

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

TABLE OF CONTENTS

I.	INTRODUCTION, BACKGROUND, AND DECISION SUMMARY	Page 3
II.	APPLICATION FOR THE EXPANSION OF THE NIKAITCHUQ UNIT	Page 3
III.	LEASE BACKGROUND	Page 4
IV.	DISCUSSION OF DECISION CRITERIA	Pages 5-19
	A. Decision Criteria Considered Under 11 AAC 83.303(b)	
	1. The Environmental Costs and Benefits of Unitized Exploration and Development	
	2. Geologic and Engineering Characteristics of the Proposed Expanded Nikaitchuq Unit	
	3. Plan of Exploration and Development for the Proposed Expanded Nikaitchuq Unit	
	4. The Economic Costs and Benefits to the State	
	5. Amendments to the State Only Model Unit Agreement Form and Other Relevant Factors	
	B. Decision Criteria Considered Under 11 AAC 83.303(a)	
	1. Promote the Conservation of All Natural Resources	
	2. The Prevention of Economic and Physical Waste	
	3. The Protection of All Parties of Interest, Including the State	
V.	FINDINGS AND DECISION	Pages 19-23
VI.	ATTACHMENTS	Page 23
	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	
	4. Nikaitchuq Unit Agreement, State Only Model Form, Revised August, 2007	

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 Tuvaq 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.

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 Tuvaq Unit, located due west of the existing Nikaitchuq Unit. The Tuvaq 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

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 Tuvaq 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

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 oil-bearing, 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 Tuvaq 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.

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 Tuvaq #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 Tuvaq. 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 Tuvaq Unit and lease segment from the KRU. Both the Nikaitchuq and Tuvaq 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 Tuvaq 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 Tuvaq 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

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 Tuvaq 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

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 Tuvaq 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 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. 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

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 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 Tuvaq 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 cost-sharing 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, in-kind 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 Tuvaq Unit covering ADLs 388571, 388572, 388573, 388574, 388575, 388577, and 388578 will be dissolved and the leases formerly included within the Tuvaq 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 Tuvaq 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

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

ATTACHMENT ONE

Exhibit A, Expanded Nikaitchuq Unit Tracts/leases

ATTACHMENT 2 TO UNIT EXPANSION APPLICATION
NIKAITCHUQ UNIT AGREEMENT: Exhibit A

Unit Area								
Revised March 20, 2007								
Nikaitchuq Unit Tract Number	Lessor / Royally Owner Lease Serial No.	Description of Utilized Lands	Utilized Acres	Royalty Rate	ORRI Owners	Overriding Royalty Interest	Working Interest Owners & Percentage Working Interest	Primary Expiration Date
1	390433	T. 15 N., R. 9 E., UMIAT MERIDIAN Section: 31 Protracted, All tide and submerged lands shoreward of the line fixed by coordinates found in Exhibit A of the Final Decree in U.S. v. Alaska, No. 84 Original Section: 32 Protracted, All tide and submerged lands shoreward of the line fixed by coordinates found in Exhibit A of the Final Decree in U.S. v. Alaska, No. 84 Original	431.6100	0.16667	William D. Armstrong	2.800%	Ent: 100%	30-Apr-2011
			<u>489.3600</u>		Jesse V. Sommer	0.083%		
			920.9700		Edgar Kerr	0.083%		
					Jeffery A. Lyslo	0.083%		
					Patricia M. Reed	0.083%		
					Matthew X. Furlin	0.083%		
					Stuart W. Gustafson	0.083%		
					Richard C. Geesaman	0.083%		
					total	3.333%		
2	389720	T. 15 N., R. 9 E., UMIAT MERIDIAN Section: 33 Protracted, All tide and submerged lands shoreward of the line fixed by coordinates found in Exhibit A of the Final Decree in U.S. v. Alaska, No. 84 Original Section: 34 Protracted, All tide and submerged lands shoreward of the line fixed by coordinates found in Exhibit A of the Final Decree in U.S. v. Alaska, No. 84 Original	448.3900	0.16667	J. Andrew Bachner	1.800%	Ent: 100%	31-May-2008
			<u>515.0300</u>		Keith C. Forsgren	0.200%		
			991.0200		William D. Armstrong	1.120%		
					Jesse V. Sommer	0.083%		
					Edgar Kerr	0.083%		
					Jeffery A. Lyslo	0.083%		
					Patricia M. Reed	0.083%		
					Matthew X. Furlin	0.083%		
					Stuart W. Gustafson	0.083%		
					Richard C. Geesaman	0.083%		
					total	3.333%		
3	389719	T. 15 N., R. 9 E., UMIAT MERIDIAN Section: 25 Protracted, All tide and submerged lands shoreward of the line fixed by coordinates found in Exhibit A of the Final Decree in U.S. v. Alaska, No. 84 Original Section: 26 Protracted, All tide and submerged lands shoreward of the line fixed by coordinates found in Exhibit A of the Final Decree in U.S. v. Alaska, No. 84 Original Section: 25 Protracted, All Section: 26 Protracted, All	166.1000	0.16667	J. Andrew Bachner	1.800%	Ent: 100%	31-May-2008
			<u>99.0000</u>		Keith C. Forsgren	0.200%		
			640.0000		William D. Armstrong	1.120%		
			<u>640.0000</u>		Jesse V. Sommer	0.083%		
			1539.0000		Edgar Kerr	0.083%		
					Jeffery A. Lyslo	0.083%		
					Patricia M. Reed	0.083%		
					Matthew X. Furlin	0.083%		
					Stuart W. Gustafson	0.083%		
					Richard C. Geesaman	0.083%		
					total	3.333%		

4	388581 T14N., R.9 E., UMIAT MERIDIAN Sec: 5 Protected, All tide and submerged lands Sec: 6 Protected, All tide and submerged lands Sec: 7 Protected, All tide and submerged lands Sec: 8 Protected, All tide and submerged lands	640.0000 609.0000 011.0000 <u>840.0000</u> 2500.0000	0.16667	William D. Armstrong Jesse V. Sommer Edgar Kerr Jeffery A. Lyslo Patricia M. Reed Matthew X. Furrin Stuart W. Gustafson Richard C. Geesaman total	3.333% 2.800% 0.083% 0.083% 0.083% 0.083% 0.083% 0.083% 0.083% 3.333%	Ent: 100%	31-Dec-2004
5	388580 T14N., R.9 E., UMIAT MERIDIAN Sec: 3 Protected, All tide and submerged lands Sec: 4 Protected, All tide and submerged lands Sec: 9 Protected, All tide and submerged lands Sec: 10 Protected, All tide and submerged lands	640.0000 640.0000 640.0000 <u>640.0000</u> 2560.0000	0.16667	William D. Armstrong Jesse V. Sommer Edgar Kerr Jeffery A. Lyslo Patricia M. Reed Matthew X. Furrin Stuart W. Gustafson Richard C. Geesaman total	3.333% 2.800% 0.083% 0.083% 0.083% 0.083% 0.083% 0.083% 0.083% 3.333%	Ent: 100%	31-Dec-2004
6	388579 T14N., R.9 E., UMIAT MERIDIAN Sec: 1 Protected, All tide and submerged lands Sec: 2 Protected, All tide and submerged lands	640.0000 <u>640.0000</u> 1280.0000	0.16667	William D. Armstrong Jesse V. Sommer Edgar Kerr Jeffery A. Lyslo Patricia M. Reed Matthew X. Furrin Stuart W. Gustafson Richard C. Geesaman total	3.333% 2.800% 0.083% 0.083% 0.083% 0.083% 0.083% 0.083% 0.083% 3.333%	Ent: 100%	31-Dec-2004
7	388583 T14N., R.9 E., UMIAT MERIDIAN Sec: 17 Unsurveyed, All tide and submerged lands Sec: 18 Unsurveyed, All tide and submerged lands Sec: 20 Protected, All tide and submerged lands T14N., R.9 E., UMIAT MERIDIAN TRACT A Sec: 17 Unsurveyed, All Uplands Sec: 18 Unsurveyed, All Uplands	597.7600 504.5200 640.0000 42.2400 <u>29.4600</u> 1894.0000	0.16667	William D. Armstrong Jesse V. Sommer Edgar Kerr Jeffery A. Lyslo Patricia M. Reed Matthew X. Furrin Stuart W. Gustafson Richard C. Geesaman total	3.333% 2.800% 0.083% 0.083% 0.083% 0.083% 0.083% 0.083% 0.083% 3.333%	Ent: 100%	31-Dec-2004
8	388582 T14N., R.9 E., UMIAT MERIDIAN Sec: 16 Unsurveyed, All tide and submerged lands Sec: 21 Unsurveyed, All tide and submerged lands T14N., R.9 E., UMIAT MERIDIAN TRACT A Sec: 16 Unsurveyed, All Uplands Sec: 21 Unsurveyed, All Uplands	618.3700 633.6800 21.6300 <u>6.9200</u> 1280.0000	0.16667	William D. Armstrong Jesse V. Sommer Edgar Kerr Jeffery A. Lyslo Patricia M. Reed Matthew X. Furrin Stuart W. Gustafson Richard C. Geesaman total	3.333% 2.800% 0.083% 0.083% 0.083% 0.083% 0.083% 0.083% 0.083% 3.333%	Ent: 100%	31-Dec-2004
9	390615 T14N., R.9 E., UMIAT MERIDIAN Sec: 28 Protected, All Sec: 33 Protected, All	640.0000 <u>640.0000</u>	0.16667	GMT Exploration Wm D Armstrong	0.13333 0.72797	Ent: 100%	30-Jun-2012

		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	0.00999		
10	390616	T14N., R.0 E., UMIAT MERIDIAN					
		Sec: 29 Protracted, All	040.0000	0.16667	GMT Exploration	0.13333	
		Sec: 32 Protracted, All	040.0000		Wm D Armstrong	0.72797	Enr: 100%
			1280.0000		Jesse V Sommer	0.02167	30-Jun-2012
					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	0.00999	
11	388571	T14N., R.0 E., UMIAT MERIDIAN					
		Sec: 1 Protracted, All tide and submerged lands	040.0000	0.16667	ConocoPhillips	4.250%	Enr: 100%
		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, 1996					31-Dec-2004
		Sec: 11 Protracted, All tide and submerged lands	539.6300				
		Sec: 12 Protracted, All tide and submerged lands	040.0000				
		T15N., R.0 E., UMIAT MERIDIAN	040.0000		total	4.250%	
		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					
		Sec: 38 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				
			202.7300				
			2766.3600				
12	388572	T14N., R.0 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%	Enr: 100%
		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					31-Dec-2004
		Sec: 9 Protracted, All tide and submerged lands	510.4100				
		Sec: 10 Protracted, All tide and submerged lands	040.0000				
		T15N., R.0 E., UMIAT MERIDIAN	040.0000		total	4.250%	
		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, 1996					
			0.9200				
			1966.2400				
13	388573	T14N., R.0 E., UMIAT MERIDIAN					
		Sec: 5 Protracted, All tide and submerged lands	040.0000	0.16670	ConocoPhillips	4.250%	Enr: 100%
		Sec: 6 Protracted, All tide and submerged lands	009.0000				31-Dec-2004
		Sec: 7 Protracted, All tide and submerged lands	011.0000				
		Sec: 8 Protracted, All tide and submerged lands	040.0000		total	4.250%	

T15N., R.0 E., UMIAT MERIDIAN

Sec: 31 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

177.2000

Sec: 32 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

109.3900

2786.5900

14	388574	T14N., R.0 E., UMIAT MERIDIAN Sec: 13 Protracted, All tide and submerged lands Sec: 14 Protracted, All tide and submerged lands Sec: 23 Protracted, All tide and submerged lands	640.0000 640.0000 <u>640.0000</u> 1920.0000	0.16667	ConocoPhillips	4.250%	Enr: 100%	31-Dec-2004
					total	4.250%		
15	388575	T14N., R.0 E., UMIAT MERIDIAN Sec: 15 Protracted, All tide and submerged lands Sec: 16 Protracted, All tide and submerged lands Sec: 21 Protracted, All tide and submerged lands Sec: 22 Protracted, All tide and submerged lands	640.0000 640.0000 640.0000 <u>640.0000</u> 2560.0000	0.16667	ConocoPhillips	4.250%	Enr: 100%	31-Dec-2004
					total	4.250%		
16	388577	T14N., R.0 E., UMIAT MERIDIAN Sec: 26 Protracted, All tide and submerged lands Sec: 35 Protracted, All tide and submerged lands	640.0000 <u>640.0000</u> 1280.0000	0.16667	ConocoPhillips	4.250%	Enr: 100%	31-Dec-2004
					total	4.250%		
17	388578	T14N., R.0 E., UMIAT MERIDIAN Sec: 27 Protracted, All tide and submerged lands Sec: 34 Protracted, All tide and submerged lands	640.0000 <u>640.0000</u> 1280.0000	0.16667	ConocoPhillips	4.250%	Enr: 100%	31-Dec-2004
					total	4.250%		
18	355024	T14N., R.0 E., UMIAT MERIDIAN Segment 2 Sec: 24 Protracted, All Sec: 25 Protracted, All Sec: 36 Protracted, All T14N., R.0 E., UMIAT MERIDIAN Segment 2 Sec: 19 Protracted, All Sec: 30 Protracted, All Sec: 31 Protracted, All	640.0000 640.0000 640.0000 617.0000 620.0000 <u>623.0000</u> 3780.0000	0.12500	ConocoPhillips BP Exxon Unocal	3.324% 2.357% 0.200% 0.297%	Enr: 100%	31-May-1993
					total	0.178112%		

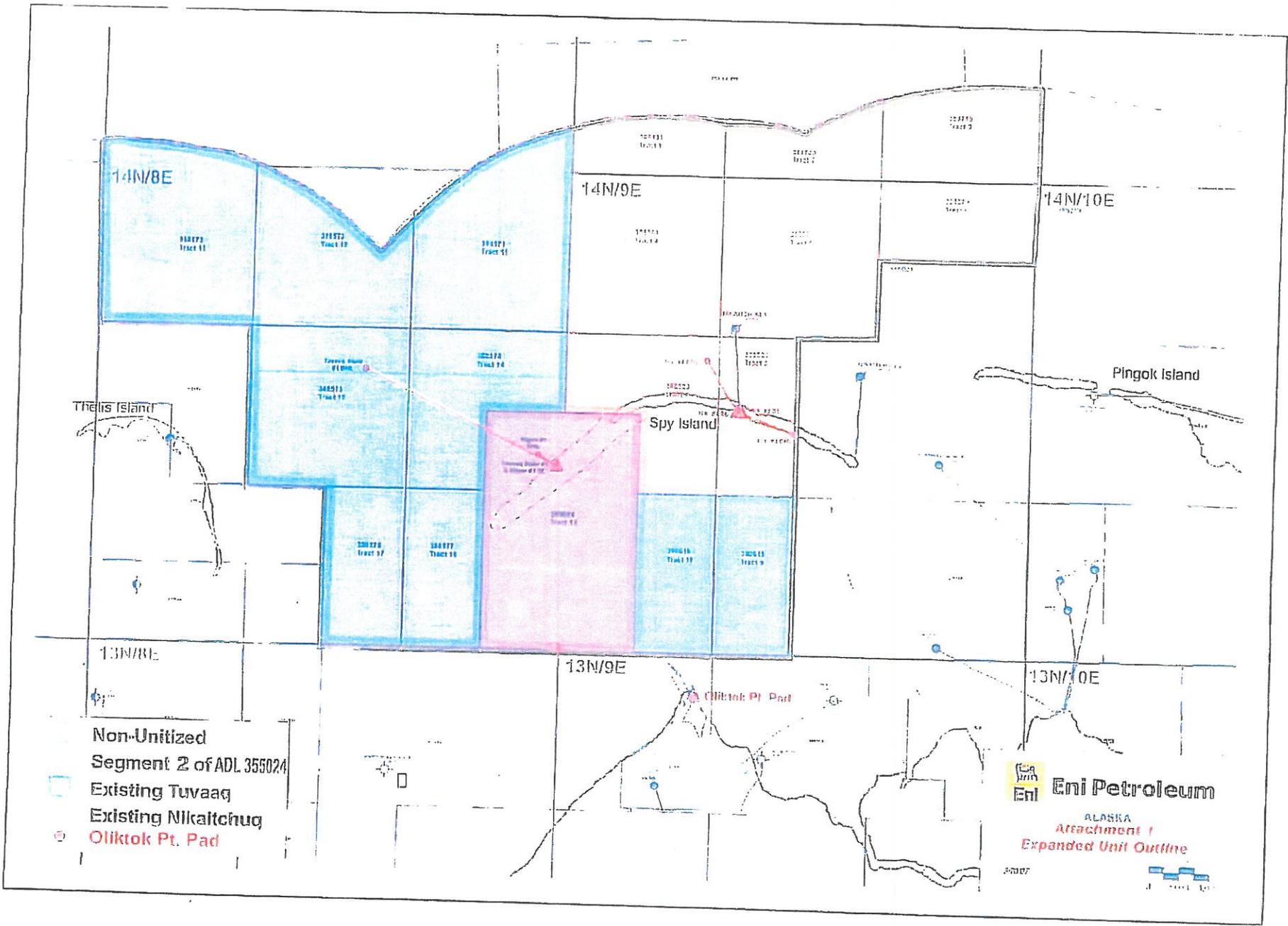
Total Utilized Land: 33869.1800

Total State Land: 33869.1800

Total BLM Land: 0.0000

Total Utilized Land: 33,869.18

ATTACHMENT TWO
Map of the Expanded Nikaitchuq Unit Boundary



- - - - - Non-Unitized Segment 2 of ADL 355024
- Existing Tuvaag
- Existing Nikaitchug
- Oliktok Pt. Pad

Eni Petroleum
 ALASKA
 Attachment 1
 Expanded Unit Outline

ATTACHMENT THREE

Plan of Exploration and Development (2nd POE)

1. ENI has submitted a 2nd POE in conjunction with the Application, attached below. The 2nd POE replaces and supersedes the Initial POEs submitted for the Tuvaq 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 and set forth below as part of approved 2nd POE, meets the requirements of 11 AAC 83.303 and 11 AAC 83.341.
2. 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.
3. 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 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.
4. 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.
5. 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.

6. 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.

Attachment 4 to the application to expand the Nikaitchuq Unit
Replacement Exhibit G to the Nikaitchuq Unit Agreement

Exhibit "G"

Attached to and made a part of that certain NIKAITCHUQ UNIT AGREEMENT
dated effective January 1, 2004
As revised herein

PLAN OF EXPLORATION

Outlined below is the revised Plan of Exploration for the expanded Nikaitchuq Unit ("Unit"). The Unit will encompass approximately 33,869 acres of State land within the shallow waters of Harrison Bay, Alaska, north of both the Kuparuk River Unit and the Milne Point Unit. The Plan of Exploration is a 5 year forecast of planned unit exploration activities. The primary prospective intervals to be evaluated by this exploration program are the Schrader Bluff and the Sag River.

The Initial Plan of Exploration for the Nikaitchuq Unit contained a history of prior exploration in the area and provided for the drilling of three wells by the 2008 winter drilling season. The expanded Nikaitchuq Unit includes land that formerly constituted the Tuvaq Unit. The Tuvaq Plan of Exploration provided for an initial well and an additional well to be drilled in 2007. Thus, there were a total of five wells expected to be drilled in the area.

Subsequent to the formation of the Nikaitchuq Unit and the Tuvaq Unit and prior to the recently completed two-well program, five wells were drilled on lands included in the expanded Unit and one additional well was drilled on an adjacent lease (ADL 355021) for a total of six wells drilled in the area during the 2004 and 2005 winter drilling seasons. A description of the drilling history for the six wells is as follows.

The first well drilled in 2004 was the Nikaitchuq #1. This well proved potential in both the Sag River and Schrader Bluff Formations. The Schrader Bluff OA sand was penetrated at 4,124' TVDSS with a gross interval of 45'. No tests were conducted on the Schrader Bluff. The Sag River B sand was penetrated at 8,679' TVDSS with a gross thickness of 32'. A six to seven day production test was conducted on the Sag River Formation.

The second well drilled in the 2004 program was the Nikaitchuq #2; it was drilled adjacent to the lands in the expanded Nikaitchuq Unit. The Sag River B sand was penetrated at 8,888' TVDSS with a gross thickness of 31'. This well was not tested, but a full core in the Sag River sand was obtained. The Schrader Bluff OA sand was also penetrated in the wellbore at 4,154' TVDSS and has an estimated 18' of net pay.

The following are the results of the wells drilled in the 2005 drilling program:

Nikaitchuq #3 was the third Sag River Formation well drilled. This well was drilled as a +/- 3,000' horizontal well to aid in the determination of the reservoir extent in an adjacent fault block south of the Nikaitchuq #1 and #2 wells. An additional flow test in the Sag B reservoir was also performed. The Sag B was penetrated at 8,781' TVDSS with an estimated 1,834' horizontal net pay. A production test was conducted on this horizontal well.

The Nikaitchuq #4 was a +/- 3,000' horizontal well drilled to test the Schrader Bluff OA sand. The Schrader Bluff OA was penetrated at 4,097' TVDSS and the horizontal section had an

estimated 2,180' of horizontal net pay. A test was conducted on this well for twelve to thirteen days. A full core was also recovered over the Schrader Bluff interval.

The Tuvaq exploration well was also drilled to test the continuity of the Schrader Bluff reservoirs along with examining the potential of deeper horizons. The Schrader Bluff OA was penetrated at 3,598' TVDSS with net pay thickness of 28'. In this wellbore an additional Schrader Bluff N zone was encountered at 3,456' TVDSS with 12' net pay thickness.

The Kigun exploration well was drilled to further investigate the Schrader Bluff intervals. The Schrader Bluff OA was penetrated at 3,643' TVDSS with a net pay thickness of 30'. The Schrader Bluff N zone was again encountered in this well at 3,504' TVDSS with a net pay thickness of 28'. Full core was obtained over the Schrader Bluff OA in this well. Fluid sampling was attempted using Schlumberger's MDT tool.

RECENTLY COMPLETED DRILLING ACTIVITY AND CURRENT PLANS

Following initial discussions with the DNR staff regarding unit expansion, two additional wells were drilled during the 2006/2007 winter drilling season. These wells were both drilled through the Schrader Bluff section with the target being the OA sand.

The first well the Oliktok Point I-1 was a pilot hole drilled from Oliktok Point to a bottom hole location of 1,050' FSL & 750' FEL of Section 33, T14N, R9E UM. This well was spud on November 29, 2006 and drilled to a total depth of 8,990' MD and 3,912' TVD. This well has been temporarily abandoned and is being evaluated for re-entry to drill an extended horizontal section and incorporate as an injection well in Eni's initial Plan of Development that will hopefully be submitted to Eni US's management for project sanction prior to the end of the 2007 calendar year.

The second well drilled was the Oliktok Point I-2, a pilot hole and horizontal segment drilled from Oliktok Point to a bottom hole location of 750' FSL & 500' FEL of Section 31, T14N, R9E UM. This well was spud on January 4, 2007 and the pilot hole reached total depth of 6,715' MD and 3,699' TVD, with the horizontal segment reaching TD at 12,711' MD and 9,055' TVD. A production test was subsequently conducted on this well. This well has been temporarily abandoned and is being evaluated for incorporation as an injection well in Eni's initial Plan of Development.

Eni US is conducting an "On-Ice Seismic Experiment" on State of Alaska offshore oil and gas leases in the vicinity of the Nikaitchuq Unit with Shell Offshore at a cost of several million dollars. The results of this experiment that commenced in April 2007 may result in substantial benefit to the Nikaitchuq Unit and other State of Alaska offshore leases in shallow waters by allowing parties to acquire seismic data on such leases during the winter season in a manner that should have greater stakeholder acceptance.

Further evaluation of the entire unit area will follow in reasonable steps. The time frame and activities will be determined by results. As mentioned above, it is anticipated that a Plan of Development will be created and presented to Eni's management for project sanction prior to the end of the 2007 calendar year. Soon after project sanction Eni will approach the State for approval of the Plan of Development and one or more Participating Areas will be established. The results of the drilling of the initial unit wells will provide information necessary to evaluate

potential development of other areas of the Unit.

The following schedule will be followed:

- Using the results of the "On-Ice Seismic Experiment", develop a plan by July 2008, regarding potential 3-D seismic acquisition covering parts of the expanded Nikaitchuq Unit.
- Acquire approximately 74 square miles of 3D seismic by September 2010.
- Improvements in drilling technology over the next few years will be closely monitored to determine if additional areas can be reached for development from then existing facilities.
- Evaluate the newly acquired seismic together with prior seismic and drilling information to develop future exploration plans by October 2011.

ATTACHMENT FOUR

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

State Only Unit Agreement
Revised June 2002
Revised August 2007

RECEIVED

AUG 28 2007

**DIVISION OF
OIL AND GAS**

NIKAITCHUQ UNIT AGREEMENT

Table of Contents

RECITALS..... 1
AGREEMENT 2
ARTICLE 1: DEFINITIONS 2
ARTICLE 2: EXHIBITS 4
ARTICLE 3: CREATION AND EFFECT OF UNIT 5
ARTICLE 4: DESIGNATION OF UNIT OPERATOR 6
ARTICLE 5: RESIGNATION OR REMOVAL OF UNIT OPERATOR 6
ARTICLE 6: SUCCESSOR UNIT OPERATOR 7
ARTICLE 7: UNIT OPERATING AGREEMENT 7
ARTICLE 8: PLANS OF EXPLORATION, DEVELOPMENT AND OPERATIONS 8
ARTICLE 9: PARTICIPATING AREAS 9
ARTICLE 10: OFFSET WELLS 11
ARTICLE 11: ALLOCATION OF PRODUCTION 12
ARTICLE 12: LEASES, RENTALS AND ROYALTY PAYMENTS 13
ARTICLE 13: UNIT EXPANSION AND CONTRACTION 15
ARTICLE 14: UNIT EFFECTIVE DATE, TERM AND TERMINATION 16
ARTICLE 15: EFFECT OF CONTRACTION AND TERMINATION 17
ARTICLE 16: COUNTERPARTS 17
ARTICLE 17: LAWS AND REGULATIONS 17
ARTICLE 18: APPEARANCES AND NOTICES 18
ARTICLE 19: JOINDER 19
ARTICLE 20: DEFAULT 19

RECITALS

All record owners of any right, title, or interest in the oil or gas reservoirs or potential hydrocarbon accumulations to be included in this Unit have been invited to join this Agreement.

The Commissioner of the Department of Natural Resources, State of Alaska, is authorized by Alaska Statute 38.05.180(p) and (q) and applicable regulations to consent to and approve oil and gas unit agreements to explore, develop and produce state oil and gas resources.

AGREEMENT

In consideration of the mutual promises in this Agreement, the parties commit their respective interests in the Unit Area defined in Exhibit A and depicted in Exhibit B to this Agreement, and agree as follows:

ARTICLE 1: DEFINITIONS

- 1.1 **Alaska Oil and Gas Conservation Commission (AOGCC)** means the independent quasi-judicial agency of the State of Alaska established by the Alaska Oil and Gas Conservation Act, AS 31.05.
- 1.2 **Approved Unit Plan** means a Unit Plan that has been approved by the Commissioner.
- 1.3 **Commissioner** means the Commissioner of the Department of Natural Resources, State of Alaska, or the Commissioner's authorized representative.
- 1.4 **Effective Date** means the time and date this Agreement becomes effective.
- 1.5 **Lease or Leases** means one or more oil and gas lease subject to this Agreement.
- 1.6 **Oil and Gas Rights** means the rights to explore, develop, and produce Unitized Substances.
- 1.7 **Outside Substances** means oil, gas, and other hydrocarbons and non-hydrocarbon substances obtained from outside the Unit Area and injected into a Reservoir in the Unit Area with the approval of the Commissioner.
- 1.8 **Outside PA Substances** means oil, gas, and other hydrocarbons and non-hydrocarbon substances obtained from one Participating Area in the Unit Area and injected into a Reservoir in a different Participating Area in the Unit Area with the Commissioner's approval.
- 1.9 **Participating Area** means all Unit Tracts and parts of Unit Tracts designated as a Participating Area under Article 9 to allocate Unitized Substances produced from a Reservoir.
- 1.10 **Participating Area Expense** means all costs, expenses or indebtedness, which are incurred by the Unit Operator for production from or operations in a Participating Area and allocated to the Unit Tracts in that Participating Area.

1.11 **Paying Quantities** means a quantity of Unitized Substances sufficient to yield a return in excess of operating costs, even if drilling and equipment costs will never be repaid and the undertaking considered as a whole will ultimately result in a loss. The quantity is insufficient to yield a return in excess of operating costs unless it will produce sufficient revenue, not considering transportation and marketing, to induce a prudent operator to produce it.

1.12 **Reservoir** means that part of the Unit Area containing an accumulation of Unitized Substances which has been discovered by drilling and evaluated by testing a well or wells, and which is geologically separate from and not in hydrocarbon communication with any other oil and gas accumulation.

1.13 **Royalty Interest** means an ownership right to or interest in the amount or value of Unitized Substances other than a Working Interest.

1.14 **State** means the State of Alaska acting in this Agreement through the Commissioner.

1.15 **Sustained Unit Production** means continuing production of Unitized Substances from a well in the Unit Area into production facilities and transportation to market, but does not include testing, evaluation or pilot production.

1.16 **Unit Area** means the lands subject to this Agreement, described in Exhibit A and depicted in Exhibit B to this Agreement, submerged or not.

1.17 **Unit Equipment** means all personal property, Lease and well equipment, plants, platforms and other facilities and equipment used, taken over or otherwise acquired for use in Unit Operations.

1.18 **Unit Expense** means all costs, expenses or indebtedness incurred by the Unit Operator for Unit Operations, except for Participating Area Expense.

1.19 **Unit Operating Agreement** means the agreement(s) entered into by the Unit Operator and the Working Interest Owners, as described in Article 7.

1.20 **Unit Operations** means all operations conducted in accordance with an Approved Unit Plan or Approved Unit Plans.

1.21 **Unit Operator** means the party designated by the Working Interest Owners and approved by the Commissioner to conduct Unit Operations.

1.22 **Unit Plan** means a unit plan of exploration or development as described in Article 8.

1.23 **Unit Tract** means each separate parcel that is described in Exhibit A and given a Unit Tract number.

1.24 **Unit Tract Participation** means the percentage allocation credited to a Unit Tract in a Participating Area to allocate Unitized Substances.

1.25 **Unitized Substances** means all oil, gas and associated substances, as those terms are defined in the Leases, produced from the Leases within the Unit Area.

1.26 **Working Interest** means the interest held in lands by virtue of a lease, operating agreement, fee title or otherwise, under which the owner of the interest is vested with the right to explore for, develop and produce minerals; the right delegated to a unit operator by a unit agreement is not a working interest.

1.27 **Working Interest Owner** means a party who owns a Working Interest.

ARTICLE 2: EXHIBITS

2.1 The following Exhibits are to be attached to and made a part of this Agreement. When this Agreement is approved, only Exhibits A, B, and G are required. Exhibit F is also required when this Agreement is approved, if the Unit Area includes Net Profit Share Leases. The Unit Operator shall supply all Exhibits.

2.2 Exhibit A is a table that identifies and describes each Unit Tract, and displays: the Unit Tract number, the Lease number, the Working Interest ownership, the Royalty Interest ownership, and the applicable royalty and net profit share rates applicable to each Unit Tract. Within thirty days after approval by the Commissioner of any expansion or contraction of the Unit Area under Article 13 or any change of the Working Interest or Royalty Interest in any Unit Tract, the Unit Operator shall submit a revised Exhibit A to the Commissioner.

2.3 Exhibit B is a map that shows the boundary lines of the Unit Area and of each Unit Tract, identified by Unit Tract number and Lease number. Within thirty days after the Commissioner approves any expansion or contraction of the Unit Area under Article 13 or any change of the Working Interest or Royalty Interest in any Unit Tract, the Unit Operator shall submit a revised Exhibit B to the Commissioner.

2.4 Exhibit C is comprised of a table for each Participating Area established under this Agreement. The Exhibit C table for each Participating Area must display the Unit Tract numbers, legal descriptions, Lease numbers, Working Interest ownership, Royalty Interest ownership, and Unit Tract Participation for that Participating Area. Exhibits must be prepared for each Participating Area established in the Unit Area. The Unit Operator shall submit an initial or revised Exhibit C to the Commissioner within thirty days of: 1) the effective date of any Participating Area, 2) any expansion or contraction of a Participating Area, 3) any division of interest or allocation formula establishing or revising the Unit Tract Participation of any Unit Tract or Unit Tracts in a Participating Area, or 4) any change of the Working Interest or Royalty Interest in any Unit Tract.

2.5 Exhibit D is comprised of a map for each Participating Area. Each Exhibit D map must show the boundary lines of the Unit Area, a Participating Area and the Unit Tracts in that Participating Area identified by Unit Tract number and Lease number. Within thirty days after approval by the Commissioner of a Participating Area or any expansion or contraction of a Participating Area under Article 9 or any change of the Working Interest or Royalty Interest in any Unit Tract in a Participating Area, the Unit Operator shall submit a revised Exhibit D to the Commissioner.

2.6 Exhibit E is comprised of a table for each Participating Area that displays the allocation of Participating Area Expense to each Unit Tract in the Participating Area, identified by Unit Tract number and Lease number. Exhibits must be prepared for each Participating Area established in the Unit Area. The Unit Operator shall submit an initial or revised Exhibit E to the Commissioner whenever an initial or revised Exhibit C is required.

2.7 Exhibit F is a table that displays the allocation of Unit Expense to each Unit Tract in the Unit Area, identified by Unit Tract number and Lease number. The Unit Operator shall submit an initial or revised Exhibit F to the Commissioner whenever an initial or revised Exhibit A is required if the Unit Area includes Net Profit Share Leases. The Unit Operator may submit a revised Exhibit F anytime, but any revisions to Exhibit F are not effective until approved by the Commissioner.

2.8 Exhibit G is the unit plan of exploration or unit plan of development required by the regulations, and Article 8 of this Agreement.

ARTICLE 3: CREATION AND EFFECT OF UNIT

3.1 All Oil and Gas Rights in and to the lands described in Exhibit A and shown in Exhibit B are subject to this Agreement so that Unit Operations will be conducted as if the Unit Area was a single Lease.

3.2 So long as this unit remains in effect, each Lease in the Unit Area shall continue in effect.

3.3 Except as otherwise provided in this Agreement, where only a portion of a lease is committed to this Agreement, that commitment constitutes a severance of the lease into unitized and nonunitized portions. The portion of the leased area not committed to this Agreement will be treated as a separate and distinct lease and may be maintained only in accordance with the terms and conditions of the lease, statutes, and regulations. Any portion of the leased area not committed to this Agreement will not be affected by the unitization, by operations in the Unit Area, or by a suspension approved or ordered by the Commissioner. If a lease has a well certified as capable of production in paying quantities on it before commitment to this Agreement, the lease will not be severed by unitization. If any portion of the Lease is included in a Participating Area formed under this Agreement, the entire Lease will remain committed to this Agreement and the Lease will not be severed.

3.4 Production of Unitized Substances in Paying Quantities from any part of a Participating Area shall be considered production from each Unit Tract in the Participating Area. It shall cause the portion of each Lease that is wholly or partially within the Participating Area to continue in effect as if a well were producing from each Unit Tract in the Participating Area.

3.5 The provisions of the various Leases and agreements pertaining to the respective Leases or production from those Leases are amended only to the extent necessary to make them conform to the written provisions of this Agreement. Otherwise, the provisions of those Leases and agreements shall remain in full force and effect.

3.6 This Agreement shall not be construed to transfer title to Oil and Gas Rights by any party to any other party or to the Unit Operator.

3.7 All data and information determined by the Commissioner to be necessary for the administration of this Agreement or for the performance of statutory responsibilities shall be provided by the Unit Operator, or Working Interest Owners, or both, upon written request. All data and information provided to the Commissioner shall be protected from disclosure under the Lease, governing law, and regulations.

ARTICLE 4: DESIGNATION OF UNIT OPERATOR

4.1. Eni US Operating Co. Inc. is designated as the Unit Operator. Eni US Operating Co. Inc agrees to accept the rights and obligations of the Unit Operator to conduct Unit Operations and to explore for, develop and produce Unitized Substances as provided in this Agreement.

4.2. Except as otherwise provided in this Agreement and subject to the terms and conditions of Approved Unit Plans, the exclusive rights and obligations of the Working Interest Owners to conduct operations to explore for, develop and produce Unitized Substances in the Unit Area are delegated to and shall be exercised by the Unit Operator. This delegation does not relieve a lessee of the obligation to comply with all Lease terms. The Unit Operator shall notify the other Working Interest Owners and the Commissioner of actions taken by the Unit Operator under this Agreement. The Unit Operator shall minimize and consolidate surface facilities to minimize surface impacts.

ARTICLE 5: RESIGNATION OR REMOVAL OF UNIT OPERATOR

5.1 The Unit Operator shall have the right to resign at any time. The Unit Operator's resignation shall not become effective until: 1) sixty days have passed since the Unit Operator delivers a written notice of an intention to resign to the Working Interest Owners and the Commissioner; and 2) all artificial islands, installations and other devices, including wells, used for operations in the Unit Area are in a condition satisfactory to the Commissioner for

suspension or abandonment of operations. However, if a successor Unit Operator is designated and approved under Article 6, the resignation is effective when approved by the Commissioner.

5.2 The Unit Operator may be removed as provided in the Unit Operating Agreement. This removal shall not be effective until: 1) the Working Interest Owners notify the Commissioner and the Unit Operator; and 2) the Commissioner approves a successor Unit Operator.

5.3 The resignation or removal of the Unit Operator shall not release it from liability for any failure to meet obligations that accrued before the effective date of the resignation or removal.

5.4 The resignation or removal of the Unit Operator does not terminate its rights, title or interest or obligations as a Working Interest Owner or other interest in the Unit Area. A termination of the Unit Operator's rights, title or interest may occur independently under the terms of the Leases and governing law. When the resignation or removal of the Unit Operator becomes effective, the Unit Operator shall relinquish possession of all Unit Equipment, artificial islands, wells, installations, devices, records, and any other assets used for conducting Unit Operations, whether or not located in the Unit Area, to the successor Unit Operator.

ARTICLE 6: SUCCESSOR UNIT OPERATOR

6.1. Whenever the Unit Operator tenders its resignation as Unit Operator or is removed as provided in Article 5, a successor Unit Operator may be designated as provided in the Unit Operating Agreement. The successor Unit Operator must accept the rights and obligations of a Unit Operator in writing. The successor Unit Operator shall file an executed copy of the designation of successor with the Commissioner. The designation of successor Unit Operator will not become effective until approved by the Commissioner.

6.2. If no successor Unit Operator is designated within sixty days after notice to the Commissioner of the resignation or removal of a Unit Operator, the Commissioner will, in his or her discretion, designate another Working Interest Owner as successor Unit Operator, or declare this Agreement terminated.

ARTICLE 7: UNIT OPERATING AGREEMENT

7.1 The Working Interest Owners and the Unit Operator shall enter into a Unit Operating Agreement. It will apportion all costs and liabilities incurred in maintaining or conducting Unit Operations among the Working Interest Owners. The Unit Operating Agreement will also apportion the benefits, which will accrue from Unit Operations among the Working Interest Owners.

7.2 Any allocation described in the Unit Operating Agreement will not bind the State in determining or settling royalties and net profit share payments. Allocations of Unit Expense, Participating Area Expense, or Unitized Substances for determining, settling and paying royalties and net profit share payments will be based on Exhibits C, E and F of this Agreement, and must be approved by the Commissioner in writing before taking effect. An original or revised conforming Exhibit C and F shall be submitted to the Commissioner within thirty days of any change in the division of interest or allocation formula establishing or revising the Unit Tract Participation of any Unit Tract or Unit Tracts in a Participating Area.

7.3 The Working Interest Owners and the Unit Operator may establish, through one or more Unit Operating Agreements and amendments, other rights and obligations between the Unit Operator and the Working Interest Owners. The Unit Operating Agreement will not modify any term or obligation of this Agreement. If the terms of this Agreement and the Unit Operating Agreement conflict, this Agreement will prevail.

7.4 Any Working Interest Owner is entitled to drill a well on the unitized portion of its Lease when the Unit Operator declines to drill that well. A Working Interest Owner must have an approved permit to drill and the well must be part of an Approved Unit Plan. If the Commissioner determines any such well to be capable of producing Unitized Substances in Paying Quantities, the land upon which that well is situated will be included in a Participating Area. The Participating Area will be formed or an existing Participating Area enlarged as provided in this Agreement. The Unit Operator will thereafter operate the well in accordance with this Agreement and the Unit Operating Agreement.

7.5 The Unit Operator shall file a copy of the Unit Operating Agreement with the Commissioner when this Agreement is filed for approval. The copy of the Unit Operating Agreement is for informational purposes only. Approval of the Unit Agreement is not approval of the Unit Operating Agreement. Complete copies of all other Unit Operating Agreements and any amendments to them will also be filed with the Commissioner within thirty days of execution and at least thirty days before their effective dates.

ARTICLE 8: PLANS OF EXPLORATION, DEVELOPMENT AND OPERATIONS

8.1. Any Unit Plan and any amendment to a Unit Plan will not be effective until the Commissioner approves it. Approved Unit Plans are incorporated into this Agreement and become effective on the date of their approval.

8.1.1. A unit plan of exploration ("Plan of Exploration") shall describe the proposed exploration and delineation activities for any land in the Unit Area that is not in a Participating Area. Plans of Exploration shall comply with 11 AAC 83.341 and any successor regulation. The Unit Operator shall submit updated Plans of Exploration to the Commissioner for approval at least sixty days before the current Plan of Exploration expires.

8.1.2. A unit plan of development ("Plan of Development") shall include a description of the proposed development activities based on data available when the plan is submitted. Plans of Development shall comply with 11 AAC 83.343 and any successor regulation. The Unit Operator shall submit updated Plans of Development to the Commissioner for approval at least ninety days before the current Plan of Development expires.

8.1.3. When this Agreement is submitted to the Commissioner for approval, the Unit Operator shall submit an initial Plan of Development or an initial Plan of Exploration (collectively called the "Initial Unit Plan") for approval by the Commissioner.

8.2. The Unit Operator shall not explore, develop or produce on the Unit Area except in accordance with an Approved Unit Plan. The Unit Operator shall obtain a plan of operations approval, and any other permits and approvals required before operations begin. A plan of operations approval must be consistent with the mitigation measures and lessee advisories developed for the most recent State areawide lease sale in the region that includes the unit as deemed necessary by the Commissioner to protect the resources of the State. The Unit Operator shall submit a complete copy of all such applications to the Commissioner. The Unit Operator shall give the Commissioner written notice before beginning testing, evaluation, or pilot production from a well in the Unit Area.

8.3. After Sustained Unit Production in Paying Quantities begins, Unit Operations shall be maintained, with lapses of no more than ninety days per lapse between operations. The lapse may be longer if suspension of operations or production has been ordered or approved by the Commissioner. Approved Unit Plans may call for a suspension of Unit Operations.

8.4. After giving written notice to the Unit Operator and an opportunity to be heard, the Commissioner may require the Unit Operator to modify from time to time the rate of prospecting and development and the quantity and rate of production.

8.5. If a well has been drilled in the Unit Area prior to the Effective Date of this Unit Agreement or is being drilled within the Unit Area on the Effective Date, that well will be considered a Unit Well as of the Effective Date of this Agreement.

8.6. The Commissioner will, in the agency's discretion, approve any injection of Outside Substances or Outside PA Substances within the Unit Area. Any injection of Outside Substances or Outside PA Substances within the Unit Area must be part of an Approved Unit Plan.

ARTICLE 9: PARTICIPATING AREAS

9.1. The Unit Operator shall submit a request for approval of the proposed initial Participating Area to the Commissioner at least six months before Sustained Unit Production from a Reservoir in the Unit Area. A Participating Area shall include only land that is

reasonably known to be underlain by Unitized Substances and known or reasonably estimated through the use of geological, geophysical and engineering data to be capable of producing or contributing to production of Unitized Substances in Paying Quantities. The Unit Operator must receive approval from the Commissioner of a Participating Area before commencement of Sustained Unit Production. The Unit Operator shall notify the Commissioner before the commencement of Sustained Unit Production from each Participating Area.

9.2. Each application for approval of a Participating Area shall include Exhibits C, D, E, and G. Exhibit F is also required if the Unit Area includes Net Profit Share Leases. If approved by the Commissioner, the area described in Exhibit C and depicted in Exhibit D shall be a Participating Area, and the allocation of Participating Area Expenses and Unit Expenses described in Exhibits E and F shall be effective on the effective date of the Participating Area.

9.3. A separate Participating Area shall be established for each Reservoir in the Unit Area. If one Reservoir underlies another Reservoir in whole or in part, separate Participating Areas may be created for each Reservoir. Any two or more Reservoirs or Participating Areas may be combined into one Participating Area if approved by the Commissioner.

9.4. At the Unit Operator's election or if so directed by the Commissioner, the Unit Operator shall apply to expand or contract the Participating Area if expansion or contraction is warranted by geological, geophysical, or engineering data. Each application for expansion or contraction shall include Exhibits C, D, E, and G. Exhibit F is also required if the Unit Area includes Net Profit Share Leases. The application must be submitted to the Commissioner for approval. Before any directed expansion or contraction of the Participating Area, the Commissioner will give the Unit Operator reasonable notice and an opportunity to be heard.

9.5. The Commissioner will establish the effective date of the initial Participating Area. That effective date shall be no later than the date of the first Sustained Unit Production. The Commissioner will establish the effective date of each later Participating Area.

9.6. Land in a Participating Area shall remain in that Participating Area even if its Unitized Substances are depleted.

9.7. If the Working Interest Owners cannot agree on the fair, reasonable and equitable allocation of production or costs, the Commissioner shall prescribe an allocation.

9.8. A Unitized Substance produced from one Participating Area ("Originating Participating Area") may be used as an Outside PA Substance ("Injected Substance") for repressuring, recycling, storage or enhanced recovery purposes in another Participating Area ("Receiving Participating Area") only if the State is paid royalty as if the Unitized Substance was saved, removed, or sold by the Working Interest Owners, except as follows:

9.8.1. If the Commissioner consents to the transfer of Unitized Substances between Participating Areas without immediate payment of royalties, the Unit Operator shall provide monthly reports to the State of the transferred Unitized Substance volumes in both the originating and receiving Participating Areas as specified in 11 AAC 04. These monthly reports shall reflect the volumes of any Unitized Substance transferred and the British thermal units ("Btus") in any natural

gas Unitized Substance transferred as an Outside PA Substance during the preceding month.

9.8.2. If the Commissioner consents to the transfer of Unitized Substances between Participating Areas without immediate payment of royalties, the royalties shall be paid when the Injected Substances are produced and sold from the Receiving Participating Area. The first natural gas Unitized Substances produced and sold from the Receiving Participating Area shall be considered to be the Injected Substances until a volume of natural gas containing Btus equal to the Btus contained in the Injected Substances is produced and sold from the Receiving Participating Area. All the Unitized Substances produced and sold from a Receiving Participating Area that are considered to be the Injected Substance shall be allocated to the Originating Participating Area. The Working Interest Owners shall pay the State royalties on Injected Substances produced and sold from a Receiving Participating Area as if those Injected Substances were produced and sold from the Originating Participating Area when they were produced from the Receiving Participating Area.

9.9. All liquid hydrocarbons removed in any equipment or facility in Alaska from produced Injected Substances and not used for fuel shall be allocated to the Receiving Participating Area. If liquid hydrocarbons are removed from the natural gas, the Btu content of the natural gas shall be measured after liquid hydrocarbons are removed.

9.10. The Commissioner must approve the deemed recovery rate and commencement date for recovery before any Outside Substance is injected within the Unit Area.

9.11. After giving written notice to the Unit Operator and an opportunity to be heard, the Commissioner will, in his or her discretion, require the Unit Operator to modify from time to time the rate of prospecting and development and the quantity and rate of production from a Participating Area.

9.12. Underground storage shall be covered by separate agreement with the Commissioner.

ARTICLE 10: OFFSET WELLS

10.1. The Unit Operator shall drill such wells as a reasonable and prudent operator would drill to protect the State from loss by reason of drainage resulting from production on other land. Without limiting the generality of the foregoing sentence, if oil or gas is produced in a well on other land not owned by the State or on which the State receives a lower rate of royalty than under any Lease in the Unit Area, and that well is within 500 feet in the case of an oil well or 1,500 feet in the case of a gas well of lands then subject to this Agreement, and that well produces oil or gas for a period of 30 consecutive days in quantities that would appear to a reasonable and prudent operator to be sufficient to recover ordinary costs of drilling, completing, and producing an additional well in the same geological structure at an offset location with a reasonable profit to the operator, and if, after notice to the Unit Operator and an opportunity to

be heard, the Commissioner finds that production from that well is draining lands then subject to this Agreement, the Unit Operator shall within 30 days after written demand by the Commissioner begin in good faith and diligently prosecute drilling operations for an offset well on the Unit Area. In lieu of drilling any well required by this paragraph, the Working Interest Owners must compensate the State in full each month for the estimated loss of royalty through drainage in the amount determined by the Commissioner.

ARTICLE 11: ALLOCATION OF PRODUCTION

11.1 Production and costs will be allocated according to 11 AAC 83.371 and any successor regulation. The Unit Operator shall submit a proposed allocation plan, with supporting data, to the Commissioner for approval. The Commissioner will, in his or her discretion, revise the proposed allocation plan if it does not equitably allocate production and costs from the Reservoir. The Commissioner will give the Unit Operator and Working Interest Owners reasonable notice and an opportunity to be heard before revising the Unit Operator's proposal. The allocation plan must be revised whenever a Participating Area is expanded or contracted. Within thirty days after approval by the Commissioner of any division of interest or allocation formula establishing or revising the Unit Tract Participation of any Unit Tract or Unit Tracts in a Participating Area, the Unit Operator shall submit revised Exhibits C and F to the Commissioner. The Unit Operator may submit a revised Exhibit F anytime, but any revisions to Exhibit F are not effective until approved by the Commissioner.

11.2 The Working Interest Owners shall pay royalties for each Unit Tract in proportion to each Working Interest Owner's ownership in that Unit Tract. The amount of Unitized Substances allocated to each Unit Tract shall be deemed to have been produced from that Unit Tract.

11.3 The Working Interest Owners may allocate Unitized Substances, Participating Area Expense, and Unit Expense differently than described in Exhibits C, E and F. However, that allocation shall not be effective for determining royalty or net profit share payments. The Unit Operator shall submit any allocation which is different than the allocations required in Exhibit C, E or F to the Commissioner under 11 AAC 83.371(b) for the State's information within ten days of its effective date with a statement explaining the reason for the different allocation.

11.4 Royalties shall not be due or payable to the State for the portion of Unitized Substances unavoidably lost or used in the Unit Area for development and production in accordance with prudent industry practices. Gas that is flared for any reason other than safety purposes as allowed by the AOGCC shall not be deemed to be unavoidably lost, and the Working Interest Owners shall pay royalties for such flared gas as if it had been produced. This exemption does not apply to Unitized Substances that are sold, traded or assigned, including sales, transactions, or assignments among the Working Interest Owners.

11.5 If a State Lease committed to this Agreement provides for a discovery royalty rate reduction for the first discovery of oil or gas, that Lease provision shall not apply to a well spudded after the Effective Date.

ARTICLE 12: LEASES, RENTALS AND ROYALTY PAYMENTS

12.1 The Working Interest Owners must pay rentals and royalty payments due under the Leases. Payments to the State shall be made in accordance with the applicable State regulations, 11 AAC 04 and 11 AAC 83.110.

12.2 Each month, the Unit Operator shall furnish a schedule to the Commissioner. That schedule shall specify, for the previous month: 1) the total amount of Unitized Substances produced; 2) the amount of Unitized Substances used for development and production or unavoidably lost; 3) the total amount of Unitized Substances allocated to each Unit Tract; 4) the amount of Unitized Substances allocated to each Unit Tract and delivered in kind as royalty to the State; and 5) the amount of Unitized Substances allocated to each Unit Tract for which royalty is to be or has been paid to the State.

12.3 Each Working Interest Owner shall pay its share of royalties to the State on Unitized Substances as provided in the Lease, except "leased area" shall mean Unit Area.

12.4 Notwithstanding any contrary Lease term, royalties and the share of Unitized Substances attributable to royalties and any payment due must be paid free and clear of all Lease expenses, Unit Expenses and Participating Area Expenses. These excluded expenses include, but are not limited to, separating, cleaning, dehydration, saltwater removal, processing, compression, pumping, and manufacturing costs. These excluded expenses also include the costs of gathering and preparing the Unitized Substances for transportation off the Unit Area and transportation costs incurred before the Unitized Substances are delivered to a common carrier pipeline. No lien for any expenses shall attach to royalty Unitized Substances. The royalty share shall bear a proportionate part of any gas shrinkage that occurs during gas processing and blending.

12.5 Notwithstanding any contrary Lease term or provision in 11 AAC 83.228—11 AAC 83.229, all royalty deductions for transportation, including marine, truck, and pipeline transportation, from the Unit Area to the point of sale are limited to the actual and reasonable costs incurred by the Working Interest Owners. These transportation costs must be determined by taking into account all tax benefits applicable to the transportation.

12.6 The Unit Operator shall give the Commissioner notice of the anticipated date for commencement of production at least six months before the commencement of Sustained Unit Production from a Participating Area. The Commissioner may take Unitized Substances in-kind in accordance with the following: The Commissioner will give the Unit Operator 90 days written notice of the state's initial election to take Unitized substances in-kind. After taking has actually commenced, the Commissioner may increase or decrease the amount of Unitized Substances taken in-kind by not more than 10 percent, upon 30 days written notice to the Operator; and greater than 10 percent, upon 90 days written notice to the Operator.

12.6.1 The Commissioner will, in his or her discretion, elect to specify the Unit Tracts from which royalty Unitized Substances taken in kind are to be allocated.

12.6.2 The Unit Operator shall deliver the State's royalty Unitized Substances at the custody transfer meter at a common carrier pipeline capable of carrying those substances, or at any other mutually agreeable place. The State will, in its discretion, designate any individual, firm or corporation to accept delivery.

12.6.3 Royalty Interest Unitized Substances delivered in kind shall be delivered in good and merchantable condition and be of pipeline quality. Those substances shall be free and clear of all lease expenses, Unit Expenses, and Participating Area Expenses, and free of any lien for these excluded Expenses. These excluded expenses include, but are not limited to, expenses for separating, cleaning, dehydration, saltwater removal, processing, compression, pumping, manufacturing, and the costs of gathering and preparing the Unitized Substances for transportation off the Unit Area and transportation costs within the Unit Area. If a Working Interest Owner processes the Unitized Substances to separate, extract or remove liquids from a Working Interest Owner's share of natural gas Unitized Substances, the State may require that a Working Interest Owner also process the State's share of natural gas Unitized Substances being taken in kind in the same manner without cost to the State. Under these circumstances, the State, or its buyer, shall only pay any tariffed transportation costs and shrinkage of the volume of gas resulting from processing.

12.6.4 Each Working Interest Owner shall furnish storage in or near the Unit Area for the State's share of Unitized Substances to the same extent that the Working Interest Owner provides storage for its own share of Unitized Substances.

12.7 If a purchaser of the State's royalty Unitized Substances does not take delivery of Unitized Substances, the State will, in its discretion elect, without penalty, to underlift for up to six months. The State will, in its discretion, underlift all or a portion of those substances. The State's right to underlift is limited to the portion of those substances that the purchaser did not take delivery of or what is necessary to meet an emergency condition. The State shall give the Unit Operator written notice thirty days before the first day of the month in which the underlifted royalty Unitized Substances are to be recovered. The State will, in its discretion, recover at a daily rate not exceeding 25 percent (25%) of its share of daily production, unless otherwise agreed.

12.8 The Unit Operator shall maintain records, and shall keep and have in its possession books and records including expense records, of all exploration, development, production, and disposition of all Unitized Substances and Outside Substances. Each Working Interest Owner shall maintain records of the disposition of its portion of the Unitized Substances and Outside Substances including sales prices, volumes, and purchasers. The Unit Operator and the Working Interest Owners shall permit the Commissioner to examine those books and records at all reasonable times. Upon request by the Commissioner, the Unit Operator and the Working Interest Owners shall make the books and records available to the Commissioner at the Commissioner's office designated by the Commissioner. They may provide these books and

records in a mutually agreeable electronic format. These books and records of exploration, development, production, and disposition must employ methods and techniques that will ensure the most accurate figures reasonably available. The Unit Operator and the Working Interest Owners shall use and consistently apply generally accepted accounting procedures.

12.9 If a Lease committed to this Agreement specifies the amount of rent due, that Lease is amended to require that rentals due be calculated under A.S. 38.05.180(n), as amended. If a Lease committed to this Agreement requires payment of minimum royalty, that Lease is amended to delete that minimum royalty obligation. The rental due under State law, as amended, must be paid in lieu of minimum royalty.

12.10 All rights and obligations relating to the State's net profit share will be determined in accordance with 11 AAC 83.201 - 11 AAC 83.295, as amended, notwithstanding any contrary Lease term. The State may audit the net profit share reports or payments due for any Lease within ten years of the year of production of Unitized Substances in Paying Quantities. The period of limitations for the State to file a lawsuit relating to an audit of a net profit share report or payment shall be three years longer than the audit period. The Working Interest Owners holding interests in net profit share Leases shall maintain the records relevant to determination of net profit share until the audit period has expired.

ARTICLE 13: UNIT EXPANSION AND CONTRACTION

13.1. The Unit Operator, at its own election may, or at the direction of the Commissioner shall, apply to expand the Unit Area to include any additional lands determined to overlie a Reservoir that is at least partially within the Unit Area, or to include any additional lands that facilitate production. The Commissioner will give the Unit Operator reasonable notice and an opportunity to be heard before any directed expansion of the Unit Area. The Unit Operator shall notify the Working Interest Owners of any expansion proposed by the Unit Operator or any third party, or proposed or directed by the Commissioner. Any unit expansion shall not be effective until approved by the Commissioner.

13.2. Ten years after Sustained Unit Production begins, the Unit Area must be contracted to include only those lands then included in an approved Participating Area, lands included in an Approved Unit Plan of Exploration or Development, and lands that facilitate production including the immediately adjacent lands necessary for secondary or tertiary recovery, pressure maintenance, reinjection, or cycling operations. The Commissioner may, after considering the provisions of 11 AAC 83.303, delay contraction of the Unit Area if the circumstances of a particular unit warrant. If a portion of a Lease contracts out of the unit, 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 Working Interest Owners waive the provisions of 11 AAC 83.356(b), which protect the Lease from severance when a portion of a lease is contracted out of the Unit Area.

13.3. Not sooner than 10 years after the effective date of this Agreement, the Commissioner may contract the Unit Area to include only that land covered by an Approved

Unit Plan of exploration or development, or that area underlain by one or more oil or gas reservoirs or one or more potential hydrocarbon accumulations and lands that facilitate production. 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 Working Interest Owners waive the provisions of 11 AAC 83.356(e), which protect the Lease from severance when a portion of a Lease is contracted out of the Unit Area. Before any contraction of the Unit Area under this Article 13.3, the Commissioner will give the Unit Operator, the Working Interest Owners, and the Royalty Interest Owners of the Leases or portions of Leases being excluded reasonable notice and an opportunity to be heard.

13.4. The Commissioner will give the Unit Operator reasonable notice and an opportunity to be heard before any directed contraction of the Unit Area. The Unit Operator shall notify the Working Interest Owners of any proposed, directed, or approved contraction of the Unit Area. Any unit contraction shall not be effective until approved by the Commissioner.

13.5. The Unit Area may be contracted with the Commissioner's approval and an affirmative vote of the Working Interest Owners.

13.6. Within thirty days after approval by the Commissioner of any expansion or contraction of the Unit Area, the Unit Operator shall submit revised Exhibits A and B to the Commissioner.

ARTICLE 14: UNIT EFFECTIVE DATE, TERM AND TERMINATION

14.1. This Agreement is effective as of 12:01 a.m. on the day after the Commissioner approves it. At least one copy of this Agreement shall be filed with the Department of Natural Resources, Anchorage, Alaska and one copy shall be filed with the AOGCC. This Agreement is binding upon each party who signs any counterpart.

14.2. Subject to the terms and conditions of the Approved Unit Plan, this Agreement terminates five years from the Effective Date unless:

14.2.1. A unit well in the Unit Area has been certified as capable of producing Unitized Substances in Paying Quantities; or

14.2.2. The unit term is extended with the approval of the Commissioner. An extension shall not exceed five years.

14.3. If the Commissioner orders or approves a suspension of production or other Unit Operations, this Agreement shall continue in force during the authorized suspension.

14.4. Nothing in this Article holds in abeyance the obligations to pay rentals, royalties, or other production or profit-based payments to the State from operations or production in any part of the Unit Area. Any seasonal restriction on operations or production or other condition

required in the Lease is not a suspension of operations or production required by law or force majeure.

14.5. This Agreement may be terminated by an affirmative vote of the Working Interest Owners and the Commissioner's approval.

ARTICLE 15: EFFECT OF CONTRACTION AND TERMINATION

15.1. If a Lease or portion of a Lease is contracted out of the Unit Area under this Agreement, then it will be maintained only in accordance with State law and the Lease.

15.2. Each Lease committed to this Agreement on the day that this Agreement terminates shall remain in force for an extension period of ninety days, or any longer period which may be approved by the Commissioner. After the extension period expires, the Lease will be maintained only in accordance with State law and the Lease.

15.3. Upon the expiration or earlier termination of the unit, the Unit Operator will be directed in writing by the Commissioner and will have the right at any time within a period of one year after the termination, or any extension of that period as may be granted by the Commissioner, to remove from the Unit Area all machinery, equipment, tools, and materials. Upon the expiration of that period or extension of that period and at the option of the Commissioner, any machinery, equipment, tools, and materials that the Unit Operator has not removed from the Unit Area become the property of the State or may be removed by the State at the Working Interest Owners' expense. At the option of the State, all improvements such as roads, pads, and wells must either be abandoned and the sites rehabilitated by the Unit Operator to the satisfaction of the State, or be left intact and the Unit Operator absolved of all further responsibility as to their maintenance, repair, and eventual abandonment and rehabilitation. Subject to the above conditions, the Unit Operator shall deliver up the Unit Area in good condition.

ARTICLE 16: COUNTERPARTS

16.1. The signing of counterparts of this Agreement shall have the same effect as if all parties had signed a single original of this Agreement. Within thirty days after approval by the Commissioner of any change of the Working Interest ownership of Oil and Gas Rights in any Unit Tract, the Unit Operator shall submit a revised Exhibits A and C to the Commissioner.

ARTICLE 17: LAWS AND REGULATIONS

17.1. This Agreement is subject to all applicable State and federal statutes and regulations in effect of the Effective Date of this Agreement, and insofar as is constitutionally

permissible, to all statutes and regulations placed in effect after the Effective Date of this Agreement. A reference to a statute or regulation in this Agreement includes any change in that statute or regulation whether by amendment, repeal and replacement, or other means. This Agreement does not limit the power of the State of Alaska or the United States of America to enact and enforce legislation or to promulgate and enforce regulations affecting, directly or indirectly, the activities of the parties to this Agreement or the value of interests held under this Agreement. In case of conflicting provisions, statutes and regulations take precedence over this Agreement.

ARTICLE 18: APPEARANCES AND NOTICES

18.1. If the State gives the Unit Operator a notice or order relating to this Agreement it shall be deemed given to all Working Interest Owners and all persons whose interest in the Unit Area derived from a Working Interest. All notices required by this Agreement shall be given in writing and delivered personally, or by United States mail or by facsimile machine to the Unit Operator at the address or facsimile number listed below. All notices actually received will also be deemed properly given. The Unit Operator will change its notice address by giving thirty days written notice to the State and the other Working Interest Owners. The State will change its notice address by giving thirty days written notice to the Unit Operator.

Address of the Unit Operator:

ENI US OPERATING INC.
ATTN: Senior Vice President, Operations
1201 Louisiana, Suite 3500
Houston, Texas 77002

Fax: (713) 393-6206

Address of the State:

Commissioner, Department of Natural Resources
550 West Seventh Avenue, Suite 1400
Anchorage, Alaska 99501-3554
Fax: (907) 269-8918

with a copy to:

Director, Division of Oil and Gas
550 West Seventh Avenue, Suite 800
Anchorage, Alaska 99501-3560
Fax: (907) 269-8938

ARTICLE 19: JOINDER

19.1. The Commissioner will, in his or her discretion, order or, upon request, approve a joinder to this Agreement under the expansion provisions of Article 13. The Unit Operator shall submit a request for joinder with a signed counterpart of this Agreement and a notice of proposed expansion under Article 13. A joinder is subject to the requirements of the Unit Operating Agreement. However, the Commissioner will, in his or her discretion, modify any provision in a Unit Operating Agreement, which the Commissioner finds discriminates against parties who request joinder. The Commissioner shall give notice and an opportunity to be heard to the Unit Operator before modifying the Unit Operating Agreement.

ARTICLE 20: DEFAULT

20.1 The Commissioner will, in his or her discretion, determine that failure of the Unit Operator or the Working Interest Owners to comply with any of the terms of this Agreement, including any Approved Unit Plan, is a default under this Agreement. The failure to comply because of force majeure is not a default.

20.2 The Commissioner will give notice to the Unit Operator and the Working Interest Owners of the default. The notice will describe the default, and include a demand to cure the default by a certain date. The cure period shall be at least thirty days for a failure to pay rentals or royalties and ninety days for any other default.

20.3 If there is no well certified as capable of producing Unitized Substances in Paying Quantities and a default is not cured by the date indicated in the demand, the Commissioner will, in his or her discretion, terminate this Agreement after giving the Unit Operator notice and an opportunity to be heard. The Commissioner will give notice, by mail, of the termination, which is effective upon mailing the notice.

20.4 If there is a well capable of producing Unitized Substances in Paying Quantities and the operations to cure the default are not completed by the date indicated in the demand, the Commissioner will terminate this Agreement by judicial proceedings.

20.5 This Article's remedies are in addition to any other administrative or judicial remedy provided for by Lease, this Agreement, or federal or State law.

IN WITNESS OF THE FOREGOING, the parties have executed this Unit Agreement on the dates opposite their respective signatures.

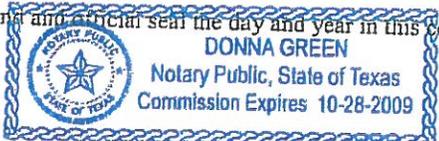
WORKING INTEREST OWNERS

Eni Petroleum US LLC
By: Nicola Salmaso Date: 08/27/2007
Nicola Salmaso
Senior Vice President
(Company Name, signatory's printed name and title)

STATE OF ~~ALASKA~~ ^{TEXAS})
County of ~~HARRIS~~)ss.
THIRD JUDICIAL DISTRICT)

This certifies that on ~~January~~ ^{August} ____, 2007, before me, a notary public in and for the State of ~~Alaska~~ ^{TEXAS}, duly commissioned and sworn, personally appeared Nicola Salmasso, known to me to be the person described in, and who executed the foregoing agreement, who then after being duly sworn according to law, acknowledged to me under oath that he executed same freely and voluntarily for the uses and purposes therein mentioned.

WITNESS my hand and official seal the day and year in this certificate first above written.



Donna Green
NOTARY PUBLIC in and for ~~Alaska~~ ^{STATE OF TEXAS}
My Commission Expires: 10/28/2009

OPERATOR
Eni US Operating Co. Inc.

By: Nicola Salmasso
Nicola Salmasso
Senior Vice President

Date: 08/27/2007

(Company Name, signatory's printed name and title)

STATE OF ~~ALASKA~~ ^{TEXAS})
County of ~~HARRIS~~)ss.
THIRD JUDICIAL DISTRICT)

This certifies that on ~~January~~ ^{August} ____, 2007, before me, a notary public in and for the State of ~~Alaska~~ ^{TEXAS}, duly commissioned and sworn, personally appeared Nicola Salmasso, known to me to be the person described in, and who executed the foregoing agreement, who then after being duly sworn according to law, acknowledged to me under oath that he executed same freely and voluntarily for the uses and purposes therein mentioned.

WITNESS my hand and official seal the day and year in this certificate first above written.



Donna Green
NOTARY PUBLIC in and for ~~Alaska~~ ^{STATE OF TEXAS}
My Commission Expires: 10/28/2009

OVERRIDING ROYALTY INTEREST OWNERS

By: _____ Date: _____

(Company Name, signatory's printed name and title)

STATE OF ALASKA)
)ss.

