

# **CORSAIR UNIT AGREEMENT**

## **APPROVAL OF THE APPLICATION TO FORM THE CORSAIR UNIT**

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

**JANUARY 31, 2007**

## TABLE OF CONTENTS

I.	DECISION SUMMARY	Page 3
II.	BACKGROUND	Page 3
III.	APPLICATION FOR THE FORMATION OF THE CORSAIR UNIT	Page 3
IV.	DISCUSSION OF DECISION CRITERIA	Pages 4-13
	A. Decision Criteria considered under 11 AAC 83.303(b)	
	1. The Environmental Costs and Benefits of Unitized Exploration and Development	
	2. The Geological and Engineering Characteristics of the Proposed Stratigraphic Expansion Area and Participating Areas, and Prior Exploration Activities in the Unit Area	
	3. Plans for Exploration or Development for the Participating Areas	
	4. The Economic Costs and Benefits to the State	
	5. Amendments to the State Only Model Unit Agreement Form and Other Relevant Factors	
	B. Decision Criteria considered under 11 AAC 83.303(a)	
	1. Promote The Conservation of All Natural Resources	
	2. The Prevention of Economic and Physical Waste	
	3. The Protection of All Parties of Interest, Including the State	
V.	FINDINGS AND DECISION	Pages 14-16
VI.	ATTACHMENTS	Page 16
	1. Exhibit A, Corsair Unit Tracts/leases	
	2. Exhibit B, Map of the Corsair Unit Boundary	
	3. Exhibit G, Corsair Plan of Exploration (Initial POE)	
	4. Unit Agreement	

## **I. DECISION SUMMARY**

Forest Oil Corporation (Forest), as the designated Corsair Unit Operator, filed the Corsair Unit formation application (Application) with the State of Alaska (state), Department of Natural Resources (DNR). Forest has submitted confidential and public portions of the application that meet the requirements for a complete application under 11 AAC 83.306. Public comment period closed on January 17, 2007, and DNR received no comments.

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

## **II. BACKGROUND**

Forest filed the Application with DNR, on behalf of itself as the sole working interest owner (WIO). The proposed unit is located in the center of Upper Cook Inlet, approximately 12 miles southwest of North Cook Inlet Field. The proposed unit area covers approximately 10,185 acres within four individual State of Alaska oil and gas leases. Approval of the proposed Corsair Unit Agreement (Agreement) would conform and modify the lease contracts to be consistent with the Agreement, and extend the term of leases for as long as they are subject to the Agreement.

Three of the leases in the proposed unit area were offered in the Cook Inlet 1999 sale held on April 21, 1999. DNR issued oil and gas leases ADLs 389196, 389197, and 389198 effective February 1, 2000, on lease form DOG 9609 (Rev 9/99) which provides a seven year primary term and reserves a fixed royalty rate of 12.5 percent to the state. The primary terms of ADLs 389196, 389197, and 389198 expire on January 31, 2007. The fourth lease was offered in the Cook Inlet 2000 sale, held on August 16, 2000. DNR issued oil and gas lease ADL 389515 effective May 1, 2001, on lease form DOG 200004 which provides a seven year primary term and reserves a fixed royalty rate of 12.5 percent to the State. The primary term of ADL 389515 expires on April 30, 2008.

## **III. APPLICATION**

Forest submitted the Application on November 29, 2006, and simultaneously paid the \$5,000.00 unit application filing fee, in accordance with 11 AAC 83.306 and 11 AAC 05.010(a)(10)(D), respectively. The Application includes: Exhibit A legally describing the proposed unit area, its leases, and ownership interests; Exhibit B, a map of the proposed unit; and Exhibit G, the proposed Plan of Exploration (Initial POE), and the Agreement; (Attachments 1-4). The Application also includes the Corsair Operating Agreement, and technical data in support of the Application.

The Agreement is based on DNR's State Only Model Unit form dated June 2002 (Model Form) with modifications proposed by DNR and Forest. The Agreement, discussed in Section IV.A.5, requires the Unit Operator, Forest, to file unit plans describing the activities planned for the proposed unit area. Forest must consider how it can best develop the resource underlying the entire unit area, without regard to internal lease boundaries. Forest filed a proposed five year Initial POE, discussed in Section IV.A.3.

The Division determined that the Application was complete and published a public notice in the "*Anchorage Daily News*" on December 18, 2006, and in the "*Peninsula Clarion*" on Thursday, December 17, 2006, under 11 AAC 83.311. Copies of the Application and the public notice were provided to interested parties under 11 AAC 83.311. DNR provided public notice to the Alaska Department of Environmental Conservation, the DNR Office of Habitat, Management and Permitting, the Kenai Peninsula Borough, the Native Village of Tyonek, the City of Kenai, the Tyonek Village Corporation, Cook Inlet Regional Corporation, the Tyonek Postmaster, the Soldotna Postmaster, and the radio station KSRM in Kenai. The notice was also published on the State of Alaska Public Notice website and the Division's website. The public notices invited interested parties and members of the public to submit comments by January 17, 2007. DNR received no comments regarding the Application.

#### **IV. DISCUSSION OF DECISION CRITERIA**

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

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

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

The proposed Corsair Unit area lies completely offshore in the center of Upper Cook Inlet, east of the village of Tyonek. This area is habitat for a variety of marine mammals, waterfowl, and fish. Area residents may use this area for subsistence hunting and fishing. Oil and gas activity in the proposed unit area may affect some wildlife habitat and some subsistence activity. Mitigation measures, including seasonal restrictions on specific activities, reduce the impact on fish, wildlife, and human populations. Mitigation measures specifically address potential impacts to subsistence access and harvests.

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

DNR considered all comments submitted before holding the Cook Inlet Sales held in 1999 and 2000. DNR included mitigation measures in the leases. The proposed Corsair Unit leases contain stipulations designed to protect the environment and address concerns regarding impacts to the area's fish and wildlife species and to habitat and subsistence activities. They address issues such as the protection of primary waterfowl areas, site restoration, construction of pipelines, seasonal restrictions on operations, public access to, or use of, the leased lands, and avoidance of seismic hazards. Including the leases in the Corsair Unit will neither change these protective measures, nor result in additional restrictions or limitations on public access to the lands or to public and navigable waters. Furthermore, lease operations both before and after unitization are subject to a coastal zone consistency determination, and must comply with the terms of both the State Coastal Management Program and Kenai Peninsula Borough Coastal Management Plan. Lease and unit operations also require State approval of a Plan of Operations application.

Ongoing mitigation measures such as seasonal restrictions on specific activities in certain areas will reduce the impact on bird, fish, and mammal populations. Designating primary waterfowl areas and restricting activities within these areas is one method of protecting the bird habitat. DNR requires consolidation of facilities to minimize surface disturbances. Regulating waste disposal is another way to limit environmental impacts. With these mitigating measures, the anticipated exploration and development related activity is not likely to significantly impact bird, fish, and mammal populations. The anticipated activity under the Agreement will impact wildlife, habitat and subsistence activity less than if the lessees developed the leases individually. Unitized exploration, development and production will minimize surface impact.

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

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

The Initial POE requires the drilling of a new exploratory well within the unit area. When Forest applies for permits and authorizations for the well from the various federal, state, and local agencies, interested parties will have the opportunity to comment during the permit review process.

## **2. The Geological and Engineering Characteristics of the Reservoir and Prior Exploration Activities of the Proposed Corsair Unit Area**

### **Introduction**

The Corsair prospect is located in the middle of Cook Inlet to the northwest of East Forelands and northeast of the Middle Ground Shoal field. The prospects lie on trend with the North Cook Inlet gas field approximately 12 miles to the northeast and the Cannery Loop and Kenai gas fields to the south. Forest provided the Division with geological and geophysical data to support the evaluation of the Corsair prospect. The geological data Forest provided consists of structural contour maps of the lower Sterling - Beluga and Tyonek horizons, map of lower Sterling - Beluga net sand, paper and digital copies of wireline logs from five neighboring wells, paper copies of mud logs from three neighboring wells and three cross sections through the prospect. The geophysical data Forest provided consists of eight interpreted paper seismic lines (two strike and six dip lines) over the heart of the prospect.

### **Regional Tectonic Setting and Structural Geology**

The Cook Inlet basin is an elongate, northeast-southwest trending, fault-bounded forearc basin that extends from Matanuska Valley southward along the Alaska Peninsula. The Corsair prospect is a doubly plunging anticline located in the central portion of the Cook Inlet basin, south of the North Cook Inlet structure and east of the Middle Ground Shoal structure. Each of these structures have successfully trapped hydrocarbons and appear to be basement-involved fault propagation folds. The structure at the Corsair prospect, also known as the SRS structure, mimics the North Cook Inlet structure and demonstrates four-way closure.

### **Depositional Systems and Stratigraphic Framework**

The Tertiary clastic sediments were deposited into the Cook Inlet Basin as two major non-marine depositional systems consisting of alluvial-fan and axial-fluvial systems.

Alluvial-fan systems occur along the margins of the basin and were sourced from adjacent highlands created by the basin-bounding faults. The fans are conical, lobate deposits of predominantly coarse-grained sediments emplaced by water and gravity-induced density flows. Migrating axial-fluvial systems occupy the central portion of the basin and interfinger with the fans towards the basin margin. These fluvial systems result in the thick accumulation of sandstone, siltstone and coal in the basin center. The sedimentary accumulations of these two systems are regionally time transgressive and represent laterally equivalent facies deposited across the basin. The Corsair prospect lies in the center of the basin and consist mainly of the axial-fluvial facies.

#### **Area Wells**

In Cook Inlet there are six exploration wells useful for evaluating the Corsair prospect: Shell SRS State #1, Shell SRS State #2, Phillips Tern A-1, Arco South Cook Inlet State #2, Arco South Cook Inlet State #3, and East Middle Ground Shoal State 18751 #1. The Tern A-1 well was drilled to test gas in the Sterling and Beluga formations, while the other five were drilled to test for oil potential in the Tyonek and Hemlock formations. The East Middle Ground Shoal State 18751 #1 also tested for gas in the Middle Ground Shoal Sands.

#### **Corsair Prospect**

The Corsair prospect is the large NNE-SSW trending doubly plunging, SRS anticline with four-way dip closure. It is located in the middle of Cook Inlet approximately 12 miles southwest of the ConocoPhillips Tyonek platform in water depths that vary from 80 to 120 feet over the structure. The structure is approximately 2.5 miles wide and 9 miles long. It lies on trend with the North Cook Inlet gas field to the north and the Cannery Loop and Kenai gas fields to the south. The anticline is asymmetric with steep dips on the western limb and shallow dips of generally less than 15 degrees on the east. Other folds in the general area exhibit a similar asymmetry. The steep western flank is bounded on the west by a deep-seated thrust fault that extends slightly into the lower Tertiary strata. The anticline is cut by several normal faults oriented perpendicular to the fold axis which compartmentalize the reservoir into separate fault blocks. The primary target is shallow gas in the lower Sterling and upper Beluga formations, which are proven gas reservoirs in the North Cook Inlet field to the northeast. A secondary exploration target is oil in the Tyonek formation.

The seismic data over the Corsair Prospect demonstrates four way closure through the entire Tertiary section. Forest believes that unusually high seismic amplitudes at the crest of the structure in the Sterling and uppermost Beluga Formations represent direct hydrocarbon indicators for gas. These amplitude anomalies are the primary drilling targets.

### **3. Plan of Exploration and Development for the Proposed Corsair Unit**

The WIO has provided technical data sufficient to define the prospect under consideration, has committed its lease interests to the proposed unit and has submitted an approved Initial POE. The Initial POE for the proposed Corsair Unit establishes

commitments that Forest shall meet in order for the Corsair Unit to continue forward. The terms of the Initial POE require Forest to timely conduct exploration, evaluation, and development activities that will result in production of commercial resource, if found, sooner than if the unit were not formed at this time and sooner than would occur under any individual lease exploration effort. Adherence to these terms will satisfy the performance standards and diligence requirements that the Division and Forest agreed to as a condition for approval of the Agreement. Failure to meet the commitments set forth in the approved Initial POE results in the automatic termination of the Corsair Unit and the termination of the leases.

The five-year Initial POE includes plans to explore and develop the Sterling-Beluga interval. During the first three years of the Initial POE, Forest will conduct exploration activities. In order to drill exploratory wells on an offshore prospect, Forest requires the use of a rig capable of drilling offshore without platform support. If Forest succeeds in negotiating contractual arrangements which cause such a rig to become available in Cook Inlet, it will be the first time such a rig has been available since 1993. Such a rig may then be available for use by other operators which may lower costs on exploration and development in other portions of the Cook Inlet basin.

By December 31, 2007, Forest has agreed to provide evidence to the satisfaction of the Commissioner of a rig/drilling commitment that would enable Forest to drill a well within the Corsair Unit no later than December 31, 2008. Failure to meet the December 31, 2007, commitment will result in the automatic termination of the Corsair Unit effective January 1, 2008. In that event, Forest will submit a payment equivalent to \$25.00 per acre for the lease acreage contained in ADLs 389196, 389197, and 389198, which would have expired effective January 31, 2007. Forest will also relinquish the fourth lease, ADL 389515, due to expire on April 30, 2008. If Forest fails to drill the exploration well by December 31, 2008, the Corsair Unit will automatically terminate effective January 1, 2009, and Forest will submit payment equivalent to \$35.00 per acre for the all of lease acreage contained in the Corsair Unit.

During the third year of the Initial POE, January 31, 2009, to January 31, 2010, given favorable results from the evaluation of the exploration well data, Forest shall conduct extended testing to confirm the presence of gas in commercial quantities and apply to form an Initial Participating Area (IPA). If Forest obtains approval of an Initial Participating Area, the Initial POE will be revised (Revised Initial POE) to include the lease areas not committed to the IPA, and Forest shall submit an approved Initial Plan of Development (Initial POD) that includes the lease areas committed to the IPA, as appropriate under 11 AAC 83.343. If Forest fails to obtain approval from DNR to establish an IPA within the Corsair Unit by January 31, 2010, the Corsair Unit will automatically terminate effective February 1, 2010. The expired acreage will return to the state. Any acreage committed to the Corsair Unit not committed to the IPA and not included in the approved Revised Initial POE will automatically contract out of the Unit and return to the state.

During the period January 31, 2010, to January 31, 2011, the first year of the Revised Initial POE and first year of the Initial POD, (fourth year of the Initial POE), Forest shall consider drilling a second exploration well within the Corsair Unit. Forest shall submit an approved Revised Initial POE that describes exploration activities to be conducted on leases ADL 389196 and ADL 389515 within the remaining two years of the Initial POE.

During the second year of this Revised Initial POE and Initial POD, the fifth and final year of the Initial POE, for the period January 31, 2011, to January, 31, 2012, Forest will submit the necessary applications to obtain approvals, including a plan of operations, that will allow construction of pipelines and infrastructure to permit commercial production of gas from the Corsair Unit Participating Area(s). If appropriate, Forest will also submit an approved Revised Initial POD for the period January 31, 2011, to January, 31, 2012.

After fulfilling all of the obligations in this Initial POE, any tract not having a portion of the lease included in an approved Participating Area by January 31, 2012, contracts out of the Unit Area, unless there is a well certified capable of producing in paying quantities located on that tract. Any lease partially committed to a Participating Area by January 31, 2012, will be segregated as to the portion excluded from the Participating Area. The portion of the lease excluded from the Participating Area will automatically contract from the Corsair Unit and the expired acreage will return to the state, unless included in an approved POE. Forest has also agreed to waive the lease extension provisions set out in 11 AAC 83.140 and Article 15.2 of the Corsair Unit Agreement, and the notice, hearing, and judicial proceedings provisions set out in 11 AAC 83.374, applicable to default and/or termination or any contraction of the Corsair Unit. Forest has also agreed to waive the lease extension provisions set out in 11 AAC 83.140 and Article 15.2 of the Corsair Unit Agreement, and the notice, hearing, and judicial proceedings provisions set out in 11 AAC 83.374, applicable to default, termination, and contraction of the Corsair Unit.

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

The Agreement defines the relationship between the Unit Operator, WIO, and the royalty owner. It describes the rights and responsibilities, in addition to those imposed by state law and the leases, of the Unit Operator, WIO and royalty owner for exploration of the unit area. It protects the interests of the state and the lessees. It defines the parties' rights and responsibilities in the event of successful or unsuccessful exploration results. DNR may approve the Agreement if the available data suggests that the unit area covers one or more geologic formations that should be developed under a DNR approved plan, and the proposed unit meets the other statutory and regulatory criteria.

Approval of the Agreement in combination with the Initial POE will result in both short term and long-term economic benefits to the state. The assessment of the leases' hydrocarbon potential will create jobs in the short term. If the WIO makes a commercial discovery and begins development/production from the Corsair Unit, the state will earn royalty and tax revenues over the long-term life of the field.

## **5. Amendments to the State Only Model Unit Agreement Form and Other Relevant Factors**

Both DNR and Forest proposed revisions to the Agreement. The revisions proposed by DNR (Attachment 4), address Articles 9: Participating Areas; 11: Allocation of Production; 12: Leases, Rentals and Royalty Payments; and 13: Unit Expansion and Contraction. The DNR proposed revisions have been made to all unit agreements for which they were proposed since 2002. The revisions further protect the state's interest, provide additional clarity to the Agreement language and, in combination with the lease amendments discussed below, conform the Agreement and current lease forms. Forest has accepted these revisions.

Forest proposed revisions to Article 1: Definitions; Article 3: Creation and Effect of Unit; Article 7: Unit Operating Agreement; Article 8: Plans of Exploration, Development and Exploration; Article 9: Participating Areas; Article 10: Offset Wells; Article 11: Allocation of Production; Article 12: Leases, Rentals and Royalty Payments; and Article 14: Unit Effective Date, Term and Termination. Some of the revisions proposed by Forest simply clarified language, which the state accepted.

Forest also proposed revisions concerning platform to shore transportation allowances and limiting the Commissioner's discretion in certain instances. The state did not accept these. Legislation passed in 1978 revised the older lease form (DL-1 and DL-2) and mandated that all royalty payments be paid free of unit expenses. The state's interest is best protected in disallowing gathering line costs as deductions to the royalty share. The state rejected proposed revisions by Forest which would limit the Commissioner's discretion to manage the unit in the public interest.

Under the Initial POE, Forest has committed to drill the first Corsair Unit well by December 31, 2008, and to form an IPA by January 31, 2010. Failure to perform either of these commitments, as well as other commitments in the Initial POE, will result in the automatic termination of the Corsair Unit, the expiration of the leases, and the return of the leasehold interests to the state. These commitments provide the state with the opportunity to receive royalties from the leases sooner than if the acreage were re-offered in a lease sale. Three of the leases in the proposed unit area will expire on January 31, 2007, if they are not extended by unitization. If the leases expire, the leasehold interest will return to the state. The earliest that the Division could re-offer the land, under the current Five Year Oil and Gas Lease Sale Schedule, is May 2007. There is no certainty that anyone would bid on the tracts or pursue exploration of this area. If the Division leased the tracts again in 2007, the state would receive bonus payments and rentals for the primary term of the new leases. However, it could be years before the new lessees would propose exploration of the area.

Three of the leases proposed for the Corsair Unit were issued on DOG 9609 (rev. 9/99), and the fourth lease is on form DOG 200004. Including the leases in the Corsair Unit Agreement would conform and modify the lease contracts to be consistent with the Agreement. Consistent lease provisions allow the WIO and the state to reduce the

administrative burdens of operating and regulating this unit. Conforming the terms of the older leases to the Agreement allows the state to avoid costly and time-consuming re-litigation of some problematic lease provisions in the older forms. Any additional administrative burdens associated with the formation of the new unit are far outweighed by the additional royalty and tax benefits derived from any production that may occur if the exploration and development activity is successful.

Effective the date of this decision, the WIO agreed to permanently amend the terms of all of the leases within the unit to conform with the provisions in DOG 200604. The amendments to the lease form include:

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

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

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

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

- Insert “under 11 AAC 83.361” in the fourth sentence of paragraph 15(d).

Paragraph 15(d), as amended, reads:

Except as otherwise provided in this subparagraph, where only a portion of the leased area is committed to a unit agreement approved or prescribed by the state, that commitment constitutes a severance of this lease as to the unitized and nonunitized portions of the leased area. The portion of the leased area not committed to the unit will be treated as a separate and distinct lease having the same effective date and term as this lease and may be maintained only in accordance with the terms and conditions of this lease, statutes, and regulations. Any portion of the leased area not committed to the unit agreement will not be affected by the unitization or pooling of any other portion of the leased area, by operations in the unit, or by suspension approved or ordered for the unit. If the leased area has a well certified as capable of production in paying quantities under 11 AAC 83.361 on it before commitment to a unit agreement, this lease will not be severed.

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

**1. Promote The Conservation of All Natural Resources**

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

The Agreement will promote the conservation of both surface and subsurface resources through unitized (rather than lease-by-lease) development. Unitization allows the Unit Operator to explore the area as if it were one lease. Without the Agreement the lessee would be compelled to seek permits to drill wells on each individual lease in order to extend the leases beyond their primary terms. Unitization reduces both the number of facilities required to develop reserves that may be discovered and the aerial extent of land required to accommodate those facilities. Review and approval of exploration and development permits under a unit agreement will also ensure that rational surface-use decisions are made without consideration of individual lease ownership or expense. After unitization, facilities can be designed and located to maximize recovery and to minimize environmental impact, without regard to lease ownership. Although the applicant has not determined the extent of any oil and gas contained in the prospective reservoir, the Agreement will ensure that the acreage is explored and recovery from the leases is maximized if a commercial hydrocarbon accumulation is discovered.

**2. The Prevention of Economic and Physical Waste**

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

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

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

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

The Agreement, in combination with the Initial POE with the agreed-to terms and conditions set out in this decision, promotes the state's economic interests because exploration will likely occur earlier than without unitization. Diligent exploration under a single approved unit plan without the complications of competing Operators is in the state's best interest. It advances evaluation of the state's petroleum resources, while minimizing impacts to the region's cultural and environmental resources. A commercial discovery will stimulate the state's economy with production-based revenue, oil and gas related jobs, and service industry activity.

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

## **V. FINDINGS AND DECISION**

### **A. The Conservation of All Natural Resources**

1. The Agreement will conserve all natural resources, including hydrocarbons, gravel, sand, water, wetlands, and valuable habitat.
2. The unitized development and operation of the leases in this proposed unit will reduce the amount of land and fish and wildlife habitat that would otherwise be disrupted by individual lease development. This reduction in environmental impacts and preservation of subsistence access is in the public interest.
3. If the exploration activities under the Initial POE result in the discovery of a commercially producible reservoir, there may be environmental impacts associated with reservoir development. All unit development must proceed according to an approved plan of development. Additionally, before undertaking any specific operations, the Unit Operator must submit a unit Plan of Operations to the Division and other appropriate state and local agencies for review and approval. The lessees may not commence any drilling or development operations until all agencies have granted the required permits. DNR may condition its approval of a unit Plan of Operations and other permits on performance of mitigation measures in addition to those in the modified leases and the Agreement, if necessary or appropriate. Compliance with mitigation measures will minimize, reduce or completely avoid adverse environmental impacts.

### **B. The Prevention of Economic and Physical Waste**


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

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

1. Forest provided evidence of reasonable effort to obtain joinder of any proper party to the Agreement.
2. Forest, the sole WIO in the Corsair Unit, holds sufficient interest in the unit area to give reasonably effective control of operations, and four State of Alaska leases are proposed for the Corsair Unit.
3. The Agreement, conditioned upon the performance of the Initial POE, adequately and equitably protects the public interest, and is in the state's best interest.
4. The Agreement meets the requirements of 11 AAC 83.303.
5. The Division complied with the public notice requirements of 11 AAC 83.311.
6. The Agreement will not diminish access to public and navigable waters beyond those limitations (if any) imposed by law or already contained in the oil and gas leases covered by this Agreement.
7. The Agreement provides for expansions and contractions of the unit area in the future, as warranted by data obtained by exploration or otherwise. The Agreement thereby protects the public interest, the rights of the parties, and the correlative rights of adjacent landowners.
8. The Initial POE, subject to the terms and conditions discussed in Section IV.A.3, meets the requirements of 11 AAC 83.303 and 11 AAC 83.341. The Initial POE, Exhibit G to the Agreement, as amended by this decision, is approved. The Unit Operator shall conduct the proposed exploration activities in accordance with the timelines specified in the plan. The Initial POE describes the performance standards and diligence requirements that the state requires.
9. The Unit Operator shall submit an annual status report on the Initial POE to the Division. The annual status report must describe the status of projects undertaken and the work completed, as well as any proposed changes to the plan. The Annual status report on the Initial POE will be due at least sixty days before the anniversary date of the Initial POE, or by November 1, 2007.
10. The Corsair Unit shall expedite exploration and potential development of the unit area. With the formation of the Corsair Unit, economic benefits to the state outweigh the economic costs of extending the primary term of the state leases committed to the unit.

For the reasons discussed in this Findings and Decision, I hereby approve the Agreement subject to the conditions set out in this decision. The Agreement will become effective as of the day approved by the Director.

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 K. 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@dnr.state.ak.us](mailto: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.



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

1-31-07

Date

## VI. ATTACHMENTS

- 1) Exhibit A, Corsair Unit Tracts/leases
- 2) Exhibit B, Map of the Corsair Unit Boundary
- 3) Exhibit G, Corsair Plan of Exploration (Initial POE)
- 4) Corsair Unit Agreement

ATTACHMENT ONE  
Exhibit A, Corsair Unit Tracts/Leases

CORSAIR UNIT AGREEMENT  
STATE OF ALASKA

EXHIBIT "A"

RECEIVED

NOV 29 2006

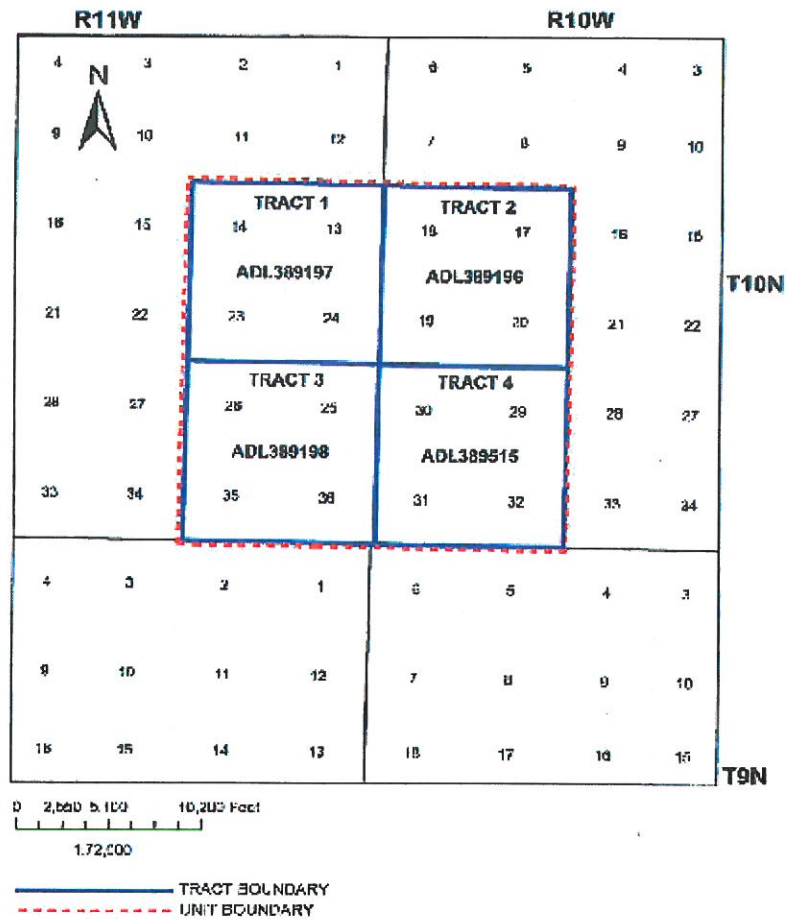
DIVISION OF  
OIL AND GAS

TRACT NO.	LEASE NO.	LEGAL DESCRIPTION	ACRES	ROYALTY	LESSORS OF RECORD	WORKING INTEREST	ORRI
1	ADL-389197	T.10N., R.11W., S.4. Sec. 13, Protracted, All Sec. 14, Protracted, All Sec. 23, Protracted, All Sec. 24, Protracted, All	2,560	12.50%	Forest Oil Corporation	100.00%	N/A
2	ADL-389196	T.10N., R.10W., S.4. Sec. 17, Protracted, All Sec. 18, Protracted, All Sec. 19, Protracted, All Sec. 20, Protracted, All	2,529	12.50%	Forest Oil Corporation	100.00%	N/A
3	ADL-389198	T.10N., R.11W., S.4. Sec. 25, Protracted, All Sec. 26, Protracted, All Sec. 35, Protracted, All Sec. 36, Protracted, All	2,560	12.50%	Forest Oil Corporation	100.00%	N/A
4	ADL-389515	T.10N., R.10W., S.4. Sec. 29, Protracted, All Sec. 30, Protracted, All Sec. 31, Protracted, All Sec. 32, Protracted, All	2,536	12.50%	Forest Oil Corporation	100.00%	N/A

**ATTACHMENT TWO**  
**Exhibit B, Corsair Unit Boundary**

**CORSAIR UNIT AGREEMENT**  
**STATE OF ALASKA**  
**EXHIBIT "B"**

**RECEIVED**  
 NOV 29 2006  
 DIVISION OF  
 OIL AND GAS



## **ATTACHMENT THREE**

### **Corsair Unit Exhibit G, Initial Plan of Exploration**

## **Corsair Unit Agreement**

### **EXHIBIT "G"**

#### **PLAN OF EXPLORATION**

Forest Oil Corporation ("Forest"), as a result of its work interpreting approximately 126 miles of proprietary 2D data acquired in 1997 by Forcenergy Inc in combination with Digicon's CI88/89 2D survey (totaling 244 miles of seismic data resulting in 2D line spacing of approximately ½ mile in both the dip and strike directions), identified large seismic amplitude anomalies located in the center of the Upper Cook Inlet approximately 12 miles southwest of the North Cook Inlet Field. This seismic anomaly is the Corsair Prospect, as interpreted by Forest. The Corsair feature is approximately 2.5 miles wide and 9 miles long and lies on structural trend with the North Cook Inlet Field. Water depths over the structure range from 80 to 120 feet and average 100 feet. Production from the North Cook Inlet Field is primarily dry gas from the lower Sterling and upper Beluga formations with a minor amount of oil production from the mid-Tyonek Sunfish sands. In the Corsair Prospect the primary objectives are the Sterling-Beluga sands that are stratigraphically equivalent to the gas producing interval at the North Cook Inlet Field.

Forest currently has a 100% Working Interest in eight (8) Leases near or on the Corsair Anticline which comprise a total of approximately 26,880 acres. Forest proposes establishing the Corsair Unit to include Leases ADL-389196, ADL-389197, ADL-389198 and ADL-389515 which comprise a total of 10,185 acres. These four (4) Leases cover the extent of the seismic amplitude anomaly as interpreted by Forest with currently available data.

Forest Oil Corporation ("Forest"), as the sole Working Interest Owner of the four Leases to be included within the Corsair Unit, proposes an initial five-year (5-year) Plan of Exploration (Initial POE) for the Corsair Unit. During the term of this Initial POE, Forest, in its capacity as the Corsair Unit Operator, plans to (1) drill an exploration well, (2) if drilling data indicates it to be appropriate, test the lower Sterling - upper Beluga interval in the exploration well (location of seismic amplitude anomaly) at the culmination of the Corsair Anticline, (3) if warranted by well test data, confirm through extended testing of the exploration well if commercial quantities of gas are present in the seismic amplitude anomaly, (4) submit an application for approval of an Initial Participating Area (Initial PA) within the Corsair Unit, and (4) commence construction of pipelines and other infrastructure to allow commercial gas production.

As justification for an extension beyond the end of the primary term of Leases ADL-389196, ADL-389197 and ADL-389198 from January 31, 2007, and of Lease ADL-

389515 from April 30, 2008, Forest, as the Corsair Unit Operator, will undertake the following exploration plan:

**Year 1/Year 2:** Within the first two years of this Initial POE, before **December 31, 2008**, the Corsair Unit Operator will commit to and drill an Exploration Well within the Unit Area.

- I. By **December 31, 2007**, the Unit Operator will provide evidence to the satisfaction of the Commissioner of a rig/drilling commitment by the Unit Operator that would enable the Unit Operator to drill a well within the Corsair Unit no later than December 31, 2008.
- II. If the Unit Operator fails to provide evidence, satisfactory to the Commissioner, by December 31, 2007, of a drill rig commitment which would allow the Unit Operator to drill the first exploration well within the Corsair Unit no later than December 31, 2008, then:
  - A. The Corsair Unit will automatically terminate;
  - B. **All** Leases in the Corsair Unit will terminate effective **January 1, 2008**, including ADL-389515 even though it will not expire until April 30, 2008;
  - C. The Working Interest Owners shall pay the State of Alaska a payment equal to \$25.00/acre x expired State Lease acreage within the Corsair Unit; and
  - D. The Unit Operator and the Working Interest Owners will be released from all further obligations in this Initial POE.
  - E. The Working Interest Owner has also agreed to waive the lease extension provisions set out in 11 AAC 83.140 and Article 15.2 of the Corsair Unit Agreement, and the notice, hearing, and judicial proceedings provisions set out in 11 AAC 83.374, applicable to default, termination, and contraction of the Corsair Unit.
- III. By **December 31, 2008**, the Unit Operator will drill an Exploration Well that meets the following minimum criteria:
  - A. Drill a well to the lower Sterling and upper Beluga gas sands, stratigraphically equivalent to the gas producing intervals at the North Cook Inlet Field;
  - B. Drill to a bottom hole location within Tract 1 or Tract 3, ADL-389197 or ADL-389198;
  - C. Log the well (GR or SP, Resistivity and Neutron/Density or Porosity: appropriate triple combo log); and
  - D. Complete, suspend, or abandon the well.
- IV. If the Unit Operator fails to drill the 1<sup>st</sup> Exploration Well described in Section II above, by **December 31, 2008**:
  - A. The Corsair Unit will terminate;

- B. All Leases in the Corsair Unit will terminate effective **January 1, 2009**;
- C. The Working Interest Owners will pay the State of Alaska a payment equal to \$35.00/acre x expired State Lease acreage within the Corsair Unit; and
- D. The Unit Operator and the Working Interest Owners will be released from all further obligations in this Initial POE.
- E. The Working Interest Owner has also agreed to waive the lease extension provisions set out in 11 AAC 83.140 and Article 15.2 of the Corsair Unit Agreement, and the notice, hearing, and judicial proceedings provisions set out in 11 AAC 83.374, applicable to default, termination, and contraction of the Corsair Unit.

**Year Three:** During the third year of this Initial POE, before **January 31, 2010**, if the Corsair Unit has not been terminated pursuant to this Initial POE, the Unit Operator will determine through well test data that the seismic amplitudes are related to commercial gas sands and seek to obtain approval of a Participating Area within the Corsair Unit.

- I. Following completion of the 1<sup>st</sup> Exploration Well, if drilling data indicates it to be appropriate, the Unit Operator will test the lower Sterling - upper Beluga interval in the Exploration Well (location of seismic amplitude anomaly) at the culmination of the Corsair Anticline.
- II. If warranted by well test data, the Unit Operator will confirm through extended testing of the Exploration Well if commercial quantities of gas are present in the seismic amplitude anomaly within the Corsair feature.
- III. The Unit Operator will obtain approval from the Department of Natural Resources to establish an Initial Participating Area (Initial PA) within the Corsair Unit by **January 31, 2010**. The Initial POE will be revised to exclude the lease areas committed to the Initial PA, and an approved Initial Plan of Development (Initial POD) will include the lease areas committed to the Initial PA, as appropriate under 11 AAC 83.343.

A lease partially committed to a Participating Area will be segregated as to the portion excluded from the Participating Area. The portion of the lease excluded from the Participating Area will automatically contract from the Unit unless included in an approved Plan of Exploration.

- IV. If the Unit Operator fails to obtain approval from the Department of Natural Resources to establish an Initial PA within the Corsair Unit by **January 31, 2010**:
- A. The Corsair Unit will automatically terminate;
  - B. **All** Leases in the Corsair Unit will terminate effective **February 1, 2010**;
  - C. The Unit Operator and the Working Interest Owners will be released from all further obligations in this Initial POE.
  - D. The Working Interest Owner has also agreed to waive the lease extension provisions set out in 11 AAC 83.140 and Article 15.2 of the Corsair Unit Agreement, and the notice, hearing, and judicial proceedings provisions set out in 11 AAC 83.374, applicable to default, termination, and contraction of the Corsair Unit.

**Year Four:** During the fourth year of this Initial POE/Initial POD, before **January 31, 2011**, if the Corsair Unit has not been terminated pursuant to this Initial POE, the Unit Operator will consider drilling a Second Exploration Well within the Corsair Unit. The Unit Operator will submit a revised, approved, Initial POE describing exploration activities to be conducted on leases ADL-389196 and ADL-389515 within the remaining two years of the Initial POE. The Unit Operator will also submit a revised, approved, Initial POD, as appropriate, describing development activities to be conducted on any acreage committed to the Corsair Unit Initial PA. The revised Initial POE and Initial POD will be due as required under 11 AAC 83.341 and 11 AAC 83.343, respectively.

**Year Five:** During the fifth year of this Initial POE/Initial POD, before **January 31, 2012**, the Unit Operator will submit the necessary applications to obtain approvals, including a plan of operation that will allow construction of pipelines and infrastructure to permit commercial production of gas from the Corsair Unit Participating Area(s).

**Initial POE General Provisions:**

- I. If the Corsair Unit terminates for failure to fulfill any of the commitments in this Initial POE, the Working Interest Owner(s) will automatically surrender all expired State acreage within the Unit Area, effective the day the Unit terminates.
- II. After fulfilling all of the obligations in this Initial POE, any Tract not having a portion of the Lease included in an approved Participating Area by January 31, 2012, contracts out of the Unit Area, unless there is a well certified capable of producing in paying quantities located on that Tract. A lease partially committed to a Participating Area will be segregated as to the portion excluded from the Participating Area. The portion of the lease excluded from the Participating Area will automatically contract from the Unit unless included in an approved Plan of Exploration.

- III. If acreage contracts out of the Corsair Unit area for failure to fulfill any of the commitments in this Initial POE, the Working Interest Owner(s) shall automatically surrender all expired State acreage that contracts out of the Corsair Unit, effective the day the Unit contracts.
- IV. The Working Interest Owner has also agreed to waive the lease extension provisions set out in 11 AAC 83.140 and Article 15.2 of the Corsair Unit Agreement, and the notice, hearing, and judicial proceedings provisions set out in 11 AAC 83.374, applicable to default, termination, and contraction of the Corsair Unit.

**ATTACHMENT FOUR**  
Corsair Unit Agreement

**UNIT AGREEMENT**

**CORSAIR UNIT**

**COOK INLET, ALASKA**

## CORSAIR UNIT AGREEMENT

### Table of Contents

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

## RECITALS

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

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

## AGREEMENT

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

## ARTICLE 1: DEFINITIONS

1.1 **Alaska Oil and Gas Conservation Commission (AOGCC)** means the independent quasi-judicial agency of the State of Alaska established by the Alaska Oil and Gas Conservation Act, AS 31.05.

1.2 **Approved Unit Plan** means a Unit Plan that the Commissioner has approved.

1.3 **Commissioner** means the Commissioner of the Department of Natural Resources, State of Alaska, or the Commissioner's authorized representative.

1.4 **Effective Date** means the time and date this Agreement becomes effective.

1.5 **Lease or Leases** means one or more oil and gas lease subject to this Agreement.

1.6 **Oil and Gas Rights** means the rights to explore, develop, and produce Unitized Substances.

1.7 **Outside Unit Substances** means oil, gas, and other hydrocarbons and non-hydrocarbon substances obtained from outside the Unit Area and injected into a Reservoir in the Unit Area with the Commissioner's approval.

1.8 **Outside PA Substances** means oil, gas, and other hydrocarbons and non-hydrocarbon substances obtained from one Participating Area in the Unit Area and injected into a Reservoir in a different Participating Area in the Unit Area with the Commissioner's approval.

1.9 **Participating Area** means all Unit Tracts and parts of Unit Tracts designated as a Participating Area under the provisions of Article 9 of this Agreement to allocate Unitized Substances produced from a Reservoir.

1.10 **Participating Area Expense** means all costs, expenses or indebtedness, which are incurred by the Unit Operator for production from or operations in a Participating Area and allocated to the Unit Tract or Tracts in that Participating Area.

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

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

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

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

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

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

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

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

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

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

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

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

1.23 **Unit Tract** means each separate Lease or portion of a Lease that is described in Exhibit A and given a Unit Tract number.

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

1.25 **Unit Well** means a well drilled within the Unit Area after the effective date of this Agreement.

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

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

1.28 **Working Interest Owner** means a party who owns a Working Interest in a Lease or portion of a Lease.

## ARTICLE 2: EXHIBITS

2.1 When this Agreement is submitted for approval, only Exhibits A, B, and G must be attached and are made a part of this Agreement. Exhibit F is also required when this Agreement is submitted if the Unit Area includes Net Profit Share Leases. Exhibits C, D, E, and F are required when a Participating Area application is submitted for approval and are, upon approval by the Commissioner, made a part of this Agreement. The Unit Operator shall supply all Exhibits.

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

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

2.4 Exhibit C is comprised of a table for each Participating Area established under this Agreement. The Exhibit C table for each Participating Area must display the Unit Tract numbers, legal descriptions, Lease numbers, Working Interest ownership, Royalty Interest ownership, and Unit Tract Participation for that Participating Area. Exhibits must be prepared for each Participating Area established in the Unit Area. The Unit Operator shall submit an initial or revised Exhibit C to the Commissioner within thirty (30) days of 1) the effective date of any Participating Area, 2) any expansion or contraction of a Participating Area, 3) any division of interest or allocation formula establishing or revising the Unit Tract Participation of any Unit Tract or Unit Tracts in a Participating Area, or 4) any change of the Working Interest or Royalty Interest in any Unit Tract.

2.5 Exhibit D is comprised of a map for each Participating Area. Each Exhibit D map must show the boundary lines of the Unit Area, a Participating Area and the Unit Tracts in that Participating Area identified by Unit Tract number and Lease number. Within thirty (30) days after approval by the Commissioner of a Participating Area or any expansion or contraction of a Participating Area under Article 9 of this Agreement or any change of the Working Interest or

Royalty Interest in any Unit Tract in a Participating Area, the Unit Operator shall submit a revised Exhibit D to the Commissioner.

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

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

2.8 Exhibit G is the Unit Plan described in Article 8 of this Agreement.

### ARTICLE 3: CREATION AND EFFECT OF UNIT

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

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

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

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

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

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

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

#### **ARTICLE 4: DESIGNATION OF UNIT OPERATOR**

4.1. Forest Oil Corporation is designated as the Unit Operator until such time, if any, that a successor Unit Operator is designated under the terms and provisions of this Agreement. Forest Oil Corporation agrees to accept the rights and obligations of the Unit Operator to conduct Unit Operations and to explore for, develop and produce Unitized Substances as provided in this Agreement.

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

#### **ARTICLE 5: RESIGNATION OR REMOVAL OF UNIT OPERATOR**

5.1 The Unit Operator will have the right to resign at any time. The Unit Operator's resignation will not become effective until: 1) sixty (60) days have passed since the Unit Operator delivers a written notice of an intention to resign to the Working Interest Owners and the Commissioner; and 2) all artificial islands, installations and other devices, including wells, used for operations in the Unit Area are in a condition satisfactory to the Commissioner for suspension or abandonment of operations. However, if a successor Unit Operator is designated and approved under Article 6 of this Agreement, the resignation is effective when approved by the Commissioner.

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

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

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

## ARTICLE 6: SUCCESSOR UNIT OPERATOR

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

6.2. If no successor Unit Operator is designated within sixty (60) days after notice to the Commissioner of the resignation or removal of a Unit Operator, the Commissioner may designate another Working Interest Owner as successor Unit Operator, or declare this Agreement terminated.

## ARTICLE 7: UNIT OPERATING AGREEMENT

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

7.2 Any allocation described in the Unit Operating Agreement will not bind the State in determining or settling royalties and net profit share payments. Allocations of Unit Expense, Participating Area Expense, or Unitized Substances for determining, settling and paying royalties and net profit share payments will be based on Exhibits C, E and F of this Agreement, and must be approved by the Commissioner in writing before taking effect. An original or revised conforming Exhibit C and F must be submitted to the Commissioner within thirty (30) days of any change in the division of interest or allocation formula establishing or revising the Unit Tract Participation of any Unit Tract or Unit Tracts in a Participating Area.

7.3 The Working Interest Owners and the Unit Operator may establish, through the Unit Operating Agreement and amendments, including any other agreement between the Working Interest Owners concerning Unit Operations, other rights and obligations between the Unit Operator and the Working Interest Owners, in addition to those set out in Article 7.1 of this Agreement. The Unit Operating Agreement must not modify any term of this Agreement. If the terms of this Agreement and the Unit Operating Agreement conflict, this Agreement will prevail.

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

7.5 The Unit Operator shall file a copy of the Unit Operating Agreement with the Commissioner when this Agreement is submitted for approval. The copy of the Unit Operating Agreement is for informational purposes only. Approval of the Unit Agreement is not approval of the Unit Operating Agreement. Complete copies of any amendments, including other other agreements between the Working Interest Owners concerning Unit Operations, to the Unit

Operating Agreement must also be filed with the Commissioner within thirty (30) days of execution and at least thirty (30) days before their effective dates.

#### **ARTICLE 8: PLANS OF EXPLORATION, DEVELOPMENT AND OPERATIONS**

8.1. A Unit Plan will consist of a unit plan of exploration ("Plan of Exploration") or a unit plan of development ("Plan of Development"), or both. Any Unit Plan and any amendment to a Unit Plan will not be effective until the Commissioner approves it. Approved Unit Plans are incorporated into this Agreement and become effective on the date of their approval.

8.1.1. A unit plan of exploration ("Plan of Exploration") must describe the proposed exploration and delineation activities for any land in the Unit Area that is not in a Participating Area. Plans of Exploration must comply with 11 AAC 83.341 and any successor regulation. The Unit Operator shall submit updated Plans of Exploration to the Commissioner for approval at least sixty (60) days before the current Plan of Exploration expires.

8.1.2. A unit plan of development ("Plan of Development") must include a description of the proposed development activities based on data available when the plan is submitted. Plans of Development must comply with 11 AAC 83.343 and any successor regulation. The Unit Operator shall submit updated Plans of Development to the Commissioner for approval at least ninety (90) days before the current Plan of Development expires.

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

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

8.3. After Sustained Unit Production in Paying Quantities begins, Unit Operations must be maintained with lapses of no more than ninety (90) days per lapse between operations. The lapse may be longer if suspension of operations or production has been ordered or approved by the Commissioner. Approved Unit Plans may provide for a suspension of Unit Operations.

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

- 8.5. The Commissioner may approve any injection of Outside Unit Substances or Outside PA Substances within the Unit Area. Any injection of Outside Unit Substances or Outside PA Substances within the Unit Area must be part of an Approved Unit Plan, which must include a deemed recovery and commencement date for each Outside Unit Substance or Outside PA Substance. Recovered Outside Unit Substances will not bear royalty unless only dry natural gas is injected as an Outside Unit Substance in which case products recovered from the dry natural gas will bear royalty, but the dry natural gas will not.

## ARTICLE 9: PARTICIPATING AREAS

9.1. The Unit Operator shall submit a request for approval of the proposed initial Participating Area to the Commissioner at least ninety (90) days before Sustained Unit Production from a Reservoir in the Unit Area. A Participating Area may include only land that is reasonably known to be underlain by Unitized Substances and known or reasonably estimated through the use of geological, geophysical and engineering data to be capable of producing or contributing to production of Unitized Substances in Paying Quantities. The Unit Operator shall request and receive approval from the Commissioner of a Participating Area before commencement of Sustained Unit Production. The Unit Operator shall notify the Commissioner before the commencement of Sustained Unit Production from each Participating Area.

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

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

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

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

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

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

9.8. A Unitized Substance produced from one Participating Area ("Originating Participating Area") may be used as an Outside PA Substance ("Injected Substance") for

repressuring, recycling, storage or enhanced recovery purposes in another Participating Area ("Receiving Participating Area") only if the State is paid royalty as if the Unitized Substance was saved, removed, or sold by the Working Interest Owners, except as follows:

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

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

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

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

9.11. Underground storage will be covered by separate agreement with the Commissioner.

#### **ARTICLE 10: OFFSET WELLS**

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

faith and diligently prosecute drilling operations for an offset well on the Unit Area. In lieu of drilling any well required by this paragraph, the Working Interest Owners must compensate the State in full each month for the estimated loss of royalty through drainage in the amount determined by the Commissioner.

#### **ARTICLE 11: ALLOCATION OF PRODUCTION**

11.1 Production and costs will be allocated under 11 AAC 83.371 and any successor regulation. The Unit Operator shall submit a proposed allocation plan, with supporting data, to the Commissioner for approval. The Commissioner may revise the proposed allocation plan if it does not equitably allocate production and costs from the Reservoir. The Commissioner will give the Unit Operator and Working Interest Owners reasonable notice and an opportunity to be heard before revising the Unit Operator's proposal. The allocation plan must be revised whenever a Participating Area is expanded or contracted. Within thirty (30) days after approval by the Commissioner of any division of interest or allocation formula establishing or revising the Unit Tract Participation of any Unit Tract or Unit Tracts in a Participating Area, the Unit Operator shall submit revised Exhibits C and F to the Commissioner. The Unit Operator may submit a revised Exhibit F anytime, but any revisions to Exhibit F are not effective until approved by the Commissioner.

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

11.3 The Working Interest Owners may allocate Unitized Substances, Participating Area Expense, and Unit Expense differently than described in Exhibits C, E and F. However, that allocation will not be effective for determining royalty or net profit share payments. The Unit Operator shall submit any allocation that is different than the allocations required in Exhibit C, E or F to the Commissioner under 11 AAC 83.371(b) for the State's information within ten (10) days of its effective date with a statement explaining the reason for the different allocation.

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

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

#### **ARTICLE 12: LEASES, RENTALS AND ROYALTY PAYMENTS**

12.1. The Working Interest Owners shall pay rentals and royalty payments due under the Leases. Payments to the State must be made under 11 AAC 04 and 11 AAC 83.110 and any successor regulations.

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

12.3. Each Working Interest Owner shall pay its share of royalties to the State on Unitized Substances as provided in the Lease, except that any reference in the Lease to the "leased area" will mean the Unit Area and any reference to "oil, gas, or associated substances" will mean "Unitized Substances."

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

12.5. Notwithstanding any contrary Lease term or provision in 11 AAC 83.228--11 AAC 83.229, all royalty deductions for transportation, including, but not limited to, marine, truck and pipeline transportation, from the Unit Area to the point of sale are limited to the actual and reasonable costs incurred by the Working Interest Owners. These transportation costs must be determined by taking into account all tax benefits applicable to the transportation.

12.6. The Unit Operator shall give the Commissioner notice of the anticipated date for commencement of production at least six (6) months before the commencement of Sustained Unit Production from a Participating Area. The Commissioner may take the State's share of Unitized Substances in-kind in accordance with the following. The Commissioner will give the Unit Operator ninety (90) days written notice of the State's initial election to take Unitized Substances in-kind. After taking has commenced, the Commissioner may increase or decrease the amount of Unitized Substances taken in-kind by not more than ten percent (10%), upon thirty (30) days written notice to the Unit Operator, but may increase or decrease the amount of Unitized Substances taken in-kind by greater than ten (10) percent upon ninety (90) days written notice to the Unit Operator.

12.6.1. The Commissioner may elect to specify the Unit Tracts from which the State's share of Unitized Substances taken in-kind are to be allocated. If the Commissioner does not specify any Unit Tracts in the written notice to the Unit Operator, the State's share of Unitized Substances taken in-kind will be allocated to all Unit Tracts in accordance with the Unit Tract Participation shown on Exhibit C to this Agreement.

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

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

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

12.7. If a purchaser of the State's share of Unitized Substances does not take delivery of Unitized Substances, the State may elect, without penalty, to underlift for up to six (6) months. The State may underlift all or a portion of those substances. The State's right to underlift is limited to the portion of those substances that the purchaser did not take delivery of or what is necessary to meet an emergency condition. The State will give the Unit Operator written notice thirty (30) days before the first day of the month in which the underlifted Unitized Substances are to be recovered. The State may recover at a daily rate not exceeding twenty-five (25) percent of its share of daily production, unless otherwise agreed with the Unit Operator.

12.8. The Unit Operator shall maintain records, and shall keep and have in its possession books and records including expense records, of all exploration, development, production, and disposition of all Unitized Substances and Outside Substances. Each Working Interest Owner shall maintain records of the disposition of its portion of the Unitized Substances and Outside Substances including sales prices, volumes, and purchasers. The Unit Operator and the Working Interest Owners shall permit the Commissioner to examine those books and records at all reasonable times. Upon request by the Commissioner, the Unit Operator and the Working Interest Owners shall make the books and records available to the Commissioner at the Commissioner's designated office. They may provide these books and records in a mutually agreeable electronic format. These books and records of exploration, development, production, and disposition must employ methods and techniques that will ensure the most accurate figures reasonably available. The Unit Operator and the Working Interest Owners shall use generally accepted and internally consistent accounting procedures.

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

12.10. All rights and obligations relating to the State's net profit share will be determined under 11 AAC 83.201--11 AAC 83.295, as amended, notwithstanding any contrary Lease term.

The State may audit the net profit share reports or payments due for any Lease within ten (10) years of the year of production of Unitized Substances in Paying Quantities. The period of limitations for the State to file a lawsuit relating to an audit of a net profit share report or payment will be three (3) years longer than the audit period. The Working Interest Owners holding interests in net profit share Leases shall maintain the records relevant to determination of net profit share until the audit period has expired.

#### **ARTICLE 13: UNIT EXPANSION AND CONTRACTION**

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

13.2. Ten (10) years after Sustained Unit Production begins, the Unit Area must be contracted to include only those lands then included in an approved Participating Area, lands included in an Approved Unit Plan, and lands that facilitate production including the immediately adjacent lands necessary for secondary or tertiary recovery, pressure maintenance, reinjection, or cycling operations. However, the Commissioner may, after considering the provisions of 11 AAC 83.303, delay contraction of the Unit Area if the circumstances warrant. If a portion of a Lease contracts out of the Unit Area, that Lease portion will be severed and treated as a separate and distinct lease, which may be maintained thereafter only in accordance with the terms and conditions of the original Lease. The Working Interest Owners waive the provisions of 11 AAC 83.356(b), which protect the Lease from severance when a portion of a lease is contracted out of the Unit Area.

13.3. Not sooner than ten (10) years after the Effective Date of this Agreement, the Commissioner may contract the Unit Area to include only that land covered by an Approved Unit Plan, or that area underlain by one or more oil or gas reservoirs or one or more potential hydrocarbon accumulations and lands that facilitate production including the immediately adjacent lands necessary for secondary or tertiary recovery, pressure maintenance, reinjection, or cycling operations. If a portion of a Lease contracts out of the Unit Area, that portion will be severed and treated as a separate and distinct lease, which may be maintained thereafter only in accordance with the terms and conditions of the original Lease. The Working Interest Owners waive whatever provisions of 11 AAC 83.356(e) that protect the Lease from severance when a portion of a Lease is contracted out of the Unit Area. Before any contraction of the Unit Area under this Article 13.3, the Commissioner will give the Unit Operator, the Working Interest Owners, and the Royalty Interest Owners of the Leases or portions of Leases being excluded reasonable notice and an opportunity to be heard.

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

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

13.6. Within thirty (30) days after approval by the Commissioner of any expansion or contraction of the Unit Area, the Unit Operator shall submit revised Exhibits A and B to the Commissioner.

#### **ARTICLE 14: UNIT EFFECTIVE DATE, TERM AND TERMINATION**

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

14.2. Subject to the terms and conditions of the Approved Unit Plan, this Agreement terminates automatically five (5) years from the Effective Date unless:

14.2.1. A Unit Well in the Unit Area has been certified by the Commissioner as capable of producing Unitized Substances in Paying Quantities as defined under 11 AAC 83.395 and any successor regulation; or

14.2.2. The unit term is extended with the approval of the Commissioner. No single extension will exceed five (5) years.

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

14.4. Nothing in this Article holds in abeyance the obligations to pay rentals, royalties, or other production or profit-based payments to the State from operations or production in any part of the Unit Area. Any seasonal restriction on operations or production or other condition required in the Lease is not a suspension of operations or production required by law or force majeure.

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

#### **ARTICLE 15: EFFECT OF CONTRACTION AND TERMINATION**

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

15.2. Each Lease committed to this Agreement on the day that this Agreement terminates will remain in force for an extension period of ninety (90) days, or any longer period that may be approved by the Commissioner. After the extension period expires, the Lease will be maintained only under State law and the Lease provisions.

15.3. Upon the expiration or earlier termination of the Corsair Unit, the Unit Operator will be directed in writing by the Commissioner and will have the right at any time within a period of one (1) year after the termination, or any extension of that period as may be granted by the Commissioner, to remove from the Unit Area all machinery, equipment, tools, and materials. Upon the expiration of that period or extension of that period and at the option of the Commissioner, any machinery, equipment, tools, and materials that the Unit Operator has not removed from the Unit

Area become the property of the State or may be removed by the State at the Working Interest Owners' expense. At the option of the State, all improvements such as roads, pads, and wells must either be abandoned and the sites rehabilitated by the Unit Operator to the satisfaction of the State, or be left intact and the Unit Operator absolved of all further responsibility as to their maintenance, repair, and eventual abandonment and rehabilitation. Subject to the above conditions, the Unit Operator shall deliver up the Unit Area in good condition.

#### **ARTICLE 16: COUNTERPARTS**

16.1. The signing of counterparts of this Agreement will have the same effect as if all parties had signed a single original of this Agreement. Within thirty (30) days after approval by the Commissioner of any change of the Working Interest ownership of Oil and Gas Rights in any Unit Tract, the Unit Operator shall submit a revised Exhibits A and C to the Commissioner.

#### **ARTICLE 17: LAWS AND REGULATIONS**

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

#### **ARTICLE 18: APPEARANCES AND NOTICES**

18.1. If the State gives the Unit Operator a notice or order relating to this Agreement it will be deemed given to all Working Interest Owners and all persons whose interest in the Unit Area derived from a Working Interest. All notices required by this Agreement will be given in writing and delivered personally, or by United States mail or by facsimile machine to the Unit Operator at the address or facsimile number listed below. All notices actually received will also be deemed properly given. The Unit Operator shall change its notice address by giving thirty (30) days written notice to the State and the other Working Interest Owners. The State may change its notice address by giving thirty (30) days written notice to the Unit Operator.

**Address of the Unit Operator:**

Forest Oil Corporation  
310 "K" Street, Suite 700  
Anchorage, Alaska 99501  
Fax: (907) 258-8601

**with a copy to:**

Forest Oil Corporation  
707 Seventeenth Street, Suite 3600  
Denver, Colorado 80202  
Attention: Land Administration  
Fax: (303) 864-6058

**Address of the State:**

Commissioner, Department of Natural Resources

550 West Seventh Avenue, Suite 1400  
Anchorage, Alaska 99501-3554  
Fax: (907) 269-8918

with a copy to:

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

#### **ARTICLE 19: JOINDER**

19.1. The Commissioner may order or, upon request, approve a subsequent joinder to this Agreement under the expansion provisions of Article 13 of this Agreement. The Unit Operator shall submit to the Commissioner a request for a subsequent joinder accompanied by a signed counterpart to this Agreement and a notice of proposed expansion under Article 13 of this Agreement. A subsequent joinder will be subject to the requirements of the Unit Operating Agreement. However, the Commissioner may require that the Working Interest Owners modify any provision in a Unit Operating Agreement, which the Commissioner finds would prevent or frustrate a subsequent joinder.

#### **ARTICLE 20: DEFAULT**

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

20.2 The Commissioner will give notice to the Unit Operator and the Working Interest Owners of the default. The notice will describe the default, and include a demand to cure the default by a certain date. The cure period will be at least thirty (30) days for a failure to pay rentals or royalties and ninety (90) days for any other default.

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

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

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

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

**SIGNATURE PAGE(S) TO CORSAIR UNIT AGREEMENT FOLLOW(S)**

**REMAINDER OF PAGE INTENTIONALLY LEFT BLANK**

.....

87  
P

WORKING INTEREST OWNERS

9a By: Leonard C. Gurule  
Senior Vice President  
Forest Oil Corporation

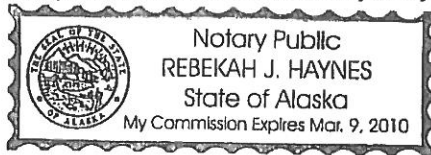
Date: 1/30/07

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

STATE OF ALASKA )  
 )ss.  
THIRD JUDICIAL DISTRICT )

This certifies that on January 30, 2007, before me, a notary public in and for the State of Alaska, duly commissioned and sworn, personally appeared Leonard C. Gurule, known to me to be the person described in, and who executed the foregoing agreement, who then after being duly sworn according to law, acknowledged to me under oath that he executed same freely and voluntarily for the uses and purposes therein mentioned.

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



Rebekah J. Haynes  
NOTARY PUBLIC in and for Alaska  
My Commission Expires: 3/9/2010

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

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

STATE OF ALASKA )  
 )ss.  
THIRD JUDICIAL DISTRICT )

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

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

\_\_\_\_\_  
NOTARY PUBLIC in and for Alaska  
My Commission Expires: \_\_\_\_\_

9a