



3900 C Street, Ste. 1000 | Anchorage, Alaska 99503

February 28, 2019

Mr. Jim Beckham, Deputy Director  
Alaska Department of Natural Resources  
Division of Oil and Gas  
550 W. 7th. Avenue, Suite 1100  
Anchorage, AK 99501

RECEIVED

FEB 28 2019

DIVISION OF  
OIL AND GAS

**Subject: 1st Amendment to Placer Unit's 3<sup>rd</sup> POD**

Dear Mr. Beckham,

In accordance with 11 AAC 83.341(d) and 11 AAC 83.343 and pursuant to the terms of Article 8 of the Placer Unit Agreement (PLU), ASRC Exploration, LLC (AEX), as Operator and as the only working interest owner of the Placer Unit, hereby petitions the Department of Natural Resources, Division of Oil & Gas (the "Division") to approve the 1<sup>st</sup> Amendment to the Placer Unit 3<sup>rd</sup> Plan of Development(3<sup>rd</sup> POD) for the Placer Unit.

The Division conditionally approved the 2018 3<sup>rd</sup> POD on September 7<sup>th</sup>, 2018 for a period of less than nine months. On September 28, 2018 AEX submitted an appeal to the DNR Commissioner regarding the Placer Unit 3<sup>rd</sup> Plan of Development Approval Letter. In that appeal, as remedy, AEX requested approval of the Placer 3<sup>rd</sup> POD for a period of one full year.

On February 25, 2019 Commissioner Fiege recommended that in lieu of the submission of the 4<sup>th</sup> POD on March 2, 2019, AEX amend the 3<sup>rd</sup> POD. AEX proposes the following amendment to the 3<sup>rd</sup> approved POD and request the Division to approve:

- The proposed long term test of Placer #3.
- Extending the approval period of the 3<sup>rd</sup> POD to one year ending on September 8, 2019.
- The proposed 2019 summer field studies required for development.

As per the conditional approval of the Placer Unit 3<sup>rd</sup> Plan of Development, AEX submitted a Progress Report on January 31, 2019. This report included information related to the proposed winter operations. In retrospect, the Progress Report could have been submitted as an amendment to the approved 3<sup>rd</sup> POD. AEX assumed that since 'reentering the Placer #3 well for a bottom-hole pressure test' was required by the Division in its approval of the 3<sup>rd</sup> POD that the 3<sup>rd</sup> POD was automatically amended to perform this 'on the ground' activity.



AEX is currently waiting on the Division to approve the amended Plan of Operations (POO) submitted on January 8, 2019. Based on the 30 day approval period we anticipated the POO approval by February 7, 2019 in order to commence our operations in a timely manner. To date, AEX has received all other permits necessary to conduct the testing operations with the exception of the ADEC MG-2 permit (which can be authorized in 1-day) and the USFWS Polar Bear LOA (which may not be required). AEX has been communicating with the Division throughout the permitting process and were told that the amended POO was complete and awaiting final approval.

It now appears that the Division has been with-holding its approval of our amended POO until AEX provide an amendment to the 3<sup>rd</sup> POD, instead of approving the amended POO and requesting the amendment to the 3<sup>rd</sup> POD simultaneously to the POO approval. Without an approved POO, AEX cannot go ahead with its Placer #3 testing operation this winter.

Attached is the 1st Amendment to the 3<sup>rd</sup> POD that describes the purpose and procedure for the Placer #3 test and proposed 2019 summer field activity.

If you have any questions or require additional information, please contact me at (907) 339-6014 or [timm@asrc.com](mailto:timm@asrc.com).

Sincerely,

A handwritten signature in black ink that reads "Teresa Imm". The signature is fluid and cursive, with a prominent loop at the end.

Teresa Imm - President  
ASRC Exploration, LLC

Cc: Corri Fiege, Commissioner, Alaska Department of Natural Resources  
Mr. Ken Diemer, State Petroleum Land Manager

Enclosures: 1<sup>st</sup> Amendment to the Placer Unit 3<sup>rd</sup> Plan of Development  
Supplement to the 1<sup>st</sup> Amendment to the Placer Unit 3<sup>rd</sup> POD





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## **1st Amendment to the Placer Unit 3<sup>rd</sup> Plan of Development for the period of September 9, 2018 through September 8, 2019**

ASRC Exploration, LLC. (AEX) proposes the 1st Amendment to the 3<sup>rd</sup> Plan of Development for the Placer Unit (3<sup>rd</sup> POD) to facilitate bringing the Placer Unit into production per 11 ACC 83.343.

The proposed 1<sup>st</sup> Amendment are for operations in addition to the activities included in the approved 3<sup>rd</sup> POD. The 1<sup>st</sup> Amendment to the 3<sup>rd</sup> POD for the Placer Unit for the period September 9, 2018 through September 8, 2019 includes added operations and activities as follows:

- a. AEX had originally proposed in the 3<sup>rd</sup> approved POD submitted on August 17<sup>th</sup>, 2018 to reenter the Placer #3 well for the purpose of testing the bottom-hole pressure response. AEX proposes to amend this operation to conduct an extended flow test on the Placer #3 well. Details regarding this operation are included in the attached supplement.
- b. AEX will start its development project permitting process for bringing the Placer Unit into production. AEX expects first oil from Placer Unit in 2022. Summer studies are necessary during 2019 to meet the permitting timeline for production in 2022. AEX plans to have a pre-application meeting with the Corps of Engineers (COE) in May 2019 regarding the development of the Placer Unit. This meeting with the COE is necessary to identify and assure that all required data is gathered during the 2019 summer field season.
- c. AEX is requesting extension of the 3<sup>rd</sup> POD to September 8, 2019 for completion and analysis of the proposed flow test from Placer #3. AEX is progressing the development of the Placer Unit through initiation of the development permitting starting in Fall of 2019. AEX will schedule a pre-application meeting with the US Corps of Engineers to identify all data and permits required for development. The extension will allow for the necessary time for the completion of summer field operations and activities necessary to move toward development and production from the Placer Unit in 2022.

-End

## Supplement to the 1<sup>st</sup> Amendment to the 3<sup>rd</sup> Placer Unit POD for the period of September 9, 2018 to September 8, 2019

### Re-entering Placer #3 well:

AEX submitted its amended 3<sup>rd</sup> POD on August 17<sup>th</sup> which was conditionally approved by the Department of Natural Resources (DNR) on September 7, 2018. As part of its conditional approval, AEX is submitting the following update to re-enter the Placer #3 well (“the well”) this winter.

AEX had originally proposed in the amended 3<sup>rd</sup> POD to re-enter the well for the purpose of testing the bottom-hole pressure response. Additionally, AEX now plans to perform an 18 - 20 day extended flow test to acquire data to better estimate the Kuparuk “C” (Kup C) sands reservoir boundaries, which will assist in field development plans. In 2016, AEX performed a well test with an initial flow and shut-in period for 2 days followed by a 5-day flow period and a 5-day shut-in period. Pressure Transient Analysis from this test showed that previously anticipated faults and reservoir boundary were not observed during the test. For sanction of the field development it is necessary for AEX to perform a longer drawdown test to estimate the reservoir boundaries. AEX has been working diligently to have all the required permits, service contractors and operating agreements ready and in-place prior to the testing. These efforts are highlighted below.

### Well Testing

Currently AEX plans to conduct a long term well test. It is planned for the test to occur starting no later than March 24<sup>th</sup> to complete the test before the end of the ice road season. That requires commencement of ice road construction by March 1<sup>st</sup>.

ASRC Exploration LLC plans to conduct a well testing program at Placer #3 well with a PTS Well Test Kit from a 300 foot (ft) x 300 ft ice pad during the winter drilling season on State of Alaska oil and gas leases within the Placer Unit. The Placer #3 is an existing well located approximately 8 miles NW of the Mustang Pad. The Placer #3 well is located in Section 31 of Township 12 North, Range 7 East, Umiat Meridian. AEX is in conversations with Oil Search Alaska (OSA) to access the Placer #3 well location via an OSA approved ice road (LAS 28269 and LONS 18-003 ). The OSA ice road begins at the Mustang Pad access road and has been constructed to access the Pikka C well site. AEX will construct a 2 mile ice road (4 miles if alternate route is used) from the OSA Pikka C access road to the Placer #3 well site within the Placer Unit. To access Placer #3 an ice-bridge crossing of the Miluveach River will be required. All AEX crews will utilize the Brooks Range Petroleum Corporation (BRPC) camp facilities planned for the Mustang Pad for the winter 2018/19. Produced fluids will be



separated onsite, with oil and water trucked to the BRPC Mustang pad. The oil will be sold to BRPC and the water will be disposed by BRPC. Gas will be flared at the Placer #3 well pad site. When concluded, the well will be suspended per Alaska Oil & Gas Conservation Commission (AOGCC) requirements. Any drilling and completion fluids used during operations will be transported to a Class II designated disposal facility on the North Slope.

The test design is as follows:

Stage 1: Flow Well to Cleanup, produce back completion fluid. Estimated time 24 hours – at most 1000 BOPD for one day

Stage 2: Shut-in for 12-24 hours to acquire a static bottom-hole pressure response

Stage 3: Flow test well for an anticipated period of 18-20 days at possibly 500-700 BOPD

Stage 4: Shut-in well for 5 days for pressure build-up analysis.

Maximum anticipated flaring on any day is expected to be 0.8 MMscf, but should average 0.5 MMscf/d with a total expected flare volume not to exceed 12 MMscf over the 18- 20 day test. To allow for future reservoir pressure monitoring, upon suspension, AEX will move the PXN plug currently set at 5,981' MD to 2,111' MD, allowing the downhole pressure gauges to be in communication with the reservoir. AEX's sundry application to flare and re-suspend the well as shown in Figure 1 has been approved by the AOGCC.

## Procedure

The procedure of the testing operation is as follows:

1. Build Ice Road spur and Ice Pad from milepost 11.9 of the Oil Search Northern Ice Road (Figure 2).
2. Move equipment to Placer #3 location
  - Hot oil Truck
  - Slickline Unit
  - FMC lubricator for Back Pressure Valve removal.
3. Install and Pressure Test Surface equipment to 3,500psi for 10 minutes with Hot Oil Truck
4. Check for pressure build-up before pulling BPV. Monitor Annulus pressure during this operation.
5. Hook up Schlumberger pressure recorder to I-wire.
6. RIH with Slickline and pull PXN Prong from Plug at 5,891' MD and POOH.
7. RIH and Pull PXN Plug at 5,891' MD
8. Observe static pressure from GLM until pressure reaches stabilized pressure
9. Create the two separate containment areas, one for tanks and one for testing equipment. Each area shall have the herculite, rig mats for the containment size and berm walls as agreed to meet regulation.

10. Spot six (6) 400 bbl. upright tanks in tank farm berm using winch truck and crane.
11. Install tank manifolds in tank farm.
12. Place rig mats for flare, spot flare and flare anchor's in position, Install igniter and cables on flare
13. RU piping in equipment and tank farm containment areas, and line to flare.
14. Rig up to Wellhead and install the SSV inline.
15. Rig up data package transducers, gauges pressure pilots on lines and vessels, and perform air pressure test.
16. Rig up safety system polyflo hose to pressure pilots and SSV, and ground/bond all equipment.
17. Shut choke and slowly pressure up to 500 psi and hold for 2 minutes. Increase Pressures slowly to 1500 and hold for 5 minutes. Pressure up slowly to 3500 psi and hold for 10 minutes.
18. Open choke and relieve pressure to tanks.
19. Shut tank manifold and pressure up slowly to 300 psi and hold for 5 minutes. Slowly pressure up to 1000 psi and hold for 10 minutes. Open tank manifold and relieve to tank #1.
20. Conduct 18-20 day Well Test
21. Bullhead in 10.8 ppg kill weight brine and freeze protect the tubing with diesel to 1,300'.
22. RIH and set PNX Plug in XN at 2,111' MD
23. RIH and set PNX prong in plug at 2,111' MD
24. Test Tubing to 3,500 psi for 30 minutes.
25. Install BPV in tubing hanger and test to 3,500 psi for 30 minutes.
26. Rig down and move out.
27. Wrap tree with black plastic liner and reinstall well placard.



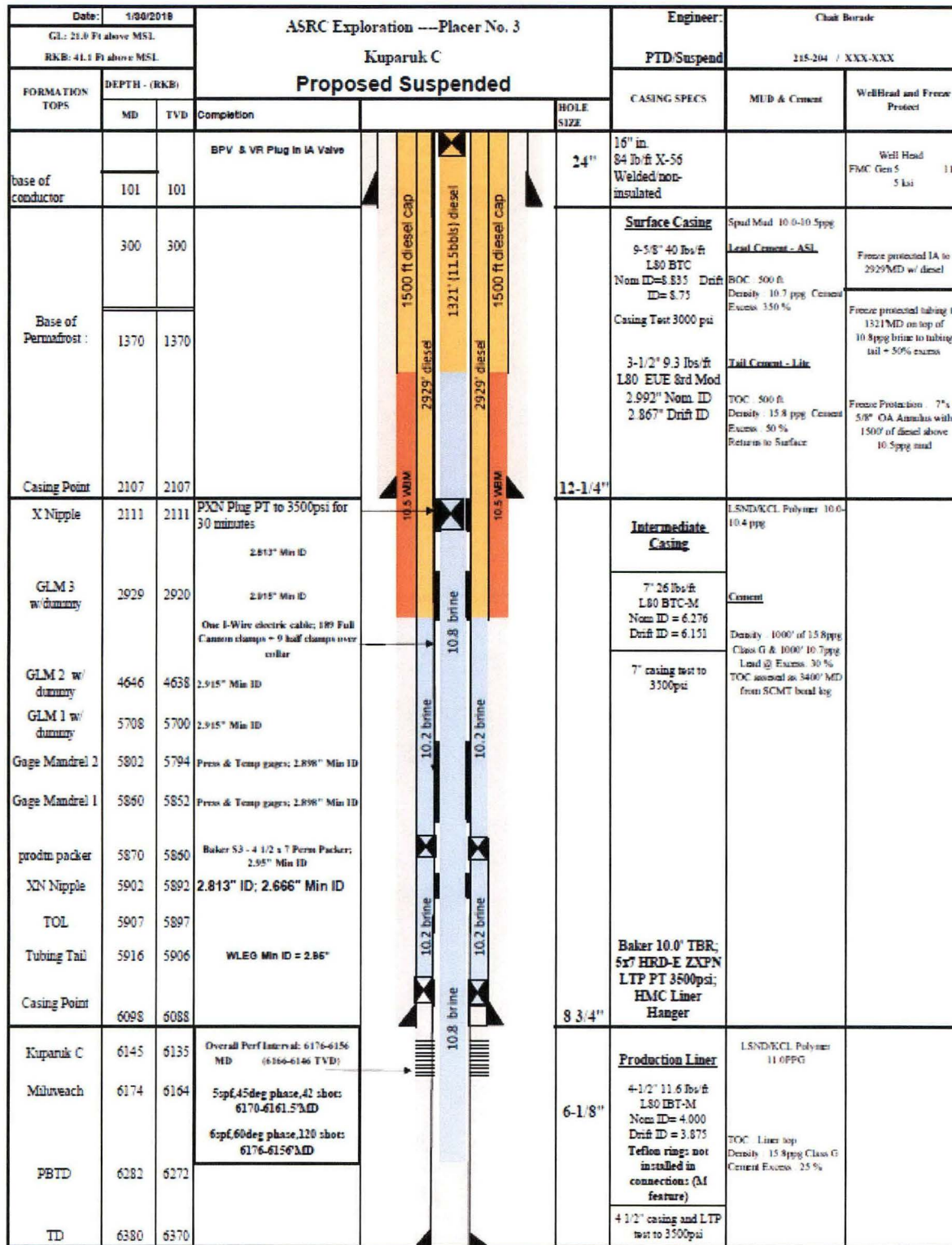


Figure 1. Proposed Suspended Well Bore Schematic after long term production test.

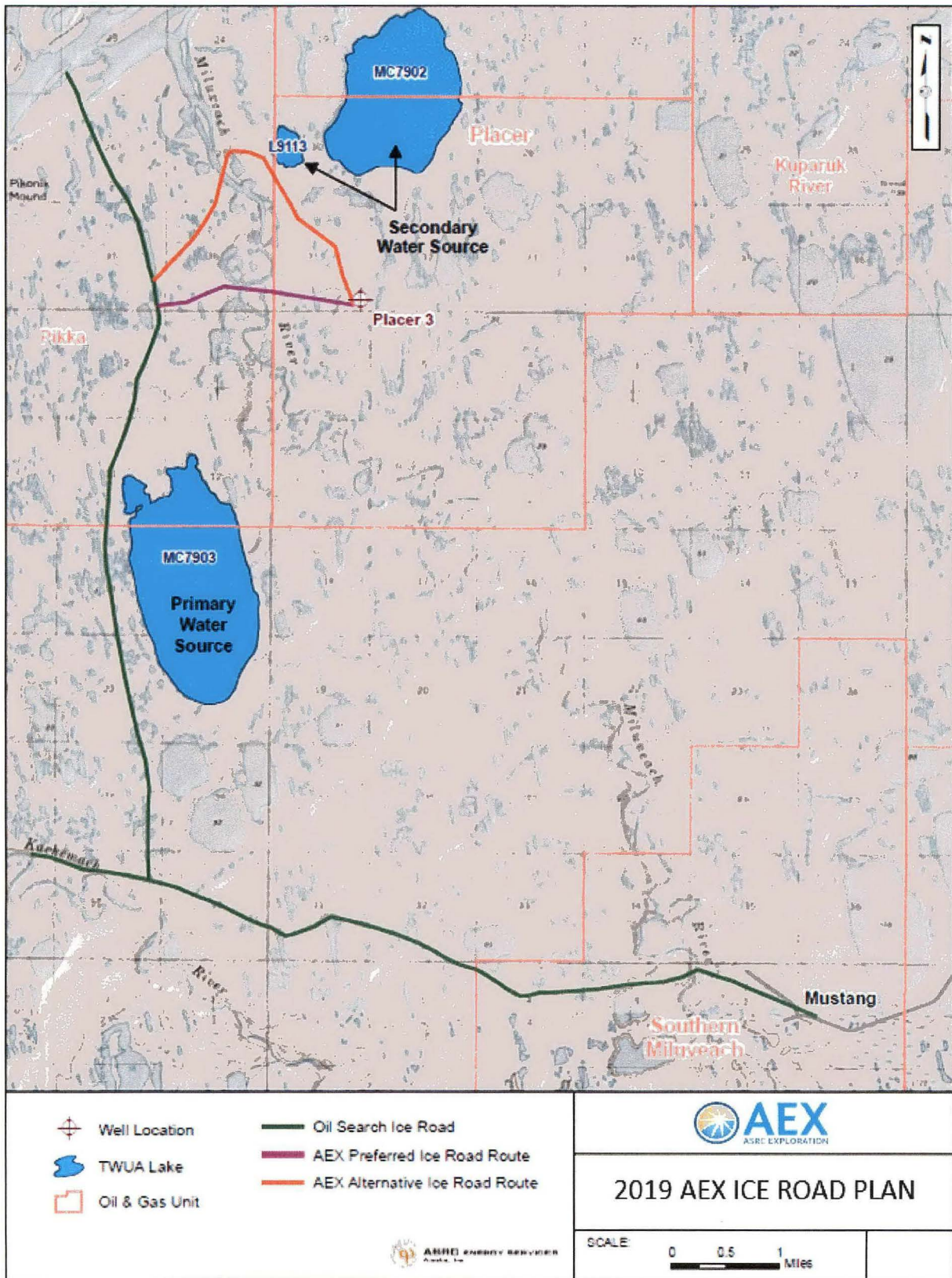


Figure 2. Map of AEX Ice Road Spur Plan





## Permitting/Contracting/Agreements:

### Permitting Status

AEX has applied for all applicable permits to access the Placer #3 well-site in order to conduct the extended well-test. The following matrix (Table 1) summarizes AEX's permit application and their status as of today. AEX has executed/currently working on agreements with adjacent operators, which will help progress this winter operation.

Table 1. Permit Status matrix for Placer #3 Extended Well Test

Regulatory Agency	Permit Name/Number	Description	Status	Estimated/ Actual Submission Date	Estimated / Actual Issue Date
US Fish and Wildlife Service	Letter of Authorization - Marine Mammal Incidental Take	Authorization for incidental take of Polar Bear during mobilization and operations	LOA May Not Be Required		
ADNR - DOG	Plan of Operations Amendment	Approval to conduct O&G activities on lease/unit	Submitted	1/8/2019	2/20/2019
ADNR - DML&W	Land Use Permit LAS # 30527	Land Use Permit for ice road and ice pad on State Lands	Issued (Expires 11/8/2020)	N/A	11/8/2015
ADNR - OHA	SHPO Review	Cultural Resources Desktop Study provided to SHPO for a courtesy review	Submitted	1/30/2019	3/2/2019
ADEC - SPAR	Oil Discharge Prevention and Contingency Plan	Approval for spill prevention and cleanup plan	Submitted Additional Information Required	1/18/2019	2/19/2019
ADEC - Air	MG-2 Air Quality Control Permit	Approval for well testing air emissions included Fuel Consumption Monitoring Plan	Application Complete waiting to submit		
ADEC - Wastewater	Stormwater Discharge Permit	Approval for discharge of stormwater from pad	Issued	1/25/2019	2/6/2019
ADF&G	Fish Habitat Permit FH19-III-0029	Approval for Stream Crossings	Issued (expires 05/31/2019)	1/15/2019	1/24/2019
NSB Title 19	Development Permit	Authorization to construct Ice Road	Issued	1/18/2019	2/13/2019
NSB Title 19	Development Permit	Authorization to construct Placer #3 Well Ice Pad	Issued	1/18/2019	2/13/2019
NSB Form 500	IHLC/TLUI Cultural Clearance	Provide Cultural Resources Desktop Study summarizing the cultural resources survey completed for the project area.	Complete	1/30/2019	2/5/2019
NSB Form 600	Request for IHLC Resource Data	NSB provides cultural resource information for the project area.	Issued	12/27/2018	1/22/2019
AOGCC Sundry Application	Request for Flaring & re-suspending the well	Form 10-403	Issued	2/1/2019	2/14/2019

Color Key
Permit or Authorization Issued
Application Submitted To Agency - In-review/Pending
Application In Process - Not Yet Submitted to Agency



### Status of Operating Agreements

1. AEX has executed an amendment to the MOU with Brooks Range Petroleum Co. originally executed on May 7, 2017. This amendment allows AEX to process produced fluids from Placer #3 at the Mustang Development Project.
2. AEX originally discussed plans to share the ice-road with Oil Search Alaska (OSA) on December 16, 2018 and again on February 26, 2019.

### Status of Vendor Contracts

1. AEX has accepted a proposal and signed an MSA with Petroleum Testing Services for testing equipment and flaring.
2. AEX has accepted a proposal for tanks, manifolding and containment with Magtech.
3. Spill Response, Vac Trucks and ancillary services will be provided by ASRC Energy Services.

Placer Development Plan Schedule	2019				2020				2021				2022				2023				2024			
	Q-1	Q-2	Q-3	Q-4	Q-1	Q-2	Q-3	Q-4	Q-1	Q-2	Q-3	Q-4	Q-1	Q-2	Q-3	Q-4	Q-1	Q-2	Q-3	Q-4	Q-1	Q-2	Q-3	Q-4
	J	F	A	M	J	F	A	M	J	F	A	M	J	F	A	M	J	F	A	M	J	F	A	M
Placer #3 Long Term Test	■	■																						
Permitting			■	■	■	■	■	■																
Project Sanction								■																
Install Gravel Roads and Pads									■	■														
Install Pipelines and Wellsite Facilities													■	■	■	■								
Drill Producer 1																	■	■						
Drill Producer 2																					■	■		
Drill Injector 1																								
Drill Injector 2																								
Oil Production																								

Figure 3. Placer Development Plan Schedule

-End-