

WHISKEY GULCH UNIT AGREEMENT

FINDINGS AND DECISION OF THE DIRECTOR,
DIVISION OF OIL AND GAS,
UNDER DELEGATION OF AUTHORITY FROM THE COMMISSIONER
STATE OF ALASKA
DEPARTMENT OF NATURAL RESOURCES

November 29, 2005

TABLE OF CONTENTS

I. INTRODUCTION AND BACKGROUND.....	1
II. APPLICATION FOR THE FORMATION OF THE WHISKEY GULCH UNIT.....	1
III. DISCUSSION OF DECISION CRITERIA.....	2
A. Decision Criteria considered under 11 AAC 83.303(b)	2
1. The Environmental Costs and Benefits of Unitized Exploration or Development	2
2. The Geological and Engineering Characteristics of the Reservoir and Prior Exploration Activities in the Unit Area	4
3. Plans for Exploration and Development of the Proposed Unit Area.....	6
4. The Economic Costs and Benefits to the State and Other Relevant Factors	7
B. Decision Criteria considered under 11 AAC 83.303(a).....	8
1. The Conservation of All Natural Resources	8
2. The Prevention of Economic and Physical Waste	9
3. The Protection of All Parties in Interest, Including the State	10
IV. FINDINGS AND DECISION.....	10
A. The Conservation of All Natural Resources	10
B. The Prevention of Economic and Physical Waste.....	11
C. The Protection of All Parties in Interest, Including the State.....	11

I. INTRODUCTION AND BACKGROUND

On October 5, 2005, Brooks Range Petroleum Corporation (Brooks Range), as the designated Whiskey Gulch Unit Operator, filed the Whiskey Gulch Unit application (Application) with the State of Alaska, Department of Natural Resources (DNR), on behalf of itself as the sole working interest owner (WIO). The proposed unit is located on the North Slope, approximately 4-5 miles south of the Kuparuk River Unit (KRU). The proposed unit area covers approximately 30,651 acres within twelve individual State of Alaska oil and gas leases. Approval of the proposed Whiskey Gulch 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.

Five of the leases in the proposed unit area were offered in the North Slope Areawide 2000 Oil and Gas Lease Sale, held on November 15, 2000. DNR issued oil and gas leases ADL 389687 (Tract 2), ADL 389692 (Tract 7), ADL 389693 (Tract 6), ADL 389694 (Tract 8), and ADL 389695 (Tract 9), effective December 1, 2001, on State of Alaska lease form number DOG 200004, which reserves a 12.50 percent royalty to the State of Alaska. The seven-year primary lease term of these leases expires on November 30, 2008.

The remaining seven leases in the proposed unit area were offered in State of Alaska Lease Sale 87, held on June 24, 1998. DNR issued oil and gas leases ADL 389089 (Tract 1), ADL 389090 (Tract 5), ADL 389091 (Tract 4), ADL 389092 (Tract 3), ADL 389093 (Tract 10), ADL 389094 (Tract 11) and ADL 389095 (Tract 12), effective December 1, 1998, on State of Alaska lease form number DOG 9609 (rev. 6/97), which reserves a 12.50 percent royalty to the State of Alaska. The seven-year primary lease term of these leases expires on November 30, 2005.

II. APPLICATION FOR THE FORMATION OF THE WHISKEY GULCH UNIT

Brooks Range submitted the Application on October 5, 2005, 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: the Agreement; 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). The Application also includes the Whiskey Gulch Operating Agreement, and technical data in support of the Application. The Agreement is based on DNR's State Only Royalty Owner model unit form dated June 2002 (Model Form) with no modifications.

The Agreement requires the unit operator, Brooks Range, to file unit plans describing the activities planned for the proposed unit area. Brooks Range must consider how it can best develop the resource underlying the entire unit area, without regard to internal lease boundaries. Brooks Range filed a proposed two-year Initial POE. The Initial POE is discussed in Section III. A. 3.

The Agreement defines the relationship between the unit operator, the working interest owner (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.

The Division of Oil and Gas (Division) determined that the Application was complete and published a public notice in the "*Anchorage Daily News*" and in the "*Arctic Sounder*" on Thursday, October 13, 2005, 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 North Slope Borough, the City of Nuiqsut, the City of Barrow, the Kuukpiik Village Corporation, Arctic Slope Regional Corporation, the Nuiqsut Postmaster, the radio station KBRW in Barrow, the U.S. Department of the Interior, Bureau of Land Management (BLM), and the Alaska Oil and Gas Conservation Commission (AOGCC). 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 November 14, 2005. DNR received no comments regarding the Application.

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 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 Whiskey Gulch Unit area is habitat for a variety of land and 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 Lease Sales 87 and the North Slope Areawide 2000. DNR included mitigation measures in the leases. The proposed Whiskey Gulch 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 Whiskey Gulch 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. Further, leases operations both before and after unitization are subject to a coastal zone consistency determination, and must comply with the terms of both the State Coastal Management Program and North Slope Borough Coastal Management Plan. 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 Whiskey Gulch 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 plan of exploration or plan of development is only one step in the process of obtaining permission to drill a well or wells or develop the potential and known reservoirs within the unit area. The Unit Operator must still obtain approval of a Plan of Operations from the State and permits from various agencies on State leases before drilling a well or wells or initiating development activities to produce reservoirs within the unit area. 11 AAC 83.346.

A proposed Plan of Operations must describe the operating procedures designed to prevent or minimize adverse effects on natural resources. Plans of Operation are subject to extensive technical review by a number of local, state, and federal agencies. They are also subject to consistency with the Alaska Coastal Management Program and local coastal district plans, if the affected lands are within the coastal zone. The unit operator 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 Whiskey Gulch Unit or the region.

The Initial POE requires the drilling of a new exploratory well within the unit area. When Brooks Range 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 in the Unit Area

State regulation requires that a unit must encompass the minimum area required to include all or part of one or more oil or gas reservoirs, or potential hydrocarbon accumulations. 11 AAC 83.356(a). Division technical staff evaluated all data provided by Brooks Range, and all pertinent public available data to determine if the proposed unit area met those criteria.

The preliminary data and information supplied by Brooks Range includes geologic cross sections, structure maps, and electric log analyses, but no interpreted seismic data. Brooks Range acquired the Whiskey Gulch Prospect and leasehold from Anadarko Petroleum Corporation (APC) and is still in the process of securing licenses for the pertinent 3D seismic data covering the proposed Unit, the Resolution 3D data acquired by APC and ConocoPhillips, and will supply the required seismic interpretation to the Division on or before November 1, 2006, the date by which they must commit to the first Whiskey Gulch well.

The proposed Whiskey Gulch Unit encompasses approximately 30,651 acres and is immediately south of the existing Kuparuk River Unit (KRU). The earliest exploration in the vicinity of the proposed Unit occurred with the drilling of the Toolik Fed wells by ARCO. The Toolik Fed #2 (Sec 5, T8N, R12E, U.M.) was drilled in 1969 to a total depth (TD) of 8,700' measured depth (MD) and though there were no cores or tests, there were some minor shows and a thin (approx. 12') Kuparuk sand is apparent on logs at 7,846' MD. The Toolik Fed #3 (Sec 4, T8N, R9E, U.M.) was drilled the following year to a TD of 6,020' MD (well above the Kuparuk level), also without cores or tests, but with minor oil shows.

The next phase of exploration drilling occurred adjacent to the proposed Unit as part of a Kuparuk Field delineation program by the KRU Working Interest Owners from 1974 – 1985. Three wells in this phase were West Sak B-10, West Sak 13, and West Sak 26.

The West Sak B-10 (Sec 23, T10N, R9E, U.M.) well, located some six miles to the north of the Whiskey Gulch Unit area, was drilled in 1978 to a TD of 7,626' MD. This well encountered shows in both the West Sak/Schrader Bluff and the Kuparuk intervals. The primary Kuparuk target was intercepted at 6,402' MD and consisted of a very thin C interval (approx. 23') underlain by distal A interval (approx. 100'). The C and A sands from 6,402-6,528' MD were perforated and flow tested no formation fluids to the surface. The West Sak/Schrader Bluff interval in the well was tested from 2,702-2,900' MD, but, though it also did not flow to the surface, the drillstem test chamber did recover a sample of 16.8° API gravity oil.

The West Sak 13 well (Sec 36, T10N, R8E, U.M.) was drilled in 1979 to the northwest of the proposed Unit, and to a TD of 7,028' MD. The top of the Kuparuk was encountered at 6,674' MD with a total interval thickness of approximately 116' MD. The section appears to be made up of distal Kuparuk A sands with no overlying C sand apparent on logs. At least four cores were taken across the Kuparuk interval, with some oil shows and staining reported in the cores, however; no tests were acquired and no RFT samples were recovered in the Kuparuk.

The West Sak 26 well (Sec 11, T9N, R10E, U.M.) was drilled in 1985 and is located approximately seven miles to the northeast of the proposed Unit Area. The well reached a TD of 7,300' MD, and intersected the top of the Kuparuk Formation at 6,872' MD. Approximately 24' of Kuparuk interval was encountered with a possible Kuparuk C sand of less than 8' at the top of the section. Two cores were cut in the Kuparuk with some oil shows and staining reported, however; no tests were acquired in this section. Extensive oil shows were encountered in the West Sak/Schrader Bluff section where 17 cores were cut and a Drill Stem Test (DST) was acquired. Multiple perforations were shot in the section 3,419-3,539' MD, but the test only recovered 300 barrels of water.

Another Kuparuk sandstone exploration well of note is the ARCO Ravik #1 well (Sec 32, T9N, R9E, U.M.), drilled in 1983 to a depth of 8,200' MD. In this well, the top of the Kuparuk is at 7,202' MD with a total interval thickness of 98'. The section appears to be predominantly distal Kuparuk A, with a possible 8' of C interval at the top. Four cores were cut across the Kuparuk and, although oil shows and stains are described in the cores, no tests were done for this interval. In drilling through the West Sak/Schrader Bluff section, oil shows were reported and oil was apparently seen on the shaker, but three DSTs were attempted and all flowed water, some with a trace of 11.9° API oil. The Ravik well lies within the boundaries of the proposed Whiskey Gulch Unit, and is located two miles southwest of the Whiskey Gulch B well (Sec 22, T9N, R9E, U.M.) location permitted by Anadarko in 2001.

Other wells drilled in this area, KRU WT-02, KRU WT-03, and the Unocal Ruby State 1, have targeted the potential of the West Sak/Schrader Bluff interval. These wells were not drilled deep enough to intersect and evaluate the Kuparuk Formation.

The Lower Cretaceous Kuparuk Formation is the principle reservoir target for the Whiskey Gulch Unit. Based on surrounding well control, the Kuparuk C sandstones (Hauterivian) and the Kuparuk A sandstones (Berriasian/Valanginian) are both present but relatively thin in this area. Although, in general, seismic data is unable to differentiate the two Kuparuk intervals from each other, seismic data has routinely been used to predict whether the Kuparuk interval is present or absent, and, in some cases, when the total Kuparuk interval is thin (less than 200'). The character and amplitude of the seismic response are useful as a predictor of total formation thickness. The primary Whiskey Gulch prospect is a Kuparuk play based on amplitude anomalies defined by APC and ConocoPhillips using the Resolution 3D survey.

An interesting set of circumstances became evident to the Division while discussing the proposed Whiskey Gulch Unit boundary and the potential hydrocarbon accumulations within the leases proposed for unitization. Confidentiality issues surrounding the APC/ConocoPhillips interpretation of the Resolution 3D data prevented Brooks Range from disclosing the Resolution

3D data to the Division. Brooks Range does not currently have a license to the Resolution 3D data and has not produced its own, independent interpretation of the Resolution 3D data to determine the prospective accumulations in the area proposed for unitization. This situation has made it difficult to make a determination of the appropriate lands to be included within the Whiskey Gulch Unit.

Seven of the twelve leases proposed for the Whiskey Gulch Unit expire November 30, 2005. Since the expiring leases would not be available for re-leasing until February 2007, the next available scheduled lease sale, the Division and Brooks Range have agreed, as part of the Initial POE for the Whiskey Gulch Unit, that Brooks Range will secure the Resolution 3D seismic data and provide its interpretation of the seismic data to the Division prior to November 1, 2006. On or before that date, the Unit Area will be re-defined as to the unitized and non-unitized portions based on Brooks Range's interpretation of the 3D data, the Unit Area will be contracted to conform to the then defined prospects. The Initial POE is discussed further in Section III.A.3.

The delay in putting the seven expiring leases into a lease sale makes this solution possible. If a scheduled lease sale date occurred before February 2007 and Brooks Range not willing to accept the Division's terms and conditions regarding the Initial POE, the Division may have been unwilling to accept the unique circumstances surrounding the Application.

The Division's assessment of the data and information provided at this time along with the proposed Initial POE support the approval of the proposed unit area.

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

The Initial POE sets out a timely sequence of reservoir delineation activities that should facilitate the ultimate development and production of the reservoir, if oil or gas is discovered in commercial quantities. Completion of these conditions and exploration activities as scheduled will satisfy the performance standards and diligence requirements that the Division and Brooks Range agreed to as a condition for approval of the Agreement.

The Initial POE includes plans to develop the unit's Kuparuk prospect based on seismic amplitude anomalies indicated by the 2000 Resolution 3D survey, and to drill an exploration well in the identified prospect, under the following conditions: Brooks Range shall (1) by November 1, 2006, provide its seismic interpretation of the Resolution 3D data to the Division and re-define the extent of the Whiskey Gulch Unit Area; (2) by November 1, 2006, commit, in writing, to drill a Whiskey Gulch Unit well by June 1, 2007; and 3) drill the first unit well to completion by June 1, 2007.

If Brooks Range fails to provide its interpretation of the Resolution 3D data to the Division or make the well drilling commitment by November 1, 2006, the Whiskey Gulch Unit will be in default, the Agreement will automatically terminate on November 1, 2006.

If Brooks Range timely files the seismic interpretation and commits to drill the first unit well, but fails to drill the well to completion by June 1, 2007, then the Whiskey Gulch Unit will be in default, the Agreement will automatically terminate on June 1, 2007, and Brooks Range shall

make a payment of Two Hundred Thirty-four Thousand One Hundred Nineteen Dollars (\$234,119.00), to and as directed by, the Division.

If Brooks Range drills the well by June 1, 2007, a new unit plan of exploration or a plan of development will be due by September 15, 2007.

These provisions ensure that the lease extensions resulting from unitization under 11 AAC 83.336(a)(2) continue only so long as Brooks Range proceeds diligently with exploration and development.

Brooks Range has agreed to waive the extension provisions of 11 AAC 83.140 and Article 15.2 of the Agreement, and the notice and hearing provisions of 11 AAC 83.374 applicable to default and termination or any contraction of the Whiskey Gulch Unit.

Brooks Range's Initial POE allows for earlier exploration and confirmation of the prospect in the Whiskey Gulch Unit area than would occur under the individual leases.

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

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 Whiskey Gulch Unit, the state will earn royalty and tax revenues over the long-term life of the field. The Initial POE with the agreed-to terms and conditions set out in this decision advances exploration and evaluation of the prospects in the expansion area sooner than would occur under any individual lease exploration effort.

Seven of the leases in the proposed unit area will expire on November 30, 2005, 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 February 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. Under the proposed Agreement and Initial POE, the unit operator agreed to make a commitment to drill the first Whiskey Gulch Unit well by November 1, 2006, and drill the well by June 1, 2007. This commitment provides the state with the opportunity to receive royalties from the leases sooner than if the acreage were re-offered.

The twelve leases proposed for the Whiskey Gulch Unit are written on a variety of forms, containing a variety of provisions. Including the leases in the Whiskey Gulch 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.

During the Agreement negotiations and the discussions for this Application, the parties bargained for amendments to the terms and conditions of the various lease contracts to harmonize them. The WIO has agreed to lease amendments requested by the Division as a condition of including the leases into the Whiskey Gulch Unit. The agreed-to lease amendments are:

- 1) Paragraph 36(b) of lease form DOG 200204 (rev. 10/2003) will replace the existing paragraph 36(b) of lease form DOG 9609 (rev. 6/97) and lease form DOG 200004; and
- 2) No ANS Royalty Settlement Agreement will apply to the Whiskey Gulch Unit leases.

The WIO has agreed to provide technical data sufficient to define the prospect under consideration, has committed its lease interests to the proposed unit and has agreed to an Initial POE that ensures a timely sequence of drilling and development activities in order to evaluate and develop all the acreage within the proposed unit area. The Initial POE with the agreed-to terms and conditions set out in this decision advances exploration and evaluation of the prospects in the unit area sooner than would occur under any individual lease exploration effort.

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

1. 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 operators. 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 Whiskey Gulch 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 Whiskey Gulch 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 in 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 modifications to the varying provisions of some of the leases will economically benefit the state, and reduce the administrative burdens of operating and regulating this unit.

The formation of the Whiskey Gulch Unit protects the economic interests of Brooks Range and the state of a common reservoir. Operating under a unit agreement and unit operating agreement assures each individual WIO an equitable allocation of costs and revenues commensurate with the value of its leases.

IV. 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. Brooks Range submitted, and has agreed to submit additional, geological, geophysical and engineering data to the Division by November 1, 2006, in support of the Application. Division technical staff determined that the Whiskey Gulch Unit area encompasses all or part of one or more potential hydrocarbon accumulations. The available geological, geophysical and engineering data, in conjunction with the data to be submitted by November 1, 2006, justify including the proposed lands, described in Exhibit A to the Application, in the Whiskey Gulch Unit.
2. The Initial POE, subject to the terms and conditions discussed in Section III.A.3., provides for the reasonable exploration of potential hydrocarbon accumulations in the unit area during the initial term of the Agreement. If the WIOs discover 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. Brooks Range provided evidence of reasonable effort to obtain joinder of any proper party to the Agreement.
2. Brooks Range, the sole WIO in the Whiskey Gulch Unit, holds sufficient interest in the unit area to give reasonably effective control of operations, and twelve State of Alaska leases are proposed for the Whiskey Gulch 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 applicant's Initial POE, subject to the terms and conditions discussed in Section III.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 until November 28, 2007. 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.

- 10. The Whiskey Gulch Unit will expedite exploration and potential development of the unit area. With the formation of the Whiskey Gulch 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 Michael Menge, 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. 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.

//signed by Kevin R. Banks for

November 29, 2005

Bill Van Dyke, Acting Director
Division of Oil and Gas

Date

- Attachments: 1. Exhibit A, Whiskey Gulch Unit Tracts/Leases
2. Exhibit B, Map of the Unit Boundary

EXHIBIT "A"

Existing Acreage and Acquired Oil and Gas Interest within the Whiskey Gulch Contract Area, Alaska

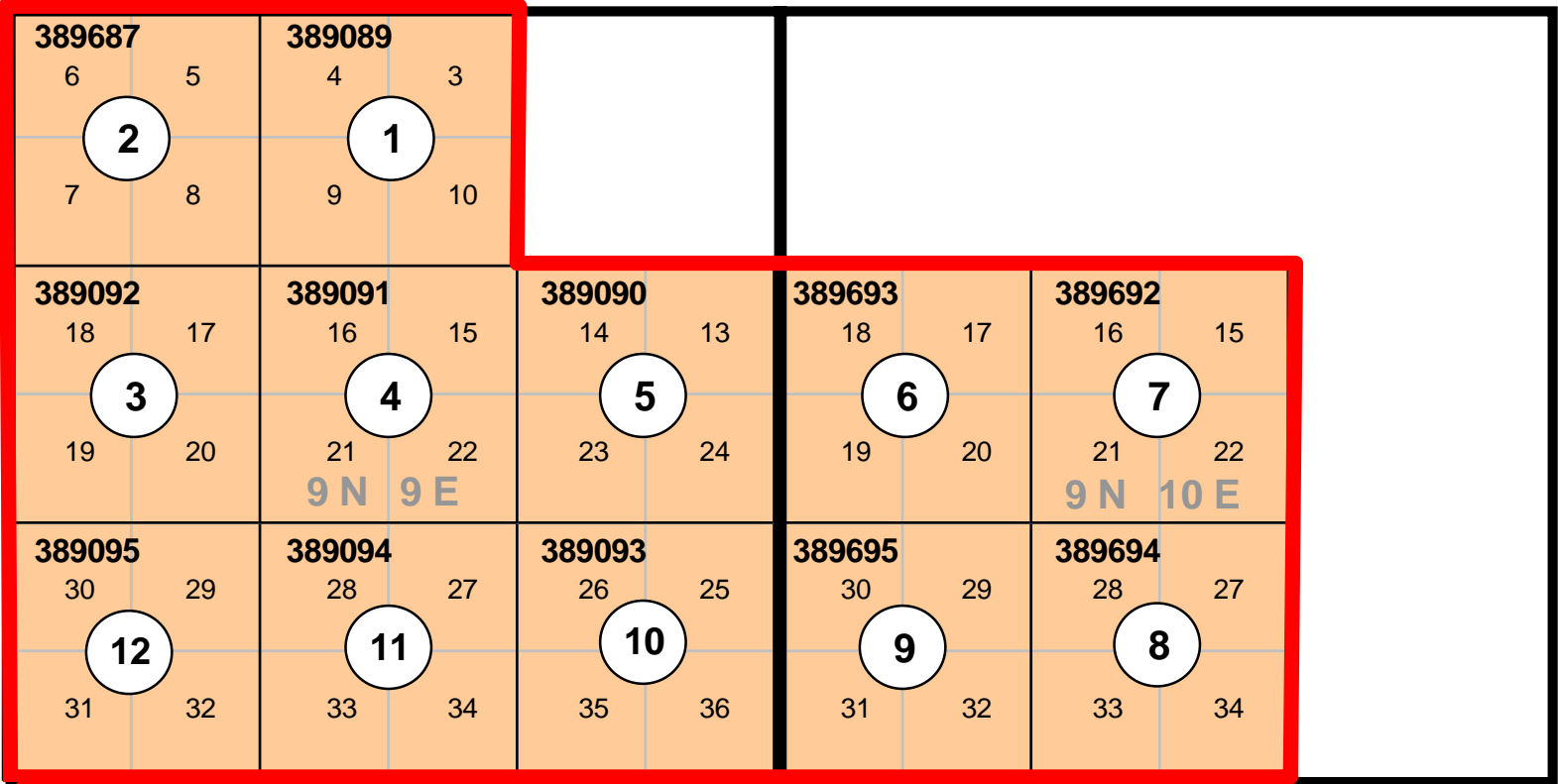
<u>Tract No.</u>	<u>Legal Description</u>	<u>Effective Date</u>	<u>No. of Acres</u>	<u>ADL No.</u>	<u>Basic Royalty</u>	<u>ORRI</u>	<u>Other Burdens</u>	<u>Working Interest Ownership</u>
1	T9N, R9E, UM Sec. 3: All (640 acres) Sec. 4: All (640 acres) Sec. 9: All (640 acres) Sec. 10: All (640 acres)	12/1/1998	2,560.00	389089	12.50%	2.00%	BRPC	100.00%
2	T9N, R9E, UM Sec. 5: All (640 acres) Sec.6: All (625 acres) Sec. 7: All (628 acres) Sec. 8: All (640 acres)	12/1/2001	2,533.00	389687	12.50%	2.00%	BRPC	100.00%
3	T9N, R9E, UM Sec. 17: All (640 acres) Sec. 18: All (631 acres) Sec. 19: All (633 acres) Sec. 20: All (640 acres)	12/1/1998	2,544.00	389092	12.50%	2.00%	BRPC	100.00%
4	T9N, R9E, UM Sec. 15: All (640 acres) Sec. 16: All (640 acres) Sec. 21: All (640 acres) Sec. 22: All (640 acres)	12/1/1998	2,560.00	389091	12.50%	2.00%	BRPC	100.00%
5	T9N, R9E, UM Sec. 13: All (640 acres) Sec. 14: All (640 acres) Sec. 23: All (640 acres) Sec. 24: All (640 acres)	12/1/1998	2,560.00	389090	12.50%	2.00%	BRPC	100.00%
6	T9N, R10E, UM Sec. 17: All (640 acres) Sec. 18: All (631 acres) Sec. 19: All (633 acres) Sec. 20: All (640 acres)	12/1/2001	2,544.00	389693	12.50%	2.00%	BRPC	100.00%
7	T9N, R10E, UM Sec. 15: All (640 acres) Sec. 16: All (640 acres) Sec. 21: All (640 acres) Sec. 22: All (640 acres)	12/1/2001	2,560.00	389692	12.50%	2.00%	BRPC	100.00%

EXHIBIT "A "

Existing Acreage and Acquired Oil and Gas Interest within the Whiskey Gulch Contract Area, Alaska

<u>Tract No.</u>	<u>Legal Description</u>	<u>Effective Date</u>	<u>No. of Acres</u>	<u>ADL No.</u>	<u>Basic Royalty</u>	<u>ORRI</u>	<u>Other Burdens</u>	<u>Working Interest Ownership</u>
8	T9N, R10E, UM Sec. 27: All (640 acres) Sec. 28: All (640 acres) Sec. 33: All (640 acres) Sec. 34: All (640 acres)	12/1/2001	2,560.00	389694	12.50%	2.00%	BRPC	100.00%
9	T9N, R10E, UM Sec. 29: All (640 acres) Sec. 30: All (636 acres) Sec. 31: All (639 acres) Sec. 32: All (640 acres)	12/1/2001	2,555.00	389695	12.50%	2.00%	BRPC	100.00%
10	T9N, R9E, UM Sec. 25: All (640 acres) Sec. 26: All (640 acres) Sec. 35: All (640 acres) Sec. 36: All (640 acres)	12/1/1998	2,560.00	389093	12.50%	2.00%	BRPC	100.00%
11	T9N, R9E, UM Sec. 27: All (640 acres) Sec. 28: All (640 acres) Sec. 33: All (640 acres) Sec. 34: All (640 acres)	12/1/1998	2,560.00	389094	12.50%	2.00%	BRPC	100.00%
12	T9N, R9E, UM Sec. 29: All (640 acres) Sec. 30: All (636 acres) Sec. 31: All (639 acres) Sec. 32: All (640 acres)	12/1/1998	2,555.00	389095	12.50%	2.00%	BRPC	100.00%

Exhibit B



- Unit boundary
- Lease boundary
- Section line
- ① Tract number

Proposed Whiskey Gulch Unit
 Brooks Range Petroleum Corporation