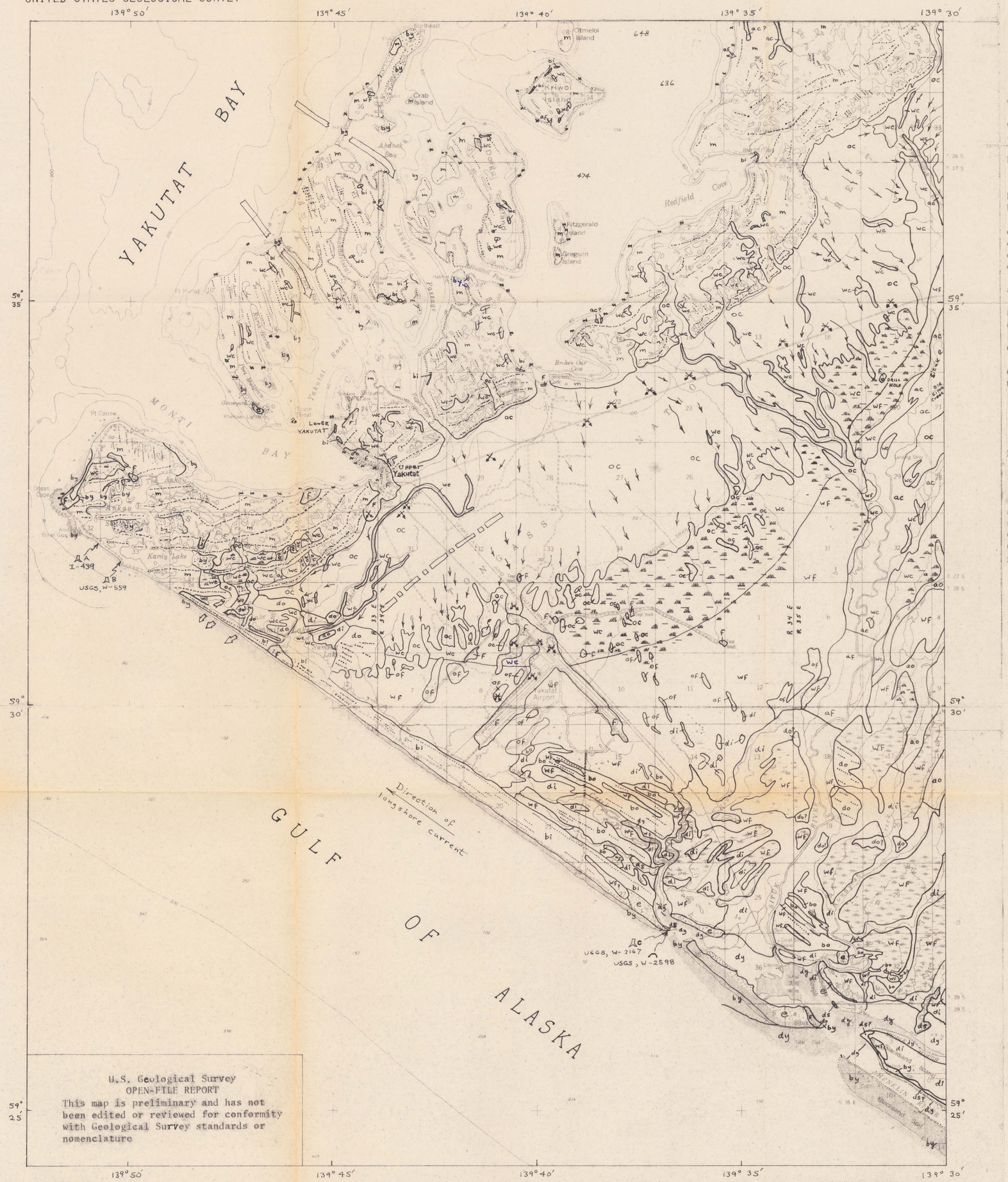
DEPARTMENT OF THE INTERIOR
UNITED STATES GEOLOGICAL SURVEY

OPEN-FILE REPORT
75-529
FIGURE 4



U.S. Geological Survey
OPEN-FILE REPORT
This map is preliminary and has not been edited or reviewed for conformity with Geological Survey standards or nomenclature

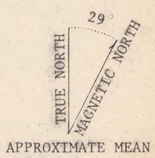
Base modified from U.S. Geological Survey topographic quadrangle maps, Yakutat B-5 and C-5, Alaska, 1959, minor revisions, 1970

Mapped by field methods, 1966, by photo interpretation, 1975

SCALE 1:63 360

0 1 2 3 4 5 MILES
0 1 2 3 4 5 6 7 KILOMETRES

CONTOUR INTERVAL 100 FEET
DOTTED LINES REPRESENT 50 FOOT CONTOURS
DATUM IS MEAN SEA LEVEL
DEPTH CURVES AND SOUNDINGS IN FEET-DATUM IS MEAN LOWER LOW WATER
SHORELINE SHOWN REPRESENTS THE APPROXIMATE LINE OF MEAN HIGH WATER
THE MEAN RANGE OF TIDE IS APPROXIMATELY 8 FEET



APPROXIMATE MEAN DECLINATION, 1959

ABBREVIATED DESCRIPTION OF GEOLOGIC MAP UNITS
(All units of Holocene, Quaternary age)

f ARTIFICIAL FILL--Includes fill and ground areas extensively modified during construction

ORGANIC DEPOSITS

wc Underlain by coarser grained deposits--Mostly sandy pebble gravel or silty sandy pebble gravel

wf Underlain by finer grained deposits--Chiefly sand and silty sand

e EOLIAN SAND DEPOSITS

BEACH DEPOSITS

by Young--Along outer coast mostly sand and some pebbly sand; elsewhere, sandy to pebbly cobble gravel with some boulders (Map unit symbol shown only for wider areas of deposits.)

bi Intermediate--Mostly sand and some pebbly sand

bo Old--Mostly sand and some pebbly sand

DELTA-ESTUARINE DEPOSITS

dy Young--Chiefly silty sand or fine sand

di Intermediate--Mostly sand, includes some silt and small pebbles

do Old--Probably mostly sand including some pebbles and silt

ds Clayey silt

ALLUVIAL DEPOSITS

ac Coarse grained--Mostly pebble gravel, includes some sand, cobbles, and silty sand

af Fine grained--Chiefly sand, includes some pebble gravel and silt

ao Old--Probably sand and silty sand, and, near base, sandy pebble gravel

OUTWASH DEPOSITS

oc Coarse grained--Chiefly sandy pebble gravel locally varying from granule sand to silty cobble gravel

of Fine grained--Mostly sand varying from pebbly sand to silty sand

m OUTER YAKUTAT BAY MORAINE COMPLEX--Most prevalent deposit a mixture called till or diamicton, chiefly granule- and pebble-laden silt to sand with lesser cobbles, clay, and some boulders. Subordinate deposits include sandy pebble gravel or sandy cobble gravel to silty fine sand

Notes:
(1) Map units developed from limited field examination in 1966 and from interpretation in 1975 of airphotos taken between 1948 and 1963; (2) map units generally 2 or more ft thick; (3) mean lower low water level is the lower limit of mapping; (4) bedrock underlies the map area at a depth of probably as much as 200 ft; (5) classification of grain sizes of rock fragments follows Wentworth (1922): clay, less than 0.00015 in.; silt, 0.00015-0.0025 in.; sand, 0.0025-0.079 in.; granule, 0.079-0.157 in.; pebble, 0.157-2.5 in.; cobble, 2.5-10.1 in.; boulder, greater than 10.1 in.

——— Contact between geologic map units

– – – – Prominent curvilinear ridge (shown in map unit m, outer Yakutat Bay moraine complex)

····· Relatively straight linear ridge (shown in map units m, outer Yakutat Bay moraine complex; do, old delta-estuarine deposits; and bi and bo, intermediate and old beach deposits, respectively)

→ Abandoned channel and direction of gradient of glacial outwash stream (shown in map unit oc, coarse outwash)

Possible alinement of former channel for glacial outwash

Alinement of drainage divide, possibly overlying a buried glacial moraine or other firm geologic feature

Borrow pit used for fill or construction aggregate; some pits possibly abandoned

Abandoned borrow pit

Areas containing mostly sand at surface (shown in units by, dy, and e, young beach and delta-estuarine deposits and eolian deposits, respectively)

Areas containing abundant cobbles, boulders, and pebbles (shown in unit by, young beach deposits)

ДA,B,C Sample locality, radiocarbon age-dated wood (see expanded description of outer Yakutat Bay moraine complex, map unit m)

⌒ Sample locality, radiocarbon age-dated marine mollusk shells (see expanded description of clayey silt delta-estuarine deposit, map unit ds)

? Query after map unit designation indicates that presence of the deposit at that particular location is speculative; alternative interpretation is that adjacent map unit is at that location

Marsh or swamp areas as interpreted by topographer who developed initial topographic map using 1948 airphotos. These wet areas form only part of the organic deposits mapped as units wc and wf

CORRELATION OF GEOLOGIC MAP UNITS

artificial fill	organic		eolian	beach	delta-estuarine		alluvial	outwash		moraine complex	
f	wc	wf	e	by	dy		ac	af			
				bi	di		ao		oc	of	m
				bo	do						
					ds						

Holocene } QUATERNARY

FIGURE 4.--RECONNAISSANCE GEOLOGIC MAP OF PART OF YAKUTAT B-5 AND C-5 QUADRANGLES, YAKUTAT AREA, ALASKA.