



PROSPECTING PROPOSED DREDGING GROUND, AROLIC RIVER
DISTRICT, GOODNEWS BAY REGION, ALASKA

GN Quad 101

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ITINERARY

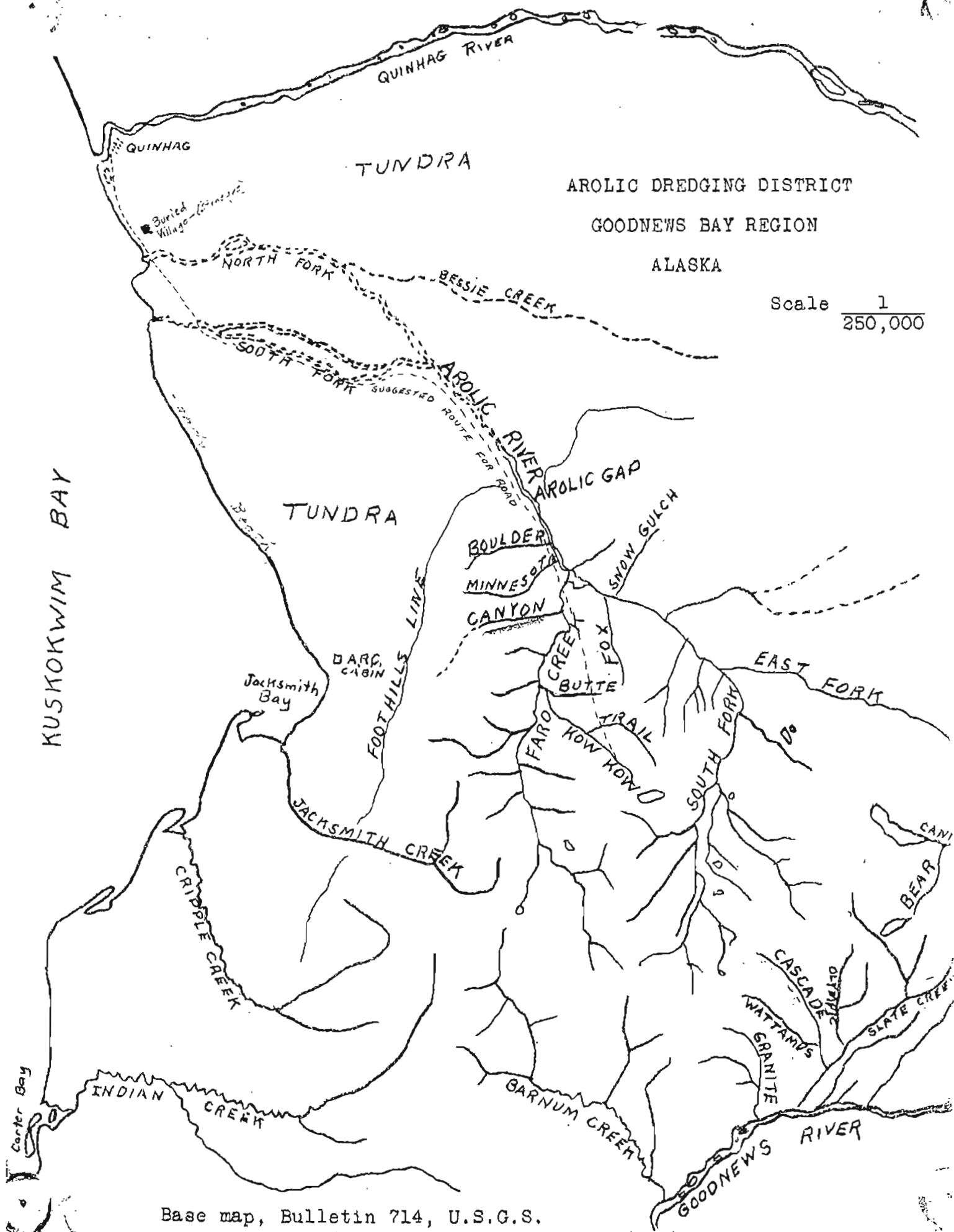
September 7, 10 a.m. left Bethel, Moravian Mission boat, "Messenger".

September 8, 12 noon arrived Quinhagak. Left Quinhagak 2 p.m. with Henry Martin, Eskimo guide, hiked along beach 20 miles to Alaska Road Commission shelter cabin at Jacksmith Bay. Arrived Jacksmith Bay 10 p.m.

September 10 and 11, investigations Kow Kow, Trail, Wattamus, Olympic and Bear Creeks.

September 12, Arolic River, arrived Quinhagak 7 p.m. Left Quinhagak 11 p.m. Moravian Mission Boat, "Messenger."

September 13 enroute Bethel.



Base map, Bulletin 714, U.S.G.S.

PROSPECTING PROPOSED DREDGING GROUND, AROLIC RIVER DISTRICT,
GOODNEWS BAY REGION, ALASKA

LOCATION AND ACCESSIBILITY

The proposed dredging area in the Arolic River District is located along Kow Kow, Trail, Butte, and Faro Creeks, and the Arolic River. The head of Kow Kow Creek marks the proposed starting point of the dredging operations. Drilling in this locality has been in progress since July, 1926, by Mr. Fohn Hansen, Mr. Albert Bell, and Mr. August Wicklund, representatives of a Fairbanks organization to be known as the Arolic Dredging Company. Quinhagak, a Moravian Mission settlement at the mouth of the Quinhag or Kanektok River, is the nearest settlement. Quinhagak is accessible to small boats only at high tide. The distance from Quinhagak to Bethel is approximately one hundred miles and from Quinhagak to Kow Kow Creek thirty five miles.

Low flats extend from the shore line of Kuskokwim Bay outward for several miles. It is not possible for a large steamer to come closer to the shore than a distance of five miles at any time. Freight may be transferred by small boat and barges to the proposed landing on the north fork of the Arolic River.

A hard sandy beach extends from Quinhagak to Carter Spit. With a small amount of work at the streams this beach could be made into a natural automobile road. Two routes may be considered for the construction of a road to the dredging ground. Apparently the best plan is to build a landing on the south bank of the north fork

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of the Arolic River and extend the road across the south fork and following the gravel benches along the bank to the mouth of Minnesota Creek, thence across Faro Creek to Butte and Kow Kow Creek. A second route extends from a point beyond Jacksmith Bay across the tundra to the foothills, along the foothills to ~~Cripple~~ Creek, to the head of Faro Creek, and terminating at Kow Kow Creek. A separate report has been made covering the road building possibilities of this district. Winter transportation is effected by dog team. There would be little difficulty to tractor transportation. The larger material used in dredge construction can be best moved in winter.

A low divide separates the drainage of the Arolic River from the streams flowing into Goodnews Bay. The proposed dredging operation takes in all of the placer creeks on the Arolic side. On the Goodnews Bay side shoveling in operations are being carried on at Wattamus Creek, Olympic Creek, and Bear Creek. A total of five men are employed in the operations on these creeks. It is the opinion that this locality is nearly worked out. Nothing is known of the dredging possibilities on the Goodnews Bay side of the divide.

TOPOGRAPHY

Bulletin 714, U. S. G. S., pages 207 to 228, "Mineral Resources of the Goodnews Bay Region," by George L. Harrington, describes the details of this region.

The main topographic feature in the Arolic district is the range of mountains that parallels the shoreline of Kuskokwim Bay a few miles back from the shoreline. The country between Kuskokwim Bay and the mountains is all tundra with many small lakes and marshes. At Bethel the mountains lie many miles from the river. The elevations in the Goodnews Bay District range between two thousand and three thousand feet. The Arolic River, at the point of emergence from the mountains to the tundra, forms a marked break in the topography of the mountains known as the Arolic Gap.

GEOLOGY

Various geologic features of interest have been noted in the discussion of the prospecting in this district. The general geology has been covered in Mr. Harrington's report. The occurrence of many quartz stringers were noted but they lacked continuity and extent. No mineralization was seen in the quartz. A lode prospect was staked at one time between Butte and Kow Kow Creeks. The depth of the moss made prospecting difficult and no interest was taken other than the sinking of a few opencuts.

The drilling has shown the bedrock of Kow Kow Creek to consist of a fine material resembling gumbo. This material is a compact sticky clay with little gravel. The depth to solid bedrock has not been determined. It is believed, from the outcrops on Butte Creek, that the bedrock is limestone.

TIMBER

There is no timber available in the district. Willows and brush grow along some of the streams. Along the Quinhag and Eek Rivers some small cottonwood and alder is found. Timber can be transported from the region above Tuluksak, on the Kuskokwim. A small saw mill, maintained by the Bureau of Education, is operated at Akiak.

WATER

No water power sites are recorded in this district. Water for dredging operations and sluicing is available by the construction of small ditches to utilize the water in nearby creeks.

PROSPECTING

The proposed dredging ground has been prospected by drilling. A small hand drill was used this season which was too light for the purpose. The installation of a Keystone power drill is planned. The results of the drilling has encouraged the operators to such an extent that they feel assured of the feasibility of the dredging project. It is not believed, however, that a definite opinion can be formed from the results of the drilling thus far accomplished. Fifty six claims are held by the dredging interests. The following prospecting data ^{were} ~~was~~ furnished by the operators:

It is proposed to start the first dredge at the head of Kow Kow Creek. The dredging will extend down Kow Kow Creek taking in Butte and Trail Creeks. Later a second dredge may operate in the Arolic Basin.

The plans are tentative and no decisions have been reached regarding them. Mr. Fohn Hansen was attracted by the possibilities of the district while placer mining some years ago. As the prospecting with a view to dredging has been carried on a short time the information regarding the ground is limited.

KX101-10 KOW KOW CREEK: Cross-section of deposit; moss 2-3 inches; gravel, 3 feet, no large boulders; sand and gravel 3 feet, pay; broken bedrock, mud and grit, $1\frac{1}{2}$ feet, pay; finely ground material resembling and locally called "gumbo"; 15 feet; solid bedrock has not been located. The so-called "gumbo" forms a false bedrock. The pay ^{as reported} averages 60¢ per cubic yard for sixty feet ^{in bedrock} and \$2.50 per cubic yard for 40 feet ^{in bedrock}. The figures are based on limited drilling returns and cannot be accepted as a basis for a definite opinion. Platinum has been found in the gravels on Kow Kow Creek.

Mr. Tupper Thompson has carried on shoveling in operations on Kow Kow Creek with fair success. One man has been employed in the operation. Discovery, One and Two Below, and One Above are held by Mr. Thompson. Mr. George Weitrick is the owner of Two Above, this claim has not been leased by the dredging company.

KX101-15 BUTTE CREEK: Butte Creek was the scene of the first mining activity in this district. At the present time all of the claims on Butte Creek are held by Jack Harolson. Shoveling in operations have been idle a large part of the present season due to a shortage of water.

Limestone bedrock outcrops at the head of Butte Creek. On the lower limits the false "gumbo" bedrock is encountered.

FARO CREEK: Prospecting has not extended to Faro Creek as yet. The claims are held under option. The claims from the mouth of Trail Creek are owned as follows: One to Seven Above; Harolson and Thompson; Eight to Eleven, Marvin Howland, teacher at Quinhagak; Twelve and Thirteen, Mr. Bergman, teacher at Goodnews Bay; Fourteen and Fifteen, Thompson. Mr. George Weitrack is prospecting on Faro Creek. One hole has been drilled on Faro Creek.

TRAIL, FOX, CREEKS, SNOW GULCH: Drilling operations are to extend to the above named points after the installation of the Keystone drill. Mr. Weitrack is prospecting this locality.

AROLIC RIVER: Claims have been staked along the Arolic River by the company. It is not definitely known, as yet, the extent of the ground to be held by the company. Drilling on the Arolic River from the Arolic Gap to Snow Gulch, ten holes, are said to average 70¢ per cubic yard. The proposed dredging area on the Arolic River is believed, by the company, to offer good possibilities for an extensive dredging operation.

CONCLUSION

The prospecting for dredging in the Arolic River District has not been sufficient to determine the success of the project. The equipment has been inadequate. It is believed that the prospecting is fully justified and that the district presents good possibilities.

There is a tendency in the part of the operators to jump at conclusions without taking into consideration all of the things encountered in making a successful dredging operation. The results of the drilling are thus far encouraging.

Natural Gasoline \$1.00 per mny with boom.