

January 31, 2024

Mr. Bryan McLellan bryan.mclellan@alaska.gov

Alaska Oil and Gas Conservation Commission 333 W. 7th Avenue Anchorage, Alaska 99501

Stage 1 Contract: Alaska Orphan Wells Remediation Program

PSA Contract No.: 25-23-1-019

Location: Alaska

RE: Stage 1 Summary Report

Dear Mr. McLellan:

Please find attached the progress summary report for Stage 1 for AOGCC review. The information provided addresses the requested information.

If you have any questions, please contact Amanda Dial (Project Manager) at (907) 334-1662 or adial@asrcenergy.com or myself at (907) 240-8041 or dcismoski@asrcenergy.com.

Sincerely,

Doug Cismoski Contract Manager

Doug Cismoski

ASRC Consulting & Environmental Services, LLC

Attachments:

Stage 1 Summary Report – January 2024

Stage 1 Summary Report: January 2024

PSA Contract No.: 25-23-1-019

1.0 Schedule

An updated high-level schedule of planned work, including what's been done to date and future plans as of the submittal of this report, for all the wells that were on the original Orphan Well list plus the Houston Core Hole 2 and additional Katalla wells is included.

Schedule A provided at the end of the report was the original schedule. In January 2024, a project decision was made to delay the field work for a variety of reasons. Schedule B provided at the end of the report shows the revised schedule. The timeline for the Katalla wells scope of work was provided at a high level in the standalone Katalla Site Visit Summary report.

2.0 Cost Summary & Overall Cost Estimate

The initial scope of work described as Stage 1 within the contract was split into tasks. Task 1 included the following scopes:

- Project kickoff meetings between AOGCC and ACES
- Preconstruction planning including collaborating with AOGCC on planning, permitting, and necessary coordination
- Planning of the site investigations to evaluate information needed for the P&A planning
- Development of cost estimates for specific packages of scope and revisions as necessary based on negotiations.
- Create and update a critical path construction project schedule for the work scopes.

Task 2 included site investigations of all the wells on the initial orphan well list for assessing, verifying, and documenting well information, site details, and preliminary environmental concerns.

Stage 1 Task 1 Spend:

Stage 1 Task 1 Work in Place costs as of 11/3/2023: \$752,867

To date for Task 1, the kickoff meetings were held between AOGCC and AES-AK in February 2023. The plug and abandonment plan for each of the southcentral wells have been developed collaboratively with AOGCC. Each of the wells were evaluated individually to identify the necessary permits and permissions required to conduct both the site visits and future P&A work. Site visits to all of the orphan wells were planned and conducted, however, the visit to Shaviovik was postponed until summer 2024. As the P&A scopes were decided, pricing from vendors was evaluated with AOGCC and ICE in order to ensure the appropriate equipment and services were selected for building the cost estimates. An initial schedule was generated, which was revised with additional detail added for each of the aspects contributing to the planning of the work. In early January 2024, a second revision to the proposed field execution schedule was created to adjust for the schedule delay.

Stage 1 Task 2 Spend:

Stage 1 Task 2 Spend to Date as of 12/31/2023: \$473,040 (includes Gulf Coast Site Visit)

For Task 2, between June and November 2023, all of the wells on the initial orphan well list, except Shaviovik, were investigated with a small field team to gather as much information as possible regarding the well details, site specifics, logistical considerations, and environmental concerns. During the site visits, additional wells, including Core Test 2 and the expanded well list identified in the Gulf Coast region were inspected while the field teams were onsite during the respective visits.

The site visit for Shaviovik is expected during summer 2024.

Utilizing the vendor pricing received so far and historical information regarding the two regions currently being included for Stage 2, the following ranges are provided for planning purposes:

- Shaviovik P&A Cost Estimate: \$4-6MM (dependent on final P&A program requirements)
- Southcentral P&A Campaign Estimate: \$14-18MM (dependent on awarding remaining subcontractors and overall finalized schedule.)

Major Accomplishments and Milestones 3.0

3.1 Well Planning

After a kickoff meeting on February 15 and 16th, the next several weeks were used by AES-AK and the AOGCC to research the actual well conditions based on available well file data and previous field visit to establish a general scope of repair work required to P&A the subject wells per current AOGCC regulations. In addition, specific objectives were developed for each well to be investigated during the summer site visits. A detailed review meeting between AES-AK and the AOGCC staff was held over the course of two days in the AES-AK offices from April 11 and 12, 2023. An initial risk assessment was also developed for each of the wells.

Prior to any site visits being conducted, AES-AK supported AOGCC's effort in confirming the property owners for each of the wells. Four private landowners of record in the Southcentral region were sent official letters by AOGCC to inform them of the necessary site visits planned for the summer and potential future work. Three of the four landowners were reached confirming their acknowledgement of the upcoming site visit. The Alaska Gulf 1 property owner has still not been reached.

AES-AK was also able to assist with research regarding the Chilkat No 25 well and confirming landowner contact information for Claim 1 in the Katalla region which allowed permission to be granted for the site visit.

Between June and August, meetings were held between AOGCC and AES-AK to review the available geologic data to establish cement placement requirements for each well. This information established the baseline operational requirements for each of the wells. A program for each well was then developed by AES-AK with 5 of the 8 southcentral wells being finalized by October 15th.

In August, AOGCC issued a clarification order declaring AES-AK as operator of record for State-responsible orphaned wells. This ruling facilitated the ability for AES-AK to generate the necessary documentation including but not limited to sundry applications, for the AOGCC to approve the required well work.

3.2 Site Visits

The first site visit was to the Iniskin Peninsula 60 miles west of Homer, AK. A team including representatives from AES-AK, AOGCC, and DNR were mobilized to Homer, Alaska, and conducted daily trips to the Iniskin Peninsula from May 22 - 25, 2023. The primary objective was to locate 6 wells registered as orphan wells by AOGCC and determine their condition. Unfortunately, none of the suspected wells were found due to overgrowth and the general environmental conditions masked available location descriptions from over 60 years ago.

The Southcentral wells sites were initially visited with a team making day trips from Anchorage between June 5 - 16. Representatives from AES-AK, Cruz, and AOGCC attended. Visits were coordinated with the private landowners.

Rosetta 1 and 2 were visited on June 5-6, during which Core Hole #2 was further investigated and determined to be a well and not a water well. Rosetta 1 was excavated approximately 4ft to fully uncover the top of the casing to take measurements and verify the well casing actively leaks gas and water. Rosetta 2 was measured and slightly excavated to check for outer cement. Low levels of gas were measured from outside the Rosetta 2 casing. Rosetta 3 was visited on June 7th where no leaks were identified. On June 8th, Rosetta 4 was assessed by the team, confirming it was still actively leaking fluid and bubbling could be heard. Alaska Gulf was visited the same day with no leaks identified.

On June 12th, the team drove out to the end of the road to visit Middle Lake 1 and then walked a mile to the well. There is a large culvert covering the well so two small windows, approximately 2ft x 3ft were cut in order to visibly evaluate the wellhead status. The windows were replaced prior to leaving the site.

The Chickaloon 1 well site was investigated on June 14th in coordination with the private landowner. There were two potential areas for the well and the team was able to confirm the well location and partially excavated the wellhead. The work was halted due to needing additional equipment to proceed so the area was backfilled and put back to its original condition.

Eureka 1 was visited on June 16-17th. The well is marked with a pole, so the area was excavated to approximately 4 feet where hard cement was encountered. The work was halted due to needing additional equipment to proceed so the area was backfilled and the well marker pole was put back in place.

All well sites, except Alaska Gulf 1, had a cultural survey conducted. In addition, all sites were evaluated for space availability and site preparation requirements.

A follow up site visit to Rosetta 1, 2 and Core Hole #2, was conducted on August 14th in order to excavate deeper and seek additional information for finalizing the well programs. A follow up visit to Eureka 1 was conducted on August 16th where additional excavation was conducted, cement was removed, and the casings were located and measured. The area was backfilled and the marker pole put back in place. Lastly, between August 28-30th, the Chickaloon 1 wellhead was excavated to completely uncover the wellhead and cellar area. The wellhead was recovered and the area regraded to allow safe use by the private landowner.

A team attempted to make a site visit to Shaviovik July 20-22nd but due to a recent helicopter accident resulting in 4 fatalities, the trip was postponed. On August 7th, a fixed wing flyover was conducted which confirmed a wellhead in place, no camp remained, and no significant debris visible from the air. Given the budget uncertainty, the site visit was postponed and will be conducted the summer of 2024.

The Gulf Coast/Katalla site visit timing was confirmed and coordinated prior to October 15th. The actual site visit was conducted November $1 - 5^{th}$ with four team members attending including representatives from ACES, Cruz, and AOGCC.

The site visits and revisits were able to provide the necessary information required to finalize major components of the well planning for the southcentral well campaign, but not for Katalla or Shaviovik.

4.0 Challenges, anticipated needs over the next 6 months. Any delays anticipated?

Overall challenges were encountered with oil and gas vendors not being familiar with Davis-Bacon wage determination which delayed responses during the RFQ process. Additionally, the Southcentral area is outside the normal support area for well work services provided by vendors on the Kenai Peninsula. The DOT road limitations as well as the potential for road restrictions during the project schedule adds a complexity to securing vendor support.

Due to the third-party pricing verification, it was necessary to conduct the RFQ process for the well work specific vendors prior to generating the individual well cost estimates. Additional pricing from vendors that provide support services is ongoing due to the limited capabilities within the Southcentral area. Although some vendors have been awarded work, funding for Stage 2 work is required before Purchase Orders are put in place. The time required for Stage 2 funding is uncertain at this time. Field work cannot commence without POs in place with vendors.

Many services such as, but not limited to, hotels, catering, and general load transportation are committed to supporting the Arctic Winter Games to be held from March 7 through 17. Then, shortly thereafter, in April, South Central road weight restrictions come into effect and further complicate moving rig and rig support equipment.

Feedback on Project to Date 5.0

Collaboration has been successful so far between AOGCC and AES-AK. AES-AK has no suggestions on how to improve this collaboration at this time.

6.0 Permit Status

A rundown of the permits obtained or outstanding for each well as of December 2023.

Rosetta 1, 2 & Core Hole 2:

- Confirmed not required: City of Houston, DOT Right of Way
- Outstanding: AK Railroad permission, DOT Lane Closure permit need is being evaluated

Rosetta 3:

- Confirmed not required: City of Houston, DOT Right of Way
- Outstanding: MTA/MEA rerouting of powerline

Rosetta 4:

- Confirmed not required: City of Houston, DOT Right of Way
- Outstanding: None

Middle Lake:

- Confirmed not required: Matsu Borough
- Outstanding: ADF&G Land Use Permit, DNR Land Use Permit

Chickaloon:

- Confirmed not required: Matsu Borough
- Outstanding: LNO Tribal Consideration being evaluated, MEA rerouting of powerline, road access improvements

Eureka 1:

- Confirmed not required: Borough
- Outstanding: DNR Land Use Permit

AK Gulf 1:

- Outstanding: DOT ROW Access for Driveway installation
 - Not being permitted at this time.

Overall Southcentral project SCRIP Report submitted and waiting SHPO approval.

7.0 Reserve Pit Remediation Potential

Currently only 2 well areas have potential remediation requirements:

- Middle Lake is the only well that has a known reserve pit on the pad.
- Rosetta 1/2 has a perceived pit area that will be sampled prior to site preparations to determine if remediation is required ahead of any necessary ground disturbance.

Vendors and Equipment Update 8.0

It's preferred to use the same vendors for all the wells as much as possible. Current known vendors are:

- PESI/Team Snubbing Rig contractor and drill pipe
- Cruz Construction logistics and site preparation

- Vault wellhead long lead equipment
- Halliburton wireline and fluid services
- Fox Energy cementing
- Baker Hughes fishing, bridge plugs, drill bits
- Lee Energy Services specialty downhole tools (gator tool)
- Hydrawell specialty downhole tools

9.0 Plan for Salvaged Equipment

Equipment/materials salvaged from the wells: The materials/equipment will be inventoried and photographed. The materials that the AOGCC wants to keep will be saved as requested. Items that can be recycled such as metal, etc., will be weighed and sent to recycling at the Anchorage metal recycling center. Other items that may be reusable will be offered for sale to other operators or can be auctioned off.

Equipment purchased for the wells: The materials/equipment remaining post-operations will be inventoried and photographed. Items considered reusable will be offered for sale to other operators or can be auctioned off. Items that are not reusable will be recycled, if possible, in Anchorage or disposed of properly.

10.0 Buy America Provision

Vendors were requested during the procurement process to provide confirmation that the materials being proposed met the Buy America provision.

11.0 Manpower Needs

A projection of manpower needs as we move into Stage 2 execution, including on-site and office-based

Office based jobs estimated: 20 Field based jobs estimated: 90

Anticipated number of jobs created and to be created:

A Head count estimate was provided based on vendor information and projected support requirements for the Stage 2 southcentral field execution of work.

12.0 Project Information Status

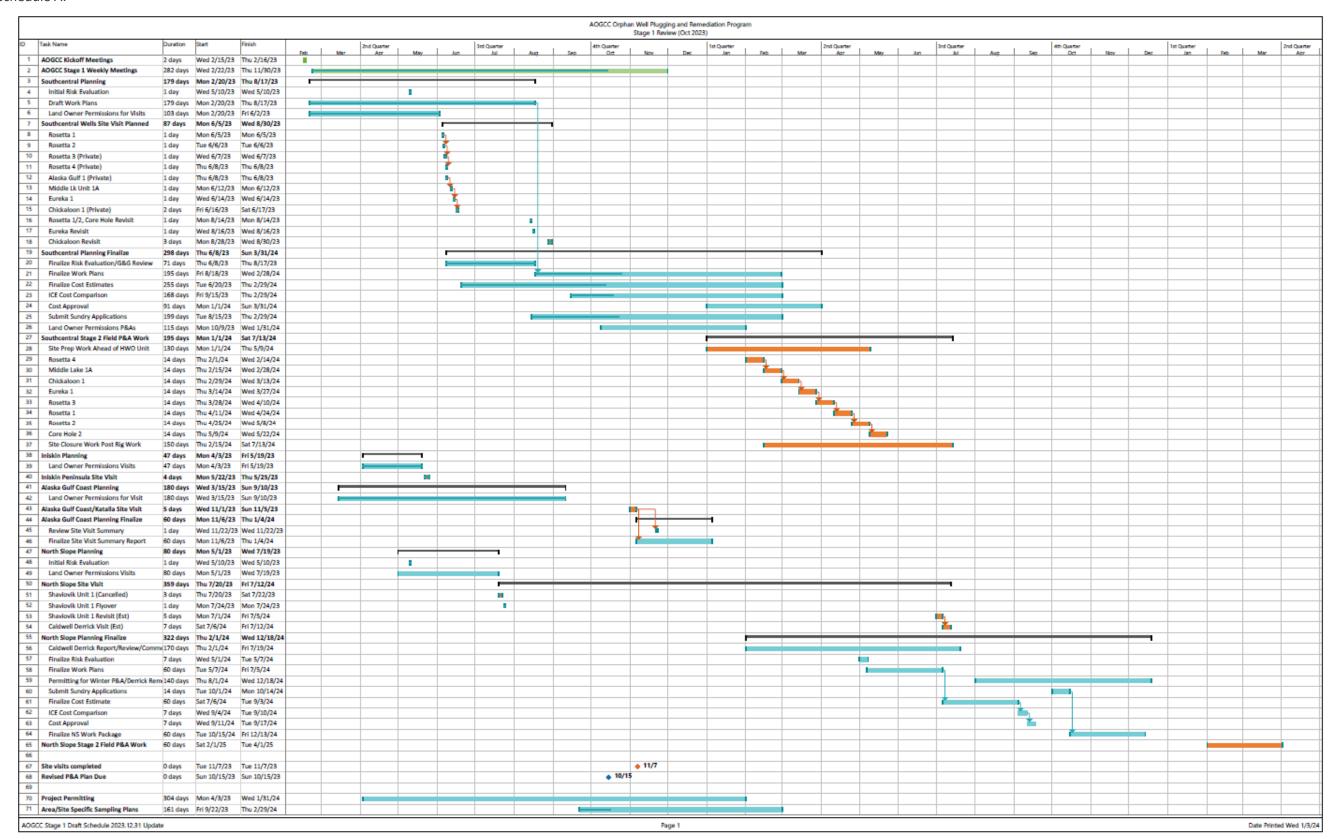
In order to ensure the AOGCC has all the information, data, and equipment that has been obtained for the project, the following elements are considered:

As of December 2023, there hasn't been any equipment purchased for the project.

Photos from the site visits have been provided through the Sharepoint site created for AOGCC access. Daily reports generated during the site visits have also been shared.

For Stage 2 operations, AES-AK anticipates sharing daily P&A reports, vendor daily reports, vendor job summaries, and other well work specific data. AES-AK expects to share necessary information while considering potential vendor confidentiality as well as private landowner considerations.

Initial Schedule A:



Stage 2 Schedule B – Southcentral Site Preparation:

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Task Name	Duration	Start	Finish	МТ				S													М		F	S	s
SITE PREP/Cellar & Wellhead INSTALL									+																_
**Rosetta 4 winter cellar/wellhead if possible	3	4/1/2024	4/4/2024	<	+/-/	April 1	-4																		
Rosetta 2 pile driving	2	6/1/2024	6/2/2024	<-	-+/-]	une 1	-2																		
Eureka	7	7/16/2024	7/23/2024																						
Rosetta 1/2/Core Hole 2 Site Prep	7	7/24/2024	7/31/2024																						
Rosetta 1 Cellar/Wellhead	3	8/1/2024	8/4/2024																						
Rosetta 2 Cellar/Wellhead	3	8/4/2024	8/7/2024																						
Core Hole 2 Cellar/Wellhead	3	8/7/2024	8/10/2024																						
Rosetta 3	7	8/1/2024	8/8/2024																						
Chickaloon Road Access Modifications	TBD	8/9/2024																							
Chickaloon (*VBRO timing restriction)	7	10/1/2024	10/8/2024																						
Rosetta 4 - Site Prep (*need snow cover)	7	12/7/2024	12/14/2024																						
Middle Lake Snow Road (*need snow cover)	21	12/21/2024	1/11/2025						+					_			_								_

Stage 2 Schedule B – Southcentral P&As:

Task Name	Duration	Start		####### 21-Oct-24 18 19 20 21 22 23 F S S M T W	24 25 26 2		31 1 2	5 6 7		2 13 14 1			21 22 23 2		27 28 29	30 1 2			7 8 9			14 15		18 19 20	21 22 2				1 2 3	4 5			15 16 17	18 19 2			
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**Rosetta 4 winter cellar/wellhead if possible	3	4/1/2024	4/4/2024																																		
Rosetta 2 pile driving	2	6/1/2024	6/2/2024																																		
Eureka	7	7/16/2024	7/23/2024																																		
Rosetta 1/2/Core Hole 2 Site Prep	7	7/24/2024	7/31/2024																																		
Rosetta 1 Cellar/Wellhead	3	8/1/2024	8/4/2024																																		
Rosetta 2 Cellar/Wellhead	3	8/4/2024	8/7/2024																																		
Core Hole 2 Cellar/Wellhead	3	8/7/2024	8/10/2024																																		
Rosetta 3	7	8/1/2024	8/8/2024																																		
Chickaloon Road Access Modifications	TBD	8/9/2024																																			
Chickaloon (*VBRO timing restriction)	7.	10/1/2024	10/8/2024															150		10000000000000000000000000000000000000																	
Rosetta 4 - Site Prep (*need snow cover)	7	12/7/2024	12/14/2024															-	Rosett	a 4 Site P	гер	- 9															
Middle Lake Snow Road (*need snow cover)	21	12/21/2024	1/11/2025																							М	ddle Lake	Snow Roa	d≗								
P&A WORK																																					
Eureka 1 - Rig Up/P&A/Rig Down	17	10/18/2024	11/4/2024		Eureka :	I P&A			6141																												
Rosetta 2 - Rig Up/P&A/Rig Down	12	11/4/2024	11/16/2024			distribution of the second			Rosetta 2 P	&A	- 3																										
Core Hole 2 - Rig Up/P&A/Rig Down	10	11/16/2024	11/26/2024								-	Cor	e Hole 2 Pi	&A																							
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Chickaloon - Rig Up/P&A/Rig Down	18	12/6/2024	12/24/2024																		Chi	ckaloon 1	P&A			- 8											
Rosetta 3 - Rig Up/P&A/Rig Down	11	12/25/2024	1/4/2025																								Rose	tta 3 P&A		- 9							
Rosetta 4 - Rig Up/P&A/Rig Down	11	1/4/2025	1/15/2025																											-	Ros	etta 4 P&/					
Middle Lake 1A - Rig Up/P&A/Rig Down	16	1/15/2025	1/31/2025																				-												Middle L	ake 1A P&	A:
SITE CLOSURE																																					
Chickaloon	7	4/15/2025	4/22/2025																																		
Eureka (or affter P&A if weather cooperates)	7	4/23/2025	4/30/2025																																		
Rosetta 1/2/Core Hole 2	7	5/1/2025	5/8/2025																																		
Rosetta 3	7	5/9/2025	5/16/2025																																		
Rosetta 4	7	5/17/2025	5/24/2025																																		
Middle Lake (Stickpicking)		5/25/2025	6/1/2025																																		

Stage 2 Schedule B – Site Closure:

