Final Findings and Determination

For

Nikaitchuq Development Royalty Modification Application

Commissioner of the Department of Natural Resources

APPROVAL OF MODIFICATION OF ROYALTY FOR LEASES: ADLs 388571, 388572, 388574, 388575, 388577, 388581, 388582, 388583, 390615, 390616 and 391283

January 11, 2008

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I. INTRODUCTION AND BACKGROUND

A. Introduction

On October 16, 2007, Eni US Operating Co. Inc. (Eni), as operator of the Nikaitchuq Unit (NU), on behalf of its affiliate Eni Petroleum US LLC, 100 percent working interest owner of the subject leases, submitted an application to the commissioner of the State of Alaska Department of Natural Resources (ADNR) for modification of royalty under AS 38.05.180(j)(1)(A) (Attachment 1). On November 30, 2007, ADNR issued a Preliminary Findings and Determination to respond to Eni's royalty modification application. The public was invited to comment on the preliminary decision for 30 days ending January 7, 2008. ADNR hereby issues its Final Findings and Determination as required under AS 38.05.

Eni has applied for royalty modification on 12 leases which overlie the Schrader Bluff and the Sag River reservoirs. However, the Sag River reservoir was withdrawn from the application at the request of Eni. Eni requests that the fixed royalty rates of

- 12.5 percent on the Net Profit Share (NPS) lease, ADL 391283, and
- 16.66667 percent on the 11 leases (ADLs 388571, 388572, 388574, 388575, 388577, 388580, 388581, 388582, 388583, 390615, and 390616)

be reduced to the minimum rate allowed, 5.0 percent, with an annual sliding-scale royalty percentage adjustment based on the level of Alaska North Slope West Coast (ANSWC) crude oil price. The 30 percent net profit share rate on ADL 391283 is to remain unchanged. Attachment 2 depicts the Nikaitchuq Unit boundaries and leases subject to this royalty modification application.

This Final Findings and Determination responds to the royalty modification application as required under AS 38.05.180(j)(8). Part I summarizes the royalty modification application and process. Part II reviews the history of the Nikaitchuq Unit formation and development, and Eni's royalty modification application. Part III reviews the state's authority to carry out royalty modification. Part IV reviews the requirements and terms of royalty modification pursuant to this application. Part V contains ADNR's analysis of the application under the royalty modification criteria. Part VI is the Final Findings and Determination.

B. Royalty Modification Procedure

This Final Findings and Determination is the first step in a process contemplated in AS 38.05.180(j) that could result in an authorization to modify the royalty terms for certain leases. The commissioner published the Preliminary Findings and Determination, gave public notice of a 30-day public comment period (Attachments 3 and 4), and offered to appear before the Legislative Budget and Audit Committee to provide a review of the

Findings and Determination and the administrative process. The commissioner will keep the submitted data confidential under AS 38.05.035(a)(9) at the request of the lessee or lessees making application for the royalty reduction. This Final Findings and Determination by ADNR regarding royalty modification is final and not appealable. With the Applicant's concurrence, ADNR will amend the subject leases to conform to the terms of this royalty modification Final Findings and Determination.

II. SUMMARY OF ENI'S APPLICATION FOR ROYALTY MODIFICATION

A. Unit and Lease Summary

ADNR approved the formation of the Nikaitchuq Unit effective April 29, 2004. At that time, Kerr-McGee Oil & Gas Corp. (KMG) held 70 percent of the working interest and Armstrong Oil & Gas Inc. (Armstrong) held 30 percent. The unit originally consisted of eight leases covering 12,968 offshore acres in the shallow waters of Harrison Bay in the Beaufort Sea, approximately three miles north of Oliktok Point. The Kuparuk River Unit (KRU) lies to the south, and the Milne Point Unit (MPU) lies to the east of the Nikaitchuq Unit. The Tuvaaq Unit, formed in August 2004, was adjacent to the western boundary of the original Nikaitchuq Unit. Effective October 5, 2007, ADNR approved the first expansion of the Nikaitchuq Unit, termination of the Tuvaaq Unit and the contraction of the Kuparuk River Unit. The Nikaitchuq Unit expanded to include all of the Tuvaaq Unit leases, the Kigun lease, formerly committed to the KRU, and two additional leases acquired by ENI at the 2004 Beaufort Sea Sale.

All 12 leases in the Eni royalty modification application are committed to the expanded Nikaitchuq Unit. (See lease map in Attachment 2.)

The ownership of the Nikaitchuq Unit has changed significantly since formation. Eni acquired Armstrong's 30 percent WIO of Nikaitchuq Unit in August 2005. In August 2006, Anadarko Petroleum Co. (Anadarko) acquired KMG, including KMG's 70 percent WIO in Nikaitchuq Unit, and became Nikaitchuq Unit operator. Eni subsequently acquired the remaining 70 percent Nikaitchuq Unit ownership from the operator, Anadarko, in March 2007, and became the 100 percent WIO and operator of Nikaitchuq Unit.

On January 11, 2006, KMG submitted an application for royalty modification under AS 38.05.180(j)(1)(A) for 14 leases of which 12 are the subject of this application.¹ KMG's application requested that the royalty rate for the 14 leases be modified from their respective existing fixed royalty rates of 16.67 percent and 12.5 percent to a fixed royalty rate of 5 percent. Effective October 31, 2006, the ADNR issued the Final Findings and Determination of the Commissioner of the Department of Natural Resources for the Nikaitchuq Development Royalty Modification Application denying KMG's application for royalty modification.

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¹ The KMG application included ADLs 355021, 355024, 388571, 388572, 388574, 388575, 388577, 388578, 388580, 388581, 388582, 388583, 390615, and 390616.

B. Project Development History

In the 2003-2004 and 2004-2005 exploration/appraisal drilling programs KMG/Armstrong encountered accumulations of hydrocarbons in the area of the thenproposed Nikaitchuq Unit. A total of six wells were drilled in the Nikaitchuq area in the 2004 and 2005 winter drilling seasons; two additional wells were drilled in 2006.

The planned development includes:

- Construction of a gravel pad with drilling, gathering and production facilities on Oliktok Point near the existing ConocoPhillips Alaska Inc. seawater treatment facility.
- Construction of a gravel drilling island near Spy Island tied back via a 3.8mile subsea flow line and utility bundle to Oliktok Point for fluid processing.
- Construction of a +/-14-mile pipeline from Oliktok Point to a tie-in near KRU DS-1Y pad for connection to the Kuparuk Transportation common carrier pipeline.
- Consideration of future modifications required to adjust facility configuration to accommodate actual results of well performance.
- A total of 73 wells drilled between 2008 and 2011, of which 31 are expected to be producers.
- First oil expected in 2010.

Development studies indicate that extended reach horizontal producing and injection wells required for pressure maintenance are needed to economically recover the hydrocarbons in place. The planned development would permit a relatively small "footprint" for centralized facilities and minimal well pads, thereby reducing environmental impacts to the region. Initial drilling will be from a 313,000-square-foot pad to be constructed at Oliktok Point. Existing roads will be utilized for access. The production facilities will be located on the same pad. Later, a small gravel island is to be constructed within the barrier islands for future drilling. A subsea bundle containing a three-phase production line and multiple utility lines will be constructed to connect the gravel island to Oliktok Point to transport production and provide fuel, secondary recovery fluid, and power to the gravel island.

C. Eni Royalty Modification Request

On October 16, 2007, Eni submitted an application (Attachment 3) to the ADNR commissioner for modification of royalty on 12 leases, ADLs: 388571, 388572, 388574, 388575, 388577, 388580, 388581, 388582, 388583, 390615, and 390616 and ADL 391283 under AS 38.05.180(j)(1)(A). In accordance with 11 AAC 88.105, 11 AAC 83.185, and 11 AAC 05.010(a)(10)(H) Eni submitted a complete application with the required \$250.00 filing fee.

The Eni application for royalty modification submitted on October 16, 2007, requests a 5.0 percent fixed royalty if the Alaska North Slope West Coast (ANSWC) crude oil price falls below an ANSWC price equivalent to the U.S. Department of Interior, Minerals Management Service (MMS) NYMEX West Texas Intermediate (WTI) oil price threshold for royalty modification for OCS August 2004-2006 deepwater oil leases in the Gulf of Mexico (GOM).² Eni proposes a sliding-scale royalty rate in any month after production start-up (expected in 2010) that would range between 5.0 and 16.6667 percent, depending on the average monthly price of ANSWC crude oil. An ANSWC monthly (nominal) price below the Alaska Department of Revenue (ADOR) *Spring 2007 Revenue Sources* forecast between 2010 (the year of first production) and 2017 shown in Figure II.1 (below) would trigger a reduced royalty rate from original fixed lease rates of 12.5 percent and 16.6667 percent, respectively. The amount of the reduction in royalty percentage would depend on (a) the original lease rate (either 12.5 percent or 16.6667 percent) and (b) the extent to which the actual future oil price falls below the ADOR forecast threshold.³

The original fixed royalty rate of 16.6667 percent for ADLs 388571, 388572, 388574, 388575, 388577, 388581, 388582, 388583, 390615, and 390616 and 12.5 percent with 30 percent net profit for ADL 391283 would be subject to the sliding scale modification in a low commodity price environment to a level at or above a floor of 5 percent. The 30 percent net profit share to the State attached to ADL 391283 would be unchanged under the Eni royalty modification proposal.

The Eni application also would provide full royalty relief at a reduced rate of 5 percent for all leases regardless of oil price if monthly production is below 4,000 barrels of oil per day for the first 10 years following the effective date of the royalty modification decision.

² ADNR estimates threshold to be \$42.53 per barrel in 2010 based on a 2007 NYMEX WTI price of \$42.64 assuming a 94 percent basis adjustment to ANSWC and 2 percent price escalation pursuant to the ENI proposal. See: MMS, *Price Thresholds and Annual Market Prices for MMS Deepwater and Deep Depth Oil and Gas Royalty Relief Programs*, Deep Water Oil, Economics Division at www.mms.gov/econ/DWRRAPrice1.htm.

³ Under the Eni proposal, the royalty percentage rate adjustment would be approximately ³/₄ percentage point per \$1 change in ANSWC price for leases with a 16.6667 percent base royalty rate and ¹/₂ percentage point per \$1 change in ANSWC price for leases with a 12.5 percent base royalty rate. After 2017, the ADOR ANSWC price forecast is inflated by the monthly change in the Producer Price Index (PPI).

III. SUMMARY OF ROYALTY MODIFICATION AUTHORITY AS 38.05.180(j)(1)(A), (2), (3), (4)(A), (5)

A. General Royalty Modification Requirements

AS 38.05.180(j)(1)(A) authorizes the DNR commissioner to provide for royalty modification on individual leases, leases unitized as described in (p) of this section (AS 38.05.180), leases subject to an agreement described in (s) or (t) of this section (AS 38.05.180), or interests unitized under AS 31.05 to allow for production from an oil or gas field or pool if:

- 1. the oil or gas field or pool has been sufficiently delineated to the satisfaction of the commissioner;
- 2. the field or pool has not previously produced oil or gas for sale; and
- **3.** oil or gas production from the field or pool would not otherwise be economically feasible.
- **4.** Under AS 38.05.180(j)(2), the commissioner may not grant a royalty modification unless the lessee or lessees requesting the royalty modification make a clear and convincing showing that a royalty modification meets the three requirements set out above and is in the best interests of the state.

B. General Royalty Modification Terms

- 1. Under AS 38.05.180(j)(3) the royalty modification terms must provide for an increase or decrease or other modification of the state's royalty share by a sliding-scale royalty or other mechanism that shall be based on a change in the price of oil or gas and may also be based on other relevant factors such as a change in production rate, projected ultimate recovery, development costs, and operating costs.
- 2. Under AS 38.05.180(j)(4)(A) a modification to royalty may not be granted for the field or pool if the royalty modification would result in a royalty rate of less than 5 percent in amount or value of the production removed or sold from a lease or leases covering the field or pool.
- **3.** Under AS 38.05.180(j)(5) a royalty reduction must include an explicit condition that the royalty reduction is not assignable without the prior written approval, which may not be unreasonably withheld, by the commissioner. The commissioner shall, in the preliminary and final findings and determinations, set out the conditions under which the royalty reduction may be assigned and may not grant a royalty reduction without an explicit condition that the royalty reduction is not transferable.

IV. DISCUSSION OF ROYALTY MODIFICATION CRITERIA

A. Leases Are Eligible For Consideration

The leases meet the requirements for consideration and all eleven subject leases proposed for royalty modification are committed in entirety to the Nikaitchuq Unit. AS 38.05.180(j)(1) allows modification of royalty for individual leases and unitized leases.

B. Reservoir Delineation: Discussion of Reservoir Geology and Engineering

1. Introduction to reservoir delineation.

The commissioner may grant royalty modification to allow for production from an oil or gas field or pool if the oil or gas field or pool has been sufficiently delineated to the satisfaction of the commissioner.

The area within the Nikaitchuq Unit for which royalty relief is sought lies offshore in the Beaufort Sea in the vicinity of Spy Island, approximately three miles north of Oliktok Point. The Nikaitchuq Unit is north of and contiguous with the northern edge of the KRU and the Milne Point Unit (MPU). The KRU is operated by ConocoPhillips and produces from the Cretaceous Kuparuk River Formation and shallower Schrader Bluff Formation. The BP-operated MPU field lies to the south-southeast of the Nikaitchuq Unit and produces oil from the Schrader Bluff, Kuparuk, and Triassic Sag River formations. The western edge of the proposed Nikaitchuq Unit is adjacent to the recently expanded Oooguruk Unit (OU) operated by Pioneer. Production from the OU is expected from the Kuparuk and Jurassic Nuiqsut sandstones.

Within the Nikaitchuq Unit, potential commercially recoverable reserves have been tested in both the Cretaceous Schrader Bluff and the Triassic Sag River formations.

Based upon the submitted application and the planned initial development, the request for royalty modification at Nikaitchuq is limited to the OA sand of the Schrader Bluff Formation. For the purpose of this application, the OA sand is defined in Kerr McGee Nikaitchuq #1 (API No. 50629231930000), completed in 2004, as the interval between 5034 feet measured depth (4127 feet subsea true vertical depth) and 5090 feet measured depth (4170 feet subsea true vertical depth).

ENI has adequately delineated the OA sand of the Schrader Bluff Formation in the Nikaitchuq area. Their drilling, testing, and evaluation programs appear to have highlighted the obvious risks inherent to developing viscous oil and identified the possible upside potential available through use of extended reach drilling and advanced completion technologies.

Although upside potential may also exist within the shallower Schrader Bluff N sand interval, the current lack of core, well test, or fluid data from this interval increases the risk and precludes it from being deemed delineated and included as part of this application. ENI plans to gather more data to thoroughly evaluate the N sand during the course of developing the deeper OA sand.

The Sag River Formation contains lighter oil than the Schrader; however, it is plagued with poor quality reservoir rock. The development potential is marginal at best unless there are significant advances in stimulation or enhanced oil recovery technology. Delineation of the Sag River Formation at Nikaitchuq to date has revealed limited reserves and similar test results to the analog at MPU where wells within the Sag River Formation consistently show initial flush production followed by steep decline within the first year. ENI is still evaluating the development potential of this interval and, as such, it has been excluded from this application.

2. Exploration History of the Area

Two key early exploration wells lie within several miles of the Nikaitchuq development area. The Unocal East Harrison Bay State #1 well lies near the northwest corner of the KRU, to the southwest of the Nikaitchuq Unit. The well was drilled in February 1977 to a measured depth of 9,809 feet, bottoming in argillite basement. The East Harrison Bay State #1 well logs appear to contain about 15 feet of oil-bearing Kuparuk Formation that appears cemented in the upper half. The Jurassic section looks silty on logs. The ARCO Kalubik #3 well, drilled in February 1998, lies to the south-southwest of the Nikaitchuq area. The well bottomed in the Jurassic at a measured depth of 7,000 feet. The well encountered a 40-foot-thick measured depth (MD) interval of Kuparuk C sandstone that appears on electric logs as oil-bearing, but siderite cemented in the upper 10 feet of the interval. On well logs the Jurassic interval contains silt with a 12-foot silty sand developed around 6,565 feet MD. The well was plugged and abandoned on March 6, 1998.

3. Drilling History

The first major exploration activity in the area in the early 1970s targeted the Ivishak Formation following the discovery of the prolific Ivishak Formation in Prudhoe Bay State #1 in 1967. The Hamilton Brothers Milne Point #18-1 was one of the early wells drilled on the Milne Point structure in 1970 in search of Ivishak and Lisburne objectives. This well encountered about 50 feet of tight oil-saturated sandstone that was not tested and a section of Kuparuk sandstone that tested at a rate of 875 BOPD. This discovery led to increased industry interest in the Milne Point area and led to exploration and delineation drilling for Kuparuk reserves. In the early 1980s the Sag River was cored in the Conoco Milne Point Unit #C-1 well and contained bleeding oil and gas. The Sag River Sandstone was also cored in the MPU #L-1 well and contained no visible porosity or staining and appeared tight on wire line logs.

In the early 1990s about a dozen wells were drilled to the west-southwest of the Nikaitchuq area with Jurassic sandstones and Kuparuk C sandstones as targets. The ARCO Kalubik #1 well encountered approximately 160 feet of productive Nuiqsut and Nechelik sandstone that tested approximately 336 BOPD (un-stimulated). In addition, the well penetrated an 85-foot section of Sag River Sandstone with calculated log porosities in the range of 15 to 22 percent. The Thetis Island #1 well also encountered an 80-foot section of porous Sag River sandstone with log-calculated porosities in the range of 16-24 percent. A pay section of Nuiqsut sandstone was also encountered that tested at an average rate of 120 BOPD with a high rate of 650 BOPD. Both the Kalubik #1 well and Thetis Island #1 well drilled through Brookian sandstones that contained mud log hydrocarbon shows.

In the late 1990s BP drilled several dedicated Sag River Sandstone test wells, including MPU #C-23, #K-33, #E-13A, 3F-33, #F-33A, and #F-73A. Alaska Oil and Gas Conservation Commission (AOGCC) production data indicate that several Milne Point wells have produced oil out of the Sag River Sandstone and two oil producing wells MPU F-33A and K-33, are currently shut-in. MPU #C-23 produced 378,012 barrels of oil between 1996 and 2001. MPU #F-33 produced 314,276 barrels of oil between September 1996 and May 1999 and was subsequently plugged and abandoned. MPU #K-33 has produced approximately 93,241 barrels of oil since 1997. MPU #E-13A produced 366,665 barrels of oil between 1995 and April 2001. MPU #F-33A produced approximately 661,099 barrels of oil since April of 2001. MPU #F-73A produced 13,430 and is now a water-alternating-gas injection (WAGIN) well. BP estimated the original oil-in-place (OOIP) at 62 MM STB oil and the reservoir area about 8500 acres based upon seismic and log data during an AOGCC Conservation Order hearing in May 1998. AOGCC reservoir data indicate that the oil commonly recovered from the Sag River sandstone has an API oil gravity of about 37 degrees. Total production from the MPU Sag River Sandstone has been 1,834,131 barrels of oil and 1,875,668 MSCF gas through October 2007. MPU Sag River recovery is less than 3 percent to date based on OOIP. The original GOR ranged from 784 – 974 SCF/STB. Production from the Sag River pool at MPU has been intermittent with extended shut-in periods since June 1999.

Between 2004 and 2005, Kerr McGee (KMG) drilled six wells in the Nikaitchuq and Tuvaaq Units. Initially, the primary exploration target was the Sag River Formation; the Kuparuk Formation was a secondary target. Although the wells did not encounter reservoir quality sand in the Kuparuk, the well logs indicated that sands in the shallower Schrader Bluff Formation were prospective. KMG then adjusted the exploration program to thoroughly evaluate the Schrader Bluff Formation. Three of the six wells tested oil from the viscous Schrader Bluff or Sag River formations. In 2006/2007 KMG drilled two additional pre-development wells from Oliktok Point to further delineate and test the Schrader Bluff sandstone. The two wells are currently suspended.

4. Schrader Bluff Formation Tests

KMG Nikaitchuq #4

Approximately 3,000 feet of gross horizontal Schrader Bluff OA sand was drilled in this well, with approximately 2,270 feet of horizontal or lateral net pay, from a 30-foot true-vertical-depth net pay thickness. A two-week production test was performed on the well using an electric submersible pump (ESP) to aid in producing the 16–17 API crude. The well tested at rates up to 1,200 barrels of oil per day during periods of the initial test. Permeability estimated from the test was greater than 350 millidarcies and was confirmed from the analysis of the flow tests conducted on a whole core obtained from the well.

KMG Tuvaaq #1

The well was not tested. It penetrated 30 feet net pay Schrader Bluff OA Sand and 12 feet net Schrader Bluff N sand. There were no cores taken at Tuvaaq. Schrader Bluff N sand was interpreted to be oil-filled here and at Kigun #1 appeared unconsolidated with permeability estimated from 100-1000 millidarcies and porosity 25-35 percent.

KMG Kigun #1

The well was not tested. It penetrated 29 feet net pay Schrader Bluff OA sand and 30 feet net N sand. An MDT tool run sampled the Schrader Bluff OA fluids which were 18 degree API, GOR 59 SCF/STB and viscosity of 82 cp at 87 degree reservoir temperature. (Contamination of the samples with oil-based mud caused concern about the reliability of the sample estimates and properties.) Schrader Bluff OA sand core data indicated 25 percent to 38 percent porosity and up to 1,000 millidarcies permeability in the sandstone intervals.

KMG Oliktok Point I-1 KMG Oliktok Point I-2

These two wells were drilled by KMG during the 2006/2007 drilling season as predevelopment wells to further test and delineate the Schrader Bluff reservoir. These wells have been suspended. Results from these wells are currently held confidential under AS 38.05.035(a)(9).

5. Analog Schrader Bluff Formation Performance

Milne Point Unit (MPU) Schrader Bluff Pool (Figure 1), Kuparuk River Unit (KRU) West Sak Pool (Figure 2) and Prudhoe Bay Unit (PBU) Polaris and Orion pools – Figure 3, represent analog Schrader Bluff Formation horizontal well performance. Each of the pools was developed initially with vertical or slanted completions. More recently a number of horizontal lateral and multi-lateral wells have been completed in each of these pools. MPU and KRU Schrader Bluff wells show a distinct, lower rate performance than the newer developed Polaris and Orion Pool wells. A significant portion of the performance difference is likely due to differences in fluid quality. Within the Schrader Bluff Formation / West Sak, developments oil gravities can vary between 15-24 degrees API and viscosity can vary between 5-130 centipoise. To date, development has been limited to those areas with higher API Gravity and lower viscosity. Later Schrader Bluff Formation developments are building on earlier techniques by going from vertical to

horizontal and multilaterals wells. The horizontal and multilaterals should consistently outperform the older wells because more formation is exposed and the completions are more efficient.

The wells in each Schrader Bluff Formation pool exhibit early flush production for six to 12 months. The PBU Schrader Bluff completions show slightly higher initial rate profiles followed by relatively steep decline. The average MPU Schrader Bluff completion (heavy bright green points and line) declined from 1200 bopd to 500 bopd at 12 to 40 months. KRU West Sak lateral completions have performed similar to MPU Schrader Bluff.

Figure 1. MPU Schrader Bluff Formation lateral performance and average performance (heavy green).



6. Reservoir delineation determination.

ENI has adequately delineated the OA sand of the Schrader Bluff Formation in the Nikaitchuq area. Their drilling, testing, and evaluation programs appear to have highlighted the obvious risks inherent to developing viscous oil and identified the possible upside potential available through use of extended reach drilling and advanced completion technologies.



Figure 2. KRU West Sak sands lateral performance and average performance (heavy orange).

Figure 3. PBU Polaris and Orion Schrader Bluff Formation initial performance.



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ENI stated that their plan is to develop Nikaitchug Schrader Bluff Formation with horizontal wells. Their prognosis of performance can be compared to the analogs by evaluating average Schrader Bluff well performance from initial completion to date. There are up to seven years of production history for the various Schrader Bluff Formation horizontal and lateral wells. Orion appears to be more productive so far but the long term performance has yet to be defined. ENI appears to estimate their development will improve on the previous KRU and MPU Schrader Bluff completions by using the latest technology, namely very long horizontal and or multi-lateral completions. ENI's cases align reasonably with the MPU Schrader Bluff and KRU West Sak and PBU Polaris average performance. PBU Orion performance is notably better than ENI's high case average rates. Analyses of oil samples taken within the OA sand in the Nikaitchuq area demonstrate measured oil viscosities of 95–188 centipoise. This is heavier than the average viscosity of production from existing KRU, MPU and PBU Schrader Bluff developments. In addition, the Nikaitchug development will include construction of a new standalone facility. The KRU, MPU, and PBU Schrader Bluff pools had existing infrastructure and production from other formations to support the additional development. Both of these factors increase the risk and make this project more economically challenged compared to existing heavy oil developments.

C. No Previous Sale of Produced Oil or Gas

The pools underlying the leases have not previously produced oil or gas for sale.

D. Economic Analysis

ADNR used its own in-house probabilistic economic model (ADNR Model) for the Nikaitchuq development to independently assess the financial performance and ultimate economic effects of a royalty modification for both Eni and for the State of Alaska. Eni shared with the state portions of its proprietary economic model, but the state chose to use its own model that incorporated many input assumptions provided by Eni.⁴

ADNR closely examined the assumptions and methods currently in use by the U.S. Minerals Management Service (MMS) for the Deep Water Royalty Relief Program. The MMS has developed an in-house proprietary probabilistic economic model for Royalty Suspension Viability Program. ADNR adopted an approach similar to that of the MMS by applying the quantitative results from the ADNR model to a prudent-investor decision framework. The ADNR decision framework is confidential. It is designed to replicate the kind of analytical framework used by industry for making prudent oil and gas investment decisions under uncertain conditions involving significant capital outlays and lengthy project life cycles.

⁴ Eni has submitted financial and technical data and analyses and requested that they be held confidential in accordance with AS 38.05.035(a)(9). Thus this section does not discuss any confidential information concerning Eni's geologic, engineering and cost data. These documents are included and discussed in detail in the confidential *Economic Analysis and Internal Decision Process*, (Attachment 6).

The prudent investor standard is maintained throughout the project evaluation process. Under this standard, ADNR incorporates a collection of project performance benchmarks that are consistent with industry norms.

To obtain royalty relief the applicant must show by clear and convincing evidence that without royalty modification the project is not economically feasible. Nikaitchuq is an offshore, heavy oil prospect with relatively high expected exploration and development costs and low expected production possibilities. The final analysis of Nikaitchuq project development conducted by ADNR pursuant to the Eni royalty modification application suggests that, under reasonable assumptions about future oil prices and without some form of royalty relief, this project would not be sanctioned for funding and development.

In its simplest form, the ADNR Model describes project cash-flows for the Nikaitchuq development over a 50-year time horizon. The ADNR Model incorporates expected investment, production, price, revenue, and cost. It incorporates fiscal system attributes, including state and federal tax, state production tax (including the recent ACES legislation)⁵, and royalty obligations, as well as other important commercial relationships, such as facility sharing and pipeline transportation charges.

The ADNR in-house model is flexible enough to allow ADNR to evaluate the effects of changes to the fiscal system. The model provides a platform for systematic evaluation of the effect of a change to the royalty rate. The model calculates the changes to the various financial metrics that result from a change in the royalty rate. These metrics include annual and cumulative discounted and undiscounted cash flow, years to payout, net present value (NPV), expected monetary value (EMV), and internal rate of return (IRR) on investment, as well as state revenues. Also, ADNR used its model to carry out sensitivity analysis of key driver assumptions and to characterize certain price, production, and cost variables in terms of probability distributions to evaluate how uncertainty among these drivers affects key project metrics and state revenues.

Eni furnished ADNR with 200 realizations of project production that depict the range of values and probabilities for the many reservoir factors that that determine ultimate reservoir recovery (e.g., aerial and vertical extent, rock characteristics, fluid composition and properties). These 200 Eni realizations represent the universe of possible resource recovery outcomes for ADNR's Monte Carlo analysis that fit the well-test data. The ADNR model samples repeatedly from this universe of production realizations, as well as from volatility inherent in price formation, as characterized in the mean reversion price model (see below), to generate a distribution of net present value (NPV) outcomes for the Nikaitchuq project. The central tendency (mean and median) and dispersion (variance) of the NPV outcomes depict project performance uncertainty and speak to the dimensions of ADNR's prudent-investor decision framework mentioned above.

ADNR incorporated the applicant's input data into its model along with its own assumptions about the path of uncertain future prices to derive independent results for the

⁵ See HB2001 (11/15/2007).

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economic feasibility of the Nikaitchuq project. The ADNR Model examines a range of possible inputs to derive a P50, or median, outcome from a Monte Carlo simulation. The P50 result is the value where 50 percent of the outcomes lay below this point and 50 percent of the outcomes lay above the P50 outcome. The ADNR Model uses Palisades Software's "@Risk" Monte Carlo software application to run the simulations and determine risk-weighted outcomes reported in the confidential supplement to this *Final Findings and Determination* (Attachment 7).

Calculating risk weighted outcomes is critical to a full analysis of a project. The probabilistic rate profile, determined based on the applicant's reservoir simulation results, is combined with pricing to determine the project revenue stream. Annual Alaska North Slope West Coast (ANSWC) crude oil prices were generated from an Ornstein-Uhlenbech type Mean-Reversion price model⁶ with parameters estimated as described by Schwartz, (1997)⁷ using annual price data for ANSWC crude as reported by Platt's. The starting ANSWC delivered price used in the model is \$67 per barrel, the average price for 2007. The risk weighted cost profiles are then matched to the revenue stream generated by the probabilistic price and production models. This yields an NPV distribution. The mean of the NPV distribution is the EMV for the entire project that incorporates uncertainty and can be compared "apples-to-apples" with other versions of the project.

ADNR analyzed various senarios to explore Nikaitchuq project performance with and without royalty modification. DNR approves royalty modification only when it believes a project will not go forward without it. This means that the impact to royalty revenues to the state is the difference between the royalty revenues with royalty modification as was prescribed in the DNR decision and zero. Even under low price scenarios, ADNR determined that the state can expect to receive an additional \$100 million over the life of the project.

If it is assumed that the project could have gone forward without royalty modification (again, not what ADNR assumes) the impact would be as indicated in Table 1. This table presents several possible price scenarios and the indicated change to the state royalty cash flow stream.

In Table 1 the scenarios labeled "\$43 and Above (Sustained)" and "\$40 Sustained" simply use a flat price deck for "Alaska North Slope West Coast" (ANSWC) crude oil (before inflation) for the life of the project, the price does not vary from year-to-year. An oil price of \$40 is always just below the \$42.64 royalty modification threshold and thus results in 5 percent royalty rates for every barrel of oil produced from the reservoir for the life of the project and the greatest negative impact to overall state royalty revenues.

⁶ Dixit & Pindyck, 1994, http://www.puc-rio.br/marco.ind/sim_stoc_proc.html#mc-mrd.

⁷ The Stochastic Behavior of Commodity Prices: Implications for Valuation and Hedging", Schwartz, E., Journal of Finance, 1997, Volume 52, issue 3, 923-973

 Table 1. Change in Alaska royalty revenues if royalty modification were not necessary and project produced oil without royalty modification.

Price Scenario	Impact on State of Alaska Royalty Revenue ("With Royalty Modification Per Decision" Minus "Without Royalty Modification", 5% discount rate)
\$43 and Above (Sustained)	\$0 million
DNR Price Model	(\$39 million)
\$40 Sustained	(\$160 million)

The "DNR Price Model" scenario does not use a constant or "sustained" price for the life of the project (i.e. flat price deck) as is the case with the other two scenarios in Table 1. We use a forward-looking, Monte Carlo-based "mean-reversion" model, as discussed above. This price model creates a price forecast where oil price fluctuates over time, simulating real-life price variability similar to what history has shown. The price for 2007, \$67 per barrel ANSWC, was taken from U.S. Energy Information Agency's most recent price projection for West Texas Intermediate (WTI) crude, and adjusted for ANS-WTI basis by taking the previous 12-month average difference between these two prices. The model reverts to DNR's expected mean value of \$53 per barrel, over time.

The ADNR has determined that under ADNR's price and discounting assumptions, the project attributes furnished by Eni, and the existing lease royalty rates in effect prior to this *Final Finding and Determination* (16.6667 percent fixed royalty rate and the 12.5 percent fixed royalty with 30 percent NPS for ADL 391283), the Nikaitchuq project does not meet prudent-investor standards for economic feasibility. ADNR concludes further that the royalty modification terms and conditions stipulated in Section IV.B would improve project economics. Eni represents that royalty modification would make project sanction more likely.

V. PUBLIC COMMENTS

On November 30, 2007, ADNR issued a Preliminary Findings and Determination to respond to Eni's royalty modification application. The public was invited to comment on the preliminary decision for thirty days, ending January 7, 2008 (Attachments 3 and 4).

No comments were received from the public.

VI. STATE'S PROPOSED ROYALTY MODIFICATION

A. Royalty Modification Requirements for the Nikaitchuq Project

- Eni's application for royalty modification on ADLs 388571, 388572, 388574, 388575, 388577, 388580, 388581, 388582, 388583, 390615, and 390616, and ADL 391283 meets the requirements for consideration under AS 38.05.180(j)(1). Eni has paid the filing fee and submitted a complete application for the royalty modification including financial and technical data that meet the requirements of 11 AAC 88.105, 11 AAC 83.185, 11 AAC 05.010(a)(10)(H), and AS 38.05.180(j)(6).
- **2.** The Schrader Bluff pool has been sufficiently delineated to the satisfaction of the commissioner for the purpose of considering royalty modification; this pool has not previously produced oil or gas for sale.
- **3.** Eni has shown that oil or gas production from the Schrader Bluff pool would not otherwise be economically feasible.
- **4.** Eni has made a clear and convincing showing that a modification of royalty meets the requirements of 38.05.180(j)(1)(A), and is in the best interests of the state.

B. Royalty Modification Terms for the Nikaitchuq Project

- 1. Royalty modification pursuant to the terms herein is granted to Eni US Operating Co. Inc. (Eni), as operator and 100 percent working interest owner of the Nikaitchuq project (Project), on ADLs 388571, 388572, 388575, 388574, 388577, 388581, 388582, 388583, 390615, 390616, and 391283. Royalty modification is denied for ADL 388580 because there was no apparent resource allocated to this lease.
- 2. Only production from Nikaitchuq Unit's Schrader Bluff OA reservoir, as delineated under this Findings and Determination, shall be eligible for royalty modification. To receive royalty modification on production, the lease must be committed to an approved participating area within six years of the date of Project sanction. After six years, any subject lease or portion of a subject lease not committed to an approved participating area for the Nikaitchuq Schrader Bluff OA reservoir shall revert to the respective individual lease royalty rates that were in effect immediately prior to this Findings and Determination.

- **3.** If the Project, not materially changed from that set out in the October 16, 2007, royalty modification application, is not sanctioned by all working interest owners by February 28, 2008, this royalty modification decision is rescinded.
- **4.** Within 30 days following the date of Project sanction, the working interest owners shall provide ADNR with the Project sanction documents, approvals for expenditure, and other documents supporting the technical and financial data submitted with Project sanction documents excluding any proprietary data. ADNR agrees to keep all such data confidential.
- 5. If six years following the date of Project sanction total actual Project spending starting December 1, 2007, does not meet \$822 million in nominal dollars, then this royalty modification is rescinded. If 11 years following the date of Project sanction total actual Project spending does not meet \$1.398 billion in nominal dollars, then this royalty modification is rescinded. The ADNR may audit the working interest owners' spending on this Project to determine compliance any time between the sixth and the 13th year following Project sanction. If at either cost threshold juncture this royalty modification is rescinded, then Eni will refund to the State of Alaska the difference between the royalty which would have been due at the royalty rates that were in effect immediately prior to the effective date of this Findings and Determination and the royalty due at the modified royalty rate, with interest as set forth in AS 38.05.135(d).
- 6. The NPS lease regulations set out in 11 AAC 83.201 11 AAC 83.295 remain in full force and effect for ADL 391283, except that the cost to the applicant for the application for royalty modification will not be included in any NPS lease Development Account balance.
- 7. (a) Nikaitchuq royalty modification mechanism implemented as follows:

i. Original lease rates are 12.5 percent for ADL 391283 and 16.67 percent for ADLs 388571, 388572, 388575, 388574, 388577, 388581, 388582, 388583, 390615, and 390616.

ii. For the first 25 years following the date of first sustained production, when Alaska North Slope West Coast ("ANS WC") delivered crude prices are below the threshold price per barrel as adjusted by inflation, then production from the Nikaitchuq Schrader Bluff OA reservoir on the subject lease will pay a 5 percent royalty. The ANS WC crude price for the month of production is the average assessment by Platt's Oilgram Price Report and Reuters online data providing service, of the spot price for ANS delivered on the West Coast. The average assessment of the spot price for ANS by each reporting service is the average of the midpoints of the high and low closing assessments for the spot price for ANS for all days during the month of production for which closing assessments are

reported. The threshold price shall start at \$42.64 per barrel. This threshold price will be adjusted annually for inflation starting on May 1, 2008, and shall be adjusted on each May 1 thereafter. The inflation adjustment shall be (1 + inflation rate) multiplied by the previous year's inflation-adjusted threshold price. The inflation rate shall be determined by taking the previous year's annual implicit price deflator for GDP (initially, for the year 2007) as reported by the end of April of each year, dividing that deflator by the two-years-previous annual implicit price deflator (initially, for the year 2006), and then subtracting 1. The source of the inflation data shall be the Department of Commerce Bureau of Analysis (BEA) U.S. Economic Accounts-GDP. National Income and Productions Account (NIPA) Table 1.1.9. When the monthly ANS WC oil price is above the threshold, royalty rates for production attributable to such month(s) shall return to the original lease royalty rates.

iii. This royalty modification shall be terminated 25 years following the date of first sustained production and at that time royalty rates shall revert to the respective individual lease royalty rates that were in effect immediately prior to this Findings and Determination.

(b) For the 18th through the 120th months after first commercial production from the Nikaitchuq Schrader Bluff OA reservoir, if production from all of the subject leases averages below 4,000 barrels of oil per day for any previous twelve month period, full royalty modification rates of 5 percent shall be in effect for all production from the Nikaitchuq Schrader Bluff OA reservoir, regardless of oil price. Provided, however, nothing in this provision shall prevent Eni from applying for royalty modification under AS 38.05.180 (j)(1)(B)or (C).

- **8.** In the determination of royalty value of oil or gas from any of its properties, Eni shall waive any rights to a transportation deduction for the pipeline constructed pursuant to the Easement granted on ADL 417493. This waiver shall remain in effect even if such pipeline is converted to a common carrier.
- **9**. If any working interest owner should contract to use any processing facilities at any time for production from the reservoirs delineated and leases covered in this Findings and Determination, that working interest owner shall furnish ADNR the facilities contract, including information regarding the fee structure and volumes processed unless such contract prevents disclosure of such information. This information will be kept confidential by ADNR. The working interest owner shall also furnish produced oil, water, and gas volumes on a monthly basis broken down by individual working interest owner.
- **10.** Should any third party petition the Nikaitchuq Unit facility owners to contract for use of any unit facilities, the cost of use shall be based on market rates. Any

resulting contract covering facilities access or use shall be shared with the ADNR. ADNR agrees to keep all such information confidential.

- **11.** This royalty modification is not assignable without prior written approval of the ADNR commissioner, which shall not be unreasonably withheld. The assignee must be fit, willing, and able to satisfy all of the duties and obligations attached to this royalty modification and all other lease terms.
- **12.** If at any time royalty modification is rescinded, the terms and conditions of this Findings and Determination shall terminate, with two exceptions. First, the provisions of Term 8 shall survive the termination of royalty modification. Second, all obligations to keep information confidential that was submitted pursuant to this Findings and Determination shall survive the termination of royalty modification.

VI. PROPOSED FINDINGS AND DETERMINATION

After detailed consideration where all the materials presented by the applicant were reviewed and incorporated into our analysis, the ADNR has determined that Eni meets the necessary requirements and that royalty modification for the Nikaitchuq development project is warranted under the terms established in Section IV of this finding and determination.

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Thomas E. Irwin Commissioner

cc: Kevin Banks, Director, Division of Oil and Gas Antony Scott, Senior Commercial Analyst, Division of Oil and Gas Jeff Landry, Department of Law

Eni Petroleum

1201 Louisiana, Suite 3500 Houston, Texas 77002 Phone: 713-393-6100 Fax: 713-393-6205



October 16, 2007

The Honorable Commissioner Tom Irwin State of Alaska Department of Natural Resources 550 W. 7th Avenue, Suite 1400 Anchorage, Alaska 99501

Re: Application for Royalty Modification/ Nikaitchuq Unit /Sate of Alaska Leases ADL 388577, ADL 388574, ADL 388571, ADL 388572, ADL 388575, ADL388580, ADL 388581, ADL 388583, ADL 388582, ADL 391283, ADL 390615 & ADL 390616

Dear Commissioner Irwin:

Eni US Operating Co. Inc. ("Eni") is Operator of the Nikaitchuq Unit on behalf of its affiliate Eni Petroleum US LLC, owner of 100% of the working interest in the Nikaitchuq Unit leases. Eni Petroleum US LLC in conjunction with Kerr-McGec Oil & Gas Corporation, as the previous Operator of the Nikaitchuq Unit, has drilled 3 exploratory and 5 appraisal wells in the Nikaitchuq Unit area depicted on Exhibit "A" attached hereto and made a part of this Application. Eni has conducted extensive reservoir evaluation, engineering studies, and economic analysis to determine if it is feasible to develop and produce the hydrocarbons discovered in the Schrader Bluff and Sag River formations within the Nikaitchuq Unit Area. Eni has, on a confidential basis, shared with various personnel within the Division of Oil and Gas, the results of such reservoir and engineering analysis, and economic studies related to the Nikaitchuq Unit Area.

Eni is working diligently to define a project that will allow the development of the State of Alaska's oil and gas resources in the Nikaitchuq Unit, located in Harrison Bay, North Slope of Alaska. The result of Eni's work is the discovery of potentially commercial reserves in the Schrader Bluff and Sag River formations; however, the economics of this offshore development project are marginal under the existing lease royalty terms in a lower oil price market place. The possible existence of the discovered hydrocarbons has long been known but has not been previously developed due to the substantial technical and economic risks associated with the development of this heavy, viscous oil, in an extremely severe offshore environment. The decision of Kerr-McGee Oil & Gas Corporation to discontinue its participation in this project is the most recent in a long history of companies electing not to move forward with this scale of development opportunity in Alaska.

In an effort to approve a development with acceptable risk, Eni hereby requests Royalty Modification for the Schrader Bluff OA sand reservoir and the Sag River reservoir on the State of Alaska Oil & Gas Leases as set forth on Exhibit "B" attached to and made a part of this Application. The State of Alaska is authorized under AS 38.05.180 (j) to reduce the royalty rate on State of Alaska oil and gas leases to as low as 5%. Eni believes that the Nikaitchuq Unit economics justify the granting of Royalty Modification to the full extent allowed under the statute in certain market conditions. Royalty Modification to protect against low commodity price for oil will provide a risk environment that is more conductive to the development of Nikaitchuq resources by Eni. An example of a Royalty Modification decision that would accomplish this is attached as Exhibit "C".

As indicated above, Eni has previously provided the Division of Oil and Gas, on a confidential basis, detailed geologic, engineering, and economic analysis sufficient to establish the following:

- The oil filed or pool underlying the subject leases has been sufficiently delineated
- The oil field or pool has not previously produced oil or gas for sale
- Oil production from the field or pool would not otherwise be economically feasible.

A summary of the data previously submitted, together with related exhibits which we request you consider in making your determination is listed on the attached Exhibit "D". Although preliminary copies have previously been submitted, this application is being sent without all the supporting documentation but such documentation will be sent in the immediate future, including maps showing the area of expected production for all sands. The work previously done by Kerr-McGee Oil & Gas Corporation for the Sag River reservoir is still valid and will be relied on by Eni in this application.

Eni believes that it has made a clear and convincing showing, through this application presentation and the previously submitted confidential information, that the proposed royalty modification for the Schrader Bluff OA sand reservoir and the Sag River reservoir will facilitate the development of the State of Alaska's resources that would otherwise not be developed and that it is in the best interest of the State of Alaska and meets the requirements of AS 38.05.180 (j).

Eni requests that the infomation previously provided on a confidential basis remain confidential to the extent permitted by law and regulation consistent with the requirements of this application and the related review process.

Eni hereby confirms its understanding that this application letter will release the DNR to spend money for consultants at Eni's expense up to the limit of 150,000.00 as provided for under AS 38.05.180 (j) (7) (A).

Sincerely;

Roberto Dall'Omo President & CEO

cc:

Kevin Banks, Acting Director State of Alaska Department of Natural Resources Division of Oil and Gas 550 West Seventh Avenue, Suite 1100 Anchorage, Alaska 99501



Exhibit B

NIKAITCHUQ UNIT ROYALTY MODIFICATION APPLICATION

Unit Area

Nikaitchuq Unit Tract Number	Lessor / Royalty Owner Lease Serial No.	Description of Unitized Lands	Unitized Acres	Royalty Rate	ORRI Owners	Overriding Royalty Interest	Working Interest Owners & Percentage Working Interest	Primary Expiration Date
	000504							
4	388581	T14N., R.9 E., UMIAT MERIDIAN Sec: 5 Protracted, All tide and submerged lands	640,0000	0.16667	William D. Armstrong	2.800%	Eni: 100%	31-Dec-2004
		Sec. 6 Protracted, All tide and submerged lands	609.0000	0.10007	Jesse V. Sommer	0.083%		01-020 2004
		Sec. 7 Protracted, All tide and submerged lands	611,0000		Edgar Kerr	0.083%		
		Sec: 8 Protracted, All tide and submerged lands	640.0000		Jeffery A. Lyslo	0.083%		
		Sec. o Protacled, Airide and Sconleiged lands	2500.0000		Patricia M. Reed	0.083%		
			2000.0000		Matthew X. Furin	0.083%		
					Stuart W. Gustafson	0.083%		
					Richard C. Geesaman	0.033%		
					total	3.333%		
5	388580	T14N., R.9 E., UMIAT MERIDIAN						
		Sec: 3 Protracted, All tide and submerged lands	640.0000	0.16667	William D. Armstrong	2.800%	Eni: 100%	31-Dec-2004
		Sec: 4 Protracted, All tide and submerged lands	640.0000		Jesse V. Sommer	0.083%		
		Sec: 9 Protracted, All tide and submerged lands	640.0000		Edgar Kerr	0.083%		
		Sec: 10 Protracted, All tide and submerged lands	640.0000		Jeffery A. Lyslo	0.083%		
			2560.0000		Patricia M. Reed	0.083%		
					Matthew X. Furin	0.083%		
					Stuart W. Gustafson	0.083%		
					Richard C. Geesaman	0.033%		
					total	3.333%		
7	388583	T14N., R.9 E., UMIAT MERIDIAN						
		Sec: 17 Unsurveyed, All tide and submerged lands	597.7600	0.16667	William D. Armstrong	2.800%	Eni: 100%	31-Dec-2004
		Sec: 18 Unsurveyed, All tide and submerged lands	584.5200		Jesse V. Sommer	0.083%		
		Sec: 20 Protracted, All tide and submerged lands	640.0000		Edgar Kerr	0.083%		
		T14N., R.9 E., UMIAT MERIDIAN TRACT A			Jeffery A. Lyslo	0.083%		
		Sec: 17 Unsurveyed, All Uplands	42.2400		Patricia M. Reed	0.083%		
		Sec: 18 Unsurveyed, All Uplands	29.4800		Matthew X. Furin	0.083%		
			1894.0000		Stuart W. Gustafson	0.083%		
					Richard C. Geesaman total	0.033% 3.333%		
8	388582	T14N., R.9 E., UMIAT MERIDIAN						
	500002	Sec: 16 Unsurveyed, All tide and submerged lands	618.3700	0.16667	William D. Armstrong	2.800%	Eni: 100%	31-Dec-2004
		Sec: 21 Unsurveyed, All tide and submerged lands	633.0800	1999/1999/199	Jesse V. Sommer	0.083%		
		T14N., R.9 E., UMIAT MERIDIAN TRACT A			Edgar Kerr	0.083%		
		Sec: 16 Unsurveyed, All Uplands	21.6300		Jeffery A. Lyslo	0.083%		
		Sec: 21 Unsurveyed, All Uplands	6.9200		Patricia M. Reed	0.083%		
		na na seu constructivo e se constructivo da constructiva	1280.0000	-	Matthew X. Furin	0.083%		
					Stuart W. Gustafson	0.083%		
					Richard C. Geesaman	0.033%		
					total	3.333%		

9	390615 T14N., R.9 E., UMIAT MERIDIAN						
	Sec: 28 Protracted, All	640.0000	0.16667	GMT Exploration	0.13333	Eni: 100%	30-Jun-2012
	Sec: 33 Protracted, All	640.0000		Wm D Armstrong	0.72797		
		1280.0000		Jesse V Sommer	0.02167		
				Edgar Kerr	0.02167		
				Jeffery A Lyslo	0.02167		
				Patricia M Reed	0.02167		
				Matthew X Furin	0.02167		
				Stuart W Gustafson	0.02167		
				Chester E Paris	0.00867		
				total	0.99999		
10	390616 T14N., R.9 E., UMIAT MERIDIAN						
	Sec: 29 Protracted, All	640.0000	0.16667	GMT Exploration	0.13333	Eni: 100%	30-Jun-2012
	Sec: 32 Protracted, All	640.0000		Wm D Armstrong	0.72797		
	Obc. OL I TOMOCIO, PM	1280.0000		Jesse V Sommer	0.02167		
		1200.0000		Edgar Kerr	0.02167		
				Jeffery A Lyslo	0.02167		
					0.02167		
				Patricia M Reed			
				Matthew X Furin	0.02167		
				Stuart W Gustafson	0.02167		
				Chester E Paris	0.00867		
				total	0.99999		
11	388571 T14N., R.8 E., UMIAT MERIDIAN						
	Sec: 1 Protracted, All tide and submerged lands	640.0000	0.16667	ConocoPhillips	4.250%	Eni: 100%	31-Dec-2004
	Sec: 2 Protracted, All tide and submerged lands within the						
	computed territorial sea, listed as "State Acreage" on Alaska's						
	seaward boundary diagram approved by the State on April 15,	500 0000					
	1996	539.6300		100	4.250%		
	Sec: 11 Protracted, All tide and submerged lands	640.0000		total	4.23076		
	Sec: 12 Protracted, All tide and submerged lands	640.0000					
	T15N., R.8 E., UMIAT MERIDIAN						
	Sec: 35 Protracted, All tide and submerged lands within the						
	computed territorial sea, listed as "State Acreage" on Alaska's seaward boundary diagram approved by the State on April 15,						
	1996	24.0000					
	Sec: 36 Protracted, All tide and submerged lands within the						
	computed territorial sea, listed as "State Acreage" on Alaska's						
	seaward boundary diagram approved by the State on April 15,						
	1996	282.7300					
		2766.3600					
12	388572 T14N., R.8 E., UMIAT MERIDIAN						
	Sec: 3 Protracted, All tide and submerged lands within the						
	computed territorial sea, listed as "State Acreage" on Alaska's						
	seaward boundary diagram approved by the State on April 15,						
	1996	170.9100	0.16667	ConocoPhillips	4.250%	Eni: 100%	31-Dec-2004
	Sec: 4 Protracted, All tide and submerged lands within the						
	computed territorial sea, listed as "State Acreage" on Alaska's						
	seaward boundary diagram approved by the State on April 15,						
	1996	516.4100		2010a.co. 1			
	Sec: 9 Protracted, All tide and submerged lands	640.0000		total	4.250%		
	Sec: 10 Protracted, All tide and submerged lands	640.0000					
	T15N., R.8 E., UMIAT MERIDIAN						
	Sec: 33 Protracted, All tide and submerged lands within the						
	computed territorial sea, listed as "State Acreage" on Alaska's						
	seaward boundary diagram approved by the State on April 15,	0.0000					
	1996	0.9200	6				
		1968.2400					
-0.02	200574						
14	388574 T14N., R.8 E., UMIAT MERIDIAN	10000	1.00000			-	
	Sec: 13 Protracted, All tide and submerged lands	640.0000	0.16667	ConocoPhillips	4.250%	Eni: 100%	31-Dec-2004

	Sec: 14 Protracted, All tide and submerged lands	640.0000						
	Sec: 23 Protracted, All tide and submerged lands	640.0000			total	4.250%		
		1920.0000						
15	388575 T14N., R.8 E., UMIAT MERIDIAN							
	Sec: 15 Protracted, All tide and submerged lands	640.0000	0.16667	ConocoPhillips		4.250%	Eni: 100%	31-Dec-2004
	Sec: 16 Protracted, All tide and submerged lands	640.0000						
	Sec: 21 Protracted, All tide and submerged lands	640.0000			total	4.250%		
	Sec: 22 Protracted, All tide and submerged lands	640.0000						
		2560.0000						
16	388577 T14N., R.8 E., UMIAT MERIDIAN							
	Sec: 26 Protracted, All tide and submerged lands	640.0000	0.16667	ConocoPhillips		4.250%	Eni: 100%	31-Dec-2004
	Sec: 35 Protracted, All tide and submerged lands	640.0000						
	r de la manuel de la manuel de la comparison de la manuel de la comparison de la manuel de la comparison de la	1280.0000			total	4.250%		
18	391283 T14N., R.8 E., UMIAT MERIDIAN Segment 2							
	Sec: 24 Protracted, All	640.0000	0.12500	ConocoPhillips		3.324%	Eni: 100%	31-May-1993
	Sec: 25 Protracted, All	640.0000		BP		2.357%		
	Sec: 36 Protracted, All	640.0000		Exxon		0.200%		
	T14N., R.9 E., UMIAT MERIDIAN Segment 2			Unocal		0.297%		
	Sec: 19 Protracted, All	617.0000			total	6.178112%		
	Sec: 30 Protracted, All	620.0000						
	Sec: 31 Protracted, All	623.0000						
		3780.0000						

EXHIBIT "C"

Attached to and made a part of that Eni US Operating Co. Inc. Application for Royalty Modification dated October 16, 2007.

1. Nikaitchuq royalty modification mechanism implemented as follows:

- (a) Original lease rates are 12.5% or 16.67% depending on the lease.
- (b) 5% royalty rate shall be in effect when Alaska North Slope West Coast ("ANS WC") crude prices are below MMS OCS royalty relief price threshold for post August 2007 GOM leases.
- (c) Sliding scale royalty will be in effect when crude oil prices for ANS WC are below the DNR Spring 2007 oil price forecast and above the MMS OCS royalty relief price threshold. Original lease royalty rates shall be in effect when ANS WC oil price is greater than the DNR Spring 2007 oil price forecast.

2. For the first ten years after royalty modification decision, if production is below 4,000 barrels of oil per day, full royalty relief rates of 5% shall be in effect for all leases regardless of oil price.



				L		
						ENI PETROLE
		ENI PETROLEUM US	LLC 100%	ENI PETROLEUM US L	LC 100%	ADL: 038971
		ADL: 0390433 Tract: BS2003-037	71	ADL: 0389720 Tract: BS2000-370		Tract: BS20
		\$57.35 Bid/Acre		\$11.14 Bid/Acre		\$11.14 Bid/ 16.67% Roya
		16.67% Royalty 0% Net Profit		16.67% Royalty 0% Net Profit		0% Net Prof
		Exp: 04/30/2011		Exp: 05/31/2008		Exp: 05/31/
		ENI PETROLEUM US	LLC 100%	ENI PETROLEUM US L	LC 100%	ENI PETROLE
						ADL: 038857 Tract: 86-2
EUM US	LLC 100%	1.11	1		. A	\$50.87 Bid, 16.67% Roya
		JIKAI	tonu	q Ur	דור	0% Net Pro
		MIXCI	UIU	y Or	IIL ,	Exp: 12/31,
71				-		
71 171		ADL: 0388581 Tract: 86-181		ADL: 0388580 Tract: 86-180		
/Acre alty		\$100.43 Bid/Acre		\$121.21 Bid/Acre		
fit		16.67% Royalty 0% Net Profit		16.67% Royalty 0% Net Profit		
/2004		Exp: 12/31/2004		Exp: 12/31/2004		
EUM US	LLC 100%	ENI PETROLEUM US	LLC 100%	ENI PETROLEUM US	LLC 100%	
		ADL: 0388583				
		Tract: 86-183 \$100.43 Bid/Acre				
		16.67% Royalty	28600			
_		0% Net Profit Exp: 12/31/2004				
	ENI PETROLEUM US	LLC 100%				
74 174				ADL: 0388582 Tract: 86-182		- E
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7 77	ADL: 0391283 Tract: 39-24		ADL: 0390616	ADL: 0390615 Tract: BS2004-367		
Acre	\$547.09 Bid/Acre			\$303.17 Bid/Acre		
lty it	12.5% Royalty 30% Net Profit		16.67% Royalty 0% Net Profit	16.67% Royalty 0% Net Profit		
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DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL AND GAS

550 WEST 7TH AVENUE, SUITE 1100 ANCHORAGE, ALASKA 99501-3560 PHONE: (907) 269-8800 FAX: (907) 269-8938

November 30, 2007

NOTICE OF THE ISSUANCE OF THE PRELIMINARY FINDINGS AND DETERMINATION APPROVING ROYALTY MODIFICATION ON NIKAITCHUQ DEVELOPMENT LEASES: ADLs 388571, 388572, 388574, 388575, 388577, 388581, 388582, 388583, 390615, 390616, and 391283 DENYING ROYALTY MODIFICATION ON NIKAITCHUQ DEVELOPMENT LEASE: ADL 388580

(COMMITTED TO THE SCHRADER BLUFF OA RERSERVOIR WITHIN THE NIKAITCHUQ UNIT)

The Alaska Department of Natural Resources (ADNR), Division of Oil and Gas (DO&G), gives notice under AS 38.05.180(j)(8) that it has issued the preliminary findings and determination under AS 38.05.180(j)(1)(A) that approves the royalty modification request on the 11 leases: ADLs 388571, 388572, 388574, 388575, 388577, 388581, 388582, 388583, 390615, 390616, and 391283. Royalty modification is denied for one lease: ADL 388580. ADNR received a correctly filed initial application on October 16, 2007, from Eni US Operating Co. Inc. (Eni), as operator of the Nikaitchuq Unit, on behalf of its affiliate Eni Petroleum US LLC.

To determine whether this royalty modification should be granted, the commissioner of ADNR is required to issue a final written finding and determination that the royalty modification applies to individual leases, leases unitized as described in AS 38.05.180(p), (s) or (t), or interests unitized under AS 31.05 to allow for production from an oil or gas field or pool if

- 1) the oil or gas field or pool has been sufficiently delineated to the satisfaction of the Commissioner;
- 2) the field or pool has not previously produced oil or gas for sale; and
- 3) oil or gas production from the field or pool would not otherwise be economically feasible;

Royalty Modification Public Notice Letter November 30, 2007 Page 2 of 3

ADNR has received and analyzed the applicant information regarding the development of these 11 leases. The analysis was then used to prepare this written preliminary finding and determination, which addresses the October 16, 2007, application. In this preliminary findings and determination the Commissioner establishes the scope of the administrative review for the approval of royalty modification and considers and discusses certain important facts and issues determined to be material as required by AS 38.05.180(j)(1)(A) upon which the commissioner will base his final determination.

The commissioner shall publish this Preliminary Findings and Decision and give public notice of a 30-day public comment period as well as offer to appear before the Legislative Budget and Audit Committee and provide a review of the Findings and Determination and the administrative process. The commissioner shall keep the submitted data confidential under <u>AS 38.05.035</u> (a)(9) at the request of the lessee or lessees making application for the royalty reduction. Within 30 days of the close of the public comment period the commissioner will prepare a summary of the public comments and make a Final Findings and Determination. The commissioner's final Findings and Determination regarding royalty modification is final and not appealable to the court.

PUBLIC COMMENT

DO&G invites the public to comment on any aspect of the royalty modification including the preliminary findings and determination and any proposed term or condition. Comments should be mailed, faxed or e-mailed to the **Division of Oil and Gas**, **550 W. 7th Ave., Suite 1100, Anchorage, Alaska 99501-3560**, Attention: Tim Ryherd, Commercial Analyst, Department of Natural Resources, Division of Oil and Gas; Phone 907-269-8771, Fax 907-269-8938; e-mail Tim.Ryherd@alaska.gov. <u>Comments must be received no later than 5:00 p.m., January 7, 2008</u>, to be considered in the final findings and determination.

Interested individuals may obtain copies of the preliminary finding and determination from DNR's website at <u>www.dog.dnr.state.ak.us</u>. The documents are also available for public review at the following locations: the Loussac Library in Anchorage, the DNR Public Information Center in Fairbanks, Anchorage, and the Barrow City Clerk's Office.

SUBJECT LEASES AND MODIFICATION DESCRIPTION

The 12 subject leases are all located north of and contiguous with the northern edge of the Kuparuk River Unit (KRU) and north west of the Milne Point Unit (MPU). All eleven leases where royalty modification is granted are committed to the Nikaitchuq Unit (ADLs 388571, 388574, 388577, 388580, 388581, 388582, 388583, 390615, and 390616). The Preliminary Findings and Decision modifies royalty rates of eleven leases from the following original terms:

- 12.5 percent fixed royalty on ADL: 391283 with a 30 percent Net Profit Share, and
- 16.66667 percent on the ten other leases (ADLs: 388571, 388572, 388574, 388575, 388577, 388581, 388582, 388583, 390615, and 390616

<u>MAPS</u>

A map of the subject lease area is available on the division's website at <u>www.dog.dnr.state.ak.us</u> and in the Preliminary Findings and Determination document.

Royalty Modification Public Notice Letter November 30, 2007 Page 3 of 3

FINAL BEST INTEREST FINDING

DNR anticipates making the final findings and determination available to the public on or about January 14, 2008

ALTERNATIVE COMMUNICATION FORMATS

The ADNR, DO&G complies with Title II of the Americans with Disabilities Act of 1990. This publication can be made available on CD or in alternative communication formats upon request. Please contact Brock Steller at (907) 375-8251 to make any necessary arrangements.

[original signed by Tom E. Irwin]	11/30/2007
Tom E. Irwin	Date
Commissioner	
12/12/2007

Anchorage Daily News Affidavit of Publication

1001 Northway Drive, Anchorage, AK 99508



ALASKA NEWSPAPERS INO

301 CALISTA COURT, SUITE B ANCHORAGE, ALASKA 99518-3028 ⁽²⁾(907) 272-9830 * ₿(907) 272-9512 DEC 2 1 2007 DIVISION OF OIL AND GAS

SOA/DNR - DIV. OF OIL & GAS ATTN: ANDI CRIPPEN 550 W. 7TH AVE., #800 ANCHORAGE, AK 99501 Date: December 19, 2007 CASE/PO/AIO: AO-10G08014 INVOICE(S) : 120700337481 PAPER: <u>ARCTIC SOUNDER</u>

AFFIDAVIT OF PUBLICATION

UNITED STATES OF AMERICA, STATE OF ALASKA, THIRD DIVISION. BEFORE ME, THE UNDERSIGNED, A NOTARY PUBLIC THIS DAY PERSONALLY APPEARED **SHARON PULOU** WHO, BEING FIRST DULY SWORN, ACCORDING TO LAW, SAYS THAT SHE IS THE ACCOUNTING ASSISTANT FOR:

THE ARCTIC SOUNDER,

PUBLISHED AT ANCHORAGE IN SAID DIVISION THREE AND STATE OF ALASKA AND THAT THE ADVERTISEMENT, OF WHICH THE ANNEXED IS A TRUE COPY, WAS PUBLISHED IN SAID PUBLICATION ON <u>12/6/2007</u> AND THEREAFTER FOR A TOTAL OF <u>1</u> CONSECUTIVE ISSUE(S), THE LAST PUBLICATION APPEARING ON <u>12/6/2007</u>, AND THAT THE RATE CHARGED THEREON IS NOT IN EXCESS OF THE RATE CHARGED TO PRIVATE

INDIVIDUALS.

NA

SHARON PULOÚ ACCOUNTING ASSISTANT, ALASKA NEWSPAPERS



SUBSCRIBED AND SWORN TO ME ON December 19, 2007

mellio SÍGNATURE

USAN M. samache) PRINT NAME

MY COMMISSION EXPIRES ON: July 26 2009

The Arctic Sounder

December 6, 2007

MATTER OF RECORD

Any charges reported in these press releases are merely accusations, and the defendant is presumed innocent until and unless proven quilty.

Barrow

Page 14

TUESDAY, NOV. 6 - Joseph M. Dingman Jr., 23, address unknown, was sentenced to 30 days in jail with 30 days suspended, ordered to complete 120 hours of community service and placed on probation for one year after pleading no contest to an Aug. 15 charge of third-degree theft; Sophia G. Ahmaogak. 24, address unknown, was placed on probation for one year and fined \$500 after pleading no contest to a July 24 charge of importation of alcohol; Michael Hugo, 22, address unknown, was sentenced to 30 days in jail with 15 days suspended and placed on probation for two years after pleading no contest to a Nov. 5 charge of fourth-degree criminal mischief, Hugo was also sentenced to 10 days in jail with 10 days suspended and placed on probation for two years after pleading no contest to a Nov. 5 charge of sixth-degree misconduct involving a controlled substance, Hugo was also sentenced to 30 days in jail with 25 days suspended and placed on probation for two years after pleading no contest to a Nov. 5 charge of fourth-degree assault.

WEDNESDAY, NOV. 7 - David A. Ahkivgak, 50,

The Arctic

address unknown, had a charge of third-degree criminal mischief dismissed.

THURSDAY, NOV. 8 - Billie Willie, 29, of Barrow, was sentenced to five days in jail after pleading no contest to a Nov. 3 charge of violating conditions of release; Charmaine Kaleak, 44, address unknown. was sentenced to 100 days in jail with 80 days suspended, fined \$3,000, ordered to complete substance-abuse treatment, had her driver's license revoked for one year and placed on probation for three years after pleading no contest to a Sept. 3 charge of refusal of breath test. Kaleak was also sentenced to 10 days in jail after pleading no contest to an Oct. 21 charge of violating conditions of release, an additional charge of violating conditions of release was dismissed; Bert E. Panigeo, 60, address unknown, was sentenced to 110 days in jail with 90 days suspended, fined \$3,000, ordered to complete substance-abuse treatment, had his driver's license revoked for one year and placed on probation for three years after pleading guilty to an Oct. 20 charge of driving under the influence; Cyrus Segevan, 20; address unknown, was fined \$200, ordered to attend alcohol information school and placed on probation until the age of 21 after pleading no contest to an Aug. 18 charge of minor consuming alcohol: Mary L. Suviu, 16, address unknown, was fined \$600, ordered

> Serving the Northwest Arctic

Borough and the North Slope Borough to attend alcohol information school, placed on probation until the age of 21 and ordered to complete 24 hours of community service after pleading no contest to an Oct. 13 charge of minor consuming alcohol.

TUESDAY, NOV. 13 – Dora R. Ahgook, 18, address unknown, was fined \$600, ordered to attend alcohol information school, placed on probation until the age of 21 and ordered to complete 24 hours of community service after pleading no contest to a Sept. 27 charge of minor consuming alcohol.

THURSDAY, NOV. 15 - Sylvia M. Kaleak, 44. address unknown, was sentenced to 45 days in jail with 42 days suspended, fined \$1,500, ordered to complete substance-abuse treatment, had driver's license revoked for 90 days and placed on probation for one year after pleading no contest to a June 9 charge of driving under the influence: Joseph Ahgeak. 20. address unknown, had a charge of disorderly conduct dismissed; Kakianaag Stein, 20, address unknown, was fined \$600, ordered to attend alcohol information school, placed on probation until the age of 21 and ordered to complete 24 hours of community service after pleading no contest to a Sept. 17 charge of minor consuming, Stein was also fined \$600, ordered to attend alcohol information school, placed on probation until the age of 21 and ordered to complete 24 hours of community service after pleading no contest to an Oct. 6 charge of minor consuming alcohol; Joseph Skin, 20, address unknown, was fined \$600, ordered to attend alcohol information school, placed on probation until the age of 21 and ordered to complete 24 hours of community service. after pleading no contest to an Oct. 6, 2006, charge of minor consuming alcohol; Melinda Nayakik, 19, address unknown, was fined \$600, ordered to attend alcohol information school, placed on probation until the age of 21 and ordered to complete 24 hours of community service after pleading no contest to an Oct. 6 charge of minor consuming alcohol.

FRIDAY, NOV. 16 – Cortez Olemaun Sr., 33, address unknown, had a charge of fourth-degree criminal mischief of a domestic violence nature dismissed; Jack R. Henry Jr., 23, of Point Lay was sentenced to 72 hours in jail, fined \$1,500 and had his driver's license revoked for 90 days after pleading no contest to a Nov. 22 charge of driving under the influence, an additional charge of driver must be licensed was dismissed.

MONDAY, NOV. 19 – Raymond P. Ahgook, 20, address unknown, was sentenced to 10 days in jail with nine days suspended, fined \$200 and placed on probation for one year after pleading no contest to a

See Page 15, MOR

RATES: 50 cents per word, minimum \$5 per insertion (10 words). DEADLINE: 12 noon, Friday, week prior

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FINANCIAL

\$\$CASH\$\$ Immediate Cash for Structured Settlements, Annuities, Lawsuits, Inheritances, Mortgage Notes & Cash Flows. J.G. Wentworth - #1 1-800-794-7310

(313236, 12/6)

MISC. FOR SALE

PERSONALIZED ORNAMENTS FOR FAMILY, FRIENDS, CO-WORKERS

FINANCIAL -

Preference will not be given unless certification is submitted, (313220, 11/29-12/6)

PUBLIC NOTICES

November 30, 2007 NOTICE OF THE ISSUANCE OF THE PRELIMINARY FINDINGS AND DETERMINATION

PUBLIC NOTICES

Findings and Determination. The commissioner's final Findings and Determination regarding royalty modification is final and not appealable to the court, PUBLIC COMMENT

DO&G invites the public to comment on any aspect of the royalty modification including the preliminary findings and determination and any proposed term or condition. Comments should be mailed, faxed or e-mailed to the Division of Oil and Gas, 550 W. 7th Ave., Suite 1100. Apphorace. Alacks. 01501 3550

PUBLIC NOTICES

(BPXA) for the Greater Prudhoe Bay Skid 50 Transfer Station under Alaska Statute 46.14 and regulation 18 AAC 50.

CLASSIFIEDS

Applicant: British Petroleum Exploration (Alaska) Inc.

Location: Section 33, Township 11N, Range 14E, Prudhoe Bay Oil Field, Alaska.

Activity: Construction and operation of a diesel standby electrical generator. This public notice is

for the draft ORL only.

PUBLIC NOTICES

Proposed Plan and 30-day public comment period regarding proposed environmental cleanup alternatives for Point Lonely Short Range Radar Station (SRRS). The Point Lonely SRRS is located between Smith and Harrison Bays on the Beaufort Sea. The closest communities are Nuiqsut, 75 miles scutheast, and Barrow, approximately 85 miles northwest.

A public meeting will be held in Barrow, Alaska, at the North Slope Borough Assembly

(313244, 12-6-12/13)

SNOWMOBILES

For sale, 2007 Polaris IQ 600 1 ¼" X 136" track. Freshly rebuilt gas shocks. Ext range fuel tank. Tall windshield. Very clean and well maint'd. Only 1600 miles. Asking \$5500. Delivered to all major cargo hubs in AK. Call 907-632-6389 or email gschaeffer@yahoo.com.

(313251, 12/6-12/13)

JOB OPPORTUNITIES

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> The Native Village of Pointe Hope P.O. BOX 109 Pointe Hope, Alaska 99766 (907)368-2330 Fax: (907)368-2332

Position: Housing Director

Opening date: November 21, 2007 Closing date: Opened Until Filled

Salary: DOE/Plus Benefits

Nature of Work: Directs and administers the NVPH Indian Housing Plan Program as defined by HUD Office of the Native American Programs and NVPH Housing Commission. Fulfill goals & objectives, creates and completes budgets and all pertinent reporting requirements, creates & implements Housing policies. Oversees all constriction & renovation activities. Conduct Housing Commission meetings and other duties as assigned by the Executive Director and Housing Commission. Knowledge, Skills and Abilities: Individual should demonstrate the following competencies: Strong administrative, problem-solving, writing and interpersonal communication skills. Must have ability to collect and disseminate historical and technical data and environmental assessments of housing law. Have knowledge of the requirements, procedures, registrations and policies as pertaining to the federal government housing laws.

Qualifications: Ability to communicate, orally and in writing, including the ability to analyze information in a logical, sequential manner, and to make concise written presentation of findings. High School or GED required. Inupiat speaking preferred. Verifiable of work history and employment is required. At least three years of managerial and supervisory work experience in the field of housing is preferred.

Interested Applicants: Application is available at the NVPHO. For more information call the Human Resources Office at the phone number listed above.

Native Preference under P.L. 97-638:

ADLs 388571, 388572, 388574, 388575, 388577, 388581, 388582, 388583, 390615, 390616, and 391283 DENYING ROYALTY MODIFICATION ON NIKAITCHUQ DEVELOPMENT LEASE:

ADL 388580 (COMMITTED TO THE SCHRADER BLUFF OA RERSERVOIR WITHIN THE NIKAITCHUQ UNIT)

The Alaska Department of Natural Resources (ADNR), Division of Oll and Gas (DO&G), glves notice under AS 38.05.180(j)(8) that it has issued the preliminary findings and determination under AS 38.05.180(j)(1)(A) that approves the royalty modification request on the 11 leases: ADLs 388571, 388572, 388574, 388575, 388577, 388581, 388582, 388583, 390615, 390616, and 391283. Royalty modi fication is denied for one lease: ADL 388580. ADNR received a correctly filed initial application on October 16, 2007, from Eni US Operating Co. Inc. (Eni), as operator of the Nikaitchuq Unit, on behalf of its affiliate Eni Petroleum US LLC.

To determine whether this royalty modification should be granted, the commissioner of ADNR is required to issue a final written finding and determination that the royalty modification applies to individual leases, leases unitized as described in AS 38.05.180(p), (s) or (t), or interests unitized under AS 31.05 to allow for production from an oil.or gas field or pool if 1) the oil or gas field or pool has been suffi-

ciently delineated to the satisfaction of the Commissioner;

2) the field or pool has not previously produced oil or gas for sale; and

3) oil or gas production from the field or pool would not otherwise be economically feasible: ADNR has received and analyzed the applicant information regarding the development of these 11 leases. The analysis was then used to prepare this written preliminary finding and determination, which addresses the October 16, 2007, application. In this preliminary findings and determination the Commissioner establishes the scope of the administrative review for the approval of royalty modification and considers and discusses certain important facts and issues determined to be material as required by AS 38,05.180(j)(1)(A) upon which the commissioner will base his final determination.

The commissioner shall publish this Preliminary Findings and Decision and give public notice of a 30-day public comment period as well as offer to appear before the Legislative Budget and Audit Committee and provide a review of the Findings and Determination and the administrative process. The commissioner shall keep the submitted data confidential under AS 38.05.035 (a)(9) at the request of the lessee or lessees making application for the royalty reduction. Within 30 days of the close of the public comment period the commissioner will prepare a summary of the public comments and make a Final

Oil and Gas; Phone 907-269-8771; Fäx 907-269-8938; e-mail Tim.Ryherd@alaska.gov. Comments must be received no later than 5:00 p.m., January 7, 2008, to be considered in the final findings and determination.

Interested individuals may obtain copies of the preliminary finding and determination from DNR's website at www.dog.dnr.state.ak.us. The documents are also available for public review at the following locations: the Loussac Library in Anchorage, the DNR Public Information Center in Fairbanks, Anchorage, and the Barrow City Clerk's Office.

SUBJECT LEASES AND MODIFICATION DESCRIPTION

The 12 subject leases are all located north of and contiguous with the northern edge of the Kuparuk River Unit (KRU) and north west of the Milne Point Unit (MPU). All eleven leases where royalty modification is granted are committed to the Nikaitchug Unit (ADLs 388571, 388574, 388577, 388580, 388581, 388582, 388583, 390615, and 390616). The Preliminary Findings and Decision modifies royalty rates of eleven leases from the following original terms: 12.5 percent fixed royalty on ADL: 391283 with a 30 percent Net Profit Share, and 16.66667 percent on the ten other leases (ADLs: 388571, 388572, 388574, 388575, 388577, 388581, 388582, 388583. 390615, and 390616

MAPS

A map of the subject lease area is available on the division's website at www.dog.dnr.state.ak.us and in the Preliminary Findings and Determination document.

FINAL BEST INTEREST FINDING

DNR anticipates making the final findings and determination available to the public on or about January 14, 2008

ALTERNATIVE COMMUNICATION FOR-MATS

The ADNR, DO&G complies with Title II of the Americans with Disabilities Act of 1990. This publication can be made available on CD or in alternative communication formats upon request. Please contact Brock Steller at (907) 375-8251 to make any necessary arrangements.

/s/ Tom E. Irwin .

11/30/2007

Commissioner

(313252, 12/6)

PUBLIC NOTICE STATE OF ALASKA DEPARTMENT OF ENVIRONMENTAL CONSERVATION

BP EXPLORATION (ALASKA) INC., GREATER PRUDHOE BAY SKID 50 TRANS-FER STATION

The Alaska Department of Environmental Conservation (ADEC) proposes to issue an Owner Requested Limit approval (ORL) to British Petroleum Exploration (Alaska) Inc. or introgen oxides by fimiting rule use to 278,000 gallons of liquid fuel per year. This limit, along with a fuel sulfur limit of 1.0 weight percent sulfur, will also keep other regulated air pollutants below the minor source thresholds listed in 18 AAC 50.502(c)(1). By limiting these emissions, BPXA avoids the requirement for new stationary source minor permitting under 18 AAC 50.502(c)(1).

ADEC Preliminary Review: Based on review of the application, ADEC has made a preliminary decision to approve the ORL for the Greater Prudhoe Bay Skid 50 Transfer Station. Available Information: Copies of ADEC's preliminary approval are available at the following offices:

ADEC/APP 610 University Avenue, Fairbanks, AK 99709-3643, (907) 451-5173

ADEC/APP 410 Willoughby, Suite 303, Juneau, AK 99801-1795, (907) 465-5100 ADEC/APP 619 East Ship Creek, Suite 249, Anchorage, AK 99501, (907) 269-7577

The draft ORL is also available at ADEC's website

http://www.dec.state.ak.us/air/ap/calendar.htm . Copies of the application are available at the Anchorage office and at the Tuzzy Consortium Library in Barrow, Alaska.

Opportunity for Public Participation: Notice is also given that any interested person may present written statements relevant to the draft ORL within 30 days after the first publication date. Any person may request a public hearing and that hearing will be held if ADEC finds that good cause exists. ADEC will consider all comments received and make any changes ADEC finds beneficial or necessary to assure compliance with 18 AAC 50 or State Law. The final decision to issue or deny the ORL will be made after the close of the public comment period. Written comments will be included in the record if received before 5:00 p.m. January 7, 2008. ADEC complies with Title II of the Americans with Disabilities Act of 1990. If you are a person with a disability who may need a special accommodation in order to participate in this public process, please contact Deborah Pock at (907) 269-0291 or TDD Relay Service 1-800-770-8973/TTY or dial 711 within 30 days of publication of this notice to ensure that any necessary accommodations can be provided.

Please direct all written statements or requests relevant to the preliminary ORL to Mr. Frank Toth at ADEC's Anchorage address. (313238, 12/6-12/13)

PUBLIC NOTICE

U.S. AIR FORCE ANNOUNCES PROPOSED PLAN PUBLIC MEETING and

30-DAY PUBLIC COMMENT PERIOD

POINT LONELY SHORT RANGE RADAR STATION

The 611th Civil Engineer Squadron (611 CES) at Elmendorf Air Force Base announces the ing and to review and comment on the Proposed Plan.

Copies of the Proposed Plan will be available at the meeting and available online at http://www.hoeflernet.com/reports/point_lcnely/point_lonely.html.

Oral and written public comments will be accepted. The public comment period begins December 13, 2007, and ends January 11, 2008. For additional information, or to send comments, please contact: Mr. Tommie Baker **Community Relations Coordinator** 611 CES/CEVR 10471 20th Street, Suite 340 Elmendorf AFB, AK 99506-2200 1-800-222-4137 1-907-552-4506 tommie.baker@us.af.mil Mr. Stan Slagle **Remedial Project Manager** 611 CES/CEVR 10471 20th Street, Suite 338 Elmendorf AFB, AK 99506-2200 1-800-222-4137 1-907-552-4489 Stanley.slagle@us.af.mil AIR FORCE RURAL ALASKA HOTLINE: 1-800-222-4137 (813217, 11/29-12/6)

LEGAL NOTICES

IN THE SUPERIOR COURT FOR THE STATE OF ALASKA SECOND JUDICIAL DISTRICT AT KOTZE-BUE In the Matter of the Estate of ELMER THOMAS MONSON, Deceased. No. 2KB-07-09 PR NOTICE TO CREDITORS [AS 13,16,450]

Notice is hereby given that Rhoda Allen has been appointed personal representative of the above-named estate. All persons having claims against the decedent are required to present their claims to her within four months after the date of the first publication of this notice or said claims will be forever barred. Claims must be presented at the following address: c/o Russell A. LaVigne, Jr., Alaska Legal Services Corporation, PO Box 526, Kotzebue, Alaska.

Dated this 2nd day of November, 2007. /s/ Russell A. LaVigne, Jr. Attorney for Rhoda Allen Personal Representative (313210, 11/22-12/6)

Jan-08-08 11:15am From-FBKS DAILY NEWS MINER

attn: Brock

Sec. 14 - 23 - 44 - 45

This affidavit is in the mail.

AFFIDAVIT OF PUBLICATION

UNITED STATES OF AMERICA STATE OF ALASKA FOURTH DISTRICT

1 2	224269 NOTICE OF THE ISSUANCE OF THE PRELIMINARY FINDINGS AND DETERMINATION APPROVING ROYALTY MODIFICATION ON NIKAITCHUQ DEVELOPMENT LEASES: ADLo 386571, 308572, 388874, 388575,		
*	386577, 986581 385582, 388565, / 380915, 390618,) 280 391283 DENYING ROYALTY MODIFICATION ON NIKAITCHUQ DEVELOPMENT LEASE- ADL 388580	- y	
\$	(COMMUTTED TO THE SCHRADER BLUFF DA RERSERVOIR WITHIN THE NIKAITCHUQ UNIT)		-14
	The Alaska Department of Natural Recources (ADNR), Division of Ori and Cas (DOAG), orea include under AS 54 00 180(µ)(8) that is hat estand the preliminary form under AS 55 00 180(µ)(8) that is hat is an original and original approves the royary mod- fication request on tro 11 istage, ADLS 388571, 388572, 384574, 38577, 388572, 384574, 388571, 388572, 384574, 38577, 388572, 384574, 38577, 388577, 384574, 384574, 38577, 38577, 384574, 38457, 384574, 38577, 38577, 384574, 38457, 384574, 38577, 3757, 3757, 38577, 38577, 3757, 3757, 37577, 37577, 3757		
Ē	AS 38 05 180(p), (5) or (0, or interests winneed under AS 31 05 to allow for pro- autrion from an p-l or gas field or pool if 1) the oil or gas hous or pool has been suf-	1.1	
	Iceanity deincated to the satisfaction of the Com- missioner. 21 The field or poor		

Before me, the undersigned, a notary public, this day personally appeared <u>service</u>, who, being first duly sworn, according to law, says that he/she is an Advertising Clerk of the Fairbanks Daily News-Miner, a newspaper (i) published in newspaper format, (ii) distributed daily more than 50 weeks per year, (iii) with a total circulation of more than 500 and more than 10% of the population of the Fourth Judicial District. (iv) holding a second class mailing permit from the United States Postal Service, (v) not published primarily to distribute advertising, and (vi) not intended for a particular professional or occupational group. The advertisement which is attached is a true copy of the advertisement published in said paper on the following day(s):

and that the rate charged thereon is not excess of the rate charged private individuals, with the usual

and that the rate charged the control is not the usual rate charged private individuals, with the usual discounts. CORRECT COPY OF THE ORIGINAL CORRECT COPY OF THE ORIGINAL 1/8/08

1977 N. M.

2.201

Subscribed and sworn to before me on this _____ day

Notary Public in and for the State Alaska.

E TRUER

on expires_

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	Federal Lease - Offshore					ENI PETROLEUM US	5 IIC 100%	ENI PETROLEUM US I	LC 100%	ENI PETROLE
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///// Demed						\$57.35 Bid/Acre 16.67% Royalty		\$11.14 Bid/Acre 16.67% Royalty		\$11.14 Bid/ 16.67% Roya 0% Net Prof
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FIRST EXPANSION OF THE NIKAITCHUQ UNIT AREA, TERMINATION OF THE TUVAAQ UNIT, AND THE CONTRACTION OF THE KUPARUK RIVER UNIT AREA

Findings and Decision of the Director of the Division of Oil and Gas, Under Delegation of Authority from the Commissioner of the State of Alaska Department of Natural Resources

OCTOBER 5, 2007

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- 3. Exhibit G. Plan of Exploration and Development
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I. INTRODUCTION AND DECISION SUMMARY

Eni US Operating Co. Inc. (ENI), as the designated Nikaitchuq Unit Operator, filed the Nikaitchuq Unit (NU) expansion application (Application) with the State of Alaska (state), Department of Natural Resources (DNR). The Application meets the requirements for a complete application under 11 AAC 83.306. Public comment period closed on August 5, 2007, and DNR received no comments.

The existing Nikaitchuq Unit, formed effective April 29, 2004, is located on the North Slope of Alaska, north of the Kuparuk River Unit (KRU) and east of the Tuvaaq Unit. The existing unit area covers approximately 12,968 acres encompassing eight state oil and gas leases (state leases). The proposed Nikaitchuq Unit expansion area would increase the area committed to the Nikaitchuq Unit from the current 12,968 acres to a total of approximately 33,870 acres.

The Division of Oil and Gas (Division) finds that the expansion of the Nikaitchuq Unit promotes conservation of all natural resources, promotes the prevention of economic and physical waste and provides for the protection of all parties of interest, including the state. DNR approves the expansion of the Nikaitchuq Unit in accordance with the criteria under 11 AAC 83.303 and conditioned by the terms of this Decision.

II. APPLICATION

ENI submitted the Application on May 18, 2007, and simultaneously paid the \$500.00 unit application filing fee, in accordance with 11 AAC 83.306 and 11 AAC 05.010(a)(10)(D), respectively. The Application includes: Exhibit A, legally describing the proposed expanded unit area, its leases, and ownership interests; Exhibit B, a map of the proposed expanded unit; Exhibit G, the Nikaitchuq Unit 2nd Plan of Exploration (2nd POE), evidence of mailing of notice of invitation to proper parties, and the necessary ratifications of joinder to the Unit Agreement. The Application also includes confidential, technical data.

The Division deemed the Application complete on June 27, 2007, and the public notice period commenced on July 5, 2007.

The Division published a public notice in the "Anchorage Daily News" and in the "Arctic Sounder" on July 5, 2007, under 11 AAC 83.311. Copies of the Application and the public notice were provided to interested parties. DNR provided public notice to the Alaska Department of Environmental Conservation, the DNR Office of Habitat, Management and Permitting, the North Slope Borough, the City of Barrow, the City of Nuiqsut, the Kuukpik Corporation, the Arctic Slope Regional Corporation, the Nuiqsut Postmaster, and the radio station KBRW in Barrow. The notice was also published on the State of Alaska Public Notice website and the Division's website. The public notices invited interested parties and members of the public to submit comments by August 5, 2007. DNR received no comments regarding the Application.

1st Expansion of the Nikaitchuq Unit Area, Termination of the Tuvaaq Unit, and the 3 Contraction of the Kuparuk River Unit Area

III. LEASE BACKGROUND

The existing Nikaitchuq Unit encompasses eight state leases: ADLs 388579, 388580, 388581, 388582, 388583, 389719, 389720, and 390433. DNR issued these leases effective January 1, 1998, following the Beaufort Sea Sale 86, held November 18, 1997, on Competitive Oil and Gas Lease Form No. DOG 9609(REV6/97). These leases have, seven-year primary terms and 16.66667 percent royalty rates. At the time of unit formation, April 29, 2004, paragraphs 15(d) and 36(b) were amended to conform to the provisions of lease form DOG 200204.

ENI proposed to include an additional 10 state leases to the Nikaitchuq Unit. Seven of these 10 are currently held by the Tuvaaq Unit, located due west of the existing Nikaitchuq Unit. The Tuvaaq leases, ADLs 388571, 388572, 388573, 388574, 388575, 388577 and 388578 were also issued effective January 1, 1998, following the Beaufort Sea Sale 86 held November 18, 1997, on Competitive Oil and Gas Lease Form No. DOG 9609(REV6/97). These leases also have seven-year primary terms and 16.66667 percent royalty rates. At the time of unit formation, August 20, 2004, paragraphs 15(d) and 36(b) were amended to conform to the provisions of lease form DOG 200204.

ENI also proposed to include ADLs 390615, 390616, and Segment 2 of ADL 355024 in the Nikaitchuq Unit. The DNR issued ADLs 390615 and 390616 effective July 1, 2005, following the 2004 Beaufort Sea Sale, on Competitive Oil and Gas Lease form No. DOG 200204(REV10/03). These lease also have seven year primary terms and 16.66667 percent royalty rates. The primary terms of these two leases will expire June 30, 2012.

Following the May 17, 1983, Beaufort Sea Sale, DNR issued ADL 355024, effective June 1, 1983, on Competitive Oil and Gas Lease Form No. DMEM-4-83 (NET PROFIT SHARE)(REVISED May 5, 1983) DNR 10-1113. This lease has a 10 year primary term, 12.5 percent fixed royalty rate, and 30 percent net profit share (NPS). Effective June 1, 1985, ADL 355024 was committed, in part, to the KRU and the KRU Kuparuk Participating Area. Effective June 16, 1988, ADL 355024 was committed in its entirety to the KRU (Third Expansion of the Kuparuk River Unit).

ADL 355024, currently committed to the KRU, contains two aerially-differentiated segments, Segment 1 and Segment 2. Segment 1, the southern portion of ADL 355024, is not a part of the Application. The KRU WIOs had previously agreed to a farm-out of Segment 2 to ENI as 100 percent working interest owner (WIO) in Segment 2, commonly referred to as the Kigun portion of the lease. If the Division approves the proposed Nikaitchuq Unit expansion, this acreage, (Segment 2 of ADL 355024), will receive a new ADL, contract from the KRU, and be committed simultaneously to the expanded Nikaitchuq Unit.

On January 11, 2006, Kerr-McGee Oil & Gas Corporation (KMG), as operator of the Nikaitchuq Unit, and on behalf of itself and ENI Petroleum Exploration Co. Inc., submitted an application to the DNR Commissioner for royalty modification under AS

1st Expansion of the Nikaitchuq Unit Area, Termination of the Tuvaaq Unit, and the Contraction of the Kuparuk River Unit Area

38.05.180(j)(1)(A). On October 31, 2006, DNR determined that royalty modification was unwarranted.

As a result of several assignments of working and royalty interest shares, 100 percent of the working interest of each of the existing Nikaitchuq Unit leases and the leases proposed for expansion is held by ENI. Each lease has overriding royalty interest owners whose shares, in total, range from 1.8 to 6.178112 percent.

IV. DISCUSSION OF DECISION CRITERIA

AS 38.05.180(p) gives DNR the authority to approve an oil and gas unit. The DNR Commissioner (Commissioner) reviews unit applications under 11 AAC 83.301 – 11 AAC 83.395. By memorandum dated September 30, 1999, the Commissioner approved a revision of Department Order 003 and delegated this authority to the Division Director. The Division's review of the Application is based on the criteria set out in 11 AAC 83.303 (a) and (b). A discussion of the subsection (b) criteria, as they apply to the Application, is set out directly below, followed by a discussion of the subsection (a) criteria.

A. Decision Criteria considered under 11 AAC 83.303(b)

1. The Environmental Costs and Benefits of Unitized Exploration or Development

The proposed expanded Nikaitchuq Unit area lies offshore in the shallow waters of Harrison Bay Alaska, immediately north and contiguous to the KRU. The expansion area includes the current Tuvaaq Unit, which is due east of the expanded Oooguruk Unit, and a lease segment from the Kuparuk River Unit. This area is habitat for various marine mammals, waterfowl, and fish. Area residents may use this area for subsistence hunting and fishing. Oil and gas activity in the proposed unit area may affect some wildlife habitat and some subsistence activity. Lease mitigation measures, including seasonal restrictions on specific activities, reduce the impact on fish, wildlife, and human populations. Mitigation measures specifically address potential impacts to subsistence access and harvests.

DNR develops lease stipulations through the lease sale process to mitigate the potential environmental impacts from oil and gas activity. Alaska statutes require DNR to give public notice and issue a written finding before disposal of the state's oil and gas resources. AS 38.05.035(e); AS 38.05.945; 11 AAC 82.415. In the written best interest finding, the Commissioner may impose additional conditions or limitations beyond those imposed by law. AS 38.05.035(e).

DNR considered all comments submitted before holding the Beaufort Sea Sales in 1983, 1997, and 2004. DNR included mitigation measures in the leases. The proposed Nikaitchuq Unit expansion leases contain stipulations designed to protect the environment and address concerns regarding impacts to the area's fish and wildlife

1st Expansion of the Nikaitchuq Unit Area, Termination of the Tuvaaq Unit, and the 5 Contraction of the Kuparuk River Unit Area species and to habitat and subsistence activities. They address the protection of primary waterfowl areas, site restoration, construction of pipelines, seasonal restrictions on operations, public access to, or use of, the leased lands, and avoidance of seismic hazards. Including the leases in the expanded Nikaitchuq Unit will neither change these protective measures, nor result in additional restrictions or limitations on public access to the lands or to public and navigable waters. Furthermore, lease operations both before and after unitization are subject to a coastal zone consistency determination, and must comply with the terms of both the State Coastal Management Program and North Slope Borough Coastal Management Plan, and require issuance of a permit from the U.S. Army Corps of Engineers. Lease and unit operations also require state approval of a Plan of Operations application.

Seasonal restrictions on specific activities in certain areas will reduce the impact on bird, fish, and mammal populations. Designating primary waterfowl areas and restricting activities within these areas is one method of protecting the bird habitat. DNR requires consolidation of facilities to minimize surface disturbances. Regulating waste disposal is another way to limit environmental impacts. With these mitigating measures, the anticipated exploration and development related activity is not likely to significantly impact bird, fish, and mammal populations.

The approval of the expansion of the Nikaitchuq Unit itself has no environmental impact because the Commissioner's approval of the unit is an administrative action, which, by itself, does not convey any authority to conduct any operations within the unit. The unit expansion does not entail any environmental costs in addition to those that may occur when permits to conduct lease-by-lease exploration or development are issued. Unitization does not waive or reduce the effectiveness of the mitigating measures that condition the lessee's right to conduct operations on these leases. The Division's approval of a Plan of Exploration or Plan of Development is only one step in the process of obtaining permission to drill a well or wells or develop the potential and known reservoirs within the unit area. The Unit Operator must still obtain approval of a Plan of Operations from the state and permits from various agencies on state leases before drilling a well or wells or initiating development activities to produce reservoirs within the unit area. 11 AAC 83.346.

A proposed Plan of Operations must describe the operating procedures designed to prevent or minimize adverse effects on natural resources. Plans of Operation are subject to extensive technical review by a number of local, state, and federal agencies. They are also subject to consistency with the Alaska Coastal Management Program and local coastal district plans, if the affected lands are within the coastal zone. The Unit Operator shall guarantee full payment for any damage sustained to the surface estate before beginning operations, and the Plan of Operations must include plans for rehabilitation of the unit area. Furthermore, when the lessees propose to explore or develop acreage within the unit area and submit a Unit Plan of Operations, the DNR may require that it comply with the lease stipulations and lessee advisories developed for the most current lease committed to the Nikaitchuq Unit or the region.

2. Geologic and Engineering Characteristics of the Proposed Expanded Nikaitchuq Unit

Introduction and Summary

The area proposed for the Nikaitchuq Unit expansion lies offshore in the Beaufort Sea in the vicinity of Spy Island, approximately three miles north of Oliktok Point. The existing NU is north of and contiguous with the northern edge of the KRU and the Milne Point Unit (MPU). The KRU is operated by ConocoPhillips and produces from the Cretaceous Kuparuk River Formation and shallower Schrader Bluff formation. The BP- operated MPU field lies to the south-southeast of the NU and produces oil from the Schrader Bluff, Kuparuk, and Triassic Sag River formations. The western edge of the proposed NU is adjacent to the recently expanded Oooguruk Unit (OU) operated by Pioneer. Production from the OU is expected from the Kuparuk and Jurassic Nuiqsut sandstones.

Within the proposed expanded NU, potentially commercially recoverable reserves have been tested in the Cretaceous Schrader Bluff and the Triassic Sag River formations.

The Division deemed the geological data submitted in support of the Application for expansion of the Nikaitchuq Unit complete on June 27, 2007. Submitted data included structure maps and permeability and thickness maps for the Schrader Bluff sandstone and Sag River sandstone, well and seismic cross sections, and well production test data. The geological, geophysical, and engineering data that ENI submitted contained the results from the recently drilled wells in the area and justifies the expansion of the Nikaitchuq Unit.

Exploration History of the Area

Two early key exploration wells lie within several miles of the Nikaitchuq development area. The Unocal East Harrison Bay State #1 well lies near the northwest corner of the KRU, to the southwest of the NU. The well was drilled in February 1977 to a measured depth of 9,809 feet, bottoming in argillite basement. The East Harrison Bay State #1 well logs appear to show about 15 feet of oil-bearing Kuparuk sandstone that appears cemented in the upper half. The Jurassic section looks silty on logs. The ARCO Kalubik #3 well, drilled in February 1998, lies to the south-southwest of the Nikaitchuq area. The well bottomed in the Jurassic at a measured depth of 7,000 feet. The well encountered a 40-foot-thick MD interval of Kuparuk C sandstone that appears on electric logs as oilbearing, but siderite cemented in the upper 10 feet of the interval. On well logs the Jurassic interval appears silty with a 12-foot silty sand developed around 6,565 feet MD. The well was plugged and abandoned on March 6, 1998.

Drilling History

The first major exploration activity in the area in the early 1970s targeted the Ivishak Formation following the discovery of the prolific Ivishak Formation in Prudhoe Bay State

#1 in 1967. The Hamilton Brothers Milne Point #18-1 was one of the early wells drilled on the Milne Point structure in 1970 in search of Ivishak and Lisburne objectives. This well encountered about 50 feet of tight oil-saturated sandstone that was not tested and a section of Kuparuk sandstone that tested at a rate of 875 BOPD. This discovery led to increased industry interest in the Milne Point area and led to exploration and delineation drilling for Kuparuk reserves. In the early 1980s the Sag River was cored in the Conoco Milne Point Unit #C-1 well and contained bleeding oil and gas. The Sag River Sandstone was also cored in the MPU #L-1 well and contained no visible porosity or staining and the Sag River appeared tight on wire line logs.

In the early 1990s about a dozen wells were drilled to the west-southwest of the Nikaitchuq area with Jurassic sandstones and Kuparuk C sandstones as targets. The ARCO Kalubik #1 well encountered approximately 160 feet of productive Nuiqsut and Nechelik sandstone that tested at an unstimulated rate of 336 BOPD. In addition the well penetrated an 85-foot section of Sag River Sandstone with calculated log porosities in the range of 15 to 22 percent. The Thetis Island #1 well also encountered an 80-foot section of porous Sag River sandstone with log-calculated porosities in the range of 16-24 percent. A pay section of Nuiqsut sandstone was also encountered in this well that tested at an average rate of 120 BOPD with a high rate of 650 BOPD. Both the Kalubik #1 well and Thetis Island #1 well drilled through Brookian sandstones that contained mud log hydrocarbon shows.

In the late 1990s BP drilled several dedicated Sag River Sandstone test wells, including MPU #C-23, #K-33, #E-13A, 3F-33, #F-33A, and #F-73A. Alaska Oil and Gas Conservation Commission (AOGCC) production data indicate that several Milne Point wells have produced oil out of the Sag River Sandstone and two oil producing wells MPU F-33A and K-33, are currently shut-in. MPU #C-23 produced 378,012 barrels of oil between 1996 and 2001. MPU #F-33 produced 314,276 barrels of oil between September 1996 and May 1999 and was subsequently plugged and abandoned. MPU #K-33 has produced approximately 93,241 barrels of oil since 1997. MPU #E-13A produced 366,665 barrels of oil between 1995 and April 2001. MPU #F-33A produced approximately 533,351 barrels of oil since April of 2001. MPU #F-73A produced 13,430 and is now a water alternating gas injection (WAGIN) well. AOGCC reservoir data indicate that the oil commonly recovered from the Sag River sandstone has an API oil gravity of about 37 degrees. Total production from the MPU Sag River Sandstone has been 1,709,268 barrels of oil and 1,754,912 MSCF gas through February 2006. The original GOR ranged from 784 – 974 SCF/STB. Production from the Sag River pool at MPU has been intermittent with shut-in periods from June 1999 through February 2002 and all of 2006.

Between 2004 and 2005, Kerr McGee (KMG) drilled six wells in the Nikaitchuq and Tuvaaq Units. Three of the six wells tested oil from the Schrader Bluff or Sag River formations. In 2006 KMG drilled two additional wells to further delineate the Schrader Bluff sandstone. These wells have been suspended.

^{1&}lt;sup>st</sup> Expansion of the Nikaitchuq Unit Area, Termination of the Tuvaaq Unit, and the 8 Contraction of the Kuparuk River Unit Area

Brookian Sandstone Potential

Brookian sandstones were deposited during latest Cretaceous and Paleocene time in available accommodation spaces as the Colville Trough was filled with sediment in response to thrust loading from the Brooks Range, a large north vergent fold and thrust belt to the south. Brookian sandstone at 5,050 - 5,250 feet in the Kalubik #1 well tested oil (API gravity not measured) at the rate of 10 BOPD. Brookian sands were also tested in the Thetis Island #1 well at depths of 5,576 - 5,578 feet MD and 5,631 - 5,633 feet MD that produced mud filtrate with a trace of oil.

Schrader Bluff Formation Tests

KMG Nikaitchuq #4

Approximately 3,000 feet of gross horizontal Schrader Bluff formation was drilled in this well, with approximately 2,270 feet of net pay, from a 30foot TVD net pay thickness. A two-week production test was performed on the well using an electric submersible pump (ESP) to aid in producing the 16–17 API crude. The well tested at rates up to 1,200 barrels of oil per day during periods of the initial test. Permeability estimated from the test was greater than 350 millidarcies and was confirmed from the analysis of the tests conducted on a whole core obtained from the well.

KMG Tuvaaq #1

The well was not tested. It penetrated 30 feet net pay Schrader Bluff OA Sand and 12 feet net Schrader Bluff N sand. There were no cores taken at Tuvaaq. Schrader Bluff N sand was interpreted to be oil-filled here and at Kigun #1 appeared unconsolidated with permeability estimated from 100-1000 millidarcies and porosity 25-35 percent.

KMG Kigun #1

The well was not tested. It penetrated 29 feet net pay Schrader Bluff OA sand and 30 feet net N sand. An MDT tool run sampled the Schrader Bluff OA fluids which were 18 API, GOR 59 SCF/STB and viscosity of 82 cp at 87 degree reservoir temperature. (Contamination of the samples with oil-based mud caused concern about the reliability of the sample estimates.) Schrader Bluff OA sand core data indicated 25 percent to 38 percent porosity and up to 1,000 millidarcies permeability in the sandstone intervals.

Jurassic Sandstone Potential

Several wells in the Colville Delta area tested Nuiqsut sands: the Texaco Colville Delta #1 well produced at a rate of 1,075 BOPD of 25 API oil; the Texaco Colville Delta #2 well produced at a rate of 409 BOPD with the measured oil gravity varying from 24- to 40-degree API; the Texaco Colville Delta #3 well produced at a rate of 2,170 BOPD of 27.7-degree API oil; and the ARCO Kalubik #1 well produced at a rate of 410 BOPD of

21-degree gravity oil. In 2003, The Pioneer Ivik #1 well, drilled in the OU about three miles southwest of proposed Nikaitchuq Unit, tested 1,300 BOPD in Jurassic sands.

Sag River Formation Tests

KMG Nikaitchuq #1 (completed April 1, 2004)

Nikaitchuq #1 encountered 41 feet gross and 23 feet net pay in the Schrader Bluff OA sand and 33 feet gross and 17 feet net Sag River B Sand. The Schrader Bluff was not tested.

On April 19, 2004 KMG announced that the Nikaitchuq #1 well "production tested more than 960 BOPD of 38-degree API crude" from the Sag River Sandstone between the depth of 10,408 - 10,472 feet MD (8,679 - 8,741 feet subsea TVD). The Sag River sand was tested for 210 hours, fluids were produced for 150 hours after oil reached surface. Daily rate peaked at 960 BOPD on Day 3 and declined to 760 BOPD at the end of the Day 6. Daily rates were calculated on a 24-hour basis rather than using instantaneous rates as plotted in the operator's report. GOR was 937 SCF/STB during the test. Wellhead pressure (WHP) fluctuated during the test mainly caused by water-loading and gas-slugging. The final WHP ranged between 300 psi to 400 psi and 14 percent water cut. A pressure transient test analysis showed permeability of about 3 - 4 millidarcies and no skin effect (undamaged). The 591-foot test radius of investigation represents about 25 acres, a relatively small portion of the reservoir.

KMG Nikaitchuq #2

The well encountered 30.5 feet gross Sag River sand and 7 feet net Schrader Bluff OA sand. There was no flow test conducted. The well was cored in the Sag River Sandstone and permeability measured 2 millidarcies indicating tight reservoir rock.

KMG Nikaitchuq #3

A 3,000-foot horizontal section was drilled with approximately 1,834 feet of net pay in the Sag River Sandstone. The Sag River was tested using a pump for 81 hours after oil surfaced. The initial rate declined from 1,327 BOPD at Day 1 to 760 BOPD (at 81 hours) of 32-degree API oil. Solution GOR averaged about 230 SCF/STB during the test. Wellhead pressure stabilized at 130 psi and pump intake pressure down hole finished at 1,230 psi prior to shut-in. Water cut ranged from 40-60 percent during the test but the water source was not determined conclusively. Pressure transient analysis indicated 5 millidarcies permeability, no skin damage, and the drainage area bounded by faults. Source of water production hampers the assessment of the formation's productivity.

Conclusion

The geological, geophysical, and engineering data that ENI submitted contains the results from the recently drilled wells in the area and justifies the expansion of the Nikaitchuq Unit.

ENI has stated its plan is to develop the Nikaitchuq Schrader Bluff Formation with horizontal wells. ENI's performance prognosis can be compared to the analogs by evaluating average Schrader Bluff well performance from initial completion to date. There is nearly five years of history for the various Schrader Bluff Formation wells. ENI appears to assume its development will improve on the previous KRU and MPU Schrader Bluff completions by using the latest technology--horizontal and multilateral completions.

The Sag River Formation has been developed on a stand-alone basis at MPU. The MPU wells consistently show initial flush production followed by steep decline within the first year to less than 50 percent of the initial rate. KMG's Sag River tests showed similar initial production rates and comparable if not more pronounced decline. At this time no obvious upside is evident based on analog performance and KMG's test results. Stimulation and perhaps innovative EOR techniques could improve recovery prospects in the Sag River Formation at Nikaitchuq.

3. Plan of Exploration and Development for the Proposed Expanded Nikaitchuq Unit

The proposed expansion of the Nikaitchuq Unit would include all of the leases currently committed to the Tuvaaq Unit and lease segment from the KRU. Both the Nikaitchuq and Tuvaaq Units currently operate under their respective Initial Plans of Exploration (Initial POE), which have five year terms. Both units are in the third year of their Initial POEs. ENI has fulfilled the work commitments set out in both Initial POEs. The proposed 2nd POE submitted with the Application would supersede the Nikaitchuq and Tuvaaq Initial POEs and address exploration activity for the proposed expanded Nikaitchuq Unit.

The data acquired from drilling the Initial POE commitment wells in both Units provided sufficient geological and geophysical data to support an application for royalty modification in 2006. The previous Operator of the Nikaitchuq and Tuvaaq Units, KMG, on behalf of itself and ENI, submitted the Application for Royalty Modification for ADLs 355021, 355024, 388571, 388572, 388574, 388575, 388577, 388578, 388580, 388581, 388582, 388583, 390615, and 390616 on January 11, 2006. Through the royalty modification process, KMG and ENI presented the full Nikaitchuq project in detail describing development and production phases with extensive geological, geophysical, engineering, and economic data. Although the Division denied royalty modification, DNR found that, as required by AS 38.05.180(j), KMG had sufficiently delineated the Schrader Bluff and Sag River pools underlying the existing and proposed expanded Nikaitchuq Unit. The next step after delineation of a particular resource would be a Plan

1st Expansion of the Nikaitchuq Unit Area, Termination of the Tuvaaq Unit, and the 11 Contraction of the Kuparuk River Unit Area of Development (POD), development activity, and the formation of participating areas leading to production. 11 AAC 83.343(a); 11 AAC 83.3519a). However, the 2nd POE does not address these activities.

The 2nd POE proposes to use results from the 2006-2007 "On-Ice Seismic Experiment" to determine appropriate 3-D seismic acquisition for the expansion acreage and commits ENI to acquire approximately 74 square miles of 3D seismic by September 2010.

In order to address the fact that, if approved, the proposed 2nd POE would apply to acreage for which a producible resource has been delineated, the Division proposed a series of development benchmarks, which ENI has agreed to. The terms of this Decision, and the conditions under which the state will approve the expansion, require that ENI commit specific leases in the expanded unit to participating areas within certain timeframes during the term of the proposed 2nd POE. The benchmarks are timed to parallel the likely development scenario presented with ENI's 2006 royalty modification application.

The planned development, as summarized in the Division's 2006 royalty modification decision, set out the following activities:

• formation of a new unit possibly comprised of the area currently committed to the Nikaitchuq and Tuvaaq units, surrounding acreage such as ADLs 390615 and 390616, and segments of ADLs 355021 and 355024 in which KMG had a working interest ownership;

• construction of a gravel pad with drilling, gathering, and production facilities on Oliktok Point near the existing ConocoPhillips Alaska Inc. seawater treatment facility;

• construction of a gravel drilling island near Spy Island tied back via a 3.8-mile subsea flow line and utility bundle to Oliktok Point for fluid processing;

• construction of a +/-14 mile pipeline from Oliktok Point to a tie-in near KRU DS-1Y pad for connection to the Kuparuk Transportation common carrier pipeline; and

• future modifications required to adjust facility configuration to accommodate actual results of well performance.

ENI's development studies indicated that extended reach horizontal producing and injection wells required for pressure maintenance were needed to economically recover the hydrocarbons in place. The planned development would permit a relatively small footprint for centralized facilities and minimal well pads, thereby reducing environmental impacts to the region. Initial drilling would be from a 313,000-square-foot pad to be constructed at Oliktok Point. Existing roads would be used for access. The production facilities would be located on the same pad. For future drilling, a small gravel island would be constructed shoreward of the barrier islands. A subsea bundle containing a

1st Expansion of the Nikaitchuq Unit Area, Termination of the Tuvaaq Unit, and the 12 Contraction of the Kuparuk River Unit Area three-phase production line and multiple utility lines would be constructed to connect the gravel island to Oliktok Point to transport production to Oliktok Point and provide fuel, secondary recovery fluid, and power to the gravel island.

Under the agreement reached between the Division and ENI, any portion of a lease included in the expanded Nikaitchuq Unit not included in a participating area **by** specified dates as described in the 2nd POE, or covered by an approved POE or POD, would be severed and contract from the unit area. The Nikaitchuq and Tuvaaq unit agreements and lease amendments, agreed to at unit formation, allow for severance of acreage partially committed to a participating area. ENI has agreed to lease amendments for the expansion leases ADLs 390615, 390616, and 391283 in order that all leases in the expanded unit would have severance provisions. ENI has agreed to waive the 90-day extension provisions of 11 AAC 83.140 and of 11 AAC 83.374 and waive the provisions of 11 AAC 83.351, which, under certain circumstances, protect a lease from severance when a portion of a it is contracted out of a unit area.

If approved, the proposed 2nd POE, in conjunction with the requirement to commit specific leases to participating areas in accordance with the schedule set out below, would provide a clear description of planned unit exploration and development activities as required under 11 AAC 83.341 and 11 AAC 83.343, and allow for the approval of reasonable work commitments. As acreage is committed to PAs and PODs annually approved over the next five years, the 2nd POE would be amended. Any acreage not committed to a participating area, or not covered by an approved POE or POD within the stated timeframe, would automatically contract from the Nikaitchuq Unit.

Effective as of the approval of the Application, Segment 2 would be segregated from ADL 355024, contracted from the KRU with the concurrence of the Kuparuk River Unit Operator and working interest owners; simultaneously committed to the Nikaitchuq Unit; and receive the new ADL 391283. On October 5, 2009, any portion of ADL 391283 not committed to a participating area would be segregated as to the portion committed to the participating area. The portion not committed to the participating area. The portion not committed to the participating area. The portion not committed to the participating area would automatically contract from the Unit unless covered by an approved POE or POD. One reason for the proposed expansion is that ENI intends to produce at Nikaitchuq by 2009. Requiring formation of a participating area by 2009 commits ENI to the development of the expansion leases.

On October 5, 2011, any portion of ADLs 388571, 388574, 388575, 388577, 388578, 388581, 388582, and 388583--not committed to a participating area would be segregated as to the portion committed to the participating area and the portion not committed to the participating area. The portion not committed to the participating area would automatically contract from the Unit unless covered by an approved POE or POD.

On October 5, 2012, any portion of ADLs 388572 and 388573 not committed to a participating area would be segregated as to the portion committed to the participating area and the portion not committed to the participating area. The portion not committed to the participating area would automatically contract from the Unit unless covered by an

1st Expansion of the Nikaitchuq Unit Area, Termination of the Tuvaaq Unit, and the 13 Contraction of the Kuparuk River Unit Area approved POE or POD, one of which must include a firm commitment to drill at least one well on either lease, or both leases will automatically contract from the unit.

On October 5, 2012, any portion of ADLs 388579, 388580, 389719, 389720, and 390433 not committed to a participating area would be segregated as to the portion committed to the participating area and the portion not committed to the participating area. The portion not committed to the participating area. The portion not committed to the participating area. The portion not committed to the participating area would automatically contract from the Unit unless covered by an approved POE or POD, one of which must include a firm commitment to drill at least one well on one of these leases or all the leases will automatically contract from the unit.

On October 5, 2012, any portion of ADLs 390615 and 390616 not committed to a participating area would be segregated as to the portion committed to the participating area and the portion not committed to the participating area. The portion not committed to the participating area would automatically contract from the Unit unless covered by an approved POE or POD.

4. The Economic Costs and Benefits to the State and Other Relevant Factors

Approval of the Application and the 2nd POE under the conditions set out in this Decision, which requires commitments to form participating areas will result in both short term and long-term economic benefits to the state. The assessment of the leases' hydrocarbon potential will create jobs in the short term. If the WIOs begin development and production from the expanded Nikaitchuq Unit, the state will earn royalty and tax revenues over the long-term life of the field.

If the expansion were not approved, the earliest that the Division could re-offer any of the acreage under the current Five Year Oil and Gas Lease Sale Schedule, would be 2013. There is no certainty that anyone would bid on the tracts or pursue exploration of this area. If the Division leased the two eligible tracts, ADLs 390615 and 390616, again in 2013, the state would receive bonus payments and rentals for the primary term of the new leases. However, it could be years before the new lessees would unitize and propose exploration of the unit area.

As a part of ENI's expansion application and earlier royalty modification application, ENI has stated their intent to construct a processing facility within the boundary of the expanded Nikaitchuq Unit at Oliktok Point. Approval of the expansion will promote the development and production of resources to be processed at the facility. Currently the only processing facility in the region is the Kuparuk River Unit processing facility. The construction of a new processing facility will provide benefit to current and future lessees who do not own facilities by offering a second source of processing capacity and accessible pipeline in the region.

5. Amendments to the State Only Model Unit Agreement Form and other Relevant Factors

The Nikaitchuq Unit Agreement executed at the formation of the Nikaitchuq Unit contains the June 2002 revisions to the State Only Model Form. DNR proposed an additional revision to this Agreement as a part of the expansion. The revision to Article 12: Leases, Rentals and Royalty Payments addresses transportation deductions. The revision further protects the state's interest and, in combination with the lease amendments discussed below, conforms the Agreement and current lease forms. ENI has accepted this revision and a copy of the executed Nikaitchuq Unit Agreement, State Only Model Form, Revised August, 2007, is attached to this Decision as Attachment 4.

Including the leases in the Expanded Nikaitchuq Unit Agreement would conform and modify the lease contracts to be consistent with the Agreement. Consistent lease provisions allow the WIOs and the state to reduce the administrative burdens of operating and regulating this unit. Conforming the terms of the older leases to the Agreement allows the state to avoid costly and time-consuming re-litigation of some problematic lease provisions in the older forms. Any additional administrative burdens associated with the expansion of the Unit are far outweighed by the additional royalty and tax benefits derived from any production that may occur if the exploration and development activity is successful.

Effective the date of this Decision, the WIOs agree to permanently amend the terms of ADLs 390615, 390616, and 391283 to conform with the provisions of the leases currently committed to the Tuvaaq and Nikaitchuq Units. The amendments to the leases include:

• Delete the last sentence of paragraph 15(d) of the leases, which reads:

If any portion of this lease is included in a participating area formed under a unit agreement, the entire leased area will remain committed to the unit and this lease will not be severed.

• Replace paragraph 36(b) of the leases with the following:

If oil, gas, or associated substances are sold away from the leased or unit area, the term "field price" will be the cash value of all consideration received by the lessee or other producer from the purchaser of the oil, gas or associated substances, less the lessee's actual and reasonable costs of transportation away from the leased or unit area to the point of sale. The "actual and reasonable costs of transportation" for marine transportation are as defined in 11 AAC 83.229(a), (b)(2), and (c) – (l).

B. Decision Criteria Considered Under 11 AAC 83.303(a)

1. Promote the Conservation of All Natural Resources

DNR recognizes unitization of the leases overlying a reservoir as a prudent conservation mechanism. Without unitization, the piece-meal, lease-by-lease development of reservoirs can become a race for possession by competing lessees. This race can result in: (1) unnecessarily dense drilling, especially along property lines; (2) rapid dissipation of reservoir pressure; and (3) irregular advance of displaced fluids, all of which contribute to the loss of ultimate recovery or economic waste. The proliferation of surface activity, duplication of production, gathering, and processing facilities, and haste to get oil to the surface also increase the potential for environmental damage. Lessee compliance with conservation orders and field pool rules issued by the AOGCC would mitigate some of these impacts without an agreement to unitize operations. Still, unitization is the most efficient method for maximizing oil and gas recovery, while minimizing negative impacts on other resources. Expansion of the NU will provide the state with a comprehensive plan for exploring and developing the entire unit area. Expansion of the NU subject to the terms and conditions of this Decision will ensure that the WIOs prudently explore the acreage included in the unit.

2. The Prevention of Economic and Physical Waste

The Unit expansion will prevent economic and physical waste because the Unit Operator must have a cost-sharing agreement, a coordinated exploration plan, and when a commercial discovery is made, a comprehensive reservoir depletion model. A costsharing agreement promotes efficient development of common surface facilities and operating strategies. With a cost-sharing agreement and reservoir model in place, the WIO can rationally decide well spacing requirements, injection plans, and the proper joint-use of surface facilities. Unitization prevents economic and physical waste by eliminating redundant expenditures for a given level of production, and by avoiding loss of ultimate recovery with the adoption of a unified reservoir management plan. In the case of the proposed Nikaitchuq Unit expansion, there is currently only one WIO. However, future WIOs will benefit from a cost-sharing agreement.

Unitized operations improve development of reservoirs beneath leases that may have variable or unknown productivity. Marginally economic reserves, which otherwise would not be produced on a lease-by-lease basis, can be produced through unitized operations in combination with more productive leases. Facility consolidation lowers capital costs and promotes optimal reservoir management. Pressure maintenance and secondary recovery procedures are easier to design and achieve through joint, unitized efforts than would otherwise be possible. In combination, these factors allow less profitable areas of a reservoir to be developed and produced in the interest of all parties, including the state.

The total cost of exploring and developing the Nikaitchuq Unit expansion leases would be higher on a lease-by-lease basis than it would be under unitization terms. Drilling and facilities investment costs will be minimized as a consequence of eliminating a need for numerous sites within the unit area. Locations of individual wells and surface facilities will be selected to optimize ultimate oil and gas recovery, while minimizing or completely avoiding adverse impacts to the environment. Reducing costs and environmental impacts through unitized operations will expedite development of any reserves discovered and will promote greater ultimate recovery of any oil and gas from the unit area. This will increase and extend the state's income stream from production taxes and royalties. The revenues to the lessees and Unit Operator may be reinvested in new exploration and development in the state. Unitization means reduced costs and increased benefits to all interested parties. It benefits the local and state economy, and provides revenues to the state's general, school, constitutional budget reserve, and permanent funds.

3. The Protection of All Parties of Interest, Including the State

Approval of the Application along with the agreed-to terms and conditions set out in this Decision and the 2nd POE, promotes the state's economic interests because exploration will likely occur earlier than without unit expansion. Unit expansion allows the acreage to be operated under a single Agreement. Diligent exploration under a single approved unit plan without the complications of competing operators is in the state's best interest. It advances evaluation of the state's petroleum resources, while minimizing impacts to the region's cultural and environmental resources. Development will stimulate the state's economy with production-based revenue, oil and gas related jobs, and service industry activity.

The Agreement provides for accurate reporting and record keeping, state approval of plans of exploration and development and operating procedures, royalty settlement, inkind taking, and emergency storage of oil and gas, all of which will further the state's interest. The Agreement will further ENI's interest by providing clear provisions for the operation of the Nikaitchuq Unit. The modifications to the varying provisions of the leases will economically benefit the state, and reduce the administrative burdens of operating and regulating this Unit.

V. FINDINGS AND DECISION

A. The Conservation of All Natural Resources

- 1. The Agreement will conserve all natural resources, including hydrocarbons, gravel, sand, water, wetlands, and valuable habitat.
- 2. The unitized development and operation of the leases in this proposed unit will reduce the amount of land and fish and wildlife habitat that would otherwise be disrupted by individual lease development. This reduction in

environmental impacts and preservation of subsistence access is in the public interest.

3. There is potential for environmental impacts associated with reservoir development. All unit development must proceed according to an approved plan of development. Additionally, before undertaking any specific operations, the Unit Operator must submit a unit Plan of Operations to the Division and other appropriate state and local agencies for review and approval. The lessees may not commence any drilling or development operations until all agencies have granted the required permits. DNR may condition its approval of a unit Plan of Operations and other permits on performance of mitigation measures in addition to those in the modified leases and the Agreement, if necessary or appropriate. Compliance with mitigation measures will minimize, reduce or completely avoid adverse environmental impacts.

B. The Prevention of Economic and Physical Waste

- 1. ENI submitted geological, geophysical and engineering data to the Division in support of the Application. Division technical staff determined that the expanded Nikaitchuq Unit area encompasses all or part of one or more potential hydrocarbon accumulations. The available geological, geophysical and engineering data justify including the proposed lands, described in Exhibit A to the Application, in the expanded Nikaitchuq Unit.
- 2. The 2nd POE subject to the terms and conditions discussed in Section IV.A.3., provides for the reasonable exploration and development of potential hydrocarbon accumulations in the unit area. The Agreement will prevent the waste of oil and gas, and increase the probability of recovering more hydrocarbons from the unit area. The Division must approve a plan of development before the Unit Operator produces any hydrocarbons in commercial quantities.

C. The Protection of All Parties in Interest, Including the State

- 1. ENI provided evidence of reasonable effort to obtain joinder of any proper party to the Agreement.
- 2. ENI holds sufficient interest in the unit area to give reasonably effective control of operations.
- 3. The unit expansion adequately and equitably protects the public interest, and is in the state's best interest.
- 4. The unit expansion meets the requirements of 11 AAC 83.303.

- 5. The Division complied with the public notice requirements of 11 AAC 83.311.
- 6. The unit expansion will not diminish access to public and navigable waters beyond those limitations (if any) imposed by law or already contained in the oil and gas leases covered by this Agreement.
- 7. The Agreement provides for additional expansions and contractions of the unit area in the future, as warranted by data obtained by exploration or otherwise. The Agreement thereby protects the public interest, the rights of the parties, and the correlative rights of adjacent landowners
- 8. The expanded Nikaitchuq Unit will expedite exploration and potential development of the unit area. With the expansion of the Nikaitchuq Unit, economic benefits to the state outweigh the economic costs of extending the primary term of the state leases committed to the unit.
- 9. Effective October 5, 2007, the Tuvaaq Unit covering ADLs 388571, 388572, 388573, 388574, 388575, 388577, and 388578 will be dissolved and the leases formerly included within the Tuvaaq Unit will be simultaneously committed to the Nikaitchuq Unit.
- 10. Effective October 5, 2007, that portion of ADL 355024 designated as Segment 2 will be segregated from the remaining portion of ADL 355024; will be contracted from the Kuparuk River Unit with the concurrence of the Kuparuk River Unit Operator and working interest owners; simultaneously committed to the Nikaitchuq Unit; and receive the new ADL 391283.
- 11. ENI has submitted a 2nd POE in conjunction with the Application. The 2nd POE replaces and supersedes the Initial POEs submitted for the Tuvaaq and Nikaitchuq Units. This 2nd POE is approved for the expanded Nikaitchuq Unit effective October 5, 2007, and it remains in effect for a period of five years, expiring October 4, 2012. An annual report will be due on or before October 5 of each plan year. The 2nd POE, subject to the terms and conditions discussed in Section IV.A.3, meets the requirements of 11 AAC 83.303 and 11 AAC 83.341.
- 12. On October 5, 2009, any portion of ADL 391283 not committed to a participating area will be segregated as to the portion committed to the participating area and the portion not committed to the participating area. The portion not committed to the participating area will automatically contract from the Unit unless included in an approved POE or POD. The Second POE will be amended to reflect acreage committed to a POD.
- 13. On October 5, 2011, any portion of the following leases, ADLs 388571, 388574, 388575, 388577, 388578, 388581, 388582, 388583, not committed to a participating area will be segregated as to the portion committed to the

1st Expansion of the Nikaitchuq Unit Area, Termination of the Tuvaaq Unit, and the 19 Contraction of the Kuparuk River Unit Area participating area and the portion not committed to the participating area. The portion not committed to the participating area will automatically contract from the Unit unless included in an approved POE or POD. The Second POE will be amended to reflect acreage committed to a POD.

- 14. On October 5, 2012, any portion of, ADLs 388572, and 388573 not committed to a participating area will be segregated as to the portion committed to the participating area and the portion not committed to the participating area. The portion not committed to the participating area will automatically contract from the Unit unless included in an approved POE or POD which must include a firm commitment to drill at least one well on either lease, or both leases will automatically contract from the unit. The Second POE will be amended to reflect acreage committed to a POD.
- 15. On October 5, 2012, any portion of the following leases, ADLs 388579, 388580, 389719, 389720, 390433, not committed to a participating area will be segregated as to the portion committed to the participating area and the portion not committed to the participating area. The portion not committed to the participating area will automatically contract from the Unit unless included in an approved POE or POD which includes a firm commitment to drill at least one well on one of these leases, or all the leases will automatically contract from the unit.
- 16. On October 5, 2012, any portion of ADLs 390615 and 390616, not committed to a participating area will be segregated as to the portion committed to the participating area and the portion not committed to the participating area. The portion not committed to the participating area will automatically contract from the Unit unless included in an approved POE or POD.
- 17. In the event of a Unit contraction or termination, tract and lease owners waive the ninety day extension provisions of 11 AAC 83.140 and 11 AAC 83.374.
- 18. If a portion of a Lease contracts out of the Unit Area, that portion will be severed and treated as a separate and distinct lease, which may be maintained thereafter only in accordance with the terms and conditions of the original lease. The WIOs waive the provisions of 11 AAC 83.351 which protect the Lease from severance when a portion of a Lease is contracted out of the Unit Area.
- 19. If the Nikaitchuq Unit terminates or portions thereof contract for failure to fulfill any of the commitments in the 2nd POE, the WIO shall automatically surrender all leases or portions thereof within the Unit not then covered by an approved POE or POD or committed to a participating area and whose primary terms have expired, effective the day the unit terminates or contracts.

For the reasons discussed in this Findings and Decision, I hereby approve the expansion subject to the conditions set out in this decision, effective October 5 2007.

A person affected by this decision may appeal it, in accordance with 11 AAC 02. Any appeal must be received within 20 calendar days after the date of "issuance" of this decision, as defined in 11 AAC 02.040(c) and (d) and may be mailed or delivered to Tom Irwin, Commissioner, Department of Natural Resources, 550 W. 7th Avenue, Suite 1400, Anchorage, Alaska 99501; faxed to 1-907-269-8918, or sent by electronic mail to dnr.appeals@alaska.gov. This decision takes effect immediately. An eligible person must first appeal this decision in accordance with 11 AAC 02 before appealing this decision to Superior Court. A copy of 11 AAC 02 may be obtained from any regional information office of the Department of Natural Resources.

Kevin R. Banks, Acting Director Division of Oil and Gas

10-5-07

Date

VI. ATTACHMENTS

1) Exhibit A, Expanded Nikaitchuq Unit Tracts/leases

2) Exhibit B, Map of the Expanded Nikaitchuq Unit Boundary

3) Exhibit G, Plan of Exploration and Development (2nd POE)

4) Nikaitchuq Unit Agreement, State Only Model Form, Revised August, 2007