



THE STATE  
of **ALASKA**  
GOVERNOR SEAN PARNELL

Department of Natural Resources

Office of the Commissioner

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January 8, 2014

Dear Alaskan:

The Department of Natural Resources (DNR) and Tesoro Refining & Marketing Company LLC (Tesoro) recently entered a one-year royalty oil supply contract in October 2013 to deliver up to 15,000 barrels per day of Alaska North Slope royalty oil. Subsequently, DNR and Tesoro have agreed to an amendment of this contract to extend its term for another year.

The document enclosed is sent to you for your information and it describes the Commissioner of Natural Resources' Final Best Interest Finding and Determination (Finding) for this proposed amendment.

As required by AS 38.06.055, this document will be submitted with a bill to the Alaska Legislature for approval of the amendment.

Thank you.

Sincerely,

A handwritten signature in blue ink, appearing to read "Joe Balash".

Joe Balash  
Commissioner

Enclosure



**Final Best Interest Finding and Determination for an Amendment  
of the  
“Agreement for the Sale of Royalty Oil between and among the State of Alaska  
and the  
Tesoro Corporation, a Delaware Corporation, and  
Tesoro Refining & Marketing Company LLC, a Delaware Limited Liability Company,  
October 25, 2013”**

The Department of Natural Resources (DNR) and Tesoro Refining & Marketing Company LLC (Tesoro) concluded negotiations and signed the above referenced one-year oil supply contract in October 2013 to deliver up to 15,000 barrels per day of Alaska North Slope royalty oil (October 2013 Agreement). Oil deliveries are slated to begin on February 1, 2014 and continue through January 31, 2015. During meetings with the Commissioner on November 6, 2013, Tesoro executives requested that oil deliveries be extended by another year.

This document describes the Commissioner of Natural Resources’ Final Best Interest Finding and Determination (Finding) for a proposed amendment to continue deliveries of up to 15,000 barrels per day of North Slope royalty in-kind oil to Tesoro Refining & Marketing Company LLC (Tesoro) for one year beyond the State’s current contractual obligation.<sup>1</sup>

## **Background**

The State of Alaska owns the mineral estate, including oil and gas, under State-owned lands. To monetize the value of this estate, the State has entered into lease agreements with third parties who explore for, develop, and produce oil and gas from these lands. The State receives a royalty share of 12-1/2 to as much 33-1/3 percent of the oil and gas produced from these leased lands on the North Slope. The State may take its royalty either “in-kind” (RIK) or “in-value” (RIV). When the State takes its royalty as RIV, the lessees who produce the oil market the State’s share along with their own production and pay the State the value of its royalty share. When the State takes its royalty share as RIK, it assumes ownership of the oil, and the Commissioner disposes of it through sale procedures, either “competitive” or “non-competitive,” under AS 38.05.183.

This Finding documents why the proposed amendment meets the requirements set out in AS 38.05.183 and AS 38.06. Extending the October 2013 Agreement and committing to royalty oil deliveries for more than one year also triggers additional provisions of AS 38.05.183 and AS 38.06.055 that require a recommendation of the Alaska Oil and Gas Royalty Development Advisory Board (Royalty Board) and approval by the Alaska Legislature.

The Royalty Board conducted a public hearing on December 11, 2013 at 1:00 PM in the Atwood State Office Building at 550 W 7<sup>th</sup> Avenue in Anchorage, Alaska, in Room 602 to consider the proposed amendment and this Finding. This hearing was also an opportunity for public comment.

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<sup>1</sup> When added to the commitment the State has made to supply up to 30,000 barrels per day to the North Pole refinery owned by Flint Hills Resources Alaska LLC, approximately 70 percent of the State’s total ANS royalty oil will be sold as royalty in-kind (based on annual average production).

Attached as Exhibit 1 to this Finding is a copy of the proposed amendment to the October 2013 Agreement. Also attached as Exhibit 2 is a copy of the October 2013 “Final Best Interest Finding and Determination for the Sale of Alaska North Slope Oil to Tesoro Refining & Marketing Company LLC” (October 2013 Finding) that includes a copy and a complete description of the original October 2013 Agreement. The conclusions reached in this October 2013 Finding remain current and valid. The reader is advised to review this document to understand the background of DNR’s RIK dispositions, the importance of the in-state refining industry to the Alaska economy, and a complete discussion of the contract terms in the October 2013 Agreement.

This Finding incorporates by references the October 2013 Finding. The “RIK Oil Sale Procedure” (p. 12) and “Analysis of the State Benefits” (p. 22-28) sections from the October 2013 Finding are replicated below in this Finding. These sections document the notice given to the Royalty Board that this amendment is made under statutory and regulatory non-competitive procedures and provide an explanation how benefits to the state will arise from the proposed amendment. The Commissioner’s final finding and determination with respect to the proposed amendment follows this analysis.

### **RIK Oil Sale Procedure**

Before executing a contract for the disposition of RIK to relieve market conditions, the Commissioner must find that the disposition is in the best interests of the State (11 AAC 03.010). The Commissioner establishes the terms, conditions, and methods of disposition of the State’s RIK oil (11 AAC 03.010). There exists a statutory presumption that taking RIK (AS38.05.182(a)) with sale to in-state customers (AS38.05.183(d)) accomplished through competitive means (AS38.05.183(a)) is in the state’s best interest. That being said, the state has many competing interests and the state’s best interest may be served through a non-competitive disposition of the state’s royalty in kind.

Given the statutory presumption that the state’s best interest is served through a competitive disposition of royalty oil to in-state customers, DNR over a year ago first sought to determine the level of interest on the part of in-state producers and refiners in the purchase of the State’s RIK. To gauge the level of interest in the market, DNR distributed an informal solicitation of interest in RIK oil in mid-August 2012.<sup>2</sup> Also, the solicitation outlined the state’s desire to obtain “special commitments” that would meaningfully address the high cost of energy in Alaska. This informal solicitation of interest was directly transmitted to six organizations: BP, ConocoPhillips, ExxonMobil, Petro Star, Flint Hills Resources (FHR), and Tesoro. Of these six, three possess commercial in-state refining capabilities. In addition to sending the informal solicitation of interest directly to these six organizations, the state also informed the market of its intent to sell RIK through announcements in both industry-specific and general media.<sup>3</sup>

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<sup>2</sup> Letter from WC Barron, Director, Division of Oil and Gas, August 13, 2012. Subject: “Non-binding Solicitation of Interest—North Slope Royalty In-Kind Oil Supply.”

<sup>3</sup> Anchorage Daily News, Aug 19, 2012. Accessed at <http://www.adn.com/2012/08/19/2593940/state-gauging-interest-in-royal.html>.

Petroleum News, Aug 19, 2012. Accessed at <http://www.petroleumnews.com/pnads/773411753.shtml>



The informal solicitation generated four responses affirming interest in purchasing the State's RIK. These affirmative responses were from BP, ConocoPhillips, FHR, and Tesoro. DNR received no indications of interest outside of these four parties; notably, Petro Star as owner of two commercial refineries in Alaska chose not to respond. Subsequent discussions with the interested parties that did reply revealed that BP and ConocoPhillips would both require the ability to export RIK oil from the state. In order to permit the export of RIK crude, under 11 AAC 03.010, the Commissioner would be required to "determine in writing that the oil, gas, or associated substances subject to export are surplus to present and projected intrastate domestic and industrial needs."<sup>4</sup> Such a determination would be inconsistent with the informal solicitation of interest distributed by DNR which outlines that the State is interested in contract terms meant to "mitigate the high cost of consumer petroleum products in Alaska and address the need for a greater supply of crude oil for use in the state."

Thus, in response to its solicitation of interest, DNR received only two affirmative responses, from FHR and Tesoro, that could potentially satisfy the criteria set out in its informal solicitation of interest. Further discussion with the two parties who expressed interest consistent with the State's goals indicated that competitive bidding would be unlikely to maximize total value to the State. First, as can be inferred by examining the recently enacted FHR contract and the Tesoro contract, the volume of royalty oil desired by the two respondents differed significantly. Tesoro was interested in one-sixth to one-third of the royalty oil volume desired by FHR. Second, the term of the contract desired by the two in-state respondents differed significantly. Tesoro sought a contract of one year or less, while FHR sought a decade-long contract. Third, the two in-state respondents desired to use royalty oil in different fashions. FHR was interested in using royalty oil as a year-round anchor crude contract, while Tesoro was interested in using the volumetric optionality contained in the proposed contract to accommodate seasonal fluctuations in demand for refined product. Taken as a whole, these differing objectives and requirements would have made structuring a competitive auction of interest to both in-state respondents difficult. Moreover, any such competitive auction would have, in DNR's expectation, resulted in diminished value for the State.

In light of the very small number of interested parties and the low probability that competitive bidding would maximize total State value, the Commissioner determined that seeking a non-competitive, negotiated agreement was in the State's best interest, and therefore, waived competitive bidding. Furthermore, given Tesoro's initial need for a royalty contract lasting for one year and another one-year under the amendment, and given that DNR has estimated that the sale price throughout the term of the proposed contract will be higher than the volume-weighted average of the current reported netback prices filed by the lessees (see "Analysis of State Benefits" below), the amendment satisfies the condition that this disposal will relieve market conditions as defined in 11 AAC 03.024.

**Consistent with his obligations under 11 AAC 03.040 and 11 AAC 03.020, the preliminary finding and determination published on December 6, 2013 represented the Commissioner's formal notification to the Royalty Board of his intent to waive competitive bidding. Also, under AS 38.06.050(a), 11 AAC 03.030, and 11 AAC 03.040, the Commissioner submitted**

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<sup>4</sup> AS 38.05.183(d) place a similar requirement on the Commissioner.



**this preliminary finding and determination to the Royalty Board for its review and recommendation to the Alaska Legislature.**

In making this Finding, the Commissioner also considered the criteria listed in AS 38.05.183(e) and AS 38.06.070(a). The Commissioner's analysis of these criteria is discussed in detail below. As outlined in 11 AAC 03.060(a), RIK contracts must be awarded to the prospective buyer whose proposal offers maximum benefit to the citizens of the State.

**Analysis of State Benefits**

**A. Cash Value Offered – AS 38.05.183(e)(1)**

The proposed amendment does not change the price term of the October 2013 Agreement. As such, the State estimates that it will continue to receive a price for its RIK oil that exceeds the price it would have received if it elected to keep its royalty oil in-value ("RIV"). Such cash value is consistent with the State's obligations as mandated in 11 AAC 03.026 and 11 AAC 03.024. Under the proposed amendment, the State will continue to supply the Nikiski refinery with a maximum of 15,000 barrels per day of North Slope royalty crude oil. Based on the Department of Revenue's estimated ANS price, TAPS tariff, and upstream deduction forecasts, State revenues from the one-year of RIK deliveries will total between \$193 million and \$580 million.<sup>5</sup>

The State is obliged to receive monetary consideration for its RIK that it estimates will exceed the volume-weighted average monetary consideration received for its RIV. Given that under the proposed amendment the allowances upstream of Valdez are similar for RIK and RIV, this is tantamount to requiring that the difference between the RIK US West Coast ("USWC") destination value, the price where most ANS oil is sold, and the RIK differential be greater than the difference between the volume-weighted RIV USWC destination value and volume-weighted RIV marine allowance. Guaranteeing this standard, however, requires knowledge of future events that are unknowable. For the October 2013 Agreement, the State relied on both a retrospective examination and reasonable expectations about future economic conditions to develop contractual elements such that RIK will be expected to exceed RIV. Based on the analyses outlined below—relying on an approach similar to that taken in the evaluation of the July 2013 FHR RIK oil supply contract—DNR expects the proposed amendment will continue to achieve RIK values that will exceed RIV values.

DNR compared the RIV value determined by the price formula in the October 2013 Agreement by with the realized value of RIV over a historical five year period. In particular, for the period between 2008 and 2012, DNR examined the difference between the RIV value for royalty oil taken from Prudhoe Bay and the value that would have been realized for the RIK taken from the same unit had the proposed contract been in effect. DNR also simultaneously undertook a complementary approach to determining whether the State is likely to exceed RIK-RIV parity by developing reasonable expectations concerning future changes to destination value and marine transportation allowances. These reasonable expectations were combined with the retrospective

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<sup>5</sup> Alaska Department of Revenue, Revenue Sources Book Fall 2012.



analysis to determine whether it was likely that the State would achieve RIK values that will exceed RIV values.

The retrospective analysis revealed that if the proposed contract had been in effect during the 2008 to 2012 period, RIK would have exceeded RIV by an average of just more than twenty-five cents per barrel. But, the value of DNR's retrospective analysis hinges critically on whether the historical period used in the retrospective analysis is representative of the future. The dramatic disruptions in world economic conditions between 2008 and 2010 were virtually unprecedented. The ANS USWC delivered value illustrates just how dramatic these economic changes affected world oil markets. The monthly average value for a barrel of ANS delivered to the USWC began 2008 at \$91.12, rose to \$134.12 by June 2008, and then fell precipitously through the last half of the year to finish 2008 at \$40.03. After hitting this bottom, the value of ANS saw a steady upward march through 2011, crossing the \$100 per barrel threshold in March 2011.<sup>6</sup> Given these aberrations, relying on dated information from a period of substantial economic upheaval has the potential to distort the analysis of the proposed contract. Indeed, when examining the difference between the Valdez value under the October 2013 Agreement versus the Valdez value of RIV for 2011, the proposed contract would have earned an average of sixty-five cents more than was received on average for a barrel of RIV. In 2012, this difference grows more still, with the October 2013 Agreement generating \$1.44 more, on average, than RIV. Taken as a whole, the retrospective analysis indicated that the revenue generated from RIK under October 2013 Agreement would have exceeded the average revenue received for Prudhoe Bay RIV. The retrospective analysis is also valid for the value of deliveries during the one-year extension under the proposed amendment.

As a part of its historical analysis, DNR analyzed the difference between the RIV USWC destination value and the RIV differential along with the corresponding elements embedded in the RIK price formula. With respect to destination value, it should be noted that most of the State's North Slope RIV oil has a destination value defined by provisions in the various RSAs between the State and BP, ExxonMobil, and ConocoPhillips. Each of the RSAs specifies different destination values. Presently, BP uses only the ANS USWC spot price reported in Platts. ConocoPhillips uses an average of the ANS USWC spot price reported by Platts and Reuters. ExxonMobil uses a market basket of crude values—including ANS, WTI, Isthmus (a Mexican crude), and Line 63 (a California crude)—as reported by Platts. The ExxonMobil market basket is constrained to be no greater than Platts reported ANS USWC value plus fifty cents and no less than Platts reported ANS USWC value minus fifty cents. Put succinctly, the RIV volume weighted average destination value is driven more strongly by the weight given to Platts reported prices than the Platts-Reuters average used to determine the destination value in the proposed RIK contract.

To see the importance of this, one must look no further than the divergence between the RIV destination value and the RIK destination value attributable in part to the sudden shift in the oil market. The USWC delivered market value of ANS as reported by Platts became decoupled from the market price reported by Reuters. On a monthly average basis, between January 2005 and December 2007, the difference between the USWC value of ANS reported by Platts and the average USWC value of ANS reported by Reuters was \$-0.09, meaning that the average of the

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<sup>6</sup> Prices reported in Platts Oilgram.

values reported by Reuters exceeded the Platts value by nearly nine cents. However, during the period from January 2008 to December 2012, this changes. During this period, on a monthly average basis, Platts reported ANS USWC value exceeded the value reported by Reuters by \$0.69. In 2012, these disparities began to ease, with Platts reporting values that exceeded the value reported by Reuters by \$0.33. Put differently, if the pattern observed in price reporting data during 2008 to 2011 had been consistent with more recent (and more distant) historical patterns, the State's retrospective analysis would have indicated that the per-barrel consideration received under the proposed contract would have exceeded the average consideration received for RIV by an even wider margin.

The other key term impacting the difference between RIK and RIV is the marine transportation allowances permitted under the RSAs. In calculating their royalty obligation the producers are allowed to deduct either their actual and reasonable costs, or a formula-calculated proxy of their costs, of transporting the State's RIV to the USWC. Many of the allowable costs associated with the transportation of RIV to the USWC are fixed costs that do not depend on the volume of oil transported. For example, the expense associated with fleet depreciation, return on capital, minimum staffing requirements, some operating costs, and overhead are affected very little by the marginal barrel of crude oil. The small cost savings associated with shipping one fewer barrel of oil is more than offset by spreading total costs across a smaller number of barrels. As the volume of North Slope oil production continues to decline over the contract period, the State can expect that the marine transportation allowance claimed by RIV shippers will trend higher, on a per barrel basis.<sup>7</sup> Such an interpretation is further buttressed by the increasing trend observed for the variable costs for operating vessels in the ANS trade. As an example, new rules governing the use of more expensive low-sulfur fuel were imposed on the fleet in 2012.<sup>8</sup>

The data can be used to infer this increasing trend. DNR estimated the volume-weighted average marine transportation allowance was \$2.65 in 2008.<sup>9</sup> The marine transportation allowance declined in 2009 to \$2.23, but then rose in 2010 to \$2.62 and rose once again in 2011 to \$3.15. In its analysis of the October 2013 Agreement DNR estimated that the volume-weighted marine transportation allowance in 2012 was in excess of \$3.60. Consistent with the view of increasing average transportation costs, the Department of Revenue forecasts that average allowable marine transportation claimed by producers for tax purposes will rise from \$3.67 in fiscal year 2014 to \$3.72 in fiscal year 2015 and \$3.77 in fiscal year 2016. As the upward trend observed in marine transportation allowance continues, the difference between the RIV marine transportation allowance and the RIK Differential in the October 2013 Agreement and will widen during the one-year extension under the proposed amendment.

## **B. Projected Effect of the Sale on the Economy of the State – AS 38.05.183(e)(2)**

The proposed amendment will provide the State an estimated \$193 million to \$580 million in total royalty revenue during the course of the one-year extension. The sale may also help facilitate the continued operation of the Nikiski refinery with the economic benefits that

<sup>7</sup> This is very dependent on the number of vessels in the ANS fleet and how well the fleet capacity matches ANS production. ExxonMobil is presently preparing to increase its number of vessels in its ANS fleet.

<sup>8</sup> Even more stringent—and costly—sulfur content requirements for marine fuel will be imposed on the ANS fleet in 2015.

<sup>9</sup> The reported volume-weighted average marine transportation allowances reported here were inferred from the lessee's royalty fillings to ensure that data confidentiality was preserved.



accompany such operations. The Nikiski refinery produces roughly two to three million gallons per day of refined petroleum products, most of which will be consumed in Alaska. Tesoro's Nikiski refinery is also the largest tax payer in the Kenai Peninsula Borough (KPB) and employs 200 Alaskans in full-time, high paying positions. As was noted above for the October 2013 Agreement, by entering into the proposed amendment, Tesoro is signaling the total value derived from the proposed contract is at least equal to that which could be secured from the private market. Insofar as the incremental value in the proposed amendment helps facilitate continued operations at the Nikiski refinery, the proposed contract benefits the Alaskan economy.

**C. Projected Benefits of Refining or Processing the Oil in Alaska – AS 38.05.183(e)(3)**

The proposed amendment of royalty oil will help ensure continued in-state processing with its potential price and labor market benefits. Products from in-state refiners supply a substantial proportion of the state's needs for refined petroleum products. Given the small and isolated nature of the Alaska market, it is probable that in the absence of in-state refining capacity, Alaskans would observe higher wholesale prices for refined petroleum products. Not only could this manifest as higher retail prices for Alaska residents who already expend more on a per capita basis for energy than residents of any other state, but the ubiquity of refined petroleum in the production and distribution of goods means such a price increase could affect the Alaska economy through smaller profit margins, higher consumer costs for non-petroleum goods, and a degraded competitive position for Alaskan goods sold Outside. The magnitude of these effects is unknown and quite hard to empirically isolate, but it is clear that it will be directly related to the size of the change in the underlying cost of refined petroleum.

The absence of the in-state refining capacity provided by Tesoro would also have direct, indirect, and induced labor market impacts in Alaska. Tesoro currently employs 200 Alaskans in high paying positions, positions that would not exist without the presence of the refinery.

**D. Ability of Prospective Buyer to Provide Refined Products for Distribution and Sale in the State with Price or Supply Benefits to the Citizens of Alaska – AS 38.05.183(e)(4)**

Tesoro's Nikiski refinery began producing refined petroleum products in 1969. The Nikiski refinery continues to operate to this day, producing well over 710 million gallons of refined product per year. Of this 710 million gallons of refined product produced by Tesoro per year, thirty-five percent (roughly a quarter of a billion gallons) will be jet fuel. Nearly all of this jet fuel will be transported to Anchorage via a Tesoro owned common-carrier pipeline to support operations at Ted Stevens Anchorage International Airport, the fourth busiest cargo airport in the world<sup>10</sup> and the economic engine that supports one out of every ten jobs<sup>11</sup> in Anchorage. The remaining refinery output is primarily a combination of gasoline and ultra-low sulfur diesel. There is little question that Tesoro's Nikiski refinery can supply refined products to Alaskans.

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<sup>10</sup> Where busiest is measured by cargo throughput. Alaska Department of Transportation & Public Facilities, Access at <http://dot.alaska.gov/anc/> on 02/19/13.

<sup>11</sup> Alaska Department of Transportation & Public Facilities, Access at <http://dot.alaska.gov/anc/> on 02/19/13.

**E. Existence and Extent of Present and Projected Local and Regional Needs for Oil and Gas Products – AS 38.06.070(a)(2)**

On a per capita basis, Alaskans spend more on energy than residents of any other state. This high expenditure rate is driven in large part by the very high per unit cost paid by Alaskans for energy. Most pertinent for current purposes, Alaskans pay the second highest rates in the country for gasoline, and some of the highest rates in the nation for distillate fuels including diesel and home heating fuel. It is not likely that the proposed sale will materially reduce the price paid by Alaskan consumers for refined petroleum products.

In 2011 Alaska consumed just over 278 million gallons of gasoline and over 875 million gallons of jet fuel. Assuming these numbers are representative of current consumption, Tesoro supplied well over 60 percent of the gasoline consumed by Alaskans and well over 28 percent of the jet fuel consumed by Alaskans (or those in Alaska). Clearly, the loss of this volume of gasoline and jet fuel could generate substantial regional and state-wide need for refined petroleum products.

**F. Revenue Needs and Projected Fiscal Condition of the State – AS 38.06.070(a)(1)**

The State's fiscal condition has been strong in recent years, but recent Office of Management and Budget projections indicate that the State could experience budget shortfalls from FY 2015 through FY 2023. The sale of royalty oil under the proposed amendment is projected to generate between \$193 million and \$580 million in State revenue. The October 2013 Agreement and proposed amendment can be expected to yield revenues that are greater than what would have been realized had the State's royalty been left in value. The proposed amendment may even offer a small incremental improvement to the State's fiscal picture by generating increased revenue through arbitrage. While the incremental revenue generated through the proposed sale will not offset the deficits that are projected by the less optimistic scenarios outlined by the Governor's Office of Management and Budget, the proposed sale will do no harm to the State's revenue picture.

**G. Desirability of Localized Capital Investment, Increased Payroll, Secondary Development and Other Possible Effects of the Sale – AS 38.06.070(a)(3)**

The proposed amendment will, in and of itself, require no additional capital investment, induce no change in payroll, yield no secondary development and have few other consequences. During negotiations of the October 2013 Agreement, Tesoro indicated that the North Slope royalty oil delivered by the State would be used in a status-quo fashion. Royalty oil will replace private sources of feedstock to run the operations at the Nikiski refinery. If the State's RIK is used in such a fashion, there will be little incremental capital investment, payroll, secondary development, or other effects.

**H. Projected Positive and Negative Environmental Effects – AS 38.06.070(a)(7)**

The sale of RIK oil will, in and of itself, have no negative environmental effects and will not affect the volume of oil shipped in Alaska. If RIK oil simply replaces oil that would have been purchased from the private market at the Valdez Marine Terminal on a one-to-one basis, then

there is no environmental impact. If the RIK oil replaces crude that would have been imported from abroad, and there is a non-zero risk of adverse environmental effect per barrel per mile, then the proposed may have a small positive environmental effect. Taken as a whole, the proposed contract is expected to have very little incremental environmental impact.

It should also be noted that the State transfers title and risk for RIK crude to the buyer at the point of delivery.<sup>12</sup> This legal construction does not change the volume of oil flowing through TAPS on a given day and does not impact environmental risk. However, it does insulate the State from the financial risk associated with an adverse environmental outcome.

**I. Projected Social Impacts – AS 38.06.070(a)(4)**

Beyond the direct revenue impact, the proposed amendment is unlikely to have any incremental social impact. The royalty oil sold under the October 2013 Agreement is unlikely to materially impact refinery operations. As such, no long-run population redistribution, change in the utilization of social services, or other social impacts are expected.

**J. The Projected Additional Costs and Responsibilities Which Could Be Imposed Upon the State and Affected Political Subdivisions by Development Related to the Transaction – AS 38.06.070(a)(5)**

The proposed amendment, in and of itself, is expected to generate negligible additional cost or responsibilities for the State or the Kenai Peninsula Borough. The State's royalty oil is expected to simply displace crude secured from the private market. The proposed amendment is unlikely to materially impact the operations of the Nikiski refinery. However, as was discussed above, when the State sells its RIK it faces counterparty risk. While the State has a long and successful history selling its royalty oil to Tesoro, there exists a non-zero probability that Tesoro could, for a host of reasons, fail to fulfill its obligations under the proposed contract. Such a failure could expose the State to financial loss. The October 2013 Agreement recognized this risk and mitigated it through a security arrangement that may require Tesoro to post a stand-by letter of credit whose value is equal to the expected value of ninety days of royalty oil. The same provision will apply during the one year term under the proposed amendment.

**K. The Existence of Specific Local or Regional Labor or Consumption Markets or Both Which Should Be Met by the Transaction – AS 38.06.070(a)(6)**

The proposed amendment is unlikely to induce substantial new hiring. However, refinery operations support multiple local labor and consumption markets. The refinery directly employs 200 Alaskans, and 20 to 30 contracts at the Nikiski refinery. Tesoro also generates labor demand and satisfies the need of multiple local consumption and labor markets through its 31 company-owned Tesoro 2Go retail outlets, 44 Tesoro-branded stations, and 4 USA Gasoline stations.<sup>13</sup> The refined product from Nikiski also supplies the Anchorage International Airport, and other in-state refiners.

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<sup>12</sup> Put differently, the state instantaneously passes the title and risk of royalty oil from the producer to the buyer at the point of delivery.

<sup>13</sup> Tesoro Kenai Fact Sheet. <http://www.tsocorp.com/stellent/groups/public/documents/documents/alaskafact.pdf>

With respect to consumption markets, it should be recognized that demand for refined product is quite seasonal. The proposed amendment preserves a valuable volumetric option. By exercising this option, Tesoro may align their crude inventory with seasonal fluctuations in demand for refined product. Such an alignment may be of use in meeting seasonal fluctuations in consumption demand in an economically optimal fashion.

**L. The Projected Effects of the Proposed Transaction upon Existing Private Commercial Enterprise and Patterns of Investment – AS 38.06.070(a)(8)**

The proposed amendment is unlikely to demonstrably impact the operations at the Nikiski refinery. As has been mentioned before, the crude supplied under the proposed amendment will likely simply displace crude from the private market. As such, the proposed amendment is expected to have very little impact on existing private commercial enterprise and patterns of investment. However, the continued operation of the Nikiski refinery will allow Tesoro to continue to supply its customers, including Ted Stevens International Airport and regional wholesale and retail markets. The continued operation of the Nikiski refinery will sustain the demand that Tesoro generates among its vendors and servicers.

**Public Comment**

Under 11 AAC 03.020(c)(2), before the publication of a final finding and determination, the Commissioner must engage in a public comment period lasting not less than 30 days. The public comment period on the proposed RIK sale began December 6, 2013 with the public notice, publication, and dissemination of the Preliminary Finding and Determination. The public comment period closed on January 6, 2014 at 4:30 PM. No comments were received.

**Final Finding and Determination**

**A. Disposal of Royalty Oil In-kind is in the State's Best Interest**

In accordance with AS 38.05.182(a), 11 AAC 03.010(b) and (d), and 11 AAC 03.060, DNR has documented its final finding and determination in this Finding. Subject to public review of and comment on this Finding, the Commissioner has determined that it is in the best interest of the State to take its RIK in order to supply the Tesoro refinery at Nikiski with feedstock for an additional one year under the same terms of the October 2013 Agreement.

**B. Competitive Bidding is Waived**

Consistent with the results of the solicitation described in the findings that accompanied the October 2013 Agreement, DNR's assessment of the potential benefits of negotiated RIK contracts, the Commissioner has determined, in accordance with AS 38.05.183(a) and 11 AAC 03.030, that the best interests of the State will be served through the sale of its RIK to Tesoro under non-competitive procedures. This disposition will be made to relieve market conditions (11 AAC 03.024).



The proposed amendment will protect the State's interest and is estimated to generate a sale price throughout the term of the contract that will be higher than the volume-weighted average of the current reported netback prices file the lessees for royalty purposes. The Commissioner further considered that DNR has negotiated a contract that will permit a transparent and equitable allocation of the State's royalty oil across all RIK buyers should the State's volumetric expectations be incorrect.

A copy of the preliminary finding and determination and its enclosures was delivered to the Royalty Board as notification under AS 38.05.183(a) and 11 AAC 03.010(g) that the commissioner intended to waive competitive bidding for this RIK sale.

#### **C. The Proposed RIK Oil Sale Offers Maximum Benefits to the State**

When RIK is sold through a process other than competitive bid, the Commissioner shall award the disposal to the prospective buyer whose proposal offers the maximum benefits to the citizens of the State of Alaska. In making the award the Commissioner must consider the criteria set out in AS 38.05.183(e) and in AS 38.06.070(a). The Commissioner's in-depth review and consideration of all of the required statutory criteria is set out above. Subject to public review and comment, the Commissioner finds that the proposed amendment offers the maximum benefit to the state.

#### **D. Alaska Royalty Oil and Gas Development Board**

A copy of the preliminary finding and determination and its enclosures was submitted to the Royalty Board in compliance with AS 38.05.183(c), 11 AAC 03.024, and 11 AAC 03.040 to provide notice of the disposition and the Commissioner's intent to waive competitive bidding in an RIK sale and to permit the Royalty Board to review the proposed amendment under AS 38.06.055 and 11 AAC 26.220. By unanimous vote of the members present in favor of Resolution 13-2, the Royalty Board approved the proposed amendment and recommended its approval by the Alaska Legislature and provided a report to the Alaska Legislature. Resolution 13-2 is attached as Exhibit 3.

#### **E. Legislative Approval**

Under AS 38.05.183 and AS 38.06.055, legislative approval was not required for the October 2013 Agreement because "the sale, exchange, or other disposition of oil or gas for one year or less if the sale, exchange, or other disposition is entered into to relieve storage or market conditions." The proposed amendment will relieve "market conditions" as defined in 11 AAC 03.024(1) as "in a noncompetitive disposition of royalty oil, gas, or associated substances the Commissioner estimates that the sale price throughout the term of the disposition will be higher than the volume-weighted average of the current reported netback prices filed by the lessees."

Legislative approval is required for an RIK oil disposition with a term of more than one year and, specifically, AS 38.06.055(c) provides that a RIK sale "may not be continued after the end of one year or renewed with the same party without prior approval of the legislature." Legislation

approving the proposed amendment will be prepared and will be submitted to the Alaska Legislature.

#### **F. Applicable Criteria and Weights**

For the purposes of the proposed amendment, as outlined above, and by reference to the October 2013 Final Finding and Determination, the Commissioner considered all criteria outlined in AS 38.05.183(e). Subject to public review and comment, the Commissioner finds that the proposed sale will positively impact, or affect no harm on, all of the criteria in AS 38.05.183(e). In his analysis of the proposed sale, the Commissioner most heavily weighted the cash value offered, the projected effect of the sale on the economy of the state, and the ability of Tesoro to supply refined product to Alaskans. While all criteria in AS 38.05.183(e) received non-zero weight, the other criteria discussed above received less weight.

#### **Conclusion**

On careful consideration of the circumstances of the proposed amendment, material information, and legal requirements will the Commissioner determine, in accordance with AS 38.05.183, that the best interest of the State does not require this RIK sale be made by competitive bid, that the sale will relieve market conditions, and the that the proposed contract with Tesoro offers maximum benefits to its citizens.

  
\_\_\_\_\_  
Joe Balash  
Commissioner

1/9/2014  
\_\_\_\_\_  
Date

#### **Attached:**

- Exhibit 1: Proposed "Amendment to Agreement for the Sale of Royalty Oil"
- Exhibit 2: "Final Best Interest Finding and determination for the Sale of Alaska North Slope Oil to Tesoro Refining & Marketing Company LLC" dated October 2013 (includes a copy of the October 2013 Agreement)
- Exhibit 3: Alaska Royalty Oil and Gas Development Advisory Board - Resolution 13-2



## **AMENDMENT TO AGREEMENT FOR THE SALE OF ROYALTY OIL**

This executed document is an Amendment to the “AGREEMENT FOR THE SALE OF ROYALTY OIL BETWEEN AND AMONG THE STATE OF ALASKA, AND TESORO CORPORATION, A DELAWARE CORPORATION AND TESORO REFINING & MARKETING COMPANY LLC, A DELAWARE LIMITED LIABILITY COMPANY, OCTOBER 25, 2013” (“October 2013 Agreement”), that was entered into between the State of Alaska (the “State”), Tesoro Refining & Marketing Company LLC (“Buyer”), and Tesoro Corporation (“Guarantor”). Capitalized terms used herein that are not defined herein shall have the meaning ascribed to such terms in the October 2013 Agreement.

### **A. RECITALS**

1. The October 2013 Agreement provides for the State to sell a portion of the State's Royalty Oil to the Buyer with deliveries beginning February 1, 2014 and ending January 31, 2015.
  
2. The Buyer has requested that the term of the Agreement be extended to provide for additional deliveries, in accordance with all other terms of the Agreement, for the period from February 1, 2015 through January 31, 2016.
  
3. AS 38.06.055 requires approval of the Alaska Legislature for any extension or renewal of the Agreement beyond a one year term. AS 38.06.050, requires that the Alaska Royalty Oil and Gas Development Advisory Board (“Royalty Board”) review all proposed sales of royalty oil that require legislative approval and submit written recommendations on the proposed sale to the Alaska Legislature.



B. AMENDMENT

1. Section 8.2 of the Agreement is amended and restated to read:  
Initial Term. The Initial Term of this Agreement shall begin on the Day of First Delivery defined in Section 2.4.1 as February 1, 2014 and terminate on January 31, 2016. Any change to the Term of this Agreement shall comply with the provisions of Section 2.1.4 and Article X of the Agreement, and with AS 38.06.050 – 055.
2. This Amendment shall become effective and enforceable on the date upon which it is signed by all of the Parties following approval of the extended term by the legislature as required under AS 38.06.055.

C. GENERAL TERMS

1. This Amendment is binding on the Parties, their principals, officers, and employees, and their successors and assigns.
2. Except as expressly modified or changed herein, all other terms and conditions of the Agreement remain unchanged and of full force and effect.
3. Any disputes regarding this Amendment shall be resolved in the Superior Court for the State of Alaska at Anchorage, Alaska according to State law.
4. This Amendment may be executed in multiple counterparts. It is not necessary for the Parties to sign the same counterpart. Each duly executed counterpart shall be deemed to be an original and all executed counterparts taken together shall be considered to be one and the same instrument.

STATE OF ALASKA

By: \_\_\_\_\_

Commissioner  
Department of Natural Resources

Date: \_\_\_\_\_

SUBSCRIBED AND SWORN to before me this \_\_\_\_\_  
day of \_\_\_\_\_, 2013.

\_\_\_\_\_  
Notary Public in and for the State of Alaska.

My commission expires:\_\_\_\_\_.

TESORO REFINING & MARKETING  
COMPANY LLC

By: \_\_\_\_\_

Title: \_\_\_\_\_

Date: \_\_\_\_\_

SUBSCRIBED AND SWORN to before me this \_\_\_\_\_  
day of \_\_\_\_\_, 2013.

\_\_\_\_\_  
Notary Public in and for the State of Alaska.

My commission expires:\_\_\_\_\_.

TESORO CORPORATION

By: \_\_\_\_\_

Title: \_\_\_\_\_

Date: \_\_\_\_\_

SUBSCRIBED AND SWORN to before me this \_\_\_\_\_  
day of \_\_\_\_\_, 2013.

\_\_\_\_\_  
Notary Public in and for the State of Alaska.

My commission expires:\_\_\_\_\_.





# Final Best Interest Finding and Determination for the Sale of Alaska North Slope Oil to Tesoro Refining & Marketing Company, LLC



Alaska Department of  
**NATURAL  
RESOURCES**

**October 2013**





**Final  
Best Interest Finding and Determination  
for the  
Sale of Alaska North Slope Royalty Oil  
to  
Tesoro Refining & Marketing Company LLC**

**Division of Oil and Gas  
Alaska Department of Natural Resources**

**October 24, 2013**



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Exhibit 1: Proposed Final Contract, “Agreement for the Sale of Royalty Oil between and among the State of Alaska, and Tesoro Corporation, A Delaware Corporation, and Tesoro Refining & Marketing Company LLC, A Delaware Limited Liability Company.”

Exhibit 2: Example “Non-binding Solicitation of Interest” Letter.





## **I. Introduction**

The Commissioner of the Department of Natural Resources (DNR), on behalf of the State of Alaska, has negotiated a one-year contract to sell the State's North Slope royalty oil to Tesoro Refining & Marketing Company, LLC (Tesoro) and Tesoro Corporation (as guarantor). Tesoro has owned and operated a commercial refinery in Nikiski, Alaska, since 1969.

The State proposes this sale of royalty in-kind oil to relieve market conditions, meet in-state need for crude, and help facilitate continued operations of Tesoro's Nikiski refinery with the attendant benefits to Alaskans. The negotiations that have resulted in the attached proposed contract have been carried out under the procedures for a non-competitive disposition of royalty oil set out in 11 AAC 03.030 – 11 AAC 03.070. Consistent with its obligations under 11 AAC 03.026(b) and 11 AAC 03.024, under the terms of this contract, the State will receive a price for its royalty oil that will be no less than the amount the State would have received, on average, if it elected to keep its royalty in-value.

This "Final Best Interest Finding and Determination for the Sale of North Slope Royalty Oil to Tesoro Refining & Marketing Company, LLC" (Final Finding and Determination) provides a summary of the State's proposed royalty in-kind contract with Tesoro. After an in-depth consideration of the potential economic, environmental, and social impacts, and the various requirements for sale of the State's royalty oil, with a focus on the criteria specified under the terms of AS 38.05.183(e) and AS 38.06.070(a), the Commissioner finds that a negotiated one-year contract for the sale of the State's royalty oil to Tesoro to relieve market conditions is in the State's best interest.

## **II. Royalty in Kind Background**

The State of Alaska owns the mineral estate, including oil and gas, under State-owned lands. To monetize the value of this estate, the State has entered into lease agreements with third parties who explore for, develop, and produce oil and gas from these lands. The State receives a royalty share of 12-1/2 to as much 33-1/3 percent of the oil and gas produced from these leased lands on the North Slope. The State may take its royalty either "in-kind" (RIK) or "in-value" (RIV). When the State takes its royalty as RIV, the lessees who produce the oil market the State's share along with their own production and pay the State the value of its royalty share. When the State takes its royalty share as RIK, it assumes ownership of the oil, and the commissioner disposes of it through sale procedures, either "competitive" or "non-competitive," under AS 38.05.183.

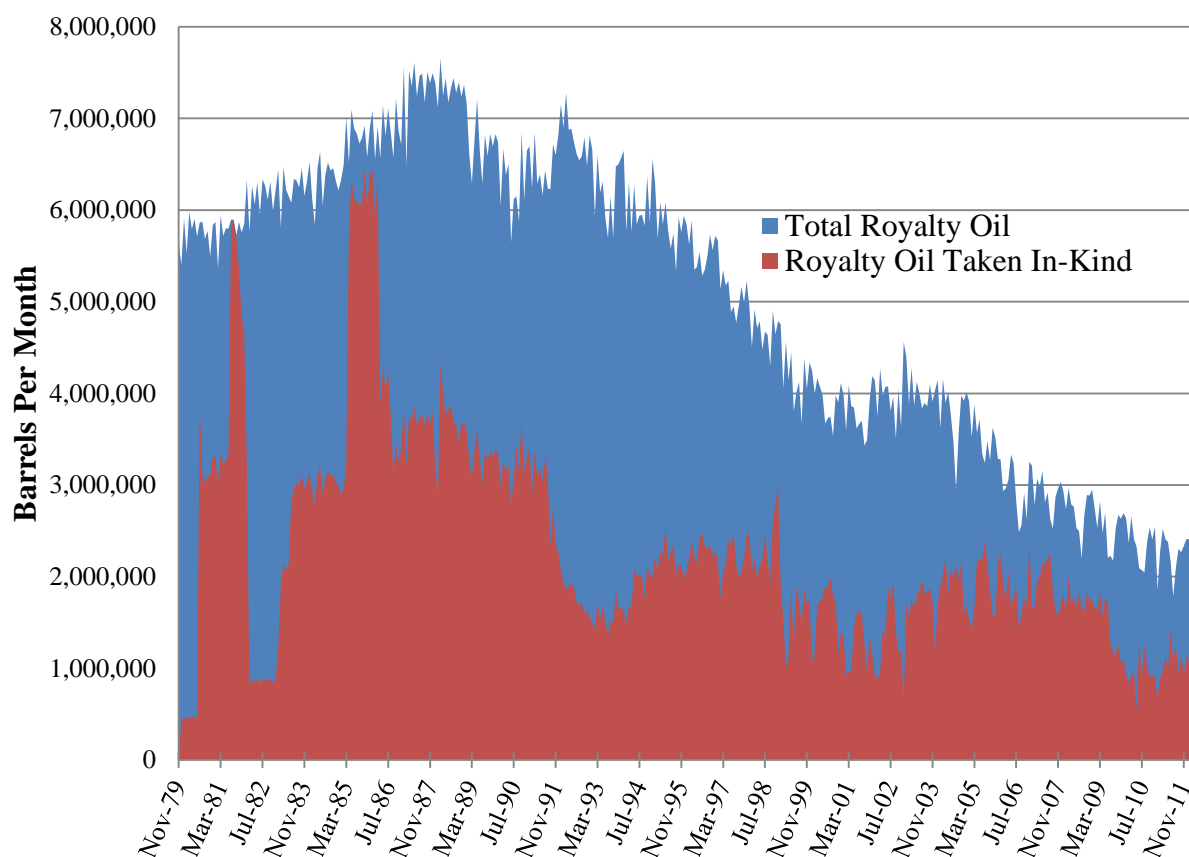
Figure 1 shows that between November 1979 and June 2012, the state disposed of 45.5 percent of its North Slope royalty oil through in-kind sales. Through the combination of both competitive and non-competitive RIK sales, the State has sold its royalty oil to in-state refineries, and occasionally has auctioned its royalty oil to customers in the Lower 48. Figure 1 summarizes the many North Slope RIK contracts since 1979 and Figure 2 illustrates the average monthly volumes of royalty oil committed to these contracts during this period.

Figure 1. Royalty In-Kind Sales History

Purchaser Contract	Period	Total RIK Volumes (barrels through Jun 2012)
<b>Negotiated In-Kind Sales</b>		
<b>Alpetco</b>		
Alpetco 7/80-1/81	1980-1981	7,390,392
Alpetco 7/80-1/82	1980-1982	31,576,151
<b>Chevron</b>		
Chevron 1 7/80 - 6/81	1980-1981	1,742,342
Chevron 2 5/83 - 5/84	1983-1984	6,721,236
Chevron 3 5/84 - 7/91	1984-1991	48,418,344
Kuparuk 12/86 - 12/91	1986-1991	8,611,247
Petrostar Purchases 12/86 - 12/91	1986-1991	2,348,070
Subtotal		67,841,239
Plus: Tesoro Exchange Barrels		16,015,527
<b>Total Chevron</b>		83,856,765
<b>Flint Hills Resources</b>	4/04-12/2004	153,697,898
<b>Golden Valley Electric Association</b>		
GVEA 1 6/81 - 5/84	1981-1984	3,182,282
GVEA 2 6/84 - 9/85	1984-1985	2,511,064
GVEA 3 10/85 - 12/91	1985-1991	12,281,462
<b>Total GVEA</b>		17,974,808
<b>MAPCO (Williams)</b>		
Mapco 1 (Williams) 11/79 - 12/2003	1979-2003	279,766,163
Mapco 2 12/97 - 11/98	1997-1998	4,917,167
Mapco 3 (Williams) 12/98-12/2003	1998-2003	28,147,483
Williams 4 (Interim) 1/2004-3/2004	2004	5,582,298
Williams 5 (Interim)		0
<b>Total Mapco</b>		318,413,111
<b>Petrostar</b>		
Petro Star 12/86 - 12/91	1986-1991	5,378,079
Less: Chevron Purchases 12/86 - 12/91	1986-1991	-2,348,070
Petro Star JV 3/92 - 12/93	1992-1993	0
<b>Total Petrostar</b>		3,030,009
<b>Tesoro</b>		
Tesoro 1 7/80 - 6/81	1980-1981	1,737,316
Tesoro 2 7/80	1980	2,550,000
Tesoro 3 12/81 - 1/82	1981-1982	838,299
Tesoro 4 1/83 - 12/94	1983-1994	179,783,385
Tesoro 5 11 months 10/85 - 8/90	1985-1990	47,364,935
Tesoro 5 Reservation Fee 10/85 - 8/90	1985-1990	-38,707,561
Tesoro 6 1/95 - 12/95	1995	13,703,946
Tesoro 7 1/96-12/98	1996-1998	38,865,223
Subtotal		246,135,543
Less: Chevron Exchange Barrels		-16,015,501
<b>Total Tesoro</b>		230,120,042
<b>Competitive In-Kind Sales</b>		
<b>First Competitive RIK Sale</b>		
Alaska Petroleum Co. Jul-81	1981	622,698
ARCO Products Co. 7/81 - 12/81	1981-1981	1,847,668
Oasis Petroleum Co. 7/81 - 1/82	1981-1982	838,604
Shell 7/81 - 1/82	1981-1982	4,191,436
Sohio 8/81 - 1/82	1981-1982	3,649,689
Union 7/81 - 1/82	1981-1982	4,328,966
<b>Total</b>		15,479,061
<b>Second Competitive RIK Sale</b>		
Chevron 4 4/85 - 3/86	1985-1986	5,703,996
Chevron 5, 6, 7 4/85 - 9/85	1985-1985	3,226,724
Sohio 4/85 - 12/85	1985-1985	955,688
Texaco 1 4/85 - 12/85	1985-1985	2,867,172
Texaco 2 4/85 - 3/86	1985-1986	9,506,588
Union 2 4/85 - 9/85	1985-1985	1,135,522
US Oil & Refining - B 4/85 - 3/86	1985-1986	3,802,521
<b>Total</b>		27,198,211
<b>Quasi-Competitive RIK Sale</b>		
Chevron 8 10/85 - 3/86	1985-1986	954,349
Union 3 10/85 - 3/86	1985-1986	715,760
US Oil & Refining - 1,2 10/85 - 3/86	1985-1986	1,908,696
<b>Total</b>		3,578,805
<b>Total North Slope RIK Oil (Including estimated future deliveries)</b>		892,315,253

Source: Alaska Department of Natural Resources, Division of Oil and Gas

**Figure 2. North Slope Historic Total Royalty Volume and In-Kind Volumes (Oil and NGLs)**



Source: State of Alaska Division of Oil and Gas

#### **A. Royalty Oil Available For Taking In-kind**

The volume of royalty oil the state receives depends on the volume of oil produced from State lands. The continuing production decline observed on the North Slope is well-known and well-documented. As the volume of North Slope oil declines, the volume of North Slope royalty oil available for taking as RIK will also decline. The proposed contract obliges the State to deliver a maximum of 15,000 barrels per day to Tesoro between February 1, 2014 and January 31, 2015. Based on yearly average forecast volume, if FHR were to nominate the maximum 30,000bpd allowed under its contract, the state is expected to have just over 34,000bpd of royalty oil remaining. Put differently, based on yearly average forecasts, if both FHR and Tesoro nominate the maximum volume permitted under their respective contracts, the State would expect to take 69.5% of its royalty oil in-kind under the proposed contract.

When considering the volume of royalty oil that will be available to the state for taking in kind, there are three key considerations. First, under a recently enacted RIK contract with Flint Hills Resources Alaska, LLC (FHR) the State will deliver up to 85 percent of its total North Slope royalty oil for sale to for FHR's North Pole, Alaska, refinery. Under the new FHR RIK contract and the proposed contract with Tesoro, up to 95% of the State's royalty oil will be committed to RIK, with the remainder kept in-value.

Second, expected royalty oil production is based on a forecast. Even the best forecasts will undoubtedly be incorrect, with the magnitude of the error greatest in out-years. Historically, the State's production forecast from which the royalty forecast is derived has been quite optimistic, with realized production often falling well below forecasted levels.<sup>1</sup> That being said, the State's royalty forecast would need to be seriously deficient during the term of the contract for the state to struggle to meet its volume obligation. However, it should be noted that the state has reserved the right to nominate no more than 95 percent of its North Slope total royalty as RIK through the term of the proposed contract.

Third, royalty forecasts provide an expected daily average production volume for the entire year. However, there is substantial seasonality in the observed level of production from the North Slope, with daily production peaking during winter months and declining to its lowest levels during summer months. Between 2008 and 2011, typical summer production volumes were 17 percent lower than the yearly average. Based on this observed decline, if FHR nominates 30,000 bpd of royalty oil and Tesoro nominate 15,000 bpd, the state will be committed to delivering nearly 84 percent of expected daily summer royalty production during the proposed contract.

## **B. Price and Consumption of Energy in Alaska**

In 2011, on a per capita basis, Alaskans spent more on energy than residents of any other state, with average per person expenditures of \$10,692 on energy throughout the year.<sup>2</sup> Of this \$10,692, over 14 percent<sup>3</sup> would be spent purchasing the second most expensive gasoline in the nation.<sup>4</sup> Not only is our gasoline among the most expensive in the nation, but our diesel and home heating fuel are also quite expensive with Alaskans paying an average of \$29.58 per million BTU (mmbtu)<sup>5</sup> for distillate fuel oil.<sup>6</sup>

As seen in Table 1, the cost of energy borne by Alaskans has risen substantially in the last decade. Alaskans pay an average of \$31.06 per mmbtu of gasoline, a 138%<sup>7</sup> increase in price over the past decade. Even more pronounced, the price of distillate fuel oil, the source of home heating for many Alaskans, has grown by just under 187% since 2001. The rate of price growth observed in energy far outstripped the overall rate of inflation in Alaska. Between 2001 and 2010, the Anchorage Consumer Price Index<sup>8</sup>, a commonly used measure of inflation in Alaska, rose by 29.7%.<sup>9</sup> At \$8.66 per mmbtu at the meter, the price borne by Alaskans for natural gas

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<sup>1</sup> The Department of Revenue, which develops the North Slope production forecast, has recently transitioned to a new, less optimistic forecasting approach.

<sup>2</sup> [http://www.eia.gov/state/seds/data.cfm?incfile=/state/seds/sep\\_sum/html/rank\\_pr.html&sid=US](http://www.eia.gov/state/seds/data.cfm?incfile=/state/seds/sep_sum/html/rank_pr.html&sid=US)

<sup>3</sup> \$1,511 per capita

<sup>4</sup> Behind Hawaii, [http://www.eia.gov/state/seds/data.cfm?incfile=/state/seds/sep\\_sum/html/rank\\_pr\\_mg.html&sid=US](http://www.eia.gov/state/seds/data.cfm?incfile=/state/seds/sep_sum/html/rank_pr_mg.html&sid=US)

<sup>5</sup> BTU is an acronym for British Thermal Unit which is defined as the amount of energy required to raise the temperature of one pound of water at 60 degrees Fahrenheit and one atmosphere by one degree Fahrenheit.

<sup>6</sup> Distillate fuel oil is a class of refined petroleum products consisting of No. 1, No. 2, and No. 4 fuel oil (i.e., home heating oil); and No. 1, No. 2, and No. 4 diesel.

<sup>7</sup> All comparisons of change are based solely on point estimates. It should be noted that these estimates are the result of an estimation procedure that has uncertainty. No tests were performed to determine if these differences were statistically distinguishable.

<sup>8</sup> <http://laborstats.alaska.gov/cpi/cpi.htm>

<sup>9</sup> It should be noted that the overall CPI includes the effect of increasing energy prices. Thus, the rate of inflation excluding the impact of the growth in energy prices would be (perhaps, substantially) lower.

remained effectively flat between 2010 and 2011. While access to competitively priced, clean-burning natural gas is a boon for those Alaskans with access to natural gas infrastructure, outside of Southcentral Alaska, very few Alaskan consumers have access to this fuel.

**Table 1. Alaska Total End-Use Price Estimates, 2011**

Fuel	Price	% Change Since	
		2010	2001
Coal	\$3.81	3.5	95.4
Distillate Fuel Oil	29.58	26.7	186.6
Gasoline	31.60	16.3	138.0
Kerosene-type Jet Fuel	23.12	37.5	287.3
Liquefied Petroleum Gas	29.76	11.1	79.0
Natural Gas	8.66	-1.6	221.9
Other	34.62	18.4	512.7
Residual Fuel Oil	17.33	26.7	546.6
Retail Electricity	47.13	8.9	52.2

Source: U.S. Energy Information Administration State Energy Data 2011 Prices and Expenditures

Notes: Prices are given in millions of BTUs.

Natural gas as it is consumed, including supplemental gaseous fuels that are commingled with natural gas.

Other category includes asphalt and road oil, aviation gasoline, kerosene, lubricants, and other petroleum products.

As noted, Alaskans spend more per person for energy than residents of any other state. This high rate of per capita expenditure on energy is driven not only by price, but also by volume consumed. Table 2 gives the statewide consumption of various forms of energy during the first decade of the twenty-first century. Table 3 then gives a further disaggregation of the consumption of distillate fuel in Alaska.<sup>10,11</sup> Despite its rarity outside of Southcentral Alaska and portions of Fairbanks, on a per capita BTU basis, natural gas was the most common fuel used in the homes of Alaskans. In 2011, the typical Alaskan consumed 28.3 mmbtu of natural gas in their residence.

On a per capita BTU basis, natural gas was also the most common fuel used in the Alaskan commercial and industrial sector. In 2011, the Alaskan commercial sector consumed approximately 23.3 mmbtu of natural gas for every resident. Based on point estimates alone, this was an 8.4 percent reduction in the per capita consumption of natural gas since 2005. Like the residential and commercial sectors, the industrial sector relied very heavily on energy supplied by natural gas. However, consumption by the industrial sector exceeded that of either the residential or commercial sectors by more than an order of magnitude. In 2011, on a per capita BTU basis, the Alaskan industrial sector consumed 350.7 mmbtu of natural gas for every Alaskan resident. While quite large, this actually represented a 34.6 percent decrease in per capita natural gas consumption by the industrial sector since 2005.

<sup>10</sup> It should be noted that the data sources and estimation strategies for Table 2 and Table 3 differ. Stemming from these differences the volume of distillate fuel oil sales, particularly by sector, differ somewhat.

<sup>11</sup> The values given in Tables 2 and 3 are point estimates, the associated standard errors are not shown. All comparisons are simple comparisons of the presented point estimates and do not consider the uncertainty associated with the estimate. Put differently, observed differences should not be interpreted as statistically significant.



**Table 2. Alaska Energy Consumption Estimates**

		Physical Units			Billion British Thermal Units			Thousands of BTU Per Capita		
		2005	2010	2011	2005	2010	2011	2005	2010	2011
<b>Residential</b>										
	Coal	40	0	0	631	0	0	946	0	0
	Electricity	2,062	2,093	2,134	7,034	7,142	7,283	10,547	10,056	10,061
	Wood	46	94	96	920	1,873	1,916	1,379	2,637	2,647
	Kerosene	31	15	25	176	83	142	264	117	196
	Liquefied Petroleum Gases	158	154	134	606	589	515	909	829	711
	Distillate Fuel Oil	1,619	1,505	1,389	9,431	8,766	8,094	14,141	12,342	11,182
	Natural Gas	18,029	18,714	20,262	18,098	18,806	20,521	27,136	26,479	28,349
<b>Commercial</b>										
	Coal	465	558	621	7,252	8,533	9,432	10,873	12,014	13,030
	Distillate Fuel Oil	1,006	1,925	1,739	5,857	11,212	10,127	8,782	15,786	13,990
	Fuel Ethanol	6	18	15	19	61	51	28	86	70
	Electricity	2,695	2,830	2,854	9,195	9,655	9,739	13,787	13,594	13,454
	Kerosene	1	16	18	5	92	104	7	130	144
	Liquefied Petroleum Gases	98	151	168	375	578	644	562	814	890
	Motor Gasoline	168	157	128	877	819	666	1,315	1,153	920
	Natural Gas	16,903	15,920	16,652	16,968	15,998	16,865	25,441	22,525	23,299
<b>Industrial</b>										
	Coal	2	4	5	25	57	73	37	80	101
	Distillate Fuel Oil	1,912	2,456	3,300	11,138	14,309	19,222	16,700	20,147	26,555
	Fuel Ethanol	3	23	23	12	79	78	18	111	108
	Electricity	1,156	1,324	1,331	3,944	4,518	4,540	5,914	6,361	6,272
	Liquefied Petroleum Gases	6	53	39	22	183	134	33	258	185
	Natural Gas	356,102	255,642	250,639	357,469	256,892	253,842	535,979	361,702	350,678
	Other Petroleum Products	5,724	4,356	4,403	34,304	26,121	26,391	51,434	36,778	36,459
	Motor Gasoline	102	202	194	533	1,053	1,011	799	1,483	1,397
	Residual Fuel Oil	0	4	0	0	23	0	0	32	0
<b>Electrical Power Generation</b>										
<i>Total Electricity Consumed</i>		5,913	6,247	6,320	20,174	21,315	21,562	30,248	30,011	29,788
<i>Fuel Consumed to Produce Electricity</i>										
	Coal	398	410	409	6,087	5,958	5,976	9,127	8,389	8,256
	Distillate Fuel Oil	538	489	568	3,134	2,850	3,307	4,699	4,013	4,569
	Natural Gas	39,284	39,732	41,738	39,506	39,963	42,344	59,234	56,268	58,497
	Residual Fuel Oil	696	306	232	4,377	1,923	1,462	6,563	2,708	2,020
<b>Transportation</b>										
<i>All Petroleum Products</i>		46,407	36,917	35,087	261,179	207,461	197,244	391,604	292,104	272,489
	Distillate Fuel Oil	7,509	7,391	7,621	43,741	43,053	44,395	65,584	60,618	61,331
	Jet Fuel	31,940	22,726	20,851	181,100	128,857	118,226	271,536	181,430	163,327
	Liquefied Petroleum Gases	4	1	2	14	3	8	21	4	11
	Lubricants	83	77	73	503	469	445	754	660	615
	Motor Gasoline	6,583	6,518	6,312	34,348	34,013	32,934	51,500	47,890	45,498
	Residual Fuel Oil	12	34	69	74	212	436	111	298	602
	Aviation Gasoline	277	169	159	1,399	854	801	2,098	1,202	1,107
<i>Non-petroleum Products</i>		2,874	4,039	4,057	3,426	5,867	6,017	5,137	8,261	8,312
	Fuel Ethanol	219	735	748	761	2,547	2,541	1,141	3,586	3,510
	Natural Gas	2,655	3,304	3,309	2,665	3,320	3,476	3,996	4,675	4,802

Source: Energy data from Energy Information Administration, State Energy Data System: 1960-2012

Population data from U.S. Census Bureau, Population Division

Notes: Other Petroleum Products include asphalt and road oil, kerosene, lubricants, aviation gasoline blending components, crude oil, petrochemical feedstock, motor gasoline blending components, miscellaneous petroleum products, natural gasoline, petroleum coke, plant condensate, pentanes plus, still gas, unfinished oils, unfractionated stream, and waxes.

Physical units are reported in the following units: coal is measured in thousands of short tons, natural gas in millions of cubic feet, electricity in millions of kilowatt hours, and petroleum products in thousands of barrels.

Fuel Ethanol includes denaturant in the physical units analysis, but excludes denaturant in the BTU analysis.

**Table 3. Alaska Distillate Fuel Consumption Estimates**

	<b>2000</b>	<b>2005</b>	<b>2010</b>	<b>2011</b>
<b>Residential</b>				
No 1 Distillate	36,307	36,205	36,914	32,421
No 2 Distillate	39,832	31,746	23,930	23,407
<i><b>Residential Total Distillate</b></i>	<b>76,139</b>	<b>67,951</b>	<b>60,843</b>	<b>55,829</b>
<b>Commercial</b>				
No 1 Distillate	16,120	17,677	39,693	38,473
No 2 Fuel Oil	19,526	5,729	8,511	8,846
No 2 Ultra-Low Sulfur Diesel (0-15ppm)	0	0	15,436	22,203
No 2 Low Sulfur Diesel (15-500ppm)	6,167	3,087	11,585	208
No 2 High Sulfur (501+ ppm)	8,953	15,709	2,587	123
Other Distillate	31	0	3	0
<i><b>Commercial Total Distillate</b></i>	<b>50,796</b>	<b>42,201</b>	<b>77,815</b>	<b>69,853</b>
<b>Industrial</b>				
No 1 Distillate	16,120	13,427	11,017	28,169
No 2 Fuel Oil	6,250	210	1,605	958
No 2 Ultra-Low and Low Sulfur Diesel	30	4,295	17,057	36,439
No 2 High Sulfur	15,301	26,919	6,480	138
<i><b>Industrial Total Distillate</b></i>	<b>37,701</b>	<b>44,850</b>	<b>36,159</b>	<b>65,704</b>
<b>Electrical Power Generation</b>				
<i><b>Electrical Generation Total Distillate</b></i>	<b>46,232</b>	<b>57,455</b>	<b>37,048</b>	<b>30,127</b>
<b>Off-Highway</b>				
No 2 Diesel -- Construction	10,815	14,050	11,654	8,239
No 2 Diesel -- Other Use	10,266	3,800	2,363	1,888
<i><b>Off-Highway Total No 2 Diesel</b></i>	<b>21,080</b>	<b>17,850</b>	<b>14,017</b>	<b>10,126</b>
<b>On-Highway</b>				
<i><b>Total On-Highway No 2 Diesel</b></i>	<b>90,999</b>	<b>172,595</b>	<b>166,599</b>	<b>169,158</b>
<b>Military</b>				
No 2 Diesel	9,451	14,233	6,369	7,234
<i><b>Total Military Distillate</b></i>	<b>9,524</b>	<b>14,401</b>	<b>11,691</b>	<b>12,409</b>
<b>Oil Company</b>				
<i><b>Total Oil Company Distillate</b></i>	<b>40,834</b>	<b>17,515</b>	<b>48,241</b>	<b>56,554</b>
<b>Total Distillate Sales</b>	<b>506,230</b>	<b>563,020</b>	<b>558,559</b>	<b>594,620</b>

Source: Energy Information Administration, Distillate Fuel Oil and Kerosene Sales by End Use

Note: Values are given in thousands of gallons

While statewide energy consumption patterns are of interest in their own right, the proposed contract will have little impact on either the consumption of, or the price of, non-crude based energy products such as natural gas. If the proposed contract is to have any impact on price or consumption patterns in the state, it will most prominently impact price and availability of

gasoline, diesel, jet fuel, and perhaps home heating oil. Notably, the second most common fuel used by Alaskans in their residence in 2011 was distillate fuel oil in the form of heating oil, with a per capita average consumption of 11.1 mmbtu per year.

Similarly, in the commercial sector, the second most common fuel was distillate fuel oil, in the form of both diesel and heating oil. Overall, the Alaska commercial sector consumed over 10.1 trillion BTUs of distillate fuel oil in 2011. In the same year, the commercial sector in Alaska consumed 666 billion BTUs of gasoline.

Although energy in the industrial sector was dominated by natural gas (83.1 percent of BTUs consumed by the industrial sector), the next two most common fuels on a BTU basis were petroleum products (i.e., other petroleum products and distillate fuel oil). While the residential, commercial, and industrial sectors all rely on petroleum products, the utilization of refined petroleum products is greatest in the transportation sector. In 2011, Alaskans (and those in Alaska) consumed just over 197 trillion BTUs of petroleum-based energy to facilitate their travels. Of these 197 trillion BTUs, 59.9 percent would be consumed in the form of jet fuel, 22.5 percent would be consumed as distillate fuel oil, and 16.4 percent would be consumed as gasoline.

### **C. Commercial Refining In Alaska**

Alaska currently has six in-state refineries, operated by five organizations: BP, ConocoPhillips, Flint Hills Resources Alaska, Petro Star, and Tesoro. Of these six refineries, four produce refined petroleum products for the consumer market.<sup>12</sup> The four in-state refineries producing refined petroleum products for the consumer market are Tesoro's Kenai refinery, FHR's North Pole refinery, and Petro Star's North Pole and Valdez refineries. All four of these refineries refine Alaskan crude and supply the Alaska retail market with refined petroleum products.

Unlike the other three commercial refineries in Alaska, Tesoro's Kenai refinery is not tied into the Trans-Alaska Pipeline System (TAPS). Being located off of TAPS impacts operations in two central ways. First, rather than drawing feedstock directly from TAPS, feedstock at the Kenai refinery arrives over water. The ability to accept waterborne cargos means that, unlike the other three commercial refineries in the state, the Kenai refinery can source crude from the world market, the Valdez Marine Terminal, or the Cook Inlet. While importation of non-Alaskan crude is possible at the Kenai refinery, it is a relatively rare event. Over 90 percent of the crude refined in the Kenai facility is Alaskan crude, both Alaska North Slope and Cook Inlet crudes. Fewer than three cargos of foreign (non-US) crude were imported in the past year.

The second key impact that being located away from TAPS has on operations at the Kenai refinery is its inability to re-inject unprocessed portions of a barrel of crude back into the pipeline. The Kenai refinery, like all commercial refineries in Alaska, does not possess the technological sophistication to transform every portion of a barrel into refined product. The portion of a barrel not refined into saleable product, the so-called "heavy ends," must be loaded onto a ship and transported to another Tesoro facility on the United States West Coast for further processing.

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<sup>12</sup> BP and ConocoPhillips currently operate small topping plants on the North Slope that primarily support oil industry operations.

Tesoro's Kenai refinery has a nameplate throughput capacity of 72,000 barrels per day, but actual throughput is highly seasonal and well below the nameplate capacity. During the summer months, when demand for refined product is at its peak, the Kenai refinery processes approximately 65,000 barrels per day of crude, declining to approximately 45,000 barrels per day during the winter months. Overall, about one-quarter (24 percent) of the product refined at the Kenai refinery is gasoline, another 35 percent is jet fuel, 11 percent is ultra-low and low sulfur diesel fuel, and 30 percent are "heavy ends."

The majority of the end-use products refined at the Kenai facility will be consumed by the Alaska market. Nearly all of the jet fuel produced at the Kenai refinery will be transported via pipeline to Anchorage, with the majority of Anchorage-bound jet fuel consumed at Ted Stevens Anchorage International Airport. Tesoro will supply ultra-low sulfur diesel and gasoline to both Southcentral and Interior markets, with product transported to the Interior via the road system. Although the Kenai refinery supplies ultra-low sulfur diesel and gasoline to the Interior market, none of the heating oil consumed in the Interior is refined by Tesoro. Stemming from its access to waterborne transportation, although rare in occurrence, Tesoro also retains the ability to ship refined product out of Alaska.

FHR's North Pole refinery is strategically located on TAPS and relies on the pipeline for all feedstock refined in the facility. At present, FHR's North Pole refinery draws approximately 82,000-84,000 barrels of Alaska North Slope crude oil (ANS) from TAPS per day. From these 82,000-84,000 barrels, the refinery will produce approximately 22,000-25,000 barrels of refined product. All crude and constituents that are not transformed into refined product are injected back into TAPS.<sup>13</sup> At present throughput volumes, the FHR North Pole refinery produces approximately 672,000 gallons of jet fuel per day, 143,000 gallons of gasoline per day, 41,000 gallons of home heating fuel per day, and 68,000 to 194,000 gallons per day of product consisting of HAGO, LAGO, naphtha, asphalt, refining fuel, and a small volume of high-sulfur diesel.

All of this nearly one million gallons per day of refined petroleum products produced at FHR's North Pole refinery will remain in the Alaska market. Currently, FHR ships approximately 680,000 gallons of refined product per day from the Interior to Anchorage on the Alaska Railroad, with the vast majority of the southbound product being jet fuel destined for Ted Stevens Anchorage International Airport. In addition to the southward movement of refined product, FHR also rails roughly 230,000 gallons of ultra-low sulfur diesel and gasoline blendstock north into the Interior each day. In addition to its production and movement of refined product, FHR also owns 30.7 million gallons of product storage capacity in Anchorage and 19.3 million gallons of product storage in Fairbanks.

Like FHR's North Pole refinery, Petro Star's North Pole and Valdez refineries both exclusively refine ANS drawn from TAPS. Petro Star's North Pole refinery has a maximum throughput

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<sup>13</sup> The "middle" of a barrel of crude is the most valuable portion of a barrel, particularly for refineries possessing the technological sophistication of Alaska's TAPS-dependent refineries. The TAPS-dependent refineries transform the middle of a barrel into refined product and return the light- and heavy-ends to TAPS. The refiner then pays a fee to the other shippers on TAPS for degrading the value of the TAPS stream.



capacity of 22,000 barrels per day, while the Valdez refinery has a maximum throughput of 60,000 barrels per day. Each of these refineries will refine between 25 and 30 percent of the crude drawn from TAPS into refined product. The remaining 70 to 75 percent of the volume drawn from TAPS will be re-injected into the pipeline.

In a typical year, roughly one-third of the refined product produced by Petro Star will be ultra-low and low sulfur diesel, nearly fifty percent will be jet fuel, and the remainder will consist primarily of home heating fuel. The majority of the refined product produced by Petro Star will remain in Alaska. Petro Star supplies jet fuel to both military and civilian customers, with the majority of the civilian jet fuel being consumed at Ted Stevens Anchorage International Airport. Petro Star also supplies between fifty and sixty percent of the home heating fuel that is sold in the Interior.

#### **D. RIK's Role in Alaskan Commercial Refining**

The State of Alaska's RIK has played a critical role in the development and continued operation of the Alaskan refining sector. All four commercial refineries currently operating in the state have, at various points in time, had a RIK contract. Three of these four refineries refined royalty oil, while a royalty contract backstopped financing for the fourth.

Most salient for the current discussion, the state has a long history selling its North Slope RIK to the Tesoro refinery in Nikiski. The state supplied the Kenai refinery with ANS crude between July 1980 and January 1982 and again between January 1983 and December 1998.<sup>14</sup> In total, the Kenai refinery purchased 230 million barrels of Alaska North Slope royalty oil under seven separate RIK contracts. Under the terms of the proposed Tesoro RIK contract, Tesoro has the option to purchase no oil from the State if the economic provisions of the contract depart from those available from other crude suppliers in the Alaska market. Insofar as Tesoro chooses not to exercise this option, it suggests that the State has offered terms more attractive than those that could be secured from the private market. In return for these attractive terms, the people of Alaska enjoy the economic, social, and labor market benefits of petroleum products refined from Alaskan crude by Alaskans in Alaska.

Similarly, the State has supplied the North Pole refinery with royalty oil for the past 33 consecutive years. Between November 1979 and June 2012, the State sold over 472 million barrels of Alaska North Slope crude to the various owners of the North Pole refinery currently operated by FHR. The current ten-year contract, expiring in 2014, with FHR has generated mutual benefits for both FHR and the people of Alaska.<sup>15</sup> The State has just awarded a new contract with FHR which will continue deliveries for an additional five-year term ending March 31, 2019. Like the proposed Tesoro contract, under the terms of FHR's ten-year royalty oil contract and its new contract, FHR has the option to purchase no oil from the State if the economic provisions of its contracts depart from those available from other crude oil suppliers in the Alaska market.

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<sup>14</sup> The State also supplied Tesoro's Kenai refinery with 81 million barrels of Cook Inlet royalty crude between 1970 and 1985.

<sup>15</sup> See Alaska Department of Natural Resources. February 12, 2004. "Best Interest Finding and Determination for the Sale of Alaska North Slope Oil to Flint Hills Resources Alaska, LLC" for a full discussion of the benefits derived from the current contract. Later sections more fully develop the benefits associated with the proposed contract

The historical relationship between the sale of RIK and Petro Star's North Pole refinery is similar to the role played by royalty oil in FHR's North Pole refinery and Tesoro's Kenai refinery. The State sold North Slope royalty oil to Petro Star's North Pole refinery from December 1986 through December 1991. In total, the state supplied Petro Star's North Pole refinery with just over 3 million barrels of North Slope royalty oil under this 5 year contract.

Perhaps the most interesting role played by a royalty oil contract was the 1992 contract with Petro Star Valdez Joint Venture. In mid-1991, Petro Star and its joint venture partners contacted DNR in order to secure a royalty oil contract for a proposed refinery in Valdez. DNR ultimately negotiated a ten-year contract with Petro Star and its joint venture partners to supply the proposed Valdez refinery with up to 30,000 barrels per day of royalty oil. With this contract in hand, the joint venture secured the needed financing and constructed the Valdez refinery. The royalty contract helped the joint venture secure financing by demonstrating guaranteed access to an on-going supply of feedstock. Ultimately, Petro Star Valdez Joint Ventures never took possession of a single barrel of royalty crude under the ten-year contract, preferring, rather, to secure its feedstock from the private market.

#### **E. Alaska's Fiscal Condition is Wedded to Oil and Gas**

Both the economic and the fiscal health of Alaska are wedded to oil and gas. In 2011, the total market value of all goods and services produced in Alaska totaled \$51.4 billion. Approximately, one out of every five of those dollars was generated by oil and gas.<sup>16</sup> Oil and gas account for an even larger share of revenues received by the State of Alaska. In fiscal year 2012, 93 percent of the state's general fund unrestricted revenue came from oil and gas.<sup>17</sup> In the same fiscal year, Alaska generated \$2.95 billion from oil and gas royalties.<sup>18</sup>

Just as our current economic and fiscal health is deeply tied to oil and gas, so is our future. The Department of Revenue forecasts that at least 87 percent of the state's general purpose unrestricted revenue will be derived from oil and gas revenue through 2021. The importance of this substantial revenue source is underscored by recent Office of Management and Budget projections of Alaska's fiscal health. Under the scenarios presented in the FY 2014 10-year Plan, the state is expected to experience a budget shortfall during fiscal year 2013. Although the results depend on the assumptions used to generate the projections, three of the four scenarios presented by the Office of Management and Budget forecast budget shortfalls to persist from fiscal year 2015 through fiscal year 2023.<sup>19</sup>

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<sup>16</sup> Gross State Product data from the United States Department of Commerce, Bureau of Economic Analysis (accessed on 8/23/2012, at <http://www.bea.gov/iTable/iTable.cfm?ReqID=70&step=1&isuri=1&acrdn=1>). In 2011, oil and gas GSP was not disaggregated from mining sector GSP. Between 2000 and 2010, oil and gas accounted for an average of 80.1% of mining GDP. If 2011 follows decennial averages, oil and gas generated \$10.1b. If oil and gas fell at a decennial low (71.5%) as a proportion of mining industry GSP, oil and gas generated \$9.0b in 2011.

<sup>17</sup> Alaska Department of Revenue – Tax Division, Fall 2012 Forecast, p. 13

<sup>18</sup> <http://dog.dnr.alaska.gov/index.htm>

<sup>19</sup> FY 2014 10-Year Plan, State of Alaska, Governor's Office of Management and Budget. All four projected scenarios indicate a budget shortfall in FY 2013. The balance of the State's total reserves is projected to remain positive through FY 2022 in all four projected scenarios.

## **F. RIK Oil Sale Procedure and Schedule**

Before executing a contract for the disposition of RIK to relieve market conditions, the commissioner must find that the disposition is in the best interests of the State (11 AAC 03.010). The commissioner establishes the terms, conditions, and methods of disposition of the State's RIK oil (11 AAC 03.010). There exists a statutory presumption that taking RIK (AS38.05.182(a)) with sale to in-state customers (AS38.05.183(d)) accomplished through competitive means (AS38.05.183(a)) is in the state's best interest. That being said, the state has many competing interests and the state's best interest may be served through a non-competitive disposition of the state's royalty in kind.

Given the statutory presumption that the State's best interest is served through a competitive disposition of royalty oil to in-state customers, DNR a year ago first sought to determine the level of interest on the part of in-state producers and refiners in the purchase of the State's RIK. To gauge the level of interest in the market, DNR distributed an informal solicitation of interest in RIK oil in mid-August 2012.<sup>20</sup> Beyond simply gauging the market's interest in RIK oil, this solicitation outlined the state's desire to obtain "special commitments" that would meaningfully address the high cost of energy in Alaska. This informal solicitation of interest was directly transmitted to six organizations: BP, ConocoPhillips, ExxonMobil, Petro Star, FHR, and Tesoro. Of these six, three possess commercial in-state refining capabilities. Beyond directly transmitting the informal solicitation of interest to these six organizations, the state also informed the market of its intent to sell RIK through announcements in both industry-specific and general media.<sup>21</sup>

The informal solicitation generated four responses affirming interest in purchasing the State's RIK. These affirmative responses were from BP, ConocoPhillips, FHR, and Tesoro. DNR received no indications of interest outside of these four parties; notably, Petro Star as owner of two commercial refineries in Alaska chose not to respond. Subsequent discussions with the interested parties that did reply revealed that BP and ConocoPhillips would both require the ability to export RIK oil from the state. In order to permit the export of RIK crude, under 11 AAC 03.010, the commissioner would be required to "determine in writing that the oil, gas, or associated substances subject to export are surplus to present and projected intrastate domestic and industrial needs."<sup>22</sup> Such a determination would be inconsistent with the informal solicitation of interest distributed by DNR which outlines that the State is interested in contract terms meant to "mitigate the high cost of consumer petroleum products in Alaska and address the need for a greater supply of crude oil for use in the state."

Thus, in response to its solicitation of interest, DNR received only two affirmative responses, FHR and Tesoro, that could potentially satisfy the criteria set out in its informal solicitation of interest. Further discussion with the two parties who expressed interest consistent with the State's goals indicated that competitive bidding would be quite unlikely to maximize total value

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<sup>20</sup> Letter from WC Barron, Director, Division of Oil and Gas, August 13, 2012. Subject: "Non-binding Solicitation of Interest—North Slope Royalty In-Kind Oil Supply."

<sup>21</sup> Anchorage Daily News, Aug 19, 2012. Accessed at <http://www.adn.com/2012/08/19/2593940/state-gauging-interest-in-royal.html>.

Petroleum News, Aug 19, 2012. Accessed at <http://www.petroleumnews.com/pnads/773411753.shtml>

<sup>22</sup> AS 38.05.183(d) place a similar requirement on the commissioner.

to the State. First, as can be inferred by examining the recently enacted FHR contract and the proposed Tesoro contract, the volume of royalty oil desired by the two respondents differed significantly. Tesoro was interested in one-sixth to one-half of the royalty oil volume desired by FHR. Second, the term of the contract desired by the two in-state respondents differed significantly. Tesoro sought a contract of one year or less, while FHR sought a decade-long contract. Third, the two in-state respondents desired to use royalty oil in different fashions. FHR was interested in using royalty oil as a year-round anchor crude contract, while Tesoro was interested in using the volumetric optionality contained in the proposed contract to accommodate seasonal fluctuations in demand for refined product. Taken as a whole, these differing objectives and requirements would have made structuring a competitive auction of interest to both in-state respondents difficult. Moreover, any such competitive auction would have, in DNR's expectation, resulted in diminished value for the State.

In light of the very small number of interested parties and the low probability that competitive bidding would maximize total State value, the commissioner determined that seeking a non-competitive, negotiated agreement was in the State's best interest, and therefore, waived competitive bidding. Furthermore, given Tesoro's need for a royalty contract lasting one year or less to meet in-state demand for refined product as well as the commissioner's estimation that the sale price throughout the term of the proposed contract will be higher than the volume-weighted average of the current reported netback prices filed by the lessees, the commissioner seeks to make this disposal to relieve market conditions.

**Consistent with his obligations under 11 AAC 03.040 and 11 AAC 03.020, the Preliminary Best Interest Finding represented the commissioner's formal notification to the Alaska Royalty Oil and Gas Development Advisory Board of his intent to waive competitive bidding and dispose of royalty oil to relieve market conditions.**

Furthermore, under AS 38.06.050(a) the commissioner submitted the Preliminary Best Interest Finding to the Alaska Royalty Oil and Gas Development Advisory Board as notification under 11 AAC 03.030 and 03.040.

The commissioner also considered the criteria listed in AS 38.05.183(e) and AS 38.06.070(a). The commissioner's analysis of these criteria is discussed in detail in following sections. As outlined in 11 AAC 03.060(a), the RIK contract must be awarded to the prospective buyer whose proposal offers maximum benefit to the citizens of the State.

Notice of the publication of the Preliminary Finding and Determination and an invitation for public comment appeared in several newspapers including the Anchorage Daily News, the Fairbanks News-Miner, the Juneau Empire, and the Kenai Peninsula Clarion. A copy of the proposed Preliminary Best Interest Finding and the proposed RIK contract was made available from the State by contacting:

Division of Oil and Gas  
Attn: Kevin Banks  
550 W. 7th Ave, Suite 800  
Anchorage, Alaska 99501



Phone: (907) 269-8781  
E-mail: [kevin.banks@alaska.gov](mailto:kevin.banks@alaska.gov)

and it was also published on the Division of Oil and Gas website at:

<http://dog.dnr.alaska.gov/>

Formal written notice of the State's intent to sell royalty oil to Tesoro and informing the recipients of the publication of the Preliminary Finding and Determination, was given directly to the parties listed in Table 4. Included among those listed below are North Slope lessees, local public officials, and the other in-state refineries. Members of the Alaska Legislature were also notified.

**Table 4. Parties Receiving Formal Written Notices**

Anadarko Petroleum Corporation ATTN: AK Land Supervisor PO Box 1330 Houston, TX 77251	ASRC Exploration, LLC 3900 C Street, STE 801 Anchorage, AK 99503	BP Exploration (Alaska) Inc. ATTN: Land Manager - Alaska PO Box 196612 Anchorage, AK 99519
Chevron USA, Inc. PO Box 4791 Houston, TX 77210 Attn: Alicia Dobelman-Church, Revenue Section	ConocoPhillips Alaska, Inc. ATTN: Land Manager PO Box 100360 Anchorage, AK 99510	Doyon, Limited ATTN: SR VP Lands & Natural Resource 1 Doyon Place, STE 300 Fairbanks, AK 99701
Eni Petroleum US, LLC 1201 Louisiana, STE 3500 Houston, TX 77002	Eni US Operating Co., Inc. 1201 Louisiana, STE 3500 Houston, TX 77002	ExxonMobil Alaska Production, Inc. ATTN: Land Resources Manager PO Box 196601 Anchorage, AK 99519
ExxonMobil Alaska Production, Inc. ATTN: Land Resources Manager PO Box 2024 Houston, TX 77525	Murphy Exploration (Alaska), Inc. 16290 Katy Frwy., STE 600 Houston, TX 77094	Nana Regional Corporation, Inc. ATTN: Vice President Minerals 1001 E. Benson Blvd Anchorage, AK 99508
Petro-Hunt, LLC 1601 Elm Street, STE 3900 Dallas, TX 75201	Pioneer Natural Resources Alaska, Inc. 700 G Street, STE 600 Anchorage, AK 99501	Savant Alaska, LLC 7501 Village Square Drive, STE 102 Castle Rock, CO 80108

Mayor Luke Hopkins  
Fairbanks North Star Borough  
809 Pioneer Rd,  
Fairbanks, AK 99701

Mayor Dan Sullivan  
Municipality of Anchorage  
632 W 6th Avenue, Suite 840,  
Anchorage, AK 99501

Mayor Bryce Ward  
City of North Pole  
125 Snowman Lane  
North Pole, AK 99705

Mayor Jerry Cleworth  
Fairbanks City Hall  
800 Cushman Street  
Fairbanks, AK 99701

Mayor Pat Porter  
City of Kenai  
210 Fidalgo Avenue  
Kenai, Alaska 99611

North Slope Borough  
Mayor Charlotte E. Brower  
P.O. Box 69  
Barrow, AK 99723

Doug Chapados,  
President/CEO  
Petro Star Inc.  
3900 C Street, STE 802  
Anchorage, AK 99503

Brad Razook, President/CEO  
Flint Hills Resources  
PO Box 2917  
Wichita, Kansas 67201-2917

Joe Beattie  
Flint Hills Resources  
1510, 111 – 5<sup>th</sup> Ave SW  
Calgary, Alberta T2P 3Y6  
Canada

A copy of the proposed final RIK oil sale contract and the State's informal letter of solicitation are attached as exhibits to this Final Finding and Determination.

### **III. Discussion of Contract Terms**

#### **A. Price**

The pricing strategy in the proposed sale is meant to arrive at an equitable value for state's royalty oil at the point where ownership is transferred to Tesoro. In order to determine the monetary consideration the State receives for its royalty oil, the proposed sale uses a netback valuation strategy. The netback value in the proposed sale is meant to represent the value of ANS sold on the United States West Coast (USWC) as it enters the Trans-Alaskan Pipeline System (TAPS) or the regulated pipelines upstream of TAPS Pump Station No. 1.

Each element of the netback value is discussed in greater detail below, but succinctly, there are five key elements to the netback value. The netback value begins by determining the value of royalty oil where the overwhelming majority of ANS is sold—the USWC. In order to account for the difference in value associated with transactions on the USWC versus Valdez, a location differential is subtracted (netted) out. Next, to account for the pipeline tariffs to ship royalty oil between the point of delivery on the North Slope and the Valdez Marine Terminal, pipeline tariffs are deducted. Fourth, an adjustment is made for the difference in quality between the royalty oil from the field in which the oil originated and the quality of the TAPS common stream received by the buyer. Finally, an adjustment is made to account for the value impact caused by the relatively small difference in the metered volume of oil put into the pipeline at TAPS Pump Station No. 1 and the metered volume of oil delivered to Valdez Marine Terminal. The per-barrel monetary consideration received by the state is represented formulaically as:

$$\text{ANS Spot Price} - \$1.95 - \text{Tariff Allowance} \pm \text{Quality Bank Adjustment} - \text{Line Loss}$$

## **1. ANS Spot Price**

“ANS Spot Price” is defined as the monthly average of the daily high and low assessments for the month for ANS traded at the USWC as reported by Platts Oilgram Price Report and Reuters online data reporting service.<sup>23</sup> Industry relies on these price reporting services to provide an assessment of the prevailing market value of ANS. The average of Platt’s and Reuters forms the basis for the ANS spot price in the existing RIK sales contract and the prevailing value calculation used by Alaska’s Department of Revenue (15 AAC 55.171 (m)). Given their common use by both the private and public sectors, Platt’s and Reuters provide one credible estimate of the current market value of ANS.

If DNR or Tesoro determines that the true market value of ANS is no longer accurately reflected by the monthly average of the Platts and Reuters daily mid-point assessment, then a good faith effort will be made to arrive at a mutually agreeable alternative source to establish the ANS Spot Price. If such a mutually agreeable alternative source cannot be identified, “the State will select the alternative source that most reliably represents the price for ANS.” The ANS Spot Price calculation does not include days in which either of the two reporting services does not assess the value of ANS on the USWC.

## **2. \$1.95 (“RIK Differential”)**

The \$1.95 term in the price structure serves a dual role. First, the term is meant to capture the difference in the value of ANS sold on the USWC and at the Valdez Marine Terminal. The per-barrel price of ANS is lower in Valdez than the USWC because of both competitive and mechanical forces. Mechanically, a barrel destined for the USWC transacts at a lower price in Valdez because the owner foregoes the cost of transportation to the USWC. Competitively, there are only four entities that have the capacity to lift oil from the Valdez terminal. These firms may have the ability to exercise what economists call market power to negotiate contracts for oil with a value at the Valdez terminal that is less than the USWC market value minus the marginal cost of transportation.

The second purpose of the \$1.95 term is the preservation of DNR’s statutory and regulatory obligation to secure a price for its RIK that is, in DNR’s estimation, greater than the volume weighted average price of RIV. While simple in statement, achieving this standard is challenging due to the way lessees report the RIV price. The RIV valuation methodology, i.e., the final value of the State’s RIV, is defined by the lease contract provisions or the many royalty settlement agreements that further refined these provisions. In some cases, the price received by the State for RIV is not known until the lessees’ royalty filing is audited several years after the initial filing or when the lessees refile their royalty reports. Thus, in order to satisfy its mandate, the State must choose a price term when selling its RIK that either directly references the volume-weighted average price of RIV subject to retroactive adjustment when the lessees refile, or anticipate the monthly difference between the reported and final price of RIV.

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<sup>23</sup> The ANS Spot Price in the recently enacted FHR was the arithmetic average of Platts, Telerate, and Reuters. However, on August 2, 2013, Telerate ceased publishing an ANS USWC spot price. Under the terms of the FHR contract, after the loss of Telerate, the ANS Spot Price in the FHR contract becomes the simple average of Platts and Reuters. Put differently, both the recently enacted FHR contract and the proposed Tesoro contract have the same ANS Spot Price.

As was the case in the negotiation of the recent FHR royalty oil contract, during the negotiations that resulted in the proposed contract, DNR and Tesoro wrestled with the problem posed by potential retroactive adjustments long after DNR had delivered its royalty oil to Tesoro. Indeed, the use of a price structure that does not directly reference RIV evolved from both FHR and Tesoro's distinct aversion to retroactive adjustment. With the notable exception of the FHR ten-year sales contract expiring in 2014 and its new five-year contract, most past RIK sale agreements contained price provisions that allowed DNR to retroactively adjust the price of royalty oil when the lessees filed their final RIV value. Such retroactive adjustments complicate the refinery's ability to price refined products when they are sold. To overcome this, Tesoro has sought contract provisions that, to the extent possible, circumscribe the ability of DNR to adjust prices for oil already delivered. This contract includes a RIK Differential that the DNR and Tesoro mutually agreed would mitigate such retroactivity and satisfy the State's legal obligation. Put differently, the use of a price provision that does not directly reference RIV was not a unilateral imposition by DNR, but rather was Tesoro's preference.

### **3. Tariff Allowance**

The Tariff Allowance provides an additional deduction from the ANS Spot Price equal to sum of the ownership-weighted average minimum interstate TAPS tariff filed with the Federal Energy Regulatory Commission (FERC), plus any tariffs paid by Tesoro for shipment of royalty oil on pipelines from fields (units) on the North Slope upstream of Pump Station No. 1. Under the proposed contract, DNR has the option of providing royalty oil from any ANS unit,<sup>24</sup> and the additional allowance for tariffs paid on pipelines upstream of TAPS Pump Station No.1 is intended to match a similar deduction taken by the lessees on RIV from those units. Because Tesoro is reimbursed for the cost incurred to ship oil from the units upstream of TAPS Pump Station No.1, DNR has the freedom to maximize value by judiciously nominating royalty oil from different combinations of North Slope units.<sup>25</sup>

The Tariff Allowance is one of the elements of the price term in the proposed contract that is subject to retroactive adjustments. The Tariff Allowance may be adjusted if the tariff used in the calculation of the Tariff Allowance is changed (or subject to a refund order) by FERC at a later date.

### **4. Quality Bank Adjustment**

The Quality Bank Adjustment is a positive or negative number that reflects the value of different streams of crude oil that are shipped in TAPS. The Quality Bank is administered by the owners of TAPS and regulated by the FERC. Oil tendered for shipment at TAPS Pump Station No. 1 is produced from several different production units and the shippers of oil of lesser value must reimburse the shippers of oil of greater value for the degradation of value of the comingled stream—the value that the shippers receive when they sell the oil. Similarly, the refineries in

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<sup>24</sup> Unit is a term defined in regulation (11 AAC 83.395) as “a group of leases covering all or part of one or more potential hydrocarbon accumulations, or all or part of one or more adjacent or vertically separate oil or gas reservoirs, which are subject to a unit agreement.” In common use, the term “unit” may sometimes be equated to the term “field.”

<sup>25</sup> This capability provides further assurance that DNR will achieve its statutory and regulatory obligation to secure a price for RIK that is at least equal to the volume weighted average of RIV. See also Section III.C. below.

North Pole and Valdez also take oil out of TAPS, extract the valuable components of the oil in manufacturing petroleum products, and re-inject into the pipeline a mixture of lower valued components. The return streams from the refineries bear a quality bank payment to each of the owners of the passing TAPS stream.

The Quality Bank Adjustment in the proposed contract is calculated as the difference of the value of royalty oil where it is tendered at the point of sale—either at TAPS Pump Station No. 1 or at the entry into a pipeline upstream of TAPS Pump Station No. 1—and the value of the oil in TAPS downstream of the Petro Star Valdez refinery. The proposed contract provides an example for how the Quality Bank Allowance is calculated for RIK oil produced at Lisburne. The Quality Bank Allowance is another element of the price term in the proposed contract that is subject to retroactive adjustments. DNR may readjust the Quality Bank Allowance if the Quality Bank administrator recalculates any of the values used in the calculation of the Quality Bank Allowance.

## **5. Line Loss**

Line loss is a per barrel amount that is calculated as

$$0.009 \times (\text{ANS Spot Price} - \$1.95 - \text{Tariff Allowance} \pm \text{Quality Bank Adjustment})$$

The line loss provision accommodates the impact on value caused by the small difference between the metered volume delivered into TAPS at Pump Station No. 1 and the metered volume delivered to the Valdez Marine Terminal.

## **B. Quantity**

DNR seeks to sell a maximum of 15,000 barrels per day of royalty oil through the proposed sale. As discussed above, the maximum volume of oil sold under the proposed sale is set such that it is highly likely the State will be able to fulfill its quantity obligations. If Tesoro nominates the maximum under the proposed contract, this sale will account for just over 23 percent of the State's total forecast volume of North Slope royalty oil during the period of the contract. However, DNR reserves the right, at the commissioner's discretion, to limit the quantity of oil sold in the proposed sale such that the total royalty oil committed to FHR and Tesoro is not more than 95 percent of the total monthly North Slope royalty oil.

The number of barrels per day outlined above represents an upper bound on the actual amount of royalty oil delivered daily under the proposed contract. On the supply side, the number of barrels of royalty oil disposed of under this contract is limited by the State's agreements with its lessees – the State's ability to nominate royalty oil is bound by production – and the commissioner's discretion to nominate no more than 95 percent of total monthly North Slope royalty oil under this contract and the State's contract with FHR.

On the demand side, the delivered volume of royalty oil may be reduced through a quantity adjustment provision. The proposed contract allows Tesoro to nominate a volume of oil that falls inside of an agreed upon nomination range, initially set at a minimum of 5,000 barrels per



day and a maximum of 15,000 barrels per day. This allows Tesoro to adjust its royalty purchase on a monthly basis in a fashion that will allow Tesoro to purchase a volume of royalty oil that is consistent with its expectations about alternative crude oil supplies from private sellers and future demand for its refined products.

In addition to the flexible quantity provision contained in the proposed contract, the buyer also retains the ability to manage for planned refinery turnarounds—extensive and routine maintenance projects that could temporarily shut-in production—and provide an additional mechanism to terminate the contract. If Tesoro fails to nominate or nominates zero barrels for three consecutive months, then the contract terminates. Thus, Tesoro can use this mechanism to terminate the contract and pursue alternative crude supply agreements.

### **C. General Discussion of Price and Quantity Terms**

On the whole, the price and quantity terms in the proposed contract offer attractive terms for Tesoro while also protecting the State's interests. With respect to the State's interests, as discussed above, DNR has a statutory and regulatory duty to ensure that RIK generates revenue at least as great as what would have been realized for the average barrel of RIV. As discussed in detail in Section IV. A. below, DNR's analysis indicates that the proposed contract will meet this standard. It should also be noted that the per-barrel price provision contained in the proposed contract is identical to that in the recently enacted FHR contract with one key exception, the RIK Differential. In the recently negotiated FHR contract, the RIK Differential was set at \$2.15. In the proposed contract with Tesoro, the RIK Differential was set at \$1.95. As argued in the best interest finding for the recent FHR contract,<sup>26</sup> the DNR expects that the FHR contract will achieve RIV-RIK price parity. As developed in greater detail below, given that the per-barrel price consideration secured from Tesoro exceeds that received from FHR by twenty cents per barrel, the proposed Tesoro contract is estimated to generate revenues that exceed the volume-weighted RIV revenue.

The proposed contract also allows the realization of additional revenues by preserving DNR's ability to arbitrage its royalty take. While for the purposes of exposition this document has treated all RIV barrels as fully substitutable, this is not absolutely correct. Stemming from variation in the calculation of royalty value across producers, the RIV price that would have been realized from a barrel of royalty oil varies across producers. The per-barrel pricing structure outlined in this section aims to generate a price that is, in expectation, at least equal to the volume-weighted average RIV price. However, under the proposed contract, DNR may choose to nominate RIK barrels from areas that would have yielded the lowest RIV price, which will necessarily be less than the volume-weighted average value. The difference between the RIK and RIV amount is additional revenue to the State that is preserved under the proposed contract.

Finally, it is also worth noting that while it is the State's expectation that each barrel of RIK oil will be sold for more than its RIV amount, the price may not necessarily match its market value. As has been discussed, under the terms of the proposed contract the State offers Tesoro flexible quantity terms, as well as supply and price certainty, that would be available from a private

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<sup>26</sup> Alaska Department of Natural Resources. March 25, 2013. "Final Best Interest Finding and Determination for the Sale of Alaska North Slope Royalty Oil to Flint Hills Resources Alaska, LLC."

supplier at only a higher price. The willingness on the part Tesoro to enter into the proposed contract is prima facie evidence that the terms offered by the State are no more onerous than those the buyer could have negotiated in the marketplace. Moreover, given that the contract may be terminated by simply failing to nominate crude oil, Tesoro's continued nomination of RIK will be further evidence that conditions imposed under the proposed sale are no worse than those that could have been secured had the buyer transacted with any other party.

## **D. Other Contract Terms of Interest**

### **1. Force Majeure**

DNR will, to the best of its abilities under its agreements with its lessees, accommodate a temporary reduction in the volume of RIK oil delivered to Tesoro if the reduction is necessitated by a Force Majeure event. The volume of royalty oil will be reduced by an amount equal to the reduction in Tesoro's requirements that is a direct result of the Force Majeure event. Tesoro will, however, accept delivery of all royalty oil nominated by the State under the proposed contract. Importantly, changes in commercial or financial markets impacting the price of crude or refined petroleum do not constitute Force Majeure events. Thus, volumes cannot be altered, and performance of other contract provisions cannot be suspended, due to changes in market conditions.

### **2. Retroactivity**

The key terms in the proposed contract subject to retroactive adjustments are the tariff allowance and the quality bank adjustment. If a tariff which has been used in the calculation of a Tariff Allowance is changed or subject to a refund order by the FERC, the Tariff Allowance will be recalculated using the changed FERC-ordered tariff, and the royalty oil price will be retroactively readjusted accordingly. Similarly, if the stream values used in the calculation of the Quality Bank Adjustment is recalculated by the Quality Bank administrator, the Quality Bank Adjustment will be recalculated and royalty oil price will be retroactively readjusted accordingly. Although Tesoro desired to eliminate all retroactive adjustment in the proposed contract, DNR was able to retain these two retroactive adjustments to help ensure that RIK-RIV price parity was achieved.

### **3. Security**

When the State enters into a sale of RIK oil, the State is exposed to the risk that the buyer will default on its obligations to pay for the royalty oil delivered to, and nominated on the behalf of, Tesoro. There are two key elements of the "default risk" to which the state is exposed in an RIK sale. The first element is the total loss from royalty oil already delivered to Tesoro, the second is the so-called "denomination" risk. Under the proposed contract, DNR would be unaware of the buyer's inability, or unwillingness, to pay for oil already delivered for up to 26 calendar days after the final delivery of the month. An immediate move on DNR's part to declare the contract in default would likely require up to another 7 calendar days. Thus, the State could deliver up to 65 calendar days of royalty oil before it could declare the buyer in default (31 days of delivery, 20 calendar days to bill, 6 calendar days for payment, and 7 calendar days to declare default).

The revenue from these 65 days of royalty oil would, in the absence of security or litigation, be a total loss.

In addition to this total loss, the State is also exposed to the losses that would likely stem from a distressed sale of previously nominated royalty oil – the “denomination risk.” In order to fulfill its obligations under the proposed contract, the DNR must alert upstream producers of its intent to take RIK at least ninety days ahead of the date of delivery (i.e., it must nominate oil at least ninety days in advance). Thus, should the buyer default, DNR will have nominated an additional 90 days of RIK oil consistent with its obligations under the sale contract. This additional 90 days of royalty oil must be disposed of by the State, likely at distressed prices.

In order to help insulate the State from the default risk that an RIK disposition generates, the State requires that either a letter of opinion from a financial analyst approved by the State is submitted to the State each year, or Tesoro provides an annually renewed, continuously maintained stand-by letter of credit equal in value to ninety days of royalty oil. In order to waive the requirement for a ninety day letter of credit, the buyer, or guarantor, must submit to a full review of the financial health of the buyer, or guarantor. If the financial analyst finds that the buyer’s, or guarantor’s, long term (and short term, if available) credit rating is likely to fall to, or below, Standard and Poor’s BBB+ or Moody’s Baa1 at any time during the next twelve months, then the state will immediately require a one-year irrevocable stand-by letter of credit.

#### **4. In-State Processing – AS 38.06.070(b)**

Under the proposed contract, Tesoro is compelled to use “commercially reasonable efforts” to manufacture refined petroleum products from the State’s RIK oil in Alaska. While the spirit of this provision is attractive from the State’s perspective, it is unlikely to materially impact the behavior of Tesoro. Tesoro currently sources crude oil from other North Slope suppliers, and the royalty oil sold under this contract is likely to displace some of these volumes. That being said, Tesoro does possess the means to source crude from abroad. If Tesoro elects to displace foreign crude with royalty oil, the proposed contract could increase the volume of Alaskan crude refined in Alaska. However, this decision will be driven by commercial and operational considerations. If processing the State’s RIK oil in Alaska is the most economic approach, then Tesoro will process the State’s RIK oil in Alaska independent of any in-state processing provision.

#### **5. Employment of Alaskans and Use of Alaska Companies**

Tesoro agrees to employ Alaska residents and Alaska companies to the extent they are available, willing, and at least as qualified as other candidates for work performed in Alaska in connection with the proposed sale.

#### **6. Dispute Resolution**

In the event that a dispute arises, both parties may avail themselves of the dispute resolution mechanism contained in the proposed contract. The dispute resolution mechanism can be triggered by either the State or Tesoro by giving notice of the dispute to the other party. Within 60 days of providing notice of the dispute, both parties shall submit their arguments and evidence

to the commissioner. After having received the arguments and evidence concerning the dispute from the parties, the commissioner shall adjudicate the dispute. Both the State and Tesoro agree to abide by the findings of the commissioner provided that the decision is “supported by substantial evidence in light of the whole record.”

## **7. Proration**

Under the terms of the proposed contract, the State reserves the right to prorate royalty oil that has been nominated for taking RIK. In the event that DNR is unable to supply the total volume of oil nominated by its RIK purchasers, DNR has reserved the right to prorate Tesoro’s nomination for volumes that exceed the portion specifically guaranteed to Tesoro.

## **IV. Analysis of State Benefits**

### **A. Cash Value Offered – AS 38.05.183(e)(1)**

Under the terms of the proposed RIK contract, the State estimates that it will receive a price for its RIK oil that exceeds the price it would have received if it elected to keep its royalty oil in-value. Such a cash value is consistent with the State’s obligations as mandated in 11 AAC 03.026 and 11 AAC 03.024. Under the proposed contract, the State would supply the Nikiski refinery with a maximum of 15,000 barrels per day of North Slope royalty crude oil. Based on Department of Revenue’s ANS price, TAPS tariff, and up-stream deduction forecasts, this is forecast to yield between \$189 million and \$568 million in state revenue.<sup>27</sup>

As has been mentioned, the State is obliged to receive monetary consideration for its RIK that it estimates will exceed the volume weighted average monetary consideration received for its RIV. Given that under the proposed contract the allowances upstream of Valdez are quite similar for RIK and RIV, this is tantamount to requiring that the difference between the RIK USWC destination value and the RIK differential be greater than the difference between the volume-weighted RIV USWC destination value and volume-weighted RIV marine allowance. Guaranteeing this standard, however, requires knowledge of future events that are unknowable. For this contract, the State has relied on both retrospective examination and reasonable expectations about future economic conditions to develop contractual elements such that RIK will be expected to exceed RIV. Based on the analyses outlined below—relying on an approach similar to that taken in the evaluation of the 2013 FHR North Slope RIK oil supply contract – DNR expects the price term contained in the proposed contract will achieve RIK-RIV parity plus some compensation for terms in the proposed contract that differ from FHR’s. Because the approach taken to determine the price in the proposed contract matches that taken when negotiating the FHR contract, the State has achieved a measure of fairness between the two purchasers.

To estimate the difference between the expected value of the RIK sold under the proposed contract and the expected value of RIV during the proposed contract term, DNR analyzed how the proposed RIK value would have compared with the realized value of RIV over the last five years. In particular, for the period between 2008 and 2012, DNR examined the difference

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<sup>27</sup> Alaska Department of Revenue, Revenue Sources Book Fall 2012.

between the RIV value for royalty oil taken from Prudhoe Bay and the value that would have been realized for the RIK taken from the same unit had the proposed contract been in effect. DNR also simultaneously undertook a complementary approach to determining whether the State is likely to exceed RIK-RIV parity by developing reasonable expectations concerning future changes to destination value and marine transportation allowances. These reasonable expectations can then be combined with the retrospective analysis to determine whether it seems likely that the State will achieve RIK-RIV parity.

The retrospective analysis revealed that if the proposed contract had been in effect during the 2008 to 2012 period, RIK would have exceeded RIV by an average of just more than twenty-five cents per barrel. But, the value of DNR's retrospective analysis hinges critically on whether the historical period used in the retrospective analysis is representative of the future. The dramatic disruptions in world economic conditions between 2008 and 2010 were virtually unprecedented. The ANS USWC delivered value illustrates just how dramatic these economic changes affected world oil markets. The monthly average value for a barrel of ANS delivered to the USWC began 2008 at \$91.12, rose to \$134.12 by June 2008, and then fell precipitously through the last half of the year to finish 2008 at \$40.03. After hitting this bottom, the value of ANS saw a steady upward march through 2011, crossing the \$100 per barrel threshold in March 2011.<sup>28</sup> Given these aberrations, relying on dated information from a period of substantial economic upheaval has the potential to distort the analysis of the proposed contract. Indeed, when examining the difference between the Valdez value under the proposed RIK contract versus the Valdez value of RIV for 2011, the proposed contract would have earned an average of sixty-five cents more than was received on average for a barrel of RIV. In 2012, this grows more still, with the proposed RIK contract generating \$1.44 more, on average, than RIV. Taken as a whole, the retrospective analysis indicates that the revenue generated from RIK under the proposed contract would have exceeded the average revenue received for Prudhoe Bay RIV.

As a part of its historical analysis, DNR analyzed the difference between the RIV USWC destination value and the RIV differential along with the corresponding elements embedded in the RIK price formula. With respect to destination value, it should be noted that most of the State's North Slope RIV oil has a destination value defined by provisions in the various RSAs between the State and BP, ExxonMobil, and ConocoPhillips. Each of the RSAs specifies different destination values. Presently, BP uses only the ANS USWC spot price reported in Platts. ConocoPhillips uses an average of the ANS USWC spot price reported by Platts and Reuters. ExxonMobil uses a market basket of crude values—including ANS, WTI, Isthmus (a Mexican crude), and Line 63 (a California crude)—as reported by Platts. The ExxonMobil market basket is constrained to be no greater than Platts reported ANS USWC value plus fifty cents and no less than Platts reported ANS USWC value minus fifty cents. Put succinctly, the RIV volume weighted average destination value is driven more strongly by Platts than the PR destination value in the proposed RIK contract.

To see the import of this, one must look no further than the divergence between the RIV destination value and the RIK destination value attributable in part to the sudden shift in market conditions. The USWC delivered market value of ANS as reported by Platts Oilgram became decoupled from the market price reported by Reuters. On a monthly average basis, between

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<sup>28</sup> Prices reported in Platts Oilgram.



January 2005 and December 2007, the difference between the USWC value of ANS reported by Platts and the average USWC value of ANS reported by Reuters was \$-0.09, meaning that the average of the values reported by Reuters exceeded the Platts value by nearly nine cents. However, during the period from January 2008 to December 2012, this changes. During this period, on a monthly average basis, Platts reported ANS USWC value exceeded the value reported by Reuters by \$0.69. In 2012, these disparities began to ease, with Platts reporting values that exceeded the value reported by Reuters by \$0.33. Put differently, if the pattern observed in price reporting data during 2008 to 2011 had been consistent with more recent (and more distant) historical patterns, the State's retrospective analysis would have indicated that the per-barrel consideration received under the proposed contract would have exceeded the average consideration received for RIV by an even wider margin.

The other key term impacting the difference between RIK and RIV is the marine transportation allowances permitted under the RSAs. In calculating their royalty obligation the producers are allowed to deduct either their actual and reasonable costs, or a formula-calculated proxy of their costs, of transporting the State's RIV to the USWC. Many of the allowable costs associated with the transportation of RIV to the USWC are fixed costs that do not depend on the volume of oil transported. For example, the expense associated with fleet depreciation, return on capital, minimum staffing requirements, some operating costs, and overhead are affected very little by the marginal barrel of crude oil. The small cost savings associated with shipping one fewer barrel of oil is more than offset by spreading total costs across a smaller number of barrels. As the volume of North Slope oil production continues to decline over the contract period, the State can expect that the marine transportation allowance claimed by RIV shippers will trend higher, on a per barrel basis.<sup>29</sup> Such an interpretation is further buttressed by the increasing trend observed for the variable costs for operating vessels in the ANS trade. As an example, new rules governing the use of more expensive low-sulfur fuel were imposed on the fleet in 2012.

The data can be used to infer this increasing trend. DNR estimates the volume-weighted average marine transportation allowance was \$2.65 in 2008.<sup>30</sup> Estimates indicate that the marine transportation allowance declined in 2009 to \$2.23, but then rose in 2010 to \$2.62 and rose once again in 2011 to \$3.15. Current DNR estimates indicate that the volume-weighted marine transportation allowance in 2012 was in excess of \$3.60. Consistent with the view of increasing average transportation costs, the Department of Revenue forecasts that average allowable marine transportation claimed by producers for tax purposes will rise from \$3.67 in fiscal year 2014 to \$3.77 in fiscal year 2015. If the upward trend observed in marine transportation allowance continues, then the growth in marine transportation allowances will increase the incremental revenue under the proposed contract.

Based on this analysis of the RIK Differential as it compares to the RIV marine transportation allowance, the resulting RIK value should exceed the value the State receives for its RIV.

## **B. Projected Effect of the Sale on the Economy of the State – AS 38.05.183(e)(2)**

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<sup>29</sup> This is very dependent on the number of vessels in the ANS fleet and how well the fleet capacity matches ANS production. ExxonMobil is presently preparing to increase its number of vessels in its ANS fleet.

<sup>30</sup> The reported volume-weighted average marine transportation allowances reported here were inferred from the lessee's royalty fillings to ensure that data confidentiality was preserved.

The proposed sale will provide the State an estimated \$189 million to \$568 million in revenue during the course of the sale. The sale may also help facilitate the continued operation of the Nikiski refinery with the economic benefits that accompany such operations. The Nikiski refinery produces roughly two to three million gallons per day of refined petroleum products, most of which will be consumed in Alaska. Tesoro's Nikiski refinery is also the largest tax payer in the Kenai Peninsula Borough (KPB) and employs 200 Alaskans in full-time, high paying positions. As was noted above, by entering into the proposed contract, Tesoro has signaled that the total value derived from the proposed contract is at least equal to that which could be secured from the private market. Insofar as the incremental value in the proposed contract helps facilitate continued operations at the Nikiski refinery, the proposed contract benefits the Alaskan economy.

**C. Projected Benefits of Refining or Processing the Oil in Alaska – AS 38.05.183(e)(3)**

The proposed sale of royalty oil will help ensure continued in-state processing with its potential price and labor market benefits. As discussed in Sections IIC and IID, products from in-state refiners supply a substantial proportion of the state's needs for refined petroleum products. Given the small and isolated nature of the Alaska market, it is probable that in the absence of in-state refining capacity, Alaskans would observe higher wholesale prices for refined petroleum products. Not only could this manifest as higher retail prices for Alaska residents who already expend more on a per capita basis for energy than residents of any other state, but the ubiquity of refined petroleum in the production and distribution of goods means such a price increase could affect the Alaska economy through smaller profit margins, higher consumer costs for non-petroleum goods, and a degraded competitive position for Alaskan goods sold Outside. The magnitude of these effects is unknown and quite hard to empirically isolate, but it is clear that it will be directly related to the size of the change in the underlying cost of refined petroleum.

The absence of the in-state refining capacity provided by Tesoro would also have direct, indirect, and induced labor market impacts in Alaska. Tesoro currently employs 200 Alaskans in high paying positions, positions that would not exist without the presence of the refinery.

**D. Ability of Prospective Buyer to Provide Refined Products for Distribution and Sale in the State with Price or Supply Benefits to the Citizens of Alaska – AS 38.05.183(e)(4)**

Tesoro's Nikiski refinery began producing refined petroleum products in 1969. The Nikiski refinery continues to operate to this day, producing well over 710 million gallons of refined product per year. Of this 710 million gallons of refined product produced by Tesoro per year, thirty-five percent (roughly a quarter of a billion gallons) will be jet fuel. Nearly all of this jet fuel will be transported to Anchorage via a Tesoro owned common-carrier pipeline to support operations at Ted Stevens Anchorage International Airport, the fourth busiest cargo airport in the world<sup>31</sup> and the economic engine that supports one out of every ten jobs<sup>32</sup> in Anchorage. The

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<sup>31</sup> Where busiest is measured by cargo throughput. Alaska Department of Transportation & Public Facilities, Access at <http://dot.alaska.gov/anc/> on 02/19/13.

<sup>32</sup> Alaska Department of Transportation & Public Facilities, Access at <http://dot.alaska.gov/anc/> on 02/19/13.

remaining refinery output is primarily a combination of gasoline and ultra-low sulfur diesel. There is little question that Tesoro's Nikiski refinery can supply refined products to Alaskans.

**E. Existence and Extent of Present and Projected Local and Regional Needs for Oil and Gas Products – AS 38.06.070(a)(2)**

As was noted at the outset, on a per capita basis, Alaskans spend more on energy than residents of any other state. This high expenditure rate is driven in large part by the very high per unit cost paid by Alaskans for energy. Most pertinent for current purposes, Alaskans pay the second highest rates in the country for gasoline, and some of the highest rates in the nation for distillate fuels including diesel and home heating fuel. It is not likely that the proposed sale will materially reduce the price paid by Alaskan consumers for refined petroleum products.

Overall, based on EIA estimates presented in Section IIC, in 2011 Alaska consumed just over 278 million gallons of gasoline and over 875 million gallons of jet fuel. Assuming these numbers are representative of current consumption, Tesoro supplied well over 60 percent of the gasoline consumed by Alaskans and well over 28 percent of the jet fuel consumed by Alaskans (or those in Alaska). Clearly, the loss of this volume of gasoline and jet fuel could generate substantial regional and state-wide need for refined petroleum products.

**F. Revenue Needs and Projected Fiscal Condition of the State – AS 38.06.070(a)(1)**

The current and projected fiscal condition of the State has been discussed in greater detail above, see Section IID. In short, the State's fiscal condition has been strong in recent years, but recent Office of Management and Budget projections indicate that the State could experience a budget shortfall in FY 2013. Based on these same projections, ongoing budget shortfalls are likely from FY 2015 through FY 2023. The sale of royalty oil under the proposed contract is projected to generate between \$189 million and \$568 million in State revenue. The proposed contract is expected to yield revenues that are at least as great as what would have realized had the State's royalty been left in value. The proposed sale may even offer a small incremental improvement to the State's fiscal picture by generating increased revenue through arbitrage. While the incremental revenue generated through the proposed sale will not offset the deficits that are projected by the less optimistic scenarios outlined by the Governor's Office of Management and Budget, the proposed sale will do no harm to the State's revenue picture.

**G. Desirability of Localized Capital Investment, Increased Payroll, Secondary Development and Other Possible Effects the Sale – AS 38.06.070(a)(3)**

The proposed sale of RIK will, in and of itself, require no additional capital investment, induce no change in payroll, yield no secondary development and have few other consequences. During negotiations, Tesoro indicated that the North Slope royalty oil transacted under the proposed sale will be used in a status-quo fashion. Royalty oil will replace private sources of feedstock to run the operations at the Nikiski refinery. If the State's RIK is used in such a fashion, there will be little incremental capital investment, payroll, secondary development, or other effects.

**H. Projected Positive and Negative Environmental Effects – AS 38.06.070(a)(7)**

The sale of RIK oil will, in and of itself, have no negative environmental effects and will not affect the volume of oil shipped in Alaska. If RIK oil simply replaces oil that would have been purchased from the private market at the VMT on a one-to-one basis, then there is no environmental impact. If the RIK oil replaces crude that would have been imported from abroad, and there is a non-zero risk of adverse environmental effect per barrel per mile, then the proposed may have a small positive environmental effect. Taken as a whole, the proposed contract is expected to have very little incremental environmental impact.

It should also be noted that the State transfers title and risk for RIK crude to the buyer at the point of delivery.<sup>33</sup> This legal construction does not change the volume of oil flowing through TAPS on a given day and does not impact environmental risk. However, it does insulate the State from the financial risk associated with an adverse environmental outcome.

**I. Projected Social Impacts – AS 38.06.070(a)(4)**

Beyond the direct revenue impact, the proposed sale is unlikely to have any incremental social impact. The royalty oil sold under this contract is unlikely to materially impact refinery operations. As such, no long-run population redistribution, change in the utilization of social services, or other social impacts are expected.

**J. The Projected Additional Costs and Responsibilities Which Could Be Imposed Upon the State and Affected Political Subdivisions by Development Related to the Transaction – AS 38.06.070(a)(5)**

The proposed sale of RIK, in and of itself, is expected to generate negligible additional cost or responsibilities for the State or the KPB. The State's royalty oil is expected to simply displace crude secured from the private market. The proposed contract is unlikely to materially impact the operations of the Nikiski refinery. However, as was discussed above, when the State sells its RIK it faces counterparty risk. While the State has a long and successful history selling its royalty oil to Tesoro, there exists a non-zero probability that Tesoro could, for a host of reasons, fail to fulfill its obligations under the proposed contract. Such a failure could expose the State to financial loss. The proposed contract recognizes this risk and mitigates it through a security arrangement that may require Tesoro to post a stand-by letter of credit equal to the expected value of ninety days of royalty oil.

**K. The Existence of Specific Local or Regional Labor or Consumption Markets or Both Which Should Be Met by the Transaction – AS 38.06.070(a)(6)**

The proposed contract is unlikely to induce substantial new hiring. However, refinery operations support multiple local labor and consumption markets. The refinery directly employs 200 Alaskans, and 20 to 30 contracts at the Nikiski refinery. Tesoro also generates labor demand and satisfies the need of multiple local consumption and labor markets through its 31 company-

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<sup>33</sup> Put differently, the state instantaneously passes the title and risk of royalty oil from the producer to the buyer at the point of delivery.

owned Tesoro 2Go retail outlets, 44 Tesoro-branded stations, and 4 USA Gasoline stations.<sup>34</sup> The refined product from Nikiski also supplies the Anchorage International Airport, and other in-state refiners.

With respect to consumption markets, it should be recognized that demand for refined product is quite seasonal. As was discussed above, the proposed contract contains a valuable volumetric option. By exercising this option, Tesoro may align their crude inventory with seasonal fluctuations in demand for refined product. Such an alignment may be of use in meeting seasonal fluctuations in consumption demand in an economically optimal fashion.

#### **L. The Projected Effects of the Proposed Transaction upon Existing Private Commercial Enterprise and Patterns of Investment – AS 38.06.070(a)(8)**

The proposed contract is unlikely to demonstrably impact the operations at the Nikiski refinery. As has been mentioned before, the crude supplied under the proposed contract will likely simply displace crude from the private market. As such, the proposed contract is expected to have very little impact on existing private commercial enterprise and patterns of investment. However, the continued operation of the Nikiski refinery will allow Tesoro to continue to supply its customers, including Ted Steven International Airport and regional wholesale and retail markets. The continued operation of the Nikiski refinery will sustain the demand that Tesoro generates among its vendors and servicers.

### **V. Public Comment**

Under 11 AAC 03.020(c)(2), before the publication of a final finding and determination, the commissioner must engage in a public comment period lasting not less than least 30 days. The public comment period on the proposed RIK sale began September 22, 2013 with the public notice, publication, and dissemination of the Preliminary Finding and Determination. The public comment period closed on September 23, 2013. No comments were received.

### **VI. Final Finding and Determination**

#### **A. Disposal of Royalty Oil In-kind is in the State's Best Interest**

In accordance with AS 38.05.182(a), 11 AAC 03.010(b) and (d), and 11 AAC 03.060, DNR has published this Final Finding and Determination. The commissioner has determined that it is in the best interest of the State to take its RIK in order to supply the Tesoro refinery at Nikiski with feedstock.

#### **B. Competitive Bidding is Waived**

Consistent with the results of the solicitation described in Section II.F. above and DNR's assessment of the potential benefits of negotiated RIK contracts, the commissioner has determined, in accordance with AS 38.05.183(a) and 11 AAC 03.030, that the best interests of the State will be served through the sale of its RIK to Tesoro under non-competitive procedures.

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<sup>34</sup> Tesoro Kenai Fact Sheet. <http://www.tsocorp.com/stellent/groups/public/documents/documents/alaskafact.pdf>



This disposition will be made to relieve market conditions (11 AAC 03.024).

The proposed contract will protect the State's interest and is estimated to generate a sale price throughout the term of the contract that will be higher than the volume-weighted average of the current reported netback prices file the lessees for royalty purposes. The commissioner further considered that DNR has negotiated a contract that will permit a transparent and equitable allocation of the State's royalty oil across all RIK buyers should the State's volumetric expectations be incorrect.

A copy of the Preliminary Finding and Determination was delivered to the Alaska Royalty Oil and Gas Development Board as notification under AS 38.05.183(a) and 11 AAC 03.010(g).

### **C. The Proposed RIK Oil Sale Offers Maximum Benefits to the State**

When RIK is sold through a process other than competitive bid, the commissioner shall award the disposal to the prospective buyer whose proposal offers the maximum benefits to the citizens of the State of Alaska. In making the award the commissioner must consider the criteria set out in AS 38.05.183(e) and in AS 38.06.070(a). The commissioner's in-depth review and consideration of all of the required statutory criteria is set out above in Section IV of this Final Finding and Determination. The commissioner finds that the proposed sale of North Slope royalty oil to Tesoro, under the terms and conditions of the attached proposed contract, offers the maximum benefit to the state.

### **D. Alaska Royalty Oil and Gas Development Board**

The Preliminary Finding and Determination and a copy of the proposed contract was submitted to the Alaska Royalty Oil and Gas Development Board in compliance with AS 38.05.183(c), 11 AAC 03.024, and 11 AAC 03.040, which require the commissioner to give written notice to the board of intent to waive competitive bidding in an RIK sale.

### **E. Legislative Approval**

Under AS 38.05.183 and AS 38.06.055, legislative approval is not required for RIK oil disposition if "the sale, exchange, or other disposition of oil or gas for one year or less if the sale, exchange, or other disposition is entered into to relieve storage or market conditions." The term of the proposed contract is one year and the proposed contract will relieve "market conditions" as defined in 11 AAC 03.024(1) as "in a noncompetitive disposition of royalty oil, gas, or associated substances the commissioner estimates that the sale price throughout the term of the disposition will be higher than the volume-weighted average of the current reported netback prices filed by the lessees."

### **G. Applicable Criteria and Weights**

For the purposes of the proposed contract, as was outline in Section IV, the commissioner considered all criteria outlined in AS 38.05.183(e). The commissioner finds that the proposed sale will positively impact, or affect no harm on, all of the criteria in AS 38.05.183(e). In his

analysis of the proposed sale, the commissioner most heavily weighted the cash value offered, the projected effect of the sale on the economy of the state, and the ability of Tesoro to supply refined product to Alaskans. While all criteria in AS 38.05.183(e) received non-zero weight, the other criteria discussed in Section IV received less weight.

## **VI. Conclusion**

On careful consideration of the circumstances of the proposed sale, material information and legal requirements, the commissioner determines, in accordance with AS 38.05.183, that the best interest of the State does not require this RIK sale be made by competitive bid, that the sale will relieve market conditions, and that the proposed contract with Tesoro offers maximum benefits to its citizens.



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**Joe Balash**  
**Acting Commissioner**

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October 24, 2013

**Date**

**AGREEMENT FOR THE SALE OF  
ROYALTY OIL  
BETWEEN AND AMONG  
THE STATE OF ALASKA,  
AND  
TESORO CORPORATION, A DELAWARE CORPORATION  
AND  
TESORO REFINING & MARKETING COMPANY LLC, A DELAWARE LIMITED  
LIABILITY COMPANY  
OCTOBER 25, 2013**

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Final Best Interest Finding and Determination—Proposed Final Contract

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**AGREEMENT FOR THE SALE AND  
PURCHASE OF ROYALTY OIL**

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This Agreement is between the State of Alaska (“State”), Tesoro Refining & Marketing Company LLC, a Delaware Limited Liability Company (“Buyer”) and Tesoro Corporation, a Delaware Corporation (“Guarantor”).

**ARTICLE I  
DEFINITIONS**

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

- 1.1 “Affiliate” is defined in Section 21.1
- 1.2 “ANS” means the Alaska North Slope.
- 1.3 “ANS Spot Price” is defined in Section 2.3.
- 1.4 “Assignee” is defined in Section 21.1.
- 1.5 “Business Day” means any day, or part of a day, during which federally chartered banks are open for business in the place designated in this Agreement for payment.
- 1.6 “Commissioner” means the Commissioner of the Alaska Department of Natural Resources or the Commissioner’s designee.
- 1.7 “Day” means a period of twenty-four consecutive hours, beginning at 12:01 a.m., Alaska Local Time.
- 1.8 “Day of First Delivery” is defined in Section 2.4.
- 1.9 “FHR” is Flint Hills Resources Alaska, LLC with whom the State has two agreements for the sale of Royalty Oil from the North Slope that run consecutively during the term of this Agreement.
- 1.10 “Financial Analyst” is defined in Section 5.3.

- 1.11 “FERC” means Federal Energy Regulatory Commission.
- 1.12 “Force Majeure” is defined in Section 14.2.
- 1.13 “Leases” means the oil and gas leases issued by the State on the Alaska North Slope from which the State takes or may take Royalty Oil in-kind.
- 1.14 “Lessee” means a person owning a working interest in any of the Leases.
- 1.15 “Letter of Credit” is defined in Section 6.1.
- 1.16 “Letter Effective Date” is defined in Section 6.2.
- 1.17 “Line Loss” is defined in Section 2.3.
- 1.18 “Minimum Interstate TAPS Tariff” is defined in Section 2.3.
- 1.19 “Month” means a period beginning at 12:01 a.m., Alaska Local Time, on the first Day of the calendar Month and ending at 12:01 a.m., Alaska Local Time, on the first Day of the following calendar Month.
- 1.20 “Moody’s” means Moody’s Investor’s Services, Inc., a subsidiary of Moody’s Corporation, and its successors.
- 1.21 “Notice” means written notice in accordance with Article XV.
- 1.22 “Notice Effective Date” is defined in Section 15.2.
- 1.23 “Opinion Letter” is defined in Section 5.3.
- 1.24 “Parties” means, collectively, Buyer, Guarantor and State.
- 1.25 “Party” means Buyer, Guarantor or State, individually.
- 1.26 “Person” is defined in AS 01.10.060.
- 1.27 “Point of Delivery” means the transfer point at which the State receives Royalty Oil in-kind from the Lessees.
- 1.28 “Price” is defined in Section 2.3.

1.29 “Process” is defined in Section 4.1.

1.30 “PSVR Reference Stream” is the blended TAPS stream immediately downstream from the Petro Star Valdez Refinery.

1.31 “Refinery Turnaround” means a period when Buyer, by notice to the State, may reduce the quantity of Sale Oil it nominates and purchases from the State to less than 5,000 barrels per Day because the Nikiski, Alaska refinery reduces the processing of Sale Oil for the purpose of performing planned or unplanned maintenance, repairs or capital improvements to the refinery.

1.32 “Quality Bank” means a system of calculations administered under the authority of the FERC that accounts for the differences in value between the individual tendered streams and the delivered co-mingled stream of TAPS.

1.33 “Quality Bank Adjustment” is defined in Section 2.3.

1.34 “Royalty Oil” means the total volume of crude petroleum oil and other hydrocarbons and associated substances from the Leases, including such substances as crude oil, condensate, natural gas liquids, or return oil from crude oil topping plants, that may be blended with crude oil before the Point of Delivery and tendered as a common stream to the State as Royalty Oil that the State may take in-kind, regardless of whether the State takes the Royalty Oil in-kind.

1.35 “Royalty Settlement Agreement” means any written royalty settlement agreement.

1.36 “Sale Oil” means the oil the State has agreed to sell to the Buyer, and the Buyer has agreed to purchase from the State under this Agreement.

1.37 “Standard and Poor’s” means Standard and Poor’s, a division of McGraw-Hill Companies, Inc. and its successors.

1.38 “TAPS” means the Trans-Alaska Pipeline System

1.39 “Tariff Allowance” is defined in Section 2.3.

1.40 “Term” is defined in Section 8.2.

1.41 “Unit” has the meaning defined in 11 AAC 83.395(7).

1.42 “Unit Agreement” means any unit agreement for a Unit from which the State takes or may take Royalty Oil.

## **ARTICLE II**

### **SALE AND PURCHASE OF ROYALTY OIL**

#### **2.1 Quantity.**

2.1.1 Sale Oil Quantity. The State agrees to sell to Buyer, and Buyer agrees to purchase from the State, an initial Sale Oil quantity of a maximum of 15,000 barrels per Day and a minimum of 5,000 barrels per Day averaged for the Month of Sale Oil delivery, as nominated by Buyer in accordance with Section 2.1.5 and 2.4. The Commissioner may limit the total amount of Sale Oil for any Month to not more than 10 percent of the total Royalty Oil for the Month.

2.1.2 Monthly Sale Oil Nomination. In accordance with 2.1.1, Buyer shall nominate the quantity of Sale Oil for each Month of Sale Oil delivery by giving Notice of Buyer’s Sale Oil nomination. Except when the additional notice provisions of Section 2.1.7 are invoked by Lessees, Buyer’s nomination shall be effective on the first Day of the Month following expiration of a minimum of one hundred Days after the Notice of Buyer’s nomination. The State will make commercially reasonable efforts to nominate, in accordance with applicable Unit Agreements, percentages of the State’s estimated Royalty Oil volume from one or more

Units, at the State’s discretion, that will equal the Sale Oil quantity nominated by the Buyer each Month of Sale Oil delivery. Notwithstanding Buyer’s Monthly nominations, any time the total commitments for Royalty Oil under all of the State’s royalty in kind contracts exceed 95 percent of Royalty Oil in a Month, Buyer agrees that the State may limit its total nomination of Royalty Oil to an amount that does not exceed 95 percent of Royalty Oil in that Month of Sale Oil delivery and may employ the proration provisions as per 2.1.3. Buyer agrees to accept the volume of Royalty Oil delivered in accordance with the State’s nomination. See Appendix 1 for an illustration of the State’s nomination procedure for Sale Oil nominated from the Prudhoe Bay Unit for October 2014.

2.1.3 Sale Oil Proration. Notwithstanding Section 2.1.1, Buyer agrees that for any Month of Sale Oil delivery in which the Buyer and Flint Hills Resources Alaska, LLC (“FHR”) nominate more than 85 percent of the State’s Royalty, the State may prorate the Buyer’s Sale Oil nomination as well as Sale Oil nomination of the Stat’s other purchasers. In no case will the Buyer’s Sale Oil nomination be reduced below 10 percent of the State’s Royalty Oil.

If proration is required, it will be performed using the following methodology. If FHR nominates no more than 24,000 barrels per day of Royalty Oil, but at least 85 percent of Royalty Oil, then Buyer’s Sale Oil nomination will be 10 percent of Royalty Oil. If FHR nominates less than 24,000 barrels per day of Royalty Oil and FHR’s nomination is less than 85 percent of Royalty Oil, then Buyer’s nomination will be set to the lesser of Buyer’s initial nomination and 95 percent of Royalty Oil minus FHR’s Sale Oil quantity. If FHR nominates more than 24,000 barrels per day and Buyer initially nominates more than 10 percent of Royalty Oil and total nominations exceed 95 percent of Royalty Oil, then the following mechanism determines



Buyer's final nomination: first, calculate the ratio that is the Buyer's nomination divided by the sum of the Buyer's nomination plus the FHR's nomination minus 24,000 barrels per day. Second, multiply this ratio by the quantity formed by subtracting 24,000 barrels per day from 85 percent of Royalty Oil. The Buyer's final nomination will be the result of this multiplication plus 10 percent of Royalty Oil. An illustration of this calculation appears in Appendix I.

2.1.4 Buyer's Election to Reduce Sale Oil Quantity.

(a) Buyer may elect to reduce the initial Sale Oil quantity by giving Notice. The initial Sale Oil quantity shall remain as stated in Section 2.1.1 for 12 Months after the Day of First Delivery. Notice of a reduction shall be delivered to the State at least six Months before the effective date of the reduction. The Commissioner may approve or deny a request for a reduction in Sale Oil quantity. The reduced maximum quantity shall be 137.5 percent of the reduced minimum quantity. For example, if the reduced minimum quantity is 4,000 barrels per Day, the reduced maximum quantity shall be 5,500 barrels per Day (4,000 times  $1.375 = 5,500$ ).

Buyer may elect additional reductions to the Sale Oil quantity following a reduction to the initial Sale Oil quantity. A reduction cannot be effective until at least 12 Months after the effective date of the most recent reduction in quantity. Notice of an additional reduction under this paragraph (a) shall be delivered to the State at least six Months before the effective date of the additional reduction. The reduced maximum quantity shall be 137.5 percent of the reduced minimum quantity.

(b) Buyer may elect to reduce the Sale Oil quantity to zero barrels of Sale Oil per day for the Month of Delivery by giving Notice. If Buyer nominates zero barrels of Sale Oil for three consecutive Months, this Agreement shall terminate automatically, without

Notice or further action by the State or the Buyer, on the last day of the third consecutive Month that the Buyer nominates zero barrels.

(c) Buyer's elections to reduce Sale Oil quantities under this Section 2.1.4 are subject to the provisions of Section 2.1.7.

2.1.5 Increase in Quantity Following Elective Reduction. Following a reduction of Sale Oil quantity under Section 2.1.2, Buyer may request an increase in the Sale Oil quantity to an amount that does not exceed the maximum Sale Oil quantity in Section 2.1.1. The increased maximum quantity must be 137.5 percent of the increased minimum quantity. An increase is not effective until at least 12 Months after the effective date of the most recent change in quantity (*i.e.*, a decrease under Section 2.1.2 or an increase under Section 2.1.3). The Commissioner may approve or deny a request for an increase in Sale Oil quantity.

2.1.6 Temporary Sale Oil Quantity Reduction in Event of Force Majeure. In the event of a Force Majeure under Article XIV, Buyer may temporarily reduce the Sale Oil quantity by an amount equal to the reduction in Buyer's requirements that is a direct result of the Force Majeure event. To temporarily reduce the Sale Oil quantity in the event of Force Majeure, Buyer shall include a Notice of temporary reduction in Sale Oil quantity due to Force Majeure under this Section with Notice of Buyer's monthly Sale Oil nominations of Sale Oil. Each notice of temporary reduction due to Force Majeure shall include documentation of the nature of the Force Majeure event and quantification of the direct impact of the Force Majeure on Buyer's Sale Oil requirements for the Month of nomination. Temporary reductions in Sale Oil quantity under this Section shall be effective only to the extent that the State is able, through the State's nomination process set out in Section 2.1.2, to reduce the volume of Royalty Oil that the State receives for

the Month of Sale Oil delivery. Buyer shall accept delivery of the total volume of Royalty Oil delivered to the State in accordance with the State's nominations of Royalty Oil.

2.1.7 Additional Notice Provisions. Buyer acknowledges that the Leases from which the State must nominate Royalty Oil require 90 Days' notice to the Lessee prior to decreasing the State's nomination of Royalty Oil to be taken in-kind in any Month. Buyer acknowledges that if a Lessee invokes the Force Majeure provisions of its Royalty Settlement Agreement, the State may be required to give up to 180 Days' (*i.e.*, an additional 90 Days) notice to the Lessee prior to decreasing the State's nomination of Royalty Oil to be taken in-kind in any Month. If a Lessee invokes the Force Majeure terms of its Royalty Settlement Agreement as a result of a reduction in Buyer's nomination in the event of Buyer's Force Majeure, Refinery Turnaround, or for any other reason, Buyer's reduced nomination shall not become effective until the end of the additional 90 Day notice period. If a Lessee invokes the Force Majeure terms of its Royalty Settlement Agreement and extends the notice period an additional 90 Days, the State agrees to make commercially reasonable efforts to reduce the volume of its Royalty Oil nominations.

2.1.8 No Guarantee of Sale Oil Quantity. The State shall exercise its rights under the Leases and Royalty Settlement Agreements to request that Royalty Oil be delivered as Sale Oil. The State can deliver Sale Oil only to the extent it receives Royalty Oil from the Lessees. The quantity of Royalty Oil available to the State may vary and may be interrupted from time to time depending on a variety of factors, including the rate of production from the Leases. The State disclaims, and Buyer waives, any guarantee, representation, or warranty, either express or implied, that a specific quantity of the total, daily, monthly, average, or aggregate Royalty Oil will be delivered as Sale Oil.

2.1.9 No Guarantee of Source of Sale Oil. The State will deliver, as Sale Oil, Royalty Oil produced from the Leases and delivered to the State as Royalty Oil in-kind. The availability to the State of Royalty Oil in-kind in any Month may vary depending on a variety of factors, including the rate of production from the Leases. The State disclaims and Buyer waives, any guarantee, representation, or warranty, either express or implied, that Sale Oil delivered and sold by the State in any Month is from a certain Lease, Unit, or other area.

2.1.10 State's Warranty of Title. The State warrants that it has good and marketable title to the Royalty Oil delivered and sold as Sale Oil.

## 2.2 Quality.

2.2.1 No Guarantee of Quality of Sale Oil. The Royalty Oil the State delivers to Buyer as Sale Oil shall be of the same quality as the Royalty Oil delivered to the State at the Point of Delivery. The quality of the Royalty Oil delivered to the State may vary from time to time. The State disclaims, and Buyer waives, any guarantee, representation, or warranty, either expressed or implied, of merchantability, fitness for use, or suitability for any particular use or purpose, or otherwise, and of any specific, average, or overall quality or characteristic of Sale Oil. Buyer specifically waives any claim that any liquid hydrocarbons, including such substances as crude oil, condensate, natural gas liquids, or return oil from the crude oil topping plant, delivered with the Sale Oil, are not Sale Oil for purposes of this Agreement.

2.3 Price of the Sale Oil. The price per barrel of Sale Oil delivered from each Unit by the State to the Buyer each Month shall be equal to

ANS Spot Price – \$1.95 – Tariff Allowance + Quality Bank Adjustment – Line Loss.

“ANS Spot Price” means the monthly average of the daily high and low assessments for the Month of Sale Oil delivery for ANS oil traded at the United States West Coast as reported by the Platts Oilgram Price report and Reuters online data reporting service. The ANS Spot Price calculation will not include days on which prices are not reported for all three reporting services, such as weekends or holidays. If any of these publications ceases to report daily assessments for ANS oil traded at the United States West Coast, the Parties agree to calculate the ANS Spot Price using the data from the remaining reporting service. If either Buyer or State makes a good faith determination that the ANS Spot Price no longer accurately represents the price for ANS oil traded at the United States West Coast, Buyer and State will attempt in good faith to arrive at a mutually agreeable alternative source to establish, or substitute for, the ANS Spot Price. If Buyer and the State arrive at a mutually agreeable alternative source, that source shall be used to determine the ANS Spot Price beginning the Month following the Month in which any of these publications ceased to report daily assessments for ANS oil traded at the United States West Coast. If Buyer and the State are unable to agree on an alternative source, the State will select the alternative source that most reliably represents the price for ANS oil traded at the United States West Coast based on the best information reasonably available to the State, and that source shall be used to determine the ANS Spot Price beginning the Month following the Month in which any of these publications ceased to report daily assessments for ANS oil traded at the United States West Coast. Any dispute between the Buyer and State concerning the ANS Spot Price under this section shall be administered in accordance with Section 12.1.

“Tariff Allowance” means the sum of (1) the average, weighted by ownership, of the Minimum Interstate TAPS Tariff (Pump Station No. 1 to Valdez Marine Terminal) on file with the Federal Energy Regulatory Commission (“FERC”) for each owner in effect on the Day the

Sale Oil is tendered by the State to Buyer; and (2) any tariffs paid by Buyer for shipment of Sale Oil upstream of Pump Station No. 1. “Minimum Interstate TAPS Tariff” means the effective TAPS tariff on file with the FERC for each carrier on a given Day, excluding incentive tariffs. If the Minimum Interstate TAPS Tariff that has been used in the calculation of a Tariff Allowance is changed or subject to a refund order by the FERC, or if Buyer pays a revised amount for tariffs paid by Buyer for shipment of Sale Oil upstream of Pump Station No. 1, the Tariff Allowance will be recalculated using the changed FERC-ordered Minimum Interstate TAPS Tariff or the revised amount for tariffs paid by Buyer for shipment of Sale Oil upstream of Pump Station No.1, the Sale Oil Price will be adjusted accordingly, and the resulting refund to the State (or credit to Buyer) will be made in accordance with Article III. If a FERC-ordered tariff is suspended or enjoined from implementation, the Tariff Allowance shall not be recalculated until the suspension or injunction is lifted and the FERC order is implemented and goes into effect. If Buyer pays a revised amount for tariffs paid by Buyer for shipment of Sale Oil upstream of Pump Station No.1, the Tariff Allowance shall be recalculated when the revised amount is paid or refund is received by Buyer and applied to Sale Oil that has been delivered to Buyer beginning on the effective date of the revision. Buyer shall, at the request of the Commissioner, provide the necessary documentation in the form of invoices, etc. from the TAPS and upstream pipeline carriers of tariff payments made by Buyer and any revised tariff payments including interest paid or received by Buyer as a consequence of those revised tariff payments.

The “Quality Bank Adjustment” is a per-barrel amount, positive or negative, that accounts for the difference in quality between the oil produced from the units on the North Slope and the co-mingled ANS TAPS stream downstream of the PSVR connection. The Quality Bank Adjustment for a Unit’s stream will be calculated each Month as the difference between the



stream value for the PSVR Reference Stream and the stream value at the Point of Delivery. The stream value and PSVR Reference Stream are reported by the TAPS quality bank administrator. If the stream value or the PSVR Reference Stream is recalculated by the Quality Bank administrator, the Quality Bank Adjustment shall be recalculated and the Price shall be adjusted in accordance with Article III to apply to Sale Oil that has been delivered to Buyer beginning on the effective date of the adjustment.

“Line Loss” is a per barrel amount equal to  $(0.0009) \times (\text{ANS Spot Price} - \$1.95 - \text{Tariff Allowance} + \text{Quality Bank Adjustment})$ .

Appendix 2 is an illustrative example of the calculation of the Price of Sale Oil. If there is a conflict between Appendix 2 and Section 2.3, Section 2.3 shall control.

2.4 Delivery of Sale Oil.

2.4.1 Day of First Delivery. The State will make first delivery of the Sale Oil to Buyer at the Point of Delivery on February 1, 2014.

2.4.2 Subsequent Deliveries. After the first delivery, the State shall tender the Sale Oil to Buyer at the Point of Delivery immediately upon the receipt of the Royalty Oil from the Lessees at the Point of Delivery.

2.5 Passage of Title and Risk of Loss. Title to, and risk of loss of, the Sale Oil shall pass from the State to Buyer for all purposes when the State tenders delivery of the Sale Oil to Buyer at the Point of Delivery. Buyer shall bear all risk and responsibility for the Sale Oil after passage of title.

2.6 Indemnification After Passage of Title. Buyer shall indemnify and hold the State harmless from and against any and all claims, costs, damages (including reasonably foreseeable consequential damages), expenses, or causes of action arising from or related to any transaction

or event in any way related to the Sale Oil after title has passed to Buyer. If Buyer suffers damages or losses caused by third parties and related to the Sale Oil, the State agrees to cooperate with the Buyer to permit Buyer to attempt to recover such damages or losses. The State will cooperate with the Buyer to permit Buyer to attempt to recover such damages or losses. The State will, on request, assign the State's claims to Buyer and cooperate in Buyer's pursuit of State assigned claims.

2.7 Transportation Arrangements. Buyer shall make all arrangements for transportation of the Sale Oil from the Point of Delivery, to, through and away from the TAPS, and all pipelines upstream from Pump Station No. 1, and shall be responsible for meeting any linefill and storage tank bottom requirements related to transportation of the Sale Oil after passage of title, except that the State shall be responsible for meeting any linefill requirements for pipelines upstream of Pump Station No. 1. If Buyer provides the necessary data, the State shall meet its linefill requirements by passing title to Sale Oil to Buyer at the Point of Delivery but not invoicing Buyer for the portion of Sale Oil required for linefill until that portion of Sale Oil has been delivered to Buyer at Pump Station No. 1. For purposes of invoicing, Buyer and State agree that the linefill upstream of Pump Station 1 that has not been invoiced will be deemed to be the last barrels injected at the Point of Delivery. On the State's request, Buyer shall provide the State with evidence of the arrangements for transportation of the Sale Oil from the Point of Delivery, through and away from TAPS, and all pipelines upstream from Pump Station No. 1, and evidence of arrangements for resale, exchange, or other disposal of the Sale Oil. Buyer's failure to provide information, evidence, or assurances requested by the State shall, at the State's election and after Notice to Buyer, constitute a material default under this Agreement.

**ARTICLE III**  
**INVOICING AND PAYMENT**

3.1 Monthly Invoices. On or before the twentieth calendar Day of each Month after the first Month of delivery of Sale Oil, the State shall send to Buyer, via facsimile transmission or electronic mail, a statement of account with an invoice for the total amount due for the estimated quantity of Sale Oil delivered to Buyer during the immediately preceding Month of Sale Oil delivery and the estimated Price applicable to those deliveries, and the amount of any adjustments for the previous Month. The State will base its estimates on the best information reasonably available to the State. The State shall adjust invoices as provided in Section 3.3.

3.2 Payment of Invoices. Buyer shall pay the total amount of each invoice, including adjustments for previous Months of Sale Oil delivery, in full, on or before the later of (1) the third Business Day after the date of the statement of account in which the invoice is included; or (2) the twentieth calendar Day of the Month. If the third Business Day after the date of the statement of account or if the twentieth calendar Day of the Month does not fall on a Business Day then the invoiced amount is due on the immediately following Business Day. Any amount that Buyer does not pay in full on or before the payment due date calculated in accordance with this section shall accrue interest as provided in Section 3.5, and become subject to the late payment provisions of Section 3.7, and any other remedies available to the State under this Agreement and at law.

3.3 Adjustments. Buyer acknowledges that any time within ten years after an invoice is sent for a Month of Sale Oil delivery, the State may receive more accurate information concerning the ANS Spot Price, actual quantity of Sale Oil delivered to Buyer, line fill, the proper calculation of Tariff Allowance, and Quality Bank Adjustments that affect the Price of the Sale Oil. Buyer agrees that any time within ten years such information becomes available to the

State, the State shall make adjustments and invoice or credit Buyer the amount of the adjustments in accordance with the process and retroactivity limits described in Section 2.3. The interest that will bear on changes to the Tariff Allowance will equal the interest paid by the carriers to the shippers under the FERC's regulations.

3.4 Payment of Adjustments. The Buyer shall pay the total amount of each adjustment in full, on or before the later of (1) the third Business Day after the date of the statement of account that includes the adjustment invoice; or (2) the twentieth calendar Day of the Month. If an adjustment is due to Buyer for an overpayment, the State shall credit to Buyer the amount of the overpayment on the following Month's invoice or, if no following Month invoice is provided, the State shall refund to Buyer the amount of the overpayment by the twentieth calendar Day of the following Month. Any amount the Buyer does not pay in full when due shall bear interest at the rate provided in Section 3.6 and become subject to the late payment provisions of Section 3.7, and any other remedies available to the State under this agreement and at law.

3.5 Adjustments After Termination. Buyer and State agree that the State shall continue to make adjustments, in compliance with and subject to the limitations set forth in the provisions of Section 3.3 above, after termination of this Agreement, and agree that the provisions of Articles III, shall survive termination of this Agreement for any reason. If following termination of this Agreement an adjustment is determined to be due to Buyer for overpayment in an amount that exceeds the amount of all sums remaining due from Buyer to the State, the State shall credit the overpayment against any sums due from Buyer to the State, and shall refund to Buyer the remaining amount of the adjustment. Any adjustments made after termination must be paid within 30 Days after the date of the invoice.

3.6 Interest. All amounts under this Agreement that Buyer does not pay in full when due, or that the State does not credit Buyer or pay in full when due, shall bear interest from the date payment is due, calculated in accordance with Section 3.4, at the rate provided by Alaska Statute 38.05.135(d) or as that statutory provision may later be amended.

3.7 Late Payment Penalty. In addition to all other remedies available to the State, if Buyer fails to make timely payment in full of any amount due, including adjustments, Buyer shall pay the State as a late payment penalty an amount equal to five percent of the total amount not timely paid, in addition to the amount not timely paid, and interest on the late payment penalty amount and the amount not timely paid as provided in Section 3.4. The Commissioner shall waive imposition of the late payment penalty if the Buyer provides substantial evidence that the failure to make timely payment was not willful and was not due to a mistake in a chronic pattern of mistakes.

3.8 Disputed Payments. If a dispute arises concerning the amount of an invoice, Buyer agrees to pay in full all amounts when due, pending final resolution of the dispute according to the Dispute Resolution procedures in Article XIII.

3.9 Confidential Information. The State and Buyer agree that pursuant to Section 3.3, the State may invoice Buyer for, and Buyer agrees to pay, amounts that are based upon confidential information held or received by the State. If confidential information is used as the basis for an invoice, upon receipt of a written request from Buyer, the State shall furnish to Buyer a certified statement of the Commissioner to the effect that, based upon the best information available to the State, the invoiced amounts are correct. At the request and expense of Buyer, the Commissioner's certified statement will be based on an audit by an independent third party.

3.10 Manner of Payment. Buyer shall pay all invoices in full within the times specified and without any deduction, set off, or withholding. Buyer shall pay all invoices by either Automated Clearinghouse or by Federal Reserve Wire Transfer (immediate funds available) according to the instructions provided to the Buyer by the Division of Oil and Gas's Royalty Accounting Manager.

Buyer may pay an invoice in such other manner or to such other address the State has specified in an invoice or by Notice. All other payments due shall be paid in the same manner and according to the same time schedule provided in this Article. If payment falls due on a Saturday, Sunday, or federal bank holiday, payment shall be made on the next Business Day.

#### **ARTICLE IV** **IN-STATE PROCESSING**

4.1 In-State Processing. Buyer agrees to use commercially reasonable efforts to process the Sale Oil at its refinery in Nikiski, Alaska. "Process" means the manufacture of refined petroleum products.

4.2 Exchange of Crude Oil. Buyer may exchange Sale Oil for other crude oil only as provided in this Article. An exchange of Sale Oil for other crude oil shall not reduce the price Buyer has agreed to pay the State for the Sale Oil. "Exchange" includes: (1) a direct trade of Sale Oil for and equal volume of other crude oil; (2) a direct trade of Sale Oil for other crude oil that involves either cash or volume adjustment, or both, based solely on the differences in quality or location of the crude oils exchanged; (3) sequential transactions in which the Buyer trades Sale Oil to one party and, in exchange receives crude oil for a party other than the party to whom the Buyer traded the Sale Oil; and (4) matching purchases and sales of Sale Oil for other crude oil.

**ARTICLE V**  
**BUYER'S AND GUARANTOR'S REPRESENTATIONS AND OBLIGATIONS**

5.1 Good Standing and Due Authorization of Buyer. Buyer warrants that it is, and shall remain at all times during the term of this Agreement: (1) qualified to do business in Alaska; and (2) in good standing with the State. Buyer warrants that it has all company power and authority necessary, and has performed all company action required, to enter into and fulfill its obligations under this Agreement.

5.2 Good Standing and Due Authorization of Guarantor. Guarantor warrants that it is, and shall remain at all times during the term of this Agreement: (1) qualified to do business in Alaska; and (2) in good standing with the State. Guarantor warrants that it has all company power and authority necessary, and has performed all company action required, to enter into and fulfill its obligations under this Agreement.

5.3 Financial Information. As soon as practicable after the execution of this Agreement and before the State's first Monthly Sale Oil Nomination under Section 2.1.2, and annually as soon as practicable after March 31 but no later than June 30, Guarantor shall cause a financial analyst (the "Financial Analyst") to submit an opinion to the Commissioner in the form of a letter (the "Opinion Letter") about Guarantor's current and expected future credit rating by Standard and Poor's and Moody's. The Financial Analyst shall be an independent contractor qualified to render an opinion as to the creditworthiness of the Guarantor and shall be in the business of understanding complex financial matters and financial statements to the extent required to render such opinion. Buyer shall have the right to designate the Financial Analyst, subject to approval by the State. The Financial Analyst shall be a contractor to Guarantor, and Guarantor shall be responsible for entering into any necessary contractual arrangements with the Financial Analyst and paying the fees and expenses of the Financial Analyst.



The contract between Guarantor and the Financial Analyst and each Opinion Letter must recite that the Financial Analyst (1) has been provided a copy of this Agreement, (2) understands the significance of the Opinion Letter in the administration of this Agreement, (3) understands that the State will rely on the Opinion Letter, and (4) understands that the Opinion Letter is for the benefit of the State. The contract between Guarantor and the Financial Analyst shall be subject to approval by the State, and the State shall be given a copy of the contract and all amendments to it.

The Opinion Letter shall (i) identify all documents reviewed in forming the opinion, (ii) identify people interviewed in forming the opinion and discuss the nature of the interview, (iii) state the current long term (and short term, if available) credit ratings of Guarantor by Standard and Poor's and Moody's and (iv) express an opinion whether those ratings are reasonably likely to fall to or below BBB+ (Standard and Poor's) and Baa1 (Moody's) at any time during the following twelve Months. Guarantor shall cause the Financial Analyst to review evidence of the most current ratings by Standard and Poor's and Moody's of Guarantor's long and short term debt, all bank presentations provided to Guarantor's lenders, all reports on Guarantor prepared by Standard and Poor's or Moody's, all documents filed by Guarantor with the Securities and Exchange Commission, if any, any other documents reasonably necessary to deliver the Opinion Letter, and a complete set of year-to-year comparative, independently audited financial statements, including footnotes, prepared in accordance with generally accepted accounting principles.

Guarantor's contract with the Financial Analyst may require the Financial Analyst to protect the confidentiality of the information supplied to it under Section 5.3. The State may review the information supplied to the Financial Analyst under Section 5.3 by executing a

confidentiality agreement with Guarantor but will not take any action that will make the information part of the State's public records.

5.4 Financial Condition. Guarantor warrants (1) that all financial information submitted to the Financial Analyst or reviewed by the State under Section 5.3 is complete and accurate at the time of preparation, and fairly represents Guarantor's financial condition at the time of submission; and (2) that there has been no material change in Guarantor's financial condition, business operations, or properties since the financial information was prepared. Guarantor warrants that the financial statements were prepared in accordance with generally accepted accounting principles. Guarantor and Buyer shall immediately inform the State of any material change in Guarantor's ownership or ownership of Buyer, ownership of parent companies, or financial condition, business operations, agreements, or property that is likely to affect their ability to perform their obligations under this Agreement.

5.5 Absolute Obligations. Buyer's and Guarantor's obligations to pay amounts due, provide assurances of performance in accordance with Article VII, accept, and dispose of and pay for Sale Oil, are absolute. These obligations shall not be excused or discharged by the operation of any disability of Buyer or Guarantor, event of Force Majeure, impracticability of performance, change in conditions, termination of this Agreement, or other reason or cause.

5.6 Guaranty. Buyer is an indirect, wholly-owned subsidiary of Guarantor. Buyer does not have public financial statements and does not have debt rated by Moody's or Standard and Poor's. The State is not willing to make this Agreement based solely on the credit worthiness of Buyer. Guarantor therefore agrees that it guarantees performance of all of Buyer's obligations under this Agreement as if Guarantor were the Buyer and legally indistinguishable

from Buyer. The State may require Guarantor at any time to satisfy any unsatisfied obligation of Buyer.

5.7 Due Authorization of State. State warrants that it has all power and authority necessary, and has performed all action required, to enter into and fulfill its obligations under this Agreement.

## **ARTICLE VI** **ASSURANCE OF PERFORMANCE**

6.1 Credit Review. If Guarantor fails to timely submit its financial statements and other documents and information required under Article VI such that the Financial Analyst is unable to timely submit the Opinion Letter; or if, in the opinion of the Financial Analyst, Guarantor's credit ratings have fallen to or below, or are reasonably likely in the twelve Months following the Opinion Letter, to fall to or below (a) "BBB+" (Standard and Poor's "Long term issuer"), or (b) "Baa1" (Moody's Investor Services "Issuer Ratings/Long Term Obligation Ratings"); or Guarantor is not rated by Standard and Poor's and Moody's, Guarantor shall immediately deliver to the State a one year irrevocable stand-by Letter of Credit meeting the requirements of Sections 6.2 through 6.5.

Guarantor shall annually renew and continuously maintain the Letter of Credit in effect until such time as, in the opinion of the Financial Analyst, Guarantor's credit rating is no longer reasonably likely to fall to or remain below (a) "BBB+" (Standard and Poor's "Long term issuer"); or (b) "Baa1" (Moody's Investor Services "Issuer Ratings/Long Term Obligation Ratings") at any time during the twelve Months following the Opinion Letter.

6.2 Letter of Credit. In the event that Guarantor is required to deliver a letter of credit to the State in accordance with Section 6.1, the Letter of Credit shall be in a form satisfactory to the Commissioner and shall be in effect on delivery. The Letter of Credit shall be issued for the

benefit of the State by a state or national banking institution of the United States that is insured by the Federal Deposit Insurance Corporation and has an aggregate capital and surplus amount of not less than One Hundred Million Dollars (\$100,000,000) (“Issuer”), or other banking institution approved by the Commissioner, such approval not to be unreasonably withheld. The principal face amount of the Letter of Credit shall be an amount reasonably estimated by the Commissioner to be equal to the Price of all Sale Oil to be delivered by the State to Buyer during the 90 Days immediately following delivery of the Letter of Credit to the Commissioner. The Letter of Credit shall not require the State to submit any documentation in support of drafts drawn against it other than a certified statement by the Commissioner and the State’s Attorney General that Guarantor is liable to the State for an amount of money equal to the amount of the draft, that the amount of money is due and payable in full, and it has not been timely paid.

6.3 Performance Assurance After Termination. If a Letter of Credit is in effect immediately prior to Termination of the Agreement, the Commissioner may require that, after Termination, the Letter of Credit be maintained in an amount estimated by the Commissioner to be equal to the value of all adjustments which may be made under Article III. As an alternative to maintaining a Letter of Credit after Termination, and on commercial terms acceptable to the Commissioner, the Guarantor may require that Buyer establish and maintain an interest-bearing escrow account equal to the value of all adjustments that may be made under Article III and with the same payment terms as the Letter of Credit.

6.4 Other Performance Assurance. The Commissioner may allow Guarantor to provide security other than the Letter of Credit if the Commissioner determines other security is adequate to protect the State’s interest.

6.5 Correction of Defects in Letter. Guarantor shall have five Business Days to correct any defect in the Letter of Credit beginning on the Business Day Guarantor first learns of the defect whether through Notice from the State or otherwise. A defect is any failure to comply with the terms and conditions of Article VI.

## **ARTICLE VII MEASUREMENTS**

7.1 Measurements. The quantity and quality of Sale Oil the State delivers under this Agreement shall be determined by measurement at the Point of Delivery. Procedures used for metering and measuring the Sale Oil shall be in accordance with the procedures in effect at the Point of Delivery.

## **ARTICLE VIII EFFECTIVE DATE AND TERM**

8.1 Effective Date. This Agreement shall become effective and enforceable on the date upon which it is signed by all parties (“Effective Date”).

8.2 Initial Term. The Initial Term of this Agreement shall begin on the Day of First Delivery defined in Section 2.4.1. as February 1, 2014 and terminate on January 31, 2015 except that the Term of this Agreement may be changed only as provided in Section 2.1.4 and Article X.

8.3 Continuation of Obligations. The provisions of Article III, Section 6.5, Section 6.3, and Section 8.3, Article IX and Article X shall survive termination of this Agreement for any reason or cause. Termination of this Agreement shall not relieve either Party from any expense, liability, or other obligation or any remedy that has accrued or attached prior to the date of termination. For Sale Oil delivered under this Agreement, termination of this Agreement shall not relieve State or Buyer of their respective obligations hereunder, including the obligation to pay all production Month invoices, initial adjustments, subsequent adjustments, and interest, and,

where applicable, penalties, costs, attorney fees, and any other charges related to the Sale Oil actually delivered.

**ARTICLE IX**  
**DEFAULT OR TERMINATION**

9.1 Default.

9.1.1 Events of Default. The Commissioner may suspend or terminate the State's obligations to tender, deliver and sell Sale Oil to Buyer, and may exercise any one or more of the rights and remedies provided in this Agreement, or at law, if any one or more of the following events of default occur:

(a) Buyer or Guarantor fails to pay in full any sum of money owed under this Agreement within five Business Days after the State gives Buyer Notice that payment is past due;

(b) Within five Business Days after Notice from the State, Buyer or Guarantor fails to provide written assurances satisfactory to the State of Buyer's or Guarantor's intention to perform its obligations under this Agreement and evidence or assurances of transportation arrangements under Section 2.7;

(c) There is a material change in Buyer's or Guarantor's financial condition, business operations, agreements, or property or ownership that is likely to affect Buyer's or Guarantor's ability to perform its obligations under this Agreement, and within five Business Days after Notice from the State, Buyer or Guarantor is unable or unwilling to provide a Letter meeting the requirements of Sections 6.1 and 6.2;

(d) Buyer or Guarantor fails to perform any of its obligations under this Agreement, and cannot cure the non-performance or the non-performance continues for

more than 30 Days after the State has given Notice to Buyer or Guarantor of its non-performance;

(e) Any representation or warranty made by Buyer or Guarantor in this Agreement is found to have been materially false or incorrect when made; or

(f) Guarantor fails, or is unable for any reason (including reasons beyond Guarantor's control), to maintain the Letter required under Article VI, regardless of Guarantor's willingness or ability to perform any other obligations under this Agreement.

9.1.2 Default by Failure or Inability to Pay. Buyer or Guarantor shall immediately provide the State with Notice if Buyer or Guarantor is unable to pay any of its debts when due, makes an arrangement for the benefit of creditors, files a bankruptcy petition, or is otherwise insolvent. Upon Notice from Buyer or Guarantor, or if the State independently determines that Buyer or Guarantor is unable to pay any of its debts when due or is otherwise insolvent, the State's obligations to deliver and sell Sale Oil to Buyer shall automatically and immediately terminate without any requirement of Notice to Buyer or Guarantor or other action by the State. Upon termination of the State's obligations under this Section 9.1.2, Buyer and Guarantor shall be liable for payment and performance of all their obligations for Sale Oil the State delivered to Buyer before termination and for a minimum of one hundred Days after termination, plus an additional 90 Days if a Lessee invokes the force majeure term of its Royalty Settlement Agreement. Within 30 Days after termination under this Article 9.1.2, the State shall have the right, upon consent of Buyer or Guarantor, to reinstate all of the State's, Buyer's and Guarantor's obligations under this Agreement retroactive to the date of termination.

9.2 State's Remedies. If Buyer or Guarantor defaults under this Agreement, in addition to all other remedies available to the State under this Agreement or at law, the following remedies shall be available to the State:

9.2.1 Buyer's and Guarantor's Obligations Become Due. All monetary obligations Buyer or Guarantor has accrued under this Agreement, even if not yet due and payable, shall immediately be due and payable in full.

9.2.2 State May Dispose of Sale Oil. The State may dispose of some or all of the Sale Oil to third parties. If the State exercises this remedy, regardless whether this Agreement is terminated, Buyer and Guarantor shall be and shall remain liable to the State for the amount of the difference between the Price for the Sale Oil under Article II and the actual price the State receives from disposition of the Sale Oil to third parties.

9.2.3 Indemnification for Loss. Buyer and Guarantor shall hold the State harmless and indemnify it against all its liability, damages, expenses, attorney's fees and costs, and losses directly arising out of Buyer's or Guarantor's default, termination of the State's obligations, and disposal of the Sale Oil to third parties. Additionally, if Buyer or Guarantor defaults in the payment of any monetary amounts due to the State for Sale Oil tendered or delivered under this Agreement, Buyer or Guarantor shall pay the State 100 percent of reasonable actual costs and attorney fees incurred by the State in pursuing payment of the monetary amounts due, regardless of whether litigation is commenced and regardless of whether legal services are provided by the Attorney General's office or private counsel.

9.2.4 Other Rights and Remedies. The State shall have the right cumulatively to exercise all rights and remedies provided in this Agreement and by law, and obtain all other relief available under law or at equity, including mandatory injunction and specific performance.



9.3 Limitation of Buyer's and Guarantor's Remedies. If Buyer or Guarantor breaches or defaults in any of its obligations under this Agreement, Buyer or Guarantor shall not obtain a temporary restraining order or preliminary injunction preventing the State from disposing of the Sale Oil in accordance with Section 9.2.2.

9.4 Article Survives Termination. This Article survives termination of the Agreement.

**ARTICLE X**  
**DISPOSITION OF OIL UPON DEFAULT OR TERMINATION**

10.1 Disposition of Oil Upon Default or Termination. Buyer and Guarantor acknowledge that the State may be required to provide six Months' notice to the Lessees before the State may decrease its in-kind nomination of Royalty Oil in any Month. If this Agreement terminates for default or any other reason after Buyer has nominated or is deemed to have nominated Sale Oil, Buyer shall continue to accept and pay for Sale Oil through the first Day of the Month following expiration of a minimum of 100 Days after the date of termination, if the Commissioner so requires. If, however, the additional notice provisions of Article 2.1.6 are invoked, Buyer shall continue to accept and pay for Sale Oil until the expiration of six Months and ten Days after the date of default or notice of termination.

10.2 Security for Disposal of Sale Oil. To secure the Buyer's obligations to purchase and dispose of Sale Oil, upon the Commissioner's request, if Buyer refuse to accept or receive Sale Oil under this Agreement, Buyer shall assign or otherwise transfer to the State, or its designee, all or part of Buyer's right to transport the Sale Oil through and away from the TAPS, and all pipelines upstream from Pump Station No. 1, whether such rights are under nominations, leases, contracts, tariffs, charter parties, or other agreements. The State will incur liability or

obligations under such assignment or transfer only to the extent the State actually exercises its rights to succeed to Buyer's interests under and obtain the benefits of the assignments.

**ARTICLE XI**  
**NONWAIVER**

11.1 Nonwaiver. The failure of a Party to insist upon strict or a certain performance, or acceptance by a Party of a certain performance or course of performance under this Agreement shall not: (1) constitute a waiver or estoppel of the right to require certain performance or claim breach by similar performance in the future; (2) affect the right of another Party to enforce any provision; or (3) affect the validity of any part of this Agreement.

**ARTICLE XII**  
**DISPUTE RESOLUTION**

12.1 Dispute Resolution. Any disagreement or dispute arising out of or related to this Agreement shall be decided according to the dispute resolution procedure set forth in this Article. The procedure set for in this Article shall be initiated by a Party by providing written Notice of the disagreement or dispute to the other Parties. No later than sixty Days after a Party provides written Notice, the Parties shall each present any arguments and evidence supporting its view of the disputed term, condition, right or obligation in writing to the Commissioner for consideration. Prior to consideration by the Commissioner, the State, Buyer, and Guarantor shall not have the right to civil litigation-type discovery or a civil litigation-type trial with the right to call or cross-examine witnesses unless granted by the Commissioner, after request. Within 30 Days after the Parties submit their final arguments and evidence, the Commissioner shall issue a finding interpreting the meaning or application of the disputed word, term, condition, right or obligation and shall set for the basis for the conclusion. Any Commissioner finding issued under

the foregoing procedure shall be considered a final administrative order and decision appealable to the Alaska Superior Court pursuant to AS 22.10.020 and applicable Alaska Rules of Court.

**ARTICLE XIII**  
**SEVERABILITY**

13.1 Severability. If a court decrees any provision of this Agreement to be invalid, all other provisions of this Agreement shall remain valid. If, however, invalidation of a provision impairs a material right or remedy under this Agreement, the Parties will negotiate in good faith to maintain the original intent and benefits of this Agreement. If the Parties cannot restore the original intent and benefits of this Agreement, then either Party may terminate this Agreement by giving Notice.

**ARTICLE XIV**  
**FORCE MAJEURE**

14.1 Effect of Force Majeure. Except for Buyer's and Guarantor's obligations to pay amounts due, provide assurance of performance in accordance with Article VII, accept, dispose of, and pay for Sale Oil, no Party shall be liable for failure to perform if performance is substantially prevented by Force Majeure after commercially reasonable efforts to perform. Except, however, if Buyer or Guarantor is prevented by Force Majeure from performing any material obligation for 180 successive Days or more, the State shall have the right to terminate this Agreement on 60 Days' Notice. If the State is prevented by Force Majeure from performing any material obligation for 180 successive Days or more, Buyer may terminate this Agreement on 60 Days' Notice. Before a Party exercises the right to terminate this Agreement, the Party may request the other Parties to negotiate in good faith to restore performance.

14.2 Force Majeure. In this Agreement the term "Force Majeure" means an event or condition not within the reasonable control of the Party claiming "Force Majeure."

14.2.1 Force Majeure Events include, but are not limited to, the following events:

- (a). act of God, fire, lightning, landslide, earthquake, storm, hurricane, hurricane warning, flood, high water, washout, explosion, well blowout, failure of plant, pipe or equipment, or;
- (b). strike, lockout, or other industrial disturbance, act of the public enemy, war, military operation, blockade, insurrection, riot, epidemic, arrest or restraint by government of people, terrorist act, civil disturbance, or national emergency;
- (c). act, order, or requisition of any governmental agency or acting governmental authority or any governmental proration, regulation, or priority.

14.2.2 Force Majeure events do not include changes in commercial or financial markets affecting the price of crude oil or processed petroleum products.

14.3 Notice and Remedy of Force Majeure. If a Party believes that Force Majeure has occurred, the Party shall immediately provide Notice to the other Parties of its claim of Force Majeure. The Party claiming Force Majeure shall use commercially reasonable diligence to remedy the Force Majeure. Except for Buyer's and Guarantor's absolute obligations to pay amounts due, provide assurances of performance in accordance with Article VI, and accept, dispose of and pay for Sale Oil, the disabled Party's obligations to perform that are affected by the Force Majeure shall be suspended from the time of Notice to the other Parties until the disability caused by the Force Majeure should have been remedied with reasonable diligence.

**ARTICLE XV**  
**NOTICE**

15.1 Method of Notice. All notices, consents, requests, demands instructions, approvals, and other communications permitted or required shall be made in writing and delivered by any two of the following methods: (a) personally delivered, (b) delivered and confirmed by facsimile transmission, (c) delivered by overnight courier delivery service, (d) delivered and confirmed by electronic mail, or (e) deposited in the United States mail, first class, postage prepaid, certified or registered, return receipt requested, addressed as follows:

Commissioner of Natural Resources  
550 West 7<sup>th</sup> Avenue, Suite 1400  
Anchorage, Alaska 99501-3650  
Facsimile Number: (907) 269-8918

and

Director, Division of Oil and Gas  
550 West 7th Street, Suite 800  
Anchorage, Alaska 99501-3510  
Facsimile Number: (907) 269-8938

the Buyer:

Tesoro Refining & Marketing Company LLC  
19100 Ridgewood Parkway  
San Antonio, Texas 78259-1828  
Facsimile Number: (210) 745-4494  
Attention: General Counsel  
e-mail: Charles.S.Parrish@tsocorp.com

the Guarantor:

Tesoro Corporation  
19100 Ridgewood Parkway  
San Antonio, Texas 78259-1828  
Facsimile Number: (210) 745-4494  
Attention: General Counsel  
e-mail: Charles.S.Parrish@tsocorp.com

or to any other place within the United States of America designated in writing by the State, Buyer or Guarantor.

15.2 Notice Effective Date. Notice given by personal delivery, or other reputable overnight courier delivery service, or United States mail, first class, postage prepaid, certified or registered, return receipt requested, shall be effective on the date of actual receipt at the appropriate address. Notice given delivered and confirmed by facsimile or electronic mail shall be effective on the date of actual receipt if received during recipient's normal business hours, or at the beginning of the next Business Day after receipt if received after recipient's normal business hours. The Notice Effective Date is the effective date of the first of the two Notices received.

15.3 Change of Address. A Party may notify the other Parties of changes in its address by giving Notice.

## **ARTICLE XVI** **RULES AND REGULATIONS**

16.1 Rules and Regulations. This Agreement is subject to the laws of the State of Alaska, and orders, rules and regulations of the United States, the State of Alaska, and any duly constituted agency of the State of Alaska.

## **ARTICLE XVII** **SOVEREIGN POWER OF THE STATE**

17.1 Sovereign Power of the State. This Agreement shall not be interpreted to limit in any way the State's ability to exercise any sovereign or regulatory powers, whether conferred by constitution, statute or regulation. The State's exercise of any sovereign or regulatory power shall not be deemed to enlarge any of Buyer's or Guarantor's rights, or limit any of Buyer's or Guarantor's obligations or liabilities under this Agreement.

**ARTICLE XVIII**  
**APPLICABLE LAW**

18.1 Governing Law. This Agreement, and all matters arising from or related to this Agreement, shall be governed, construed and determined by the laws of the State of Alaska.

18.2 Jurisdiction. Any legal action or proceeding arising out of or related to this Agreement shall be brought in a state court of general jurisdiction sitting in the State of Alaska, and the Parties irrevocably submit to the jurisdiction of that court in any action or proceeding.

18.3 Venue. The Parties agree that the venue for any legal action or proceeding arising out of or related to this Agreement shall be in the Alaska Superior Court sitting in Anchorage, Alaska.

**ARTICLE XIX**  
**WARRANTIES**

19.1 Warranties. The purchase and sale of Royalty Oil under this Agreement are subject only to the warranties the State has expressly set forth in this Agreement. The State disclaims and Buyer and Guarantor waive all other warranties, express or implied in law.

**ARTICLE XX**  
**AMENDMENT**

20.1 Amendment. This Agreement may be supplemented, amended, or modified only by written instrument duly executed by the Parties, and, where required, only on approval under Alaska Statute 38.06.055.

20.2 Legislative Approval. Any material amendment to this Agreement that appreciably reduces the consideration received by the State requires prior approval of the legislature.

**ARTICLE XXI**  
**SUCCESSORS AND ASSIGNS**

21.1 Assignments and Other Transfers. Buyer may freely assign its rights and obligations to an Affiliate formed under the laws of a state in the United States of America. An “Affiliate” shall mean an entity that is directly or indirectly controlled by Guarantor or Guarantor’s permitted assigns, or is directly or indirectly controlled by an entity that directly or indirectly controls Guarantor or Guarantor’s permitted assigns, where control means the right to vote more than fifty percent of the voting interest in the entity.

Buyer and Guarantor may, without consent of the State, collectively assign their rights and obligations under this Agreement to a Person that acquires all or substantially all of the Alaska refining assets of Buyer and Guarantor (the “Assignee”), provided that at least 45 Days before the effective date of the assignment the Assignee provides to the State (a) all of the financial information and warranties Guarantor is required to provide under Article V and (b) a copy of the form of the assignment, including Assignee’s obligation to assume and discharge all of Buyer’s and Guarantor’s obligations under this Agreement. If, based on the financial information supplied under Article V, Assignee is required to supply a Letter of Credit under Article VII, the Letter of Credit in the form and amount required by Article VI must be provided to the State at least 30 Days before the effective date of the assignment. No assignment can be made to an Assignee with long term credit ratings of less than BBB (Standard and Poor’s) or Baa3 (Moody’s). From and after the effective date of the Assignment, Buyer and Guarantor shall be relieved of their rights and obligations under this Agreement. No assignment shall be effective until after 45 Days’ Notice to the State.



Buyer and Guarantor may not otherwise assign their rights or obligations under this Agreement without first obtaining the written consent of the Commissioner, which may not be unreasonably withheld.

21.2 Binding on Successors. This Agreement shall be binding upon and inure to the benefit of the legal representative, Parties and their successors, and assigns of the Parties.

## **ARTICLE XXII** **RECORDS**

22.1 Inspection of Records. The Parties shall each accord to the other and the other's authorized agents, attorneys, and auditors access during reasonable business hours to any and all property, records, books, documents, or indices related to Buyer's, Guarantor's or the State's performance under this Agreement, and which are under possession or control of the Party from which access is sought, so the other Party may inspect, photograph, and make copies of the property, records, books, documents, or indices except: (1) the State shall not be required to disclose any information, data, or records that it is required by state or federal law or regulation, or by agreement with the Person supplying the record, to be held confidential; (2) the State's access to and treatment of Guarantor's financial records shall be limited by Section 5.3; and (3) no party shall be required to produce documents that are protected by the attorney-client privilege. If information the State obtains from Buyer or Guarantor may be held confidential under state or federal law or regulation, Buyer may request in writing that the State hold the information confidential, and the State shall keep the information confidential to the extent and for the term provided by law.

**ARTICLE XXIII**  
**EMPLOYMENT OF ALASKA RESIDENTS**

23.1 Employment of Alaska Residents. Buyer shall comply with all valid federal, state, and local laws in hiring Alaska residents and companies, and shall not discriminate against Alaska residents and companies. Within the constraints of law, Buyer voluntarily agrees to employ Alaska residents and Alaska companies to the extent they are available, willing, and at least as qualified as other candidates for work performed in Alaska in connection with this Agreement. “Alaska resident” means an individual who is physically present in Alaska with the intent to remain in the state indefinitely. An individual may demonstrate an intent to remain in the state by maintaining a residence in the state, possessing a resident fishing, trapping or hunting license, or receiving a permanent fund dividend. “Alaska companies” means companies incorporated in Alaska or whose principal place of business is in Alaska. If a court invalidates any portion of this provision, Buyer agrees to employ Alaska residents and Alaska companies to the extent permitted by law.

**ARTICLE XIV**  
**COUNTERPARTS**

24.1 Counterparts. This Agreement may be executed in multiple counterparts. It is not necessary for the Parties to sign the same counterpart. Each duly executed counterpart shall be deemed to be an original and all executed counterparts taken together shall be considered to be one and the same instrument.

**ARTICLE XXV**  
**MISCELLANEOUS**

25.1 Agreement Not to Be Construed Against Any Party as Drafter. The Parties recognize that this Agreement is the product of the joint efforts of the Parties and agree that it shall not be construed against any Party as drafter.

25.2 Entire Agreement. This Agreement constitutes the entire agreement and understanding between the Parties about the subject matter of this transaction and all prior agreements, understandings, and representations, whether oral or written, about this subject matter are merged into and superseded by this written Agreement.

25.3 Headings. The headings throughout this Agreement are for reference purposes only and shall not be construed or considered in interpreting the terms and provisions of this Agreement.

25.4 Authority to Sign. Each Person signing this Agreement warrants that he or she has authority to sign the Agreement.

25.5 Further Assurances. The Parties agree to do such further acts or execute such further documents as may reasonably be required to implement this Agreement.

25.6 Currency. All dollar amounts are U.S. dollars.

**SIGNATURES:**

the State:

THE STATE OF ALASKA

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Joe Balash  
Acting Commissioner  
Department of Natural Resources

Date:

TESORO REFINING & MARKETING  
COMPANY, LLC

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Dave Kirshner  
Vice-President, Commercial

Date:

TESORO CORPORATION

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Scott Spendlove  
Chief Financial Officer

Date:

**APPENDIX 1:  
SALE OIL NOMINATION PROCEDURE**

**Example Nomination Procedure for July 2014 Deliveries**

	Prudhoe Bay & Satellites	Greater Pt McIntyre Area	MPU Total	DIU Total	KRU Total	Northstar Total	CRU Total	Badami Total	Oooguruk Total	Nikaitchuq Total	Total
<b>March 15, 2014</b> State receives preliminary barrel per day (bpd) production forecasts from the operator 105 days prior to the start of the production month	149,600	14,000	14,000	5,800	73,700	9,200	47,500	1,000	6,700	8,000	329,500
<b>Not later than March 21, 2014</b> RIK purchaser notifies state of monthly bpd nomination (a)											30,000
<b>Not later than March 30, 2014</b> State computes RIK %											
Estimated royalty rates	12.50%	13.34%	13.77%	14.42%	12.50%	27.50%	14.74%	14.80%	5.00%	12.50%	
State Ownership	100.00%	100.00%	100.00%	100.00%	100.00%	82.16%	67.82%	100.00%	100.00%	100.00%	
Total state estimated royalty bpd (bpd * royalty rate)	18,700	1,868	1,928	836	9,213	2,079	4,748	148	335	1,000	40,854
State's Total RIK nomination percentage (Purchaser RIK bpd/estimated royalty bpd)											73.43%
<b>March 30, 2014</b> State notifies unit operator of state's RIK nomination percentage	94.64%	94.64%	95.00%	95.00%	85.00%	0.00%	0.00%	0.00%	0.00%	0.00%	
<b>May 26, 2014</b> Unit operator notifies state and working interest owners of updated production forecast Production forecast (bpd) for July production month State calculates RIK bpd	188,938	30,009	10,900	8,560	72,080	7,300	45,064	1,291	6,900	7,800	378,842
Royalty rates based on updated estimates (b)	12.50%	13.391158%	12.50%	12.50%	12.50%	27.50%	14.74%	14.80%	5.00%	12.50%	
State's RIK nomination percentage	94.64%	94.64%	95.00%	95.00%	85.00%	0.00%	0.00%	0.00%	0.00%	0.00%	
RIK bpd (bpd production forecast * Royalty rate * nomination %)	22,351	3,803	1,294	1,017	7,659	0	0	0	0	0	36,124
State's Tendering percentage (RIK bpd/Production Forecast volumes)	11.83000000%	12.67339193%	11.87500000%	11.87500000%	10.62500000%	0.00000000%	0.00000000%	0.00000000%	0.00000000%	0.00000000%	
<b>May 31, 2014</b> State notifies RIK purchaser of bpd volume available for July production month	22,351	3,803	1,294	1,017	7,659	0	0	0	0	0	36,124
<b>August 2, 2014</b> State invoices RIK purchaser for May production											
Metered volume for July 1-31, 2014	7,279,221	561,360	375,992	260,120	2,712,974	256,569	1,406,636	42,261	207,194	248,903	13,351,230
State's RIK Tendering percentage	11.83000000%	12.67339193%	11.87500000%	11.87500000%	10.62500000%	0.00000000%	0.00000000%	0.00000000%	0.00000000%	0.00000000%	
Total RIK bbls	861,131.84	71,143.35	44,649.05	30,889.25	288,253.49	-	-	-	-	-	1,296,067
bpd volume (Total RIK/31) (varies from forecast)	27,778	2,295	1,440	996	9,298	0	0	0	0	0	41,809
bpd volume varies from forecast	9,078	427	(488)	160	86						9,264

Table notes:

- (a) The state determines from which units to nominate RIK volumes (section 2.1.5 of the Agreement)  
(b) The estimated royalty percentage for Greater Pt McIntyre is a composite royalty rate from several fields and will vary with production

**Proration Procedure: RIK Volume by Purchaser Calculator (MS Excel Workbook—filename: Proration\_Calculator\_09\_06\_13)**

The State RIK has shared with Tesoro the above captioned calculator that illustrates the proration procedures described in Section 2.1.3. The calculator uses five separate hypothetical cases to show what volume of RIK that will be delivered to Tesoro and FHR. In its agreement with FHR the State will sell up to 85 percent of its Royalty Oil to FHR, preserving up to 15 percent for sale to Tesoro or for keeping in-value. The State and FHR have agreed that if 85 percent of the Royalty Oil is insufficient to fulfill total nominations, FHR will receive 24,000 barrels per day (“bpd”) and the difference between 85 percent of Royalty Oil and 24,000 bpd will be prorated between FHR and Tesoro. If the allocation mechanism provides more barrels to a RIK purchaser than was nominated, the barrels in excess of the nominated volume are assumed to be delivered to the other purchaser (not to exceed the other purchaser's nomination volume).

The spreadsheet input values and hypothetical cases are as follows:

Inputs

- Total Royalty Oil (in bpd) is the volume of Royalty Oil that is available for taking in-kind.
- Flint Hills Resources Nomination (in bpd) is the volume of Royalty Oil that Flint Hills desires to purchase in the given month.
- Tesoro Nomination (in bpd) is the volume of Royalty Oil that Tesoro desires to purchase in the given month.
- Volume Reserved for Sale to Flint Hills Resources (in bpd) is the volume of Royalty Oil that is guaranteed to FHR (assuming that 85 percent of Royalty Oil is at least 24,000 bpd)
- Volume Reserved for Sale to Tesoro (in percent of Total Royalty Oil, not to exceed 15) is the percent of Royalty Oil that is guaranteed to Tesoro, this is analogous to the 24,000 bpd reserved for FHR. It should be noted that we have agreed to provide FHR with the minimum of 24,000 bpd or 85 percent of Royalty Oil. If the difference between 85 percent of Royalty Oil and 24,000 bpd is positive, the difference is barrels that are subject to proration. Thus, assuming the difference is positive, Tesoro would receive the "Volume Reserved for Sale to Tesoro" plus a share of the prorated barrels.

Cases

1. The State has sufficient volumes of Royalty Oil, no proration.

If the total nominations received from the RIK purchasers is less than the volume of Royalty Oil the State is willing and able to take in-kind, then both FHR and TSO will receive their full nominations.

Example: Assume that DNR expects that on an annual average daily basis the State will receive 61,373 bpd in FY2016 (i.e., cell B5=61,737) and FHR nominates 30,000 bpd (i.e., cell B8=30,000) and Tesoro nominated 15,000 bpd (i.e., cell B9=15,000). The State guarantees Tesoro 10 percent of its Royalty Oil (i.e., cell B13=10).

The State supplies FHR with 30,000 bpd (B24) and Tesoro with 15,000 bpd (B25) since  $45,000 < 95$  percent of Royalty Oil.

2. The State has insufficient volumes of Royalty Oil, proration is triggered.

If the total nominations by both purchasers exceed 85 percent of Royalty Oil, the proration mechanism is triggered. The state guarantees Tesoro its "Volume Reserved for Sale to Tesoro" and, similarly, guarantees FHR its "Volume Reserved for Sale to Flint Hills Resources."

Example: The State has 30,000 bpd of Royalty Oil. FHR nominates 30,000 bpd and Tesoro nominates 15,000 bpd. Further suppose the State guarantees Tesoro 10 percent of its Royalty Oil.

Proration is triggered since  $45,000 \text{ bpd} < 25,500 \text{ bpd} = 0.85 \times 30,000$ . The State then calculates the share of volumes subject to proration that will be delivered to Flint Hills as  $(30,000 - 24,000)/(30,000 + 15,000 - 24,000) = 0.286$ , in essence this ratio measure what proportion of the total "unmet" nominations are from FHR (after removing the 24,000 bpd guaranteed to FHR).

The state then calculates the proportion of total "unmet" nominations from Tesoro as  $15,000/(30,000 + 15,000 - 24,000) = 0.714$ . The total volume subject to proration is 85 percent of Royalty Oil minus the barrels guaranteed to FHR, i.e.,  $25,500 - 24,000 = 1,500$ . The volume of prorated barrels delivered to FHR is  $0.286 \times 1,500 = 429$ , and the volume of prorated barrels delivered to FHR is  $0.714 \times 1,500 = 1,071$ . The total volume delivered to FHR is  $24,000 + 429 = 24,429 \text{ bpd}$ , and the total volume delivered to Tesoro is  $3,000 + 1,071 = 4,071$ .

3. 85 percent of Royalty Oil is less than or equal to "Volume Reserved for Sale to Flint Hills Resources" and FHR nominates at least "Volume Reserved for Sale to Flint Hills Resources."

If 85 percent of the State's Royalty Oil is less than or equal to the "Volume Reserved for Sale to Flint Hills Resources" (i.e., 24,000 bpd), then the State would deliver 85 percent of Royalty Oil to FHR. The State would then deliver "Volume Reserved for Sale to Tesoro" to Tesoro. The state would commit  $(85 + \text{"Volume Reserved for Sale to Tesoro"})$  percent of its royalty to RIK.

Example: The State has 20,000 bpd of Royalty Oil. FHR nominates 30,000 bpd and Tesoro nominates 15,000 bpd. Suppose the State guarantees Tesoro 10 percent of its Royalty Oil.

Since 85 percent of Royalty Oil is 17,000 bpd and the State guarantees FHR the minimum of 85 percent and 24,000 bpd, the State would deliver 17,000 bpd to FHR. The State would also deliver "Volume Reserved for Sale to Tesoro" percent (in this example, 10 percent) of Royalty Oil to Tesoro which translates to 2,000 bpd.

4. 85 percent of Royalty Oil meets or exceeds the "Volume Reserved for Sale to Flint Hills Resources" (i.e., 24,000 bpd) and FHR nominates no more than "Volume Reserved for Sale to Flint Hills Resources."

If 85 percent of the State's Royalty Oil meets or exceeds the "Volume Reserved for Sale to Flint Hills Resources" (i.e., 24,000 bpd) and FHR nominates no more than "Volume Reserved for Sale to Flint Hills Resources" then FHR will receive their full nomination and Tesoro would receive the minimum of their nomination and  $(85 + \text{Volume Reserved for Sale to Tesoro})$  percent of Royalty Oil.

Example: The State has 35,000 bpd in Royalty Oil. FHR nominates 20,000 bpd and Tesoro nominates 15,000 bpd. The State guarantees Tesoro 10 percent of its Royalty Oil.

Since  $0.85 \times 35,000 = 29,750$  bpd is greater than both "Volume Reserved for Sale to Flint Hills Resources" (i.e., 24,000 bpd) and FHR's nomination (e.g., 20,000 bpd), the State would deliver 20,000 bpd to FHR. Since the State has allocated up to 95 percent of Royalty Oil (i.e., 33,250 bpd) for RIK, Tesoro would receive 13,250 bpd.

5. 85 percent of Royalty Oil is less than or equal to "Volume Reserved for Sale to Flint Hills Resources" (i.e., 24,000 bpd) and FHR nominates no more than "Volume Reserved for Sale to Flint Hills Resources."

If 85 percent of the State's Royalty Oil is less than or equal to the "Volume Reserved for Sale to Flint Hills Resources" and FHR nominates no more than "Volume Reserved for Sale to Flint Hills Resources," then the allocation of RIK will be driven by the difference of 85 percent of Royalty Oil and FHR's nomination. If 85 percent of royalty is greater than FHR's nomination, then FHR will receive its full nomination and Tesoro will receive the minimum of their nomination and  $(85 + \text{Volume Reserved for Sale to Tesoro})$  percent of Royalty Oil. If 85 percent of royalty is less than or equal to FHR's nomination, then FHR will receive 85 percent of Royalty Oil and Tesoro will receive "Volume Reserved for Sale to Tesoro" percent of Royalty Oil.

Example 1: State has 28,000 bpd. FHR nominates 10,000 bpd and Tesoro nominates 10,000 bpd. The State guarantees Tesoro 10 percent of its Royalty Oil.

Since  $0.85 \times 28,000 = 23,800$  bpd is less than "Volume Reserved for Sale to Flint Hills Resources," the State is obliged to deliver to FHR the minimum of 24,000 bpd and their nomination. In this case, the State will deliver FHR their full nomination of 10,000 bpd. The State would also have sufficient volume to meet Tesoro's nomination.

Example 2: State has 10,000 bpd. FHR nominates 10,000 bpd and Tesoro nominates 10,000 bpd. The State guarantees Tesoro 10 percent of its Royalty Oil.

Since  $0.85 \times 10,000 \text{ bpd} = 8,500$  is less than "Volume Reserved for Sale to Flint Hills Resources," the State is obliged to deliver FHR 8,500 bpd. The State would then deliver Tesoro their "Volume Reserved for Sale to Tesoro" which in this example is 1,000 bpd.





## APPENDIX 2: EXAMPLE OF CALCULATION OF PRICE OF SALE OIL

The Price of the Sale Oil delivered by the State to the Buyer each Month for each Unit from which the Sale Oil is nominated is:

$$\text{Price} = \text{ANS Spot Price} - 1.95 - \text{Tariff Allowance} + \text{Quality Bank Adjustment} - \text{Line Loss}$$

### ANS Spot Price

Table 2-1 illustrates the calculation of the ANS Spot Price for July 2014.

<b>Table 2-1: Calculation of ANS Spot Price</b>						
Effective Date	Platt's Oilgram Price Report			Reuters On-line Data Reporting Service		
	ANS Daily Low	ANS Daily High	ANS Daily Midpoint Average	ANS Daily Low	ANS Daily High	ANS Daily Midpoint Average
07/01/14	\$111.28	\$111.32	\$111.30000	\$110.49	\$110.59	\$110.54000
07/02/14	\$113.01	\$113.05	\$113.03000	\$112.44	\$112.54	\$112.49000
07/03/14	\$112.64	\$112.68	\$112.66000	\$112.20	\$112.30	\$112.25000
07/07/14	\$114.66	\$114.70	\$114.68000	\$114.22	\$114.32	\$114.27000
07/08/14	\$112.28	\$112.32	\$112.30000	\$111.74	\$111.85	\$111.79500
07/09/14	\$111.20	\$111.24	\$111.22000	\$110.79	\$112.13	\$111.45954
07/10/14	\$113.36	\$113.40	\$113.38000	\$114.60	\$114.70	\$114.65000
07/11/14	\$113.84	\$113.88	\$113.86000	\$114.84	\$114.94	\$114.89000
07/14/14	\$113.47	\$113.51	\$113.49100	\$113.60	\$113.70	\$113.65050
07/15/14	\$114.90	\$114.94	\$114.92000	\$115.19	\$115.29	\$115.24000
07/16/14	\$113.55	\$113.59	\$113.57000	\$114.08	\$114.18	\$114.13000
07/17/14	\$115.16	\$115.19	\$115.17500	\$115.45	\$115.55	\$115.50000
07/18/14	\$115.30	\$115.34	\$115.32000	\$115.39	\$115.49	\$115.44000
07/21/14	\$116.40	\$116.50	\$116.45000	\$116.18	\$116.28	\$116.23000
07/22/14	\$116.20	\$116.23	\$116.21500	\$116.81	\$116.94	\$116.87500
07/23/14	\$116.50	\$116.55	\$116.52500	\$116.15	\$116.25	\$116.20000
07/24/14	\$116.65	\$116.70	\$116.67500	\$116.54	\$116.64	\$116.59000
07/25/14	\$115.71	\$115.75	\$115.73000	\$115.35	\$115.45	\$115.40000
07/28/14	\$114.75	\$114.79	\$114.77000	\$114.39	\$114.50	\$114.44500
07/29/14	\$113.93	\$113.98	\$113.95500	\$114.64	\$114.75	\$114.69500
07/30/14	\$113.55	\$113.60	\$113.57500	\$113.18	\$113.28	\$113.23000
07/31/14	\$114.16	\$114.20	\$114.18000	\$114.46	\$114.54	\$114.50000
	Platt's Montly Avg. =		\$114.22641	Reuters Monthly Avg. =		\$114.29409

$$\text{ANS Spot Price}_{\text{July 2014}} = \$114.260250$$

## Tariff Allowance

The Tariff Allowance (TA) is the sum of (1) the average, weighted by ownership, of the Minimum Interstate TAPS Tariff for each owner in effect on the Day the Sale Oil is tendered by the State to the Buyer; and (2) any tariffs paid by Buyer for shipment of Sale Oil upstream of Pump Station No. 1. Table 2-2, 2-3, and 2-4 illustrates how the state will calculate the TA for each of the Units from which Sale Oil may be offered.

**Table 2-2: Calculation of TAPS Portion of Tariff Allowance**

<b>Ownership-Weighted Average Minimum Interstate TAPS Tariff – July 2014</b>				
Pipeline Company	FERC No.	Percent Pipeline Company Ownership	Minimum Interstate TAPS Tariff (Pump Station No.1 to Valdez Marine Terminal) by Pipeline Company	TAPS Tariff times Company Ownership Percentage
ConocoPhillips Transportation Alaska, Inc.		29.61017%	\$5.04	\$1.49235
ExxonMobil Pipeline Company		21.28289%	\$5.06	\$1.07691
BP Pipelines (Alaska) Inc.		49.10694%	\$5.04	\$2.47499
		100.0000%		

Ownership-Weighted Average Minimum Interstate TAPS Tariff = \$5.04426

**Table 2-3: Calculation of Portion of Tariff Allowance Upstream of Pump Station No. 1**

<b>Minimum Tariff on Pipelines Upstream of Pump Station No. 1 – July 2014</b>				
Pipeline Company	FERC No.	RCA Tariff Advice Letter No.	Pipeline	Tariff
Kuparuk Transportation Company			Kuparuk River Unit to TAPS Pump Station No. 1	
				\$0.26400
Endicott Pipeline Company			Endicott Main Production Island to TAPS Pump Station No. 1	
				\$2.01000
Kuparuk Transportation Company			Milne Point Pipeline Connection to TAPS Pump Station No. 1	
				\$0.19300
Milne Point Pipeline Company			Milne Point Central Facilities to Kuparuk Transportation Company Tie-in	
				<u>\$0.96000</u>
			Total MPU Upstream Tariff Allowance:	\$1.15300
Kuparuk Transportation Company			Kuparuk River Unit to TAPS Pump Station No. 1	
				\$0.26400
Alpine Transportation Company			Colville, Alaska Alpine Field to Kuparuk River Unit	
				<u>\$0.69000</u>
			Total CRU Upstream Tariff Allowance:	\$0.95400
BP Transportation (Alaska) Inc.			Northstar Unit Seal Island to TAPS Pump Station No. 1	
				\$2.14000

**Table 2-4: Calculation of Tariff Allowance for Each Unit****Calculation of TA for Prudhoe Bay Unit**

Ownership-Weighted Average Minimum Interstate TAPS Tariff:	\$5.04426
Upstream Tariff	<u>\$0.00000</u>
TA <sub>PBU</sub>	\$5.04426

**Calculation of TA for Kuparuk River Unit**

Ownership-Weighted Average Minimum Interstate TAPS Tariff:	\$5.04497
Kuparuk Transportation Co. Tariff	<u>\$0.26400</u>
TA <sub>KRU</sub>	\$5.30826

**Calculation of TA for Duck Island Unit**

Ownership-Weighted Average Minimum Interstate TAPS Tariff:	\$5.04426
Endicott Pipeline Co. Tariff:	<u>\$2.01000</u>
TA <sub>DIU</sub>	\$7.05426

**Calculation of TA for Milne Point Unit**

Ownership-Weighted Average Minimum Interstate TAPS Tariff:	\$5.04426
Kuparuk Transportation Co. Tariff	\$0.19300*
Milne Point Pipeline Co. Tariff	<u>\$0.96000</u>
TA <sub>MPU</sub>	\$6.19726

**Calculation of TA for Colville River Unit**

Ownership-Weighted Average Minimum Interstate TAPS Tariff:	\$5.04426
Kuparuk Transportation Co. Tariff:	\$0.26400
Alpine Transportation Company Tariff:	<u>\$0.69000</u>
TA <sub>MPU</sub>	\$5.99826

**Calculation of TA for Northstar Unit**

Ownership-Weighted Average Minimum Interstate TAPS Tariff:	\$5.04426
BP Transportation (Alaska) Inc. Tariff:	<u>\$2.14000</u>
TA <sub>DIU</sub>	\$7.18426

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\*From Kuparuk Pipeline/Milne Point Pipeline connection to TAPS Pump Station No. 1.

**Quality Bank Adjustment (QBA)**

The TAPS Quality Bank compensates shippers of a high-value crude oil stream when a lower-value crude oil stream is blended in the common stream.<sup>35</sup> To calculate the Price of the Sale Oil at the Point of Delivery an adjustment must be made for the impact that the sale oil will have on the value of the commingled crude oil stream when it enters the TAPS Valdez terminal.

The QBA is a per-barrel value, either positive or negative, and will be calculated each Month by the State for Sale Oil from each Unit. The State will estimate a QBA for each applicable Unit for the initial billing. Typically, the State receives the data to calculate the actual QBA for the

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<sup>35</sup> Mitchell & Mitchell, 8300 Douglas Avenue, #800, Dallas, TX 75225, administers the TAPS Quality Bank. Anyone who ships oil on TAPS must make prior arrangements with Mitchell & Mitchell to participate in the TAPS Quality Bank.

Month about two Months after the Month the Sale Oil is delivered. For this reason the QBA will be subject to a routine true-up in a subsequent adjustment.

**Table 2-5: Hypothetical TAPS Quality Bank Data**  
(as provided by the Quality Bank Administrator)

TAPS Quality Bank Stream Values and Total Stream Volume Shipped July 2014				
Sample Location	Stream	Volume (BBL)	Stream Value (\$/BBL)	Total Stream Value (\$)
PBU IPA	PBU IPA	6,339,237	\$110.4164400000	\$699,955,981.86
LISBURNE	LISBURNE	271,173	\$112.2028800000	\$30,426,391.58
ENDICOTT	ENDICOTT	202,497	\$109.5248100000	\$22,178,445.45
KUPARUK	KUPARUK	7,008,864	\$109.1719600000	\$765,171,420.25
NORTHSTAR	NORTHSTAR	396,155	\$115.0336100000	\$45,571,139.77
PS #1	PS #1 REFERENCE	14,217,926	<b>\$109.9529832205</b>	\$1,563,303,378.91
GVEA OFFTAKE	GVEA PASSING	10,748,066	\$109.9891900000	\$1,182,171,073.41
GVEA RETURN	GVEA RETURN	2,601,950	\$107.3460500000	\$279,309,054.80
GVEA	GVEA REFERENCE	13,350,016	<b>\$109.4740357018</b>	\$1,461,480,128.20
PSVR OFFTAKE	PSVR PASSING	11,912,350	\$109.4969400000	\$1,304,379,691.54
PSVR RETURN	PSVR RETURN	1,051,990	\$105.4520200000	\$110,934,470.52
PSVR	PSVR REFERENCE	12,978,304	<b>\$109.1697812657</b>	\$1,415,314,162.05

KTC Quality Bank Stream Values and Total Stream Volume Shipped July 2014				
Sample Location	Stream	Volume (BBL)	Stream Value (\$/BBL)	Total Stream Value (\$)
ALPINE	ALPINE	2,241,772	\$110.7967700000	\$248,381,096.68
MILNE POINT	MILNE POINT	638,565	\$108.6292500000	\$69,366,837.03
KUPARUK REFERENCE	KUPARUK REFERENCE	7,010,971	\$109.1719600000	\$765,401,445.57
NIKAITCHUQ	NIKAITCHUQ	210,697	\$107.4115200000	\$22,631,285.03
KUPARUK RIVER UNIT	KUPARUK RIVER UNIT	3,919,937	<b>\$108.4257800166</b>	\$425,022,226.84

Table 2-5 shows the kind of information supplied by the TAPS quality bank administrator that will be used to calculate the quality bank differential for Sale Oil produced from each Unit. The TAPS quality bank administrator provides this information to the State, pipeline owners, and shippers. As a shipper on TAPS, the Buyer will also receive this information. In the column titled “Stream Value (\$/BBL)” are the different per-barrel values of each stream produced from the Units from which Sale Oil may be delivered. The PSVR Reference Stream value is labeled “PSVR Reference” and is the stream value of the blended TAPS stream immediately downstream of the Petro Star Valdez Refinery return stream. The Quality Bank Adjustment is calculated as the difference between the stream value of each Unit and the PSVR Reference Stream.

For example, assume that the Month is July 2014 and the Sale Oil is produced from Lisburne. The QBA for Sale Oil from Lisburne (QBA<sub>LIS</sub>) is calculated as the per-barrel difference between the Stream value for Lisburne, indicated as “Lisburne” in Table 2.5, and the PSVR Reference Stream Value. In this example Sale Oil from Lisburne increases the value of the stream of oil

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measured at Valdez. Therefore, \$3.0330987343 per barrel is the QBA incorporated in the calculation of Price for Sale Oil from Lisburne.

Quality Bank Adjustment for Lisburne = the stream value for Lisburne minus the stream value of PSVR Reference (from Table 2-5)

$$QBA_{LIS} = 112.2028800000 - 109.1697812657$$

$$QBA_{LIS} = \$3.03310$$

Note: The Price of Sale Oil from the PBU IPA and Lisburne are invoiced separately.

Using the results of the example calculations above, Line Loss for Sale Oil delivered from Lisburne in July 2014 equals

$$\text{Line Loss}_{LIS} = (.0009) \times (\$114.26025 - \$1.95 - \$5.04426 + \$3.03310) = \$0.09909$$

### **Calculating the Price of Sale Oil**

The Price of Sale Oil delivered from Lisburne in July 2014 is

$$\text{Price}_{LIS} = \$114.26025 - \$1.95 - \$5.04426 + \$3.03310 - \$0.09909 = \$110.00000$$

Note that each number in the equation is rounded to five decimal places. If a number's sixth decimal is 0, 1, 2, 3, or 4, the number shall be truncated to the fifth decimal. If a number's sixth decimal is 5, 6, 7, 8, or 9, the number shall be truncated to the fifth decimal and the fifth decimal shall be increased by 1.

**APPENDIX 3**  
**EXAMPLE OF CALCULATION OF INTEREST AND LATE PAYMENT PENALTIES**

**Sample Calculation of an Invoice for July 2014 Deliveries**

Assumptions:

1. Month is August 2014.
2. Sale Oil delivered to the Buyer from Lisburne in July 2014 = 31,000 barrels (1,000 bpd).
3. July 2014 Price of the Sale Oil for Lisburne as initially estimated by the State = \$110.00000 per barrel.
4. Statement of account, with July 2014 invoice, sent to the Buyer on August 2, 2014.
5. July 2014 invoice payment due to the State = August 22, 2014.
6. Buyer pays State only \$1,000,000 on the due date, August 22, and pays the outstanding balance on August 25, 2014.
7. Annual interest rate provided by Alaska Statute 38.05.135(d) for August 2014 is 11 percent.

Method for calculating Buyer's invoice payment for July 2014 deliveries:

$$\begin{aligned}\text{Invoice Amount} &= \text{Quantity of Sale Oil} \times \text{Buyer's Price of Sale Oil} \\ &= 31,000 \times \$110.00000 = \$3,410,000.00\end{aligned}$$

Because payment in full was not received by the State on or before August 22, 2014, interest will accrue on the unpaid balance from August 22, 2014 through the date the payment is received, and a late payment penalty will be assessed.

Below is a sample calculation of late payment penalty fee (assuming that it is not waived under Section 3.7) and interest. This sample calculation shows what will happen if the Buyer makes a partial payment on August 22 and the balance on August 25.

Late Payment Penalty Fee:

Statement of Account amount	=	\$3,410,000.00
Amount paid on August 22	=	<u>\$1,000,000.00</u>
Outstanding balance (8/22/11)	=	\$2,410,000.00
Late Payment Penalty Fee (\$2,410,000 x 5%) =	=	\$120,500.00

Interest:

\$2,410,000 x (11%/365) x 3 Days	=	<u>\$2,178.90</u>
Amount Buyer owes on August 25, 2014	=	\$2,532,678.90

Note: As more accurate data is received by the State, the State may adjust the Price and/or the actual quantity of Sale Oil and invoice the Buyer in the initial adjustment invoice submitted with the following Month's (August 2014) statement of account.

### **Sample Calculation of an Adjustment Invoice in September 2014**

#### Assumptions:

1. Month is September 2014.
2. Sale Oil delivered in July 2014 has been revised to 30,000 barrels.
3. July 2014's price for Sale Oil is unchanged at \$110.00000 per barrel.
4. Date of the statement of account that contains the adjustment invoice is September 1, 2014.
5. Date the adjustment invoice payment is due to the State = September 20, 2014.

Method for calculating the Buyer's adjustment invoice amount for July 2014:

$$\begin{aligned}\text{Invoice Amount} &= \text{Quantity of Sale Oil} \times \text{Buyer's Price of Sale Oil} \\ &= 30,000 \times \$110.00000 \\ &= \$3,300,000.00\end{aligned}$$

Adjusted Invoice Amount for July 2014	=	\$3,300,000.00
Amount previously paid by the Buyer for July 2014	=	<u>\$3,410,000.00</u>
Overpayment for July 2014	=	(\$110,000.00)

Credit due the Buyer against statement of account amount dated September 1 due September 20, 2014.

Note: As more accurate data is received by the State, the State may adjust the Price and/or the actual quantity of Sale Oil and invoice the Buyer in the adjustment invoice submitted with the following Month's (October 2014) statement of account.

### **Sample Calculation of an Adjustment Invoice in October 2014**

#### Assumptions:

1. Month is October 2014.
2. July 2014's price for Sale Oil is changed to \$110.05000 per barrel due to a change in the quality bank.
3. The statement of account that contains the adjustment invoice is October 4, 2014.
4. The adjusted invoice payment is due to the State = October 20, 2014.

Method for calculating the Buyer's adjustment invoice amount for July 2014:

$$\begin{aligned}\text{Production Month Invoice Amount} &= \text{Quantity of Sale Oil} \times \text{Buyer's Price of Sale Oil} \\ &= 30,000 \times \$110.05000 \\ &= \$3,301,500.00\end{aligned}$$



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Adjusted Invoice Amount for July 2014	=	\$3,301,500.00
Amount previously paid by the Buyer for July 2014	=	<u>\$3,300,000.00</u>
Underpayment for July 2014	=	\$1,500.00

The underpayment is due the State on October 20, 2014.

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THE STATE  
of **ALASKA**  
GOVERNOR SEAN PARNELL

**Department of Natural Resources**

Division of Oil & Gas

550 W. 7<sup>th</sup> Avenue, Suite 1100  
Anchorage, Alaska 99501-3560  
Main: 907.269-8800  
Fax: 907.269.8939

August 13, 2012

<Address Block>

Subject: Non-binding Solicitation of Interest—North Slope Royalty In-Kind Oil Supply

Dear \_\_\_\_\_:

The Department of Natural Resources ("DNR") is inquiring whether there is interest among commercial refiners to acquire some or all of the State's North Slope royalty in-kind ("RIK") oil that will become available for sale when the current RIK supply contract obligations terminate on March 31, 2014. If there is interest by more than one potential buyer, DNR may issue an Invitation to Bid and conduct a sealed-bid auction for the oil.

DNR has received an inquiry from a potential buyer for a multi-year RIK contract. Under AS 38.05.184, the sale of the state's royalty oil must be by competitive bid except when the commissioner determines that the best interest of the state does not require competitive bidding or that no competition exists.

We would like to know if your company might be interested in participating in an auction for a one-year or multi-year contract to purchase RIK oil and, if so, whether you would be interested in participating in a competitive sealed bid auction for the oil in 2014. This is an informal, non-binding inquiry and your response will not create any kind of commitment by you or Flint Hills Resources, LLC. Your response, and that of other commercial refiners, will be used only to gauge whether there is potential interest in acquiring RIK to help DNR determine whether competition exists for the RIK oil that would warrant a competitive sale.

Below we have described some of the contractual terms that might apply to such a sale. Of course, they are subject to change depending on circumstances at the time DNR issues an Invitation to Bid.

**Priority Bidders.** The Department proposes to limit the RIK offering to commercial petroleum processors that have (1) provided financial guarantees in the form of a stand-by letter of credit or a parent guarantee, presuming that the Buyer is not the parent, combined with an Opinion Letter provided by a Financial Analyst, and (2) proposed effective, viable Special Commitments that, if implemented, would have an impact on lowering in-state energy costs for consumers and addressing the need for a greater supply of crude oil for use in the state. The requirement for proposing Special Commitments is discussed further

*"To responsibly develop Alaska's resources by making them available  
for maximum use and benefit consistent with the public interest."*

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below.

Sealed Bid Auction of RIK Oil Lots. At auction would be RIK oil in 5,000 barrels per day increments (each increment is referred to as an “RIK Oil Lot”). Bidders may opt to bid on one or more RIK Oil Lots depending on the volume they require. Each RIK Oil Lot will be offered separately and the winner of each RIK Oil Lot will be determined by the highest cash bonus bid. By offering RIK Oil Lots, more than one bidder may acquire RIK oil at the auction. The cash bonus bid pays for an option to receive a maximum amount of oil during the term of the RIK contract. During the term of the contract, a buyer may change its monthly nomination to a quantity less than the sum of the RIK Oil Lots it acquired as a result of the competitive bid process. There is no penalty to reduce the amount of the monthly nomination and the buyer may later increase it. This provides operational flexibility for a buyer to match its monthly RIK oil acquisition to its refinery’s requirements.

Bid Process. The Department will distribute a public notice and a formal Invitation to Bid to all potential buyers and the public. Bidders will have at least 30 days after the Invitation to Bid is published to submit bids and documentation.

Proposed Contractual Terms (subject to change).

- Sale Oil Quantity. The contract will specify the volume, or “Sale Oil Quantity,” awarded as a result of the auction. For example, if a buyer successfully bid three RIK Oil Lots, the Sale Oil Quantity inserted in the RIK Contract would be 15,000 barrels per day.
- State’s RIK Nomination. Because the State must nominate to take its royalty oil in-kind, the contract will provide that DNR will make commercially reasonable efforts to nominate, in accordance with applicable Unit Agreements, percentages of the State’s estimated royalty oil from one or more Units that will equal the Sale Oil Quantity nominated by the buyer. The nomination procedures are basically unchanged from every RIK contract offered by the Department since the first production of oil at the Prudhoe Bay Unit. Any former or current buyer of RIK oil should be familiar with these procedures.
- Price. The price for the Sale Oil is calculated as a simple netback price. The formula starts with a destination value for the State’s royalty oil in the US West Coast—the spot price of ANS crude oil reported in Platt’s Oilgram—minus a location differential that approximates the cost of marine transportation allowed under the State’s lease contracts and royalty settlement agreements. The interstate tariffs for TAPS and pipelines upstream of TAPS Pump Station No. 1 are also subtracted depending on the source of the RIK that will be supplied to the buyer. The price formula includes a Quality Bank Adjustment calculated using the same methodology that the State uses when pricing RIV.
- Contract term. The contract will supply RIK for one year or multiple years, depending on the bids awarded, beginning in April 2014.
- Security Arrangements. The security arrangements protect the State from the risk of default by requiring a stand-by letter of credit or a parent guarantee, presuming that the

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buyer is not the parent, combined with an Opinion Letter provided by a Financial Analyst.

- **Special Commitments.** Bidders will be required to propose Special Commitments that will be incorporated into the RIK contract. The Special Commitments should propose means to mitigate the high cost of consumer petroleum products in Alaska and address the need for a greater supply of crude oil for use in the state. Examples of a Special Commitments might be committing to investments that contribute to lowering the cost of petroleum products to the consumer. A bidder might propose to make a direct investment or enter into a contractual arrangement with others in the petroleum product supply chain that will have an effect on lowering consumer prices. Or, to increase the supply of Alaska crude oil to the in-state market that otherwise would be transported out of state, a bidder might also choose to purchase oil from the same producer from whom the state has nominated RIK oil.

I will appreciate a written response to this informal solicitation by August 24, 2012. In the meantime, I invite you to call me at 907-269-7493 to discuss this letter. As stated above, this is an informal, non-binding inquiry and your response will not create any commitment by you or your company.

Sincerely,

W.C. Barron  
Director









**THE ALASKA ROYALTY OIL AND GAS DEVELOPMENT ADVISORY BOARD**  
**Resolution 13-2**

- Whereas**, on Wednesday, December 11, 2013 at 1:00 p.m., the Alaska Royalty Oil and Gas Development Advisory ("Royalty Board") conducted a public hearing in Room 602 of the Atwood State Office Building, 550 W 7<sup>th</sup> Avenue, Anchorage, Alaska to consider a Proposed Amendment of the "Agreement for the Sale of Royalty Oil between and among the State of Alaska and the Tesoro Corporation, a Delaware Corporation, and Tesoro Refining & Marketing Company LLC, a Delaware Limited Liability Company, October 25, 2013" ("October 2013 Agreement").
- Whereas**, under the October 2013 Agreement DNR has agreed to sell between 5,000 to 15,000 barrels per day of Alaska North Slope royalty oil to Tesoro Refining & Marketing Company LLC ("Tesoro") for one year beginning on February 1, 2014 through January 31, 2015.
- Whereas**, under the Proposed Amendment, the term of the October 2013 Agreement will be extended by another year and, upon enactment of legislation approving the Proposed Amendment, delivery of royalty oil will continue through January 31, 2016.
- Whereas**, at this public hearing the Royalty Board reviewed DNR's Preliminary Best Interest Finding and Determination for the Proposed Amendment submitted to the Royalty Board by DNR via email and certified mail on December 6, 2013.
- Whereas**, at the December 11, 2013 public hearing the Royalty Board heard testimony from the staff of DNR, representatives of Tesoro, and members of the public.
- Whereas**, the Royalty Board considered the approval and recommendation to the Alaska Legislature in light of the criteria of AS 38.06.070 and, after a thorough discussion, the Royalty Board voted to approve the proposed sale and recommend the proposed agreement be approved by the Alaska Legislature. The Royalty Board also adopted the attached report to be submitted to the Alaska Legislature along with its recommendation as required under AS 38.06.070.
- Be it resolved**, that based on the Royalty Board's review of the Proposed Amendment, the Preliminary Finding and Determination, and the information presented at its public hearing, the Royalty Board is of the opinion that the disposition of Alaska North Slope royalty oil to Tesoro Refining & Marketing Company LLC for an additional year meets the requirements of AS 38.06.070. In accordance with AS 38.06.070(c) the Royalty Board submits the attached report and, in accordance with AS 38.06.050, recommends that the Alaska State Legislature approve the Proposed Amendment.

Bob Roses 12/11/13  
 Bob Roses Date

Charles Wieggers 12/11/2013  
 Charles Wieggers Date

Steve Menard 12/11/13  
 Steve Menard Date

\_\_\_\_\_  
 Steve Selvaggio Date

\_\_\_\_\_  
 Dana Pruhs Date

Jo Ellen Hanrahan 12/11/13  
 Jo Ellen Hanrahan Date

Joe Balash 12/11/13  
 Joe Balash Date

Matt Fonder 12/11/13  
 Matt Fonder Date