NICOLAI CREEK UNIT

APPROVAL OF THE APPLICATION TO STRATIGRAPHICALLY EXPAND THE SOUTH AND BELUGA PARTICIPATING AREAS

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

APRIL 2, 2007

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I. DECISION SUMMARY

Aurora Gas, LLC (Aurora), as Nicolai Creek Unit (NCU) operator, has applied to stratigraphically expand the Nicolai Creek Unit South Participating Area (South PA) and the Nicolai Creek Unit Beluga Participating Area (Beluga PA). The existing South PA is defined to include the Tyonek Formation encountered between 2,422' and 2,918' measured depth (md) in the Aurora Gas Nicolai Creek Unit No. 2 well (NCU-2). The existing Beluga PA is defined to include the Beluga Formation encountered between 1,320' and 1,477' md in the Aurora Gas Nicolai Creek Unit No. 9 well (NCU-9).

The State of Alaska Department of Natural Resources (DNR), Division of Oil and Gas (Division) approves the stratigraphic expansion of the South PA and the Beluga PA in accordance with 11 AAC 83.303. This stratigraphic expansion does not revise the description of the surface acreage committed to either participating area. This Decision expands the outline of each participating area to include producing and prospective intervals within each reservoir.

This approval stratigraphically expands the outline of the South PA to include the producing and prospective intervals within the Tyonek Formation from 2,240' to 4,227' md in the NCU-2 and from 2,187' to 3,575' md in the Aurora Gas Nicolai Creek Unit No. 1B well (NCU-1B) and underlying the portions of Tracts 2, 3, and 4 of the NCU committed to the South PA as described in Exhibit B-2 to the Nicolai Creek Unit Agreement, (Attachment 1).

The outline of the Beluga PA is expanded to include the producing and prospective intervals in the Beluga Formation from 668' to 1,904' md in the NCU-9 and underlying the portions of Tracts 2, 3, and 4 of the NCU committed to the Beluga PA as described in Exhibit B-3 to the Nicolai Creek Unit Agreement, (Attachment 2).

II. BACKGROUND

Effective March 10, 2005, the Division approved the "Revised Nicolai Creek Unit Area, the Revised Participating Areas A and B, and the Formation of the Beluga Participating Area" (March 2005 Decision).

The March 2005 Decision, Section III, paragraph 2, states:

Within the NPA and SPA, reservoirs sandstones are restricted to the Upper Tyonek Formation....Gas appears trapped in the Upper Tyonek Formation in unconsolidated, non-marine sandstone reservoirs between **1,680 and 3,475 feet subsea true vertical depth (SSTVD).** Since the Tyonek reservoirs of both the NPA and SPA are stacked sandstone bodies, the composite areas of the reservoir extent, which is controlled by structure and sandstone distribution and confirmed by seismic and well data, are summed together to define the outline of the SPA and NPA areas.

The BPA is defined by the surface acreage covering the anticipated productive Beluga Formation sandstones. Since the Beluga reservoirs appear to be stacked sandstone bodies, the composite areas of the reservoir extent, which is controlled by structure and sandstone distribution and confirmed by seismic and well data, are summed together to define the outline of the BPA.

The March 2005 Decision noted that the sum of the stacked sandstone bodies which form the Upper Tyonek Formation would define the South PA outline, the interval occurring between 1,680' and 3,475' SSTVD. This SSTVD interval equates to between 1,876' to 4,227' md in the NCU-2 and encompasses the interval from 2,187' to 3,575' md in the NCU-1B sidetrack. However, the March 2005 Decision defined the South PA to include only the producing intervals of the Tyonek Formation encountered in the NCU-2 between 2,422' and 2,918' md.

The March 2005 Decision similarly notes that the sum of the Beluga sandstones would define the outline of the Beluga PA. However, the March 2005 Decision did not specify the depths which define the Beluga PA expressed as an SSTVD interval. The March 2005 Decision defined the Beluga PA producing intervals, expressed as measured depths, within the NCU-9 encountered between 1,320' and 1,477' md.

III. APPLICATION

Aurora applied to stratigraphically expand the South PA by letter dated July 31, 2006, addressed to Michael Menge, Commissioner of DNR. The Division received a copy of this letter by facsimile on September 21, 2006. Aurora submitted to the DNR, and the Division received, an application to stratigraphically expand the Beluga PA on September 26, 2006. Aurora submitted geologic and well data that indicate that approval of this stratigraphic expansion will conform the stratigraphic intervals of the South PA and Beluga PA to the actual intervals capable of producing or contributing to the production of hydrocarbons in paying quantities within each participating area. DNR wrote a letter to the Alaska Oil and Gas Conservation Commission (AOGCC) on September 26, 2006, supporting the approval of regular production and Administrative Amendment to Conservation Order 478A (CO 478A) for the NCU-1B and NCU-9.

On October 5, 2006, Aurora requested authorization from the AOGCC to commence regular gas production from the NCU-1B, the NCU-2, and the NCU-9. The AOGCC approved the request in Conservation Order 478A.01, effective October 27, 2006, based on Aurora's application to DNR to stratigraphically expand the participating areas and Aurora's submittal of letters from DNR, the United States Department of the Interior, Bureau of Land Management (BLM), and the Mental Health Trust Land Office (TLO) acknowledging awareness that the perforated intervals within NCU-1B and NCU-9 wells lay outside of existing participating areas and consenting to regular production from those wells. BLM and TLO also required that royalty payments be adjusted retroactively to the

date of first production from these wells when the expanded participating areas became effective.

IV. DISCUSSION OF DECISION CRITERIA

The Commissioner of the Department of Natural Resources (Commissioner) reviews applications related to units including expansion of units and the formation of participating areas, 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 Director of the Division of Oil and Gas (Director). The Division's review of the Application is based on the criteria set out in 11 AAC 83.303 (a), (b) and (c). Subsection (c), paragraph (4) directs the Commissioner to consider the criteria in subsections (a) and (b) when evaluating an approval of a Participating Area (PA). 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 and Development

Approval of the stratigraphic expansion of the South PA and the Beluga PA has no direct environmental impact. This approval acts solely to expand the stratigraphic interval of the participating areas. The description of the surface acreage committed to the South PA and the Beluga PA does not change.

This Decision is an administrative action and does not authorize any on-the-ground activity. Potential effects on the environment are analyzed when permits to conduct exploration or development in the unit area are reviewed. Approval of this expansion does not convey any authority to conduct any operations on the surface within the unit area. The Unit Operator must still obtain approval of a Plan of Operations from the State, and other permits from various agencies before drilling a well or wells or initiating development activities. DNR considered environmental issues in the lease sale process, the initial unitization process for the unit area leases, and will review them again during the unit plan of operations approval process.

2. The Geological and Engineering Characteristics of the Proposed Stratigraphically Expanded Participating Areas:

A participating area must be expanded to include acreage reasonably known to be underlain by hydrocarbons and known or 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. 11 AAC 83.351(c).

A. Geologic Characteristics and Exploration Activities of the South PA

The reservoir sandstones within the South PA are restricted to the Upper Tyonek Formation. The Upper Tyonek Formation is composed of stacked fluvial sandstone bodies interbedded with thick coals and siltstones. Productive Upper Tyonek sands are often laterally discontinuous due to their fluvial origin and are located within structural closures. Structural closures on the northwest side of the Cook Inlet basin are set up by reverse faults that trend sub parallel to the basin margin and transverse faults that cut and offset fold axes.

The early exploration in the South PA began in 1965 with the drilling of the Texaco, Nicolai Creek State #1. The Nicolai Creek State #1 well was drilled to a total depth of 8,338', abandoned, and then sidetracked as the Nicolai Creek State #1A. Texaco tested the Hemlock Formation and the Tyonek sands in Nicolai Creek State #1A. The Hemlock Formation (7,790'-7,828', 7,583'-7,623', 7,570'-7,850', 7,210'-7,230', and 6,685'-6,725' md) flowed formation water; and the Tyonek sands (3,615'-3,630' and 3,420'-3,462' md) produced dry gas. Nicolai Creek State #1A was produced for 3 months until sand plugged off the production string. The well was shut in until 1991 and suspended.

In 1966, Texaco drilled the NCU-2 and perforated the Tyonek Formation (3,270'-3,315' md). The well produced a minimal amount of gas for one year, and then in 1969, the well was shut in. NCU-2 was suspended in 1991. In July 2002, Aurora LLC re-entered the existing NCU-2 borehole and recompleted the Carya 2-1.1, Carya 2-1.2, and Carya 2-2.1 sands (2,426'-2,476', 2,700'-2,716', and 2893'-2916' md, respectively). The well produced 602 MMcf thru July, 2006.

In August 2002, Aurora re-entered and sidetracked the Nicolai Creek State #1A and then completed it as the NCU-1B. In September 2003, Aurora perforated the Carya 2.4-2, Carya 2.5-1, and Carya 2.6-1 sands (3191'-3211', 3371'-3401', and 3560'-3575' md, respectively) and produced gas, water, and sand. In June 2006, due to the NCU-1B's poor performance, Aurora plugged off the Carya 2-6 sand and added perforations to the Carya 2-1.2 sands (2,307'-2,326' and 2,350'-2,370' md), Carya 2-2.1 sands (2,480'-2,486' md), Carya 2-2.2 sands (2,604'-2,622' md), and Carya 2-3 sands (2,837'-2,842', 2,862'-2,867', 2,913'-2,918' md). Pressure data indicate that there is no depletion in the Carya 2-1.2, Carya 2-1.2, and Carya 2-2.1 zones in the NCU-1B from production in the NCU-2. This indicates that there is a geologic barrier and no communication between the two well bores in these Upper Tyonek sands.

The Division acknowledges that Aurora LLC has already perforated sands below the existing Nicolai Creek Southern PA as described by the 2,422' to 2,918' md in the NCU-2 and concurs that Aurora's plan to stratigraphically expand the Nicolai Creek Southern PA to include all of the productive and prospective gas sands within the Tyonek Formation, from 2,240' to 4,227' md in the NCU-2, and from 2,187' to 3,575' md in the Aurora Gas Nicolai Creek Unit No. 1B well (NCU-1B), is reasonable to develop the resources.

B. Geologic Characteristics and Exploration Activities of the Beluga PA

The Nicolai Creek Beluga Participating Area is defined by the surface acreage covering the anticipated productive Beluga Formation sandstones. The Beluga Formation is a series of stacked fluvial channel sands that are interbedded with thin coals and siltstones. Productive Beluga sands are often laterally discontinuous due to their fluvial origin and are located within structural closures. Structural closures on the northwest side of the Cook Inlet basin are set up by reverse faults that trend sub parallel to the basin margin and transverse faults that cut and offset fold axes.

In 2003, Aurora drilled the NCU-9 to capture the Beluga reserves that were behind 2 strings of pipe in wells drilled off of the same pad (Nicolai Creek State #1A and Nicolai Creek Unit #2). The original application by Aurora for the formation of the Beluga PA had requested the inclusion of the stratigraphic interval of the Beluga Formation encountered between 1,320' and 1,477' md in NCU-9. In October 2003, Aurora perforated this interval (1,320'-1,330', 1,343'-1,393', and 1,407'-1,447' md) and successfully produced dry gas. The NCU-9 has produced 1,042 MMcf thru July 2006.

In September, 2006, Aurora added new perforations in the NCU-9 in shallower and deeper Beluga sands, namely the Tsuga 2-6 (1,148'-1,170', 1,190'-1,200', 1,219'-1,223', and 1,248'-1,264' md), Tsuga 2-7 (1,552'-1,562', 1,624'-1,630', 1,641'-1,662', 1,748'-1,758', and 1,768'-1,778' md), and Tsuga 2-8 (1,827'-1,837', and 1,894'-1,904' md). Additional log pay has been recognized in the Tsuga 2-5. Aurora plans to perforate these zones in the future.

The Division acknowledges that Aurora has already perforated sands above and below the existing PA and concurs that Aurora's plan to stratigraphically expand the Beluga PA to include the Tsuga 2-5, 2-6, 2-7, and 2-8 sands, from 668' to 1,904' md in the NCU-9, is reasonable to develop the resources.

3. The Further Plans of Development for the Participating Areas

The State will benefit from the Operator's further Plan of Development (POD), which proposes to maximize the physical recovery of hydrocarbons from all the gas-bearing reservoirs of the Tyonek and Beluga Formations within the respective participating areas. Maximum hydrocarbon production will enhance the State's long-term royalty and tax revenues. Aurora provided sufficient technical data to define the current and prospective producing intervals and submitted a POD for the period January 1, 2007, through December 31, 2007, which DNR approved on December 21, 2006.

The POD proposes continued review and interpretation of the existing 3D seismic data which may lead to additional development wells targeting the stacked Carya 2 (Upper Tyonek) channel sands or Tsuga (Beluga) sands. Aurora has already received AOGCC approval for the Nicolai Creek Unit No. 10 development well (NCU-10). If successful,

the additional production from this well will require the expansion and modification of the production facility.

Aurora completed a workover of the NCU-1B and has added perforations in the Carya 2. As the well produces the Carya 2-3, 2-4.2 and the 2-5.1, resulting in reservoir pressure decline, the well will be opened to the Carya 2.2 sands, allowing commingled production. Aurora also completed a workover and added perforations in the Tsuga 2 sands. Similar to the plan for the NCU-1B, as the production in the existing intervals results in a decline of reservoir pressure, the well will be opened to the Tsuga 2-6 sands and production commingled with that of the shallower completions. The NCU-2 continues to produce, although production is declining rapidly. Aurora anticipates a recompletion of the Tsuga 2-8.2 and 2-8.3 and the addition of perforations in these intervals encountered in the NCU-2. The NCU-3 continues to produce, although nominally, at a rate of 400 to 600 mcf per day.

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

Aurora submitted tract participation schedules for the individual tracts/leases in the South PA and the Beluga PA (Attachments 1 & 2) as required by 11 AAC 83.371. The proposed allocation distributes expenses and production among the tracts/leases in each participating area on a surface acreage basis. Each participating area is defined by the surface acreage covering the anticipated productive area. Since the gas-bearing Beluga and Tyonek reservoirs are stacked sandstone bodies, the composite area of the reservoirs, which is controlled by structure and sandstone distribution, is summed together to define the outline of each participating area.

The Division finds Aurora's tract participation schedules acceptable for allocating production and costs among the leases in the participating areas. Aurora will work with the Division's Royalty Accounting Section to submit royalty and operator reports to properly allocate the production from the NCU-2, NCU-1B, and NCU-9 to the South PA and Beluga PA, retroactively to November 1, 2003. Aurora will continue to allocate production based on the approved tract participation schedules for each participating area. Aurora will continue to report production from the South PA, and Beluga PA using production accounting unit codes NCPA and NCBE, respectively.

The Nicolai Creek Field represents a degree of economic cost to the State. Aurora successfully restarted sustained production in the NCU-3 well in September 2001 and the AOGCC approved its written plan submitted under AS 31.05.030(i) which qualified the field for a reduction in royalty rate, from 12.5% to 5%. AS 31.05.030(i) provides for a royalty rate of five percent on the first 25,000,000 barrels of oil and 35,000,000,000 cubic feet of gas produced from eligible fields within 10 years of initial production for sale, if production for sale commenced before January 1, 2004. Thus, the State receives 7.5% less royalty revenue from Nicolai Creek production. Factors which compensate the State for this cost include the potential for increased local and statewide employment as AS 31.05.030 (i) requires local hire, an increase to Southcentral gas supply, and an increase to property tax revenue should production volumes require construction of additional facilities.

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 formation of participating areas within unit areas to develop hydrocarbon-bearing reservoirs are well-accepted means of hydrocarbon conservation. The stratigraphic expansion of the South PA and the Beluga PA additionally conserves natural resources by increasing hydrocarbon production without increasing the surface acreage required to produce the additional hydrocarbons or the facilities required to accommodate that additional production. Aurora has perforated additional intervals within existing, approved, and permitted wells. This stratigraphic expansion of existing participating areas promotes efficient evaluation and development of the State's resources, yet minimizes impacts to the area's cultural, biological, and environmental resources.

2. The Prevention of Economic and Physical Waste

This proposed stratigraphic expansion prevents economic and physical waste within the Nicolai Creek Unit. Aurora is the sole working interest owner of the depths which define the South PA and the Beluga PA, thus issues related to equitable cost and revenue sharing between working interest owners of the participating areas do not arise. Waste of capital and physical resources by working interest owners with competing development and production interests within a participating area do not occur when the area is wholly owned by a single entity. Aurora has successfully re-started the NCU -1B and perforated additional intervals in the NCU-9, the NCU-2 and the NCU-1B. Using existing wellbores to increase production prevents economic and physical waste.

Although Aurora owns 100% of the working interest of the South PA and the Beluga PA, as well as the North PA, Aurora does not own 100% working interest of all intervals of the entire NCU. In November, 2006, Aurora assigned to Swift Energy Alaska, Inc. (Swift) a 50% working interest in the Nicolai Creek Unit, exclusive of the current participating areas, the South PA, the North PA, and the Beluga PA, from the surface to 100' below the stratigraphic equivalent of the Upper Tyonek Formation, Carya 2-7 "D" Coal Marker, as encountered at 6,960' md in the Nicolai Creek Unit No. 4 (NCU-4) well. Swift ratified the Nicolai Creek Unit Operating Agreement on October 31, 2006, and plans to explore the potential of oil prospects.

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

The proposed stratigraphic expansion of the South PA and the Beluga PA within the NCU protects the economic interests of the working interest owner of the reservoirs and the royalty owners. The expansion promotes the State's economic interests because hydrocarbon recovery will be maximized and additional production-based revenue will be derived from the expanded participating areas' increased production. The tract allocation schedule presented with the Application treats the royalty owners fairly and

required no revision from the schedule approved in the March 2005 Decision because the participating area acreages do not change with this stratigraphic expansion. BLM, as royalty owner and affected landowner, and TLO, as affected landowner, have required that Aurora submit revised royalty payments, adjusted retroactively to the date of first production from the wells when the stratigraphically expanded participating areas become effective. As a condition of this approval, DNR also requires these retroactively adjusted payments, Section IV, paragraph 4.

IV. FINDINGS AND DECISION

Considering the facts discussed in this document and the administrative record, I hereby make findings and impose conditions as follows.

- 1. The stratigraphic expansion of the South PA and the Beluga PA within the Nicolai Creek Unit promotes the conservation of all natural resources, promotes the prevention of economic and physical waste, protects all parties of interest, and is necessary and advisable to protect the public interest. AS 38.05.180(p); 11 AAC 83.303.
- 2. The applicant for stratigraphic expansion of the South PA and the Beluga PA holds 100% working interest in the participating areas and has sufficient interest in the unit to exercise control of unit operations. 11 AAC 83.316(c).
- 3. The Beluga and South PA's stratigraphic expansion will not diminish access to public and navigable waters beyond those limitations imposed by law or already contained in the oil and gas leases.
- 4. The available geological and engineering data demonstrate that the stratigraphic intervals proposed for the South PA and the Beluga PA are appropriate. Aurora must submit revised royalty payments, adjusted retroactively to the date of first production from the wells, when the stratigraphically expanded participating areas become effective.
- 5. Diligent exploration and delineation of the Tyonek and Beluga Formation reservoirs underlying the approved participating areas is to be conducted by the Unit Operator under the plans of development and operation approved by the State. Before undertaking any specific surface operations, the unit operator must submit a Plan of Operations to the DNR and other appropriate State and local agencies for review and approval. All agencies must grant the required permits before production may commence. DNR may condition its approval of a unit Plan of Operations and other permits on performance of mitigating measures in addition to those in the leases if necessary or appropriate. Requiring strict adherence to the mitigation measures will minimize adverse environmental impacts. A revised participating area POD that describes the status of projects undertaken, drilling results, and the work completed, any changes or expected changes to the plan, and a further plan of development, must be submitted in accordance with 11 AAC 83.343. The current approved POD, the

NCU 33^{rd} POD, is in effect through December 31, 2007. The NCU 34^{th} POD will be due on or before October 2, 2007.

- 6. This Decision expands the stratigraphic limits of the South PA to include producing and prospective intervals of the Tyonek Formation occurring between 2,240' to 4,227' md in the NCU-2 and from 2,187' to 3,575' md in the NCU-1B, equivalent to 1,680' and 3,475' SSTVD, and underlying the portions of Tracts 2, 3, and 4 of the NCU committed to the South PA as described in Exhibit B-2 to the Nicolai Creek Unit Agreement, (Attachment 1).
- 7. This Decision expands the stratigraphic limits of the Beluga Formation to include producing and prospective intervals of the Beluga Formation occurring between 668' and 1,904', md in the NCU-9, equivalent to between 620' and 1,856' SSTVD, and underlying the portions of Tracts 2, 3, and 4 of the NCU committed to the Beluga PA as described in Exhibit B-3 to the Nicolai Creek Unit Agreement, (Attachment 2).
- 8. Aurora must submit revised royalty and operator reports for the South PA and the Beluga PA back to November 1, 2003. Aurora will continue to report and allocate production based on the approved tract participation schedules for each participating area. Aurora will continue to report production from the South PA, and Beluga PA using production accounting unit codes NCPA and NCBE, respectively.

For the reasons discussed in this Findings and Decision, I hereby approve the Stratigraphic Expansion of the South PA and Beluga PA, and their respective tract allocation schedules, subject to the conditions specified herein.

These approvals are effective April 2, 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 1-907-269-8918, or sent by electronic dnr_appeals@dnr.state.ak.us. 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.

//Singed by Antony Scott for	April 2, 2007
Kevin R. Banks,	
Acting Director	Date
Division of Oil and Gas	

Attachments:

- 1. Nicolai Creek Unit Agreement Exhibit B-2
- 2. Nicolai Creek Unit Agreement Exhibit B-3

ATTACHMENT ONE: Nicolai Creek Unit Agreement Exhibit B-2

ATTACHMENT TWO: Nicolai Creek Unit Agreement Exhibit B-3

ATTACHMENT ONE: Nicolai Creek Unit Agreement Exhibit B-2



Exhibit "B"

NICOLAI CREEK UNIT AGREEMENT Unit Area

AGREEMENT	Royally ORRI Owners Royally Interest Noteing Expiration Recording Property Notein Recording Property Notein Recording Property Notein Recording Property Notein Recording Record	0.125C Alica F. & J. Bailey Hinkle 0.0025794 Aurora 100% HBP Anchorage Milkus & Robert K. Masuda 0.0025779 Trom surface to 100° Milkus & Robert K. Masuda 0.0025774 Trom surface to 100° Milkus & Robert T. America Discovery Coutland L. Strobio 0.0025794 Upper Tyonek Alica Coutland 0.0025794 Upper Tyonek Alica Coutland 0.0025794 Upper Tyonek Halsuyo & Eisub Myamata 0.0025794 Discovery 0.0025794 Command Coutland Manash 0.0025794 Discovery 0.0025794 Policy the base of the Ruth S. & Mobiley Phalic & Lang Courand 0.0025794 Policy the base of the Laverna I. Traxinger 0.0025794 Formation (6.9507). David Boless 0.0025794 Laverna I. Traxinger 0.0025794 Formation (6.9507). David Boless 0.0002799 Laverna I. Traxinger 0.0025794 Formation (6.9507). David Boless 0.0002799 Laverna I. Traxinger 0.0002799 Laverna II. Traxinger 0.0002799 Laverna III. Traxinger 0.0002799 Laverna II. Traxinger 0.0002799 Laverna II. Traxinger 0.0002799 Laverna III. Traxinger 0.0002799 Laver	Alica F. & J. Ballay Hinko 0.0025784 samo as abovo HBP Anctionago N/A N/A	he 0.125C David Bolens 0.0100000 samo as abovo НВР Anchorago NJA NJA	ks 0.125C David Bolens 0.0100000 some as above HBP Anchorage 0.47 0083
				David Bole	David Bol
ICOLAI 6	Gross Participating Own	320,0000	45,3000	37.5420 37.5420	7.9030 7.9030
	Greek Greek Tract Number Description of Participating Lands	7. 11 R., R. 12 W., S.M. Saction 20: W112 Comprising a total of approximately 320.0 acres.	2 T. 11 M., R. 12 W., S.M. Sociolo 28 50: Being all that portion of Societo 29: Being all that portion of Societo 29: It is NIZAW/I4SW/I4 & SIZAW/I4SW/I4 compatible approximately 23.0 acros. Introduced the structure of acros. Introduced the structure of acros. Introduced the structure of acros. Introduced approximately 10.0 acros. Int. Being all that unsurvoyed portion of Section 30: EI/ANE/I4SEI/4 Compatible approximately 12.30 acros. Introduced of the shoretine along the mean high tide of Cook Intel. Compatible a proximately 12.30 acros. Introduced of the shoretine along the mean high tide of Cook Intel. Compatible a trial of approximately 45.30 acres.	5 T. 11 N., R. 12 W., S.M. Socion 29. Deing all dide and submerged lands within the S1/2NW1/4SW1/4 and the N1/2SW1/4SW1/4 Comprising a total of approximately 37.542 acres.	4 T. 11 N., R. 12 W., S.M. Soction 30: being all tide and submerged lands within the SE1/4NE1/4SE1/4 Computsing a total of approximately 7.503 acres.

Currently subject to Royally Reduction Relief at .05



Exhibit "B-2"

NICOLAI CREEK UNIT AGREEMENT South Participating Area

DIVISION OF OIL AND GAS

						1				
Creek Linit Yract Number	k t er Description of Participating Lands	Gross Acres	Tract Participatin g Factor (PA)	Committed Participating Acreage	Lessor / Royalty Owner Lease Serial No.	Royally	ORRI Owners	Overriding Royally Interest	Working Interest Owners & Percentage Working Interest	Expiration Date
N	T. 11 M., R. 12 W., S.M. Section 29 & 30: Being all that portion of Section 29: the SW1/4NW1/4SW1/4 comprising approximately 1.8 acres, and, being all that usurveyed portion of Section 30: SE1/4NE1/4SE1/4 Comprising approximately 2.30 acres, landward of the shoreline along the mean high tide of Cook Inlet, and, being all that usurveyed portion of Section 30: SE1/4NE1/4SE1/4 Comprising approximately 2.30 acres, landward of the shoreline along the mean high tide of Cook Inlet. Comprising a total of approximately 4.10 acres.	4.1000 of Gook Inlet, of Gook Inlet.	4.1000 0.1013321 (inlet,	4.1000	BLM AA-8426	0.1260	Ilinkle Alasuda Masuda Tamoth Tokama Tokama ants Tokama Ants Ants Ants		Aurora 100% from surface to 100° below the base of the Upper Tyonek Aurora 50%, Swift 50% downward from 100° below the base of the Upper Tyonek Formation (6,850°).	d #
n	T. 11 M., R. 12 W., S.M. Section 28: baing all tide and submerged lands within the SW14NW114SW114 and the N172SW114SW114 Comprising a total of approximately 28.458 acres.	28.4580	28.4560 0.7033440	28.4580	State of Alaska ADL-17585	0.1250	David Bolens Mantal Health Trust Land Of total	0.010000 0.050000 0.0150000	same as above	
4	T. 11 N., R. 12 W., S.M. Section 30: being all tide and submerged lands within the SE1/ANE1/4SE1/4 Comprising a total of approximately 7.903 acres.	7.9030	7,8030 0.1953239	7.9030	State of Alaska ADL-17598	0.1250 ·	David Bolens Mantal Health Trust Land Of Lotal	0.0150000 0.0050000 0.0150000	вате аз абоче	HB.
	Total Parlicipating Area Land:	40.4610	1.0000	40.4610						

Currently subject to Royally Reduction Relief at .05

ATTACHMENT TWO: Nicolai Creek Unit Agreement Exhibit B-3



Exhibit "B"

NICOLAI CREEK UNIT AGREEMENT Unit Area

	•) i			5				t			
				_	Unit Area	rea			⊸ O	ON AND GAS		
Creg Crat Number	sk t ct car car car car car car car car car car	Gross	Committed Participating (Acreage	Lessor / Royatty Owner Lense Serial No.	Royally	ORRIOwners	Overriding Rough Internet	Working Interest Owners & Perconlage	Expiration	Bourough Recording	5	
-	7. 11 N. R. 12 W. S.M. Socion 20: W1/Z Compitsing a total of approximately 320.0 acros.	320.0000	320,0000	State of Ataska ADL-63279	0.125C	Alica Milsu Keiso Donal Alica Halsu Jayna Rosa Ruth (Patric Laven John (Aurora 100% from surface to 100 below the base of the Upper Tyonek Aurora 50%, Swill 50% downward from 100 below the base of the Upper Tyonek Fermation (6,950).	НВ Ь Н	Anchorago	N/A N/A	NA NA
N	T. 11 N., R. 12 W., S.M. Section 28 & 30: Deing all that portion of Section 29: the NIZAW1/4SW1/4 & S1/ZWW1/4SW1/4 Compilising approximately 23.0 errors, landward of the Styreline along the mean high tide of Gook Intel, and all of the SW1/4SW1/4NW1/4 compressing approximately 10.0 errors, onto being all that unsurveyed portion of Section 30: E1/ZME1/4SE1/4 comprising approximately 12.30 errors, landward of the styreline along the mean high tide of Gook Intel. Comprising a total of approximately 45.30 errors,	45.3000 300k Iriet, 300k Iriet.	45,3000	BLM AA-8426		Alica F. & J. Bailoy Hinklo Missua & Robert K. Masuda Masuda & Robert K. Masuda Donald L. Strubtio Alico Coultand Alico Coultand Alico Coultand Alico Coultand Alico Coultand Rassa M. & Bernard Minesh Routh S. & Mobiey Phans Pautica & Lauck B Conway Lavema I. Trannger John R. Rodenick David Belens David Belens Lotal	0.0025784 0.0028571 0.0028571 0.0028574 0.0025784 0.00285794 0.0025784 0.0025784 0.0025784 0.0025784 0.0025784 0.0025784	sато as abovo	œ E	Anctorago	N/A	NA
n	T. 11 N., R. 12 W., S.M. Section 28: being all tide and submerged lands within the S1/ZNW1/4S/W1/4 and the N1/ZS/W1/4S/W1/4 Comprising a total of approximately 37.542 acres.	37.5420	37.5420	State of Alaska ADL-17585	0,125C	David Bolens Lotal	0.0100000	samo as above	HBP	Anchorage	N/A	N/A
4	T. 11 N., R. 12 W., S.M. Socilon 10: Deing all tide and submerged lands within the SE1/4NE1/4SE1/4 Comprising a total of approximately 7.903 acres.	7.9030	7.9030	State of Alaske ADL-17598	0.1250	David Botens total	0.0100000	same as above	ABH G	Anchorage	047 00	0083
	Total Unlized Land:	410.7450	410.7450									

Currently subject to Royalty Reduction Relief at .05

Total State Land: 365,4450 Total BLM Land: 45,3000 Total Unitized Land: 410,7450



DIVISION OF OIL AND GAS

NICOLAI CREEK UNIT AGREEMENT Beluga Participating Area

Exhibit "B-3"

		7			
	Expiration Date	HB dB	HBP	НВР	
	Working Interest Owners & Percentage Working Interest		вате вs above	same as above	
	Overriding Rovally Interest	0.0025794 0.0028571 0.0028571 0.0025794 0.0025794 0.0025794 0.0025794 0.0025794 0.0025794 0.0025794 0.0025794 0.0025794	0.010000 0.005000 0.0150000	0.010000 0.005000 0.0150000	20.
	ORRIOWNers	Alice F. & J. Balley Hinkle Milsue & Robert K. Masuda Kristo & Marcella T. Masuda Donald L. Stroble Afea Coulthard Alson & Elsuo Myamoto Jayne Y. & Fred S. Hokamo Jayne Y. & Fred S. Hokamo Rose M. & Bernard Maresh Ruth S. & Mobiley Pharis Patrica & Jack B Conway Laverna I. Trakinger John R. Roderick David Bolens	David Bolens Mantal Heath Trust Land Of total	David Bolens Mantal Health Trust Land Ol_ total	 Currently subject to Royalty Reduction Relief at .05
•	Royalty Interest	D.1250	0.1250 •	0.1250 •	Currently subject
•	Lessor / Royally Owner Lease Serial No.	BLM AA-B426	State of Alaska ADL-17585	State of Alaska ADL-17598	·
1	- Committed Participating Acreage	45.3000	27.5500	7.9030	80.7530
	Tract Participatin 9 Factor (PA)	45.3000 0.5609699 5k Inlet, 8k Inlet.	27.5500 0.3411638	7.9030 0.0978663	1.0000 (percentage) 0.4390301 0.5609699 1.0000000
	Gross Acres	45.3000 of Cook Inlet,): or Cook Inlet.	27.5500	7.9030	80.7530 35.4530 45.3000 80.7530
	r Description of Participating Lands	T. 11 N., R. 12 W., S.M. Saction 29 & 30: being all that portion of Saction 29: the N12NW14SW14 & S12NW14SW14 comprising approximately 23.0 acres, landward of the storeline along the mean high lide of the storeline along the mean high lide of comprising approximately 10.0 acres; and, being all that unsurveyed portion of Section 30: E1/2NE14SE14 comprising approximately 12.30 acres, landward of the shoreline along the mean high tide of (Comprising a total of approximately 45.30 acres.	T. 11 N., R. 12 W., S.M. Section 28: being all tide and submerged lands within the S1/ZNW1/4SW1/4 and the NW1/4SW1/4SW1/4 Comprising a total of approximately 27.55 scres.	T. 11 N., R. 12 W., S.M. Section 30: Deing all tide and submerged lands wiltin the SE1/4NE1/4SE1/4 Comprising a total of approximately 7,903 acres.	Total Participating Area Land: Total State Participating Area Land: Total Other Participating Area Land: Total Participating Area Land:
	Craek Tack Number	N	n	4	