## FINDINGS AND DECISION

of the Director, Division of Oil and Gas

## APPROVING THE THREE MILE CREEK UNIT APPLICATION

Under Delegation of Authority from the Commissioner, Department of Natural Resources, State of Alaska

March 26, 2004

## TABLE OF CONTENTS

I.	INTF	RODUCTION AND BACKGROUND	1
	Thre	ee Mile Creek Unit, Regional Area Map	3
II.	APPI	LICATION FOR THE FORMATION OF THE THREE MILE CREEK UNIT	4
III.	DISC	CUSSION OF DECISION CRITERIA	5
	1.	THE ENVIRONMENTAL COSTS AND BENEFITS OF UNITIZED EXPLORATION OR DEVELOPMENT	5
	2.	THE GEOLOGICAL AND ENGINEERING CHARACTERISTICS OF THE RESERVOIR	7
	3.	PRIOR EXPLORATION ACTIVITIES IN THE UNIT AREA	8
	4.	PLANS FOR EXPLORATION AND DEVELOPMENT OF THE PROPOSED UNIT AREA	9
	5.	THE ECONOMIC COSTS AND BENEFITS TO THE STATE	10
	6.	Amendments to the Standard Unit Agreement	11
IV.	FINE	DINGS	12
	1.	PROMOTE THE CONSERVATION OF ALL NATURAL RESOURCES	12
	2.	PROMOTE THE PREVENTION OF ECONOMIC AND PHYSICAL WASTE	13
	3.	PROVIDE FOR THE PROTECTION OF ALL PARTIES IN INTEREST, INCLUDING THE STATE	14
V.	DEC	ISION	14
VI.	ATT	ACHMENTS	15
	Atta	chment 1 Exhibit A, Tract Description and Ownership Schedule	16
	Atta	chment 2 Exhibit B, Map of the Three Mile Creek Unit Boundary	18
	Atta	chment 3 Exhibit G, Three Mile Creek Unit Plan of Exploration	19

#### I. INTRODUCTION AND BACKGROUND

The Three Mile Creek Unit (TMC Unit) is located on the West side of Cook Inlet, about four miles west of the Beluga River Unit and seven miles north of the village of Tyonek (See map on Page 3). The TMC Unit area encompasses approximately 8,080 acres within seven oil and gas leases. Approximately 5,520 acres or 68.3% of the unit area lies within four State of Alaska (State) leases, and Cook Inlet Region, Inc. (CIRI) is the lessor of three oil and gas leases that encompass the remaining 2,560 acres or 31.7% of the TMC Unit area.

Aurora Gas LLC (Aurora), the unit operator, requested that the State and CIRI jointly administer the TMC Unit Agreement (Agreement). On January 30, 2004, the State, Department of Natural Resources, Division of Oil and Gas (DNR or Division, as appropriate) and CIRI approved the TMC Unit Application (the Application) effective January 31, 2004.

The Application identified two natural gas prospects within the unit area, the Three Mile Creek and the Olson Creek prospects, which are constrained by a generally north-south trending fault. Aurora's TMC Unit Initial Plan of Exploration (Initial POE) includes plans to acquire new seismic data over the unit area, drill an exploration well in each prospect, and obtain approval of a participating area during the three-year term of the Agreement. The lessees agreed to segregate the three TMC Unit leases that are bisected by the fault, C-061502, ADL 388232, and ADL 388233. The Initial POE contains the legal descriptions of the new leases created by segregation, identified as TMC Unit Tracts 3, 5, and 7. The unit acreage east of the fault retained the original lease numbers, and the Division and CIRI assigned new lease numbers to the unit acreage segregated out of each lease that lies west of the fault.

The Application proposed including portions of two State leases, ADL 388232 and ADL 388233, and two CIRI leases, C-061394 and C-061502, in the TMC Unit. Aurora holds 100% working interest ownership in the two CIRI leases and Forest Oil Corporation (Forest) holds 100% working interest in the two State leases. Aurora and Forest (the Applicants) hold working interest ownership in approximately 79% and 21% of the unit area, respectively.

DNR held Cook Inlet Sale 85A on December 18, 1996, and issued oil and gas leases ADL 388232 and ADL 388233, on State lease form DOG 9609, which retains a 12.5% royalty to the State. With an effective date of February 1, 1997, and a seven-year primary term, the non-unitized portions of ADL 388232 and ADL 388233 expired on January 31, 2004, while the portions committed to the TMC Unit are extended under the Agreement.

Under the terms of the Initial POE, the Division segregated the unitized acreage in each State lease into two leases with both committed to the TMC Unit. The eastern portion of ADL 388232, designated Tract 6, retains the original lease number, and the Division assigned a new lease number, ADL 390515, to the unitized acreage segregated out of ADL 388232, designated Tract 7. The eastern portion of ADL 388233, designated Tract 4, retains the original lease

number, and the Division assigned a new lease number ADL 390516, to the unitized acreage segregated out of ADL 388233, designated Tract 5.

Effective January 15, 1996, CIRI issued oil and gas lease C-061394 with a five-year primary term and an expiration date of January 15, 2001, which reserved a 16 2/3 percent royalty to CIRI. The entire lease area is committed to the TMC Unit, and the primary term is extended under the Agreement.

CIRI lease C-61502 was originally a State lease, ADL 3180, which the Division transferred to CIRI in 1996. The State issued oil and gas lease ADL 3180 effective August 1, 1961, on lease form DL-1 revised April 1961, which retained a 12.5 percent royalty to the State. Although the State had selected the mineral estate under the leased area from the federal government, it did not have patent to the land and, therefore, ADL 3180 was a conditional lease and its five-year primary term was extended indefinitely under Paragraph 39 of the lease.<sup>1</sup>

In 1991, the United States Department of Interior, Bureau of Land Management (BLM) rejected the State's selection application and approved conveyance of the mineral estate under ADL 3180 to CIRI. The Division transferred ADL 3180 to CIRI effective February 15, 1996, which ended the lease's conditional status, and established a new expiration date of February 15, 2001. On August 20, 1998, CIRI entered into an option agreement with Anadarko Petroleum and Arco Alaska, Inc. (now ConocoPhillips Alaska, Inc.), the working interest owners of C-061394 and ADL 3180. On January 17, 2000, ConocoPhillips and Anadarko exercised their option to extend the lease terms until February 27, 2003, in exchange for converting ADL 3180 to a CIRI lease form, which amended the lease provisions of ADL 3180, including increasing the rental rate from \$1.00 to \$3.00 per acre and the royalty rate from 12.5 to 16 2/3 percent. In addition, CIRI assigned a new lease number, C-061502, to the acreage previously identified as ADL 3180. On December 3, 2002, CIRI and the lessees agreed to further extend the lease terms of C-061364 and C-061502 until February 28, 2006.

Under the terms of the Initial POE, CIRI segregated C-061502 into two leases with both committed to the TMC Unit. The eastern portion of C-061502, designated Tract 2, retains the original lease number, and CIRI assigned a new lease number, C-061506, to the unitized acreage segregated out of C-061502, which is designated Tract 3.

The Agreement conforms and modifies the seven leases committed to the TMC Unit so that the unit operator can explore and develop on a unit-wide basis instead of on a lease-by-lease basis.

<sup>&</sup>lt;sup>1</sup>ADL 3180, Lease Form DL-1 revised April 1961, Paragraph 39 CONDITIONAL LEASES. If all or a part of said land is land that has been selected by the Lessor under laws of the United States granting lands to Lessor, but such land has not been patented to Lessor by the United States, then this lease is a conditional lease as provided by law until such patent become effective. If for any reason such a selection is not finally approved or such a patent does not become effective, and rental, royalty or minimum royalty payments made to Lessor under this lease will not be refunded.



Three Mile Creek Unit, Regional Area Map

### II. APPLICATION FOR THE FORMATION OF THE THREE MILE CREEK UNIT

On November 17, 2003, Aurora submitted an application to form the TMC Unit with supporting technical data; Exhibits A and B, legal description and map of the proposed unit area; a plan of exploration; and a Unit Operating Agreement. Aurora paid the \$5,000 unit application filing fee on November 24, 2003. Aurora initially proposed that the TMC Unit include additional acreage within an oil and gas lease that the State, Mental Health Trust Land Office (MHTLO) issued to Forest, identified as MHT 9300084, and that the DNR, CIRI, and the MHTLO jointly manage the TMC Unit. After reviewing Aurora's interpretation of the potential hydrocarbon accumulations and the proposed plan of exploration, all parties agreed that it was not appropriate to include the acreage within MHT 9300084 at this time.

Aurora revised the proposed Agreement and Exhibits to delete references to the MHTLO and resubmitted the Application on December 23, 2004. The Application included a proposed unit agreement; Exhibit A to the agreement, legally describing the proposed unit area, its leases, and ownership interests; Exhibit B to the agreement, a map of the proposed unit; and Exhibit G to the Agreement, a proposed plan of exploration. In addition, Aurora submitted an executed TMC Unit Operating Agreement; technical data supporting the Application; and evidence that Aurora had invited all proper parties to join the TMC Unit.

The Division determined that the Application included all of the items listed in 11 AAC 83.306 and constituted a complete application for approval. The Division issued a public notice of the pending Application on December 24, 2003, which DNR posted on the State's web page. The *"Anchorage Daily News"* and the *"Peninsula Clarion"* published the TMC Unit notice on Sunday, December 28, 2003. The Division provided copies of the public notice to CIRI; the Kenai Peninsula Borough (KPB) assembly, planning commission, and mayor; the Tyonek Village Corporation; the Native Village of Tyonek; the Ninilchik Native Association; and other interested parties in compliance with 11 AAC 83.311. In addition, the adjacent mineral owner, MHTLO, and an adjacent Lessee, Pelican Hills Oil & Gas Company, received notice of the Application. The Division also provided public notices to the Alaska Department of Environmental Conservation; the Alaska Department of Fish and Game; and to post offices, libraries, and radio stations in Tyonek, Kenai, and Homer, Alaska. The notice invited interested parties and members of the public to submit comments on the Application by January 28, 2004. DNR received no comments on the Application during the thirty-day public comment period.

Although the Division determined that the Application was complete for public notice, there were several outstanding issues to be discussed with the Applicants and CIRI before approval of the TMC Unit was in the State's interest. In December 2003 and January 2004, Aurora submitted additional geological and geophysical data, well data, and revised maps of their interpretation of the data. The Division and CIRI proposed amendments to the proposed Agreement and negotiated an acceptable Initial POE, which is Exhibit G to the Agreement (Attachment 3 to this decision). On January 29, 2004, the Applicants submitted written acceptance of the modifications to the Application contained in the Agreement and Initial POE attached to the Division's conditional decision. By letter dated January 30, 2004, CIRI approved

the modified Application. The Division also issued a decision approving the Application on January 30, 2004, extending the State leases by unitization.

The Division conditioned its approval of the Application on the Applicant's execution and delivery of the modified Agreement within thirty days, by March 1, 2004. Forest and Aurora submitted executed Agreements on February 3, 2004 and February 20, 2004, respectively. Aurora also provided new Exhibits A and B with the legal descriptions of the revised tracts within the TMC Unit area. On February 24, 2004, the Division issued notices to the Applicants severing the State leases as described in the Initial POE and assigned the new lease numbers to TMC Unit Tract 5 and Tract 7. In accordance with the Division's January 30, 2004 conditional decision, the TMC Unit became effective as of 12:01 a.m. on January 31, 2004. The following is the Division's evaluation of the Application in compliance with 11 AAC 83.316.

## III. 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 AS 38.05.180(p) and 11 AAC 83.301 - 11 AAC 83.395. By memorandum dated September 30, 1999, the Commissioner approved a revision of Department Order 003, and delegated this authority to the Division Director (Director).

The Director will approve a unit application upon finding that it will: 1) promote the conservation of all natural resources; 2) promote the prevention of economic and physical waste; and 3) provide for the protection of all parties of interest, including the State in accordance with 11 AAC 83.303(a). Subsection .303(b) sets out six factors that the Director will consider in evaluating a unit application. A discussion of the subsection .303(b) criteria, as they apply to the Application, is set out directly below, followed by the Director's findings relevant to the subsection .303(a) criteria and the Director's approval of the TMC Unit.

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

The TMC Unit area is habitat for a variety of mammals, waterfowl, and fish. Area residents use the birch and willow forests, grasslands, spruce bogs, rivers, and streams for subsistence hunting and fishing, and recreation. Oil and gas activity in the unit area may affect some wildlife habitat. In addition to oil and gas leases, there are coal leases and mining claims within the unit area.

The DNR considered environmental issues in the lease sale process, and the State leases contain mitigation measures designed to reduce the environmental impacts of exploration and development of the leased area. Mitigation measures include seasonal restrictions on specific activities to reduce the impact on fish, wildlife, and human populations. Mitigation measures specifically address potential impacts to subsistence access and harvesting. For example, no facilities may be sited within one-half mile of the Beluga River and lessees will use existing transportation corridors to access drill sites. Unitization does not waive or reduce the effectiveness of the mitigating measures that condition the lessee's right to conduct operations on these leases.

Unitization allows the unit operator to explore and develop hydrocarbon resources under a single unit plan rather than on a lease-by-lease basis. Without unitization, the lease provisions would compel the lessees to seek permits to explore and develop each individual lease. The proliferation of surface activity and the duplication of production, gathering, and processing facilities would increase the potential for environmental damage. Unitized exploration, development, and production minimize surface impacts by consolidating facilities, optimizing drilling operations, and reducing overall activity in the environment.

The lessee's compliance with conservation orders and field pool rules issued by the AOGCC would mitigate some of the surface 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. After unitization, the unit operator can design and locate facilities to maximize recovery and to minimize environmental impacts, without regard to lease boundaries. Review and approval of exploration and development plans under a unit agreement will also ensure that the unit operator makes rational surface-use decisions without regard for individual lease ownership or expense.

The Director's approval of a unit agreement is an administrative action, which by itself does not convey any authority to conduct operations on unitized leases. Unitization and approval of a unit plan of exploration does not authorize any physical activity. A unit plan of exploration outlines the activities that the Lessors and the Unit Operator agree are appropriate to explore for hydrocarbons within the unit area. Each activity in the Initial POE is contingent on the outcome of preceding activities, which may require revising the plan. The unit operator will identify specific actions necessary to carry out each activity as the plan evolves. Before initiating operations, the unit operator must obtain the Division's approval of a unit plan of operations that provides a more detailed description of proposed surface activities than the Initial POE. The unit plan of operations may specify facility locations, drilling methods, waste disposal, or processing and transportation of production fluids, as appropriate. The Division will review each proposed unit plan of operations to ensure that it is consistent with an approved unit plan of exploration or development.

The TMC Unit includes State and CIRI leases that may have different environmental protection provisions. Article 8.2 of the Agreement requires that a unit plan of operations be consistent with the leases, mitigation measures, and lessee advisories developed by the DNR for the State's most recent Cook Inlet areawide lease sale. Approval of the Application and future operations within the TMC Unit will be subject to this provision. When the unit operator submits a unit plan of operations for approval, the Division will apply the current mitigation measures developed during the leasing process uniformly across the unit, ensuring environmental protections that might not otherwise occur on private lands.

The TMC Unit is within the Alaska Coastal Zone, and therefore it is subject to the Alaska Coastal Management Program (ACMP) and applicable KPB district plan. All exploration or development activity that may occur, unless categorically approved under the ACMP ABC (General Concurrence) list, will be subject to a multi-agency coastal zone consistency review, whether the activity is on State or CIRI land. The appropriate federal, State and local agencies

must determine if the operator's plan of operations is consistent with the ACMP, and the lessees may not commence exploration or development operations until all agencies have granted the required permits.

The operator's unit plan of operations must include restoration and rehabilitation of the unit area after operations are completed. The unit operator, working interest owners, and individual lessees must clean up all well site locations in conformance with AOGCC regulation 11 AAC 25.170, and under the terms of the leases, the site must be rehabilitated to the satisfaction of the lessor. If the State owns the subsurface but not the surface, the Division will consider the unit operator's ability to compensate the surface owner for damage sustained to the surface estate In addition, the DNR, the Department of Environmental Conservation (DEC), and the Alaska Oil and Gas Conservation Commission (AOGCC) have bonding and financial responsibility requirements to ensure performance by the operator and reclamation of the area.<sup>2</sup>

The environmental impacts of exploring and developing the subject leases would be greater without unitization. To the extent feasible, the unit operator will consolidate facilities, space gas wells close together, and use existing roads, to minimize environmental impacts. Consequently, the benefits of consolidated exploration and development, and application of the State's areawide mitigation measures, balance the potential costs to the surrounding environment. Unitization minimizes the environmental impacts and costs of exploration and development of the unit area, which meets the section .303(b)(1) criteria and supports approval of the Application.

2. The Geological and Engineering Characteristics of the Reservoir

The Division received the following technical data in support of the application: Aurora's geological justification for formation of the unit, a history of oil and gas exploration in the area, annotated well logs, a well log cross-section, several representative dip seismic cross sections across the Moquawkie anticlinal trend, and depth and time structure-contour maps on two horizons within the Tertiary Beluga Formation. Division staff evaluated the confidential data provided by the unit operator and data otherwise available to them, and determined that the TMC Unit area encompasses all or part of one or more potential hydrocarbon accumulations, fulfilling the regulatory requirement in 11 AAC 83.356(a).

Cook Inlet area-wide geology maps from the 1960s and 1970s identify the regional fault and anticlinal trend that is the structural basis of the proposed TMC Unit. The Bruin Bay fault is the main structural feature in the unit area. Adjacent to and east of the Bruin Bay fault is the Moquawkie Anticline, a prominent anticlinal trend with an axial trace paralleling the fault. Aurora identified two structural highs along the anticline in the TMC Unit area, the Three Mile Creek prospect (south) and the Olson Creek prospect (north), which are separated by a structural saddle. Aurora's objective in the Initial POE is to delineate and test gas sands in the Beluga Formation above 4,300 feet true vertical depth (TVD) within the two prospect areas.

The Tertiary (Miocene) Beluga Formation is present in the subsurface over much of the upper Cook Inlet Basin. It is well exposed in outcrops on the southern Kenai Peninsula near Homer

<sup>&</sup>lt;sup>2</sup> 11 AAC 96.060; 18 AAC 75; 20 AAC 25.025.

and along the Beluga River. The formation thins or is truncated locally on structural highs and on the northeastern side of the Cook Inlet Basin. The Beluga Formation consists of interbedded poorly sorted sandstone, siltstone, claystone, sub-bituminous coal and ash beds, with locally abundant pebbly sandstone and pebble conglomerate. The depositional environment for the Beluga Formation is interpreted as shallow braided streams. The Beluga Formation is 4,150 feet thick at its subsurface type section, in the SOCAL Beluga River #1 well (now known as BRU #212-35), located east of the TMC Unit, within the Beluga River Unit. In the Beluga River field the Beluga Formation reservoir has an average porosity of 24%, and contains over 100 feet of net pay. In addition to the Beluga River field, the Beluga Formation also produced gas at Swanson River, Cannery Loop, Kenai, Lewis River, Nicolai Creek, North Cook Inlet, Stump Lake, Beaver Creek and Theodore River fields.

The Division cannot disclose the details of the confidential data, but the well and geophysical data provided with the application, and otherwise available to DNR, indicate that the potential for hydrocarbons within the proposed unit area is sufficient to qualify for unitization, and unitized development and production of any underlying gas reservoirs is appropriate.

The State's evaluation of the subsurface geology supports the formation of the TMC Unit to include the lands described in Exhibit A and depicted in Exhibit B to the Agreement (Attachments 1 and 2 to this decision). The geological and engineering characteristics of the TMC Unit area set out in .303(b)(2) support approval of the application.

3. Prior Exploration Activities in the Unit Area

The TMC Unit is located in the Cook Inlet basin, approximately nine miles west of the mouth of the Beluga River, and northwest of the Beluga River Unit. The exploration data Aurora provided with the application, data otherwise available to DNR, and Aurora's Initial POE reasonably justify including the proposed acreage in the TMC Unit.

The industry recognized the Three Mile Creek anticlinal trend as a potential exploration target by the mid-1960s, and used surface mapping tools to locate major structures before mapping the subsurface with seismic, gravity, and magnetic geophysical instruments and other tools that were available at the time. Several vintages of seismic data are available for the area. Table 1 lists eight exploration wells drilled in the area, including the Beluga River #1 well in the nearby Beluga River field.

Table 1. V	Vells Drilled On or Near the M	loquawk	ie Anticlin	al Trend	
Operator	Well Name & No.	Year Drilled	Status	Location	API Number
Superior	Chuit State #1	1962	P&A	T12N-R11W-8	502831000500
Superior	Chuit State #2	1962	P&A	T12N-R11W-7	502831000400
SOCAL	Beluga River #1 (#212-35)	1962	GAS	T13N-R10W-35	502831002700
Pan Am	Chuitna River State 03193 #1	1967	P&A	T12N-R12W-15	502831000600
Superior	Three Mile Creek State #1	1967	P&A-G	T12N-R11W-3	502832000400
Phillips	North Tyonek State #1	1973	P&A	T13N-R11W-25	502832004000
Anadarko	Lone Creek #1	1998	GAS	T12N-R11W-18	502832009600
Anadarko	Lone Creek #2	2000	P&A-G	T12N-R11W-30	502832009800

The first wells drilled in the area were the Superior Chuit State #1, plugged and abandoned at a total depth (TD) of 12,500 feet, and Superior Chuit State #2, plugged and abandoned at 9,152 feet TD in 1962. Both wells are located east of the Bruin Bay fault and west of the TMC Unit. In February 1967 Superior drilled the Superior Chuitna River State #1 well about four miles west of the unit area on the west side of the Bruin Bay fault.

The most significant well drilled in the area is the Superior Three Mile Creek State #1, located on the Three Mile Creek prospect structure within the TMC Unit Tract 4. In October 1967, Superior drilled this well to 13,773 feet TD as an oil exploration well, and found indications of gas in the Beluga Formation.

Phillips North Tyonek State #1 is also a significant well located just outside the eastern boundary of TMC Unit Tract 4. In 1973, Phillips drilled the North Tyonek State #1 well to 6,063 feet TD and tested several intervals, but determined all of the gas shows to be less than commercial.

The Anadarko Lone Creek #1 and Lone Creek #2 wells, drilled more recently on the Moquawkie anticline south of the TMC Unit, tested 10.6 million cubic feet of gas per day in the Tertiary Tyonek Formation at a depth of 2,400 feet.

Technology (primarily drilling technology, well log analysis, and seismic acquisition and processing) has evolved greatly since these early wells were drilled in upper Cook Inlet. Aurora is using advanced technology in its Cook Inlet exploration. With new seismic data and improved well log analysis tools, Aurora believes that it has a greater ability to identify and refine potential oil and gas exploration prospects within the Beluga Formation.

Based on the history of the area and the data presented by Aurora, the presence of hydrocarbons in the proposed unit area is prospective, but relatively unproven. This is especially true of the northeastern portion of the proposed TMC Unit. While Aurora justified the size of the TMC Unit based on the technical data and the Initial POE, additional exploration commitments will be necessary to justify retaining the entire unit area beyond the initial three-year term.

The exploration data provided with the application and otherwise available to DNR supports inclusion of the proposed acreage in the TMC Unit. Therefore, the prior exploration activities fulfill the criteria in section .303(b)(3) and support approval of the Application.

4. Plans for Exploration and Development of the Proposed Unit Area

The unit operator must provide plans for exploration or development that justify including the proposed acreage in the unit area.<sup>3</sup> A unit plan of exploration must include a description of proposed exploration activities, including the bottom-hole locations and depths of proposed wells, and the estimated date drilling will commence.<sup>4</sup>

<sup>&</sup>lt;sup>3</sup> 11 AAC 83.306(1)

<sup>&</sup>lt;sup>4</sup> 11 AAC 83.341(a).

Attachment 3 to this Decision is the Initial POE, Exhibit G to the Agreement, agreed to by the Applicants and approved by DNR and CIRI. In summary, Aurora plans to drill an exploratory well in the Three Mile Creek Prospect and acquire new seismic data over the unit area within the first two years, and drill a second exploratory well in the Olson Creek Prospect in the third year. In addition, if Aurora makes a commercial discovery, it will obtain approval of a plan of development and a participating area.

The Initial POE sets out a timely sequence of exploration activities that will facilitate the ultimate development and production of the reservoir, if Aurora discovers gas in commercial quantities. Furthermore, completion of the proposed exploration activities as scheduled during the three-year initial term will satisfy the performance standards and diligence requirements that the State, CIRI, and Aurora agreed to as a condition for approval of the Agreement. Failure to timely perform the various components set out in the Initial POE would constitute a default under the Agreement.

The Initial POE protects the interests of the public and the State by committing Aurora to drill wells and acquire seismic data within the unit area. The Initial POE, with the agreed-to terms and conditions, ensures that the lease extensions resulting from unitization under 11 AAC 83.336 continue only so long as the applicants proceed diligently with exploration and development of the unit area. The Initial POE complies with 11 AAC 83.341 and supports approval of the Application under the section .303(b)(4) criteria.

5. The Economic Costs and Benefits to the State

Approval of the Agreement and the Initial POE will result in both short-term and long-term economic benefits to the State and local communities. Assessment of the hydrocarbon potential within the unit will create jobs in the short-term.

If the working interest owners make a commercial discovery, develop, and begin production from the TMC Unit, the State will earn royalty and tax revenues over the long-term life of the field. Royalties and severance taxes benefit the local and state economy, and provide revenue to the State's general, school, and permanent funds. Aurora may likely reinvest revenues in new exploration and development in the State. Development of the TMC Unit would also increase demand for goods and services supplied by local businesses, retailers, and service providers. If drilling is successful, Aurora plans to deliver TMC Unit gas to supply residential needs in the Cook Inlet basin. The benefits of an increased property tax base for the KPB and reduced energy costs for residents and businesses would be significant to these communities. Additional supply and deliverability of Cook Inlet gas to existing users may keep regional energy prices stable.

The primary term of the State leases in the proposed unit area would have expired on January 31, 2004, if they were not committed to the TMC Unit. Had the leases expired, the acreage would have been returned to the State and the Division would have reoffered it in the May 2004 Areawide oil and gas lease sale. If the lands were leased in the 2004 sale, the State might receive bonus payments and rentals for the primary term of the new leases. However, even if the new lessee proposed exploration of the area during the new primary term, it could be years before the State would receive royalties and taxes on any commercial production. The potential long-term

economic benefits of exploration and earlier development of the TMC Unit area outweighs the short-term loss of potential bonus payments. In addition, if Aurora does not fulfill its exploration obligations, the Initial POE specifies payments that will be due to the State to defer the short-term loss of potential bonus payments.

In summary, the economic benefits outweigh the costs of unitization. Aurora has made meaningful commitments to explore the unit area, and if it is successful, the State will receive taxes, royalties, and increased economic activity. Moreover, the discovery of additional gas reserves in Cook Inlet may help to maintain stable energy supplies for the area. Therefore, DNR's evaluation of the section .303(b)(5) economic criteria supports approval of the Application.

6. Amendments to the Standard Unit Agreement

The Agreement, executed by the Applicants, is consistent with the State Only Model Form, dated June 2002, modified to provide for joint administration by the State and CIRI. The Applicants and CIRI agreed to add Section 3.11 to Article 3: Creation and Effect of Unit.

If at least 25 percent (25%) of the acreage leased in C-061394 and C-061502 is included in any Three Mile Creek Participating Area(s) by February 27, 2008, those CIRI Lands within the Unit that are not in a Participating Area(s) will continue to be held in accordance with the terms of (i) the Three Mile Creek Unit Agreement and (ii) the applicable CIRI Leases. If, however, less than 25% of the acreage leased in C-061394 and C-061502 is included in any Three Mile Creek Participating Area(s) by February 27, 2008, all CIRI Lands within the Unit but not then in a Participating Area(s) shall expire, contract out of, and no longer be committed to the Unit from that day forward. This provision does not prevent more than 25% of the acreage leased in C-061394 and C-061394 and C-061394 and C-061502 from being included in Participating Area(s) during the term of the Unit.

Exhibit G to the Agreement, the Initial POE, contains the following General Provisions.

If the Three Mile Creek Unit terminates for failure to fulfill any of the commitments in this Initial POE, the Working Interest Owners will automatically surrender all expired State acreage within the Unit Area, effective the day the Unit terminates.

If acreage contracts out of the Three Mile Creek Unit area for failure to fulfill any of the commitments in this Initial POE, the Working Interest Owners shall automatically surrender all expired State acreage that contracts out of the Three Mile Creek Unit, effective the day the Unit contracts. The Commissioner and the President may delay contraction of the unit area if warranted.

The Working Interest Owners waive the extension provision of 11 AAC 83.140 and Article 16.2 of the Three Mile Creek Unit Agreement, and the notice and

hearing provisions of 11 AAC 83.374 applicable to default and/or termination of the Three Mile Creek Unit.

In addition, the State proposed changes to Article 13: State and Private Leases, Rentals and Royalty Interest Payments. Article 13.1 was amended to reference the regulations on payments to the State, Article 13.7 to follow the statutory language on taking oil or gas in-kind, and Article 13.8 to specify records that the Unit Operator and Working Interest Owners shall maintain.

These modifications to the Standard Unit Agreement are in the best interest of the State and CIRI and under the .303.(b)(6) criteria, support approval of the Application.

### IV. FINDINGS

The Application, meets the criteria in 11 AAC 83.303(a) as discussed below.

1. Promote the Conservation of All Natural Resources

The Agreement will promote the conservation of both surface and subsurface resources through unitized (rather than lease-by-lease) development. Without the Agreement, the lease contracts would compel the lessees to seek permits to drill wells on each individual lease. Without unitization, the unregulated development of reservoirs can become a race for possession by competing operators through unnecessarily dense drilling, rapid dissipation of reservoir pressures, and irregular advancement of displaced fluids, all of which contribute to the loss of ultimate recovery or economic waste. This proliferation of surface activity, duplication of production, gathering, and processing facilities, and haste to get oil to the surface can result in the waste of resources.

Unitization reduces both the number of facilities required to explore for and develop reserves and the aerial extent or the footprint required to accommodate those facilities. All reservoir development must be consistent with conservation orders and field pool rules issued by AOGCC. After unitization, the unit operator can design and locate facilities to maximize recovery and minimize environmental impacts, without regard to lease boundaries. Although Aurora has not determined the extent of any gas contained in the unit area, the Agreement will ensure that the lessees explore the acreage and maximize the recovery of reserves from the leases if they discover a commercial hydrocarbon accumulation.

If the exploration activities result in the discovery of a commercial reservoir, there will be environmental impacts associated with reservoir development. However, all unit development must proceed according to an approved unit plan of development. Additionally, before undertaking any specific operations on State land, the unit operator must obtain the Division's approval of a unit plan of operations. DNR will condition its approval of a unit plan of operations and other permits on performance of the mitigation measures developed for the most recent Cook Inlet Areawide lease sale in addition to those in the leases. Compliance with mitigation measures will minimize, reduce or avoid adverse natural resource impacts. Unitized exploration and development of the TMC Unit area will reduce the amount of land, fish, and wildlife habitat that would otherwise be disrupted by individual lease development. Unitized operations will conserve natural resources, including hydrocarbons, gravel, sand, water, wetlands, and other valuable habitat. This reduction in environmental impacts and preservation of existing uses is in the public interest.

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 that complies with local, state, and federal rules and is consistent with DNR Area and other resource management plans. Formation of the TMC Unit and implementation of the Initial POE will ensure that the working interest owners prudently explore the unit area and maximize the recovery of reserves from the leases if they discover a commercial hydrocarbon accumulation. Unified field exploration and development without concern for property ownership promotes the conservation of all natural resources.

2. Promote the Prevention of Economic and Physical Waste

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. Unitization reduces the need for numerous exploration and development sites and thus minimizes drilling and facility investment costs. A cost-sharing agreement will promote efficient development of common surface facilities and operating strategies. The unit operator can select locations for individual wells and surface facilities that optimize oil and gas recovery while maintaining equity among all parties.

Unitization allows pooling of capital so that the working interest owners can share the exploration and development risks. Reducing costs and environmental impact through unitized operations will expedite development of any reserves discovered and will promote greater ultimate recovery of oil and gas from the unit area. This may increase and extend the State's income stream from production taxes and royalties. The lessees may reinvest revenues in new exploration and development in the State. Unitization means lower financing costs and increased benefits to all interested parties. It benefits the local and state economy, and may provide production-based revenues to the State's general, school, and permanent funds.

The total cost of exploring and developing the TMC Unit area would be higher on a lease-bylease basis than it would be under unitization. Unitized operations optimize 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 the unit operator to develop and produce less profitable areas of a reservoir in the interest of all parties, including the State. Formation of the TMC Unit and approval of the Initial POE will ensure that Aurora prudently and reasonably explores and develops all potential reservoirs within the unit area. 3. Provide for the Protection of All Parties in Interest, Including the State

Unitized development protects the economic interests of the working interest owners and royalty owners of a common reservoir. Under the Agreement and the Unit Operating Agreement, each working interest owner has an equitable allocation of costs and revenues commensurate with the value of their leases. Aurora provided evidence of reasonable effort to obtain joinder of all proper parties to the Agreement, and the Division complied with the public notice requirements of 11 AAC 83.311. The Applicants hold sufficient interest in the unit area to have reasonably effective control of operations.

The fact that the State and CIRI will jointly manage the Agreement also weighs in favor of unitization. The exploration and development of reservoirs underlying both State and CIRI leases will require joint approval by both lessors. The CIRI leases have a higher royalty rate than the State leases, but CIRI would have more latitude to renegotiate economic terms and environmental provisions than the State. The State's approval of the unit plans of exploration and development will ensure that the working interest owners do not concentrate exploration on the CIRI leases to the exclusion of the State acreage in the unit area.

The Agreement, as modified by the State and CIRI, and with the agreed-to terms and conditions outlined in the Initial POE, adequately and equitably protects the public interest, and promotes the State's 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 lessor's best interest. It advances evaluation of the State and CIRI's petroleum resources, while minimizing impacts to the region's cultural and environmental resources. A commercial discovery will stimulate the State economy with production-based revenue, oil and gas related jobs, and service industry activity. A commercial discovery on CIRI's acreage may also benefit the corporate stockholders by increasing stock value and funding dividends.

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. The Agreement provides for future expansions and contractions of the unit area, as warranted by data obtained by exploration or otherwise. In addition, the Agreement provisions and State law provide for notice and an opportunity to be heard if the lessee disagrees with a State unit administration decision. The Agreement thereby protects the public interest, the rights of the parties, and the correlative rights of adjacent landowners.

## V. DECISION

I find that the Application, meets the criteria in 11 AAC 83.303(a). As discussed above, the Agreement will promote the conservation of all natural resources, promote the prevention of economic and physical waste, and provide for the protection of all parties in interest including the State. The Application adequately and equitably protects the public interest, is in the State's best interest, and it meets the requirements of AS 38.05.180(p) and 11 AAC 83.303.

Under the Division's January 30, 2004 conditional decision, the TMC Unit became effective as of 12:01 a.m. on January 31, 2004. The preceding discussion provides the basis for that decision in compliance with 11 AAC 83.316.

- 1) In accordance with 11 AAC 83.341(d), an annual status report is due on the anniversary of the effective date of the TMC Unit, January 31 each year. The annual status report must describe the status of projects undertaken and the work completed during the previous year, as well as any proposed changes to the Initial POE.
- 2) The unit operator shall submit a second Plan of Exploration to the Commissioner and the President by December 2, 2006, at least 60 days before the Initial POE expires. Alternatively, the unit operator shall request approval of the first Plan of Development, if appropriate, at least 90 days before the Initial POE expires.<sup>5</sup>

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 Thomas E. Irwin, DNR Commissioner, 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. This decision takes effect immediately. If no appeal is filed by the appeal deadline, this decision becomes a final administrative order and decision of the department on the 31<sup>st</sup> day after issuance. 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 DNR.

Original signed by Mark D. Myers

March 26, 2004

Mark D. Myers Director Date

## VI. ATTACHMENTS

Attachment 1.	Exhibit A, Tract Description and Ownership Schedule

- Attachment 2. Exhibit B, Map of the Three Mile Creek Unit Boundary
- Attachment 3 Exhibit G, Three Mile Creek Unit Plan of Exploration

<sup>&</sup>lt;sup>5</sup> 11 AAC 83.341(b) and .343(c).

Section         Tract Acres         Mneral Owner         Lease Number         Expiration Date         Royetty Rate         ORR1 % Owner           640.00         640.00         CIRI         C-061594         2/28/2006         0.1666667         0           640.00         CIRI         C-061502         2/28/2006         0.1666667         0         5           640.00         CIRI         C-061502         2/28/2006         0.1666667         0         5           560.00         CIRI         C-061502         2/28/2006         0.1666667         0         5           560.00         CIRI         C-061502         2/28/2006         0.1666667         0         5           560.00         CIRI         C-061506         2/28/2006         0.1666667         0         5           560.00         CIRI         C-061506         2/28/2006         0.1666667         0         5           560.00         State         ADL 38623         1/31/2004         0.125         0.0146         Mobil*           560.00         State         ADL 38623         1/31/2004         0.125         0.0146         Mobil*           560.00         State         ADL 38623         1/31/2004         0.125         0.014	Tract AcresMneral OwnerLease NumberExpiration DateRoyalty RateORR1 % Rate1,820.00CIRIC-0613942/28/20060.16666670560.00CIRIC-0615022/28/20060.16666670560.00CIRIC-0615022/28/20060.16666670560.00CIRIC-0615062/28/20060.16666670560.00CIRIC-0615062/28/20060.1666667080.00CIRIC-0615062/28/20050.1666667080.00CIRIC-0615062/28/20050.1666667080.00CIRIC-0615062/28/20050.1666667080.00CIRIC-0615062/28/20050.1666667080.00CIRIC-0615062/28/20050.1666667080.00CIRIC-0615062/28/20050.1666667080.00CIRIC-0615062/28/20050.1666667080.00CIRIC-0615062/28/20050.1666667080.00CIRIC-0615062/28/20050.1666667080.00CIRIC-0615062/28/20050.1666667080.00CIRIADL 3882331/31/20040.1250.014680.00CIRIADL 3882331/31/20040.1250.014680.00CIRIADL 3882331/31/20040.1250.014680.00CIRIADL 3882331/31/20040.125
Tract Acres         Mneral Owner         Lease           1,920.00         CIRI         C-061394           560.00         CIRI         C-061502           560.00         CIRI         C-061502           560.00         CIRI         C-061502           80.00         CIRI         C-061502           3,320.00         STATE         ADL 388233           3,320.00         STATE         ADL 388233	Tract Acres         Mneral Owner         Lease           1,920.00         CIRI         C-061394           560.00         CIRI         C-061502           560.00         CIRI         C-061502           560.00         CIRI         C-061502           80.00         CIRI         C-061502           3,320.00         STATE         ADL 388233           3,320.00         STATE         ADL 388233
Mneral Lease Owner Number CIRI C-061394 CIRI C-061502 CIRI C-061506 CIRI C-061506	Mneral Lease Owner Number CIRI C-061394 CIRI C-061502 CIRI C-061506 CIRI C-061506
Expiration     Royelty Rate     ORRI % OWNer     ORRI % Owner       2/26/2006     0.1666667     0       2/26/2006     0.1666667     0       2/28/2006     0.1666667     0       2/28/2006     0.1666667     0       2/28/2005     0.1666667     0       2/28/2005     0.1666667     0       2/28/2005     0.1666667     0       2/28/2005     0.1666667     0       2/28/2005     0.1666667     0       2/28/2005     0.1666667     0       2/28/2005     0.1666667     0       2/28/2005     0.1666667     0       2/28/2005     0.1666667     0       2/28/2005     0.1666667     0       2/28/2005     0.125     0.0146       Mobil *     1/3 ti.2004     0.125       1/3 ti.2004     0.125     0.0146       Mobil *     Issueres;       Section 23: Unsurveyed, SE 1/4, 160 acrees;       Section 23: Unsurveyed, SE 1/4, 160 acrees;       Section 25: Unsurveyed, All, 640 acrees;       Section 35: Unsurveyed, All, 640 acrees;       Section 35: Unsurveyed, All, 640 acrees;       Section 35: Unsurveyed, All, 640 acrees;       Section 25: Unsurveyed, All, 640 acrees;       Section 25: Unsurveyed, All, 640 acrees;	Expiration     Royalty Rate Rate     ORRI %     ORRI %     ORRI WIO       2/28/2006     0.1666667     0     Aurora       2/28/2006     0.125     0.0146     Mobil *       1/31.2004     0.125     0.0146     Aurora       Section 22: Unsurveyed, SE1/4, 160 acres;     Section 23: Unsurveyed, SE1/4, 160 acres;       Section 23: Unsurveyed, AII, 640 acres;     Section 35: Unsurveyed, AII, 640 acres;       Section 35: Unsurveyed, AII, 640 acres;     Section 35: Unsurveyed, AII, 640 acres;       Section 35: Unsurveyed, AII, 640 acres;     Section 65: Unsurveyed, AII, 640 a
Royalty Rate     ORRI % OWNEr       0.1666667     0       0.1666667     0       0.1666667     0       0.1666667     0       0.1666667     0       0.1666667     0       0.1666667     0       0.1666667     0       0.1666667     0       0.1666667     0       0.1666667     0       0.1666667     0       0.1666667     0       0.125     0.0148       Mobil     0       nsurveyed, S1/2, 320 acres; nsurveyed, S1/2, 320 acres; nsurveyed, All, 640 acres; nsurv	Royalty     ORRI %     ORRI %     ORRI %     OWNer       0.1666667     0     Aurora       0.125     0.0146     Mobil *       0.125     0.0148     Aurora       0.125     0.0148     Mobil *       North, Range 11 West, Seward Meridian, Alaska       nent 1       nsurveyed, SE1/4, 160 acres;       nsurveyed, All, 640 acres;
0 ORRI % Owner 0 Owner 11 West Seward Merid 11 Owners; 11,2 30 ocres; 11,2 30 ocres; 11,2 30 ocres; 11,2 30 ocres; 11,5 40 o	ORRI     ORRI     WIO       0     Aurora       0.0146     Mobil*       Aurora     Aurora       11     Vest, Seward Meridian, Alaska       11, 640 acres;     11, 640 acres;       11, 640 acres;     11, 640 acres;       11, 640 acres;     11, 640 acres;       11, 640 acres;     40 acres;       11, 640 acres;     560 acres;       11, 640 acres;     560 acres;       12, SW 1/4, E1/2NW 1/4, 560 acres;       13, 640 acres;       14, 640 acres;       14, 640 acres;       15, 640 acres;       16, 60 acres;       16, 60 acres;       172, SW 1/4, E1/2NW 1/4, 560 acres;       16, 60 acres;       174, 560 acres;       16, 60 acres;       175, 60 acres;       176, 60 acres;       177, 500 acres;
ORRI Owner Owner S, res; s; more or le	ORRI Owner WIO Aurora Aurora Aurora Aurora s; es; es; es; E 1/2NW1/4, 560 acres; E 1/2NW1/4, 560 acres;
	Aurora Aurora Aurora Aurora Aurora S60 acres;

# Attachment 1 Exhibit A, Tract Description and Ownership Schedule

									7					σ		1			ch	Tract
<ul> <li>Mobil Exploration &amp; Producting North America, Inc. (Mobil)</li> <li>Although AURORA has reservations about the validity of this interest, in an abundance of caution and to recognize the DNR's regulations regarding Unitization protocol, AURORA elects to identify this interest now while deferring to address the validity issue later.</li> </ul>	TOTAL	State of Alaska, DNR (STATE)	Cook Inlet Region, Inc. (CIRI)	Mineral Ownership	Total Unit Acreage	containing approximately 520.00 acres, more or less.	Section 12, Unsurveyed, W1/2NW1/4;	Section 1, Unsurveyed, NE1/4, E1/2NW1/4, SW1/4, NW1/4SE1/4	Township 13 North, Range 11 West, Seward Meridian, Alaska	contemining approximately: 1, routour acres, more or ress.	Section 13, Unsurveyed, N1/2, SW1/4;	Section 12, Unsurveyed, E1/2, SW1/4, E1/2NW1/4;	Section 1, Unsurveyed, SW1/4SE1/4, E1/2SE1/4;	Township 13 North, Range 11 West, Seward Meridian, Alaska	containing approximately 520.00 acres, more or less.	Section 27: Unsurveyed, vv //2/vvv //4;	Section 22: Unsurveyed W1/2, W1/2NE1/4, VE1/4NE1/4 ;	Tract A	Township 13 North, Range 11 West, Seward Meridian, Alaska	Tract Legal Description
t, in an abur RORA elects							80.00	440.00			480.00	560.00	120.00			80.00	440.00			Section Acres
to identify t	8,030.00	5,520.00	2,550.00	Acreage	8,080.00				520.00					1,160.00					520.00	Tract Acres
ution and his interest	100.00%	68.32%	31.68%	Percent					STATE					STATE					STATE	Mneral Owner
									ADL 390515					ADL 388232					ADL 390516	Lease Number
		Forest Oil Corporation (Forest)	Aurora Gas, LLC (Aurora)	Working Interest Ownership					1/31/2004					1/31/2004	Section 22: Unsurveyed, SW1/4, 160 acres; Section 27: Unsurveyed, W 1/2NW1/4, 80 acres; containing approximately 240.00 acres, more or less	Tract A. Segment 1	Townshin 13	Legal Descri	1/31/2004	Expiration Date
Exhibit A, amended by DNR on March 24, 2004		poration (Fore	LC (Aurora)	rest Ownersh					0.125					0.125	nsurveyed, S nsurveyed, W proximately 2	ment 1	Townshin 13 North Ranne 11 West Seward Meridian Alaska	Legal Description of ORR Interest	0.125	Royalty Rate
ended by D		est)		τip					0					0	W1/4, 160 a 1/2NW1/4, 40.00 acres	The second second	11 West S	Interest	0.0146	ORRI %
NR on Marc	8,080.00	1,680.00	6,400.00	Acreage											icres; 80 acres; more or les	CHICK IN THIS IS	oward Merid		Mobil *	ORRI Owner
h 24, 2004	100.00%	20.79%	79.21%	Percent					Forest					Forest	- 26	and and and	ian Alaska		Aurora	WIO
									10000					100.00					10000	WIO %



Attachment 2 Exhibit B, Map of the Three Mile Creek Unit Boundary

Attachment 3 Exhibit G, Three Mile Creek Unit Plan of Exploration

The Working Interest Owners propose a three-year (3) Plan of Exploration (Initial POE) for the Three Mile Creek Unit. During the term of this Initial POE, the Three Mile Creek Unit Operator plans to drill two exploration wells, acquire new seismic data over the unit area, and obtain approval of an Initial Participating Area (Initial PA). The Unit Operator identified two prospects within the Unit Area, the Three Mile Creek Prospect and the Olson Creek Prospect, which are constrained by a generally north-south trending fault. The well and seismic data will help the Unit Operator determine the location of the fault and the area to be included in the Initial PA.

Three leases; C-061502, ADL 388232, and ADL 388233, are severed along the fault as follows:

Tract 3, the western portion severed from C-061502

Township 12 North, Range 11 West, Seward Meridian, Alaska Those portions of Tract A more particularly described as protracted Section 4: W1/2NW1/4, 80.00 acres; Tract 3 contains approximately 80.00 acres, more or less

Tract 5, the western portion severed from ADL 388233

Township 13 North, Range 11 West, Seward Meridian, Alaska, Tract A Segment 1 Section 22: Unsurveyed, SW1/4, 160.00 acres; Section 27: Unsurveyed, W1/2NW1/4, 80.00 acres; Segment 2 Section 22: Unsurveyed, NW1/4, W1/2NE1/4, NE1/4NE1/4, 280.00 acres; Tract 5 contains approximately 520.00 acres, more or less.

**Tract 7**, the western portion severed from ADL 388232

Township 13 North, Range 11 West, Seward Meridian, Alaska Section 1, Unsurveyed, NE1/4, E1/2NW1/4, SW1/4, NW1/4SE1/4, 440.00 acres; Section 12, Unsurveyed, W1/2NW1/4, 80.00 acres;
Tract 7 contains approximately 520.00 acres, more or less.

CIRI will assign a new lease number to Tract 3, and the Division will assign new lease numbers to Tracts 5 and 7, which are now separate and distinct leases having the same effective date and term as the original leases. The State leases may be maintained in accordance with the terms and conditions of the lease, the Agreement, statutes, and regulations.

**Year 1/Year 2:** Within the first two years of this Initial POE, before **January 31, 2006**, the Three Mile Creek Unit Operator plans to drill an exploration well and acquire new seismic data over the unit area.

I. By January 31, 2006, the Unit Operator must:

- A. drill the 1st Exploration Well
  - 1. to the base of the Tsuga 2-4 interval or the stratigraphic equivalent of the 4,300' TVD marker, as seen in the Three Mile Creek State-1 Well whichever is deeper;
  - 2. to a bottom hole location within Tract 4, ADL 388233;
  - 3. log the well (GR or SP, Resistivity and Neutron/Density or Porosity: appropriate triple combo log); and
  - 4. complete, suspend, or abandon the well.

and

- B. acquire not less than 27 Line Miles of new seismic data sufficient to evaluate the entire unit area, as shown on the map titled *Proposed Three Mile Creek/Olsen Creek 2D Program 27 Miles* received by DNR on January 20, 2004.
- II. If the Working Interest Owners fail to either drill the 1st Exploration Well or acquire new seismic data, as described in Sections I. A. or I. B. above, by January 31, 2005:
  - A. the Three Mile Creek Unit will automatically terminate;
  - B. the Working Interest Owners shall pay the State of Alaska a payment equal to \$8/acre x expired State acreage; and
  - C. the Working Interest Owners will be released from all further obligations in this Initial POE.
- III. If the Working Interest Owners fail to drill the 1st Exploration Well and acquire new seismic data, as described in Section I. above, by January 31, 2006:
  - A. the Three Mile Creek Unit will terminate;
  - B. the Working Interest Owners will pay the State of Alaska a payment equal to \$16/acre x expired State acreage; and
  - C. the Working Interest Owners will be released from all further obligations in this Initial POE.

- IV. If, after drilling the 1st Exploration Well and acquiring new seismic data, as described in Section I above, the Working Interest Owners decide not to drill a 2<sup>nd</sup> Exploration Well during Year 3 of this Initial POE:
  - A. the Unit Operator shall notify DNR and CIRI in writing of the nodrill decision by January 31, 2006;
  - B. Tract 6 and Tract 7 will automatically contract out of the Three Mile Creek Unit; and
  - C. the Working Interest Owners shall pay the State of Alaska a payment equal to \$16/acre x contracted acreage.

**Year Three:** During the third year of this Initial POE, before **January 31, 2007**, the Unit Operator plans to drill a 2nd Exploration Well and obtain approval of a Participating Area within the Three Mile Creek Unit.

- V. By January 31, 2007, the Unit Operator must:
  - A. drill a 2nd Exploration Well
    - 1. to the base of the Tsuga 2-4 interval or the stratigraphic equivalent of the 4,300' TVD marker, as seen in the Three Mile Creek State-1 Well, whichever is deeper;
    - 2. to a bottom hole location within Tract 6, ADL 388232;
    - 3. log the well (GR or SP, Resistivity and Neutron/Density or Porosity: appropriate triple combo log); and
    - 4. complete, suspend, or abandon the well.

and

- B. obtain approval from the proper authorities of an Initial Participating Area within the Three Mile Creek Unit.
- VI. If the Working Interest Owners fail to drill the 2<sup>nd</sup> Exploration Well, as described in Section V. A. above, by **January 31, 2007**:
  - A. Tract 6 and Tract 7 will automatically contract out of the Three Mile Creek Unit; and
  - B. the Working Interest Owners shall pay the State of Alaska a payment equal to \$24/acre x contraction acreage.
- VII. If the Working Interest Owners fail to obtain approval of an Initial Participating Area, as described in Section V. B. above, by January 31, 2007, the Three Mile Creek Unit will automatically terminate.

VIII. 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, 2007, contracts out of the Unit Area, unless there is a well certified capable of producing in paying quantities located on that tract.

#### **Initial POE General Provisions:**

- IX. If the Three Mile Creek Unit terminates for failure to fulfill any of the commitments in this Initial POE, the Working Interest Owners will automatically surrender all expired State acreage within the Unit Area, effective the day the Unit terminates.
- X. If acreage contracts out of the Three Mile Creek Unit area for failure to fulfill any of the commitments in this Initial POE, the Working Interest Owners shall automatically surrender all expired State acreage that contracts out of the Three Mile Creek Unit, effective the day the Unit contracts. The Commissioner and the President may delay contraction of the unit area if warranted.

The Working Interest Owners waive the extension provision of 11 AAC 83.140 and Article 16.2 of the Three Mile Creek Unit Agreement, and the notice and hearing provisions of 11 AAC 83.374 applicable to default and/or termination of the Three Mile Creek Unit.