

MILNE POINT UNIT

APPLICATION FOR THE  
SEVENTH REVISION OF THE KUPARUK  
PARTICIPATING AREA

DECISION AND FINDINGS OF THE COMMISSIONER  
ALASKA DEPARTMENT OF NATURAL RESOURCES

JANUARY 30, 1995

MILNE POINT UNIT  
SEVENTH REVISION OF THE KUPARUK  
PARTICIPATING AREA

I. INTRODUCTION AND BACKGROUND

This matter concerns the Kuparuk Participating Area (KPA) located within the current boundary of the Milne Point Unit (MPU) and what lands should be included in the proposed seventh revision to the KPA. BP Exploration (Alaska), Inc. (BPX) applied to revise (expand) the KPA within the existing boundaries of the MPU. The acreage proposed for inclusion in the KPA overlies the oil reservoir known as the "Kuparuk Reservoir".

An oil and gas "unit" is comprised of a group of leases which 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 which 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 parties which share the costs of unit development. Unitization generally allows a potential or known reservoir to be more efficiently explored, developed, or produced than on a lease by lease basis.

A "participating area" (PA) is usually limited to that part of the unit area which has been shown to be productive of oil or gas in "paying quantities." A PA may consist of less, but not more, area than the unit area. If the unit area encompasses more than one reservoir, a separate PA must generally be established for each delineated reservoir. For example, the MPU now consists of two PAs overlying two reservoirs located within the MPU area: the KPA for the Kuparuk Reservoir, and the Schrader Bluff PA for the Schrader Bluff Reservoir.

The boundaries of PAs can be continually revised as more wells are drilled and more data are obtained. The regulations governing unitization expressly provide for the expansion and contraction of a PA. Only those parties who own interests within the designated PA will share in the costs of production and revenues from the sale of the oil or gas from the PA.

The Division concludes that BPX's application to revise the KPA should be granted. It further concludes that the KPA should be limited to the area proposed by BPX as that area has been shown to be "reasonably known to be underlain by hydrocarbons and known or reasonably estimated...to be capable of producing or contributing to production of hydrocarbons in paying quantities." 11 AAC 83.351(a) (emphasis added). If additional data are obtained or submitted in the future, the boundaries of the KPA may be revised. The effective date of the Seventh Revision of the KPA is June 4, 1994.

The Division further concludes that the Exhibit C to the MPU Agreement (Tract Allocation Schedule), dated October 10, 1994 (Attachment 2), should be granted with an effective date of October 1, 1994. Based on the proposed F-Pad development plans and the estimated start of service dates for production from the expansion area submitted by BPX, the October 10, 1994 tract allocation schedule "equitably allocates production and costs among the leases." 11 AAC 83.371(a).

## II. APPLICATION FOR THE SEVENTH REVISION OF THE KUPARUK PARTICIPATING AREA

BPX's application was submitted pursuant to 11 AAC 83.351(c) and Section 11 of the MPU Agreement. BPX submitted materials in support of its application on July 13, July 28, August 18, September 14, and October 10, 1994. The Seventh KPA Revision application included: a proposed plan of development and operations for the expansion area; geological and geophysical data supporting the proposed revision to the KPA; individual tract reserves estimates for the proposed expansion area; and a tract allocation schedule for the proposed revised KPA. BPX requested that the Division approve the Seventh Revision to the KPA effective June 4, 1994.

The proposed KPA expansion acreage encompasses the Kuparuk Reservoir within the Kuparuk River Formation. The reservoir contains hydrocarbons and is purported to be capable of producing hydrocarbons in paying quantities. The Kuparuk Reservoir is referenced on Attachment 3 of BPX's KPA expansion application. The leases proposed for inclusion in the KPA (portions of ADLs 355017, 355018, and 355021) and the proposed tract allocation schedule for the leases are listed in Attachment 1 and Attachment 2, respectively. ADL 355017 reserves a 12.5% royalty share and a 40% Net Profit share to the state, while ADLs 355018 and 355021 reserve a 12.5% royalty and 30% Net Profit share to the state. The royalty share is free and clear of all lease and unit expenses.

## III. GEOLOGICAL AND ENGINEERING CHARACTERISTICS DATA IN SUPPORT OF THE APPLICATION

The proposed KPA expansion area is already included within the boundaries of the MPU Area. The proposed PA expansion acreage was included in the MPU when the Division approved the Third Expansion of the MPU on March 2, 1994. BPX estimates that the Seventh KPA expansion area contains approximately 88 million barrels of recoverable reserves.

BPX's submitted geological, petrophysical and well information to support its proposed revision of the KPA. These data include geologic logs from four wells that penetrated the Kuparuk River Formation within the proposed expansion area, No Point #1, L-14, L-15, and NW Milne #1, as well as one additional well adjacent to the expansion area, C-21, and structure and gross iospach maps of the Kuparuk River Formation within the entire MPU Area. BPX and the Division staff met to discuss additional, significant data, and structural interpretations from the expansion area. These meetings reviewed pertinent confidential information including proprietary BPX 3-D seismic data, well log data from the expansion area wells, core and core descriptions from the NW Milne #1 Well, interpreted structure maps, isochore maps, geological cross-sections, and volumetric calculations of the hydrocarbons in-place within the proposed PA expansion area. The data and interpretations are discussed later in this Decision and Findings.

## IV. 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 KPA 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. The expansion of the existing KPA to encompass the new acreage will provide for more efficient, integrated development of the entire Kubaruk Reservoir within the MPU. A comprehensive operating agreement and plan of development governing the expanded area will help avoid duplicative development efforts on and beneath the surface.

Furthermore, producing hydrocarbon liquids from the expansion area through the existing production and processing facilities generally reduces the incremental environmental impact of the additional production. While some facilities and infrastructure will be constructed to accommodate the additional production, including a new drillsite (F Pad) at No Point and a new gravel road from L Pad to F Pad, the expanded PA will share all the existing facilities, gravel pads, and infrastructure within the MPU. Expanding the KPA will maximize oil and gas recovery, while minimizing negative impacts on other resources within the area.

#### (B) Prevention of Economic and Physical Waste

Generally, the formation and subsequent expansion of a PA facilitates the equitable division of costs and allocation of hydrocarbon shares, and provides for a diligent development plan which maximizes physical and economic benefit from a reservoir's production. Further, the formation and subsequent expansion of a PA incorporating facility sharing opportunities and adopting a unified reservoir management strategy may allow economically marginal hydrocarbon accumulations to be developed that otherwise might not be.

Expanding the KPA and providing for PA operations of the leases improves the likelihood of more complete development of a reservoir with variable productivity across adjoining leases. Using the existing KPA infrastructure and facilities eliminates the need to construct stand-alone facilities to process the additional volume of recoverable hydrocarbons from the expansion area. The state has participated in attempts to reduce the need for additional major processing facilities and thus to minimize any additional surface impacts and costs. The state has agreed to allow commingled production through the existing MPU facilities and has worked to provide for a well test-based production allocation methodology for current and future reservoirs sharing those facilities. The adoption of that methodology is subject to periodic review and reconsideration to assure that the state's royalty and tax interests are protected.

Further, facility consolidation will save capital and promote better reservoir management through pressure maintenance and enhanced recovery procedures. In combination, these factors allow the Kuparuk Reservoir to be developed and produced in the interest of all parties, including the State.

#### (C) Protection of All Parties

Expanding the KPA seeks to protect the economic interests of all working interest owners of the reservoirs in the PA, as well as the royalty owner. By combining interests and operating under the terms of a unit agreement and unit operating agreement, such as the MPU Agreement and MPU Operating Agreement, the owners agree that costs and revenues will be fairly allocated based on specific ownership interests.

Because hydrocarbon recovery will be maximized and additional production-based revenue will be derived from the KPA production, the state's economic interest is furthered. Additional recovery of hydrocarbons, however, in and of itself may not always be determinative of 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. It has been the state's consistent policy of opening the renegotiation of some specific terms of the original lease contracts at the time of unitization decisions. Although not required here, amendments to an existing unit agreement or oil and gas lease may be necessary to protect the state's interest. In particular, amendments may be necessary where an application seeks to include leases which are not already within unit boundaries or leases, which contain different terms and conditions, or which through their commitment to an existing unit agreement, by virtue of the terms of that agreement, its operating agreement or applicable settlement agreements, would prejudice the state's economic interests.

By Decision and Findings regarding the Third Expansion of the MPU, dated March 2, 1992, such amendments to the MPU Agreement were required by the Division in order to incorporate the Net Profit Share leases (NPSL) that are now proposed for inclusion into the MPU KPA. At the time of the third expansion of the MPU area, the MPU Agreement was amended to accommodate the terms and conditions of the NPSLs. With the amendments to the MPU Agreement, the state's economic interest, as the sole royalty owner, in the allocation of production and costs from the KPA expansion area, is protected.

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

(1) The Environmental Costs and Benefits

As discussed above in section IV(A), the sharing of the existing facilities eliminates duplication and minimizes the surface area, both onshore and offshore, altered by additional development. Most of the reservoir to be developed in the expanded KPA is located offshore underlying Simpson Lagoon. Options for locating a drillsite to develop the reservoir were to place the pad offshore at the site of an existing drilling island or to place the pad at an onshore location. Given the higher development costs of the various offshore production scenarios, and the fewer environmental concerns with an onshore pad location, extended-reach, directionally drilled wells will be used to develop a major portion of the reservoir from a new man-made gravel pad designated MPU F Pad. The Northwest Milne F Pad Development Project consists of constructing a new drillsite at the tip of No Point, installing production facilities at the drillsite, constructing a gravel road from L Pad (existing) to F Pad, and routing new pipelines along the new road corridors to L Pad. The need for an offshore drillsite will be evaluated in the future.

BPX is currently applying for permits and authorizations for the F Pad Project from the various federal, state, and local agencies. They propose to construct and maintain the F-Pad project in an environmentally sound manner and in compliance with federal, state, and local regulations. The proposed F-Pad surface location is in the nearshore zone to minimize habitat impacts at an onshore area site, while the proposed road routing from L Pad to F Pad is designed to minimize stream and braided channel crossings. With these proposed facility design features, no significant additional impacts to nearshore and onshore habitat or biological resources are anticipated because of the additional Kuparuk production from the expanded KPA.

(2) The Geological and Engineering Characteristics, and Previous Exploration of the Proposed Expansion Area

The expansion PA acreage and the F Pad development are an extension of the existing Kuparuk Reservoir development trend from the C and L Pad areas of the current KPA to the northwest. Seismic and well data indicate that the MPU Lower Kuparuk oil bearing reservoir extends from the developed portion of the unit area into the northwest Milne area. Based on well and 3-D seismic data, the oil bearing limits of the reservoir are controlled by truncation of the entire reservoir section to the northwest of the NW Milne#1 Well and a yet to be discovered oil/water contact to the northeast.

Fluid and rock properties were determined using log, core, and test data from recently drilled wells at L Pad, C Pad, and appraisal wells north and west of the future F Pad location, No Point #1 and NW Milne #1. The contours of structural depth maps and the location of faults were determined by interpreting available 3-D seismic data. The seismic data were used to map the proposed expansion area south of the NW Milne #1 well. Structural interpretations were facilitated by the presence of strong seismic reflectors within the Kuparuk Formation. The areas not covered by the 3-D survey are limited to the extreme northern portion of the proposed PA expansion area.

Of the four wells drilled within the proposed expansion area, two wells, L-14 and NW Milne #1, have been certified by the Department of Natural Resources (DNR) as capable of production in paying quantities. The reservoir characteristics in these wells are very similar to those in other portions of the MPU. The log, core, and well test data acquired from the northwest MPU area indicate that the proposed expansion area contains hydrocarbons and is estimated to be capable of producing or contributing to production of hydrocarbons in paying quantities.

(3) The Applicant's Plan for Exploration or Development of the Expanded Participating Area

Initial plans for the development of the expansion area involve the F Pad Development Project. The major activities associated with this project are constructing a new gravel drillsite at the tip of No Point and a new gravel road from L Pad to F Pad, drilling the new wells, installing production facilities at the drillsite, and routing a new pipeline from L Pad to F Pad. Gravel placement began in late 1994, pipelines and well flowlines will be installed in the first half of 1995, while development drilling is scheduled to commence early this year. Initial drilling plans for F Pad wells include 18 producers, 9 water injectors, two water source wells, and completion/hookup of the No Point #1 Well. Plans also include the drilling of additional wells from C-Pad and L-Pad into the expansion area. Production from F Pad is expected to commence in late 1995. Projected oil recovery from the KPA expansion area under the terms of the initial plan of development is estimated to be over 75 million barrels.

(4) The Economic Costs and Benefits to the State

As discussed in section IV (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.

As required by 11 AAC 83.371, BPX submitted with the application an allocation of production and cost for the leases in the proposed KPA expansion area (Attachment 2 of the Application and Exhibit C to the MPU Agreement). The proposed tract allocation schedule distributes working interest equity among the leases according to gross recoverable reserves. The basis of the tract allocation schedule, recoverable reserves, is consistent with previous revisions of the KPA that have, in the past, been acceptable to the Division for inputting tract allocations. Division staff agree with BPX's estimate of gross recoverable reserves from the expansion area tracts, and the Division finds BPX's tract allocation methodology acceptable for allocating production and costs among the leases in the expanded KPA.

While the division agrees with the methodology for determining the tract participation factors, a disagreement arose regarding the effective date for the revised tract participation schedule. In its July 13, 1994 Application for the Seventh Revision of the MPU KPA, BPX and OXY requested a June 4, 1994 effective date for the revised KPA and the revised tract participation schedule. The revised tract participation schedule was based on all the tracts proposed to be included in the expanded KPA.

There are no economic costs and royalty issues associated with approving the revision of the KPA to be effective on June 4, 1994. However, there are economic costs and royalty concerns associated with a June 4, 1994 effective date for the proposed tract participation schedule. A June 4, 1994 effective date for the tract allocation schedule would reduce the state's royalty revenues from the currently producing portion of the KPA without the compensating benefit of increased production from a significant portion of the expanded KPA.<sup>1</sup> BPX's effective royalty rate for the current KPA is approximately 16.38 percent. As the expansion area leases have a 12.5 percent royalty rate, BPX's effective royalty rate would be approximately 13.45 percent if the entire expansion area would be incorporated into the tract allocation schedule on June 4, 1994.

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<sup>1</sup>In this discussion regarding the effective date of the revised tract allocation schedule for the revised KPA, it should be noted that pursuant to 11 AAC 83.371(a) and Article 11 of the MPU Agreement, Exhibit C to the MPU Agreement or any revised division of interest or formula allocating unitized substances and costs among the leases may not take effect until approved in writing by the Commissioner.

At present, all production from the MPU KPA, except for some J Pad wells and well L-14, is allocated to the current KPA according to an approved tract allocation schedule (Attachment 3 - current KPA Tract Allocation Schedule). Per the proposed Plan of Development for the expansion area, as discussed in Section IV (3) above and the Estimated Start of Service Schedule for New MPU Wells (1994-1996) submitted to the Division by BPX (Attachment 4), production from F-Pad and a significant portion of the proposed KPA expansion area is not anticipated until late 1995. An effective date of June 4, 1994 for the tract allocation schedule would reduce the state's royalty revenues from the producing portion of the MPU KPA without the benefit of concurrently producing the anticipated reserves from the expansion area, in particular, the reserves expected to be produced from the F-Pad Project. By adding the gross recoverable reserves from the expansion tracts now without receiving the benefit of the production of those reserves now, reduces the state's royalty share for the currently producing tracts, i.e., the tracts in Attachment 3.

The division and BPX have resolved this issue regarding the effective date of a revised tract allocation schedule by agreeing to a plan in which the KPA tract participation factors are updated (revised) as development on the three expansion leases occurs. The three expansion leases, ADLs 355017, 355018, and 355021, have been divided into sub-tracts. The recoverable reserves in the proposed sub-tracts of ADLs 355017, 355018 and 355021 will be included in the tract participation schedule (Attachment 3) on the first day of the month in which a production well or a well contributing to production, i.e., a water injection or WAG well, with a bottomhole location on the described lands (sub-tract) begins operation, i.e., begins producing or injecting. A map indicating the sub-tracts in the expanded KPA is attached (Attachment 5) and the proposed Estimated Start of Service Schedule for New MPU Wells is enclosed as Attachment 4. When a new well(s) is about to be put into operation, that is, production or injection, BPX will apply to the Division to add the appropriate sub-tract to the KPA tract allocation schedule. The effective date of the revised tract allocation schedule which adds the appropriate sub-tract to the schedule shall be the first day of the month in which operations commence from the sub-tract. The revised tract allocation schedule will not take effect until approved in writing by the commissioner.<sup>2</sup>

Finally, the parties have further agreed that BPX will be permitted to revise the tract allocation schedule to reflect the entire approved Seventh KPA when regular production begins from F-Pad, that is, when the designated F-Pad wells begin normal operation on or about October 1, 1995. As with the interim sub-tract revisions, the revised tract allocation schedule reflecting the entire expansion area (that is, inclusive of all the sub-tracts) will not take effect until approved in writing by the commissioner, and the effective date of the revised tract allocation schedule shall be the first day of the month in which normal production operations commence from F-Pad.

The BPX application for the 7th Revision to KPA is appropriate in that the geological, geophysical and engineering data submitted justify expansion of the MPU KPA at this time. However, the application represents a situation new to the Department in that the majority of facilities and infrastructure needed to produce the reserves allocated to the expansion area, F Pad, new wells, pipeline and well flowline, etc., will not be fully operational until late 1995. Ordinarily, the drillsite, drillsite facilities, the wells, flowlines and pipelines are in place in order to commence production upon receipt of appropriate state agencies approvals. The above agreed-to plan permits the state and the MPU WIOs to receive the economic benefits of the revised KPA using a phased-in approach prior to full production from F Pad and the significant portion of the expansion area.

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<sup>2</sup>The Division believes that this solution regarding the effective date for the tract allocation schedule is a principled one. It is the solution the Division would advocate even if a retroactive effective date for the tract allocation schedule resulted in a higher royalty to the state.

The division approves the Exhibit C (Attachment 3) effective October 1, 1994. BPX is to submit revisions to the tract allocation schedule according to the plan outlined in this section. Any proposed revisions to tract allocation schedule will not take effect until approved in writing by the commissioner.

## 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. Under 11 AAC 83.351(c), a participating area must be expanded to include acreage reasonably estimated through the use of geological, geophysical, or engineering data to be capable of producing or contributing to the production of hydrocarbons in paying quantities.
2. Under 11 AAC 83.303(c), the department will consider the factors specified in 11 AAC 83.303(a) and (b) when evaluating requests concerning participating areas.
3. The geological and engineering data submitted in support of the KPA expansion justify the inclusion of all of BPX's proposed tracts within the KPA at this time. The revised PA acreage is wholly contained within the boundaries of the current MPU. 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 under which these lands were leased from the state, the following lands are to be included in the KPA:

T.14.N.,R.10.E.,U.M., Sec. 27: S/2 SW/4; Sec. 28: SW/4, W/2 NW/4, SE/4NW/4, W/2 SE/4, SE/4 SE/4; Secs. 29, 32, 33, and 34; Sec. 35: SW/4, S/2 NW/4, W/2 SE/4, SE/4 SE/4  
(ADL 355017 (Tract 15));

T.14.N.,R.10.E.,U.M., Sec. 30 and Sec. 31;  
T.14.N.,R.9.E.,U.M., Secs. 25 and 26; Sec. 27: E/2, E/2 SW/4, SE/4NW/4; Sec. 34: N/2 NE/4, SE/4 NE/4, NE/4 SE/4; Secs. 35 and 36  
(ADL 355018 (Tract 16));

T.14.N.,R.9.E.,U.M., Sec. 22: SE/4 SE/4; Sec. 23: SE/4, S/2 SW/4, NE/4SW/4, S/2 NE/4, NE/4 NE/4; Sec. 24  
(ADL 355021 (Tract 18)).

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

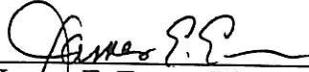
5. The production of KPA hydrocarbon liquids through the existing production and processing facilities within the MPU reduces the environmental impact of the additional production. Utilization of existing facilities will avoid unnecessary duplication of development efforts on and beneath the surface.
6. The currently approved well test allocation methodology for measuring and allocating gas and hydrocarbon liquids between the two MPU participating areas, the KPA and the Schrader Bluffs Participating Area (SBPA), continues to be acceptable for royalty allocation purposes and for allocating the commingled gas and hydrocarbon liquids production between the KPA and the SBPA as those streams are processed through the common MPU facilities.

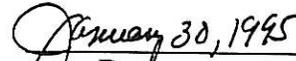
The MPU Operator, BPX, shall provide the Division with the monthly production allocation reports and well test data for the wells producing through the MPU facilities. The Division reserves the right to request any information it deems pertinent to the review of those reports.

7. The Division continues to reserve 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, well test data, and separator back-pressure adjustments. The allocation procedures may be revised by the Division in its sole discretion.
8. The expansion of the KPA equitably divides costs and allocates produced hydrocarbons, and sets forth a development plan designed to maximize physical and economic recovery from the Kuparuk Reservoir within the approved KPA.
9. Pursuant to 11 AAC 83.351(a) and 11 AAC 83.371(a), the Division approves the October 10, 1994 tract allocation schedule (Attachment 2) for each lease within the revised KPA. The tract allocation schedule shall be effective October 1, 1994.
10. Revisions to the October 10, 1994 tract allocation schedule may be permitted from time to time as more wells are drilled and brought into operation (begin production or injection) from the expanded PA. Any revisions to the October 10, 1994 tract allocation schedule shall be in accordance with the terms and conditions specified in section IV(4) of this Decision and Findings.
11. Diligent exploration and delineation of the Kuparuk Reservoir underlying the approved participating area is to be conducted by BPX under the MPU plans of development and operation approved by the state.
12. The plan of development for the KPA expansion area meets the requirements of 11 AAC 83.303 and 11 AAC 83.343. Annual updates to the MPU Plan of Development which describe the status of projects undertaken and the work completed, any changes or expected changes to the plan, and a further plan of development, must be submitted in accordance with 11 AAC 83.343.

13. This Seventh Revision of the KPA within the MPU will be effective retroactive to 12:01 a.m. June 4 , 1994.

For these reasons and subject to the conditions and limitations noted, I hereby approve the Seventh Revision of the Kuparuk Participating Area within the Milne Point Unit.

  
James E. Eason, Director  
Division of Oil and Gas

  
Date

For: Marty K. Rutherford, Acting Commissioner  
Alaska Department of Natural Resources

- Attachments: Delegation of Authority  
Attachment 1: Seventh Revision KPA Tracts  
Attachment 2: Exhibit C to MPU Agreement (Tract Allocation Schedule)  
Attachment 3: Currently approved KPA Tract Allocation Schedule  
Attachment 4: Estimated Start of Service Schedule for New MPU Wells  
Attachment 5: Proposed Sub-tracts of ADLs 355017, 355018, and 355021

## DELEGATION OF AUTHORITY

With respect to the Seventh Revision of the Kuparuk Participating Area in the Milne Point Unit, I hereby delegate to the Director of the Division of Oil and Gas my authority under 11 AAC 83.343 to approve/deny plans of development, my authority under 11 AAC 83.351 to approve or deny a participating area, and my authority under 11 AAC 83.371 to approve or deny allocation of cost and production formulas.

Dated: 1-20-95  
Anchorage, Alaska

  
Marty K. Rutherford, Acting Commissioner  
Alaska Department of Natural Resources

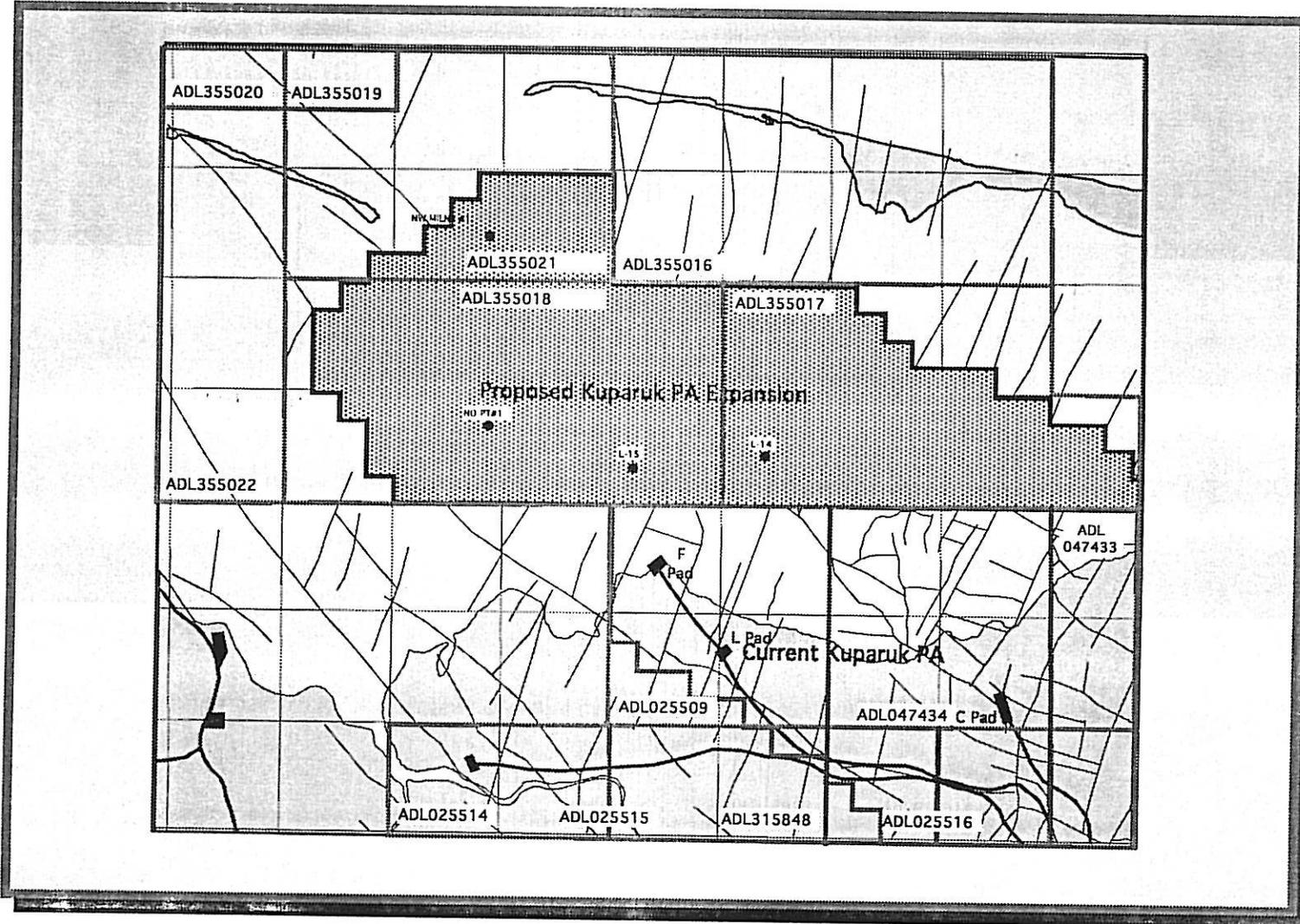
MILNE POINT UNIT KUPARUK RIVER FINAL PARTICIPATING AREA  
 REVISED MARCH 1, 1992

ATTACHMENT I

<u>Tract</u>	<u>ADL #</u>	<u>Legal Description</u>	<u>Acres</u>	<u>Royalty</u>	<u>Tract Participation</u>	<u>Working Interest</u>	
2	47433	T13N, R10E, U.M.; Sec. 1: S/2; Secs. 2, 11, 12	2240	20.0%	07.62377	Conoco OXY	86.000% 14.000%
3	47434	T13N, R10E, U.M.; Secs. 3, 4, 9, 10	2560	20.0%	34.09616	Conoco OXY	87.750% 12.250%
4	25516	T13N, R10E, U.M.; Sec. 15	640	12.5%	02.19544	Chevron	100.000%
4A	315848	T13N, R10E, U.M.; Sec. 16: N/2, SE/4, NE/4 SW/4	520	12.5%	00.15591	Chevron	100.000%
5	47437	T13N, R10E, U.M.; Secs. 13, 14; Sec. 23: N/2, SE/4, E/2 SW/4; Sec. 24	2480	20.0%	24.29536	Conoco OXY	86.000% 14.000%
6	47438	T13N, R11E, U.M.; Sec. 18: W/2 W/2, NE/4 NW/4, NW/4 NE/4, E/2 SW/4, S/2 SE/4; Sec. 19; Sec. 20: SW/4, W/2 NW/4, SE/4 NW/4, W/2 SE/4, SE/4 SE/4	1424	20.0%	06.79384	Conoco OXY	86.000% 14.000%
8	28231	T13N, R11E, U.M.; Sec. 29: W/2 NE/4, NW/4, N/2 SW/4, NW/4 SE/4; Sec. 30; Sec. 31: N/2 NW/4	1076.5	12.5%	04.61634	Conoco	100.000%
9	25518	T13N, R10E, U.M.; Sec. 25; Sec. 26: E/2 NE/4	720	12.5%	01.03215	Chevron	100.000%
10	25509	T13N, R10E, U.M.; Sec. 5, 6; Sec. 7: NE/4, E/2 NW/4, NW/4 NW/4, NE/4 SE/4; Sec. 8: N/2, SE/4, N/2 SW/4, SE/4 SW/4	2182	12.5%	19.15917	Chevron	100.000%
12	25515	T13N, R10E, U.M.; Sec. 17: N/2 NE/4	80	12.5%	00.03186	Conoco	100.000%
			13,922.5		100.00000		

# BP EXPLORATION - ALASKA

## Proposed Kuparuk Participating Area Expansion



MILNE POINT UNIT AGREEMENT  
KUPARUK PARTICIPATING AREA

TRACT PARTICIPATION FACTORS

EXHIBIT C  
EFFECTIVE \_\_\_\_\_

RECEIVED

OCT 10 1994

DIVISION OF OIL & GAS

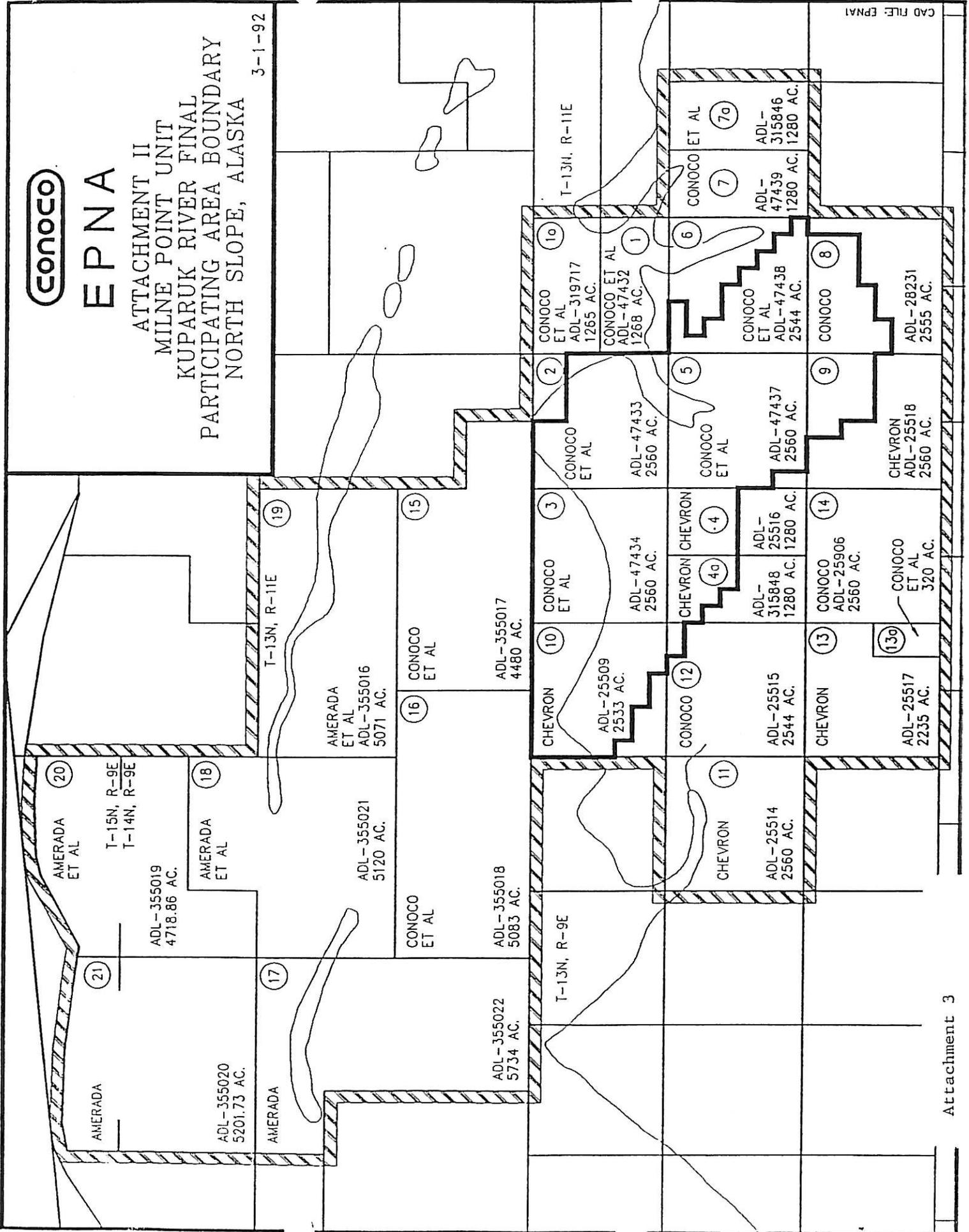
TRACT # (1)	ADL #	ACRES	BP E&O AND		NET PROFIT SHARE %	TRACT PARTICIPATION		LEGAL DESCRIPTION	SECTIONS
			BPXA ROYALTY %	OXY ROYALTY %		EFFECTIVE DATE	PERCENT		
2	47433	2,240.0	20	12.5		3/1/92	5.83909%	T13N, R10E	Sec. 1: S/2; Secs. 2, 11, 12
3	47434	2,560.0	20	12.5		3/1/92	26.11444%	T13N, R10E	Secs. 3, 4, 9, 10
4	25516	640.0	12.5	12.5		3/1/92	1.68150%	T13N, R10E	Sec. 15
4A	315848	520.0	12.5	12.5		3/1/92	0.11941%	T13N, R10E	Sec. 16: N/2, SE/4, NE/4 SW/4
5	47437	2,480.0	20	12.5		3/1/92	18.60796%	T13N, R10E	Secs. 13, 14; Sec. 23: N/2, SE/4, E/2 SW/4; Sec. 24
6	47438	1,424.0	20	12.5		3/1/92	5.20344%	T13N, R11E	Sec. 18: W/2 W/2, NE/4 NW/4, NW/4 NE/4, E/2 SW/4, S/2 SE/4; Sec. 19; Sec. 20: SW/4, W/2 NW/4, SE/4 NW/4, W/2 SE/4, SE/4 SE/4
8	28231	1,076.5	12.5	12.5		3/1/92	3.53568%	T13N, R10E	Sec. 29: W/2 NE/4, NW/4, N/2 SW/4, NW/4 SE/4; Sec. 30; Sec. 31: N/2 NW/4
9	25518	720.0	12.5	12.5		3/1/92	0.79053%	T13N, R10E	Sec. 25; Sec. 26: E/2 NE/4
10	25509	2,182.0	12.5	12.5		3/1/92	14.67412%	T13N, R10E	Secs. 5, 6; Sec. 7: NE/4, E/2 NW/4, NW/4 NW/4, NE/4 SE/4; Sec. 8: N/2, SE/4, N/2 SW/4, SE/4 SW/4
12	25515	80.0	12.5	12.5		3/1/92	0.02440%	T13N, R10E	Sec. 17: N/2 NE/4
15	355017	480.0	12.5	12.5	40	tbd		T14N, R10E	Sec. 27: S/2 SW/4; Sec. 28: SW/4, W/2 NW/4, SE/4 NW/4, W/2 SE/4, SE/4 SE/4
15	355017	640.0	12.5	12.5	40	tbd		T14N, R10E	Sec. 29
15	355017	640.0	12.5	12.5	40	tbd	10.03287%	T14N, R10E	Sec. 32
15	355017	640.0	12.5	12.5	40	tbd		T14N, R10E	Sec. 33
15	355017	640.0	12.5	12.5	40	tbd		T14N, R10E	Sec. 34
15	355017	360.0	12.5	12.5	40	tbd		T14N, R10E	Sec. 35: SW/4, S/2 NW/4, W/2 SE/4, SE/4 SE/4
Total 15	Total 355017	3,400.0							
16	355018	620.0	12.5	12.5	30	tbd		T14N, R10E	Sec. 30
16	355018	623.0	12.5	12.5	30	tbd	13.37656%	T14N, R10E	Sec. 31
16	355018	640.0	12.5	12.5	30	tbd		T14N, R9E	Sec. 25
16	355018	640.0	12.5	12.5	30	tbd		T14N, R9E	Sec. 26
16	355018	440.0	12.5	12.5	30	tbd		T14N, R9E	Sec. 27: E/2, E/2 SW/4, SE/4 NW/4
16	355018	800.0	12.5	12.5	30	tbd		T14N, R9E	Sec. 34: N/2 NE/4, SE/4 NE/4, NE/4 SE/4; Sec. 35
16	355018	640.0	12.5	12.5	30	tbd		T14N, R9E	Sec. 36
Total 16	Total 355018	4,403.0							
18	355021	440.0	12.5	12.5	30	tbd		T14N, R9E	Sec. 22: SE/4 SE/4; Sec. 23: SE/4, S/2 SW/4, NE/4 SW/4, S/2 NE/4, NE/4 NE/4
18	355021	640.0	12.5	12.5	30	tbd		T14N, R9E	Sec. 24
Total 18	Total 355021	1,080.0							
		22,805.5	16.68643	12.5			100.00000%		
(1) Working Interests are BP E & O 64.38%, BPXA 26.81%, and OXY 8.81%.									



# EPNA

ATTACHMENT II  
 MILNE POINT UNIT  
 KUPARUK RIVER FINAL  
 PARTICIPATING AREA BOUNDARY  
 NORTH SLOPE, ALASKA

3-1-92



CAD FILE: EPNA1

In-Service Schedule For New MPU Wells (1994-6)

Name	Service	Location	Estimated Start of Service
<u>Rig #1</u>			
J-6	Kup Prod	New Fault Block	9/15/94
J-8	SBP Prod (Horiz)	New Fault Block	9/01/94
J-9	Kup Inj	J-6 Fault Block	10/01/94
J-10	Kup Prod	New Fault Block	10/15/94
J-11	Kup Prod	J-6 Fault Block	11/01/94
J-12	Kup Prod	J-10 Fault Block	11/01/94
J-13	Kup Prod	J-10 Fault Block	11/15/94
E-9	Kup Prod	New Fault Block	11/15/94
E-10	Kup Prod	New Block (E of E-4)	12/01/94
E-12	SBP Prod (MLHoriz)	New Fault Block	1/01/95
E-13	Ivishak Prod	New Block (A-1 Area)	1/15/95
E-14	Sag R Prod (Horiz)	New Block (A-1 Area)	2/01/95
E-15	Kup Inj	B-6 Fault Block	5/01/95
E-16	Kup Prod (Horiz)	New Block (A-1 Area)	5/01/95
E-17	Kup Prod	New Block (Cascade Area)	5/01/95
L-16	Kup Prod	New Fault Block	5/01/95
L-17	Kup Inj	New Fault Block	5/15/95
L-18	Kup Prod	New Fault Block	6/01/95
E-18	SBP Prod (Horiz)	New Fault Block	6/01/95
E-11	Kup Prod	New Block (W of E-9)	7/01/95
E-19	Kup Prod	E-9 Fault Block	7/01/95
E-20	SBP Prod	New Fault Block	7/15/95
E-21	SBP Prod	New Fault Block	8/01/95
I-5	SBP Inj	I Pad Area	9/01/95
J-14	SBP Inj	J-1 Fault Block	9/15/95
J-15	SBP Prod (Horiz)	New Fault Block	10/01/95
C-24	Kup Prod	New Block (C-21 Area)	10/15/95
C-25	Kup Prod	New Block (C-21 Area)	11/01/95
C-26	Kup Prod	New Block (C-21 Area)	11/15/95
F-26	Kup Prod	New Fault Block (North)	12/01/95
F-10	Kup Prod	L-14 Fault Block	12/15/95
F-A	Prince Creek WS	New Fault Block	1/01/96
F-8	Kup Prod	New Block (Between L-14/F-26)	1/15/96
<u>Rig #2</u>			
L-19	Kup Prod	New Fault Block	6/15/95
L-20	Kup Prod	New Fault Block	7/01/95
L-21	Kup Inj	New Fault Block	7/01/95
F-2	Kup Prod	F-1 Fault Block	10/1/95
F-11	Kup Prod	L-14 Fault Block	10/1/95
F-5	Kup Prod	New Block (Between NWM-1/F-26)	10/1/95
F-6	Kup Prod	F-26 Fault Block	10/1/95
F-12	Kup Prod	L-14 Fault Block	10/1/95
C-23	Ivishak Prod	New Fault Block	6/15/95
<u>Completion</u>			
F-1 (Compl)	Kup Prod	New Fault Block	10/1/95

RECEIVED

SEP 13 1994

DIVISION OF OIL & GAS

= Expanded Area

# BP EXPLORATION - ALASKA

Proposed Kuparuk Participating Area Expansion

