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

AWC Volume SE SC SW W (AR) IN USGS Quad NOATAK D-3, D-4, D-5, C-5

Anadromous Water Catalog Number of Waterway 331-00-10060

Name of Waterway WULIK RIVER USGS name X Local name ____

Addition ____ Deletion ____ Correction ____ Backup Information X

For Office Use

Nomination # 94 334	[signature] 10-26-93
Revision Year:	Regional Supervisor Date
Revision to: Atlas ____ Catalog ____ Both N/A	[signature] 1/26/94
Revision Code:	N/A —
	Drafted Date

OBSERVATION INFORMATION

Species	Date(s) Observed	Spawning	Rearing	Migration	Anadromous
DOLLY VARDEN	9/29/93			X	X

IMPORTANT: Provide all supporting documentation that this water body is important for the spawning, rearing or migration of anadromous fish, including: number of fish and life stages observed; sampling methods, sampling duration and area sampled; copies of field notes; etc. Attach a copy of a map showing location of mouth and observed upper extent of each species, as well as any other information such as: specific stream reaches observed as spawning or rearing habitat; locations, types, and heights of any barriers; etc.

Comments: OVERWINTERING DOLLY VARDEN IN WULIK RIVER

ENCLOSED TRIP REPORT 144,138 DOLLY VARDEN

Name of Observer (please print) FRED DECICCO

Date: 10/25/93 Signature: [signature]

Address: 1300 College Road
FBX, AK 99701

ALASKA DEPT. OF FISH & GAME
NOV 1993
REGION II
[illegible]

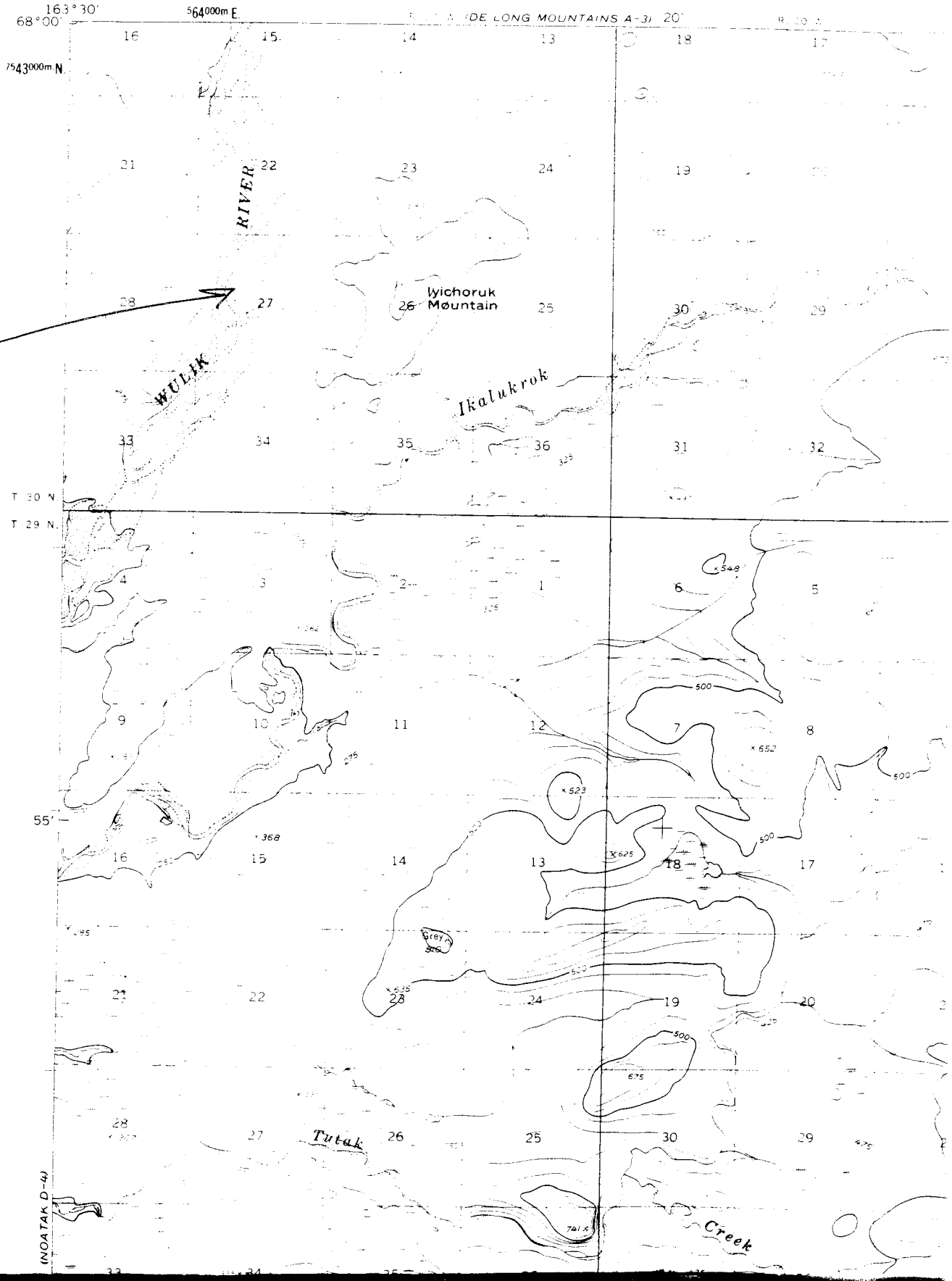
This certifies that in my best professional judgement and belief the above information is evidence that this waterbody should be included in or deleted from the Catalog of Waters Important for Spawning, Rearing or Migration of Anadromous Fishes per AS 16.05.870.

Signature of Area Biologist: [signature] 10/25/93 Rev. 7/93

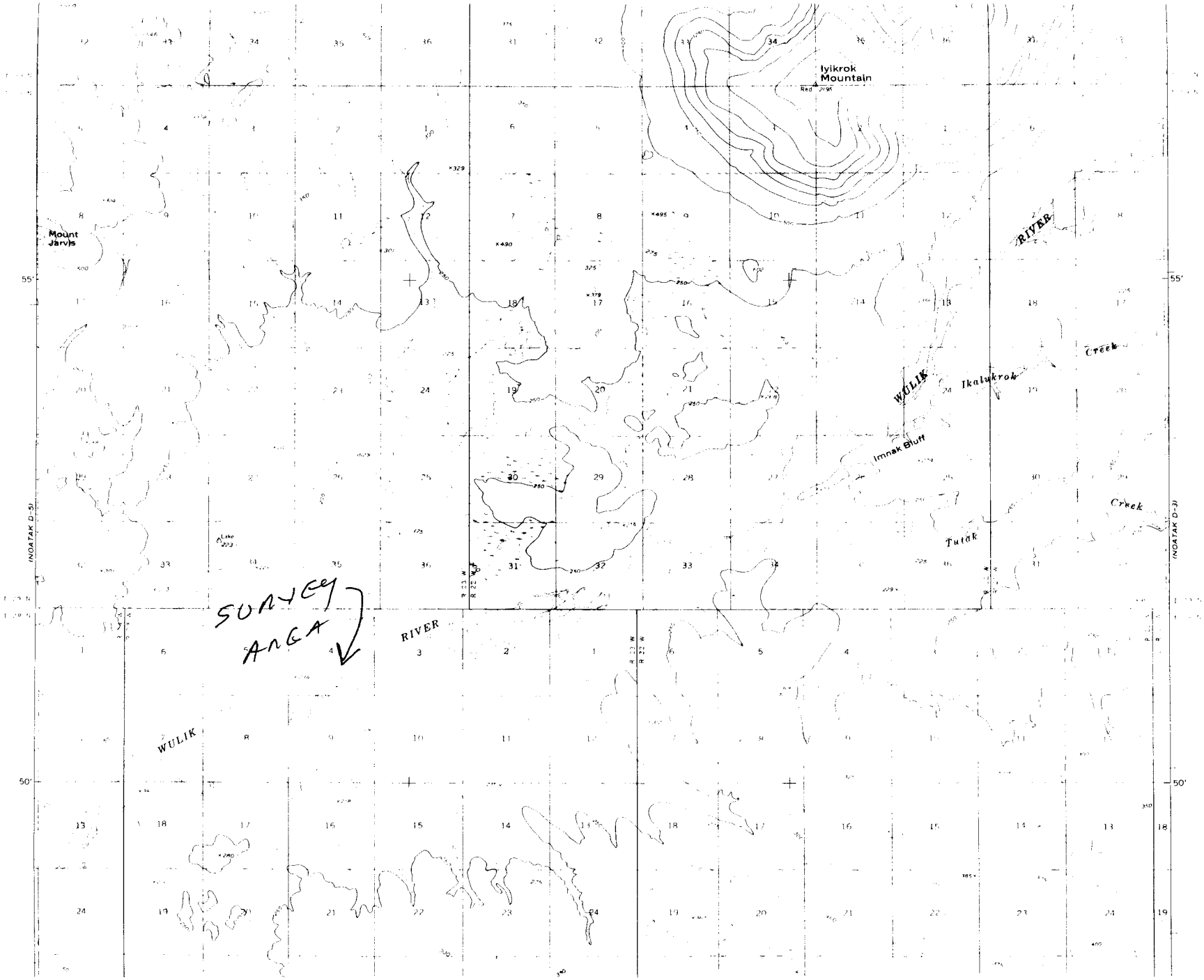
(DE LONG MOUNTAINS A-3)

NOATAK D-3

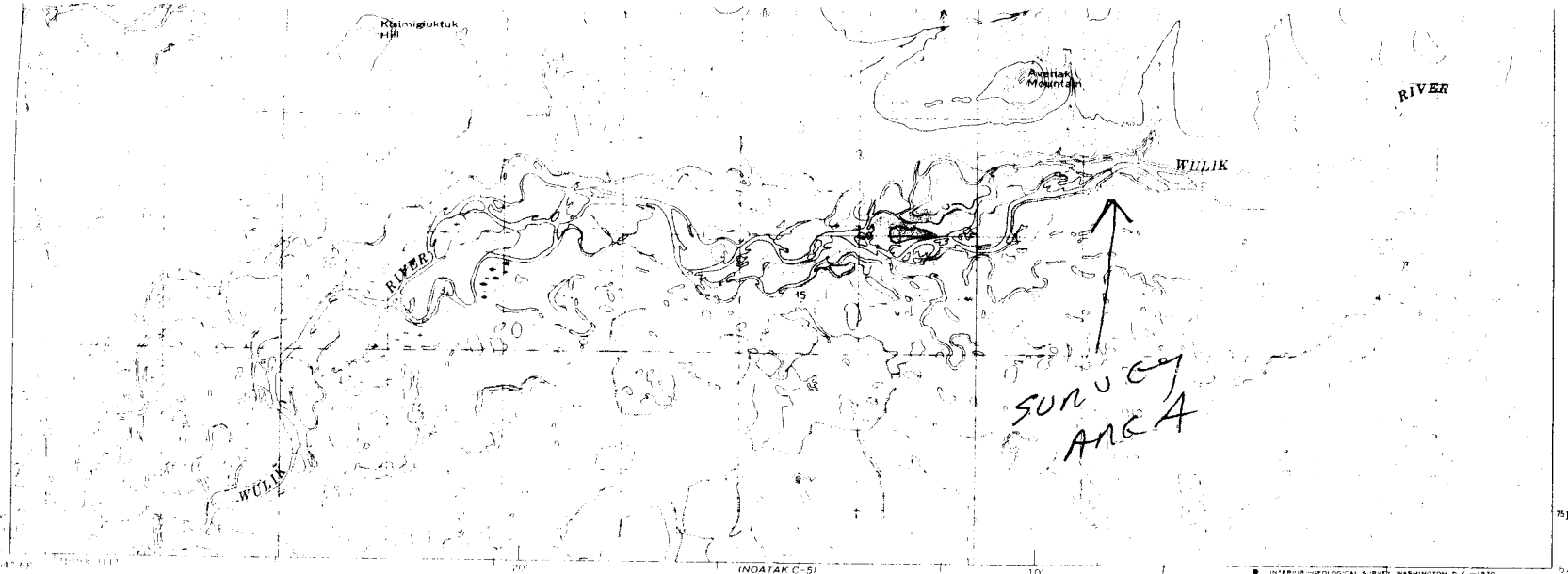
UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY



SURVEY AREA


Iyikrok Mountain
Mount Jarvis
WULIK RIVER
Ikalukrok Creek
Imnak Bluff
Tutak Creek
SURVEY AREA
WULIK RIVER
(NOATAK D-5)
(NOATAK D-3)
55'
50'

NOATAK D-4



Mapped by the Army Map Service
Published for civil use by the Geological Survey

Control by USC&GS and USGS

Topography by photogrammetric methods from aerial photographs taken 1952, field annotated 1955. Map not field checked.

Universal Transverse Mercator projection. 1927 North American datum. 10,000 foot grid based on Alaska coordinate system, zone 8. 1000 meter Universal Transverse Mercator grid ticks, zone 3, shown in blue.

Land lines represent unsurveyed and unmarked locations predetermined by the Bureau of Land Management. Folio 8, 4, Kateel River Meridian.

SCALE 1:63 360

CONTOUR INTERVAL 50 FEET
DASHED LINES REPRESENT 25 FOOT CONTOURS
DATUM IS MEAN SEA LEVEL

ALTERNATE MEAN DECLINATION, 1955

ALASKA
QUADRANGLE LOCATION

ROAD CLASSIFICATION

No roads or trails in this area

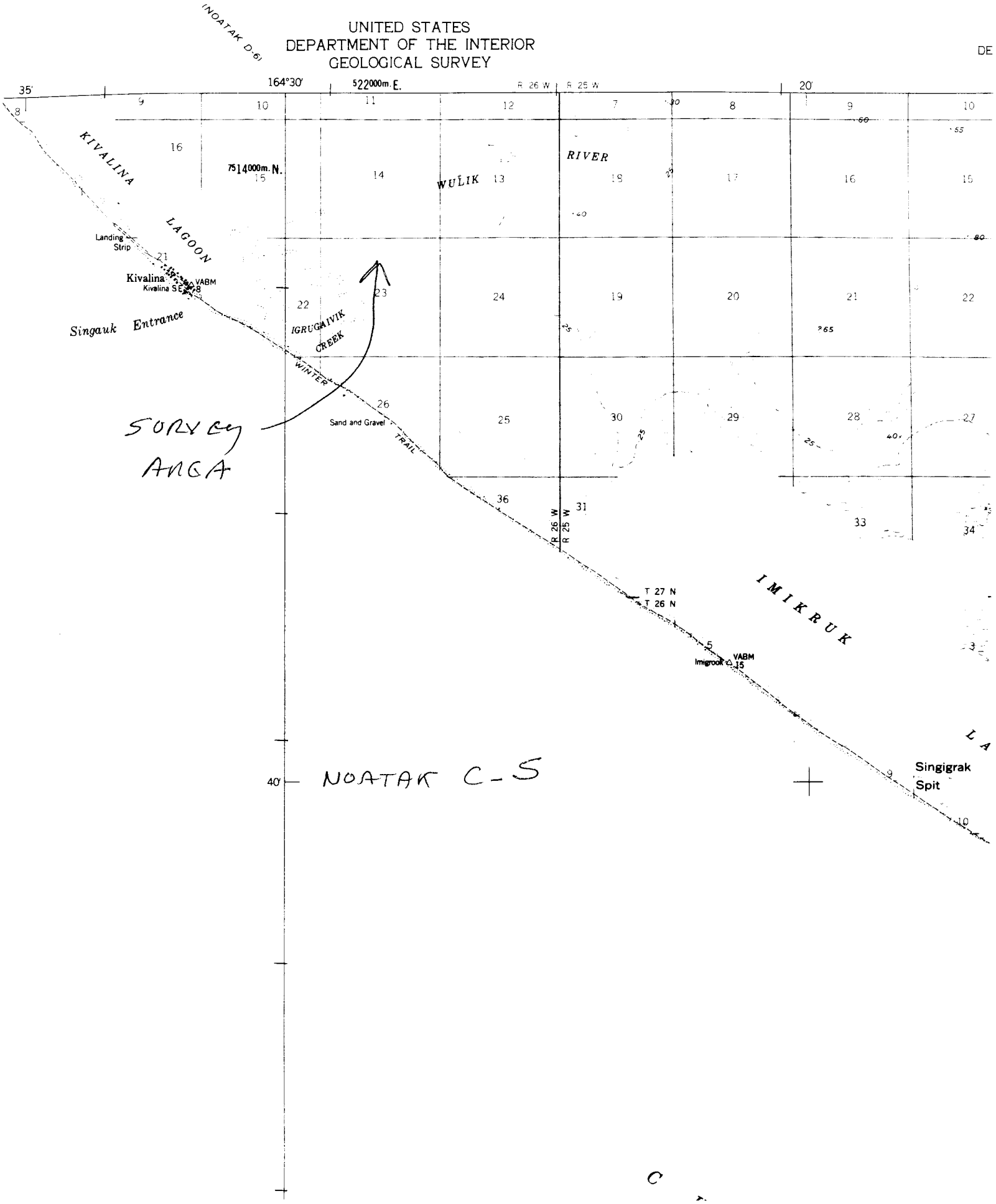
FOR SALE BY U. S. GEOLOGICAL SURVEY
FAIRBANKS, ALASKA 99701, DENVER, COLORADO 80225, OR WASHINGTON, D.C. 20242
A FOLDER DESCRIBING TOPOGRAPHIC MAPS AND SYMBOLS IS AVAILABLE ON REQUEST

NOATAK (D-5), ALASKA
N6745—W16400/15 x 30

1955

NOATAK D-5

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY



RECEIVED
OCT 04 1993
Alaska Dept. of Fish & Game
Habitat – Region III

MEMORANDUM **STATE OF ALASKA**

TO: Al Ott
Regional Supervisor
ADF&G Habitat Division
Fairbanks, Alaska

DATE: 10-1-93

File No. WU1_93

TELEPHONE NO: (907) 443-5796

SUBJECT: Wulik River Survey

FROM: Fred DeCicco FD
Area Biologist SF
Nome, Alaska

I departed Nome at about 10 AM on 29 September via Bering Air for Kotzebue, arriving at 1150 AM. There were no PA-18's available in Kotzebue. The National Park Service had tentatively consented to let me use theirs, however, it was in need of a 100 hour inspection and could not be flown. We ended up using Jim Rood and his Cessna 206, because his cub was also out of commission. We left Kotzebue at about 1:30 PM for the survey.

Survey conditions were very good. The weather was clear and sunny with a moderate downstream wind. However, it had been cold (zero F.) the previous night and there was a lot of slush ice in the river. Because of the speed of the 206, I was not able to see as well as I could have from a cub, but I was able to get a count. There were a lot of fish in the river. There seemed to be more in the lower river below Phil Driver's than I recall seeing in the past. The counts of char follow:

Kivalina River Total: 16,534

Wulik River, Mouth to Sivu:	13,893
Sivu to Driver's:	67,395
Driver's to Ikalukrok:	55,200
Above Ikalukrok:	7,650
Total for Wulik River:	144,138

cc: Fred Andersen, Sport Fish Division

FILE COPY
SGW
CRH
RFM
AGO uw
RAP
RTS
AHT
PKW
JFW

MEMORANDUM

State of Alaska
Department of Fish and Game

To: Lance Trasky
Regional Supervisor
Habitat and Restoration Division

Date: October 25, 1993

File No:

Telephone Number: 451-6192

From: Alvin G. Ott
Regional Supervisor
Habitat and Restoration Division
Department of Fish and Game

Subject: 1994 Anadromous Catalog Nominations

RE: 1994 Anadromous Catalog Nominations -- Justification for Designation of Juvenile Arctic Char (Dolly Varden) within the Seward Peninsula Area as Anadromous.

In response to your past requests, the following justification has been prepared for the record and reflects the factual basis for our determination that Seward Peninsula Arctic char (now classified as Dolly Varden) are predominately anadromous.

Arctic and sub-arctic char populations exhibit a number of life history patterns. This variation is further complicated in that char within a single drainage exhibit considerable "plasticity" in which sympatric and allopatric forms exist with different life history patterns. McCart (1980) describes four life history types. Three of these types (isolated stream residents, residual and anadromous) occupy stream habitats while the fourth type resides in lakes. The lake resident type is generally regarded to be a resident, non-anadromous, population (recent taxonomic clarification regards this morph type as a true Arctic char - other char morph types are now considered to be Dolly Vardens). However, McCart concludes that all three stream morphs cannot be distinquished by meristic characteristics. The only way to distinguish anadromous and non-anadromous populations is to document the life history pattern of the fish in question or examine external characteristics such as parr-marks and coloration. All three stream morphs are identical for the first several years of life and are indistinguishable until either (1) anadromous populations undertake their first sea-ward migration (Age III to V) or (2) stream residents and residual morphs first reach sexual maturity (typically Age VI).

Within this framework, research conducted by Dr. Hans Norbeng of Norway is particularly noteworthy. Dr. Norbeng artifically spawned both resident and anadromous char as separate groups and presented the results of his research at the First International Symposium on Arctic char in 1981. Dr. Norbeng's research demonstrated that both matings between resident adults and matings between anadromous adults produced the same ratio of resident versus anadromous offspring. Regardless of whether resident or anadromous adults were spawned, the offspring produced were 30% small residents, 10% large residents, and 60% anadromous. He concluded that small and large resident char were analogous to precocious individuals in salmon populations and that the life history pattern that develops may be a function of gene ratio.

Based on these findings, we believe that a reasonable basis exists for concluding that a significant percentage of juvenile char collected in mainstem and tributary streams on the