

COLVILLE RIVER UNIT

APPROVAL OF THE EIGHTH 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 6, 2018

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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 Eighth Unit Expansion of the Colville River Unit (CRU) (Application) on April 25, 2018 from the CRU Operator, ConocoPhillips Alaska, Inc. (CPAI). The proposed and approved expansion of the CRU includes approximately 412 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 a jointly owned State of Alaska and ASRC oil and gas lease.

“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 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. CPAI 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 April 25, 2018.

II. APPLICATION AND LEASE SUMMARY

CPAI submitted the Application under the provisions of 11 AAC 83.356 and Section 12.1 of the CRUA on April 25, 2018, 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; Attachment 3, geological, geophysical, engineering, and well information directly supporting the application; and Attachment 4, planned exploration and development activities for the proposed expansion area. The ratified unit agreement and unit operating agreement were already on file with the Division.

The Division published a public notice in the *Anchorage Daily News* and *Arctic Sounder* on May 10, 2018, in compliance with 11 AAC 83.311. 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 June 11, 2018. No comments were received.

The proposed expansion includes an additional 412 acres within one jointly owned State of Alaska and ASRC oil and gas lease bordered on three sides by existing unit acreage. Attachments 1 and 2 of the Application contain a description of the proposed expansion lease and a map of the proposed boundaries, respectively. At the time of application CPAI held 78 percent of the working interest and the remaining 22 percent working interest was held by Anadarko E&P Onshore LLC. Since that time, CPAI has been assigned 100 percent of the working interest.

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. CPAI is operating under an approved plan of operations and plan of development.

2. Geological and Engineering Characteristics and Exploration History

The Brookian sequence represents a wide range of clastic rocks that filled the Colville foreland basin from west to east during Cretaceous and Tertiary time. Multiple formations and clinoformal successions make up the Brookian sequence. Brookian clinoforms present themselves in seismic as topsets (sand-prone coastal plain and shallow marine shelf), foresets (muddy slope and sandy turbidite channels and slope apron fans), and bottomsets (sandy basin-floor turbidites and organic rich shales). This discussion focuses on the Brookian topsets of the Nanushuk Formation.

Oil production from Nanushuk sands began in the CRU in 2006 with the development of the Qannik field. The productive Qannik sands are at the top of a coarsening upwards interval that is approximately 100 feet thick. Net pay averages 10 to 15 feet and the porosity ranges from 20 to 25 percent. The Qannik sandstone is very fine-grained and lithic-rich. Qannik reservoir fluid samples recovered from the Nanuq #2 and Nanuq #5 exploratory wells and the CD2-11 and CD2-404 service wells measured between 27-degree and 32-degree API gravity (AOGCC Conservation Order No. 605).

In 2012, Repsol E&P USA Inc. and Armstrong Oil and Gas (AOG) began a multi-year exploration program that identified oil in the Nanushuk Formation east of the CRU in the following exploration wells: Qugruk #3, Qugruk #3A, Qugruk #301, Qugruk #7, and Qugruk #8. At the time of this decision, the only well data that are publicly available through AOGCC are from Qugruk #3 and Qugruk #3A. Well data for Qugruk #301, Qugruk #7, and Qugruk #8 remain confidential. Oil bearing Nanushuk sands in the Qugruk #3A well appear as two coarsening upwards packages. The total interval is approximately 90 feet thick with porosity ranging from 18 to 24 percent in the sands that have resistivity values greater than 10 ohm-m. Repsol E&P USA Inc. and AOG reported Nanushuk production as achieving a peak rate of 4,600 barrels of oil per day (BOPD) from a stimulated production test in a 2,000 foot horizontal lateral in the Qugruk #301 well and a peak rate of 2,160 BOPD (30-degree API oil) from a stimulated production test the vertical Qugruk #8 well.

In 2017, AOG drilled the Horseshoe #1 and Horseshoe #1A wells to confirm the extent of the Nanushuk trend to the south of the CRU. AOG announced that both Horseshoe wells encountered oil pay in the Nanushuk Formation. Repsol E&P USA and AOG announced that the initial pressure data in the oil leg at the Horseshoe wells were on the same gradient as the oil-bearing Nanushuk sands in the Qugruk wells to the north. In 2018, CPAI drilled Putu #2 and Putu #2A within the fifth expansion area of the CRU to depths of 6,499 feet Measured Depth (MD) (4,675 True Vertical Depth (TVD)) and 5,044 feet MD (5,044 feet TVD) respectively. The Putu #2 and Putu #2A wells are located along a northeast-southwest arcuate trend between the Qugruk #8 and the Horseshoe #1 and #1A well locations that mimics the shape of Brookian shelf edge margins in this region.

Conclusion

The eighth expansion of the Colville River Unit proposed by CPAI is sufficiently supported by technical data submitted by the operator. Data submitted to the Division included confidential well data, maps, well log cross-sections through prospective reservoirs, seismic attribute displays, and annotated seismic lines through prospective reservoirs.

Review of the geological, geophysical, and engineering data has allowed the Division to reasonably establish the potential for the Brookian reservoirs in the proposed expansion acreage.

3. Plans of Exploration and Development

The eighth expansion area is bordered on three sides by the fifth expansion area. Terms of the fifth expansion area required CPAI to drill two exploration wells in the fifth expansion area, followed by a decision to develop the area. CPAI drilled the two required wells during the 2018 winter season and has until August 14, 2020 to propose plans to develop the area. Because the eighth expansion area is so closely related to the fifth expansion area the Division will consider the requirements for exploration and terms of voluntary surrender or contraction to be the same

for the eighth expansion area as those set forth in the Commissioner's August 1, 2017 decision on Reconsideration of the Denial of the Fifth Expansion.¹

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 parties of interest.

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 share future infrastructure and facilities with existing unit acreage. If the area was not unitized development would result in 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,

¹ CPAI’s Expansion Application raised this issue in a section entitled “Deferral of Unit Contraction.” To clarify, the terms and conditions set forth in the Commissioner’s August 1, 2017 decision on the CPAI’s Fifth Expansion Application do not “defer unit contraction.” Article 12.4 and 12.6 of the CRUA address the Commissioner’s authority to contract the CRUA from time to time after 10 years have passed since first production. As the Commissioner’s decision on the Fifth Expansion explained, DNR cannot modify or contract away its regulatory discretion. *Exxon Corp. v. State*, 40 P.3d 786, 796 (Alaska 2001). Accordingly, to the extent Conoco’s request was meant to be an assurance of deferral or a date certain regarding future contraction, it is denied. Conoco will, however, get notice and an opportunity to be heard before the Commissioner exercises discretion to contract the unit. 11 AAC 83.356(e).

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). Review of the unit, including this eighth expansion, under future annual plans of development will provide for continued oversight and approval of CPAI's ongoing 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. Conversely, denying the expansion would leave a small amount of acreage that is physically surrounded by the unit without the benefits of oversight and joint operations provided by the unit agreement.

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, in-kind taking, and emergency storage of oil and gas, all of which will further the State's interest.

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 compliance with mitigation measures in the modified leases, as well as additional conditions 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 CRU area encompasses all or part of one or more oil and gas reservoir(s) or potential hydrocarbon accumulation(s).
2. The available geological, geophysical and engineering data justify including the proposed lands in the unit, 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 CPAI 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. 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 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 April 25, 2018.

For the reasons discussed in this Findings and Decision, I hereby approve the CRU Eighth Unit 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. 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 Jes Spuhler with the Division at 907-269-8817, or by email at jes.spuhler@alaska.gov

Sincerely,



Chantal Walsh, Director
Division of Oil and Gas

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

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 Royalty (%)	NPSL (%)	Royalty Owners	Mineral Ownts.	Net Royalty	ORRI Owners	Net (%)	ORRI Owners	Tract CPAI	Working Interest (%)
1	364472 931986	T13N,R5E-U.M. Sec. 9, Protracted, All Sec. 10, Protracted, All Sec. 15, Protracted, All Sec. 16, Protracted, All Sec. 21, Protracted, All Sec. 22, Protracted, All Sec. 28, Protracted, All TOTAL	640.00 640.00 640.00 640.00 640.00 640.00 640.00 640.00 4,480.00	None 12.5 30 100 12.5 CPAI	12.5	30	State	100	12.5	CPAI	1.200000	CPAI	78.000000	
2	364470 931974	T13N,R5E-U.M. Sec. 17, Protracted, All Sec. 18, Protracted, All Sec. 19, Protracted, All Sec. 20, Protracted, All Sec. 30, Protracted, All TOTAL	640.00 631.00 633.00 640.00 636.00 3,180.00	None 12.5 30 100 12.5 CPAI	12.5	30	State	100	12.5	Enca Tekna Inv.	0.666600	CPAI	78.000000	
3	364471 931976	T13N,R5E-U.M. Sec. 26, Protracted, All Sec. 27, Protracted, All Sec. 29, Protracted, All Sec. 31, Protracted, All Sec. 32, Protracted, All Sec. 33, Protracted, All Sec. 34, Protracted, All Sec. 35, Protracted, All Sec. 36, Protracted, All TOTAL	640.00 640.00 640.00 639.00 640.00 640.00 640.00 640.00 640.00 640.00 5,759.00	None 12.5 30 100 12.5 CPAI	12.5	30	State	100	12.5	Enca Tekna Inv.	0.666600	CPAI	78.000000	
										W.G. Strocker	0.666600	APC	22.000000	
										D.K. Nerland	0.023400			100.000000
										R.E. Wagner	0.643400			
												2.000000		

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Tr. No.	ADL No./ AK No.	Legal Description	Acres	Depth Restrictions	Original Royalty (%)	NPSL (%)	Royalty Mineral Owns.	Net Roualty	ORRI Owners	Net ORRI (%)	Tract Owners	Working Interest (%)
4	372105 932002	T12N,R5E-U.M. Sec. 5 Sec. 6 TOTAL	640.00 577.00 1,217.00	Above 10,350' Below 10,350'	12.5 12.5	State 100	12.5	Petro-Hunt XH, LLC RW Res CPAI	0.440190 0.345030 0.226800 1.701900	CPAI	66.790810 APC	22.000000 100.000000
5	372104 932000	T12N,R5E-U.M. Sec. 3, All Sec. 4, All TOTAL	640.00 640.00 1,280.00	Above 10,350' Below 10,350'	12.5 12.5	State 100	12.5	Petro-Hunt XH, LLC RW Res CPAI	0.440190 0.345030 0.226800 1.701900	CPAI	66.790810 APC	22.000000 100.000000

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Tr. No.	ADL No./ AK No.	Legal Description	Acres	Depth Restrictions	Original Royalty (%)	NPSL (%)	Royalty Mineral Owns.	Net R royalty	ORRI Owners (%)	Net ORRI (%)	Tract Owners (%)	Working Interest (%)
8	372104 932000	T12N, R5E-U.M. Sec. 9, All Sec. 10, All TOTAL	640.00 640.00 1,280.00	Above 10,350' Below 10,350'	12.5 12.5	State 100	12.5	Petro-Hunt XH, LLC RW Res Chevron CPAI	0.440190 0.345030 0.226800 1.703000 1.701900	CPAI	78/000000 22/000000 100/000000	
9	372105 932002	T12N, R5E-U.M. Sec. 7, All Sec. 8, All TOTAL	580.00 640.00 1,220.00	Above 10,350' Below 10,350'	12.5 12.5	State 100	12.5	Petro-Hunt XH, LLC RW Res Chevron CPAI	0.440190 0.345030 0.226800 1.703000 1.701900	CPAI	78/000000 22/000000 100/000000	

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Tr. No.	ADL No./ AK No.	Legal Description	Acres	Depth Restrictions	Original Royalty (%)	NPSL (%)	Royalty Owners	Net Royalty Owns.	ORRI Owners (%)	Net ORRI (%)	Tract CPAI	Working Interest (%)
10	25538 932100	T12N,R5E-U.M. Sec. 17, All Sec. 18, All Sec. 19, All Sec. 20, All TOTAL	640.00 583.00 585.00 640.00 2,448.00	None 12.5	State 100	12.5	Chevron	1.703000	CPAI APC	78.000000 22.000000 100.000000		
11	372107 932006	T12N,R5E-U.M. Sec. 21, SE1/4SE1/4, W1/2SE1/4, SW1/4 Sec. 22, SW1/4SE1/4, S1/2SW1/4 TOTAL	280.00 120.00 400.00	Above 8,500' 12.5	State 100	12.5	Petro-Hunt XH, LLC RW Res Chevron CPAI	0.440190 0.345030 0.226800 1.703000 0.880380	CPAI APC	78.000000 22.000000 100.000000		
		8,500'-10,350'		12.5	State 100	12.5	Petro-Hunt XH, LLC RW Res Chevron CPAI	0.440190 0.345030 0.226800 1.703000 1.701900	CPAI APC	78.000000 22.000000 100.000000		
		Below 10,350'		12.5	State 100	12.5	Chevron	1.703000	CPAI APC	66.790810 16.342170	Petro-Hunt XH, LLC RW Res	7.336490 5.750530 3.780000
								4.416920		100.000000		

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Tr. No.	ADL No./ AK No.	Legal Description	Acres	Depth Restrictions	Original Royalty (%)	NPSL (%)	Royalty Owners	Mineral Ownts.	Net Royerly	ORRI Owners	Net (%)	ORRI Owners	Tract Owners	Working Interest (%)
12	372106 932004	T12N,R5E-U.M. Sec. 13, All Sec. 14, All Sec. 23, All TOTAL	640.00 640.00 640.00 1,920.00	Above 8,500' 12.5 State	12.5 100	12.5 CPAI*	Petro-Hunt XH, LLC RW Res Chevron CPAI	0.324590 0.254430 0.226800 1.703000 0.649180	1.515000 0.324590 0.254430 0.226800 6.188000	CPAI APC	78.000000 22.000000 100.000000			
				8,500'-10,350'	12.5	12.5	Petro-Hunt XH, LLC RW Res Chevron CPAI	0.324590 0.254430 0.226800 1.703000 1.255180	1.515000 0.324590 0.254430 0.226800 5.279000	CPAI APC	78.000000 22.000000 100.000000			
				Below 10,350'	12.5	12.5	Chevron	1.703000	CPAI APC	68.928524 17.641213				
							Petro-Hunt XH, LLC RW Res	5.409868 4.240395 3.780000						
														100.000000
<hr/>														
There is no Tract 13														
14	25529 932098	T12N,R4E-U.M. Sec. 24, All TOTAL	640.00 640.00	None	12.5	State ASRC*	51.97 48.03	6.49625 5.00375	Chevron Kuukpik Corp.*	1.703000 1.000000	CPAI APC	78.000000 22.000000		
								11.5		2.703000				
15	25529 932096	T12N,R4E-U.M. Sec. 23, All TOTAL	640.00 640.00	None	12.5	State ASRC*	49.95	6.25625 5.24375	Chevron Kuukpik Corp.*	1.703000 1.000000	CPAI APC	78.000000 22.000000		
								11.5		2.703000				

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Tr. No.	ADL No./ AK No.	Legal Description	Acres	Depth Restrictions	Original R royalty (%)	NPSL (%)	Royalty Owners	Mineral Owns.	Net Royalty	ORRI Owners	Net ORRI (%)	Tract Owners	Working Interest (%)
16	25529	T12N,R4E-U.M. Sec. 22 excl. NPRA	346.19	None	12.5	State ASRC*	47.37 52.63	5.92125 5.57875	Chevron Kuukpik Corp.*	1.703000 1.000000	CPAI APC	78.000000 22.000000	
		TOTAL	346.19					11.5		2.703000		100.000000	
17	387211 932197	T12N,R4E-U.M. Sec. 22, All, within NPRA, excl. USS 9502	257.86	None	16.66667	State ASRC*	47.37 52.63	7.895002 7.105001	Kuukpik Corp.*	1.666667	CPAI APC	78.000000 22.000000	
		Lot 2										100.000000	
		TOTAL	257.86										
18A	387211 932197	T12N,R4E-U.M. Sec. 21, All, within NPRA	229.92	None	16.66667	State ASRC*	26.23 73.77	4.371668 10.628335	Kuukpik Corp.*	1.666667	CPAI APC	78.000000 22.000000	
		TOTAL	229.92					15.000003				100.000000	
18B	387211 932197	T12N,R4E-U.M. 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	None	16.66667	State ASRC*	26.23 73.77	4.37167 11.295	Kuukpik Corp.*	1.000000	CPAI APC	78.000000 22.000000	
		TOTAL	90.00					15.66667				100.000000	
19	380095 932056	T12N,R4E-U.M. 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 NPRA	320.08	None	16.667	State ASRC*	26.23 73.77	4.37175 11.29525	Kuukpik Corp.*	1.000000	CPAI APC	78.000000 22.000000	
		TOTAL	320.08					15.667				100.000000	

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Tr. No.	ADL No./ AK No.	Legal Description	Acres	Depth Restrictions	Original Royalty (%)	NPSL (%)	Royalty Mineral Owns.	Net Rovalty Owners	ORRI Owners (%)	Net ORRI (%)	Tract Owners	Working Interest (%)
20	380095 932056	T12N,R4E-U.M. 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	None ASRC*	16.6667 12.55	State ASRC*	87.45 1.09171	14.57529 15.6667	Kuukpik Corp.* 1.09171	1.000000 15.6667	CPAI APC	78.000000 22.000000	<u>100.000000</u>
21	387211 932197	T12N,R4E-U.M. 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	178.00 ASRC*	None 16.66667 12.55	State ASRC*	87.45 1.09167	14.575 15.66667	Kuukpik Corp.* 1.09167	1.000000 15.66667	CPAI APC	78.000000 22.000000	<u>100.000000</u>
22	ASRC NPRA 1 932126	T12N,R3E-U.M. Sec. 25 Sec. 26 Sec. 27 Sec. 34 Sec. 35 Sec. 36 TOTAL	462.00 640.00 640.00 640.00 640.00 640.00 3,840.00	None 12.5 ASRC*	100 12.5 ASRC*	100 11.25 Kuukpik Corp.* 1.250000	11.25 Kuukpik Corp.* 1.250000	1.000000 1.250000	CPAI AP	78.000000 22.000000	<u>100.000000</u>	

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Tr. No.	ADL No./ AK No.	Legal Description	Acres	Depth Restrictions	Original Royalty (%)	NPSL (%)	Royalty Owners	Mineral Owns.	Net R	ORRI Owners (%)	Net ORRI (%)	Tract Owners	Working Interest (%)
23	ASRC NPRA 2 932128	T12N,R4E-U.M. Sec. 28	565.98	None	16.667	ASRC*	100	15	Kuukpik Corp.*	1.666700	CPAI	78.000000	AEP 100.000000
		Sec. 29	402.79										
		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 932199	T12N,R4E-U.M. Sec. 27, All, within NPRA	550.29	None	Sliding Scale	ASRC*	8	1.333334	Kuukpik Corp.*	**1.666667	CPAI	78.000000	AEP 100.000000
		TOTAL	550.29	**16.66667			92	**13.666669					
								15.000003					
25	25530 932098	T12N,R4E-U.M. Sec. 27, All, excl. NPRA	89.71	None	12.5	ASRC*	8	1.000000	Chevron	1.703000	CPAI	78.000000	AEP 100.000000
		TOTAL	89.71	**16.66667			92	10.500000	Kuukpik Corp.*	1.000000			
								11.500000		2.703000			
26	387212 932199	T12N,R4E-U.M. Sec. 26, All, within NPRA	17.36	None	Sliding Scale	ASRC*	60.18	10.030002	Kuukpik Corp.*	**1.666667	CPAI	78.000000	AEP 100.000000
		TOTAL	17.36	**16.66667			39.82	**4.970001					
								15.000003					

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27	25530	T12N,R4E-U.M. Sec. 26, All, excl. NPRA	622.64	None	12.5	State	60.18	7.522500	Chevron	1.703000	CPAI	78.000000	
	932098				ASRC*	39.82	3.977500	Kuukpik Corp.*	1.000000	APC		22.000000	
		TOTAL	622.64					11.500000		2.703000		100.000000	
28	25530	T12N,R4E-U.M. Sec. 25, All	640.00	None	12.5	State	55.79	6.973750	Chevron	1.703000	CPAI	78.000000	
	932098				ASRC*	44.21	4.526250	Kuukpik Corp.*	1.000000	APC		22.000000	
		TOTAL	640.00					11.500000		2.703000		100.000000	
29	25558	T12N,R5E,U.M. Sec. 29, All	640.00	None	12.5	State	100	12.5	Chevron	1.703000	CPAI	78.000000	
	932102	Sec. 30, All	588.00								APC	22.000000	
		Sec. 31, All	591.00									100.000000	
		Sec. 32, All	640.00										
		TOTAL	2,459.00										
30	25557	T12N,R5E,U.M. Sec. 27, All	640.00	None	12.5	State	100	12.5	Chevron	1.703000	CPAI	78.000000	
	932106	Sec. 28, All	640.00								APC	22.000000	
		Sec. 33, All	640.00									100.000000	
		Sec. 34, All	640.00										
		TOTAL	2,560.00										
31	372108	T12N,R5E-U.M. Sec. 26, NW1/4NW1/4, S1/2 NW1/4, SW1/4, W1/2SE1/4,	Above 8,500'	12.5	State	100	12.5	CPAI*	1.515000	CPAI	78.000000		
	932008				Petro-Hunt	0.324590						22.000000	
		TOTAL	360.00		XH, LLC	0.254430						100.000000	
					RW Res	0.226800							
					Chevron	1.703000							
					CPAI	0.649180						4.673000	

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Tr. No.	ADL No./ AK No.	Legal Description	Acres	Depth Restrictions	Original Royalty (%)	NPSL (%)	Royalty Mineral Owns.	Net Royalty	ORRI Owners	Net ORRI (%)	Tract Owners	Working Interest (%)		
38	387212 932199	T12N,R4E-U.M. Sec. 34, All, within NPRA	640.00	None	State	0.18	0.03	Kuukpik Corp.*	**1.666667	CPAI	78.000000	APC	22.000000	
		TOTAL	640.00	**16.66667				15.000003			100.000000			
39	387207 932191	T11N,R4E-U.M. Sec. 3, All, within NPRA	588.85	Sliding Scale	ASRC*	89.75	**13.291669	State	10.25	1.708334	Kuukpik Corp.*	**1.666667	CPAI	78.000000
		TOTAL	588.85	**16.66667				15.000003			100.000000			
40	380075 932034	T11N-R4E- U.M. Sec. 3, All, excl. NPRA	51.15	None	State	10.25	1.708370	Kuukpik Corp.*	1.000000	CPAI	78.000000	APC	22.000000	
		TOTAL	51.15					15.667000			100.000000			
<hr/>														
There is no Tract 41														
42	380075 932034	T11N-R4E, U.M. Sec. 2, All	640.00	None	State	57.25	9.541860	Kuukpik Corp.*	1.000000	CPAI	78.000000	APC	22.000000	
		TOTAL	640.00	16.667	ASRC*	42.75	6.125140		15.667000		100.000000			
43	380075 932034	T11N,R4E,U.M. Sec. 1, All	640.00	None	State	53.51	8.918510	Chevron	1.703000	CPAI	78.000000	APC	22.000000	
		TOTAL	640.00	16.667	ASRC*	46.49	6.748490	Kuukpik Corp.*	1.000000	APC	22.000000		100.000000	
44	25559 932104	T11N,R5E-U.M. Sec. 5, All	640.00	None	State	100	12.5	Chevron	1.703000	CPAI	78.000000	APC	22.000000	
		Sec. 6, All	593.00								100.000000			
		Sec. 7, All	596.00											
		Sec. 8, All	640.00											
		TOTAL	2,469.00					15.667000	2.703000		100.000000			

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Tr. No.	ADL No./ AK No.	Legal Description	Acres	Depth Restrictions	Original R royalty (%)	NPSL (%)	Royalty Owners	Mineral Owns.	Net Royalty	ORRI Owners	Net ORRI (%)	Tract Owners	Working Interest (%)
51	380075 932034	T11N-R4E, U.M. Sec. 11, All, excl. NPRA TOTAL	594.02 594.02	None	16.667		State ASRC*	70.59 29.41	11.765240 3.901760	Kuukpik Corp.*	1.000000	CPAI APC	78.000000 22.000000
52	387207 932191	T11N,R4E-U.M. Sec. 11, All, within NPRA TOTAL	45.98 45.98	None	Sliding Scale	State ASRC*	70.59 29.41	11.765002 **3.235001	Kuukpik Corp.*	**1.666667	CPAI APC	78.000000 22.000000	
53	380075 932034	T11N-R4E, U.M. Sec. 10, All, excl. NPRA TOTAL	5.83 5.83	None	16.667		State ASRC*	2.39 97.61	0.398340 15.268660	Kuukpik Corp.*	1.000000	CPAI APC	78.000000 22.000000
54	387207 932191	T11N-R4E-U.M. Sec. 10, All, within NPRA TOTAL	634.17 634.17	None	Sliding Scale	State ASRC*	2.39 97.61	0.398333 **14.601670	Kuukpik Corp.*	**1.666667	CPAI APC	78.000000 22.000000	
55	387208 932193	T11N-R4E-U.M. Sec. 16, All, within NPRA TOTAL	630.47 630.47	None	Sliding Scale	State ASRC*	0.34 99.66	0.056667 **14.943336	Kuukpik Corp.*	**1.666667	CPAI APC	78.000000 22.000000	
56	380075 932034	T11N-R4E, U.M. Sec. 16, All, excl. NPRA TOTAL	9.53 9.53	None	16.667		State ASRC*	0.34 99.66	0.056667 15.61033	Kuukpik Corp.*	1.000000	CPAI APC	78.000000 22.000000
57	387208 932193	T11N-R4E-U.M. Sec. 15, All, within NPRA TOTAL	103.94 103.94	None	Sliding Scale	State ASRC*	39.8 60.2	6.633335 **8.366668	Kuukpik Corp.*	**1.666667	CPAI APC	78.000000 22.000000	

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Tr. No.	ADL No./ AK No.	Legal Description	Acres	Depth Restrictions	Original Royalty (%)	NPSL (%)	Royalty Owners	Mineral Owns.	Net Royalty	ORRI Owners	Net ORRI (%)	Tract Owners	Working Interest (%)
58	380075 932034	T11N-R4E, U.M. Sec. 15, All, excl. NPRA TOTAL	536.06 536.06	None	16.667		State ASRC*	39.8 60.2	6.633470 9.033530	Kuukpik Corp.*	1.000000	CPAI APC	78.000000 22.000000
									15.667000				100.000000
59	380075 932034	T11N-R4E, U.M. Sec. 14, All TOTAL	640.00 640.00	None	16.667		State ASRC*	53.63 46.37	8.938510 6.728490	Kuukpik Corp.*	1.000000	CPAI APC	78.000000 22.000000
									15.667000				100.000000
60	380075 932034	T11N-R4E, U.M. Sec. 13, All TOTAL	640.00 640.00	None	16.667		State ASRC*	67.55 32.45	11.258560 4.408440	Kuukpik Corp.*	1.000000	CPAI APC	78.000000 22.000000
									15.667000				100.000000
61	372097 931996	T11N-R5E-U.M. Sec. 17, All Sec. 18, All TOTAL	640.00 599.00 1,239.00	Above 10,350' Below 10,350'	12.5		State	100.00	12.50000	CPAI*	1.515000	CPAI APC	78.000000 22.000000
										Petro-Hunt XH, LLC RW Res Chevron CPAI	0.324590 0.254430 0.226800 1.703000 1.255180		100.000000
									5.279000				

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There are no Tracts 65-67

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Tr. No.	ADL No./ AK No.	Legal Description	Acres	Depth Restrictions	Royalty (%)	NPSL (%)	Royalty Owners	Mineral Owns.	Net Royalty	ORRI Owners	Net (%)	ORRI Owners	Tract Owners	Working Interest (%)
69	384211 932080	T1N,R5E-U.M. Sec. 21, All TOTAL	640.00	None	16.667		ASRC*	50	8.333500	CPAI	1.328100	CPAI	78.000000 APC	22.000000
									15.667000		2.328100			100.000000
70	384211 932080	T1N,R5E-U.M. Sec. 20, All TOTAL	640.00	Above 7,631' 640.00	16.667		ASRC*	55.79	9.298520	CPAI	1.328100	CPAI	78.000000 APC	22.000000
									6.368480	Kuukpik Corp.*	1.000000			100.000000
									15.667000		2.328100			
71	384211 932080	T1N,R5E-U.M. Sec. 19, All TOTAL	601.00 601.00	Above 7,631' Below 7,631'	16.667 16.667		ASRC*	52.88 47.12	8.813510 6.853490	CPAI	1.328100	CPAI	78.000000 APC	22.000000
									15.667000		2.328100			100.000000
72	380077 932036	T1N,R4E-U.M. Sec. 24, All TOTAL	640.00	None	16.667		ASRC*	60.51 39.49	10.085200 5.581800	Kuukpik Corp.*	1.000000	CPAI	78.000000 APC	22.000000
									15.667000					100.000000
73	380077 932036	T1N,R4E-U.M. Sec. 23, All TOTAL	640.00 640.00	None	16.667		ASRC*	50.67 49.33	8.445170 7.221830	Kuukpik Corp.*	1.000000	CPAI	78.000000 APC	22.000000
									15.667000					100.000000

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Tr. No.	ADL No./ AK No.	Legal Description	Acres	Depth Restrictions	Original R royalty (%)	NPSL (%)	Royalty Owners	Mineral Owns.	Net Royalty	ORRI Owners	Net ORRI (%)	Tract Owners	Working Interest (%)
74	380077 932036	T11N,R4E-U.M. Sec. 22, All, excl. NPRA TOTAL	228.74 228.74	None	16.667	State ASRC*	21.35 78.65	3.558400 12.108600	Kuukpik Corp.* 15.667000	1.000000 15.667000	CPAI APC	78.000000 22.000000	100.000000
75	387208 932193	T11N,R4E-U.M. Sec. 22, All, within NPRA TOTAL	411.26 411.26	None	Sliding Scale **16.66667	State ASRC*	21.35 78.65	3.558334 **11.441669	Kuukpik Corp.* 15.000003	**1.666667 15.000003	CPAI APC	78.000000 22.000000	100.000000
76	387209 932195	T11N,R4E-U.M. Sec. 27, All, within NPRA TOTAL	614.70 614.70	None	Sliding Scale **16.66667	State ASRC*	2.6 97.4	0.433333 **14.56667	Kuukpik Corp.* 15.000003	**1.666667 15.667000	CPAI APC	78.000000 22.000000	100.000000
77	380077 932036	T11N,R4E-U.M. Sec. 27, All, excl. NPRA TOTAL	25.30 25.30	None	16.667	State ASRC*	2.6 97.4	0.433340 15.233660	Kuukpik Corp.* 15.667000	1.000000 15.667000	CPAI APC	78.000000 22.000000	100.000000
78	387209 932195	T11N,R4E-U.M. Sec. 26, All, within NPRA TOTAL	25.23 25.23	None	Sliding Scale **16.66667	State ASRC**	48.75 51.25	8.125002 **6.875001	Kuukpik Corp.* 15.000003	**1.666667 15.667000	CPAI APC	78.000000 22.000000	100.000000
79	380077 932036	T11N,R4E-U.M. Sec. 26, All, excl. NPRA TOTAL	614.77 614.77	None	16.667	State ASRC*	48.75 51.25	8.125160 7.541840	Kuukpik Corp.* 15.667000	1.000000 15.667000	CPAI APC	78.000000 22.000000	100.000000
80	384209 932076	T11N-R4E,U.M. Sec. 25, All TOTAL	640.00 640.00	None	16.667	State ASRC*	63.41 36.59	10.568545 4.098455	CPAI Kuukpik Corp.* 14.667000	1.328100 1.000000 2.328100	CPAI APC	78.000000 22.000000	100.000000

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81	384211 932080	T11N-R5E-U.M. Sec. 30, All TOTAL	604.00	None	16.667	State ASRC*	50.17 49.83	8.361830 7.305170	CPAI Kuukpik Corp.*	1.328100 1.000000	CPAI APC	78.000000 22.000000	TOTAL	100.000000
82	380082 932046	T11N-R5E,U.M. Sec. 29, All TOTAL	640.00	None	16.667	State ASRC*	50.86 49.14	8.476840 7.190160	CPAI Kuukpik Corp.*	1.000000 2.328100	CPAI APC	78.000000 22.000000	TOTAL	100.000000
83	384215 932084	T13N-R4E-U.M. 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 TOTAL	640.00	None	16.667	State ASRC*	57.35 42.65	9.558525 6.108476	CPAI Kuukpik Corp.*	1.328100 1.000000	Petro-Hunt CPAI	0.380000 77.620000	TOTAL	100.000000
84	380092 932052	T12N-R4E, U.M. Sec. 1, Unsurveyed, All TOTAL	640.00	None	16.667	State ASRC*	55.36 44.64	9.226851 6.440149	CPAI Kuukpik Corp.*	1.000000 1.5667000	CPAI APC	78.000000 22.000000	TOTAL	100.000000
85	380092 932052	T12N-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 TOTAL	640.00	None	16.667	State ASRC*	54.62 45.38	9.103515 6.563485	CPAI Kuukpik Corp.*	1.000000 15.667000	CPAI APC	78.000000 22.000000	TOTAL	100.000000

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89	25526	T12N-R4E,U.M. Sec. 10, Unsurveyed, All, east of the highest high water mark on the left bank of the Nechelik Channel of the Colville River	None	12.5	State	70.39	8.798750	Chevron	1.703000	CPIA	78.000000		
	932094				ASRC*	29.61	2.701250	Kuukpik Corp.*	1.000000	APC	22.000000		
							11.500000						100.000000
		TOTAL							2.703000				
90	25526	T12N-R4E,U.M. Sec. 11, Unsurveyed, All	640.00	None	12.5	State	52.87	6.608750	Chevron	1.703000	CPIA	78.000000	
	932094				ASRC*	47.13	4.891250	Kuukpik Corp.*	1.000000	APC	22.000000		
		TOTAL	640.00				11.500000						100.000000
91	25526	T12N-R4E,U.M. Sec. 12, Unsurveyed, All	640.00	None	12.5	State	53.32	6.665000	Chevron	1.703000	CPIA	78.000000	
	932094				ASRC*	46.68	4.835000	Kuukpik Corp.*	1.000000	APC	22.000000		
		TOTAL	640.00				11.500000						100.000000
92	25526	T12N-R4E,U.M. Sec. 13, Unsurveyed, All	640.00	None	12.5	State	55.09	6.88625	Chevron	1.703000	CPIA	78.000000	
	932094				ASRC*	44.91	4.61375	Kuukpik Corp.*	1.000000	APC	22.000000		
		TOTAL	640.00				11.500000						100.000000
93	388901	T12N-R4E,U.M. Sec. 14, Unsurveyed, All	640.00	None	12.5	State	64.45	8.05625	Chevron	1.703000	CPIA	78.000000	
	932349				ASRC*	35.55	3.44375	Kuukpik Corp.*	1.000000	APC	22.000000		
		TOTAL	640.00				11.500000						100.000000
94	388901	T12N-R4E,U.M. Sec. 15, Unsurveyed, All, east of the highest high water mark on the left bank of the Nechelik Channel of the Colville River	398.55	None	12.5	State	58.34	7.29250	Chevron	1.703000	CPIA	78.000000	
	932349				ASRC*	41.66	4.20750	Kuukpik Corp.*	1.000000	APC	22.000000		
		TOTAL	398.55				11.500000						100.000000

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Tr. No.	ADL No./ AK No.	Legal Description	Acres	Depth Restrictions	Original Royalty (%)	NPSL (%)	Royalty Owners	Mineral Owns.	Net R	ORRI Owners	Net ORRI (%)	Tract Owners	Working Interest (%)
95	388904 932355	T12N,R4E-U.M. Sec. 15, Unsurveyed, All, West of highest high water mark on the left bank of the Nechelik Channel of the Colville River, excluding U.S. Survey 9502 Lots 1 and 2 and the NPR-A TOTAL	None 16.6667 ASRC* 41.66	State 9.72353 5.94347 15.66700	58.34 9.72334 Kuukpik Corp.* 1.000000	41.66 5.27667 15.000000	Kuukpik Corp.* 1.666667 CPAI APC	78.000000 22.000000 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 TOTAL	None 16.66667 ASRC* 41.66	State 9.72334 5.27667 15.000000	58.34 5.27667 15.000000	41.66 5.27667 15.000000	Kuukpik Corp.* 1.666667 CPAI APC	78.000000 22.000000 100.000000					
97	388906 932359	T12N,R4E-U.M. Sec. 16, Unsurveyed all within the NPR-A, excl. U.S. Survey 9502 Lot 1 TOTAL	None 16.66667 ASRC* 53.79	State 7.70167 7.29834 15.000000	46.21 7.29834 15.000000	53.79 7.29834 15.000000	Kuukpik Corp.* 1.666667 CPAI APC	78.000000 22.000000 100.000000					
98	388904 932355	T12N,R4E-U.M. Sec. 16, Unsurveyed, All excluding U.S. Survey 9502 Lot 1 and the NPR-A TOTAL	None 16.6667 ASRC* 53.79	State 7.70182 7.96518 15.66700	46.21 7.96518 15.66700	53.79 7.96518 15.66700	Kuukpik Corp.* 1.000000 CPAI APC	78.000000 22.000000 100.000000					

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Tr. No.	ADL No./ AK No.	Legal Description	Acres	Depth Restrictions	Original R royalty (%)	NPSL (%)	Royalty Owns.	Mineral Net Royalty	ORRI Owners	Net ORRI (%)	Tract Owners	Working Interest (%)
There are no Tracts 99-100												
101	380093 932054	T12N,R4E-U.M. Sec. 9, Unsurveyed, All	640.00	None	16.667	ASRC*	48.47	8.58851	Kuukpik Corp.*	1.000000	CPAI APC	78.000000 22.000000
		TOTAL	640.00					15.66700				100.000000
102	380093 932054	T12N,R4E-U.M. Sec. 10, Unsurveyed, All West of the highest high water mark on the left bank of the Nechelik Channel of the Colville River	264.64	None	16.667	ASRC*	70.39 29.61	11.731901 3.935099	Kuukpik Corp.*	1.000000	CPAI APC	78.000000 22.000000
		TOTAL	264.64					15.66700				100.000000
103	380093 932054	T12N,R4E-U.M. Sec. 3, Unsurveyed, W1/2W1/2, 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	None	16.667	ASRC*	73.42 26.58	12.236911 3.430089	Kuukpik Corp.*	1.000000	CPAI APC	78.000000 22.000000
		TOTAL	20.00					15.667				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	None	16.667	ASRC*	57.69 42.31	9.615192 6.051808	Kuukpik Corp.*	1.000000	CPAI APC	78.000000 22.000000
		TOTAL	502.00					15.667				100.000000

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Tr. No.	ADL No./ AK No.	Legal Description	Acres	Depth Restrictions	Original Royalty (%)	NPSL (%)	Royalty Owners	Mineral Owns.	Net Royerly	ORRI Owners	Net ORRI (%)	Tract Owners	Working Interest (%)
105	389726	T12N.R4E-U.M.	None	16.66667	State	57.69	9.615002	Kuukpik Corp.*	1.000000	CPAI	78.000000		
	932684	Sec. 4, Unsurveyed, All within the bed of the Nechelik Channel of the Colville River as shown on the official Tract Map for the State O&G Lease Sale 75, dated August 26, 1992			ASRC*	42.31	6.051668			APC	22.000000		
									15.66667				100.000000
		TOTAL	138.00										
			138.00										

There is no Tract 106

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

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Tr. No.	ADL No./ AK No.	Legal Description	Acres	Depth Restrictions	Original Royalty (%)	NPSL (%)	Royalty Owns.	Mineral Owns.	Net Roya	ORRI Owners (%)	Net ORRI (%)	Tract Owners	Working Interest (%)
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 TOTAL	None 16.66667 420.00 420.00	State ASRC*	67.65 32.35	11.275023 4.391677	Kuukpik Corp.* 15.6667	1.000000 15.6667	CPAI APC	78.000000 22.000000	CPAI APC	78.000000 22.000000	100.000000
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 TOTAL	None 16.667 220.00 220.00	State ASRC*	67.65 32.35	11.275226 4.391775	Kuukpik Corp.* 15.667000	1.000000 2.328100	CPAI Petro-Hunt	77.620000 0.380000	CPAI APC	77.620000 22.000000	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 TOTAL	None 16.667 555.00 555.00	State ASRC*	60.52 39.48	10.086868 5.580132	Kuukpik Corp.* 15.667	1.000000 2.328100	CPAI Petro-Hunt	77.620000 0.380000	CPAI APC	77.620000 22.000000	100.000000

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Tr. No.	ADL No./ AK No.	Legal Description	Acres	Depth Restrictions	Original Royalty (%)	NPSL (%)	Royalty Owners	Mineral Owns.	Net R royalty	ORRI Owners	Net ORRI (%)	Tract Owners	Working Interest (%)
112	388527	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	None	16.66667	State	60.52	10.086669	A. James III	8.333330	CPAI	78.000000		
	932623			ASRC*	39.48	5.580001	Revocable		15.66667	Trust	APC	22.000000	
							Kuukpik Corp.*	1.000000					100.000000
113	388527	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	None	16.66667	State	57.35	9.558335	A. James III	8.333330	CPAI	78.000000		
	932623			ASRC*	42.65	6.108335	Revocable		15.66667	Trust	APC	22.000000	
							Kuukpik Corp.*	1.000000					100.000000
114	389725	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	None	16.667	State	83.68	13.946946	CPAI	1.328100	CPAI	77.620000		
	932682			ASRC*	16.32	1.720054	Kuukpik Corp.*	1.000000	15.667	Petro-Hunt	0.380000		
													100.000000

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Tr. No.	ADL No./ AK No.	Legal Description	Acres	Depth Restrictions	Original Royalty (%)	NPSL (%)	Royalty Owns.	Mineral Net Royalty	ORRI Owners	Net ORRI (%)	Tract Owners	Working Interest (%)
115	388527	T13N,R4E-U.M.	None	16.66667	State	83.68	13.946669	A. James III	8.333330	CPAI	78.000000	
932623 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		ASRC*	16.32	1.72001	Revocable		APC	22.000000	
			TOTAL	444.00			15.66667	Trust			100.000000	
There are no Tracts 116-118												
119	380081	T11N,R5E-U.M.	None	16.667	State	50.06	8.3435	Kuukpik Corp.*	1.000000	CPAI	78.000000	
	932044	Sec. 28, Unsurveyed, All	640.00		ASRC*	49.94	7.3235			APC	22.000000	
		TOTAL	640.00				15.667				100.000000	
120	ASRC NPR-A 2	T11N,R4E-U.M.	None	16.667	ASRC*	100.00	15.0003	Kuukpik Corp.*	1.666700	CPAI	78.000000	
	932128	Sec. 28, All	640.00							AEP	22.000000	
		Sec. 33, All	640.00								100.000000	
		Sec. 34, All	640.00									
		TOTAL	1,920.00									
121	388905	T11N,R4E-U.M.	None	Sliding Scale	State	30.51	5.085001	Kuukpik Corp.*	**1.666667	CPAI	78.000000	
	932357	Sec. 35, Unsurveyed, All, within NPR-A	286.63	**16.66667	ASRC*	69.49	**9.915002			APC	22.000000	
		TOTAL	286.63				15.000003				100.000000	
122	388902	T11N,R4E-U.M.	None	16.667	State	30.51	5.085102	Kuukpik Corp.*	1.000000	CPAI	78.000000	
	932351	Sec. 35, Unsurveyed, All, excluding the NPA-A	353.37		ASRC*	69.49	10.581898			APC	22.000000	
		TOTAL	353.37				15.667				100.000000	

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123	388902 932351	T11N,R4E-U.M. Sec. 36, Unsurveyed, All TOTAL	640.00	None 640.00	16.667	ASRC*	State 60.97 39.03	10.16187 5.50513	Kuukpik Corp.* 1.000000	CPAI APC	78.000000 22.000000	<u>100.000000</u>	
124	388903 932353	T11N,R5E-U.M. Sec. 31, Unsurveyed, All Sec. 32, Unsurveyed, All TOTAL	607.00 640.00 1,247.00	None 607.00 640.00	16.667	ASRC*	State 50.00 50.00	8.33335 7.33335	Kuukpik Corp.* 1.000000	CPAI APC	78.000000 22.000000	<u>100.000000</u>	
125	391587 341409	T11N,R5E-U.M. Sec. 33, Unsurveyed, All TOTAL	640.00	None 640.00	16.667	ASRC*	State 50.20 49.80	8.366834 7.300166	Kuukpik Corp.* 1.000000	CPAI APC	78.000000 22.000000	<u>100.000000</u>	
There are no Tracts 126-130													
131	388044 932015	T10N,R5E-U.M. Sec. 6, Unsurveyed, All TOTAL	609.00	None 609.00	16.667	ASRC*	State 50.00 50.00	8.33335 7.33335	Kuukpik Corp.* CPAI	1.000000 <u>1.290000</u>	CPAI APC	78.000000 22.000000	<u>100.000000</u>
131A	391590 341405	T10N,R5E-U.M. Sec. 5, N1/2NW1/4, SW1/4NW1/4, NW1/4SW1/4 TOTAL	160.00 160.00 160.00	None 160.00 160.00	16.667	ASRC*	State 50.00 50.00	8.33335 7.33335	Kuukpik Corp.* CPAI	1.000000 <u>1.290000</u>	CPAI APC	78.000000 22.000000	<u>100.000000</u>
132	388902 932351	T10N,R4E-U.M. Sec. 1, Unsurveyed, All, excluding the NPR-A TOTAL	586.43 586.43	None 586.43	16.667	ASRC*	State 55.07 44.93	9.178517 6.488483	Kuukpik Corp.* CPAI	1.000000 <u>15.667</u>	CPAI APC	78.000000 22.000000	<u>100.000000</u>

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Tr. No.	ADL No./ AK No.	Legal Description	Acres	Depth Restrictions	Original Royalty (%)	NPSL (%)	Royalty Mineral Owns.	Net Rental Royalty	ORRI Owners	Net ORRI (%)	Tract Owners	Working Interest (%)
133	388902 932351	T10N, R4E-U.M. Sec. 2, Unsurveyed, All, excluding the NPA-A	None	16.667	State ASRC*	7.86 92.14	1.310026 14.356974	Kuukpik Corp.* 14.356974	1.000000 15.667	CPAI APC	78.000000 22.000000	100.000000
		TOTAL	87.63									
			87.63									

There are no Tracts 134 - 161

162	390344 933508	T12 N, R4E, U.M. 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	None	16.667	State ASRC*	76.19 23.81	12.698587 2.9684127 15.667000	Kuukpik Corp.* 1.000000	CPAI APC	78.000000 22.000000
		TOTAL	308.00	308.00						
163	390344 933508	T12 N, R4E, U.M. 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	None	16.667	State ASRC*	64.60 35.40	10.76688 4.90012 15.66700	Kuukpik Corp.* 1.000000	CPAI APC	78.000000 22.000000
		TOTAL	531.00	531.00						

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164	390345	T12 N, R4E, U.M. 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	None	16.6667	State	69.63	11.60523	Kuukpik Corp.*	1.000000	CPAI	78.000000	
	933510				ASRC*	30.37	4.06177			APC	22.000000	
							15.6667000				100.000000	
165	390348	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	None	16.66667	State	69.63	11.60523	Kuukpik Corp.*	1.000000	CPAI	78.000000	
	933516				ASRC*	30.37	4.06177			APC	22.000000	
							15.6667000				100.000000	
166	390350	T12 N, R4E, U.M. Section 8, Unsurveyed, All, tide and submerged lands as shown on the official tract map for O&G	None	16.66667	State	64.60	10.76667	Kuukpik Corp.*	1.000000	CPAI	78.000000	
	933520				ASRC*	35.40	4.90000			APC	22.000000	
							15.66667				100.000000	

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167	390350	T12 N, R4E, U.M.	None	16.66667	State	76.19	12.69834	Kuukpik Corp.*	1.00000	CPIA	78.00000	
	933520	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		ASRC*	23.81		2.96833			APC	22.00000	
							15.66667				100.00000	
		TOTAL	332.00									
168	388465	T12 N, R4E, U.M.	None	16.66667	State	100.00	N/A		None	CPIA	78.00000	
	300632	Section 6, Protracted, All tide and submerged lands	577.00							APC	22.00000	
		Section 7, Protracted, All tide and submerged lands	580.00								100.00000	
		TOTAL	1,157.00									

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169	388466	T12 N, R4E, U.M. Section 18, Protracted, All tide and submerged lands	583.00	None	16.66667	State	100.00	N/A	None	None	CPAI APC	78.00000 22.00000
	300634	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	424.25									
		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	71.65									
		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	264.72									
		Section 31, Unsurveyed, All tide and submerged lands seaward of the line of mean high water	50.63									
		Section 32, Unsurveyed, All tide and submerged lands seaward of the line of mean high water	101.59									
		TOTAL	1,733.05									

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Tr. No.	ADL No./ AK No.	Legal Description	Acres	Restrictions	Depth	NPSL (%)	Royalty (%)	Mineral Owns.	Net Royalty	ORRI Owners	Net ORRI (%)	Tract Owners	Working Interest (%)
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 NIPRA 1 932126	T12N, R3E, U.M. Section 11: all excluding tide and submerged lands seaward of the line of mean high water Section 13: all excluding tide and submerged lands seaward of the line of mean high water Section 14: all excluding tide and submerged lands seaward of the line of mean high water Section 23 Section 24: All, excluding tide and submerged lands seaward of the line of mean high water TOTAL	None 178.72 184.11 624.00 640.00 625.00 2,251.83	100.00 Kuukpik Corp.* 2.000000 CPAI AEP <hr/> 100.000000	78.000000 22.000000
178	ASRC NIPRA 2 932128	T12N, R4E, U.M. Section 19 (fractional): All, excluding tide and submerged lands seaward of the line of mean high water TOTAL	None 16.667 ASRC* 100.00 15.0000 Kuukpik Corp.* 1.667000 CPAI AEP <hr/> 100.000000	16.667 ASRC* 100.00 15.0000 Kuukpik Corp.* 1.667000 CPAI AEP <hr/> 78.000000 22.000000	78.000000 22.000000

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179	ASRC NPRA3 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 12.5	ASRC*	100.00	11.2500	Kuukpik Corp.*	1.25000	CPAI AEP	78.000000 22.000000 <u>100.000000</u>	
180	ASRC NPRA4 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	15.00030	Kuukpik Corp.*	1.66670	CPAI AEP	78.000000 22.000000 <u>100.000000</u>	
181	AA087888 307461	T11N, R3E, U.M. Section 10, All Section 14, All Total	640.00 640.00 1,280.00	None 16.6667	BLM	100.00	16.66667	None	None	CPAI	100.000000	
181A	AA092347 340758	T11N, R3E, U.M. Section 11, All Section 13, All Total	640.00 640.00 1,280.00	None 16.6667	ASRC*	100.00	14.16667	Kuukpik Corp.*	2.500000	CPAI AEP	78.000000 22.000000 <u>100.000000</u>	

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182	AA081817 932552	T11N, R4E, U.M. Section 31, All T11N, 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 16.66667 BLM 100.00	16.66667		16.66667	None	None	CPAI	100.000000	
182A	AA092344 340757	T11N, R4E, U.M. Section 19, All Section 20, All Section 30, All T11N, R3E, U. M. Section 24, All Section 25, All Total	600.00 640.00 602.00 640.00 640.00 3,122.00	None 16.66667 ASRC* 100.00	16.66667	ASRC*	100.00	14.16667	Kuukpik Corp.* 2.500000	CPAI	78.000000	
183	390337 300618	T10N, R4E, U.M. Section 2, Surveyed by protraction, Lots 2 and 4 Total	552.37 552.37	None Sliding Scale 16.66667**	7.86 ASRC*	92.14	13.69000 15.00000	1.31000 Kuukpik Corp.*	1.666667	CPAI	78.000000	
184	390337 300618	T10N, R4E, U.M. Section 1, Surveyed, by protraction, Lot 4 Total	53.57 53.57	None Sliding Scale 16.66667**	55.07 ASRC*	44.93	9.17834 5.82166 15.00000	Kuukpik Corp.* 9.17834 5.82166 15.00000	1.666667	CPAI	78.000000	
										APC	22.000000	
											100.000000	

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Tr. No.	ADL No./ AK No.	Legal Description	Acres	Depth Restrictions	Original R royalty (%)	NPSL (%)	Royalty Owners	Mineral Owns.	Net R royalty	ORRI Owners	Net ORRI (%)	Tract Owners	Working Interest (%)
185	390672	T10N, R4E, U.M. Section 12, Surveyed, by protraction, Lots 1 and 2 and the bed and of the Nechohlk Channel, 227.73 acres	None	16.66667	State	20.95	3.491667	Kuukpik Corp.*	1.000000	CPAI	78.000000		
	366717				ASRC*	79.05	12.175003	Kuukpik Corp.***	0.500000	APC	22.000000		
							15.666670	ALASKA ORRI	2.783330				100.000000
							BRPC		0.050000				
									4.333330				
		TOTAL	227.73										
186	390675	T10N, R5E, UM Section 7, Surveyed, by protraction, Fractional, Lots 1 and 2 and the beds of the Nechohlk Channel and the unnamed waterbody, 606.46 acres	None	16.66667	State	51.10	8.516668	Kuukpik Corp.*	1.000000	CPAI	78.000000		
	366720				ASRC*	48.90	7.150002	Kuukpik Corp.***	0.500000	APC	22.000000		
							15.666670	ALASKA ORRI	2.783330				100.000000
							BRPC		0.050000				
									4.333330				
		TOTAL	606.46										
187	391915	T10N, R5E, U.M Section 8, Surveyed, by protraction, All including the beds of the Nechohlk Channel and the unnamed waterbody, 640.00 acres	None	16.66667	State	50.52	8.420002	Kuukpik Corp.*	1.000000	CPAI	78.000000		
	366725				ASRC*	49.48	7.246668	Kuukpik Corp.***	0.500000	APC	22.000000		
							15.666670	ALASKA ORRI	2.783330				100.000000
							BRPC		0.050000				
									4.333330				
		TOTAL	640.00										
188	390674	T10N, R5E U.M Section 9, Surveyed, by protraction, All including the beds of the unnamed waterbodies, 640.00 acres	None	16.66667	State	50.00	8.333335	Kuukpik Corp.*	1.000000	CPAI	78.000000		
	366719				ASRC*	50.00	7.333335	Kuukpik Corp.***	0.500000	APC	22.000000		
							15.666670	ALASKA ORRI	2.783330				100.000000
							BRPC		0.050000				
									4.333330				
		TOTAL	640.00										

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Tr. No.	ADL No./ AK No.	Legal Description	Acres	Depth Restrictions	Original R royalty (%)	NPSL (%)	Royalty Owns.	Mineral Net	ORRI Owners	Net (%)	ORRI Owners	Tract CPAI	Working Interest (%)
189	391914	T10N, R5E, UM Section 10, Surveyed, by protraction, All including the beds of the Colville River and the unnamed waterbodies 640.00 acres	640.00	None 16.66667	State ASRC*	78.22 21.78	13.036669 2.630001	Kuukpik Corp.* Kuukpik Corp.***	1.000000 0.500000	CPAI APC	78.000000 22.000000		
	366724												
		All including the beds of the Colville River and the unnamed waterbodies 640.00 acres											
		TOTAL	640.00										
190	390676	T10N, R5E, UM Section 15, Surveyed, by protraction, All including the beds of the Colville River and the unnamed waterbody, 640.00 acres	640.00	None 16.66667	State ASRC*	82.00 18.00	13.666669 2.000001	Kuukpik Corp.* Kuukpik Corp.***	1.000000 0.500000	CPAI APC	78.000000 22.000000		
	366721												
		All including the beds of the Colville River and the unnamed waterbody, 640.00 acres											
		TOTAL	640.00										
191	391015	T10N, R5E, UM Section 16, Surveyed, by protraction All excluding U.S. Survey 9121, 580.32 acres; Special Surveys U.S. Survey 9121, that portion within Section 16, 59.68 acres; Tract 191 contains 640.00 acres, more or less.	640.00	None 16.66667	State ASRC*	58.57 41.43	9.761669 5.905001	Kuukpik Corp.* Kuukpik Corp.***	1.000000 0.500000	CPAI APC	78.000000 22.000000		
	366730												
		All excluding U.S. Survey 9121, 580.32 acres; Special Surveys U.S. Survey 9121, that portion within Section 16, 59.68 acres; Tract 191 contains 640.00 acres, more or less.											
		TOTAL	640.00										

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Tr. No.	ADL No./ AK No.	Legal Description	Acres	Depth Restrictions	Original Royalty (%)	NPSL (%)	Royalty Owners	Mineral Owns.	Net R royalty	ORRI Owners (%)	Net ORRI (%)	Tract CPAI	Working Interest (%)
192	391016 366731	T10N, R5E, UM Section 17, Surveyed, by protraction. Lots 1, 2, and 3 and the bed of the Nechelik Channel of the Colville River, 342.76 acres; Special Surveys U.S. Survey 9121, that portion within Section 17, 20.30 acres; Tract 192 contains 363.06 acres, more or less TOTAL	None 16.66667	State ASRC*	20.57 79.43	3.428334 12.238336 15.666670	Kuukpik Corp.* Kuukpik Corp.*** ALASKA ORRI	1.000000 0.500000 2.783330	CPAI APC	78.000000 22.000000 100.000000			
			BRPC					0.050000					
								4.333330					
193	390677 366722	T10N, R5E, UM Section 18, Surveyed, by protraction, Fractional, Lots 1 and 2 and the bed of the Nechelik Channel, 383.34 acres TOTAL	None 16.66667	State ASRC*	34.87 65.13	5.811668 9.85502	Kuukpik Corp.* Kuukpik Corp.*** ALASKA ORRI	1.000000 0.500000 2.783330	CPAI APC	78.000000 22.000000 100.000000			
			BRPC					0.050000					
								4.333330					
194	391536 366628	T10N, R5E, UM Section 7, Surveyed by protraction, Lot 3, 5.53 acres TOTAL	None 16.66667	State ASRC*	51.10 48.90	8.511668 6.483335 15.000003	Kuukpik Corp.* Kuukpik Corp.*** ALASKA ORRI	1.000000 0.500000 2.783330	CPAI APC	78.000000 22.000000 100.000000			
			BRPC					0.050000					
								4.333330					
195	390673 366718	T10N, R4E, UM Section 13, Surveyed, by protraction, Lot 1 and the bed of the Nechelik Channel, 24.14 acres TOTAL	None 16.66667	State ASRC*	5.55 94.45	0.925000 14.741670 15.666670	Kuukpik Corp.* Kuukpik Corp.*** ALASKA ORRI	1.000000 0.500000 2.783330	CPAI APC	78.000000 22.000000 100.000000			
			BRPC					0.050000					
								4.333330					

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Tr. No.	ADL No./ AK No.	Legal Description	Acres	Depth Restrictions	Original R royalty (%)	NPSL (%)	Royalty Owns.	Mineral Net Royalty	ORRI Owners (%)	Net ORRI (%)	Tract Owners (%)	Working Interest (%)
196	391535	T10N, R4E, Tract A, UM	None	16.66667	ASRC*	94.45	0.925000	Kuukpik Corp.*	1.000000	CPAI	78.000000	
	366627	Section 13, Surveyed, by protraction, Lot 2, 615.86 acres	615.86				14.075003	Kuukpik Corp.***	0.500000	APC	22.000000	
		TOTAL	615.86				15.000003	ALASKA ORRI	2.783330		100.000000	
					BRPC		0.050000					4.333330
197	391922	T10N, R5E, UM	None	16.66667	ASRC*	65.13	5.811668	Kuukpik Corp.*	1.000000	CPAI	78.000000	
	366631	Section 18, Surveyed by protraction, Lot 3, 231.32 acres	231.32				9.188335	Kuukpik Corp.***	0.500000	APC	22.000000	
		TOTAL	231.32				15.000003	ALASKA ORRI	2.783330		100.000000	
					BRPC		0.050000					4.333330
198	391537	T10N, R5E, UM	None	16.66667	ASRC*	79.43	3.428334	Kuukpik Corp.*	1.000000	CPAI	78.000000	
	366629	Section 17, Surveyed, by protraction, Lot 4, 276.94 acres	276.94				11.571669	Kuukpik Corp.***	0.500000	APC	22.000000	
		TOTAL	276.94				15.000003	ALASKA ORRI	2.783330		100.000000	
					BRPC		0.050000					4.333330
199	391923	T10N, R5E, UM	None	16.66667	ASRC*	83.54	2.743334	Kuukpik Corp.*	1.000000	CPAI	78.000000	
	366632	Section 20, Surveyed by protraction, Lots 2, 4 and 5 and the beds of all meandering waterbodies within the National Petroleum Reserve-Alaska,	409.55				12.256669	Kuukpik Corp.***	0.500000	APC	22.000000	
		TOTAL	409.55				15.000003	ALASKA ORRI	2.783330		100.000000	
					BRPC		0.050000					4.333330

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Tr. No.	ADL No./ AK No.	Legal Description	Acres	Depth Restrictions	Original R royalty (%)	NPSL (%)	Royalty Owners	Mineral Owns.	Net Royalty	ORRI Owners	Net (%)	ORRI Owners	Tract CPAI	Working Interest (%)
200	391918	T10N, R5E, UM Section 20, Surveyed by protraction, Fractional, Lots 1 and 3 and the bed of the Nechelik Channel, 242.67 acres	242.67	None	16.66667	State ASRC*	16.46	2.743334	Kuukpik Corp.*	1.000000	CPAI	78.000000		
	366728	TOTAL	242.67				83.54	12.923336	Kuukpik Corp.***	0.500000	APC	22.000000		
								15.666670	ALASKA ORRI	2.783330				100.000000
								BRPC	0.050000					
										4.333330				
201	391917	T10N, R5E, UM Section 21, Surveyed, by protraction, All including the bed of the Colville River and the Nechelik Channel, 640.00 acres	640.00	None	16.66667	State ASRC*	56.38	9.396669	Kuukpik Corp.*	1.000000	CPAI	78.000000		
	366727	TOTAL	640.00				43.62	6.270001	Kuukpik Corp.***	0.500000	APC	22.000000		
								15.666670	ALASKA ORRI	2.783330				100.000000
								BRPC	0.050000					
										4.333330				
202	391916	T10N, R5E, UM Section 22, Surveyed, by protraction, All including the bed of the Colville River, 640.00 acres	640.00	None	16.66667	State ASRC*	73.39	12.231669	Kuukpik Corp.*	1.000000	CPAI	78.000000		
	366726	TOTAL	640.00				26.61	3.435001	Kuukpik Corp.***	0.500000	APC	22.000000		
								15.666670	ALASKA ORRI	2.783330				100.000000
								BRPC	0.050000					
										4.333330				
203	391919	T10N, R5E, UM Section 28, Surveyed, by protraction, All including the bed of the Colville River, 640.00 acres	640.00	None	16.66667	State ASRC*	78.58	13.096669	Kuukpik Corp.*	1.000000	CPAI	78.000000		
	366729	TOTAL	640.00				21.42	2.570001	Kuukpik Corp.***	0.500000	APC	22.000000		
								15.666670	ALASKA ORRI	2.783330				100.000000
								BRPC	0.050000					
										4.333330				
204	390679	T10N, R5E, UM Section 29, Surveyed, by protraction, Fractional, Lot 1 and that portion of the Colville River within the NE 1/4 and S 1/2, 436.40 acres	436.40	None	16.66667	State ASRC*	46.12	7.686668	Kuukpik Corp.*	1.000000	CPAI	78.000000		
	366723	TOTAL	436.40				53.88	7.980002	Kuukpik Corp.***	0.500000	APC	22.000000		
								15.666670	ALASKA ORRI	2.783330				100.000000
								BRPC	0.050000					
										4.333330				

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205	391538	T10N, R5E, U.M.	None	16.66667	State	46.12	7.686668	Kuuikpik Corp.*	1.000000	CPAI	78.000000	
	366630	Section 29, Surveyed by protraction, Lots 2 through 4 and the beds of all meanderable waterbodies, including the portion of the Colville River lying within the NW 1/4, 203.60 acres			ASRC*	53.88	7.313335	Kuuikpik Corp.***	0.500000	APC	22.000000	
								ALASKA ORRI	2.783330			
					BRPC			BRPC	0.050000			100.000000
												4.333330
206	AA094165	T11N, R3E, U.M.	None	16.66667	BLM	100.00	16.66667	None	None	CPAI	100.000000	
	366606	Section 22, All	640.00									
		Section 27, All	640.00									
		Section 34, All	640.00									
		Section 35, All	640.00									
		Total	2,560.00									
207	AA094167	T10N, R3E, U.M.	None	16.66667	BLM	100.00	16.66667	None	None	CPAI	100.000000	
	366608	Section 1, All	638.00									
		Section 2, All	639.00									
		Section 3, All	639.00									
		Total	1,916.00									
208	AA092675	T10N, R4E, U.M.	None	16.66667	BLM	100.00	16.66667	None	None	CPAI	100.000000	
	341734	Section 6, All	609.00									
		Total	609.00									
209	AA084140	T12N, R4E, U.M.	None	16.66667	BLM	100.00	16.66667	None	None	CPAI	100.000000	
	933472	U.S.SURVEY 9502, LOTS 1 and 2.	239.93									
		Total	239.93									

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210	391773	T10N, R4E, U.M.		None	16.66667		State	20.95	3.49167	Kuukpik Corp.*	1.66667	CPAI
	342612	Section 12: Surveyed By Protraction, Lot 3			ASRC*	79.05	13.17500				APC	22.00000
		Total	412.27					16.66667				100.00000
TOTAL UNIT ACREAGE											131,871.49	

* Kuukpik Corp. Overriding Royalty deducted from ASRC Royalty as agreed between Kuukpik Corp. and ASRC for surface access.

** This lease has a sliding scale royalty therefore the original royalty percentage will vary between 16.66667% and 33.33333%. Kuukpik 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 Kuukpik shall be entitled to receive 2% overriding royalty ($0.10 \times 0.20 = 0.02$) on 8/8ths of production, the State would receive 10% royalty on 8/8ths of production ($0.50 \times 0.20 = 0.10$) $- (0.10 \times 0.20) = 0.08$].

*** The 0.5% overriding royalty interest was created via several Assignment and Conveyance documents dated December 1, 2017 from Alaska ORRI and BRPC to Kuukpik Corp. The 0.5% overriding royalty interest is owned separate from and in addition to the overriding royalty deducted from ASRC Royalty as agreed between Kuukpik Corp. and ASRC for surface access.

KEY:

- ALASKA ORRI:** ALASKA ORRI, LLC
- APC: Anadarko Petroleum Corporation
- AEP: Anadarko E&P Onshore LLC
- ASRC: Arctic Slope Regional Corporation
- BLM: Bureau of Land Management
- BRPC: Brooks Range Petroleum Corporation
- 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 Tekha Investments
- Kuukpik Corp.: Kuukpik 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. Stroeder: William G. Stroeder

2. Colville River Unit Approved Exhibit B

Map of Proposed Expanded Unit Area

Application for 8th Expansion of the Colville River Unit
 April 25, 2018

