STATE OF ALASKA

TONY KNOWLES, GOVERNOR

DEPARTMENT OF NATURAL RESOURCES

DIVISION OF OIL AND GAS

3601 "C" STREET, SUITE 1380
ANCHORAGE, ALASKA 99503-5948
PHONE: (907) 269-8800

August 20, 1998

Pete Zseleczky, Land manager
BP Exploration (Alaska), Inc.
900 East Benson Boulevard
P.O. Box 196612
Anchorage, AK 99519-6612

RE: Badami Unit
Badami Sands Participating Area

Dear Mr. Zseleczky:

The Badami Sands Participating Area is approved effective August 1, 1998. BP Exploration (Alaska), Inc., (BP) as Unit Operator applied to form the Badami Sands Participating Area (BSPA) within the Badami Unit. The Commissioner of the Department of Natural Resources found that the BSPA would: 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. The commissioner's decision and findings, dated August 20, 1998, is enclosed.

Sincerely,

Carol Lee
Unit Manager

Hand Delivered to:

Krissell Crandall, Sr. Landman

8/20/98
Date

C:\USER\CDL\Units\BADAMI\BSPA approval cover.doc

BADAMI UNIT

APPLICATION FOR THE FORMATION OF THE BADAMI SANDS PARTICIPATING AREA

Decision and Findings of the Commissioner
Alaska Department of Natural Resources

August 20, 1998

Table of Contents

I. INTRODUCTION AND BACKGROUND

BP Exploration (Alaska), Inc., (BP) as Unit Operator applied to form the Badami Sands Participating Area (BSPA) to be located within the current boundary of the Badami Unit. The Badami Unit is located on the North Slope, both onshore and offshore, west of the Point Thomson Unit. The Unit Area is comprised of ten oil and gas leases with an area of approximately 37,402 acres. BP and Petrofina Delaware, Inc. (Petrofina) jointly own all ten leases with 70% and 30% working interest respectively.

An oil and gas "unit" is comprised of a group of leases that cover all or part of one or more potential or known reservoirs and which are subject to a "unit agreement." The "unit agreement" is the instrument that is typically executed by those with an interest in the leases, including the royalty owner, and which specifies how unit operations will be conducted, and how costs and benefits will be allocated among the various leases. A second agreement called a "unit operating agreement" controls the relationship between the parties that share the costs of unit development. Unitization generally allows the unit owners to explore, develop and produce potential or known reservoirs more efficiently than on a lease by lease basis.

On March 13, 1995, the Department of Natural Resources, Division of Oil and Gas (DNR) approved the formation of the Badami Unit with an initial five-year Plan of Exploration. BP complied with all the requirements of the POE in two years and determined that the Badami reservoir was sufficiently delineated to initiate development activities. On September 19, 1997, DNR approved BP's Initial Plan of Development for the Badami Unit. BP anticipates sustained unit production to commence in August 1998. BP must submit an application to form a participating area at least 90 days before sustained unit production. 11 AAC 83.351.

A participating area (PA) is that part of the unit area designated for the purpose of allocating hydrocarbon production from a reservoir. The state regulations governing unitization allow for the expansion or contraction of a participating area as more wells are drilled and more data is obtained. Only parties who own an interest within a PA share in the costs of production and revenues from the sale of the oil or gas from the participating area. Exhibit C to the Badami Unit Agreement is a schedule that identifies and describes a PA including geologic descriptions and a schedule showing Unit Tract numbers, legal descriptions, lease numbers, and Unit Tract Participation. Exhibit D is a map showing the boundary lines of a PA and the Unit Tracts in a PA established under the Badami

Unit Agreement. Exhibit E is a schedule that describes the allocation of PA Expense to each Unit Tract in a PA established under the Badami Unit Agreement.

II. APPLICATION FOR THE FORMATION OF THE BADAMI SANDS PARTICIPATING AREA

On May 15, 1998, BP submitted an *Application for the Formation of the Badami Sands Participating Area within the Badami Unit* (The Original Application) pursuant to 11 AAC 83.351 and Section 9 of the Badami Unit Agreement (the Agreement). The Original Application included Exhibits C, D, E and F to the Agreement and supporting geological and geophysical data. BP proposed a PA boundary determined on an interim basis by the "Circle and Tangent" method based upon anticipated production and injection well target locations, as illustrated in Exhibit D and Attachment 1 to the Original Application. All area substances and all area costs were to be allocated based on the acreage identified in Exhibit C during a three-year interim period. After the three-year interim period a redetermination would occur allowing for adjustments as necessary. BP requested that DNR approve the BSPA effective the first day of the month following the filing of the application. By letter dated June 9, 1998, DNR informed BP that the Original Application was incomplete. DNR also proposed that the effective date for the BSPA be 12:01 a.m. on the date following approval by DNR.

On June 12, 1998, BP submitted a *Supplemental Application for the Formation of the Badami Sands Participating Area within the Badami Unit* (Supplemental Application). The Supplemental Application included a revised Exhibit C and an Attachment 5 consisting of an estimated drilling schedule. BP requested that DNR approve the Supplemental Application effective the first day of the month that sustained unit production occurs.

BP invited DNR staff to a presentation on June 17, 1998, to discuss an alternate allocation method. On July 10, 1998, BP submitted the *Second Supplemental Application for the Formation of the Badami Sands Participating Area within the Badami Unit* (the Second Supplemental Application). The Second Supplemental Application included revised Exhibits C, D and Attachment 1 and amended the second paragraph of the Original Application. BP proposed that the PA boundary be the outer boundaries of the area determined by the "circle quarter section intersect" method based upon anticipated production and injection well target locations, as illustrated in Exhibit D and Attachment 1 to the Second Supplemental Application. The "circle quarter section intersect" method is described in detail in the Second Supplemental Application. All area substances and all area cost would be allocated based on the bottom-hole location of the

wells and the actual production from each well. Note: multilateral wells will have multiple bottom-hole locations with production allocated to each wellbore. On July 20, 1998, BP submitted a revised Exhibit D to support the Second Supplemental Application.

The acreage BP proposed including in the BSPA overlies an oil reservoir known as the Badami Sand Interval of the Lower Canning Formation (Badami Reservoir). The proposed area is reasonably estimated to be capable of producing or contributing to the production of hydrocarbons in paying quantities. 11 AAC 83.351(a). BP proposes including portions of eight leases in the BSPA: ADLs 365533, 365535, 367004, 367005, 367006, 367010, 367011, and 377011.

ADL 365533 and ADL 365535 reserve a 16 2/3% royalty share to the state. ADL 377011 reserves a 16.66667% royalty share to the state. The other five leases in the proposed BSPA reserve a 12.5% royalty share to the state. However, the proposed BSPA revises the royalty share to the state on production from portions of four leases. A north/south line can be drawn to divide the proposed BSPA. The leases in the western portion of the proposed BSPA reserve a 12.5% royalty share to the state. The leases in the eastern area reserve the higher royalty share to the state. To mitigate problems of locating wells and allocating royalty to wells located near the boundary between the two areas with different royalty rates, BP proposed a third royalty area as a strip measuring 2640 feet wide centered on the dividing line (The Strip). The lessees will pay royalty at the rate of 14.585% (the Averaged Royalty Rate) based on actual production from wellbores with bottom-hole locations in The Strip. On August 10, 1998, DNR requested that BP define separate tracts for the portions of the leases with the Averaged Royalty Rate. BP submitted revised Exhibits C and D on August 12, 1998. The Averaged Royalty Rate will apply to Tracts 2.2, 4.2, 6.2, and 7.2.

The royalty share for Tracts 1, 2.1, 3, 4.1, 5, 6.1, 7.1, and 10 will be at the rate specified in the respective lease agreements. However, the royalty share reserved to the state on Tract 4.1 in ADL 377011, Tract 7.1 in ADL 365533, and Tract 10 in ADL 365535 will be stated in decimal format with two places after the decimal, 16.67% instead of a fraction.

Traditionally the share of production allocated to each tract in a PA is stated as a percent of the total production for the field. BP has requested a different method for allocating production among the tracts in the BSPA. All area substances will be allocated based on each well's bottom-hole location and actual production. All production from wells with bottom-hole locations in a tract will be allocated to that tract. If lateral wellbores from a multi-lateral well cross royalty tracts, commingled production from the well will be equally divided between the lateral's bottom-hole locations. For example, if one of the three well-bores of a

tri-lateral well is on the 16.67% portion of a lease and the other two are in The Strip, then 1/3 of the production from the well pays 16.67% royalty and the remaining 2/3 pays the Averaged Royalty Rate. All area costs will be allocated to BP (70%) and Petrofina (30%) as indicated in Exhibit E.

III. DISCUSSION OF THE PARTICIPATING AREA DECISION CRITERIA

11 AAC 83.351(a) provides that a PA may include "only land reasonably known to be underlain by hydrocarbons and known or reasonably estimated through use of geological, geophysical, or engineering data to be capable of producing or contributing to the production of hydrocarbons in paying quantities." "Paying quantities" means:

> quantities sufficient to yield a return in excess of operating costs, even if drilling and equipment costs may never be repaid and the undertaking as a whole may ultimately result in a loss; quantities are insufficient to yield a return in excess of operating costs unless those quantities, not considering the costs of transportation and marketing, will produce sufficient revenue to induce a prudent operator to produce those quantities.

11 AAC 83.395(4). A PA application must be evaluated under these standards, as well as those of 11 AAC 83.303.

Under 11 AAC 83.303, a proposed PA will be approved if the commissioner finds that the PA is necessary or advisable to protect the public interest. To make such a finding, the commissioner must determine that the proposed PA will: 1) conserve natural resources, 2) prevent economic and physical waste; and 3) protect all parties of interest, including the state.

In evaluating the above criteria, the commissioner will consider: 1) the environmental costs and benefits, 2) the geological and engineering characteristics of the potential hydrocarbon accumulation or reservoir proposed for inclusion in the PA, 3) prior exploration activities in the proposed PA, 4) the applicant's plans for exploration or development of the proposed PA, 5) the economic costs and benefits to the state, and 6) any other relevant factors (including mitigation measures) the commissioner determines necessary or advisable to protect the public interest. The following evaluates the BSPA under these criteria and considerations.

A. Conservation of Natural Resources

The formation of oil and gas units and PAs within unit areas to develop hydrocarbon-bearing reservoirs generally conserves hydrocarbons. A single PA will provide for efficient, integrated development of the Badami Reservoir. A comprehensive operating agreement and plan of development governing that production will help avoid duplicative development efforts on and beneath the surface.

B. Prevention of Economic and Physical Waste

Generally, forming a PA facilitates the equitable division of costs and allocation of hydrocarbon shares, and provides for a diligent development plan that maximizes physical and economic benefit from a reservoir. The BSPA prevents economic and physical waste by eliminating redundant expenditures for a given level of production, and avoids the loss of ultimate recovery by adopting a unified reservoir management strategy. The oil and gas resources can be produced through a single facility infrastructure system. The BSPA will improve the efficiency of developing the Badami Reservoir, which has variable productivity across adjoining leases. Marginal economic reserves, which otherwise would not be produced on a lease-by-lease basis, can be produced through the PA. Facility consolidation saves capital and promotes better reservoir management for all working interest owners through pressure maintenance and secondary recovery procedures. In combination, these factors allow less profitable areas of a reservoir to be developed and produced while preventing economic and physical waste.

C. Protection of All Parties

Forming PAs seeks to protect the economic interests of all working interest owners of the reservoir as well as the royalty owner. By combining interests and operating under the terms of a unit agreement and unit operating agreement the owners may be assured that costs and revenues will be fairly allocated.

The BSPA will maximize hydrocarbon recovery and additional production-based revenue from BSPA production will promote the state's economic interest. However, additional recovery of hydrocarbons, in and of itself may not always determine the state's best interest. Production must occur under suitable terms and conditions to assure that the economic interests of both the working interest owners and the state, as the royalty owner, are protected. Amendments to an existing unit agreement or oil and gas lease may be necessary to protect the state's interest.

The commissioner may, with the consent of the lessees, change the royalty requirements of the leases in connection with the institution and operation of a unit plan, if he determines that it is necessary or proper to protect the public interest. AS 38.05.180 (p). Modifying the royalty rate for the acreage in The Strip protects the state's interest. The lessees' ability to locate wells on the lower royalty leases and drain hydrocarbons from the higher royalty leases is reduced. The royalty rate is increased on the Tracts in the west side of The Strip and equally decreased on the Tracts in the east side of The Strip. Applying the Average Royalty Rate to the area in The Strip has a neutral effect on the overall royalty due to the state from the BSPA.

In reviewing the above criteria, the following factors were considered:

1. The Environmental Costs and Benefits

Producing hydrocarbon from the Badami Reservoir through the Badami Unit facilities will reduce the environmental impact of development. The use of Unit facilities will reduce the number of roads, flowlines, pipelines and other surface disturbances. This reduction in surface impacts serves to protect wildlife habitats and reduces impacts to wetlands. The BSPA promotes efficient development of the state's resources, while minimizing impacts to the region's cultural, biological, and environmental resources.

2. The Geological and Engineering Characteristics of the Reservoir

The Badami fan complex consists of at least 600 feet of turbidite deposits overlying what is probably highstand and slumped shales. The Badami oil accumulations lie within the channel sands of this thick, laterally extensive, toe-of-slope turbidite fan complex of the Canning Formation. A canyon-cut slope trends northwest to southeast and defines the southwestern, proximal boundary of the fan complex. To the northeast, the major sand bodies appear to either shale out or are cut out by internal erosional surfaces. The Badami field within the BSPA appears to be divided into two large areas by an erosional channel and/or depositional incontinuities. The southeastern area, first encountered by Conoco Inc. (Conoco) in the Badami No. 1 well, is by far the most productive and is a priority in development. The northwestern area is fairly sand rich but may have relatively poor oil properties as characterized by the Badami No. 2 well. However, the oil properties appear to be quite variable so one well in this area may not be definitive.

These turbidite channel sands appear to be surrounded on all sides by impermeable, deep water shales and so the trapping mechanism appears to be entirely stratigraphic. The BSPA boundary is therefore based on the presence of sand as indicated on the seismic data. Structure probably plays no part in the trap, however, elevation may play a role in fluid properties if the oil has stratified. No gas cap or fluid contacts have been encountered in the wells drilled so far.

Because of the multi-bedded, thin and discontinuous nature of the sands in the BSPA, BP has chosen to drill multilateral wells to develop the reservoir. These wells and wellbores should drain the reservoir more efficiently and produce at higher production rates relative to single-bore wells. The uncertain nature of the area being drained by each well or wellbore and the differing royalty rates across the reservoir make the production allocation proposed by BP a good choice at this time for the BSPA. Each tract will be allocated the oil and gas actually produced from that tract and the royalty owner will be paid accordingly. Establishment of The Strip means that there will be no disputes about drainage across lease lines or gaming of bottom-hole locations for wells. Royalty differences will still exist but the differences will be substantially reduced.

3. Prior Exploration and Development Activities

The oil and gas drilling history of the Mikkelson Bay area goes back to the period from 1970 to 1983 when several oil companies independently drilled six exploration wells. The main exploration target at that time was the Ellesmerian sequence of rocks similar to those of the Prudhoe Bay and Duck Island fields, specifically the Lisburne and Endicott groups. The results were negative for these deep rocks but several wells encountered oil saturated sandstones in a shallower section that tested small quantities of oil. These sands were interpreted to be deep water, Brookian sequence turbidites.

Conoco drilled the Badami #1 discovery well in 1990 down to the Kekiktuk Formation (11,977 feet tvd). The Kekiktuk Formation was disappointing but at a shallower zone (10,230 feet tvd) a turbidite fan complex was encountered that tested 2,670 barrels of oil per day (BOPD) at 28° API gravity and a gas oil ratio of about 690. Conoco drilled Badami No. 2 in 1992 as a delineation/step-out well. It encountered similar sands, however, the oil found in this well was much heavier at 19° API gravity and the well only tested 379 BOPD. It is unknown whether this turbidite fan was an exploration target or a fortuitous find. However, in the late 1980's seismic sequence stratigraphy and deep water turbidites came into vogue on the North Slope and several companies drilled wells based on these concepts.

Effective, December 30, 1993, Conoco transferred its interest in the leases to BP. BP acquired approximately 80 square miles of 3D seismic data in the area in 1993. During the 1994-1995 winter season BP drilled two Badami appraisal wells designated Badami #4 and #5 (the Badami #3 well was never drilled). The Badami No. 4 well tested 180 and 380 BOPD respectively from two zones. This oil was fairly heavy at 21° to 22° API gravity. The Badami No. 5 well tested much better, with 1,660 BOPD at 26° API gravity, yielding results similar to Badami No. 1.

BP conducted a second 3D seismic survey in the first quarter of 1995 to complete coverage over the entire unit area. On September 12, 1994, BP applied for approval of the Badami Unit Agreement. DNR approved the formation of the Agreement effective March 13, 1995, with a five-year Plan of Exploration. In 1996, BP reprocessed the seismic data and interpreted the well data from the Badami #4 and Badami #5 wells. BP incorporated the seismic and well data into new geoscience and engineering models of the Badami Reservoir in 1996. On July 14, 1997, BP submitted the Initial Three-year Plan of Development for the Badami Unit (Initial POD). On September 19, 1997, DNR approved the Initial POD. In the winter of 1997-98, BP began drilling development wells predominantly around the Badami No. 1 and No. 5 well locations.

4. The Applicant's Plan for Exploration or Development of the Participating Area

The Initial POD includes plans to drill up to 38 development wells in the Badami Reservoir. The Badami Unit will be a remote, standalone development with no permanent connecting road to the existing North Slope infrastructure. The Badami Unit facilities are designed to provide full process and export capabilities to support a hydrocarbon liquid production rate of 35,000 bpd. The facilities are also planned to process 22.5 million scfd of produced gas, 13,600 bpd of produced water, and 30,000 bpd of source water. When BP submitted the Initial POD for approval, they planned to commence sustained production in October 1998. BP has revised the timeline and now anticipates sustained unit production to commence in August 1998. Enhanced Oil Recovery (EOR) operations are planned to begin as soon as practicable after production start-up. A water-alternating-gas (WAG) miscible gas flood is planned. The Commissioner must approve any injection of Outside Substances into a Reservoir in the Unit Area as part of a unit plan of development or operation. The Alaska Oil and Gas Conservation Commission must also approve any injection of Outside Substances into a Reservoir in the Unit Area. Article 8.6 of the Agreement.

5. The Economic Costs and Benefits to the State

As discussed in Article III C. above, increased production and revenues, in and of themselves and without consideration of other relevant factors, may not always be in the state's best interest. Here, however, the gains in economic benefits outweigh any perceived costs to the state. The state's economy benefits from the production-based revenue, oil and gas related jobs, and service industry activity.

As required by 11 AAC 83.371, BP submitted an allocation of production and cost for the leases in the proposed BSPA (Exhibits C and E). The proposed allocation method distributes production based on the bottom-hole location and actual production from each well. This is an equitable method for allocating production in this stratified, discontinuous reservoir with different royalty rates across the field. This allocation method is appropriate for the BSPA due to a unique set of circumstances: the state is the only royalty owner, the lessees have equalized their interests across the field, and there are no overriding royalty owners.

However, this allocation method is more complicated to administer. It will require the Unit Operator to provide DNR with directional surveys for each wellbore and identify the exact bottom-hole location by Tract. DNR will audit the surveys to verify that production is allocated to the appropriate Tract. BP will conduct a minimum of two well tests per month on each producing well and submit a monthly production allocation report to DNR. The working interest owners must report the production allocated to each Tract and DNR will have to process multiple royalty reports each month. The cost of the administrative burden is outweighed by the accuracy of the reported production and increased fairness in the allocation of production.

All of the leases in the BSPA were issued after December 1, 1979. Under AS 37.13.010, 50 percent of all mineral lease rentals, royalties, and royalty sale proceeds, received by the state from mineral leases issued after December 1, 1979, will be deposited in the Alaska Permanent Fund (Post Chapter 13 Leases). Leases issued before December 1, 1979 contribute only 25 percent of the proceeds to the Alaska Permanent Fund. The BSPA is the first North Slope PA where all production will be from Post Chapter 13 Leases.

Allowable field cost deductions for the BSPA are addressed in Paragraph 37 of the Leases and Article 10.9 of the Badami Unit Agreement. Royalty paid in value will be free and clear of all lease expense, Unit Expense, and Participating Area Expense (and any portion of those expenses that is incurred away from the Unit Area), including, but not limited to, expenses for separating, cleaning, dehydration, gathering, saltwater disposal, and preparing the Unitized

Substances for transportation off the Unit Area. No field cost deductions are allowed.

6. Any Other Relevant Factors (Including Mitigation Measures) the Commissioner Determines Necessary or Advisable to Protect the Public Interest

Representatives from BP and DNR discussed the development of the Badami Reservoir before and after the submittal of the Original Application. The division was concerned about the size of the proposed BSPA in relation to the Initial POD and the equitable allocation of production among the leases in the proposed PA. The geology of the area is very complicated and has not been thoroughly explored. The proposed BSPA boundary is based on BP's target locations for 68 delineation wells shown on Exhibit D to the Second Supplemental Application (Although there are only 38 wells in the Initial POD). Some of the tracts in the proposed BSPA may not be underlain by hydrocarbons and the reservoir may not be continuous across the field. BP proposed and DNR accepted an allocation methodology based on the bottom-hole locations of the wells. Production will only be allocated to Tracts with producing wells. As BP drills the wells and gathers data they will develop a better understanding of the field. BP will revise the proposed well locations as they acquire more information. Some of the proposed wells may not be drilled while others may have discouraging results. Some tracts may not be developed in a timely manner, if they are developed at all. BP agreed that the BSPA would contract or expand to include only those tracts with production or injection wells.

BP's Initial POD includes 38 development wells sanctioned by company management. The plan consists of approximately 20 production wells and 15 water/miscible fluid injection wells, 2 source water wells and one Class I waste disposal well. DNR approved the Initial POD through September 24, 2000. BP must submit an Annual Report describing the operations conducted under the Initial POD by September 24, 1999.

The Second POD is due on June 26, 2000, ninety days before the Initial POD expires. By June 26, 2000, BP shall submit an application for expansion or contraction of the BSPA. The BSPA must include "only land reasonably known to be underlain by hydrocarbons and known or reasonably estimated through use of geological, geophysical, or engineering data to be capable of producing or contributing to the production of hydrocarbons in paying quantities." DNR will review the existing production and injection well locations and BP's proposed Second POD and drilling schedule when we evaluate the expansion/contraction application.

VI. FINDINGS AND DECISION

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

1. The proposed Badami Sands PA meets the requirements of 11 AAC 83.303.

2. The available geological and engineering data submitted demonstrate that a paying quantities certification is appropriate for the wells in the Badami Reservoir. The acreage is known to be underlain by hydrocarbons and known or reasonably estimated to be capable of production or contributing to production in sufficient quantities to justify the formation of the BSPA within the Badami Unit.

3. The geological and engineering data supporting the BSPA justify the inclusion of all of the proposed tracts at this time. The entire BSPA is within the boundaries of the current Badami Unit. Under the terms of the applicable regulations governing formation and operation of oil and gas units (11 AAC 83.301 – 11 AAC 83.395) and the terms and conditions of the lease agreements, the following lands are included in the BSPA:

   T. 9N., R. 19E., Umiat Meridian, NE1/4 Section 1.

   T. 9N., R. 20E., Umiat Meridian, Sections 2-6, NE1/4 Section 7, Sections 8-11, NW1/4 Section 14, and NE1/4 Section 15.

   T. 10N., 19E., Umiat Meridian, Sections 24, 25, 36.

   T. 10N., 20E., Umiat Meridian, S1/2 Section 20; W1/2, W1/2SE1/4 Section 29; Sections 30-32; W1/2, SE1/4 Section 33; and Sections 34, and 35.

4. The Badami Unit Agreement and the Alaska statutes and regulations governing oil and gas units provide for further expansions or contractions of a PA as warranted by additional information and findings. Therefore, the public interest and the correlative rights of all parties, including the state, are protected.

5. BP will submit an expansion/contraction application by June 26, 2000, so that the BSPA will only include Tracts with existing and sanctioned production or injection wells.

6. The production of BSPA hydrocarbon liquids through the Badami Unit facilities reduces environmental impacts. Utilization of unit facilities will avoid unnecessary duplication of development efforts on and beneath the surface.

7. Formation of the BSPA equitably divides costs and allocates produced hydrocarbons. The Initial POD is designed to maximize physical and economic recovery from the Badami Reservoir. The Unit Operator will diligently explore and delineate the Badami Reservoir underlying the approved PA under the Badami Unit the plans of development and operations approved by DNR.

8. Pursuant to 11 AAC 83.351(a) and 11 AAC 83.371(a), DNR approves the tract allocation schedule for the BSPA as presented on the Exhibit C dated August 12,1998. DNR assigned unique account codes to each tract in the BSPA for royalty accounting purposes and BP included those codes on the Exhibit C. BP and Petrofina shall reference the account codes on the monthly royalty reports.

9. BP, as Unit Operator, shall provide DNR with the monthly production allocation reports and well test data for the Badami wells by the 20th of the following month. The monthly allocation report shall include the bottom-hole location for each wellbore; the volume of oil, gas, and water produced from each well; and specific well test data for all tests that have been conducted. DNR reserves the right to request any information it deems pertinent to the review of those reports. Moreover, this approval of the allocation methodology is conditioned upon the operator's agreement to reply promptly and fully to any such requests.

10. DNR reserves the right to review the well test allocations to insure compliance with the methodology prescribed in this decision. Such review may include, but is not limited to, inspection of facilities, equipment, and well test data.

11. The leases and the Agreement do not allow the lessees to deduct any field costs from the state's royalty share of produced hydrocarbons.

12. BP must submit an Outside Substances Agreement to DNR for approval prior to injecting any Outside Substances into the BSPA.

13. The BSPA is approved effective August 1, 1998.

For these reasons and subject to the conditions and limitations noted, I hereby approve the Badami Sands Participating Area within the Badami Unit.

Kenneth A. Boyd, Director
Division of Oil and Gas

20 AUG '98
Date

For: John Shively, Commissioner
Alaska Department of Natural Resources

Attachment: Delegation of Authority
Exhibit C to the Badami Unit Agreement

C:\USER\CDL\Units\BADAMI\BSPA Decision.doc

DELEGATION OF AUTHORITY

Badami Sands Participating Area, Badami Unit

I hereby delegate to the Director of the Division of Oil and Gas, my authority under AS 38.05.180(p), 11 AAC 83.351 and .371 to approve the Badami Sands Participating Area (BSPA) and the method for allocating hydrocarbon production and operating costs among the leases in the BSPA.

John T. Shively, Commissioner
Alaska Department of Natural Resources

8/19/98
Date

EXHIBIT C
Badami Sands Participating Area Application

Participating Area and Tract Participation

Unit Tract No.	Legal Description Of Unit Tract Acreage Within Participating Area	Section Acreage	Tract Acreage (w/in PA)	Allocation	ADL No.	Royalty (%)	ORRI (%)	Royalty Acct. Code	Working Interest Owners And Percentage Interest
1	T. 10 N., R. 19 E. Umiat Meridian, Alaska Section 24: All	 640	640	100%	367004	12.5	None	B010	70% BP Exploration (Alaska) Inc. 30% Petrofina Delaware, Inc.
2.1	T. 10 N., R. 20 E. Umiat Meridian, Alaska Section 19: S½ Section 29: W½, W½SE¼ Section 30: All Section 31: All Section 32: W½, W½E½	 309 400 620 623 480	2.432	100%	367006	12.5	None	B021	70% BP Exploration (Alaska) Inc. 30% Petrofina Delaware, Inc.
2.2	T. 10 N., R. 20 E. Umiat Meridian, Alaska Section 29: E½SE¼ Section 32: E½E½	 80 160	240	100%	367006	14.585	None	B022	70% BP Exploration (Alaska) Inc. 30% Petrofina Delaware, Inc.
3	T. 10 N., R. 19 E. Umiat Meridian, Alaska Section 25: All Section 36: All	 640 640	1,280	100%	367005	12.5	None	B030	70% BP Exploration (Alaska) Inc. 30% Petrofina Delaware, Inc.
4.1	T. 10 N., R. 20 E. Umiat Meridian, Alaska Section 33: E½W½, SE¼ Section 34: All Section 35: All	 320 640 640	1,600	100%	377011	16.67	None	B041	70% BP Exploration (Alaska) Inc. 30% Petrofina Delaware, Inc.
4.2	T. 10 N., R. 20 E. Umiat Meridian, Alaska Section 33: W½W½	 160	160	100%	377011	14.585	None	B042	70% BP Exploration (Alaska) Inc. 30% Petrofina Delaware, Inc.

EXHIBIT C
Badami Sands Participating Area Application

Participating Area and Tract Participation

Unit Tract No.	Legal Description Of Unit Tract Acreage Within Participating Area	Section Acreage	Tract Acreage (w/in PA)	Alloca-tion	ADL No.	Royalty (%)	ORRI (%)	Royalty Acct. Code	Working Interest Owners And Percentage Interest
5	T. 9 N., R. 19 E. Umiat Meridian, Alaska Section 1: NE¼	 160	160	100%	367010	12.5	None	B050	70% BP Exploration (Alaska) Inc. 30% Petrofina Delaware, Inc.
6.1	T. 9 N., R. 20 E. Umiat Meridian, Alaska Section 5: W½, W½E½ Section 6: All Section 7: NE¼ Section 8: W½, W½E½	 480 625 160 480	1.745	100%	367011	12.5	None	B061	70% BP Exploration (Alaska) Inc. 30% Petrofina Delaware, Inc.
6.2	T. 9 N., R. 20 E. Umiat Meridian, Alaska Section 5: E½E½ Section 8: E½E½	 160 160	320	100%	367011	14.585	None	B062	70% BP Exploration (Alaska) Inc. 30% Petrofina Delaware, Inc.
7.1	T. 9 N., R. 20 E. Umiat Meridian, Alaska Section 2: All Section 3: All Section 4: E½, E½W½ Section 9: E½, E½W½ Section 10: All Section 11: All	 640 640 480 480 640 640	3.520	100%	365533	16.67	None	B071	70% BP Exploration (Alaska) Inc. 30% Petrofina Delaware, Inc.
7.2	T. 9 N., R. 20 E. Umiat Meridian, Alaska Section 4: W½W½ Section 9: W½W½	 160 160	320	100%	365533	14.585	None	B072	70% BP Exploration (Alaska) Inc. 30% Petrofina Delaware, Inc.

EXHIBIT C
Badami Sands Participating Area Application

Participating Area and Tract Participation

Unit Tract No.	Legal Description Of Unit Tract Acreage Within Participating Area	Section Acreage	Tract Acreage (w/in PA)	Alloca-tion	ADL No.	Royalty (%)	ORRI (%)	Royalty Acct. Code	Working Interest Owners And Percentage Interest
10	T. 9 N., R. 20 E. Umiat Meridian, Alaska Section 14: NW¼ Section 15: NE¼	 160 160	320	100%	365535	16.67	None	B100	70% BP Exploration (Alaska) Inc. 30% Petrofina Delaware, Inc.
	Total Acreage In Badami Sands Participating Area		12,737					BUBS	

Note: The Badami Sands Participating Area establishes two different royalty rates for those portions of Unit Tracts 2, 4, 6 and 7 which lie within the Participating Area. At the request of the Division of Oil and Gas, those Unit Tracts within the Participating Area which are subject to different royalty rates have been designated as Unit Tracts 2.1, 2.2, 4.1, 4.2, 6.1, 6.2, 7.1 and 7.2.