NIKAITCHUQ UNIT

APPROVAL OF THE

FIRST EXPANSION OF THE SCHRADER BLUFF PARTICIPATING AREA

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

TABLE OF CONTENTS

I.	IN.	TRODUCTIONAND DECISION SUMMARY	3
II.	AP	PLICATION AND LEASE SUMMARY	3
III.	DIS	SCUSSION OF DECISION CRITERIA	4
A	۱.	Decision Criteria considered under 11 AAC 83.303(b)	4
	1.	Environmental Costs and Benefits	4
	2. Ac	Geologic and Engineering Characteristics and Prior Exploration and Development tivities of the Proposed Nikaitchuq Participating Area	4
	3.	Plans of Development	7
	4.	The Economic Costs and Benefits to the State and Other Relevant Factors	7
В	3.	Decision Criteria considered under 11 AAC 83.303(a)	7
	1.	Promote the Conservation of All Natural Resources.	7
	2.	The Prevention of Economic and Physical Waste	8
	3.	The Protection of All Parties of Interest, Including the State	8
IV.	FIN	NDINGS AND DECISION	9
A	۱.	The Conservation of All Natural Resources	9
В	3.	The Prevention of Economic and Physical Waste	9
C	· ·	The Protection of All Parties in Interest, Including the State	9
V.	Att	achments	11
A	kttac]	hment 1: NU SBPA Approved Exhibit C – Description of lands within expanded PA	12
A	kttac]	hment 2: NU SBPA Approved Exhibit D – Map of expanded PA	17
A	ttac	hment 3: NU SBPA Approved Exhibit E – Expense allocation by tract in expanded PA	19
A	kttac]	hment 4: NU SBPA Approved Exhibit F – Expense allocation by tract in unit area	24

I. INTRODUCTIONAND DECISION SUMMARY

On October 20, 2015, Eni US Operating Company, Inc. (Eni), as Nikaitchuq Unit (NU) Operator, applied to expand the Schrader Bluff Participating Area (SBPA) (Application) and revise the basis for allocation of production from an acreage to an oil in place basis. The company submitted geological, geophysical and engineering data that justify the expansion of the SBPA.

The NU was approved on April 29, 2004 and later expanded on October 5, 2007 by expanding to include the Tuvaaq Unit and a portion of the Kuparuk River Unit. ADL 355024 was segregated, the northern portion was contracted from the Kuparuk River Unit, then assigned ADL 391283 and incorporated into the NU. The SBPA was formed effective January 21, 2011 with first production beginning January 31, 2011. In 2013 and 2014 leases ADL 389720, ADL 388573, ADL 390433 and ADL 388580 contracted from the unit under the terms of the 2007 expansion decision.

The existing SBPA allocates production and cost on a surface acreage basis. The Application proposes reallocating production and cost on an original oil in place basis. The new approved allocation factors will be applied retroactively to the date of first production, February 1, 2011.

A participating area "must be expanded to include acreage reasonably estimated through use of geological, geophysical, or engineering data to be capable of producing or contributing to the production of hydrocarbons in paying quantities, and must be contracted to exclude acreage reasonably proven through the use of geological, geophysical, and engineering data to be incapable of producing hydrocarbons in paying quantities, subject to approval by the commissioner." 11 AAC 83.351(c).

Eni submitted confidential and public information in the Application. The confidential economic, geological, geophysical, and engineering data indicate that the acreage proposed for inclusion in the SBPA is producing or contributing to production of hydrocarbons in paying quantities, or is reasonably estimated to be capable of producing or contributing to production of hydrocarbons in paying quantities.

The Division finds that the expansion of the SBPA 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. AS 38.05.180(p); 11 AAC 83.303. I approve the Application under the terms and conditions of Section IV.C..3. The effective date of the expansion of the SBPA is October 1, 2015.

II. APPLICATION AND LEASE SUMMARY

The Application includes Exhibit C (Attachment 1), legally describing the proposed expanded participating area, its leases, and ownership interests; and Exhibit D (Attachment 2), a map of the proposed expanded participating area, and Exhibit E (Attachment 3), proposed participating area expense allocation, and Exhibit F (Attachment 4), proposed unit area expense. Revised exhibits C and D were submitted March 15, 2016. The proposed SBPA includes 17,277.63 acres. Eni proposes that the SBPA be expanded to include ADLs 391283, 390615, 390616, 388583, 388574, and portions of 388571, 388581, 388572, 388575, 388582 and 388577. ADL 391283 has a 12.5 percent royalty rate and 30 percent Net Profit Share (NPS). The remaining ADLs have 16.66667 percent royalty rates.

Three leases, ADL 390615 (tract 9), ADL 390616 (tract 10) and a portion of ADL 391283 (Tract 18B) OA reservoir only, received royalty modification under a January 11, 2008 DNR decision. For the first 25 years following the date of first sustained production, when Alaska North Slope West Coast (ANS WC) delivered crude prices fall below a threshold price per barrel (initially \$42.64 per barrel, adjusted annually for inflation), production allocated to these leases from the Nikaitchuq Schrader Bluff OA reservoir for that month will be subject to a five percent royalty rate.

All of the leases within the NU are currently producing and each or part of each of the leases in the NU are within the proposed SBPA. The leases proposed for the expanded participating area are described in detail in Attachments 1 and 2.

III. DISCUSSION OF DECISION CRITERIA

The DNR Commissioner (Commissioner) reviews applications related to units, including participating area formations, expansions and contractions, under 11 AAC 83.303–11 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. Analysis and discussion of subsection (b) requirements precedes and supports findings under subsection (a).

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

1. Environmental Costs and Benefits

Approval of the SBPA expansion has no direct environmental impact. This decision is an administrative action and does not authorize any on-the-ground activity. The Unit Operator must 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. Potential effects on the environment are analyzed when permits to conduct exploration or development in the unit area are reviewed. Eni has obtained the required permits for the current SBPA wells and is operating under an approved plan of operations and plan of development. DNR considers environmental issues during the lease sale process and the unit plan of operations approval process.

2. Geologic and Engineering Characteristics and Prior Exploration and Development Activities of the Proposed Nikaitchuq Participating Area

Prior Exploration and Development Activities

Oil-bearing sands of late Cretaceous- to early Tertiary-aged Schrader Bluff Formation ("Schrader Bluff") are present and in production at numerous fields on the North Slope within the Kuparuk River, Milne Point, Prudhoe Bay and Nikaitchuq Units. The Schrader Bluff Oil Pool at Nikaitchuq was discovered in 2004 by the Nikaitchuq No. 1 exploratory well. The pool was delineated by Kerr-McGee during 2004 and 2005 with the Nikaitchuq No. 2, 3 and 4, Kigun No. 1 and Tuvaaq No. 1 exploratory wells. Between 2005 and 2007, Eni US Operating Company, Inc. (Eni) acquired 100% working interest in the Nikaitchuq Unit and became unit operator. During 2006 and 2007, two

additional exploratory wells, Oliktok Point No. I-1 and I-2 were drilled to delineate the pool and test the concept of development employing horizontal wells. Development drilling began in 2008 and came on production in January 2011 coincident with the formation of the initial Schrader Bluff Participating Area (SBPA). Development drilling has continued since start-up and extends beyond the current boundary of the initial SBPA within the unit.

Characteristics of the Reservoir

The Schrader Bluff Formation is part of a larger accumulation collectively referred to as the shallow viscous- or heavy-oil sands that include the Ugnu and West Sak sands of the Kuparuk River Unit and the Schrader Bluff Formation within the Prudhoe Bay and Milne Point Units. The sands within the Schrader Bluff Formation are subdivided into 5 major intervals designated (from oldest to youngest) as O, N, M, L, and K. Each individual sand interval is further subdivided into members by letters with A the youngest and B older, etc. The M, L, and K sands are roughly equivalent to the Ugnu Sands in the Kuparuk River Field and are Paleocene (early Tertiary) in age. The O sands contain the primary developed producing sands within the Schrader Bluff Formation, with local secondary accumulations of thickened N sandstones. The O sands are lateral stratigraphic equivalents of the West Sak reservoir sands A through D in the Kuparuk River Field and are Maastrichtian (latest Cretaceous) in age. The West Sak and Schrader Bluff sandstones were deposited as laterally extensive, coarsening upward delta-front sequences comprised of sandstones, siltstones, and mudstones that were part of a northeasterly prograding deltaic system that was deposited on an extensive, relatively flat (one to two degree) open marine shelf of late Cretaceous to early Paleocene age which extended in a northwest to southeast strike direction over the present Nikaitchug, Kuparuk, Milne Point, and Prudhoe Bay units.

Within the Nikaitchuq Unit, the SBPA is vertically defined to include (in ascending order) the OB, OA and N sands identified between the measured depths of 3,530 and 3,867 feet in the Kigun No. 1 well. The OA sand is the primary reservoir, whereas the OB sand is generally of non-reservoir quality in terms of both fluid type and rock type. The shallower N sand is a potential future development target of heavier quality oil currently under evaluation, including the dedicated OP19-T1N well drilled in 2013. In the Nikaitchuq area the structure of the Schrader Bluff forms a monocline that dips gently toward the northeast and is cut by numerous, northwest-trending, normal faults that have vertical displacements ranging up to 80 feet. The reservoir is likely separated into compartments based on the interbedded nature of the reservoir sandstones and faults that have displacements that exceed the thickness of the OA and N strata. The Schrader Bluff sandstones appear to shale out toward the southwest. Down-dip to the northeast, the reservoir is truncated by an Oil-Water Contact (OWC). To the south and southeast, the reservoir sands appear to continue beyond the Nikaitchuq Unit boundary into the Kuparuk River and Milne Point Units.

The reservoir sandstones in the OA sand are fine- to very fine-grained and lithic-rich. Gross thickness ranges from 30 to 40 feet. Porosity ranges from 25% to 35%, permeability ranges from 100 to 600 millidarcies, and water saturation ranges from 23% to 45%, with 45% likely representing a transition zone near the oil-water contact. Properties of the N sand reservoir are less well understood at present: porosity ranges from 23% to 33%, and water saturation ranges from 13% to 22%.

Oil samples recovered from the OA sand in the Nikaitchuq No. 4, Kigun No. 1, Oliktok Point No. I-1, and Oliktok Point No. I-2 exploratory wells measure between 16° and 19° API gravity, with viscosity ranging from about 100 to 200 centipoise. The solution Gas-to-Oil Ratio (GOR) measures from 80 to 140 Standard Cubic Feet per Stock Tank Barrel (scf/stb), and the bubble point pressure ranges from about 1,150 psia in the reservoir compartment containing Oliktok Point No. I-1 to approximately 750 psia in the compartment containing Oliktok Point No. I-2. Initial reservoir pressure is about 1,700 psi at a depth of -3,760 feet True Vertical Depth Sub Sea (TVDSS) in Kigun No. 1 and Oliktok Point No. I-1. The bubble point pressures of the reservoir compartments vary between 750 and 1,150 psi. Reservoir temperature is about 80° F. The temperature in the Shallower N sand is approximately 78° F, but the oil gravity is approximately 13° and viscosity ranges from 2,000 – 5,000 centipoise. The GOR in the N sand is approximately 36 scf/stb.

In the OA sand, an OWC is estimated at approximately -4,177 feet TVDSS in the Nikaitchuq No. 2 well. The depth of the OWC in the N sand is less certain, lying somewhere between the deepest-known-oil depth of -3,643 feet TVDSS in well Oliktok Point No. I-1 and the shallowest-known-water depth of -3,949 feet TVDSS in well Nikaitchuq No. 4. The fluid contacts are thought to be constant in the Unit as development drilling has indicated no evidence of different oil-water contacts within separate reservoir compartments.

Current Activity and Production

As of January 31, 2016, the Nikaitchuq Unit has produced a cumulative volume of approximately 27.8 million barrels of oil from the Schrader Bluff Formation and currently produces over 25,000 barrels of oil per day (BOPD). Eni has maintained a continuous development drilling program since start-up, at times utilizing two drilling rigs simultaneously, resulting in 56 drilled development wells. These wells are comprised of 29 OA-sand producers, 1 N-sand test producer, 21 OA-sand water injectors (used to provide pressure support), 3 water source wells, and 2 disposal wells. In order to increase flow rate and recovery, Eni has also drilled additional horizontal lateral well bores in 17 OA-sand producers. Wells drilled outside the current SBPA have been operating under approved tract operations within the unit. The expanded SBPA will encompass all existing development wells and five additional horizontal development wells planned along the northeastern portion of the reservoir above the OWC.

Geologic and Engineering Conclusion

Eni submitted sufficient public and proprietary interpretive technical data to support an expansion of the SBPA. The data submitted included well data, geologic maps, grids, and cross sections of the depth structure and reservoir properties, and proprietary seismic interpretations. The SBPA expansion area includes all quarter—quarter sections within a 1,200 foot radius of the portion of the well bores open to production/injection within the proven Schrader Bluff OA reservoir. The 1,200 foot radius is based upon the spacing between the existing development producer and injection wells. The Division reviewed Eni's data and found that the geological, geophysical, and engineering data submitted justifies the vertical and geographic extent of the SBPA. The area within the proposed SBPA is reasonably capable of producing or contributing to the production of hydrocarbons in paying quantities.

3. Plans of Development

The Division approved the NU Eighth POD on August 19, 2015. The NU Eighth POD describes the activities completed to date to maintain sustained production from the onshore drill site (ODS), and Spy Island drill site (SID). Eni plans to continue drilling extended reach horizontal wells and to add additional sidetrack laterals to existing wells. By the end of 2015 Eni expected to have twenty-eight producing wells, an additional nineteen producing lateral wellbores, and twenty-two injection wells. Since the submission of the POD Eni ceased drilling operations, however the drilling rig remains on location. At this time two production and three injection wells remain to be drilled.

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

The expanded SBPA will continue to provide economic benefits to the State through royalty and tax payments on production. The revised allocation methodology provides an equitable production allocation between the leases. Eni submitted tract participation schedules for the leases in the proposed SBPA expansion (Attachment 1) as required under 11 AAC 83.351. The proposed allocation distributes expenses and production among the tracts/leases on an original oil in place basis. Eni is the sole working interest owner, and the State the sole royalty owner, of the leases. NU production is processed at the Nikaitchuq Production Facility and a 10 inch sales quality crude line ties the facility to the Kuparuk pipeline. The majority of the Schrader Bluff development is complete and wells are already on production but are reported as non-PA production.

The SBPA lies within the Nikaitchuq Schrader Bluff Oil Pool and operates under the terms of Alaska Oil and Gas Conservation Commission Conservation Order No 639. Wells are tested at least monthly with Schlumberger VX multi-phase meters. These well tests are used to allocate daily production from the Nikaitchuq Production Facility LACT meter.

DNR's January 11, 2008 royalty modification decision has resulted in a cost to the State. When ANS WC delivered crude prices fall below a threshold price per barrel (initially \$42.64 per barrel, adjusted annually for inflation), production allocated to leases ADL 390615 (Tract 9), ADL 390616 (Tract 10) and a portion of ADL 391283 (Tract 18B) from the Nikaitchuq Schrader Bluff OA reservoir are subject to a five percent royalty rate. Eni stated, and the State independently determined, that a prudent-investor would not have proceeded with the project without the royalty modification. Since August of 2015 the price of ANS WC has been below the threshold price and the royalty rate has decreased to 5% for a portion of the Nikaitchuq Schrader Bluff OA production. Current and future lessees near the NU who do not own facilities may also benefit from the Unit's facility and pipelines.

B. Decision Criteria considered under 11 AAC 83.303(a)

1. Promote the Conservation of All Natural Resources

The unitization of oil and gas reservoirs and the expansion and contraction of participating areas within unit areas to develop hydrocarbon-bearing reservoirs are well-accepted means of hydrocarbon conservation. Expansion and contraction of a participating area within an existing unit, with development occurring under the terms of a unit agreement, promotes efficient evaluation and development of the State's oil and gas, and minimizes impacts to the area's cultural, biological, and environmental resources.

2. The Prevention of Economic and Physical Waste

The majority of the Schrader Bluff development is complete and wells are already on production but are reported as non-PA production.

Approval of the Application will prevent economic and physical waste because the approval will allocate production revenue under the approved SBPA tract allocations, equitably allocating production revenues among the tracts. Approval of the expanded SBPA will not result in economic waste given the current well spacing, market demand, and anticipated production rates. Annual approval of the NU development activities as described in future PODs must also provide for the prevention of economic and physical waste.

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

A participating area "must be expanded to include acreage reasonably estimated through use of geological, geophysical, or engineering data to be capable of producing or contributing to the production of hydrocarbons in paying quantities and must be contracted to exclude acreage reasonably proven through the use of geological, geophysical, and engineering data to be incapable of producing hydrocarbons in paying quantities, subject to approval by the commissioner." 11 AAC 83.351(c).

The Division reviewed confidential geophysical, geological and engineering data and interpretations submitted by Eni to determine the acreage proposed for inclusion in the revised SBPA. Eni has demonstrated that the acreage proposed for the SBPA expansion is "reasonably estimated" to be capable of producing or contributing to production of hydrocarbons in paying quantities. The expanded SBPA includes all quarter-quarter section within a 1,200-foot radius of the portion of the well bores open to production / injection within the proven Schrader Bluff OA reservoir. The 1,200foot radius is based upon the spacing between the existing development producer and injection wells. The expanded SBPA also will include approximately 940 acres (~5% of proposed SBPA acreage) in the northeastern portion of the reservoir where five additional development wells are planned to be drilled between existing development wells and the edge of the reservoir as defined by the OWC. This additional reservoir acreage above the OWC is well delineated by both nearby well control and seismic interpretation. This understanding of the extent of the OA sand in combination with the consistency of the reservoir allows the Division to reasonably estimate the undrilled area to be capable of producing or contributing to the production of hydrocarbons in paying quantities. Each of the leases that make up the undrilled area are within the Nikaitchuq Unit and already in production from existing wells. Eni has tentative plans to drill the five wells in the area at a later time. By expanding the SBPA to include the undrilled area at this time the Division avoids further administrative burden of processing a future expansion application for the same area. The lease containing the undrilled area reserves a 16.6667% royalty share to the State. Because of the January 2011 royalty modification decision, the leases within the original SBPA are subject to a five percent royalty rate, while the remaining leases in the expanded SBPA are subject to a 16.6667% royalty rate. The expansion of the SBPA has required Eni to reallocate (from the date of first production) the entire Working Interest Ownership and the State's royalty share of production to account for the portion of oil produced from the higher royalty leases. If a smaller SBPA were approved at this time, and later expanded to include the as yet undrilled area, a smaller amount of production would then be reallocated from five percent royalty leases to 16.6667% royalty leases.

At the time of reallocation, further royalty would be due the State in addition to statutorily required interest on the previously underpaid royalty.

Thus, the leases included in the approved, expanded SBPA are described in attachments 1 and 2.

The people of Alaska have an interest in the development of the State's oil and gas resources to maximize the economic and physical recovery of the resources. AS 38.05.180(a). Approval of the revision under future annually updated and approved PODs will provide for continued review and approval of Eni's plans to develop the SBPA and NU in a manner which will maximize economic and physical recovery. The revised SBPA equitably allocates production based on producing acreage.

IV. FINDINGS AND DECISION

A. The Conservation of All Natural Resources

1. Revision of the SBPA will provide for continued development of the participating area under the NU Agreement and will maximize the efficient recovery of oil and gas and minimize the adverse impacts on the surface and other resources, including hydrocarbons, gravel, sand, water, wetlands, and valuable habitat.

B. The Prevention of Economic and Physical Waste

- 1. Eni submitted geological, geophysical, and engineering data to the Division in support of the Application, as approved. Division technical staff determined that the expanded SBPA area is "reasonably estimated" to be capable of producing or contributing to production in paying quantities.
- 2. The available geological, geophysical and engineering data justify including the lands described in Section III. A.2. of this decision.
- 3. The production of hydrocarbons through the existing production and processing facilities reduces the environmental impact of the additional production. Using existing facilities will avoid unnecessary duplication of development efforts on and beneath the surface.

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

- 1. The economic, geological, geophysical, and engineering data that Eni provided reasonably justify the inclusion of the acreage into the revised SBPA under the terms of the applicable regulations governing formation, expansion, and operation of oil and gas units and participating areas (11 AAC 83.301 11 AAC 83.395) and the terms and conditions under which these lands were leased from the State.
- 2. The SBPA revision provides for the equitable division of costs and an equitable allocation of produced hydrocarbons under a POD designed to maximize physical and economic recovery from the reservoirs within the approved participating areas. The allocations of production and costs for the tracts within the revised SBPA are approved. The Schrader Bluff N sands are part of the Schrader Bluff PA. Production from the OP19-T1 test well

(currently the only well producing the N sands) will continue to be treated as a 'quasi-tract operation' within the PA to track the production from the N Sands that were specifically excluded from the royalty modification. The production to accounting unit code NQ14 reports 29% for NFC lease ADL 390616/Tract 10 at 16.66667% royalty rate and 71% for NPSL lease ADL 391283/Tract 18B at 12.5% royalty rate. Tract 18B does not qualify for royalty reduction in accounting unit code NQ14.

- 3. Royalty Accounting Unit codes NQ05 (tracts 7, 14 & 11), NQ06 (tracts 14 & 18A), NQ07 (tracts 14 & 18A), NQ08 (tracts 11, 12 & 14), NQ09 (tract 14), NQ10 (tract 11), NQ11 (tracts 14 & 18A), NQ12 (tracts 11, 12 & 14), NQ13 (tracts 14, 15 & 16), NQ15 (tracts 4, 7 & 11), NQ16 (tracts 7 & 18A), NQ17 (tracts 7, 8 & 18A), NQ18 (tracts 11, 12 & 14), NQ19 (tracts 14, 15 & 16), NQ20 (tracts 7 & 8), NQ21 (tracts 7 & 8), NQ22 (tracts 7 & 18B), NQ23 (tract 16), NQ24 (tract 16), and NQ25 (tracts 12, 14, and 15), are terminated effective May 1, 2016.
 - a. Operator shall submit revised operator reports (O1 Forms) and the lessee shall submit revised royalty reports (A1 Forms) zeroing out production under these royalty accounting unit codes listed above back to February 2011 production month, and allocate that production to Royalty Accounting Unit Code NQSB as set forth in the approved SBPA tract allocation schedule attached as Exhibit C.
 - b. Operator shall submit revised operator reports (O1 Forms) and lessee shall submit revised royalty reports (A1 Forms) within 60 days after the approval date of this Decision. The NQ working interest owner shall also file revised Net Profit Share Lease reports. Volume/Value reports (VV Form) must be revised back to February 1, 2011 zeroing out production under the tract operation and increasing production volume under Royalty Accounting Unit code of NQSB. The Account Reports (AC Form), and the Production Tax Lease Allowance Reports (PT Form) must be revised back to the date of first development expenses, October 2007. *Note:* These reports are subject to audit under AS 38.05.036. These revised NPSL (VV, AC, PT Forms) reports and Royalty (A1 and O1 Forms) reports are due 60 days after the date of this Decision. If the revised royalty and NPSL reports are not filed within 60 days after the approval of this Decision, the reports not filed by this due date are subject to an administrative fee under 11 AAC 04.080 for royalty reports and 11 AAC 83.245(h)(2) for NPSL reports.

For the reasons discussed in this Findings and Decision, I hereby approve the SBPA expansion and conversion to oil in place allocation factors retroactively effective to February 1, 2011.

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 Marty Rutherford, Acting 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.

Corri A. Feige, Director Division of Oil and Gas

Date

V. Attachments

- 1. Nikaitchuq Unit Schrader Bluff Participating Area Proposed Expansion Exhibit C Description of lands within the proposed Expansion participating area
- 2. Nikaitchuq Unit Schrader Bluff Participating Area Proposed Expansion Exhibit D Map of proposed participating area
- 3. Nikaitchuq Unit Schrader Bluff Participating Area Proposed Expansion Exhibit E Proposed participating area expense allocation
- 4. Nikaitchuq Unit Schrader Bluff Participating Area Proposed Revised Exhibit F Proposed unit area expense allocation

Attachment 1: NU SBPA Approved Exhibit C – Description of lands within expanded PA

Nikaitchuq Unit Tract Number	Lessor/Royalty Owner Lease Serial No.	Description of Unitized Lands	Tract Acres Within PA	Royalty Rate	ORRI Owners See Exhibit F for ORRI Owners		Overriding Royalty Interest	Working Interest Owners & Percentage Working Interest	Tract Allocation (Based on OOIP)
4	388581	T14N., R.9 E., UMIAT MERIDIAN							
		Sec: 6 W/2 SW/4, 80.00 Protracted, tide and submerged lands	80.0000	0.1666667	William D. Armstrong		2.8000%	Eni: 100%	3.464458%
		Sec: 7 W/2, 320.00; SE/4, 160.00; W/2 NE/4, 80.00; SE/4 NE/4,			Jesse V. Sommer		0.0833%		
		40.00 Protracted, tide and submerged lands	600.0000		Edgar Kerr		0.0833%		
		Sec: 8 W/2 SW/4, 80.00; SE/4 SW/4, 40.00 Protracted, tide and			Jeffery A. Lyslo		0.0833%		
		submerged lands	120.0000	-	Reed LIGC, LLC		0.0833%		
			800.0000		Matthew X. Furin		0.0833%		
					Stuart W. Gustafson		0.0420%		
					Richard C. Geesaman		0.0333%		
					MAECO Family Trust		0.0420%		
						total	3.3340%		
7	388583	T14N., R.9 E., UMIAT MERIDIAN							
		Sec: 17 Unsurveyed, All tide and submerged lands	597.7600	0.1666667	William D. Armstrong		2.8000%	Eni: 100%	10.683230%
		Sec: 18 Unsurveyed, All tide and submerged lands	584.5200		Jesse V. Sommer		0.0830%		
		Sec: 20 Protracted, All tide and submerged lands	640.0000		Edgar Kerr		0.0830%		
		T14N., R.9 E., UMIAT MERIDIAN TRACT A			Jeffery A. Lyslo		0.0830%		
		Sec: 17 Unsurveyed, All Uplands	42.2400		Reed LIGC, LLC		0.0830%		
		Sec: 18 Unsurveyed, All Uplands	29.4800	-	Matthew X. Furin		0.0830%		
			1894.0000		Stuart W. Gustafson		0.0833%		
					Richard C. Geesaman		0.0330%		
		T14N., R.9 E., UMIAT MERIDIAN				total	3.3313%		
8	388582								
		Sec: 16 Unsurveyed SW/4, 138.37; W/2 SE/4, 80.00;		0.1666667	William D. Armstrong		2.8000%	Eni: 100%	5.893720%
		SE/4 SE/4, 40.00; SW/4 NW/4, 40.00	298.3700		Jesse V. Sommer		0.0830%		
		Sec: 21 Unsurveyed, All tide and submerged lands	633.0800		Edgar Kerr		0.0830%		
		T14N., R.9 E., UMIAT MERIDIAN TRACT A	04 (000		Jeffery A. Lyslo		0.0830%		
		Sec: 16 Unsurveyed, tide and submerged lands Sec: 21 Unsurveyed, All Uplands	21.6300		Reed LIGC, LLC Matthew X. Furin		0.0830% 0.0830%		
		Sec. 21 Orisulveyeu, All Opianus	6.9200	-					
			960.0000		Stuart W. Gustafson		0.0004%		
					GMT Exploration Company, LLC		0.0330%		
					MAECO Family Trust	total	0.0004% 3.2488%		

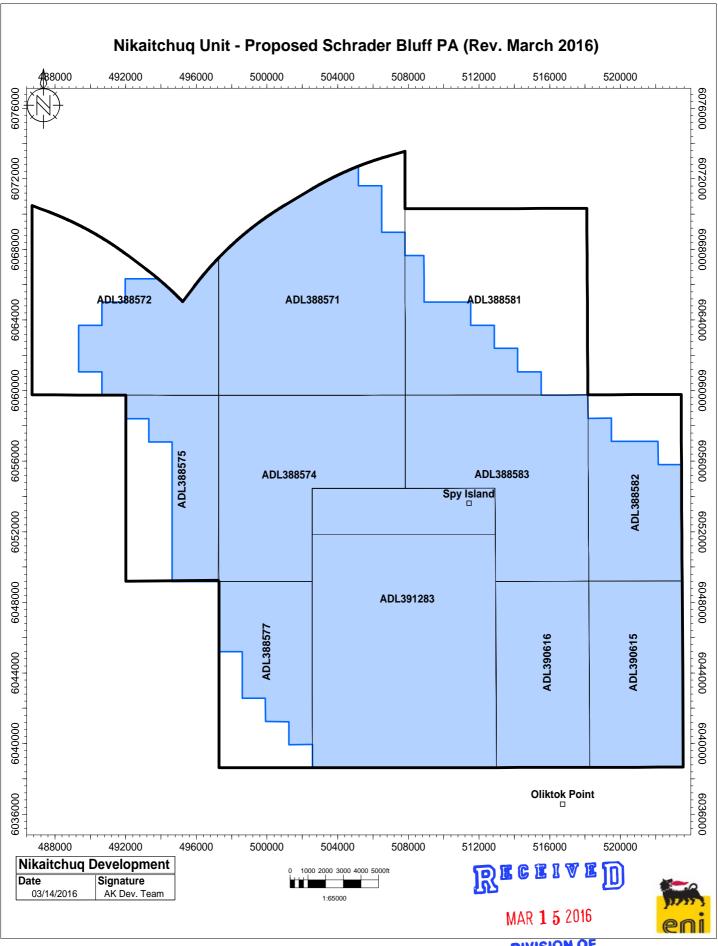
Nikaitchuq	Lessor/Royalty					Overriding		
Unit Tract Number	Owner Lease Serial No.	Description of Unitized Lands	Tract Acres Within PA	Dovalty Data	ORRI Owners See Exhibit F for ORRI Owners	Royalty Interest	Owners & Percentage Working Interest	Tract Allocation (Based on OOIP)
-		T14N., R.9 E., UMIAT MERIDIAN	WILIIII PA	Royalty Rate	See Exhibit F for ORRI Owners	mieresi	working interest	(Based on OOIP)
9	390615	Sec: 28 Protracted, All	(40, 0000	0.1////7	CMT Evaluration North Clans Davidty Company 11 C	0.12200/	Fni: 1000/	7.20404004
		Sec: 33 Protracted, All	640.0000 640.0000	0.1666667	GMT Exploration North Slope Royalty Company, LLC Wm D Armstrong	0.1330% 0.7280%		7.204969%
		Sec. 55 Frontidoca, Fili	1280.0000	•	Jesse V Sommer	0.0220%		
			1200.0000		Edgar Kerr	0.0220%		
					Jeffery A Lyslo	0.0220%		
					Reed LIGC, LLC	0.0220%		
					Matthew X Furin	0.0220%		
					Chester E Paris	0.0090%		
					Stuart W Gustafson	0.0110%		
					MAECO Family Trust	0.0110%		
					tota			
10	390616	T14N., R.9 E., UMIAT MERIDIAN						
		Sec: 29 Protracted, All	640.0000	0.1666667	GMT Exploration North Slope Royalty Company, LLC	0.1330%	Eni: 100%	7.218772%
		Sec: 32 Protracted, All	640.0000	-	Wm D Armstrong	0.7280%		
			1280.0000		Jesse V Sommer	0.0220%		
					Edgar Kerr	0.0220%		
					Jeffery A Lyslo	0.0220%		
					Reed LIGC, LLC	0.0220%		
					Matthew X Furin	0.0220%		
					Chester E Paris	0.0090%		
					Stuart W Gustafson	0.0110%		
					MAECO Family Trust	0.0110%		
11	388571	T14N., R.8 E., UMIAT MERIDIAN			tota	1.0020%		L
- ''	300371			0.1666667	ConocoPhillips	4.2500%	Eni: 100%	15.624569%
		Sec: 1 Protracted, tide and submerged lands W/2, 320.00; SE/4, 160.00; W/2 NE/4, 80.00; SE/4 NE/4, 40.00	600.0000	0.1000007	Corlocor rimps	4.230070	EIII. 10070	13.02430770
		Sec: 2 Protracted, All tide and submerged lands within the	000.0000					
		computed territorial sea, listed as "State Acreage" on Alaska's						
		seaward boundary diagram approved by the State on April 15,						
		1996	539.6300					
		Sec: 11 Protracted, All tide and submerged lands	640.0000					
		Sec: 12 Protracted, All tide and submerged lands	640.0000					
		T15N., R.8 E., UMIAT MERIDIAN Sec: 35 Protracted, All tide and submerged lands within the						
		computed territorial sea, listed as "State Acreage" on Alaska's						
		seaward boundary diagram approved by the State on April 15,						
		1996	24.0000					
		Sec: 36 Protacted, Tide and submerged lands within the						
		computed territorial sea, listed as "State Acreage" on Alaska's						ĺ
		seaward boundary diagram approved by the State on April 15,						
		1996. S/2 SW/4, 80.00; SW/4 SE/4, 40.00; S/2 NE/4 SW/4, 20.00; NE/4 NE/4 SW/4, 5.00; SE/4 NW/4 SW/4, 5.00	200.0000					
		20.00, NET NET 388/4, 3.00, 3E/4 1888/4 388/4, 3.00	2643.6300	•	tot	al 4.25009/		
			∠043.0300		tot	al 4.2500%		

Nikaitchug	Lessor/Royalty			1			Overriding	Working Interest	
Unit Tract	Owner Lease		Tract Acres		ORRI Owners		Royalty	Owners & Percentage	Tract Allocation
Number	Serial No.	Description of Unitized Lands	Within PA	Royalty Rate	See Exhibit F for ORRI Owners		Interest	Working Interest	(Based on OOIP)
12	388572	T14N., R.8 E., UMIAT MERIDIAN							
		Sec: 3 Protacted, Tide and submerged lands within the		0.1666667	ConocoPhillips		4.2500%	Eni: 100%	5.576259%
		computed territorial sea, listed as "State Acreage" on Alaska's			•				
		seaward boundary diagram approved by the State on April 15,							
		1996. S/2 SW/4, 80.00; SE/4, 160.00	240.0000						
		Sec: 9 Protracted, tide and submerged lands SE/4 SE/4, 40.00;	240.0000						
		N/2 SE/4, 80.00; S/2 NE/4, 80.00; NE/4 NE/4, 40.00 Sec: 10 Protracted, All tide and submerged lands	240.0000 640.0000						
		Sec. 10 Frotracted, All tide and submerged lands	1120.0000	•		total	4.2500%		
14	388574	T14N., R.8 E., UMIAT MERIDIAN	1120.0000			totai	4.2300 %		
14	300374	Sec: 13 Protracted, All tide and submerged lands	640.0000	0.16667	ConocoPhillips		4.2500%	Eni: 100%	11.580400%
		Sec: 14 Protracted, All tide and submerged lands	640.0000	0.10007	Conocorninps		4.230076	EIII. 100 %	11.36040076
		Sec: 23 Protracted, All tide and submerged lands	640.0000						
		Sec. 25 Frontacted, Air tide and Sabinerged lands	1920.0000	-		total	4.2500%		
			1920.0000			totai	4.2300 /6		
15	388575	T14N., R.8 E., UMIAT MERIDIAN							
		Sec: 15 Protracted, tide and submerged lands N/2 NW/4, 80.00;		0.1666667	ConocoPhillips		4.2500%	Eni: 100%	4.665286%
		SE/4 NW/4, 40.00; E/2 320.00	440.0000						
		Sec: 22 E/2 320.00 Protracted, tide and submerged lands	320.0000	-					
			760.0000			total	4.2500%		
16	388577	T14N., R.8 E., UMIAT MERIDIAN							
		Sec: 26 Protracted, tide and submerged lands N/2, 320.00;		0.1666667	ConocoPhillips		4.2500%	Eni: 100%	5.714286%
		SE/4, 160.00; N/2 SW/4, 80.00; SE/4 SW/4, 40.00	600.0000						
		Sec: 35 Protracted, tide and submerged lands NE/4, 160.00;							
		NE/4 NW/4, 40.00, NE/4 SE/4, 40.00	240.0000	-					
			840.0000			total	4.2500%		

Nikaitchug	Lessor/Royalty		1	1		Overri	ing Working Interest	I
Unit Tract	Owner Lease		Tract Acres		ORRI Owners	Roya		Tract Allocation
Number	Serial No.	Description of Unitized Lands	Within PA	Royalty Rate		Inter		(Based on OOIP)
18A	391283	T14N., R.8 E., UMIAT MERIDIAN	***************************************	nojunj nato	COC EXHIBIT TO CITE CONTROL		or Working Interest	(Bassa sir sis i)
TOA	371203	Sec: 24 Protracted N/2	320.0000	0.12500	ConocoPhillips	3.318	0% Eni: 100%	3.801375%
		T14N., R.9 E., UMIAT MERIDIAN	320.0000	0.12000	BP BP	2.357		3.00137370
		Sec: 19 Protracted N/2	308.5000		Exxon	0.200		
			628.5000	30% NPS	Unocal	0.297		
			020.3000	30 /6 INF 3	William D. Armstrong	0.489		
					Jesse V. Sommer	0.469		
					Edgar Kerr	0.015		
					•	0.015		
					Jeffrey A. Lysio	0.015		
					Reed LIGC, LLC			
					Matthew X. Furin	0.015		
					Stuart W. Gustafson	0.007		
					Chester E. Paris	0.006		
					GMT Exploration Company, LLC	0.090		
					MAECO Family Trust	0.007		
18B	391283	T14N., R.8 E., UMIAT MERIDIAN			t	otal 6.845	5%	
186	391283	Sec: 24 Protracted S/2	220,0000	0.12500	Cara-a District	2 210	0% Eni: 100%	10 572/7/0/
			320.0000	0.12500 30% NPS	ConocoPhillips BP	3.318		18.572676%
		Sec: 25 Protracted, All	640.0000	30% NPS		2.357		
		Sec: 36 Protracted, All	640.0000		Exxon	0.200		
		T14N., R.9 E., UMIAT MERIDIAN			Unocal	0.297		
		Sec: 30 Protracted, All	620.0000		William D. Armstrong	0.489		
		Sec: 31 Protracted, All	623.0000		Jesse V. Sommer	0.015		
		Sec: 19 Protracted S/2	308.5000		Edgar Kerr	0.015		
			3151.5000		Jeffrey A. Lysio	0.015		
					Reed LIGC, LLC	0.014		
					Matthew X. Furin	0.015		
					Stuart W. Gustafson	0.007		
					Chester E. Paris	0.006	0%	
					GMT Exploration Company, LLC	0.090	0%	
					MAECO Family Trust	0.007	0%	
						otal 6.845	.04	

Total Unitized Land: 17277.6300 Total PA Expense Allocation: 100.000000%

Attachment 2: NU SBPA Approved Exhibit D – Map of expanded PA



Attachment 3: NU SBPA Approved Exhibit E – Expense allocation by tract in expanded PA

Nikaitchuq Unit Tract	Lessor/Royalty Owner Lease		Tract Acres			Overriding	Working Interest	Allocation of Participating
Number	Serial No.	Description of Unitized Lands		Royalty Rate	ORRI Owners	Royalty Interest	Owners & Percentage Working Interest	Area Expenses (Based on OOIP)
4	388581	T14N., R.9 E., UMIAT MERIDIAN	WILLIIII FA	Royalty Rate	ORKI OWIIEIS	IIIterest	Working Interest	(Based off OOTF)
-	300301	Sec: 6 W/2 SW/4, 80.00 Protracted, tide and submerged lands	80.0000	0.1666667	William D. Armstrong	2.8000%	Eni: 100%	3.464458%
		Sec: 7 W/2, 320.00; SE/4, 160.00; W/2 NE/4, 80.00; SE/4 NE/4,	00.0000	0.1000007	Jesse V. Sommer	0.0833%	E111. 10070	3.40443070
		40.00 Protracted, tide and submerged lands	600.0000		Edgar Kerr	0.0833%		
		Sec: 8 W/2 SW/4, 80.00; SE/4 SW/4, 40.00 Protracted, tide and	000.0000		Jeffery A. Lyslo	0.0833%		
		submerged lands	120.0000		Reed LIGC, LLC	0.0833%		
			800.0000		Matthew X. Furin	0.0833%		
			000.0000		Stuart W. Gustafson	0.0420%		
					Richard C. Geesaman	0.0333%		
					MAECO Family Trust	0.0420%		
					total	3.3340%		
7	388583	T14N., R.9 E., UMIAT MERIDIAN				•		
		Sec: 17 Unsurveyed, All tide and submerged lands	597.7600	0.1666667	William D. Armstrong	2.8000%	Eni: 100%	10.683230%
		Sec: 18 Unsurveyed, All tide and submerged lands	584.5200		Jesse V. Sommer	0.0830%		
		Sec: 20 Protracted, All tide and submerged lands	640.0000		Edgar Kerr	0.0830%		
		T14N., R.9 E., UMIAT MERIDIAN TRACT A	0.0000		Jeffery A. Lyslo	0.0830%		
		Sec: 17 Unsurveyed, All Uplands	42.2400		Reed LIGC, LLC	0.0830%		
		Sec: 18 Unsurveyed, All Uplands	29.4800	_	Matthew X. Furin	0.0830%		
			1894.0000	_	Stuart W. Gustafson	0.0833%		
					Richard C. Geesaman	0.0330%		
					total	3.3313%		
8	388582	T14N., R.9 E., UMIAT MERIDIAN						
		Sec: 16 Unsurveyed SW/4, 138.37; W/2 SE/4, 80.00;		0.1666667	William D. Armstrong	2.8000%	Eni: 100%	5.893720%
		SE/4 SE/4, 40.00; SW/4 NW/4, 40.00	298.3700		Jesse V. Sommer	0.0830%		
		Sec: 21 Unsurveyed, All tide and submerged lands	633.0800		Edgar Kerr	0.0830%		
		T14N., R.9 E., UMIAT MERIDIAN TRACT A			Jeffery A. Lyslo	0.0830%		
		Sec: 16 Unsurveyed, tide and submerged lands	21.6300		Reed LIGC, LLC	0.0830%		
		Sec: 21 Unsurveyed, All Uplands	6.9200	-	Matthew X. Furin	0.0830%		
			960.0000		Stuart W. Gustafson	0.0004%		
					GMT Exploration Company, LLC	0.0330%		
					MAECO Family Trust	0.0004%		
					total	3.2488%		

Nikaitchuq	Lessor/Royalty					Overriding	Working Interest	Allocation of Participating
Unit Tract	Owner Lease		Tract Acres			Royalty	Owners & Percentage	Area Expenses
Number	Serial No.	Description of Unitized Lands	Within PA	Royalty Rate	ORRI Owners	Interest	Working Interest	(Based on OOIP)
9	390615	T14N., R.9 E., UMIAT MERIDIAN						
		Sec: 28 Protracted, All	640.0000	0.1666667	GMT Exploration North Slope Royalty Company, LLC	0.1330%	Eni: 100%	7.204969%
		Sec: 33 Protracted, All	640.0000		Wm D Armstrong	0.7280%		
			1280.0000	_	Jesse V Sommer	0.0220%		
					Edgar Kerr	0.0220%		
					Jeffery A Lyslo	0.0220%		
					Reed LIGC, LLC	0.0220%		
					Matthew X Furin	0.0220%		
					Chester E Paris	0.0090%		
					Stuart W Gustafson	0.0110%		
					MAECO Family Trust	0.0110%		
					total	1.0020%		
10	390616	T14N., R.9 E., UMIAT MERIDIAN						
		Sec: 29 Protracted, All	640.0000	0.1666667	GMT Exploration North Slope Royalty Company, LLC	0.1330%	Eni: 100%	7.218772%
		Sec: 32 Protracted, All	640.0000		Wm D Armstrong	0.7280%		
			1280.0000	=	Jesse V Sommer	0.0220%		
					Edgar Kerr	0.0220%		
					Jeffery A Lyslo	0.0220%		
					Reed LIGC, LLC	0.0220%		
					Matthew X Furin	0.0220%		
					Chester E Paris	0.0090%		
					Stuart W Gustafson	0.0110%		
					MAECO Family Trust	0.0110%		
					total	1.0020%		
11	388571	T14N., R.8 E., UMIAT MERIDIAN					_	
		Sec: 1 Protracted, tide and submerged lands W/2, 320.00; SE/4,		0.1666667	ConocoPhillips	4.2500%	Eni: 100%	15.624569%
		160.00; W/2 NE/4, 80.00; SE/4 NE/4, 40.00	600.0000					
		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	539.6300					
		Sec: 11 Protracted, All tide and submerged lands	640.0000					
		Sec: 12 Protracted, All tide and submerged lands	640.0000					
		T15N., R.8 E., UMIAT MERIDIAN	0.0000					
		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 Soc: 26 Protected. Tide and submorged lands within the	24.0000					
		Sec: 36 Protacted, 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. S/2 SW/4, 80.00; SW/4 SE/4, 40.00; S/2 NE/4 SW/4,						
			200 2000			1	ĺ	1
		20.00; NE/4 NE/4 SW/4, 5.00; SE/4 NW/4 SW/4, 5.00	200.0000					

Nikaitchuq	Lessor/Royalty						Overriding	Working Interest	Allocation of Participatin
Unit Tract	Owner Lease		Tract Acres				Royalty	Owners & Percentage	Area Expenses
Number	Serial No.	Description of Unitized Lands	Within PA	Royalty Rate	ORRI Owners		Interest	Working Interest	(Based on OOIP)
12	388572	T14N., R.8 E., UMIAT MERIDIAN							
		Sec: 3 Protacted, Tide and submerged lands within the		0.1666667	ConocoPhillips		4.2500%	Eni: 100%	5.576259%
		computed territorial sea, listed as "State Acreage" on Alaska's							
		seaward boundary diagram approved by the State on April 15,							
		1996. S/2 SW/4, 80.00; SE/4, 160.00	240.0000						
		Sec: 9 Protracted, tide and submerged lands SE/4 SE/4, 40.00;							
		N/2 SE/4, 80.00; S/2 NE/4, 80.00; NE/4 NE/4, 40.00	240.0000						
		Sec: 10 Protracted, All tide and submerged lands	640.0000	_					
			1120.0000			total	4.25%		
14	388574	T14N., R.8 E., UMIAT MERIDIAN							
		Sec: 13 Protracted, All tide and submerged lands	640.000	0.1666667	ConocoPhillips		4.2500%	Eni: 100%	11.580400%
		Sec: 14 Protracted, All tide and submerged lands	640.000						
		Sec: 23 Protracted, All tide and submerged lands	640.000	_					
			1920.000	_		total	4.2500%		
15	388575	T14N., R.8 E., UMIAT MERIDIAN							
		Sec: 15 Protracted, tide and submerged lands N/2 NW/4, 80.00;		0.1666667	ConocoPhillips		4.2500%	Eni: 100%	4.665286%
		SE/4 NW/4, 40.00; E/2 320.00	440.0000						
		Sec: 22 E/2 320.00 Protracted, tide and submerged lands	320.0000						
			760.0000	_		total	4.2500%		
16	388577	T14N., R.8 E., UMIAT MERIDIAN					-	•	
		Sec: 26 Protracted, tide and submerged lands N/2, 320.00;	-	0.1666667	ConocoPhillips		4.2500%	Eni: 100%	5.714286%
		SE/4, 160.00; N/2 SW/4, 80.00; SE/4 SW/4, 40.00	600.0000		•				
		Sec: 35 Protracted, tide and submerged lands NE/4, 160.00;							
		NE/4 NW/4, 40.00, NE/4 SE/4, 40.00	240.0000						
			840.0000	_		total	4.2500%		
			340.0000			wai	7.230076	l	<u> </u>

Nikaitchuq Unit Tract Number	Lessor/Royalty Owner Lease Serial No.	Description of Unitized Lands	Tract Acres Within PA	Royalty Rate	ORRI Owners		Overriding Royalty Interest	Working Interest Owners & Percentage Working Interest	Allocation of Participating Area Expenses (Based on OOIP)
18A	391283	T14N., R.8 E., UMIAT MERIDIAN							
		Sec: 24 Protracted N/2	320.0000	0.125	ConocoPhillips		3.3180%	Eni: 100%	3.801375%
		T14N., R.9 E., UMIAT MERIDIAN			BP		2.3570%		
		Sec: 19 Protracted N/2	308.5000	_	Exxon		0.2000%		
			628.5000		Unocal		0.2970%		
					William D. Armstrong		0.4890%		
					Jesse V. Sommer		0.0150%		
					Edgar Kerr		0.0150%		
					Jeffrey A. Lysio		0.0150%		
					Reed LIGC, LLC		0.0146%		
					Matthew X. Furin		0.0150%		
					Stuart W. Gustafson		0.0070%		
					Chester E. Paris		0.0060%		
					GMT Exploration Company, LLC		0.0900%		
					MAECO Family Trust		0.0070%		
						total	6.8456%		
18B	391283	T14N., R.8 E., UMIAT MERIDIAN							
		Sec: 24 Protracted S/2	320.0000	0.125	ConocoPhillips		3.3180%	Eni: 100%	18.572676%
		Sec: 25 Protracted, All	640.0000	30% NPS	BP		2.3570%		
		Sec: 36 Protracted, All	640.0000		Exxon		0.2000%		
		T14N., R.9 E., UMIAT MERIDIAN			Unocal		0.2970%		
		Sec: 30 Protracted, All	620.0000		William D. Armstrong		0.4890%		
		Sec: 31 Protracted, All	623.0000		Jesse V. Sommer		0.0150%		
		Sec: 19 Protracted S/2	308.5000	_	Edgar Kerr		0.0150%		
			3151.5000		Jeffrey A. Lysio		0.0150%		
					Reed LIGC, LLC		0.0146%		
					Matthew X. Furin		0.0150%		
					Stuart W. Gustafson		0.0070%		
					Chester E. Paris		0.0060%		
					GMT Exploration Company, LLC		0.0900%		
					MAECO Family Trust		0.0070%		
						total	6.8456%		

Total Unitized Land: 17277.6300 Total PA Expense Allocation: 100.000000%

Attachment 4: NU SBPA Approved Exhibit F – Expense allocation by tract in unit area

Nikaitchuq	Lessor/Royalty					Overriding	J	Unit Expense
Unit Tract	Owner Lease					Royalty	Owners & Percentage	Allocation
Number	Serial No.	Description of Unitized Lands	Unitized Acres	Royalty Rate	ORRI Owners	Interest	Working Interest	(Based on OOIP)
4	388581	T14N., R.9 E., UMIAT MERIDIAN						
		Sec: 5 Protracted, All tide and submerged lands	640.0000	0.1666667	William D. Armstrong	2.8000%	Eni: 100%	3.464458%
		Sec: 6 Protracted, All tide and submerged lands	609.0000		Jesse V. Sommer	0.0833%		
		Sec: 7 Protracted, All tide and submerged lands	611.0000		Edgar Kerr	0.0833%		
		Sec: 8 Protracted, All tide and submerged lands	640.0000	-	Jeffery A. Lyslo	0.0833%		
			2500.0000		Reed LIGC, LLC	0.0833%		
					Matthew X. Furin	0.0833%		
					Stuart W. Gustafson	0.0420%		
					Richard C. Geesaman	0.0333%		
					MAECO Family Trust	0.0420%		
					tot	al 3.3340%		
7	388583	T14N., R.9 E., UMIAT MERIDIAN						
		Sec: 17 Unsurveyed, All tide and submerged lands	597.7600	0.1666667	William D. Armstrong	2.8000%	Eni: 100%	10.683230%
		Sec: 18 Unsurveyed, All tide and submerged lands	584.5200		Jesse V. Sommer	0.0830%		
		Sec: 20 Protracted, All tide and submerged lands	640.0000		Edgar Kerr	0.0830%		
		T14N., R.9 E., UMIAT MERIDIAN TRACT A			Jeffery A. Lyslo	0.0830%		
		Sec: 17 Unsurveyed, All Uplands	42.2400		Reed LIGC, LLC	0.0830%		
		Sec: 18 Unsurveyed, All Uplands	29.4800	•	Matthew X. Furin	0.0830%		
			1894.0000		Stuart W. Gustafson	0.0833%		
					Richard C. Geesaman	0.0330%		
					tot	al 3.3313%		
8	388582	T14N., R.9 E., UMIAT MERIDIAN						
		Sec: 16 Unsurveyed, All tide and submerged lands	618.3700	0.1666667	William D. Armstrong	2.8000%	Eni: 100%	5.893720%
		Sec: 21 Unsurveyed, All tide and submerged lands	633.0800		Jesse V. Sommer	0.0830%		
		T14N., R.9 E., UMIAT MERIDIAN TRACT A			Edgar Kerr	0.0830%		
		Sec: 16 Unsurveyed, All Uplands	21.6300		Jeffery A. Lyslo	0.0830%		
		Sec: 21 Unsurveyed, All Uplands	6.9200	•	Reed LIGC, LLC	0.0830%		
			1280.0000		Matthew X. Furin	0.0830%		
					Stuart W. Gustafson	0.0004%		
					GMT Exploration Company, LLC	0.0330%		
					MAECO Family Trust	0.0004%		
					tot	al 3.2488%		

Nikaitchuq Unit Tract	Lessor/Royalty Owner Lease	′				Overriding Royalty	Working Interest Owners & Percentage	Unit Expense Allocation
Number	Serial No.	Description of Unitized Lands	Unitized Acres	Royalty Rate	ORRI Owners	Interest	Working Interest	(Based on OOIP)
9	390615	T14N., R.9 E., UMIAT MERIDIAN	01111200710100	nojunj nato	Citit Cititals	111101001	Working TitleTest	(bassa sii sisii)
	370013	Sec: 28 Protracted, All	640.0000	0.1666667	GMT Exploration North Slope Royalty Company, LLC	0.1330%	Eni: 100%	7.204969%
		Sec: 33 Protracted, All	640.0000	0.1000007	Wm D Armstrong	0.7280%	EIII. 10070	7.20470770
			1280.0000	•	Jesse V Sommer	0.0220%		
			1200.0000		Edgar Kerr	0.0220%		
					Jeffery A Lyslo	0.0220%		
					Reed LIGC, LLC	0.0220%		
					Matthew X Furin	0.0220%		
					Chester E Paris	0.0090%		
					Stuart W Gustafson	0.0110%		
					MAECO Family Trust	0.0110%		
					total	1.002%		
10	390616	T14N., R.9 E., UMIAT MERIDIAN						
		Sec: 29 Protracted, All	640.0000	0.1666667	GMT Exploration North Slope Royalty Company, LLC	0.1330%	Eni: 100%	7.218772%
		Sec: 32 Protracted, All	640.0000	-	Wm D Armstrong	0.7280%		
			1280.0000		Jesse V Sommer	0.0220%		
					Edgar Kerr	0.0220%		
					Jeffery A Lyslo	0.0220%		
					Reed LIGC, LLC	0.0220%		
					Matthew X Furin	0.0220%		
					Stuart W Gustafson	0.0110%		
					Chester E Paris	0.0090%		
					MAECO Family Trust	0.0110%		
					total	1.0020%		
11	388571	T14N., R.8 E., UMIAT MERIDIAN						
		Sec: 1 Protracted, All tide and submerged lands	640.0000	0.1666667	ConocoPhillips	4.2500%	Eni: 100%	15.624569%
		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	539.6300					
		Sec: 11 Protracted, All tide and submerged lands	640.0000					
		Sec: 12 Protracted, All tide and submerged lands	640.0000					
		T15N., R.8 E., UMIAT MERIDIAN						
		Sec: 35 Protracted, All tide and submerged lands						
		within the computed territorial sea, listed as "State						
		Acreage" on Alaska's seaward boundary diagram	0.4.0005					
		approved by the State on April 15, 1996 Sec: 36 Protracted, All tide and submerged lands	24.0000					
		within the computed territorial sea, listed as "State						
		Acreage" on Alaska's seaward boundary diagram	000 700-					
		approved by the State on April 15, 1996	282.7300	•				
			2766.3600		total	4.2500%		

Nikaitchuq	Lessor/Royalty						Overriding	Working Interest	Unit Expense
Unit Tract Number	Owner Lease	December of Heilined London		Davielle Date		ORRI Owners	Royalty	Owners & Percentage	Allocation (Based on OOIP)
	Serial No.	Description of Unitized Lands	Unitized Acres	Royally Rate	U	orri Owners	Interest	Working Interest	(Based on OOIP)
12	388572	T14N., R.8 E., UMIAT MERIDIAN							
		Sec: 3 Protracted, All tide and submerged lands		0.1666667	ConocoPhillips		4.2500%	Eni: 100%	5.576259%
		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						
		Sec: 4 Protracted, All tide and submerged lands	170.9100						
		within the computed territorial sea, listed as "State							
		Acreage" on Alaska's seaward boundary diagram							
		approved by the State on April 15, 1996	516.4100						
		Sec: 9 Protracted, All tide and submerged lands	640.0000						
		Sec: 10 Protracted, All tide and submerged lands	640.0000						
		T15N., R.8 E., UMIAT MERIDIAN							
		Sec: 33 Protracted, All tide and submerged lands							
		within the computed territorial sea, listed as "State							
		Acreage" on Alaska's seaward boundary diagram approved by the State on April 15, 1996	0.0000						
		approved by the State of April 15, 1990	0.9200 1968.2400	•		4-4-1	4.2500%		
1.4	200574	T14N., R.8 E., UMIAT MERIDIAN	1968.2400			total	4.2500%		
14	388574				O BI IIII		4.050004	F 1 4000/	44 500 4000/
		Sec: 13 Protracted, All tide and submerged lands	640.0000	0.1666667	ConocoPhillips		4.2500%	Eni: 100%	11.580400%
		Sec: 14 Protracted, All tide and submerged lands	640.0000						
		Sec: 23 Protracted, All tide and submerged lands	640.0000	•			4.050004		
45	200575	TAIN DOE HANATMEDIDIAN	1920.0000			total	4.2500%		
15	388575	T14N., R.8 E., UMIAT MERIDIAN			0 81.1111		4.05000/	F 1 4000/	
		Sec: 15 Protracted, All tide and submerged lands	640.0000	0.1666667	ConocoPhillips		4.2500%	Eni: 100%	4.665286%
		Sec: 22 Protracted, All tide and submerged lands	640.0000	•					
	000577	T441 B 6 5 11111 T 1150 B 141	1280.0000			total	4.2500%		
16	388577	T14N., R.8 E., UMIAT MERIDIAN			0 81.1111		4.050000	F 1 1000/	5 74 400 / C:
		Sec: 26 Protracted, All tide and submerged lands	640.0000	0.1666667	ConocoPhillips		4.2500%	Eni: 100%	5.714286%
		Sec: 35 Protracted, All tide and submerged lands	640.0000						
			1280.0000			total	4.2500%		

Nikaitchuq Unit Tract	Lessor/Royalty Owner Lease						erriding oyalty	Working Interest Owners & Percentage	Unit Expense Allocation
Number	Serial No.	Description of Unitized Lands	Unitized Acres	Royalty Rate	ORRI Owners	In	nterest	Working Interest	(Based on OOIP)
18 A	391283	T14N., R.8 E., UMIAT MERIDIAN							
		Sec: 24 Protracted N/2	320.0000	0.12500	ConocoPhillips		3180%	Eni: 100%	3.801375%
		T14N., R.9 E., UMIAT MERIDIAN		30% NPS	BP		3570%		
		Sec: 19 Protracted N/2	308.5000	-	Exxon	0.2	2000%		
			628.5000		Unocal		2970%		
					William D. Armstrong	0.4	4890%		
					Jesse V. Sommer		0150%		
					Edgar Kerr		0150%		
					Jeffrey A. Lysio		0150%		
					Reed LIGC, LLC		0146%		
					Matthew X. Furin		0150%		
					Stuart W. Gustafson	0.0	0070%		
					Chester E. Paris		0060%		
					GMT Exploration Company, LLC		0900%		
					MAECO Family Trust		0070%		
					t	otal 6.8	3456%		
18 B	391283	T14N., R.8 E., UMIAT MERIDIAN							1
		Sec: 24 Protracted S/2	320.0000	0.12500	ConocoPhillips		3180%	Eni: 100%	18.576760%
		Sec: 25 Protracted, All	640.0000	30% NPS	BP		3570%		
		Sec: 36 Protracted, All	640.0000		Exxon		2000%		
		T14N., R.9 E., UMIAT MERIDIAN			Unocal		2970%		
		Sec: 30 Protracted, All	620.0000		William D. Armstrong		4890%		
		Sec: 31 Protracted, All	623.0000		Jesse V. Sommer		0150%		
		Sec: 19 Protracted S/2	308.5000	•	Edgar Kerr		0150%		
			3151.5000		Jeffrey A. Lysio		0150%		
					Reed LIGC, LLC		0146%		
					Matthew X. Furin		0150%		
					Stuart W. Gustafson		0070%		
					Chester E. Paris		0060%		
					GMT Exploration Company, LLC		0900%		
					MAECO Family Trust		0070%		
					t	otal 6.8	3456%		

Total Unitized Land: 21228.6000 Total Unit Expense Allocation: 100.00%