

# **Exhibit 1.**

## **North Slope Field Cost Increases**

### ***North Slope Field Cost Increases***

#### **North Slope Field Cost Increases (2006 v. 2012)**

*[Exhibit 1 Data Sheet]*

#### **Estimates of Current North Slope v. Lower-48 Field Costs**

*[Exhibit 1 Source, Sheet 1]*

#### **ADOR Fall 2007 Revenue Sources Book, p. 36**

*[Exhibit 1 Source, Sheet 2]*

#### **ADOR Fall 2012 Revenue Sources Book, p. 35**

*[Exhibit 1 Source, Sheet 3]*

## North Slope Field Cost Increases (2006 v. 2012)

### Exhibit 1 Data Sheet

1. Estimated North Slope Field Costs, FY 2007 (History)	\$3,659,000,000 (1)
2. Estimated North Slope Field Costs, FY 2013 (Forecast)	\$6,341,800,000 (2)
3. Percentage Increase (FY 2013 v. FY 2007)	73.3% (3)
4. CPI-U Indexed Inflation Factor (2007 – 2012)	9.2% (4)
<hr/>	
5. Current Lower-48 costs per barrel (operating + capital)	\$6.00 - \$22.00 (5)
6. Current Alaska costs per barrel (operating + capital)	\$32.00 - \$49.00 (5)

#### Sources and Notes:

(1) Alaska Dept. of Revenue, *Fall 2007 Revenue Sources Book*, p. 36.  $(\$3,659 / [739.7] * 365 = \$ 13.55 \text{ per bbl.}) *$

(2) Alaska Dept. of Revenue, *Fall 2012 Revenue Sources Book*, p. 35.  $(6,341.8 / [552.8 * 365] = \$31.43 \text{ per bbl.}) *$

(3) (Line 2 / Line 1) - 1.00.

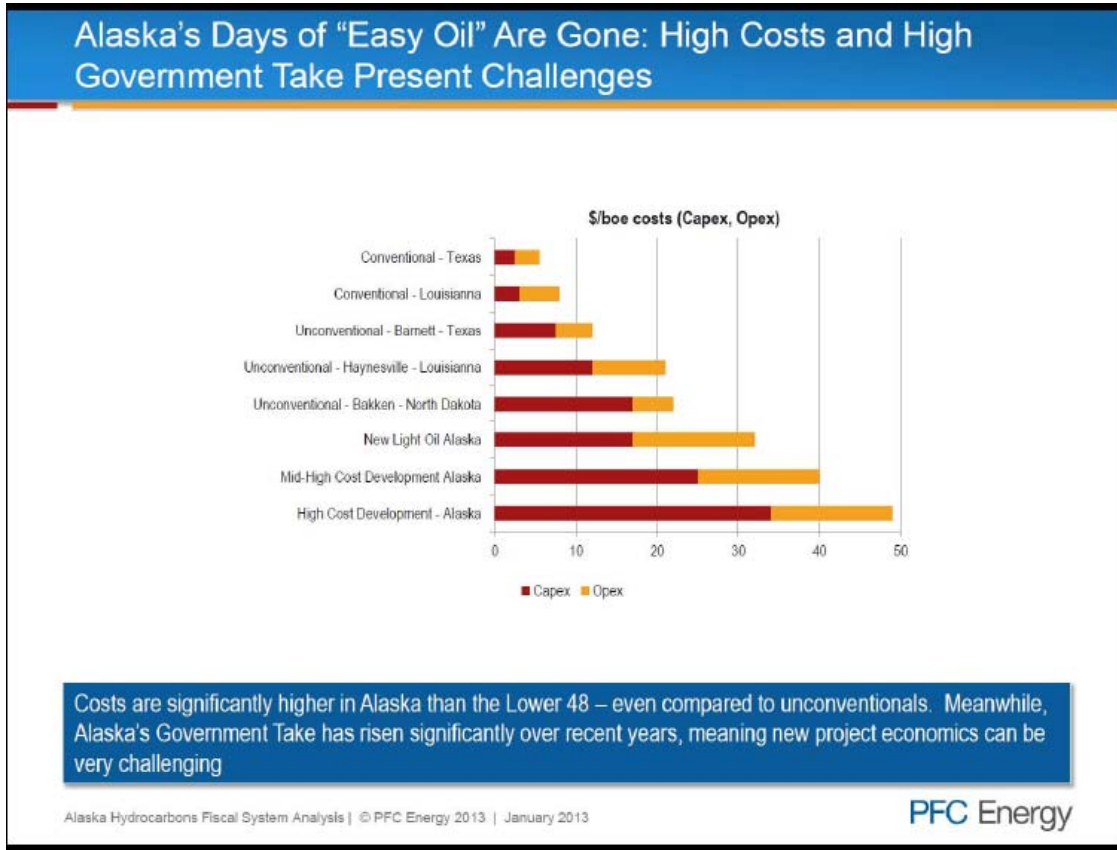
Note: The result shown above is calculated independent of production decline to present field expenditure increases on a per-dollar basis for comparison to inflation. If calculated on a per-barrel basis, between FY 2007 and FY 2013 estimated costs per barrel increased by 132.0%, calculated as follows:  $(\{ \$31.43 / \$13.55 \} - 1.00) = 131.96\%$ .

(4) Calculated from CPI-U (U.S. Dept. of Labor Bureau of Labor Statistics, accessed Oct. 20, 2011; updated with EIA data).

(5), (6) PFC Energy, "Alaska's Days of 'Easy Oil' Are Gone: High Costs and High Government Take Present Challenges" (in "Alaska Hydrocarbons Fiscal Systems Analysis," presented to the Alaska Senate TAPS Throughput Committee, January 31, 2013, Slide 47. \*

\* See following exhibits.

## Estimates of Current North Slope v. Lower-48 Field Cost



- PFC Energy, "Alaska's Days of 'Easy Oil' Are Gone: High Costs and High Government Take Present Challenges" (in "Hydrocarbons Fiscal Systems," presented to the Alaska Senate TAPS Throughput Committee, January 31, 2013, Slide 47.

"Days of Easy Oil  
Are Gone"  
(Above)

ADOR, Revenue  
Sources Book  
(Unaudited)

/ - - - - - \$ / boe (operating and capital) - - - - - /

Lower-48:

Conventional (Texas) . . . . . \$6.00 / bbl.  
 Unconventional Bakken (North Dakota) . . . . \$22.00 / bbl.

Alaska

FY 2007 (Fall 2007 *Revenue Sources Book*) . . . . . \$13.55 / bbl. \*  
 FY 2013 (Fall 2012 *Revenue Sources Book*) . . . . . \$31.43 / bbl. \*\*  
 New Light Oil (Alaska) . . . . . \$32.00 / bbl.  
 High Cost Development (Alaska) . . . . . \$49.00 / bbl.

\* (3,659 / [739.7 \* 365])  
 Fall 2007 *Revenue Sources Book*, p. 36 (history)  
 \*\* (6,341.8 / [552.8 \* 365])  
 Fall 2012 *Revenue Sources Book*, p. 35 (forecast)

Figure 4-6. Basic Data Used for ANS Oil &amp; Gas Production Taxes

	FY 2007 History	FY 2008 Forecast	FY 2009 Forecast
<b>State Production Tax Revenue from the North Slope</b>			
Millions of Dollars	2,286.3	3,398.0	2,195.0
<b>Key North Slope Assumptions</b>			
Price of ANS WC in dollars per barrel	61.63	72.64	66.32
Transit Costs & Other in dollars per barrel	5.96	6.34	6.80
ANS Wellhead in dollars per barrel	55.67	66.30	59.32
<b>Production in barrels per day</b>			
Production in barrels per day	739,702	730,942	700,686
Royalty barrels per day	92,463	91,368	87,586
Taxable barrels per day	647,239	639,574	613,100
<b>Lease Expenditures in Millions of Dollars</b>			
Operating Expenditures [OPEX]	2,081	2,149	2,354
Capital Expenditures [CAPEX]	1,578	2,188	2,002
Total Expenditures	3,659	4,337	4,356
<b>Implied North Slope Data</b>			
Credits from CAPEX in Millions of dollars	315.6	219.0	418.9
<b>Lease Expenditures per barrel of oil produced</b>			
OPEX	7.71	8.05	9.21
CAPEX	5.84	8.20	7.83
Total Expenditures	13.55	16.25	17.03
<b>Average Production Value per Barrel [Pre-Tax]</b>			
Average Production Value per Barrel [Pre-Tax]	42.12	50.05	42.49
<b>Production Tax Collected per Taxable Barrel</b>			
Production Tax Collected per Taxable Barrel	9.68	14.56	9.81

**Notes**

- 1 Costs for FY 2007 are unaudited and for the entire North Slope. Cost data reported July 2006 through December 2006 are actuals. January 2007 through June 2007 are estimates
- 2 Costs for FY 2008 and FY 2009 are estimated after having reviewed the annual filings from oil companies and incorporating adjustments based on our assessment of future cost increases.
- 3 Assumptions for the transitional credits and the \$12 million credits are not included in the table.
- 4 The average production value per barrel presented in this table would differ from estimates the oil companies would prepare for tax liability purposes for several reasons: [a] the data in the chart are North Slope wide averages; [b] different companies have different cost structures and operate in different fields; [c] a company computing this average for tax liability purposes would only include the barrels it gets to keep, i.e., the company would exclude the barrels it pays in royalty.
- 5 FY 2008 ANS West Coast price forecast is as of November 30, 2007.

Figure 4-7. Basic Data Used for ANS Oil & Gas Production Taxes<sup>(1)</sup>

	History	Forecast	
	FY 2012	FY 2013	FY 2014
<b>North Slope Price and Production</b>			
Price of ANS WC in dollars per barrel	112.65	108.67	109.61
Transit Costs & Other in dollars per barrel	8.81	9.43	8.81
ANS Wellhead in dollars per barrel	103.84	99.24	100.80
<b>North Slope Production</b>			
Total ANS Production in thousands of barrels per day	579.1	552.8	538.4
Royalty and federal thousands of barrels per day <sup>(2)</sup>	76.4	71.4	70.7
Taxable thousands of barrels per day	502.7	481.4	467.7

**North Slope Lease Expenditures<sup>(3)(4)</sup>**

Total North Slope Lease Expenditures in \$ millions			
Operating Expenditures [OPEX]	3,001.2	3,078.9	2,817.4
Capital Expenditures [CAPEX]	2,383.4	3,262.9	3,845.1
Total North Slope Expenditures	5,384.6	6,341.8	6,662.5
<b>Deductible North Slope Lease Expenditures in \$ millions</b>			
Operating Expenditures [OPEX]	2,862.2	2,832.8	2,779.0
Capital Expenditures [CAPEX]	1,543.0	2,393.0	3,338.6
Deductible North Slope Expenditures	4,405.3	5,225.8	6,117.6

**State Production Tax Revenue<sup>(1)</sup>**

Millions of Dollars	6,146.1	4,353.2	3,778.8
Production Tax Collected per Taxable Barrel	33.4	24.8	22.1

**State Wide Production Tax Credits<sup>(3)(5)</sup>**

Credits Used against Tax Liability in \$ millions	360.0	490.0	615.0
Credits for Potential Purchase in \$ millions	353.0	360.0	400.0

<sup>(1)</sup> Production tax is calculated on a company specific basis, therefore the aggregated data reported here will not generate the total tax revenue shown. For an illustration of the tax calculation, see Appendix D.

<sup>(2)</sup> Royalty and Federal barrels represents DOR's best estimate of barrels that are not taxed. This estimate includes both state and federal royalty barrels, and barrels produced from federal offshore property.

<sup>(3)</sup> Lease expenditures and credits used against tax liability for FY 2012 were prepared using unaudited company-reported estimates.

<sup>(4)</sup> Expenditure data for FY 2013 and FY 2014 are compiled from company submitted expenditure forecast estimates and other documentation as provided to the DOR. Expenditures shown here are shown in two ways: (1) total estimated expenditures including for those companies with no tax liability; and (2) estimated deductible expenditures for only those companies with a tax liability.

<sup>(5)</sup> Production tax credits shown include all production tax credits and all areas of the state. North Slope CAPEX credits are spread out over two years as specified in the ACES production tax. Assumptions for the \$12 million credits for small Alaska producers are included in the table.