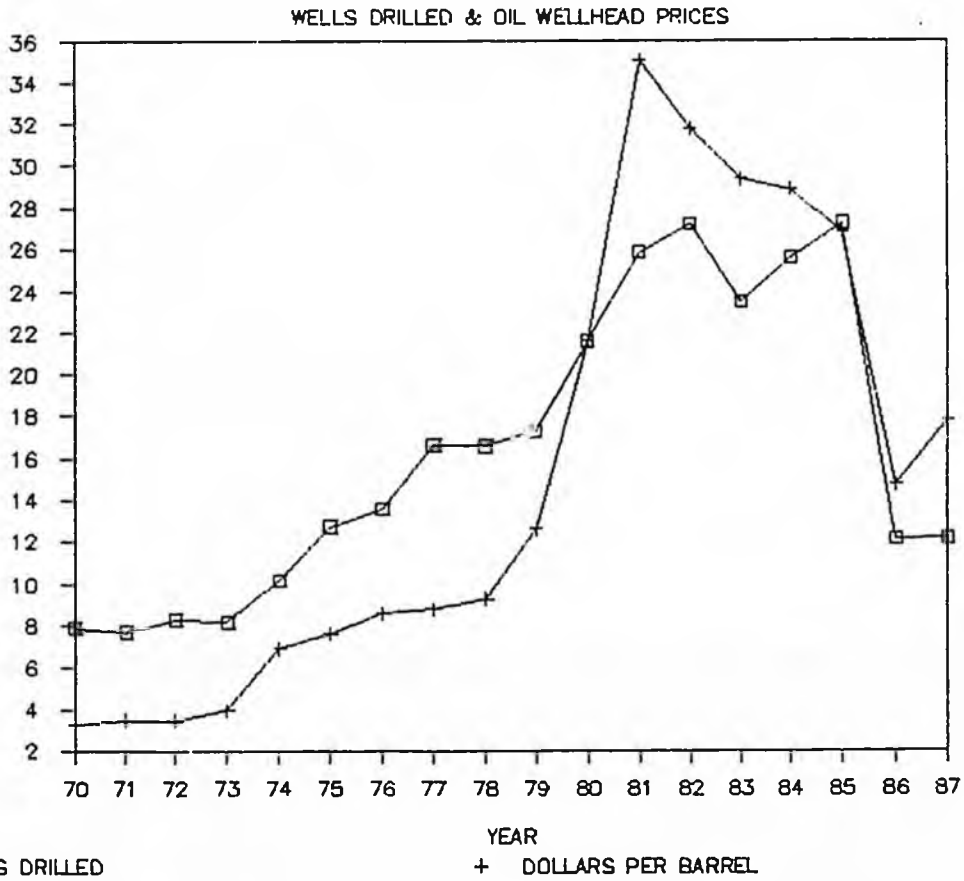


FIGURE 11

TEXAS



CHAPTER 5

PRICES

CRUDE OIL PRICES

Crude oil prices stabilized in recent months between $17 to $20 per barrel, due to OPEC production restraint balancing moderate consumption demand after a high in the Summer months, and high inventories of crude oil. The weak accord signed in Vienna this December, however, should push the price of oil lower to between $15 and $18 per barrel for the next year.

The spot price of West Texas Intermediate (WTI) began to drop slowly from the late Summer high even though most OPEC member countries appeared to be abiding by their new interim output quotas, the war between Iraq and Iran has intensified from time to time, and some non-OPEC producing countries have cut down their production. WTI was over $20 per barrel in August, it decreased to around $18 per barrel on November 1987 on the spot market and, during the past week, the majority of U.S. refiners' posted price for WTI crude oil was $18.15 per barrel. Even though $18 per barrel is almost half of its early 80's prices, it is better than the $11 to $ 13 per barrel in the Summer of 1986.

TABLE IX

AVERAGE CRUDE OIL PRICES
(Dollars per Barrel)

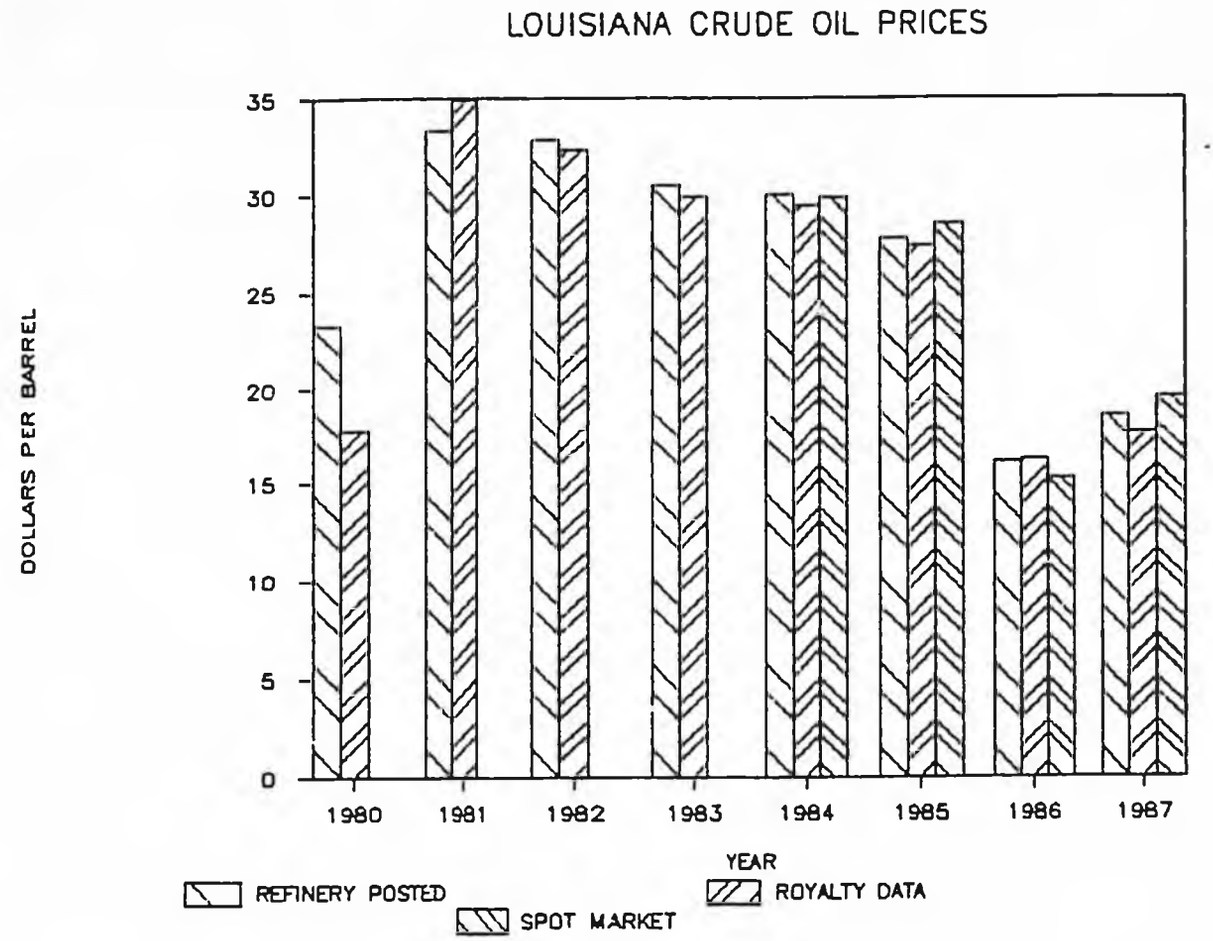
	LOUISIANA		UNITED STATES		
	ROYALTY			REFINERY	
YEAR	PAYMENT	WELLHEAD	WELLHEAD	IMPORTS	DOMESTIC ACQUISITION
1977	7.46	8.33	8.57	13.24	9.55
1978	9.85	9.42	9.00	13.30	10.61
1979	10.03	11.40	12.64	20.19	14.27
1980	17.80	19.87	21.59	32.27	24.23
1981	34.94	35.45	31.77	35.10	34.33
1982	32.38	32.44	28.52	32.11	31.22
1983	29.95	30.20	26.19	27.73	28.87
1984	29.42	29.67	25.88	27.44	28.53
1985	27.41	27.24	24.08	25.83	26.66
1986*	16.73	15.29	12.60	14.31	14.81
1987*	17.25	17.42	14.85	17.58	17.15

* Preliminary
Data source: U.S. Department of Energy and Louisiana Department of Natural Resources.

Louisiana refiners' crude oil average posted price for the South Louisiana Sweet (SLS) in July 1986 was around $12 per barrel, and a year later in July 1987, the posted price recovered to around $21 per barrel. After the Summer's peak demand the posted price has been dropping to around $18 per barrel in recent months. The expected SLS crude oil price for the next year is between $16 and $19 per barrel, if the sea lanes in the Persian Gulf are kept open, and producing countries do not flood the market.

Some historical oil prices for the United States and Louisiana are listed in Table IX and a comparison of the different sources for Louisiana crude oil reference prices is plotted in Figure 12.

FIGURE 12



NATURAL GAS PRICES

The spot price for natural gas has also been weak, due to the low price of competitive fuels and a gas surplus in the market. The price of Louisiana gas is on a continuous decline trend that started in 1985 but seems to have reversed this past month, because of the expectation of a high demand during the Winter months and market disruption caused by the recent Federal Energy Regulatory Commission (FERC) Order 500. The November average spot price for Louisiana gas, published by U.S. Natural Gas Clearing House in Houston indicated $1.50 per MCF. The price calculated from the royalty data is around $1.65 per MCF on the average from the 1987 reported data.

FERC Order 500, however, has unintentionally driven spot prices into the $1.75 to $1.85 per MCF range recently as some producers have begun to withhold less expensive gas from the spot market. Order 500 allows pipelines to be relieved of some of their high price take-or-pay obligations to a producer on a cubic foot for cubic foot basis for every cubic foot of less expensive gas the pipeline transports for that producer on a direct sale to a third party. Huge sums are involved, and many producers are simply not willing to comply with this crediting provision for the higher price gas the pipeline had previously contracted to buy, causing these producers to withhold low price gas otherwise available for sale.

TABLE X

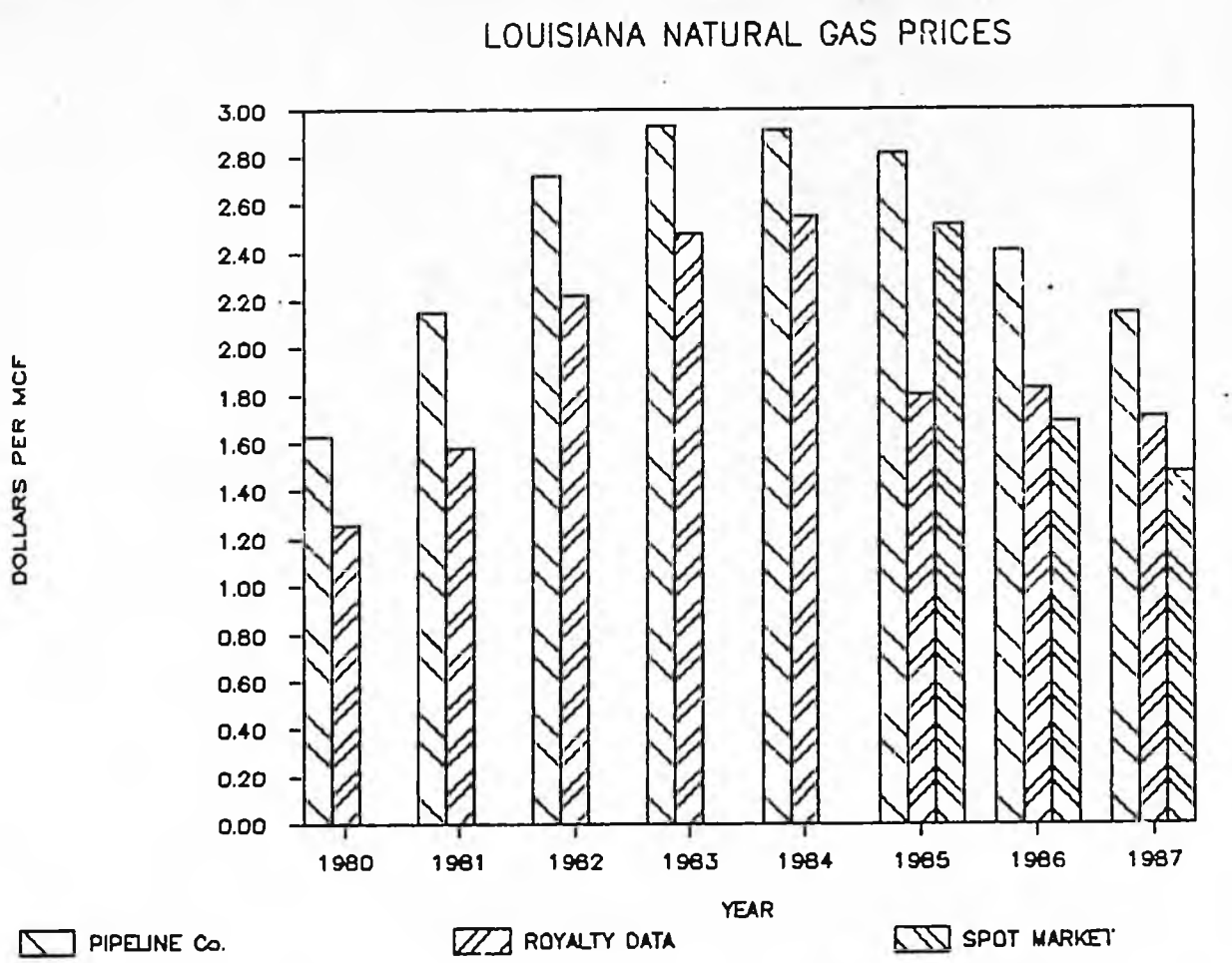
AVERAGE NATURAL GAS PRICES
(Dollars per MCF)

	UNITED STATES			LOUISIANA	
YEAR	WELLHEAD	PIPELINE IMPORTS	PIPELINE DOMESTIC ACQUISITION	ROYALTY PAYMENT	WELLHEAD
1979	1.18	2.60	1.22	0.99	1.11
1980	1.59	4.42	1.63	1.26	1.61
1981	1.98	4.84	2.15	1.58	2.07
1982	2.46	4.94	2.72	2.22	2.60
1983	2.59	4.51	2.93	2.48	2.67
1984	2.66	4.08	2.91	2.55	2.73
1985	2.51	3.18	2.81	1.80	2.16
1986*	1.86	2.53	2.39	1.75	1.84
1987*	1.65	2.19	2.14	1.41	1.69

* Preliminary
Data source: U.S. Department of Energy and Louisiana Department of Natural Resources.

Some historical natural gas prices for the United States and Louisiana are listed in Table X and a comparison of the different Louisiana natural gas reference prices is plotted in Figure 13.

FIGURE 13



APPENDIX A

SEVERANCE TAX

Legal Citation: LSA R.S. 47:631 through 47:646

Oil/Condensate/Similar Natural Resources
(Per Barrel of 42 Gallons)

a) Full rate - Oil/Condensate	12 1/2% of value
b) Incapable oil rate	6 1/4% of value
c) Stripper oil rate	3 1/8% of value

Gas
(Per MCF at 15.025 psia)

a) Full rate	$00.07
b) Incapable oil well gas *	$00.03
c) Incapable gas well gas **	$00.01 3/10
d) Reduced rate ***	$00.04
e) Special rate ****	$00.03

* Gas produced from an oil well with wellhead pressure of fifty pounds per square inch gauge or less under operating conditions.

** Gas produced from a gas well which has been determined by the Secretary to be incapable of producing an average of 250,000 cubic feet of gas per day during the entire taxable month.

*** Gas sold under a contract, in existence prior to November 15, 1973, at a price less than the rate authorized by the FPC in Opinion #597 and #607 which require seller to pay and bear more than 50% of any increase in severance tax levied since date of contract.

**** Gas sold under a contract, in existence prior to May 1, 1972, at a price less than the FPC authorized area rate which requires seller to pay and bear all of the severance tax without reimbursement of any portion thereof.

Exemptions

1. Gas which is subsequently injected into a formation for purposes of recycling, repressuring or pressure maintenance or for any other purpose which increases the ultimate recovery of oil or other hydrocarbons, or for the purpose of storing.

2. Gas when produced from oil wells and vented of flared directly into the atmosphere, unless otherwise sold.

3. Gas used as drilling fuel in the field where produced or used by operators for fuel in connection with the operation and development for, or production of, oil and gas in the field where produced.

4. Gas used in the manufacture of carbon black.

5. Gas consumed in the production of natural resources in the state of Louisiana.

6. United States Government Royalties.

7. The working interest owners in an oil or gas well that discover a new field shall be exempted from fifty percent (50%) of all severance taxes on oil or gas produced from that well for a period of twenty-four (24) months from the date regular production is begun.

Percentage of crude oil production that paid severance tax.

YEAR	FULL RATE	INCAPABLE RATE	STRIPER RATE
1979	95.37%	1.22%	3.41%
1980	94.96%	1.25%	3.79%
1981	94.33%	1.26%	4.42%
1982	93.71%	1.54%	4.73%
1983	93.17%	1.56%	5.27%
1984	92.99%	1.68%	5.33%
1985	92.72%	1.66%	5.62%
1986	92.55%	1.76%	5.69%

Percentage of natural gas production that paid severance tax.

YEAR	FULL	INCAPABLE		REDUCED	SPECIAL
		OIL	GAS		
	RATE	RATE	RATE	RATE	RATE
1979	96.74%	0.79%	2.24%	0.08%	0.15%
1980	96.21%	0.83%	2.70%	0.07%	0.18%
1981	95.89%	0.82%	2.93%	0.06%	0.30%
1982	95.72%	1.39%	3.16%	0.10%	0.19%
1983	95.47%	0.79%	3.44%	0.07%	0.22%
1984	95.66%	0.75%	3.18%	0.08%	0.33%
1985	95.61%	0.86%	3.16%	0.12%	0.26%
1986	95.63%	0.80%	3.18%	0.11%	0.29%

Percentage of state production that is royalty and percentage deductions from royalty payments.

	CRUDE OIL		NATURAL GAS	
YEAR	ROYALTY	DEDUCTION	ROYALTY	DEDUCTION
1979	4.93%	12.05%	4.17%	8.00%
1980	4.80%	12.15%	4.07%	6.05%
1981	4.68%	12.10%	3.91%	5.04%
1982	4.63%	12.26%	4.16%	3.37%
1983	4.66%	12.31%	4.21%	3.04%
1984	4.71%	12.37%	4.05%	3.27%
1985	4.47%	12.41%	4.03%	3.78%
1986	4.52%	12.80%	4.09%	3.85%

STATE OF ALASKA
ALASKA OIL AND GAS CONSERVATION COMMISSION
3001 Porcupine Drive
Anchorage, Alaska 99501

Re: THE APPLICATION OF ATLANTIC RICHFIELD COMPANY for a hearing to present testimony to determine the pool rules for the development and production of the Kuparuk River Formation west of the Prudhoe Bay Field. The contraction of the Prudhoe Bay Kuparuk River Oil Pool and the naming of the field is considered as part of the application.	Conservation Order No. 173 Kuparuk River Field Kuparuk River Oil Pool. Prudhoe Bay Field Prudhoe Bay Kuparuk River Oil Pool. May 6, 1981

IT APPEARING THAT:

1. Atlantic Richfield Company by letter dated November 25, 1980, requested the Alaska Oil and Gas Conservation Commission to take the necessary steps to adopt pool rules for the development and production of the Kuparuk River Formation west and north of the Prudhoe Bay Field.

2. Notice of a public hearing was published in the Anchorage Times on February 5, 1981.

3. A public hearing was held on March 25, 1981 at the Municipality of Anchorage Assembly Room, 3500 East Tudor Road, Anchorage, Alaska. Testimony was presented and oral and written statements were accepted.

4. The hearing was continued until April 8, 1981 at 4:30 PM. Additional written statements and maps were received.

FINDINGS:

1. Oil was first discovered in the Kuparuk area when Sinclair Oil Company tested oil from the Kuparuk River Formation at their Ugnu No. 1 well in 1969.

2. Since 1969, more than 25 wells have been drilled and hundreds of miles of multi-fold seismic data have been acquired in an attempt to define the limits of the Kuparuk River oil accumulation.

3. The area for the Prudhoe Bay Kuparuk River Oil Pool Rules was initially described on January 12, 1970 in Conservation Order No. 83-A and the area has not been changed since that date.

4. A fault, labeled the Eileen fault, exists in the western part of the Prudhoe Bay Field and the evidence indicates that this fault marks the western boundary of the oil accumulation defined as the Prudhoe Bay Kuparuk River Oil Pool.

5. There is doubt about the existence of the Eileen Fault north of the Prudhoe Bay Field and this area may have several faults.

6. Some of the area west and north of the Prudhoe Bay Field should be included within the area where a common accumulation is possible and not covered by the Prudhoe Bay Kuparuk River Oil Pool rules.

7. The Kuparuk River Formation interval in the Atlantic Richfield Company West Oak River State #1 well appears adequate for defining the pool.

8. The area of oil accumulation appears to be controlled by structural dip and truncation to the south, truncation of the formation to the west, northeast dip and possible faulting to the north and east, and a fault, the Eileen Fault, to the east.

9. The Kuparuk River formation consists of very fine to medium grained marine sandstone, usually occurring as three sand members separated by mudstones, siltstones and thinly bedded sandstones.

10. Sand members of the Kuparuk River Formation west of the Eileen Fault could be a common pool and share the same fluid contact.

11. To date, no wells have established the existence of a gas cap in the Kuparuk River Formation.

12. Although water has been found in the Kuparuk River Formation, no oil-water contacts have been substantiated in any individual sand members.

13. The aquifer underlying the Kuparuk River oil accumlation appears to be small in volume and the influx into the oil column is expected to be insignificant.

14. Preliminary development plans cover an area of 210 squares miles.

15. Initial reservoir pressure is estimated to average 3100 psia. with a bubble point pressure of 3000 psia.

16. Solution gas drive is expected to be the primary recovery mechanism.

17. All gas produced will be utilized, in accordance with 20 AAC 25.035 GAS UTILIZATION, for use as fuel, safety flaring, artifical lifting of oil, and injection into the reservoir for storage until a gas sales pipeline is available.

18. It is proposed that when gas sales facilities become available, the injected gas will be produced from the injected area for fuel and for sale.

19. Waterflooding plans are being formulated for the reservoir.

20. The blowout prevention equipment and its use should be in accordance with 20 AAC 25.035 BLOWOUT PREVENTION EQUIPMENT.

21. The Kuparuk River Field, the name proposed by the operator for the area to be covered by these rules, is considered an appropriate name since it meets the required criteria.

22. Development is planned under state-wide spacing regulations.

23. In the northern latitudes, the convergence of governmental survey lines toward true north results in some governmental quarter sections of less than 150 acres.

24. The drilling, completion and production from a well located in a governmental quarter section of no less than 125 acres will not adversely affect correlative rights.

25. Surface casing setting depths between 500 feet below the base of the permafrost and 2700 feet TVD will allow flexibility in the complex directional well programs.

26. Slotted liners, wire wrapped screen liners with and without gravel packing, and open hole completions may offer a means to reduce formation damage and improve oil recovery.

27. The casing design criteria being used has effectively eliminated casing collapse.

28. Installation of downhole and surface automatic shut-in valves could prevent an uncontrolled flow of oil or gas.

29. A minimum subsurface safety valve setting depth of 500 feet should provide adequate protection from an uncontrolled flow and should reduce the risk of damaging both the valve and the control line while running in the hole.

30. To properly regulate and operate the reservoir, performance must be carefully monitored and bottomhole pressure and gas-oil ratio test data must be obtained soon after production commences.

31. The contribution of each of the various perforated intervals in each producing well may be determined by running productivity profile surveys.

NOW THEREFORE, IT IS ORDERED THAT Conservation Order No. 98-A is hereby amended by removing the following described area from the area covered by the Prudhoe Bay Kuparuk River Oil Pool Rules.

T 11 N, R 10 E, U.M.	T 12 N, R 10 E, U.M.
Secs. 1,2,11,12,13,14,23, 24,25,26,35,and 36.	Secs. 1,2,11,12,13,14,23, 24,25,26,35 and 36.
T 11 N, R 11 E,U.M.	T 12 N, R 11 E, U.M.
Secs. 3,4,5,6,7,8,9,10, 11,14,15,16,17,18, 19,20,21,22,23,24, 25,26,27,28,29,30, 31,32,33,34,35 and 36.	Secs. 3,4,5,6,7,8,18,19, 20,29,30,31,32 and 33.
T 13 N, R 10 E, U.M.	T 13 N, R 11 E, U.M.
Secs. 13,14,15,16,21,22, 23,24,25,26,27,28, 33,34,35 and 36.	Secs. 17,18,19,20,28,29, 30,31,32 and 33.

NOW THEREFORE IT IS FURTHER ORDERED THAT the rules hereinafter set forth apply to the following described area:

T 9 N, R 6 E, U.M.
Secs. 1,2,11,12,13 and 14.

T 9 N, R 7 E, U.M.
Secs. 1,2,3,4,5,6,7,8,9, 10,11,12,13,14,15, 16,17 and 18.

T 9 N, R 8 E, U.M.
Secs. 1,2,3,4,5,6,7,8,9, 10,11,12,13,14,15, 16,17 and 18.

T 9 N, R 9 E, U.M.
Secs. 1,2,3,4,5,6,7,8,9, 10,11,12,15,16,17 and 18.

T 9 N, R 10 E, U.M.
Secs. 1,2,3,4,5,6,7,8,9, 10,11 and 12.

T 10 N, R 6 E, U.M.
Secs. 1,2,3,4,9,10,11,12,13, 14,15,16,21,22,23,24, 25,26,35 and 36.

T 10 N, R 7 E, U.M.
ALL

T 10 N, R 8 E, U.M.
ALL

T 10 N, R 9 E, U.M.
ALL

T 10 N, R 10 E, U.M.
ALL

T 10 N, R 11 E, U.M.
Secs. 5,6,7,8,17,18,19 and 20.

T 11 N, R 6 E, U.M.
Secs. 25,26,35 and 36.

T 11 N, R 7 E, U.M.
Secs. 1,2,3,4,9,10,11,12, 13,14,15,16,17,18,19, 20,21,22,23,24,25,26, 27,28,29,30,31,32,33, 34,35 and 36.

T 11 N, R 8 E, U.M.
ALL

T 11 N, R 9 E, U.M.
ALL

T 11 N, R 10 E, U.M.
ALL

T 11 N, R 11 E, U.M.
Secs. 3,4,5,6,7,8,9,10,11, 14,15,16,17,18,19,20, 21,22,23,24,25,26,27, 28,29,30,31,32,33,34, 35 and 36.

T 12 N, R 7 E, U.M.
Secs. 25,26,35 and 36.

T 12 N, R 8 E, U.M.
ALL

T 12 N, R 9 E, U.M.
ALL

T 12 N, R 10 E, U.M.
ALL

T 12 N, R 11 E, U.M.
Secs. 3,4,5,6,7,8,18,19,20, 29,30,31,32 and 33.

T 13 N, R 8 E, U.M.
Secs. 13,14,23,24,25,26, 27,28,33,34,35 and 36.

T 13 N, R 9 E, U.M.
ALL

T 13 N, R 10 E, U.M.
ALL

T 13 N, R 11 E, U.M.
Secs. 7,8,16,17,18,19,20,21, 28,29,30,31,32 and 33.

Rule 1. Name of Field

The name of the field shall be the Kuparuk River Field.

Rule 2. Definition of Pool

The name of the Pool in the Kuparuk River Field shall be the Kuparuk River Oil Pool and is defined as the accumulation of oil that is common to and correlates with the accumulation found in the Atlantic Richfield Company West Sak River State No. 1 well between the depths of 6,474 and 6,880 feet.

Rule 3. Well Spacing

Not more than one well may be drilled on any governmental quarter section or governmental lot corresponding to it nor may any well be drilled on a governmental quarter section or governmental lot corresponding to it which contains less than 125 acres, nor may the Pool be opened in a well bore that is closer than 500 feet to any property line nor closer than 1,000 feet to the Pool opened to the well bore in another well.

Rule 4. Casing and Cementing Requirements

(a) Casing and cementing requirements are as specified in 20 AAC 25.030. CASING AND CEMENTING. except as modified below.

(b) For proper anchorage and to prevent an uncontrolled flow, a conductor casing shall be set at least 75 feet below the surface and sufficient cement shall be used to fill the annulus behind the pipe to the surface.

(c) For proper anchorage, to prevent an uncontrolled flow, and to protect the well from the effects of permafrost thaw-subsidence and freeze back, a string of surface casing shall be set at least 500 measured feet below the base of the permafrost section but not below 2700 feet true vertical depth. Sufficient cement shall be used to fill the annulus behind the casing to the surface.

(d) The surface casing, including connections, shall have minimum post-yield strain properties of 0.9% in tension and 1.26% in compression.

(1) The only types and grades of casing, with threaded connections, that have been shown to meet the requirements in (d) above and have been approved for use as surface casing are the following:

(A) 13-3/8 inch, 72 pounds/foot, L-80, Buttress;

(B) 13-3/8 inch, 72 pounds/foot, N-80, Buttress;

(C) 10-3/4 inch, 45.5 pounds/foot, K-55, Buttress;

(2) The Commission may approve other types and grades of surface casing upon a showing that the proposed casing and connection can meet the post-yield strain requirements in (d) above. This evidence shall consist of one of the following:

(A) full scale tensile and compressive tests;

(B) finite element model studies; or,

(C) other types of axial strain data acceptable to the Commission.

(e) Other means for maintaining the integrity of the well from the effects of permafrost thaw-subsidence and freeze back may be approved by the Commission upon application.

(f) The Commission may approve alternative completion methods (to 20 AAC 25.030 (b) (4) and (5)) upon application and presentation of data which shows the alternatives are based on accepted engineering principles. Such alternative designs may include:

(1) slotted liners, wire wrapped screen liners, or combinations thereof, landed inside of open hole and may be gravel packed;

(2) open hole completions provided that the casing is set not more than 200 feet above the productive zone.

Rule 5. Automatic Shut-In Equipment

(a) Upon completion, each well which is capable of unassisted flow of hydrocarbons must be equipped with a commission-approved

(1) fail-safe automatic surface safety valve (SSV) capable of preventing an uncontrolled flow by automatically closing if such a flow should occur; and

(2) fail-safe automatic surface controlled subsurface safety valve (SSSV), unless another type of subsurface valve is approved by the Commission; this valve must be in the tubing string located at a depth of 500 feet or greater below ground level; the valve must be capable of preventing an uncontrolled flow by automatically closing if such a flow should occur.

(b) A representative of the Commission will witness operation and performance tests at intervals and times as prescribed by the Commission to confirm that the SSV, SSSV, and all associated equipment are in proper working condition; and

(c) A well that is not capable of unassisted flow of hydrocarbons as determined by a "no flow" performance test witnessed by a commission representative is not required to have fail-safe automatic SSV or SSSV valves.

Rule 6. Safety Flares

(a) The daily average volume of 250 MCF/day is permitted for a safety flare in the Central Production Facility operated by Atlantic Richfield Company.

(b) Safety flare volumes for additional facilities may be approved administratively upon application.

(c) Safety flare volumes may be increased or decreased administratively.

Rule 7. Gas-Oil Ratio Tests

Between 90 and 120 days after continuous production and each six months thereafter a gas-oil ratio test shall be taken on each producing well. The test shall be of at least 12 hours duration and shall be conducted at the normal producing rate of the well. Test results shall be reported on Gas-Oil Ratio Test, Form 10-409. All tests run in a calendar month shall be reported by the 15th of the following month.

Rule 8. Pressure Surveys

(a) A static bottomhole pressure survey shall be taken on each well prior to initial sustained production.

(b) Following initial sustained production from each governmental section, a transient pressure survey shall be taken on one well in the section after six months and after 18 months.

(c) One of the wells from (b) above on each lease will be designated a key well and a transient pressure survey on this well shall be taken after 30 months production and annually thereafter.

(d) Bottomhole pressures obtained by a static buildup pressure survey, a 24 hour shut-in instantaneous test or a multiple flow rate test will be acceptable.

(e) Data from the surveys required in this rule shall be filed with the Commission by the last day of the month following the month in which each survey is taken. Reservoir Pressure Report, Form 10-412 shall be utilized for all surveys with attachments for complete additional data. Data submitted shall include, but are not limited to, rate, pressure, time, depths, temperature, and other well conditions necessary for complete analysis of each survey being conducted. The Pool pressure datum plane shall be 6,200 feet subsea.

(f) Results and data from any special reservoir pressure monitoring techniques, tests, or surveys shall also be submitted as prescribed in (e) of this rule.

(g) By administrative order, the Commission may require additional pressure surveys or modify the key wells designated in (c) of this rule.

Rule 9. Productivity Profiles

(a) During the first year of production, a production survey shall be run in each well which has multiple sand intervals open to the well bore.

(b) Subsequent surveys shall be run in wells which exhibit rapid changes in gas-oil ratio, water-oil ratio, or productivity. Subsequent surveys shall also be required in wells which have had remedial work performed to change the production profile unless the remedial work results in only one sand interval being open to the well bore.

(c) Complete production survey data and results shall be recorded and filed with the Commission by the 15th day of the month following the month in which each survey is taken.

(d) By administrative order, the Commission shall specify additional surveys should it be determined that the surveys submitted under (a) and (b) are inadequate.

Done at Anchorage, Alaska and dated May 6, 1981.

Hoyle H. Hamilton, Chairman
Alaska Oil and Gas Conservation Commission

ALASKA OIL AND GAS CONSERVATION COMMISSION

Harry W. Kugler, Commissioner
Alaska Oil and Gas Conservation Commission

Lonnie C. Smith, Commissioner
Alaska Oil and Gas Conservation Commission

MINING ISSUES - 6(i), ET AL

get response to Gov.

CC: FNB, Juneau

Alaska State Legislature

Senate Resources Committee

Sen. John B. (Jack) Coghill, Chairman
Sen. Paul Fischer, Vice-Chairman
Sen. Lloyd Jones
Sen. Arliss Sturgulewski
Sen. Jim Duncan
Sen. Fred Zharoff
Sen. Dick Ellason

Box V
Juneau, Alaska 99811
(907) 465-4907

June 16, 1987

Governor Steve Cowper
P.O. Box A
Juneau, AK 99811

Dear Governor:

As you are aware of the State Supreme Courts decision in Trustees for Alaska v. State of Alaska, that addresses implementation of section 6(i) of the Stathood Act, I will go directly to an issue which I feel is of concern.

After several reading of the courts decision, I am left with the impression that all state lands which contain minerals must be leased. Does this include lands which have been administratively closed to mineral entry under past practices of location?

Not being an attorney I suppose the question here would be:

> Does administrative "closure" constitute violation of the "express[ed] condition that all sales, grants,...for any mineral lands so granted shall be subject to and contain reservation to the State of all of the minerals in the lands so sold, granted,...together with the right to prospect for, mine, and remove same[.]"?

I am not aware this issue was raised in the litigation, but I have some knowledge that further litigation may follow this ruling. Perhaps you could have this question reviewed by the Attorney General.

There are elements within the courts opinion which raise this question in my mind, but if this brief letter is insufficient for your use, please notify my office and we will send you back up information.

Sincerely,

Senator John B. Coghill

JC/brg

Larry, please draft a response for the Gov's signature & send to CW by 7/8

STEVE COWPER, GOVERNOR

DEPARTMENT OF NATURAL RESOURCES

DIVISION OF LAND AND WATER MANAGEMENT

3601 C STREET
P.O. BOX 7005
ANCHORAGE, ALASKA 99510-7005
PHONE: (907) 561-2020

MINERAL CLOSING ORDERS ACREAGE AND PURPOSE

July 16, 1987

About five million acres, or six percent, of state land is closed to new mineral entry through mineral closing orders. More than half of this acreage was closed in anticipation of land disposals. The attached table presents the effective date, purpose, description, and acreage closed for each mineral order on record.

State land may be closed to mineral entry for one of the following reasons:

Land Disposals. Land scheduled for future homesteading, subdivision, agricultural, commercial, or industrial disposal is generally closed just before state funds are committed for survey or on-site capital improvements.

Land Exchanges. State land is closed during the land exchange process to prevent creation of third-party interests.

Public Recreation/Wildlife Habitat. Areas such as campgrounds, archaeological sites, and important habitat areas may be closed if necessary to preserve public access, cultural resources, or the use of resources.

Resource Development/Transportation Corridors. Materials sites, pipeline or road corridors, and airports may be closed to mineral entry if mining would directly interfere with their operation or pose a security risk.

Reserved Use. Land may be closed if it is transferred to another agency or reserved as a future townsite.

Purpose of Closure	Code	Acreage Closed	Percent of Total
Land Disposals	LD	2,622,730	51.5%
Public Recreation/ Wildlife Habitat	PR/WH	1,349,593	26.5%
Land Exchange	LE	594,076	11.7%
Resource Development/ Transportation Corridor	RD/TC	376,023	7.4%
Reserved Use	RU	148,843	2.9%
Unknown	UK	435	0.0%
Total		5,091,701	100.0%

MCO #	EFF. DATE	PURPOSE	ACREAGE	DESCRIPTION	AMENDMENTS	DATE AMENDED	ACREAGE CLOSED OR (OPENED)	NET ACREAGE CLOSED	% OF TOTAL
LAND DISPOSALS									
MCO 15	1969/2/13	LD	121.412	PORT LYONS SUBDIV.				121.412	
MCO 45	1972/2/29	LD	440.000	ESTER				440.000	
MCO 46	1972/3/30	LD	5.950	ESTER				5.950	
MCO 67	1977/9/26	LD	0.000	NW AK GAS LAND DISPOSALS	MCO 67A3; MOO 383A	1981; 1984	98,390.000	98,390.000	
MCO 70	1980/9/9	LD	6,662.250	ANDERSON				6,662.250	
MCO 71	1980/8/20	LD	8,622.793	JUNE CREEK				8,622.793	
MCO 72	1980/8/20	LD	333.745	MINCHUMINA				333.745	
MCO 73	1980/9/9	LD	15,881.060	POTLACH PONDS	MOO 73A1	1982/11/1	(1,920.000)	13,961.060	
MCO 74	1980/9/8	LD	697.000	KETCHIKAN MOUNT PT.	MCO 74A1	1981/3/4	67.210	764.210	
MCO 75	1980/9/9	LD	1,280.000	CHENA RIDGE				1,280.000	
MCO 76	1980/8/28	LD	2,560.000	TOK				2,560.000	
MCO 77	1980/8/28	LD	3,840.000	TOK				3,840.000	
MCO 78	1980/8/28	LD	48.166	SKAGWAY				48.166	
MCO 79	1980/8/28	LD	1,280.000	HAINES				1,280.000	
MCO 80	1980/8/28	LD	261.200	PETERSBURG				261.200	
MCO 81	1980/8/28	LD	2.030	WRANGELL				2.030	
MCO 82	1980/8/28	LD	265.700	KETCHIKAN				265.700	
MCO 83	1980/8/28	LD	1,024.748	GUSTAVUS				1,024.748	
MCO 84	1980/8/28	LD	1,285.000	YAKUTAT				1,285.000	
MCO 85	1980/8/28	LD	488.790	SHELTER ISLAND				488.790	
MCO 86	1980/12/6	LD	6,789.110	THORNE BAY				6,789.110	
MCO 87	1980/8/28	LD	8,480.000	FISH LAKES DISPOSAL				8,480.000	
MCO 88	1980/8/28	LD	32,000.000	SKWENTNA FLATS	MCO 88A2	1981/3/23	8,580.000	40,580.000	
MCO 89	1980/8/28	LD	5,760.000	LOCKWOOD LAKE				5,760.000	
MCO 90	1980/8/28	LD	7,960.000	KAHILTNA FLATS				7,960.000	
MCO 91	1980/8/28	LD	10,000.000	INDIAN RIVER REMOTE				10,000.000	
MCO 92	1980/8/28	LD	1,600.000	DINGLISHNA HILL				1,600.000	
MCO 93	1980/8/28	LD	640.000	BENCH LAKE				640.000	
MCO 94	1980/8/28	LD	20,000.000	COAL CREEK				20,000.000	
MCO 95	1980/8/28	LD	1,280.000	SOURDOUGH				1,280.000	

MCO #	EFF. DATE	PURPOSE	ACREAGE	DESCRIPTION	AMENDMENTS	DATE AMENDED	ACREAGE CLOSED OR (OPENED)	NET ACREAGE CLOSED	% OF TOTAL
MCO 96	1980/8/28	LD	[illegible]000.000	TALKEETNA BLUFFS				6,000.000	
MCO 97	1980/8/28	LD	[illegible],920.000	CHICKALOON BENCH	MCO 97A1; MOO 97A2	1983/8/21	190.000	2,110.000	
MCO 98	1980/8/28	LD	14,000.000	PETERS CREEK				14,000.000	
MCO 99	1980/8/28	LD	9,000.000	KENNY CREEK	MCO 99A1	1980/10/8	0.000	9,000.000	
MCO 100	1980/8/28	LD	2,560.000	ENTERPRISE ESTATES				2,560.000	
MCO 101	1980/8/28	LD	15,000.000	NINEMILE CREEK				15,000.000	
MCO 102	1980/8/28	LD	3,200.000	CANYON LAKE				3,200.000	
MCO 103	1980/8/28	LD	7,360.000	TALACHULITNA LAKES				7,360.000	
MCO 104	1980/9/28	LD	29,240.000	YENLO HILLS	MCO 104A1	1982/3/30	2,120.000	31,360.000	
MCO 105	1980/8/28	LD	6,975.000	HUNTS CREEK				6,975.000	
MCO 106	1980/9/9	LD	22,166.000	WASHINGTON CREEK	MOO 106A1; MOO 383A	1982; 1984	(5,943.000)	16,223.000	
MCO 107	1980/9/16	LD	3,170.000	CHENA HOT SPRINGS	MOO 383A	1984/3/16	(340.000)	2,830.000	
MCO 108	1980/9/16	LD	584.620	HAY STACK	MOO 383A	1984/3/16	(256.620)	328.000	
MCO 109	1980/9/16	LD	1,280.000	KEYSTONE	MOO 383A	1984/3/16	(570.000)	710.000	
MCO 110	1980/9/16	LD	700.000	MURPHY				700.000	
MCO 111	1980/11/8	LD	9,468.000	OVERLAND				9,468.000	
MCO 112	1980/9/16	LD	46,400.000	KANTISHNA	MOO 112A1	1982/11/1	(19,721.000)	26,679.000	
MCO 113	1980/9/16	LD	1,600.000	NENANA SOUTH				1,600.000	
MCO 114	1980/9/16	LD	11,520.000	SLATE CREEK				11,520.000	
MCO 115	1980/9/16	LD	3,900.000	REX-QUOTA				3,900.000	
MCO 116	1980/9/16	LD	160.000	SALCHA AG				160.000	
MCO 117	1980/9/16	LD	2,880.000	TANANA RIVER WEST				2,880.000	
MCO 119	1980/9/16	LD	190.000	DONLEY				190.000	
MCO 120	1980/9/3	LD	1,920.000	ALDER CREEK				1,920.000	
MCO 121	1980/10/6	LD	1,950.980	PELICAN				1,950.980	
MCO 122	1980/10/3	LD	35,200.000	KICHATNA				35,200.000	
MCO 123	1980/10/3	LD	22,400.000	NAKOCHNA				22,400.000	
MCO 124	1980/10/1	LD	24,320.000	KAHILTNA REMOTE	MCO 124A1,A2	1981/2/8	2,540.000	26,860.000	
MCO 125	1980/10/6	LD	594.600	HOLLIS				594.600	
MCO 126	1980/9/3	LD	5,310.000	HOMER DISPOSAL AREA	MCO 126A1	1980/6/2	320.000	5,630.000	
MCO 127	1980/9/3	LD	10,095.630	TALKEETNA DISPOSAL AREA				10,095.630	
MCO 128	1980/9/30	LD	49,100.000	CHASE AREA DISPOSAL	MOO 128A1;MCO 128A2	1982; 1983	(2,800.000)	46,300.000	

MCO #	EFF. DATE	PURPOSE	ACREAGE	DESCRIPTION	AMENDMENTS	DATE AMENDED	ACREAGE CLOSED OR (OPENED)	NET ACREAGE CLOSED	% OF TOTAL
MCO 129	1930/10/1	LD	559.723	ROBE LAKE DISPOSAL AREA				559.723	
MCO 130	1980/9/30	LD	623.958	SWAN LAKE DISPOSAL AREA				623.958	
MCO 132	1980/10/15	LD	30,400.000	BALD MOUNTAIN				30,400.000	
MCO 133	1980/10/27	LD	26,000.000	SHELL HILLS REMOTE				26,000.000	
MCO 134	1981/2/3	LD	1,920.000	ANACONDA CREEK	MOO 383A	1984/3/16	(1,880.000)	40.000	
MCO 135	1981/2/3	LD	4,417.000	CROOKED CREEK				4,417.000	
MCO 136	1981/1/3	LD	83,754.000	WEST FORK				83,754.000	
MCO 137	1980/11/20	LD	21,135.000	YENTNA DISPOSAL AREA				21,135.000	
MCO 138	1980/11/20	LD	1,409.400	ALEXANDER CREEK WEST SUB				1,409.400	
MCO 139	1981/2/3	LD	3,500.000	KOKOMO CREEK				3,500.000	
MCO 140	1981/2/3	LD	1,588.750	FORTUNE CREEK	MOO 140A1	1982/11/1	(880.000)	708.750	
MCO 141	1981/2/3	LD	2,312.000	LEFT FORK	MOO 141A1	1982/11/1	(320.000)	1,992.000	
MCO 142	1981/3/4	LD	1,000.000	OLNES EAST	MOO 383A	1984/3/16	(400.000)	600.000	
MCO 143	1981/3/23	LD	219.000	HOLSTEIN HEIGHTS				219.000	
MCO 144	1981/3/23	LD	1,280.000	MCKINLEY VIEW				1,280.000	
MCO 145	1981/3/23	LD	3,840.000	SAFARI LAKE				3,840.000	
MCO 146	1981/3/23	LD	3,200.000	COLORADO STATION				3,200.000	
MCO 147	1981/3/23	LD	1,280.000	SUPER CUB				1,280.000	
MCO 148	1980/3/23	LD	2,560.000	HIGH MOUNTAIN LAKE SUB	MCO 148A1	1982/3/30	1,280.000	3,840.000	
MCO 149	1981/3/23	LD	3,200.000	HEWITT-WHISKEY				3,200.000	
MCO 150	1981/3/23	LD	1,280.000	KUTNA CREEK				1,280.000	
MCO 151	1981/3/23	LD	3,200.000	SHELL LAKE NORTH				3,200.000	
MCO 152	1981/3/23	LD	43,520.000	HEWITT LAKE REMOTE				43,520.000	
MCO 153	1981/3/23	LD	74,880.000	LAKE CR./MCDOUGAL REMOTE				74,880.000	
MCO 154	1981/3/23	LD	19,200.000	GREEN ACRES REMOTE				19,200.000	
MCO 155	1981/3/23	LD	5,760.000	BIG ELEVEN REMOTE				5,760.000	
MCO 156	1981/3/23	LD	39,200.000	JOHNSON CREEK REMOTE				39,200.000	
MCO 157	1981/3/23	LD	7,845.000	GATE CREEK B REMOTE				7,845.000	
MCO 158	1981/3/23	LD	46,640.000	WINDY FORKS REMOTE				46,640.000	
MCO 159	1981/3/23	LD	5,993.000	MCCARTHY REMOTE PARCEL				5,993.000	
MCO 160	1981/3/23	LD	10,400.000	IRON CREEK REMOTE				10,400.000	
MCO 161	1981/3/23	LD	15,360.000	SUNDAY LAKES REMOTE				15,360.000	

MCO #	EFF. DATE	PURPOSE	ACREAGE	DESCRIPTION	AMENDMENTS	DATE AMENDED	ACREAGE CLOSED OR (OPENED)	NET ACREAGE CLOSED	% OF TOTAL
MCO 162	1981/4/27	LD	54,960.000	KUTNA CREEK REMOTE				54,960.000	
MCO 165	1981/4/27	LD	22,200.000	FRIDAY CREEK REMOTE				22,200.000	
MCO 168	1981/4/27	LD	115,860.000	BIG RIVER REMOTE				115,860.000	
MCO 169	1981/5/4	LD	24,735.000	SKWENTNA FLATS ADDN.	MCO 169A1	1983/9/6	30.000	24,765.000	
MCO 170	1981/3/18	LD	2,558.000	SOUTH CARIBOU LAKE SUBD.				2,558.000	
MCO 171	1981/3/30	LD	4,693.608	CHASE II				4,693.608	
MCO 172	1981/3/30	LD	520.000	PUPPY HAVEN				520.000	
MCO 173	1981/4/17	LD	15,537.920	PT.MACKENZIE AG				15,537.920	
MCO 174	1981/5/25	LD	822.140	HAYSTACK EXTENSION				822.140	
MCO 175	1981/5/25	LD	80.000	EIELSON AG				80.000	
MCO 176	1981/5/25	LD	1,283.330	ROSIE CREEK				1,283.330	
MCO 177	1981/5/25	LD	610.720	KEYSTONE EXTENSION	MCO 177A1; MOO 383A	1983-1984	372.000	982.720	
MCO 178	1981/5/25	LD	2,493.690	MCCLOUD				2,493.690	
MCO 179	1981/5/25	LD	1,080.000	DESPERATION	MOO 383A	1984/3/16	(709.000)	371.000	
MCO 180	1981/5/25	LD	35.000	HORSESHOE				35.000	
MCO 181	1981/5/25	LD	70.000	POPEYE				70.000	
MCO 182	1981/5/28	LD	3,520.000	CHENA HOT SPRINGS EXTEN	MOO 383A	1984/3/16	(3,470.000)	50.000	
MCO 184	1981/5/22	LD	77,938.000	EUREKA	MOO 184A1; MOO 383A	1982; 1984	(22,396.000)	55,542.000	
MCO 185	1981/5/22	LD	10,150.000	TANANA RIVER NORTH	MOO 185A1	1982/11/1	(10,150.000)	0.000	
MCO 186	1981/6/16	LD	2,160.000	SCOTTY LAKE AG				2,160.000	
MCO 188	1981/7/23	LD	4,723.000	WRANGELL NARROWS				4,723.000	
MCO 189	1981/6/29	LD	1,305.000	EDNA BAY/EXCURSION INLET	MCO 189A	1981/7/17	2,320.000	3,625.000	
MCO 193	1981/10/8	LD	5,277.000	BEAR LAKE REMOTE				5,277.000	
MCO 194	1981/10/8	LD	1,920.000	FIRWEED MTN SUBD	MOO 194A1	1985/8/6	(560.800)	1,359.200	
MCO 195	1981/10/8	LD	4,984.510	LE ROUX VIEW REMOTE				4,984.510	
MCO 196	1981/10/8	LD	10,400.000	DILLINGHAM REMOTE				10,400.000	
MCO 197	1981/10/8	LD	1,140.000	PAPOOSE TWINS REMOTE				1,140.000	
MCO 198	1981/10/10	LD	13,800.000	TWIN LAKES REMOTE				13,800.000	
MCO 199	1981/10/8	LD	1,720.000	SCHNEIDER LAKE REMOTE				1,720.000	
MCO 200	1982/3/14	LD	44,800.000	FAR MOUNTAIN				44,800.000	
MCO 201	1982/1/8	LD	13,440.000	ALBERT CREEK				13,440.000	
MCO 202	1981/10/15	LD	93,214.000	DUGAN HILLS/DEADMAN LAKE	MOO 202A1	1982/11/1	(41,049.000)	52,165.000	

MCO #	EFF. DATE	PURPOSE	ACREAGE	DESCRIPTION	AMENDMENTS	DATE AMENDED	ACREAGE CLOSED OR (OPENED)	NET ACREAGE CLOSED	% OF TOTAL
MCO 203	1982/1/8	LD	1,737.000	BROWN'S COURT AG				1,737.000	
MCO 204	1982/1/8	LD	4,425.000	TWO MILE LAKE AG	MCO 204A1;MOO 204A2	1982	503.240	4,928.240	
MCO 205	1982/1/8	LD	1,110.000	BONANZA	MOO 205A1; MOO 383A	1982; 1984	(1,110.000)	0.000	
MCO 206	1982/1/8	LD	11,840.000	DUNE LAKE/TEKLANIKA CHAN.	MOO 206A1	1983/6/9	(8,502.000)	3,338.000	
MCO 207	1981/10/15	LD	2,560.000	GESKAKMINA LAKE	MOO 383A	1984/3/16	(1,901.000)	659.000	
MCO 208	1982/1/8	LD	1,220.000	EAGLE	MOO 383A	1984/3/16	(516.000)	704.000	
MCO 209	1982/1/8	LD	3,680.000	LAKE MINCHUMINA II	MCO 209A1	1982/4/30	815.000	4,495.000	
MCO 210	1982/1/8	LD	11,520.000	SAM CREEK	MOO 383A	1984/3/16	(9,925.000)	1,595.000	
MCO 212	1981/11/17	LD	300.000	FIREWEED				300.000	
MCO 214	1982/1/8	LD	54,400.000	ZITZIANA				54,400.000	
MCO 215	1982/1/8	LD	15,880.000	CANNON				15,880.000	
MCO 216	1982/1/20	LD	18,619.000	TOK HILLS	MOO 216A1; MOO 383A	1982; 1984	(18,619.000)	0.000	
MCO 217	1981/12/16	LD	1,030.000	TWENTY-THREE MILE SLOUGH				1,030.000	
MCO 218	1982/6/8	LD	263.250	NORTH RIDGE				263.250	
MCO 221	1982/1/8	LD	17,866.000	CATHEDRAL BLUFFS	MOO 221A1	1982/11/1	(16,753.000)	1,113.000	
MCO 222	1982/1/8	LD	595.000	TANQUARDEL	MOO 222A1	1982/11/1	(595.000)	0.000	
MCO 223	1982/4/29	LD	712.000	TENDERFOOT	MOO 383A	1983/3/16	(55.000)	657.000	
MCO 224	1982/1/8	LD	1,680.000	GLENN				1,680.000	
MCO 225	1982/1/8	LD	1,400.000	KINDAMINA LAKE				1,400.000	
MCO 226	1982/1/8	LD	8,080.000	WEST TWIN LAKE				8,080.000	
MCO 227	1982/1/8	LD	1,893.000	IOWA CR./LITTLE CHENA AG				1,893.000	
MCO 228	1982/5/6	LD	4,180.000	ANY CREEK	MOO 383A	1984/3/16	(585.000)	3,595.000	
MCO 229	1982/1/8	LD	10,200.000	CARIBOU CREEK	MCO 229A1	1983/6/9	480.000	10,680.000	
MCO 230	1982/1/8	LD	3,040.000	VOLKMAR LAKE REMOTE				3,040.000	
MCO 231	1981/10/2	LD	947.360	FAIRBANKS ODD LOTS				947.360	
MCO 232	1981/10/15	LD	32,336.770	WINDY CREEK				32,336.770	
MCO 233	1981/10/15	LD	12,925.000	BEAR CREEK				12,925.000	
MCO 234	1982/7/1	LD	23,111.500	NORTHEAST ALASKA RANGE				23,111.500	
MCO 235	1982/6/8	LD	9,009.000	CHENA SOUTH	MOO 235A1	1982/11/1	(320.000)	8,689.000	
MCO 240	1982/3/8	LD	640.000	SADDLE POINT SUBDIV				640.000	
MCO 241	1982/3/8	LD	5,440.000	DENALI VIEW REMOTE	MCO 241A1	1983/3/7	640.000	6,080.000	
MCO 242	1982/3/8	LD	360.000	GOOSE CREEK AG				360.000	

MCO #	EFF. DATE	PURPOSE	ACREAGE	DESCRIPTION	AMENDMENTS	DATE AMENDED	ACREAGE CLOSED OR (OPENED)	NET ACREAGE CLOSED	% OF TOTAL
MCO 243	1982/3/8	LD	4,160.000	DELTA ISLAND AG				4,160.000	
MCO 244	1982/3/8	LD	1,800.000	LITTLE SUSITNA AG				1,800.000	
MCO 245	1982/3/8	LD	760.000	MOOSE CREEK AG				760.000	
MCO 246	1982/3/8	LD	2,480.000	RABIDEUX AG				2,480.000	
MCO 247	1982/3/8	LD	960.000	NANCY LAKE AG				960.000	
MCO 248	1982/3/8	LD	5,280.000	AMBER LAKE SUBDIV				5,280.000	
MCO 249	1982/3/8	LD	22,831.000	JACK RABBIT HILLS REMOTE				22,831.000	
MCO 251	1982/3/30	LD	1,910.000	TRAIL RIDGE SUBDIV				1,910.000	
MCO 253	1982/3/30	LD	200.000	KENNEY LAKE SUBDIV				200.000	
MCO 254	1982/3/13	LD	6.280	SUREFIRE				6.280	
MCO 255	1982/1/20	LD	612.000	MULLEN/DUSTEROFF				612.000	
MCO 256	1982/3/30	LD	2,509.000	FAIRBANKS SUBDIV				2,509.000	
MCO 257	1982/4/20	LD	420.000	BEARS DEN				420.000	
MCO 258	1982/2/9	LD	460.000	BUFFALO AG				460.000	
MCO 259	1982/2/9	LD	290.000	CLEARWATER AG				290.000	
MCO 261	1982/4/20	LD	720.000	FARMVIEW				720.000	
MCO 262	1982/4/20	LD	14,743.000	GOLDSTREAM AG	MOO 162A1	1983/5/24	(680.000)	14,063.000	
MCO 263	1982/4/25	LD	29,980.000	LITTLE MELOZITNA REMOTE				29,980.000	
MCO 264	1982/4/20	LD	13,189.000	MARIANA				13,189.000	
MCO 265	1982/4/22	LD	160.000	NENANA ODD LOTS				160.000	
MCO 266	1982/4/25	LD	16,532.000	NORTH FORK				16,532.000	
MCO 267	1982/4/20	LD	12,736.000	NOWITNA				12,736.000	
MCO 268	1982/4/20	LD	106.560	PARKRIDGE				106.560	
MCO 269	1982/4/20	LD	429.000	THREE MILE				429.000	
MCO 270	1982/4/20	LD	16,062.000	WHITE MOUNTAIN				16,062.000	
MCO 271	1982/2/2	LD	39,323.000	DELTA II				39,323.000	
MCO 272	1982/4/20	LD	475.000	OLIVE PL./THOMS PL. SUB				475.000	
MCO 273	1982/4/20	LD	250.000	WHALE PASSAGE SUBDIV				250.000	
MCO 274	1982/4/20	LD	90.000	TENAKEE SPRINGS SUBDIV				90.000	
MCO 275	1982/4/20	LD	800.000	THOMAS BAY SUBDIV				800.000	
MCO 276	1982/4/20	LD	250.000	TAKU RIVER SUBDIV				250.000	
MCO 277	1982/4/20	LD	1,827.000	GODDARD HOT SPRINGS				1,827.000	

MCO #	EFF. DATE	PURPOSE	ACREAGE	DESCRIPTION	AMENDMENTS	DATE AMENDED	ACREAGE CLOSED OR (OPENED)	NET ACREAGE CLOSED	% OF TOTAL
MCO 278	1982/4/20	LD	8,448.000	WRANGELL				8,448.000	
MCO 279	1982/4/20	LD	2,835.000	FREDERICK POINT				2,835.000	
MCO 280	1982/5/6	LD	5.000	MCKINLEY PARK COMM LAND				5.000	
MCO 281	1982/5/13	LD	80.620	MITKOF COMM LAND SALE				80.620	
MCO 282	1982/7/8	LD	620.000	PARKER LAKE SUBDIV				620.000	
MCO 283	1982/7/8	LD	45,816.000	LAKE LOUISE REMOTE				45,816.000	
MCO 284	1982/8/28	LD	5,708.090	MAT-SU BOROUGH AG				5,708.090	
MCO 285	1983/2/24	LD	340.000	JOHN LAKE SUBDIV				340.000	
MCO 286	1982/12/23	LD	7,970.000	HURRICANE REMOTE				7,970.000	
MCO 287	1982/12/13	LD	9,660.000	RESURRECTION PEN. REMOTE				9,660.000	
MCO 289	1982/8/24	LD	90.000	FAIRBANKS ODD LOT II				90.000	
MCO 290	1982/8/24	LD	51.920	DELTA				51.920	
MCO 294	1982/9/17	LD	14,085.000	DUGAN HILLS				14,085.000	
MCO 295	1983/2/24	LD	275.830	LAKE LOUISE SMALL LOTS				275.830	
MCO 298	1983/6/14	LD	70.000	HENEY CREEK				70.000	
MCO 299	1983/6/14	LD	11,160.000	KUSTATAN RIDGE				11,160.000	
MCO 303	1983/6/14	LD	22.510	FIELDING LAKE SUBDIV				22.510	
MCO 304	1983/6/14	LD	2,360.000	SNAKE LAKE SUBDIV				2,360.000	
MCO 305	1983/6/14	LD	13,393.000	WEARY LAKE REMOTE				13,393.000	
MCO 306	1983/6/14	LD	920.000	SUMMIT LAKE SUBDIV				920.000	
MCO 307	1983/6/14	LD	4,252.000	CROSSWIND LAKE				4,252.000	
MCO 308	1982/12/16	LD	3,840.000	SOUTH LAKE LOUISE REMOTE				3,840.000	
MCO 310	1983/6/14	LD	2,038.000	CASCADE CREEK				2,038.000	
MCO 311	1983/6/14	LD	500.000	INDIAN RIVER WEST				500.000	
MCO 313	1983/6/14	LD	1,800.000	SHERMAN REMOTE				1,800.000	
MCO 314	1983/6/14	LD	775.000	CURRY NORTH REMOTE				775.000	
MCO 315	1983/6/14	LD	3,595.000	MCKENZIE CREEK REMOTE	MCO 315A1	1985/8/6	160.000	3,755.000	
MCO 316	1984/7/17	LD	9,419.920	UPPER TRAPPER CREEK				9,419.920	
MCO 317	1983/6/14	LD	580.000	BLACK DIAMOND				580.000	
MCO 318	1983/9/6	LD	1,160.000	WILLOW CREEK AG				1,160.000	
MCO 319	1982/12/13	LD	230.000	WIGWAM				230.000	
MCO 320	1982/12/8	LD	46,080.000	YUKI				46,080.000	

MCO #	EFF. DATE	PURPOSE	ACREAGE	DESCRIPTION	AMENDMENTS	DATE AMENDED	ACREAGE CLOSED OR (OPENED)	NET ACREAGE CLOSED	% OF TOTAL
MCO 321	1982/12/20	LD	1,400.000	HUTLITAKWA				1,400.000	
MCO 322	1982/12/20	LD	840.000	KENTUCKY CREEK				840.000	
MCO 323	1982/12/20	LD	357.790	BERG SUBDIV				357.790	
MCO 324	1983/8/28	LD	2,560.000	SMALL LAKES				2,560.000	
MCO 325	1983/11/8	LD	377.370	PETROF VIEW				377.370	
MCO 326	1983/9/6	LD	40.000	POINT MCKENZIE ODD LOT				40.000	
MCO 327	1983/9/6	LD	80.000	KASHWITNA				80.000	
MCO 328	1983/9/6	LD	880.000	LYNX LAKE ODD LOTS				880.000	
MCO 329	1983/9/6	LD	120.000	WILLOW SUBDIV				120.000	
MCO 330	1983/9/6	LD	150.000	JACK LAKE				150.000	
MCO 331	1983/9/6	LD	315.000	LILLY				315.000	
MCO 332	1983/9/6	LD	61.510	LOST LAKE				61.510	
MCO 333	1983/9/6	LD	34.340	CHERI LAKE NORTH				34.340	
MCO 334	1983/8/28	LD	23,040.000	MOUNT RICH REMOTE				23,040.000	
MCO 336	1983/8/28	LD	11,091.000	RAINBOW LAKE	MOO 336A1	1985/9/8	(320.000)	10,771.000	
MCO 337	1983/9/6	LD	44,081.000	BLYING SOUND				44,081.000	
MCO 338	1983/10/4	LD	2,351.000	LOON LAKE				2,351.000	
MCO 340	1983/9/6	LD	524.660	MIDDLE FORK CHULITNA				524.660	
MCO 341	1983/9/6	LD	320.000	NEIL LAKE				320.000	
MCO 343	1983/9/6	LD	920.000	WILLOW CREEK NORTH AG				920.000	
MCO 345	1983/5/3	LD	1,000.000	GEORGE INLET/REVILLA				1,000.000	
MCO 348	1983/3/30	LD	435.000	WATERFALL				435.000	
MCO 349	1983/8/28	LD	120.000	KINGS RIVER				120.000	
MCO 350	1983/9/6	LD	12,936.000	CANNERY CREEK				12,936.000	
MCO 351	1983/9/6	LD	181.690	RABIDEUX				181.690	
MCO 352	1983/9/6	LD	22,100.000	TAZLINA RIVER				22,100.000	
MCO 353	1983/5/3	LD	705.000	MITKOF				705.000	
MCO 355	1983/6/7	LD	10,680.000	PILGRIM				10,680.000	
MCO 357	1983/6/7	LD	34,160.000	MT. RYAN				34,160.000	
MCO 358	1983/6/7	LD	287.450	ASPENWOOD				287.450	
MCO 359	1983/6/7	LD	10,120.000	TEKLANIKA				10,120.000	
MCO 362	1983/6/7	LD	1,350.000	MARTIN				1,350.000	

MCO #	EFF. DATE	PURPOSE	ACREAGE	DESCRIPTION	AMENDMENTS	DATE AMENDED	ACREAGE CLOSED OR (OPENED)	NET ACREAGE CLOSED	% OF TOTAL
MCO 363	1983/6/7	LD	115.000	TOTCHAKET HEIGHTS				115.000	
MCO 364	1983/6/7	LD	86,880.000	MONZONITE HILLS				86,880.000	
MCO 367	1983/6/7	LD	800.000	SEVEN MILE				800.000	
MCO 368	1983/6/23	LD	160.000	BEAR CREEK				160.000	
MCO 369	1983/6/7	LD	27,200.000	BEARPAW				27,200.000	
MCO 370	1983/6/7	LD	2,120.000	RIDGE ROCK				2,120.000	
MCO 371	1983/6/7	LD	7,680.000	SOUTHWIND				7,680.000	
MCO 372	1983/6/7	LD	260.000	LIVENGOOD				260.000	
MCO 373	1983/6/7	LD	1,475.000	SPRUCEHILL				1,475.000	
MCO 374	1983/8/31	LD	3,500.000	FBX NORTH STAR BOROUGH				3,500.000	
MCO 375	1983/8/31	LD	3,500.000	FBX NORTH STAR BOROUGH				3,500.000	
MCO 376	1983/10/4	LD	3,150.000	MONTANA CREEK				3,150.000	
MCO 377	1983/10/4	LD	772.500	VILLAGE VIEW				772.500	
MCO 378	1985/3/26	LD	3,972.210	MAT-SU BOROUGH AG				3,972.210	
MCO 380	1983/12/12	LD	640.000	BLUFF CABIN RIDGE				640.000	
MCO 382	1984/3/13	LD	305.000	SPINACH CREEK SUBDIV				305.000	
MCO 383	1984/3/16	LD	18,832.000	FAIRBANKS AREA DISPOSALS				18,832.000	
MCO 384	1984/3/31	LD	735.000	NAUKATI BAY				735.000	
MCO 386	1984/6/5	LD	390.000	NIKISHKA AG HOMESITE				390.000	
MCO 387	1984/5/17	LD	416.580	LAKE LOUISE SMALL LOTS II				416.580	
MCO 388	1984/5/9	LD	6,769.280	CHASE III AG HOMESITE				6,769.280	
MCO 396	1984/4/23	LD	12.840	MCGRATH SUBDIV				12.840	
MCO 399	1984/6/25	LD	180.000	HORSE ISLAND				180.000	
MCO 400	1984/6/25	LD	385.000	VALLENAR BAY,GRAVINA IS.				385.000	
MCO 401	1984/6/25	LD	165.000	FUNTER BAY, ADMIRALTY IS.				165.000	
MCO 402	1984/6/25	LD	266.790	MEYERS CHUCK				266.790	
MCO 403	1984/6/25	LD	775.000	CAMP COOGAN				775.000	
MCO 404	1984/6/25	LD	640.000	CAPE POLE, KOSCIUSKO IS.				640.000	
MCO 405	1984/7/17	LD	20,237.000	APPEL MTN. NON-AG				20,237.000	
MCO 406	1984/7/17	LD	2,224.620	BEAR COVE				2,224.620	
MCO 407	1984/7/17	LD	1.276	ECCLES CREEK				1.276	
MCO 408	1984/7/17	LD	240.000	GLENNALLEN SUBDIV.				240.000	

MCO #	EFF. DATE	PURPOSE	ACREAGE	DESCRIPTION	AMENDMENTS	DATE AMENDED	ACREAGE CLOSED OR (OPENED)	NET ACREAGE CLOSED	% OF TOTAL
MCO 410	1984/7/17	LD	560.000	HOMER AG HOMESTEADS				560.000	
MCO 411	1984/7/17	LD	755.000	JACK BAY HOMESTEADS				755.000	
MCO 412	1984/7/17	LD	1,010.000	LITTLE CREEK HOMESTEADS				1,010.000	
MCO 415	1984/7/17	LD	150.000	PETERSVILLE RD. ADD LOTS				150.000	
MCO 416	1984/7/24	LD	5,040.000	PLATEAU LAKES				5,040.000	
MCO 417	1984/7/17	LD	2,980.000	PRIMO LAKES				2,980.000	
MCO 418	1984/7/24	LD	930.000	CHUGACH VIEW SUBDIV				930.000	
MCO 420	1984/7/17	LD	160.000	SOUTH 3-MILE CR. HOMESTEAD				160.000	
MCO 422	1984/7/17	LD	130.000	WORTMANN'S E./HEIDEN VIEW	MCO422A	1985/9/8	40.000	170.000	
MCO 425	1985/5/6	LD	17.430	TAL INC PREF RIGHT				17.430	
MCO 426	1984/7/25	LD	21,809.000	WINDY-HEALY-ROBE				21,809.000	
MCO 427	1984/7/17	LD	4,390.000	CHANDALAR LAKE				4,390.000	
MCO 429	1985/8/3	LD	5,060.000	FBKS NORTH STAR BOROUGH				5,060.000	
MCO 430	1985/8/6	LD	2,890.460	TONSINA NORTH AG HOMESTEAD				2,890.460	
MCO 431	1985/11/23	LD	23,006.000	DILLINGER R. NON-AG HMSD				23,006.000	
MCO 433	1985/9/8	LD	13,795.000	HALFWAY MTN. NON-AG HOMESTEAD				13,795.000	
MCO 435	1985/9/8	LD	6,160.000	NUNSATUK RIVER NON-AG HOMESTEAD				6,160.000	
MCO 436	1985/8/6	LD	21,912.000	SOUTH FORK NON-AG HOMESTEAD				21,912.000	
MCO 437	1985/8/6	LD	1,998.000	KUPREANOF PENINSULA NON-AG HOMESTEAD				1,998.000	
MCO 438	1985/8/6	LD	520.000	SW CHINIAK LAKE NON-AG HOMESTEAD				520.000	
MCO 439	1985/8/6	LD	190.000	WOODY ISLAND SUBDIVISION				190.000	
MCO 440	1985/8/6	LD	40.000	COTTONWOOD CREEK ODD LOT				40.000	
MCO 441	1985/8/6	LD	280.000	LOGGING CAMP BAY SUBDIV.				280.000	
MCO 442	1985/8/6	LD	260.000	POE BAY SUBDIVISION				260.000	
MCO 443	1985/7/29	LD	2,368.000	WOOD RIVER/ALEKNAGIK RD.				2,368.000	
MCO 444	1985/7/29	LD	120.000	LITTLE SUSISTNA E. ODD LOT				120.000	
MCO 445	1985/7/29	LD	1,090.000	ALEXANDER CREEK NORTH AG HOMESTEAD				1,090.000	
MCO 446	1985/7/29	LD	2,666.000	CASWELL LAKE AG HOMESTEAD				2,666.000	
MCO 447	1985/7/29	LD	2,880.000	KROTO CREEK AG HOMESTEAD				2,880.000	
MCO 448	1985/7/29	LD	1,960.000	WHITSOL NORTH AG HOMESTEAD				1,960.000	
MCO 449	1985/7/29	LD	1,440.000	BELUGA MTN. WEST NON-AG HOMESTEAD				1,440.000	
MCO 450	1985/7/29	LD	10,634.000	HAPPY RIVER NON-AG HOMESTEAD				10,634.000	

MCO #	EFF. DATE	PURPOSE	ACREAGE	DESCRIPTION	AMENDMENTS	DATE AMENDED	ACREAGE CLOSED OR (OPENED)	NET ACREAGE CLOSED	% OF TOTAL
MCO 451	1985/7/29	LD	1,560.000	HILINE LAKE SOUTH SUBDIVISION				1,560.000	
MCO 453	1985/3/26	LD	80.000	MCGRATH ROAD ODD LOT				80.000	
MCO 454	1985/8/23	LD	5.000	CORDOVA PREFERENCE RIGHT				5.000	
MCO 456	1985/6/5	LD	950.000	ST. JOHN HARBOR ON ZAREMBO ISLAND				950.000	
MCO 457	1985/6/5	LD	2,560.000	COFFMAN COVE,PRINCE OF WALES				2,560.000	
MCO 458	1985/6/5	LD	700.000	MIDDLE ISLAND IN SITKA SOUND				700.000	
MCO 459	1985/6/5	LD	10.000	UPPER CHILKOOT LAKE, REEVE'S				10.000	
MCO 462	1985/9/8	LD	14.990	KENAI/MAT-SU 0.102 PREF RT.				14.990	
MCO 463	1985/9/15	LD	59.130	KENAI LAKE, QUARTZ CREEK .068				59.130	
MCO 464	1985/9/8	LD	5.000	POINT POSSESSION .035 PREF				5.000	
MCO 467	1985/12/29	LD	800.000	KLUKWAN NATIVE ALLOTMENT RECO				800.000	
MCO 468	1985/11/12	LD	6.270	B.G.R, INC. (CURTIS) T&M				6.270	
MCO 471	1985/11/5	LD	52.853	PANDORA'S PARCEL				52.853	
MCO 472	1985/12/10	LD	17.440	MOOSE PASS/KENAI LK .068 PREF				17.440	
MCO 473	1985/12/10	LD	2.500	TRAPPER CREEK .102 PREF RIGHT				2.500	
MCO 475	1986/2/16	LD	42.410	LITTLE TUTKA BAY,KALGIN IS.				42.410	
MCO 478	1986/9/26	LD	3,840.000	GRAND CENTRAL SUBDIV				3,840.000	
MCO 479	1986/5/7	LD	4.990	CARNEY/HOHOLITNA R.				4.990	
MCO 480	1987/4/27	LD	514.600	KETCHIKAN GATEWAY BORO SUB.				514.600	
MCO 481	1986/6/10	LD	1,135.000	CAPE FANSHAW				1,135.000	
MCO 490	1986/7/30	LD	7.700	LOWER TRAIL LK .068 PREF				7.700	
MCO 491	1986/7/31	LD	1.378	ROCKY LK .102 PREF				1.378	
MCO 492	1986/7/21	LD	5.920	ESKA .035(8)(5) PREF				5.920	
MCO 494	1986/7/25	LD	2.640	CH.81,SLA 1985 PREF				2.640	
MCO 503	1986/9/9	LD	9.090	KALIFONSKY/LUCY LAKE				9.090	
MCO 504	1986/10/6	LD	49.980	WALDROP				49.980	
MCO 505	1986/10/6	LD	1.970	SPEAR				1.970	
MCO 508	1987/4/28	LD	240.000	UNKNOWN				240.000	
MCO 514	1987/2/24	LD	4.250	KENAI PENINSULA PREF				4.250	
MCO 516	1987/3/10	LD	0.179	EAGLE RIVER PREF RIGHT				0.179	
MCO 517	1987/5/11	LD	2.500	SKWENTNA AREA AUCTION				2.500	
MCO 521	1987/5/19	LD	3.530	MORZHOVOI BAY PREF RIGHT				3.530	

MCO #	EFF. DATE	PURPOSE	ACREAGE	DESCRIPTION	AMENDMENTS	DATE AMENDED	ACREAGE CLOSED OR (OPENED)	NET ACREAGE CLOSED	% OF TOTAL
MCO 523	1987/6/22	LD	3.440	HENEY CREEK PREF RIGHT				3.440	
MCO 524	1987/6/2	LD	.390	ORCA INLET PREF RIGHT				1.390	
MCO 527	1987/7/8	LD	1.720	KASILOF AK SUBDIV.				1.720	
							Subtotal	2,622,729.839	51.5%
LAND EXCHANGES									
MCO 65	1975/6/5	LE	115,000.000	MCKINLEY PARK				115,000.000	
MCO 68	1978/2/23	LE	313,631.910	CIRI-BELUGA POOL				313,631.910	
MCO 190	1981/7/13	LE	1,344.575	UNREDEEMED LANDS				1,344.575	
MCO 239	1982/4/20	LE	109,282.730	UNIVERSITY LAND TRUST				109,282.730	
MCO 381	1984/6/5	LE	1,136.000	SELDOVIA LAND EXCHANGE				1,136.000	
MCO 394	1985/3/25	LE	1.426	ANCHOR PT. LAND EXCHANGE				1.426	
MCO 395	1984/4/4	LE	37,864.000	UNIVERSITY LAND				37,864.000	
MCO 398	1984/4/20	LE	15,810.000	BLM LAND EXCHANGE				15,810.000	
MCO 469	1985/10/24	LE	1.130	AUSTIN EXCHANGE				1.130	
MCO 506	1986/11/28	LE	4.390	EKLUTNA, INC., EXCHANGE				4.390	
							Subtotal	594,076.161	11.7%
PUBLIC RECREATION / WILDLIFE HABITAT									
MCO 62	1974/7/5	PR/WH	81.820	GIRDWOOD				81.820	
MCO 66	1976/3/29	PR/WH	42,240.000	DENALI ST PK EXPANSION				42,240.000	
MCO 238	1982/4/1	PR/WH	9,585.000	DEEP CR MGMT PLAN				9,585.000	
MCO 391	1985/10/12	PR/WH	4,325.000	CAMPBELL TRACT				4,325.000	
MCO 393	1984/9/13	PR/WH	213,697.000	BRISTOL BAY AREA PLAN				213,697.000	
MCO 423	1982/4/2	PR/WH	42,017.000	FISH CREEK				42,017.000	
MCO 455	1985/8/7	PR/WH	319,818.000	SUSITNA AREA PLAN				319,818.000	
MCO 466	1985/12/29	PR/WH	130,860.000	SW PRINCE OF WALES ISLAND				130,860.000	
MCO 483	1986/6/27	PR/WH	98,269.000	TANANA BASIN AREA PLAN				98,269.000	

MCO #	EFF. DATE	PURPOSE	ACREAGE	DESCRIPTION	AMENDMENTS	DATE AMENDED	ACREAGE CLOSED OR (OPENED)	NET ACREAGE CLOSED	% OF TOTAL
MCO 495	1986/10/15	PR/WH	80.000	UPPER LITTLE SUSITNA R.				80.000	
MCO 496	1986/10/15	PR/WH	1,952.000	REED VALLEY/REED LAKES				1,952.000	
MCO 497	1986/10/15	PR/WH	530.000	INDEPENDENCE MINE				530.000	
MCO 498	1986/10/15	PR/WH	360.000	SUMMIT LK./HATCHER PASS REC				360.000	
MCO 499	1986/10/15	PR/WH	2,150.000	GOVT PEAK SKI AREA	MCO 499A1	1986/10/31	(2,150.000)	0.000	
MCO 500	1986/10/15	PR/WH	5,360.000	MAT-SU MINERAL LICKS				5,360.000	
MCO 507	1986/12/6	PR/WH	1,085.000	HATCHER PASS RD CORRIDOR				1,085.000	
MCO 509	1986/12/6	PR/WH	1,800.000	CASTLE MOUNTAIN				1,800.000	
MCO 510	1986/11/20	PR/WH	385,807.890	TANANA BASIN AREA PLAN				385,807.890	
MCO 511	1987/4/8	PR/WH	83,725.000	COPPER RIVER BASIN				83,725.000	
MCO 519	1987/4/27	PR/WH	8,000.000	UPPER COOK INLET OPP				8,000.000	
							Subtotal	1,349,592.710	26.5%

RESOURCE DEVELOPMENT / TRANSPORATION CORRIDOR

MCO 11	1968/6/27	RD/TC	320.000	TALKEETNA				320.000	
MCO 18	1970/11/4	RD/TC	520.000	VALDEZ				520.000	
MCO 19	1971/10/28	RD/TC	360.000	VALDEZ				360.000	
MCO 20	1971/10/28	RD/TC	240.000	KEYSTONE CANYON				240.000	
MCO 21	1971/10/28	RD/TC	128.210	COPPER CENTER				128.210	
MCO 22	1971/10/28	RD/TC	195.750	GLENNALLEN				195.750	
MCO 23	1971/10/28	RD/TC	120.000	PAXON				120.000	
MCO 24	1971/10/28	RD/TC	240.000	SUMMIT LAKE				240.000	
MCO 25	1971/10/28	RD/TC	80.000	ISABEL PASS				80.000	
MCO 26	1971/10/28	RD/TC	34.220	DONNELLY				34.220	
MCO 27	1971/10/28	RD/TC	160.000	DONNELLY DOME				160.000	
MCO 28	1971/10/28	RD/TC	19.884	WEST ADDN. DELTA TOWNSITE				19.884	
MCO 29	1971/10/28	RD/TC	168.410	BIG DELTA				168.410	
MCO 30	1971/10/28	RD/TC	341.770	SHAW CREEK FLATS				341.770	
MCO 32	1971/10/28	RD/TC	560.000	SHAW CREEK LODGE				560.000	
MCO 35	1971/10/28	RD/TC	160.000	RICHARDSON RD. HOUSE				160.000	

MCO	#	EFF. DATE	PURPOSE	ACREAGE	DESCRIPTION	AMENDMENTS	DATE AMENDED	ACREAGE CLOSED OR (OPENED)	NET ACREAGE CLOSED	% OF TOTAL
MCO	36	1971/10/28	RD/TC	480.000	SALCHA RIVER				480.000	
MCO	37	1971/10/28	RD/TC	377.230	CHENA RIVER	MOO 37A1	1971/11/11	(57.230)	320.000	
MCO	38	1971/10/28	RD/TC	160.000	FAIRBANKS	MOO 38A1	1971/11/11	(80.000)	80.000	
MCO	39	1971/10/28	RD/TC	160.000	FOX				160.000	
MCO	40	1971/10/28	RD/TC	480.000	CHATANIKA RIVER				480.000	
MCO	41	1971/10/28	RD/TC	120.000	OLNES				120.000	
MCO	42	1971/10/28	RD/TC	25.000	FIELDING LAKE				25.000	
MCO	43	1971/11/3	RD/TC	269.190	PAXON TO FAIRBANKS	MOO 43A1	1982/11/1	(40.000)	229.190	
MCO	44	1972/2/8	RD/TC	59.000	VALDEZ	MOO 44A1	1974/5/16	0.000	59.000	
MCO	49	1973/7/6	RD/TC	10.000	VALDEZ				10.000	
MCO	50	1973/12/6	RD/TC	398.000	T A P S				398.000	
MCO	51	1973/12/6	RD/TC	638.200	T A P S				638.200	
MCO	52	1973/12/6	RD/TC	611.400	T A P S				611.400	
MCO	53	1973/12/6	RD/TC	274.450	T A P S				274.450	
MCO	54	1973/12/6	RD/TC	521.590	T A P S	MCO 54A1	1974/3/15	14.350	535.940	
MCO	55	1973/12/6	RD/TC	521.800	T A P S				521.800	
MCO	56	1973/12/6	RD/TC	634.700	T A P S				634.700	
MCO	57	1973/12/6	RD/TC	371.620	T A P S				371.620	
MCO	58	1973/12/6	RD/TC	371.200	T A P S				371.200	
MCO	59	1973/12/6	RD/TC	454.200	T A P S				454.200	
MCO	60	1973/12/10	RD/TC	18.600	T A P S				18.600	
MCO	61	1974/1/23	RD/TC	314.910	T A P S				314.910	
MCO	67	1977/9/26	RD/TC	1,420,160.000	NW AK GAS PIPELINE	MOO 67A2,A4,A5	1981-1985	(1,093,460.000)	326,700.000	
MCO	288	1983/2/8	RD/TC	20,967.000	BELUGA COAL TRANSPORT				20,967.000	
MCO	511	1987/4/8	RD/TC	17,600.000	COPPER RIVER BASIN				17,600.000	
								Subtotal	376,023.454	7.4%
RESERVE USE										
MCO	10	1968/2/29	RU	40.000	ANCHORAGE				40.000	
MCO	12	1968/7/16	RU	324.000	FAIRBANKS				324.000	

MCO #	EFF. DATE	PURPOSE	ACREAGE	DESCRIPTION	AMENDMENTS	DATE AMENDED	ACREAGE CLOSED OR (OPENED)	NET ACREAGE CLOSED	% OF TOTAL
MCO 13	1968/11/4	RU	40.992	GLENNALLEN				40.992	
MCO 14	1968/11/4	RU	38.864	COPPER CENTER				38.864	
MCO 16	1969/3/28	RU	10.090	WILLOW				10.090	
MCO 17	1969/3/28	RU	640.000	PETERSVILLE ROAD				640.000	
MCO 31	1971/10/28	RU	440.000	T V S F	MOO 31A1	1982/11/1	(440.000)	0.000	
MCO 33	1971/10/28	RU	520.000	T V S F	MOO 33A1	1982/11/1	(520.000)	0.000	
MCO 34	1971/10/28	RU	40.000	T V S F	MOO 34A1	1982/11/1	(40.000)	0.000	
MC 7	1973/3/13	RU	630.000	KODIAK				630.000	
MCO [illegible]	1973/3/29	RU	338.457	JUNEAU				338.457	
MCO 63	1974/7/8	RU	69.469	JUNEAU				69.469	
MCO 64	1975/4/30	RU	174.725	GIRDWOOD				174.725	
MCO 69	1979/12/21	RU	1,920.000	INDEPENDENCE				1,920.000	
MCO 191	1981/10/23	RU	74,500.000	TERROR LAKE				74,500.000	
MCO 192	1981/10/8	RU	3,280.000	ANCHORAGE AIRPORT				3,280.000	
MCO 250	1982/3/13	RU	65,698.000	WILLOW CAPITAL SITE				65,698.000	
MCO 296	1982/12/7	RU	5.060	CIRCLE DIS. HIST. SITE				5.060	
MCO 356	1983/8/28	RU	110.000	AK GATEWAY SCHOOL DIST				110.000	
MCO 379	1983/11/15	RU	80.000	MENANA				80.000	
MCO 390	1985/11/23	RU	30.800	DIV OF FOR/COPPER RIVER				30.800	
MCO 397	1984/4/17	RU	425.000	CHENA RIVER FLOOD CONTROL				425.000	
MCO 409	1985/2/28	RU	2.590	GLENNALLEN LIBRARY				2.590	
MCO 413	1984/7/17	RU	240.000	PARKER LK. N. HOMESTEADS				240.000	
MCO 428	1984/7/16	RU	113.180	CENTRAL GRAVEL				113.180	
MCO 476	1986/5/7	RU	24.000	GOLD CR. RECLAMATION				24.000	
MCO 477	1986/5/27	RU	71.250	KENAI PENINSULA				71.250	
MCO 482	1986/6/27	RU	34.337	TRACT C, CHERI LAKE				34.337	
MCO 489	1986/9/19	RU	2.387	NRO SITE				2.387	
							Subtotal	148,843.201	2.9%

UNKNOWN

MCO	#	EFF. DATE	PURPOSE	ACREAGE	DESCRIPTION	AMENDMENTS	DATE AMENDED	ACREAGE CLOSED OR (OPENED)	NET ACREAGE CLOSED	% OF TOTAL
MCO	1	1965/3/26	UK	40.000	WILLOW TOWNSITE, AK SUB.				40.000	
MCO	2	1965/8/1	UK	116.230	T5N, R11W, SM				116.230	
MCO	3	1965/6/4	UK	12.500	NEW GIRDWOOD TOWNSITE				12.500	
MCO	4	1965/6/21	UK	160.000	T12N, R3W, SM				160.000	
MCO	5	1965/7/22	UK	59.470	KADIAK AK SUBDIV. KODIAK				59.470	
MCO	6	1966/6/29	UK	35.000	T1N, R1E, FM				35.000	
MCO	7	1966/12/7	UK	12.100	T8S, R14W, SM				12.100	
MCO	8	1967/1/13	UK	0.500	OLD FEDERAL JAIL, KODIAK				0.500	
MCO	9	1967/9/19	UK	0.120	KODIAK				0.120	
								Subtotal	435.920	0.0%
								TOTAL	5,091,701.285	100.0%

THE FOLLOWING DOCUMENT HAS

NOT BEEN FILMED BUT IS

AVAILABLE IN THE ORIGINAL

FILE

MEMORANDUM

State of Alaska
DEPARTMENT OF LAW

TO: Senator Jan Faiks

DATE: September 3, 1987

FILE NO:

TELEPHONE NO: 276-3550

THRU:

SUBJECT: Status of the "6(i) Case"

FROM: Mark P. Worcester MPW
Assistant Attorney General
Oil and Gas Section-Anchorage

This memorandum responds to the oral request from your staff that the Department of Law provide a written briefing on the status on the so called "6(i)" litigation.

On May 1, 1987 the Alaska Supreme Court issued its opinion in Trustees for Alaska vs. State of Alaska, ____ P.2d ____, Op. No. 3175 (Alaska, May 1, 1987), (Attachment A.) The Alaska Supreme Court held (1) that section 6(i) of the Alaska Statehood Act may be enforced by private interests groups, such as Trustees for Alaska; (2) that the state must charge cash rents or royalties for "hardrock" minerals (gold, silver, zinc, lead, and so forth); but (3) that the cash rent or royalty requirement only applies to lands known to be mineral in character at the time of state selection.

The State of Alaska and the Alaska Miners Association have each filed petitions in the United States Supreme Court for writs of certiorari. Copies of these petitions, exclusive of appendices, are attached as Attachments B and C. As you can see, the petitions are substantially similar. Each petition asks the United States Supreme Court to review and reverse the Alaska Supreme Court on the first two holdings identified above. The petitions contend that only the United States Attorney General can invoke section 6(i) in litigation, and only in the United States District Court for the District of Alaska. The petitions also assert that the Alaska Legislature was granted exclusive jurisdiction to determine the terms of the state's hardrock mineral leasing system. The state argues that it is within the discretion and policy judgment of Alaska Legislature whether to impose a cash rent or royalty requirement on hardrock minerals.

This week, Trustees for Alaska filed a cross-petition in the United States Supreme Court (Attachment D), seeking review of the Alaska Supreme Court decision that the cash rent or royalty requirement applies only to lands which were "mineral in character" at the time of "state selection". (The Alaska Supreme

Court opinion expresses no opinion on what the time of "selection" really is, or about the nature of information which must be available in order for land to be deemed "mineral in character". See Slip Op. at 43, n.33.) Trustee's argues that the rent or royalty requirement should apply to all state lands obtained under Section 6 of the Alaska Statehood Act.

The State of Alaska has formally requested the United States Solicitor General to file an amicus curiae brief in support of the state's petition in the United States Supreme Court. Contacts have also been made with the Department of the Interior's Solicitor's Office, urging Interior to support the state's request to the Solicitor General. No response has yet been received from the Solicitor General.

Prior to the state's filing of its petition for a writ of certiorari, the Alaska Superior Court issued an order requiring Trustees for Alaska to submit a proposed form of declaratory judgment, and to identify any unresolved issues. Trustees for Alaska proposed a declaration and an injunction (Attachment E), and supported this with a memorandum (Attachment F). Among other things, Trustees seeks an injunction against any mining after May 15, 1988 unless the Alaska Legislature imposes "fair market value" rental and royalty requirements. The state has opposed Trustee's form of relief, and contends that no form of order should be entered until the United States Supreme Court has acted (Attachment G). To protect against the possibility that the Superior Court might wish to proceed to enter a declaration at this time, the state has also lodged its own form of order with that court (Attachment H). The Alaska Miners Association's pleadings on the timing and form of relief are attached as Attachment I.

Please let me know if you have any further questions in light of this memorandum and the attached materials.

cc: Bob Evans, Governors Legislative Liaison/w/enclosures
Grace Berg Schaible, Attorney General/wo/enclosures
Judith M. Brady, Commissioner, DNR/wo/enclosures
Jerry Gallagher, Director, Division of Mining/wo/enclosures
Robert M. Maynard/wo/enclosures
Michael Frank/wo/enclosures

MW:so

No. 87-206

IN THE
SUPREME COURT OF THE UNITED STATES

OCTOBER TERM, 1987

TRUSTEES FOR ALASKA, et al.,

Cross-Petitioner

v.

STATE OF ALASKA,

Cross-Respondent

CROSS-PETITION FOR A WRIT OF CERTIORARI TO THE ALASKA SUPREME COURT

Ronald M. Zobel
(Counsel of Record)
Eric Smith
Robert W. Adler
Trustees for Alaska
725 Christensen Drive
Suite 4
Anchorage, AK 99501
(907) 276-4244

ATTACHMENT D

CROSS PETITION FOR CERTIORARI

QUESTION PRESENTED

1. Do the mineral leasing requirements of section 6(i) of the Alaska Statehood Act apply to all state mineral lands, or only to lands "whose mineral character was known at the time of [state] selection," when section 6(i) states that "[a]ll grants made or confirmed under this Act shall include mineral deposits," when the leasing restrictions in section 6(i) expressly apply to the "grants of mineral lands to the State of Alaska . . . ," and when the purpose of the leasing requirement was to generate revenue for the new state?

PARTIES INVOLVED

Cross-Petitioners Trustees for Alaska, Nunam Kitlutsisti, Dinyea Corporation, Village of Minto, Alaska Independent Fishermen's Marketing Association, Alaska Center for the Environment, Southeast Alaska Conservation Council, and Friends of the Earth (hereinafter Trustees for Alaska et al.), are a coalition of environmental, Alaska Native, and fishing organizations. Cross-petitioners were plaintiffs in the trial court, and appellants before the Alaska Supreme Court.

Cross-Respondent State of Alaska was the defendant in the trial court, and appellee in the Alaska Supreme Court.

Cross-Respondents Alaska Miners Association, Fairbanks North Star Borough, and Joseph E. Vogler were defendant-intervenors in the trial court,

and appellees in the Alaska Supreme Court.

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TABLE OF AUTHORITIES

OPINIONS BELOW

The opinion of the Alaska Supreme Court has not, as of the time of preparation of this Cross-Petition, been reported in West's Pacific Reporter. The slip opinion is reprinted in Appendix A. The decision of the Alaska Superior Court is reprinted in Appendix B.

JURISDICTION

The jurisdiction of this Court is invoked under 28 U.S.C. Sec. 1257(3). This Cross-Petition is filed pursuant to U.S. Supreme Court Rule 19.5. The opinion of the Alaska Supreme Court was issued on May 1, 1987. Petitions for Writs of Certiorari were filed by the State of Alaska and the Alaska Miners Association, and were received by Respondents Trustees for Alaska, et al., on August 3, 1987, and July 31, 1987, respectively.

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Section

Statehood Act,

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STATUTE INVOLVED

Section 6(i) of the Alaska Statehood Act, Pub. L. 85-508, 72 Stat. 339, 342 (1958) provides:

> All grants made or confirmed under this Act shall include mineral deposits. The grants of mineral lands to the State of Alaska under subsections (a) and (b) of this section are made upon the express condition that all sales, grants, deeds, or patents for any of the mineral lands so granted shall be subject to and contain a reservation to the State of all of the minerals in the lands so sold, granted, deeded, or patented, together with the right to prospect for, mine and remove the same. Mineral rights in such lands shall be subject to lease by the State as the State legislature may direct: Provided, That any lands or minerals hereafter disposed of contrary to the provisions of this section shall be forfeited to the United States by appropriate proceeding instituted by the Attorney General for that purposes in the United States District Court for the District of Alaska.

ATTACHMENT _____

STATEMENT OF THE CASE

The Alaska Statehood Act, note preceding 48 U.S.C. sec. 21, sets forth the terms and conditions under which Alaska was admitted as a state into the United States.

Section 6 of the Statehood Act gave Alaska the right to select 103,350,000 acres of land from the United States to pass into state ownership. However, these land grants were not unqualified. Rather, section 6 sets forth a number of requirements that govern the use and disposition of lands after conveyance to the new state.

The litigation below involved the proper interpretation of one such restriction, contained in section 6(i) of the Statehood Act (quoted above). Section 6(i) governs the manner in which the state is allowed to dispose of

"mineral lands" for the use and benefit of the citizens of Alaska. In particular, section 6(i) requires that state minerals be subject to "lease", as opposed to the federal system of mineral location. As explained below, this requirement was included to ensure that Alaska had a sufficient fiscal base to support the new state.

Mineral leasing in Alaska is governed by Title 38, Chapter 5 of the Alaska Statutes. For certain types of minerals, such as coal, phosphates, oil shale, oil and gas, sodium, sulfur, potassium, and geothermal resources, this statute requires the payment of rents and royalties to the state, providing the source of revenue anticipated by section 6(i). See AS 38.05.135 - 38.05.184. In sharp contrast, however, no rents and royalties are required for "hardrock"

ATTACHMENT

minerals such as gold, silver, copper, molybdenum, lead, zinc, platinum, tin, and tungsten. AS 38.05.185 - 38.05.275.

Plaintiffs challenged the state's failure to charge rents and royalties for the extraction of hardrock minerals from state lands on the basis that this practice was, inter alia, in violation of section 6(i) of the Statehood Act. The Alaska Superior Court rejected this challenge for two reasons. First, the Court agreed with the defendants that the final proviso in section 6(i) constituted the exclusive means by which Alaska's compliance with section 6(i) could be challenged, and that plaintiffs lacked standing under Alaska law to bring this action. Appendix B at B-2 - B-4. Second, the Superior Court ruled in favor of the defendants on the merits. Id. at B-4.

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