

**APPROVAL OF THE TENTH EXPANSION OF THE KUPARUK RIVER UNIT,
THE ELEVENTH EXPANSION OF THE KUPARUK PARTICIPATING AREA,
AND THE SECOND EXPANSION OF THE TARN PARTICIPATING AREA**

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

August 16, 2011

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I. INTRODUCTION, BACKGROUND, AND DECISION SUMMARY

The State of Alaska (State), Department of Natural Resources (DNR), Division of Oil and Gas (Division), approved the formation of the Tarn Participating Area (TPA) effective July 2, 1998, and on February 12, 2008 approved the First Expansion of the TPA retroactively effective to July 1, 2007. The Division approved the Ninth Expansion of the Kuparuk River Unit (KRU) effective June 1, 2003. On August 15, 2005 the Division approved the Tenth Expansion of the Kuparuk Participating Area (KPA) effective September 1, 2005.

The Division received the Application for the Approval of the 11th Expansion of the Kuparuk River Unit, the 11th Expansion of the Kuparuk Participating area and the 2nd Expansion of the Tarn Participating Area (Application) on April 20, 2011 from the KRU Operator, ConocoPhillips Alaska, Inc. (CPAI). The Application title contains a typographic error – CPAI and the Division agree that this is the 10th, not 11th, expansion of the unit area. The Division deemed the Application complete on May 2, 2011. Public notice comment period closed on June 16, 2011, no comments were received. The proposed KRU expansion area covers approximately 2,880 acres. The expansion of the unit coincides with the expansion of the KPA (320 acres) and the TPA (2,560 acres), Attachments 1-5.

“A unit must encompass the minimum area required to include all or part of one or more oil or gas reservoirs, or all or part of one or more potential hydrocarbon accumulations” 11 AAC 83.356(a). CPAI has submitted confidential geological, geophysical, and engineering data which demonstrate that the area approved for unit expansion includes all or part of an oil reservoir.

A participating area “may include only the 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.” 11 AAC 83.351(a). CPAI submitted confidential and public information in the Application. The confidential economic, geological, geophysical, and engineering data support the Application and indicate that the acreage proposed for inclusion in the TPA and the KPA is capable of producing or contributing to production of hydrocarbons in paying quantities.

The Division finds that the expansion of the KRU, the KPA, and the TPA promote conservation of all natural resources, promote the prevention of economic and physical waste and provide for the protection of all parties of interest, including the State. AS 38.05.180(p); 11 AAC 83.303. I approve the Application under the terms and conditions of Section V. The effective date of the 10th KRU Expansion, the 11th KPA, and 2nd TPA expansions is March 1, 2011.

II. APPLICATION AND LEASE HISTORY

CPAI submitted the Application on April 20, 2011, and simultaneously paid the \$500.00 unit application filing fee, in accordance with 11 AAC 83.306 and 11 AAC 05.010(a)(10)(D), respectively. The Application includes: Exhibit A, legally describing the proposed expanded unit area, its leases, and ownership interests; Exhibit B, a map of the proposed expanded unit; an Exhibit C for the KPA and the TPA, legally describing the proposed expanded participating areas and the tract allocation factors, and Exhibit D for the KPA and the TPA, a map of the proposed expanded participating areas. The Application also includes confidential economic and technical data. CPAI also submitted evidence of notice to proper parties, return postal receipts. The Division deemed the application complete on May 2, 2011.

The Division published a public notice in the “*Anchorage Daily News*” on May 5, 2011 and in the “*Arctic Sounder*” on May 16, 2011, under 11 AAC 83.311. Copies of the Application and the public notice were provided to interested parties. 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 Barrow, the City of Nuiqsut, the Kuukpik Corporation, the Arctic Slope Regional Corporation, the Nuiqsut Postmaster, and the radio station KBRW in Barrow. 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 June 16, 2011. DNR received no comments regarding the Application.

The leases proposed for the unit expansion and participating area expansions are summarized below as along with those TPA expansion leases that lie within the existing KRU boundary.

KRU Expansion Leases

Tract No.	ADL	Issued	Primary Term	Form No.	Royalty Rate	Expansion PA
69	25585	2/1/1965	10	DL-1OCTOBER 1963	12.50000%	KPA
164	390503	5/1/2004	7	DOG 200204(REV10/03)	16.66667%	KPA
130	380052	2/1/1993	10	DOG 9208	12.50000%	TPA
134	380053	2/1/1993	10	DOG 9208	12.50000%	TPA
136	375074	4/1/1991	10	DNR 10-4037 9/90	12.50000%	TPA
165	390982	2/1/2007	5	DOG 200204(REV10/03)	16.66667%	TPA
166	390983	2/1/2007	5	DOG 200204(REV10/03)	16.66667%	TPA
167	390984	2/1/2007	5	DOG 200204(REV10/03)	16.66667%	TPA

TPA Expansion Leases within the existing KRU boundary

90	25603	2/1/1965	10	DL-1OCTOBER 1963	12.50000%
95	25608	2/1/1965	10	DL-1OCTOBER 1963	12.50000%
131	380051	2/1/1993	10	DOG 9208	12.50000%

Except for Tract 164, ownership of all of the leases proposed for the various expansions is aligned as follows,

ConocoPhillips Alaska, Inc.	55.402367%
BP Exploration (Alaska) Inc.	39.282233%
Union Oil Company of California	4.950600%
ExxonMobil Alaska Production, Inc.	0.364800 %

Tract 164 ownership as assigned effective May 1, 2011:

ConocoPhillips Alaska, Inc.	55.275300%
BP Exploration (Alaska) Inc.	39.192000%
Union Oil Company of California	4.950600%
ExxonMobil Alaska Production, Inc.	0.582100 %

III. DISCUSSION OF DECISION CRITERIA

The DNR Commissioner (Commissioner) reviews applications related to units, including unit contraction and participating area expansion, under 11 AAC 83.303-11 AAC 83.395. By memorandum dated September 30, 1999, the Commissioner approved a revision of Department Order 003 and delegated this authority to the Division Director. 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. Environmental Costs and Benefits

The proposed expansion area is habitat for various 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. 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).

Approval of the KRU, KPA, and TPA expansions has no direct environmental impact. This decision is an administrative action and does not authorize any on-the-ground

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of the Kuparuk Participating Area, and the Second Expansion of the Tarn
Participating Area

activity. The unit expansion 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. The Unit Operator must 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. Potential effects on the environment are analyzed when permits to conduct exploration or development in the unit area are reviewed. CPAI has obtained the required permits for the current TPA and KPA wells and is operating under an approved plan of operations and plan of development. DNR considers environmental issues during the lease sale process, and the unit Plan of Operations approval process.

2. Geological and Engineering Characteristics

a. Exploration History

The Kuparuk River Oil Pool was discovered in 1969 by the Sinclair Ugnu No. 1 well. This pool is the second largest on the Arctic Slope of Alaska, occupying approximately 500 square miles. It is defined as the accumulation of oil that is common to, and correlates with, the accumulation found in the ARCO West Sak River State No. 1 well between the measured depths of 6,474 and 6,880 feet. The tenth expansion of the KRU with relation to the eleventh expansion of the KPA is focused to the west of the 2A and 2M Drillsites within the KPA. Development Infill injectors, seismic surveys, and enhanced oil recovery programs in the area have allowed determination that the active reservoir area is beyond the current KRU and KPA boundaries, leading to this expansion request.

The Tarn Oil Pool lies within the KRU, and it is defined as the accumulation of hydrocarbons common to and correlating with the intervals between the measured depths of 4376' and 5990' interval in the Bermuda #1 well (KRU 36 10-7/1). Original oil in place (OOIP) in the Bermuda and Cairn intervals is estimated to be is about 136 million barrels. The tenth expansion of the KRU with relation to the second expansion of the TPA is focused to the south of the current border of the TPA. This expansion is supported by the current Tract well 2N-342 which is exploiting a southeastern lobe of sand called the "Tarn South".

b. Characteristics of the Reservoir

The Kuparuk River Formation is a sequence of clastic sediments deposited on a shallow marine shelf during Neocomian (Early Cretaceous) time. The formation is divided into Upper and Lower Members. These two Members are comprised of four informal units that are termed, in ascending order, "A", "B", "C", and "D". The "A" and "C" units are the pay-bearing intervals within the KRU. The A unit exists throughout the pool area, and it consists of sandstone, siltstone and mudstone in a series of regressive cycles that range to 70' thick. When mapped in detail, these individual cycles form elongate bodies

that strike northeast-southwest. Porosity averages 23% and permeability averages about 80 millidarcies (md). The A unit thins to the west where it is truncated by an intraformational unconformity that lies at the base of the C unit. The C Unit is composed of glauconitic sandstone and siltstone with subordinate conglomerate and lesser shale. Bands of siderite-cemented sandstone are common. Porosity and permeability average 21% and 90 md, respectively. Throughout the KRU, C-unit sand deposition appears to have been influenced by syndepositional, northwest-trending normal faults.

The Tarn oil pool is composed of five intervals of late Cretaceous-aged marine sandstone with interbedded mudstone intervals that lie within the Seabee Formation. These five intervals are informally termed, from deepest to shallowest, Iceberg, Arete, Cairn, Bermuda, and C30. They share a common depositional environment, have similar lithologic characteristics and fluid compositions. Sand and hydrocarbon distribution within the pool is complex, with variable gross sand percentages within each interval. Not all of the potential reservoir intervals in the pool have been shown to be hydrocarbon bearing, and the primary reservoir intervals are the Bermuda and Cairn. Hydrocarbon distribution is controlled by sand distribution, with updip stratigraphic seal along the western margin of the pool area. The lobe exploited by the 2N-342 well is most closely related to the Bermuda Interval.

c. Current Production

Current daily production of the KPA is approximately 89,000 barrels of oil per day (BOPD) based on June 2011 data from the Alaska Oil and Gas Conservation Commission (AOGCC) website. The KPA has a cumulative production of 2,238,349,752 barrels of oil since initial production started in 1981.

Current daily production of the TPA is approximately 13,000 BOPD based on June 2011 data from the AOGCC website. The TPA has a cumulative production of 103,052,459 barrels of oil since initial production started in 1998.

d. Recent Reservoir Development

Recent reservoir development in the KPA is defined by infill drilling mostly with coil tubing drilling technology and some rotary projects. Reservoir management has focused on the performance of enhanced oil recovery projects that are being managed on a pad by pad basis. In the area of the proposed expansion to the west of the participating area, development has consisted of enhanced oil recovery (EOR) management and the cycling of water and gas injection and its interaction with offset producers. These EOR activities and the associated data were able to provide the best argument that the areas currently outside of the KPA and KRU should be captured in an expansion.

The reservoir development of the TPA in the area of the requested expansion is centered on the drilling, completion and production of the 2N-342 tract operations well. Data from this well which includes production data, pressure transient test data, simulation

data, and log data best supported the proposed expansion. The expansion to the south was best supported with combined data and results from the pressure transient analysis and a volumetric analysis of the lobe penetrated by the 2N-342 well. The proposed southern and “corners” expansions of the current TPA are best supported as a package when 4D seismic interpretation data was combined with the reservoir model.

e. Conclusion

The expansions of the KRU, KPA and TPA proposed by CPAI have been sufficiently supported with technical data submitted by the operator. Data submitted to the Division included: data and analysis from recently drilled unit wells, historic production/injection data and analysis, and confidential interpretation of proprietary seismic data. Review of this geological, geophysical and engineering data, in conjunction with numerous follow-up meetings with the operator has allowed the Division to establish that the technical requirements were reasonably met to support approval of the proposed expansions.

3. Plans of Development

The Division approved the 2010 KRU Plan of Development (POD) for the period August 1, 2010 through July 31, 2011 and the 2011 KRU POD, for the period August 1, 2011 through July 31, 2012. The proposed unit and participating area expansions are based upon wells, producers and injectors, which have already been drilled. Future TPA drilling may target areas previously considered uneconomic such as the thinner distal lobes. The unit and participating area expansions are supported by wells already contributing to production.

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

The expanded KRU, KPA, and TPA will provide economic benefits to the State through royalty and tax payments on production, although, because these expansion areas are already producing or contributing to production, there is no additional direct economic benefit. Unitized development conducted under the KRU Agreement provides for development of all the unitized leases as a single lease, rather than development conducted on a lease by lease basis. Unitized development maximizes oil and gas recovery, promotes conservation, prevents waste, and protects all of the parties of interest.

The allocation of production under the approved Exhibit C for the KPA and the TPA also maximizes oil and gas recovery, promotes conservation, prevents waste, and protects all of the parties of interest.

The primary term of ADL 390503, Tract 164, would have expired April 30, 2011 if not under a pending unit expansion application. The Division and CPAI have agreed that

portions of ADL 390503 will be severed from the unit. The unitized portion is committed in part to the KPA. The nonunitized portion is assigned ADL 391905. The primary term of ADL 391905 will be extended for two years, the maximum time allowed under 11 AAC 83.373(b). To partially offset any potential loss of lease sale bonus bids on this acreage, the State is increasing the lease rentals for this lease as authorized under AS 38.05.180(m). ("Upon extension, the commissioner may increase lease rentals so long as the increased rental rate does not exceed 150 percent of the rate for the preceding year.") The rental rate for ADL 391905 will increase from \$3.00 per acre to \$4.50 per acre effective April 30, 2011. AS 38.05.180(m). Rental is payable in advance, and continues until income to the state from royalty exceeds rental income to the state for that year. AS 38.05.180(n).

ADLs 390983 and 390984, Tracts 166 and 167, are also severed as to the unitized and nonunitized portions of the lease. The primary term for these leases expires January 31, 2012. The unitized portions are committed in part to the TPA - - the rental will not increase. The nonunitized portions are not extended, they will expire January 31, 2012 -- the rental will not increase.

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

1. Promote the Conservation of All Natural Resources

The unitization of oil and gas reservoirs and the expansion of participating areas within unit areas to develop hydrocarbon-bearing reservoirs are well-accepted means of hydrocarbon conservation. Expansion of a participating area within an existing unit, with development occurring under the terms of a unit agreement, promotes efficient evaluation and development of the State's resources, and minimizes impacts to the area's cultural, biological, and environmental resources.

2. The Prevention of Economic and Physical Waste

The proposed expansion areas are already contributing to the production of oil from the KRU. Approval of the Application will prevent economic and physical waste because the approval will allocate production under the Exhibit C tract allocations, equitably allocating revenues amongst the working interest owners (WIOs). Approval of the expansion areas will not result in economic waste given the current well spacing, market demand, and anticipated production rates.

Annual approval of the KRU development activities as described in the future plans of development must also provide for the prevention of economic and physical waste. Using the KRU infrastructure and facilities eliminates the need to construct stand-alone facilities. Increasing the volume of oil processed at KRU facilities lowers the cost for all barrels processed at KRU.

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

CPAI has demonstrated that the acreage agreed upon for the KRU expansion overlies all or part of an oil reservoir and is appropriate to be unitized. CPAI has demonstrated that the acreage proposed for the KPA and TPA expansions is capable of producing or contributing to production of hydrocarbons in paying quantities.

The people of Alaska have an interest in the development of the State's oil and gas resources to maximize the economic and physical recovery of the resources, AS 38.05.180(a). Approval of the expansions under future annually approved plans of development will provide for continued review and approval of CPAI's plans to develop the KPA and TPA in a manner which will maximize economic and physical recovery. Combining interests and operating under the terms of the KRU Agreement and KRU Operating Agreement assures each individual WIO an equitable allocation of costs and revenues commensurate with the resources of its leases. Allocation of production under the approved Exhibit C for each participating area protects the correlative rights of the WIOs.

The KRU, KPA, and TPA expansions protect the economic interests of the WIOs and the royalty owner. The expansions promote the State's economic interests because hydrocarbon recovery will be maximized and additional production-based revenue will be derived from the increased production. Diligent exploration and development under a single approved unit plan without the complications of competing leasehold interests promotes the State's interest. Operating under the KRU 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.

Leases committed to a unit may be severed upon unitization. 11 AAC 83.373(a) provides that "Where only a portion of a lease is committed to a unit agreement approved or prescribed by the commissioner, the commitment constitutes a severance to the lease as to the unitized and nonunitized portions of the lease. The portion of the lease not committed to the unit will be treated as a separate and distinct lease".

The Division and CPAI agree that ADLs 390503, 390983, and 390984 will be severed upon unitization. The nonunitized portions of those leases are assigned new ADLs as provided in Section IV.C.10., below.

IV. FINDINGS AND DECISION

A. The Conservation of All Natural Resources

1. Expansion of the KRU, KPA, and TPA will provide for continued development of the expansion areas under the KRU Agreement and will maximize the efficient recovery of oil and gas and minimize the adverse impacts on the surface and other

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resources, including hydrocarbons, gravel, sand, water, wetlands, and valuable habitat.

2. The unitized development and operation of the leases in this expansion 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. There is potential for 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. CPAI submitted geological, geophysical and engineering data to the Division in support of the Application. Division technical staff determined that the expanded KRU area encompasses all or part of one or more oil reservoirs and that the expanded KPA and TPA areas are producing or contributing to production in paying quantities.
2. The available geological, geophysical and engineering data justify including the proposed lands, as described in Section III, B.3. of this decision.
3. The production of hydrocarbons through the existing production and processing facilities reduces the environmental impact of the additional production. Using existing facilities will avoid unnecessary duplication of development efforts on and beneath the surface.

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

1. The unit expansion as approved protects all parties' 'interests including the people of Alaska who have an interest in the development of the State's oil and gas resources to maximize the economic and physical recovery of the resources, AS 38.05.180(a).

2. The economic, geological, geophysical, and engineering data that CPAI provided reasonably justify the inclusion of the KRU, KPA, and TPA expansion acreage under the terms of the applicable regulations governing formation, expansion, and operation of oil and gas units and participating areas (11 AAC 83.301 – 11 AAC 83.395) and the terms and conditions under which these lands were leased from the State.
3. CPAI provided evidence of reasonable effort to obtain joinder of any proper party to the Agreement.
4. CPAI holds sufficient interest in the unit area to give reasonably effective control of operations.
5. The unit expansion meets the requirements of 11 AAC 83.303.
6. The Division complied with the public notice requirements of 11 AAC 83.311.
7. The KPA and TPA expansions provide for the equitable division of costs and an equitable allocation of produced hydrocarbons under a POD designed to maximize physical and economic recovery from the reservoirs within the approved participating areas. The allocations of production and costs for the tracts within the KPA and the TPA are approved. The lands approved for the KPA and TPA expansions are described in Attachment 3, Kuparuk River Unit KPA and Tarn Participating Areas Proposed Expansion Exhibits C.
8. The unit expansion 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 decision.
9. The KRU Agreement provides for additional expansions and contractions of the unit area in the future, as warranted by data obtained by exploration or otherwise. The KRU Agreement thereby protects the public interest, the rights of the parties, and the correlative rights of adjacent landowners.
10. ADL 390503, 390983, and 390984 are severed with the nonunitized portions being assigned new ADLs as follows:

KRU Expansion Leases

<u>Tract No.</u>	<u>ADL</u>	<u>PA Exp. Area</u>	<u>Unitized legal description</u>	<u>New ADL assigned to nonunitized portion</u>
164	390503	KPA	T. 11N, R. 08E, U.M. Alaska, Sec 20	391905

Approval of the Tenth Expansion of the Kuparuk River Unit , the Eleventh Expansion 12 of the Kuparuk Participating Area, and the Second Expansion of the Tarn Participating Area

If you have any questions regarding this decision, contact Temple Davidson with the Division at 907-269-8784.



W.C. Barron Director
Division of Oil and Gas

8/16/11
Date

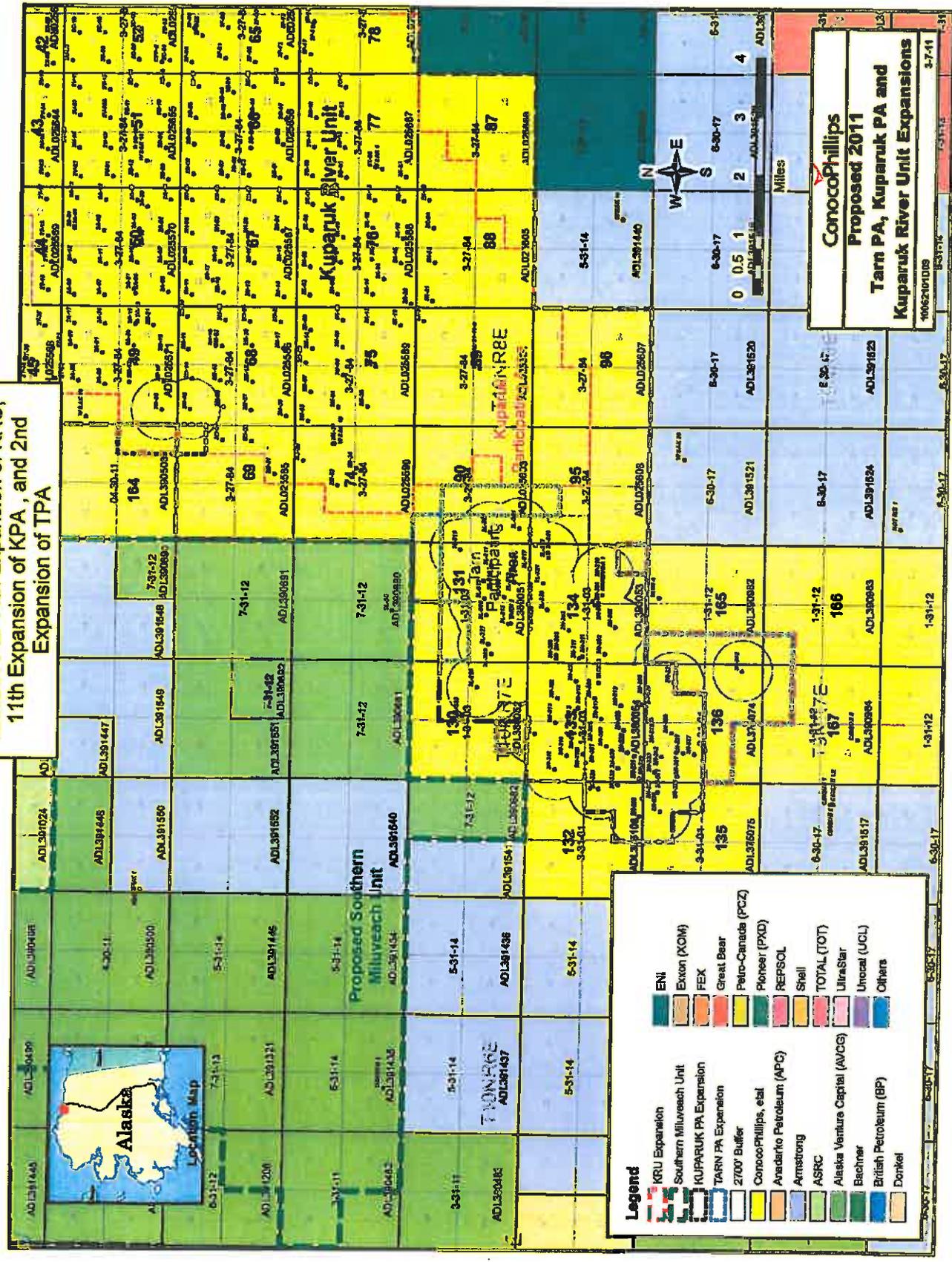
Cc: Jeff Landry, Department of Law

ATTACHMENTS

1. Kuparuk River Unit Map of Proposed Expansion Area
2. Kuparuk River Unit Description of Lands within the Proposed Expansion Area
3. Kuparuk River Unit KPA and Tarn Participating Areas Proposed Expansion Exhibits C
4. Kuparuk River Unit KPA and Tarn Participating Areas Proposed Expansion Boundaries
5. Kuparuk and Tarn Reservoir Limits within Kuparuk River Unit

ATTACHMENT ONE
Kuparuk River Unit Map of Proposed Expansion Area

**Exhibit A to 11th Expansion of KRU,
11th Expansion of KPA, and 2nd
Expansion of TPA**



Legend

	KRU Expansion		ENI
	Southern Miluiveach Unit		Exxon (XOM)
	KUPARUK PA Expansion		FEX
	TARN PA Expansion		Great Bear
	2700' Buffer		Petro-Canada (PCZ)
	ConocoPhillips, et al		Pioneer (PXD)
	Avadarto Petroleum (APC)		REPSOL
	Armstrong		Shell
	ASRC		TOTAL (TOT)
	Alaska Ventura Capital (AVCC)		UltraStar
	Bachner		Unocal (UCL)
	British Petroleum (BP)		Others
	Donkel		

ConocoPhillips
Proposed 2011
Tarn PA, Kuparuk PA and
Kuparuk River Unit Expansions

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ATTACHMENT TWO

Kuparuk River Unit Description of Lands within the Proposed Expansion Area

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Exhibit B to 11th Expansion of KRU, 11th Expansion of KPA, and 2nd Expansion of Tarn PA

Description of KRU Expansion Area, KPA Expansion Area, and Tarn PA Expansion Area

KRU Expansion Area

KRU Tract No.	ADL No.	Legal Description	Gross acres	Royalty	ORRI	Ownership*
69	ADL 025585	T11N, R08E, UM, Alaska, Sec. 29 NE4	160	12.5%	None	COP 55.402367% BP 39.282233% CVX 4.950600% XOM 0.364800%**
130	ADL 380052	T10N, R07E, UM, Alaska, Sec. 21 SE4	160	12.5%	None	Aligned
134	ADL 380053	T10N, R07E, UM, Alaska, Sec. 36, SE4	160	12.5%	None	Aligned
136	ADL 375074	T09N, R07E, UM, Alaska, Sec. 3, SE4, Sec. 9, N2, Sec. 10, All.	1,120	12.5%	None	Aligned
164	ADL 390503	T11N, R08E, UM, Alaska, Sec. 20, E2	320	16.66667%	None	COP 55.275300% BP 39.192000% CVX 4.950600% XOM 0.582100%
165	ADL 390982	T09N, R07E, UM, Alaska, Sec. 2, W2, Sec. 11, W2	640	16.66667%	None	Aligned
166	ADL 390983	T09N, R07E, UM, Alaska, Sec. 14, NW4	160	16.66667%	None	Aligned
167	ADL 390984	T09N, R07E, UM, Alaska, Sec. 15, N2	320	16.66667%	None	Aligned

ATTACHMENT THREE

Kuparuk River Unit KPA and Tarn Participating Areas Proposed Expansion Exhibits C

Exhibit B
Description of KRU Expansion Area, KPA Expansion Area, and Tam PA Expansion Area

KPA Expansion Area

KRU Tract No.	ADL No.	Legal Description	Gross acres	Royalty	ORRI	Ownership
69	ADL 025585	T11N, R08E, UM, Alaska, Sec. 29 NE4	160	12.5%	None	Aligned
164	ADL 390503	T11N, R08E, UM, Alaska, Sec. 20, E2	320	16.66667%	None	COP 55.275300% BP 39.192000% CVX 4.950600% XOM 0.582100%

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Exhibit B
Description of KRU Expansion Area, KPA Expansion Area, and Tam PA Expansion Area

Tam PA Expansion Area

KRU Tract No.	ADL No.	Legal Description	Gross acres	Royalty	ORRI	Ownership
90	ADL 025603	T10N, R08E, UM, Alaska, Sec. 18, NW4, and SE4, Sec. 19 E2	640	12.5%	None	Aligned
95	ADL 025608	T10N, R08E, UM, Alaska, Sec. 30 NE4	160	12.5%	None	Aligned
130	ADL 380052	T10N, R07E, UM, Alaska, Sec. 21 SE4	160	12.5%	None	Aligned
131	ADL 380051	T10N, R07E, UM, Alaska, Sec. 13 N2, Sec. 14 S2	640	12.5%	None	Aligned
134	ADL 380053	T10N, R07E, UM, Alaska, Sec. 36, SE4	160	12.5%	None	Aligned
136	ADL 375074	T09N, R07E, UM, Alaska, Sec. 3, SE4, Sec. 9, N2, Sec. 10, All.	1,120	12.5%	None	Aligned
165	ADL 390982	T09N, R07E, UM, Alaska, Sec. 2, W2, Sec. 11, W2	640	16.66667%	None	Aligned
166	ADL 390983	T09N, R07E, UM, Alaska, Sec. 14, NW4	160	16.66667%	None	Aligned
167	ADL 390984	T09N, R07E, UM, Alaska, Sec. 15, N2	320	16.66667%	None	Aligned

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* Names of parties: COP ConocoPhillips Alaska, Inc.
BP BP Exploration (Alaska) Inc.
CVX Chevron U.S.A. Inc.
XOM ExxonMobil Alaska Production Inc.
** Hereinafter referred to as "Aligned."

ATTACHMENT FOUR

Kuparuk River Unit KPA and Tarn Participating Areas Proposed Expansion Boundaries

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Kuparuk River Unit

Kuparuk Participating Area

Proposed Expansion Kuparuk River Unit

Proposed 10th Expansion Kuparuk Participating Area

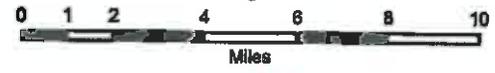
Proposed Expansion Tarn Participating Area

Tarn Participating Area

Proposed Expansion Kuparuk River Unit

Legend

-  New_KRU
-  New_Kuparuk_PA
-  New_Tarn_PA
-  KUPARUK_PA_expansion
-  TARN_PA_expansion
-  Kuparuk Leases



ConocoPhillips

Kuparuk River Unit Exhibit 'B-1'

Proposed Expansion Kuparuk River Unit, Kuparuk PA, and Tarn PA Located within T8-13N, R7-11E Umiat Meridian, Alaska

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ATTACHMENT FIVE

Kuparuk and Tarn Reservoir Limits within Kuparuk River Unit

RECEIVED

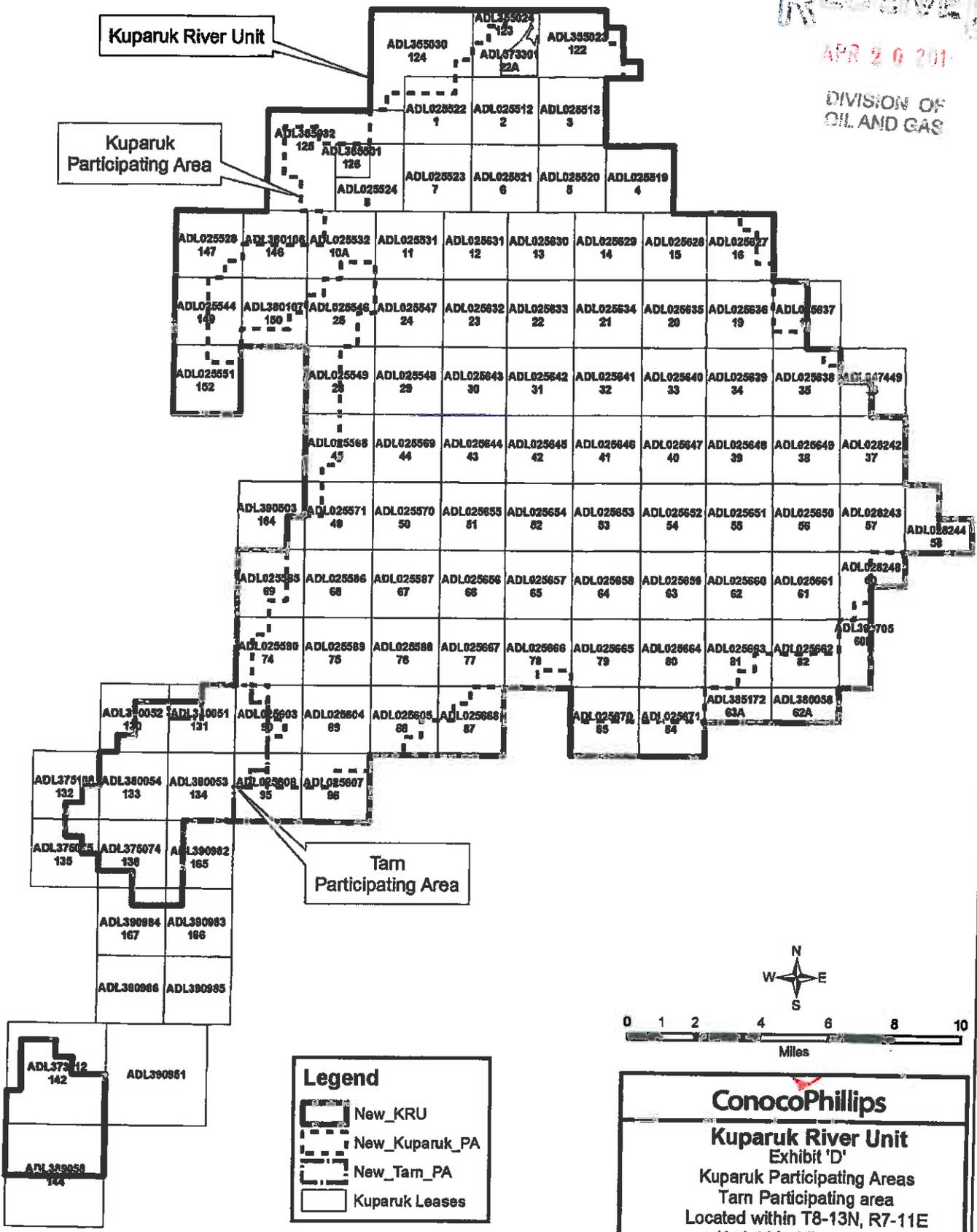
APR 20 2011

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Kuparuk River Unit

Kuparuk Participating Area

Tam Participating Area



Legend

- New_KRU
- New_Kuparuk_PA
- New_Tam_PA
- Kuparuk Leases

ConocoPhillips

Kuparuk River Unit
Exhibit 'D'

Kuparuk Participating Areas
Tam Participating area
Located within T8-13N, R7-11E
Umiam Meridian, Alaska

11020201D01 2-23-11