

COLVILLE RIVER UNIT

APPROVAL OF THE SIXTH EXPANSION OF THE UNIT 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 22, 2016

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## **I. INTRODUCTION AND DECISION SUMMARY**

The Department of Natural Resources, Division of Oil and Gas (Division) received the Application for the Sixth Unit Expansion Colville River Unit (CRU) (Application), on May 11, 2016 from the CRU Operator, ConocoPhillips Alaska, Inc. (ConocoPhillips). The proposed and approved expansion of the CRU includes approximately 5,085 acres. Attachments 1 and 2 set out the approved Exhibits A and B.

The State of Alaska, Arctic Slope Regional Corporation (ASRC), and the United States Bureau of Land Management (BLM) jointly manage the CRU. The CRU contains State of Alaska oil and gas leases, ASRC oil and gas leases, jointly owned State of Alaska and ASRC oil and gas leases, and BLM oil and gas leases. The expansion area consists of BLM oil and gas leases only.

“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). ConocoPhillips has submitted confidential geological, geophysical, and engineering data which demonstrate that the area approved for expansion includes all or part of an oil reservoir.

In parallel with DNR regulations, Article 12.1 of the Colville River Unit Agreement (CRUA) allows for expansion of the CRU to include any additional lands determined to overlie any reservoir, any part of which is within the Unit Area. ConocoPhillips has presented information to the Division that supports the determination that a reservoir within the unit boundaries extends into the expansion area. Therefore, the expansion meets the requirements of the CRUA.

The Division finds that the expansion of the CRU, promotes conservation of all natural resources, promotes the prevention of economic and physical waste and provides for the protection of all parties of interest, including the State. AS 38.05.180(p); 11 AAC 83.303. I approve the Application, effective July 1, 2016.

## **II. APPLICATION AND LEASE SUMMARY**

ConocoPhillips submitted the Application under the provisions of 11 AAC 83.356 and Section 12.1 of the CRUA on May 11, 2016, and simultaneously paid the \$500.00 unit expansion application filing fee, in accordance with 11 AAC 83.306 and 11 AAC 05.010(a)(10)(E), respectively. The Application included: Exhibit A (Attachment 1), a list legally describing the proposed expanded unit area, its leases, and ownership interests; Exhibit B (Attachment 2), a map of the proposed expanded unit; Exhibit C, geological, geophysical, engineering, and well information directly supporting the application and Planned exploration and development activities for the proposed expansion area. ConocoPhillips also submitted evidence of notice to proper parties by submitting the ballot agreement approving the sixth expansion signed by the working interest owners. The ratified unit agreement and unit operating agreement were already on file with the Division.

The Division published a public notice in the *Alaska Dispatch News* and *Arctic Sounder* on June 2, 2016, and republished on June 23, 2016, to extend the comment period under 11 AAC 83.311.

Copies of the Application and the public notice were provided to interested parties. DNR provided public notice to the North Slope Borough, the City of Barrow, the City of Nuiqsut, the Kuukpik Corporation, the Arctic Slope Regional Corporation (ASRC), the Nuiqsut Postmaster, the Barrow Postmaster, the radio station KBRW in Barrow, as well as the Alaska Department of Environmental Conservation, the Alaska Department of Fish and Game, the Alaska Oil and Gas Conservation Commissioner, and the ADF&G Division of Habitat. The public notices invited interested parties and members of the public to submit comments by July 25, 2016. No comments were received.

The proposed expansion includes an additional 5,085 acres. Attachments 1 and 2 of the Application contain the list of the proposed expansion leases and a map of the proposed boundaries. The leases proposed for the unit are summarized below. CPAI has executed an assignment for 22% working interest in leases AA094165 and AA094167 to Anadarko E&P Onshore LLC. BLM is reviewing the request. The expansion area is entirely federal leases. Article 12.1 of the CRUA requires approval of the Commissioner before any unit expansion.

Tract No.	Lease No.	Lease Date	Acres	Royalty (%)	WIO	Seg	Description
206	AA09416 5	04/01/16	2,560	16.6667	100% ConocoPhillips	1	T11N, R3E UM Sec 22, All Sec 27, All Sec 34, All Sec 35, All
207	AA09416 7	04/01/16	1,916	16.6667	100% ConocoPhillips	1	T11N, R3E UM Sec 1, All Sec 2, All Sec 3, All
208	AA09267 5	11/01/10	609	16.6667	78% ConocoPhillips 22% Anadarko E&P Onshore LLC	1	T11N, R3E UM Sec 6, All
			5,085				

### III. DISCUSSION OF DECISION CRITERIA

A unit may be expanded to conserve the natural resources of all or a part of an oil or gas pool, field, or like area when determined and certified to be necessary or advisable in the public interest (AS 38.05.180(p)). Conservation of the natural resources of all or part of an oil or gas pool, field or like area means “maximizing the efficient recovery of oil and gas and minimizing the adverse impacts on the surface and other resources.” 11 AAC 83.395(1).

The DNR Commissioner (Commissioner) reviews applications related to units under 11 AAC 83.303 – 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 Commissioner will approve a proposed expanded unit upon a finding that it will (1) promote conservation of all natural resources, including all or part of an oil or gas pool, field, or like area; (2) promote the prevention of economic and physical waste; and (3) provide for the protection of all parties of interest including the state. 11 AAC 83.303(a).

In evaluating these three criteria, the Commissioner will consider (1) the environmental costs and benefits of unitized exploration or development; (2) the geological and engineering characteristics of the potential hydrocarbon accumulation or reservoir proposed for unitization; (3) prior exploration activities in the proposed unit area; (4) the applicant's plans for exploration or development of the unit area; (5) the economic costs and benefits to the state; and (6) any other relevant factors, including measures to mitigate impacts identified above, the commissioner determines necessary or advisable to protect the public interest. 11 AAC 83.303(b).

A discussion of the subsection (b) criteria, as they apply to the Application, is set out below, followed by a discussion of the subsection (a) criteria.

Article 12.1 of the CRUA describes the requirements for unit expansion. "After notice to the Working Interest Owners, and with the approval of the President and the Commissioner, (and the AO if any Federal Leases are directly implicated) the Unit Operator, at its own election may, or at the direction of the President, Commissioner (and the AO if any Federal Leases are directly implicated), shall, expand the Unit Area to include any additional lands determined to overlie any Reservoir, any part of which is within the Unit Area, or to include any additional lands regarded as reasonably necessary for the purposes of this Agreement. Any expansion shall not be effective until approved by the President and Commissioner (and the AO if any Federal Leases are directly implicated). The State, ASRC, and the United States will not unreasonably withhold any approval required by this Article."

**A. Decision Criteria considered under 11 AAC 83.303(b)**

**1. Environmental Costs and Benefits**

The 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.

DNR also considers environmental issues during the lease sale process, and the unit Plan of Operations approval process. 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 CRU expansion has no direct environmental impact. This decision is an administrative action and does not authorize any on-the-ground 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. ConocoPhillips is operating under an approved plan of operations and plan of development.

## **2. Geological and Engineering Characteristics**

### **Exploration and Development History**

The expansion acreage lies west of the current Nanuq Kuparuk Participating Area that was formed on November 14, 2006 based on favorable drilling results from the Nanuq exploration wells.

ARCO encountered nine feet of oil-bearing Kuparuk Sandstone in the Nanuk 1 well in 1996 while drilling down to delineate the deeper Alpine reservoir. This well reached a total depth of 7,630 feet Measured Depth (MD) in the Jurassic.

In 2000, ConocoPhillips drilled the Nanuk 2 well to a total depth of 9,112 feet MD into the Jurassic. This well encountered 12 True Vertical Depth (TVD) feet of oil-bearing Kuparuk C sandstone at 7,956 feet MD, -7,046 feet true vertical depth subsea. After the Nanuk 1 and Nanuk 2 were drilled, the spelling of Nanuk was changed to Nanuq.

The Nanuq 3 well drilled in 2001 encountered approximately 10 feet TVD of oil-bearing Kuparuk C sandstone. The Kuparuk interval was cored. Reservoir analyses calculated an average core porosity of 20 percent and average core permeability of 240 millidarcys.

Sustained Nanuq Kuparuk production commenced in 2006 following construction of the CD4 pad. Since then five water alternating gas injection wells and four production wells have been drilled from the CD4 pad. As of April 30, 2016, the Nanuq Kuparuk reservoir has produced approximately 29 million barrels of oil.

In 2015 ConocoPhillips drilled the CD5-313 and CD5-315 wells west of the present Nanuq Kuparuk Participating Area and proved additional Kuparuk C reservoir was present. The results from the two wells demonstrates that the linear east-west trend of the Kuparuk shoreface sand body extends farther to the west. The expansion acreage follows this trend. CPAI plans to drill one producer and one supporting injector into the Kuparuk C reservoir in the expansion acreage.

### **Characteristics of the Reservoir**

The lower Cretaceous Kuparuk C sandstone in the Nanuq area is stratigraphically trapped in depositional and topographic lows on top of the regional Lower Cretaceous Unconformity (LCU) surface as a transgressive sandstone in a shallow marine-shoreface environment. The reservoir is

overlain successively by mudstone and shale sequences of the Kuparuk D, Kalubik, HRZ, and basal Torok intervals. The Kuparuk C is underlain by silty shales of the Miluveach formation.

The Nanuq Kuparuk Reservoir is defined as the intervals between 7,956 feet MD to 7,972 feet MD, in the Nanuk 2 well. The Kuparuk C sandstone consists of fine to medium grained, quartz-rich sandstone with variable quantities of glauconite and silt. Porosity and permeability tend to be excellent except where the sandstone is cemented with siderite. Faulting is considered to be minimal in this area and is not anticipated to impact ultimate oil recovery. Maximum gross thickness of the transgressive sandstone lag is twelve feet TVD at the Nanuk No. 2 well location, with net pay of approximately six feet TVD. No fluid contacts have been identified to date in the Nanuq-Kuparuk Reservoir.

Seismic data over the area is of good to fair quality however the Kuparuk interval is too thin to resolve the top and base. The mapping of productive Kuparuk C sands relies on seismic attribute analysis and well penetrations.

Oil properties of the Nanuq Kuparuk Reservoir, as measured from production tests and RFT data, indicate the oil is closely related to the Nanuq Nanuq Reservoir oil. Samples indicate that oil gravity ranges from 40 to 41 API, with oil viscosity estimated at 0.5 centipoise. Solution gas to oil ratio is approximately 990 standard cubic feet per stock tank barrel. Initial Nanuq Kuparuk Reservoir pressure is 3,249 pounds per square inch absolute. The Nanuq Kuparuk reservoir uses waterflood or miscible waterflood alternating gas to optimally recover oil.

## **Conclusion**

The 6th expansion of the Colville River Unit proposed by CPAI is sufficiently supported by technical data submitted by the operator. Data submitted to the Division include: maps, cross-sections, a seismic attribute display, a gross Kuparuk sandstone thickness map from seismic attributes, and an annotated seismic line.

Review of the geological, geophysical, and engineering data has allowed the Division to reasonably establish the potential for the Kuparuk C reservoir in the requested expansion acreage. The Division acknowledges that the Kuparuk C sand may be below seismic resolution; however, recent successful drilling and production of the Kuparuk C reservoir sands in the CD5 area as well as CPAI's continued effort to advance the infrastructure and resources capable of carrying forward the continued development of the expansion acreage, provide the Division the basis to support approval of the requested expansion.

## **3. Plans of Development**

The Division approved the 18th CRU Plan of Development (POD) effective April 13, 2016 for the period May 16, 2016 through May 15, 2017. The POD describes plans to drill two additional Nanuq Kuparuk wells in the latter half of 2016 and early 2017. These wells will occupy the expansion area and will be drilled from the CD5 pad.

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

The expanded CRU will provide economic benefits to the State through tax payments on production and increased Trans Alaska Pipeline System throughput. Unitized development conducted under the CRU 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. Although the expansion area is entirely federal leases, the CRUA requires approval of the Commissioner before any unit expansion.

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

##### **1. Promote the Conservation of All Natural Resources**

A unit may be formed under AS 38.05.180(p) “[t]o conserve the natural resources of all or a part of an oil or gas pool, field, or like area.” Conservation of the natural resources of all or part of an oil or gas pool, field or like area means “maximizing the efficient recovery of oil and gas and minimizing the adverse impacts on the surface and other resources.” 11 AAC 83.395(9). The unitization of oil and gas reservoirs or accumulations and the formation and expansion of unit areas to develop hydrocarbon-bearing reservoirs or accumulations are well-accepted means of hydrocarbon conservation. Unitization, with development occurring under the terms of a unit agreement, can promote efficient evaluation and development of the State’s resources, and minimize impacts to the area’s cultural, biological, and environmental resources. Expansion of 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. Wells producing this area will be drilled from existing gravel pads and production will be processed through existing facilities. If the area was not unitized development would require additional surface impacts.

##### **2. The Prevention of Economic and Physical Waste**

Unitization, as opposed to activity on a lease-by-lease basis, may prevent economic and physical waste. Economic waste is often referred to as the drilling of wells in excess of the number necessary for the efficient recovery or delineation of the oil and gas in place. Physical waste, among other things, includes the inefficient, excessive, or improper use of, or unnecessary dissipation of, reservoir energy.

Unitization may also prevent economic and physical waste by eliminating redundant expenditures for a given level of production, or by avoiding loss of ultimate recovery with the adoption of a unified reservoir management plan. Annual approval of the CRU development activities as described in the future plans of development must also provide for the prevention of economic and physical waste. Using the CRU infrastructure and facilities eliminates the need to construct stand-alone facilities. The limited size of the resource in the expansion area combined with Alaska Oil and Gas Conservation

Commission well spacing requirements make it unlikely the expansion area could not be developed unless coordinated with the existing CRU.

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

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 expansion under future annually approved plans of development will provide for continued review and approval of ConocoPhillips plans to develop the CRU in a manner which will maximize economic and physical recovery. Combining interests and operating under the terms of the CRUA and CRU Operating Agreement assures an equitable allocation of costs and revenues commensurate with the resources.

The CRU expansion protects the economic interests of the WIOs, the State, ASRC, and BLM. The expansion promotes 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 CRUA 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.

ConocoPhillips requests that the Application acreage be subject to contraction from the CRU no sooner than July 1, 2021. Article 12.4 and 12.6 of the CRUA addresses the Commissioners authority to contract the CRUA from time to time after 10 years have passed since first production. This five-year delay of contraction is a reasonable time to delineate the area and bring it into production. Therefore, ConocoPhillips request to delay contraction of the sixth expansion area from the unit until July 1, 2021 is granted.

### **C. Decision Criteria considered under Article 12.1 of the CRUA**

As described in Article 12.1 of the CRUA the operator may at its own election expand the unit area to include any additional lands determined to overlie any reservoir, any part of which is within the unit area. Article 12.1 later states no expansion shall be effective until approved by the Commissioner, and the state will not unreasonably withhold any approval required by this article.

## **IV. FINDINGS AND DECISION**

### **A. The Conservation of All Natural Resources**

1. Expansion of the CRU will provide for continued development of the expansion area under the CRUA and will maximize the efficient recovery of oil and gas and minimize the adverse impacts on the surface and other 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 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. ConocoPhillips submitted geological, geophysical and engineering data to the Division in support of the Application. Division technical staff determined that the expanded CRU area encompasses all or part of one or more oil and gas reservoir(s)
2. The available geological, geophysical and engineering data justify including the proposed lands, as described in Section III, A.2. 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.
2. The economic, geological, geophysical, and engineering data that ConocoPhillips provided reasonably justify the inclusion of the CRU 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 – 83.395.)
3. ConocoPhillips provided evidence of reasonable effort to obtain joinder of any proper party to the Agreement.
4. ConocoPhillips 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 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.
8. The CRU Agreement provides for additional expansions and contractions of the unit area in the future, as warranted by data obtained by exploration or otherwise. The CRU Agreement thereby protects the public interest, the rights of the parties, and the correlative rights of adjacent landowners.
9. The approved expanded unit is effective July 1, 2016.

For the reasons discussed in this Findings and Decision, I hereby approve the CRU sixth expansion.

A person affected by this decision may appeal it, in accordance with 11 AAC 02. Any appeal must be received within 20 calendar days after the date of "issuance" of this decision, as defined in 11 AAC 02.040(c) and (d) and may be mailed or delivered to Andrew T. Mack, Commissioner, Department of Natural Resources, 550 W. 7th Avenue, Suite 1400, Anchorage, Alaska 99501; faxed to 1-907-269-8918, or sent by electronic mail to [dnr.appeals@alaska.gov](mailto:dnr.appeals@alaska.gov). This decision takes effect immediately. An eligible person must first appeal this decision in accordance with 11 AAC 02 before appealing this decision to Superior Court. A copy of 11 AAC 02 may be obtained from any regional information office of the Department of Natural Resources.

If you have any questions regarding this decision, contact Kevin Pike with the Division at 907-269-8451, or by email at [kevin.pike@alaska.gov](mailto:kevin.pike@alaska.gov)

Sincerely,



Corri Feige  
Director  
Division of Oil and Gas

cc: Teresa Imm, Arctic Slope Regional Corporation  
Wayne Svejnoha, Bureau of Land Management  
Department of Law

**V. Attachments**

1. Colville River Unit Proposed Exhibit A: Description of Lands within the Expanded Unit
2. Colville River Unit Proposed Exhibit B: Map of Expanded Unit Area

**1. Colville River Unit Approved Exhibit A**

Description of Lands within the Proposed Expanded Unit

Exhibit A  
Attached to and made a part  
of the Colville River Unit Agreement

Tr. No.	ADL No./AK No.	Legal Description	Acres	Depth Restrictions	Original			Net Royalty*	ORRI Owners	Net ORRI (%)	Tract Owners	Working Interest (%)					
					Royalty (%)	NPSTL (%)	Royalty Owners										
1	364472 931986	T13N1R5E-U.M.	640.00	None	12.5	30	State	100	12.5	CPAI	1,200,000	CPAI	78,000,000				
														Sec. 9, Protracted, All	640.00	APC	22,000,000
														Sec. 10, Protracted, All	640.00		
														Sec. 15, Protracted, All	640.00		
														Sec. 16, Protracted, All	640.00		
														Sec. 21, Protracted, All	640.00		
														Sec. 22, Protracted, All	640.00		
														Sec. 28, Protracted, All	640.00		
														TOTAL	4,480.00		

2	364470 931974	T13N1R5E-U.M.	640.00	None	12.5	30	State	100	12.5	Enea Tekna Inv.	0,666,600	CPAI	78,000,000				
														Sec. 17, Protracted, All	640.00	APC	22,000,000
														Sec. 18, Protracted, All	631.00		
														Sec. 19, Protracted, All	633.00		
														Sec. 20, Protracted, All	640.00		
														Sec. 30, Protracted, All	636.00		
														TOTAL	3,180.00		

3	364471 931976	T13N1R5E-U.M.	640.00	None	12.5	30	State	100	12.5	Enea Tekna Inv.	0,666,600	CPAI	78,000,000				
														Sec. 26, Protracted, All	640.00	APC	22,000,000
														Sec. 27, Protracted, All	640.00		
														Sec. 29, Protracted, All	640.00		
														Sec. 31, Protracted, All	639.00		
														Sec. 32, Protracted, All	640.00		
														Sec. 33, Protracted, All	640.00		
														Sec. 34, Protracted, All	640.00		
														Sec. 35, Protracted, All	640.00		
														Sec. 36, Protracted, All	640.00		
TOTAL	5,759.00																



**Exhibit A**  
Attached to and made a part  
of the Colville River Unit Agreement

Tr. No.	ADL No./ AK No.	Legal Description	Acres	Depth Restrictions	Original			Net ORRI Owners (%)	Net ORRI Owners (%)	Tract Owners	Working Interest (%)	
					Royalty (%)	NPSL Royalty (%)	Mineral Ows.					
6	372103	T12N,R5E-U.M.		Above 10,350'	12.5	State	100	12.5	CPAI*	1,200,000	CPAI	78,000,000
	931998	Sec. 1, Unsurveyed, All	640.00						CPAI**	1,200,000	APC	22,000,000
		Sec. 2, Unsurveyed, All	640.00						Petro-Hunt	0,257,200		100,000,000
		TOTAL	1,280.00						RW Res	0,226,800		
									XH, LLC	0,201,600		
									CPAI	0,874,400		
										<u>3,960,000</u>		
				Below 10,350'	12.5	State	100	12.5	CPAI		CPAI	71,471,623
											APC	17,101,710
											Petro-Hunt	4,286,667
											RW Res	3,780,000
											XH, LLC	3,360,000
												<u>100,000,000</u>

7	372103	T12N, R5E-U.M.		Above 10,350'	12.5	State	100	12.5	CPAI*	1,200,000	CPAI	78,000,000
	931998	Sec. 11, All	640.00						CPAI**	1,200,000	APC	22,000,000
		Sec. 12, All	640.00						Petro-Hunt	0,257,200		100,000,000
		TOTAL	1,280.00						RW Res	0,226,800		
									XH, LLC	0,201,600		
									Chevron	1,703,000		
									CPAI	0,874,400		
										<u>5,663,000</u>		
				Below 10,350'	12.5	State	100	12.5	Chevron	1,703,000	CPAI	71,471,623
											APC	17,101,710
											Petro-Hunt	4,286,667
											RW Res	3,780,000
											XH, LLC	3,360,000
												<u>100,000,000</u>

Exhibit A  
Attached to and made a part  
of the Colville River Unit Agreement

Tr. No.	ADL No./ AK No.	Legal Description	Acres	Depth Restrictions	Original			Net Royalty*	ORRI Owners	Net ORRI (%)	Tract Owners	Working Interest (%)
					Royalty (%)	NPSL (%)	Royalty Owners					
8	372104	TI2N, R5E-U.M.		Above 10,350'	12.5	State	100	12.5	Petro-Hunt	0.440190	CPAI	78.000000
	932000	Sec. 9, All	640.00						XH, LLC	0.345030	APC	22.000000
		Sec. 10, All	640.00						RW Res	0.226800		100.000000
		TOTAL	1,280.00						Chevron	1.703000		
									CPAI	1.701900		
										<u>4.416920</u>		
				Below 10,350'	12.5	State	100	12.5	Chevron	1.703000	CPAI	66.790810
											APC	16.342170
											Petro-Hunt	7.336490
											XH, LLC	5.750530
											RW Res	3.780000
												100.000000

9	372105	TI2N, R5E-U.M.		Above 10,350'	12.5	State	100	12.5	Petro-Hunt	0.440190	CPAI	78.000000
	932002	Sec. 7, All	580.00						XH, LLC	0.345030	APC	22.000000
		Sec. 8, All	640.00						RW Res	0.226800		100.000000
		TOTAL	1,220.00						Chevron	1.703000		
									CPAI	1.701900		
										<u>4.416920</u>		
				Below 10,350'	12.5	State	100	12.5	Chevron	1.703000	CPAI	66.790810
											APC	16.342170
											Petro-Hunt	7.336490
											XH, LLC	5.750530
											RW Res	3.780000
												100.000000



Exhibit A  
Attached to and made a part  
of the Colville River Unit Agreement

Tr. No.	ADL No./AK No.	Legal Description	Acres	Depth Restrictions	Original			Net Royalty*	ORRI Owners	Net ORRI (%)	Tract Owners	Working Interest (%)
					Royalty (%)	NPSL (%)	Royalty Owners					
11A	391577	T12N,R5E-U.M.		Above 8.500'	12.5	State	100	12.5	Petro-Hunt	0.440190	CPAI	78.000000
	341402	Sec. 15, All	640.00						XH, LLC	0.345030	APC	22.000000
		Sec. 16, All	640.00						RW Res	0.226800		100.000000
		TOTAL	1,280.00						Chevron	1.703000		
									CPAI	1.701900		
										4.416920		
				8,500-10.350'	12.5	State	100	12.5	Petro-Hunt	0.440190	CPAI	78.000000
									XH, LLC	0.345030	APC	22.000000
									RW Res	0.226800		100.000000
									Chevron	1.703000		
									CPAI	1.701900		
										4.416920		
				Below 10.350'	12.5	State	100	12.5	Chevron	1.703000	CPAI	66.790810
											APC	16.342170
											Petro-Hunt	7.336490
											XH, LLC	5.750530
											RW Res	3.780000
												100.000000



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Tr. No.	ADL No./ AK No.	Legal Description	Acres	Depth Restrictions	Original			Net Royalty*	ORRI Owners	Net		Tract Owners	Working Interest (%)
					Royalty (%)	NPSL (%)	Royalty Owners			ORRI (%)	ORRI Owners		
15	25529	T12N,R4E-U.M.		None	12.5	State	50.05	6.25625	Chevron	1.703000	CPAI	78.000000	
	932096	Sec. 23, All	640.00			ASRC	49.95	5.24375	Kuukpik Corp.	1.000000	APC	22.000000	
		TOTAL	640.00					11.5		2.703000		100.000000	
16	25529	T12N,R4E-U.M.		None	12.5	State	47.37	5.92125	Chevron	1.703000	CPAI	78.000000	
	932096	Sec. 22 excl. NPRA	346.19			ASRC	52.63	5.57875	Kuukpik Corp.	1.000000	APC	22.000000	
		TOTAL	346.19					11.5		2.703000		100.000000	
17	387211	T12N,R4E-U.M.		None	16.66667	State	47.37	7.895002	Kuukpik Corp.	1.666667	CPAI	78.000000	
	932197	Sec. 22, All, within NPRA, excl. USS 9502	257.86			ASRC	52.63	7.105001			APC	22.000000	
		Lot 2						15.000003				100.000000	
		TOTAL	257.86									100.000000	
18-A	387211	T12N,R4E-U.M.		None	16.66667	State	26.23	4.371668	Kuukpik Corp.	1.666667	CPAI	78.000000	
	932197	Sec. 21, All, within NPRA	229.92			ASRC	73.77	10.628335			APC	22.000000	
		TOTAL	229.92					15.000003				100.000000	
18-B	387211	T12N,R4E-U.M.		None	16.66667	State	26.23	4.37167	Kuukpik Corp.	1.000000	CPAI	78.000000	
	932197	Sec. 21, tide & submerged lands seaward of the line of mean high water as shown on the official tract map for Oil and Gas Lease Sale 43	90.00			ASRC	73.77	11.295			APC	22.000000	
		TOTAL	90.00					15.66667				100.000000	

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Tr. No.	ADL No./ AK No.	Legal Description	Acres	Depth Restrictions	Original			Net Royalty*	ORRI Owners	Net ORRI (%)	Tract Owners	Working Interest (%)
					Royalty (%)	NPSL (%)	Royalty Owners					
19	380095	T12N,R4E-U.M.		None	16.667	State	26.23	4.37175	Kunkpik Corp.	1.000000	CPAI	78.000000
	932056	Sec. 21, All, excl. tide & submerged lands seaward of the line of mean high water as shown on the official tract map for Oil and Gas Lease Sale 43 and NPRRA				ASRC	73.77	11.29525			APC	22.000000
		TOTAL	320.08					15.667				100.000000

20	380095	T12N,R4E-U.M.		None	16.667	State	87.45	14.57529	Kunkpik Corp.	1.000000	CPAI	78.000000
	932056	Sec. 20, All, excl. tide & submerged lands seaward of the line of mean high water as shown on the official tract map for Oil and Gas Lease Sale 43				ASRC	12.55	1.09171			APC	22.000000
		TOTAL	178.00					15.667				100.000000

21	387211	T12N,R4E-U.M.		None	16.66667	State	87.45	14.575	Kunkpik Corp.	1.000000	CPAI	78.000000
	932197	Sec. 20, All, tide & submerged lands seaward of the line of mean high water as shown on the official tract map for Oil and Gas Lease Sale 43				ASRC	12.55	1.09167			APC	22.000000
		TOTAL	462.00					15.66667				100.000000

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Tr. No.	ADL No./ AK No.	Legal Description	Acres	Depth Restrictions	Original		NPSL Owners	Mineral Ows.	Net Royalty*	ORRI Owners	Net		Tract Owners	Working Interest (%)
					Royalty (%)	(%)					ORRI (%)	ORRI (%)		
22	ASRC NPRA 1	T12N,R3E-U.M.			None	12.5	ASRC	100	11.25	Kuukpiik Corp.	1.250000	CPAI	78,000,000	
	932126	Sec. 25	640.00									AEI	22,000,000	
		Sec. 26	640.00										100,000,000	
		Sec. 27	640.00											
		Sec. 34	640.00											
		Sec. 35	640.00											
		Sec. 36	640.00											
		TOTAL	3,840.00											

23	ASRC NPRA 2	T12N,R4E-U.M.			None	16.667	ASRC	100	15	Kuukpiik Corp.	1.666700	CPAI	78,000,000	
	932128	Sec. 28	565.98									AEI	22,000,000	
		Sec. 29	402.79										100,000,000	
		Sec. 30	321.28											
		Sec. 31	541.00											
		Sec. 32	534.95											
		Sec. 33	640.00											
		T11N,R4E-U.M.												
		Sec. 4	640.00											
		Sec. 5	640.00											
		Sec. 7	593.24											
		Sec. 8	640.00											
		Sec. 9	640.00											
		Sec. 21	640.00											
		TOTAL	6,799.24											
24	387212	T12N,R4E-U.M.			None	Sliding	State	8	1.333334	Kuukpiik Corp.	**1.66666	CPAI	78,000,000	
	932199	Sec. 27, All, within NPRA	550.29			Scale	ASRC	92	**13.66666			APC	22,000,000	
		TOTAL	550.29			**16.6666			15.000003				100,000,000	

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Tr. No.	ADL No./ AK No.	Legal Description	Acres	Depth Restrictions	Original			Net Royalty*	ORRI Owners	Net		Tract Owners	Working Interest (%)
					Royalty (%)	NPSL (%)	Royalty Owners			ORRI (%)	ORRI (%)		
25	25530	T12N,R4E-U.M.		None	12.5		State	8	1,000,000	Chevron	1,703,000	CPAI	78,000,000
	932098	Sec. 27, All, excl. NPRA	89.71				ASRC	92	10,500,000	Kuukpiik Corp.	1,000,000	APC	22,000,000
		TOTAL	89.71						11,500,000		2,703,000		100,000,000
26	387212	T12N,R4E-U.M.		None	Sliding		State	60.18	10,030,002	Kuukpiik Corp.	**1,666,666	CPAI	78,000,000
	932199	Sec. 26, All, within NPRA	17.36		Scale		ASRC	39.82	**4,970,001			APC	22,000,000
		TOTAL	17.36		**16,666				15,000,003				100,000,000
27	25530	T12N,R4E-U.M.		None	12.5		State	60.18	7,522,500	Chevron	1,703,000	CPAI	78,000,000
	932098	Sec. 26, All, excl. NPRA	622.64				ASRC	39.82	3,977,500	Kuukpiik Corp.	1,000,000	APC	22,000,000
		TOTAL	622.64						11,500,000		2,703,000		100,000,000
28	25530	T12N,R4E-U.M.		None	12.5		State	55.79	6,973,750	Chevron	1,703,000	CPAI	78,000,000
	932098	Sec. 25, All	640.00				ASRC	44.21	4,526,250	Kuukpiik Corp.	1,000,000	APC	22,000,000
		TOTAL	640.00						11,500,000		2,703,000		100,000,000
29	25558	T12N-R5E, U.M.		None	12.5		State	100	12.5	Chevron	1,703,000	CPAI	78,000,000
	932102	Sec. 29, All	640.00									APC	22,000,000
		Sec. 30, All	588.00										100,000,000
		Sec. 31, All	591.00										
		Sec. 32, All	640.00										
		TOTAL	2,459.00										
30	25557	T12N-R5E, U.M.		None	12.5		State	100	12.5	Chevron	1,703,000	CPAI	78,000,000
	932106	Sec. 27, All	640.00									APC	22,000,000
		Sec. 28, All	640.00										100,000,000
		Sec. 33, All	640.00										
		Sec. 34, All	640.00										
		TOTAL	2,560.00										



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					Royalty (%)	NPSL (%)	Royalty Owners					
33	391579			Below 7,130'	16.667		State	58.42				
	341413 (cont.)						ASRC	41.58				
								9.736860	CPAI	0.745500		
								5.930140	Chevron	1.703000	CPAI	77.700000
								15.667000	Kuukpik Corp.	1.000000	APC	22.000000
								3.448500			Petro-Hunt	0.300000
												100.000000

34	391580	TI2N,R5E-U.M.		Above 10,350'	12.5		State	100				
	341403	Sec. 35, All	640.00									
		TOTAL	640.00					12.5	CPAI*	1.515000	CPAI	78.000000
									Petro-Hunt	0.324590	APC	22.000000
									XH, LLC	0.254430		100.000000
									RW Res	0.226800		
									Chevron	1.703000		
									CPAI	1.255180		
										5.279000		
				Below 10,350'	12.5		State	100				
									Chevron	1.703000	CPAI	68.928524
											APC	17.641213
											Petro-Hunt	5.409868
											XH, LLC	4.240395
											RW Res	3.780000
												100.000000
35	380096	TI2N,R4E-U.M.		None	16.667		State	50.72				
	932058	Sec. 36, All	640.00				ASRC	49.28				
		TOTAL	640.00									
								15.667000	Kuukpik Corp.	1.000000	APC	22.000000
								2.703000				100.000000
36	25530	TI2N,R4E-U.M.		None	12.5		State	59.24				
	932058	Sec. 35, All, excl. NPRRA	596.62				ASRC	40.76				
		TOTAL	596.62									
								7.405000	Chevron	1.703000	CPAI	78.000000
								4.095000	Kuukpik Corp.	1.000000	APC	22.000000
								11.500000		2.703000		100.000000

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Tr. No.	ADL No./ AK No.	Legal Description	Acres	Depth Restrictions	Original			Net Royalty*	ORRI Owners	Net		Tract Owners	Working Interest (%)
					Royalty (%)	NPSL (%)	Royalty Owners			ORRI (%)	ORRI Owners		
37	387212	TI2N,R4E-U.M.		None	Sliding	State	59.24	9.873335	Kuukpiik Corp.	**1.66666	CPAI	78.000000	
	932199	Sec. 35, All, within NPRA	43.38		Scale	ASRC	40.76	**5.126668			APC	22.000000	
		TOTAL	43.38		**16.6666			<u>15.000003</u>				<u>100.000000</u>	
38	387212	TI2N,R4E-U.M.		None	Sliding	State	0.18	0.03	Kuukpiik Corp.	**1.66666	CPAI	78.000000	
	932199	Sec. 34, All, within NPRA	640.00		Scale	ASRC	99.82	**14.97000			APC	22.000000	
		TOTAL	640.00		**16.6666			<u>15.000003</u>				<u>100.000000</u>	
39	387207	TI1N,R4E-U.M.		None	Sliding	State	10.25	1.708334	Kuukpiik Corp.	**1.66666	CPAI	78.000000	
	932191	Sec. 3, All, within NPRA	588.85		Scale	ASRC	89.75	**13.29166			APC	22.000000	
		TOTAL	588.85		**16.6666			<u>15.000003</u>				<u>100.000000</u>	
40	380075	TI1N-R4E-U.M.		None	Sliding	State	10.25	1.708370	Kuukpiik Corp.	1.000000	CPAI	78.000000	
	932034	Sec. 3, All, excl. NPRA	51.15		Scale	ASRC	89.75	13.958630			APC	22.000000	
		TOTAL	51.15					<u>15.667000</u>				<u>100.000000</u>	
<b><u>There is no Tract 41</u></b>													
42	380075	TI1N-R4E-U.M.		None	Sliding	State	57.25	9.541860	Kuukpiik Corp.	1.000000	CPAI	78.000000	
	932034	Sec. 2, All	640.00		Scale	ASRC	42.75	6.125140			APC	22.000000	
		TOTAL	640.00					<u>15.667000</u>				<u>100.000000</u>	
43	380075	TI1N-R4E-U.M.		None	Sliding	State	53.51	8.918510	Chevron	1.703000	CPAI	78.000000	
	932034	Sec. 1, All	640.00		Scale	ASRC	46.49	6.748490	Kuukpiik Corp.	1.000000	APC	22.000000	
		TOTAL	640.00					<u>15.667000</u>		<u>2.703000</u>		<u>100.000000</u>	

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Tr. No.	ADL No./ AK No.	Legal Description	Acres	Depth Restrictions	Original			Net	Working Interest (%)								
					Royalty (%)	NP&SL (%)	Royalty Owners										
44	25559 932104	TIIN,R5E-U.M. Sec. 5, All Sec. 6, All Sec. 7, All Sec. 8, All TOTAL	640.00 593.00 596.00 640.00 2,469.00	None	12.5	State	100	12.5	Chevron CPAI	1,703,000 APC	78,000,000 22,000,000 100,000,000						
												Net Royalty*	ORRI Owners (%)	Tract Owners			
45	372095 931992	TIIN,R5E-U.M. Sec. 3, All Sec. 4, All Sec. 9, All Sec. 10, All TOTAL	640.00 640.00 640.00 640.00 2,560.00	Above 10,350' Below 10,350'	12.5	State	100	12.5	CPAI* Petro-Hunt XH, LLC RW Res Chevron CPAI	1,515,000 0,324,590 0,254,430 0,226,800 1,703,000 1,255,180 5,279,000	CPAI APC 100,000,000	78,000,000 22,000,000 100,000,000					
													Net Royalty*	ORRI Owners (%)	Tract Owners		
46	25560 932108	TIIN,R5E-U.M. Sec. 2, All TOTAL	640.00 640.00	None	12.5	State	100	12.5	Chevron CPAI	1,703,000 APC	78,000,000 22,000,000 100,000,000						
												Net Royalty*	ORRI Owners (%)	Tract Owners			
47	391581 341400	TIIN,R5E-U.M. Sec. 1, W1/2W1/2 TOTAL	160.00 160.00	None	12.5	State	63.69	ASRC	36.31	7,961,250 3,538,750 11,500,000	Chevron Kaukpkj Corp. 2,703,000	1,703,000 1,000,000 2,703,000	CPAI APC 100,000,000	78,000,000 22,000,000 100,000,000			
															Net Royalty*	ORRI Owners (%)	Tract Owners

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Tr. No.	ADL No./ AK No.	Legal Description	Acres	Depth Restrictions	Original Royalty (%)	NPSL Royalty (%)	Mineral Owms.	Net Royalty*	ORRI Owners	Net ORRI (%)	Tract Owners	Working Interest (%)
<b><u>There is no Tract 48</u></b>												
49	25560	TIINR5E-U.M.		None	12.5		State 57.68	7.210000	Chevron	1.703000	CPAI	78.000000
	932108	Sec. 11, All	640.00				ASRC 42.32	4.290000	Kuukpiik Corp.	1.000000	APC	22.000000
		TOTAL	640.00					11.500000		2.703000		100.000000
50	380075	TIIN-R4E, U.M.		None	16.667		State 76.87	12.811920	Chevron	1.703000	CPAI	78.000000
	932034	Sec. 12, All	640.00				ASRC 23.13	2.855080	Kuukpiik Corp.	1.000000	APC	22.000000
		TOTAL	640.00					15.667000		2.703000		100.000000
51	380075	TIIN-R4E, U.M.		None	16.667		State 70.59	11.765240	Kuukpiik Corp.	1.000000	CPAI	78.000000
	932034	Sec. 11, All, excl. NPRA	594.02				ASRC 29.41	3.901760			APC	22.000000
		TOTAL	594.02					15.667000				100.000000
52	387207	TIIN-R4E-U.M.		None	Sliding Scale		State 70.59	11.765002	Kuukpiik Corp.	**1.66666	CPAI	78.000000
	932191	Sec. 11, All, within NPRA	45.98				ASRC 29.41	**3.235001			APC	22.000000
		TOTAL	45.98		**16.6666			15.000003				100.000000
53	380075	TIIN-R4E, U.M.		None	16.667		State 2.39	0.398340	Kuukpiik Corp.	1.000000	CPAI	78.000000
	932034	Sec. 10, All, excl. NPRA	5.83				ASRC 97.61	15.268660			APC	22.000000
		TOTAL	5.83					15.667000				100.000000
54	387207	TIIN-R4E-U.M.		None	Sliding Scale		State 2.39	0.398333	Kuukpiik Corp.	**1.66666	CPAI	78.000000
	932191	Sec. 10, All, within NPRA	634.17				ASRC 97.61	**14.60167			APC	22.000000
		TOTAL	634.17		**16.6666			15.000003				100.000000
55	387208	TIIN-R4E-U.M.		None	Sliding Scale		State 0.34	0.056667	Kuukpiik Corp.	**1.66666	CPAI	78.000000
	932193	Sec. 16, All, within NPRA	630.47				ASRC 99.66	**14.94333			APC	22.000000
		TOTAL	630.47		**16.6666			15.000003				100.000000

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					Royalty (%)	NPSL (%)	Royalty Owners			ORRI (%)	ORRI Owners			
56	380075	TIIN-R4E, U.M.	None	None	16.667	State	0.34	ASRC	99.66	0.05667	Kuukpiik Corp.	1.000000	CPAI	78.000000
	932034	Sec. 16, All, excl. NPRA	9.53							15.61033			APC	22.000000
		TOTAL	9.53							15.667				100.000000
57	387208	TIIN-R4E-U.M.	None	None	Sliding	State	39.8	ASRC	60.2	6.633335	Kuukpiik Corp.	**1.66666	CPAI	78.000000
	932193	Sec. 15, All, within NPRA	103.94		Scale					**8.366668			APC	22.000000
		TOTAL	103.94							15.000003				100.000000
58	380075	TIIN-R4E, U.M.	None	None	16.667	State	39.8	ASRC	60.2	6.633470	Kuukpiik Corp.	1.000000	CPAI	78.000000
	932034	Sec. 15, All, excl. NPRA	536.06							9.033530			APC	22.000000
		TOTAL	536.06							15.667000				100.000000
59	380075	TIIN-R4E, U.M.	None	None	16.667	State	53.63	ASRC	46.37	8.938510	Kuukpiik Corp.	1.000000	CPAI	78.000000
	932034	Sec. 14, All	640.00							6.728490			APC	22.000000
		TOTAL	640.00							15.667000				100.000000
60	380075	TIIN-R4E, U.M.	None	None	16.667	State	67.55	ASRC	32.45	11.258560	Kuukpiik Corp.	1.000000	CPAI	78.000000
	932034	Sec. 13, All	640.00							4.408440			APC	22.000000
		TOTAL	640.00							15.667000				100.000000
61	372097	TIIN-R5E-U.M.	Above 10,350'		12.5	State	100.00	State		12.50000	CPAI*	1.515000	CPAI	78.000000
	931996	Sec. 17, All	640.00							Petro-Hunt	0.324590		APC	22.000000
		Sec. 18, All	599.00							XH, LLC	0.254430			100.000000
		TOTAL	1,239.00							RW Res	0.226800			
									Chevron	1.703000				
									CPAI	1.255180				
										5.279000				

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Tr. No.	ADL No./ AK No.	Legal Description	Acres	Depth Restrictions	Original			Net Royalty*	ORRI Owners	ORRI (%)	Tract Owners	Working Interest (%)
					Royalty (%)	NPSL (%)	Royalty Owners					
61	372097			Below 10,350'	12.5		12.500000	Chevron	1.703000		CPAI	68.928524
	931996 (Cont)										APC Petro-Hunt XH, LLC RW Res	17.641213 5.409868 4.240395 3.780000
												100.000000

62	372096	TIIN, R5E-U.M.		Above 10,350'	12.5		12.50000	CPAI*	1.515000		CPAI	78.000000
	931994	Sec. 16, All TOTAL	640.00 640.00					Petro-Hunt XH, LLC RW Res Chevron CPAI	0.324590 0.254430 0.226800 1.703000 1.255180		APC	22.000000 100.000000
				Below 10,350'	12.5		12.50000	Chevron	1.703000		CPAI	68.928524
											APC Petro-Hunt XH, LLC RW Res	17.641213 5.409868 4.240395 3.780000
												100.000000

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Tr. No.	ADL No./ AK No.	Legal Description	Acres	Depth Restrictions	Original				Net	Tract Owners	Working Interest (%)	
					Royalty (%)	NPSL Royalty (%)	Mineral Owns.	Net Royalty*				
64	391583	TIIN,R5E,U.M.		None	16.667							
	341411	Sec. 14, NW1/4NW1/4	40.00			State	37.21	10.465210	Chevron	1.703000	CPAI	78.000000
		TOTAL	40.00				ASRC	5.201790	15.667000	CPAI	1.328100	APC
		TOTAL						4.031100	Kuukpkik Corp.	1.000000		100.000000

**There are no Tracts 65-67**

68	380079	TIIN-R5E,U.M.		None	16.667							
	932040	Sec. 22, NW1/4, NW1/4SW1/4	200.00			State	57.26	9.543520	Chevron	1.703000	CPAI	78.000000
		TOTAL	200.00				ASRC	42.74	6.123480	Kuukpkik Corp.	1.000000	APC
		TOTAL						15.667000		2.703000		100.000000

69	384211	TIIN,R5E-U.M.		None	16.667							
	932080	Sec. 21, All	640.00			State	50	8.333500	CPAI	1.328100	CPAI	78.000000
		TOTAL	640.00				ASRC	50	7.333500	Kuukpkik Corp.	1.000000	APC
		TOTAL						15.667000		2.328100		100.000000

70	384211	TIIN,R5E-U.M.		Above 7.631'	16.667							
	932080	Sec. 20, All	640.00			State	55.79	9.298520	CPAI	1.328100	CPAI	78.000000
		TOTAL	640.00				ASRC	44.21	6.368480	Kuukpkik Corp.	1.000000	APC
		TOTAL						15.667000		2.328100		100.000000

71	384211	TIIN,R5E-U.M.		Below 7.631'	16.667							
	932080	Sec. 19, All	601.00			State	55.79	9.298520	CPAI	1.328100	CPAI	77.620000
		TOTAL	601.00				ASRC	44.21	6.368480	Kuukpkik Corp.	1.000000	APC
		TOTAL						15.667000		2.328100	Petro-Hunt	0.380000
		TOTAL						100.000000				100.000000

71	384211	TIIN,R5E-U.M.		Above 7.631'	16.667							
	932080	Sec. 19, All	601.00			State	52.88	8.813510	CPAI	1.328100	CPAI	78.000000
		TOTAL	601.00				ASRC	47.12	6.853490	Kuukpkik Corp.	1.000000	APC
		TOTAL						15.667000		2.328100		100.000000

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Tr. No.	ADL No./ AK No.	Legal Description	Acres	Depth Restrictions	Original			Net	Tract	Working Interest (%)		
					Royalty (%)	NPSL (%)	Royalty* Owners					
71	384211			Below 7,631'	16.667	State	52.88	8,813,510	CPAI	1.328100	CPAI	77.620000
	932080 (Cont.)					ASRC	47.12	6,853,490	Kuukpiik Corp.	1.000000	APC	22.000000
								15,667,000		2.328100	Petro-Hunt	0.380000
												100.000000
72	380077	TIIN,R4E-U.M.		None	16.667	State	60.51	10,085,200	Kuukpiik Corp.	1.000000	CPAI	78.000000
	932036	Sec. 24, All	640.00			ASRC	39.49	5,581,800			APC	22.000000
		TOTAL	640.00					15,667,000				100.000000
73	380077	TIIN,R4E-U.M.		None	16.667	State	50.67	8,445,170	Kuukpiik Corp.	1.000000	CPAI	78.000000
	932036	Sec. 23, All	640.00			ASRC	49.33	7,221,830			APC	22.000000
		TOTAL	640.00					15,667,000				100.000000
74	380077	TIIN,R4E-U.M.		None	16.667	State	21.35	3,558,400	Kuukpiik Corp.	1.000000	CPAI	78.000000
	932036	Sec. 22, All, excl. NPRA	228.74			ASRC	78.65	12,108,600			APC	22.000000
		TOTAL	228.74					15,667,000				100.000000
75	387208	TIIN,R4E-U.M.		None	Sliding	State	21.35	3,558,334	Kuukpiik Corp.	**1.666666	CPAI	78.000000
	932193	Sec. 22, All, within NPRA	411.26		Scale	ASRC	78.65	**11,441,666			APC	22.000000
		TOTAL	411.26		**16.666666			15,000,003				100.000000
76	387209	TIIN,R4E-U.M.		None	Sliding	State	2.6	0,433,333	Kuukpiik Corp.	**1.666666	CPAI	78.000000
	932195	Sec. 27, All, within NPRA	614.70		Scale	ASRC	97.4	**14,566,667			APC	22.000000
		TOTAL	614.70		**16.666666			15,000,003				100.000000
77	380077	TIIN,R4E-U.M.		None	16.667	State	2.6	0,433,340	Kuukpiik Corp.	1.000000	CPAI	78.000000
	932036	Sec. 27, All, excl. NPRA	25.30			ASRC	97.4	15,233,660			APC	22.000000
		TOTAL	25.30					15,667,000				100.000000

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Tr. No.	ADL No./AK No.	Legal Description	Acres	Depth Restrictions	Original			Net	Tract Owners	Working Interest (%)	
					Royalty (%)	NPSP Royalty (%)	Mineral Owners				
78	387209	TIIN,R4E-U.M.		None	Sliding Scale						
	932195	Sec. 26, All, within NPRRA	25.23			48.75	8.125002	Kuukpik Corp.	**1.66666	CPAI	78.000000
		TOTAL	25.23		**16.6666	51.25	**6.875001			APC	22.000000
							15.000003				100.000000
79	380077	TIIN,R4E-U.M.		None							
	932036	Sec. 26, All, excl NPRRA	614.77			48.75	8.125160	Kuukpik Corp.	1.000000	CPAI	78.000000
		TOTAL	614.77			51.25	7.541840			APC	22.000000
							15.667000				100.000000
80	384209	TIIN-R4E,U.M.		None							
	932076	Sec. 25, All	640.00			63.41	10.568540	CPAI	1.328100	CPAI	78.000000
		TOTAL	640.00			36.59	5.098460	Kuukpik Corp.	1.000000	APC	22.000000
							15.667000				100.000000
81	384211	TIIN,R5E-U.M.		None							
	932080	Sec. 30, All	604.00			50.17	8.361830	CPAI	1.328100	CPAI	78.000000
		TOTAL	604.00			49.83	7.305170	Kuukpik Corp.	1.000000	APC	22.000000
							15.667000				100.000000
82	380082	TIIN-R5E,U.M.		None							
	932046	Sec. 29, All	640.00			50.86	8.476840	Kuukpik Corp.	1.000000	CPAI	78.000000
		TOTAL	640.00			49.14	7.190160			APC	22.000000
							15.667000				100.000000
83	384215	TIIN,R4E-U.M.		None							
	932084	Sec. 36, Unsurveyed, All excl. tide & submerged lands seaward of the line of mean high water and channel closing line as shown on the official tract map for Oil and Gas Lease Sale 43				57.35	9.558525	CPAI	1.328100	Petro-Hunt	0.380000
						42.65	6.108476	Kuukpik Corp.	1.000000	CPAI	77.620000
							15.667000			APC	22.000000
		TOTAL									100.000000
							597.00				597.00
							597.00				597.00

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Tr. No.	ADL No./ AK No.	Legal Description	Acres	Depth Restrictions	Original			Net Royalty*	ORRI Owners	Net ORRI (%)	Tract Owners	Working Interest (%)
					Royalty (%)	NPSL Royalty (%)	Mineral Owms.					
84	380092 932052	TI2N-R4E, U.M. Sec. 1, Unsurveyed, All	640.00	None	16.667	State ASRC	55.36 44.64	9.226851 6.440149	Kuukpkik Corp.	1.000000	CPAI APC	78.000000 22.000000
		TOTAL	640.00					<u>15.667000</u>				<u>100.000000</u>
85	380092 932052	TI2N-R4E, U.M. Sec. 2, Unsurveyed, All excl. tide & submerged lands seaward of the line of mean high water as shown on the official tract map for Oil and Gas Lease Sale 43	583.00	None	16.667	State ASRC	54.62 45.38	9.103515 6.563485	Kuukpkik Corp.	1.000000	CPAI APC	78.000000 22.000000
		TOTAL	583.00					<u>15.667000</u>				<u>100.000000</u>
86	388525 932306	TI2N-R4E, U.M. Sec. 2, Unsurveyed, All within the bed of the unnamed channel for the Colville River as shown on the official tract map for State Oil and Gas Lease Sale 75, dated August 26, 1992	57.00	None	16.66667	State ASRC	54.62 45.38	9.103335 6.563335	Kuukpkik Corp.	1.000000	CPAI APC	78.000000 22.000000
		TOTAL	57.00					<u>15.666670</u>				<u>100.000000</u>
87	380092 932052	TI2N-R4E, U.M. Sec. 3, Unsurveyed, E1/2, E1/2W 1/2, excl. tide & submerged lands seaward of the line of mean high water as shown on the official tract map for Oil and Gas Lease Sale 43	293.00	None	16.667	State ASRC	73.42 26.58	12.236911 3.430089	Kuukpkik Corp.	1.000000	CPAI APC	78.000000 22.000000
		TOTAL	293.00					<u>15.667000</u>				<u>100.000000</u>

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Tr. No.	ADL No./ AK No.	Legal Description	Acres	Depth Restrictions	Original			Net Royalty*	ORRI Owners	Net		Tract Owners	Working Interest (%)
					Royalty (%)	NPSL (%)	Royalty Owners			ORRI (%)	ORRI Owners		
88	388525	T12N-R4E, U.M.		None	16.66667		73.42	12.236669	Chevron	1.000000	CPAI	78.000000	
	932306	Sec. 3, Unsurveyed, All within the beds of the Nechelek Channel and the bed of the unnamed channel of the Colville River as shown on the official tract map for Oil and Gas Lease Sale 75, dated August 26, 1992					26.58	3.430001			APC	22.000000	
		TOTAL	327.00					15.666670				100.000000	

89	25526	T12N-R4E, U.M.		None	12.5		70.39	8.798750	Chevron	1.703000	CPAI	78.000000
	932094	Sec. 10, Unsurveyed, All, east of the highest high water mark on the left bank of the Nechelek Channel of the Colville River					29.61	2.701250	Kuukpik Corp.	1.000000	APC	22.000000
		TOTAL	375.36					11.500000				100.000000

90	25526	T12N-R4E, U.M.		None	12.5		52.87	6.608750	Chevron	1.703000	CPAI	78.000000
	932094	Sec. 11, Unsurveyed, All					47.13	4.891250	Kuukpik Corp.	1.000000	APC	22.000000
		TOTAL	640.00					11.500000				100.000000

91	25526	T12N-R4E, U.M.		None	12.5		53.32	6.665000	Chevron	1.703000	CPAI	78.000000
	932094	Sec. 12, Unsurveyed, All					46.68	4.835000	Kuukpik Corp.	1.000000	APC	22.000000
		TOTAL	640.00					11.500000				100.000000

92	25526	T12N-R4E, U.M.		None	12.5		55.09	6.88625	Chevron	1.703000	CPAI	78.000000
	932094	Sec. 13, Unsurveyed, All					44.91	4.61375	Kuukpik Corp.	1.000000	APC	22.000000
		TOTAL	640.00					11.50000				100.000000

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Tr. No.	ADL No./AK No.	Legal Description	Acres	Depth Restrictions	Original				Net Royalty*	ORRI Owners	Net		Tract Owners	Working Interest (%)
					Royalty (%)	NPSL (%)	Royalty Owners	Mineral Owners			ORRI (%)	ORRI (%)		
93	388901 932349	T12N,R4E-U.M. Sec. 14, Unsurveyed, All	640.00	None	12.5		State 64.45 ASRC 35.55	8.05625 3,44375	Chevron Kuukpik Corp.	1.703000 1.000000		CPAI APC	78.000000 22.000000	
		TOTAL	640.00				11.50000			2.703000			100.000000	
94	388901 932349	T12N,R4E-U.M. Sec. 15, Unsurveyed, All, east of the highest high water mark on the left bank of the Nechehik Channel of the Colville River	398.55	None	12.5		State 58.34 ASRC 41.66	7.29250 4.20750	Chevron Kuukpik Corp.	1.703000 1.000000	2.703000	CPAI APC	78.000000 22.000000	
		TOTAL	398.55											
95	388904 932355	T12N,R4E-U.M. Sec. 15, Unsurveyed, All, West of highest high water mark on the left bank of the Nechehik Channel of the Colville River, excluding U.S. Survey 9502 Lots 1 and 2 and the NPR-A	73.46	None	16.667		State 58.34 ASRC 41.66	9.72353 5.94347	Kuukpik Corp.	1.000000		CPAI APC	78.000000 22.000000	
		TOTAL	73.46					15.66700					100.000000	
96	388906 932359	T12N,R4E-U.M. Sec. 15, Unsurveyed, All, within the NPR-A, excluding U.S. Survey 9502 Lots 1 and 2	7.66	None	16.66667		State 58.34 ASRC 41.66	9.72334 5.27667	Kuukpik Corp.	1.666667		CPAI APC	78.000000 22.000000	
		TOTAL	7.66					15.00000					100.000000	

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Tr. No.	ADL No./AK No.	Legal Description	Acres	Depth Restrictions	Original			Net Royalty*	ORRI Owners	Net ORRI (%)	Tract Owners	Working Interest (%)
					Royalty (%)	NPSL (%)	Royalty Owners					
97	388906 932359	T12N,R4E-U.M. Sec. 16, Unsurveyed all within the NPR-A, excl. U.S. Survey 9502 Lot 1	17.08	None	16.6667	State	46.21	7.70167	Kaukpik Corp.	1.66667	CPAI	78.00000
		TOTAL	17.08			ASRC	53.79	<u>7.29834</u>			APC	<u>22.00000</u>
								15.00000				100.00000
98	388904 932355	T12N,R4E-U.M. Sec. 16, Unsurveyed, All excluding U.S. Survey 9502 Lot 1 and the NPR-A	579.27	None	16.667	State	46.21	7.70182	Kaukpik Corp.	1.00000	CPAI	78.00000
		TOTAL	579.27			ASRC	53.79	<u>7.96518</u>			APC	<u>22.00000</u>
								15.66700				100.00000

**There are no Tracts 99-100**

101	380093 932054	T12N,R4E-U.M. Sec. 9, Unsurveyed, All	640.00	None	16.667	State	51.53	8.58851	Kaukpik Corp.	1.00000	CPAI	78.00000
		TOTAL	640.00			ASRC	48.47	<u>7.07850</u>			APC	<u>22.00000</u>
								15.66700				100.00000
102	380093 932054	T12N,R4E-U.M. Sec. 10, Unsurveyed, All West of the highest high water mark on the left bank of the Nechehik Channel of the Colville River	264.64	None	16.667	State	70.39	11.731901	Kaukpik Corp.	1.00000	CPAI	78.00000
		TOTAL	264.64			ASRC	29.61	<u>3.935099</u>			APC	<u>22.00000</u>
								15.667000				100.00000

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Tr. No.	ADL No./AK No.	Legal Description	Acres	Depth Restrictions	Original			Net Royalty*	ORRI Owners	Net ORRI (%)	Tract Owners	Working Interest (%)
					Royalty (%)	NPSL (%)	Royalty Owners					
103	380093 932054	T12N,R4E-U.M. Sec. 3, Unsurveyed, W1/2W 1/2, excl. tide and submerged lands seaward of the line of mean high water as shown on the official tract map for O&G Lease Sale 43	20.00 20.00 TOTAL	None	16.667	State ASRC	73.42 26.58	12.236911 3.430089	Kaukpik Corp.	1.000000	CPAI APC	78.000000 22.000000 100.000000
104	380093 932054	T12N,R4E-U.M. Sec. 4, Unsurveyed, All, excl. tide and submerged lands seaward of the line of mean high water as shown on the official tract map for O&G Lease Sale 43	502.00 502.00 TOTAL	None	16.667	State ASRC	57.69 42.31	9.615192 6.051808 15.667	Kaukpik Corp.	1.000000	CPAI APC	78.000000 22.000000 100.000000
105	389726 932684	T12N,R4E-U.M. Sec. 4, Unsurveyed, All within the bed of the Necheik Channel of the Colville River as shown on the official Tract Map for the State O&G Lease Sale 75, dated August 26, 1992	138.00 138.00 TOTAL	None	16.66667	State ASRC	57.69 42.31	9.615002 6.051668 15.66667	Kaukpik Corp.	1.000000	CPAI APC	78.000000 22.000000 100.000000

**There is no Tract 106**

Exhibit A  
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Tr. No.	ADL No./ AK No.	Legal Description	Acres	Depth Restrictions	Original			Net Royalty*	ORRI Owners	Net		Tract Owners	Working Interest (%)
					Royalty (%)	NPSL Royalty (%)	Mineral Owns.			ORRI (%)	ORRI (%)		
107	389725 932682	T13N,R4E-U.M. Sec. 33, Unsurveyed, All, excluding tide and submerged lands seaward of the line of mean high water as shown on the official tract map for O&G Lease Sale 43	278.00	None	16.667	State ASRC	76.96 23.04	12.826923 2.840077	CPAI Kunkpik Corp.	1.328100 1.000000	CPAI APC	77.620000 22.000000	
		TOTAL	278.00					15.667000		2.328100	Petro-Hunt	0.380000 100.000000	
108	388529 932310	T13N,R4E-U.M. Sec. 33, Unsurveyed, All tide and submerged lands seaward of the line of mean high water and all uplands within the bed of the Neehelik Channel of the Colville River, both as shown on the official tract map for State O&G Lease Sale 75A dated June 17, 1993	362.00	None	16.66667	State ASRC	76.96 23.04	12.826669 2.840001	Kunkpik Corp.	1.000000	CPAI APC	78.000000 22.000000	
		TOTAL	362.00					15.66667				100.000000	
109	388528 932308	T13N,R4E-U.M. Sec. 34, Unsurveyed, All tide and submerged lands seaward of the line of mean high water and the channel closing line, and all uplands within the bed of the unnamed channel of the Colville River, both as shown on the official tract map for State O&G Lease Sale 75A dated June 17, 1993	420.00	None	16.66667	State ASRC	67.65 32.35	11.275023 4.391677	Kunkpik Corp.	1.000000	CPAI APC	78.000000 22.000000	
		TOTAL	420.00					15.6667				100.000000	

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Tr. No.	ADL No./AK No.	Legal Description	Acres	Depth Restrictions	Original			Net Royalty*	ORRI Owners	Net ORRI (%)	Tract Owners	Working Interest (%)
					Royalty (%)	NPSL (%)	Royalty Owners					
110	389725 932682	T13N,R4E-U.M. Sec. 34, Unsurveyed, All, excluding tide and submerged lands seaward of the line of mean high water as shown on the official tract map for O&G Lease Sale 43	220.00 220.00	None	16.667	State	67.65	11.275226	CPAI	1.328100	CPAI	77.620000
						ASRC	32.35	4.391775	Kuukpik Corp.	1.000000	APC	22.000000
								15.667000		2.328100	Petro-Hunt	0.380000
		TOTAL	220.00									100.000000
111	389725 932682	T13N,R4E-U.M. Sec. 35, Unsurveyed, All, excluding tide and submerged lands seaward of the line of mean high water and channel closing line as shown on the official tract map for O&G Lease Sale 43	555.00 555.00	None	16.667	State	60.52	10.086868	CPAI	1.328100	CPAI	77.620000
						ASRC	39.48	5.580132	Kuukpik Corp.	1.000000	APC	22.000000
								15.667		2.328100	Petro-Hunt	0.380000
		TOTAL	555.00									100.000000
112	388527 932623	T13N,R4E-U.M. Sec. 35, Unsurveyed, All tide and submerged lands seaward of the line of mean high water and the channel closing line as shown on the official tract map for O&G Lease Sale 75A dated June 17, 1993	85.00 85.00	None	16.66667	State	60.52	10.086669	A. James III	8.333330	CPAI	78.000000
						ASRC	39.48	5.580001	Revocable Trust	1.000000	APC	22.000000
								15.66667	Kuukpik Corp.	9.333330		100.000000
		TOTAL	85.00									100.000000

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Tr. No.	ADL No./ AK No.	Legal Description	Aeres	Depth Restrictions	Original			Net	Working Interest (%)			
					Royalty (%)	NPSL Royalty (%)	Mineral Owns.					
113	388527 932623	T13N,R4E-U.M. Sec. 36, Unsurveyed, All tide and submerged lands seaward of the line of mean high water and the channel closing line as shown on the official tract map for O&G Lease Sale 75A dated June 17, 1993	43.00 43.00	None	16.66667	State ASRC	57.35 42.65	9.558335 6.108335	A. James III Revocable Trust Kukkpik Corp.	8.333330	CPAI APC	78.000000 22.000000 100.000000
		TOTAL						15.66667		1.000000 9.333330		

114	389725 932682	T13N,R4E-U.M. Sec. 25, Unsurveyed, All, excluding tide and submerged lands seaward of the line of mean high water as shown on the official tract map for O&G Lease Sale 43	196.00 196.00	None	16.667	State ASRC	83.68 16.32	13.946946 1.720054	CPAI Kukkpik Corp.	1.328100 1.000000	CPAI APC	77.620000 22.000000 100.000000
115	388527 932623	T13N,R4E-U.M. Sec. 25, Unsurveyed, All tide and submerged lands seaward of the line of mean high water as shown on the official tract map for O&G Lease Sale 75A dated June 17, 1993	444.00 444.00	None	16.66667	State ASRC	83.68 16.32	13.946669 1.720001	A. James III Revocable Trust Kukkpik Corp.	8.333330 1.000000	CPAI APC	78.000000 22.000000 100.000000
		TOTAL						15.66667		9.333330		

**There are no Tracts 116-118**

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Tr. No.	ADL No./AK No.	Legal Description	Acres	Depth Restrictions	Original				Net		Working Interest (%)						
					Royalty (%)	NPSL (%)	Royalty Owners	Mineral Owns	Net Royalty*	ORRI Owners (%)		Tract Owners					
119	380081	TIIN,RSE-U.M.	640.00	None	16.667	State	50.06	8.3435	Kuukpiik Corp.	1.000000	CPAI	78.000000					
	932044	Sec. 28, Unsurveyed, All											ASRC	49.94	7.3235	APC	22.000000
		TOTAL													15.667		100.000000
120	ASRC NPRA 2	TIIN,R4E-U.M.	640.00	None	16.667	ASRC	100.00	15.0003	Kuukpiik Corp.	1.666700	CPAI	78.000000					
	932128	Sec. 28, All											APC	22.000000			
		Sec. 33, All												640.00			
		Sec. 34, All												640.00			
		TOTAL										1,920.00					
121	388905	TIIN,R4E-U.M.	286.63	None	Sliding Scale	State	30.51	5.085001	Kuukpiik Corp.	**1.666667	CPAI	78.000000					
	932357	Sec. 35, Unsurveyed, All, within NPR-A											ASRC	69.49	**9.915002	APC	22.000000
		TOTAL													15.000003		100.000000
															**16.66667		
122	388902	TIIN,R4E-U.M.	353.37	None	16.667	State	30.51	5.085102	Kuukpiik Corp.	1.000000	CPAI	78.000000					
	932351	Sec. 35, Unsurveyed, All, excluding the NPR-A											ASRC	69.49	10.581898	APC	22.000000
		TOTAL													15.667		100.000000
123	388902	TIIN,R4E-U.M.	640.00	None	16.667	State	60.97	10.16187	Kuukpiik Corp.	1.000000	CPAI	78.000000					
	932351	Sec. 36, Unsurveyed, All											ASRC	39.03	5.50513	APC	22.000000
		TOTAL													15.667		100.000000
124	388903	TIIN,RSE-U.M.	607.00	None	16.667	State	50.00	8.3335	Kuukpiik Corp.	1.000000	CPAI	78.000000					
	932353	Sec. 31, Unsurveyed, All											ASRC	50.00	7.3335	APC	22.000000
		Sec. 32, Unsurveyed, All													15.667		100.000000
		TOTAL															

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Tr. No.	ADL No./ AK No.	Legal Description	Acres	Depth Restrictions	Original			Net ORRI (%)	Tract Owners	Working Interest (%)		
					Royalty (%)	NPSL Royalty (%)	Mineral Owms.					
125	391587	T11N,R5E-U.M.		None	16.667	State	50.20	8.366834	Kuukpik Corp.	1.000000	CPAI	78.000000
	341409	Sec. 33, Unsurveyed, All	640.00			ASRC	49.80	7.300166			APC	22.000000
		TOTAL	640.00					15.667				

**There are no Tracts 126-130**

131	380044	T10N,R5E-U.M.		None	16.667	State	50.00	8.3335	Kuukpik Corp.	1.000000	CPAI	78.000000
	932015	Sec. 6, Unsurveyed, All	609.00			ASRC	50.00	7.3335	CPAI	1.290000	APC	22.000000
		TOTAL	609.00					15.667		1.290000		100.000000

131A	391590	T10N,R5E-U.M.		None	16.667	State	50.00	8.3335	Kuukpik Corp.	1.000000	CPAI	78.000000
	341405	Sec. 5, N1/2NW1/4, SW1/4NW1/4, NW1/4SW1/4	160.00			ASRC	50.00	7.3335	CPAI	1.290000	APC	22.000000
		TOTAL	160.00					15.667		1.290000		100.000000

132	388902	T10N,R4E-U.M.		None	16.667	State	55.07	9.178517	Kuukpik Corp.	1.000000	CPAI	78.000000
	932351	Sec. 1, Unsurveyed, All, excluding the NPR-A	586.43			ASRC	44.93	6.488483			APC	22.000000
		TOTAL	586.43					15.667				100.000000

133	388902	T10N,R4E-U.M.		None	16.667	State	7.86	1.310026	Kuukpik Corp.	1.000000	CPAI	78.000000
	932351	Sec. 2, Unsurveyed, All, excluding the NPR-A	87.63			ASRC	92.14	14.356974			APC	22.000000
		TOTAL	87.63					15.667				100.000000

**There are no Tracts 134 - 161**

Exhibit A  
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Tr. No.	ADL No./ AK No.	Legal Description	Acres	Depth Restrictions	Original				Net		Tract Owners	Working Interest (%)	
					Royalty (%)	NPSL (%)	Royalty Owners	Mineral Ows.	Net Royalty*	ORRI Owners (%)			
162	390344	T12 N, R4E, U.M.		None	16.667		State	76.19	12.698587	Kuukpik Corp.	1.00000	CPAI	78.00
	933508	Section 5, Unsurveyed, All, excluding tide and submerged lands seaward of the line of mean high water as shown on the official tract map for O&G Lease Sale 43					ASRC	23.81	<u>2.9684127</u>			APC	<u>22.00</u>
		TOTAL	308.00						<u>15.6670000</u>				<u>100.000000</u>
163	390344	T12 N, R4E, U.M.		None	16.667		State	64.60	10.76688	Kuukpik Corp.	1.00000	CPAI	78.000000
	933508	Section 8, Unsurveyed, All, excluding tide and submerged lands seaward of the line of mean high water as shown on the official tract map for O&G Lease Sale 43					ASRC	35.40	<u>4.90012</u>			APC	<u>22.000000</u>
		TOTAL	531.00						<u>15.66700</u>				<u>100.000000</u>
164	390345	T12 N, R4E, U.M.		None	16.667		State	69.63	11.60523	Kuukpik Corp.	1.00000	CPAI	78.000000
	933510	Section 17, Unsurveyed, All, excluding tide and submerged lands seaward of the line of mean high water as shown on the official tract map for O&G Lease Sale 43					ASRC	30.37	<u>4.06177</u>			APC	<u>22.000000</u>
		TOTAL	448.00						<u>15.667000</u>				<u>100.000000</u>

Exhibit A  
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Tr. No.	ADL No./ AK No.	Legal Description	Acre s	Depth Restrictions	Original			Net Royalty*	ORRI Owners	Net ORRI (%)	Tract Owners	Working Interest (%)
					Royalty (%)	NPSL Royalty (%)	Mineral Owms.					
165	390348 933516	T12 N, R4E, U.M. Section 17, Unsurveyed, All, tide and submerged lands seaward of the mean high water as shown on the official tract map for O&G Lease Sale 43		None	16.66667	State ASRC	69.63 30.37	11.60523 4.06177	Kuukpik Corp.	1.00000	CPAI APC	78.000000 22.000000 100.000000
		TOTAL	192.00									192.00

166	390350 933520	T12 N, R4E, U.M. Section 8, Unsurveyed, All, tide and submerged lands as shown on the official tract map for O&G Lease Sale 75		None	16.66667	State ASRC	64.60 35.40	10.76667 4.90000	Kuukpik Corp.	1.00000	CPAI APC	78.000000 22.000000 100.000000
		TOTAL	109.00									109.00
167	390350 933520	T12 N, R4E, U.M. Section 5, Unsurveyed, All, tide and submerged lands and all uplands within the bed of the unnamed channel of the Colville River as shown on official tract map for O&G Lease Sale 75		None	16.66667	State ASRC	76.19 23.81	12.69834 2.96833	Kuukpik Corp.	1.00000	CPAI APC	78.000000 22.000000 100.000000
		TOTAL	332.00									332.00

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Tr. No.	ADL No./AK No.	Legal Description	Acres	Depth Restrictions	Original			Net ORRI Owners (%)	Net ORRI Owners (%)	Tract Owners	Working Interest (%)	
					Royalty (%)	NPSL Royalty (%)	Mineral Owns.					
168	388465	T12 N, R4E, U.M.		None	16.66667	State	100.00	N/A	None	None	CPAI	78.000000
	300632	Section 6, Protracted, All tide and submerged lands	577.00								APC	22.000000
		Section 7, Protracted, All tide and submerged lands	580.00									
		TOTAL	1,157.00									100.000000
169	388466	T12 N, R4E, U.M.		None	16.66667	State	100.00	N/A	None	None	CPAI	78.000000
	300634	Section 18, Protracted, All tide and submerged lands	583.00								APC	22.000000
		Section 19, Unsurveyed, All tide and submerged lands seaward of the line of mean high water and the channel closing lines as shown on the official tract map	444.59									
		Section 28, Unsurveyed, All tide and submerged lands seaward of the line of mean high water and the channel closing lines as shown on the official tract map	62.67									
		Section 29, Unsurveyed, All tide and submerged lands seaward of the line of mean high water	237.21									
		Section 30, Unsurveyed, All tide and submerged lands seaward of the line of mean high water and the channel closing lines as shown on the official tract map	286.90									
		Section 31, Unsurveyed, All tide and submerged lands seaward of the line of mean high water	47.04									
		Section 32, Unsurveyed, All tide and submerged lands seaward of the line of mean high water	90.66									
		TOTAL	1,752.07									

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Tr. No.	ADL No./AK No.	Legal Description	Acres	Depth Restrictions	Original			Net ORRI Owners	Net ORRI Owners (%)	Tract Owners	Working Interest (%)
					Royalty (%)	NPSL (%)	Royalty Owners				
169	388466 300634 (cont.)	THE CHANNEL CLOSING LINES WITHIN SECTIONS 19, 28 AND 30 WERE DRAWN BASED ON COASTAL BOUNDARY BAY CLOSING LINE PROCEDURE. THE PURPOSE IS TO SEGREGATE TIDE AND SUBMERGED ACREAGE FROM UPLAND ACREAGE.									
	388463	T12 N, R3E, U.M.		None	16.66667	State	100.00	N/A	None	None	CPAI 78.000000
	300628	S1/2 of Section 1, Protracted, All tide and submerged lands	320.00								APC 22.000000
		S1/2 of Section 2, Protracted, All tide and submerged lands	320.00								<u>100.000000</u>
		Section 11, Unsurveyed, all tide and submerged lands seaward of the line of mean high water and the channel closing lines as shown on the official tract map	476.33								
		Section 12, Protracted, All tide and submerged lands	640.00								
		Section 13, Unsurveyed, All tide and submerged lands seaward of the line of mean high water and the channel closing lines as shown on the official tractmap	454.20								
		Section 14, Unsurveyed, All tide and submerged lands seaward of the line of mean high water and the channel closing lines as shown on the official tract map	43.11								
		Section 24, Unsurveyed, All tide and submerged lands seaward of the line of mean high water	22.86								
		TOTAL	2,276.50								

Exhibit A  
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Tr. No.	ADL No./AK No.	Legal Description	Acres	Original			Net Royalty*	ORRI Owners	Net		Tract Owners	Working Interest (%)
				Depth	Royalty (%)	NPSL Royalty (%)			ORRI (%)	ORRI (%)		
170	388463 300628 (cont)	THE CHANNEL CLOSING LINES WITHIN SECTIONS 11, 13 AND 14 WERE DRAWN BASED ON COASTAL BOUNDARY BAY CLOSING LINE PROCEDURE. THE PURPOSE IS TO SEGREGATE TIDE AND SUBMERGED ACREAGE FROM UPLAND ACREAGE.										

**There are no Tracts 171-176**

177	ASRC NPRA 1	T12N, R3E, U.M.	None	12.50	ASRC	100.00	10.500000	Kukpiik Corp.	2.000000	CPAI	78.000000
932126		Section 11: all excluding tide and submerged lands seaward of the line of mean high water								AEF	22.000000
		Section 13: all excluding tide and submerged lands seaward of the line of mean high water	178.72								<u>100.000000</u>
		Section 14: all excluding tide and submerged lands seaward of the line of mean high water	184.11								
		Section 23	624.00								
		Section 24: All, excluding tide and submerged lands seaward of the line of mean high water	640.00								
		TOTAL	625.00								
			2,251.83								

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Tr. No.	ADL No./AK No.	Legal Description	Acres	Depth Restrictions	Original			Net			Working Interest (%)
					Royalty (%)	NPSL Owners (%)	Royalty (%)	ORRI Owners (%)	ORRI Owners (%)		
178	ASRC NPPRA 2 932128	T12N, R4E, U.M. Section 19 (fractional): All, excluding tide and submerged lands seaward of the line of mean high water TOTAL	118.97  118.97	None	16.667	ASRC 100.00	15.0000	Kuukpiik Corp.	1.667000	CPAI AEP	78.000000 22.000000 100.000000

179	ASRC NPPRA3 932671	T11N, R3E, U.M. Section 1, All Section 2, All Section 3, All Section 12, All Total	640.00 640.00 640.00 640.00 2,560.00	None	16.667	ASRC 100.00	15.0000	Kuukpiik Corp.	1.66670	CPAI AEP	78.000000 22.000000 100.000000
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180	ASRC NPPRA4 932669	T11N, R4E, U.M. Section 6, All Section 17, All Section 18, All Section 29, All Section 32, All T10N, R4E, U.M. Section 3, All Section 4, All Section 5, All Total	593.45 640.00 598.58 640.00 640.00 640.00 640.00 640.00 640.00 5,032.03	None	16.667	ASRC 100.00	15.0000	Kuukpiik Corp.	1.66670	CPAI AEP	78.000000 22.000000 100.000000
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181	AA087888 307461	T11N, R3E, U.M. Section 10, All Section 14, All Total	640.00 640.00 1,280.00	None	16.667	BLM 100.00	16.66667	None	None	CPAI AEP	78.000000 22.000000 100.000000
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Exhibit A  
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of the Colville River Unit Agreement

Tr. No.	ADL No./AK No.	Legal Description	Acres	Depth Restrictions	Original			Net ORRI (%)	Tract Owners	Working Interest (%)								
					Royalty (%)	NPSL Royalty (%)	Mineral Owns.											
181A	AA092347 340758	TIIN, R3E, U. M. Section 11, All Section 13, All Total	640.00 640.00 1,280.00	None	16.6667	ASRC	100.00	15.00000	Kuukpiik Corp.	1.6667	CPAI AEP	78.000000 22.000000 100.000000						
182	AA081817 932552	TIIN, R4E, U.M. Section 31, All TIIN, R3E, U. M. Section 23, All Section 26, All Section 36, All Total	605.00 640.00 640.00 640.00 2,525.00	None	16.6667	BLM	100.00	16.66667	None	None	CPAI AEP	78.000000 22.000000 100.000000						
182A	AA092344 340757	TIIN, R4E, U.M. Section 19, All Section 20, All Section 30, All TIIN, R3E, U. M. Section 24, All Section 25, All Total	600.00 640.00 602.00 640.00 640.00 3,122.00	None	16.6667	ASRC	100.00	15.00000	Kuukpiik Corp.	1.6667	CPAI AEP	78.000000 22.000000 100.000000						
183	390337 300618	TI0N, R4E, U.M. Section 2, Surveyed by protraction, Lots 2 and 4 Total	552.37 552.37	None	Sliding Scale	State ASRC	7.86 92.14	1.31000	Kuukpiik Corp.	1.53566	CPAI APC	78.000000 22.000000 100.000000						

0.74883



**Exhibit A**  
Attached to and made a part  
of the Colville River Unit Agreement

Tr. No.	ADL No./ AK No.	Legal Description	Acres	Depth Restrictions	Original			Net ORRI Owners	Net ORRI Owners	Tract Owners	Working Interest (%)
					Royalty (%)	NPSL (%)	Royalty*				

\* ASRC's net royalty amount reflects the net ORRI granted to Kukukik.

\*\* This lease has a sliding scale overriding royalty therefore the original royalty percentage will vary between 16.66667% and 33.33333%. Kukukik shall receive an overriding royalty equal to 10% of the Original Royalty Percentage, payable out of ASRC Original Royalty Percentage share of production. For example, using a fictitious tract with equal ownership of mineral interest between the State and ASRC, if the royalty rate escalates to 20%, then Kukukik shall be entitled to receive 2% overriding royalty (0.10 x 0.20 = 0.02) on 8/8ths of production, the State would receive 10% royalty on 8/8ths of production (0.50 x 0.20 = 0.10), and ASRC would receive 8% royalty on 8/8ths of production [(0.50 x 0.20) - (0.10 x 0.20) = 0.08].

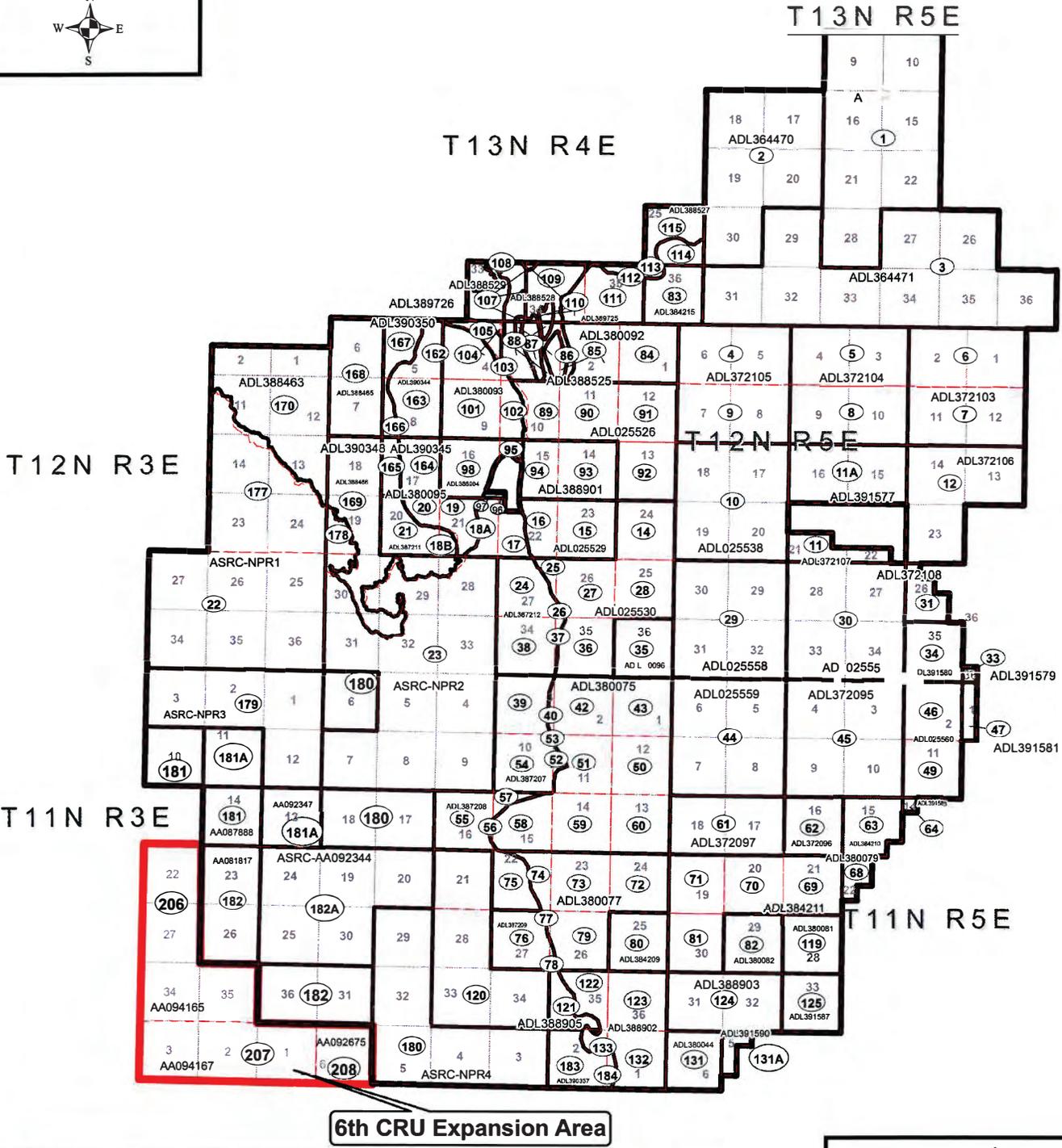
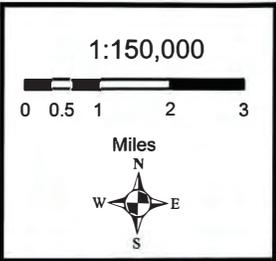
\*\*\* CPAI has executed an assignment for 22% working interest to AEP. The fully executed assignment is currently being routed to the BLM for approval.

**KEY:**

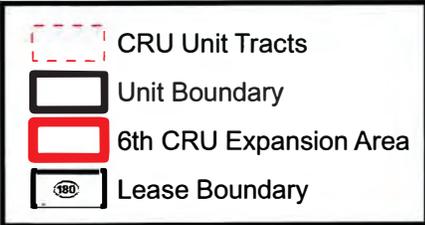
- APC:** Anadarko Petroleum Corporation
- AEP:** Anadarko E&P Onshore LLC
- ASRC:** Arctic Slope Regional Corporation
- BLM:** Bureau of Land Management
- Chevron:** Chevron U.S.A. Inc.
- CPAI:** ConocoPhillips Alaska, Inc.
- CPAI\*:** CPAI, et al, as successor to Texaco
- CPAI\*\*:** CPAI, et al, as successor to Midgard Energy Company
- D.K. Nerland:** Delores K. Nerland
- Enea Tena Inv.:** Enea Tekna Investments
- Kukukik Corp.:** Kukukik Corporation
- Petro-Hunt:** Petro-Hunt, L.L.C.
- R.E. Wagner:** Richard E. Wagner
- R W Res:** Rosewood Resources, Inc.
- State:** State of Alaska
- W.G. Stroecker:** William G. Stroecker

**2. Colville River Unit Approved Exhibit B**

Map of Proposed Expanded Unit Area



**6th CRU Expansion Area**



**ConocoPhillips**

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**Exhibit B**  
**Sixth Expansion of the**  
**Colville River Unit**  
**Colville Delta, Alaska**  
 May 2, 2016