

PLACER UNIT

DENIAL OF THE PLACER UNIT EXPANSION APPLICATION

AND

DENIAL OF THE REQUEST TO AMEND THE PLAN OF EXPLORATION

FINDINGS AND DECISION OF THE DIRECTOR

DIVISION OF OIL AND GAS

UNDER DELEGATION OF AUTHORITY FROM THE COMMISSIONER

DEPARTMENT OF NATURAL RESOURCES

STATE OF ALASKA

JANUARY 14, 2013

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

This is the decision of the Alaska Department of Natural Resources, Director of Oil and Gas pursuant to a September 30, 1999 delegation of authority from the DNR Commissioner on the August 17, 2012, application of ASRC Exploration, LLC (AELLC) to expand the Placer Unit (PLU) area and to amend the PLU Plan of Exploration (POE) to defer the drilling obligation. (Application). AELLC is the PLU Operator and sole working interest owner (WIO) of the unit and the expansion areas.

The request to expand the unit and the request to modify the POE are both denied. The expansion of the unit is unnecessary to accomplish the activities set out in the Application, and it does not protect the public interest to grant a six fold expansion of the unit area before AELLC has met the major initial work commitment upon which the Placer Unit approval was based. AELLC's application to form the Placer unit included a firm exploration commitment to re-enter the Placer #1 well, an existing and former ConocoPhillips well in the unit area, or to drill a new well in the unit by June 30, 2013 for the purpose of determining whether sufficient volume of producible hydrocarbons exists in the unit area to warrant commercial development. It is not in the public interest to relieve AELLC of this commitment that would determine whether it was economic to put the unit into development or to expand the unit with no firm commitment to produce or develop the unit.

## **II. UNIT HISTORY.**

On January 10, 2011, AELLC submitted an application to the Department of Natural Resources (DNR) to approve formation of the PLU. In 1997, Arco Alaska shot a 3D seismic survey covering the Placer area and in 2004, ConocoPhillips and partners (AELLC farmed in for a 35 percent working interest in the project) drilled two wells – Placer #1 and Placer #2. Placer #1 found an oil-bearing reservoir in the thin Kuparuk C sand. Although no production test was attempted at the time the Placer #1 well was drilled, the wellbore was suspended rather than plugged and abandoned to preserve the ability to test the well at a later date. Ultimately, after drilling the Placer #2 well, the partnership decided, without testing, that the reservoir discovered in Placer #1 was not economic to develop and the leases were subsequently dropped. AELLC re-acquired the leases in the 2006 lease sale with a five-year primary term. At the time AELLC applied to form the Placer Unit, AELLC had secured ownership of the Placer #1 well bore from ConocoPhillips to maintain the option of testing the original well and were also in the process of acquiring a license to 3D seismic over the area.

AELLC's unit formation application included the following commitments in the initial POE:

1. By December 31, 2011, the Unit Operator will have reprocessed and reinterpreted newly-licensed seismic data set that was shot across the unit acreage.
2. On or before June 30, 2013, the Unit Operator will have drilled and logged a Unit exploratory well or alternatively, will have re-entered and tested the Placer #1 well.
  - a. Log the Unit exploratory well (GR or SP, Resistivity and Neutron/Density or Porosity: appropriate triple combo log); and
  - b. Complete, suspend or abandon the Unit exploratory well or, if the Placer #1 well was re-entered, complete or abandon the previously drilled well.
  - c. If the Unit Operator fails to either drill the first initial Unit exploratory well or fails to reenter and test the Placer #1 well as described in the paragraph by June 30, 2013:
    - i. The Placer Unit will automatically terminate;
    - ii. The WIO shall surrender all such acreage within Lease whose primary terms have expired to the Commissioner, effective the day that the Unit terminates.

In addition to the seismic and drilling commitments, the unit formation application stated that a four-to-seven day production test from the Placer #1 and the newly-drilled well would be required to determine whether the Kuparuk reservoir at Placer has sufficient volume and production to justify development. The unit application also required AELLC to submit either a second POE to follow the initial POE or an Initial Plan of Development (POD) to DNR for approval at least sixty days prior to the expiration of the Initial POE that would respectively provide for unit production or an additional exploration well:

1. Provide a POD for the installation of production facilities, pipelines and future development wells to the Division.
  - a. Submit an application to the Division to form an initial Participating Area within the PLU; or
2. Submit to the Division the second POE for PLU. The second POE shall describe plans for the drilling of a Unit well by June 30, 2014.

The Division approved the PLU on September 8, 2011 but based on the following rationale included only portions of the four leases that AELLC had proposed for inclusion in the unit:

“In considering the lands justified for inclusion within the PLU, the Division reviewed the data available from the Placer wells and nearby offset wells, as well as the performance of existing wells in nearby analogous developments of thin Kuparuk C sand. Based upon this review, it was mutually agreed between the Division and AEL that a reasonable interpretation would support approval of a unit encompassing an area based upon a 3,500 foot drainage radius around the Placer #1 bottom hole location (BHL). See Attachments 1 and 2. The proposed unit would cover only a portion of each of the four leases that AEL proposed to incorporate into the unit and would not include the area

penetrated by the Placer #2 well, which failed to demonstrate a producible reservoir within the Kuparuk.” (Sept. 8, 2011 Unit Approval Decision at 10).

The PLU is located on the North Slope of Alaska, southwest of the Kuparuk River Unit and encompasses portions of four state leases, ADLs 391023, 391024, 391027, and 391028, totaling 1,480 acres in size. The portions of the leases not included in the unit were severed from the portions of the leases included in the unit, given new lease numbers, and granted a two year extension of the primary term to January 31, 2014. The severed leases outside the unit were renumbered as follows: 391023 became 391910, 391024 became 391911, 391027 became 391912, and 391028 became 391913. The severed leases excluded from the unit amounted to 7,288 acres.

On August 17, 2012, AELLC submitted the Application and it was titled: “Placer Unit Request to Expand Unit and to Modify the Plan of Exploration.” The Application requested DNR include ADLs 391910, 391911, 391912, and 391913 or the portions of ADLs 391023, 391024, 391027, and 391028 that were severed on initial unitization, in the unit. If granted, the Application would expand the unit by a factor of 5.9 from 1,480 acres to 8,768 acres in size. The Application also requested an extension of the obligation to reenter the Placer #1 well or to drill a new exploratory well by June 30, 2014.

Exhibit A of AELLC’s Application lists the acreage proposed for expansion as if the leases were proposed for expansion. The PLU expansion is for the lands not committed to the PLU. The leases proposed to be included in the expansion of PLU are summarized in Table 1 below.

***Table 1 – ADLs Proposed for Expansion of PLU***

<b>ADL</b>	<b>Acres</b>	<b>State Royalty Interest %</b>	<b>Lease Effective Date</b>	<b>Working Interest Owners and Percentages</b>	<b>Lease Expiration Date</b>	<b>Legal Description</b>
391910	480	16.66667	2/1/2007	AELLC 100%	1/31/2014	T. 11N., R. 7 E., Umiat Meridian, Alaska Sec 4: NE1/4NE1/4, 40 ac Sec 9: E1/2NE1/4, SW1/4NE1/4, S1/3, 440 ac
391911	1909	16.66667	2/1/2007	AELLC 100%	1/31/2014	T. 11N., R. 7E., Umiat Meridian, Alaska Sec 5: W1/2SW1/4, N1/2NW1/4, SW1/4NW1/4, 200 ac Sec 6: All, 593 ac Sec 7: All, 596 ac Sec 8: SW1/4NE1/4, S1/2, NW1/4, 520 ac
391912	2480	16.66667	2/1/2007	AELLC 100%	1/31/2014	T. 12 N., R. 7 E., Tract A, Umiat Meridian, Alaska Sec 27: All, 640 ac

						Sec 28: All, 640 ac Sec 33: E1/2, N1/2SW1/4, NW1/4, 560 ac Sec 34: All, 640 ac
391913	2419	16.66667	2/1/2007	AELLC 100%	1/31/2014	T. 12 N., R. 7 E., Tract A, Umiat Meridian, Alaska Sec 29: All, 640 ac Sec 30: All, 588 ac Sec 31: All, 591 ac Sec 32: N1/2, N1/2SE1/4, SW1/4SE1/4, SW1/4, 600 ac
<b>TOTAL</b>	7288					

Regarding unit expansion, the application states:

“The interpretation of the sand indicates that the Kuparuk sand at Placer extends well beyond the current unit boundaries. The Full Stack amplitude, Far stack Amplitude, and Poisson’s Ratio inversion are all useful indicators as to the presence of the sand. At least one of these seismic attributes indicates the sand is present in each section of the four Placer leases.” (Application at 2).

“Because the Placer sand is, at best, only marginally large enough to develop, it is critically important that a single pad development be located in the most advantageous location. Moreover, the sand appears to merge with the BRPC Appaloosa prospect to the south. Therefore, it may be prudent to involve BRPC in any Unit expansion discussions and in the locating of the delineation well so that the area from Placer to Mustang can be developed in an optimal manner in order to maximize the economic recovery of these thin sands.” (Application at 2).

“The Far Stack Amplitude display shows evidence that the sand at Placer extends outside the current unit area as well as outside the AELLC leases to the north and to the south. In particular, AELLC’s work shows that the sand extends at least as far south as the BRPC Appaloosa prospect. This recent work shows that drilling within the current unit area may not be optimum. Further work is needed to pick the optimum location.” (Application at 3).

“This is particularly significant in that BRPC recently discovered oil-charged Kuparuk sand at its Mustang prospect, located six miles south of Placer. BRPC is currently working on front end engineering and design (FEED) for a development of that oil. It appears that there may be an opportunity for Placer to be developed as part of the BRPC development.” (Application at 3).

Regarding delay of the drilling deadline, the Application states:

“AELLC requests a one year deferral of the well obligation at Placer in order to further its evaluation of the [P]lacer unit and surrounding area and to work with BRPC on developing the most efficient plan for delineating and developing this area.” (Application at 3).

### **III. STATUTE, REGULATORY, AND UNIT AGREEMENT PROVISIONS RELEVANT TO THE APPLICATION**

The statutory standard for unitization is whether it would be necessary and advisable in the public interest:

“To conserve the natural resources of all or a part of an oil or gas pool, field, or like area, the lessees and their representatives may unite with each other, or jointly or separately with others, in collectively adopting or operating under a cooperative or a unit plan of development or operation of the pool, field, or like area, or a part of it, when determined and certified by the commissioner to be necessary or advisable in the public interest.”

AS 38.05.180(p); (emphasis added). The legislature has also identified several aspects of the public interest with regard to the state oil and gas leasing program:

“(a) The legislature finds that

(1) the people of Alaska have an interest in the development of the state's oil and gas resources to

(A) maximize the economic and physical recovery of the resources;

(B) maximize competition among parties seeking to explore and develop the resources;

(C) maximize use of Alaska's human resources in the development of the resources;

(2) it is in the best interests of the state

(A) to encourage an assessment of its oil and gas resources and to allow the maximum flexibility in the methods of issuing leases to

(i) recognize the many varied geographical regions of the state and the different costs of exploring for oil and gas in these regions;

(ii) minimize the adverse impact of exploration, development, production, and transportation activity; and

(B) to offer acreage for oil and gas leases, specifically including

(i) state acreage that has been the subject of a best interest finding at annual areawide



lease sales; and

(ii) land in areas that, under (d) of this section, may be leased without having been included in the leasing program prepared and submitted under (b) of this section.”

Unitization extends the primary term of a lease. Alaska statute 38.05.180(m) provides in relevant part:

“An oil and gas lease shall be automatically extended if and for so long thereafter as oil or gas is produced in paying quantities from the lease or if the lease is committed to a unit approved by the commissioner, and a gas only lease shall be automatically extended if and for so long thereafter as gas is produced in paying quantities from the lease or if the lease is committed to a unit approved by the commissioner.”

DNR has set forth unitization decision criteria in regulation that retain the public interest as the primary criterion:

**“11 AAC 83.303. Criteria.** (a) The commissioner will approve a proposed unit agreement for state oil and gas leases if he makes a written finding that the agreement is necessary or advisable to protect the public interest considering the provisions of AS 38.05.180 (/p) and this section. The commissioner will approve a proposed unit agreement upon a written 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.

(b) In evaluating the above 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.



(c) The commissioner will consider the criteria in (a) and (b) of this section when evaluating each requested authorization or approval under 11 AAC 83.301 - 11 AAC 83.395, including

- (1) an approval of a unit agreement;
- (2) an extension or amendment of a unit agreement;
- (3) a plan or amendment of a plan of exploration, development or operations;
- (4) a participating area; or
- (5) a proposed or revised production or cost allocation formula.”

The regulations touch on unit expansion to require that a unit include at least part of a potential hydrocarbon reservoir:

**“11 AAC 83.356. Unit area; contraction and expansion**

(a) 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.

(b) 10 years after sustained unit production begins, the unit area must be contracted to include only those lands then included in an approved participating area and lands that facilitate production including the immediately adjacent lands necessary for secondary or tertiary recovery, pressure maintenance, reinjection, or cycling operations. The commissioner will, in the commissioner's discretion, after considering the provisions of 11 AAC 83.303, delay contraction of the unit area if the circumstances of a particular unit warrant. If any portion of a lease is included in the participating area, the portion of the lease outside the participating area will neither be severed nor will it continue to be subject to the terms and conditions of the unit. The portion of the lease outside the participating area will continue in full force and effect so long as production is allocated to the unitized portion of the lease and the lessee satisfies the remaining terms and conditions of the lease.

(c) Any expansion or contraction of the unit area must be based on legal subdivisions of land as defined in 11 AAC 88.185.

(d) No land will be excluded from a unit area due to the depletion of hydrocarbons.

(e) Not sooner than 10 years after the effective date of the unit agreement, the commissioner will, in the commissioner's discretion, contract the unit area to include only that land covered by an approved unit plan of exploration or development, or that area underlain by one or more oil or gas reservoirs or one or more potential hydrocarbon

accumulations and lands that facilitate production as set out in (b) of this section. Before any contraction of the unit area under this subsection, the commissioner will give the unit operator, the working interest owners, and the royalty owners of the leases or portions of leases being excluded reasonable notice and an opportunity to be heard.”

Potential “hydrocarbon reservoir,” “reservoir,” and “unit” are defined by regulation as follows:

**“11 AAC 83.395. Definitions.**

Unless the context clearly requires a different meaning, in 11 AAC 83.301 - 11 AAC 83.395 and in the applicable unit agreements

. . . .

(5) "potential hydrocarbon accumulation" means any structural or stratigraphic entrapping mechanism which has been reasonably defined and delineated through geophysical, geological, or other means and which contains one or more intervals, zones, strata, or formations having the necessary physical characteristics to accumulate and prevent the escape of oil and gas;

(6) "reservoir" means an oil or gas accumulation which has been discovered by drilling and evaluated by testing and which is separate from any other accumulation of oil and gas;

(7) "unit" means a group of leases covering all or part of one or more potential hydrocarbon accumulations, or all or part of one or more adjacent or vertically separate oil or gas reservoirs, which are subject to a unit agreement;”.

**Placer Unit Agreement**

Article 13 of the unit agreement address unit expansion. It states in relevant part:

“13.1. The Unit Operator, at its own election may, or at the direction of the Commissioner shall, apply to expand the Unit Area to include any additional lands determined to overlie a Reservoir that is at least partially within the Unit Area, or to include any additional lands that facilitate production. . . .”

**IV. DISCUSSION OF DECISION CRITERIA**

The primary statutory decision criteria for unitization applications including unit expansion is whether approval is necessary or advisable in the public interest to conserve oil and gas resources. (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 primary regulatory decision criterion for a unitization application is also the public interest. 11 AAC 83.303(a). The Commissioner will approve a proposed expanded unit if he finds that it necessary and advisable in the public interest and unitization 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 the 11 AAC 83.303(a) 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. 11 AAC 83.303(b) Decision Considerations**

This section discusses the 11 AAC 83.303(b) factors that should be considered before applying the decision criteria under 11 AAC 83.303(a).

##### **1. 303(b)(1) - Environmental Costs and Benefits**

Expansion of a unit could have an environmental benefit of potentially increasing the amount of property subject to joint development, and an extension of the drilling deadline would delay drilling operations on the property. But neither expansion of the unit to include additional oil and gas leases nor a one year extension of the POE will generate significant environmental costs or benefits.

The proposed expansion of the unit will not provide a significant joint development benefit. AELLC already owns all of the leases in the unit and the proposed expansion area. Thus AELLC does not need to unitize the property in order to effect joint development.

AELLC must obtain DNR approval of a unit plan and obtain permits from various agencies before drilling a well or wells or initiating development activities to produce reservoirs within the unit area. 11 AAC 83.346. The potential environmental effects of proposed on-the-ground activities are analyzed in the permitting and plan review processes. This includes consideration terms of state oil and gas leases that are designed to protect the environment, should development occur, and to address concerns regarding potential impact to fish and game, wildlife habitats, and subsistence. These conditions address issues such as construction of pipelines, seasonal restriction on operations, public access to, or use of, the leased lands, and avoidance of seismic hazards. Permits have to be obtained before development activity can occur, and they typically set additional conditions designed to protect the environment. Thus, while DNR issued a best interest finding that the leases were appropriate for oil and gas development before they

were offered for bid, AELLC will be required to obtain additional approvals before conducting operations on the leases regardless of whether the properties are unitized. It is the permitting process where measures are taken to mitigate environmental impacts of unit operations.

## 2. 303(b)(2) - Geological and Engineering Characteristics

Some of the information and data AELLC submitted in support of its 2011 application to form the Placer Unit and its 2012 Application to expand the unit and to extend the drilling deadline is accorded confidentiality protection under AS 38.05.035(a)(8)(C) and 11 AAC 96.220. This decision will discuss the non-confidential information.

The September 8, 2011 DNR decision approving the Placer unit, includes a discussion of the geology of the unit area and data previously submitted.<sup>1</sup> AELLC submitted additional confidential data in September 2012 as part of the Application that included re-processed 3D seismic data volumes and results of seismic modeling. The additional data showed that AELLC had reprocessed and reinterpreted newly licensed seismic data and that it conducted seismic modeling of petrophysical and rock physics to attempt to better image the thin Kuparuk C sand in the area.

AELLC's modeling effort may provide some additional confidence of the potential for sand presence, but the Kuparuk C sand in this area is generally below the thickness at which destructive interference between the top and base seismic reflectors occurs. This destructive interference will limit the ability to accurately resolve the thickness and rock properties of the interval. Resolving thin Kuparuk C sand accumulations is also complicated by mineralogy. The common presence of secondary siderite can result in greater uncertainty in the seismic response at any particular location.

AELLC stated in its application to form the unit that, in addition to the seismic work, a four-to-seven day production test of either the Placer #1 well and/or a newly-drilled well would be required to determine whether the reservoir at Placer has sufficient volume to be commercially viable. The need for the test is due to the limits of seismic resolution and the inability to reliably determine the volume and producibility of the accumulation based upon seismic data alone.

Notwithstanding the modeling issues, for purposes of this decision, the unit area in the vicinity of the Placer #1 well is assumed to contain oil bearing Kuparuk sand. The seismic work AELLC submitted with the Application suggests that deposits of Kuparuk sand may also exist in portions of the expansion area, but no conclusive data has been presented that the oil-bearing Kuparuk sands within the unit area are commercially viable or that reservoir-quality, oil-bearing Kuparuk sands extend into the expansion area. Due to the inherent uncertainty of the seismic data and the

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<sup>1</sup> Section IV.A.2-3., of the September 8, 2011, Placer Unit Agreement: Approval of the Application to Form the Placer Unit.

lack of production tests of the existing Placer #1 well or a newly-drilled well, expansion of the PLU beyond the current boundaries is premature and not warranted by the existing geologic and geophysical data.

3. 303(b)(3) – Prior Exploration Activities

AELLC licensed, re-processed, and conducted seismic modeling of petrophysical and rock physics of existing 3D seismic data encompassing the unit and expansion area. AELLC has performed no other exploration work in the unit area.

4. 303(b)(4) - Applicant's Plans for Exploration of the Placer Unit

The two-year Initial POE for the PLU established the work obligation that the WIO committed to in order to induce DNR to approve unit formation. The terms of the Initial POE were:

1. By December 31, 2011, the Unit Operator will have reprocessed and reinterpreted newly-licensed seismic data set that was shot across the unit acreage.
2. On or before June 30, 2013, the Unit Operator will have drilled and logged a Unit exploratory well or alternatively, will have re-entered and tested the Placer #1 well.
  - a. Log the Unit exploratory well (GR or SP, Resistivity and Neutron/Density or Porosity: appropriate triple combo log); and
  - b. Complete, suspend or abandon the Unit exploratory well or, if the Placer #1 well was re-entered, complete or abandon the previously drilled well.
  - c. If the Unit Operator fails to either drill the first initial Unit exploratory well or fails to reenter and test the Placer #1 well as described in the paragraph by June 30, 2013:
    - i. The Placer Unit will automatically terminate;
    - ii. The WIO shall surrender all such acreage within Lease whose primary terms have expired to the Commissioner, effective the day that the Unit terminates.

AELLC's unit application stated that a four-to-seven day production test of either the reentered Placer #1 well or a newly drilled well would be required to determine whether the reservoir at Placer has sufficient volume and production to justify development.

The unit application also required AELLC to submit to the Division a second POE or Initial Plan of Development (POD) at least sixty days prior to the expiration of the Initial POE. Under the second POD or the Initial POD, AELLC shall:

1. Provide a POD for the installation of production facilities, pipelines and future development wells to the Division.



- a. Submit an application to the Division to form an initial Participating Area within the PLU; or
2. Submit to the Division the second POE for PLU. The second POE shall describe plans for the drilling of a Unit well by June 30, 2014.

AELLC fulfilled the seismic reprocessing and reinterpretation requirements.

The Application proposes that the unit be expanded and that the drilling deadline be extended to June 30, 2014 so that AELLC can determine the best placement for the well in the newly expanded unit. No additional unit exploration plans are offered.

5. 303(b)(5) - The Economic Costs and Benefits to the State

DNR has an obligation to protect the public's interest in maximizing economic and physical recovery from the state's oil and gas resources. AS 38.05.180(a)(1)(A). Maximizing economic recovery of hydrocarbons ensures royalty and tax revenues, and increased employment opportunities over the long-term. Realization of these potential benefits requires exploration and development of state oil and gas properties. A deferral of exploration work would presumably delay production for another year; thereby delaying the economic benefits to the state relating to revenues and employment increases. By deferring the well obligation, AELLC delays realization of economic benefits from exploration and development of state resources. Accordingly, deferring AELLC's exploration commitment does not benefit the state economically.

The state is also required to maximize competition among parties in oil and gas development. AS 38.05.180(a)(1)(B). Without firm development proposals, unitization of the expansion area would not enhance competition or effect development. To the contrary, it would automatically extend the primary term of the leases and deprive other potential lessees of the opportunity to develop the property and work to reduce competition.

The AELLC Application does not explain how the unit expansion or lease extension will benefit the state economically or otherwise. AELLC is proposing that the state increase the unit area by 7,288 acres or from 1,480 acres to 8,768 acres a factor of 5.9. Unitization will extend the leases beyond their primary term with no clear benefit to the state contrary to the statutory mandate that the state maximize return and competition.

6. 303(b)(6) - Other Relevant Factors

The purpose of unitization is to effect efficient development of multiple leases overlying a common reservoir. But the Application essentially proposes that DNR relieve AELLC of the work commitments it made to induce DNR to approve the initial unit. And the Application offers no development rationale to support the expansion or the drilling extension.

AELLC requests a one year delay of the June 2013 commitment to drill a well or to renter the Placer #1 well to June 2014. The requested extension will not only delay drilling of the initial well, it will delay by one year the submittal of (1) the second POE now due by May 2, 2013, and the drilling of the second exploration well now due by June 2014, or (2) the first plan of development that would provide for the installation of production facilities, pipelines and future development wells and the initial participating area application to put the unit into production both now due in May 2, 2013. The Application does not propose efficient development. Instead, it significantly delays unit development with no supporting rationale that is consistent with the purpose of unitization being efficient development.

Unitization of the proposed expansion area is not necessary to allow for joint development of the expansion areas and the unit. AELLC is the sole Lessee of all of the unit and the expansion leases. The unit leases are extended by unitization and the expansion leases do not expire until January 31, 2014. AELLC has the ability to jointly develop all of the leases without unitization. AELLC has time to explore and to propose additional meaningful unit development to justify the proposed expansion at a later time.

AELLC argues that expansion should be granted to allow it to join with Brooks Range Petroleum Corporation ("BRPC") in developing the unit, the expansion areas, and BRPC's Mustang project to the south of the unit. But, there is no proposal to expand the unit to include BRPC or its properties in the unit. There is no indication that BRPC has any desire to join AELLC in the Placer unit. Neither the original Placer unit application nor the Application to expand the unit includes any development commitment that would support unitization. The purpose of unitization is not to enable a lessee to hold state oil and gas leases beyond their primary term to allow additional time to conduct exploration activities or to investigate potential joint development. Unitization is intended to allow joint development of reservoirs underlying leases under different ownership. Here there is no development commitment.

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

State regulation provides that the commissioner will approve a modification to a unit agreement or unit plan if he finds that it will promote the conservation of natural resources, that it will prevent economic and physical waste, that it will provide for the protection of all parties in interest including the state, and that it is necessary and advisable in the public interest. 11 AAC 83.303(a). This section addresses those decision criteria.

### **1. 303(a)(1) – Promote the Conservation of all Natural Resources**

Alaska statute authorizes the DNR Commissioner to approve an agreement among multiple lessees that hold separate leases overlying a common reservoir to jointly develop the leases for the purpose of conserving the natural resources of all or a part of an oil or gas pool, field, or like area. AS 38.05.180(p). In this context, "conservation" 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 may work to conserve the reservoir when leases overlying a common reservoir are owned by different parties. Diligent exploration and development under a single approved unit plan without the complications of competing leasehold interests promotes the state’s interest. But in this case, the PLU and the expansion leases have a single lessee, AELLC. Therefore, there are no complicating factors from competing leaseholder interests that prevent AELLC from diligently exploring and developing the PLU and adjoining leases. Without the competing interests of multiple lessees in the proposed unit area, the unit is not necessary. The Application does not propose activities that would be conducted differently under unitization than they would be on an individual lease basis. It is not necessary to expand the unit to effect joint development because as the sole lessee, AELLC already has the power to jointly develop the unit and the expansion leases.

The Application contains no additional work proposals beyond those AELLC offered to induce the state to approve the initial unit. The Application makes no proposal directed at maximizing efficient recovery of the current unit or expansion areas. While a larger unit area should theoretically enable more efficient and less intrusive development, that is not the case here where AELLC does not propose any on-the-ground activities that would maximize the efficient recovery of oil and gas. The only development proposal is to delay the exploration wells AELLC already committed to in the initial unit application. AELLC does not need a unit to drill exploration wells in the unit or the expansion areas.

Neither denial of the proposed unit expansion or drilling extension precludes AELLC from drilling exploration wells in the unit and the expansion areas to obtain data to support a development proposal that would implement efficient recovery of oil and gas resources. AELLC could then propose unit expansion to support that development. But here there is no development proposal and no showing that granting the Application would result in realization of the purpose of the unitization statute.

AELLC’s suggestion that it may be able to jointly develop properties with BRPC does not support the Application. Unitization of the expansion areas is unnecessary to enable AELLC to discuss joint development with BRPC. Since AELLC owns the expansion areas, it can initiate a joint development or enter into an agreement with BRPC to jointly develop their leases and file a unit application.

## 2. 303(a)(2) - Prevention of Economic and Physical Waste

Unitization, as opposed to activity on a lease-by-lease basis, may prevent economic and physical waste by preventing the drilling of wells in excess of the number necessary for the efficient recovery of hydrocarbons or drilling in a manner that results in the improper use of or unnecessary dissipation of reservoir energy. But there is currently no proposal to develop the unit or the expansion areas. The Application simply proposes to increase the unit area by a factor of six and to delay the drilling of the promised exploratory well or reentry of the Placer #1 well. Drilling a single exploratory well or re-entering and testing an existing exploratory well does not constitute a threat of waste by excessive drilling so there is no apparent need to expand the unit to prevent waste. The deferral of the drilling of exploration wells will not prevent waste, and deferral is contrary to efficient development because the activities described in the Initial POE are necessary to determining whether the thin Kuparuk C sands are commercially viable.

Unitization may also prevent waste by eliminating or reducing redundant expenditures for a given level of production, or by avoiding loss of ultimate recovery with the adoption of a unified reservoir management plan. This is not a consideration here where there are no actual or proposed production activities. And denial of the Application now does not prevent unitization when there is a commitment to development.

The Application also states AELLC and BRPC have entered into discussions related to coordinating efforts in delineating the Mustang and Placer accumulations and exploring other prospects in the area (Appaloosa). The Kuparuk sands in the PLU have yet to be determined to be commercial viable. Preliminary discussion between AELLC and BRPC cannot be considered a unified reservoir management plan for the purpose of avoiding loss of ultimate recovery. And unitization is not necessary for AELLC and BRPC to continue discussions.

### 3. 303(a)(3) - Protection of all Parties of Interest, including the State

Unit expansion and extension of the drilling deadline would protect the interests of AELLC by extending the term of the expansion leases and delaying the work and financial commitments AELLC made to obtain the unit. But these actions would not protect the state's interest because it would delay development.

State oil and gas leases are issued for a fix term of five to ten years after which they come back to the state to be reoffered for bid unless they are in production or certain other limited conditions extend the lease term. Unitization is one of the conditions that allow a lessee to hold a lease beyond its primary term. AS 38.05.180(m). But the purpose of unitization is to effect efficient production and to minimize adverse impacts of oil and gas development. 11 AAC 83.395(1). The initial PLU POE commits to limited exploration in the form of a single exploration well. While exploration can be done after a lease is committed to a unit, lease exploration is more properly an activity that should occur during the primary term of a lease.

Unitization is primarily intended to enable multiple lessees to develop a common reservoir underlying their leases that was discovered during the primary term of the lease.

The initial PLU plan is a POE that is a marginal justification for unitization because it does not address the primary purposes of unitization. The POE commits only to limited exploration in the form of one exploration well or to reentry of the Placer #1 well. It does not commit to any development activities. The Placer unit agreement does not bind multiple lessees to a common development plan and there were no development commitments to support formation of the unit.<sup>2</sup> Expanding the unit in the absence of a development commitment and before AELLC has met the obligations in the Initial POE it made does not protect the state interest.

#### 4. 303(a) – Necessary and Advisable in the Public Interest

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 and in maximizing competition to develop state resources. AS 38.05.180(a). There has been no showing that delaying the work commitments AELLC has already made would work to maximize economic or physical recovery from the unit or that delay would enhance competition. Increasing the unit area will increase the amount of state oil and gas properties that have primary terms extended by unitization. Committing more property to the unit and delaying drilling commitments extends the period of time AELLC can keep the leases from being reoffered without development or production. This would not maximize production or enhance competition. The Application does not promote the public interest.

## V. FINDINGS AND DECISION

### 1. Findings

1. Unit expansion will not minimize the adverse impacts of development because the scope of the work commitments remain the same as AELLC committed to in the original application to form the unit – the initial POE development commitment remains one Unit exploration well or redrilling the Placer #1 well.
2. The Application does not maximize development of state resources as one exploration well and no production or development is proposed.
3. Exploration may be a component of unit activity but the primary purpose of unitization is development of reserves proven during the primary term of a lease.
4. AELLC does not propose any on-the-ground activities that would maximize the efficient recovery of oil and gas recovery when conducted on unitized land any more than if the four non-unitized leases are included in the PLU.

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<sup>2</sup> The POE does state that AELLC has the option of proposing further exploration or unit development when the initial POE expires, but this is not a firm development commitment justifying unitization.

5. AELLC submitted an annual report which included confidential re-processed 3D seismic data volumes and results of seismic modeling of Kuparuk interval of interest, but this work does not show that the Kuparuk sand is commercially viable, and it does not fully satisfy the Initial POE work commitments.
6. The Application does not show how expansion of the PLU would eliminate redundant expenditures when the scope and the commercial viability of the prospect has not been sufficiently delineated and confirmed to induce AELLC to commit to production.
7. The Application is silent on how it would prevent physical waste through proper and efficient management of reservoir energy.
8. AELLC is the sole lessee of the unit and the expansion areas, and unit expansion is not necessary to protect multiple lessees overlying a common reservoir.
9. The only interest that would be protected through grant of the Application is AELLC's interest in continuing to retain the unit leases beyond their primary term without meeting the work commitments it made to induce DNR to approve formation of the unit.
10. DNR extended the term of the expansion leases when it severed them from the portion of the leases to be included in the unit on unit formation, and AELLC has time to conduct activities on those leases and formulate a proposal that could justify unitization.
11. Granting the Application would not protect the State's interest in developing the State's oil and gas resources to maximize the economic and physical recovery.

## **2. Decision**

It is not necessary or advisable in the public interest to grant the Application. The Application does not further the purposes of unitization or the public interest in oil and gas leasing. Expansion of the unit and delay of the work commitments protects AELLC's interest, but not the state's interest. It is inappropriate to relieve AELLC of the commitments it made to induce the state to approve formation of the unit. The unit should not be expanded before AELLC has met those commitments. AELLC has time to meet the commitments it made to the state in its application to form the unit, to determine commercial viability of the reservoir, to commit to production, and then apply for unit expansion before the expansion leases expire or to begin development operations that would extend the term of the leases. Unitization is not necessary for AELLC to develop the expansion areas. The purpose of unitization is to effect efficient development and production of state leases that are owned by multiple lessees and not to indefinitely hold state leases beyond their primary term in return for the promise to drill one exploratory well.

The Application to Expand the Placer Unit and To Modify the Plan of Exploration to delay drilling of the initial exploration well is denied because it is unnecessary to accomplish the

activities set out in the Application and it does not serve to protect the public interest. AELLC agreed to drill and log a Unit exploratory well or re-enter, complete, and abandon the Placer #1 well by June 30, 2013. The Application is denied.

Failure to comply with any of the terms of an approved unit agreement, including any plans of explorations, development, or operations which are a part of the unit agreement, is a default under the unit agreement. 11 AAC 83.374(a). In the event of a default under 11 AAC 83.374(a), the defaulting party will receive notice of the default and a demand to cure by a specific date in accordance with 11 AAC 83.374(b).

A person affected by this decision may appeal it, in accordance with 11 AAC 02.010 through 11 AAC 02.900. 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 Daniel S. Sullivan, Commissioner, DNR, 550 W. 7<sup>th</sup> Avenue, Suite 1400, Anchorage, Alaska 99501; faxed to (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 02.010 through 11 AAC 02.900 before appealing this decision to Superior Court. A copy of 11 AAC 02.010 through 11 AAC 02.900 may be obtained from any regional information office of the Department of Natural Resources.



W.C. Barron  
Director  
Division of Oil and Gas

1/14/13  
Date

#### ATTACHMENTS

- 1) Placer Unit - Request to Expand Unit Area and Modify the Plan of Exploration (August 20, 2012)
- 2) Placer Unit, Request to Expand Unit and to Modify the Plan of Exploration: Amended Exhibits A and B (September 24, 2012)

## **ATTACHMENT ONE**

Placer Unit - Request to Expand Unit Area and Modify the Plan of Exploration (August 20, 2012)



# ASRC EXPLORATION LLC

An ASRC Company 

August 20, 2012

Mr. Daniel S. Sullivan, Commissioner  
Alaska Department of Natural Resources  
550 W. 7<sup>th</sup> Ave., Suite 1400  
Anchorage, AK 99501-3557

**RECEIVED**

AUG 17 2012

**DIVISION OF  
OIL AND GAS**

**Subject: Placer Unit—Request to Expand Unit Area and Modify the Plan of Exploration**

Dear Commissioner Sullivan:

ASRC Exploration, LLC (ASRC), as Operator and 100% working interest owner of the Placer Unit, hereby petitions the Department of Natural Resources (the "Department") to approve expansion of the Placer unit area and modification of the Placer unit plan of exploration.

A copy of this request including the supporting exhibits and confidential materials that support the request has been provided to Director William Barron at the Division of Oil and Gas.

ASRC firmly believes that this application meets the statutory and regulatory requirements for unit expansion and modification of the unit plan of exploration and that your approval of the requests is in the state's best interest.

If you have any questions or require additional information, please contact me at the letterhead address and phone number above.

Sincerely,



Teresa Imm  
President

Cc: **Patricia Bettis**

Enclosures



**PLACER UNIT  
REQUEST TO EXPAND UNIT AND  
TO MODIFY THE PLAN OF EXPLORATION**

**Submitted by**

**ASRC Exploration LLC**

**August 20, 2012**

In accordance with 11 AAC 83.303, .341 and .356, ASRC Exploration LLC (AELLC) requests that the Placer Unit area be expanded and the current plan of exploration be modified. Support for these requests is included below and in the attached documents as well as in the 2012 Placer unit annual report submitted concurrently with these requests.

### **Request to Expand the Placer Unit**

The interpretation of the sand indicates that the Kuparuk sand at Placer extends well beyond the current unit boundaries. The Full Stack amplitude, Far stack Amplitude, and Poisson's Ration inversion are all useful indicators as to the presence of sand. At least one of these seismic attributes indicates the sand is present in each section of the four Placer Leases. Based on the modeling and analysis of the re-processed seismic data, AELLC requests that the Placer Unit be expanded to include all of the acreage in the following leases:

ADL 391023

ADL 391024

ADL 391027

ADL 391028

AELLC owns 100% of the working interest in these leases. Portions of each lease are already committed to the Placer Unit. A revised Exhibit A and Exhibit B are included in this submittal. AELLC has already signed the unit agreement and unit operating agreement.

Because the Placer sand is, at best, only marginally large enough to develop, it is critically important that a single pad development be located in the most advantageous location. Moreover, the sand appears to merge with the BRPC Appaloosa prospect to the south. Therefore, it may be prudent to involve BRPC in any Unit expansion discussions and in the locating of the delineation well so that the area from Placer to Mustang can be developed in an optimal manner in order to maximize the economic recovery of these thin sands.

### **Request to Modify the Exploration Program**

The Far Stack Amplitude display shows evidence that the sand at Placer extends outside the current unit area as well as outside the AELLC leases to the north and to the south. In particular, AELLC's work shows that the sand extends at least as far south as the BRPC Appaloosa prospect. This recent work shows that drilling within the current unit area may not be optimum. Further work is needed to pick an optimum location.

This is particularly significant in that BRPC recently discovered oil-charged Kuparuk sand at its Mustang prospect, located six miles south of Placer. BRPC is currently working on front end engineering and design (FEED) for a development of that oil. It appears that there may be an opportunity for Placer to be developed as part of the BRPC development.

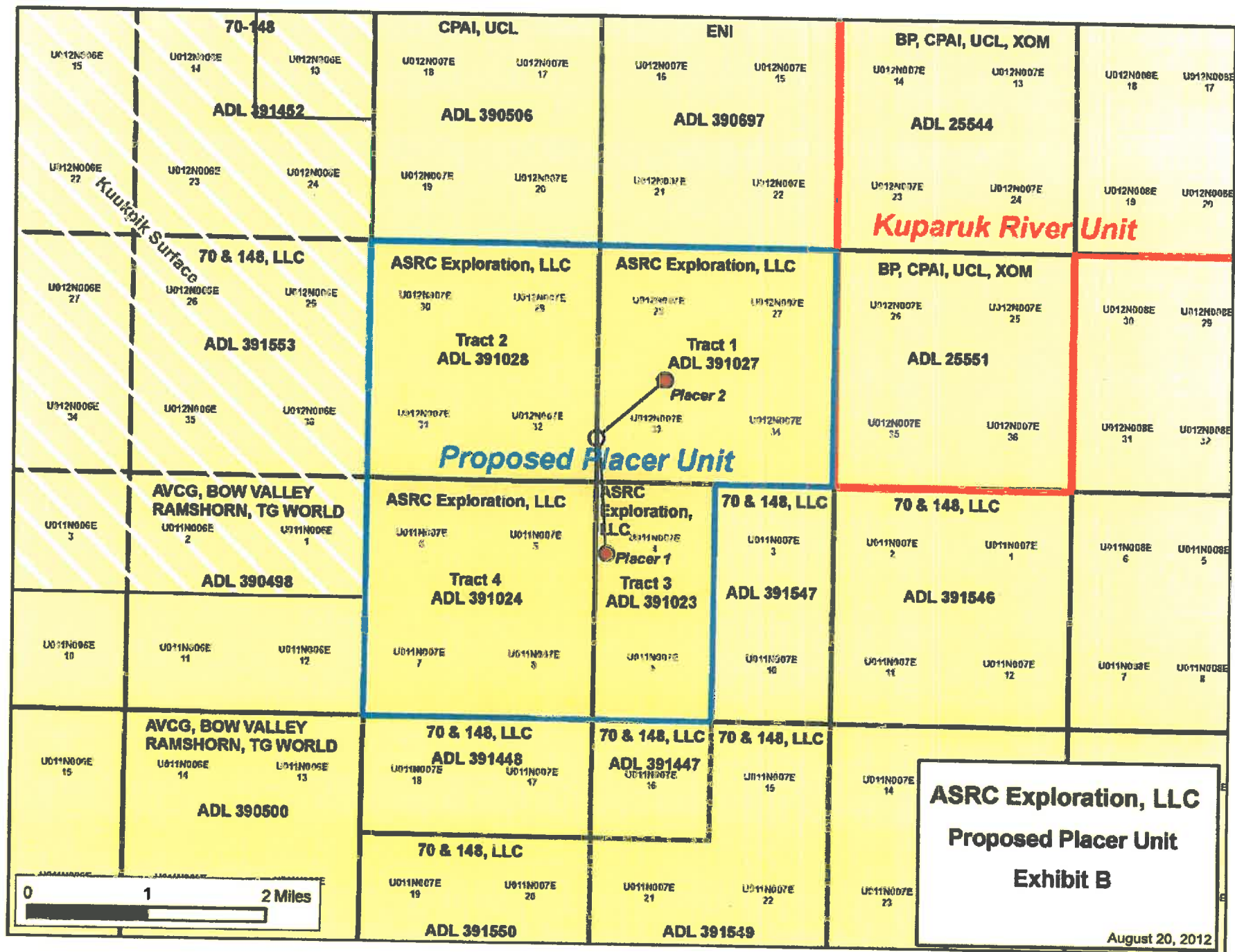
AELLC believes that it is clearly in the best interest of the State of Alaska for AELLC and BRPC to work together and determine how best to position delineation wells so that the region from Placer to Mustang can be developed efficiently. The two companies are currently working toward that goal.

AELLC requests a one year deferral of the well obligation at Placer in order to further its evaluation of the placer unit and surrounding area and to work with BRPC on developing the most efficient plan for delineating and developing this area.

-END-

**EXHIBIT A**  
**PLACER UNIT—REVISED AUGUST 2012**

Tract #	Legal Description	Lease #	Acreage	Royalty Owner & Percentage	Working Interest Owners	WIO Percentage	Overriding Royalty Interests	ORRI Percentage
1	T. 12 N., R. 7 E., TRACT A, UMIAT MERIDIAN, ALASKA.  SECTION 27, UNSURVEYED, ALL, 640.00 ACRES; SECTION 28, UNSURVEYED, ALL, 640.00 ACRES; SECTION 33, UNSURVEYED, ALL, 640.00 ACRES; SECTION 34, UNSURVEYED, ALL, 640.00 ACRES; THIS TRACT (NS2006-1159) CONTAINS 2,560.00 ACRES, MORE OR LESS.	ADL - 391027	2560	State of Alaska 16.666670%	ASRC Exploration LLC	100.00%	N/A	
2	T. 12 N., R. 7 E., TRACT A, UMIAT MERIDIAN, ALASKA.  SECTION 29, UNSURVEYED, ALL, 640.00 ACRES; SECTION 30, UNSURVEYED, ALL, 588.00 ACRES; SECTION 31, UNSURVEYED, ALL, 591.00 ACRES; SECTION 32, UNSURVEYED, ALL, 640.00 ACRES; THIS TRACT (NS2006-1160) CONTAINS 2,459.00 ACRES, MORE OR LESS.	ADL - 391028	2459	State of Alaska 16.666670%	ASRC Exploration LLC	100.00%	N/A	
3	T. 11 N., R. 7 E., UMIAT MERIDIAN, ALASKA.  SECTION 4, UNSURVEYED, ALL, 640.00 ACRES; SECTION 9, UNSURVEYED, ALL, 640.00 ACRES; THIS TRACT (NS2006-1056) CONTAINS 1,280.00 ACRES, MORE OR LESS.	ADL - 391023	1280	State of Alaska 16.666670%	ASRC Exploration LLC	100.00%	N/A	
4	T. 11 N., R. 7 E., UMIAT MERIDIAN, ALASKA.  SECTION 5, UNSURVEYED, ALL, 640.00 ACRES; SECTION 6, UNSURVEYED, ALL, 593.00 ACRES; SECTION 7, UNSURVEYED, ALL, 596.00 ACRES; SECTION 8, UNSURVEYED, ALL, 640.00 ACRES; THIS TRACT (NS2006-1057) CONTAINS 2,469.00 ACRES, MORE OR LESS.	ADL - 391024	2469	State of Alaska 16.666670%	ASRC Exploration LLC	100.00%	N/A	
<b>TOTALS</b>			<b>8,768.00</b>	<b>acres</b>	<b>ASRC Exploration LLC</b>	<b>100.00%</b>		



## **ATTACHMENT TWO**

Placer Unit, Request to Expand Unit and to Modify the Plan of Exploration: Amended Exhibits A and B (September 24, 2012)

# ASRC EXPLORATION LLC

An ASRC Company

September 24, 2012

CERTIFIED MAIL  
RETURN RECEIPT REQUESTED

Alaska Division of Oil and Gas  
Attn: Ms. Patricia Bettis  
550 W. 7<sup>th</sup> Ave., Suite 1100  
Anchorage, AK 99501-3560

RE: Placer Unit – Data Submittal  
Application for the Placer Unit Expansion

Dear Ms. Bettis;

In your letter dated September 10, 2012, the Division of Oil and Gas has requested additional data to support our request of August 24, 2012 for the Placer Unit expansion. The letter stated that our application was incomplete under 11 AAC 83.306.

Attached and enclosed are the additional information, including all the pertinent geophysical data which is the foundation of the Application for expansion of the Placer Unit as required under 11 AAC 83.306(4) as listed in Attachment A of your letter (attached). Enclosed are nine (9) CD's containing the volumes requested in Attachment A. Please note that we are also including a copy of the Poisson's Ration volume although it was not specifically requested.

Also attached are revised Exhibits A and B reflecting the affected leases for the Placer Unit expansion. I will also e-mail to you copies of Exhibits A and B for your files.

Please let me know if you have any additional data needs or questions in order to process our Application for the Placer Unit expansion.

Sincerely,



Teresa Imm, President

Cc: Exhibits A and B  
Nine (9) CD's with geophysical data and loading sheets – Confidential

3900 C STREET • SUITE 1000 • ANCHORAGE ALASKA • 99503 • (907) 339-6014 • FAX (907) 339-6028

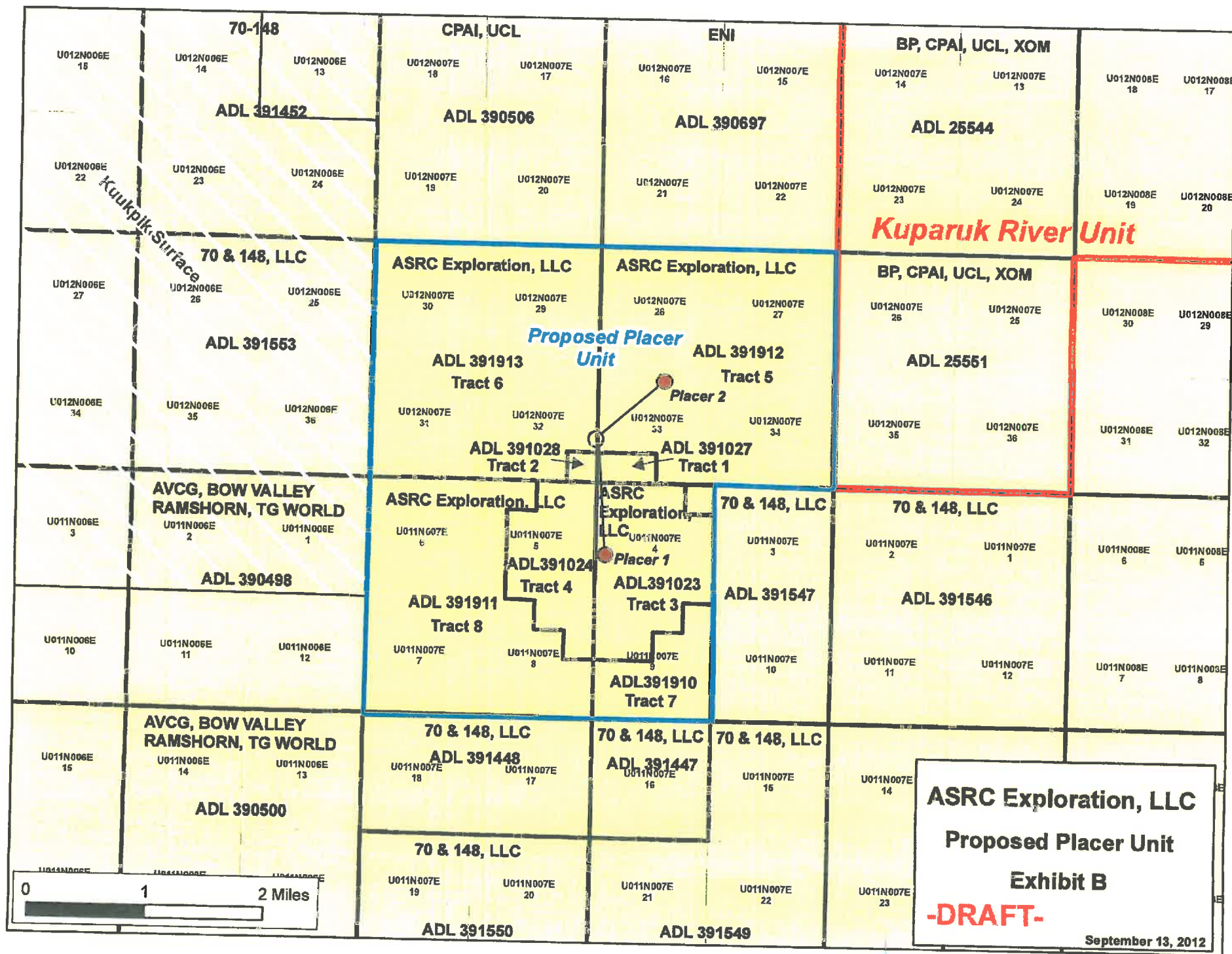
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*Data  
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EXHIBIT A  
PLACER UNIT

Tract #	Legal Description	Lease #	Acreage	Royalty Owner & Percentage	Working Interest Owners	WIO Percentage	Overriding Royalty Interests	ORRI Percentage
1	T. 12 N., R. 7 E., UMIAT MERIDIAN, ALASKA.  SECTION 33, UNSURVEYED, S1/2 SW1/4 80.00 ACRES; THIS TRACT (NS2006-1159) CONTAINS 80.00 ACRES, MORE OR LESS.	ADL - 391027	80	State of Alaska 16.666670%	ASRC Exploration LLC	100.00%	N/A	
2	T. 12 N., R. 7 E., UMIAT MERIDIAN, ALASKA.  SECTION 32, UNSURVEYED, SE1/4 SE1/4, 40.00 ACRES; THIS TRACT (NS2006-1160) CONTAINS 40.00 ACRES, MORE OR LESS.	ADL - 391028	40	State of Alaska 16.666670%	ASRC Exploration LLC	100.00%	N/A	
3	T. 11 N., R. 7 E., UMIAT MERIDIAN, ALASKA.  SECTION 4, UNSURVEYED, W1/2, SE1/4, S1/2 NE1/4, NW1/4 NE1/4, 600.00 ACRES; SECTION 8, UNSURVEYED, NW1/4, NW1/4 NE1/4, 200.00 ACRES; THIS TRACT (NS2006-1058) CONTAINS 300.00 ACRES, MORE OR LESS.	ADL - 391023	800	State of Alaska 16.666670%	ASRC Exploration LLC	100.00%	N/A	
4	T. 11 N., R. 7 E., UMIAT MERIDIAN, ALASKA.  SECTION 5, UNSURVEYED, E1/2, E1/2 SW1/4, SE1/4 NW1/4, 440.00 ACRES; SECTION 8, UNSURVEYED, N1/2 NE1/4, SE1/4 NE1/4, 120.00 ACRES; THIS TRACT (NS2006-1057) CONTAINS 560.00 ACRES, MORE OR LESS.	ADL - 391024	560	State of Alaska 16.666670%	ASRC Exploration LLC	100.00%	N/A	
5	T. 12 N., R. 7 E., UMIAT MERIDIAN, ALASKA.  SECTION 27, UNSURVEYED, ALL, 640.00 ACRES; SECTION 28, UNSURVEYED, ALL, 640.00 ACRES; SECTION 33, UNSURVEYED, N1/2, N1/2 SW1/4, SE1/4, 560.00 ACRES; SECTION 34, UNSURVEYED, ALL, 640.00 ACRES; THIS TRACT (NS2006-1159) CONTAINS 2,480.00 ACRES, MORE OR LESS.	ADL - 391912	2480	State of Alaska 16.666670%	ASRC Exploration LLC	100.00%	N/A	
6	T. 12 N., R. 7 E., UMIAT MERIDIAN, ALASKA.  SECTION 28, UNSURVEYED, ALL, 640.00 ACRES; SECTION 30, UNSURVEYED, ALL, 563.00 ACRES; SECTION 31, UNSURVEYED, ALL, 591.00 ACRES; SECTION 32, UNSURVEYED, N1/2, N1/2 SE1/4, SW1/4 SE1/4, 600.00 ACRES; THIS TRACT (NS2006-1160) CONTAINS 2,419.00 ACRES, MORE OR LESS.	ADL - 391913	2419	State of Alaska 16.666670%	ASRC Exploration LLC	100.00%	N/A	
7	T. 11 N., R. 7 E., UMIAT MERIDIAN, ALASKA.  SECTION 4, UNSURVEYED, NE1/4 NE1/4, 40.00 ACRES; SECTION 8, UNSURVEYED, S1/2, S1/2 NE1/4, NE1/4 NE1/4, 440.00 ACRES; THIS TRACT (NS2006-1056) CONTAINS 480.00 ACRES, MORE OR LESS.	ADL - 391910	480	State of Alaska 16.666670%	ASRC Exploration LLC	100.00%	N/A	
8	T. 11 N., R. 7 E., UMIAT MERIDIAN, ALASKA.  SECTION 5, UNSURVEYED, E1/2 SW1/4, E1/2 NW1/4, NE1/4 NW1/4 200.00 ACRES; SECTION 6, UNSURVEYED, ALL, 593.00 ACRES; SECTION 7, UNSURVEYED, ALL, 586.00 ACRES; SECTION 8, UNSURVEYED, E1/2, SW1/4, SW1/4 NE1/4, 520.00 ACRES; THIS TRACT (NS2006-1057) CONTAINS 1809.00 ACRES, MORE OR LESS.	ADL - 391911	1909	State of Alaska 16.666670%	ASRC Exploration LLC	100.00%	N/A	
TOTAL ACRES			8768					



**ASRC Exploration, LLC**  
**Proposed Placer Unit**  
**Exhibit B**  
**-DRAFT-**  
September 13, 2012