State of Alaska
Department of Fish and G
Nomination for Waters
Important to Anadromous Species

1986
Year of Revision

OK

Approved

[illegible]	12-31-85
Regional Supervisor	Date
OK SRS	1/2/86
Tom Rucci	1-2-86
Drafted	

ALASKA DEPT. OF FISH & GAME
DEC 31 1985
REGION II
HABITAT DIVISION

Name of Waterway UNNAMED MUD LAKE CREEK

AWC# of Waterway

AWC Volume & Number 5

USGS Quad NUATAK C-4

Addition X
Deletion

Correction
Change

Change to X Atlas
X Catalog
Both

66486

Species	Date(s) Observed	Spawning	Rearing	Migration
Arctic char	8/23/84		X	

Comments: Provide any clarifying information, including number of fish observed, location of fish survey data, etc.

SEE HIGHLIGHTED PORTIONS OF DAMES AND MOORE REPORT ATTACHED (D&M, 1984)

ANADROMOUS ADULT ARCTIC CHAR UPSTREAM ON THE OMIKUNIK ABOVE CONFLUENCE WITH MUD LAKE CREEK

Attach a copy of a map showing location of mouth and upper points of each species, specific stream reaches identified for spawning or rearing, locations of barriers, such as falls. Attach a copy of the fish survey data, if available.

Name of Observer (please print)

Date: Signature:

Address:

JOB REPORT

1984 FISH SURVEY ALONG THE PROPOSED COMINCO ALASKA INC. ACCESS ROUTE

October 12, 1984

Dames & Moore

5438-078-20

made on the main Omikviorok River and on Dud Creek (Dames & Moore, unpublished data).

This report compiles and includes information from those earlier surveys along with results from the 1984 surveys.

2.0 MATERIALS AND METHODS

The primary method used for sampling fish in 1984 was a Smith-Root Type VII electroshocker fished in the pulsed DC mode. In 1982 and 1983 work, a Type XI electroshocker was used. In all 3 years, aerial stream surveys for spawning fish were conducted from helicopters. All streams with reasonable potential for spawning by anadromous fish were flown for several miles both up and downstream during late August or early September of at least one of the study years.

At all crossings surveyed, the nature of the stream habitat was qualitatively described and the stream then electroshocked for up to 100 meters up and downstream. Lesser distances were sampled in streams with moderate to high densities of fish. Fork length was measured on all salmonids captured and total length was recorded for cottids.

3.0 RESULTS AND DISCUSSION

3.1 GENERAL

A total of 17 potential stream crossings was surveyed between August 21 and 24, 1984. Of these, 14 were found to contain fish in the immediate vicinity of the crossing. In addition, the Lake Fork of the Omikviorok and the upper North Fork of Evaingiknuk Creek had fish downstream of the crossing, although none was taken at the crossing. Arctic char (*Salvelinus alpinus*) was the predominant species taken, followed by the sculpin (*Cottus cognatus*). Surprisingly, no juvenile Arctic grayling (*Thymallus arcticus*)

Crossing No. 10 Lake Fork - Omikviorok River (Mud Lake Creek)

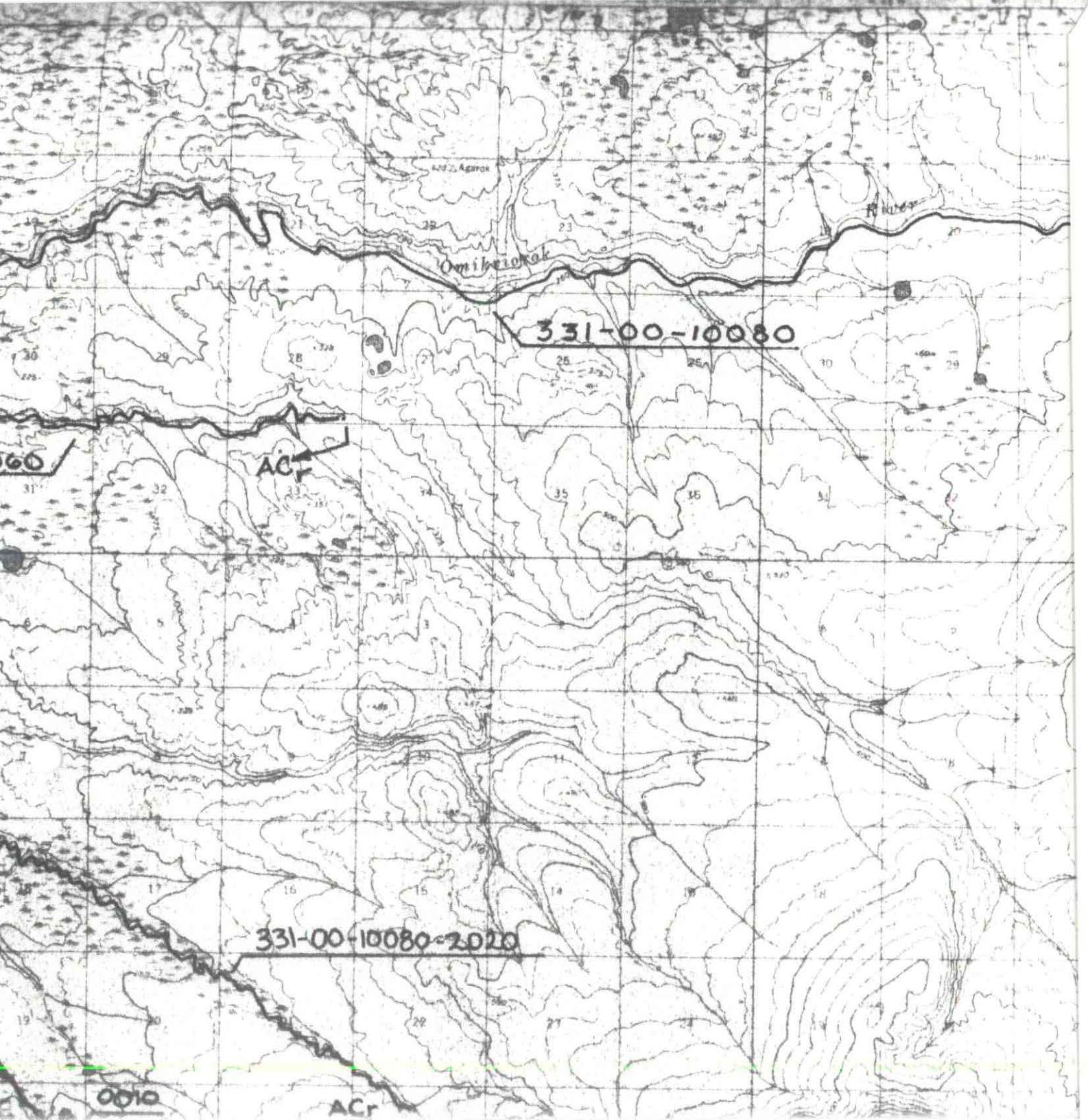
This small tributary joins the Omikviorok River just downstream of the main crossing (No.9). The stream drains from a wetland area on the east side of Mud Lake. At the surveyed crossing (NW 1/4, Sec. 22, T27N, R22W), the stream was flowing some 10-12 cfs on August 23, 1984. The channel is "semi-beaded" with deep wide low-velocity pools separated by shallow narrow high-velocity chutes. Bed materials are cobbles and boulders in the chutes and pools with some sand and silt accumulations in the pools. The creek flows in an incised ravine with willow and grass banks. The channel appears very stable.

Habitat is good for larger fish, and grayling adults were reported by surveyors earlier in the summer. No fish were taken in angling or electroshocking on August 23, 1984, possibly because of the lack of juvenile habitat and the difficulty of sampling the deep pools. A shallow upstream area (SE corner, Sec. 15) was also electroshocked and produced moderate densities of char fry (55-60 mm) as well as a sculpin (74 mm). Thus, this must be regarded as a fish stream and may be used for rearing by anadromous fry from Winter Fork spawning.

3.4 TUTAK CREEK SYSTEM

Tutak Creek is the major tributary of the Wulik River that enters downstream of Ikalukrok Creek. The system drains much of the northwest slope of the Mulgrave Hills and a broad valley between the hills and a lower ridge paralleling Ikalukrok Creek. Two major tributaries of Tutak Creek that will be crossed by the road have been termed Left Tak and Right Tak (south and north, respectively, of the main stem). Prior to these studies, fish use was little known, although char fry were known to be abundant in the upper mainstem (P. Driver, personal communication).

In September, 1982, Dames & Moore (1983a) reported numerous large schools of 1-ocean char juveniles in the reach below the Right Tak confluence. Moderate to high densities of char fry (53-75 mm) and grayling fry



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