

# Alaska Clean Seas Technical Manual

## Volume 2 Map Atlas

Revised 2008







# ALASKA CLEAN SEAS TECHNICAL MANUAL

## VOLUME 2

### MAP ATLAS

© 1999, 2001, 2003, 2006, 2007, 2008 Alaska Clean Seas

All rights reserved. No part of this work covered by the copyrights hereon may be reproduced in any form or by any means without the written permission of Alaska Clean Seas.

Alaska Clean Seas  
Pouch 340022  
Prudhoe Bay, Alaska 99734-0022

Phone: (907) 659-2405  
Fax: (907) 659-2616

## DISCLAIMER

In producing this manual, Alaska Clean Seas has endeavored to provide the best available information based on the latest technological and engineering advancements. ACS believes that the information and procedures contained herein are well founded, and utilize information obtained from actual experiences in the environments where these procedures are intended to apply. Nonetheless, ACS and its members expressly disclaim that the procedures provided in this manual, even if followed correctly and competently, will necessarily produce any specific results. Implementation of the recommendations and procedures contained herein is at the sole risk of the user.

The base maps in this atlas were provided by BP Exploration (Alaska) Inc. While every effort was made to ensure an accurate depiction of surface features, BPXA does not warrant that the data is accurate or fit for any particular purpose.

The *Alaska Clean Seas Technical Manual* provides a detailed source of information pertaining to spill response variables on the North Slope of Alaska. This information includes:

- Spill response tactics in a variety of conditions and seasonal variations.
- Maps of resources at risk from a spill.
- Information on the Incident Management System used in a spill event.

The *Technical Manual* is generally applicable to all operators on the North Slope. Facility-specific information is provided in operator oil discharge prevention and contingency plans. The information provided in this manual, in conjunction with the individual operator contingency plans, is intended to meet the requirements of Alaska Department of Environmental Conservation spill planning regulations (18 AAC 75).

There are always variables beyond the control of any response organization that affect response performance. These variables include personnel safety considerations, weather, visibility, sea conditions, location of spill, type of oil spilled, rate of discharge, condition of the equipment or facility causing the spill, and for a vessel, position of discharging vessel and condition of remaining cargo. In addition, site-specific conditions such as the amount and type of wildlife and sea mammals in or around the site, or the amount and nature of debris present, could interfere with response performance. Accordingly, it is not possible to guarantee response performance in exact accordance with the estimates, strategies or scenarios presented in this *Technical Manual* for planning purposes. For example, the safety of employees, contractor personnel, government representatives, and the public is of paramount importance and will override all other considerations in response operations.

## FOREWORD

This map atlas is the second volume of three manuals that make up the *Alaska Clean Seas Technical Manual* providing ACS member companies with a unified response plan for spills in the North Slope oil fields, both onshore and offshore, and from Pump Station 1 to Pump Station 4 (Milepost 167) of the Trans-Alaska Pipeline System:

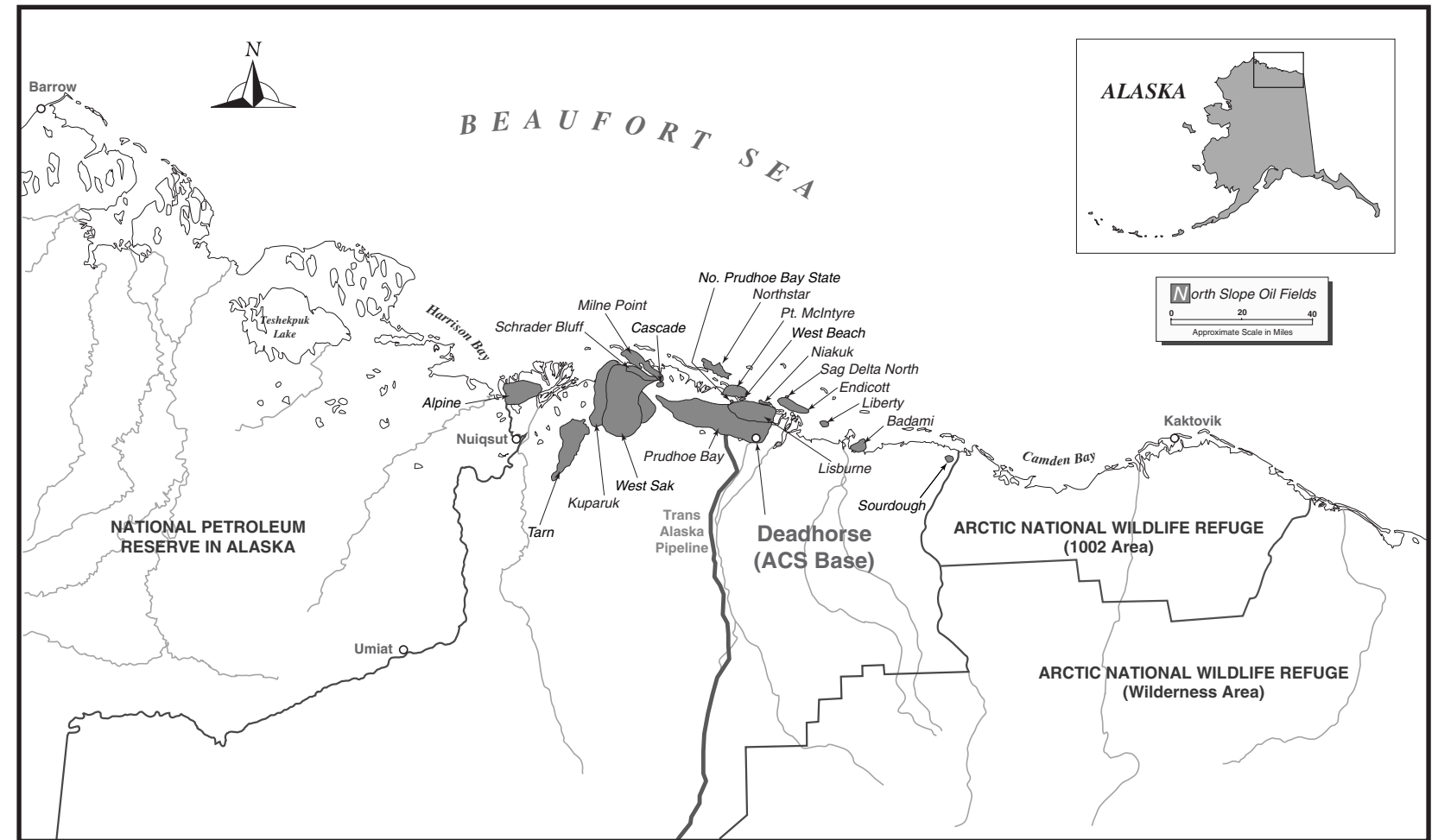
*Volume 1: Tactics Descriptions*

*Volume 2: Map Atlas*

*Volume 3: North Slope Incident Management System*

The *Technical Manual* grew out of the work of the Industry/Agency North Slope Spill Response Project Team, which consists of government and industry personnel representing the following organizations: Alaska Clean Seas, Alaska Department of Environmental Conservation, Alyeska Pipeline Service Company, ARCO Alaska, Inc. (now ConocoPhillips Alaska, Inc.), BP Exploration (Alaska) Inc., North Slope Borough, U.S. Coast Guard, U.S. Environmental Protection Agency, and U.S. Minerals Management Service. This team was formed in the spring of 1997 in response to the concerns of both agencies and industry that spill response capability for the North Slope needed to be re-evaluated in light of proposed new offshore development such as Northstar and Liberty. Also, both agency and industry felt that industry should develop a unified North Slope response plan under the auspices of Alaska Clean Seas. The Project Team was supported by the Tactics Team, consisting of technical representatives from agencies and industry. The Project Team developed nine scenarios covering a variety of spill situations, conditions, and seasons. The Tactics Team used the scenarios to develop tactics, which became the basis for the tactics descriptions in the *Technical Manual*.

This manual contains a set of maps that cover the North Slope oil fields and their environs at scales of either 1:26,000 or 1:63,360. A map index and overall legend are provided. The region was windowed to fit on 11" x 17" pages, and efforts were made to cover all facilities as completely as possible.



The following information is shown on these maps:

- Facilities, roads, and pipelines
- Culvert locations
- Pre-staged response equipment
- Priority protection sites
- Topographic information
- Hydrographic information including drainage divides and flow directions interpreted from aerial photography
- Shoreline types

Each map also has a corresponding legend page that provides the following information:

- Priority protection sites
- General sensitivity information
- Cultural sites
- Air access
- Vessel access and hydrographic conditions
- Staging areas and prestaged equipment
- Countermeasures considerations



# LIST OF REVISIONS

SHEET	LEGEND	MAP
1	Revised 04/06	Revised 04/06
2	Revised 03/03	Revised 04/06
3	Revised 03/03	Revised 04/06
4	Revised 04/06	Revised 04/06
5	Revised 04/06	Revised 04/06
6	Revised 04/06	Revised 04/06
7	Revised 04/06	Revised 04/06
8	Revised 04/06	Revised 04/06
9	Revised 04/06	Revised 04/06
10	Revised 04/06	Revised 04/06
11	Revised 05/08	Revised 04/06
12	Revised 04/06	Revised 04/06
13	Revised 04/06	Revised 04/06
14	Revised 05/08	Revised 04/06
15	Revised 05/08	Revised 05/08
16	Revised 04/06	Revised 04/06
17	Revised 04/06	Revised 04/06
18	Revised 04/06	Revised 04/06
19	Revised 04/06	Revised 04/06
20	Revised 03/07	Revised 05/08
21	Revised 04/06	Revised 04/06
21A	Revised 03/03	Revised 04/06
22	Revised 04/06	Revised 05/08
23	Revised 04/06	Revised 04/06
23A	Revised 12/03	Revised 04/06
23B	Original 03/03	Revised 05/08
24	Revised 04/06	Revised 04/06
25	Revised 12/03	Revised 05/08
26	Revised 12/03	Revised 04/06
27	Revised 12/03	Revised 05/08
28	Revised 12/03	Revised 05/08
28A	Revised 12/03	Revised 05/08
28B	Revised 12/03	Revised 05/08
28C	Revised 12/03	Revised 05/08
29	Revised 05/08	Revised 05/08
30	Revised 05/08	Revised 04/06
31	Revised 05/08	Revised 04/06
32	Revised 05/08	Revised 04/06
33	Revised 05/08	Revised 03/03
34	Revised 05/08	Revised 03/03
35	Revised 05/08	Revised 05/08
36	Revised 05/08	Revised 04/06
37	Revised 05/08	Revised 04/06
S38	Revised 05/08	Revised 04/06

SHEET	LEGEND	MAP
39	Revised 05/08	Revised 04/06
39A	Revised 05/08	Revised 05/08
40	Revised 05/08	Revised 04/06
41	Revised 05/08	Revised 05/08
42	Revised 05/08	Revised 04/06
43	Revised 05/08	Revised 04/06
44	Revised 05/08	Revised 04/06
45	Revised 05/08	Revised 04/06
45A	Revised 05/08	Revised 04/06
46	Revised 05/08	Revised 04/06
47	Revised 05/08	Revised 04/06
48	Revised 03/03	Revised 04/06
49	Revised 04/06	Revised 04/06
49A	Original 04/06	Original 04/06
50	Revised 03/03	Revised 04/06
51	Revised 03/03	Revised 04/06
52	Revised 03/03	Revised 04/06
53	Revised 12/03	Revised 05/08
54	Revised 12/03	Revised 05/08
55	Revised 03/03	Revised 05/08
56	Revised 04/06	Revised 03/03
57	Revised 04/06	Revised 05/08
58	Revised 04/06	Revised 12/03
59	Revised 04/06	Revised 03/03
60	Revised 12/03	Revised 12/03
61	Revised 04/06	Revised 03/03
62	Revised 04/06	Revised 12/03
63	Revised 03/07	Revised 12/03
64	Revised 03/03	Revised 03/03
65	Revised 12/03	Revised 12/03
66	Revised 04/06	Revised 04/06
67	Revised 12/03	Revised 04/06
68	Revised 03/03	Revised 03/03
69	Revised 03/07	Revised 12/03
70	Revised 03/03	Revised 03/03
71	Revised 04/06	Revised 04/06
72	Revised 04/06	Revised 03/03
73	Revised 05/08	Revised 03/03
74	Revised 05/08	Revised 12/03
75	Revised 03/03	Revised 04/06
76	Revised 12/03	Revised 04/06
77	Revised 12/03	Revised 12/03
78	Revised 12/03	Revised 04/06
79	Revised 12/03	Revised 03/03

SHEET	LEGEND	MAP
80	Revised 05/08	Revised 03/03
81	Revised 03/03	Revised 03/03
82	Revised 03/03	Revised 03/03
83	Revised 07/06	Revised 07/06
84	Revised 03/03	Revised 04/06
85	Revised 04/06	Revised 04/06
86	Revised 07/06	Revised 07/06
87	Revised 04/06	Revised 03/03
88	Revised 04/06	Revised 03/03
89	Revised 07/06	Revised 07/06
90	Revised 04/06	Revised 04/06
91	Revised 04/06	Revised 04/06
92	Revised 03/03	Revised 03/03
93	Revised 05/08	Revised 05/08
94	Revised 03/03	Revised 03/03
95	Revised 03/03	Revised 03/03
96	Revised 04/06	Revised 03/03
97	Revised 03/03	Revised 03/03
98	Revised 03/03	Revised 03/03
99	Revised 03/03	Revised 03/03
100	Revised 04/06	Revised 04/06
101	Revised 04/06	Revised 03/03
102	Revised 04/06	Revised 03/03
103	Revised 05/08	Revised 03/03
104	Revised 05/08	Revised 05/08
105	Revised 04/06	Revised 04/06
106	Deleted 04/06	Deleted 04/06
107	Deleted 04/06	Deleted 04/06
108	Deleted 04/06	Deleted 04/06
109	Deleted 04/06	Deleted 04/06
110	Deleted 04/06	Deleted 04/06
111	Deleted 04/06	Deleted 04/06
112	Revised 04/06	Revised 04/06
113	Revised 04/06	Revised 03/03
114	Revised 04/06	Revised 03/03
115	Revised 04/06	Revised 04/06
116	Deleted 04/06	Deleted 04/06
117	Deleted 04/06	Deleted 04/06
118	Revised 04/06	Revised 04/06
119	Revised 04/06	Revised 04/06
120	Revised 04/06	Revised 04/06
121	Revised 04/06	Revised 04/06
122	Deleted 04/06	Deleted 04/06
123	Revised 04/06	Revised 04/06

SHEET	LEGEND	MAP
124	Revised 04/06	Revised 04/06
125	Revised 04/06	Revised 04/06
126	Revised 04/06	Revised 04/06
127	Revised 04/06	Revised 04/06
128	Revised 04/06	Revised 04/06
129	Revised 04/06	Revised 04/06
130	Revised 04/06	Revised 04/06
131	Revised 04/06	Revised 04/06
132	Revised 04/06	Revised 04/06
133	Revised 04/06	Revised 04/06
134	Revised 04/06	Revised 04/06
135	Revised 04/06	Revised 04/06
136	Original 04/06	Original 04/06
137	Original 04/06	Original 04/06
138	Original 04/06	Revised 05/08
139	Revised 05/08	Revised 05/08
140	Revised 05/08	Revised 05/08
141	Revised 05/08	Revised 05/08
142	Revised 05/08	Revised 05/08
143	Original 04/06	Revised 05/08
144	Original 04/06	Original 04/06
145	Original 04/06	Original 04/06
146	Original 04/06	Original 04/06
147	Revised 05/08	Revised 05/08
148	Original 04/06	Revised 05/08
149	Original 04/06	Original 04/06
150	Original 04/06	Original 04/06
151	Original 04/06	Original 04/06
152	Revised 05/08	Revised 05/08
153	Original 04/06	Original 04/06
154	Original 04/06	Original 04/06
155	Original 04/06	Original 04/06
156	Original 04/06	Original 04/06
157	Original 04/06	Original 04/06
158	Original 04/06	Original 04/06
159	Original 04/06	Original 04/06
160	Original 04/06	Original 04/06
161	Original 04/06	Original 04/06
162	Original 04/06	Original 04/06
163	Original 04/06	Original 04/06
164	Original 04/06	Original 04/06
165	Original 04/06	Original 04/06
166	Original 04/06	Original 04/06
167	Original 04/06	Original 04/06



# LIST OF REVISIONS (CONT.)

SHEET	LEGEND	MAP
168	Original 04/06	Original 04/06
169	Original 04/06	Original 04/06
170	Original 04/06	Original 04/06
171	Original 04/06	Original 04/06
172	Original 04/06	Original 04/06
173	Original 04/06	Original 04/06
174	Original 04/06	Original 04/06
175	Original 04/06	Original 04/06
176	Original 04/06	Original 04/06
177	Original 05/08	Original 05/08
178	Original 05/08	Original 05/08
179	Original 05/08	Original 05/08
180	Original 05/08	Original 05/08
181	Original 05/08	Original 05/08
182	Original 05/08	Original 05/08
183	Original 05/08	Original 05/08
184	Original 05/08	Original 05/08
185	Original 05/08	Original 05/08
186	Original 05/08	Original 05/08
187	Original 05/08	Original 05/08
188	Original 05/08	Original 05/08
189	Original 05/08	Original 05/08
190	Original 05/08	Original 05/08
191	Original 05/08	Original 05/08
192	Original 05/08	Original 05/08
193	Original 05/08	Original 05/08
194	Original 05/08	Original 05/08
195	Original 05/08	Original 05/08
196	Original 05/08	Original 05/08
197	Original 05/08	Original 05/08
198	Original 05/08	Original 05/08
199	Original 05/08	Original 05/08
200	Original 05/08	Original 05/08
201	Original 05/08	Original 05/08
202	Original 05/08	Original 05/08
203	Original 05/08	Original 05/08
204	Original 05/08	Original 05/08
205	Original 05/08	Original 05/08
206	Original 05/08	Original 05/08
207	Original 05/08	Original 05/08
208	Original 05/08	Original 05/08
209	Original 05/08	Original 05/08
210	Original 05/08	Original 05/08

SHEET	LEGEND	MAP
211	Original 05/08	Original 05/08
212	Original 05/08	Original 05/08
213	Original 05/08	Original 05/08
214	Original 05/08	Original 05/08
215	Original 05/08	Original 05/08
216	Original 05/08	Original 05/08
217	Original 05/08	Original 05/08
218	Original 05/08	Original 05/08
219	Original 05/08	Original 05/08
220	Original 05/08	Original 05/08
221	Original 05/08	Original 05/08
222	Original 05/08	Original 05/08

# Alaska Clean Seas Technical Manual Volume 2, Map Atlas

## REVISION FORM

Alaska Clean Seas requests that users of this manual provide notification of any errors or suggested revisions for use in future updates. If you would like to submit information, please photocopy this form and fill it out. The form is designed to copy easily onto an 8.5" x 11" sheet. Please send the completed form to:

Alaska Clean Seas  
Special Projects and Development Coordinator  
Pouch 340022  
Prudhoe Bay, Alaska 99734-0022

Phone: 907-659-3207  
Fax: 907-659-2616

Map: \_\_\_\_\_

Change: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

Source of Information for Change: \_\_\_\_\_

\_\_\_\_\_

Name of Person Submitting Change: \_\_\_\_\_

Organization: \_\_\_\_\_ Telephone: \_\_\_\_\_

Date: \_\_\_\_\_

Thank you for helping ACS maintain its Technical Manual up-to-date!

## HOW TO USE *THE ACS TECHNICAL MANUAL VOLUME 2, MAP ATLAS*

The purpose of the ACS *Technical Manual* is to provide a comprehensive set of response tactics in a user-friendly format that is accessible both to plan reviewers and operations personnel. The tactics were designed to provide the building blocks for facility-specific plans so that scenarios in those plans could simply and thoroughly identify the resources and personnel needed to respond to site-specific spills. At the same time, the technical details on how each tactic is implemented can be eliminated from the facility plans of ACS member companies.

*Volume 1, Tactics Descriptions*, contains tactics arranged by subject as follows:

- Safety
- Containment
- Recovery and Storage
- Tracking and Surveillance
- Burning
- Shoreline Cleanup
- Wildlife and Sensitive Areas
- Disposal
- Logistics and Equipment
- Administration

Each tactic is numbered with a key letter to identify the subject: e.g., Tactic S-1 (Site Entry Procedures) is the first tactic in the safety section, while C-1 (Containment Using Snow Berm) is the first in the containment section. These numbers are useful for referencing in member-company response plans.

Each tactic consists of the following elements: a simplified diagram, a brief narrative description, an equipment and personnel table, a support equipment table, capacities for planning, and deployment considerations and limitations. Sufficient information is provided to allow the user to quickly see how the tactic is deployed and to identify the equipment and personnel needed to implement the tactic. The resource tables also provide storage locations for the equipment and estimated mobilization times and deployment times. These tables can be used to determine equipment needs and to develop response times for individual facilities.

*Volume 2, Map Atlas*, contains 11" x 17" maps (scales 1:26,000 or 1:63,360) and legend pages covering the developed areas of the North Slope and providing detailed geographic, biological, and civil information on the region. The following two pages contain a sample map and corresponding legend page. As shown on these samples, each color map contains the following information: facilities, roads, and pipelines; culvert locations; prestaged response equipment locations; priority protection sites; topographic information; hydrographic information, including drainage divides and flow direction; and shoreline types. For each map there is a corresponding legend page that provides written data on the information shown on the maps, including priority protection sites, general sensitivity data, cultural sites, air access, vessel access, hydrographic conditions, countermeasures considerations, staging areas, and prestaged equipment.

The illustrations of the priority protection sites have been reviewed and accepted by state and federal agency biologists. Environmental sensitivity information provided by the Alaska Regional Response Team Sensitive Areas Working Group is included on the map legend pages under "General Sensitivities." The purpose of this information is to alert responders that certain animals may be present at certain times of the year and that some regions are more sensitive than others.

*Volume 3, Incident Management System*, provides a unified organization for ACS member companies to respond to spills and other incidents and crises on the North Slope. The organization consists of three levels of teams (Tactical Response Teams, Incident Management Teams, and Crisis Management Teams) and is based on the Incident Command System (ICS). The manual describes the organization of the teams and includes a full complement of ICS forms and status boards, as well as job checklists for ICS positions.





# SAMPLE MAP LEGEND PAGE

Environmental sensitivity information is provided on the left side of the page

Response considerations are presented on the right side of the page (in some cases, they start at the bottom of the left side of the page).

The sheet number matches the appropriate map

SHEET 35

## Sensitivity Information

The priority protection sites are discrete locations along the coast that can be defended from a spill by means of mechanical containment and recovery equipment. Industry biologists identified these sites from available data. They may be superseded at the time of a spill by decision of the Unified Command.

Most environmental sensitivity information was provided by the Alaska Regional Response Team Sensitive Areas Working Group. The purpose of this information is to alert responders that certain animals may be present at certain times of the year and that some regions are more sensitive than others.

Information on cultural sites is intentionally vague in order to protect the sites. The purpose of this information is to alert responders they need to check the actual location.

**PRIORITY PROTECTION SITES**

SITE NO.	DESCRIPTION	SENSITIVITY	TACTIC	EST. BOOM
PS24A	Salt marsh 1 mile NE of Ugnuravik River mouth	Most sensitive during open water season. Keep oil from entering salt marsh.	C-13 or C-14	4,500'
PS25	Ugnuravik River mouth	Most sensitive during open water season. Keep oil from entering river. Peat shorelines are present on west shore of river.	C-13 or C-14	1,500'
PS27	Creek mouth west of Oliktok Pt. airstrip	Most sensitive during open water season. Keep oil from entering river.	C-13 or C-14	100'

**GENERAL SENSITIVITIES**

- Coastal areas support high concentrations of breeding, nesting, brood-rearing, and molting waterbirds during the summer.
- Simpson Lagoon has large flocks of molting male Oldsquaw in July and early August, especially in the lee shores of the barrier islands.
- Shoreline and offshore areas support molting and brood-rearing eiders. This is also a staging area for migrating Phalaropes (shorebirds). Birds are present in June through September.
- This is a Brant nesting, brood-rearing, and molting area. Birds are present from May through August.
- This is a Spectacled Eider breeding and nesting area. Birds may be present in June to September.
- Plan to deploy bird-hazing systems during the open-water season.
- The Ugnuravik River provides habitat for anadromous whitefish and for resident fish.
- There is a seawater intake on the north wall of the Oliktok Seawater Treatment Plant approximately 8 ft below the surface. Precautions should be taken to keep oil away from this area.
- Polar bears may be present November to April.

**CULTURAL SITES**

Information on the exact locations of cultural sites is confidential. This information is contained in the *North Slope Archaeological Data* document, copies of which are kept at the following offices: State Historical Preservation Officer (SHPO) (907-269-8721), ACS in Deadhorse (907-659-2405), North Slope Borough Lands Division (907-852-0322), North Slope Borough Lands Division (907-852-0322), BPXA Crisis Center in Anchorage (907-564-5243), and the ConocoPhillips Incident Command Center in Anchorage (907-265-1000). The following cultural site(s) are located in the area depicted on this sheet:

- XBP-002 on the coast west of Oliktok Point
- XBP-039 on the coast west of Oliktok Point

ACS Tech. Manual Vol. 2, 04/06

NOTE: All values given on these pages are for planning purposes only.

## Response Considerations

SHEET 35

**AIR ACCESS\***

- There is an emergency aircraft landing strip located at Oliktok Point. This a 4,000-ft gravel airstrip, which is unattended and closed to the public. Approval to use the strip must be obtained 24 hours in advance by calling 907-552-1738 or 317-552-1738. Visual inspection prior to use is recommended.
- Kuparuk airstrip (Sheet 51) is located approximately 14 miles southeast of Oliktok Point.

AIRSTRIP	DESCRIPTION/ LOCATION	FIXED-WING MINIMUMS	FUEL/ SERVICES	TRAFFIC CONTROL
Kuparuk Airstrip	6,000-ft. gravel runway, attended continuously	VFR: 1 mi vis. clear of clouds IFR: 0.75 mi vis.	Jet A	24-hr advance notification required: 907-659-7213

## VESSEL ACCESS\* AND HYDROGRAPHIC CONDITIONS

- Simpson Lagoon water depths range from 3 to 7 ft.
- Bars and shoals obstruct the passages between Pingok Island and Cottle Island (Sheets 33 and 34, respectively).
- There is small boat shelter from east winds behind the small sand spit west of Oliktok Point. It provides excellent moorage but is limited to 5 ft of water. This shelter is exposed to southwest winds. Shelter from southwest winds is available on the east side of Oliktok Point.
- There is a boat launch at Oliktok Dock.
- Simpson Lagoon currents are generally to the west at 10 to 30 cm/sec.

## COUNTERMEASURES CONSIDERATIONS

- Sand-silt shores are very narrow (less than 20 ft wide) and interrupted by small creek mouths and areas of thick peat deposits. Large areas of potential overwash between Oliktok Point and Kalubik Creek (to the west) may make cleanup difficult. Backshore areas are wet tundra.
- Vegetated shorelines in this area may preclude the use of heavy equipment. Sand-silt washed over on the vegetated shorelines is mixed with large peat blocks, making mechanized travel difficult.
- West and north winds and Colville River discharge will cause floating oil to impinge on the shoreline west of Oliktok Point. There is some restricted access to beaches by shallow water.

## STAGING AREAS AND PRESTAGED EQUIPMENT

- There are staging areas at Oliktok Dock and approximately 2 miles southeast of Oliktok Dock.

PRESTAGED EQUIP. AREA	LOCATION	ITEM	QUANTITY	TYPE
KUP-11	DS-3R	Boom	500'	8" x 6" river
KUP-12	Oliktok Dock	Boom	3,400'	8" x 6" river
KUP-12 Cont'd	Additional equipment stored seasonally at Oliktok	Boom	1,300'	Shore Seal (with floating pump and blower)
		Boom	1,100'	14" x 24" inflatable ocean
		Mini-barges	492'	14" x 20" Nofi rapid deploy
		HYPUs	2	249 bbl
		Anchor Systems	1	For boom deployment
		Various	Various	Various

\*See the latest *Supplement, Alaska* and United States Coast Pilot for current information on air and vessel access, respectively.

NOTE: All values given on these pages are for planning purposes only.

ACS Tech. Manual Vol. 2, 12/03

Information on airstrips was taken from the Supplement Alaska, a compilation of airport data published bimonthly by the National Oceanic and Atmospheric Administration. Responders should refer to the latest edition at the time of a spill. Other information on potential landing sites has been included as appropriate.

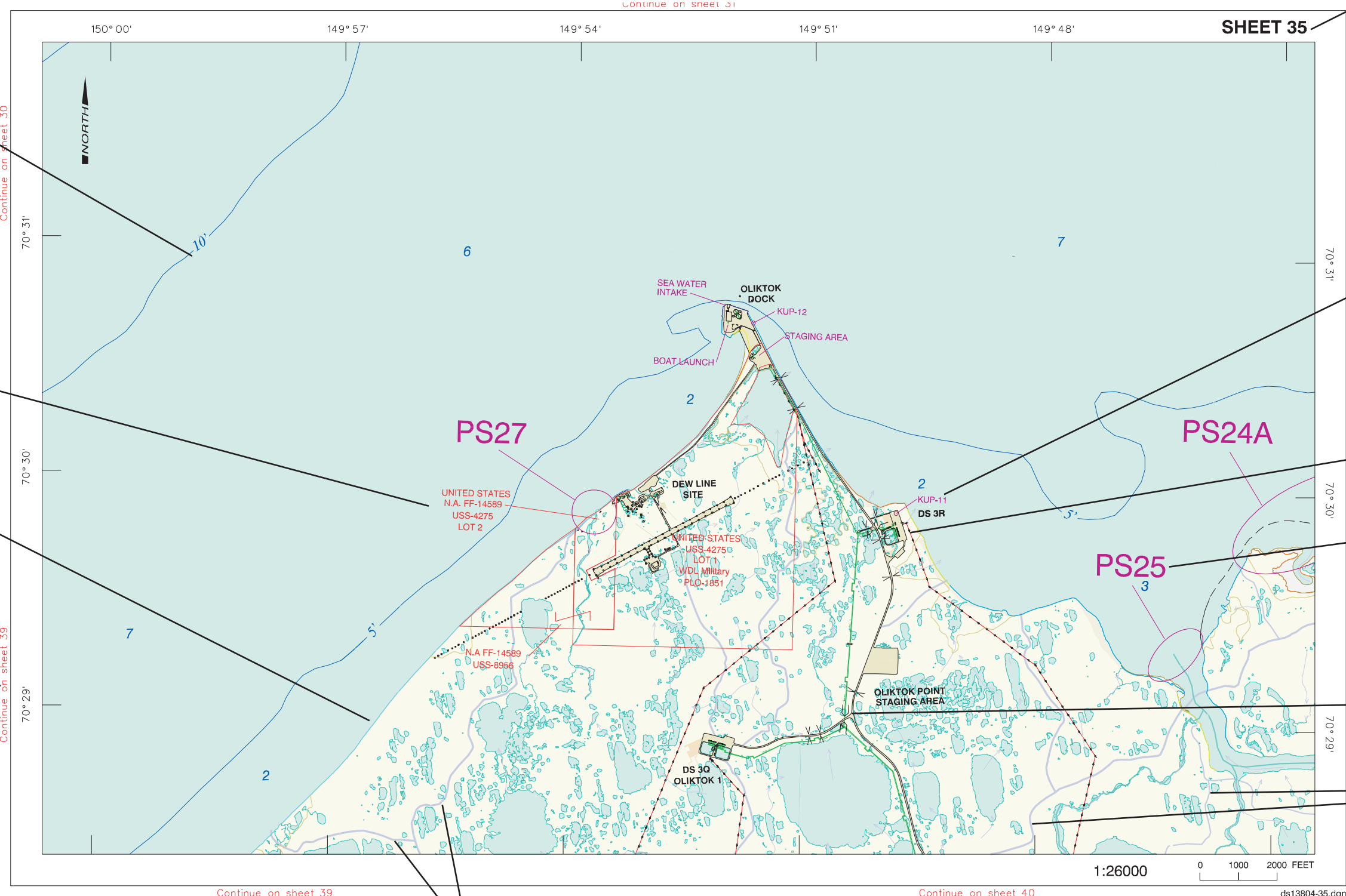
Much of the information on marine access was taken from the United States Coast Pilot, Pacific and Arctic Coasts Alaska: Cape Spencer to Beaufort Sea, published biannually by the National Oceanic and Atmospheric Administration as a supplement to NOAA nautical charts. Consult the latest edition.

Information is provided on how environmental conditions might affect a response.

Information is provided on potential staging areas and/or prestaged response equipment.

# SAMPLE MAP

**SHEET 35**



Bathymetric data are provided for the near-shore Beaufort Sea.

Areas labeled in red are private lands or military sites.

Shorelines are color-coded to indicate shoreline type (see Map Legend & Index section).

Adjacent atlas maps are indicated where appropriate.

Drainage divides and generalized flow directions are shown as interpreted from aerial photography.

Adjacent atlas maps are indicated where appropriate.

Maps are numbered for easy reference to the index sheets (see Map Legend & Index section) and for use in contingency plans.

Adjacent atlas maps are indicated where appropriate.

Locations of potential staging areas and prestaged equipment for spill response are shown on the map and described on the facing page.

Detail is provided on oil field facilities and infrastructure.






"PS" sites are priority protection sites identified on the facing page.

Culverts are identified on roads.




Drainage divides and generalized flow directions are shown as interpreted from aerial photography.

# LEGEND



## INFRASTRUCTURE

-  Gravel Road
-  Pipeline
-  Gravel Well Pad/Facility
-  Overhead Power Lines  
(Buried Power Lines are not shown)
-  Tractor Tracks or Winter Trails  
(Not functional roads)






## SURFACE WATER

-  Surface Drainage  
Interpreted From Aerial Photography
-  Primary Surface Watershed Boundary
-  Secondary Surface Watershed Boundary

## CULTURAL RESOURCES












-  Private Property/Military Site
-  Fish Stream  
Alaska Department of Fish and Game

## RESPONSE ITEMS



-  Single/Multiple Culvert(s)
-  Single/Multiple Casing(s)
-  PS18  
Priority Protection Sites
-  EOA-4  
Approximate location of  
Pre-Staged Equipment in Conex  
Alaska Clean Seas
-  KUP-1  
Potential Spill Control Site

## SENSITIVE SHORELINE AND RIVER BANK TYPES

(Shoreline location updated 2004, shoreline type updated 1997)  
EML Environmental Mapping Ltd., Saanichton, BC and  
Owens Coastal Consultants, Bainbridge Island, WA

-  Man-Made Solid Structures
-  Pebble-Cobble Beaches
-  Mixed Sand-Gravel Beaches
-  Sand Beaches
-  Sand Flats
-  Mud Flats
-  Salt Marshes  
Polygons were generated by photointerpretation from 1:7,200  
CIR photography and 1:6,000 topo maps. Coverage is limited  
to Kalubik Creek on the west to Staines River on the east.  
Interpretation by AeroMap US.
-  Peat Shorelines
-  Inundated Low-Lying  
Tundra Shorelines
-  Tundra Cliffs  
Vegetated low banks
-  Vegetated low banks  
and slopes

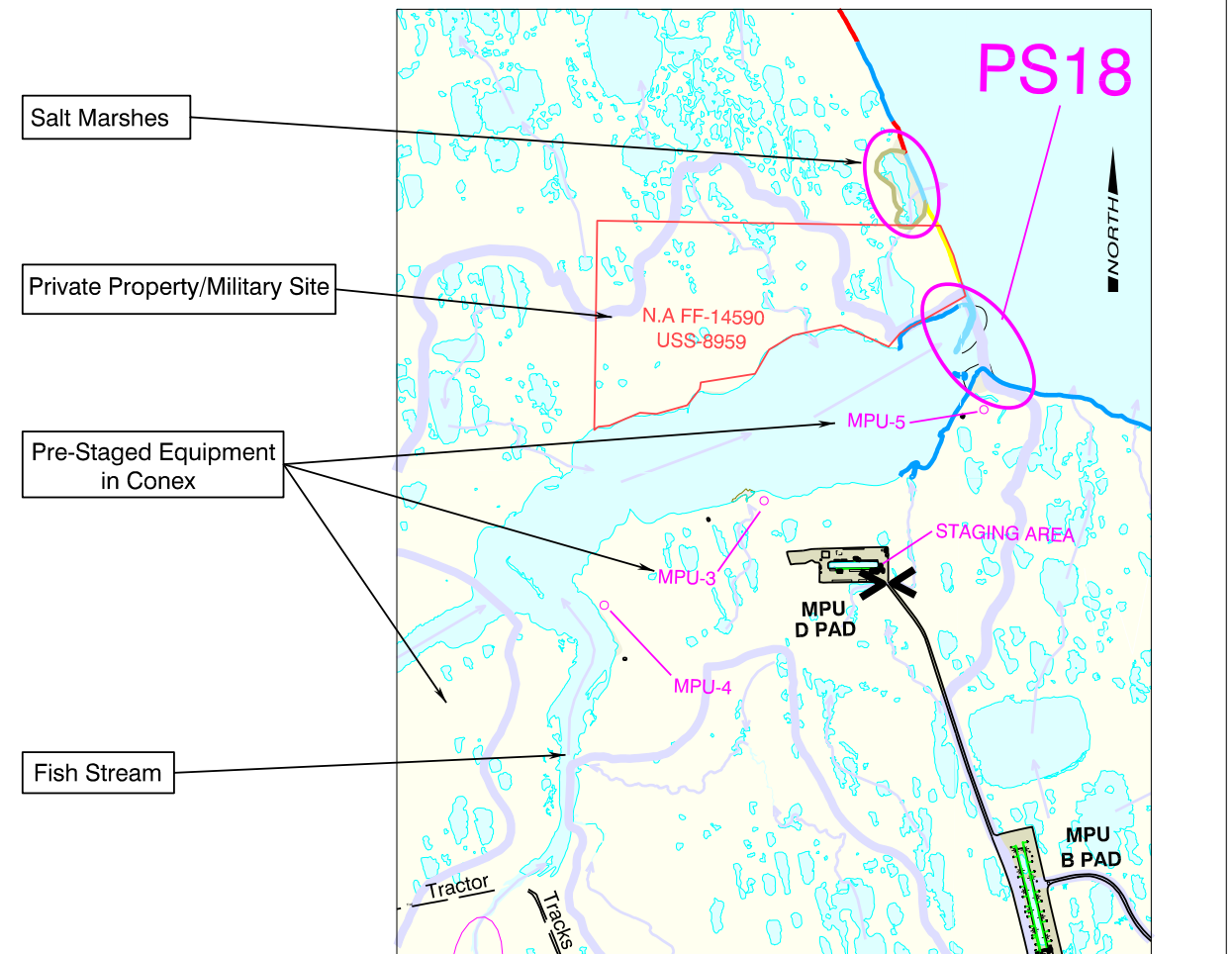
## SHORE FEATURES

-  Naturally Occuring Nonvegetated Areas  
(Gravel Bars, Beaches, and Mud Flats)
-  Tidal Flats  
(Mud or Gravel Bars, below Mean Sea Level)

Shoreline is Mean Sea Level as established by  
limited tidal observations in 1968 at East Dock.

Bathymetry interpreted from 1949-50 NOAA  
soundings, depth in feet.

Map sheets or portions of map sheets 1-7, 9-15, 17-28C, 45A,  
49A and 112-176 are based on USGS 1:63,360 quad maps.  
Map sheets or portions of map sheets 7-9, 12, 15-17, 20-21,  
23B-105, 121 and 175-176 are based on ConocoPhillips Alaska,  
Inc. and BP Exploration Alaska, Inc. topographic maps 1:6,000.



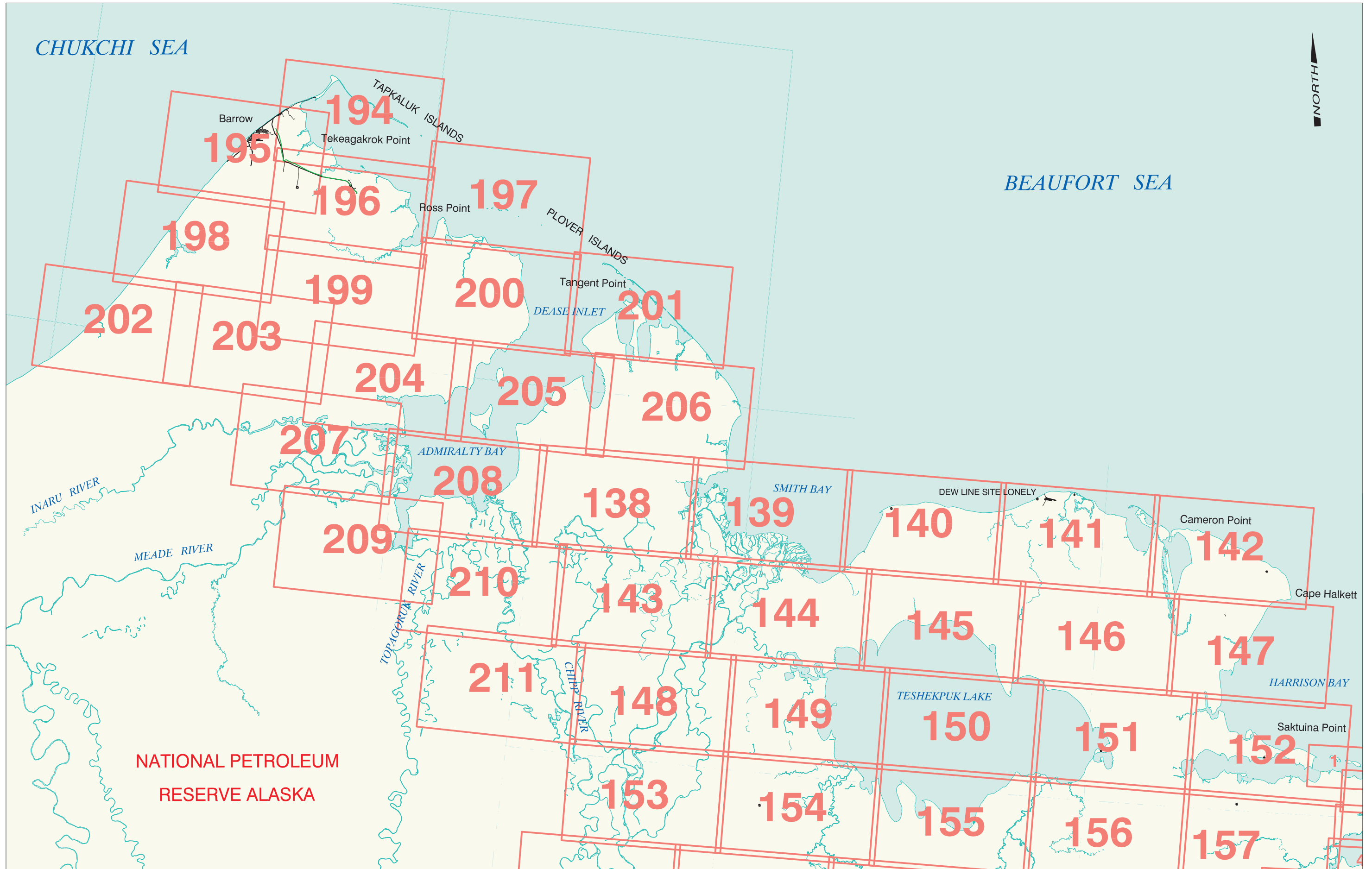


## INDEX OF PROMINENT FEATURES

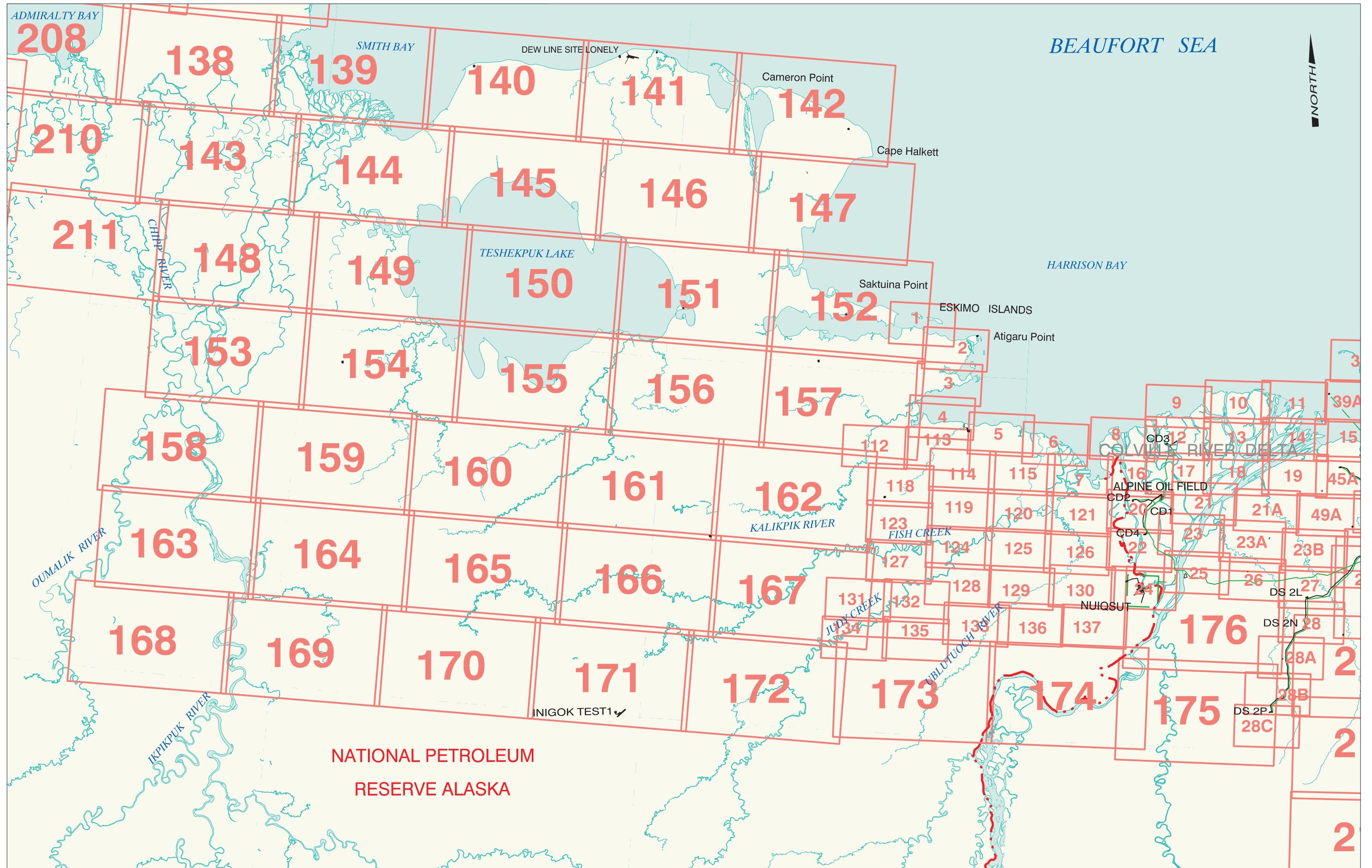
NAME	SHEET				
A Pad	76	Bullen Point	101	DOT Mine Site 3	180
Admiralty Bay	204, 205, 208, 209	C Pad	70, 71, 76	Drew Point Test 1	140
AGI	65	Cape Halkett 1	147	DS 1	78, 81
Alaska Island	98	Cape Simpson	206	DS 11	78
Alaska Island No. 1	98	CC2	63, 70	DS 12	81, 180
Alaska State A-1	100	CC3	70	DS 13	81
Alaska State C-1	103, 104	CCP	71	DS 14	76, 77
Alaska State D-1	99	CD-1	16, 20	DS 15	71
Alaska State F-1	99	CD-2	20	DS 16	82, 180
Alaska State G-2	100	CD-3	12	DS 17	81, 82, 180
Alpenglow State 1	182	CD-4	22	DS 18	71, 72
Alpine development	16, 20	CD-5	121	DS 1A	51
Alpine pipeline	20, 22, 23, 24, 25, 26, 27, 29	CGF	65, 71	DS 1B	51
Anachlik Island	14, 19	Challenge Island	98	DS 1C	51, 52
Anajuk Point	21	Christie Point	200	DS 1D	52, 55
Anderson Point	186	Ciri Pad	141	DS 1E	51, 55
ARCO Able State 1	65	Cities Serv. Gwydyr Bay State Bay A	61	DS 1F	54, 212
ARCO Kuparuk River State	61, 63	Collinson Point	186	DS 1G	46, 47, 51
ARCO NW Eileen 1	48	Colville #1	19, 45A	DS 1H	47, 51
ARCO PBU Discovery Well PB State 1	65, 71	Colville River mine site	25	DS 1J, West Sak Pilot Pad	55, 177
ARCO Ravik State 1	213	Conoco Gwydyr Bay State 1	61	DS 1L	54, 212
ARCO West Mikkelsen State 1	87, 89	Cottle Island	34, 56	DS 1M	52, 55
Arey Island	187	Cooper Island	197	DS 1Q	46
Argo Island	92	CPF 1	51	DS 1R	46, 47
Atigaru Point	2	CPF 2	54, 212	DS 1Y	50
Atigaru Point 1	2	CPF 3	41, 42, 46	DS 2	77
B Pad	76	CPS	76, 77	DS 2A	49, 53
Back Point	57	Crescent Island	194	DS 2B	53, 212
Badami airstrip	91	Cross Island	93	DS 2C	54, 212
Badami CPU Pad	91	CSP	70	DS 2D	54, 212
Badami dock	91	D Pad	70, 76	DS 2E	54, 212
Badami Pipeline	79, 83, 86, 87, 90, 91	Dalton Highway	180, 219, 222	DS 2F	54, 212
Badami Tie-in Pad	79	Deadhorse	81, 180	DS 2G	53, 212
Barrow	195	Deadmans Island	194	DS 2H	29, 53, 212
Barter Island	188	Dease Inlet	200, 201, 205	DS 2K	29, 212
Beechey Point	38, 56	Delta State 2	79	DS 2L	27
Belvedere Island	96, 97	Demarcation Point	193	DS 2M	29, 53, 212
Bernard Spit	188	DEW Line site at Brownlow Pt.	105, 184	DS 2N	28, 213
Bertoncini Island	33, 34	DEW Line site at Nuvagapak Pt.	191	DS 2P	28B, 28C, 175
Black Head	201	DEW Line site at Oliktok Pt.	35, 39, 40	DS 2T	49
BOC	70, 76	DEW Line site east of Collinson Pt.	186	DS 2U	49, 50
Bodfish Island	34	DEW Line site east of Demarcation Pt.	193	DS 2V	49, 50
BP Discovery Well	71, 77	DEW Line site east of Pt. Storkersen	62	DS 2W	46
Brant Point	194, 195	DEW Line site Lonely	141	DS 2W	50
Brownlow Point	105, 184	DEW Line site west of Saktuina Pt.	152	DS 2X	50
		Dock 2	62	DS 2Z	50
		Dock 3	62	DS 3	82, 180
		Doctor Island	194	DS 30	40
				DS 31I	41
				DS 3A West Sak 23	41, 45
				DS 3B	45, 46
				DS 3C	42, 46
				DS 3F	45
				DS 3G	45
				DS 3H	41, 45
				DS 3J	41, 42, 45
				DS 3K	42
				DS 3M	39
				DS 3N	39, 40, 41, 42
				DS 3Q Oliktok 1	35, 39, 40
				DS 3R	35, 36, 39, 40
				DS 3S	45A
				DS 4	78
				DS 5	77, 78
				DS 6	77, 81
				DS 7	77
				DS 9	78, 82
				DS L1	65, 71
				DS L2	71, 72
				DS L3	72
				DS L4	72
				DS L5	66, 72
				DS PM1	62
				DS PM2	62
				DSNK	66
				Duchess Island	98, 99
				Duck Island	74
				Duck Island 1 & 2	74
				Duck Island 3	74
				Duck Island Gravel Mine	78, 79, 82
				E Pad	64
				East Dock	72
				East Mikkelsen Bay State 1	101
				E Teshekpuk 1	151
				East Ugnu 1	42, 46, 47
				East Ugnu Production Test Pad	42, 47
				Egg Island	58, 60
				Eileen State 1	44, 48
				Eileen West End (03-21-11-12)	68, 69
				Endeavor Island	67
				Eskimo Islands	1
				F Pad	64, 70
				FAB Pad	70
				Flaxman Island	100, 105
				Foggy Island	74, 80
				Foggy Island State 1	74
				Frontier Camp	64, 70
				FS1	77, 78
				FS2	78
				FS3	77
				G Pad	64, 70
				GC1	70
				GC2	70
				GC3	70, 71, 76, 77
				Getty State 1 (02-10-13)	76
				Goose Island	88
				Griffin Point	189
				Gull Island	65
				Gwydyr Bay South	61
				Gwydyr Bay State 1	61
				H Pad	70, 76
				Hamilton Kuparuk Delta 51-1	60, 62
				Hamilton Pt. Storkersen 1	62
				Harrison Bay 1	113
				Heald Point	66
				Helmricks	14
				Hemi Springs State 1	177
				Hemi State 1	177, 178
				Highland State 1	68, 177
				Howe Island	73, 74
				Hurl State (5-10-13)	75
				Icy Reef	192
				Igalik Island	201
				Inigok Test 1	171
				Ikpikpuk Test 1	154
				J Pad	63, 64, 70
				Jago Spit	188
				Jeanette Island	94
				JW Dalton 1	141
				K Pad	64, 71
				Kaktovik	188
				Karluk Island	95
				Kavearak Point	34, 38
				KIC	51
				Konganevik Point	185
				Kookpuk No. 1	23A
				KRU WT1	177, 212
				KRU WT2	178, 213
				Kulgurak Island	201
				Kuparuk Base Camp	51
				Kuparuk Dead Arm Mine Site	63
				L Pad	48
				Lake 79 Fed 1	182, 183
				Lake State 1	82, 180

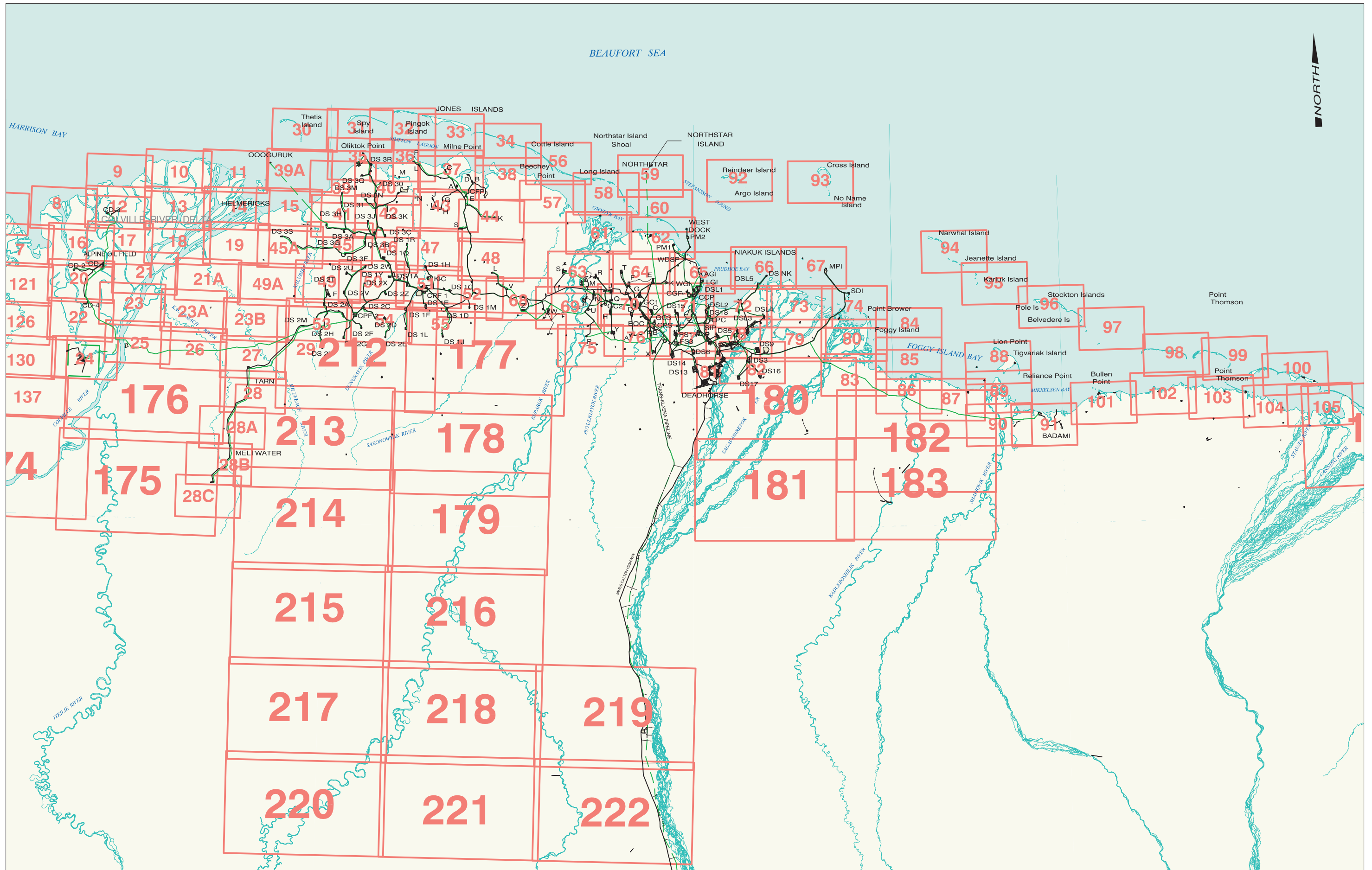
## INDEX OF PROMINENT FEATURES (CONT.)

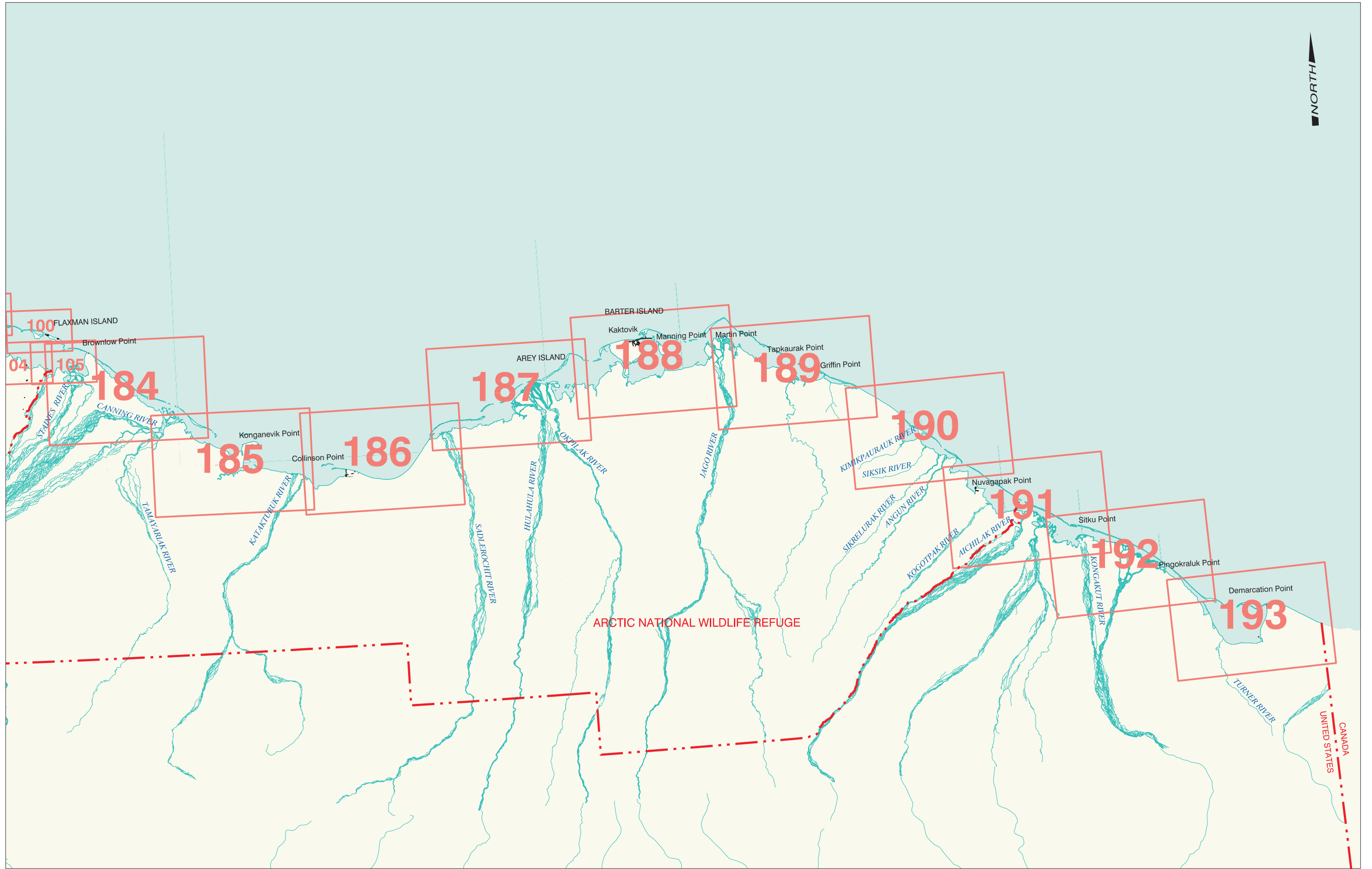
Leavitt Island	32	MPU K Pad	44	Pole Island	96	Term Well A	64, 65
LGI	65	MPU L Pad	36, 37, 40	Pump Station 1	76, 77	Term Well B	69
Livehorse 1/W T Foran 1	142	MPU M Pad	36, 40	Put 23 Mine Site	71, 77	Term Well C	63
Long Island	56, 58, 59	MPU mine site	38	Put 27 Mine Site	71, 77	Texaco Prudhoe 1	44
LPC	71, 72, 77, 78	MPU N Pad	40, 42, 43	Put River (33-12-13)	63, 64	Thetis Island	30
M Pad	63	MPU S Pad	43, 44, 47	Q Pad	70	Tigvariak Island	88, 89
Main Production Island	67	N Pad	63, 69	R Pad	63	Tolaktovut Point	9
Manning Point	188	Narwhal Island	94	Reindeer Island	92	Trans-Alaska Pipeline	76, 77, 219, 222
Martin Island	197	NGI	65, 71	Resolution Island	67	Tulageak Point	197
Martin Point	189	Niakuk 1 & 2	66	Ross Point	197	Tulimanik Island	201
Mary Sachs Island	99, 100	Niakuk 4 & 5	66	S Pad	63	U Pad	69
MCC	78	No Name Island	93	S. Harrison Bay 1	4, 5	V Pad	68
McClure Islands	94	N Inigok 1	161, 166	Sag Delta (31-11-16)	79	W Pad	68, 69
McTavish Point	204	North Kalikpik 1	157	Sag Delta 1	66, 67	W. Fish Creek 1	118
Meltwater road and pipeline	28, 28A, 28B, 28C, 213	North Prudhoe Bay 2	65	Sag Delta 11	73, 79	West Beach State	65
Midway Islands	92	North Staines River #1	104	Sag Delta 2/2A	73	West Channel 1-3	180
Milne Point	33, 37	Northstar Caribou Pad	71	Sag Delta 3 & 4	67	West Dock	60, 62
Milne Pt. 18-1	37	Northstar Island	99	Sag Delta 31-10-16	180	West Dock staging pad	62, 65
Mine C by CPF 1	51	Northstar Production Facility	59	Sag Delta 41-10-16	1	West Mikkelsen Bay No. 2	88
Mine C by DS 9	78, 82	Nuekshat Island	14, 19	Saktuina Point	197	West Mikkelsen State 1	182
Mine D	50, 51	Nuiqsut	24, 176	Sanigarauak Island	74	West Sak 1	51, 52
Mine Site B	52	Nuvagapak Point	191	Satellite Drilling Island	75	West Sak 10	212
Mine Site E	40	Oarlock Island	205	SE Eileen 1, 2	59	West Sak 11	49
Mine Site F	49	Oliktok dock	35	Seal Island	60, 62	West Sak 13	212, 213
Mine Site near Badami airstrip	91	Oliktok Point	35	Seawater Treatment Plant	69	West Sak 14	53, 212
MK AS/WS	69	Oliktok Point staging area	35,36, 39, 40	Service City	90	West Sak 15	29, 212
Mobil Kuparuk (13-15-11-12)	68, 69	OSP	77, 78	Shav Mine Site	87, 88, 89	West Sak 16	39, 41
Mobil Kuparuk (22-11-12)	69, 177	P Pad	75	Shell West Mikkelsen Bay 3	88	West Sak 17	40, 42
Mobil Kuparuk (26-12-12)	63	PBOC	78, 82	Shell West Mikkelsen Bay 4	77	West Sak 2	55, 212
Mobil Kuparuk (33-22-11-12)	69	Pingok Island	32, 33	Simpson Lagoon (exploration site)	31, 32	West Sak 24A	52
Mobil Kuparuk State	68, 69, 177	Pingokraluk Point	192, 193	SIP	38	West Sak 25	43
Mobil Kuparuk State (23-07-11-12)	68	Pingut Pad	72, 78	Spy Island	104	West Sak 26	178
Mobil Mikkelsen Bay State 1	90, 91	Pingut State No. 1	72, 78, 79	Staging pad between Kavearak Point and Beechey Point	96, 97	West Sak 3	54, 212
Mobil Socal 32-29E	48	Placid Beechey Point 1	38	Staines River State #1	91	West Sak 4	29, 212
MP (32-30-11-13)	69, 75	Placid Prudhoe Bay State No. 1	75, 76	Stockton Islands	50	West Sak 5	177
MP West Kuparuk (33-07-11-12)	52, 68	Plover Islands	197	Storage gravel pad near Badami airstrip	68, 69	West Sak 6	55
MPU A Pad	37	Point Barrow	194	Storage pad near DS 1Y	60, 62	West Sak 9	50
MPU B Pad	37	Point Brower	74	Storage Pad near W Pad	72, 78	West Sak 18	49A
MPU C Pad	37	Point Gordon	102	Stump Island	64	West Sak 20	28, 212, 213
MPU Central Facilities Pad	37, 43	Point Hopson	102	Surfcote Pad	72	West Sak Production Test Pad	51, 52
MPU D Pad	37	Point McIntyre	62	T Pad	201	West Staines River State 18-09-23-180	103
MPU E Pad	43	Point Storkersen	60, 62	T3C	194	WGI	65, 71
MPU F Pad	36	Point Sweeney	103	Tangent Point	189	Wright Point	205
MPU G Pad	43	Point Thomson	103	Tapkaluk Islands	189	X Pad	76, 77
MPU H Pad	43	Point Thomson Unit #1	103	Tapkaurak Point	27, 28, 29	Y Pad	75, 76
MPU I Pad	43	Point Thomson Unit #2	102	Tapkaurak Spit	194	Z Pad	68
MPU J Pad	43	Point Thomson Unit #3	103, 104	Tarn road and pipeline			
		Point Thomson Unit #4	102	Tekegakrok Point			



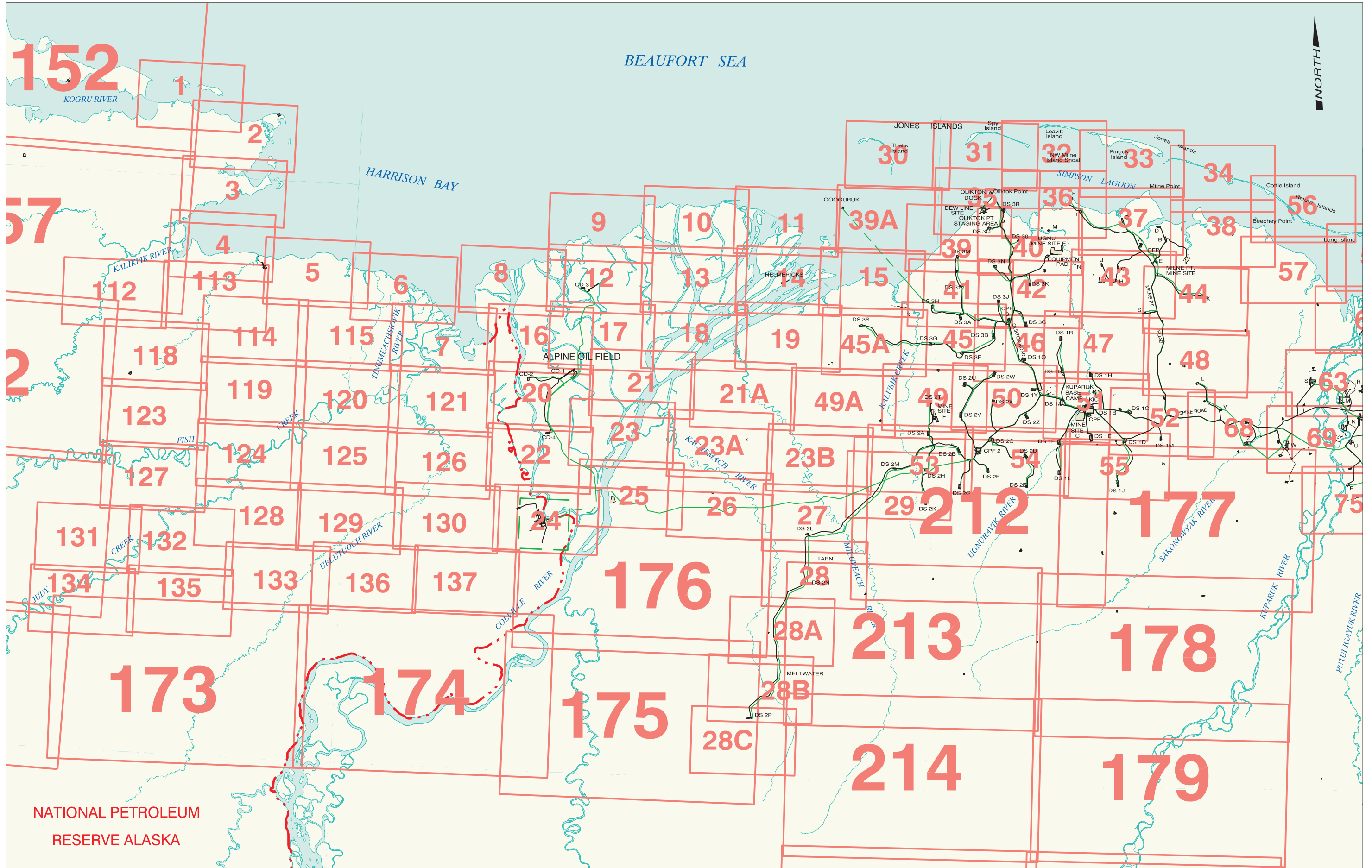


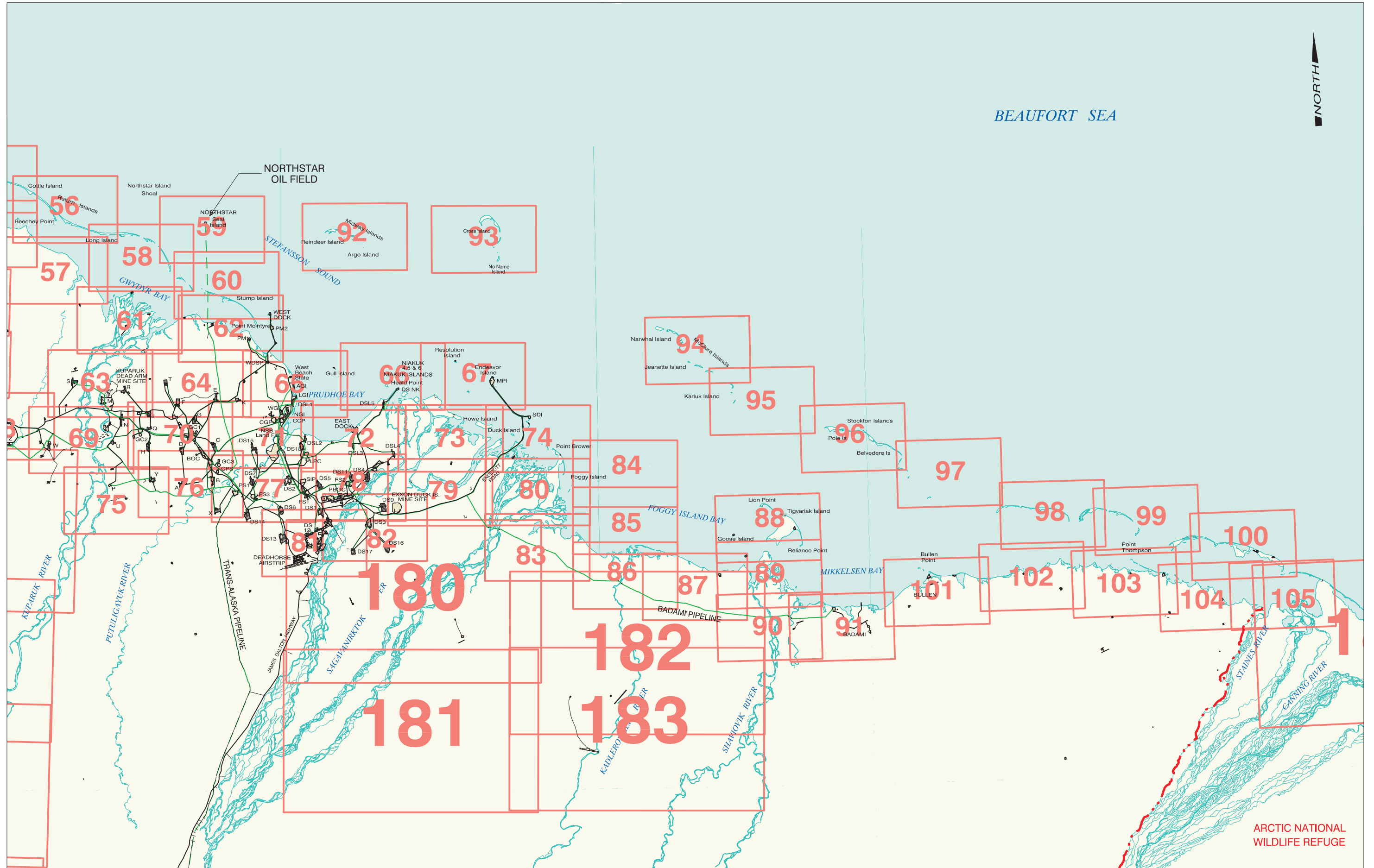








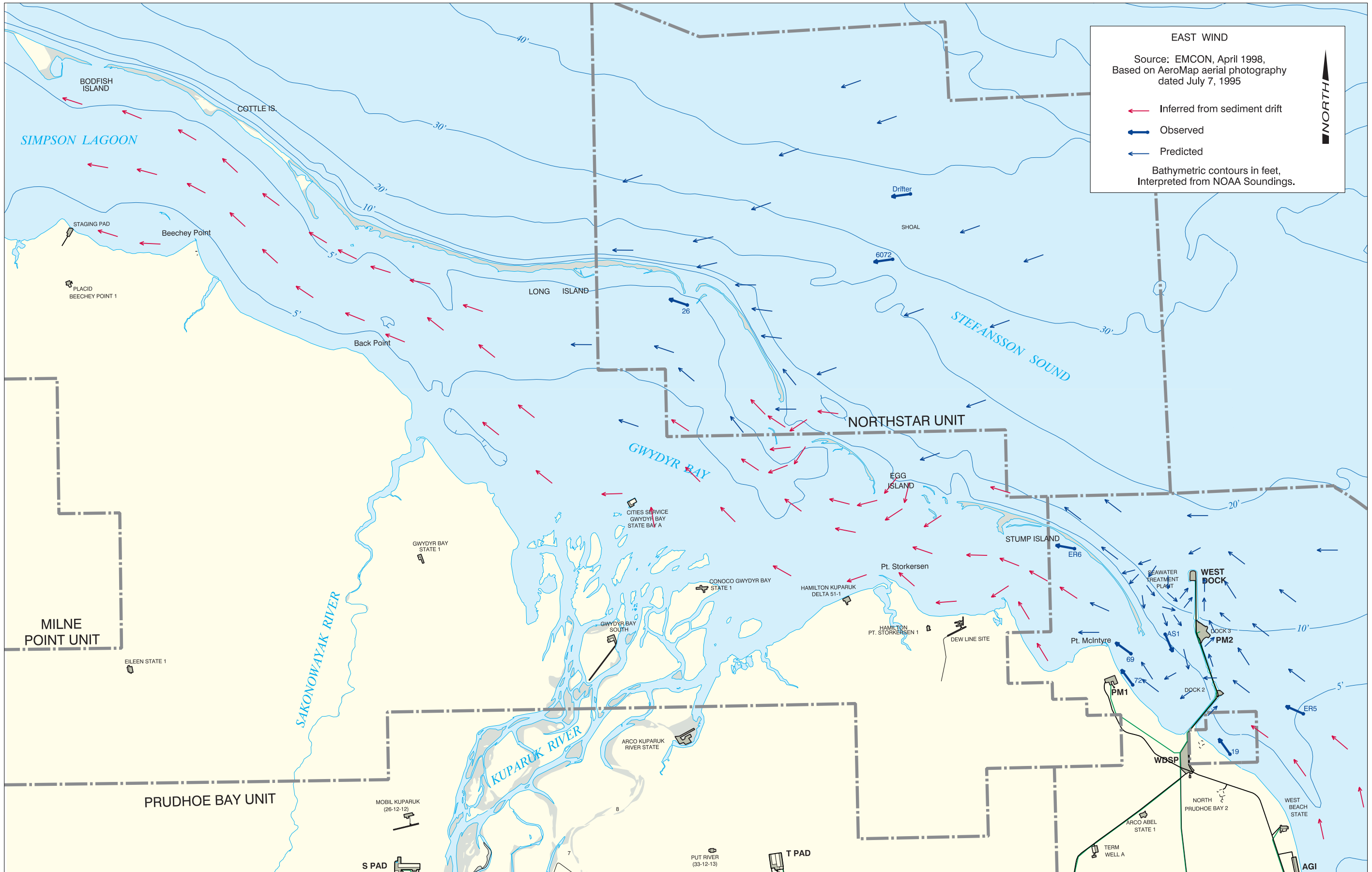


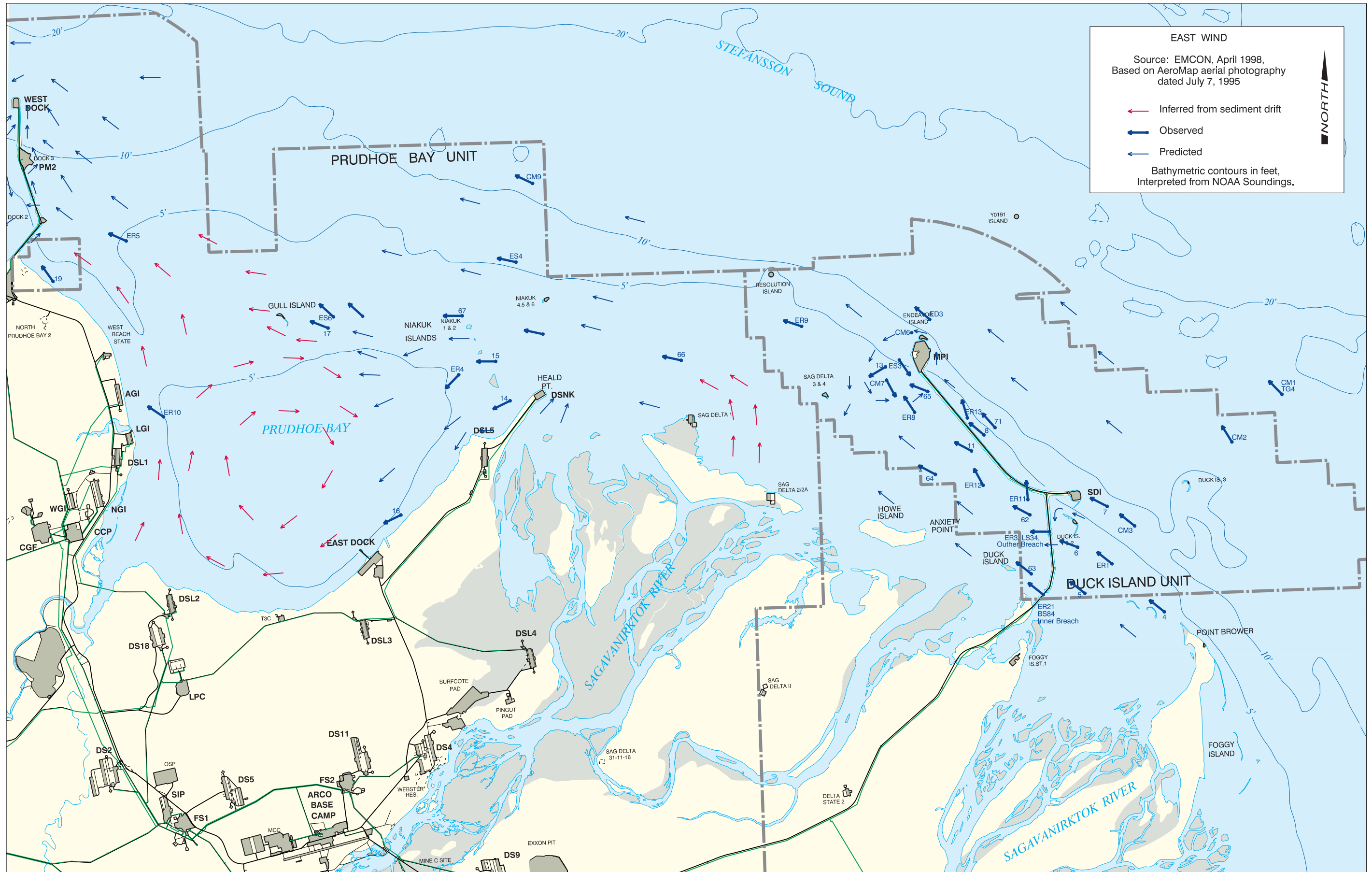




## **CIRCULATION IN THE NEARSHORE BEAUFORT SEA**

Ocean surface currents in the vicinity of the North Slope oil production facilities are primarily wind driven. Wind shifts can reverse surface water currents within a few hours. The following maps show surface current patterns under two wind conditions: an east wind and a west wind. This information is a compilation of observed current measurement data, as well as inferred currents from sediment drift and predicted currents. Note that a great deal of data has been collected on the surface water currents in the vicinity of both the Endicott and West Dock causeways.





**EAST WIND**

Source: EMCON, April 1998,  
Based on AeroMap aerial photography  
dated July 7, 1995

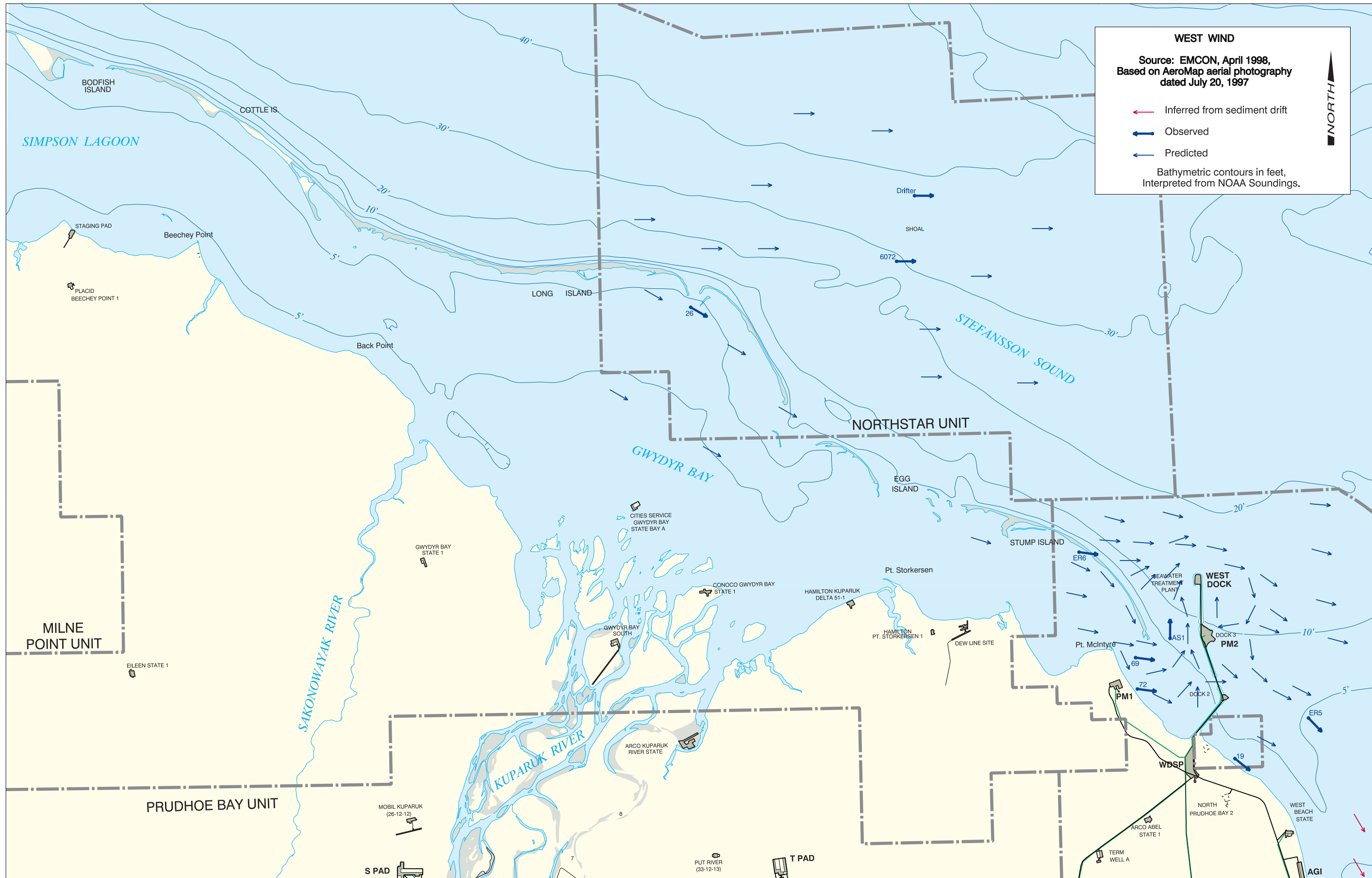
- ← Inferred from sediment drift
- ← Observed
- ← Predicted

Bathymetric contours in feet,  
Interpreted from NOAA Soundings.

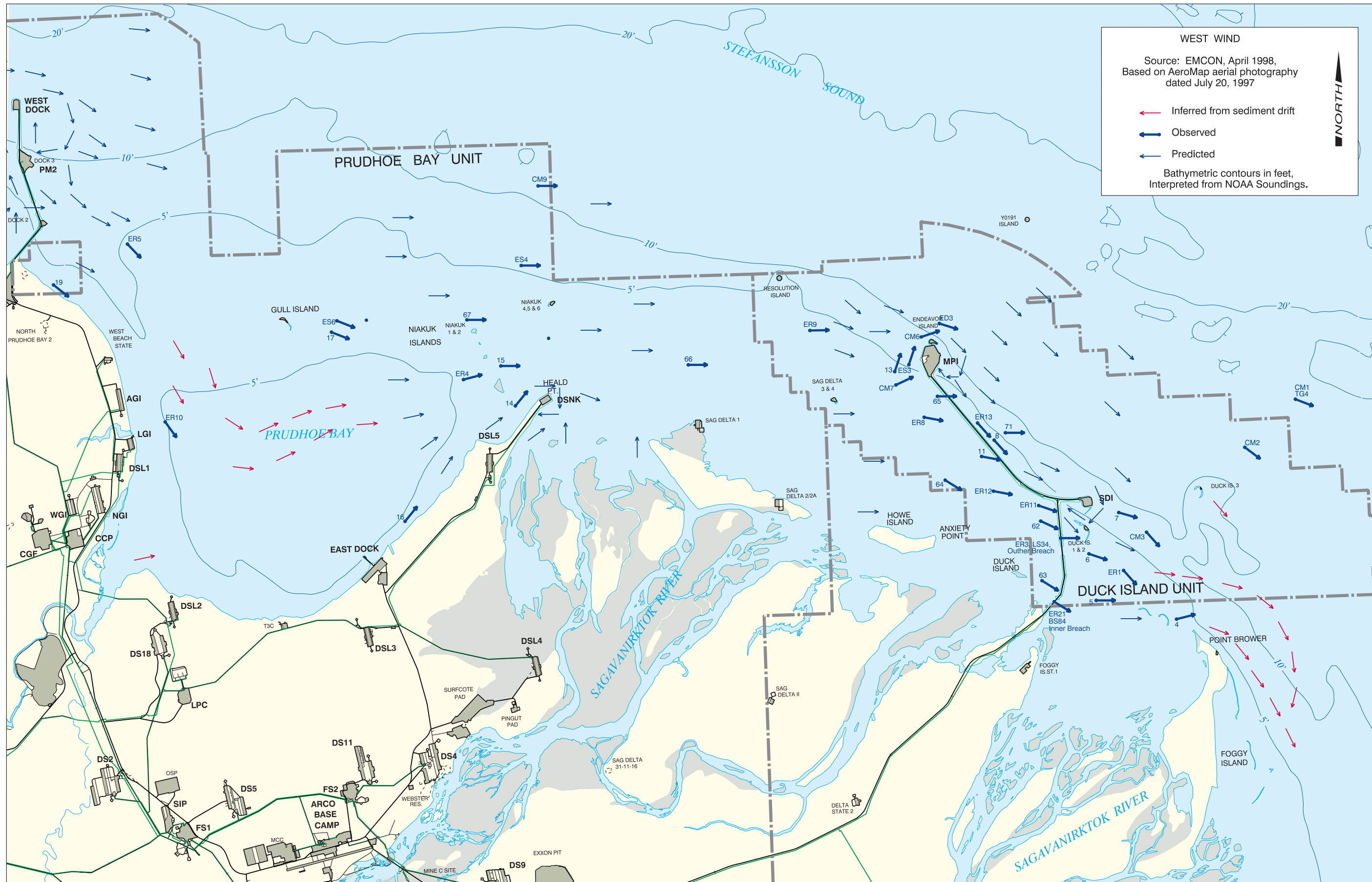
**NORTH** ↑

1:100000 0 1 2 MILES

**SHEET 2 OF 2**







**WEST WIND**

Source: EMCON, April 1998,  
Based on AeroMap aerial photography  
dated July 20, 1997

- ← Inferred from sediment drift
- ← Observed
- ← Predicted

Bathymetric contours in feet,  
Interpreted from NOAA Soundings.

**NORTH**

1:100000 0 1 2 MILES

**SHEET 2 OF 2**

# ALASKA REGIONAL RESPONSE TEAM (ARRT) SENSITIVE AREAS WORKING GROUP CRITERIA FOR RELATIVE PRIORITY RATING OF SENSITIVE AREAS

This volume of the *Alaska Clean Seas Technical Manual* contains a map atlas of the North Slope oil fields and vicinity. These maps and their accompanying legend pages identify sensitive-area locations for priority protection in the event of a spill. The locations on these maps are ones that can be defended by exclusion or deflection tactics. Also included on the map legend pages are general statements of environmental sensitivity — e.g., presence of birds or marine mammals — provided by the Alaska Regional Response Team (ARRT) Sensitive Areas Working Group.

It is important to remember that detailed protection strategies and incident-specific protection priorities will be developed by the Unified Command at the time of the spill. In evaluating the sites that must be protected, the Unified Command will apply criteria developed by the ARRT Sensitive Areas Working Group with representatives from State and Federal agencies and the private sector. The following relative priority listing prioritizes resources into designations of major, moderate, and lesser concern. Resources are not prioritized within each designation. These designations are for consideration in initial spill response activities; they are not applicable to extended cleanup activities. Specific guidance to On-Scene Coordinators for protecting cultural resources is contained in Annex M of the *Unified Plan*.

The following criteria were developed as a tool to establish levels of concern.\* These criteria are not listed in a priority order.

- Human economic disruption — economic/social value; human food source disruption
- Mortality — wildlife, fish, other organisms (how many potentially killed in relation to abundance)
- Animal displacement and sensitivity to displacement
- Aesthetic degradation
- Habitat availability and rarity
- Sublethal effects, including sensitivity to physical or toxic effects of oil or hazardous substances and long-term effects to habitat, species, or both
- Threatened and endangered species, and/or other legal designation
- Persistent concentration of oil or hazardous substances
- Reproduction rate or recolonizing potential
- Relative importance to ecosystem
- Potential for physical contact with spill — pathway of oil or hazardous substance
- Resource sensitivity to response countermeasures

\*NOTE: The information here, including the sensitivity graphs on the following pages, was excerpted from the Sensitive Areas section of the *Alaska Regional Response Team North Slope Subarea Contingency Plan*. Please refer to the latest version of that publication for any revisions that may have occurred since this *ACS Technical Manual* was printed.

## AREAS OF MAJOR CONCERN

- Shoreline Geomorphology - Coastal Habitat Types:
  - River deltas
  - Sheltered lagoons
  - Open lagoons
  - Salt marshes
  - Mud flats
  - Barrier islands
  - Spit beaches
  - Protected bays
- Inland Habitat Types:
  - Riparian willow
  - Connected lakes
  - Freshwater springs
- Threatened or Endangered Species Habitat
- Spotted Seal Haulout Areas (>10 animals)
- Ringed Seal Lairs and Pupping Areas
- Walrus Haulout Areas
- Beluga Whale Concentration Areas
- Bowhead Whale Nearshore Migration Routes
- Polar Bear Denning and Feeding Areas
- Bear Concentration Areas (marine mammal/carcasses; salmon)
- Caribou Calving and Insect Relief Areas
- Large Seabird Colonies (>100 birds)
- Waterfowl and Shorebird Spring and Fall Concentration and Staging Areas
- Waterfowl Molting Concentration Areas
- Anadromous Fish Spawning and/or Rearing Streams (i.e., salmon, Dolly Varden, whitefish)
- Land Management Designations
  - Federal: Wilderness
    - Wild and Scenic Rivers
    - National Natural Landmarks
    - Research Natural Areas (Toolik Lake, Galbraith Lake)
- Cultural Resources/Archaeological Sites:
  - National Historic Landmarks
  - Burial Sites
  - National Register Eligible Village Sites
  - Intertidal Sites
- Subsistence Harvest Areas
- High Commercial Use Areas
- High Recreational Use Areas
- River Floodplains

## AREAS OF MODERATE CONCERN

- Shoreline Geomorphology - Coastal Habitat Types:
  - Beaded tundra streams
- Upland Habitat Types:
  - Drained lake basins
- Recurring Leads and Polynyas in Sea Ice
- Spotted Seal Haulout Areas (< 10 animals)
- Ringed Seal Shorefast Ice Concentration Areas
- Seabird Colonies (10 - 100 birds)
- Waterfowl and Shorebird Nesting Concentration Areas
- Shorebird Molting Concentration Areas
- Polar Bear General Distribution
- Walrus General Distribution
- Caribou Migration Routes
- Muskox Riparian Habitat
- Commercial Harvest Areas
- Recreational Use Areas
- Land Management Designations
  - Federal:
    - National Parks
    - National Wildlife Refuges
- Cultural Resources/Archaeological Sites
  - National Register Eligible Sites (Other Than Village Sites)
  - Sites Adjacent To Shorelines

## AREAS OF LESSER CONCERN

- Upland Habitat Types:
  - Mesic/dry tussock tundra
  - Alpine tundra
- Bearded Seal General Distribution
- Bowhead Whale General Distribution
- Gray Whale Nearshore Migration and Feeding Areas
- Seabird Colonies (<10 birds)
- Waterfowl and Shorebird General Distribution
- General Freshwater Fish Habitat
- Land Management Designations
  - Federal:
    - Public Lands
    - National Forests
    - National Preserves
  - State:
    - General Public Lands



# INFORMATION ON SEASONAL SENSITIVITIES

The following information on seasonal sensitivities of various fish and wildlife on the North Slope and adjacent Beaufort Sea has been provided by the Alaska Regional Response Team (ARRT) Sensitive Areas Working Group.

## Ringed Seals

CATEGORY	LEAST	MEDIUM	MOST
Abundance		Pack ice	Shorefast ice
Susceptibility		Year around	
Human Harvest			Year around

The shorefast ice between Cape Lisburne and Point Lay has one of the highest densities of ringed seals.

Critical Life Periods	J	F	M	A	M	J	J	A	S	O	N	D
Nearshore concentrations in shorefast ice												
Pupping and weaning												
Molting												
Present in area												

## Bearded Seals

CATEGORY	LEAST	MEDIUM	MOST
Abundance			Ice-edge
Susceptibility		Year around	
Human Harvest			Year around

Critical Life Periods	J	F	M	A	M	J	J	A	S	O	N	D
Pupping in Chukchi Sea												
Present in Beaufort Sea												
Present in Chukchi Sea												

## Spotted Seals

CATEGORY	LEAST	MEDIUM	MOST
Abundance (on haulouts)	< 10	10-100	> 100
Susceptibility		Year around	
Human Harvest			May 1-Nov 30

The largest known concentration of spotted seals in Alaska haulout at Kasegaluk Lagoon from mid-July until late October or early November.

Critical Life Periods	J	F	M	A	M	J	J	A	S	O	N	D
Coastal haulouts/ Concentration areas												
Chukchi Sea												
Beaufort Sea												

## Beluga Whales

CATEGORY	LEAST	MEDIUM	MOST
Abundance <sup>1</sup>	< 10	10-100	> 100
Susceptibility	Aug 1-Mar 31	Apr 1-May 20 (Chukchi Sea) May 15-Aug 31 (Beaufort Sea)	May 20-July 31 (Chukchi Sea)
Human Harvest	Sept 10-Mar 31 (Chukchi Sea) Oct 20-July 31 (Beaufort Sea)		Apr 1-Sept 10 (Chukchi Sea) Aug 1-Oct 20 (Beaufort Sea)

<sup>1</sup> Between June 20 and August 15, large numbers of beluga whales concentrate in Kasegaluk Lagoon.

Critical Life Periods	J	F	M	A	M	J	J	A	S	O	N	D
Nearshore migration												
Chukchi Sea												
Beaufort Sea												
Calving												

## Bowhead Whales

CATEGORY	LEAST	MEDIUM	MOST
Susceptibility	Nov 1-Mar 20	July 1-Oct 31 (Chukchi Sea) July 1- July 31 (Beaufort Sea)	Mar 20-June 30 (Chukchi Sea) Apr 15-June 30; Aug 1-Oct 31 (Beaufort Sea)
Human Harvest <sup>2</sup>	June 16-Nov 1 (Chukchi Sea)		Apr 1-June 15 (Chukchi Sea) Aug 1-Oct 20 (Beaufort Sea)

<sup>2</sup> During the ice-covered months in the Beaufort and Chukchi seas, whales are unavailable for harvest.

Critical Life Periods	J	F	M	A	M	J	J	A	S	O	N	D
Nearshore migration												
Chukchi Sea												
Beaufort Sea												
Calving												

## Gray Whales

CATEGORY	LEAST	MEDIUM	MOST
Abundance	Jun 1-July 31; Oct 1-Oct 31 (Chukchi Sea) Jun 1-Oct 31 (Beaufort Sea)	Aug 1-Sep 30 (Chukchi Sea)	
Susceptibility		When present	

Critical Life Periods	J	F	M	A	M	J	J	A	S	O	N	D
Nearshore migration & feeding												
Chukchi Sea												

## Walrus

CATEGORY	LEAST	MEDIUM	MOST
Abundance	Nov 1-May 1	May 1-June 15 Oct 1-Oct 31	June 15-Sept 30
Susceptibility		Year around	
Human Harvest	May 1-May 15 Sep 1-Oct 30		May 15-Aug 20

Critical Life Periods	J	F	M	A	M	J	J	A	S	O	N	D
Present on haulouts or in nearshore waters												

## Polar Bears

CATEGORY	LEAST	MEDIUM	MOST
Abundance	Pack ice	Shorefast ice and active ice areas	Denning areas during entrance/emergence; feeding areas such as leads/polynyas; coastal beaches and barrier islands
Susceptibility	Summer (June-August)		Fall, winter, spring (September-May)
Human Harvest	June-Sept. (Chukchi Sea) June-Aug. (Beaufort Sea)	October, February (Chukchi Sea) Sept., Jan.-March (Beaufort Sea)	Nov.-Jan., March-May (Chukchi Sea) Oct.-Dec., April-May (Beaufort Sea)

Critical Life Periods	J	F	M	A	M	J	J	A	S	O	N	D
Denning of pregnant females*												
Along or on the coastline												

\* Concentration areas for pregnant females occur at Icy Cape, Pt. Franklin, and in the ANWR 1002 area

## Brown Bear

CATEGORY	LEAST	MEDIUM	MOST
Susceptibility	Nov 15-Apr 30		May 1- Nov 15
Human Harvest	June 1-Aug 30		Sept 1-May 31

Critical Life Periods	J	F	M	A	M	J	J	A	S	O	N	D
Denning												
Concentration associated w/ Mammalian food sources												
Salmon streams												

# INFORMATION ON SEASONAL SENSITIVITIES (CONT.)

## Caribou

CATEGORY	LEAST	MEDIUM	MOST
Abundance <sup>3</sup>			
Susceptibility	Nov 1-Mar 15	May 15-May 20 June 10-June 30 Aug 15-Sept 15	May 20-June 10 July 1-Aug 15
Human Harvest			Year around

<sup>3</sup> There are four caribou herds that utilize various portions of this region. Depending on the herd and the climatic conditions, abundance may vary widely. As a result, specific abundance figures will not be established for use in prioritizing the importance of an area.



## Muskoxen

CATEGORY	LEAST	MEDIUM	MOST
Abundance	Three groups of muskoxen reside in this region of the state. Their range is currently expanding with major concentrations occurring along the river systems.		
Susceptibility		Year around	
Human Harvest	Muskox are harvested from the Itkillik River to the Canadian border.		



## Seabirds

CATEGORY	LEAST	MEDIUM	MOST
Abundance	< 10	10-100	> 100
Susceptibility	Nov 1-Jan 31	Feb 1-Mar 31	May 1-Sept 30
Species Diversity	1-3	4-6	> 6
Human Harvest <sup>9</sup>			May 1-July 30

<sup>9</sup> Seabird eggs utilized by Native communities from late June through July.

Most of the world's population of Ross' Gull is found in nearshore areas of the Barrow area from September through October.



## Waterfowl and Shorebirds

CATEGORY	LEAST	MEDIUM	MOST
Abundance	In prep.		
Susceptibility <sup>4-8</sup>	Oct 1-May 15	May 15-June 20	June 20-Sept 30
Human Harvest		July 1-Aug 15 (Chukchi Sea) July 10-Aug 1; Oct 1-Nov 15 (Beaufort Sea)	Apr 1-Jun 30; Aug 15-Sept 30 (Chukchi Sea) May 1- July 10; Aug 1-Sept 30 (Beaufort Sea)

<sup>4</sup> Spectacled Eider – are in the area from late May through late September.

<sup>5</sup> Steller's Eider – are concentrated in the Barrow area from early June to September.

<sup>6</sup> Common Eider – nesting and brood-rearing on barrier islands from late June to mid-August.

<sup>7</sup> Snow Geese – brood-rearing is concentrated at Putuligayuk, Sagavanirktok, Kadleroshilik, and Shaviovik river deltas; Howe Island; and Foggy Island Bay from early July to mid-August.

<sup>8</sup> Brant – brood-rearing is concentrated at Putuligayuk, Kuparuk and eastern Colville River deltas; mouth of East Creek to Oliktok Point from early July to mid-August.



## Salmon

CATEGORY	LEAST	MEDIUM	MOST
Abundance	Due to limited information and the finite number of fishbearing streams in the area, all anadromous fish streams in this area are considered important.		
Susceptibility	June 15-Aug 1		Aug 1-June 15
Human Harvest			June 15-Aug 30



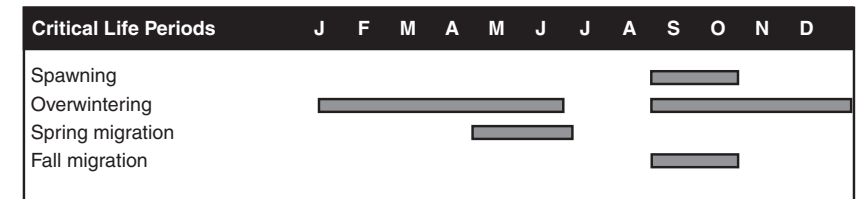
## Dolly Varden/Arctic Char

CATEGORY	LEAST	MEDIUM	MOST
Abundance	Due to limited information and the finite number of fishbearing streams in the area, all anadromous fish streams in this area are considered important.		
Susceptibility		June 16-Sept 15	Sept 15-June 15
Human Harvest	Oct 1-June 15		June 16-Sept 30



## Anadromous Whitefish

CATEGORY	LEAST	MEDIUM	MOST
Abundance	Limited data are currently available on fish populations within North Slope streams.		
Susceptibility		June 15-Aug 31	Sept 1-June 15
Human Harvest			July 1-Sept 15 Oct 1-Nov 15



## Freshwater Fish

CATEGORY	LEAST	MEDIUM	MOST
Abundance	Limited data are currently available on fish populations within North Slope streams.		
Susceptibility		June 15-Aug 31	Sept 1-July 15
Human Harvest	Oct 1-May 30	June 1-Sept 30	







# CULTURAL RESOURCE CONSIDERATIONS

## DEFINITION OF “CULTURAL RESOURCES”

Federal and state law requires protection of cultural resources in the vicinity of the spill or response.

“Cultural resources” is a broad term used to refer to ruins, structures, sites, graves, artifacts, deposits, and/or objects that pertain to history or prehistory. The question is not whether someone thinks a resource has value, but whether the resource meets the criteria of federal or state law.

There are two kinds of impacts of concern during a spill response operation::

- *Direct impact* from spilled substances
- *Indirect impacts* from ground-disturbing activities, vandalism, and theft

## RESPONSIBILITIES

Cultural resource protection is primarily an agency responsibility. The duties of the responsible party in an oil spill are to:

- Be aware that cultural resources may exist in the response area.
- Recognize that their existence may affect how response is conducted.
- Cooperate with state and federal officials charged with cultural resource protection.
- Assure that all response personnel do not collect, remove, or disturb cultural resources encountered in a response in any way.
- Consider retaining a cultural resources specialist as a consultant to Planning Section in case of a significant spill.

## SITE LOCATIONS

Because of federal law and state policy, the exact locations of cultural resource sites are not shown on ACS or member company maps. Known cultural resource sites on the North Slope have been mapped. Access to this information is restricted. Non-site-specific information on known cultural resources sites can found in the Area Contingency Plans. In a responsible party-funded response to a spill, the FOSC will consult with appropriate ARRT members regarding cultural resources which may be at risk from a spill or response.

Site-specific cultural resource surveys will be required in areas the State Historic Preservation Officer believes are not well-surveyed for sites.

Responsible parties and response teams should be particularly attentive to the possible existence of cultural resource sites at/on:

- Coastal barrier islands
- Elevated terraces or cut-bank bluffs along rivers
- Pingos
- Most shoreline areas, particularly near embayments or promontories
- Prominent hills inland

For detailed questions, consult the ARRT *Cultural Resources Protection Guidelines* (Alaska Unified Plan, Tab E to Annex X).

# INDEX OF PRIORITY PROTECTION SITES

Site	Sheet(s)	Site	Sheet(s)	Site	Sheet(s)	Site	Sheet(s)
PS2	91	PS39	6	PS82	185	PS126	140
PS3	89, 90, 91	PS40	6	PS83	185	PS127	139
PS3A	89	PS41	6	PS84	185, 186	PS128	139
PS3B	87, 182	PS42	15	PS85	186	PS129	206
PS3C	87	PS43	14, 15	PS86	186	PS130	206
PS3D	85, 86, 87	PS44	6	PS87	186	PS131	206
PS4	85, 86	PS45	5, 6	PS88	186	PS132	201
PS4A	83, 85	PS46	5	PS89	186	PS133	201
PS4B	83	PS47	4	PS90	186	PS134	201
PS5	73, 74	PS48	4, 157	PS91	186, 187	PS135	201
PS6	73	PS49	3, 4, 157	PS92	187	PS136	205
PS7	74	PS50	3	PS93	187	PS137	208
PS8	71	PS51	2	PS94	187	PS138	208
PS9	71	PS52	2	PS95	187	PS139	208
PS10	65	PS53	1, 152	PS96	188	PS140	208, 209
PS11	62, 65	PS54	3	PS97	188	PS141	208
PS12	67, 74, 80	PS55	91	PS98	188	PS142	208
PS14	62	PS56	100	PS99	188	PS143	208
PS15	62	PS57	100	PS100	188, 189	PS144	204, 208
PS16	60, 62	PS59	101	PS101	189	PS145	204
PS16A	61	PS60	102	PS102	189	PS146	204, 205
PS16B	57, 58, 61	PS61	102	PS103	190	PS147	205
PS16C	57	PS62	102	PS104	190	PS148	200
PS17	38, 56	PS63	102	PS105	190, 191	PS149	200
PS17A	38, 56	PS64	102	PS106	191	PS150	197, 200
PS17B	38	PS65A	102, 103	PS107	191	PS151	197
PS17C	38	PS65B	102, 103	PS108	191, 192	PS152	197
PS17D	38	PS66	102, 103	PS109	192	PS153	196, 197
PS17E	38	PS66A	103	PS110	192, 193	PS154	196
PS18	37	PS67	103	PS111	193	PS155	196
PS18A	37	PS68	103	PS112	152	PS156	196
PS19	37	PS69	103	PS113	152	PS157	196
PS24	36, 40	PS70	103	PS114	152	PS158	194, 196
PS24A	35, 36, 40	PS71	103, 104	PS115	147	PS159	194, 195
PS25	35, 36, 40	PS72	104	PS116	147	PS160	194, 195
PS27	35, 39, 40	PS73	104	PS117	142	PS161	194, 195
PS29	15	PS74	184	PS118	142	PS162	195
PS31	14	PS75	184	PS119	141, 142	PS163	198
PS34	7	PS76	184	PS120	141	PS164	198, 202
PS35	7	PS77	184	PS121	141	PS165	202
PS36	7	PS78	184, 185	PS122	141	PS166	202
PS37	7	PS79	185	PS123	141	PS167	202
PS38	6, 7	PS80	185	PS124	141		
		PS81	185	PS125	140		

## MAPS

The following pages contain the maps that make up the *Alaska Clean Seas Technical Manual Volume 2 Map Atlas*. Please refer to the Map Legend and Index tab to see what the map symbols mean and where these maps fit into the North Slope.



### PRIORITY PROTECTION SITES

SITE NO.	DESCRIPTION	SENSITIVITY	TACTIC	EST. BOOM
PS53	Tidal pond	Most sensitive during open water season. Peat shoreline. Keep oil from entering pond.	C-13 or C-14	500'

### GENERAL SENSITIVITIES

- Concentrations of swans, ducks, geese, and shorebirds are present here in June before open water is present elsewhere.
- Plan to deploy bird-hazing systems during the open-water season.

### CULTURAL SITES

Information on the exact locations of cultural sites is confidential. This information is contained in the *North Slope Archaeological Data* document, copies of which are kept at the following offices: State Historical Preservation Officer (SHPO) (907-269-8721), ACS in Deadhorse (907-659-2405), North Slope Borough Lands Division (907-852-0322), BPXA Crisis Center in Anchorage (907-564-5243), and the ConocoPhillips Incident Command Center in Anchorage (907-265-1000). The following cultural site(s) are located in the area depicted on this sheet:

- HAR-002 on the coast south of the eastern Eskimo Island
- HAR-014 on the coast south of the eastern Eskimo Island
- HAR-018 on the coast south of the eastern Eskimo Island
- HAR-022 near Saktuina Point
- HAR-025 on the eastern Eskimo Island



### AIR ACCESS\*

- There is a landing strip near the Kogru River inlet approximately 5 miles west of Saktuina Point (west of the area covered by this sheet).

### VESSEL ACCESS\* AND HYDROGRAPHIC CONDITIONS

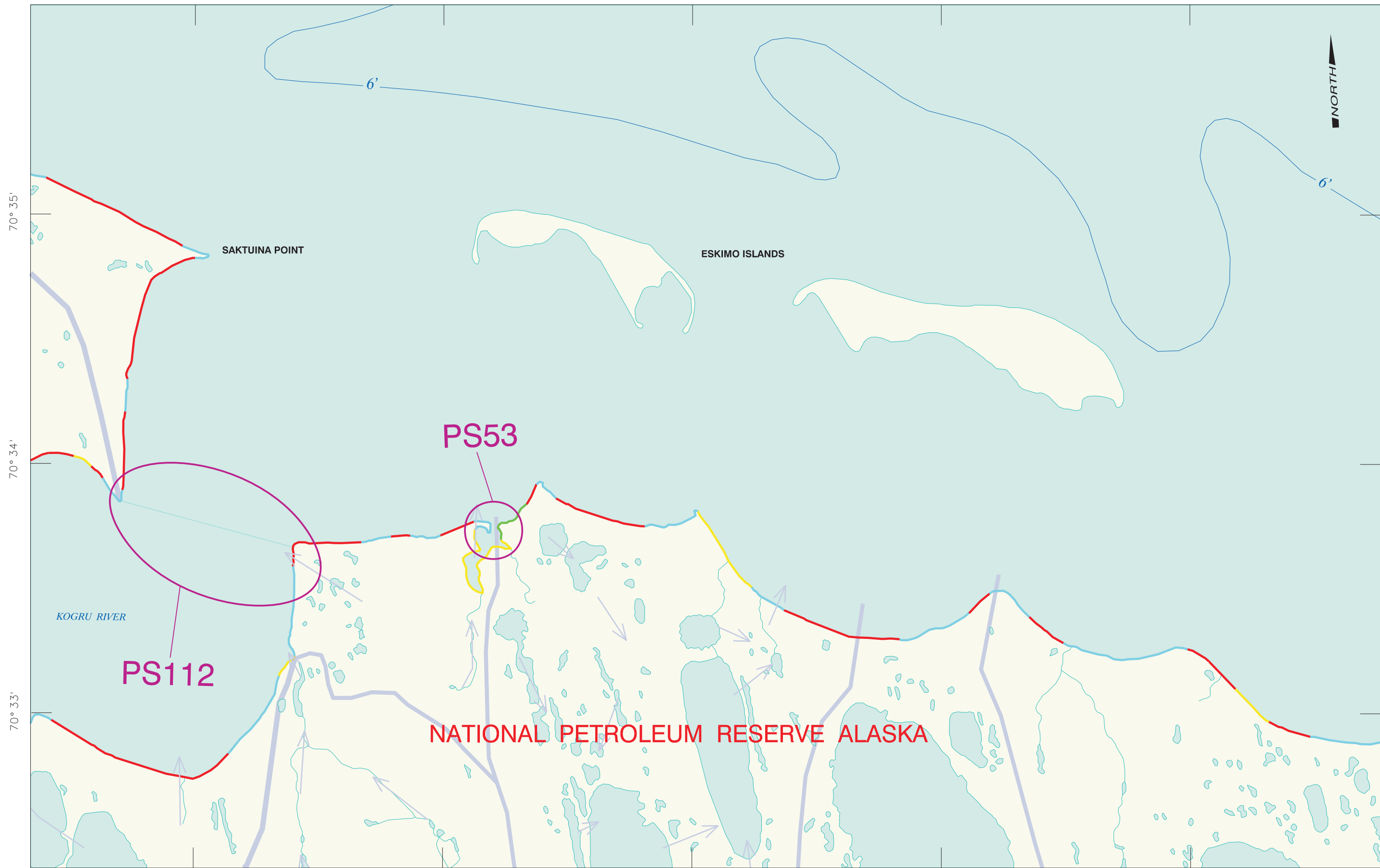
- There is extensive shoaling within 1 mile of shoreline. Water depths range from 1 to 4 ft.
- Navigation is unlikely between the Eskimo Islands and the coast due to shoals.

### COUNTERMEASURES CONSIDERATIONS

- Silt is present along many shoreline areas and is layered with peat, making load-bearing capacity minimal. Water depths are very shallow.

\*See the latest *Supplement, Alaska* and United States Coast Pilot for current information on air and vessel access, respectively.

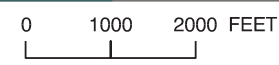
152° 03' 152° 00' 151° 57' 151° 54' 151° 51'



Continue on sheet 152

Continue on sheet 2

1:26000





**PRIORITY PROTECTION SITES**

SITE NO.	DESCRIPTION	SENSITIVITY	TACTIC	EST. BOOM
PS51	Tidal pond opening	Most sensitive during open water season. Inundated low-lying tundra shoreline. Keep oil from entering pond.	C-13 or C-14	800'
PS52	Tidal pond opening	Most sensitive during open water season. Inundated low-lying tundra shoreline. Keep oil from entering pond.	C-13 or C-14	300'

**GENERAL SENSITIVITIES**

- Concentrations of swans, ducks, geese, and shorebirds are present here in June before open water is present elsewhere.
- Plan to deploy bird-hazing systems during the open-water season.
- Polar bear denning may occur on the small island southeast of PS51 from November through April.

**CULTURAL SITES**

Information on the exact locations of cultural sites is confidential. This information is contained in the *North Slope Archaeological Data* document, copies of which are kept at the following offices: State Historical Preservation Officer (SHPO) (907-269-8721), ACS in Deadhorse (907-659-2405), North Slope Borough Lands Division (907-852-0322), North Slope Borough Lands Division (907-852-0322), BPXA Crisis Center in Anchorage (907-564-5243), and the ARCO Incident Command Center in Anchorage (907-265-1000). The following cultural site(s) are located in the area depicted on this sheet:

- HAR-002 on the coast north of the large lake at the left side of the map
- HAR-014 on the coast north of the large lake at the left side of the map
- HAR-018 on the coast north of the large lake at the left side of the map
- HAR-024 on the unnamed island south-southeast of Atigaru Point
- HAR-026 near Atigaru Point
- HAR-040 near the shore of the large lake at the left side of the map



**AIR ACCESS\***

- There is a landing strip near the Kogru River 13 miles west of Atigaru Point (west of the area covered by this atlas).

**VESSEL ACCESS\* AND HYDROGRAPHIC CONDITIONS**

- There is extensive shoaling within 1 mile of shoreline. Water depths range from 1 to 4 ft.
- A fair anchorage for small vessels is located 3 miles south of Atigaru Point.

**COUNTERMEASURES CONSIDERATIONS**

- Silt is present along many shoreline areas and is layered with peat, making load-bearing capacity minimal. Water depths are very shallow.
- Small islands south of Atigaru Point will collect floating oil.

\*See the latest *Supplement, Alaska* and United States Coast Pilot for current information on air and vessel access, respectively.

NATIONAL PETROLEUM RESERVE ALASKA

PS52

ATIGARU POINT 1

ATIGARU POINT

PS51



1:26000

0 1000 2000 FEET

Continue on sheet 1

Continue on sheet 152

Continue on sheet 157



**PRIORITY PROTECTION SITES**

SITE NO.	DESCRIPTION	SENSITIVITY	TACTIC	EST. BOOM
PS49	Kalikpik River northern channel mouth	Most sensitive during open water season. Inundated low-lying tundra shoreline and peat shoreline. Keep oil from entering channel.	C-13 or C-14	1,300'
PS50	Tidal pond opening	Most sensitive during open water season. Tundra cliffs and inundated low-lying tundra shoreline. Keep oil from entering pond.	C-13 or C-14	500'
PS54	Tidal pond opening	Most sensitive during open water season. Keep oil from entering pond.	C-13 or C-14	1,200'

**GENERAL SENSITIVITIES**

- Concentrations of swans, ducks, geese, and shorebirds are present here in June before open water is present elsewhere.
- Plan to deploy bird-hazing systems during the open-water season.



**AIR ACCESS\***

- Emergency landing for fixed-wing aircraft is available on the sand flats near the mouth of the Tingmeachsiovik River (Sheet 6).

**VESSEL ACCESS\* AND HYDROGRAPHIC CONDITIONS**

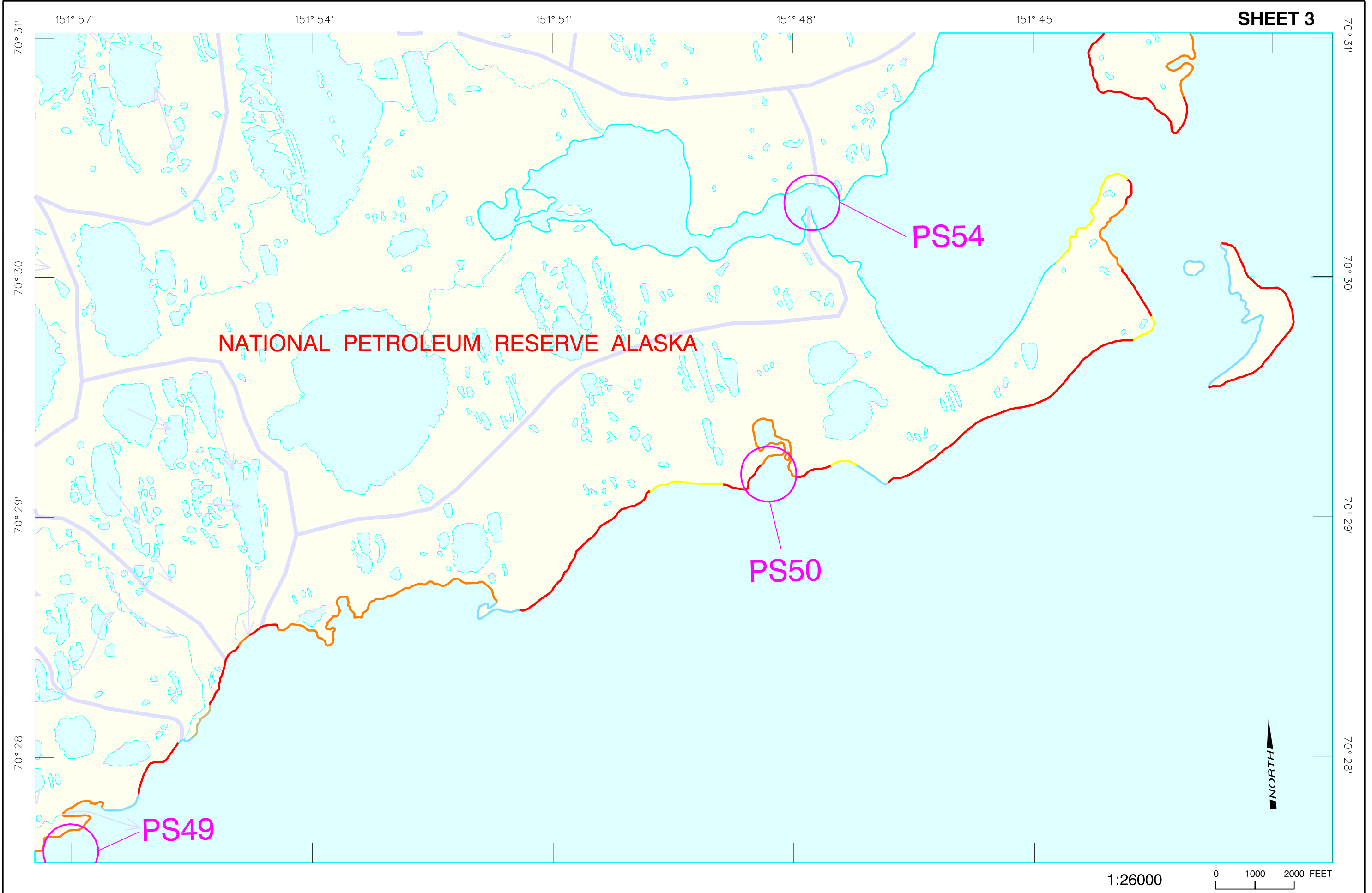
- Extensive shoaling and high sediment transport limit or restrict navigation by sea. Water depths ranging from 2 to 3 ft restrict or preclude marine access.
- Limited small boat anchorage and shelter from west and northwest winds are reported in the bay near the upper right corner of the sheet.

**COUNTERMEASURES CONSIDERATIONS**

- Sand-silt beaches are very narrow (less than 20 ft wide). Bluffs are often too high for backshore access. Water depths are very shallow in the nearshore areas.
- The west end of the bay (lower portion of map) will collect floating oil during sustained east or northeast winds.

\*See the latest *Supplement, Alaska* and United States Coast Pilot for current information on air and vessel access, respectively.





Continue on sheet 157





**PRIORITY PROTECTION SITES**

SITE NO.	DESCRIPTION	SENSITIVITY	TACTIC	EST. BOOM
PS47	Stream mouth	Most sensitive during open water season. Inundated low-lying tundra shoreline. Keep oil from entering stream.	C-13 or C-14	300'
PS48	Kalikpik River mouth and adjoining inlet	Most sensitive during open water season. Peat shoreline. Keep oil from entering river.	C-13 or C-14	2,300'
PS49	Kalikpik River northern channel mouth	Most sensitive during open water season. Inundated low-lying tundra shoreline and peat shoreline. Keep oil from entering channel.	C-13 or C-14	1,300'

**GENERAL SENSITIVITIES**

- Concentrations of swans, ducks, geese, and shorebirds are present here in June before open water is present elsewhere.
- Plan to deploy bird-hazing systems during the open-water season.
- The Kalikpik River provides habitat for anadromous whitefish and resident fish.

**CULTURAL SITES**

Information on the exact locations of cultural sites is confidential. This information is contained in the *North Slope Archaeological Data* document, copies of which are kept at the following offices: State Historical Preservation Officer (SHPO) (907-269-8721), ACS in Deadhorse (907-659-2405), North Slope Borough Lands Division (907-852-0322), North Slope Borough Lands Division (907-852-0322), BPXA Crisis Center in Anchorage (907-564-5243), and the ConocoPhillips Incident Command Center in Anchorage (907-265-1000). The following cultural site(s) are located in the area depicted on this sheet:

- HAR-027 on the coast near the bay south of the Kalikpik River delta
- HAR-028 on the coast east of the Kalikpik River delta near the center of the map



**AIR ACCESS\***

- Emergency landing for fixed-wing aircraft is available on the sand flats near the mouth of the Tingmeachsiovik River (Sheet 6).
- There is an aircraft landing strip located at the Alpine oil field (Sheet 20) approximately 19 miles southeast of S Harrison Bay 1. This is a 5,000-ft gravel airstrip operated by ConocoPhillips.

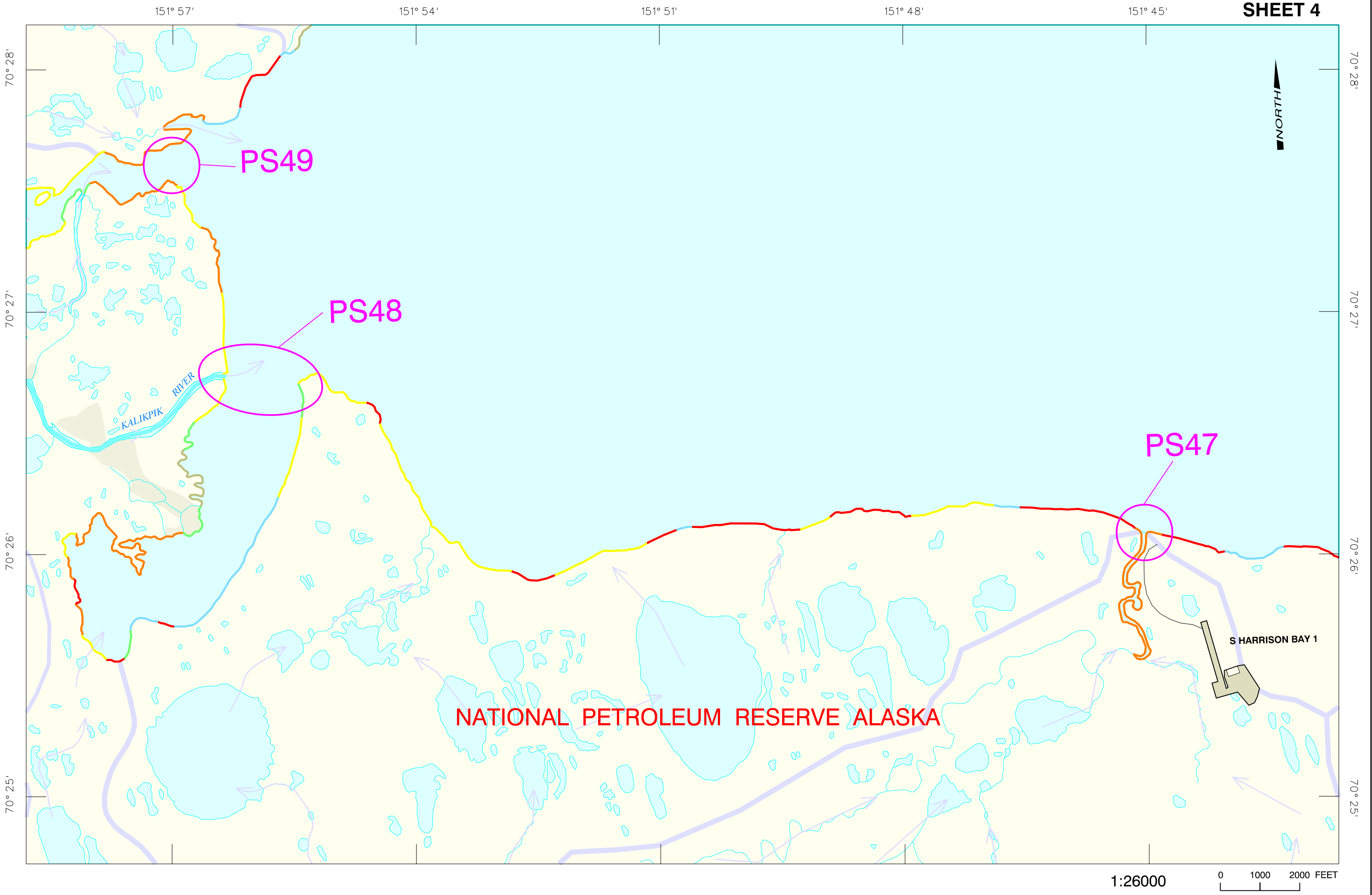
**VESSEL ACCESS\* AND HYDROGRAPHIC CONDITIONS**

- Extensive shoaling and high sediment transport limit or restrict navigation by sea. Water depths ranging from 2 to 3 ft restrict or preclude marine access.
- Water depths are very shallow in the nearshore areas.
- Kalikpik River annual average discharge rate is 55 cfs.

**COUNTERMEASURES CONSIDERATIONS**

- Sand-silt beaches are very narrow (less than 20 ft wide). Bluffs are often too high for backshore access.
- The delta of the Kalikpik River is a very complex polygonal tundra and sand-silt flats area. Access is uncertain.
- The west end of Harrison Bay and the mouth of the Kalikpik River will collect floating oil during sustained east or northeast winds.

\*See the latest *Supplement, Alaska* and United States Coast Pilot for current information on air and vessel access, respectively.



Continue on sheet 109

Continue on sheet 5



### PRIORITY PROTECTION SITES

SITE NO.	DESCRIPTION	SENSITIVITY	TACTIC	EST. BOOM
PS45	Stream mouth	Most sensitive during open water season. Inundated low-lying tundra shoreline. Keep oil from entering stream.	C-13 or C-14	300'
PS46	Stream mouth	Most sensitive during open water season. Inundated low-lying tundra shoreline. Keep oil from entering stream.	C-13 or C-14	800'

### GENERAL SENSITIVITIES

- Concentrations of swans, ducks, geese, and shorebirds are present here in June before open water is present elsewhere.
- Plan to deploy bird-hazing systems during the open-water season.



### AIR ACCESS\*

- Emergency landing for fixed-wing aircraft is available on the sand flats near the mouth of the Tingmeachsiovik River (Sheet 6).
- There is an aircraft landing strip located at the Alpine oil field (Sheet 20) approximately 15 miles to the southeast. This is a 5,000-ft gravel airstrip operated by ConocoPhillips.

### VESSEL ACCESS\* AND HYDROGRAPHIC CONDITIONS

- Extensive shoaling and high sediment transport limit or restrict navigation by sea. Water depths ranging from 2 to 3 ft restrict or preclude marine access.
- Water depths are very shallow in the nearshore areas.

### COUNTERMEASURES CONSIDERATIONS

- Sand-silt beaches are very narrow (less than 20 ft wide). Bluffs are often too high for backshore access.

\*See the latest *Supplement, Alaska* and United States Coast Pilot for current information on air and vessel access, respectively.

151° 42'

151° 39'

151° 36'

151° 33'

151° 30'

70° 27'

70° 27'

70° 26'

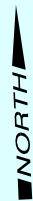
70° 26'

70° 25'

70° 25'

70° 24'

70° 24'



S HARRISON BAY 1

NATIONAL PETROLEUM RESERVE ALASKA

PS46

PS45

1:26000

0 1000 2000 FEET

Continue on sheet 4

Continue on sheet 113

Continue on sheet 6





## PRIORITY PROTECTION SITES

SITE NO.	DESCRIPTION	SENSITIVITY	TACTIC	EST. BOOM
PS38	Tingmeachsiovik River Delta	Most sensitive during open water season. Keep oil from entering river.	C-13 or C-14	300'
PS39	Tingmeachsiovik River Delta	Most sensitive during open water season. Keep oil from entering river.	C-13 or C-14	300'
PS40	Tingmeachsiovik River Delta	Most sensitive during open water season. Keep oil from entering river.	C-13 or C-14	600'
PS41	Tingmeachsiovik River Delta	Most sensitive during open water season. Keep oil from entering river.	C-13 or C-14	400'
PS44	Tidewater ponds	Most sensitive during open water season. Inundated low-lying tundra shoreline. Keep oil from entering ponds.	C-13 or C-14	800'
PS45	Stream mouth	Most sensitive during open water season. Inundated low-lying tundra shoreline. Keep oil from entering stream.	C-13 or C-14	300'

## GENERAL SENSITIVITIES

- The Colville River delta (to the east) supports very high numbers of breeding waterfowl in July. Birds may also be present in the freshwater overflow during the spring before breakup elsewhere.
- The Tingmeachsiovik River and Fish Creek deltas provide important brood-rearing habitat for brant and other waterfowl species.
- Waterbirds, particularly eiders and loons, use the Tingmeachsiovik River delta for nesting, rearing, and staging from June to September.
- Plan to deploy bird-hazing systems during spring and the open-water season.
- The Tingmeachsiovik River and Fish Creek provide habitat for anadromous whitefish and resident fish.

## CULTURAL SITES

Information on the exact locations of cultural sites is confidential. This information is contained in the *North Slope Archaeological Data* document, copies of which are kept at the following offices: State Historical Preservation Officer (SHPO) (907-269-8721), ACS in Deadhorse (907-659-2405), North Slope Borough Lands Division (907-852-0322), North Slope Borough Lands Division (907-852-0322), BPXA Crisis Center in Anchorage (907-564-5243), and the ConocoPhillips Incident Command Center in Anchorage (907-265-1000). The following cultural site(s) are located in the area depicted on this sheet:

- HAR-028 near the coast in the Tingmeachsiovik River delta



## AIR ACCESS\*

- Emergency landing for fixed-wing aircraft is available on the sand flats near the mouth of the Tingmeachsiovik River and on the sand flats west of the Nechelik Channel (Sheet 7).
- There is an aircraft landing strip located at the Alpine oil field (Sheet 20) approximately 10 miles to the southeast. This is a 5,000-ft gravel airstrip operated by ConocoPhillips.
- Commercial and air freight services are available at the City of Nuiqsut airport (Sheet 24) approximately 13 miles to the southeast. This is a 4,300-ft, unattended gravel airstrip. Visual inspection prior to use is recommended.

## VESSEL ACCESS\* AND HYDROGRAPHIC CONDITIONS

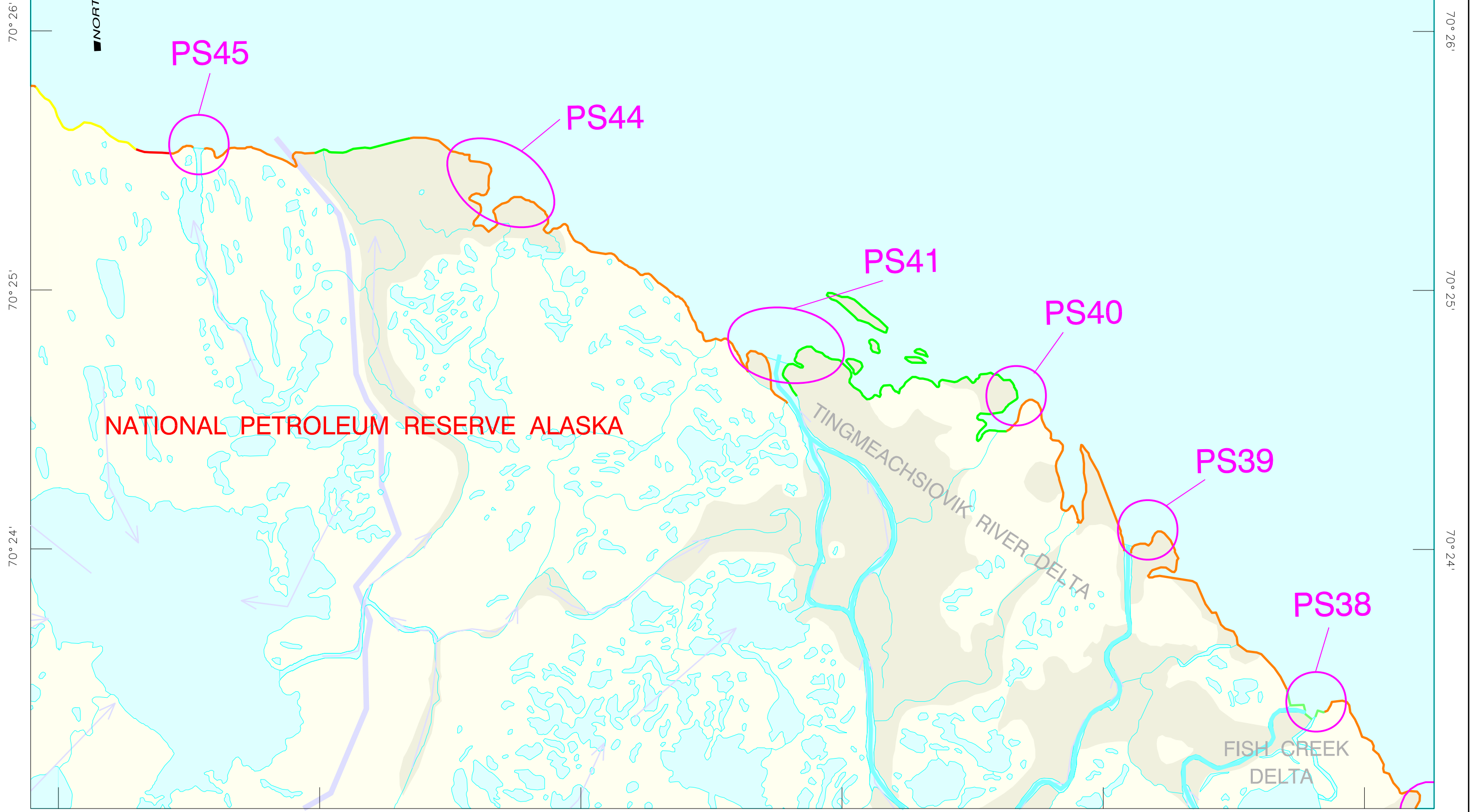
- There is severe shoaling and continuous sediment transport in the Colville River delta. Water depths are generally less than 4 ft up to 5 miles offshore.
- Water is highly turbid during summer freshet, up to 1,650 mg/l solids. This precludes visual observation of shoals and subsurface obstructions.

## COUNTERMEASURES CONSIDERATIONS

- Vegetated shorelines and mud flats in the river delta have minimal load-bearing capacity. Caution should be used to minimize erosion or loss of equipment.

\*See the latest *Supplement, Alaska* and United States Coast Pilot for current information on air and vessel access, respectively.

151° 30' 151° 27' 151° 24' 151° 21' 151° 18'



Continue on sheet 5

1:26000 0 1000 2000 FEET



**PRIORITY PROTECTION SITES**

SITE NO.	DESCRIPTION	SENSITIVITY	TACTIC	EST. BOOM
PS34	Fish Creek mouth	Most sensitive during open water season. Keep oil from entering river. Important area for anadromous fish.	C-13 or C-14	600'
PS35	Fish Creek mouth	Most sensitive during open water season. Keep oil from entering river. Important area for anadromous fish.	C-13 or C-14	500'
PS36	Fish Creek mouth	Most sensitive during open water season. Keep oil from entering river. Important area for anadromous fish.	C-13 or C-14	1,000'
PS37	Fish Creek mouth	Most sensitive during open water season. Keep oil from entering river. Important area for anadromous fish.	C-13 or C-14	300'
PS38	Tingmeachsiovik River Delta	Most sensitive during open water season. Keep oil from entering river.	C-13 or C-14	300'

**GENERAL SENSITIVITIES**

- The Colville River delta (to the east), and the Fish Creek and Tingmeachsiovik River deltas support very high numbers of nesting and brood-rearing waterfowl, waterbirds, and shorebirds from June through September. Molting birds are present in July and August.
- Birds may also be present in the freshwater overflow during the spring before breakup elsewhere.
- The Tingmeachsiovik River and Fish Creek deltas provide important brood-rearing habitat for brant and other waterfowl species.
- Plan to deploy bird-hazing systems during spring and the open-water season.
- The Tingmeachsiovik River and delta provide habitat for anadromous whitefish and resident fish.
- Fish Creek delta is an important area for anadromous fish.
- The Colville River delta is a polar bear denning area.

**CULTURAL SITES**

The area surrounding Fish Creek is a subsistence use area.

Information on the exact locations of cultural sites is confidential. The site described below is being proposed for inclusion in the North Slope archaeological data maintained by the State Historical Preservation Officer (SHPO) (907-269-8721). The following site is located in the area depicted on this sheet:

- Proposed 49-HAR-044 in the Fish Creek Delta



**AIR ACCESS\***

- Emergency landing for fixed-wing aircraft is available on the sand flats near the mouth of the Tingmeachsiovik River (Sheet 6) and on the sand flats east across the inlet from the Tingmeachsiovik River delta.
- There is an aircraft landing strip located at the Alpine oil field (Sheet 20) approximately 7 miles southeast of the Fish Creek delta. This is a 5,000-ft gravel airstrip operated by ConocoPhillips.
- Commercial and air freight services are available at the City of Nuiqsut airport (Sheet 24) approximately 13 miles southeast of the Fish Creek delta. This is a 4,300-ft, unattended gravel airstrip. Visual inspection prior to use is recommended.

**VESSEL ACCESS\* AND HYDROGRAPHIC CONDITIONS**

- Severe shoaling and continuous sediment transport occur in the Colville River delta (to the east). Water depths are generally less than 4 ft up to 5 miles offshore.
- Water is highly turbid during summer freshet, up to 1,650 mg/l solids. This precludes visual observation of shoals and subsurface obstructions.

**COUNTERMEASURES CONSIDERATIONS**

- Vegetated shorelines and mud flats in the river deltas have minimal load-bearing capacity. Caution should be used to minimize erosion or loss of equipment.

\*See the latest *Supplement, Alaska* and United States Coast Pilot for current information on air and vessel access, respectively.

151° 21'

151° 18'

151° 15'

151° 12'

151° 09'

Continue on sheet 6

70° 23'

70° 22'

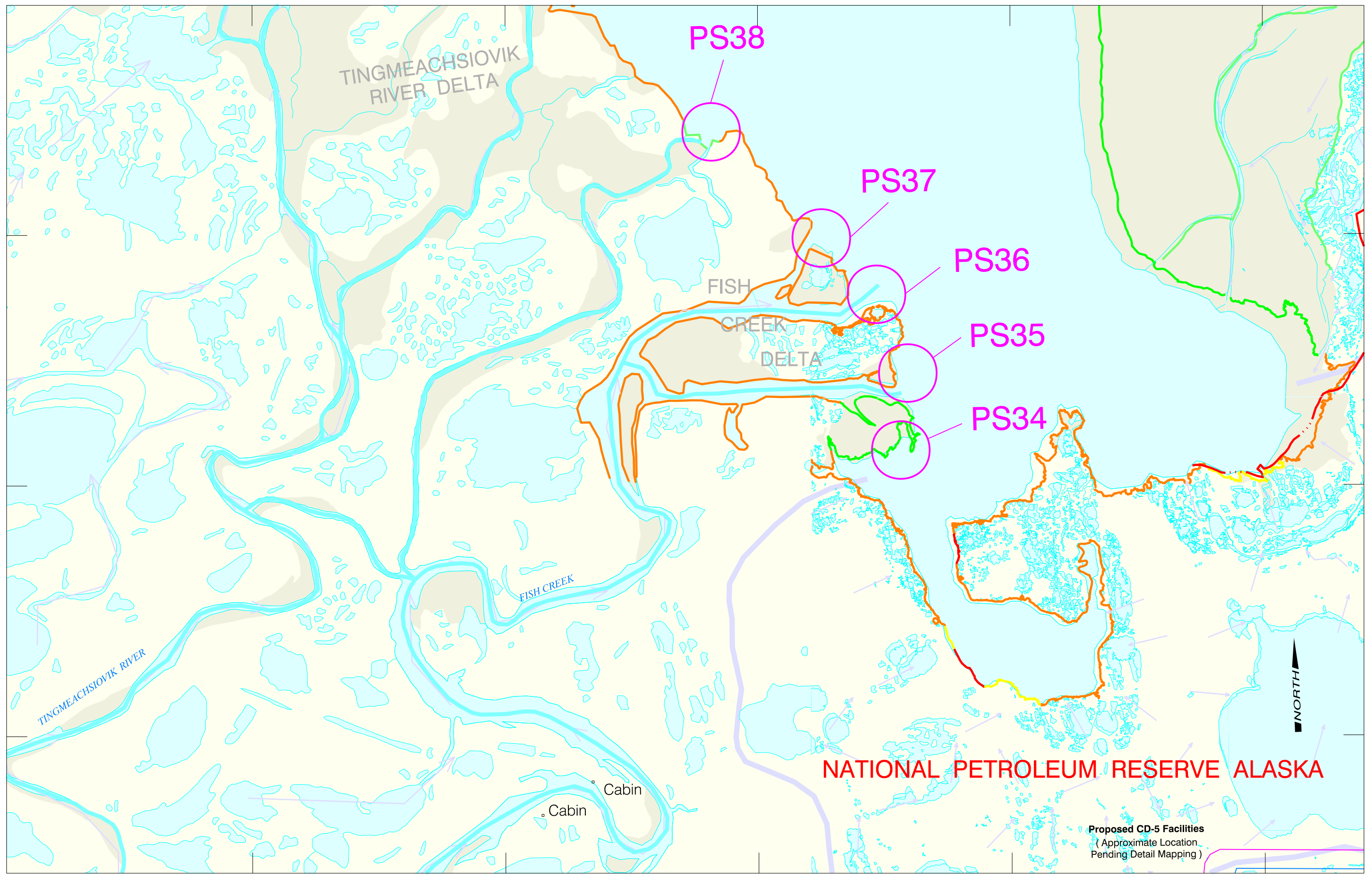
70° 21'

70° 23'

70° 22'

70° 21'

Continue on sheet 16



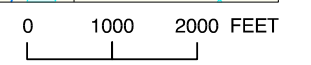
Continue on sheet 115

Continue on sheet 16

NATIONAL PETROLEUM RESERVE ALASKA

Proposed CD-5 Facilities  
(Approximate Location  
Pending Detail Mapping)

1:26000







**PRIORITY PROTECTION SITES**

- There are no priority protection sites on this sheet.

**GENERAL SENSITIVITIES**

- Seals and fish are harvested for subsistence in the Nechelik Channel and at its mouth.
- The Colville River delta supports very high numbers of nesting and brood-rearing waterfowl, waterbirds, and shorebirds from May through September. Molting birds are present in July and August.
- Birds may also be present in the freshwater overflow during the spring before breakup elsewhere.
- The outer portion of the delta is an important migration staging area for shorebirds from July through September and a Pintail molting area in July and August.
- Spectacled Eider nest sites have been found near water in this area. Consult Wildlife Leader in the Incident Command System's Environment Unit for an advisory regarding protection of these Spectacled Eider nest sites. The Spectacled Eider is listed as threatened by the U.S. Fish and Wildlife Service.
- Plan to deploy bird-hazing systems during spring and the open-water season.
- All waterways and waterbodies within the confines of the Colville River delta (the west bank of the Nechelik Channel to the Colville River's easternmost bank) are considered habitat for anadromous fish.
- The Nechelik Channel is a migratory pathway for char, cisco and whitefish, and an overwintering area for a number of anadromous and marine fish.
- Polar bear dens have been found in this area. Dens may be in use from October through April.
- Spotted seals may be present July through September.

**CULTURAL SITES**

Information on the exact locations of cultural sites is confidential. This information is contained in the *North Slope Archaeological Data* document, copies of which are kept at the following offices: State Historical Preservation Officer (SHPO) (907-269-8721), ACS in Deadhorse (907-659-2405), North Slope Borough Lands Division (907-852-0322), North Slope Borough Lands Division (907-852-0322), BPXA Crisis Center in Anchorage (907-564-5243), and the ARCO Incident Command Center in Anchorage (907-265-1000). The following cultural site(s) are located in the area depicted on this sheet:

- HAR-169 on the west bank of Nechelik Channel



**AIR ACCESS\***

- Emergency landing for fixed-wing aircraft is available on the sand flats near the mouth of the Tingmeachsiovik River (Sheet 6) and on the sand flats west of the Nechelik Channel of the Colville River (Sheet 7).
- There is an aircraft landing strip located at the CD-3 (Sheet 12) approximately 5 miles to the east. This is a 3,000-ft gravel airstrip operated by ConocoPhillips.
- Commercial and air freight services are available at the City of Nuiqsut airport (Sheet 24) approximately 16 miles south of the mouth of Nechelik Channel. This is a 4,300-ft, unattended gravel airstrip. Visual inspection prior to use is recommended.

**VESSEL ACCESS\* AND HYDROGRAPHIC CONDITIONS**

- Severe shoaling and continuous sediment transport occur in the Colville River delta. Water depths are generally less than 4 ft up to 5 miles offshore.
- The average annual discharge rate of the Colville River is 12,000 cfs.
- Annual river-sediment discharge is 6.5 million tons (more than 300 tons/sq mi).
- Water is highly turbid during summer freshet, up to 1,650 mg/l solids. This precludes visual observation of shoals and subsurface obstructions.

**COUNTERMEASURES CONSIDERATIONS**

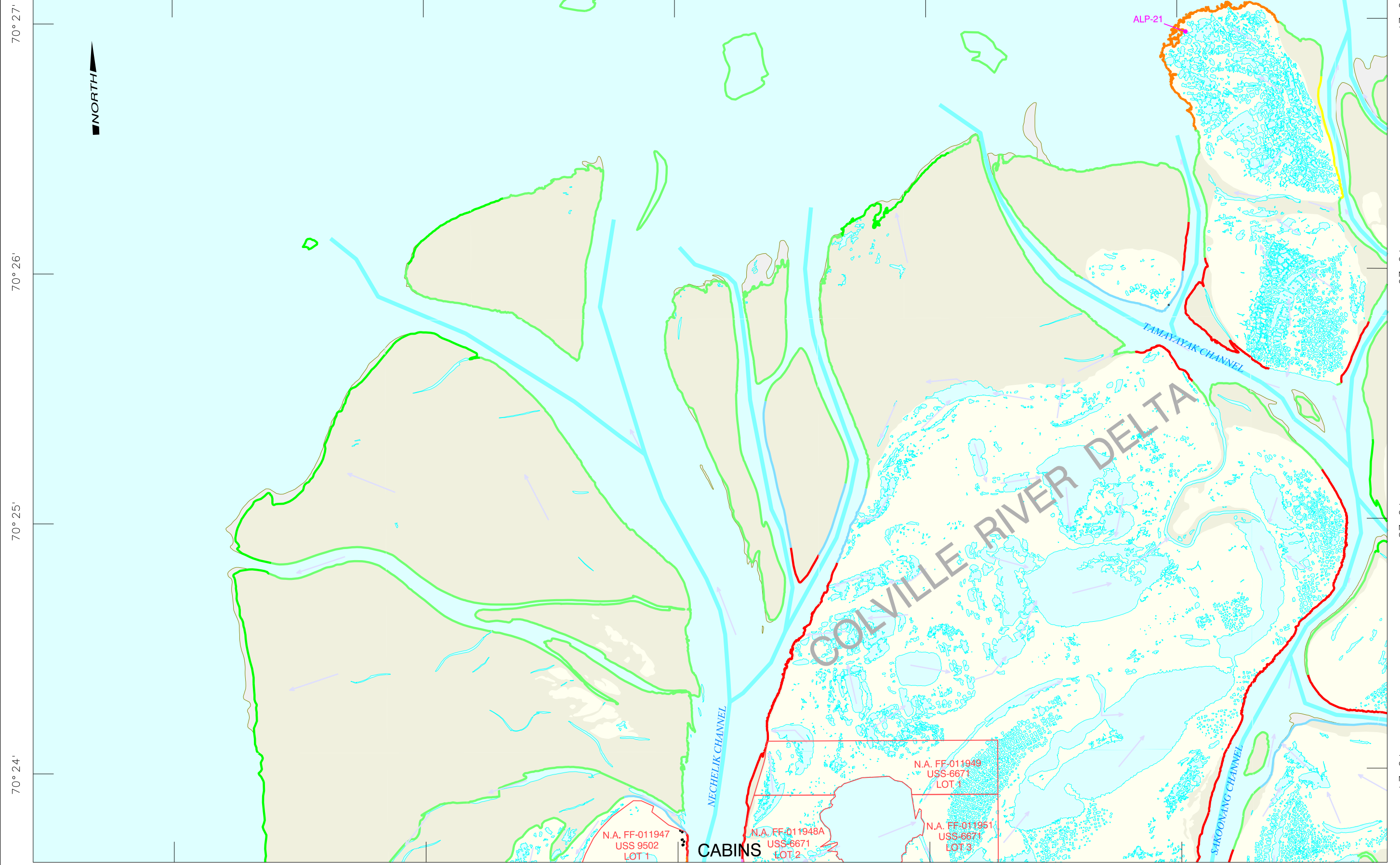
- Voluminous riverine discharge and hydrodynamic circulation will preclude almost any floating oil from contacting shoreline. Circulation will cause oil to drift either to western or eastern shores of Harrison Bay.
- Because of very low relief over extensive mud flats in the Colville River delta, oil may spread over large areas.
- Vegetated shorelines and mud flats in the Colville River delta have minimal load-bearing capacity. Caution should be used to minimize erosion or loss of equipment.

**STAGING AREAS AND PRESTAGED EQUIPMENT**

PRESTAGED EQUIP. AREA	LOCATION	ITEM	QUANTITY	TYPE
ALP-21	On island at east side of mouth of Tamayayak Channel about 2.2 miles southwest of Tolaktovut Pt.	Boom Anchor System	3,000' 4	8" x 6" harbor 40-lb. Danforth system

\*See the latest *Supplement, Alaska* and United States Coast Pilot for current information on air and vessel access, respectively.

151° 12' 151° 09' 151° 06' 151° 03' 151° 00'



70° 27' 70° 26' 70° 25' 70° 24'

70° 27' 70° 26' 70° 25' 70° 24'

Continue on sheet 12

1:26000 0 1000 2000 FEET



**PRIORITY PROTECTION SITES**

- There are no priority protection sites on this sheet.

**GENERAL SENSITIVITIES**

- The Colville River delta supports very high numbers of nesting and brood-rearing waterfowl, waterbirds, and shorebirds from May through September. Molting birds are present in July and August.
- Birds may also be present in the freshwater overflow during the spring before breakup elsewhere.
- The outer portion of the delta is an important migration staging area for shorebirds from July through September and a Pintail molting area in July and August.
- Spectacled Eider nest sites have been found in the western side of the Colville River delta.
- Spectacled Eider broods occasionally occupy the Tolaktovut Point area in late summer.
- Plan to deploy bird-hazing systems during spring and the open-water season.
- The Colville River is a migratory pathway for char, cisco, and whitefish. The Elaktoveach Channel is an overwintering area for several marine and anadromous fish.
- All waterways and waterbodies within the confines of the Colville River delta (the west bank of the Nechelik Channel to the Colville River's easternmost bank) are considered habitat for anadromous fish.
- The Colville River delta is a polar bear denning area.
- Spotted seals may be present July through September.



**AIR ACCESS\***

- There is an aircraft landing strip located at the CD-3 (Sheet 12) approximately 3 miles south of Tolaktovut Point. This is a 3,000-ft gravel airstrip operated by ConocoPhillips.
- Commercial and air freight services are available at the City of Nuiqsut airport (Sheet 24) approximately 17 miles south of the coast. This is a 4,300-ft, unattended gravel airstrip. Visual inspection prior to use is recommended.

**VESSEL ACCESS\* AND HYDROGRAPHIC CONDITIONS**

- Severe shoaling and continuous sediment transport occur in the Colville River delta. Water depths are generally less than 4 ft up to 5 miles offshore.
- The average annual discharge rate of the Colville River is 12,000 cfs.
- Annual river-sediment discharge is 6.5 million tons (more than 300 tons/sq mi).
- Water is highly turbid during summer freshet, up to 1,650 mg/l solids. This precludes visual observation of shoals and subsurface obstructions.

**COUNTERMEASURES CONSIDERATIONS**

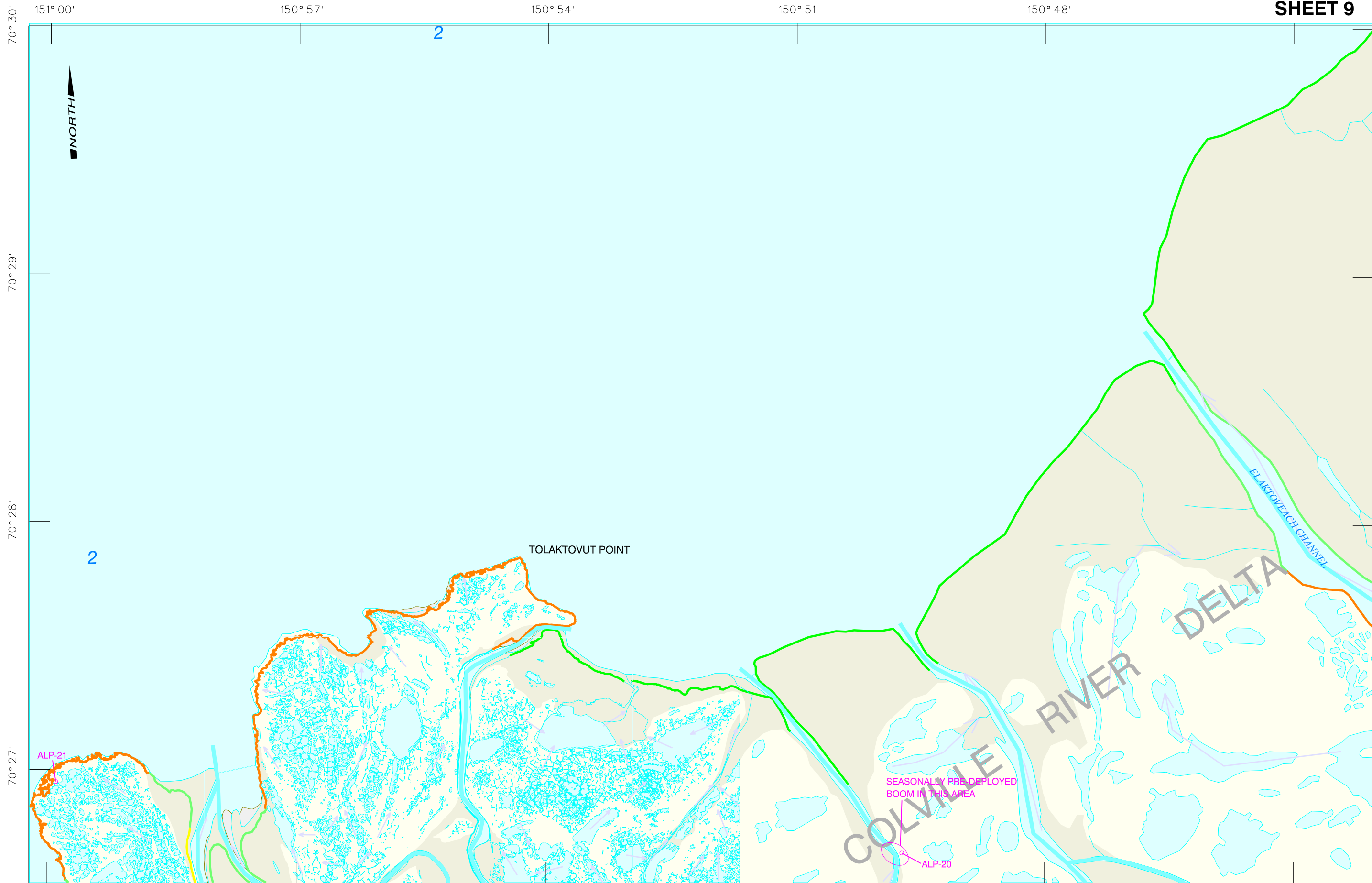
- Voluminous riverine discharge and hydrodynamic circulation will preclude almost any floating oil from contacting shoreline. Circulation will cause oil to drift either to western or eastern shores of Harrison Bay.
- Because of very low relief over extensive mud flats in the Colville River delta, oil may spread over large areas.
- Load-bearing capacity of muddy sediments on the west side of the delta is minimal.

**STAGING AREAS AND PRESTAGED EQUIPMENT**

- Boom is seasonally prestaged at ALP-20.

PRESTAGED EQUIP. AREA	LOCATION	ITEM	QUANTITY	TYPE
ALP-20 (Seasonal)	On Tamayayak Channel about 2.5 miles northeast of CD-3	Boom Anchor System	750' 2	8" x 6" river 23-lb. anchor
ALP-21	On island at east side of mouth of Tamayayak Channel about 2.2 miles southwest of Tolaktovut Pt.	Boom Anchor System	3,000' 4	8" x 6" harbor 40-lb. Danforth system

\*See the latest *Supplement, Alaska* and United States Coast Pilot for current information on air and vessel access, respectively.



Continue on sheet 10

Continue on sheet 12

1:26000 0 1000 2000 FEET





### PRIORITY PROTECTION SITES

- There are no priority protection sites on this sheet.

### GENERAL SENSITIVITIES

- The Colville River delta supports very high numbers of nesting and brood-rearing waterfowl, waterbirds, and shorebirds from May through September. Molting birds are present in July and August.
- Birds may also be present in the freshwater overflow during the spring before breakup elsewhere.
- The outer portion of the delta is an important migration staging area for shorebirds from July through September and a Pintail molting area in July and August.
- Plan to deploy bird-hazing systems during spring and the open-water season.
- The Colville River is a migratory pathway for char, cisco, and whitefish. The eastern channel is an overwintering area for several marine and anadromous fish.
- All waterways and waterbodies within the confines of the Colville River delta (the west bank of the Nechelik Channel to the Colville River's easternmost bank) are considered habitat for anadromous fish.
- The Colville River delta is a polar bear denning area.
- Spotted seals may be present July through September.



### AIR ACCESS\*

- There is an aircraft landing strip located at the CD-3 (Sheet 12) approximately 8 miles to the southwest. This is a 3,000-ft gravel airstrip operated by ConocoPhillips.
- Commercial and air freight services are available at the City of Nuiqsut airport (Sheet 24) approximately 21 miles south of the mouth of Elaktoveach Channel. This is a 4,300-ft, unattended gravel airstrip. Visual inspection prior to use is recommended.

### VESSEL ACCESS\* AND HYDROGRAPHIC CONDITIONS

- Severe shoaling and continuous sediment transport occur in the Colville River delta. Water depths are generally less than 4 ft up to 5 miles offshore.
- The average annual discharge rate of the Colville River is 12,000 cfs.
- Annual river-sediment discharge is 6.5 million tons (more than 300 tons/sq mi).
- Water is highly turbid during summer freshet, up to 1,650 mg/l solids. This precludes visual observation of shoals and subsurface obstructions.

### COUNTERMEASURES CONSIDERATIONS

- Voluminous riverine discharge and hydrodynamic circulation will preclude almost any floating oil from contacting shoreline. Circulation will cause oil to drift either to western or eastern shores of Harrison Bay.
- Because of very low relief over extensive mud flats in the Colville River delta, oil may spread over large areas.
- Load-bearing capacity of muddy sediments on the west side of the delta is minimal. Sediments at the delta front become more sandy toward the eastern side and therefore more firmly packed.

\*See the latest *Supplement, Alaska* and United States Coast Pilot for current information on air and vessel access, respectively.

150° 45'

150° 42'

150° 39'

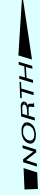
150° 36'

150° 33'

**SHEET 10**

70° 30'

70° 30'



# COLVILLE RIVER DELTA

70° 29'

70° 29'

Continue on sheet 9

Continue on sheet 11

70° 28'

70° 28'

ELAKTOVEACH CHANNEL

70° 27'

70° 27'

1:26000

0 1000 2000 FEET



### PRIORITY PROTECTION SITES

- There are no priority protection sites on this sheet.
- \* Priority Protection Area -- The entire delta region of the Colville River is one large Priority Protection Area due to its size and numerous geographical features. On-site conditions may require the use of open water tactics to prevent oil migration into this delta.

### GENERAL SENSITIVITIES

- In May and June, before breakup, the freshwater overflow on the ice in front of the Colville River delta is an important area for waterfowl and shorebirds.
- The Colville River delta supports very high numbers of nesting and brood-rearing waterfowl, waterbirds, and shorebirds from May through September. Molting birds are present in July and August.
- The outer portion of the delta is an important migration staging area for shorebirds from July through September and a Pintail molting area in July and August.
- Plan to deploy bird-hazing systems during spring and the open-water season.
- The Colville River is a migratory pathway for char, cisco, and whitefish. The eastern channel is an overwintering area for several marine and anadromous fish.
- All waterways and waterbodies within the confines of the Colville River delta (the west bank of the Nechelik Channel to the Colville River's easternmost bank) are considered habitat for anadromous fish.
- The Colville River delta is a polar bear denning area.
- Spotted seals may be present July through September.



### AIR ACCESS\*

- Commercial and air freight services are available at the City of Nuiqsut airport (Sheet 24) approximately 24 miles to the southwest. This is a 4,300-ft, unattended gravel airstrip. Visual inspection prior to use is recommended.
- There is an unmarked emergency landing strip on the east side of the Colville River delta.

### VESSEL ACCESS\* AND HYDROGRAPHIC CONDITIONS

- Severe shoaling and continuous sediment transport occur in the Colville River delta. Water depths are generally less than 4 ft up to 5 miles offshore.
- The main channel of the Colville River generally maintains a 3 ft water depth and is usually navigable 70 miles upriver to the rapids below the mouth of the Anaktuvuk River.
- The average annual discharge rate of the Colville River is 12,000 cfs.
- Annual river-sediment discharge is 6.5 million tons (more than 300 tons/sq mi).
- Water is highly turbid during summer freshet, up to 1,650 mg/l solids. This precludes visual observation of shoals and subsurface obstructions.

### COUNTERMEASURES CONSIDERATIONS

- Voluminous riverine discharge and hydrodynamic circulation will preclude almost any floating oil from contacting shoreline. Circulation will cause oil to drift either to western or eastern shores of Harrison Bay.
- Because of very low relief over extensive mud flats in the Colville River delta, oil may spread over large areas.
- Load-bearing capacity of muddy sediments on the west side of the delta is minimal. Sediments at the delta front become more sandy toward the eastern side and therefore more firmly packed.

\*See the latest *Supplement, Alaska* and United States Coast Pilot for current information on air and vessel access, respectively.

150° 30'

150° 27'

150° 24'

150° 21'

150° 18'

70° 30'

70° 29'

70° 28'

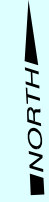
70° 27'

70° 30'

70° 29'

70° 28'

70° 27'



3

COLVILLE

RIVER

DELTA

KUPIGRUAK CHANNEL

1:26000

0 1000 2000 FEET

Continue on sheet 10

Continue on sheet 39A

Continue on sheet 14





**PRIORITY PROTECTION SITES**

- There are no priority protection sites on this sheet.

**GENERAL SENSITIVITIES**

- In May and June, before breakup, the freshwater overflow on the ice in front of the Colville River delta is an important area for waterfowl and shorebirds.
- The Colville River delta supports very high numbers of nesting and brood-rearing waterfowl, waterbirds, and shorebirds from May through September. Molting birds are present in July and August.
- The outer portion of the delta is an important migration staging area for shorebirds from July through September and a Pintail molting area in July and August.
- Spectacled Eider nest sites have been found in the western side of the Colville River delta.
- Plan to deploy bird-hazing systems during spring and the open-water season.
- The Colville River is a migratory pathway for char, cisco, and whitefish. The eastern channel is an overwintering area for several marine and anadromous fish.
- All waterways and waterbodies within the confines of the Colville River delta (the west bank of the Nechelik Channel to the Colville River's easternmost bank) are considered habitat for anadromous fish.
- The Colville River delta is a polar bear denning area.
- Spotted seals may be present July through September.



**AIR ACCESS\***

- There is a 3,000-ft gravel airstrip operated by ConocoPhillips at CD-3 and a 5,000-ft gravel airstrip operated by ConocoPhillips at the Alpine oil field approximately 5 miles south of CD-3.
- Commercial and air freight services are available at the City of Nuiqsut airport (Sheet 24) approximately 15 miles to the south. This is a 4,300-ft, unattended gravel airstrip. Visual inspection prior to use is recommended.

**VESSEL ACCESS\* AND HYDROGRAPHIC CONDITIONS**

- Severe shoaling and continuous sediment transport occur in the Colville River delta. Water depths are generally less than 4 ft up to 5 miles offshore.
- The average annual discharge rate of the Colville River is 12,000 cfs.
- Annual river-sediment discharge is 6.5 million tons (more than 300 tons/sq mi).
- Water is highly turbid during summer freshet, up to 1,650 mg/l solids. This precludes visual observation of shoals and subsurface obstructions.

**COUNTERMEASURES CONSIDERATIONS**

- Voluminous riverine discharge and hydrodynamic circulation will preclude most floating oil from shoreline contact.
- During periods of extreme storm surge, some of the bars and islands may be contaminated by oil. Vegetated areas are probably wet tundra. Caution should be exercised.
- Because of very low relief over extensive mud flats in the Colville River delta, oil may spread over large areas.
- Load-bearing capacity of muddy sediments on the west side of the delta is minimal. Sediments at the delta front become more sandy toward the eastern side and therefore more firmly packed.

**STAGING AREAS AND PRESTAGED EQUIPMENT**

- Boom is seasonally prestaged at ALP-20.
- Boom is seasonally predeployed in vicinity of ALP-17 and ALP-19.

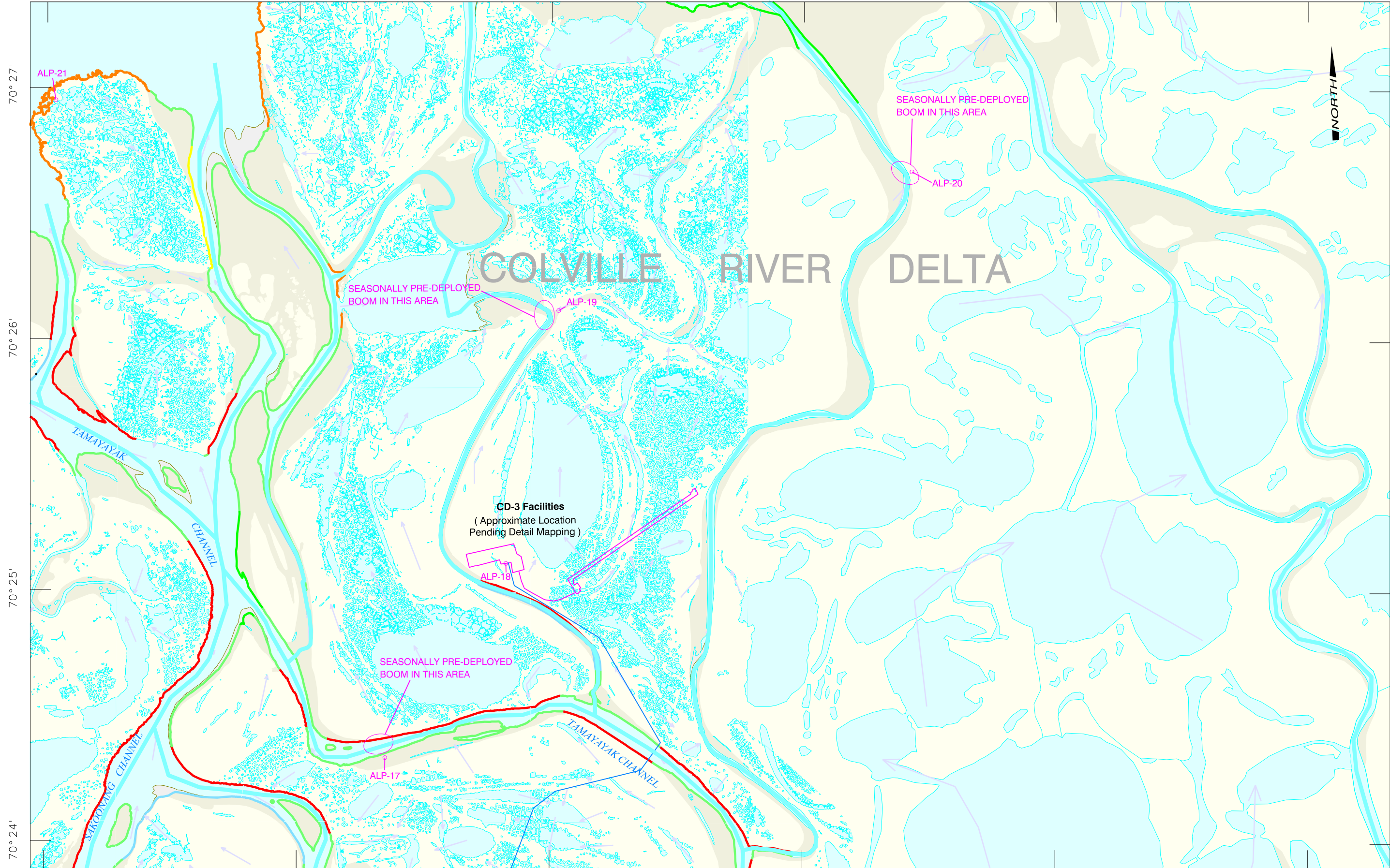
PRESTAGED EQUIP. AREA	LOCATION	ITEM	QUANTITY	TYPE
ALP-17	On Tamayayak Channel about 1 mile southwest of CD-3	Boom Pump Skimmer Storage Anchor System	2,000' 1 2 8 4	8" x 6" river 3" trash diesel Drum or brush 2,500-gal. open top 40-lb. Danforth system
ALP-18	On CD-3 pad	Boom Pump Skimmer Storage Anchor System	2,000' 1 2 8 4	8" x 6" river 3" trash diesel Drum or brush 2,500-gal. open top 40-lb. Danforth system
ALP-19	On Tamayayak Channel about 1 mile downstream of CD-3	Boom Pump Skimmer Storage Anchor System	2,000' 1 2 8 4	8" x 6" river 3" trash diesel Drum or brush 2,500-gal. open top 40-lb. Danforth system
ALP-20 (Seasonal)	On Tamayayak Channel about 2.5 miles northeast of CD-3	Boom Anchor System	750' 2	8" x 6" river 23-lb. anchor
ALP-21	On island at east side of mouth of Tamayayak Channel about 2.2 miles southwest of Tolaktovut Pt.	Boom Anchor System	3,000' 4	8" x 6" river 40-lb. Danforth system

\*See the latest *Supplement, Alaska* and United States Coast Pilot for current information on air and vessel access, respectively.

151° 00'      150° 57'      150° 54'      150° 51'      150° 48'

Continue on sheet 8

Continue on sheet 13



70° 27'  
70° 26'  
70° 25'  
70° 24'

70° 27'  
70° 26'  
70° 25'  
70° 24'

1:26000      0      1000      2000 FEET



### PRIORITY PROTECTION SITES

- There are no priority protection sites on this sheet.

### GENERAL SENSITIVITIES

- The Colville River delta supports very high numbers of nesting and brood-rearing waterfowl, waterbirds, and shorebirds from May through September. Molting birds are present in July and August.
- Birds may also be present in the freshwater overflow during the spring before breakup elsewhere.
- The outer portion of the delta is an important migration staging area for shorebirds from July through September and a Pintail molting area in July and August.
- Plan to deploy bird-hazing systems during spring and the open-water season.
- The Colville River is a migratory pathway for char, cisco, and whitefish. The eastern channel is an overwintering area for several marine and anadromous fish.
- All waterways and waterbodies within the confines of the Colville River delta (the west bank of the Nechelik Channel to the Colville River's easternmost bank) are considered habitat for anadromous fish.
- The Colville River delta is a polar bear denning area.



### AIR ACCESS\*

- There is an aircraft landing strip located at the CD-3 (Sheet 12) approximately 6 miles to the west. This is a 3,000-ft gravel airstrip operated by ConocoPhillips.
- There is 5,000-ft gravel airstrip operated by ConocoPhillips located at the Alpine oil field (Sheet 20) approximately 8 miles to the southwest.
- Commercial and air freight services are available at the City of Nuiqsut airport (Sheet 24) approximately 17 miles to the southwest. This is a 4,300-ft, unattended gravel airstrip. Visual inspection prior to use is recommended.

### VESSEL ACCESS\* AND HYDROGRAPHIC CONDITIONS

- Severe shoaling and continuous sediment transport occur in the Colville River delta. Water depths are generally less than 4 ft up to 5 miles offshore.
- The main channel of the Colville River generally maintains a 3 ft water depth and is usually navigable 70 miles upriver to the rapids below the mouth of the Anaktuvuk River.
- The average annual discharge rate of the Colville River is 12,000 cfs.
- Annual river-sediment discharge is 6.5 million tons (more than 300 tons/sq mi).
- Water is highly turbid during summer freshet, up to 1,650 mg/l solids. This precludes visual observation of shoals and subsurface obstructions.

### COUNTERMEASURES CONSIDERATIONS

- During periods of extreme storm surge, some of the bars and islands may be contaminated by oil. Vegetated areas are probably wet tundra. Caution should be exercised.

\*See the latest *Supplement, Alaska* and United States Coast Pilot for current information on air and vessel access, respectively.



150° 45'

150° 42'

150° 39'

150° 36'

150° 33'

70° 27'

70° 27'

70° 26'

70° 26'

70° 25'

70° 25'

70° 24'

70° 24'



# COLVILLE RIVER DELTA

ELAKTOVEACH CHANNEL

KUPIGRUAK CHANNEL

N.A. FF-13834  
USS-9999  
LOT 5

N.A. FF-13834  
USS-9999  
LOT 4

N.A. FF-13833  
USS-9999  
LOT 3

N.A. FF-13835  
USS-9999  
LOT 2

N.A. FF-14315  
USS-9999  
LOT 1

1:26000

0 1000 2000 FEET

Continue on sheet 12

Continue on sheet 14





**PRIORITY PROTECTION SITES**

SITE NO.	DESCRIPTION	SENSITIVITY	TACTIC	EST. BOOM
PS31	Colville River main channel and sea-facing island shores in its delta.	Most sensitive during open water season. Brant nesting and brood-rearing area	C-13 or C-14	8,000'
PS43	Creek mouth at eastern edge of Colville River delta.	Most sensitive during open water season. Inundated low-lying tundra shoreline. Keep oil from entering creek.	C-13 or C-14	500'

\* Priority Protection Area -- The entire delta region of the Colville River is one large Priority Protection Area due to its size and numerous geographical features. On-site conditions may require the use of open water tactics to prevent oil migration into this delta.

**GENERAL SENSITIVITIES**

- This is a Brant nesting, brood-rearing and molting area. Birds are present from May through August.
- In May and June, before breakup, the freshwater overflow on the ice in front of the Colville River delta is an important area for waterfowl and shorebirds.
- The Colville River delta and coastal areas support very high numbers of nesting and brood-rearing waterfowl, water-birds, and shorebirds from May through September. Molting birds are present in July and August.
- The outer portion of the delta is an important migration staging area for shorebirds from July through September and a Pintail molting area in July and August.
- Plan to deploy bird-hazing systems during spring and the open-water season.
- The Colville River is a migratory pathway for char, cisco, and whitefish. The eastern channel is an overwintering area for several marine and anadromous fish.
- All waterways and waterbodies within the confines of the Colville River delta (the west bank of the Nechelik Channel to the Colville River's easternmost bank) are considered habitat for anadromous fish.
- The Colville River delta is a polar bear denning area.
- Spotted seals may be present July through September.

**CULTURAL SITES**

Information on the exact locations of cultural sites is confidential. This information is contained in the *North Slope Archaeological Data* document, copies of which are kept at the following offices: State Historical Preservation Officer (SHPO) (907-269-8721), ACS in Deadhorse (907-659-2405), North Slope Borough Lands Division (907-852-0322), North Slope Borough Lands Division (907-852-0322), BPXA Crisis Center in Anchorage (907-564-5243), and the ARCO Incident Command Center in Anchorage (907-265-1000). The following cultural site(s) are located in the area depicted on this sheet:

- HAR-160 on long narrow island northeast of Nuekshat Island



**AIR ACCESS\***

- Commercial and air freight services are available at the City of Nuiqsut airport (Sheet 24) approximately 20 miles to the southwest. This is a 4,300-ft, unattended gravel airstrip. Visual inspection prior to use is recommended.
- There is an emergency landing strip at Helmricks west of the main channel near the mouth. This is an unattended, 2,500-ft dirt runway, for emergency use only. The runway is soft when wet.

**VESSEL ACCESS\* AND HYDROGRAPHIC CONDITIONS**

- Severe shoaling and continuous sediment transport occur in the Colville River delta. Water depths are generally less than 4 ft up to 5 miles offshore.
- The main channel of the Colville River generally maintains a 3 ft water depth and is usually navigable 70 miles upriver to the rapids below the mouth of the Anaktuvuk River.
- The average annual discharge rate of the Colville River is 12,000 cfs.
- Annual river-sediment discharge is 6.5 million tons (more than 300 tons/sq mi).
- Water is highly turbid during summer freshet, up to 1,650 mg/l solids. This precludes visual observation of shoals and subsurface obstructions.

**COUNTERMEASURES CONSIDERATIONS**

- Voluminous riverine discharge and hydrodynamic circulation will preclude almost any floating oil from contacting shoreline. Circulation will cause oil to drift either to western or eastern shores of Harrison Bay.
- Because of very low relief over extensive mud flats in the Colville River delta, oil may spread over large areas.
- Load-bearing capacity of muddy sediments on the west side of the delta is minimal. Sediments at the delta front become more sandy toward the eastern side and therefore more firmly packed.
- During periods of extreme storm surge, some of the bars and islands may be contaminated by oil. Vegetated areas are probably wet tundra. Caution should be exercised.

\*See the latest *Supplement, Alaska* and United States Coast Pilot for current information on air and vessel access, respectively.

150° 30'

150° 27'

150° 24'

150° 21'

150° 18'

70° 27'

70° 27'

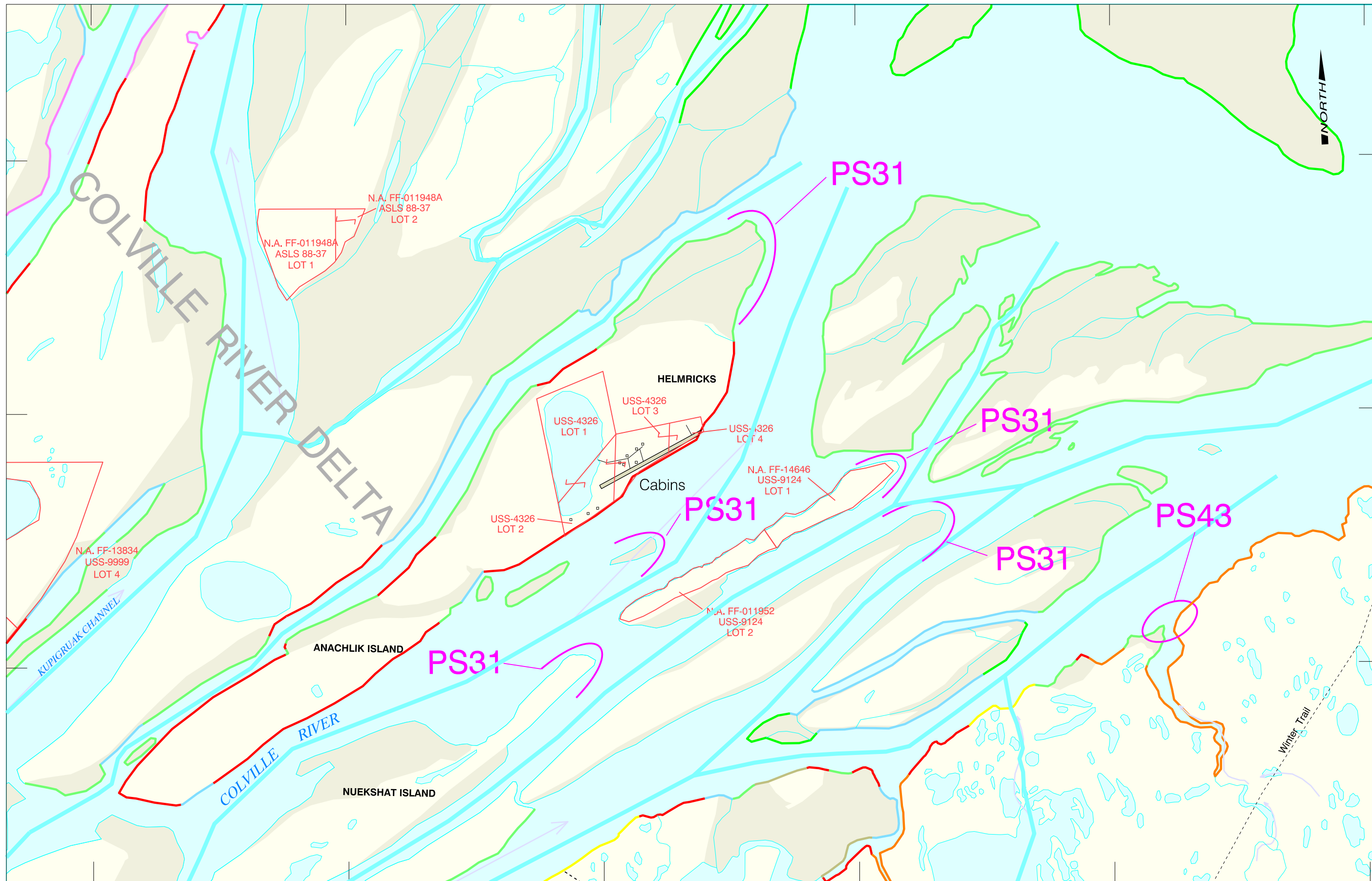
70° 26'

70° 26'

70° 25'

70° 25'

70° 24'



Continue on sheet 13

Continue on sheet 15



### PRIORITY PROTECTION SITES

SITE NO.	DESCRIPTION	SENSITIVITY	TACTIC	EST. BOOM
PS29	Kalubik Creek mouth	Most sensitive during open water season. Creek mouth is characterized by peat shoreline or salt marsh.	C-13 or C-14	1,500'
PS42	Creek mouth west of Kalubik Creek	Most sensitive during open water season. Inundated low-lying tundra shoreline. Keep oil from entering creek.	C-13 or C-14	300'
PS43	Creek mouth at eastern edge of Colville River delta	Most sensitive during open water season. Inundated low-lying tundra shoreline. Keep oil from entering creek.	C-13 or C-14	500'

### GENERAL SENSITIVITIES

- In May and June, before breakup, the freshwater overflow on the ice in front of the Colville River delta is an important area for waterfowl and shorebirds.
- The Colville River delta and coastal areas support very high numbers of nesting and brood-rearing waterfowl, water-birds, and shorebirds from May through September. Molting birds are present in July and August.
- The outer portion of the delta is an important migration staging area for shorebirds from July through September and a Pintail molting area in July and August.
- This is a Brant nesting, brood-rearing and molting area. Birds are present from May through August.
- Plan to deploy bird-hazing systems during spring and the open-water season.
- The Colville River is a migratory pathway for char, cisco, and whitefish. The eastern channel is an overwintering area for several marine and anadromous fish.
- All waterways and waterbodies within the confines of the Colville River delta (the west bank of the Nechelik Channel to the Colville River's easternmost bank) are considered habitat for anadromous fish.
- Kalubik Creek provides habitat for anadromous whitefish and char and for resident fish.
- Polar bear dens have been found in this area. Dens may be in use from October through April.
- Spotted seals may be present July through September.

### CULTURAL SITES

Information on the exact locations of cultural sites is confidential. This information is contained in the *North Slope Archaeological Data* document, copies of which are kept at the following offices: State Historical Preservation Officer (SHPO) (907-269-8721), ACS in Deadhorse (907-659-2405), North Slope Borough Lands Division (907-852-0322), North Slope Borough Lands Division (907-852-0322), BPXA Crisis Center in Anchorage (907-564-5243), and the ARCO Incident Command Center in Anchorage (907-265-1000). The following cultural site(s) are located in the area depicted on this sheet:

- HAR-015 on the west bank of Kalubik Creek
- HAR-016 on the west bank of Kalubik Creek
- HAR-017 on the west bank of Kalubik Creek



### AIR ACCESS\*

- Commercial and air freight services are available at the City of Nuiqsut airport (Sheet 24) approximately 25 miles southeast of the mouth of Kalubik Creek. This is a 4,300-ft, unattended gravel airstrip. Visual inspection prior to use is recommended.

### VESSEL ACCESS\* AND HYDROGRAPHIC CONDITIONS

- Severe shoaling and continuous sediment transport occur in the Colville River delta. Water depths are generally less than 4 ft up to 5 miles offshore.
- The main channel of the Colville River generally maintains a 3 ft water depth and is usually navigable 70 miles upriver to the rapids below the mouth of the Anaktuvuk River.
- The average annual discharge rate of the Colville River is 12,000 cfs.
- Annual river-sediment discharge is 6.5 million tons (more than 300 tons/sq mi).
- Water is highly turbid during summer freshet, up to 1,650 mg/l solids. This precludes visual observation of shoals and subsurface obstructions.

### COUNTERMEASURES CONSIDERATIONS

- Voluminous riverine discharge and hydrodynamic circulation will preclude almost any floating oil from contacting shoreline. Circulation will cause oil to drift either to western or eastern shores of Harrison Bay.
- Sand-silt shores are very narrow (less than 20 ft wide) and interrupted by small creek mouths and areas of thick peat deposits. Large areas of potential overwash east of Kalubik Creek may make cleanup difficult. Backshore areas are wet tundra.

\*See the latest *Supplement, Alaska* and United States Coast Pilot for current information on air and vessel access, respectively.

150° 18'

150° 15'

150° 12'

150° 09'

150° 06'

Continue on sheet 14

Continue on sheet 39

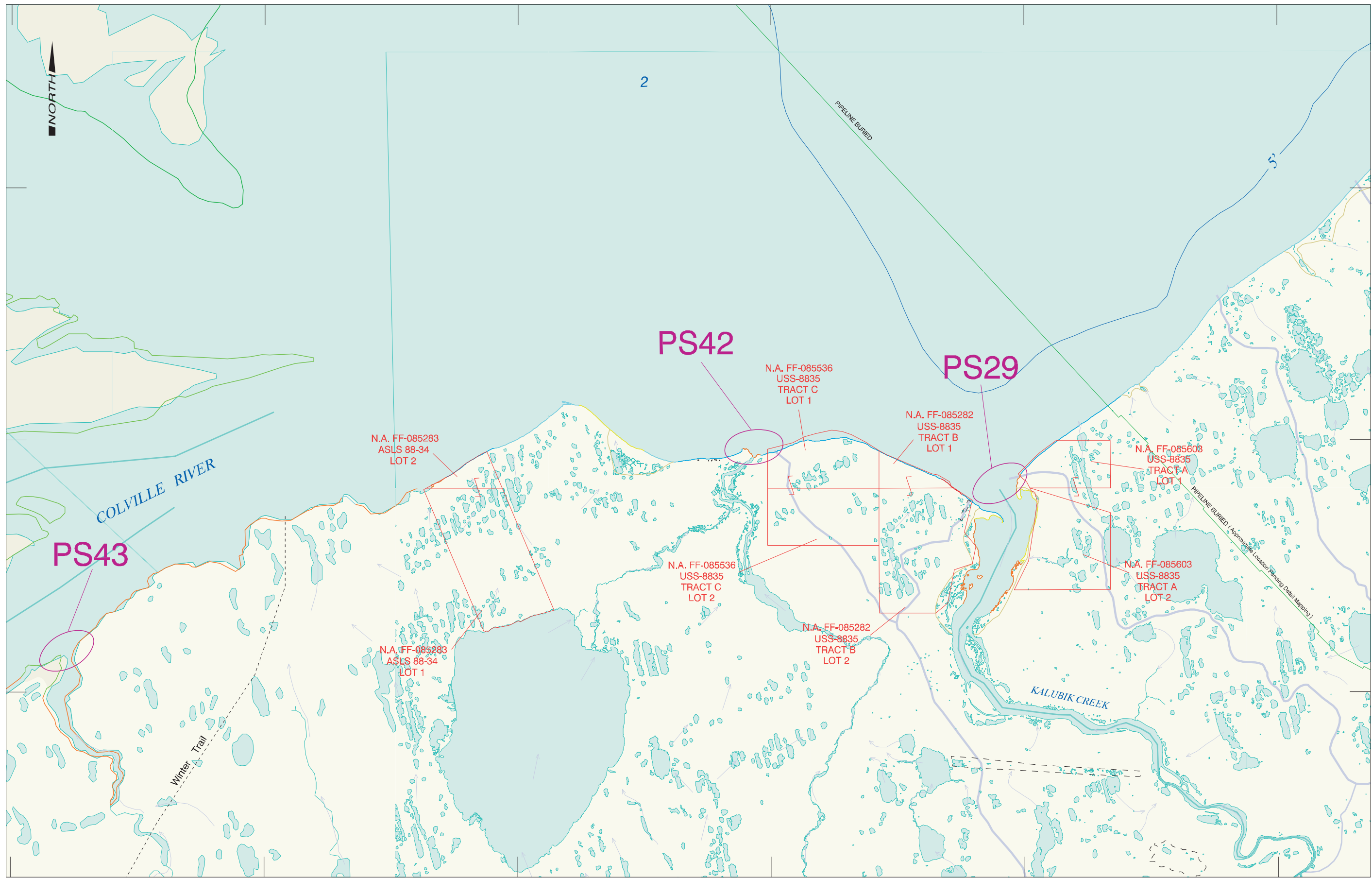
70° 26'

70° 26'

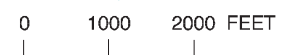
70° 25'

70° 25'

Continue on sheet 41



1:26000







**PRIORITY PROTECTION SITES**

- There are no priority protection sites on this sheet.

**GENERAL SENSITIVITIES**

- The Colville River delta supports very high numbers of nesting and brood-rearing waterfowl, waterbirds, and shorebirds from May through September. Molting birds are present in July and August.
- Birds may also be present in the freshwater overflow during the spring before breakup elsewhere.
- The outer portion of the delta is an important migration staging area for shorebirds from July through September and a Pintail molting area in July and August.
- Spectacled Eider nest sites have been found in the western side of the Colville River delta.
- Plan to deploy bird-hazing systems during spring and the open-water season.
- The Colville River is a migratory pathway for char, cisco, and whitefish. The Nechelik Channel is an overwintering area for several marine and anadromous fish.
- All waterways and waterbodies within the confines of the Colville River delta (the west bank of the Nechelik Channel to the Colville River's easternmost bank) are considered habitat for anadromous fish.
- Polar bear dens have been found in this area. Dens may be in use from October through April.

**CULTURAL SITES**

Information on the exact locations of cultural sites is confidential. This information is contained in the *North Slope Archaeological Data* document, copies of which are kept at the following offices: State Historical Preservation Officer (SHPO) (907-269-8721), ACS in Deadhorse (907-659-2405), North Slope Borough Lands Division (907-852-0322), North Slope Borough Lands Division (907-852-0322), BPXA Crisis Center in Anchorage (907-564-5243), and the ARCO Incident Command Center in Anchorage (907-265-1000). The following cultural site(s) are located in the area depicted on this sheet:

- HAR-169 on the west bank of Nechelik Channel in the upper portion of the map



**AIR ACCESS\***

- There is a 5,000-ft gravel airstrip operated by ConocoPhillips at the Alpine oil field and a 3,000-ft gravel airstrip operated by ConocoPhillips at CD-3 approximately 5 miles North of Alpine CD-1.
- Commercial and air freight services are available at the City of Nuiqsut airport (Sheet 24) approximately 11 miles to the south. This is a 4,300-ft, unattended gravel airstrip. Visual inspection prior to use is recommended.
- Emergency landing for fixed-wing aircraft is available on the sand flats west of the Nechelik Channel.

**VESSEL ACCESS\* AND HYDROGRAPHIC CONDITIONS**

- Water is highly turbid during summer freshet, up to 1,650 mg/l solids. This precludes visual observation of shoals and subsurface obstructions.

**COUNTERMEASURES CONSIDERATIONS**

- During periods of extreme storm surge, some of the bars and islands may be contaminated by oil. Vegetated areas are probably wet tundra. Caution should be exercised.
- Because of very low relief over extensive mud flats in the Colville River delta, oil may spread over large areas.
- Load-bearing capacity of muddy sediments on the west side of the delta is minimal. Sediments at the delta front become more sandy toward the eastern side and therefore more firmly packed.

**STAGING AREAS AND PRESTAGED EQUIPMENT**

- Boom is typically predeployed seasonally east of the Alpine airstrip and near ALP-14, ALP-15, and ALP-16.

PRESTAGED EQUIP. AREA	LOCATION	ITEM	QUANTITY	TYPE
ALP-8	East of Nechelik Channel and approx. 2.5 miles W of Alpine production pad	Boom	2,100'	8" x 6" river
ALP-9	On east bank of Nechelik Channel approx. 3.5 miles NW of Alpine production pad	Boom Pump Skimmer Storage Anchor Systems	2,250' 1 1 4 2	8" x 6" river 3" trash, diesel Drum or brush 2,500-gal. open top 40-lb. anchor system
ALP-10	South of Sagoonang Channel approx. 1.5 miles NW of Alpine production pad	Boom Boom Pump Skimmer Storage Anchor System Anchor System	1,050' 2,000' 1 1 4 1 1	8" x 6" river 8" x 6" foam log 3" trash, diesel Drum or brush 2,500-gal. open top 14-lb. Davis system 18-lb. Davis system
ALP-14	On Sagoonang Channel	Boom Pump Skimmer Storage Anchor System	2,000' 1 2 8 4	8" x 6" river 3" trash diesel Drum or brush 2,500-gal. open top 40-lb. Danforth system
ALP-15 (Seasonal)	On Tamayayak Channel	Boom Anchor System	2,000' 4	8" x 6" river 40-lb. Danforth system
ALP-16	On Tamayayak Channel	Boom Pump Skimmer Storage Anchor System	2,000' 1 2 8 4	8" x 6" river 3" trash diesel Drum or brush 2,500-gal. open top 40-lb. Danforth system

\*See the latest *Supplement, Alaska* and United States Coast Pilot for current information on air and vessel access, respectively.

151° 06'

151° 03'

151° 00'

150° 57'

70° 24'

70° 24'

70° 23'

70° 23'

70° 22'

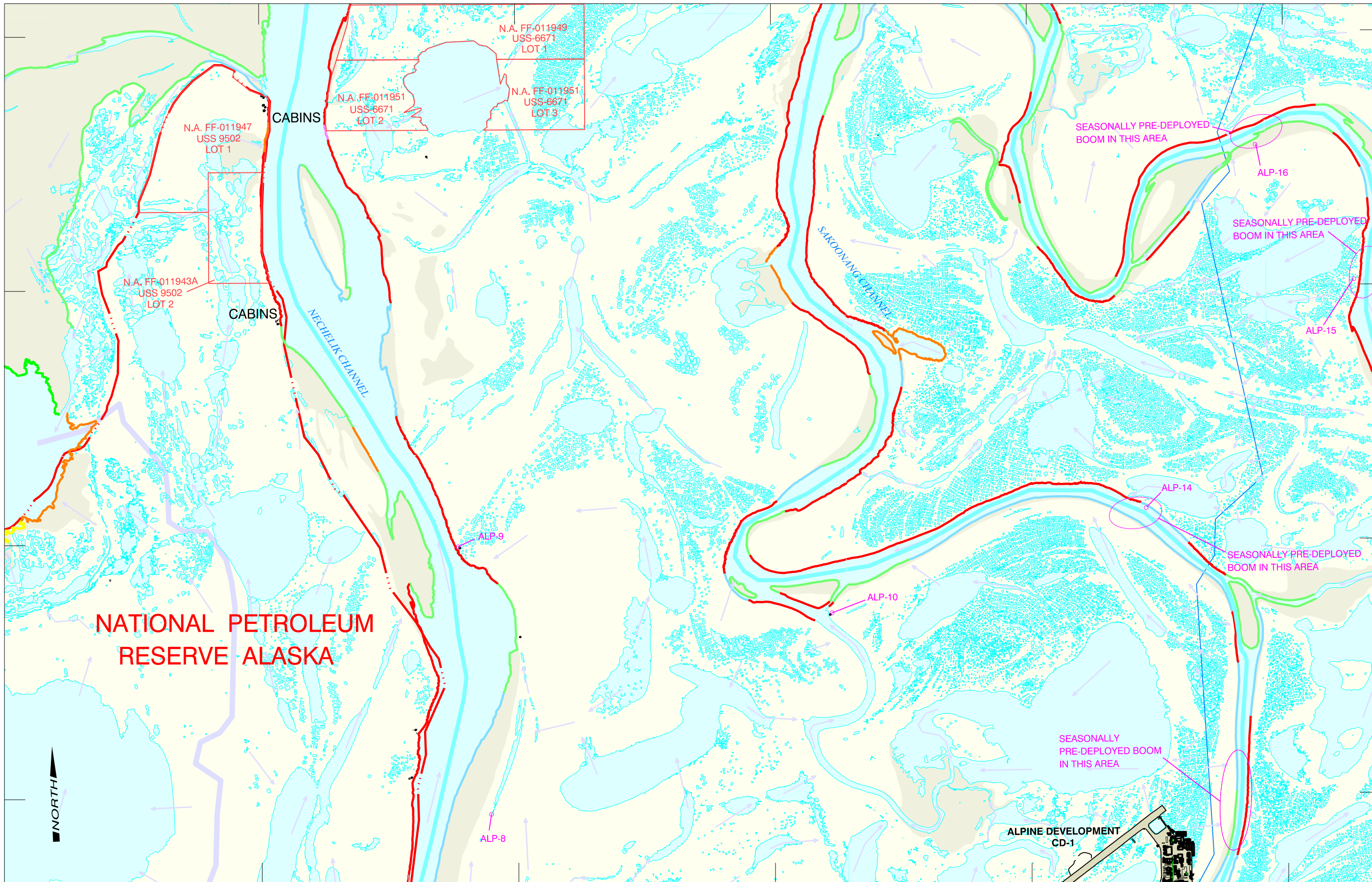
70° 22'

70° 21'

70° 21'

Continue on sheet 7

Continue on sheet 17







**PRIORITY PROTECTION SITES**

- There are no priority protection sites on this sheet.

**GENERAL SENSITIVITIES**

- The Colville River delta supports very high numbers of nesting and brood-rearing waterfowl, waterbirds, and shorebirds from May through September. Molting birds are present in July and August.
- Birds may also be present in the freshwater overflow during the spring before breakup elsewhere.
- Spectacled Eider nest sites have been found in the western side of the Colville River delta.
- Plan to deploy bird-hazing systems during spring and the open-water season.
- The Colville River is a migratory pathway for char, cisco, and whitefish. The eastern channel is an overwintering area for several marine and anadromous fish.
- All waterways and waterbodies within the confines of the Colville River delta (the west bank of the Nechelik Channel to the Colville River's easternmost bank) are considered habitat for anadromous fish.
- The Colville River delta is a polar bear denning area.



**AIR ACCESS\***

- There is an aircraft landing strip located at the CD-3 (Sheet 12) approximately 4 miles north of ALP-10. This is a 3,000-ft gravel airstrip operated by ConocoPhillips.
- There is an aircraft landing strip located at the Alpine oil field (Sheet 20) approximately 1 mile southeast of ALP-10. This is a 5,000-ft gravel airstrip operated by ConocoPhillips.

Commercial and air freight services are available at the City of Nuiqsut airport (Sheet 24) approximately 12 miles to the south. This is a 4,300-ft, unattended gravel airstrip. Visual inspection prior to use is recommended.

**VESSEL ACCESS\* AND HYDROGRAPHIC CONDITIONS**

- There are no marine waters or shoreline on this sheet.

**STAGING AREAS AND PRESTAGED EQUIPMENT**

- Boom is typically predeployed seasonally on Sakoonang Channel near bottom of this sheet and near ALP-14, ALP-15, ALP-16, and ALP-17.

PRESTAGED EQUIP. AREA	LOCATION	ITEM	QUANTITY	TYPE
ALP-10	South of Sakoonang Channel approx. 1.5 miles NW of Alpine production pad	Boom	1,050'	8" x 6" river
		Boom	2,000'	8" x 6" foam log
		Pump	1	3" trash, diesel
		Skimmer	1	Drum or brush
		Storage	4	2,500-gal. open top
		Anchor System	1	14-lb. Davis system
		Anchor System	1	18-lb. Davis system
ALP-14	On Sakoonang Channel	Boom	2,000'	8" x 6" river
		Pump	1	3" trash diesel
		Skimmer	2	Drum or brush
		Storage	8	2,500-gal. open top
		Anchor System	4	40-lb. Danforth system
ALP-15 (Seasonal)	On Tamayayak Channel	Boom	2,000'	8" x 6" river
		Pump	1	3" trash diesel
		Skimmer	2	Drum or brush
		Storage	8	2,500-gal. open top
		Anchor System	4	40-lb. Danforth system
ALP-16	On Tamayayak Channel	Boom	2,000'	8" x 6" river
		Pump	1	3" trash diesel
		Skimmer	2	Drum or brush
		Storage	8	2,500-gal. open top
		Anchor System	4	40-lb. Danforth system
ALP-17	On Tamayayak Channel about 1 mile southwest of CD-3	Boom	2,000'	8" x 6" river
		Pump	1	3" trash diesel
		Skimmer	2	Drum or brush
		Storage	8	2,500-gal. open top
		Anchor System	4	40-lb. Danforth system

\*See the latest Supplement, Alaska and United States Coast Pilot for current information on air and vessel access, respectively.

150° 57'

150° 54'

150° 51'

150° 48'

150° 45'

70° 24'

70° 23'

70° 22'

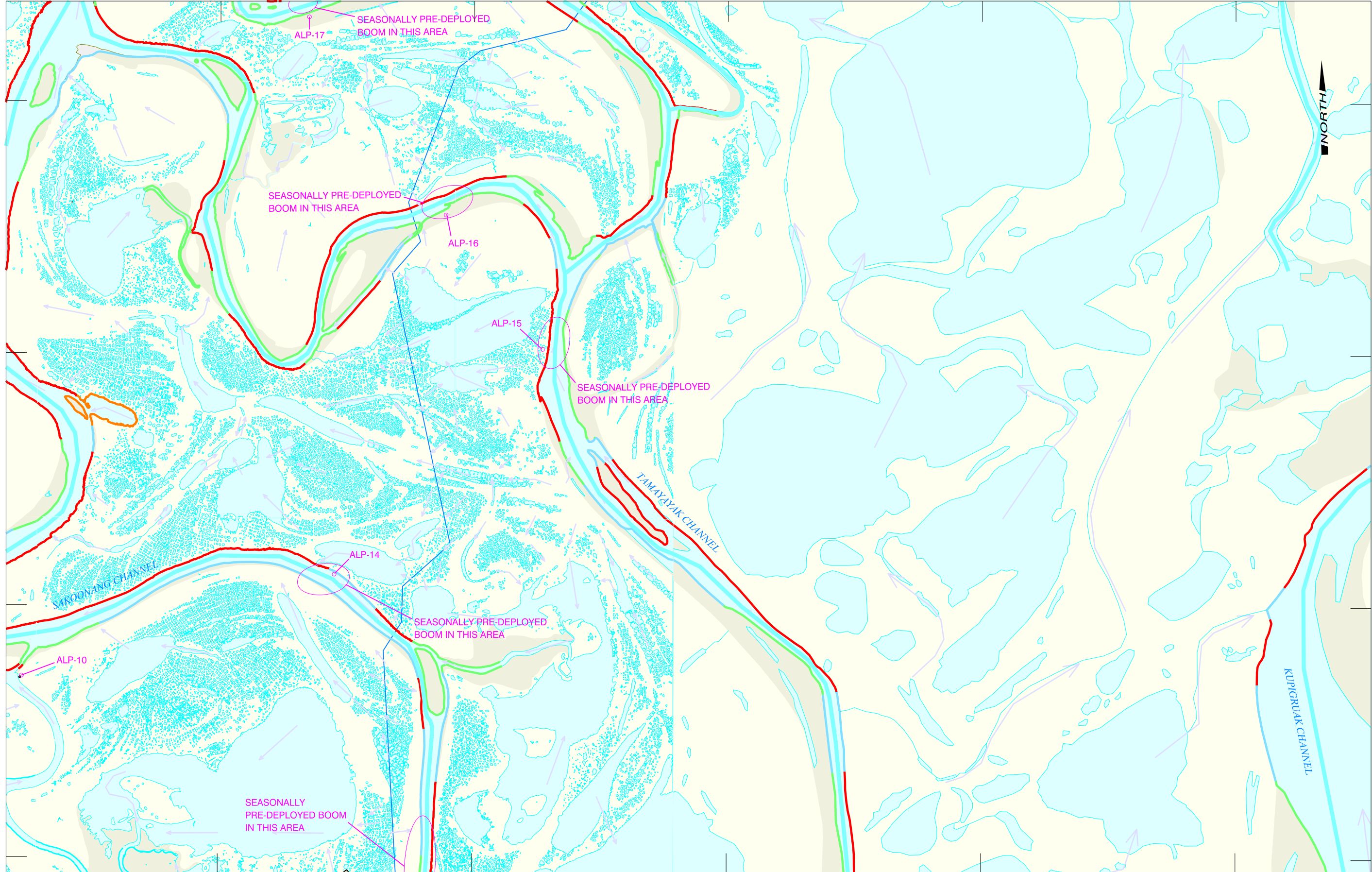
70° 21'

70° 24'

70° 23'

70° 22'

70° 21'



1:26000

0 1000 2000 FEET

Continue on sheet 16

Continue on sheet 18





**PRIORITY PROTECTION SITES**

- There are no priority protection sites on this sheet.

**GENERAL SENSITIVITIES**

- The Colville River delta and coastal areas support very high numbers of nesting and brood-rearing waterfowl, water-birds, and shorebirds from May through September. Molting birds are present in July and August.
- Birds may also be present in the freshwater overflow during the spring before breakup elsewhere.
- Plan to deploy bird-hazing systems during spring and the open-water season.
- The Colville River is a migratory pathway for char, cisco, and whitefish. The eastern channel is an overwintering area for several marine and anadromous fish.
- All waterways and waterbodies within the confines of the Colville River delta (the west bank of the Nechelik Channel to the Colville River's easternmost bank) are considered habitat for anadromous fish.
- The Miluveach River provides habitat for anadromous whitefish and char and for resident fish.
- The Colville River delta is a polar bear denning area.



**AIR ACCESS\***

- There is an aircraft landing strip located at the CD-3 (Sheet 12) approximately 9 miles northwest of Pikonik Mound. This is a 3,000-ft gravel airstrip operated by ConocoPhillips.
- Commercial and air freight services are available at the City of Nuiqsut airport (Sheet 24) approximately 13 miles to the southwest. This is a 4,300-ft, unattended gravel airstrip. Visual inspection prior to use is recommended.

**VESSEL ACCESS\* AND HYDROGRAPHIC CONDITIONS**

- There are no marine waters or shoreline on this sheet.
- Main channel of the Colville River generally maintains a 3 ft water depth and is usually navigable 70 miles upriver to the rapids below the mouth of the Anaktuvuk River.

**COUNTERMEASURES CONSIDERATIONS**

- Voluminous riverine discharge and hydrodynamic circulation will preclude almost any floating oil from contacting shoreline.
- During periods of extreme storm surge, some of the bars and islands may be contaminated by oil. Vegetated areas are probably wet tundra. Caution should be exercised.

**STAGING AREAS AND PRESTAGED EQUIPMENT**

PRESTAGED EQUIP. AREA	LOCATION	ITEM	QUANTITY	TYPE
ALP-13	On west bank of Miluveach River south of confluence with Colville River	Boom Anchor Systems	750' 2	8" x 6" river

\*See the latest *Supplement, Alaska* and United States Coast Pilot for current information on air and vessel access, respectively.

150° 45' 150° 42' 150° 39' 150° 36' 150° 33'

Continue on sheet 17

Continue on sheet 19

70° 22'

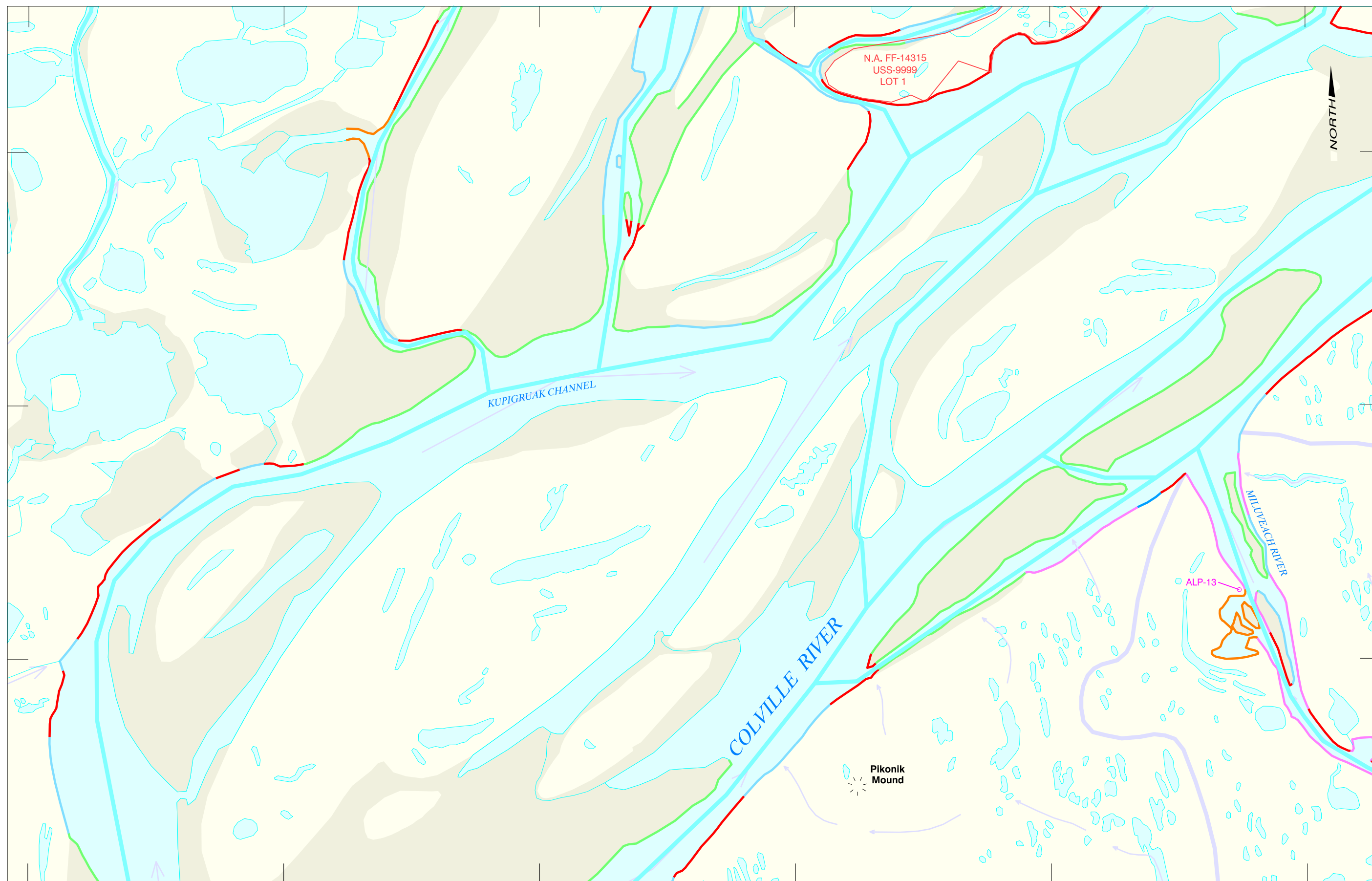
70° 23'

70° 24'

70° 22'

70° 23'

70° 24'



1:26000 0 1000 2000 FEET



### PRIORITY PROTECTION SITES

- There are no priority protection sites on this sheet.

### GENERAL SENSITIVITIES

- The Colville River delta and coastal areas support very high numbers of nesting and brood-rearing waterfowl, water-birds, and shorebirds from May through September. Molting birds are present in July and August.
- Birds may also be present in the freshwater overflow during the spring before breakup elsewhere.
- This is a Brant nesting, brood-rearing and molting area. Birds are present from May through August.
- Plan to deploy bird-hazing systems during spring and the open-water season.
- The Colville River is a migratory pathway for char, cisco, and whitefish. The eastern channel is an overwintering area for several marine and anadromous fish.
- All waterways and waterbodies within the confines of the Colville River delta (the west bank of the Nechelik Channel to the Colville River's easternmost bank) are considered habitat for anadromous fish.
- The Miluveach River provides habitat for anadromous whitefish and char and for resident fish.
- The Colville River delta is a polar bear denning area.

### CULTURAL SITES

Information on the exact locations of cultural sites is confidential. This information is contained in the *North Slope Archaeological Data* document, copies of which are kept at the following offices: State Historical Preservation Officer (SHPO) (907-269-8721), ACS in Deadhorse (907-659-2405), North Slope Borough Lands Division (907-852-0322), North Slope Borough Lands Division (907-852-0322), BPXA Crisis Center in Anchorage (907-564-5243), and the ARCO Incident Command Center in Anchorage (907-265-1000). The following cultural site(s) are located in the area depicted on this sheet:

- HAR-159 on Nuekshat Island



### AIR ACCESS\*

- Commercial and air freight services are available at the City of Nuiqsut airport (Sheet 24) approximately 18 miles to the southwest. This is a 4,300-ft, unattended gravel airstrip. Visual inspection prior to use is recommended.

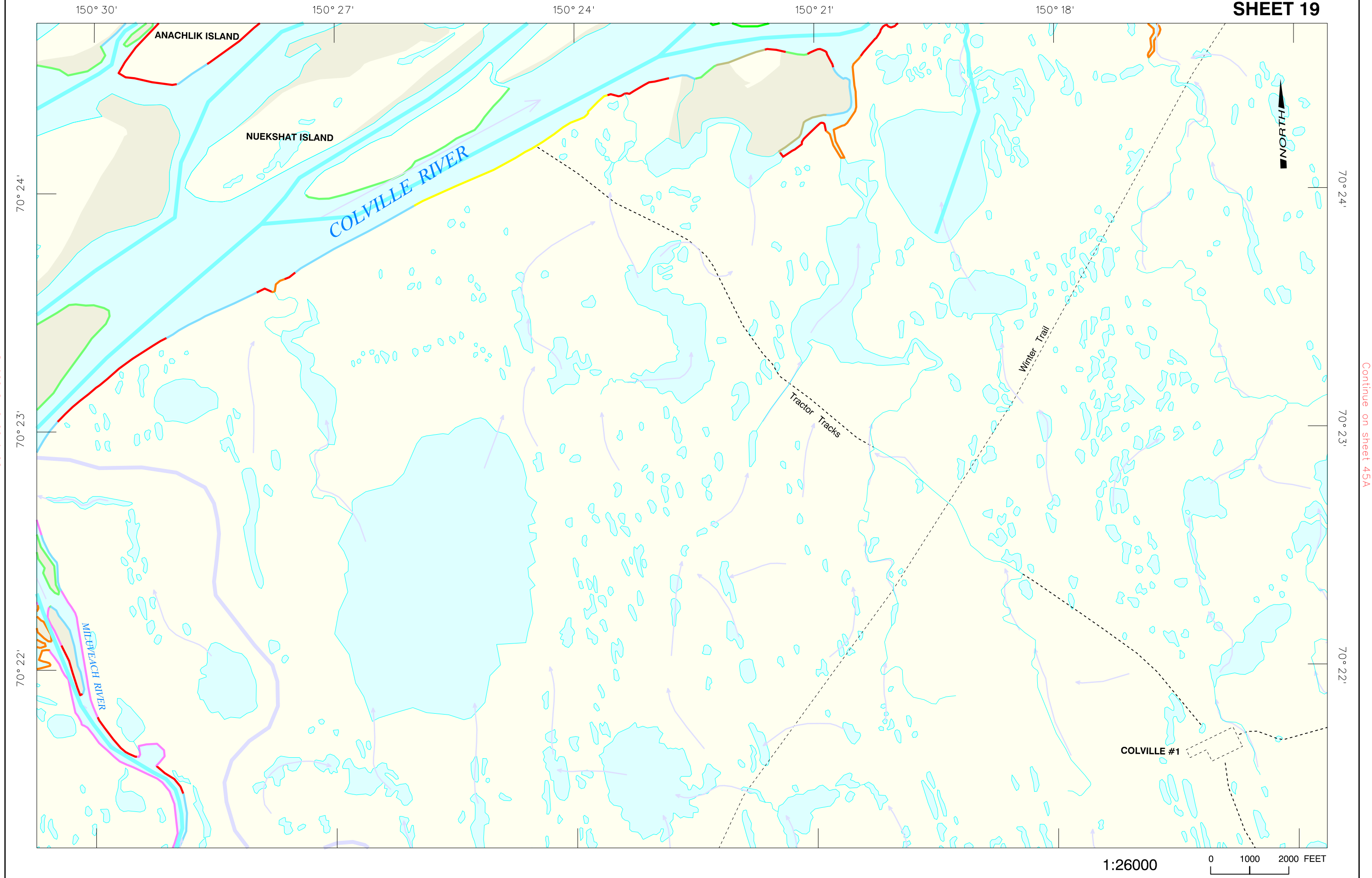
### VESSEL ACCESS\* AND HYDROGRAPHIC CONDITIONS

- There are no marine waters or shoreline on this sheet.
- Main channel of the Colville River generally maintains a 3 ft water depth and is usually navigable 70 miles upriver to the rapids below the mouth of the Anaktuvuk River.

### COUNTERMEASURES CONSIDERATIONS

- Voluminous riverine discharge and hydrodynamic circulation will preclude almost any floating oil from contacting shoreline.
- During periods of extreme storm surge, some of the bars and islands may be contaminated by oil. Vegetated areas are probably wet tundra. Caution should be exercised.

\*See the latest *Supplement, Alaska* and United States Coast Pilot for current information on air and vessel access, respectively.



Continue on sheet 18

Continue on sheet 45A

1:26000

0 1000 2000 FEET





**PRIORITY PROTECTION SITES**

- There are no priority protection sites on this sheet.

**GENERAL SENSITIVITIES**

- The Colville River delta supports very high numbers of nesting and brood-rearing waterfowl, waterbirds, and shorebirds from May through September. Molting birds are present in July and August.
- Birds may also be present in the freshwater overflow during the spring before breakup elsewhere.
- Spectacled Eider nest sites have been found near water in this area. Consult Wildlife Leader in the Incident Command System's Environment Unit for an advisory regarding protection of these Spectacled Eider nest sites. The Spectacled Eider is listed as threatened by the U.S. Fish and Wildlife Service.
- Plan to deploy bird-hazing systems during spring and the open-water season.
- The Colville River is a migratory pathway for char, cisco, and whitefish. The Nechelik Channel is an overwintering area for several marine and anadromous fish.
- All waterways and waterbodies within the confines of the Colville River delta (the west bank of the Nechelik Channel to the Colville River's easternmost bank) are considered habitat for anadromous fish.
- The Colville River delta is a polar bear denning area.

**CULTURAL SITES**

Information on the exact locations of cultural sites is confidential. This information is contained in the *North Slope Archaeological Data* document, copies of which are kept at the following offices: State Historical Preservation Officer (SHPO) (907-269-8721), ACS in Deadhorse (907-659-2405), North Slope Borough Lands Division (907-852-0322), North Slope Borough Lands Division (907-852-0322), BPXA Crisis Center in Anchorage (907-564-5243), and the ARCO Incident Command Center in Anchorage (907-265-1000). The following cultural site(s) are located in the area depicted on this sheet:

- HAR-156 on the east bank of Nechelik Channel in the lower portion of the map



**AIR ACCESS\***

- There is a 5,000-ft gravel airstrip operated by ConocoPhillips located at the Alpine oil field.
- Commercial and air freight services are available at the City of Nuiqsut airport (Sheet 24) approximately 11 miles to the south. This is a 4,300-ft, unattended gravel airstrip. Visual inspection prior to use is recommended.

**VESSEL ACCESS\* AND HYDROGRAPHIC CONDITIONS**

- There are no marine waters or shoreline on this sheet.
- There is a boat launch on the east side of the Alpine production pad.

**COUNTERMEASURES CONSIDERATIONS**

- Vegetated shorelines in the Colville River delta have minimal load-bearing capacity. Caution should be used to minimize erosion or loss of equipment.

**STAGING AREAS AND PRESTAGED EQUIPMENT**

- Boom is typically predeployed seasonally at the inlet from Nanuk Lake to Nechelik Channel.
- Boom is typically predeployed at four locations on Sakoonang Channel:
  - Southeast of the Alpine production pad,
  - South of the Alpine production pad,
  - East of the Alpine production pad, and
  - East of the Alpine airstrip.

PRESTAGED EQUIP. AREA	LOCATION	ITEM	QUANTITY	TYPE
SK-13	East of Sakoonang Channel and approx. 0.5 miles southeast of Alpine production pad	Boom	4,000'	8" x 6" river
ALP-8	East of Nechelik Channel and approx. 2.5 miles west of Alpine production pad	Boom	2,100'	8" x 6" river

\*See the latest *Supplement, Alaska* and United States Coast Pilot for current information on air and vessel access, respectively.

151° 06'

151° 03'

151° 00'

150° 57'

150° 54'

70° 21'

70° 21'

70° 20'

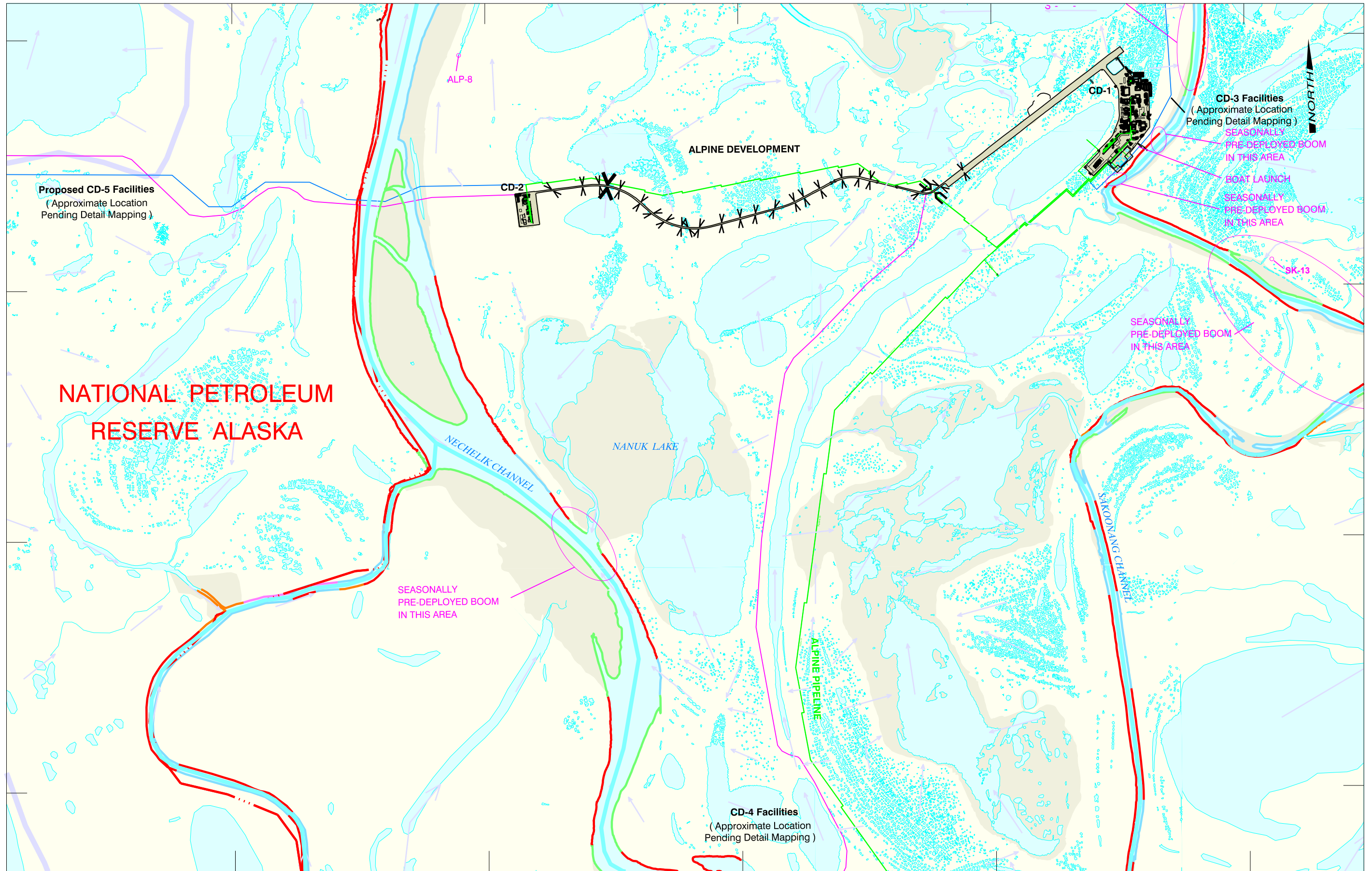
70° 20'

70° 19'

70° 19'

70° 18'

70° 18'



Continue on sheet 121

Continue on sheet 21

1:26000

0 1000 2000 FEET



**PRIORITY PROTECTION SITES**

- There are no priority protection sites on this sheet.

**GENERAL SENSITIVITIES**

- The Colville River delta supports very high numbers of nesting and brood-rearing waterfowl, waterbirds, and shorebirds from May through September. Molting birds are present in July and August.
- Birds may also be present in the freshwater overflow during the spring before breakup elsewhere.
- Plan to deploy bird-hazing systems during spring and the open-water season.
- The Colville River is a migratory pathway for char, cisco, and whitefish. The eastern channel is an overwintering area for several marine and anadromous fish.
- All waterways and waterbodies within the confines of the Colville River delta (the west bank of the Nechelik Channel to the Colville River's easternmost bank) are considered habitat for anadromous fish.
- The Kachemach River provides habitat for anadromous whitefish and for resident fish.
- The Colville River delta is a polar bear denning area.

**CULTURAL SITES**

Information on the exact locations of cultural sites is confidential. This information is contained in the *North Slope Archaeological Data* document, copies of which are kept at the following offices: State Historical Preservation Officer (SHPO) (907-269-8721), ACS in Deadhorse (907-659-2405), North Slope Borough Lands Division (907-852-0322), North Slope Borough Lands Division (907-852-0322), BPXA Crisis Center in Anchorage (907-564-5243), and the ARCO Incident Command Center in Anchorage (907-265-1000). The following cultural site(s) are located in the area depicted on this sheet:

- HAR-162 near Anajuk Point



**AIR ACCESS\***

- There is an aircraft landing strip located at the Alpine oil field (Sheet 20) approximately 12 miles west of Anajuk Point. This is a 5,000-ft gravel airstrip operated by ConocoPhillips.
- Commercial and air freight services are available at the City of Nuiqsut airport (Sheet 24) approximately 10 miles to the southwest. This is a 4,300-ft, unattended gravel airstrip. Visual inspection prior to use is recommended.

**VESSEL ACCESS\* AND HYDROGRAPHIC CONDITIONS**

- There are no marine waters or shoreline on this sheet.
- Main channel of the Colville River generally maintains a 3 ft water depth and is usually navigable 70 miles upriver to the rapids below the mouth of the Anaktuvuk River.

**COUNTERMEASURES CONSIDERATIONS**

- Voluminous riverine discharge and hydrodynamic circulation will preclude almost any floating oil from contacting shorelines.
- Vegetated shorelines in the Colville River delta have minimal load-bearing capacity. Caution should be used to minimize erosion or loss of equipment.

**STAGING AREAS AND PRESTAGED EQUIPMENT**

- Boom is typically predeployed seasonally on Sakoonang Channel northwest of the Ramayayak Channel confluence with the main channel of the Colville River.

PRESTAGED EQUIP. AREA	LOCATION	ITEM	QUANTITY	TYPE
ALP-12	West bank of Kachemach River above three finger fork	Boom Anchor	750' 2	8" x 6" river 23-lb. anchor

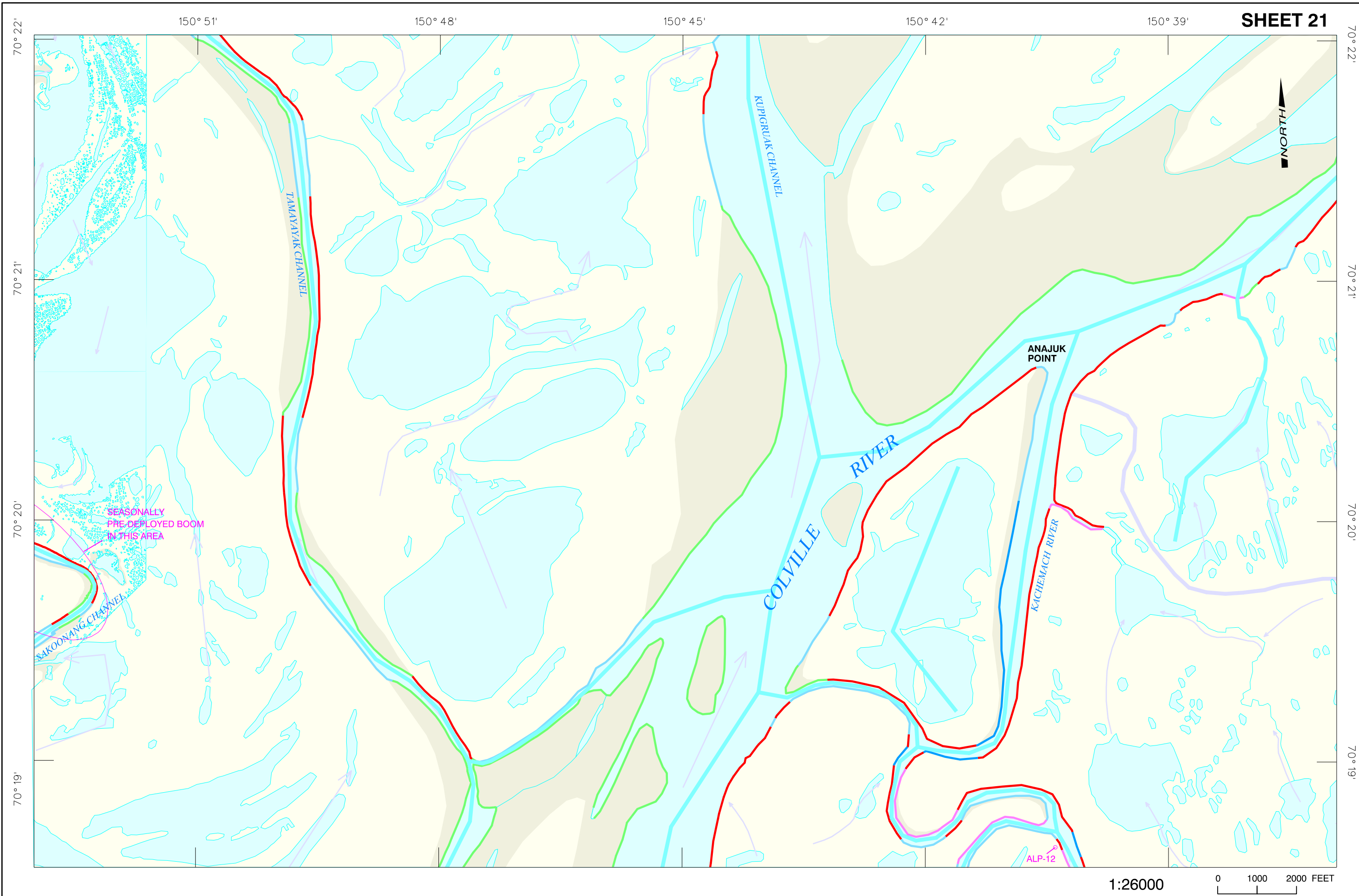
\*See the latest *Supplement, Alaska* and United States Coast Pilot for current information on air and vessel access, respectively.



Continue on sheet 16

Continue on sheet 20

Continue on sheet 21A



1:26000

0 1000 2000 FEET





### PRIORITY PROTECTION SITES

- There are no priority protection sites on this sheet.

### GENERAL SENSITIVITIES

- The Colville River delta and coastal areas support very high numbers of nesting and brood-rearing waterfowl, water-birds, and shorebirds from May through September. Molting birds are present in July and August.
- Birds may also be present in the freshwater overflow during the spring before breakup elsewhere.
- This is a Brant nesting, brood-rearing and molting area. Birds are present from May through August.
- Plan to deploy bird-hazing systems during spring and the open-water season.
- The Colville River is a migratory pathway for char, cisco, and whitefish. The eastern channel is an overwintering area for several marine and anadromous fish.
- All waterways and waterbodies within the confines of the Colville River delta (the west bank of the Nechelik Channel to the Colville River's easternmost bank) are considered habitat for anadromous fish.
- The Miluveach River provides habitat for anadromous whitefish and char and for resident fish.



### AIR ACCESS\*

- Commercial and air freight services are available at the City of Nuiqsut airport (Sheet 24) approximately 14 miles to the southwest. This is a 4,300-ft, unattended gravel airstrip. Visual inspection prior to use is recommended.

### VESSEL ACCESS\* AND HYDROGRAPHIC CONDITIONS

- There are no marine waters or shoreline on this sheet.

\*See the latest *Supplement, Alaska* and United States Coast Pilot for current information on air and vessel access, respectively.

150° 36'

150° 33'

150° 30'

150° 27'

150° 24'

70° 21'

70° 21'

70° 20'

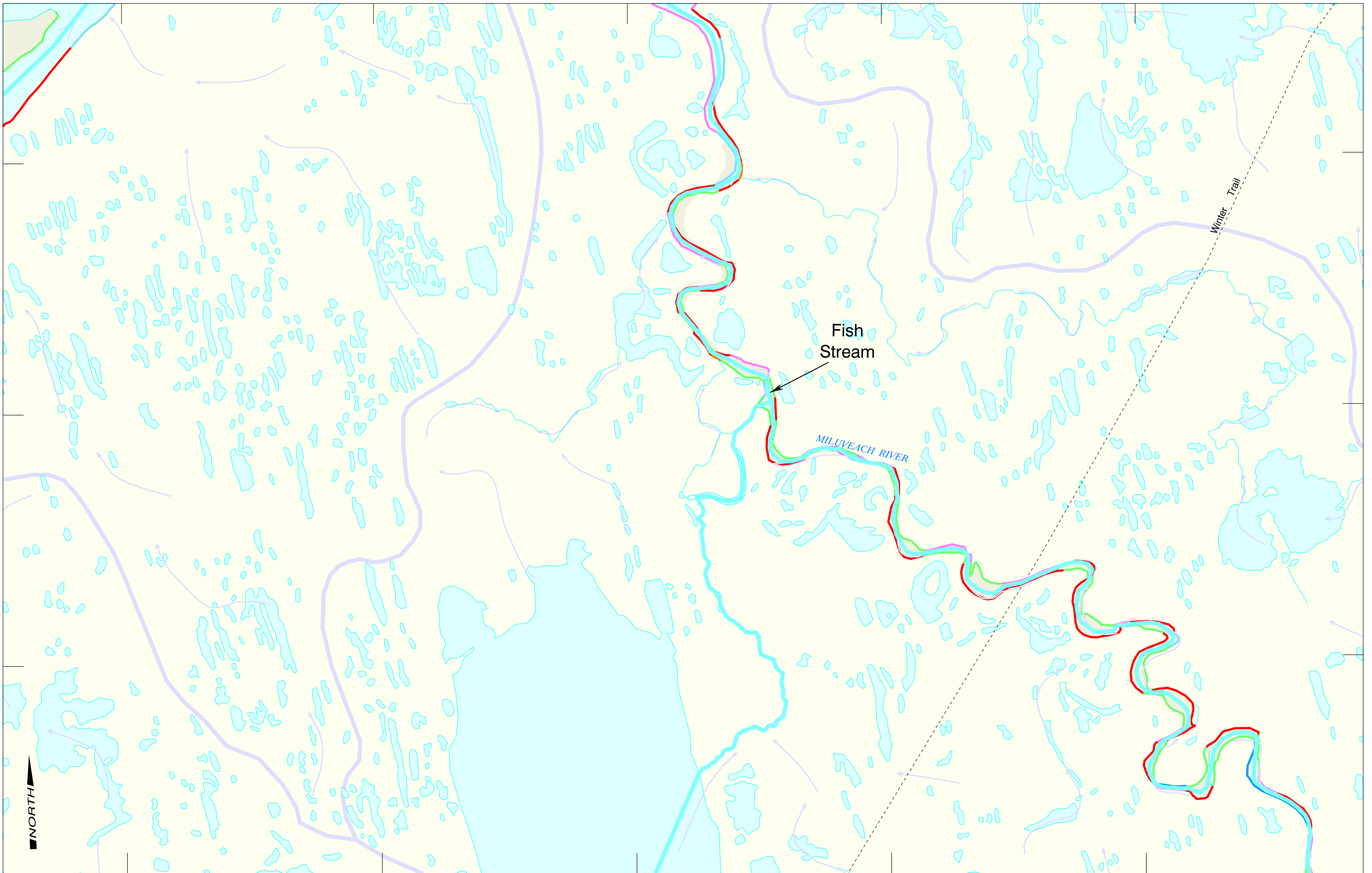
70° 20'

70° 19'

70° 19'

Continue on sheet 21

Continue on sheet 49A



1:26000

0 1000 2000 FEET



**PRIORITY PROTECTION SITES**

- There are no priority protection sites on this sheet.

**GENERAL SENSITIVITIES**

- The Colville River delta supports very high numbers of nesting and brood-rearing waterfowl, waterbirds, and shorebirds from May through September. Molting birds are present in July and August.
- Birds may also be present in the freshwater overflow during the spring before breakup elsewhere.
- Plan to deploy bird-hazing systems during spring and the open-water season.
- The Colville River is a migratory pathway for char, cisco, and whitefish. The eastern channel is an overwintering area for several marine and anadromous fish.
- All waterways and waterbodies within the confines of the Colville River delta (the west bank of the Nechelik Channel to the Colville River's easternmost bank) are considered habitat for anadromous fish.
- The Colville River delta is a polar bear denning area.

**CULTURAL SITES**

Information on the exact locations of cultural sites is confidential. This information is contained in the *North Slope Archaeological Data* document, copies of which are kept at the following offices: State Historical Preservation Officer (SHPO) (907-269-8721), ACS in Deadhorse (907-659-2405), North Slope Borough Lands Division (907-852-0322), North Slope Borough Lands Division (907-852-0322), BPXA Crisis Center in Anchorage (907-564-5243), and the ARCO Incident Command Center in Anchorage (907-265-1000). The following cultural site(s) are located in the area depicted on this sheet:

- HAR-155 on the west side of Nechelik Channel in the lower portion of the map
- HAR-157 on the west side of Nechelik Channel in the lower portion of the map



**AIR ACCESS\***

- There is an aircraft landing strip located at the Alpine oil field (Sheet 20) approximately 8 miles north of ALP-5. This is a 5,000-ft gravel airstrip operated by ConocoPhillips.
- Commercial and air freight services are available at the City of Nuiqsut airport (Sheet 24) approximately 4 miles to the south. This is a 4,300-ft, unattended gravel airstrip. Visual inspection prior to use is recommended.

**VESSEL ACCESS\* AND HYDROGRAPHIC CONDITIONS**

- There are no marine waters or shoreline on this sheet.

**COUNTERMEASURES CONSIDERATIONS**

- Vegetated shorelines in the Colville River delta have minimal load-bearing capacity. Caution should be used to minimize erosion or loss of equipment.

**STAGING AREAS AND PRESTAGED EQUIPMENT**

PRESTAGED EQUIP. AREA	LOCATION	ITEM	QUANTITY	TYPE
ALP-5	On west bank of Sagoonang Channel at approx. latitude 70° 17'	Boom Pump Skimmer Storage Anchor Systems	1,050' 1 1 4 10	8" x 6" river 3" trash, diesel Drum or brush 2,500-gal. open top 18-lb. Davis system

\*See the latest *Supplement, Alaska* and United States Coast Pilot for current information on air and vessel access, respectively.

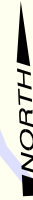
151° 06'

151° 03'

151° 00'

150° 57'

150° 54'



70° 17'

70° 16'

70° 15'

70° 17'

70° 16'

70° 15'

**NATIONAL PETROLEUM  
RESERVE ALASKA**

NECHELIK CHANNEL

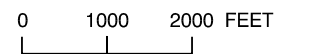
CD-4 Facilities  
(Approximate Location  
Pending Detail Mapping)

ALPINE PIPELINE

SAKOONANG CHANNEL

ALP-5

1:26000



Continue on sheet 126

Continue on sheet 23

Continue on sheet 25

Continue on sheet 24





**PRIORITY PROTECTION SITES**

- There are no priority protection sites on this sheet.

**GENERAL SENSITIVITIES**

- Coastal areas support high concentrations of breeding, nesting, brood-rearing, and molting waterbirds during the summer.
- The Colville River delta supports very high numbers of nesting and brood-rearing waterfowl, waterbirds, and shorebirds from May through September. Molting birds are present in July and August.
- Birds may also be present in the freshwater overflow during the spring before breakup elsewhere.
- Plan to deploy bird-hazing systems during spring and the open-water season.
- The Colville River is a migratory pathway for char, cisco, and whitefish. The eastern channel is an overwintering area for several marine and anadromous fish.
- All waterways and waterbodies within the confines of the Colville River delta (the west bank of the Nechelik Channel to the Colville River's easternmost bank) are considered habitat for anadromous fish.
- The Kachemach River provides habitat for anadromous whitefish and for resident fish.
- The Colville River delta is a polar bear denning area.



**AIR ACCESS\***

- There is an aircraft landing strip located at the Alpine oil field (Sheet 20) approximately 8 miles north of ALP-5. This is a 5,000-ft gravel airstrip operated by ConocoPhillips.
- Commercial and air freight services are available at the City of Nuiqsut airport (Sheet 24) approximately 8 miles to the southwest. This is a 4,300-ft, unattended gravel airstrip. Visual inspection prior to use is recommended.

**VESSEL ACCESS\* AND HYDROGRAPHIC CONDITIONS**

- There are no marine waters or shoreline on this sheet.
- Main channel of the Colville River generally maintains a 3 ft water depth and is usually navigable 70 miles upriver to the rapids below the mouth of the Anaktuvuk River.

**COUNTERMEASURES CONSIDERATIONS**

- Vegetated shorelines in the Colville River delta have minimal load-bearing capacity. Caution should be used to minimize erosion or loss of equipment.

**STAGING AREAS AND PRESTAGED EQUIPMENT**

PRESTAGED EQUIP. AREA	LOCATION	ITEM	QUANTITY	TYPE
ALP-5	On west bank of Sagoonang Channel at approx. latitude 70° 17'	Boom Pump Skimmer Storage Anchor Systems	1,050' 1 1 4 10	8" x 6" river 3" trash, diesel Drum or brush 2,500-gal. open top 18-lb. Davis system
ALP-12	West bank of Kachemach River above three finger fork	Boom Anchor	750' 2	8" x 6" river 23-lb. anchor

\*See the latest *Supplement, Alaska* and United States Coast Pilot for current information on air and vessel access, respectively.

150° 54'

150° 51'

150° 48'

150° 45'

150° 42'

70° 19'

70° 19'

70° 18'

70° 18'

70° 17'

70° 17'

70° 16'

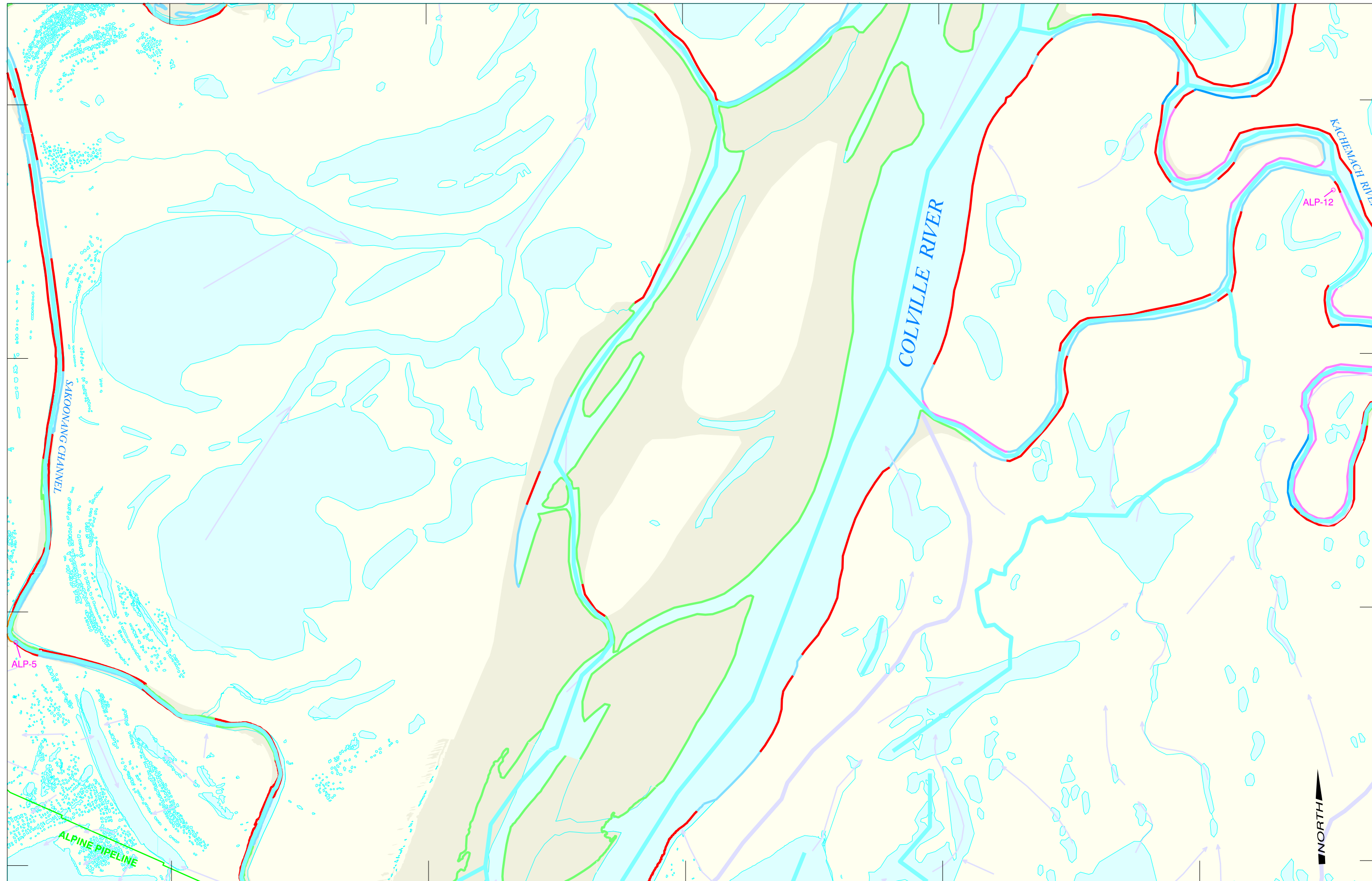
70° 16'

Continue on sheet 20

Continue on sheet 22

Continue on sheet 23A

Continue on sheet 25



1:26000

0 1000 2000 FEET



**PRIORITY PROTECTION SITES**

- There are no priority protection sites on this sheet.

**GENERAL SENSITIVITIES**

- This is a Brant nesting, brood-rearing and molting area. Birds are present from May through August.
- Plan to deploy bird-hazing systems during spring and the open-water season.
- The Kachemach River provides habitat for anadromous whitefish and for resident fish.



**AIR ACCESS\***

- Commercial and air freight services are available at the City of Nuiqsut airport (Sheet 24) approximately 11 miles to the southwest. This is a 4,300-ft, unattended gravel airstrip. Visual inspection prior to use is recommended.

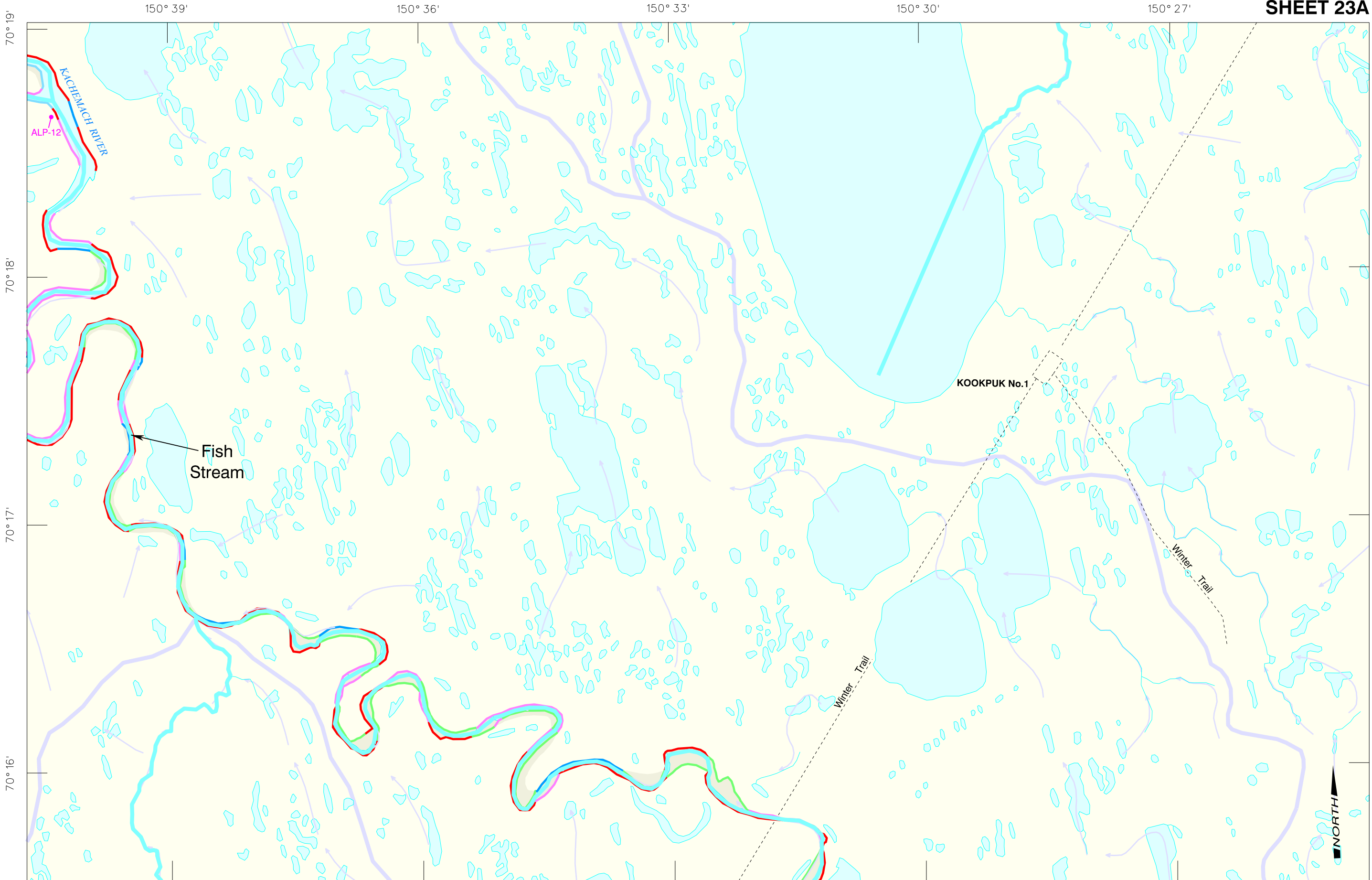
**VESSEL ACCESS\* AND HYDROGRAPHIC CONDITIONS**

- There are no marine waters or shoreline on this sheet

**STAGING AREAS AND PRESTAGED EQUIPMENT**

PRESTAGED EQUIP. AREA	LOCATION	ITEM	QUANTITY	TYPE
ALP-12	West bank of Kachemach River above three finger fork	Boom Anchor	750' 2	8" x 6" river 23-lb. anchor

\*See the latest *Supplement, Alaska* and United States Coast Pilot for current information on air and vessel access, respectively.



Continue on sheet 23

Continue on sheet 23B

1:26000

0 1000 2000 FEET





### PRIORITY PROTECTION SITES

- There are no priority protection sites on this sheet.

### GENERAL SENSITIVITIES

- This is a Brant nesting, brood-rearing and molting area. Birds are present from May through August.
- Plan to deploy bird-hazing systems during spring and the open-water season.
- The Miluveach River provides habitat for anadromous whitefish and char and for resident fish.



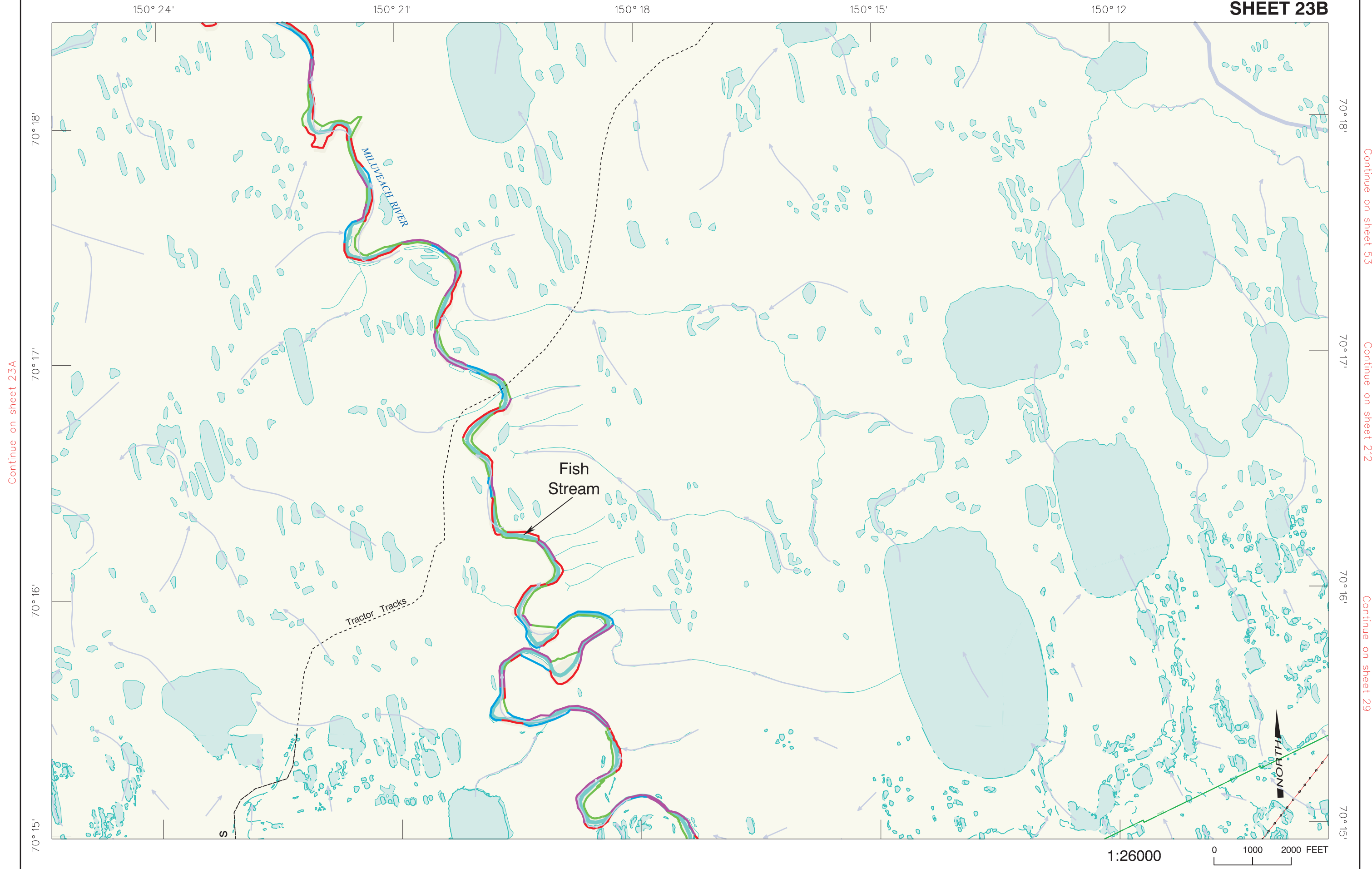
### AIR ACCESS\*

- Commercial and air freight services are available at the City of Nuiqsut airport (Sheet 24) approximately 16 miles to the southwest. This is a 4,300-ft, unattended gravel airstrip. Visual inspection prior to use is recommended.

### VESSEL ACCESS\* AND HYDROGRAPHIC CONDITIONS

- There are no marine waters or shoreline on this sheet.

\*See the latest *Supplement, Alaska* and United States Coast Pilot for current information on air and vessel access, respectively.



Continue on sheet 23A

Continue on sheet 53

Continue on sheet 212

Continue on sheet 29



### PRIORITY PROTECTION SITES

- There are no priority protection sites on this sheet.

### GENERAL SENSITIVITIES

- The Colville River delta supports very high numbers of nesting and brood-rearing waterfowl, waterbirds, and shorebirds from May through September. Molting birds are present in July and August.
- Birds may also be present in the freshwater overflow during the spring before breakup elsewhere.
- Plan to deploy bird-hazing systems during spring and the open-water season.
- The Colville River is a migratory pathway for char, cisco, and whitefish. The eastern channel is an overwintering area for several marine and anadromous fish.
- All waterways and waterbodies within the confines of the Colville River delta (the west bank of the Nechelik Channel to the Colville River's easternmost bank) are considered habitat for anadromous fish.
- Polar bear dens have been found in this area. Dens may be in use from October through April.

### CULTURAL SITES

Information on the exact locations of cultural sites is confidential. This information is contained in the *North Slope Archaeological Data* document, copies of which are kept at the following offices: State Historical Preservation Officer (SHPO) (907-269-8721), ACS in Deadhorse (907-659-2405), North Slope Borough Lands Division (907-852-0322), BPXA Crisis Center in Anchorage (907-564-5243), and the ConocoPhillips Incident Command Center in Anchorage (907-265-1000). The following cultural site(s) are located in the area depicted on this sheet:

- HAR-031 on the west side of Nechelik Channel north of Nuiqsut
- HAR-155 on the west side of Nechelik Channel north of Nuiqsut
- HAR-158 on the east bank of Nechelik Channel east of Nuiqsut



### AIR ACCESS\*

- There is a 5,000-ft gravel airstrip operated by ConocoPhillips at the Alpine oil field approximately 10 miles northeast of Nuiqsut.
- Commercial and air freight services are available at the City of Nuiqsut airport. This is a 4,300-ft, unattended gravel airstrip. Visual inspection prior to use is recommended.

### VESSEL ACCESS\* AND HYDROGRAPHIC CONDITIONS

- There are no marine waters or shoreline on this sheet.
- Main channel of the Colville River generally maintains a 3 ft water depth and is usually navigable 70 miles upriver to the rapids below the mouth of the Anaktuvuk River.

### COUNTERMEASURES CONSIDERATIONS

- Voluminous riverine discharge and hydrodynamic circulation will preclude almost any floating oil from contacting shoreline.
- Vegetated shorelines in the Colville River delta have minimal load-bearing capacity. Caution should be used to minimize erosion or loss of equipment.
- The community of Nuiqsut is west of the Nechelik Channel.

### STAGING AREAS AND PRESTAGED EQUIPMENT

- Boom is typically predeployed seasonally on Nechelik Channel at Nuiqsut.

\*See the latest *Supplement, Alaska* and United States Coast Pilot for current information on air and vessel access, respectively.

151° 06'

151° 03'

151° 00'

150° 57'

150° 54'

70° 14'

70° 13'

70° 12'

70° 14'

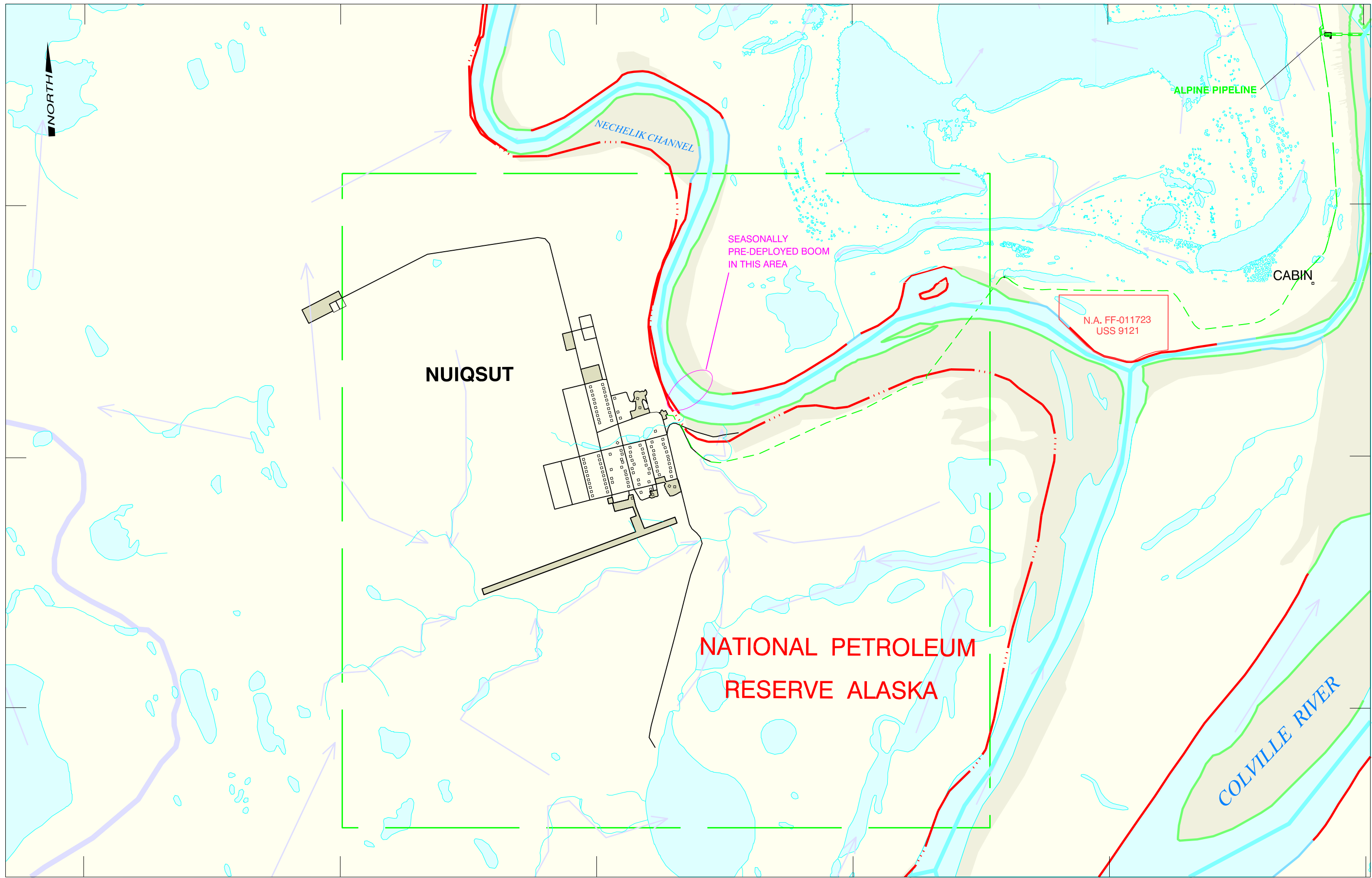
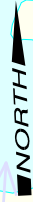
70° 13'

70° 12'

Continue on sheet 130

Continue on sheet 25

Continue on sheet 176



1:26000  
0 1000 2000 FEET





**PRIORITY PROTECTION SITES**

- There are no priority protection sites on this sheet.

**GENERAL SENSITIVITIES**

- The Colville River delta supports very high numbers of nesting and brood-rearing waterfowl, waterbirds, and shorebirds from May through September. Molting birds are present in July and August.
- Birds may also be present in the freshwater overflow during the spring before breakup elsewhere.
- Plan to deploy bird-hazing systems during spring and the open-water season.
- The Colville River is a migratory pathway for char, cisco, and whitefish. The eastern channel is an overwintering area for several marine and anadromous fish.
- All waterways and waterbodies within the confines of the Colville River delta (the west bank of the Nechelik Channel to the Colville River's easternmost bank) are considered habitat for anadromous fish.



**AIR ACCESS\***

- Commercial and air freight services are available at the City of Nuiqsut airport (Sheet 24) approximately 4 miles southwest of the Alpine Pipeline crossing over the Colville River. This is a 4,300-ft, unattended gravel airstrip. Visual inspection prior to use is recommended.

**VESSEL ACCESS\* AND HYDROGRAPHIC CONDITIONS**

- There are no marine waters or shoreline on this sheet.
- Main channel of the Colville River generally maintains a 3 ft water depth and is usually navigable 70 miles upriver to the rapids below the mouth of the Anaktuvuk River.

**COUNTERMEASURES CONSIDERATIONS**

- Voluminous riverine discharge and hydrodynamic circulation will preclude almost any floating oil from contacting shoreline.
- Vegetated shorelines in the Colville River delta have minimal load-bearing capacity. Caution should be used to minimize erosion or loss of equipment.

**STAGING AREAS AND PRESTAGED EQUIPMENT**

PRESTAGED EQUIP. AREA	LOCATION	ITEM	QUANTITY	TYPE
ALP-3	On east bank of Colville River north of Alpine pipeline crossing	Boom	2,000'	10" x 20" harbor
		Pump	1	3" trash, diesel
		Skimmer	2	Drum or brush
		Storage	8	2,500-gal. open top
		Anchor Systems	4	40-lb. Danforth system

\*See the latest *Supplement, Alaska* and United States Coast Pilot for current information on air and vessel access, respectively.

150° 54' 150° 51' 150° 48' 150° 45' 150° 42'

70° 16'

70° 16'

70° 15'

70° 15'

70° 14'

70° 14'

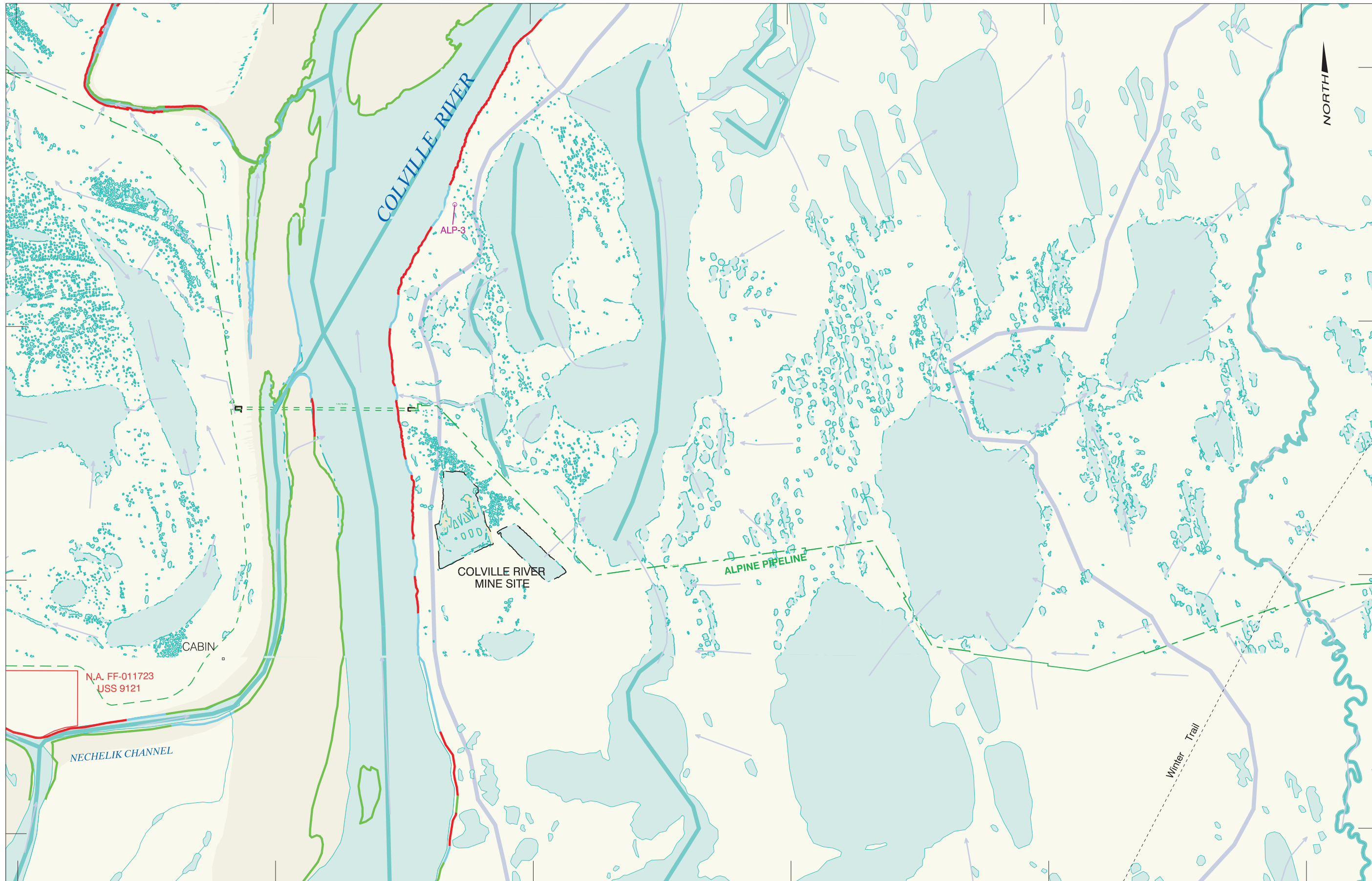
70° 13'

70° 13'

Continue on sheet 22

Continue on sheet 24

Continue on sheet 26



1:26000 0 1000 2000 FEET



**PRIORITY PROTECTION SITES**

- There are no priority protection sites on this sheet.

**GENERAL SENSITIVITIES**

- Coastal areas support high concentrations of breeding, nesting, brood-rearing, and molting waterbirds during the summer.
- The Kachemach River provides habitat for anadromous whitefish and for resident fish.



**AIR ACCESS\***

- Commercial and air freight services are available at the City of Nuiqsut airport (Sheet 24) approximately 13 miles to the west. This is a 4,300-ft, unattended gravel airstrip. Visual inspection prior to use is recommended.

**VESSEL ACCESS\* AND HYDROGRAPHIC CONDITIONS**

- There are no marine waters or shoreline on this sheet.

**STAGING AREAS AND PRESTAGED EQUIPMENT**

- Boom is typically predeployed seasonally on the Kachemach River immediately north of the Alpine pipeline crossing and approximately 1/4 mile northwest of the pipeline crossing.

PRESTAGED EQUIP. AREA	LOCATION	ITEM	QUANTITY	TYPE
ALP-2	On east bank of Kachemach River north of Alpine pipeline crossing	Boom	1,425'	8" x 6" river
		Pump	1	3" trash, diesel
		Skimmer	2	Drum or brush
		Skimmer	1	Rope mop
		Storage	1	500-gal. bladder, helicopter
		Storage	1	500-gal. bladder, liftable
		Storage	4	2,500-gal. open top
Anchor System	1	18-lb. Davis system		

\*See the latest *Supplement, Alaska* and United States Coast Pilot for current information on air and vessel access, respectively.

150° 39'

150° 36'

150° 33'

150° 30'

150° 27'

70° 15'

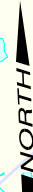
70° 15'

70° 14'

70° 14'

70° 13'

70° 13'



Winter Trail

Winter Trail

Winter Trail

Fish Stream

KACHEMACI RIVER

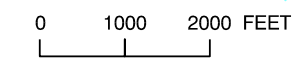
SEASONALLY PRE-DEPLOYED BOOM IN THIS AREA

SEASONALLY PRE-DEPLOYED BOOM IN THIS AREA

ALPINE PIPELINE

ALP-2

1:26000



Continue on sheet 25

Continue on sheet 27





**PRIORITY PROTECTION SITES**

- There are no priority protection sites on this sheet.

**GENERAL SENSITIVITIES**

- Coastal areas support high concentrations of breeding, nesting, brood-rearing, and molting waterbirds during the summer.
- The Miluveach River provides habitat for anadromous whitefish and char and for resident fish.
- The Kachemach River provides habitat for anadromous whitefish and for resident fish.



**AIR ACCESS\***

- Commercial and air freight services are available at the City of Nuiqsut airport (Sheet 24) approximately 16 miles west of DS 2L. This is a 4,300-ft, unattended gravel airstrip. Visual inspection prior to use is recommended.

**VESSEL ACCESS\* AND HYDROGRAPHIC CONDITIONS**

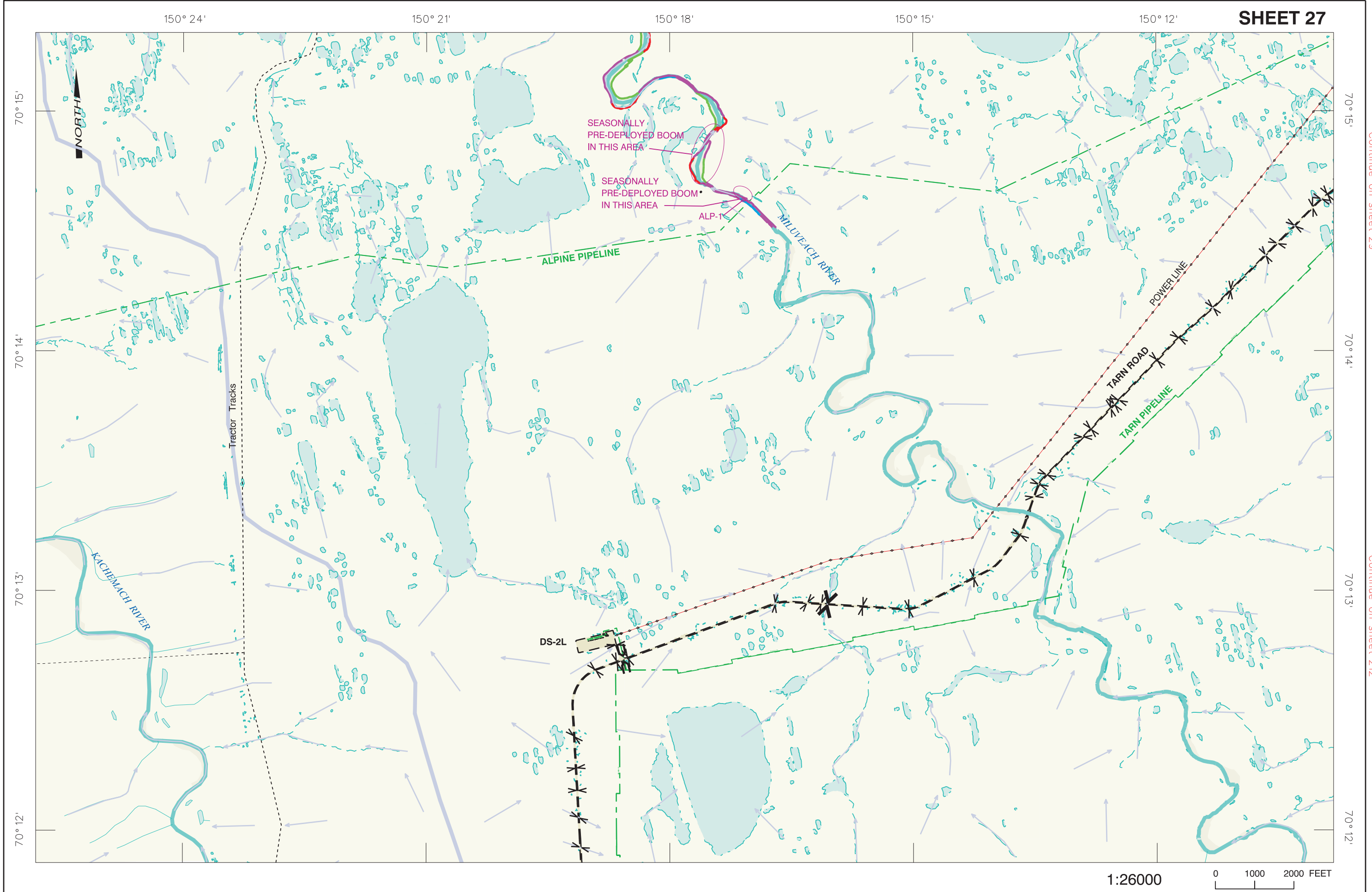
- There are no marine waters or shoreline on this sheet.

**STAGING AREAS AND PRESTAGED EQUIPMENT**

- Boom is typically predeployed seasonally on the Miluveach River immediately north of the Alpine pipeline crossing and approximately 1/4 mile northwest of the pipeline crossing.

PRESTAGED EQUIP. AREA	LOCATION	ITEM	QUANTITY	TYPE
ALP-1	On west bank of Miluveach River north of Alpine pipeline crossing	Boom	1,500'	8" x 6" river
		Pump	1	3" trash, diesel
		Skimmer	2	Drum or brush
		Storage	2	500-gal. bladder, helicopter
		Storage	8	2,500-gal. open top
		Anchor System	1	10-lb. anchor system

\*See the latest *Supplement, Alaska* and United States Coast Pilot for current information on air and vessel access, respectively.



Continue on sheet 26

Continue on sheet 176

Continue on sheet 29

Continue on sheet 212



**PRIORITY PROTECTION SITES**

- There are no priority protection sites on this sheet.

**GENERAL SENSITIVITIES**

- Coastal areas support high concentrations of breeding, nesting, brood-rearing, and molting waterbirds during the summer.
- The Miluveach River provides habitat for anadromous whitefish and char and for resident fish.
- The Kachemach River provides habitat for anadromous whitefish and for resident fish.



**AIR ACCESS\***

- Commercial and air freight services are available at the City of Nuiqsut airport (Sheet 24) approximately 16 miles west of DS-2N. This is a 4,300-ft, unattended gravel airstrip. Visual inspection prior to use is recommended.

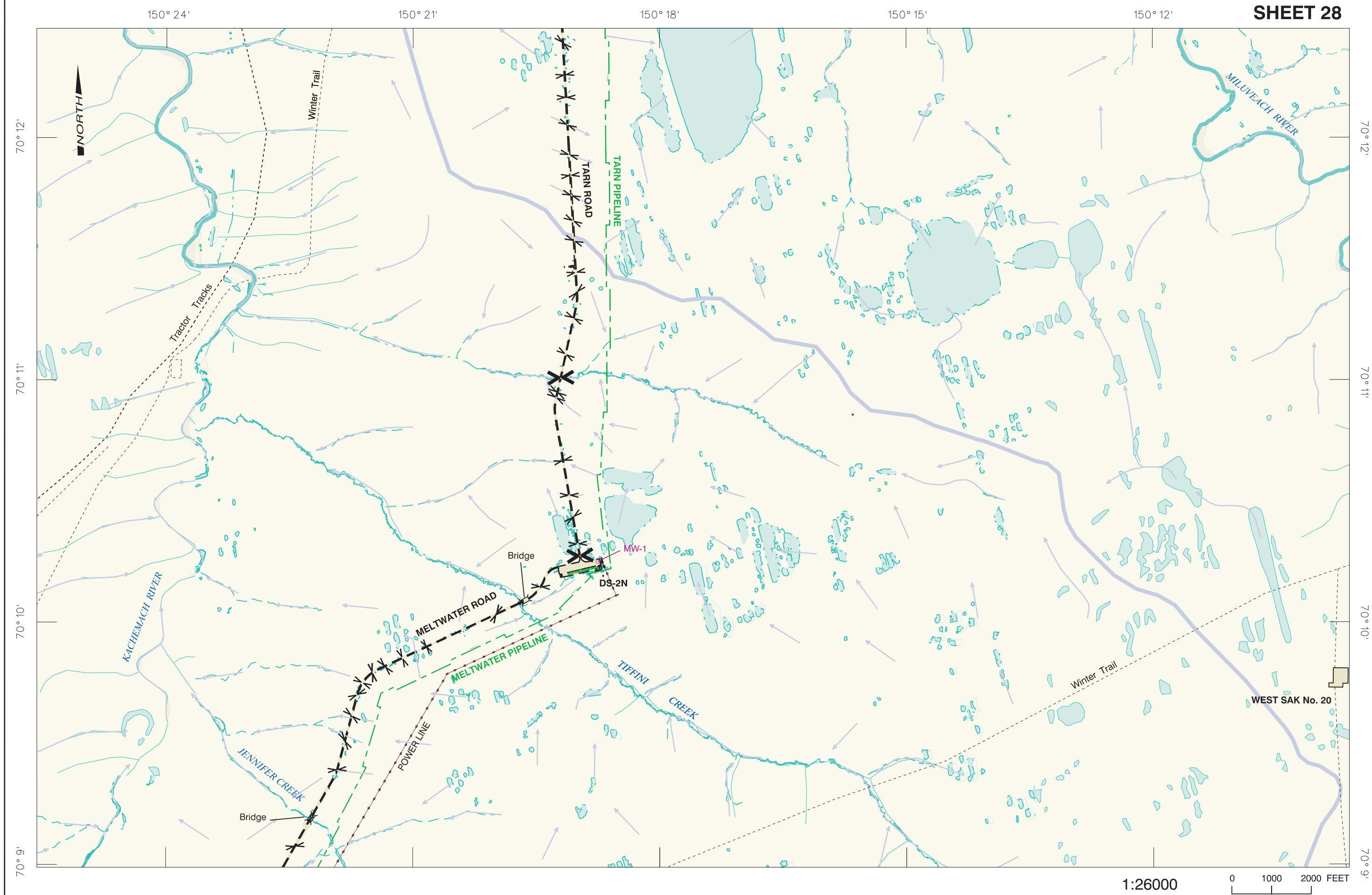
**VESSEL ACCESS\* AND HYDROGRAPHIC CONDITIONS**

- There are no marine waters or shoreline on this sheet.

**STAGING AREAS AND PRESTAGED EQUIPMENT**

PRESTAGED EQUIP. AREA	LOCATION	ITEM	QUANTITY	TYPE
MW-1	DS-2N	Pipe Plastic sheeting Sandbags	40' 2 rolls Variable (sufficient to block tributary)	6" diameter Visqueen

\*See the latest *Supplement, Alaska* and United States Coast Pilot for current information on air and vessel access, respectively.



Continue on sheet 176

Continue on sheet 212

Continue on sheet 213

1:26000

0 1000 2000 FEET





### PRIORITY PROTECTION SITES

- There are no priority protection sites on this sheet.

### GENERAL SENSITIVITIES

- Coastal areas support high concentrations of breeding, nesting, brood-rearing, and molting waterbirds during the summer.
- The Kachemach River provides habitat for anadromous whitefish and for resident fish.
- Jessica Creek provides habitat for anadromous fish.



### AIR ACCESS\*

- Commercial and air freight services are available at the City of Nuiqsut airport (Sheet 24) approximately 14 miles northwest of MW-3. This is a 4,300-ft, unattended gravel airstrip. Visual inspection prior to use is recommended.

### VESSEL ACCESS\* AND HYDROGRAPHIC CONDITIONS

- There are no marine waters or shoreline on this sheet.

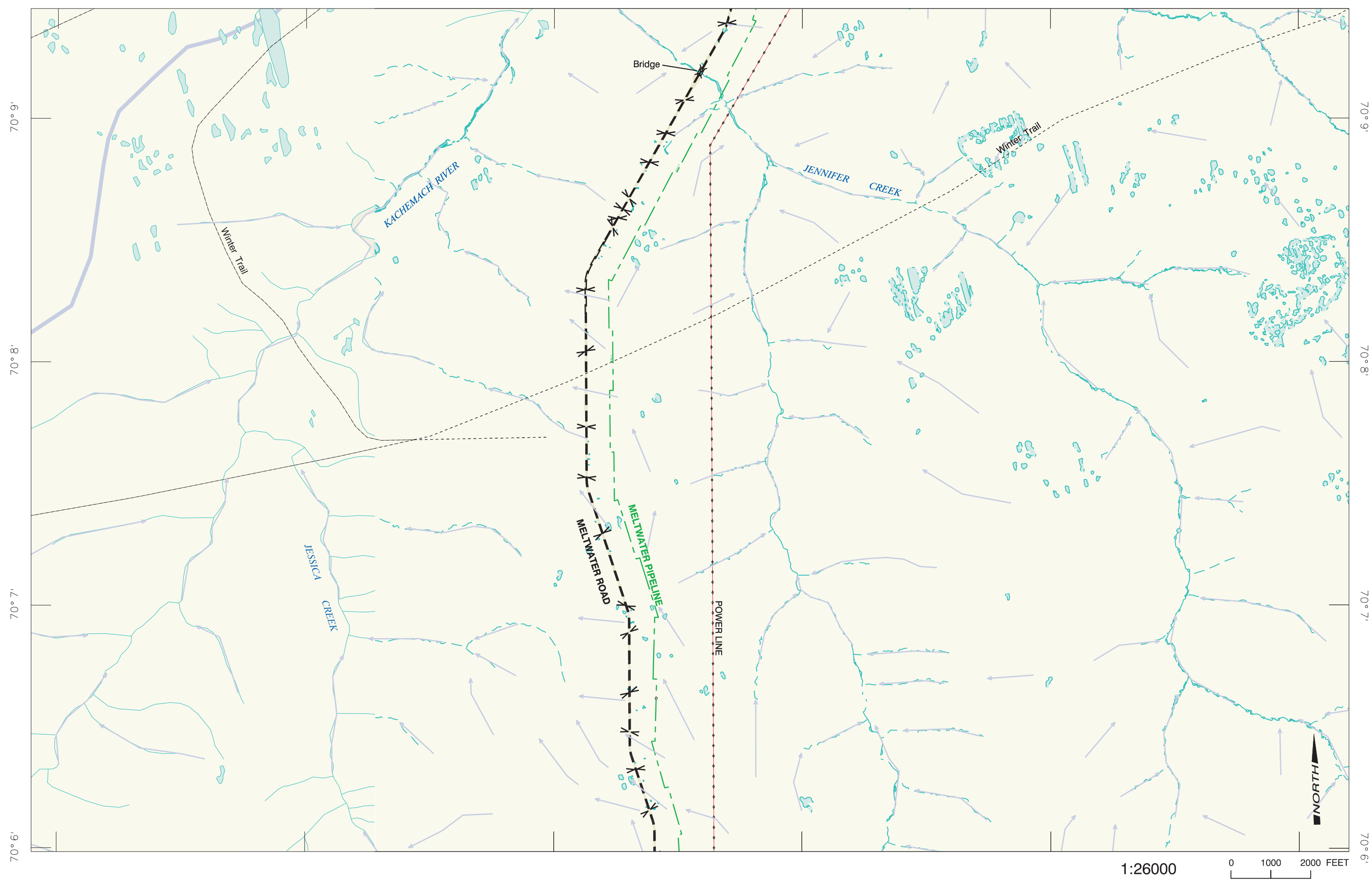
\*See the latest *Supplement, Alaska* and United States Coast Pilot for current information on air and vessel access, respectively.

150° 30' 150° 27' 150° 24' 150° 21' 150° 18'

Continue on sheet 176

Continue on sheet 175

Continue on sheet 213



1:26000 0 1000 2000 FEET



**PRIORITY PROTECTION SITES**

- There are no priority protection sites on this sheet.

**GENERAL SENSITIVITIES**

- Coastal areas support high concentrations of breeding, nesting, brood-rearing, and molting waterbirds during the summer.
- The Kachemach River provides habitat for anadromous whitefish and for resident fish.
- Jessica Creek provides habitat for anadromous fish.



**AIR ACCESS\***

- Commercial and air freight services are available at the City of Nuiqsut airport (Sheet 24) approximately 17 miles northwest of DS-2P. This is a 4,300-ft, unattended gravel airstrip. Visual inspection prior to use is recommended.

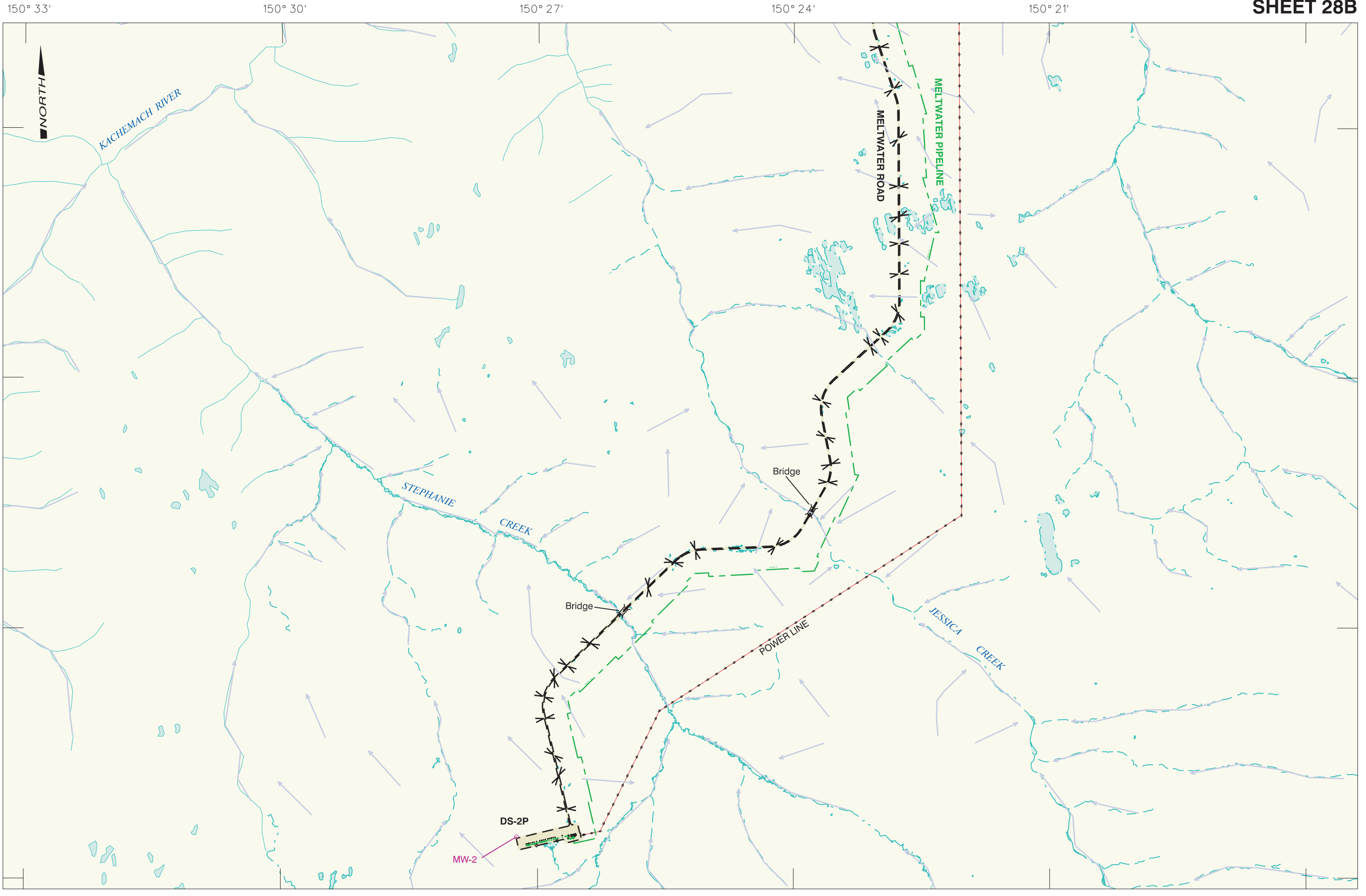
**VESSEL ACCESS\* AND HYDROGRAPHIC CONDITIONS**

- There are no marine waters or shoreline on this sheet.

**STAGING AREAS AND PRESTAGED EQUIPMENT**

PRESTAGED EQUIP. AREA	LOCATION	ITEM	QUANTITY	TYPE
MW-2	DS-2P	Pipe Plastic sheeting Sandbags	40' 2 rolls Variable (sufficient to block tributary)	6" diameter Visqueen

\*See the latest *Supplement, Alaska* and United States Coast Pilot for current information on air and vessel access, respectively.



Continue on sheet 175

Continue on sheet 213

Continue on sheet 214

1:26000

0 1000 2000 FEET





**PRIORITY PROTECTION SITES**

- There are no priority protection sites on this sheet.

**GENERAL SENSITIVITIES**

- Coastal areas support high concentrations of breeding, nesting, brood-rearing, and molting waterbirds during the summer.
- The Kachemach River provides habitat for anadromous whitefish and for resident fish.
- Jessica Creek provides habitat for anadromous fish.



**AIR ACCESS\***

- Commercial and air freight services are available at the City of Nuiqsut airport (Sheet 24) approximately 17 miles northwest of DS-2P. This is a 4,300-ft, unattended gravel airstrip. Visual inspection prior to use is recommended.

**VESSEL ACCESS\* AND HYDROGRAPHIC CONDITIONS**

- There are no marine waters or shoreline on this sheet.

**STAGING AREAS AND PRESTAGED EQUIPMENT**

PRESTAGED EQUIP. AREA	LOCATION	ITEM	QUANTITY	TYPE
MW-2	DS-2P	Pipe Plastic sheeting Sandbags	40' 2 rolls Variable (sufficient to block tributary)	6" diameter Visqueen

\*See the latest *Supplement, Alaska* and United States Coast Pilot for current information on air and vessel access, respectively.

150° 33'

150° 30'

150° 27'

150° 24'

150° 21'

70° 3'

70° 2'

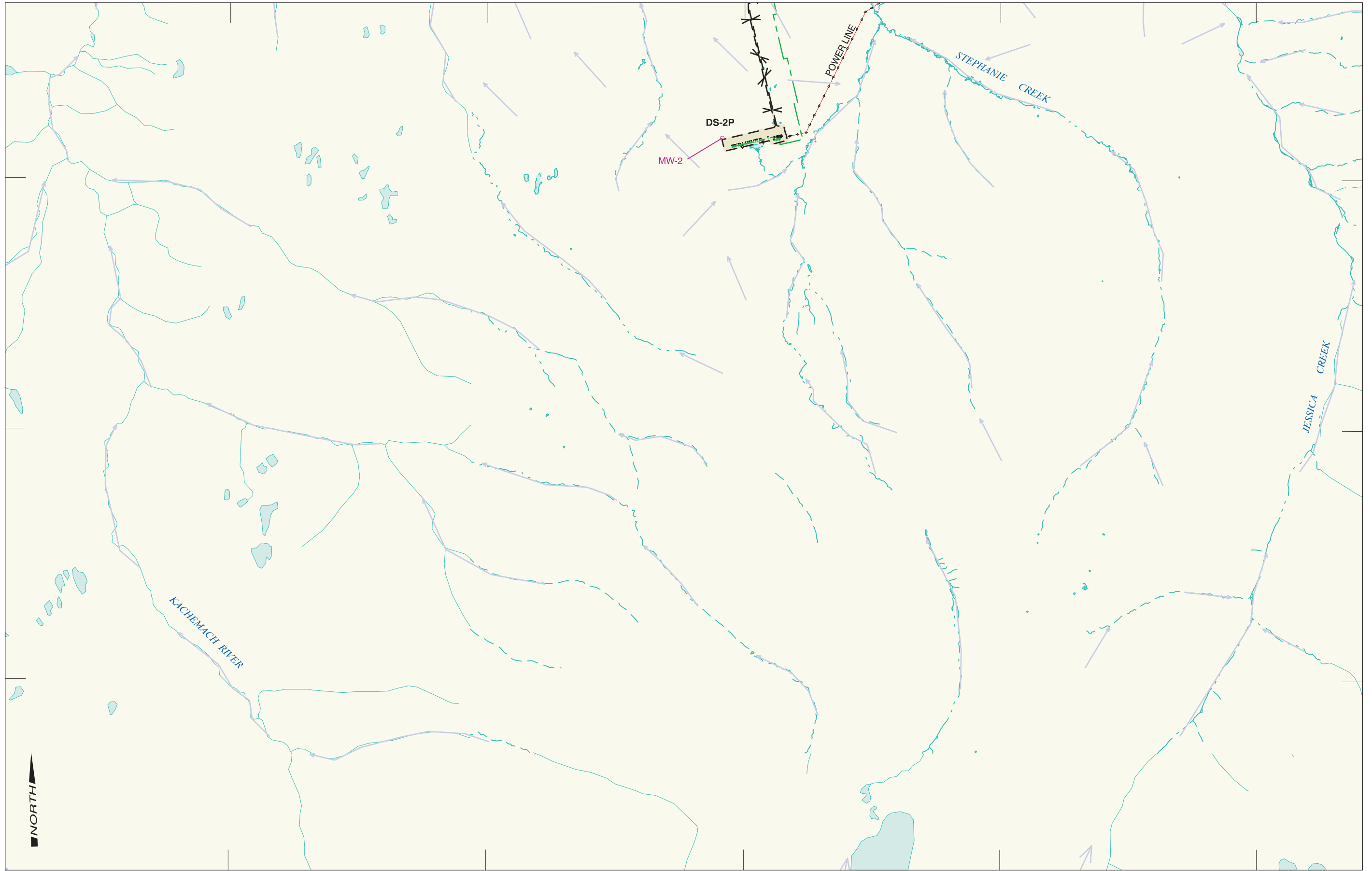
70° 1'

70° 3'

70° 2'

70° 1'

Continue on sheet 175



1:26000

0 1000 2000 FEET



### PRIORITY PROTECTION SITES

- There are no priority protection sites on this sheet.

### GENERAL SENSITIVITIES

- Coastal areas support high concentrations of breeding, nesting, brood-rearing, and molting waterbirds during the summer.
- This is a Brant nesting area. Birds are present from May through July.
- This is a Spectacled Eider nesting area.
- Kalubik Creek provides habitat for anadromous whitefish and char and for resident fish.

### CULTURAL SITES

Information on the exact locations of cultural sites is confidential. This information is contained in the *North Slope Archaeological Data* document, copies of which are kept at the following offices: State Historical Preservation Officer (SHPO) (907-269-8721), ACS in Deadhorse (907-659-2405), North Slope Borough Lands Division (907-852-0322), BPXA Crisis Center in Anchorage (907-564-5243), and the ConocoPhillips Incident Command Center in Anchorage (907-265-1000). The following cultural site(s) are located in the area depicted on this sheet:

- HAR-00155 near DS 2K.



### AIR ACCESS\*

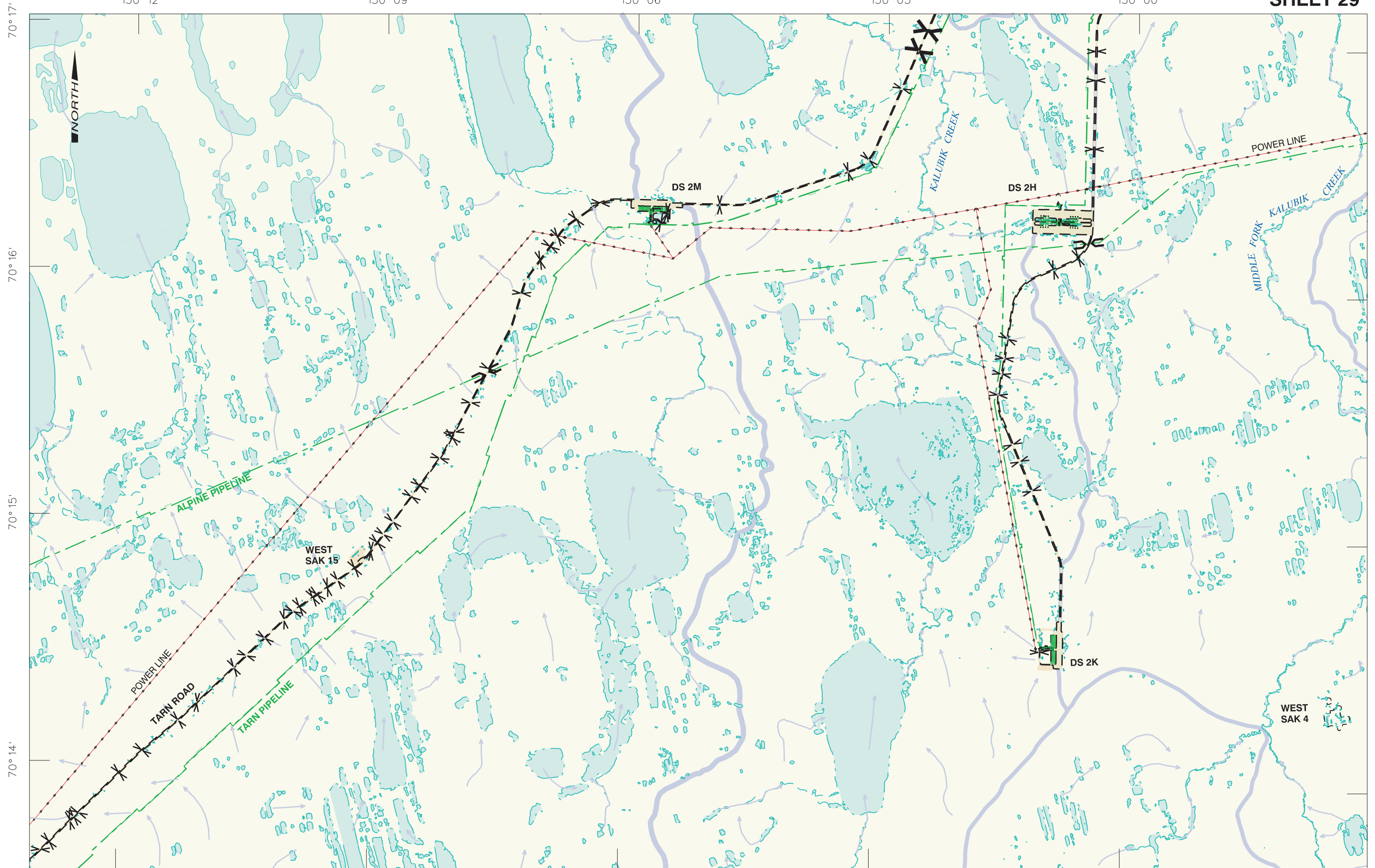
- Commercial and air freight services are available at the City of Nuiqsut airport (Sheet 24) approximately 19 miles west of West Sak 15. This is a 4,300-ft, unattended gravel airstrip. Visual inspection prior to use is recommended.

### VESSEL ACCESS\* AND HYDROGRAPHIC CONDITIONS

- There are no marine waters or shoreline on this sheet.

\*See the latest *Supplement, Alaska* and United States Coast Pilot for current information on air and vessel access, respectively.

150° 12' 150° 09' 150° 06' 150° 03' 150° 00'



Continue on sheet 23B

Continue on sheet 27

70° 17'

70° 16'

70° 15'

70° 14'

Continue on sheet 53

Continue on sheet 212

1:26000

0 1000 2000 FEET

Continue on sheet 27

ds13804-29.dgn





### PRIORITY PROTECTION SITES

- There are no priority protection sites on this sheet.

### GENERAL SENSITIVITIES

- The lee shores of the barrier islands are important areas for waterfowl molting and staging during August and September.
- Shoreline and offshore areas support molting Oldsquaws and eiders, and brood-rearing eiders. This is also a staging area for migrating Phalaropes (shorebirds). Birds are present in June through September.
- Common Eiders nest on offshore islands in June and July.
- Plan to deploy bird-hazing systems during the open-water season.

### CULTURAL SITES

Information on the exact locations of cultural sites is confidential. This information is contained in the *North Slope Archaeological Data* document, copies of which are kept at the following offices: State Historical Preservation Officer (SHPO) (907-269-8721), ACS in Deadhorse (907-659-2405), North Slope Borough Lands Division (907-852-0322), North Slope Borough Lands Division (907-852-0322), BPXA Crisis Center in Anchorage (907-564-5243), and the ConocoPhillips Incident Command Center in Anchorage (907-265-1000). The following cultural site(s) are located in the area depicted on this sheet:

- HAR-001 on Thetis Island



### AIR ACCESS\*

- Helmericks (Sheet 14), an unattended, 2,500 ft. dirt airstrip, is located approximately 9 miles southwest. It is situated west of the main channel of the Colville River near the mouth, and should be considered for emergency use only. Ditches line both sides of runway, which gets soft when wet.
- Ugnu-Kuparuk (Sheet 51) is a continuously attended, 6,000 ft. gravel private airstrip serving the Kuparuk facilities. It is located approximately 20 miles southeast.

### VESSEL ACCESS\* AND HYDROGRAPHIC CONDITIONS

- Surface currents generally flow to the west at 10 to 30 cm/sec.
- Good small boat anchorage in 12 ft of water is available on the east side of Thetis Island, with protection from southwest winds.
- Strong offshore winds can reduce water depths by 2 to 3 ft.
- Thetis Island may be awash during storm surges of 2 to 3 ft and strong west and northwest winds.

\*See the latest *Supplement, Alaska* and United States Coast Pilot for current information on air and vessel access, respectively.

150° 12'

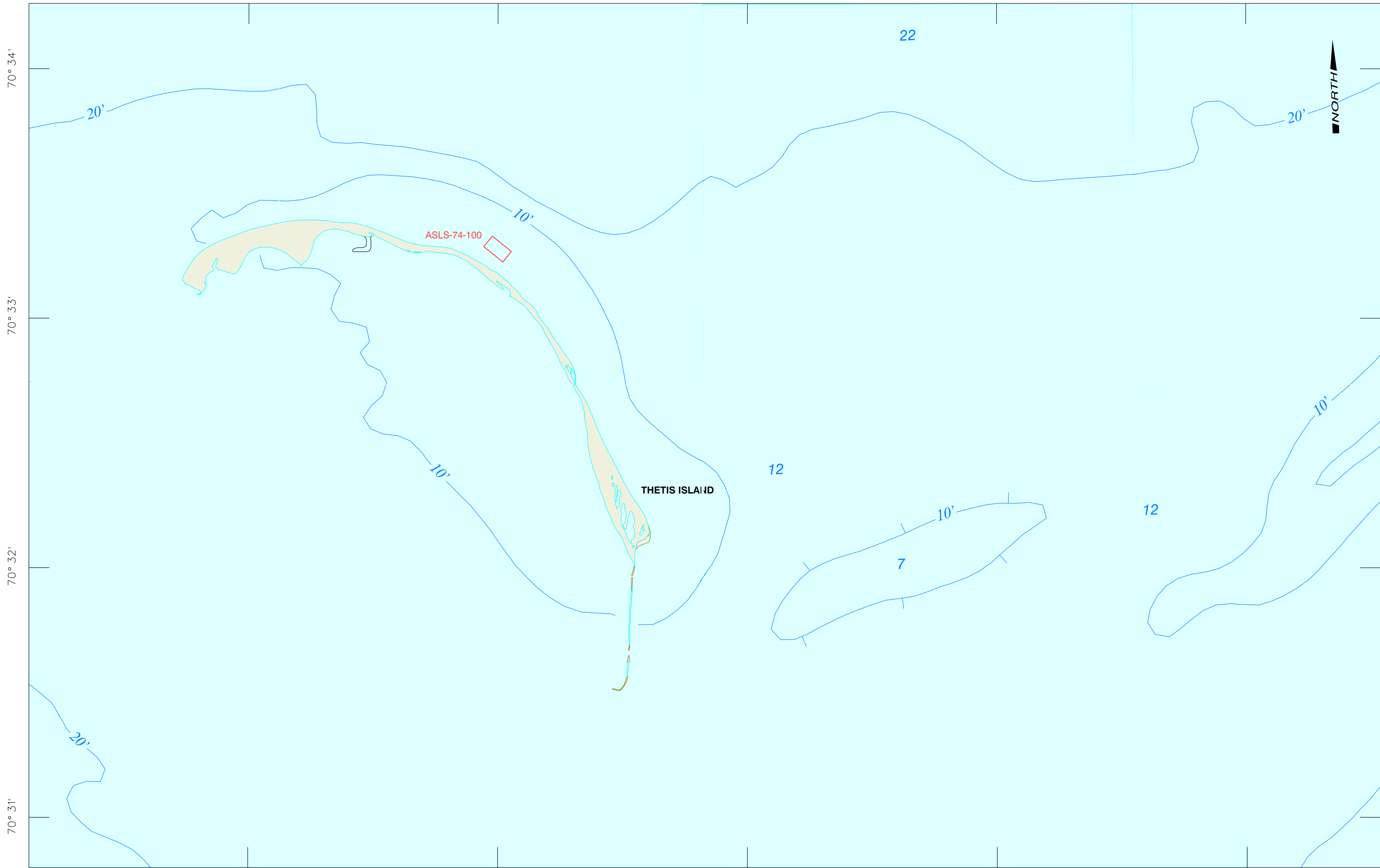
150° 9'

150° 06'

150° 03'

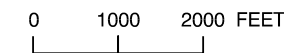
150° 00'

**SHEET 30**



Continue on sheet 31

1:26000





### PRIORITY PROTECTION SITES

- There are no priority protection sites on this sheet.

### GENERAL SENSITIVITIES

- The lee shores of Spy Island are important areas for waterfowl molting and staging during August and September.
- Shoreline and offshore areas support molting Oldsquaws and eiders, and brood-rearing eiders. This is also a staging area for migrating Phalaropes (shorebirds). Birds are present in June through September.
- Common Eiders nest on offshore islands in June and July.
- Plan to deploy bird-hazing systems during the open-water season.
- Polar bear dens have been found in this area. Dens may be in use from October through April.

### CULTURAL SITES

Information on the exact locations of cultural sites is confidential. This information is contained in the *North Slope Archaeological Data* document, copies of which are kept at the following offices: State Historical Preservation Officer (SHPO) (907-269-8721), ACS in Deadhorse (907-659-2405), North Slope Borough Lands Division (907-852-0322), North Slope Borough Lands Division (907-852-0322), BPXA Crisis Center in Anchorage (907-564-5243), and the ConocoPhillips Incident Command Center in Anchorage (907-265-1000). The following cultural site(s) are located in the area depicted on this sheet:

- XBP-035 on Spy Island



### AIR ACCESS\*

- Helmericks (Sheet 14), an unattended, 2,500 ft. dirt airstrip, is located approximately 13 miles southwest of Spy Island. It is situated west of the main channel of the Colville River near the mouth, and should be considered for emergency use only. Ditches line both sides of runway, which gets soft when wet.
- Ugnu-Kuparuk (Sheet 51) is a continuously attended, 6,000 ft. gravel private airstrip serving the Kuparuk facilities. It is located approximately 16 miles south-southeast of Spy Island.

### VESSEL ACCESS\* AND HYDROGRAPHIC CONDITIONS\*

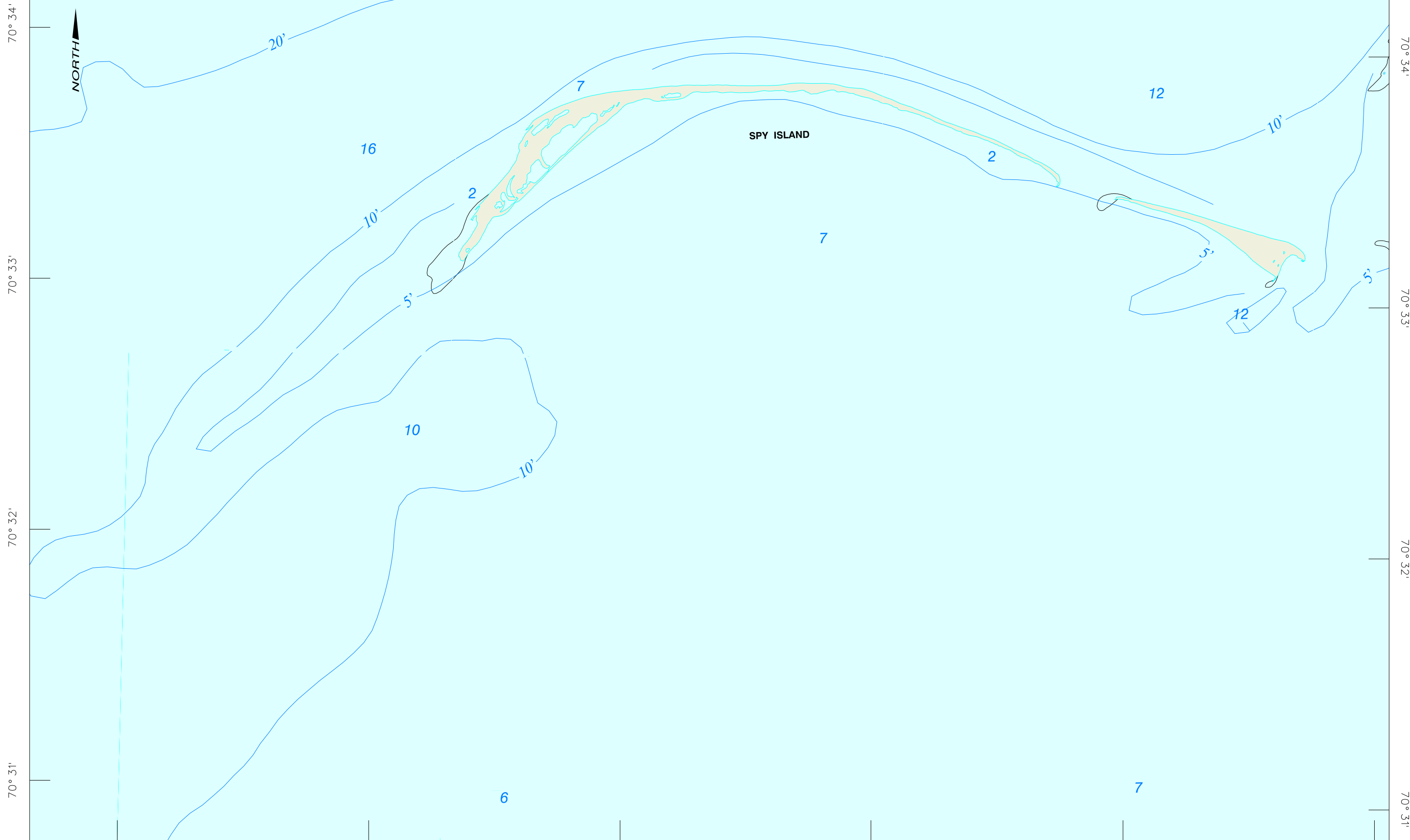
- Marine waters generally flow to the west with surface currents of 10 to 30 cm/sec.
- Water access is limited on lagoon-facing shores of the island, but is good on ocean-facing shores.
- Spy Island is inundated by storm surges.
- Alongshore sediment transport is to the west with erosion on the eastern end of Spy island and accumulation on the western end.

### STAGING AREAS AND PRESTAGED EQUIPMENT

- There are staging areas and prestaged equipment at Oliktok Point (Sheet 35).

\*See the latest *Supplement, Alaska* and United States Coast Pilot for current information on air and vessel access, respectively.

150° 00' 149° 57' 149° 54' 149° 51' 149° 48'



Continue on sheet 30

Continue on sheet 32

Continue on sheet 36

Continue on sheet 35





### PRIORITY PROTECTION SITES

- There are no priority protection sites on this sheet.

### GENERAL SENSITIVITIES

- The lee shores of the islands are important molting areas for male Oldsquaws in late July and early August.
- Shoreline and offshore areas support molting and brood-rearing eiders. This is also a staging area for migrating Phalaropes (shorebirds). Birds are present in June through September.
- Common Eiders nest on offshore islands in June and July.
- Plan to deploy bird-hazing systems during the open-water season.
- Polar bear dens have been found in this area. Dens may be in use from October through April.

### CULTURAL SITES

Information on the exact locations of cultural sites is confidential. This information is contained in the *North Slope Archaeological Data* document, copies of which are kept at the following offices: State Historical Preservation Officer (SHPO) (907-269-8721), ACS in Deadhorse (907-659-2405), North Slope Borough Lands Division (907-852-0322), North Slope Borough Lands Division (907-852-0322), BPXA Crisis Center in Anchorage (907-564-5243), and the ConocoPhillips Incident Command Center in Anchorage (907-265-1000). The following cultural site(s) are located in the area depicted on this sheet:

- XBP-011 on Pingok Island



### AIR ACCESS\*

- Ugnu-Kuparuk (Sheet 51) is a continuously attended, 6,000 ft. gravel private airstrip serving the Kuparuk facilities. It is located approximately 17 miles south of Leavitt Island.
- Helmericks (Sheet 14), an unattended, 2,500 ft. dirt airstrip, is located approximately 18 miles west-southwest of Leavitt Island. It is situated west of the main channel of the Colville River near the mouth, and should be considered for emergency use only. Ditches line both sides of runway, which gets soft when wet.

### VESSEL ACCESS\* AND HYDROGRAPHIC CONDITIONS

- Water access is limited on lagoon-facing shores of islands, but is good on ocean-facing shores.
- Alongshore sediment transport is to the west with erosion on the eastern ends of islands and accumulation on the western ends.

### STAGING AREAS AND PRESTAGED EQUIPMENT

- There are staging areas and prestaged equipment at Oliktok Point (Sheet 35).

\*See the latest *Supplement, Alaska* and United States Coast Pilot for current information on air and vessel access, respectively.

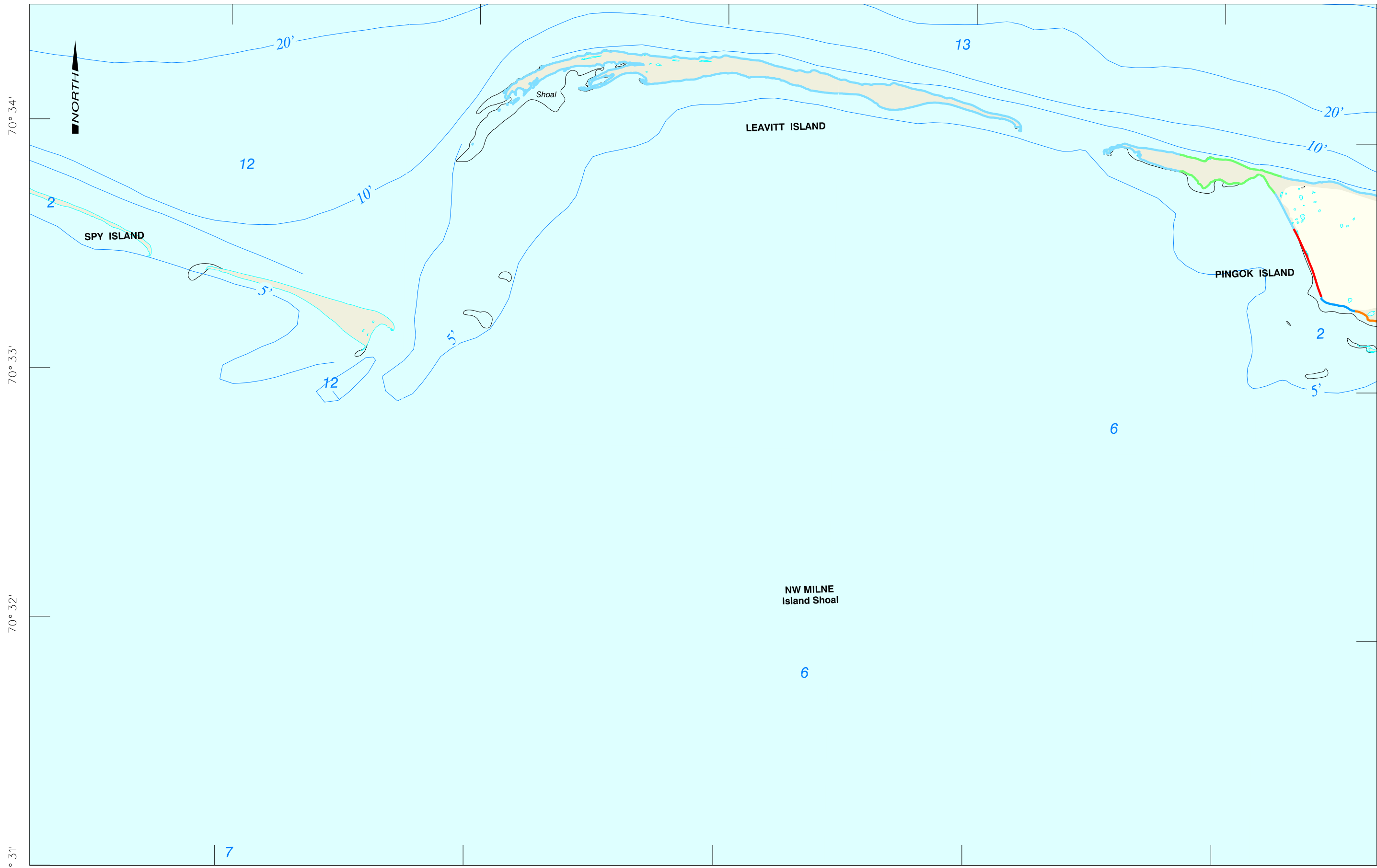
149° 48'

149° 45'

149° 42'

149° 39'

149° 36'



Continue on sheet 31

Continue on sheet 33

Continue on sheet 36

Continue on sheet 35

Continue on sheet 36

1:26000

0 1000 2000 FEET



### PRIORITY PROTECTION SITES

- There are no priority protection sites on this sheet.

### GENERAL SENSITIVITIES

- The lee shores of the islands are important molting areas for male Oldsquaws in late July and early August.
- Shoreline and offshore areas support molting and brood-rearing eiders. This is also a staging area for migrating Phalaropes (shorebirds). Birds are present in June through September.
- Common Eiders nest on offshore islands in June and July.
- Plan to deploy bird-hazing systems during the open-water season.
- Polar bear dens have been found in this area. Dens may be in use from October through April.

### CULTURAL SITES

Information on the exact locations of cultural sites is confidential. This information is contained in the *North Slope Archaeological Data* document, copies of which are kept at the following offices: State Historical Preservation Officer (SHPO) (907-269-8721), ACS in Deadhorse (907-659-2405), North Slope Borough Lands Division (907-852-0322), North Slope Borough Lands Division (907-852-0322), BPXA Crisis Center in Anchorage (907-564-5243), and the ConocoPhillips Incident Command Center in Anchorage (907-265-1000). The following cultural site(s) are located in the area depicted on this sheet:

- XBP-011 on Pingok Island
- XBP-012 on Pingok Island
- XBP-013 on Bertoncini Island
- XBP-030 on Pingok Island
- XBP-034 on Pingok Island



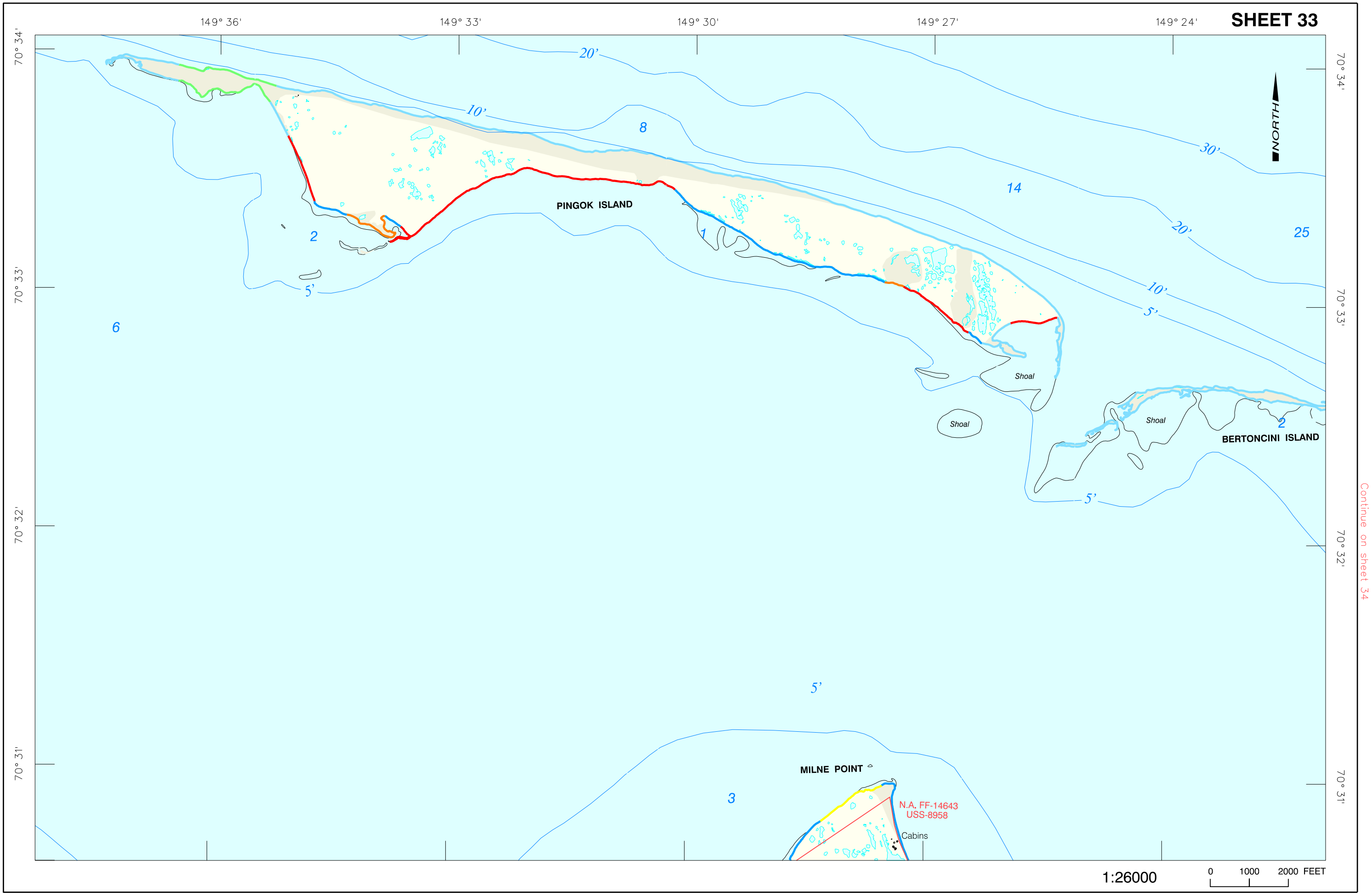
### AIR ACCESS\*

- Ugnu-Kuparuk (Sheet 51) is a continuously attended, 6,000 ft. gravel private airstrip serving the Kuparuk facilities. It is located approximately 16 miles south of Pingok Island.
- Helmericks (Sheet 14), an unattended, 2,500 ft. dirt airstrip, is located approximately 20 miles west-southwest of Pingok Island. It is situated west of the main channel of the Colville River near the mouth, and should be considered for emergency use only. Ditches line both sides of runway, which gets soft when wet.

### VESSEL ACCESS\* AND HYDROGRAPHIC CONDITIONS

- Water access is limited on lagoon-facing shores of islands, but good on ocean-facing shores.
- Alongshore sediment transport is to the west with erosion on eastern ends of islands and accumulation on the western ends.
- There are a small lake and springs with fresh water at the midpoint of Pingok Island.

\*See the latest *Supplement, Alaska* and United States Coast Pilot for current information on air and vessel access, respectively.



Continue on sheet 32

Continue on sheet 34

Continue on sheet 37





### PRIORITY PROTECTION SITES

- There are no priority protection sites on this sheet.

### GENERAL SENSITIVITIES

- The lee shores of the islands are important molting areas for male Oldsquaws in late July and early August.
- Shoreline and offshore areas support molting and brood-rearing eiders. This is also a staging area for migrating Phalaropes (shorebirds). Birds are present in June through September.
- Common Eiders nest on offshore islands in June and July.
- Plan to deploy bird-hazing systems during the open-water season.
- Polar bear dens have been found in this area. Dens may be in use from October through April.

### CULTURAL SITES

Information on the exact locations of cultural sites is confidential. This information is contained in the *North Slope Archaeological Data* document, copies of which are kept at the following offices: State Historical Preservation Officer (SHPO) (907-269-8721), ACS in Deadhorse (907-659-2405), North Slope Borough Lands Division (907-852-0322), North Slope Borough Lands Division (907-852-0322), BPXA Crisis Center in Anchorage (907-564-5243), and the ConocoPhillips Incident Command Center in Anchorage (907-265-1000). The following cultural site(s) are located in the area depicted on this sheet:

- XBP-004 near Kavarak Point
- XBP-013 on Bertoncini Island
- XBP-014 on Cottle Island



### AIR ACCESS\*

- Ugnu-Kuparuk (Sheet 51) is a continuously attended, 6,000 ft. gravel private airstrip serving the Kuparuk facilities. It is located approximately 16 miles south-southwest of Bodfish Island.
- A continuously attended, private heliport is located at the Northstar facility (Sheet 59), approximately 13 miles east-southeast of Bodfish Island. The wooden pad is 62'x55'.
- An unattended and unmaintained 1,500 ft. gravel private airstrip is located at Point McIntyre (Sheet 62), approximately 17 miles southeast of Bodfish Island. Runway has soft spots, with erosion, grass and rocks up to 3". Recommend emergency use only.

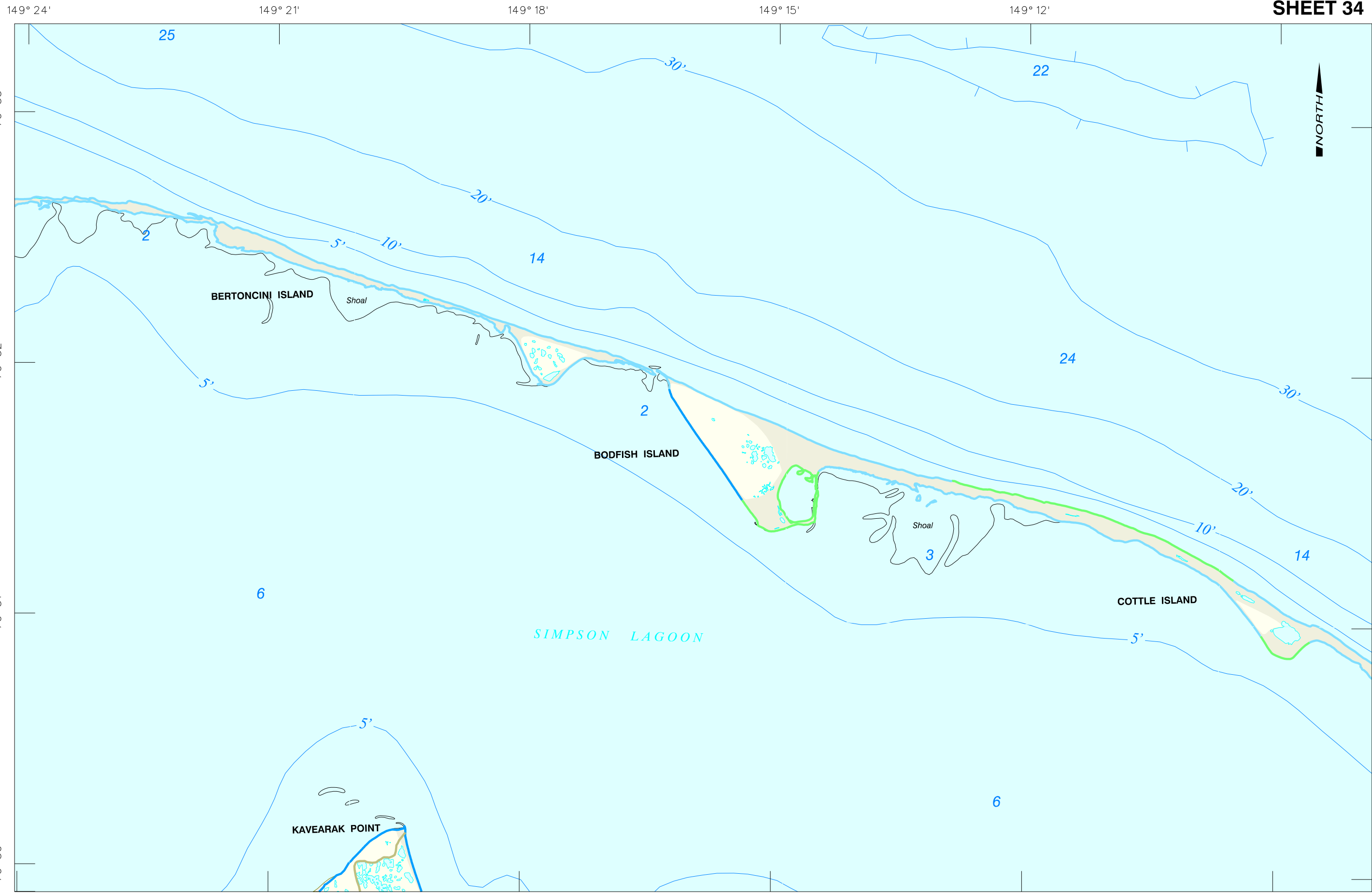
### VESSEL ACCESS\* AND HYDROGRAPHIC CONDITIONS

- Water access by other than very shallow-draft vessels will be precluded in Simpson Lagoon and Gwydyr Bay due to shallow water depths.
- Bars and shoals obstruct the passages between Pingok Island (Sheet 33) and Cottle Island.
- Barrier islands tend to migrate toward shore at 5 to 10 meters per year and westward 20 to 30 meters.
- Simpson Lagoon currents are generally to the west at 10 to 30 cm/sec.

### COUNTERMEASURES CONSIDERATIONS

- The embayment on the east side of Bodfish Island will collect westerly flowing oil spills. All barrier islands will serve to restrain onshore/offshore dispersion of floating oil.

\*See the latest *Supplement, Alaska* and United States Coast Pilot for current information on air and vessel access, respectively.



Continue on sheet 33

Continue on sheet 56

Continue on sheet 38



**PRIORITY PROTECTION SITES**

SITE NO.	DESCRIPTION	SENSITIVITY	TACTIC	EST. BOOM
PS24A	Salt marsh 1 mile NE of Ugnuravik River mouth	Most sensitive during open water season. Keep oil from entering salt marsh.	C-13 or C-14	4,500'
PS25	Ugnuravik River mouth	Most sensitive during open water season. Keep oil from entering river. Peat shorelines are present on west shore of river.	C-13 or C-14	1,500'
PS27	Creek mouth west of Oliktok Pt. airstrip	Most sensitive during open water season. Keep oil from entering river.	C-13 or C-14	100'

**GENERAL SENSITIVITIES**

- Coastal areas support high concentrations of breeding, nesting, brood-rearing, and molting waterbirds during the summer.
- Simpson Lagoon has large flocks of molting male Oldsquaw in July and early August, especially in the lee shores of the barrier islands.
- Shoreline and offshore areas support molting and brood-rearing eiders. This is also a staging area for migrating Phalaropes (shorebirds). Birds are present in June through September.
- This is a Brant nesting, brood-rearing, and molting area. Birds are present from May through August.
- This is a Spectacled Eider breeding and nesting area. Birds may be present in June to September.
- Plan to deploy bird-hazing systems during the open-water season.
- The Ugnuravik River provides habitat for anadromous whitefish and for resident fish.
- There is a seawater intake on the north wall of the Oliktok Seawater Treatment Plant approximately 8 ft below the surface. Precautions should be taken to keep oil away from this area.
- Polar bears may be present November to April.

**CULTURAL SITES**

Information on the exact locations of cultural sites is confidential. This information is contained in the *North Slope Archaeological Data* document, copies of which are kept at the following offices: State Historical Preservation Officer (SHPO) (907-269-8721), ACS in Deadhorse (907-659-2405), North Slope Borough Lands Division (907-852-0322), North Slope Borough Lands Division (907-852-0322), BPXA Crisis Center in Anchorage (907-564-5243), and the ConocoPhillips Incident Command Center in Anchorage (907-265-1000). The following cultural site(s) are located in the area depicted on this sheet:

- XBP-002 on the coast west of Oliktok Point
- XBP-039 on the coast west of Oliktok Point



**AIR ACCESS\***

- Helmericks (Sheet 14), an unattended, 2,500 ft. dirt airstrip, is located approximately 12 miles southwest of Oliktok Point. It is situated west of the main channel of the Colville River near the mouth, and should be considered for emergency use only. Ditches line both sides of runway, which gets soft when wet.
- Ugnu-Kuparuk (Sheet 51) is a continuously attended, 6,000 ft. gravel private airstrip serving the Kuparuk facilities. It is located approximately 15 miles south-southeast of Oliktok Point.

**VESSEL ACCESS\* AND HYDROGRAPHIC CONDITIONS**

- Simpson Lagoon water depths range from 3 to 7 ft.
- Bars and shoals obstruct the passages between Pingok Island and Cottle Island (Sheets 33 and 34, respectively).
- There is small boat shelter from east winds behind the small sand spit west of Oliktok Point. It provides excellent moorage but is limited to 5 ft of water. This shelter is exposed to southwest winds. Shelter from southwest winds is available on the east side of Oliktok Point.
- There is a boat launch at Oliktok Dock.
- Simpson Lagoon currents are generally to the west at 10 to 30 cm/sec.

**COUNTERMEASURES CONSIDERATIONS**

- Sand-silt shores are very narrow (less than 20 ft wide) and interrupted by small creek mouths and areas of thick peat deposits. Large areas of potential overwash between Oliktok Point and Kalubik Creek (to the west) may make cleanup difficult. Backshore areas are wet tundra.
- Vegetated shorelines in this area may preclude the use of heavy equipment. Sand-silt washed over on the vegetated shorelines is mixed with large peat blocks, making mechanized travel difficult.
- West and north winds and Colville River discharge will cause floating oil to impinge on the shoreline west of Oliktok Point. There is some restricted access to beaches by shallow water.

**STAGING AREAS AND PRESTAGED EQUIPMENT**

- There are staging areas at Oliktok Dock and approximately 2 miles southeast of Oliktok Dock.

PRESTAGED EQUIP. AREA	LOCATION	ITEM	QUANTITY	TYPE
KUP-11	DS-3R	Boom	500'	8" x 6" river
KUP-12	Oliktok Dock	Boom	3,400'	8" x 6" river
KUP-12 Cont'd	Additional equipment stored seasonally at Oliktok	Boom	1,300'	Shore Seal (with floating pump and blower)
		Boom	1,100'	14" x 24" Inflatable ocean
		Boom	492'	14" x 20" Nofi rapid deploy
		Mini-barges	2	249 bbl
		HYPUs	1	For boom deployment
		Anchor Systems	Various	Various

\*See the latest *Supplement, Alaska* and United States Coast Pilot for current information on air and vessel access, respectively.

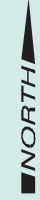
150° 00'

149° 57'

149° 54'

149° 51'

149° 48'



70° 31'

10'

6

7

70° 31'

SEA WATER INTAKE  
OLIKTOK DOCK  
KUP-12  
STAGING AREA  
BOAT LAUNCH

PS27

PS24A

UNITED STATES  
N.A. FF-14589  
USS-4275  
LOT 2

DEW LINE SITE  
UNITED STATES  
USS-4275  
LOT 1  
WDL Military  
PLO-1851

2  
KUP-11  
DS 3R

PS25  
3

70° 30'

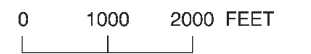
N.A FF-14589  
USS-8956

OLIKTOK POINT  
STAGING AREA

DS 3Q  
OLIKTOK 1

70° 29'

1:26000



Continue on sheet 30

Continue on sheet 39

Continue on sheet 32

Continue on sheet 36



**PRIORITY PROTECTION SITES**

SITE NO.	DESCRIPTION	SENSITIVITY	TACTIC	EST. BOOM
PS24	Gaps between marsh islands west of MPU L Pad	Most sensitive during open water season. Salt marsh and/or inundated low-lying tundra shoreline.	C-13 or C-14	400'
PS24A	Salt marsh 1 mile NE of Ugnuravik River mouth	Most sensitive during open water season. Keep oil from entering salt marsh.	C-13 or C-14	4,500'
PS25	Ugnuravik River mouth	Most sensitive during open water season. Keep oil from entering river. Peat shorelines are present on west shore of river.	C-13 or C-14	1,500'

**GENERAL SENSITIVITIES**

- Coastal areas support high concentrations of breeding, nesting, brood-rearing, and molting waterbirds during the summer.
- Simpson Lagoon has large flocks of molting male Oldsquaw in July and early August, especially in the lee shores of the barrier islands.
- Shoreline and offshore areas support molting and brood-rearing eiders. This is also a staging area for migrating Phalaropes (shorebirds). Birds are present in June through September.
- This is a Brant nesting, brood-rearing, and molting area. Birds are present from May through August.
- Pairs of Spectacled Eider have been found in this area.
- Plan to deploy bird-hazing systems during the open-water season.
- The Ugnuravik River provides habitat for anadromous whitefish and for resident fish.

**CULTURAL SITES**

Information on the exact locations of cultural sites is confidential. This information is contained in the *North Slope Archaeological Data* document, copies of which are kept at the following offices: State Historical Preservation Officer (SHPO) (907-269-8721), ACS in Deadhorse (907-659-2405), North Slope Borough Lands Division (907-852-0322), North Slope Borough Lands Division (907-852-0322), BPXA Crisis Center in Anchorage (907-564-5243), and the ConocoPhillips Incident Command Center in Anchorage (907-265-1000). The following cultural site(s) are located in the area depicted on this sheet:

- XBP-036 on the north bank of the river near MPU M Pad



**AIR ACCESS\***

- Ugnu-Kuparuk (Sheet 51) is a continuously attended, 6,000 ft. gravel private airstrip serving the Kuparuk facilities. It is located approximately 12 miles south of MPU Pad F.
- Helmericks (Sheet 14), an unattended, 2,500 ft. dirt airstrip, is located approximately 16 miles west-southwest of MPU Pad F. It is situated west of the main channel of the Colville River near the mouth, and should be considered for emergency use only. Ditches line both sides of runway, which gets soft when wet.

**VESSEL ACCESS\* AND HYDROGRAPHIC CONDITIONS**

- Simpson Lagoon water depths range from 3 to 7 ft.
- There is small boat shelter from east winds behind the small sand spit west of Oliktok Point (Sheet 35). It provides excellent moorage but is limited to 5 ft of water. This shelter is exposed to southwest winds. Shelter from southwest winds is available on the east side of Oliktok Point.
- Simpson Lagoon currents are generally to the west at 10 to 30 cm/sec.
- There is a boat launch at the southwest end of MPU F Pad.

**COUNTERMEASURES CONSIDERATIONS**

- Sand-silt shores are very narrow (less than 20 ft wide) and interrupted by small creek mouths and areas of thick peat deposits. Backshore areas are wet tundra.
- Vegetated shorelines making up much of this area will preclude the use of heavy equipment. Sand-silt washed over on the vegetated shorelines is mixed with large peat blocks, making mechanized travel difficult.

**STAGING AREAS AND PRESTAGED EQUIPMENT**

- There is a staging area 1 mile west of the mouth of the Ugnuravik River.
- There is a staging area at MPU L Pad.

PRESTAGED EQUIP. AREA	LOCATION	ITEM	QUANTITY	TYPE
KUP-11	DS 3R	Boom	500'	8" x 6" river
MPU-6	MPU F Pad	Boom	4,000'	8" x 6" river
		Boom	900'	Shore/tide
		Pump	2	3" diaphragm
		Pump	2	2" trash
		Skimmer	4	Weir, Mata Ray

400' of boom is taken from F-pad and pre-deployed at Central Creek during summer months.

\*See the latest *Supplement, Alaska* and United States Coast Pilot for current information on air and vessel access, respectively.



149° 48'

149° 45'

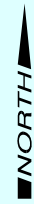
149° 42'

149° 39'

149° 36'

6

7



70° 31'

70° 30'

70° 29'

70° 31'

70° 30'

70° 29'

Continue on sheet 35

Continue on sheet 35

Continue on sheet 37



1:26000

0 1000 2000 FEET



**PRIORITY PROTECTION SITES**

SITE NO.	DESCRIPTION	SENSITIVITY	TACTIC	EST. BOOM
PS18	Creek mouth 2 miles SE of Milne Point	Most sensitive during open water season. Keep oil from entering lagoon.	C-13 or C-14	800'
PS18A	Salt marsh 1.75 miles SE of Milne Point	Most sensitive during open water season. Keep oil from entering salt marsh.	C-13 or C-14	800'
PS19	Inlet to marsh 2 miles SW of Milne Point	Most sensitive during open water season. Inundated low-lying tundra shorelines.	C-13 or C-14	500'

**GENERAL SENSITIVITIES**

- Coastal areas support high concentrations of breeding, nesting, brood-rearing, and molting waterbirds during the summer.
- Simpson Lagoon has large flocks of molting male Oldsquaw in July and early August, especially in the lee shores of the barrier islands.
- Shoreline and offshore areas support molting and brood-rearing eiders. This is also a staging area for migrating Phalaropes (shorebirds). Birds are present in June through September.
- This is a Brant nesting, brood-rearing, and molting area. Birds are present from May through August.
- Pairs of Spectacled Eiders have been found in this area.
- Plan to deploy bird-hazing systems during the open-water season.

**CULTURAL SITES**

Information on the exact locations of cultural sites is confidential. This information is contained in the *North Slope Archaeological Data* document, copies of which are kept at the following offices: State Historical Preservation Officer (SHPO) (907-269-8721), ACS in Deadhorse (907-659-2405), North Slope Borough Lands Division (907-852-0322), North Slope Borough Lands Division (907-852-0322), BPXA Crisis Center in Anchorage (907-564-5243), and the ConocoPhillips Incident Command Center in Anchorage (907-265-1000). The following cultural site(s) are located in the area depicted on this sheet:

- XBP-010 on the coast east of Milne Point



**AIR ACCESS\***

- Ugnu-Kuparuk (Sheet 51) is a continuously attended, 6,000 ft. gravel private airstrip serving the Kuparuk facilities. It is located approximately 13 miles south of Milne Point.
- Helmericks (Sheet 14), an unattended, 2,500 ft. dirt airstrip, is located approximately 21 miles west-southwest of Milne Point. It is situated west of the main channel of the Colville River near the mouth, and should be considered for emergency use only. Ditches line both sides of runway, which gets soft when wet.

**VESSEL ACCESS\* AND HYDROGRAPHIC CONDITIONS**

- Simpson Lagoon water depths range from 3 to 7 ft.
- Aircraft wreckage is present in 4 ft of water 0.5 mile offshore north of Milne Pt. 18-1.
- Simpson Lagoon currents are generally to the west at 10 to 30 cm/sec.

**COUNTERMEASURES CONSIDERATIONS**

- Vegetated shorelines making up much of this area will preclude the use of heavy equipment. Sand-silt washed over on the vegetated shorelines is mixed with large peat blocks, making mechanized travel difficult.

**STAGING AREAS AND PRESTAGED EQUIPMENT**

- There are staging areas at MPU D Pad and at MPU L Pad.
- Boom is typically predeployed seasonally on Central Milne Creek north of MPU-2 and northeast of Milne Point Road.

PRESTAGED EQUIP. AREA	LOCATION	ITEM	QUANTITY	TYPE
MPU-2	MPU A Pad	Boom	1,000'	8" x 6" river
		Boom	300'	Shore/tide
		Pump	1	3" diaphragm
		Skimmer	1	Rope mop, Z14-E
		Skimmer	1	Disc, MI-30
MPU-3	On east side of inlet, southwest of MPU D Pad	Storage	1	2,400-gal. Fastank
		Boom	1,000'	8" x 6" river
		Boom	100'	Shore/tide
		Pump	1	3" diaphragm
		Skimmer	1	Rope mop, Z14-E
MPU-4	South side of inlet northwest of MPU D Pad	Skimmer	1	Weir, slurp
		Storage	1	2,400-gal. Fastank
		Boom	1,000'	8" x 6" river
		Boom	200'	Shore/tide
		MPU-5	On south side of inlet near entrance to bay	Boom
Boom	200'			Shore/tide
Pump	1			3" diaphragm
Skimmer	1			Disc, MI-30

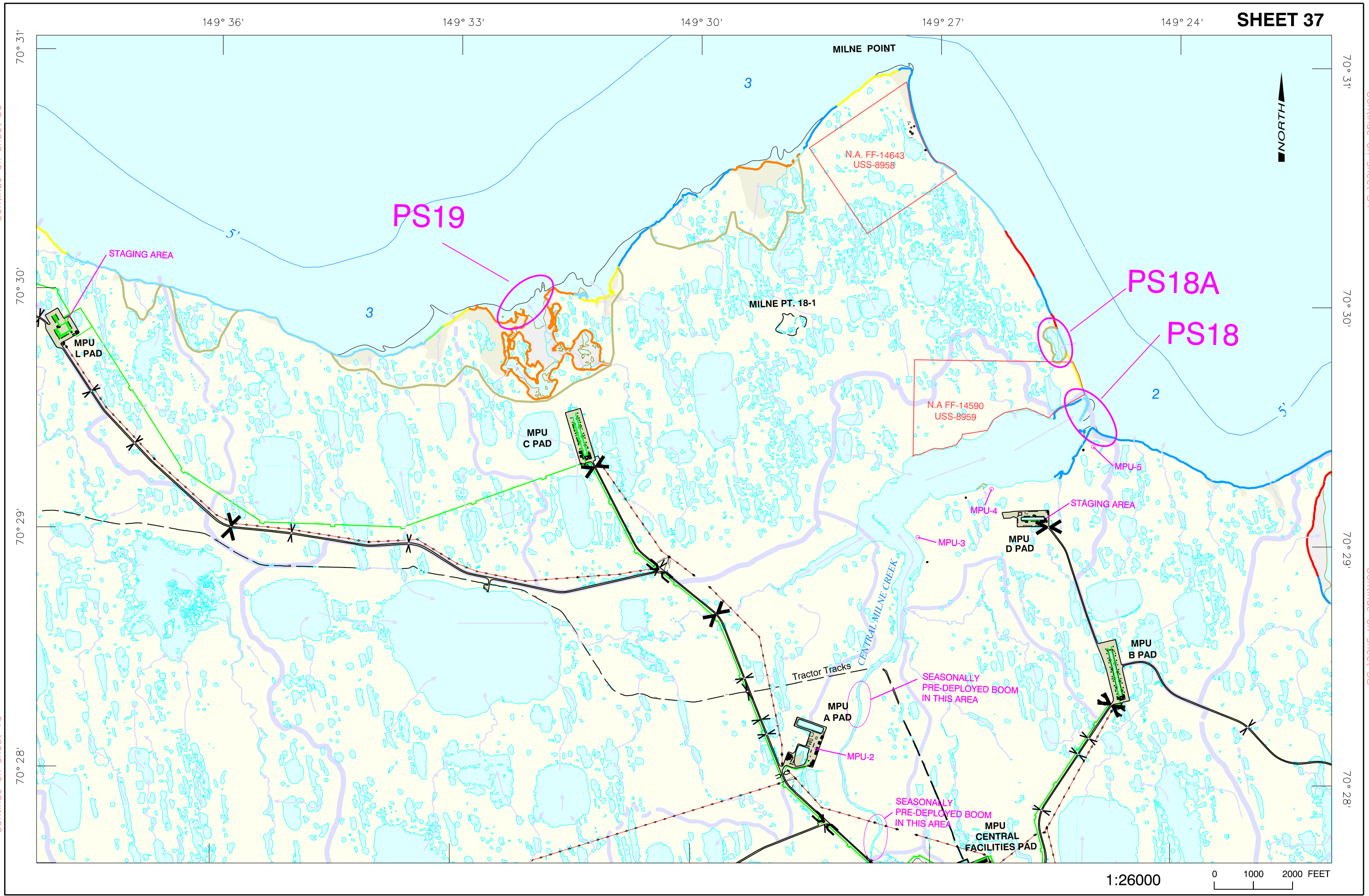
\*See the latest *Supplement, Alaska* and United States Coast Pilot for current information on air and vessel access, respectively.

Continue on sheet 36

Continue on sheet 34

Continue on sheet 40

Continue on sheet 38







### PRIORITY PROTECTION SITES

SITE NO.	DESCRIPTION	SENSITIVITY	TACTIC	EST. BOOM
PS17	Creek mouth 0.5 miles SE of Beechey Point	Most sensitive during open water season. Inundated low-lying tundra shorelines.	C-13 or C-14	500'
PS17A	Salt marsh 0.5 miles SW of Beechey Point	Most sensitive during open water season. Keep oil from entering salt marsh.	C-13 or C-14	2,000'
PS17B	Salt marsh 1 mile SW of Beechey Point	Most sensitive during open water season. Keep oil from entering salt marsh.	C-13 or C-14	1,200'
PS17C	Salt marsh 1.75 miles SE of Kavearak Point	Most sensitive during open water season. Keep oil from entering salt marsh. Inundated low-lying tundra shorelines.	C-13 or C-14	200'
PS17D	Salt marsh inlet 1 mile south of Kavearak Point	Most sensitive during open water season. Keep oil from entering salt marsh.	C-13 or C-14	2,000'
PS17E	Salt marsh on 1.5 miles SW of Kavearak Point	Most sensitive during open water season. Keep oil from entering salt marsh. Inundated low-lying tundra shorelines.	C-13 or C-14	700'

### GENERAL SENSITIVITIES

- Coastal areas support high concentrations of breeding, nesting, brood-rearing, and molting waterbirds during the summer.
- Simpson Lagoon has large flocks of molting male Oldsquaw in July and early August, especially in the lee shores of the barrier islands.
- Shoreline and offshore areas support molting and brood-rearing eiders. This is also a staging area for migrating Phalaropes (shorebirds). Birds are present in June through September.
- This is a Brant nesting, brood-rearing, and molting area. Birds are present from May through August.
- Pairs of Spectacled Eiders have been found in this area.
- Plan to deploy bird-hazing systems during the open-water season.
- East Milne Creek provides habitat for anadromous whitefish and char and for resident fish.
- Polar bear dens have been found in this area. Dens may be in use from October through April.

### CULTURAL SITES

Information on the exact locations of cultural sites is confidential. This information is contained in the *North Slope Archaeological Data* document, copies of which are kept at the following offices: State Historical Preservation Officer (SHPO) (907-269-8721), ACS in Deadhorse (907-659-2405), North Slope Borough Lands Division (907-852-0322), North Slope Borough Lands Division (907-852-0322), BPXA Crisis Center in Anchorage (907-564-5243), and the ConocoPhillips Incident Command Center in Anchorage (907-265-1000). The following cultural site(s) are located in the area depicted on this sheet:

- XBP-003 near Beechey Point



### AIR ACCESS\*

- Ugnu-Kuparuk (Sheet 51) is a continuously attended, 6,000 ft. gravel private airstrip serving the Kuparuk facilities. It is located approximately 13 miles southwest of Kavearak Point.
- A continuously attended, private heliport is located at the Northstar facility (Sheet 59), approximately 15 miles east of Kavearak Point. The wooden pad is 62'x55'.
- An unattended and unmaintained 1,500 ft. gravel private airstrip is located at Point McIntyre (Sheet 62), approximately 18 miles southeast of Kavearak Point. Runway has soft spots, with erosion, grass and rocks up to 3". Recommend emergency use only.

### VESSEL ACCESS\* AND HYDROGRAPHIC CONDITIONS

- Water access by other than very shallow-draft vessels will be precluded in Simpson Lagoon and Gwydyr Bay due to shallow water depths.
- There is small boat shelter in 4 ft of water behind sandbar extending northwest from Beechey Point.
- Gwydyr Bay and Simpson Lagoon surface currents are generally to the west at 10 to 30 cm/sec. Water depth is 2 to 7 ft.

### STAGING AREAS AND PRESTAGED EQUIPMENT

- There is a staging pad approximately 2 miles west of Beechey Point.

\*See the latest *Supplement, Alaska* and United States Coast Pilot for current information on air and vessel access, respectively.

149° 24' 149° 21' 149° 18' 149° 15' 149° 12'

70° 30'

70° 29'

70° 28'

70° 30'

70° 29'

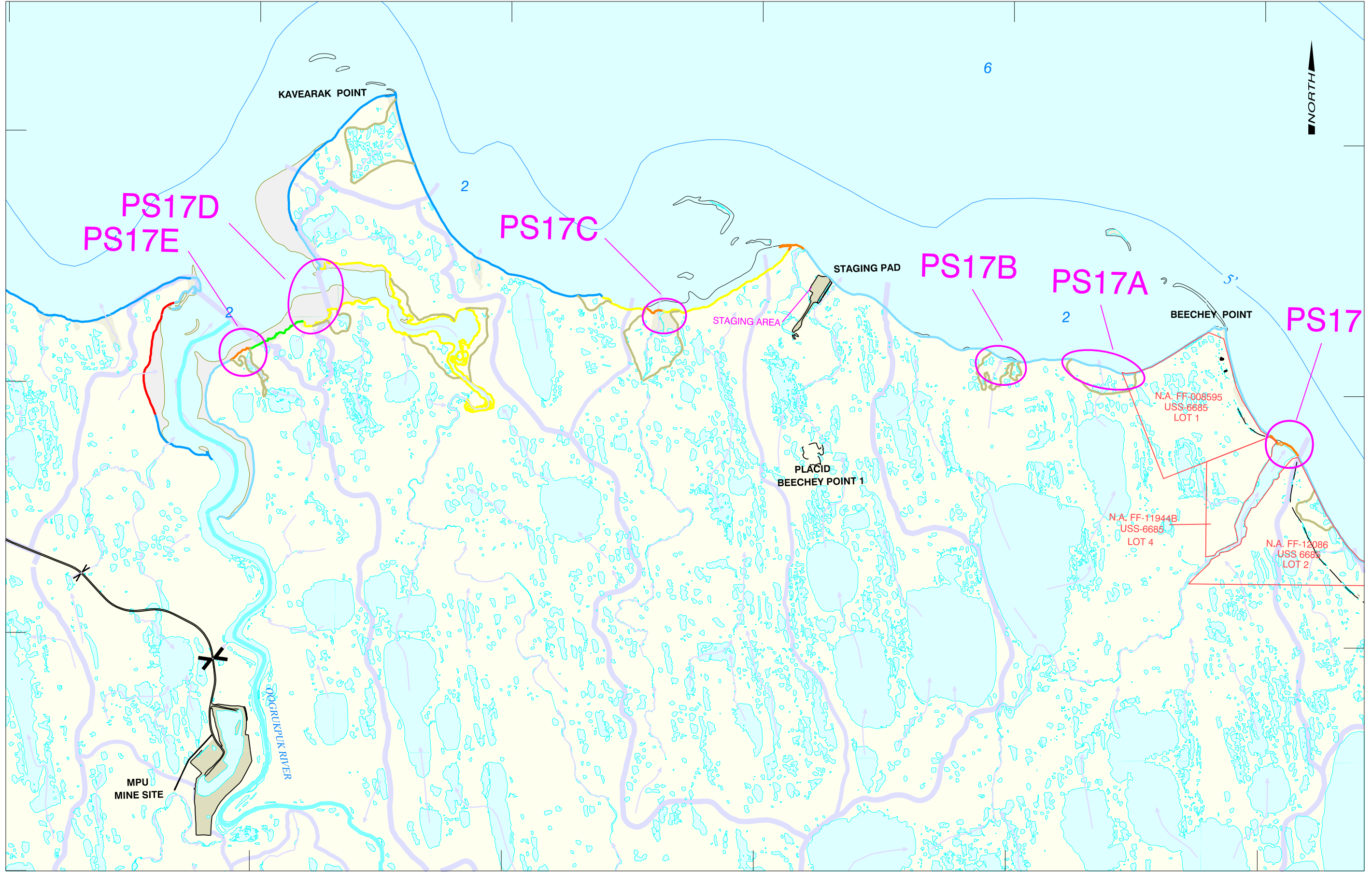
70° 28'

Continue on sheet 37

Continue on sheet 43

Continue on sheet 56

Continue on sheet 57



1:26000

0 1000 2000 FEET





**PRIORITY PROTECTION SITES**

SITE NO.	DESCRIPTION	SENSITIVITY	TACTIC	EST. BOOM
PS27	Creek mouth west of Oliktok Pt. airstrip	Most sensitive during open water season. Keep oil from entering river.	C-13 or C-14	100'

**GENERAL SENSITIVITIES**

- Coastal areas support high concentrations of breeding, nesting, brood-rearing, and molting waterbirds during the summer.
- Concentrations of swans, ducks, geese, and shorebirds are present here in June before open water is present elsewhere.
- Shoreline and offshore areas support molting Oldsquaws and eiders, and brood-rearing eiders. This is also a staging area for migrating Phalaropes (shorebirds). Birds are present in June through September.
- This is a Spectacled Eider nesting area.
- This is a Brant nesting, brood-rearing, and molting area. Birds are present from May through August.
- Plan to deploy bird-hazing systems during the open-water season.

**CULTURAL SITES**

Information on the exact locations of cultural sites is confidential. This information is contained in the *North Slope Archaeological Data* document, copies of which are kept at the following offices: State Historical Preservation Officer (SHPO) (907-269-8721), ACS in Deadhorse (907-659-2405), North Slope Borough Lands Division (907-852-0322), North Slope Borough Lands Division (907-852-0322), BPXA Crisis Center in Anchorage (907-564-5243), and the ConocoPhillips Incident Command Center in Anchorage (907-265-1000). The following cultural site(s) are located in the area depicted on this sheet:

- XBP-002 on the coast near the airstrip



**AIR ACCESS\***

- Helmericks (Sheet 14), an unattended, 2,500 ft. dirt airstrip, is located approximately 12 miles southwest of Oliktok Point. It is situated west of the main channel of the Colville River near the mouth, and should be considered for emergency use only. Ditches line both sides of runway, which gets soft when wet.
- Ugnu-Kuparuk (Sheet 51) is a continuously attended, 6,000 ft. gravel private airstrip serving the Kuparuk facilities. It is located approximately 15 miles south-southeast of Oliktok Point.

**VESSEL ACCESS\* AND HYDROGRAPHIC CONDITIONS**

- Simpson Lagoon water depths range from 3 to 7 ft.
- There is small boat shelter from east winds behind the small sand spit west of Oliktok Point (Sheet 35). It provides excellent moorage but is limited to 5 ft of water. This shelter is exposed to southwest winds. Shelter from southwest winds is available on the east side of Oliktok Point.
- Simpson Lagoon currents are generally to the west at 10 to 30 cm/sec.

**COUNTERMEASURES CONSIDERATIONS**

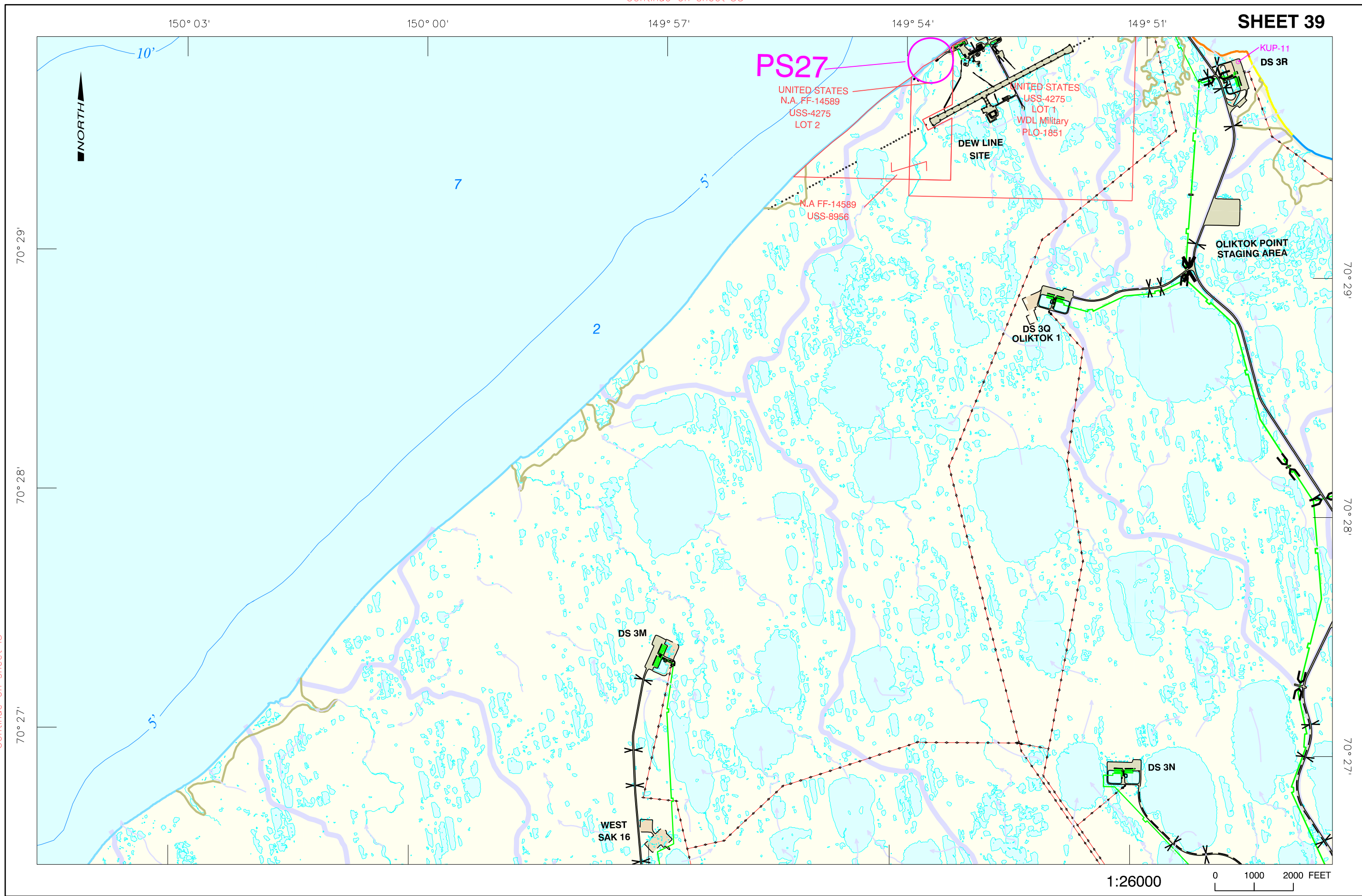
- Sand-silt shores are very narrow (less than 20 ft wide) and interrupted by small creek mouths and areas of thick peat deposits. Large areas of potential overwash west of Oliktok Point may make cleanup difficult. Backshore areas are wet tundra.
- West and north winds and Colville River discharge will cause floating oil to impinge on the shoreline west of Oliktok Point. There is some restricted access to beaches by shallow water.

**STAGING AREAS AND PRESTAGED EQUIPMENT**

- There is a staging area south of DS 3R.

PRESTAGED EQUIP. AREA	LOCATION	ITEM	QUANTITY	TYPE
KUP-11	DS 3R	Boom	500'	8" x 6" river

\*See the latest *Supplement, Alaska* and United States Coast Pilot for current information on air and vessel access, respectively.



150° 03'

150° 00'

149° 57'

149° 54'

149° 51'

10'

7

2

NORTH

PS27

UNITED STATES  
N.A. FF-14589  
USS-4275  
LOT 2

UNITED STATES  
USS-4275  
LOT 1  
WDL Military  
PLO-1851

DEW LINE  
SITE

N.A. FF-14589  
USS-8956

KUP-11

DS 3R

OLIKOTOK POINT  
STAGING AREA

DS 3Q  
OLIKOTOK 1

DS 3M

WEST  
SAK 16

DS 3N

1:26000

0 1000 2000 FEET

70° 29'

70° 28'

70° 27'

70° 29'

70° 28'

70° 27'

Continue on sheet 15

Continue on sheet 40



### PRIORITY PROTECTION SITES

- There are no priority protection sites on this sheet.

### GENERAL SENSITIVITIES

- Shoreline and offshore areas support molting Oldsquaws and eiders, and brood-rearing eiders. This is also a staging area for migrating Phalaropes (shorebirds). Birds are present in June through September.
- Plan to deploy bird-hazing systems during the open-water season.



### AIR ACCESS\*

- Helmericks (Sheet 14), an unattended, 2,500 ft. dirt airstrip, is located approximately 4 miles southwest of the Oooguruk site. It is situated west of the main channel of the Colville River near the mouth, and should be considered for emergency use only. Ditches line both sides of runway, which gets soft when wet.
- Ugnu-Kuparuk (Sheet 51) is a continuously attended, 6,000 ft. gravel private airstrip serving the Kuparuk facilities. It is located approximately 19 miles southeast of the Oooguruk site.

### VESSEL ACCESS\* AND HYDROGRAPHIC CONDITIONS

- Surface currents generally flow to the west at 10 to 30 cm/sec.
- Strong offshore winds can reduce water depths by 2 to 3 ft.

\*See the latest *Supplement, Alaska* and United States Coast Pilot for current information on air and vessel access, respectively.

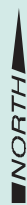
150° 15'

150° 12'

150° 09'

150° 06'

150° 03'



70° 30'

6

Proposed Ooguruk Facilities  
(Approximate Location  
Pending Detail Mapping)



70° 30'

Continue on sheet 35

Continue on sheet 11

70° 29'

PIPELINE BURIED

5'

10'

7

70° 29'

Continue on sheet 39

70° 28'

7

70° 28'

1:26000

0 1000 2000 FEET





**PRIORITY PROTECTION SITES**

SITE NO.	DESCRIPTION	SENSITIVITY	TACTIC	EST. BOOM
PS24	Gaps between marsh islands west of MPU L Pad	Most sensitive during open water season. Salt marsh and/or inundated low-lying tundra shoreline.	C-13 or C-14	400'
PS24A	Salt marsh 1 mile NE of Ugnuravik River mouth	Most sensitive during open water season. Keep oil from entering salt marsh.	C-13 or C-14	4,500'
PS25	Ugnuravik River mouth	Most sensitive during open water season. Keep oil from entering river. Peat shorelines are present on west shore of river.	C-13 or C-14	1,500'
PS27	Creek mouth west of Oliktok Pt. airstrip	Most sensitive during open water season. Keep oil from entering river.	C-13 or C-14	100'

**GENERAL SENSITIVITIES**

- Coastal areas support high concentrations of breeding, nesting, brood-rearing, and molting waterbirds during the summer.
- Simpson Lagoon has large flocks of molting male Oldsquaw in July and early August, especially in the lee shores of the barrier islands.
- This is a Spectacled Eider nesting area.
- This is a Brant nesting, brood-rearing, and molting area. Birds are present from May through August.
- Pairs of Spectacled Eiders have been found in this area.
- Plan to deploy bird-hazing systems during the open-water season.
- The Ugnuravik River provides habitat for anadromous whitefish and for resident fish.

**CULTURAL SITES**

Information on the exact locations of cultural sites is confidential. This information is contained in the *North Slope Archaeological Data* document, copies of which are kept at the following offices: State Historical Preservation Officer (SHPO) (907-269-8721), ACS in Deadhorse (907-659-2405), North Slope Borough Lands Division (907-852-0322), North Slope Borough Lands Division (907-852-0322), BPXA Crisis Center in Anchorage (907-564-5243), and the ConocoPhillips Incident Command Center in Anchorage (907-265-1000). The following cultural site(s) are located in the area depicted on this sheet:

- XBP-036 on the north bank of the river near MPU M Pad
- XBP-037 between Mine Site E and the inlet to the northwest
- XBP-038 near Mine Site E



**AIR ACCESS\***

- Ugnu-Kuparuk (Sheet 51) is a continuously attended, 6,000 ft. gravel private airstrip serving the Kuparuk facilities. It is located approximately 11 miles south of Mine Site E.
- Helmericks (Sheet 14), an unattended, 2,500 ft. dirt airstrip, is located approximately 15 miles west of Mine Site E. It is situated west of the main channel of the Colville River near the mouth, and should be considered for emergency use only. Ditches line both sides of runway, which gets soft when wet.

**VESSEL ACCESS\* AND HYDROGRAPHIC CONDITIONS**

- Simpson Lagoon water depths range from 3 to 7 ft.
- Simpson Lagoon currents are generally to the west at 10 to 30 cm/sec.

**COUNTERMEASURES CONSIDERATIONS**

- Vegetated shorelines making up much of this area will preclude the use of heavy equipment. Sand-silt washed over on the vegetated shorelines is mixed with large peat blocks, making mechanized travel difficult.

**STAGING AREAS AND PRESTAGED EQUIPMENT**

- There is a staging area approximately 1 mile west of the mouth of the Ugnuravik River.
- There is a staging area at MPU L Pad.

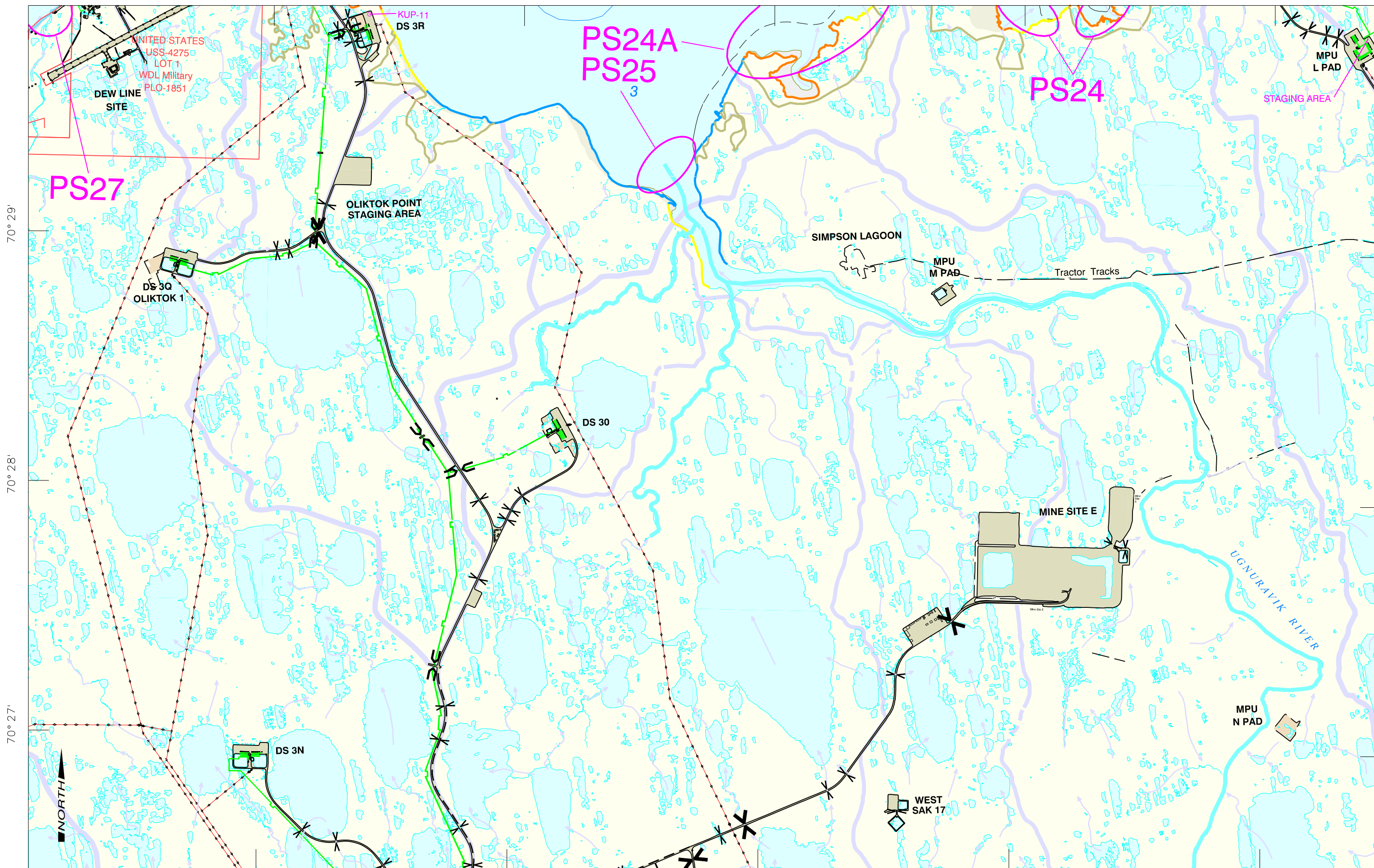
PRESTAGED EQUIP. AREA	LOCATION	ITEM	QUANTITY	TYPE
KUP-11	DS 3R	Boom	500'	8" x 6" river

\*See the latest *Supplement, Alaska* and United States Coast Pilot for current information on air and vessel access, respectively.

149° 48'

149° 45'

149° 42'



Continue on sheet 39

Continue on sheet 37

Continue on sheet 43

70° 29'

70° 28'

70° 27'

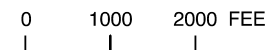
70° 29'

70° 28'

70° 27'



1:26000





**PRIORITY PROTECTION SITES**

- There are no priority protection sites on this sheet.

**GENERAL SENSITIVITIES**

- Coastal areas support high concentrations of breeding, nesting, brood-rearing, and molting waterbirds during the summer.
- Concentrations of swans, ducks, geese, and shorebirds are present here in June before open water is present elsewhere.
- This is a Spectacled Eider nesting area.
- Plan to deploy bird-hazing systems during the open-water season.
- Kalubik Creek provides habitat for anadromous whitefish and char and for resident fish.



**AIR ACCESS\***

- Helmericks (Sheet 14), an unattended, 2,500 ft. dirt airstrip, is located approximately 10 miles west of West Sak 16. It is situated west of the main channel of the Colville River near the mouth, and should be considered for emergency use only. Ditches line both sides of runway, which gets soft when wet.
- Ugnu-Kuparuk (Sheet 51) is a continuously attended, 6,000 ft. gravel private airstrip serving the Kuparuk facilities. It is located approximately 12 miles southeast of West Sak 16.

**VESSEL ACCESS\* AND HYDROGRAPHIC CONDITIONS**

- Severe shoaling and continuous sediment transport occur in the Colville River delta. Water depths are generally less than 4 ft up to 5 miles offshore.

**COUNTERMEASURES CONSIDERATIONS**

- Sand-silt shores are very narrow (less than 20 ft wide) and interrupted by small creek mouths. Areas of potential overwash may make cleanup difficult. Backshore areas are wet tundra.
- West and north winds and Colville River discharge will cause floating oil to impinge on the shoreline west of Oliktok Point. There is some restricted access to beaches by shallow water.

**STAGING AREAS AND PRESTAGED EQUIPMENT**

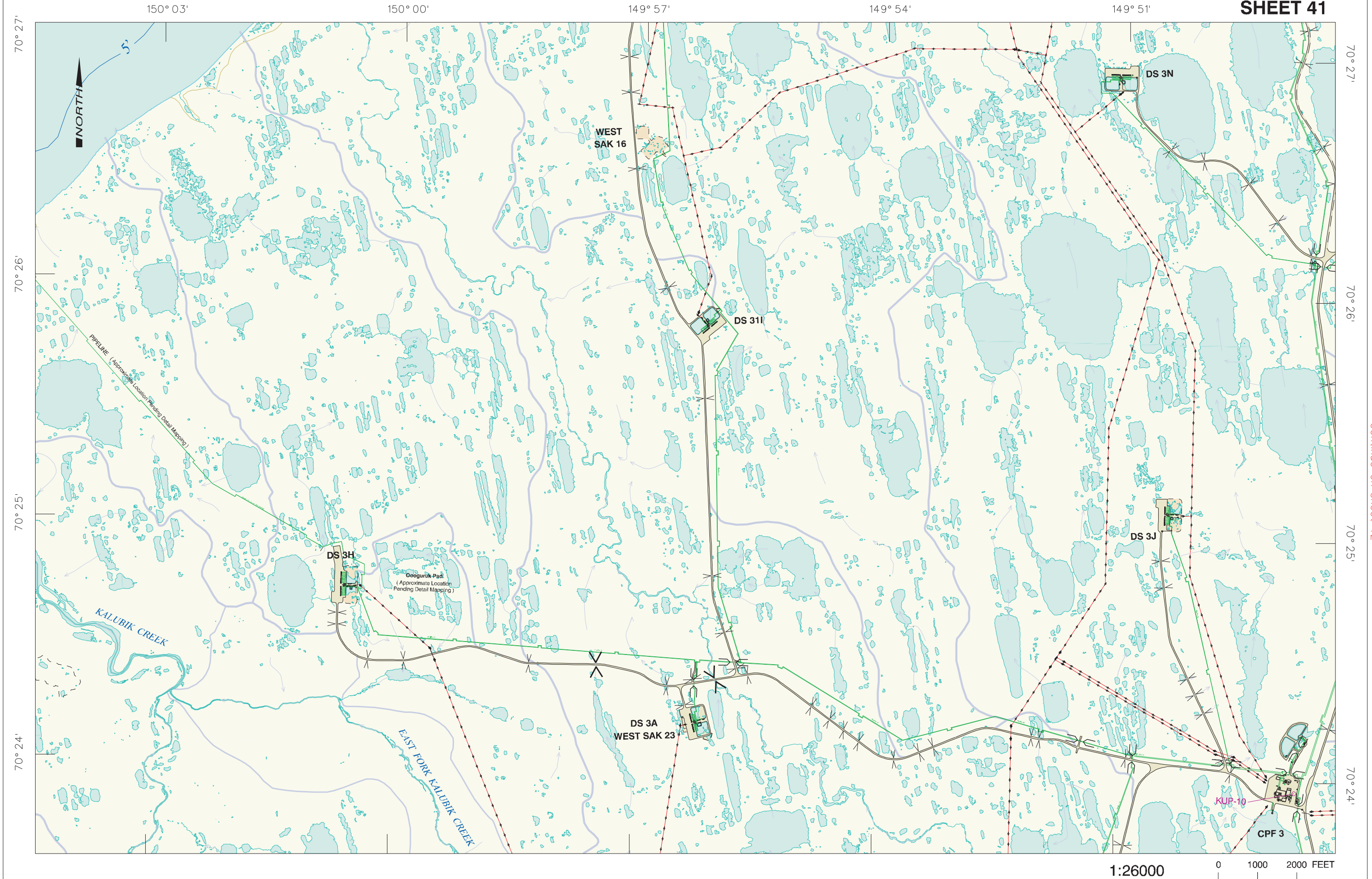
PRESTAGED EQUIP. AREA	LOCATION	ITEM	QUANTITY	TYPE
KUP-10	At CPF-3	Storage	2	2,400-gal. Fastank

\*See the latest *Supplement, Alaska* and United States Coast Pilot for current information on air and vessel access, respectively.



Continue on sheet 15

Continue on sheet 42



1:26000 0 1000 2000 FEET





**PRIORITY PROTECTION SITES**

- There are no priority protection sites on this sheet.

**GENERAL SENSITIVITIES**

- Coastal areas support high concentrations of breeding, nesting, brood-rearing, and molting waterbirds during the summer.
- Concentrations of swans, ducks, geese, and shorebirds are present here in June before open water is present elsewhere.
- This is a Spectacled Eider nesting area.
- This is a Brant nesting area. Birds are present from May through July.
- Plan to deploy bird-hazing systems during the open-water season.
- The Ugnuravik River provides habitat for anadromous whitefish and for resident fish.



**AIR ACCESS\***

- Ugnu-Kuparuk (Sheet 51) is a continuously attended, 6,000 ft. gravel private airstrip serving the Kuparuk facilities. It is located approximately 9 miles south of MPU N Pad.
- Helmericks (Sheet 14), an unattended, 2,500 ft. dirt airstrip, is located approximately 16 miles west of MPU N Pad. It is situated west of the main channel of the Colville River near the mouth, and should be considered for emergency use only. Ditches line both sides of runway, which gets soft when wet.

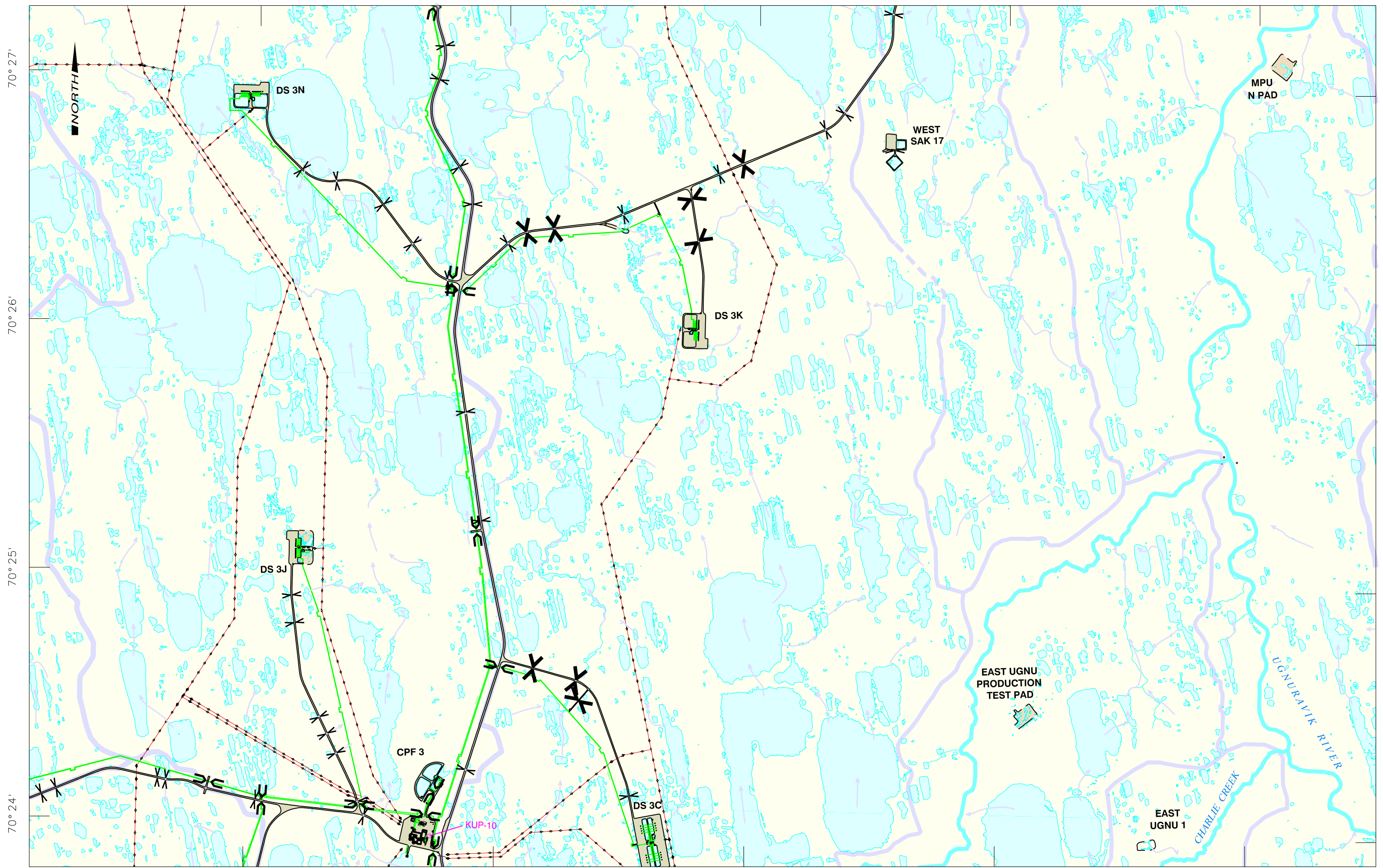
**VESSEL ACCESS\* AND HYDROGRAPHIC CONDITIONS**

- There are no marine waters or shorelines on this sheet.

**STAGING AREAS AND PRESTAGED EQUIPMENT**

PRESTAGED EQUIP. AREA	LOCATION	ITEM	QUANTITY	TYPE
KUP-10	At CPF-3	Storage	2	2,400-gal. Fastank

\*See the latest *Supplement, Alaska* and United States Coast Pilot for current information on air and vessel access, respectively.



Continue on sheet 41

Continue on sheet 43

1:26000

0 1000 2000 FEET



### PRIORITY PROTECTION SITES

- There are no priority protection sites on this sheet.

### GENERAL SENSITIVITIES

- Coastal areas support high concentrations of breeding, nesting, brood-rearing, and molting waterbirds during the summer.
- Concentrations of swans, ducks, geese, and shorebirds are present here in June before open water is present elsewhere.
- This is a Brant nesting, brood-rearing, and molting area. Birds are present from May through August.
- Pairs of Spectacled Eiders have been found in this area.
- Plan to deploy bird-hazing systems during the open-water season.
- The Ugnuravik River provides habitat for anadromous whitefish and for resident fish.

### CULTURAL SITES

Information on the exact locations of cultural sites is confidential. This information is contained in the *North Slope Archaeological Data* document, copies of which are kept at the following offices: State Historical Preservation Officer (SHPO) (907-269-8721), ACS in Deadhorse (907-659-2405), North Slope Borough Lands Division (907-852-0322), North Slope Borough Lands Division (907-852-0322), BPXA Crisis Center in Anchorage (907-564-5243), and the ConocoPhillips Incident Command Center in Anchorage (907-265-1000). The following cultural site(s) are located in the area depicted on this sheet:

- XBP-008 west of Central Milne Creek and south of MPU H Pad



### AIR ACCESS\*

- Ugnu-Kuparuk (Sheet 51) is a continuously attended, 6,000 ft. gravel private airstrip serving the Kuparuk facilities. It is located approximately 10 miles south of MPU Central Facilities Pad.

### VESSEL ACCESS\* AND HYDROGRAPHIC CONDITIONS

- There are no marine waters or shorelines on this sheet.

### STAGING AREAS AND PRESTAGED EQUIPMENT

- Boom is typically predeployed seasonally on Central Milne Creek northeast of Milne Point Road.

\*See the latest *Supplement, Alaska* and United States Coast Pilot for current information on air and vessel access, respectively.



Continue on sheet 40

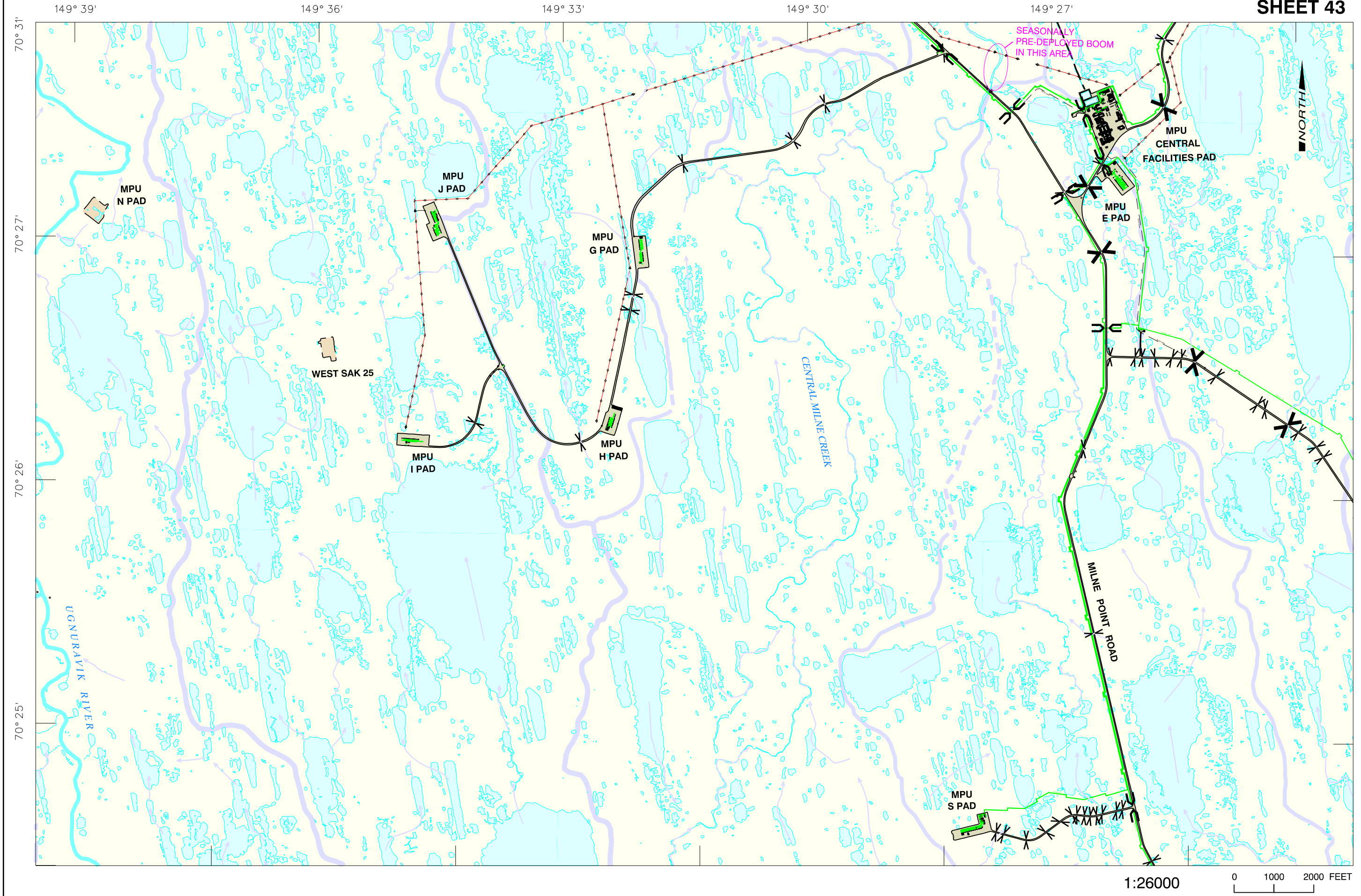
Continue on sheet 42

70° 27'

70° 26'

70° 25'

Continue on sheet 44



1:26000 0 1000 2000 FEET





### PRIORITY PROTECTION SITES

- There are no priority protection sites on this sheet.

### GENERAL SENSITIVITIES

- Coastal areas support high concentrations of breeding, nesting, brood-rearing, and molting waterbirds during the summer.
- Concentrations of swans, ducks, geese, and shorebirds are present here in June before open water is present elsewhere.
- This is a Brant nesting area. Birds are present from May through July.
- Pairs of Spectacled Eiders have been found in this area.
- Plan to deploy bird-hazing systems during the open-water season.
- East Milne Creek provides habitat for anadromous whitefish and char and for resident fish.



### AIR ACCESS\*

- Ugnu-Kuparuk (Sheet 51) is a continuously attended, 6,000 ft. gravel private airstrip serving the Kuparuk facilities. It is located approximately 9 miles southwest of MPU K Pad.
- A continuously attended, private heliport is located at the Northstar facility (Sheet 59), approximately 15 miles east-northeast of MPU K Pad. The wooden pad is 62'x55'.
- An unattended and unmaintained 1,500 ft. gravel private airstrip is located at Point McIntyre (Sheet 62), approximately 16 miles east of MPU K Pad. Runway has soft spots, with erosion, grass and rocks up to 3". Recommend emergency use only.

### VESSEL ACCESS\* AND HYDROGRAPHIC CONDITIONS

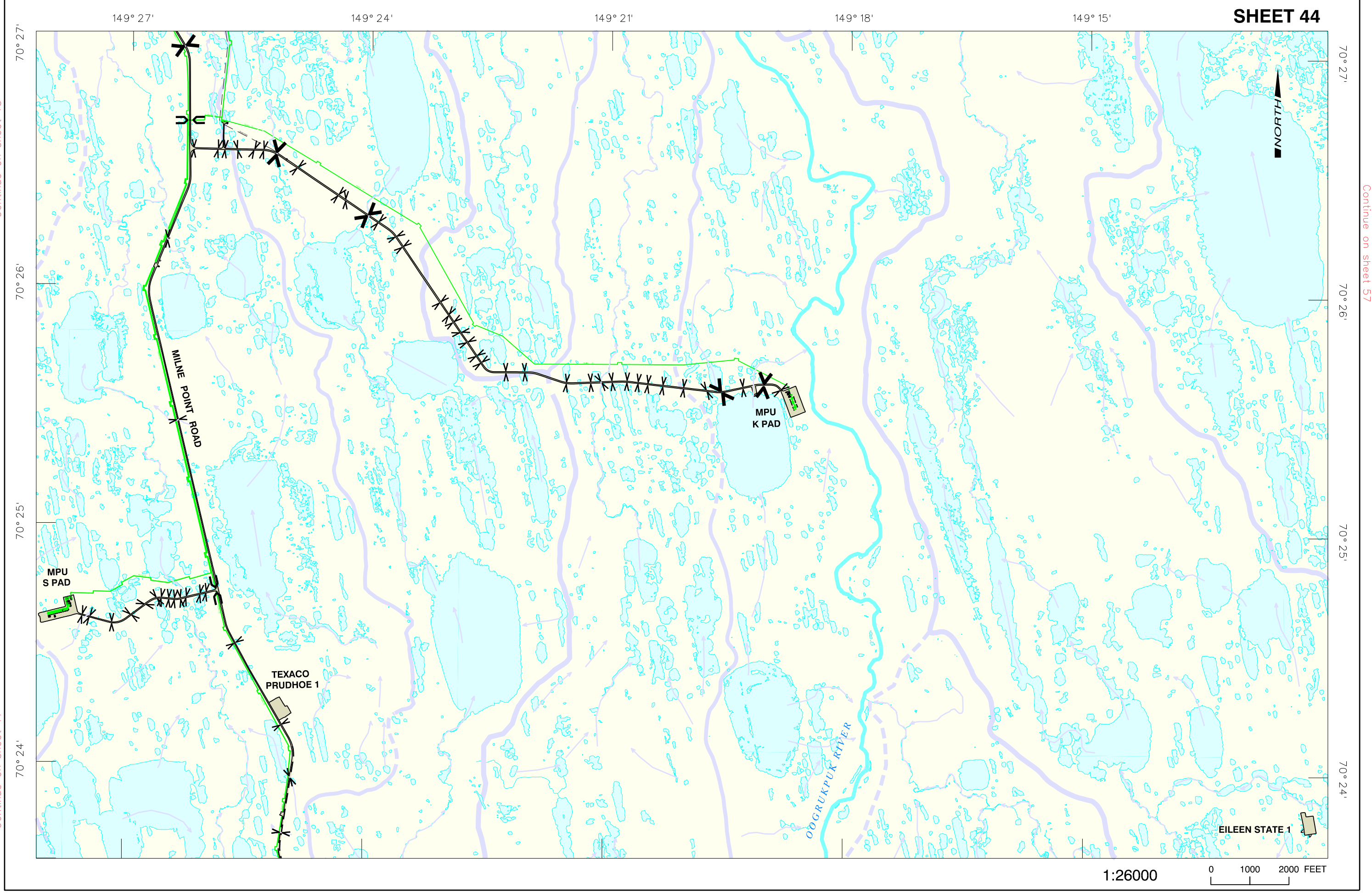
- There are no marine waters or shorelines on this sheet.

\*See the latest *Supplement, Alaska* and United States Coast Pilot for current information on air and vessel access, respectively.

Continue on sheet 43

Continue on sheet 57

Continue on sheet 47





### PRIORITY PROTECTION SITES

- There are no priority protection sites on this sheet.

### GENERAL SENSITIVITIES

- Coastal areas support high concentrations of breeding, nesting, brood-rearing, and molting waterbirds during the summer.
- Concentrations of swans, ducks, geese, and shorebirds are present here in June before open water is present elsewhere.
- This is a Brant nesting, brood-rearing, and molting area. Birds are present from May through August.
- Plan to deploy bird-hazing systems during the open-water season.
- Kalubik Creek provides habitat for anadromous whitefish and char and for resident fish.



### AIR ACCESS\*

- Ugnu-Kuparuk (Sheet 51) is a continuously attended, 6,000 ft. gravel private airstrip serving the Kuparuk facilities. It is located approximately 9 miles southeast of West Sak 23.
- Helmericks (Sheet 14), an unattended, 2,500 ft. dirt airstrip, is located approximately 11 miles west-northwest of West Sak 23. It is situated west of the main channel of the Colville River near the mouth, and should be considered for emergency use only. Ditches line both sides of runway, which gets soft when wet.

### VESSEL ACCESS\* AND HYDROGRAPHIC CONDITIONS

- There are no marine waters or shorelines on this sheet.

### STAGING AREAS AND PRESTAGED EQUIPMENT

- Boom is typically predeployed seasonally on Kalubik Creek northwest of DS 3G.

\*See the latest *Supplement, Alaska* and United States Coast Pilot for current information on air and vessel access, respectively.

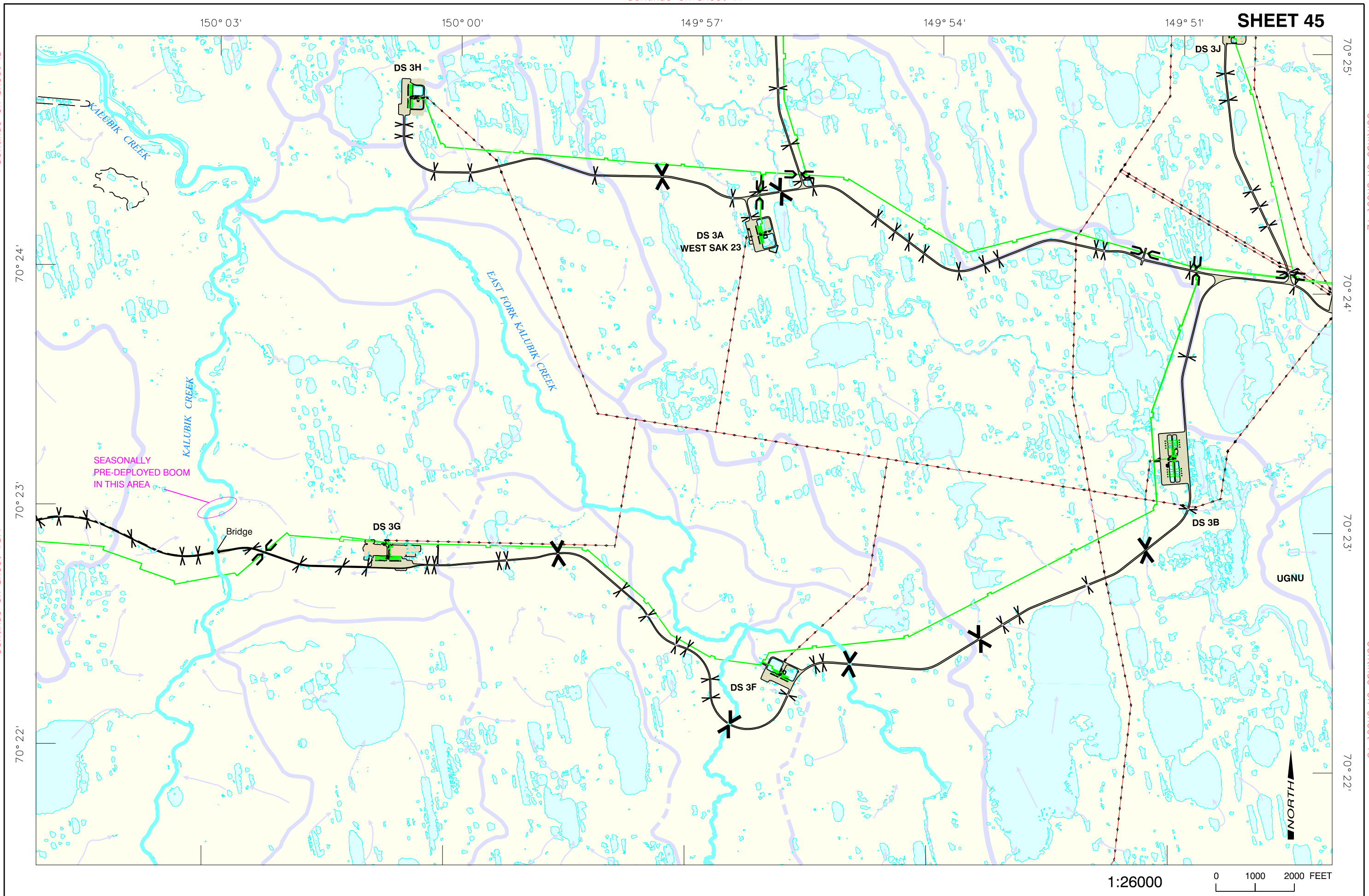


Continue on sheet 15

Continue on sheet 42

Continue on sheet 45A

Continue on sheet 46



1:26000

0 1000 2000 FEET





### PRIORITY PROTECTION SITES

- There are no priority protection sites on this sheet.

### GENERAL SENSITIVITIES

- Coastal areas support high concentrations of breeding, nesting, brood-rearing, and molting waterbirds during the summer.
- Concentrations of swans, ducks, geese, and shorebirds are present here in June before open water is present elsewhere.
- This is a Brant nesting, brood-rearing, and molting area. Birds are present from May through August.
- Plan to deploy bird-hazing systems during the open-water season.
- Kalubik Creek provides habitat for anadromous whitefish and char and for resident fish.



### AIR ACCESS\*

- Helmericks (Sheet 14), an unattended, 2,500 ft. dirt airstrip, is located approximately 5 miles northwest of DS 3S. It is situated west of the main channel of the Colville River near the mouth, and should be considered for emergency use only. Ditches line both sides of runway, which gets soft when wet.
- Ugnu-Kuparuk (Sheet 51) is a continuously attended, 6,000 ft. gravel private airstrip serving the Kuparuk facilities. It is located approximately 15 miles east-southeast of DS 3S.

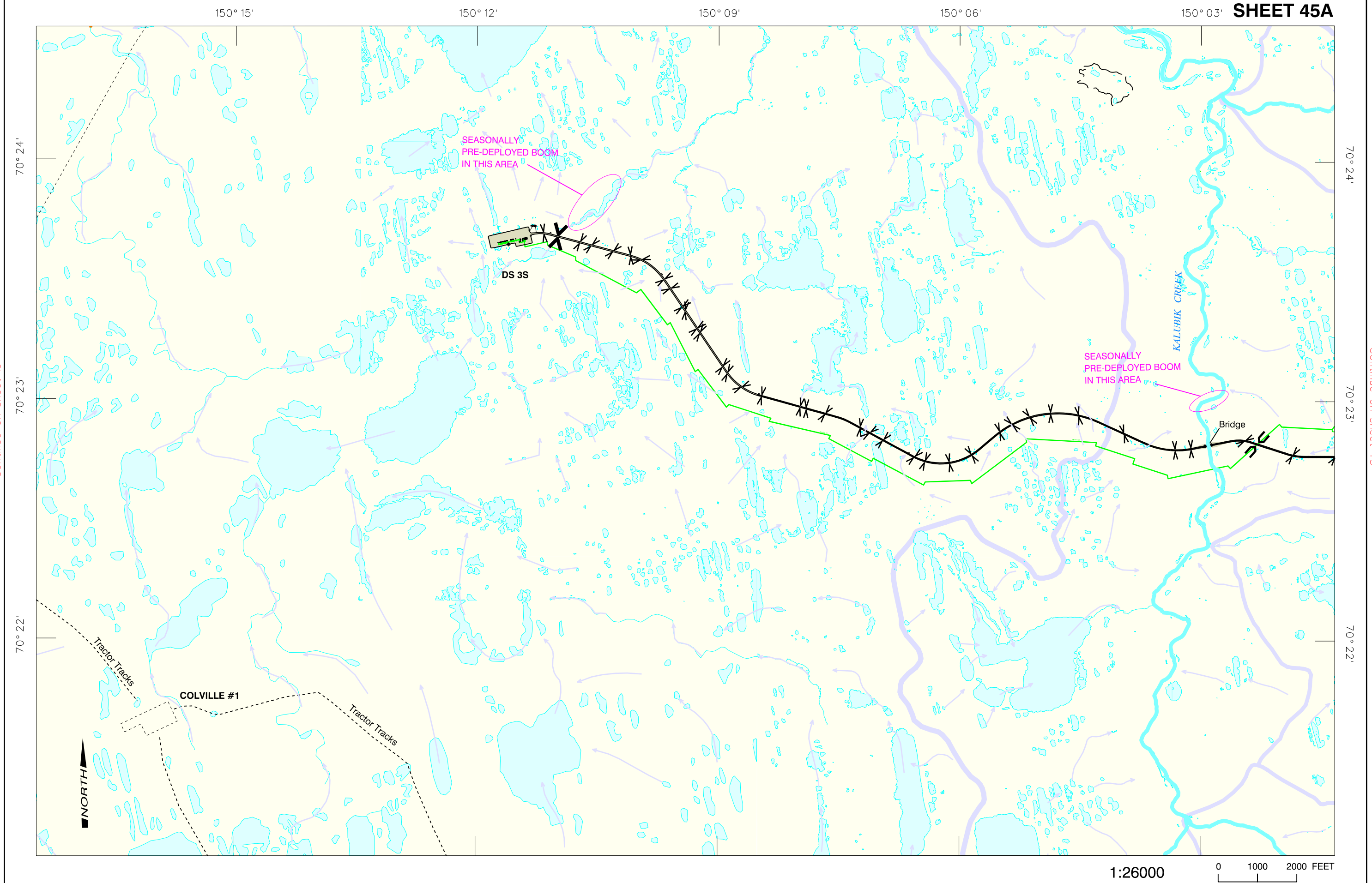
### VESSEL ACCESS\* AND HYDROGRAPHIC CONDITIONS

- There are no marine waters or shorelines on this sheet.

### STAGING AREAS AND PRESTAGED EQUIPMENT

- Boom is typically predeployed seasonally on Kalubik Creek north of road to DS 3S.
- Boom is typically predeployed seasonally on the stream just northeast of DS 3S.

\*See the latest *Supplement, Alaska* and United States Coast Pilot for current information on air and vessel access, respectively.



Continue on sheet 19

Continue on sheet 45



**PRIORITY PROTECTION SITES**

- There are no priority protection sites on this sheet.

**GENERAL SENSITIVITIES**

- Coastal areas support high concentrations of breeding, nesting, brood-rearing, and molting waterbirds during the summer.
- Concentrations of swans, ducks, geese, and shorebirds are present here in June before open water is present elsewhere.
- This is a Spectacled Eider nesting area.
- This is a Brant nesting, brood-rearing, and molting area. Birds are present from May through August.
- Plan to deploy bird-hazing systems during the open-water season.
- Charlie Creek provides habitat for anadromous whitefish and for resident fish.
- The Ugnuravik River provides habitat for anadromous whitefish and for resident fish.

**CULTURAL SITES**

Information on the exact locations of cultural sites is confidential. This information is contained in the *North Slope Archaeological Data* document, copies of which are kept at the following offices: State Historical Preservation Officer (SHPO) (907-269-8721), ACS in Deadhorse (907-659-2405), North Slope Borough Lands Division (907-852-0322), BPXA Crisis Center in Anchorage (907-564-5243), and the ConocoPhillips Incident Command Center in Anchorage (907-265-1000). The following cultural site(s) are located in the area depicted on this sheet:

- XBP-033 west of the road south of CPF 3



**AIR ACCESS\***

- Ugnu-Kuparuk (Sheet 51) is a continuously attended, 6,000 ft. gravel private airstrip serving the Kuparuk facilities. It is located approximately 8 miles southeast of CPF 3.
- Helmericks (Sheet 14), an unattended, 2,500 ft. dirt airstrip, is located approximately 13 miles west of CPF 3. It is situated west of the main channel of the Colville River near the mouth, and should be considered for emergency use only. Ditches line both sides of runway, which gets soft when wet.

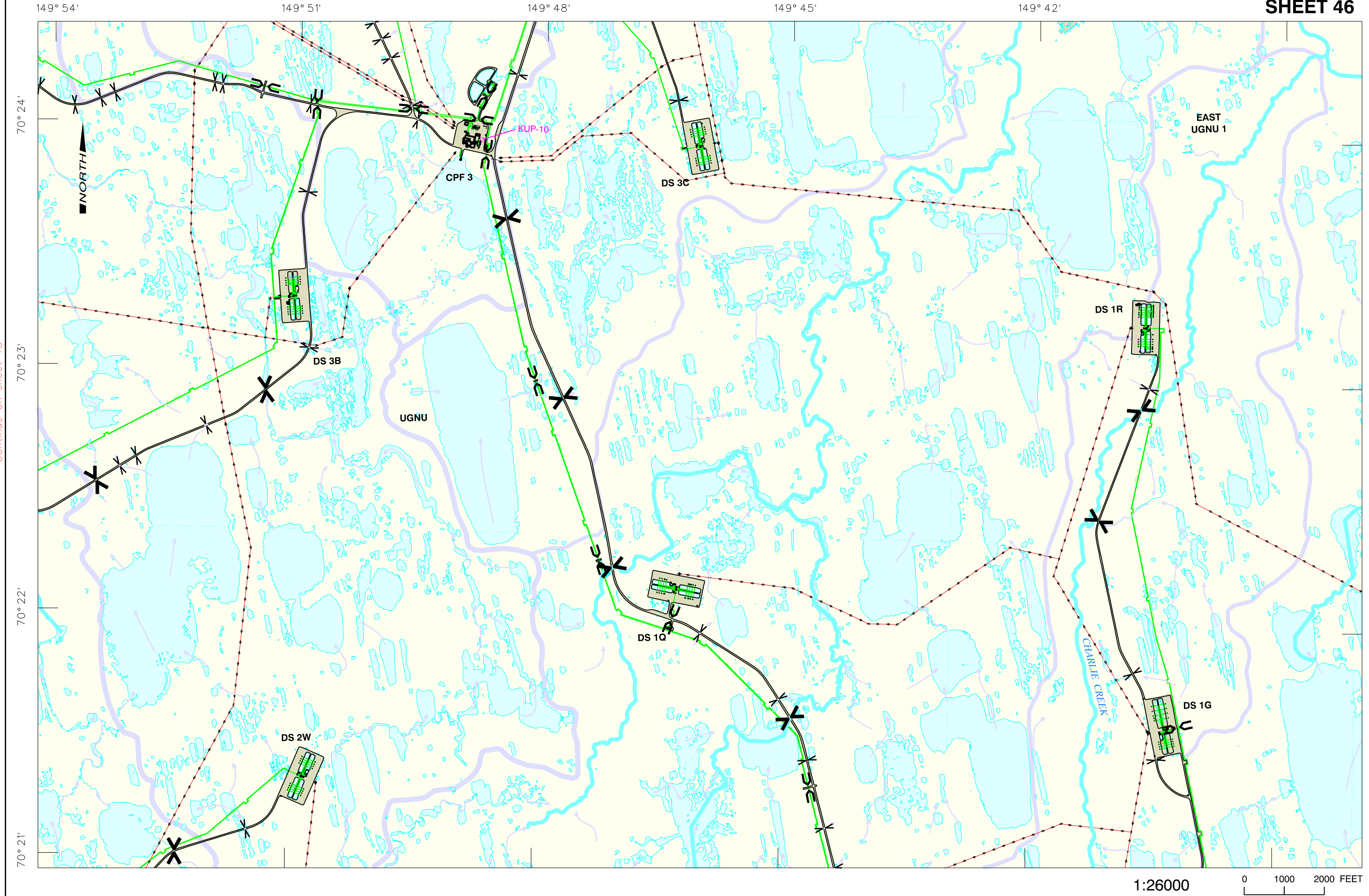
**VESSEL ACCESS\* AND HYDROGRAPHIC CONDITIONS**

- There are no marine waters or shorelines on this sheet.

**STAGING AREAS AND PRESTAGED EQUIPMENT**

PRESTAGED EQUIP. AREA	LOCATION	ITEM	QUANTITY	TYPE
KUP-10	At CPF-3	Storage	2	2,400-gal. Fastank

\*See the latest *Supplement, Alaska* and United States Coast Pilot for current information on air and vessel access, respectively.



Continue on sheet 45

70° 24'

70° 23'

70° 22'

Continue on sheet 47





### PRIORITY PROTECTION SITES

- There are no priority protection sites on this sheet.

### GENERAL SENSITIVITIES

- Coastal areas support high concentrations of breeding, nesting, brood-rearing, and molting waterbirds during the summer.
- Concentrations of swans, ducks, geese, and shorebirds are present here in June before open water is present elsewhere.
- This is a Brant nesting, brood-rearing, and molting area. Birds are present from May through August.
- Pairs of Spectacled Eiders have been found in this area.
- Plan to deploy bird-hazing systems during the open-water season.
- The Ugnuravik River and Charlie Creek provide habitat for anadromous whitefish and for resident fish.



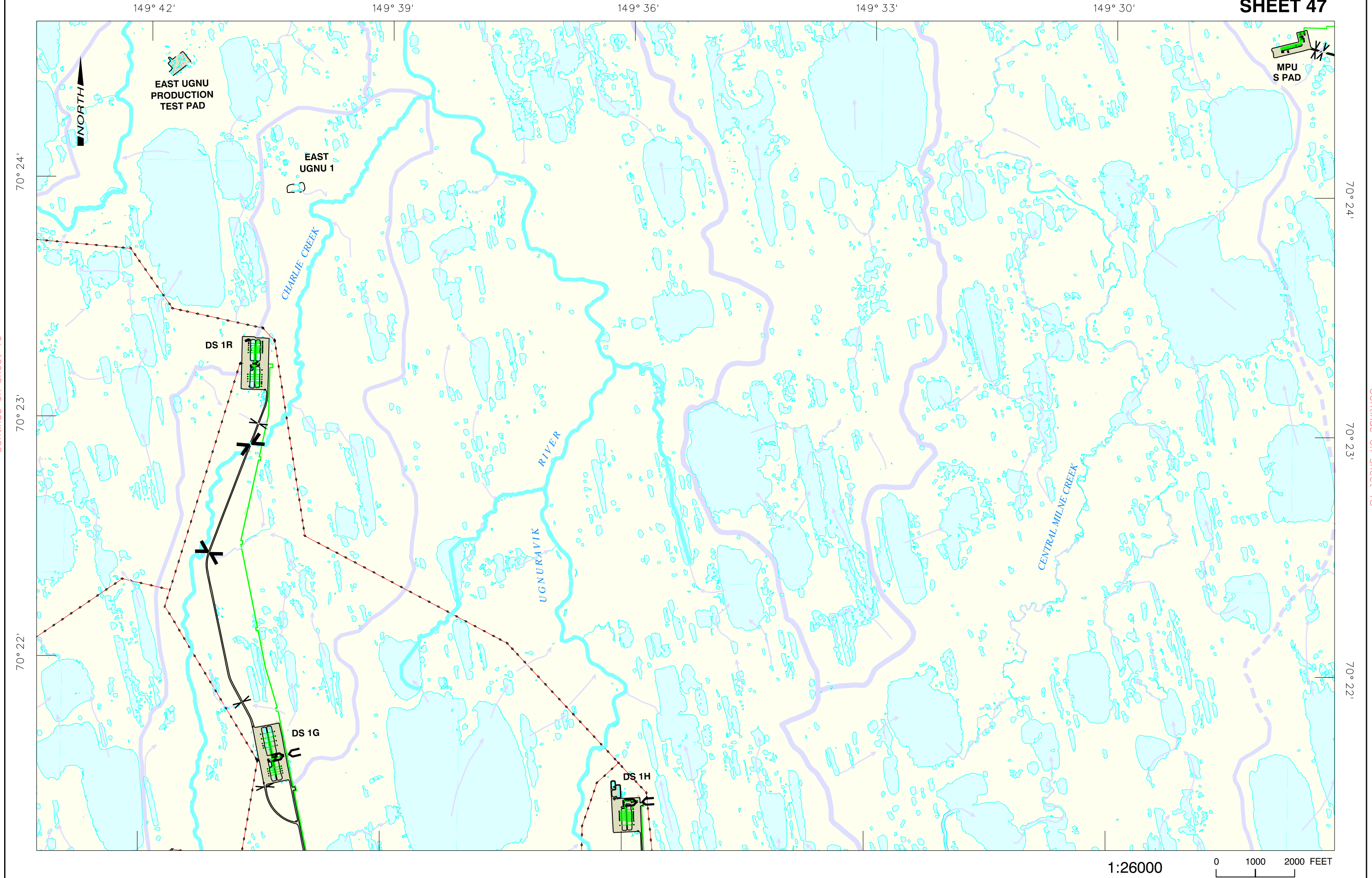
### AIR ACCESS\*

- Ugnu-Kuparuk (Sheet 51) is a continuously attended, 6,000 ft. gravel private airstrip serving the Kuparuk facilities. It is located approximately 5 miles south-southeast of DS 1R.
- Helmericks (Sheet 14), an unattended, 2,500 ft. dirt airstrip, is located approximately 16 miles west-northwest of DS 1R. It is situated west of the main channel of the Colville River near the mouth, and should be considered for emergency use only. Ditches line both sides of runway, which gets soft when wet.

### VESSEL ACCESS\* AND HYDROGRAPHIC CONDITIONS

- There are no marine waters or shorelines on this sheet.

\*See the latest *Supplement, Alaska* and United States Coast Pilot for current information on air and vessel access, respectively.



1:26000

0 1000 2000 FEET



**PRIORITY PROTECTION SITES**

- There are no priority protection sites on this sheet.

**GENERAL SENSITIVITIES**

- Coastal areas support high concentrations of breeding, nesting, brood-rearing, and molting waterbirds during the summer.
- Concentrations of swans, ducks, geese, and shorebirds are present here in June before open water is present elsewhere.
- This is a Brant nesting, brood-rearing, and molting area. Birds are present from May through August.
- Pairs of Spectacled Eiders have been found in this area.
- Plan to deploy bird-hazing systems during the open-water season.
- East Milne Creek provides habitat for anadromous whitefish and char and for resident fish.



**AIR ACCESS\***

- The Pt. McIntyre airstrip (Sheet 62) is approximately 16 miles east-northeast of ARCO NW Eileen 1. This is a 1,500-ft gravel strip, which is unattended and not maintained. Emergency use only is recommended.
- The Kuparuk airstrip (Sheet 51) is approximately 5 miles west-southwest of ARCO NW Eileen 1.

AIRSTRIP	DESCRIPTION/ LOCATION	FIXED-WING MINIMUMS	FUEL/ SERVICES	TRAFFIC CONTROL
Kuparuk Airstrip	6,000-ft. gravel runway, attended continuously	VFR: 1 mi vis. clear of clouds IFR: 0.75 mi vis.	Jet A	24-hr advance notification required: 907-659-7213

**VESSEL ACCESS\* AND HYDROGRAPHIC CONDITIONS**

- There are no marine waters or shorelines on this sheet.

\*See the latest *Supplement, Alaska* and United States Coast Pilot for current information on air and vessel access, respectively.

149° 27'

149° 24'

149° 21'

149° 18'

149° 15'



EILEEN STATE 1

OGRUKPUK RIVER

ARCO NW  
EILEEN 1

MOBIL  
SOCAL  
32-29E

MILNE POINT ROAD

Tractor Tracks

L PAD

70° 23'

70° 23'

70° 22'

70° 22'

70° 21'

70° 21'

Continue on sheet 47

1:26000

0 1000 2000 FEET





**PRIORITY PROTECTION SITES**

- There are no priority protection sites on this sheet.

**GENERAL SENSITIVITIES**

- Coastal areas support high concentrations of breeding, nesting, brood-rearing, and molting waterbirds during the summer.
- Concentrations of swans, ducks, geese, and shorebirds are present here in June before open water is present elsewhere.
- This is a Spectacled Eider nesting area.
- This is a Brant nesting area. Birds are present from May through July.
- Plan to deploy bird-hazing systems during the open-water season.
- Kalubik Creek provides habitat for anadromous whitefish and char and for resident fish.



**AIR ACCESS\***

- The Kuparuk airstrip (Sheet 51) is approximately 9 miles east of Mine Site F.

AIRSTRIP	DESCRIPTION/ LOCATION	FIXED-WING MINIMUMS	FUEL/ SERVICES	TRAFFIC CONTROL
Kuparuk Airstrip	6,000-ft. gravel runway, attended continuously	VFR: 1 mi vis. clear of clouds IFR: 0.75 mi vis.	Jet A	24-hr advance notification required: 907-659-7213

**VESSEL ACCESS\* AND HYDROGRAPHIC CONDITIONS**

- There are no marine waters or shorelines on this sheet.

\*See the latest *Supplement, Alaska* and United States Coast Pilot for current information on air and vessel access, respectively.

150° 06'

150° 03'

150° 00'

149° 57'

149° 54'



70° 21'

70° 20'

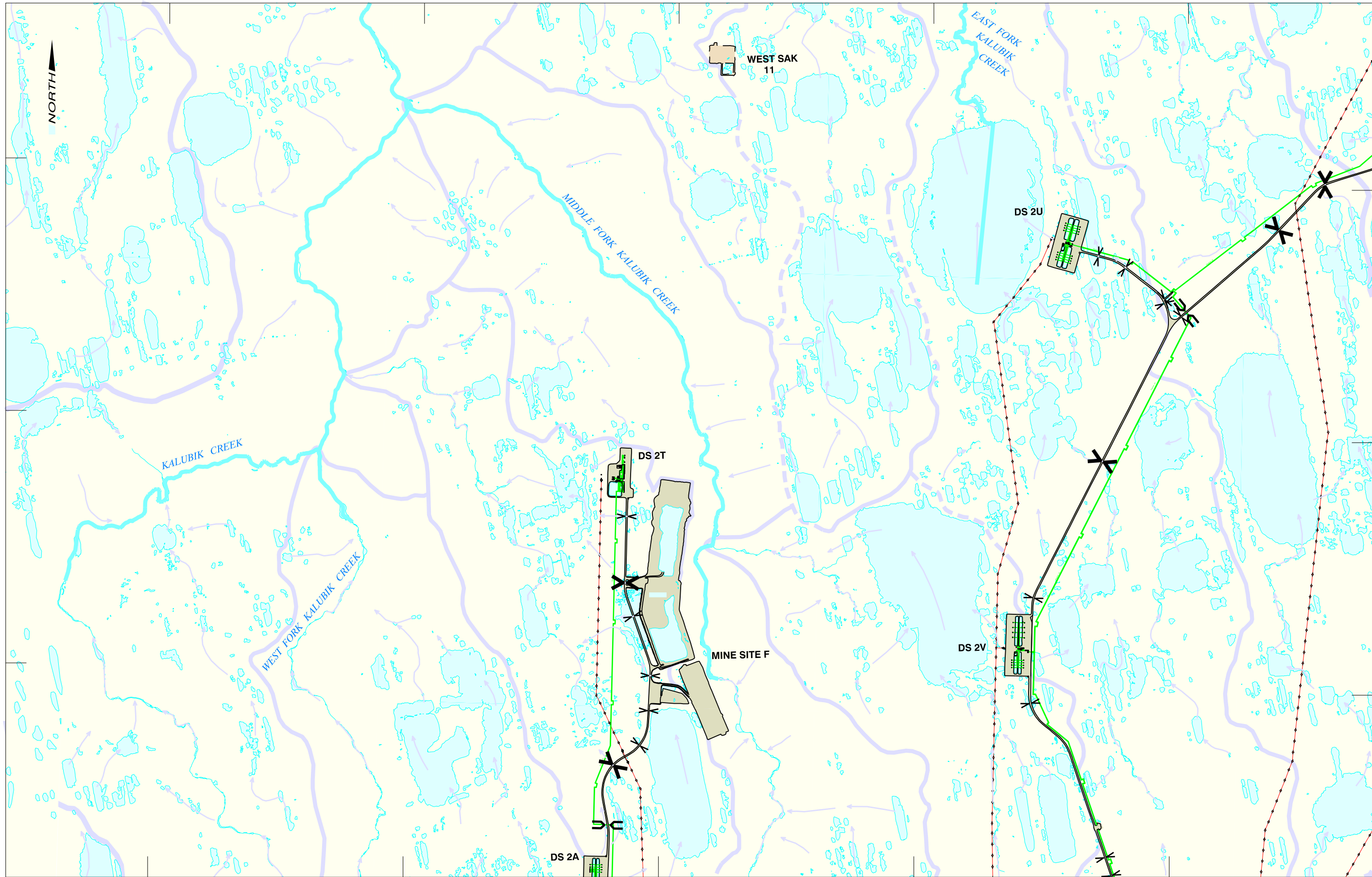
70° 19'

70° 21'

70° 20'

70° 19'

Continue on sheet 49A



1:26000

0 1000 2000 FEET



**PRIORITY PROTECTION SITES**

- There are no priority protection sites on this sheet.

**GENERAL SENSITIVITIES**

- Coastal areas support high concentrations of breeding, nesting, brood-rearing, and molting waterbirds during the summer.
- Concentrations of swans, ducks, geese, and shorebirds are present here in June before open water is present elsewhere.
- Plan to deploy bird-hazing systems during the open-water season.
- Kalubik Creek provides habitat for anadromous whitefish and char and for resident fish.



**AIR ACCESS\***

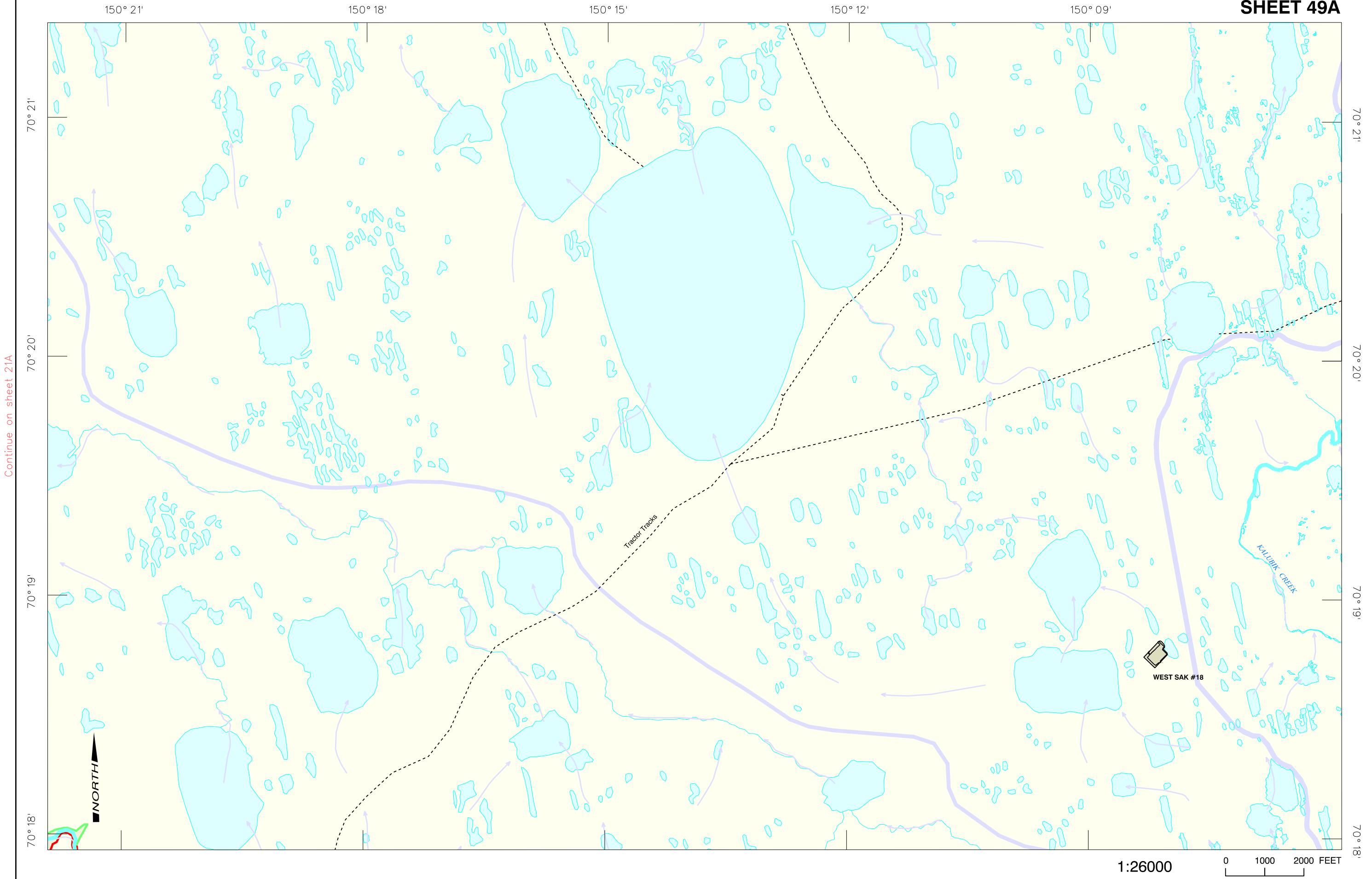
- The Kuparuk airstrip (Sheet 51) is approximately 12 miles east of West Sak #18.

AIRSTRIP	DESCRIPTION/ LOCATION	FIXED-WING MINIMUMS	FUEL/ SERVICES	TRAFFIC CONTROL
Kuparuk Airstrip	6,000-ft. gravel runway, attended continuously	VFR: 1 mi vis. clear of clouds IFR: 0.75 mi vis.	Jet A	24-hr advance notification required: 907-659-7213

**VESSEL ACCESS\* AND HYDROGRAPHIC CONDITIONS**

- There are no marine waters or shorelines on this sheet.

\*See the latest *Supplement, Alaska* and United States Coast Pilot for current information on air and vessel access, respectively.







**PRIORITY PROTECTION SITES**

- There are no priority protection sites on this sheet.

**GENERAL SENSITIVITIES**

- Coastal areas support high concentrations of breeding, nesting, brood-rearing, and molting waterbirds during the summer.
- Concentrations of swans, ducks, geese, and shorebirds are present here in June before open water is present elsewhere.
- This is a Spectacled Eider nesting area.
- This is a Brant nesting area. Birds are present from May through July.
- Plan to deploy bird-hazing systems during the open-water season.
- Kalubik Creek provides habitat for anadromous whitefish and char and for resident fish.
- Charlie Creek provides habitat for anadromous whitefish and for resident fish.



**AIR ACCESS\***

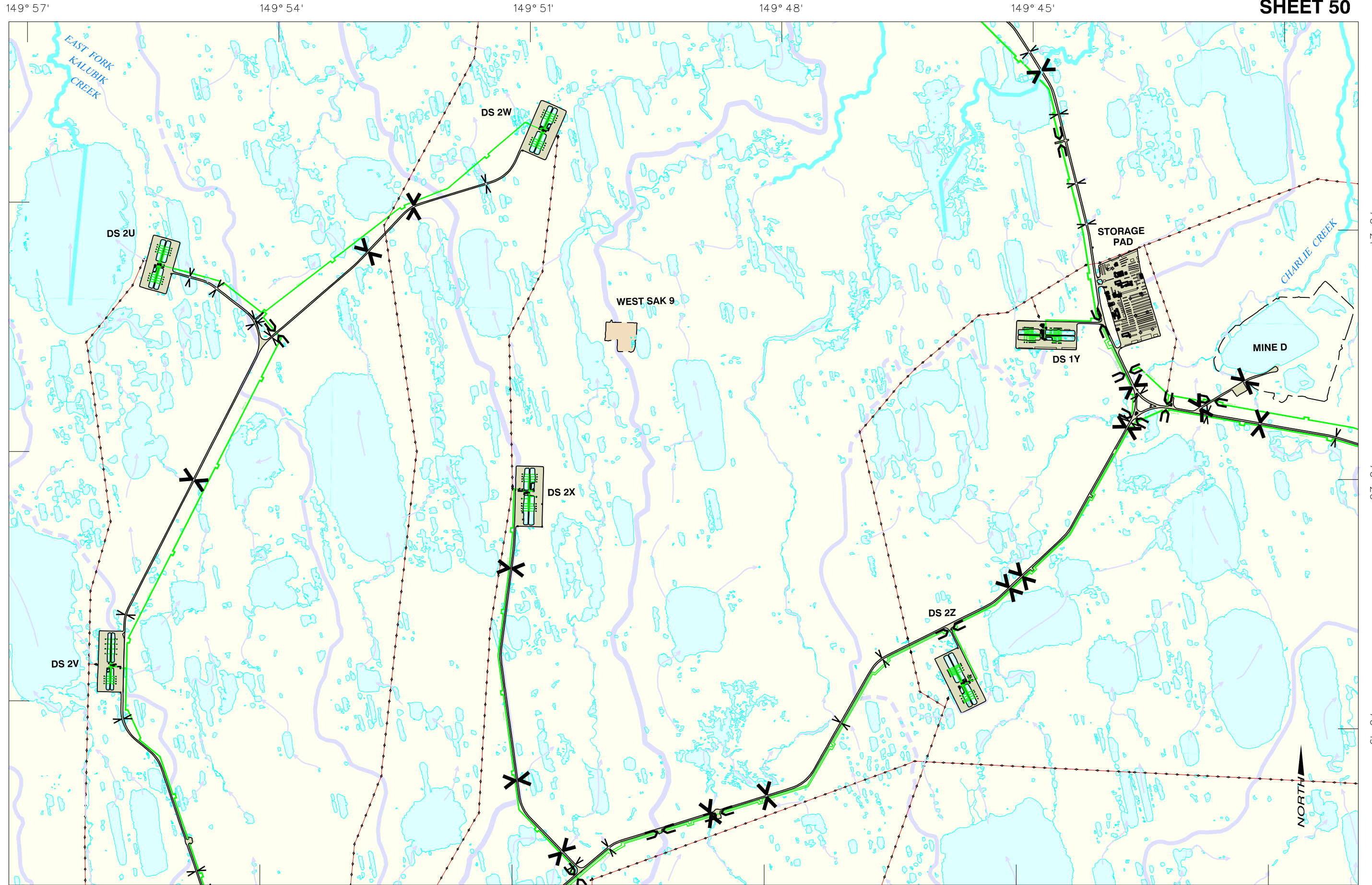
- The Kuparuk airstrip (Sheet 51) is approximately 5 miles west of DS 2X.

AIRSTRIP	DESCRIPTION/LOCATION	FIXED-WING MINIMUMS	FUEL/SERVICES	TRAFFIC CONTROL
Kuparuk Airstrip	6,000-ft. gravel runway, attended continuously	VFR: 1 mi vis. clear of clouds IFR: 0.75 mi vis.	Jet A	24-hr advance notification required: 907-659-7213

**VESSEL ACCESS\* AND HYDROGRAPHIC CONDITIONS**

- There are no marine waters or shorelines on this sheet.

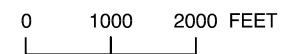
\*See the latest *Supplement, Alaska* and United States Coast Pilot for current information on air and vessel access, respectively.



Continue on sheet 49

Continue on sheet 51

1:26000





**PRIORITY PROTECTION SITES**

- There are no priority protection sites on this sheet.

**GENERAL SENSITIVITIES**

- Coastal areas support high concentrations of breeding, nesting, brood-rearing, and molting waterbirds during the summer.
- Concentrations of swans, ducks, geese, and shorebirds are present here in June before open water is present elsewhere.
- This is a Brant nesting area. Birds are present from May through July.
- Plan to deploy bird-hazing systems during the open-water season.
- The Ugnuravik River and Charlie Creek provide habitat for anadromous whitefish and for resident fish.
- There is a freshwater intake west of DS 1B and north of Mine C at approximately 20 to 25 ft below the surface.



**AIR ACCESS\***

AIRSTRIP	DESCRIPTION/ LOCATION	FIXED-WING MINIMUMS	FUEL/ SERVICES	TRAFFIC CONTROL
Kuparuk Airstrip	6,000-ft. gravel runway, attended continuously	VFR: 1 mi vis. clear of clouds IFR: 0.75 mi vis.	Jet A	24-hr advance notification required: 907-659-7213

**VESSEL ACCESS\* AND HYDROGRAPHIC CONDITIONS**

- There are no marine waters or shorelines on this sheet.

\*See the latest *Supplement, Alaska* and United States Coast Pilot for current information on air and vessel access, respectively.



149° 42'

149° 39'

149° 36'

149° 33'

149° 30'

70° 21'

70° 20'

70° 19'

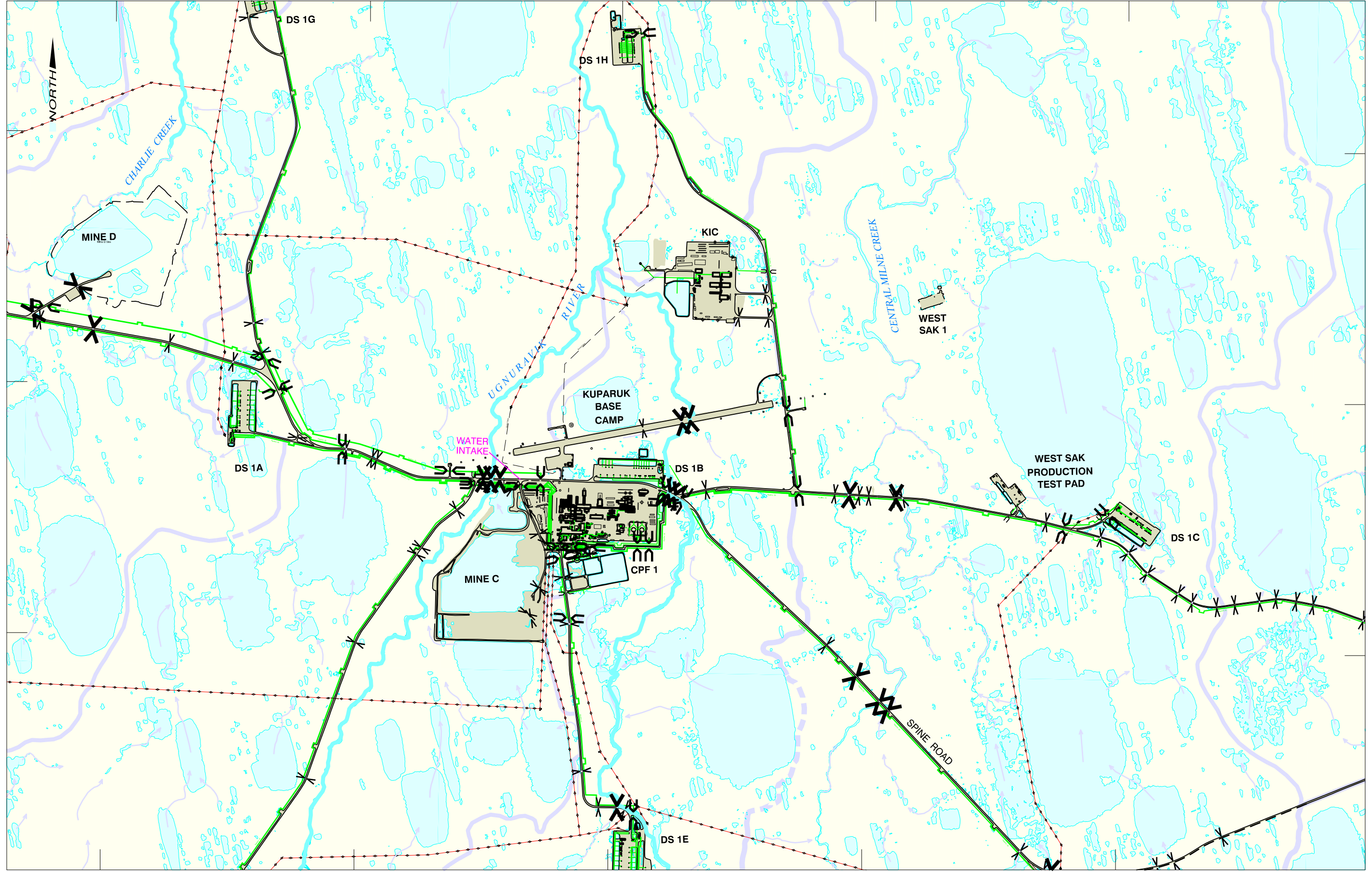
70° 21'

70° 20'

70° 19'

Continue on sheet 50

Continue on sheet 52



1:26000 0 1000 2000 FEET





**PRIORITY PROTECTION SITES**

- There are no priority protection sites on this sheet.

**GENERAL SENSITIVITIES**

- Coastal areas support high concentrations of breeding, nesting, brood-rearing, and molting waterbirds during the summer.
- Concentrations of swans, ducks, geese, and shorebirds are present here in June before open water is present elsewhere.
- This is a Brant nesting, brood-rearing, and molting area. Birds are present from May through August.
- Pairs of Spectacled Eiders have been found in this area.
- Plan to deploy bird-hazing systems during the open-water season.
- East Milne Creek provides habitat for anadromous whitefish and char and for resident fish.



**AIR ACCESS\***

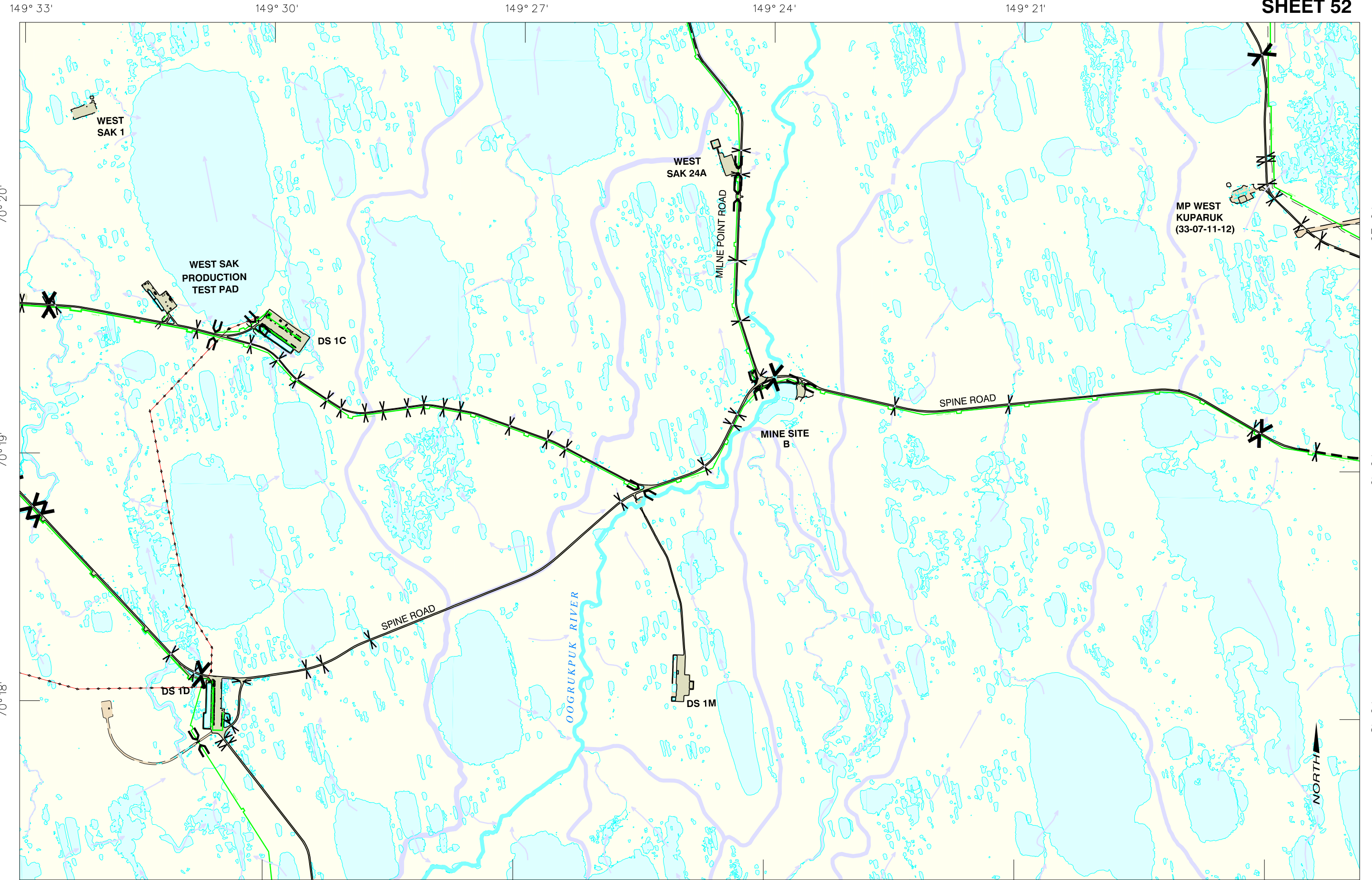
- The Kuparuk airstrip (Sheet 51) is approximately 4 miles west of Mine Site B.

AIRSTRIP	DESCRIPTION/ LOCATION	FIXED-WING MINIMUMS	FUEL/ SERVICES	TRAFFIC CONTROL
Kuparuk Airstrip	6,000-ft. gravel runway, attended continuously	VFR: 1 mi vis. clear of clouds IFR: 0.75 mi vis.	Jet A	24-hr advance notification required: 907-659-7213

**VESSEL ACCESS\* AND HYDROGRAPHIC CONDITIONS**

- There are no marine waters or shorelines on this sheet.

\*See the latest *Supplement, Alaska* and United States Coast Pilot for current information on air and vessel access, respectively.



Continue on sheet 51

Continue on sheet 68

1:26000

0 1000 2000 FEET



**PRIORITY PROTECTION SITES**

- There are no priority protection sites on this sheet.

**GENERAL SENSITIVITIES**

- Coastal areas support high concentrations of breeding, nesting, brood-rearing, and molting waterbirds during the summer.
- Concentrations of swans, ducks, geese, and shorebirds are present here in June before open water is present elsewhere.
- This is a Spectacled Eider nesting area.
- This is a Brant nesting area. Birds are present from May through July.
- Plan to deploy bird-hazing systems during the open-water season.
- Kalubik Creek provides habitat for anadromous whitefish and char and for resident fish.
- Polar bear dens have been found in this area. Dens may be in use from October through April.



**AIR ACCESS\***

- The Kuparuk airstrip (Sheet 51) is approximately 7 miles northeast of CPF 2.

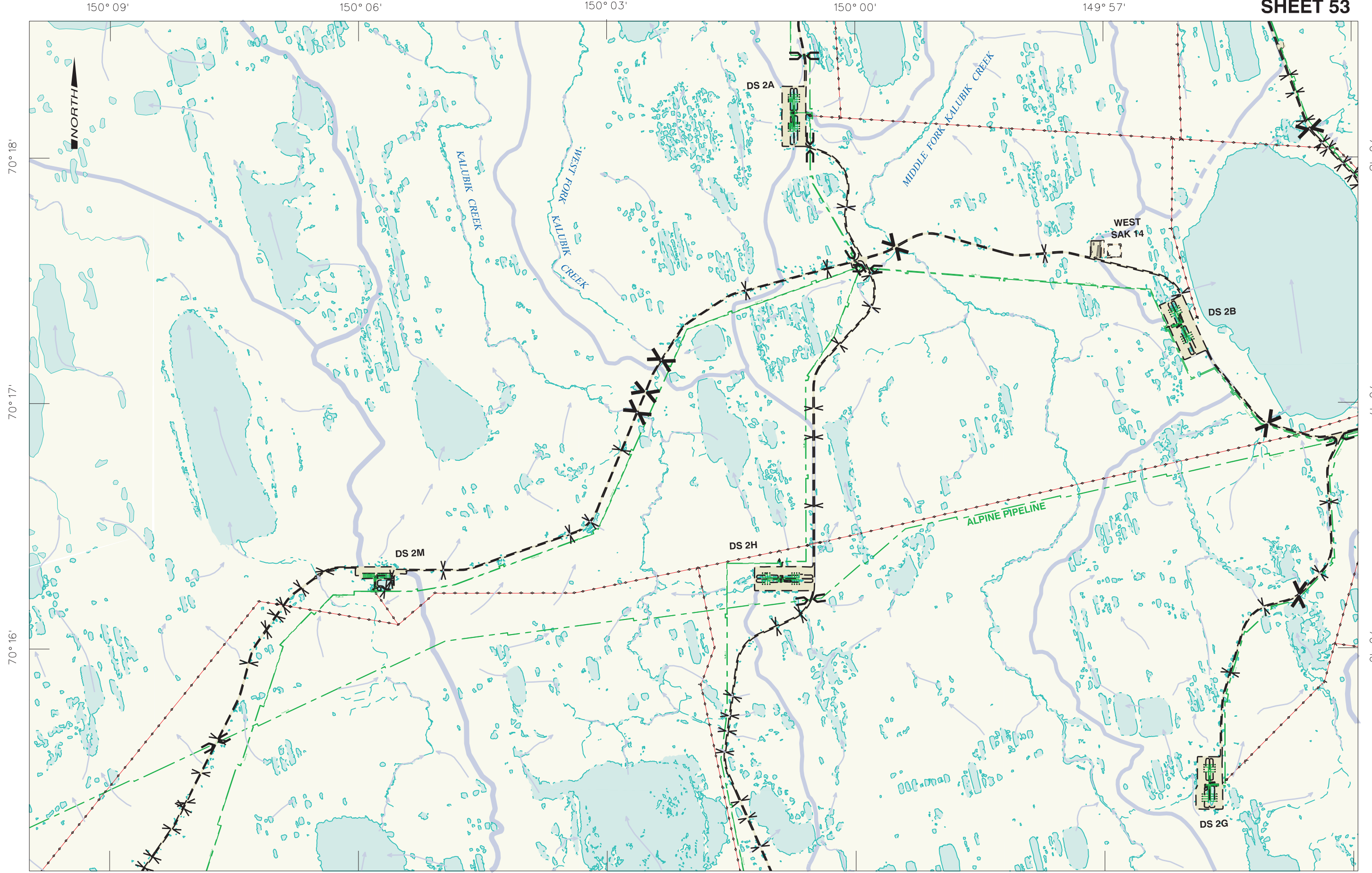
AIRSTRIP	DESCRIPTION/ LOCATION	FIXED-WING MINIMUMS	FUEL/ SERVICES	TRAFFIC CONTROL
Kuparuk Airstrip	6,000-ft. gravel runway, attended continuously	VFR: 1 mi vis. clear of clouds IFR: 0.75 mi vis.	Jet A	24-hr advance notification required: 907-659-7213

**VESSEL ACCESS\* AND HYDROGRAPHIC CONDITIONS**

- There are no marine waters or shorelines on this sheet.

\*See the latest *Supplement, Alaska* and United States Coast Pilot for current information on air and vessel access, respectively.





Continue on sheet 23B

Continue on sheet 54

Continue on sheet 212

150° 09'

150° 06'

150° 03'

150° 00'

149° 57'

70° 18'

70° 17'

70° 16'

70° 18'

70° 17'

70° 16'

1:26000

0 1000 2000 FEET





**PRIORITY PROTECTION SITES**

- There are no priority protection sites on this sheet.

**GENERAL SENSITIVITIES**

- Coastal areas support high concentrations of breeding, nesting, brood-rearing, and molting waterbirds during the summer.
- Concentrations of swans, ducks, geese, and shorebirds are present here in June before open water is present elsewhere.
- This is a Spectacled Eider nesting area.
- This is a Brant nesting area. Birds are present from May through July.
- Plan to deploy bird-hazing systems during the open-water season.
- The Ugnuravik River provides habitat for anadromous whitefish and for resident fish.



**AIR ACCESS\***

- The Kuparuk airstrip (Sheet 51) is approximately 7 miles northeast of CPF 2.

AIRSTRIP	DESCRIPTION/ LOCATION	FIXED-WING MINIMUMS	FUEL/ SERVICES	TRAFFIC CONTROL
Kuparuk Airstrip	6,000-ft. gravel runway, attended continuously	VFR: 1 mi vis. clear of clouds IFR: 0.75 mi vis.	Jet A	24-hr advance notification required: 907-659-7213

**VESSEL ACCESS\* AND HYDROGRAPHIC CONDITIONS**

- There are no marine waters or shorelines on this sheet.

**STAGING AREAS AND PRESTAGED EQUIPMENT**

PRESTAGED EQUIP. AREA	LOCATION	ITEM	QUANTITY	TYPE
KUP-9	At CPF-2	Storage	2	2,400-gal. Fastank

\*See the latest *Supplement, Alaska* and United States Coast Pilot for current information on air and vessel access, respectively.

149° 54'

149° 51'

149° 48'

149° 45'

149° 42'

70° 18'

70° 18'

70° 17'

70° 17'

70° 16'

70° 16'

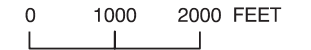
Continue on sheet 53

Continue on sheet 55

Continue on sheet 177



1:26000





**PRIORITY PROTECTION SITES**

- There are no priority protection sites on this sheet.

**GENERAL SENSITIVITIES**

- Coastal areas support high concentrations of breeding, nesting, brood-rearing, and molting waterbirds during the summer.
- Concentrations of swans, ducks, geese, and shorebirds are present here in June before open water is present elsewhere.
- Plan to deploy bird-hazing systems during the open-water season.
- The Ugnuravik River provides habitat for anadromous whitefish and for resident fish.



**AIR ACCESS\***

- The Kuparuk airstrip (Sheet 51) is approximately 2 miles west of DS 1D.

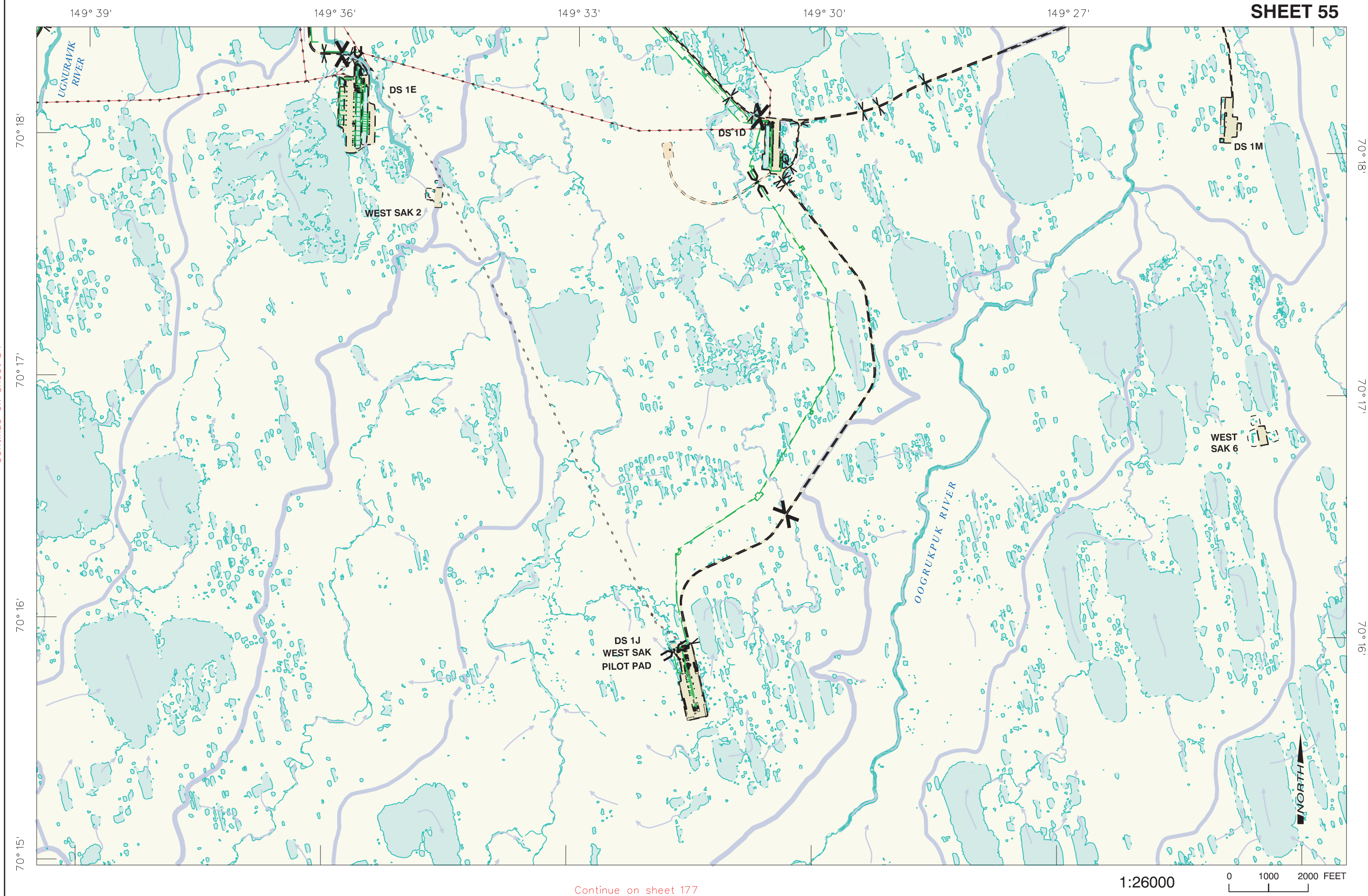
AIRSTRIP	DESCRIPTION/ LOCATION	FIXED-WING MINIMUMS	FUEL/ SERVICES	TRAFFIC CONTROL
Kuparuk Airstrip	6,000-ft. gravel runway, attended continuously	VFR: 1 mi vis. clear of clouds IFR: 0.75 mi vis.	Jet A	24-hr advance notification required: 907-659-7213

**VESSEL ACCESS\* AND HYDROGRAPHIC CONDITIONS**

- There are no marine waters or shorelines on this sheet.

\*See the latest *Supplement, Alaska* and United States Coast Pilot for current information on air and vessel access, respectively.





Continue on sheet 54

Continue on sheet 52

Continue on sheet 177

1:26000

0 1000 2000 FEET





### PRIORITY PROTECTION SITES

SITE NO.	DESCRIPTION	SENSITIVITY	TACTIC	EST. BOOM
PS17	Creek mouth 0.5 miles SE of Beechey Point	Most sensitive during open water season. Inundated low-lying tundra shorelines.	C-13 or C-14	500'
PS17A	Salt marsh 0.5 miles SW of Beechey Point	Most sensitive during open water season. Keep oil from entering salt marsh.	C-13 or C-14	2,000'

### GENERAL SENSITIVITIES

- Coastal areas support high concentrations of breeding, nesting, brood-rearing, and molting waterbirds during the summer.
- Simpson Lagoon has large flocks of molting male Oldsquaw in July and early August, especially in the lee shores of the barrier islands.
- Shoreline and offshore areas support molting and brood-rearing eiders. This is also a staging area for migrating Phalaropes (shorebirds). Birds are present in June, July, and August.
- Common Eiders nest on offshore islands in June and July.
- This is a Brant brood-rearing and molting area. Birds are present in July and August.
- Plan to deploy bird-hazing systems during the open-water season.
- Polar bear dens have been found in this area. Dens may be in use from October through April.

### CULTURAL SITES

Information on the exact locations of cultural sites is confidential. This information is contained in the *North Slope Archaeological Data* document, copies of which are kept at the following offices: State Historical Preservation Officer (SHPO) (907-269-8721), ACS in Deadhorse (907-659-2405), North Slope Borough Lands Division (907-852-0322), North Slope Borough Lands Division (907-852-0322), BPXA Crisis Center in Anchorage (907-564-5243), and the ConocoPhillips Incident Command Center in Anchorage (907-265-1000). The following cultural site(s) are located in the area depicted on this sheet:

- XBP-003 near Beechey Point
- XBP-014 on Cottle Island



### AIR ACCESS\*

- The Pt. McIntyre airstrip (Sheet 62) is approximately 12 miles southeast of Beechey Point. This is a 1,500-ft gravel strip, which is unattended and not maintained. Emergency use only is recommended.
- The Kuparuk airstrip (Sheet 51) is approximately 14 miles southwest of Beechey Point.

AIRSTRIP	DESCRIPTION/ LOCATION	FIXED-WING MINIMUMS	FUEL/ SERVICES	TRAFFIC CONTROL
Kuparuk Airstrip	6,000-ft. gravel runway, attended continuously	VFR: 1 mi vis. clear of clouds IFR: 0.75 mi vis.	Jet A	24-hr advance notification required: 907-659-7213

### VESSEL ACCESS\* AND HYDROGRAPHIC CONDITIONS

- Water access by other than very shallow-draft vessels will be precluded in Simpson Lagoon and Gwydyr Bay due to shallow water depths.
- There is small boat shelter in 4 ft of water behind a sandbar extending northwest from Beechey Point.
- There is no navigable passage between Cottle and Long Islands.
- Gwydyr Bay and Simpson Lagoon surface currents are generally to the west at 10 to 30 cm/sec. Water depth is 2 to 7 ft.
- Barrier islands tend to migrate toward shore at 5 to 10 meters per year and westward 20 to 30 meters.
- Alongshore sediment transport is westerly.

### COUNTERMEASURES CONSIDERATIONS

- The east end of Cottle Island is subject to trapping floating oil during generally east winds and offshore circulation patterns.

\*See the latest *Supplement, Alaska* and United States Coast Pilot for current information on air and vessel access, respectively.

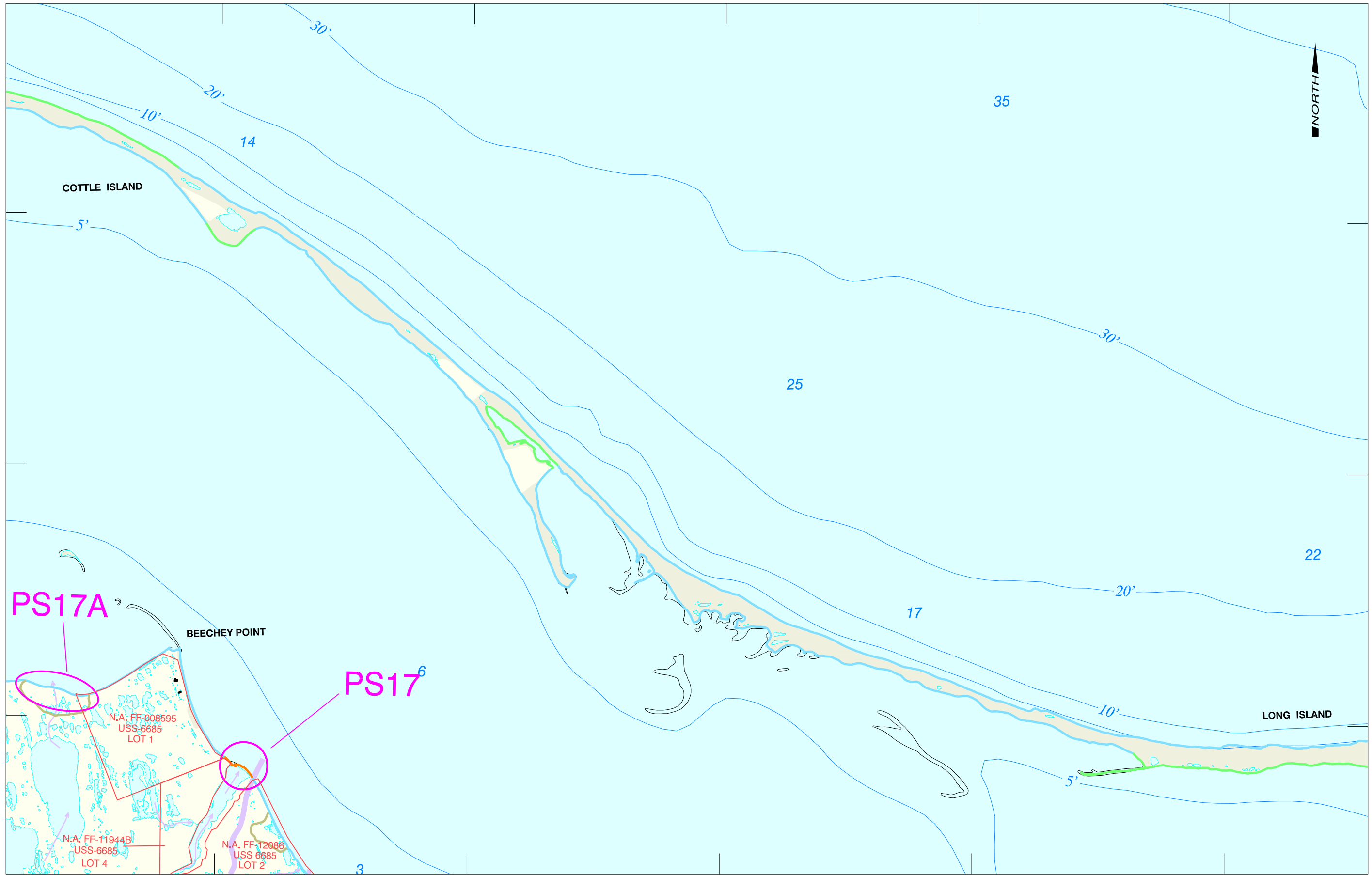
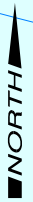
149° 9'

149° 6'

149° 3'

149° 00'

148° 57'



Continue on sheet 34

Continue on sheet 38

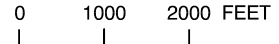
70° 31'

70° 30'

70° 29'

Continue on sheet 58

1:26000





**PRIORITY PROTECTION SITES**

SITE NO.	DESCRIPTION	SENSITIVITY	TACTIC	EST. BOOM
PS16B	Salt marsh 1.25 miles SE of the Sakonowayak River mouth	Most sensitive during open water season Keep oil from entering salt marsh. Inundated low-lying tundra shorelines.	C-13 or C-14	3,500'
PS16C	Sakonowayak River mouth	Most sensitive during open water season. Keep oil from entering river.	C-13 or C-14	2,800'

**GENERAL SENSITIVITIES**

- Coastal areas support high concentrations of breeding, nesting, brood-rearing, and molting waterbirds during the summer.
- The lee shores of the barrier islands are important molting areas for Oldsquaw in July and early August.
- Shoreline and offshore areas support molting Oldsquaws and eiders, and brood-rearing eiders. This is also a staging area for migrating Phalaropes (shorebirds). Birds are present in June through September.
- This is a Brant nesting, brood-rearing, and molting area. Birds are present from May through August.
- Pairs of Spectacled Eiders have been found in this area.
- Plan to deploy bird-hazing systems during the open-water season.
- The Sakonowayak River provides habitat for anadromous whitefish.

**CULTURAL SITES**

Information on the exact locations of cultural sites is confidential. This information is contained in the *North Slope Archaeological Data* document, copies of which are kept at the following offices: State Historical Preservation Officer (SHPO) (907-269-8721), ACS in Deadhorse (907-659-2405), North Slope Borough Lands Division (907-852-0322), North Slope Borough Lands Division (907-852-0322), BPXA Crisis Center in Anchorage (907-564-5243), and the ConocoPhillips Incident Command Center in Anchorage (907-265-1000). The following cultural site(s) are located in the area depicted on this sheet:

- XBP-015 near Back Point
- XBP-016 on the coast near the bottom right corner of the map



**AIR ACCESS\***

- The Pt. McIntyre airstrip (Sheet 62) is approximately 10 miles southeast of Back Point. This is a 1,500-ft gravel strip, which is unattended and not maintained. Emergency use only is recommended.
- The Kuparuk airstrip (Sheet 51) is approximately 15 miles southwest of Back Point.

AIRSTRIP	DESCRIPTION/ LOCATION	FIXED-WING MINIMUMS	FUEL/ SERVICES	TRAFFIC CONTROL
Kuparuk Airstrip	6,000-ft. gravel runway, attended continuously	VFR: 1 mi vis. clear of clouds IFR: 0.75 mi vis.	Jet A	24-hr advance notification required: 907-659-7213

**VESSEL ACCESS\* AND HYDROGRAPHIC CONDITIONS**

- Water access by other than very shallow-draft vessels will be precluded in Gwydyr Bay due to shallow water depths.
- Gwydyr Bay surface currents are generally to the west at 10 to 30 cm/sec. Water depth is 2 to 7 ft.
- Annual average flow rate of the Kuparuk River (to the east) is 1,830 cfs. Much of the sediment load is transported west in the alongshore current.

**COUNTERMEASURES CONSIDERATIONS**

- Riverine discharge is large enough to preclude much oil impinging on any beaches south of Back Point.

PRESTAGED EQUIP. AREA	LOCATION	ITEM	QUANTITY	TYPE
KUP-8	West bank of river near mouth	Boom	2,000'	8" x 6" river

\*See the latest *Supplement, Alaska* and United States Coast Pilot for current information on air and vessel access, respectively.

149° 12'

149° 9'

149° 6'

149° 3'

149° 00'

Continue on sheet 38

70° 27'

Continue on sheet 44

70° 26'

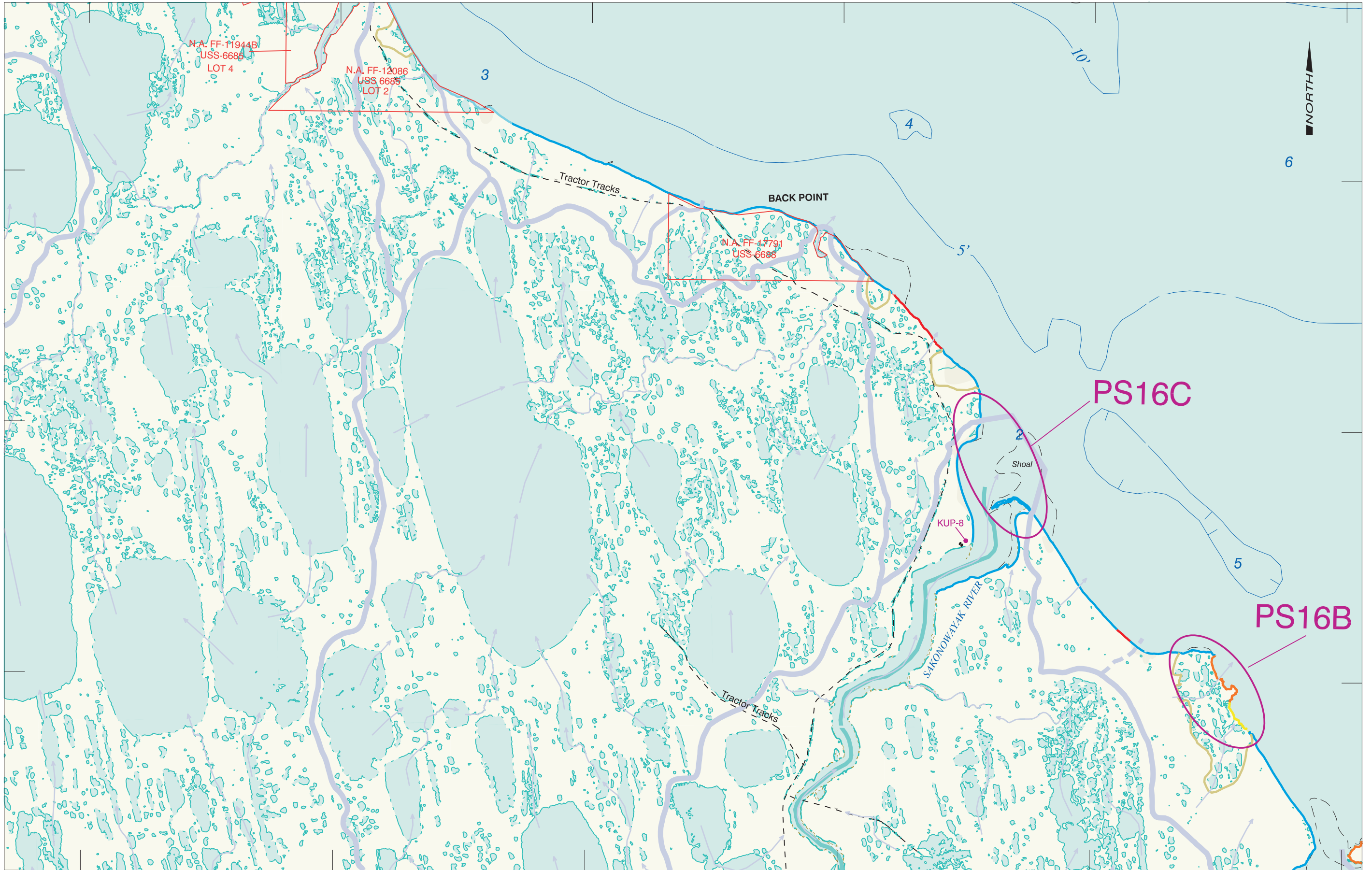
70° 28'

70° 27'

70° 26'

Continue on sheet 58

Continue on sheet 61



PS16C

PS16B

1:26000

0 1000 2000 FEET





**PRIORITY PROTECTION SITES**

SITE NO.	DESCRIPTION	SENSITIVITY	TACTIC	EST. BOOM
PS16B	Salt marsh 2 miles NW of Kuparuk River delta	Most sensitive during open water season Keep oil from entering salt marsh. Inundated low-lying tundra shorelines.	C-13 or C-14	3,500'

**GENERAL SENSITIVITIES**

- Coastal areas support high concentrations of breeding, nesting, brood-rearing, and molting waterbirds during the summer.
- Concentrations of swans, ducks, geese, and shorebirds are present here in June before open water is present elsewhere.
- The lee side of Egg Island is an important area for Oldsquaw molting and staging in July and August.
- Shoreline and offshore areas support molting Oldsquaws and eiders, and brood-rearing eiders. This is also a staging area for migrating Phalaropes (shorebirds). Birds are present in June through September.
- Common Eiders nest on offshore islands in June and July.
- This is a Brant nesting area. Birds are present from May through July.
- Plan to deploy bird-hazing systems during the open-water season.

**CULTURAL SITES**

Information on the exact locations of cultural sites is confidential. This information is contained in the *North Slope Archaeological Data* document, copies of which are kept at the following offices: State Historical Preservation Officer (SHPO) (907-269-8721), ACS in Deadhorse (907-659-2405), North Slope Borough Lands Division (907-852-0322), BPXA Crisis Center in Anchorage (907-564-5243), and the ConocoPhillips Incident Command Center in Anchorage (907-265-1000). The following cultural site(s) are located in the area depicted on this sheet:

- XBP-018 on the center of the three larger islands on the sheet



**AIR ACCESS\***

- The Pt. McIntyre airstrip (Sheet 62) is located approximately 2.5 miles southeast of Egg Island. This is a 1,500-ft gravel strip, which is unattended and not maintained. Emergency use only is recommended.
- The Kuparuk airstrip (Sheet 51) is located approximately 10 miles southwest of Egg Island.

AIRSTRIP	DESCRIPTION/ LOCATION	FIXED-WING MINIMUMS	FUEL/ SERVICES	TRAFFIC CONTROL
Kuparuk Airstrip	6,000-ft. gravel runway, attended continuously	VFR: 1 mi vis. clear of clouds IFR: 0.75 mi vis.	Jet A	24-hr advance notification required: 907-659-7213

**VESSEL ACCESS\* AND HYDROGRAPHIC CONDITIONS**

- Water access is limited to shallow-draft vessels on the lagoon-facing shores of the barrier islands.
- Bars and shoals extend into Gwydyr Bay off the southeast end of the island northwest of Egg Island, but a 5-ft deep channel between these bars and Egg Island is the best marine entrance to the bay.
- Gwydyr Bay surface currents are generally to the west at 10 to 30 cm/sec. Water depth is 2 to 7 ft.
- Annual average flow rate of the Kuparuk River is 1,830 cfs. Much of the sediment load is transported west in the alongshore current.
- Barrier islands may be awash during storm surges. The islands are migrating toward shore at 5 to 10 meters per year and westward 20 to 30 meters.

\*See the latest *Supplement, Alaska* and United States Coast Pilot for current information on air and vessel access, respectively.

148° 57'

148° 54'

148° 51'

148° 48'

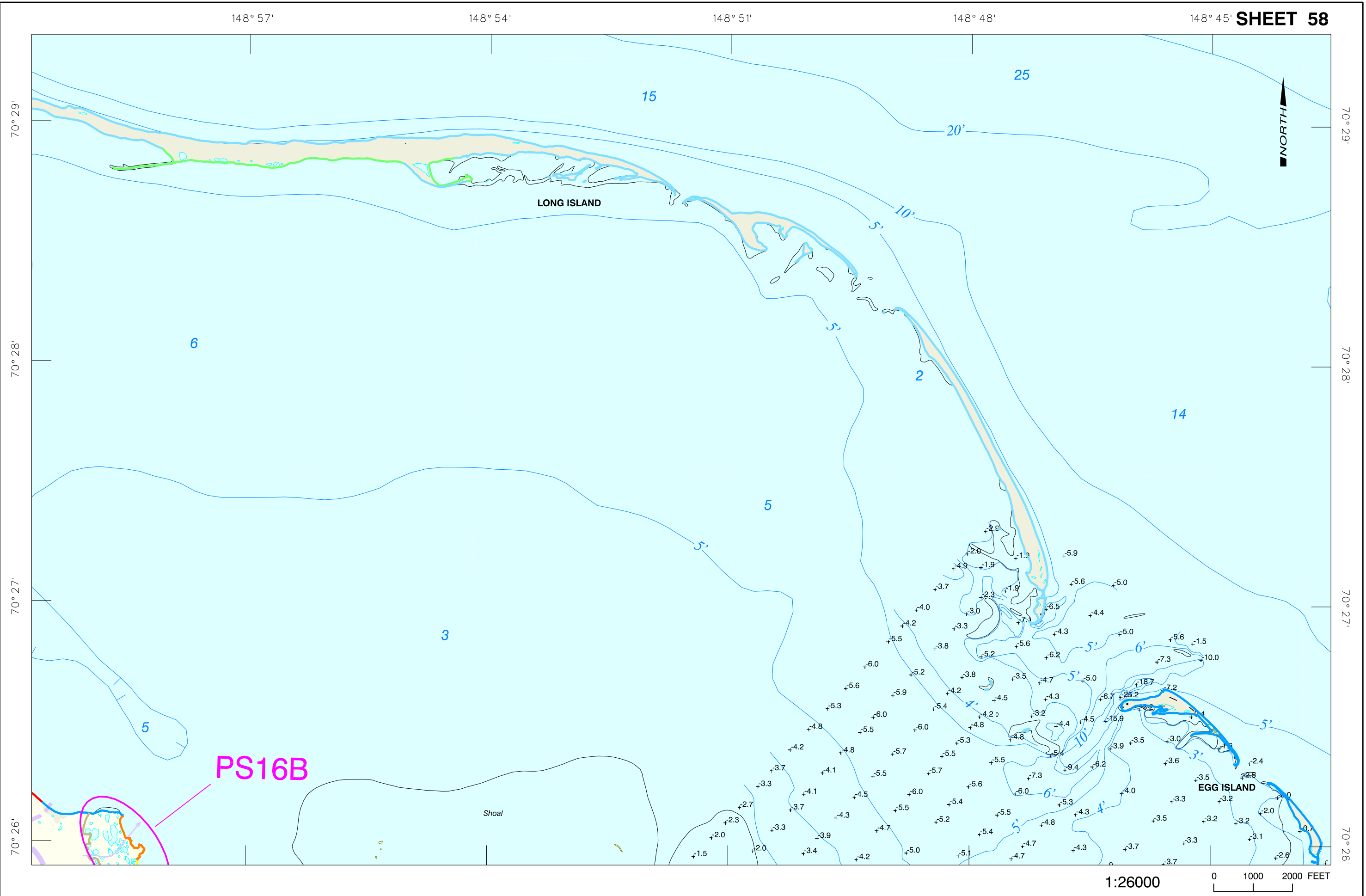
148° 45'

Continue on sheet 56

Continue on sheet 59

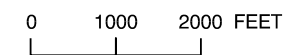
Continue on sheet 57

Continue on sheet 60



**PS16B**

1:26000





**PRIORITY PROTECTION SITES**

- There are no priority protection sites on this sheet.

**GENERAL SENSITIVITIES**

- Concentrations of swans, ducks, geese, and shorebirds are present here in June before open water is present elsewhere.
- Shoreline and offshore areas support molting Oldsquaws and eiders, and brood-rearing eiders. This is also a staging area for migrating Phalaropes (shorebirds). Birds are present in June through September.
- Common Eiders nest on offshore islands in June and July.
- Plan to deploy bird-hazing systems during the open-water season.

**CULTURAL SITES**

Information on the exact locations of cultural sites is confidential. This information is contained in the *North Slope Archaeological Data* document, copies of which are kept at the following offices: State Historical Preservation Officer (SHPO) (907-269-8721), ACS in Deadhorse (907-659-2405), North Slope Borough Lands Division (907-852-0322), BPXA Crisis Center in Anchorage (907-564-5243), and the ConocoPhillips Incident Command Center in Anchorage (907-265-1000). The following cultural site(s) are located in the area depicted on this sheet:

- XBP-018 on Long Island



**AIR ACCESS\***

- Deadhorse airport (Sheet 81) is approximately 21 miles to the south-southeast.
- The Pt. McIntyre airstrip (Sheet 62) is located approximately 6 miles to the south. This is a 1,500-ft gravel strip, which is unattended and not maintained. Emergency use only is recommended.

**VESSEL ACCESS\* AND HYDROGRAPHIC CONDITIONS**

- Water access is limited to shallow-draft vessels on the lagoon-facing shores of the barrier islands.
- The best marine entrance to Gwydyr Bay is in the 5-ft-deep channel at the west end of Egg Island (Sheet 58).
- Gwydyr Bay surface currents are generally to the west at 10 to 30 cm/sec. Water depth is 2 to 7 ft.
- Annual average flow rate of the Kuparuk River is 1,830 cfs. Much of the sediment load is transported west in the alongshore current.
- Barrier islands may be awash during storm surges. The islands are migrating toward shore at 5 to 10 meters per year and westward 20 to 30 meters.

**STAGING AREAS AND PRESTAGED EQUIPMENT**

PRESTAGED EQUIP. AREA	LOCATION	ITEM	QUANTITY	TYPE
NS-4	Northstar	Vessel	2	24'
		Storage	2	2,400-gal. Fastanks
		Storage	3	1,500-gal. Foldatanks
		Skimmer	1	Electric rope mop
		Skimmer	1	Brush
		Boom	2,000'	10" x 14" NOFI boom bag
		Boom	2,460'	Ro-Boom

\*See the latest *Supplement, Alaska* and United States Coast Pilot for current information on air and vessel access, respectively.

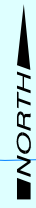
148° 48'

148° 45'

148° 42'

148° 39'

148° 36'



70° 30'

70° 30'

70° 29'

70° 29'

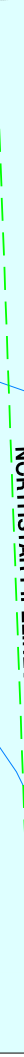
70° 28'

70° 28'

**NORTHSTAR  
PRODUCTION  
FACILITY**  
SEAL ISLAND



**NORTHSTAR PIPELINES**



25

30'

20'

14

**LONG ISLAND**

5'

10'

40'

40'

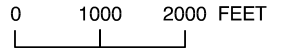
34

34

29

21

1:26000



Continue on sheet 58

Continue on sheet 60





## PRIORITY PROTECTION SITES

SITE NO.	DESCRIPTION	SENSITIVITY	TACTIC	EST. BOOM
PS16	Inlet to salt marsh at Pt. Storkersen	Most sensitive during open water season. Salt marsh and/or undated low-lying tundra shoreline.	C-13 or C-14	400'

## GENERAL SENSITIVITIES

- Coastal areas support high concentrations of breeding, nesting, brood-rearing, and molting waterbirds during the summer.
- Concentrations of swans, ducks, geese, and shorebirds are present here in June before open water is present elsewhere.
- The lee side of Egg Island is an important area for Oldsquaw molting and staging in July and August.
- Shoreline and offshore areas support molting Oldsquaws and eiders, and brood-rearing eiders. This is also a staging area for migrating Phalaropes (shorebirds). Birds are present in June through September.
- Common Eiders nest on offshore islands in June and July.
- This is a Brant nesting, brood-rearing, and molting area. Birds are present from May through August.
- Plan to deploy bird-hazing systems during the open-water season.
- There is a seawater intake at the seawater treatment plant at West Dock approximately 14 ft below the surface at the southwest corner of the barge. Precautions should be taken to keep oil out of this area.



## AIR ACCESS\*

- Deadhorse airport (Sheet 81) is approximately 16 miles southeast of Pt. Storkersen.
- The Pt. McIntyre airstrip (Sheet 62) is located approximately 1 mile southeast of Pt. Storkersen. This is a 1,500-ft gravel strip, which is unattended and not maintained. Emergency use only is recommended.

## VESSEL ACCESS\* AND HYDROGRAPHIC CONDITIONS

- Water access is limited to shallow-draft vessels on the lagoon-facing shores of the barrier islands.
- The best marine entrance to Gwydyr Bay is in the 5-ft-deep channel at the west end of Egg Island.
- The passage between Egg Island and Stump Island has depths of 3 ft, but there is little water between Stump Island and Pt. McIntyre.
- Gwydyr Bay surface currents are generally to the west at 10 to 30 cm/sec. Water depth is 2 to 7 ft.
- Barrier islands may be awash during storm surges. The islands are migrating toward shore at 5 to 10 meters per year and westward 20 to 30 meters.

## COUNTERMEASURES CONSIDERATIONS

- Riverine discharge is high enough to preclude much floating oil gathering on deltaic surfaces west of Point Storkersen.

## STAGING AREAS AND PRESTAGED EQUIPMENT

PRESTAGED EQUIP. AREA	LOCATION	ITEM	QUANTITY	TYPE
NS-1	End of Pt. Storkersen	Boom Anchors	400' 4	8" x 6" river 40 lb. c/w rigging

\*See the latest *Supplement, Alaska* and United States Coast Pilot for current information on air and vessel access, respectively.





**PRIORITY PROTECTION SITES**

SITE NO.	DESCRIPTION	SENSITIVITY	TACTIC	EST. BOOM
PS16A	Inlet to salt marsh east of Kuparuk River delta	Most sensitive during open water season. Keep oil from entering salt marsh. Inundated low-lying tundra shorelines.	C-13 or C-14	4,000'
PS16B	Salt marsh 2 miles NW of Kuparuk River delta	Most sensitive during open water season. Keep oil from entering salt marsh. Inundated low-lying tundra shorelines.	C-13 or C-14	3,500'

**GENERAL SENSITIVITIES**

- Coastal areas support high concentrations of breeding, nesting, brood-rearing, and molting waterbirds during the summer.
- Concentrations of swans, ducks, geese, and shorebirds are present here in June before open water is present elsewhere.
- Shoreline and offshore areas support molting Oldsquaws and eiders, and brood-rearing eiders. This is also a staging area for migrating Phalaropes (shorebirds). Birds are present in June through September.
- This is a Brant nesting, brood-rearing, and molting area. Birds are present from May through August.
- Pairs of Spectacled Eiders have been found in this area.
- Plan to deploy bird-hazing systems during the open-water season.
- The Kuparuk River provides habitat for anadromous whitefish and for resident fish.

**CULTURAL SITES**

Information on the exact locations of cultural sites is confidential. This information is contained in the *North Slope Archaeological Data* document, copies of which are kept at the following offices: State Historical Preservation Officer (SHPO) (907-269-8721), ACS in Deadhorse (907-659-2405), North Slope Borough Lands Division (907-852-0322), BPXA Crisis Center in Anchorage (907-564-5243), and the ConocoPhillips Incident Command Center in Anchorage (907-265-1000). The following cultural site(s) are located in the area depicted on this sheet:

- XBP-016 on the coast west of the Kuparuk River delta
- XBP-017 on the west bank of the river southwest of Gwydyr Bay South



**AIR ACCESS\***

- The Pt. McIntyre airstrip (Sheet 62) is located approximately 3 miles east of the Kuparuk River delta. This is a 1,500-ft gravel strip, which is unattended and not maintained. Emergency use only is recommended.
- The Kuparuk airstrip (Sheet 51) is located approximately 17 miles southwest of the Kuparuk River delta.

AIRSTRIP	DESCRIPTION/ LOCATION	FIXED-WING MINIMUMS	FUEL/ SERVICES	TRAFFIC CONTROL
Kuparuk Airstrip	6,000-ft. gravel runway, attended continuously	VFR: 1 mi vis. clear of clouds IFR: 0.75 mi vis.	Jet A	24-hr advance notification required: 907-659-7213

**VESSEL ACCESS\* AND HYDROGRAPHIC CONDITIONS**

- Water access is limited to shallow-draft vessels on the lagoon-facing shores of the barrier islands.
- Best marine entrance to Gwydyr Bay is in the 5-ft-deep channel at the west end of Egg Island (Sheet 58).
- Gwydyr Bay surface currents are generally to the west at 10 to 30 cm/sec. Water depth is 2 to 7 ft.
- Annual average discharge rate of the Kuparuk River is 1,830 cfs. Much of the sediment load is transported west in alongshore currents.

**COUNTERMEASURES CONSIDERATIONS**

- Riverine discharge is high enough to preclude much floating oil gathering on deltaic surfaces.

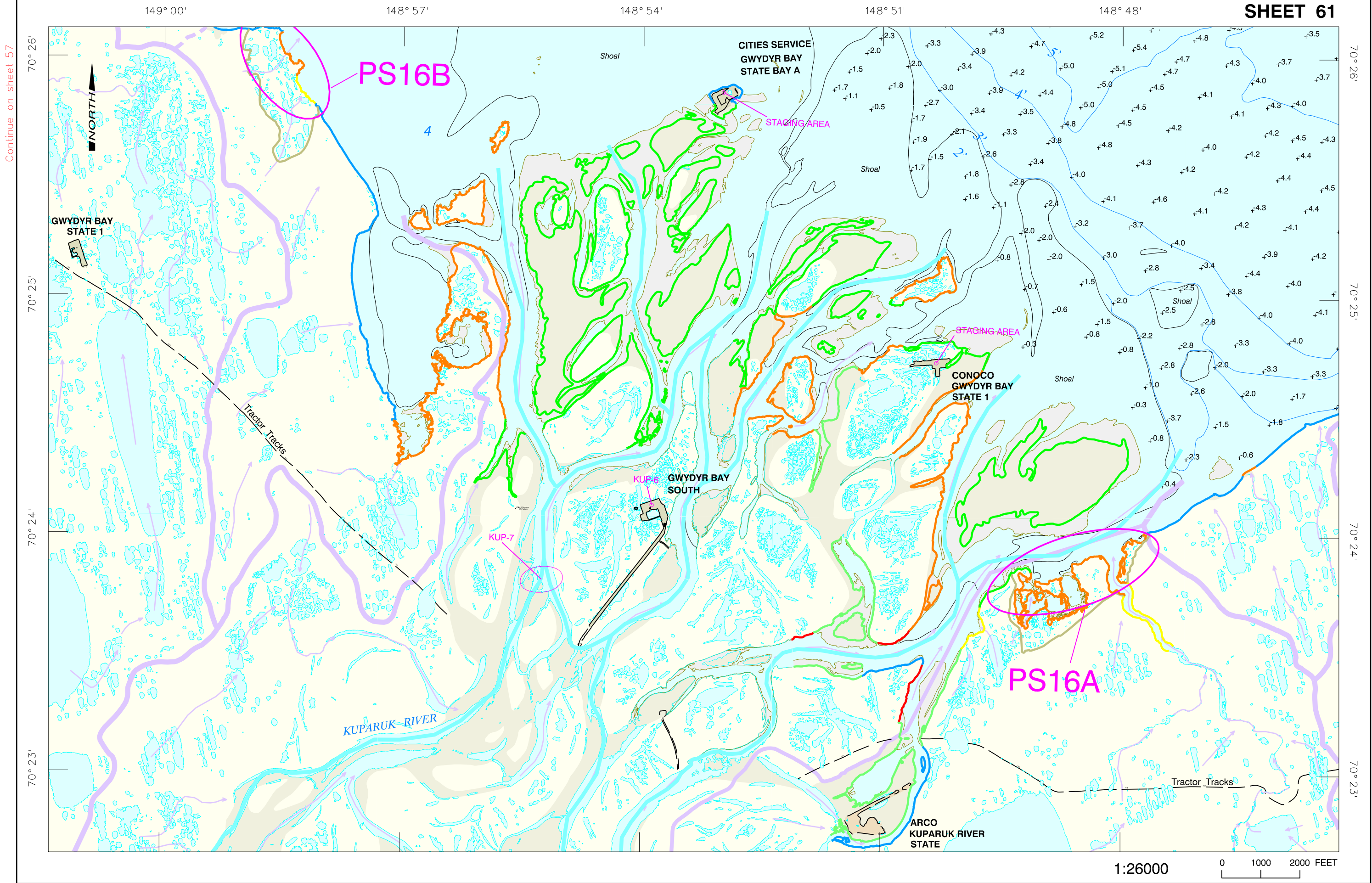
**STAGING AREAS AND PRESTAGED EQUIPMENT**

- There are staging areas at Gwydyr Bay State Bay A and Gwydyr Bay State 1.
- KUP-7 is a predetermined containment site. No equipment is staged there.

PRESTAGED EQUIP. AREA	LOCATION	ITEM	QUANTITY	TYPE
KUP-6	Gwydyr Bay South pad	Boom Skimmer	3,900' 1	8" x 6" river 3" Manta Ray Weir

\*See the latest *Supplement, Alaska* and United States Coast Pilot for current information on air and vessel access, respectively.





Continue on sheet 57

Continue on sheet 60

Continue on sheet 62





**PRIORITY PROTECTION SITES**

SITE NO.	DESCRIPTION	SENSITIVITY	TACTIC	EST. BOOM
PS11	Tidal inlet, west side of West Dock base	Most sensitive during open water season, when oil could drift into inlet. Inundated low-lying tundra shoreline.	C-13 or C-14	1,000'
PS14	Marsh inlet, 0.5 miles west of Pt. McIntyre	Most sensitive during open water season, when oil could drift into salt marsh.	C-13 or C-14	500'
PS15	Marsh inlet, 0.5 miles east of DEW line site	Most sensitive during open water season, when oil could drift into salt marsh.	C-13 or C-14	100'
PS16	Inlet to salt marsh, Pt. Storkersen	Most sensitive during open water season, when oil could drift into salt marsh and/or inundated low-lying tundra shoreline.	C-13 or C-14	400'

**GENERAL SENSITIVITIES**

- Coastal areas support high concentrations of breeding, nesting, brood-rearing, and molting waterbirds during the summer.
- Concentrations of swans, ducks, geese, and shorebirds are present here in June before open water is present elsewhere.
- Shoreline and offshore areas support molting Oldsquaws and eiders, and brood-rearing eiders. This is also a staging area for migrating Phalaropes (shorebirds). Birds are present in June through September.
- This is a Brant nesting, brood-rearing, and molting area. Birds are present from May through August.
- Pairs of Spectacled Eiders have been found in this area.
- Plan to deploy bird-hazing systems during the open-water season.
- There is a seawater intake at the seawater treatment plant at West Dock approximately 14 ft below the surface at the southwest corner of the barge. Precautions should be taken to keep oil out of this area.
- Polar bears may be present November to April.

**CULTURAL SITES**

Information on the exact locations of cultural sites is confidential. This information is contained in the *North Slope Archaeological Data* document, copies of which are kept at the following offices: State Historical Preservation Officer (SHPO) (907-269-8721), ACS in Deadhorse (907-659-2405), North Slope Borough Lands Division (907-852-0322), BPXA Crisis Center in Anchorage (907-564-5243), and the ConocoPhillips Incident Command Center in Anchorage (907-265-1000). The following cultural site(s) are located in the area depicted on this sheet:

- XBP-019 near Point McIntyre
- XBP-040 near the DEW line site west of Point McIntyre



**AIR ACCESS\***

- The Pt. McIntyre airstrip is a 1,500-ft gravel strip, which is unattended and not maintained. Emergency use only is recommended.
- Deadhorse airport (Sheet 81) is approximately 14 miles south-southeast of Pt. McIntyre.

**VESSEL ACCESS\* AND HYDROGRAPHIC CONDITIONS**

- Gwydyr Bay surface currents are generally to the west at 10 to 30 cm/sec. High shoaling areas exist between the Kuparuk River delta (to the west) and West Dock. Water depth ranges from 2 to 5 feet. The best marine entrance to Gwydyr Bay is in the 5-ft-deep channel at the west end of Egg Island (Sheet 58).
- There are boat launches at Dock 2 and the entrance to West Dock. There is a barge mooring on the east side of West Dock between Dock 2 and Dock 3. There is a small boat mooring at the south end of the seawater treatment plant.
- The outer portion of Prudhoe Bay has water depths of 5 to 8 feet and affords good holding anchorage with protection from all but northwest weather. The inner bay has shoals across most of the entrance, with water depths of 2 to 6 ft. There is little water between Pt. Storkersen and Pt. McIntyre, and between Pt. McIntyre and Stump Island.
- Water access is limited to shallow-draft vessels on the lagoon-facing shores of barrier islands. These islands are awash during storm surges and are migrating toward shore at 5 to 10 meters per year and westward 20 to 30 meters.
- Currents through the West Dock breach can be very strong.
- Annual average discharge rate of the Kuparuk River is 1,830 cfs. Much of the sediment load is transported west in alongshore currents.

**COUNTERMEASURES CONSIDERATIONS**

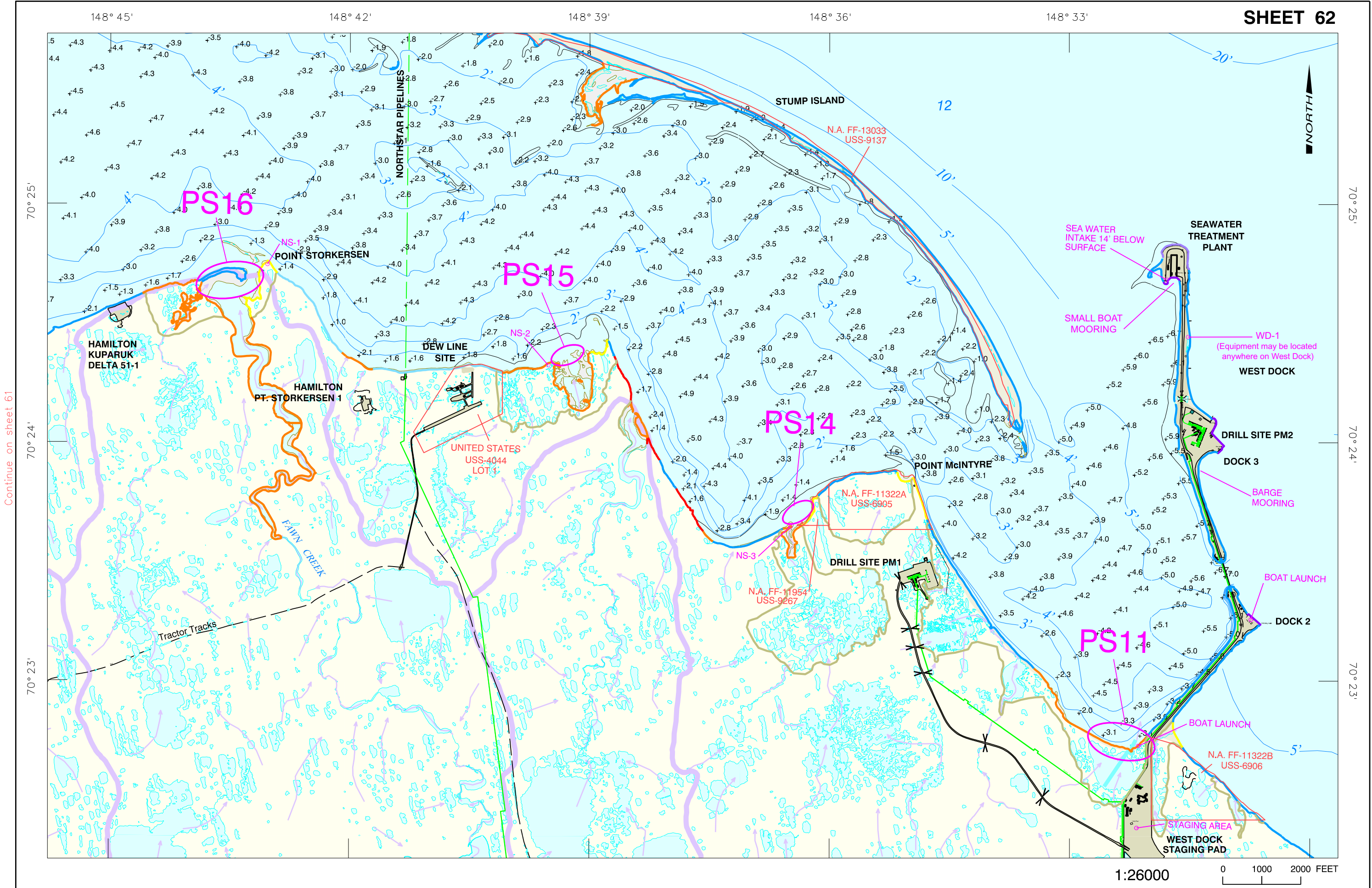
- High riverine discharge keeps most floating oil from gathering on deltaic surfaces west of Pt. Storkersen.

**STAGING AREAS AND PRESTAGED EQUIPMENT**

- The West Dock Staging Pad is a staging area.

PRESTAGED EQUIP. AREA	LOCATION	ITEM	QUANTITY	TYPE
WD-1	West Dock	Vessel	4	42'
		Vessel	1	45'
		Vessel	1	55'
		Vessel	2	38'
		Vessel	4	25'
		Skimmer	1	Foxtail
		Skimmer	1	Rope mop, Foxden
		Skimmer	1	Walosep
		Skimmer	1	Transrec-250
		Skimmer	7	Lori
		Barge	1	Beaufort-21
		Boom	5,400'	8" x 6" Delta boom
		Boom	2,492'	10" x 14" NOFI boom bag
		Boom	4,000'	14" x 18" light ocean, reel
		Boom	2,350'	Fire boom
		Boom	3,000'	20" x 30" ocean boom
Anchors	8	40 lb. c/w rigging		
Anchor Systems	6	66 lb. Bruce anchor system w/line and buoys		
NS-1	End of Pt. Storkersen	Boom	400'	8" x 6" river
		Anchors	4	40 lb. c/w rigging
NS-2	On coast east of DEW Line site	Boom	1,000'	8" x 6" river
		Anchors	4	40 lb. c/w rigging
NS-3	On coast SW of Pt. McIntyre	Boom	500'	8" x 6" river
		Anchors	4	40 lb. c/w rigging

\*See the latest *Supplement, Alaska* and United States Coast Pilot for current information on air and vessel access, respectively.



Continue on sheet 61



**PRIORITY PROTECTION SITES**

- There are no priority protection sites on this sheet.

**GENERAL SENSITIVITIES**

- Coastal areas support high concentrations of breeding, nesting, brood-rearing, and molting waterbirds during the summer.
- Concentrations of swans, ducks, geese, and shorebirds are present here in June before open water is present elsewhere.
- This is a Brant nesting area. Birds are present from May through July.
- Pairs of Spectacled Eiders have been found in this area.
- Plan to deploy bird-hazing systems during the open-water season.
- The Kuparuk River provides habitat for anadromous whitefish and for resident fish.
- The Sakonowak River provides habitat for anadromous whitefish.



**AIR ACCESS\***

- Deadhorse airport (Sheet 81) is approximately 17 miles southeast of S Pad and 4 miles southwest of the Prudhoe Bay airport.

**VESSEL ACCESS\* AND HYDROGRAPHIC CONDITIONS**

- There are no marine waters or shoreline on this sheet.
- There are two boat launches on the Kuparuk River on either side of the Spine Road bridge.
- The annual average discharge rate of the Kuparuk River is 1,830 cfs.

**COUNTERMEASURES CONSIDERATIONS**

- The Spine Road bridge over the Kuparuk River washes out during breakup each year and must be repaired.

**STAGING AREAS AND PRESTAGED EQUIPMENT**

- There is a staging area east of Kuparuk Reservoir 2 near the road to Dead Arm Mine Site.
- KUP-3 is a predetermined containment site.
- KUP-5 is a predetermined containment site. No equipment is staged there.
- Boom is typically predeployed seasonally southeast of WOA-1 and east of S Pad.

PRESTAGED EQUIP. AREA	LOCATION	ITEM	QUANTITY	TYPE
KUP-2	On Spine Road approx. 0.5 mile west of bridge	Boom Anchor Systems	5,050' 3	8" x 6" Delta boom
KUP-4	On west bank of river northeast of S Pad	Boom Skimmer Storage	3,250' 2 4	8" x 6" river Weir, Manta Ray, 3" 2,400-gal Fastank
WOA-1	On west bank of main channel south of bridge	Boom	6,000'	8" x 6" river

\*See the latest *Supplement, Alaska* and United States Coast Pilot for current information on air and vessel access, respectively.



149° 03'

149° 00'

148° 57'

148° 54'

70° 22'

70° 21'

70° 20'

70° 22'

70° 21'

70° 20'

ARCO  
KUPARUK RIVER  
STATE

PUT RIVER  
(33-12-13)

KUPARUK RIVER

MOBIL KUPARUK  
(26-12-12)

N.A. FF-17451  
USS-9125

KUP-5

KUP-4

KUP-3

SEASONALLY  
PRE-DEPLOYED BOOM  
IN THIS AREA

S PAD

KUPARUK DEAD ARM  
MINE SITE

R PAD

SMITH CREEK

TERM WELL C

KUP-2

WOA-1

BOAT LAUNCH

SPINE ROAD

KUPARUK RESERVOIRS  
STAGING AREA

M PAD

SEASONALLY  
PRE-DEPLOYED BOOM  
IN THIS AREA

J PAD

CC2

N PAD

1:26000

0 1000 2000 FEET

Continue on sheet 68

Continue on sheet 64





### PRIORITY PROTECTION SITES

- There are no priority protection sites on this sheet.

### GENERAL SENSITIVITIES

- Coastal areas support high concentrations of breeding, nesting, brood-rearing, and molting waterbirds during the summer.
- Concentrations of swans, ducks, geese, and shorebirds are present here in June before open water is present elsewhere.
- This is a Brant nesting area. Birds are present from May through July.
- Pairs of Spectacled Eiders have been found in this area.
- Plan to deploy bird-hazing systems during the open-water season.



### AIR ACCESS\*

- Deadhorse airport (Sheet 81) is approximately 11 miles south of E Pad.
- The Pt. McIntyre airstrip (Sheet 62) is approximately 4 miles north of E Pad. This is a 1,500-ft gravel strip, which is unattended and not maintained. Emergency use only is recommended.

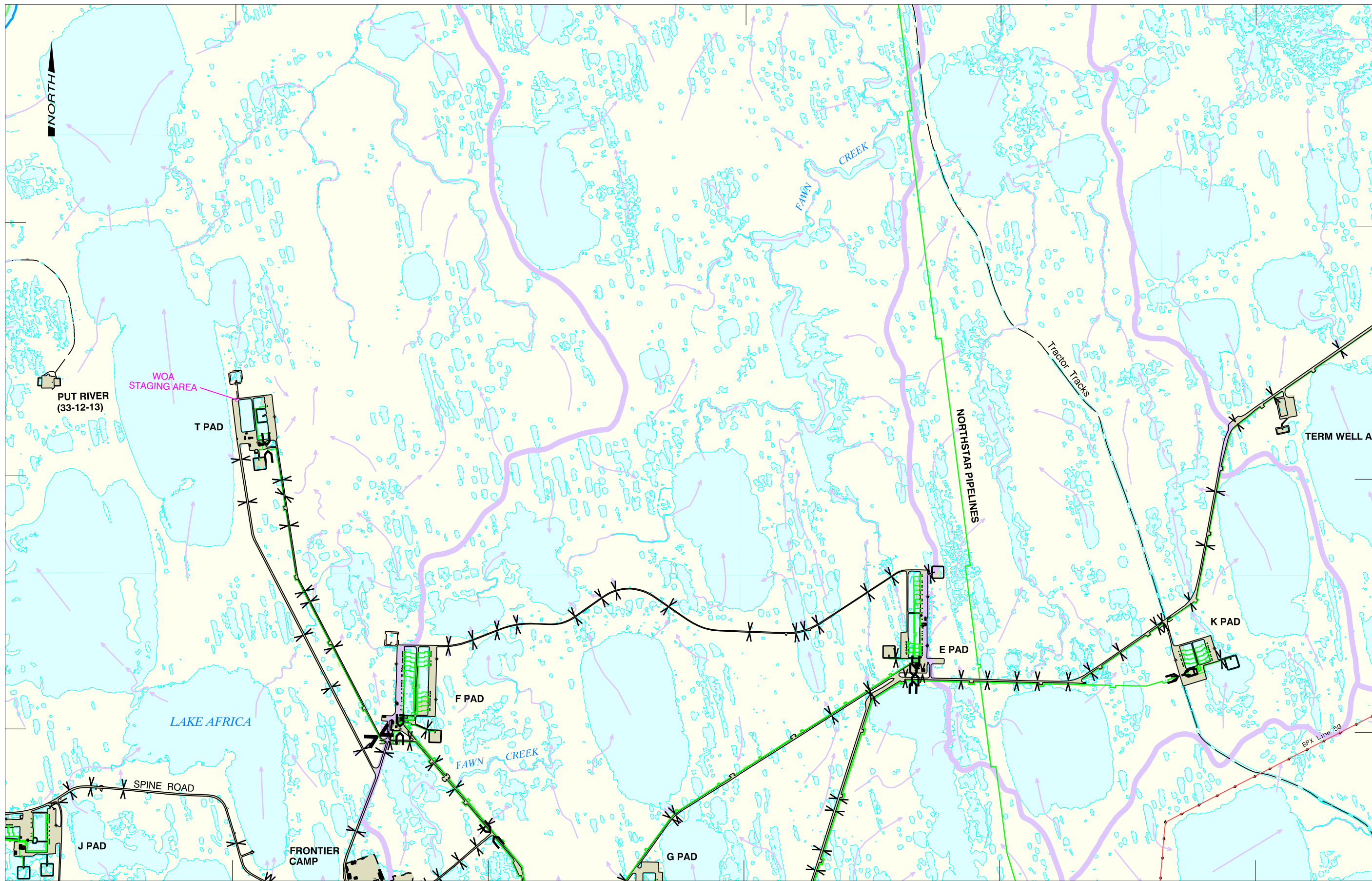
### VESSEL ACCESS\* AND HYDROGRAPHIC CONDITIONS

- There are no marine shorelines or waters on this sheet.

### STAGING AREAS AND PRESTAGED EQUIPMENT

- There is a staging area at T Pad.

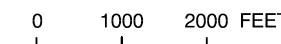
\*See the latest *Supplement, Alaska* and United States Coast Pilot for current information on air and vessel access, respectively.



Continue on sheet 63

Continue on sheet 65

1:26000





**PRIORITY PROTECTION SITES**

SITE NO.	DESCRIPTION	SENSITIVITY	TACTIC	EST. BOOM
PS10	Creek mouth north of LGI	Most sensitive during open water season. Inundated low-lying tundra shoreline.	C-13 or C-14	100'
PS11	Tidal inlet, west side of West Dock base	Most sensitive during open water season, when oil could drift into inlet. Inundated low-lying tundra shoreline.	C-13 or C-14	1,000'

**GENERAL SENSITIVITIES**

- Coastal areas support high concentrations of breeding, nesting, brood-rearing, and molting waterbirds during the summer.
- Concentrations of swans, ducks, geese, and shorebirds are present here in June before open water is present elsewhere.
- Shoreline and offshore areas support molting Oldsquaws and eiders, and brood-rearing eiders. This is also a staging area for migrating Phalaropes (shorebirds). Birds are present in June through September.
- High concentrations of brood-rearing and molting Snow Geese are present in July and August.
- This is a Brant nesting, brood-rearing, and molting area. Birds are present from May through August.
- Pairs of Spectacled Eiders have been found in this area.
- Plan to deploy bird-hazing systems during the open-water season.



**AIR ACCESS\***

- Deadhorse airport (Sheet 78) is located approximately 10 miles south of LGI.

**VESSEL ACCESS\* AND HYDROGRAPHIC CONDITIONS**

- Outer portions of Prudhoe Bay have water depths of 6 to 9 ft and afford good holding anchorage with protection from all but northwest winds. Inner bay has shoals across most of the entrance, with water depths of 2 to 6 ft.
- The best marine access route to Prudhoe Bay parallels the west shore at a distance of 0.4 mile and has depths of 4 ft.
- There are boat launches at West Beach State and at the south end of West Dock.
- There is high sediment transport in westerly direction along shore due to Sagavanirktok River discharge.
- Eddies and reduced current velocities in Prudhoe Bay cause extensive shoaling and migration of barrier islands.

**COUNTERMEASURES CONSIDERATIONS**

- Sand-gravel beaches on the interior of Prudhoe Bay are quite narrow and interrupted by vegetated shorelines, making large machinery impractical.

**STAGING AREAS AND PRESTAGED EQUIPMENT**

- The West Dock Staging Pad is a staging area.

PRESTAGED EQUIP. AREA	LOCATION	ITEM	QUANTITY	TYPE
EOA-3	West Beach State	Boom Anchor System	2,000' 1	8" x 6" river

\*See the latest *Supplement, Alaska* and United States Coast Pilot for current information on air and vessel access, respectively.



148° 33'

148° 30'

148° 27'

148° 24'

70° 22'

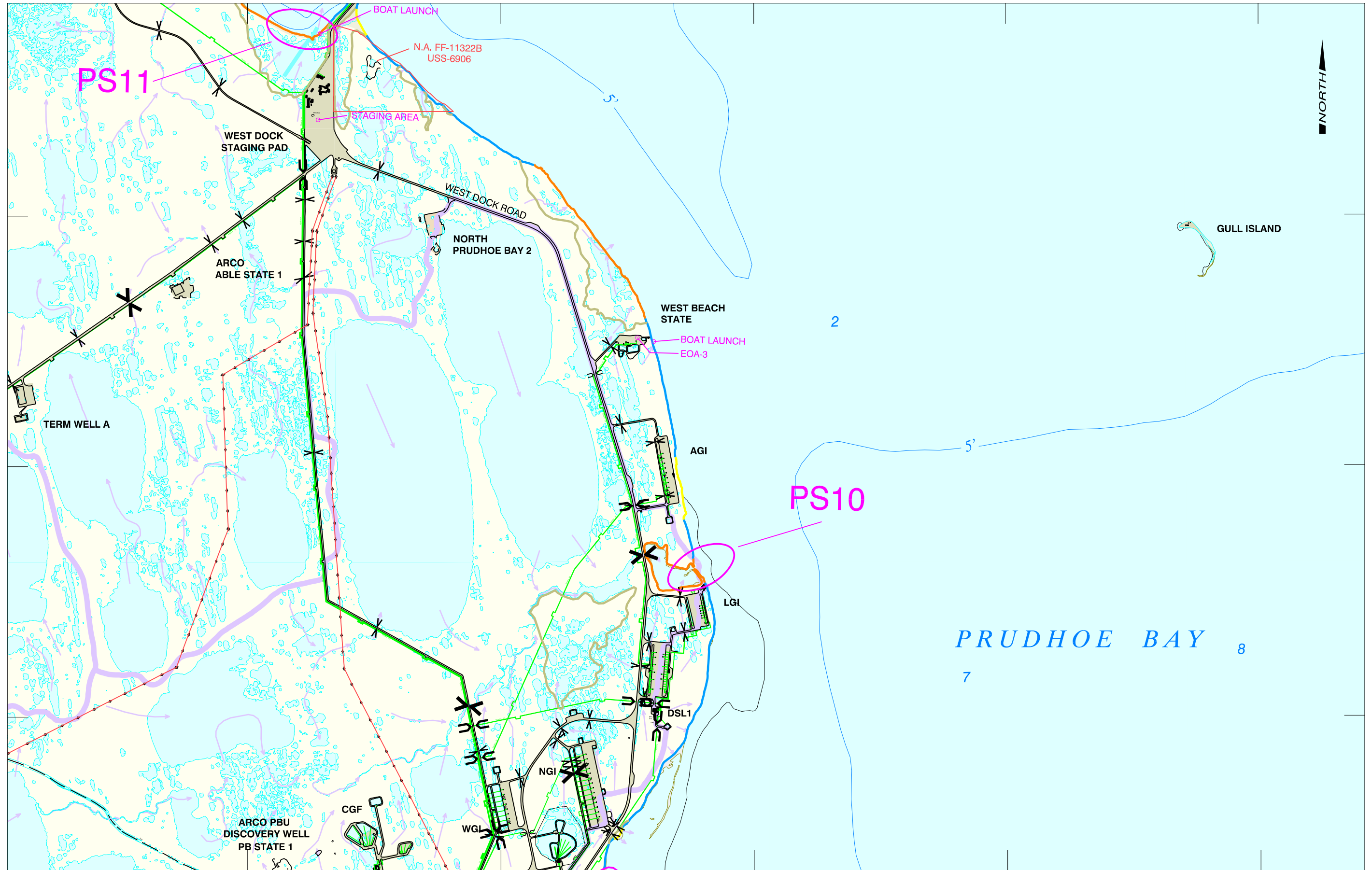
70° 21'

70° 20'

70° 22'

70° 21'

70° 20'



Continue on sheet 64

Continue on sheet 66

1:26000

0 1000 2000 FEET





### PRIORITY PROTECTION SITES

- There are no priority protection sites on this sheet.

### GENERAL SENSITIVITIES

- Coastal areas support high concentrations of breeding, nesting, brood-rearing, and molting waterbirds during the summer.
- Concentrations of swans, ducks, geese, and shorebirds are present from June to September in the Sagavanirktok River delta.
- The outer portion of the delta is an important migration staging area for shorebirds from July through September and a Pintail molting area in July and August.
- High concentrations of brood-rearing, and molting Snow Geese are present in July and August.
- This is a Brant nesting, brood-rearing and molting area. Birds are present from May through August.
- Plan to deploy bird-hazing systems during the open-water season.
- The Sagavanirktok River is a migratory corridor for arctic char and whitefish, and an overwintering area for a variety of whitefish, burbot, grayling, and sculpin.
- Polar bear dens have been found in this area. Dens may be in use from October through April.

### CULTURAL SITES

Information on the exact locations of cultural sites is confidential. This information is contained in the *North Slope Archaeological Data* document, copies of which are kept at the following offices: State Historical Preservation Officer (SHPO) (907-269-8721), ACS in Deadhorse (907-659-2405), North Slope Borough Lands Division (907-852-0322), BPXA Crisis Center in Anchorage (907-564-5243), and the ConocoPhillips Incident Command Center in Anchorage (907-265-1000). The following cultural site(s) are located in the area depicted on this sheet:

- XBP-006 near Heald Point



### AIR ACCESS\*

- Deadhorse airport (Sheet 78) is located approximately 12 miles south-southwest of Heald Point.

### VESSEL ACCESS\* AND HYDROGRAPHIC CONDITIONS

- Outer portions of Prudhoe Bay have water depths of 6 to 9 ft and afford good holding anchorage with protection from all but northwest winds. Inner bay has shoals across most of the entrance, with water depths of 2 to 6 ft.
- The best marine access route to Prudhoe Bay parallels the west shore at a distance of 0.4 mile with 4 ft. depths.
- Annual average flow rate of the Sagavanirktok River is 2,770 cfs.
- There is high sediment transport in a westerly direction along shore due to Sagavanirktok River discharge.
- There is extensive shoaling as much as 2 miles out from the Sagavanirktok River delta.
- Eddies and reduced current velocities in Prudhoe Bay cause extensive shoaling and migration of barrier islands.

### COUNTERMEASURES CONSIDERATIONS

- Sand-gravel beaches on the interior of Prudhoe Bay are quite narrow and are interrupted by vegetated shorelines; this makes the use of large machinery impractical.

\*See the latest *Supplement, Alaska* and United States Coast Pilot for current information on air and vessel access, respectively.

148° 18'

148° 15'

148° 12'

148° 09'

70° 23'

70° 23'

70° 22'

70° 22'

70° 21'

70° 21'

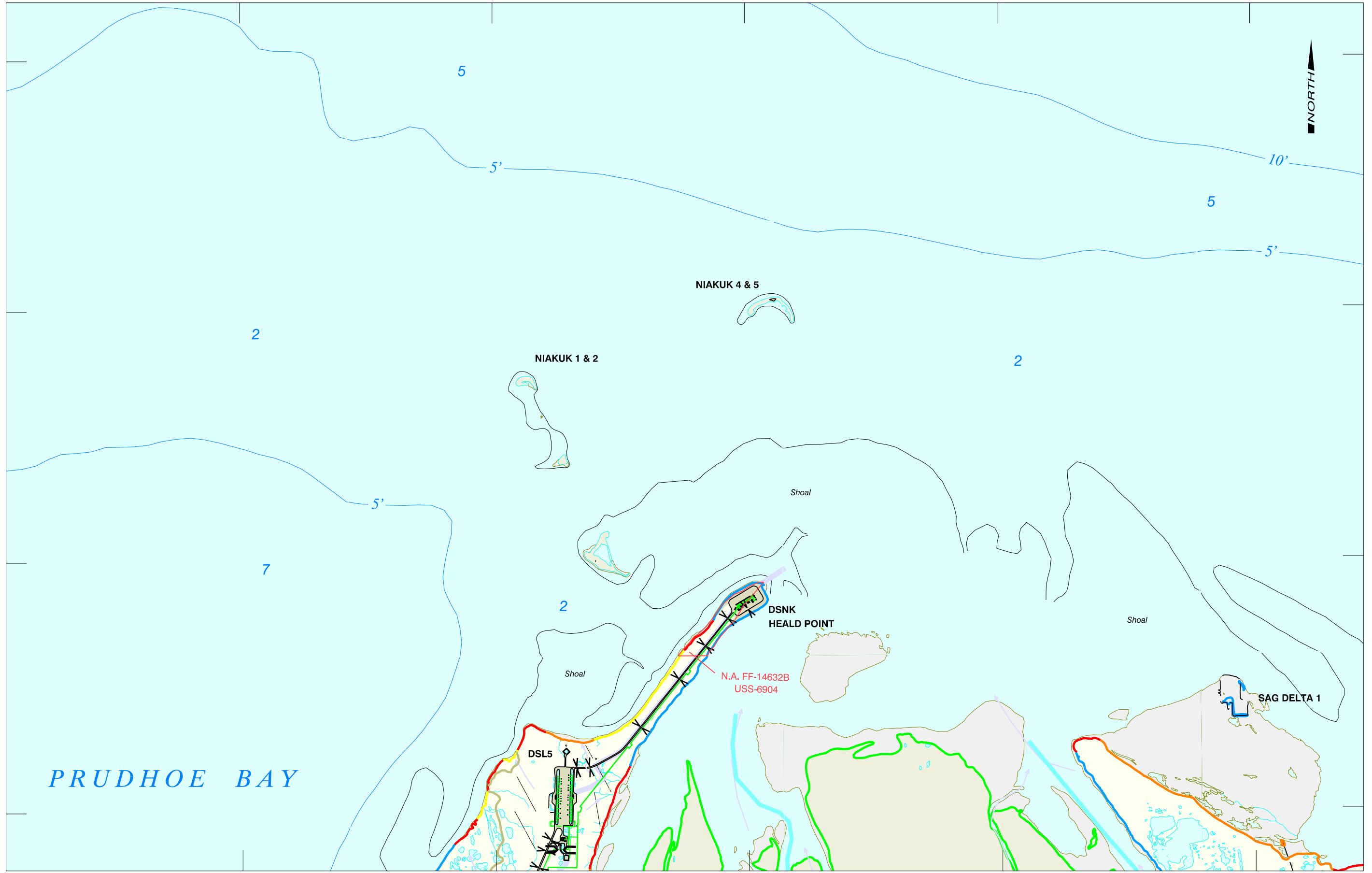
70° 20'

70° 20'



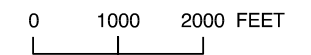
Continue on sheet 65

Continue on sheet 67



PRUDHOE BAY

1:26000





## PRIORITY PROTECTION SITES

SITE NO.	DESCRIPTION	SENSITIVITY	TACTIC	EST. BOOM
PS12	Eight seabird colonies from Heald Pt. to Pt. Brower	Most sensitive during open water season (June through September). Concentrations of birds.	C-13 or C-14	6,000'

## GENERAL SENSITIVITIES

- Coastal areas support high concentrations of breeding, nesting, brood-rearing, and molting waterbirds during the summer.
- Concentrations of swans, ducks, geese, and shorebirds are present from June to September in the Sagavanirktok River delta.
- The outer portion of the delta is an important migration staging area for shorebirds from July through September and a Pintail molting area in July and August.
- High concentrations of brood-rearing and molting Snow Geese are present in July and August.
- Plan to deploy bird-hazing systems during the open-water season.
- There is a seawater intake between the Endicott Main Production Island (MPI) and Endeavor Island approximately 4 to 9 ft below the surface. Precautions should be taken to keep oil away from this area.



## AIR ACCESS\*

- Deadhorse airport (Sheet 78) is located approximately 15 miles southwest of Endicott Main Production Island (MPI).

## VESSEL ACCESS\* AND HYDROGRAPHIC CONDITIONS

- Outer portions of Prudhoe Bay have water depths of 6 to 9 ft and afford good holding anchorage with protection from all but northwest winds. Inner bay has shoals across most of the entrance, with water depths of 2 to 6 ft.
- There is a boat launch on the west side of MPI.
- There is high sediment transport in a westerly direction along shore due to Sagavanirktok River discharge.
- Annual average flow rate of the Sagavanirktok River is 2,770 cfs. River discharge discolors seawater for many miles.
- There is extensive shoaling as much as 2 miles out from the Sagavanirktok River delta.
- Eddies and reduced current velocities in Prudhoe Bay cause extensive shoaling and migration of barrier islands.

## STAGING AREAS AND PRESTAGED EQUIPMENT

- There is a staging area on the MPI.

PRESTAGED EQUIP. AREA	LOCATION	ITEM	QUANTITY	TYPE
END-9	West side of MPI	Boom	1,000'	14" x 18" light ocean, reel
END-8	Southwest corner of MPI	Boom	6,000'	8" x 6" river

\*See the latest *Supplement, Alaska* and United States Coast Pilot for current information on air and vessel access, respectively.

148° 06'

148° 03'

148° 00'

147° 57'

147° 54'

70° 23'

70° 23'

70° 22'

70° 22'

70° 21'

70° 21'

70° 20'

70° 20'



PS12

13

16

Y0191 Island Shoal

10'

5

RESOLUTION ISLAND

5'

3

PS12

5

ENDEAVOR ISLAND

END-9  
BOAT LAUNCH  
STAGING AREA

SEA WATER INTAKE 4' TO 9' BELOW SURFACE

3

MAIN PRODUCTION ISLAND

END-8

SAG DELTA 3 & 4

11

Shoal

SAG DELTA 1

Shoal

Shoal

PS12

10'

5'

3

1:26000

0 1000 2000 FEET

Continue on sheet 66

Continue on sheet 73

Continue on sheet 74





### PRIORITY PROTECTION SITES

- There are no priority protection sites on this sheet.

### GENERAL SENSITIVITIES

- Coastal areas support high concentrations of breeding, nesting, brood-rearing, and molting waterbirds during the summer.
- Concentrations of swans, ducks, geese, and shorebirds are present here in June before open water is present elsewhere.
- This is a Brant nesting area. Birds are present from May through July.
- Pairs of Spectacled Eiders have been found in this area.
- Plan to deploy bird-hazing systems during the open-water season.
- The Sakonowak River provides habitat for anadromous whitefish.



### AIR ACCESS\*

- Deadhorse airport (Sheet 81) is approximately 18 miles southeast of Z Pad.

### VESSEL ACCESS\* AND HYDROGRAPHIC CONDITIONS

- There are no marine shorelines or waters on this sheet.

\*See the latest *Supplement, Alaska* and United States Coast Pilot for current information on air and vessel access, respectively.

149° 18'

149° 15'

149° 12'

149° 09'

70° 20'

70° 20'

70° 19'

70° 19'

70° 18'

70° 18'



MP WEST  
KUPARUK  
(33-07-11-12)

Tractor Tracks

V PAD

SAKONOWYAK RIVER

Tractor Tracks

MOBIL KUPARUK  
(13-15-11-12)

SPINE ROAD

MOBIL KUPARUK  
STATE  
(23-07-11-12)

SPINE ROAD

STORAGE PAD

EILEEN WEST END  
(03-21-11-12)

W PAD

Z PAD

HIGHLAND  
STATE 1  
(24-11-11)

MOBIL KUPARUK  
STATE

1:26000

0 1000 2000 FEET

Continue on sheet 52

Continue on sheet 69



**PRIORITY PROTECTION SITES**

- There are no priority protection sites on this sheet.

**GENERAL SENSITIVITIES**

- Coastal areas support high concentrations of breeding, nesting, brood-rearing, and molting waterbirds during the summer.
- Concentrations of swans, ducks, geese, and shorebirds are present here in June before open water is present elsewhere.
- Pairs of Spectacled Eiders have been found in this area.
- Plan to deploy bird-hazing systems during the open-water season.
- The Kuparuk River provides habitat for anadromous whitefish and for resident fish.
- The Sakonowak River provides habitat for anadromous whitefish.



**AIR ACCESS\***

- Deadhorse airport (Sheet 81) is approximately 16 miles southeast of W Pad.

**VESSEL ACCESS\* AND HYDROGRAPHIC CONDITIONS**

- There are no marine shorelines or waters on this sheet.
- The annual average discharge rate of the Kuparuk River is 1,830 cfs.
- There are two boat launches on the Kuparuk River on either side of the Spine Road bridge.

**STAGING AREAS AND PRESTAGED EQUIPMENT**

- There is a possible staging area at the Service City pad.
- KUP-1 is a predetermined containment site. No equipment is staged there.
- Boom is typically predeployed seasonally southeast of WOA-1.

PRESTAGED EQUIP. AREA	LOCATION	ITEM	QUANTITY	TYPE
KUP-2	On Spine Road approx. 0.5 mile west of bridge	Boom Anchor Systems	5,050' 3	8" x 6" river
WOA-1	On west bank of main channel south of bridge	Boom	6,000'	8" x 6" river



149° 06'

149° 03'

149° 00'

148° 57'

70° 19'

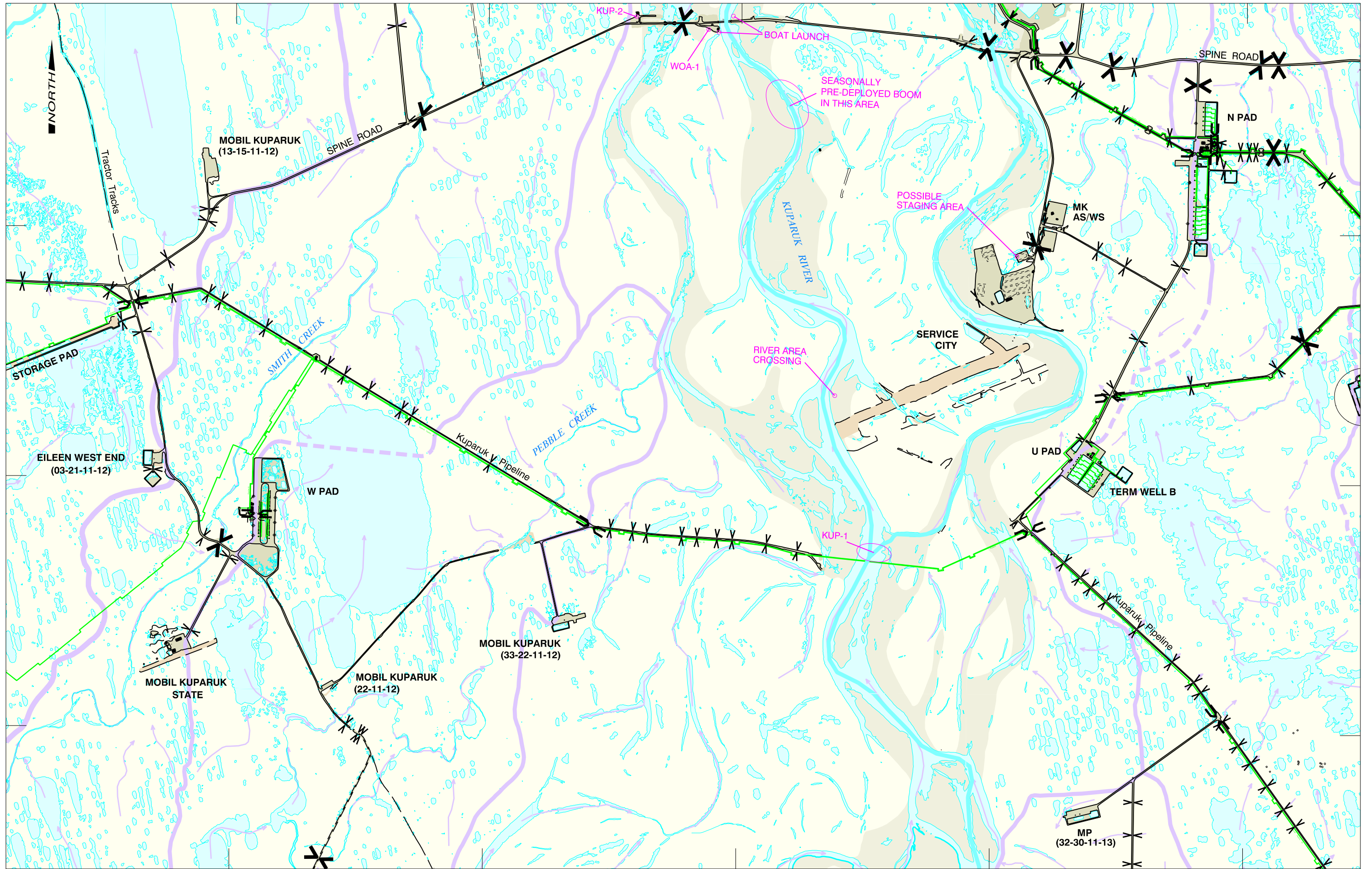
70° 19'

70° 18'

70° 18'

70° 17'

70° 17'



Continue on sheet 68

Continue on sheet 70

1:26000

0 1000 2000 FEET





### PRIORITY PROTECTION SITES

- There are no priority protection sites on this sheet.

### GENERAL SENSITIVITIES

- Coastal areas support high concentrations of breeding, nesting, brood-rearing, and molting waterbirds during the summer.
- Concentrations of swans, ducks, geese, and shorebirds are present here in June before open water is present elsewhere.
- This is a Brant nesting area. Birds are present from May through July.
- Pairs of Spectacled Eiders have been found in this area.
- Plan to deploy bird-hazing systems during the open-water season.
- There is a freshwater intake in Big Lake west of the BOC. The intake is 5 ft below the surface and is not used during winter. Precautions should be taken to protect this area.



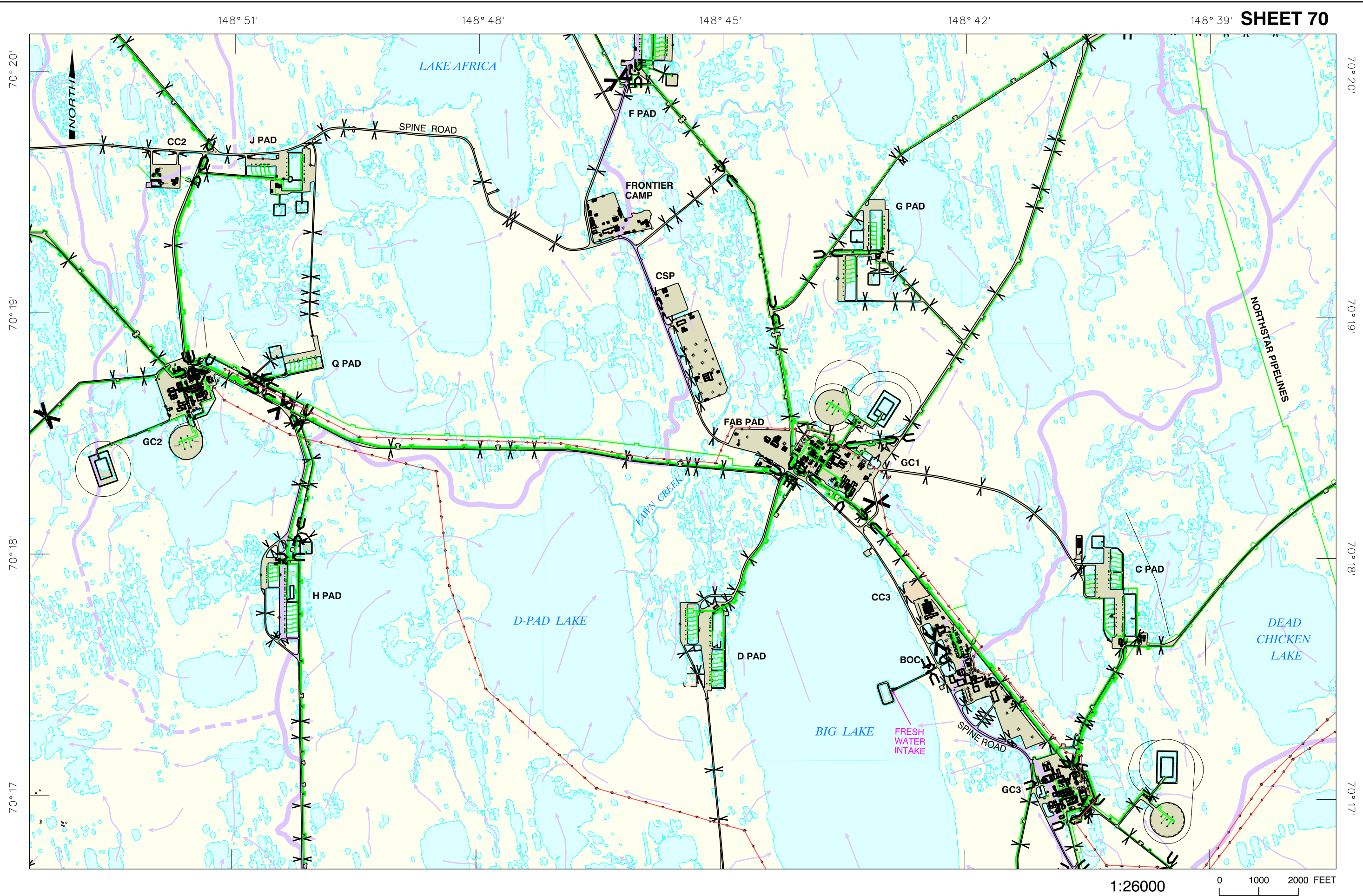
### AIR ACCESS\*

- Deadhorse airport (Sheet 81) is approximately 10 miles south-southeast of GC1.

### VESSEL ACCESS\* AND HYDROGRAPHIC CONDITIONS

- There are no marine shorelines or waters on this sheet.

\*See the latest *Supplement, Alaska* and United States Coast Pilot for current information on air and vessel access, respectively.



Continue on sheet 69

Continue on sheet 71



**PRIORITY PROTECTION SITES**

SITE NO.	DESCRIPTION	SENSITIVITY	TACTIC	EST. BOOM
PS8	Mouth of the Putuligayuk River	Most sensitive during open water season. Keep oil from entering river.	C-13 or C-14	1,000'
PS9	Creek mouth, east side of CCP	Most sensitive during open water season, when oil could drift into inlet. Salt marsh and/or inundated low-lying tundra shoreline.	C-13 or C-14	500'

**GENERAL SENSITIVITIES**

- Coastal areas support high concentrations of breeding, nesting, brood-rearing, and molting waterbirds during the summer.
- Concentrations of swans, ducks, geese, and shorebirds are present here in June before open water is present elsewhere.
- High concentrations of brood-rearing and molting Snow Geese are present in July and August.
- This is a Brant brood-rearing and molting area. Birds are present in July and August.
- Pairs of Spectacled Eiders have been found in this area.
- Plan to deploy bird-hazing systems during the open-water season.
- The Putuligayuk and Little Putuligayuk Rivers provide habitat for anadromous whitefish and char.

**CULTURAL SITES**

Information on the exact locations of cultural sites is confidential. This information is contained in the *North Slope Archaeological Data* document, copies of which are kept at the following offices: State Historical Preservation Officer (SHPO) (907-269-8721), ACS in Deadhorse (907-659-2405), North Slope Borough Lands Division (907-852-0322), BPXA Crisis Center in Anchorage (907-564-5243), and the ConocoPhillips Incident Command Center in Anchorage (907-265-1000). The following cultural site(s) are located in the area depicted on this sheet:

- XBP-007 on the coast west of the Putuligayuk River



**AIR ACCESS\***

- Deadhorse airport (Sheet 81) is approximately 9 miles south of the CGF.

**VESSEL ACCESS\* AND HYDROGRAPHIC CONDITIONS**

- Outer portions of Prudhoe Bay have water depths of 6 to 9 ft and afford good holding anchorage with protection from all but northwest winds. Inner bay has shoals across most of the entrance, with water depths of 2 to 6 ft.
- The best marine access route to Prudhoe Bay parallels the west shore at a distance of 0.4 mile and has depths of 4 ft.
- There is a boat launch on the north side of the large bend in the Putuligayuk River west of the river mouth.
- There is a boat launch west of the inlet at the mouth of the Putuligayuk River.

**COUNTERMEASURES CONSIDERATIONS**

- Sand-gravel beaches on the interior of Prudhoe Bay are quite narrow and interrupted by vegetated shorelines; this makes the use of large machinery impractical.

**STAGING AREAS AND PRESTAGED EQUIPMENT**

- There is a possible staging area at the Put 23 Mine site.

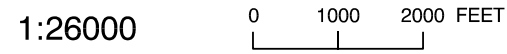
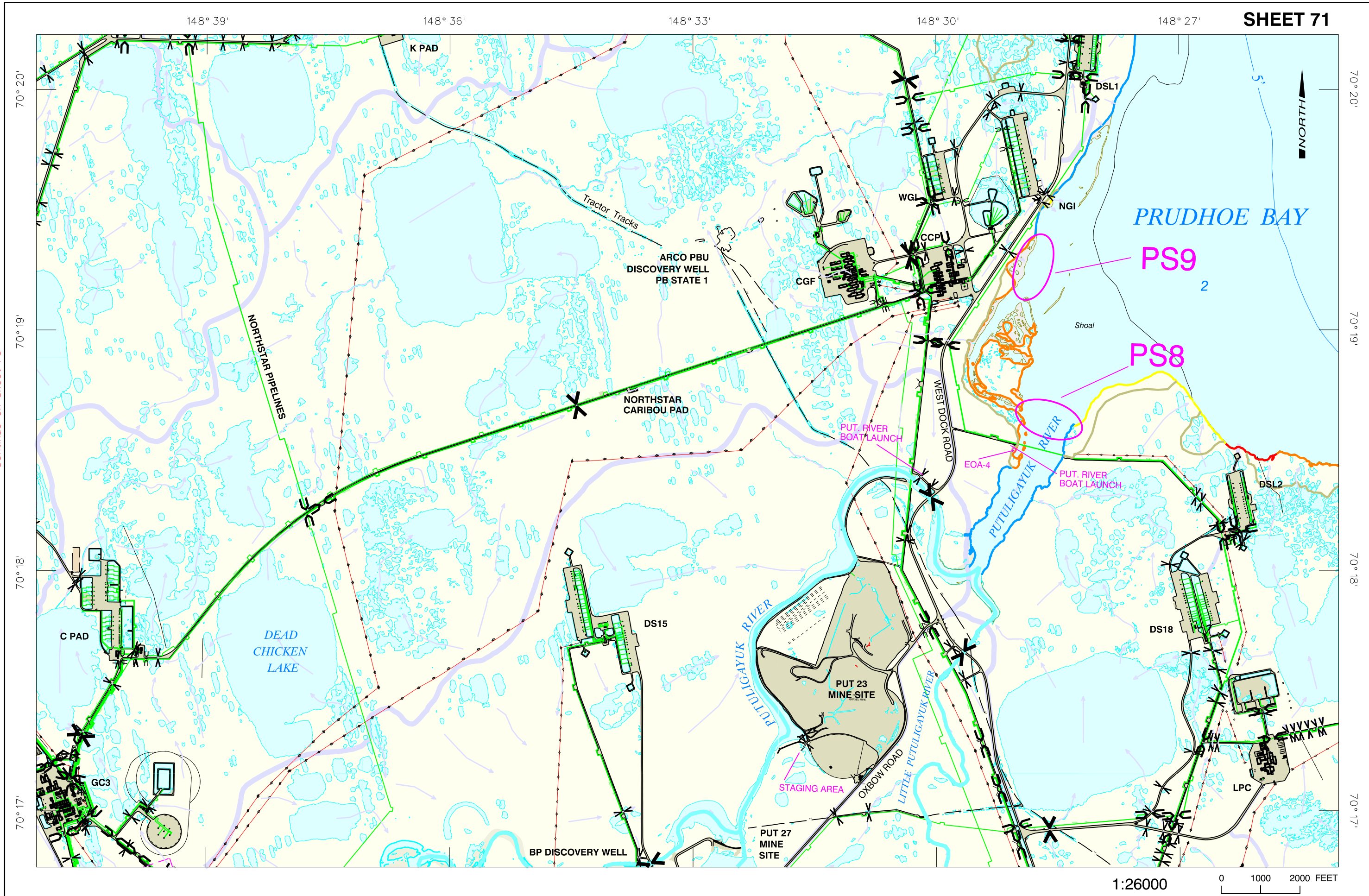
PRESTAGED EQUIP. AREA	LOCATION	ITEM	QUANTITY	TYPE
EOA-4	West side of inlet at the mouth of the Putuligayuk River	Boom Anchor System	2,000' 1	8" x 6" river

\*See the latest *Supplement, Alaska* and United States Coast Pilot for current information on air and vessel access, respectively.



Continue on sheet 70

Continue on sheet 72







**PRIORITY PROTECTION SITES**

- There are no priority protection sites on this sheet.

**GENERAL SENSITIVITIES**

- Coastal areas support high concentrations of breeding, nesting, brood-rearing, and molting waterbirds during the summer.
- Concentrations of swans, ducks, geese, and shorebirds are present here in June before open water is present elsewhere.
- High concentrations of brood-rearing and molting Snow Geese are present in July and August.
- This is a Brant nesting, brood-rearing and molting area. Birds are present from May through August.
- Pairs of Spectacled Eiders have been found in this area.
- Plan to deploy bird-hazing systems during the open-water season.
- The Sagavanirktok River is a migratory corridor for arctic char and whitefish, and an overwintering area for a variety of whitefish, burbot, grayling, and sculpin.

**CULTURAL SITES**

Information on the exact locations of cultural sites is confidential. This information is contained in the *North Slope Archaeological Data* document, copies of which are kept at the following offices: State Historical Preservation Officer (SHPO) (907-269-8721), ACS in Deadhorse (907-659-2405), North Slope Borough Lands Division (907-852-0322), BPXA Crisis Center in Anchorage (907-564-5243), and the ConocoPhillips Incident Command Center in Anchorage (907-265-1000). The following cultural site(s) are located in the area depicted on this sheet:

- XBP-005 on the east coast of Prudhoe Bay northeast of East Dock



**AIR ACCESS\***

- Deadhorse airport (Sheet 81) is approximately 9 miles south-southwest of East Dock.

**VESSEL ACCESS\* AND HYDROGRAPHIC CONDITIONS**

- Outer portions of Prudhoe Bay have water depths of 6 to 9 ft and afford good holding anchorage with protection from all but northwest winds. Inner bay has shoals across most of the entrance, with water depths of 2 to 6 ft.
- The best marine access route to Prudhoe Bay parallels the west shore at a distance of 0.4 mile and has depths of 4 ft.
- There is a boat launch at East Dock.
- There is a boat launch on the west bank of the west channel of the Sagavanirktok River south of Surfcode Pad.

**COUNTERMEASURES CONSIDERATIONS**

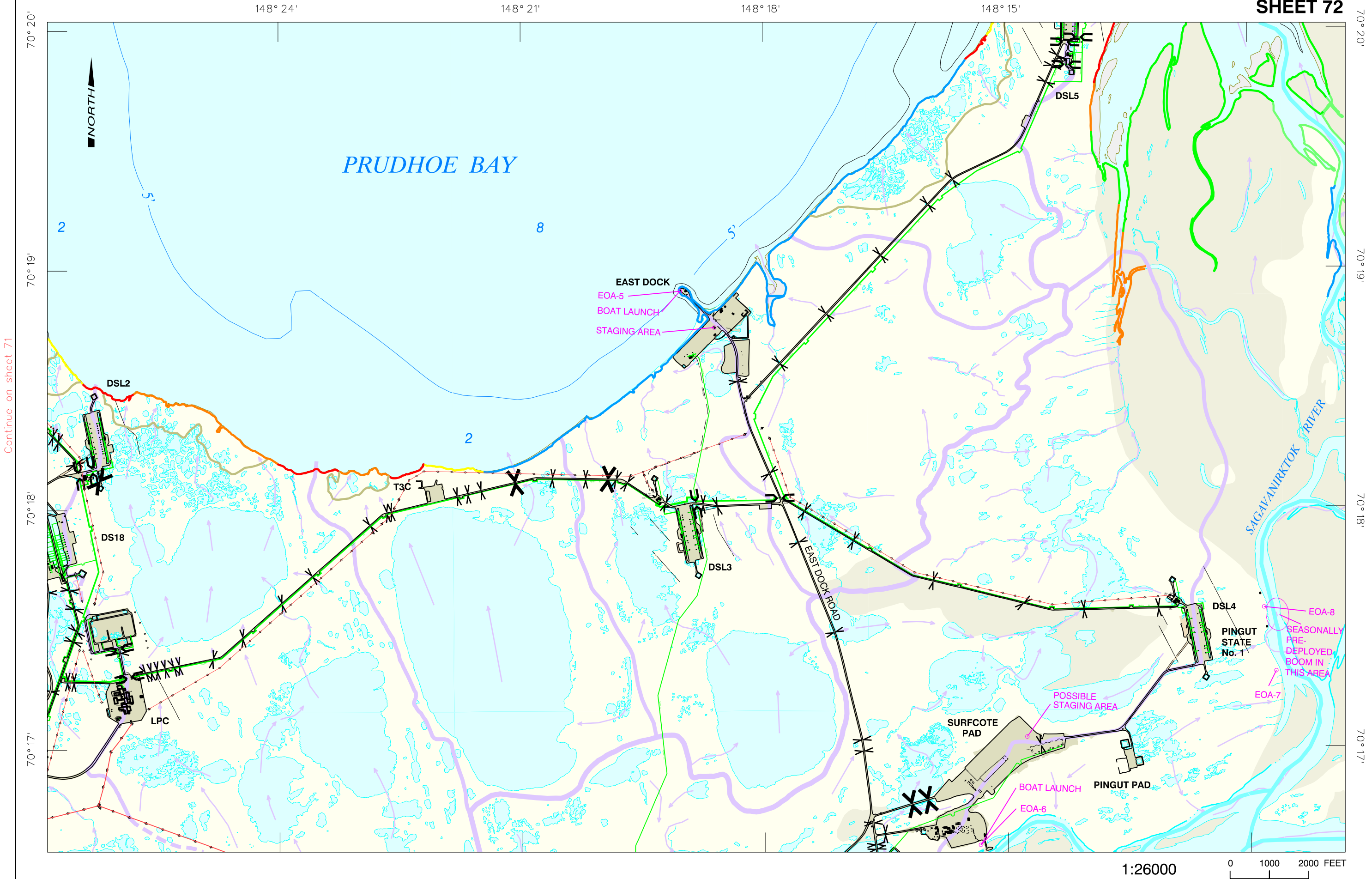
- Sand-gravel beaches on the interior of Prudhoe Bay are quite narrow and interrupted by vegetated shorelines; this makes the use of large machinery impractical.

**STAGING AREAS AND PRESTAGED EQUIPMENT**

- There is a staging area at the East Dock pad.
- There is a possible staging area at Surfcode Pad.
- Boom is typically predeployed seasonally between EOA-7 and EOA-8.

PRESTAGED EQUIP. AREA	LOCATION	ITEM	QUANTITY	TYPE
EOA-5	East Dock	Boom	10,950'	8"x 6" river
EOA-6	West of the river south of Surfcode Pad	Boom Boom Skimmer Pump	950' 10,000' 3 3	8"x12" fire 8"x 6" river Disc, MI 3" diaphragm
EOA-7	West bank of river near DSL4 south of EOA-8	Boom Storage Storage Storage	2,000' 1 1 1	8"x 6" river 1,320-gal bladder 2,640-gal bladder 2,400-gal Fastank
EOA-8	West bank of river near DSL4 north of EOA-7	Boom Storage Storage Storage	2,000' 1 1 1	8"x 6" river 1,320-gal bladder 2,640-gal bladder 2,400-gal Fastank

\*See the latest *Supplement, Alaska* and United States Coast Pilot for current information on air and vessel access, respectively.



Continue on sheet 71

Continue on sheet 73



**PRIORITY PROTECTION SITES**

SITE NO.	DESCRIPTION	SENSITIVITY	TACTIC	EST. BOOM
PS5	Howe Island	Most sensitive during open water season (June through September). Snow goose breeding area.	C-13 or C-14	5,000'
PS6	Inlet channel, southwest of Howe Island	Most sensitive during open water season when oil could drift into inlet. Inundated low-lying tundra shoreline.	C-13 or C-14	1,000'

\* Priority Protection Area -- The entire delta region of the Sagavanirktok River is one large Priority Protection Area due to its size and numerous geographical features. On-site conditions may require the use of open water tactics to prevent oil migration into this delta.

**GENERAL SENSITIVITIES**

- Coastal areas support high concentrations of breeding, nesting, brood-rearing, and molting waterbirds during the summer.
- Howe Island is the only known major site for Snow Goose breeding in the United States. Birds are present from June to September on the island and in the Sagavanirktok River delta.
- Concentrations of swans, ducks, other geese, and shorebirds also are present from June to September in the Sagavanirktok River delta.
- The outer portion of the delta is an important migration staging area for shorebirds from July through September and a Pintail molting area in July and August.
- This is a Brant nesting, brood-rearing, and molting area. Birds are present from May through August.
- Pairs of Spectacled Eiders have been found in this area.
- Plan to deploy bird-hazing systems during the open-water season.
- The Sagavanirktok River is a migratory corridor for arctic char and whitefish, and an overwintering area for a variety of whitefish, burbot, grayling, and sculpin.
- Polar bear dens have been found in this area. Dens may be in use from October through April.

**CULTURAL SITES**

Information on the exact locations of cultural sites is confidential. This information is contained in the *North Slope Archaeological Data* document, copies of which are kept at the following offices: State Historical Preservation Officer (SHPO) (907-269-8721), ACS in Deadhorse (907-659-2405), North Slope Borough Lands Division (907-852-0322), BPXA Crisis Center in Anchorage (907-564-5243), and the ConocoPhillips Incident Command Center in Anchorage (907-265-1000). The following cultural site(s) are located in the area depicted on this sheet:

- XBP-001 on Howe Island



**AIR ACCESS\***

- Deadhorse airport (Sheet 81) is located approximately 13 miles southwest of Howe Island.

**VESSEL ACCESS\* AND HYDROGRAPHIC CONDITIONS**

- Outer portions of Prudhoe Bay have water depths of 6 to 9 ft and afford good holding anchorage with protection from all but northwest winds. Inner bay has shoals across most of the entrance, with water depths of 2 to 6 ft.
- Annual average flow rate of the Sagavanirktok River is 2,770 cfs. River discharge discolors seawater for many miles. Large amounts of river sediments are swept westward in alongshore currents.
- There is extensive shoaling as much as 2 miles out from the Sagavanirktok River delta.

**COUNTERMEASURES CONSIDERATIONS**

- Mud flats at the eastern front of the Sagavanirktok River delta may have low load-bearing capacity.
- Most shorelines between the Kuparuk River (to the west) and the Sagavanirktok River are accessible by balloon-tired vehicles or beach-front access at West Dock and East Dock.

**STAGING AREAS AND PRESTAGED EQUIPMENT**

- Boom is typically predeployed seasonally between EOA-7 and EOA-8, and near EOA-9.

PRESTAGED EQUIP. AREA	LOCATION	ITEM	QUANTITY	TYPE
EOA-7	West bank of river near DSL4 south of EOA-8	Boom	2,000'	8"x 6" river
		Storage	1	1,320-gal bladder
		Storage	1	2,640-gal bladder
		Storage	1	2,400-gal Fastank
EOA-8	West bank of river near DSL4 north of EOA-7	Boom	2,000'	8"x 6" river
		Storage	1	1,320-gal bladder
		Storage	1	2,640-gal bladder
		Storage	1	2,400-gal Fastank
EOA-9	East bank of main channel west of Sag Delta 11	Boom	2,000'	8"x 6" river
		Storage	2	1,320-gal bladder
		Storage	2	2,640-gal bladder
		Storage	1	2,400-gal Fastank

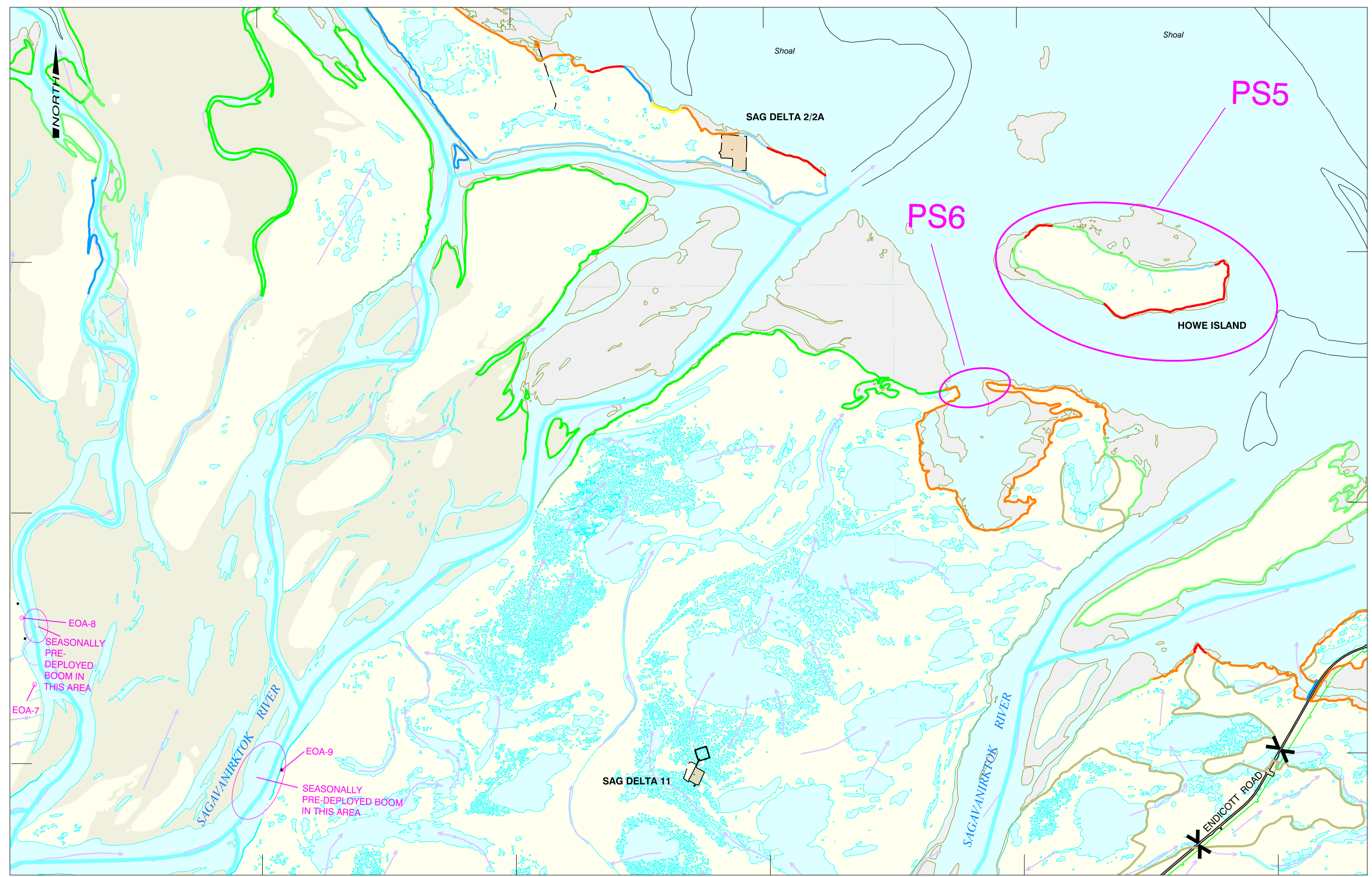
\*See the latest *Supplement, Alaska* and United States Coast Pilot for current information on air and vessel access, respectively.



148° 09'      148° 06'      148° 03'      148° 00'

70° 19'  
70° 18'  
70° 17'

70° 19'  
70° 18'  
70° 17'



1:26000      0      1000      2000 FEET

Continue on sheet 72

Continue on sheet 74





**PRIORITY PROTECTION SITES**

SITE NO.	DESCRIPTION	SENSITIVITY	TACTIC	EST. BOOM
PS5	Howe Island	Most sensitive during open water season (June through September). Snow goose breeding area.	C-13 or C-14	5,000'
PS7	Duck Island	Most sensitive during open water season (June through September). Concentrations of birds.	C-13 or C-14	3,000'
PS12	Eight seabird colonies from Heald Pt. to Pt. Brower (one site, Duck Island 3, may be submerged)	Most sensitive during open water season (June through September). Concentrations of birds.	C-13 or C-14	6,000'

\* Priority Protection Area -- The entire delta region of the Sagavanirktok River is one large Priority Protection Area due to its size and numerous geographical features. On-site conditions may require the use of open water tactics to prevent oil migration into this delta.

**GENERAL SENSITIVITIES**

- Coastal areas support high concentrations of breeding, nesting, brood-rearing, and molting waterbirds during the summer.
- Howe Island is the only known major site for Snow Goose breeding in the United States. Birds are present from June to September on the island and in the Sagavanirktok River delta.
- Concentrations of swans, ducks, other geese, and shorebirds also are present from June to September in the Sagavanirktok River delta.
- The outer portion of the delta is an important migration staging area for shorebirds from July through September and a Pintail molting area in July and August.
- This is a Brant nesting, brood-rearing and molting area. Birds are present from May through August.
- Plan to deploy bird-hazing systems during the open-water season.
- The Sagavanirktok River is a migratory corridor for arctic char and whitefish, and an overwintering area for a variety of whitefish, burbot, grayling, and sculpin.

**CULTURAL SITES**

Information on the exact locations of cultural sites is confidential. This information is contained in the *North Slope Archaeological Data* document, copies of which are kept at the following offices: State Historical Preservation Officer (SHPO) (907-269-8721), ACS in Deadhorse (907-659-2405), North Slope Borough Lands Division (907-852-0322), BPXA Crisis Center in Anchorage (907-564-5243), and the ConocoPhillips Incident Command Center in Anchorage (907-265-1000). The following cultural site(s) are located in the area depicted on this sheet:

- XBP-001 on Howe Island
- XBP-022 near Point Brower



**AIR ACCESS\***

- Deadhorse airport (Sheet 81) is located approximately 16 miles southwest of Endicott Satellite Drilling Island (SDI).

**VESSEL ACCESS\* AND HYDROGRAPHIC CONDITIONS**

- There is a boat launch on the west side of SDI.
- There is small boat and float plane shelter in the lagoon on the southeast side of Point Brower. Water depth is 2 to 4 ft.
- Annual average flow rate of the Sagavanirktok River is 2,770 cfs. River discharge discolors seawater for many miles. Large amounts of river sediments are swept westward in alongshore currents.
- There is extensive shoaling as much as 2 miles out from the Sagavanirktok River delta.
- Currents are swift through the Endicott causeway breaches.

**COUNTERMEASURES CONSIDERATIONS**

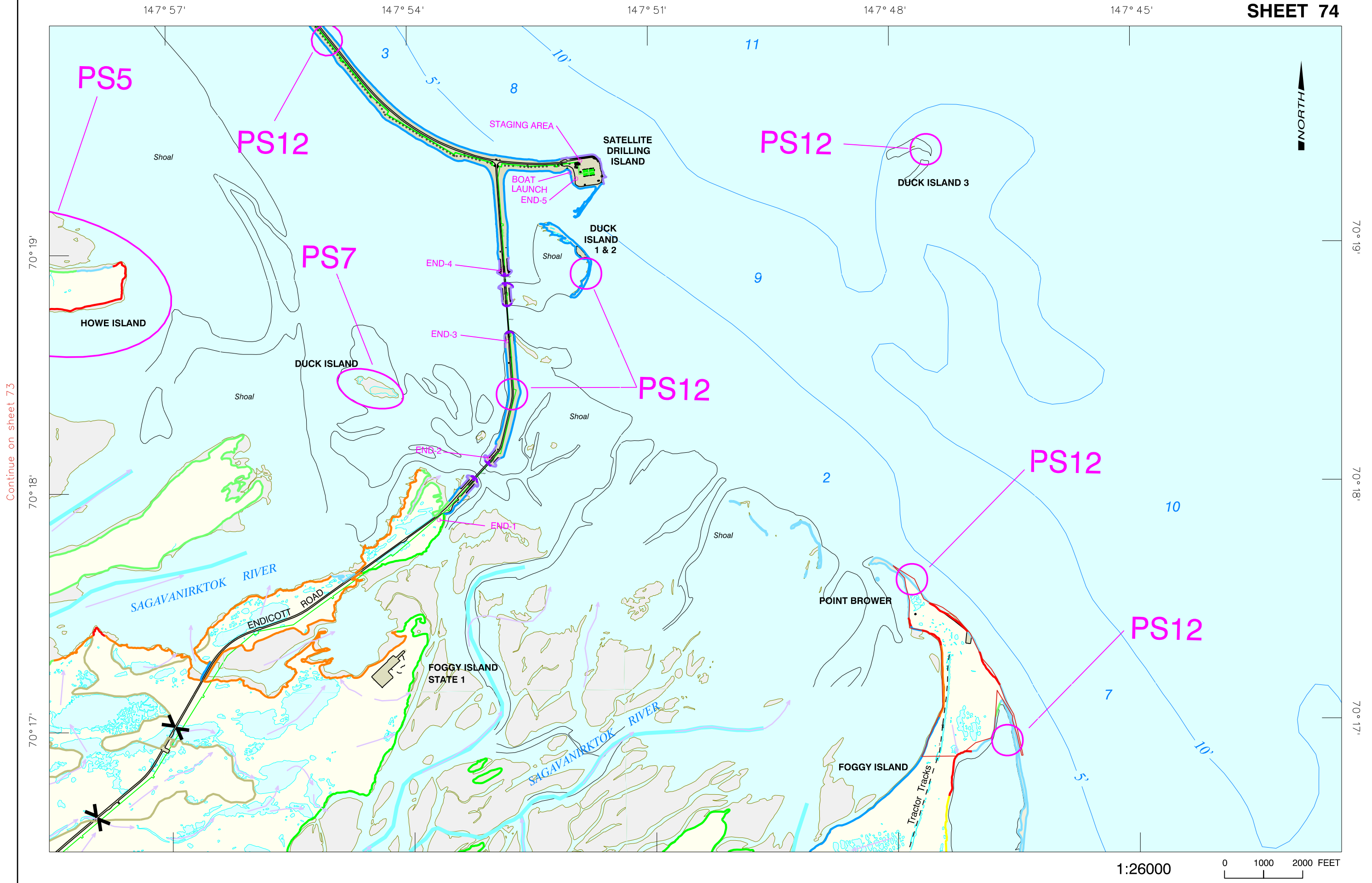
- Mud flats at the eastern front of the Sagavanirktok River delta may have low load-bearing capacity.

**STAGING AREAS AND PRESTAGED EQUIPMENT**

- There is a staging area on the SDI.

PRESTAGED EQUIP. AREA	LOCATION	ITEM	QUANTITY	TYPE
END-1	At entrance to causeway	Boom	4,000'	8"x 6" river
END-2	On causeway north of first bridge	Boom	4,000'	8"x 6" river
END-3	On causeway south of second bridge	Boom	6,000'	8"x 6" river
END-4	On causeway north of third bridge	Boom	6,000'	8"x 6" river
END-5	SDI	Boom	4,400'	8"x 6" river

\*See the latest *Supplement, Alaska* and United States Coast Pilot for current information on air and vessel access, respectively.



Continue on sheet 73

70° 19'

70° 18'

70° 17'

Continue on sheet 84



### PRIORITY PROTECTION SITES

- There are no priority protection sites on this sheet.

### GENERAL SENSITIVITIES

- Coastal areas support high concentrations of breeding, nesting, brood-rearing, and molting waterbirds during the summer.
- Concentrations of swans, ducks, geese, and shorebirds are present here in June before open water is present elsewhere.
- Pairs of Spectacled Eiders have been found in this area.
- Plan to deploy bird-hazing systems during the open-water season.
- The Kuparuk River provides habitat for anadromous whitefish and for resident fish.
- The Putuligayuk River provides habitat for anadromous whitefish and char.



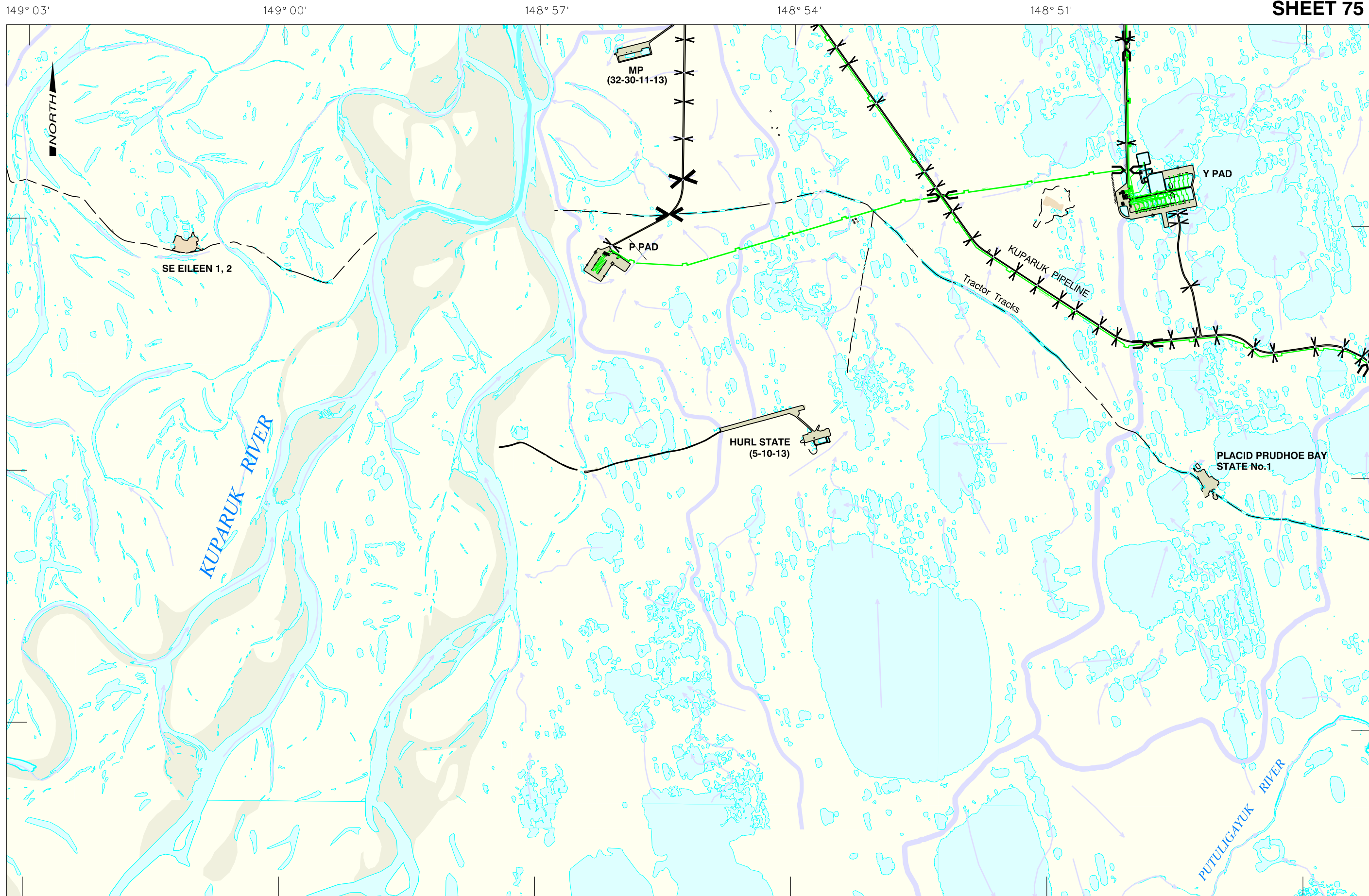
### AIR ACCESS\*

- Deadhorse airport (Sheet 81) is approximately 12 miles southeast of P Pad.

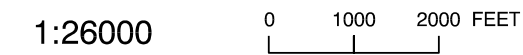
### VESSEL ACCESS\* AND HYDROGRAPHIC CONDITIONS

- There are no marine shorelines or waters on this sheet.
- The annual average discharge rate of the Kuparuk River is 1,830 cfs.

\*See the latest *Supplement, Alaska* and United States Coast Pilot for current information on air and vessel access, respectively.



Continue on sheet 76







**PRIORITY PROTECTION SITES**

- There are no priority protection sites on this sheet.

**GENERAL SENSITIVITIES**

- Coastal areas support high concentrations of breeding, nesting, brood-rearing, and molting waterbirds during the summer.
- Concentrations of swans, ducks, geese, and shorebirds are present here in June before open water is present elsewhere.
- This is a Brant nesting area. Birds are present from May through July.
- Pairs of Spectacled Eiders have been found in this area.
- Plan to deploy bird-hazing systems during the open-water season.
- The Putuligayuk River provides habitat for anadromous whitefish and char.
- There is a freshwater intake in Big Lake west of the BOC. The intake is 5 ft below the surface and is not used during winter because of ice. Precautions should be taken to protect this area.



**AIR ACCESS\***

- Deadhorse airport (Sheet 81) is approximately 8 miles southeast of A Pad.

**VESSEL ACCESS\* AND HYDROGRAPHIC CONDITIONS**

- There are no marine shorelines or waters on this sheet.

**STAGING AREAS AND PRESTAGED EQUIPMENT**

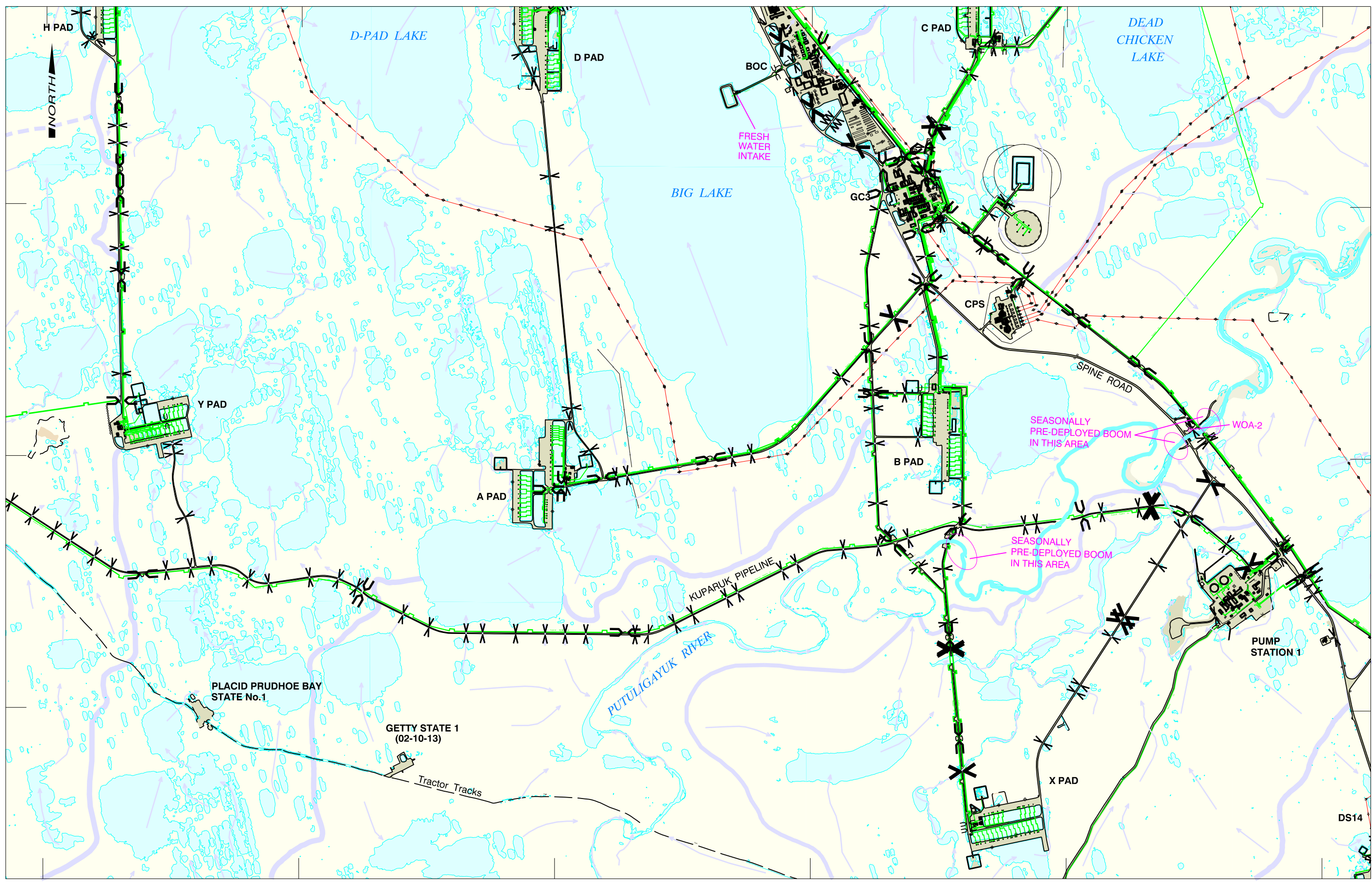
- Boom is typically predeployed seasonally on the Putuligayuk River on either side of Spine Road near WOA-2 and near the X Pad access road.

PRESTAGED EQUIP. AREA	LOCATION	ITEM	QUANTITY	TYPE
WOA-2	On pad north of Put River near Spine Road	Boom	2,175'	8" x 6" river

148° 51' 148° 48' 148° 45' 148° 42' 148° 39'

Continue on sheet 56

Continue on sheet 75



1:26000 0 1000 2000 FEET



**PRIORITY PROTECTION SITES**

- There are no priority protection sites on this sheet.

**GENERAL SENSITIVITIES**

- Coastal areas support high concentrations of breeding, nesting, brood-rearing, and molting waterbirds during the summer.
- Concentrations of swans, ducks, geese, and shorebirds are present here in June before open water is present elsewhere.
- This is a Brant nesting area. Birds are present from May through July.
- Pairs of Spectacled Eiders have been found in this area.
- Plan to deploy bird-hazing systems during the open-water season.
- The Putuligayuk and Little Putuligayuk Rivers provide habitat for anadromous whitefish and char.



**AIR ACCESS\***

- Deadhorse airport (Sheet 81) is approximately 5 miles southeast of Pump Station 1.

**VESSEL ACCESS\* AND HYDROGRAPHIC CONDITIONS**

- There are no marine shorelines or waters on this sheet.

**STAGING AREAS AND PRESTAGED EQUIPMENT**

- There is a possible staging area at the OSP.
- There is a staging area on the west side of the pad at Put 23 Mine Site.
- Boom is typically predeployed seasonally on the Putuligayuk River on either side of Spine Road near WOA-2.

PRESTAGED EQUIP. AREA	LOCATION	ITEM	QUANTITY	TYPE
WOA-2	On pad north of Put River near Spine Road	Boom	2,175'	8" x 6" river

\*See the latest *Supplement, Alaska* and United States Coast Pilot for current information on air and vessel access, respectively.



148° 39' 148° 36' 148° 33' 148° 30' 148° 27'

70° 17'

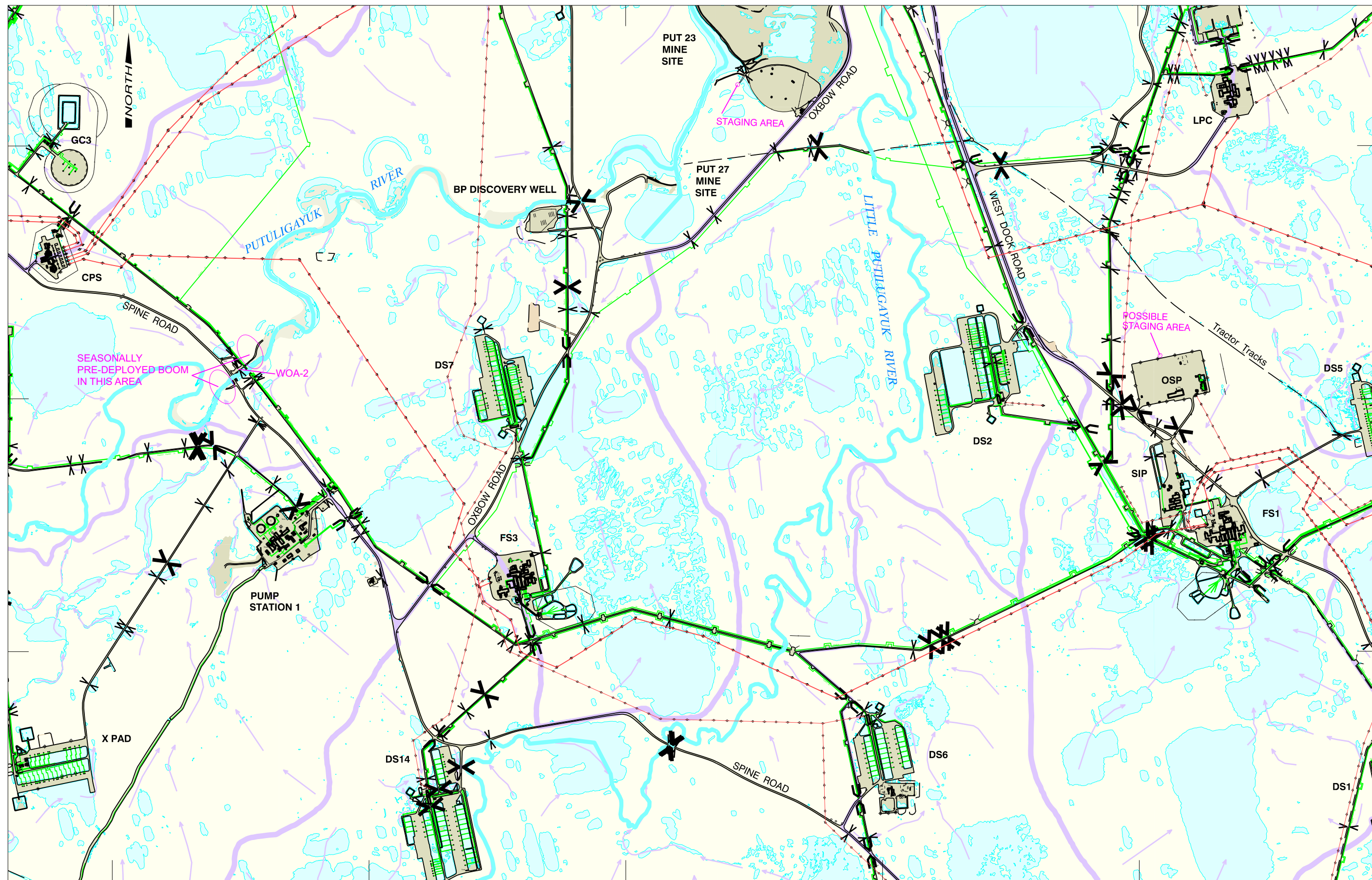
70° 17'

70° 16'

70° 16'

70° 15'

70° 15'



Continue on sheet 76

Continue on sheet 78





**PRIORITY PROTECTION SITES**

- There are no priority protection sites on this sheet.

**GENERAL SENSITIVITIES**

- Coastal areas support high concentrations of breeding, nesting, brood-rearing, and molting waterbirds during the summer.
- Concentrations of swans, ducks, geese, and shorebirds are present here in June before open water is present elsewhere.
- High concentrations of brood-rearing and molting Snow Geese are present in July and August.
- This is a Brant nesting area. Birds are present from May through July.
- Pairs of Spectacled Eiders have been found in this area.
- Plan to deploy bird-hazing systems during the open-water season.
- The Sagavanirktok River is a migratory corridor for arctic char and whitefish, and an overwintering area for a variety of whitefish, burbot, grayling, and sculpin.
- There is a freshwater intake at the south end of Webster Reservoir at 30 to 35 ft below the surface. This intake is used from September through June.
- There is a freshwater intake on the west bank of the west channel of the Sagavanirktok River east of the PBOC at approximately 10 to 12 ft below the surface. This intake is used from June to September.
- Precautions should be taken to protect these water intake areas.



**AIR ACCESS\***

- Deadhorse airport (Sheet 81) is approximately 5 miles southwest of the PBOC.

**VESSEL ACCESS\* AND HYDROGRAPHIC CONDITIONS**

- There are no marine shorelines or waters on this sheet.
- There is a boat launch on the west bank of the west channel of the Sagavanirktok River northeast of DS4.
- Annual average flow rate of the Sagavanirktok River is 2,770 cfs.

**STAGING AREAS AND PRESTAGED EQUIPMENT**

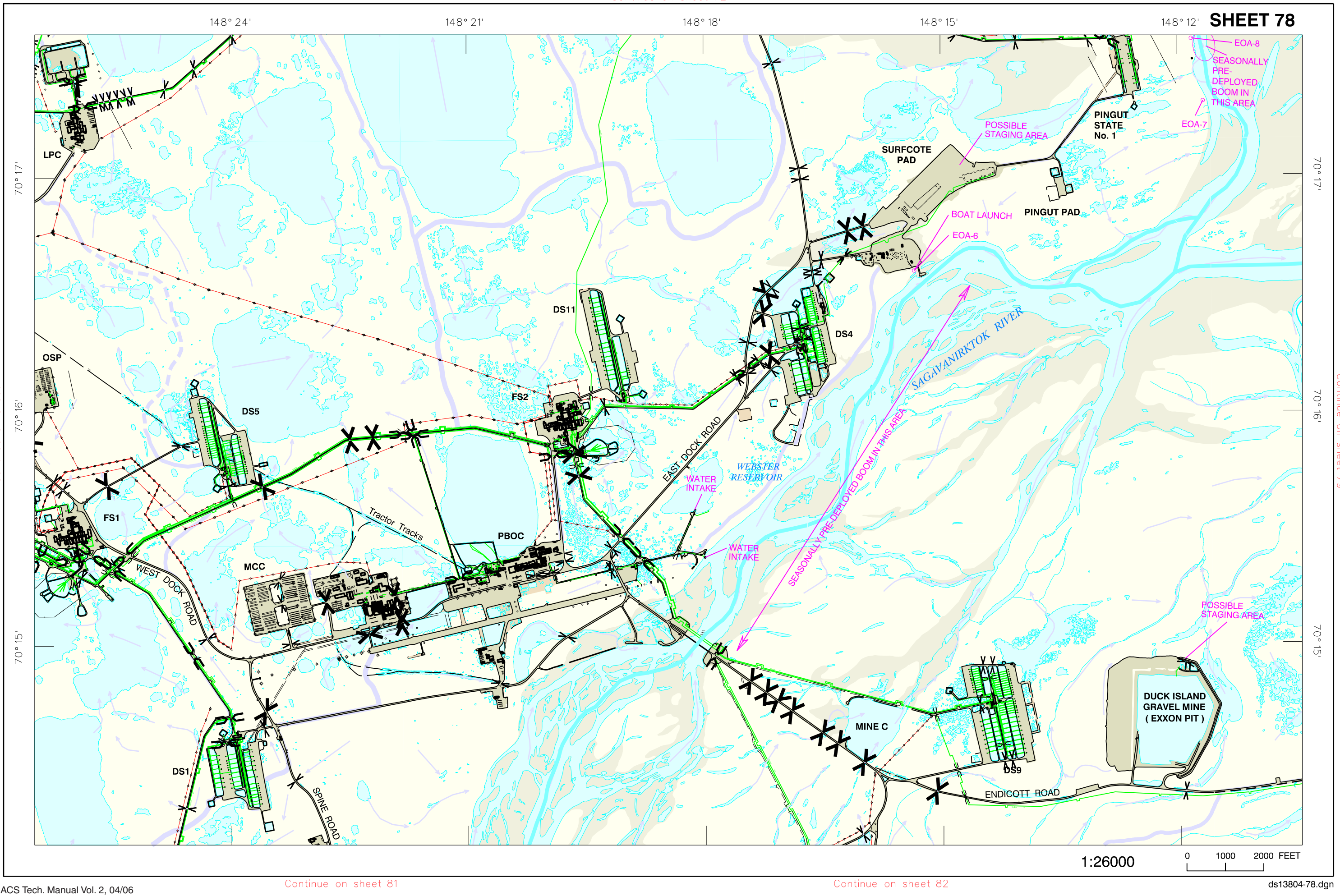
- There is a possible staging area at the Duck Island Gravel Mine site.
- There is a possible staging area at Surfcode Pad.
- Boom is typically predeployed seasonally between the Sagavanirktok River bridge and EOA-6, and between EOA-7 and EOA-8.

PRESTAGED EQUIP. AREA	LOCATION	ITEM	QUANTITY	TYPE
EOA-6	West of the river south of Surfcode Pad	Boom	950'	8" x 12" fire
		Boom	10,000'	8" x 6" river
		Skimmer	3	MI
		Pump	3	3" diaphragm
EOA-7	West bank of river near DSL4 south of EOA-8	Boom	2,000'	8" x 6" river
		Storage	1	1,320-gal bladder
		Storage	1	2,640-gal bladder
EOA-8	West bank of river near DSL4 north of EOA-7	Storage	1	2,400-gal Fastank
		Storage	1	8" x 6" river
		Storage	1	1,320-gal bladder

\*See the latest *Supplement, Alaska* and United States Coast Pilot for current information on air and vessel access, respectively.

Continue on sheet 77

Continue on sheet 79





**PRIORITY PROTECTION SITES**

- There are no priority protection sites on this sheet.

**GENERAL SENSITIVITIES**

- Coastal areas support high concentrations of breeding, nesting, brood-rearing, and molting waterbirds during the summer.
- Concentrations of swans, ducks, geese, and shorebirds are present here in June before open water is present elsewhere.
- The outer portion of the delta is an important migration staging area for shorebirds from July through September and a Pintail molting area in July and August.
- High concentrations of brood-rearing and molting Snow Geese are present in July and August.
- This is a Brant nesting, brood-rearing, and molting area. Birds are present from May through August.
- Pairs of Spectacled Eiders have been found in this area.
- Plan to deploy bird-hazing systems during the open-water season.
- The Sagavanirktok River is a migratory corridor for arctic char and whitefish, and an overwintering area for a variety of whitefish, burbot, grayling, and sculpin.



**AIR ACCESS\***

- Deadhorse airport (Sheet 81) is approximately 11 miles southwest of Delta State 2.

**VESSEL ACCESS\* AND HYDROGRAPHIC CONDITIONS**

- There are no marine waters or shorelines on this sheet.
- Annual average flow rate of the Sagavanirktok River is 2,770 cfs.

**STAGING AREAS AND PRESTAGED EQUIPMENT**

- There is a possible staging area at the Duck Island Gravel Mine site.
- Boom is typically predeployed seasonally near EOA-9.

PRESTAGED EQUIP. AREA	LOCATION	ITEM	QUANTITY	TYPE
EOA-9	East bank of main channel west of Sag Delta 11	Boom	2,000'	8" x 6" river
		Storage	2	1,320-gal bladder, liftable
		Storage	2	2,640-gal bladder, tow/lift
		Storage	1	2,400-gal Fastank
EOA-7	West bank of river near DSL4 south of EOA-8	Boom	2,000'	8" x 6" river
		Storage	1	1,320-gal bladder, liftable
		Storage	1	2,640-gal bladder, tow/lift
		Storage	1	2,400-gal Fastank

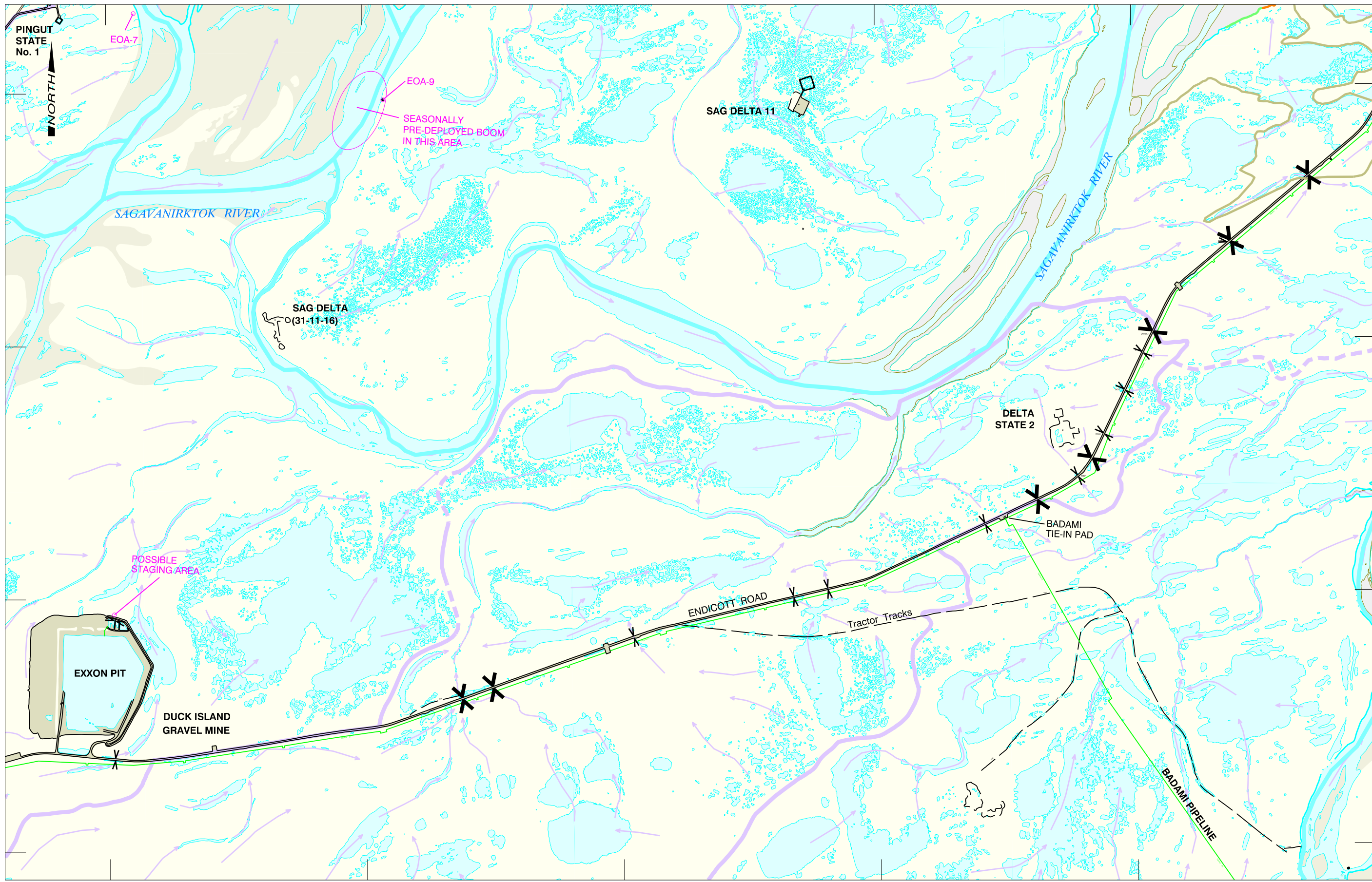
\*See the latest *Supplement, Alaska* and United States Coast Pilot for current information on air and vessel access, respectively.



148° 12'      148° 09'      148° 06'      148° 03'      148° 00'

70° 17'  
70° 16'  
70° 15'  
70° 14'

70° 17'  
70° 16'  
70° 15'  
70° 14'



Continue on sheet 78

Continue on sheet 80

1:26000      0      1000      2000 FEET





**PRIORITY PROTECTION SITES**

SITE NO.	DESCRIPTION	SENSITIVITY	TACTIC	EST. BOOM
PS12	Eight seabird colonies from Heald Pt. to Pt. Brower (one site, Duck Island 3, may be submerged)	Most sensitive during open water season (June through September). Concentrations of birds.	C-13 or C-14	6,000'

\* Priority Protection Area -- The entire delta region of the Sagavanirktok River is one large Priority Protection Area due to its size and numerous geographical features. On-site conditions may require the use of open water tactics to prevent oil migration into this delta.

**GENERAL SENSITIVITIES**

- Coastal areas support high concentrations of breeding, nesting, brood-rearing, and molting waterbirds during the summer.
- Concentrations of swans, ducks, geese, and shorebirds are present here in June before open water is present elsewhere.
- The outer portion of the delta is an important migration staging area for shorebirds from July through September and a Pintail molting area in July and August.
- High concentrations of brood-rearing and molting Snow Geese are present in July and August.
- This is a Brant nesting, brood-rearing and molting area. Birds are present from May through August.
- Pairs of Spectacled Eiders have been found in this area.
- Plan to deploy bird-hazing systems during the open-water season.
- The Sagavanirktok River is a migratory corridor for arctic char and whitefish, and an overwintering area for a variety of whitefish, burbot, grayling, and sculpin.
- Polar bear dens have been found in this area. Dens may be in use from October through April.



**AIR ACCESS\***

- Deadhorse airport (Sheet 81) is approximately 25 miles to the southwest.

**VESSEL ACCESS\* AND HYDROGRAPHIC CONDITIONS**

- Annual average flow rate of the Sagavanirktok River is 2,770 cfs. River discharge discolors seawater for many miles.

\*See the latest *Supplement, Alaska* and United States Coast Pilot for current information on air and vessel access, respectively.





**PRIORITY PROTECTION SITES**

- There are no priority protection sites on this sheet.

**GENERAL SENSITIVITIES**

- Coastal areas support high concentrations of breeding, nesting, brood-rearing, and molting waterbirds during the summer.
- Concentrations of swans, ducks, geese, and shorebirds are present here in June before open water is present elsewhere.
- This is a Brant nesting area. Birds are present from May through July.
- Pairs of Spectacled Eiders have been found in this area.
- Plan to deploy bird-hazing systems during the open-water season.
- The Sagavanirktok River is a migratory corridor for arctic char and whitefish, and an overwintering area for a variety of whitefish, burbot, grayling, and sculpin.



**AIR ACCESS\***

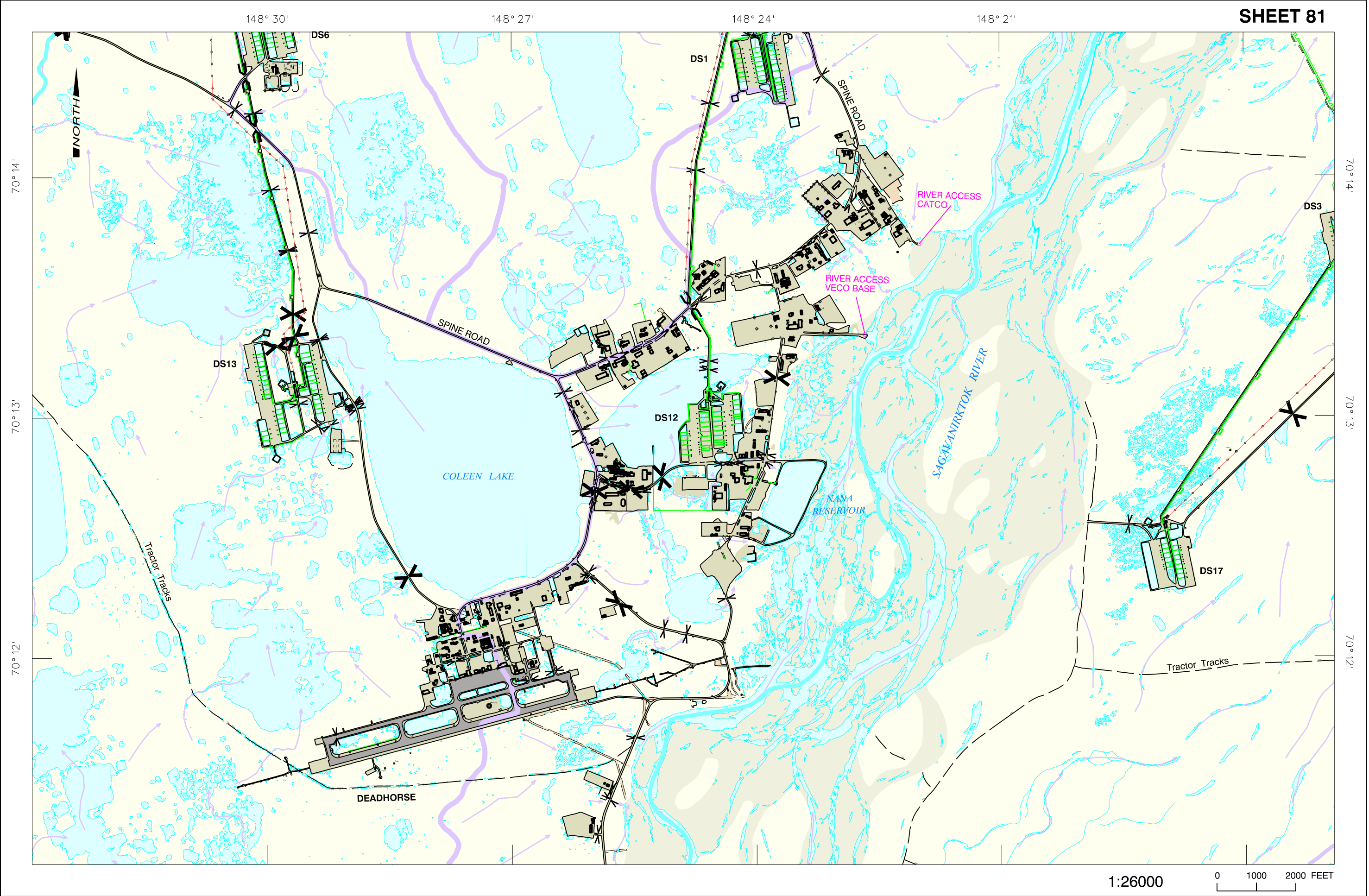
AIRFIELD	RUNWAY DESCRIPTION	FIXED WING MINIMUMS	FUEL / SERVICES	ATC
Deadhorse Airport	6,500 ft. asphalt	VFR: 1 mi vis. clear of clouds IFR: 0.5 mi vis. (ILS)	100-octane avgas, Jet B, Mogas	Deadhorse Tower

**VESSEL ACCESS\* AND HYDROGRAPHIC CONDITIONS**

- There are no marine shorelines or waters on this sheet.
- Annual average flow rate of the Sagavanirktok River is 2,770 cfs. River discharge discolors seawater for many miles.

\*See the latest *Supplement, Alaska* and United States Coast Pilot for current information on air and vessel access, respectively.





Continue on sheet 82





### PRIORITY PROTECTION SITES

- There are no priority protection sites on this sheet.

### GENERAL SENSITIVITIES

- Coastal areas support high concentrations of breeding, nesting, brood-rearing, and molting waterbirds during the summer.
- Concentrations of swans, ducks, geese, and shorebirds are present here in June before open water is present elsewhere.
- High concentrations of brood-rearing and molting Snow Geese are present in July and August.
- Pairs of Spectacled Eiders have been found in this area.
- Plan to deploy bird-hazing systems during the open-water season.
- The Sagavanirktok River is a migratory corridor for arctic char and whitefish, and an overwintering area for a variety of whitefish, burbot, grayling, and sculpin.
- There is a freshwater intake on the west bank of the west channel of the Sagavanirktok River east of the PBOC at approximately 10 to 12 ft below the surface. This intake is used from June to September.



### AIR ACCESS\*

- Deadhorse airport (Sheet 81) is approximately 5 miles southwest of the PBOC.

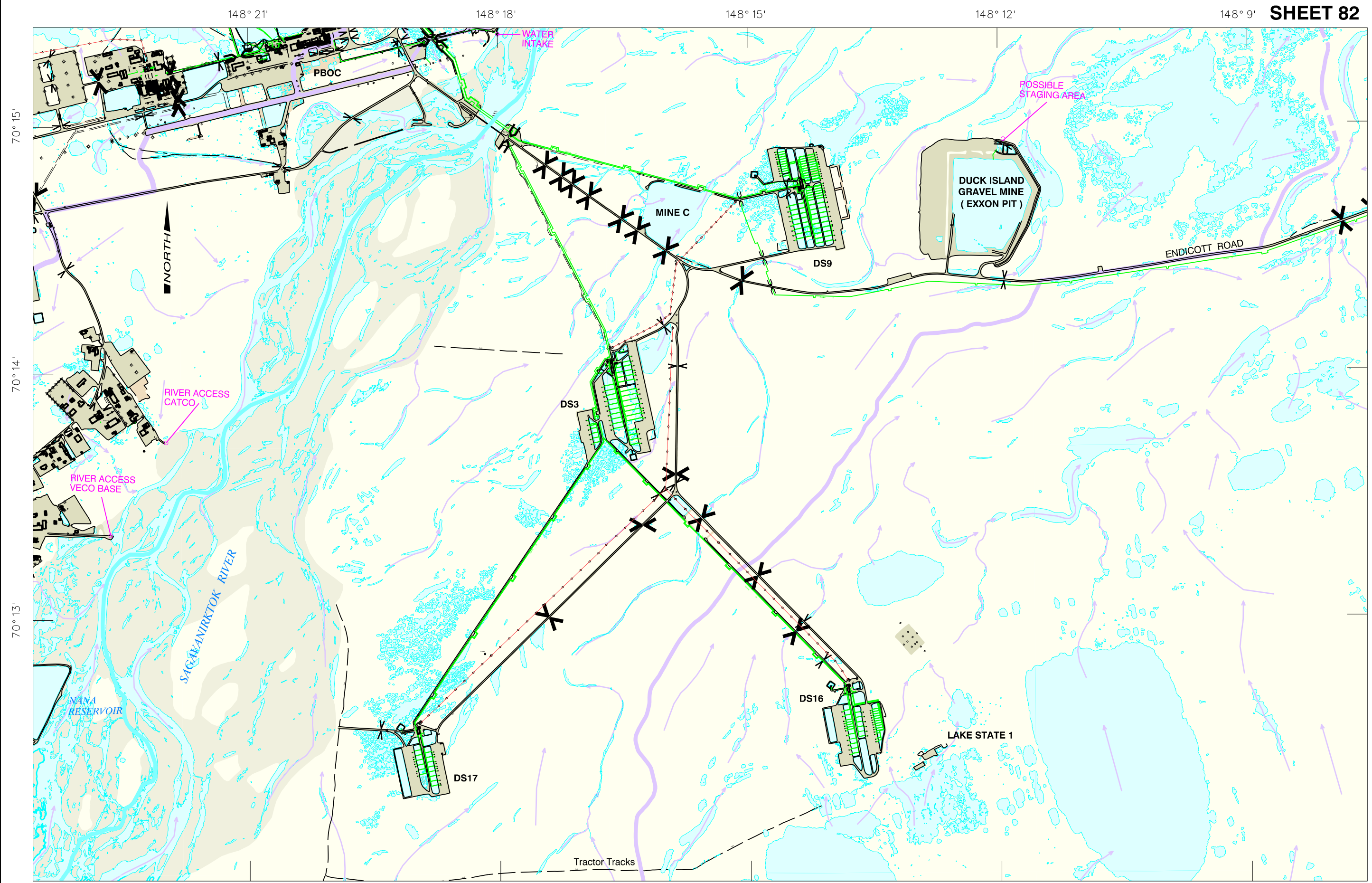
### VESSEL ACCESS\* AND HYDROGRAPHIC CONDITIONS

- There are no marine shorelines or waters on this sheet.
- Annual average flow rate of the Sagavanirktok River is 2,770 cfs.

### STAGING AREAS AND PRESTAGED EQUIPMENT

- There is a possible staging area at the Duck Island Gravel Mine site.

\*See the latest *Supplement, Alaska* and United States Coast Pilot for current information on air and vessel access, respectively.



Continue on sheet 81



**PRIORITY PROTECTION SITES**

SITE NO.	DESCRIPTION	SENSITIVITY	TACTIC	EST. BOOM
PS4A	Inlet to salt marsh 1.25 miles SE of Sagavanirktok River delta	Most sensitive during open water season. Keep oil from entering salt marsh.	C-13 or C-14	500'
PS4B	Inlet to salt marsh south of Sagavanirktok River delta	Most sensitive during open water season. Keep oil from entering salt marsh.	C-13 or C-14	500'

**GENERAL SENSITIVITIES**

- Coastal areas support high concentrations of breeding, nesting, brood-rearing, and molting waterbirds during the summer.
- Concentrations of swans, ducks, geese, and shorebirds are present here in June before open water is present elsewhere.
- The outer portion of the delta is an important migration staging area for shorebirds from July through September and a Pintail molting area in July and August.
- High concentrations of brood-rearing and molting Snow Geese are present in July and August.
- This is a Brant nesting, brood-rearing and molting area. Birds are present from May through August.
- Pairs of Spectacled Eiders have been found in this area.
- Plan to deploy bird-hazing systems during the open-water season.
- The Sagavanirktok River is a migratory corridor for arctic char and whitefish, and an overwintering area for a variety of whitefish, burbot, grayling, and sculpin.

**CULTURAL SITES**

Information on the exact locations of cultural sites is confidential. This information is contained in the *North Slope Archaeological Data* document, copies of which are kept at the following offices: State Historical Preservation Officer (SHPO) (907-269-8721), ACS in Deadhorse (907-659-2405), North Slope Borough Lands Division (907-852-0322), North Slope Borough Lands Division (907-852-0322), BPXA Crisis Center in Anchorage (907-564-5243), and the ConocoPhillips Incident Command Center in Anchorage (907-265-1000). The following cultural site(s) are located in the area depicted on this sheet:

- XBP-020 on the east bank of the Sagavanirktok River
- XBP-021 on the east bank of the Sagavanirktok River
- XBP-023 on the coast east of the Sagavanirktok River delta



**AIR ACCESS\***

- Deadhorse airport (Sheet 81) is approximately 13 miles to the west.

**VESSEL ACCESS\* AND HYDROGRAPHIC CONDITIONS**

- Annual average flow rate of the Sagavanirktok River is 2,770 cfs. River discharge discolors sea water for many miles.

**COUNTERMEASURES CONSIDERATIONS**

- Mud flats at the eastern front of the Sagavanirktok River delta may have low load-bearing capacity.

**STAGING AREAS AND PRESTAGED EQUIPMENT**

PRESTAGED EQUIP. AREA	LOCATION	ITEM	QUANTITY	TYPE
BAD-1	East of Sagavanirktok River north of Badami pipeline	Boom	3,225'	8" x 6" river
		Pump	1	3" trash, diesel
		Skimmer	1	Disc, MI-30
		Skimmer	1	Rope mop, Z14-E
		Storage	2	500-gal bladder, liftable

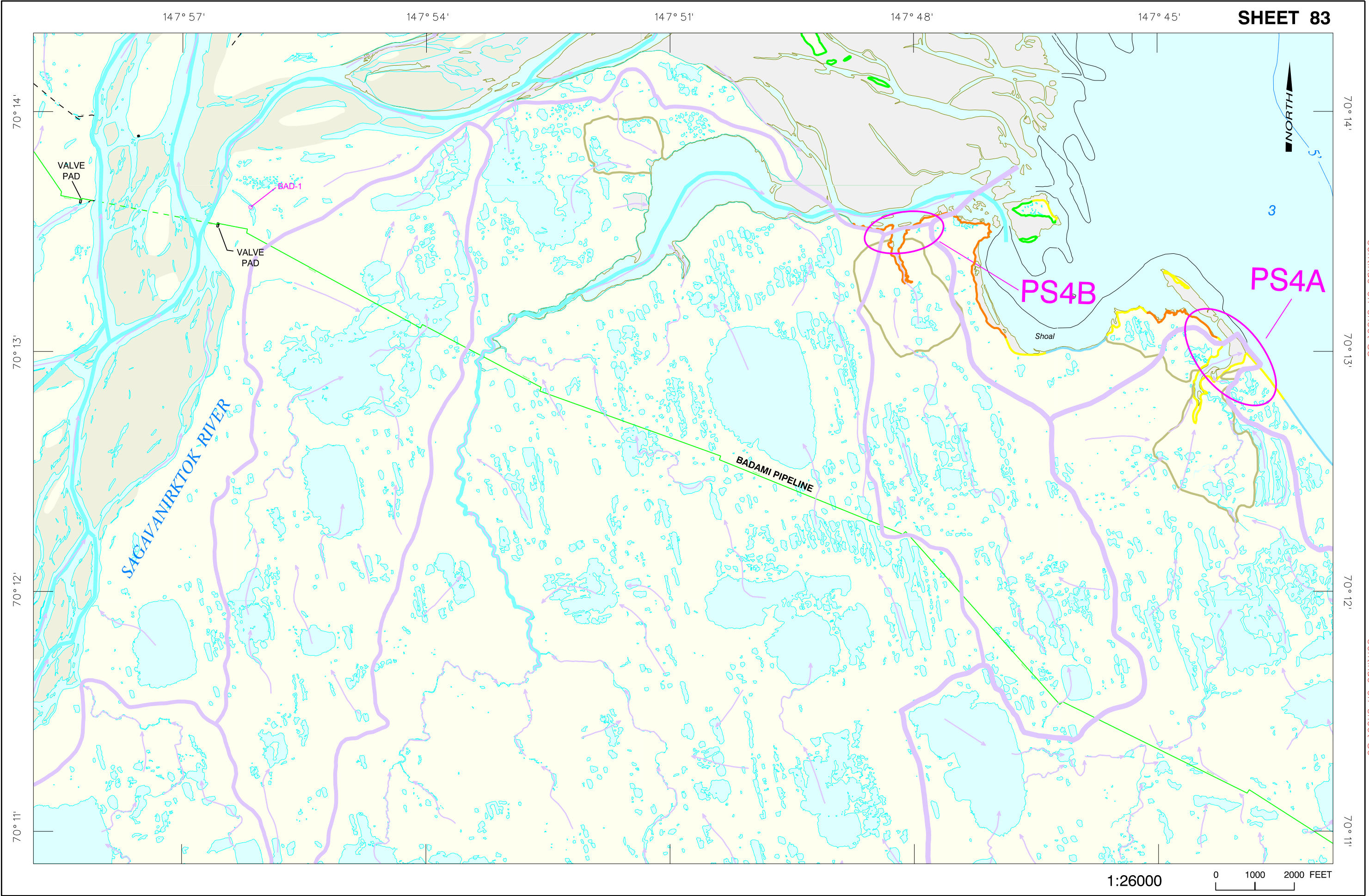
\*See the latest *Supplement, Alaska* and United States Coast Pilot for current information on air and vessel access, respectively.



Continue on sheet 79

Continue on sheet 85

Continue on sheet 86







### PRIORITY PROTECTION SITES

- There are no priority protection sites on this sheet.

### GENERAL SENSITIVITIES

- Concentrations of swans, ducks, geese, and shorebirds are present here in June before open water is present elsewhere.
- Plan to deploy bird-hazing systems during the open-water season.



### AIR ACCESS\*

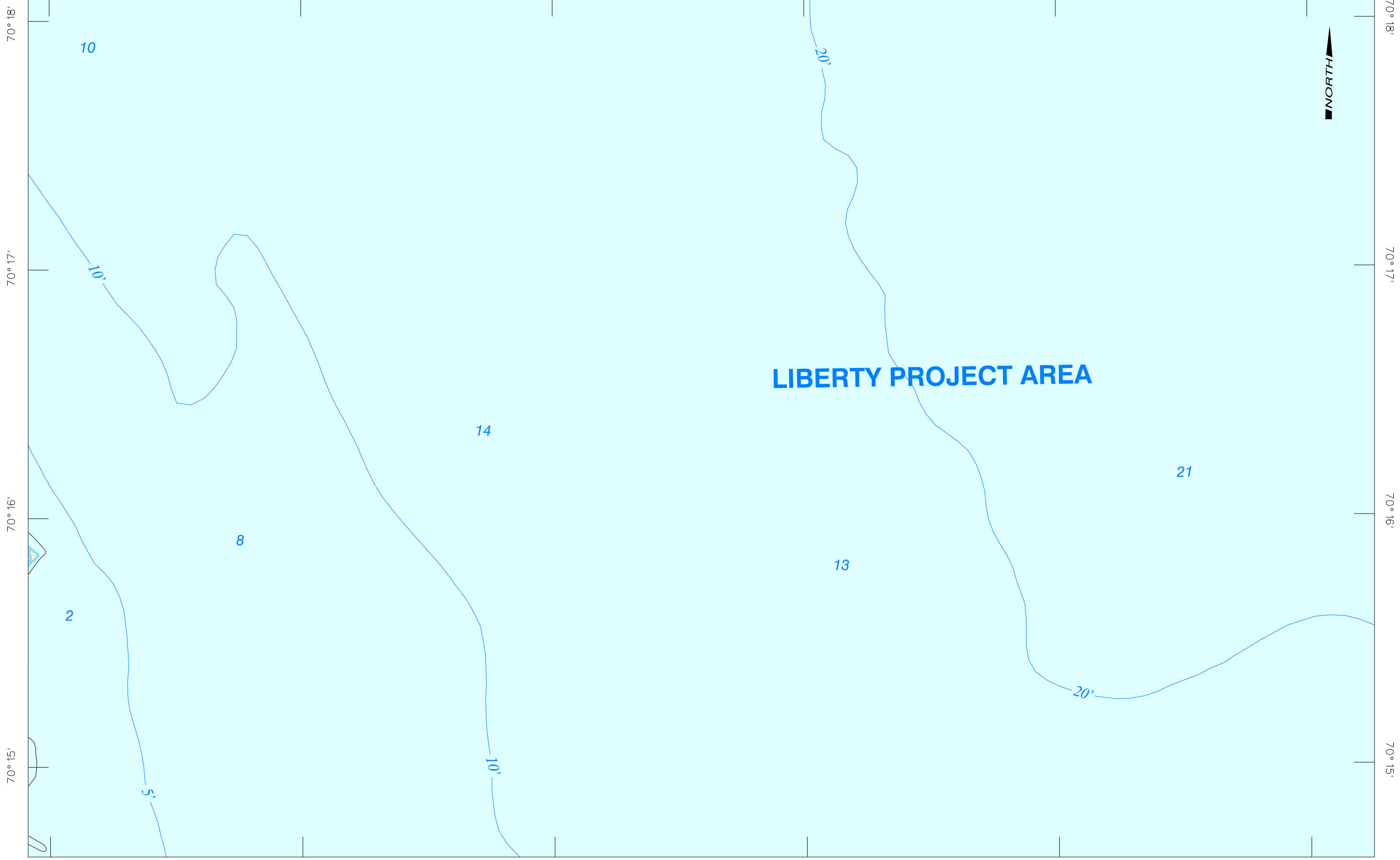
- Deadhorse airport (Sheet 81) is approximately 22 miles to the southwest.
- Badami airstrip (Sheet 91) is approximately 15 miles to the southeast.

### VESSEL ACCESS\* AND HYDROGRAPHIC CONDITIONS

- Annual average flow rate of the Sagavanirktok River is 2,770 cfs. River discharge discolors seawater for many miles.

\*See the latest *Supplement, Alaska* and United States Coast Pilot for current information on air and vessel access, respectively.

147° 45'      147° 42'      147° 39'      147° 36'      147° 33'

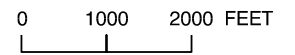


Continue on sheet 74

Continue on sheet 80

Continue on sheet 85

1:26000





**PRIORITY PROTECTION SITES**

SITE NO.	DESCRIPTION	SENSITIVITY	TACTIC	EST. BOOM
PS3D	Inlet to salt marsh 1.5 miles east of Kadleroshilik River delta	Most sensitive during open water season. Keep oil from entering salt marsh. Inundated low-lying tundra shorelines.	C-13 or C-14	1,000'
PS4	Inlet mouth west of Kadleroshilik River delta	Most sensitive during open water season. Salt marsh and/or inundated low-lying tundra shorelines.	C-13 or C-14	1,000'
PS4A	Inlet to salt marsh 2.5 miles NW of Kadleroshilik River delta	Most sensitive during open water season. Keep oil from entering salt marsh.	C-13 or C-14	500'

**GENERAL SENSITIVITIES**

- Coastal areas support high concentrations of breeding, nesting, brood-rearing, and molting waterbirds during the summer.
- Concentrations of swans, ducks, geese, and shorebirds are present here in June before open water is present elsewhere.
- High concentrations of brood-rearing and molting Snow Geese are present in July and August.
- This is a Brant nesting, brood-rearing and molting area. Birds are present from May through August.
- Plan to deploy bird-hazing systems during the open-water season.
- The Kadleroshilik River provides habitat for anadromous char and for resident fish.

**CULTURAL SITES**

Information on the exact locations of cultural sites is confidential. This information is contained in the *North Slope Archaeological Data* document, copies of which are kept at the following offices: State Historical Preservation Officer (SHPO) (907-269-8721), ACS in Deadhorse (907-659-2405), North Slope Borough Lands Division (907-852-0322), North Slope Borough Lands Division (907-852-0322), BPXA Crisis Center in Anchorage (907-564-5243), and the ConocoPhillips Incident Command Center in Anchorage (907-265-1000). The following cultural site(s) are located in the area depicted on this sheet:

- XBP-024 on the coast in the bottom left corner of the map



**AIR ACCESS\***

- There is float plane landing in the lagoon east of the mouth of the Kadleroshilik River. Water depths range from 3 to 5 ft. There is a hard gravel beach on the spit. Campsite, firewood, and water are available at east end of the lagoon.
- Deadhorse airport (Sheet 81) is approximately 19 miles west of the Kadleroshilik River delta.
- Badami airstrip (Sheet 91) is approximately 14 miles southeast of the Kadleroshilik River delta.

**VESSEL ACCESS\* AND HYDROGRAPHIC CONDITIONS**

- Water depths are shallow and changeable off the Kadleroshilik River delta.
- Annual average flow rate of the Sagavanirktok River is 2,770 cfs. River discharge discolors seawater for many miles.
- Average annual rate of flow of the Kadleroshilik River is 325 cfs. Sediment discharge is westward.

**COUNTERMEASURES CONSIDERATIONS**

- Access is very limited in areas of vegetated shorelines. Caution should be exercised to minimize erosion.

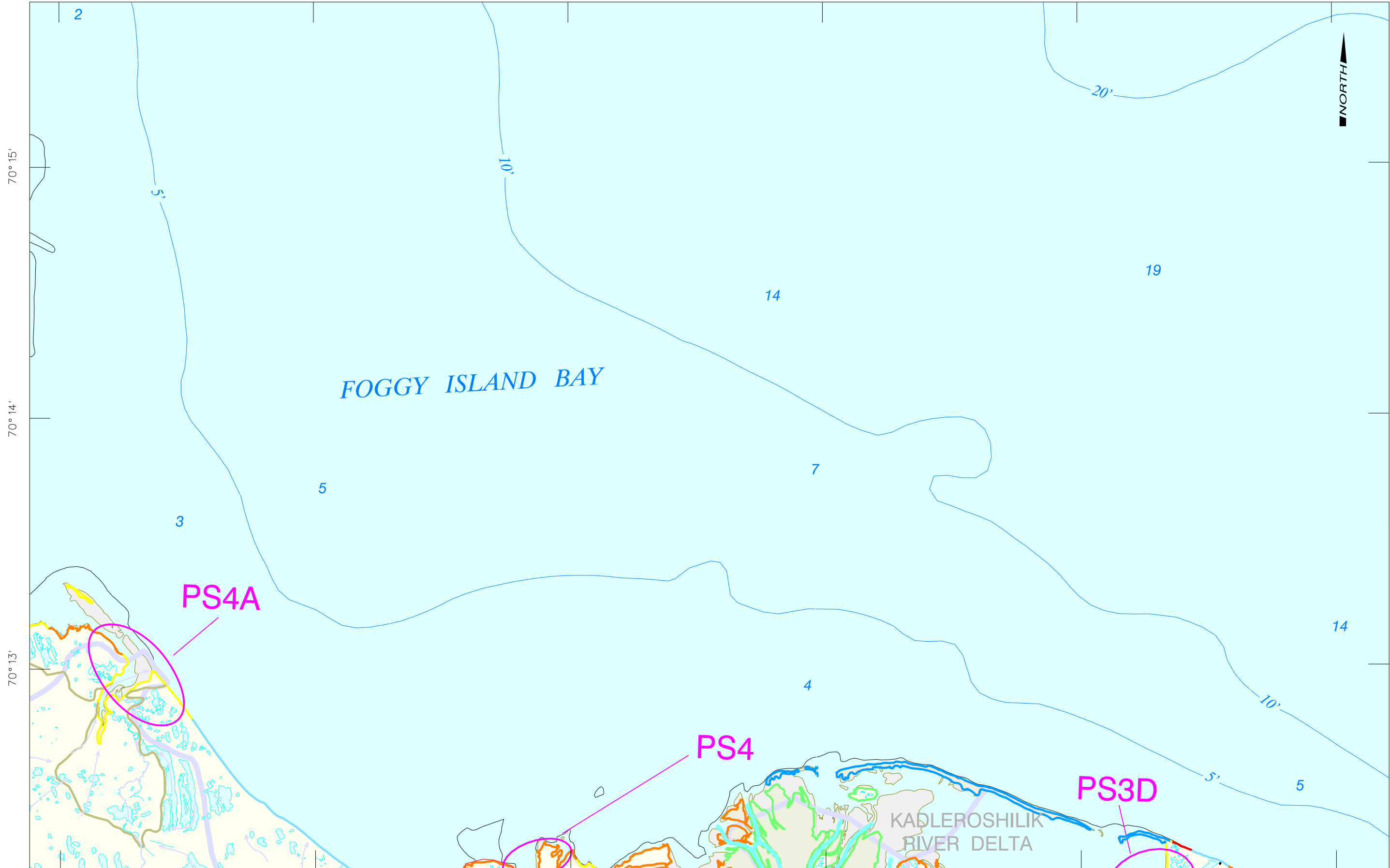
\*See the latest *Supplement, Alaska* and United States Coast Pilot for current information on air and vessel access, respectively.

147° 45' 147° 42' 147° 39' 147° 36' 147° 33'

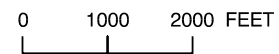


Continue on sheet 80

Continue on sheet 83



1:26000







**PRIORITY PROTECTION SITES**

SITE NO.	DESCRIPTION	SENSITIVITY	TACTIC	EST. BOOM
PS4	Inlet mouth west of Kadleroshilik River delta	Most sensitive during open water season. Salt marsh and/or inundated low-lying tundra shorelines.	C-13 or C-14	1,000'
PS3D	Inlet to salt marsh 1.5 miles east of Kadleroshilik River delta	Most sensitive during open water season. Keep oil from entering salt marsh. Inundated low-lying tundra shorelines.	C-13 or C-14	1,000'

**GENERAL SENSITIVITIES**

- Coastal areas support high concentrations of breeding, nesting, brood-rearing, and molting waterbirds during June through September.
- Concentrations of swans, ducks, geese, and shorebirds are present here in June before open water is present elsewhere.
- High concentrations of brood-rearing and molting Snow Geese are present in July and August.
- This is a Brant nesting, brood-rearing, and molting area. Birds are present from May through August.
- Pairs of Spectacled Eiders have been found in this area.
- Plan to deploy bird-hazing systems during the open-water season.
- The Kadleroshilik River provides habitat for anadromous char and for resident fish.

**CULTURAL SITES**

Information on the exact locations of cultural sites is confidential. This information is contained in the *North Slope Archaeological Data* document, copies of which are kept at the following offices: State Historical Preservation Officer (SHPO) (907-269-8721), ACS in Deadhorse (907-659-2405), North Slope Borough Lands Division (907-852-0322), North Slope Borough Lands Division (907-852-0322), BPXA Crisis Center in Anchorage (907-564-5243), and the ConocoPhillips Incident Command Center in Anchorage (907-265-1000). The following cultural site(s) are located in the area depicted on this sheet:

- XBP-024 on the coast west of the inlet on the left side of the map
- XBP-025 on the coast west of the Kadleroshilik River



**AIR ACCESS\***

- There is float plane landing in the lagoon east of the mouth of the Kadleroshilik River. Water depths range from 3 to 5 ft. There is a hard gravel beach on the spit. Campsite, firewood, and water are available at east end of the lagoon.
- Deadhorse airport (Sheet 81) is approximately 19 miles west of the Kadleroshilik River delta.
- Badami airstrip (Sheet 91) is approximately 14 miles southeast of the Kadleroshilik River delta.

**VESSEL ACCESS\* AND HYDROGRAPHIC CONDITIONS**

- Water depths are shallow and changeable off the Kadleroshilik River delta.
- Average annual rate of flow of the Kadleroshilik River is 325 cfs. Sediment discharge is westward.

**COUNTERMEASURES CONSIDERATIONS**

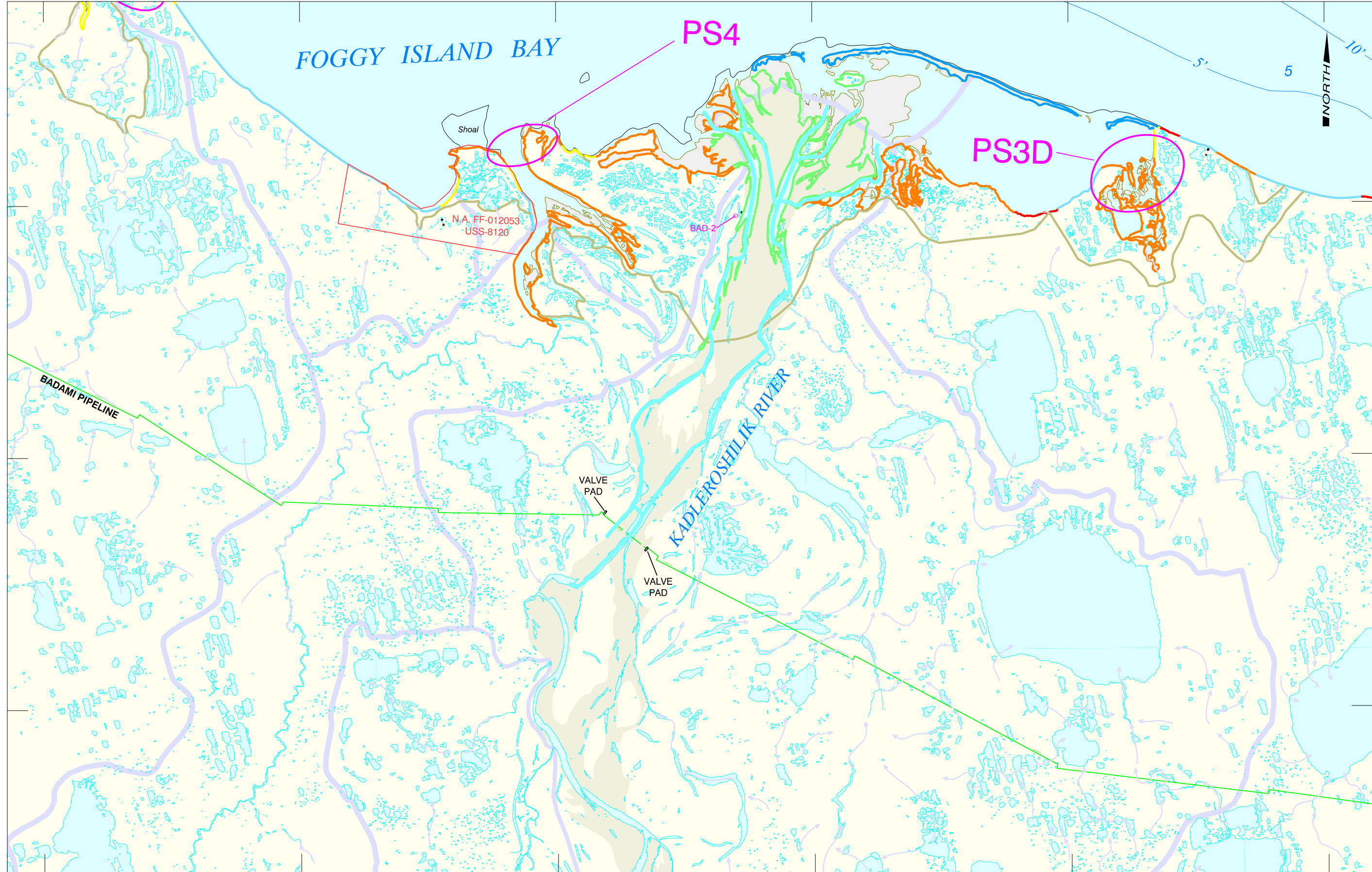
- Access is very limited in areas of vegetated shorelines. Caution should be exercised to minimize erosion.

**STAGING AREAS AND PRESTAGED EQUIPMENT**

PRESTAGED EQUIP. AREA	LOCATION	ITEM	QUANTITY	TYPE
BAD-2	Western side of Kadleroshilik River delta	Boom Skimmer Storage Storage	1,125' 1 1 1	8" x 6" river Drum or brush cassette 2,500-gal open top 500-gal bladder, liftable

\*See the latest *Supplement, Alaska* and United States Coast Pilot for current information on air and vessel access, respectively.

147° 45' 147° 42' 147° 39' 147° 36' 147° 33'



Continue on sheet 83

70° 12'

70° 11'

70° 10'

Continue on sheet 87

1:26000

0 1000 2000 FEET



**PRIORITY PROTECTION SITES**

SITE NO.	DESCRIPTION	SENSITIVITY	TACTIC	EST. BOOM
PS3B	Inlet mouth 2 miles west of Shaviovik River delta	Most sensitive during open water season. Inundated low-lying tundra shorelines.	C-13 or C-14	200'
PS3C	Inlet mouth 3.5 miles west of Shaviovik River delta	Most sensitive during open water season. Inundated low-lying tundra shorelines.	C-13 or C-14	200'
PS3D	Inlet to salt marsh 5.5 miles west of Shaviovik River delta	Most sensitive during open water season. Keep oil from entering salt marsh. Inundated low-lying tundra shorelines.	C-13 or C-14	1,000'

**GENERAL SENSITIVITIES**

- Coastal areas support high concentrations of breeding, nesting, brood-rearing, and molting waterbirds during June through September.
- Concentrations of swans, ducks, geese, and shorebirds are present here in June before open water is present elsewhere.
- High concentrations of brood-rearing and molting Snow Geese are present in July and August.
- This is a Brant nesting, brood-rearing, and molting area. Birds are present from May through August.
- Pairs of Spectacled Eiders have been found in this area.
- Plan to deploy bird-hazing systems during the open-water season.
- The Shaviovik River provides habitat for anadromous char and for resident fish.
- Polar bear dens have been found in this area. Dens may be in use from October through April.

**CULTURAL SITES**

Information on the exact locations of cultural sites is confidential. This information is contained in the *North Slope Archaeological Data* document, copies of which are kept at the following offices: State Historical Preservation Officer (SHPO) (907-269-8721), ACS in Deadhorse (907-659-2405), North Slope Borough Lands Division (907-852-0322), North Slope Borough Lands Division (907-852-0322), BPXA Crisis Center in Anchorage (907-564-5243), and the ConocoPhillips Incident Command Center in Anchorage (907-265-1000). The following cultural site(s) are located in the area depicted on this sheet:

- XBP-026 on the coast west of the center of the sheet



**AIR ACCESS\***

- Emergency small plane landing can be accommodated on gravel bar on north end of Tigvariak Island (Sheet 88).
- Bullen Point airstrip (Sheet 101) is approximately 13 miles east of West Mikkelsen State 1. This is an unattended, 2,900-ft gravel airstrip. The extreme west end of the strip reportedly tends to be soft.
- Deadhorse airport (Sheet 81) is located approximately 25 miles west of West Mikkelsen State 1.
- Badami airstrip (Sheet 91) is approximately 9 miles east-southeast of West Mikkelsen State 1.

**VESSEL ACCESS\* AND HYDROGRAPHIC CONDITIONS**

- Water depths are shallow and changeable off the Shaviovik River delta (to the east) and the Kadleroshilik River delta (to the west).
- Average annual rate of flow of the Kadleroshilik River is 325 cfs. Sediment discharge is westward.
- Average annual rate of discharge of the Shaviovik River is 800 cfs. Shoaling extends 2 miles northwest into Foggy Island Bay.

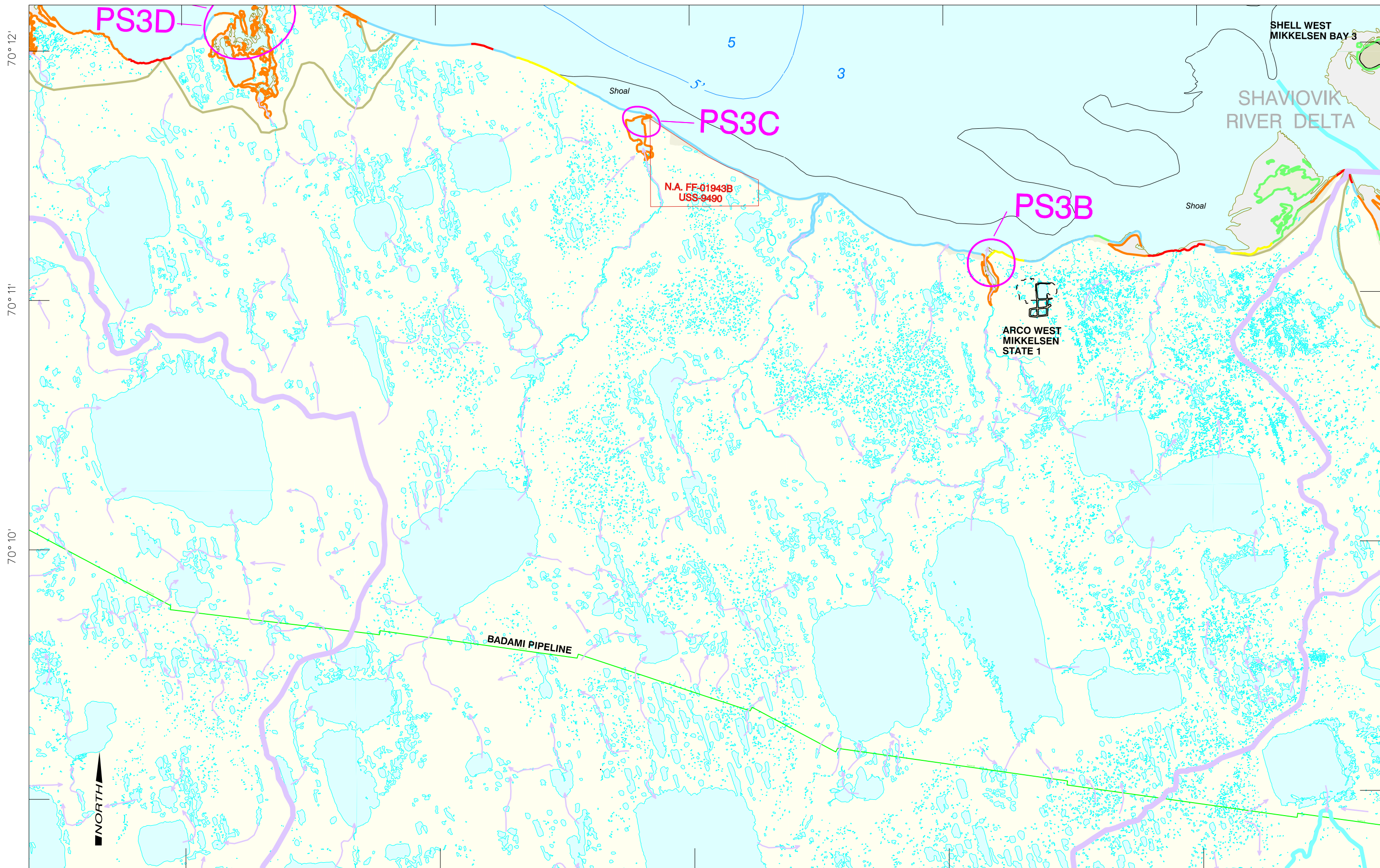
**COUNTERMEASURES CONSIDERATIONS**

- Access is very limited in areas of vegetated shorelines. Caution should be exercised to minimize erosion.

\*See the latest *Supplement, Alaska* and United States Coast Pilot for current information on air and vessel access, respectively.



147° 33'      147° 30'      147° 27'      147° 24'      147° 21'



Continue on sheet 86

Continue on sheet 89

Continue on sheet 90

1:26000

0 1000 2000 FEET





### PRIORITY PROTECTION SITES

- There are no priority protection sites on this sheet.

### GENERAL SENSITIVITIES

- Coastal areas support high concentrations of breeding, nesting, brood-rearing, and molting waterbirds during the summer.
- Concentrations of swans, ducks, geese, and shorebirds are present here in June before open water is present elsewhere.
- Shoreline and offshore areas support molting Oldsquaws and eiders, and brood-rearing eiders. This is also a staging area for migrating Phalaropes (shorebirds). Birds are present in June through September.
- High concentrations of brood-rearing and molting Snow Geese are present in July and August.
- This is a Brant nesting, brood-rearing, and molting area. Birds are present from May through August.
- Plan to deploy bird-hazing systems during the open-water season.
- The Shaviovik River provides habitat for anadromous char and for resident fish.

### CULTURAL SITES

Information on the exact locations of cultural sites is confidential. This information is contained in the *North Slope Archaeological Data* document, copies of which are kept at the following offices: State Historical Preservation Officer (SHPO) (907-269-8721), ACS in Deadhorse (907-659-2405), North Slope Borough Lands Division (907-852-0322), North Slope Borough Lands Division (907-852-0322), BPXA Crisis Center in Anchorage (907-564-5243), and the ConocoPhillips Incident Command Center in Anchorage (907-265-1000). The following cultural site(s) are located in the area depicted on this sheet:

- XBP-027 on the island south of Tigvariak Island
- XBP-031 on Tigvariak Island



### AIR ACCESS\*

- Emergency small plane landing can be accommodated on gravel bar on north end of Tigvariak Island.
- Bullen Point airstrip (Sheet 101) is approximately 9 miles west of Tigvariak Island. This is an unattended, 2,900-ft gravel airstrip. The extreme west end of the strip reportedly tends to be soft.
- Deadhorse airport (Sheet 81) is approximately 28 miles west of Tigvariak Island.
- Badami airstrip (Sheet 91) is approximately 7 miles southeast of Tigvariak Island.

### VESSEL ACCESS\* AND HYDROGRAPHIC CONDITIONS

- Water depths are shallow and changeable off the Shaviovik River delta.
- Waters around Tigvariak Island are very shallow.
- Average annual rate of discharge of the Shaviovik River is 800 cfs. Shoaling extends 2 miles northwest into Foggy Island Bay.

### COUNTERMEASURES CONSIDERATIONS

- Access is very limited in areas of vegetated shorelines. Caution should be exercised to minimize erosion.

\*See the latest *Supplement, Alaska* and United States Coast Pilot for current information on air and vessel access, respectively.

147° 21'

147° 18'

147° 15'

147° 12'

147° 09'

70° 15'

70° 15'

70° 14'

70° 14'

70° 13'

70° 13'

70° 12'

70° 12'

12

14

19

3

5

6

10'

6

TIGVARIAK ISLAND

5'

2

16

GOOSE ISLAND  
SHELL WEST MIKKELSEN BAY 4

WEST MIKKELSEN  
BAY No. 2

5

10'

2

Shoal

5'

Shoal

SHELL WEST  
MIKKELSEN BAY 3

Shoal

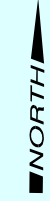
SHAVIOVIK RIVER DELTA

Shoal

13

1:26000

0 1000 2000 FEET





**PRIORITY PROTECTION SITES**

SITE NO.	DESCRIPTION	SENSITIVITY	TACTIC	EST. BOOM
PS3	River mouth channels of an unnamed river (referred to as No Name River) east of the Shaviovik River delta	Most sensitive during open water season. Salt marsh and/or inundated low-lying tundra shoreline.	C-13 or C-14	3,000'
PS3A	Salt marsh and inundated tundra shoreline east of Shaviovik River delta	Most sensitive during open water season. Salt marsh and/or inundated low-lying tundra shoreline.	C-13 or C-14	3,000'

**GENERAL SENSITIVITIES**

- Coastal areas support high concentrations of breeding, nesting, brood-rearing, and molting waterbirds during the summer.
- Concentrations of swans, ducks, geese, and shorebirds are present here in June before open water is present elsewhere.
- Shoreline and offshore areas support molting Oldsquaws and eiders, and brood-rearing eiders. This is also a staging area for migrating Phalaropes (shorebirds). Birds are present in June through September.
- High concentrations of brood-rearing and molting Snow Geese are present in July and August.
- This is a Brant nesting, brood-rearing, and molting area. Birds are present from May through August.
- Pairs of Spectacled Eiders have been found in this area.
- Plan to deploy bird-hazing systems during the open-water season.
- The Shaviovik River provides habitat for anadromous char and for resident fish.
- Polar bear dens have been found in this area. Dens may be in use from October through April.

**CULTURAL SITES**

Information on the exact locations of cultural sites is confidential. This information is contained in the *North Slope Archaeological Data* document, copies of which are kept at the following offices: State Historical Preservation Officer (SHPO) (907-269-8721), ACS in Deadhorse (907-659-2405), North Slope Borough Lands Division (907-852-0322), North Slope Borough Lands Division (907-852-0322), BPXA Crisis Center in Anchorage (907-564-5243), and the ConocoPhillips Incident Command Center in Anchorage (907-265-1000). The following cultural site(s) are located in the area depicted on this sheet:

- XBP-027 on the largest of the islands in the Shaviovik River delta
- XBP-028 on the coast in the lower right portion of the map
- XBP-032 on the coast east of the Shaviovik River delta



**AIR ACCESS\***

- Emergency small plane landing can be accommodated on gravel bar on north end of Tigvariak Island (Sheet 88).
- Bullen Point airstrip (Sheet 101) is approximately 13 miles east of West Mikkelsen State 1. This is an unattended, 2,900-ft gravel airstrip. The extreme west end of the strip reportedly tends to be soft.
- Deadhorse airport (Sheet 81) is located approximately 25 miles west of West Mikkelsen State 1.
- Badami airstrip (Sheet 91) is approximately 9 miles east-southeast of West Mikkelsen State 1.

**VESSEL ACCESS\* AND HYDROGRAPHIC CONDITIONS**

- Water depths are shallow and changeable off the Shaviovik River delta.
- There is small boat anchorage at the south end of Tigvariak Island. Water depths are limited at 2 to 4 ft.
- Average annual rate of discharge of the Shaviovik River is 800 cfs. Shoaling extends 2 miles northwest into Foggy Island Bay.

**COUNTERMEASURES CONSIDERATIONS**

- Access is very limited in areas of vegetated shorelines. Caution should be exercised to minimize erosion.
- Gravel beaches are generally wide (more than 30 ft), but are interrupted by numerous inlets and vegetated shorelines.
- Small embayments will collect oil during sustained west or northwest winds and storm surge.

**STAGING AREAS AND PRESTAGED EQUIPMENT**

PRESTAGED EQUIP. AREA	LOCATION	ITEM	QUANTITY	TYPE
BAD-3	West of Shaviovik River main channel near delta	Boom	1,650'	8" x 6" river
		Pump	1	2" diaphragm, diesel
		Skimmer	1	Drum or brush cassette
		Storage	1	2,500-gal open top
		Storage	2	500-gal bladder, liftable

\*See the latest *Supplement, Alaska* and United States Coast Pilot for current information on air and vessel access, respectively.



147° 21'

147° 18'

147° 15'

147° 12'

147° 09'

70° 12'

70° 11'

70° 10'

70° 12'

70° 11'

70° 10'



SHELL WEST MIKKELSEN BAY 3

TIGVARIAK ISLAND

SHAVIOVIK RIVER DELTA

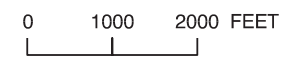
SHAVIOVIK RIVER

ARCO WEST MIKKELSEN STATE 1

PS3A

PS3

1:26000



Continue on sheet 87

Continue on sheet 90





**PRIORITY PROTECTION SITES**

SITE NO.	DESCRIPTION	SENSITIVITY	TACTIC	EST. BOOM
PS3	River mouth channels of an unnamed river (referred to as No Name River) east of the Shaviovik River delta	Most sensitive during open water season. Salt marsh and/or inundated low-lying tundra shoreline.	C-13 or C-14	3,000'

**GENERAL SENSITIVITIES**

- Coastal areas support high concentrations of breeding, nesting, brood-rearing, and molting waterbirds during the summer.
- Concentrations of swans, ducks, geese, and shorebirds are present here in June before open water is present elsewhere.
- Shoreline and offshore areas support molting Oldsquaws and eiders, and brood-rearing eiders. This is also a staging area for migrating Phalaropes (shorebirds). Birds are present in June through September.
- Pairs of Spectacled Eiders have been found in this area.
- Plan to deploy bird-hazing systems during the open-water season.
- The Shaviovik River and No Name River provide habitat for anadromous char and for resident fish.
- Polar bear dens have been found in this area. Dens may be in use from October through April.

**CULTURAL SITES**

Information on the exact locations of cultural sites is confidential. This information is contained in the *North Slope Archaeological Data* document, copies of which are kept at the following offices: State Historical Preservation Officer (SHPO) (907-269-8721), ACS in Deadhorse (907-659-2405), North Slope Borough Lands Division (907-852-0322), North Slope Borough Lands Division (907-852-0322), BPXA Crisis Center in Anchorage (907-564-5243), and the ConocoPhillips Incident Command Center in Anchorage (907-265-1000). The following cultural site(s) are located in the area depicted on this sheet:

- XBP-028 on the coast in the upper right portion of the map



**AIR ACCESS\***

- Bullen Point airstrip (Sheet 101) is approximately 8 miles northeast of Mikkelsen Bay State 1. This is an unattended, 2,900-ft gravel airstrip. The extreme west end of the strip reportedly tends to be soft.
- Badami airstrip (Sheet 91) is approximately 4 miles east of Mikkelsen Bay State 1.

**VESSEL ACCESS\* AND HYDROGRAPHIC CONDITIONS**

- Water depths are shallow and changeable off the Shaviovik River delta.
- Average annual rate of discharge of the Shaviovik River is 800 cfs.

**COUNTERMEASURES CONSIDERATIONS**

- Access is very limited in areas of vegetated shorelines. Caution should be exercised to minimize erosion.
- Gravel beaches are generally wide (more than 30 ft), but are interrupted by numerous inlets and vegetated shorelines.
- Small embayments will collect oil during sustained west or northwest winds and storm surge.

\*See the latest *Supplement, Alaska* and United States Coast Pilot for current information on air and vessel access, respectively.

147° 21'

147° 18'

147° 15'

147° 12'

147° 09'

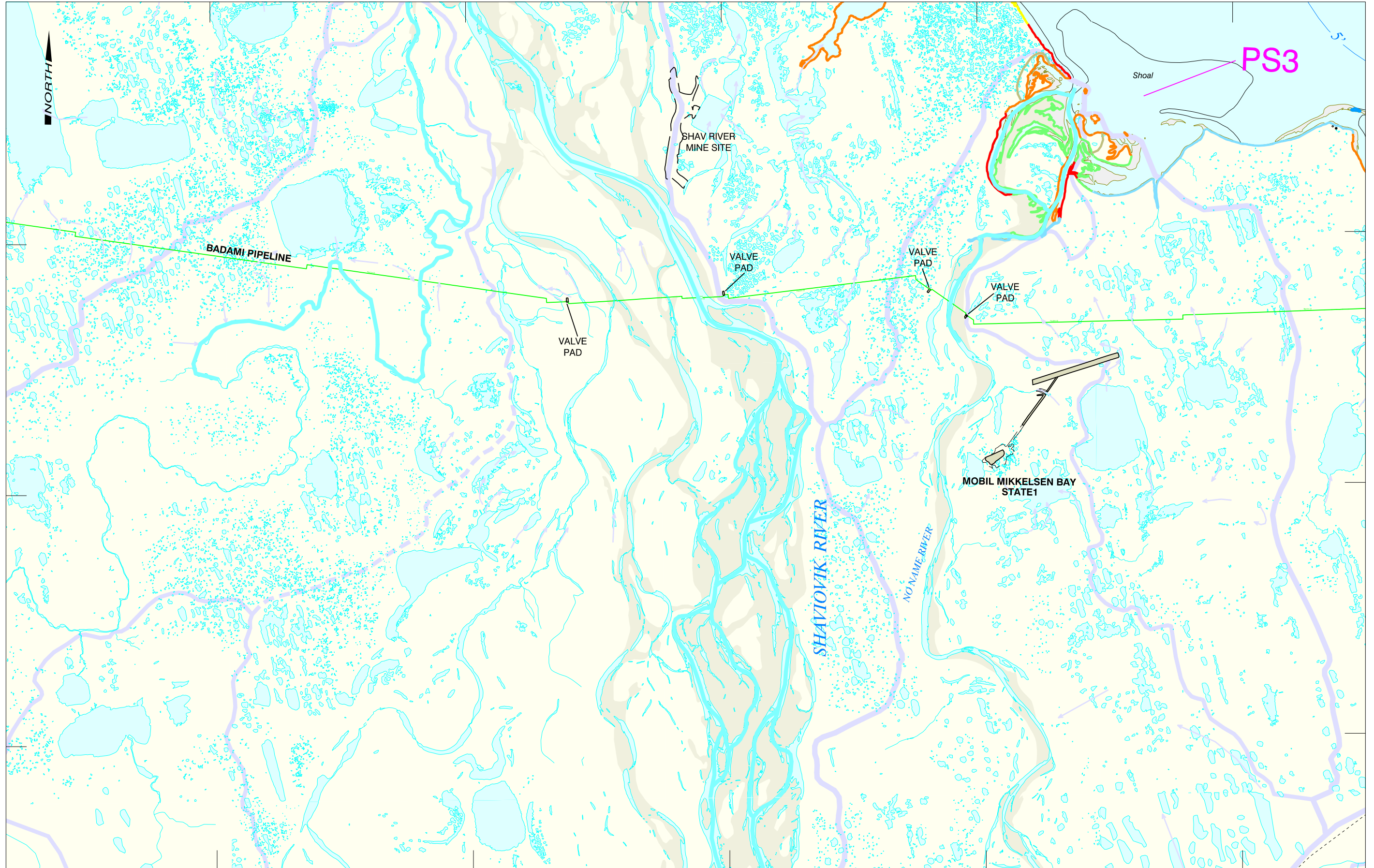
Continue on sheet 87

70° 09'

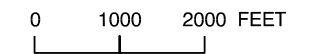
70° 08'

70° 07'

Continue on sheet 91



1:26000





**PRIORITY PROTECTION SITES**

SITE NO.	DESCRIPTION	SENSITIVITY	TACTIC	EST. BOOM
PS2	Badami Creek mouth	Most sensitive during open water season. Keep oil from entering creek. Inundated low-lying tundra shoreline.	C-13 or C-14	1,200'
PS3	River mouth channels of an unnamed river (referred to as No Name River) east of the Shaviovik River delta	Most sensitive during open water season. Salt marsh and/or inundated low-lying tundra shoreline.	C-13 or C-14	3,000'
PS55	Lagoon at mouth of East Badami Creek	Most sensitive during open water season. Salt marsh and/or inundated low-lying tundra shoreline.	C-13 or C-14	200'

**GENERAL SENSITIVITIES**

- Coastal areas support high concentrations of breeding, nesting, brood-rearing, and molting waterbirds during the summer.
- Concentrations of swans, ducks, geese, and shorebirds are present here in June before open water is present elsewhere.
- Shoreline and offshore areas support molting Oldsquaws and eiders, and brood-rearing eiders. This is also a staging area for migrating Phalaropes (shorebirds). Birds are present in June through September.
- Pairs of Spectacled Eiders have been found in this area.
- Plan to deploy bird-hazing systems during the open-water season.
- East Badami Creek and No Name River provide habitat for anadromous char and for resident fish.
- Polar bear dens have been found in this area. Dens may be in use from October through April.

**CULTURAL SITES**

Information on the exact locations of cultural sites is confidential. This information is contained in the *North Slope Archaeological Data* document, copies of which are kept at the following offices: State Historical Preservation Officer (SHPO) (907-269-8721), ACS in Deadhorse (907-659-2405), North Slope Borough Lands Division (907-852-0322), North Slope Borough Lands Division (907-852-0322), BPXA Crisis Center in Anchorage (907-564-5243), and the ConocoPhillips Incident Command Center in Anchorage (907-265-1000). The following cultural site(s) are located in the area depicted on this sheet:

- XBP-028 on the coast west of Badami CPU Pad



**AIR ACCESS\***

- Bullen Point airstrip (Sheet 101) is approximately 8 miles northeast of Mikkelsen Bay State 1. This is an unattended, 2,900-ft gravel airstrip. The extreme west end of the strip reportedly tends to be soft.

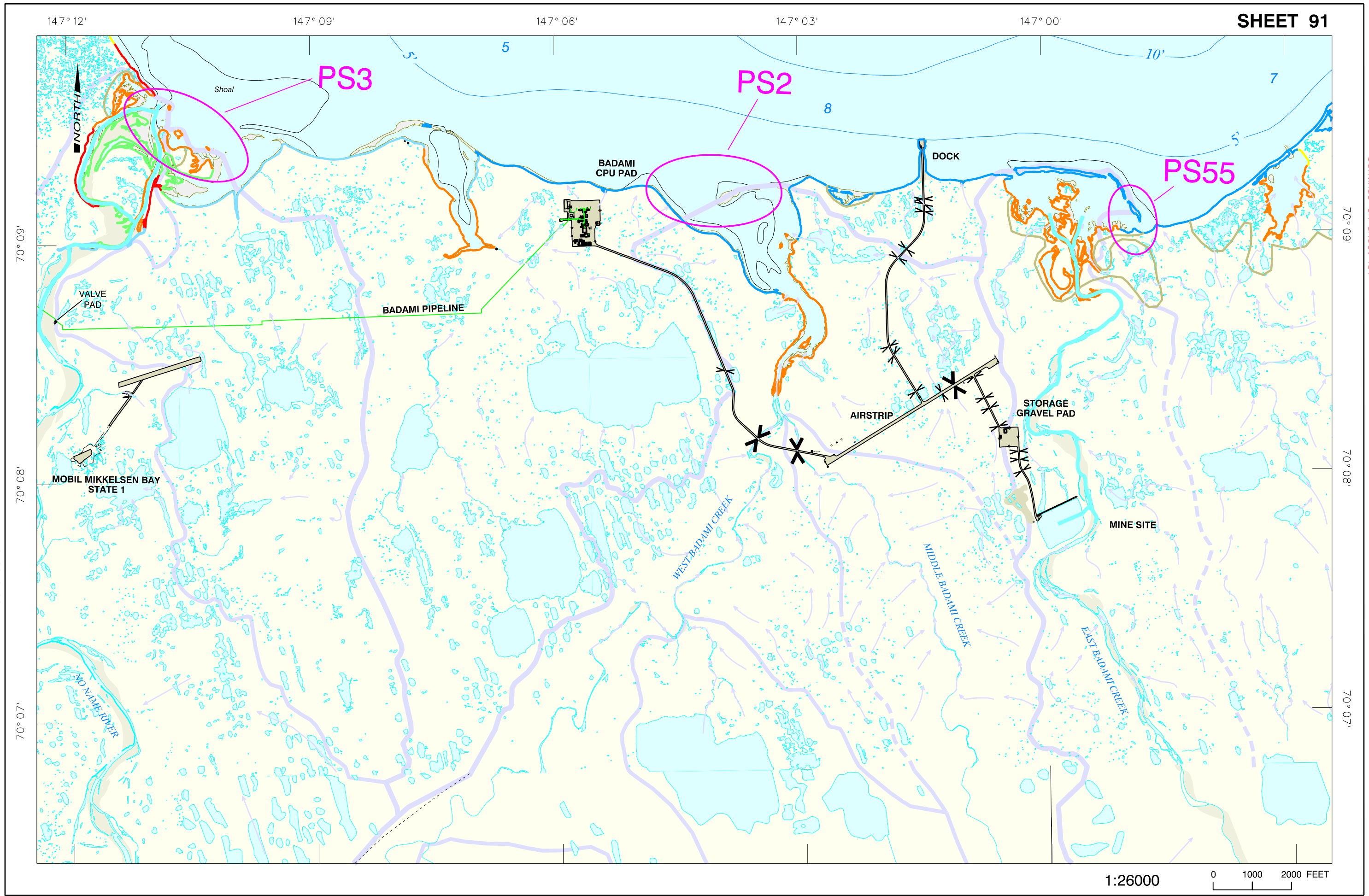
AIRSTRIP	DESCRIPTION/ LOCATION	FIXED-WING MINIMUMS	FUEL/ SERVICES	TRAFFIC CONTROL
Badami Airstrip	5,100-ft gravel runway, unmanned	1 mile IFR and no VFR (carrier's decision); ceiling is uncontrolled	None	Notify 907-659-1215 of intention to land

**COUNTERMEASURES CONSIDERATIONS**

- Access is very limited in areas of vegetated shorelines. Caution should be exercised to minimize erosion.
- Gravel beaches are generally wide (more than 30 ft), but are interrupted by numerous inlets and vegetated shorelines.
- Small embayments will collect oil during sustained west or northwest winds and storm surge.

\*See the latest *Supplement, Alaska* and United States Coast Pilot for current information on air and vessel access, respectively.





Continue on sheet 90

Continue on sheet 101





### PRIORITY PROTECTION SITES

- There are no priority protection sites on this sheet.

### GENERAL SENSITIVITIES

- Concentrations of swans, ducks, geese, and shorebirds are present here in June before open water is present elsewhere.
- Plan to deploy bird-hazing systems during the open-water season.



### AIR ACCESS\*

- Deadhorse airport (Sheet 81) is located approximately 20 miles south of Reindeer Island.

### VESSEL ACCESS\* AND HYDROGRAPHIC CONDITIONS

- Water access is limited to shallow-draft vessels on the lagoon-facing shores of the barrier islands.
- The variability of bottom topography and the erosional nature of the islands may make navigation difficult.
- Water depths across Stefansson Sound range from 12 to 30 ft.
- Good anchorage for vessels drawing up to 6 ft can be found behind Reindeer Island.
- Gwydyr Bay surface currents are generally to the west at 10 to 30 cm/sec. Water depth is 2 to 7 ft.
- Annual average discharge rate of the Kuparuk River is 1,830 cfs. Much of sediment load is transported west in along-shore transport.
- Barrier islands may be awash during storm surges. The islands are migrating toward shore at 5 to 10 meters per year and westward 20 to 30 meters.

\*See the latest *Supplement, Alaska* and United States Coast Pilot for current information on air and vessel access, respectively.

148° 24'

148° 21'

148° 18'

148° 15'

148° 12'

70° 30'

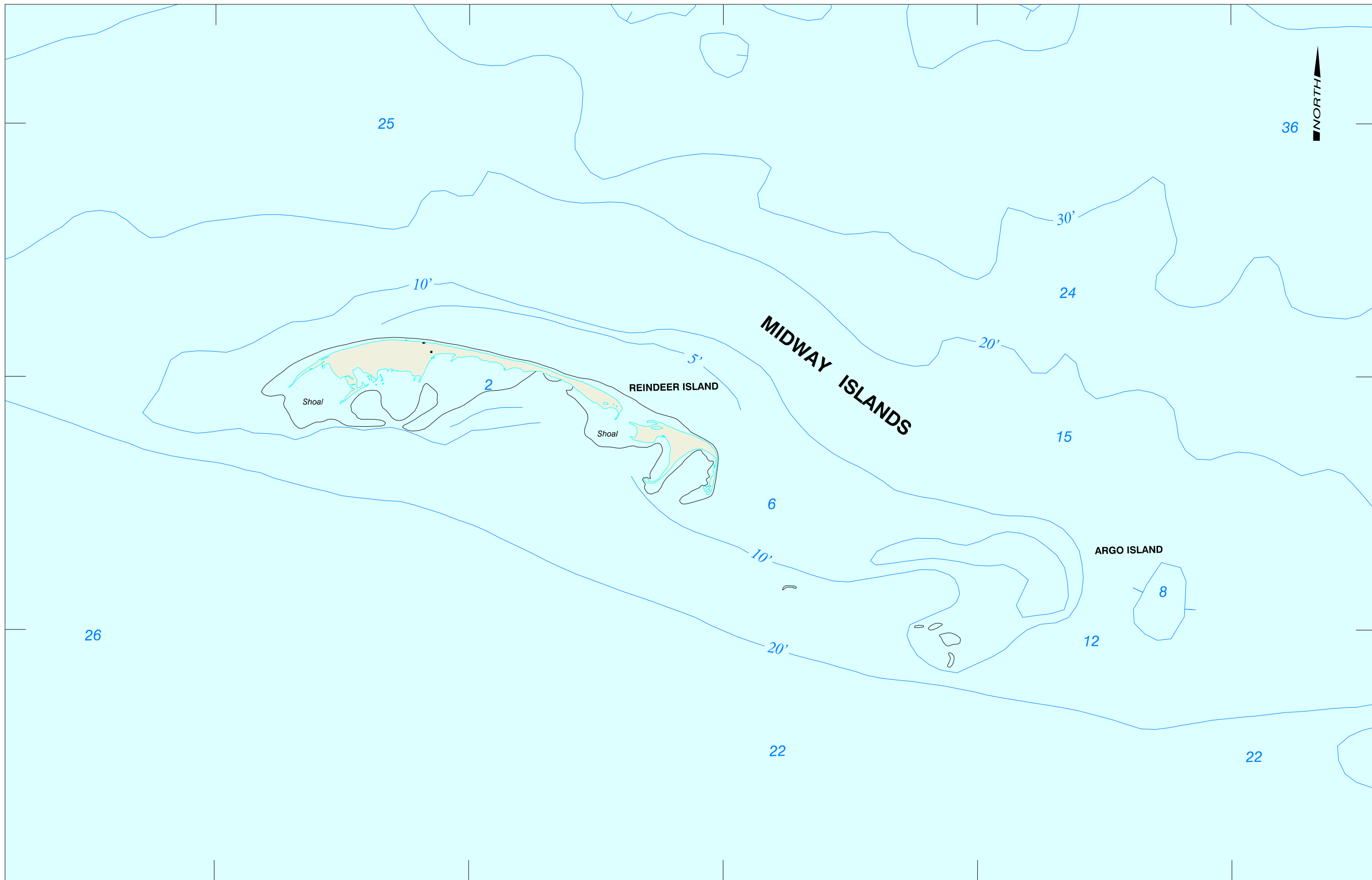
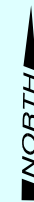
70° 30'

70° 29'

70° 29'

70° 28'

70° 28'



1:26000

0 1000 2000 FEET



### PRIORITY PROTECTION SITES

- There are no individual priority protection sites on this sheet.
- \* Priority Protection Area -- Cross Island and adjacent islets should be viewed as one large Priority Protection Area due to a high concentration of polar bears. On-site conditions may require the use of open water tactics to prevent oil migration into sensitive habitat.

### GENERAL SENSITIVITIES

- Concentrations of swans, ducks, geese, and shorebirds are present here in June before open water is present elsewhere.
- Common Eiders nest on offshore islands in June and July.
- The lee side of Cross Island is an important molting area for Oldsquaw in August.
- Plan to deploy bird-hazing systems during the open-water season.
- Polar bear dens have been found in this area. Dens may be in use from October through April.
- North Slope residents use Cross Island as a staging area for the annual fall whale hunt.
- Polar bears congregate near, and feed on, the whale bone piles remaining after subsistence hunts.

### CULTURAL SITES

Information on the exact locations of cultural sites is confidential. This information is contained in the *North Slope Archaeological Data* document, copies of which are kept at the following offices: State Historical Preservation Officer (SHPO) (907-269-8721), ACS in Deadhorse (907-659-2405), North Slope Borough Lands Division (907-852-0322), North Slope Borough Lands Division (907-852-0322), BPXA Crisis Center in Anchorage (907-564-5243), and the ConocoPhillips Incident Command Center in Anchorage (907-265-1000). The following cultural site(s) are located in the area depicted on this sheet:

- XBP-009 on Cross Island



### AIR ACCESS\*

- Deadhorse airport (Sheet 81) is located approximately 24 miles south-southwest of Cross Island.

### VESSEL ACCESS\* AND HYDROGRAPHIC CONDITIONS

- Water depths across Stefansson Sound range from 12 to 30 ft.
- The variability of bottom topography and the erosional nature of the islands may make navigation difficult.
- There is somewhat protected anchorage for small vessels drawing up to 10 ft behind Cross Island and several small islands that extend to the south.

### COUNTERMEASURES CONSIDERATIONS

- Large ice floes remain hinged to the north and east sides of Cross Island during open-water season.

\*See the latest *Supplement, Alaska* and United States Coast Pilot for current information on air and vessel access, respectively.

148° 06'

148° 03'

148° 00'

147° 57'

147° 54'

70° 30'

70° 29'

70° 28'

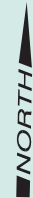
70° 27'

70° 30'

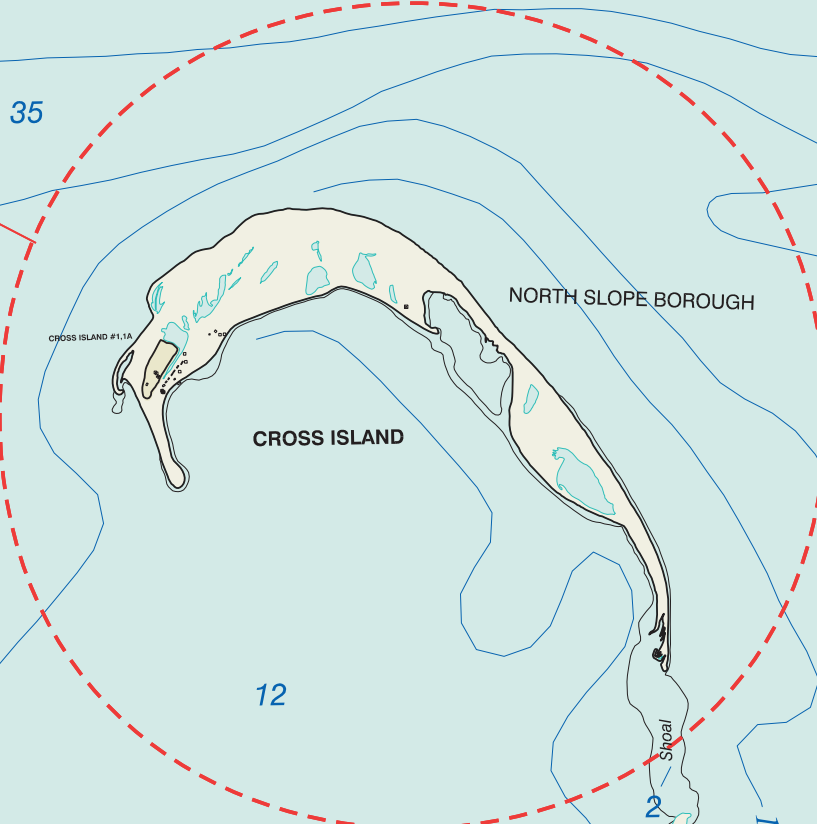
70° 29'

70° 28'

70° 27'



PRIORITY PROTECTION AREA



NORTH SLOPE BOROUGH

CROSS ISLAND

NO NAME ISLAND

CROSS ISLAND #1,1A

Street

Street

36

40'

35

50'

43

34

40'

23

30'

12

30'

20'

20'

10'

16

23

27

15

20'

21

21

21

1:26000

0 1000 2000 FEET





### PRIORITY PROTECTION SITES

- There are no priority protection sites on this sheet.

### GENERAL SENSITIVITIES

- Concentrations of swans, ducks, geese, and shorebirds are present here in June before open water is present elsewhere.
- Shoreline and offshore areas support molting Oldsquaws and eiders, and brood-rearing eiders. This is also a staging area for migrating Phalaropes (shorebirds). Birds are present in June through September.
- Common Eiders nest on offshore islands in June and July.
- The lee side of the McClure Islands is an important molting and staging area for Oldsquaw and shorebirds.
- Plan to deploy bird-hazing systems during the open-water season.



### AIR ACCESS\*

- Badami airstrip (Sheet 91) is approximately 19 miles southeast of Narwhal Island.

### VESSEL ACCESS\* AND HYDROGRAPHIC CONDITIONS

- Protected anchorage is available in depths of 15 ft south of the northwest end of Narwhal Island. Little ice is encountered during open-water season.
- Protected anchorage is available in depths of 9 to 15 ft south of Jeanette Island.
- Jeanette Island is exposed to vigorous ice and wind action, and there is continuous change in the shoreline and in shallower depths.
- Newport Entrance (Sheet 95), southeast of the McClure Islands, is 1 mile wide with depths of 16 to 18 ft. Two sand bars (1 mile and 2.3 miles south-southeast of Karluk Island, respectively) are a few yards in width and are awash during storm high waters. Water depth over the bars is 5 to 7 ft.

### COUNTERMEASURES CONSIDERATIONS

- Due to the variability of bottom topography and erosional nature of these islands, access may be limited to helicopter-deployable equipment.

\*See the latest *Supplement, Alaska* and United States Coast Pilot for current information on air and vessel access, respectively.

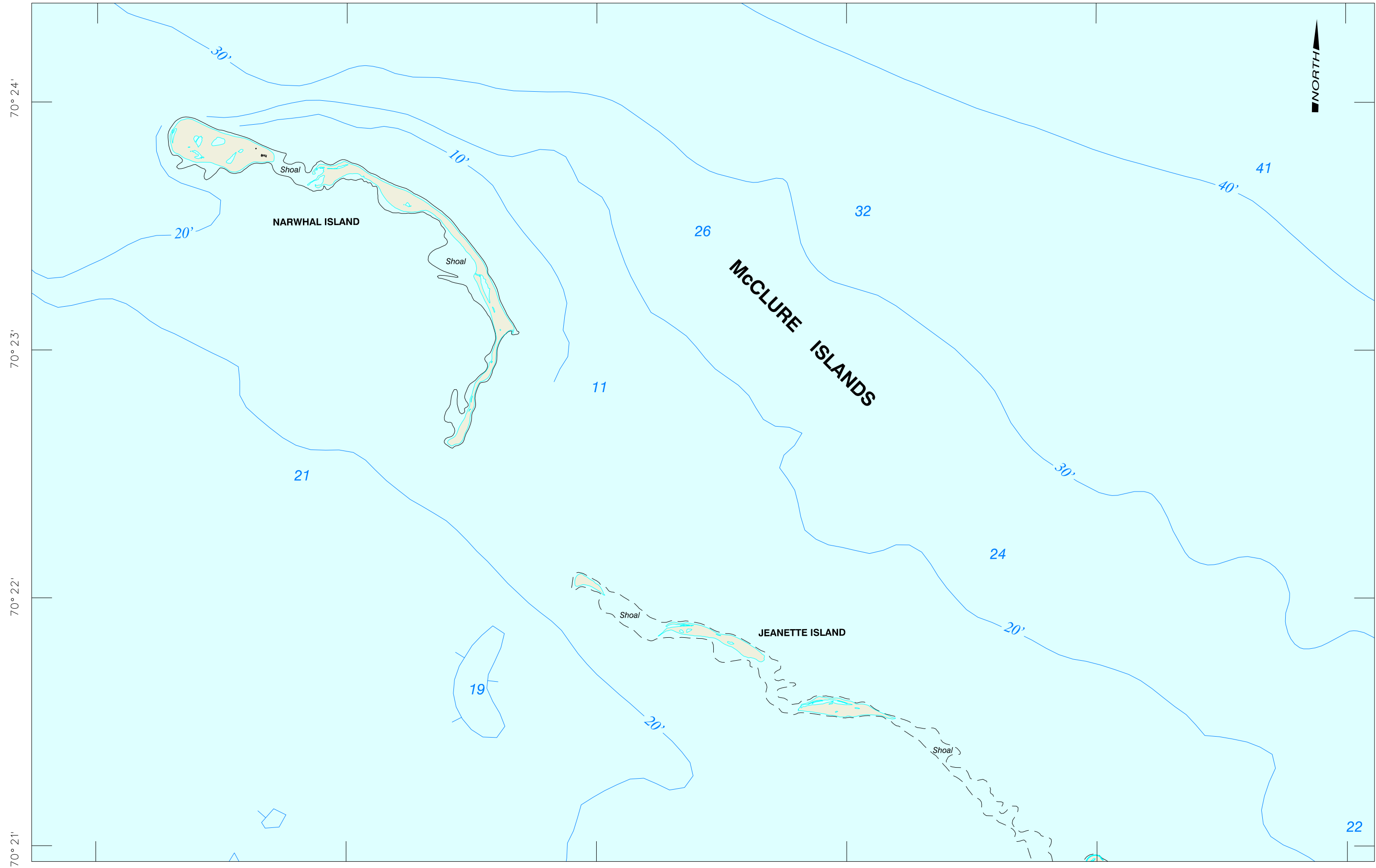
147° 33'

147° 30'

147° 27'

147° 24'

147° 21'



70° 24'  
70° 23'  
70° 22'  
70° 21'

Continue on sheet 95

1:26000

0 1000 2000 FEET



### PRIORITY PROTECTION SITES

- There are no priority protection sites on this sheet.

### GENERAL SENSITIVITIES

- Concentrations of swans, ducks, geese, and shorebirds are present here in June before open water is present elsewhere.
- Shoreline and offshore areas support molting Oldsquaws and eiders, and brood-rearing eiders. This is also a staging area for migrating Phalaropes (shorebirds). Birds are present in June through September.
- Common Eiders nest on offshore islands in June and July.
- The lee side of the barrier islands is an important molting and staging area for Oldsquaw and shorebirds.
- Plan to deploy bird-hazing systems during the open-water season.



### AIR ACCESS\*

- Badami airstrip (Sheet 91) is approximately 15 miles southeast of Karluk Island.

### VESSEL ACCESS\* AND HYDROGRAPHIC CONDITIONS

- Protected anchorage is available in depths of 9 to 15 ft south of Karluk Island.
- Karluk Island is exposed to vigorous ice and wind action, and there is continuous change in the shoreline and in shallower depths.
- Newport Entrance, southeast of the McClure Islands, is 1 mile wide with depths of 16 to 18 ft. Two sand bars (1 mile and 2.3 miles south-southeast of Karluk Island, respectively) are a few yards in width and are awash during storm high waters. Water depth over the bars is 5 to 7 ft.

### COUNTERMEASURES CONSIDERATIONS

- Due to the variability of bottom topography and erosional nature of these islands, access may be limited to helicopter-deployable equipment.

\*See the latest *Supplement, Alaska* and United States Coast Pilot for current information on air and vessel access, respectively.

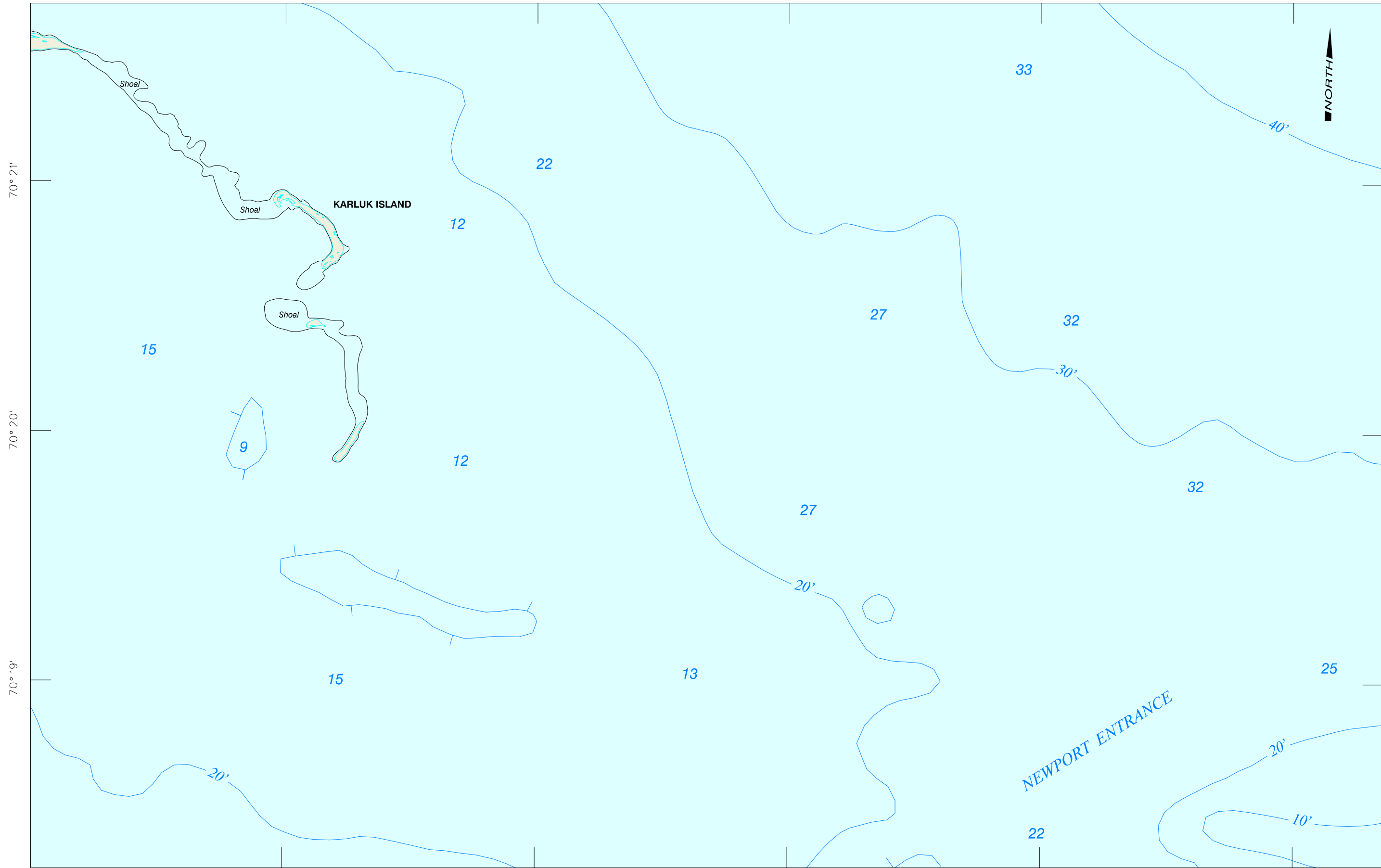
147° 21'

147° 18'

147° 15'

147° 12'

Continue on sheet 94



1:26000

0 1000 2000 FEET

Continue on sheet 96





### PRIORITY PROTECTION SITES

- There are no priority protection sites on this sheet.

### GENERAL SENSITIVITIES

- Concentrations of swans, ducks, geese, and shorebirds are present here in June before open water is present elsewhere.
- Shoreline and offshore areas support molting Oldsquaws and eiders, and brood-rearing eiders. This is also a staging area for migrating Phalaropes (shorebirds). Birds are present in June through September.
- Common Eiders nest on offshore islands in June and July.
- The lee side of the Stockton Islands is an important molting and staging area for Oldsquaws in July and August.
- Plan to deploy bird-hazing systems during the open-water season.

### CULTURAL SITES

Information on the exact locations of cultural sites is confidential. This information is contained in the *North Slope Archaeological Data* document, copies of which are kept at the following offices: State Historical Preservation Officer (SHPO) (907-269-8721), ACS in Deadhorse (907-659-2405), North Slope Borough Lands Division (907-852-0322), North Slope Borough Lands Division (907-852-0322), BPXA Crisis Center in Anchorage (907-564-5243), and the ConocoPhillips Incident Command Center in Anchorage (907-265-1000). The following cultural site(s) are located in the area depicted on this sheet:

- XBP-029 on Pole Island



### AIR ACCESS\*

- Bullen Point airstrip (Sheet 101) is located approximately 10 miles south-southeast of Pole Island. This is an unattended, 2,900-ft gravel airstrip. The extreme west end of the strip reportedly tends to be soft.
- Badami airstrip (Sheet 91) is approximately 11 miles south of Pole Island.

### VESSEL ACCESS\* AND HYDROGRAPHIC CONDITIONS

- Newport Entrance (Sheet 95) is 1 mile wide with depths of 16 to 18 ft. Two sand bars (1 mile and 2.3 miles south-southeast of Karluk Island, respectively) are a few yards in width and are awash during storm high waters. Water depth over the bars is 5 to 7 ft.
- Challenge Entrance (Sheet 97) is between Belvedere Island and Challenge Island (Sheet 98). The west side of the opening and the area immediately south of Belvedere Island are shallow and dotted with tiny islets and bare shoals. The best water is 0.8 miles west of Challenge Island where vessels drawing 10 ft or less can enter safely.

### COUNTERMEASURES CONSIDERATIONS

- Due to the variability of bottom topography and erosional nature of these islands, access may be limited to helicopter-deployable equipment.

\*See the latest *Supplement, Alaska* and United States Coast Pilot for current information on air and vessel access, respectively.

147° 09'

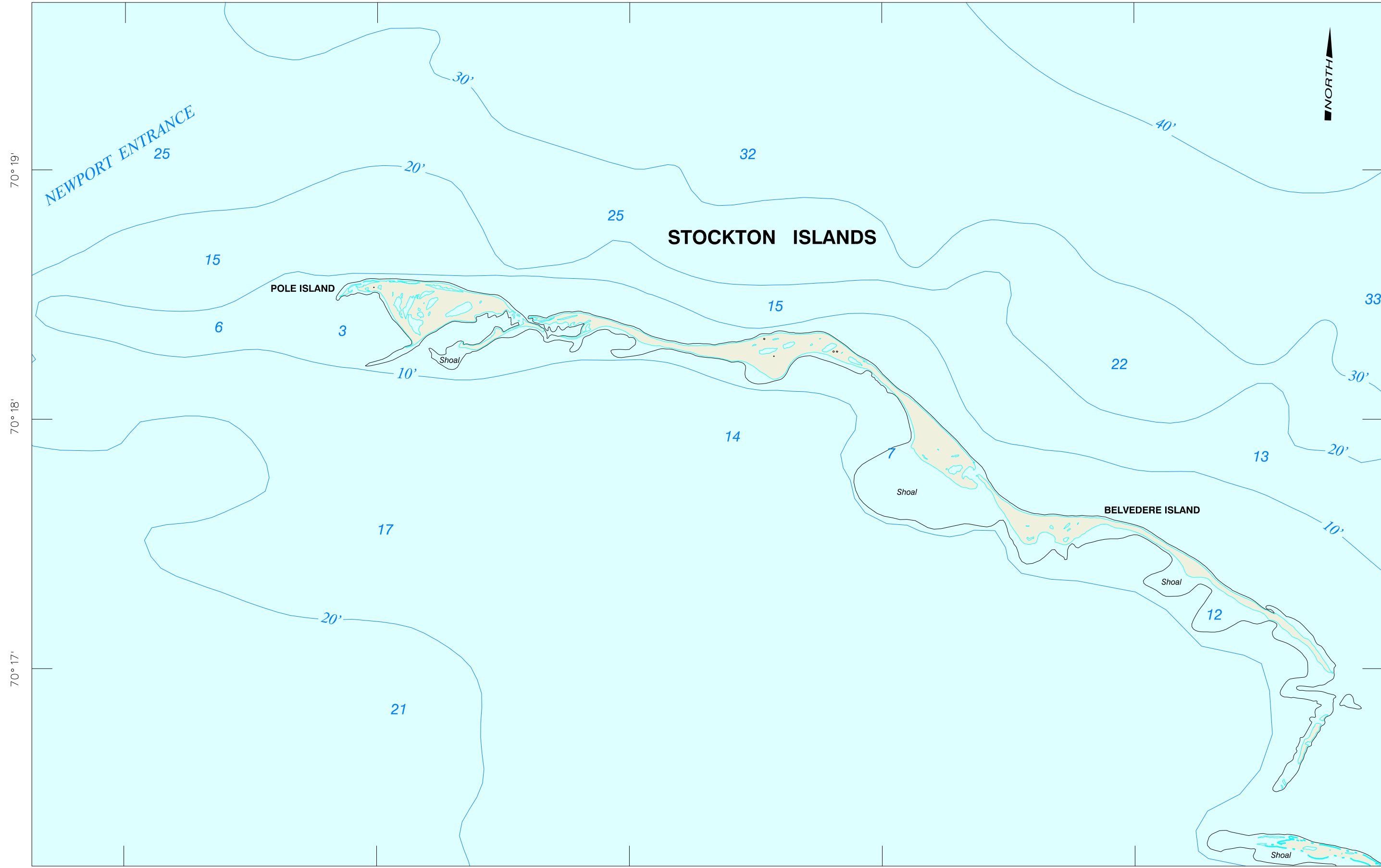
147° 06'

147° 03'

147° 00'

146° 57'

Continue on sheet 95



70° 19'

70° 18'

70° 17'

Continue on sheet 97

1:26000  
0 1000 2000 FEET



### PRIORITY PROTECTION SITES

- There are no priority protection sites on this sheet.

### GENERAL SENSITIVITIES

- Concentrations of swans, ducks, geese, and shorebirds are present here in June before open water is present elsewhere.
- Shoreline and offshore areas support molting Oldsquaws and eiders, and brood-rearing eiders. This is also a staging area for migrating Phalaropes (shorebirds). Birds are present in June through September.
- The lee side of the barrier islands is an important molting and staging area for Oldsquaws in July and August.
- Plan to deploy bird-hazing systems during the open-water season.



### AIR ACCESS\*

- Bullen Point airstrip (Sheet 101) is located approximately 6 miles to the south. This is an unattended, 2,900-ft gravel airstrip. The extreme west end of the strip reportedly tends to be soft.
- Badami airstrip (Sheet 91) is approximately 9 miles to the southwest.

### VESSEL ACCESS\* AND HYDROGRAPHIC CONDITIONS

- Challenge Entrance is between Belvedere Island and Challenge Island (Sheet 98). The west side of the opening and the area immediately south of Belvedere Island are shallow and dotted with tiny islets and bare shoals. The best water is 0.8 miles west of Challenge Island where vessels drawing 10 ft or less can enter safely.

### COUNTERMEASURES CONSIDERATIONS

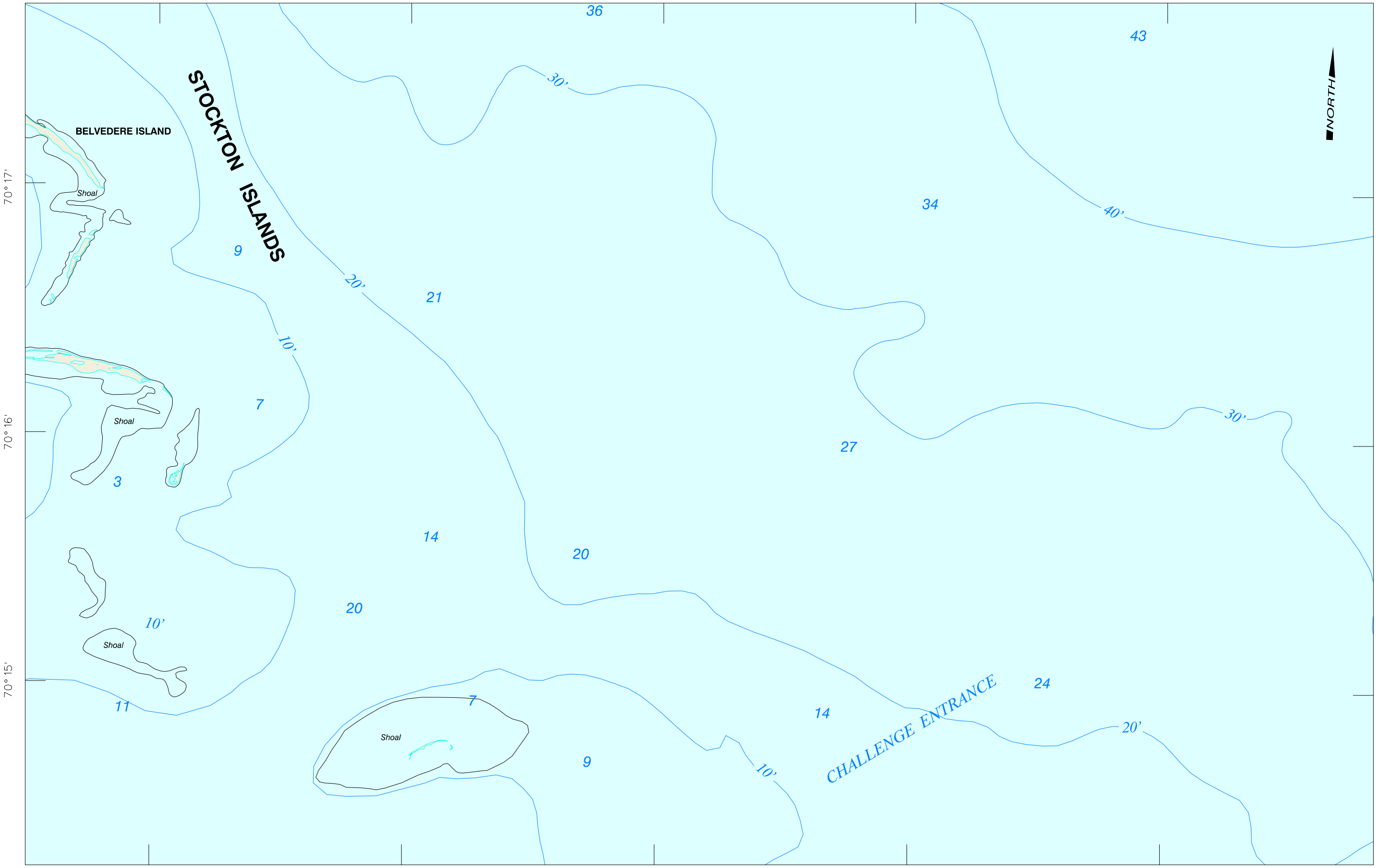
- Due to the variability of bottom topography and erosional nature of these islands, access may be limited to helicopter-deployable equipment.

\*See the latest *Supplement, Alaska* and United States Coast Pilot for current information on air and vessel access, respectively.

146° 54' 146° 51' 146° 48' 146° 45' 146° 42'



Continue on sheet 96



70° 17'

70° 16'

70° 15'

Continue on sheet 98

1:26000 0 1000 2000 FEET





### PRIORITY PROTECTION SITES

- There are no priority protection sites on this sheet.

### GENERAL SENSITIVITIES

- Concentrations of swans, ducks, geese, and shorebirds are present here in June before open water is present elsewhere.
- Shoreline and offshore areas support molting Oldsquaws and eiders, and brood-rearing eiders. This is also a staging area for migrating Phalaropes (shorebirds). Birds are present in June through September.
- This is the edge of a major molting and staging area for Oldsquaw in August and September. The area extends eastward on the lee side of the barrier islands.
- Common Eiders nest on offshore islands in June and July.
- Plan to deploy bird-hazing systems during the open-water season.



### AIR ACCESS\*

- Bullen Point airstrip (Sheet 101) is located approximately 6 miles southwest of Challenge Island. This is an unattended, 2,900-ft gravel airstrip. The extreme west end of the strip reportedly tends to be soft.
- Badami airstrip (Sheet 91) is approximately 11 miles southwest of Challenge Island.

### VESSEL ACCESS\* AND HYDROGRAPHIC CONDITIONS

- There is no channel between Challenge Island and Alaska Island.
- Channel between Alaska and Duchess islands averages 7 ft, but is meandering and not recommended for travel.
- Mary Sachs Entrance (Sheet 99) has extensive shoals to 3 ft on either side. Mid-channel depth is 10 ft.
- Challenge Entrance (Sheet 97) is between Belvedere Island (Sheet 96) and Challenge Island. The west side of the opening and the area immediately south of Belvedere Island are shallow and dotted with tiny islets and bare shoals. The best water is 0.8 miles west of Challenge Island where vessels drawing 10 ft or less can enter safely.
- Water depths near the mainland shore are shallow and changeable due to growth and change in bars and spits just offshore.

### COUNTERMEASURES CONSIDERATIONS

- Gravel beaches are often “perched” on tundra vegetation, complicating response measures.
- Due to the variability of bottom topography and erosional nature of these islands, access may be limited to helicopter-deployable equipment.

\*See the latest *Supplement, Alaska* and United States Coast Pilot for current information on air and vessel access, respectively.

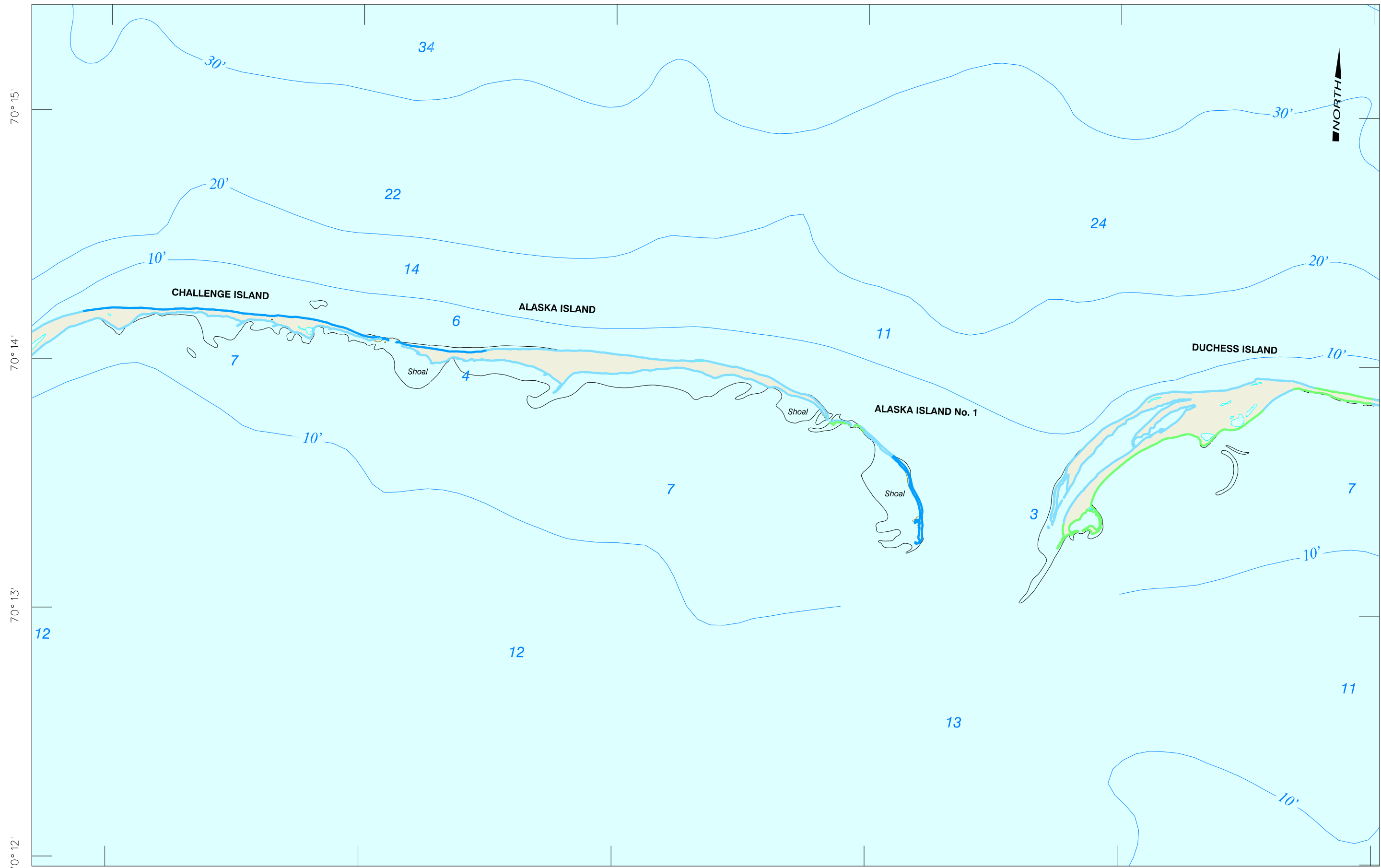
146° 39'

146° 36'

146° 33'

146° 30'

146° 27'



Continue on sheet 97

Continue on sheet 99



### PRIORITY PROTECTION SITES

- There are no priority protection sites on this sheet.

### GENERAL SENSITIVITIES

- Concentrations of swans, ducks, geese, and shorebirds are present here in June before open water is present elsewhere.
- Shoreline and offshore areas support molting Oldsquaws and eiders, and brood-rearing eiders. This is also a staging area for migrating Phalaropes (shorebirds). Birds are present in June through September.
- This is the edge of a major molting and staging area for Oldsquaw in August and September. The area extends eastward on the lee side of the barrier islands.
- Common Eiders nest on offshore islands in June and July.
- Plan to deploy bird-hazing systems during the open-water season.



### AIR ACCESS\*

- Flaxman Island airstrip (Sheet 100) is located approximately 7 miles east-southeast of Northstar Island. This is an 800-ft gravel strip atop 20-ft bluffs on the east end of the island. The runway reportedly is deteriorating, and the extreme west end should be avoided.

### VESSEL ACCESS\* AND HYDROGRAPHIC CONDITIONS

- Water depths near the mainland shore are shallow and changeable due to growth and change in bars and spits just offshore.
- Channels at either end of Northstar Island are shallow and changing. They are not recommended for travel.
- Access on the lagoon side of Flaxman Island may be difficult due to shallow water depths.
- Mary Sachs Entrance has extensive shoals to 3 ft on both sides. Mid-channel depth is 10 ft.
- There is extensive shoaling on the south and southeast sides of Northstar Island.

### COUNTERMEASURES CONSIDERATIONS

- Gravel beaches are often "perched" on tundra vegetation, complicating response measures.

\*See the latest *Supplement, Alaska* and United States Coast Pilot for current information on air and vessel access, respectively.

146° 24' 146° 21' 146° 18' 146° 15' 146° 12'



Continue on sheet 98

70° 14'

70° 13'

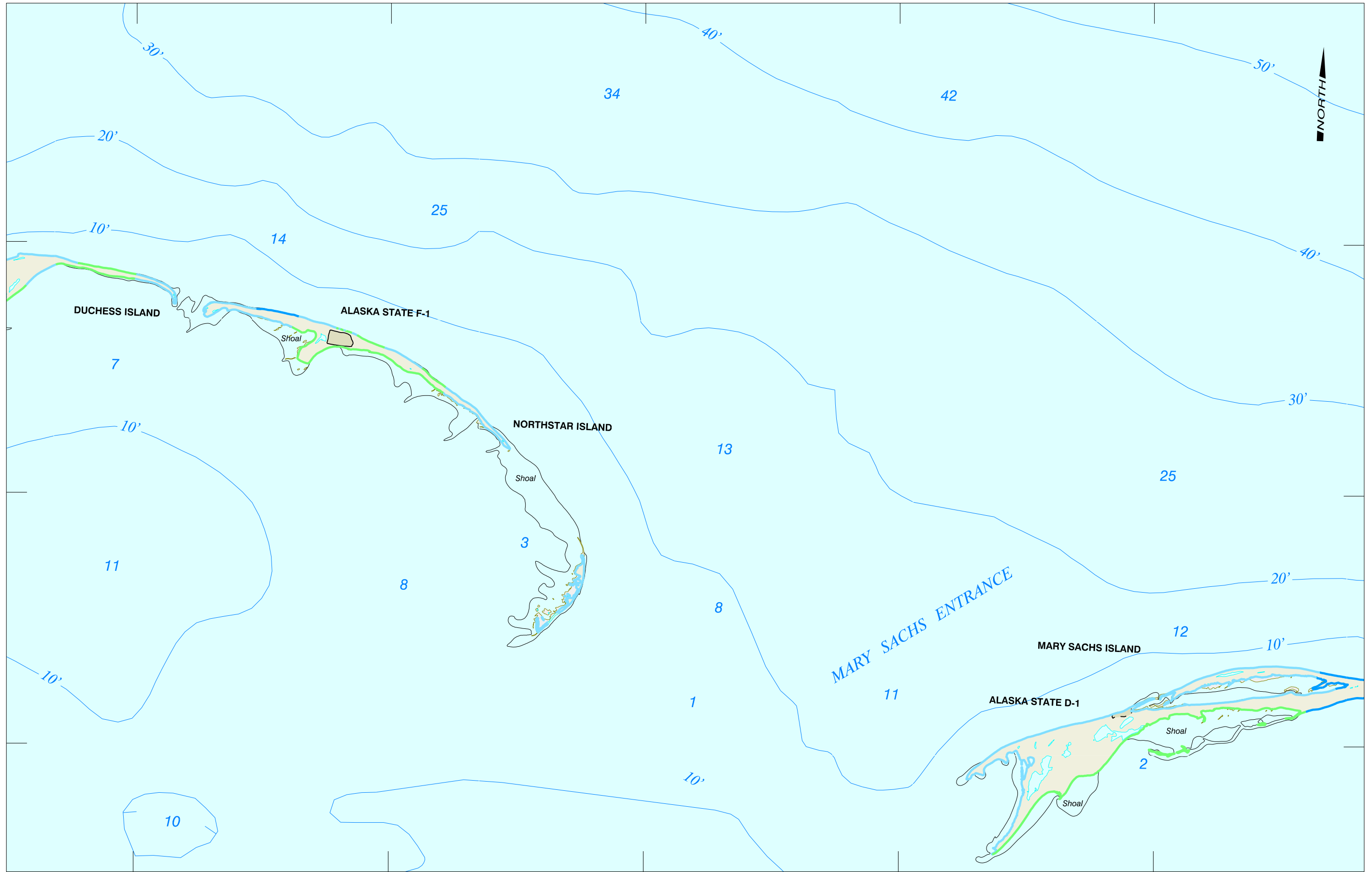
70° 12'

70° 14'

70° 13'

70° 12'

Continue on sheet 100



1:26000 0 1000 2000 FEET





### PRIORITY PROTECTION SITES

SITE NO.	DESCRIPTION	SENSITIVITY	TACTIC	EST. BOOM
PS56	Lagoon on Flaxman Island	Most sensitive during open water season. Keep oil from entering lagoon. Salt marsh and/or inundated low-lying tundra shoreline.	C-13 or C-14	500'
PS57	Salt marsh and inundated tundra shoreline on east side of Flaxman Island	Most sensitive during open water season. Keep oil from entering salt marsh and/or inundated low-lying tundra shoreline.	C-13 or C-14	3,000'

### GENERAL SENSITIVITIES

- Concentrations of swans, ducks, geese, and shorebirds are present here in June before open water is present elsewhere.
- Shoreline and offshore areas support molting Oldsquaws and eiders, and brood-rearing eiders. This is also a staging area for migrating Phalaropes (shorebirds). Birds are present in June through September.
- This is the edge of a major molting and staging area for Oldsquaw in August and September. The area extends eastward on the lee side of Flaxman Island.
- Plan to deploy bird-hazing systems during the open-water season.
- Polar bear dens have been found in this area. Dens may be in use from October through April.

### CULTURAL SITES

Information on the exact locations of cultural sites is confidential. This information is contained in the *North Slope Archaeological Data* document, copies of which are kept at the following offices: State Historical Preservation Officer (SHPO) (907-269-8721), ACS in Deadhorse (907-659-2405), North Slope Borough Lands Division (907-852-0322), North Slope Borough Lands Division (907-852-0322), BPXA Crisis Center in Anchorage (907-564-5243), and the ConocoPhillips Incident Command Center in Anchorage (907-265-1000). The following cultural site(s) are located in the area depicted on this sheet:

- XFI-002 on Flaxman Island
- XFI-007 on Flaxman Island
- XFI-008 on Flaxman Island



### AIR ACCESS\*

- Flaxman Island airstrip is an 800-ft gravel strip atop 20-ft bluffs on the east end of the island. The runway reportedly is deteriorating, and the extreme west end should be avoided.

### VESSEL ACCESS\* AND HYDROGRAPHIC CONDITIONS

- Water depths near the mainland shore are shallow and changeable due to growth and change in bars and spits just offshore.
- Access on the lagoon side of Flaxman Island may be difficult due to shallow water depths.
- Mary Sachs Entrance (Sheet 99) has extensive shoals to 3 ft on either side. Mid-channel depth is 10 ft.
- There is passage between Flaxman Island and Brownlow Point to the southeast. The channel is close to the east end of the island and has depths of 8 ft, which shoal to 4 ft in the lagoon.
- There is extensive shoaling at the mouth of the west fork of the Canning River southeast of Flaxman Island.
- Annual average discharge of the Staines River is 14 cfs.

### COUNTERMEASURES CONSIDERATIONS

- Island lagoon will trap oil during sustained west and southwest winds.

\*See the latest *Supplement, Alaska* and United States Coast Pilot for current information on air and vessel access, respectively.

146° 09'

146° 06'

146° 03'

146° 00'

145° 57'

**SHEET 100**

70° 13'

70° 13'

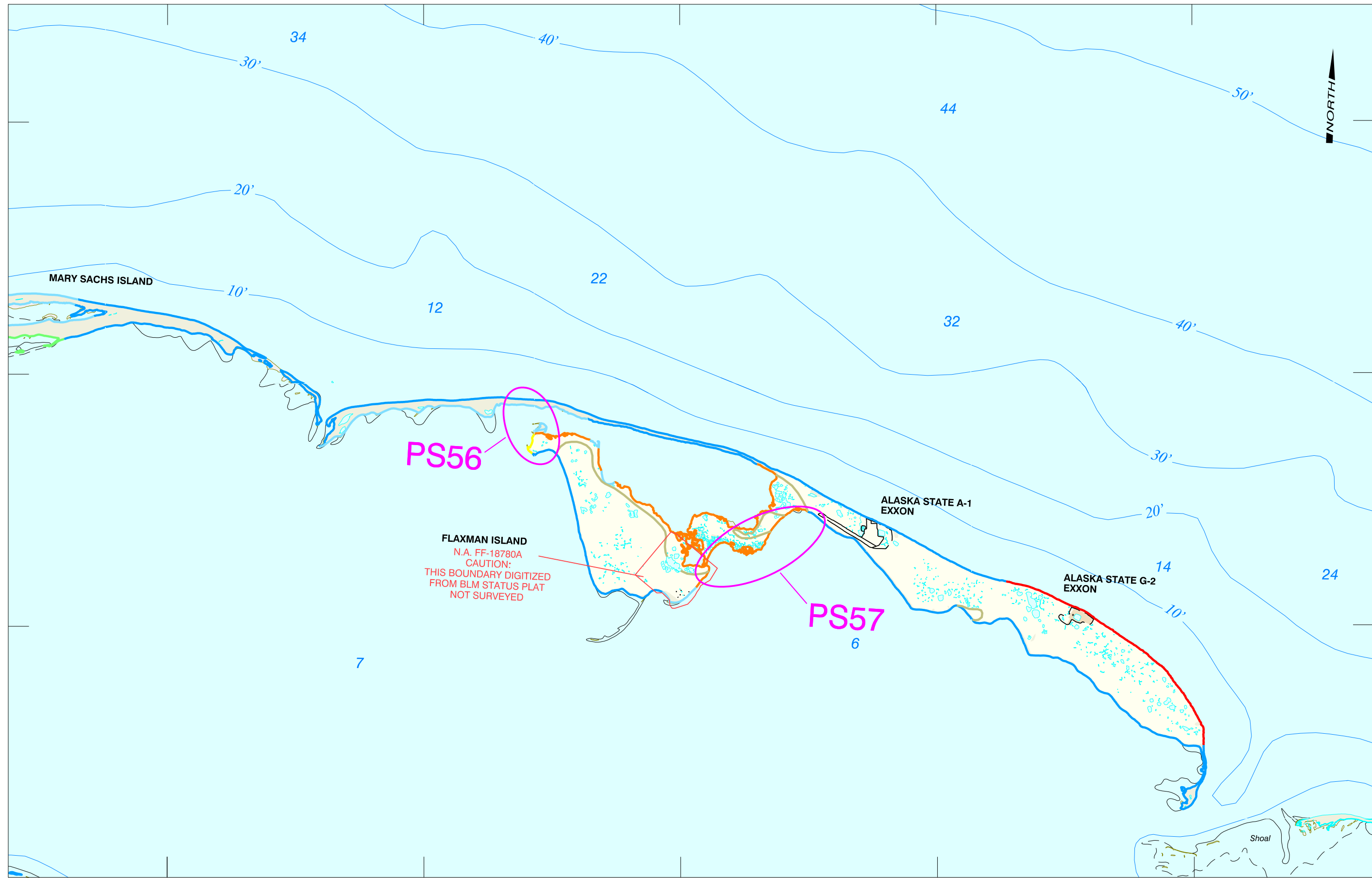
70° 12'

70° 12'

70° 11'

70° 11'

Continue on sheet 99



**PS56**

**FLAXMAN ISLAND**  
N.A. FF-18780A  
CAUTION:  
THIS BOUNDARY DIGITIZED  
FROM BLM STATUS PLAT  
NOT SURVEYED

**PS57**  
6

**ALASKA STATE A-1  
EXXON**

**ALASKA STATE G-2  
EXXON**

Shoal

1:26000

0 1000 2000 FEET



**PRIORITY PROTECTION SITES**

SITE NO.	DESCRIPTION	SENSITIVITY	TACTIC	EST. BOOM
PS59	Entrance to lagoon 2 miles east of Bullen Point	Most sensitive during open water season. Salt marsh and/or inundated low-lying tundra shoreline.	C-13 or C-14	100'

**GENERAL SENSITIVITIES**

- Concentrations of swans, ducks, geese, and shorebirds are present here in June before open water is present elsewhere.
- Shoreline and offshore areas support molting Oldsquaws and eiders, and brood-rearing eiders. This is also a staging area for migrating Phalaropes (shorebirds). Birds are present in June through September.
- Plan to deploy bird-hazing systems during the open-water season.

**CULTURAL SITES**

Information on the exact locations of cultural sites is confidential. This information is contained in the *North Slope Archaeological Data* document, copies of which are kept at the following offices: State Historical Preservation Officer (SHPO) (907-269-8721), ACS in Deadhorse (907-659-2405), North Slope Borough Lands Division (907-852-0322), North Slope Borough Lands Division (907-852-0322), BPXA Crisis Center in Anchorage (907-564-5243), and the ConocoPhillips Incident Command Center in Anchorage (907-265-1000). The following cultural site(s) are located in the area depicted on this sheet:

- XFI-001 near Bullen Point



**AIR ACCESS\***

- Badami airstrip (Sheet 91) is approximately 4 miles southwest of the Bullen Point airstrip.
- Bullen Point airstrip is an unattended, 2,900-ft gravel airstrip. The extreme west end of the strip reportedly tends to be soft.

**VESSEL ACCESS\* AND HYDROGRAPHIC CONDITIONS**

- Waters around Bullen Point are very shallow.

**COUNTERMEASURES CONSIDERATIONS**

- Gravel beaches are generally wide (more than 30 ft), but are interrupted by numerous inlets and vegetated shorelines.
- Embayment at Bullen Point will collect oil during west or northwest sustained winds and storm surge.

**STAGING AREAS AND PRESTAGED EQUIPMENT**

- There is a possible staging area at the pad 1 1/2 miles east of Bullen Point.

\*See the latest *Supplement, Alaska* and United States Coast Pilot for current information on air and vessel access, respectively.

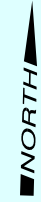
146° 57'

146° 54'

146° 51'

146° 48'

146° 45'



MIKKELSEN BAY

BULLEN POINT

PS59

STAGING AREA

LANDING STRIP

UNITED STATES  
USS-4307

EAST MIKKELSEN BAY  
STATE 1

Shoal

14

7

10'

6

5'

11

3

10'  
7  
5'

70° 11'

70° 10'

70° 09'

70° 11'

70° 10'

70° 09'

Continue on sheet 102

Continue on sheet 91

1:26000

0 1000 2000 FEET





### PRIORITY PROTECTION SITES

SITE NO.	DESCRIPTION	SENSITIVITY	TACTIC	EST. BOOM
PS60	Lagoon 0.25 miles east of Pt. Gordon	Most sensitive during open water season. Salt marsh and inundated low-lying tundra shorelines.	C-13 or C-14	100'
PS61	Lagoon 0.25 miles east of Pt. Hopson	Most sensitive during open water season. Salt marsh and inundated low-lying tundra shorelines.	C-13 or C-14	600'
PS62	Lagoon 0.75 miles east of Pt. Thomson Unit #4	Most sensitive during open water season. Salt marsh and inundated low-lying tundra shorelines.	C-13 or C-14	1,000'
PS63	Lagoon 1 mile west of Pt. Hopson	Most sensitive during open water season. Salt marsh and inundated low-lying tundra shorelines.	C-13 or C-14	100'
PS64	Inlet to salt marsh 0.5 miles east of Pt. Hopson	Most sensitive during open water season. Salt marsh and inundated low-lying tundra shorelines.	C-13 or C-14	200'
PS65A	Inlet to salt marsh 0.9 miles east of Pt. Hopson	Most sensitive during open water season. Salt marsh and inundated low-lying tundra shorelines.	C-13 or C-14	400'
PS65B	Inlet to salt marsh 1.1 miles east of Pt. Hopson	Most sensitive during open water season. Salt marsh and inundated low-lying tundra shorelines.	C-13 or C-14	750'
PS66	Inlet to salt marsh 1.5 miles east of Pt. Hopson	Most sensitive during open water season. Salt marsh and inundated low-lying tundra shorelines.	C-13 or C-14	600'

### GENERAL SENSITIVITIES

- Concentrations of swans, ducks, geese, and shorebirds are present here in June before open water is present elsewhere.
- Shoreline and offshore areas support molting Oldsquaws and eiders, and brood-rearing eiders. This is also a staging area for migrating Phalaropes (shorebirds). Birds are present in June through September.
- Plan to deploy bird-hazing systems during the open-water season.

### CULTURAL SITES

Information on the exact locations of cultural sites is confidential. This information is contained in the *North Slope Archaeological Data* document, copies of which are kept at the following offices: State Historical Preservation Officer (SHPO) (907-269-8721), ACS in Deadhorse (907-659-2405), North Slope Borough Lands Division (907-852-0322), North Slope Borough Lands Division (907-852-0322), BPXA Crisis Center in Anchorage (907-564-5243), and the ConocoPhillips Incident Command Center in Anchorage (907-265-1000). The following cultural site(s) are located in the area depicted on this sheet:

- XFI-004 near Point Gordon
- XFI-005 near Point Hopson



### AIR ACCESS\*

- Bullen Point airstrip (Sheet 101) is located approximately 5 miles west of Point Gordon. This is an unattended, 2,900-ft gravel airstrip. The extreme west end of the strip reportedly tends to be soft.

### VESSEL ACCESS\* AND HYDROGRAPHIC CONDITIONS

- Water depths near the mainland shore are shallow and changeable due to growth and change in bars and spits just offshore.

### COUNTERMEASURES CONSIDERATIONS

- Gravel beaches are often "perched" on tundra vegetation, complicating response measures.
- Embayments and inlets on coast will collect surface oil during sustained west and northwest winds.

\*See the latest *Supplement, Alaska* and United States Coast Pilot for current information on air and vessel access, respectively.

146° 42'

146° 39'

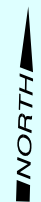
146° 36'

146° 33'

146° 30'

70° 12'

70° 12'



70° 11'

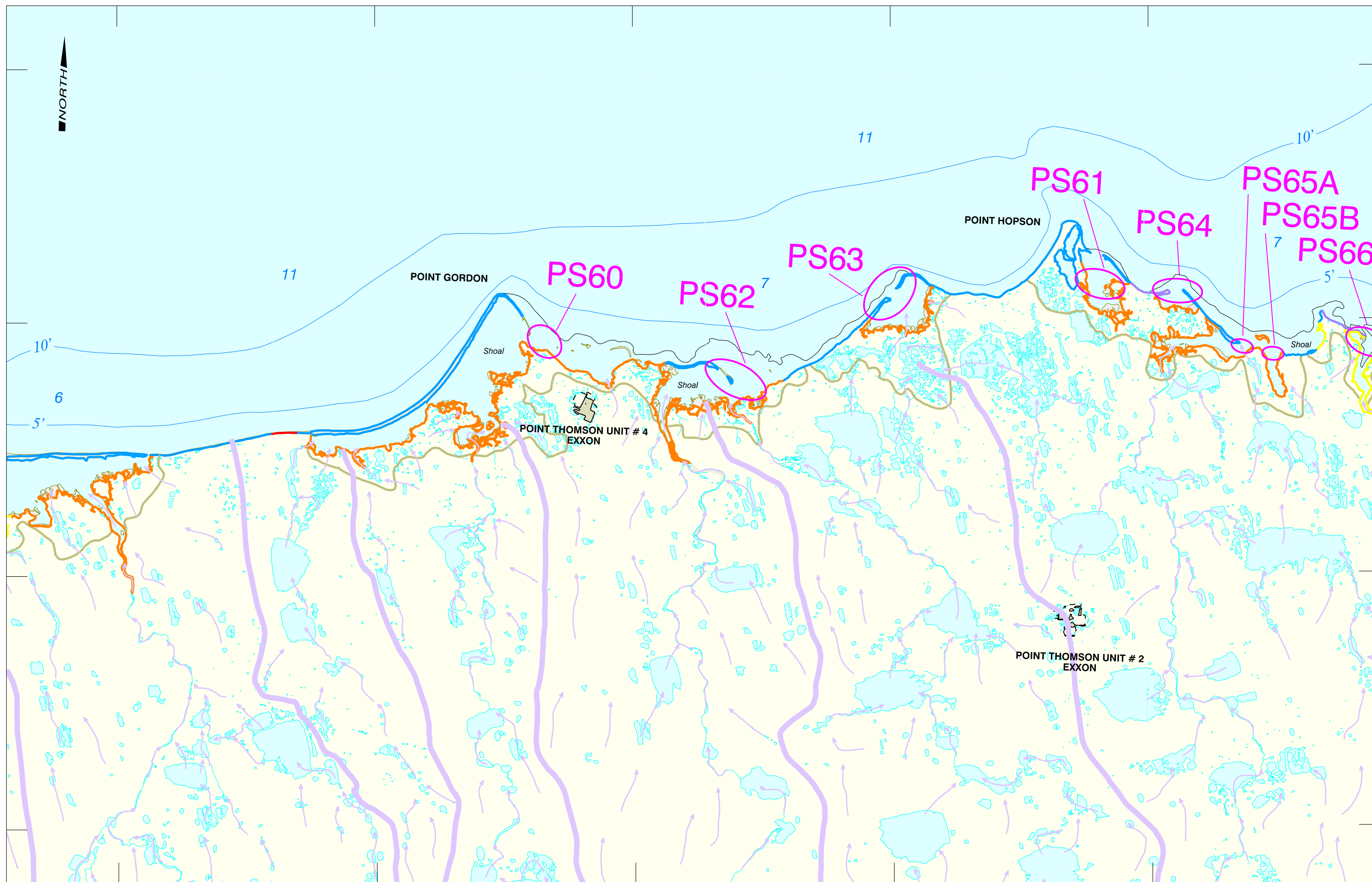
70° 11'

70° 10'

70° 10'

70° 09'

70° 09'



Continue on sheet 101

Continue on sheet 103

1:26000

0 1000 2000 FEET



**PRIORITY PROTECTION SITES**

SITE NO.	DESCRIPTION	SENSITIVITY	TACTIC	EST. BOOM
PS65A	Inlet to salt marsh 1.3 miles west of Pt. Sweeney	Most sensitive during open water season. Salt marsh and inundated low-lying tundra shorelines.	C-13 or C-14	400'
PS65B	Inlet to salt marsh 1.1 miles west of Pt. Sweeney	Most sensitive during open water season. Salt marsh and inundated low-lying tundra shorelines.	C-13 or C-14	750'
PS66	Inlet to salt marsh 0.75 miles west of Pt. Sweeney	Most sensitive during open water season. Salt marsh and inundated low-lying tundra shorelines.	C-13 or C-14	600'
PS66A	Lagoon on east side of Pt. Sweeney	Most sensitive during open water season. Salt marsh and inundated low-lying tundra shorelines.	C-13 or C-14	200'
PS67	Inlet to salt marsh 0.5 miles east of Pt. Sweeney	Most sensitive during open water season. Salt marsh and inundated low-lying tundra shorelines.	C-13 or C-14	200'
PS68	Inlet to salt marsh 1.5 miles east of Pt. Sweeney	Most sensitive during open water season. Salt marsh and inundated low-lying tundra shorelines.	C-13 or C-14	1,000'
PS69	Inlet to salt marsh immediately north of Pt. Thomson Unit #1	Most sensitive during open water season. Salt marsh and inundated low-lying tundra shorelines.	C-13 or C-14	500'
PS70	Lagoon 0.5 miles west of Pt. Thomson Unit #3	Most sensitive during open water season. Salt marsh and inundated low-lying tundra shorelines.	C-13 or C-14	200'
PS71	Inlet to salt marsh and creek mouth 0.5 miles south of Pt. Thomson Unit #3	Most sensitive during open water season. Salt marsh and inundated low-lying tundra shorelines.	C-13 or C-14	500'

**GENERAL SENSITIVITIES**

- Concentrations of swans, ducks, geese, and shorebirds are present here in June before open water is present elsewhere.
- Shoreline and offshore areas support molting Oldsquaws and eiders, and brood-rearing eiders. This is also a staging area for migrating Phalaropes (shorebirds). Birds are present in June through September.
- This is the edge of a major molting and staging area for Oldsquaw in August and September. The area extends eastward on the lee side of the barrier islands.
- Plan to deploy bird-hazing systems during the open-water season.

**CULTURAL SITES**

Information on the exact locations of cultural sites is confidential. This information is contained in the *North Slope Archaeological Data* document, copies of which are kept at the following offices: State Historical Preservation Officer (SHPO) (907-269-8721), ACS in Deadhorse (907-659-2405), North Slope Borough Lands Division (907-852-0322), North Slope Borough Lands Division (907-852-0322), BPXA Crisis Center in Anchorage (907-564-5243), and the ConocoPhillips Incident Command Center in Anchorage (907-265-1000). The following cultural site(s) are located in the area depicted on this sheet:

- XFI-006 near Point Thomson



**AIR ACCESS\***

- Bullen Point airstrip (Sheet 101) is located approximately 9 miles west of Point Sweeney. This is an unattended, 2,900-ft gravel airstrip. The extreme west end of the strip reportedly tends to be soft.

**VESSEL ACCESS\* AND HYDROGRAPHIC CONDITIONS**

- Water depths near the mainland shore are shallow and changeable due to growth and change in bars and spits just offshore.

**COUNTERMEASURES CONSIDERATIONS**

- Gravel beaches are often “perched” on tundra vegetation, complicating response measures.
- Numerous embayments and inlets on the coastline will trap oil during sustained west and northwest winds.

**STAGING AREAS AND PRESTAGED EQUIPMENT**

PRESTAGED EQUIP. AREA	LOCATION	ITEM	QUANTITY	TYPE
	Pad 3			

Currently, this site contains no pre-staged equipment.

\*See the latest *Supplement, Alaska* and United States Coast Pilot for current information on air and vessel access, respectively.



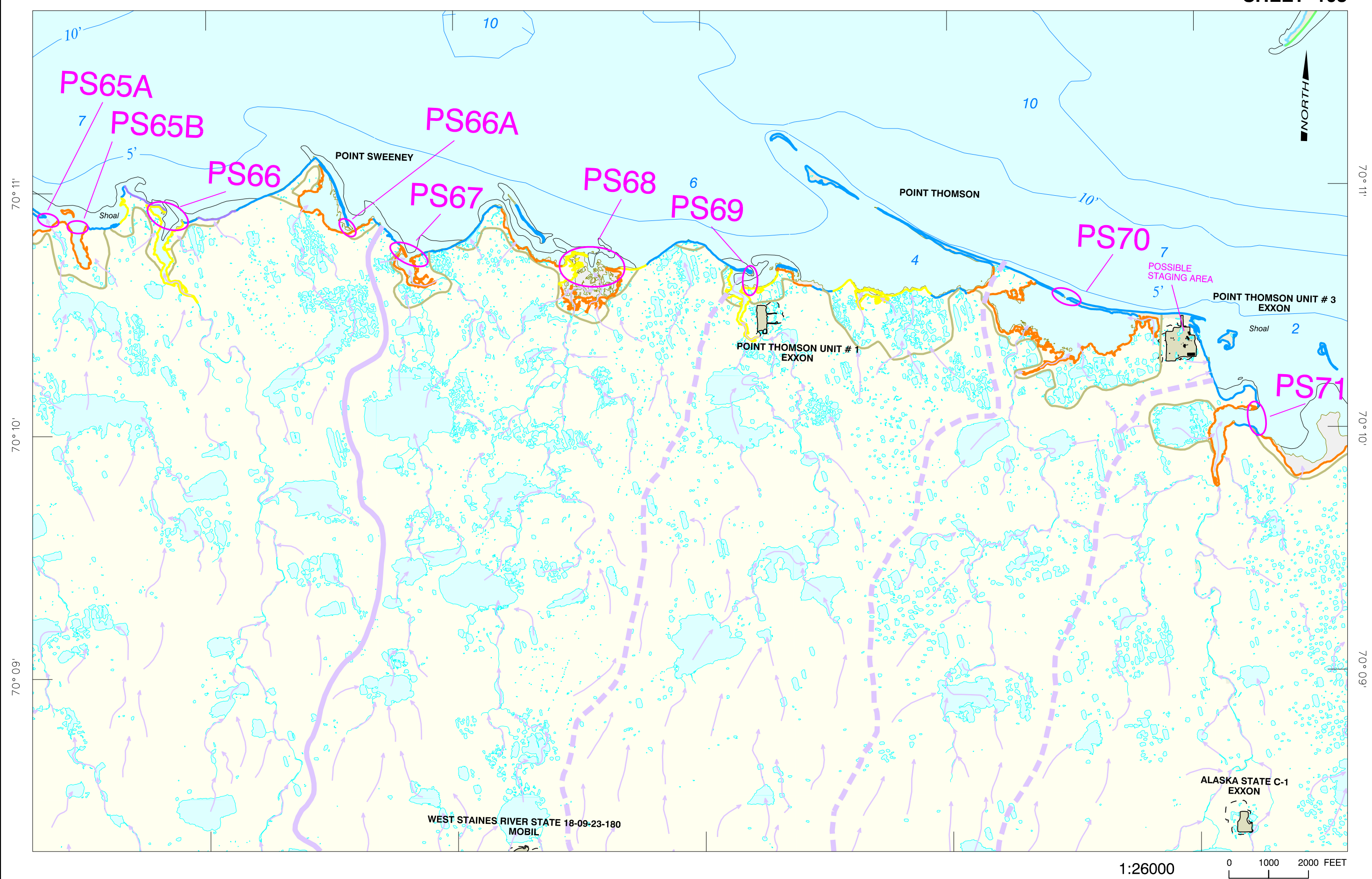
146° 27'

146° 24'

146° 21'

146° 18'

146° 15'



Continue on sheet 102

Continue on sheet 104

1:26000

0 1000 2000 FEET





**PRIORITY PROTECTION SITES**

SITE NO.	DESCRIPTION	SENSITIVITY	TACTIC	EST. BOOM
PS71	Inlet to salt marsh and creek mouth 0.5 mile south of Pt. Thomson Unit #3	Most sensitive during open water season. Salt marsh and inundated low-lying tundra shorelines.	C-13 or C-14	500'
PS72	Inlet at creek mouth 1 mile NW of North Staines River #1	Most sensitive during open water season. Inundated low-lying tundra shorelines.	C-13 or C-14	500'
PS73	Creek mouth 0.5 mile SE of North Staines River #1	Most sensitive during open water season. Salt marsh and peat shorelines.	C-13 or C-14	500'

**GENERAL SENSITIVITIES**

- Concentrations of swans, ducks, geese, and shorebirds are present here in June before open water is present elsewhere.
- Shoreline and offshore areas support molting Oldsquaws and eiders, and brood-rearing eiders. This is also a staging area for migrating Phalaropes (shorebirds). Birds are present in June through September.
- This is the edge of a major molting and staging area for Oldsquaw in August and September. The area extends eastward on the lee side of the barrier islands.
- Plan to deploy bird-hazing systems during the open-water season.
- The Staines River provides habitat for anadromous char and for resident fish.



**AIR ACCESS\***

- Bullen Point airstrip (Sheet 101) is located approximately 14 miles west of Point Thomson Unit #3. This is an unattended, 2,900-ft gravel airstrip. The extreme west end of the strip reportedly tends to be soft.

**VESSEL ACCESS\* AND HYDROGRAPHIC CONDITIONS**

- Water depths near the mainland shore are shallow and changeable due to growth and change in bars and spits just offshore.
- Lagoon areas are very shallow. Sand-silt beaches are narrow (less than 20 ft wide) and often backed by ice-rich undercut scarps up to 5 ft high.
- There is extensive shoaling between the shoreline and Flaxman Island (Sheet 100). Water depths range from 3 to 6 ft.
- Annual average discharge of the Staines River is 14 cfs.

**COUNTERMEASURES CONSIDERATIONS**

- Gravel beaches are often “perched” on tundra vegetation, complicating response measures.
- River delta areas are complex shorelines with potentially unstable sand-silt and mud tidal flats present.
- Numerous embayments and inlets on the coastline will trap oil during sustained west and northwest winds.

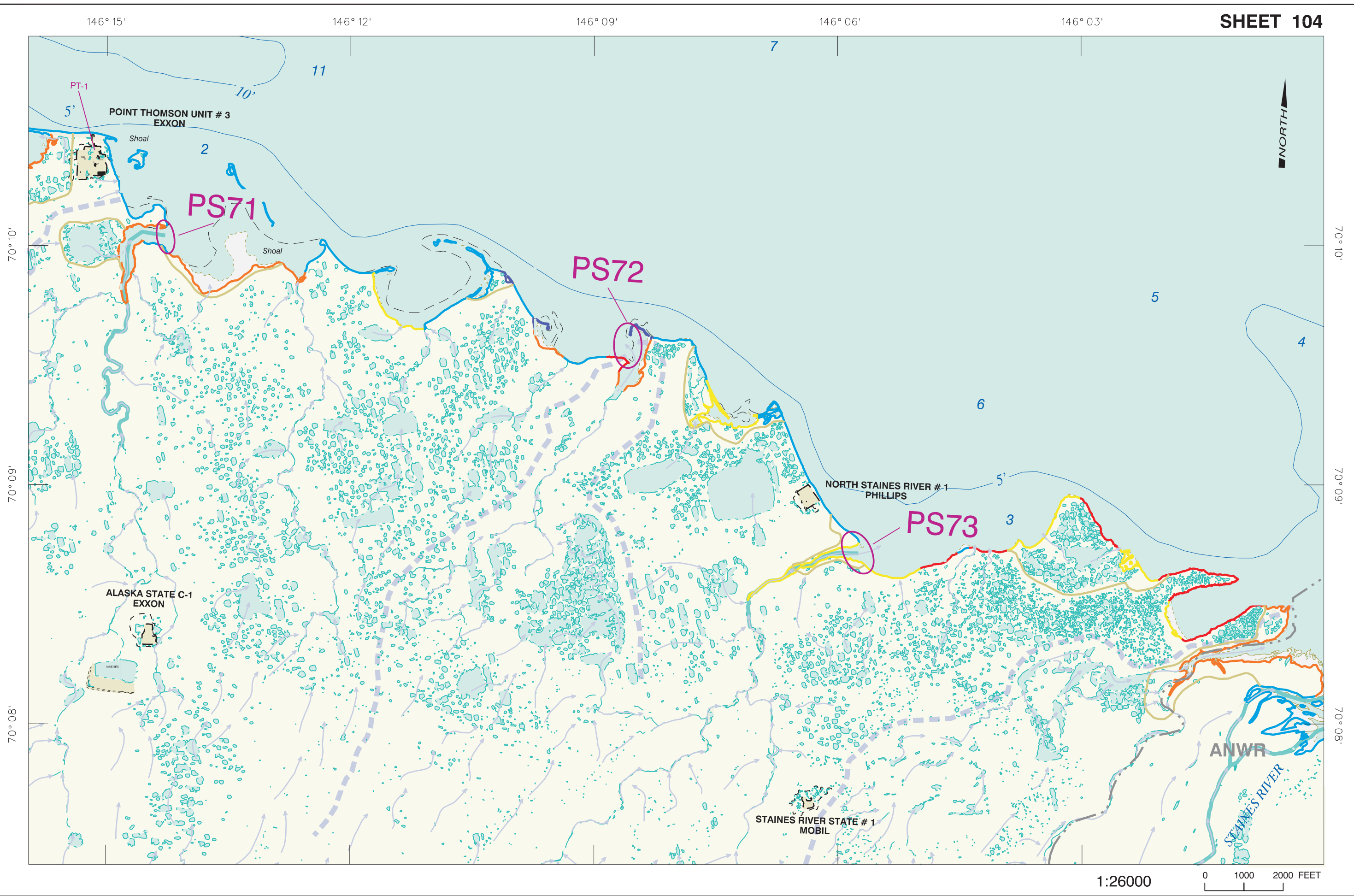
**STAGING AREAS AND PRESTAGED EQUIPMENT**

PRESTAGED EQUIP. AREA	LOCATION	ITEM	QUANTITY	TYPE
	Pad 3			

Currently, this site contains no pre-staged equipment.

\*See the latest *Supplement, Alaska* and United States Coast Pilot for current information on air and vessel access, respectively.

146° 15' 146° 12' 146° 09' 146° 06' 146° 03'



Continue on sheet 103

Continue on sheet 105



### PRIORITY PROTECTION SITES

- There are no priority protection sites on this sheet.

### GENERAL SENSITIVITIES

- Concentrations of swans, ducks, geese, and shorebirds are present here in June before open water is present elsewhere.
- Shoreline and offshore areas support molting Oldsquaws and eiders, and brood-rearing eiders. This is also a staging area for migrating Phalaropes (shorebirds). Birds are present in June through September.
- This is the edge of a major molting and staging area for Oldsquaw in August and September. The area extends eastward on the lee side of the barrier islands.
- Plan to deploy bird-hazing systems during the open-water season.
- The Canning River is a migratory pathway for arctic char and a possible overwintering area.
- The Staines River provides habitat for anadromous char and for resident fish.
- Polar bear dens have been found in this area. Dens may be in use from October through April.

### CULTURAL SITES

Information on the exact locations of cultural sites is confidential. This information is contained in the *North Slope Archaeological Data* document, copies of which are kept at the following offices: State Historical Preservation Officer (SHPO) (907-269-8721), ACS in Deadhorse (907-659-2405), North Slope Borough Lands Division (907-852-0322), North Slope Borough Lands Division (907-852-0322), BPXA Crisis Center in Anchorage (907-564-5243), and the ConocoPhillips Incident Command Center in Anchorage (907-265-1000). The following cultural site(s) are located in the area depicted on this sheet:

- XFI-008 on Flaxman Island
- XFI-009 near Brownlow Point



### AIR ACCESS\*

- Bullen Point airstrip (Sheet 101) is located approximately 20 miles west of the mouth of the Staines River. This is an unattended, 2,900-ft gravel airstrip. The extreme west end of the strip reportedly tends to be soft.

### VESSEL ACCESS\* AND HYDROGRAPHIC CONDITIONS

- Lagoon areas are very shallow. There is extensive shoaling between the shoreline and Flaxman Island. Water depths range from 3 to 6 ft.
- There is passage between Flaxman Island and Brownlow Point. The channel is close to the east end of the island and has depths of 8 ft, which shoal to 4 ft in the lagoon.
- Annual average discharge of the Staines River is 14 cfs.

### COUNTERMEASURES CONSIDERATIONS

- Sand-silt beaches are narrow and often “perched” on tundra vegetation.
- River delta areas are complex shorelines with potentially unstable sand-silt and mud tidal flats present.
- Numerous embayments and inlets on the coastline will trap oil during sustained west and northwest winds.

\*See the latest *Supplement, Alaska* and United States Coast Pilot for current information on air and vessel access, respectively.

146° 03'

146° 00'

145° 57'

145° 54'

145° 51'

70° 10'

70° 10'

70° 09'

70° 09'

70° 08'

70° 08'

FLAXMAN ISLAND

Shoal

BROWNLOW POINT

DEW LINE SITE

Tower

N.A. FF-017781

N.A. FF-018780B

Shoal

Shoal

WEST CHANNEL CANNING RIVER

STAINES RIVER

ANWR

5

5

3

2

6

4

3

3

24

20'

10'

5'

13

30'

24

20'

10'

5'

3

2

13

24

20'

10'

5'

3

2

13

24

20'

10'

5'

3

2

13

24

20'

10'

5'

3

2

13

24

20'

10'

5'

3

2

13

24

20'

10'

5'

3

2

13

24

20'

10'

5'

3

2

13

24

20'

10'

5'

3

2

13

24

20'

10'

5'

3

2

13

24

20'

10'

5'

3

2

13

24

20'

10'

5'

3

2

13

24

20'

10'

5'

3

2

13

24

20'

10'

5'

3

2

13

24

20'

10'

5'

3

2

13

24

20'

10'

5'

3

2

13

24

20'

10'

5'

3

2

13

24

20'

10'

5'

3

2

13

24

20'

10'

5'

3

2

13

24

20'

10'

5'

3

2

13

24

20'

10'

5'

3

2

13

24

20'

10'

5'

3

2

13

24

20'

10'

5'

3

2

13

24

20'

10'

5'

3

2

13

24

20'

10'

5'

3

2

13

24

20'

10'

5'

3

2

13

24

20'

10'

5'

3

2

13

24

20'

10'

5'

3

2

13

24

20'

10'

5'

3

2

13

24

20'

10'

5'

3

2

13

24

20'

10'

5'

3

2

13

24

20'

10'

5'

3

2

13

24

20'

10'

5'

3

2

13

24

20'

10'

5'

3

2

13

24

20'

10'

5'

3

2

13

24

20'

10'

5'

3

2

13

24

20'

10'

5'

3

2

13

24

20'

10'

5'

3

2

13

24

20'

10'

5'

3

2

13

24

20'

10'

5'

3

2

13

24

20'

10'

5'

3

2

13

24

20'

10'

5'

3

2

13

24

20'





### PRIORITY PROTECTION SITES

- There are no priority protection sites on this sheet.

### GENERAL SENSITIVITIES

- Concentrations of swans, ducks, geese, and shorebirds are present here in June before open water is present elsewhere.
- Plan to deploy bird-hazing systems during the open-water season.
- Coastal areas support high concentrations of breeding, nesting, brood-rearing, and molting waterbirds during the summer.
- The Kalikpik River provides habitat for anadromous whitefish and resident fish.



### AIR ACCESS\*

- There is an aircraft landing strip located at the Alpine oil field (Sheet 20) approximately 25 miles to the southeast. This is a 5,000-ft gravel airstrip operated by ConocoPhillips.
- There is a landing strip near the Kogru River inlet approximately 5 miles west of Saktuina Point (Sheet 1). (Landing strip is west of the area covered by Sheet 1).
- Emergency landing for fixed-wing aircraft is available on the sand flats near the mouth of the Tingmeachsiovik River and on the sand flats west of the Nechelik Channel (Sheet 7).

### VESSEL ACCESS\* AND HYDROGRAPHIC CONDITIONS

- There are no marine waters or shoreline on this sheet.

### COUNTERMEASURES CONSIDERATIONS

- The delta of the Kalikpik River is a very complex polygonal tundra and sand-silt flats area. Access is uncertain.

\*See the latest *Supplement, Alaska and United States Coast Pilot* for current information on air and vessel access, respectively.

152° 12'

152° 9'

152° 6'

152° 3'

70° 25'

70° 25'

70° 24'

70° 24'

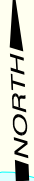
70° 23'

70° 23'

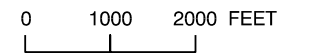
70° 22'

# NATIONAL PETROLEUM RESERVE ALASKA

KALIKPIK RIVER



1:26000



Continue on sheet 157

Continue on sheet 113

Continue on sheet 162

Continue on sheet 162

Continue on sheet 118



### PRIORITY PROTECTION SITES

- There are no priority protection sites on this sheet.

### GENERAL SENSITIVITIES

- Coastal areas support high concentrations of breeding, nesting, brood-rearing, and molting waterbirds during the summer.
- Polar bear dens have been found in this area. Dens may be in use from October through April.



### AIR ACCESS\*

- There is an aircraft landing strip located at the Alpine oil field (Sheet 20) approximately 20 miles to the southeast. This is a 5,000-ft gravel airstrip operated by ConocoPhillips.
- There is a landing strip near the Kogru River inlet approximately 5 miles west of Saktuina Point (Sheet 1). (Landing strip is west of the area covered by Sheet 1).
- Emergency landing for fixed-wing aircraft is available on the sand flats near the mouth of the Tingmeachsiovik River and on the sand flats west of the Nechelik Channel (Sheet 7).

### VESSEL ACCESS\* AND HYDROGRAPHIC CONDITIONS

- There are no marine waters or shoreline on this sheet.

\*See the latest *Supplement, Alaska and United States Coast Pilot* for current information on air and vessel access, respectively.

151° 57'

151° 54'

151° 51'

151° 48'

151° 45'

70° 25'

70° 24'

70° 23'

70° 25'

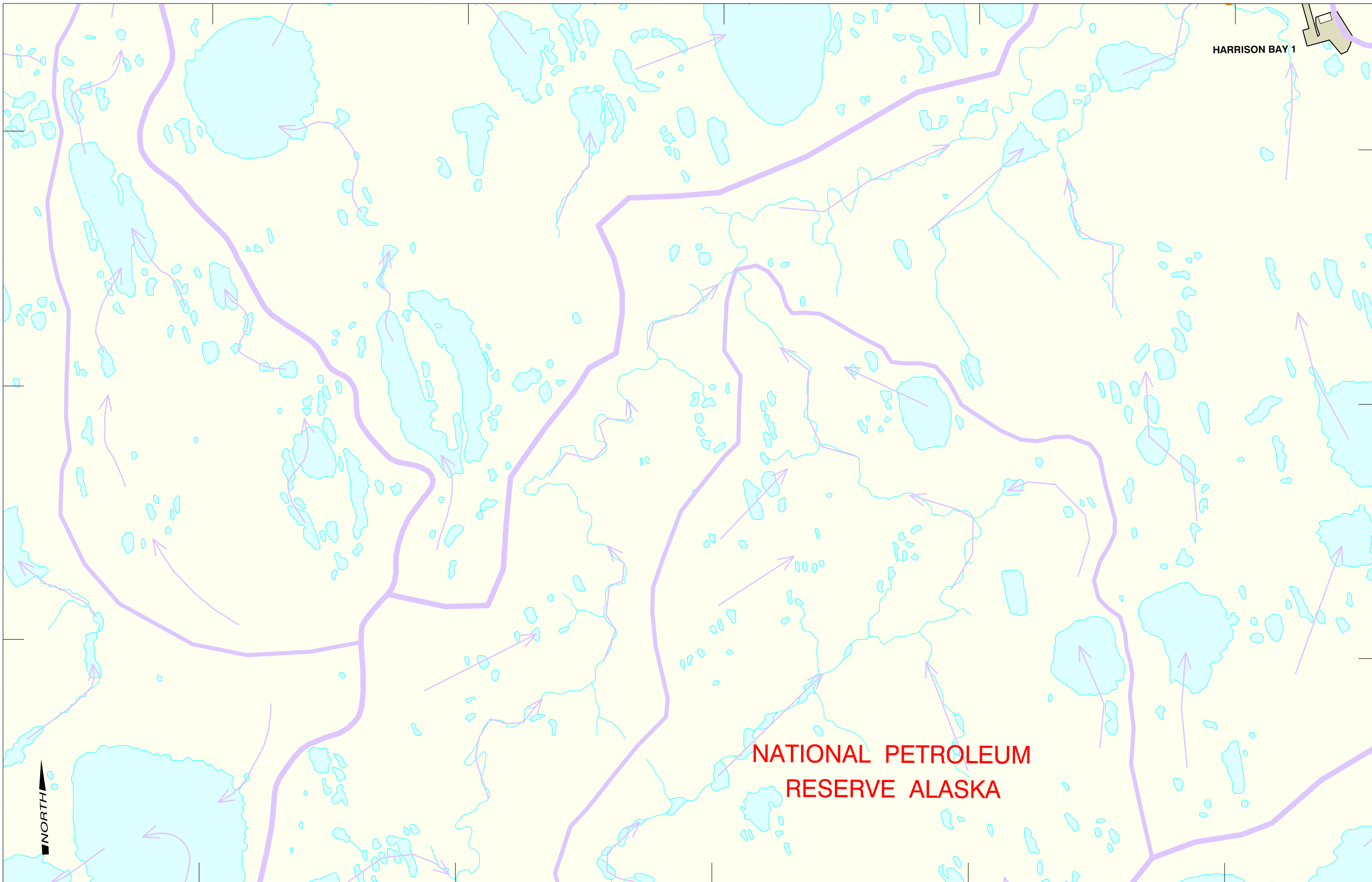
70° 24'

70° 23'

Continue on sheet 5

Continue on sheet 114

Continue on sheet 112



**NATIONAL PETROLEUM  
RESERVE ALASKA**

1:26000

0 1000 2000 FEET





### PRIORITY PROTECTION SITES

- There are no priority protection sites on this sheet.

### GENERAL SENSITIVITIES

- Coastal areas support high concentrations of breeding, nesting, brood-rearing, and molting waterbirds during the summer.
- Polar bear dens have been found in this area. Dens may be in use from October through April.



### AIR ACCESS\*

- There is an aircraft landing strip located at the Alpine oil field (Sheet 20) approximately 20 miles to the east. This is a 5,000-ft gravel airstrip operated by ConocoPhillips.
- Emergency landing for fixed-wing aircraft is available on the sand flats near the mouth of the Tingmeachsivik River and on the sand flats west of the Nechelik Channel (Sheet 7).

### VESSEL ACCESS\* AND HYDROGRAPHIC CONDITIONS

- There are no marine waters or shoreline on this sheet.

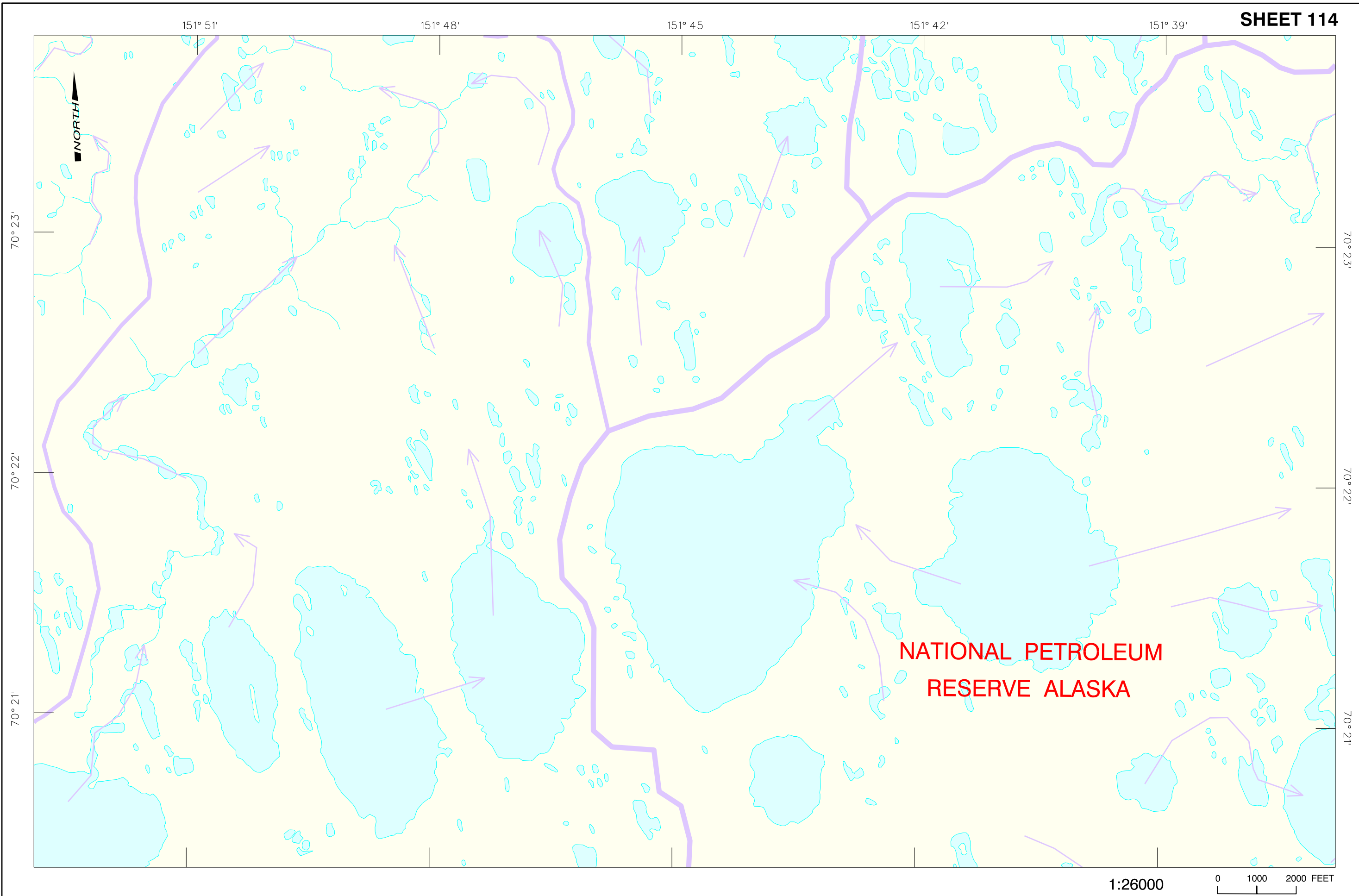
\*See the latest *Supplement, Alaska and United States Coast Pilot* for current information on air and vessel access, respectively.

Continue on sheet 113

Continue on sheet 118

Continue on sheet 115

Continue on sheet 119





### PRIORITY PROTECTION SITES

- There are no priority protection sites on this sheet.

### GENERAL SENSITIVITIES

- Coastal areas support high concentrations of breeding, nesting, brood-rearing, and molting waterbirds during the summer.
- The Tingmeachsiovik River provides habitat for anadromous whitefish and resident fish.



### AIR ACCESS\*

- There is an aircraft landing strip located at the Alpine oil field (Sheet 20) approximately 15 miles to the east. This is a 5,000-ft gravel airstrip operated by ConocoPhillips.
- Emergency landing for fixed-wing aircraft is available on the sand flats near the mouth of the Tingmeachsiovik River and on the sand flats west of the Nechelik Channel (Sheet 7).
- Commercial and air freight services are available at the City of Nuiqsut airport (Sheet 24) approximately 16 miles to the southeast. This is a 4,300-ft, unattended gravel airstrip. Visual inspection prior to use is recommended.

### VESSEL ACCESS\* AND HYDROGRAPHIC CONDITIONS

- There are no marine waters or shoreline on this sheet.

\*See the latest *Supplement, Alaska and United States Coast Pilot* for current information on air and vessel access, respectively.

151° 36'

151° 33'

151° 30'

151° 27'

151° 24'



**NATIONAL PETROLEUM  
RESERVE ALASKA**

70° 23'

70° 23'

70° 22'

70° 22'

70° 21'

70° 21'

Continue on sheet 114

Continue on sheet 7

TINGMEACHSIOVIK RIVER

1:26000

0 1000 2000 FEET





### PRIORITY PROTECTION SITES

- There are no priority protection sites on this sheet.

### GENERAL SENSITIVITIES

- Coastal areas support high concentrations of breeding, nesting, brood-rearing, and molting waterbirds during the summer.



### AIR ACCESS\*

- There is an aircraft landing strip located at the Alpine oil field (Sheet 20) approximately 26 miles east of W Fish Creek 1. This is a 5,000-ft gravel airstrip operated by ConocoPhillips.
- There is a landing strip near the Kogru River inlet approximately 5 miles west of Saktuina Point (Sheet 1). (Landing strip is west of the area covered by Sheet 1).
- Emergency landing for fixed-wing aircraft is available on the sand flats near the mouth of the Tingmeachsiovik River and on the sand flats west of the Nechelik Channel (Sheet 7).

### VESSEL ACCESS\* AND HYDROGRAPHIC CONDITIONS

- There are no marine waters or shoreline on this sheet.

\*See the latest *Supplement, Alaska and United States Coast Pilot* for current information on air and vessel access, respectively.

152° 06'

152° 03'

152° 00'

151° 57'

151° 54'

70° 22'

70° 22'

70° 21'

70° 21'

70° 20'

70° 20'

70° 19'

70° 19'

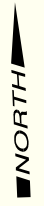
Continue on sheet 162

Continue on sheet 114

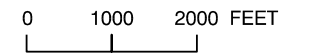
Continue on sheet 119

**NATIONAL PETROLEUM  
RESERVE ALASKA**

**W FISH CREEK 1**



1:26000





### PRIORITY PROTECTION SITES

- There are no priority protection sites on this sheet.

### GENERAL SENSITIVITIES

- Coastal areas support high concentrations of breeding, nesting, brood-rearing, and molting waterbirds during the summer.
- Fish Creek provides habitat for anadromous whitefish and resident fish.



### AIR ACCESS\*

- There is an aircraft landing strip located at the Alpine oil field (Sheet 20) approximately 18 miles to the east. This is a 5,000-ft gravel airstrip operated by ConocoPhillips.
- There is a landing strip near the Kogru River inlet approximately 5 miles west of Saktuina Point (Sheet 1). (Landing strip is west of the area covered by Sheet 1).
- Emergency landing for fixed-wing aircraft is available on the sand flats near the mouth of the Tingmeachsiovik River and on the sand flats west of the Nechelik Channel (Sheet 7).

### VESSEL ACCESS\* AND HYDROGRAPHIC CONDITIONS

- There are no marine waters or shoreline on this sheet.

\*See the latest *Supplement, Alaska and United States Coast Pilot* for current information on air and vessel access, respectively.

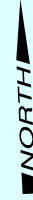
151° 51'

151° 48'

151° 45'

151° 42'

151° 39'



70° 20'

70° 20'

70° 19'

70° 19'

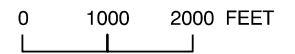
70° 18'

70° 18'

**NATIONAL PETROLEUM  
RESERVE ALASKA**

FISH CREEK

1:26000



Continue on sheet 118

Continue on sheet 123

Continue on sheet 120





### PRIORITY PROTECTION SITES

- There are no priority protection sites on this sheet.

### GENERAL SENSITIVITIES

- Coastal areas support high concentrations of breeding, nesting, brood-rearing, and molting waterbirds during the summer.
- The Tingmeachsiovik River and Fish Creek provide habitat for anadromous whitefish and resident fish.

### CULTURAL SITES

Areas south of Fish Creek are subsistence use areas.



### AIR ACCESS\*

- There is an aircraft landing strip located at the Alpine oil field (Sheet 20) approximately 13 miles to the east. This is a 5,000-ft gravel airstrip operated by ConocoPhillips.
- Emergency landing for fixed-wing aircraft is available on the sand flats near the mouth of the Tingmeachsiovik River and on the sand flats west of the Nechelik Channel (Sheet 7).
- Commercial and air freight services are available at the City of Nuiqsut airport (Sheet 24) approximately 13 miles to the southeast. This is a 4,300-ft, unattended gravel airstrip. Visual inspection prior to use is recommended.

### VESSEL ACCESS\* AND HYDROGRAPHIC CONDITIONS

- There are no marine waters or shoreline on this sheet.

\*See the latest *Supplement, Alaska and United States Coast Pilot* for current information on air and vessel access, respectively.

151° 36'

151° 33'

151° 30'

151° 27'

151° 24'



**NATIONAL PETROLEUM  
RESERVE ALASKA**

TINGMEACHSIOVIK RIVER

FISH CREEK

FISH CREEK

70° 20'

70° 20'

70° 19'

70° 19'

70° 18'

70° 18'

Continue on sheet 119

Continue on sheet 121

1:26000

0 1000 2000 FEET



### PRIORITY PROTECTION SITES

- There are no priority protection sites on this sheet.

### GENERAL SENSITIVITIES

- Coastal areas support high concentrations of breeding, nesting, brood-rearing, and molting waterbirds during the summer.
- The Tingmeachsiovik and Ublutuoch rivers and Fish Crrek provide habitat for anadromous whitefish and resident fish.
- The Colville River delta is a polar bear denning area.

### CULTURAL SITES

The area surrounding the Ublutuoch River is a subsistence use area.



### AIR ACCESS\*

- There is an aircraft landing strip located at the Alpine oil field (Sheet 20) approximately 7 miles to the east. This is a 5,000-ft gravel airstrip operated by ConocoPhillips.
- Emergency landing for fixed-wing aircraft is available on the sand flats near the mouth of the Tingmeachsiovik River and on the sand flats west of the Nechelik Channel (Sheet 7).
- Commercial and air freight services are available at the City of Nuiqsut airport (Sheet 24) approximately 9 miles to the southeast. This is a 4,300-ft, unattended gravel airstrip. Visual inspection prior to use is recommended.

### VESSEL ACCESS\* AND HYDROGRAPHIC CONDITIONS

- There are no marine waters or shoreline on this sheet.

\*See the latest *Supplement, Alaska and United States Coast Pilot* for current information on air and vessel access, respectively.

151° 21'

151° 18'

151° 15'

151° 12'

151° 09'

70° 20'

70° 19'

70° 18'

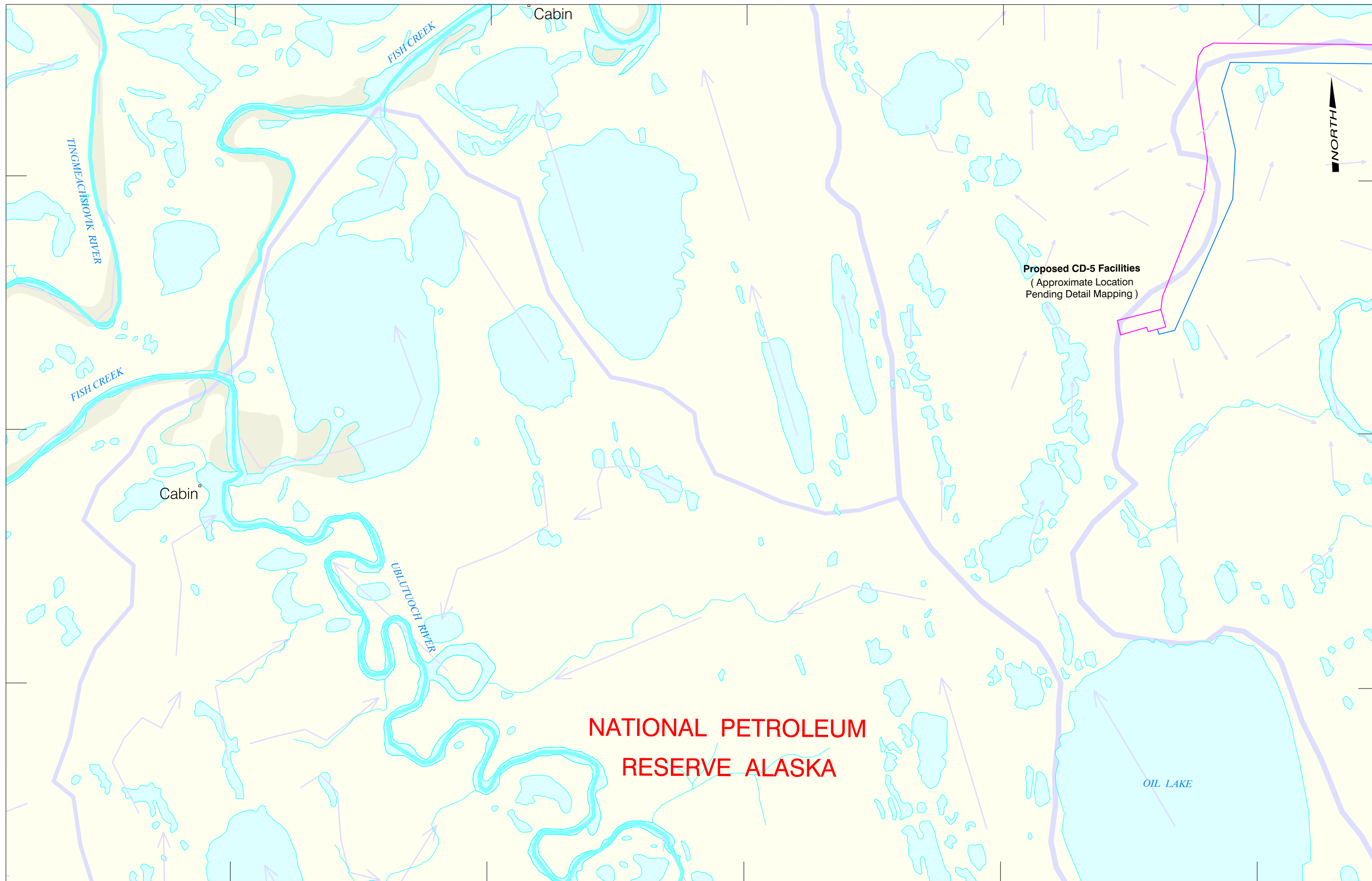
70° 20'

70° 19'

70° 18'

Continue on sheet 20

Continue on sheet 120



**NATIONAL PETROLEUM RESERVE ALASKA**

1:26000

0 1000 2000 FEET





### PRIORITY PROTECTION SITES

- There are no priority protection sites on this sheet.

### GENERAL SENSITIVITIES

- Coastal areas support high concentrations of breeding, nesting, brood-rearing, and molting waterbirds during the summer.
- Fish Creek provides habitat for anadromous whitefish and resident fish.



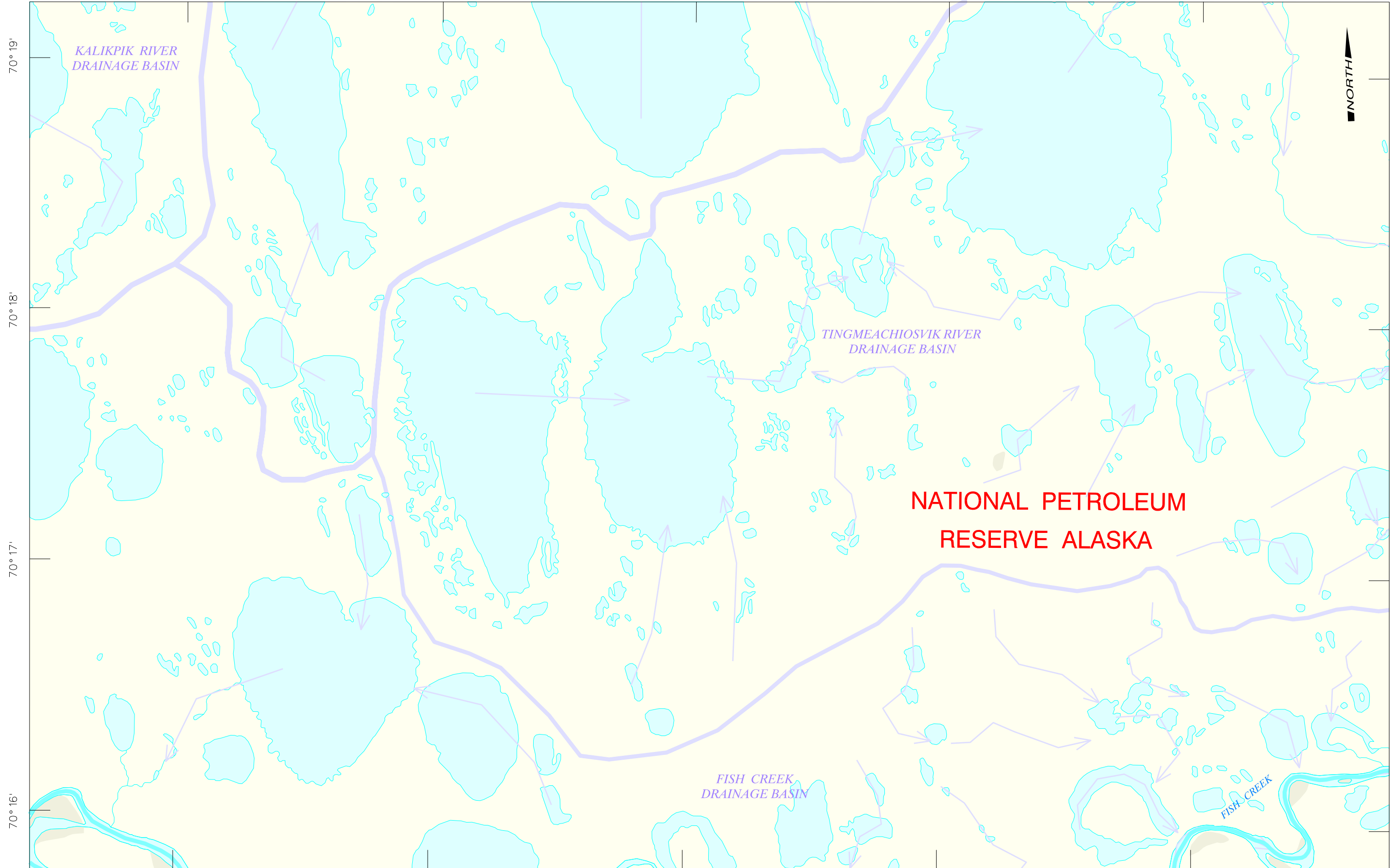
### AIR ACCESS\*

- There is an aircraft landing strip located at the Alpine oil field (Sheet 20) approximately 25 miles to the northeast. This is a 5,000-ft gravel airstrip operated by ConocoPhillips.
- Emergency landing for fixed-wing aircraft is available on the sand flats near the mouth of the Tingmeachsivik River and on the sand flats west of the Nechelik Channel (Sheet 7).

### VESSEL ACCESS\* AND HYDROGRAPHIC CONDITIONS

- There are no marine waters or shoreline on this sheet.

\*See the latest *Supplement, Alaska and United States Coast Pilot* for current information on air and vessel access, respectively.



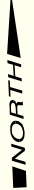
**NATIONAL PETROLEUM  
RESERVE ALASKA**

*KALIKPIQ RIVER  
DRAINAGE BASIN*

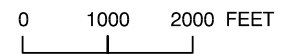
*TINGMEACHIOSVIK RIVER  
DRAINAGE BASIN*

*FISH CREEK  
DRAINAGE BASIN*

*FISH CREEK*



1:26000



152° 06'

152° 03'

152° 00'

151° 57'

151° 54'

70° 19'

70° 18'

70° 17'

70° 16'

70° 19'

70° 18'

70° 17'

70° 16'

Continue on sheet 162

Continue on sheet 119

Continue on sheet 124



### PRIORITY PROTECTION SITES

- There are no priority protection sites on this sheet.

### GENERAL SENSITIVITIES

- Coastal areas support high concentrations of breeding, nesting, brood-rearing, and molting waterbirds during the summer.
- Fish and Judy creeks provide habitat for anadromous whitefish and resident fish.

### CULTURAL SITES

The area east of Judy Creek and south of Fish Creek is a subsistence use area.



### AIR ACCESS\*

- There is an aircraft landing strip located at the Alpine oil field (Sheet 20) approximately 20 miles to the northeast. This is a 5,000-ft gravel airstrip operated by ConocoPhillips.
- Emergency landing for fixed-wing aircraft is available on the sand flats near the mouth of the Tingmeachsivik River and on the sand flats west of the Nechelik Channel (Sheet 7).

### VESSEL ACCESS\* AND HYDROGRAPHIC CONDITIONS

- There are no marine waters or shoreline on this sheet.

\*See the latest *Supplement, Alaska and United States Coast Pilot* for current information on air and vessel access, respectively.

151° 51'

151° 48'

151° 45'

151° 42'

151° 39'

70° 17'

70° 17'

70° 16'

70° 16'

70° 15'

70° 15'

70° 14'



FISH CREEK

FISH CREEK

JUDY CREEK

**NATIONAL PETROLEUM  
RESERVE ALASKA**

1:26000

0 1000 2000 FEET

Continue on sheet 123

Continue on sheet 127

Continue on sheet 125





### PRIORITY PROTECTION SITES

- There are no priority protection sites on this sheet.

### GENERAL SENSITIVITIES

- Coastal areas support high concentrations of breeding, nesting, brood-rearing, and molting waterbirds during the summer.
- Fish Creek provides habitat for anadromous whitefish and resident fish.



### AIR ACCESS\*

- There is an aircraft landing strip located at the Alpine oil field (Sheet 20) approximately 15 miles to the northeast. This is a 5,000-ft gravel airstrip operated by ConocoPhillips.
- Emergency landing for fixed-wing aircraft is available on the sand flats near the mouth of the Tingmeachsivik River and on the sand flats west of the Nechelik Channel (Sheet 7).
- Commercial and air freight services are available at the City of Nuiqsut airport (Sheet 24) approximately 12 miles to the southeast. This is a 4,300-ft, unattended gravel airstrip. Visual inspection prior to use is recommended.

### VESSEL ACCESS\* AND HYDROGRAPHIC CONDITIONS

- There are no marine waters or shoreline on this sheet.

\*See the latest *Supplement, Alaska and United States Coast Pilot* for current information on air and vessel access, respectively.

151° 36'

151° 33'

151° 30'

151° 27'

151° 24'

70° 17'

70° 17'

70° 16'

70° 16'

70° 15'

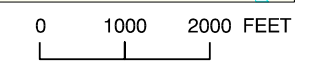
70° 15'



FISH CREEK

**NATIONAL PETROLEUM  
RESERVE ALASKA**

1:26000



Continue on sheet 124

Continue on sheet 126



### PRIORITY PROTECTION SITES

- There are no priority protection sites on this sheet.

### GENERAL SENSITIVITIES

- Coastal areas support high concentrations of breeding, nesting, brood-rearing, and molting waterbirds during the summer.
- The Ublutuoch River provides habitat for anadromous whitefish and resident fish.



### AIR ACCESS\*

- There is an aircraft landing strip located at the Alpine oil field (Sheet 20) approximately 10 miles to the northeast. This is a 5,000-ft gravel airstrip operated by ConocoPhillips.
- Emergency landing for fixed-wing aircraft is available on the sand flats near the mouth of the Tingmeachsivik River and on the sand flats west of the Nechelik Channel (Sheet 7).
- Commercial and air freight services are available at the City of Nuiqsut airport (Sheet 24) approximately 7 miles to the southeast. This is a 4,300-ft, unattended gravel airstrip. Visual inspection prior to use is recommended.

### VESSEL ACCESS\* AND HYDROGRAPHIC CONDITIONS

- There are no marine waters or shoreline on this sheet.

\*See the latest *Supplement, Alaska and United States Coast Pilot* for current information on air and vessel access, respectively.

151° 21'

151° 18'

151° 15'

151° 12'

70° 17'

70° 17'

70° 16'

70° 16'

70° 15'

70° 15'



OIL LAKE

UBLUTUOCH RIVER

**NATIONAL PETROLEUM  
RESERVE ALASKA**

1:26000

0 1000 2000 FEET

Continue on sheet 125

Continue on sheet 22





### PRIORITY PROTECTION SITES

- There are no priority protection sites on this sheet.

### GENERAL SENSITIVITIES

- Coastal areas support high concentrations of breeding, nesting, brood-rearing, and molting waterbirds during the summer.
- Fish Creek provides habitat for anadromous whitefish and resident fish.
- Judy Creek and its tributary provide habitat for anadromous whitefish and resident fish.



### AIR ACCESS\*

- There is an aircraft landing strip located at the Alpine oil field (Sheet 20) approximately 25 miles to the northeast. This is a 5,000-ft gravel airstrip operated by ConocoPhillips.
- Emergency landing for fixed-wing aircraft is available on the sand flats near the mouth of the Tingmeachsivik River and on the sand flats west of the Nechelik Channel (Sheet 7).

### VESSEL ACCESS\* AND HYDROGRAPHIC CONDITIONS

- There are no marine waters or shoreline on this sheet.

\*See the latest *Supplement, Alaska and United States Coast Pilot* for current information on air and vessel access, respectively.

Continue on sheet 162

Continue on sheet 167

70° 16'

70° 15'

70° 14'

70° 13'

152° 06'

152° 03'

152° 00'

151° 57'

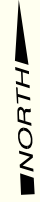
151° 54'



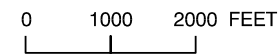
FISH CREEK

**NATIONAL PETROLEUM  
RESERVE ALASKA**

JUDY CREEK



1:26000





### PRIORITY PROTECTION SITES

- There are no priority protection sites on this sheet.

### GENERAL SENSITIVITIES

- Coastal areas support high concentrations of breeding, nesting, brood-rearing, and molting waterbirds during the summer.
- Judy Creek provides habitat for anadromous whitefish and resident fish.

### CULTURAL SITES

The area east of Judy Creek near the top of this sheet is a subsistence use area.



### AIR ACCESS\*

- There is an aircraft landing strip located at the Alpine oil field (Sheet 20) approximately 20 miles to the northeast. This is a 5,000-ft gravel airstrip operated by ConocoPhillips.
- Emergency landing for fixed-wing aircraft is available on the sand flats near the mouth of the Tingmeachsivik River and on the sand flats west of the Nechelik Channel (Sheet 7).

### VESSEL ACCESS\* AND HYDROGRAPHIC CONDITIONS

- There are no marine waters or shoreline on this sheet.

\*See the latest *Supplement, Alaska and United States Coast Pilot* for current information on air and vessel access, respectively.

151° 51'

151° 48'

151° 45'

151° 42'

151° 39'

70° 14'

70° 14'

70° 13'

70° 13'

70° 12'

70° 12'

70° 11'

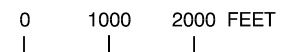
70° 11'



JUDY CREEK

**NATIONAL PETROLEUM  
RESERVE ALASKA**

1:26000



Continue on sheet 127

Continue on sheet 129

Continue on sheet 132





### PRIORITY PROTECTION SITES

- There are no priority protection sites on this sheet.

### GENERAL SENSITIVITIES

- Coastal areas support high concentrations of breeding, nesting, brood-rearing, and molting waterbirds during the summer.
- The Ublutuoch River provides habitat for anadromous whitefish and resident fish.



### AIR ACCESS\*

- There is an aircraft landing strip located at the Alpine oil field (Sheet 20) approximately 15 miles to the northeast. This is a 5,000-ft gravel airstrip operated by ConocoPhillips.
- Emergency landing for fixed-wing aircraft is available on the sand flats near the mouth of the Tingmeachsiovik River and on the sand flats west of the Nechelik Channel (Sheet 7).
- Commercial and air freight services are available at the City of Nuiqsut airport (Sheet 24) approximately 11 miles to the east. This is a 4,300-ft, unattended gravel airstrip. Visual inspection prior to use is recommended.

### VESSEL ACCESS\* AND HYDROGRAPHIC CONDITIONS

- There are no marine waters or shoreline on this sheet.

\*See the latest *Supplement, Alaska and United States Coast Pilot* for current information on air and vessel access, respectively.

151° 36'

151° 33'

151° 30'

151° 27'

151° 24'

70° 14'

70° 14'

70° 13'

70° 13'

70° 12'

70° 12'

70° 11'

70° 11'



**NATIONAL PETROLEUM  
RESERVE ALASKA**

UBLUTUOCH RIVER

1:26000

0 1000 2000 FEET

Continue on sheet 128

Continue on sheet 130



### PRIORITY PROTECTION SITES

- There are no priority protection sites on this sheet.

### GENERAL SENSITIVITIES

- Coastal areas support high concentrations of breeding, nesting, brood-rearing, and molting waterbirds during the summer.
- The Ublutuoch River provides habitat for anadromous whitefish and resident fish.



### AIR ACCESS\*

- There is an aircraft landing strip located at the Alpine oil field (Sheet 20) approximately 10 miles to the northeast. This is a 5,000-ft gravel airstrip operated by ConocoPhillips.
- Emergency landing for fixed-wing aircraft is available on the sand flats near the mouth of the Tingmeachsivik River and on the sand flats west of the Nechelik Channel (Sheet 7).
- Commercial and air freight services are available at the City of Nuiqsut airport (Sheet 24) approximately 5 miles to the east. This is a 4,300-ft, unattended gravel airstrip. Visual inspection prior to use is recommended.

### VESSEL ACCESS\* AND HYDROGRAPHIC CONDITIONS

- There are no marine waters or shoreline on this sheet.

\*See the latest *Supplement, Alaska and United States Coast Pilot* for current information on air and vessel access, respectively.

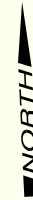
151° 21'

151° 18'

151° 15'

151° 12'

151° 09'



70° 14'

70° 13'

70° 12'

70° 14'

70° 13'

70° 12'

UBLUTUOCH RIVER

**NATIONAL PETROLEUM  
RESERVE ALASKA**

1:26000

0 1000 2000 FEET

Continue on sheet 129

Continue on sheet 24

Continue on sheet 136

Continue on sheet 137





### PRIORITY PROTECTION SITES

- There are no priority protection sites on this sheet.

### GENERAL SENSITIVITIES

- Coastal areas support high concentrations of breeding, nesting, brood-rearing, and molting waterbirds during the summer.
- Judy Creek and its tributary provide habitat for anadromous whitefish and resident fish.



### AIR ACCESS\*

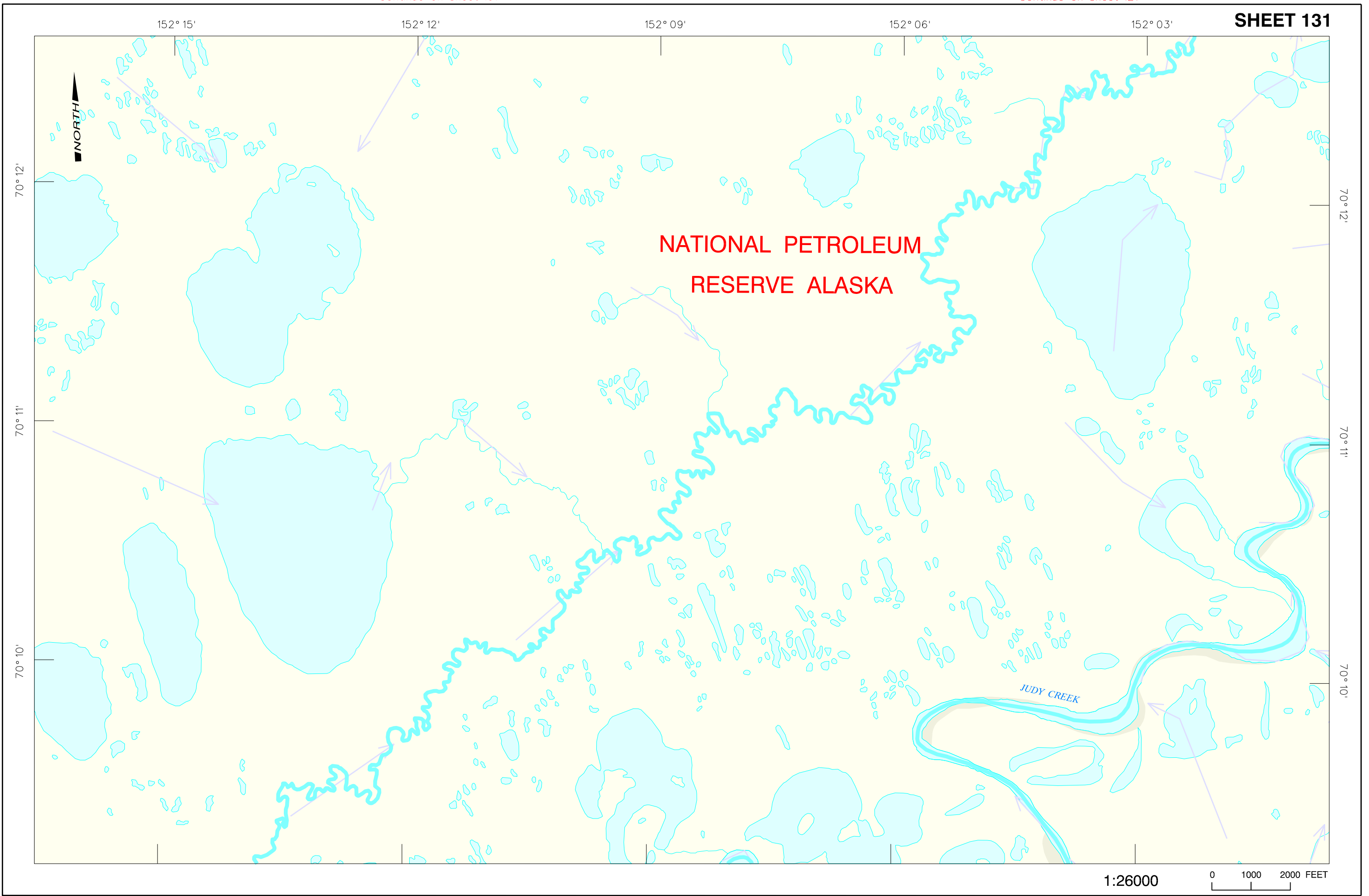
- There is an aircraft landing strip located at the Alpine oil field (Sheet 20) approximately 30 miles to the northeast. This is a 5,000-ft gravel airstrip operated by ConocoPhillips.
- Commercial and air freight services are available at the City of Nuiqsut airport (Sheet 24) approximately 25 miles to the east. This is a 4,300-ft, unattended gravel airstrip. Visual inspection prior to use is recommended.

### VESSEL ACCESS\* AND HYDROGRAPHIC CONDITIONS

- There are no marine waters or shoreline on this sheet.

\*See the latest *Supplement, Alaska and United States Coast Pilot* for current information on air and vessel access, respectively.

Continue on sheet 167



1:26000

0 1000 2000 FEET



### PRIORITY PROTECTION SITES

- There are no priority protection sites on this sheet.

### GENERAL SENSITIVITIES

- Coastal areas support high concentrations of breeding, nesting, brood-rearing, and molting waterbirds during the summer.
- Judy Creek provides habitat for anadromous whitefish and resident fish.



### AIR ACCESS\*

- There is an aircraft landing strip located at the Alpine oil field (Sheet 20) approximately 25 miles to the northeast. This is a 5,000-ft gravel airstrip operated by ConocoPhillips.
- Commercial and air freight services are available at the City of Nuiqsut airport (Sheet 24) approximately 21 miles to the east. This is a 4,300-ft, unattended gravel airstrip. Visual inspection prior to use is recommended.

### VESSEL ACCESS\* AND HYDROGRAPHIC CONDITIONS

- There are no marine waters or shoreline on this sheet.

\*See the latest *Supplement, Alaska* and *United States Coast Pilot* for current information on air and vessel access, respectively.

152° 00'

151° 57'

151° 54'

151° 51'

151° 48'

70° 12'

70° 11'

70° 10'

70° 12'

70° 11'

70° 10'

**NORTH**

JUDY CREEK

**NATIONAL PETROLEUM  
RESERVE ALASKA**

1:26000

0 1000 2000 FEET

Continue on sheet 131

Continue on sheet 128

Continue on sheet 133

Continue on sheet 135





### PRIORITY PROTECTION SITES

- There are no priority protection sites on this sheet.

### GENERAL SENSITIVITIES

- Coastal areas support high concentrations of breeding, nesting, brood-rearing, and molting waterbirds during the summer.
- The Ublutuoch River and its tributary provide habitat for resident fish.



### AIR ACCESS\*

- There is an aircraft landing strip located at the Alpine oil field (Sheet 20) approximately 20 miles to the northeast. This is a 5,000-ft gravel airstrip operated by ConocoPhillips.
- Commercial and air freight services are available at the City of Nuiqsut airport (Sheet 24) approximately 15 miles to the northeast. This is a 4,300-ft, unattended gravel airstrip. Visual inspection prior to use is recommended.

### VESSEL ACCESS\* AND HYDROGRAPHIC CONDITIONS

- There are no marine waters or shoreline on this sheet.

\*See the latest *Supplement, Alaska and United States Coast Pilot* for current information on air and vessel access, respectively.

151° 45'

151° 42'

151° 39'

151° 36'

151° 33'

70° 11'

70° 11'

70° 10'

70° 10'

70° 9'

70° 9'

70° 8'

70° 8'



**NATIONAL PETROLEUM  
RESERVE ALASKA**

*UBLUTUOCH RIVER*

1:26000

0 1000 2000 FEET

Continue on sheet 132

Continue on sheet 135

Continue on sheet 173

Continue on sheet 174



### PRIORITY PROTECTION SITES

- There are no priority protection sites on this sheet.

### GENERAL SENSITIVITIES

- Coastal areas support high concentrations of breeding, nesting, brood-rearing, and molting waterbirds during the summer.
- Judy Creek and its tributary provide habitat for anadromous whitefish and resident fish.



### AIR ACCESS\*

- There is an aircraft landing strip located at the Alpine oil field (Sheet 20) approximately 30 miles to the northeast. This is a 5,000-ft gravel airstrip operated by ConocoPhillips.
- Commercial and air freight services are available at the City of Nuiqsut airport (Sheet 24) approximately 27 miles to the northeast. This is a 4,300-ft, unattended gravel airstrip. Visual inspection prior to use is recommended.

### VESSEL ACCESS\* AND HYDROGRAPHIC CONDITIONS

- There are no marine waters or shoreline on this sheet.

\*See the latest *Supplement, Alaska and United States Coast Pilot* for current information on air and vessel access, respectively.

152° 15'

152° 12'

152° 09'

152° 06'

152° 03'

70° 9'

70° 9'

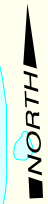
70° 8'

70° 8'

70° 7'

70° 7'

70° 6'



JUDY CREEK

**NATIONAL PETROLEUM  
RESERVE ALASKA**

Continue on sheet 167

Continue on sheet 135

1:26000

0 1000 2000 FEET





### PRIORITY PROTECTION SITES

- There are no priority protection sites on this sheet.

### GENERAL SENSITIVITIES

- Coastal areas support high concentrations of breeding, nesting, brood-rearing, and molting waterbirds during the summer.



### AIR ACCESS\*

- There is an aircraft landing strip located at the Alpine oil field (Sheet 20) approximately 25 miles to the northeast. This is a 5,000-ft gravel airstrip operated by ConocoPhillips.
- Commercial and air freight services are available at the City of Nuiqsut airport (Sheet 24) approximately 22 miles to the northeast. This is a 4,300-ft, unattended gravel airstrip. Visual inspection prior to use is recommended.

### VESSEL ACCESS\* AND HYDROGRAPHIC CONDITIONS

- There are no marine waters or shoreline on this sheet.

\*See the latest *Supplement, Alaska and United States Coast Pilot* for current information on air and vessel access, respectively.

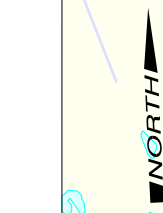
152° 00'

151° 57'

151° 54'

151° 51'

151° 48'



70° 9'

70° 9'

70° 8'

70° 8'

70° 7'

70° 7'

**NATIONAL PETROLEUM  
RESERVE ALASKA**

Continue on sheet 134

Continue on sheet 133

1:26000

0 1000 2000 FEET



### PRIORITY PROTECTION SITES

- There are no priority protection sites on this sheet.

### GENERAL SENSITIVITIES

- Coastal areas support high concentrations of breeding, nesting, brood-rearing, and molting waterbirds during the summer.
- The Ublutuoch River and its tributary provide habitat for resident fish.



### AIR ACCESS\*

- There is an aircraft landing strip located at the Alpine oil field (Sheet 20) approximately 15 miles to the northeast. This is a 5,000-ft gravel airstrip operated by ConocoPhillips.
- Commercial and air freight services are available at the City of Nuiqsut airport (Sheet 24) approximately 11 miles to the northeast. This is a 4,300-ft, unattended gravel airstrip. Visual inspection prior to use is recommended.

### VESSEL ACCESS\* AND HYDROGRAPHIC CONDITIONS

- There are no marine waters or shoreline on this sheet.

\*See the latest *Supplement, Alaska and United States Coast Pilot* for current information on air and vessel access, respectively.



Continue on sheet 133

Continue on sheet 137





### PRIORITY PROTECTION SITES

- There are no priority protection sites on this sheet.

### GENERAL SENSITIVITIES

- Coastal areas support high concentrations of breeding, nesting, brood-rearing, and molting waterbirds during the summer.



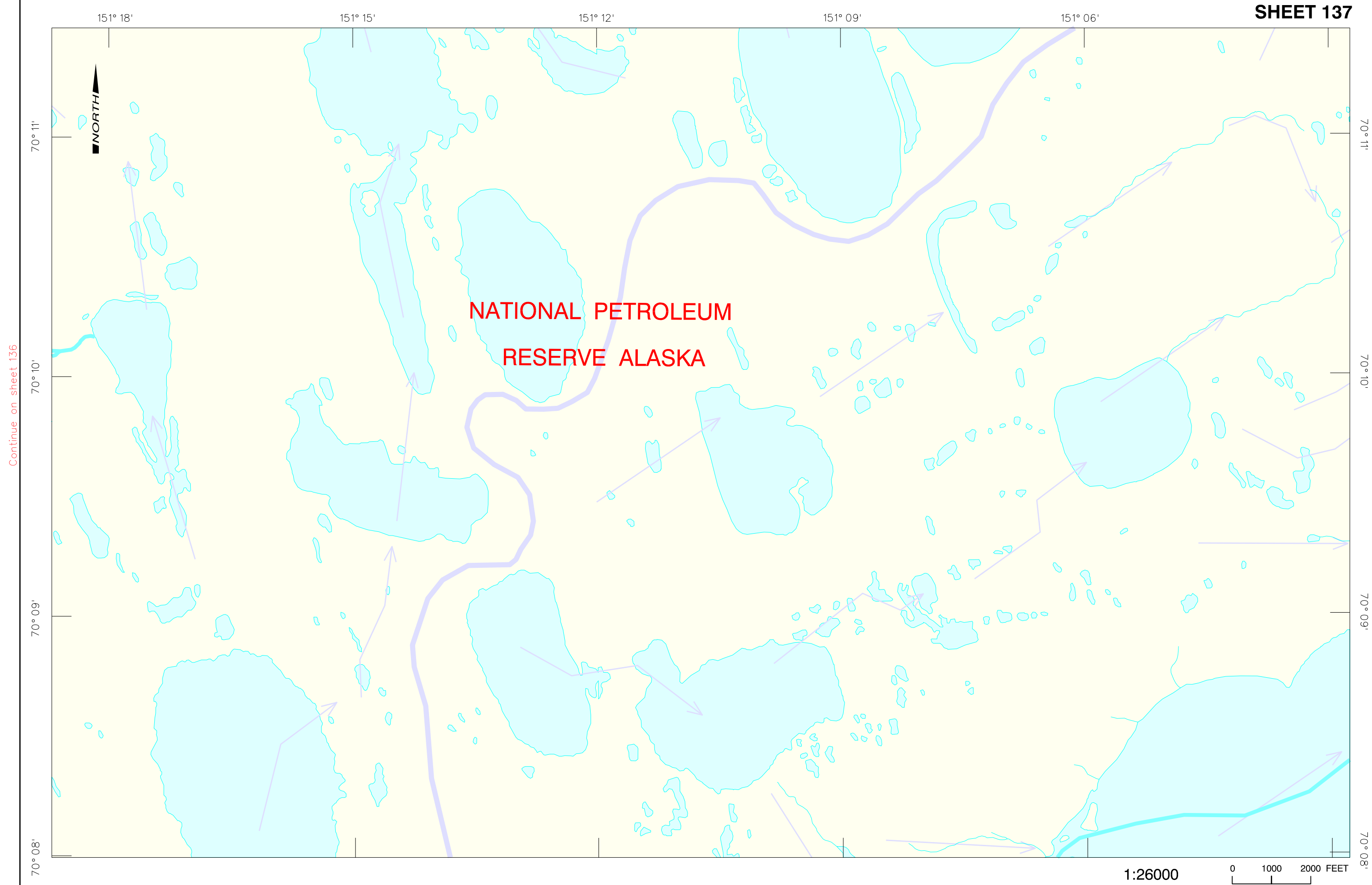
### AIR ACCESS\*

- There is an aircraft landing strip located at the Alpine oil field (Sheet 20) approximately 15 miles to the northeast. This is a 5,000-ft gravel airstrip operated by ConocoPhillips.
- Commercial and air freight services are available at the City of Nuiqsut airport (Sheet 24) approximately 6 miles to the northeast. This is a 4,300-ft, unattended gravel airstrip. Visual inspection prior to use is recommended.

### VESSEL ACCESS\* AND HYDROGRAPHIC CONDITIONS

- There are no marine waters or shoreline on this sheet.

\*See the latest *Supplement, Alaska* and United States Coast Pilot for current information on air and vessel access, respectively.



**NATIONAL PETROLEUM  
RESERVE ALASKA**

Continue on sheet 136

Continue on sheet 176

1:26000

0 1000 2000 FEET



### PRIORITY PROTECTION SITES

- Priority protection sites have not been identified pending field reconnaissance.

### GENERAL SENSITIVITIES

- Coastal areas support high concentrations of breeding, nesting, brood-rearing, and molting waterbirds during the summer.
- The delta at the mouth of the Piasuk River is a haulout area for spotted seals.
- The Alaktak River and Pittalukruak Lake provide habitat for fish.



### AIR ACCESS\*

- There is an aircraft landing strip located at Dew Line Site Lonely (Sheet 141) approximately 45 miles northeast of Pittalukruak Lake. This 5,000-ft gravel airstrip unattended and closed to the public. Runway is not maintained and condition is unknown.
- Commercial and air freight services are available at the Barrow airport (not on maps) approximately 50 miles to the northwest. This is a 6,500-ft asphalt airstrip.

### VESSEL ACCESS\* AND HYDROGRAPHIC CONDITIONS

- The Piasuk River is generally less than 3 feet deep with extensive shoaling and sandbars across the entrance to Smith Bay.

### COUNTERMEASURES CONSIDERATIONS

- Peat deposits fronting vegetated shorelines make access very difficult. Water depths, especially at the delta of the Piasuk River, are uncertain.
- The inlet forming the north side of the Piasuk River delta is a natural catchment area during sustained east and north-east winds.

\*See the latest *Supplement, Alaska* and United States Coast Pilot for current information on air and vessel access, respectively.

155° 18' 155° 12' 155° 6' 155° 0' 154° 54' 154° 48'

70° 54'

70° 52'

70° 50'

70° 48'

70° 54'

70° 52'

70° 50'

70° 48'

Continue on sheet 208

Continue on sheet 139



NATIONAL PETROLEUM RESERVE ALASKA

ALAKTAK DRAINAGE

RIVER BASIN

PIASUK RIVER DRAINAGE BASIN

PITALUKRUAKE LAKE

PIASUK RIVER

N.A. FF-013512

N.A. FF-093612A

N.A. FF-079515

N.A. FF-079515

N.A. FF-079515

N.A. FF-093612A

1:63360

0 2500 5000 FEET





**PRIORITY PROTECTION SITES**

SITE NO.	DESCRIPTION	SENSITIVITY	TACTIC	EST. BOOM
PS127	Mouth of the Piasuk River and barrier island.	Most sensitive during open water season. Prevent oil from entering the river.	C-13 or C-14	1200'
PS128	West side of the Piasuk River delta north to the mainland shore.	Most sensitive during open water season. Prevent oil from entering the inlet).	C-13 or C-14	4000'

\* Priority Protection Area -- The entire Ikpikpuk River delta region is one large Priority Protection Area due to its size and numerous geographical features. On-site conditions may require the use of open water tactics to prevent oil migration into the delta.

**GENERAL SENSITIVITIES**

- Coastal areas support high concentrations of breeding, nesting, brood-rearing, and molting waterbirds during the summer.
- The delta at the mouth of the Piasuk River is a haulout area for spotted seals.
- Feeding bowhead whales are known to congregate from August to October between Pitt Point (Sheet 141) and Point Barrow to the west.

**CULTURAL SITES**

Information on the exact locations of cultural sites is confidential. This information is contained in the *North Slope Archaeological Data* document, copies of which are kept at the following offices: State Historical Preservation Officer (SHPO) (907-269-8721), ACS in Deadhorse (907-659-2405), North Slope Borough Lands Division (907-852-0322), North Slope Borough Lands Division (907-852-0322), BPXA Crisis Center in Anchorage (907-564-5243), and the ConocoPhillips Incident Command Center in Anchorage (907-265-1000). The following cultural site(s) are located in the area depicted on this sheet:

- TES-00025 west of the Ikpikpuk River delta
- TES-00027 north of the inlet at the mouth of the Piasuk River
- TES-00031 north of the inlet at the mouth of the Piasuk River



**AIR ACCESS\***

- There is an aircraft landing strip located at Dew Line Site Lonely (Sheet 141) approximately 26 miles northeast of the Ikpikpuk River delta. This 5,000-ft gravel airstrip is unattended and closed to the public. Runway is not maintained and condition is unknown.
- Commercial and air freight services are available at the Barrow airport (not on maps) approximately 60 miles to the northwest. This is a 6,500-ft asphalt airstrip.

**VESSEL ACCESS\* AND HYDROGRAPHIC CONDITIONS**

- Access is limited to shallow-draft vessels.
- The Piasuk River is generally less than 3 feet deep with extensive shoaling and sandbars across the entrance to Smith Bay.
- Extensive shoaling and sediment deposition by Ikpikpuk River impede navigation in Smith Bay.
- Ikpikpuk River average annual discharge rate of 2,270 cfs is sufficiently large to keep most floating oils off deltaic flats except during storm surge conditions from west or northwest winds.

**COUNTERMEASURES CONSIDERATIONS**

- The inlet forming the north side of the Piasuk River delta is a natural catchment area during sustained east and north-east winds.
- This is a very complex shoreline area with many inlets, areas of washover, and polygonal subsiding tundra. Access is difficult. Large numbers of personnel may damage vegetation, causing excessive erosion.
- Peat deposits fronting vegetated shorelines make access very difficult. Water depths, especially at the delta of the Piasuk River, are uncertain.

\*See the latest *Supplement, Alaska* and United States Coast Pilot for current information on air and vessel access, respectively.

154° 42'

155° 36'

155° 30'

155° 24'

154° 18'

154° 12'



SMITH BAY

PS128

PS127

PRIORITY PROTECTION AREA

PLASUK RIVER

PLASUK RIVER DRAINAGE BASIN

NATIONAL PETROLEUM RESERVE ALASKA

IKPIKPUK RIVER DELTA

IKPIKPUK RIVER DRAINAGE BASIN

Cabin

10'

5'

1:63360

0 2500 5000 FEET

Continue on sheet 138

Continue on sheet 140

Continue on sheet 143

Continue on sheet 144



### PRIORITY PROTECTION SITES

SITE NO.	DESCRIPTION	SENSITIVITY	TACTIC	EST. BOOM
PS125	Tidal breach area of coastal pond.	Most sensitive during open water season. Prevent oil from entering the pond.	C-14	400'
PS126	Outlet of small creek.	Most sensitive during open water season. Prevent oil from entering the creek.	C-14	200'

### GENERAL SENSITIVITIES

- Nearshore areas are important staging sites for Oldsquaw, eiders, and phalaropes in August and September.
- Coastal areas support high concentrations of breeding, nesting, brood-rearing, and molting waterbirds during the summer.
- Feeding bowhead whales are known to congregate from August to October between Pitt Point (Sheet 141) and Point Barrow to the west.



### AIR ACCESS\*

- There is an aircraft landing strip located at Dew Line Site Lonely (Sheet 141) approximately 16 miles east of Drew Point. This 5,000-ft gravel airstrip is unattended and closed to the public. Runway is not maintained and condition is unknown.
- Commercial and air freight services are available at the Barrow airport (not on maps) approximately 75 miles northwest of Drew Point. This is a 6,500-ft, asphalt airstrip.

### VESSEL ACCESS\* AND HYDROGRAPHIC CONDITIONS

- Access is limited to shallow-draft vessels.
- Small boat shelter may be possible at Drew Pt.
- Extensive shoaling and sediment deposition by Ikpikpuk River impede navigation in Smith Bay.
- Ikpikpuk River average annual discharge rate of 2,270 cfs is sufficiently large to keep most floating oils off deltaic flats except during storm surge conditions from west or northwest winds.

### COUNTERMEASURES CONSIDERATIONS

- Access east of Ikpikpuk River delta is very poor because of slumping bluffs and peat shores. Caution should be taken to prevent loss of equipment or further bluff erosion.
- Intermittent bluffs along the east shore of Smith Bay restrict access to beach and tundra surfaces.
- Beaches, where present, are very narrow. Beaches near Pt. McLeod have a sand/shell matrix with low load-bearing capacity. Peat shores south of Drew Pt. are accessible by foot only.

\*See the latest *Supplement, Alaska* and United States Coast Pilot for current information on air and vessel access, respectively.

154° 00'

153° 54'

153° 48'

153° 42'

153° 36'

153° 30'



Continue on sheet 139

Continue on sheet 141

1:63360

0 2500 5000 FEET

Continue on sheet 144

Continue on sheet 145





**PRIORITY PROTECTION SITES**

SITE NO.	DESCRIPTION	SENSITIVITY	TACTIC	EST. BOOM
PS119	Eastern entrance to Pogik Bay.	Most sensitive during open water season. Prevent oil from entering the bay.	C-13 or C-14	2500'
PS120	Pogik Point to mainland across western entrance to Pogik Bay.	Most sensitive during open water season. Prevent oil from entering the bay.	C-13 or C-14	5000'
PS121	Outlet of small creek.	Most sensitive during open water season. Prevent oil from entering the creek.	C-14	200'
PS122	Tidal breach area of coastal pond.	Most sensitive during open water season. Tidal flats. Prevent oil from entering the pond.	C-14	200'
PS123	Tidal breach area of two coastal pond.	Most sensitive during open water season. Tidal flats. Prevent oil from entering the pond.	C-14	200'
PS124	Tidal breach area of coastal pond.	Most sensitive during open water season. Tidal flats. Prevent oil from entering the pond.	C-14	200'

**GENERAL SENSITIVITIES**

- Nearshore areas around Pitt Pt. are important staging sites for Oldsquaw, eiders, and phalaropes in August and September.
- Coastal areas support high concentrations of breeding, nesting, brood-rearing, and molting waterbirds during the summer.
- Feeding bowhead whales are known to congregate from August to October between Pitt Point (Sheet 141) and Point Barrow to the west.
- The Smith River provides habitat for fish.

**CULTURAL SITES**

Information on the exact locations of cultural sites is confidential. This information is contained in the *North Slope Archaeological Data* document, copies of which are kept at the following offices: State Historical Preservation Officer (SHPO) (907-269-8721), ACS in Deadhorse (907-659-2405), North Slope Borough Lands Division (907-852-0322), North Slope Borough Lands Division (907-852-0322), BPXA Crisis Center in Anchorage (907-564-5243), and the ConocoPhillips Incident Command Center in Anchorage (907-265-1000). The following cultural site(s) are located in the area depicted on this sheet:

- TES-00028 southwest of Pitt Point
- TES-00030, 33, 34, 38-40, 43-45, 46 near Dew Line Site Lonely



**AIR ACCESS\***

- There is an aircraft landing strip located at Dew Line Site Lonely. This 5,000-ft gravel airstrip is unattended and closed to the public. Runway is not maintained and condition is unknown.
- Commercial and air freight services are available at the Barrow airport (not on maps) approximately 90 miles northwest of Pitt Point. This is a 6,500-ft, asphalt airstrip.

**VESSEL ACCESS\* AND HYDROGRAPHIC CONDITIONS**

- Beaufort Sea depths range from 8 to 10 ft only 200 meters offshore of the Pitt Pt. area.
- Lagoon southeast of Pitt Pt. is very shallow. Entrances across sand spits open and close with heavy seas and along-shore transport.
- Pogik Bay has large shoals blocking marine access. Water depths are probably less than 4 ft.

**COUNTERMEASURES CONSIDERATIONS**

- Heavy peat deposits over much of the shoreline around Pogik Bay make access difficult. Caution should be taken to prevent loss of equipment or further bluff erosion. Mud tidal flats have little load-bearing capacity. Low slumping vegetated shorelines make footing unstable.
- Beaches west of Lonely have a sand/shell matrix with low load-bearing capacity. Access to sand/gravel beaches north and east of Lonely is good.
- The entire area around Okalik Lake is wet tundra and unsuitable for overland travel.
- Pogik Bay will tend to collect floating oil from either an east or west prevailing wind.

\*See the latest *Supplement, Alaska* and United States Coast Pilot for current information on air and vessel access, respectively.



Continue on sheet 140

Continue on sheet 142

# NATIONAL PETROLEUM RESERVE ALASKA

1:63360

0 2500 5000 FEET

Continue on sheet 145

Continue on sheet 146



### PRIORITY PROTECTION SITES

SITE NO.	DESCRIPTION	SENSITIVITY	TACTIC	EST. BOOM
PS117	Ocean access to tidal pool.	Most sensitive during open water season. Prevent oil from entering the pool.	C-14	200'
PS118	Narrow inlet to a lake.	Most sensitive during open water season. Prevent oil from entering the lake.	C-13 or C-14	800'
PS119	Eastern entrance to Pogik Bay.	Most sensitive during open water season. Prevent oil from entering the bay.	C-13 or C-14	2500'

### GENERAL SENSITIVITIES

- Nearshore areas around Cape Halkett are important staging sites for Oldsquaw, eiders, and phalaropes in August and September.
- Coastal areas support high concentrations of breeding, nesting, brood-rearing, and molting waterbirds during the summer.

### CULTURAL SITES

Information on the exact locations of cultural sites is confidential. This information is contained in the *North Slope Archaeological Data* document, copies of which are kept at the following offices: State Historical Preservation Officer (SHPO) (907-269-8721), ACS in Deadhorse (907-659-2405), North Slope Borough Lands Division (907-852-0322), North Slope Borough Lands Division (907-852-0322), BPXA Crisis Center in Anchorage (907-564-5243), and the ConocoPhillips Incident Command Center in Anchorage (907-265-1000). The following cultural site(s) are located in the area depicted on this sheet:

- HAR-00019 near Cameron Point



### AIR ACCESS\*

- There is an aircraft landing strip located at Dew Line Site Lonely (Sheet 141) approximately 14 miles west of Cameron Pt. This 5,000-ft gravel airstrip is unattended and closed to the public. Runway is not maintained and condition is unknown.
- Commercial and air freight services are available at the Barrow airport (not on maps) approximately 100 miles north-west of Cameron Point. This is a 6,500-ft, asphalt airstrip.

### VESSEL ACCESS\* AND HYDROGRAPHIC CONDITIONS

- Pogik Bay and the large inlet west of Cameron Pt. have large shoals blocking marine access. Water depths are probably less than 4 ft.
- Sand shoals are present 0.7 miles east of Cape Halkett with 5 ft of water between cape and shoaling.

### COUNTERMEASURES CONSIDERATIONS

- Heavy peat deposits and low slumping vegetated shoreline make access difficult and may preclude vehicular access. The area is backed by wet tundra. Caution should be taken to prevent loss of equipment or further bluff erosion. Mud tidal flats have little load-bearing capacity.
- Pogik Bay will tend to collect floating oil from either an east or west prevailing wind.

\*See the latest *Supplement, Alaska* and United States Coast Pilot for current information on air and vessel access, respectively.



Continue on sheet 141

**NATIONAL PETROLEUM  
RESERVE ALASKA**

1:63360 0 2500 5000 FEET

Continue on sheet 146

Continue on sheet 147





### PRIORITY PROTECTION SITES

- Priority protection sites have not been identified pending field reconnaissance.

### GENERAL SENSITIVITIES

- Coastal areas support high concentrations of breeding, nesting, brood-rearing, and molting waterbirds during the summer.
- The Alaktak and Ikpikpuk rivers provide habitat for fish.

### CULTURAL SITES

Information on the exact locations of cultural sites is confidential. This information is contained in the *North Slope Archaeological Data* document, copies of which are kept at the following offices: State Historical Preservation Officer (SHPO) (907-269-8721), ACS in Deadhorse (907-659-2405), North Slope Borough Lands Division (907-852-0322), North Slope Borough Lands Division (907-852-0322), BPXA Crisis Center in Anchorage (907-564-5243), and the ConocoPhillips Incident Command Center in Anchorage (907-265-1000). The following cultural site(s) are located in the area depicted on this sheet:

- TES-00001 and 00024 east of Alaktak River near the top of this map



### AIR ACCESS\*

- There is an aircraft landing strip located at Dew Line Site Lonely (Sheet 141) approximately 35 miles to the north-east. This 5,000-ft gravel airstrip is unattended and closed to the public. Runway is not maintained and condition is unknown.
- Commercial and air freight services are available at the Barrow airport (not on maps) approximately 55 miles to the northwest. This is a 6,500-ft, asphalt airstrip.

### VESSEL ACCESS\* AND HYDROGRAPHIC CONDITIONS

- There are no marine waters or shorelines on this map.

\*See the latest *Supplement, Alaska* and United States Coast Pilot for current information on air and vessel access, respectively.

155° 12' 155° 06' 155° 00' 154° 54' 154° 48' 154° 42'

70° 46'

70° 46'

70° 44'

70° 44'

70° 42'

70° 42'

70° 40'

70° 40'

Continue on sheet 210

Continue on sheet 144



NATIONAL PETROLEUM RESERVE ALASKA

ALAKTAK RIVER DRAINAGE BASIN

PIASUK RIVER DRAINAGE BASIN

IKPIJUK RIVER DRAINAGE BASIN

PIASUK RIVER

ALAKTAK RIVER

IKPIJUK RIVER

Alaktak  
N.A. EF-011957

1:63360 0 2500 5000 FEET



### PRIORITY PROTECTION SITES

- Priority protection sites have not been identified pending field reconnaissance.

### GENERAL SENSITIVITIES

- Coastal areas and areas west and north of Teshekpuk Lake support high concentrations of breeding, nesting, brood-rearing, and molting waterbirds during the summer.
- The Miguakiak and Ikpikpuk rivers provide habitat for fish.

### CULTURAL SITES

Information on the exact locations of cultural sites is confidential. This information is contained in the *North Slope Archaeological Data* document, copies of which are kept at the following offices: State Historical Preservation Officer (SHPO) (907-269-8721), ACS in Deadhorse (907-659-2405), North Slope Borough Lands Division (907-852-0322), North Slope Borough Lands Division (907-852-0322), BPXA Crisis Center in Anchorage (907-564-5243), and the ConocoPhillips Incident Command Center in Anchorage (907-265-1000). The following cultural site(s) are located in the area depicted on this sheet:

- TES-00049 near the confluence of the Ikpikpuk and Miguakiak rivers
- TES-00046 north of Miguakiak River near the bottom center of this map



### AIR ACCESS\*

- There is an aircraft landing strip located at Dew Line Site Lonely (Sheet 141) approximately 24 miles northeast of Smith Bay. This 5,000-ft gravel airstrip is unattended and closed to the public. Runway is not maintained and condition is unknown.
- Commercial and air freight services are available at the Barrow airport (not on maps) approximately 70 miles to the northwest. This is a 6,500-ft, asphalt airstrip.

### VESSEL ACCESS\* AND HYDROGRAPHIC CONDITIONS

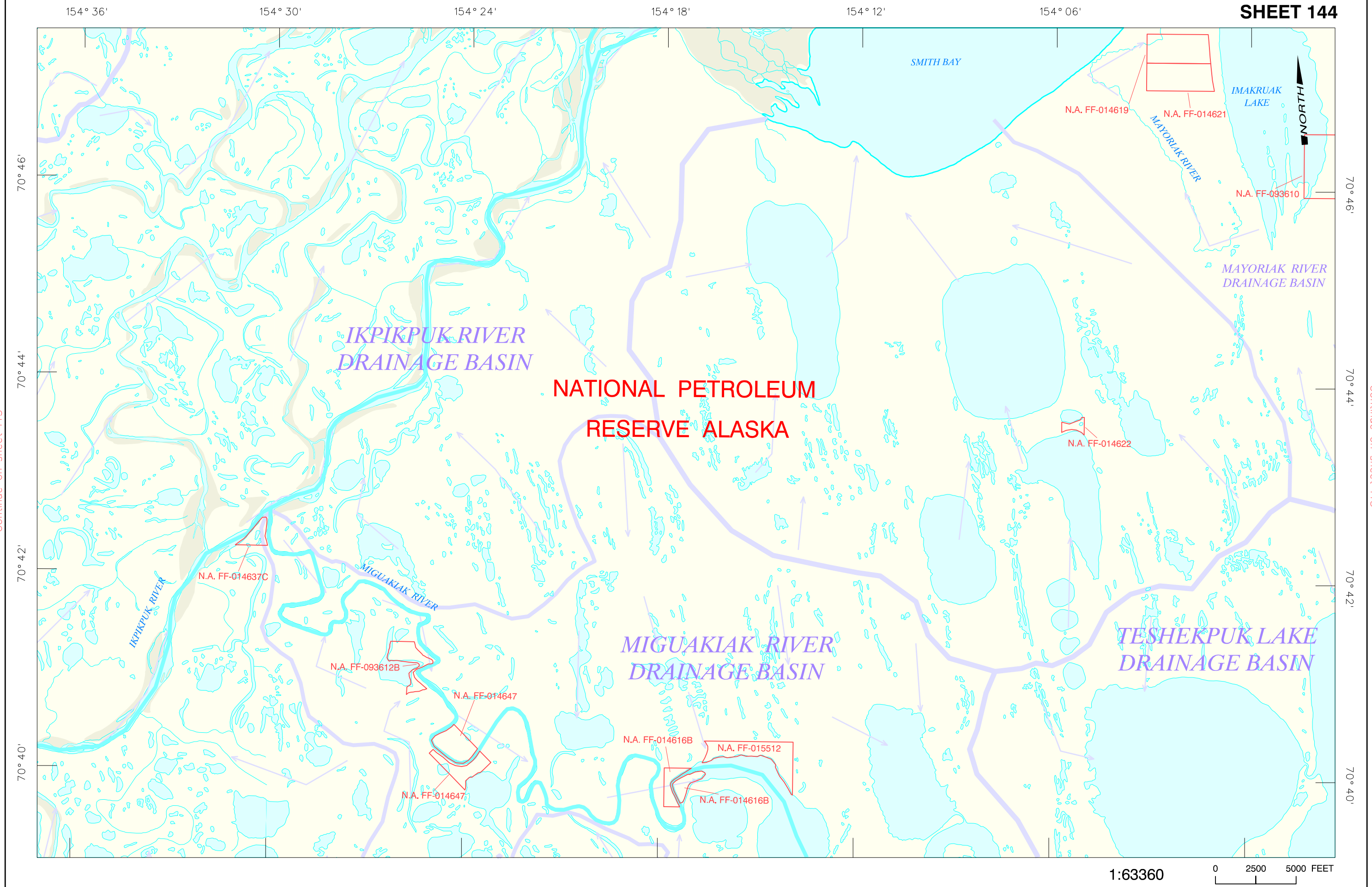
- Extensive shoaling and sediment deposition by Ikpikpuk River impede navigation in Smith Bay.
- Ikpikpuk River average annual discharge rate of 2,270 cfs is sufficiently large to keep most floating oils off deltaic flats except during storm surge conditions from west or northwest winds.

### COUNTERMEASURES CONSIDERATIONS

- Access east of Ikpikpuk River delta is very poor because of slumping bluffs and peat shores. Caution should be taken to prevent loss of equipment or further bluff erosion.
- Intermittent bluffs along east shore of Smith Bay restrict access to beach and tundra surfaces.

\*See the latest *Supplement, Alaska* and United States Coast Pilot for current information on air and vessel access, respectively.





Continue on sheet 143

Continue on sheet 145

1:63360 0 2500 5000 FEET





### PRIORITY PROTECTION SITES

- Priority protection sites have not been identified pending field reconnaissance.

### GENERAL SENSITIVITIES

- Coastal areas and areas west and north of Teshekpuk Lake support high concentrations of breeding, nesting, brood-rearing, and molting waterbirds during the summer.
- Teshekpuk Lake provides habitat for fish.

### CULTURAL SITES

Information on the exact locations of cultural sites is confidential. This information is contained in the *North Slope Archaeological Data* document, copies of which are kept at the following offices: State Historical Preservation Officer (SHPO) (907-269-8721), ACS in Deadhorse (907-659-2405), North Slope Borough Lands Division (907-852-0322), North Slope Borough Lands Division (907-852-0322), BPXA Crisis Center in Anchorage (907-564-5243), and the ConocoPhillips Incident Command Center in Anchorage (907-265-1000). The following cultural site(s) are located in the area depicted on this sheet:

- TES-00006 near top center of this map
- TES-00003, 4, and 5 west of Teshekpuk Lake
- TES-00007 and 8 east of Teshekpuk Lake



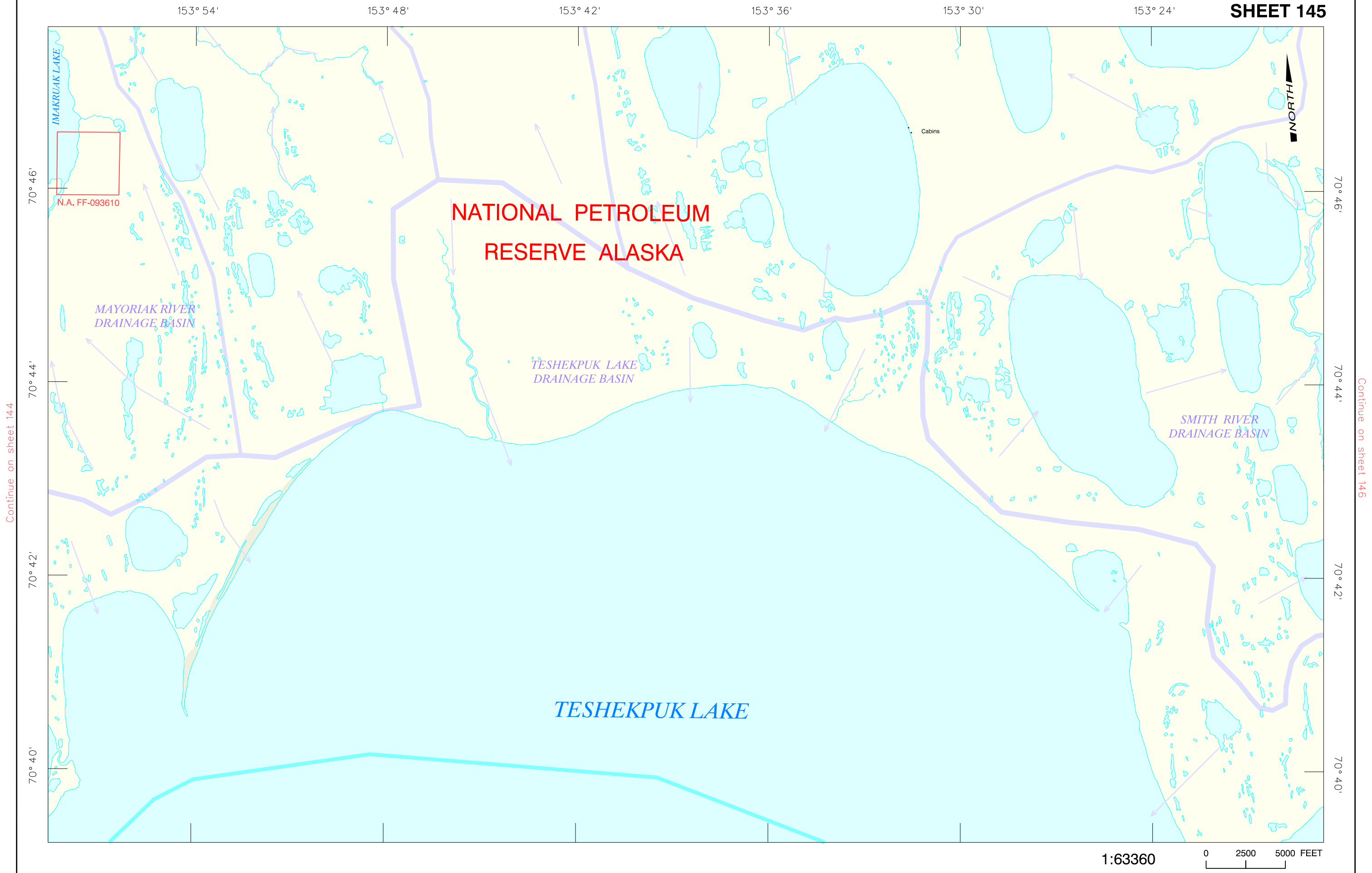
### AIR ACCESS\*

- There is an aircraft landing strip located at Dew Line Site Lonely (Sheet 141) approximately 15 miles northeast of Teshekpuk Lake. This 5,000-ft gravel airstrip is unattended and closed to the public. Runway is not maintained and condition is unknown.
- Commercial and air freight services are available at the Barrow airport (not on maps) approximately 80 miles northwest of Teshekpuk Lake. This is a 6,500-ft, asphalt airstrip.

### VESSEL ACCESS\* AND HYDROGRAPHIC CONDITIONS

- There are no marine waters or shorelines on this map.

\*See the latest *Supplement, Alaska* and United States Coast Pilot for current information on air and vessel access, respectively.



Continue on sheet 144

Continue on sheet 146



### PRIORITY PROTECTION SITES

- Priority protection sites have not been identified pending field reconnaissance.

### GENERAL SENSITIVITIES

- Coastal areas and areas between Teshekpuk Lake and the coast support high concentrations of breeding, nesting, brood-rearing, and molting waterbirds during the summer.
- Concentrations of geese molt in the area north and east of Teshekpuk Lake in July and early August.
- Teshekpuk Lake provides habitat for fish.



### AIR ACCESS\*

- There is an aircraft landing strip located at Dew Line Site Lonely (Sheet 141) approximately 16 miles north of Teshekpuk Lake. This 5,000-ft gravel airstrip is unattended and closed to the public. Runway is not maintained and condition is unknown.
- There is an aircraft landing strip located at the Dew Line Site on the north shore of Kogru River inlet (Sheet 152) approximately 20 miles to the southeast. This an 1,800-ft gravel airstrip. Runway condition is unknown.
- Commercial and air freight services are available at the Barrow airport (not on maps) approximately 95 miles northwest of Teshekpuk Lake. This is a 6,500-ft, asphalt airstrip.

### VESSEL ACCESS\* AND HYDROGRAPHIC CONDITIONS

- There are no marine waters or shorelines on this map.

\*See the latest *Supplement, Alaska* and United States Coast Pilot for current information on air and vessel access, respectively.

153° 18'

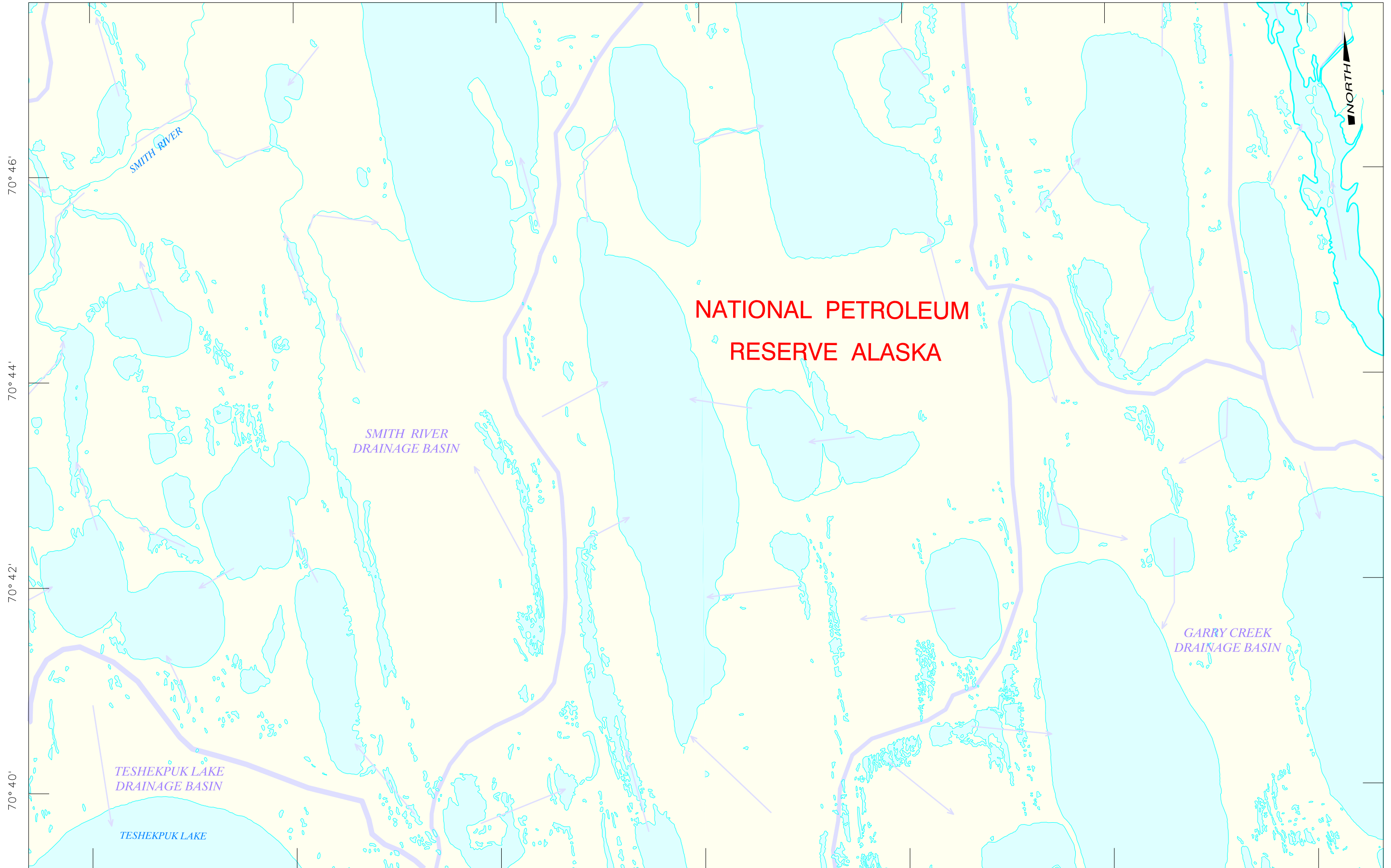
153° 12'

153° 06'

153° 00'

152° 54'

152° 48'



Continue on sheet 145

Continue on sheet 147

1:63360

0 2500 5000 FEET





### PRIORITY PROTECTION SITES

SITE NO.	DESCRIPTION	SENSITIVITY	TACTIC	EST. BOOM
PS115	Co-located outlets of two unnamed small creeks.	Most sensitive during open water season. Prevent oil from entering the creeks.	C-14	100'
PS116	Small inlet being fed by a marsh drainage river.	Most sensitive during open water season. Prevent oil from migrating inland.	C-13 or C-14	3000'

### GENERAL SENSITIVITIES

- Coastal areas and areas between Teshekpuk Lake and the coast support high concentrations of breeding, nesting, brood-rearing, and molting waterbirds during the summer.
- Nearshore areas around Cape Hallett are important staging sites for Oldsquaw, eiders, and phalaropes in August and September.
- Concentrations of geese molt in the area north and east of Teshekpuk Lake in July and early August.



### AIR ACCESS\*

- There is an aircraft landing strip located at Dew Line Site Lonely (Sheet 141) approximately 25 miles to the north-west. This 5,000-ft gravel airstrip is unattended and closed to the public. Runway is not maintained and condition is unknown.
- There is an aircraft landing strip located at the Dew Line Site on the north shore of Kogru River inlet (Sheet 152) approximately 10 miles to the south. This an 1,800-ft gravel airstrip. Runway condition is unknown.
- There is an aircraft landing strip located at the Alpine oil field (Sheet 20) approximately 45 miles to the southeast. This is a 5,000-ft gravel airstrip operated by ConocoPhillips.
- Commercial and air freight services are available at the City of Nuiqsut airport (Sheet 24) approximately 50 miles to the southeast. This is a 4,300-ft, unattended gravel airstrip. Visual inspection prior to use is recommended.

### VESSEL ACCESS\* AND HYDROGRAPHIC CONDITIONS

- The Pacific Shoal, with water depths of 3 to 6 ft, begins 5 miles southeast of Cape Hallett (Sheet 142) and extends 5 miles south toward Atigaru Point (Sheet 2).
- Extensive shoaling occurs along the shoreline and near the embayment of the unnamed stream near the center of this map.

### COUNTERMEASURES CONSIDERATIONS

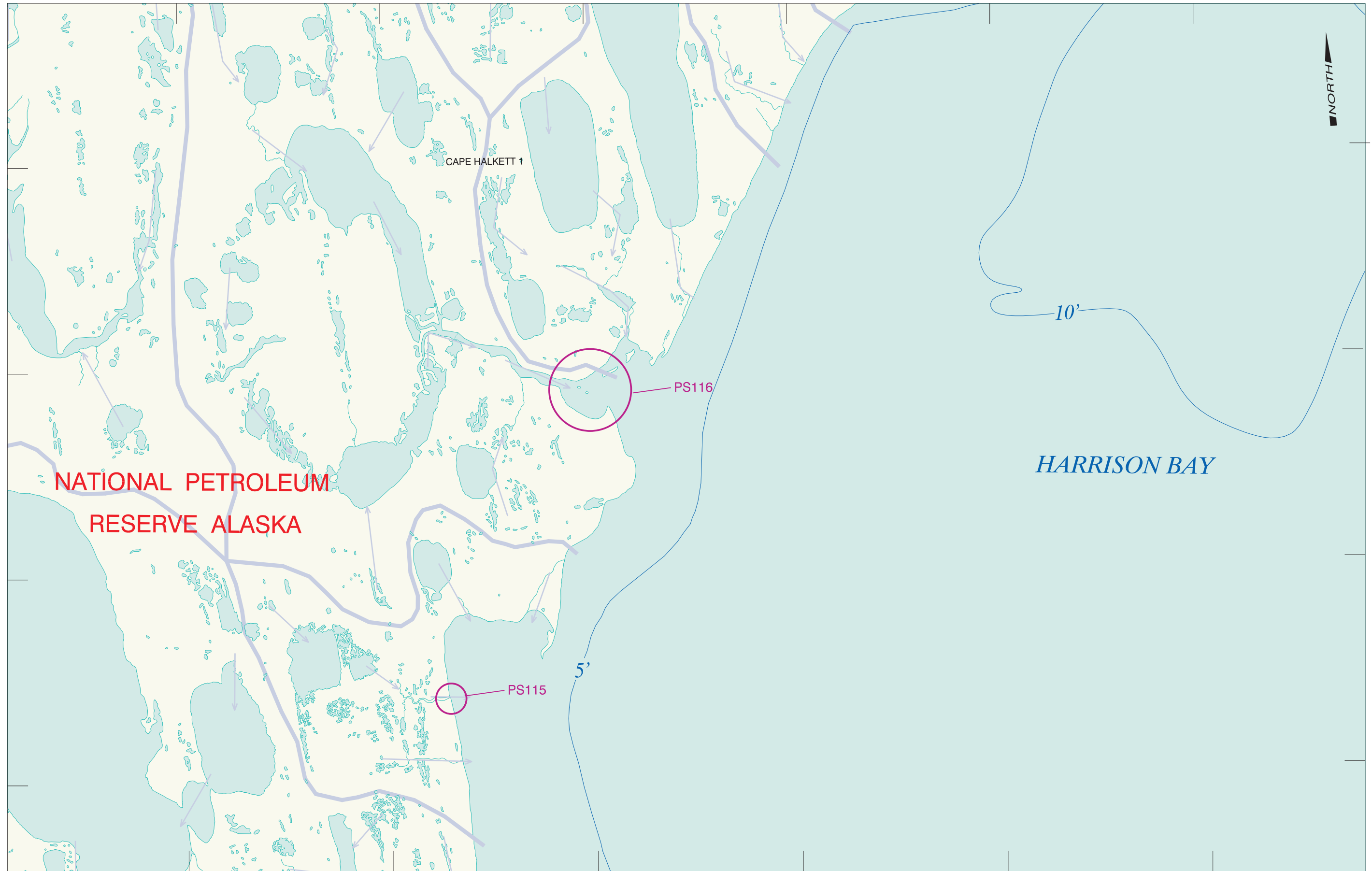
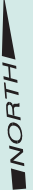
- Peat shores and vegetated shoreline south of Cape Hallett preclude anything but foot access. Caution should be exercised to prevent loss of equipment or bluff erosion.
- The small lagoon below and left of the center of the map will collect current-swept floating oil and trap it behind the sand spit at the eastern side of the lagoon.

\*See the latest *Supplement, Alaska* and United States Coast Pilot for current information on air and vessel access, respectively.

152° 36' 152° 30' 152° 24' 152° 18' 152° 12' 152° 06'

70° 46' 70° 44' 70° 42' 70° 40'

70° 46' 70° 44' 70° 42' 70° 40'



NATIONAL PETROLEUM RESERVE ALASKA

CAPE HALKETT 1

HARRISON BAY

PS116

PS115

10'

5'

1:63360

0 2500 5000 FEET

Continue on sheet 146

Continue on sheet 151

Continue on sheet 152



### PRIORITY PROTECTION SITES

- Priority protection sites have not been identified pending field reconnaissance.

### GENERAL SENSITIVITIES

- The Chipp and Ikpikpuk rivers provide habitat for fish.



### AIR ACCESS\*

- There is an aircraft landing strip located at Dew Line Site Lonely (Sheet 141) approximately 45 miles to the north-east. This 5,000-ft gravel airstrip is unattended and closed to the public. Runway is not maintained and condition is unknown.
- Commercial and air freight services are available at the Barrow airport (not on maps) approximately 65 miles to the northwest. This is a 6,500-ft, asphalt airstrip.

### VESSEL ACCESS\* AND HYDROGRAPHIC CONDITIONS

- There are no marine waters or shorelines on this map.

\*See the latest *Supplement, Alaska* and United States Coast Pilot for current information on air and vessel access, respectively.

155° 06'

155° 00'

154° 54'

154° 48'

154° 42'

154° 36'

Continue on sheet 211

Continue on sheet 149



**NATIONAL PETROLEUM  
RESERVE ALASKA**

*ALAKTAK RIVER  
DRAINAGE BASIN*

*IKPIJUK RIVER  
DRAINAGE BASIN*

*ALAKTAK RIVER*

*IKPIJUK RIVER*

*CHIPP RIVER  
DRAINAGE BASIN*

1:63360

0 2500 5000 FEET





### PRIORITY PROTECTION SITES

- Priority protection sites have not been identified pending field reconnaissance.

### GENERAL SENSITIVITIES

- Coastal areas and areas west and north of Teshekpuk Lake support high concentrations of breeding, nesting, brood-rearing, and molting waterbirds during the summer.
- The Miguakiak River and Teshekpuk Lake provide habitat for fish.

### CULTURAL SITES

Information on the exact locations of cultural sites is confidential. This information is contained in the *North Slope Archaeological Data* document, copies of which are kept at the following offices: State Historical Preservation Officer (SHPO) (907-269-8721), ACS in Deadhorse (907-659-2405), North Slope Borough Lands Division (907-852-0322), North Slope Borough Lands Division (907-852-0322), BPXA Crisis Center in Anchorage (907-564-5243), and the ConocoPhillips Incident Command Center in Anchorage (907-265-1000). The following cultural site(s) are located in the area depicted on this sheet:

- TES-00050 south of the Miguakiak River near the top center of this map
- TES-00019 and 21 west of Teshekpuk Lake near the bottom of this map



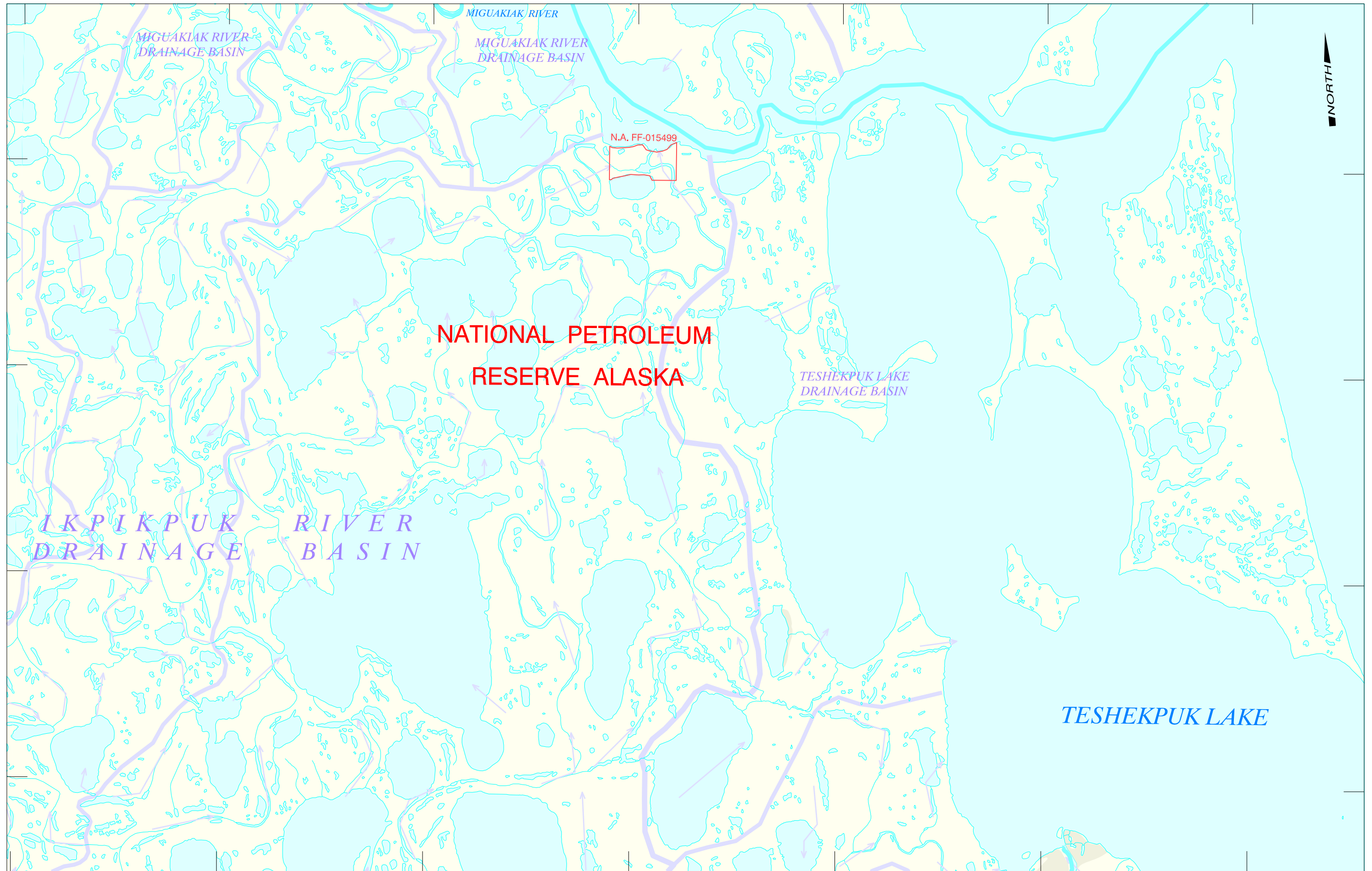
### AIR ACCESS\*

- There is an aircraft landing strip located at Dew Line Site Lonely (Sheet 141) approximately 30 miles to the north-east. This 5,000-ft gravel airstrip is unattended and closed to the public. Runway is not maintained and condition is unknown.
- Commercial and air freight services are available at the Barrow airport (not on maps) approximately 75 miles to the northwest. This is a 6,500-ft, asphalt airstrip.

### VESSEL ACCESS\* AND HYDROGRAPHIC CONDITIONS

- There are no marine waters or shorelines on this map.

\*See the latest *Supplement, Alaska* and United States Coast Pilot for current information on air and vessel access, respectively.



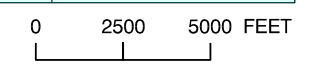
Continue on sheet 148

Continue on sheet 150

**NATIONAL PETROLEUM  
RESERVE ALASKA**

*TESHEKPUK LAKE*

1:63360





### PRIORITY PROTECTION SITES

- Priority protection sites have not been identified pending field reconnaissance.

### GENERAL SENSITIVITIES

- Coastal areas and areas between Teshekpuk Lake and the coast support high concentrations of breeding, nesting, brood-rearing, and molting waterbirds during the summer.
- Concentrations of geese molt in the area north and east of Teshekpuk Lake in July and early August.
- Teshekpuk Lake provides habitat for fish.

### CULTURAL SITES

Information on the exact locations of cultural sites is confidential. This information is contained in the *North Slope Archaeological Data* document, copies of which are kept at the following offices: State Historical Preservation Officer (SHPO) (907-269-8721), ACS in Deadhorse (907-659-2405), North Slope Borough Lands Division (907-852-0322), North Slope Borough Lands Division (907-852-0322), BPXA Crisis Center in Anchorage (907-564-5243), and the ConocoPhillips Incident Command Center in Anchorage (907-265-1000). The following cultural site(s) are located in the area depicted on this sheet:

- TES-00008 on the spit of land at the top of this map
- TES-00011 near the point on the bottom right of this map



### AIR ACCESS\*

- There is an aircraft landing strip located at Dew Line Site Lonely (Sheet 141) approximately 23 miles to the north. This 5,000-ft gravel airstrip is unattended and closed to the public. Runway is not maintained and condition is unknown.
- Commercial and air freight services are available at the Barrow airport (not on maps) approximately 90 miles to the northwest. This is a 6,500-ft, asphalt airstrip.

### VESSEL ACCESS\* AND HYDROGRAPHIC CONDITIONS

- There are no marine waters or shorelines on this map.

\*See the latest *Supplement, Alaska* and United States Coast Pilot for current information on air and vessel access, respectively.

153° 48'

153° 42'

153° 36'

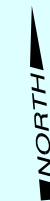
153° 30'

153° 24'

153° 18'

**SHEET 150**

**NATIONAL PETROLEUM  
RESERVE ALASKA**



*TESHEKPUK LAKE*

70° 38'

70° 38'

70° 36'

70° 36'

70° 34'

70° 34'

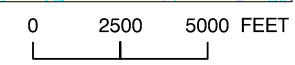
70° 32'

70° 32'

Continue on sheet 149

Continue on sheet 151

1:63360







### PRIORITY PROTECTION SITES

- Priority protection sites have not been identified pending field reconnaissance.

### GENERAL SENSITIVITIES

- Coastal areas and areas between Teshekpuk Lake and the coast support high concentrations of breeding, nesting, brood-rearing, and molting waterbirds during the summer.
- Concentrations of geese molt in the area north and east of Teshekpuk Lake in July and early August.
- Teshekpuk Lake provides habitat for fish.

### CULTURAL SITES

Information on the exact locations of cultural sites is confidential. This information is contained in the *North Slope Archaeological Data* document, copies of which are kept at the following offices: State Historical Preservation Officer (SHPO) (907-269-8721), ACS in Deadhorse (907-659-2405), North Slope Borough Lands Division (907-852-0322), North Slope Borough Lands Division (907-852-0322), BPXA Crisis Center in Anchorage (907-564-5243), and the ConocoPhillips Incident Command Center in Anchorage (907-265-1000). The following cultural site(s) are located in the area depicted on this sheet:

- TES-00009 and 29 north of Teshekpuk Lake near the top left corner of this map
- HAR-00003 north of the bay at the east end of Teshekpuk Lake
- HAR-00020 near the eastern extremity of the inlet at the east end of Teshekpuk Lake
- HAR-00011 near the horseshoe-shaped lake west of Garry Creek
- HAR-00021 west of the egg-shaped lake at the lower right of the map



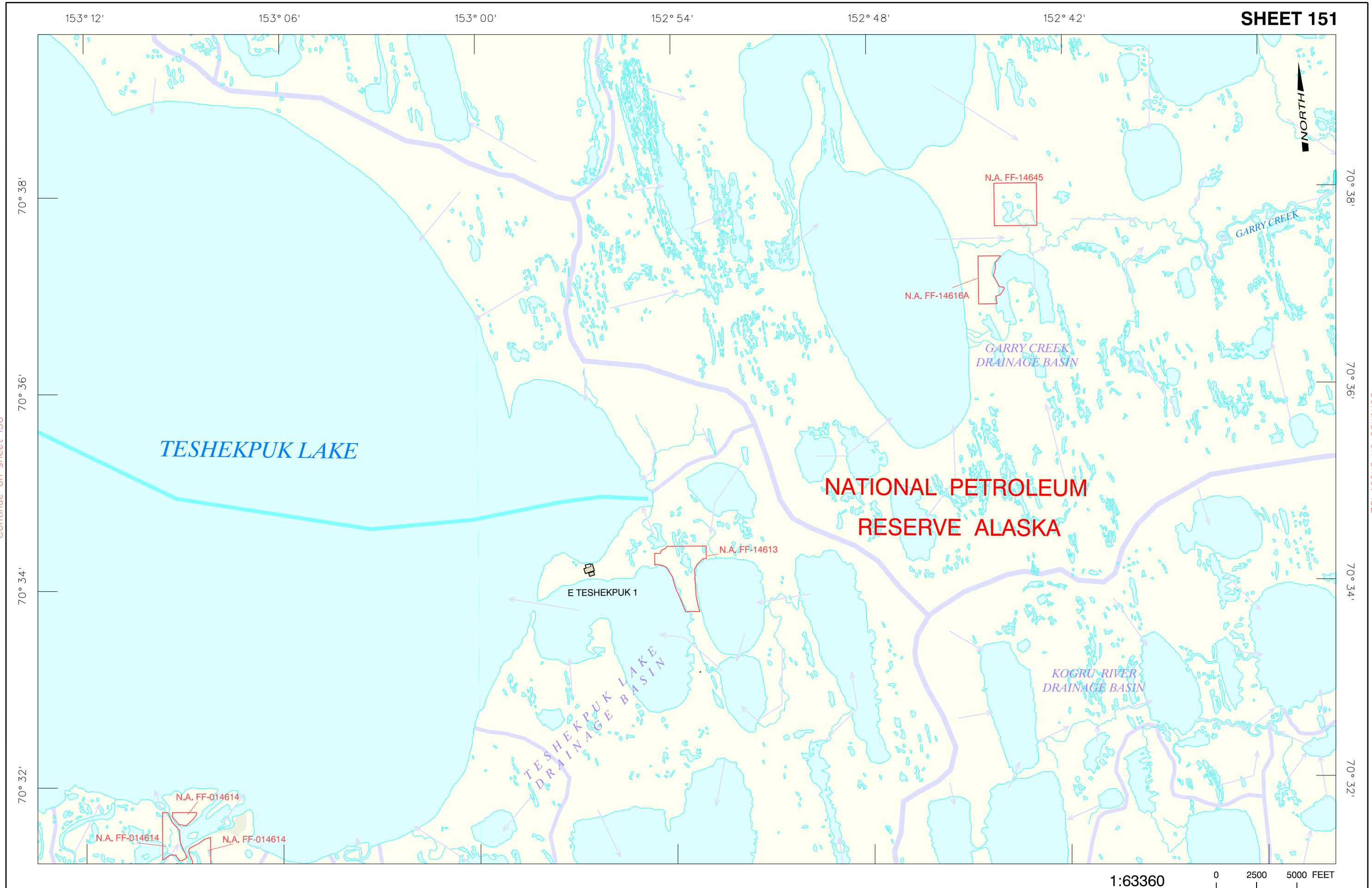
### AIR ACCESS\*

- There is an aircraft landing strip located at the Dew Line Site on the north shore of Kogru River inlet (Sheet 152) approximately 16 miles east of E. Teshekpuk 1. This is a 1,800-ft gravel airstrip. Runway condition is unknown.
- There is an aircraft landing strip located at Dew Line Site Lonely (Sheet 141) approximately 24 miles north of E. Teshekpuk 1. This 5,000-ft gravel airstrip is unattended and closed to the public. Runway is not maintained and condition is unknown.
- There is an aircraft landing strip located at the Alpine oil field (Sheet 20) approximately 50 miles to the southeast. This is a 5,000-ft gravel airstrip operated by ConocoPhillips.
- Commercial and air freight services are available at the City of Nuiqsut airport (Sheet 24) approximately 50 miles to the southeast. This is a 4,300-ft, unattended gravel airstrip. Visual inspection prior to use is recommended.

### VESSEL ACCESS\* AND HYDROGRAPHIC CONDITIONS

- There are no marine waters or shorelines on this map.

\*See the latest *Supplement, Alaska* and United States Coast Pilot for current information on air and vessel access, respectively.



Continue on sheet 150

Continue on sheet 152

1:63360

0 2500 5000 FEET



### PRIORITY PROTECTION SITES

SITE NO.	DESCRIPTION	SENSITIVITY	TACTIC	EST. BOOM
PS53	Tidal pond	Most sensitive during open water season. Peat shoreline. Prevent oil from entering the pond.	C-13 or C-14	500'
PS112	Shore to shore across the mouth of the Kogru River.	Most sensitive during open water season. Tundra cliffs and vegetated low banks. Prevent oil from entering the river.	C-13 or C-14	4,000'
PS113	Entrance and ocean-facing extent of a small inlet.	Most sensitive during open water season. Prevent oil from entering the inlet.	C-13 or C-14	400'
PS114	Shore to shore across the mouth of Garry Creek.	Most sensitive during open water season. Prevent oil from entering the creek.	C-13 or C-14	2,000'

### GENERAL SENSITIVITIES

- Coastal areas and areas between Teshekpuk Lake and the coast support high concentrations of breeding, nesting, brood-rearing, and molting waterbirds during the summer.
- Concentrations of geese molt in the area north and east of Teshekpuk Lake in July and early August.

### CULTURAL SITES

Information on the exact locations of cultural sites is confidential. This information is contained in the *North Slope Archaeological Data* document, copies of which are kept at the following offices: State Historical Preservation Officer (SHPO) (907-269-8721), ACS in Deadhorse (907-659-2405), North Slope Borough Lands Division (907-852-0322), North Slope Borough Lands Division (907-852-0322), BPXA Crisis Center in Anchorage (907-564-5243), and the ConocoPhillips Incident Command Center in Anchorage (907-265-1000). The following cultural site(s) are located in the area depicted on this sheet:

- HAR-00023 south of the inlet at the mouth of Garry Creek
- HAR-00012 near the inlet on the south side of Kogru River inlet southwest of the Dew Line Site
- HAR-00013 on the southern shore of Kogru River inlet southeast of the Dew Line Site
- HAR-00022 near Saktuina Point
- HAR-00058 southwest of Saktuina Point



### AIR ACCESS\*

- There is an aircraft landing strip located at the Dew Line Site on the north shore of Kogru River inlet. This is a 1,800-ft gravel airstrip. Runway condition is unknown.
- There is an aircraft landing strip located at the Alpine oil field (Sheet 20) approximately 30 miles southeast of Saktuina Pt. This is a 5,000-ft gravel airstrip operated by ConocoPhillips.
- Commercial and air freight services are available at the City of Nuiqsut airport (Sheet 24) approximately 35 miles south-east of Saktuina Pt. This is a 4,300-ft, unattended gravel airstrip. Visual inspection prior to use is recommended.

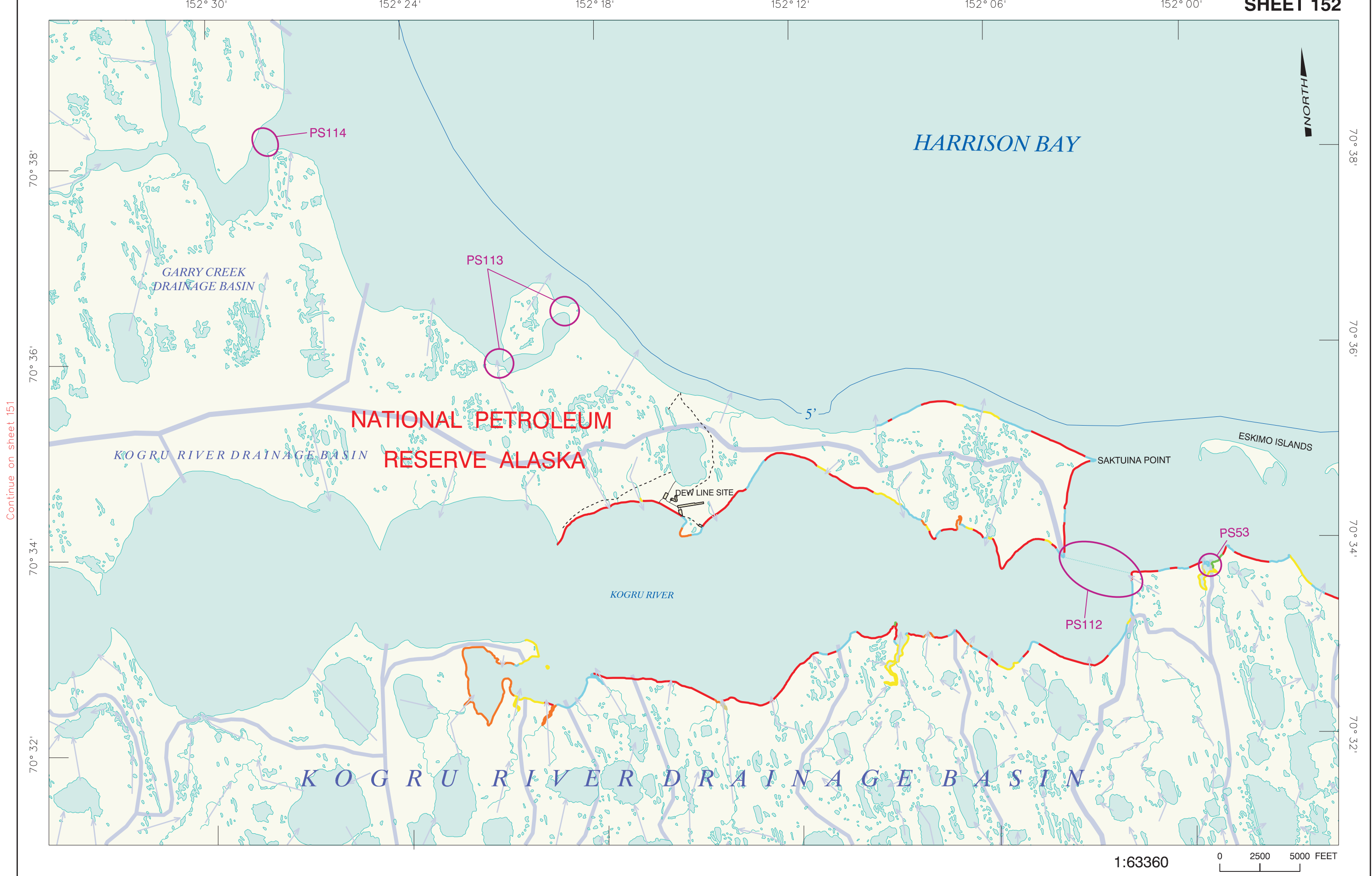
### VESSEL ACCESS\* AND HYDROGRAPHIC CONDITIONS

- Severe shoaling and sediment transport occur in nearshore areas and restrict water depths across the mouth of the Kogru River inlet to 3 to 5 ft. Water depths in the inlet are generally 5 to 8 ft. Boat access to the inlet must proceed from the north through the passage between Saktuina Pt. and the Eskimo Islands.

### COUNTERMEASURES CONSIDERATIONS

- Access is very poor due to wide and extensive peat deposits along the shoreline. Extreme caution should be used to prevent loss of equipment. Nearshore waters are very shallow, precluding most vessel access.
- Beaches are very narrow and are often interrupted by vegetated shoreline or bluffs.
- All of Kogru River inlet will tend to trap westerly transport of floating oil.

\*See the latest *Supplement, Alaska* and United States Coast Pilot for current information on air and vessel access, respectively.



Continue on sheet 151

Continue on sheet 1

Continue on sheet 2





### PRIORITY PROTECTION SITES

- Priority protection sites have not been identified pending field reconnaissance.

### GENERAL SENSITIVITIES

- The Chipp and Ikpikpuk rivers provide habitat for fish.



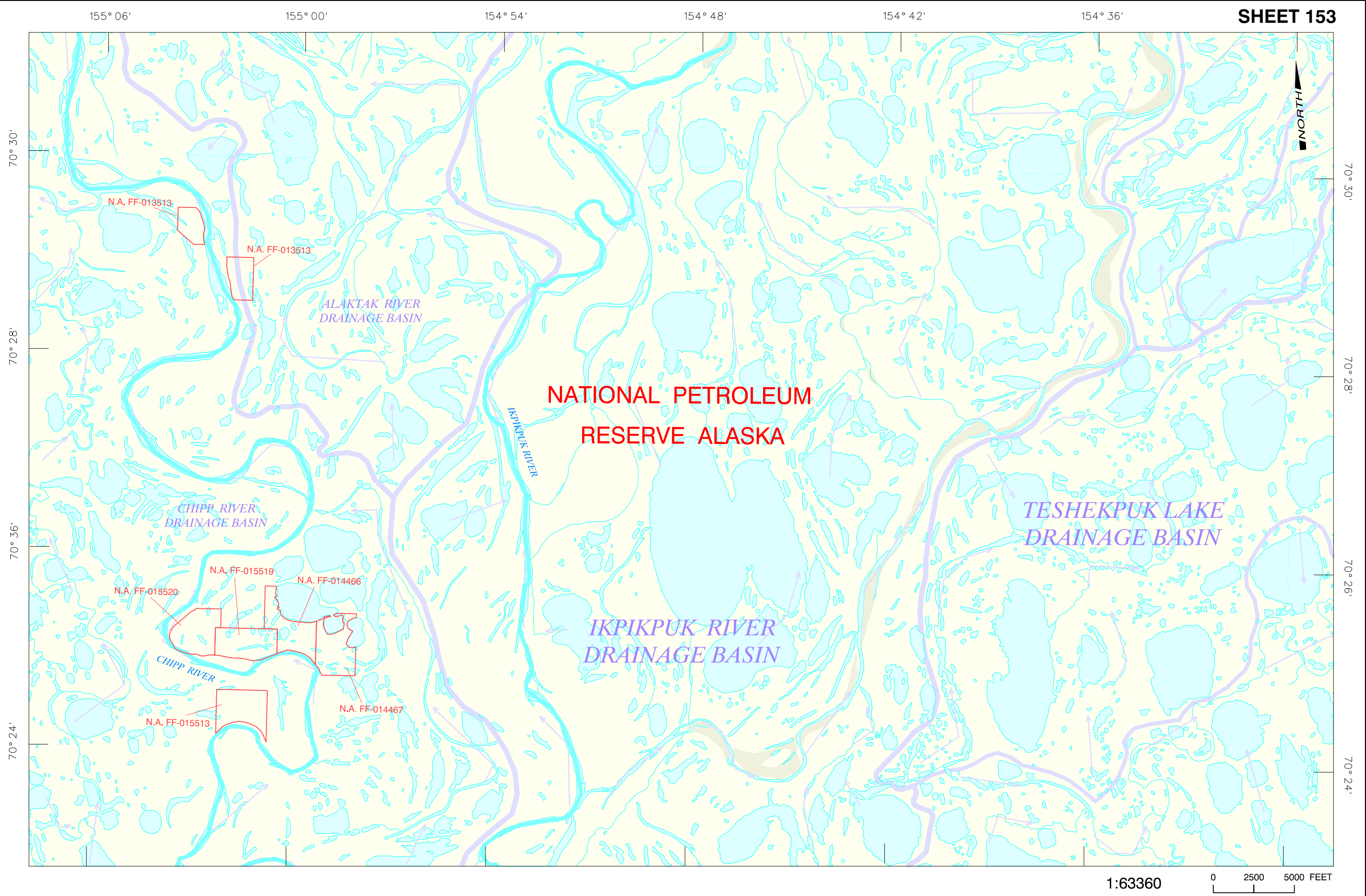
### AIR ACCESS\*

- There is an aircraft landing strip located at Dew Line Site Lonely (Sheet 141) approximately 50 miles to the north-east. This 5,000-ft gravel airstrip is unattended and closed to the public. Runway is not maintained and condition is unknown.
- Commercial and air freight services are available at the Barrow airport (not on maps) approximately 70 miles to the northwest. This is a 6,500-ft, asphalt airstrip.

### VESSEL ACCESS\* AND HYDROGRAPHIC CONDITIONS

- There are no marine waters or shorelines on this map.

\*See the latest *Supplement, Alaska* and United States Coast Pilot for current information on air and vessel access, respectively.



Continue on sheet 154

**NATIONAL PETROLEUM  
RESERVE ALASKA**

1:63360

0 2500 5000 FEET



### PRIORITY PROTECTION SITES

- Priority protection sites have not been identified pending field reconnaissance.

### GENERAL SENSITIVITIES

- Teshekpuk Lake provides habitat for fish.

### CULTURAL SITES

Information on the exact locations of cultural sites is confidential. This information is contained in the *North Slope Archaeological Data* document, copies of which are kept at the following offices: State Historical Preservation Officer (SHPO) (907-269-8721), ACS in Deadhorse (907-659-2405), North Slope Borough Lands Division (907-852-0322), North Slope Borough Lands Division (907-852-0322), BPXA Crisis Center in Anchorage (907-564-5243), and the ConocoPhillips Incident Command Center in Anchorage (907-265-1000). The following cultural site(s) are located in the area depicted on this sheet:

- TES-00019, 20, 21, and 22 west of Teshekpuk Lake at the top of this map



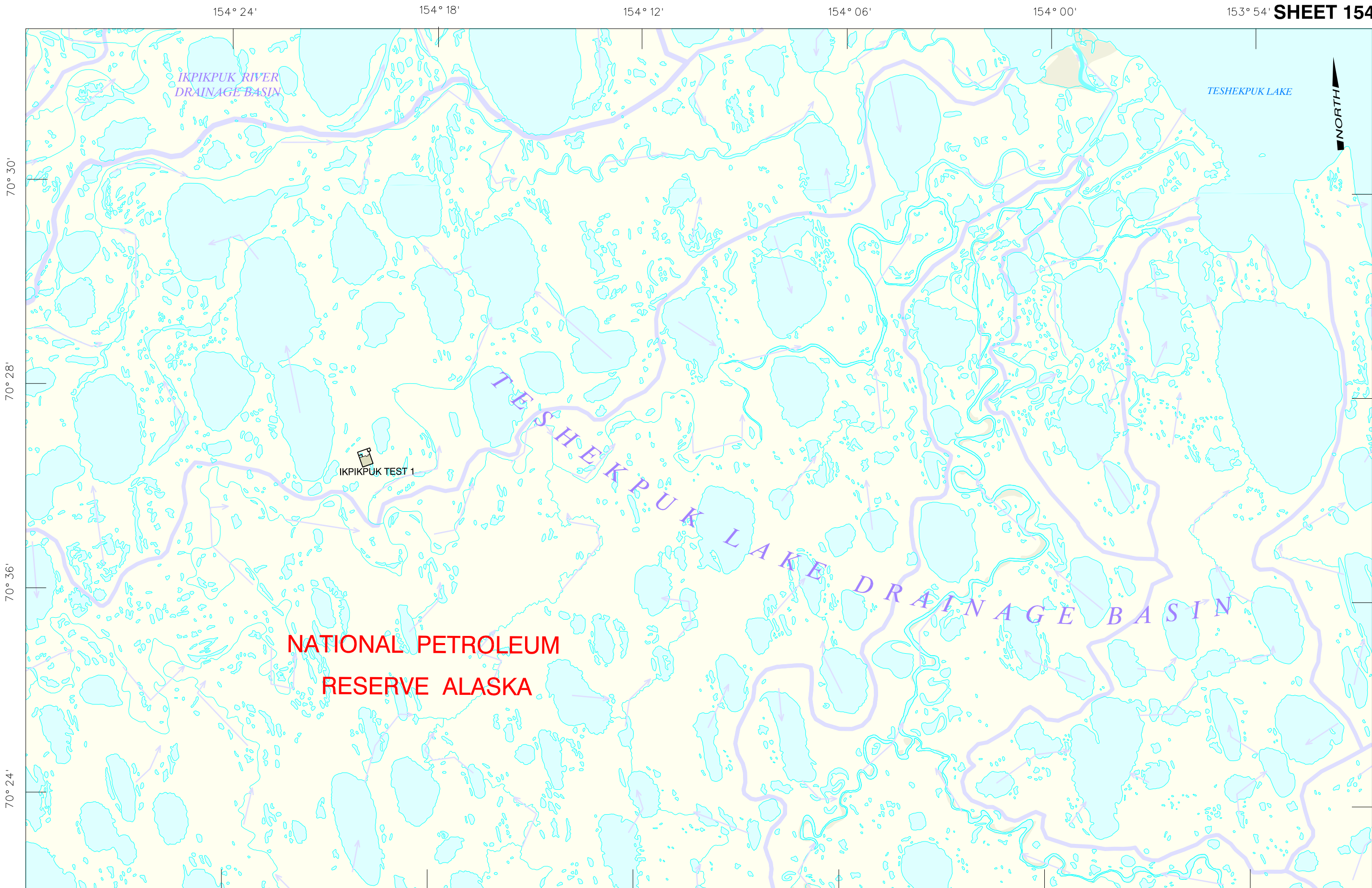
### AIR ACCESS\*

- There is an aircraft landing strip located at Dew Line Site Lonely (Sheet 141) approximately 40 miles northeast of Ikpikpuk Test 1. This 5,000-ft gravel airstrip is unattended and closed to the public. Runway is not maintained and condition is unknown.
- Commercial and air freight services are available at the Barrow airport (not on maps) approximately 80 miles to the northwest. This is a 6,500-ft, asphalt airstrip.

### VESSEL ACCESS\* AND HYDROGRAPHIC CONDITIONS

- There are no marine waters or shorelines on this map.

\*See the latest *Supplement, Alaska* and United States Coast Pilot for current information on air and vessel access, respectively.



Continue on sheet 153

Continue on sheet 155

**NATIONAL PETROLEUM  
RESERVE ALASKA**

**TESHEKPUK LAKE DRAINAGE BASIN**

**IKPIJUK RIVER  
DRAINAGE BASIN**

**TESHEKPUK LAKE**

**IKPIJUK TEST 1**

1:63360

0 2500 5000 FEET





### PRIORITY PROTECTION SITES

- Priority protection sites have not been identified pending field reconnaissance.

### GENERAL SENSITIVITIES

- Teshekpuk Lake provides habitat for fish.

### CULTURAL SITES

Information on the exact locations of cultural sites is confidential. This information is contained in the *North Slope Archaeological Data* document, copies of which are kept at the following offices: State Historical Preservation Officer (SHPO) (907-269-8721), ACS in Deadhorse (907-659-2405), North Slope Borough Lands Division (907-852-0322), North Slope Borough Lands Division (907-852-0322), BPXA Crisis Center in Anchorage (907-564-5243), and the ConocoPhillips Incident Command Center in Anchorage (907-265-1000). The following cultural site(s) are located in the area depicted on this sheet:

- TES-00012 southwest of the large bay on Teshekpuk Lake on this map
- TES-00013 on the southwest shore of the large bay on Teshekpuk Lake on this map
- TES-00014 on the southeast shore of the large bay on Teshekpuk Lake on this map
- TES-00015 and 16 near the point east of the smaller of the two inlets on Teshekpuk Lake on this map
- TES-00017 near the south end of the smaller of the two inlets on Teshekpuk Lake on this map
- TES-00018 near the south end of the larger of the two inlets on Teshekpuk Lake on this map
- TES-00052 near Kealok Creek near the bottom of this map



### AIR ACCESS\*

- There is an aircraft landing strip located at the Dew Line Site on the north shore of Kogru River inlet (Sheet 152) approximately 30 miles to the northeast. This is a 1,800-ft gravel airstrip. Runway condition is unknown.
- There is an aircraft landing strip located at the Alpine oil field (Sheet 20) approximately 60 miles to the east. This is a 5,000-ft gravel airstrip operated by ConocoPhillips.
- Commercial and air freight services are available at the City of Nuiqsut airport (Sheet 24) approximately 60 miles to the southeast. This is a 4,300-ft, unattended gravel airstrip. Visual inspection prior to use is recommended.

### VESSEL ACCESS\* AND HYDROGRAPHIC CONDITIONS

- There are no marine waters or shorelines on this map.

\*See the latest *Supplement, Alaska* and United States Coast Pilot for current information on air and vessel access, respectively.

153° 48'

153° 42'

153° 36'

153° 30'

153° 24'

153° 18'

*TESHEKPUK LAKE*



70° 30'

70° 30'

70° 28'

70° 28'

70° 36'

70° 36'

70° 24'

70° 24'

*TESHEKPUK LAKE DRAINAGE BASIN*

**NATIONAL PETROLEUM  
RESERVE ALASKA**

*KEALOK CREEK*

Continue on sheet 154

Continue on sheet 156

1:63360

0 2500 5000 FEET



### PRIORITY PROTECTION SITES

- Priority protection sites have not been identified pending field reconnaissance.

### GENERAL SENSITIVITIES

- Coastal areas and areas between Teshekpuk Lake and the coast support high concentrations of breeding, nesting, brood-rearing, and molting waterbirds during the summer.

### CULTURAL SITES

Information on the exact locations of cultural sites is confidential. This information is contained in the *North Slope Archaeological Data* document, copies of which are kept at the following offices: State Historical Preservation Officer (SHPO) (907-269-8721), ACS in Deadhorse (907-659-2405), North Slope Borough Lands Division (907-852-0322), North Slope Borough Lands Division (907-852-0322), BPXA Crisis Center in Anchorage (907-564-5243), and the ConocoPhillips Incident Command Center in Anchorage (907-265-1000). The following cultural site(s) are located in the area depicted on this sheet:

- HAR-00050 and 72 in the bottom right quadrant of this map



### AIR ACCESS\*

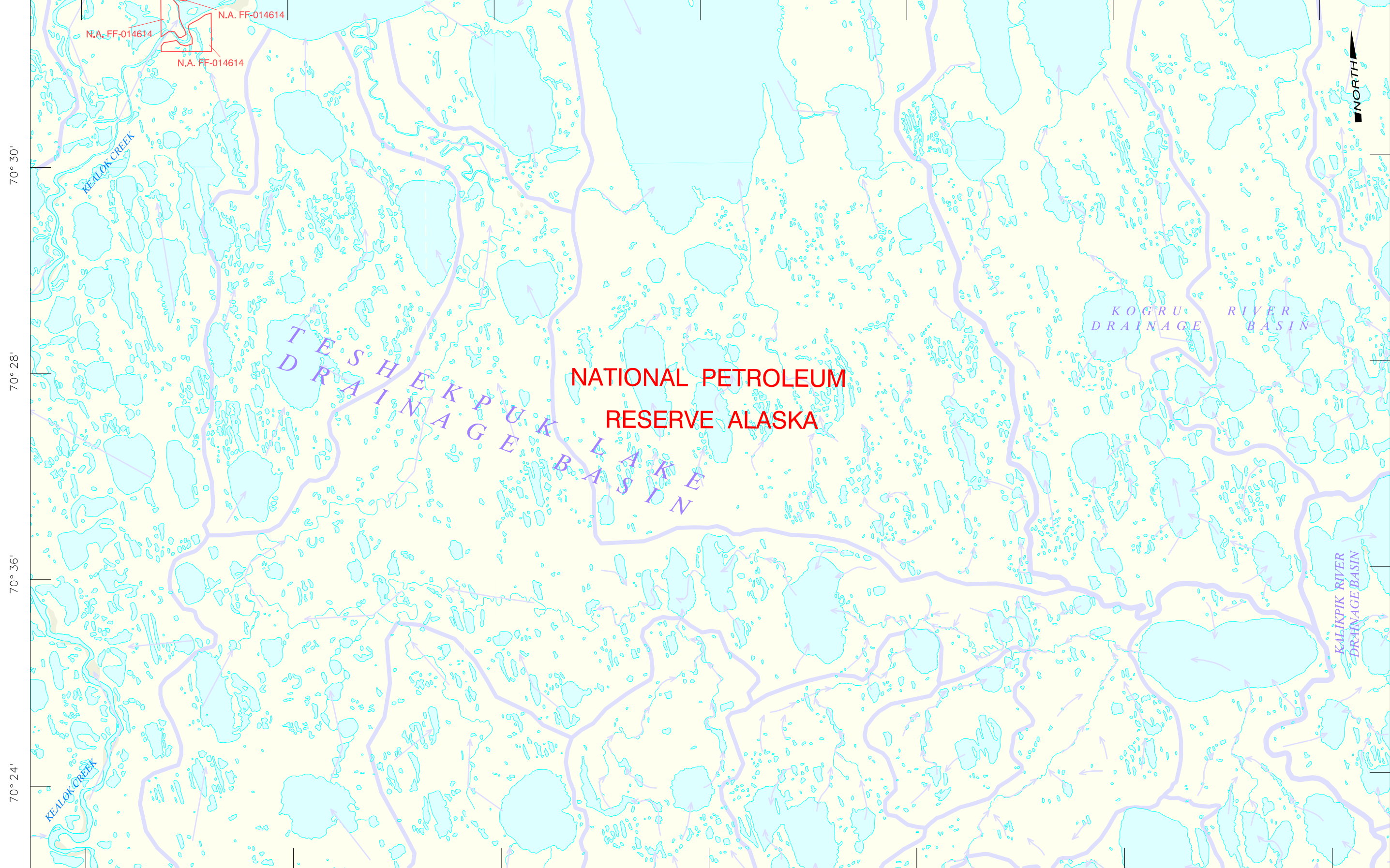
- There is an aircraft landing strip located at the Dew Line Site on the north shore of Kogru River inlet (Sheet 152) approximately 20 miles to the northeast. This is a 1,800-ft gravel airstrip. Runway condition is unknown.
- There is an aircraft landing strip located at the Alpine oil field (Sheet 20) approximately 45 miles to the east. This is a 5,000-ft gravel airstrip operated by ConocoPhillips.
- Commercial and air freight services are available at the City of Nuiqsut airport (Sheet 24) approximately 50 miles to the southeast. This is a 4,300-ft, unattended gravel airstrip. Visual inspection prior to use is recommended.

### VESSEL ACCESS\* AND HYDROGRAPHIC CONDITIONS

- There are no marine waters or shorelines on this map.

\*See the latest *Supplement, Alaska* and United States Coast Pilot for current information on air and vessel access, respectively.

153° 12' 153° 06' 153° 00' 152° 54' 152° 48' 152° 42'



Continue on sheet 155

Continue on sheet 157

70° 30' 70° 28' 70° 36' 70° 24'

70° 30' 70° 28' 70° 26' 70° 24'

NATIONAL PETROLEUM RESERVE ALASKA

1:63360 0 2500 5000 FEET





**PRIORITY PROTECTION SITES**

SITE NO.	DESCRIPTION	SENSITIVITY	TACTIC	EST. BOOM
PS48	Kalikpik River mouth and adjoining inlet	Most sensitive during open water season. Peat shoreline. Keep oil from entering river.	C-13 or C-14	2,300'
PS49	Kalikpik River northern channel mouth	Most sensitive during open water season. Inundated low-lying tundra shoreline and peat shoreline. Keep oil from entering channel.	C-13 or C-14	1,300'

**GENERAL SENSITIVITIES**

- Concentrations of swans, ducks, geese, and shorebirds are present here in June before open water is present elsewhere.
- Plan to deploy bird-hazing systems during the open-water season.
- Coastal areas support high concentrations of breeding, nesting, brood-rearing, and molting waterbirds during the summer.
- The Kalikpik River and its tributary provide habitat for anadromous whitefish and resident fish.

**CULTURAL SITES**

Information on the exact locations of cultural sites is confidential. This information is contained in the *North Slope Archaeological Data* document, copies of which are kept at the following offices: State Historical Preservation Officer (SHPO) (907-269-8721), ACS in Deadhorse (907-659-2405), North Slope Borough Lands Division (907-852-0322), North Slope Borough Lands Division (907-852-0322), BPXA Crisis Center in Anchorage (907-564-5243), and the ConocoPhillips Incident Command Center in Anchorage (907-265-1000). The following cultural site(s) are located in the area depicted on this sheet:

- HAR-00047 near the bottom left corner of this map



**AIR ACCESS\***

- There is an aircraft landing strip located at the Dew Line Site on the north shore of Kogru River inlet (Sheet 152) approximately 5 miles north of North Kalikpik 1. This is a 1,800-ft gravel airstrip. Runway condition is unknown.
- There is an aircraft landing strip located at the Alpine oil field (Sheet 20) approximately 35 miles southeast of North Kalikpik 1. This is a 5,000-ft gravel airstrip operated by ConocoPhillips.
- Commercial and air freight services are available at the City of Nuiqsut airport (Sheet 24) approximately 38 miles southeast of North Kalikpik 1. This is a 4,300-ft, unattended gravel airstrip. Visual inspection prior to use is recommended.

**VESSEL ACCESS\* AND HYDROGRAPHIC CONDITIONS**

- Extensive shoaling and high sediment transport limit or restrict navigation by sea. Water depths ranging from 2 to 3 ft restrict or preclude marine access.
- Water depths are very shallow in the nearshore areas.
- Kalikpik River annual average discharge rate is 55 cfs.

**COUNTERMEASURES CONSIDERATIONS**

- Sand-silt beaches are very narrow (less than 20 ft wide). Bluffs are often too high for backshore access.
- The delta of the Kalikpik River is a very complex polygonal tundra and sand-silt flats area. Access is uncertain.
- The west end of Harrison Bay and the mouth of the Kalikpik River will collect floating oil during sustained east or northeast winds.

\*See the latest *Supplement, Alaska* and United States Coast Pilot for current information on air and vessel access, respectively.

152° 30'

152° 24'

152° 18'

152° 12'

152° 06'

152° 00'

70° 30'

70° 28'

70° 36'

70° 24'

70° 30'

70° 28'

70° 26'

70° 24'

Continue on sheet 3

Continue on sheet 4

Continue on sheet 113

Continue on sheet 156



NATIONAL PETROLEUM RESERVE ALASKA

NORTH KALIKPIK

KOGRUGE RIVER BASIN  
DRAINAGE

KALIKPIK RIVER BASIN  
DRAINAGE

KALIKPIK RIVER

PS49

PS48

1:63360

0 2500 5000 FEET



### PRIORITY PROTECTION SITES

- Priority protection sites have not been identified pending field reconnaissance.

### GENERAL SENSITIVITIES

- The Oumalik and Ikpikpuk rivers provide habitat for fish.



### AIR ACCESS\*

- There is an aircraft landing strip located at Dew Line Site Lonely (Sheet 141) approximately 60 miles to the north-east. This 5,000-ft gravel airstrip is unattended and closed to the public. Runway is not maintained and condition is unknown.
- Commercial and air freight services are available at the Barrow airport (not on maps) approximately 80 miles to the northwest. This is a 6,500-ft, asphalt airstrip.

### VESSEL ACCESS\* AND HYDROGRAPHIC CONDITIONS

- There are no marine waters or shorelines on this map.

\*See the latest *Supplement, Alaska* and United States Coast Pilot for current information on air and vessel access, respectively.





Continue on sheet 159

1:63360

0 2500 5000 FEET





### PRIORITY PROTECTION SITES

- Priority protection sites have not been identified pending field reconnaissance.



### AIR ACCESS\*

- There is an aircraft landing strip located at the Dew Line Site on the north shore of Kogru River inlet (Sheet 152) approximately 50 miles to the northeast. This is a 1,800-ft gravel airstrip. Runway condition is unknown.
- There is an aircraft landing strip located at the Alpine oil field (Sheet 20) approximately 80 miles to the east. This is a 5,000-ft gravel airstrip operated by ConocoPhillips.
- Commercial and air freight services are available at the City of Nuiqsut airport (Sheet 24) approximately 80 miles to the southeast. This is a 4,300-ft, unattended gravel airstrip. Visual inspection prior to use is recommended.

### VESSEL ACCESS\* AND HYDROGRAPHIC CONDITIONS

- There are no marine waters or shorelines on this map.

\*See the latest *Supplement, Alaska* and United States Coast Pilot for current information on air and vessel access, respectively.

154° 36'

154° 30'

154° 24'

154° 18'

154° 12'

154° 06'

70° 22'

70° 20'

70° 18'

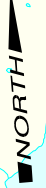
70° 16'

70° 22'

70° 20'

70° 18'

70° 16'



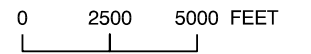
**NATIONAL PETROLEUM  
RESERVE ALASKA**

*TESHEKPUK LAKE  
DRAINAGE BASIN*

N.A. FF-014581A

*IKPIKPUK RIVER  
DRAINAGE BASIN*

1:63360



Continue on sheet 158

Continue on sheet 160



### PRIORITY PROTECTION SITES

- Priority protection sites have not been identified pending field reconnaissance.

### CULTURAL SITES

Information on the exact locations of cultural sites is confidential. This information is contained in the *North Slope Archaeological Data* document, copies of which are kept at the following offices: State Historical Preservation Officer (SHPO) (907-269-8721), ACS in Deadhorse (907-659-2405), North Slope Borough Lands Division (907-852-0322), North Slope Borough Lands Division (907-852-0322), BPXA Crisis Center in Anchorage (907-564-5243), and the ConocoPhillips Incident Command Center in Anchorage (907-265-1000). The following cultural site(s) are located in the area depicted on this sheet:

- TES-00052 near the upper right corner of this map



### AIR ACCESS\*

- There is an aircraft landing strip located at the Dew Line Site on the north shore of Kogru River inlet (Sheet 152) approximately 35 miles northeast of Kealok Creek. This is a 1,800-ft gravel airstrip. Runway condition is unknown.
- There is an aircraft landing strip located at the Alpine oil field (Sheet 20) approximately 65 miles to the east. This is a 5,000-ft gravel airstrip operated by ConocoPhillips.
- Commercial and air freight services are available at the City of Nuiqsut airport (Sheet 24) approximately 65 miles to the southeast. This is a 4,300-ft, unattended gravel airstrip. Visual inspection prior to use is recommended.

### VESSEL ACCESS\* AND HYDROGRAPHIC CONDITIONS

- There are no marine waters or shorelines on this map.

\*See the latest *Supplement, Alaska* and United States Coast Pilot for current information on air and vessel access, respectively.

154° 00'

153° 54'

153° 48'

153° 42'

153° 36'

153° 30'

70° 22'

70° 20'

70° 18'

70° 16'

70° 22'

70° 20'

70° 18'

70° 16'



TESHEKPUK LAKE  
DRAINAGE BASIN

**NATIONAL PETROLEUM  
RESERVE ALASKA**

KEALOK CREEK

KALIKPIK RIVER  
DRAINAGE BASIN

1:63360

0 2500 5000 FEET

Continue on sheet 159

Continue on sheet 161





### PRIORITY PROTECTION SITES

- Priority protection sites have not been identified pending field reconnaissance.

### CULTURAL SITES

Information on the exact locations of cultural sites is confidential. This information is contained in the *North Slope Archaeological Data* document, copies of which are kept at the following offices: State Historical Preservation Officer (SHPO) (907-269-8721), ACS in Deadhorse (907-659-2405), North Slope Borough Lands Division (907-852-0322), North Slope Borough Lands Division (907-852-0322), BPXA Crisis Center in Anchorage (907-564-5243), and the ConocoPhillips Incident Command Center in Anchorage (907-265-1000). The following cultural site(s) are located in the area depicted on this sheet:

- TES-00057 west of Kealok Creek near top of this map
- TES-00059 near the top left corner of this map
- TES-00052 in top left corner of this map
- TES-00023, 26, 47, and 51 in lower left quadrant of this map
- HAR-00006 near center of this map



### AIR ACCESS\*

- There is an aircraft landing strip located at the Dew Line Site on the north shore of Kogru River inlet (Sheet 152) approximately 25 miles to the northeast. This is a 1,800-ft gravel airstrip. Runway condition is unknown.
- There is an aircraft landing strip located at the Alpine oil field (Sheet 20) approximately 50 miles to the east. This is a 5,000-ft gravel airstrip operated by ConocoPhillips.
- Commercial and air freight services are available at the City of Nuiqsut airport (Sheet 24) approximately 50 miles to the southeast. This is a 4,300-ft, unattended gravel airstrip. Visual inspection prior to use is recommended.

### VESSEL ACCESS\* AND HYDROGRAPHIC CONDITIONS

- There are no marine waters or shorelines on this map.

\*See the latest *Supplement, Alaska* and United States Coast Pilot for current information on air and vessel access, respectively.

153° 18'

153° 12'

153° 06'

153° 00'

152° 54'

152° 48'

70° 22'

70° 20'

70° 18'

70° 16'

70° 22'

70° 20'

70° 18'

70° 16'



TESHUKPUK LAKE DRAINAGE BASIN

KEALOK CREEK

Cabins

NATIONAL PETROLEUM RESERVE ALASKA

KALIKPIK RIVER DRAINAGE BASIN

KALIKPIK RIVER

N INIGOK 1

1:63360

0 2500 5000 FEET

Continue on sheet 160

Continue on sheet 162



### PRIORITY PROTECTION SITES

- Priority protection sites have not been identified pending field reconnaissance.

### GENERAL SENSITIVITIES

- Coastal areas support high concentrations of breeding, nesting, brood-rearing, and molting waterbirds during the summer.
- The Kalikpik River provides habitat for resident fish.
- Fish Creek provides habitat for anadromous whitefish and resident fish.

### CULTURAL SITES

Information on the exact locations of cultural sites is confidential. This information is contained in the *North Slope Archaeological Data* document, copies of which are kept at the following offices: State Historical Preservation Officer (SHPO) (907-269-8721), ACS in Deadhorse (907-659-2405), North Slope Borough Lands Division (907-852-0322), North Slope Borough Lands Division (907-852-0322), BPXA Crisis Center in Anchorage (907-564-5243), and the ConocoPhillips Incident Command Center in Anchorage (907-265-1000). The following cultural site(s) are located in the area depicted on this sheet:

- HAR-00005 near Fish Creek
- HAR-00048 and 49 east of Kalikpik River near the vertical center of this map
- HAR-00009 west of Kalikpik River near the vertical center of this map



### AIR ACCESS\*

- There is an aircraft landing strip located at the Dew Line Site on the north shore of Kogru River inlet (Sheet 152) approximately 25 miles north of Fish Creek. This is a 1,800-ft gravel airstrip. Runway condition is unknown.
- There is an aircraft landing strip located at the Alpine oil field (Sheet 20) approximately 30 miles northeast of Fish Creek. This is a 5,000-ft gravel airstrip operated by ConocoPhillips.
- Commercial and air freight services are available at the City of Nuiqsut airport (Sheet 24) approximately 26 miles east of Fish Creek. This is a 4,300-ft, unattended gravel airstrip. Visual inspection prior to use is recommended.

### VESSEL ACCESS\* AND HYDROGRAPHIC CONDITIONS

- There are no marine waters or shorelines on this map.

\*See the latest *Supplement, Alaska* and United States Coast Pilot for current information on air and vessel access, respectively.

152° 42'

152° 36'

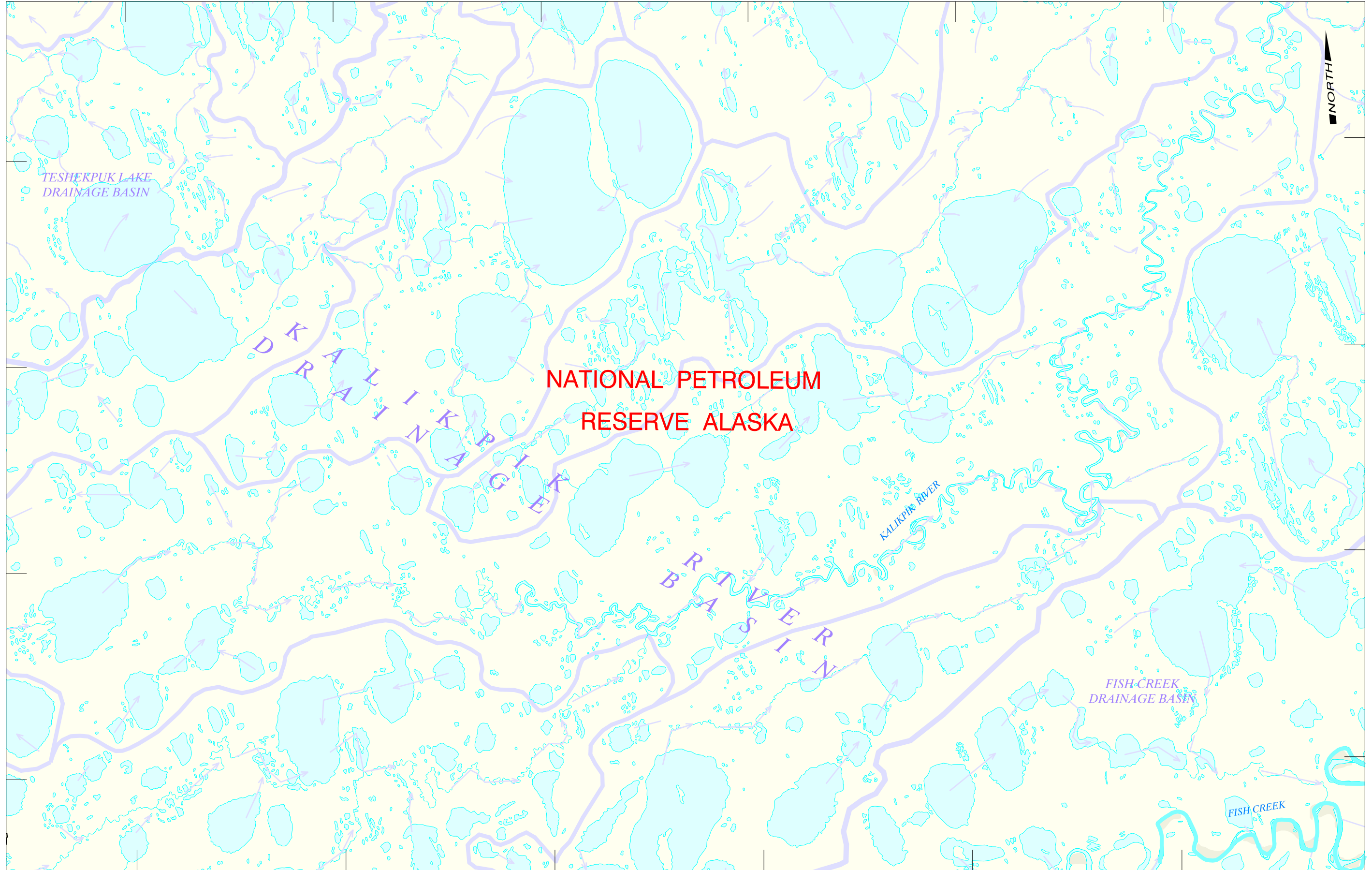
152° 30'

152° 24'

152° 18'

152° 12'

**SHEET 162**



Continue on sheet 161

Continue on sheet 118

Continue on sheet 123

70° 22'

70° 20'

70° 18'

70° 16'

70° 22'

70° 20'

70° 18'

70° 16'

1:63360

0 2500 5000 FEET





### PRIORITY PROTECTION SITES

- Priority protection sites have not been identified pending field reconnaissance.

### GENERAL SENSITIVITIES

- The Oumalik and Ikpikpuk rivers provide habitat for fish.



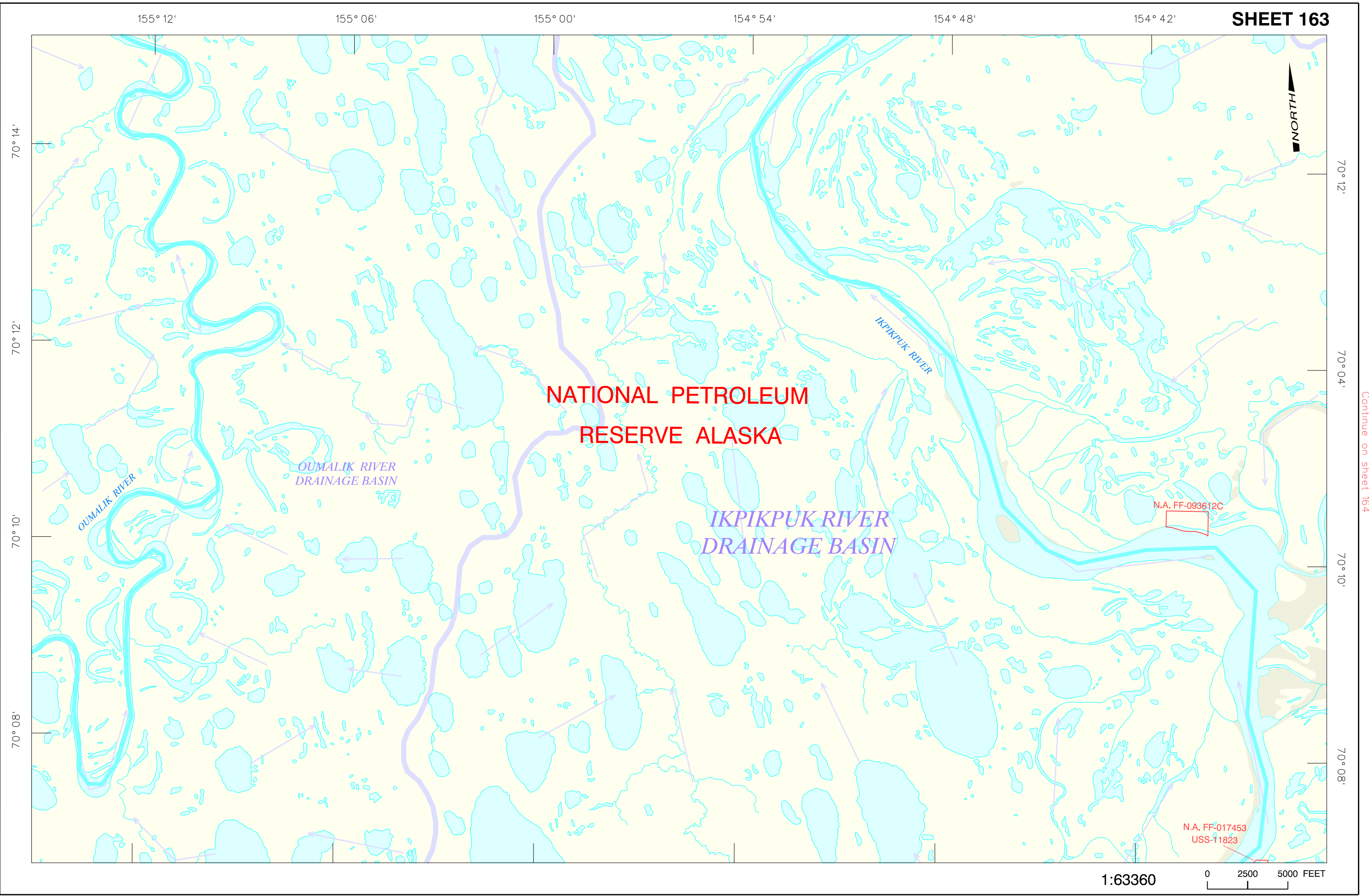
### AIR ACCESS\*

- There is an aircraft landing strip located at Inigok Test 1 (Sheet 171) approximately 45 miles to the southeast. This an approximately 5,000-ft gravel airstrip. Runway condition is unknown.
- Commercial and air freight services are available at the Barrow airport (not on maps) approximately 85 miles to the northwest. This is a 6,500-ft, asphalt airstrip.

### VESSEL ACCESS\* AND HYDROGRAPHIC CONDITIONS

- There are no marine waters or shorelines on this map.

\*See the latest *Supplement, Alaska* and United States Coast Pilot for current information on air and vessel access, respectively.



Continue on sheet 164



### PRIORITY PROTECTION SITES

- Priority protection sites have not been identified pending field reconnaissance.



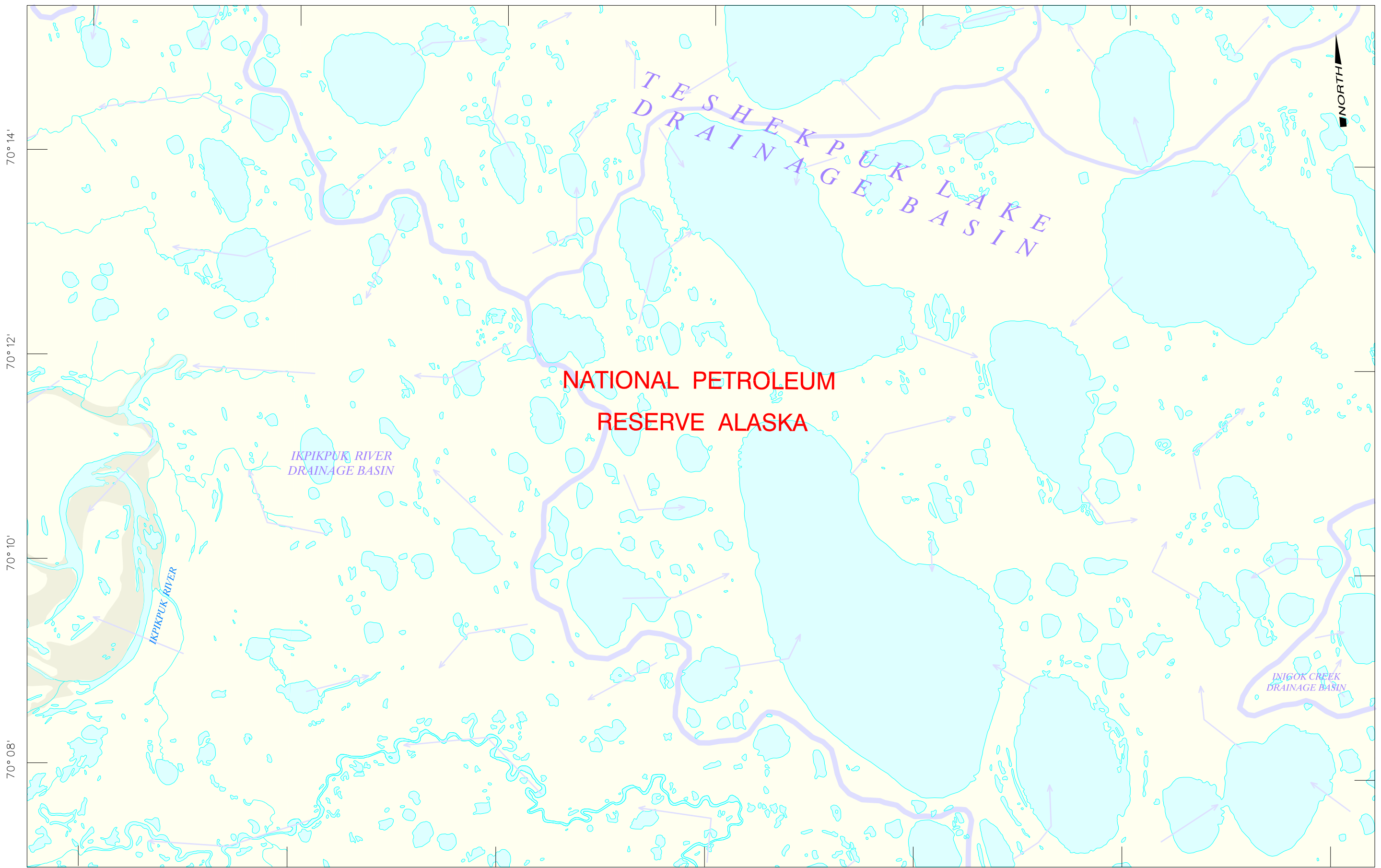
### AIR ACCESS\*

- There is an aircraft landing strip located at Inigok Test 1 (Sheet 171) approximately 30 miles to the southeast. This an approximately 5,000-ft gravel airstrip. Runway condition is unknown.
- Commercial and air freight services are available at the Barrow airport (not on maps) approximately 95 miles to the northwest. This is a 6,500-ft, asphalt airstrip.

### VESSEL ACCESS\* AND HYDROGRAPHIC CONDITIONS

- There are no marine waters or shorelines on this map.

\*See the latest *Supplement, Alaska* and United States Coast Pilot for current information on air and vessel access, respectively.



Continue on sheet 163

Continue on sheet 165

1:63360

0 2500 5000 FEET





### PRIORITY PROTECTION SITES

- Priority protection sites have not been identified pending field reconnaissance.



### AIR ACCESS\*

- There is an aircraft landing strip located at Inigok Test 1 (Sheet 171) approximately 20 miles to the southeast. This is an approximately 5,000-ft gravel airstrip. Runway condition is unknown.
- There is an aircraft landing strip located at the Alpine oil field (Sheet 20) approximately 65 miles to the northeast. This is a 5,000-ft gravel airstrip operated by ConocoPhillips.
- Commercial and air freight services are available at the City of Nuiqsut airport (Sheet 24) approximately 65 miles to the east. This is a 4,300-ft, unattended gravel airstrip. Visual inspection prior to use is recommended.

### VESSEL ACCESS\* AND HYDROGRAPHIC CONDITIONS

- There are no marine waters or shorelines on this map.

\*See the latest *Supplement, Alaska* and United States Coast Pilot for current information on air and vessel access, respectively.

154° 00'

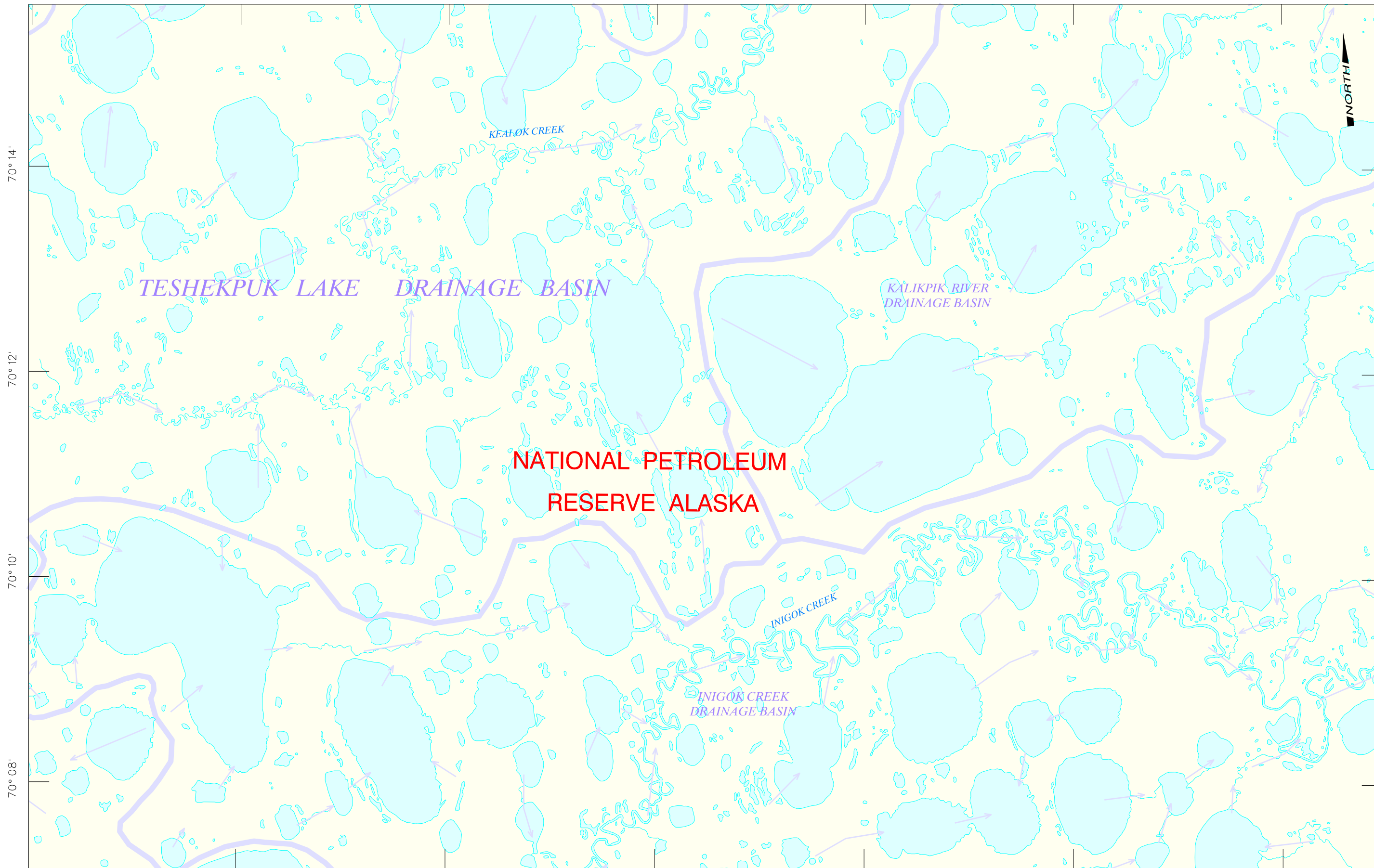
153° 54'

153° 48'

153° 42'

153° 36'

153° 30'



Continue on sheet 164

Continue on sheet 166

**NATIONAL PETROLEUM  
RESERVE ALASKA**

1:63360

0 2500 5000 FEET



### PRIORITY PROTECTION SITES

- Priority protection sites have not been identified pending field reconnaissance.

### CULTURAL SITES

Information on the exact locations of cultural sites is confidential. This information is contained in the *North Slope Archaeological Data* document, copies of which are kept at the following offices: State Historical Preservation Officer (SHPO) (907-269-8721), ACS in Deadhorse (907-659-2405), North Slope Borough Lands Division (907-852-0322), North Slope Borough Lands Division (907-852-0322), BPXA Crisis Center in Anchorage (907-564-5243), and the ConocoPhillips Incident Command Center in Anchorage (907-265-1000). The following cultural site(s) are located in the area depicted on this sheet:

- TES-00026 on left side of this map near the top



### AIR ACCESS\*

- There is an aircraft landing strip located at Inigok Test 1 (Sheet 171) approximately 20 miles southeast of N Inigok 1. This is an approximately 5,000-ft gravel airstrip. Runway condition is unknown.
- There is an aircraft landing strip located at the Alpine oil field (Sheet 20) approximately 45 miles northeast of N Inigok 1. This is a 5,000-ft gravel airstrip operated by ConocoPhillips.
- Commercial and air freight services are available at the City of Nuiqsut airport (Sheet 24) approximately 43 miles east of N Inigok 1. This is a 4,300-ft, unattended gravel airstrip. Visual inspection prior to use is recommended.

### VESSEL ACCESS\* AND HYDROGRAPHIC CONDITIONS

- There are no marine waters or shorelines on this map.

\*See the latest *Supplement, Alaska* and United States Coast Pilot for current information on air and vessel access, respectively.

N INIGOK 1



IKPIKPUK RIVER  
DRAINAGE BASIN

INIGOK CREEK  
DRAINAGE BASIN

INIGOK CREEK

INIGOK CREEK

**NATIONAL PETROLEUM  
RESERVE ALASKA**

Continue on sheet 165

Continue on sheet 167

70° 14'

70° 14'

70° 12'

70° 12'

70° 10'

70° 10'

70° 08'

70° 08'

1:63360

0 2500 5000 FEET





### PRIORITY PROTECTION SITES

- Priority protection sites have not been identified pending field reconnaissance.

### GENERAL SENSITIVITIES

- Fish Creek provides habitat for anadromous whitefish and resident fish.
- Judy Creek and its tributary provide habitat for anadromous whitefish and resident fish.



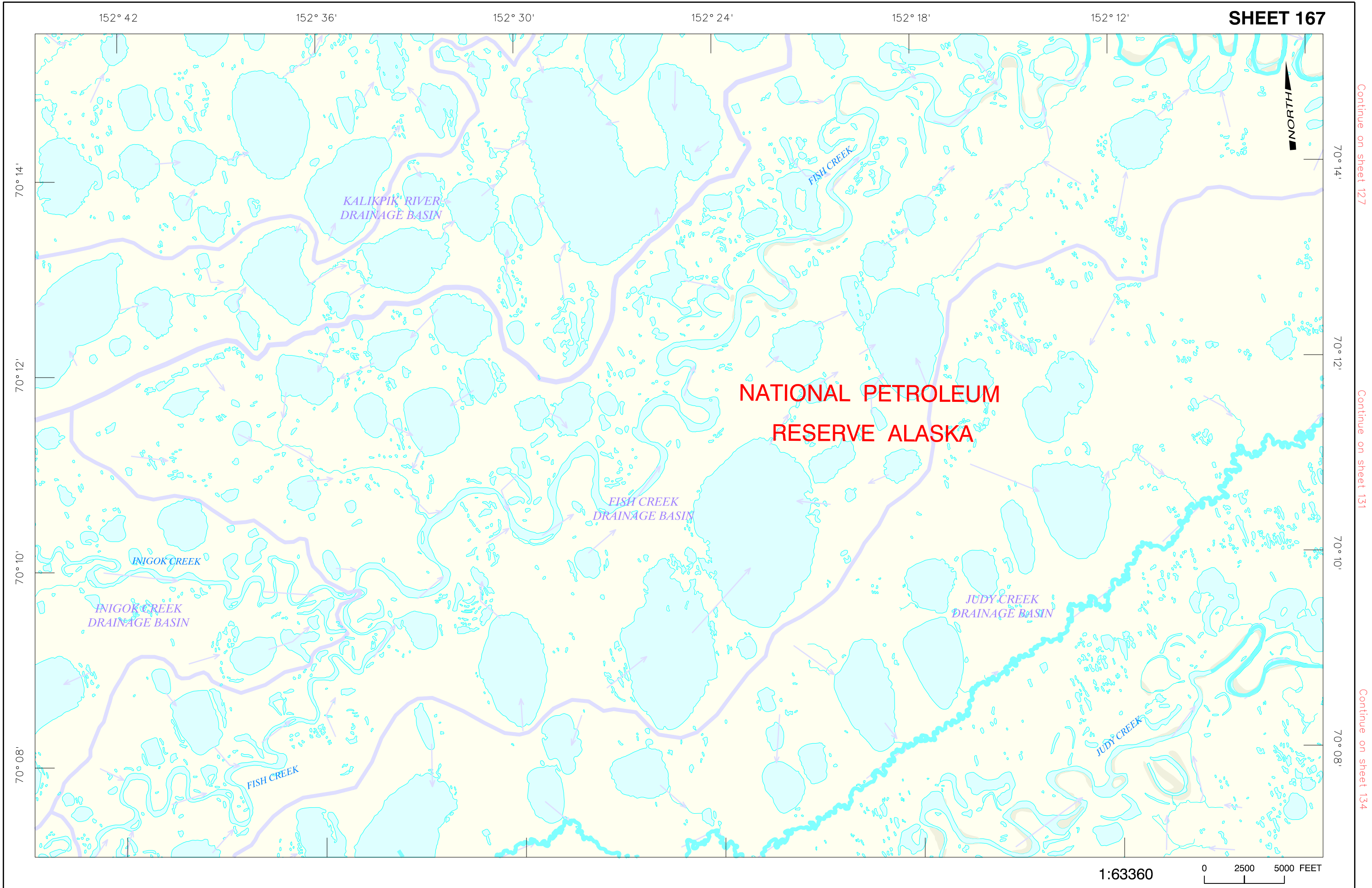
### AIR ACCESS\*

- There is an aircraft landing strip located at Inigok Test 1 (Sheet 171) approximately 20 miles to the southwest. This is an approximately 5,000-ft gravel airstrip. Runway condition is unknown.
- There is an aircraft landing strip located at the Alpine oil field (Sheet 20) approximately 35 miles to the northeast. This is a 5,000-ft gravel airstrip operated by ConocoPhillips.
- Commercial and air freight services are available at the City of Nuiqsut airport (Sheet 24) approximately 35 miles to the east. This is a 4,300-ft, unattended gravel airstrip. Visual inspection prior to use is recommended.

### VESSEL ACCESS\* AND HYDROGRAPHIC CONDITIONS

- There are no marine waters or shorelines on this map.

\*See the latest *Supplement, Alaska* and United States Coast Pilot for current information on air and vessel access, respectively.



Continue on sheet 166

Continue on sheet 127

Continue on sheet 131

Continue on sheet 134

1:63360

0 2500 5000 FEET



### PRIORITY PROTECTION SITES

- Priority protection sites have not been identified pending field reconnaissance.

### GENERAL SENSITIVITIES

- The Oumalik and Ikpikpuk rivers provide habitat for fish.



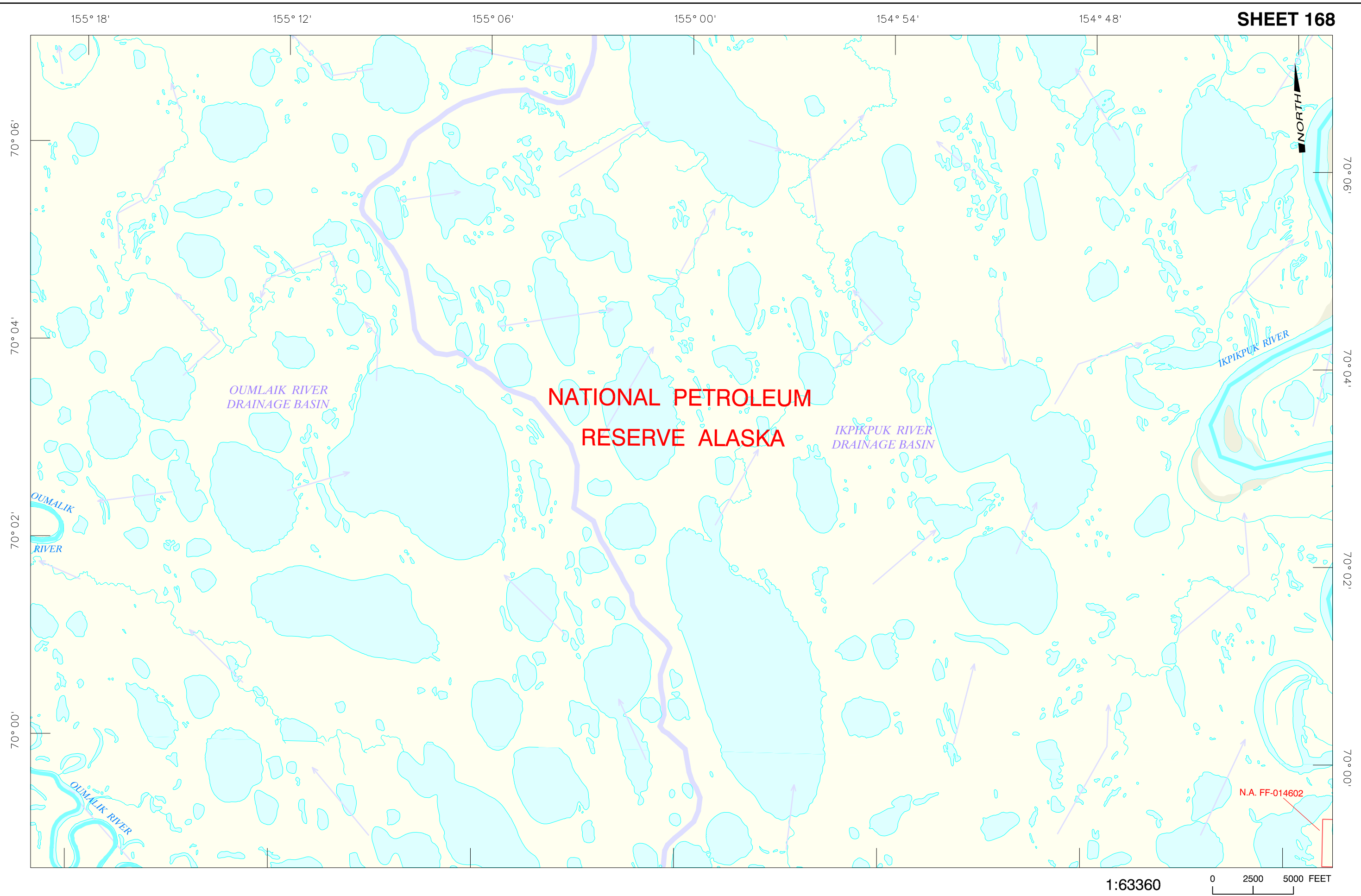
### AIR ACCESS\*

- There is an aircraft landing strip located at Inigok Test 1 (Sheet 171) approximately 40 miles east of the Ikpikpuk River. This is an approximately 5,000-ft gravel airstrip. Runway condition is unknown.
- Commercial and air freight services are available at the Barrow airport (not on maps) approximately 95 miles to the northwest. This is a 6,500-ft, asphalt airstrip.

### VESSEL ACCESS\* AND HYDROGRAPHIC CONDITIONS

- There are no marine waters or shorelines on this map.

\*See the latest *Supplement, Alaska* and United States Coast Pilot for current information on air and vessel access, respectively.



Continue on sheet 169





### PRIORITY PROTECTION SITES

- Priority protection sites have not been identified pending field reconnaissance.

### GENERAL SENSITIVITIES

- The Ikpikpuk River provides habitat for fish.

### CULTURAL SITES

Information on the exact locations of cultural sites is confidential. This information is contained in the *North Slope Archaeological Data* document, copies of which are kept at the following offices: State Historical Preservation Officer (SHPO) (907-269-8721), ACS in Deadhorse (907-659-2405), North Slope Borough Lands Division (907-852-0322), North Slope Borough Lands Division (907-852-0322), BPXA Crisis Center in Anchorage (907-564-5243), and the ConocoPhillips Incident Command Center in Anchorage (907-265-1000). The following cultural site(s) are located in the area depicted on this sheet:

- TES-00002 and 58 on east shore of Ikpikpuk River on lower portion of this map
- TES-00010 east of Ikpikpuk River tributary near bottom of this map



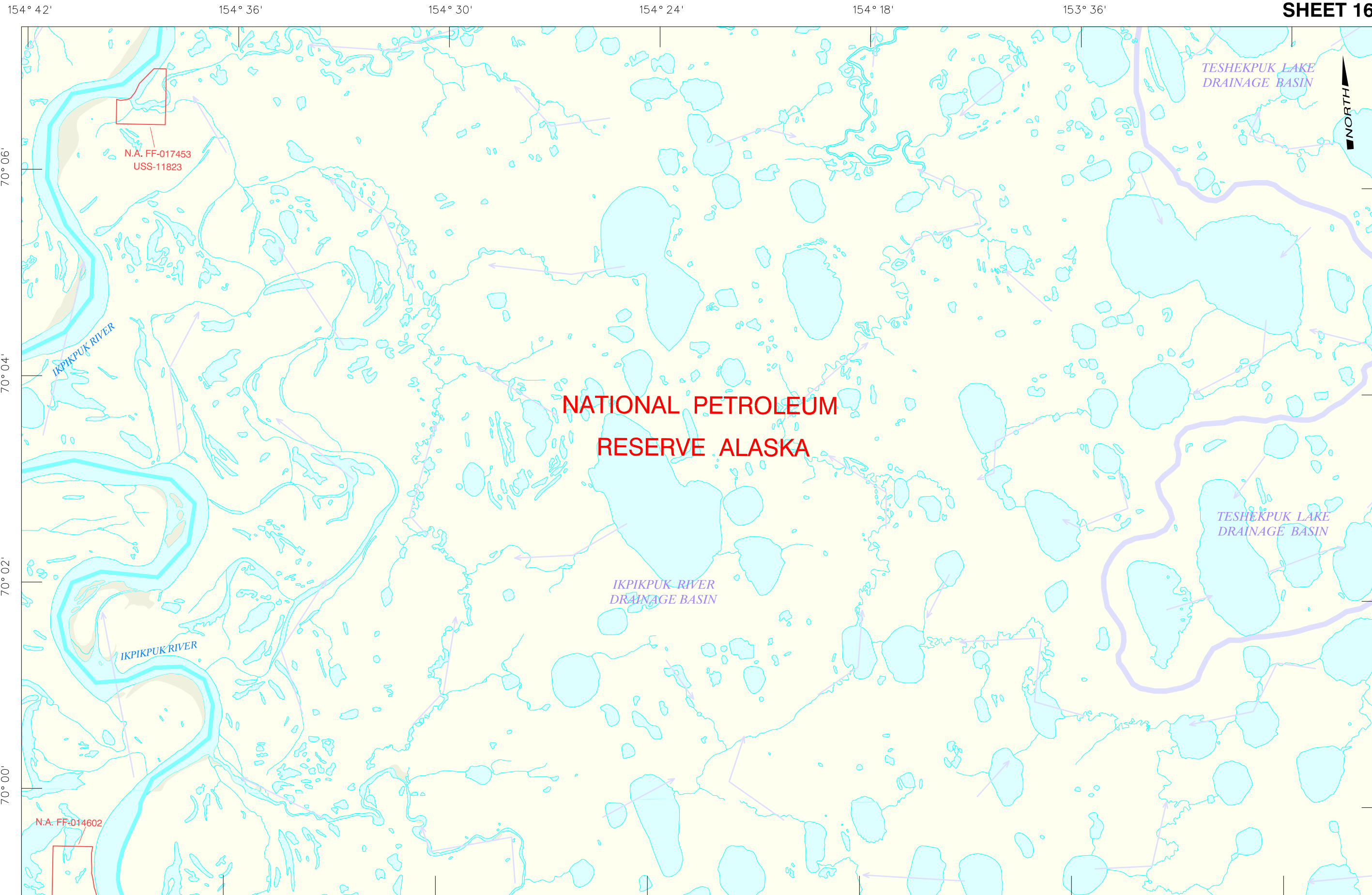
### AIR ACCESS\*

- There is an aircraft landing strip located at Inigok Test 1 (Sheet 171) approximately 35 miles east of the Ikpikpuk River. This is an approximately 5,000-ft gravel airstrip. Runway condition is unknown.
- Commercial and air freight services are available at the Barrow airport (not on maps) approximately 105 miles to the northwest. This is a 6,500-ft, asphalt airstrip.

### VESSEL ACCESS\* AND HYDROGRAPHIC CONDITIONS

- There are no marine waters or shorelines on this map.

\*See the latest *Supplement, Alaska* and United States Coast Pilot for current information on air and vessel access, respectively.



Continue on sheet 168

Continue on sheet 170

1:63360

0 2500 5000 FEET



### PRIORITY PROTECTION SITES

- Priority protection sites have not been identified pending field reconnaissance.



### AIR ACCESS\*

- There is an aircraft landing strip located at Inigok Test 1 (Sheet 171) approximately 16 miles to the east. This is an approximately 5,000-ft gravel airstrip. Runway condition is unknown.
- There is an aircraft landing strip located at the Alpine oil field (Sheet 20) approximately 70 miles to the northeast. This is a 5,000-ft gravel airstrip operated by ConocoPhillips.
- Commercial and air freight services are available at the City of Nuiqsut airport (Sheet 24) approximately 65 miles to the northeast. This is a 4,300-ft, unattended gravel airstrip. Visual inspection prior to use is recommended.

### VESSEL ACCESS\* AND HYDROGRAPHIC CONDITIONS

- There are no marine waters or shorelines on this map.

\*See the latest *Supplement, Alaska* and United States Coast Pilot for current information on air and vessel access, respectively.



**NATIONAL PETROLEUM  
RESERVE ALASKA**

*TESHEKPUK LAKE  
DRAINAGE BASIN*

*INIGOK CREEK  
DRAINAGE BASIN*

*IKPIJUK RIVER  
DRAINAGE BASIN*

*INIGOK CREEK*

1:63360

0 2500 5000 FEET

Continue on sheet 169

Continue on sheet 171





### PRIORITY PROTECTION SITES

- Priority protection sites have not been identified pending field reconnaissance.

### CULTURAL SITES

Information on the exact locations of cultural sites is confidential. This information is contained in the *North Slope Archaeological Data* document, copies of which are kept at the following offices: State Historical Preservation Officer (SHPO) (907-269-8721), ACS in Deadhorse (907-659-2405), North Slope Borough Lands Division (907-852-0322), North Slope Borough Lands Division (907-852-0322), BPXA Crisis Center in Anchorage (907-564-5243), and the ConocoPhillips Incident Command Center in Anchorage (907-265-1000). The following cultural site(s) are located in the area depicted on this sheet:

- TES-00054 northwest of Inigok Test 1
- TES-00055 north of Inigok Test 1
- TES-00056 in upper left quadrant of this map



### AIR ACCESS\*

- There is an aircraft landing strip located at Inigok Test 1. This is an approximately 5,000-ft gravel airstrip. Runway condition is unknown.
- There is an aircraft landing strip located at the Alpine oil field (Sheet 20) approximately 56 miles northeast of Inigok Test 1. This is a 5,000-ft gravel airstrip operated by ConocoPhillips.
- Commercial and air freight services are available at the City of Nuiqsut airport (Sheet 24) approximately 52 miles north-east of Inigok Test 1. This is a 4,300-ft, unattended gravel airstrip. Visual inspection prior to use is recommended.

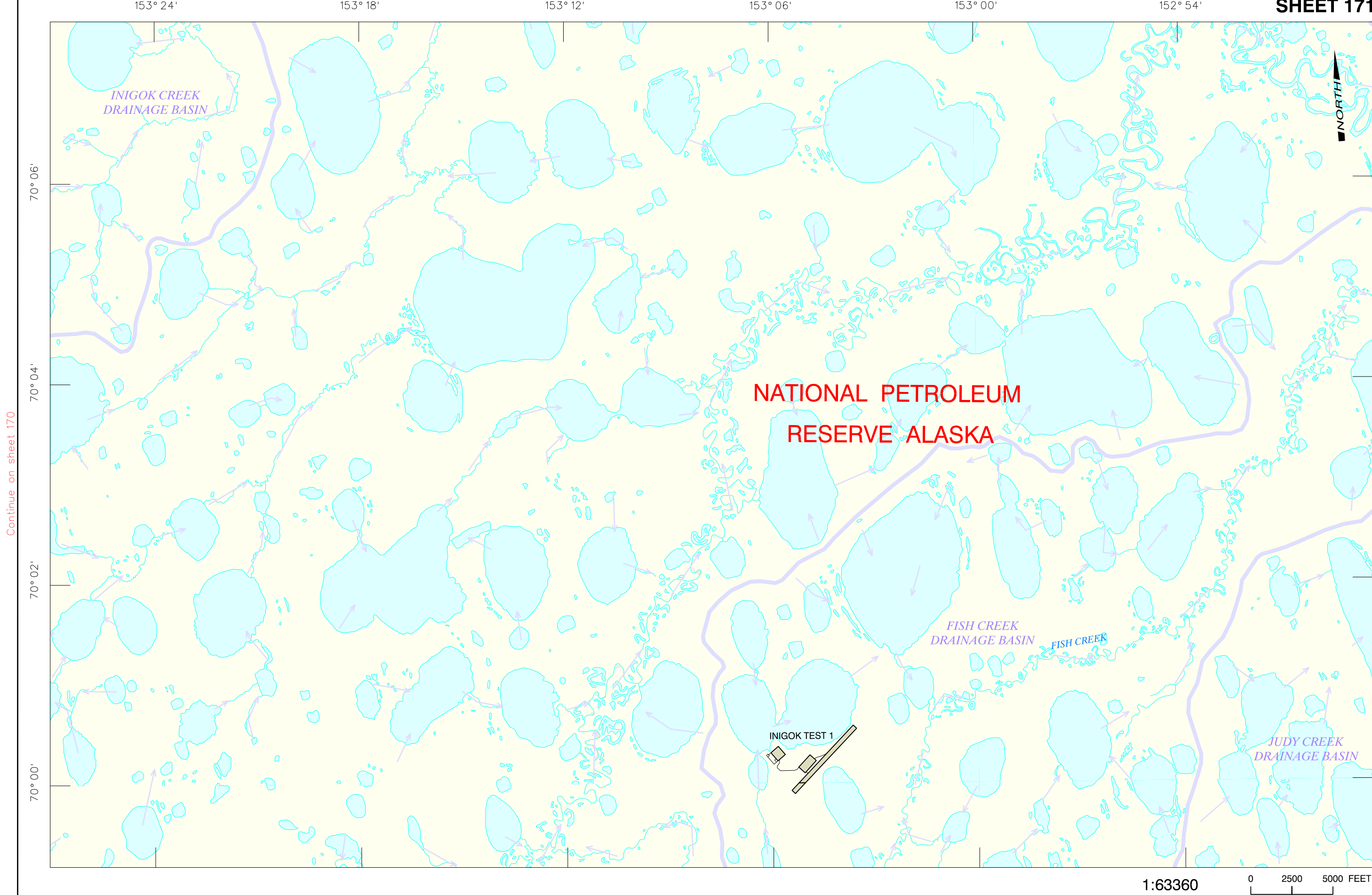
### VESSEL ACCESS\* AND HYDROGRAPHIC CONDITIONS

- There are no marine waters or shorelines on this map.

### STAGING AREAS AND PRESTAGED EQUIPMENT

- Two gravel pads adjacent to the Inigok Test 1 airstrip could be used as staging areas; however, their condition is unknown.

\*See the latest *Supplement, Alaska* and United States Coast Pilot for current information on air and vessel access, respectively.



Continue on sheet 170

Continue on sheet 172

1:63360

0 2500 5000 FEET



### PRIORITY PROTECTION SITES

- Priority protection sites have not been identified pending field reconnaissance.

### GENERAL SENSITIVITIES

- The tributary of Judy Creek provides habitat for fish.



### AIR ACCESS\*

- There is an aircraft landing strip located at Inigok Test 1 (Sheet 171) approximately 15 miles to the west. This is an approximately 5,000-ft gravel airstrip. Runway condition is unknown.
- There is an aircraft landing strip located at the Alpine oil field (Sheet 20) approximately 45 miles to the northeast. This is a 5,000-ft gravel airstrip operated by ConocoPhillips.
- Commercial and air freight services are available at the City of Nuiqsut airport (Sheet 24) approximately 35 miles to the northeast. This is a 4,300-ft, unattended gravel airstrip. Visual inspection prior to use is recommended.

### VESSEL ACCESS\* AND HYDROGRAPHIC CONDITIONS

- There are no marine waters or shorelines on this map.

\*See the latest *Supplement, Alaska* and United States Coast Pilot for current information on air and vessel access, respectively.

152° 48'

152° 42'

152° 36'

152° 30'

152° 24'

152° 18'

**SHEET 172**



Continue on sheet 171

Continue on sheet 173

**NATIONAL PETROLEUM  
RESERVE ALASKA**

*JUDY CREEK  
DRAINAGE BASIN*

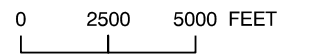
*FISH CREEK  
DRAINAGE BASIN*

JUDY CREEK

FISH CREEK



1:63360







### PRIORITY PROTECTION SITES

- Priority protection sites have not been identified pending field reconnaissance.

### GENERAL SENSITIVITIES

- The Colville River is a migratory pathway for char, cisco, and whitefish.

### CULTURAL SITES

Information on the exact locations of cultural sites is confidential. This information is contained in the *North Slope Archaeological Data* document, copies of which are kept at the following offices: State Historical Preservation Officer (SHPO) (907-269-8721), ACS in Deadhorse (907-659-2405), North Slope Borough Lands Division (907-852-0322), North Slope Borough Lands Division (907-852-0322), BPXA Crisis Center in Anchorage (907-564-5243), and the ConocoPhillips Incident Command Center in Anchorage (907-265-1000). The following cultural site(s) are located in the area depicted on this sheet:

- There are numerous cultural sites along both sides of the Colville River throughout this area.



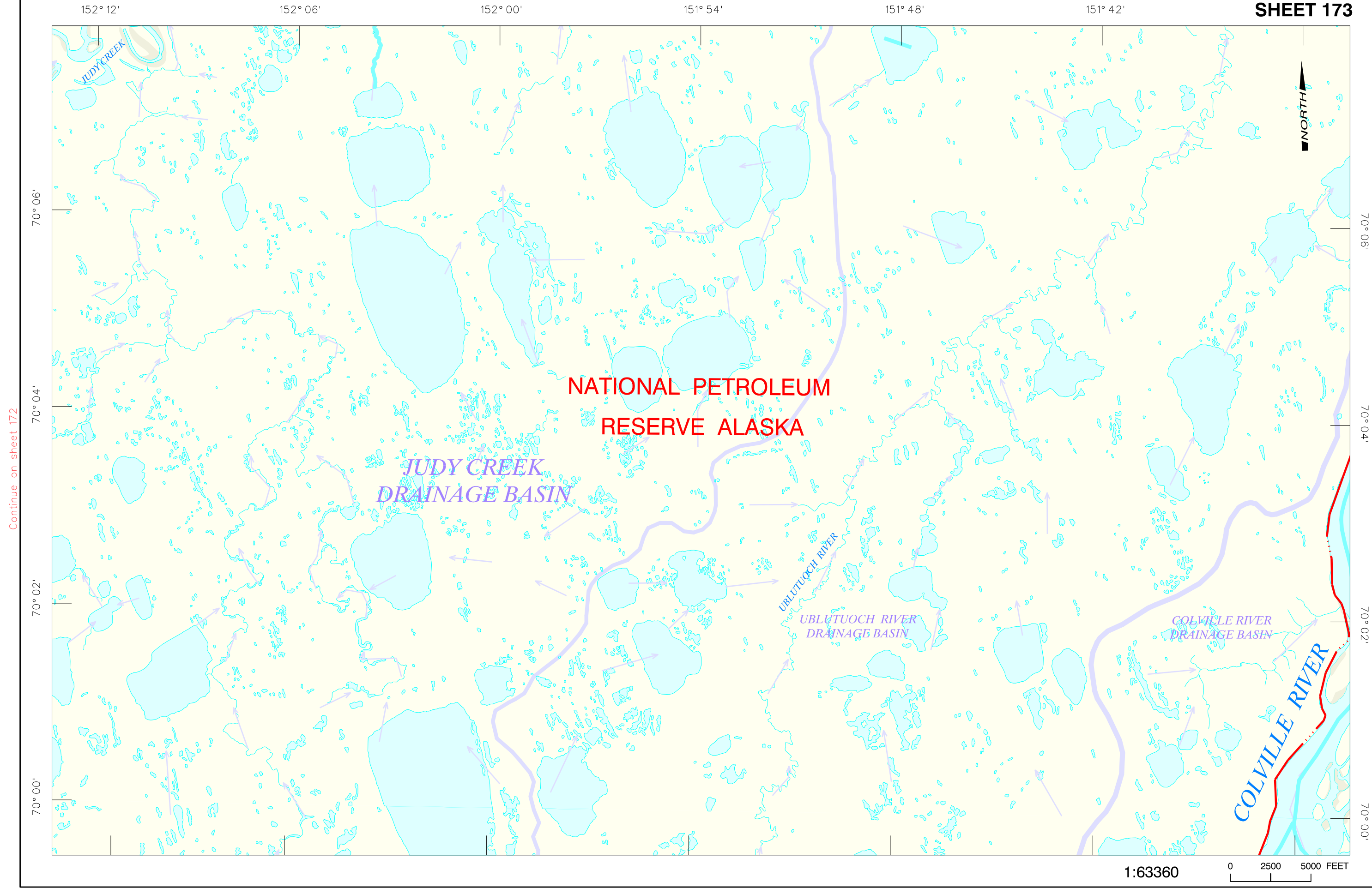
### AIR ACCESS\*

- There is an aircraft landing strip located at the Alpine oil field (Sheet 20) approximately 35 miles northeast of the Colville River. This is a 5,000-ft gravel airstrip operated by ConocoPhillips.
- Commercial and air freight services are available at the City of Nuiqsut airport (Sheet 24) approximately 30 miles northeast of the Colville River. This is a 4,300-ft, unattended gravel airstrip. Visual inspection prior to use is recommended.

### VESSEL ACCESS\* AND HYDROGRAPHIC CONDITIONS

- There are no marine waters or shorelines on this map.
- Main channel of the Colville River generally maintains a 3-ft water depth and is usually navigable 70 miles upriver to the rapids below the mouth of the Anaktuvuk River.

\*See the latest *Supplement, Alaska* and United States Coast Pilot for current information on air and vessel access, respectively.



Continue on sheet 172

Continue on sheet 174

1:63360 0 2500 5000 FEET



### PRIORITY PROTECTION SITES

- Priority protection sites have not been identified pending field reconnaissance.

### GENERAL SENSITIVITIES

- The Colville River is a migratory pathway for char, cisco, and whitefish.

### CULTURAL SITES

Information on the exact locations of cultural sites is confidential. This information is contained in the *North Slope Archaeological Data* document, copies of which are kept at the following offices: State Historical Preservation Officer (SHPO) (907-269-8721), ACS in Deadhorse (907-659-2405), North Slope Borough Lands Division (907-852-0322), North Slope Borough Lands Division (907-852-0322), BPXA Crisis Center in Anchorage (907-564-5243), and the ConocoPhillips Incident Command Center in Anchorage (907-265-1000). The following cultural site(s) are located in the area depicted on this sheet:

- There are numerous cultural sites along both sides of the Colville River throughout this area.



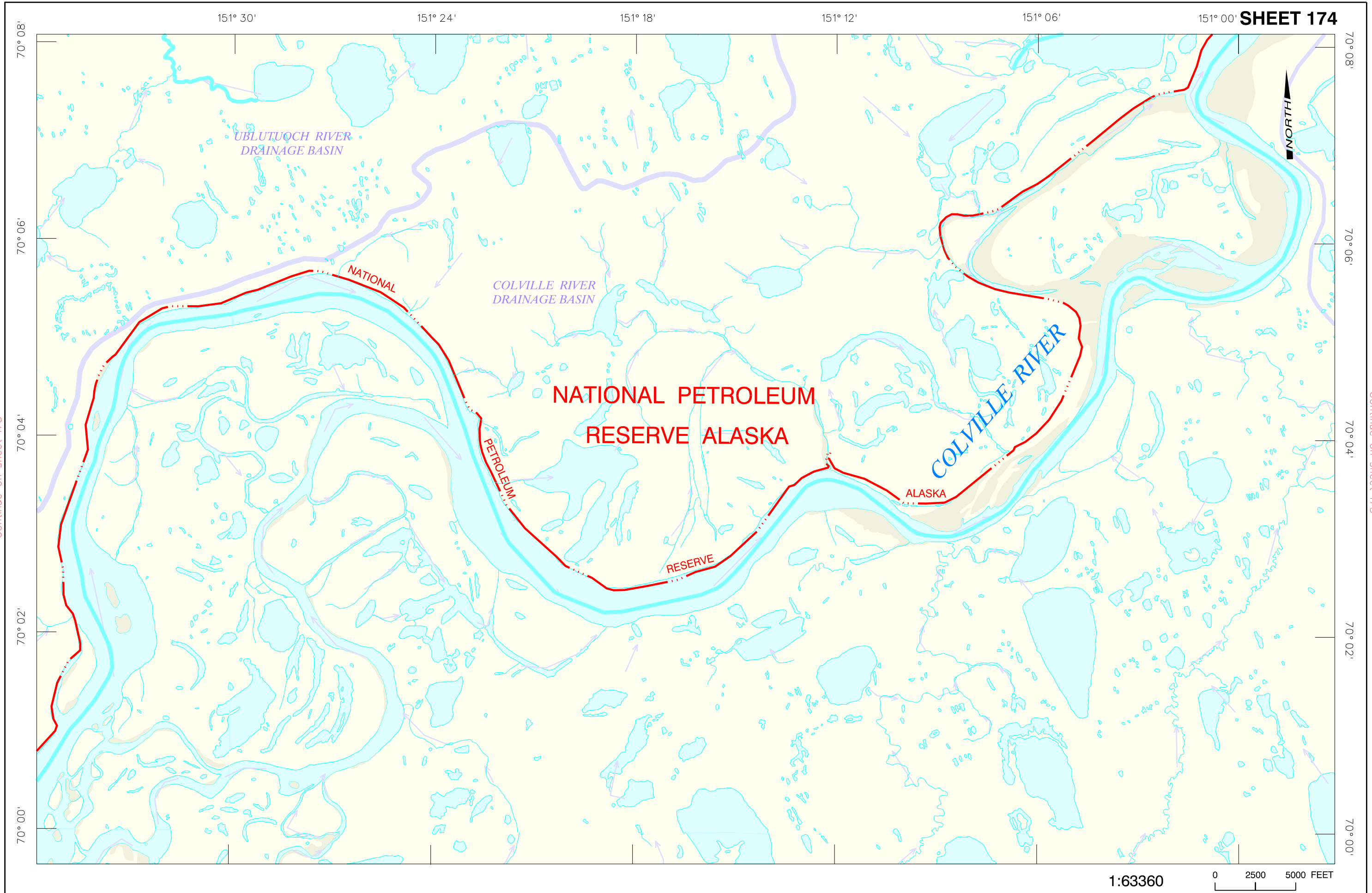
### AIR ACCESS\*

- There is an aircraft landing strip located at the Alpine oil field (Sheet 20) approximately 30 miles to the northeast. This is a 5,000-ft gravel airstrip operated by ConocoPhillips.
- Commercial and air freight services are available at the City of Nuiqsut airport (Sheet 24) approximately 15 miles to the northeast. This is a 4,300-ft, unattended gravel airstrip. Visual inspection prior to use is recommended.

### VESSEL ACCESS\* AND HYDROGRAPHIC CONDITIONS

- There are no marine waters or shorelines on this map.
- Main channel of the Colville River generally maintains a 3-ft water depth and is usually navigable 70 miles upriver to the rapids below the mouth of the Anaktuvuk River.

\*See the latest *Supplement, Alaska* and United States Coast Pilot for current information on air and vessel access, respectively.



Continue on sheet 173

Continue on sheet 175

1:63360

0 2500 5000 FEET





**PRIORITY PROTECTION SITES**

- Priority protection sites have not been identified pending field reconnaissance.

**GENERAL SENSITIVITIES**

- The Colville River is a migratory pathway for char, cisco, and whitefish.
- The Itkillik River provides habitat for fish.

**CULTURAL SITES**

Information on the exact locations of cultural sites is confidential. This information is contained in the *North Slope Archaeological Data* document, copies of which are kept at the following offices: State Historical Preservation Officer (SHPO) (907-269-8721), ACS in Deadhorse (907-659-2405), North Slope Borough Lands Division (907-852-0322), North Slope Borough Lands Division (907-852-0322), BPXA Crisis Center in Anchorage (907-564-5243), and the ConocoPhillips Incident Command Center in Anchorage (907-265-1000). The following cultural site(s) are located in the area depicted on this sheet:

- There are numerous cultural sites along both sides of the Colville River throughout this area.



**AIR ACCESS\***

- There is an aircraft landing strip located at the Alpine oil field (Sheet 20) approximately 31 miles northwest of DS 2P. This is a 5,000-ft gravel airstrip operated by ConocoPhillips.
- Commercial and air freight services are available at the City of Nuiqsut airport (Sheet 24) approximately 17 miles northwest of DS 2P. This is a 4,300-ft, unattended gravel airstrip. Visual inspection prior to use is recommended.

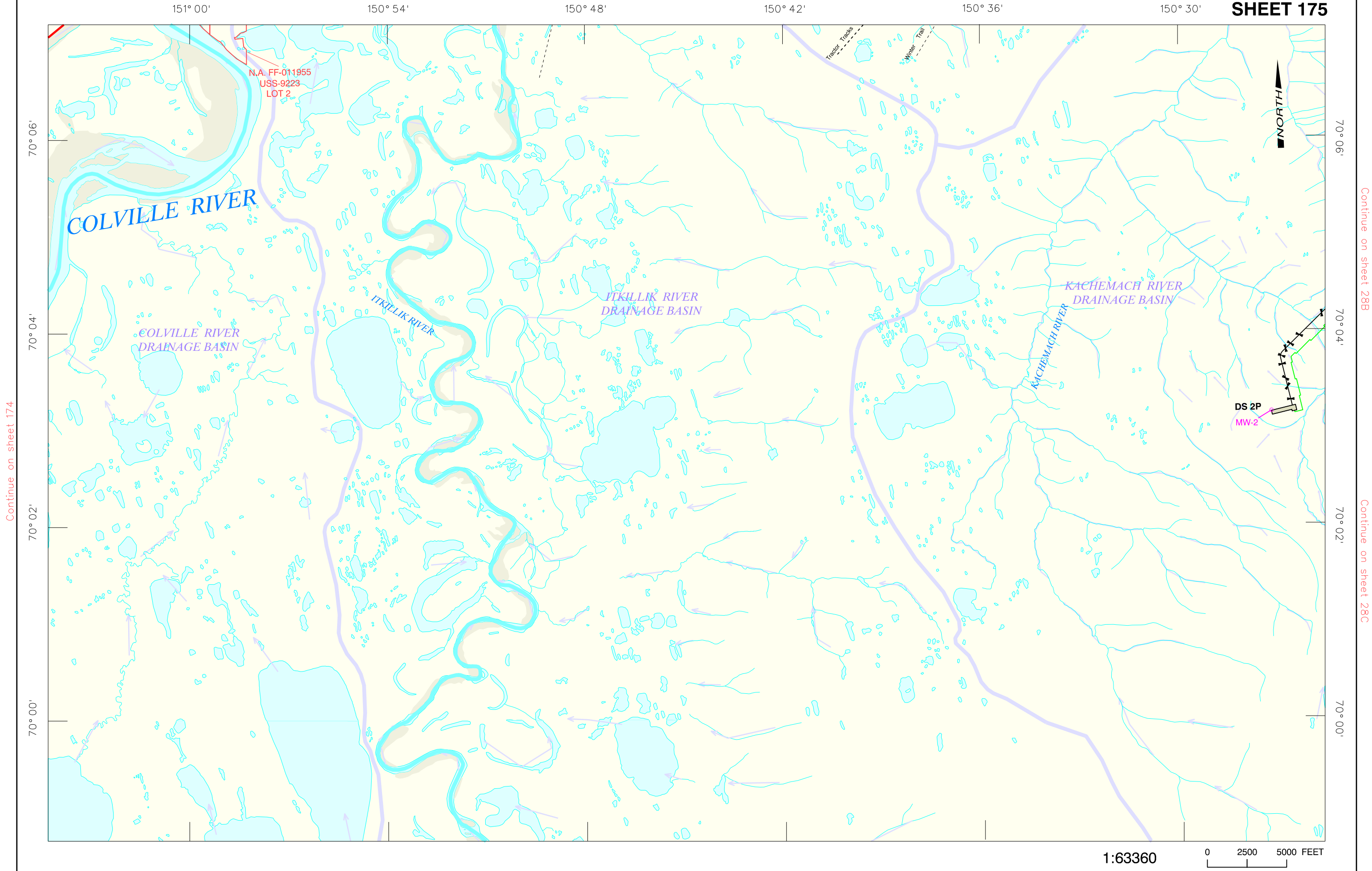
**VESSEL ACCESS\* AND HYDROGRAPHIC CONDITIONS**

- There are no marine waters or shorelines on this map.
- Main channel of the Colville River generally maintains a 3-ft water depth and is usually navigable 70 miles upriver to the rapids below the mouth of the Anaktuvuk River.

**STAGING AREAS AND PRESTAGED EQUIPMENT**

PRESTAGED EQUIP. AREA	LOCATION	ITEM	QUANTITY	TYPE
MW-2	DS 2P	Pipe Plastic sheeting Sandbags	40' 2 rolls Variable (sufficient to block tributary)	6" diameter Visqueen

\*See the latest *Supplement, Alaska* and United States Coast Pilot for current information on air and vessel access, respectively.



Continue on sheet 174

Continue on sheet 28B

Continue on sheet 28C

1:63360

0 2500 5000 FEET



**PRIORITY PROTECTION SITES**

- Priority protection sites have not been identified pending field reconnaissance.

**GENERAL SENSITIVITIES**

- The Colville River is a migratory pathway for char, cisco, and whitefish.
- The Kachemach River provides habitat for anadromous whitefish and for resident fish.
- The Itkillik River provides habitat for fish.

**CULTURAL SITES**

Information on the exact locations of cultural sites is confidential. This information is contained in the *North Slope Archaeological Data* document, copies of which are kept at the following offices: State Historical Preservation Officer (SHPO) (907-269-8721), ACS in Deadhorse (907-659-2405), North Slope Borough Lands Division (907-852-0322), North Slope Borough Lands Division (907-852-0322), BPXA Crisis Center in Anchorage (907-564-5243), and the ConocoPhillips Incident Command Center in Anchorage (907-265-1000). The following cultural site(s) are located in the area depicted on this sheet:

- There are numerous cultural sites along both sides of the Colville River throughout this area.
- HAR-00031 and 00155 north of Nuiqsut
- HAR-00056 near the top right corner of this map



**AIR ACCESS\***

- Commercial and air freight services are available at the City of Nuiqsut airport. This is a 4,300-ft, unattended gravel airstrip. Visual inspection prior to use is recommended.

**VESSEL ACCESS\* AND HYDROGRAPHIC CONDITIONS**

- There are no marine waters or shorelines on this map.
- Main channel of the Colville River generally maintains a 3-ft water depth and is usually navigable 70 miles upriver to the rapids below the mouth of the Anaktuvuk River.

**STAGING AREAS AND PRESTAGED EQUIPMENT**

- Boom is typically predeployed seasonally on the Kachemach River immediately north of the Alpine pipeline crossing and approximately 1/4 mile northwest of the pipeline crossing.

PRESTAGED EQUIP. AREA	LOCATION	ITEM	QUANTITY	TYPE
ALP-2	On east bank of Kachemach River north of Alpine pipeline crossing	Boom	1,425'	8" x 6" river
		Pump	1	3" trash, diesel
		Skimmer	2	Drum or brush
		Skimmer	1	Rope mop
		Storage	1	500-gal. bladder, helicopter
		Storage	1	500-gal. bladder, liftable
		Storage	4	2,500-gal. open top
Anchor System	1	18-lb. Davis system		

\*See the latest *Supplement, Alaska* and United States Coast Pilot for current information on air and vessel access, respectively.

151° 00'

150° 54'

150° 48'

150° 42'

150° 36'

150° 30'

70° 14'

70° 12'

70° 10'

70° 08'

70° 14'

70° 12'

70° 10'

70° 08'

Continue on sheet 24

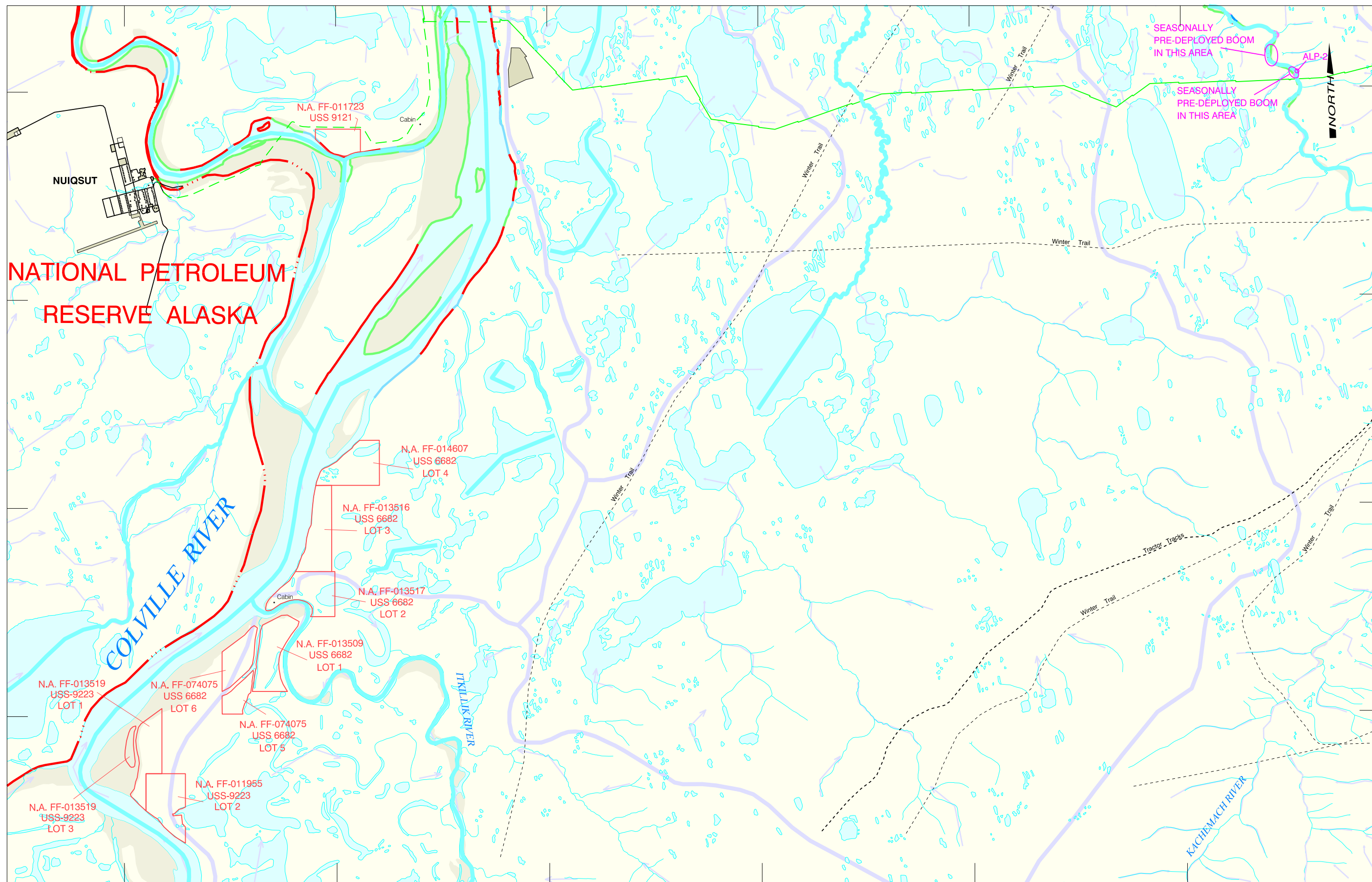
Continue on sheet 137

Continue on sheet 174

Continue on sheet 27

Continue on sheet 28

Continue on sheet 28A



**NATIONAL PETROLEUM RESERVE ALASKA**

**COLVILLE RIVER**

**IKTALIK RIVER**

**KACHEMACH RIVER**

1:63360

0 2500 5000 FEET





### PRIORITY PROTECTION SITES

- No priority protection sites have been identified in this area.

### GENERAL SENSITIVITIES

- Coastal areas support concentrations of breeding, nesting, brood-rearing, and molting waterbirds during the open water months.
- Known spectacled eider nesting area.
- Expect to deploy bird hazing systems.
- Polar bear dens may be present where topographical features provide adequate snow cover.
- Grizzly bear dens may be present in pingos and other bluff and relief habitats.
- Anadromous and resident fish present in Sakonowyak and Kuparuk Rivers.

### CULTURAL SITES

Information on the exact locations of cultural sites is confidential. This information is contained in the *North Slope Archaeological Data* document, copies of which are kept at the following offices: State Historical Preservation Officer (SHPO) (907-269-8721), ACS in Deadhorse (907-659-2405), North Slope Borough Lands Division (907-852-0322), BPXA Crisis Center in Anchorage (907-564-5243), and the ConocoPhillips Incident Command Center in Anchorage (907-265-1000). The following cultural site(s) are located in the area depicted on this sheet:

- XBP-00091 north-northwest of WSPP/DS 1J.
- XBP-00073 east of WSPP/DS 1J.
- XBP-00074 northeast of KRU WT1.
- XBP-00093 southwest of Hemi Springs State 1.



### AIR ACCESS\*

- Ugnu-Kuparuk (Sheet 51) is a continuously attended, 6,000 ft. gravel private airstrip serving the Kuparuk facilities. It is located approximately 8 miles to the Northwest.
- Commercial and air freight services are available at Deadhorse airport (Sheet 81), located approximately 22 miles to the East-Southeast. Its runway is 6,500 ft. asphalt.

### VESSEL ACCESS\* AND HYDROGRAPHIC CONDITIONS

- There are no marine waters or shorelines on this map.

### COUNTERMEASURES CONSIDERATIONS

- No significant countermeasures considerations were identified in this area, pending field reconnaissance.

\*See the latest *Supplement, Alaska* and United States Coast Pilot for current information on air and vessel access, respectively.

149° 36'

149° 30'

149° 24'

149° 18'

149° 12'

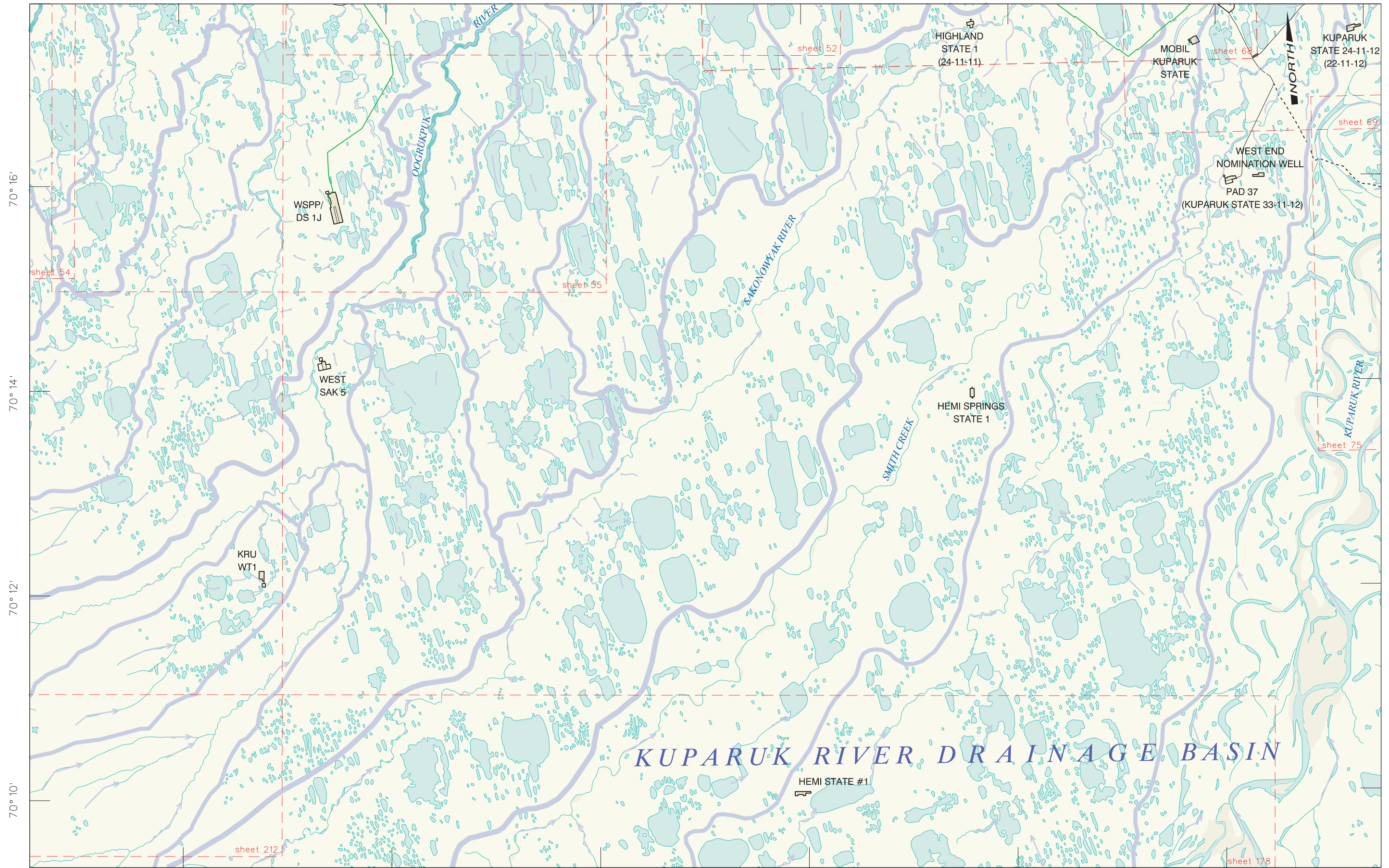
149° 06'

**SHEET 177**

Continue on sheet 54

Continue on sheet 212

Continue on sheet 75



70° 16'

70° 14'

70° 12'

70° 10'

70° 16'

70° 14'

70° 12'

70° 10'

**KUPARUK RIVER DRAINAGE BASIN**

1:63360

0 2500 5000 FEET



### PRIORITY PROTECTION SITES

- No priority protection sites have been identified in this area.

### GENERAL SENSITIVITIES

- Coastal areas support concentrations of breeding, nesting, brood-rearing, and molting waterbirds during the open water months.
- Known spectacled eider nesting area.
- Expect to deploy bird hazing systems.
- Caribou wintering grounds.
- Polar bear dens may be present where topographical features provide adequate snow cover.
- Grizzly bear dens may be present in pingos and other bluff and relief habitats.
- Anadromous and resident fish present in Sakonowayak and Kuparuk Rivers.

### CULTURAL SITES

Information on the exact locations of cultural sites is confidential. This information is contained in the *North Slope Archaeological Data* document, copies of which are kept at the following offices: State Historical Preservation Officer (SHPO) (907-269-8721), ACS in Deadhorse (907-659-2405), North Slope Borough Lands Division (907-852-0322), BPXA Crisis Center in Anchorage (907-564-5243), and the ConocoPhillips Incident Command Center in Anchorage (907-265-1000). The following cultural site(s) are located in the area depicted on this sheet:

- No cultural site(s) have been identified in the area depicted on this sheet.



### AIR ACCESS\*

- Ugnu-Kuparuk (Sheet 51) is a continuously attended, 6,000 ft. gravel private airstrip serving the Kuparuk facilities. It is located approximately 15 miles to the North-Northwest.
- Commercial and air freight services are available at Deadhorse airport (Sheet 81), located approximately 23 miles to the East-Northeast. Runway is 6,500 ft. asphalt.

### VESSEL ACCESS\* AND HYDROGRAPHIC CONDITIONS

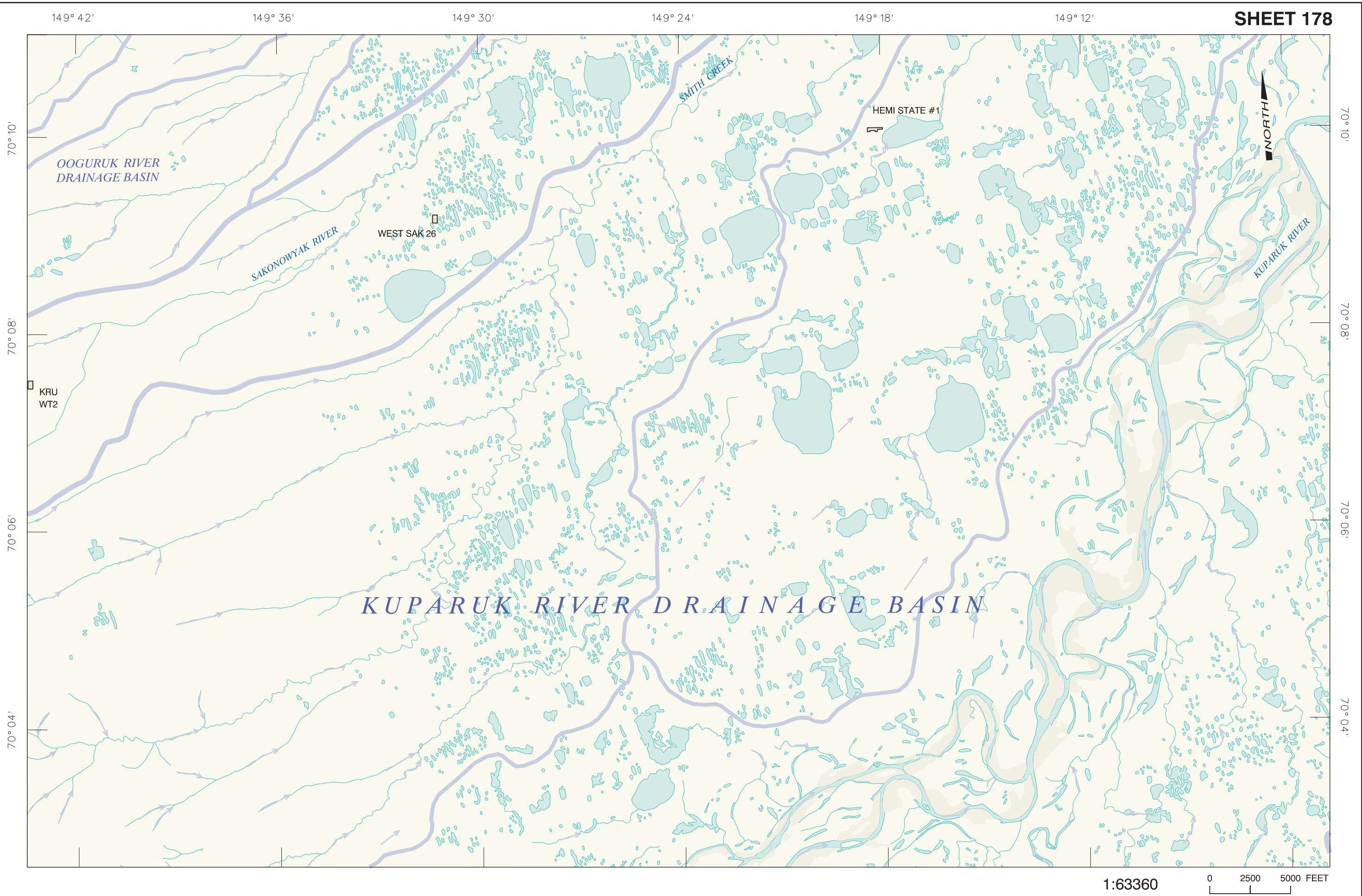
- There are no marine waters or shorelines on this map.

### COUNTERMEASURES CONSIDERATIONS

- No significant countermeasures considerations were identified in this area, pending field reconnaissance.

\*See the latest *Supplement, Alaska* and United States Coast Pilot for current information on air and vessel access, respectively.





Continue on sheet 213

Continue on sheet 214

1:63360

0 2500 5000 FEET





### PRIORITY PROTECTION SITES

- No priority protection sites have been identified in this area.

### GENERAL SENSITIVITIES

- Coastal areas support concentrations of breeding, nesting, brood-rearing, and molting waterbirds during the open water months.
- Known spectacled eider nesting area.
- Expect to deploy bird hazing systems.
- Caribou wintering and calving grounds.
- Polar bear dens may be present where topographical features provide adequate snow cover.
- Grizzly bear dens may be present in pingos and other bluff and relief habitats.
- Anadromous and resident fish present in Kuparuk River.

### CULTURAL SITES

Information on the exact locations of cultural sites is confidential. This information is contained in the *North Slope Archaeological Data* document, copies of which are kept at the following offices: State Historical Preservation Officer (SHPO) (907-269-8721), ACS in Deadhorse (907-659-2405), North Slope Borough Lands Division (907-852-0322), BPXA Crisis Center in Anchorage (907-564-5243), and the ConocoPhillips Incident Command Center in Anchorage (907-265-1000). The following cultural site(s) are located in the area depicted on this sheet:

- SAG-00085 located just below the center of this sheet.



### AIR ACCESS\*

- Ugnu-Kuparuk (Sheet 51) is a continuously attended, 6,000 ft. gravel private airstrip serving the Kuparuk facilities. It is located approximately 22 miles to the North.
- Commercial and air freight services are available at Deadhorse airport (Sheet 81), located approximately 23 miles to the East-Northeast. Runway is 6,500 ft. asphalt.

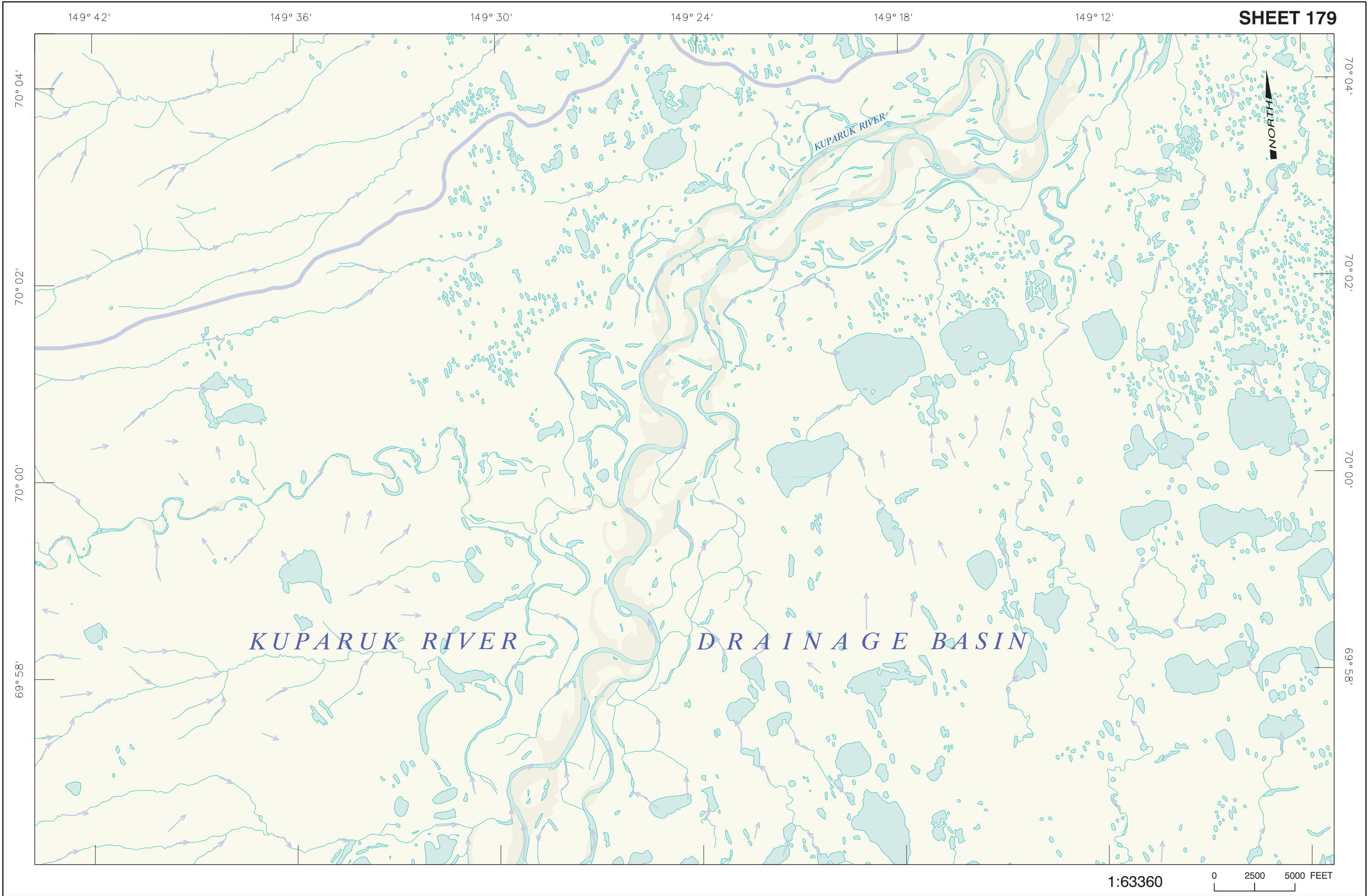
### VESSEL ACCESS\* AND HYDROGRAPHIC CONDITIONS

- There are no marine waters or shorelines on this map.

### COUNTERMEASURES CONSIDERATIONS

- No significant countermeasures considerations were identified in this area, pending field reconnaissance.

\*See the latest *Supplement, Alaska* and United States Coast Pilot for current information on air and vessel access, respectively.





**PRIORITY PROTECTION SITES**

- No priority protection sites have been identified in this area.

**GENERAL SENSITIVITIES**

- Coastal areas support concentrations of breeding, nesting, brood-rearing, and molting waterbirds during the open water months.
- Known spectacled eider nesting area.
- Caribou present May through June.
- Polar bear dens may be present where topographical features provide adequate snow cover.
- Anadromous and resident fish present in Sagavanirktok River.

**CULTURAL SITES**

Information on the exact locations of cultural sites is confidential. This information is contained in the *North Slope Archaeological Data* document, copies of which are kept at the following offices: State Historical Preservation Officer (SHPO) (907-269-8721), ACS in Deadhorse (907-659-2405), North Slope Borough Lands Division (907-852-0322), BPXA Crisis Center in Anchorage (907-564-5243), and the ConocoPhillips Incident Command Center in Anchorage (907-265-1000). The following cultural site(s) are located in the area depicted on this sheet:

- XBP-00020 and XBP-00021 in the northeast quadrant of this sheet.



**AIR ACCESS\***

AIRFIELD	RUNWAY DESCRIPTION	FIXED WING MINIMUMS	FUEL / SERVICES	ATC
Deadhorse Airport	6,500 ft. asphalt	VFR: 1 mi vis. clear of clouds IFR: 0.5 mi vis. (ILS)	100-octane avgas, Jet B, Mogas	Deadhorse Tower

- Coastal Landing Strip is an unattended 2,500 ft. gravel airstrip serving Sag Delta 31-10-16. Condition unknown, use caution.
- Kadler Landing Strip is an unattended 2,500 ft. gravel airstrip serving Kadler State 1. Condition unknown, use caution.
- Kad River Landing Strip (Sheet 183) is an unattended 6,000 ft. gravel airstrip located approximately 10 miles southeast of Kadler Landing Strip. Condition unknown, use caution.
- Pingo H Landing Strip (Sheet 183) is an unattended 6,000 ft. gravel airstrip located approximately 10 miles southeast of Kadler Landing Strip. Condition unknown, use caution.

**VESSEL ACCESS\* AND HYDROGRAPHIC CONDITIONS**

- There are no marine waters or shorelines on this map.
- Annual average flow rate of the Sagavanirktok River is 2,770 cfs.

**COUNTERMEASURES CONSIDERATIONS**

- No significant countermeasures considerations were identified in this area, pending field reconnaissance.

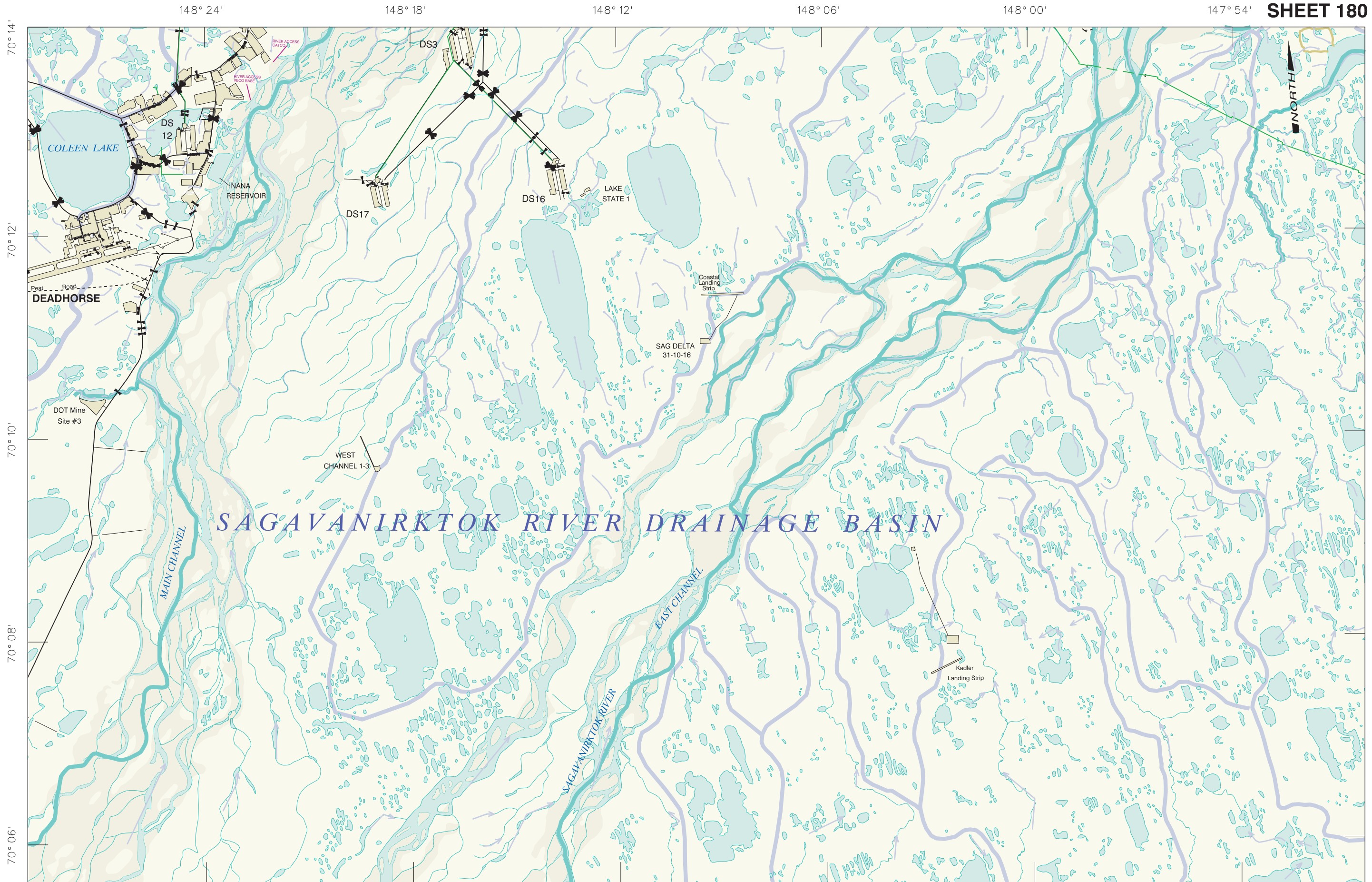
\*See the latest *Supplement, Alaska* and United States Coast Pilot for current information on air and vessel access, respectively.



Continue on sheet 81

Continue on sheet 182

Continue on sheet 183



1:63360 0 2500 5000 FEET





### PRIORITY PROTECTION SITES

- No priority protection sites have been identified in this area.

### GENERAL SENSITIVITIES

- Caribou present May through June.
- Polar bear dens may be present where topographical features provide adequate snow cover.
- Anadromous and resident fish present in Sagavanirktok River.

### CULTURAL SITES

Information on the exact locations of cultural sites is confidential. This information is contained in the *North Slope Archaeological Data* document, copies of which are kept at the following offices: State Historical Preservation Officer (SHPO) (907-269-8721), ACS in Deadhorse (907-659-2405), North Slope Borough Lands Division (907-852-0322), BPXA Crisis Center in Anchorage (907-564-5243), and the ConocoPhillips Incident Command Center in Anchorage (907-265-1000). The following cultural site(s) are located in the area depicted on this sheet:

- No cultural site(s) have been identified in the area depicted on this sheet.



### AIR ACCESS\*

- Kadler Landing Strip (Sheet 180) is an unattended 2,500 ft. gravel airstrip located approximately 6 miles north-north-east from the center of this sheet. Condition unknown, use caution.
- Coastal Landing Strip (Sheet 180) is an unattended 2,500 ft. gravel airstrip located approximately 8 miles north from the center of this sheet. Condition unknown, use caution.
- Pingo H Landing Strip (Sheet 183) is an unattended 6,000 ft. gravel airstrip located approximately 10 miles east-southeast from the center of this sheet. Condition unknown, use caution.
- Kad River Landing Strip (Sheet 183) is an unattended 6,000 ft. gravel airstrip located approximately 12 miles east from the center of this sheet. Condition unknown, use caution.
- Commercial and air freight services are available at Deadhorse airport (Sheet 81), located approximately 12 miles northwest from the center of this sheet. Runway is 6,500 ft. asphalt.

### VESSEL ACCESS\* AND HYDROGRAPHIC CONDITIONS

- There are no marine waters or shorelines on this map.
- Annual average flow rate of the Sagavanirktok River is 2,770 cfs.

### COUNTERMEASURES CONSIDERATIONS

- No significant countermeasures considerations were identified in this area, pending field reconnaissance.

\*See the latest *Supplement, Alaska* and United States Coast Pilot for current information on air and vessel access, respectively.

148° 24'

148° 18'

148° 12'

148° 06'

148° 00'

**SHEET 181**



**SAGAVANIRKTOK RIVER DRAINAGE BASIN**

Continue on sheet 182

Continue on sheet 183

1:63360

0 2500 5000 FEET



### PRIORITY PROTECTION SITES

SITE NO.	DESCRIPTION	SENSITIVITY	TACTIC	EST. BOOM
PS3B	Inlet mouth 2 miles west of Shaviolik River delta.	Most sensitive during open water season. Inundated, low-lying tundra shorelines.	C-13 or C-14	200'

### GENERAL SENSITIVITIES

- Coastal areas support concentrations of breeding, nesting, brood-rearing, and molting waterbirds during the open water months.
- Ringed seals present in coastal waters and/or ice. Ringed seals are associated with shorefast ice in the winter and early summer where they pup. Pups are very sensitive to oil for first 6 to 8 weeks of life (April, May).
- Caribou present May through June.
- Polar bear dens may be present where topographical features provide adequate snow cover.
- Anadromous and resident fish present in freshwater rivers and many inland lakes.

### CULTURAL SITES

Information on the exact locations of cultural sites is confidential. This information is contained in the *North Slope Archaeological Data* document, copies of which are kept at the following offices: State Historical Preservation Officer (SHPO) (907-269-8721), ACS in Deadhorse (907-659-2405), North Slope Borough Lands Division (907-852-0322), BPXA Crisis Center in Anchorage (907-564-5243), and the ConocoPhillips Incident Command Center in Anchorage (907-265-1000). The following cultural site(s) are located in the area depicted on this sheet:

- XBP-00042 west of Alpenglow State 1.
- XBP-00082 south of Alpenglow State 1.
- XBP-00068 east of West Mikkelsen State 1.



### AIR ACCESS\*

- Kad River Landing Strip is an unattended 6,000 ft. gravel airstrip just east of the Kad River Fed 1 site. Condition unknown, use caution.
- Pingo H Landing Strip (Sheet 183) is an unattended 6,000 ft. gravel airstrip south of the Lake 79 Fed 1 site on the adjoining sheet. Condition unknown, use caution.
- Kadler Landing Strip (Sheet 180) is an unattended 2,500 ft. gravel airstrip located approximately 10 miles northwest of the Kad River Landing Strip. Condition unknown, use caution.
- Coastal Landing Strip (Sheet 180) is an unattended 2,500 ft. gravel airstrip located approximately 14 miles northwest of the Kad River Landing Strip. Condition unknown, use caution.
- An unattended, 5,100 ft. gravel private airstrip serving the Badami field (Sheet 91) is located approximately 13 miles to the east.
- Commercial and air freight services are available at Deadhorse airport (Sheet 81), located approximately 21 miles to the west-northwest. Runway is 6,500 ft. asphalt.
- Bullen Point Air Force Station (Sheet 101) is located approximately 18 miles to the east-northeast. This facility is closed to the public and should be considered for emergency landing only. The unattended, 3,500 ft. gravel runway is not maintained and its condition is unknown. Visual inspection recommended prior to use. May be used for spill response operations upon approval by Elmendorf Air Force Base, 11th Air Force Airfield Management, (907) 552-7384/3636/5265.

### VESSEL ACCESS\* AND HYDROGRAPHIC CONDITIONS

- Water depths are shallow and changeable off the Shaviolik River delta (to the east) and the Kadleroshilik River delta (to the west).
- Average annual rate of flow of the Kadleroshilik River is 325 cfs. Sediment discharge is westward.
- Average annual rate of discharge of the Shaviolik River is 800 cfs. Shoaling extends 2 miles northwest into Foggy Island Bay.

### COUNTERMEASURES CONSIDERATIONS

- Extensive mud flats at the Shaviolik River delta have minimal load-bearing capacity.
- No additional significant countermeasures considerations were identified in this area, pending field reconnaissance.

\*See the latest *Supplement, Alaska* and United States Coast Pilot for current information on air and vessel access, respectively.



147° 54' 147° 48' 147° 42' 147° 36' 147° 30' 147° 24'

Continue on sheet 180

Continue on sheet 181



70° 10'

70° 08'

70° 06'

70° 04'

70° 10'

70° 08'

70° 06'

70° 04'

1:63360

0 2500 5000 FEET





### PRIORITY PROTECTION SITES

- No priority protection sites have been identified in this area.

### GENERAL SENSITIVITIES

- Caribou present May through June.
- Polar bear dens may be present where topographical features provide adequate snow cover.
- Anadromous and resident fish present in Kadleroshilik freshwater rivers and many inland lakes.

### CULTURAL SITES

Information on the exact locations of cultural sites is confidential. This information is contained in the *North Slope Archaeological Data* document, copies of which are kept at the following offices: State Historical Preservation Officer (SHPO) (907-269-8721), ACS in Deadhorse (907-659-2405), North Slope Borough Lands Division (907-852-0322), BPXA Crisis Center in Anchorage (907-564-5243), and the ConocoPhillips Incident Command Center in Anchorage (907-265-1000). The following cultural site(s) are located in the area depicted on this sheet:

- SAG-00078 in the southeast quadrant of this sheet.
- XBP-00075 and XBP-00041 southeast of Pingo H Landing Strip.



### AIR ACCESS\*

- Kad River Landing Strip is an unattended 6,000 ft. gravel airstrip just east of the Kad River Fed 1 site. Condition unknown, use caution.
- Pingo H Landing Strip is an unattended 6,000 ft. gravel airstrip south of the Lake 79 Fed 1 site. Condition unknown, use caution.
- Kadler Landing Strip (Sheet 180) is an unattended 2,500 ft. gravel airstrip located approximately 10 miles northwest of the Kad River Landing Strip. Condition unknown, use caution.
- Coastal Landing Strip (Sheet 180) is an unattended 2,500 ft. gravel airstrip located approximately 14 miles northwest of the Kad River Landing Strip. Condition unknown, use caution.
- An unattended, 5,100 ft. gravel private airstrip serving the Badami field (Sheet 91) is located approximately 15 miles to the northeast.
- Commercial and air freight services are available at Deadhorse airport (Sheet 81), located approximately 22 miles to the northwest. Runway is 6,500 ft. asphalt.
- Bullen Point Air Force Station (Sheet 101) is located approximately 20 miles to the northeast. This facility is closed to the public and should be considered for emergency landing only. The unattended, 3,500 ft. gravel runway is not maintained and its condition is unknown. Visual inspection recommended prior to use. May be used for spill response operations upon approval by Elmendorf Air Force Base, 11th Air Force Airfield Management, (907) 552-7384/3636/5265.

### VESSEL ACCESS\* AND HYDROGRAPHIC CONDITIONS

- There are no marine waters or shorelines on this map.

### COUNTERMEASURES CONSIDERATIONS

- No significant countermeasures considerations were identified in this area, pending field reconnaissance.

\*See the latest *Supplement, Alaska* and United States Coast Pilot for current information on air and vessel access, respectively.

147° 54'      147° 48'      147° 42'      147° 36'      147° 30'      147° 24'

Continue on sheet 180

Continue on sheet 181



70° 06'      70° 04'      70° 02'      70° 00'

70° 06'      70° 04'      70° 02'      70° 00'

1:63360      0      2500      5000 FEET



**PRIORITY PROTECTION SITES**

SITE NO.	DESCRIPTION	SENSITIVITY	TACTIC	EST. BOOM
PS74	Gap between Flaxman Island and Brownlow Point.	Most sensitive during open water season. Keep oil from entering Lion Bay. Tundra cliffs and mixed sand and gravel beaches on Flaxman Island.	C-13 or C-14	3000'
PS75	Breach in barrier island.	Most sensitive during open water season. Keep oil from reaching mainland shore.	C-14	200'
PS76	Breach in barrier island.	Most sensitive during open water season. Keep oil from reaching mainland shore.	C-14	200'
PS77	Breach in barrier island.	Most sensitive during open water season. Keep oil from reaching mainland shore.	C-14	400'
PS78	Canning/Tamayariak River delta.	Most sensitive during open water season. Keep oil from entering the river. NOTE: Boom only if PS77 fails.	C-13 or C-14	2000'

\* Priority Protection Area -- The entire delta regions of both the Canning and West Canning rivers are large Priority Protection Areas due to their size and numerous geographical features. On-site conditions may require the use of open water tactics to prevent oil migration into these deltas.

**GENERAL SENSITIVITIES**

- Caribou present May through June, with high concentrations east of the Canning River.
- Polar bear dens may be present where topographical features provide adequate snow cover.
- Ringed seals present in coastal waters and/or ice. Ringed seals are associated with shorefast ice in the winter and early summer where they pup. Pups are very sensitive to oil for first 6 to 8 weeks of life (April, May).
- Bearded seals present in the Beaufort Sea.
- All activities within the Arctic National Wildlife Refuge – Alaska (ANWR).
- Anadromous and resident fish present in freshwater rivers and many inland lakes.
- From August through November, Bowhead whales congregate and feed in Beaufort Sea offshore waters.
- Coastal areas support concentrations of breeding, nesting, brood-rearing, and molting waterbirds during the open water months.

**CULTURAL SITES**

Information on the exact locations of cultural sites is confidential. This information is contained in the *North Slope Archaeological Data* document, copies of which are kept at the following offices: State Historical Preservation Officer (SHPO) (907-269-8721), ACS in Deadhorse (907-659-2405), North Slope Borough Lands Division (907-852-0322), BPXA Crisis Center in Anchorage (907-564-5243), and the ConocoPhillips Incident Command Center in Anchorage (907-265-1000). The following cultural site(s) are located in the area depicted on this sheet:

- XFI-00008 on eastern Flaxman Island.
- XFI-00009 near Brownlow Point.
- XFI-00020 on the coast near the center of this sheet.



**AIR ACCESS\***

- Bullen Point Air Force Station (Sheet 101) is located approximately 26 miles to the West. This facility is closed to the public and should be considered for emergency landing only. The unattended, 3,500 ft. gravel runway is not maintained and its condition is unknown. Visual inspection recommended prior to use. May be used for spill response operations upon approval by Elmendorf Air Force Base, 11th Air Force Airfield Management, (907) 552-7384/3636/5265.
- An unattended, 5,100 ft. gravel private airstrip serving the Badami field (Sheet 91) is located approximately 30 miles to the West.

**VESSEL ACCESS\* AND HYDROGRAPHIC CONDITIONS**

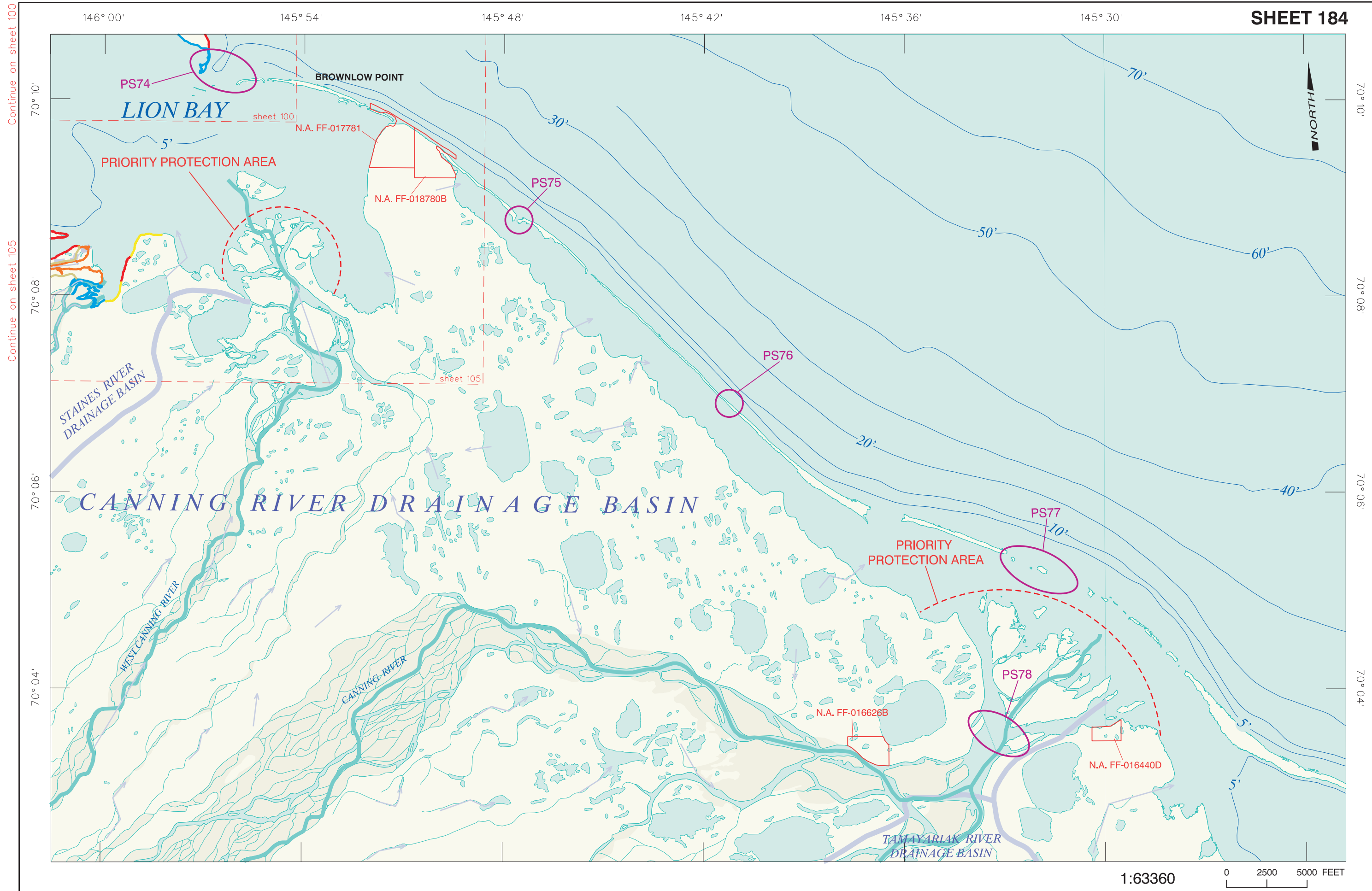
- The west branch of the Canning River empties into the lagoon southwest of Brownlow Point, with its delta forming extensive shoals in the eastern portion of the lagoon.
- A sand and gravel bar remains partly exposed at high water, extending southeast from Brownlow Point past the Canning River east branch.
- From Brownlow Point to the Canning River east branch, the lagoon between the delta and the barrier bar is about 0.5 miles wide and has depths of 2-3 feet. Discharge from the river discolors the seawater from many miles.
- Southeast of the Canning River east branch is a lagoon that provides excellent small-craft anchorage in depths of 8-10 feet. The best approach from seaward is around the southeast end of the barrier bar at a distance of approximately 0.3 miles.

**COUNTERMEASURES CONSIDERATIONS**

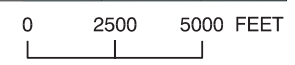
- Expect inlets, embayments and protruding shoreline features to collect oil during sustained incoming winds.
- Barrier islands are often very low and may not completely protect the mainland shoreline.
- Both gravel and sand-silt beaches are often narrow and/or lying on top of tundra vegetation, presenting potential risk to load-bearing machinery and equipment.
- The steepness of many beaches may largely preclude the use of mechanized equipment.
- River deltas typically present complex shorelines consisting of potentially unstable sand-silt and mud tidal flats.
- Brownlow Point, the northernmost point of the Canning River delta, has elevations up to 25 ft.
- No additional significant countermeasures considerations were identified in this area, pending field reconnaissance.

\*See the latest *Supplement, Alaska* and United States Coast Pilot for current information on air and vessel access, respectively.





1:63360







### PRIORITY PROTECTION SITES

SITE NO.	DESCRIPTION	SENSITIVITY	TACTIC	EST. BOOM
PS78	Canning/Tamayariak River delta.	Most sensitive during open water season. Keep oil from entering the river. NOTE: Boom only if PS77 fails.	C-13 or C-14	2000'
PS79	Gap between barrier island and shore.	Most sensitive during open water season. Keep oil from entering lagoon. NOTE: If booming fails, boom streams behind on the mainland shore.	C-13	4000'
PS80	Small inlet.	Most sensitive during open water season. Keep oil from entering the inlet.	C-13 or C-14	800'
PS81	Boulder patch off Konganevik Point.	Most sensitive during open water season. High density of fish.	C-13	5000'
PS82	Inlet.	Most sensitive during open water season. Keep oil from entering the inlet.	C-13 or C-14	2000'
PS83	Mouth of small stream.	Most sensitive during open water season. Keep oil from entering the stream.	C-14	150'
PS84	Mouth of Katakaturuk River.	Most sensitive during open water season. Keep oil from entering the river.	C-14	300'

\* Priority Protection Area -- The entire delta region of the Canning River is one large Priority Protection Areas due to its size and numerous geographical features. On-site conditions may require the use of open water tactics to prevent oil migration into these deltas.

### GENERAL SENSITIVITIES

- Caribou present May through June.
- Polar bear dens may be present where topographical features provide adequate snow cover.
- Ringed seals present in coastal waters and/or ice. Ringed seals are associated with shorefast ice in the winter and early summer where they pup. Pups are very sensitive to oil for first 6 to 8 weeks of life (April, May).
- Bearded seals present in the Beaufort Sea.
- All activities within the Arctic National Wildlife Refuge – Alaska (ANWR).
- Anadromous and resident fish present in freshwater rivers and many inland lakes.
- From August through November, Bowhead whales congregate and feed in Beaufort Sea offshore waters.
- Coastal areas support concentrations of breeding, nesting, brood-rearing, and molting waterbirds during the open water months.

### CULTURAL SITES

Information on the exact locations of cultural sites is confidential. This information is contained in the *North Slope Archaeological Data* document, copies of which are kept at the following offices: State Historical Preservation Officer (SHPO) (907-269-8721), ACS in Deadhorse (907-659-2405), North Slope Borough Lands Division (907-852-0322), BPXA Crisis Center in Anchorage (907-564-5243), and the ConocoPhillips Incident Command Center in Anchorage (907-265-1000). The following cultural site(s) are located in the area depicted on this sheet:

- XFI-00019 west of Konganevik Point.
- XFI-00017 and XFI-00018 near Konganevik Point.
- XMM-00018 south of Konganevik Point.



### AIR ACCESS\*

- Bullen Point Air Force Station (Sheet 101) is located approximately 37 miles to the West-Northwest. This facility is closed to the public and should be considered for emergency landing only. The unattended, 3,500 ft. gravel runway is not maintained and its condition is unknown. Visual inspection recommended prior to use. May be used for spill response operations upon approval by Elmendorf Air Force Base, 11th Air Force Airfield Management, (907) 552-7384/3636/5265.
- An unattended, 5,100 ft. gravel private airstrip serving the Badami field (Sheet 91) is located approximately 41 miles to the West-Northwest.
- Barter Island LRRS airstrip (Sheet 188) is located approximately 41 miles to the East-Northeast. Although still owned by the Air Force, it is leased to the North Slope Borough and is open to the public. The airfield is attended, but the 4,800 ft. gravel runway is not monitored and is reported to be soft with ruts the entire length. Visual inspection recommended prior to use.

### VESSEL ACCESS\* AND HYDROGRAPHIC CONDITIONS

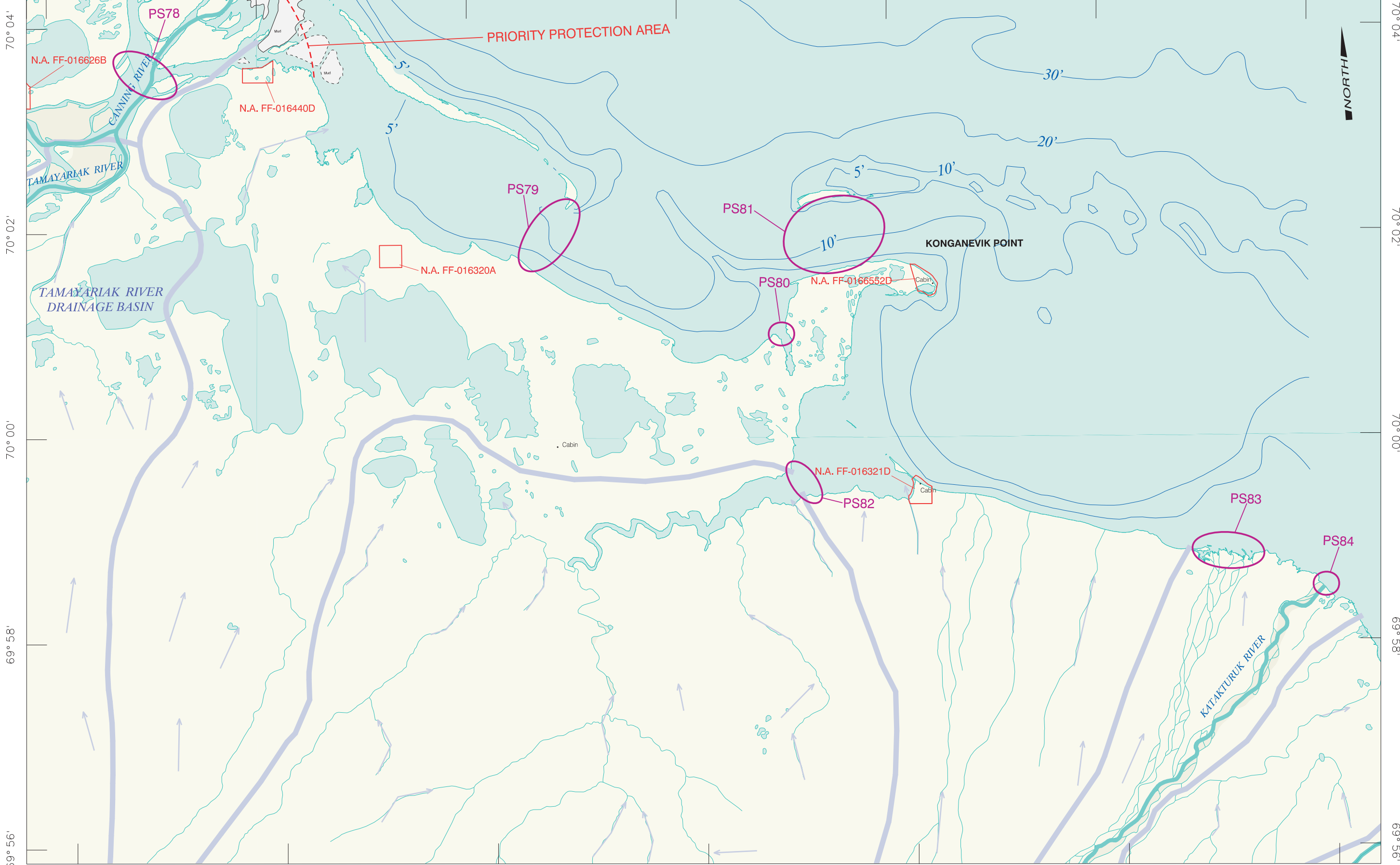
- Southeast of the Canning River east branch is a lagoon that provides excellent small-craft anchorage in depths of 8-10 feet. The best approach from seaward is around the southeast end of the barrier bar at a distance of approximately 0.3 miles.
- Approximately 1 mile north of Konganevik Point are extensive shoals that are partly awash. Between the shoals and the island is a channel with depths of 7-17 ft.
- Large boulders line the entire shore of Konganevik Point -- use caution when navigating.
- Approximately 2 miles south of Konganevik Point is a small craft anchorage offering protection from all winds in depths of 4 feet.

### COUNTERMEASURES CONSIDERATIONS

- Expect inlets, embayments and protruding shoreline features to collect oil during sustained incoming winds.
- Barrier islands are often very low and may not completely protect the mainland shoreline.
- Both gravel and sand-silt beaches are often narrow and/or lying on top of tundra vegetation, presenting potential risk to load-bearing machinery and equipment.
- The steepness of many beaches may largely preclude the use of mechanized equipment.
- River deltas typically present complex shorelines consisting of potentially unstable sand-silt and mud tidal flats.
- No additional significant countermeasures considerations were identified in this area, pending field reconnaissance.

\*See the latest *Supplement, Alaska* and United States Coast Pilot for current information on air and vessel access, respectively.

145° 36' 145° 30' 145° 24' 145° 18' 145° 12' 145° 06'



Continue on sheet 184

Continue on sheet 186

1:63360 0 2500 5000 FEET



**PRIORITY PROTECTION SITES**

SITE NO.	DESCRIPTION	SENSITIVITY	TACTIC	EST. BOOM
PS84	Mouth of Katakturuk River.	Most sensitive during open water season. Keep oil from entering the river.	C-14	300'
PS85	Mouth of small stream.	Most sensitive during open water season. Keep oil from entering the stream.	C-14	200'
PS86	Mouth of Marsh Creek.	Most sensitive during open water season. Keep oil from entering the creek.	C-14	200'
PS87	Mouth of small stream.	Most sensitive during open water season. Keep oil from entering the stream.	C-14	200'
PS88	Mouth of Carter Creek.	Most sensitive during open water season. Keep oil from entering the creek.	C-14	200'
PS89	Mouth of small stream.	Most sensitive during open water season. Keep oil from entering the stream.	C-14	150'
PS90	Mouth of small stream.	Most sensitive during open water season. Keep oil from entering the stream.	C-14	200'
PS91	Breaks in barrier islands at Sadlerochit River mouth.	Most sensitive during open water season. Keep oil from entering the river.	C-13 or C-14	1000'

**GENERAL SENSITIVITIES**

- Caribou present May through June.
- Polar bear dens may be present where topographical features provide adequate snow cover.
- Bearded seals present in the Beaufort Sea.
- Ringed seals present in coastal waters and/or ice. Ringed seals are associated with shorefast ice in the winter and early summer where they pup. Pups are very sensitive to oil for first 6 to 8 weeks of life (April, May).
- All activities within the Arctic National Wildlife Refuge – Alaska (ANWR).
- From August through November, Bowhead whales congregate and feed in Beaufort Sea offshore waters.
- Coastal areas support concentrations of breeding, nesting, brood-rearing, and molting waterbirds during the open water months. Collinson Point in particular is a very important nesting site for Common Eiders.
- Anadromous and resident fish present in freshwater rivers and many inland lakes.

**CULTURAL SITES**

Information on the exact locations of cultural sites is confidential. This information is contained in the *North Slope Archaeological Data* document, copies of which are kept at the following offices: State Historical Preservation Officer (SHPO) (907-269-8721), ACS in Deadhorse (907-659-2405), North Slope Borough Lands Division (907-852-0322), BPXA Crisis Center in Anchorage (907-564-5243), and the ConocoPhillips Incident Command Center in Anchorage (907-265-1000). The following cultural site(s) are located in the area depicted on this sheet:

- XMM-00114, XMM-00004 and XMM-00019 along the coast south of Collinson Point.
- XMM-00005 and XMM-00006 along the coast east of Collinson Point.
- XMM-00009 in the southwest quadrant of this sheet.
- XMM-00001, XMM-00042, XMM-00043 and XMM-00045 along the southeast coast of Camden Bay
- XFI-00003, XFI-00013, XFI-00014 and XFI-00015 near Anderson Point extending southwest along the coast.
- XFI-00016 east of Anderson Point.



**AIR ACCESS\***

- Barter Island LRRS airstrip (Sheet 188) is located approximately 26 miles to the East-Northeast. Although still owned by the Air Force, it is leased to the North Slope Borough and is open to the public. The airfield is attended, but the 4,800 ft. gravel runway is not monitored and is reported to be soft with ruts the entire length. Visual inspection recommended prior to use.
- Bullen Point Air Force Station (Sheet 101) is located approximately 50 miles to the West-Northwest. This facility is closed to the public and should be considered for emergency landing only. The unattended, 3,500 ft. gravel runway is not maintained and its condition is unknown. Visual inspection recommended prior to use. May be used for spill response operations upon approval by Elmendorf Air Force Base, 11th Air Force Airfield Management, (907) 552-7384/3636/5265.
- An unattended, 5,100 ft. gravel private airstrip serving the Badami field (Sheet 91) is located approximately 55 miles to the West-Northwest.

**VESSEL ACCESS\* AND HYDROGRAPHIC CONDITIONS**

- The Katakturuk River empties into the south side of Camden Bay on the west side of Simpson Cove.
- Simpson Cove has excellent holding ground and affords protection from ice and wind for vessels drawing up to 6 feet. Approach should be made from northeast of Collinson Point. Once inside the cove, depths average from 6-11 feet.
- Anderson Point marks the eastern edge of Camden Bay. South and west of this point, the bottom slopes to depths of 10-12 feet very close to shore.

**COUNTERMEASURES CONSIDERATIONS**

- Expect inlets, embayments and protruding shoreline features to collect oil during sustained incoming winds.
- Barrier islands are often very low and may not completely protect the mainland shoreline.
- Both gravel and sand-silt beaches are often narrow and/or lying on top of tundra vegetation, presenting potential risk to load-bearing machinery and equipment.
- The steepness of many beaches may largely preclude the use of mechanized equipment.
- River deltas typically present complex shorelines consisting of potentially unstable sand-silt and mud tidal flats.
- No additional significant countermeasures considerations were identified in this area, pending field reconnaissance.

\*See the latest *Supplement, Alaska* and United States Coast Pilot for current information on air and vessel access, respectively.

145° 00'

144° 54'

144° 48'

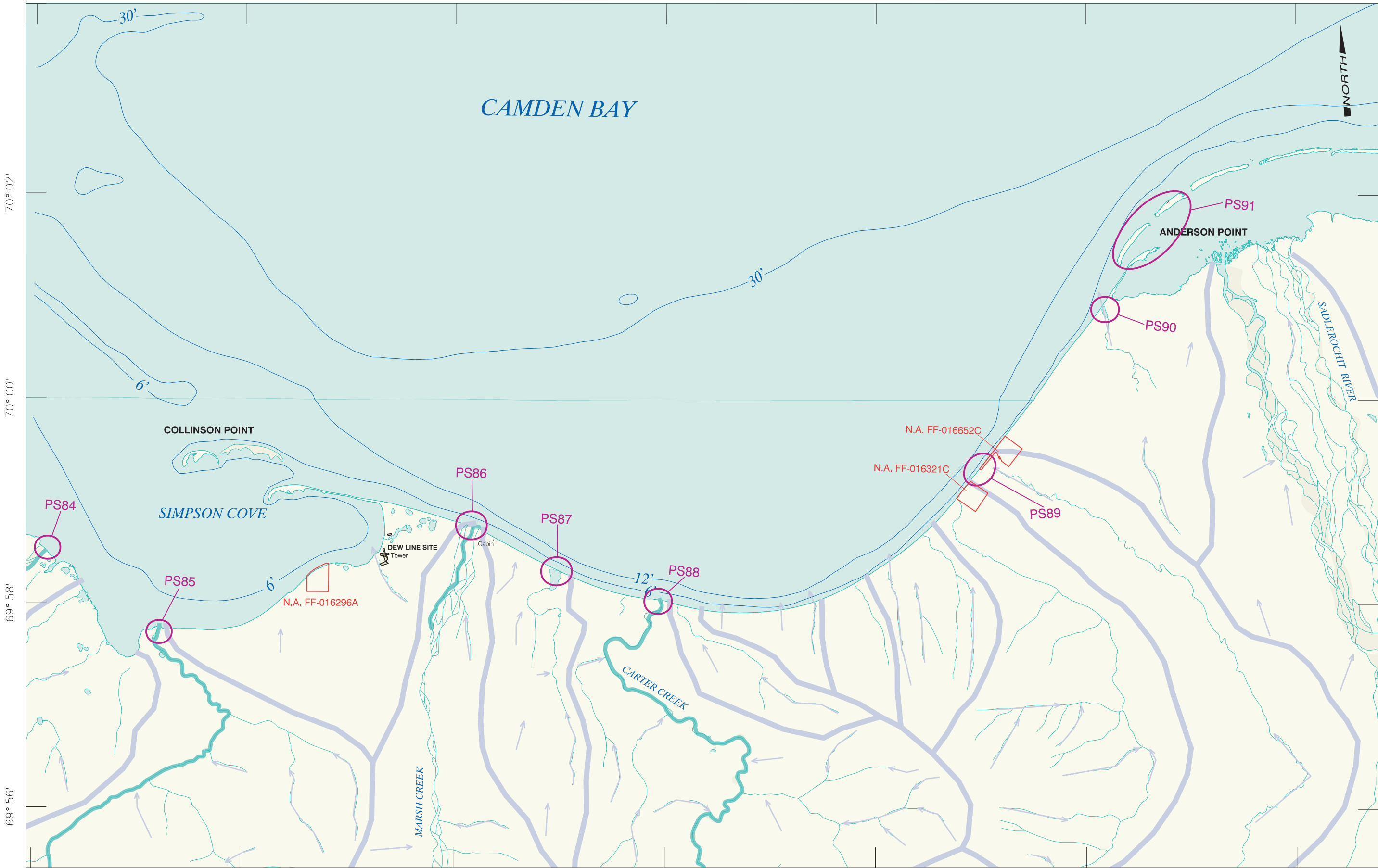
144° 42'

144° 36'

144° 30'

Continue on sheet 185

Continue on sheet 187



70° 02'

70° 02'

70° 00'

70° 00'

69° 58'

69° 58'

69° 56'

69° 56'

1:63360

0 2500 5000 FEET





### PRIORITY PROTECTION SITES

SITE NO.	DESCRIPTION	SENSITIVITY	TACTIC	EST. BOOM
PS91	Breaks in barrier islands at Sadlerochit River mouth.	Most sensitive during open water season. Keep oil from entering the river.	C-13 or C-14	1000'
PS92	Mouth of Nataroarak Creek.	Most sensitive during open water season. Keep oil from entering the creek.	C-14	500'
PS93	Breaks in barrier island at Hulahula River mouth.	Most sensitive during open water season. Keep oil from entering the river.	C-13 or C-14	1000'
PS93A	Mouth of Hulahula River.	Most sensitive during open water season. Keep oil from entering the river. NOTE: Boom only if PS93 fails.	C-14	400'
PS94	Mouth of the west channel of the Okpilak River.	Most sensitive during open water season. Keep oil from entering the river. NOTE: Boom only if PS93 fails.	C-13 or C-14	1000'
PS95	Arey Island to mainland.	Most sensitive during open water season. Keep oil from entering the lagoon.	C-13 or C-14	3000'

### GENERAL SENSITIVITIES

- Arey Island is an important subsistence use area for local residents.
- The Hulahula River is a high recreation, wildlife and subsistence use area.
- Caribou present May through June.
- Polar bear dens may be present where topographical features provide adequate snow cover.
- Bearded seals present in the Beaufort Sea.
- Ringed seals present in coastal waters and/or ice. Ringed seals are associated with shorefast ice in the winter and early summer where they pup. Pups are very sensitive to oil for first 6 to 8 weeks of life (April, May).
- All activities within the Arctic National Wildlife Refuge – Alaska (ANWR).
- From August through November, Bowhead whales congregate and feed in Beaufort Sea offshore waters.
- Coastal areas support breeding, nesting, brood-rearing, and molting waterbirds during the open water months.
- Anadromous and resident fish present in freshwater rivers and many inland lakes.

### CULTURAL SITES

Information on the exact locations of cultural sites is confidential. This information is contained in the *North Slope Archaeological Data* document, copies of which are kept at the following offices: State Historical Preservation Officer (SHPO) (907-269-8721), ACS in Deadhorse (907-659-2405), North Slope Borough Lands Division (907-852-0322), BPXA Crisis Center in Anchorage (907-564-5243), and the ConocoPhillips Incident Command Center in Anchorage (907-265-1000). The following cultural site(s) are located in the area depicted on this sheet:

- XFI-00003 near Anderson Point.
- XFI-00016 east of Anderson Point.
- XFI-00011 near the mouth of Kajutakrok Creek.
- XFI-00012 near the mouth of Nataroarak Creek.
- XFI-00010 on the mainland south of the western end of Arey Island.
- BRL-00007 on Arey Island.



### AIR ACCESS\*

- Barter Island LRRS airstrip (Sheet 188) is located approximately 13 miles to the East-Northeast. Although still owned by the Air Force, it is leased to the North Slope Borough and is open to the public. The airfield is attended, but the 4,800 ft. gravel runway is not monitored and is reported to be soft with ruts the entire length. Visual inspection recommended prior to use.

### VESSEL ACCESS\* AND HYDROGRAPHIC CONDITIONS

- Anderson Point marks the eastern edge of Camden Bay. South and west of this point, the bottom slopes to depths of 10-12 feet very close to shore.
- Waters are deep close to the outer shore of Arey Island, except at the southwest end.

### COUNTERMEASURES CONSIDERATIONS

- Expect inlets, embayments and protruding shoreline features to collect oil during sustained incoming winds.
- Barrier islands are often very low and may not completely protect the mainland shoreline.
- Both gravel and sand-silt beaches are often narrow and/or lying on top of tundra vegetation, presenting potential risk to load-bearing machinery and equipment.
- The steepness of many beaches may largely preclude the use of mechanized equipment.
- River deltas typically present complex shorelines consisting of potentially unstable sand-silt and mud tidal flats.
- No additional significant countermeasures considerations were identified in this area, pending field reconnaissance.

\*See the latest *Supplement, Alaska* and United States Coast Pilot for current information on air and vessel access, respectively.

144° 24'

144° 18'

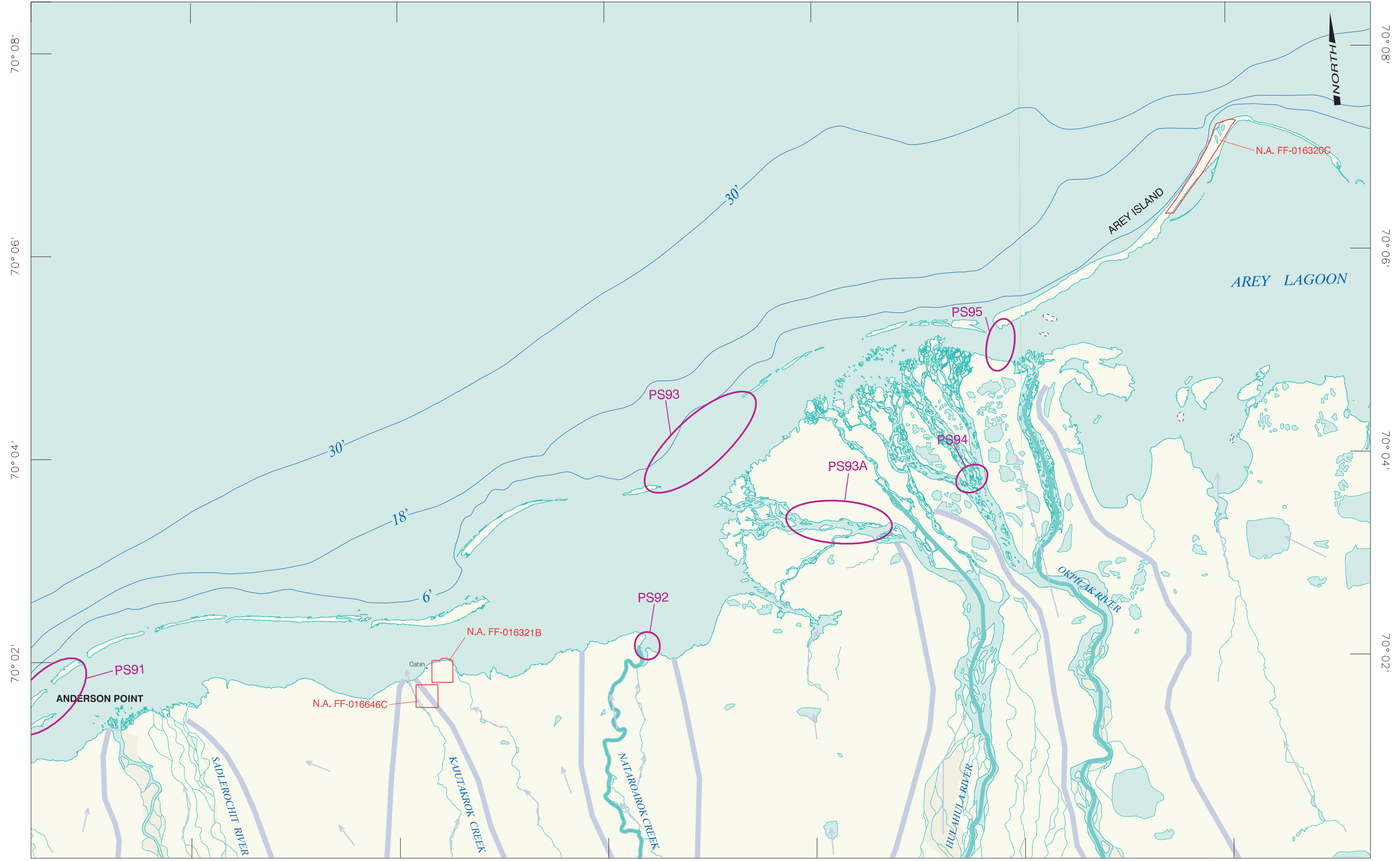
144° 12'

144° 06'

144° 00'

143° 54'

**SHEET 187**



Continue on sheet 186

Continue on sheet 188

Continue on sheet 186

1:63360

0 2500 5000 FEET



**PRIORITY PROTECTION SITES**

SITE NO.	DESCRIPTION	SENSITIVITY	TACTIC	EST. BOOM
PS96	Kuvritovik Entrance.	Most sensitive during open water season. Expect polar bear activity during whaling season. Use hazing and other precautions.	C-13 or C-14	3000'
PS97	Mouth of Bernard Harbor.	Most sensitive during open water season. Expect polar bear activity during whaling season. Use hazing and other precautions.	C-13 or C-14	2000'
PS98	Nelsaluk Pass.	Most sensitive during open water season. Expect polar bear activity during whaling season. Use hazing and other precautions.	C-13 or C-14	1500'
PS99	Jago Entrance.	Most sensitive during open water season. Prevent oil from reaching mainland shore.	C-13	2000'
PS100	Breaks in barrier island southeast of Jago Spit.	Most sensitive during open water season. Prevent oil from reaching the river delta.	C-14	800'

\* Priority Protection Area -- Barter Island and adjacent areas should be viewed as one large Priority Protection Area due to a high concentration of polar bears. On-site conditions may require the use of open water tactics to prevent oil migration into sensitive habitat.

**GENERAL SENSITIVITIES**

- The entire area covered by this sheet is a high recreation, wildlife and subsistence use area.
- Polar bears congregate near, and feed on, the whale bone piles remaining after subsistence hunts.
- Caribou present May through June.
- Polar bear dens may be present where topographical features provide adequate snow cover.
- Bearded seals present in the Beaufort Sea.
- Ringed seals present in coastal waters and/or ice. Ringed seals are associated with shorefast ice in the winter and early summer where they pup. Pups are very sensitive to oil for first 6 to 8 weeks of life (April, May).
- All activities within the Arctic National Wildlife Refuge – Alaska (ANWR).
- From August through November, Bowhead whales congregate and feed in Beaufort Sea offshore waters.
- Coastal areas host breeding, nesting, brood-rearing, and molting waterbirds during open water months.
- Anadromous and resident fish present in freshwater rivers and many inland lakes.

**CULTURAL SITES**

Information on the exact locations of cultural sites is confidential. This information is contained in the *North Slope Archaeological Data* document, copies of which are kept at the following offices: State Historical Preservation Officer (SHPO) (907-269-8721), ACS in Deadhorse (907-659-2405), North Slope Borough Lands Division (907-852-0322), BPXA Crisis Center in Anchorage (907-564-5243), and the ConocoPhillips Incident Command Center in Anchorage (907-265-1000). The following cultural site(s) are located in the area depicted on this sheet:

- BRL-00001 and BRL-00004 on western Barter Island.
- BRL-00006 and BRL-00009 on southwestern Barter Island.
- BRL-00002, BRL-00023, BRL-00024, BRL-00025, BRL-00026, BRL-00027, BRL-00028, BRL-00029, BRL-00030, BRL-00031, BRL-00032, BRL-00034, BRL-00035, BRL-00036, BRL-00037, BRL-00038, BRL-00040, BRL-00041, BRL-00042, BRL-00043, BRL-00044, BRL-00045, BRL-00046, and BRL-00047 near Kaktovik.
- BRL-00048 on western Bernard Spit.
- BRL-00014 and BRL-00015 near the southeast coast of Jago Lagoon.
- BRL-00016 near the delta mouth of the Jago River.



**AIR ACCESS\***

- Barter Island LRRS airstrip is owned by the Air Force, but leased to the North Slope Borough and is open to the public. The airfield is attended, but the 4,800 ft. gravel runway is not monitored and is reported to be soft with ruts the entire length. Visual inspection recommended prior to use.

**VESSEL ACCESS\* AND HYDROGRAPHIC CONDITIONS**

- Barter Island, elevation 58 ft., is the highest ground in this general area, with bluffs on its seaward side.
- Bernard Harbor lies off the northeast corner of Barter Island, just offshore of the village of Kaktovik. It is protected by Bernard Spit to its north, and has depths of 5-7 ft. over good holding bottom, but can only be entered by vessels drafting 4 ft. or less. Vessels entering from the west should favor the Barter Island shoreline.
- Manning Point is a barrier spit that projects north from the mainland to within 0.2 miles of the northeast end of Barter Island. Kaktovik Lagoon, between the spit and the island, and Jago Lagoon, on the east side of the spit, have depths of 9-12 feet, but cannot be entered by vessels drafting more than 4 ft.
- Jago Spit is a barrier island lying approximately 1 mile north of the shallow Jago River delta.

**COUNTERMEASURES CONSIDERATIONS**

- Expect inlets, embayments and protruding shoreline features to collect oil during sustained incoming winds.
- Barrier islands are often very low and may not completely protect the mainland shoreline.
- Both gravel and sand-silt beaches are often narrow and/or lying on top of tundra vegetation, presenting potential risk to load-bearing machinery and equipment.
- The steepness of many beaches may largely preclude the use of mechanized equipment.
- River deltas typically present complex shorelines consisting of potentially unstable sand-silt and mud tidal flats.
- No additional significant countermeasures considerations were identified in this area, pending field reconnaissance.

**STAGING AREAS AND PRESTAGED EQUIPMENT**

PRESTAGED EQUIP. AREA	LOCATION	ITEM	QUANTITY	TYPE
	Kaktovik			

Currently, this site contains no pre-staged equipment.

\*See the latest *Supplement, Alaska* and United States Coast Pilot for current information on air and vessel access, respectively.

143° 48'

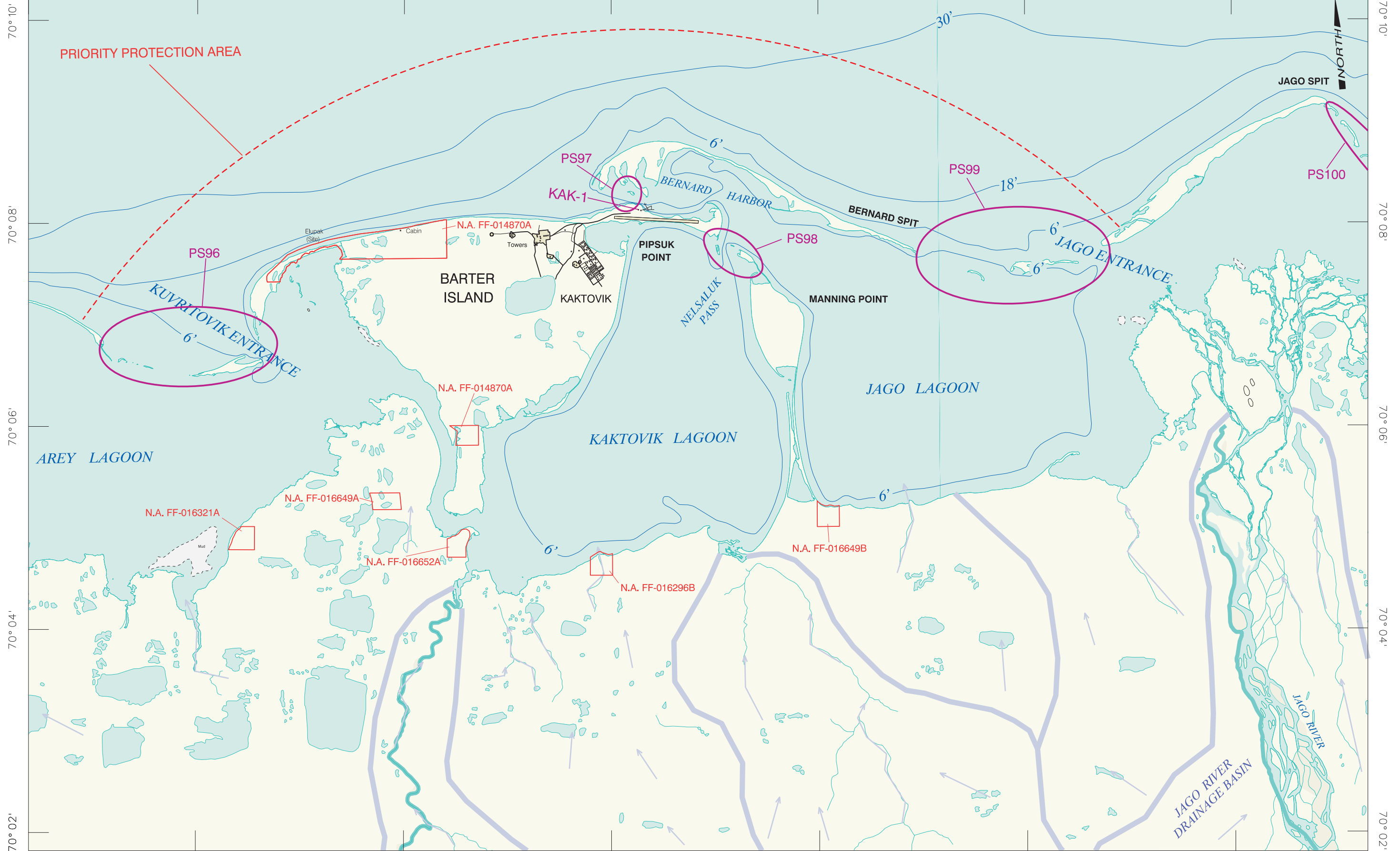
143° 42'

143° 36'

143° 30'

143° 24'

143° 18'



Continue on sheet 187

Continue on sheet 189

1:63360

0 2500 5000 FEET





### PRIORITY PROTECTION SITES

SITE NO.	DESCRIPTION	SENSITIVITY	TACTIC	EST. BOOM
PS100	Breaks in barrier island southeast of Jago Spit.	Most sensitive during open water season. Prevent oil from reaching mainland shore.	C-14	800'
PS101	Multiple breaks in barrier island.	Most sensitive during open water season. Prevent oil from reaching mainland shore.	C-13 or C-14	1000'
PS102	Break into northwest corner of Pokok Lagoon.	Most sensitive during open water season. Prevent oil from entering the lagoon.	C-14	300'

### GENERAL SENSITIVITIES

- Caribou present May through June.
- Polar bear dens may be present where topographical features provide adequate snow cover.
- Bearded seals present in the Beaufort Sea.
- Ringed seals present in coastal waters and/or ice. Ringed seals are associated with shorefast ice in the winter and early summer where they pup. Pups are very sensitive to oil for first 6 to 8 weeks of life (April, May).
- All activities within the Arctic National Wildlife Refuge – Alaska (ANWR).
- From August through November, Bowhead whales congregate and feed in Beaufort Sea offshore waters. Bowhead whales are present in high concentrations east of Griffin Point.
- Coastal areas support concentrations of breeding, nesting, brood-rearing, and molting waterbirds during the open water months.
- Anadromous and resident fish present in freshwater rivers and many inland lakes.

### CULTURAL SITES

Information on the exact locations of cultural sites is confidential. This information is contained in the *North Slope Archaeological Data* document, copies of which are kept at the following offices: State Historical Preservation Officer (SHPO) (907-269-8721), ACS in Deadhorse (907-659-2405), North Slope Borough Lands Division (907-852-0322), BPXA Crisis Center in Anchorage (907-564-5243), and the ConocoPhillips Incident Command Center in Anchorage (907-265-1000). The following cultural site(s) are located in the area depicted on this sheet:

- BRL-00016 near the delta mouth of the Jago River.
- BRL-00008 near Martin Point.
- BRL-00010 on the south shore of Tapkaurak Lagoon.
- BRL-00003 and BRL-00011 near Tapkaurak Point.
- BRL-00012 and BRL-00013 near the eastern end of Tapkaurak Spit.
- BRL-00005 and BRL-00017 near Griffin Point.
- BRL-00018, BRL-00020 and BRL-00022 near Pokok Lagoon.



### AIR ACCESS\*

- Barter Island LRRS airstrip (Sheet 188) is located approximately 14 miles to the West-Northwest. Although still owned by the Air Force, it is leased to the North Slope Borough and is open to the public. The airfield is attended, but the 4,800 ft. gravel runway is not monitored and is reported to be soft with ruts the entire length. Visual inspection recommended prior to use.

### VESSEL ACCESS\* AND HYDROGRAPHIC CONDITIONS

- Martin Point, low and irregular, is located on the east side of the shallow Jago River delta.
- From Martin Point southeast to Griffin Point, low barrier islands are separated from the mainland by shallow lagoons. Considerable driftwood has accumulated on the higher parts of the islands. The mainland shores of the lagoons have tundra bluffs up to 20 ft. There is deep water along the seaward side of the barrier islands, and small boats can navigate within a few yards of the beach except near the inlets.
- A mile northwest of Griffin Point is Oruktalik Entrance, a narrow barrier passage through which vessels drafting 5 feet or less may enter Oruktalik Lagoon.
- Small boats can navigate very close to the beach between Griffin Point and Pokok Bay to the southeast.
- Southeast of Pokok Lagoon, the coastline becomes 25-30 ft. bluffs fronted by a narrow steep sand beach.

### COUNTERMEASURES CONSIDERATIONS

- Expect inlets, embayments and protruding shoreline features to collect oil during sustained incoming winds.
- Barrier islands are often very low and may not completely protect the mainland shoreline.
- Both gravel and sand-silt beaches are often narrow and/or lying on top of tundra vegetation, presenting potential risk to load-bearing machinery and equipment.
- The steepness of many beaches may largely preclude the use of mechanized equipment.
- River deltas typically present complex shorelines consisting of potentially unstable sand-silt and mud tidal flats.
- No additional significant countermeasures considerations were identified in this area, pending field reconnaissance.

\*See the latest *Supplement, Alaska* and United States Coast Pilot for current information on air and vessel access, respectively.

143° 18'

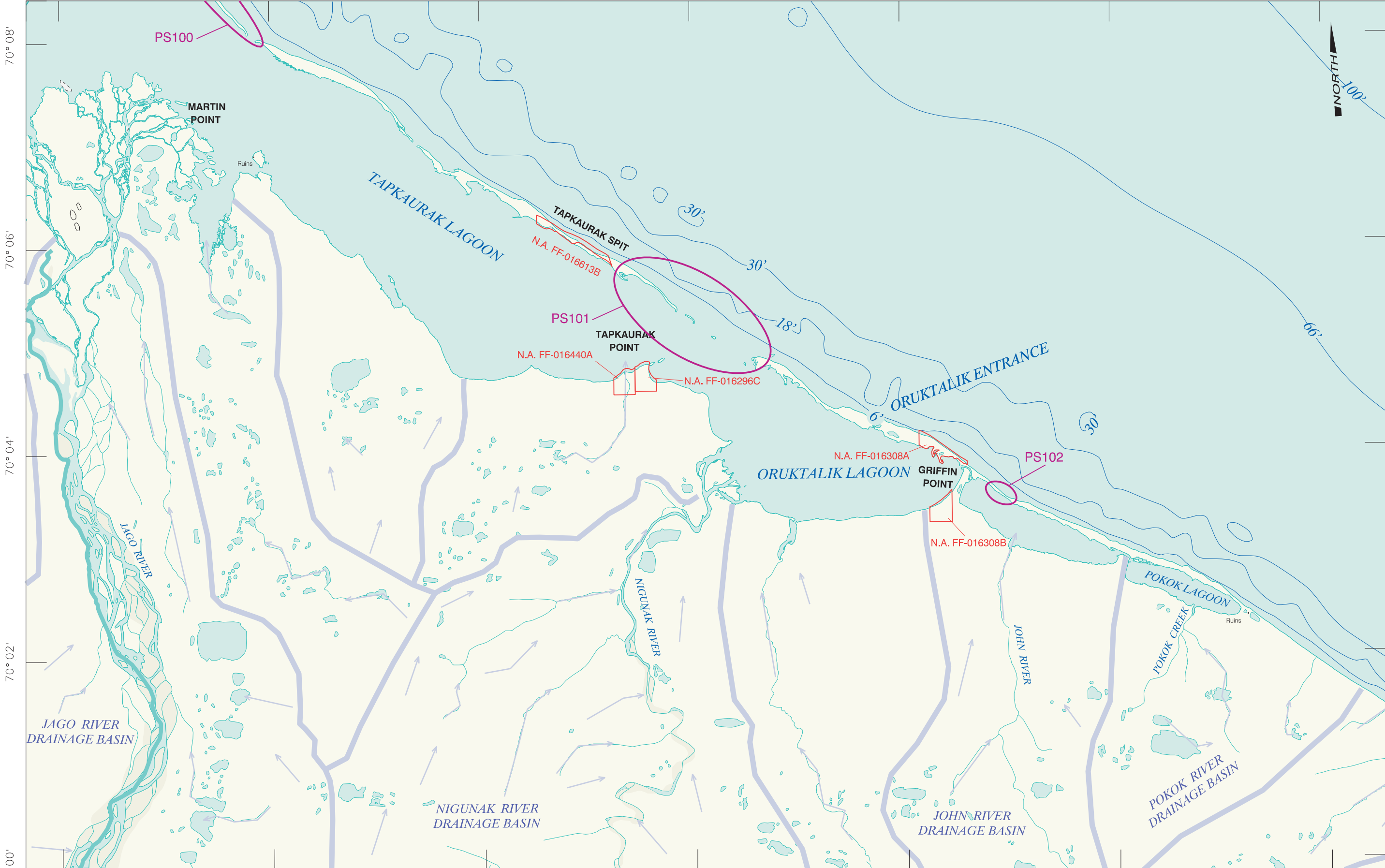
143° 12'

143° 06'

143° 00'

142° 54'

142° 48'



Continue on sheet 188

Continue on sheet 190

1:63360

0 2500 5000 FEET



## PRIORITY PROTECTION SITES

SITE NO.	DESCRIPTION	SENSITIVITY	TACTIC	EST. BOOM
PS103	Entrance to Pokok Bay.	Most sensitive during open water season. Prevent oil from entering the bay.	C-13 or C-14	300'
PS104	Multiple openings into Angun Lagoon.	Most sensitive during open water season. Prevent oil from entering the lagoon.	C-13 or C-14	800'
PS105	Opening in barrier island.	Most sensitive during open water season. Prevent oil from reaching mainland shore.	C-13	1000'

## GENERAL SENSITIVITIES

- Caribou present May through June.
- Polar bear dens may be present where topographical features provide adequate snow cover.
- Bearded seals present in the Beaufort Sea.
- Ringed seals present in coastal waters and/or ice. Ringed seals are associated with shorefast ice in the winter and early summer where they pup. Pups are very sensitive to oil for first 6 to 8 weeks of life (April, May).
- All activities within the Arctic National Wildlife Refuge – Alaska (ANWR).
- From August through November, Bowhead whales congregate in high concentrations and feed in Beaufort Sea offshore waters.
- Coastal areas support concentrations of breeding, nesting, brood-rearing, and molting waterbirds during the open water months.
- Anadromous and resident fish present in freshwater rivers and many inland lakes.

## CULTURAL SITES

Information on the exact locations of cultural sites is confidential. This information is contained in the *North Slope Archaeological Data* document, copies of which are kept at the following offices: State Historical Preservation Officer (SHPO) (907-269-8721), ACS in Deadhorse (907-659-2405), North Slope Borough Lands Division (907-852-0322), BPXA Crisis Center in Anchorage (907-564-5243), and the ConocoPhillips Incident Command Center in Anchorage (907-265-1000). The following cultural site(s) are located in the area depicted on this sheet:

- XDP-00046 on the mainland coast near the northwestern end of Beaufort Lagoon.
- XDP-00001 near Angun Point.
- XDP-00026, XDP-00027 and XDP-00028 between Pokok Bay and Angun Lagoon.
- XDP-00004 near the northwestern boundary of Pokok Bay.
- BRL-00019, BRL-00021 and BRL-00022 near the coast in the northwest quadrant of this sheet.



## AIR ACCESS\*

- Barter Island LRRS airstrip (Sheet 188) is located approximately 28 miles to the Northwest. Although still owned by the Air Force, it is leased to the North Slope Borough and is open to the public. The airfield is attended, but the 4,800 ft. gravel runway is not monitored and is reported to be soft with ruts the entire length. Visual inspection recommended prior to use.

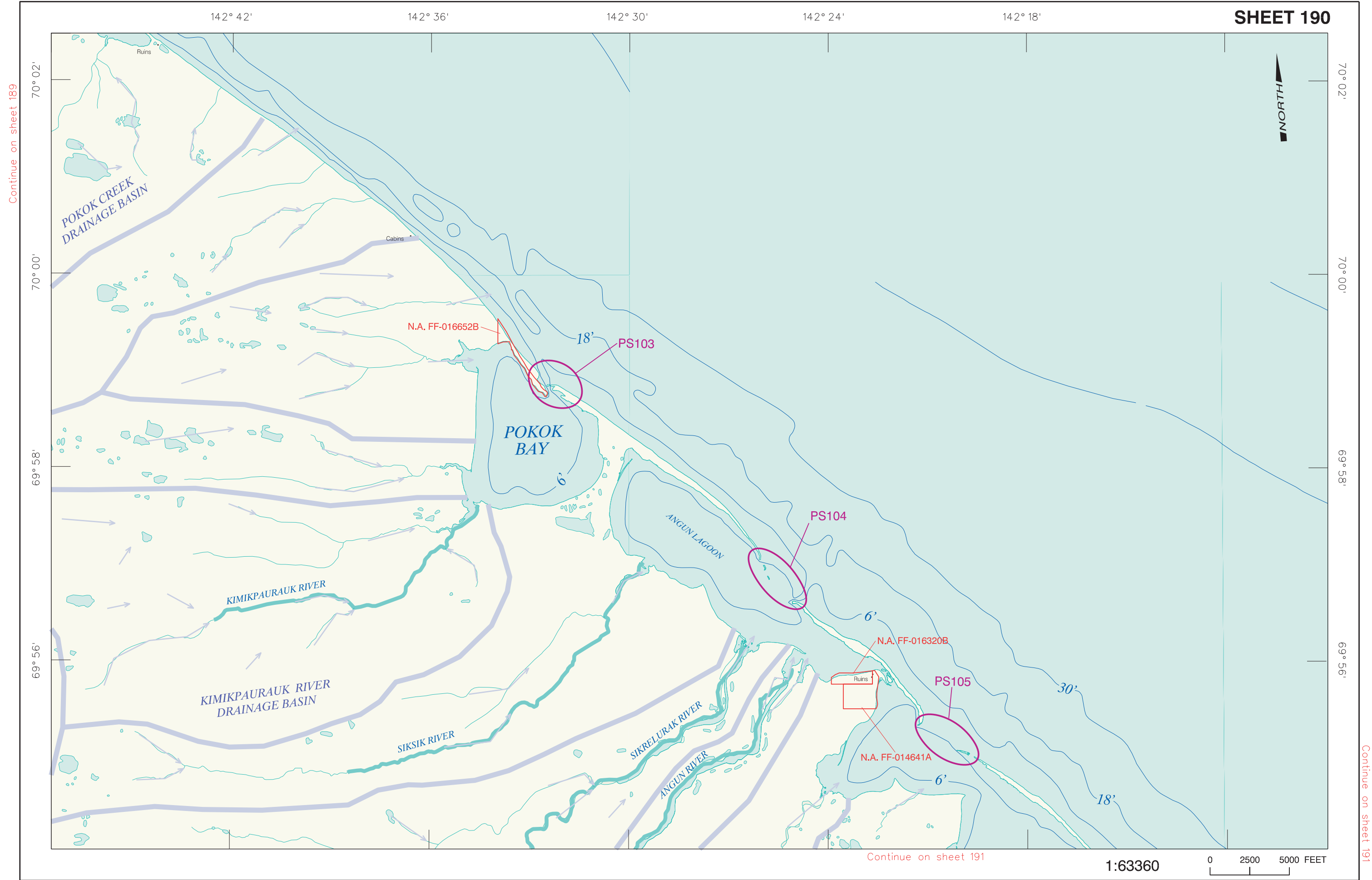
## VESSEL ACCESS\* AND HYDROGRAPHIC CONDITIONS

- Southeast of Pokok Lagoon, the coastline becomes 25-30 ft. bluffs fronted by a narrow steep sand beach all the way to within 1.5 miles of Pokok Bay. Small boats can navigate very close to the beach.
- Pokok Bay, 10-12 ft. depth, has good holding bottom and protection from ice and winds. Bars extend out from both sides of the entrance. Depth of the entrance is approximately 7 ft., with approach from the west recommended.
- Humphrey Point on the southeast side of Pokok Bay has a low bluff and narrow sand beach. Extending southeast are low barrier islands that cover in many places at high water. The seaward sides of these islands are irregular, and small craft must stay well offshore.
- Angun Lagoon, had depths from 10-11 ft. There is a 10-foot bluff at Angun Point. The lagoon entrance is very narrow with a controlling depth of 8 ft. Use caution when entering due to constant shift of the barrier islands.
- Beaufort Lagoon, with depths of 5-12 feet in the middle, extends southeast behind the barrier reef running from Angun Point to Siku Point.

## COUNTERMEASURES CONSIDERATIONS

- Expect inlets, embayments and protruding shoreline features to collect oil during sustained incoming winds.
- Barrier islands are often very low and may not completely protect the mainland shoreline.
- Both gravel and sand-silt beaches are often narrow and/or lying on top of tundra vegetation, presenting potential risk to load-bearing machinery and equipment.
- The steepness of many beaches may largely preclude the use of mechanized equipment.
- River deltas typically present complex shorelines consisting of potentially unstable sand-silt and mud tidal flats.
- No additional significant countermeasures considerations were identified in this area, pending field reconnaissance.

\*See the latest *Supplement, Alaska* and United States Coast Pilot for current information on air and vessel access, respectively.



Continue on sheet 189

Continue on sheet 191

Continue on sheet 191

1:63360

0 2500 5000 FEET





### PRIORITY PROTECTION SITES

SITE NO.	DESCRIPTION	SENSITIVITY	TACTIC	EST. BOOM
PS105	Opening in barrier island.	Most sensitive during open water season. Prevent oil from reaching mainland shore.	C-13	1000'
PS106	Opening in barrier island.	Most sensitive during open water season. Prevent oil from entering the lagoon.	C-14	200'
PS107	Openings in barrier island at the mouth of the Aichilik River.	Most sensitive during open water season. Prevent oil from reaching the river delta.	C-14	400'
PS108	Openings to Egaksrak Lagoon.	Most sensitive during open water season. Prevent oil from entering the lagoon.	C-13 or C-14	500'

### GENERAL SENSITIVITIES

- The Kongakut River delta is a high recreation, wildlife and subsistence use area.
- Caribou present May through June.
- Polar bear dens may be present where topographical features provide adequate snow cover.
- Bearded seals present in the Beaufort Sea.
- Ringed seals present in coastal waters and/or ice. Ringed seals are associated with shorefast ice in the winter and early summer where they pup. Pups are very sensitive to oil for first 6 to 8 weeks of life (April, May).
- Activities east of Aichilik River within the Arctic National Wildlife Refuge – Alaska (ANWR).
- From August through November, Bowhead whales congregate in high concentrations and feed in Beaufort Sea offshore waters.
- Coastal areas support concentrations of breeding, nesting, brood-rearing, and molting waterbirds during the open water months.
- Anadromous and resident fish present in freshwater rivers and many inland lakes.

### CULTURAL SITES

Information on the exact locations of cultural sites is confidential. This information is contained in the *North Slope Archaeological Data* document, copies of which are kept at the following offices: State Historical Preservation Officer (SHPO) (907-269-8721), ACS in Deadhorse (907-659-2405), North Slope Borough Lands Division (907-852-0322), BPXA Crisis Center in Anchorage (907-564-5243), and the ConocoPhillips Incident Command Center in Anchorage (907-265-1000). The following cultural site(s) are located in the area depicted on this sheet:

- XDP-00023 and XDP-00025 on Icy Reef east of Siku Entrance.
- XDP-00024 and XDP-00029 on the southeast shore of Nuvagapak Lagoon.
- XDP-00045 and XDP-00046 on the mainland coast near the northwestern end of Beaufort Lagoon.



### AIR ACCESS\*

- Barter Island LRRS airstrip (Sheet 188) is located approximately 40 miles to the Northwest. Although still owned by the Air Force, it is leased to the North Slope Borough and is open to the public. The airfield is attended, but the 4,800 ft. gravel runway is not monitored and is reported to be soft with ruts the entire length. Visual inspection recommended prior to use.

### VESSEL ACCESS\* AND HYDROGRAPHIC CONDITIONS

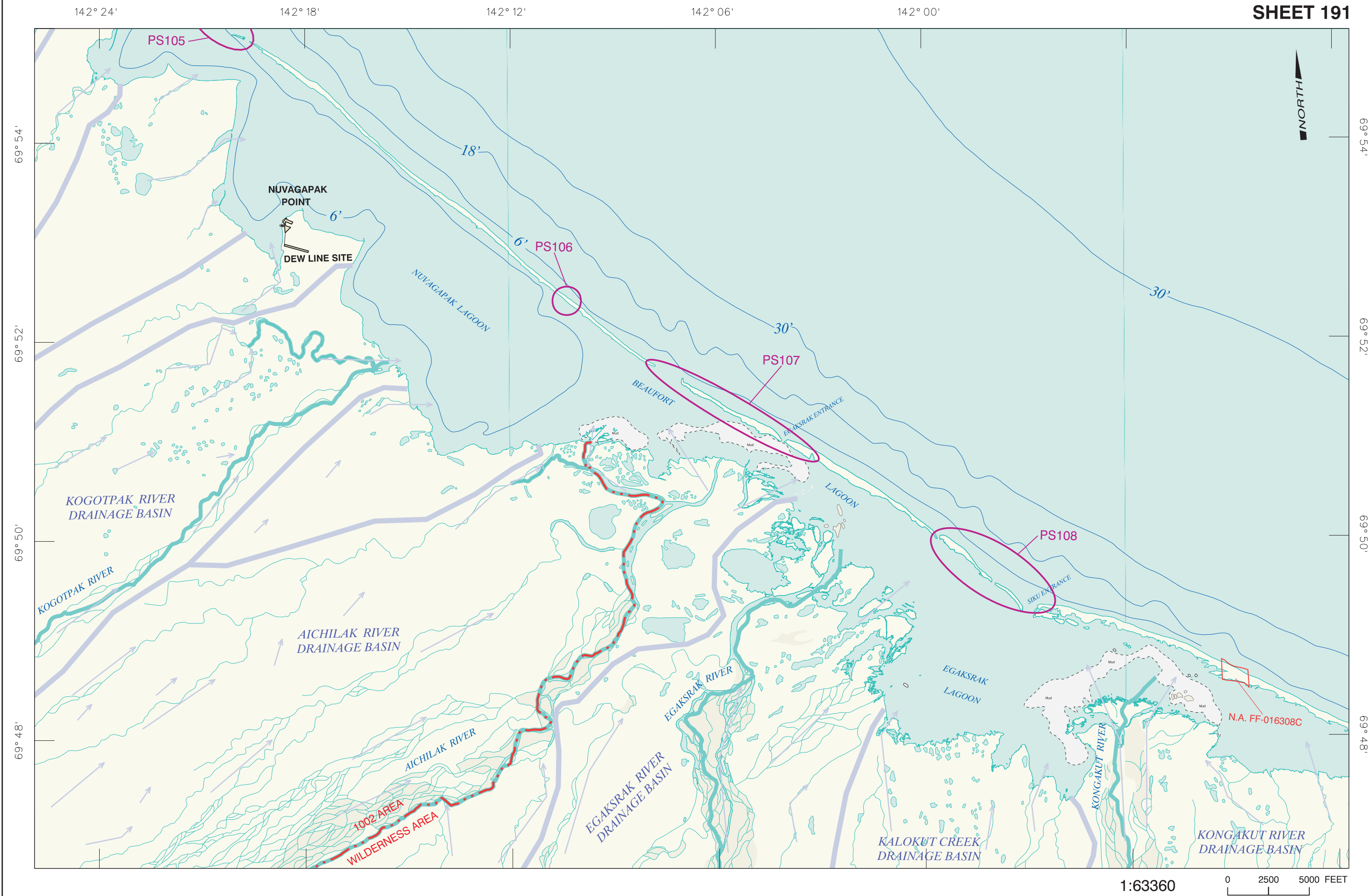
- Beaufort Lagoon, with depths of 5-12 feet in the middle, extends southeast behind the barrier island(s) running from Angun Point to Siku Point. The southeast part of the lagoon from the Aichilik River delta to Siku Point has not been surveyed but the entrances are known to be shallow and subject to change. The principal entrance to the lagoon is a narrow channel with a depth of 2-5 feet, about 1.8 miles southeast of Angun Point; use caution.
- Nuvagapak Lagoon has depths of 8-10 feet in the middle.
- Egaksrak Lagoon has not been surveyed.
- Siku Point is the northwest end of Icy Reef, a barrier island that extends 13 miles southeast to Demarcation Bay without a break. Icy Reef has elevations from 1-10 feet, and is more prominent than its neighboring barrier islands to the northwest. The island has considerable driftwood along its entire length, and water depths of 15 feet are within 100 yards of the beach.

### COUNTERMEASURES CONSIDERATIONS

- Expect inlets, embayments and protruding shoreline features to collect oil during sustained incoming winds.
- Barrier islands are often very low and may not completely protect the mainland shoreline.
- Both gravel and sand-silt beaches are often narrow and/or lying on top of tundra vegetation, presenting potential risk to load-bearing machinery and equipment.
- The steepness of many beaches may largely preclude the use of mechanized equipment.
- River deltas typically present complex shorelines consisting of potentially unstable sand-silt and mud tidal flats.
- No additional significant countermeasures considerations were identified in this area, pending field reconnaissance.

\*See the latest *Supplement, Alaska* and United States Coast Pilot for current information on air and vessel access, respectively.

Continue on sheet 190



Continue on sheet 192

1:63360

0 2500 5000 FEET



**PRIORITY PROTECTION SITES**

SITE NO.	DESCRIPTION	SENSITIVITY	TACTIC	EST. BOOM
PS108	Openings to Egaksrak Lagoon.	Most sensitive during open water season. Prevent oil from entering the lagoon.	C-13 or C-14	500'
PS109	Opening in barrier island at mouth of Kongukut River.	Most sensitive during open water season. Prevent oil from reaching the river delta.	C-14	200'
PS110	Opening to Pingokruluk Lagoon.	Most sensitive during open water season. Prevent oil from entering the lagoon.	C-14	200'

**GENERAL SENSITIVITIES**

- Caribou present May through June.
- Polar bear dens may be present where topographical features provide adequate snow cover.
- Bearded seals present in the Beaufort Sea.
- Ringed seals present in coastal waters and/or ice. Ringed seals are associated with shorefast ice in the winter and early summer where they pup. Pups are very sensitive to oil for first 6 to 8 weeks of life (April, May).
- From August through November, Bowhead whales congregate in high concentrations and feed in Beaufort Sea offshore waters.
- Coastal areas support concentrations of breeding, nesting, brood-rearing, and molting waterbirds during the open water months.
- Anadromous and resident fish present in freshwater rivers and many inland lakes.

**CULTURAL SITES**

Information on the exact locations of cultural sites is confidential. This information is contained in the *North Slope Archaeological Data* document, copies of which are kept at the following offices: State Historical Preservation Officer (SHPO) (907-269-8721), ACS in Deadhorse (907-659-2405), North Slope Borough Lands Division (907-852-0322), BPXA Crisis Center in Anchorage (907-564-5243), and the ConocoPhillips Incident Command Center in Anchorage (907-265-1000). The following cultural site(s) are located in the area depicted on this sheet:

- XDP-00016 on the coast south of Pingokraluk Point.
- XDP-00003 on the mainland coast near the northwestern end of Pingokraluk Lagoon.
- XDP-00023 and XDP-00025 on Icy Reef east of Siku Entrance.



**AIR ACCESS\***

- Barter Island LRRS airstrip (Sheet 188) is located approximately 50 miles to the Northwest. Although still owned by the Air Force, it is leased to the North Slope Borough and is open to the public. The airfield is attended, but the 4,800 ft. gravel runway is not monitored and is reported to be soft with ruts the entire length. Visual inspection recommended prior to use.

**VESSEL ACCESS\* AND HYDROGRAPHIC CONDITIONS**

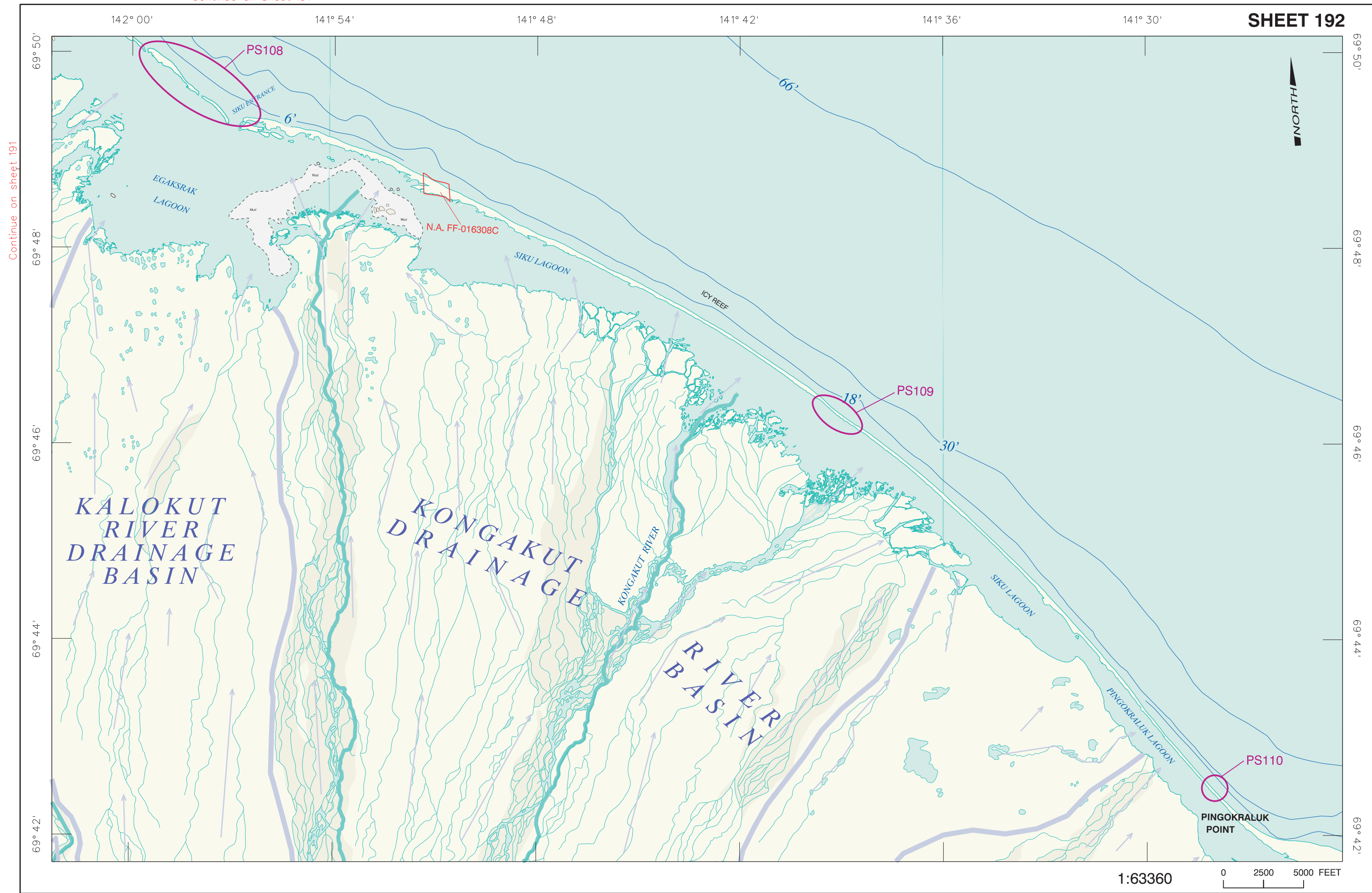
- Siku Point is the northwest end of Icy Reef, a barrier island that extends 13 miles southeast to Demarcation Bay without a break. Icy Reef has elevations from 1-10 feet, and is more prominent than its neighboring barrier islands to the northwest. The island has considerable driftwood along its entire length, and water depths of 15 feet are within 100 yards of the beach.
- The northwest half of the mainland shore behind Icy Reef is low and relatively flat. Halfway to Demarcation Bay is a large ice field, approximately 3 miles long, that Natives say never melts. Observations from Icy Reef indicate the ice field is fairly uniform and stands a few feet above the surface of the lagoon.
- The southeast half of the mainland shore behind Icy Reef has bluffs with elevations of as much as 25 feet.
- Pingokraluk Point, a 49-foot-high tundra mound, is a prominent landmark.

**COUNTERMEASURES CONSIDERATIONS**

- Expect inlets, embayments and protruding shoreline features to collect oil during sustained incoming winds.
- Barrier islands are often very low and may not completely protect the mainland shoreline.
- Both gravel and sand-silt beaches are often narrow and/or lying on top of tundra vegetation, presenting potential risk to load-bearing machinery and equipment.
- The steepness of many beaches may largely preclude the use of mechanized equipment.
- River deltas typically present complex shorelines consisting of potentially unstable sand-silt and mud tidal flats.
- No additional significant countermeasures considerations were identified in this area, pending field reconnaissance.

\*See the latest *Supplement, Alaska* and United States Coast Pilot for current information on air and vessel access, respectively.





Continue on sheet 191

Continue on sheet 193

1:63360 0 2500 5000 FEET





**PRIORITY PROTECTION SITES**

SITE NO.	DESCRIPTION	SENSITIVITY	TACTIC	EST. BOOM
PS110	Opening to Pingokruluk Lagoon.	Most sensitive during open water season. Prevent oil from entering the lagoon.	C-14	200'
PS111	Opening to Demarcation Bay.	Most sensitive during open water season. Prevent oil from entering the bay.	C-13	1200'

**GENERAL SENSITIVITIES**

- Caribou present May through June.
- Polar bear dens may be present where topographical features provide adequate snow cover.
- Bearded seals present in the Beaufort Sea.
- Ringed seals present in coastal waters and/or ice. Ringed seals are associated with shorefast ice in the winter and early summer where they pup. Pups are very sensitive to oil for first 6 to 8 weeks of life (April, May).
- From August through November, Bowhead whales congregate in high concentrations and feed in Beaufort Sea offshore waters.
- Coastal areas support concentrations of breeding, nesting, brood-rearing, and molting waterbirds during the open water months.
- Anadromous and resident fish present in freshwater rivers and many inland lakes.

**CULTURAL SITES**

Information on the exact locations of cultural sites is confidential. This information is contained in the *North Slope Archaeological Data* document, copies of which are kept at the following offices: State Historical Preservation Officer (SHPO) (907-269-8721), ACS in Deadhorse (907-659-2405), North Slope Borough Lands Division (907-852-0322), BPXA Crisis Center in Anchorage (907-564-5243), and the ConocoPhillips Incident Command Center in Anchorage (907-265-1000). The following cultural site(s) are located in the area depicted on this sheet:

- XDP-00015 on the coast near the border.
- XDP-00002, XDP-00005, XDP-00006, XDP-00007, XDP-00008 and XDP-00014 along the mainland coast at the northeast boundary of Demarcation Bay.
- XDP-00010 near Demarcation Point.
- XDP-00009 and XDP-00012 along the southern coast of Demarcation Bay.
- XDP-00010 on Icy Reef near its eastern end in Demarcation Bay.
- XDP-00013 and XDP-00016 along the coast south of Pingokraluk Point.
- XDP-00003 on the mainland coast near the northwestern end of Pingokraluk Lagoon..



**AIR ACCESS\***

- Barter Island LRRS airstrip (Sheet 188) is located approximately 64 miles to the Northwest. Although still owned by the Air Force, it is leased to the North Slope Borough and is open to the public. The airfield is attended, but the 4,800 ft. gravel runway is not monitored and is reported to be soft with ruts the entire length. Visual inspection recommended prior to use.

**VESSEL ACCESS\* AND HYDROGRAPHIC CONDITIONS**

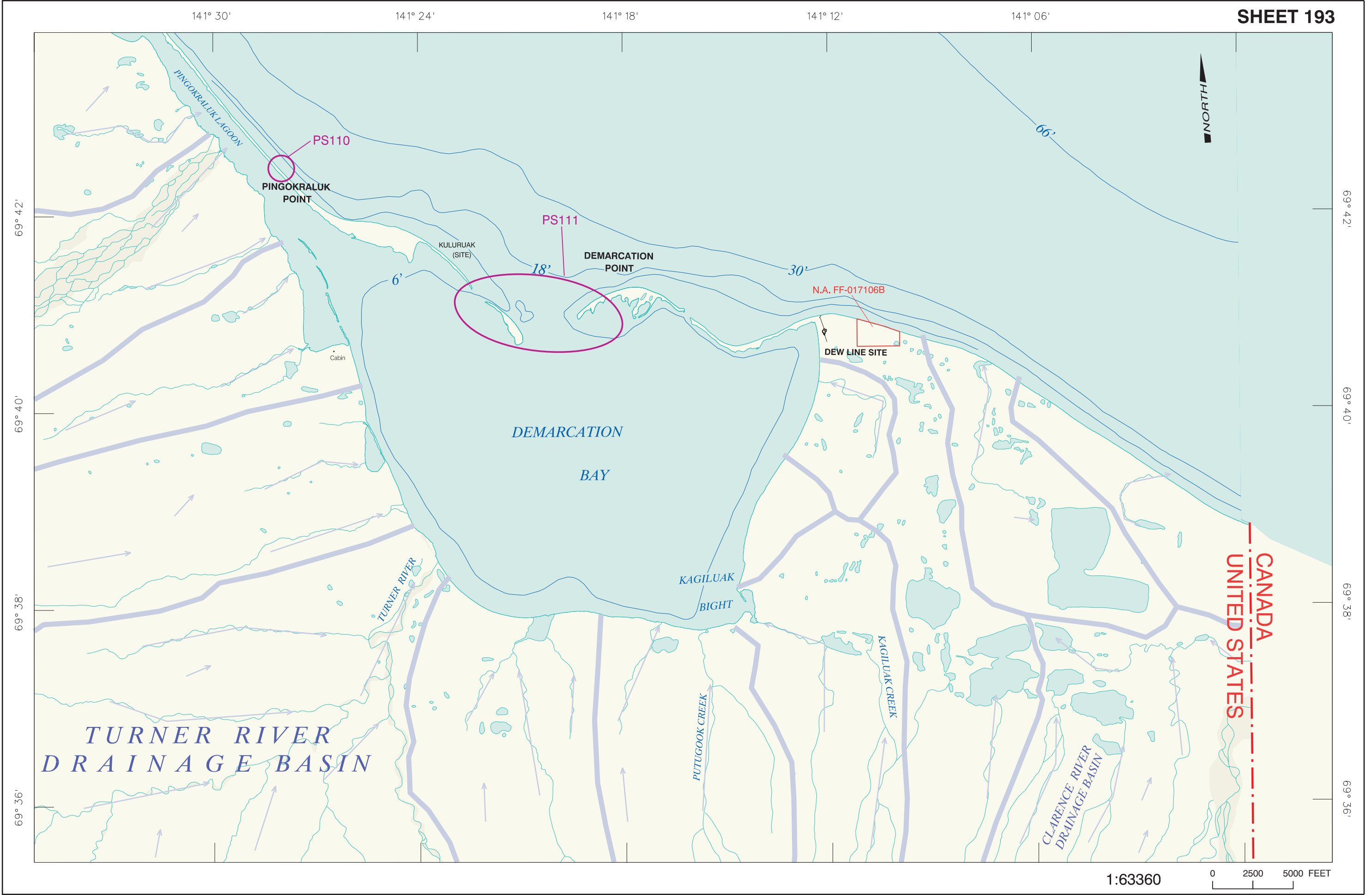
- Pingokraluk Point, a 49-foot-high tundra mound, is a prominent landmark.
- Demarcation Point, located on the east side of the entrance to Demarcation Bay, is low tundra that rises gradually to a 30-foot bluff.
- A depth of 13 feet can be carried into Demarcation Bay 0.5 miles west of Demarcation Point. The bay has depths of 13-16 feet, sticky bottom, and good protection from all weather. Along the shores of the bay are bluffs with elevations of up to 25 feet.
- From Demarcation Point to the Canadian border, a narrow, steep sand beach is backed by irregular bluffs. Small boats can navigate within a few yards of the beach, and there are depths of 30 feet within 0.3 miles.

**COUNTERMEASURES CONSIDERATIONS**

- Expect inlets, embayments and protruding shoreline features to collect oil during sustained incoming winds.
- Barrier islands are often very low and may not completely protect the mainland shoreline.
- Both gravel and sand-silt beaches are often narrow and/or lying on top of tundra vegetation, presenting potential risk to load-bearing machinery and equipment.
- The steepness of many beaches may largely preclude the use of mechanized equipment.
- River deltas typically present complex shorelines consisting of potentially unstable sand-silt and mud tidal flats.
- No additional significant countermeasures considerations were identified in this area, pending field reconnaissance.

\*See the latest *Supplement, Alaska* and United States Coast Pilot for current information on air and vessel access, respectively.

Continue on sheet 192





**PRIORITY PROTECTION SITES**

SITE NO.	DESCRIPTION	SENSITIVITY	TACTIC	EST. BOOM
PS158	Mouth of Mayoek River Drainage Basin.	Most sensitive during open water season. Prevent oil from entering the river.	C-13 or C-14	800'
PS159	Mouth of Ikpik Slough.	Most sensitive during open water season. Prevent oil from entering the slough.	C-13 or C-14	1200'
PS160	Mouth of Central Marsh Drainage Basin.	Most sensitive during open water season. Prevent oil from entering the marsh.	C-13 or C-14	800'
PS161	Small inlet to North Salt Lagoon.	Most sensitive during open water season. Prevent oil from entering the lagoon.	C-14	200'

\*NOTE: Priority Protection Sites not visually verified due to clouds during aerial reconnaissance.

**GENERAL SENSITIVITIES**

- Elson Lagoon, bounded by a line stretching from Tekagakrok Point to Doctor Island, is heavily used in summer months for subsistence fishing.
- Coastal areas and inland lakes support high concentrations of breeding, nesting, brood-rearing, and molting waterbirds during the open water months.
- Known nesting area for threatened Spectacled and Steller's Eiders.
- Expect to deploy bird hazing systems.
- From August through November, Bowhead whales congregate and feed in Beaufort Sea offshore waters, seaward of the barrier islands, between Pitt Point (Sheet 141) and Point Barrow (Sheet 194). They migrate westward each Fall through the nearshore environment, rounding Point Barrow close to shore before moving south offshore along the Chukchi Sea coast.
- Polar bears congregate near, and feed on, the whale bone piles remaining after subsistence hunts.
- Freshwater rivers and many inland lakes contain resident and anadromous fish species.
- Ringed seals are associated with shorefast ice in the winter and early summer where they pup. Pups are very sensitive to oil for first 6 to 8 weeks of life (April, May).
- All activities within the National Petroleum Reserve – Alaska (NPRA).

**CULTURAL SITES**

Information on the exact locations of cultural sites is confidential. This information is contained in the *North Slope Archaeological Data* document, copies of which are kept at the following offices: State Historical Preservation Officer (SHPO) (907-269-8721), ACS in Deadhorse (907-659-2405), North Slope Borough Lands Division (907-852-0322), BPXA Crisis Center in Anchorage (907-564-5243), and the ConocoPhillips Incident Command Center in Anchorage (907-265-1000). The following cultural site(s) are located in the area depicted on this sheet:

- BAR-00036 near Point Barrow
- BAR-00011 south of Point Barrow
- BAR-00001 northeast of North Salt Lagoon
- BAR-0066 east of North Salt Lagoon
- BAR-00094 near Brant Point
- BAR-00041, BAR-00046, BAR-00047, BAR-00048, BAR-00049, BAR-00050, BAR-00051, BAR-00052, BAR-00053, and BAR-00054, all near Imikpuk Lake and North Salt Lagoon
- BAR-00034 near Imikpuk Lake and Middle Salt Lagoon



**AIR ACCESS\***

- Commercial and air freight services are available at Barrow airport (Sheet 195), located approximately 10 miles to the Southwest. Runway is 6,500 ft. asphalt.

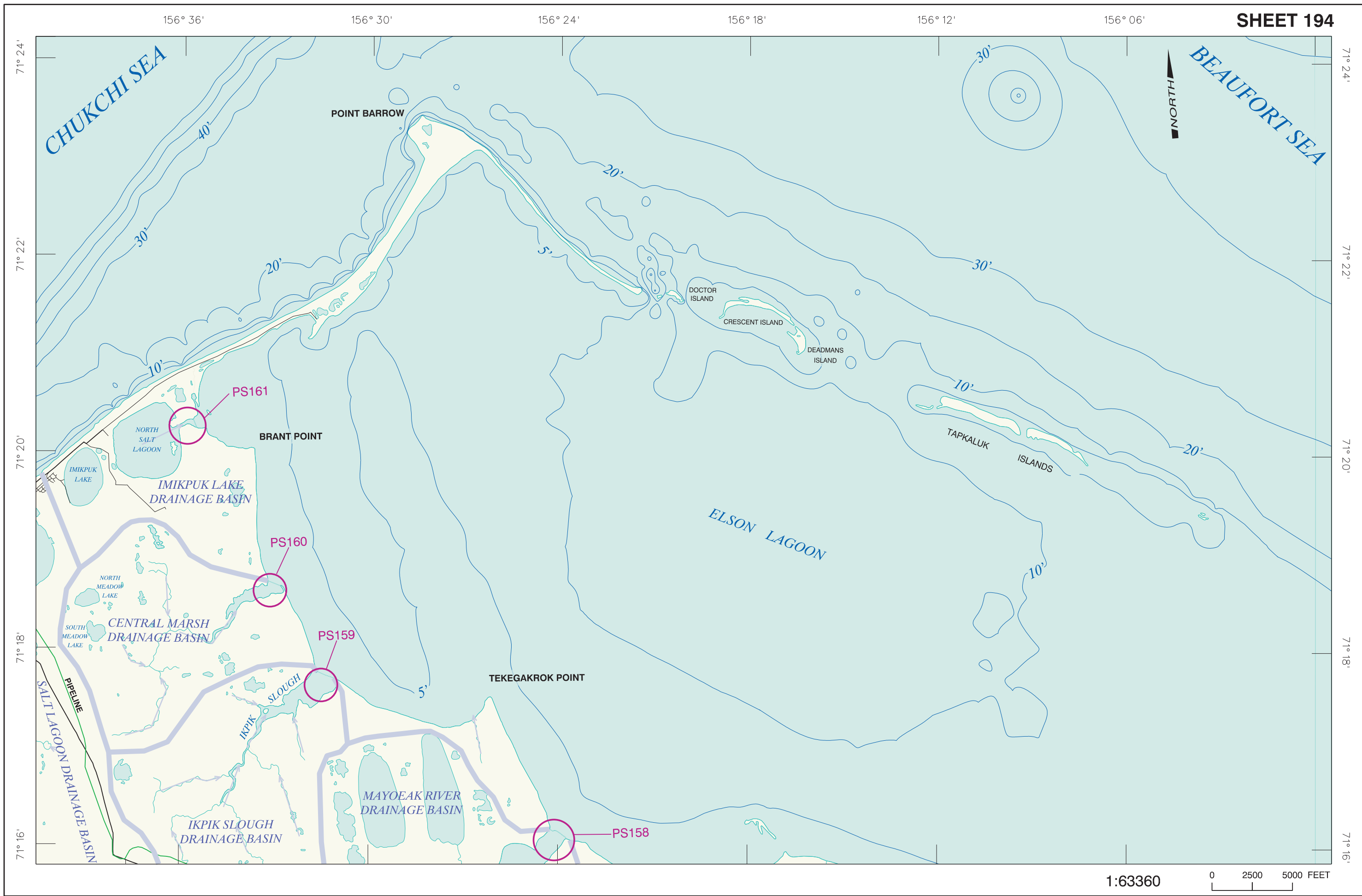
**VESSEL ACCESS\* AND HYDROGRAPHIC CONDITIONS**

- Point Barrow is the seaward end of a gravelly spit jutting 3 miles northeast from the mainland. It marks the northeast corner of the Chukchi Sea and the southwest corner of the Beaufort Sea.
- The diurnal range of tide at Point Barrow is approximately 0.4 ft.
- Northwest of the point, the current flows constantly in a northeast direction at 3-4 knots. Along the northeast side of the point, the current flows in a northwest direction at 1 knot.
- Average breakup at Barrow is in late July, with average freezeup is in early October. Navigation is difficult in the ice, and is usually suspended from early December to early July.
- Elson Lagoon, with depths of 8-12 ft., extends from Point Barrow 21 miles southeast to Christie Point. Between the lagoon and Beaufort Sea are a long series of low barrier islands known as the Plover Islands. Consult current navigation charts to determine the safest entryway into the lagoon.

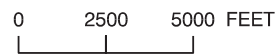
**COUNTERMEASURES CONSIDERATIONS**

- The shores around Barrow and out on Barrow Spit are sand-gravel and gravel-cobble beaches. Sediment size is coarser on the spit and point than around the lagoon.
- Elson Lagoon is wide and shallow affording mainland beaches little protection from wind and waves.
- The Plover Islands have steep ocean-facing beaches and more gradually-sloping lagoon-facing shores.
- No additional significant countermeasures considerations were identified in this area, pending field reconnaissance.

\*See the latest *Supplement, Alaska* and United States Coast Pilot for current information on air and vessel access, respectively.



1:63360



Continue on sheet 195

Continue on sheet 197

Continue on sheet 196





**PRIORITY PROTECTION SITES**

SITE NO.	DESCRIPTION	SENSITIVITY	TACTIC	EST. BOOM
PS159	Mouth of Ikpik Slough.	Most sensitive during open water season. Prevent oil from entering the slough.	C-13 or C-14	1200'
PS160	Mouth of Central Marsh Drainage Basin.	Most sensitive during open water season. Prevent oil from entering the marsh.	C-13 or C-14	800'
PS161	Small inlet to North Salt Lagoon.	Most sensitive during open water season. Prevent oil from entering the lagoon.	C-14	200'
PS162	Mouth of Nunavak Bay.	Most sensitive during open water season. Prevent oil from entering the bay.	C-14	200'

**GENERAL SENSITIVITIES**

- Coastal areas and inland lakes support high concentrations of breeding, nesting, brood-rearing, and molting waterbirds during the open water months.
- Expect to deploy bird hazing systems.
- Waterbirds will occupy leads in the ice during spring breakup.
- Known nesting area for threatened Spectacled and Steller's Eiders.
- Offshore waters are home to a large population of beluga whales, walrus and bearded seals.
- Each Fall, bowhead whales migrate south, rounding Point Barrow close to shore before moving further offshore along the Chukchi Sea coast.
- Polar bears congregate near, and feed on, the whale bone piles remaining after subsistence hunts.
- Freshwater rivers and many inland lakes contain resident and anadromous fish species.
- All activities within the National Petroleum Reserve – Alaska (NPRA).

**CULTURAL SITES**

Information on the exact locations of cultural sites is confidential. This information is contained in the *North Slope Archaeological Data* document, copies of which are kept at the following offices: State Historical Preservation Officer (SHPO) (907-269-8721), ACS in Deadhorse (907-659-2405), North Slope Borough Lands Division (907-852-0322), BPXA Crisis Center in Anchorage (907-564-5243), and the ConocoPhillips Incident Command Center in Anchorage (907-265-1000). The following cultural site(s) are located in the area depicted on this sheet:

- BAR-00094 near Brant Point
- BAR-0066 east of North Salt Lagoon
- BAR-00041, BAR-00046, BAR-00047, BAR-00048, BAR-00049, BAR-00050, BAR-00051, BAR-00052, BAR-00053, and BAR-00054, all near Imikpuk Lake and North Salt Lagoon
- BAR-00034 near Imikpuk Lake and Middle Salt Lagoon
- BAR-00002, BAR-00004, BAR-00007, BAR-00009, BAR-00012, BAR-00015, BAR-00016, BAR-00032, BAR-00033, BAR-00035, BAR-00055, BAR-00056, BAR-00057, BAR-00058, BAR-00059, BAR-00060, BAR-00061, BAR-00062, BAR-00063, BAR-00064, BAR-00065, BAR-00067, and BAR-00068, all near Isatkoak Lagoon
- BAR-00039 and BAR-00040, both east of Wiley Post / Will Rogers Memorial Airport
- BAR-00042 and BAR-00043, both southwest of Wiley Post / Will Rogers Memorial Airport
- BAR-0037 north of Nunavak Bay
- BAR-00038, BAR-00031, BAR-00003, and BAR-00044, in order, extending southwest of Nunavak Bay



**AIR ACCESS\***

AIRFIELD	RUNWAY DESCRIPTION	FIXED WING MINIMUMS	FUEL / SERVICES	ATC
Wiley Post / Will Rogers Memorial Airport	6,500 ft. asphalt	VFR: 1000 ft. ceilings, 3 mi vis. Special VFR: 500 ft. ceilings, 1 mi vis IFR: 400 ft ceilings, 1 mi vis.	NC-100 and A1; S2	Barrow tower

**VESSEL ACCESS\* AND HYDROGRAPHIC CONDITIONS**

- The coastline south of Barrow features no projecting points or shoals and the 5-fathom curve is 0.5-1 mile from shore, but depths may vary as much as a fathom from year to year due to ice gouging. There is no protection from heavy weather.

**COUNTERMEASURES CONSIDERATIONS**

- The shores around Barrow are sand-gravel and gravel-cobble beaches.
- Elson Lagoon is wide and shallow affording mainland beaches little protection from wind and waves.
- The coastline south of Barrow is rimmed with mud bluffs 25-90 ft. high, and furrowed by many small streams.
- No additional significant countermeasures considerations were identified in this area, pending field reconnaissance.

\*See the latest *Supplement, Alaska* and United States Coast Pilot for current information on air and vessel access, respectively.

157° 06'

157° 00'

156° 54'

156° 48'

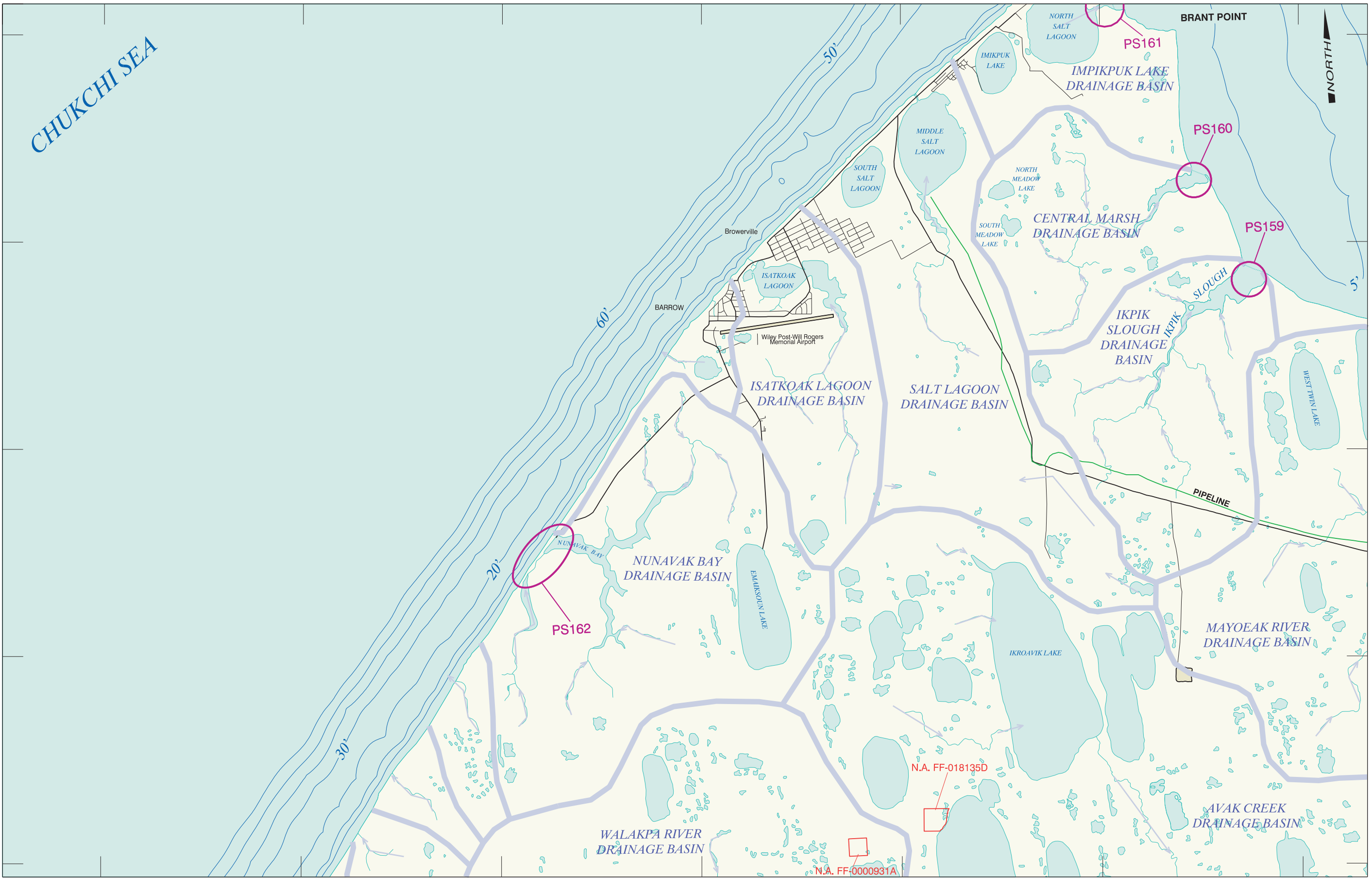
156° 42'

156° 36'

71° 20'  
71° 18'  
71° 16'  
71° 14'  
71° 12'

71° 20'  
71° 18'  
71° 16'  
71° 14'  
71° 12'

CHUKCHI SEA



Continue on sheet 194

Continue on sheet 196

1:63360

0 2500 5000 FEET

Continue on sheet 198



**PRIORITY PROTECTION SITES**

SITE NO.	DESCRIPTION	SENSITIVITY	TACTIC	EST. BOOM
PS153	Mouth of small creek.	Most sensitive during open water season. Prevent oil from entering the creek.	C-14	200'
PS154	Mouth of Avak Creek.	Most sensitive during open water season. Prevent oil from entering the creek.	C-13 or C-14	500'
PS155	Mouth of slough.	Most sensitive during open water season. Prevent oil from entering the slough.	C-14	200'
PS156	Mouth of slough.	Most sensitive during open water season. Prevent oil from entering the slough.	C-14	200'
PS157	Mouth of small creek.	Most sensitive during open water season. Prevent oil from entering the creek.	C-14	200'
PS158	Mouth of Mayoek River Drainage Basin.	Most sensitive during open water season. Prevent oil from entering the river.	C-13 or C-14	800'

\*NOTE: Priority Protection Sites not visually verified due to clouds during aerial reconnaissance.

**GENERAL SENSITIVITIES**

- Coastal, barrier island and inland lake areas support high concentrations of breeding, nesting, brood-rearing, and molting waterbirds during the summer months.
- Known nesting area for threatened Spectacled and Stellar's Eiders.
- Expect to deploy bird hazing systems.
- From August through November, Bowhead whales congregate and feed in Beaufort Sea offshore waters between Pitt Point (Sheet 141) and Point Barrow (Sheet 194). They migrate westward each Fall through the nearshore environment (but in general offshore of the barrier islands).
- Significant populations of anadromous, estuarine and marine fish present inshore of barrier islands.
- Polar bears are present throughout the area primarily during the winter.
- Ringed seals are associated with shorefast ice in the winter and early summer where they pup. Pups are very sensitive to oil for first 6 to 8 weeks of life (April, May).
- All activities within the National Petroleum Reserve – Alaska (NPRA).

**CULTURAL SITES**

Information on the exact locations of cultural sites is confidential. This information is contained in the *North Slope Archaeological Data* document, copies of which are kept at the following offices: State Historical Preservation Officer (SHPO) (907-269-8721), ACS in Deadhorse (907-659-2405), North Slope Borough Lands Division (907-852-0322), BPXA Crisis Center in Anchorage (907-564-5243), and the ConocoPhillips Incident Command Center in Anchorage



**AIR ACCESS\***

- Commercial and air freight services are available at Barrow airport (Sheet 195), located approximately 10 miles to the Northwest. Runway is 6,500 ft. asphalt.

**VESSEL ACCESS\* AND HYDROGRAPHIC CONDITIONS**

- Elson Lagoon, with depths of 8-12 ft., extends from Point Barrow 21 miles southeast to Christie Point. Between the lagoon and Beaufort Sea are a long series of low barrier islands known as the Plover Islands. Consult current navigation charts to determine the safest entryway into the lagoon.

**COUNTERMEASURES CONSIDERATIONS**

- Sand-gravel beaches in this area are narrow with a peat veneer, presenting potential risk to load-bearing machinery and equipment.
- The steepness of many beaches may largely preclude the use of mechanized equipment.
- Small stretches of vegetated and peat shorelines are present in more protected coastal areas.
- Expect inlets, embayments and protruding shoreline features to collect oil during sustained incoming winds.
- Barrier islands are often very low and may not completely protect the mainland shoreline.
- No additional significant countermeasures considerations were identified in this area, pending field reconnaissance.

\*See the latest *Supplement, Alaska* and United States Coast Pilot for current information on air and vessel access, respectively.

141° 36'      141° 30'      141° 24'      141° 18'      141° 12'      141° 06'

71° 16'

71° 14'

71° 12'

71° 10'

71° 16'

71° 14'

71° 12'

71° 10'



Continue on sheet 195

Continue on sheet 198

Continue on sheet 197

Continue on sheet 200

1:63360      0      2500      5000 FEET





### PRIORITY PROTECTION SITES

SITE NO.	DESCRIPTION	SENSITIVITY	TACTIC	EST. BOOM
PS150	Tidal breach area of coastal pond.	Most sensitive during open water season. Prevent oil from entering the pond.	C-14	200'
PS151	Mouth of slough.	Most sensitive during open water season. Prevent oil from entering the slough.	C-14	200'
PS152	Entrance to Ross Bay.	Most sensitive during open water season. Prevent oil from entering the bay.	C-13 or C-14	500'
PS153	Mouth of small creek.	Most sensitive during open water season. Prevent oil from entering the creek.	C-14	200'

\*NOTE: Priority Protection Sites not visually verified due to clouds during aerial reconnaissance.

### GENERAL SENSITIVITIES

- Coastal, barrier island and inland lake areas support high concentrations of breeding, nesting, brood-rearing, and molting waterbirds during the summer months.
- Known nesting area for threatened Spectacled and Stellar's Eiders.
- Expect to deploy bird hazing systems.
- From August through November, Bowhead whales congregate and feed in Beaufort Sea offshore waters between Pitt Point (Sheet 141) and Point Barrow (Sheet 194). They migrate westward each Fall through the nearshore environment (but in general offshore of the barrier islands).
- Significant populations of anadromous, estuarine and marine fish present inshore of barrier islands.
- Polar bears are present throughout the area primarily during the winter.
- All activities within the National Petroleum Reserve – Alaska (NPRA).

### CULTURAL SITES

Information on the exact locations of cultural sites is confidential. This information is contained in the *North Slope Archaeological Data* document, copies of which are kept at the following offices: State Historical Preservation Officer (SHPO) (907-269-8721), ACS in Deadhorse (907-659-2405), North Slope Borough Lands Division (907-852-0322), BPXA Crisis Center in Anchorage (907-564-5243), and the ConocoPhillips Incident Command Center in Anchorage (907-265-1000). The following cultural site(s) are located in the area depicted on this sheet:

- BAR-00069 and BAR-00070 on unnamed islets in the Plover Islands.



### AIR ACCESS\*

- Commercial and air freight services are available at Barrow airport (Sheet 195), located approximately 24 miles to the West-Northwest. Runway is 6,500 ft. asphalt.

### VESSEL ACCESS\* AND HYDROGRAPHIC CONDITIONS

- Elson Lagoon, with depths of 8-12 ft., extends from Point Barrow 21 miles southeast to Christie Point. Between the lagoon and Beaufort Sea are a long series of low barrier islands known as the Plover Islands. Consult current navigation charts to determine the safest entryway into the lagoon.

### COUNTERMEASURES CONSIDERATIONS

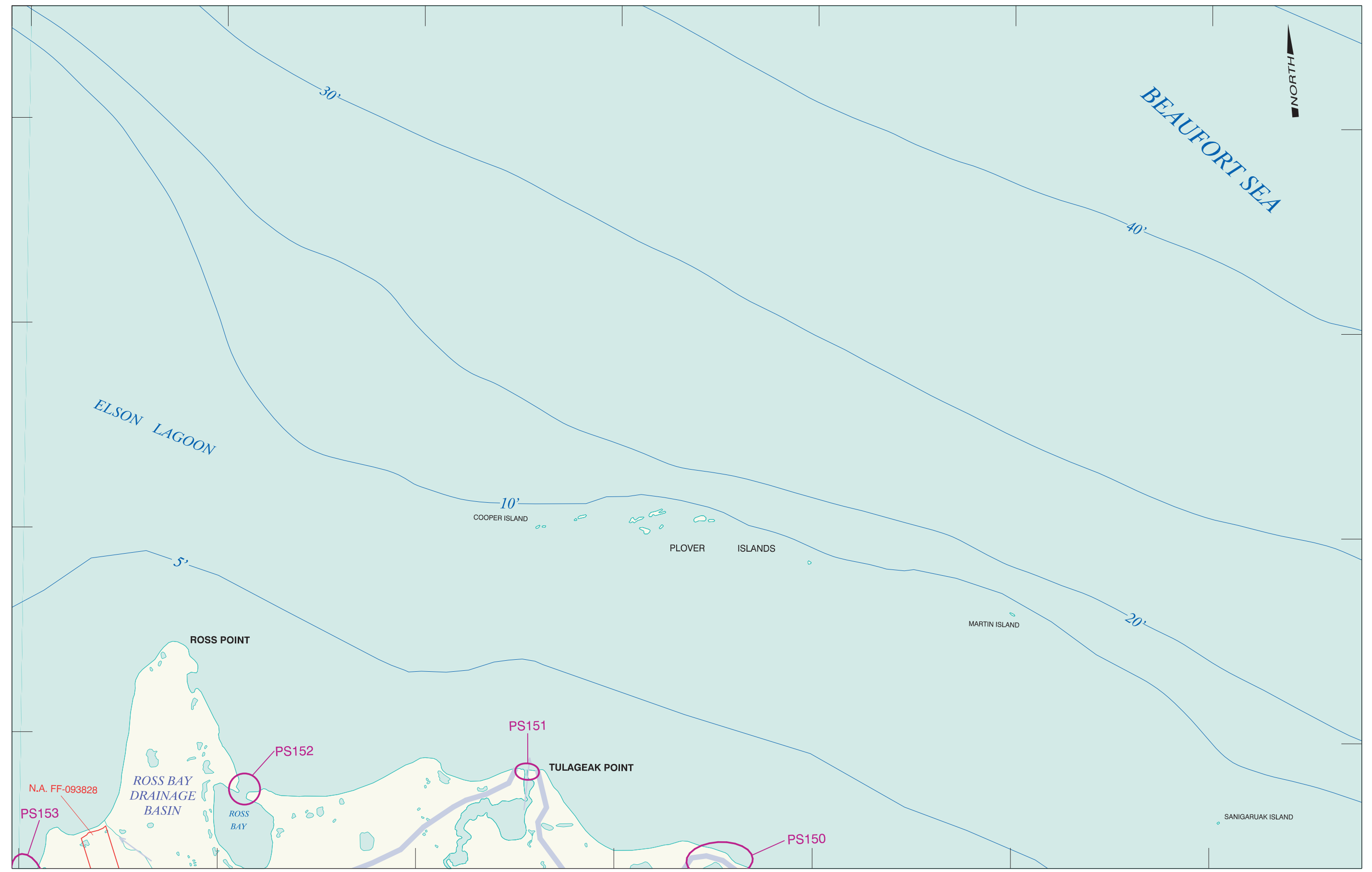
- Sand-gravel beaches in this area are narrow with a peat veneer, presenting potential risk to load-bearing machinery and equipment.
- The steepness of many beaches may largely preclude the use of mechanized equipment.
- Small stretches of vegetated and peat shorelines are present in more protected coastal areas.
- Expect inlets, embayments and protruding shoreline features to collect oil during sustained incoming winds.
- Barrier islands are often very low and may not completely protect the mainland shoreline.
- No additional significant countermeasures considerations were identified in this area, pending field reconnaissance.

\*See the latest *Supplement, Alaska* and United States Coast Pilot for current information on air and vessel access, respectively.

156° 00' 155° 54' 155° 48' 155° 42' 155° 36' 155° 30' 155° 24'

Continue on sheet 194

Continue on sheet 196



1:63360 0 2500 5000 FEET

Continue on sheet 200



**PRIORITY PROTECTION SITES**

SITE NO.	DESCRIPTION	SENSITIVITY	TACTIC	EST. BOOM
PS163	Mouth of Walakpa Bay.	Most sensitive during open water season. Prevent oil from entering the bay.	C-13 or C-14	500'
PS164	Mouth of Singaruak Creek.	Most sensitive during open water season. Prevent oil from entering the creek.	C-14	200'

**GENERAL SENSITIVITIES**

- Coastal areas and inland lakes support concentrations of breeding, nesting, brood-rearing, and molting waterbirds during the open water months.
- Expect to deploy bird hazing systems.
- Waterbirds will occupy leads in the ice during spring breakup.
- Known nesting area for threatened Spectacled and Steller's Eiders.
- Offshore waters are home to a large population of beluga whales, walrus and bearded seals.
- Each Fall, bowhead whales migrate south, rounding Point Barrow close to shore before moving further offshore along the Chukchi Sea coast.
- Polar bears congregate near, and feed on, the whale bone piles remaining after subsistence hunts.
- Freshwater rivers and many inland lakes contain resident and anadromous fish species.
- All activities within the National Petroleum Reserve – Alaska (NPRA).

**CULTURAL SITES**

Information on the exact locations of cultural sites is confidential. This information is contained in the *North Slope Archaeological Data* document, copies of which are kept at the following offices: State Historical Preservation Officer (SHPO) (907-269-8721), ACS in Deadhorse (907-659-2405), North Slope Borough Lands Division (907-852-0322), BPXA Crisis Center in Anchorage (907-564-5243), and the ConocoPhillips Incident Command Center in Anchorage (907-265-1000). The following cultural site(s) are located in the area depicted on this sheet:

- BAR-00044, BAR-00030, BAR-00010 and BAR-00029 near the coast sequentially from the top of this sheet south toward Walakpa Bay.
- BAR-00005, BAR-00095, BAR-00013 and BAR-00096 near western Walakpa Bay.
- BAR-00014 and BAR-00091 northeast of Walakpa Bay.
- BAR-00028, BAR-00008 and BAR-00097 near the coast sequentially from Walakpa Bay southwest to the bottom of this sheet.



**AIR ACCESS\***

- Commercial and air freight services are available at Barrow airport (Sheet 195), located approximately 11 miles to the North-Northeast. Runway is 6,500 ft. asphalt.

**VESSEL ACCESS\* AND HYDROGRAPHIC CONDITIONS**

- The coastline features no projecting points or shoals and the 5-fathom curve is 0.75-1.25 miles from shore, but depths may vary as much as a fathom from year to year due to ice gouging. There is no protection from heavy weather.

**COUNTERMEASURES CONSIDERATIONS**

- The coastline is rimmed with mud bluffs 25-90 ft. high, and furrowed by many small streams.
- No additional significant countermeasures considerations were identified in this area, pending field reconnaissance.

\*See the latest *Supplement, Alaska* and United States Coast Pilot for current information on air and vessel access, respectively.

157° 12' 157° 06' 157° 00' 156° 54' 156° 48' 156° 42'

71° 12' 71° 10' 71° 08' 71° 06'

71° 12' 71° 10' 71° 08' 71° 06'

Continue on sheet 196

Continue on sheet 199



1:63360 0 2500 5000 FEET





### PRIORITY PROTECTION SITES

- No priority protection sites have been identified in this area.

### GENERAL SENSITIVITIES

- Known nesting area for threatened Spectacled and Steller's Eiders.
- Black brant breeding, nesting, rearing area during the summer months.
- Inland lake areas support concentrations of breeding, nesting, brood-rearing, and molting waterfowl during the summer months.
- Expect to deploy bird hazing systems.
- Freshwater rivers and many inland lakes contain resident and anadromous fish species.
- All activities within the National Petroleum Reserve – Alaska (NPRA).

### CULTURAL SITES

Information on the exact locations of cultural sites is confidential. This information is contained in the *North Slope Archaeological Data* document, copies of which are kept at the following offices: State Historical Preservation Officer (SHPO) (907-269-8721), ACS in Deadhorse (907-659-2405), North Slope Borough Lands Division (907-852-0322), BPXA Crisis Center in Anchorage (907-564-5243), and the ConocoPhillips Incident Command Center in Anchorage (907-265-1000). The following cultural site(s) are located in the area depicted on this sheet:

- BAR-00024 northeast of Lake Tusikvoak.



### AIR ACCESS\*

- Commercial and air freight services are available at Barrow airport (Sheet 195), located approximately 16 miles to the Northwest. Runway is 6,500 ft. asphalt.

### VESSEL ACCESS\* AND HYDROGRAPHIC CONDITIONS

- There are no marine waters or shorelines on this map.

### COUNTERMEASURES CONSIDERATIONS

- No significant countermeasures considerations were identified in this area, pending field reconnaissance.

\*See the latest *Supplement, Alaska* and United States Coast Pilot for current information on air and vessel access, respectively.

156° 36'

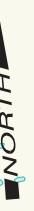
156° 30'

156° 24'

156° 18'

156° 12'

156° 06'



Continue on sheet 198

71° 08'

71° 06'

71° 04'

71° 02'

71° 08'

71° 06'

71° 04'

71° 02'

Continue on sheet 200



Continue on sheet 203

1:63360

0 2500 5000 FEET



**PRIORITY PROTECTION SITES**

SITE NO.	DESCRIPTION	SENSITIVITY	TACTIC	EST. BOOM
PS148	Mouth of small creek.	Most sensitive during open water season. Prevent oil from entering the creek.	C-14	200'
PS149	Mouth of small creek.	Most sensitive during open water season. Prevent oil from entering the creek.	C-14	200'
PS150	Tidal breach area of coastal pond.	Most sensitive during open water season. Prevent oil from entering the pond.	C-14	200'
PS153	Mouth of small creek.	Most sensitive during open water season. Prevent oil from entering the creek.	C-14	200'

\*NOTE: Priority Protection Sites not visually verified due to clouds during aerial reconnaissance.

**GENERAL SENSITIVITIES**

- Known nesting area for threatened Spectacled and Steller’s Eiders.
- Black brant and snow geese breeding, nesting, rearing area during the summer.
- Coastal areas and inland lakes support concentrations of breeding, nesting, brood-rearing, and molting waterbirds during the open water months.
- Expect to deploy bird hazing systems.
- Freshwater rivers and many inland lakes contain resident and anadromous fish species.
- Caribou present in June and July near the coast for insect relief.
- Spotted seals utilize Dease Inlet and haulout in Admiralty Bay.
- All activities within the National Petroleum Reserve – Alaska (NPRA).

**CULTURAL SITES**

Information on the exact locations of cultural sites is confidential. This information is contained in the *North Slope Archaeological Data* document, copies of which are kept at the following offices: State Historical Preservation Officer (SHPO) (907-269-8721), ACS in Deadhorse (907-659-2405), North Slope Borough Lands Division (907-852-0322), BPXA Crisis Center in Anchorage (907-564-5243), and the ConocoPhillips Incident Command Center in Anchorage (907-265-1000). The following cultural site(s) are located in the area depicted on this sheet:

- No cultural site(s) have been identified in the area depicted on this sheet.



**AIR ACCESS\***

- Commercial and air freight services are available at Barrow airport (Sheet 195), located approximately 26 miles to the Northwest. Runway is 6,500 ft. asphalt.

**VESSEL ACCESS\* AND HYDROGRAPHIC CONDITIONS**

- Dease Inlet has depths of 8-10 ft., except for the shallows near the beaches.

**COUNTERMEASURES CONSIDERATIONS**

- Much of the shoreline in this area is vegetated and overwashed by a peat veneer, presenting potential risk to load-bearing machinery and equipment.
- Vegetated shorelines are slumping, making access from sea difficult.
- Backshore areas are wet polygonal tundra.
- Expect inlets, embayments and protruding shoreline features to collect oil during sustained incoming winds.
- No additional significant countermeasures considerations were identified in this area, pending field reconnaissance.

\*See the latest *Supplement, Alaska* and United States Coast Pilot for current information on air and vessel access, respectively.

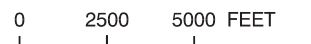
Continue on sheet 196

Continue on sheet 199

Continue on sheet 201



1:63360







**PRIORITY PROTECTION SITES**

SITE NO.	DESCRIPTION	SENSITIVITY	TACTIC	EST. BOOM
PS132	Numerous breaches in Tulamanik barrier island.	Most sensitive during open water season. Prevent oil from entering McKay Lagoon.	C-14	1000'
PS133	Northwest tip of Kulgurak Island to Tangent Point.	Most sensitive during open water season. Prevent oil from entering McKay Lagoon.	C-13 or C-14	4000'
PS134	Small inlet on west side of Tangent Point.	Most sensitive during open water season. Prevent oil from entering McKay Lagoon.	C-13 or C-14	4000'
PS135	Larger inlet on west side of Tangent Point.	Most sensitive during open water season. Prevent oil from entering the inlet.	C-13 or C-14	5000'

\*NOTE: Priority Protection Sites not visually verified due to clouds during aerial reconnaissance.

**GENERAL SENSITIVITIES**

- Known nesting area for threatened Spectacled and Steller's Eiders.
- Black brant and snow geese breeding, nesting, rearing area during the summer.
- Coastal areas and inland lakes support concentrations of breeding, nesting, brood-rearing, and molting waterbirds during the open water months.
- Expect to deploy bird hazing systems.
- Freshwater rivers and many inland lakes contain resident and anadromous fish species.
- Caribou present in the vicinity during June and July insect relief period.
- Spotted seals utilize Dease Inlet and haulout in Admiralty Bay.
- Polar bears congregate near, and feed on, the whale bone piles remaining after subsistence hunts and are active on the nearshore ice during winter.
- All activities within the National Petroleum Reserve – Alaska (NPRA).

**CULTURAL SITES**

Information on the exact locations of cultural sites is confidential. This information is contained in the *North Slope Archaeological Data* document, copies of which are kept at the following offices: State Historical Preservation Officer (SHPO) (907-269-8721), ACS in Deadhorse (907-659-2405), North Slope Borough Lands Division (907-852-0322), BPXA Crisis Center in Anchorage (907-564-5243), and the ConocoPhillips Incident Command Center in Anchorage (907-265-1000). The following cultural site(s) are located in the area depicted on this sheet:

- BAR-00093 and BAR-00071 in the southeast quadrant of this sheet.



**AIR ACCESS\***

- Commercial and air freight services are available at Barrow airport (Sheet 195), located approximately 41 miles to the Northwest. Runway is 6,500 ft. asphalt.
- Lonely Air Station (Sheet 141) is located approximately 43 miles to the Southeast. This facility is closed to the public and should be considered for emergency landing only. The unattended, 5,000 ft. gravel runway is not maintained and its condition is unknown. Visual inspection recommended prior to use. May be used for spill response operations upon approval by Elmendorf Air Force Base, 11th Air Force Airfield Management, (907) 552-7384/3636/5265.

**VESSEL ACCESS\* AND HYDROGRAPHIC CONDITIONS**

- Dease Inlet has depths of 8-10 ft., except for the shallows near the beaches. There is a shallow entrance channel between Tangent Point and the islands to its northwest.
- The islands running southeast along the coast from Tangent Point are low sand barriers separated from the mainland by mud flats and shallow lagoons. These rapidly changing islands have steep beaches on their seaward side, with depth of 8 ft. or more only 100 yards offshore. Deep channels open and close through the islands during summer storms.
- The coastal bluffs running southeast from the southeast end of Mackay Lagoon vary in height from 4-15 ft. The land behind is marshy with numerous lakes. Launches may proceed safely along this stretch of coast at a distance of about 100 yards.

**COUNTERMEASURES CONSIDERATIONS**

- The Plover Islands' have sand-gravel ocean-facing beaches that are narrow and steep.
- Much of the lagoon areas behind the Plover Islands, along with much of Fatigue Bay, consists of mud tidal flats.
- Much of the mainland area -- particularly the interior of Fatigue Bay and similar water bodies -- consists of complex, subsiding tundra vegetated shorelines, often with a heavy peat overlay. These shorelines are very unstable and present a high risk to load-bearing machinery, equipment and personnel.
- No additional significant countermeasures considerations were identified in this area, pending field reconnaissance.

\*See the latest *Supplement, Alaska* and United States Coast Pilot for current information on air and vessel access, respectively.

155° 18'

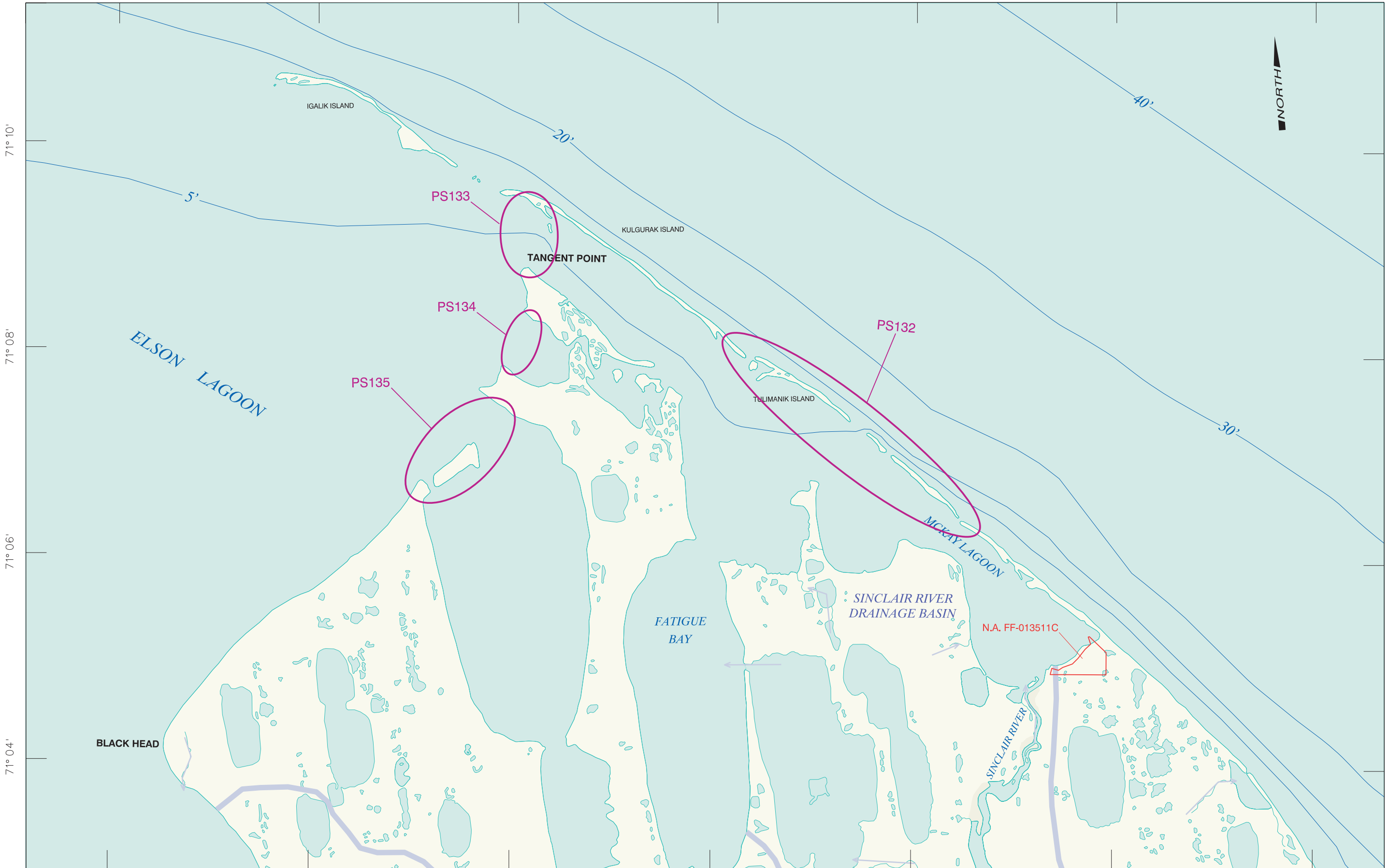
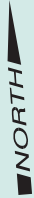
155° 12'

155° 06'

155° 00'

154° 54'

154° 48'



Continue on sheet 200

71° 10'

71° 08'

71° 06'

71° 04'

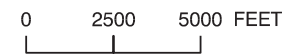
71° 10'

71° 08'

71° 06'

71° 04'

1:63360



Continue on sheet 205

Continue on sheet 206



### PRIORITY PROTECTION SITES

SITE NO.	DESCRIPTION	SENSITIVITY	TACTIC	EST. BOOM
PS164	Mouth of Singaruak Creek.	Most sensitive during open water season. Prevent oil from entering the creek.	C-14	200'
PS165	Mouth of slough.	Most sensitive during open water season. Prevent oil from entering the slough.	C-14	200'
PS166	Mouth of slough.	Most sensitive during open water season. Prevent oil from entering the slough.	C-14	200'
PS167	Mouth of small creek.	Most sensitive during open water season. Prevent oil from entering the creek.	C-14	200'

### GENERAL SENSITIVITIES

- Coastal areas and inland lakes support high concentrations of breeding, nesting, brood-rearing, and molting waterbirds during the open water months.
- Expect to deploy bird hazing systems.
- Waterbirds will occupy leads in the ice during spring breakup.
- Known nesting area for threatened Spectacled and Steller's Eiders.
- Offshore waters are home to a large population of beluga whales, walrus and bearded seals.
- Each Fall, bowhead whales migrate south, rounding Point Barrow close to shore before moving further offshore along the Chukchi Sea coast.
- Polar bears congregate near, and feed on, the whale bone piles remaining after subsistence hunts.
- Freshwater rivers and many inland lakes contain resident and anadromous fish species.
- All activities within the National Petroleum Reserve – Alaska (NPRA).

### CULTURAL SITES

Information on the exact locations of cultural sites is confidential. This information is contained in the *North Slope Archaeological Data* document, copies of which are kept at the following offices: State Historical Preservation Officer (SHPO) (907-269-8721), ACS in Deadhorse (907-659-2405), North Slope Borough Lands Division (907-852-0322), BPXA Crisis Center in Anchorage (907-564-5243), and the ConocoPhillips Incident Command Center in Anchorage (907-265-1000). The following cultural site(s) are located in the area depicted on this sheet:

- BAR-00097, BAR-00026 and BAR-00027 near the coast sequentially from the top of this sheet south toward Nulavik.
- BAR-00025 northeast of Nulavik.
- XMR-00062 near the coast in the southwest quadrant of this sheet.
- XMR-00084 west of Kilusiktok Lake.



### AIR ACCESS\*

- Commercial and air freight services are available at Barrow airport (Sheet 195), located approximately 22 miles to the Northeast. Runway is 6,500 ft. asphalt.

### VESSEL ACCESS\* AND HYDROGRAPHIC CONDITIONS

- The coastline features no projecting points or shoals and the 5-fathom curve is 0.75-1.25 miles from shore, but depths may vary as much as a fathom from year to year due to ice gouging. There is no protection from heavy weather.

### COUNTERMEASURES CONSIDERATIONS

- The coastline is rimmed with mud bluffs 25-90 ft. high, and furrowed by many small streams.
- No additional significant countermeasures considerations were identified in this area, pending field reconnaissance.

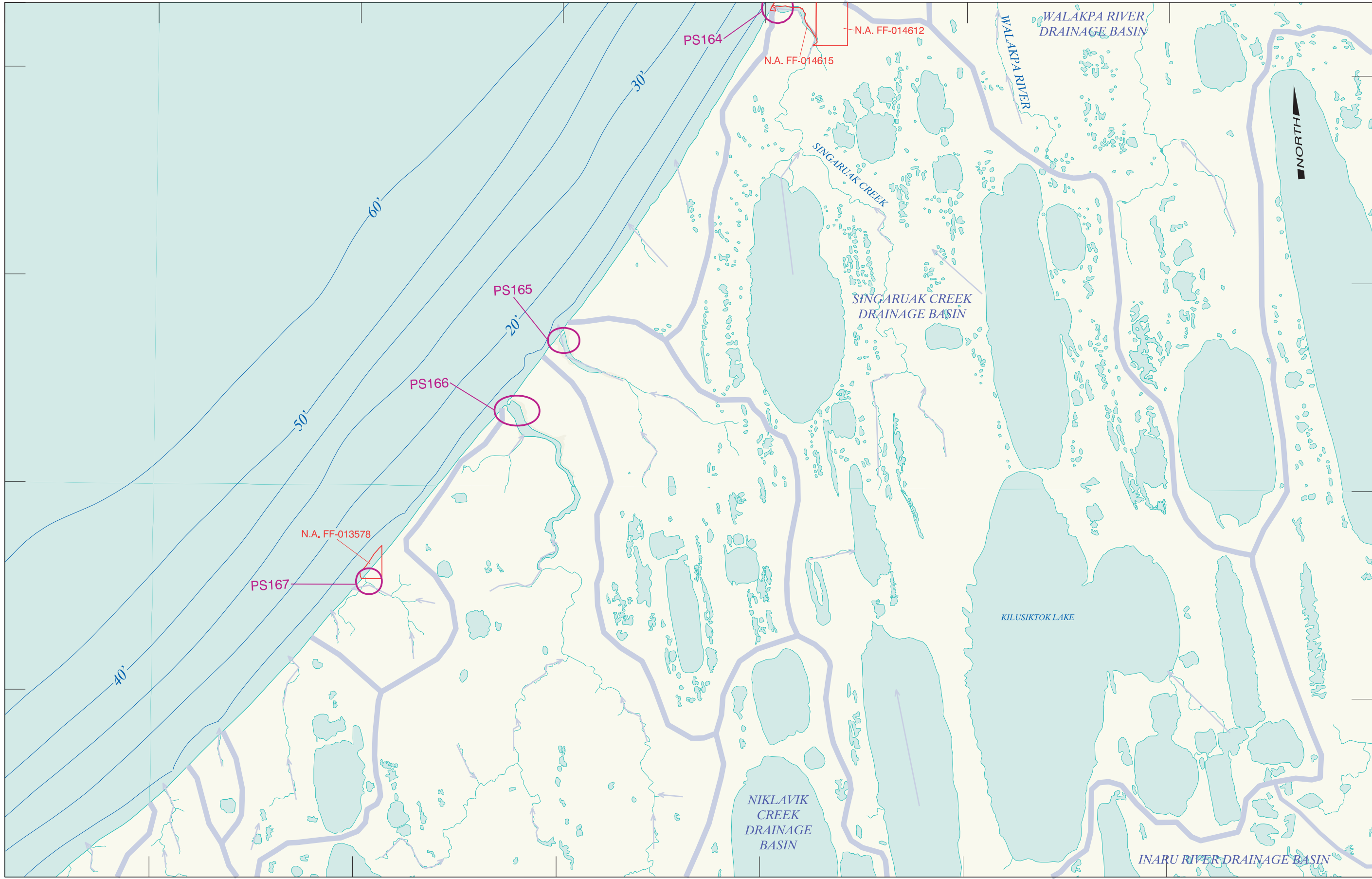
\*See the latest *Supplement, Alaska* and United States Coast Pilot for current information on air and vessel access, respectively.

157° 30' 157° 24' 157° 18' 157° 12' 157° 06' 157° 00'

71° 04' 71° 02' 71° 00' 70° 58'

71° 04' 71° 02' 71° 00' 70° 58'

Continue on sheet 203



1:63360 0 2500 5000 FEET





### PRIORITY PROTECTION SITES

- No priority protection sites have been identified in this area.

### GENERAL SENSITIVITIES

- Inland lakes support high concentrations of breeding, nesting, brood-rearing, and molting waterbirds during the open water months.
- Known nesting area for threatened Spectacled and Steller's Eiders.
- Expect to deploy bird hazing systems.
- Inland lakes contain resident and anadromous fish important to subsistence users.

### CULTURAL SITES

Information on the exact locations of cultural sites is confidential. This information is contained in the *North Slope Archaeological Data* document, copies of which are kept at the following offices: State Historical Preservation Officer (SHPO) (907-269-8721), ACS in Deadhorse (907-659-2405), North Slope Borough Lands Division (907-852-0322), BPXA Crisis Center in Anchorage (907-564-5243), and the ConocoPhillips Incident Command Center in Anchorage (907-265-1000). The following cultural site(s) are located in the area depicted on this sheet:

- No cultural site(s) have been identified in the area depicted on this sheet.



### AIR ACCESS\*

- Commercial and air freight services are available at Barrow airport (Sheet 195), located approximately 19 miles to the North. Runway is 6,500 ft. asphalt.

### VESSEL ACCESS\* AND HYDROGRAPHIC CONDITIONS

- There are no marine waters or shorelines on this map.

### COUNTERMEASURES CONSIDERATIONS

- No significant countermeasures considerations were identified in this area, pending field reconnaissance.

\*See the latest *Supplement, Alaska* and United States Coast Pilot for current information on air and vessel access, respectively.

157° 00'      156° 54'      156° 48'      156° 42'      156° 36'      156° 30'      156° 24'

71° 10'

71° 08'

71° 06'

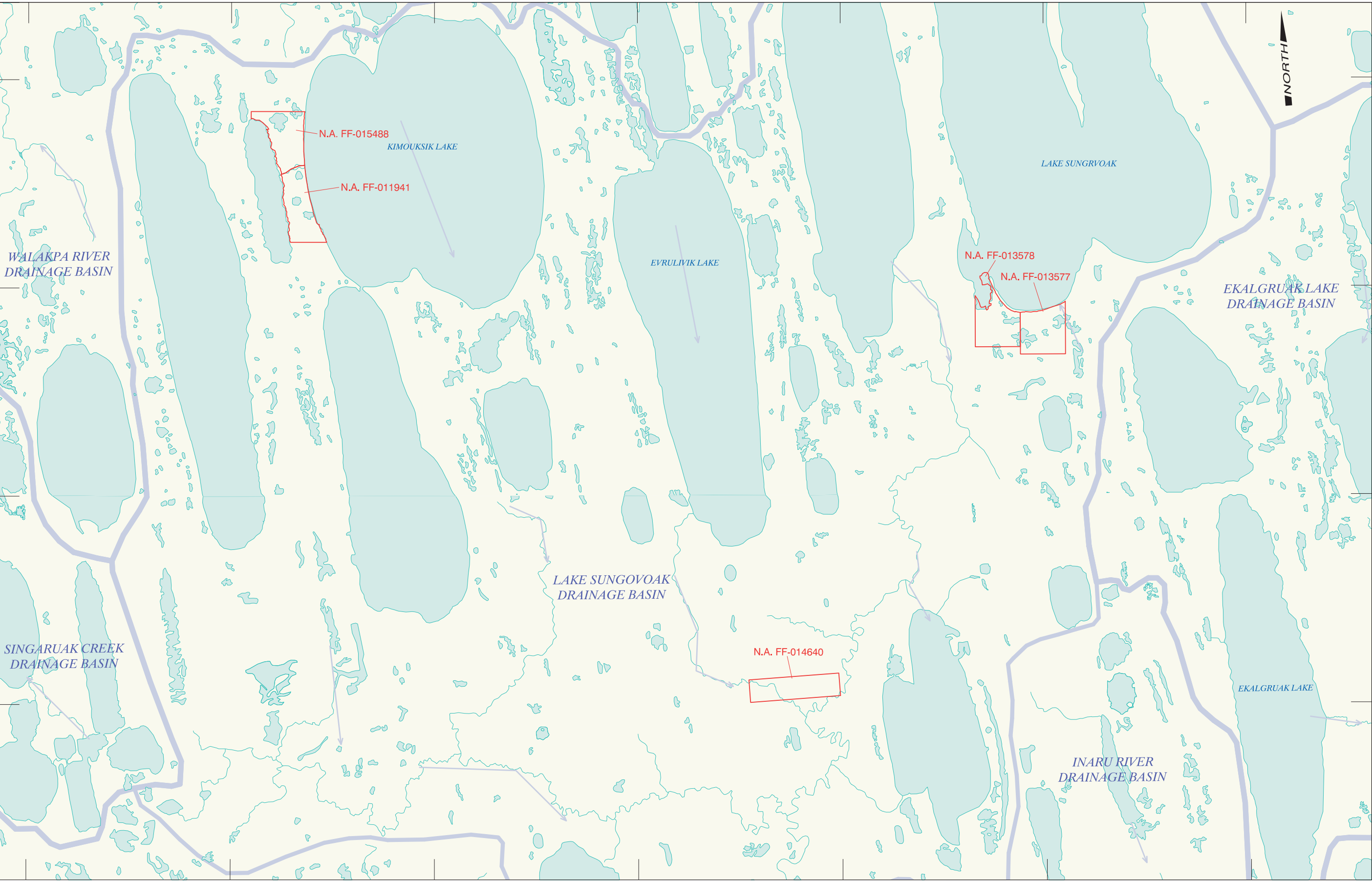
71° 04'

71° 10'

71° 08'

71° 06'

71° 04'

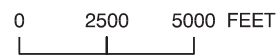


Continue on sheet 202

Continue on sheet 199

Continue on sheet 204

1:63360





### PRIORITY PROTECTION SITES

SITE NO.	DESCRIPTION	SENSITIVITY	TACTIC	EST. BOOM
PS144	Mouth of Inaru River entering Kuyanak Bay.	Most sensitive during open water season. Prevent oil from entering the river.	C-13 or C-14	2000'
PS145	Mouth of small bay.	Most sensitive during open water season. Prevent oil from entering the bay.	C-13 or C-14	2000'
PS146	Mouth of small creek.	Most sensitive during open water season. Prevent oil from entering the creek.	C-14	200'

### GENERAL SENSITIVITIES

- The southernmost portion of Admiralty Bay, below a line stretching from Kuyanak Bay to the Alaktak River, is an important subsistence fishing area during summer months.
- Known nesting area for threatened Spectacled and Steller's Eiders.
- Black brant breeding, nesting, rearing area during the summer.
- Coastal areas and inland lakes support concentrations of breeding, nesting, brood-rearing, and molting waterbirds during the open water months.
- Expect to deploy bird hazing systems.
- Freshwater rivers and many inland lakes contain resident and anadromous fish species.
- Spotted seals haulout in Admiralty Bay.
- All activities within the National Petroleum Reserve – Alaska (NPRA).

### CULTURAL SITES

Information on the exact locations of cultural sites is confidential. This information is contained in the *North Slope Archaeological Data* document, copies of which are kept at the following offices: State Historical Preservation Officer (SHPO) (907-269-8721), ACS in Deadhorse (907-659-2405), North Slope Borough Lands Division (907-852-0322), BPXA Crisis Center in Anchorage (907-564-5243), and the ConocoPhillips Incident Command Center in Anchorage (907-265-1000). The following cultural site(s) are located in the area depicted on this sheet:

- XMR-00077 and XMR-00078 in the southwest quadrant of this sheet.



### AIR ACCESS\*

- Commercial and air freight services are available at Barrow airport (Sheet 195), located approximately 26 miles to the Northwest. Runway is 6,500 ft. asphalt.

### VESSEL ACCESS\* AND HYDROGRAPHIC CONDITIONS

- Admiralty Bay has 8-10 ft. depths and bottom similar to the outer part of Dease Inlet.
- Shore may be accessed only with very shallow draft (< 3 ft.) vessels.

### COUNTERMEASURES CONSIDERATIONS

- Slumping tundra and peat shores are unstable, presenting a high risk to load-bearing machinery, equipment and personnel.
- Much of this area is complex deltaic and subsiding tundra polygons.
- The shoreline is primarily mixed sand-silt or vegetated. Peat is often overwashed onto the tundra vegetation.
- Expect inlets, embayments and protruding shoreline features to collect oil during sustained incoming winds.
- No additional significant countermeasures considerations were identified in this area, pending field reconnaissance.

\*See the latest *Supplement, Alaska* and United States Coast Pilot for current information on air and vessel access, respectively.

156° 24'      156° 18'      156° 12'      156° 06'      156° 00'      155° 54'      155° 48'

Continue on sheet 199

Continue on sheet 203

Continue on sheet 207

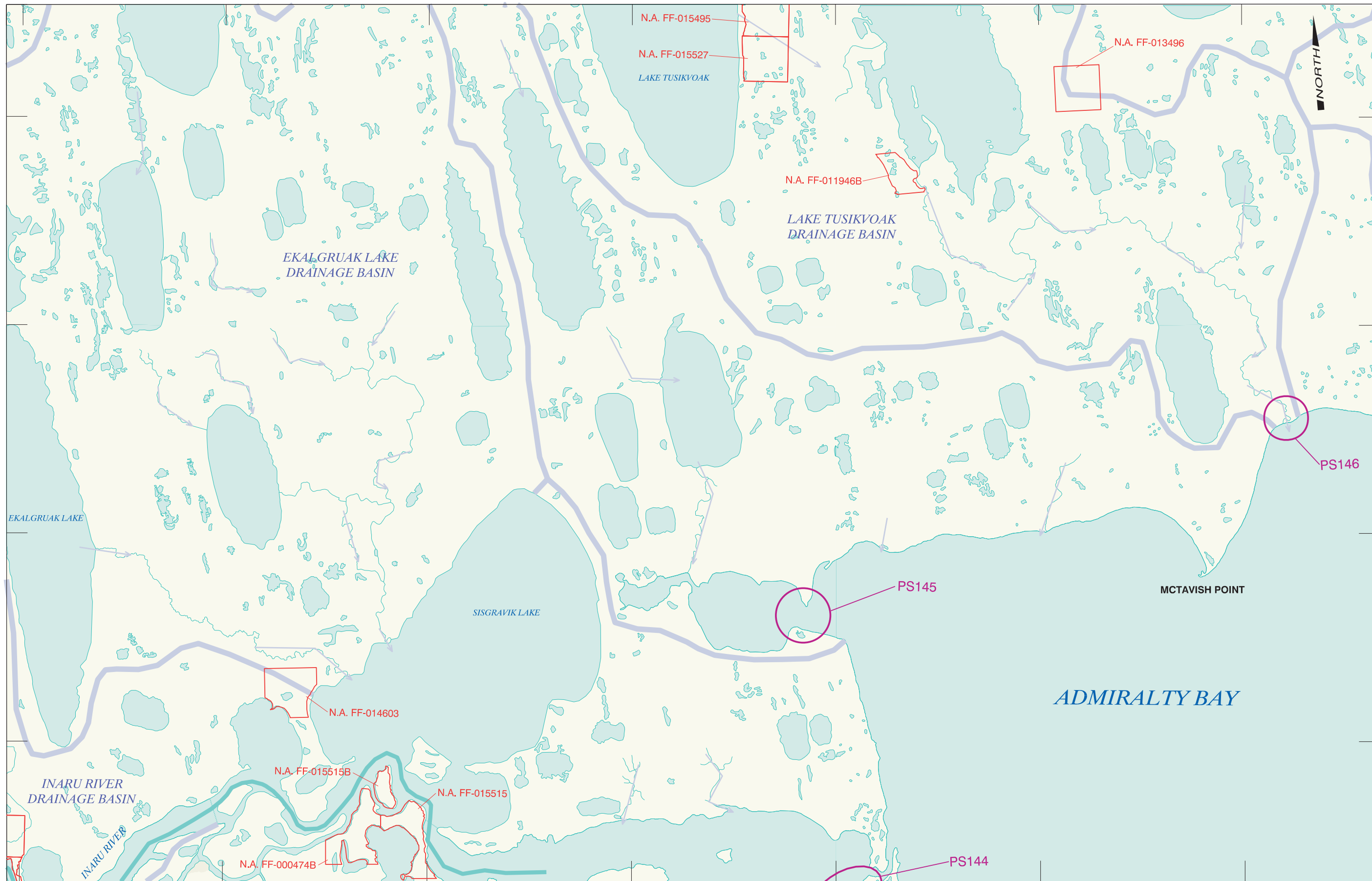
71° 02'

71° 00'

70° 58'

70° 56'

Continue on sheet 205



1:63360

0 2500 5000 FEET





### PRIORITY PROTECTION SITES

SITE NO.	DESCRIPTION	SENSITIVITY	TACTIC	EST. BOOM
PS136	Mouth of bay on southeast corner of Oarlock Island.	Most sensitive during open water season. Prevent oil from entering the bay.	C-13 or C-14	1500'
PS146	Mouth of small creek.	Most sensitive during open water season. Prevent oil from entering the creek.	C-14	200'
PS147	Mouth of small creek.	Most sensitive during open water season. Prevent oil from entering the creek.	C-14	200'

\*NOTE: Priority Protection Sites not visually verified due to clouds during aerial reconnaissance.

### GENERAL SENSITIVITIES

- Nesting likely in the area for threatened Spectacled and Steller's Eiders.
- Black brant and snow geese breeding, nesting, rearing area during the summer.
- Coastal areas and inland lakes support concentrations of breeding, nesting, brood-rearing, and molting waterbirds during the open water months.
- Expect to deploy bird hazing systems.
- Freshwater rivers and many inland lakes contain resident and anadromous fish species.
- Caribou present in the vicinity during June and July insect relief period.
- Oarlock Island in Admiralty Bay and the mouth of the Chipp River are traditional haulouts for spotted seals during the summer. Seals are sensitive to disturbance.
- All activities within the National Petroleum Reserve – Alaska (NPRA).

### CULTURAL SITES

Information on the exact locations of cultural sites is confidential. This information is contained in the *North Slope Archaeological Data* document, copies of which are kept at the following offices: State Historical Preservation Officer (SHPO) (907-269-8721), ACS in Deadhorse (907-659-2405), North Slope Borough Lands Division (907-852-0322), BPXA Crisis Center in Anchorage (907-564-5243), and the ConocoPhillips Incident Command Center in Anchorage (907-265-1000). The following cultural site(s) are located in the area depicted on this sheet:

- No cultural site(s) have been identified in the area depicted on this sheet.



### AIR ACCESS\*

- Commercial and air freight services are available at Barrow airport (Sheet 195), located approximately 35 miles to the Northwest. Runway is 6,500 ft. asphalt.
- Lonely Air Station (Sheet 141) is located approximately 51 miles to the East-Southeast. This facility is closed to the public and should be considered for emergency landing only. The unattended, 5,000 ft. gravel runway is not maintained and its condition is unknown. Visual inspection recommended prior to use. May be used for spill response operations upon approval by Elmendorf Air Force Base, 11th Air Force Airfield Management, (907) 552-7384/3636/5265.

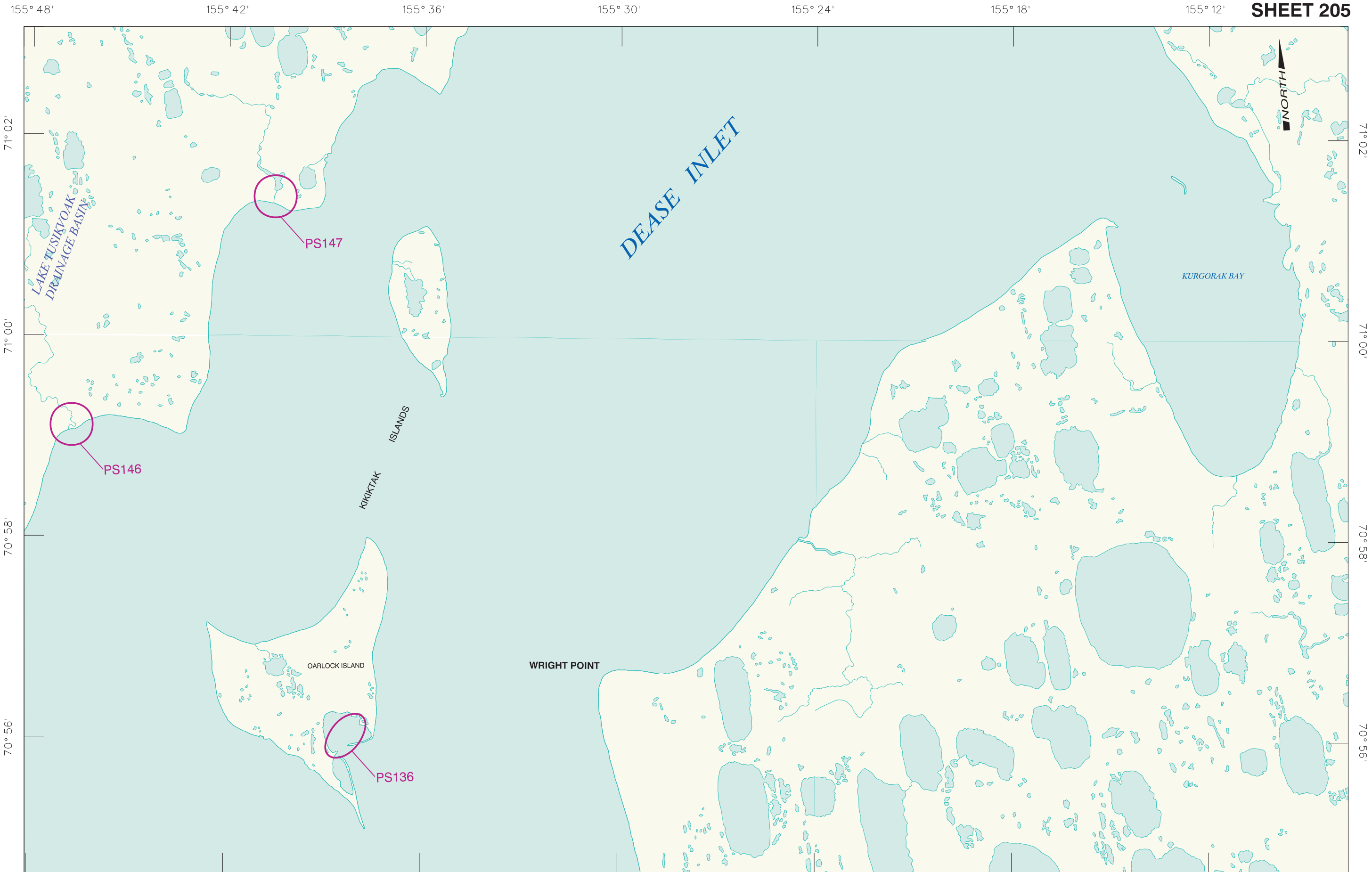
### VESSEL ACCESS\* AND HYDROGRAPHIC CONDITIONS

- Dease Inlet has depths of 8-10 ft., except for the shallows near the beaches.

### COUNTERMEASURES CONSIDERATIONS

- Slumping tundra and peat shores are unstable, presenting a high risk to load-bearing machinery, equipment and personnel.
- The western shoreline of Dease Inlet is mixed sand-silt or vegetated. Peat is often overwashed onto the tundra vegetation. Both shore types present potential risk to load-bearing machinery and equipment. Backshore areas are wet tundra.
- Both Tiny and Oarlock islands' shorelines are completely vegetated.
- The southeastern shoreline of Admiralty Bay is predominantly sandy and narrow, backed by sand scarps from 10-30 ft. in height. These scarps generally preclude shore access.
- The eastern shoreline of Admiralty Bay north of Wright Point is slumping tundra scarps, 2-8 ft. high. Peat slurry is present in some areas.
- Kurgorak Bay consists of peat shorelines with 2-6 ft. scarps behind.
- No additional significant countermeasures considerations were identified in this area, pending field reconnaissance.

\*See the latest *Supplement, Alaska* and United States Coast Pilot for current information on air and vessel access, respectively.



Continue on sheet 204

Continue on sheet 206

1:63360

0 2500 5000 FEET



**PRIORITY PROTECTION SITES**

SITE NO.	DESCRIPTION	SENSITIVITY	TACTIC	EST. BOOM
PS129	Mouth of slough.	Most sensitive during open water season. Prevent oil from entering the slough.	C-14	200'
PS130	Mouth and tidal breach area of slough.	Most sensitive during open water season. Prevent oil from entering the slough.	C-14	300'
PS131	Tidal breach area of coastal pond.	Most sensitive during open water season. Prevent oil from entering the pond.	C-13 or C-14	200'

\*NOTE: Priority Protection Sites not visually verified due to clouds during aerial reconnaissance.

**GENERAL SENSITIVITIES**

- Known nesting area for threatened Spectacled and Steller's Eiders.
- Black brant and snow geese breeding, nesting, rearing area during the summer.
- Coastal areas and inland lakes support concentrations of breeding, nesting, brood-rearing, and molting waterbirds during the open water months.
- Expect to deploy bird hazing systems.
- Freshwater rivers and many inland lakes contain resident and anadromous fish species.
- Caribou present in the vicinity during June and July insect relief period.
- Polar bears congregate near, and feed on, the whale bone piles remaining after subsistence hunts and are active on the nearshore ice during winter.
- All activities within the National Petroleum Reserve – Alaska (NPRA).

**CULTURAL SITES**

Information on the exact locations of cultural sites is confidential. This information is contained in the *North Slope Archaeological Data* document, copies of which are kept at the following offices: State Historical Preservation Officer (SHPO) (907-269-8721), ACS in Deadhorse (907-659-2405), North Slope Borough Lands Division (907-852-0322), BPXA Crisis Center in Anchorage (907-564-5243), and the ConocoPhillips Incident Command Center in Anchorage (907-265-1000). The following cultural site(s) are located in the area depicted on this sheet:

- BAR-00026 and BAR-00045 along the coast in the northeast quadrant of this sheet.
- TES-00062, TES-00063, TES-00064, TES-00065, TES-00066, TES-00031 and TES-00027 in the southeast quadrant of this sheet.



**AIR ACCESS\***

- Lonely Air Station (Sheet 141) is located approximately 37 miles to the East-Southeast. This facility is closed to the public and should be considered for emergency landing only. The unattended, 5,000 ft. gravel runway is not maintained and its condition is unknown. Visual inspection recommended prior to use. May be used for spill response operations upon approval by Elmendorf Air Force Base, 11th Air Force Airfield Management, (907) 552-7384/3636/5265.
- Commercial and air freight services are available at Barrow airport (Sheet 195), located approximately 47 miles to the Northwest. Runway is 6,500 ft. asphalt.

**VESSEL ACCESS\* AND HYDROGRAPHIC CONDITIONS**

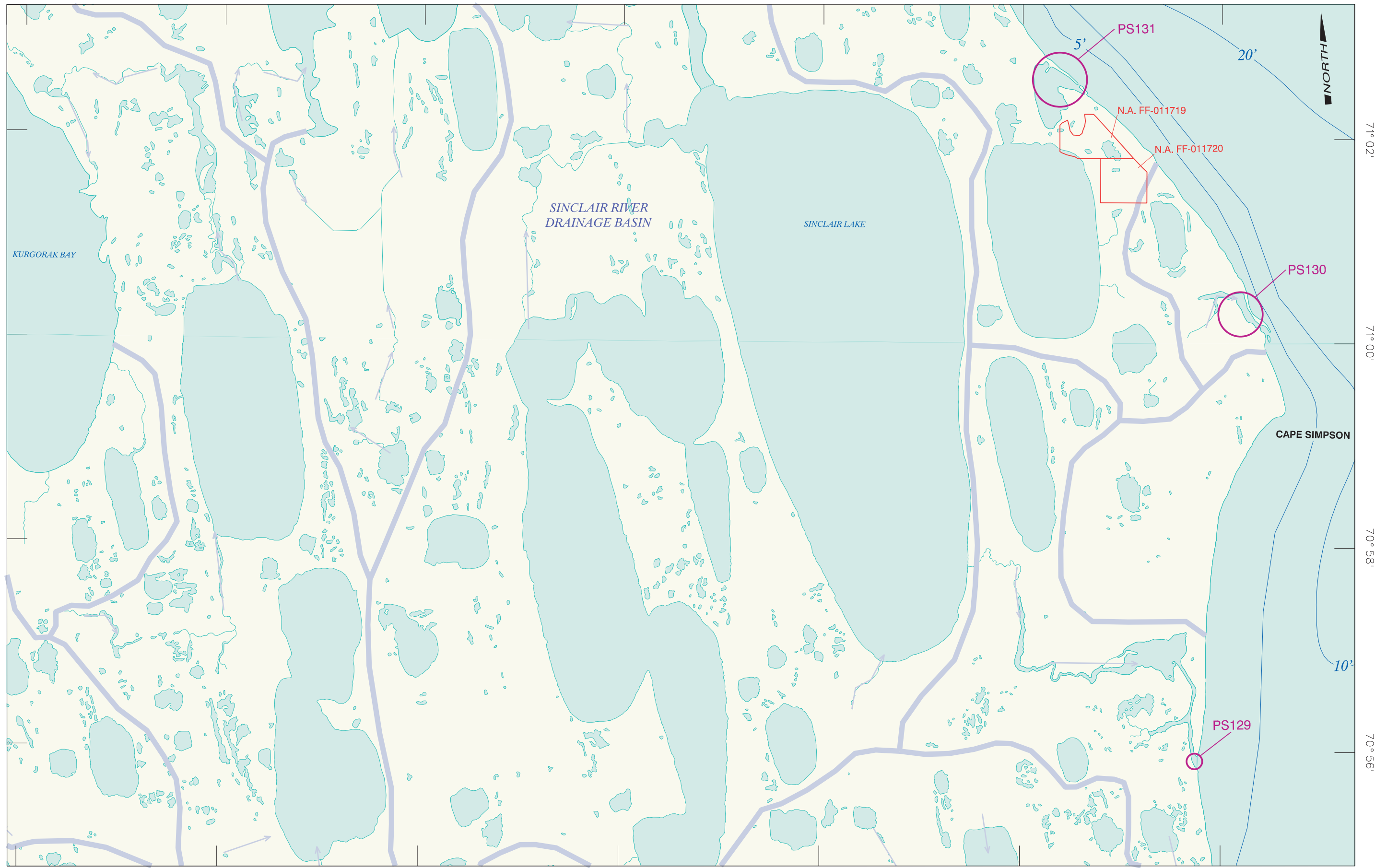
- The coastal bluffs running northwest from Cape Simpson vary in height from 4-15 ft. Launches may proceed safely along this stretch of coast at a distance of about 100 yards.
- There are shoals and sandbars off Cape Simpson.
- South of Cape Simpson, rapid erosion of the 10-20 ft. bluffs has caused shoaling, requiring launches of 3-4 ft. draft to stay 0.2-0.5 miles offshore.
- Smith Bay, with depths of 3-10 ft., lies southeast of Cape Simpson.

**COUNTERMEASURES CONSIDERATIONS**

- North of Cape Simpson, the Beaufort Sea shoreline is very narrow (<10 ft.) and consists of sand and gravel. The land behind is marshy with numerous lakes.
- South of Cape Simpson, the Beaufort Sea shoreline is 20-30 ft., ice-rich, tundra scarps. These are undercut, with large blocks falling into the ocean. The land behind is marshy with numerous lakes.
- Slumping tundra and peat shores are unstable, presenting a high risk to load-bearing machinery, equipment and personnel.
- Kurgorak Bay consists of peat shorelines with 2-6 ft. scarps behind.
- No additional significant countermeasures considerations were identified in this area, pending field reconnaissance.

\*See the latest *Supplement, Alaska* and United States Coast Pilot for current information on air and vessel access, respectively.

155° 12' 155° 06' 155° 00' 154° 54' 154° 48' 154° 42' 154° 36'



Continue on sheet 204

71° 02' 71° 00' 70° 58' 70° 56'

71° 02' 71° 00' 70° 58' 70° 56'

1:63360 0 2500 5000 FEET





### PRIORITY PROTECTION SITES

- No priority protection sites have been identified in this area.

### GENERAL SENSITIVITIES

- Known nesting area for threatened Spectacled eiders and good nesting habitat for Steller's eiders.
- Black brant and snow geese breeding, nesting, and rearing area during the summer.
- Coastal areas and inland lakes support concentrations of breeding, nesting, brood-rearing, and molting waterbirds during the open water months.
- Expect to deploy bird hazing systems.
- Freshwater rivers and many inland lakes contain resident and anadromous fish species.
- Spotted seals haulout in Admiralty Bay.
- All activities within the National Petroleum Reserve – Alaska (NPRA).

### CULTURAL SITES

Information on the exact locations of cultural sites is confidential. This information is contained in the *North Slope Archaeological Data* document, copies of which are kept at the following offices: State Historical Preservation Officer (SHPO) (907-269-8721), ACS in Deadhorse (907-659-2405), North Slope Borough Lands Division (907-852-0322), BPXA Crisis Center in Anchorage (907-564-5243), and the ConocoPhillips Incident Command Center in Anchorage (907-265-1000). The following cultural site(s) are located in the area depicted on this sheet:

- XMR-00077 and XMR-00078 southwest of Sisgravik Lake.
- XMR-00079 near the Anaru River on left side of this sheet.
- XMR-00076 and XMR-00080 in the lower center of this sheet.



### AIR ACCESS\*

- Commercial and air freight services are available at Barrow airport (Sheet 195), located approximately 29 miles to the North-Northwest. Runway is 6,500 ft. asphalt.
- An unattended, 4,400 ft. gravel airstrip serving the community of Atqasuk (located out of sheet coverage area) is located approximately 38 miles to the Southwest. Visual inspection recommended prior to use.

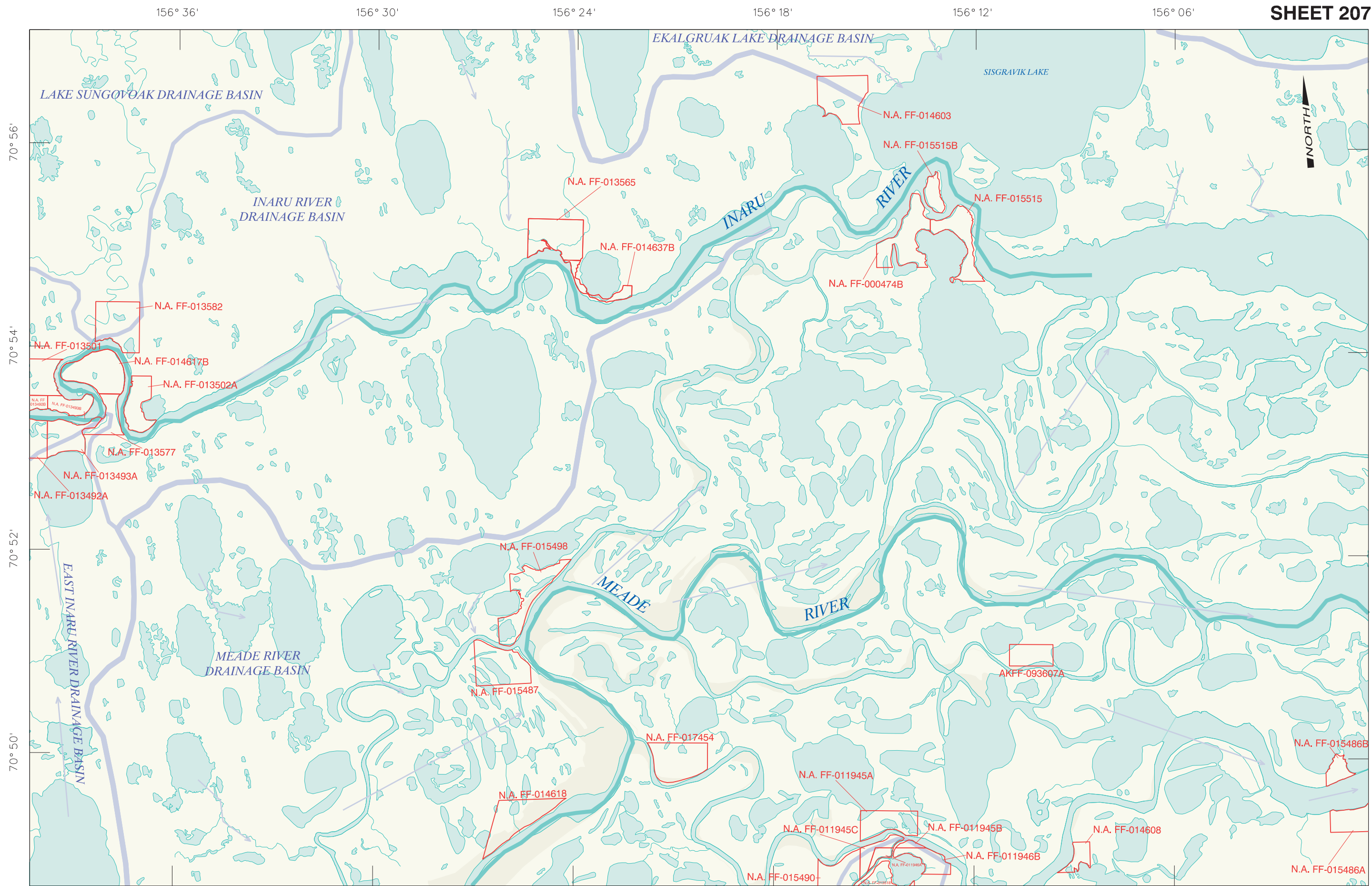
### VESSEL ACCESS\* AND HYDROGRAPHIC CONDITIONS

- Several rivers flow into southern Admiralty Bay, resulting in a low, marshy delta dotted by many small lakes.
- Water depths are extremely shallow and in many cases uncharted, making shore access difficult.

### COUNTERMEASURES CONSIDERATIONS

- Much of this area is complex deltaic and subsiding tundra polygons.
- The shoreline is primarily vegetated, with some limited areas of silt-sand. Peat is often overwashed onto the tundra vegetation. Both shore types present potential risk to load-bearing machinery and equipment.
- No additional significant countermeasures considerations were identified in this area, pending field reconnaissance.

\*See the latest *Supplement, Alaska* and United States Coast Pilot for current information on air and vessel access, respectively.



Continue on sheet 208

1:63360

0 2500 5000 FEET



**PRIORITY PROTECTION SITES**

SITE NO.	DESCRIPTION	SENSITIVITY	TACTIC	EST. BOOM
PS137	Mouth of the Alaktak River.	Most sensitive during open water season. Prevent oil from entering the river.	C-13 or C-14	800'
PS138	Entire delta area at mouth of Chipp River.	Most sensitive during open water season. Prevent oil from entering the river.	C-13 or C-14	1000'
PS139	Area guarding primary entrance to Admiralty Bay Drainage Basin.	Most sensitive during open water season. Prevent oil from entering the basin.	C-13 or C-14	800'
PS140	Shore to shore at the extreme south-southwest end of Admiralty Bay.	Most sensitive during open water season. Prevent oil from entering the furthest portion of the bay.	C-13 or C-14	5000'
PS141	Mouth of southern entrance to the Meade River Drainage Basin.	Most sensitive during open water season. Prevent oil from entering the basin.	C-13 or C-14	2000'
PS142	Mouth of the Meade River.	Most sensitive during open water season. Prevent oil from entering the river.	C-13 or C-14	2000'
PS143	Mouth of northern entrance to the Meade River Drainage Basin.	Most sensitive during open water season. Prevent oil from entering the basin.	C-13 or C-14	500'
PS144	Mouth of Inaru River entering Kuyanak Bay.	Most sensitive during open water season. Prevent oil from entering the river.	C-13 or C-14	2000'

**GENERAL SENSITIVITIES**

- The southernmost portion of Admiralty Bay, below a line stretching from Kuyanak Bay to the Alaktak River, is an important subsistence fishing area during summer months.
- Black brant and snow geese breeding, nesting, rearing area during the summer.
- Coastal areas and inland lakes support concentrations of breeding, nesting, brood-rearing, and molting waterbirds during the open water months.
- Expect to deploy bird hazing systems.
- Freshwater rivers and many inland lakes contain resident and anadromous fish species.
- Caribou in the area southwest of Admiralty Bay during summer months.
- The mouth of the Chipp River is a traditional haulout for spotted seals during the summer. Seals are sensitive to disturbance.
- All activities within the National Petroleum Reserve – Alaska (NPRA).

**CULTURAL SITES**

Information on the exact locations of cultural sites is confidential. This information is contained in the *North Slope Archaeological Data* document, copies of which are kept at the following offices: State Historical Preservation Officer (SHPO) (907-269-8721), ACS in Deadhorse (907-659-2405), North Slope Borough Lands Division (907-852-0322), BPXA Crisis Center in Anchorage (907-564-5243), and the ConocoPhillips Incident Command Center in Anchorage (907-265-1000). The following cultural site(s) are located in the area depicted on this sheet:

- No cultural site(s) have been identified in the area depicted on this sheet.



**AIR ACCESS\***

- Commercial and air freight services are available at Barrow airport (Sheet 195), located approximately 38 miles to the North-Northwest. Runway is 6,500 ft. asphalt.
- An unattended, 4,400 ft. gravel airstrip serving the community of Atqasuk (located out of sheet coverage area) is located approximately 48 miles to the Southwest. Visual inspection recommended prior to use.

**VESSEL ACCESS\* AND HYDROGRAPHIC CONDITIONS**

- Admiralty Bay has 8-10 ft. depths and bottom similar to the outer part of Dease Inlet.
- Numerous rivers flow into southern Admiralty Bay, resulting in a low, marshy delta dotted by many small lakes.
- Water depths in the south are extremely shallow and in many cases uncharted, making shore access very difficult.

**COUNTERMEASURES CONSIDERATIONS**

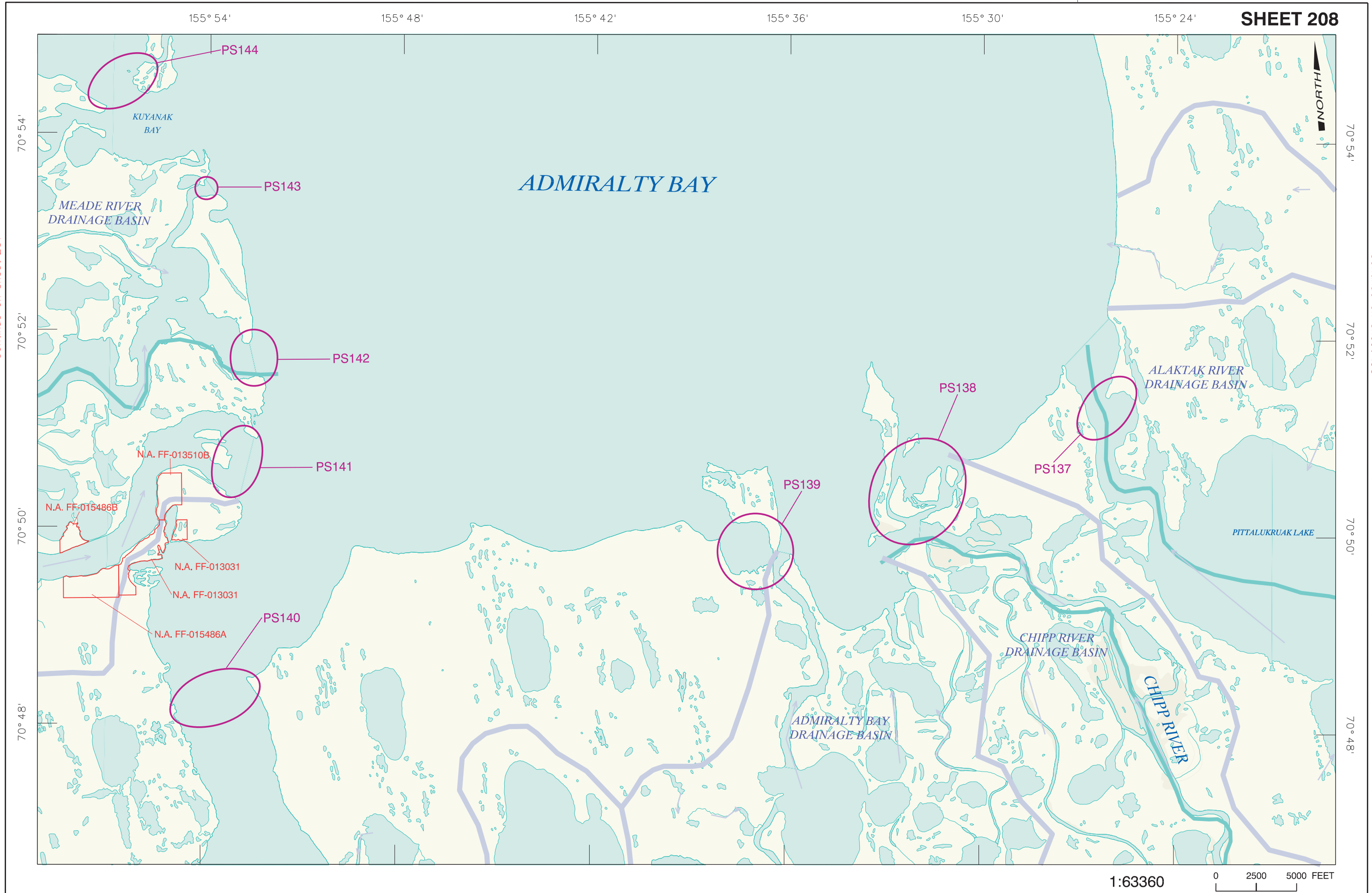
- The Meade River Drainage Basin area consists of complex deltaic and subsiding tundra polygons.
- The bay's extreme southern shoreline is primarily wet vegetation, with some limited areas of silt-sand backed by 10-20 ft. tundra scarps. Both shore types present potential risk to load-bearing machinery and equipment.
- The shoreline entrance to Pittalukruak Lake is vegetated and consists of subsiding tundra not backed by scarps. Some peat may be overwashed onto it.
- The eastern shoreline of Admiralty Bay is predominantly sandy and narrow, backed by sand scarps from 10-30 ft. in height. These scarps generally preclude shore access.
- No additional significant countermeasures considerations were identified in this area, pending field reconnaissance.

\*See the latest *Supplement, Alaska* and United States Coast Pilot for current information on air and vessel access, respectively.



Continue on sheet 207

Continue on sheet 138







**PRIORITY PROTECTION SITES**

SITE NO.	DESCRIPTION	SENSITIVITY	TACTIC	EST. BOOM
PS140	Shore to shore at the extreme south-southwest end of Admiralty Bay.	Most sensitive during open water season. Prevent oil from entering the furthest portion of the bay.	C-13 or C-14	5000'

**GENERAL SENSITIVITIES**

- The southernmost reaches of Admiralty Bay are an important subsistence fishing area during summer months.
- Black brant breeding, nesting, rearing area during the summer.
- Freshwater rivers and many inland lakes contain resident and anadromous fish species.
- Known nesting area for threatened Spectacled eiders.
- Expect to deploy bird hazing systems.
- Many inland lakes contain freshwater fish important to subsistence users.
- All activities within the National Petroleum Reserve – Alaska (NPRA).

**CULTURAL SITES**

Information on the exact locations of cultural sites is confidential. This information is contained in the *North Slope Archaeological Data* document, copies of which are kept at the following offices: State Historical Preservation Officer (SHPO) (907-269-8721), ACS in Deadhorse (907-659-2405), North Slope Borough Lands Division (907-852-0322), BPXA Crisis Center in Anchorage (907-564-5243), and the ConocoPhillips Incident Command Center in Anchorage (907-265-1000). The following cultural site(s) are located in the area depicted on this sheet:

- XMR-00080 in the northwest quadrant of this sheet.



**AIR ACCESS\***

- An unattended, 4,400 ft. gravel airstrip serving the community of Atqasuk (located out of sheet coverage area) is located approximately 36 miles to the West-Southwest. Visual inspection recommended prior to use.
- Commercial and air freight services are available at Barrow airport (Sheet 195), located approximately 39 miles to the North-Northwest. Runway is 6,500 ft. asphalt.

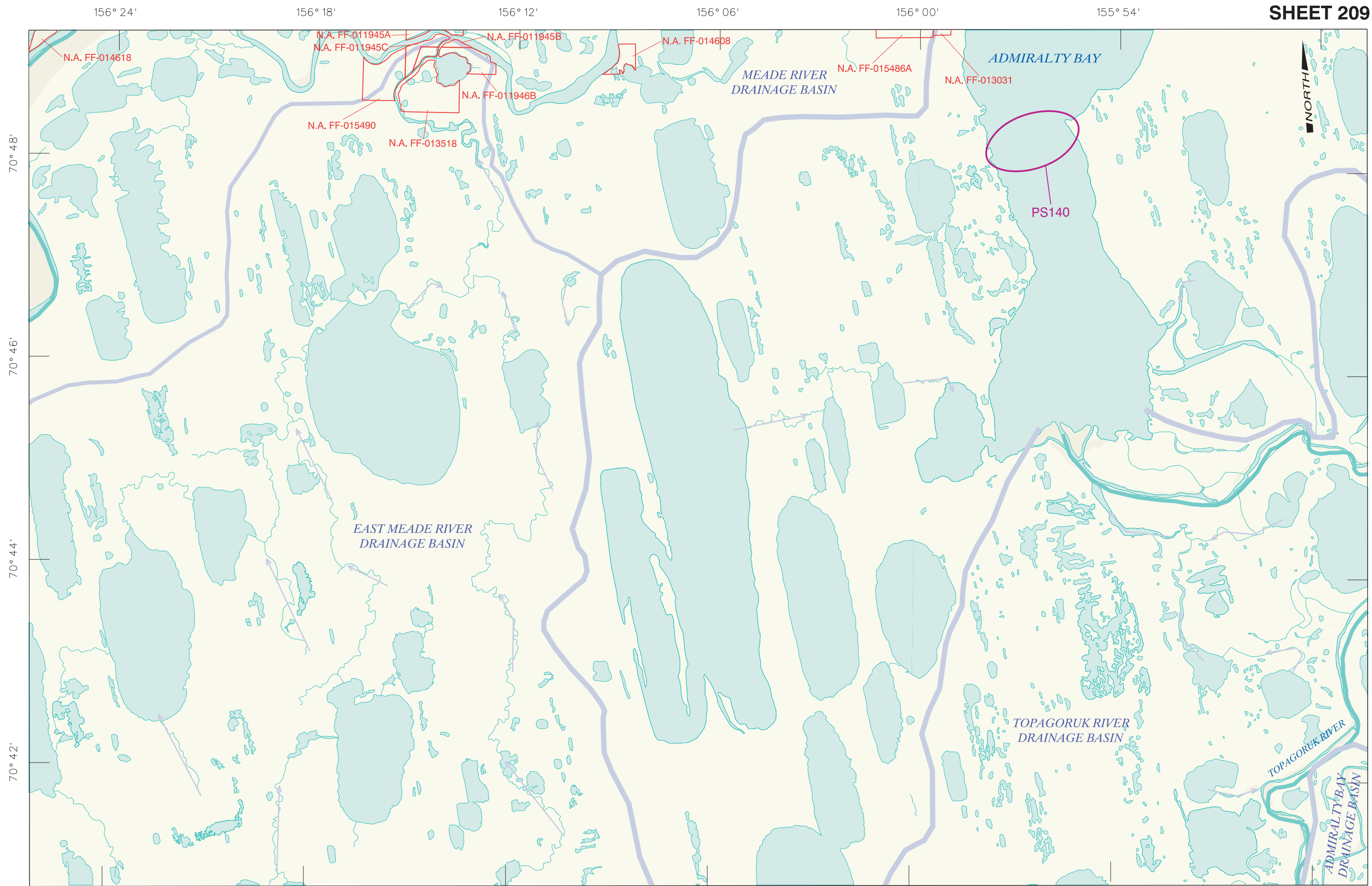
**VESSEL ACCESS\* AND HYDROGRAPHIC CONDITIONS**

- Several rivers flow into southern Admiralty Bay, resulting in a low, marshy delta dotted by many small lakes.
- Water depths are extremely shallow and in many cases uncharted, making shore access very difficult.

**COUNTERMEASURES CONSIDERATIONS**

- The bay's extreme southern shoreline is primarily wet vegetation, with some limited areas of silt-sand backed by 10-20 ft. tundra scarps. Both shore types present potential risk to load-bearing machinery and equipment.
- This area is wet tundra and peat, dotted with numerous small lakes and creeks. Expect it to be very unstable.
- No additional significant countermeasures considerations were identified in this area, pending field reconnaissance.

\*See the latest *Supplement, Alaska* and United States Coast Pilot for current information on air and vessel access, respectively.



Continue on sheet 210

1:63360 0 2500 5000 FEET



### PRIORITY PROTECTION SITES

- No priority protection sites have been identified in this area.

### GENERAL SENSITIVITIES

- Inland lakes support concentrations of breeding, nesting, brood-rearing, and molting waterbirds during the open water months.
- Expect to deploy bird hazing systems.
- Caribou present in the area during summer months.
- Chipp River contains resident and anadromous fish that are important to subsistence..
- All activities within the National Petroleum Reserve – Alaska (NPRA).

### CULTURAL SITES

Information on the exact locations of cultural sites is confidential. This information is contained in the *North Slope Archaeological Data* document, copies of which are kept at the following offices: State Historical Preservation Officer (SHPO) (907-269-8721), ACS in Deadhorse (907-659-2405), North Slope Borough Lands Division (907-852-0322), BPXA Crisis Center in Anchorage (907-564-5243), and the ConocoPhillips Incident Command Center in Anchorage (907-265-1000). The following cultural site(s) are located in the area depicted on this sheet:

- No cultural site(s) have been identified in the area depicted on this sheet.



### AIR ACCESS\*

- An unattended, 4,400 ft. gravel airstrip serving the community of Atqasuk (located out of sheet coverage area) is located approximately 45 miles to the West-Southwest. Visual inspection recommended prior to use.
- Commercial and air freight services are available at Barrow airport (Sheet 195), located approximately 48 miles to the North-Northwest. Runway is 6,500 ft. asphalt.

### VESSEL ACCESS\* AND HYDROGRAPHIC CONDITIONS

- Several rivers flow into Admiralty Bay, resulting in a low, marshy delta dotted by numerous small lakes.

### COUNTERMEASURES CONSIDERATIONS

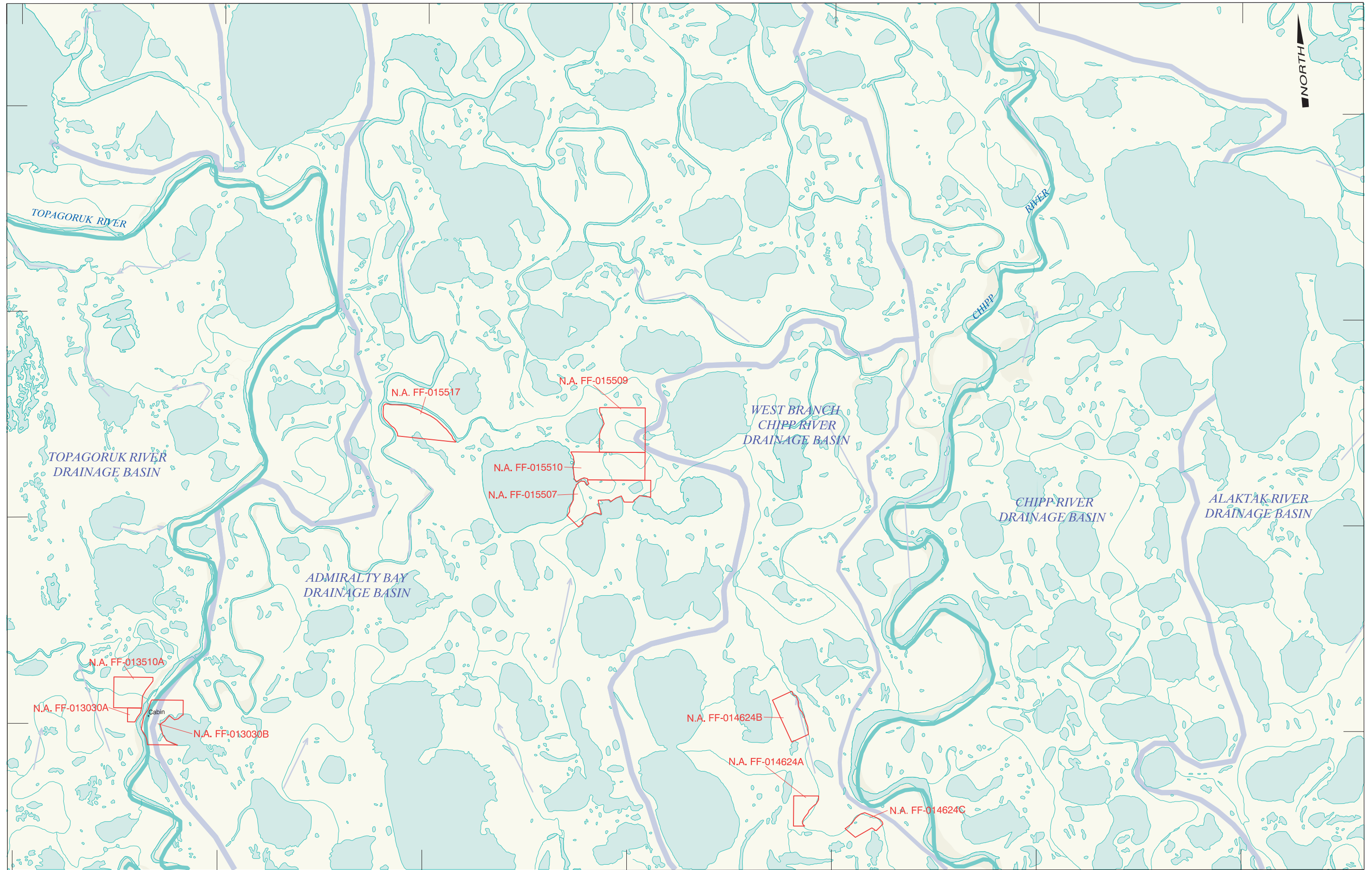
- This area is wet tundra and peat, dotted with numerous small lakes and creeks. Expect it to be very unstable, presenting a high risk to load-bearing machinery, equipment and personnel.
- No additional significant countermeasures considerations were identified in this area, pending field reconnaissance.

\*See the latest *Supplement, Alaska* and United States Coast Pilot for current information on air and vessel access, respectively.



Continue on sheet 209

Continue on sheet 143



1:63360 0 2500 5000 FEET





### PRIORITY PROTECTION SITES

- No priority protection sites have been identified in this area.

### GENERAL SENSITIVITIES

- Coastal areas support concentrations of breeding, nesting, brood-rearing, and molting waterbirds during the open water months.
- Expect to deploy bird hazing systems.
- Caribou present in the area during summer months.
- Chipp River contains resident and anadromous fish that are important to subsistence.
- All activities within the National Petroleum Reserve – Alaska (NPRA).

### CULTURAL SITES

Information on the exact locations of cultural sites is confidential. This information is contained in the *North Slope Archaeological Data* document, copies of which are kept at the following offices: State Historical Preservation Officer (SHPO) (907-269-8721), ACS in Deadhorse (907-659-2405), North Slope Borough Lands Division (907-852-0322), BPXA Crisis Center in Anchorage (907-564-5243), and the ConocoPhillips Incident Command Center in Anchorage (907-265-1000). The following cultural site(s) are located in the area depicted on this sheet:

- No cultural site(s) have been identified in the area depicted on this sheet.



### AIR ACCESS\*

- An unattended, 4,400 ft. gravel airstrip serving the community of Atqasuk (located out of sheet coverage area) is located approximately 47 miles to the West-Southwest. Visual inspection recommended prior to use.
- Lonely Air Station (Sheet 141) is located approximately 55 miles to the East-Northeast. This facility is closed to the public and should be considered for emergency landing only. The unattended, 5,000 ft. gravel runway is not maintained and its condition is unknown. Visual inspection recommended prior to use. May be used for spill response operations upon approval by Elmendorf Air Force Base, 11th Air Force Airfield Management, (907) 552-7384/3636/5265.
- Commercial and air freight services are available at Barrow airport (Sheet 195), located approximately 57 miles to the North-Northwest. Runway is 6,500 ft. asphalt.

### VESSEL ACCESS\* AND HYDROGRAPHIC CONDITIONS

- There are no marine waters or shorelines on this map.

### COUNTERMEASURES CONSIDERATIONS

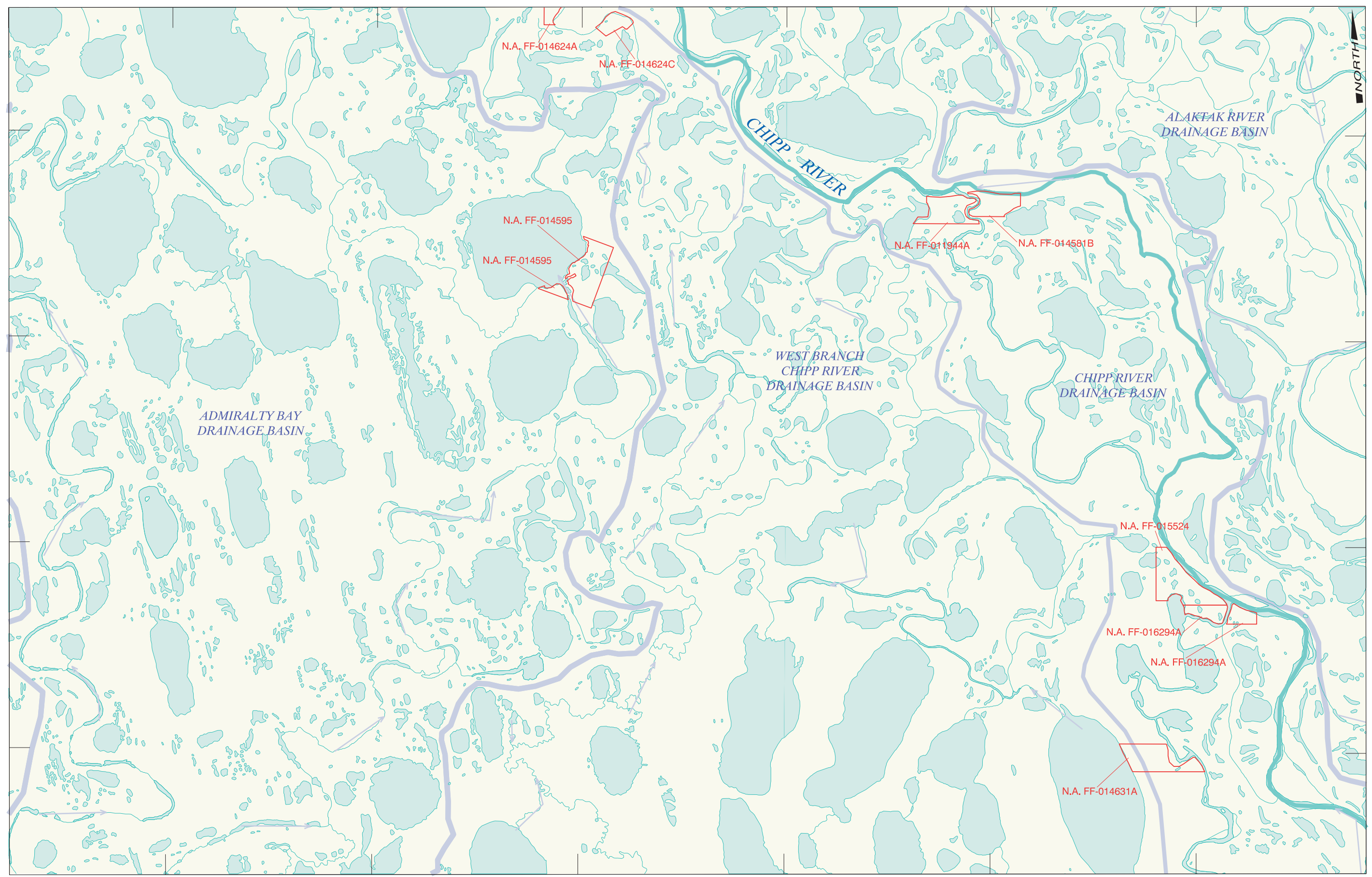
- This area is wet tundra and peat, dotted with numerous small lakes and creeks. Expect it to be very unstable, presenting a high risk to load-bearing machinery, equipment and personnel.
- No additional significant countermeasures considerations were identified in this area, pending field reconnaissance.

\*See the latest *Supplement, Alaska* and United States Coast Pilot for current information on air and vessel access, respectively.

155° 42' 155° 36' 155° 30' 155° 24' 155° 18' 155° 12'

70° 38'  
70° 36'  
70° 34'  
70° 32'

70° 38'  
70° 36'  
70° 34'  
70° 32'



Continue on sheet 148

1:63360 0 2500 5000 FEET



### PRIORITY PROTECTION SITES

- No priority protection sites have been identified in this area.

### GENERAL SENSITIVITIES

- Coastal areas support concentrations of breeding, nesting, brood-rearing, and molting waterbirds during the open water months.
- Known spectacled eider nesting area.
- Expect to deploy bird hazing systems.
- Polar bear dens may be present where topographical features provide adequate snow cover.
- Anadromous and resident fish present in Ugnuravik River.

### CULTURAL SITES

Information on the exact locations of cultural sites is confidential. This information is contained in the *North Slope Archaeological Data* document, copies of which are kept at the following offices: State Historical Preservation Officer (SHPO) (907-269-8721), ACS in Deadhorse (907-659-2405), North Slope Borough Lands Division (907-852-0322), BPXA Crisis Center in Anchorage (907-564-5243), and the ConocoPhillips Incident Command Center in Anchorage (907-265-1000). The following cultural site(s) are located in the area depicted on this sheet:

- XBP-00091 northeast of DS 1L.
- HAR-00155 near DS 2K.



### AIR ACCESS\*

- Ugnu-Kuparuk (Sheet 51) is a continuously attended, 6,000 ft. gravel private airstrip serving the Kuparuk facilities. It is located approximately 10 miles to the Northeast.
- An irregularly attended, 5,000 ft. gravel private airstrip serving the Alpine field (Sheet 20) is located approximately 25 miles to the Northwest.
- Commercial and air freight services are available at Nuiqsut airport (Sheet 24), located approximately 25 miles to the West. The unattended runway is 4,300 ft. gravel. Its condition is not monitored, thus visual inspection prior to use is recommended.
- Commercial and air freight services are available at Deadhorse airport (Sheet 81), located approximately 34 miles to the East. Runway is 6,500 ft. asphalt.

### VESSEL ACCESS\* AND HYDROGRAPHIC CONDITIONS

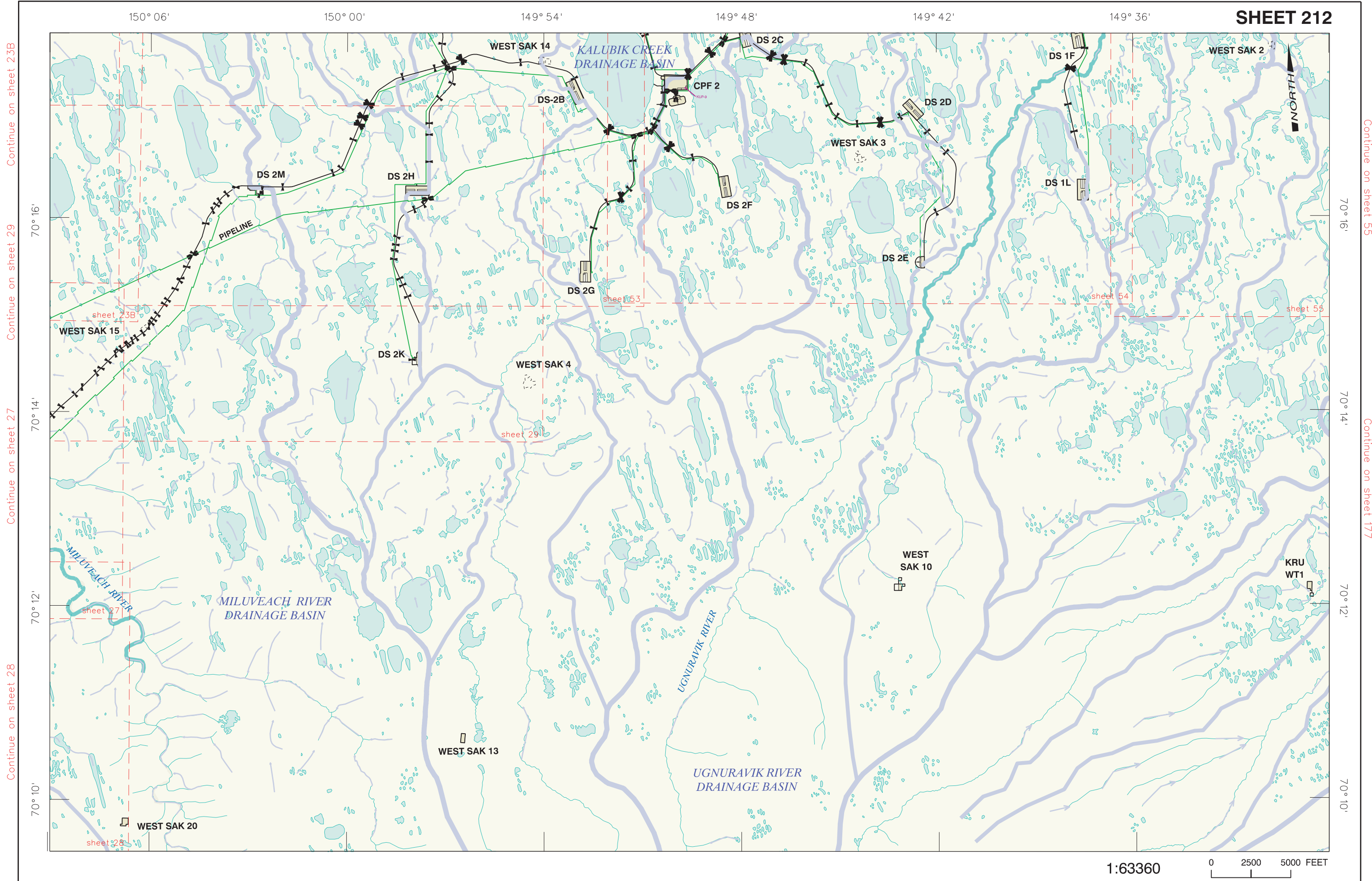
- There are no marine waters or shorelines on this map.

### COUNTERMEASURES CONSIDERATIONS

- No significant countermeasures considerations were identified in this area, pending field reconnaissance.

\*See the latest *Supplement, Alaska* and United States Coast Pilot for current information on air and vessel access, respectively.





Continue on sheet 23B

Continue on sheet 29

Continue on sheet 27

Continue on sheet 28

Continue on sheet 55

Continue on sheet 177





### PRIORITY PROTECTION SITES

- No priority protection sites have been identified in this area.

### GENERAL SENSITIVITIES

- Coastal areas support concentrations of breeding, nesting, brood-rearing, and molting waterbirds during the open water months.
- Known spectacled eider nesting area.
- Expect to deploy bird hazing systems.
- Polar bear dens may be present where topographical features provide adequate snow cover.
- Grizzly bear dens may be present in pingos and other bluff and relief habitats.
- Anadromous and resident fish present in Ugnuravik and Miluveach Rivers.

### CULTURAL SITES

Information on the exact locations of cultural sites is confidential. This information is contained in the *North Slope Archaeological Data* document, copies of which are kept at the following offices: State Historical Preservation Officer (SHPO) (907-269-8721), ACS in Deadhorse (907-659-2405), North Slope Borough Lands Division (907-852-0322), BPXA Crisis Center in Anchorage (907-564-5243), and the ConocoPhillips Incident Command Center in Anchorage (907-265-1000). The following cultural site(s) are located in the area depicted on this sheet:

- No cultural site(s) have been identified in the area depicted on this sheet.



### AIR ACCESS\*

- Ugnu-Kuparuk (Sheet 51) is a continuously attended, 6,000 ft. gravel private airstrip serving the Kuparuk facilities. It is located approximately 18 miles to the Northeast.
- An irregularly attended, 5,000 ft. gravel private airstrip serving the Alpine field (Sheet 20) is located approximately 25 miles to the Northwest.
- Commercial and air freight services are available at Nuiqsut airport (Sheet 24), located approximately 22 miles to the West-Northwest. The unattended runway is 4,300 ft. gravel. Its condition is not monitored, thus visual inspection prior to use is recommended.
- Commercial and air freight services are available at Deadhorse airport (Sheet 81), located approximately 38 miles to the East-Northeast. Runway is 6,500 ft. asphalt.

### VESSEL ACCESS\* AND HYDROGRAPHIC CONDITIONS

- There are no marine waters or shorelines on this map.

### COUNTERMEASURES CONSIDERATIONS

- No significant countermeasures considerations were identified in this area, pending field reconnaissance.

\*See the latest *Supplement, Alaska* and United States Coast Pilot for current information on air and vessel access, respectively.

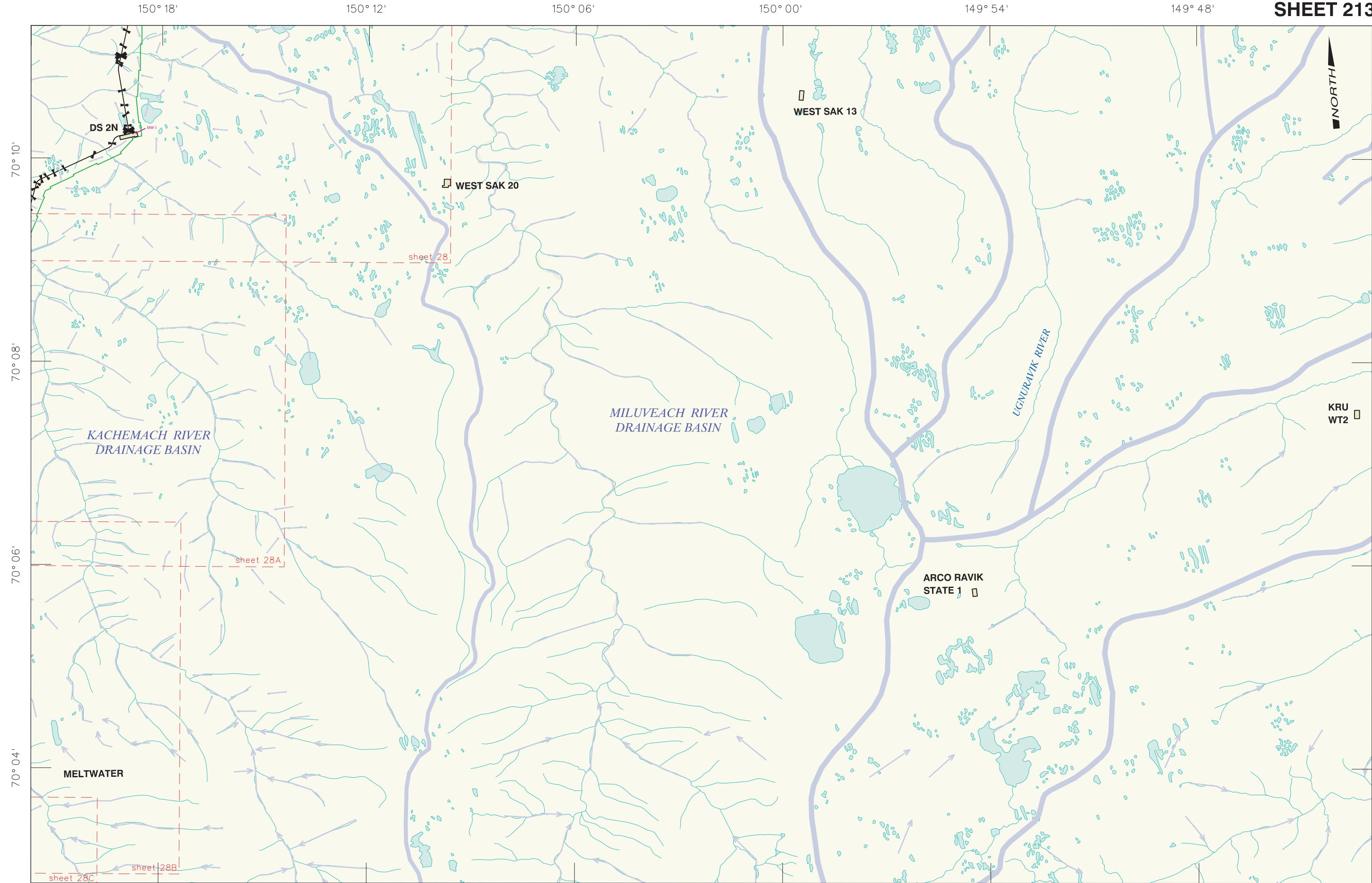
Continue on sheet 28

Continue on sheet 28A

Continue on sheet 28B

Continue on sheet 178

Continue on sheet 179



1:63360

0 2500 5000 FEET



### PRIORITY PROTECTION SITES

- No priority protection sites have been identified in this area.

### GENERAL SENSITIVITIES

- Coastal areas support concentrations of breeding, nesting, brood-rearing, and molting waterbirds during the open water months.
- Known spectacled eider nesting area.
- Expect to deploy bird hazing systems.
- Polar bears and potential dens present in the area.
- Grizzly bear dens may be present in pingos and other bluff and relief habitats.
- Anadromous and resident fish present in Miluveach River.

### CULTURAL SITES

Information on the exact locations of cultural sites is confidential. This information is contained in the *North Slope Archaeological Data* document, copies of which are kept at the following offices: State Historical Preservation Officer (SHPO) (907-269-8721), ACS in Deadhorse (907-659-2405), North Slope Borough Lands Division (907-852-0322), BPXA Crisis Center in Anchorage (907-564-5243), and the ConocoPhillips Incident Command Center in Anchorage (907-265-1000). The following cultural site(s) are located in the area depicted on this sheet:

- No cultural site(s) have been identified in the area depicted on this sheet.



### AIR ACCESS\*

- Ugnu-Kuparuk (Sheet 51) is a continuously attended, 6,000 ft. gravel private airstrip serving the Kuparuk facilities. It is located approximately 24 miles to the North-Northeast.
- An irregularly attended, 5,000 ft. gravel private airstrip serving the Alpine field (Sheet 20) is located approximately 31 miles to the Northwest.
- Commercial and air freight services are available at Nuiqsut airport (Sheet 24), located approximately 26 miles to the Northwest. The unattended runway is 4,300 ft. gravel. Its condition is not monitored, thus visual inspection prior to use is recommended.
- Commercial and air freight services are available at Deadhorse airport (Sheet 81), located approximately 40 miles to the Northeast. Runway is 6,500 ft. asphalt.

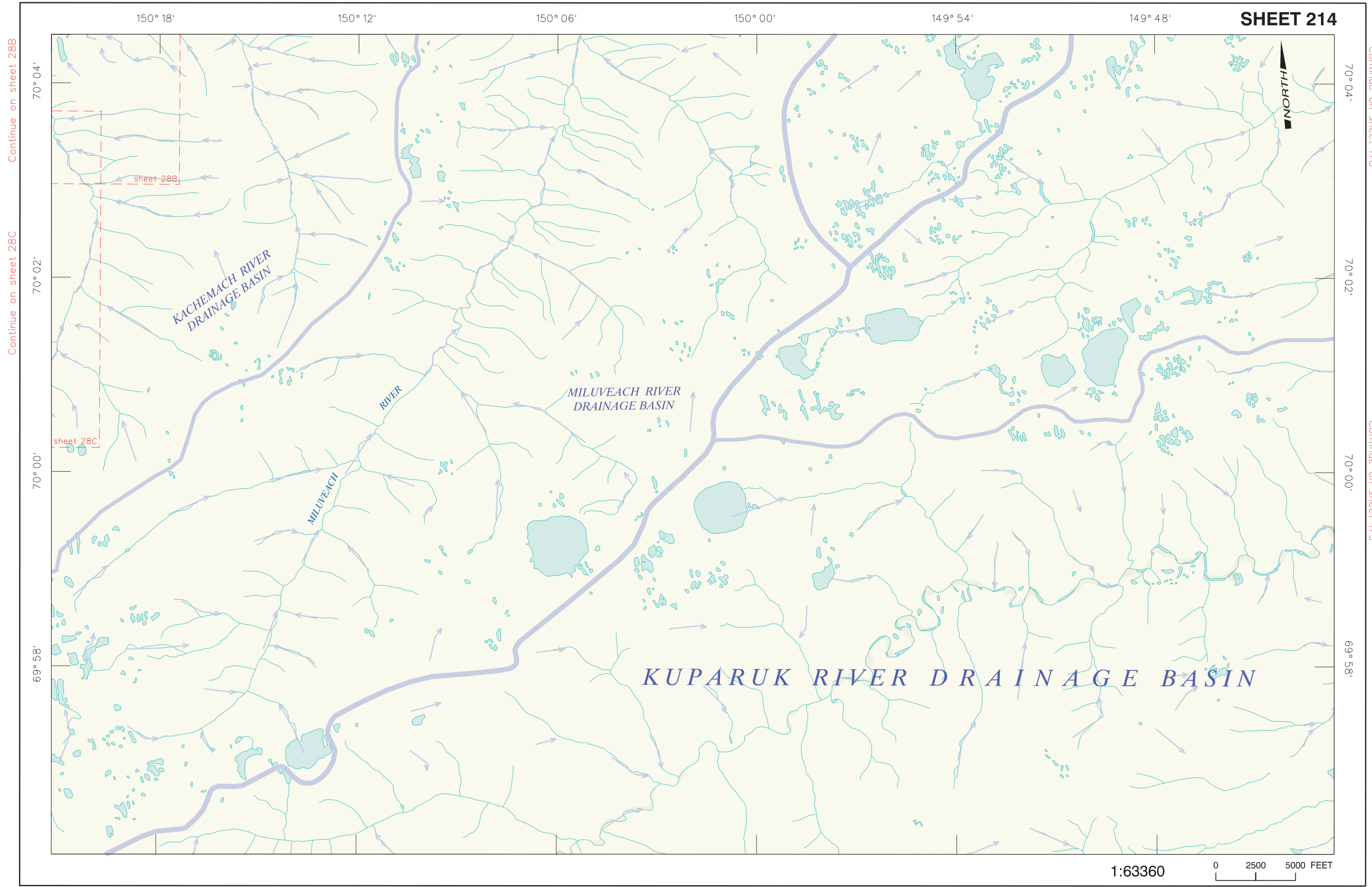
### VESSEL ACCESS\* AND HYDROGRAPHIC CONDITIONS

- There are no marine waters or shorelines on this map.

### COUNTERMEASURES CONSIDERATIONS

- No significant countermeasures considerations were identified in this area, pending field reconnaissance.

\*See the latest *Supplement, Alaska* and United States Coast Pilot for current information on air and vessel access, respectively.



Continue on sheet 28B

Continue on sheet 28C

Continue on sheet 178

Continue on sheet 179

1:63360

0 2500 5000 FEET





### PRIORITY PROTECTION SITES

- No priority protection sites have been identified in this area.

### GENERAL SENSITIVITIES

- Coastal areas support concentrations of breeding, nesting, brood-rearing, and molting waterbirds during the open water months.
- Expect to deploy bird hazing systems.
- Polar bear dens may be present where topographical features provide adequate snow cover.
- Grizzly bear dens may be present in pingos and other bluff and relief habitats.
- Caribou present in the winter.

### CULTURAL SITES

Information on the exact locations of cultural sites is confidential. This information is contained in the *North Slope Archaeological Data* document, copies of which are kept at the following offices: State Historical Preservation Officer (SHPO) (907-269-8721), ACS in Deadhorse (907-659-2405), North Slope Borough Lands Division (907-852-0322), BPXA Crisis Center in Anchorage (907-564-5243), and the ConocoPhillips Incident Command Center in Anchorage (907-265-1000). The following cultural site(s) are located in the area depicted on this sheet:

- No cultural site(s) have been identified in the area depicted on this sheet.



### AIR ACCESS\*

- Ugnu-Kuparuk (Sheet 51) is a continuously attended, 6,000 ft. gravel private airstrip serving the Kuparuk facilities. It is located approximately 32 miles to the North-Northeast.
- Commercial and air freight services are available at Nuiqsut airport (Sheet 24), located approximately 32 miles to the Northwest. The unattended runway is 4,300 ft. gravel. Its condition is not monitored, thus visual inspection prior to use is recommended.
- Commercial and air freight services are available at Deadhorse airport (Sheet 81), located approximately 44 miles to the Northeast. Runway is 6,500 ft. asphalt.

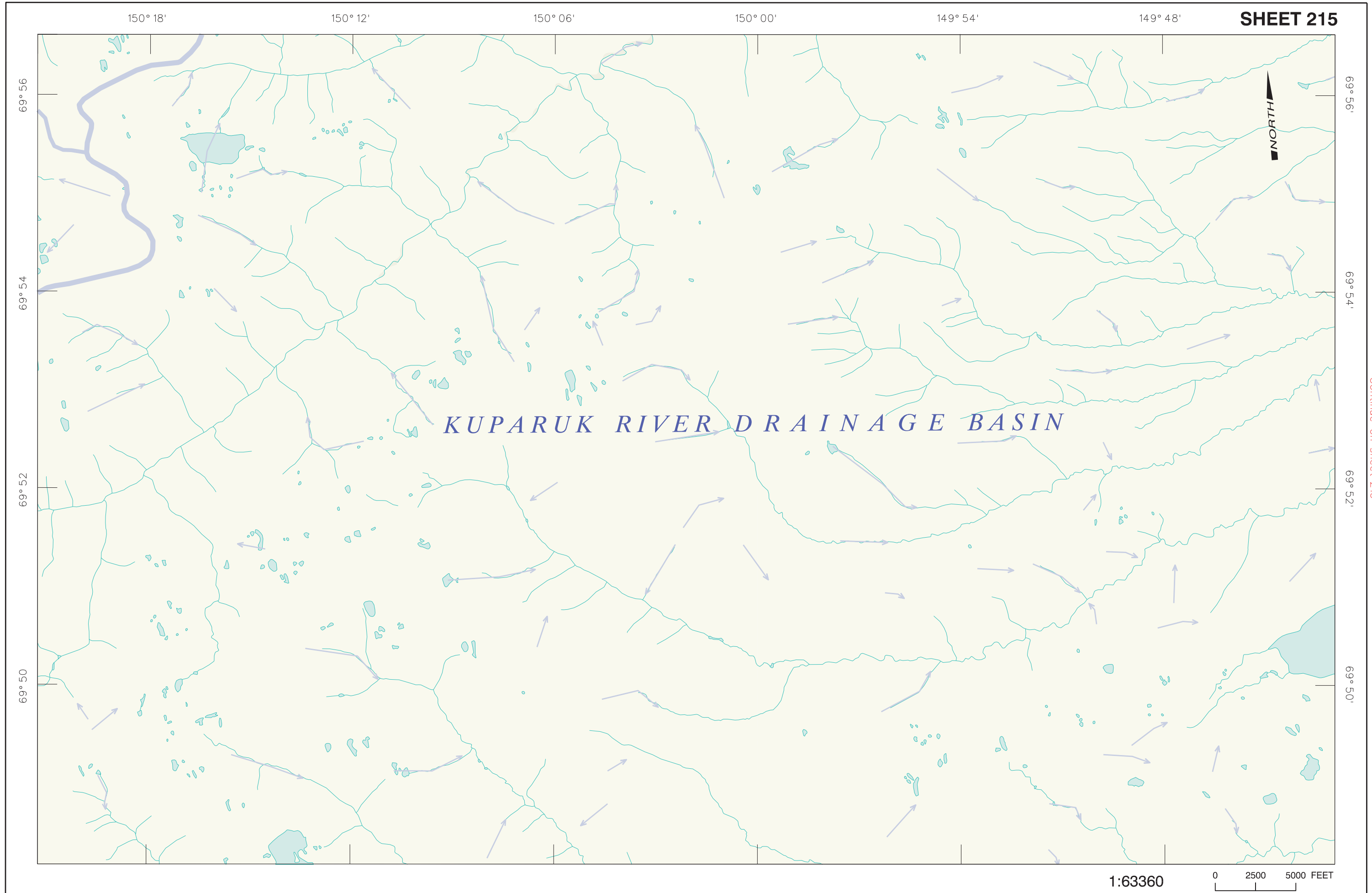
### VESSEL ACCESS\* AND HYDROGRAPHIC CONDITIONS

- There are no marine waters or shorelines on this map.

### COUNTERMEASURES CONSIDERATIONS

- No significant countermeasures considerations were identified in this area, pending field reconnaissance.

\*See the latest *Supplement, Alaska* and United States Coast Pilot for current information on air and vessel access, respectively.



Continue on sheet 216



### PRIORITY PROTECTION SITES

- No priority protection sites have been identified in this area.

### GENERAL SENSITIVITIES

- Coastal areas support concentrations of breeding, nesting, brood-rearing, and molting waterbirds during the open water months.
- Expect to deploy bird hazing systems.
- Caribou present in the winter.
- Polar bear dens may be present where topographical features provide adequate snow cover.
- Grizzly bear dens may be present in pingos and other bluff and relief habitats.
- Anadromous and resident fish present in the Kuparuk and Toolik Rivers and most side tributaries.

### CULTURAL SITES

Information on the exact locations of cultural sites is confidential. This information is contained in the *North Slope Archaeological Data* document, copies of which are kept at the following offices: State Historical Preservation Officer (SHPO) (907-269-8721), ACS in Deadhorse (907-659-2405), North Slope Borough Lands Division (907-852-0322), BPXA Crisis Center in Anchorage (907-564-5243), and the ConocoPhillips Incident Command Center in Anchorage (907-265-1000). The following cultural site(s) are located in the area depicted on this sheet:

- No cultural site(s) have been identified in the area depicted on this sheet.



### AIR ACCESS\*

- Franklin Bluffs landing strip, details unknown, appears on Sheet 219 to the southeast.
- Several small landing strips, details unknown, appear on Sheet 222 to the southeast.
- Ugnu-Kuparuk (Sheet 51) is a continuously attended, 6,000 ft. gravel private airstrip serving the Kuparuk facilities. It is located approximately 31 miles to the North.
- Commercial and air freight services are available at Deadhorse airport (Sheet 81), located approximately 31 miles to the Northeast. Runway is 6,500 ft. asphalt.
- Commercial and air freight services are available at Nuiqsut airport (Sheet 24), located approximately 43 miles to the Northwest. The unattended runway is 4,300 ft. gravel. Its condition is not monitored, thus visual inspection prior to use is recommended.

### VESSEL ACCESS\* AND HYDROGRAPHIC CONDITIONS

- There are no marine waters or shorelines on this map.

### COUNTERMEASURES CONSIDERATIONS

- No significant countermeasures considerations were identified in this area, pending field reconnaissance.

\*See the latest *Supplement, Alaska* and United States Coast Pilot for current information on air and vessel access, respectively.

149° 42'

149° 36'

149° 30'

149° 24'

149° 18'

149° 12'

69° 56'

69° 54'

69° 52'

69° 50'

69° 56'

69° 54'

69° 52'

69° 50'

Continue on sheet 215



1:63360







### PRIORITY PROTECTION SITES

- No priority protection sites have been identified in this area.

### GENERAL SENSITIVITIES

- Coastal areas support concentrations of breeding, nesting, brood-rearing, and molting waterbirds during the open water months.
- Expect to deploy bird hazing systems.
- Caribou present in the winter.
- Grizzly bear dens may be present in pingos and other bluff and relief habitats.
- Anadromous and resident fish present in the Kuparuk River and most side tributaries.

### CULTURAL SITES

Information on the exact locations of cultural sites is confidential. This information is contained in the *North Slope Archaeological Data* document, copies of which are kept at the following offices: State Historical Preservation Officer (SHPO) (907-269-8721), ACS in Deadhorse (907-659-2405), North Slope Borough Lands Division (907-852-0322), BPXA Crisis Center in Anchorage (907-564-5243), and the ConocoPhillips Incident Command Center in Anchorage (907-265-1000). The following cultural site(s) are located in the area depicted on this sheet:

- SAG-00088 near the Kuparuk River in the southeast quadrant of this sheet.



### AIR ACCESS\*

- Commercial and air freight services are available at Nuiqsut airport (Sheet 24), located approximately 39 miles to the Northwest. The unattended runway is 4,300 ft. gravel. Its condition is not monitored, thus visual inspection prior to use is recommended.
- Ugnu-Kuparuk (Sheet 51) is a continuously attended, 6,000 ft. gravel private airstrip serving the Kuparuk facilities. It is located approximately 41 miles to the North-Northeast.
- Commercial and air freight services are available at Deadhorse airport (Sheet 81), located approximately 50 miles to the Northeast. Runway is 6,500 ft. asphalt.

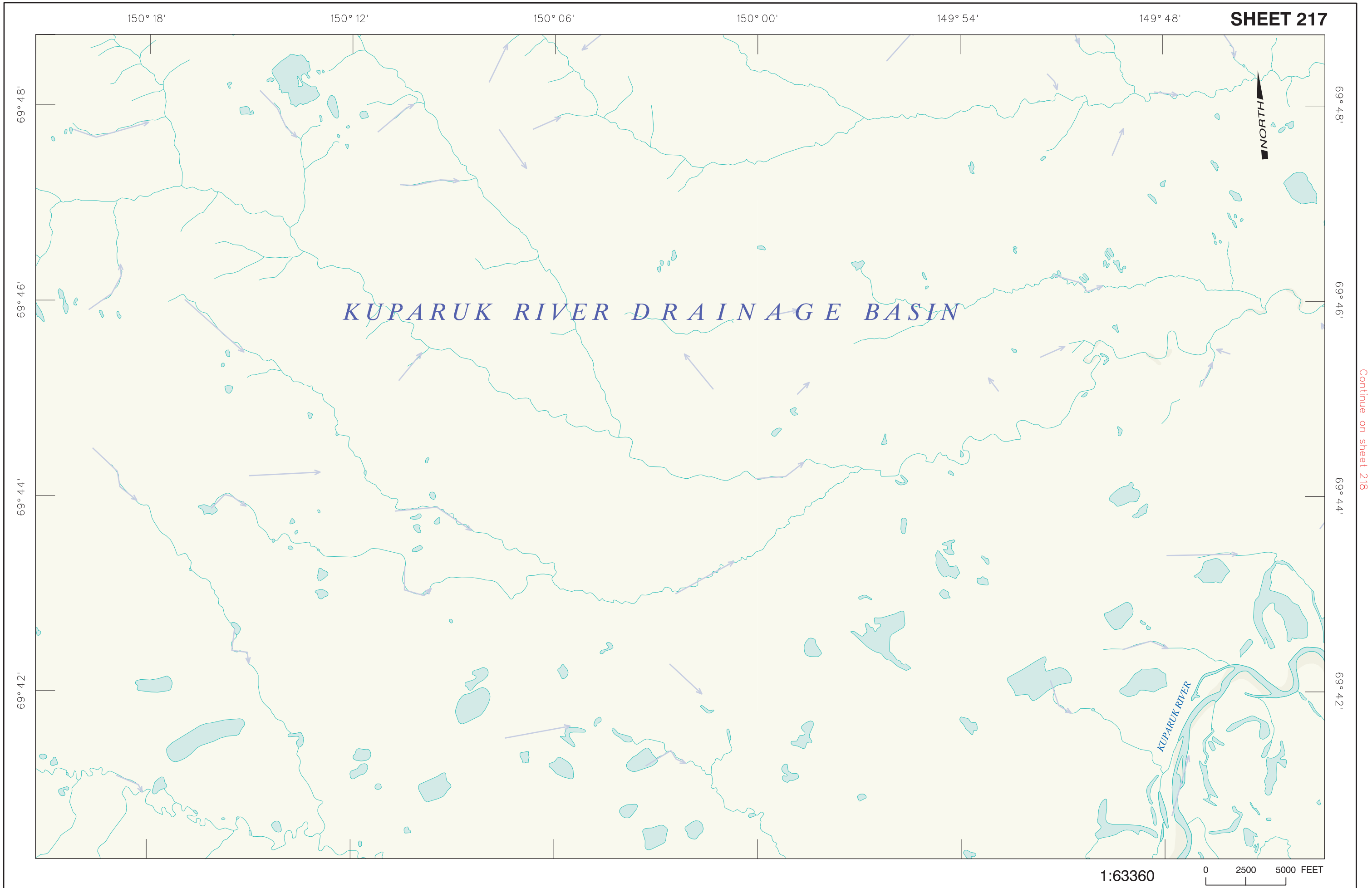
### VESSEL ACCESS\* AND HYDROGRAPHIC CONDITIONS

- There are no marine waters or shorelines on this map.

### COUNTERMEASURES CONSIDERATIONS

- No significant countermeasures considerations were identified in this area, pending field reconnaissance.

\*See the latest *Supplement, Alaska* and United States Coast Pilot for current information on air and vessel access, respectively.





### PRIORITY PROTECTION SITES

- No priority protection sites have been identified in this area.

### GENERAL SENSITIVITIES

- Coastal areas support concentrations of breeding, nesting, brood-rearing, and molting waterbirds during the open water months.
- Expect to deploy bird hazing systems.
- Caribou wintering and calving grounds.
- Grizzly bear dens may be present in pingos and other bluff and relief habitats.
- Anadromous and resident fish present in the Kuparuk and Toolik Rivers and most side tributaries.

### CULTURAL SITES

Information on the exact locations of cultural sites is confidential. This information is contained in the *North Slope Archaeological Data* document, copies of which are kept at the following offices: State Historical Preservation Officer (SHPO) (907-269-8721), ACS in Deadhorse (907-659-2405), North Slope Borough Lands Division (907-852-0322), BPXA Crisis Center in Anchorage (907-564-5243), and the ConocoPhillips Incident Command Center in Anchorage (907-265-1000). The following cultural site(s) are located in the area depicted on this sheet:

- SAG-00086 and SAG-00087 in the southwest quadrant of this sheet.



### AIR ACCESS\*

- Franklin Bluffs landing strip, details unknown, appears on Sheet 219 directly to the east.
- Several small landing strips, details unknown, appear on Sheet 222 to the southeast.
- Commercial and air freight services are available at Deadhorse airport (Sheet 81), located approximately 38 miles to the Northeast. Runway is 6,500 ft. asphalt.
- Ugnu-Kuparuk (Sheet 51) is a continuously attended, 6,000 ft. gravel private airstrip serving the Kuparuk facilities. It is located approximately 40 miles to the North.
- Commercial and air freight services are available at Nuiqsut airport (Sheet 24), located approximately 49 miles to the Northwest. The unattended runway is 4,300 ft. gravel. Its condition is not monitored, thus visual inspection prior to use is recommended.

### VESSEL ACCESS\* AND HYDROGRAPHIC CONDITIONS

- There are no marine waters or shorelines on this map.

### COUNTERMEASURES CONSIDERATIONS

- No significant countermeasures considerations were identified in this area, pending field reconnaissance.

\*See the latest *Supplement, Alaska* and United States Coast Pilot for current information on air and vessel access, respectively.

149° 42'

149° 36'

149° 30'

149° 24'

149° 18'

149° 12'

69° 48'

69° 46'

69° 44'

69° 42'

69° 48'

69° 46'

69° 44'

69° 42'

Continue on sheet 217

Continue on sheet 219



*TOOLIK RIVER  
DRAINAGE BASIN*

*KUPARUK RIVER*

*KUPARUK RIVER  
DRAINAGE BASIN*



1:63360

0 2500 5000 FEET





### PRIORITY PROTECTION SITES

- No priority protection sites have been identified in this area.

### GENERAL SENSITIVITIES

- Coastal areas support concentrations of breeding, nesting, brood-rearing, and molting waterbirds during the open water months.
- Expect to deploy bird hazing systems.
- Caribou wintering and calving grounds.
- Grizzly bear dens may be present in pingos and other bluff and relief habitats.
- Anadromous and resident fish present in the Toolik and Sagavanirktok Rivers and most side tributaries.
- Peregrine falcons may be present in area adjacent to the Sagavanirktok River.

### CULTURAL SITES

Information on the exact locations of cultural sites is confidential. This information is contained in the *North Slope Archaeological Data* document, copies of which are kept at the following offices: State Historical Preservation Officer (SHPO) (907-269-8721), ACS in Deadhorse (907-659-2405), North Slope Borough Lands Division (907-852-0322), BPXA Crisis Center in Anchorage (907-564-5243), and the ConocoPhillips Incident Command Center in Anchorage (907-265-1000). The following cultural site(s) are located in the area depicted on this sheet:

- No cultural site(s) have been identified in the area depicted on this sheet.



### AIR ACCESS\*

- Franklin Bluffs landing strip, details unknown, is depicted on this sheet.
- Several small landing strips, details unknown, appear on Sheet 222 directly to the south.
- Commercial and air freight services are available at Deadhorse airport (Sheet 81), located approximately 32 miles to the North. Runway is 6,500 ft. asphalt.
- Ugnu-Kuparuk (Sheet 51) is a continuously attended, 6,000 ft. gravel private airstrip serving the Kuparuk facilities. It is located approximately 44 miles to the North-Northwest.
- An unattended, 5,100 ft. gravel private airstrip serving the Badami field (Sheet 91) is located approximately 50 miles to the Northeast.

### VESSEL ACCESS\* AND HYDROGRAPHIC CONDITIONS

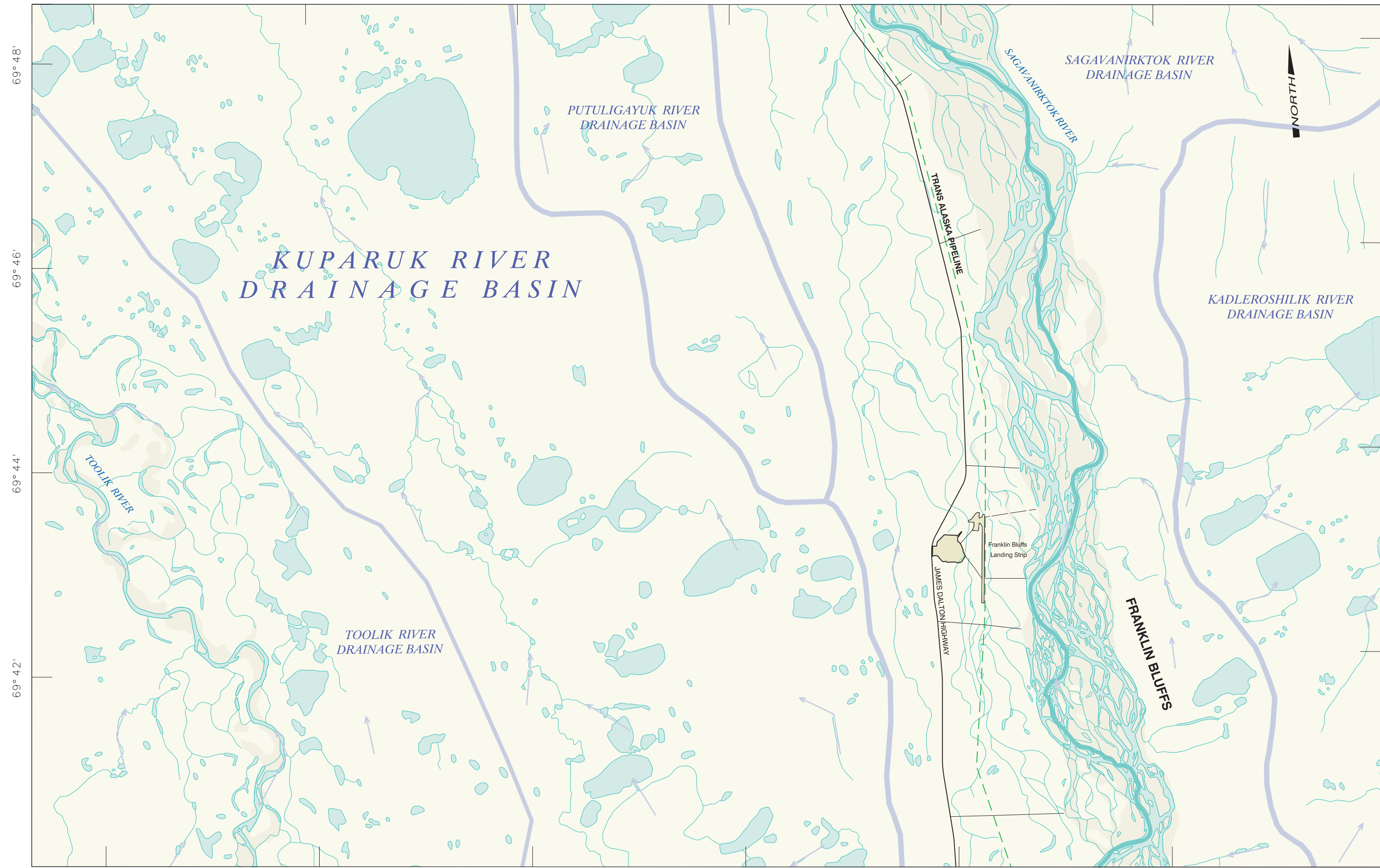
- There are no marine waters or shorelines on this map.

### COUNTERMEASURES CONSIDERATIONS

- No significant countermeasures considerations were identified in this area, pending field reconnaissance.

\*See the latest *Supplement, Alaska* and United States Coast Pilot for current information on air and vessel access, respectively.

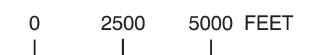
149° 06'      149° 00'      148° 54'      148° 48'      148° 42'      148° 36'



69° 48'  
69° 46'  
69° 44'  
69° 42'

Continue on sheet 218

1:63360



Continue on sheet 222



### PRIORITY PROTECTION SITES

- No priority protection sites have been identified in this area.

### GENERAL SENSITIVITIES

- Coastal areas support concentrations of breeding, nesting, brood-rearing, and molting waterbirds during the open water months.
- Expect to deploy bird hazing systems.
- Caribou present in the winter.
- Grizzly bear dens may be present in pingos and other bluff and relief habitats.
- Anadromous and resident fish present in the Kuparuk River and most side tributaries.

### CULTURAL SITES

Information on the exact locations of cultural sites is confidential. This information is contained in the *North Slope Archaeological Data* document, copies of which are kept at the following offices: State Historical Preservation Officer (SHPO) (907-269-8721), ACS in Deadhorse (907-659-2405), North Slope Borough Lands Division (907-852-0322), BPXA Crisis Center in Anchorage (907-564-5243), and the ConocoPhillips Incident Command Center in Anchorage (907-265-1000). The following cultural site(s) are located in the area depicted on this sheet:

- No cultural site(s) have been identified in the area depicted on this sheet.



### AIR ACCESS\*

- Commercial and air freight services are available at Nuiqsut airport (Sheet 24), located approximately 47 miles to the Northwest. The unattended runway is 4,300 ft. gravel. Its condition is not monitored, thus visual inspection prior to use is recommended.
- Ugnu-Kuparuk (Sheet 51) is a continuously attended, 6,000 ft. gravel private airstrip serving the Kuparuk facilities. It is located approximately 51 miles to the North-Northeast.
- Commercial and air freight services are available at Deadhorse airport (Sheet 81), located approximately 56 miles to the Northeast. Runway is 6,500 ft. asphalt.

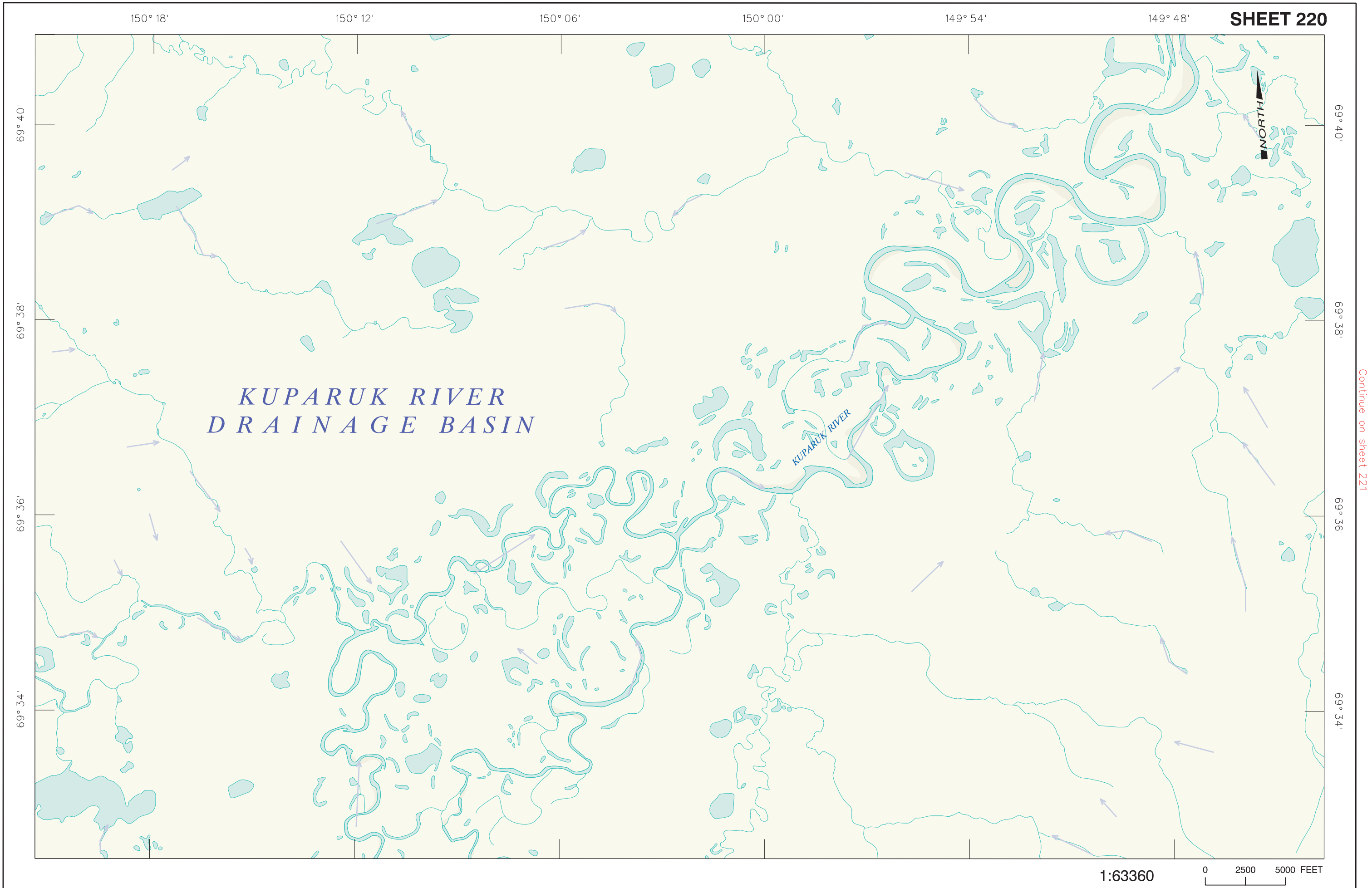
### VESSEL ACCESS\* AND HYDROGRAPHIC CONDITIONS

- There are no marine waters or shorelines on this map.

### COUNTERMEASURES CONSIDERATIONS

- No significant countermeasures considerations were identified in this area, pending field reconnaissance.

\*See the latest *Supplement, Alaska* and United States Coast Pilot for current information on air and vessel access, respectively.



Continue on sheet 221





### PRIORITY PROTECTION SITES

- No priority protection sites have been identified in this area.

### GENERAL SENSITIVITIES

- Coastal areas support concentrations of breeding, nesting, brood-rearing, and molting waterbirds during the open water months.
- Expect to deploy bird hazing systems.
- Caribou present in the winter.
- Grizzly bear dens may be present in pingos and other bluff and relief habitats.

### CULTURAL SITES

Information on the exact locations of cultural sites is confidential. This information is contained in the *North Slope Archaeological Data* document, copies of which are kept at the following offices: State Historical Preservation Officer (SHPO) (907-269-8721), ACS in Deadhorse (907-659-2405), North Slope Borough Lands Division (907-852-0322), BPXA Crisis Center in Anchorage (907-564-5243), and the ConocoPhillips Incident Command Center in Anchorage (907-265-1000). The following cultural site(s) are located in the area depicted on this sheet:

- No cultural site(s) have been identified in the area depicted on this sheet.



### AIR ACCESS\*

- Several small landing strips, details unknown, appear on Sheet 222 directly to the east.
- Franklin Bluffs landing strip, details unknown, appears on Sheet 219 to the northeast.
- Commercial and air freight services are available at Deadhorse airport (Sheet 81), located approximately 47 miles to the Northeast. Runway is 6,500 ft. asphalt.
- Ugnu-Kuparuk (Sheet 51) is a continuously attended, 6,000 ft. gravel private airstrip serving the Kuparuk facilities. It is located approximately 50 miles to the North.
- Commercial and air freight services are available at Nuiqsut airport (Sheet 24), located approximately 56 miles to the Northwest. The unattended runway is 4,300 ft. gravel. Its condition is not monitored, thus visual inspection prior to use is recommended.

### VESSEL ACCESS\* AND HYDROGRAPHIC CONDITIONS

- There are no marine waters or shorelines on this map.

### COUNTERMEASURES CONSIDERATIONS

- No significant countermeasures considerations were identified in this area, pending field reconnaissance.

\*See the latest *Supplement, Alaska* and United States Coast Pilot for current information on air and vessel access, respectively.

149° 42'

149° 36'

149° 30'

149° 24'

149° 18'

149° 12'

69° 40'

69° 38'

69° 36'

69° 34'

69° 40'

69° 38'

69° 36'

69° 34'



*TOOLIK RIVER  
DRAINAGE BASIN*

*KUPARUK RIVER  
DRAINAGE BASIN*

1:63360

0 2500 5000 FEET

Continue on sheet 220

Continue on sheet 222



### PRIORITY PROTECTION SITES

- No priority protection sites have been identified in this area.

### GENERAL SENSITIVITIES

- Coastal areas support concentrations of breeding, nesting, brood-rearing, and molting waterbirds during the open water months.
- Expect to deploy bird hazing systems.
- Caribou wintering and calving grounds.
- Grizzly bear dens may be present in pingos and other bluff and relief habitats.
- Anadromous and resident fish present in the Toolik and Sagavanirktok Rivers and most side tributaries.
- Peregrine falcons may be present in area adjacent to the Sagavanirktok River.

### CULTURAL SITES

Information on the exact locations of cultural sites is confidential. This information is contained in the *North Slope Archaeological Data* document, copies of which are kept at the following offices: State Historical Preservation Officer (SHPO) (907-269-8721), ACS in Deadhorse (907-659-2405), North Slope Borough Lands Division (907-852-0322), BPXA Crisis Center in Anchorage (907-564-5243), and the ConocoPhillips Incident Command Center in Anchorage (907-265-1000). The following cultural site(s) are located in the area depicted on this sheet:

- SAG-00007 and SAG-00073 are located along the highway corridor in the northeast quadrant of this sheet.



### AIR ACCESS\*

- Several small landing strips, details unknown, appear on this sheet.
- Franklin Bluffs landing strip, details unknown, is located approximately 8 miles northeast of the center of this sheet.
- Commercial and air freight services are available at Deadhorse airport (Sheet 81), located approximately 41 miles to the North. Runway is 6,500 ft. asphalt.
- Ugnu-Kuparuk (Sheet 51) is a continuously attended, 6,000 ft. gravel private airstrip serving the Kuparuk facilities. It is located approximately 53 miles to the North-Northwest.
- An unattended, 5,100 ft. gravel private airstrip serving the Badami field (Sheet 91) is located approximately 56 miles to the Northeast.

### VESSEL ACCESS\* AND HYDROGRAPHIC CONDITIONS

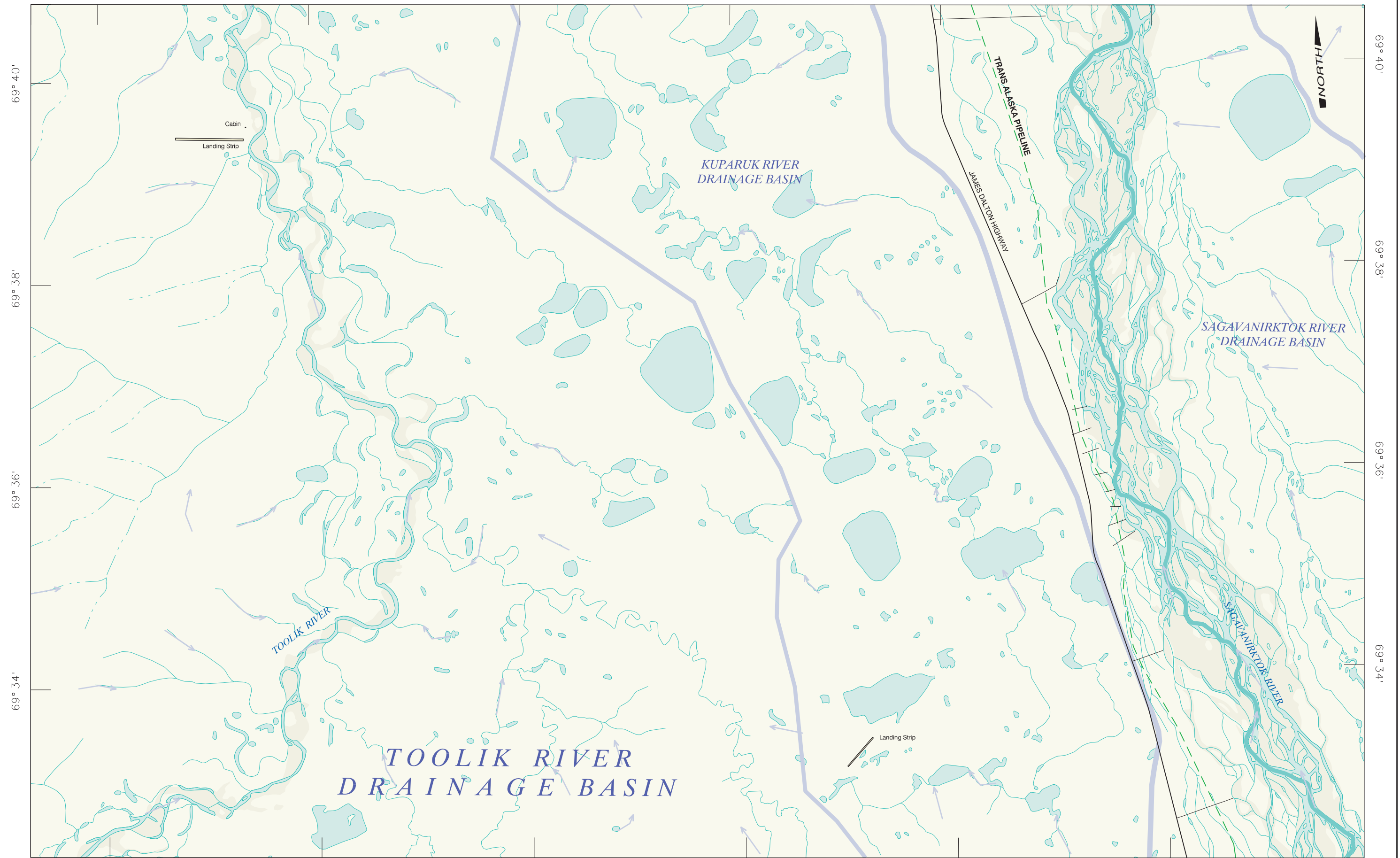
- There are no marine waters or shorelines on this map.

### COUNTERMEASURES CONSIDERATIONS

- No significant countermeasures considerations were identified in this area, pending field reconnaissance.

\*See the latest *Supplement, Alaska* and United States Coast Pilot for current information on air and vessel access, respectively.

149° 06' 149° 00' 148° 54' 148° 48' 148° 42' 148° 36'



Continue on sheet 221

69° 40'  
69° 38'  
69° 36'  
69° 34'

69° 40'  
69° 38'  
69° 36'  
69° 34'

1:63360 0 2500 5000 FEET