



In Reply Refer To:
AOGCC Orphan Well Plugging and Remediation Program
Post 2023 Fieldwork Project Update

December 21, 2023

Gary Harrison
Chairman/Elder
Chickaloon Native Village

Angela Wade and Norma Johnson
Tribal Historic Preservation Officers
Chickaloon Village Traditional Council

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Dear Chairman Harrison and Historic Preservation Officers Ms. Wade and Ms. Johnson:

In response to your letter dated June 21st, 2023, Alaska Oil and Gas Conservation Commission (AOGCC) would like to provide an update on the Orphan Well Plugging and Remediation Program (Project) activities.

As a reminder, the objectives of the Project are to P&A orphaned wells and remediate the areas to include methane monitoring and reduction through source control, and identification and remediation of any contamination occurring to surface and groundwater. Some well initial site assessments in the summer of 2023 verified or established the latitude/longitude of the wells and included visual examination of the surrounding area and potential site access options. Some excavation around the wellheads' immediate area was necessary to identify and assess the well status regarding its quality of plugging and impacts on the surrounding area. Site assessments supported the preparation of work plans and environmental surveys for future P&A activity. This included some cultural resources surveys of the wells, which are all over 50 years old, and the anticipated impacted areas.

Since the initial consultation, the well count for P&A has increased based on additional information and in-field observations. Wells were divided into four regions and have been renumbered 1 through 42. The regions, well names, and associated numbers are listed in Table 1.

Table 1. Regions and Wells for P&A

Well Number	Well Name
Southcentral Region	
1	Rosetta Well 1
2	Rosetta Well 2
3	Core Hole 2*
4	Rosetta Well 3
5	Rosetta Well 4
6	Alaska Gulf 1
7	Chickaloon
8	Eureka 1
9	Middle Lake Unit 1
North Slope Region	
10	Shavirovik Unit 1
Gulf Coast Region	
11	Well A
12	Well B
13	Well C
14	Well No. 1
15	Well No. 2
16	Well No. 3
17	Well No. 4
18	Well No. 5
19	Well No. 7
20	Well No. 8
21	Well No. 11
22	Well No. 12
23	Well No. 13
24	Well No. 14
25	Well No. 16
26	Well No. 17
27	Well No. 17
28	Well No. 18
29	Well No. 19
30	Well No. 20
31	Well No. 21
32	Well No. 22
33	Well No. 23
34	Well No. 24
35	Well No. 25
36	Wells No. 109/110
Iniskin Region	
37	AK Petro 1
38	AK Petro 2
39	AK Petro 3

Well Number	Well Name
40	AK Petro 4
41	Dry Bay 1
42	Dry Bay 2

*Core Hole 2 was initially thought to be a water well in the vicinity of Rosetta 1 and 2, however during fieldwork, it was discovered to be an additional well in need of P&A.

**Additional wells in the Gulf Coast region were identified through regional research and in cooperation with the Bureau of Land Management.

Fieldwork in the summer of 2023 included initial site assessments in the Southcentral region of the Rosetta Well 1, 2, 3, and 4, Core Hole 2, Chickaloon, Eureka 1, and Middle Lake Unit 1 wells; a fly over assessment and site verification in the North Slope region of the Shaviovik Unit 1 well; site visit and location verification in the Gulf Coast Region of the No.25 well and 26 additional well identified in the area for P&A; and a site visit was conducted in the Iniskin region.

Southcentral Region

The 8 wells that underwent initial site assessment in the Southcentral region are all over 50 years old and were assessed for historic value, and each wells project area was also evaluated for cultural resources. The Alaska Gulf 1 well site was not visited in 2023 due to a lack of landowner permission. The evaluation was conducted by a Secretary of the Interior-qualified archaeologist, and sufficient data was collected for National Register of Historic Places eligibility recommendations. The Area of Potential Effect (APE) was refined from the preliminary APE which was defined by a ½-mile buffer around the well sites to the areas immediately impacted by the oil exploration activities in the past, along with a 50-foot buffer. In some instances, the access routes to the orphaned wells were included, also with a 50-foot buffer. This refined APE better reflected the project's actual anticipated area of effect.

The cultural resources survey was conducted from June 6 through June 17, 2023. Eight previously undocumented sites were recorded: the Eureka 1 well (ANC-04777), Rosetta Well 1, Rosetta Well 2, and Core Hole 2 (ANC-04778), Rosetta Well 3 (ANC-04779), Rosetta Well 4 (ANC-04780), Middle Lake Unit 1 well (TYO-00390), a privately owned historic cabin (ANC-04781), a collection of historic debris (ANC-04782), and a historic can dump (ANC-04783). None of these are recommended eligible for inclusion in the National Register of Historic Places. One previously documented site was revisited, Chickaloon well (ANC-00772), and was not recommended eligible for inclusion in the National Register of Historic Places.

Additional details about these sites can be found in the project's cultural resources permit report on file at the State Historic Preservation Office or can be requested. Below is a summary of findings related to the Chickaloon well (ANC-00772) survey.

Chickaloon Well (ANC-00772)

Compared to other wells within the southcentral area, Chickaloon 1 has limited documented details. According to the records available, the wellsite, which is listed in the AHRs database (ANC-00772), was originally established in 1926, and operated by the Peterson Oil Association (AOGCC 1995a). Based on AOGCC records, Peterson Oil Association managed by Ivan L. Peterson with a business address based out of San Fransico was one of many small independent exploration companies established during Alaska's long history of oil exploration.

Ivan L. Peterson is likely the same Ivan Peterson referenced by Katherine Wickersham Wade in the book *Chickaloon Spirit: The Life & Times of Katherine Wickersham Wade* (2002). Chapters 6 and 7 of the book cover Life at Drill Lake, a brief account of Katherine's personal experiences as a child around the drill camp. She speaks fondly of Old Cap Peterson, an older man who was in charge of drilling. A recalled story involving a miscommunication about a pet that led to a physical altercation with a local references Old Cap Peterson's son Ivan Peterson and Mr. Church. Mr. Church is likely Henry Church the Tool Dresser named as one of the employees from the AOGCC records. Beyond these two brief chapters, Peterson and the activities at Drill Lake are not mentioned elsewhere in the book. A photo at the start of Chapter 6 shows the drill rig and a few outbuildings that closely resemble the illustration done by Ivan from AOGCC records.

Little else is known about the well itself or the operators that drilled it. Records reflect that during initial drilling on August 31, 1928, at around 1,300 feet (396.24 meters) depth, gas and rock pressure resulted in considerable damage to the drill rig. The Star rig used was dismantled starting the following spring on March 4, 1929, and was replaced with a new Standard rig and equipment shipped up from Los Angeles. By the time of its expected abandonment in 1930, the total depth was recorded as 1,362 feet (415.14 meters) (AOGCC 1995a).

The Chickaloon region has a long history of resource development. In 1921 the *Canadian Mining Journal* reported that the United States Engineering Coal Commission was testing large swaths of land in the area in search of coal deposits. These tests were intended to determine the extent of potential deposits for naval fuel use (Bell et al 1921). In 1925 the supervision of mineral leasing operations on public lands in Alaska was transferred from the Bureau of Mines to the Geological Survey. By 1926 there were 90,279 tons of coal produced from eight operating coal properties, more than half of which came from the Matanuska field near Chickaloon. Though mining was relatively new, the Governor of Alaska's report to the Secretary of the Interior reported no fatalities, and special safety-related attention was shown to mining operations. This same report notes that in 1925 only one oil drilling operation with 4 wells in the Cold Bay region of Alaska was active and only two rigs were placed for future drilling, one of which was the Peterson Oil Association rig in Chickaloon (Alaska Governor 1921). Coal mining in the area stopped after the U.S. Navy converted ships to oil-fired boilers later in the 1920s. Like many other exploratory oil wells in the Matanuska Valley, the Peterson Oil Association well failed to find any oil (Wells 2023).

Chickaloon 1 was originally assigned the AHRS number of ANC-00772 in 1997, though the original documentation cites a cement pad as the location of the wellhead, however, the site visit revealed that the wellhead actually lies nearby. The AHRS entry associated with ANC-00772 has been updated under these findings.

A historic cabin (ANC-04781) was identified on private property during the pedestrian survey of the Chickaloon APE, while historical, its origins are unclear. The cabin appears to be older with logs that fit notched within another. The arctic entry is 52 inches deep and appears to be an addition after the original construction. The cabin is 20.5 feet long and 14 feet 2 inches along the face which has a wood door with a plastic window, as are the other two windows on this face. The cabin has metal flashing and a shingled roof.

Archaeologists also observed a collection of historic debris (AHRS ANC-04782) on private lands during the survey. The site is approximately 150 by 150 feet and includes a railing constructed of two pieces of flimsy metal, braided cable, a 55-gallon drum labeled as 'STD-RPM; Seward DFLO; Per US Pat Off.; Lubricating oil for all diesel engines; SAE 30; Standard Oil Company Co.', a roller section likely used to

compact sediments, various sizes of lumber and plywood, two smaller 5–10-gallon drums, a crushed 55-gallon drum with no identifiable features, and one rail wheel. A Hires Root Beer can was found with a crimped seal and two church-key openings, likely dating to 1955-1958 (USASODA, 2023). The site is possibly associated with the oil well activities associated with Chickaloon well (ANC-00772) from the 1920s. However, some of the materials may have been moved later in the 1950s to clear the area.

As previously mentioned, none of the above sites were recommended eligible for inclusion in the National Register of Historic Places.

North Slope Region

Fieldwork in the North Slope region at the Shaviovik Unit 1 well included a fixed-wing overflight for site location verification and preliminary site condition recordation. No on-ground site assessments were conducted. A cultural resources survey of the APE is anticipated for the summer 2024 season.

Gulf Coast Region

Fieldwork in the Gulf Coast region in the fall of 2023 included a preliminary site visit for well location verification of the No. 25 well and an additional 26 identified historic wells in the area for potential future P&A activities. Fieldwork was conducted between November 1 and 5th, 2023, and included location verification, visual examination of the well site locations, and some excavation around the wellheads' immediate area to identify and assess the well status. A cultural resources monitor was included in the site visit crew for any ground-disturbing activities and well-site recordation. The 2023 Gulf Coast region site visit will aid in the future designation of the APE and therefore additional project-required environmental surveys, including a cultural resources survey.

Iniskin Region

Fieldwork in the Iniskin region in 2023 included a site visit to verify well site location. No well sites were found however and well locations were not confirmed.

If you have any additional questions or comments related to the project, I can be reached at the address above, by telephone at (907)793-1226, or by e-mail at bryan.mclellan@alaska.gov.

Sincerely,

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