



EVOS
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S42
1989
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[Shoreline evaluations, 1989].

Volume 25

Kodiak section 3

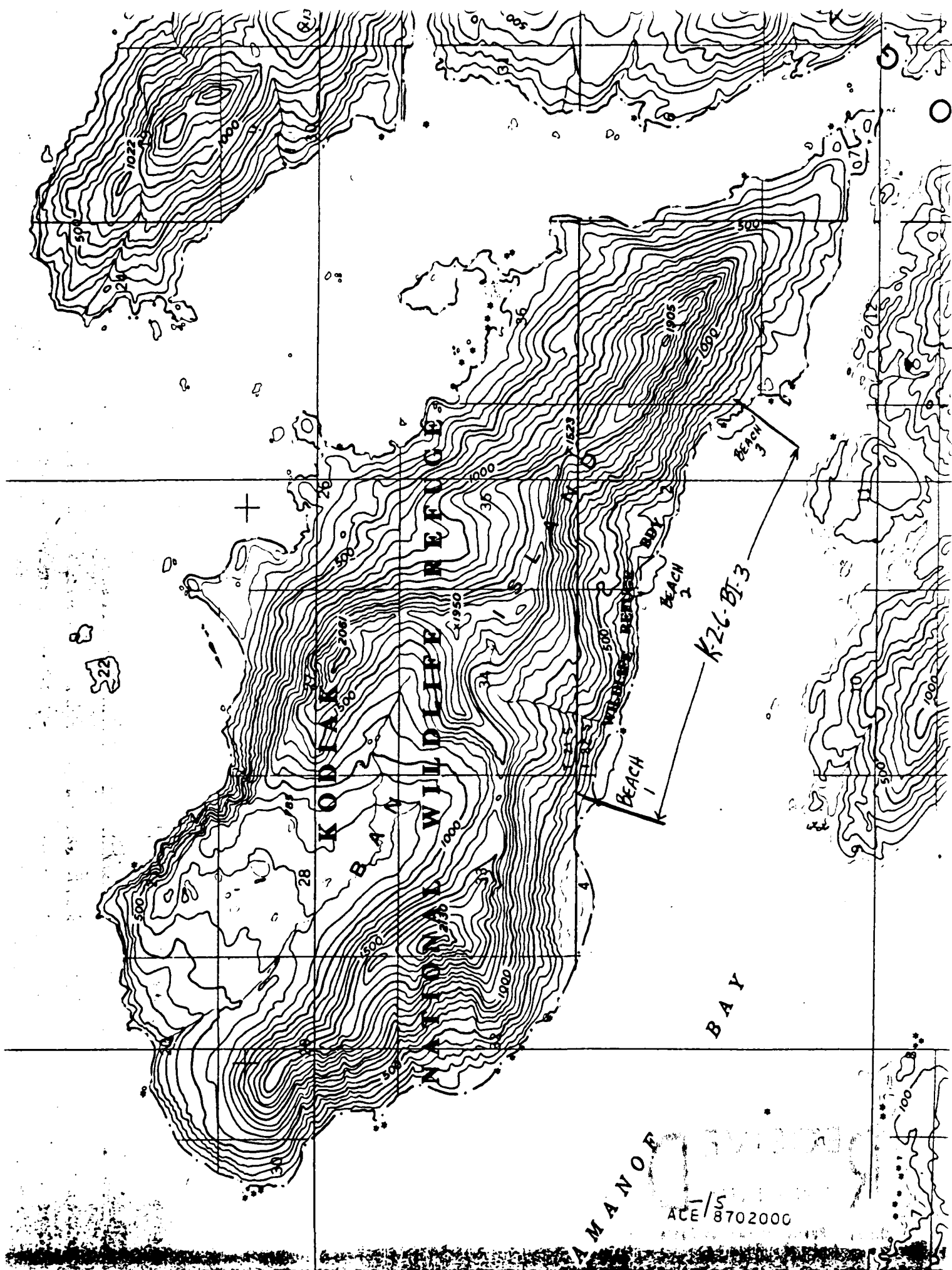
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Kodiak
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Section 3

RECEIVED
MAR 11 1985
Oil & Gas Division
U.S. Department of the Interior
Washington, D.C. 20548



RECEIVED
MAR 11 1992

Oil Spill Public Information Center
648 G Street
Anchorage, AK 99501

(version 5/02/89)

SHORELINE CLEANUP PROGRAM

DATE 7/19/89

SHORELINE SEGMENT K2-6-BI-4

LOCATION: (see enclosed map) Ban Island (S. shore to E most tip)
off west side of Afognak Island

ADEC NO. _____ SHORELINE ASSESSMENT DATE: 7/19/89

Recommended Cleanup Activity(ies):
-Manual removal of oiled debris.

Priorities/Considerations: Class 5-A

Ecological Constraints (from site survey):

Archaeological Constraints (from site survey):

-No access to the grass/upland zone by beach crews during cleanup in this segment.

-If heretofore undiscovered cultural materials are uncovered during cleanup, contact Exxon's Archaeological Field Director and take actions prescribed in the Operational Guidelines for Shoreline Cleanup dated 21 April, 1989 as amended.

J. David McManis
State Historic Preservation Officer *

Date: 7/26/89

EXXON: _____

Date: _____

FOSC: _____

Date: _____

*Signature required to satisfy stipulations in Alaska DNR land use permits for tide and submerged lands.

ACE ⁺¹⁵ 8702001

SHORELINE OIL EVALUATIONA. General

1. Date: 7/19/89 2. Time: 1215-1300 3. Observer: C. DILLON
 4. Surveyed From: Foot/Boat/Helio/Plane 5. Weather: Sun/Cloud/Rain/Snow/Fog

B. Location

6. Location Ban Island (S. shore) 7. Segment #: K-2-6-BI-4
 8. Length of shoreline segment: 3500 m
 9. Access: Foot/Vehicle/Boat/Barge/Helio/Float Plane
 10. _____

C. Shoreline

11. Shoreline Type: SPI/BAR/BEA/COV/HLD/STRT/CLF/EST/DAF
 12. Slope: LANG/HAND/VER
 13. Wave Exposure: High/Med/Low
 14. Sediment: B5% / C5% / P5% / G & S 5% / M % / R5%
 15. Drift Debris on Beach: Yes/No Supra/Upper/Mid/Lower Type logs/algae

D. Oil Summary

16. Degree of Oiling: Heavy/Moderate/Light/Very Light/No Oil/Unobserved
 17. Area of Beach Impact: Width of Band: 2 bands / meter each
 Continuous: Y/N % of Segment _____ SU / SP / H / M / L
 Sporadic: Y/N % of Segment < 5 SU / SP / H M / L
 18. Est. Oil Thickness where >1cm: 0 cm Est. Oil Penetration: 0 cm
 19. Pooled Oil: _____ % "Free" Oil: _____ % Coated: H _____ % / M _____ % / L _____ %
 20. Fresh _____ % Mousse _____ % Tar Formation: _____ %
 21. Drift Debris Oiled? Yes/No Supra/Upper/Mid/Lower Amount: Very Small

Comments:

Segment is entirely unoiled except for a very small amount of oil soaked algae along the upper and Supra ITZ on beach 1/500m long. Refer to attached map for location.
page 2 of oil evaluation form attached blank since it is not applicable.

DOCUMENTATION: K-2.6.BI-4Map/Aerial photo marking segment boundaries AttachedVTR: Y/N N Tape Number(s) NonePhotography: Y/N N Roll Number(s) NoneSample Numbers Collected: None

K-2-6-BI-4

(Version July 18, 1989)

Page 2

SHORELINE OIL EVALUATION

22. Oil Type

Fresh _____ %
Mousse _____ %
Weathered _____ %
Tar _____ %
100 %

23. Stabilized or "Free"

24. Oil Character (Location)

thick (> 1cm) + continuous (> 1sq.m.)
coating on B/BD/Wood/Rock
cracks & crevices on bedrock
patties (> 10cm diameter)
balls (< 10cm diameter)
asphalt pavement

SU	SP	H	M	L	Buried	Length(m)	Width(m)

25. Oil Distribution:

Continuous % of Segment _____ SU/SP/H/M/L H/M/L/VL
Sporadic % of Segment _____ SU/SP/H/M/L H/M/L/VL

Total	Length(m)	Width(m)
Very light:	_____	_____
Light:	_____	_____
Moderate:	_____	_____
Heavy:	_____	_____
Buried:	_____	_____

26. Preliminary Cleanup Est.

Total TYPE A: _____ m
Total TYPE B: _____ m
Total TYPE A/B: _____ m

Mobilization Potential: High/Medium/Low

Comments:

Not applicable.

ACE 8702004

version: 4/24/89

ECOLOGICAL EVALUATION

LOCATION: Ben Island SITE: ~~South~~ South shore OBSERVER: M. Fawcett

LOCATION PREFIX: BI SEG. NO.: 4 LENGTH: 3500 (M)

DATE: 7/19/89 TIME (HHMM): 1215-1300 TIDE HT.: +0.6 to +1.6 (M)

OILED ZONE: Splash High Medium Low

SUBSTRATUM: Rocks Boulder Cobble Gravel Sand Mud

LIVE BIOTA

Fucus (algae): Patchy Y/N Contin. Y/N Dense Y/N Sparse Y/N None Y/N

Mytilus (Mussels): Patchy Y/N Contin. Y/N Dense Y/N Sparse Y/N None Y/N

dense bed on sand flat behind hooked point

Balanus (Barnacles): Patchy Y/N Contin. Y/N Dense Y/N Sparse Y/N None Y/N

Littorina

Patchy Y/N Contin. Y/N Dense Y/N Sparse Y/N None Y/N

Limpets: Patchy Y/N Contin. Y/N Dense Y/N Sparse Y/N None Y/N

OTHER OBSERVATIONS: light bits of oil in wrack above steep
gravel beach at west end of segment

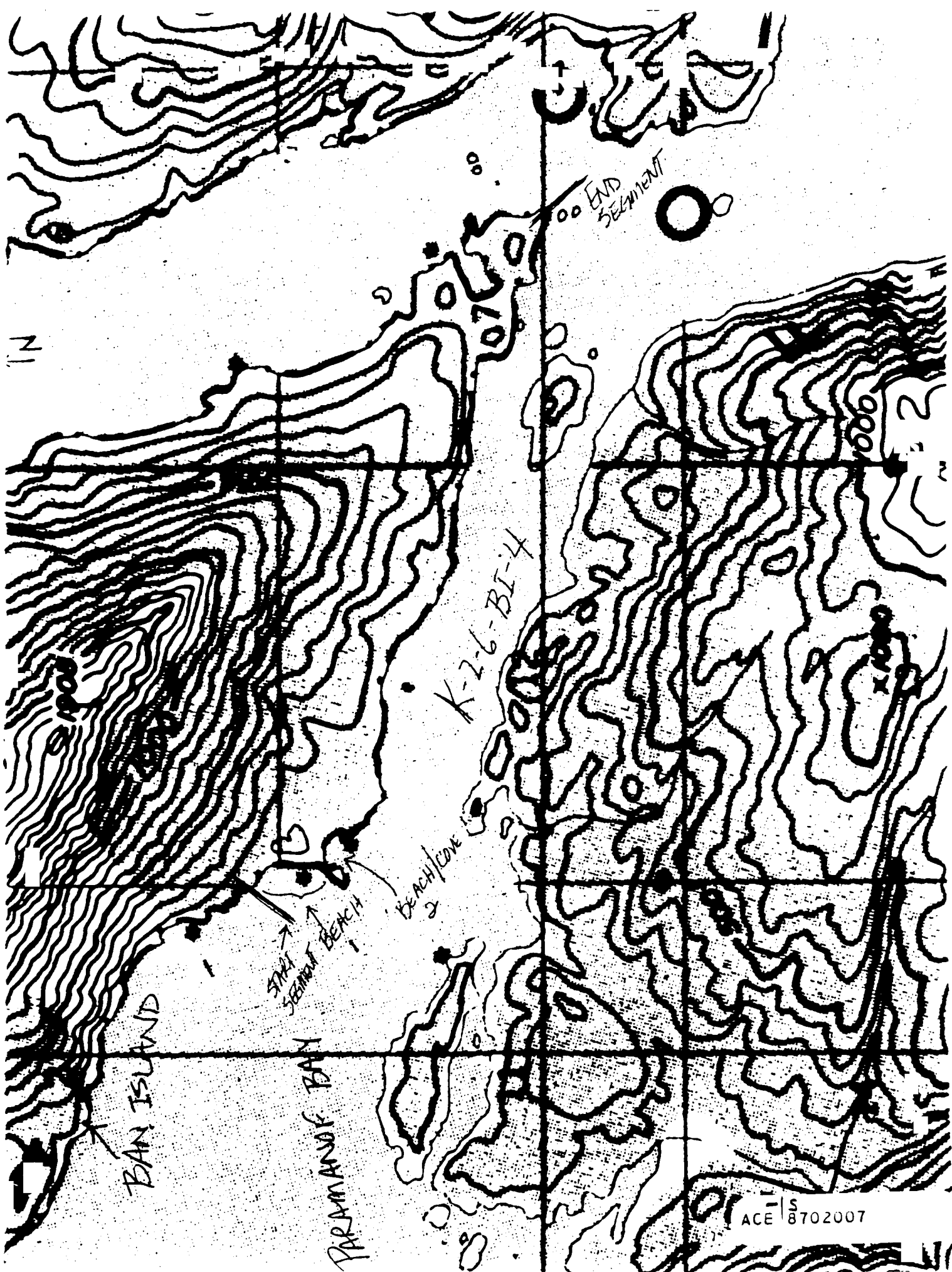
CLEANUP PRECAUTIONS: none - little or no macro-flora or fauna
present near oiled area

ACE 8702005

MAMMALS: Otters _____ Harbor Seals _____ Sea Lions _____ Whales _____
Other _____

BIRDS: pigeon guillemots, gulls, ravens

GENERAL OBSERVATIONS: steep gravel beach at west end of segment, then
small protected cove, rest of segment rock faces & boulders/cobbles



ACE | S 8702007

Segment Name

Ban Island



Link

New Card



Seg. ID

Sector

Location

Assess. Date

Enter/Update

K02-04-BI001

Kodiak

Foul Bay

7/17/89

Predominant Sediment

Pebble

Degree of Oiling

Moderate

Amount of Debris

Moderate

CLYDES

31



Length (yds)

1308

Width (yds)

1

% Oiled

50

Penetration (in)

0

Gross Contamination Removal

Started

Completed

% Complete

Assesment
Done By

Pre-Assessment
Approval Date

Recommended Treatment



Open ShoreMap

05AUG89 m.m.
NO SIGNED SCAT

ACE/S
8702008

(version 5/02/89)

SHORELINE CLEANUP PROGRAM

DATE 5/20/89

SHORELINE SEGMENT BI-1

LOCATION: (see enclosed map) West Shore of Ban Island

ADEC NO. _____ SHORELINE ASSESSMENT DATE: 5/19/89

Recommended Cleanup Activity(ies):

- See below
- Use high temperature flooding/spray to remove mousse from coated boulders/cobbles.

Priorities Considerations:

- Remove by shovel the one (1) meter wide continuous band of contaminated seaweed drift at the top of the high intertidal zone.

Ecological Constraints (from site survey):

- Avoid healthy community in low intertidal zone.

Archeological Constraints (from site survey):

If heretofore undiscovered cultural materials are uncovered during cleanup, contact Exxon's Archeological Field Director and take actions prescribed in the Operational Guidelines for Shoreline Cleanup dated 4/21/89 as amended.

Charles E. Holmes
State Historic Preservation Officer *

Date: May 21, 1989

EXXON: _____

Date: _____

FOSC: _____

Date: _____

* Signature required to satisfy stipulations in Alaska DNR land use permits for tide and submerged lands .

ACE 8702010



SHORELINE OIL EVALUATIONDate: 19 May 1989 Time: 0800 hrsObserver: BRYAN TRIMMSurveyed From: Foot/Boat/Helio/PlaneWeather: Sun/Cloud/Rain/Snow/Fog**LOCATION**LOCATION WEST COAST BAN IS. PARAMARIBAY SEGMENT NUMBER BI-1LENGTH OF SHORELINE SEGMENT: 1200 m 1312 ydsACCESS: Foot/Vehicle/Boat/Barge/Helio/Float Plane**SHORELINE:**

Shoreline Type: SPI/BEA/COV/HLD/STRT

Slope: LANG/HANG/VERWave Exposure: High/Med/LowSediment: B 25% / C 25% / P 35% / G 15% / S -% / M -% / R -%Drift Debris on Beach: Yes/No Supra/Upper/Mid/Lower Type Logs/SEAWEED**OIL**Degree of Oiling: Heavy/Moderate/Light/No Oil/UnobservedArea of Beach Impact: SU / SP / H / M / LContinuous: Y/N % of Segment 50 Width of Band: 1 mSporadic: Y/N % of Segment 5Est. Oil Thickness where > 1cm: - cm Est. Oil Penetration: ? cmPooled Oil: -% "Free" Oil: 50% Coated: H -% / M 50% / L -%Fresh -% Mousse 100% Tar Formation: -%Drift Debris Oiled? Yes/No Supra/Upper/Mid/Lower Amount: H/M/L/

Comments:

A 1m WIDE CONTINUOUS BAND OF OILED SEAWEED DRIFT AT THE TOP OF THE HIGH INTERTIDAL ZONE. A 6m
WIDE, MODERATE COATING OF COBBLE/BOULDER BEACH IN THE HIGH INTERTIDAL ZONE HAS AN UNKNOWN DEPTH
OF PENETRATION. H1-TEMPERATURE FLOODING MAY CLEAN THE BOULDER/COBBLE BEACH. REMOVAL OF THE SEAWEED
DRIFT (OILED) WILL PREVENT ANIMALS FROM CONTAMINATION.

DOCUMENTATION:Map/Aerial photo marking segment boundaries AttachedFR: Y/N Tape Number(s) NonePhotography: (Y)/N Roll Number(s) SMB-9Sample Numbers Collected: None

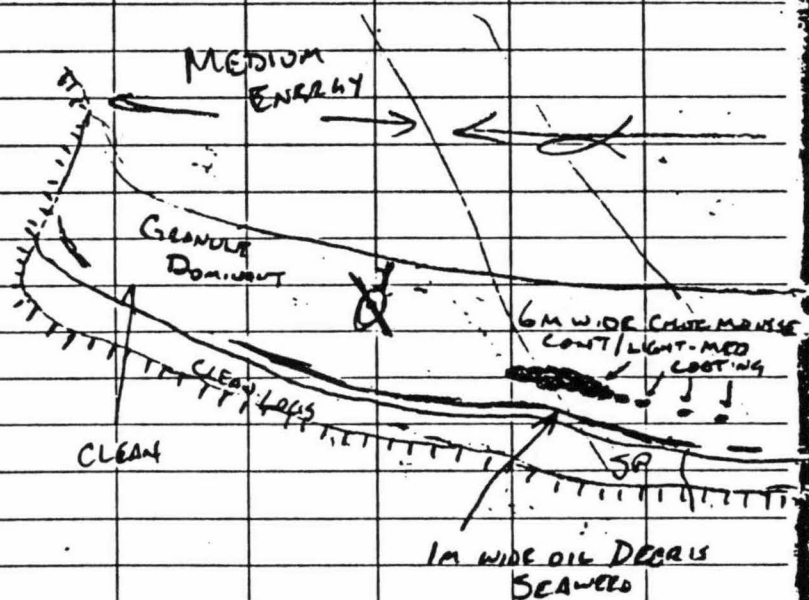
ECOLOGICAL EVALUATION

LOCATION: Ban Island SITE: W. Shore Ban Is. OBSERVER: Sam BanLOCATION PREFIX: BI SEG. NO.: 1 LENGTH: 1200 (M)DATE: 5/19/89 TIME (HHMM): 0800 TIDE HT.: +1 (M)OILED ZONE: Splash High Medium LowSUBSTRATUM: Rocks Boulder Cobbles Gravel Sand Mud

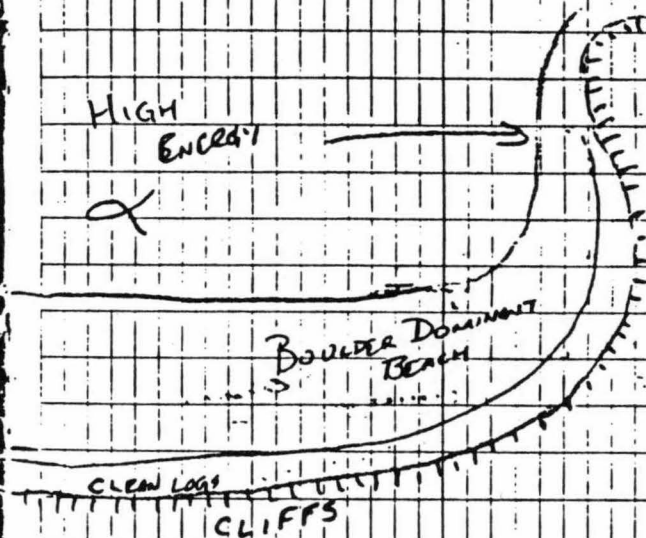
LIVE BIOTA

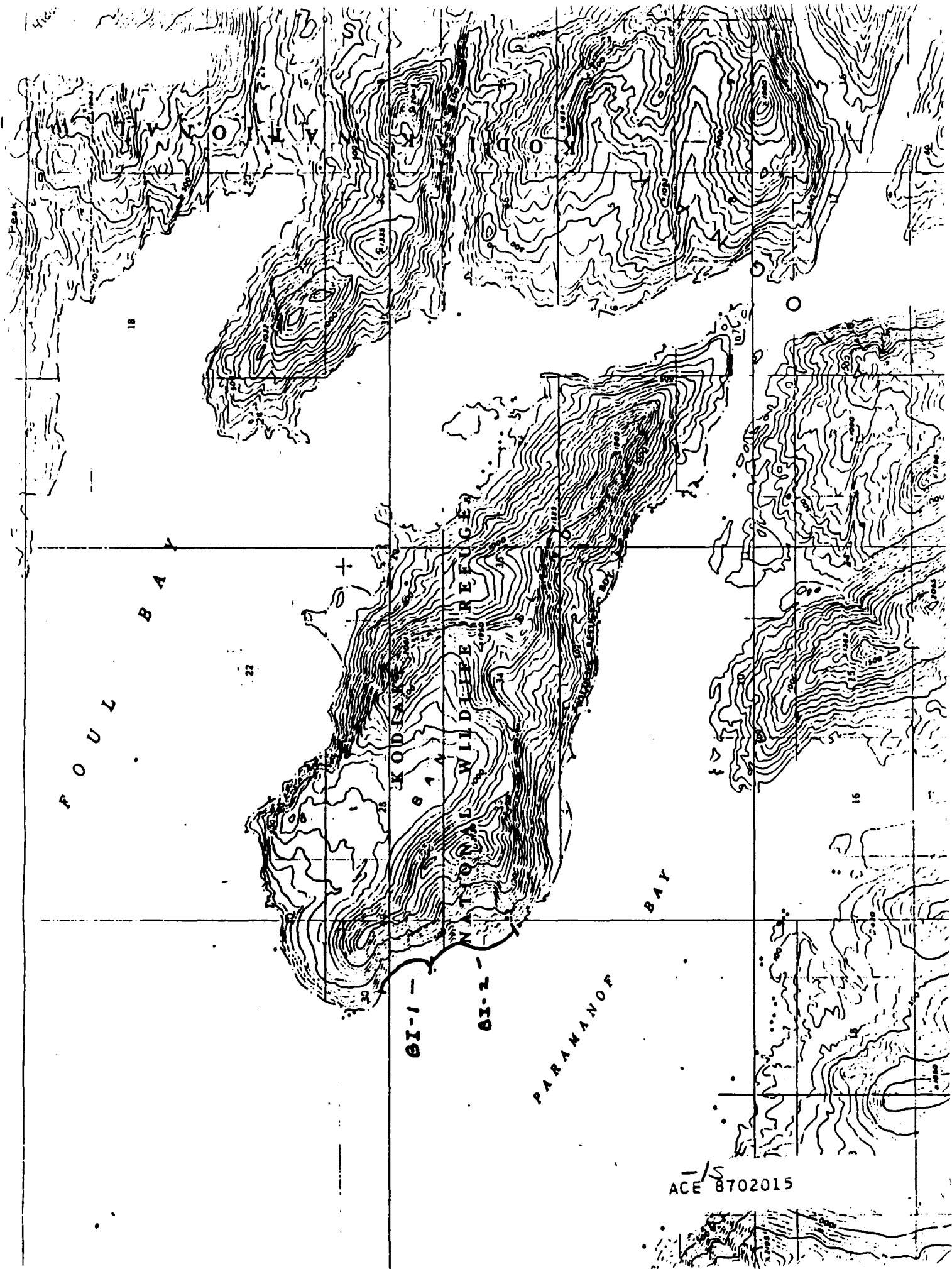
Fucus (algae): Patchy (Y/N) Contin. Y/N Dense (Y/N) Sparse Y/N None Y/NDense on rocks, healthy in lower ITZ, none oiledMytilus (Mussels): Patchy (Y/N) Contin. Y/N Dense (Y/N) Sparse Y/N None Y/NDense on rocks and healthy in lower ITZBalanus (Barnacles): Patchy (Y/N) Contin. Y/N Dense (Y/N) Sparse Y/N None Y/NDense in lower ITZ, not impactedStorinaPatchy (Y/N) Contin. Y/N Dense Y/N Sparse (Y/N) None Y/NHealthy on rocks in lower ITZ also thisLimpets: Patchy (Y/N) Contin. Y/N Dense Y/N Sparse (Y/N) None Y/NHealthy on rocks in lower ITZOTHER OBSERVATIONS: Two Deer seen on beach prior to landingMost oil is mixed with debris at strand line decreases as moving down the beach.CLEANUP PRECAUTIONS: Avoid healthy communities in lower ITZMAMMALS: Otters Harbor Seals Sea Lions Whales
Other NoneBIRDS: Gulls & eaglesGENERAL OBSERVATIONS: Light to moderate oiling, boulder & cobble areas have been oiled and may need to be steam cleaned

PLANE VIEW BI-1



HIGH ENERGY





-15
ACE 8702015

(version July 23, 1989)

SHORELINE PRE CLEANUP REASSESSMENT

For 9/2

DATE 7/19/89 SHORELINE SEGMENT K2-6-BI-2R REASSESSMENT DATE 7/19

Observers: OG C. Dillon BIO M. Fawcett ARCH S. Ludwig

Reason for Reassessment K02-06-BI 002 R

Revised Recommended Cleanup Activity(ies):

- Manual removal of oiled algae and driftwood on strand line.

- Manual removal of oiled sediments.

-K2-6-BI-1 and K2-6-BI-2 (as reported on 5/19/89) were reassessed and evaluated entirely on 7/19/89. See segment report K2-6-BI-1 dated 7/19/89.

Revised Ecological Constraints:

- Avoid trampling highly developed community of lower intertidal zone or allowing run-off of oily wastes into lower intertidal zone.

Revised Archaeological Constraints:

No access to the forest/upland zone by beach crews during cleanup in this segment.

-If heretofore undiscovered cultural materials are uncovered during cleanup, contact Exxon's Archaeological Field Director and take actions prescribed in the Operational Guidelines for Shoreline Cleanup dated 4/21/89 as amended.

[Signature]
State Historic Preservation Officer *

Date: 7/26/89

EXXON: _____

Date: _____

FOSC: _____

Date: _____

*Signature required to satisfy stipulations in Alaska DNR land use permits for tide submerged lands.

SEGMENT INSPECTION RECORD

✓ 913
DT

ADEC # K2-6

Shoreline Segment: BI-2

Shoreline Treatment Process(es) Completed for this Segment

Yards Signed Off

☐ Hot water wash	☐ Mechanical
☐ Warm water wash	☒ Non-mechanical
☐ Water deluge	☐ Other

Exxon

Treatment as indicated above has been completed. Request demobilization from this segment.

Exxon Comments

Signature *Gayle Cannon* Date 8/8/89 Time 1700

Printed Name Gayle Cannon

Existing Shoreline Condition As Visually Determined by USCG

Surface Oil

Percent	Degree of Oiling
☐	Heavy
☐	Medium
☐	Light
☐	Very Light

100%

Subsurface Oil

☐ Yes ☐ No

Comment Below

Reassessment

☐ Yes - Necessary

☐ No - Not necessary unless re-oiled

ADEC Rep

Comments see K2-6 BI-1 comments

Existing Shoreline Condition As Visually Determined by ADEC

Surface Oil

Percent	Degree of Oiling
☐	Heavy
☐	Medium
☐	Light
☐	Very Light

100%

Subsurface Oil

☐ Yes ☒ No

Comment Below

Reassessment

☐ Yes - Necessary

☒ No - Not necessary unless re-oiled

Signature *Scott Sheiter* Date 8/22/89 Time 3:45 PM

Printed Name Scott Sheiter

FOSC Rep Demobilization approved/disapproved

Comments same comment for BI-2

Signature *E J Madden* Date 8/22/89 Time —

Printed Name E J Madden

Copy: Exxon ADEC FOSC ISCC Return All Signed Originals to Exxon

517

KODIAK SCAT
K2-7

-)

DEC 29 1989

ACE 8643503

(version 5/02/89)

SHORELINE CLEANUP PROGRAM

DATE 7/20/89

SHORELINE SEGMENT K2-7-PA-1

LOCATION: (see enclosed map) Paramanof Bay (2 arms at head of Bay) on NW side of Afognak Island.

ADEC NO. _____ SHORELINE ASSESSMENT DATE: 7/20/89

Recommended Cleanup Activity(ies):

-No cleanup recommended due to apparent absence of oil.
Subject to FOSC reassessment at a later date.

Priorities/Considerations: Class

Ecological Constraints (from site survey):

Archaeological Constraints (from site survey):

-If cleanup is planned, there must be no access to the forest/upland zone in the south arm of the segment by beach crews during cleanup.

-If heretofore undiscovered cultural materials are uncovered during cleanup, contact Exxon's Archeological Field Director and take actions prescribed in the Operational Guidelines for Shoreline Cleanup dated 4/21/89 as amended.


State Historic Preservation Officer *

Date: 7/26/89

EXXON: _____

Date: _____

FOSC: _____

Date: _____

*Signature required to satisfy stipulations in Alaska DNR land use permits for tide and submerged lands.

4/F/S/FF
ACE 8702019

SHORELINE OIL EVALUATION

A. General

1. Date: 7/20/89 2. Time: 0805-1055 3. Observer: C. DILLON
4. Surveyed From: Foot/Boat/Helio/Plane 5. Weather: Sun/Cloud/Rain/Snow/Fog

B. Location

6. Location: Head of Paramout Bay 7. Segment #: K-2-7PB-1
8. Length of shoreline segment: 20,000 m
9. Access: Foot/Vehicle/Boat/Barge/Helio/Float Plane

10. _____

C. Shoreline

11. Shoreline Type: SPI/BAR/BEA/COV/HLD/STRT/CLF/EST/DAF
12. Slope: LANG/HAND/VER
13. Wave Exposure: High/Med/Low
14. Sediment: B5% / C50% / P40% / G & S ___% / M ___% / R5%
15. Drift Debris on Beach: Yes/No Supra/Upper/Mid/Lower Type logs/algae

D. Oil Summary

16. Degree of Oiling: Heavy/Moderate/Light/Very Light/No Oil/Unobserved
17. Area of Beach Impact: Width of Band: _____ m
Continuous: Y/N % of Segment X SU / SP / H / M / L
Sporadic: Y/N % of Segment A SU / SP / H / M / L
18. Est. Oil Thickness where >1cm: _____ cm Est. Oil Penetration: _____ cm
19. Pooled Oil: _____% "Free" Oil: _____% Coated: H ___% / M ___% / L ___%
20. Fresh _____% Mousse _____% Tar Formation: _____%
21. Drift Debris Oiled? Yes/No Supra/Upper/Mid/Lower Amount: _____%

Comments:

DOCUMENTATION: K-2-7-PB-1

Map/Aerial photo marking segment boundaries Attached

VTR: Y/N Tape Number(s) None } No camera

Photography: Y/N Roll Number(s) None } available

Sample Numbers Collected: None

SHORELINE OIL EVALUATION

22. Oil Type

Fresh _____ %
 Mousse _____ %
 Weathered _____ %
 Tar _____ %
 100 %

23. Stabilized or "Free"

24. Oil Character (Location)

thick (> 1cm) + continuous (> 1sq.m.)
 coating on B/BD/Wood/Rock
 cracks & crevices on bedrock
 patties (>10cm diameter)
 balls (< 10cm diameter)
 asphalt pavement

SU	SP	H	M	L	Buried	Length(m)	Width(m)

25. Oil Distribution:

Continuous % of Segment _____ SU/SP/H/M/L H/M/L/VL
 Sporadic % of Segment _____ SU/SP/H/M/L H/M/L/VL

Total	Length(m)	Width(m)
Very light:		
Light:		
Moderate:		
Heavy:		
Buried:		

26. Preliminary Cleanup Est.

Total TYPE A: _____ m
 Total TYPE B: _____ m
 Total TYPE A/B: _____ m

Mobilization Potential: High/Medium/Low

Comments:

No oil observed

ECOLOGICAL EVALUATION

LOCATION: Afagait SITE: Piramon-H Bay OBSERVER: M. Fawcett

LOCATION PREFIX: K2-7 ~~P2-7~~ SEG. NO.: 1 LENGTH: 20,000 (M)

DATE: 7/26/89 TIME (HHMM): 0800-1655 TIDE HT.: -0.9 to +1.2 (M)

OILED ZONE: Splash High Medium Low NO oil seen

SUBSTRATUM: Rocks Boulder Cobble Gravel Sand Mud

LIVE BIOTA

Fucus (algae): Patchy Y/N Contin. Y/N Dense Y/N Sparse Y/N None Y/N

Mytilus (Mussels): Patchy Y/N Contin. Y/N Dense Y/N Sparse Y/N None Y/N

Balanus (Barnacles): Patchy Y/N Contin. Y/N Dense Y/N Sparse Y/N None Y/N

Littorina

Patchy Y/N Contin. Y/N Dense Y/N Sparse Y/N None Y/N

Limpets: Patchy Y/N Contin. Y/N Dense Y/N Sparse Y/N None Y/N

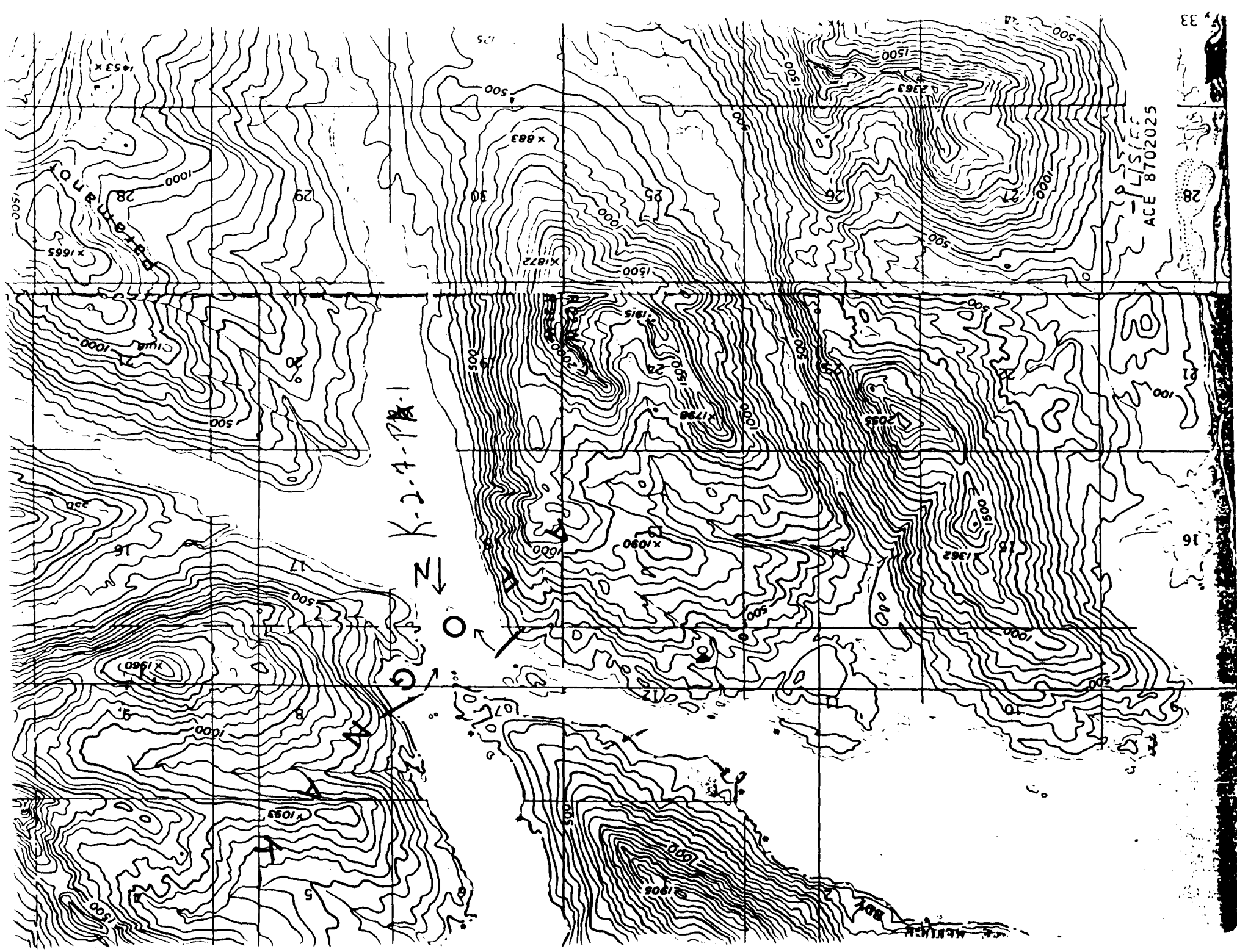
OTHER OBSERVATIONS: 2 anomalous fish streams, 1 at end of each a.s.
- Many Pycnogonida & other starfish: Echinasterias, Leptasterias, Echinasterias

CLEANUP PRECAUTIONS: no cleanup needed at this time

MAMMALS: Otters Harbor Seals Sea Lions Whales
Other

BIRDS: 9 eagles

GENERAL OBSERVATIONS: Most of segment is steep rock and boulders,
with protected, with small coves, cobble/sand beaches, some mudflats



1955
-L/S/C
ACE 8702025

33
28

16

517-659-90A
- KODIAK SCAT
- K2-8

COMPLETE JAN 05 1990

ACE 8643504

(version 6/04/89)

SHORELINE PRE-CLEANUP ASSESSMENT BLOCK REPORT

Block (see enclosed map): K2-8

Includes Shoreline Segments: PA-2, PA-3

Location: Paramanof Bay

Submitted: _____ Date: _____
(for Exxon)

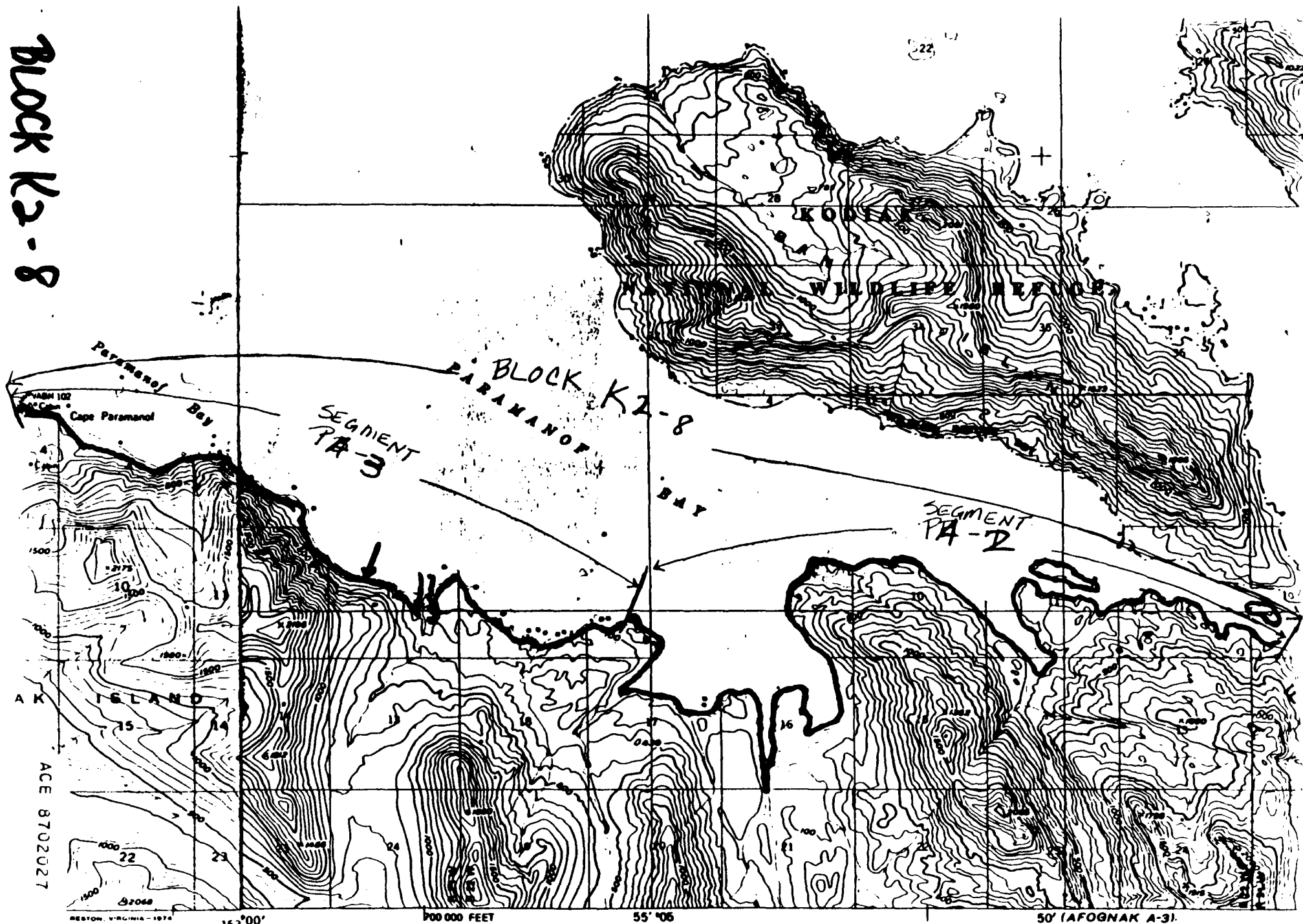
FOSC Approval: _____ Date: _____

The cleanup procedures identified in the Shoreline Cleanup Program are recommended. Exxon and other field personnel are encouraged to suggest innovations and productivity enhancements to the OSC's on-scene representative. Requirements for safety and the protection of cultural material must be observed.

CC: KISCC

+ / F I S :
ACE 8702026

Block K2-8

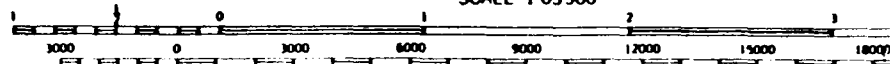


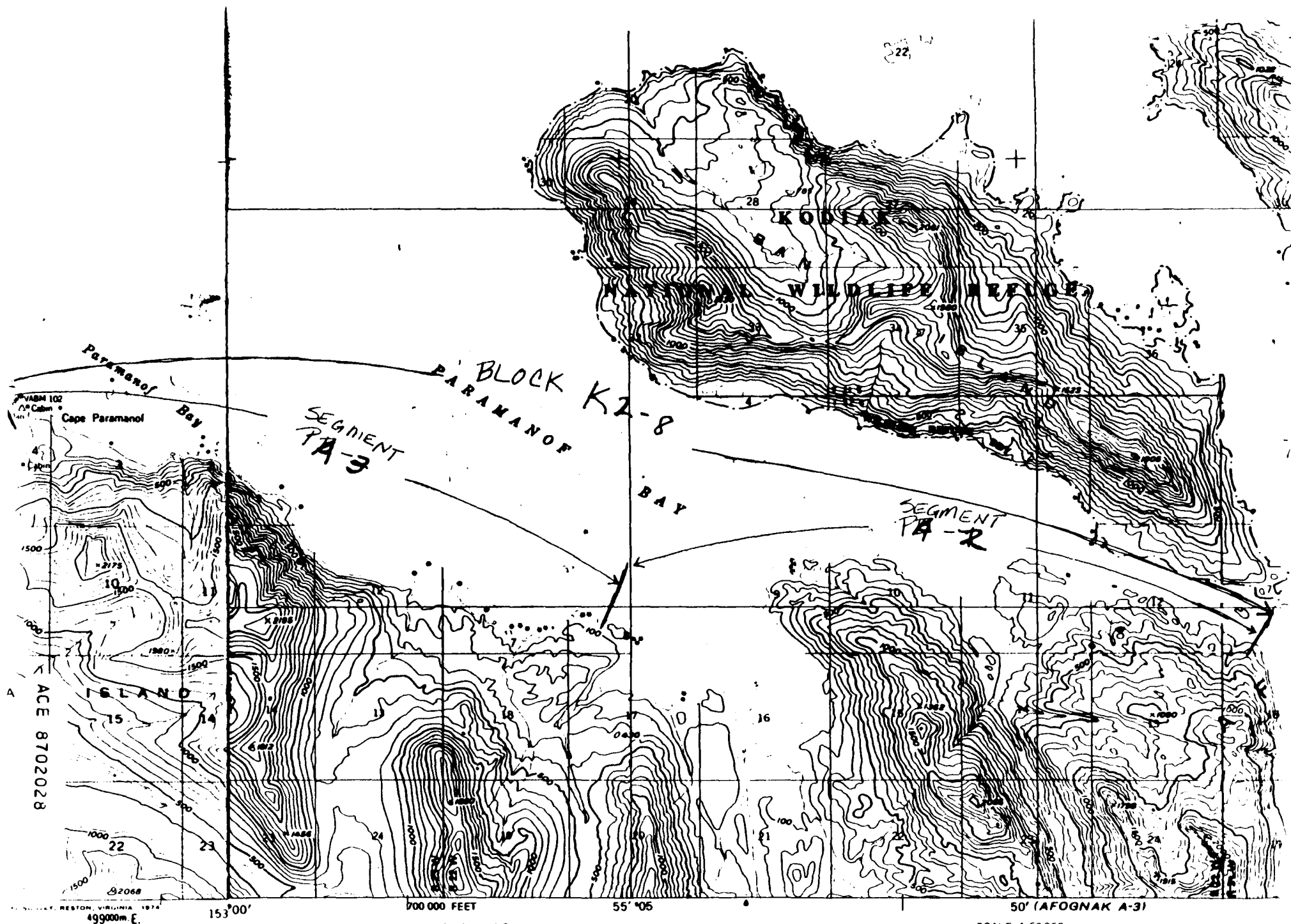
RESTON, VIRGINIA-1974
499888m E.

Mapped, edited, and published by the Geological Survey
Control by NOS/NOAA and USCE

ROAD CLASSIFICATION

Topography by photogrammetric methods 1954 from aerial photographs



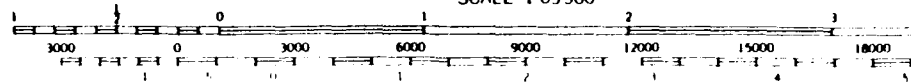


Mapped, edited, and published by the Geological Survey

Control by NOS/NOAA and USCE

Topography by photogrammetric methods 1954 from aerial photographs
 1:50,000 scale, 1:50,000 scale, not field-checked

SCALE 1:63360



(version 5/02/89)

SHORELINE CLEANUP PROGRAM

DATE 7/20/89

SHORELINE SEGMENT K2-8-PA-2

LOCATION: (see enclosed map) Paramanof Bay (across from S. shore of Ban Island) on NW shore of Afognak Island.

ADEC NO. _____ SHORELINE ASSESSMENT DATE: 7/20/89

Recommended Cleanup Activity(ies):

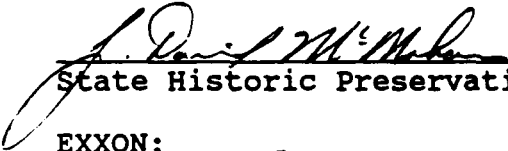
- No cleanup recommended due to apparent absence of oil. Subject to FOSC reassessment at a later date.

Priorities/Considerations: Class

Ecological Constraints (from site survey):

Archaeological Constraints (from site survey):

- If cleanup is planned, a full archaeological assessment must be conducted in this segment.
- If heretofore undiscovered cultural materials are uncovered during cleanup, contact Exxon's Archeological Field Director and take actions prescribed in the Operational Guidelines for Shoreline Cleanup dated 4/21/89 as amended.


State Historic Preservation Officer *

Date: 7/26/89

EXXON: _____

Date: _____

FOSC: _____

Date: _____

*Signature required to satisfy stipulations in Alaska DNR land use permits for tide and submerged lands.

ACE 8702029

SHORELINE OIL EVALUATIONA. General

1. Date: 7/20/89 2. Time: 1055-1330 3. Observer: C. DILLON
1945-2230
 4. Surveyed From: Foot/Boat/Helio/Plane 5. Weather: Sun/Cloud/Rain/Snow/Fog

B. Location

6. Location: Yamanof Bay (across from S shore of Ban Island). Segment #: K-2-8-PA-7
 8. Length of shoreline segment: 30,000 m

9. Access: Foot/Vehicle/Boat/Barge/Helio/Float Plane

10. Access for helos only on large beaches, float planes at low tide due to submerged rocks.

C. Shoreline

11. Shoreline Type: SPI/BAR/BEA/COV/HLD/STRT/CLF/EST/DAF

12. Slope: LANG/HAND/VER

13. Wave Exposure: High/Med/Low

14. Sediment: B35% / G20% / P5% / G & S5% / M % / R25%

15. Drift Debris on Beach: Yes/No Supra/Upper/Mid/Lower Type logs/algae

D. Oil Summary

16. Degree of Oiling: Heavy/Moderate/Light/Very Light/No Oil/Unobserved

17. Area of Beach Impact: Width of Band: X m
 Continuous: Y/N % of Segment X SU / SP / H / M / L

Sporadic: Y/N % of Segment X SU / SP / H / M / L

18. Est. Oil Thickness where >1cm: cm Est. Oil Penetration: cm

19. Pooled Oil: % "Free" Oil: % Coated: H % / M % / L %

20. Fresh % Mousse % Tar Formation: %

21. Drift Debris Oiled? Yes/No Supra/Upper/Mid/Lower Amount: %

Comments:

ACE 8702030

DOCUMENTATION: K-2-8-PA-2

Map Aerial photo marking segment boundaries Attached

VTR: Y/N Y Tape Number(s) None 7 No camera

Photography: Y/N Y Roll Number(s) None 1 available

Sample Numbers Collected: None

ACE 8702031

K-2-8-PA2

(Version July 18, 1989)

Page 2

SHORELINE OIL EVALUATION

22. Oil Type

Fresh	_____	%
Mousse	_____	%
Weathered	_____	%
Tar	_____	%
	100	%

NA

23. Stabilized or "Free"

24. Oil Character (Location)

thick(> 1cm) + continuous (> 1sq.m.)
 coating on B/BD/Wood/Rock
 cracks & crevices on bedrock
 patties (>10cm diameter)
 balls (< 10cm diameter)
 asphalt pavement

SU	SP	H	M	L	Buried	Length(m)	Width(m)

25. Oil Distribution:

Continuous	% of Segment	_____	SU/SP/H/M/L	H/M/L/VL
Sporadic	% of Segment	_____	SU/SP/H/M/L	H/M/L/VL

Total	Length(m)	Width(m)
Very light:	_____	_____
Light:	_____	_____
Moderate:	_____	_____
Heavy:	_____	_____
Buried:	_____	_____

26. Preliminary Cleanup Est.

Total TYPE A: _____ m
 Total TYPE B: _____ m
 Total TYPE A/B: _____ m

Mobilization Potential: High/Medium/Low

Comments:

No oil observed

ACE 8702032

ECOLOGICAL EVALUATION

LOCATION: Afognak SITE: Paradise Bay OBSERVER: M. Fawcett
 LOCATION PREFIX: K2-8 SEG. NO.: 2 LENGTH: 30,000 (M)

DATE: 7/20/89 TIME (HHMM): 1100-1320 TIDE HT.: -0.9 to +1.5 (M)

OILED ZONE: Splash High Medium Low no oil observed

SUBSTRATUM: Rocks Boulder Cobble Gravel Sand Mud

LIVE BIOTA

Fucus (algae): Patchy Y/N Contin. Y/N Dense Y/N Sparse Y/N None Y/N

Mytilus (Mussels): Patchy Y/N Contin. Y/N Dense Y/N Sparse Y/N None Y/N

Balanus (Barnacles): Patchy Y/N Contin. Y/N Dense Y/N Sparse Y/N None Y/N

Littorina

Patchy Y/N Contin. Y/N Dense Y/N Sparse Y/N None Y/N

Limpets: Patchy Y/N Contin. Y/N Dense Y/N Sparse Y/N None Y/N

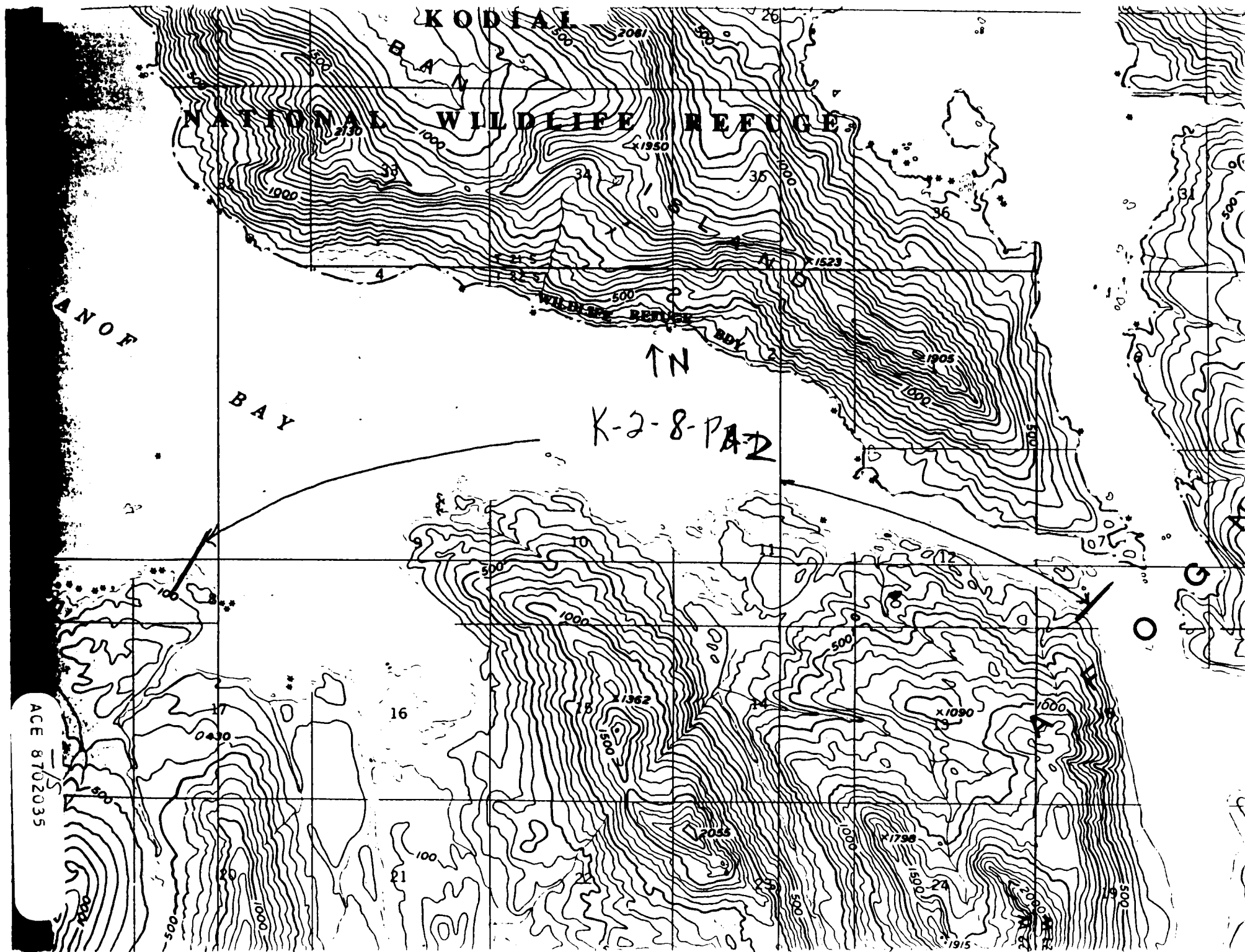
OTHER OBSERVATIONS: many starfish, especially Pycnopodia
1 anadromous fish stream - pinks, chum, silvers

CLEANUP PRECAUTIONS: no cleanup needed

MAMMALS: Otters 5-6 ^{sea otters} Harbor Seals _____ Sea Lions _____ Whales _____
 Other _____

BIRDS: 2 eagles 2 puffins 1 harlequin duck 3 oystercatchers

GENERAL OBSERVATIONS: Mostly steep rock shore interspersed with some
shale cobble gravel beaches and sand/mud-flats



(version 5/02/89)

SHORELINE CLEANUP PROGRAM

DATE 7/21/89

SHORELINE SEGMENT K2-8-PA-3

LOCATION: (see enclosed map) Paramanof Bay (across from S. shore of Ban Island) on NW shore of Afognak Island.

ADEC NO. _____ SHORELINE ASSESSMENT DATE: 7/21/89

Recommended Cleanup Activity(ies):

- Manual removal of mousse patties and drift debris. Patties scattered along storm berms and strand lines on beaches 3, 4, and 5.
- Manual removal (scrapping/wiping) of oil spots from larger logs.
- No cleanup recommended at beach 1 due to ecological constraints listed below. Subject to FOSC reassessments at a later date.

Priorities/Considerations: Class 5-A

Ecological Constraints (from site survey):

- No cleanup of beach 1 due to high, ecosystem sensitivities, diversities and abundances.
- Rocky convoluted shorelines generally contain locally sensitive ecosystems and should be avoided.

Archaeological Constraints (from site survey):

-Archaeological monitor is required during cleanup in beach 5 area at west end of segment. An archaeological monitor is also required in beach 1 area if cleanup is planned in this area of the segment. No access to forest/upland zone by beach crews during cleanup.

J. David McManis
State Historic Preservation Officer *

Date: 7/26/89

EXXON: _____

Date: _____

FOSC: _____

Date: _____

*Signature required to satisfy stipulations in Alaska DNR land use permits for tide and submerged lands.

+ / S
ACE 8702036

SHORELINE OIL EVALUATIONA. General

1. Date: 7/21/89 2. Time: 0845-1350 3. Observer: C. DILLON
 4. Surveyed From: Foot/Boat/Helio/Plane 5. Weather: Sun/Cloud/Rain/Snow/Fog

B. Location

6. Location: Paramanot Bay 7. Segment #: K-2-8-PB-2 ^{PA-3}

8. Length of shoreline segment: 9000 m

9. Access: Foot/Vehicle/Boat/Barge/Helio/Float Plane

10. _____

C. Shoreline

11. Shoreline Type: SPI/BAR/BEA/COV/HLD/STRT/CLF/EST/DAF

12. Slope: LANG/HAND/VER

13. Wave Exposure: High/Med/Low

14. Sediment: B 30% / C 20% / R 25% / G & S 5% / M % / P 20%

15. Drift Debris on Beach: Yes/No Supra/Upper/Mid/Lower Type logs/algae/straw

D. Oil Summary

16. Degree of Oiling: Heavy/Moderate/Light/Very Light/No Oil/Unobserved

17. Area of Beach Impact: Width of Band: N/A m

Continuous: Y/N % of Segment SU / SP / H / M / L

Sporadic: Y/N % of Segment 25 SU SP / H / M / L

18. Est. Oil Thickness where >1cm: cm Est. Oil Penetration: cm

19. Pooled Oil: % "Free" Oil: N/A Coated: H % / M % / L %

20. Fresh % Mousse % Tar Formation: %

21. Drift Debris Oiled? Yes/No Supra/Upper/Mid/Lower Amount: Very Small

Comments:

Extent of oiling: Beach 3 has a few tar balls/potties and a small amount of splattered logs on the upper storm berm ~75 east of the stream. Beach 4 has a few tar balls/potties among debris on Supra ITL strand within 100 m west of the rocks at the east end of the beach. Beach 5 has several tar balls/potties along debris strand.

DOCUMENTATION:

PA-3
K-2-8-PB-2

Map/Aerial photo marking segment boundaries Attached

VTR: Y ☒ N ☐ Tape Number(s) None

Photography: Y ☒ N ☐ Roll Number(s) None

Sample Numbers Collected: None

PA-3
K-2-8-PB-2

(Version July 18, 1989)

Page 2

SHORELINE OIL EVALUATION

22. Oil Type

Fresh	_____	%
Mousse	_____	%
Weathered	_____	%
Tar	<u>100</u>	%
	100	%

23. Stabilized or "Free"

24. Oil Character (Location)

thick(> 1cm) + continuous (> 1sq.m.)
coating on B/BD/Wood/Rock
cracks & crevices on bedrock
patties (>10cm diameter)
balls (< 10cm diameter)
asphalt pavement

See
Comments
on pg 1

SU	SP	H	M	L	Buried	Length(m)	Width(m)
						1000	<1-3
						1000	<1-3

25. Oil Distribution:

Continuous	% of Segment	_____	SU/SP/H/M/L	H/M/L/VL
Sporadic	% of Segment	<u><5</u>	<u>SU/SP/H/M/L</u>	<u>H/M/L/VL</u>

Total	Length(m)	Width(m)
Very light:	<u>1000</u>	<u><1-3</u>
Light:	_____	_____
Moderate:	_____	_____
Heavy:	_____	_____
Buried:	_____	_____

26. Preliminary Cleanup Est.

Total TYPE A: 1000 m
Total TYPE B: _____ m
Total TYPE A/B: _____ m

Mobilization Potential: High/Medium/Low

Comments:

ECOLOGICAL EVALUATION

LOCATION: AFONATK ISLAND PARAMARIBAY, KIRIBATI SITE: SOUTH / SOUTH WEST SHORE TO CAPE OBSERVER: S BLUESTONE
 LOCATION PREFIX: K-2-B PB PA SEG. NO.: 23 LENGTH: 9,000 (M)
 DATE: 7/21/89 TIME (HDDM): 1115HRS - 1600HRS TIDE HT.: -0.6 TO 2.31 (M)

OILED ZONE: Splash High Medium Low (VERY LIGHT TAR BALLS AND SCARC SPLAT)

SUBSTRATUM: Rocks Boulder Cobble Gravel Sand Mud

LIVE BIOTA

Fucus (algae): Patchy Y/N Contin. Y/N Dense Y/N Sparse Y/N None Y/N
 LOCAL DENSE, ABUNDANT GROWTHS IN ROCKY LITE HEADLAND AREAS, SPARSE TO NONE ON SANDY CRENULATED BEACH COVES. Dominant Algal growth in LITE, w/ ULVA SP & ENDOCLEUDIA SP in MID-LOW LITE. ULVA SPARSE TO LOCALLY MOD DENSE IN LITE.

Mytilus (Mussels): Patchy Y/N Contin. Y/N Dense Y/N Sparse Y/N None Y/N
M. edulis LIMITED TO ROCKY OVERLAPS THAT FORM HEADLANDS AND PROMONTORIES. LOCALLY ABUNDANT IN M-LITE.

Balanus (Barnacles): Patchy Y/N Contin. Y/N Dense Y/N Sparse Y/N None Y/N
B. glandulata FOUND IN GREAT TO MOD. ABUNDANCES IN LITE AND MITE; FOWER IN LITE. B. crenatus FOUND IN LITE ROCKY HEADLAND AREAS IN ABUND.

Littorina

Patchy Y/N Contin. Y/N Dense Y/N Sparse Y/N None Y/N
 WHEN PRESENT, FOUND IN DENSE GROVES FORMING IN MITE ON PETRIFIED DEBRIS. LOCALLY ABUNDANT IN WESTERN AREAS OF PB-2, ON BOULDER BEACHES (HIGH ENERGY).

Limpets: Patchy Y/N Contin. Y/N Dense Y/N Sparse Y/N None Y/N
 LOCALLY FOUND IN L-MITE TIDE POOLS ON ROCK AND BOULDER AREAS. LITTORINA SP DOMINANT.

OTHER OBSERVATIONS: Few Scaevola sp. VILVES FOUND ON SANDY BEACHES.

LOCAL KALIMERIS SP (CRITONE) AND ANEMONES (ANTHOUREA SP) AND Tealia SP.

CLEANUP PRECAUTIONS: HIGH DIVERSITY AND ABUNDANCES IN ROCKY HEADLAND AREAS. ACCESS WOULD BE A PROBLEM IN THESE ECOSYSTEMS, DUE TO SUBMERGED REEFS AND OFF-SHORE ISLETS

MAMMALS: Otters X Harbor Seals Sea Lions Whales
 other DEER ON BEACH.

BIRDS: BIRD EAGLES, CORMORANTS, LARUS BULLS, ETC.

GENERAL OBSERVATIONS: ABUNDANT OFF-SHORE, SUBTIDAL REEF & PHYCAL COMMUNITIES. STEEP BEACHES w/ CLIFF SUPRATIDAL ZONES; HIGH ENERGY ENVIRONMENTS.

K-2-8-~~DB~~-2
PA-3

Beach/cove

Beach 2

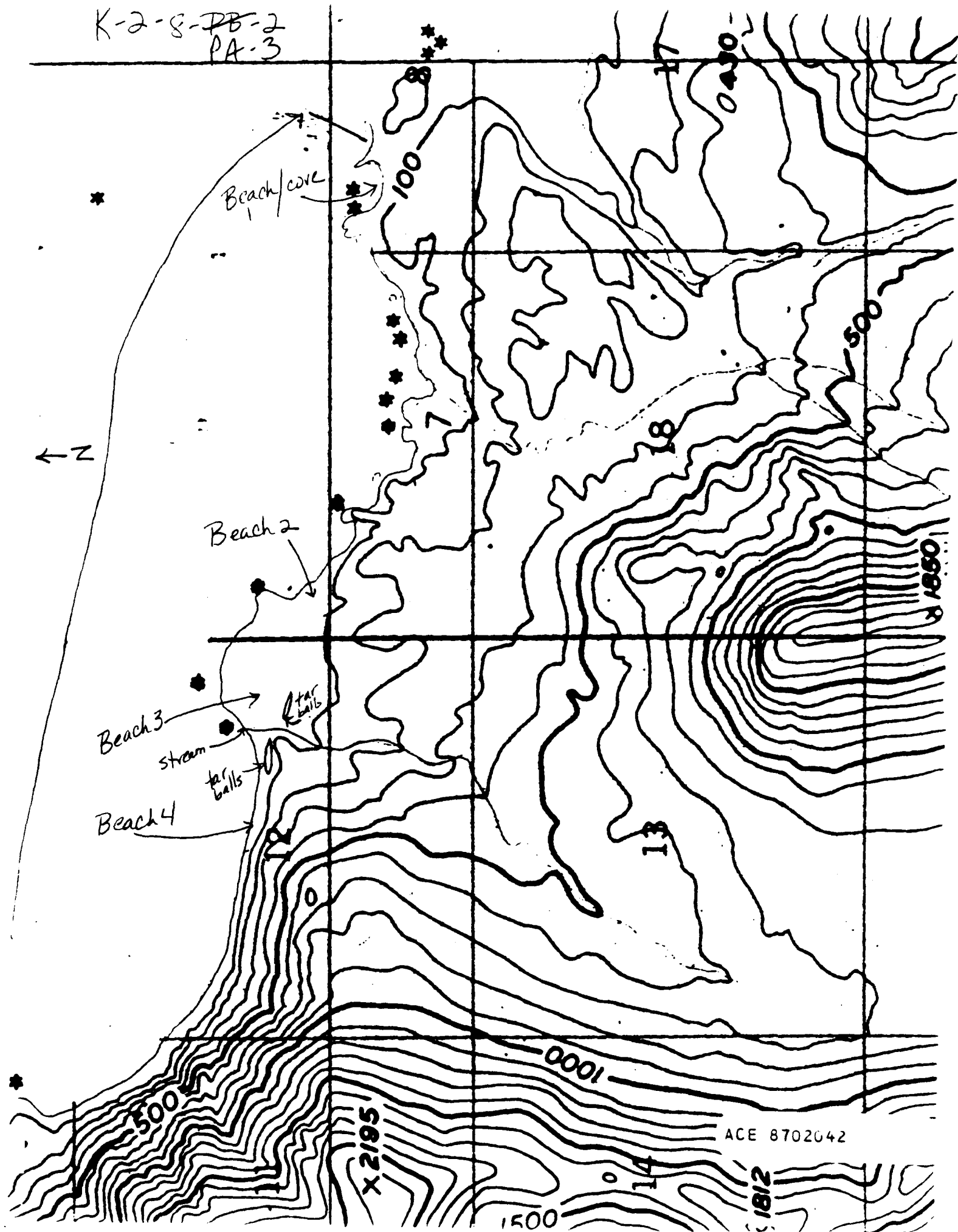
Beach 3

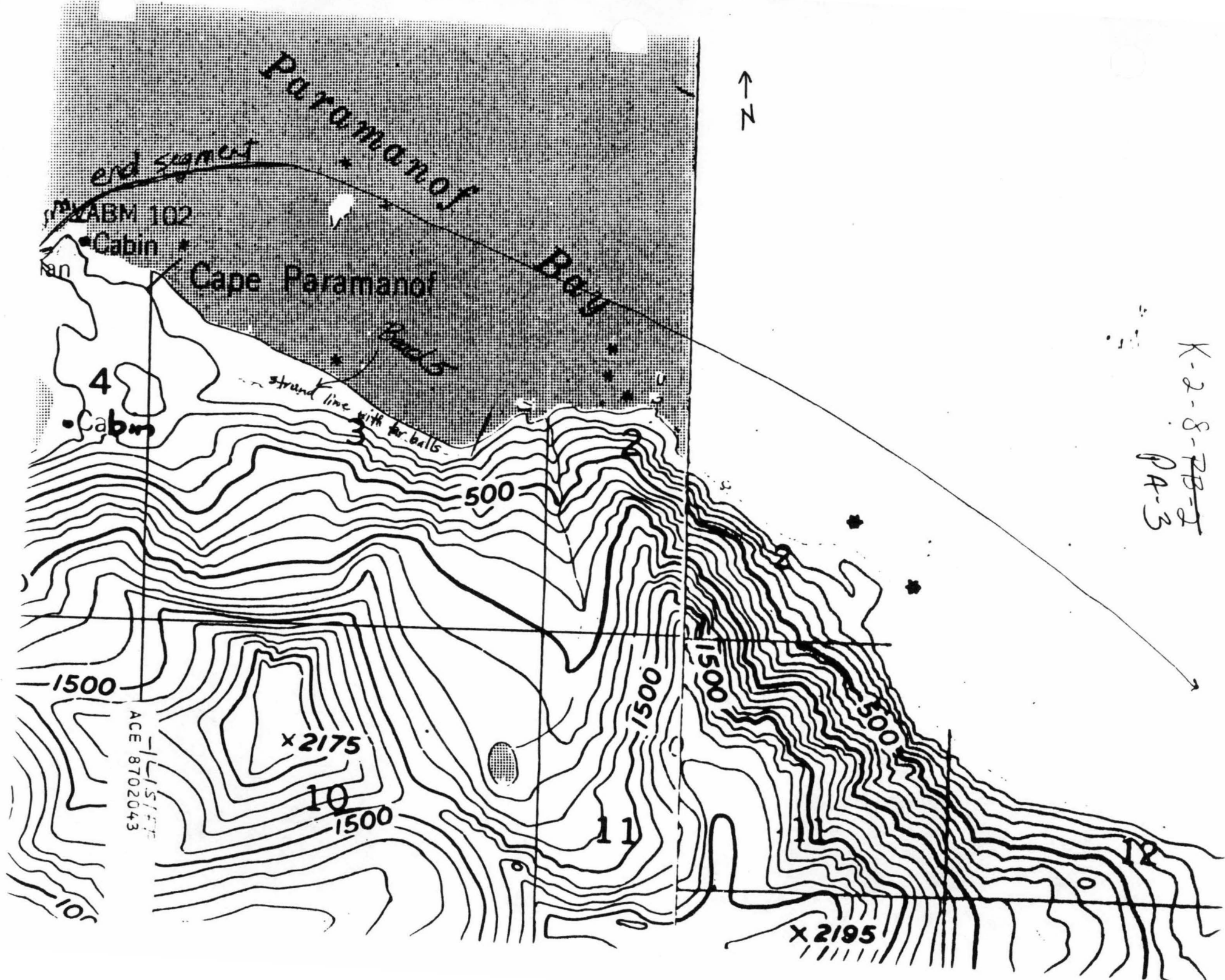
Beach 4

stream
tar balls

tar balls

← Z





K-2-8-75-2
PA-3

517 - KODIAK SCAT
K2-9

COMPLETE JAN 26 1990

ACE 8643505

(
(version 5/02/89)

SHORELINE CLEANUP PROGRAM

DATE 7/22/89

SHORELINE SEGMENT K2-9-PA-7

LOCATION: (see enclosed map) W side of Afognak Island north of
Tonaak Cape.

⁹
ADEC NO. K2-9 SHORELINE ASSESSMENT DATE: 7/22/89

Recommended Cleanup Activity(ies):

-No cleanup recommended due to apparent absence of oil.
Subject to FOSC reassessment at a later date.

Priorities/Considerations: Class

Ecological Constraints (from site survey):

Archaeological Constraints (from site survey):

-If heretofore undiscovered cultural materials are uncovered during cleanup, contact Exxon's Archaeological Field Director and take actions prescribed in the Operational Guidelines for Shoreline Cleanup dated 4/21/89 as amended.


State Historic Preservation Officer *

Date: _____

EXXON: _____

Date: _____

FOSC: _____

Date: _____

*Signature required to satisfy stipulations in Alaska DNR land use permits for tide and submerged lands.

(
+ / F / S /
ACE 8702044

SHORELINE OIL EVALUATION

A. General

1. Date: 7/22/89 2. Time: 1200-1245 3. Observer: C. DILLON
4. Surveyed From: Foot/Boat Helio/Plane 5. Weather: Sun Cloud Rain/Snow/Fog

B. Location

6. Location North of Tarank Cape 7. Segment #: PA-7
K-2-9-PB-4

8. Length of shoreline segment: 3500 m

9. Access: Foot/Vehicle Boat/Barge Helio/Float Plane maybe

10. _____

C. Shoreline

11. Shoreline Type: SPI/BAR BEA COV HLD STRT CLF EST/DAF

12. Slope: LANG HAND VER

13. Wave Exposure: High Med/Low

14. Sediment: B 5% / C 5% / P 10% / G & S % / M % / R 5%

15. Drift Debris on Beach: Yes/No Supra/Upper/Mid/Lower Type logs

D. Oil Summary

16. Degree of Oiling: Heavy/Moderate/Light/Very Light No Oil Unobserved

17. Area of Beach Impact: Width of Band: N/A m

Continuous: Y/N % of Segment SU / SP / H / M / L

Sporadic: Y/N % of Segment SU / SP / H / M / L

18. Est. Oil Thickness where >1cm: cm Est. Oil Penetration: cm

19. Pooled Oil: % "Free" Oil: % Coated: H % / M % / L %

20. Fresh % Mousse % Tar Formation: %

21. Drift Debris Oiled? Yes/No Supra/Upper/Mid/Lower Amount: %

Comments:

DOCUMENTATION:

PA-7
K-2-9-7B-4Map/Aerial photo marking segment boundaries

Attached

VTR:

Y/N

Tape Number(s)

None

Photography:

Y/N

Roll Number(s)

None

Sample Numbers Collected:

None

PA-7

K-2-9-DB-4

(Version July 18, 1989)

Page 2

SHORELINE OIL EVALUATION

22. Oil Type

Fresh _____ %
Mousse _____ %
Weathered _____ %
Tar _____ %
100 %

N/A

23. Stabilized or "Free"

24. Oil Character (Location)

thick(> 1cm) + continuous (> 1sq.m.)
coating on B/BD/Wood/Rock
cracks & crevices on bedrock
patties (>10cm diameter)
balls (< 10cm diameter)
asphalt pavement

SU	SP	H	M	L	Buried	Length(m)	Width(m)

25. Oil Distribution:

Continuous % of Segment _____ SU/SP/H/M/L H/M/L/VL
Sporadic % of Segment _____ SU/SP/H/M/L H/M/L/VL

Total	Length(m)	Width(m)
Very light:	_____	_____
Light:	_____	_____
Moderate:	_____	_____
Heavy:	_____	_____
Buried:	_____	_____

26. Preliminary Cleanup Est.

Total TYPE A: _____ m
Total TYPE B: _____ m
Total TYPE A/B: _____ m

Mobilization Potential: High/Medium/Low

Comments:

No oil observed.

ACE 8702047

ECOLOGICAL EVALUATION

LOCATION: ^{AFONAK IS BETWEEN} CAPE PARADISE AND ^{AREX JUST NORTH} TANAKA SITE: OF TANAKA CAPE OBSERVER: S. BLUEZIONE
 LOCATION PREFIX: ^{K-2-9:} BBPA SEG. NO.: 17 LENGTH: 3500 (M)
 DATE: 7/22/89 TIME (HHMM): 1200-1300 TIDE HT.: -0.33 to +0.33 (M)

OILED ZONE: Splash High Medium Low N/A

SUBSTRATUM: Rocks Boulder Cobble Gravel Sand Mud

LIVE BIOTA

Fucus (algae): Patchy (Y/N) Contin. (Y/N) Dense (Y/N) Sparse (Y/N) None (Y/N)
^{Phycos} Present in GREAT ABUNDANCES upon offshore islets in sub-tidal zones. Phaeophytes dominant, some Chlorophytes, few Phodoph.

Mytilus (Mussels): Patchy (Y/N) Contin. (Y/N) Dense (Y/N) Sparse (Y/N) None (Y/N)
 Found on islets & in LITZ.

Balanus (Barnacles): ^{locally} Patchy (Y/N) Contin. (Y/N) ^{locally} Dense (Y/N) Sparse (Y/N) None (Y/N)
 Generally B. glandula seen as a band in m-LITZ; B. caricosa in LITZ.

Littorina

Patchy (Y/N) Contin. (Y/N) Dense (Y/N) Sparse (Y/N) None (Y/N)
 Limited to m-LITZ POOLS.

Limpets: Patchy (Y/N) Contin. (Y/N) Dense (Y/N) Sparse (Y/N) None (Y/N)
 Found in LITZ ONLY.

OTHER OBSERVATIONS: steep cliff faces; HIGH RATE OF EROSION.
SEA CAVES AND ISLETS CREATE UNIQUE SUB-INTERTIDAL
SCHOOLS OF BAT FISH WITNESSED. ^{community}

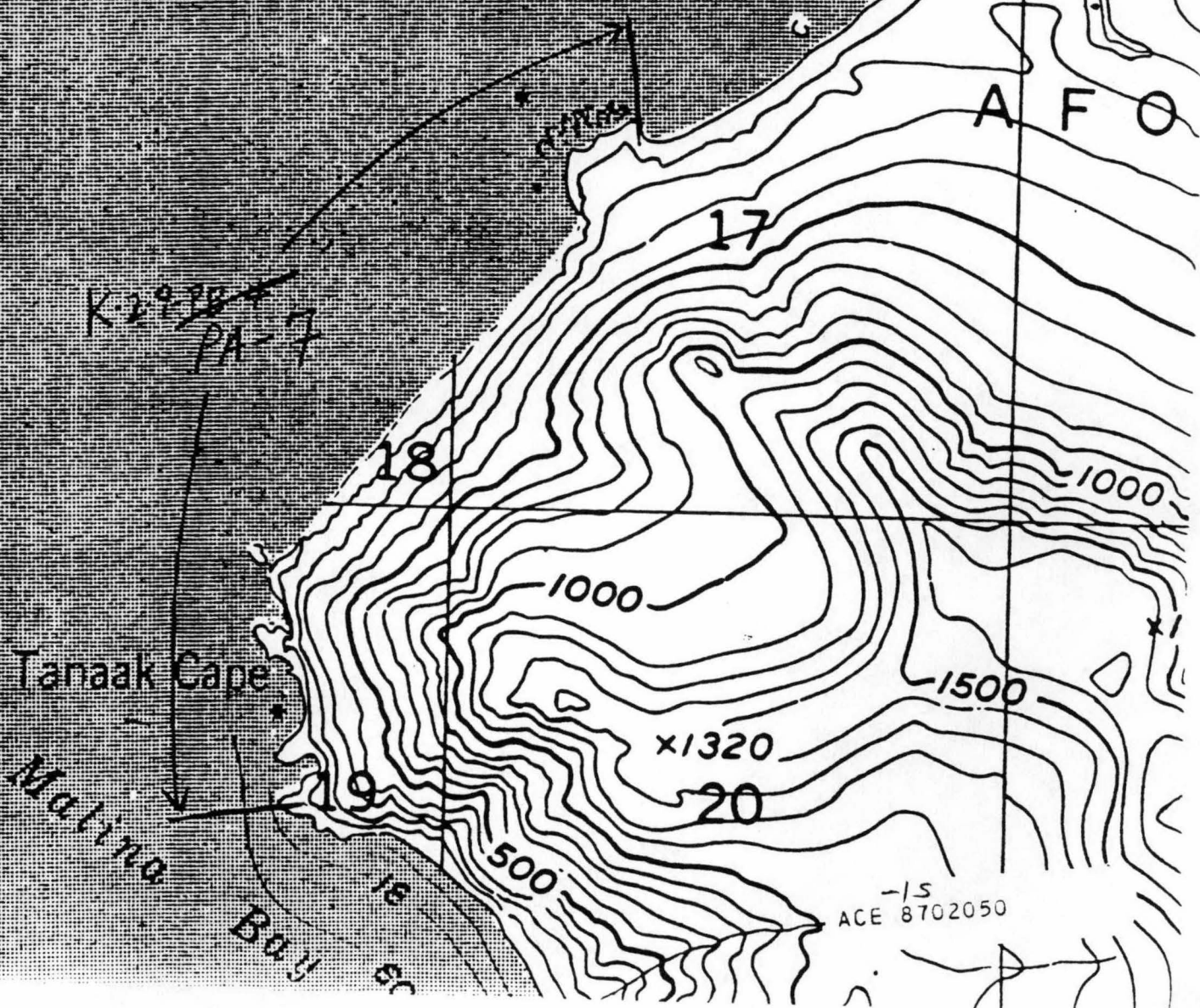
CLEANUP PRECAUTIONS: ACCESS COULD BE DIFFICULT; HIGHLY DIVERSE
community.

MAMMALS: Otters X Harbor Seals Sea Lions X Whales
 other

BIRDS: BIRD TABLE, CORMORANTS, LARUS SP GULLS (ROOSTING)

GENERAL OBSERVATIONS: HIGH ENERGY ENVIRONMENT. BROAD WINTER
FETCH.

↑ N



-15
ACE 8702050

(version 6/04/89)

SHORELINE PRE-CLEANUP ASSESSMENT BLOCK REPORT

Block (see enclosed map): K2-9

Includes Shoreline Segments: PA-4, PA-5, PA-6, PA-7

Location: Paramanof Bay

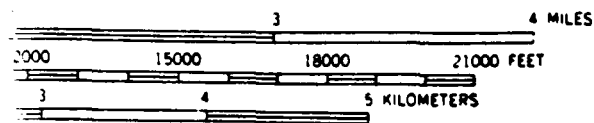
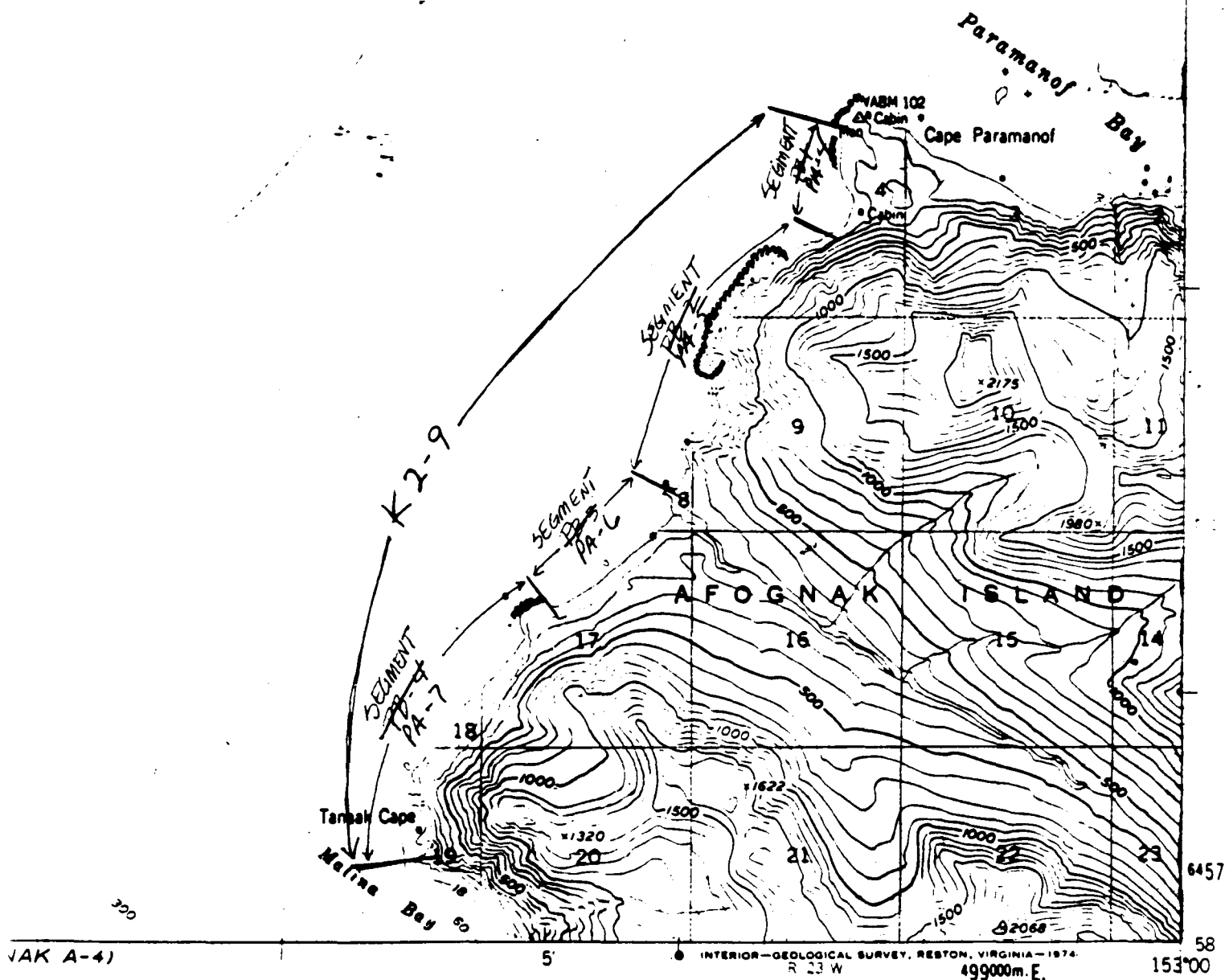
Submitted: _____ Date: _____
(for Exxon)

FOSC Approval: _____ Date: _____

The cleanup procedures identified in the Shoreline Cleanup Program are recommended. Exxon and other field personnel are encouraged to suggest innovations and productivity enhancements to the OSC's on-scene representative. Requirements for safety and the protection of cultural material must be observed.

CC: KISCC

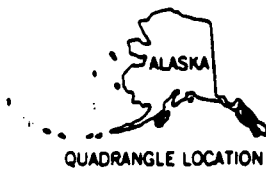
+15
ACE 8702051



EET

OVER LOW WATER
OF MEAN HIGH WATER
BY 12 FEET

L SURVEY
25. OR RESTON, VIRGINIA 22092
SOLS IS AVAILABLE ON REQUEST



QUADRANGLE LOCATION

ROAD CLASSIFICATION

No roads or trails in this area

AFOGNAK (B-4), ALASKA
N5815-W15300/15X20

1952
MINOR REVISIONS 1973

-/S
ACE 8702053

(version 5/02/89)

SHORELINE CLEANUP PROGRAM

DATE 7/22/89

SHORELINE SEGMENT K2-9-PA-4

LOCATION: (see enclosed map) Paramanof Bay

ADEC NO. _____ SHORELINE ASSESSMENT DATE: 7/22/89

Recommended Cleanup Activity(ies):

- Manual removal of tar balls/patties and oiled algae and small driftwood.
- Manual removal (scrape/wipe) oil spots off of large logs.
- Relocate oily berm sediments into the surf zone.

Priorities/Considerations: Class 3-A

Ecological Constraints (from site survey):

- Cleanup should be restricted to the oiled cobble beach upper/drift line, where semi-buried oiling is found.
- Cleanup is not recommended in rocky headlands.

Archaeological Constraints (from site survey):

- No access to the forest/upland zone by beach crews during cleanup.
- If heretofore undiscovered cultural materials are uncovered during cleanup, contact Exxon's Archeological Field Director and take actions prescribed in the Operational Guidelines for Shoreline Cleanup dated 4/21/89 as amended.


State Historic Preservation Officer *

Date: 7/26/89

EXXON: _____

Date: _____

FOSC: _____

Date: _____

*Signature required to satisfy stipulations in Alaska DNR land use permits for tide and submerged lands.

SHORELINE OIL EVALUATIONA. General

1. Date: 7/22/89 2. Time: 0920-1025 3. Observer: C. DILLON
 4. Surveyed From: Foot/Boat/Helio/Plane 5. Weather: Sun/Cloud/Rain/Snow/Fog

B. Location

6. Location: Paramanof Bay (W of Cape Paramanof) 7. Segment #: K-2-9-PB-1 ^{PA-4}
 8. Length of shoreline segment: 1200 m

9. Access: Foot/Vehicle/Boat/Barge/Helio/Float Plane

10. _____

C. Shoreline

11. Shoreline Type: SPI/BAR/BEA/COV/HLD/STRT/CLF/EST/DAF

12. Slope: LANG/HAND/VER

13. Wave Exposure: High/Med/Low

14. Sediment: B5% / C55% / P30% / G & S ___% / M ___% / R ___%

15. Drift Debris on Beach: Yes/No Supra/Upper/Mid/Lower Type logs/algae

D. Oil Summary

16. Degree of Oiling: Heavy/Moderate/Light/Very Light/No Oil/Unobserved

17. Area of Beach Impact: Width of Band: 1-4 m
 Continuous: Y/N % of Segment <30 SU SP / H / M / L

Sporadic: Y/N % of Segment _____ SU / SP / H / M / L

18. Est. Oil Thickness where >1cm: <1 cm Est. Oil Penetration: up to 15 cm

19. Pooled Oil: _____% "Free" Oil: _____% ^{Splattered} Coated: H ___% / M 90% / L 5% VL 5%

20. ^{Dried/Weathered} Fresh 90% Mousse _____% Tar Formation: 10%

21. Drift Debris Oiled? Yes/No Supra/Upper/Mid/Lower Amount: Moderate%

Comments:

The beach is approx 1200 m long at the water line and 600 m long along the Supra ITZ and storm berm. The center of the beach is all cobbles and pebbles and the ends of the beach are boulders. The boulders at the North corner of the beach are very lightly oiled and the cobbles and pebbles in the crevices

DOCUMENTATION: K-2-9-PB-T PA-4

Map/Aerial photo marking segment boundaries Attached

VTR: Y/N Tape Number(s) None

Photography: Y/N Roll Number(s) None

Sample Numbers Collected: None

PA-4

K-2-9-PB-7

SHORELINE OIL EVALUATION

22. Oil Type

Fresh	_____	%
Mousse	_____	%
Weathered	90	%
Tar	10	%
	100	%

23. Stabilized or "Free"

24. Oil Character (Location)

thick (> 1cm) + continuous (> 1sq.m.)
 coating on B/BD/Wood/Rock Storm berm
 cracks & crevices on bedrock
 patties (>10cm diameter)
 balls (< 10cm diameter)
 asphalt pavement

SU	SP	H	M	L	Buried	Length(m)	Width(m)
✓					4-12cm	300	1-4
✓							
✓							

25. Oil Distribution:

Continuous	% of Segment	30	<u>SU</u> /SP/H/M/L	H/ <u>M</u> /L/VL
Sporadic	% of Segment	_____	SU/SP/H/M/L	H/M/L/VL

Total	Length(m)	Width(m)
Very light:	10	4
Light:	10	4
Moderate:	280	1-4
Heavy:		
Buried:	280	1-4

26. Preliminary Cleanup Est.

Total TYPE A:	_____m
Total TYPE B:	_____m
Total TYPE A/B:	300 m

Mobilization Potential: High/Medium/Low

Comments:

between the boulders are lightly coated - no penetration. Area of impact is 10m long by 4m wide and the oil is a dried stain. The debris strand above the storm berm has a moderate amount of oiled logs + algae plus scattered tar patties/balls. The cobble/pebble storm berm is moderately coated and penetrated up to 15cm with 4cm or more clean sed's on top. The oiled berm sediments either taper off or become so deeply buried by the center of the beach that they are not visible.

ACE 8702057

ECOLOGICAL EVALUATION

LOCATION: AFOGWAH ISLAND, WEST END OF AFOGWAH
PARANNOF Bay, K-2-4 SITE: BETWEEN PARANNOF Bay
AND TANAKA POINT OBSERVER: S. BLUESTONE
 LOCATION PREFIX: BB PA SEG. NO.: 1 4 LENGTH: 1200 (M)
 DATE: 7 / 22 / 89 TIME (HDDM): 0915 - 1030 HRSTIDE HT.: +0.5 TO -0.17 (M)

OILED ZONE: Splash High Medium Low (VERY LIGHT SPLAT, LOCAL BURIED
 TARRY/OIL, AND TRACE MURDER PATCHES)
 SUBSTRATUM: Rocks Boulder Cobble Gravel Sand Mud → MAJORITY OF OILED SEGMENT
 → MAJORITY OF OILED SEGMENT SEGMENT V. LIGHT
 OILING, AND BURIED

LIVE BIOTA

Fucus (algae): Patchy Y/N Contin. Y/N Dense Y/N Sparse Y/N None Y/N
 ABUNDANT IN ROCKY ITZ HEADLAND AREAS. ABUNDANT AND DIVERSE PHYCAL COMMUNITY
 LOCALLY, UITE = Fucus, Balgin, MITZ = Fucus, Halosaccia, LITE = Laminaria, Sodium,
MARIA sp & ULVA

Mytilus (Mussels): Patchy Y/N Contin. Y/N Dense Y/N Sparse Y/N None Y/N
 Found M. edulis in patchy ZONATIONS AROUND M-LITE IN ROCKY ITZ'S

Balanus (Barnacles): Patchy Y/N Contin. Y/N Dense Y/N Sparse Y/N None Y/N
 ONLY SPREAD ON COBBLED BEACHES. B. glandula found as dominant spp. in
 many M-LITE'S, W/SOME B. cariosis IN LITE

Littorina

Patchy Y/N Contin. Y/N Dense Y/N Sparse Y/N None Y/N
 Found in High energy environ. in RITE'S grazing on decaying
 PHYCAL DEBRIS. Common in tidepool areas. ABSENT ON COBBLED BEACH.

Limpets: Patchy Y/N Contin. Y/N Dense Y/N Sparse Y/N None Y/N
 Found typically in LITE and in tidepools in MITZ

OTHER OBSERVATIONS: Very high diversity in M-LITE ROCK ENDS OF SECTION
and south. Abundant spp. include Anthopleura, Tealia, Katharina, Nassarius, and
Ocenebra sp.

CLEANUP PRECAUTIONS: VERY SENSITIVE ECOLOGICAL COMMUNITY; ACCESS NOT
A PROBLEM IN MAJORITY OF SECTION. Cleanup should be limited to crenulated
cobble cove

MAMMALS: Otters X Harbor Seals Sea Lions Whales
 Other RED FOXES & ONE ARCTIC SIGHTED ON BEACH

BIRDS: NESTING BIRD FAUCES, OYSTERCATCHERS AND LARUS GULLS.

GENERAL OBSERVATIONS: BEACHES BECOME PROGRESSIVELY HIGHER ENERGY TOWARDS
WEST/SOUTH end of section. GREATER DIVERSITY OF INTERIDAL FLORA/FAUNA IN ROCKY
headland areas

VABM 102

Cabin

Cape Para

Man

K2-9-28-1
PA-4

4

Cabin

1000

1500

x 21

9

1000

500

8

A F O G N A K

15

16

17

500

-15
ACE 8702060

1000

(version 5/02/89)

SHORELINE CLEANUP PROGRAM

DATE 7/22/89

SHORELINE SEGMENT K2-9-PA-5

LOCATION: (see enclosed map) Paramanof Bay on W side of Afognak
Island (between cape Paramanof and Tanoak Cape)

ADEC NO. _____ SHORELINE ASSESSMENT DATE: 7/22/89

Recommended Cleanup Activity(ies):

-No cleanup recommended due to apparent absence of oil.
Subject to FOSC reassessment at a later date.

Priorities/Considerations: Class

Ecological Constraints (from site survey):

Archaeological Constraints (from site survey):

-If heretofore undiscovered cultural materials are uncovered during cleanup, contact Exxon's Archeological Field Director and take actions prescribed in the Operational Guidelines for Shoreline Cleanup dated 4/21/89 as amended.


State Historic Preservation Officer *

Date: 7/26/89

EXXON: _____

Date: _____

FOSC: _____

Date: _____

*Signature required to satisfy stipulations in Alaska DNR land use permits for tide and submerged lands.

SHORELINE OIL EVALUATION

A. General

1. Date: 7/22/89 2. Time: 1025-1100 3. Observer: C. DILLON
4. Surveyed From: Foot/Boat/Helio/Plane 5. Weather: Sun/Cloud/Rain/Snow/Fog

B. Location

6. Location Paramaribo Bay (S. of Cape Paramaribo) 7. Segment #: K-2-9-PA-5
8. Length of shoreline segment: 4000 m

9. Access: Foot/Vehicle/Boat/Barge/Helio/Float Plane

10. _____

C. Shoreline

11. Shoreline Type: SPI/BAR/BEA/COV/HLD/STRT/CLF/EST/DAF

12. Slope: LANG/HAND/VER

13. Wave Exposure: High/Med/Low

14. Sediment: B30% / C10% / P10% / G & S ___% / M ___% / R50%

15. Drift Debris on Beach: Yes/No Supra/Upper/Mid/Lower Type logs

D. Oil Summary

16. Degree of Oiling: Heavy/Moderate/Light/Very Light/No Oil/Unobserved

17. Area of Beach Impact: Width of Band: _____ m

Continuous: Y/N % of Segment _____ SU X / SP / H / M / L

Sporadic: Y/N % of Segment _____ SU / SB / H / M / L

18. Est. Oil Thickness where >1cm: _____ cm Est. Oil Penetration: _____ cm

19. Pooled Oil: _____% "Free" Oil: _____% Coated: H ___% / M ___% / L ___%

20. Fresh _____% Mousse _____% Tar Formation: _____%

21. Drift Debris Oiled? Yes/No Supra/Upper/Mid/Lower Amount: _____%

Comments:

DOCUMENTATION:

PA-5
K-2-9.7B 2

(Map) Aerial photo marking segment boundaries Attached

VTR: Y/N (N) Tape Number(s) None

Photography: Y/N (N) Roll Number(s) None

Sample Numbers Collected: None

PA-5

K-2-9-~~PA-2~~

SHORELINE OIL EVALUATION

22. Oil Type

Fresh _____ %
Mousse _____ %
Weathered _____ %
Tar _____ %
100 %

N
A

23. Stabilized or "Free"

24. Oil Character (Location)

thick(> 1cm) + continuous (> 1sq.m.)
coating on B/BD/Wood/Rock
cracks & crevices on bedrock
patties (>10cm diameter)
balls (< 10cm diameter)
asphalt pavement

SU	SP	H	M	L	Buried	Length(m)	Width(m)

25. Oil Distribution:

Continuous % of Segment _____ SU/SP/H/M/L H/M/L/VL
Sporadic % of Segment _____ SU/SP/H/M/L H/M/L/VL

Total	Length(m)	Width(m)
Very light:	_____	_____
Light:	_____	_____
Moderate:	_____	_____
Heavy:	_____	_____
Buried:	_____	_____

26. Preliminary Cleanup Est.

Total TYPE A: _____ m
Total TYPE B: _____ m
Total TYPE A/B: _____ m

Mobilization Potential: High/Medium/Low

Comments:

No oil observed

ECOLOGICAL EVALUATION

LOCATION: AFONAK ISLAND, BETWEEN CAPE PARADISE AND TONGA SITE: AREA JUST SOUTH OF CAPE PARADISE ON WEST SIDE OF COVE OBSERVER: SBURLOW

LOCATION PREFIX: K-2-4-^{AFONAK} ~~PS~~ PA SEG. NO.: ~~2~~ 5 LENGTH: _____ (M)

DATE: 7/22/89 TIME (HHMM): 1030-1105 TIDE HT.: -0.5 TO -0.33 (M)

OILED ZONE: Splash High Medium Low N/A (NONE VISIBLE)

SUBSTRATUM: Rocks Boulder Cobble Gravel Sand Mud

LIVE BIOTA

Fucus (algae): Patchy ☒ Y ☐ N Contin. ☒ Y ☐ N Dense ☒ Y ☐ N Sparse ☐ Y ☒ N None ☐ Y ☒ N
 Abundant and diverse physical community, including (from LITZ up): Alaria sp.
Codium sp., Laminaria, Fucus, Hypnea and Ulva

Mytilus (Mussels): Patchy ☒ Y/N Contin. ☒ Y/N Dense ☒ Y/N Sparse ☒ Y/N None ☒ Y/N
Present on numerous near-shore ISLETS and ROCKY ITZ HAZARD
AREAS IN L-ITZ. (*m. edulis*) Absent on COBBLE CRENULATE beaches.

Balanus (Barnacles): Patchy ^{locally} Y/N Contin. ^{locally} Y/N Dense Y/N Sparse Y/N None Y/N
B. glandula abundant throughout in DO U ITR; B. cariosus dominant in LITR.

Littorina

Patchy ☒ Y/N Contin. ☐ Y/☒ N Dense ☐ Y/☒ N Sparse ☒ Y/N None ☒ Y/N
found sparse populations in tidepools of rocky crevices
beaches.

Limpets: Patchy ☒ Y/N Contin. ☒ Y/N Dense ☒ Y/N Sparse ☒ Y/N None ☒ Y/N
limited to LITZ tide pools.

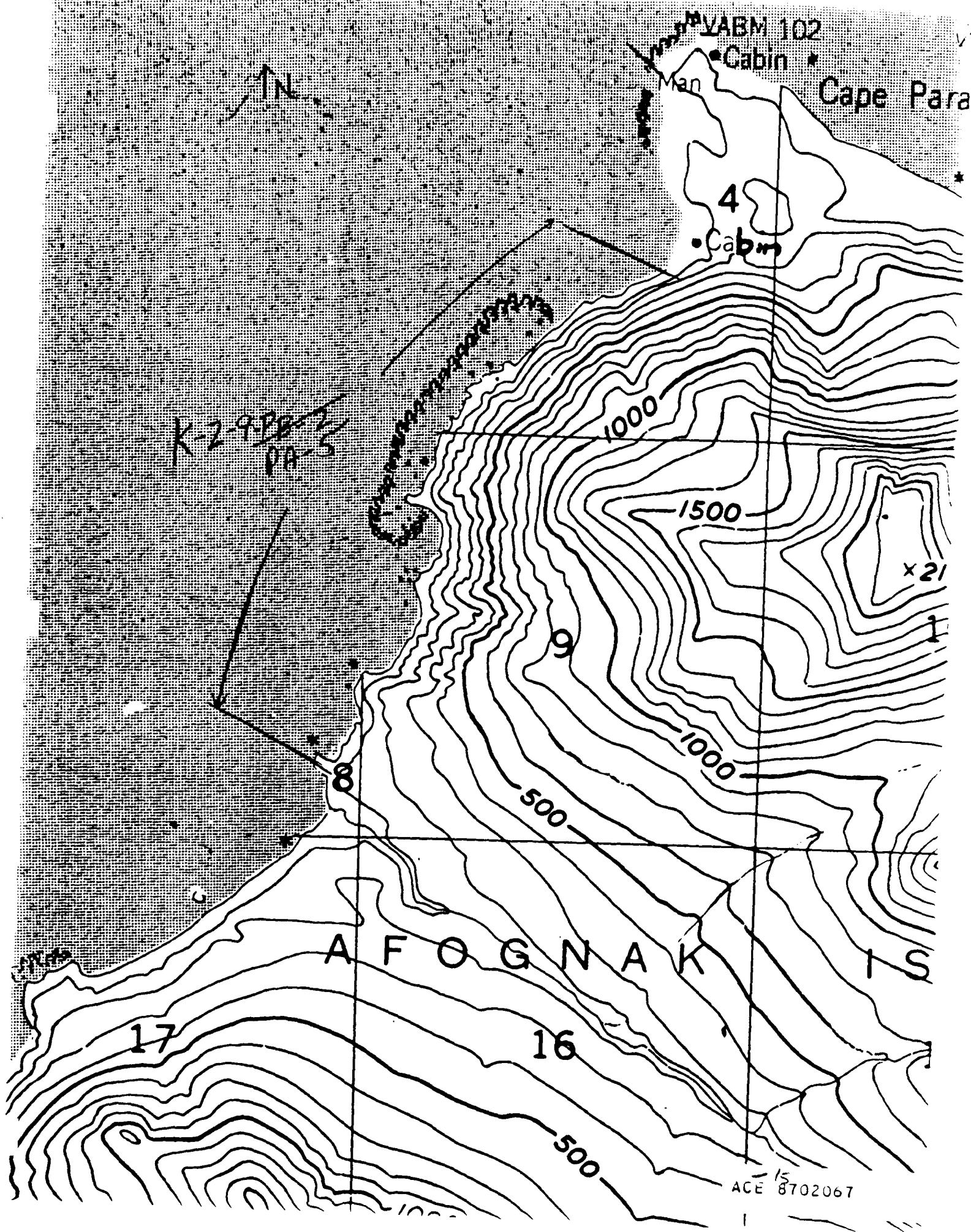
OTHER OBSERVATIONS: Steep slope, rocky beaches, backed by bedrock cliffs & landslide debris; high rate of erosion. Well developed subtidal communities w/ ↑ abundance of *Myxus* & fish

CLEANUP PRECAUTIONS: TOUGH ACCESS. Well developed ecosystems
(↑ div. & ↑ abund). Also, OFFSHORE REEF COMMUNITIES.

MAMMALS: Otters X Harbor Seals Sea Lions Whales
Other GREY FOX

BIRDS: Numerous Larus gulls (roosting), eagle sighting

GENERAL OBSERVATIONS: Shoal, Rocky BEACHES; SUBMERGED ROCKS
immediately off-shore.



ACE 8702067

(version 5/02/89)

SHORELINE CLEANUP PROGRAM

DATE 7/22/89

SHORELINE SEGMENT K2-9-PA-6

LOCATION: (see enclosed map) W side of Afognak Island between
Cape Paramanof and Tanaak Cape.

ADEC NO. K2-9 SHORELINE ASSESSMENT DATE: 7/22/89

Recommended Cleanup Activity(ies):

-No cleanup recommended due to very light oiling and ecological constraints listed below. Subject to FOSC reassessment at a later date.

Priorities/Considerations: Class 5-A

Ecological Constraints (from site survey):

-No cleanup due to very sensitive intertidal habitat with great floral and faunal diversity and abundance. Additionally, anadromous stream present and nesting bald eagles.

Archaeological Constraints (from site survey):

- If cleanup is planned, there must be no access to the forest/upland zone in the north end of the segment by beach crews during cleanup.
- If heretofore undiscovered cultural materials are uncovered during cleanup, contact Exxon's Archaeological Field Director and take actions prescribed in the Operational Guidelines for Shoreline Cleanup dated 4/21/89 as amended.


State Historic Preservation Officer *

Date: 7/26/89

EXXON: _____

Date: _____

FOSC: _____

Date: _____

*Signature required to satisfy stipulations in Alaska DNR land use permits for tide and submerged lands.

SHORELINE OIL EVALUATIONA. General

1. Date: 7/22/89 2. Time: 1100-1200 3. Observer: C. DILLON
 4. Surveyed From: Foot/Boat/Helio/Plane 5. Weather: Sun/Cloud/Rain/Snow/Fog

B. Location

6. Location: Side of Agiak Island (between Cape Parry and Tanak Cape) 7. Segment #: K-2-9-PA-6
PA-6
 8. Length of shoreline segment: 1500 m

9. Access: Foot/Vehicle/Boat/Barge/Helio/Float Plane

10. _____

C. Shoreline

11. Shoreline Type: SPI/BAR/BEA/COV/HLD/STRT/CLF/EST/DAF

12. Slope: LANG/HAND/VER

13. Wave Exposure: High/Med/Low

14. Sediment: B5% / C2% / P15% / G & S__% / M__% / R5%

15. Drift Debris on Beach: Yes/No Supra/Upper/Mid/Lower Type logs/sawed

D. Oil Summary

16. Degree of Oiling: Heavy/Moderate/Light/Very Light/No Oil/Unobserved

17. Area of Beach Impact: Width of Band: 1-4 m

Continuous: Y/N % of Segment SU / SP / H / M / L

Sporadic: Y/N % of Segment 25 SU / SP / H / M / L

18. Est. Oil Thickness where >1cm: 0 cm Est. Oil Penetration: 0 cm

19. Pooled Oil: _____ % "Free" Oil: _____ % ^{Splattered} Coated: H % / M % / L % VL 100%

20. Fresh _____ % Mousse _____ % Tar Formation: 100 %

21. Drift Debris Oiled? Yes/No/Supra/Upper/Mid/Lower Amount: Small %

Comments:

Debris and pebble/cobble berm at North 300m of beach
(between anadromous stream and Eagle's nest) are very
lightly splattered and there are a few tar balls along
the strand line. A 150m long section of boulders and
cobbles on the Supra ITL in the middle of the beach
are splattered with droplet size oil spots.

DOCUMENTATION:

PA-6
K-2-9-FB-3

(Map/Aerial photo marking segment boundaries

Attached

VTR:

Y/N

Tape Number(s)

None

Photography:

Y/N

Roll Number(s)

None

Sample Numbers Collected:

None

P4-6

K-2-9-PB3

(Version July 18, 1989)

Page 2

SHORELINE OIL EVALUATION

22. Oil Type

Fresh	_____	%
Mousse	_____	%
Weathered	<u>85</u>	%
Tar	<u>15</u>	%
	100	%

23. Stabilized or "Free" - *Splatters are stabilized, tar balls are free.*

24. Oil Character (Location)

thick (> 1cm) + continuous (> 1sq.m.)
 coating on B/BD/Wood/Rock *splattering*
 cracks & crevices on bedrock
 patties (> 10cm diameter)
 balls (< 10cm diameter)
 asphalt pavement

SU	SP	H	M	L	Buried	Length(m)	Width(m)
✓						450	1-4
✓						450	1-4
✓						450	1-4

25. Oil Distribution:

Continuous	% of Segment	_____	SU/SP/H/M/L	H/M/L/VL
Sporadic	% of Segment	<u>25</u>	<u>SU</u> /SP/H/M/L	H/M/L/ <u>VL</u>

	Length(m)	Width(m)
Total		
Very light:	<u>450</u>	<u>1-4</u>
Light:	_____	_____
Moderate:	_____	_____
Heavy:	_____	_____
Buried:	_____	_____

26. Preliminary Cleanup Est.

Total TYPE A: _____ m
 Total TYPE B: _____ m
 Total TYPE A/B: _____ m

Mobilization Potential: High/Medium/Low

Comments:

ECOLOGICAL EVALUATION

LOCATION: ^{AFDGNNA IS. between} ~~Cape Parnassus of Tenuk~~ SITE: ^{AREA JUST SOUTH of} ~~MAIN DRAINAGE~~ OBSERVER: S. Buezo
 LOCATION PREFIX: ^{K-2-9} ~~PB~~ SEG. NO.: 76 LENGTH: 1500 (M)
 DATE: 7/22/89 TIME (HHMM): 1105-1200 TIDE HT.: -0.33 (M)
 OILED ZONE: Splash High Medium Low (VERY LIGHT SPLAT)
 SUBSTRATUM: Rocks Boulder Cobble Gravel Sand Mud

LIVE BIOTA

Fucus (algae): ^{Locally} Patchy (Y/N) Contin. (Y/N) Dense (Y/N) Sparse (Y/N) None (Y/N)
 VERY WELL DEVELOPED PHYSICAL COMMUNITY. Great abundances and diversity.
Fucus sp., Ralfsia, Halosaccionia, Corallina sp., Laminaria, Sodium, Algia & Ulva
Mytilus (Mussels): ^{Locally} Patchy (Y/N) Contin. (Y/N) Dense (Y/N) Sparse (Y/N) None (Y/N)
 Found P. edulis in ITZ and locally in MITZ.

Balanus (Barnacles): ^{Generally} Patchy (Y/N) Contin. (Y/N) Dense (Y/N) Sparse (Y/N) None (Y/N)
 Found in great abundance throughout section; B. glandula dominant w/
 some B. crenatus in lower ITZ.

Littorina
 Patchy (Y/N) Contin. (Y/N) Dense (Y/N) Sparse (Y/N) None (Y/N)
 Limited in range to cobble/boulder RITZ tide pools. Found in
 CLUSTERS

Limpets: Patchy (Y/N) Contin. (Y/N) Dense (Y/N) Sparse (Y/N) None (Y/N)
 GREATER ABUNDANCE THAN PB-2013; YET STILL SPARSE

OTHER OBSERVATIONS: Greater abundances of Tealia, Katharina and
Massamius sp. Visible SALMONID sp. seen in subtidal creek

CLEANUP PRECAUTIONS: EXTREMELY WELL DEVELOPED ECOSYSTEM in ITZ
Also ANTG stream drains across section

MAMMALS: Otters X Harbor Seals X Sea Lions Whales
 other FOX (RED)

BIRDS: 3 BIRD EAGLES (JUVENILES) sited. Assume local nest

GENERAL OBSERVATIONS: DELICATE community. No clean-up
recommended.

Tanaak Cape

Malina

Bay

PA-4
K-2-9-73-3

stream

al
eagle
nest

A F O

x1320

ACE 8702074

K020901* K2-9 covers SCAT
Segments PA-4, PA-5, PA-6, PA-7

ADEC Post-Treatment Survey Form

Assessment
SEGMENT ~~SURVEY~~ - (K2-9) (SCAT PA-4)Date: 19 Sept 89 Time: 1330 Location: South Side Cape Paramanof
to Cape TanduakTeam members J.R. Hopkins, Jeff Ginalias
Survey type: boat / ground / helicopter / floatplane

WEATHER / SEA CONDITIONS

Low tide: (time/height) 1051 1.2 High tide: (time/height) 1708 9.8
Weather: surry - cloudy - rain - fog - snow
Sea: (rough - moderate - calm) Wave height: 4-6 ft.
Wind direction: (N-NE-E-SE-S-SW-W-NW) Knots: (0-15 16-30 30+)

SHORELINE DESCRIPTION

Type: (headland - low lying rocky beach - cove - lagoon - marsh)
Exposure to waves: (high - medium - low)
Sediment type: (bedrock - boulder - cobble - gravel - sand - silt)

OIL CHARACTERISTICS

Degree of oiling:

heavy = > 50% coverage of the intertidal zone

moderate = 10 - 50%

light = < 10%

very light = < 1%

none

> 6m

3-6m

1-3m

< 1m

Area of impact: (supratidal - high - mid - low - subtidal)Surface coverage, continuous: (y/n) NoMax. thickness: 2 mm Max. penetration: H cm H 15 cm L cmAverage oil coverage: 10 % Oiled drift debris: (y/n)Oil type: pooled - mousse - sticky - tarry - asphalt - stain

BIOLOGICAL DAMAGE

Fucus (algae): (oiled - damaged - cooked - normal)Mytilus (mussels): (dead, live - oiled - tarred - stained - normal)Balanus (barnacles): (dead, live - oiled - tarred - stained - normal)Mammals: (dead) None Birds: (dead) None

SOLID WASTE LEFT ON SHORE:

(none) - one locality - few localities - many localities)
(boom-cleanup debris-garbage-signs-paint marks-other)Number of bags collected: +15
ACE 8702075

K2-9

2/11

SAMPLE INFORMATION None

station # (i.e. KN012/1; Knight Island, segment 012, sample 1)
((oss = oil surface sediment obs = oil bulk sediment))

1. _____ (oss-obs)
2. _____ (oss-obs)
3. _____ (oss-obs)
4. _____ (oss-obs)

PHOTO INFORMATION

station# (i.e. KN012/01) 89//who//s/p//roll#/frame(89GPs23/1-8)

- | | |
|----------------------------|-----------|
| 1. <u>89 JRM 4 / 33-36</u> | 11. _____ |
| 2. _____ | 12. _____ |
| 3. _____ | 13. _____ |
| 4. _____ | 14. _____ |
| 5. _____ | 15. _____ |
| 6. _____ | 16. _____ |
| 7. _____ | 17. _____ |
| 8. _____ | 18. _____ |
| 9. _____ | 19. _____ |
| 10. _____ | 20. _____ |

COMMENTS (Be specific, where, what, etc.)

Direction walking along segment: Water on (left - right)

Distance: (if pacing - who, and #)

K020901 Gravel beach with a southwest
exposure - Heavy drift wood deposit
high on beach. Band of oil
continuous along length of beach
(≈ 200 yds). This is one of the
few beach areas in K2-9.
Most of the rest of the section
is headlands and large rock
shore areas or very narrow
bands along the headlands.
This is not a good site for Winter
212 Helicopter landings; the beach
is too narrow and full of drift wood.

Signature [Signature] Date 19 Sept 89.

include 1/2 inch to 1 inch map marked up?
hand drawn detail of important observations?

-1/1515
ACE 870207c

KODIAK SCAT
K2-10

COMPLETE JAN 23 1990

ACE 8643506

(version 6/04/89)

SHORELINE PRE-CLEANUP ASSESSMENT BLOCK REPORT

Block (see enclosed map): K2-10

Includes Shoreline Segments: MB-1, MB-2, MB-3, MB-4, MB-5, MB-6,
MB-7, MB-8, MB-9, MB-11, MB-13

Location: Malina Bay

Submitted: _____ Date: _____
(for Exxon)

FOSC Approval: _____ Date: _____

The cleanup procedures identified in the Shoreline Cleanup Program are recommended. Exxon and other field personnel are encouraged to suggest innovations and productivity enhancements to the OSC's on-scene representative. Requirements for safety and the protection of cultural material must be observed.

CC: KISCC

ACE 8702077

DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

50 14600NA

K2-10

MB-13

MB-3

MB-2

MB-4

MB-5

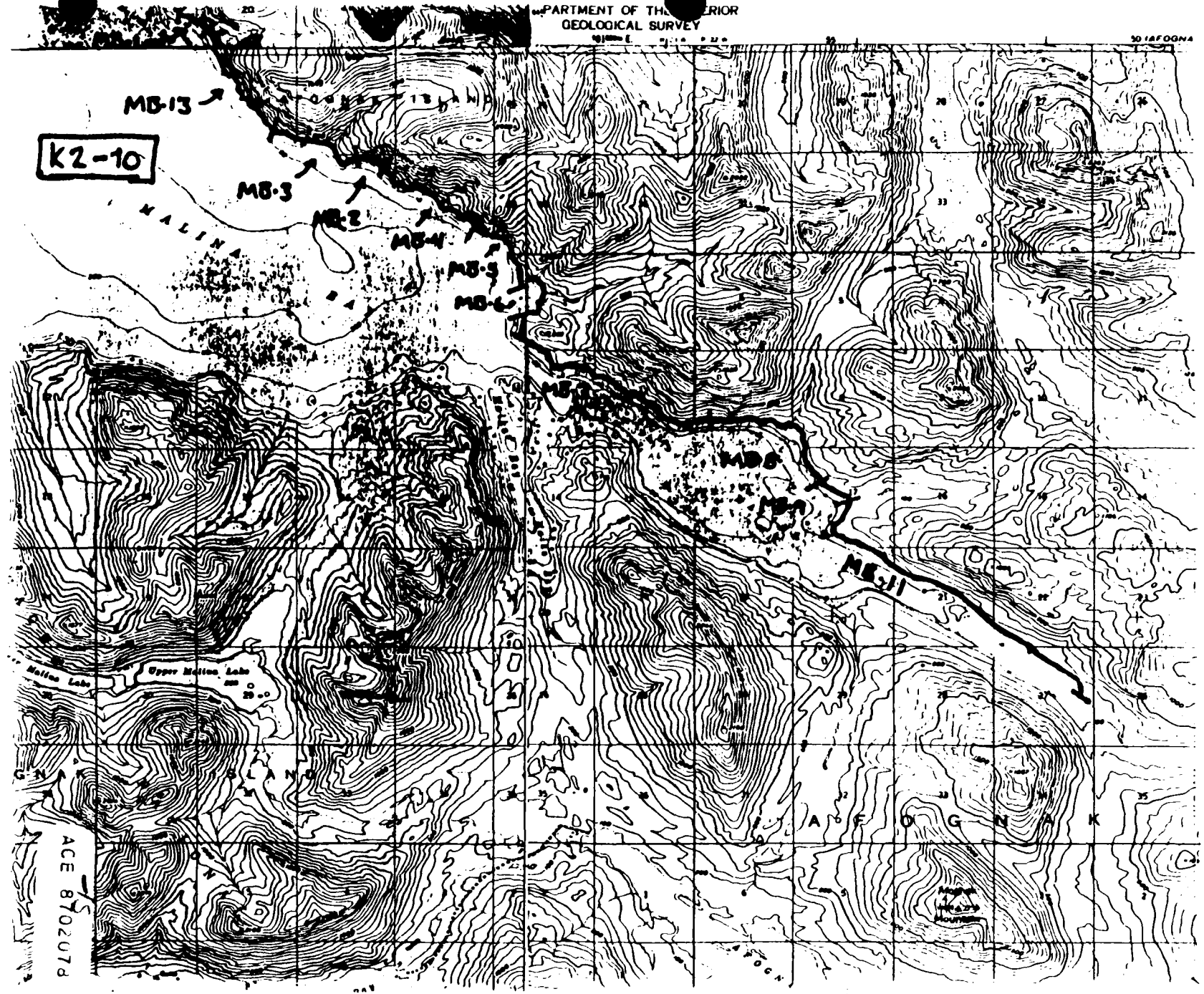
MB-6

MB-11

Upper Malina Lake

Malina Lake

ACE 8702078



(version July 23, 1989)

SHORELINE PRE CLEANUP REASSESSMENT

DATE 7/25/89 SHORELINE SEGMENT K2-10-MB-1 REASSESSMENT DATE 7/25

Observers: OG B. Trimm BIO D. McCormick ARCH J. Erlandson

Reason for Reassessment Dramatic change in oiling

Revised Recommended Cleanup Activity(ies):

- Manual removal of thicker accumulations of fresh mousse in between boulders & rock crevices.
- Manual removal of oiled sediments may require excavation of more than 1 inch material. If boulders are moved to recover oil, replace afterwoods to prevent erosion.
- Limited access to calm days for boats and calm days and low tide for helicopters.
- Due to the significant increase in oiling a full assessment was completed for this segment.

Revised Ecological Constraints:

- No constraints for manual removal.

Revised Archaeological Constraints:

No access to the forest/upland zone by beach crews during cleanup in this segment.

-If heretofore undiscovered cultural materials are uncovered during cleanup, contact Exxon's Archaeological Field Director and take actions prescribed in the Operational Guidelines for Shoreline Cleanup dated 4/21/89 as amended.

J. David M. McArthur
State Historic Preservation Officer *

Date: 7/28/89

EXXON: _____

Date: _____

FOSC: _____

Date: _____

*Signature required to satisfy stipulations in Alaska DNR land use permits for tide submerged lands.

ACE ^{7/5} 8702079

REASSESSMENT
SHORELINE OIL EVALUATION

Date: 25 July 89 / Time: 1410
 Surveyed From: Boat/Boat/Helio/Plane

Observer: Bryan Trimm
 Weather: Sun/Cloud/Rain/Snow/Fog

CATION

Location: South & Adjacent to Tanager Cape, Malina Bay, Arecibo, Puerto Rico Segment ID: K2-10-MB-1
 Segment Length: 250 m. Access: Vehicle/Boat/Barge/Helio/Float Plane
 Access Restrictions: Boat limited to calm days / Helio limited to low tide & calm days

SHORELINE

Shoreline Type: SPI/BEA/COV/HLD/STRT Slope: Lo/Med/Hi/Vert
 Wave Exposure: High/Med/Low
 Sediment: B 40% / C 20% / P 10% / G&S 10% / M ___% / R 20%

OIL

Avg. Degree of Oiling: HEAVY / MODERATE / LIGHT / VERY LIGHT / NONE OBSERVED
 Area of Impact: SU/SP/H/M/L

OIL DISTRIBUTION

Continuous % of Segment 70 SU/SP/H/M/L H/M/L/VL
 Sporadic % of Segment 10 SU/SP/H/M/L H/M/L/VL

Total	Length(m)	Width(m)	Thickness (cm):	
Very light:	<u>60</u>	<u>1</u>	<u>1</u>	SU/SP/H/M/L
Light:	<u>50</u>	<u>3</u>	<u>30</u>	SU/ <u>SP</u> /H/M/L
Moderate:	<u>50</u>	<u>5</u>	<u>0</u>	SU/SP/H/M/L
Heavy:	<u>40</u>	<u>7</u>		

Mobilization Potential: High/Medium/Low

Drift Debris Oiled? Y/N Amount: H/M/L/VL SU/SP/H/M/L Type: _____

OIL MORPHOLOGY

Coiled Oil:	<u>1</u>	%	SU/SP/H/M/L
Free Oil:	<u>20</u>	%	SU/ <u>SP</u> /H/M/L
Plattered:	<u>30</u>	%	SU/ <u>SP</u> /H/M/L
Coated:	<u>50</u>	%	SU/ <u>SP</u> /H/M/L
Pancakes/Balls:	<u>1</u>	%	SU/SP/H/M/L

H/M/L/VL
H/M/L/VL

Preliminary Cleanup Est.

Total TYPE A: 200 m
 Total TYPE B: _____ m
 Total TYPE A/B: _____ m

OIL WEATHERING

Fresh:	<u>1</u>	%	SU/SP/H/M/L
Mousse:	<u>20</u>	%	SU/ <u>SP</u> /H/M/L
Weathered Mousse:	<u>80</u>	%	SU/ <u>SP</u> /H/M/L
Asphalt Mousse:	_____	%	SU/SP/H/M/L
Bar:	_____	%	SU/SP/H/M/L

COMMENTS

THE BEACH IS BOULDER RUBBLE RUBBLE. AT THE BASE OF VERTICAL ROCKY CLIFFS, WEATHERED & FRESH (CHOCOLATE) MOUSSE IS FOUND IN THE HITZ & SPLASH ZONE FOR 80% OF THE SEGMENT LENGTH. THE FRESH MOUSSE (& THICKEST ACCUMULATION, 1CM) IS FOUND IN BETWEEN THE BOULDERS. THE OILING BAND VARIES FROM 0 TO 7m WIDE. THE EXPOSED SURFACES HAVE WEATHERED MOUSSE & ONLY IN BETWEEN THE BOULDERS (PROTECTED) IS THERE ANY FRESH MOUSSE LEFT. OIL SEEMS TO BE DEGRADING.

DOCUMENTATION:

Map/Aerial photo marking segment boundaries See Attached

VTR: Y/N Tape Number(s) ?

Photography: Y/N Roll Number(s) _____

Sample Numbers Collected: N/A

29 July 89

Tuesday

25 July

Tuesday

1345

FLY OVER TANAKA CAY

ROCKY HEADLANDS & WELL ROUNDED

B/C. H. ENERGY WAVE. NO OIL

OBSERVED FROM HELICO. LIMITED

ACCESS - NO RECOMMENDED

CLEANUP.

1410

- MB-1

CLOUDY

OVERFLOW - FOUND WORK CREWS CLEANING

AT PRESENT TIME. GENERALLY 10-30m

WIDE B/C/P BEACH. H. ENERGY ROCKY

CLIFFS (VERT)

ACCESS - BOAT ONLY

LT COAT 0.7m WIDE WEATHERED Mousse

OIL WEATHERING FROM EXPOSED SURFACES

HITE/SP REALLY NO BURIAL/PENETRATION

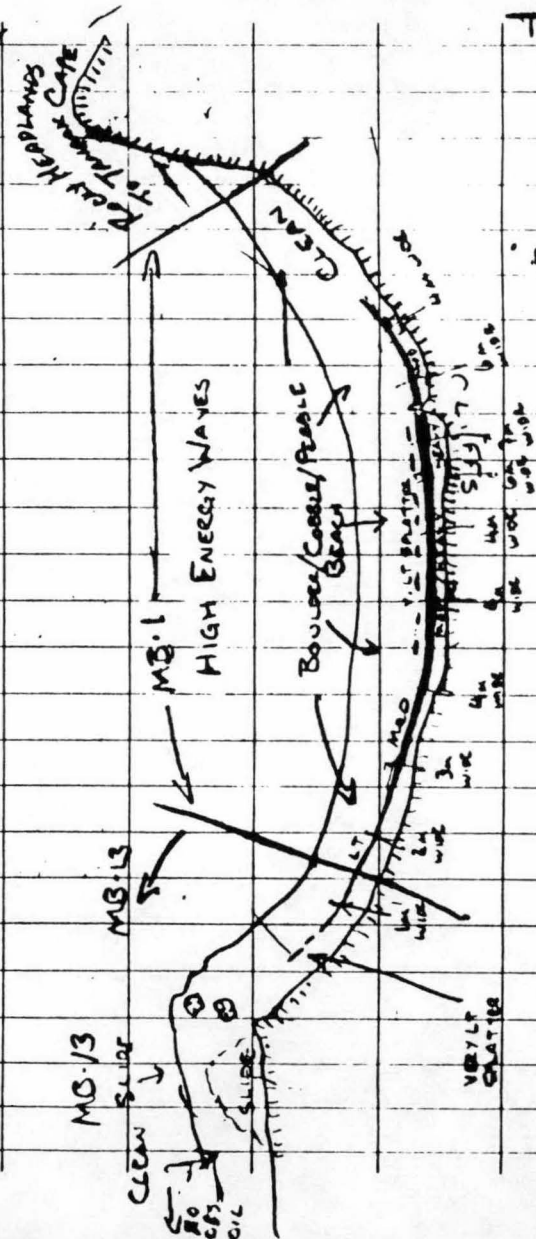
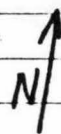
- MAYBE TO 30m - COARSE GRAINED BEACH

HEAVIEST (& ALSO LEAST WORN) IN BETWEEN

BOULDER/CREEVES

SHOWN DEEN BY OIL

20% CHOC MOUSSE 80% WEATHERED MOUSSE



ACE 8702082

LEVEL

ECOLOGICAL EVALUATION

MALINA BAY

LOCATION: AFOGNAK IS. SITE: _____ OBSERVER: D. M. C. COENICK
 LOCATION PREFIX: K-2-10-MB SEG. NO.: 1 LENGTH: 250 (M)
 DATE: 7/31/89 TIME (HHMM): 1410 TIDE HT.: +1.0 (M)

OILED ZONE: Splash High Medium Low

SUBSTRATUM: Rocks Boulder Cobble Gravel Sand Mud

LIVE BIOTA

Fucus (algae): Patchy Y/N Contin. Y/N Dense Y/N Sparse Y/N None Y/N

Mytilus (Mussels): Patchy Y/N Contin. Y/N Dense Y/N Sparse Y/N None Y/N

Patchily dense.

Balanus (Barnacles): Patchy Y/N Contin. Y/N Dense Y/N Sparse Y/N None Y/N

Dense clumps on boulders.

Littorina

Patchy Y/N Contin. Y/N Dense Y/N Sparse Y/N None Y/N

approx 1% are oiled.

Limpets: Patchy Y/N Contin. Y/N Dense Y/N Sparse Y/N None Y/N

None observed

OTHER OBSERVATIONS: Alaria, Laminaria, Colothrix, Halimnion, Kallurina,
Endocladia, Sertulariidae, Externophs, Epiastis, Sculpin in tide
pools.

CLEANUP PRECAUTIONS: None. Cleanup should proceed as is.

MAMMALS: Otters _____ Harbor Seals _____ Sea Lions _____ Whales _____
 Other _____

BIRDS: Capercaillie, gulls, Kittiwakes

GENERAL OBSERVATIONS: Oiling varies from very light splatter to
moderate and heavy in area that clean-up crew is already working
in. Very little oil stressed biota seen in this segment and clean-up operation
does not appear to be impacting clean, healthy areas of the ITZ.

NOTE: CLEANUP CREW WORKING ON BOUNDARY BETWEEN MB-12 & MB-13

ACE 8702083

-
- No oil observed
 - V. Light
 - Light
 - Moderate
 - Heavy

UNIVERSITY OF CALIFORNIA
DEPARTMENT OF GEOLOGY
NO. 1

K2-10

MB-13

MB-3

MB-2

MB-4

MB-5

MB-6

MB-7

ACE 8702084

(version 5/02/89)

SHORELINE CLEANUP PROGRAM

DATE 5/20/89

SHORELINE SEGMENT MB-1

LOCATION: (see enclosed map) South of Tanqok Cape in Malina Bay

ADEC NO. _____ SHORELINE ASSESSMENT DATE: 5/19/89

Recommended Cleanup Activity(ies):

No cleanup recommended.

Priorities Considerations:

None.

Ecological Constraints (from site survey):

No ecological constraints since cleanup is not recommended. An ecological evaluation form is not included. Should this recommendation change, ecological constraints must be reevaluated.

Archeological Constraints (from site survey):

If cleanup is planned, a cultural resource evaluation must be completed.

Charles E. Holmes
State Historic Preservation Officer *

Date: May 21, 1989

EXXON: _____

Date: _____

FOSC: _____

Date: _____

* Signature required to satisfy stipulations in Alaska DNR
land use permits for tide and submerged lands .

ACE 8702085

SHORELINE OIL EVALUATIONDate: 19 May 1989 Time: 1012Observer: BRYAN TRIMMSurveyed From: Foot/Boat/Helio/PlaneWeather: Sun/Cloud/Rain/Snow/FogLOCATIONLOCATION 1/2 mi (0.9 km) S of TANAKA CAPE (AFOGNAR IS) SEGMENT NUMBER MB-1LENGTH OF SHORELINE SEGMENT: 250 mACCESS: Foot/Vehicle/Boat/Barge/Helio/Float PlaneSHORELINE:Shoreline Type: SPI/BEA/COV/HLD/STRTSlope: LANG/HANG/VERWave Exposure: High/Med/LowSediment: B 75% / C 25% / P % / G % / S % / M % / R %Drift Debris on Beach: Yes/No Supra/Upper/Mid/Lower Type LOGS/SEAWOODOILDegree of Oiling: Heavy/Moderate/Light/No Oil/UnobservedArea of Beach Impact: SU / SP / H / M / LContinuous: Y/N % of Segment 10 Width of Band: 2 mSporadic: N/N % of Segment 5Est. Oil Thickness where > 1cm: cm Est. Oil Penetration: cmPooled Oil: % "Free" Oil: % Coated: H % / M 100% / L %Fresh % Mousse 100% Tar Formation: %Drift Debris Oiled? Yes/No Supra/Upper/Mid/Lower Amount: H/M/L/

Comments:

MB-1 IS INACCESSIBLE TO REALLY ANY CLEAN-UP CREW. NO CLEAN-UP RECOMMENDED.

DOCUMENTATION:Map/Aerial photo marking segment boundaries AttachedTR: Y/N Tape Number(s) NonePhotography: Y/N Roll Number(s) NoneSample Numbers Collected: None

Malina River

MB-1

AFOGNAK ISLAND

MB-2

MALINA

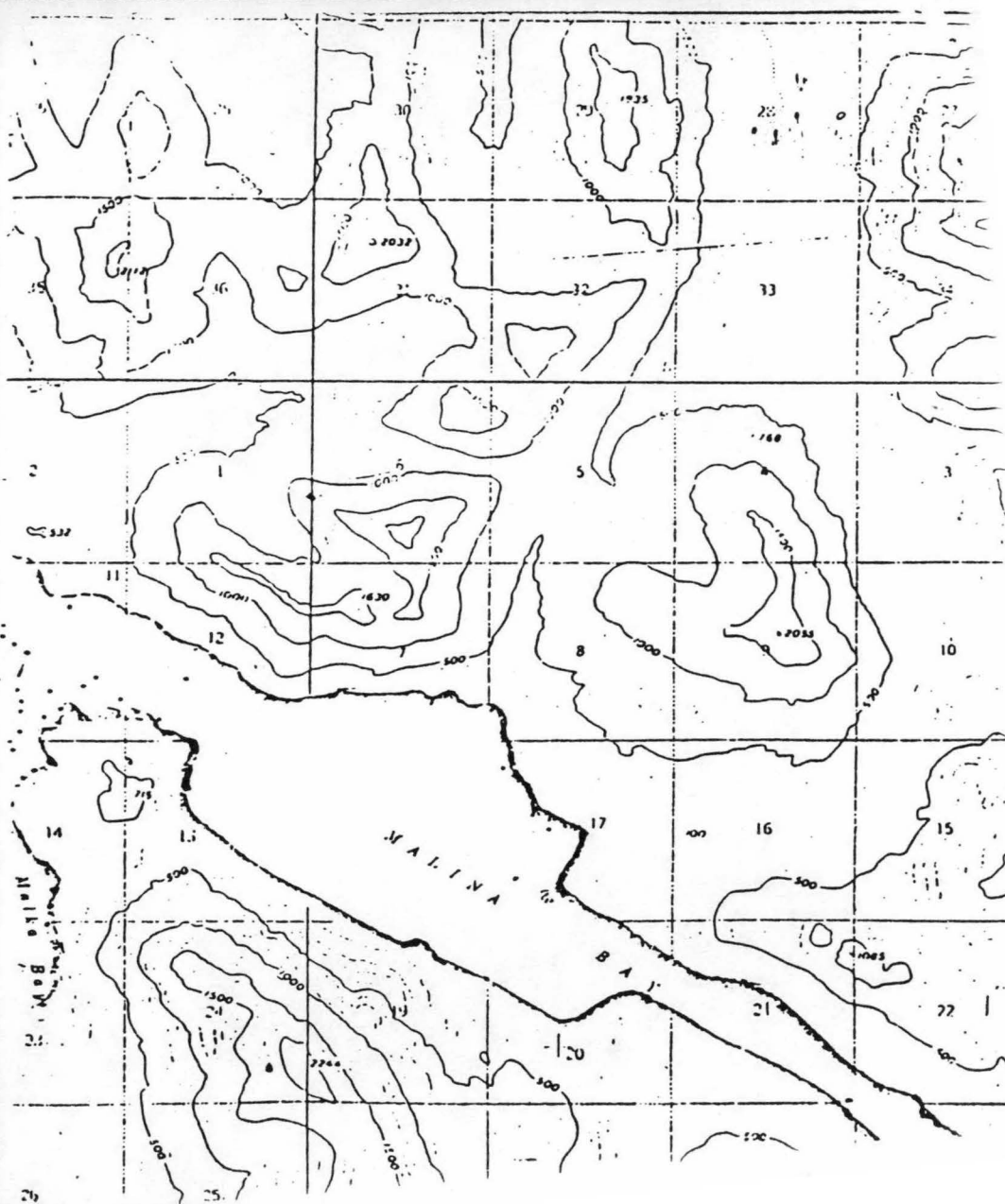
BAY

Malina Bay

ACE 8702089

Upper Malina Lake

Cloud Peak



(version July 23, 1989)

SHORELINE PRE CLEANUP REASSESSMENT

DATE 7/25/89 SHORELINE SEGMENT K2-10-MB-2 REASSESSMENT DATE 7/25

Observers: OG B. Trimm BIO D. McCormick ARCH J. Erlandson

Reason for Reassessment Significant time lapse since original
assessment

Revised Recommended Cleanup Activity(ies):

- No revisions to original recommendation of no cleanup. Subject
to FOSC reassessment at a later date.

Revised Ecological Constraints:

Revised Archaeological Constraints:

- If cleanup is planned, cultural resource evaluation must be
completed.


State Historic Preservation Officer *

Date: 7/25/89

EXXON: _____

Date: _____

FOSC: _____

Date: _____

*Signature required to satisfy stipulations in Alaska DNR land
use permits for tide submerged lands.

(version 5/02/89)

SHORELINE CLEANUP PROGRAM

DATE 5/20/89

SHORELINE SEGMENT MB-2

LOCATION: (see enclosed map) North shore of Malina Bay

ADEC NO. _____ SHORELINE ASSESSMENT DATE: 5/19/89

Recommended Cleanup Activity(ies):

No cleanup activities recommended.

Priorities Considerations:

None.

Ecological Constraints (from site survey):

No ecological constraints since cleanup is not recommended. An ecological evaluation form is not included. Should this recommendation change, ecological constraints must be considered.

Archeological Constraints (from site survey):

If cleanup is planned, cultural resource evaluation must be completed.

Charles E. Holmes
State Historic Preservation Officer *

Date: May 21, 1989

EXXON: _____

Date: _____

FOSC: _____

Date: _____

* Signature required to satisfy stipulations in Alaska DNR land use permits for tide and submerged lands .

ACE 8702091

SHORELINE OIL EVALUATIONDate: 19 May 1989 Time: -1020Observer: Bryan TrimmSurveyed From: Foot/Boat/Helicopter/PlaneWeather: Sun/Cloud/Rain/Snow/FogLOCATIONLOCATION N. SHORE MALINA BAYSEGMENT NUMBER M3-2LENGTH OF SHORELINE SEGMENT: 100 m

ACCESS: Foot/Vehicle/Boat/Barge/Helicopter/Float Plane

SHORELINE:Shoreline Type: SPI/BEA/COV/HLD/STRTSlope: LANG/HANG/VERWave Exposure: High/Med/LowSediment: B 50% / C 50% / P ___% / G ___% / S ___% / M ___% / R ___%Drift Debris on Beach: Yes/No Supra/Upper/Mid/Lower Type LogsOILDegree of Oiling: Heavy/Moderate/Light/No Oil/Unobserved

Area of Beach Impact: SU / SP / H / M / L

Continuous: Y/N ___% of Segment ___ Width of Band: ___ m

Sporadic: Y/N ___% of Segment ___

Est. Oil Thickness where > 1cm: ___ cm Est. Oil Penetration: ___ cm

Pooled Oil: ___% "Free" Oil: ___% Coated: H ___% / M ___% / L ___%

Fresh ___% Mousse ___% Tar Formation: ___%

Drift Debris Oiled? Yes/No Supra/Upper/Mid/Lower Amount: H/M/L/

Comments:

DROPPED ON BEACH FOR 2 MINUTES. DID NOT SEE ANY OILING. NO OIL, NO CLEAN-UP.

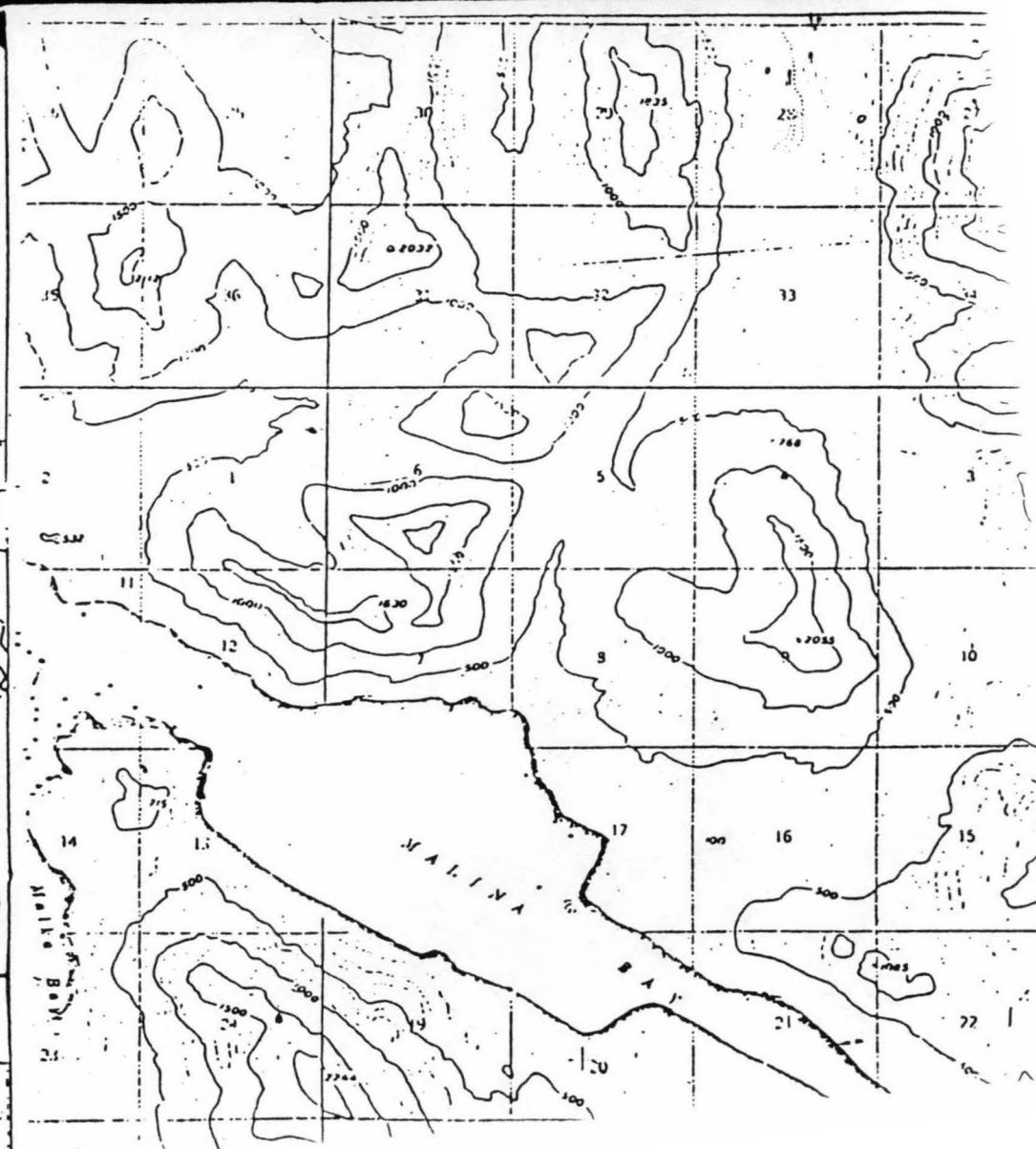
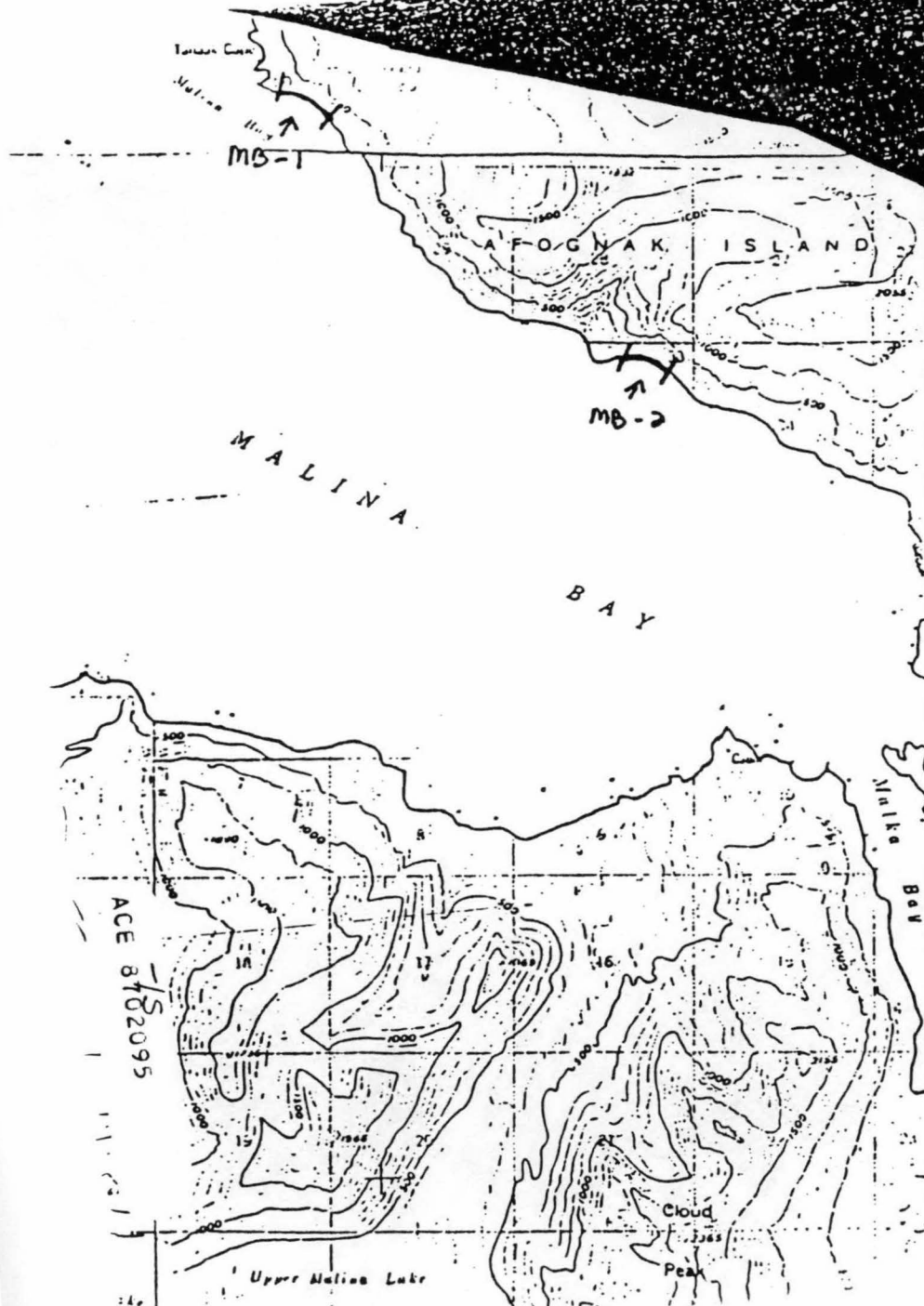
DOCUMENTATION:

Map/Aerial photo marking segment boundaries Attached

VTR: Y/N Tape Number(s) None

Photography: Y/N Roll Number(s) None

Sample Numbers Collected: None



(version July 23, 1989)

SHORELINE PRE CLEANUP REASSESSMENT

DATE 7/25/89 SHORELINE SEGMENT K2-10-MB-3 REASSESSMENT DATE 7/26

Observers: OG B. Trimm BIO D. McCormick ARCH J. Erlandson

Reason for Reassessment Significant time lapsed since original assessment.

Revised Recommended Cleanup Activity(ies):

- Helicopter overflight revealed only very light splatter on boulders.

- Manual removal of oil from boulders, if required, and between boulders should oil be present there.

- Boulder beach and exposure may restrict access to calm days.

Revised Ecological Constraints:

- Avoid cleanup near stream.

- Avoid reoiling of lower intertidal zone when cleaning.

Revised Archaeological Constraints:

If heretofore undiscovered cultural materials are uncovered during cleanup, contact Exxon's Archaeological Field Director and take actions prescribed in the Operational Guidelines for Shoreline Cleanup dated 4/21/89 as amended.


State Historic Preservation Officer *

Date: 7/28/89

EXXON: _____

Date: _____

FOSC: _____

Date: _____

*Signature required to satisfy stipulations in Alaska DNR land use permits for tide submerged lands.

+/S
ACE 8702096

(version 5/02/89)

SHORELINE CLEANUP PROGRAM

DATE 6/29/89

SHORELINE SEGMENT MB-3

LOCATION: (see enclosed map) MALINA BAY, NORTH SHORE-KODIAK

ADEC NO. _____ SHORELINE ASSESSMENT DATE: 6/16/89

Recommended Cleanup Activity(ies):

Hot washing with wands and vacuum to clean the oiled boulder/cobble beach.

Manual removal of oiled debris and if possible, pancake mousse patches.

High pressure washing to remove oil from boulders.

Use other approved methods as appropriate.

Priorities Considerations:

Seabird colonies located within Malina Bay.

Ecological Constraints (from site survey):

Avoid cleanup near stream.

Avoid reoiling of lower intertidal zone when cleaning.

Archeological Constraints (from site survey):

If heretofore undiscovered cultural materials are uncovered during cleanup, contact Exxon's Archeological Field Director and take actions prescribed in the Operational Guidelines for Shoreline Cleanup dated 4/21/89 as amended.

Douglas Reger
State Historic Preservation Officer *

Date: 6/30/89

EXXON: _____

Date: _____

FOSC: _____

Date: _____

* Signature required to satisfy stipulations in Alaska DNR land use permits for tide and submerged lands.

ACE 8702097

(version 5/16/89)

SHORELINE OIL EVALUATION FORM - KODIAK

Date: 6-16-89 / Time: 0917

Observer: S. Peeland

Surveyed From: Foot/Boat/Helio/Plane

Weather: Sun/Cloud/Rain/Snow/Ic

LOCATION

LOCATION Malina Bay

SEGMENT I.D. K-2-10-MB-3

LENGTH OF SHORELINE SEGMENT: 1735 m

ACCESS: Foot/Vehicle/Boat/Barge/Helio/Float Plane

SHORELINE:

Shoreline Type: SPI/BEA/COV/HID/STRT

Slope: LAUG/HANG/VER

Wave Exposure: High/Med/Low

Sediment: B20 / C50 / P10 / G10 / S10 / M / R

Drift Debris on Beach: Yes/No Supra/Upper/Mid/Lower Type Lg / kelp

OIL

Degree of Oiling: Heavy/Moderate/Light/No Oil/Unobserved

Total Area of Beach Impact: SU / SP / H / M / L

OIL DISTRIBUTION

Continuous: Y/N Segment 1 No. Bands _____ Width _____

Sporadic: Y/N Segment 1 Min/Max Dia 5-10cm Impact Width 10m

Est. Oil Thickness where > 1cm: 4 cm SU / SP / UP / MID / LO

Est. Oil Penetration: 0 cm SU / SP / UP / MID / LO

Layers? Yes/No No. Layers _____ Oil Weathering _____

Drift Debris Oiled? Yes/No Supra/Upper/Mid/Lower Amount: 0 / 0 / 1 / 2

OIL MORPHOLOGY

Pooled Oil _____ "Free" Oil 40 Spattered 50 H/H/VL Shown 10

OIL WEATHERING (OW)

Fresh Oil _____ SU/SP/VP/MID/LO Choc Mousse _____ SU/SP/VP/MID/LO

Pancake Mousse 50 SU/SP/VP / MID / LO Asphalt Mousse 50 SU/SP/VP / MID / LO

Tar Formation _____

Comments:

K-2-10-MB-3 is a barren/crble beach backed by moderate
angle cliffs. The OFC oil classification does not adequately describe
the impacts. The beach (barren/crble) is covered by oil which is
weathered into a pancake/asphalt consistency. Oil is very resistant to
removal due to degree of weathering.

ACE 8702098

DOCUMENTATION:

Map/Aerial photo marking segment boundaries See attached

VTR: Y/N Tape Number(s) _____

Photography: Y/N Roll Number(s) JT-1

Sample Numbers Collected: N/A

ACE 8702099

ECOLOGICAL EVALUATION

LOCATION: MALINA BAY SITE: North Shore OBSERVER: J. Tarpley
 LOCATION PREFIX: K-2/MB SEG. NO.: K-2-10-MB-3 LENGTH: 1735 (M)
 DATE: 6/16/89 TIME (HHMM): 0920 TIDE HT.: 0.0 (M)

OILED ZONE: Splash High Medium Low

SUBSTRATUM: Rocks Boulder Cobble Gravel Sand Mud

LIVE BIOTA

↑ rocky pts.

↑ sandy beach areas

Fucus (algae): Patchy Y/N Contin. Y/N Dense Y/N Sparse Y/N None Y/N

In low ITZ

Mytilus (Mussels): Patchy Y/N Contin. Y/N Dense Y/N Sparse Y/N None Y

In low ITZ

Balanus (Barnacles): Patchy Y/N Contin. Y/N Dense Y/N Sparse Y/N None Y

Littorina

Patchy Y/N Contin. Y/N Dense Y/N Sparse Y/N None Y/N

Limpets: Patchy Y/N Contin. Y/N Dense Y/N Sparse Y/N None Y/N

OTHER OBSERVATIONS: Biota all located just NW of stream
Sandy beach had little flora or fauna. Very little drift material

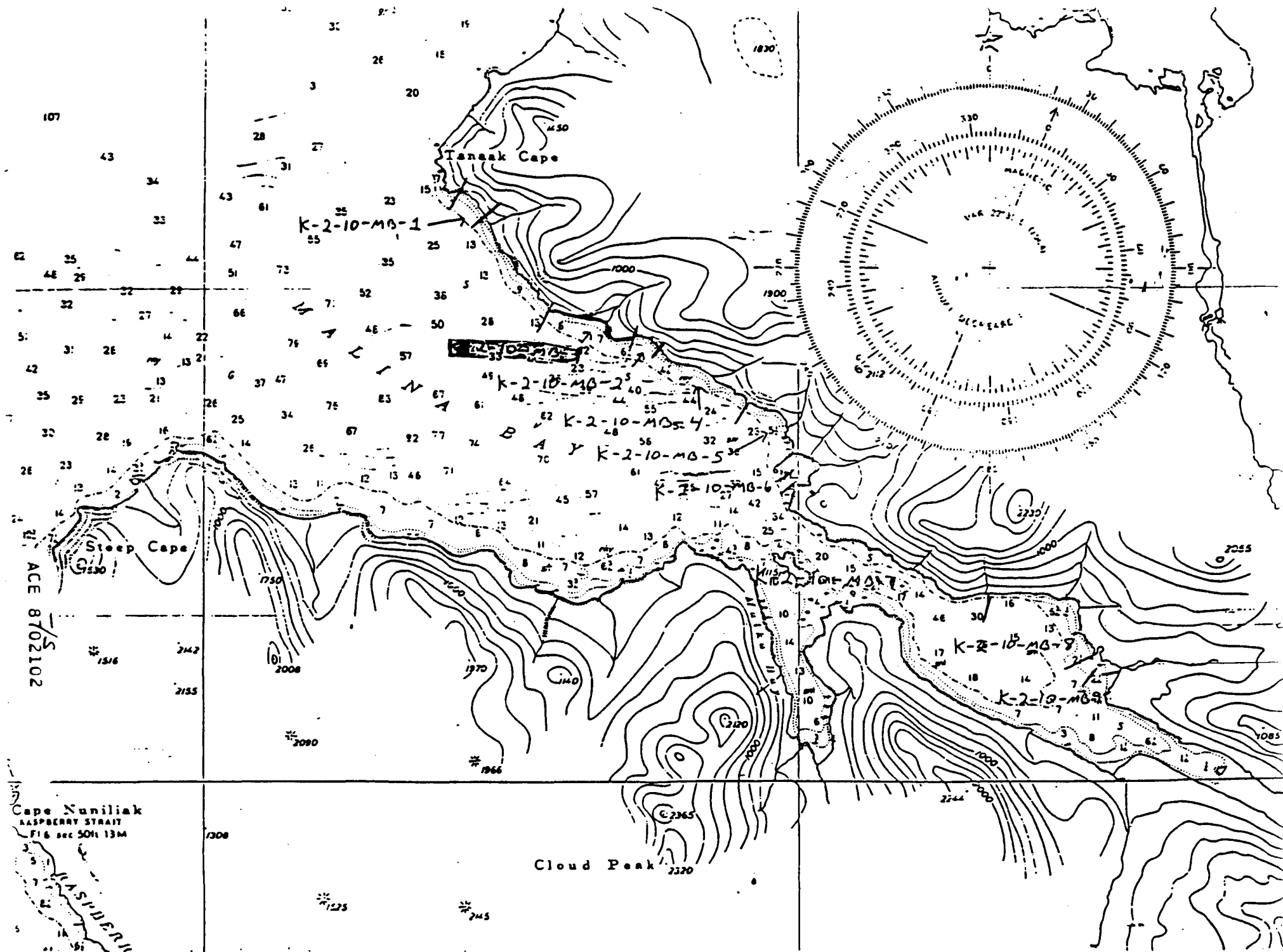
CLEANUP PRECAUTIONS: Avoid cleanup near stream. Avoid washing
oil into low ITZ.

MAMMALS: Otters Harbor Seals Sea Lions Whales
 Other Deer, Fox, Bear Tracks.

BIRDS: None

GENERAL OBSERVATIONS:

ACE 8702100



(version July 23, 1989)

SHORELINE PRE CLEANUP REASSESSMENT

DATE 7/25/89 SHORELINE SEGMENT K2-10-MB-4 REASSESSMENT DATE 7/26

Observers: OG B. Trimm BIO D. McCormick ARCH J. Erlandson

Reason for Reassessment Significant time lapsed since original assessment.

Revised Recommended Cleanup Activity(ies):

- Overflight in helicopter reveals only very light splatter on boulders.
- If required, manually remove splatters from boulders and, if present, oil between boulders.
- Manual removal of oiled sediments to depths greater than 1 inch may also be required. Replacements of boulders moved to access oiled sediments will minimize erosion.

Revised Ecological Constraints:

- Avoid contamination of lower intertidal zone.

Revised Archaeological Constraints:

-If heretofore undiscovered cultural materials are uncovered during cleanup, contact Exxon's Archaeological Field Director and take actions prescribed in the Operational Guidelines for Shoreline Cleanup dated 4/21/89 as amended.

[Signature]
State Historic Preservation Officer *

Date: _____

EXXON: _____

Date: _____

FOSC: _____

Date: _____

*Signature required to satisfy stipulations in Alaska DNR land use permits for tide submerged lands.

ACE 8702103

(version 5/02/89)

SHORELINE CLEANUP PROGRAM

DATE 6/29/89

SHORELINE SEGMENT MB-4

LOCATION: (see enclosed map) MALINA BAY NORTH SHORE

ADEC NO. _____ SHORELINE ASSESSMENT DATE: 6/16/89

Recommended Cleanup Activity(ies):

Hot washing with wands and vacuum to clean the oiled boulder/cobble/gravel beach.

Manual removal of oiled debris and mousse patches, where possible.

High pressure washing to remove oil from boulders.

Use other approved methods as appropriate.

Priorities Considerations:

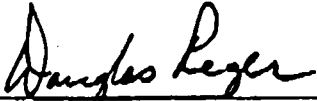
Sea bird colonies and otters in bay.

Ecological Constraints (from site survey):

Avoid washing oil down into lower intertidal zone. This site is densely covered with barnacles, limpets and mussels. Large cleanup crews would damage these organisms which are now alive and healthy.

Archeological Constraints (from site survey):

If heretofore undiscovered cultural materials are uncovered during cleanup, contact Exxon's Archeological Field Director and take actions prescribed in the Operational Guidelines for Shoreline Cleanup dated 4/21/89 as amended.



State Historic Preservation Officer *

Date: 6/30/89

EXXON: _____

Date: _____

FOSC: _____

Date: _____

* Signature required to satisfy stipulations in Alaska DNR land use permits for tide and submerged lands.

ACE 8702104

(version 5/16/89)

SHORELINE OIL EVALUATION FORM - RODIAR

Date: 6-16-89 / Time: 0945

Observer: S. Pealard

Surveyed From: Foot / Boat / Helio / Plane

Weather: Sun / Cloud / Rain / Snow /

LOCATION

LOCATION Malina Bay

SEGMENT I.D. K-2-10-MB-4

LENGTH OF SHORELINE SEGMENT: 1875 m

ACCESS: Foot / Vehicle / Boat / Barge / Helio / Float Plane

SHORELINE

Shoreline Type: SPI / BEA / COV / HLD / STRT

Slope: LAUG / HANG / VER

Wave Exposure: High / Med / Low

Sediment: B20 / C20 / P20 / G20 / S20 / M / R

Drift Debris on Beach: Yes / No Supra / Upper / Mid / Lower Type

OIL

Degree of Oiling: Heavy / Moderate / Light / No Oil / Unobserved

Total Area of Beach Impact: SU / SP / H / M / L

OIL DISTRIBUTION

Continuous: Y / N Segment 1 No. Bands 1 Width 10m

Sporadic: Y / N Segment 100 Min/Max Dias 10 Impact Width 10m

Est. Oil Thickness where > 1cm: < 1 cm SU / SP / UP / HD / LO

Est. Oil Penetration: 0-25 cm SU / SP / UP / HD / LO

Layers? Yes / No No. Layers 1 Oil Weathering 1

Drift Debris Oiled? Yes / No Supra / Upper / Mid / Lower Amount: 1 / 1 / 1 / 1

OIL MORPHOLOGY

Pooled Oil 1 "Free" Oil 50 Spattered 50 H / U / A / FD Sheen 1

OIL WEATHERING (OW)

Fresh Oil 1 SU / SP / VP / MID / LO Choc Mousse 1 SU / SP / VP / MID / LO

Pancake Mousse 50 SU / SP / VP / MID / LO Asphalt Mousse 50 SU / SP / VP / MID / LO

Tar Formation 1

Comments:

ACE 8702105

K-2-10-MB-4 unit is a boulder/cobble/gravel beach backed by high cliffs. Oil occurs in the high to mid tidal zone and appears quite wet, spreading rapidly. On areas of coarse silt, the oil has fallen through the voids in the rocks. The oil is very difficult to remove by manual scrubbing.

DOCUMENTATION:

Map/Aerial photo marking segment boundaries See attached

VTR: Y/N Tape Number(s) _____

Photography: Y/N Roll Number(s) JT-1

Sample Numbers Collected: N/A

ACE 8702106

ECOLOGICAL EVALUATION

LOCATION: Malina Bay SITE: North Shore OBSERVER: J. Tarpley
 LOCATION PREFIX: K-2/MB SEG. NO.: K-2-10-MB-4 LENGTH: 1875 (M)
 DATE: 6/16/89 TIME (HHMM): 0945 TIDE HT.: 0.0 (M)

OILED ZONE: Splash High Medium Low

SUBSTRATUM: Rocks Boulder Cobble Gravel Sand Mud

LIVE BIOTA

Fucus (algae): Patchy Y/N Contin. Y/N Dense Y/N Sparse Y/N None Y/N

On rocky boulder beach - Healthy

Mytilus (Mussels): Patchy Y/N Contin. Y/N Dense Y/N Sparse Y/N None Y/N

Low ITZ on boulder beach

Balanus (Barnacles): Patchy Y/N Contin. Y/N Dense Y/N Sparse Y/N None Y/N

Healthy throughout ITZ

Littorina

Patchy Y/N Contin. Y/N Dense Y/N Sparse Y/N None Y/N

Limpets: Patchy Y/N Contin. Y/N Dense Y/N Sparse Y/N None Y/N

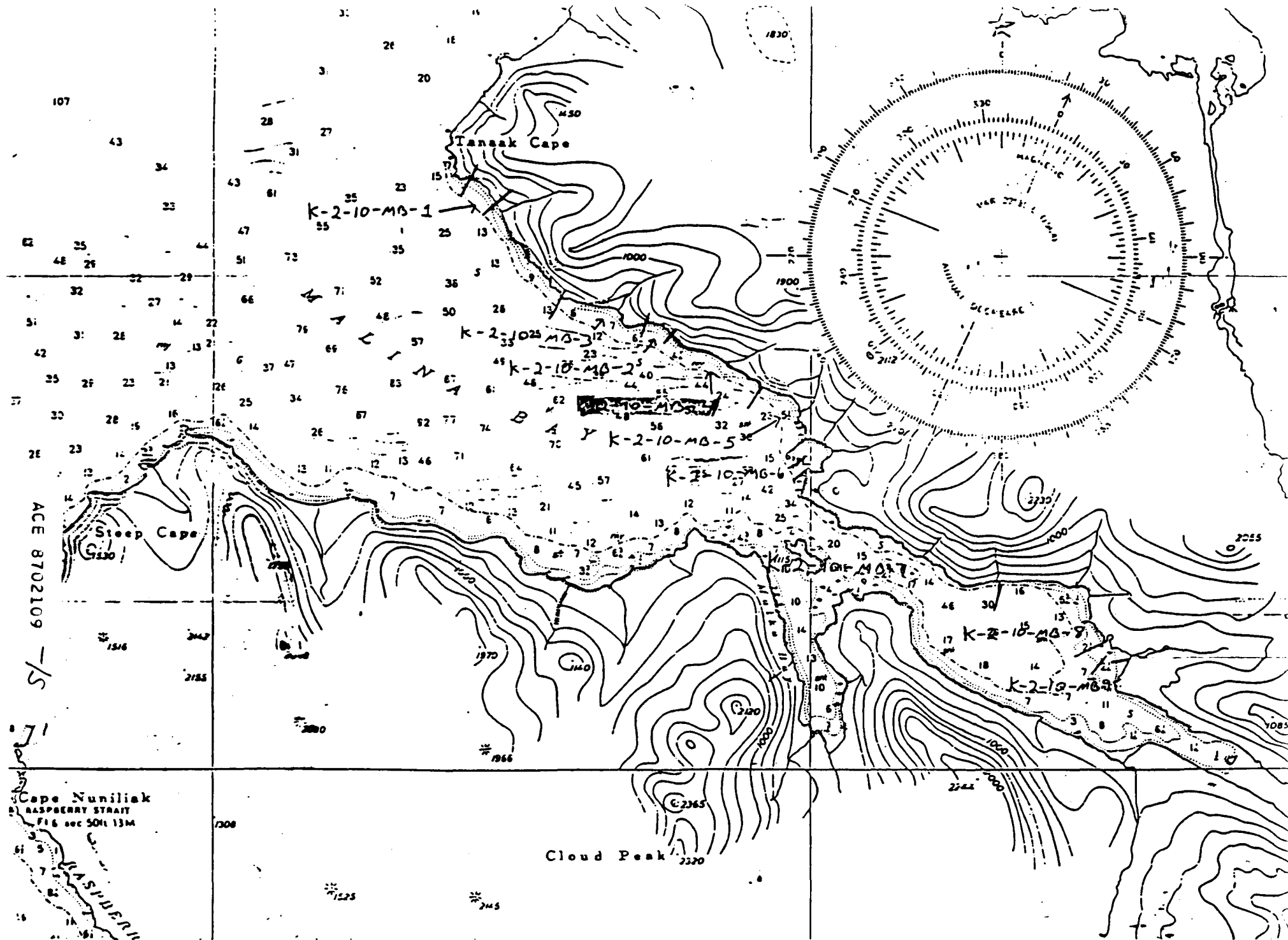
OTHER OBSERVATIONS: Sandy beaches devoid of life, However rock boulder areas are densely colonized by flora & fauna.

CLEANUP PRECAUTIONS: Avoid washing oil into lush growth of low ITZ. Large number of people in cleanup crew would damage barnacles & mussels & limpets throughout the zone

MAMMALS: Otters _____ Harbor Seals 1 Sea Lions _____ Whales _____
 Other Deer tracks Harbor seal seen offshore

BIRDS: Kittiwakes off beach

GENERAL OBSERVATIONS: Oil coated at base of rocks. Little of the biota is affected although where it has been affected has been killed. Areas of rock not oiled, organisms appear healthy.



(version July 23, 1989)

SHORELINE PRE CLEANUP REASSESSMENT

DATE 7/18/89 SHORELINE SEGMENT K2-10-MB-5 REASSESSMENT DATE 7/18

Observers: OG B. Trimm BIO D. McCormick ARCH J. Erlandson

Reason for Reassessment Significant time lapsed since original assessment.

Revised Recommended Cleanup Activity(ies):

- No revisions to original recommendation of no cleanup. Subject to FOSC reassessment at a later date.

Revised Ecological Constraints:

- No revisions

Revised Archaeological Constraints:

If cleanup is conducted and heretofore undiscovered cultural materials are uncovered, contact Exxon's Archaeological Field Director and take actions prescribed in the Operational Guidelines for Shoreline Cleanup dated 4/21/89 as amended.


State Historic Preservation Officer *

Date: 7/28/89

EXXON: _____

Date: _____

FOSC: _____

Date: _____

*Signature required to satisfy stipulations in Alaska DNR land use permits for tide submerged lands.

G. MACDONALD

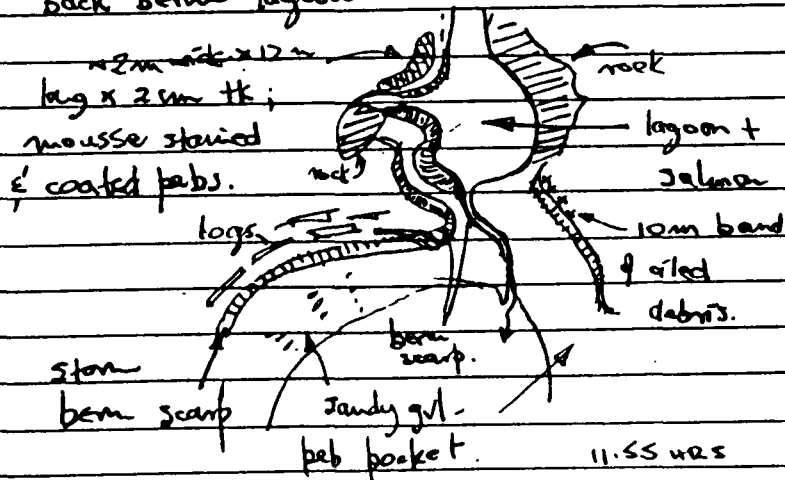
7/18 K2-10 Re-assessments
Malina Bay, N. of Malina B.

① 11:00

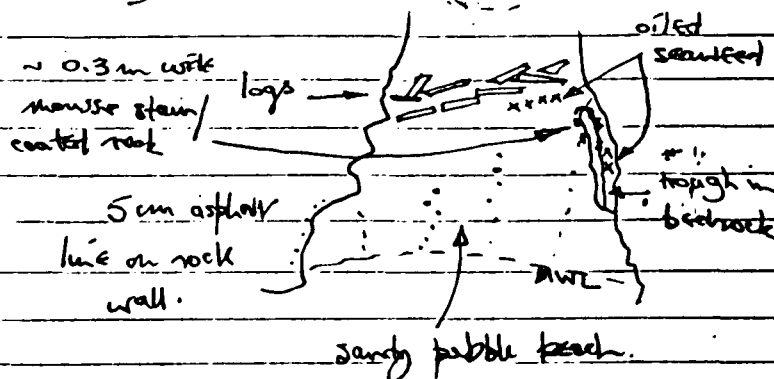
Dyke beach; low pocket b.; no oil; eroded peb. berm @ 30'; trace asphalt spotted driftwood; lower beach sandy guls; no oil; v. exposed - case - diff scour - wave cut scarp.

② mod-hi < peb-snd beach - 2 ter pits in berm to ~ 20' - no oil

③ low-mod < peb-snd beach; lower beach eroded / washed to beach, upper berm face ~ 1m hi; v. exposed small ck; logs exposed in berm face & on top; rare trace of oil stain on logs; back berm lagoon



④ mod < sandy-peb. pocket, a/c bedrock; sandy bottom; Pond;



12:10 hrs.

* trough is self cleaning w/ gtl. scouring; v. exposed but slightly in lee of "gull rookery island."

7/18/89 Malina Bay. Afognak Island

"Eike Bay" reassessment

4 beaches examined

MB-5
4/16/89

1st beach had light bits of oil in wrack
above high energy sand beach - Boulder field
at west end with dense barnacle cover, patchy
mussels, algae etc. - small stream (no fish)

Beach No. 2 - small, passed b.
Beach No. 3.

MB-6
6/16/89

sand beach - stream bisects beach - Anadromous
stream. saw 30 or 40 adult pink salmon
in pool above mouth, also many salmon fry
and juveniles. Oil buried in sand bar
right next to pool with fish in it.
cleanup not recommended - water in pool
clean, fish ok, oil probably will be removed
in winter or spring run off. Some oily wrack
above sand beach east of stream, no constraints
re: cleanup there, but probably difficult to keep crew
away from stream so cleanup not advised.

~~Beach No. 4~~

Beach No. 4

ACE 8702112

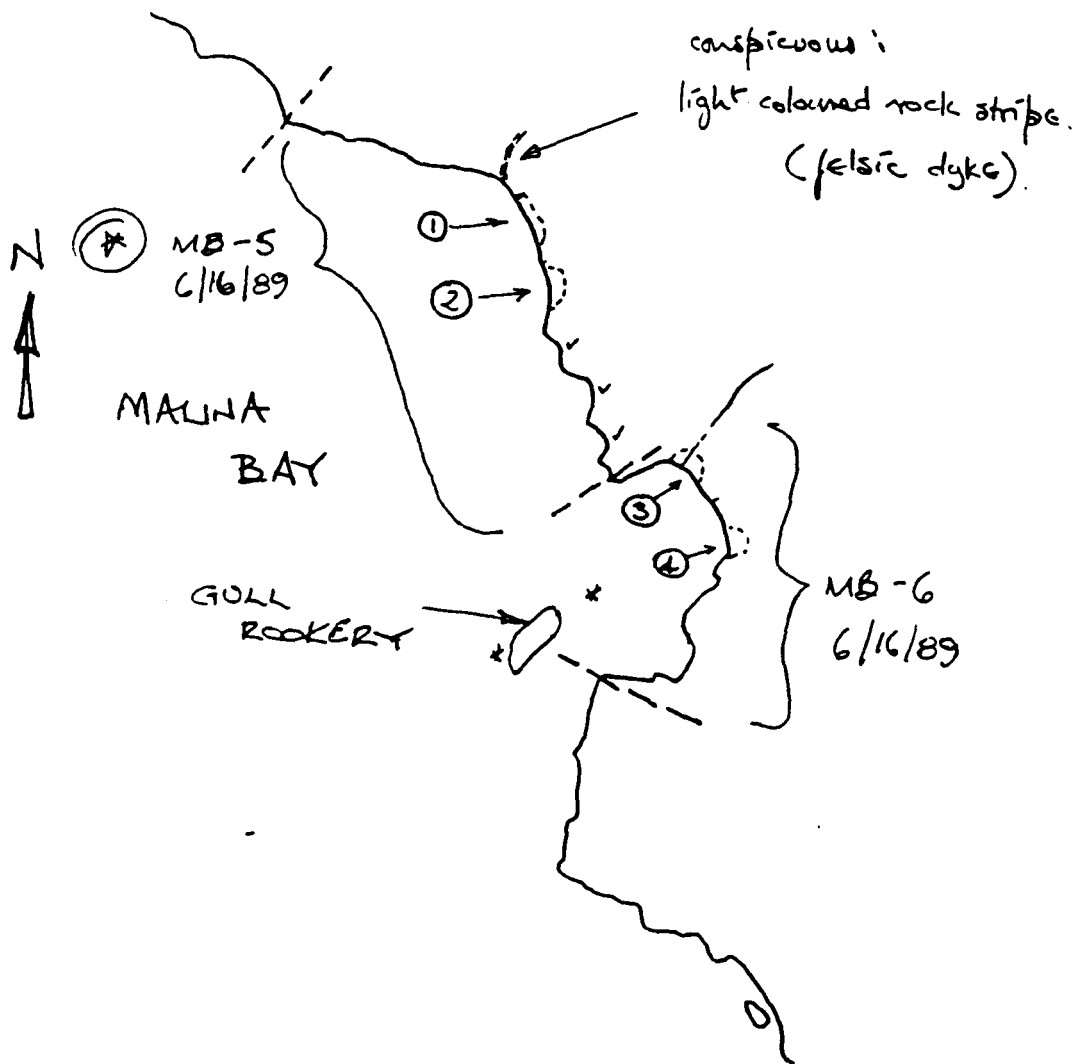
sand/gravel beach, cliffs at each end
1 eagle

some light oil remains on rock at either end, + 10-12 ft
some oiled fucus, a few dead limpets, mussels ok. Gull Roostery
on nearby island (200-300 birds) would be disturbed by cleanup.

7/18/89
G. MACDONALD

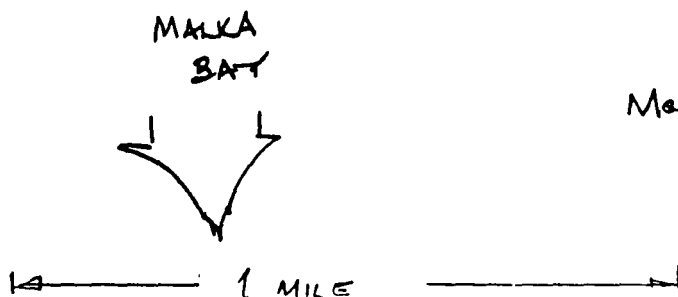
MAJNA BAY REASSESSMENTS (K2-10 ADEL.)

pocket beaches N. of Malika Bay.



ACE 8702113

Map base: USGS topo.
enlargement.



(version 5/02/89)

SHORELINE CLEANUP PROGRAM

DATE 6/29/89

SHORELINE SEGMENT MB-5

LOCATION: (see enclosed map) MALINA BAY NORTH SHORE

ADEC NO. _____ SHORELINE ASSESSMENT DATE: 6/16/89

Recommended Cleanup Activity(ies):

No cleanup recommended at this time, subject to FOSC approval. No oil observed.

Priorities Considerations:

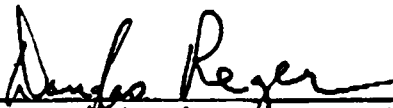
KISCC considers this a sensitive area due to local seabird nesting colonies.

Ecological Constraints (from site survey):

No ecological constraints. Cleanup treatment is not recommended or necessary.

Archeological Constraints (from site survey):

If heretofore undiscovered cultural materials are uncovered during cleanup, contact Exxon's Archeological Field Director and take actions prescribed in the Operational Guidelines for Shoreline Cleanup dated 4/21/89 as amended.



State Historic Preservation Officer *

Date: 6/30/89

EXXON: _____

Date: _____

FOSC: _____

Date: _____

* Signature required to satisfy stipulations in Alaska DNR land use permits for tide and submerged lands.

ACE 8702114

(version 5/16/89)

SHORELINE OIL EVALUATION FORM - KODIAK

Date: 6-16-89 / Time: 1030

Observer: S. Perland

Surveyed From: Foot / Boat / Helio / Plane

Weather: Sun / Cloud / Rain / Snow /

LOCATION

LOCATION Malina Bay (South shore)

SEGMENT I.D. K-2-10-MB-5

LENGTH OF SHORELINE SEGMENT: 900 m

ACCESS: Foot / Vehicle / Boat / Barge / Helio / Float Plane

SHORELINE

Shoreline Type: SPI / BEA / COV / HLD / STRT

Slope: LANG / HANG / VER

Wave Exposure: High / Med / Low

Sediment: B2S / C2S / P2S / G2S / S / M / R

Drift Debris on Beach: Yes / No Supra / Upper / Mid / Lower Type Log / kelp

OIL

Degree of Oiling: Heavy / Moderate / Light / No Oil / Unobserved

Total Area of Beach Impact: SU / SP / H / M / L

OIL DISTRIBUTION

Continuous: Y/N Segment # _____ No. Bands _____ Width _____

Sporadic: Y/N Segment # _____ Min/Max Dia _____ Impact Width _____

Est. Oil Thickness where > 1cm: _____ cm SU / SP / UP / MID / LO

Est. Oil Penetration: _____ cm SU / SP / UP / MID / LO

Layers? Yes/No No# Layers _____ Oil Weathering _____

Drift Debris Oiled? Yes/No Supra / Upper / Mid / Lower Amount: H / M / L

OIL MORPHOLOGY

Pooled Oil _____ % "Free" Oil _____ % Spattered _____ % H/U/L/VL Sheen _____ %

OIL WEATHERING (OW)

Fresh Oil _____ % SU/SP/VP/MID/LO Choc Mousse _____ % SU/SP/VP/MID/LO

Pancake Mousse _____ % SU/SP/VP/MID/LO Asphalt Mousse _____ % SU/SP/VP/MID/LO

Tar Formation _____ %

Comments:

ACE 8702115

No oil observed in unit K-2-10-MB-5.

DOCUMENTATION:

(Map) Aerial photo marking segment boundaries See attached

VTR: Y/(N) Tape Number(s) _____

Photography: (Y)N Roll Number(s) JT-1

Sample Numbers Collected: N/A

ACE 8702116

ECOLOGICAL EVALUATION

LOCATION: Malina Bay SITE: North Shore OBSERVER: J. Tapley
 LOCATION PREFIX: K-2/MB SEG. NO.: K-2-10-MB-5 LENGTH: 900 (M)
 DATE: 6/16/89 TIME (HHMM): 1030 TIDE HT.: +0.2 (M)
 OILED ZONE: Splash High Medium Low ☒
 SUBSTRATUM: Rocks Boulder Cobble Gravel Sand Mud

LIVE BIOTA

Fucus (algae): Patchy ☒/N Contin. Y/☒ Dense ☒/N Sparse Y/☒ None Y/☒

Mytilus (Mussels): Patchy ☒/N Contin. Y/☒ Dense ☒/N Sparse Y/☒ None Y/☒

Balanus (Barnacles): Patchy Y/☒ Contin. ☒/N Dense ☒/N Sparse Y/☒ None Y/☒

Littorina

Patchy ☒/N Contin. Y/☒ Dense Y/☒ Sparse ☒/N None Y/☒

Limpets: Patchy ☒/N Contin. Y/☒ Dense Y/☒ Sparse ☒/N None Y/☒

OTHER OBSERVATIONS: Little seaweed drift. Sandy beach devoid of life
All organisms located on Cobble boulder beach areas.

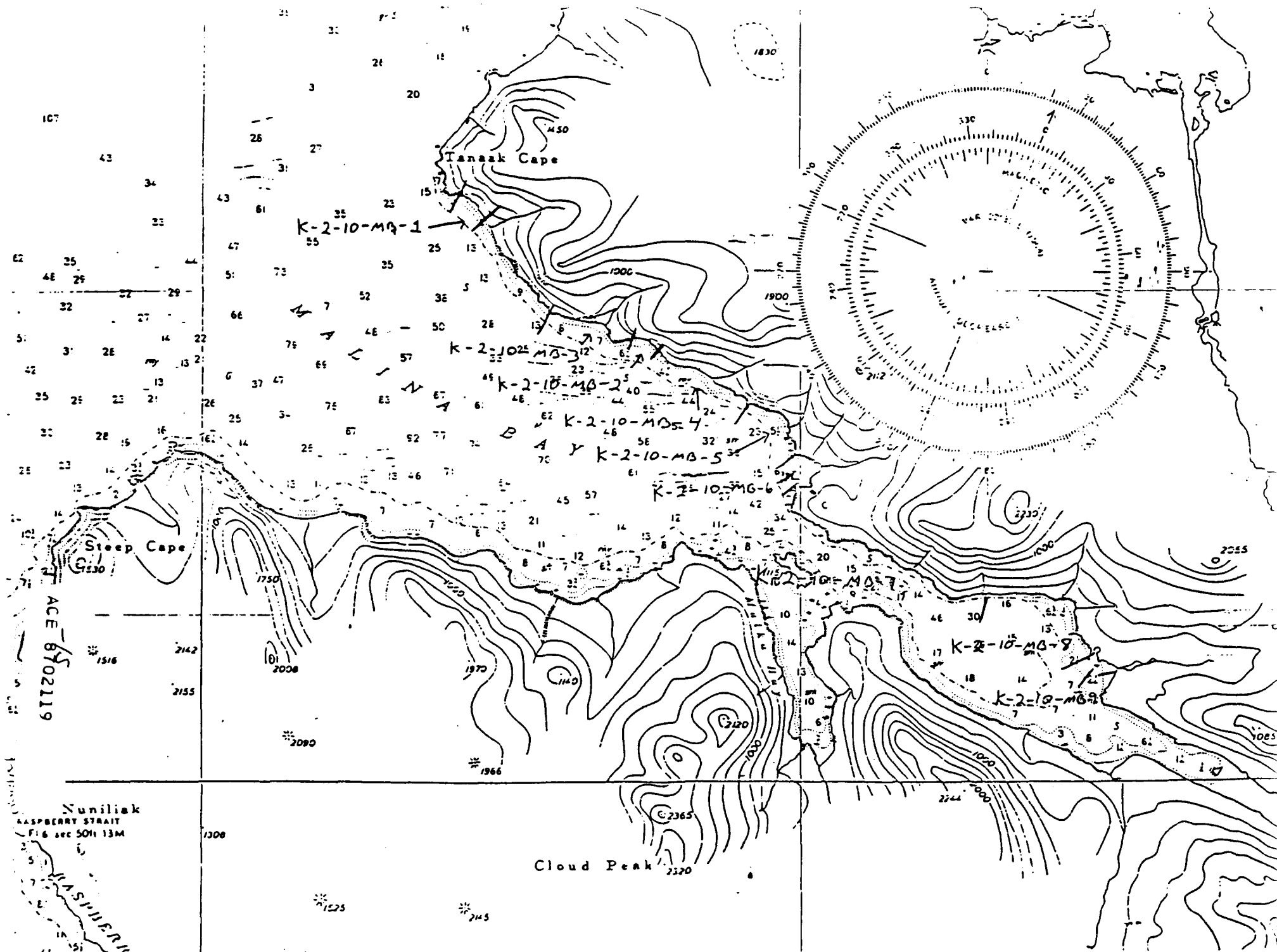
CLEANUP PRECAUTIONS: None since no oil was found.

MAMMALS: Otters _____ Harbor Seals _____ Sea Lions _____ Whales _____
 Other Fox, Deer, & Bear Tracks

BIRDS: None

GENERAL OBSERVATIONS: _____

ACE 8702117



(version July 23, 1989)

SHORELINE PRE CLEANUP REASSESSMENT

DATE 7/18/89 SHORELINE SEGMENT K2-10-MB-6 REASSESSMENT DATE 7/18

Observers: OG B. Trimm BIO D. McCormick ARCH J. Erlandson

Reason for Reassessment Significant time lapsed since original assessment.

Revised Recommended Cleanup Activity(ies):

- No cleanup recommended due to apparent rapid natural cleaning in process and ecological constraints listed below. Subject to FOSC reassessment at a later date.

Revised Ecological Constraints:

- Avoid fertile salmon stream on Beach #3.
- Large gull rookery on Beach #4. No cleanup recommended.

Revised Archaeological Constraints:

If cleanup is conducted and heretofore undiscovered cultural materials are uncovered, contact Exxon's Archaeological Field Director and take actions prescribed in the Operational Guidelines for Shoreline Cleanup dated 4/21/89 as amended.


State Historic Preservation Officer *

Date: 7/28/89

EXXON: _____

Date: _____

FOSC: _____

Date: _____

*Signature required to satisfy stipulations in Alaska DNR land use permits for tide submerged lands.

ACE⁺¹⁵ 8702120

Gr. Macdonald

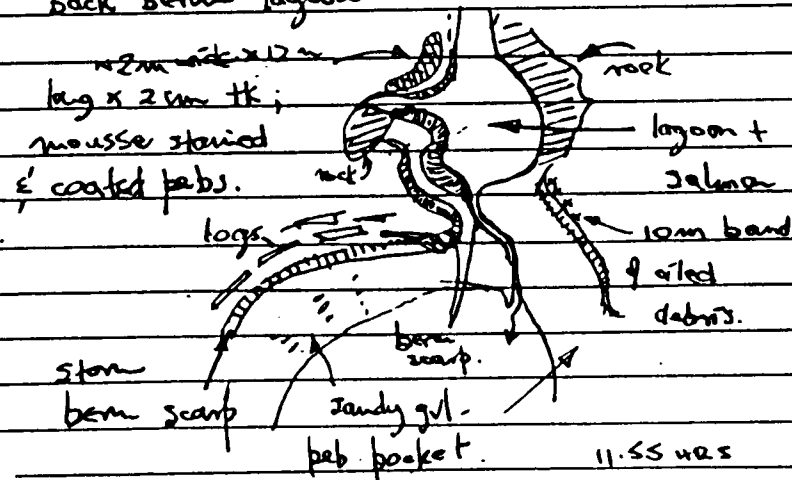
7/18 K2-10 Re-assessments
Malina Bay, N. of Malika B.

① 11:00

Dyke beach; low pocket b.; no oil; eroded peb. berm @ 20'; trace asphalt spotted throughout; lower beach sandy gills; no oil; v. exposed - cave - diff scum - wave cut scarp.

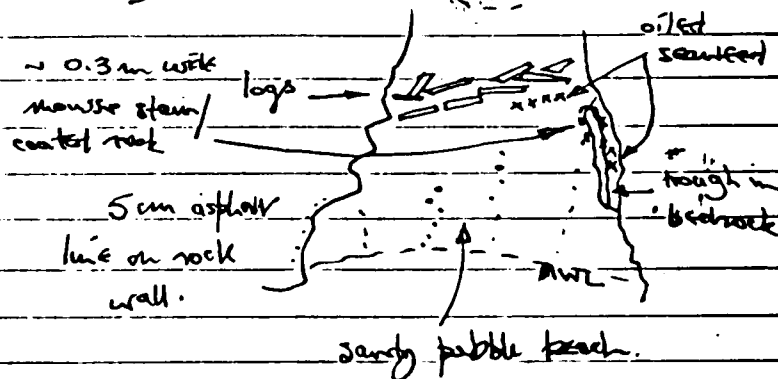
② mod-hi low peb-snd beach - 2 tier pits in berm to N 20' - no oil

③ low-mod low peb-snd beach; lower beach eroded / wooded to backrock, upper berm face ~ 1m hi; v. exposed small ck; logs exposed in berm face & on top; rare trace of oil stain on logs; back berm lagoon



11:55 hrs

④ mod low sandy-peb. pocket, oiled bedrock; sandy bottom; Pond;



12:10 hrs.

* though is self cleaning w/ gill scouring; v. exposed but slightly in lee of "gull rookery island."

17 Fawcett

7/18/89 Malina Bay, Afognak Island
"Dike Bay" reassessment

4 beaches examined

MB-5
4/16/89

1st beach had light bits of oil in wrack
above high energy sand beach - Boulder field
at west end with dense barnacle cover, patchy
mussels, algae etc. - small stream (no fish)

Beach No. 2 - small, passed by
Beach No. 3.

sand beach - stream bisects beach - Anadromous
stream: saw 30 or 40 adult pink salmon
in pool above mouth, also many salmon fry
and juveniles. Oil buried in sand bar
right next to pool with fish in it.
cleanup not recommended - water in pool
clean, fish ok, oil probably will be removed
in winter or spring run off. Some oily wrack
above sand beach east of stream, no constraints:
cleanup there, but probably difficult to keep oil
away from stream, so cleanup not advised.

MB-6
6/16/89

~~Beach No. 4~~

Beach No. 4

ACE 8702122

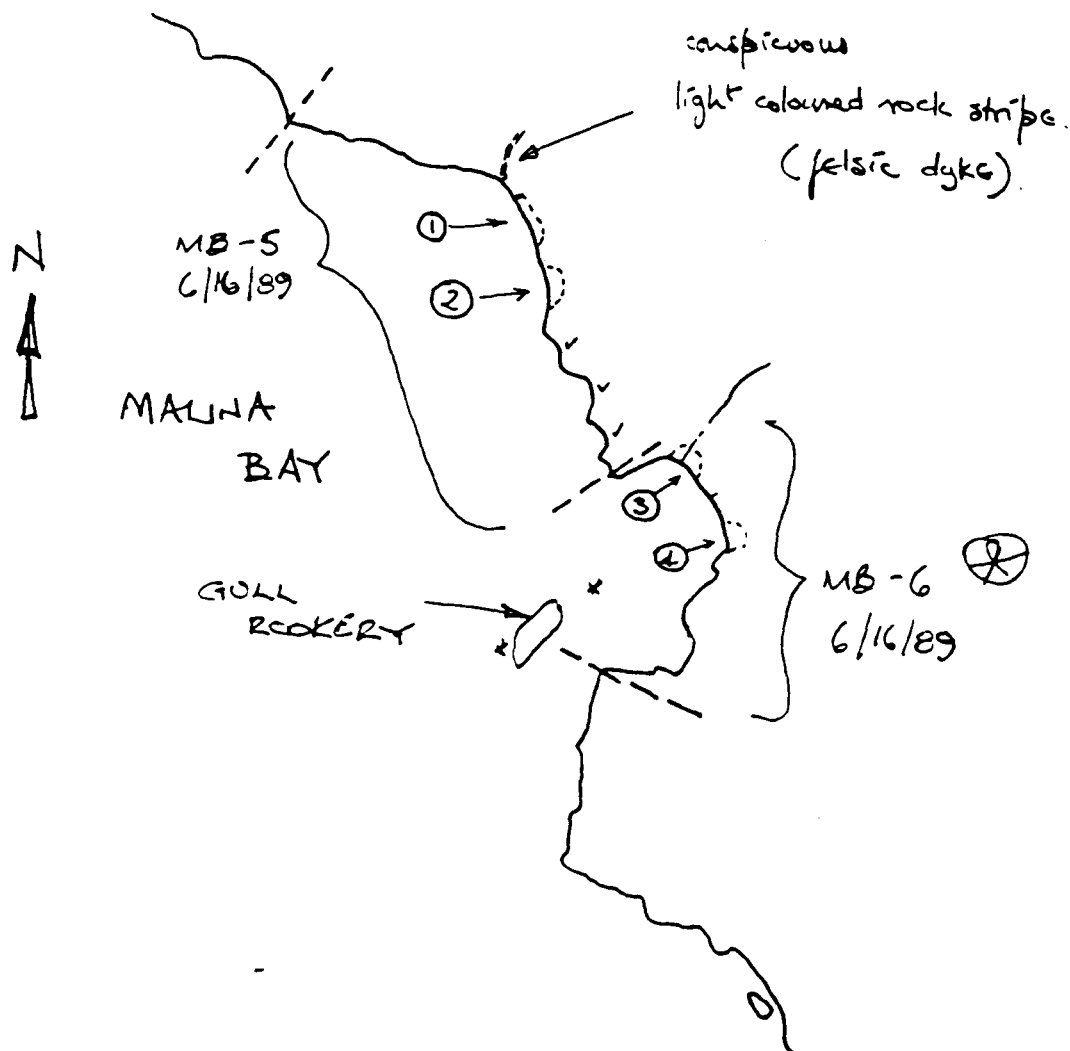
sand/gravel beach, cliffs at each end
1 eagle

1 remains in rock at either end, + 10-12

7/18/89
G. MACDONALD

MALKA BAY REASSESSMENTS (K2-10 ADEC.)

∴ pocket beaches N. of Malika Bay.



Map base: USGS topo.
enlargement.

ACE 8702123

(version 5/02/89)

SHORELINE CLEANUP PROGRAM

DATE 6/29/89

SHORELINE SEGMENT MB-6

LOCATION: (see enclosed map) MALINA BAY, NORTH SHORE-KODIAK
SMALL COVE ACROSS FROM MALKA BAY

ADEC NO. _____ SHORELINE ASSESSMENT DATE: 6/16/89

Recommended Cleanup Activity(ies):

Hot washing with wands and vacuum to clean the oiled boulder/cobble beach.

Manual removal of contaminated debris and mousse patches, if possible.

High pressure washing to remove oil from boulders.

Removal of oiled driftwood.

Use other approved methods as appropriate.

Priorities Considerations:

KISCC considers this to be a sensitive area due to local marine wildlife.

Ecological Constraints (from site survey):

Avoid damaging healthy organisms at moderately oiled clefts in cliffs.

Avoid washing oil into stream.

Archeological Constraints (from site survey):

If heretofore undiscovered cultural materials are uncovered during cleanup, contact Exxon's Archeological Field Director and take actions prescribed in the Operational Guidelines for Shoreline Cleanup dated 4/21/89 as amended.

Daughes Reger
State Historic Preservation Officer *

Date: 6/30/89

EXXON: _____

Date: _____

FOSC: _____

Date: _____

* Signature required to satisfy stipulations in Alaska DNR land use permits for tide and submerged lands.

ACE 8702124

(version 5/16/89)

SHORELINE OIL EVALUATION FORM - KODIAK

Date: 6-16-89 / Time: 1250

Observer: S. Perland

Surveyed From: Foot/Boat/Helicopter/Plane

Weather: Sun/Cloud/Rain/Snow

LOCATION

LOCATION North shore / Malina Bay

SEGMENT I.D. K-2-10-MB-6

LENGTH OF SHORELINE SEGMENT: 1000 m

ACCESS: Foot/Vehicle/Boat/Dredge/Helicopter/Float Plane

SHORELINE:

Shoreline Type: SPI/SEA/COV/MID/STET

Slope: LAUG/HANG/VEB

Wave Exposure: High/Med/Low

Sediment: B2S / CSO / P15 / G10 / S / M / R

Drift Debris on Beach: Yes/No Supra/Upper/Mid/Lower Type Log/kelp

OIL

Degree of Oiling: Heavy/Moderate/Light/No Oil/Unobserved

Total Area of Beach Impact: SU / SP / ID / LO / L

OIL DISTRIBUTION

Continuous: Y/N Segment 102 No. Bands 1 Width 8-10 m

Sporadic: Y/N Segment 1 Min/Max Dia 1 Impact Width

Est. Oil Thickness where > 1cm: < 1 cm SU / SP / ID / LO / L

Est. Oil Penetration: 0-40 cm SU / SP / ID / LO / L

Layers? Yes/No No. Layers 1 Oil Weathering 1

Drift Debris Oiled? Yes/No Supra/Upper/Mid/Lower Amount: 11 / ID / L

OIL MORPHOLOGY

Pooled Oil 1 "Free" Oil 50 Spattered 50 H/ID/VL Shown

OIL WEATHERING (OW)

Fresh Oil 1 SU/SP/VE/MID/LO Choc Mousse 1 SU/SP/VE/MID/LO

Pancake Mousse 50 SU/SP/VE/MID/LO Asphalt Mousse 50 SU/SP/VE/MID/LO

Tar Formation 1

Comments:

ACE 8702125

K-2-10-MB-6 is the heaviest oiled area observed on the north shore / Malina Bay. The cliff shoreline with a boulder and rubble beach is moderately oiled. In the small pocket beach located at head of the cove, oil was observed along the HWL and the oil is weathered and very resistant to smearing. Oil debris was observed at the mouth of the cove where the stream enters the bay.

DOCUMENTATION:

Map/Aerial photo marking segment boundaries _____

VTR: Y/N Tape Number(s) _____

Photography: Y/N Roll Number(s) JT-1 _____

Sample Numbers Collected: N/A _____

Headland

Midland 0:1

Scatterable horizon

Cliff

log 10

Ground beach

Ground beach

Midland 0:1

Scatterable horizon

Cliff

log 10

Light 0:1

Cliff

Scattered marine patches
log 10
(VL)

ECOLOGICAL EVALUATION

LOCATION: Malina Bay SITE: North Shore OBSERVER: J. Turpley
 LOCATION PREFIX: K-2/MB SEG. NO.: K-2-10+MB-6 LENGTH: 1000 (M)
 DATE: 6/16/89 TIME (HHMM): 1100 TIDE HT.: +0.2 (M)

OILED ZONE: Splash High Medium Low

SUBSTRATUM: Rocks Boulder Cobble Gravel Sand Mud

LIVE BIOTA

Fucus (algae): Patchy Y/N Contin. Y/N Dense Y/N Sparse Y/N None Y/N

Mytilus (Mussels): Patchy Y/N Contin. Y/N Dense Y/N Sparse Y/N None Y/N

Balanus (Barnacles): Patchy Y/N Contin. Y/N Dense Y/N Sparse Y/N None Y/N

Littorina

Patchy Y/N Contin. Y/N Dense Y/N Sparse Y/N None Y/N

Limpets: Patchy Y/N Contin. Y/N Dense Y/N Sparse Y/N None Y/N

OTHER OBSERVATIONS: Oiled drift at mouth of stream.

No organisms on gravel/sand beach

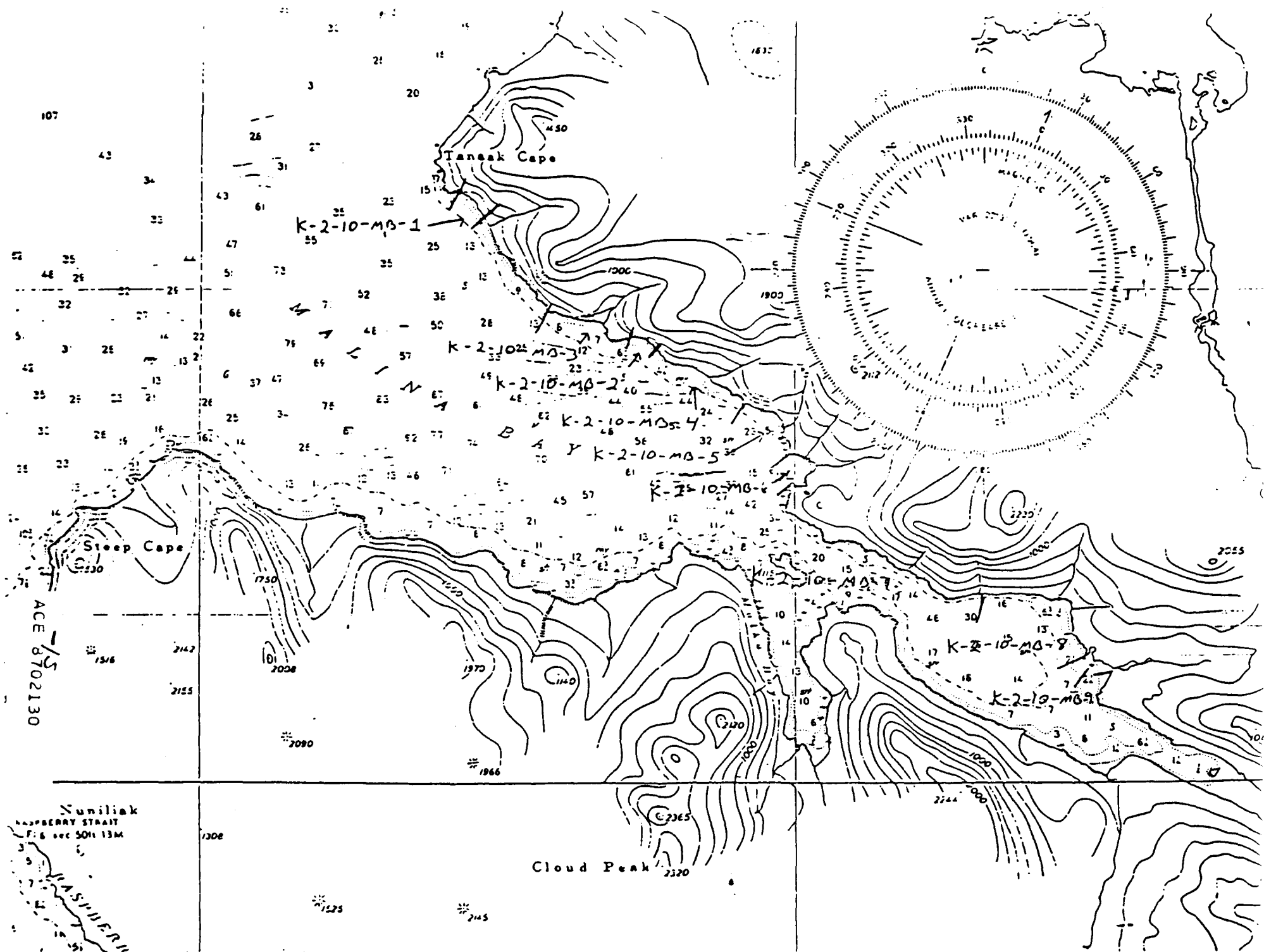
CLEANUP PRECAUTIONS: Avoid washing oil into stream

Avoid healthy un-oiled life.

MAMMALS: Otters 2 Harbor Seals Sea Lions Whales
 other ↳ offshore (200m)

BIRDS: See Scaull nesting colony on offshore Island

GENERAL OBSERVATIONS: Oiled drift material at mouth of stream. North Ben
of stream also oiled. Cleft in cliff is moderately coated with
oil (1 north of stream & 1 south of stream) sessile organisms & algae
are dead.



(version July 23, 1989)

SHORELINE PRE CLEANUP REASSESSMENT

DATE 7/26/89 SHORELINE SEGMENT K2-10-MB-7 REASSESSMENT DATE 7/26

Observers: OG B. Trimm BIO D. McCormick ARCH J. Erlandson

Reason for Reassessment Significant time lapsed since original assessment.

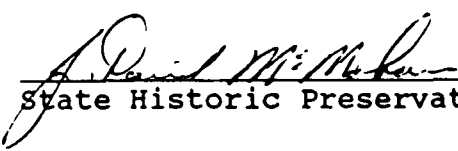
Revised Recommended Cleanup Activity(ies):

- No revisions to original recommendation of no cleanup. Subject to FOSC reassessment at a later date.

Revised Ecological Constraints:

Revised Archaeological Constraints:

If cleanup is planned, a 250 m portion of the segment may be excluded from cleanup depending on the degree of oiling.


State Historic Preservation Officer *

Date: 7/28/89

EXXON: _____

Date: _____

FOSC: _____

Date: _____

*Signature required to satisfy stipulations in Alaska DNR land use permits for tide submerged lands.

+ / S
ACE 8702131

(version 5/02/89)

SHORELINE CLEANUP PROGRAM

DATE 6/29/89

SHORELINE SEGMENT MB-7

LOCATION: (see enclosed map) NORTH SHORE OF MALINA BAY

KODIAK

ADEC NO. _____ SHORELINE ASSESSMENT DATE: 6/16/89

Recommended Cleanup Activity(ies):

No cleanup recommended at this time subject to FOSC approval. No oil observed.

Priorities Considerations:

KISCC considers this is a sensitive area due to the abundance of local marine birds and mammals.

Ecological Constraints (from site survey):

No ecological constraints. No cleanup is recommended at this time.

Archeological Constraints (from site survey):

If oiling occurs in the future and cleanup is planned, a 250m portion may be excluded from cleanup depending on the degree of oiling. Additional archaeological/oil evaluation would be necessary.

Douglas Reger
State Historic Preservation Officer *

Date: 6/30/89

EXXON: _____

Date: _____

FOSC: _____

Date: _____

* Signature required to satisfy stipulations in Alaska DNR land use permits for tide and submerged lands.

ACE 8702132

(version 5/16/89)

SHORELINE OIL EVALUATION FORM - KONIAR

Date: 6-16-89 / Time: 7:00

Observer: S. Pealand

Surveyed From: Foot/Boat/Helio/Plane

Weather: Sun/Cloud/Rain/Snow/Ice

LOCATION

LOCATION North Shore of Malina Bay SEGMENT I.D. K-2-10-MB-7

LENGTH OF SHORELINE SEGMENT: 5000 m

ACCESS: Foot/Vehicle/Boat/Harbor/Helio/Float/Plane

SHORELINE:

Shoreline Type: SPI/SEA/COV/HID/STET

Slope: LAAG/HANG/VEP

Wave Exposure: High/Med/Low

Sediment: B20 / C50 / P20 / G20 / S12 / M / R

Drift Debris on Beach: Yes/No Supra/Upper/Mid/Lower Type Log / kelp

OIL

Degree of oiling: Heavy/Moderate/Light/No Oil/Unobserved

Total Area of Beach Impact: SU / SP / H / M / L

OIL DISTRIBUTION

Continuous: Y/N Segment 1 No. Bands 1 Width 1

Sporadic: Y/N Segment 1 Min/Max Dia 1 Impact Width 1

Est. Oil Thickness where > 1cm: 1 cm SU / SP / UP / HID / LO

Est. Oil Penetration: 1 cm SU / SP / UP / HID / LO

Layers? Yes/No No. Layers 1 Oil Weathering 1

Drift Debris Oiled? Yes/No Supra/Upper/Mid/Lower Amount: 1 / 1 / 1 / 1

OIL MORPHOLOGY

Pooled Oil 1 "Free" Oil 1 Spattered 1 H / U / L / VL Sheen 1

OIL WEATHERING (OW)

Fresh Oil 1 SU / SP / VF / MID / LO Choc Mousse 1 SU / SP / VF / MID / LO

Pancake Mousse 1 SU / SP / VF / MID / LO Asphalt Mousse 1 SU / SP / VF / MID / LO

Tar Formation 1

Comments:

ACE 8702133

No oil observed

DOCUMENTATION:

Map/Aerial photo marking segment boundaries See attached

VTR: Y (N) Tape Number(s) _____

Photography: (Y) N Roll Number(s) ST - 1

Sample Numbers Collected: N/A

ACE 8702134

ECOLOGICAL EVALUATION

LOCATION: Malina Bay SITE: North Shore OBSERVER: J. Tarpley
 LOCATION PREFIX: K-2/MB SEG. NO.: K-2-10-MB-7 LENGTH: 5000 (M)
 DATE: 6/16/89 TIME (HHMM): 1800 TIDE HT.: +1.0 (M)

OILED ZONE: Splash High Medium Low ☒

SUBSTRATUM: Rocks Boulder Cobble Gravel Sand Mud

LIVE BIOTA

Fucus (algae): Patchy Y/N Contin. Y/N Dense Y/N Sparse Y/N None Y/N

Mytilus (Mussels): Patchy Y/N Contin. Y/N Dense Y/N Sparse Y/N None Y/N

Balanus (Barnacles): Patchy Y/N Contin. Y/N Dense Y/N Sparse Y/N None Y/N

Heavy recruit settlement

Littorina

Patchy Y/N Contin. Y/N Dense Y/N Sparse Y/N None Y/N

Limpets: Patchy Y/N Contin. Y/N Dense Y/N Sparse Y/N None Y/N

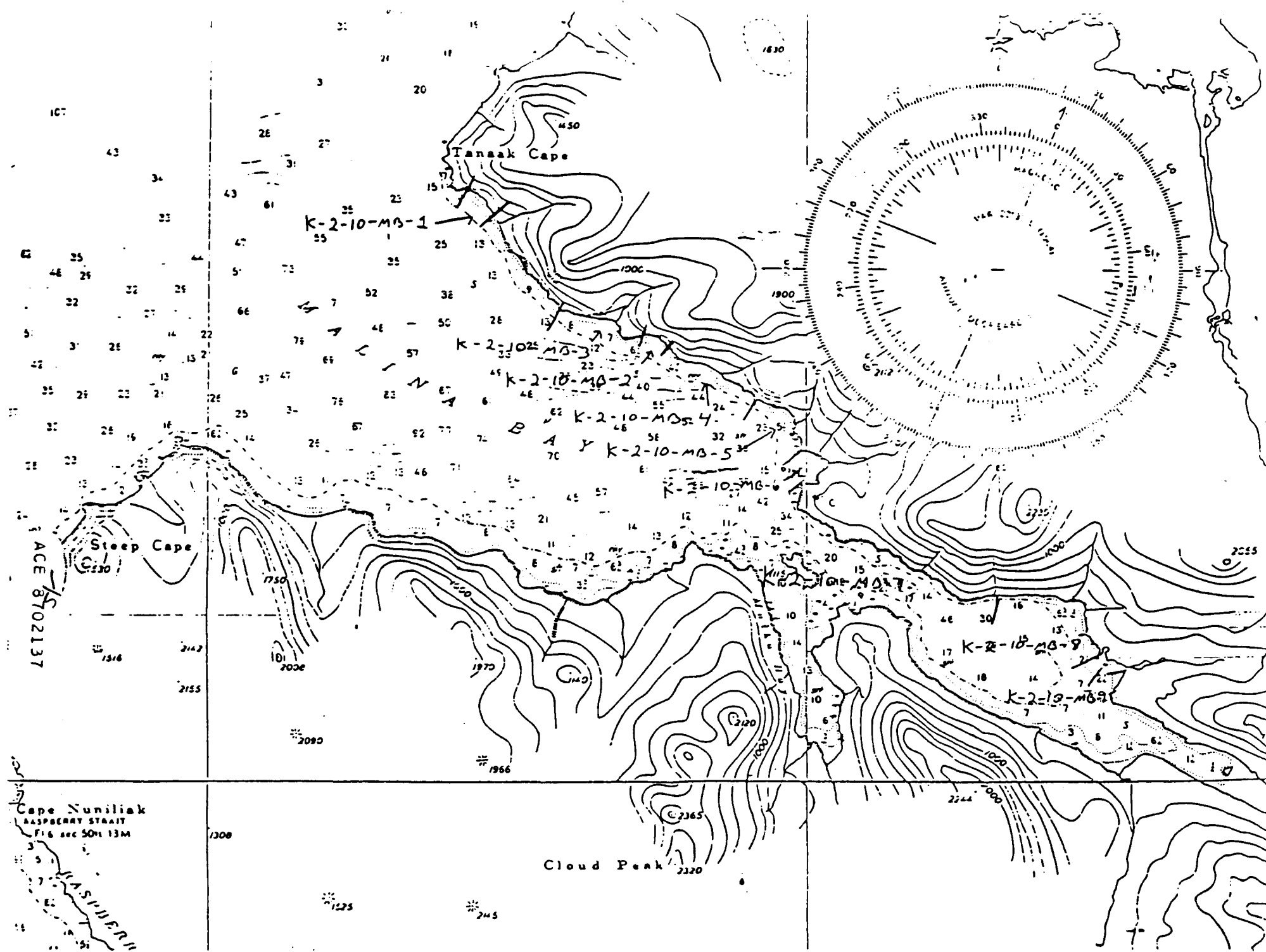
OTHER OBSERVATIONS: Clam shells, Mytilus shells

CLEANUP PRECAUTIONS: None - since no cleanup is recommended.

MAMMALS: Otters _____ Harbor Seals _____ Sea Lions _____ Whales _____
 Other NONE

BIRDS: NONE

GENERAL OBSERVATIONS: Small ITZ at base of steep cliffs.
No oil observed



Cape Nuniliak
RASPBERRY STRAIT
Fig sec 50m 13M
NUNILIAK

Cloud Peak 2320

(version July 23, 1989)

SHORELINE PRE CLEANUP REASSESSMENT

DATE 7/26/89 SHORELINE SEGMENT K2-10-MB-8 REASSESSMENT DATE 7/26

Observers: OG B. Trimm BIO D. McCormick ARCH J. Erlandson

Reason for Reassessment Significant time lapsed since original assessment.

Revised Recommended Cleanup Activity(ies):

- Manual removal of small oiled drift debris and mousse patches.

Revised Ecological Constraints:

Revised Archaeological Constraints:

Inspection by an archaeological monitor is required while cleanup is conducted.


State Historic Preservation Officer *

Date: 7/28/89

EXXON: _____

Date: _____

FOSC: _____

Date: _____

*Signature required to satisfy stipulations in Alaska DNR land use permits for tide submerged lands.

(version 5/02/89)

SHORELINE CLEANUP PROGRAM

DATE 6/29/89

SHORELINE SEGMENT MB-8

LOCATION: (see enclosed map) NORTH SHORE OF MALINA BAY

ADEC NO. _____ SHORELINE ASSESSMENT DATE: 6/16/89

Recommended Cleanup Activity(ies):

Manual removal of contaminated debris, driftwood and mousse patches.

Use other approved methods as appropriate.

Priorities Considerations:

KISCC considers this to be a sensitive area due to abundance of local seabirds and marine mammals.

Ecological Constraints (from site survey):

Avoid reoiling lower intertidal zone.

Archeological Constraints (from site survey):

Inspection by an archaeological monitor is recommended while cleanup is conducted. If heretofore undiscovered cultural materials are uncovered during cleanup, contact Exxon's Archeological Field Director and take actions prescribed in the Operational Guidelines for Shoreline Cleanup dated 4/21/89 as amended.

Douglas Peger
State Historic Preservation Officer *

Date 6/30/89

EXXON: _____

Date: _____

FOSC: _____

Date: _____

* Signature required to satisfy stipulations in Alaska DNR land use permits for tide and submerged lands.

ACE 8702139

(version 5/16/89)

SHORELINE OIL EVALUATION FORM - KONTAK

Date: 6-16-89 / Time: 1830

Observer: S. Perland

Surveyed From: Foot/Boat/Helicopter/Plane

Weather: Sun/Cloudy/Rain/Snow

LOCATION

LOCATION North Shore of Melina

SEGMENT I.D. K-2-10-110-2

LENGTH OF SHORELINE SEGMENT: 2500 m

ACCESS: Foot/Vehicle/Boat/Barge/Helicopter/Float/Plane

SHORELINE:

Shoreline Type: SPI/BEA/COV/HID/STFT

Slope: LAUG/HOUG/VER

Wave Exposure: High/Med/Low

Sediment: B / CSD / PDS / GDS / S / M / R

Drift Debris on Beach: Yes/No Supra/Upper/Mid/Lower Type Log/6-10

OIL

Degree of Oiling: Heavy/Moderate/Light/No Oil/Unobserved

Total Area of Beach Impact: SU / SP / (H) / (M) / L

OIL DISTRIBUTION

Continuous: Y/N Segment 1 No. Bands Width

Sporadic: Y/N Segment 100 Min/Max Dia 2-10cm Impact Width 10m

Est. Oil Thickness where > 1cm: < 1 cm SU / SP / (H) / (M) / L

Est. Oil Penetration: 0 cm SU / SP / (H) / (M) / L

Layers? Yes/No No. Layers Oil Weathering

Drift Debris Oiled? Yes/No Supra/Upper/Mid/Lower Amount: H / M / L

OIL MORPHOLOGY

Pooled Oil % "Free" Oil % Spattered 100 % H/H/L/SP Sheen

OIL WEATHERING (OW)

Fresh Oil % SU/SP/VP/MID/LO Choc Mousse % SU/SP/VP/MID/LO

Pancake Mousse 50 % SU/SP/VP/MID/LO Asphalt Mousse 50 % SU/SP/VP/MID/LO

Tar Formation %

ACE 8702140

Comments:

The oil observed is very widely scattered throughout the
beach and mud flat areas. Oil appears in pancakes and asphalt
masses. Some oil is observed splattered on the high tide debris line.
Also one or two spots of oil observed every 100m / stretch of 10.

DOCUMENTATION:

Map/Aerial photo marking segment boundaries See attached

VTR: Y/N Tape Number(s) _____

Photography: Y/N Roll Number(s) JT-1

Sample Numbers Collected: N/A

ACE 8702141

ECOLOGICAL EVALUATION

LOCATION: Malina Bay SITE: North shore OBSERVER: J. Tarpley
 LOCATION PREFIX: K-2/MB SEG. NO.: K-2-10-MB-8 LENGTH: 2500 (M)
 DATE: 6 / 16 / 89 TIME (HHMM): 1820 TIDE HT.: +1.0 (M)

OILED ZONE: Splash High Medium Low

SUBSTRATUM: Rocks Boulder Cobble Gravel Sand Mud

LIVE BIOTA

Fucus (algae): Patchy Y/N Contin. Y/N Dense Y/N Sparse Y/N None Y/N

Mytilus (Mussels): Patchy Y/N Contin. Y/N Dense Y/N Sparse Y/N None Y/N

Low ITZ

Balanus (Barnacles): Patchy Y/N Contin. Y/N Dense Y/N Sparse Y/N None Y/N

Littorina

Patchy Y/N Contin. Y/N Dense Y/N Sparse Y/N None Y/N

Limpets: Patchy Y/N Contin. Y/N Dense Y/N Sparse Y/N None Y/N

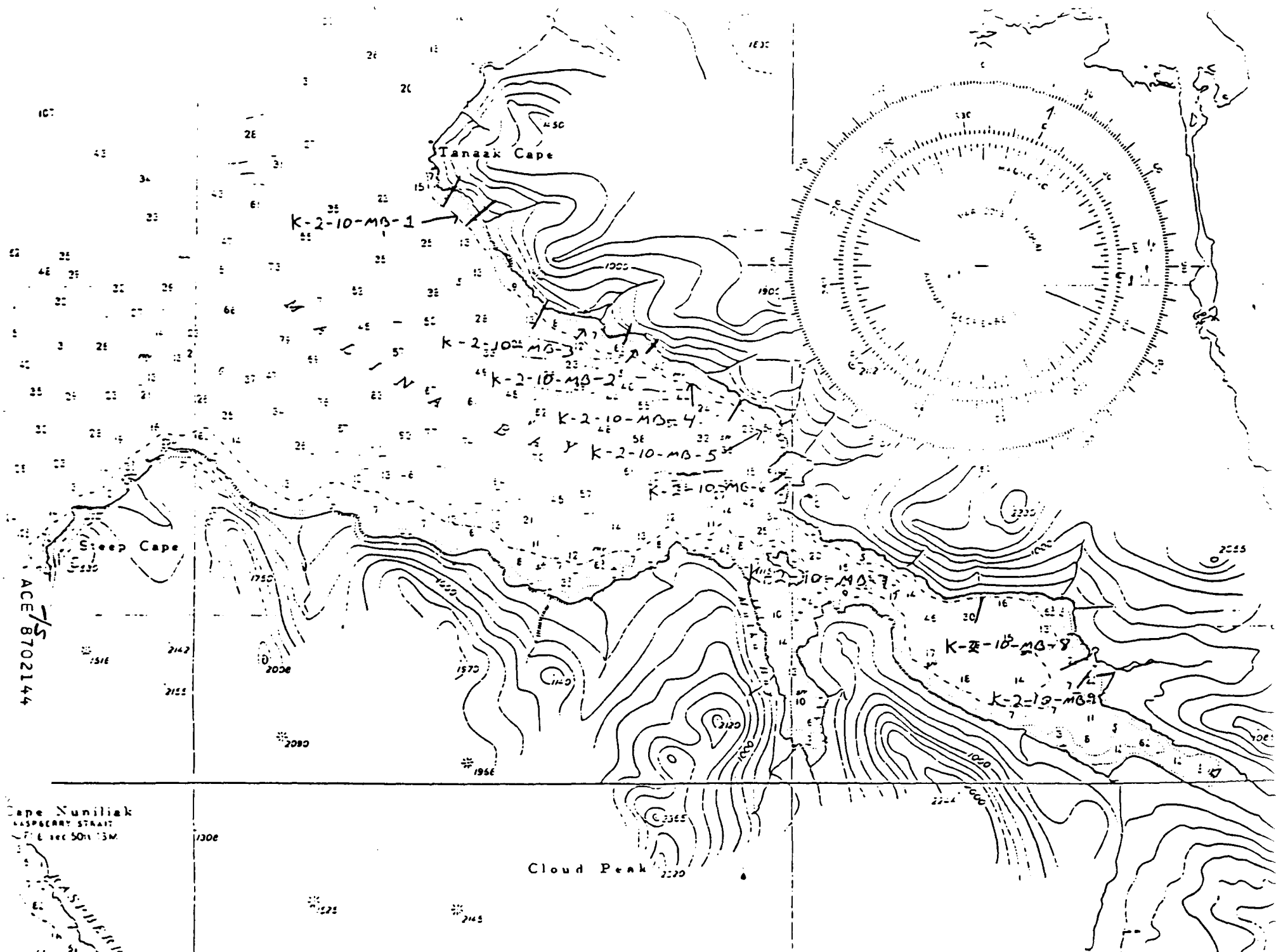
OTHER OBSERVATIONS: No life on sandy beaches. Flora & Fauna
found in abundance on rocky cobble boulder areas. Clams & Mytilus shells

CLEANUP PRECAUTIONS: Clean up mouse traps avoid oiling tower
ITZ.

MAMMALS: Otters Harbor Seals Sea Lions Whales
 Other Deer antlers

BIRDS: 3 Gulls on beach

GENERAL OBSERVATIONS: Shingle beach



(version July 23, 1989)

SHORELINE PRE CLEANUP REASSESSMENT

DATE 7/26/89 SHORELINE SEGMENT K2-10-MB-9 REASSESSMENT DATE 7/26

Observers: OG B. Trimm BIO D. McCormick ARCH J. Erlandson

Reason for Reassessment Significant time lapsed since original
assessment.

Revised Recommended Cleanup Activity(ies):

- Manual removal of small oiled drift debris and mousse patches.

Revised Ecological Constraints:

- Limit work crew size to 10 and use some path from beach to prevent damage of biota (muscles, barnacles, etc.) in lower intertidal zone.

Revised Archaeological Constraints:

- If heretofore undiscovered cultural materials are uncovered during cleanup, contact Exxon's Archaeological Field Director and take actions prescribed in the Operational Guidelines for Shoreline Cleanup dated 4/21/89 as amended.


State Historic Preservation Officer *

Date: 7/25/89

EXXON: _____

Date: _____

FOSC: _____

Date: _____

*Signature required to satisfy stipulations in Alaska DNR land use permits for tide submerged lands.

+/S
ACE 8702145

(version 5/02/89)

SHORELINE CLEANUP PROGRAM

DATE 6/29/89

SHORELINE SEGMENT MB-9

LOCATION: (see enclosed map) NORTH SHORE OF MALINA BAY

ADEC NO. _____ SHORELINE ASSESSMENT DATE: 6/16/89

Recommended Cleanup Activity(ies):

Manual removal of contaminated debris and mousse patches.

Removal of oiled driftwood.

Use other approved methods as appropriate.

Priorities Considerations:

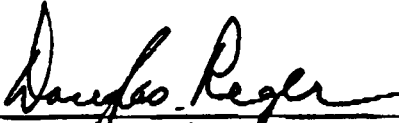
KISCC considers this a sensitive area due to local seabirds and marine mammals.

Ecological Constraints (from site survey):

Avoid putting large cleanup crews on rocky boulder areas due to balanus and mytilus shell breakage from human traffic.

Archeological Constraints (from site survey):

If heretofore undiscovered cultural materials are uncovered during cleanup, contact Exxon's Archeological Field Director and take actions prescribed in the Operational Guidelines for Shoreline Cleanup dated 4/21/89 as amended.



State Historic Preservation Officer *

Date: 6/30/89

EXXON: _____

Date: _____

FOSC: _____

Date: _____

* Signature required to satisfy stipulations in Alaska DNR land use permits for tide and submerged lands.

ACE 8702146

TOTAL P.02

(version 5/16/89)

SHORELINE OIL EVALUATION FORM - RODIAR

Date: 6-16-79 / Time: 1900

Observer: S. Poland

Surveyed From: Foot/Boat/Helio/Plane

Weather: Sun/Cloud/Rain/Snow/...

LOCATION

LOCATION North shore / Malina I

SEGMENT I.D. K-2-12-43-7

LENGTH OF SHORELINE SEGMENT: 1500 m

ACCESS: Foot/Vehicle/Boat/Barge/Helio/Float/Plane

SHORELINE

Shoreline Type: SPI/SEA/COV/HLD/STET

Slope: LAUC/HAUC/VER

Wave Exposure: High/Med/Low

Sediment: B t / C 25 t / P 25 t / G 25 t / S 25 t / M t / R t

Drift Debris on Beach: Yes/No Supra/Upper/Mid/Lower Type Log/kelp

OIL

Degree of Oiling: Heavy/Moderate/Light/No Oil/Unobserved

Total Area of Beach Impact: SU / SP / H / M / L

OIL DISTRIBUTION

Continuous: Y/N Segment 1 No. Bands 1 Width 100

Sperradic: Y/N Segment 1 / 100 Min/Max Dia 100 Impact Width 10-15 m

Est. Oil Thickness where > 1cm: < 1 cm SU / SP / UP / HD / LO

Est. Oil Penetration: 0 cm SU / SP / UP / HD / LO

Layers? Yes/No No# Layers 1 Oil Weathering 1

Drift Debris Oiled? Yes/No Supra/Upper/Mid/Lower Amount: H / M / L

OIL MORPHOLOGY

Pooled Oil 1 "Free" Oil 1 Spattered 100 H/H/L/VD Sheen 1

OIL WEATHERING (OW)

Fresh Oil 1 SU/SP/VP/MID/LO Choc Mousse 1 SU/SP/VP/MID/LO

Pancake Mousse 100 SU/SP/VP/NID/LO Asphalt Mousse 1 SU/SP/VP/MID/LO

Tar Formation 1

ACE 8702147

Comments:

The oil occurrence in K-2-12-43-7 is widely scattered in the mid to high tide zone. The mousse splats are weathered with a dark crust. About 5 splats were observed in every 100 m of shoreline.

DOCUMENTATION:

Map Aerial photo marking segment boundaries See attached

VTR: Y/N Tape Number(s) _____

Photography: N/A Roll Number(s) ~~111~~

Sample Numbers Collected: N/A

ACE 8702148

ECOLOGICAL EVALUATION

LOCATION: Malibu Bay SITE: North shore OBSERVER: J. Tarpley
 LOCATION PREFIX: K-2/MB SEG. NO.: K-2-10-MB-9 LENGTH: 1500 (M)
 DATE: 6/16/89 TIME (HHMM): 1900 TIDE HT.: +1.2 (M)

OILED ZONE: Splash High Medium Low

SUBSTRATUM: Rocks Boulder Cobble Gravel Sand Mud

LIVE BIOTA

Fucus (algae): Patchy Y/N Contin. Y/N Dense Y/N Sparse Y/N None Y/N

Mytilus (Mussels): Patchy Y/N Contin. Y/N Dense Y/N Sparse Y/N None Y/N

Balanus (Barnacles): Patchy Y/N Contin. Y/N Dense Y/N Sparse Y/N None Y/N

Littorina
Patchy Y/N Contin. Y/N Dense Y/N Sparse Y/N None Y/N

Limpets: Patchy Y/N Contin. Y/N Dense Y/N Sparse Y/N None Y/N

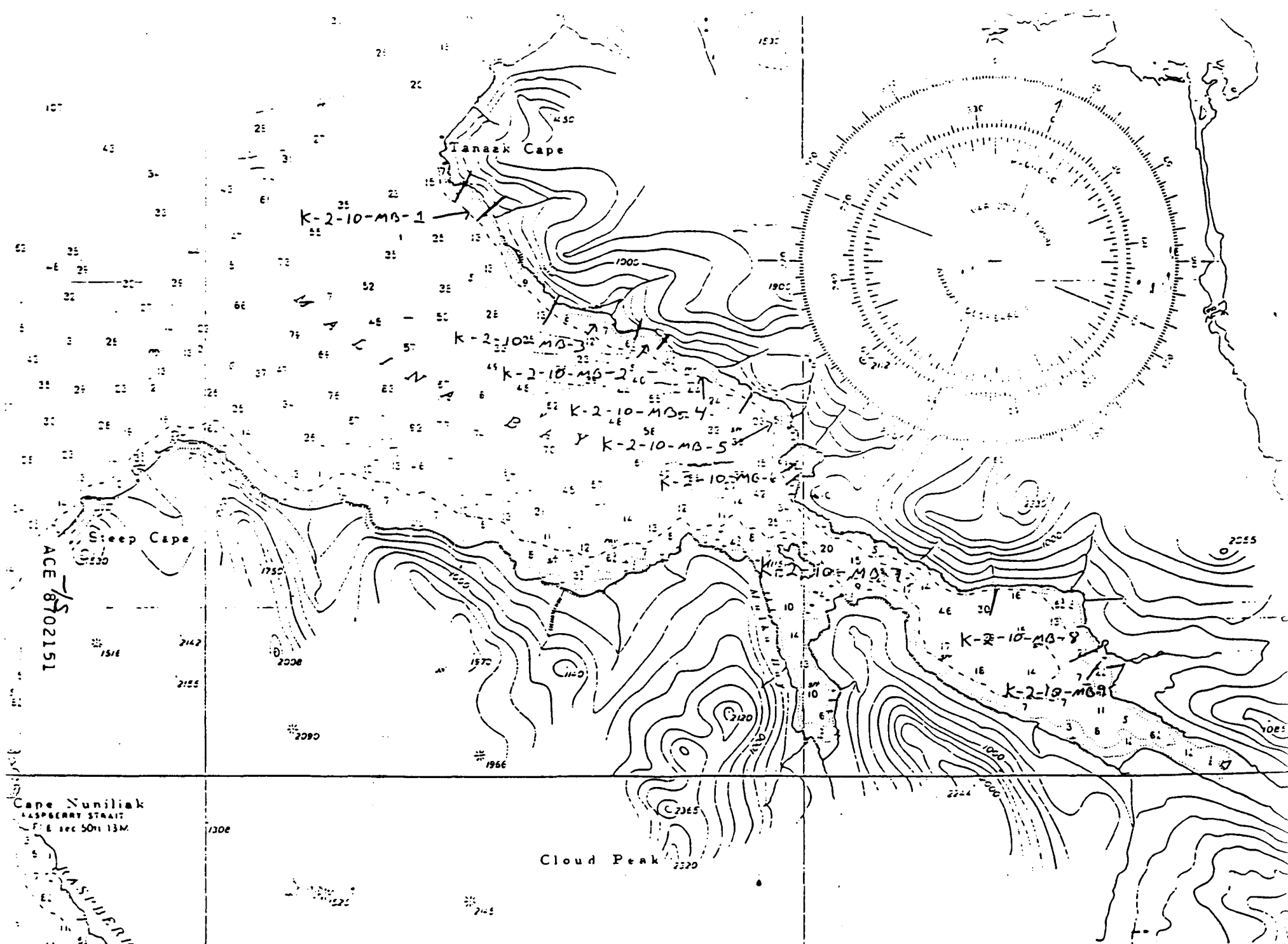
OTHER OBSERVATIONS: Clam shells, Mytilus shells.

CLEANUP PRECAUTIONS: Do not put large numbers of cleanup
personnel on rocky areas rich with organisms. Human traffic w
crush dense Balanus & mytilus beds

MAMMALS: Otters _____ Harbor Seals _____ Sea Lions _____ Whales _____
 Other Deer Tracks

BIRDS: Gulls offshore in bay

GENERAL OBSERVATIONS: Algal drift at high tide line is oiled.
Splattered mousse in mid ITC.



(version 5/02/89)

SHORELINE CLEANUP PROGRAM

DATE 7/17/89

SHORELINE SEGMENT K2-10-MB-11

LOCATION: (see enclosed map) Malina Bay

ADEC NO. _____ SHORELINE ASSESSMENT DATE: 7/17/89

Recommended Cleanup Activity(ies):

-No cleanup required due to apparent absence of oil.
Subject to FOSC reassessment at a later date.

Priorities/Considerations: Class

Ecological Constraints (from site survey):

Archaeological Constraints (from site survey):

-If cleanup is conducted and heretofore undiscovered cultural materials are uncovered, contact Exxon's Archeological Field Director and take actions prescribed in the Operational Guidelines for Shoreline Cleanup dated 4/21/89 as amended.


State Historic Preservation Officer *

Date: 7/28/89

EXXON: _____

Date: _____

FOSC: _____

Date: _____

*Signature required to satisfy stipulations in Alaska DNR land use permits for tide and submerged lands.

SHORELINE OIL EVALUATION FORM - KODIAKDate: 7/17/89 Time: 19:00Observer: G. MACDONALDSurveyed From: Foot/Boat/Helio/PlaneWeather: Sun/Cloud/Rain/Snow/FogLOCATION
LOCATION N. Shore MARINA BAY.SEGMENT I.D. K2-10, MB-11LENGTH OF SHORELINE SEGMENT: 5,000 mACCESS: Foot/Vehicle/Boat/Barge/Helio/Float Plane - calm only
shallow draft only.SHORELINE:Shoreline Type: SPI/BEA/COV/HLD/STRTSlope: LANG/HANG/VER+

beaches

rock walls.

Wave Exposure: High/Med/Low

Sediment: B ___% / C ___% / P ___% / G ___% / S ___% / M ___% / R ___%

Drift Debris on Beach: Yes/No Supra/Upper/Mid/Lower Type _____OILDegree of Oiling: Heavy/Moderate/Light/No Oil/Unobserved/Very LightTotal Area of Beach Impact: SU / SP / H / M / L NOT APPLICABLEOIL DISTRIBUTION

Continuous: Y/N Segment % _____ No. Bands _____ Width _____

Sporadic: Y/N Segment % _____ Min/Max Dia _____ Impact Width _____

Est. Oil Thickness where > 1cm: _____ cm. SU / SP / UP / MID / LO
Depth below top sed

Est. Oil Penetration: _____ cm SU / SP / UP / MID / LO

Layers? Yes/No No# Layers _____ Oil Weathering _____

Drift Debris Oiled? Yes/No Supra/Upper/Mid/Lower Amount: H / M / L / VL

OIL MORPHOLOGY

Pooled Oil _____% "Free" Oil _____% Spattered _____% H/M/L/VL Sheen _____%

OIL WEATHERING (OW)

Fresh Oil _____% SU/SP/VP/MID/LO Choc Mousse _____% SU/SP/VP/MID/LO

Pancake Mousse _____% SU/SP/VP/MID/LO Asphalt Mousse _____% SU/SP/VP/MID/LO

Tar Formation _____%

Comments:

AN OIL FREE SEGMENT, VERY EXPOSEDWITH HI. FETCH & HIGH WIND TUNNEL EFFECTFROM THE NORTHWEST.

ACE 8702153

NO PHOTO: BROKEN CAMERA

7/17 SEGMENT MB-TL

19.00 HRS

outcrop; low & cob-gvl beach; trace
≤ 2cm dia. asphalt mouse spots @ MWL;
backwater lagoon - no oil.

bldr ↔ cob-gvl ↔ bldr-gvl ↔ outcrop
beach, no oil. mod. exposed.

becoming more rocky, & craggy to W;
outcrop/cliff to 30m, occas. gvl pocket
no oil; ice scoured rock
some massive boulder jumble @
base of cliff.

21.15 END of SEGMENT

SEGMENT : [REDACTED]
Malina Bay

1 MILE
SCALE

MALINA BAY

MB-11

MB-10

Malina Bay

7/17 pm: K2-10, MB-11

ACE 8702155

7/16 & 7/17/89

G. MACDONALD

Scale 1:70,000 (1" = 1.23 miles)

BASE MAP : NOAA Nautical Chart # 16604, 9th Ed; 9/10/83

ECOLOGICAL EVALUATION

LOCATION: Afognak Isl SITE: Malina Bay OBSERVER: M. Fawcett

LOCATION PREFIX: MB SEG. NO.: 11 LENGTH: 5,000 (M)

DATE: 7/17/89 TIME (HHMM): 1915 TIDE HT.: +1.5 (M)

OILED ZONE: Splash High Medium Low

SUBSTRATUM: Rocks Boulder Cobble Gravel Sand Mud

LIVE BIOTA

Fucus (algae): Patchy Y/N Contin. Y/N Dense Y/N Sparse Y/N None Y/N

Mytilus (Mussels): Patchy Y/N Contin. Y/N Dense Y/N Sparse Y/N None Y/N

Balanus (Barnacles): Patchy Y/N Contin. Y/N Dense Y/N Sparse Y/N None Y/N
continuous young-of-year Balanus on rocks & boulders

Litterina

Patchy Y/N Contin. Y/N Dense Y/N Sparse Y/N None Y/N

Limpets: Patchy Y/N Contin. Y/N Dense Y/N Sparse Y/N None Y/N

OTHER OBSERVATIONS: Anadromous stream at end of main beach - saw
10 cr sc pink salmon in it

CLEANUP PRECAUTIONS: Keep away from stream - avoid damaging
low intertidal zone

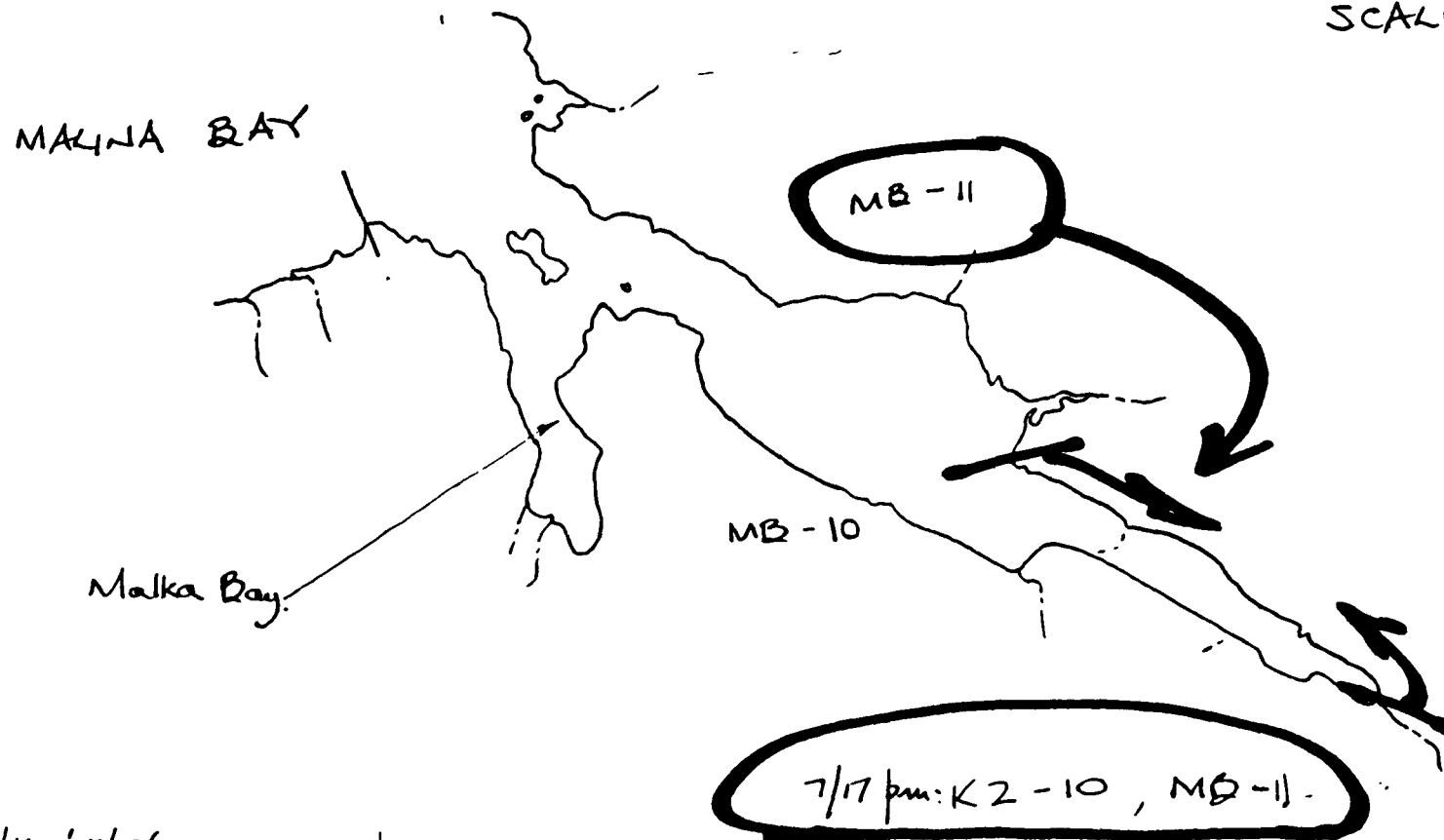
MAMMALS: Otters _____ Harbor Seals _____ Sea Lions _____ Whales _____
Other _____

BIRDS: 2 Arctic ~~terns~~ terns, 2 eagles with nest, pigeon guillemot, oystercatchers

GENERAL OBSERVATIONS: corn crabs & gulls on small island

KZ-10, MB-11
 SEGMENT: ,
 Malina Bay.

1 MILE
 SCALE.



ACE 8702150

7/16 & 7/17/89

G. Macdonald

Scale 1:70,000 (1" = 1.23 miles)

BASE MAP: NOAA Nautical Chart # 16604, 9th Ed; 9/10/83

REF. MAP

(version 5/02/89)

SHORELINE CLEANUP PROGRAM

DATE 7/17/89

SHORELINE SEGMENT K2-10-MB-13

LOCATION: (see enclosed map) Malina Bay

ADEC NO. _____ SHORELINE ASSESSMENT DATE: 7/25/89

Recommended Cleanup Activity(ies):

- Manual removal of thicker accumulations of fresh mousse in between boulders and rock crevices.
- Manual removal of oiled sediments. Excavation to depths greater than one inch may be necessary to clean beach. Replacement of boulders if moved to excavate oiled sediments will minimize erosion.

Priorities/Considerations: Class 4-A

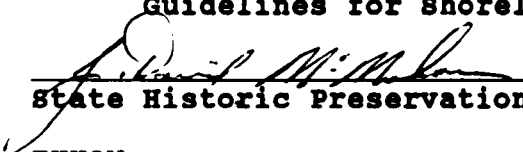
- Access may be limited to calm days, very exposed beach and high vertical cliffs.

Ecological Constraints (from site survey):

- No constraints.

Archaeological Constraints (from site survey):

- If heretofore undiscovered cultural materials are uncovered during cleanup, contact Exxon's Archeological Field Director and take actions prescribed in the Operational Guidelines for Shoreline Cleanup dated 4/21/89 as amended.


State Historic Preservation Officer *

Date: 7/28/89

EXXON: _____

Date: _____

FOSC: _____

Date: _____

*Signature required to satisfy stipulations in Alaska DNR land use permits for tide and submerged lands.

+ / S
ACE 8702159

SHORELINE OIL EVALUATION

Date: 25 July 89 / Time: 1505
 Surveyed From: Foot/Boat/Helio/Plane

Observer: Bryan Tenn
 Weather: Sun/Cloud/Rain/Snow/Fog

LOCATION

Location: 1000' EAST M. 2A, West-side Arconax Island Segment ID: KC-10-MB-3
 Segment Length: 1600 m. Access: Vehicle/Boat/Barge/Helio/Float Plane
 Access Restrictions: HELICOPTER AT LOW TIDE, BOATS IN CALM DAYS - USE 200 ACS AS SURF EDGE

SHORELINE

Shoreline Type: SPI/BEA/COV/HLD/STRT Slope: Lo/Med/Hi/Vert
 Wave Exposure: High/Med/Low
 Sediment: B40% / C 20% / P 10% / G&S 10% / M % / R 20%

OIL

Avg. Degree of Oiling: HEAVY / MODERATE / LIGHT / VERY LIGHT / NONE OBSERVED
 Area of Impact: SU/SP/H/M/L

OIL DISTRIBUTION

Continuous % of Segment 0 SU/SP/H/M/L H/M/L/VL
 Sporadic % of Segment 15 SU/SP/H/M/L H/M/L/VL

Total	Length(m)	Width(m)	Thickness >1cm:	
Very light:	<u>150</u>	<u>3</u>	<u> </u> cm	SU/SP/H/M/L
Light:	<u> </u>	<u> </u>	Penetration/Rework: <u>30</u> cm	SU/ <u>SP</u> /H/M/L
Moderate:	<u> </u>	<u> </u>	Burial Depth: <u> </u> cm	SU/SP/H/M/L
Heavy:	<u> </u>	<u> </u>		

Mobilization Potential: High/Medium/Low
 Drift Debris Oiled? Y/N Amount: H/M/L/VL SU/SP/H/M/L Type:

OIL MORPHOLOGY

Pooled Oil:	<u> </u> %	SU/SP/H/M/L
"Free" Oil:	<u>20</u> %	SU/ <u>SP</u> /H/M/L
Splattered:	<u>80</u> %	SU/ <u>SP</u> /H/M/L
Coated:	<u> </u> %	SU/SP/H/M/L
Pancakes/Balls:	<u> </u> %	SU/SP/H/M/L

H/M/L/VL
H/M/L/VL

Preliminary Cleanup Est.

Total TYPE A: 150 m
 Total TYPE B: m
 Total TYPE A/B: m

OIL WEATHERING

Fresh:	<u> </u> %	SU/SP/H/M/L
Mousse:	<u>20</u> %	SU/ <u>SP</u> /H/M/L
Weathered Mousse:	<u>80</u> %	SU/ <u>SP</u> /H/M/L
Asphalt Mousse:	<u> </u> %	SU/SP/H/M/L
Tar:	<u> </u> %	SU/SP/H/M/L

COMMENTS

FRESH OILY BOULDER RIBBLE AT THE BASE OF WEST COE ROCKY CLIFFS. THE NORTH END OF THE
 STRIP HAS LIGHT OILING (RIBBLE TO VERY LIGHT) FINALLY NO OBSERVED OIL ONLY 150M SOUTH
 (OF THE NORTH BOUNDARY). THE REST OF THE STRIP HAS NO OBSERVABLE OILING. ACCESS LIMITED
 TO CHOPTERS DURING LOW TIDE & CALM DAYS (WIND AGAINST CLIFFS) OR BOATS ON CALM DAYS. AT NORTH
 BOUNDARY (CHOPTER) FRESH MOUSSE FOUND IN BETWEEN BOULDER & ROCK CRACKS. WEATHERED
 MOUSSE FOUND ON TOP (EXPOSED) BOULDER & ROCK SURFACES. OILING IS AN EXTENSION OF THE
 M.C. 1

ACE 8702100

DOCUMENTATION:

Map/Aerial photo marking segment boundaries See notes

VTR: Y/N Tape Number(s) _____

Photography: Y/N Roll Number(s) 10-21

Sample Numbers Collected: 11th

25 July 89

Tuesday

WORK CREW REMOVING B.I. SHORE OILED

SUBSTRATE

VERY SLIGHT SENT OF OIL

2600 BAGS REMOVED TO DATE (150m BONE)

WORK HERE SINCE 22 JULY

PRESENT MANUAL METHODS - THOUGH

SLOW & TIDIOUS IS REMOVING A GOOD

B.I. OF THE OIL.

MB-13

1505 - BOARD SKIFF GO TO LANDING ZONE DROP
OFF USCGC-2 & RUN SKIFF TO POCKET
BEACH ADJACENT TO THE EAST. NO OIL
LOST TIDE. CALL 352TH. BOARD &
GO TO END MP-9.

1533 - MP-9 WEST - FLYOVER - GIVE
RICK GILLIE IDEA OF BEACHES TO
REASSESS (IF NEEDED)

1605 - FINISH FLYOVER - LONG DAY -
LV FOR ADQ VIA PT. BAILEY
PICK UP EXXON REP

25 July

TUESDAY

COMMENTS ON FLYOVER - SAW ONLY

V.L.T SPLAT TO NO VISIBLE OILING

RECOMMEND ① A MORE DETAILED REASSESSMENT
OR ② NO ACTION FOR THESE BEACHES SINCE
OVERFLT FOUND LITTLE TO NO OIL

1627 LV PT BAILEY. WAIT TO PICK
UP CREW MEMBER

1633 LV PT BAILEY → ADQ

1653 LD ADQ

1740 LV ADQ → SCAT OFFICE

1800 SHOOTGUN TRAINING CLASS

2030 SCAT STAFF MTG

2100 GET MATERIAL TO WRITE UP SEGMENTS -
GIVE MARY MORRIS TO WRITE UP.

2130 START WRITE UPS.

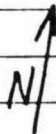
2300 - GOOD NIGHT

ACE 8702162

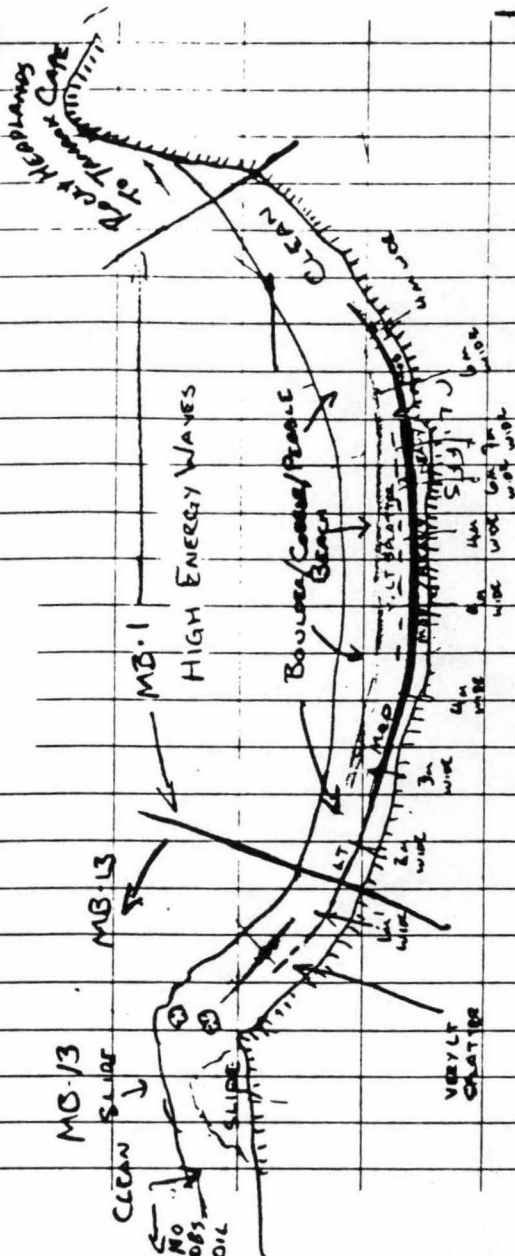
LEVEL

25 July

T-102-1



- No oil observed
- V. Light
- Light
- Moderate
- Heavy



LEVEL

ACE 8702163

ECOLOGICAL EVALUATION

LOCATION: Molina Br. ADAMS IS. SITE: _____ OBSERVER: D. McCornick
 LOCATION PREFIX: MB SEG. NO.: 13 LENGTH: 1600 (M)
 DATE: 7/25/89 TIME (HMM): 1505 TIDE HT.: +1.5 (M)

OILED ZONE: Splash 'High Medium Low None

SUBSTRATUM: Rocks Boulder Cobble Gravel Sand Mud

LIVE BIOTA

Fucus (algae): Patchy Y/N Contin. Y/N Dense Y/N Sparse Y/N None Y/N

Mytilus (Mussels): Patchy Y/N Contin. Y/N Dense Y/N Sparse Y/N None Y/N

Balanus (Barnacles): Patchy Y/N Contin. Y/N Dense Y/N Sparse Y/N None Y/N

Littorina
 Patchy Y/N Contin. Y/N Dense Y/N Sparse Y/N None Y/N

Spots: Patchy Y/N Contin. Y/N Dense Y/N Sparse Y/N None Y/N

OTHER OBSERVATIONS: Algae, Encrinurus, Pinctada, Entomopsis

CLEANUP PRECAUTIONS: None since no cleanup recommended

MAMMALS: LANE
Otters 2 Harbor Seals _____ Sea Lions _____ Whales _____
 Other _____

BIRDS: _____

GENERAL OBSERVATIONS: No oil observed in this segment which consists of primarily rocky boulder is. NOTE: OILING FOUND AT BOUNDARY BETWEEN MB-14 MB-13.

401000-£. H. 1. 1. P. 22 W.

K2-10

MB-13
(FIELD)

MB-3

ME-2

105-4

MB-5

MB-6

MO-2

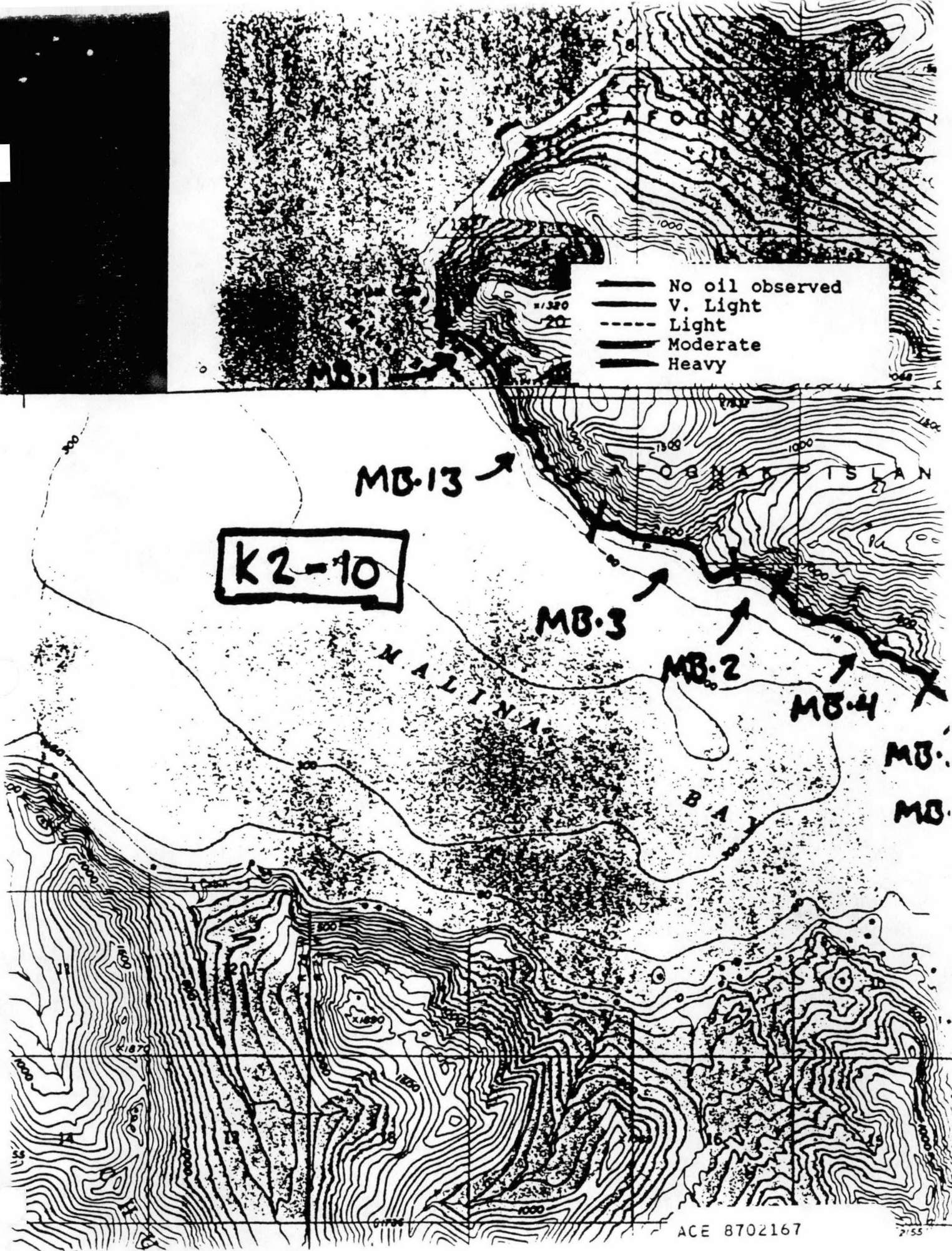
MB-6

MEMO

MB-2A

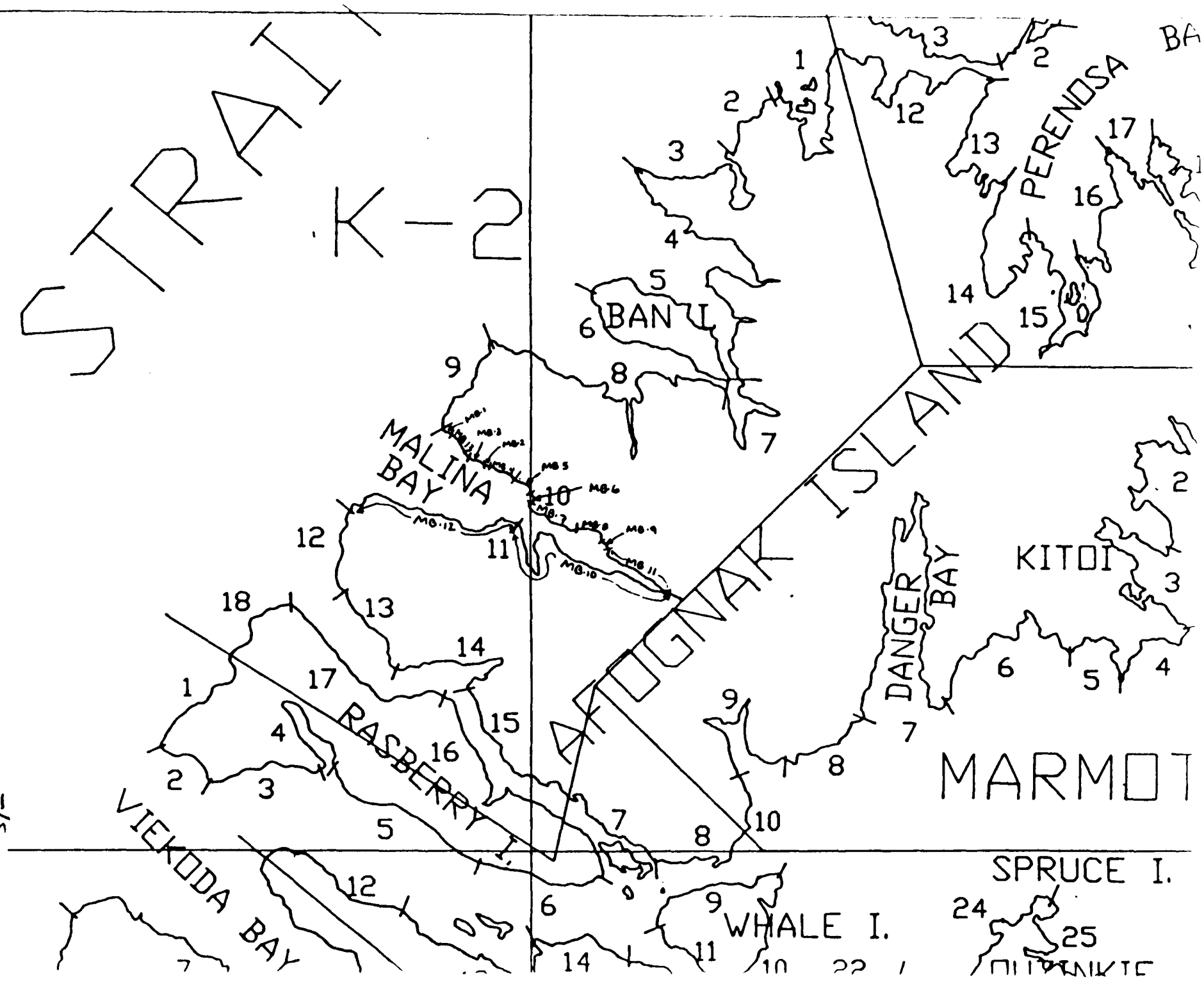
Upper Malina Lake

ACE 8702166



STRAIT K-2

ACE 8702168
-15



SEGMENT INSPECTION RECORD

ORIGINAL
8/2/89

ADEC # K2-10

Shoreline Segment: K2-10

Shoreline Treatment Process(es) Completed for this Segment

Yards Signed Off

☐ Hot water wash	☐ Mechanical
☐ Warm water wash	☒ Non-mechanical
☐ Water deluge	☐ Other

Exxon

Treatment as indicated above has been completed. Request demobilization from this segment.

Exxon Comments

Malina Bay cleaned except for the boulder area at Tanaah Cape. Cleaning crews anticipate 4 days to clean that area. Request inspection of the remaining bay area.

Signature Jack A. Rickner

Date Aug 2, 1989

Time 0818

Printed Name Jack Rickner

Existing Shoreline Condition As Visually Determined by USCG
Surface Oil

Percent	Degree of Oiling
<u>< 1%</u>	Heavy
<u>-</u>	Medium
<u>-</u>	Light
<u>< 1%</u>	Very Light
100%	

Subsurface Oil

☒ Yes ☐ No

Comment Below

Reassessment

☒ Yes - Necessary

☐ No - Not necessary unless re-oiled

ADEC Rep

Comments

Pls. see reverse.

Signature

Clarke A. Pelz

Date 8.3.89

Time 1:30 PM

Printed Name

Clarke A. Pelz

FOSC Rep

Demobilization approved/disapproved

Comments

SEE REVERSE

Signature

Date

Time

Printed Name

Copy: Exxon

ADEC

FOSC

ISCC

Return All Signed Originals to Exxon

+15
ACE 8702169

Aug 19 87

Only Segments MB-5, MB-6, MB-7, MB-8, and MB-9 were inspected. Segments MB-3 & MB-4 were not worked - cleanup crew was on scene and will commence cleanup in 24 hr. A small pocket cove in the fractured headland ^{between} MB 5 & 6 has been heavily impacted. Cleanup crews were working the area and had removed all mouse, pooled oil, and solid debris/kelp. The work performed, accomplished the Type A work order requirement. Accordingly Segment MB 5 through MB-9 are designated for Type A treatment. It is recommended that the impacted

★ → pocket cove between MB 5 & 6 be re-evaluated for Type B cleanup.

ADEC Only MB-5+6 were inspected from the ground. MB-7 was partially inspected from the air. The remaining segments to the back of the bay are unlikely to have received any significant hits. Type-A treatment seems to have been well down and it appears the team working on scene has done a good job. Gross surface oil has been removed from the pocket between MB 6+5. This would be a good candidate for type B treatment.

★ → MB-4+5 should be inspected when treatment is complete.

Charlie Kelly

DEC 29 1989

Partial # 1

"

Partial # 2

1035 645-90
KODIAK SCAT
K2-11

COMPLETE ~~JAN 8 1990~~

JAN - 9 1990

ACE 8643507

-30 Called Joe Bernier @ Florida North. He said he would
sent. He sent 1 bag of 100 ea Q-Tips inside. Will send
down 9 more bags.

(version 6/04/89)

SHORELINE PRE-CLEANUP ASSESSMENT BLOCK REPORT

Block (see enclosed map): K2-11

Includes Shoreline Segments: MB-10, MB-12

Location: Malina Bay

Submitted: _____ Date: _____
(for Exxon)

FOSC Approval: _____ Date: _____

The cleanup procedures identified in the Shoreline Cleanup Program are recommended. Exxon and other field personnel are encouraged to suggest innovations and productivity enhancements to the OSC's on-scene representative. Requirements for safety and the protection of cultural material must be observed.

CC: KISCC

ACE 8702172/A

(version 5/02/89)

SHORELINE CLEANUP PROGRAM

DATE 7/18/89

SHORELINE SEGMENT K2-11-MB-12

LOCATION: (see enclosed map) S. Coast of Malina Bay - Steep
Cape to Malka Bay.

ADEC NO. K2-11 SHORELINE ASSESSMENT DATE: 7/18/89

Recommended Cleanup Activity(ies):

- No cleanup recommended due to apparent absence of oil.
Subject to FOSC reassessment at a later date.

Priorities/Considerations:

- If oiling does occur, highly exposed shoreline may restrict access.

Ecological Constraints (from site survey):

Archaeological Constraints (from site survey):

- If cleanup is planned, an archaeological monitor will have to be assigned in archaeologically sensitive portions of the segment.

J. E. Smith
State Historic Preservation Officer *

Date: 7/23/89

EXXON: Jack A. Rickner

Date: 7/28/89

FOSC: _____

Date: _____

*Signature required to satisfy stipulations in Alaska DNR land use permits for tide and submerged lands.

^{1/5}
ACE 8702172/B

SHORELINE OIL EVALUATION FORM - KODIAK

Date: 7/18/89 Time: 08:00

Observer: G. MARDONALD

Surveyed From: Foot/Boat/Helio/Plane

Weather: (Sun) Cloud/Rain/Snow/Fog

LOCATION
LOCATION

S. shore of MALINA BAY

SEGMENT I.D. K2-11, M8-12

LENGTH OF SHORELINE SEGMENT: 10,300 m

ACCESS: Foot/Vehicle/Boat/Barge/Helio/Float Plane
shallow draft.

SHORELINE:

Shoreline Type: SPI/BEA/COV/HLD/STRT

Slope: LANG/HANG/VER

Wave Exposure: (High)/Med/Low 5% - V. HI. FETCH & FETCH ANGLE.

Sediment: B 30 / C 2 / P 2 / G 2 / S 2 / M 2 / R 60

Drift Debris on Beach: (Yes)/No (Supra) Upper/Mid/Lower Type SOME DRIFTWOOD

OIL

Degree of Oiling: Heavy/Moderate/Light/(No Oil)/Unobserved/Very Light

Total Area of Beach Impact: SU / SP / H / M / L NOT APPLICABLE

OIL DISTRIBUTION

Continuous: Y/N Segment # _____ No. Bands _____ Width _____

Sporadic: Y/N Segment # _____ Min/Max Dia _____ Impact Width _____

Est. Oil Thickness where > 1cm: _____ cm. SU / SP / UP / MID / LO
Depth below top sed

Est. Oil Penetration: _____ cm SU / SP / UP / MID / LO

Layers? Yes/No No. Layers _____ Oil Weathering _____

Drift Debris Oiled? Yes/No Supra/Upper/Mid/Lower Amount: H / M / L / VL

OIL MORPHOLOGY

Pooled Oil _____ "Free" Oil _____ Spattered _____ H/M/L/VL Sheen _____

OIL WEATHERING (OW)

Fresh Oil _____ SU/SP/VP/MID/LO Choc Mousse _____ SU/SP/VP/MID/LO

Pancake Mousse _____ SU/SP/VP/MID/LO Asphalt Mousse _____ SU/SP/VP/MID/LO

Tar Formation _____

Comments:

4 HIGHLY EXPOSED, HIGH ENERGY, ERADING COAST SEGMENT.

ACE 8702173

NO PHOTO DOC.

CAMERA BROKEN.

7/18/89 SEGMENT MB-12
Maka Bay ← Steep Cape
08.00 HRS

- ① Steep exposed rock walls to ~ 75m; v. exposed; hi fth & fth L; stacks, pillars; rounded bldr-cob stands between o.c; erosional beach; granitics; no oil; slt alt dionites.
- ② broad rounded bldr-cob-pbb w/ trace sand/gravel; glac. till & outwash silt to 10m tk; small stream; fining upbeach; no oil.
- ③ steep, high, rugged shattered granitic promontory; rnd. bldr-cob, low angle strand @ base of cliff - MIZ;
- ④ diorite contact w/ metaseds; hi sheared folded, slt foliated;
- ⑤ low L bldr-cob-backrock beach/bench; rounded bldrs etc; capped w/ till in valley sections; no oil

⑥ low-mud & peb-grl beach over wave
cut bench; 10m. till cap; adjacent
metaseds outcrop point to E; no oil;
granitic thrust contact/intervives; dykes?;
50m altered drab cliff w/ massive
blks & bwn

⑦ contact w/ thermal alter^d of metaseds
; thrust/shears; limonite; no oil

⑧ massive boulder over bedrock

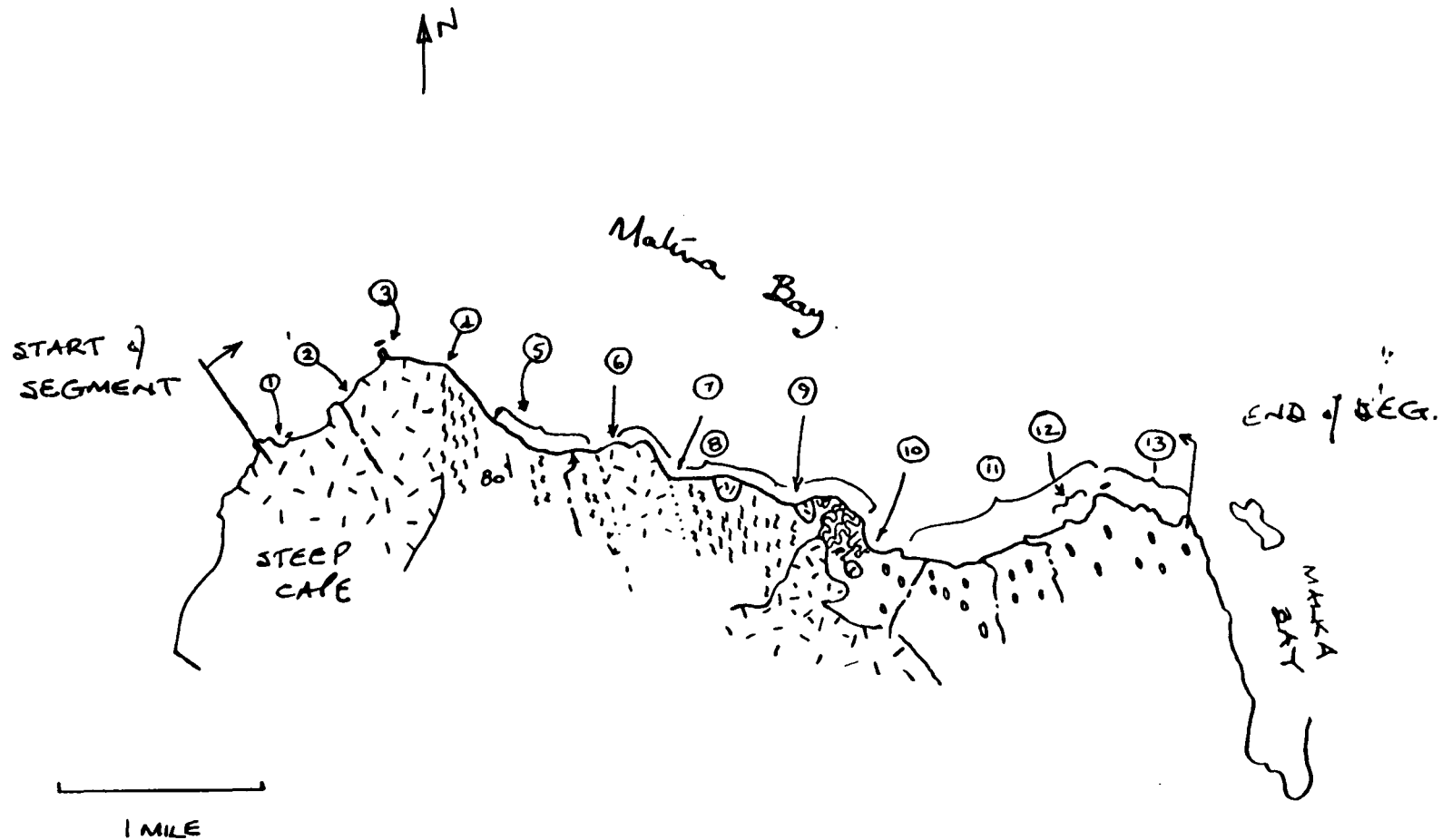
⑨ rounded bldr-cob-grl pebble beach;
country rocks altered to Qtz-chlor-bio
schist in places; no oil.

⑩ low-mud & peb-sand beach; w/
foliated gneiss interbedded w/ sheared
greenstone & metaseds; still exposed;
low relief steep rock walls to 5m;
till cap (2-3m thk). no oil.

⑪ low & wave-cut bench w/ veneer of
blks, cob-peb-sands; no oil;
sands < LWL.

⑫ peb-sand pebble beaches over bedrock
~ 10-50m Hk. no oil.

⑬ steep hi cliff (30m); v. exposed; no oil.
10-35m ENE of SEGMENT



SEGMENT MB-12

KEY

② LOCATION - SEE notes

--- STREAM

∞ general strike & dip of rocks.

--- GRANITIC ROCKS; GRANITES, DIORITES, SHEARED METASEDIMENTS

QTZ-CHLOR-BIO SCHIST & RELATED METAMORPHICS

• ALTERED METASEDS, GREENSTONES; LAVAS, PILLOW BASALTS.

Map base: NOAA
Nautical Chart 16604
scale 1:78,000

7/10/89 a.m.
G. MACDONALD

ACE 8702176

version: 4/24/89

ECOLOGICAL EVALUATION

LOCATION: Afognak Is SITE: Malina Bay OBSERVER: M. Fawcett
LOCATION PREFIX: MB SEG. NO.: 12 LENGTH: 10,300 (M)
DATE: 7/18/89 TIME (HHMM): 0807 TIDE HT.: -0.3 (M)

OILED ZONE: Splash High Medium Low

SUBSTRATUM: Rocks Boulder Cobble Gravel Sand Mud mostly cliffs

LIVE BIOTA

Fucus (algae): Patchy Y/N Contin. Y/N Dense Y/N Sparse Y/N None Y/N

Mytilus (Mussels): Patchy Y/N Contin. Y/N Dense Y/N Sparse Y/N None Y/N

Balanus (Barnacles): Patchy Y/N Contin. Y/N Dense Y/N Sparse Y/N None Y/N

Balanus dense except on unstable high energy beaches

Littorina

Patchy Y/N Contin. Y/N Dense Y/N Sparse Y/N None Y/N

Limpets: Patchy Y/N Contin. Y/N Dense Y/N Sparse Y/N None Y/N

OTHER OBSERVATIONS: 1 small steep stream (non-abundant) - abundant
Thaus emarginata, T. lima, T. canaliculata in some areas - also Katharina,
Mapalia muscosa, Leptasterias, Henricia, Pycnopodia, Pisaster

CLEANUP PRECAUTIONS: no cleanup needed, access unlikely

MAMMALS: Otters 28 ^{sea otters, 2 river otters} Harbor Seals _____ Sea Lions _____ Whales _____
Other 7 deer near beach

BIRDS: + eagles (1 pair with nest), gulls, puffins, pigeon guillemot, osprey, magpies

GENERAL OBSERVATIONS: Mainly high energy cobble beaches and
cliffs - access rare because of surf

ACE 8702177

(version 5/02/89)

SHORELINE CLEANUP PROGRAM

DATE 7/18/89

SHORELINE SEGMENT K2-11-MB-10

LOCATION: (see enclosed map) Malina Bay

ADEC NO. _____ SHORELINE ASSESSMENT DATE: 7/17/89

Recommended Cleanup Activity(ies):

- No cleanup required due to apparent absence of oil.
Subject to FOSC reassessment at a later date.

Priorities/Considerations:

- None

Ecological Constraints (from site survey):

- If reoiling occurs and cleanup is advised, avoid damaging healthy lower intertidal zone through trampling or allowing run-off of oily wastes.

Archaeological Constraints (from site survey):

- If cleanup is planned, an archaeological monitor will have to be assigned in archaeologically sensitive portions of the segment.

A. David McMan
State Historic Preservation Officer *

Date: 7/28/89

EXXON: _____

Date: _____

FOSC: _____

Date: _____

*Signature required to satisfy stipulations in Alaska DNR land use permits for tide and submerged lands.

+/S
ACE 8702179

SHORELINE OIL EVALUATION FORM - KODIAKDate: 7/17/89 Time: 07:50Observer: G. MACDONALDSurveyed From: Foot/Boat/Helio/PlaneWeather: Sun/Cloud/Rain/Snow/FogLOCATION MAKINA BAY, SOUTHEASTSEGMENT I.D. K2-11, MB -10LENGTH OF SHORELINE SEGMENT: ~~242/1650~~ 16,500 mACCESS: Foot/Vehicle/Boat/Barge/Helio/Float Plane calm only.SHORELINE:Shoreline Type: SPI/BEA/INLET COV/HLD/STRTSlope: LANG HANG/VERWave Exposure: High/Med/Lowbeach rock wall.Sediment: B30 / C5 / P10 / G10 / STRACE / M5 / R40Drift Debris on Beach: Yes/No Supra/Upper/Mid/Lower Type SEAGRASSOILDegree of Oiling: Heavy/Moderate/Light/No Oil/Unobserved/Very LightTotal Area of Beach Impact: SU / SP / H / M / L NOT APPLICABLE.OIL DISTRIBUTIONContinuous: Y/N Segment # No. Bands Width Sporadic: Y/N Segment # Min/Max Dia Impact Width Est. Oil Thickness where > 1cm: cm. SU / SP / UP / MID / LO
Depth below top sedEst. Oil Penetration: cm SU / SP / UP / MID / LOLayers? Yes/No No# Layers Oil Weathering

Drift Debris Oiled? Yes/No Supra/Upper/Mid/Lower Amount: H / M / L / VL

OIL MORPHOLOGYPooled Oil "Free" Oil Spattered H/M/L/VL Sheen OIL WEATHERING (OW)Fresh Oil SU/SP/VP/MID/LO Choc Mousse SU/SP/VP/MID/LOPancake Mousse SU/SP/VP/MID/LO Asphalt Mousse SU/SP/VP/MID/LOTar Formation

ACE 8702180

Comments:

S. SHORE MAKINA BAY + MAKKA BAY — OIL FREE.< 10 MOUSSE COATED GRASS CLUMPS NOTED
IN ENTIRE SEGMENT.NO PHOTO: CAMERA
FAILUREG.

7/16 SEGMENT K2-11, MB -10

19:00 hrs S. Malina Bay

barren steep - mud < fab-grl beach;
grades into lowlt cob-bldr-grl then
boulder-fab-grl - bedrock shore.
2 mouse coated grass clumps in 200 m.

long boulder-fab-grl → bedrock-bldr-fab-
grl. strait; occas. rock outcrop.
terminates at glacial drift narrow -
no oil.

fab/cob-grl-sand long, even, b/wk.
shore w/ occas. rock outcrop; no oil.

inlet necks down to v. shallow eelgrass
bay, then muddy bottom tidal
shallow/flats.

check head of inlet - htz of black-
dried eelgrass - no oil.

2 dessicated/pancake mouse pads
@ 4172 in 300 m. of max.
exposed "end shore".

halt segment @ 21:00 hrs

restaur MB-10; 7/17 am; 07.30

steep beach walls, v. exposed,
attened pillow lavas; Mokka Bay.

gvl-pbb, gvl-bldr v. exposed pocket;
traces (2) slightly oiled debris bldgs.

2 gvl-and-pbb beaches; no oil, low L,
v. exposed; rimmed by steep rocky crags.

↓ tidal flats; grassy expanse of hinterland;
glac. striated boulders;

↓ outcrop -
6 mud-cob-pbb flats,
rock-bldr alone

~~step in [redacted] 12 m.~~

~~[redacted]~~

10.30 END of SEGMENT
10,970 m.

7/17 5.00 AM MB-11

19.00

outcrop; cob gvl beach; trace
S. [redacted] asphalt [redacted] spots @ MWL;
blackwater [redacted] - no oil

blkr [redacted] gvl ↔ bldr [redacted] outcrop
beach, no oil [redacted] mat. exposed

becoming more rocky, craggy to W;
cliff to 25 m; occas. gvl pocket
no oil; [redacted] scoured

some [redacted] live [redacted] [redacted] @
[redacted] [redacted] [redacted]

21.15

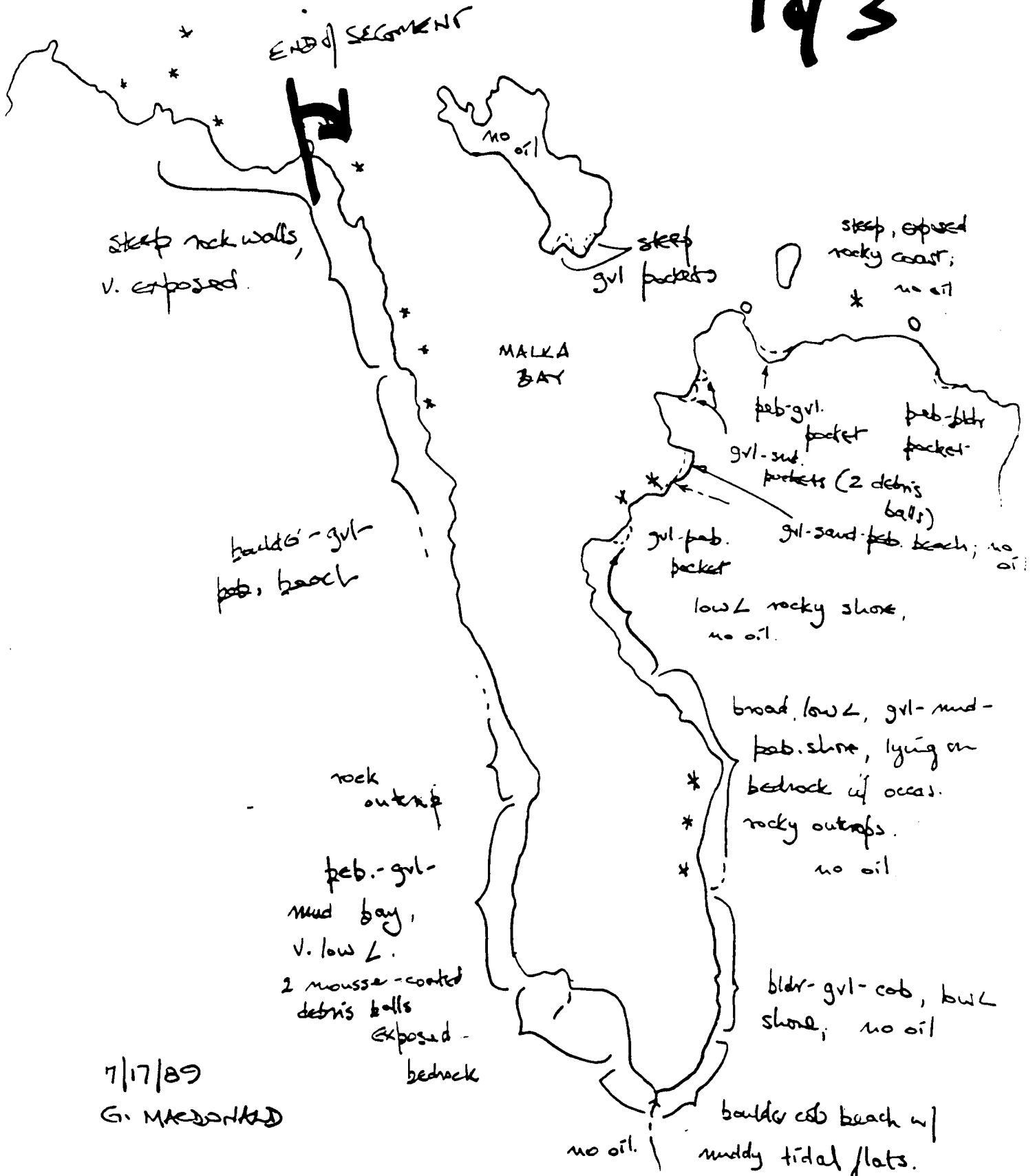
END of GME

SEGMENT MB 10

Malina Bay.



143



7/17/89

G. MACDONALD

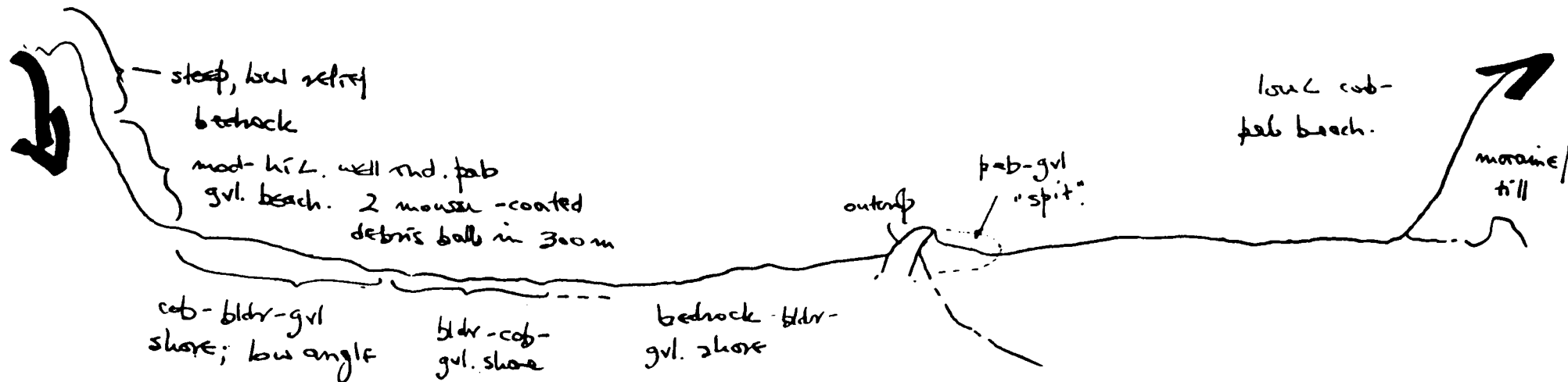
4

SEGMENT MB-10

7/16/89 p.m.

SE. Malina Bay, S. shore
G. MACDONALD.

273

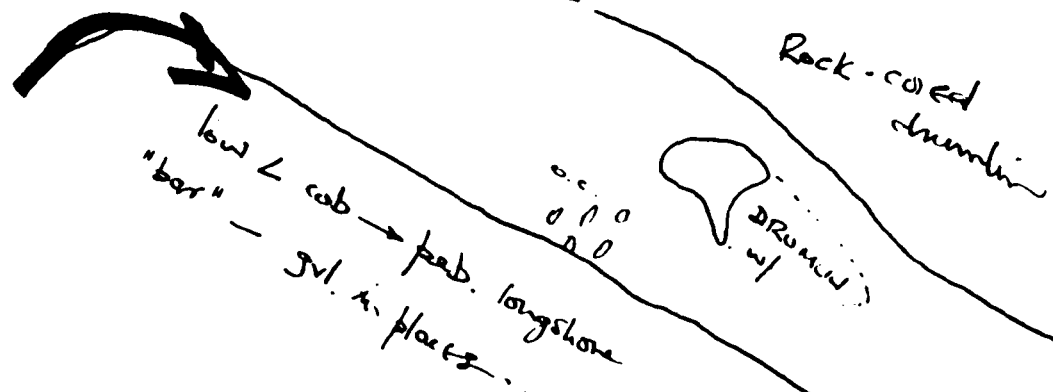


ACE 8702184



SE. Malina Bay

MB-10



343

ECOLOGICAL EVALUATION

LOCATION: Afegnak Id. SITE: Malina Bay OBSERVER: M. Fawcett

LOCATION PREFIX: MB SEG. NO.: 10 LENGTH: 16,500 (M)

DATE: 7/1/89 TIME (HHMM): 1915-2100 hrs TIDE HT.: 1.5 (7/16) (M)

continued 7/17/89 0720 hrs - 1025 hrs.
OILED ZONE: Splash High Medium Low - rare traces - 0.3 to + 0.4 (7/17)
rare traces of oil: a 10-12 small mousse patches or streaks in entire segment
SUBSTRATUM: Rocks Boulder Cobble Gravel Sand Mud

LIVE BIOTA

Fucus (algae): Patchy Y/N Contin. Y/N Dense Y/N Sparse Y/N None Y/N

Mytilus (Mussels): Patchy Y/N Contin. Y/N Dense Y/N Sparse Y/N None Y/N

some dense beds of mussels on mud flats near head of Bay

Balanus (Barnacles): Patchy Y/N Contin. Y/N Dense Y/N Sparse Y/N None Y/N

Barnacle sp. dense on all hard surfaces

Littorina

Patchy Y/N Contin. Y/N Dense Y/N Sparse Y/N None Y/N

Limpets: Patchy Y/N Contin. Y/N Dense Y/N Sparse Y/N None Y/N

Calisella digitalis, strigatella, pelta, Acanthina scutum

OTHER OBSERVATIONS: Katharina, Mopalia muscosa common in

Some areas several Ischnochiton sp. (caeperi?) seen -

Thais (Nucella) emarginata common - Many clams near head of Bay, also
Rungeness & helmet crabs

CLEANUP PRECAUTIONS: no cleanup advised at this time - If re-occurs & cleanup is advised, avoid run off of wastes into low intertidal
or trampling of
(1 mother & pup)

MAMMALS: Otters 4 Harbor Seals _____ Sea Lions _____ Whales _____
Other _____

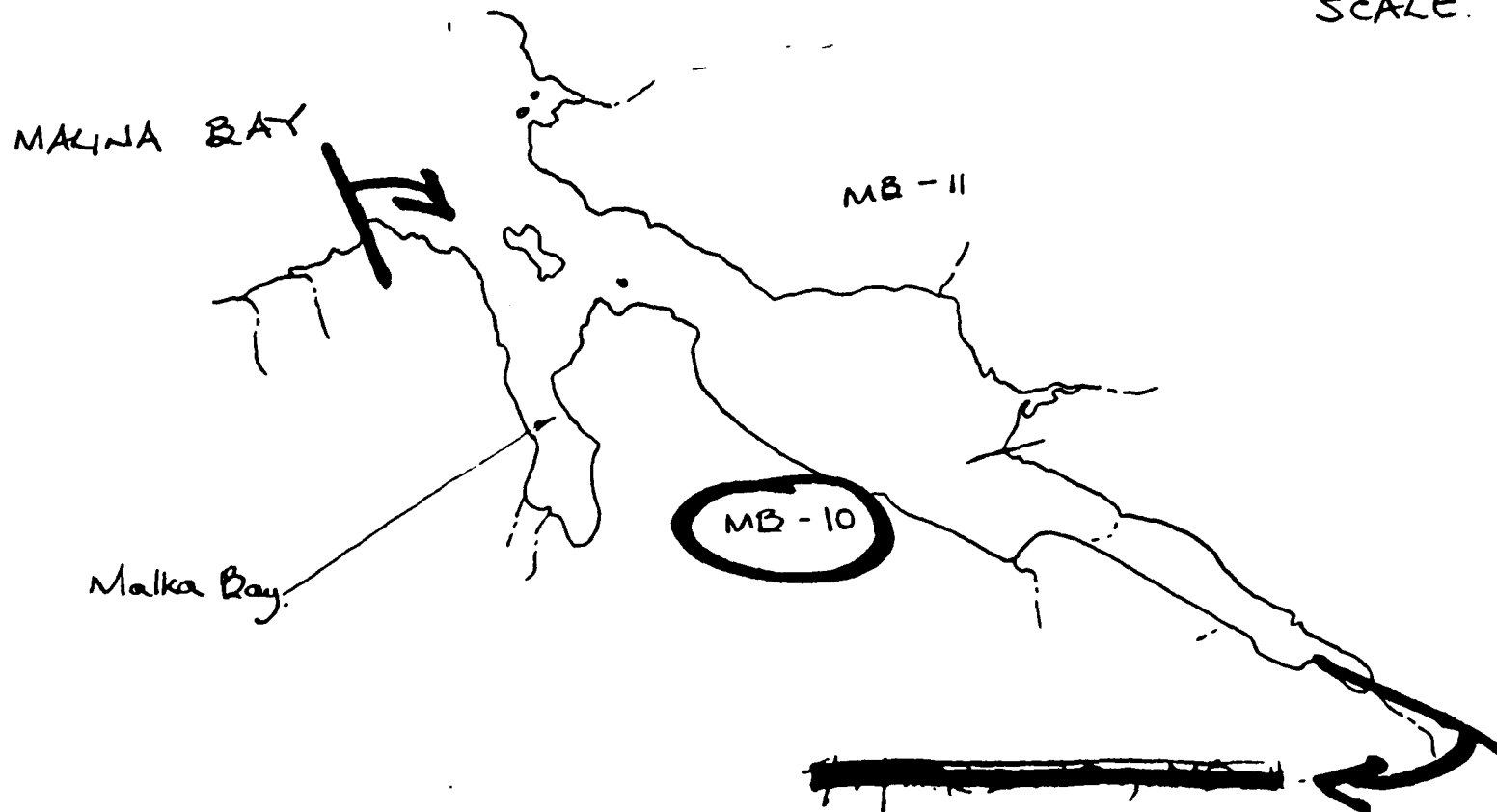
BIRDS: goldeneye, magpies, numerous oystercatchers, 1 king eagle, 2 pairs eagles with nests

GENERAL OBSERVATIONS: vast eelgrass beds near heads of Bays -

Starfish seen: Pycnopodia, Solaster, Eremasterias, Leptasterias, Evasterias
Pisaster - two small, probable anadromous fish streams at head
of Bay - jacks or Solly varden seen in bigger on

SEGMENT : K2-11, **MB-10**
Malina Bay.

1 MILE
SCALE.



7/16 & 7/17/89
G. MACDONALD

Scale 1:70,000 (1" = 1.23 miles)

BASE MAP : NOAA Nautical Chart # 16604, 9th Ed, 9/10/83

REF. MAP

51

KODIAK SCAT

K2-12

DEC 29 1960

ACE 8643508

K2-12

(version 5/02/89)

SHORELINE CLEANUP PROGRAM

DATE 5/26/89

SHORELINE SEGMENT SC-1

LOCATION: (see enclosed map) South of STEEP CAPE, near entrance
to Raspberry Straight

ADEC NO. _____ SHORELINE ASSESSMENT DATE: 5/19/89

Recommended Cleanup Activity(ies):

- Remove oiled coated seaweed drift in the high intertidal zone.
- Check to make sure that the clean seaweed does not cover any contaminated seaweed drift.

Priorities Considerations:

See Above.

Ecological Constraints (from site survey):

Avoid areas of healthy fucus in lower intertidal zone.

Archeological Constraints (from site survey):

No access above the active beach. Site should be monitored during cleanup. The restraints for type A cleanup should be applied to this segment. If heretofore undiscovered cultural materials are uncovered during cleanup, contact Exxon's Archeological Field Director and take actions prescribed in the Operational Guidelines for Shoreline Cleanup dated 4/21/89 as amended.

Douglas R. Regeer
State Historic Preservation Officer *

Date: 5/29/89

EXXON: _____

Date: _____

FOSC: _____

Date: _____

* Signature required to satisfy stipulations in Alaska DNR land use permits for tide and submerged lands.

+ / F / S / -
ACE 8702189

SHORELINE OIL EVALUATIONDate: 19 MAY 1989 Time: 1050 HRSObserver: BRYAN TRIMMSurveyed From: Foot/Boat/Helio/PlaneWeather: SUR/Cloud/Rain/Snow/Fog**LOCATION**LOCATION 1 MILE (1750m) S. OF STEEP CAPE ON
AFOGNAK Is (ENTRANCE TO RASPBERRY SEA).SEGMENT NUMBER SC-1LENGTH OF SHORELINE SEGMENT: 1500 mACCESS: Foot/Vehicle/Boat/Barge/Helio/Float Plane**SHORELINE:**Shoreline Type: SPI/SEA/COV/HLD/STRTSlope: LANG/HANG/VERWave Exposure: High/Med/LowSediment: B 25% / C 25% / P 25% / G 25% / S —% / M —% / R —%Drift Debris on Beach: Yes/No Supra/Upper/Mid/Lower Type LOGS/SEAWEED**OIL**Degree of Oiling: Heavy/Moderate/Light/No Oil/UnobservedArea of Beach Impact: SU / SP / H / M / LContinuous: Y/N % of Segment 25 Width of Band: 1/2 mSporadic: Y/N % of Segment 35Est. Oil Thickness where > 1cm: — cm Est. Oil Penetration: 5 cmPooled Oil: —% "Free" Oil: —% Coated: H —% / M —% / L 100%Fresh —% Mousse 98% Tar Formation: 2%Drift Debris Oiled? Yes/No Supra/Upper/Mid/Lower Amount: H/M/L**Comments:**

LIGHT CHOCOLATE MOUSSE COATING OF BOULDER/CORBBLE BEACH. NO CLEANUP RECOMMENDED (TOO THIN A
SEEMS TO BE 2ND OR 3RD OILING.

COATING). REMOVE THE 1/2 M BAND OF OILED SEAWEED DRIFT AT THE TOP OF THE HIGH INTERTIDAL ZONE.

NOTE: MAKE SURE WORK CREWS CHECK & MAKE SURE CLEAN SEAWEED DRIFT DOES NOT OVERLAY ANY OILED
SEAWEED DRIFT.

ECOLOGICAL EVALUATION

LOCATION: Afognak Is SITE: S. of Star Cape OBSERVER: Sm BarnLOCATION PREFIX: SC SEG. NO.: 1 LENGTH: 1500 (M)DATE: 5/19/89 TIME (HHMM): 1050 TIDE HT.: + 2 (M)OILED ZONE: Splash High Medium LowSUBSTRATUM: Rocks Boulder Cobble Gravel Sand Mud

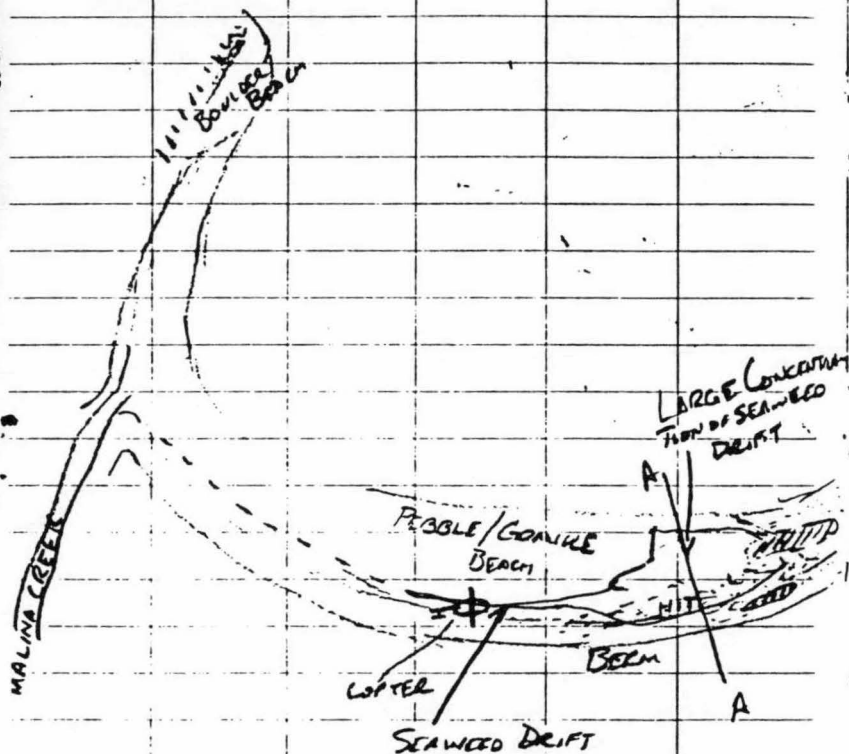
LIVE BIOTA

Fucus (algae): Patchy (Y)/N Contin. Y/N Dense (Y)/N Sparse Y/N None Y/NDense in lower FTZ Some coated at beginning of seg.Mytilus (Mussels): Patchy (Y)/N Contin. Y/N Dense (Y)/N Sparse Y/N None Y/Nsame as aboveBalanus (Barnacles): Patchy (Y)/N Contin. Y/N Dense (Y)/N Sparse Y/N None Y/NDense spot in lower FTZLittorinaPatchy Y/N Contin. Y/N Dense Y/N Sparse (Y)/N None Y/NHealthyLimpets: Patchy Y/N Contin. Y/N Dense Y/N Sparse (Y)/N None Y/NHealthy, Thais alsoOTHER OBSERVATIONS: Amphipods alive in debris, Debris very dense in areas. lightly oiledCLEANUP PRECAUTIONS: Avoid healthy Fucus community in lower FTZ and on bouldersMAMMALS: Otters _____ Harbor Seals _____ Sea Lions _____ Whales _____
Other Deep tracksBIRDS: None seenGENERAL OBSERVATIONS: Over ice light oiling of beach

DOCUMENTATION:Map/Aerial photo marking segment boundaries A HatchedVTR: Y/N Tape Number(s) NonePhotography: (Y)/N Roll Number(s) SMA-8Sample Numbers Collected: None

PLANE VIEW SC-1

ACE 8702193



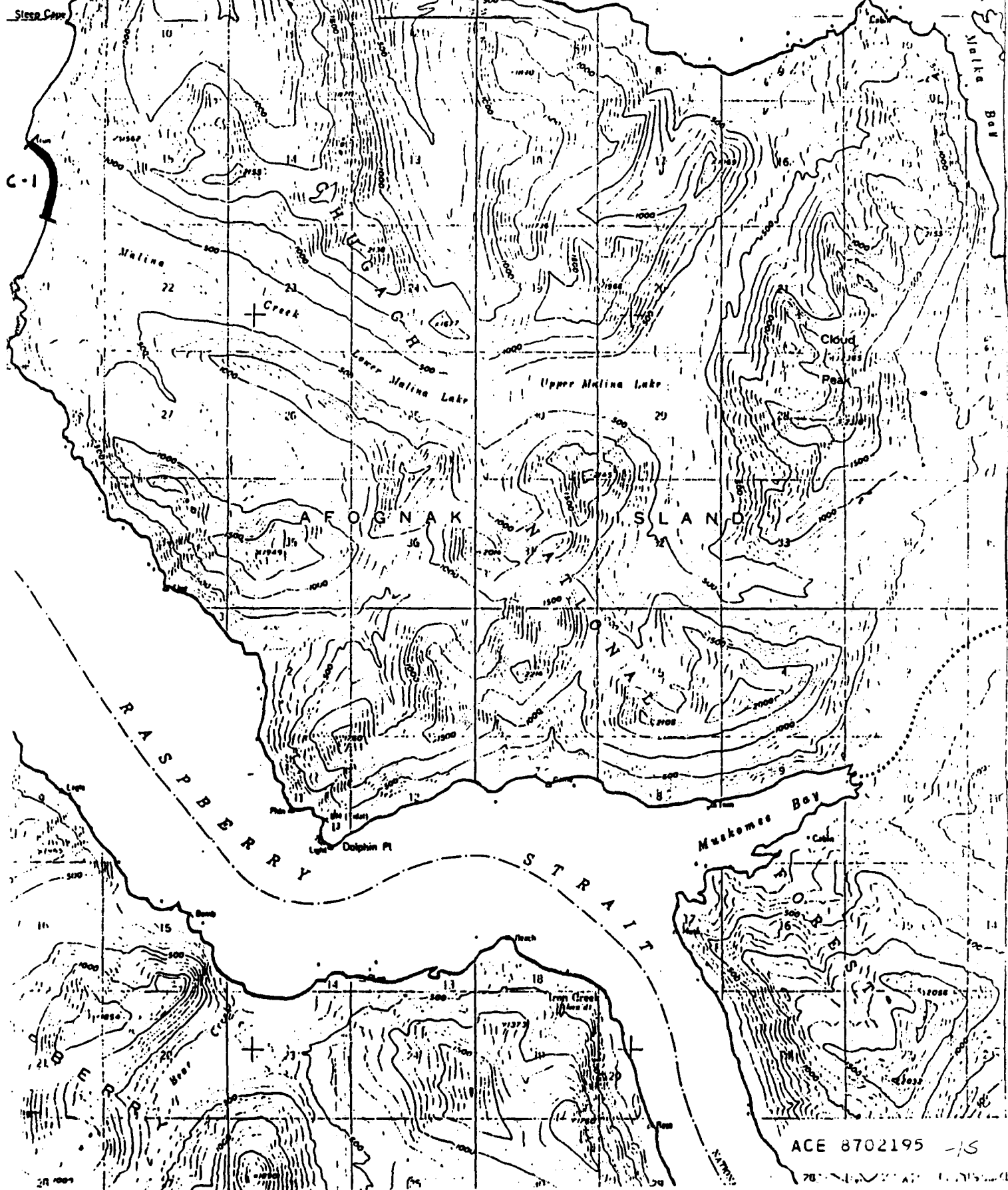
 LIGHT COATED
 MOUSSE
 SPLATTERED OIL
 LIGHT MOD

NORTH

BOULDER/COBBLE

SP

SC-1
Steep Cape
Afognak Is.



ACE 8702195 -15

(version 5/24/89)

SHORELINE PRE-CLEANUP ASSESSMENT BLOCK REPORT

Location (see enclosed map): STEEP CAPE BLOCK

Includes Shoreline Segments: SC-1

Submitted : _____ Date: _____
(for Exxon)

ISCC Approval: _____ Date: _____

FOSC Approval: _____ Date: _____

The cleanup procedures identified in the Shoreline Cleanup Program are recommended. Modifications to these systems can be made in the field. Exxon and other field personnel are encouraged to suggest innovations and productivity enhancements to the OSC's on-scene representative. The OSC's representative has the authority to approve on-site modifications. The Field Resource Team should be consulted if these actions do not fit within the Ecological Constraints of the Shoreline Cleanup Program. Requirements for safety and the protection of cultural material must be observed.

Distribution:

Exxon Shoreline Coordinator
Exxon Shoreline Supervisor
Exxon SCAT file

FOSC
CDFU
NOAA
EPA
USDA (FS)
USFW
A.DEC
A.FG
A.DNR
CAC
PWSCA
USFS
SHPO

-14/FF
ACE 8702196

517

117 47

KODIAK SCAT

K3-1

COMPLETE

01/22/90

ACE 8643509

1-10 Called Ron about status of digitizer pad. His supply
guy said they are getting limited merchandise because
of volcano activity. Will contact Butch or I when
pad is in Anchorage.

ACE 8702197
-F11E|FF|-|H

ORIGINAL
RECEIVED
7/24/89

TYPE A SHORELINE CLEANUP WORK ORDER

Date 7/23/89

Shoreline Segment IB-9

Location (see map)

From Pillar Cape NW into Izhut Bay

ADEC No. K3-1

Shoreline assessment date 7/15/89

Recommended Cleanup Activities

Manual removal of mousse patties and tar balls from high tide line.
Clean oiled driftwood if found in tidal area.

Priority Considerations

Class 5
Oil contamination light
Resources absent

Ecological Constraints

None

Archaeological Constraints (from site survey)

If any archaeological or historical sites or artifacts are discovered during the clean up activity, they must remain undisturbed and the Exxon archaeologist Jim Haggarty contacted (486-5680) (take action prescribed in the "Guideline for Shoreline Cleanup" dated 4/21/89 as ammended) and the State Historic Preservation Office notified as soon as possible.

Submitted by: Jack A. Riskner
Exxon

Date 7/24/89

Approved: [Signature]
Federal On-Scene Coordinator Representative

Date 7-26/89

ACE 6702198 +/S

(version 6/04/89)

SHORELINE PRE-CLEANUP ASSESSMENT BLOCK REPORT

Block (see enclosed map): K3-1

Includes Shoreline Segments: IB-9

Location: From Pillar Cape NW into Izhut Bay

Afognak (A1) quadrangle

Submitted: _____ Date: _____
(for Exxon)

FOSC Approval: _____ Date: _____

The cleanup procedures identified in the Shoreline Cleanup Program are recommended. Exxon and other field personnel are encouraged to suggest innovations and productivity enhancements to the OSC's on-scene representative. Requirements for safety and the protection of cultural material must be observed.

CC: KISCC

ACE 8702260

Ecology

१५३५

20 17
2 17
1 17

K3-1-1B-9

51 N/A

Tonki Bay

FORD
MOUNTAIN

(version 5/02/89)

SHORELINE CLEANUP PROGRAM

DATE 7/16/89

SHORELINE SEGMENT K3-1-IB-9

LOCATION: (see enclosed map) From Pillar Cape NW into Izhut Bay
Afognak (A1) quadrangle

ADEC NO. _____ SHORELINE ASSESSMENT DATE: 7/15/89

Recommended Cleanup Activity(ies):

- Manual removal of mousse patties and tar balls from high tide line.
- Clean oiled driftwood if found in tidal area.

Priorities/Considerations: Class 5

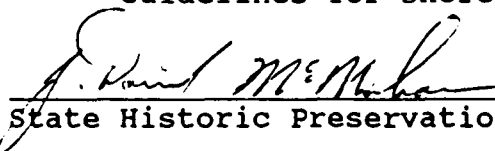
- Oil contamination light
- Resources absent

Ecological Constraints (from site survey):

- None

Archaeological Constraints (from site survey):

- If heretofore undiscovered cultural materials are uncovered during cleanup, contact Exxon's Archeological Field Director and take actions prescribed in the Operational Guidelines for Shoreline Cleanup dated 4/21/89 as amended.


State Historic Preservation Officer *

Date: 7/21/89

EXXON: _____

Date: _____

FOSC: _____

Date: _____

*Signature required to satisfy stipulations in Alaska DNR land use permits for tide and submerged lands.

ACE 8702201

SHORELINE OIL EVALUATION

ORIGINAL

Date: 7/15/89 / Time: 1635-1715
7/16/89 / Time: 0845-1105
 Surveyed From: Foot/Boat/Helio/Plane

Observer: M. Acton
 Weather: Sun/Cloud/Rain/Snow/Fog

LOCATION

Location: Pillar Cape NW into Izhut Bay Segment ID: K3-1-IB-9
 Segment Length: 6 miles m. Access: Vehicle/Boat/Barge/Helio/Float Plane
 Access Restrictions: Boat landing during low energy periods only

SHORELINE

Shoreline Type: SPI/BEA/COV/HLD/STRT Slope: Lo/Med/Hi/Vert
 Wave Exposure: High/Med/Low
 Sediment: B 20 % / C 15 % / P 10 % / G&S 15 % / M % / R 40 %

OIL

vg. Degree of Oiling: HEAVY / MODERATE / LIGHT / VERY LIGHT / NONE OBSERVED
 Area of Impact: SU/SP/H/M/L

OIL DISTRIBUTION

Continuous % of Segment SU/SP/H/M/L H/M/L/VL
 Sporadic % of Segment 5 SU/SP/H/M/L H/M/L/VL

Total	Length(m)	Width(m)	Thickness >1cm:	cm	SU/SP/H/M/L
Very light:	<u>50</u>	<u>5</u>	<u>8</u>	cm	SU/SP/H/M/L
Light:	<u> </u>	<u> </u>	Penetration/Rework:	<u> </u> cm	SU/SP/ <u>H</u> /M/L
Moderate:	<u> </u>	<u> </u>	Burial Depth:	<u> </u> cm	SU/SP/H/M/L
Heavy:	<u> </u>	<u> </u>			

obilization Potential: High/Medium/Low

ot Debris Oiled? Y/N Amount: H/M/L/VL SU/SP/H/M/L Type:

OIL MORPHOLOGY

ooled Oil: % SU/SP/H/M/L
 Free" Oil: % SU/SP/H/M/L
 plattered: % H/M/L/VL SU/SP/H/M/L
 oated: % H/M/L/VL SU/SP/H/M/L
 ancakes/Balls: 100 % SU/SP/H/M/L

Preliminary Cleanup Est.

Total TYPE A: m
 Total TYPE B: m
 Total TYPE A/B: m

OIL WEATHERING

resh: % SU/SP/H/M/L
 ousse: % SU/SP/H/M/L
 eathered Mousse: 90 % SU/SP/H/M/L
 sphalt Mousse: % SU/SP/H/M/L
 ar: balls 10 % SU/SP/H/M/L

COMMENTS

Segment consists of 3 beaches, w/ the remainder being rock cliff/headland, rock platforms, and large boulders (see attached maps 1-3 for beach descriptions).
 Entire segment flown by helio, 3 beaches by foot. No landing spots on non beach areas.
 Very light oiling consisting primarily of mousse patties w/ some tar balls observed on one beach (see Map #2).
 No oil observed from helio on non beach areas.

ACE 8702202

DOCUMENTATION:

(Map) Aerial photo marking segment boundaries See Attachment

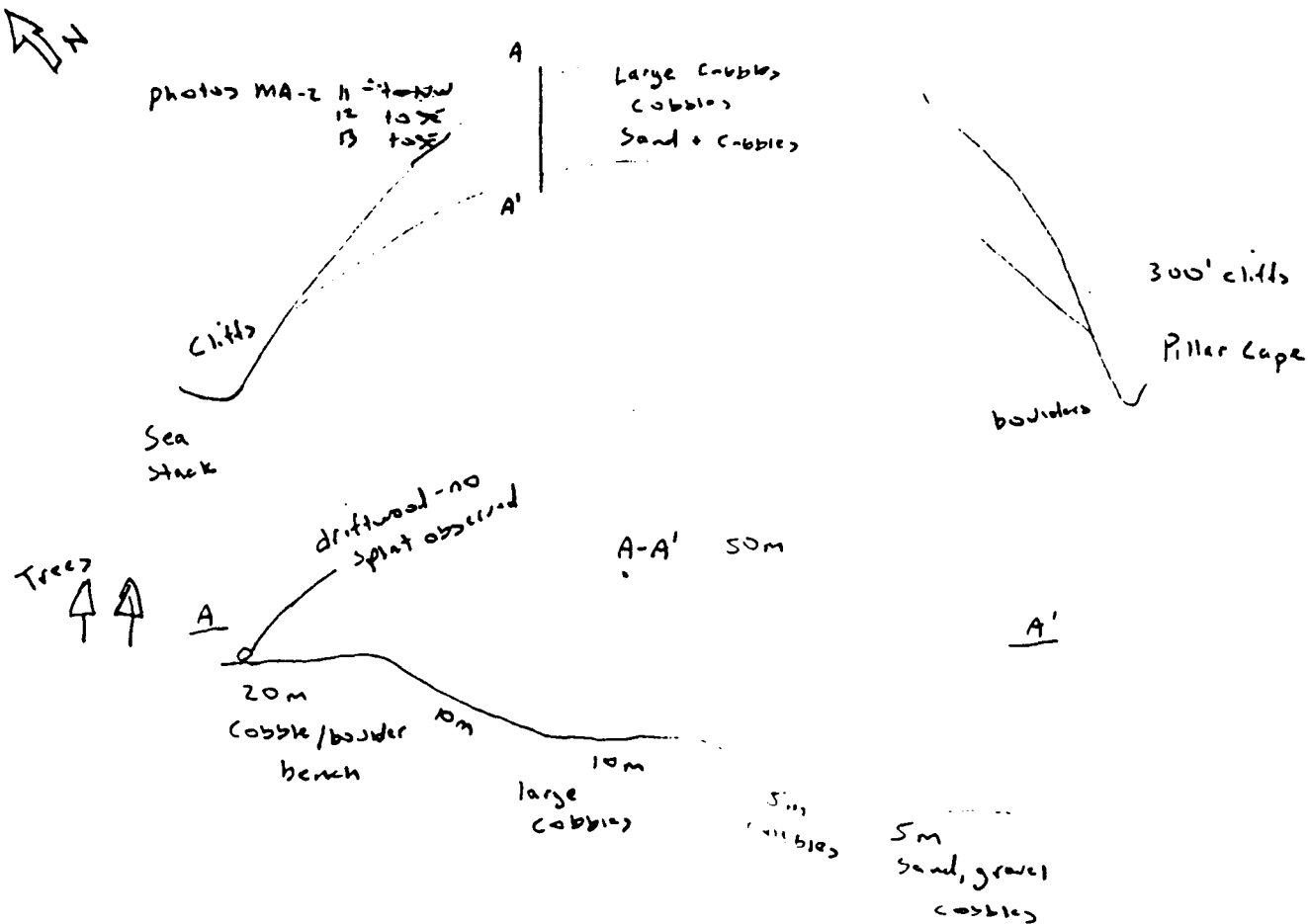
VTR: Y/N Tape Number(s) _____

Photography: ☒ Y/N Roll Number(s) MA2

Sample Numbers Collected: N/A

Map #1

ORIGINAL



No Oil observed

Walked beach at approx 1645, tide at +4. (7/15)

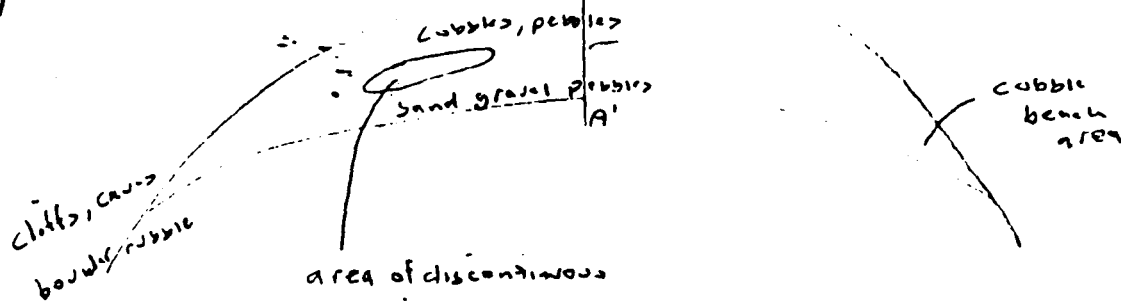
ACE 8702204

Map #2

photos MA-2-15 to NW
16 to SE
17 to SE

ORIGINAL

N



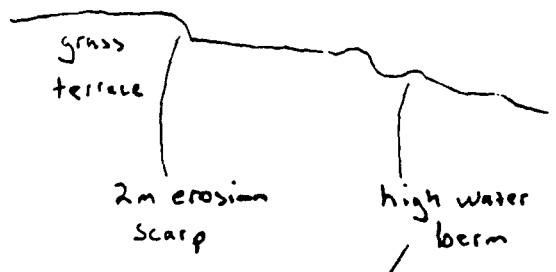
area of discontinuous
V. lt. oiling - mousse
patties up to 15cm diameter
and tar balls up to 3cm diameter

All oil observed on surface, none
observed in subsurface.

A-A' 30m

A

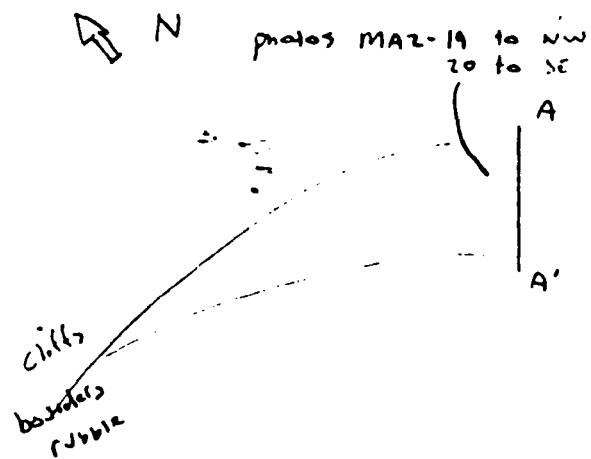
A'



very lt. oiling observed
mousse patties, tar balls
splat

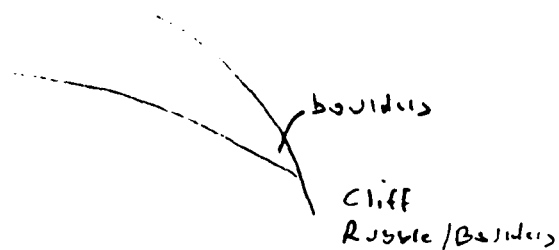
Walked beach at approx 0900, tide at +1. (7/10)

Map #3

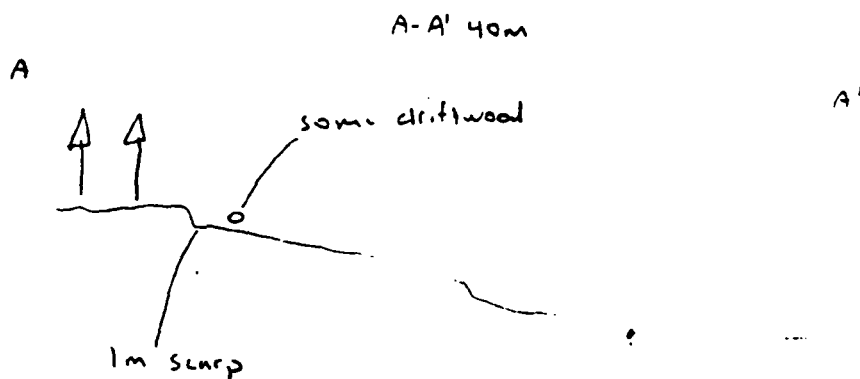


ORIGINAL

Beach 50% pebbles/sm cobbles
50% sand/gravel



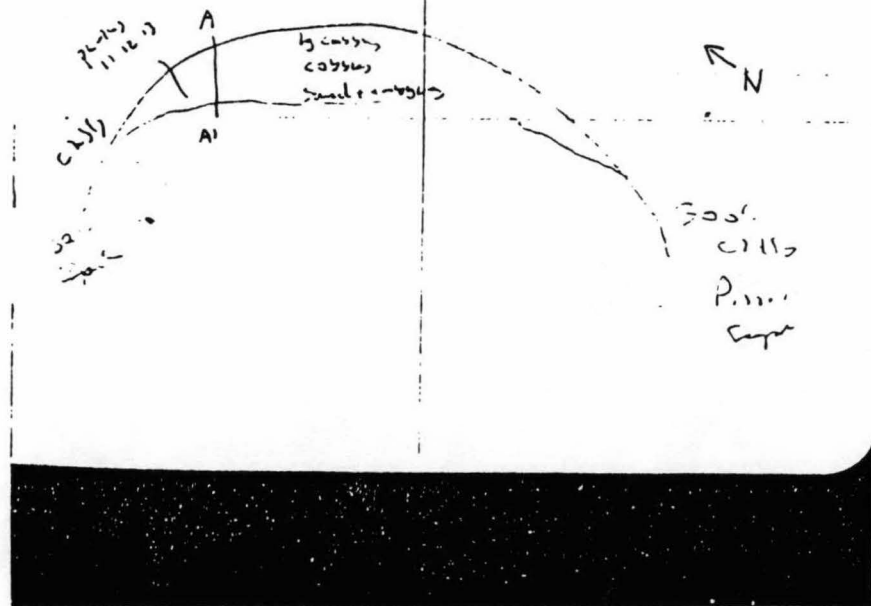
Walked beach at approx 1030, tide at +3. (7/16)
Did not walk extreme ends of beach.



No oil observed.

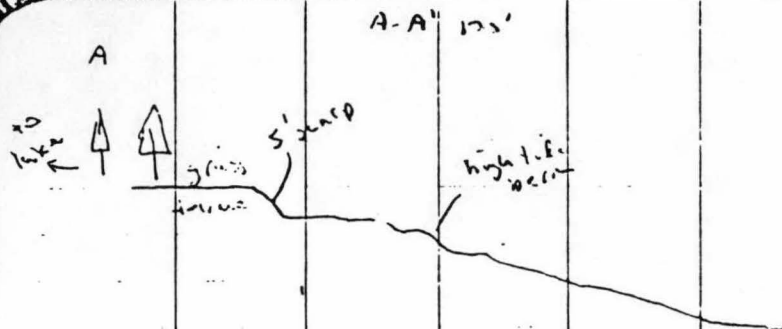
ACE 8702206

set down at 1035 just NE of Pinner Cape
 1st been NE of Pinner Cape



ACE 8702207

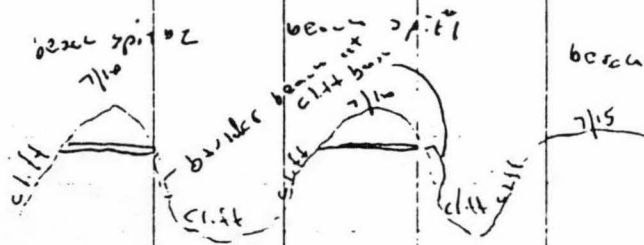
ORIGINAL



1015 left off
1020 land at spit on

NW to point
narrow beach beach, vertical cliffs, many slopes
-cliffs, some grassy

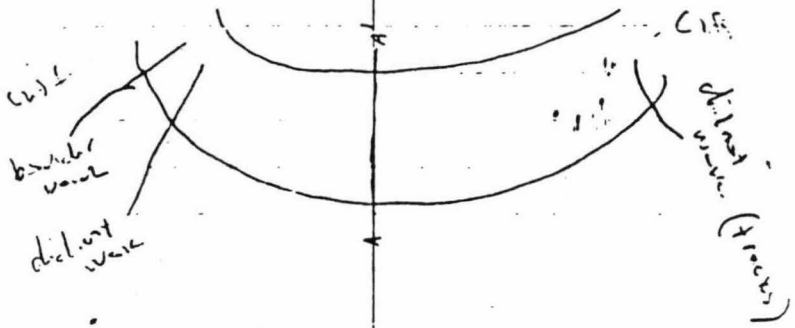
from pt NW to spit - beach here



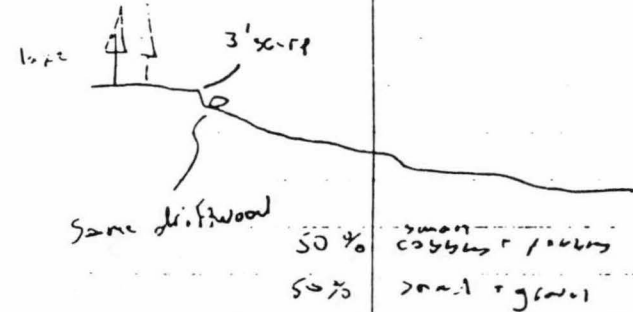
pillar
-pe

MA. 14 NW
20 SE

could not cross from NW end of year due to
beach track in not out



A-A' 40m



Same driftwood 50%
50% small cobbles & pebbles
sand & gravel

off 1105
rest of segment to NW
few small pebbles
just cliff prominently

CRIB

ECOLOGICAL EVALUATION

LOCATION: Kodiak SITE: Afognak-Izhut Bay OBSERVER: G. Penn
 LOCATION PREFIX: K3-1 SEG. NO.: IB-7 LENGTH: 6 miles (M)
 DATE: 07/15/89 TIME (HHMM): 16:35 TIDE HT.: 1.1 (M)
07/16/89 18:45 0.3 (m)
 OILED ZONE: Splash High Medium Low
 SUBSTRATUM: Rocks Boulder Cobble Gravel Sand Mud

LIVE BIOTA

Fucus (algae): Patchy (Y/N) Contin. Y/N Dense Y/N Sparse (Y/N) None Y/N

Generally on rocks & boulders

Mytilus (Mussels): Patchy Y/N Contin. Y/N Dense Y/N Sparse Y/N None Y/N

None observed

Balanus (Barnacles): Patchy (Y/N) Contin. Y/N Dense Y/N Sparse (Y/N) None Y/N

Littorina

Patchy Y/N Contin. Y/N Dense Y/N Sparse Y/N None Y/N

None observed

Limpets: Patchy Y/N Contin. Y/N Dense Y/N Sparse Y/N None Y/N

None observed

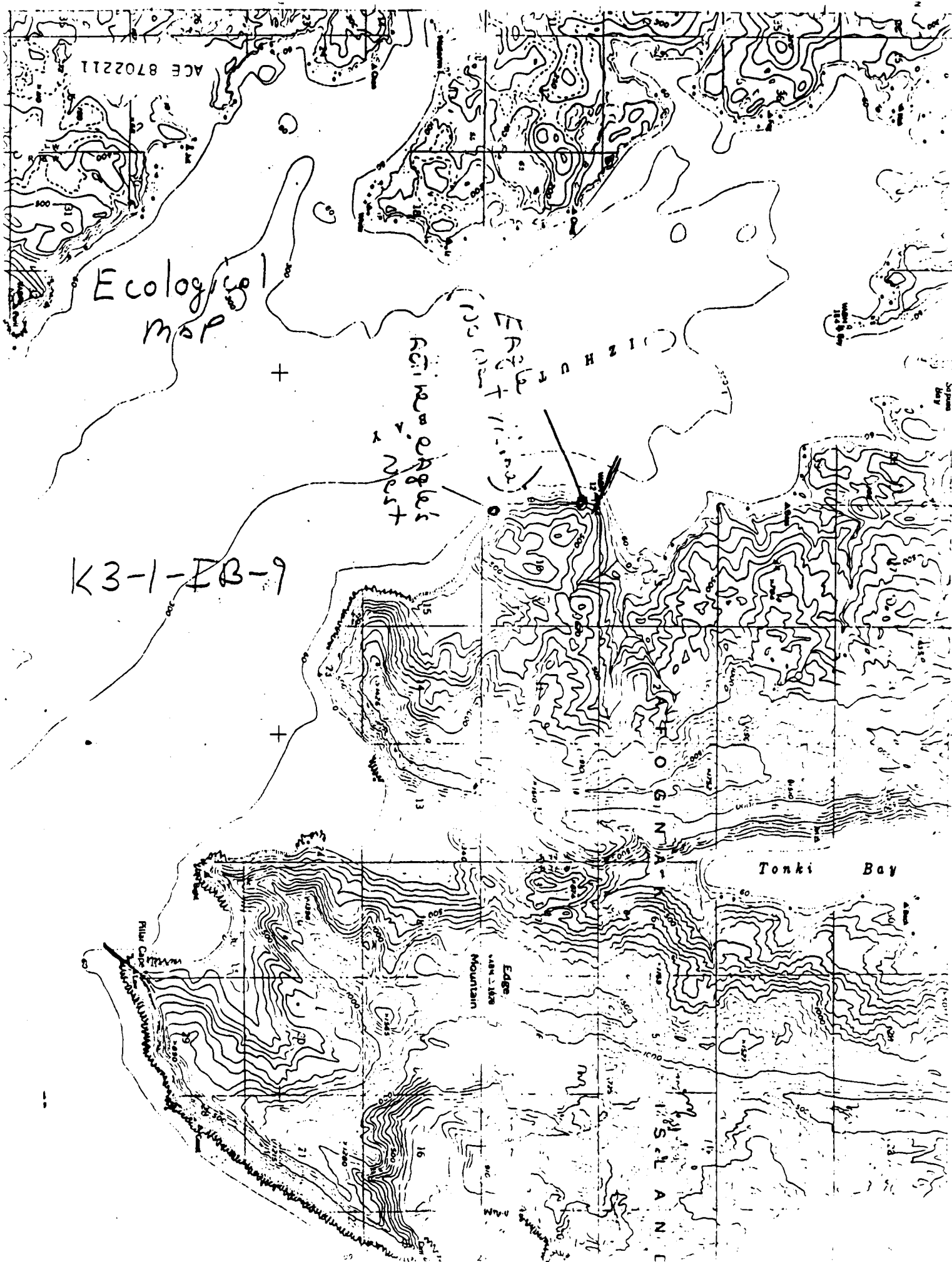
OTHER OBSERVATIONS:

CLEANUP PRECAUTIONS: None - as in cleanup recommendations

MAMMALS: Otters _____ Harbor Seals _____ Sea Lions _____ Whales _____
 Other _____

BIRDS: (11.00) Engel + Nest - Ducks, Br. geese & Cormorants

GENERAL OBSERVATIONS: Intertidal community poor in macro- & meso- biota due to steep slope (usually vertical).



ACE 8702211

Ecological
map

K3-1-EB-9

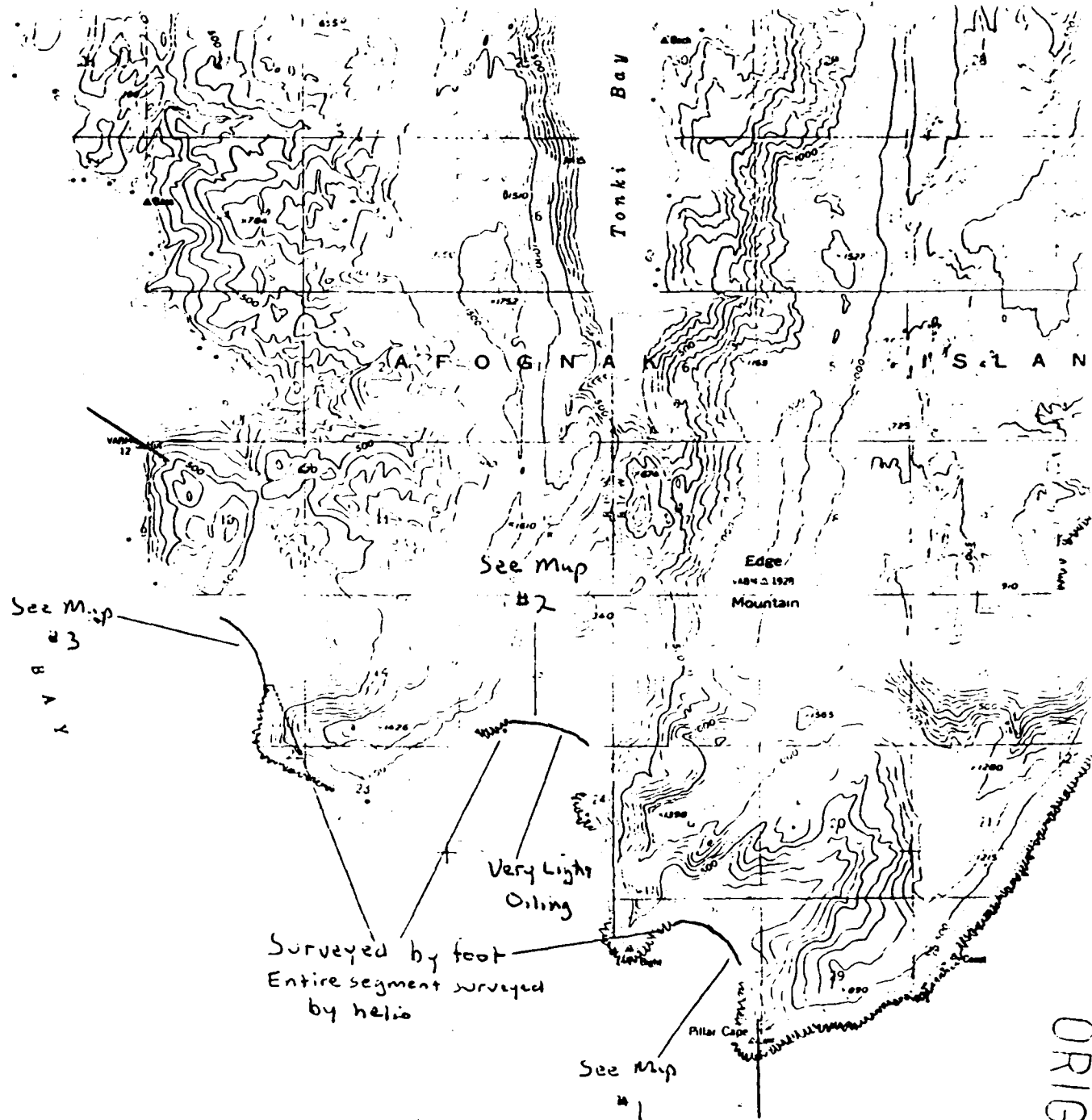
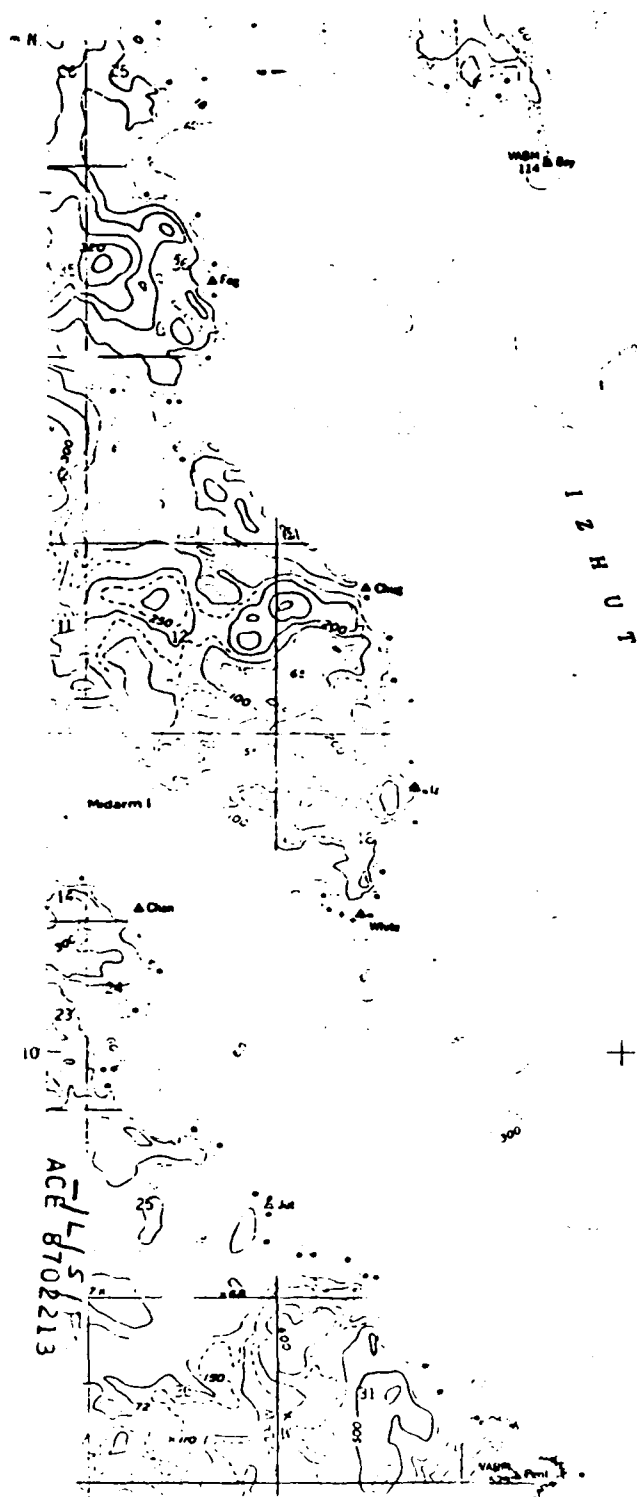
LAC +
(11.12)

Tonki Bay

Edge
Mountain

Pillar
Cave

S. L. A. N. I



ORIGINAL

LIBRARY
KODIAK SCAT

K3-2

COMPLETE JAN - 9 1990

ACE 8643510

K-03-02

(version 6/14/89)

SHORELINE CLEANUP PROGRAM

DATE 6/27/89 SHORELINE SEGMENT IB-1

LOCATION: (see enclosed map) IZHUT BAY-WEST SHORE
NEAR HEAD OF BAY, AFOGNAK ISLAND

ADEC NO. _____ SHORELINE ASSESSMENT DATE: 6/17/89

Recommended Cleanup Activity(ies):

Manual removal of mousse patties and contaminated drift material.

Use other approved techniques as appropriate.

Priorities Considerations: 5-B classification on the beach.

KISCC considers this a sensitive area due to local seabird colonies and pinniped haulouts within the bay.

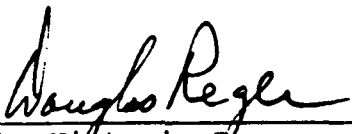
Ecological Constraints (from site survey):

Caution must be used not to erode spring and storm berms to a point where waves could cut into forest.

Avoid rocky areas adjacent to beach.

Archeological Constraints (from site survey):

If heretofore undiscovered cultural materials are uncovered during cleanup, contact Exxon's Archeological Field Director and take actions prescribed in the Operational Guidelines for Shoreline Cleanup dated 4/21/89 as amended.



State Historic Preservation Officer *

Date: 6/29/89

ISCC: _____

Date: _____

EXXON: _____

Date: _____

FOSC: _____

Date: _____

* Signature required to satisfy stipulations in Alaska DNR land use permits for tide and submerged lands.

+ / F / S / F .
ACE 8702214

(version 5/16/89)

SHORELINE OIL EVALUATION FORM - KODIAK

Date: June 17 / 1989 Time: 09:53

Observer: Mike Milas

Surveyed From: Foot/Boat/Helio/Plane

Weather: Sun/Cloud/Rain/Snow/Fog

LOCATION AFOGNAK ISLAND
LOCATION 12 HUT BAY

SEGMENT I.D. V-3-2 - 1B-1

LENGTH OF SHORELINE SEGMENT: 2850 m

ACCESS: Foot/Vehicle/Boat/Barge/Helio/Float Plane

SHORELINE:

Shoreline Type: SPI/BEA/COV/HID/STRT

Slope: LANG/HANG/VER

Wave Exposure: High/Mod/Low

Sediment: B 0 / C 5 / P 5 / G 0 / S 0 / M 0 / R 80

Drift Debris on Beach: (Yes/No) Supra/Upper/Mid/Lower Type 1A

OIL

Degree of Oiling: Heavy/Moderate/Light/No Oil/Unobserved

Total Area of Beach Impact: SU / (SP / H) / M / L

OIL DISTRIBUTION

Continuous: Y/N Segment 1 No. Bands 1 Width 1

Sporadic: (Y/N) Segment 1 Min/Max Dia 5 cm Impact Width 1

Est. Oil Thickness where > 1cm: N/A cm SU / SP / UP / MID / LO

Est. Oil Penetration: 0 cm SU / SP / UP / MID / LO

Layers? Yes/No No# Layers 1 Oil Weathering 1

Drift Debris Oiled? Yes/No Supra/Upper/Mid/Lower Amount: H / M / L / V

OIL MORPHOLOGY

Pooled Oil 0 "Free" Oil 0 Spattered SD H/M/L/VL Sheen 1

OIL WEATHERING (OW)

Fresh Oil 0 SU/SP/VP/MID/LO Choc Mousse 0 SU/SP/VP/MID/LO

Pancake Mousse 0 SU/SP/VP/MID/LO Asphalt Mousse 0 SU/SP/VP/MID/LO

Tar Formation 0

ACE 8702215

Comments:

This section of coast consists of rocky headlands which contain cobble/boulder/pebble banks in small coves

A very small number of "patties" occur in sheltered rocky coves or in sheltered coves

Clean-up: Manual Removal however the amount of oil which will be recovered is very small and degree will prove

DOCUMENTATION:

Map Aerial photo marking segment boundaries see attached

VTR: Y/N Tape Number(s) _____

Photography: Y/N Roll Number(s) JT-1

Sample Numbers Collected: N/A

ECOLOGICAL EVALUATION

* Sandy Beach Portion
of segment (Oil 2)LOCATION: LEHUT Bay SITE: West shore north head OBSERVER: J. TAPLEYLOCATION PREFIX: K3/IB SEG. NO.: K-3-2-IB-1 LENGTH: 2850 (M)DATE: 6/17/89 TIME (HHMM): 0930 TIDE HT.: 0.0 (M)OILED ZONE: Splash High Medium LowSUBSTRATUM: Rocks Boulder Cobble Gravel Sand Mud

LIVE BIOTA

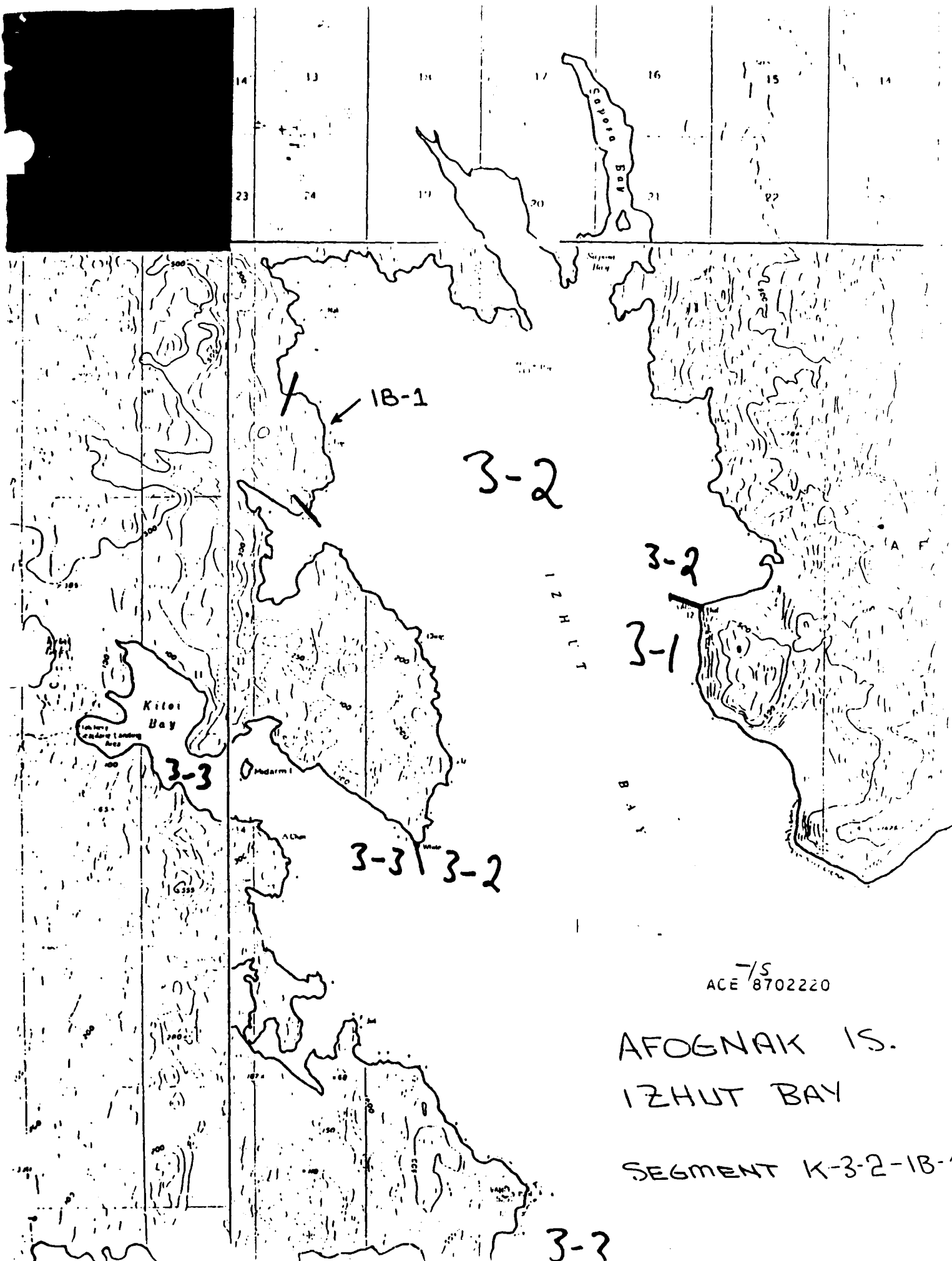
Fucus (algae): Patchy Y/N Contin. Y/N Dense Y/N Sparse Y/N None Y/NMytilus (Mussels): Patchy Y/N Contin. Y/N Dense Y/N Sparse Y/N None Y/NBalanus (Barnacles): Patchy Y/N Contin. Y/N Dense Y/N Sparse Y/N None Y/NLittorinaPatchy Y/N Contin. Y/N Dense Y/N Sparse Y/N None Y/NLimpets: Patchy Y/N Contin. Y/N Dense Y/N Sparse Y/N None Y/NOTHER OBSERVATIONS: (Nereis)
Build Kelp forests thick offshore. Moderate amount of drift
seaweed material on high beach spring to storm beach. Amphipods in drift
No other biota living on beach.CLEANUP PRECAUTIONS: Cleanup crews must be careful not to erode
berms to the point where waves will cut into forest.MAMMALS: Otters 2 Harbor Seals Sea Lions Whales
Other 1 mother + pup ~ 1200m offshoreBIRDS: NONEGENERAL OBSERVATIONS: This segment is a combination of steep rocky cliffs and
pebble beaches. Beaches are lacking any biota whereas the rocky cliff ITZ
is rich and diverse with marine life. * See p.2 of Ecological evaluation
of rocky cliff portions of segment.

ECOLOGICAL EVALUATION

LOCATION: Izhut Bay SITE: West shore to mal head OBSERVER: J. TurpleyLOCATION PREFIX: K3/IB SEG. NO.: K-3-2-IB-1 LENGTH: 2850 (M)DATE: 6/17/89 TIME (HHMM): 0730 TIDE HT.: 0.0 (M)OILED ZONE: Splash High Medium Low ☒SUBSTRATUM: Rocks Boulder Cobble Gravel Sand Mud
Cliff & benches

LIVE BIOTA

Fucus (algae): Patchy Y/N Contin. Y/N Dense Y/N Sparse Y/N None Y/NMytilus (Mussels): Patchy Y/N Contin. Y/N Dense Y/N Sparse Y/N None Y/NBalanus (Barnacles): Patchy Y/N Contin. Y/N Dense Y/N Sparse Y/N None Y/NLittorinaPatchy Y/N Contin. Y/N Dense Y/N Sparse Y/N None Y/NLimpets: Patchy Y/N Contin. Y/N Dense Y/N Sparse Y/N None Y/NOTHER OBSERVATIONS: Bull Kelp (Nereocystis) forests offshore. All plant and animal life rich & diverse and healthy.CLEANUP PRECAUTIONS: None since no cleanup recommended for this part of the segmentMAMMALS: Otters _____ Harbor Seals _____ Sea Lions _____ Whales _____
Other NoneBIRDS: NoneGENERAL OBSERVATIONS: This rocky cliff portion alternates w/ sandy pocket beaches. See attached for Ecological Evaluation of beach.



(version 6/14/89)

K3-2

SHORELINE CLEANUP PROGRAM

DATE 6/27/89

SHORELINE SEGMENT IB-1

LOCATION: (see enclosed map) IZHUT BAY-WEST SHORE

NEAR HEAD OF BAY, AFOGNAK ISLAND

ADEC NO. _____ SHORELINE ASSESSMENT DATE: 6/17/89

Recommended Cleanup Activity(ies):

Manual removal of mousse patties and contaminated drift material.

Use other approved techniques as appropriate.

Priorities Considerations: 5-B classification on the beach.

KISCC considers this a sensitive area due to local seabird colonies and pinniped haulouts within the bay.

Ecological Constraints (from site survey):

Caution must be used not to erode spring and storm berms to a point where waves could cut into forest.

Avoid rocky areas adjacent to beach.

Archeological Constraints (from site survey):

If heretofore undiscovered cultural materials are uncovered during cleanup, contact Exxon's Archeological Field Director and take actions prescribed in the Operational Guidelines for Shoreline Cleanup dated 4/21/89 as amended.

Douglas Regier

State Historic Preservation Officer *

Date: 6/29/89

ISCC: _____

Date: _____

EXXON: *Att Wade*

Date: 7/1/89

FOSC: *PCSTH RCA 7/2/89*

Date: 7/12/89

* Signature required to satisfy stipulations in Alaska DNR land use permits for tide and submerged lands.

Type A removal of surface contamination only.

ACE 8702221

SHORELINE OIL EVALUATION FORM - KODIAK

Date: June 17 1989 / Time: 09:53 Observer: Mike Miles
 Surveyed From: Foot/Boat/Helio/Plane Weather: Sun/Cloud/Rain/Snow/Fog
 LOCATION AFOGNAK ISLAND
 LOCATION 12 HUT BAY SEGMENT I.D. X-3-2 - 1B-1

LENGTH OF SHORELINE SEGMENT: 2850 m

ACCESS: Foot/Vehicle/Boat/Barge/Helio/Float Plane

SHORELINE:

Shoreline Type: SPI/BEA/COV/HLD/STRT

Slope: LANG/HANG/VER

Wave Exposure: High/Med/Low

Sediment: B/D / C/S / P/S / G / S / M / R SO

Drift Debris on Beach: Yes/No Supra/Upper/Mid/Lower Type Seaweed

OIL

Degree of Oiling: Heavy/Moderate/Light/No Oil/Unobserved very light

Total Area of Beach Impact: SU / SP/H / M / L

OIL DISTRIBUTION

Continuous: Y/N Segment 0 No. Bands Width

Sporadic: Y/N Segment < 1% Min/Max Dia 5 cm Impact Width mousse patties too infrequent to score

Est. Oil Thickness where > 1cm: N/A cm SU / SP / UP / MID / LO

Est. Oil Penetration: 0 cm SU / SP / UP / MID / LO

Layers? Yes/No No# Layers Oil Weathering

Drift Debris Oiled? Yes/No Supra/Upper/Mid/Lower Amount: H / M / L / VL

OIL MORPHOLOGY

Pooled Oil 0 / "Free" Oil SD / Spattered SD / H/M/L/VL Sheen

OIL WEATHERING (OW)

Fresh Oil 0 / SU/SP/VP/MID/LO Choc Mousse DO / SU/SP/VP/MID/LO

Pancake Mousse 0 / SU/SP/VP/MID/LO Asphalt Mousse 0 / SU/SP/VP/MID/LO

Tar Formation 0 /

ACE 8702222

Comments:

This section of coast consists of rocky headlands which contain cobble/boulder/pebble beaches in small coves

A very small number of mousse "patties" occur in sheltered rocky headlands or in sheltered coves

Clean-up: Manual Removal. However the amount of oil which will be recovered is very small and access will present serious difficulties to working on much of this segment.

DOCUMENTATION:

Map Aerial photo marking segment boundaries see attached

VTR: Y/N Tape Number(s) _____

Photography: Y/N Roll Number(s) JT-1

Sample Numbers Collected: N/A

ECOLOGICAL EVALUATION

* Sandy Beach Portion
of segment (Oiled zone)

LOCATION: LEHUT BAY SITE: West shore towards head OBSERVER: J. TAPLEY
LOCATION PREFIX: K3/IB SEG. NO.: K-3-2-IB-1 LENGTH: 2850 (M)
DATE: 6/17/77 TIME (HHMM): 0930 TIDE HT.: 0.0 (M)

OILED ZONE: Splash High Medium Low

SUBSTRATUM: Rocks Boulder Cobble Gravel Sand Mud

LIVE BIOTA

Fucus (algae): Patchy Y/N Contin. Y/N Dense Y/N Sparse Y/N None Y/N

Mytilus (Mussels): Patchy Y/N Contin. Y/N Dense Y/N Sparse Y/N None Y/N

Balanus (Barnacles): Patchy Y/N Contin. Y/N Dense Y/N Sparse Y/N None Y/N

Littorina
Patchy Y/N Contin. Y/N Dense Y/N Sparse Y/N None Y/N

Limpets: Patchy Y/N Contin. Y/N Dense Y/N Sparse Y/N None Y/N

OTHER OBSERVATIONS: (Wreckage)
Ball kelp forests thick offshore. Moderate amount of drift
seaweed material on high beach spring to storm beach. Amphipods in drift
No other biota living on beach.

CLEANUP PRECAUTIONS: Cleanup crews must be careful not to erode
berms to the point where waves will cut into forest.

MAMMALS: Otters 2 Harbor Seals 1 mother + pup ~ 100m offshore Sea Lions _____ Whales _____

BIRDS: NONE

GENERAL OBSERVATIONS: This segment is a combination of steep rocky cliffs and
pocket beaches. Beaches are lacking any biota whereas the rocky cliff ITZ
is rich and diverse with marine life. * See p. 2 of Ecological evaluation
of rocky cliff portions of segment.

ECOLOGICAL EVALUATION

LOCATION: Izhut Bay SITE: West Shore toward head OBSERVER: J. Tarpley
 LOCATION PREFIX: K3/IB SEG. NO.: K-3-2-IB-1 LENGTH: 2850 (M)

DATE: 6/17/89 TIME (HHMM): 0930 TIDE HT.: 0.0 (M)

OILED ZONE: Splash High Medium Low ☒

SUBSTRATUM: Rocks Boulder Cobble Gravel Sand Mud
Cliff & benches

LIVE BIOTA

Fucus (algae): Patchy ☒ Contin. ☒ Dense ☒ Sparse ☒ None ☒

Mytilus (Mussels): Patchy ☒ Contin. ☒ Dense ☒ Sparse ☒ None ☒

Balanus (Barnacles): Patchy ☒ Contin. ☒ Dense ☒ Sparse ☒ None ☒

Littorina
 Patchy ☒ Contin. ☒ Dense ☒ Sparse ☒ None ☒

Limpets: Patchy ☒ Contin. ☒ Dense ☒ Sparse ☒ None ☒

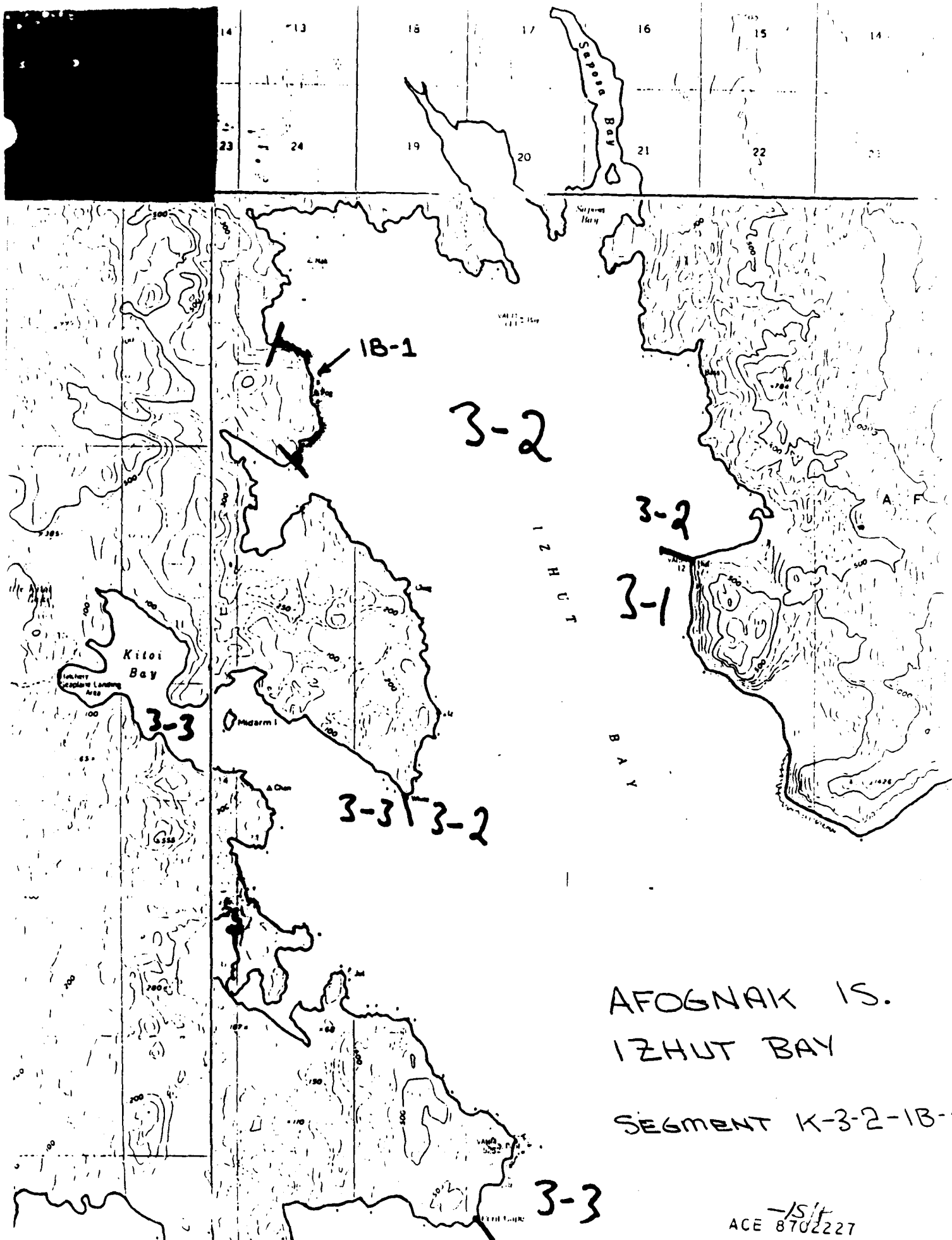
OTHER OBSERVATIONS: Bull Kelp (Nereocystis) forests offshore. All plant and animal life rich & diverse and healthy

CLEANUP PRECAUTIONS: None since no cleanup recommended for this part of the segment

MAMMALS: Otters _____ Harbor Seals _____ Sea Lions _____ Whales _____
 Other None

BIRDS: None

GENERAL OBSERVATIONS: This rocky cliff portion alternates w/ sandy pocket beaches. See attached for Ecological Evaluation of beaches



AFOGNAK IS.

IZHUT BAY

SEGMENT K-3-2-IB-1

-15/1
ACE 8702227

(version 6/14/89)

SHORELINE CLEANUP PROGRAM

DATE 6/27/89

SHORELINE SEGMENT IB-2

LOCATION: (see enclosed map) AFOGNAK ISLAND-WEST SHORE OF

IZHUT BAY

ADEC NO. K3-2 SHORELINE ASSESSMENT DATE: 6/17/89

Recommended Cleanup Activity(ies):

Manual removal of mousse patties, oiled seaweed and heavily oiled logs.

After the fall bird migration, a reassessment of the remaining oil and additional cleaning techniques (such as relocation of the oiled splash zone beach material into the active surf zone) may be appropriate.

Other techniques may be used as appropriate.

Priorities Considerations: 4B to locally 3B

Resources not immediately present on beach, however, KISCC* considers this a sensitive area due to local seabird colonies and pinniped haulouts within the bay.

Ecological Constraints (from site survey):

Caution must be used not to erode spring and storm berms during cleanup to a point where waves could cut into forest.

Archeological Constraints (from site survey):

If heretofore undiscovered cultural materials are uncovered during cleanup, contact Exxon's Archeological Field Director and take actions prescribed in the Operational Guidelines for Shoreline Cleanup dated 4/21/89 as amended.

Douglas Regier
State Historic Preservation Officer *

Date: 6/29/89

ISCC: [Signature]

Date: _____

EXXON: [Signature]

Date: 7/1/89

FOSC: [Signature]

Date: 7/13/89

Type A removal of surface contamination only.

* Signature required to satisfy stipulations in Alaska DNR land use permits for tide and submerged lands.

ACE 8102228

SHORELINE OIL EVALUATION FORM - KODIAK

LINE 17
Date: 39 / Time: 23:35

Observer: MIKE

Surveyed From: Foot/Boat/Helio/Plane

Weather: Sun/Cloud/Rain/Snow/Fog

LOCATION AFOGNAK ISLAND
LOCATION IZHUT BAY

SEGMENT I.D. K-3-2-1B-2

LENGTH OF SHORELINE SEGMENT: 450 m

ACCESS: Foot/Vehicle/Boat/Barge/Helio/Float Plane

SHORELINE:

Shoreline Type: SPI/BEA/COV/HLD/STRT

Slope: LANG/HANG/VER

Wave Exposure: High/Med/Low

Sediment: B 1 / C 20 / P 60 / G 20 / S 1 / M 1 / R 1

Drift Debris on Beach: Yes/No Supra/Upper/Mid/Lower Type logs + drift

OIL

Degree of Oiling: Heavy/Moderate/Light/No Oil/Unobserved

Total Area of Beach Impact: SU / SP H / M / L

OIL DISTRIBUTION

Continuous: Y/N Segment 1 No. Bands 1 Width 10-20 cm

Sporadic: Y/N Segment 1 Min 10 Max 10 Dia 10 cm Impact Width 2-4 m

Est. Oil Thickness where > 1cm: N/A cm SU / SP / UP / MID / LO

Est. Oil Penetration: 10-20 cm SU SP / UP / MID / LO

Layers? Yes/No No# Layers N/A Oil Weathering N/A

Drift Debris Oiled? Yes/No Supra/Upper/Mid/Lower Amount: H / M / L / VL

OIL MORPHOLOGY

Pooled Oil 0 "Free" Oil SU Spattered SU H/M/L/VL Sheen 0

OIL WEATHERING (OW)

Fresh Oil 0 SU/SP/VP/MID/LO Choc Mousse 0 SU/SP/VP/MID/LO

Pancake Mousse 0 SU/SP/VP/MID/LO Asphalt Mousse 0 SU/SP/VP/MID/LO

Tar Formation 0 SEE ATTACHED COMMENT SHEET

Comments:

COMMENTS

K-3-2-1B-2

SHORELINE OIL EVALUATION FORM

This pebble beach has a pebble/cobble storm berm. A small number of 5-10 cm diameter mousse 'patties' occur in the mid to Upper ITZ through-out the length of this segment. The spring tide/ storm berm on the north end of this beach contain buried mousse 'patties' up to at least 30cm below the beach surface. This ~~and~~ contamination has very little surface expression. Logs and drifted sea-weed overlie this oil but this drifted material is generally not oiled. The width of contaminated berm is 2 to 4 m. Isolated ~~as~~ mousse patties do however occur sporadically over a wider area.

Clean-up should include manual removal of mousse patties, oiled seaweed and the more heavily contaminated driftwood. Relocation of ~~contaminated~~ pebbles and cobbles in the spring tide/ storm berm ~~area~~ would assist natural cleaning processes but would result in oil contamination of the ITZ.

likely result in

DOCUMENTATION:

Map Aerial photo marking segment boundaries see attached

VTR: Y/N Tape Number(s) _____

Photography: Y/N Roll Number(s) JT-1

Sample Numbers Collected: N/A

ECOLOGICAL EVALUATION

LOCATION: Izbut Bay SITE: West shore OBSERVER: J. Tarpley
 LOCATION PREFIX: K-3/IB SEG. NO.: K-3-2-IB-2 LENGTH: 450 (M)
 DATE: 4/17/99 TIME (HHMM): 0820 TIDE HT.: 0.0 (M)

OILED ZONE: Splash High Medium Low

SUBSTRATUM: Rocks Boulder Cobble Gravel Sand Mud

LIVE BIOTA

Fucus (algae): Patchy Y/N Contin. Y/N Dense Y/N Sparse Y/N None Y/N

Mytilus (Mussels): Patchy Y/N Contin. Y/N Dense Y/N Sparse Y/N None Y/N

Balanus (Barnacles): Patchy Y/N Contin. Y/N Dense Y/N Sparse Y/N None Y/N

Littorina

Patchy Y/N Contin. Y/N Dense Y/N Sparse Y/N None Y/N

Limpets: Patchy Y/N Contin. Y/N Dense Y/N Sparse Y/N None Y/N

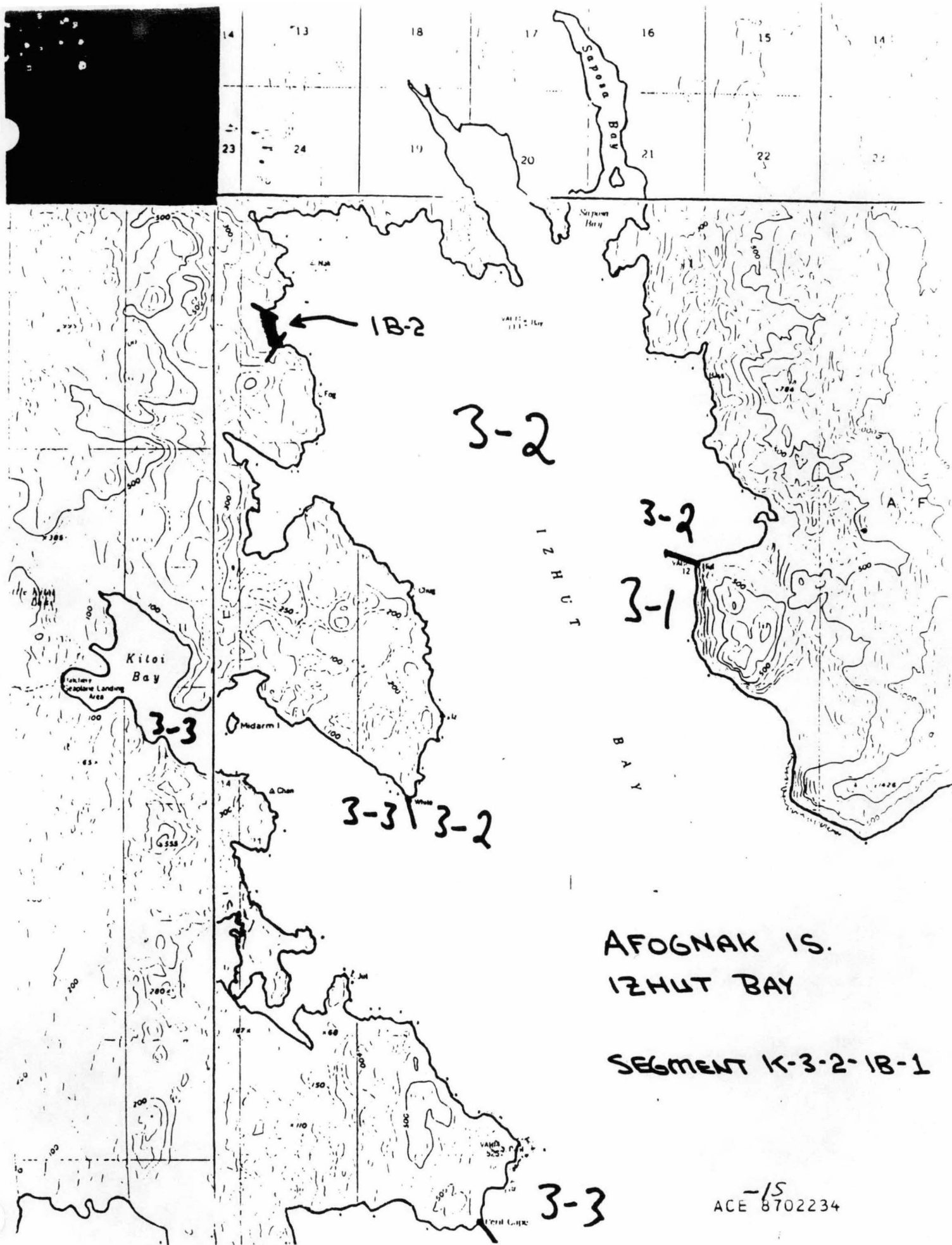
OTHER OBSERVATIONS: Amphipods in algal drift at Spring berm/High tide line and also in gravel. No biota lower on beach IIZ. Moderate amount of seaweed drift.

CLEANUP PRECAUTIONS: Clean up crews must be careful not to erode berms on beach to the point where waves will cut into forest. Avoid unoiled rocky areas adjacent to beach.

MAMMALS: Otters Harbor Seals Sea Lions Whales
 Other Deer Tracks on beach

BIRDS: Terrestrial birds at Forest/Beach interface

GENERAL OBSERVATIONS: Sandy beach bounded on each side by rocky cliffs covered with rich and diverse biota. This area is not oiled.



AFOGNAK IS.
IZHUT BAY

SEGMENT K-3-2-1B-1

-15
ACE 8702234

(version 6/14/89)

SHORELINE CLEANUP PROGRAM

DATE 6/27/89 SHORELINE SEGMENT IB-2

LOCATION: (see enclosed map) AFOGNAK ISLAND-WEST SHORE OF
IZHUT BAY

ADEC NO. _____ SHORELINE ASSESSMENT DATE: 6/17/89

Recommended Cleanup Activity(ies):

Manual removal of mousse patties, oiled seaweed and heavily oiled logs.

After the fall bird migration, a reassessment of the remaining oil and additional cleaning techniques (such as relocation of the oiled splash zone beach material into the active surf zone) may be appropriate.

Other techniques may be used as appropriate.

Priorities Considerations: 4B to locally 3B

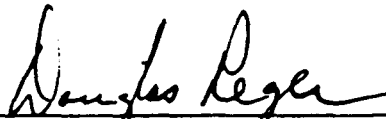
Resources not immediately present on beach, however, KISCC considers this a sensitive area due to local seabird colonies and pinniped haulouts within the bay.

Ecological Constraints (from site survey):

Caution must be used not to erode spring and storm berms during cleanup to a point where waves could cut into forest.

Archeological Constraints (from site survey):

If heretofore undiscovered cultural materials are uncovered during cleanup, contact Exxon's Archeological Field Director and take actions prescribed in the Operational Guidelines for Shoreline Cleanup dated 4/21/89 as amended.



State Historic Preservation Officer *

Date: 6/29/89

ISCC: _____

Date: _____

EXXON: _____

Date: _____

FOSC: _____

Date: _____

* Signature required to satisfy stipulations in Alaska DNR land use permits for tide and submerged lands.

⁺¹⁵
ACE 8702235

(version 5/16/89)

SHORELINE OIL EVALUATION FORM - KODIAK

Date: / Time: Observer:

Surveyed From: Foot/Boat/Helio/Plane Weather: Sun/Cloud/Rain/Snow/Fog

LOCATION AFOGNAR ISLAND
LOCATION IZHUT BAY SEGMENT I.D. K-3-2-12-

LENGTH OF SHORELINE SEGMENT: 450 m

ACCESS: Foot/Vehicle/Boat/Barge/Helio/Float Plane

SHORELINE:
Shoreline Type: SPI/BEA/COV/HLD/STRT Slope: LANG/HANG/VER

Wave Exposure: High/Mod/Low

Sediment: B / C / P 60 / G / S / M / R

Drift Debris on Beach: Yes/No [Supra/Upper/Mid/Lower Type]

OIL
Degree of Oiling: Heavy/Moderate/Light/No Oil/Unobserved

Total Area of Beach Impact: SU / SP / H / M / L

OIL DISTRIBUTION

Continuous: Y/N Segment No. Bands Width

Sporadic: Y/N Segment Min/Max Dia 10 cm Impact Width 2-4 m

Est. Oil Thickness where > 1cm: 11/0 cm SU / SP / UP / MID / LO

Est. Oil Penetration: 10-20 cm SU / SP / UP / MID / LO

Layers? Yes/No No. Layers 11/A Oil Weathering N/A

Drift Debris Oiled? Yes/No [Supra/Upper/Mid/Lower Amount: H / M / L / VL

OIL MORPHOLOGY

Pooled Oil "Free" Oil 30 Spattered 50 H/M/L/VL Sheen 0

OIL WEATHERING (OW)

Fresh Oil 0 SU/SP/VP/MID/LO Choc Mousse 10 SU/SP/VP/MID/LO

Pancake Mousse 0 SU/SP/VP/MID/LO Asphalt Mousse 0 SU/SP/VP/MID/LO

Tar Formation 0 SEE ATTACHED COMMENT SHEET

Comments:

ACE 8702236

June 17/89

Mike Miles

COMMENTS K-3-2-1B-2

SHORELINE OIL EVALUATION FORM

This pebble beach has a pebble/cobble storm berm. A small number of 5-10 cm diam. mousse 'patties' occur in the mid to Upper ITZ through-out the length of this segment. The storm berm on the north end of this beach contain buried mousse 'patties' up to at least 30cm below the beach surface. This ~~and~~ contamination has very little surface expression. Logs and drifted sea-weed overlie this oil but this drifted material is generally not oiled. The width of contaminated berm is 2 to 4 m. Isolated ~~the~~ mousse patties do however occur sporadically over a wider area.

Clean-up should include manual removal of mousse patties, oiled seaweed and the more heavily contaminated driftwood. Relocation of contaminated pebbles and cobbles in the spring tide/slow berm might assist natural cleaning processes but would result in oil contamination of the ITZ.

Likely result in

DOCUMENTATION:

Map/Aerial photo-marking segment boundaries see attached

VTR: Y/N Tape Number(s) _____

Photography: Y/N Roll Number(s) II-1

Sample Numbers Collected: N/A

ACE 8702238

ECOLOGICAL EVALUATION

LOCATION: Izbut Bay SITE: West shore OBSERVER: J. TarpleyLOCATION PREFIX: K-3/IB SEG. NO.: K-3-2-IB-2 LENGTH: 450 (M)DATE: 6/17/89 TIME (HHMM): 0820 TIDE HT.: 0.0 (M)OILED ZONE: Splash High Medium LowSUBSTRATUM: Rocks Boulder Cobble Gravel Sand MudLIVE BIOTAFucus (algae): Patchy Y/N Contin. Y/N Dense Y/N Sparse Y/N None Y/NMytilus (Mussels): Patchy Y/N Contin. Y/N Dense Y/N Sparse Y/N None Y/NBalanus (Barnacles): Patchy Y/N Contin. Y/N Dense Y/N Sparse Y/N None Y/NLittorinaPatchy Y/N Contin. Y/N Dense Y/N Sparse Y/N None Y/NLimpets: Patchy Y/N Contin. Y/N Dense Y/N Sparse Y/N None Y/NOTHER OBSERVATIONS: Amphipods in algal drift at Spring berm/High tide line and also in gravel. No biota lower on beach IIZ. Moderate amount of seaweed drift.CLEANUP PRECAUTIONS: Clean up crews must be careful not to erode berms on beach to the point where waves will cut into forest. Avoid unoiled rocky areas adjacent to beach.MAMMALS: Otters _____ Harbor Seals _____ Sea Lions _____ Whales _____
Other Deer Tracks on beachBIRDS: Terrestrial birds at Forest/Beach interfaceGENERAL OBSERVATIONS: Sandy beach bounded on each side by rocky cliffs covered with rich and diverse biota. This area is not oiled.

(version 6/14/89)

SHORELINE CLEANUP PROGRAM

DATE 6/27/89

SHORELINE SEGMENT IB-3

LOCATION: (see enclosed map) IZHUT BAY-WEST SHORE, AFOGNAK ISLAND

ADEC NO. K3-2 SHORELINE ASSESSMENT DATE: 6/17/89

Recommended Cleanup Activity(ies):

Manual removal of oiled debris.

After the fall bird migration, a reassessment of the remaining oil and additional cleaning techniques (such as relocation of the oiled splash zone beach material into the active surf zone) may be appropriate.

Other techniques may be used as appropriate.

Priorities Considerations: Class 3-4B

Critical resources not immediately present on this beach, however KISCC considers this a sensitive area due to local seabird colonies and pinniped haulouts in the bay.

Ecological Constraints (from site survey):

Caution must be used not to erode spring and winter berms during cleanup to a point where waves could cut into the forest.

Keep away from stream at north end of beach #1.

Archeological Constraints (from site survey):

If heretofore undiscovered cultural materials are uncovered during cleanup, contact Exxon's Archeological Field Director and take actions prescribed in the Operational Guidelines for Shoreline Cleanup dated 4/21/89 as amended.

Douglas Reger
State Historic Preservation Officer *

Date: 6/29/89

ISCC: [Signature]

Date: _____

EXXON: [Signature]

Date: 7/1/89

FOSC: [Signature] RWD 7/1/89

Date: 7/1/89

Type A removal of surface contamination only.
* Signature required to satisfy stipulations in Alaska DNR land use permits for tide and submerged lands.

+1216
ACE 8702242

SHORELINE OIL EVALUATION FORM - KODIAK

Date: June 17/89 Time: 10:15 -> 10:35 Observer: 11.12.11.12

Surveyed From: Foot/Boat/Helio/Plane Weather: Sun/Cloud/Rain/Snow/Fog

LOCATION AFOGNAK ISLAND SEGMENT I.D. K-3-2-1B-3
LOCATION 12 HUT BAY TOTAL SEGMENT 1400 BEACH 1

LENGTH OF SHORELINE SEGMENT: 1400 m
ACCESS: Foot/Vehicle/Boat/Barge/Helio/Float Plane

SHORELINE:

Shoreline Type: SPI/BEA/COV/HLD/STRT Slope: LANG/HANG/VER

Wave Exposure: High/Med/Low

Sediment: B 5 % / C 5 % / PO 1 % / G 1 % / S 1 % / M 1 % / R 80 %

Drift Debris on Beach: Yes/No Supra/Upper/Mid/Lower Type logs and

OIL
Degree of Oiling: Heavy/Moderate/Light/No Oil/Unobserved drifted
seaweed

Total Area of Beach Impact: SU / SP / H / M / L

OIL DISTRIBUTION

Continuous: Y/N Segment 1 No. Bands 1 Width 1

Sporadic: Y/N Segment 1 Min/Max Dia 10 Impact Width 6m

Est. Oil Thickness where > 1cm: N/A cm SU / SP / UP / MID / LO

Est. Oil Penetration: > 20 cm SU / SP / UP / MID / LO

Layers? Yes/No No# Layers 1 Oil Weathering 1

Drift Debris Oiled? Yes/No Supra/Upper/Mid/Lower Amount: H / M / L / VL

OIL MORPHOLOGY

Pooled Oil 0 % "Free" Oil 50 % Spattered 50 % H/M/L/VL Sheen 0 %

OIL WEATHERING (OW)

Fresh Oil 0 % SU/SP/VP/MID/LO Choc Mousse 100 % SU/SP/VP/MID/LO

Pancake Mousse 0 % SU/SP/VP/MID/LO Asphalt Mousse 0 % SU/SP/VP/MID/LO

Tar Formation 0 %

SEE ATTACHED SHEET

Comments:

MIKE MILES

JUNE 17/89

AFOGNAK ISLAND

IZHUT BAY

SEGMENT K3-2-1B-3

BEACH 1

COMMENTS

OIL EVALUATION FORM

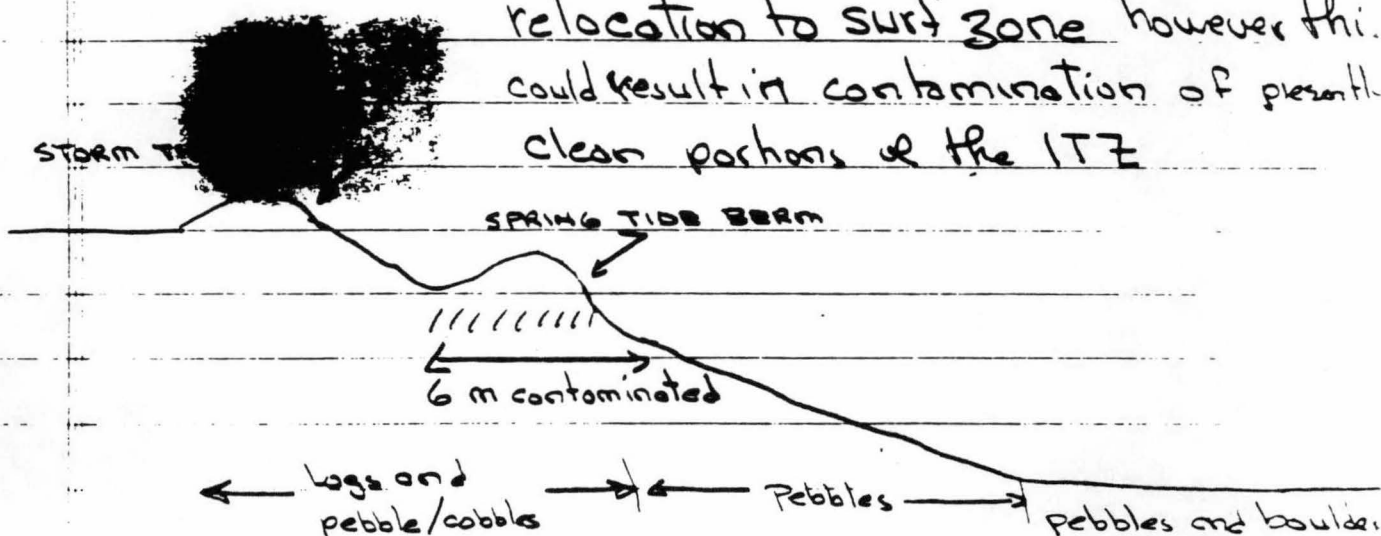
This shoreline consists of rocky headlands and small coves containing pebble/cobble/boulder beaches.

The spring tide/storm berm on Beach 1 is contaminated with buried oil, oiled seaweed or other debris. Small numbers of ≤ 10 cm diameter mousse "patties" occur on the beach surface. Logs on mid to supra ITZ are not significantly oiled.

Clean-up:

Manual removal

relocation to surf zone however this could result in contamination of present clean portions of the ITZ.



(version 5/16/89)

SHORELINE OIL EVALUATION FORM - KODIAK

Date: June 17 1999 / Time: 10:53

Observer: Mike [unclear]

Surveyed From: Foot/Boat/Helio/Plane

Weather: Sun/Cloud/Rain/Snow/Fog

LOCATION
LOCATION

SEGMENT I.D. K-3-2-1B-3

LENGTH OF SHORELINE SEGMENT: 1400 TOTAL SEGMENT m

ACCESS: Foot/Vehicle/Boat/Barge/Helio/Float Plane

SHORELINE:

Shoreline Type: SPI/BEA/COV/HLD/STRT

Slope: LANG/HANG/VER

Wave Exposure: High/Med/Low

Sediment: B / C / P / G / S / M / R

Drift Debris on Beach: Yes/No

Supra/Upper/Mid/Lower Type Beach 1

OIL

Degree of Oiling: Heavy/Moderate/Light/No Oil/Unobserved

Total Area of Beach Impact: SU/SP/H/M/L

OIL DISTRIBUTION

Continuous: Y/N Segment 1 No. Bands 1 Width 1

Sporadic: Y/N Segment 1 Min/Max Length < 10cm Impact Width 6m | Beach 1

Est. Oil Thickness where > 1cm: 4/4 cm SU/SP/UP/MID/LO

Est. Oil Penetration: > 10 cm in SP SU/SP/UP/MID/LO

Layers? Yes/No No# Layers 1 Oil Weathering 1

Drift Debris Oiled? Yes/No Supra/Upper/Mid/Lower Amount: H/M/L/VL

OIL MORPHOLOGY

Pooled Oil 0 "Free" Oil 50 Spattered 50 H/M/L/VL Sheen 0

OIL WEATHERING

Fresh Oil 0 SU/SP/VP/MID/LO Choc Mousse 100 SU/SP/VP/MID/LO

Pancake Mousse 0 SU/SP/VP/MID/LO Asphalt Mousse 0 SU/SP/VP/MID/LO

Tar Formation 0

Comments:

SEE ATTACHED SHEET

MIKE MILES
JUNE 17/89

AFOGNAK ISLAND
IZHUT BAY
SEGMENT K3-2-1B-3
BEACH 2

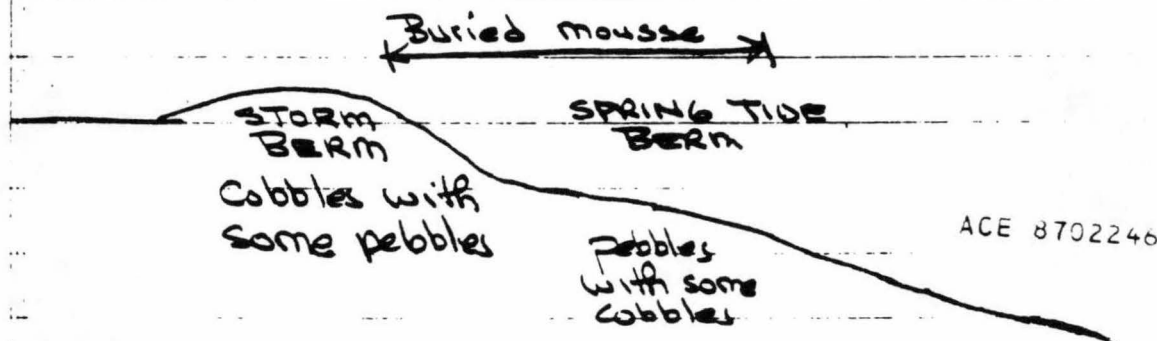
COMMENTS
OIL EVALUATION FORM

This is a cobble/pebble beach situated between rocky headlands. The spring tide/lower storm berm contains buried mousse to depths of ≥ 10 cm. Significant quantities of oiled seaweed occur on the surface of the spring tide berm. ^{small} numbers of mousse "patches" [≤ 5 cm in length] have been thrown up onto the log debris.

CLEANUP

- manual removal of oiled debris
- the contaminated berm could be rolled down slope into areas which are receiving wave action - however wave action is expected to clean these sediments over time.

CROSS-SECTION



SHORELINE OIL EVALUATION FORM - KODIAK

June 17

Date: 1989 / Time: 10:00 → 11:00

Observer: MIKE MILES

Surveyed From: Foot/Boat/Helio/Plane

Weather: Sun/Cloud/Rain/Snow/Fog

LOCATION AFOGNAK ISLAND

LOCATION 12 HUT BAY

SEGMENT I.D. K-3-2-1B-3

LENGTH OF SHORELINE SEGMENT: 100 m TOTAL SEGMENT: 100

Rocky Coast
between
around
Beaches 1 + 2

ACCESS: Foot/Vehicle/Boat/Barge/Helio/Float Plane

at low tide on adjacent beach

SHORELINE:

Shoreline Type: SPI/BEA/COV/HLD/STRT

Slope: LANG/HANG/VER

Wave Exposure: High/Med/Low

Sediment: B 1 / C 1 / P 1 / G 1 / S 1 / M 1 / R 100

Drift Debris on Beach: Yes/No Supra/Upper/Mid/Lower Type

OIL

Degree of Oiling: Heavy/Moderate/Light/No Oil/Unobserved

Total Area of Beach Impact: SU / SP / H / M / L

OIL DISTRIBUTION

Continuous: Y/N Segment 1 No. Bands Width

Sporadic: Y/N Segment 1 Min/Max Dia Impact Width

Est. Oil Thickness where > 1cm: N/A cm SU / SP / UP / MID / LO

Est. Oil Penetration: 0 cm SU / SP / UP / MID / LO

Layers? Yes/No No# Layers Oil Weathering

Drift Debris Oiled? Yes/No Supra/Upper/Mid/Lower Amount: H / M / L / VL

OIL MORPHOLOGY

Pooled Oil 0 % "Free" Oil 0 % Spattered 0 % H/M/L/VL Sheen 0 %

OIL WEATHERING (NOW)

Fresh Oil 0 % SU/SP/VP/MID/LO Choc Mousse 0 % SU/SP/VP/MID/LO

Pancake Mousse 0 % SU/SP/VP/MID/LO Asphalt Mousse 0 % SU/SP/VP/MID/LO

Tar Formation 0 %

Comments:

This form covers the portions of segment K-3-2-1B-3
between and adjacent to Beaches 1 and 2

This area of shoreline consists of rocky headland.

This area was surveyed by helicopter and small portions adjacent
to Beaches 1 and 2 were walked. No oil was observed and
clean-up is not required

DOCUMENTATION:

Map Aerial photo marking segment boundaries See attached

VTR: Y/N Tape Number(s) _____

Photography: Y/N Roll Number(s) ST-1

Sample Numbers Collected: N/A

ACE 8702248

ECOLOGICAL EVALUATION

Beach #1

LOCATION: Izhuat Bay SITE: West shore towards head OBSERVER: J. Tarpley
 LOCATION PREFIX: K-3/IB SEG. NO.: K-3-2-IB-3 LENGTH: 1400 (M)
 DATE: 6/17/89 TIME (HHMM): 1015 TIDE HT.: +0.5 (M)

OILED ZONE: Splash High Medium Low

SUBSTRATUM: Rocks Boulder Cobble Gravel Sand Mud

LIVE BIOTA

Fucus (algae): Patchy Y/N Contin. Y/N Dense Y/N Sparse Y/N None Y/N

Mytilus (Mussels): Patchy Y/N Contin. Y/N Dense Y/N Sparse Y/N None Y/N

Balanus (Barnacles): Patchy Y/N Contin. Y/N Dense Y/N Sparse Y/N None Y/N

Littorina
 Patchy Y/N Contin. Y/N Dense Y/N Sparse Y/N None Y/N

Limpets: Patchy Y/N Contin. Y/N Dense Y/N Sparse Y/N None Y/N

OTHER OBSERVATIONS: Moderate amount of seaweed drift material high IT
Amphipods in drift and cobble at high ITZ. No living biota on beach
in lower ITZ. Fish (tidepool sculpins and salmonids) in F/W stream.

CLEANUP PRECAUTIONS: Cleanup crews must be careful not to erode
berms to the point where waves will cut into forest. Avoid stream

MAMMALS: Otters _____ Harbor Seals _____ Sea Lions _____ Whales _____
 Other Deer tracks and scat.

BIRDS: Terrestrial birds at beach/Forest interface.

GENERAL OBSERVATIONS: Drift material oiled in high ITZ. F/W stream
flowing out of north end of beach. No oil found up stream banks

* See Ecological Evaluations for beach #2 within this segment and
 rocky cliff portions of segment.

ECOLOGICAL EVALUATION

Beach #2

LOCATION: Izmit Bay SITE: West Shore OBSERVER: J. Tarpley
 LOCATION PREFIX: K-3/IB SEG. NO.: K-3-2-IB-3 LENGTH: 1400 (M)
 DATE: 6/17/89 TIME (HHMM): 1050 TIDE HT.: +0.75 (M)

OILED ZONE: Splash High Medium Low

SUBSTRATUM: Rocks Boulder Cobble Gravel Sand Mud

LIVE BIOTA

Fucus (algae): Patchy Y/N Contin. Y/N Dense Y/N Sparse Y/N None Y/N

Mytilus (Mussels): Patchy Y/N Contin. Y/N Dense Y/N Sparse Y/N None Y/N

Balanus (Barnacles): Patchy Y/N Contin. Y/N Dense Y/N Sparse Y/N None Y/N

Littorina
 Patchy Y/N Contin. Y/N Dense Y/N Sparse Y/N None Y/N

Limpets: Patchy Y/N Contin. Y/N Dense Y/N Sparse Y/N None Y/N

OTHER OBSERVATIONS: Amphipods in drift and cobble at high spring term.

CLEANUP PRECAUTIONS: Caution should be taken not to erode berm to a point where waves will cut into forest. Avoid rocky outcrops adjacent to beach.

MAMMALS: Otters _____ Harbor Seals _____ Sea Lions _____ Whales _____
 Other none

BIRDS: Terrestrial birds at forest/beach interface

GENERAL OBSERVATIONS: Lightly oiled drift seaweed material at high tide line.
Rocky outcroppings and cliff faces adjacent to sandy beach (not oiled).
Bull Kelp (Nereocystis) forests offshore.

* See Ecological Evaluations for beach #1 and rocky cliff portions of this segment.

ECOLOGICAL EVALUATION

LOCATION: Izhut Bay SITE: West Shore OBSERVER: J. Tarpley
 LOCATION PREFIX: K-3/IB SEG. NO.: K-3-2-IB-3 LENGTH: 1400 (M)
 DATE: 6/17/87 TIME (HHMM): 1015 TIDE HT.: +0.5 (M)

OILED ZONE: Splash High Medium Low $\emptyset$

SUBSTRATUM: ROCKS Boulder Cobble Gravel Sand Mud

LIVE BIOTA

Fucus (algae): Patchy Y/N Contin. Y/N Dense Y/N Sparse Y/N None Y/N

Mytilus (Mussels): Patchy Y/N Contin. Y/N Dense Y/N Sparse Y/N None Y/N

Balanus (Barnacles): Patchy Y/N Contin. Y/N Dense Y/N Sparse Y/N None Y/N

Littorina

Patchy Y/N Contin. Y/N Dense Y/N Sparse Y/N None Y/N

Limpets: Patchy Y/N Contin. Y/N Dense Y/N Sparse Y/N None Y/N

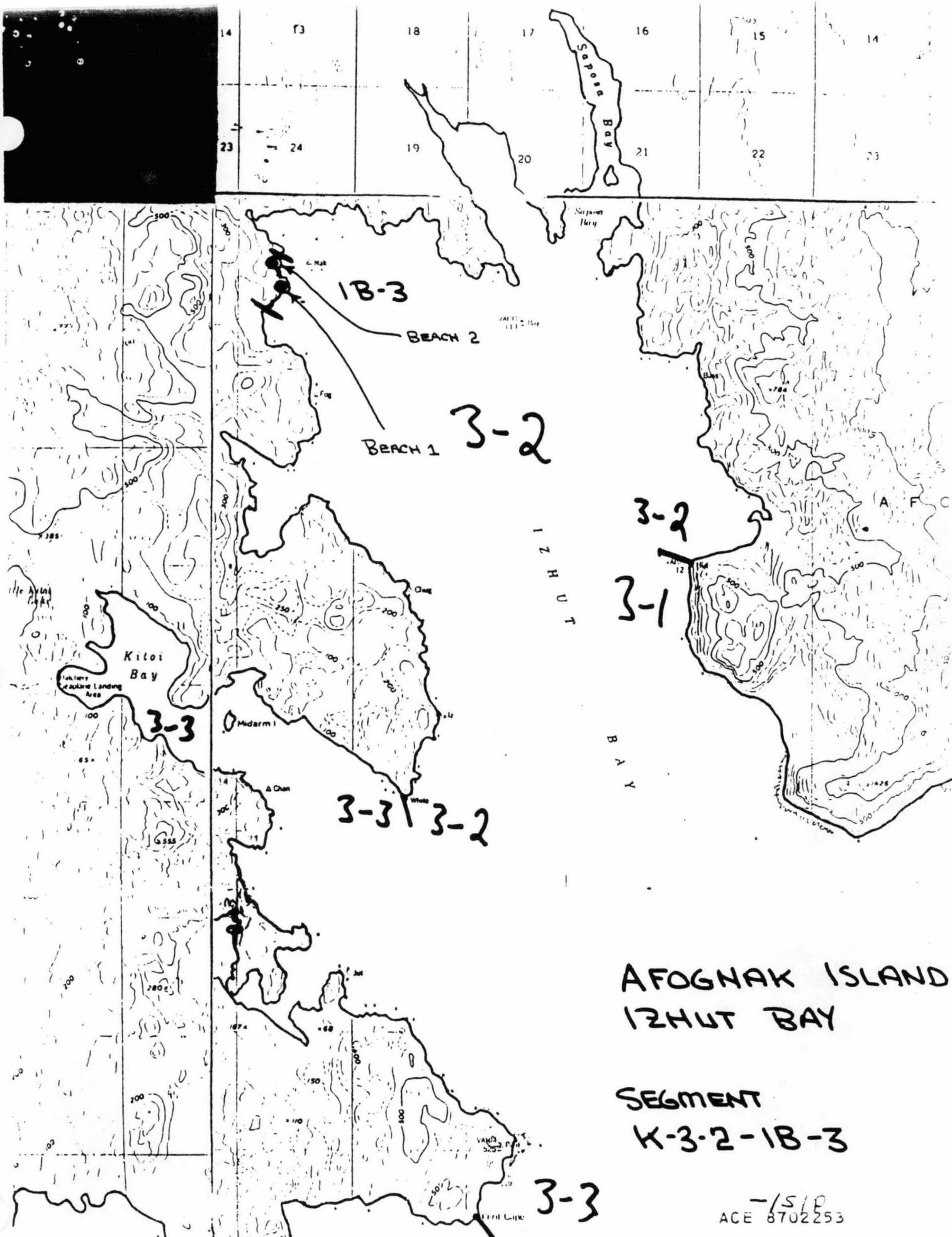
OTHER OBSERVATIONS: Intertidal zone of cliffs and rocky beaches
healthy and apparently oil free.

CLEANUP PRECAUTIONS: None - since no recommended cleanup is
advised on these portions of this segment.

MAMMALS: Otters Harbor Seals Sea Lions Whales
 Other NONE

BIRDS: NONE

GENERAL OBSERVATIONS: Inaccessible for cleanup. Healthy & oil-free areas.
*See Ecological Evaluations for beach #1 and #2 of this segment.



AFOGNAK ISLAND
IZHUT BAY

SEGMENT
K-3-2-1B-3

-151P
ACE 8702253

(version 6/14/89)

SHORELINE CLEANUP PROGRAM

DATE 6/27/89

SHORELINE SEGMENT IB-3

LOCATION: (see enclosed map) IZHUT BAY-WEST SHORE, AFOGNAK ISLAND

ADEC NO. _____ SHORELINE ASSESSMENT DATE: 6/17/89

Recommended Cleanup Activity(ies):

Manual removal of oiled debris.

After the fall bird migration, a reassessment of the remaining oil and additional cleaning techniques (such as relocation of the oiled splash zone beach material into the active surf zone) may be appropriate.

Other techniques may be used as appropriate.

Priorities Considerations: Class 3-4B

Critical resources not immediately present on this beach, however KISCC considers this a sensitive area due to local seabird colonies and pinniped haulouts in the bay.

Ecological Constraints (from site survey):

Caution must be used not to erode spring and winter berms during cleanup to a point where waves could cut into the forest.

Keep away from stream at north end of beach #1.

Archeological Constraints (from site survey):

If heretofore undiscovered cultural materials are uncovered during cleanup, contact Exxon's Archeological Field Director and take actions prescribed in the Operational Guidelines for Shoreline Cleanup dated 4/21/89 as amended.

Douglas Reger
State Historic Preservation Officer *

Date: 6/29/89

ISCC: _____

Date: _____

EXXON: _____

Date: _____

FOSC: _____

Date: _____

* Signature required to satisfy stipulations in Alaska DNR land use permits for tide and submerged lands.

+15
ACE 8702254

(version 5/16/89)

SHORELINE OIL EVALUATION FORM - KODIAK

Date: June 17/89 Time: 10:15 -> 10:35

Observer: 11-1-11-1

Surveyed From: (Foot) Boat/Helio/Plane

Weather: Sun/Cloud/Rain/Snow/Fog

LOCATION AFOGNAK ISLAND
LOCATION 12 MILE BAY

SEGMENT I.D. K-3-2-1B-3
TOTAL SEGMENT 16.5 mi BEACH 1

LENGTH OF SHORELINE SEGMENT: 1400 m

ACCESS: Foot/Vehicle/Boat/Barge/Helio/Float Plane

SHORELINE:

Shoreline Type: SPI/DEA/COV/HLD/STET

Slope: LANG/HANG/VER

Wave Exposure: High/Med/Low

Sediment: B 5 / C 5 / P 0 / G 0 / S 0 / M 0 / R 80

Drift Debris on Beach: (Yes/No)

Supra/Upper/Mid/Lower Type long 2A

OIL

Degree of Oiling: Heavy/Moderate/Light/No Oil/Unobserved

Total Area of Beach Impact: SU / SP / H / M / L

OIL DISTRIBUTION

Continuous: Y/N Segment # _____ No. Bands _____ Width _____

Sporadic: (Y/N) Segment # <10 Min/Max Dia 10 Impact Width 6m

Est. Oil Thickness where > 1cm: N/A cm SU / SP / UP / MID / LO

Est. Oil Penetration: > 20 cm SU / (SP) / UP / MID / LO

Layers? Yes/(No) No# Layers _____ Oil Weathering _____

Drift Debris Oiled? Yes/No Supra/Upper/Mid/Lower Amount: H / M / L / VL

OIL MORPHOLOGY

Pooled Oil 0 % "Free" Oil 50 % Spattered 50 % H/M/L/VL Sheen 0 %

OIL WEATHERING (OW)

Fresh Oil 0 % SU/SP/VP/MID/LO Choc Mousse 100 % SU/SP/VP/MID/LO

Pancake Mousse 0 % SU/SP/VP/MID/LO Asphalt Mousse 0 % SU/SP/VP/MID/LO

Tar Formation 0 %

Comments:

ACE 8702255

MIKE MILES
JUNE 17/89

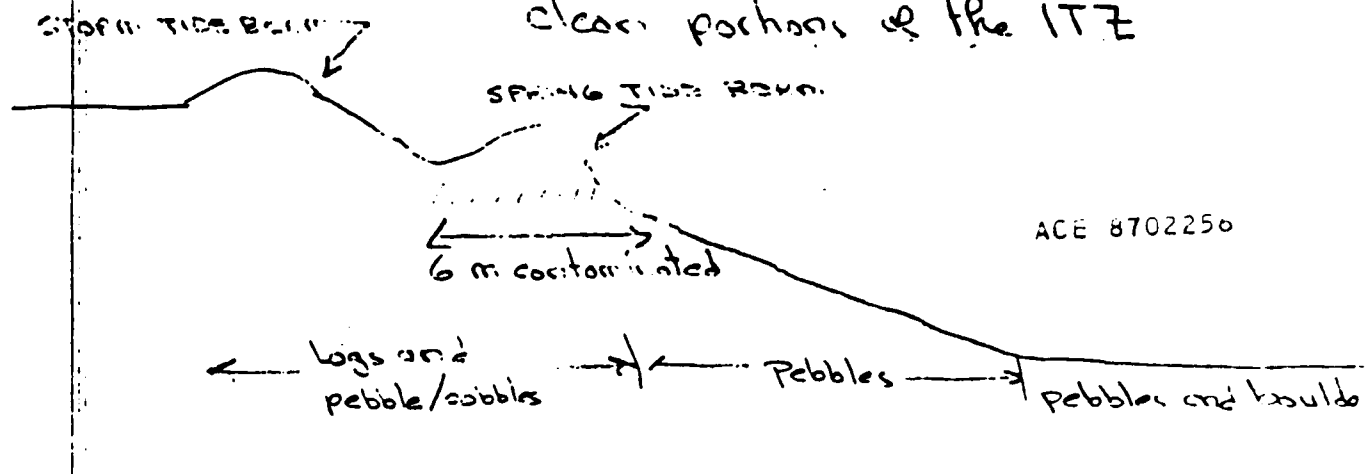
AFOGNAK ISLAND
IZHUT BAY
SEGMENT K3-2-1B-3
BEACH 1

COMMENTS
OIL EVALUATION FORM

This shoreline consists of rocky headlands and small coves containing pebble/cobble/boulder beaches.

The spring tide/storm berm on Beach 1 is contaminated with buried oil; oiled seaweed or other debris. Small numbers of ≤ 10 cm diameter mouse "patties" occur on the beach surface. Logs on mid to supra ITZ are not significantly oiled.

Clean-up: Manual removal relocation to surf zone however this could result in contamination of previously clean portions of the ITZ



(version 5/16/89)

SHORELINE OIL EVALUATION FORM - KODIAK

Date: 11/30 / Time: 10:00

Observer: W. J. ...

Surveyed From: Foot/Boat/Helio/Plane

Weather: Sun/Cloud/Rain/Snow/Fog

LOCATION

LOCATION _____

SEGMENT I.D. K-3-2-1B-3

LENGTH OF SHORELINE SEGMENT: 1400 m

ACCESS: Foot/Vehicle/Boat/Barge/Helio/Float Plane

SHORELINE:

Shoreline Type: SPI/BEA/COV/HID/STET

Slope: LANG/HANG/VER

Wave Exposure: High/Med/Low

Sediment: B 1 / C 5 / P 3 / G 1 / S 1 / M 1 / R 1

Drift Debris on Beach: Yes/No Supra/Upper/Mid/Lower Type _____

OIL

Degree of Oiling: Heavy/Moderate/Light/No Oil/Unobserved

Total Area of Beach Impact: SU SP/H M / L

OIL DISTRIBUTION

Continuous: Y/N Segment 1 No. Bands _____ Width _____

Sporadic: Y/N Segment 75 Min/Max 10 Impact Width 60 | Bank 1

Est. Oil Thickness where > 1cm: 11/A cm SU / SP / UP / MID / LO

Est. Oil Penetration: 2.10 cm SP SU / SP / UP / MID / LO

Layers? Yes No No. Layers _____ Oil Weathering _____

Drift Debris Oiled? Yes/No Supra/Upper/Mid/Lower Amount: H / M / L VL

OIL MORPHOLOGY

Pooled Oil 0 "Free" Oil SD Spattered SD H/M/L/VL Sheen 0

OIL WEATHERING (OW)

Fresh Oil 0 SU/SP/VP/MID/LO Choc Mousse 10 SU/SP/VP/MID/LO

Pancake Mousse 0 SU/SP/VP/MID/LO Asphalt Mousse 0 SU/SP/VP/MID/LO

Tar Formation 0

Comments:

SEE ATTACHED SHEET

ACE 8702257

MIKE MILES
JUNE 17/89

AFGNIAK ISLAND
IZHUT BAY
SEGMENT K3-2-1B-3
BEACH 2

COMMENTS

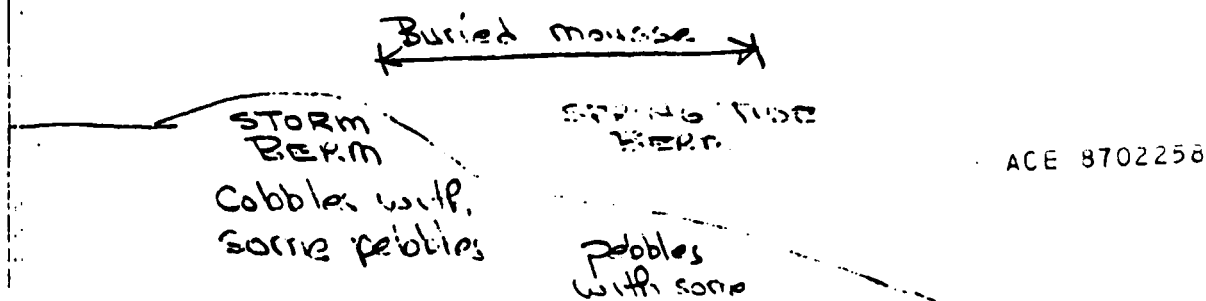
OIL EVALUATION FORM

This is a cobble/pebble beach situated between rocky headlands. The spring tide/lower storm berm contains buried mousse to depths of ≥ 10 cm. Significant quantities of oiled seaweed occur on the surface of the spring tide berm. ^{small} numbers of mousse "patties" [≤ 5 cm in length] have been blown up onto the log debris.

CLEANUP

- Manual removal of oiled debris
- the contaminated berm could be rolled down slope into areas which are receiving more wave action - however wave action can be expected to clean those sediments over time.

CROSS-SECTION



(version 5/16/89)

SHORELINE OIL EVALUATION FORM - KODIAKDate: June 17 1989 / Time: 10:00 → 11:00Observer: MIKE MILESSurveyed From: Foot/Boat/Helio/PlaneWeather: Sun/Cloud/Rain/Snow/FogLOCATION AFOGNAK ISLANDLOCATION IZHUT BAYSEGMENT I.D. K-3-2-1B-3LENGTH OF SHORELINE SEGMENT: 400 m TOTAL SEGMENT: 400Rocky Cor-
bution
around
Beach 1ACCESS: Foot/Vehicle/Boat/Barge/Helio/Float Plane

at low tide on adjacent beach

SHORELINE:Shoreline Type: SPI/BEA/COV/HID/STRT

Slope: LANG/HANG/VER

Wave Exposure: High/Med/LowSediment: B 1 / C 1 / P 1 / G 1 / S 1 / M 1 / R 100Drift Debris on Beach: Yes/No Supra/Upper/Mid/Lower Type OILDegree of Oiling: Heavy/Moderate/Light/No Oil/Unobserved

Total Area of Beach Impact: SU / SP / H / M / L

OIL DISTRIBUTIONContinuous: Y/N Segment 1 No. Bands Width Sporadic: Y/N Segment 1 Min/Max Dia Impact Width Est. Oil Thickness where > 1cm: 11/0 cm SU / SP / UP / MID / LOEst. Oil Penetration: 0 cm SU / SP / UP / MID / LOLayers? Yes/No No. Layers Oil Weathering Drift Debris Oiled? Yes/No Supra/Upper/Mid/Lower Amount: H / M / L / VLOIL MORPHOLOGYPooled Oil 0 "Free" Oil 0 Spattered 0 H/H/L/VL Sheen 0OIL WEATHERING (OW)Fresh Oil 0 SU/SP/VP/MID/LO Choc Mousse 0 SU/SP/VP/MID/LOPancake Mousse 0 SU/SP/VP/MID/LO Asphalt Mousse 0 SU/SP/VP/MID/LOTar Formation 0

Comments:

ACE 8702259

This form covers the portions of Segment K-3-2-1B-3
between and adjacent to Beaches 1 and 2This area of shoreline consists of rocky land.This area was surveyed by helicopter and small portions adjacent
to Beaches 1 and 2 were walked. No oil was observed.

DOCUMENTATION:

Map Aerial photo marking segment boundaries See attached

VTR: Y/N Tape Number(s) _____

Photography: Y/N Roll Number(s) ST-1

Sample Numbers Collected: N/A

ECOLOGICAL EVALUATION

Beach #1

LOCATION: Izhat Bay SITE: West shore toward head OBSERVER: J. Tarpley
 LOCATION PREFIX: K-3/IB SEG. NO.: K-3-2-IB-3 LENGTH: 1400 (M)
 DATE: 6/17/89 TIME (HHMM): 1015 TIDE HT.: +0.5 (M)

OILED ZONE: Splash High Medium Low

SUBSTRATUM: Rocks Boulder Cobble Gravel Sand, Mud

LIVE BIOTA

Fucus (algae): Patchy Y/N Contin. Y/N Dense Y/N Sparse Y/N None Y/N

Mytilus (Mussels): Patchy Y/N Contin. Y/N Dense Y/N Sparse Y/N None Y/N

Balanus (Barnacles): Patchy Y/N Contin. Y/N Dense Y/N Sparse Y/N None Y/N

Littorina

Patchy Y/N Contin. Y/N Dense Y/N Sparse Y/N None Y/N

Limpets: Patchy Y/N Contin. Y/N Dense Y/N Sparse Y/N None Y/N

OTHER OBSERVATIONS: Moderate amount of seaweed drift material high ITZ
Amphipods in drift and cobble at high ITZ. No living biota on beach
in lower ITZ. Fish (tridacna sculpins and salmonids) in F/W stream.

CLEANUP PRECAUTIONS: Cleanup crews must be careful not to create
berms to the point where waves will cut into forest. Avoid stream

MAMMALS: Otters _____ Harbor Seals _____ Sea Lions _____ Whales _____
 Other Deer tracks and scat.

BIRDS: Terrestrial birds at beach/forest interface.

GENERAL OBSERVATIONS: Drift material oiled in high ITZ. F/W stream
flowing out of north end of beach. No oil found up stream banks

* See Ecological Evaluations for beach #2 within this segment and
 rocky cliff portions of segment.

ECOLOGICAL EVALUATION

Beach #2

LOCATION: Izhut Bay SITE: West Shore OBSERVER: J. TarpleyLOCATION PREFIX: K-3/IB SEG. NO.: K-3-2-IB-3 LENGTH: 1400 (M)DATE: 6/17/89 TIME (HHMM): 1050 TIDE HT.: +0.75 (M)OILED ZONE: Splash High Medium LowSUBSTRATUM: Rocks Boulder Cobble Gravel Sand Mud

LIVE BIOTA

Fucus (algae): Patchy Y/N Contin. Y/N Dense Y/N Sparse Y/N None Y/NMytilus (Mussels): Patchy Y/N Contin. Y/N Dense Y/N Sparse Y/N None Y/NBalanus (Barnacles): Patchy Y/N Contin. Y/N Dense Y/N Sparse Y/N None Y/NLittorina
Patchy Y/N Contin. Y/N Dense Y/N Sparse Y/N None Y/NLimpets: Patchy Y/N Contin. Y/N Dense Y/N Sparse Y/N None Y/NOTHER OBSERVATIONS: Amphipods in drift and rubble at high spring berm.CLEANUP PRECAUTIONS: Caution should be taken not to erode berm to a point where waves will cut into forest. Avoid rocky outcrops adjacent to beachMAMMALS: Otters _____ Harbor Seals _____ Sea Lions _____ Whales _____
Other noneBIRDS: Terrestrial birds at forest/beach interfaceGENERAL OBSERVATIONS: Lightly oiled drift seaweed material at high tide line
Rocky outcroppings and cliff faces adjacent to sandy beach (not oiled).
Bull Kelp (*Nereocystis*) forests offshore.

ACE 8702262

* See Ecological Evaluations for beach #1 and rocky cliff portions of this segment.

ECOLOGICAL EVALUATION

* Rocky Cliffs & Benches

LOCATION: Izhuat. Bay SITE: West Shore OBSERVER: J. Tarpley

LOCATION PREFIX: K-3/IB SEG. NO.: K-3-2-IB-3 LENGTH: ~~400~~ 1400 (M)

DATE: 6/17/89 TIME (HHMM): 1015 TIDE HT.: +0.5 (M)

OILED ZONE: Splash High Medium Low $\emptyset$

SUBSTRATUM: ROCKS Boulder Cobble Gravel Sand Mud

LIVE BIOTA

↳ C.I.F.S.

Fucus (algae): Patchy Y/N Contin. Y/N Dense Y/N Sparse Y/N None Y/N

Mytilus (Mussels): Patchy Y/N Contin. Y/N Dense Y/N Sparse Y/N None Y/N

Balanus (Barnacles): Patchy Y/N Contin. Y/N Dense Y/N Sparse Y/N None Y/N

Littorina

Patchy Y/N Contin. Y/N Dense Y/N Sparse Y/N None Y/N

Limpets: Patchy Y/N Contin. Y/N Dense Y/N Sparse Y/N None Y/N

OTHER OBSERVATIONS: Intertidal zone of cliffs and rocky benches
healthy and apparently oil free.

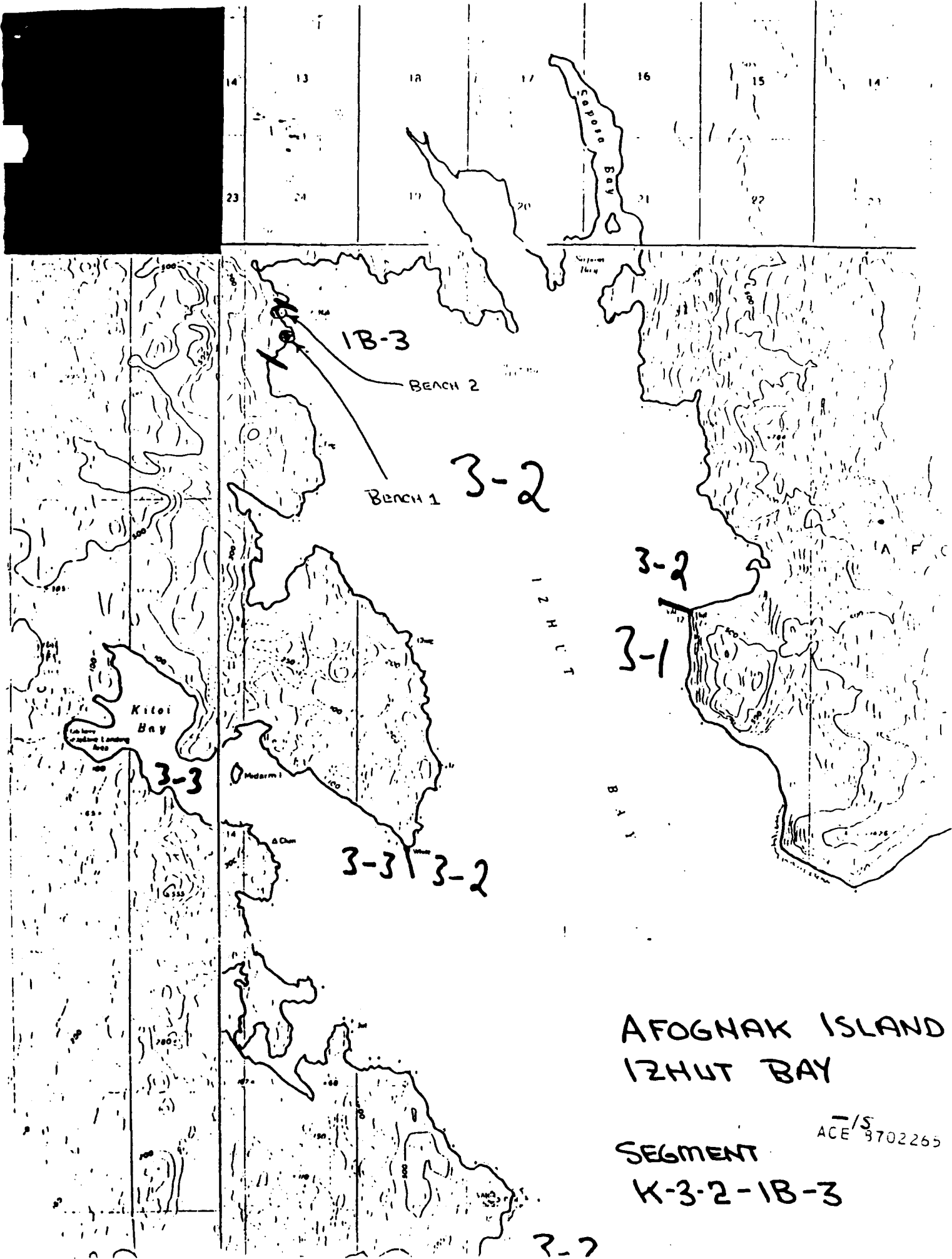
CLEANUP PRECAUTIONS: None - since no recommended cleanup is
advised on these portions of the segment.

MAMMALS: Otters Harbor Seals Sea Lions Whales
Other ADAXE

BIRDS: NONE

GENERAL OBSERVATIONS: Inaccessible for cleanup. Healthy & oil free areas.

* See Ecological Evaluations for bench #1 and #2 of this segment.



AFOGNAK ISLAND
IZHUT BAY

SEGMENT
K-3-2-1B-3

ACE 3702265

3-2

(version 6/14/89)

SHORELINE CLEANUP PROGRAM

DATE 6/27/89 SHORELINE SEGMENT IB-4

LOCATION: (see enclosed map) IZHUT BAY-TOMBOLO ON WEST SHORE,
AFOGNAK ISLAND

ADEC NO. _____ SHORELINE ASSESSMENT DATE: 6/17/89

Recommended Cleanup Activity(ies):

Manual removal of oiled debris and mousse patties.

Hot water, moderate to high pressure washing of rock surfaces.

Other techniques may be used as appropriate.

Priorities Considerations: 3-B

Critical resources not immediately present on beach.

However, KISCC considers this a sensitive area due to local seabird colonies and pinniped haulouts within the bay.

Ecological Constraints (from site survey):

Avoid washing oil into low intertidal zone where a currently healthy biota exists.

Archeological Constraints (from site survey):

If heretofore undiscovered cultural materials are uncovered during cleanup, contact Exxon's Archeological Field Director and take actions prescribed in the Operational Guidelines for Shoreline Cleanup dated 4/21/89 as amended.



State Historic Preservation Officer *

Date: 6/29/89

ISCC: _____

Date: _____

EXXON: _____

Date: _____

FOSC: _____

Date: _____

* Signature required to satisfy stipulations in Alaska DNR land use permits for tide and submerged lands.

ACE 8702266 +15

(version 5/16/89)

SHORELINE OIL EVALUATION FORM - KODIAKDate: June 17 / Time: 7:30Observer: Mike JonesSurveyed From: Foot/Boat/Helio/PlaneWeather: Sun Cloud/Rain/Snow/FogLOCATION AFOGNAK ISLAND
LOCATION IZHUT BAYSEGMENT I.D. K-3-2-1B 4LENGTH OF SHORELINE SEGMENT: 200 m

ACCESS: Foot/Vehicle/Boat/Barge/Helio/Float Plane

SHORELINE:Shoreline Type: SPI/BEA/COV/HLD/STETSlope: LANG/HANG/VERWave Exposure: High/Med/LowSediment: B75% / C25% / P__% / G__% / S__% / M__% / R__%Drift Debris on Beach: Yes/No Supra/Upper/Mid/Lower Type _____OILDegree of Oiling: Heavy/Moderate/Light/No Oil/UnobservedTotal Area of Beach Impact: SU / SP / H / M / LOIL DISTRIBUTIONContinuous: Y/N Segment 70 ^{of segment length} No. Bands 1 Width 6-10Sporadic: Y/N Segment 70 ^{of segment length} Min/Max Dia > 10cm Impact Width > 20 mEst. Oil Thickness where > 1cm: N/A cm SU / SP / UP / MID / LOEst. Oil Penetration: < 1 cm SU / SP / UP / MID / LOLayers? Yes/No No. Layers _____ Oil Weathering _____Drift Debris Oiled? Yes/No Supra/Upper/Mid/Lower Amount: H / M / L / VLOIL MORPHOLOGYPooled Oil Y/N % "Free" Oil 10 % Spattered 90 % H/M/L/VL Sheen 0 %OIL WEATHERING (OW)Fresh Oil 0 % SU/SP/VP/MID/LO Choc Mousse 10 % SU/SP/VP/MID/LOPancake Mousse 0 % SU/SP/VP/MID/LO Asphalt Mousse 90 % SU/SP/VP/MID/LOTar Formation 0 %

Comments:

SEE ATTACHED MAP AND COMMENT SHEET

ACE 8702267

MIKE MILES

JUNE 17/89

AFOGNAK ISLAND

IZHUT BAY

SEGMENT K-3-2-1B-4

COMMENTS

SHORELINE OIL EVALUATION FORM

This section of shoreline consists of a cobble/boulder 'tombolo' [a spit like feature] which extends out to a vegetated island.

A band of continuous ^{tar coating} extends over a width of 6 to 8 m at the high tide to low spring tide level. Discontinuous tar coatings in small to medium sized 'splatters' extend over a ~20 m wide section of the mid to high ITZ.

Cleanup

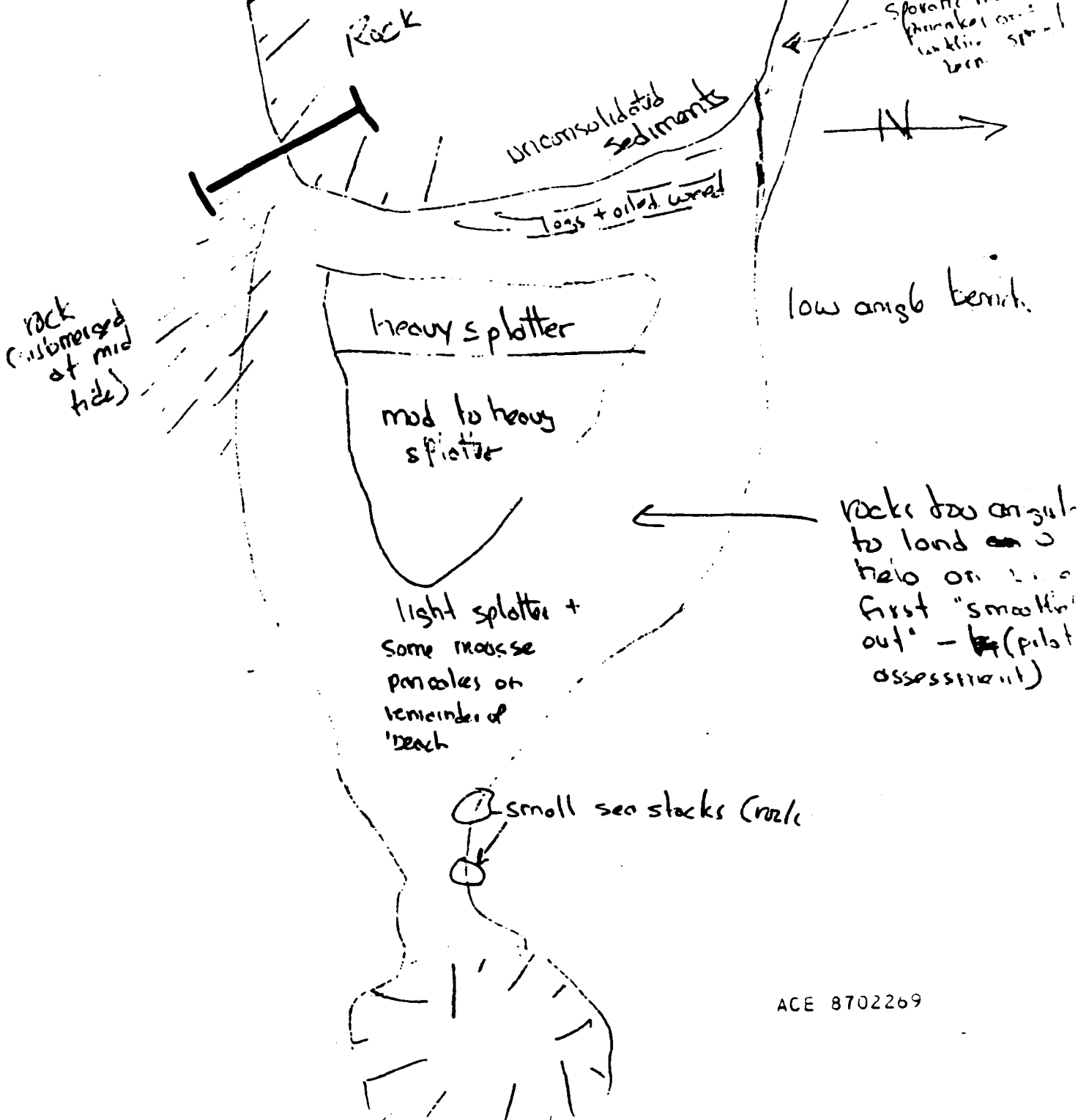
- i) Manually remove oiled debris
- ii) moderate to high pressure hot water would be required to remove the tar coatings on this shore.

K-3-2 - IB-4

June 17/89

11:40

IB 3
Bamh2



ACE 8702269

DOCUMENTATION:

Map Aerial photo-marking segment boundaries See Attached

VTR: Y/N Tape Number(s) _____

Photography: Y/N Roll Number(s) JT-1

Sample Numbers Collected: N/A

ACE 8702270

ECOLOGICAL EVALUATION

LOCATION: IZHUT BAY SITE: West Shore - Rocky Spit #1 OBSERVER: J. Tapley
 LOCATION PREFIX: K-3/IB SEG. NO.: K-3-2-IB-4 LENGTH: 200 (M)

DATE: 6 / 17 / 89 TIME (HMM): 1130 TIDE HT.: +1.5 (M)

OILED ZONE: Splash High Medium Low

SUBSTRATUM: Rocks Boulder Cobble Gravel Sand Mud

LIVE BIOTA

Fucus (algae): Patchy Y/N Contin. Y/N Dense Y/N Sparse Y/N None Y/N

Mytilus (Mussels): Patchy Y/N Contin. Y/N Dense Y/N Sparse Y/N None Y

Balanus (Barnacles): Patchy Y/N Contin. Y/N Dense Y/N Sparse Y/N None Y

Littorina
 Patchy Y/N Contin. Y/N Dense Y/N Sparse Y/N None Y/N

Limpets: Patchy Y/N Contin. Y/N Dense Y/N Sparse Y/N None Y/N

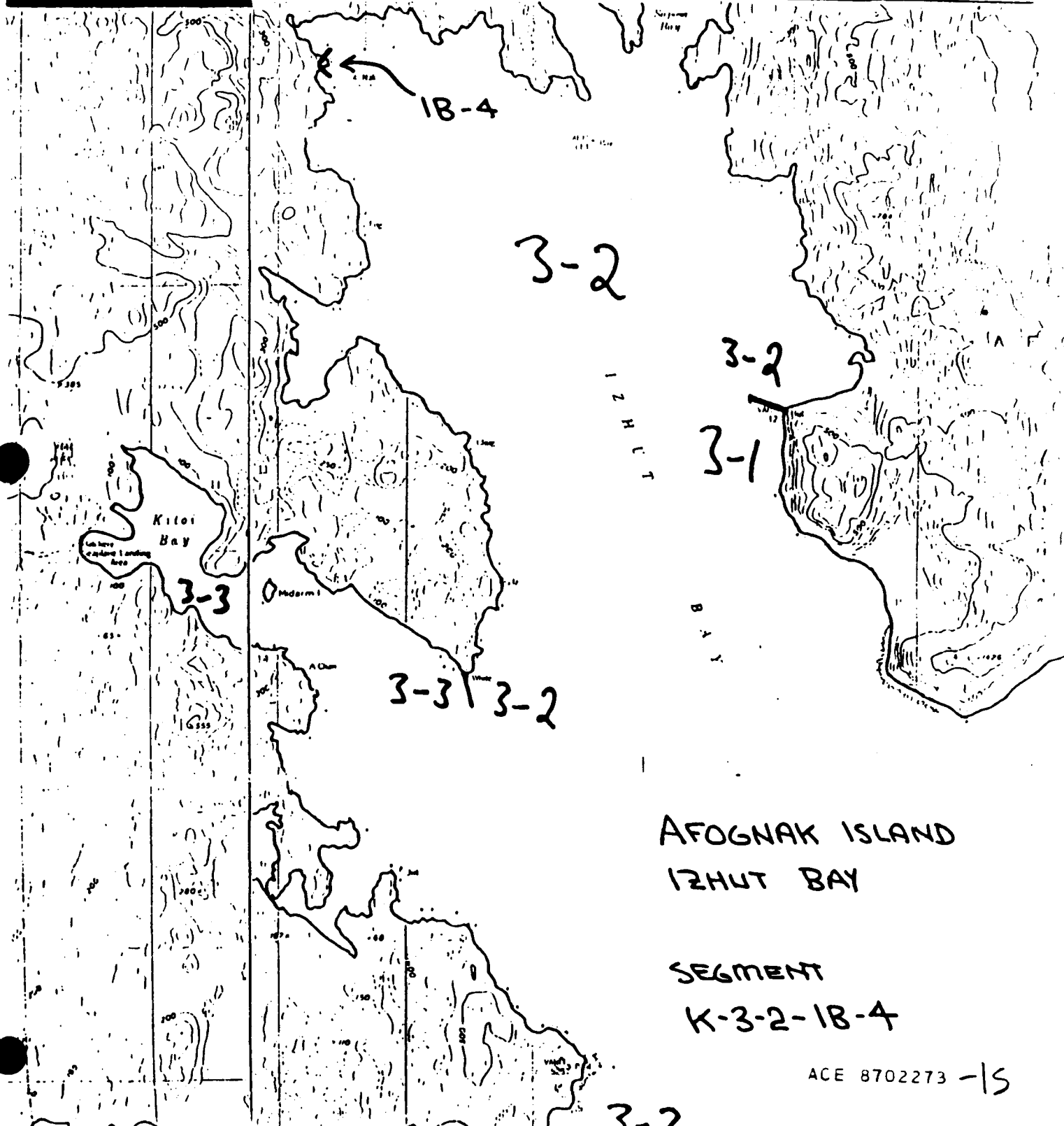
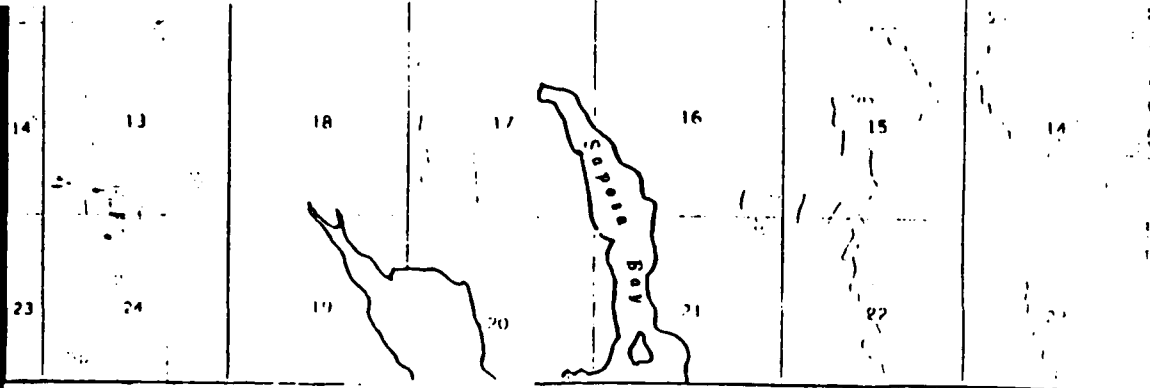
OTHER OBSERVATIONS: All biota in lower ITZ below oiled zone. Some
Balanus in oiled zone. Coated barnacles → dead.

CLEANUP PRECAUTIONS: Avoid washing oil into lower ITZ of
healthy biota.

MAMMALS: Otters _____ Harbor Seals _____ Sea Lions _____ Whales _____
 Other NONE

BIRDS: Gulls on spit and rock stack.

GENERAL OBSERVATIONS: Little drift material in high tide line area
Oiled zone is between healthy biota of low ITZ and berm.



AFOGNAK ISLAND
IZHUT BAY

SEGMENT
K-3-2-18-4

ACE 8702273 -15

3-2

(version 6/14/89)

SHORELINE CLEANUP PROGRAM

DATE 6/27/89 SHORELINE SEGMENT IB-4

LOCATION: (see enclosed map) IZHUT BAY-TOMBOLO ON WEST SHORE,
AFOGNAK ISLAND

ADEC NO. K3-2 SHORELINE ASSESSMENT DATE: 6/17/89

Recommended Cleanup Activity(ies):

Manual removal of oiled debris and mousse patties.

Hot water, moderate to high pressure washing of rock surfaces.

Other techniques may be used as appropriate.

Priorities Considerations: 3-B

Critical resources not immediately present on beach.

However, KISCC considers this a sensitive area due to local seabird colonies and pinniped haulouts within the bay.

Ecological Constraints (from site survey):

Avoid washing oil into low intertidal zone where a currently healthy biota exists.

Archeological Constraints (from site survey):

If heretofore undiscovered cultural materials are uncovered during cleanup, contact Exxon's Archeological Field Director and take actions prescribed in the Operational Guidelines for Shoreline Cleanup dated 4/21/89 as amended.

Douglas Regier
State Historic Preservation Officer *

Date: 6/29/89

ISCC: _____

Date: _____

EXXON: [Signature]

Date: 7/1/89

FOSC: [Signature] Rev 7/1/89

Date: 7/13/89

Type A removal of surface contamination only. Reusers upon completion.
* Signature required to satisfy stipulations in Alaska DNR land use permits for tide and submerged lands.

NO Type B w/o KISCC review

SHORELINE OIL EVALUATION FORM - KODIAK

June 17

Date: 58 / Time: 11:30Observer: RF E RFSurveyed From: Foot/Boat/Helio/PlaneWeather: Sun/Cloud/Rain/Snow/FogLOCATION AFOGNAK ISLAND
LOCATION 1244T BAYSEGMENT I.D. K-3-2-1B-4LENGTH OF SHORELINE SEGMENT: 200 mACCESS: Foot/Vehicle/Boat/Barge/Helio/Float Plane

SHORELINE:

Shoreline Type: SPL/BEA/COV/HLD/STRTSlope: LANG/HANG/VERWave Exposure: High/Med/LowSediment: B 75 / C 25 / P / G / S / M / R Drift Debris on Beach: Yes/No Supra/Upper/Mid/Lower Type

OIL

Degree of Oiling: Heavy/Moderate/Light/No Oil/UnobservedTotal Area of Beach Impact: SU / SP / H / M / L

OIL DISTRIBUTION

Continuous: Y/N Segment 70 ^{of segment length} No. Bands 1 Width 6-10Sporadic: Y/N Segment 70 ^{of segment length} Min/Max Dia > 10cm Impact Width > 20 mEst. Oil Thickness where > 1cm: N/A cm SU / SP / UP / MID / LOEst. Oil Penetration: < 1 cm SU / SP / UP / MID / LOLayers? Yes/No No# Layers Oil Weathering Drift Debris Oiled ? Yes/No Supra/Upper/Mid/Lower Amount: H / M / L / VL

OIL MORPHOLOGY

Pooled Oil 0 % "Free" Oil 10 % Spattered 90 % H/M/L/VL Sheen 0 %

OIL WEATHERING (ICE)

Fresh Oil 0 % SU/SP/VP/MID/LO Choc Mousse 10 % SU/SP/VP/MID/LOPancake Mousse 0 % SU/SP/VP/MID/LO Asphalt Mousse 90 % SU/SP/VP/MID/LOTar Formation 0 %

Comments:

SEE ATTACHED MAP AND COMMENT SHEET

MIKE MILBS

JUNE 17/89

AFOGNAK ISLAND

IZHUT BAY

SEGMENT K-3-2-1B-4

COMMENTS

SHORELINE OIL EVALUATION FORM

This section of shoreline consists of a cobble/boulder "tombolo" [a spit like feature] which extends out to a vegetated island.

A band of continuous ^{tar coating} extends over a width of 6 to 8 m at the high tide to low spring tide level. Discontinuous tar coatings in small to medium sized "splatters" extend over a ~20 m wide section of the mid to high ITZ.

Cleanup

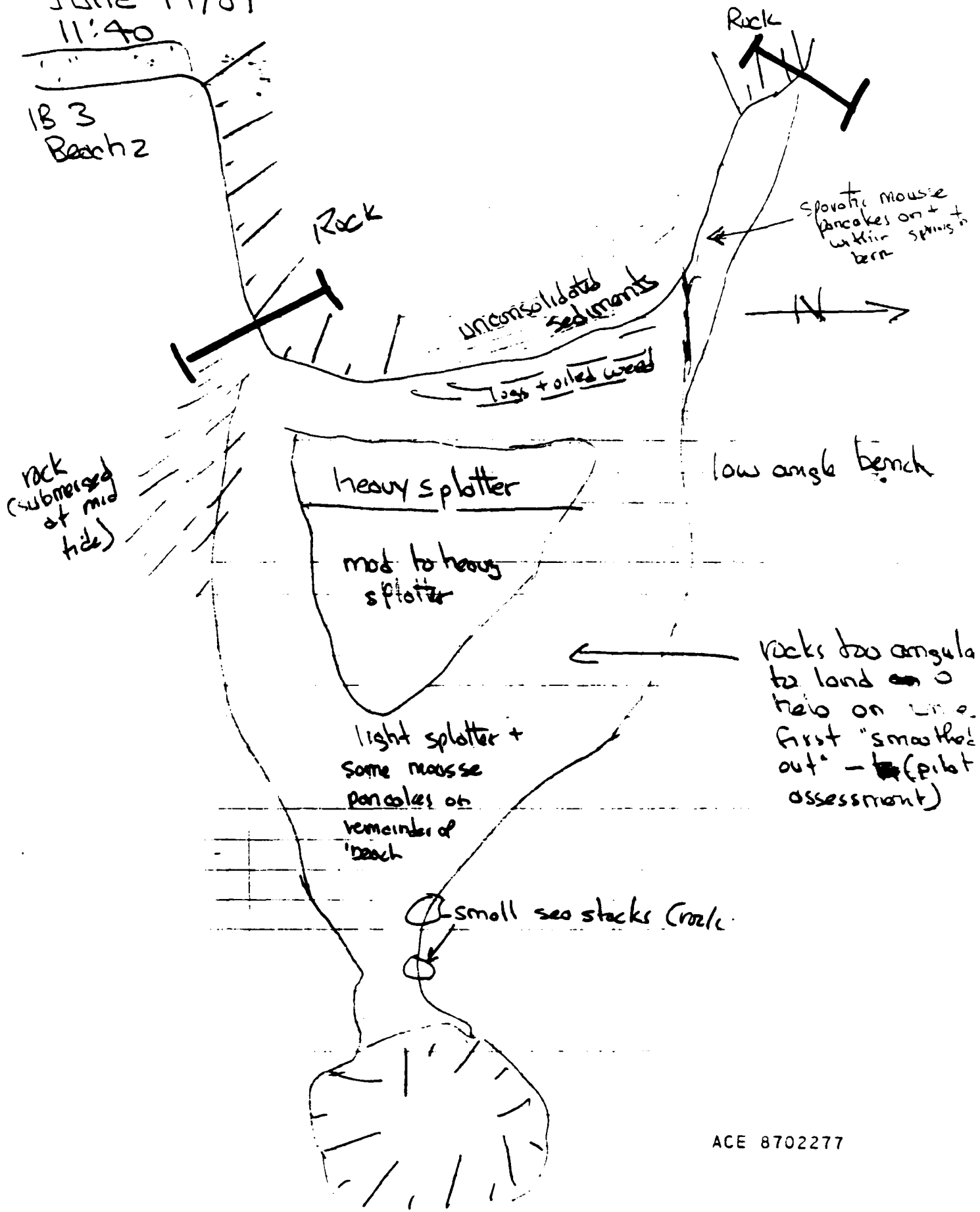
- i) Manually remove oiled debris
- ii) moderate to high pressure hot water would be required to remove the tar coatings on this

K-3-2 - IB-4

June 17/89

11:40

IB 3
Beach 2



ACE 8702277

DOCUMENTATION:

Map Aerial photo marking segment boundaries See Attached

VTR: Y/N Tape Number(s) _____

Photography: Y/N Roll Number(s) JT-1

Sample Numbers Collected: N/A

ACE 8702278

ECOLOGICAL EVALUATION

LOCATION: IZHUT BAY SITE: West Shore - Rocky Spit off mass OBSERVER: J. Tapley
 LOCATION PREFIX: K-3/IB SEG. NO.: K-3-2-IB-4 LENGTH: 200 (M)
 DATE: 6 / 17 / 89 TIME (HHMM): 1130 TIDE HT.: +1.5 (M)

OILED ZONE: Splash High Medium Low

SUBSTRATUM: Rocks Boulder Cobble Gravel Sand Mud

LIVE BIOTA

Fucus (algae): Patchy Y/N Contin. Y/N Dense Y/N Sparse Y/N None Y/N

Mytilus (Mussels): Patchy Y/N Contin. Y/N Dense Y/N Sparse Y/N None Y/N

Balanus (Barnacles): Patchy Y/N Contin. Y/N Dense Y/N Sparse Y/N None Y/N

Littorina
 Patchy Y/N Contin. Y/N Dense Y/N Sparse Y/N None Y/N

Limpets: Patchy Y/N Contin. Y/N Dense Y/N Sparse Y/N None Y/N

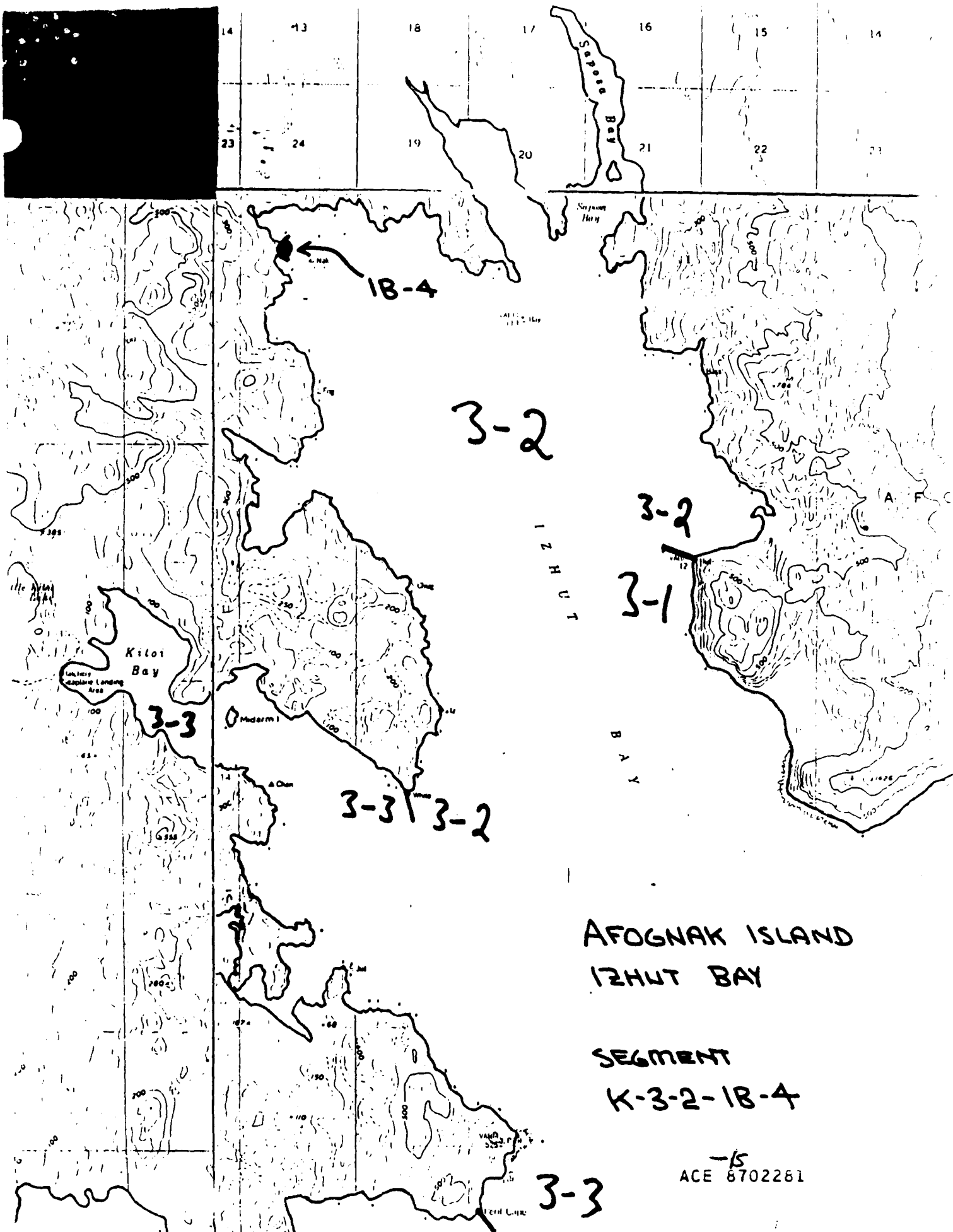
OTHER OBSERVATIONS: All biota in lower ITZ below oiled zone. Some
Balanus in oiled zone. Coated barnacles → dead.

CLEANUP PRECAUTIONS: Avoid washing oil into lower ITZ of
healthy biota.

MAMMALS: Otters Harbor Seals Sea Lions Whales
 Other NONE

BIRDS: Gulls on spit and rock stacks.

GENERAL OBSERVATIONS: Little drift material in high tide line area
Oiled zone is between healthy biota of low ITZ and berm.



AFOGNAK ISLAND
IZHUT BAY

SEGMENT
K-3-2-18-4

-15
ACE 8702281

(version 6/14/89)

SHORELINE CLEANUP PROGRAM

DATE 6/28/89

SHORELINE SEGMENT IB-5

LOCATION: (see enclosed map) NORTHWEST SMALL BAY-IZHUT BAY,

AFOGNAK ISLAND

ADEC NO. K3-2 SHORELINE ASSESSMENT DATE: 6/17/89

Recommended Cleanup Activity(ies):

Manual removal of oiled debris and mousse patties.

After the fall bird migration, a reassessment of the remaining oil and additional cleaning techniques (such as relocation of the oiled splash zone beach material into the active surf zone) may be appropriate.

Other techniques may be used as appropriate.

Priorities Considerations: Class 4-A

KISCC considers this a sensitive area due to salmon runs up this lagoon and local seabird colonies and pinniped haulouts within the bay.

Ecological Constraints (from site survey):

Avoid contamination of lower intertidal zone.

Avoid contamination of lagoon by refloating oil during cleanup.

Archeological Constraints (from site survey):

If heretofore undiscovered cultural materials are uncovered during cleanup, contact Exxon's Archeological Field Director and take actions prescribed in the Operational Guidelines for Shoreline Cleanup dated 4/21/89 as amended.

Douglas Regan
State Historic Preservation Officer *

Date: 6/29/89

ISCC: _____

Date: _____

EXXON: [Signature]

Date: 7/1/89

FOSC: [Signature] RWD 7/1/89

Date: 7/1/89

Type A removal of surface contamination only.

* Signature required to satisfy stipulations in Alaska DNR land use permits for tide and submerged lands.

15/P
ACE 8702282

SHORELINE OIL EVALUATION FORM - KODIAK

Date: June 17/89 / Time: 17:40

Observer: MIKE MILES

Surveyed From: Foot/Boat/Helio/Plane

Weather: Sun/Cloud/Rain/Snow/Fog

LOCATION AFOGNAK ISLAND
LOCATION 12 HUT BAY

SEGMENT I.D. K-3-2-1B-5

LENGTH OF SHORELINE SEGMENT: 1500 m

ACCESS: Foot/Vehicle/Boat/Barge/Helio/Float Plane

SHORELINE:

Shoreline Type: SPI/BEA/COV/HLD/STRT

Slope: LANG/HANG/VER

Wave Exposure: High/Med/Low

Sediment: B 5 / C 30 / P 35 / G 5 / S 5 / M / R 20

Drift Debris on Beach: Yes/No

Supra/Upper/Mid/Lower Type logs + shells
sea weed

OIL

Degree of Oiling: Heavy/Moderate/Light/No Oil/Unobserved

Total Area of Beach Impact: SU / SP / H / M / L

OIL DISTRIBUTION

Continuous: Y/N Segment No. Bands Width

Sporadic: Y/N Segment Min/Max Dia ≤ 10 cm Impact Width 5 to 9 m

Est. Oil Thickness where > 1cm: 4/4 cm SU / SP / UP / MID / LO

Est. Oil Penetration: 0-20 cm in spring tide bar SU / SP / UP / MID / LO

Layers? Yes/No No# Layers Oil Weathering

Drift Debris Oiled? Yes/No Supra/Upper/Mid/Lower Amount: H / M / L / VL

OIL MORPHOLOGY

Pooled Oil 0 / "Free" Oil SD / Spattered SD / H/M/L/VL Sheen

OIL WEATHERING (OW)

Fresh Oil 0 / SU/SP/VP/MID/LO Choc Mousse SD / SU/SP/VP/MID/LO

Pancake Mousse 30 / SU/SP/VP/MID/LO Asphalt Mousse 20 / SU/SP/VP/MID/LO

Tar Formation 0

Comments:

SEE ATTACHED MAP AND COMMENT SHEET

MIKE MILES

JUNE 17/89

AFOGNAK ISLAND

IZHUT BAY

SEGMENT K-3-2-1B-5

COMMENTS

SHORELINE OIL EVALUATION FORM

This section of shoreline consists of a number of rocky headlands which separate small pebble (near 1B4) to cobble beaches. A low gradient stream/estuary drains into the middle of this segment.

The spring tide storm berm on the pebble beach near 1B4 is contaminated with mousse over a width of 1 to 4 m. The mid to upper ITZ of all beach areas contain occasional mousse "potties" on the beach surface. No oil was observed during a low elevation reconnaissance of the stream/estuary.

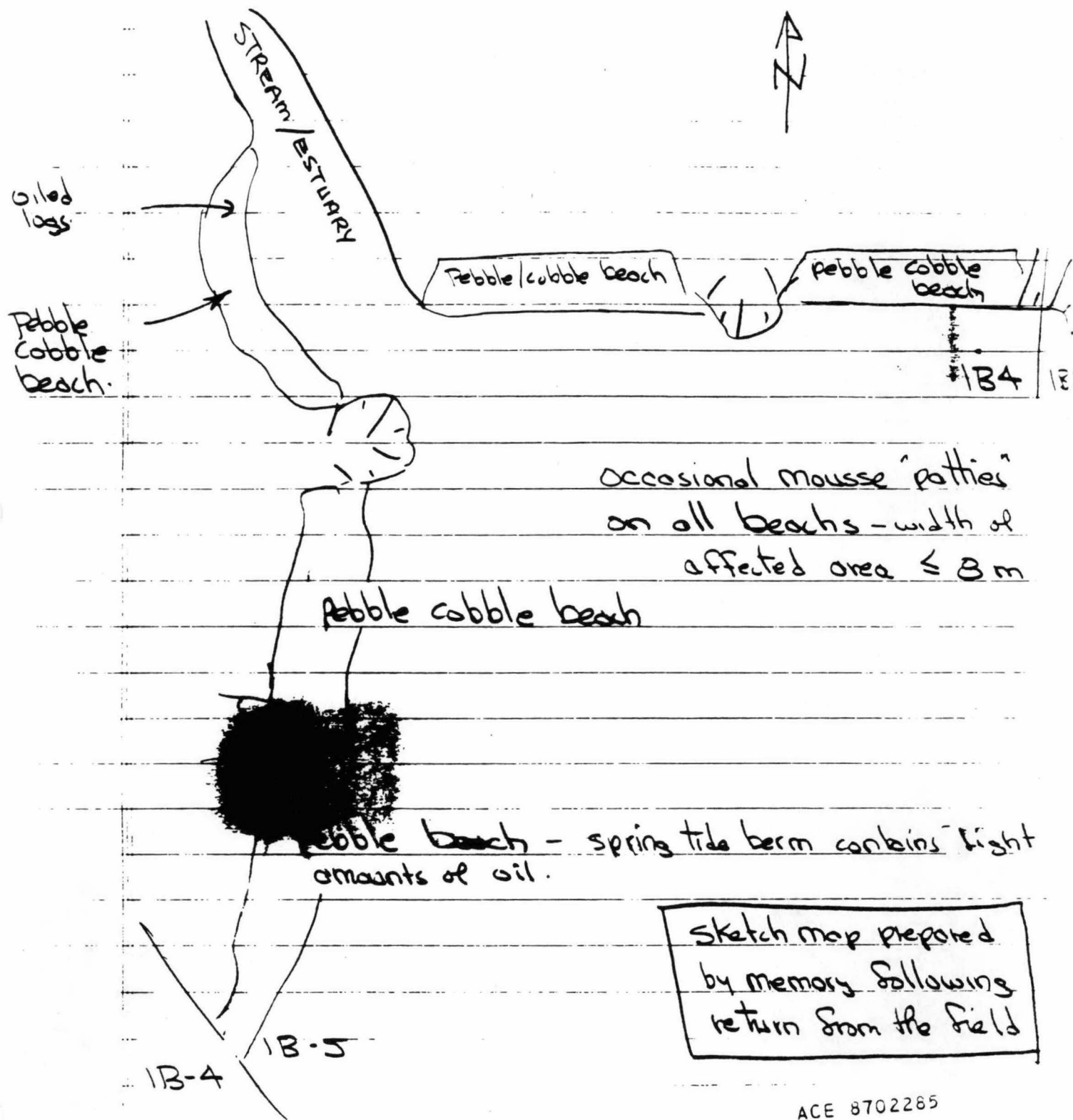
CLEAN-UP

- Manual removal of oiled debris and mousse

- Move contaminated pebbles and cobbles in the Spring tide berm into the lower surf zone. [Natural wave action will however eventually clean these sediments and the amount of oil in these materials is quite small]

June 17/89
Mike Miles

AFOGNAK ISLAND
IZHUT BAY
SEGMENT K-3-2-1B-5



ACE 8702285

DOCUMENTATION:

Map Aerial photo marking segment boundaries See attached

VTR: Y/N Tape Number(s) _____

Photography: Y/N Roll Number(s) JT-1

Sample Numbers Collected: N/A

ECOLOGICAL EVALUATION

LOCATION: Izhuat Bay SITE: NW Lagoon OBSERVER: J. Tarpley
 LOCATION PREFIX: K-3/IB SEG. NO.: K-3-2-IB-5 LENGTH: 1500 (M)
 DATE: 6/17/87 TIME (HHMM): 1700 TIDE HT.: +1.25 (M)
 OILED ZONE: Splash High Medium Low
 SUBSTRATUM: Rocks Boulder Cobble Gravel Sand Mud

LIVE BIOTA

Fucus (algae): Patchy Y/N Contin. Y/N Dense Y/N Sparse Y/N None Y/N

Mytilus (Mussels): Patchy Y/N Contin. Y/N Dense Y/N Sparse Y/N None Y/N

Balanus (Barnacles): Patchy Y/N Contin. Y/N Dense Y/N Sparse Y/N None Y/N

Littorina
 Patchy Y/N Contin. Y/N Dense Y/N Sparse Y/N None Y/N

Limpets: Patchy Y/N Contin. Y/N Dense Y/N Sparse Y/N None Y/N

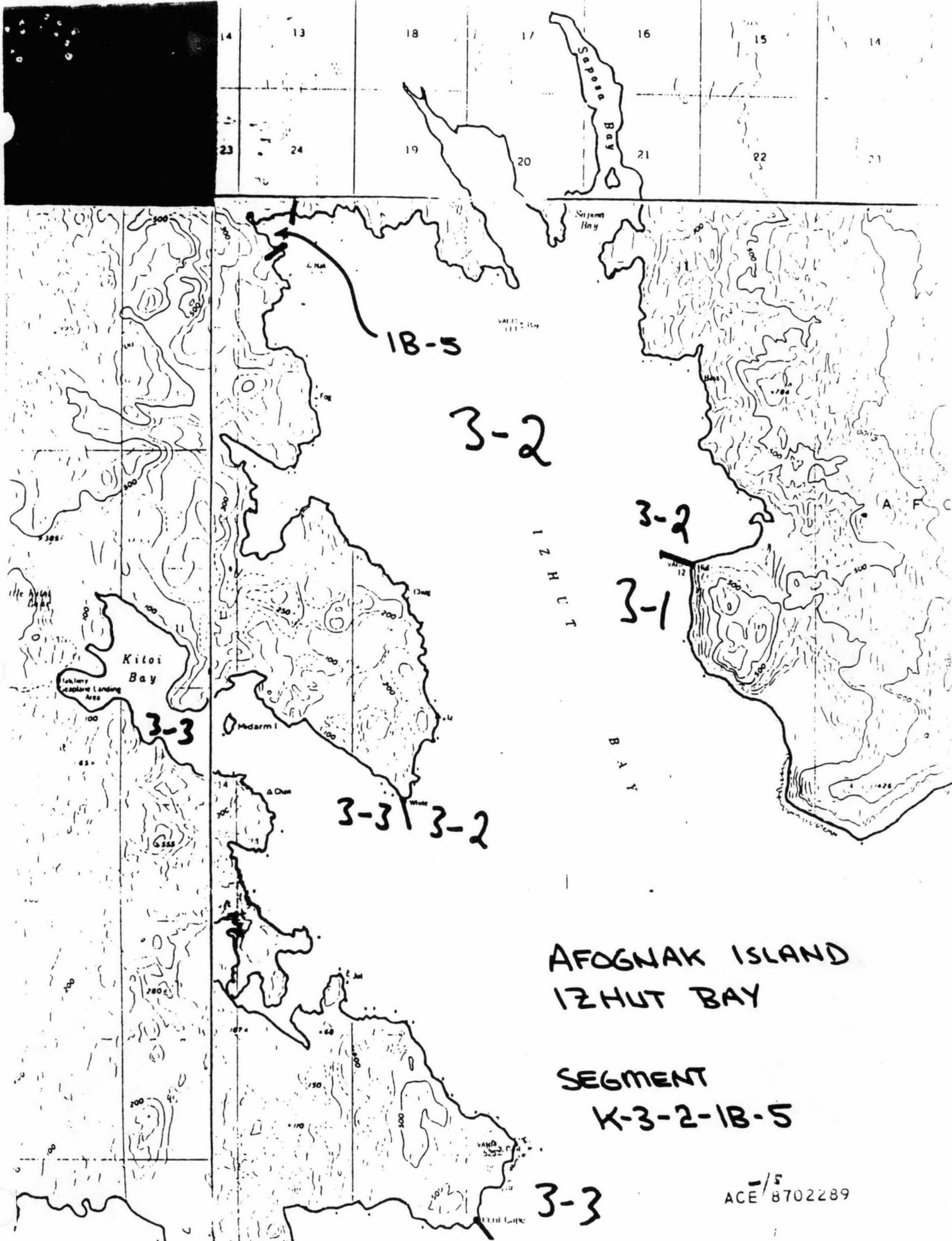
OTHER OBSERVATIONS: Clam & Mytilus shells along beaches. All biota
mid to low ITZ. 1 Large Nereid polychaete worm on beach.
Salmon run lagoon & stream.

CLEANUP PRECAUTIONS: Avoid oiling lower ITZ or any healthy organisms.

MAMMALS: Otters 1 Harbor Seals 2 Sea Lions _____ Whales _____
 Other Seal Otter Foraging in small bay

BIRDS: 2 Brandt's Cormorants, 1 Puffin.

GENERAL OBSERVATIONS: It was a hot afternoon and mousse was liquifying
over rocks into cracks. Lots of pollen in water. Biota not largely
affected by mousse patties. This segment has varying ecological impact
due to changing biota. Most of the beach is lacking any biota however on
section near head of lagoon (south side) is categorized as to what's listed above.



(version 6/14/89)

SHORELINE CLEANUP PROGRAM

DATE 6/28/89 SHORELINE SEGMENT IB-5

LOCATION: (see enclosed map) NORTHWEST SMALL BAY-IZHUT BAY,
AFOGNAK ISLAND

ADEC NO. _____ SHORELINE ASSESSMENT DATE: 6/17/89

Recommended Cleanup Activity(ies):

Manual removal of oiled debris and mousse patties.

After the fall bird migration, a reassessment of the remaining oil and additional cleaning techniques (such as relocation of the oiled splash zone beach material into the active surf zone) may be appropriate.

Other techniques may be used as appropriate.

Priorities Considerations: Class 4-A

KISCC considers this a sensitive area due to salmon runs up this lagoon and local seabird colonies and pinniped haulouts within the bay.

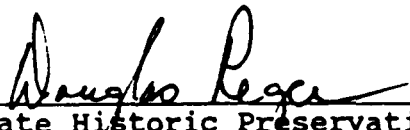
Ecological Constraints (from site survey):

Avoid contamination of lower intertidal zone.

Avoid contamination of lagoon by refloating oil during cleanup.

Archeological Constraints (from site survey):

If heretofore undiscovered cultural materials are uncovered during cleanup, contact Exxon's Archeological Field Director and take actions prescribed in the Operational Guidelines for Shoreline Cleanup dated 4/21/89 as amended.



State Historic Preservation Officer *

Date: 6/29/89

ISCC: _____

Date: _____

EXXON: _____

Date: _____

FOSC: _____

Date: _____

* Signature required to satisfy stipulations in Alaska DNR land use permits for tide and submerged lands.

TIS
ACE 8702290

(version 5/16/89)

SHORELINE OIL EVALUATION FORM - KODIAK

Date: JUNE 17/89 / Time: 17:40

Observer: MIKE MILES

Surveyed From: Foot / Boat / Helio / Plane

Weather: Sun / Cloud / Rain / Snow / Fog

LOCATION AFOGNAK ISLAND
LOCATION 12 HUT BAY

SEGMENT I.D. K-3-2-1B-5

LENGTH OF SHORELINE SEGMENT: 1500 m

ACCESS: Foot / Vehicle / Boat / Barge / Helio / Float Plane

SHORELINE:

Shoreline Type: SPI / BEA / COV / HLD / STRT

Slope: LANG / HANG / VER

Wave Exposure: High / Med / Low

Sediment: B 1 / C 10 / P 1 / G 5 / S 5 / M 1 / R 20

Drift Debris on Beach: Yes / No

(Supra / Upper / Mid / Lower Type low to mid 1, 6
solved)

OIL

Degree of Oiling: Heavy / Moderate / Light / No Oil / Unobserved

Total Area of Beach Impact: SU / SP / H / M / L

OIL DISTRIBUTION

Continuous: Y / N Segment 1 No. Bands 1 Width 1

Sporadic: Y / N Segment 10 Min / Max Dia 10 cm Impact Width 5 to 9 m

Est. Oil Thickness where > 1cm: 11A cm SU / SP / UP / MID / LO

Est. Oil Penetration: 0-20 cm cm SU / SP / UP / MID / LO

Layers? Yes / No No Layers 1 Oil Weathering 1

Drift Debris Oiled? Yes / No Supra / Upper / Mid / Lower Amount: H / M / L VL

OIL MORPHOLOGY

Pooled Oil 0 "Free" Oil SD Spattered SD H / M / L VL Sheen 1

OIL WEATHERING (OW)

Fresh Oil 0 SU / SP / VP / MID / LO Choc Mousse SD SU / SP / VP / MID / LO

Pancake Mousse SD SU / SP / VP / MID / LO Asphalt Mousse SD SU / SP / VP / MID / LO

Tar Formation 0

Comments:

SEE ATTACHED MAP AND COMMENT SHEET

ACE 8702291

MIKE MILES
JUNE 17/89

AFOGNAK ISLAND
IZHUT BAY
SEGMENT K-3-2-1B-5

COMMENTS
SHORELINE OIL EVALUATION FORM

This section of shoreline consists of a number of rocky headlands which separate small pebble (near 1B4) to cobble beaches. A low gradient stream/estuary drains into the middle of this segment.

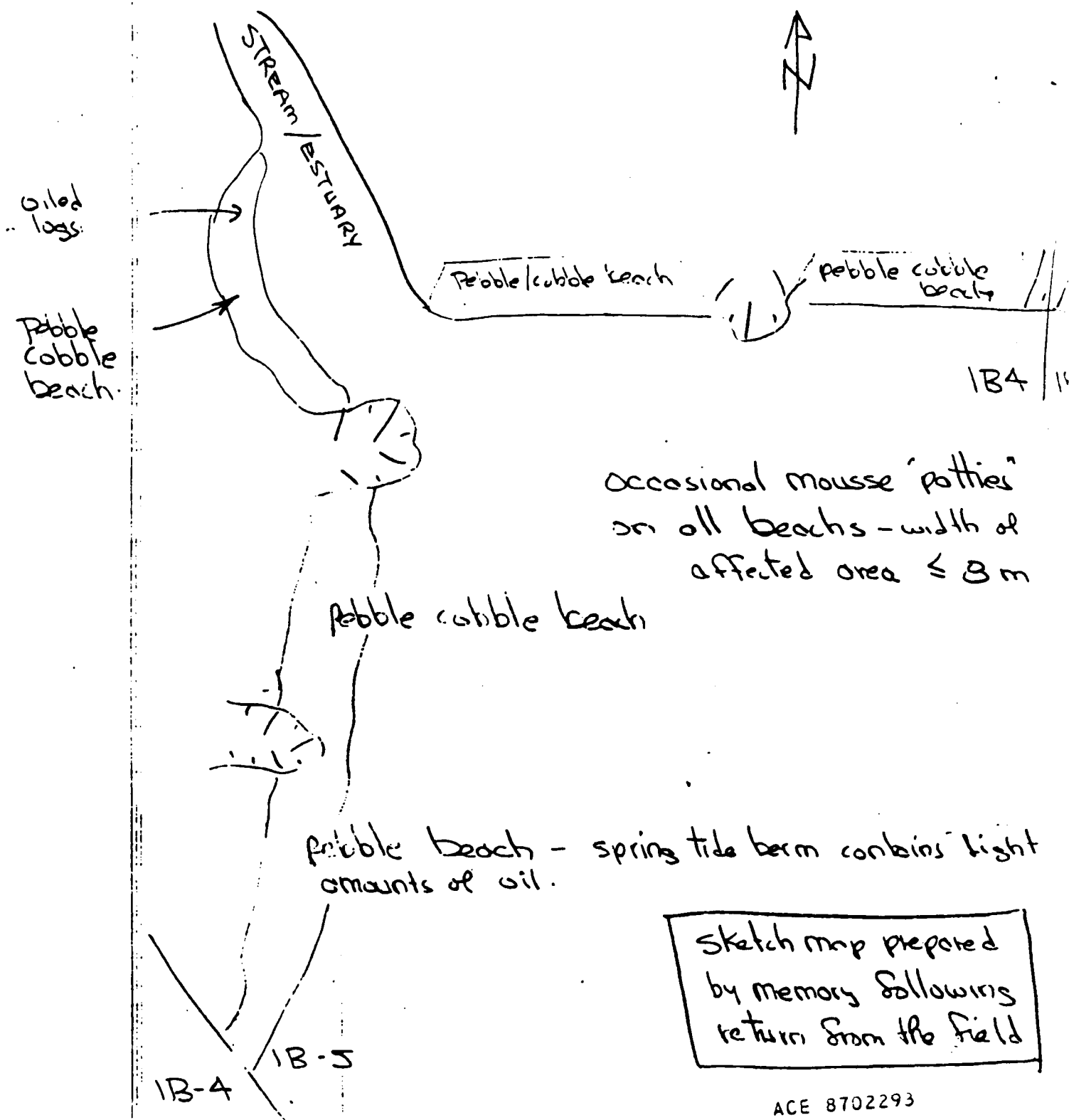
The spring tide storm berm on the pebble beach near 1B4 is contaminated with mousse over a width of 1 to 4 m. The mid to upper IZ of all beaches contain occasional mousse 'patties' on the beach surface. No oil was observed during a low elevation reconnaissance of the stream/estuary.

CLEAN-UP

- Manual removal of oiled debris and mousse patties
- Possibly move contaminated pebbles and cobbles in the spring tide berm into the lower surf zone. [Natural wave action will however eventually clean from sediment and the amount of oil in these materials is quite small]

June 17 / 89
mike miles

AFOGNAK ISLAND
IZHUT BAY
SEGMENT K-3-2-IB-5



ACE 8702293

DOCUMENTATION:

Map/Aerial photo marking segment boundaries See attached

VTR: Y/N Tape Number(s) _____

Photography: Y/N Roll Number(s) IT-1

Sample Numbers Collected: N/A

ECOLOGICAL EVALUATION

LOCATION: Izhut Bay SITE: NW Lagoon OBSERVER: J. Tarpley
 LOCATION PREFIX: K-3/IB SEG. NO.: K-3-2-IB-5 LENGTH: 1500 (M)
 DATE: 6/17/89 TIME (HMM): 1700 TIDE HT.: +1.25 (M)

OILED ZONE: Splash High Medium Low

SUBSTRATUM: Rocks Boulder Cobble Gravel Sand Mud

LIVE BIOTA

Fucus (algae): Patchy Y/N Contin. Y/N Dense Y/N Sparse Y/N None Y/N

Mytilus (Mussels): Patchy Y/N Contin. Y/N Dense Y/N Sparse Y/N None Y/N

Balanus (Barnacles): Patchy Y/N Contin. Y/N Dense Y/N Sparse Y/N None Y/N

Littorina

Patchy Y/N Contin. Y/N Dense Y/N Sparse Y/N None Y/N

Limpets: Patchy Y/N Contin. Y/N Dense Y/N Sparse Y/N None Y/N

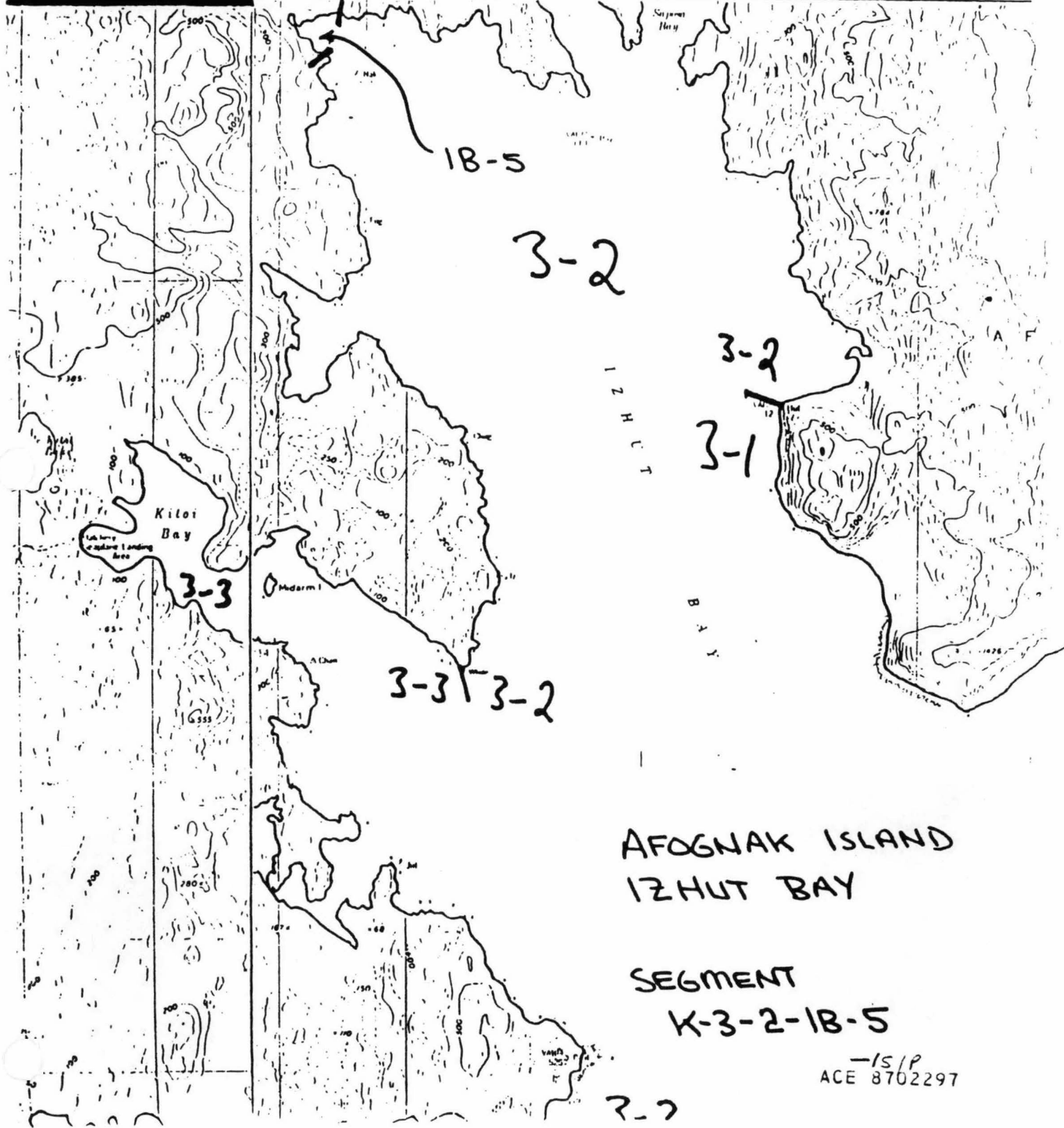
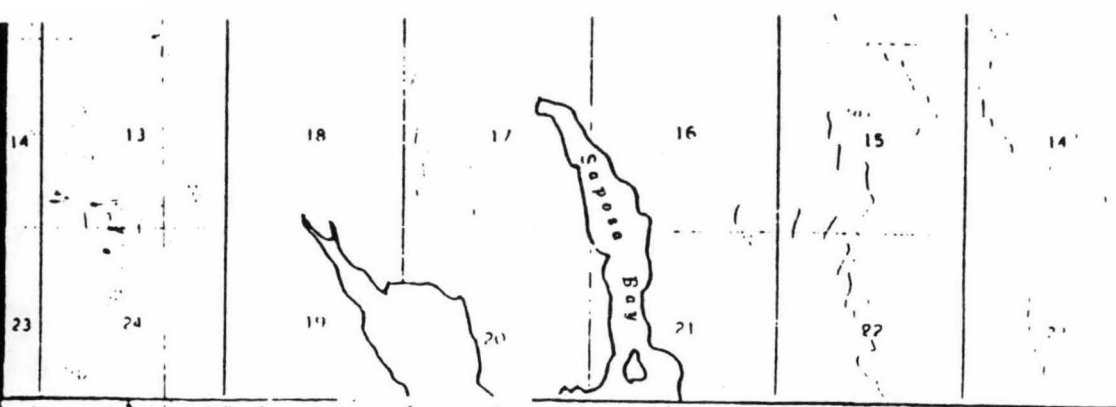
OTHER OBSERVATIONS: Clam & Mytilus shells along beaches. All biota
mid to low ITZ. 1 Large Nereis polychaete worm on beach.
Salmon run lagoon & stream.

CLEANUP PRECAUTIONS: Avoid oiling lower ITZ or any healthy organisms.

MAMMALS: Otters 1 Harbor Seals 2 Sea Lions _____ Whales _____
 Other Sea Otter Foraging in small Bay

BIRDS: 2 Brant's Cormorants, 1 Puffin.

GENERAL OBSERVATIONS: It was a hot afternoon and mousse was liquifying
over rocks into cracks. Lots of pollen in water. Biota not largely
affected by mousse patties. This segment has varying ecological impact
due to changing biota. Most of the beach is lacking any biota however one
section near head of lagoon (south side) is categorized as to what's listed above.



AFOGNAK ISLAND
12 HUT BAY

SEGMENT
K-3-2-1B-5

-15/P
ACE 8702297

2-2

(version 6/14/89)

SHORELINE CLEANUP PROGRAM

DATE 6/28/89

SHORELINE SEGMENT IB-6

LOCATION: (see enclosed map) NORTHWEST SHORE OF IZHUT BAY,

AFOGNAK ISLAND

ADEC NO. K3-2 SHORELINE ASSESSMENT DATE: 6/17/89

Recommended Cleanup Activity(ies):

No cleanup recommended at this time subject to FOSC approval.

Insufficient oil was found on the beach overflight and 3 brief inspections to justify cleanup activities. A more thorough inspection does not appear to be warranted.

Priorities Considerations: Class 5-B

KISCC considers this area to be sensitive, due to local seabird colonies and marine mammal haulouts.

Critical resources are not immediately present on this segment.

Ecological Constraints (from site survey):

No ecological constraints apparent at this time due to the inability to survey beach properly. Should cleanup be initiated, the ecological constraints must be reevaluated.

Archeological Constraints (from site survey):

If cleanup is conducted, additional cultural resource evaluation is recommended. If cleanup is conducted and heretofore undiscovered cultural materials are uncovered, contact Exxon's Archeological Field Director and take actions prescribed in the Operational Guidelines for Shoreline Cleanup dated 4/21/89 as amended.

Douglas Regier
State Historic Preservation Officer *

Date: 6/29/89

ISCC: _____

Date: _____

EXXON: [Signature]

Date: 7/1/89

FOSC: [Signature] copies acknowledged by district

Date: 7/25/89

* Signature required to satisfy stipulations in Alaska DNR land use permits for tide and submerged lands.

+15
ACE 8702298

(version 5/16/89)

SHORELINE OIL EVALUATION FORM - KODIAK

JUNE

Date: 17/89 / Time: _____

Observer: MIKE MILES

Surveyed From: Foot / Boat / Helio / Plane

Weather: Sun / Cloud / Rain / Snow / Fog

LOCATION
LOCATION AFOGNAK IS. - 12HUT BAY

SEGMENT I.D. K-3-2-1B-6

LENGTH OF SHORELINE SEGMENT: 5200 m

ACCESS: Foot / Vehicle / Boat / Barge / Helio / Float Plane

limited access due to
rocky headlands and
steep small beaches

SHORELINE:

Shoreline Type: SPI / BEA / COV / HLD / STRT

Slope: LANG / HANG / VER

Wave Exposure: High / Med / Low

Sediment: B ___ / C 10 / P 10 / G ___ / S ___ / M ___ / R 20

Drift Debris on Beach: Yes / No

Supra / Upper / Mid / Lower Type logs + small
amounts of
sea weed

OIL

Degree of Oiling: Heavy / Moderate / Light / No Oil / Unobserved

Total Area of Beach Impact: SU / SP / H / M / L

OIL DISTRIBUTION

Continuous: Y / N Segment # _____ No. Bands _____ Width _____

Sporadic: Y / N Segment # < 5 Min/Max Dia 4/1A Impact Width 1-2 m

Est. Oil Thickness where > 1cm: 4/1A cm SU / SP / UP / MID / LO

Est. Oil Penetration: 10 cm in one small beach SU / SP / UP / MID / LO

Layers? Yes / No No# Layers _____ Oil Weathering _____

Drift Debris Oiled? Yes / No Supra / Upper / Mid / Lower Amount: H / M / L / VL

OIL MORPHOLOGY

Pooled Oil 0 % "Free" Oil 0 % Spattered 100 % H/M/L/VL Sheen 0 %

OIL WEATHERING (ON)

Fresh Oil 0 % SU/SP/VP/MID/LO Choc Mousse 0 % SU/SP/VP/MID/LO

Pancake Mousse 0 % SU/SP/VP/MID/LO Asphalt Mousse 100 % SU/SP/VP/MID/LO

Tar Formation 0 %

Comments:

ACE 8702299

This segment consists of a rocky shore with a number of small steep gradient cobble/pebble beach.

Survey was undertaken by helicopter with quick "power-on" stops on small beaches. No oil was visible on the rocky headlands. Very small quantities of oil were found in the spring tide berm at stop 1 (see map). No mousse patches were found at this site and no oil of any kind was found on either of the 2 other stops. Wave action is expected to remove the observed oil and, given the access difficulty, no clean-up is recommended.

DOCUMENTATION:

Map Aerial photo marking segment boundaries See attached

VTR: Y/N Y Tape Number(s) _____

Photography: Y/N Y Roll Number(s) _____

Sample Numbers Collected: N/A

ACE 8702300

ECOLOGICAL EVALUATION

LOCATION: Izhut Bay SITE: NW shore OBSERVER: J. Tarpley
LOCATION PREFIX: K-3/IB SEG. NO.: K-3-2-IB-6 LENGTH: 5200 (M)
DATE: 6/17/89 TIME (HHMM): 1300 TIDE HT.: +1.0 (M)

OILED ZONE: Splash High Medium Low

SUBSTRATUM: Rocks Boulder Cobble Gravel Sand Mud

LIVE BIOTA

Fucus (algae): Patchy Y/N Contin. Y/N Dense Y/N Sparse Y/N None Y/N

Mytilus (Mussels): Patchy Y/N Contin. Y/N Dense Y/N Sparse Y/N None Y/N

Balanus (Barnacles): Patchy Y/N Contin. Y/N Dense Y/N Sparse Y/N None Y/N

Littorina

<u>Patchy</u>	Y/N	<u>Contin.</u>	Y/N	<u>Dense</u>	Y/N	<u>Sparse</u>	Y/N	<u>None</u>	Y/N
---------------	-----	----------------	-----	--------------	-----	---------------	-----	-------------	-----

Lipids: Patchy Y/N Contin. Y/N Dense Y/N Sparse Y/N None Y/N

OTHER OBSERVATIONS:

CLEANUP PRECAUTIONS:

MAMMALS: Otters Harbor Seals Sea Lions 1 Whales
Other ♂ Steller's Sea Lion

BIRDS: G. Gulls on offshore rocks

GENERAL OBSERVATIONS: No ecological evaluation is possible at this time due to the inability of the helicopter to land at this segment.
Overhead fly by was done and no ecological constraints are apparent. However, if cleanup is initiated for this segment ecological evaluations must be re-evaluated.

SEGMENT INSPECTION RECORD

ADEC #

Shoreline Segment: K3-2-IB6

Shoreline Treatment Process(es) Completed for this Segment

☐ Hot water wash	☐ Mechanical
☐ Warm water wash	☒ Non-mechanical
☐ Water deluge	☐ Other

Exxon

Treatment as indicated above has been completed. Request demobilization from this segment.

Exxon Comments This area was outside of the cleanup recommended area; however the Exxon/VRELO beach cleaning team cleaned the beach anyway.

Signature Jack A. Rickner Date 7/27/89 Time 1947

Printed Name Jack A. Rickner

Existing Shoreline Condition As
Visually Determined by USCG
Surface Oil

Percent	Degree of Oiling
☐	Heavy
☐	Medium
☐	Light
☒	Very Light

100%

Subsurface Oil
☒ Yes ☐ No

Comment Below

Reassessment
☒ Yes - Necessary

☐ No - Not necessary unless re-oiled

ADEC Rep

Comments Please see reverse

Existing Shoreline Condition As
Visually Determined by ADEC

Percent	Degree of Oiling
☐	Heavy
☐	Medium
☐	Light
☒	Very Light

100%

Subsurface Oil
☒ Yes ☐ No

Comment Below

Reassessment
☒ Yes - Necessary

☐ No - Not necessary unless re-oiled

Signature _____ Date _____ Time _____

Printed Name _____

FOSC Rep Demobilization approved/disapproved

Comments see reverse

Signature Jack A. Rickner Date 7/27/89 Time _____

Printed Name Jack A. Rickner

Copy: Exxon ADEC FOSC ISCC Return All Signed Originals to Exxon

ACE 8702304

NDAA/CG Comment: - oil on effor rocky wave
cut platform has been removed to a level
no longer efficient to contain as type A.

The remaining oil is in a discontinuous band
10 feet wide at the MHW line. This is a possible
candidate for type B remedial action and further
monitoring. The gravel beaches located in
this segment all exhibit oil mixed to
depth in the spring high mean area. Surface
oil was removed, but beach processes will
have new oil as the sediment is turned
by spring tide or storm action. The degree
of oil remaining in the beach sediment is well
below saturation. This is a possible site for
type B and further site specific monitoring

John Byster

U.S. F&W.S. Comment: I agree that type B cleanup would be necessary to remove
much additional oil. This segment should be demobilized at this time.

Gay R. Bellinger

ADEC Comments: Removal of surface oil has
been effected. A potential exists here for reoiling.

Charles A. Pelt

(version 6/14/89)

SHORELINE CLEANUP PROGRAM

DATE 6/28/89 SHORELINE SEGMENT IB-6

LOCATION: (see enclosed map) NORTHWEST SHORE OF IZHUT BAY,

AFOGNAK ISLAND

ADEC NO. _____ SHORELINE ASSESSMENT DATE: 6/17/89

Recommended Cleanup Activity(ies):

No cleanup recommended at this time subject to FOSC approval.

Insufficient oil was found on the beach overflight and 3 brief inspections to justify cleanup activities. A more thorough inspection does not appear to be warranted.

Priorities Considerations: Class 5-B

KISCC considers this area to be sensitive, due to local seabird colonies and marine mammal haulouts.

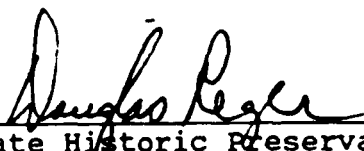
Critical resources are not immediately present on this segment.

Ecological Constraints (from site survey):

No ecological constraints apparent at this time due to the inability to survey beach properly. Should cleanup be initiated, the ecological constraints must be reevaluated.

Archeological Constraints (from site survey):

If cleanup is conducted, additional cultural resource evaluation is recommended. If cleanup is conducted and heretofore undiscovered cultural materials are uncovered, contact Exxon's Archeological Field Director and take actions prescribed in the Operational Guidelines for Shoreline Cleanup dated 4/21/89 as amended.



State Historic Preservation Officer *

Date: 6/29/89

ISCC: _____

Date: _____

EXXON: _____

Date: _____

FOSC: _____

Date: _____

* Signature required to satisfy stipulations in Alaska DNR land use permits for tide and submerged lands.

^{7/5}
ACE 8702307

(version 5/16/89)

SHORELINE OIL EVALUATION FORM - KODIAK

Date: JUNE 17/89 Time:

Observer: MIKE MILES

Surveyed From: Foot/Boat/Helio/Plane

Weather: Sun/Cloud/Rain/Snow/Fog

LOCATION AFOS 1111 12HUT BAY

SEGMENT I.D. K-3-2-1B-6

LENGTH OF SHORELINE SEGMENT: 5200 m

ACCESS: Foot/Vehicle/Boat/Barge/Helio/Float Plane

limited access due to
rocky headlands and
steep small bays

SHORELINE:

Shoreline Type: SPI/BEA/COV/HLD/STET

Slope: LANG/HANG/VER

Wave Exposure: High/Med/Low

Sediment: B / C 10 / P 10 / G / S / M / R 80

Drift Debris on Beach: Yes/No

Supra/Upper/Mid/Lower Type logs + small
amounts of
sea weed

OIL

Degree of Oiling: Heavy/Moderate/Light/No Oil/Unobserved

Total Area of Beach Impact: SU / SP / H / M / L

OIL DISTRIBUTION

Continuous: Y/N Segment No. Bands Width

Sporadic: Y/N Segment Min/Max Dia 4/A Impact Width 1-2 m

Est. Oil Thickness where > 1cm: 4/A cm SU / SP / UP / MID / LO

Est. Oil Penetration: 7/10 cm SU / SP / UP / MID / LO

Layers? Yes/No No# Layers Oil Weathering

Drift Debris Oiled? Yes/No Supra/Upper/Mid/Lower Amount: H / M / L / VL

OIL MORPHOLOGY

Pooled Oil 0 % "Free" Oil 0 % Spattered 100 % H/M/L/VL Sheen 0 %

OIL WEATHERING (OW)

Fresh Oil 0 % SU/SP/VP/MID/LO Choc Mousse 0 % SU/SP/VP/MID/LO

Pancake Mousse 0 % SU/SP/VP/MID/LO Asphalt Mousse 100 % SU/SP/VP/MID/LO

Tar Formation 0 %

ACE 8702308

Comments:

This segment consists of a rocky shore with a
number of small steep gradient cobble/pebble beaches.
Survey was undertaken by helicopter with quick "power-on" stops on
small beaches. No oil was visible on the rocky headlands.
Very small quantities of oil were found in the spring tide berm at stop
1 (see map). No mousse patches were found at this site and no
oil was found in the water.

DOCUMENTATION:

Map/Aerial photo marking segment boundaries See attached

VTR: Y/N Tape Number(s) _____

Photography: ~~Y~~/N Roll Number(s) ~~3/1~~ _____

Sample Numbers Collected: N/A _____

ACE 8702309

• 563 •

DATE: 6/17/89 TIME (HHMM): 1200 TIDE HT.: +1.0 (M)

OILED ZONE: Splash High Medium Low

SUBSTRATUM: Rocks Boulder Cobble Gravel Sand Mud
 ↳ cliffs ↳ beaches

LIVE BIOTA

LIVE BIOTA

Fucus (algae): Patchy Y/N Contin. Y/N Dense Y/N Sparse Y/N None Y/N

Mytilus (Mussels): Patchy Y/N Contin. Y/N Dense Y/N Sparse Y/N None :

Balanus (Barnacles): Patchy Y/N Contin. Y/N Dense Y/N Sparse Y/N None Y

Littorina

Patchy	Y/N	Contin.	Y/N	Dense	Y/N	Sparse	Y/N	None	Y/N
--------	-----	---------	-----	-------	-----	--------	-----	------	-----

Limpets: Patchy Y/N Contin. Y/N Dense Y/N Sparse Y/N None Y/N

OTHER OBSERVATIONS:

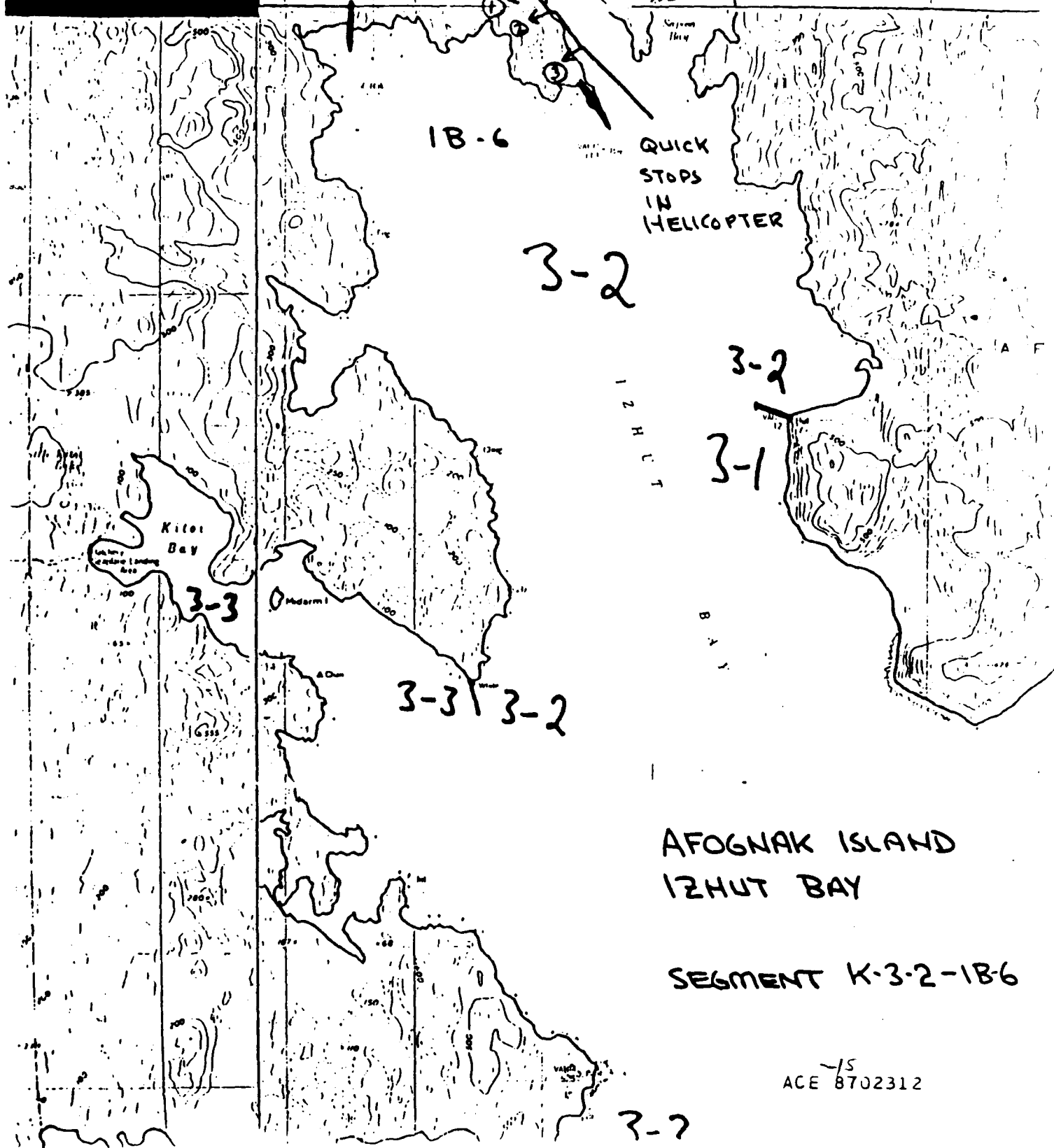
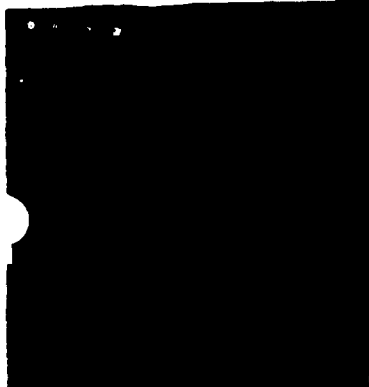
CLEANUP PRECAUTIONS:

ACE 8702310

MAMMALS: Otters ____ Harbor Seals ____ Sea Lions 1 Whales ____
Other ♂ Steller's Sea Lion

BIRDS: G. Gulls on offshore rocks

GENERAL OBSERVATIONS: No ecological evaluation is possible at this time due to the inability of the helicopter to land at this segment.
Overhead fly by was done and no ecological constraints are apparent. However, if cleanup is initiated for this segment ecological evaluations must be re-evaluated.



AFOGNAK ISLAND
IZHUT BAY

SEGMENT K-3-2-1B-6

ACE 8702312

(version 6/14/89)

SHORELINE CLEANUP PROGRAM

DATE 6/28/89

SHORELINE SEGMENT IB-7

LOCATION: (see enclosed map) SOUTH SIDE OF RUTH BAY-IZHUT BAY
AFOGNAK ISLAND

ADEC NO. K3-2 SHORELINE ASSESSMENT DATE: 6/17/89

Recommended Cleanup Activity(ies):

Manually remove the small number of mousse patties which occur on this beach.

See note under "Archeological Constraints".

Priorities Considerations: Class 5A

KISCC considers this a sensitive area due to salmon runs and local seabird colonies and pinniped haulouts in the bay.

Ecological Constraints (from site survey):

Avoid oiling low intertidal zone upon cleanup.

Avoid trafficking through healthy low intertidal zone biota.

Archeological Constraints (from site survey):

Potential for disturbance of sensitive cultural resources, balanced against degree of oiling, argues against any cleanup. Archaeological monitor recommended if cleanup proceeds.

Douglas Reger
State Historic Preservation Officer *

Date: 6/29/89

ISCC: _____

Date: _____

EXXON: [Signature]

Date: 7/1/89

FOSC: [Signature]
by direction

Date: 7/2/89

* Signature required to satisfy stipulations in Alaska DNR land use permits for tide and submerged lands.

ACE 8702313

SHORELINE OIL EVALUATION FORM - KODIAK

Date: June 17/89 / Time: 18:53

Observer: MIKE MILES

Surveyed From: Foot Boat Helio Plane

Weather: Sun/Cloud/Rain/Snow/Fog

LOCATION AFOGNAK ISLAND
LOCATION 124UT BAY
LOCATION (RUTH BAY)

SEGMENT I.D. K-3-2 1B-7

LENGTH OF SHORELINE SEGMENT: 220 m

ACCESS: Foot/Vehicle/Boat/Barge/Helio/Float Plane

SHORELINE:

Shoreline Type: SPI/BEA/COV/HLD/STRT

Slope: LANG/HANG/VER

Wave Exposure: High/Med/Low

Sediment: B 0 / C 30 / P 60 / G 0 / S 0 / M 0 / R 0

Drift Debris on Beach: Yes/No

Supra/Upper/Mid/Lower Type

logs + drift
wood

OIL

Degree of Oiling: Heavy/Moderate/Light/No Oil/Unobserved

Total Area of Beach Impact: SU / SP / H / M / L

OIL DISTRIBUTION

Continuous: Y/N Segment 1 No. Bands 0 Width 0

Sporadic: Y/N Segment 100 Min/Max Dia < 5cm Impact Width 0

Est. Oil Thickness where > 1cm: 0 cm SU / SP / UP / MID / LO

Est. Oil Penetration: 0 cm SU / SP / UP / MID / LO

Layers? Yes/No No# Layers 0 Oil Weathering 0

Drift Debris Oiled? Yes/No Supra/Upper/Mid/Lower Amount: H / M / L / VL

OIL MORPHOLOGY

Pooled Oil 0 "Free" Oil 50 Spattered 50 H/M/L/VL Sheen 0

OIL WEATHERING

Fresh Oil 0 SU/SP/VP/MID/LO Choc Mousse 75 SU/SP/VP/MID/LO

Pancake Mousse 25 SU/SP/VP/MID/LO Asphalt Mousse 0 SU/SP/VP/MID/LO

Tar Formation 0

Comments:

SEE ATTACHED COMMENT SHEET

Mike Miles
June 17/89

AFOGNAK ISLAND
IZHUT BAY [RUTH BAY]
SEGMENT K-3-2-1B-7

COMMENTS

SHORELINE OIL EVALUATION

A very limited number of small mousse "patties" occur on this pebble/cobble beach

CLEAN-UP

- Hand clean-up would recover the limited number of mousse patties. However clean-up will not be recommended due to the presence of cultural resources.

DOCUMENTATION:

Map/Aerial photo marking segment boundaries See attached

VTR: Y/N Tape Number(s) _____

Photography: Y/N Roll Number(s) _____

Sample Numbers Collected: N/A

ACE 8702316

ECOLOGICAL EVALUATION

LOCATION: Izhut Bay SITE: South side of Ruth Bay OBSERVER: J. Tarpley
 LOCATION PREFIX: K-3/IB SEG. NO.: K-3-2-IB-7 LENGTH: 220 (M)
 DATE: 6 / 17 / 89 TIME (HHMM): 1620 TIDE HT.: +1.0 (M)

OILED ZONE: Splash High Medium Low

SUBSTRATUM: Rocks Boulder Cobble Gravel Sand Mud

LIVE BIOTA

Fucus (algae): Patchy Y/N Contin. Y/N Dense Y/N Sparse Y/N None Y/N

Mytilus (Mussels): Patchy Y/N Contin. Y/N Dense Y/N Sparse Y/N None Y/N

Balanus (Barnacles): Patchy Y/N Contin. Y/N Dense Y/N Sparse Y/N None Y/N

Littorina
 Patchy Y/N Contin. Y/N Dense Y/N Sparse Y/N None Y/N

Limpets: Patchy Y/N Contin. Y/N Dense Y/N Sparse Y/N None Y/N

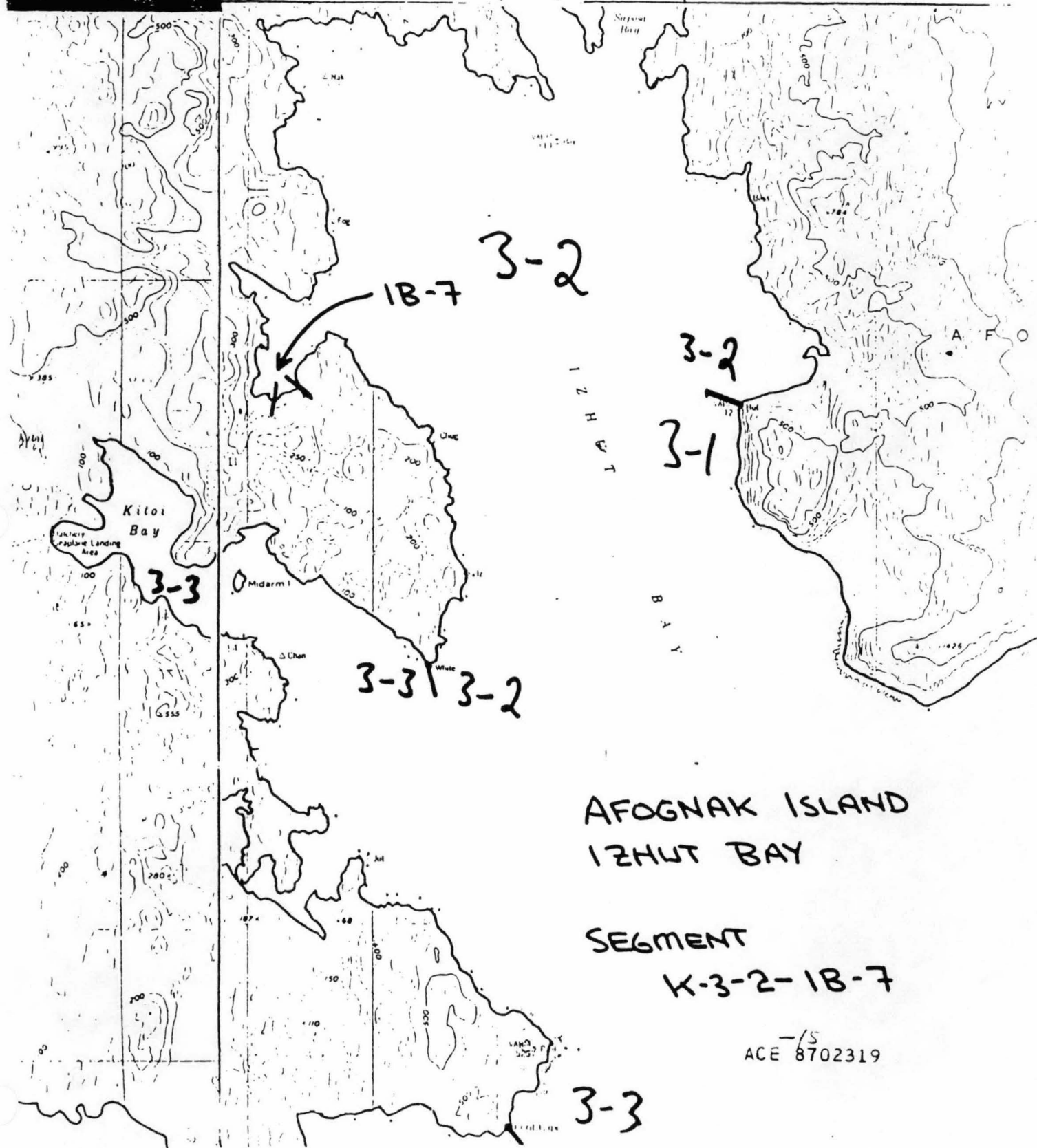
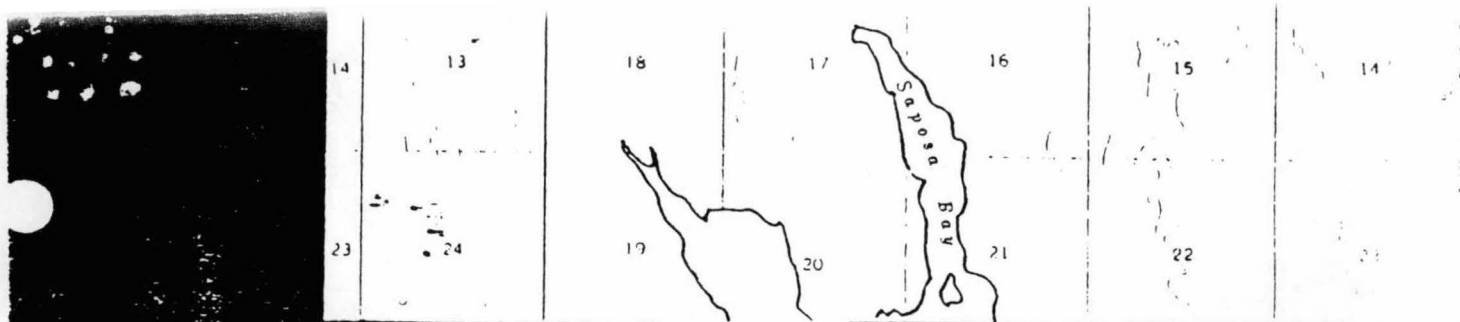
OTHER OBSERVATIONS: Living biota of beach in low ITZ, Underwater at the time of evaluation. Upper beach absent of any biota. Moderate amount of drift.

CLEANUP PRECAUTIONS: Avoid oiling healthy biota in low ITZ

MAMMALS: Otter Other Harbor Seals None Sea Lions None Whales None

BIRDS: None

GENERAL OBSERVATIONS: None



K-03-02

(version 6/14/89)

SHORELINE CLEANUP PROGRAM

DATE 6/28/89

SHORELINE SEGMENT IB-7

LOCATION: (see enclosed map) SOUTH SIDE OF RUTH BAY-IZHUT BAY
AFOGNAK ISLAND

ADEC NO. _____ SHORELINE ASSESSMENT DATE: 6/17/89

Recommended Cleanup Activity(ies):

Manually remove the small number of mousse patties which occur on this beach.

See note under "Archeological Constraints".

Priorities Considerations: Class 5A

KISCC considers this a sensitive area due to salmon runs and local seabird colonies and pinniped haulouts in the bay.

Ecological Constraints (from site survey):

Avoid oiling low intertidal zone upon cleanup.

Avoid trafficking through healthy low intertidal zone biota.

Archeological Constraints (from site survey):

Potential for disturbance of sensitive cultural resources, balanced against degree of oiling, argues against any cleanup. Archaeological monitor recommended if cleanup proceeds.

Douglas Reger
State Historic Preservation Officer *

Date: 6/29/89

ISCC: _____

Date: _____

EXXON: _____

Date: _____

FOSC: _____

Date: _____

* Signature required to satisfy stipulations in Alaska DNR land use permits for tide and submerged lands.

7/5
ACE 8702320

(version 5/16/89)

SHORELINE OIL EVALUATION FORM - KODIAK

Date: JUNE 17/89 / Time: 18:53Observer: MIKE NILESSurveyed From: (Foot/Boat/Helio/Plane)Weather: Sun/Cloud/Rain/Snow/ fogAFOGNAK ISLANDLOCATION 12 HWT BAYLOCATION (RUTH BAY)SEGMENT I.D. K-3-2 1B-7LENGTH OF SHORELINE SEGMENT: 220 mACCESS: Foot/Vehicle/Boat/Barge/Helio/Float PlaneSHORELINE:Shoreline Type: SPI/DEA/COV/HID/STRTSlope: LANG/HANG/VERWave Exposure: High/Med/LowSediment: B/D / C30 / P60 / G / S / M / RDrift Debris on Beach: Yes/NoSupra/Upper/Mid/Lower Typeless + drift
underOILDegree of Oiling: Heavy/Moderate/Light/No Oil/UnobservedTotal Area of Beach Impact: SU / SP / H / M / LOIL DISTRIBUTIONContinuous: Y/N Segment 1 No. Bands 1 Width 1Sporadic: Y/N Segment 1 Min/Max Dia < 5cm Impact Width 3Est. Oil Thickness where > 1cm: 0 cm SU / SP / UP / MID / LOEst. Oil Penetration: 0 cm SU / SP / UP / MID / LOLayers? Yes/NO No. Layers 1 Oil Weathering 1Drift Debris Oiled? Yes/NO Supra/Upper/Mid/Lower Amount: H / M / L / VLOIL MORPHOLOGYPooled Oil 1 "Free" Oil 1 Spattered 5 H/H/L/VL Sheen 1OIL WEATHERING (OW)Fresh Oil 0 SU/SP/VP/MID/LO Choc Mousse 75 SU/SP/VP/MID/LOPancake Mousse 25 SU/SP/VP/MID/LO Asphalt Mousse 0 SU/SP/VP/MID/LOTar Formation 0

Comments:

ACE 8702321

SEE ATTACHED COMMENT SHEET

Mike Miles
June 17/89

AFOGNAK ISLAND
IZHUT BAY [RUTH BAY]
SEGMENT K-3-2-1B-7

Comments
SHORELINE OIL EVALUATION

A very limited number of small mousse "patties" occur on this pebble/cobble beach

CLEAN-UP

- Hand clean-up would recover the limited number of mousse patties however clean-up will not be recommended due to the presence of cultural resources

ACE 8702322

DOCUMENTATION:

Map/Aerial photo marking segment boundaries See attached

VTR: Y/N Tape Number(s) _____

Photography: N/N Roll Number(s) ~~5821~~

Sample Numbers Collected: N/A

ACE 8702323

ECOLOGICAL EVALUATION

LOCATION: Izhat Bay SITE: South side of Ruth Bay OBSERVER: J. Tarpley
 LOCATION PREFIX: K-3/IB SEG. NO.: K-3-2 JB-7 LENGTH: 220 (M)
 DATE: 6/17/89 TIME (HHMM): 1620 TIDE HT.: +1.0 (M)

OILED ZONE: Splash High Medium Low

SUBSTRATUM: Rocks Boulder Cobble Gravel Sand Mud

LIVE BIOTA

Fucus (algae): Patchy Y/N Contin. Y/N Dense Y/N Sparse Y/N None Y/N

Mytilus (Mussels): Patchy Y/N Contin. Y/N Dense Y/N Sparse Y/N None Y/N

Balanus (Barnacles): Patchy Y/N Contin. Y/N Dense Y/N Sparse Y/N None Y/N

Littorina
 Patchy Y/N Contin. Y/N Dense Y/N Sparse Y/N None Y/N

Limpets: Patchy Y/N Contin. Y/N Dense Y/N Sparse Y/N None Y/N

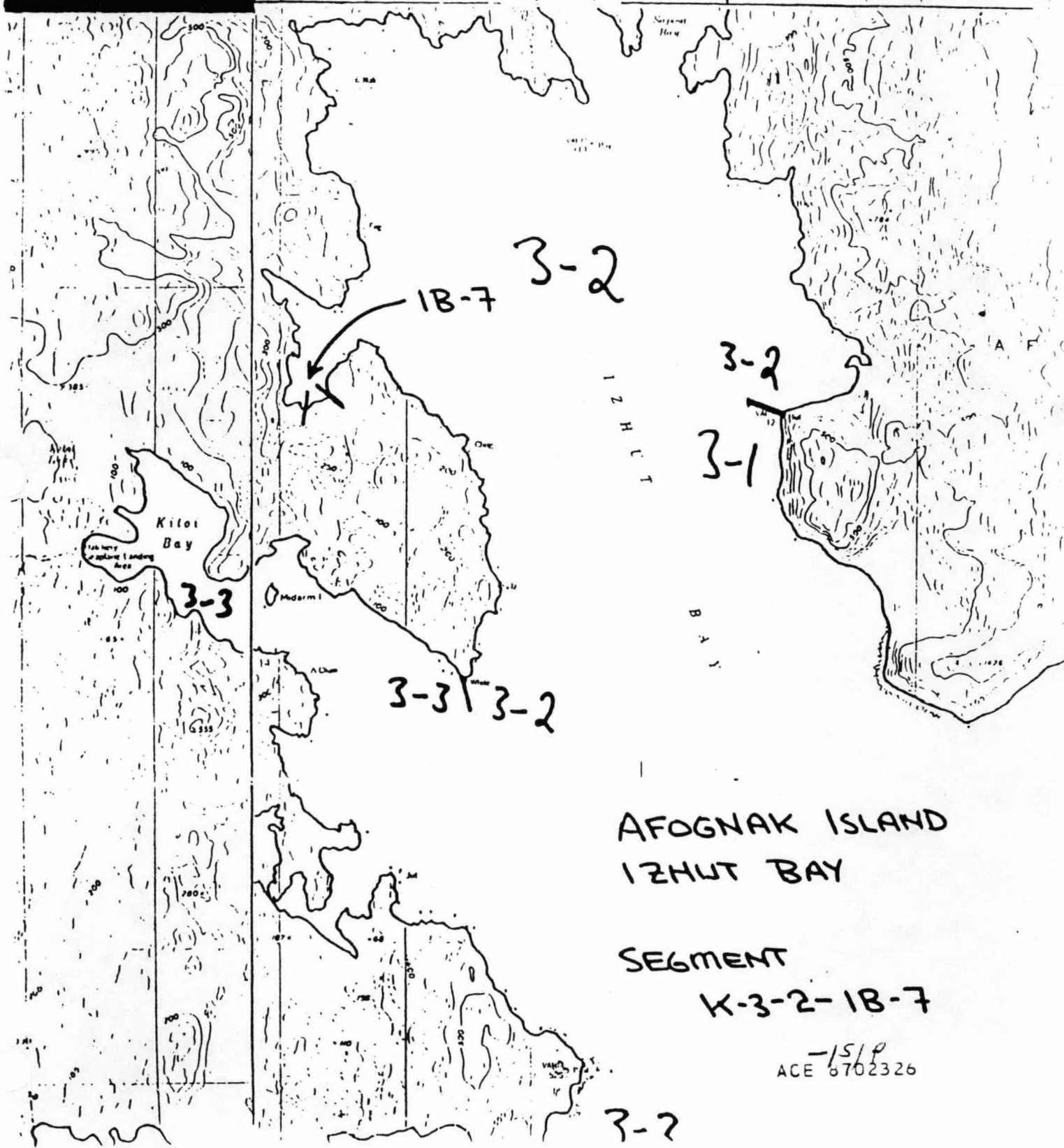
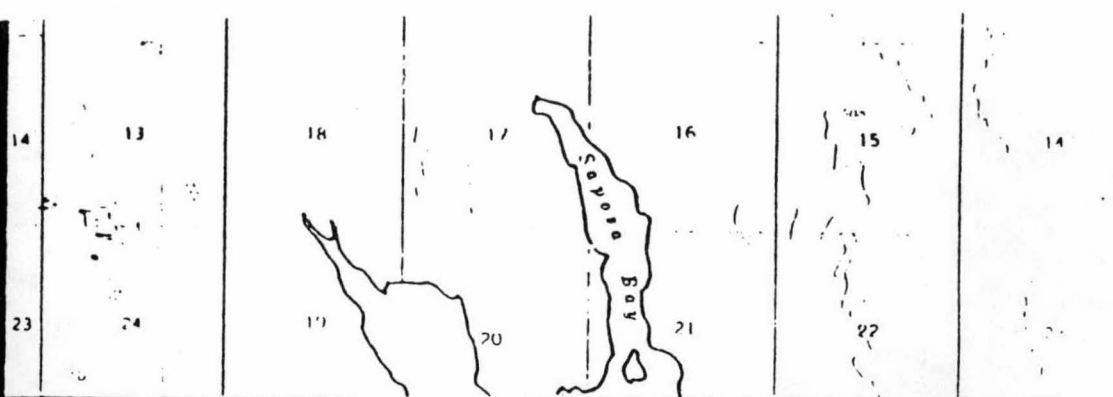
OTHER OBSERVATIONS: Living biota of beach in low ITZ, Underwater at the time of evaluation. Upper beach absent of any biota. Moderate amount of drift.

CLEANUP PRECAUTIONS: Avoid oiling healthy biota in low ITZ.

MAMMALS: Otters _____ Harbor Seals _____ Sea Lions _____ Whales _____
 Other NONE

BIRDS: NONE

GENERAL OBSERVATIONS: _____



(version 5/02/89)

SHORELINE CLEANUP PROGRAM

DATE 8/21/89

SHORELINE SEGMENT K3-2-IB-10

LOCATION: (see enclosed map) Izhut Bay

ADEC NO. _____ SHORELINE ASSESSMENT DATE: 8/13/89

Recommended Cleanup Activity(ies):

-No cleanup recommended due to absence of oil. Subject to
FOSC reassessment at a later date.

Priorities/Considerations:

Ecological Constraints (from site survey):

Archaeological Constraints (from site survey):

-If cleanup is conducted and heretofore undiscovered
cultural materials are uncovered, contact Exxon's Archeological
Field Director and take actions prescribed in the Operational
Guidelines for Shoreline Cleanup dated 4/21/89 as amended.


State Historic Preservation Officer *

Date: 8/23/89

EXXON: _____

Date: _____

FOSC: _____

Date: _____

*Signature required to satisfy stipulations in Alaska DNR land
use permits for tide and submerged lands.

+ / S
ACE 8702327

SHORELINE OIL EVALUATIONA. General

1. Date: 8/13/89 2. Time: 1230 3. Observer: M. Acton
 4. Surveyed From: Foot/Boat/Helio/Plane 5. Weather: Sun/Cloud/Rain/Snow/Fog
 6. Location: Izhut Bay 7. Segment #: K3-2-IB-10
 8. Length of shoreline segment: 3500 yds 9. Tidal Stage $\pm$ +4.5 ft.
 10. Access: Foot/Vehicle/Boat/Barge/Helio/Float Plane
 11. Total Percentage of Segment Accessible: <5 %
 12. Access Restrictions: No helio landing access

B. Shoreline

13. Shoreline Type: SPI/BEA/COV/HLD/STRT/CLP/DAF
 14. Slope: LANG/HANG/VERT
 15. Wave Exposure: High/Med/Low
 16. Sediment: BLS / CS / PS / GS SS / MS / RS
 17. Drift Debris on Beach: Yes/No Supra/Upper/Mid/Lower Type Driftwood

C. Oil Summary

18. Degree of Oiling: Heavy/Moderate/Light/Very Light/No Oil Observed
 19. Area of Beach Impact: Width of Band: _____ yds
 Continuous: Total % of Segment _____
 Sporadic: Total % of Segment _____
 No Oil: Total % of Segment _____
 20. Est. Oil Thickness where >1in: _____ in 21. Est. Oil Penetration: _____ in
 22. Pooled Oil: _____ % "Free" Oil: _____ % Coated: H _____ % / M _____ % / L _____ %
 23. Fresh _____ % Mousse _____ % Tar Formation: _____ %
 24. Drift Debris Oiled? Yes/No Sup/Up/Mid/Low Amount: _____ H/M/L

Comments:

Segment surveyed by helio; no helio landing access. No oil impact observed from
helio survey. Shoreline primarily headland or cliffs

SEE PAGE 2 FOR SUPPLEMENTAL INFORMATION

SUPPLEMENTAL SHORELINE OIL EVALUATION25. Oil Type

Fresh _____ %
 Mousse _____ %
 Weathered _____ %
 Tar _____ %
 100 %

26. Total Oil Coverage

	Length(yd)	Width (yd)
Very Light:	_____	_____
Light:	_____	_____
Moderate:	_____	_____
Heavy:	_____	_____

27. Oil Distribution

pooled/continuous
 coating/ splat
 cracks / crevices
 patties (>10cm diameter)
 balls (< 10cm diameter)
 asphalt pavement

SP	H	M	M	Thick >1in	Length(yd)	Width(yd)	Burial
							Depth

28. Preliminary Cleanup Est.

Total TYPE A: _____ yds.
 Total TYPE B: _____ yds.
 Total TYPE A/B: _____ yds.

29. Remedialization Potential: High/Medium/Low

DOCUMENTATION:

Map/Aerial photo marking segment boundaries 1:63,360 and 1:1500 maps

VTR: ☒/N Tape Number (s) K05 39

Photography: ☒/N Roll Number (s) HLDI

Additional Comments:

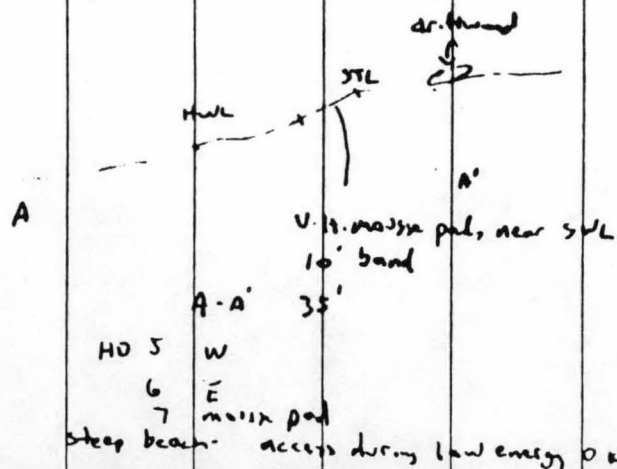
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1605 depart to continue
headland, R.O. rock pattern - few spots w/
flat cobbles

1620 300' walked 1 spot observed

1635 no oil observed walked 300' to S
over headland and down to beach W
of headland
3 beach areas

1715 is of 3 beaches
150' long
steep gravel pebble cobble beach



ACE 8702330

46

This area had v. l. oil impact similar to 1500 stop
no cleanup recommended

1745 depart for Kodiak

1805 Arrive Kodiak

8/13 0825 depart Kodiak for Phoenix & Izhet
Action Dots Davis Odan (USCO)

Utemyer - to be dropped off at Phoenix Bay
Drop Chunks off

950 - walked approx 1 mile - no oil observed
sand / flat cobbles - pebble beach

1050 - small pocket beach - no oil observed
Action out only - walked 300' / flat cobbles

1100 - same type as 1050
1 spot observed Action out only

1105 - 1 spot observed Action out only
similar small pocket beach

1130 walked approx 0.5 mile
v. l. massive pads along narrow shore
2 pads observed on mud flat

almost entirely R.O. or A.O. boulder and R.O.
1225 start bay arm very narrow cobble bottom

1230 no oil observed

1245 finished bay at W end of Izhet Bay
depart for Kodiak

1305 Arrive Kodiak

ECOLOGICAL EVALUATION

LOCATION: Dzhut Bay SITE: K32 IB10 OBSERVER: H Davis
 LOCATION PREFIX: IB SEG. NO.: 10 LENGTH: 3500 (M)
 DATE: 8/13/89 TIME (H:M): 1220-1240 TIDE HT.: 4.0' up to 5.0' (M)

OILED ZONE: Splash High Medium Low

SUBSTRATUM: ROCKS Boulder Cobble GRAVEL Sand Mud

LIVE BIOTA

FUCUS (algae): Patchy Y/N Contin. Y/N Dense Y/N Sparse Y/N None Y/N

Dense and sparse patches of Fucus. Sandy coves Enteromorpha Golden Diatoms Nereocystis in patches off rocky out.

MYTILUS (Mussels): Patchy Y/N Contin. Y/N Dense Y/N Sparse Y/N None Y/N

Dense clumps in rocky areas

BALANUS (Barnacles): Patchy Y/N Contin. Y/N Dense Y/N Sparse Y/N None Y/N

Dense cover on rocky areas, boulders. Sparse in slate shingle areas.

Littorina

Patchy Y/N Contin. Y/N Dense Y/N Sparse Y/N None Y/N

LIMPETS: Patchy Y/N Contin. Y/N Dense Y/N Sparse Y/N None Y/N

OTHER OBSERVATIONS: Very healthy looking area. Nereocystis and Schyphozoa along south-east shore (outside cove area) Seen only from Helix

CLEANUP PRECAUTIONS: Manual clean up will not adversely effect biota, but minimize damage to mid-intertidal biota in low energy coves.

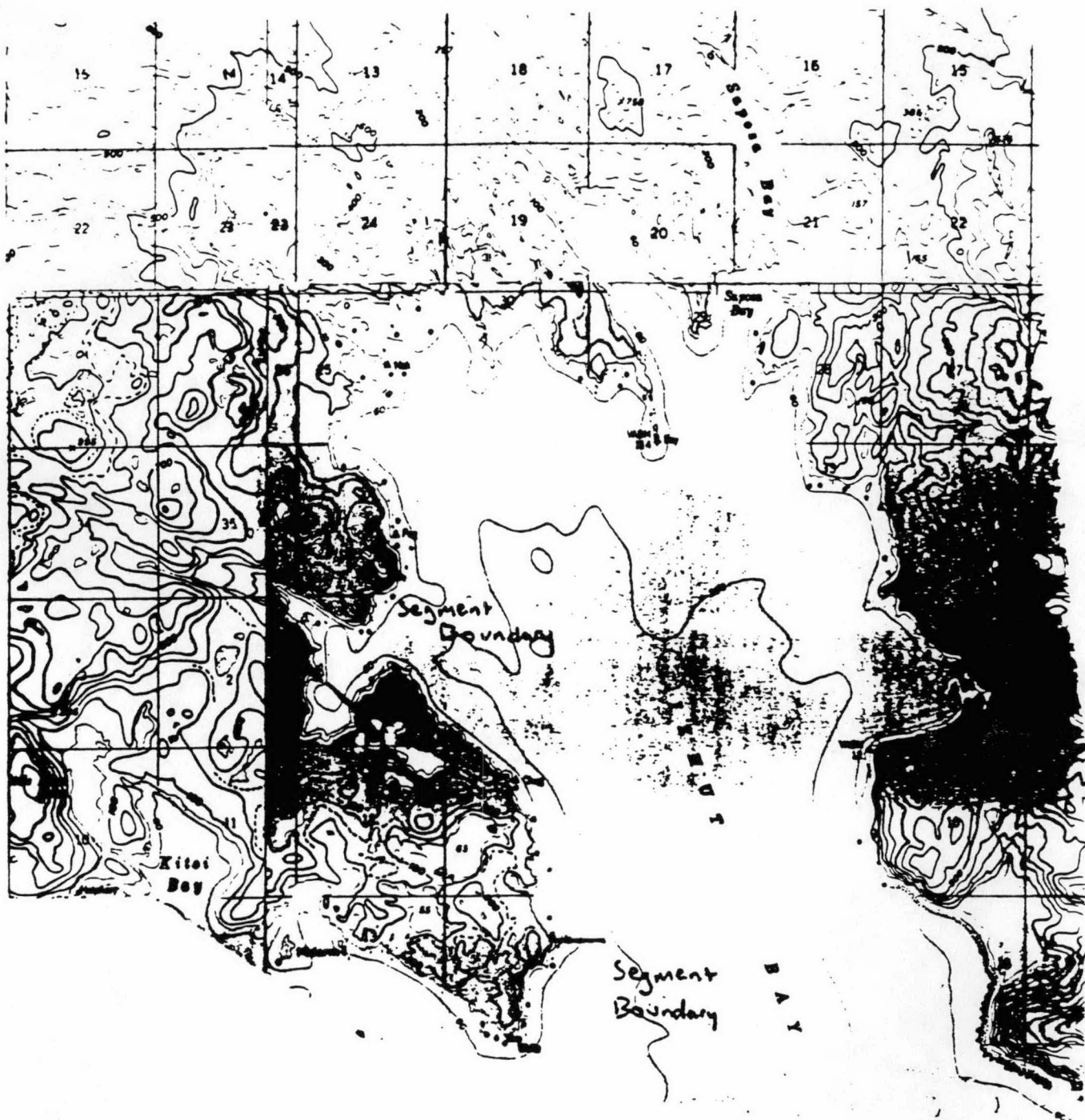
MAMMALS: Otters _____ Harbor Seals _____ Sea Lions _____ Whales _____
 Other _____

BIRDS: Gulls, Ravens

GENERAL OBSERVATIONS: _____

K3-2-IB-10

1:63,360



(version 5/02/89)

SHORELINE CLEANUP PROGRAM

DATE 8/21/89

SHORELINE SEGMENT K3-2-IB-11

LOCATION: (see enclosed map) Izhut Bay

ADEC NO. _____ SHORELINE ASSESSMENT DATE: 8/13/89

Recommended Cleanup Activity(ies):

-No cleanup recommended due to absence of oil. Subject to FOSC reassessment at a later date.

Priorities/Considerations:

Ecological Constraints (from site survey):

-No ecological constraints due to no cleanup recommended.

Archaeological Constraints (from site survey):

-If cleanup is conducted an archaeological monitor is required during cleanup.

-If cleanup is conducted and heretofore undiscovered cultural materials are uncovered, contact Exxon's Archeological Field Director and take actions prescribed in the Operational Guidelines for Shoreline Cleanup dated 4/21/89 as amended.


State Historic Preservation Officer *

Date: 8/23/89

EXXON: _____

Date: _____

FOSC: _____

Date: _____

*Signature required to satisfy stipulations in Alaska DNR land use permits for tide and submerged lands.

⁺¹⁵
ACE 8702334

SHORELINE OIL EVALUATIONGeneral

1. Date: 8/12/89 2. Time: 1230 3. Observer: M Acton
 4. Surveyed From: Foot/Boat/Helio/Plane 5. Weather: Sun/Cloud/Rain/Snow/Fog
 6. Location Izumi Bay 7. Segment #: K3-2-IB-11
 8. Length of shoreline segment: 2000 yds 9. Tidal Stage $\pm$ +4.5 ft.
 10. Access: Foot/Vehicle/Boat/Barge/Helio/Float Plane
 11. Total Percentage of Segment Accessible: 50 %
 12. Access Restrictions: Limited helio landing access

B. Shoreline

13. Shoreline Type: SPI/BEA/COV/HLD/STRT/CLP/DAF
 14. Slope: LANG/HANG/VERT
 15. Wave Exposure: High/Med/Low
 16. Sediment: B20 / C10 / P1 / G1 S5 / M1 / R65
 17. Drift Debris on Beach: Yes/No Supre/Upper/Mid/Lower Type Driftwood

Oil Summary

18. Degree of Oiling: Heavy/Moderate/Light/Very Light/No Oil Observed
 19. Area of Beach Impact: Width of Band: _____ yds
 Continuous: Total % of Segment _____
 Sporadic: Total % of Segment _____
 No Oil: Total % of Segment _____
 20. Est. Oil Thickness where >1in: _____ in 21. Est. Oil Penetration: _____ in
 22. Pooled Oil: _____ % "Free" Oil: _____ % Coated: H _____ % / M _____ % / L _____ %
 23. Fresh _____ % Mousse _____ % Tar Formation: _____ %
 24. Drift Debris Oiled? Yes/No Sup/Up/Mid/Low Amount: _____ H/M/L

Comments:

Segment surveyed by helio. Only one helio landing access. No oil observed.
Shoreline primarily narrow boulder beach / rock platform / cliff.

SEE PAGE 2 FOR SUPPLEMENTAL INFORMATION

SUPPLEMENTAL SHORELINE OIL EVALUATION25. Oil Type

Fresh _____ %
 Mousse _____ %
 Weathered _____ %
 Tar _____ %
 100 %

26. Total Oil Coverage

	Length(yd)	Width (yd)
Very Light:	_____	_____
Light:	_____	_____
Moderate:	_____	_____
Heavy:	_____	_____

27. Oil Distribution

pooled/continuous
 coating/ splat
 cracks / crevices
 patties (>10cm diameter)
 balls (< 10cm diameter)
 asphalt pavement

SP	H	M	M	Thick	Length(yd)	Width(yd)	Burial
				>1in			Depth

28. Preliminary Cleanup Est.

Total TYPE A: _____ yds.
 Total TYPE B: _____ yds.
 Total TYPE A/B: _____ yds.

29. Remediation Potential: High/Medium/Low

DOCUMENTATION:

Map/Aerial photo marking segment boundaries 1:63,360 and 1:1500 maps

VTR: ☒ Y/N Tape Number (s) KOS 39

Photography: ☒ Y/N Roll Number (s) HLDI

Additional Comments:

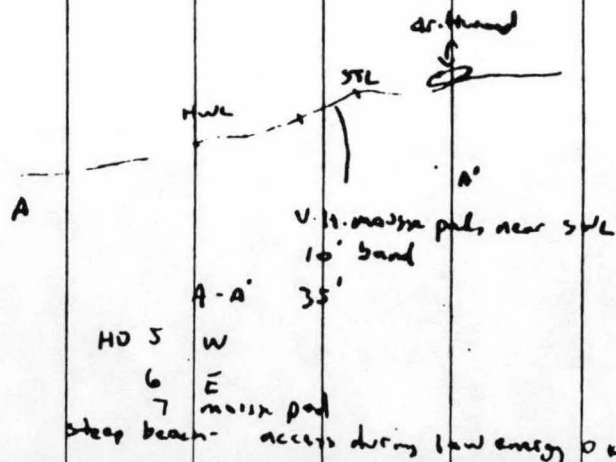
45

1605 depart to continue
headland, RO rock pattern - few spots w/
flat cobbles

1620 300' walked 1 spot observed

1635 no oil observed walked 300' to S
over headland and down to beach W
of headland
3 beach areas

1715 is of 3 beaches
150' long
steep gravel pebble cobble beach



46

This area had V.H. oil impact similar to 1500 stop
no cleanup recommended

1745 depart for Kodiak
1805 Arrive Kodiak

8/13 0825 depart Kodiak for Phoenix r. Izhut
Acton Donta Davis Odan (USCW)
Utemyer - to be dropped off at Phoenix Bay
Drop Chunks off

0950 - walked approx 1 mile - no oil observed
sand / flat cobbles - pebble beach

1050 - small pocket beach - no oil observed
Acton out only - walked 300' / flat cobbles

1100 - same type as 1050
1 spot observed Acton out only

1105 - 1 spot observed Acton out only
similar small pocket beach

1130 walked approx 0.5 mile
V.H. mussel beds along narrow shore
2 pads observed on mud flat

almost entirely RO. or A.O. boulder and RO
1225 start bay arm very narrow cobble beaches

1230 no oil observed

1245 finished bay at W side of Izhut Bay
depart for Kodiak

1305 Arrive Kodiak

ACE 8702337

ECOLOGICAL EVALUATION

LOCATION: Izhut Bay SITE: K3 2 IB || OBSERVER: H. Davis
 LOCATION PREFIX: IB SEG. NO.: 11 LENGTH: 2000 (M)
 DATE: 8 / 13 / 89 TIME (HDDM): 1200 - 1220 TIDE HT.: 3.0' up to 4.0' (M)

OILED ZONE: Splash High Medium Low

SUBSTRATUM: Rocks Boulder Cobble Gravel Sand Mud

LIVE BIOTA

Fucus (algae): Patchy Y/N Contin. Y/N Dense Y/N Sparse Y/N None Y/N

On Rocky - Cobble Fucus in Dense Patches. In sandy coves Enteromorpha less Fucus. All Healthy (from Helio.)

Mytilus (Mussels): Patchy Y/N Contin. Y/N Dense Y/N Sparse Y/N None Y/N

On rocky areas dense patches associated w/ Barnacles

Balanus (Barnacles): Patchy Y/N Contin. Y/N Dense Y/N Sparse Y/N None Y/N

Barnacles continuous on all rocky - cobble surface. None in sandy areas Healthy

Littorina

Patchy Y/N Contin. Y/N Dense Y/N Sparse Y/N None Y/N

Limpets: Patchy Y/N Contin. Y/N Dense Y/N Sparse Y/N None Y/N

OTHER OBSERVATIONS: Seen from Helio the area looks very healthy

CLEANUP PRECAUTIONS: avoid soft sediment around anadromous stream (see map)

Manual clean up will not adversely effect biota. Avoid healthy mid tidal biota

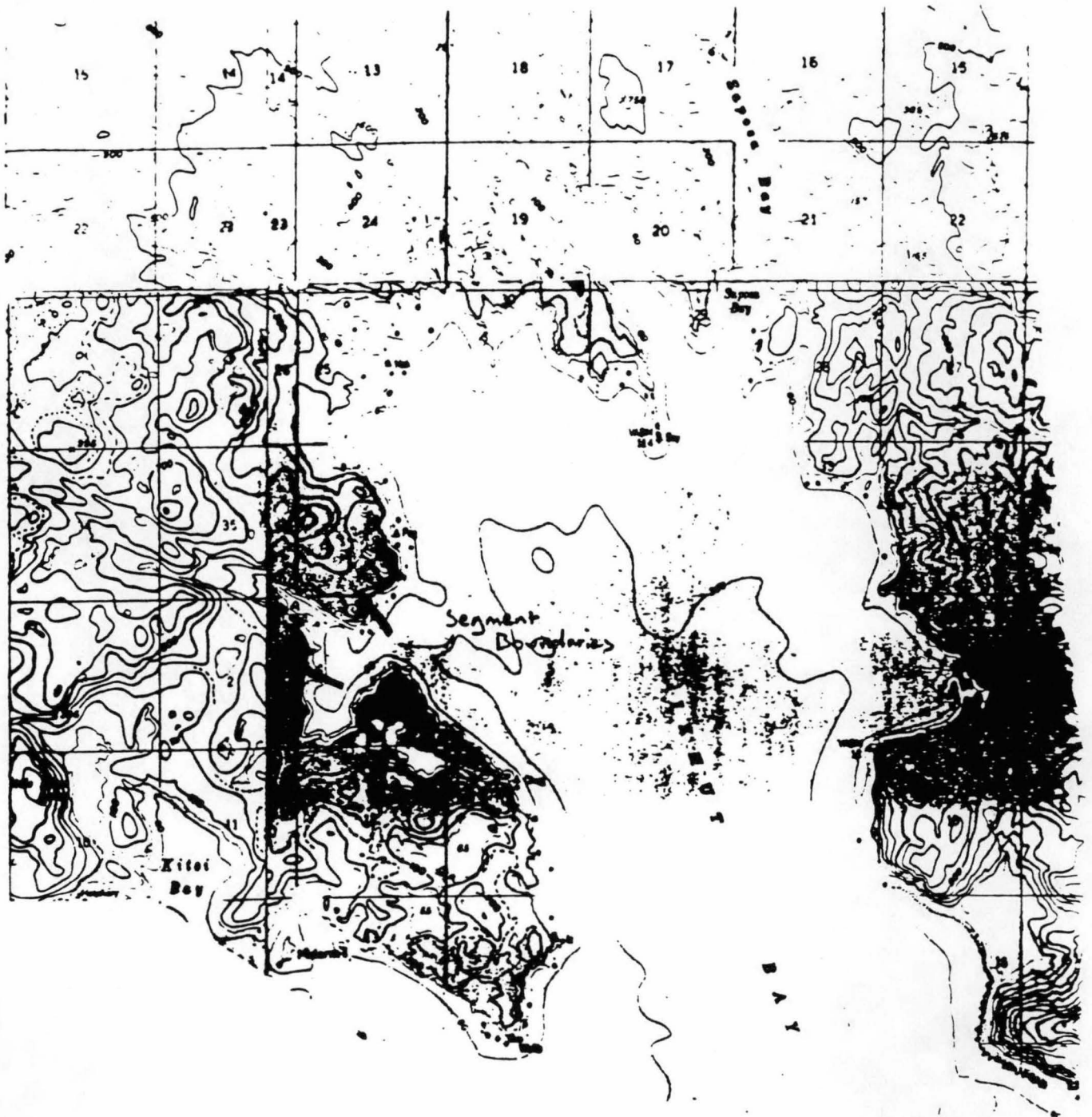
MAMMALS: Otters _____ Harbor Seals _____ Sea Lions _____ Whales _____
 Other _____

BIRDS: 1 Cormorant, Gulls

GENERAL OBSERVATIONS: low energy coves w/ healthy algal growth

K3-2-IB- 11

1:63,360



— Area surveyed on foot

A Anadromous stream

-15

ACE 8702340

(version 5/02/89)

SHORELINE CLEANUP PROGRAM

DATE 8/21/89

SHORELINE SEGMENT K3-2-IB-12

LOCATION: (see enclosed map) Izhut Bay

ADEC NO. _____ SHORELINE ASSESSMENT DATE: 8/12/89

Recommended Cleanup Activity(ies):

-No cleanup recommended due to observation of very light oil impact only. Subject to FOSC reassessment at a later date.

Priorities/Considerations: Class 5-A

Ecological Constraints (from site survey):

-No ecological constraints due to no cleanup recommended.

Archaeological Constraints (from site survey):

-If cleanup is conducted and heretofore undiscovered cultural materials are uncovered, contact Exxon's Archeological Field Director and take actions prescribed in the Operational Guidelines for Shoreline Cleanup dated 4/21/89 as amended.


State Historic Preservation Officer *

Date: 8/23/89

EXXON: _____

Date: _____

FOSC: _____

Date: _____

*Signature required to satisfy stipulations in Alaska DNR land use permits for tide and submerged lands.

+15
ACE 8702341

SHORELINE OIL EVALUATIONA. General

1. Date: 8/12/89 2. Time: 1500 3. Observer: M. Acton
 4. Surveyed From: Foot/Boat/Helio/Plane 5. Weather: Sun/Cloud/Rain/Snow/Fog
 6. Location: Izmit Bay 7. Segment #: K3-2-1B-12
 8. Length of shoreline segment: 10,500 yds 9. Tidal Stage $\pm$ 4.0 8.12 ft.
 10. Access: Foot/Vehicle/Boat/Barge/Helio/Float Plane
 11. Total Percentage of Segment Accessible: 25 %
 12. Access Restrictions: Headland / cliffs

B. Shoreline

13. Shoreline Type: SPI/BEA/COV/HLD/STRT/CLF/DAF
 14. Slope: LANG/HANG/VERT
 15. Wave Exposure: High/Med/Low
 16. Sediment: B S / C l / P s / G s / M s / R o s
 17. Drift Debris on Beach: Yes/No Supra/Upper/Mid/Lower Type Driftwood

C. Oil Summary

18. Degree of Oiling: Heavy/Moderate/Light/Very Light/No Oil Observed
 19. Area of Beach Impact: Width of Band: 3 yds
 Continuous: Total % of Segment
 Sporadic: Total % of Segment 3
 No Oil: Total % of Segment 97
 20. Est. Oil Thickness where >1in: in 21. Est. Oil Penetration: < in
 22. Pooled Oil: % "Free" Oil: % Coated: H % / M % / L %
 23. Fresh % Mousse 100 % Tar Formation: %
 24. Drift Debris Oiled? Yes/No Sup/Up/Mid/Low Amount: H/M/L

Comments:

Section surveyed by helio. Shoreline surveyed on foot depicted on 1:62340 section map
Section comprised primarily of headland, headland/rock platform / boulders. Access by helio
is limited. Very light oil in the form mousse pad/balls observed at several locations surveyed
on foot. Area of impact may be larger due to limitation of spotting very light oil from helio.
Bears at stream mouth mud flat. Cleanup of few scattered mousse pads may cause

SEE PAGE 2 FOR SUPPLEMENTAL INFORMATION

SUPPLEMENTAL SHORELINE OIL EVALUATION25. Oil Type

Fresh _____ 3
 Mousse _____ 100 3
 Weathered _____ 3
 Tar _____ 3
 100 3

26. Total Oil Coverage

	Length(yd)	Width (yd)
Very Light:	350	3
Light:		
Moderate:		
Heavy:		

27. Oil Distribution

pooled/continuous
 coating/ splat
 cracks / crevices
patties (>10cm diameter)
balls (< 10cm diameter)
 asphalt pavement

SP	H	M	M	Thick >1in	Length(yd)	Width(yd)	Burial Depth
x	x				350	3	
x	x				350	3	

28. Preliminary Cleanup Est.

Total TYPE A: _____ yds.
 Total TYPE B: _____ yds.
 Total TYPE A/B: _____ yds.

29. Remobilization Potential: High/Medium/Low

DOCUMENTATION:

Map/Aerial photo marking segment boundaries 1:63,360 and 1:1500 maps

VTR: Y/N Tape Number (s) KOS 39

Photography: Y/N Roll Number (s) HLD1

Additional Comments:

greater ecological impact than scattered mousse pads present. Hundreds / thousands of
anadromous fish in and near stream mouth.

43

1420 start Kuluik

1425 drop off Jordan, Moss at head of bay to look around

They requested to be dropped off -

pilot advised against being left there

Jordan insisted - back were dropped

off w/ shotgun & radio

1430 continued assessment

1435 received request from Moss for pickup

pilot informed Jordan & Moss that

neither he nor his company would

assume responsibility

44

8/12 1140 depart Kadink 358 EH

Dest - Seal Bay for Knacht

1150 start down engine problem

Chris Deb Meyer Anton Berth Voss

Rick K

8/12 1425 depart Kadink

Anton Davis Chris

1440-1455 overflight at signal

1455 - begin

1455-1500 - section is primarily R.O., cobb pattern areas - no oil observed - however difficult to observe - no landing spots

1500 flew cobbler beach w/ v.H. noise pads in approx 10' band at H.W. approx 1000' - was along all length visible

HDI-1 noise pad cleanup

2 NW

3 SE

approx 70' from water to SWL

beach approx 6% slope - low to mod energy

access for shallow draft boat

cleanup not recommended

ACE 8702344

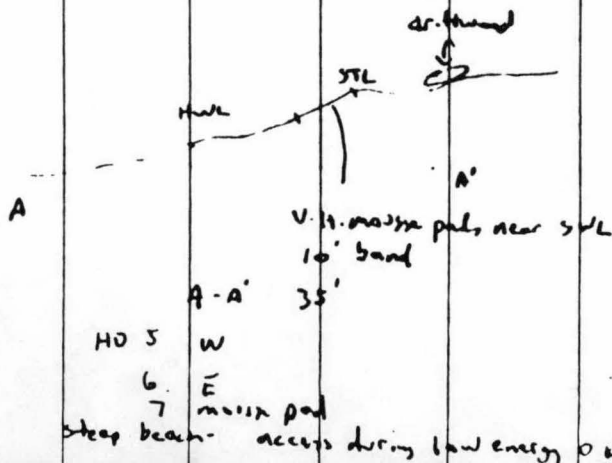
45

1605 depart to continue
headland, RO rock platform - few spots w/
flat cobbles

1620 300' walked 1 spot observed

1635 no oil observed walked 300' to S
over headland and down to beach W
of headland
3 beach areas

1715 is of 3 beaches
150' long
steep gravel pebble cobb beach



This area had oil impact similar to 1500 step
no cleanup recommended

1745 depart for Kodiak
1805 Arrive Kodiak

8/13 0825 depart Kodiak for Phoenix & Izhut
Acton Donta Davis Odum (USCG) '11
Utemeyer - to be dropped off at Phoenix Bay
Drop Chunks off

950 - walked approx 1 mile - no oil observed
sand / flat cobbles - pebble beach

1050 - small pocket beach - no oil observed
Acton out only - walked 300' / flat cobbles

1100 - same type as 1050
1 spot observed Acton out only

1105 - 1 spot observed Acton out only
smaller small pocket beach

1130 walked approx 0.5 mile
V.H. mussel pads along narrow shore
2 pads observed on mud flat

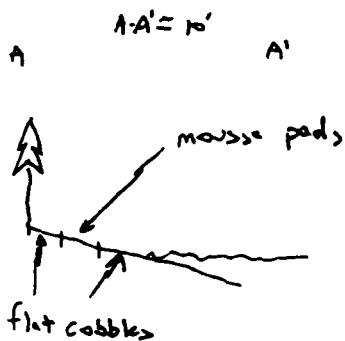
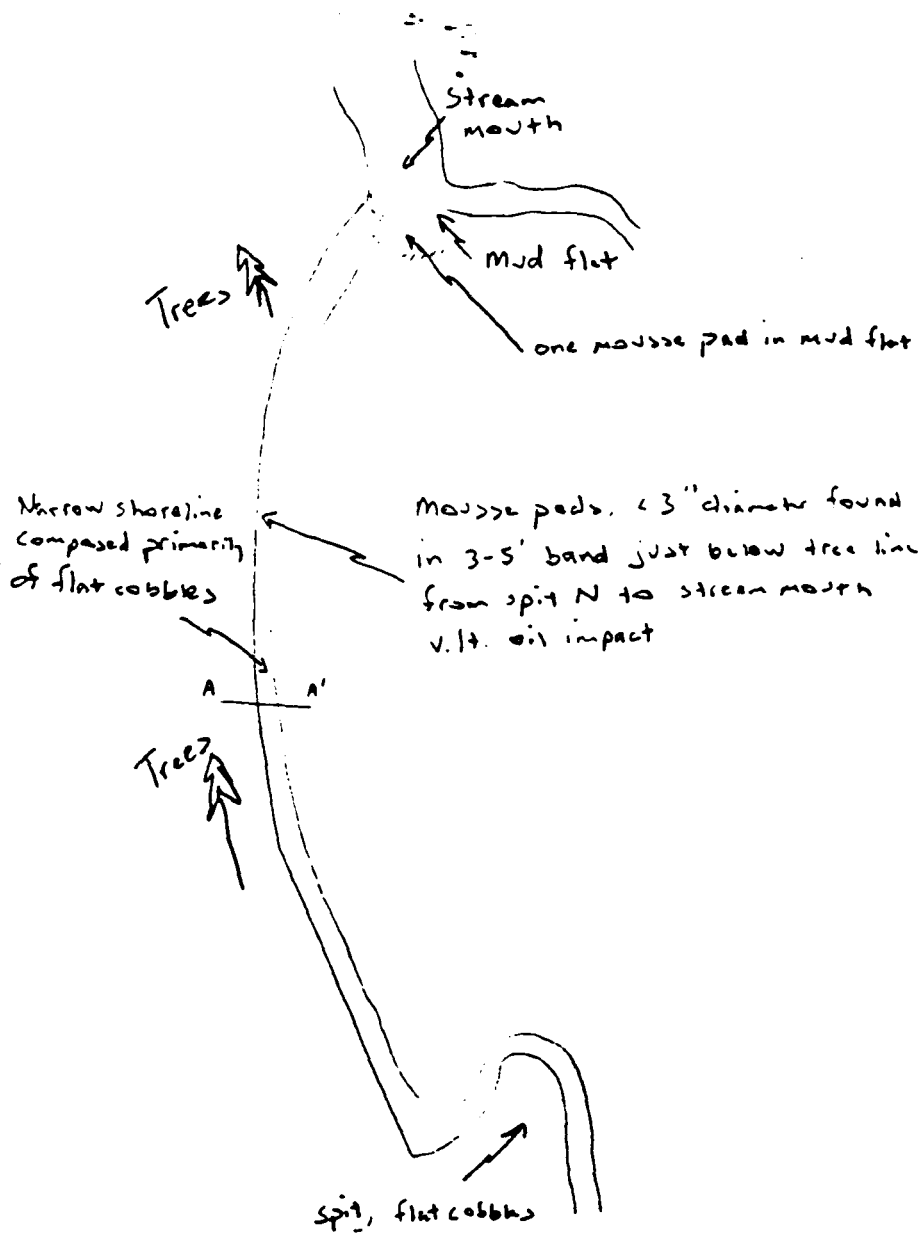
almost entirely RO. or A.O. boulder
1225 start bay arm very narrow cobb beach and RO

1230 no oil observed

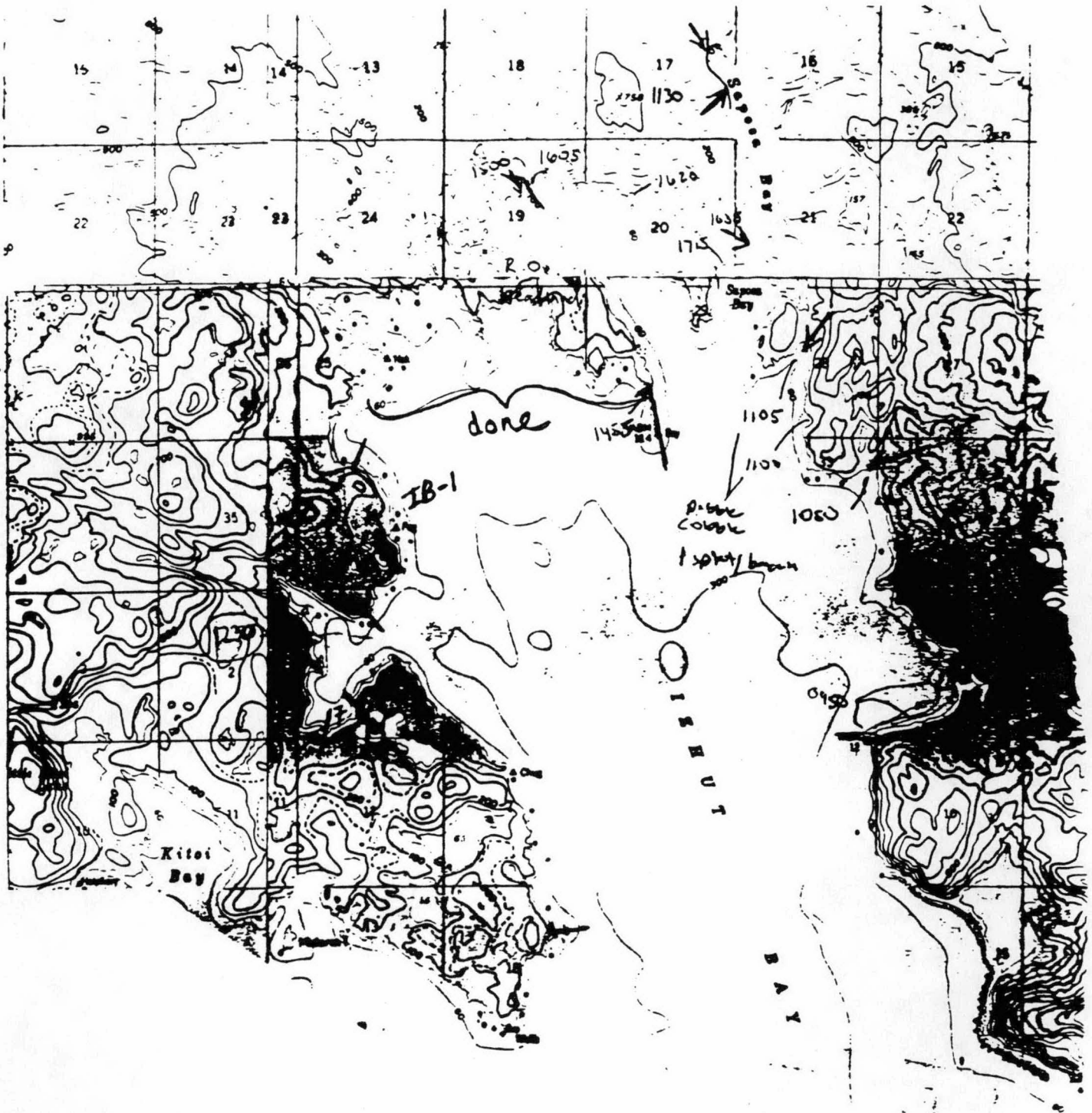
1245 finished bay at W side of Izhut Bay
depart for Kodiak

1305 Arrive Kodiak

ACE 8702345



Field Notes



K-3-a-IB(~~see~~)
12

ACE 8702347

ECOLOGICAL EVALUATION

LOCATION: Izmit Bay SITE: K3 2 IB 12 OBSERVER: H. Davis
 LOCATION PREFIX: IB SEG. NO.: 12 LENGTH: 10600 (M)

DATE: 8 / 12 / 89 TIME (HDDM): 14:50 - 17:45 TIDE HT.: 5.0' down to 3.8' (M)
9:30 - 11:50 2.0' up to 2.0'

OILED ZONE: Splash High Medium Low

SUBSTRATUM: Rocks Boulder Cobble Gravel Sand Mud

LIVE BIOTA

Fucus (algae): Patchy Y/N Contin. Y/N Dense Y/N Sparse Y/N None Y/N

Sparse in sandy areas to dense patches on Rocks. All Healthy. Enteromorpha Halosaccion Nereocystis off Rocky pls.

Mytilus (Mussels): Patchy Y/N Contin. Y/N Dense Y/N Sparse Y/N None Y/N

Patchy Mytilus along shore. All Healthy. No Pisaster observed.

Balanus (Barnacles): Patchy Y/N Contin. Y/N Dense Y/N Sparse Y/N None Y/N

Balanus Chthamalus continuous (except sandy shore) varies from total surface coverage to scattered individuals.

Littorina

Patchy Y/N Contin. Y/N Dense Y/N Sparse Y/N None Y/N

Same Pattern as Mytilus and Balanus. All Healthy

Limpets: Patchy Y/N Contin. Y/N Dense Y/N Sparse Y/N None Y/N

N. pinnata, N. setacea + Colicella sp. patchy along rocky and slate shingle

OTHER OBSERVATIONS: Gnathomas fish abundant several hundred Scyphozoa in water. No
oil stressed individuals observed. Bear and Fox trucks on beaches.

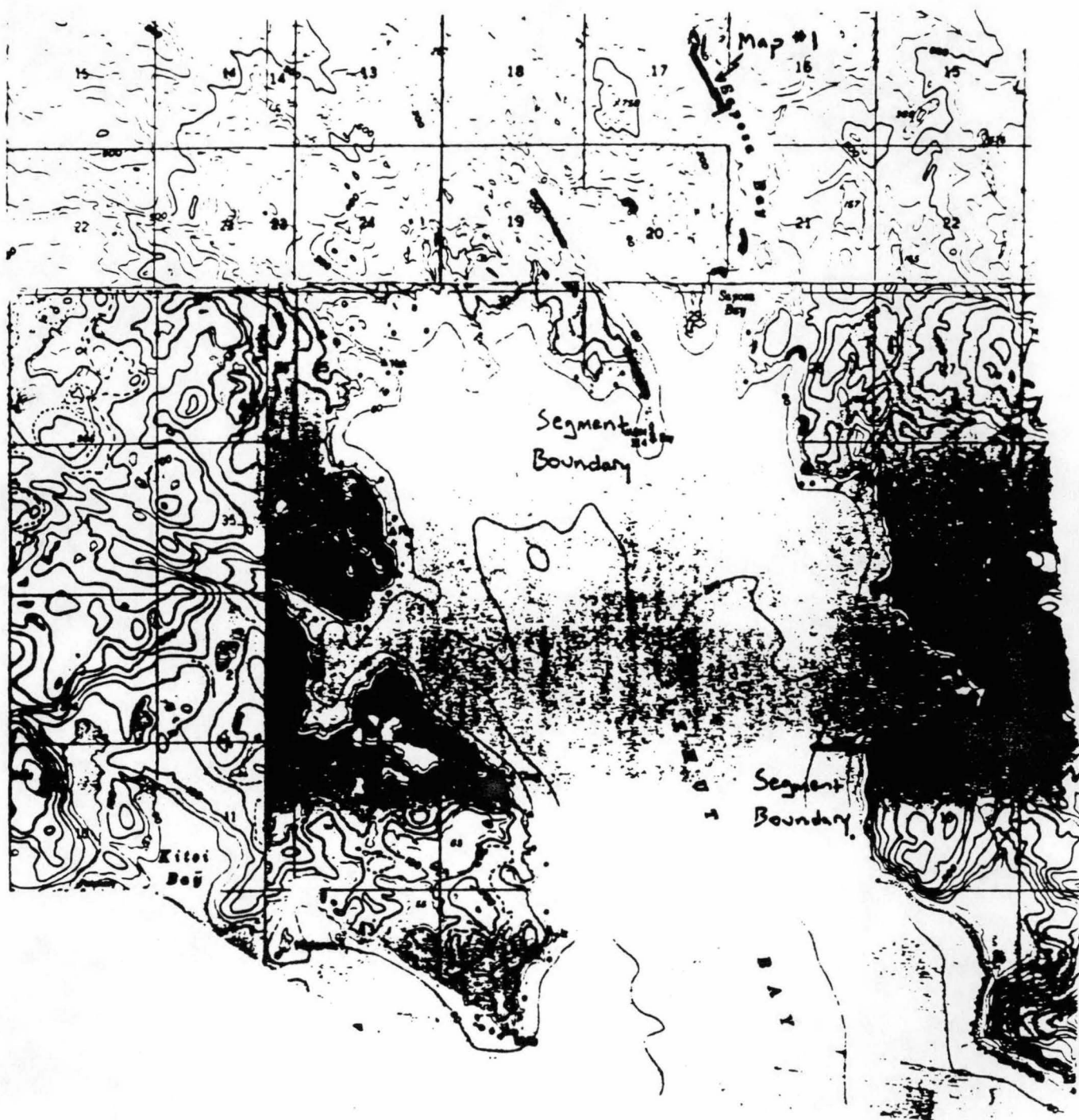
CLEANUP PRECAUTIONS: Don't disturb eagle nests on the soft sediment around gnathomas fish stream
If no cleanup then No constraints. Manual cleanup will not adversely effect biota

MAMMALS: Otters 3 Harbor Seals _____ Sea Lions _____ Whales _____
 Other 2 river otters also seen.

BIRDS: Eagles (2 adult, 1 juvenile) cormorant, gulls

GENERAL OBSERVATIONS: Very healthy area

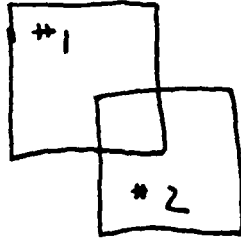
K3-2-IB- 12
1:63,360



— Shoreline surveyed on foot
● Eagle nest
A Anadromous Stream

ACE 8702350

Index For 1:1500 Maps



(version 6/04/89)

SHORELINE PRE-CLEANUP ASSESSMENT BLOCK REPORT

Location (see enclosed map): KODIAK-IZHUT BAY NORTHWEST BLOCK

Includes Shoreline Segments: IB-1, IB-2, IB-3, IB-4, IB-5,

IB-6, IB-7

Submitted: [Signature] Date: 7/1/89
(for Exxon)

→ ISCC Recommendation: _____ Date: _____

FOSC Approval: _____ Date: _____

The cleanup procedures identified in the Shoreline Cleanup Program are recommended. Modifications to these systems can be made in the field. Exxon and other field personnel are encouraged to suggest innovations and productivity enhancements to the OSC's on-scene representative. The OSC's representative has the authority to approve on-site modifications. The Field Resource Team should be consulted if these actions do not fit within the Ecological Constraints of the Shoreline Cleanup Program. Requirements for safety and the protection of cultural material must be observed.

Distribution:

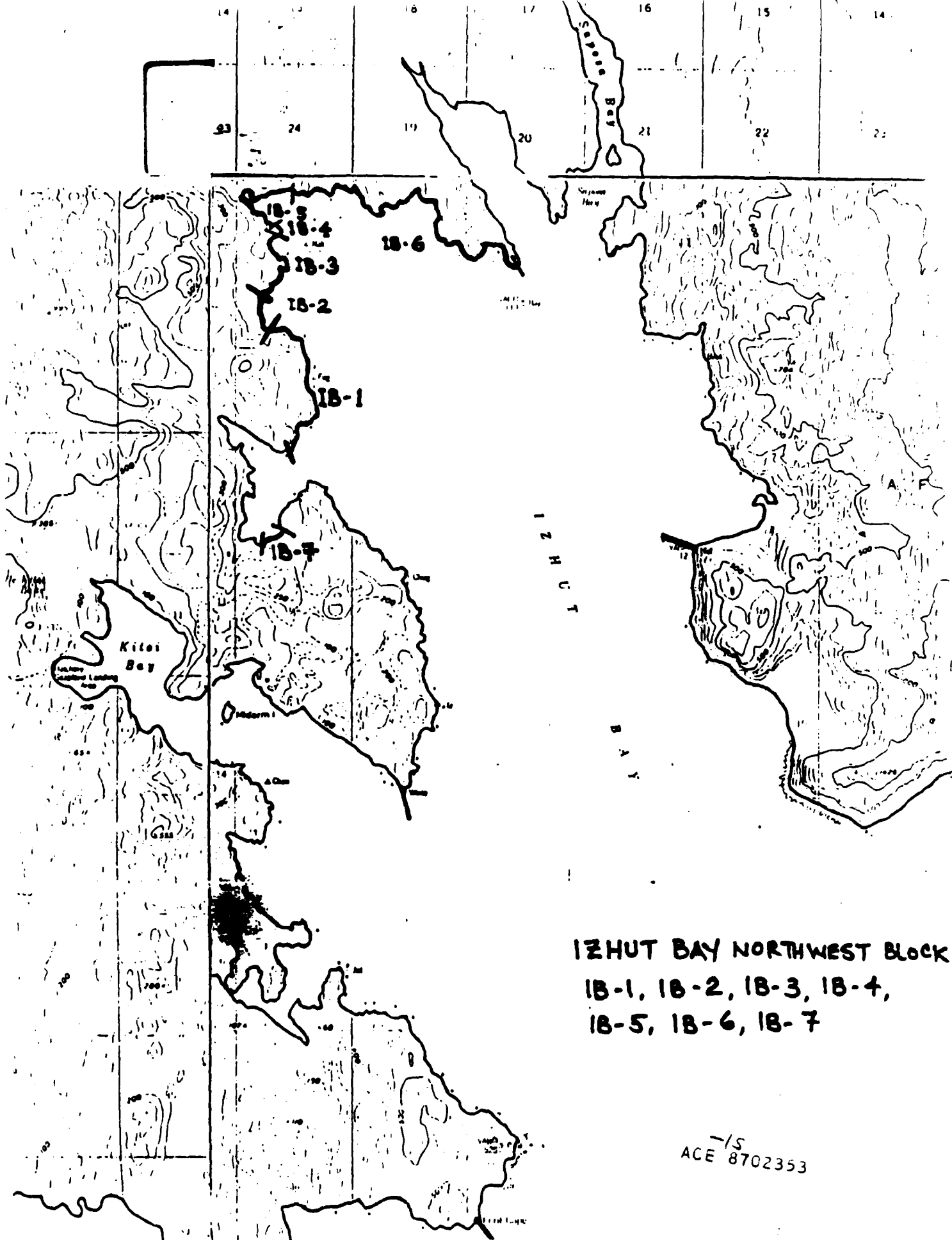
Exxon Shoreline Coordinator
Exxon Shoreline Supervisor
Exxon SCAT file

FOSC
CDFU
NOAA -
EPA
USDA (FS)
USFW
A.DEC
A.FG
A.DNR
CAC
PWSCA
USFS
SHPO

*IB 1, 2, 3, 4 & 5 work as done
approved 7/1/89 for Type A
removal of surface contamination
only.*

*~~IB 6, 7 funded to H&S for~~
~~removal.~~ [Signature] 7/13*

+15
ACE 8702352



TYPE A SHORELINE CLEANUP WORK ORDER

Date: 7/7/89 Shoreline Segment: K3-2 IB-1,2,3,4,5
Location: (Attach map) IZHUT BAY - NORTHWEST BLOCK

ADEC No. K3-2 Shoreline Assessment Date: 6/17/89

Recommended Cleanup Activity(ies):

Manual removal of mouse patties and contaminated drift material.

Priority Considerations:

See attached shoreline segment reports

Ecological Constraints (from site survey):

See attached shoreline segment reports.

Archaeological Constraints: *See attached segment reports.*

If any archaeological or historical sites or artifacts are discovered during the cleanup activity, they must remain undisturbed and the Exxon archaeologist C. Mobley contacted (as per procedures in the "Guideline for Shoreline Cleanup") and the State Historic Preservation Office notified as soon as possible.

Submitted by:

[Signature]
Exxon

Date: 7/7/89

State Historic Preservation Officer Telephone Approval (Required)

SEE ATTACHED
Date: _____

Approved:

See Attachment
Assistant OSC Western Alaska (if appropriate)

Date: _____

Approved:

[Signature] *Rec'd 7/7/89*
Federal On-Scene Coordinator

Date: 7/13/89

ACE 8702354

4/30/89

SEGMENT INSPECTION RECORD

ADEC # K3-2

Shoreline Segment: IB-5

Shoreline Treatment Process(es) Completed for this Segment

☐ Hot water wash	☐ Mechanical
☐ Warm water wash	☒ Non-mechanical
☐ Water deluge	☐ Other

Exxon

Treatment as indicated above has been completed. Request demobilization from this segment.

Comments Manual removal of mousse patties and contaminated drift material.

Signature Jack A. Rickner

Date 7/21/89

Time 0748

Printed Name Jack Rickner

Existing Shoreline Condition As
Visually Determined by USCG

Surface Oil

Percent	Degree of Oiling
☐	Heavy
☐	Medium
☐	Light
☐	Very Light

100%

Subsurface Oil

☐ Yes ☐ No

Comment Below

Reassessment

☐ Yes - Necessary

☐ No - Not necessary unless re-oiled

ADEC Rep

Comments

Existing Shoreline Condition As
Visually Determined by ADEC

Surface Oil

Percent	Degree of Oiling
☐	Heavy
☐	Medium
☐	Light
☐	Very Light

100%

Subsurface Oil

☐ Yes ☐ No

Comment Below

Reassessment

☐ Yes - Necessary

☐ No - Not necessary unless re-oiled

Signature

Date

Time

Printed Name

FOSC Rep

Demobilization approved/disapproved

Comments

See comments on attached sheet.

Signature

Date

Time

Printed Name

Copy: Exxon ADEC FOSC ISCC

Return All Signed Originals to Exxon

-141 FF
ACE 8702355

~~KODIAK SCAT~~
~~K3-3~~

COMPLETE JAN 26 1990

ACE 8643511

KISCC
Copy

(version 6/04/89)

SHORELINE PRE-CLEANUP ASSESSMENT BLOCK REPORT

Block (see enclosed map): K3-3

Includes Shoreline Segments: IB-8

Location: Peril Cape N into Izhut Bay

Submitted: _____ Date: _____
(for Exxon)

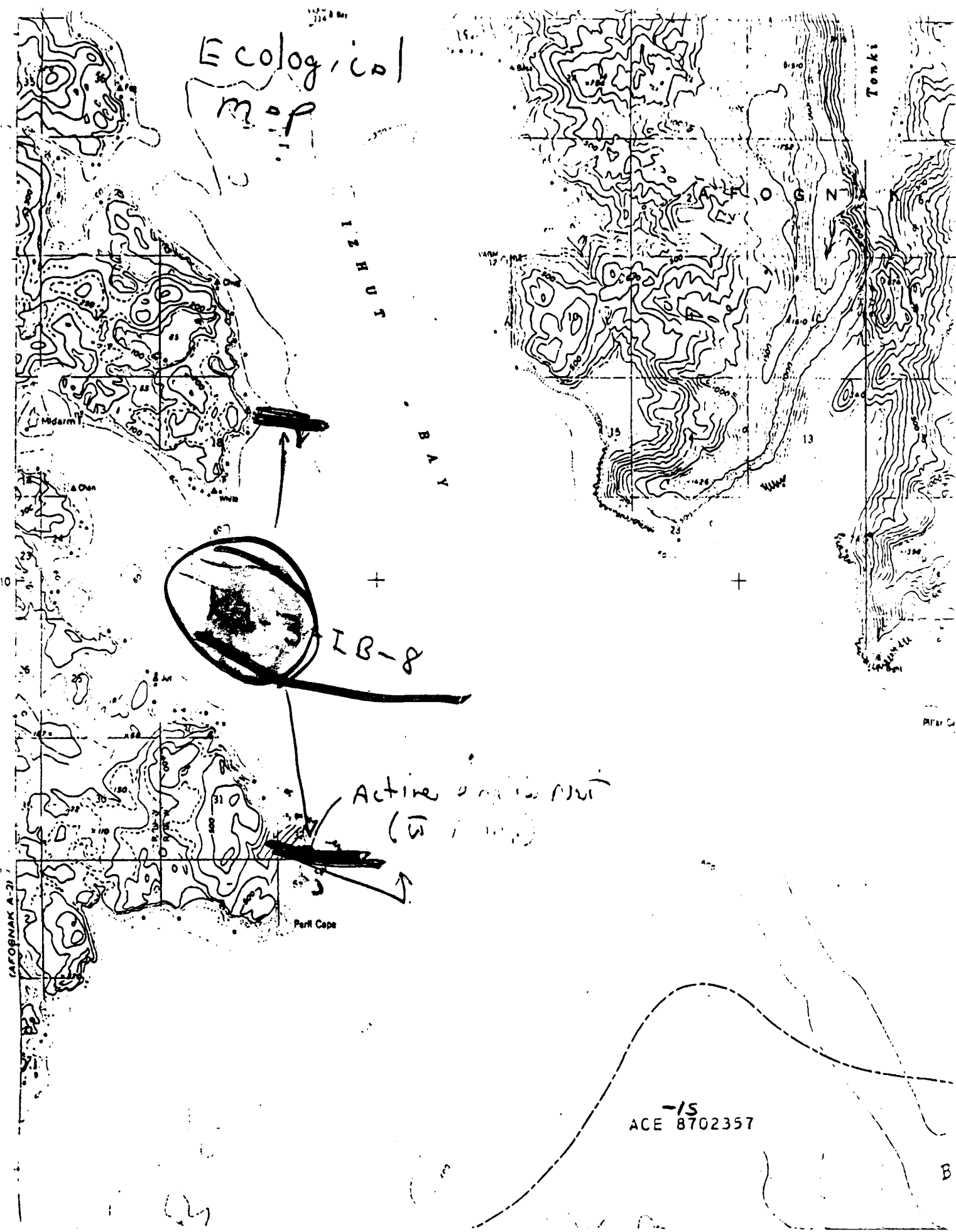
FOSC Approval: _____ Date: _____

The cleanup procedures identified in the Shoreline Cleanup Program are recommended. Exxon and other field personnel are encouraged to suggest innovations and productivity enhancements to the OSC's on-scene representative. Requirements for safety and the protection of cultural material must be observed.

CC: KISCC

ACE 1 F/S/FT
8702356

Ecological map



KISCC
Copy

(version 5/02/89)

SHORELINE CLEANUP PROGRAM

DATE 7/17/89

SHORELINE SEGMENT K3-3-IB-8

LOCATION: (see enclosed map) Peril Cape N into Izhut Bay

ADEC NO. _____ SHORELINE ASSESSMENT DATE: 7/15/89

Recommended Cleanup Activity(ies):

- Manual removal of mousse from high tide line on the west side of the beach.
- Use sorbent cloth and pom-poms to remove oil covering on cobble surface of the beach.
- Clean oiled driftwood.
- Low pressure wash the west side of the cobble to remove oil.
- Use other approved techniques where appropriate.

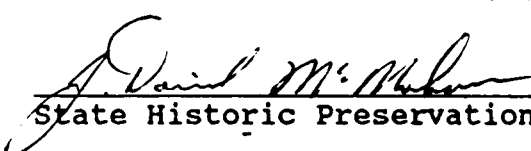
Priorities/Considerations: Class 5

- Oil contamination light
- Resources present.

Ecological Constraints (from site survey):

Archaeological Constraints (from site survey):

- If heretofore undiscovered cultural materials are uncovered during cleanup, contact Exxon's Archeological Field Director and take actions prescribed in the Operational Guidelines for Shoreline Cleanup dated 4/21/89 as amended.


State Historic Preservation Officer *

Date: 7/21/89

EXXON: _____

Date: _____

FOSC: _____

Date: _____

*Signature required to satisfy stipulations in Alaska DNR land use permits for tide and submerged lands.

ACE ¹⁵ 8702358

SHORELINE OIL EVALUATION

ate: 7/15/89 / Time: 1410 - 1615
 Surveyed From: Foot/Boat/Helio/Plane

Observer: M. Acton
 Weather: Sun/Cloud/~~Rain~~/Snow/Fog

LOCATION
 Location: Izhut Bay, Peril Cape to North side entrance to Katoi Bay Segment ID: K3-3-IB-8
 Segment Length: 8 miles m. Access: Vehicle/Boat/Barge/Helio/Float Plane
 Access Restrictions: Helio access only for beach in Map #1

SHORELINE

Shoreline Type: SPI/~~SEA~~/~~COV~~/HLD/STRT Slope: Lo/Med/Hi/Vert
 Wave Exposure: High/Med/Low
 Sediment: B 5 % / C 5 % / P % / G&S 5 % / M % / R 85 %

CL

g. Degree of Oiling: HEAVY / MODERATE / LIGHT / VERY LIGHT / NONE OBSERVED
 Area of Impact: SU/SP/H/M/L

CL DISTRIBUTION

Continuous % of Segment SU/SP/H/M/L H/M/L/VL
 Sporadic % of Segment 41 SU/SP/H/M/L H/H/L/VL

otal	Length(m)	Width(m)	Thickness >1cm:	cm	SU/SP/ <u>H</u> /M/L
Very light:	<u>30</u>	<u>5</u>	Penetration/Rework:	<u> </u> cm	SU/SP/H/M/L
Light:	<u> </u>	<u> </u>	Burial Depth:	<u>30</u> cm	SU/SP/H/M/L
Moderate:	<u>60</u>	<u>5</u>			
Heavy:	<u> </u>	<u> </u>			

obilization Potential: High/Medium/Low

ift Debris Oiled? Y/N Amount: H/M/L/VD SU/SP/H/M/L Type: Driftwood, seaweed

CL MORPHOLOGY

oiled Oil:	<u> </u> %	SU/SP/H/M/L
Free" Oil:	<u> </u> %	SU/SP/H/M/L
blattered:	<u>10</u> %	H/M/L/ <u>V</u> D SU/SP/ <u>H</u> /M/L
oated:	<u>55</u> %	H/ <u>H</u> /L/VL SU/SP/ <u>H</u> /M/L
uncakes/Balls:	<u>35</u> %	SU/SP/ <u>H</u> /M/L

 Preliminary Cleanup Est.

Total TYPE A: 60 m
 Total TYPE B: m
 Total TYPE A/B: m

CL WEATHERING

esh:	<u> </u> %	SU/SP/H/M/L
ousse:	<u> </u> %	SU/SP/H/M/L
athered Mousse:	<u>90</u> %	SU/SP/H/M/L
phalt Mousse:	<u> </u> %	SU/SP/H/M/L
r:	<u>10</u> %	SU/SP/H/M/L

COMMENTS

Segment consists primarily of rock cliff and platform, headland, and large boulders/rubble with no/limited access by helio. Entire segment flown by helio. One beach was suitable to helio landing and was assessed on foot (see map #1).

Sporadic, moderate oiling consisting of weathered mousse was observed at the beach assessed on foot (see map #1).

DOCUMENTATION:

ap Aerial photo marking segment boundaries See Attached map

VTR: Y/Ⓢ Tape Number(s) _____

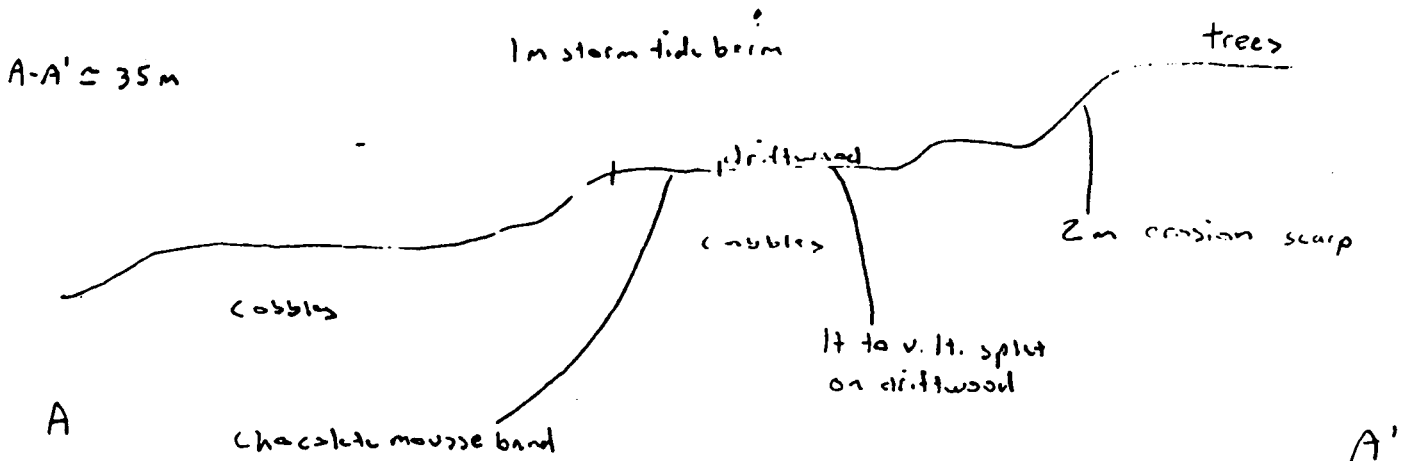
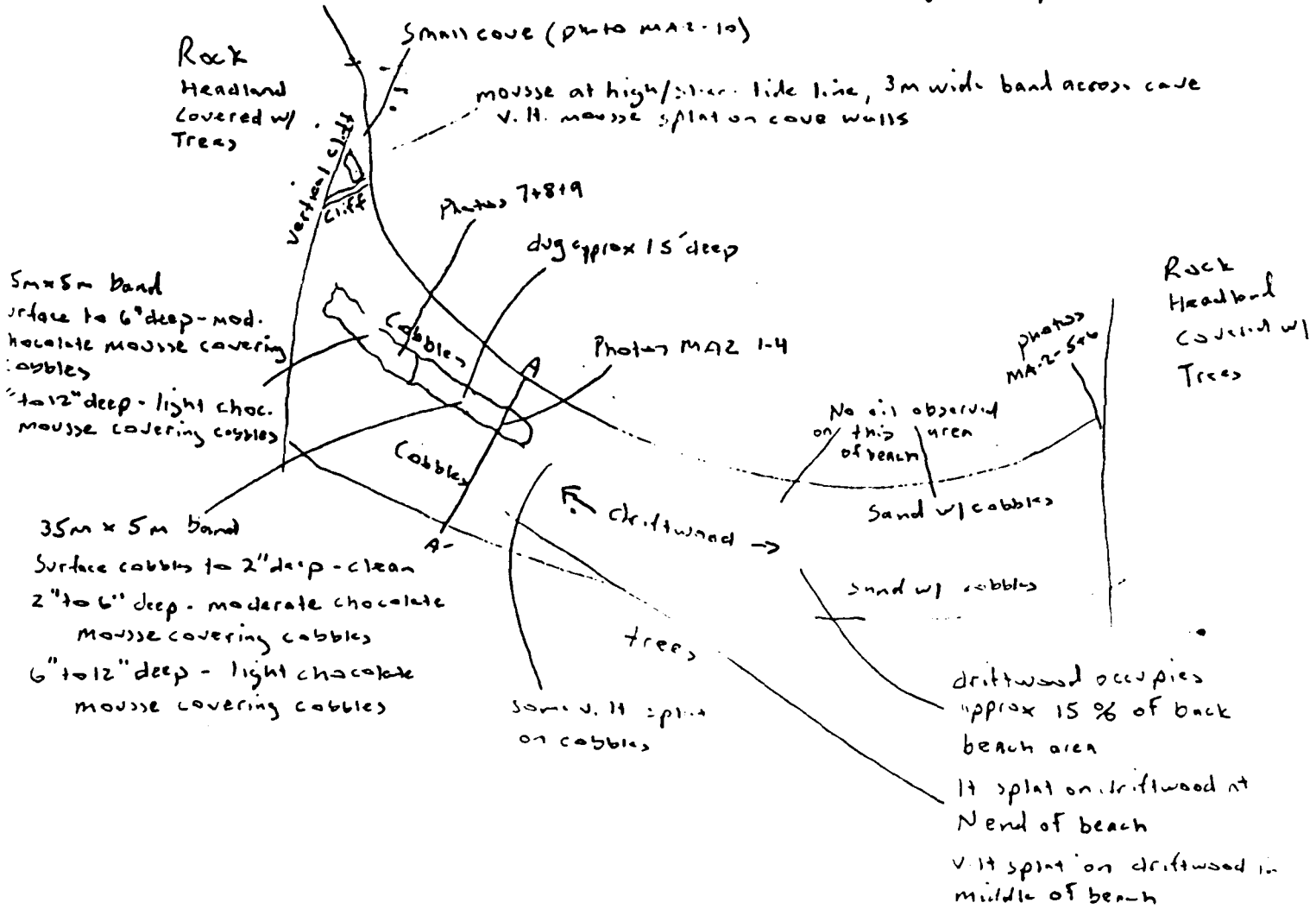
Photography: Ⓢ/N Roll Number(s) MA2

Sample Numbers Collected: _____ N/A



Map 1

Approx 200m long beach
high energy beach



Survey beach from 1410 - 1550

High water 1200 - 1500 + 5'

ACE 8702361

recommended, but very low priority
worked w/ in map^{area} to R.O. + buildings
and controls to w -

1520 hrs left Raspberry Is. bound to Kodik
Approx 1600 hrs - set down below Bustin Pass
Active back at airport approx 1710 by land
transport

7/15 - Alinuleh
- Oktober 1933

7/15 1345 ju ar. pair
Acton Penn Ludwig G. pair (Vx's)

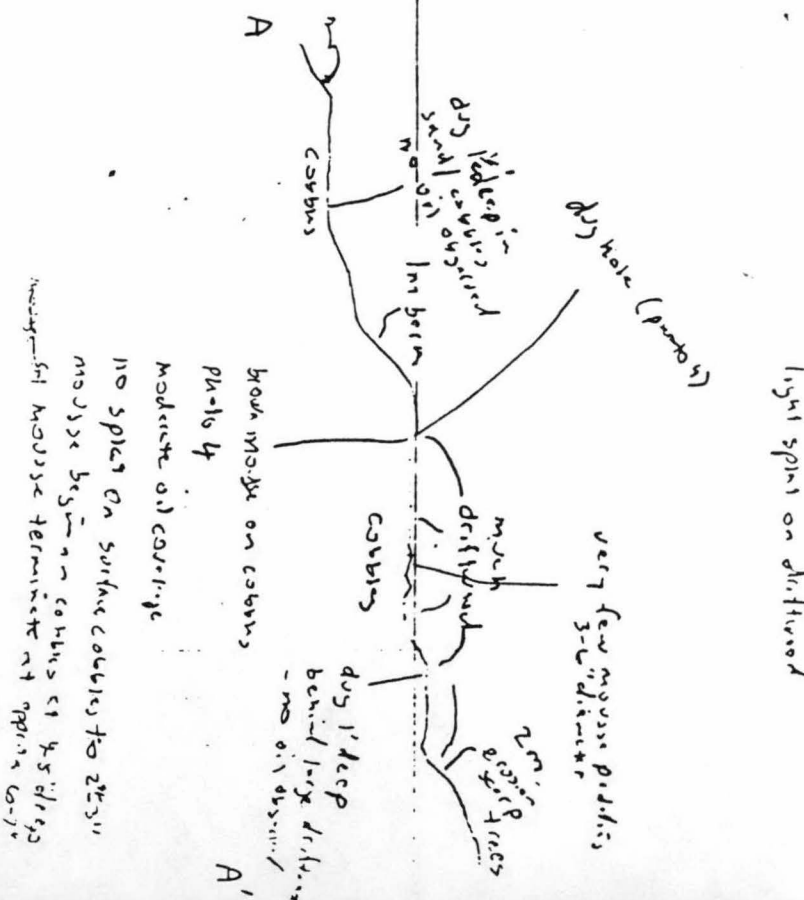
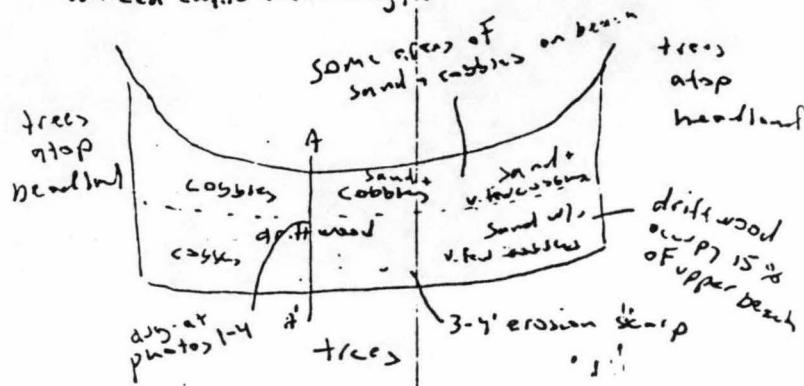
14.2	Pacific Cape		
	steep rocky cliff	no	beach
	tide near high		
	minor beach		

MA-2	1	to 3
	2	bad shot
	3	to N

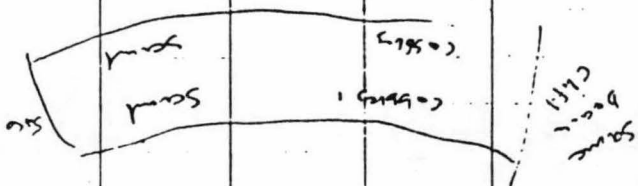
200m of beach - cobbles + small boulders

Minor scarp at back beach line
dense trees
vertical rock wall band at both ends
area of ~~energy~~ high energy beach

worked engine beam length



Some marine on feathers & seaweed
No boat access to beach



Oil doesn't appear at Seal of beach in sand
except for very few marine packings

Less split on Northwest at Seal of beach

Photo 5-6

Look to Seal of beach
no oil observation on 5 Seal of beach

Photo 7-8 Marine on 2-1-1-1

Head of beach

5m x 25m - decrease w/ depth

Moderate oil input still at 1' but

decreasing

could not dig deeper

Photo 9 - this area

Top 4m moderate oil

4-12" light oil

Coat at Head of beach
Marine at high - still in
Photo 10 - oil drops

Same as other marine oil

cleanup crew has been in this cave
- the w/ oil and rats

Photo 10 - cave

Same with split on cave walls

Marine packings on beach look fairly fresh

1550 - 1-1-1-1

NO BOAT ACCESS !! energy to high

Large Pile to 12' stop - oil clear

ECOLOGICAL EVALUATION

LOCATION: Kodiak - SITE: AFOUNT - Izhut Bay OBSERVER: G. Penn

LOCATION PREFIX: K3-3 SEG. NO.: IB-8 LENGTH: 8 miles (M)

DATE: 07/15/89 TIME (HHMM): 14:21 TIDE HT.: _____ (M)

OILED ZONE: Splash High Medium Low

SUBSTRATUM: Rocks Boulder Cobble Gravel Sand Mud

LIVE BIOTA

Fucus (algae): Patchy Y/N Contin. Y/N Dense Y/N Sparse Y/N None Y/N

Mytilus (Mussels): Patchy Y/N Contin. Y/N Dense Y/N Sparse Y/N None Y/N

unobserved from 510-610

Balanus (Barnacles): Patchy Y/N Contin. Y/N Dense Y/N Sparse Y/N None Y/N

on vertical faces, Intertidal, 100-150 ft. Rock Columns

Littorina

Patchy Y/N Contin. Y/N Dense Y/N Sparse Y/N None Y/N

Un-observed

Limpets: Patchy Y/N Contin. Y/N Dense Y/N Sparse Y/N None Y/N

Un-observed

OTHER OBSERVATIONS: on oiled Beach - Amphipods & Neomysis
very active in cobble/pobble beach @ 100-150 ft.

CLEANUP PRECAUTIONS: None - Applicable cleanup methods

should not perturb biota significantly on the oiled beach
Other areas - no precautions - as no oil visible - no cleanup recommended.

MAMMALS: Otters _____ Harbor Seals _____ Sea Lions _____ Whales _____
Other _____

BIRDS: 1 - sick Raven on oiled Beach - not oiled - appeared at end of natural

! (like sp. Eagle + not Heermann)
GENERAL OBSERVATIONS: Intertidal generally poor due to
steepness of slope - usually vertical.

Ecological
map

VABM 114 Bay

IZHUT

BAY

Tonki Ba

A F O G I N A

K3-3-IB-8

Active (5)

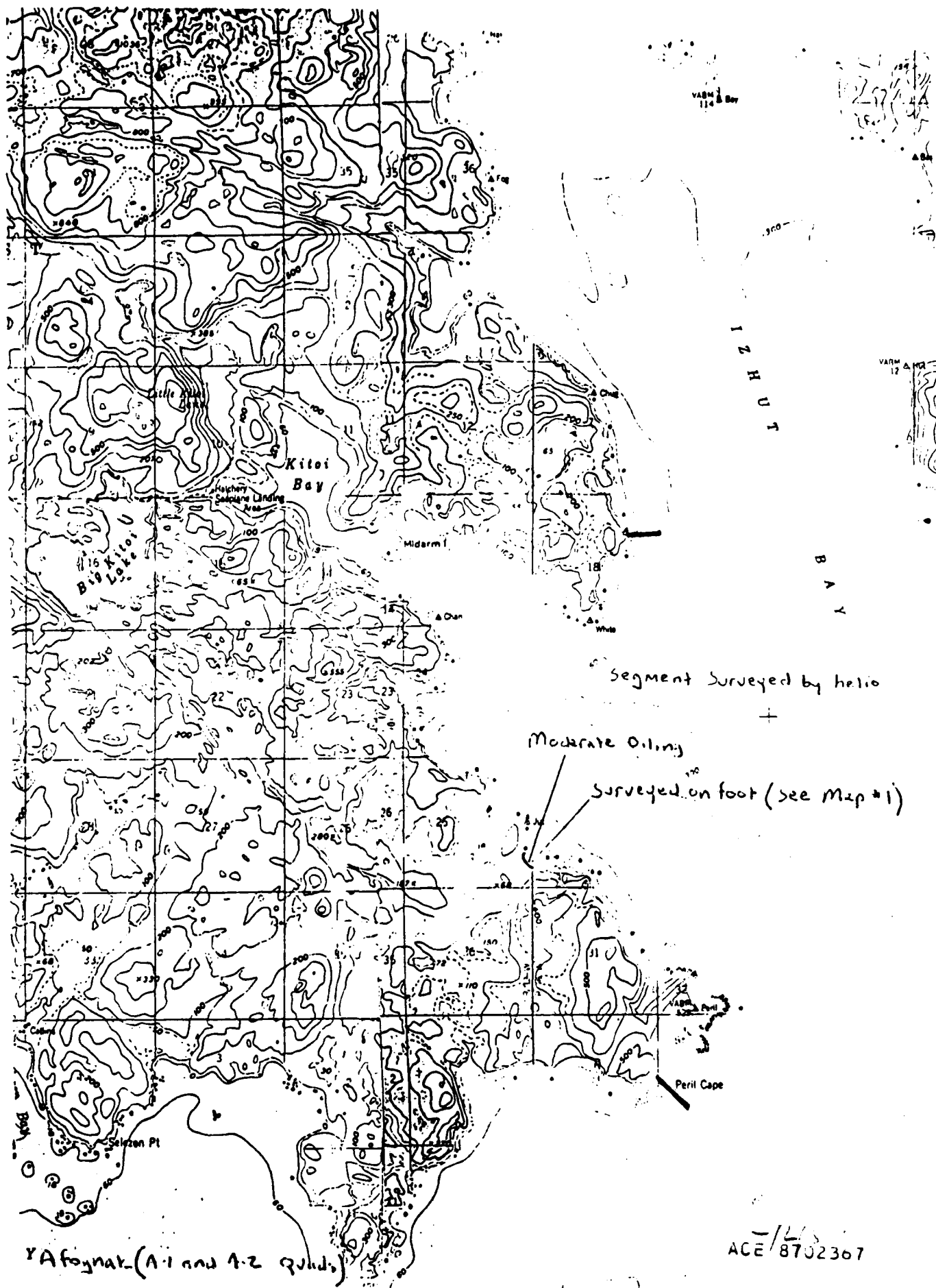
Peril Cape

Pillar Ca

IAFORNAK A-21

ACE 8702365

B



Yafognak (A-1 and A-2 grids)

ACE/8702307

5 - KODIAK SCAT
K3-4

DEC 29 1960

ACE 8643512

(version 6/04/89)

SHORELINE PRE-CLEANUP ASSESSMENT BLOCK REPORT

Block (see enclosed map): K3-4

Includes Shoreline Segments: DU-1

Location: Cape Izhut West to Peril Cape

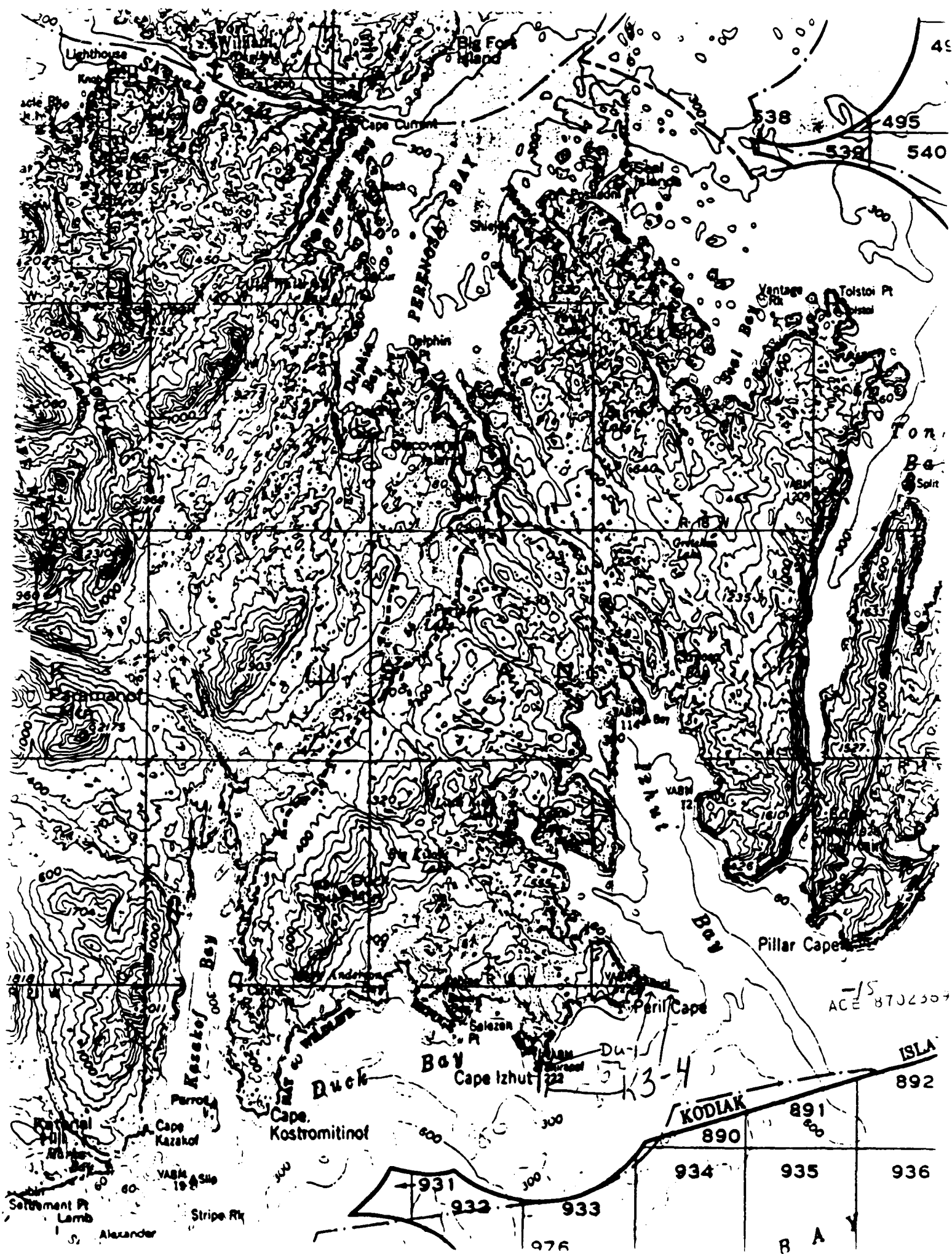
Submitted: _____ Date: _____
(for Exxon)

FOSC Approval: _____ Date: _____

The cleanup procedures identified in the Shoreline Cleanup Program are recommended. Exxon and other field personnel are encouraged to suggest innovations and productivity enhancements to the OSC's on-scene representative. Requirements for safety and the protection of cultural material must be observed.

CC: KISCC

+1F/S/FF-
ACE 8702368



(version 5/02/89)

SHORELINE CLEANUP PROGRAM

DATE 7/16/89

SHORELINE SEGMENT K3-4-DU-1

LOCATION: (see enclosed map) Cape Izhut west to Peril Cape

ADEC NO. K3 SHORELINE ASSESSMENT DATE: 7/16/89

Recommended Cleanup Activity(ies):

-No cleanup recommended due to apparent absence of oil.
Subject to FOSC reassessment at a later date.

Priorities/ Considerations: Class

Ecological Constraints (from site survey):

Archeological Constraints (from site survey):

-If cleanup is conducted and heretofore undiscovered cultural materials are uncovered, contact Exxon's Archeological Field Director and take actions prescribed in the Operational Guidelines for Shoreline Cleanup dated 4/21/89 as amended.


State Historic Preservation Officer *

Date: 7/29/89

EXXON: _____

Date: _____

FOSC: _____

Date: _____

*Signature required to satisfy stipulations in Alaska DNR land use permits for tide and submerged lands.

+/S
ACE 8702370

SHORELINE OIL EVALUATION

Date: 7/16/89 / Time: 1110-1140
 Surveyed From: Foot/Boat/Helio/Plane

Observer: M. Acton
 Weather: Sun/Cloud/Rain/Snow/Fog

LOCATION

Location: Cape Izard west to Peril Cape Segment ID: K3-4-DU-1
 Segment Length: 6 km m. Access: Vehicle/Boat/Barge/Helio/Float Plane
 Access Restrictions: Boat access during low energy periods only

SHORELINE

Shoreline Type: SPI/BEA/COV/HLD/STRT Slope: Lo/Med/Hi/Vert
 Wave Exposure: High/Med/Low
 Sediment: B 40 % / C 10 % / P % / G&S % / M % / R 50 %

OIL

Avg. Degree of Oiling: HEAVY / MODERATE / LIGHT / VERY LIGHT / NONE OBSERVED
 Area of Impact: SU/SP/H/M/L

OIL DISTRIBUTION

Continuous	% of Segment	<u> </u>	SU/SP/H/M/L	H/M/L/VL
Sporadic	% of Segment	<u> </u>	SU/SP/H/M/L	H/M/L/VL

Total	Length(m)	Width(m)	Thickness >1cm:	cm	SU/SP/H/M/L
Very light:	<u> </u>	<u> </u>	Penetration/Rework:	<u> </u> cm	SU/SP/H/M/L
Light:	<u> </u>	<u> </u>	Burial Depth:	<u> </u> cm	SU/SP/H/M/L
Moderate:	<u> </u>	<u> </u>			
Heavy:	<u> </u>	<u> </u>			

Mobilization Potential: High/Medium/Low

Drift Debris Oiled? Y/N Amount: H/M/L/VL SU/SP/H/M/L Type:

OIL MORPHOLOGY

Pooled Oil:	<u> </u> %	SU/SP/H/M/L
"Free" Oil:	<u> </u> %	SU/SP/H/M/L
Splattered:	<u> </u> %	H/M/L/VL SU/SP/H/M/L
Coated:	<u> </u> %	H/M/L/VL SU/SP/H/M/L
Pancakes/Balls:	<u> </u> %	SU/SP/H/M/L

 Preliminary Cleanup Est.

Total TYPE A: m
 Total TYPE B: m
 Total TYPE A/B: m

OIL WEATHERING

Fresh:	<u> </u> %	SU/SP/H/M/L
Mousse:	<u> </u> %	SU/SP/H/M/L
Weathered Mousse:	<u> </u> %	SU/SP/H/M/L
Asphalt Mousse:	<u> </u> %	SU/SP/H/M/L
Far:	<u> </u> %	SU/SP/H/M/L

COMMENTS

Segment surveyed by helio. No helio landing areas. No foot survey in segment
 No oil observed.

DOCUMENTATION:

Map/Aerial photo marking segment boundaries See attached map

VTR: Y/N Tape Number(s) _____

Photography: Y/N Roll Number(s) _____

Sample Numbers Collected: _____

ACE 8702372

13

Peril cap. and N.N. - no good l.d.,

Brief to Andrew, 91st cabin, in Silver Bay

Selektion β_1 - nur 0.1 Objekte

1200 Smith packing been Capt. return for for
left us for lunch - see 1150's map

300m	600m
400	

on M 31-
A 11-31
approx 6-12
m.w. 6-12
J 11-12

$\frac{1}{2} \times 100 = 50$

12
מס' 12

do it and
s'ing

gro. from
lure

A-A' 8m

5 ↑

A hand-drawn map of a coastal area. A vertical line divides the map. To the left of the line, the letter 'A' is written. To the right, the word 'ship' is written at the top, 'disturbed' is written in the middle, and 'high tide' is written at the bottom. A small circle is drawn on the line, and a wavy line represents the coast.

here is low angle

Sa. l g l p n l

40-20-1

14

very high degree of c.f.

major faulting at M-H tide line

incoming tide moving mass pollution beach

1335 set down in Kazakof Uy

k

K
 41 small pinkish brown 25
~~75~~ w. l.
100m long

all year

10' backshore embankment

some dirt seed - n = 2 pl-7

few 6-8 massive brils at N end of beach

V. 19. 5:1

1-2" diameter

MA 2-21 N

225

Winkler length of present boat

bankat 1515

7/17 Mon

Lift off from Kodak	0800
---------------------	------

Destination - Shuyuk Bay

Colbyville Pa - 27518 0842

Acton Penn

Gillipana Gilpin

COPIES/620114 620114,

ACE 8702373

ECOLOGICAL EVALUATION

LOCATION: Kodiak SITE: Afogak-Duck Bay OBSERVER: G. Penn

LOCATION PREFIX: K3-5 SEG. NO.: D4-1 LENGTH: 6 km (M)

DATE: 37/16/89 TIME (HHMM): 11:10 TIDE HT.: 1.0 (M)

OILED ZONE: Splash High Medium Low None

SUBSTRATUM: Rocks Boulder Cobble Gravel Sand Mud

LIVE BIOTA

Fucus (algae): Patchy Y/N Contin. Y/N Dense Y/N Sparse Y/N None Y/N

Mytilus (Mussels): Patchy Y/N Contin. Y/N Dense Y/N Sparse Y/N None Y/N
unobserved

Balanus (Barnacles): Patchy Y/N Contin. Y/N Dense Y/N Sparse Y/N None Y/N

Littorina
Patchy Y/N Contin. Y/N Dense Y/N Sparse Y/N None Y/N
unobserved

Limpets: Patchy Y/N Contin. Y/N Dense Y/N Sparse Y/N None Y/N
unobserved

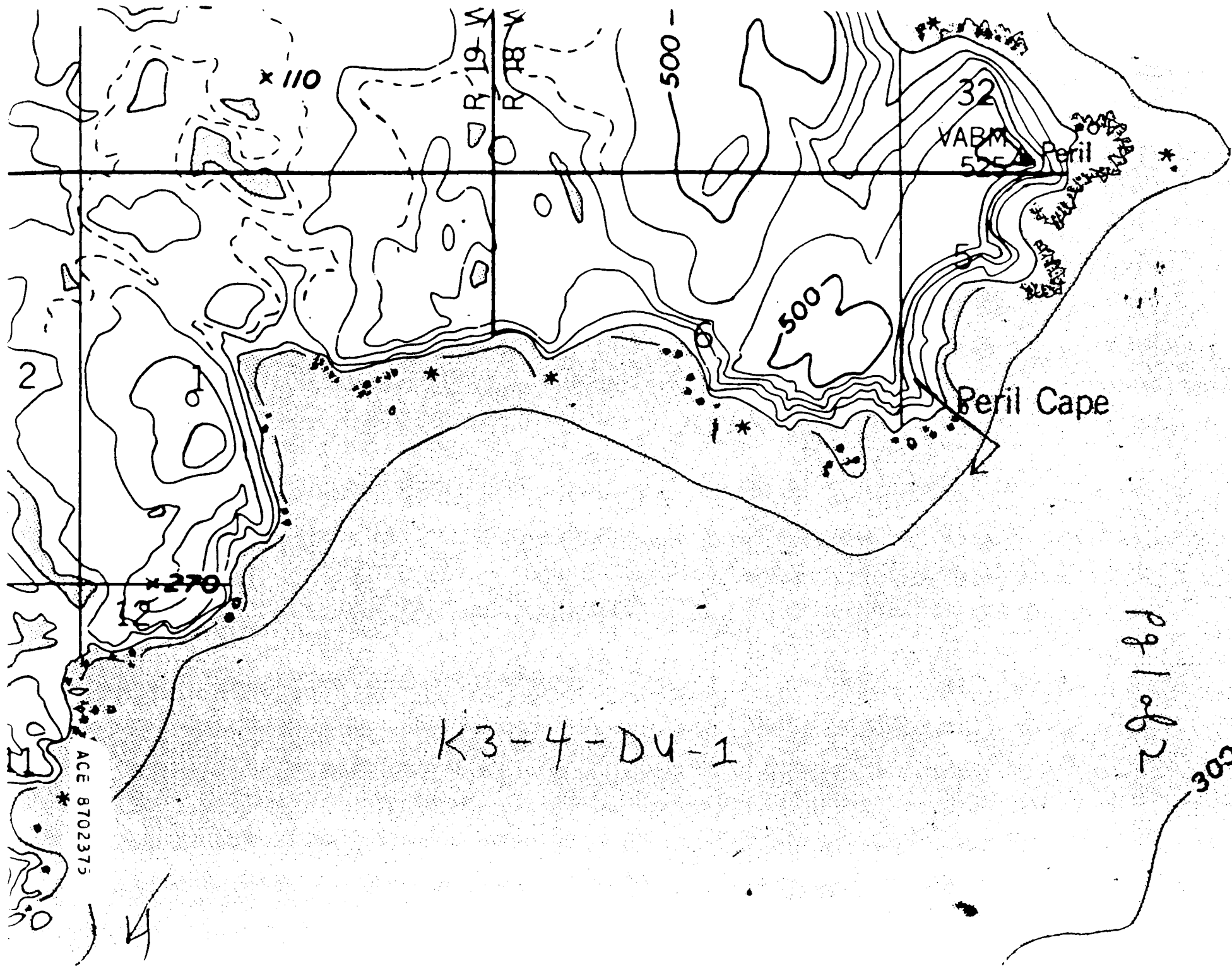
OTHER OBSERVATIONS: _____

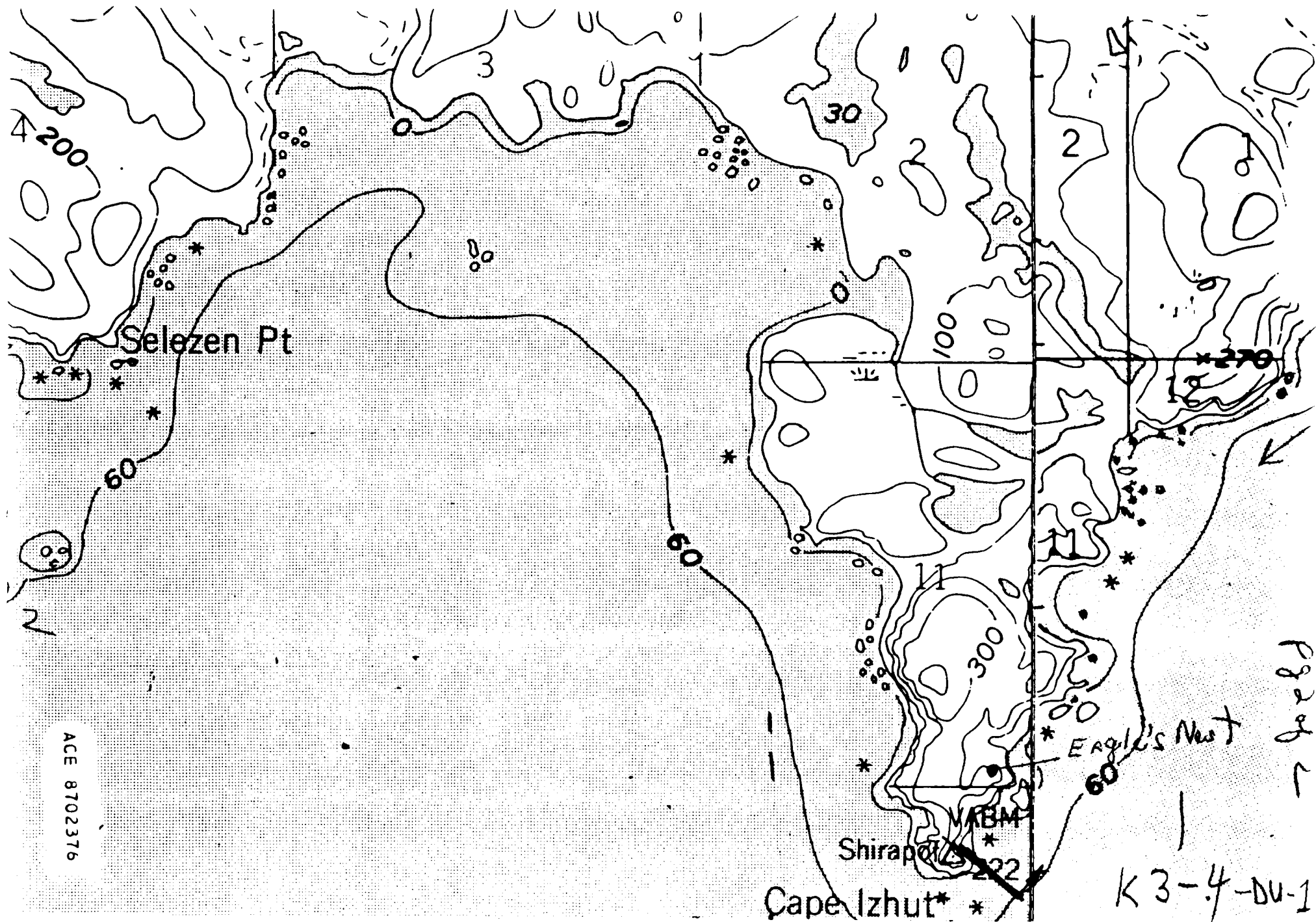
CLEANUP PRECAUTIONS: None - no oil visible

MAMMALS: Otters _____ Harbor Seals _____ Sea Lions _____ Whales _____
Other _____

BIRDS: _____

GENERAL OBSERVATIONS: Intertidal biota generally poor due to steepness of beach (usually vertical). Ocean frontage usually has well developed subtidal kelp beds.





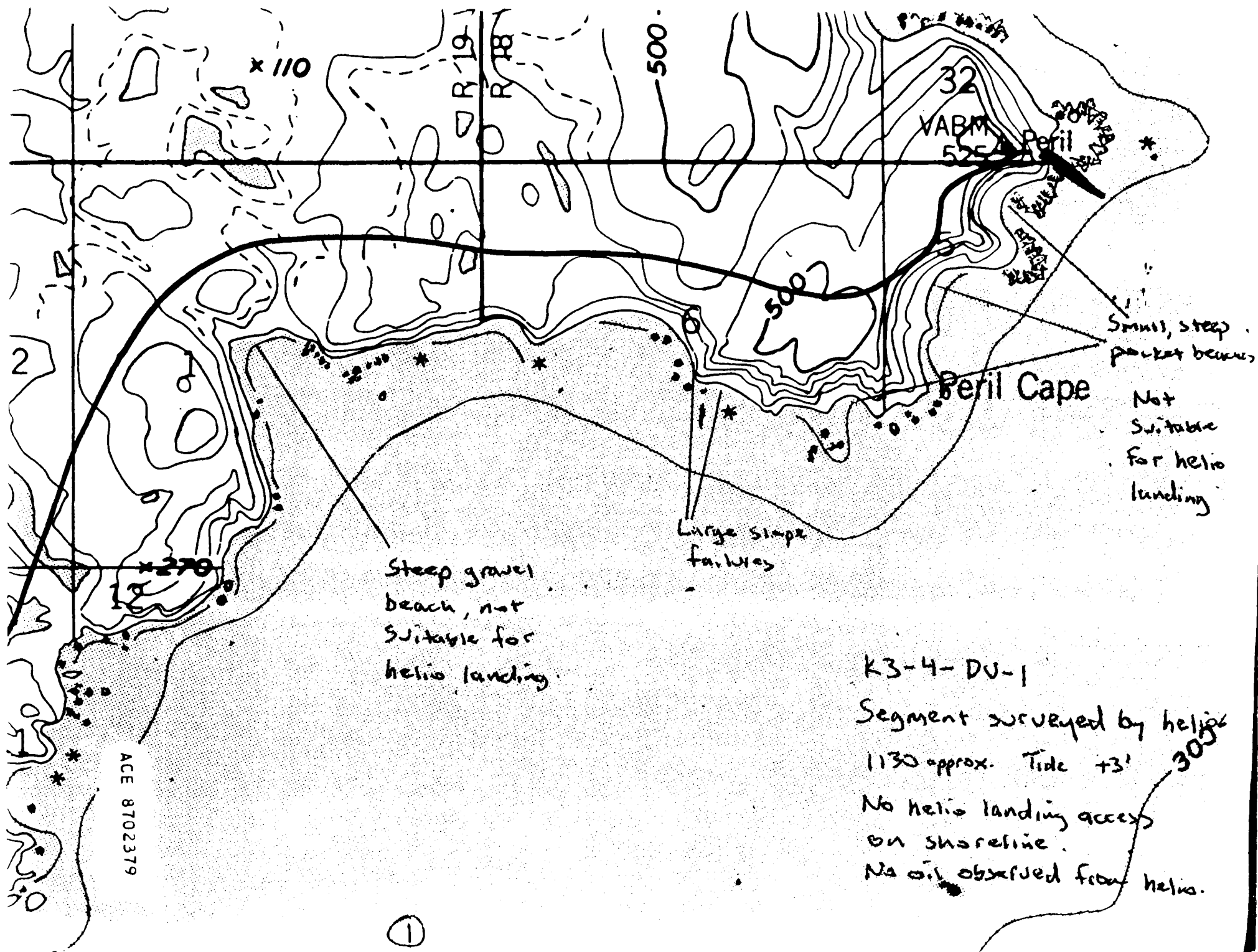
ACE 8702376

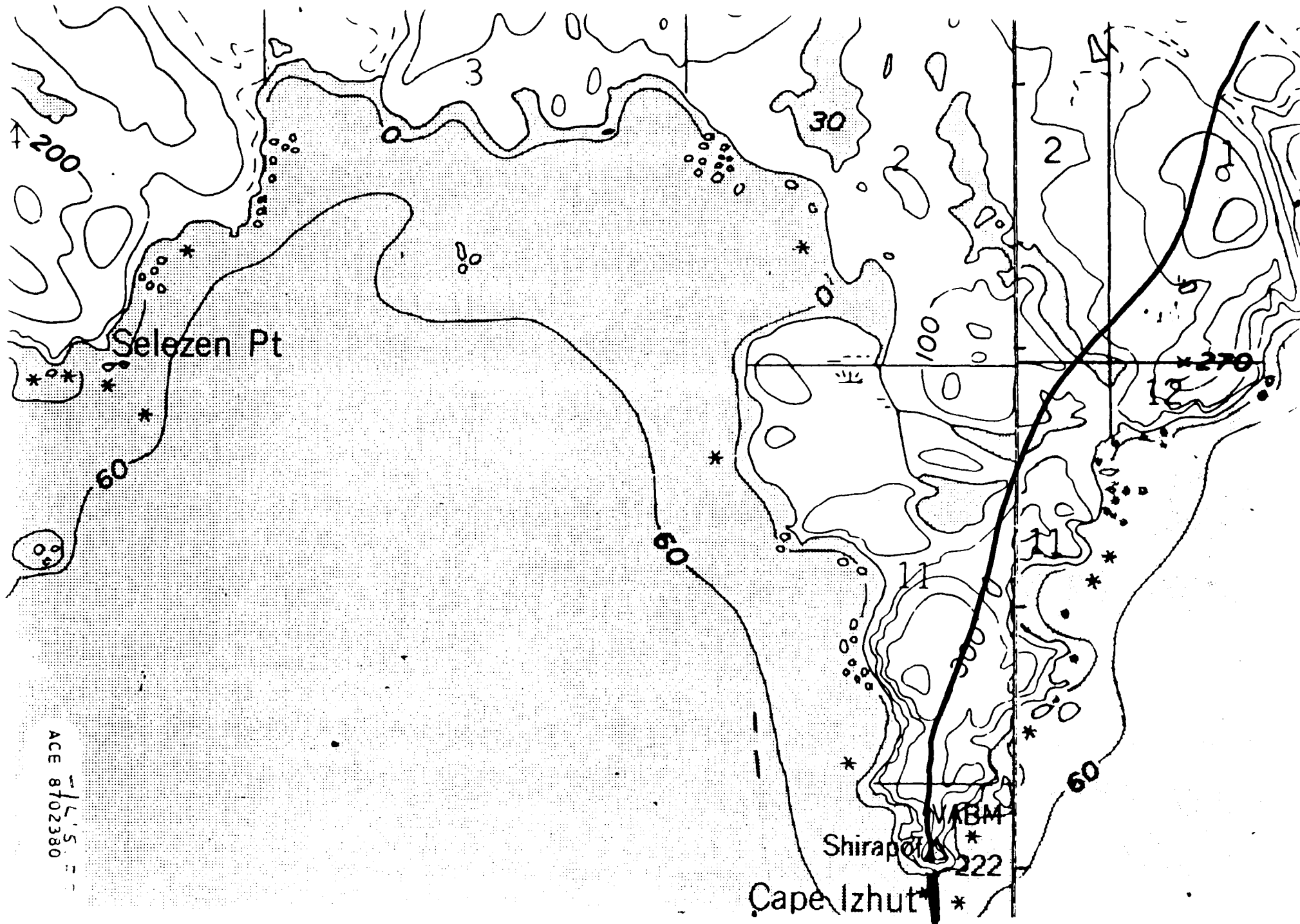
1928
→

K 3-4-DU-1

Segment Map Index

2	1
---	---





ACE 8702380

2

K3-5

ACE 8643513

(version 5/02/89)

SHORELINE CLEANUP PROGRAM

DATE 7/16/89

SHORELINE SEGMENT K3-5-DU-2

LOCATION: (see enclosed map) Selezen Point to Cape Izhut

ADEC NO. _____ SHORELINE ASSESSMENT DATE: 7/16/89

Recommended Cleanup Activity(ies):

-No cleanup recommended due to apparent absence of oil.
Subject to FOSC reassessment at a later date.

Priorities/Considerations:

-Limited helicopter acces.

Ecological Constraints (from site survey):

Archaeological Constraints (from site survey):

-If cleanup is conducted and heretofore undiscovered cultural materials are uncovered, contact Exxon's Archaeological Field Director and take actions prescribed in the Operational Guidelines for Shoreline Cleanup dated 4/21/89 as amended.

J. David McManis
State Historic Preservation Officer *

Date: 7/30/89

EXXON: _____

Date: _____

FOSC: _____

Date: _____

*Signature required to satisfy stipulations in Alaska DNR land use permits for tide and submerged lands.

+/F/S/EX
ACE 8702381

SHORELINE OIL EVALUATION

ate: 7/14/89 / Time: 1145
 Surveyed From: Foot/Boat/Helio/Plane

Observer: M. Acton
 Weather: Sun/Cloud/Rain/Snow/Fog

LOCATION
 Location: Selezen Point to Cape Izhut Segment ID: K3-S-DU-2
 Segment Length: 5 km m. Access: Vehicle/Boat/Barge/Helio/Float Plane
 Access Restrictions: Boat access during low energy periods

SHORELINE
 Shoreline Type: SPI/BEA/COV/HL/STRT Slope: Lo/Med/Hi/Vert
 Wave Exposure: High/Med/Low
 Sediment: B 40% / C 10% / P % / G&S % / M % / R 50%

IL
 Avg. Degree of Oiling: HEAVY / MODERATE / LIGHT / VERY LIGHT / NONE OBSERVED
 Area of Impact: SU/SP/H/M/L

IL DISTRIBUTION

Continuous	% of Segment	_____	SU/SP/H/M/L	H/M/L/VL
Spodic	% of Segment	_____	SU/SP/H/M/L	H/M/L/VL

Oil	Length(m)	Width(m)	Thickness >1cm: _____ cm	SU/SP/H/M/L
Very light:	_____	_____	Penetration/Rework: _____ cm	SU/SP/H/M/L
Light:	_____	_____	Burial Depth: _____ cm	SU/SP/H/M/L
Medium:	_____	_____		
Heavy:	_____	_____		

obilization Potential: High/Medium/Low
 Drift Debris Oiled? Y/N Amount: H/M/L/VL SU/SP/H/M/L Type: _____

IL MORPHOLOGY

Coiled Oil: _____%	SU/SP/H/M/L
Free Oil: _____%	SU/SP/H/M/L
Plattered: _____%	H/M/L/VL SU/SP/H/M/L
Coated: _____%	H/M/L/VL SU/SP/H/M/L
Pancakes/Balls: _____%	SU/SP/H/M/L

Preliminary Cleanup Est.

Total TYPE A: _____ m
 Total TYPE B: _____ m
 Total TYPE A/B: _____ m

IL WEATHERING

Fresh: _____%	SU/SP/H/M/L
Mousse: _____%	SU/SP/H/M/L
Weathered Mousse: _____%	SU/SP/H/M/L
Asphalt Mousse: _____%	SU/SP/H/M/L
Star: _____%	SU/SP/H/M/L

COMMENTS

Segment surveyed by helio. Poor helio access
 No oil observed.

DOCUMENTATION:

Map Aerial photo marking segment boundaries See Attached Maps

VTR: Y/N Tape Number(s) _____

Photography: Y/N Roll Number(s) _____

Sample Numbers Collected: _____

ACE 8702383

ECOLOGICAL EVALUATION

LOCATION: Kodiak SITE: Afognak - Duck Bay OBSERVER: G. Penz
 LOCATION PREFIX: K3-6 SEG. NO.: DU-2 LENGTH: 5 km (M)
 DATE: 07/16/89 TIME (HHMM): 11.45 TIDE HT.: 1 m (M)

OILED ZONE: Splash High Medium Low None

SUBSTRATUM: Rocks Boulder Cobble Gravel Sand Mud

LIVE BIOTA

Fucus (algae): Patchy Y/N Contin. Y/N Dense Y/N Sparse Y/N None Y/N

Mytilus (Mussels): Patchy Y/N Contin. Y/N Dense Y/N Sparse Y/N None Y/N

unobserved

Balanus (Barnacles): Patchy Y/N Contin. Y/N Dense Y/N Sparse Y/N None Y/N

Littorina

Patchy Y/N Contin. Y/N Dense Y/N Sparse Y/N None Y/N

unobserved

Limpets: Patchy Y/N Contin. Y/N Dense Y/N Sparse Y/N None Y/N

unobserved

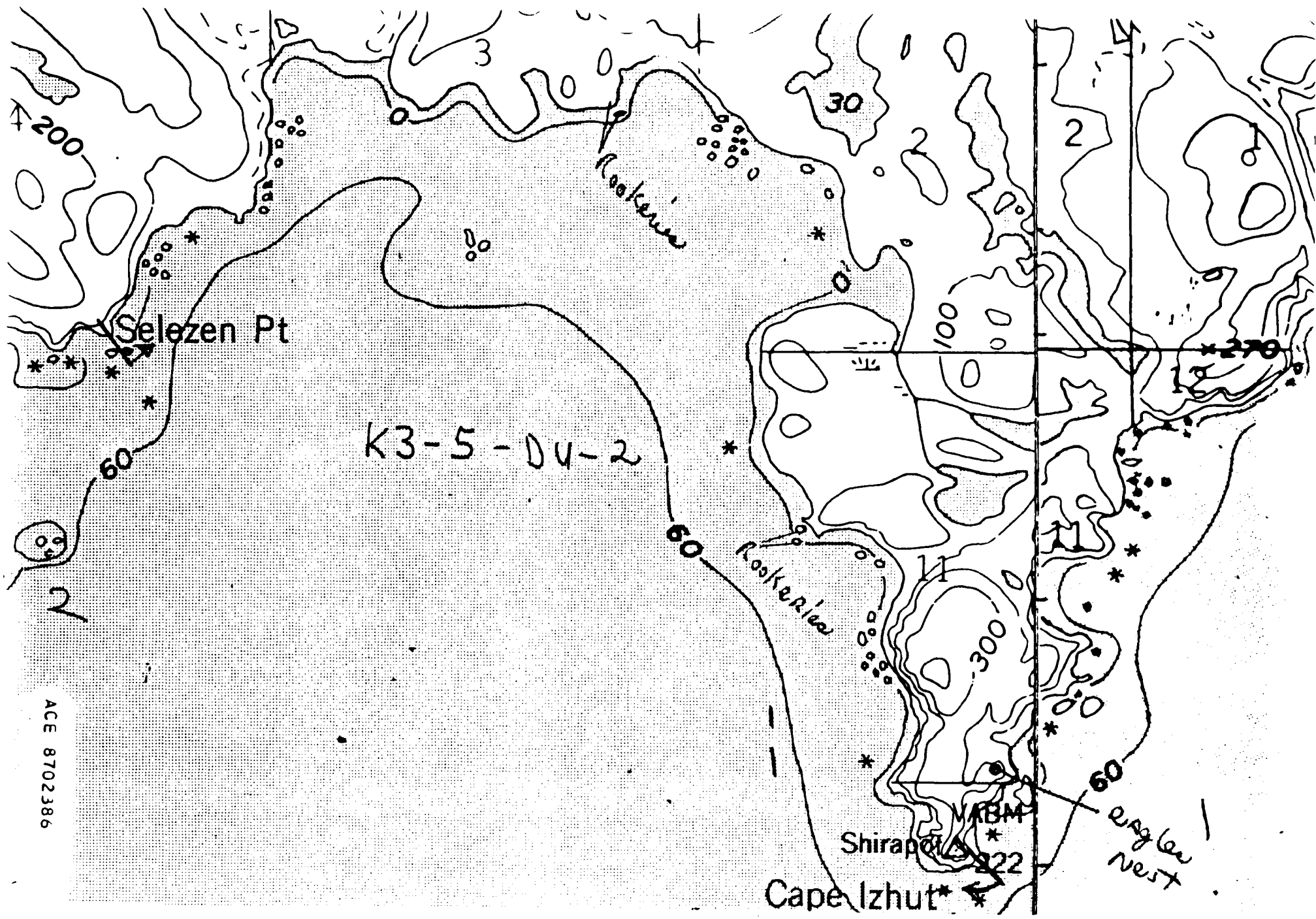
OTHER OBSERVATIONS: _____

CLEANUP PRECAUTIONS: None - no oil visible

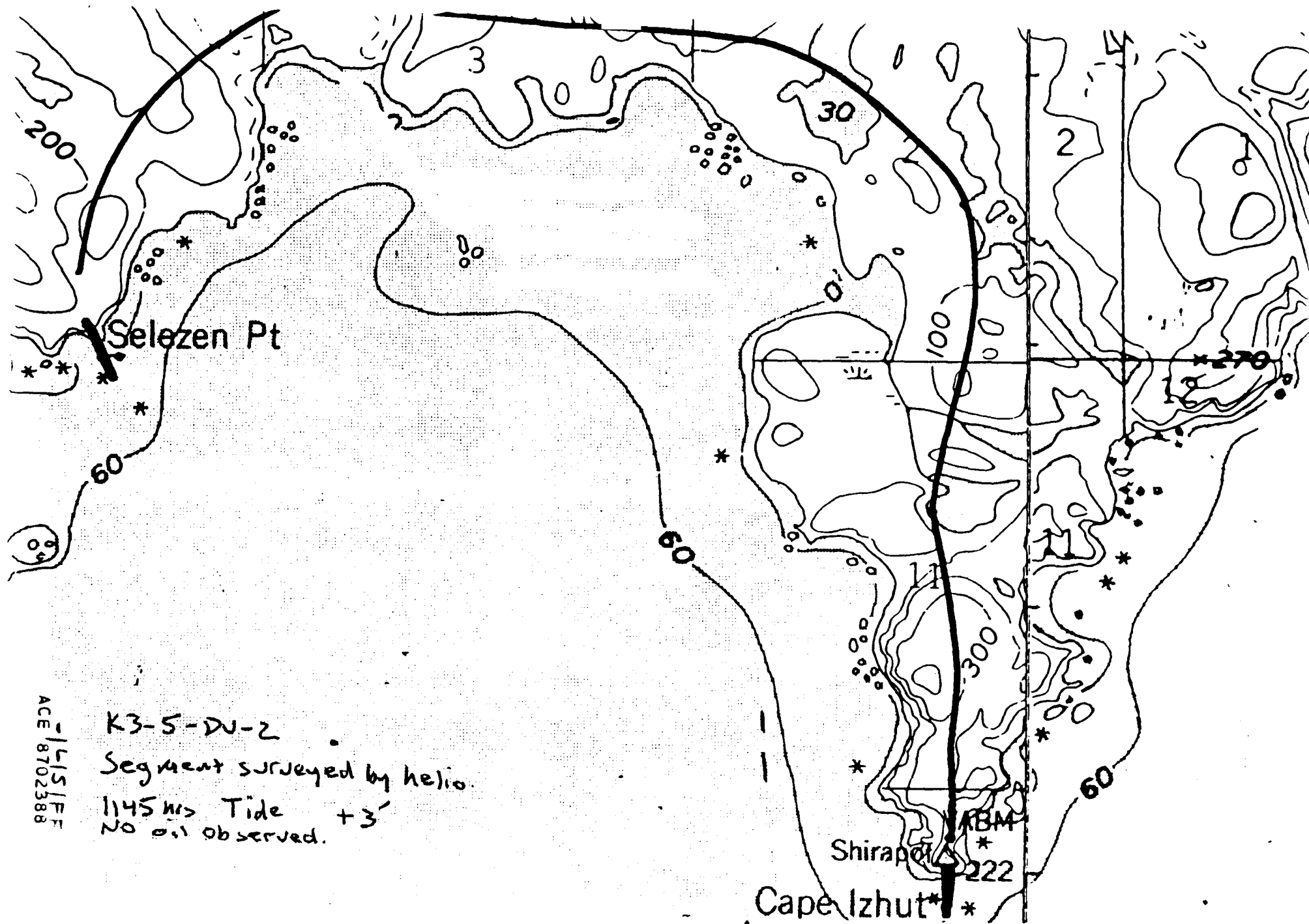
MAMMALS: Otters _____ Harbor Seals _____ Sea Lions _____ Whales _____
 Other _____

BIRDS: Eagles & nest, Ducks, Cormorants

GENERAL OBSERVATIONS: Intertidal zone generally poor in biota due to steepness of beach slope (usually vertical).



ACE 8702386



ACE 8702388
-1415/FF

K3-5-DU-2

Segment surveyed by helio.

1145 hrs Tide +3'

No obs observed.

KODIAK SCAT
K3-6

COMPLETE

JAN 03 1990

ACE 8643514

(version 6/04/89)

SHORELINE PRE-CLEANUP ASSESSMENT BLOCK REPORT

Block (see enclosed map): K3-6

Includes Shoreline Segments: DU-3

Location: Cape Kostromitinof to Selezen Point

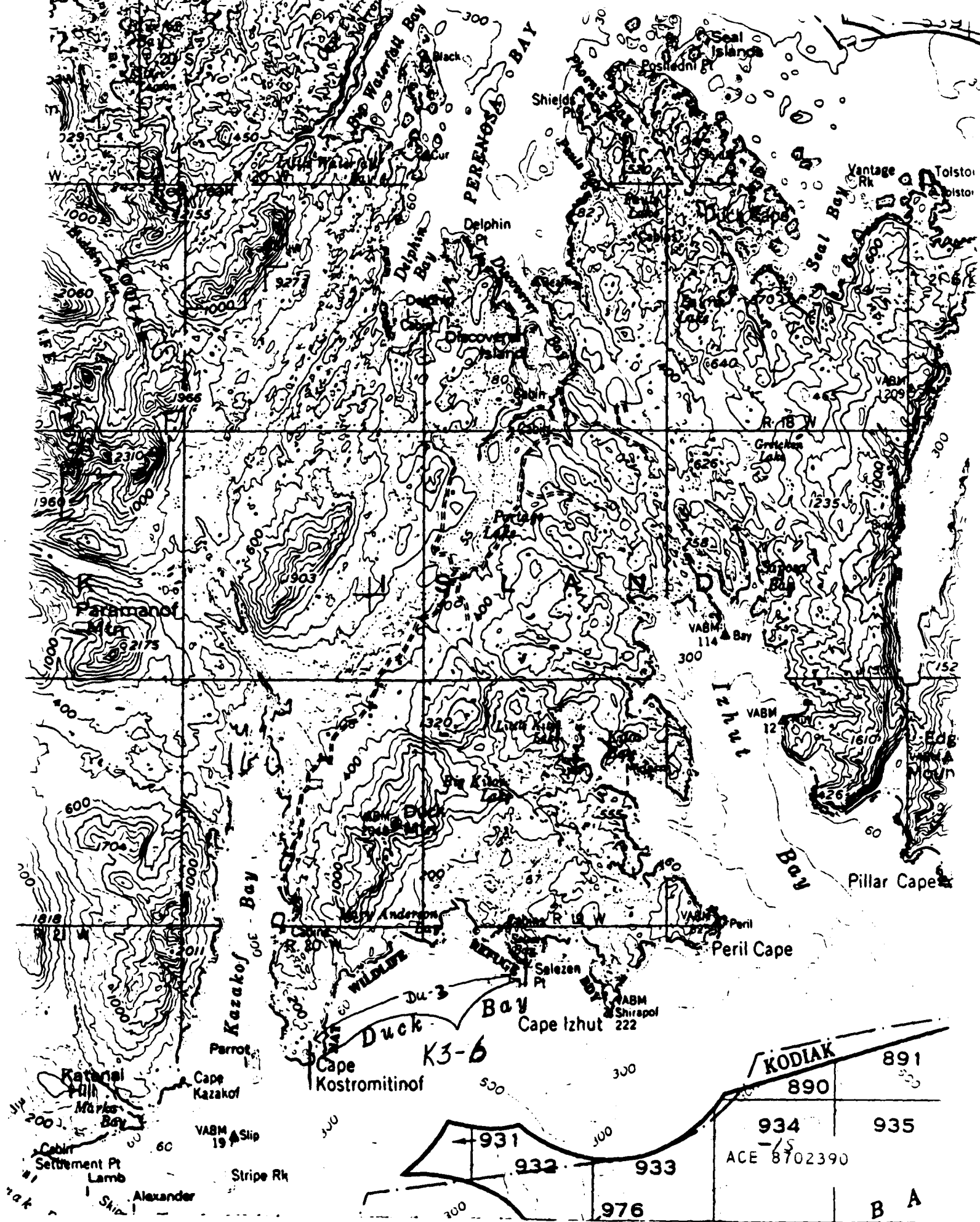
Submitted: _____ Date: _____
(for Exxon)

FOSC Approval: _____ Date: _____

The cleanup procedures identified in the Shoreline Cleanup Program are recommended. Exxon and other field personnel are encouraged to suggest innovations and productivity enhancements to the OSC's on-scene representative. Requirements for safety and the protection of cultural material must be observed.

CC: KISCC

T/F/S/P
ACE 8702389



(version 5/02/89)

SHORELINE CLEANUP PROGRAM

DATE 7/16/89

SHORELINE SEGMENT K3-6-DU-3

LOCATION: (see enclosed map) Cape Kostromitinof to Selezen
Point

ADEC NO. K3 SHORELINE ASSESSMENT DATE: 7/16/89

Recommended Cleanup Activity(ies):

-Manual removal of mousse patties (see note map #1).

Priorities/ Considerations: Class 5-A

-Boat access may be restricted to calm days.

Ecological Constraints (from site survey):

Archeological Constraints (from site survey):

-Inspection by an archaeological monitor is required while
cleanup is conducted.

-If heretofore undiscovered cultural materials are uncovered
during cleanup, contact Exxon's Archaeological Field Dir-
ector and take actions prescribed in the Operational Guide-
lines for Shoreline Cleanup dated 4/21/89 as amended.

A. David M. Mahan
State Historic Preservation Officer *

Date: 7/30/89

EXXON: _____

Date: _____

FOSC: _____

Date: _____

*Signature required to satisfy stipulations in Alaska DNR land
use permits for tide and submerged lands.

ACE 8702391

SHORELINE OIL EVALUATION

Date: 7/16/89 / Time: 1200
 Surveyed From: Foot/Boat/Helio/Plane

Observer: M. Acton
 Weather: Sun/Cloud/Rain/Snow/Fog

LOCATION

Location: Cape Kestromitinaf to Selezen Point Segment ID: K3-6-DU-3
 Segment Length: 13 Km m. Access: Vehicle/Boat/Barge/Helio/Float Plane
 Access Restrictions: Boat access during low energy periods.

SHORELINE

Shoreline Type: SPI/BEA/COV/HLD/STRT Slope: Lo/Med/Hi/Vert
 Wave Exposure: High/Med/Low
 Sediment: B 20 % / C 20 % / P % / G&S 10 % / M % / R 40 %

OIL

Avg. Degree of Oiling: HEAVY / MODERATE / LIGHT / VERY LIGHT / NONE OBSERVED
 Area of Impact: SU/SP/H/M/L

OIL DISTRIBUTION

Continuous % of Segment _____ SU/SP/H/M/L H/M/L/VL
 Sporadic % of Segment 10 SU/SP/H/M/L H/M/L/VL

Total	Length(m)	Width(m)	Thickness >1cm:	
Very light:	<u>100</u>	<u>5</u>	_____ cm	SU/SP/H/M/L
Light:	_____	_____	Penetration/Rework: _____ cm	SU/SP/H/M/L
Moderate:	_____	_____	Burial Depth: _____ cm	SU/SP/H/M/L
Heavy:	_____	_____		

Mobilization Potential: High/Medium/Low

Drift Debris Oiled? Y/N Amount: H/M/L/VL SU/SP/H/M/L Type: _____

OIL MORPHOLOGY

Pooled Oil: _____ %		SU/SP/H/M/L
"Free" Oil: _____ %		SU/SP/H/M/L
Splattered: _____ %	H/M/L/VL	SU/SP/H/M/L
Coated: _____ %	H/M/L/VL	SU/SP/H/M/L
Pancakes/Balls: <u>100</u> %		SU/SP/H/M/L

Preliminary Cleanup Est.

Total TYPE A: 100 m
 Total TYPE B: _____ m
 Total TYPE A/B: _____ m

OIL WEATHERING

Fresh: _____ %	SU/SP/H/M/L
Mousse: _____ %	SU/SP/H/M/L
Weathered Mousse: <u>100</u> %	SU/SP/H/M/L
Asphalt Mousse: _____ %	SU/SP/H/M/L
Tar: _____ %	SU/SP/H/M/L

COMMENTS

Segment surveyed by helio. Limited helio access.
 See segment maps and Note Map for comments.

DOCUMENTATION:

Map Aerial photo marking segment boundaries See Attached Map

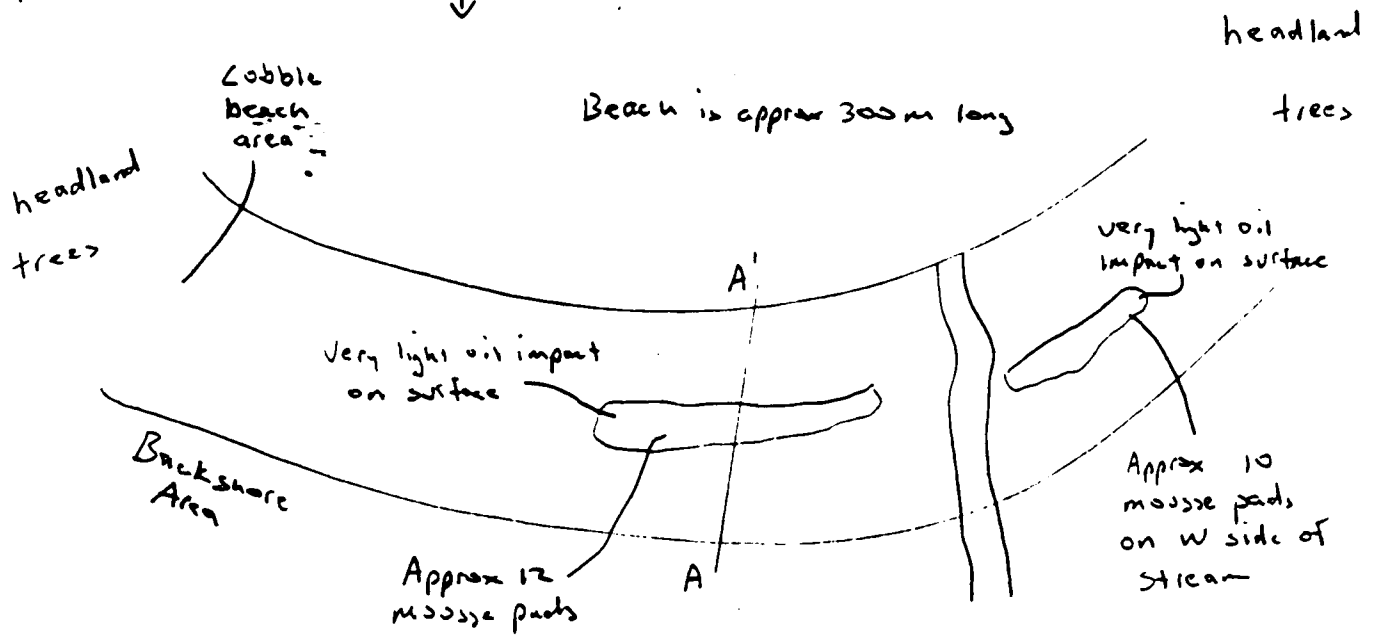
VTR: Y/N Tape Number(s) _____

Photography: Y/N Roll Number(s) _____

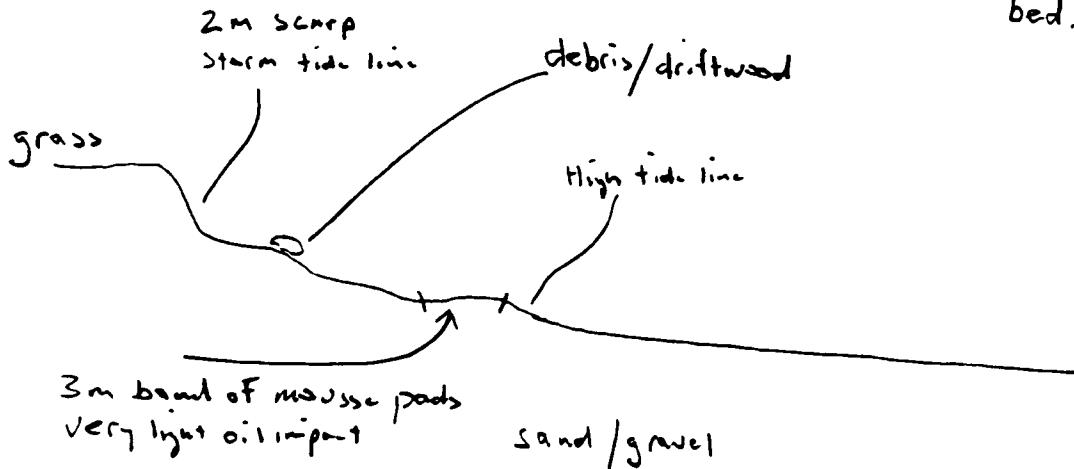
Sample Numbers Collected: _____

ACE 8702393

N
↓



No oil observed in stream or on stream-bed.



A

A'

A-A' 80m

13 A

Peril Cape and N.W. - no good landing

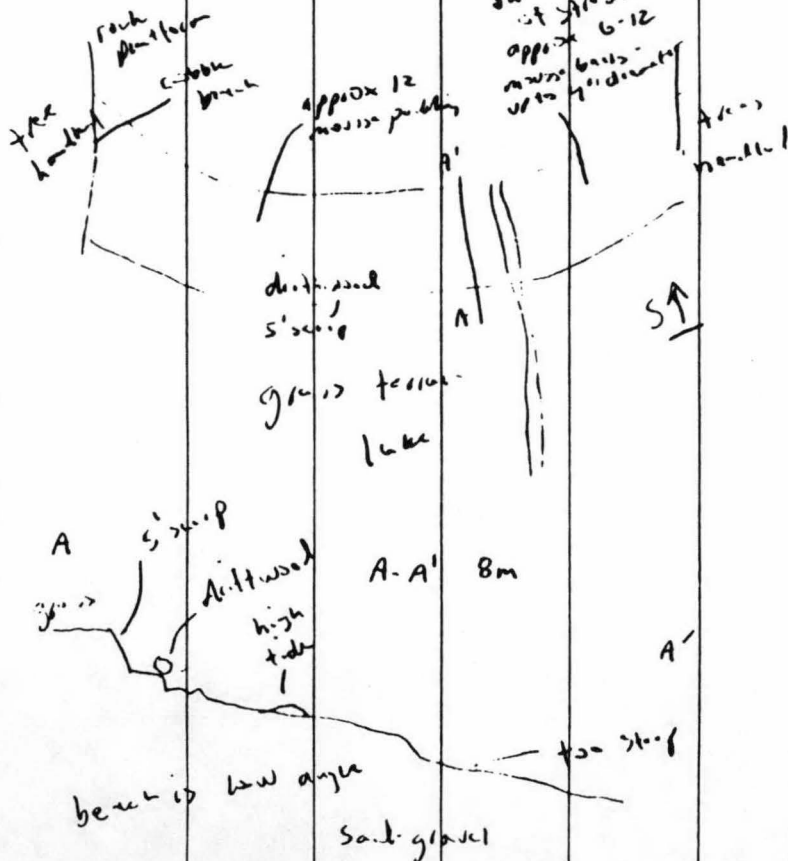
Dried toadstools SE of cabins in Selezen Bay

Selezen Bay - no oil beyond

1200 small packet beach - Lupton return for fuel
left us for lunch - see 1:50 map

1015

1020



14

very light degree of oil

mouse puffs at M-H tide line

incoming tide moving mouse puffs up beach

1335 set down in Kazakof Bay

K

1 small packet beach $\frac{25}{75}$ w.d.
100m long

all sand

10' backshore embankment

some driftwood - no spl-7

~~some driftwood~~

few 6-8 mouse puffs at head of beach

V.H. oil

1-2" droplets

MAZ-21 N

22 S

walked long way packet beach

back at 1515

7/17 Mon

Lift off from Koduk 0800

Destination - Shuyuk Bay

Colsher Pt - start 0840

Acton Penn

Gillipina Gillpin

coarse / banded beach,

ACE 8702395

ECOLOGICAL EVALUATION

LOCATION: Kodiak SITE: Afognak-Duck Bay OBSERVER: G. Penn
 LOCATION PREFIX: K3-6 SEG. NO.: D4-3 LENGTH: 13 km (M)
 DATE: 07/16/89 TIME (HHMM): 1200 TIDE HT.: 1 m (M)
 OILED ZONE: Splash High Medium Low None
 SUBSTRATUM: Rocks Boulder Cobble Gravel Sand Mud

LIVE BIOTA

Fucus (algae): Patchy Y/N Contin. Y/N Dense Y/N Sparse Y/N None Y/N

Mytilus (Mussels): Patchy Y/N Contin. Y/N Dense Y/N Sparse Y/N None Y/N
unobserved

Balanus (Barnacles): Patchy Y/N Contin. Y/N Dense Y/N Sparse Y/N None Y/N

Littorina

Patchy Y/N Contin. Y/N Dense Y/N Sparse Y/N None Y/N

unobserved

Limpets: Patchy Y/N Contin. Y/N Dense Y/N Sparse Y/N None Y/N

unobserved

OTHER OBSERVATIONS: _____

CLEANUP PRECAUTIONS: None - intertidal biota generally below cleanup area.

MAMMALS: Otters _____ Harbor Seals _____ Sea Lions _____ Whales _____
 Other _____

BIRDS: Eagles + Nest

GENERAL OBSERVATIONS: Intertidal zone generally poor in Biota due to steepness of beach slope (usually vertical)

(version of 4/29/89)

CULTURAL RESOURCE EVALUATION

Date July 16 '89 Location Dick Bay Site Aogalak Is.

Location Prefix K-3-6-LU Segment # 3 Length 13 km

Survey Method:

Air X (A - indicate on map) Boat _____ (A - indicate on map)

Ground X (G - indicate on map)

Known cultural resources (AHRS #) AFG-24,25,50 Data Source D.W. Clark

Oil conditions/beach visibility clean

Width of beach zone surveyed 40 m Tree fringe surveyed 15m

Cultural resources observed in beach zone (AHRS code) 0

Cultural resources observed in tree fringe (AHRS code) 0

General observations justifying survey method and segment's site probability:

Shore Profile steep headlands and wide gravel beaches

Fresh Water Sources streams

Sea Exposure generally open exposure

Access/Safety possible access to some beaches

Probability of undiscovered sites in beach zone (circle one) 1 2 3 4 5
Monitoring during cleanup needed yes / no insufficient grounds to support recommendation Collection yes / no no 7-24-89

Photos: Color Roll # _____ Frames _____

B/W Roll # _____ Frames _____

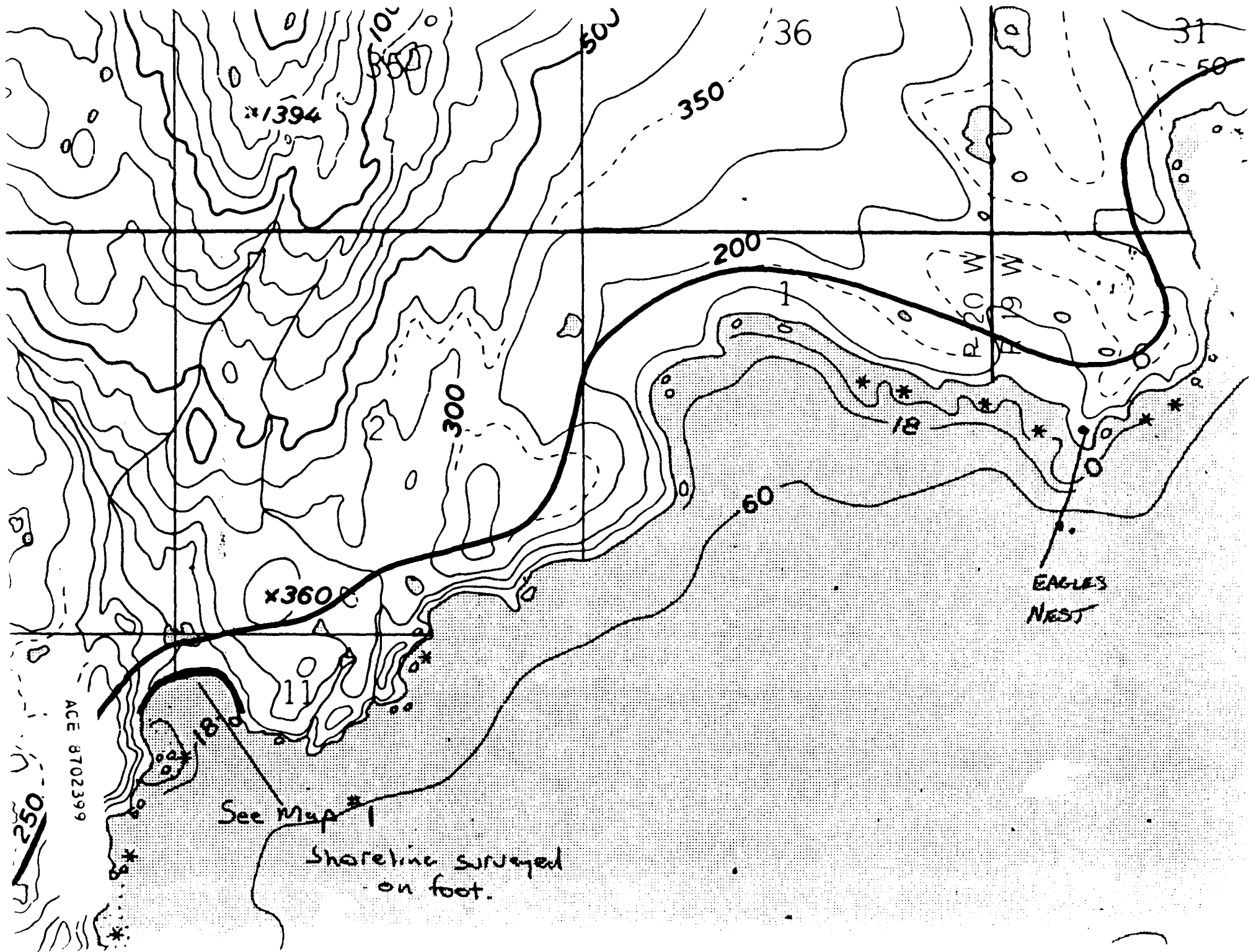
Observer(s) Ludwig

Time survey started 1145 Time survey ended 1345

Cultural resource considerations/restraints:

Only one of the beaches was surveyed by Fort. If cleanup becomes necessary on any of the other beaches, an archaeological survey must first be conducted.

ACE 8702397



x394

x360

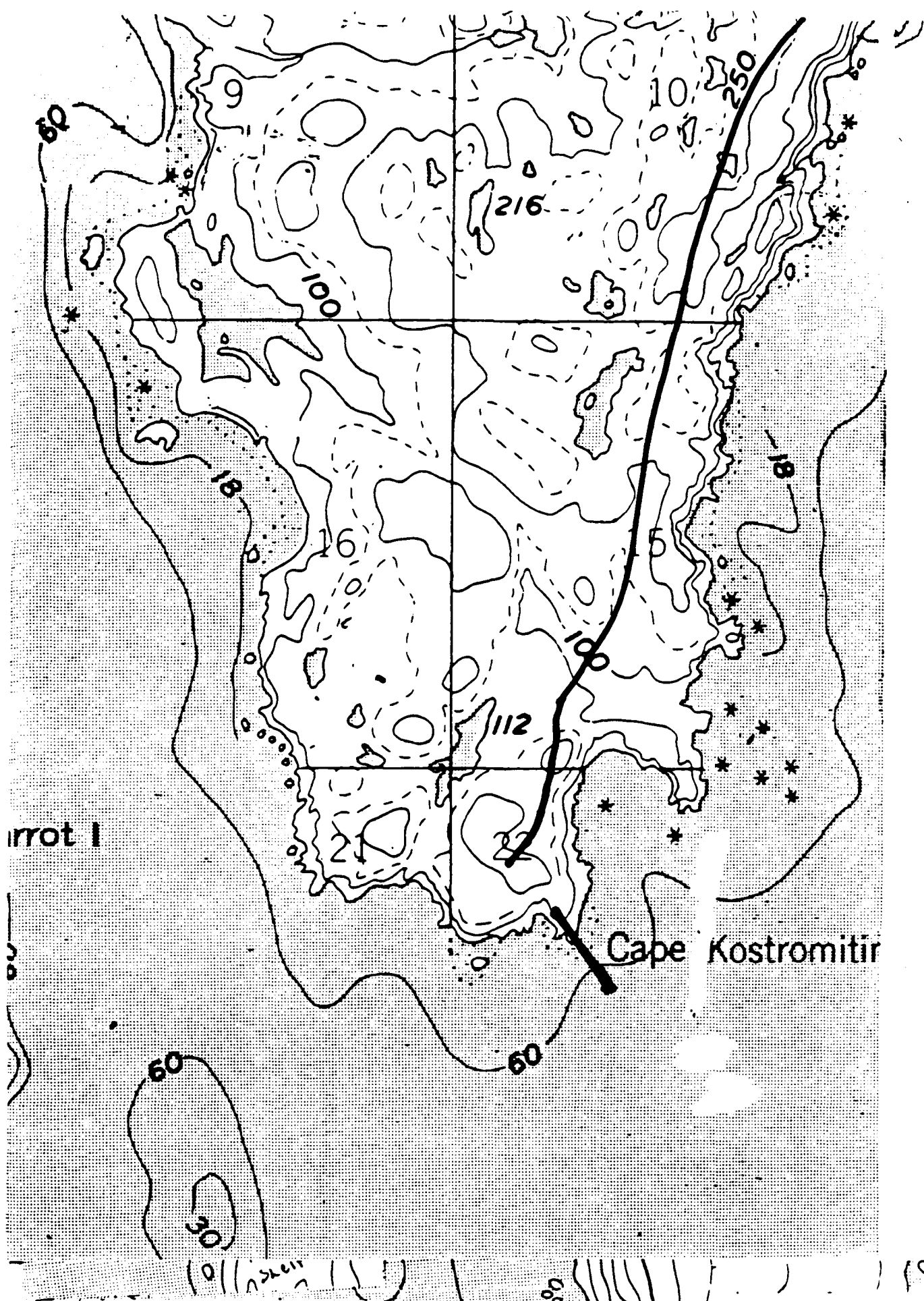
ACE 8702399

See Map #1

Shoreline surveyed
on foot.

EAGLES
NEST

P 20 W
P 19 W



517 3000
- KODIAK SCAT
- K3-7

- 8

COMPLETE JAN 23 1990

ACE 7963934

ACE 8707341 +1F|FF

(version 6/04/89)

SHORELINE PRE-CLEANUP ASSESSMENT BLOCK REPORT

Block (see enclosed map): K3-7

Includes Shoreline Segments: KZ-1

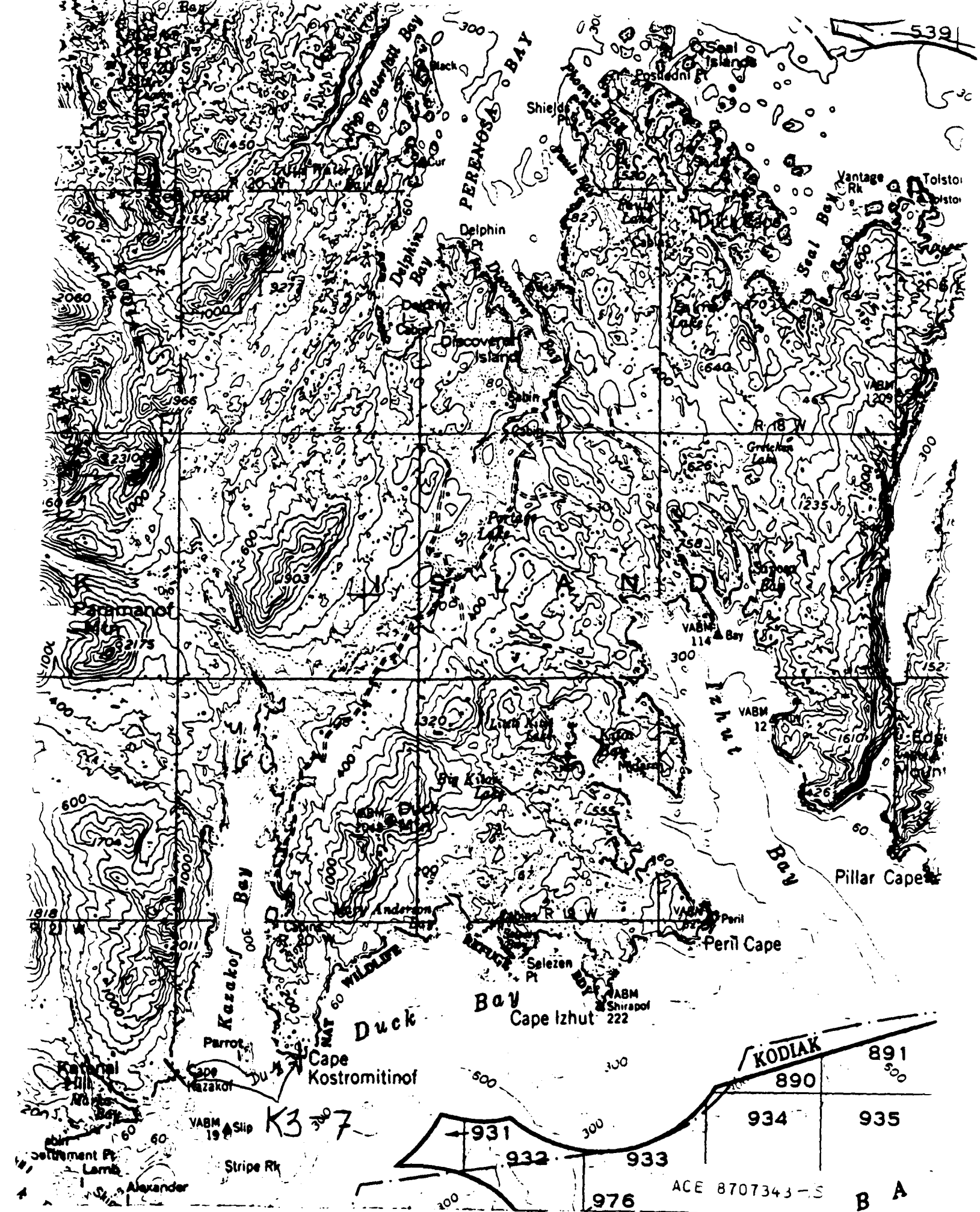
Location: Kazakof Bay

Submitted: _____ Date: _____
(for Exxon)

FOSC Approval: _____ Date: _____

The cleanup procedures identified in the Shoreline Cleanup Program are recommended. Exxon and other field personnel are encouraged to suggest innovations and productivity enhancements to the OSC's on-scene representative. Requirements for safety and the protection of cultural material must be observed.

CC: KISCC



(version 5/02/89)

SHORELINE CLEANUP PROGRAM

DATE 7/16/89

SHORELINE SEGMENT K3-7-KZ-1

LOCATION: (see enclosed map) Kazakof Bay, Cape Kazakof to Cape
Kostromitinof

ADEC NO. _____ SHORELINE ASSESSMENT DATE: 7/16/89

Recommended Cleanup Activity(ies):

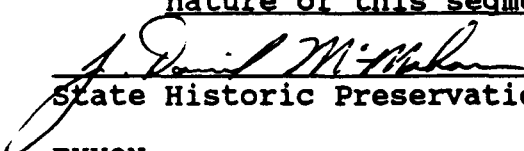
-No cleanup recommended due to very light oiling and the potential for cleanup to incur a greater impact than the oil itself. Subject to FOSC reassessment at a later date.

Priorities/Considerations: Class 5-A

Ecological Constraints (from site survey):

Archaeological Constraints (from site survey):

-If cleanup is planned, a full archaeological assessment must be conducted due to the archaeologically sensitive nature of this segment.


State Historic Preservation Officer *

Date: 7/29/89

EXXON: _____

Date: _____

FOSC: _____

Date: _____

*Signature required to satisfy stipulations in Alaska DNR land use permits for tide and submerged lands.

SHORELINE OIL EVALUATION

Date: 7/10/89 / Time: 1345
 Surveyed From: Foot/Boat/Helio/Plane

Observer: M. Acton
 Weather: Sun/Cloud/Rain/Snow/Fog

LOCATION

Location: Kazakof Bay, Cape Kazakof to Cape Kontomirnof Segment ID: K2-6-K2-1
 Segment Length: 35 km m. Access: Vehicle/Boat/Barge/Helio/Float Plane
 Access Restrictions: Limited helio access

SHORELINE

Shoreline Type: SPI/SEA/COV/HLD/STRT Slope: Lo/Med/Hi/Ver
 Wave Exposure: High/Med/Low
 Sediment: B 15 % / C % / P % / G&S 15 % / M % / R 70 %

OIL

Avg. Degree of Oiling: HEAVY / MODERATE / LIGHT / VERY LIGHT / NONE OBSERVED
 Area of Impact: SU/SP/H/M/L

OIL DISTRIBUTION

Continuous % of Segment SU/SP/H/M/L H/M/L/VL
 Sporadic % of Segment SU/SP/H/M/L H/M/L/VL

Total	Length(m)	Width(m)	Thickness >1cm:	cm	SU/SP/H/M/L
Very light:	<u>25</u>	<u>3</u>	Penetration/Rework:	<u> </u> cm	SU/SP/H/M/L
Light:	<u> </u>	<u> </u>	Burial Depth:	<u> </u> cm	SU/SP/H/M/L
Moderate:	<u> </u>	<u> </u>			
Heavy:	<u> </u>	<u> </u>			

Mobilization Potential: High/Medium/Low

Shift Debris Oiled? Y/N Amount: H/M/L/VL SU/SP/H/M/L Type:

OIL MORPHOLOGY

Pooled Oil: % SU/SP/H/M/L
 "Free" Oil: % SU/SP/H/M/L
 Splattered: % H/M/L/VL SU/SP/H/M/L
 Coated: % H/M/L/VL SU/SP/H/M/L
 Pancakes/Balls: 100 % SU/SP/H/M/L

Preliminary Cleanup Est.

Total TYPE A: m
 Total TYPE B: m
 Total TYPE A/B: m

OIL WEATHERING

Fresh: % SU/SP/H/M/L
 Mousse: % SU/SP/H/M/L
 Weathered Mousse: 100 % SU/SP/H/M/L
 Asphalt Mousse: % SU/SP/H/M/L
 Tar: % SU/SP/H/M/L

COMMENTS

Shoreline is primarily rock cliff/rock platform with few small pocket beaches.
 Segment surveyed by helio, very limited helio landing access near shoreline.
 Very light oil observed at one of the foot survey locations.
 See segment maps for notes.

DOCUMENTATION:

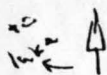
Map/Aerial photo marking segment boundaries See Attached Map

VTR: Y/N Tape Number(s) _____

Photography: Y/N Roll Number(s) MA 2

Sample Numbers Collected: _____

13



Peril caps and N.M. - no good landing
Direct to town SE of cabins in Seleen Bay
Seleen Bay - no oil observed

1200 small packet beach - capt's return for fuel
left us for lunch - see 1.1500 up

1015
1020

rock platform
tree landing
cabin beach

300m beach
400

approx 12
moose paddies

on N side
approx 6-12
moose paddies
up to 100m

approx
moose

dist. and
s' side

grass terrace
lake



A
S' side
dist. and
high tide

A-A' 8m

A'

beach is low angle

sand gravel

ACE 8707347

14

very light degree of oil
moose paddies at M-H tide line
incoming tide moving moose paddies up beach

1335 set down in Kazakof Bay

K

small packet beach $\frac{25}{75}$ width
100m long

all mud

10' backshore embankment

some driftwood - no oil

~~no oil~~

few 6-8 moose bills at head of beach

V.H. oil

1-2' diameter

MAZ-21 N

22 S

Washed longer or packet beach

beach 1515

7/17 Mon

Lift off from Koduk 0800

Destination - Shuyuk Bay

Corshore Pt - start 0840

Acton Penn

Gillipina Gilpin

corshore/beach beach,

ECOLOGICAL EVALUATION

LOCATION: Kodiak SITE: Afognak-Kazakof Bay OBSERVER: G. P. ...
 LOCATION PREFIX: K3-7 SEG. NO.: KZ-1 LENGTH: 35 km (M)
 DATE: 07/16/89 TIME (HHMM): 1345 TIDE HT.: 1.2 (M)

OILED ZONE: Splash High Medium Low None

SUBSTRATUM: Rocks Boulder Cobble Gravel Sand Mud

LIVE BIOTA

Fucus (algae): Patchy Y/N Contin. Y/N Dense Y/N Sparse Y/N None Y/N

Mytilus (Mussels): Patchy Y/N Contin. Y/N Dense Y/N Sparse Y/N None Y/N
unobserved

Balanus (Barnacles): Patchy Y/N Contin. Y/N Dense Y/N Sparse Y/N None Y/N

Littorina

Patchy Y/N Contin. Y/N Dense Y/N Sparse Y/N None Y/N

unobserved

Limpets: Patchy Y/N Contin. Y/N Dense Y/N Sparse Y/N None Y/N

unobserved

OTHER OBSERVATIONS: _____

CLEANUP PRECAUTIONS: None - No cleanup recommended

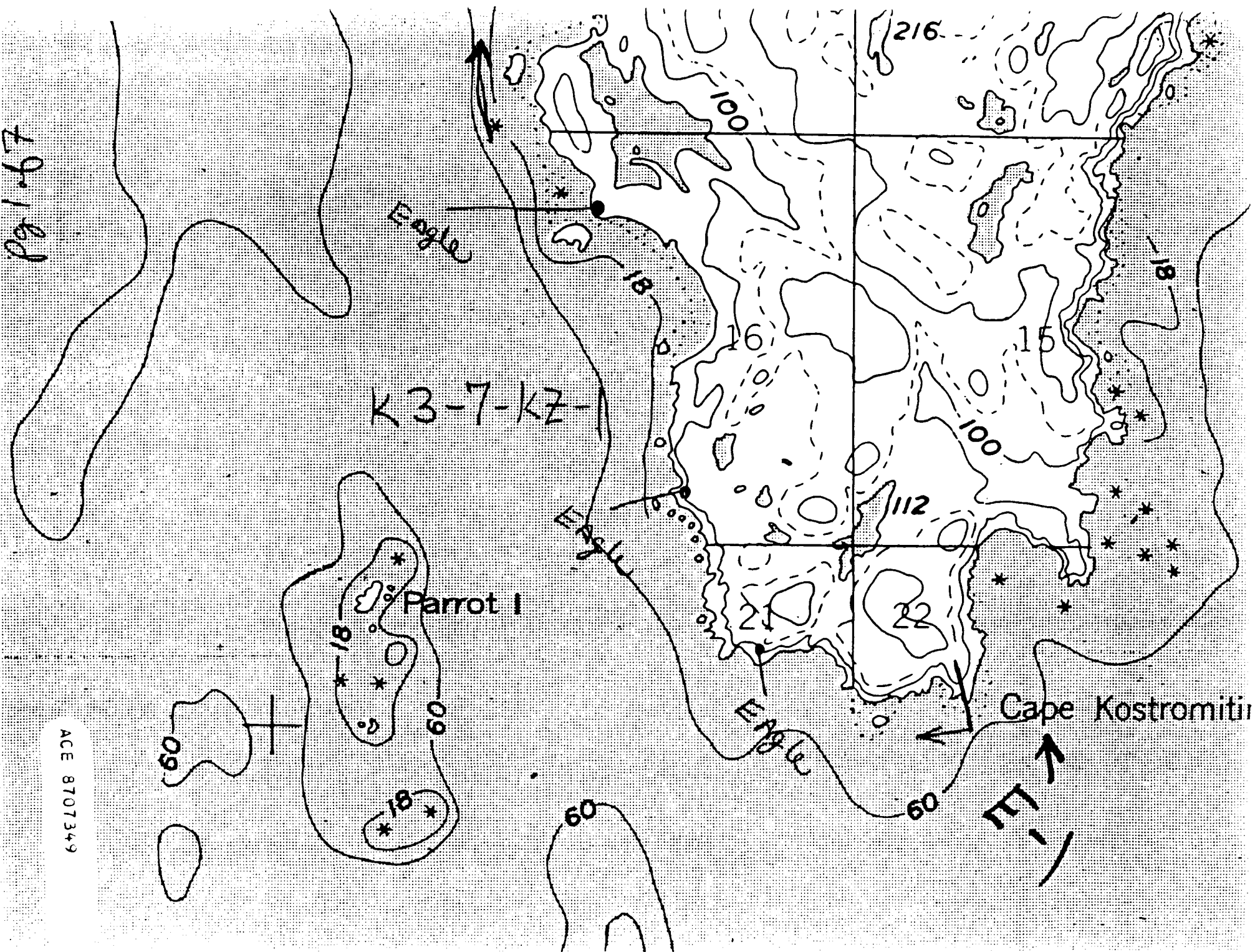
MAMMALS: Otters _____ Harbor Seals _____ Sea Lions _____ Whales _____
 Other _____

BIRDS: Engles + Nest, Gull Rookeries

GENERAL OBSERVATIONS: _____

Pg 1 of 7

ACE 8707349



K3-7-KZ-

Gull
Rookery

Eagle
Nest

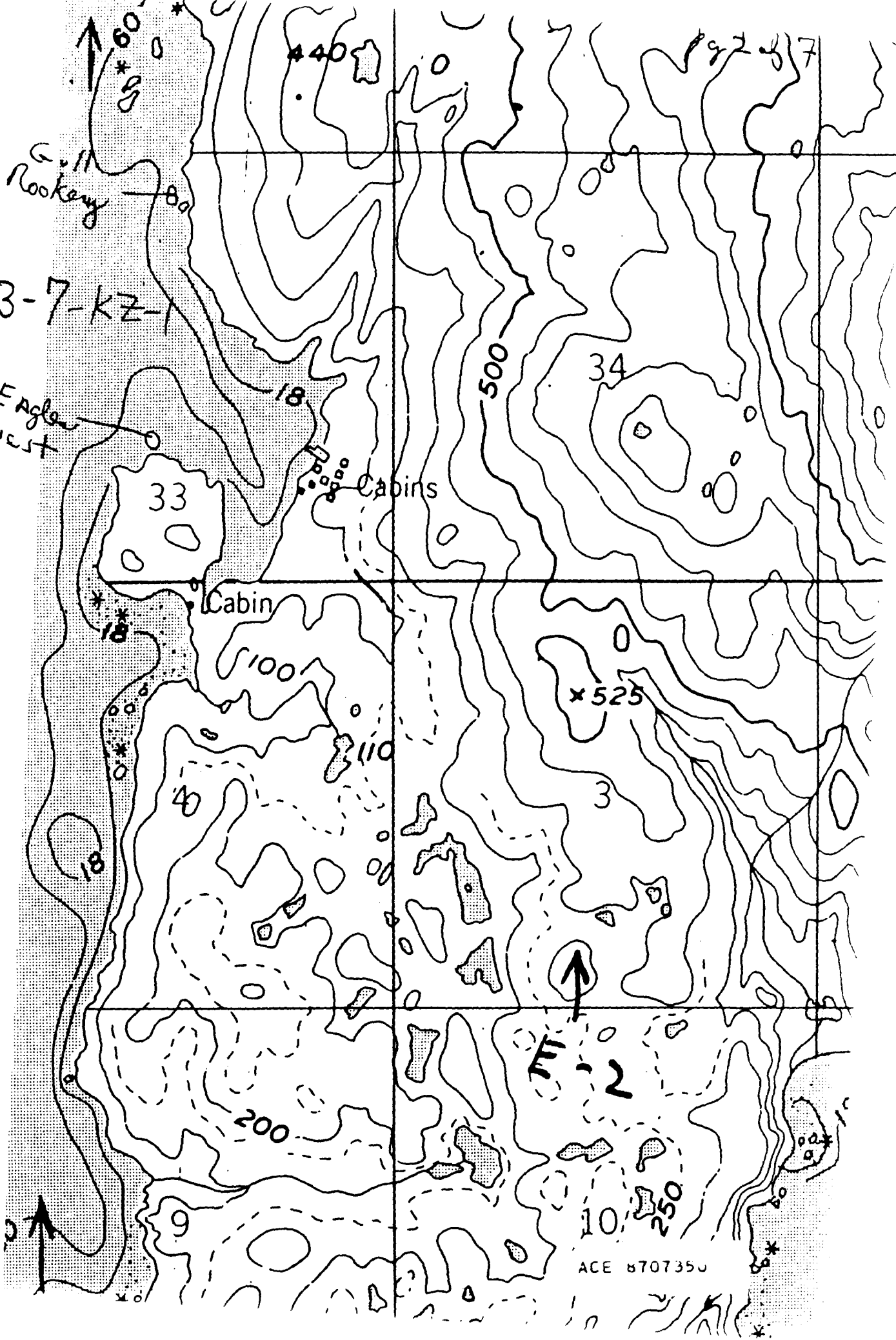
Cabins

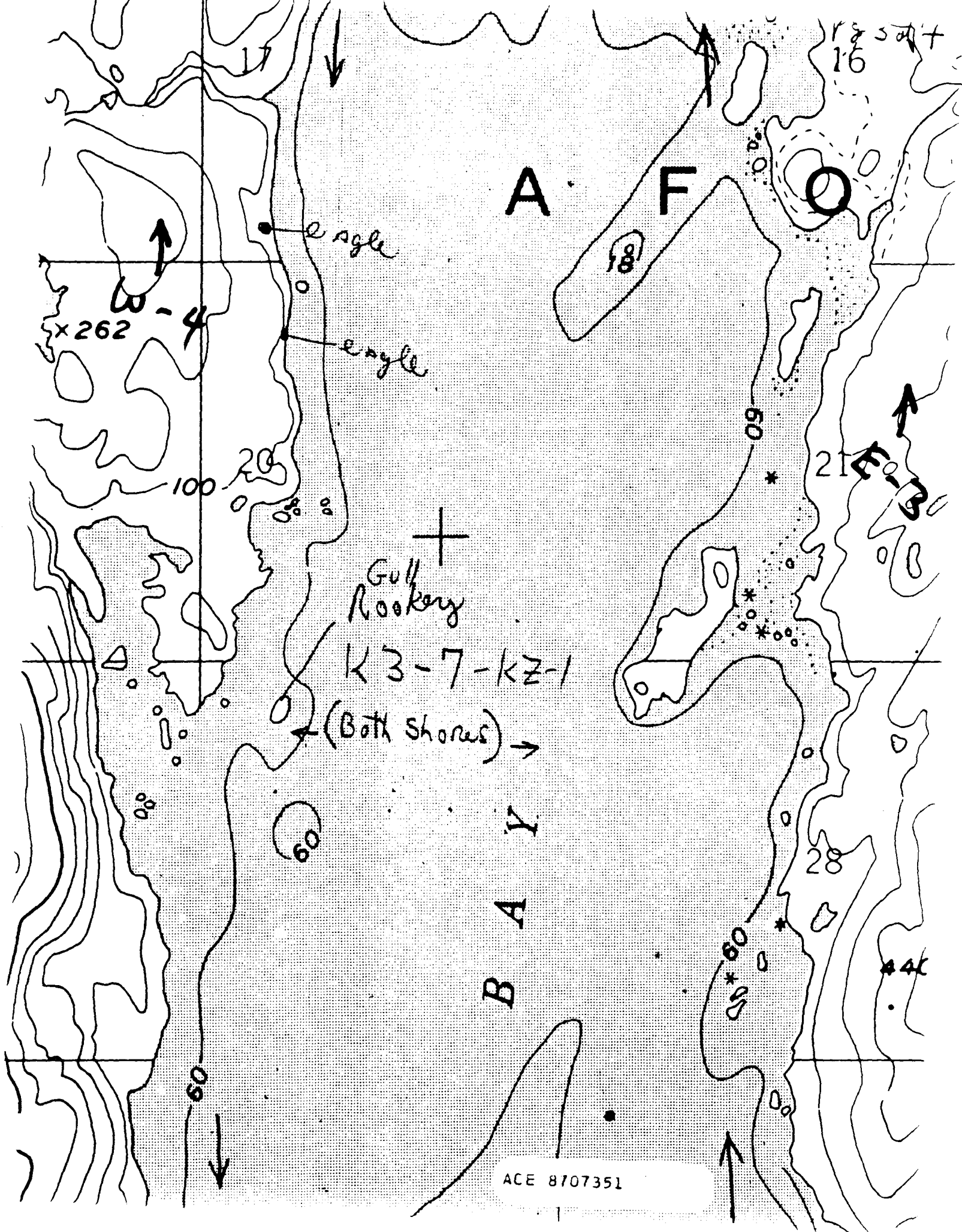
Cabin



2

ACE 8707350





*792

124.67

C H U G A C H

50
100
W →

4

8

50

18

100
E →

18

*292

*232

K3-7-KZ-1

A F O G

ACE 8707352

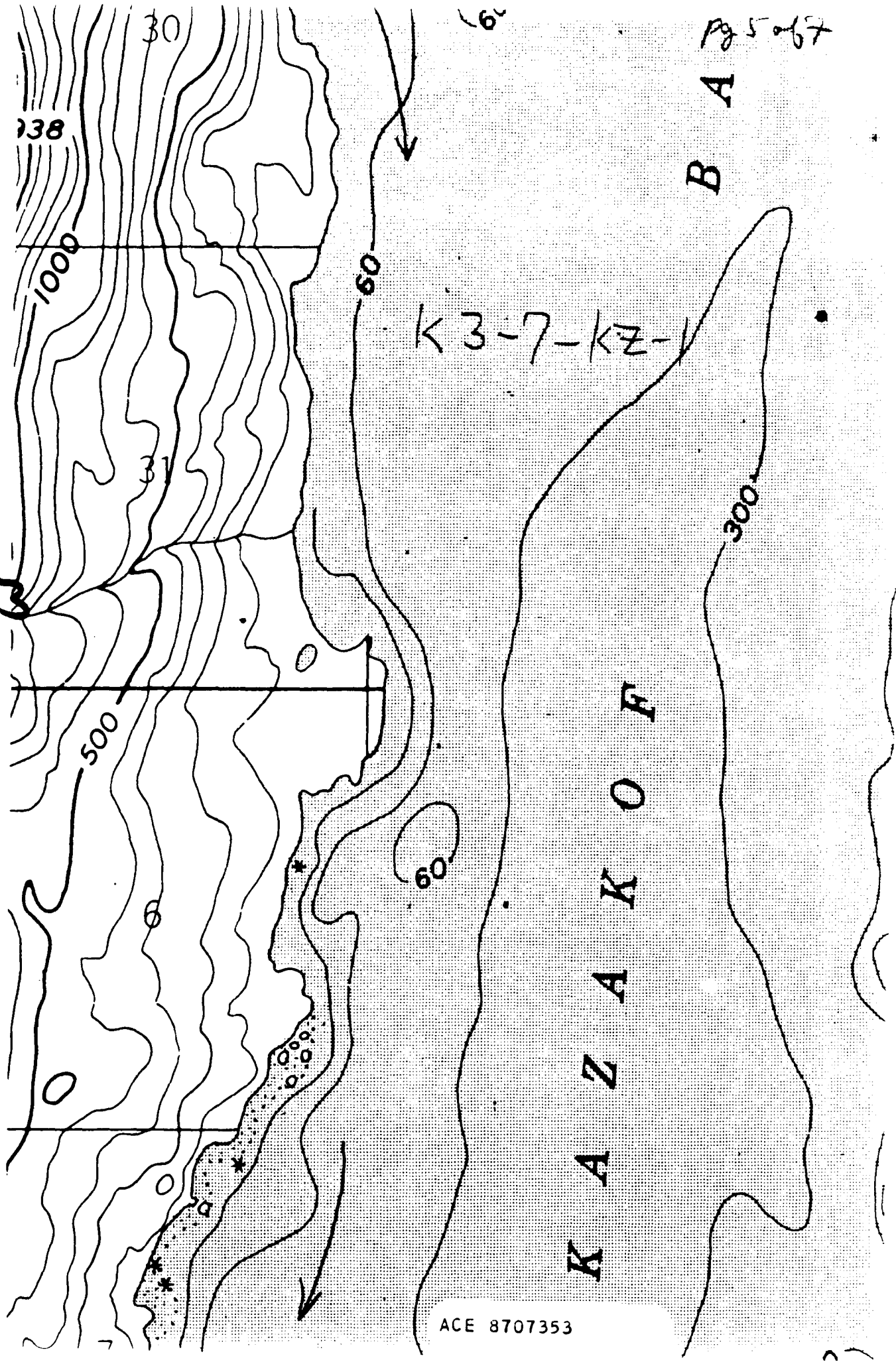
(6)

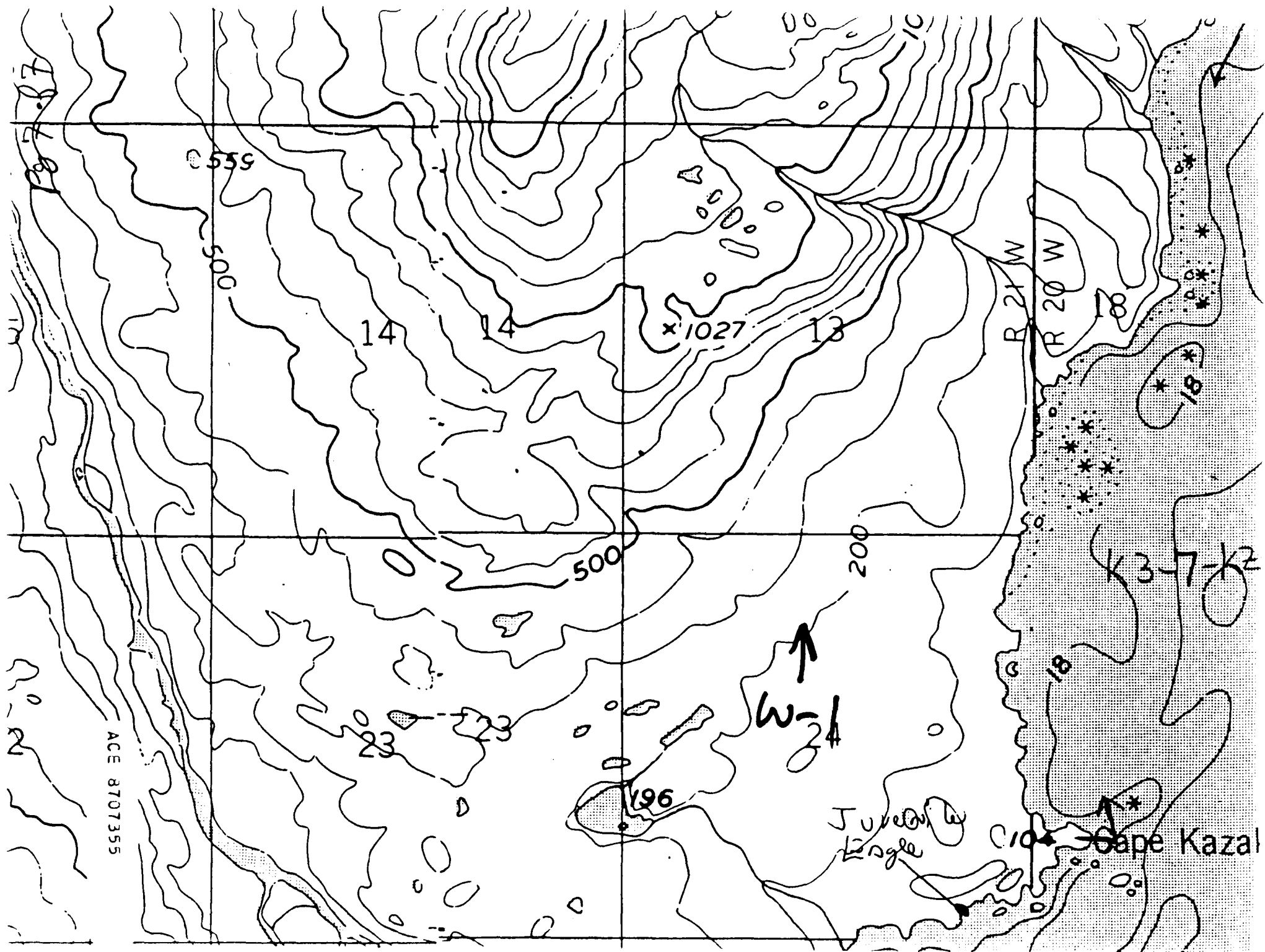
B A

K3-7-KZ-1

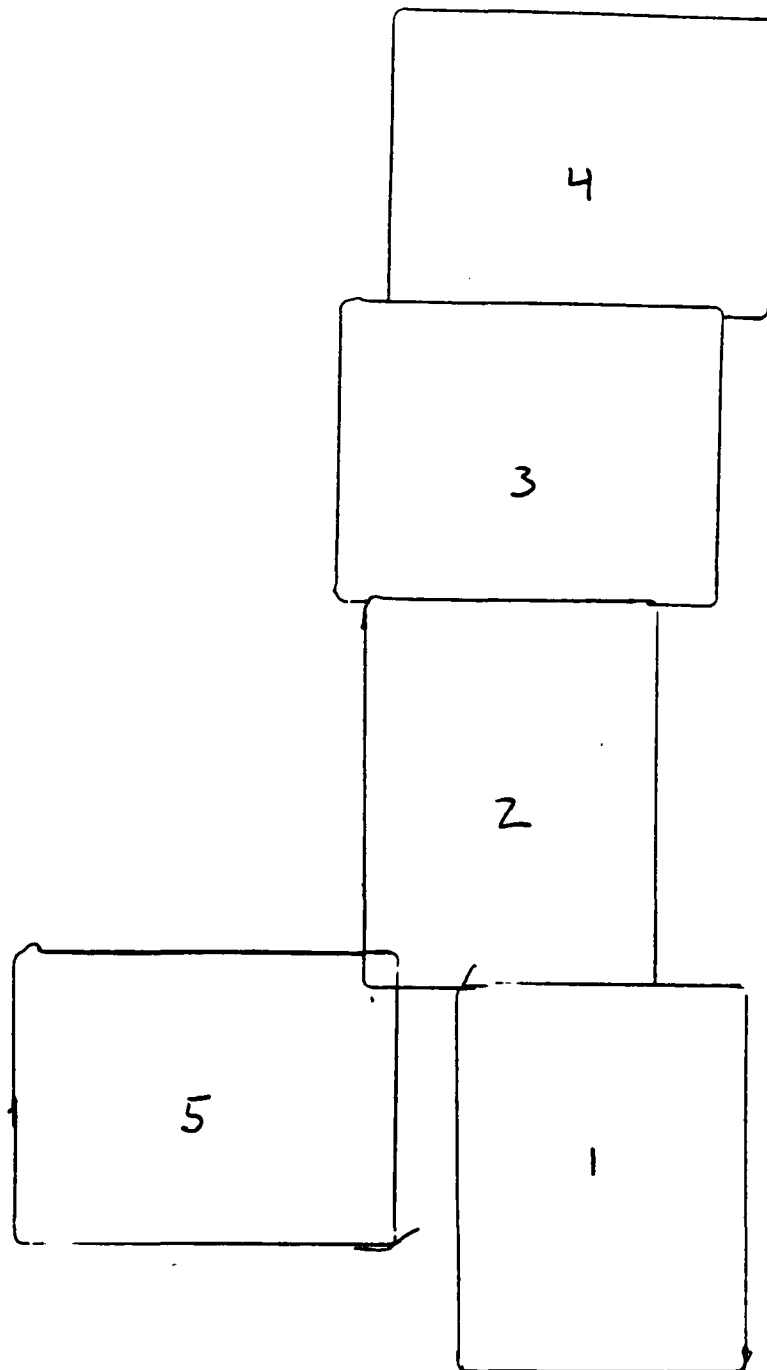
K A Z A K O F

W-3 ↑





Segment Areas



Surveyed on foot
Very light oil impact
observed.

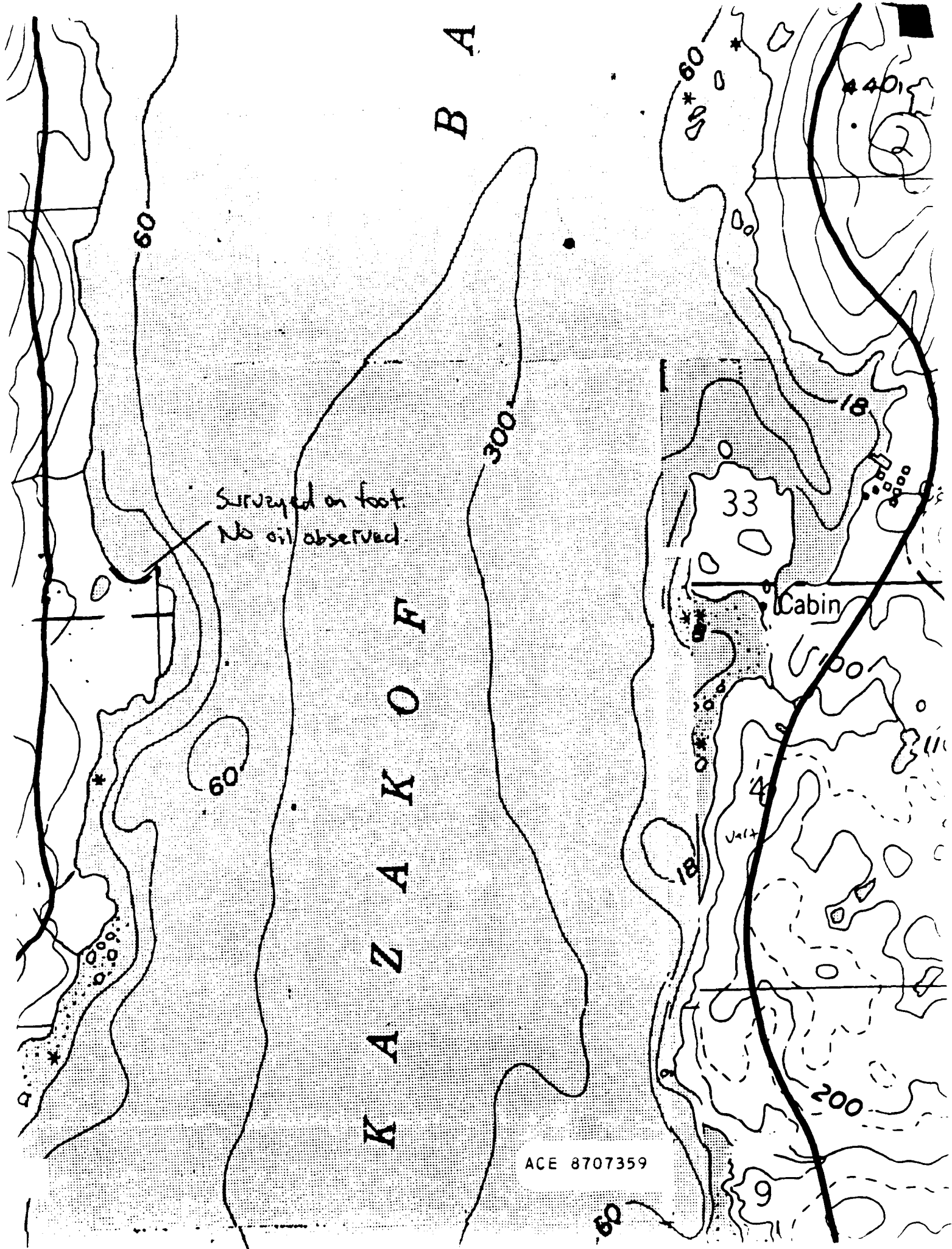
3-6-K2-1

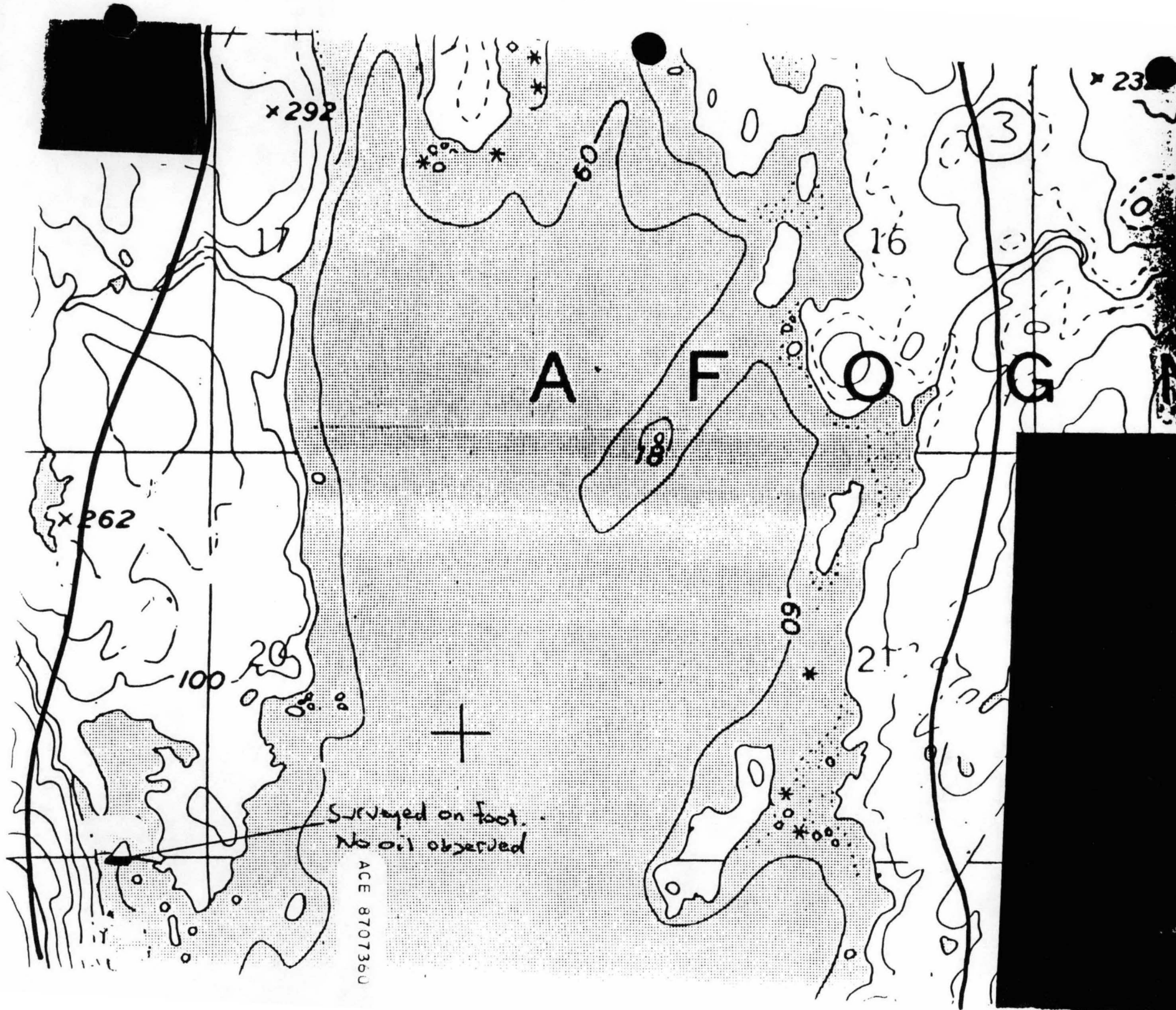
1345 hrs Tide +4'

Segment surveyed by helio
Limited helio landing access

Parrot I

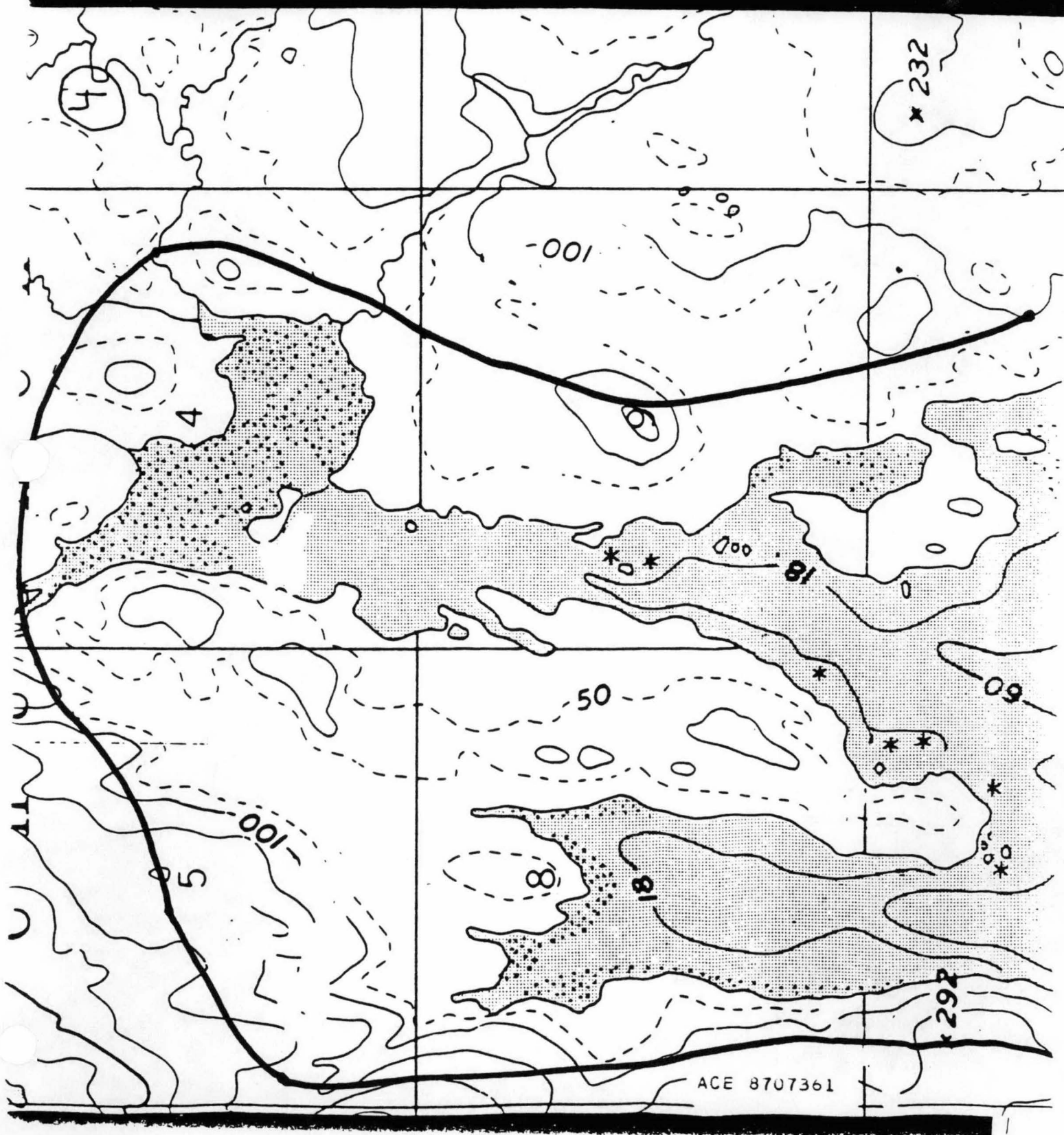
Cape Kistror

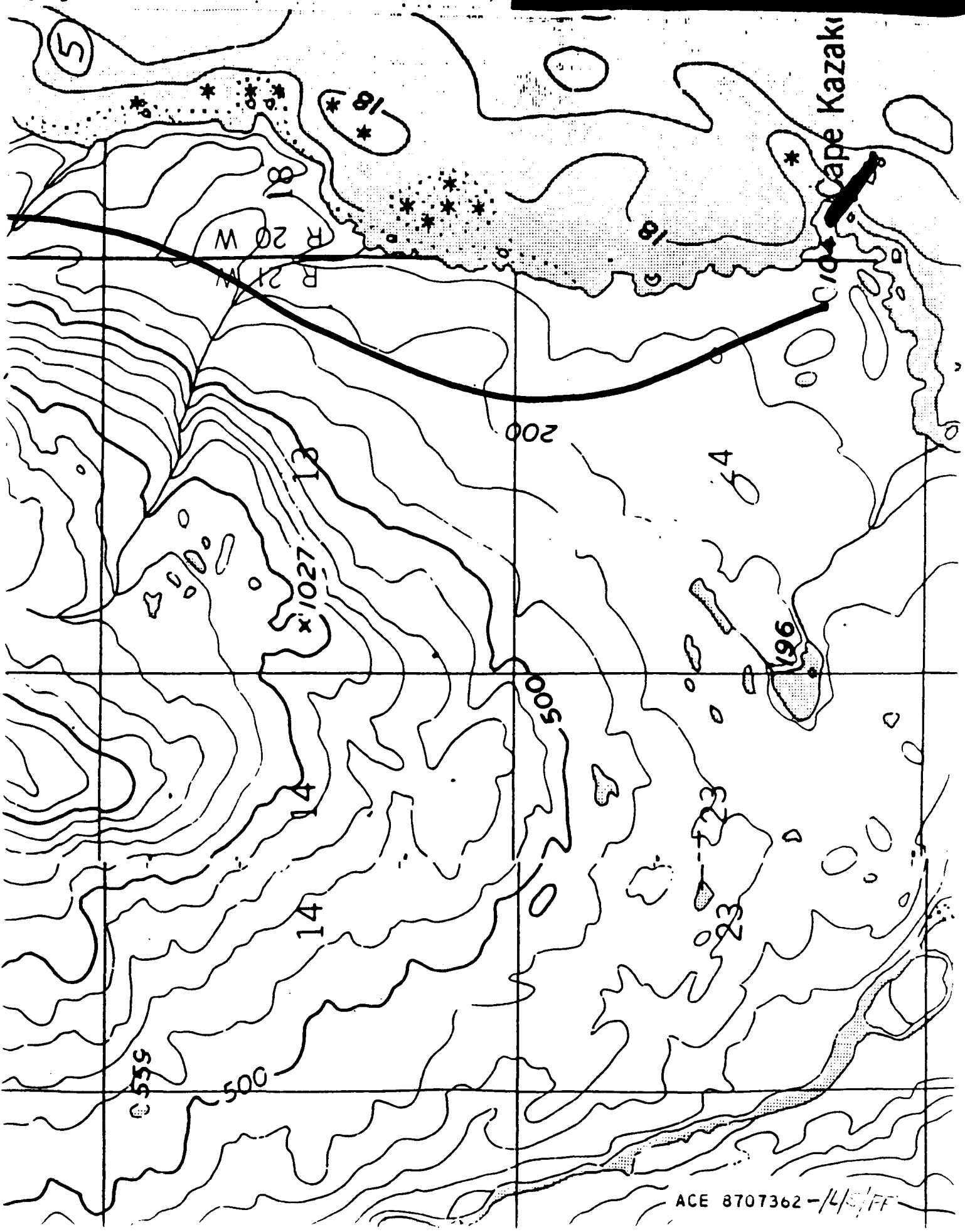
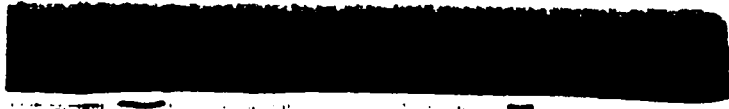




Surveyed on foot.
No oil observed

ACE 8707360





Parting #1 DEC 29 1989

5 - KODIAK SCAT
K4-2

COMPLETE JAN - 9 1990

ACE 7963935

(version 6/04/89)

SHORELINE PRE-CLEANUP ASSESSMENT BLOCK REPORT

Block (see enclosed map): K4-2

Includes Shoreline Segments: RI-2

Location: Raspberry Island

Submitted: _____ Date: _____
(for Exxon)

FOSC Approval: _____ Date: _____

~~The~~ cleanup procedures identified in the Shoreline Cleanup Program are recommended. Exxon and other field personnel are encouraged to suggest innovations and productivity enhancements to the OSC's on-scene representative. Requirements for safety and the protection of cultural material must be observed.

CC: KISCC

(version 5/02/89)

SHORELINE CLEANUP PROGRAM

DATE 7/12/89

SHORELINE SEGMENT K4-2-RI-2

LOCATION: (see enclosed map) Western end of Raspberry Island

ADEC NO. _____ SHORELINE ASSESSMENT DATE: 7/12/89

Recommended Cleanup Activity(ies):

-No cleanup recommended due to light to very light oiling and ecological constraints listed below. Subject to FOSC reassessment at a later date.

Priorities/Considerations: Class 5-A

Ecological Constraints (from site survey):

-Multiple nesting bald eagles and sea otter colonies prelude any cleanup effort at this sight.

Archaeological Constraints (from site survey):

-If cleanup is conducted and heretofore undiscovered cultural materials are uncovered, contact Exxon's Archaeological Field Director and take actions prescribed in the Operational Guidelines for Shoreline Cleanup dated 4/21/89 as amended.


State Historic Preservation Officer *

Date: 7/31/89

EXXON: _____

Date: _____

FOSC: _____

Date: _____

*Signature required to satisfy stipulations in Alaska DNR land use permits for tide and submerged lands.

SHORELINE OIL EVALUATION

Date: 12 July 1989 Time: 15:50-18:15
Surveyed From: Foot/Boat/Helio/Plane

Observer: DUNCAN M. FITZGERALD
Weather: Sun/Cloud/Rain/Snow/Fog

LOCATION

Location: Western End of Kaspberay Island Segment ID: K-4-2-RI-2
Segment Length: 4800 m. Access: Vehicle/Boat/Barge/Helio/Float Plane
Access Restrictions: Only land at pocket beaches

SHORELINE

Shoreline Type: SPI/BEA/COV/WLD/STRT Slope: Lo/Med/Hi/Vert
Wave Exposure: High/Med/Low
Sediment: B 10 % / C 50 % / P 5 % / G&S 15 % / M % / R 20 %

OIL

Avg. Degree of Oiling: HEAVY / MODERATE / LIGHT / VERY LIGHT / NONE OBSERVED
Area of Impact: SU/SP/H/M/L

OIL DISTRIBUTION

Continuous % of Segment SU/SP/H/M/L H/M/L/VL
Sporadic % of Segment 40% SU/SP/H/M/L H/M/L/VL

Total	Length(m)	Width(m)	Thickness >1cm:	cm	SU/SP/H/M/L
Very light:	<u>1200m</u>	<u>2-8m</u>	Penetration/Rework:	<u> </u> cm	SU/SP/H/M/L
Light:	<u>100m</u>	<u>2-8m</u>	Burial Depth:	<u> </u> cm	SU/SP/H/M/L
Moderate:	<u> </u>	<u> </u>			
Heavy:	<u> </u>	<u> </u>			

Mobilization Potential: High/Medium/Low
Drift Debris Oiled? Y/N Amount: H/M/L/VL SU/SP/H/M/L Type: Dr. H wood + seaweed

OIL MORPHOLOGY

Pooled Oil:	%	SU/SP/H/M/L
"Free" Oil:	<u>2</u> %	SU/SP/H/M/L
Splattered:	<u>2</u> %	H/M/L/VL SU/SP/H/M/L
Coated:	<u> </u> %	H/M/L/VL SU/SP/H/M/L
Pancakes/Balls:	<u> </u> %	SU/SP/H/M/L

Preliminary Cleanup Est.

Total TYPE A: m
Total TYPE B: m
Total TYPE A/B: m

OIL WEATHERING

Fresh:	%	SU/SP/H/M/L
Mousse:	<u> </u> %	SU/SP/H/M/L
Weathered Mousse:	<u>2</u> %	SU/ <u>SP</u> /H/M/L
Asphalt Mousse:	<u> </u> %	SU/SP/H/M/L
Tar:	<u>98</u> %	SU/ <u>SP</u> /H/M/L

COMMENTS

ECOLOGICAL EVALUATION

LOCATION: ^{WEST END OF} RASPBERRY IS., KODIAK SITE: RASPBERRY CAFE TO MALINA POINT OBSERVER: S. BLUESTONE
 LOCATION PREFIX: RI SEG. NO.: 2 LENGTH: 4800 (M)
 DATE: 7/12/89 TIME (HHMM): 15:50-18:15 TIDE HT.: 3.0-3.8 (M)
 OILED ZONE: Splash High Medium Low (BURIED SPILT IN COBBLES AND DRIFT MATERIAL
TRACE SPILT IN MED. TIDE)
 SUBSTRATUM: Rocks Boulder Cobble Gravel Sand Mud

LIVE BIOTA

Fucus (algae): Patchy (Y/N) Contin. (Y/N) Dense (Y/N) Sparse (Y/N) None (Y/N)
ENDOLABRIA AND TRACE FUCUS & PRUETOPSIS sp. in LITE; RAFFIA sp. in LITE &
TERRESTRIAL LICHEN IN HIGH LITE; MOST COBBLE BEACHES LACK PHYCAL GROWTHS.

Mytilus (Mussels): Patchy (Y/N) Contin. (Y/N) Dense (Y/N) Sparse (Y/N) None (Y/N)
M. edulis in LITE and in M-LITE ROCKY HEADLAND AREAS; ABSENT ON
COBBLE BEACHES.

Balanus (Barnacles): Patchy (Y/N) Contin. (Y/N) Dense (Y/N) Sparse (Y/N) None (Y/N)
PRESENT IN ROCKY HEADLAND AREAS; B. glandula and B. cariosus in M-LITE.

Littorina

Patchy (Y/N) Contin. (Y/N) Dense (Y/N) Sparse (Y/N) None (Y/N)
PRESENT IN M-LITE; GRAZING IN INTERSTITIAL SPACES AND ON PHYCAL
DEBRIS

Limpets: Patchy (Y/N) Contin. (Y/N) Dense (Y/N) Sparse (Y/N) None (Y/N)
LOW ABUNDANCES. LIMITED TO TIDE POOLS AND LITE in ROCKY HEADLAND
AREAS. OFF-SHORE ON COBBLE BEACHES

OTHER OBSERVATIONS: BEACH CONSISTS OF BEDROCK HEADLANDS & SEA STRA
WITH COBBLE COVES. STORM CUSPS AND BEACH ROBS ON COBBLE COVES IMPLY HIGH ENERGY
ENVIRONMENTS.

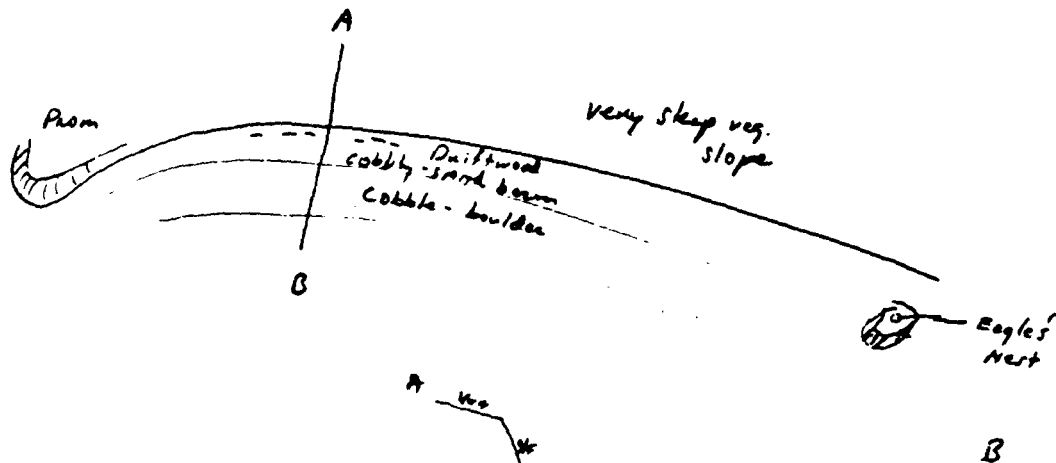
CLEANUP PRECAUTIONS: TWO NESTING BIRD EAGLE SITES; SEA OTTERS AND
WHALES SITED. HIGHLY SENSITIVE ECOLOGICAL COMMUNITY SHOULD PRECLUDE
CLEAN-UP HERE.

MAMMALS: Otters X Harbor Seals Sea Lions ^{BLUE} Whales X
 other BIRD EAGLES; BEAR SAT ON BEACH, EVIDENCE OF FORAGING

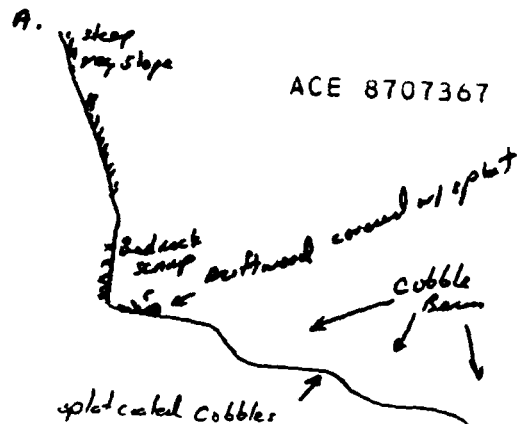
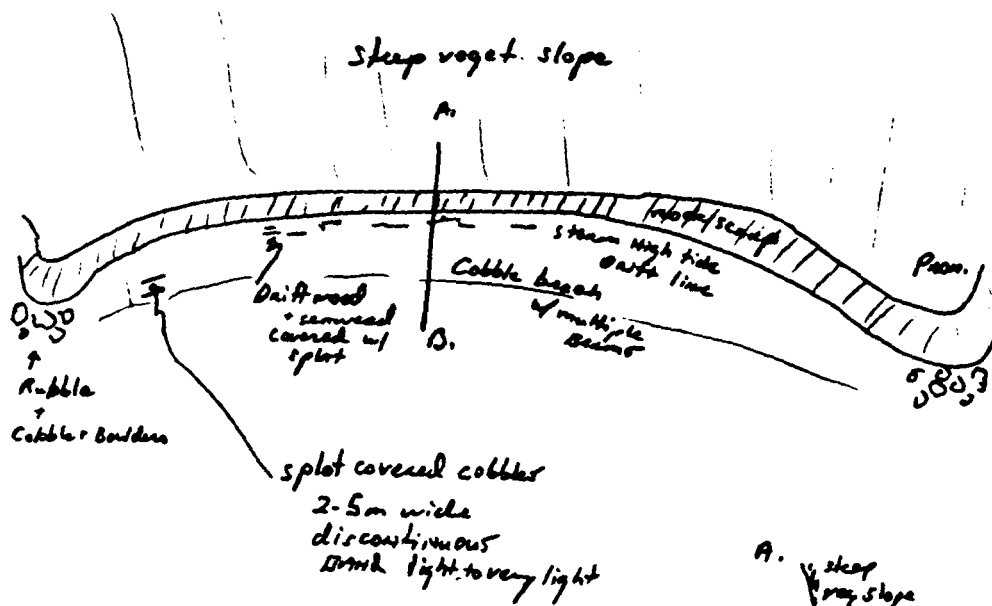
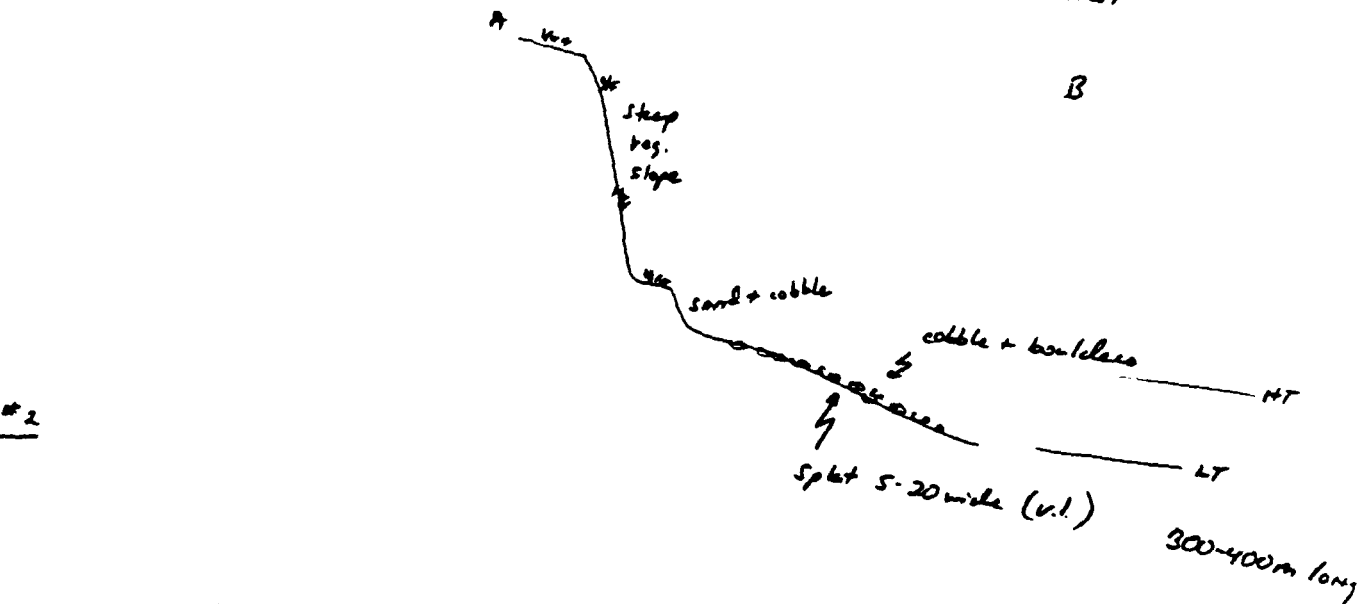
BIRDS: BIRD EAGLE NEST SITES.

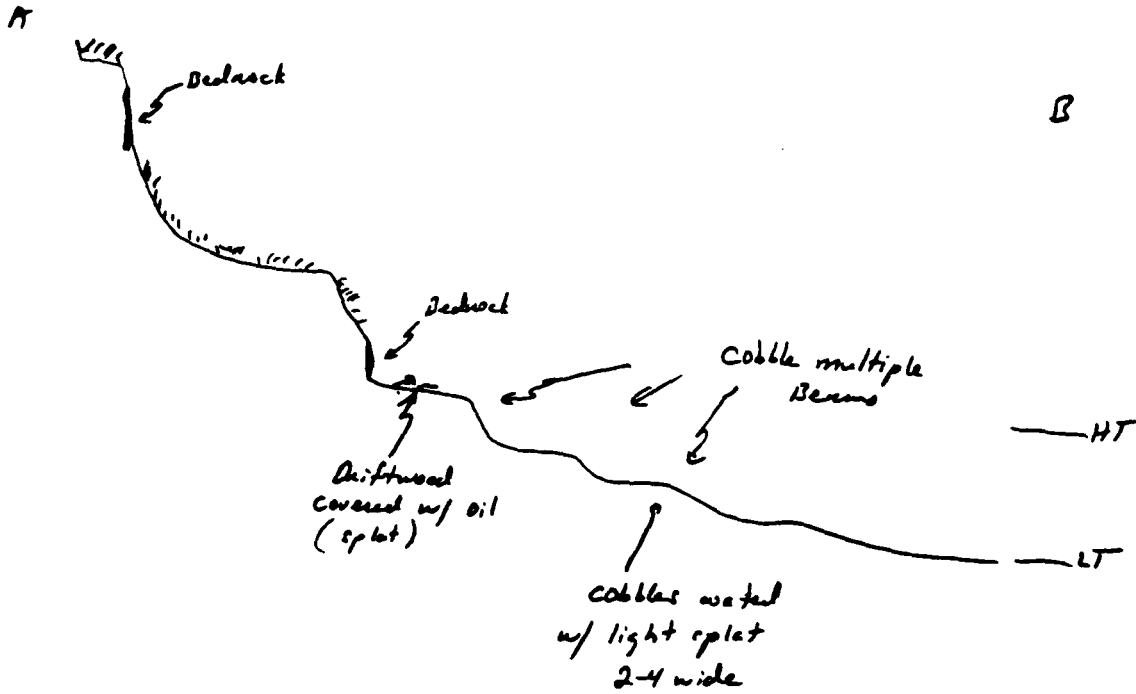
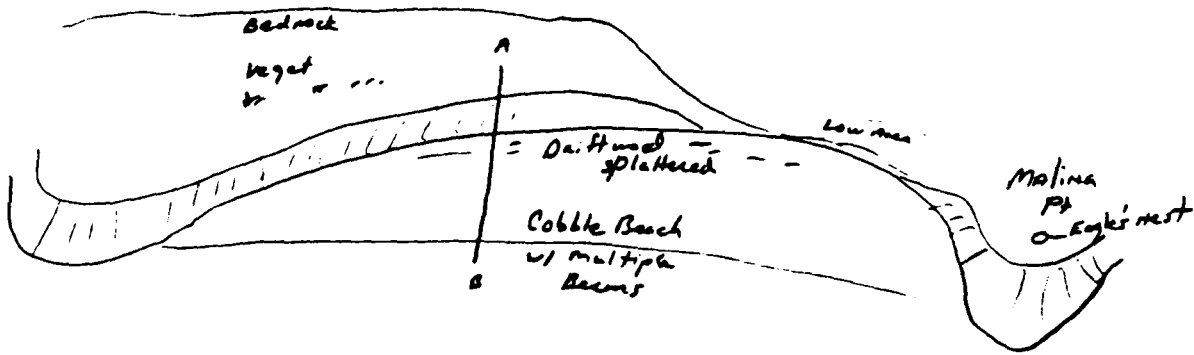
GENERAL OBSERVATIONS: HIGH ENERGY, EXPOSED HEADLAND AREA WITH
BROAD FETCH -> WILL SELF CLEAN. NO CLEAN-UP NECESSARY

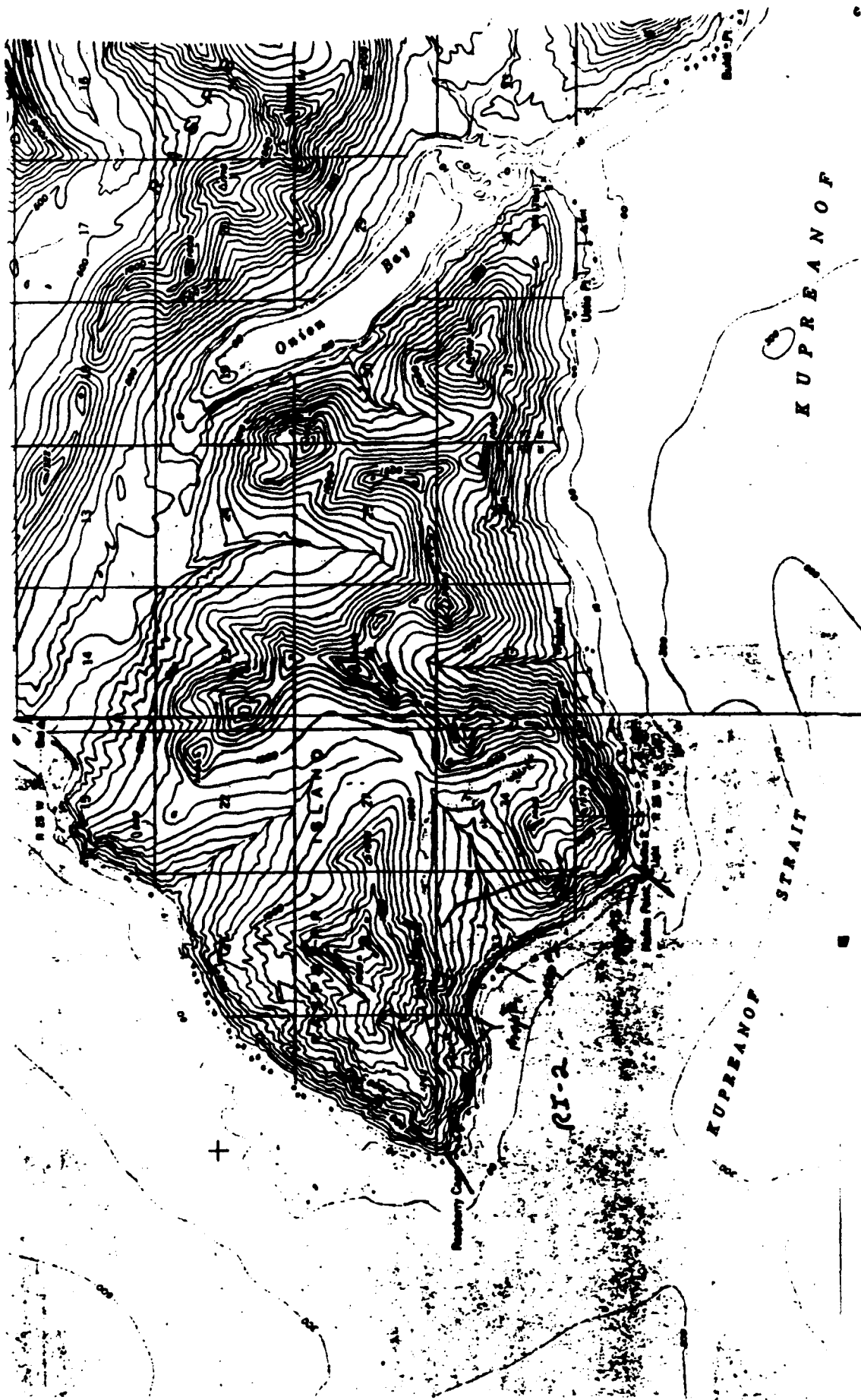
map #1



map #2







K4-3

ACE 7963936



(version 5/02/89)

SHORELINE CLEANUP PROGRAM

DATE 7/12/89

SHORELINE SEGMENT K4-3-RI-3

LOCATION: (see enclosed map) Southwestern end of Raspberry
Island

ADEC NO. _____ SHORELINE ASSESSMENT DATE: 7/12/89

Recommended Cleanup Activity(ies):

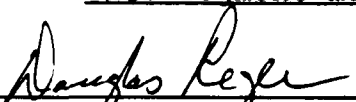
-No cleanup recommended due to very light oiling (splat).
Subject to FOSC reassessment at a later date.

Priorities/Considerations: Class 5-A

Ecological Constraints (from site survey):

Archaeological Constraints (from site survey):

-If cleanup is planned a full archaeological assessment of
this segment must be conducted.


State Historic Preservation Officer *

Date: 8-2-89

EXXON: _____

Date: _____

ISCC: _____

Date: _____

FOSC: _____

Date: _____

*Signature required to satisfy stipulations in Alaska DNR land
use permits for tide and submerged lands.

SHORELINE OIL EVALUATION

Date: 12 Jul / Time: 18:15-18:40 Observer: DUNCAN M. FITZGERALD
 Surveyed From: Foot/Boat/Helio/Plane Weather: Sun/Cloud/Rain/Snow/Fog

LOCATION
 Location: Southwestern end of Raspberry IS Segment ID: 43-RI-3
 Segment Length: 4100 m. Access: Vehicle/Boat/Barge/Helio/Float Plane
 Access Restrictions: most of th shoreline IS inaccessible

SHORELINE

Shoreline Type: SPI/SEA/COV/HLD/STRT Slope: Lo/Med/Hi/Vert
 Wave Exposure: High/Med/Low
 Sediment: B 30 % / C 15 % / P ____ % / G&S 5 % / M ____ % / R 50 %

OIL

Avg. Degree of Oiling: HEAVY / MODERATE / LIGHT / VERY LIGHT / NONE OBSERVED
 Area of Impact: SU/SP/H/M/L

OIL DISTRIBUTION

Continuous % of Segment ____ SU/SP/H/M/L H/M/L/VL
 Sporadic % of Segment ____ SU/SP/H/M/L H/M/L/VL

Total	Length(m)	Width(m)	Thickness >1cm: ____ cm	SU/SP/H/M/L
Very light:	____	____	Penetration/Rework: ____ cm	SU/SP/H/M/L
Light:	____	____	Burial Depth: ____ cm	SU/SP/H/M/L
Moderate:	____	____		
Heavy:	____	____		

Mobilization Potential: High/Medium/Low

Drift Debris Oiled? Y/N Amount: H/M/L/VL SU/SP/H/M/L Type: ____

OIL MORPHOLOGY

Pooled Oil: ____ %		SU/SP/H/M/L
"Free" Oil: ____ %		SU/SP/H/M/L
Splattered: ____ %	H/M/L/VL	SU/SP/H/M/L
Coated: ____ %	H/M/L/VL	SU/SP/H/M/L
Pancakes/Balls: ____ %		SU/SP/H/M/L

 Preliminary Cleanup Est.

Total TYPE A: ____ m
 Total TYPE B: ____ m
 Total TYPE A/B: ____ m

OIL WEATHERING

Fresh: ____ %	SU/SP/H/M/L
Mousse: ____ %	SU/SP/H/M/L
Weathered Mousse: ____ %	SU/SP/H/M/L
Asphalt Mousse: ____ %	SU/SP/H/M/L
Tar: ____ %	SU/SP/H/M/L

COMMENTS

Spot was only observed at two sections of shoreline
 approximated 100m in length

ECOLOGICAL EVALUATION

LOCATION: WEST END OF
ARTS/BOAT IS., KODIAK SITE: SOUTH OF MARINA PT.
WORKING EAST OBSERVER: S. BLUESTONE

LOCATION PREFIX: RI SEG. NO.: 3 LENGTH: 48 (M)

DATE: 7/12/89 TIME (HHMM): 18:15-18:40 TIDE HT.: 5.5-5.9 ft. (M)

OILED ZONE: Splash High Medium Low TRACE SPLAT ? RELATIVELY CLEAN
(FLEW MOST OF SEGMENT AT

SUBSTRATUM: Rocks Boulder Cobble Gravel Sand Mud VERY LOW ALTITUDE)

LIVE BIOTA

Fucus (algae): Patchy Y/N Contin. Y/N ^{LOCALLY} Dense Y/N Sparse Y/N None Y/N
Endocladia sp. and Fucus sp. MITZ TO LITE; DOMINANT IN ROCKY HEADLAND
AREAS BETWEEN SMALL-COBBLE COVE.

Mytilus (Mussels): Patchy Y/N Contin. Y/N Dense Y/N Sparse Y/N None Y/N ^{LOCALLY}
M. edulis FOUND IN AND AROUND CREVASSES AND INTERSTITIAL SPACES

Balanus (Barnacles): Patchy Y/N ^{SOMEWHAT} Contin. Y/N Dense Y/N Sparse Y/N None Y/N
FORM A BAND IN THE M-LITE; B. glandula and B. cariosus DOMINANT spp.
SLIGHTLY LARGER INDIVIDUALS IN LITE.

Littorina

Patchy Y/N Contin. Y/N ^{LOCALLY} Dense Y/N Sparse Y/N None Y/N
SMALL COBS APPARENTLY ABSENT IN LITE; NUMEROUS IN RITE HIGH TO MED. ZONE AREA.
APPROX 20-4.0 cm

Limpets: Patchy Y/N Contin. Y/N Dense Y/N Sparse Y/N None Y/N ^{LOCALLY}
SCATTERED IN POOLS AND LITE.

OTHER OBSERVATIONS: STEEP ROCKY CLIFF FACES ABUTTING COBBLY/BOULDERY
BEACHES (STEEP GRADIENT). NUMEROUS SHOREBIRDS NESTING IN CLIFFS

CLEANUP PRECAUTIONS: VERY HARD ACCESS; SEA CAVES, SEA MOUNTS AND
STEEP CLIFFS (NO CLEAN-UP NECESSARY)

MAMMALS: Otters Harbor Seals Sea Lions Whales X
Other

BIRDS: Gulls, Ravens, Bald Eagles

GENERAL OBSERVATIONS: CLEAN-UP NOT NECESSARY



ACE 8707375 -12

(version 5/02/89)

SHORELINE CLEANUP PROGRAM

DATE 7/14/89

SHORELINE SEGMENT K4-3-RI-4

LOCATION: (see enclosed map) South shore of Raspberry Island,
west end

ADEC NO. K4-3 SHORELINE ASSESSMENT DATE: 7/13/89

Recommended Cleanup Activity(ies):

- Use sorbent pads to wipeup liquid mousse at Ustia Pt. (see map #1).
- Use shovels to remove 20m by 2m band of asphalt mousse immediately east of Ustia Pt.
- Utilize 2-3 man crew, manual, non mechanized equipment.

Priorities/Considerations: Class 5-A

- Very light oil contamination.
- Ecological resources present (otters, eagles) see attached ecological map.
- Evidence of bear activity observed.

Ecological Constraints (from site survey):

- Eagle activity and nesting. Rich subtidal zone.

Archaeological Constraints (from site survey):

- If heretofore undiscovered cultural materials are uncovered during cleanup, contact Exxon's Archaeological Field Director and take actions prescribed in the Operational Guidelines for Shoreline cleanup dated 4/21/89 as amended.

Douglas Regier
State Historic Preservation Officer *

Date: 8-2-89

EXXON: _____

Date: _____

ISCC: _____

Date: _____

FOSC: _____

Date: _____

*Signature required to satisfy stipulations in Alaska DNR land use permits for tide and submerged lands.

SHORELINE OIL EVALUATION

Date: 13 July 1989 / Time: 1215-1520
 Surveyed From: Foot/Boat/Helio/Plane

Observer: Michael Acton
 Weather: Sun/Cloud/Rain/Snow/Fog

LOCATION

Location: SW end of Raspberry Island Segment ID: K-4-3-RI-4
 Segment Length: 3700 m. Access: Vehicle/Boat/Barge/Helio/Float Plane
 Access Restrictions: Access only at pocket beaches

SHORELINE

Shoreline Type: SPI/SEA/COV/HLD/STRT Slope: Lo/Med/HI/Vert
 Wave Exposure: High/Med/Low
 Sediment: B 10 % / C 40 % / P 10 % / G&S 20 % / M % / R 20 %

OIL

Avg. Degree of Oiling: HEAVY / MODERATE / LIGHT / VERY LIGHT / NONE OBSERVED
 Area of Impact: SU/SP/H/M/L

OIL DISTRIBUTION

Continuous % of Segment SU/SP/H/M/L H/M/L/VL
 Sporadic % of Segment 40 SU/SP/H/M/L H/M/L/VL

Total	Length(m)	Width(m)	Thickness >1cm: _____ cm	SU/SP/H/M/L
Very light:	<u>400</u>	<u>2</u>	Penetration/Rework: _____ cm	SU/SP/H/M/L
Light:	<u> </u>	<u> </u>	Burial Depth: _____ cm	SU/SP/H/M/L
Moderate:	<u>20</u>	<u>1-2</u>		SU/SP/H/M/L
Heavy:	<u> </u>	<u> </u>		

Mobilization Potential: High/Medium/LOW

Drift Debris Oiled? Y/N Amount: H/M/L/VL SU/SP/H/M/L Type: Driftwood

OIL MORPHOLOGY

Pooled Oil: _____ %	SU/SP/H/M/L
"Free" Oil: <u>42</u> %	SU/SP/H/M/L
Splattered: <u>48</u> %	SU/SP/H/M/L
Coated: _____ %	SU/SP/H/M/L
Pancakes/Balls: _____ %	SU/SP/H/M/L

H/M/L/VL
 H/M/L/VL

Preliminary Cleanup Est.

Total TYPE A: 25 m
 Total TYPE B: _____ m
 Total TYPE A/B: _____ m

OIL WEATHERING

Fresh: _____ %	SU/SP/H/M/L
Mousse: <u>2</u> %	SU/SP/ <u>H</u> / <u>M</u> / <u>L</u>
Weathered Mousse: _____ %	SU/SP/H/M/L
Asphalt Mousse: <u>40</u> %	SU/SP/ <u>H</u> / <u>M</u> / <u>L</u>
Tar: <u>48</u> %	SU/ <u>SP</u> / <u>H</u> / <u>M</u> / <u>L</u>

COMMENTS

DOCUMENTATION:

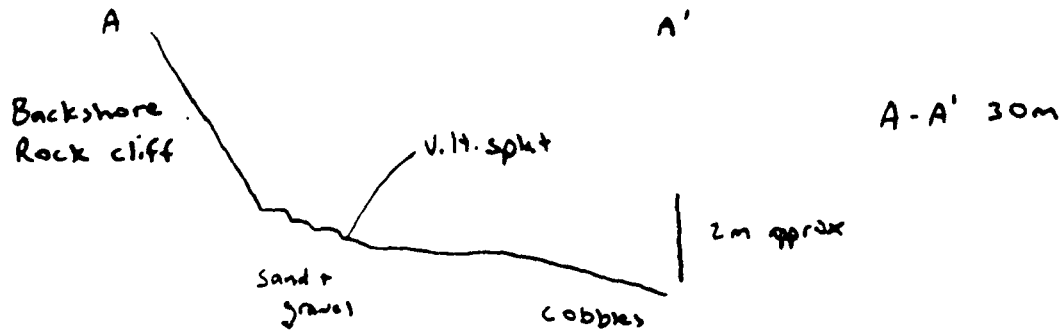
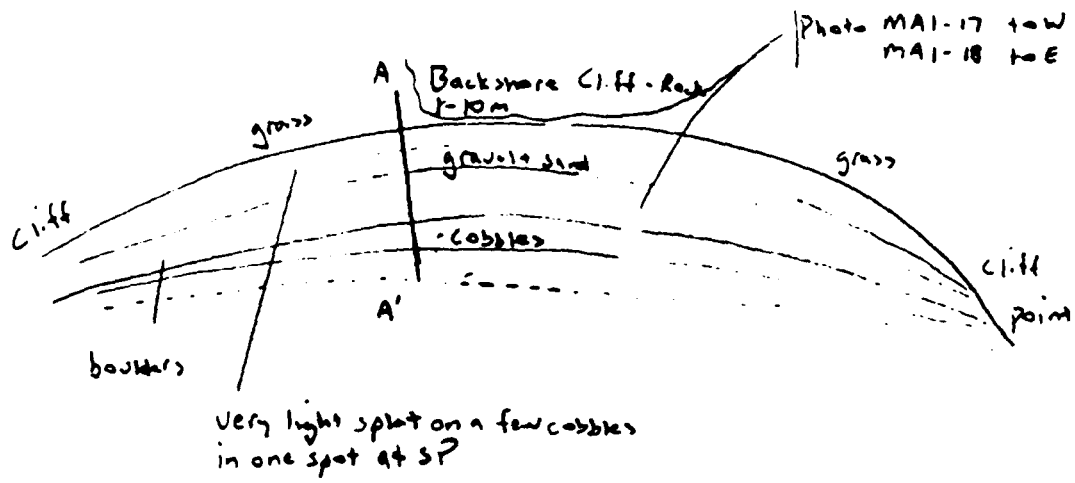
Map/Aerial photo marking segment boundaries Afognak (A-4)

VTR: Y/N Tape Number(s) _____

Photography: Y/N Roll Number(s) MAI

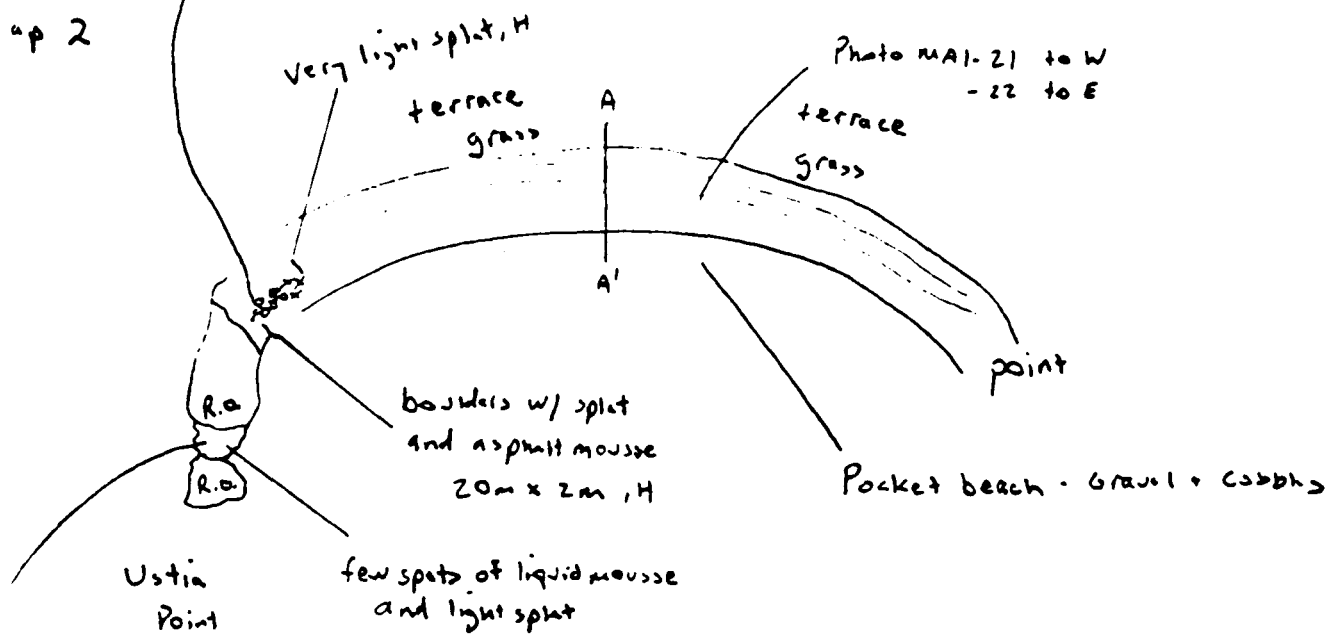
Sample Numbers Collected: _____

Map 1

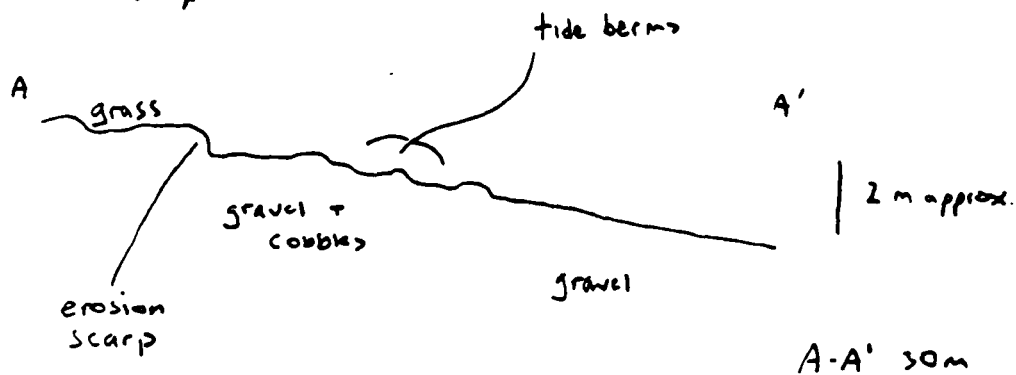


ACE 8707379

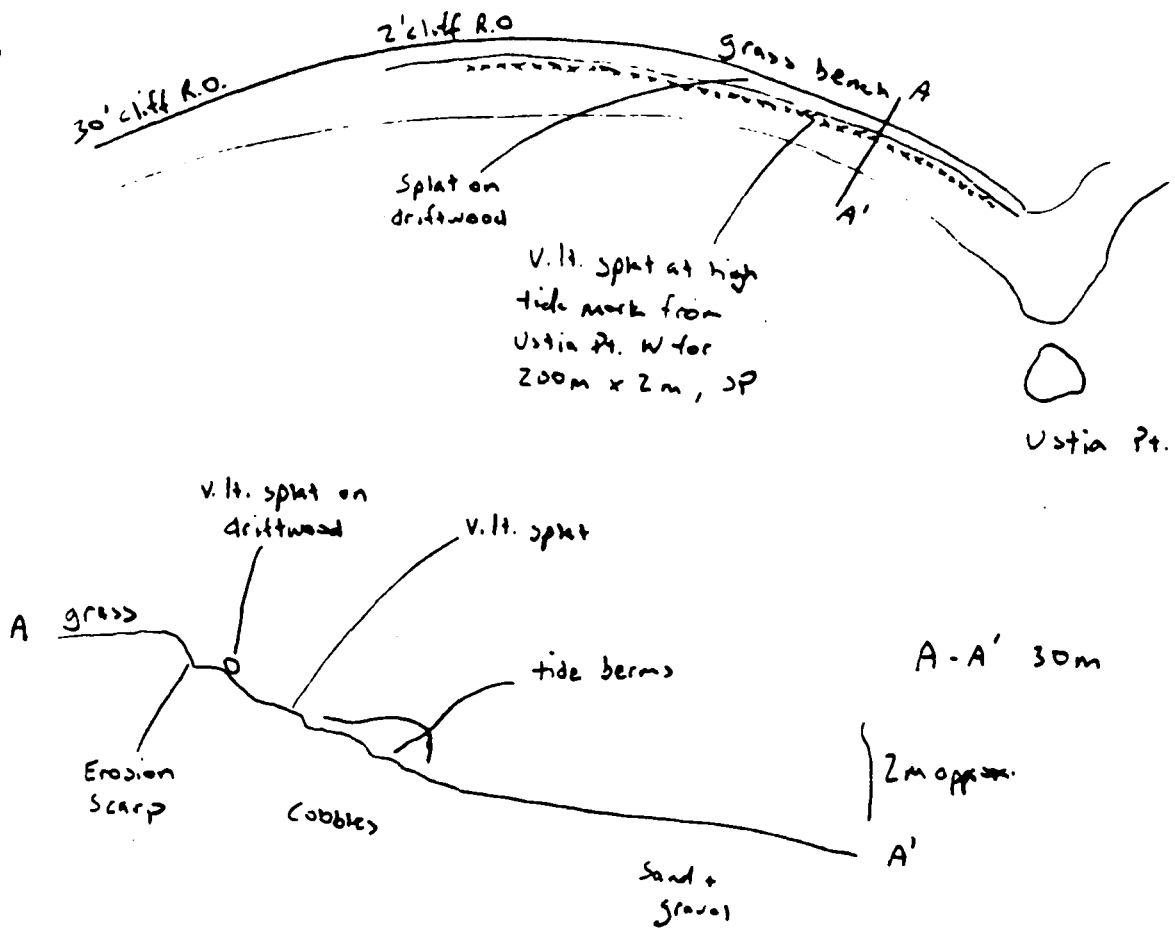
Photo MA1-26 asphaltic oil, Ustia Pt in background to W
27 close-up



Note MA1-23 mouse at Ustin Pt., to E
 -24 mouse close-up
 -25 mouse close-up



Map 3



Acton Penn Abert Gilpin Overcast ①

7/13 - 0910 arrive airport

Trvs. 0930 take off

First to Isthm Bay to calibrate Acton

0942 Return toward Kodiak - duct to fog

Head toward Ocean Bay

Pass clouded in

Cape clouded in

1005 Turn back to Kodiak

1015 Land Kodiak

1125 Same crew - to Raspberry Island
Orion Bay Area

1:45 off

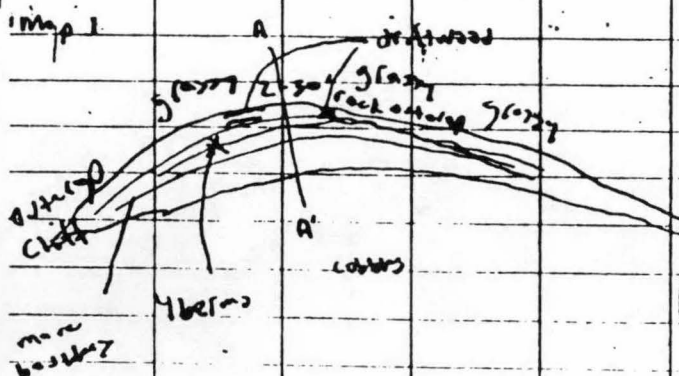
W of Isthm Bay

Acton - great beach

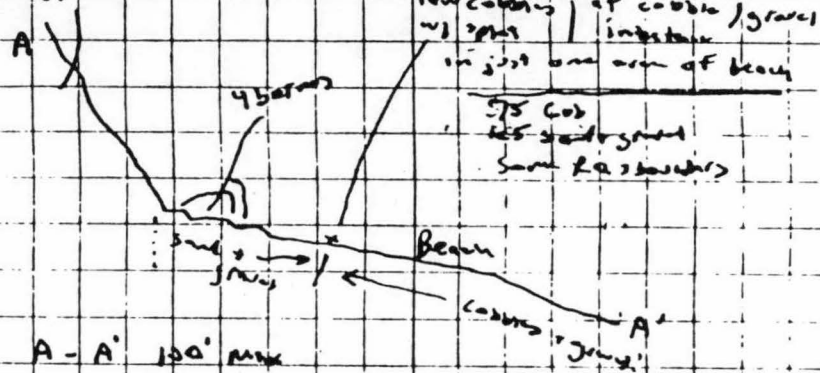
2 - R.O. cliff w/
basins, R.O. base

cut drainage

1215 set down area 3



Very steep slope
or R.O.



A - A' 100' max

Role MAI

Photo	Sec	Map	to W toward area
17	3	Map 1	to W toward area
18	"	"	to E
19	"	10 min stop	to W
20	"	10 min	to E

Set down area 6 1320 hr - 10 min check
no oil observed

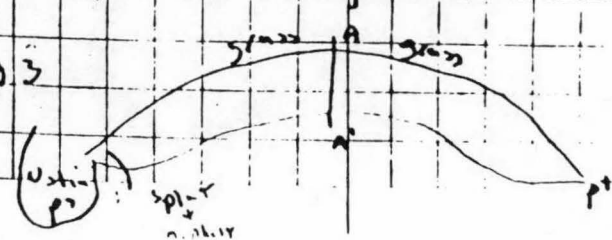
1345 set down just E of Isthm Pt.

Ustin Pt. is R.O.

beach to W area 8

rocket base to right and 9 photo 11 row 22 no oil

Map 3



ACE 8707382

Acton Penn About Gilpin Overcast ③

7/13 - 0915 arrive airport
 TPU 0930 takeoff

First to Isthm Bay to calibrate Acton
 0942 Return toward Kodak - ducting
 Head toward Ocean Bay
 Pass clouded in
 Cape clouded in
 1005 Turn back in Kodak
 1015 Land Kodak

1125 Same crew - to Raspberry Island
 | Onion Bay Area

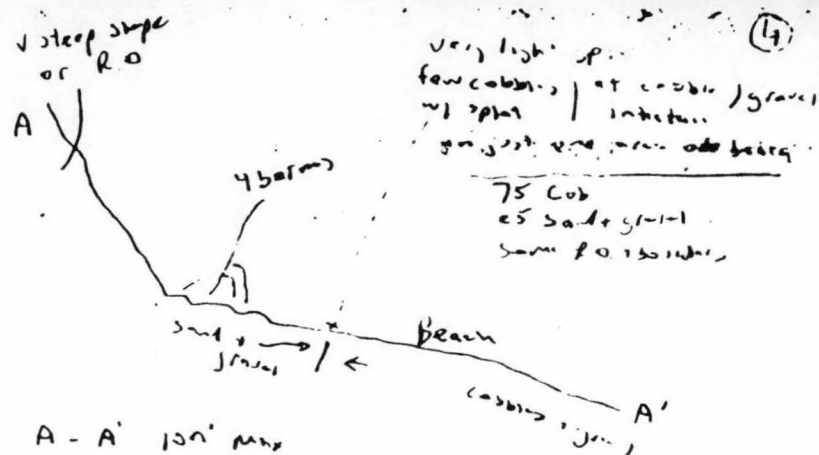
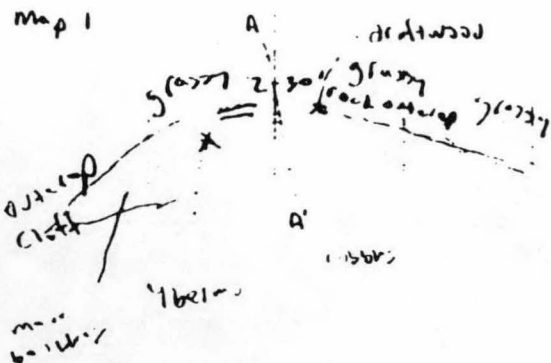
1144 alt

W of 1122 pt

Area 1 - gravel beach
 2 - R.O. cliff w/
 boulder, R.O. base

eat drinking

1215 set down area 3



A - A' 100' m'

Role MAI

Photo	17	18	19	20	Sec 3	Map 1	to W tank & area
							to E
						10 min stop	to W
						"	to E
							to E

Set down area 6 1320 hr - 10 min check
 no oil observed

1345 set down just E of Vatin Pt.

Vatin Pt. is R.O.

boat to W area 8

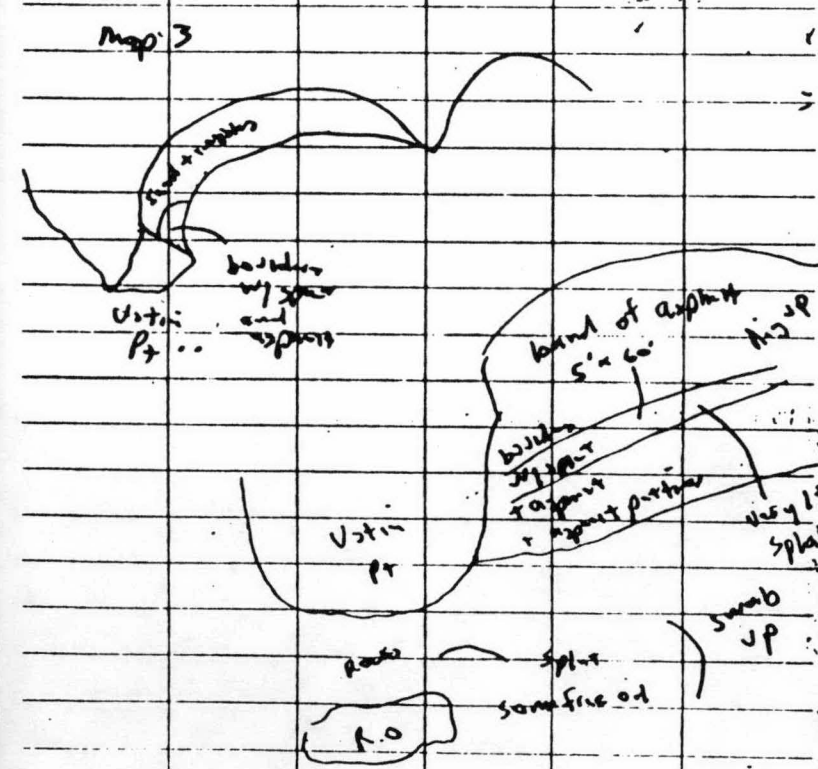
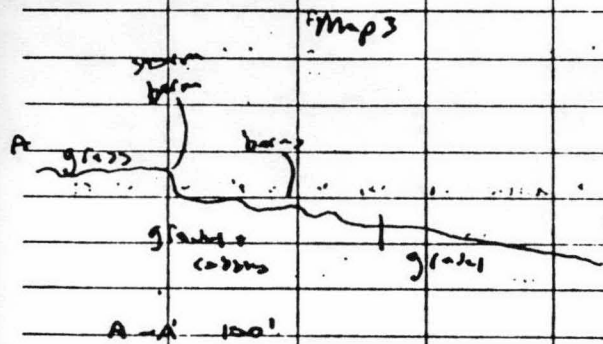
packed boat to right area 9

photo at row 1122

Map 3

(unlabeled)

pt

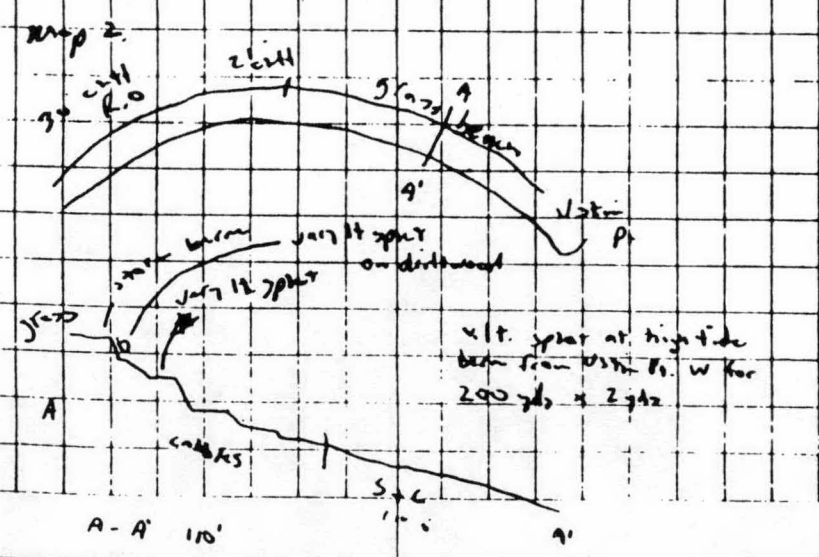


Map 2

- photos 22-25 } looking E
oil right at Votia Pt. | free bit
- 26 asphaltic oil w/ Votia Pt. in background
27 close up
28 oil

very high splash on eastern S tip end
of Votia Pt. - at high tide there
just behind flood berm

- Map 2
29 - to W
30 - to E Votia Pt.
31 - midden



ACE 8707384

cleanup of Justin Pt.

Recommended, but very low priority

Walked w/ on trip^{over} to R.O. + building

and coming to W 7

1520 hrs - left Raspering In basin to Kadink

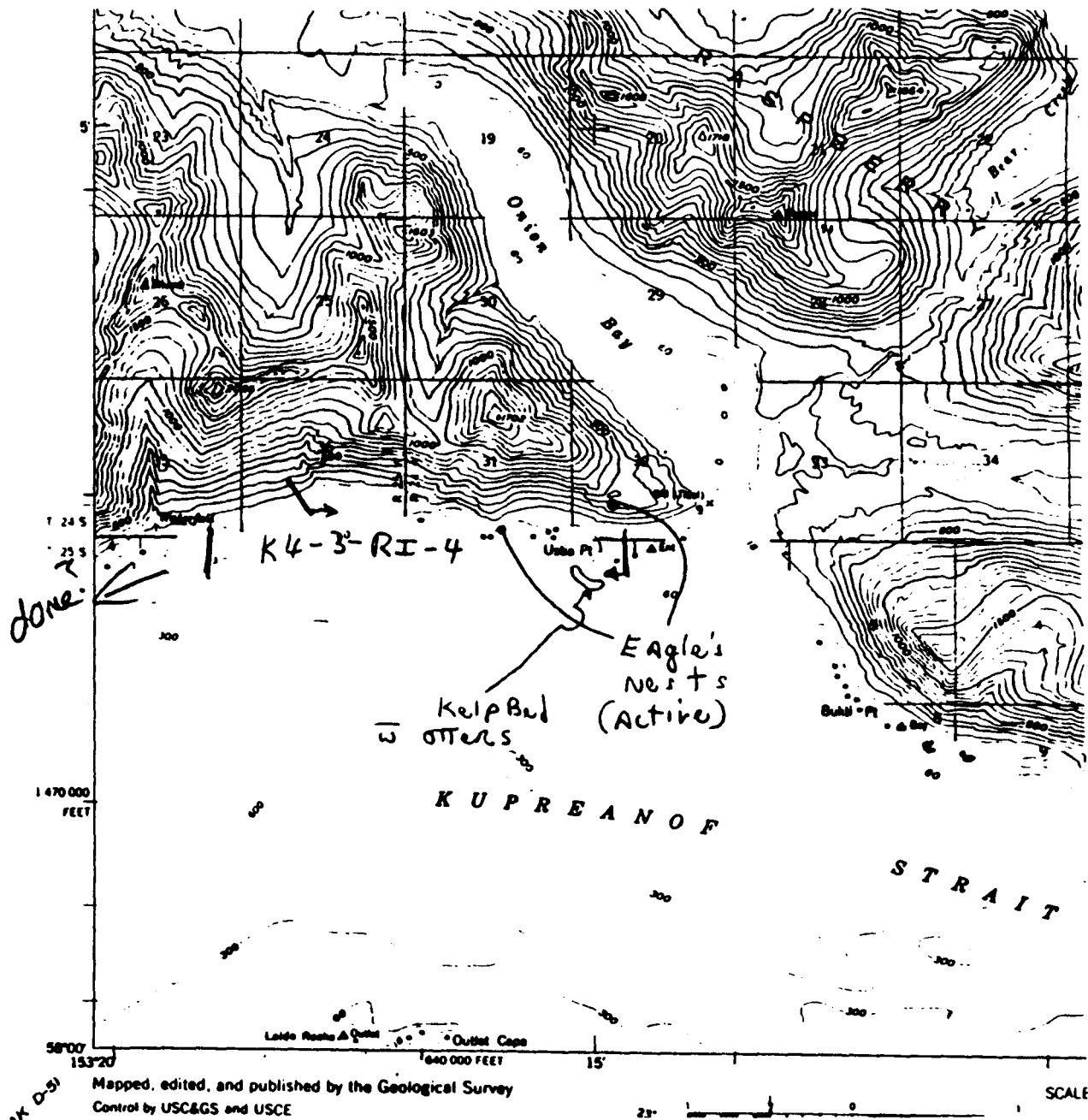
Approx 1600 hrs - set down below Justin Pass

Arrive back at camp at approx 1710 by land
transport

ACE 8707385

POOR QUALITY ORIGINAL

Ecological Map
K4-3-RI-4



ACE 8707386

ECOLOGICAL EVALUATION

K4-3

LOCATION: Kodiak SITE: Raspberry Island OBSERVER: Penn

LOCATION PREFIX: RI SEG. NO.: 4 LENGTH: 3700 (M)

DATE: 07/13/89 TIME (HHMM): 12:00 TIDE HT.: 1.5 (M)

OILED ZONE: Splash (High) Medium Low

SUBSTRATUM: (Rocks Boulder Cobble Gravel) Sand Mud

LIVE BIOTA

Fucus (algae): Patchy (Y/N) Contin. (Y/N) Dense (Y/N) Sparse (Y/N) None (Y/N)

Range Limited to headlands

Mytilus (Mussels): Patchy (Y/N) Contin. (Y/N) Dense (Y/N) Sparse (Y/N) None (Y/N)

Range Limited to headlands - (+) tactile Response

Balanus (Barnacles): Patchy (Y/N) Contin. (Y/N) Dense (Y/N) Sparse (Y/N) None (Y/N)

Range Limited to headlands - (+) Tactile Response

Littorina

Patchy (Y/N) Contin. (Y/N) Dense (Y/N) Sparse (Y/N) None (Y/N)

Range Limited to headlands - (+) tactile Response

Limpets: Patchy (Y/N) Contin. (Y/N) Dense (Y/N) Sparse (Y/N) None (Y/N)

Range Limited to headlands - (+) tactile Response

OTHER OBSERVATIONS: No observed emergent biota on cobble/gravel beaches.

*CLEANUP PRECAUTIONS: Cleanup if any should be limited to shoveling + bagging oiled material + wiping of rock surfaces with sorbent pads.

Do not use any wash systems, as subtidal biota is dense (Nereis etc.) + wave energy too high for efficient boom placement.

MAMMALS: Otters 10-15 Harbor Seals Sea Lions Whales
Other

BIRDS: eagles + nest - see map for Location

GENERAL OBSERVATIONS: fox tracks + scat observed on beach.

+ For cleanup, other approved mechanical/dispersion techniques may be applicable and may be used as long as their usage complies with the biological constraints.

517-650-97
- KODIAK SCAT
- K4-24
- - - - -

COMPLETE

DEC 31 1983

ACE 7963937

(version 5/02/89)

SHORELINE CLEANUP PROGRAM

DATE 7/31/89

SHORELINE SEGMENT K4-24-SP-7

LOCATION: (see enclosed map) North Cape Spruce Island

ADEC NO. _____ SHORELINE ASSESSMENT DATE: 6/11/89

Recommended Cleanup Activity(ies):

-No cleanup recommended due to apparent absence of oil and ecological constraints listed below. Subject to FOSC reassessment at a later date.

Priorities/ Considerations:

Ecological Constraints (from site survey):

-No ecological evaluation form is included in this report because this segment was surveyed by helicopter only. If oil becomes evident in this area in the future, an ecological assessment must be done in this segment.

Archeological Constraints (from site survey):

-If cleanup is conducted and heretofore undiscovered cultural materials are uncovered, contact Exxon's Archeological Field Director and take actions prescribed in the Operational Guidelines for Shoreline Cleanup dated 4/21/89 as amended.


State Historic Preservation Officer *

Date: 8/16/89

EXXON: _____

Date: _____

FOSC: _____

Date: _____

*Signature required to satisfy stipulations in Alaska DNR land use permits for tide and submerged lands.

(version 5/16/89)

SHORELINE OIL EVALUATION FORM - KODIAK

Date: 6-11-89 / Time: 1635

Observer: S. Peeland

Surveyed From: Foot/Boat/Helio/Plane

Weather: Sun/Cloud/Rain/Snow/ fog

LOCATION

LOCATION Spruce Island - North Cape

SEGMENT I.D. K-4-24-50-1

LENGTH OF SHORELINE SEGMENT: 1970 m

ACCESS: Foot/Vehicle/Boat/Barge/Helio/Float Plane

SHORELINE:

Shoreline Type: SPI/BEA/COV/HLD/STRT

Slope: LAUG/HANG/VER

Wave Exposure: High/Med/Low

Sediment: B50 / C25 / P25 / G / S / M / R

Drift Debris on Beach: Yes/No

Supra/Upper/Mid/Lower Type Log / kelp

OIL

Degree of Oiling: Heavy/Moderate/Light/No Oil/Unobserved

Total Area of Beach Impact: SU / SP / H / M / L

OIL DISTRIBUTION

Continuous: Y/N Segment # _____ No. Bands _____ Width _____

Sporadic: Y/N Segment # _____ Min/Max Dia _____ Impact Width _____

Est. Oil Thickness where > 1cm: _____ cm SU / SP / UP / MID / LO

Est. Oil Penetration: _____ cm SU / SP / UP / MID / LO

Layers? Yes/No No. Layers _____ Oil Weathering _____

Drift Debris Oiled? Yes/No Supra/Upper/Mid/Lower Amount: H / M / L / VL

OIL MORPHOLOGY

Pooled Oil _____ % "Free" Oil _____ % Spattered _____ % H/H/L/VL Shorn _____ %

OIL WEATHERING (OW)

Fresh Oil _____ % SU/SP/VP/MID/LO Choc Mousse _____ % SU/SP/VP/MID/LO

Pancake Mousse _____ % SU/SP/VP/MID/LO Asphalt Mousse _____ % SU/SP/VP/MID/LO

Tar Formation _____ %

ACE 8707391

Comments:

DOCUMENTATION:

Map/Aerial photo marking segment boundaries See Attached

VTR: Y/N (N) Tape Number(s) _____

Photography: Y/N (N) Roll Number(s) _____

Sample Numbers Collected: N/A

ACE 8707392

4, 25, 26, 27

K-4-24-SP-7
K-4-24-SP-8

4-24

4-25

K-4-25-SP-6

4-24

4-25

CORPORATE BDY

K-4-25-SP-5

K-4-25-SP-4

K-4-25-SP-3

4-25

4-26

K-4-26-SP-2

4-28

VARROW

K-4-25-SP-1

4-26

ACE 8707394 -/S

(version 5/02/89)

SHORELINE CLEANUP PROGRAM

DATE 7/31/89

SHORELINE SEGMENT K4-24-SP-8

LOCATION: (see enclosed map) West side Spruce Island

ADEC NO. _____ SHORELINE ASSESSMENT DATE: 6/11/89

Recommended Cleanup Activity(ies):

-Manual removal of mousse patties and splat.

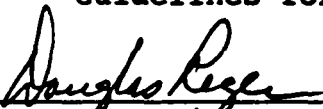
Priorities/ Considerations: Class 4-A

Ecological Constraints (from site survey):

-None.

Archeological Constraints (from site survey):

-If heretofore undiscovered cultural materials are uncovered during cleanup, contact Exxon's Archeological Field Director and take actions prescribed in the Operational Guidelines for Shoreline Cleanup dated 4/21/89 as amended.


State Historic Preservation Officer *

Date: 8/16/89

EXXON: _____

Date: _____

FOSC: _____

Date: _____

*Signature required to satisfy stipulations in Alaska DNR land use permits for tide and submerged lands.

(version 5/16/89)

SHORELINE OIL EVALUATION FORM - KONIAR

Date: 6-11-89 / Time: 1645

Observer: S. Pealand

Surveyed From: Foot/Boat/Helio/Plane

Weather: Sun/Cloud/Rain/Snow/ fog

LOCATION

LOCATION Spive Island - Saldween Lagoon

SEGMENT I.D. K-4-24-SP-8

LENGTH OF SHORELINE SEGMENT: _____ m

ACCESS: Foot/Vehicle/Boat/Barge/Helio/Float Plane

SHORELINE:

Shoreline Type: SPI/DEA/COV/HID/STET

Slope: LAUG/HAUG/VER

Wave Exposure: High/Med/Low

Sediment: B 10 % / C 30 % / P 40 % / G 20 % / S 20 % / M 1 % / R 1 %

Drift Debris on Beach: Yes/No Supra/Upper/Mid/Lower Type Log / 6-1/2

OIL

Degree of Oiling: Heavy/Moderate/Light/No Oil/Unobserved

Total Area of Beach Impact: SU / SP / H / M / L

IL DISTRIBUTION

Continuous: Y/N Segment 1 No. Bands _____ Width _____

Sporadic: Y/N Segment 1 Min/Max Dia 4-6cm Impact Width _____

Est. Oil Thickness where > 1cm: _____ cm SU / SP / UP / MID / LO

Est. Oil Penetration: 0 cm SU / SP / UP / MID / LO

Layers? Yes/No No. Layers _____ Oil Weathering _____

Drift Debris Oiled? Yes/No Supra/Upper/Mid/Lower Amount: H / U / L / M

OIL MORPHOLOGY

Pooled Oil _____ % "Free" Oil _____ % Spattered 100 % H/U/L/VL Sheen _____ %

OIL WEATHERING (OW)

Fresh Oil _____ % SU/SP/VP/MID/LO Choc Mousse 100 % SU/SP/VP/MID/LO

Pancake Mousse _____ % SU/SP/VP/MID/LO Asphalt Mousse _____ % SU/SP/VP/MID/LO

Tar Formation _____ %

Comments:

ACE 8707396

K-4-24-SP-8 unit consists of a series of 3 interconnected pocket beaches separated by small rock headlands. Each pocket is characterized by a storm berm covered by logs and kelp. The east and middle beaches are made up of rubble and gravel. The western beach is much coarser and is comprised of broken rubble. The very discontinuous oil spots are found along the high water line. No oil is found in the debris.

POOR QUALITY ORIGINAL

DOCUMENTATION:

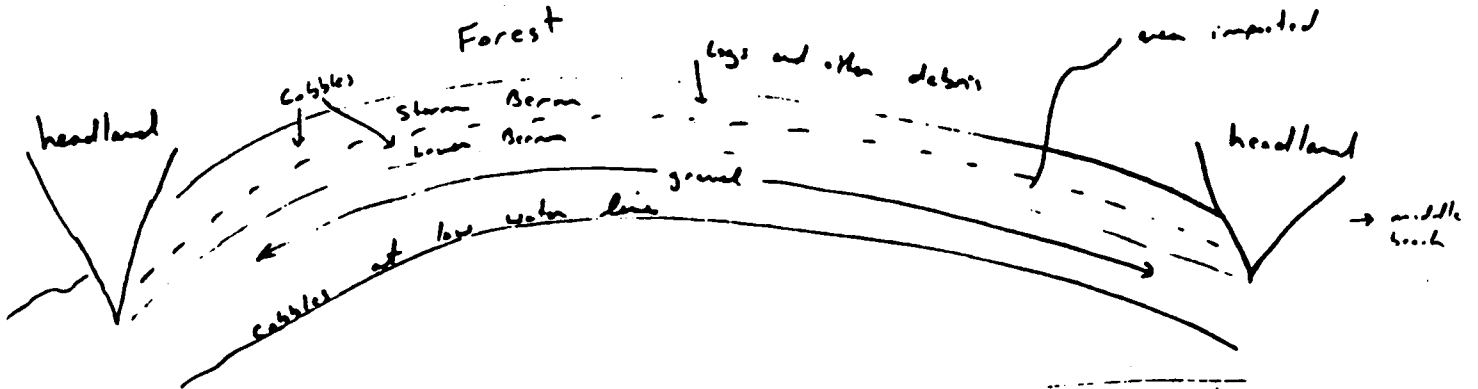
Map/Aerial photo marking segment boundaries See Attached

VTR: Y/N Tape Number(s) _____

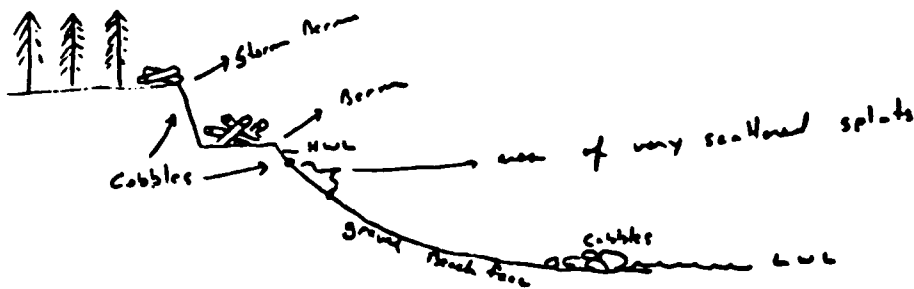
Photography: Y/N Roll Number(s) DMC-14

Sample Numbers Collected: N/A

East and Middle Beach Morphology

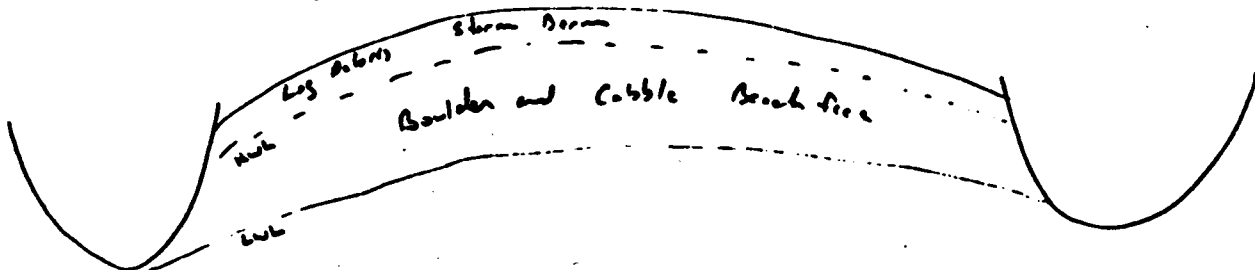


Representation Profile of East and Middle Beach



West Beach

Forest



ECOLOGICAL EVALUATION

LOCATION: WEST SIDE
SPRUCE IS. SITE: _____ OBSERVER: _____
 LOCATION PREFIX: SP SEG. NO.: 8 LENGTH: 1600 (M)
 DATE: 6/11/89 TIME (HHMM): 1620 TIDE HT.: +1.5 (M)
 OILED ZONE: Splash High Medium Low
 SUBSTRATUM: Rocks Boulder Cobble Gravel Sand Mud

LIVE BIOTA

Fucus (algae): Patchy ☒ Y ☐ N Contin. ☐ Y ☒ N Dense ☐ Y ☒ N Sparse ☐ Y ☒ N None ☐ Y ☒ N
Dense on rocky outcroppings only

Mytilus (Mussels): Patchy ☒ Y ☐ N Contin. ☐ Y ☒ N Dense ☐ Y ☒ N Sparse ☐ Y ☒ N None ☐ Y ☒ N
Dense clumps on rocky outcroppings only

Balanus (Barnacles): Patchy ☒ Y ☐ N Contin. ☐ Y ☒ N Dense ☐ Y ☒ N Sparse ☐ Y ☒ N None ☐ Y ☒ N
Dense on rocky outcroppings only

Littorina
 Patchy ☐ Y ☒ N Contin. ☐ Y ☒ N Dense ☐ Y ☒ N Sparse ☐ Y ☒ N None ☐ Y ☒ N
Continuous but not dense on southernmost beach

Limpets: Patchy ☒ Y ☐ N Contin. ☐ Y ☒ N Dense ☐ Y ☒ N Sparse ☐ Y ☒ N None ☐ Y ☒ N

OTHER OBSERVATIONS: giant sea urchins in tide pools, Endocladia, Katharina, Sesuvium
bull kelp, ulva,

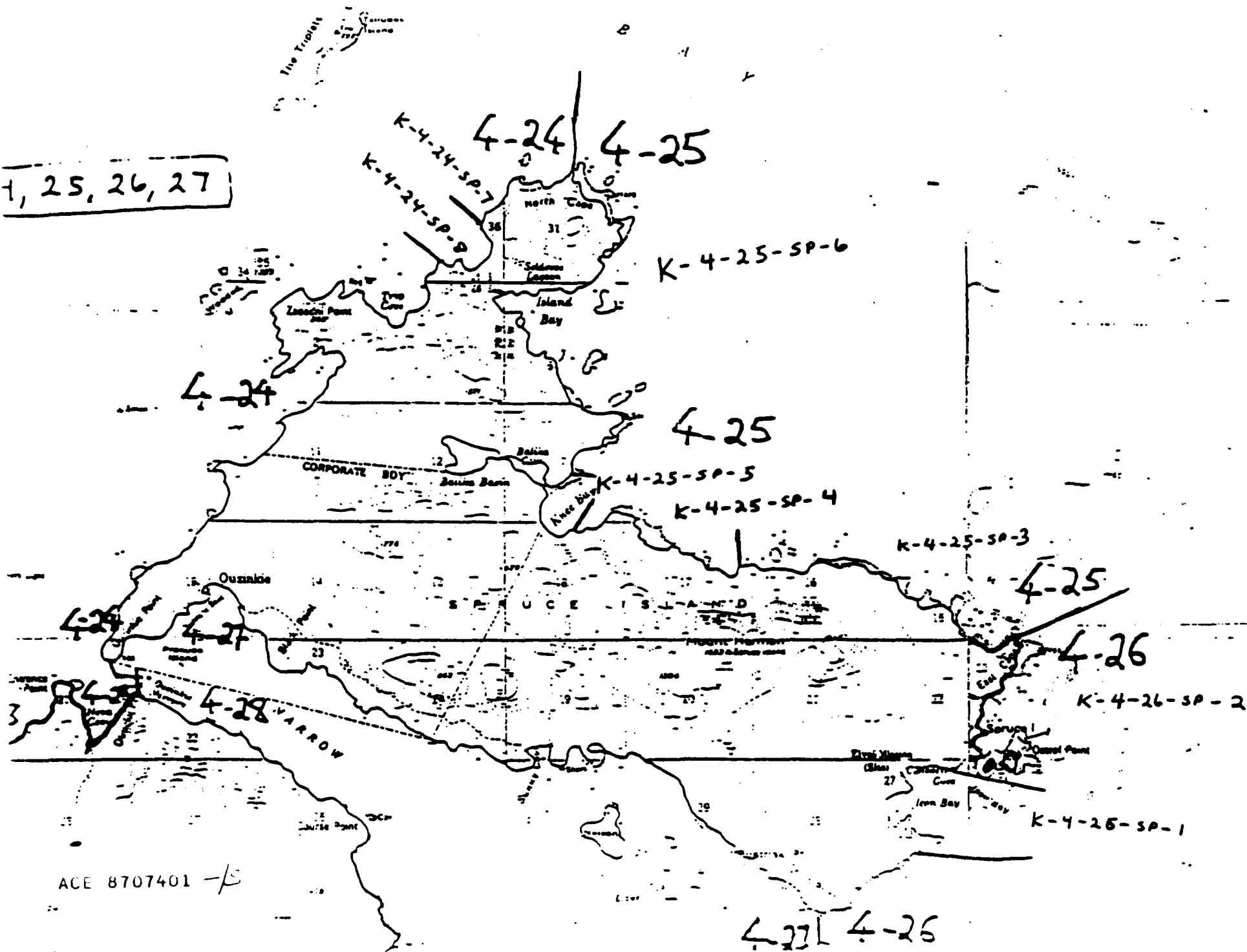
CLEANUP PRECAUTIONS: None

MAMMALS: Otters _____ Harbor Seals _____ Sea Lions _____ Whales _____
 Other _____

BIRDS: bold eagle

GENERAL OBSERVATIONS: This segment consists of 3 beaches separated by rocky
headlands. With the exception of patchy Littorina on the southernmost
beach, all are devoid of biota. The rocky areas are dense with typical
mid-lower ITZ biota. Several mouse patties observed on two northern

1, 25, 26, 27



(version 6/14/89)

SHORELINE CLEANUP PROGRAM

DATE 6/21/89

SHORELINE SEGMENT SP-9

LOCATION: (see enclosed map) TRIP COVE-NORTHWEST END SPRUCE IS.

ADEC NO. _____ SHORELINE ASSESSMENT DATE: 6/14/89

Recommended Cleanup Activity(ies):

No cleanup recommended at this time subject to FOSC approval.
No oil observed.

Priorities Considerations:

Ecological Constraints (from site survey):

No constraints, since no oil was observed in this segment. If this segment becomes oiled in the future, an ecological assessment will be required.

Archeological Constraints (from site survey):

If cleanup is conducted and heretofore undiscovered cultural materials are uncovered, contact Exxon's Archeological Field Director and take actions prescribed in the Operational Guidelines for Shoreline Cleanup dated 4/21/89 as amended.


State Historic Preservation Officer *

Date: June 24, 1989

ISCC: _____

Date: _____

EXXON: _____

Date: _____

FOSC: _____

Date: _____

* Signature required to satisfy stipulations in Alaska DNR land use permits for tide and submerged lands.

(version 5/16/89)

SHORELINE OIL EVALUATION FORM - KODIAK

Date: 6-14-89 Time: 1345

Observer: S. Portland

Surveyed From: Foot/Boat/Helio/Plane

Weather: Sun/Cloud/Rain/Snow/Fog

LOCATION

LOCATION Spence Island - Trip Cave

SEGMENT I.D. K-4-24-SP-9

LENGTH OF SHORELINE SEGMENT: 2625 m

ACCESS: Foot/Vehicle/Boat/Barge/Helio/Float Plane

SHORELINE:

Shoreline Type: SPI/BEA/COV/HLD/STRT

Slope: LAHG/HANG/VER

Wave Exposure: High/Med/Low

Sediment: B 10 / C 32 / P 20 / G 20 / S 20 / M 1 / R 1

Drift Debris on Beach: Yes/No Supra/Upper/Mid/Lower Type Log / kelp

OIL

Degree of Oiling: Heavy/Moderate/Light/No Oil/Unobserved

Total Area of Beach Impact: SU / SP / H / M / L

OIL DISTRIBUTION

Continuous: Y/N Segment 1 No. Bands 1 Width 1

Sporadic: Y/N Segment 1 Min/Max Dia 1 Impact Width 1

Est. Oil Thickness where > 1cm: 1 cm SU / SP / UP / MID / LO

Est. Oil Penetration: 1 cm SU / SP / UP / MID / LO

Layers? Yes/No No Layers 1 Oil Weathering 1

Drift Debris Oiled? Yes/No Supra/Upper/Mid/Lower Amount: H / U / L / VL

OIL MORPHOLOGY

Pooled Oil 1 "Free" Oil 1 Spattered 1 H/U/L/VL Sheen 1

OIL WEATHERING (OW)

Fresh Oil 1 SU/SP/VP/MID/LO Choc Mousse 1 SU/SP/VP/MID/LO

Pancake Mousse 1 SU/SP/VP/MID/LO Asphalt Mousse 1 SU/SP/VP/MID/LO

Tar Formation 1

ACE 8707403

Comments:

No oil observed in unit K-4-24-SP-9. It seems
oil is observed only Kodak SEAT. removed.

DOCUMENTATION:

Map Aerial photo marking segment boundaries See Attached

VTR: Y/N Tape Number(s) _____

Photography: Y/N Roll Number(s) DMC-14

Sample Numbers Collected: N/A

ECOLOGICAL EVALUATION

LOCATION: ^{TRIP COVE} NW side of Spruce IS. SITE: _____ OBSERVER: D. McCormick

LOCATION PREFIX: SP SEG. NO.: 9 LENGTH: 2625 (M)

DATE: 6/14/89 TIME (HHMM): 1345 TIDE HT.: +1.5 (M)

OILED ZONE: Splash High Medium Low NONE

SUBSTRATUM: Rocks Boulder Cobble Gravel Sand Mud

LIVE BIOTA

Fucus (algae): Patchy Y/N Contin. Y/N Dense Y/N Sparse Y/N None Y/N

Dense & continuous on boulders only - either side of beaches

Mytilus (Mussels): Patchy Y/N Contin. Y/N Dense Y/N Sparse Y/N None Y/N

Balanus (Barnacles): Patchy Y/N Contin. Y/N Dense Y/N Sparse Y/N None Y/N

Dense & continuous on boulders only

Littorina

Patchy Y/N Contin. Y/N Dense Y/N Sparse Y/N None Y/N

Limpets: Patchy Y/N Contin. Y/N Dense Y/N Sparse Y/N None Y/N

Continuous on boulders only - either side of beaches

OTHER OBSERVATIONS: 1 Salpeter on beach. No oil observed

CLEANUP PRECAUTIONS: _____

MAMMALS: Otters _____ Harbor Seals _____ Sea Lions _____ Whales _____
Other _____

BIRDS: _____

GENERAL OBSERVATIONS: No oil observed at this time.

25, 26, 27

4-24 | 4-25

K-4-25-SP-6

425

K-4-25-SP-5
K-4-25-SP-4

K-4-25-50-3

-4-25

4-26

K-4-26-SP-2

K-4-25-SP-

17-4-20

ACE 8707407 -15

K-04-24

(version 6/14/89)

SHORELINE CLEANUP PROGRAM

DATE 6/21/89 SHORELINE SEGMENT SP-10

LOCATION: (see enclosed map) SPRUCE ISLAND-ZAPADNI POINT

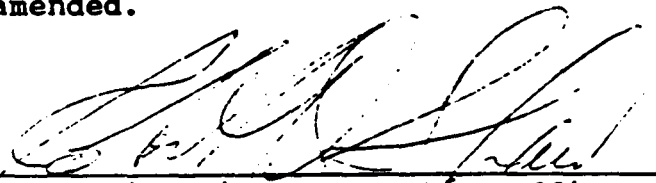
ADEC NO. _____ SHORELINE ASSESSMENT DATE: 6/14/89

Recommended Cleanup Activity(ies):
No cleanup recommended at this time subject to FOSC approval.
No oil observed.

Priorities Considerations:

Ecological Constraints (from site survey):
No ecological evaluation form is included in this report
because the segment was surveyed by helicopter only.

Archeological Constraints (from site survey):
If cleanup is conducted, re-evaluation of constraints by DNR/SHPO staff is required. If cleanup is conducted and heretofore undiscovered cultural materials are uncovered, contact Exxon's Archeological Field Director and take actions prescribed in the Operational Guidelines for Shoreline Cleanup dated 4/21/89 as amended.



State Historic Preservation Officer *

Date: June 24, 1989

ISCC: _____

Date: _____

EXXON: _____

Date: _____

FOSC: _____

Date: _____

* Signature required to satisfy stipulations in Alaska DNR land use permits for tide and submerged lands.

(version 5/02/89)

SHORELINE CLEANUP PROGRAM

DATE 6/21/89

SHORELINE SEGMENT K4-24-SP-10

LOCATION: (see enclosed map) Spruce Island - Zapadni Point

ADEC NO. _____ SHORELINE ASSESSMENT DATE: 6/14/89

Recommended Cleanup Activity(ies):

- No cleanup recommended due to apparent absence of oil.
Subject to FOSC reassessment at a later date.

Priorities/ Considerations:

Ecological Constraints (from site survey):

- No ecological evaluation form is included in this report
because the segment was surveyed by helicopter only.

Archeological Constraints (from site survey):

- If cleanup is conducted, re-evaluation of constraints by
DNR/SHPO staff is required.
- If cleanup is conducted and heretofore undiscovered
cultural materials are uncovered, contact Exxon's
Archeological Field Director and take actions prescribed in
the Operational Guidelines for Shoreline Cleanup dated
4/21/89 as amended.

State Historic Preservation Officer *

Date: _____

EXXON: _____

Date: _____

FOSC: _____

Date: _____

*Signature required to satisfy stipulations in Alaska DNR land
use permits for tide and submerged lands.

ACE 8707409

(version 5/16/89)

SHORELINE OIL EVALUATION FORM - KONTAK

Date: 6-14-89 / Time: 1445

Observer: S. Pealand

Surveyed From: Foot/Boat/Helio/Plane

Weather: Sun/Cloud/Rain/Snow/Fog

LOCATION

LOCATION Spruce Island - Zapadni Point

SEGMENT I.D. K-4-24-SP-10

LENGTH OF SHORELINE SEGMENT: 1312 m

ACCESS: Foot/Vehicle/Boat/Barge/Helio/Float Plane

SHORELINE:

Shoreline Type: SPI/BEA/COV/HLD/STRT

Slope: LAUG/HANG/VER

Wave Exposure: High/Med/Low

Sediment: B 2 / C 2 / P 1 / G 1 / S 1 / M 1 / R 20

Drift Debris on Beach: Yes/No Supra/Upper/Mid/Lower Type Log / kelp

OIL

Degree of Oiling: Heavy/Moderate/Light/No Oil/Unobserved

Total Area of Beach Impact: SU / SP / H / M / L

IL DISTRIBUTION

Continuous: Y/N Segment 1 No. Bands 1 Width 1

Sporadic: Y/N Segment 1 Min/Max Dia 1 Impact Width 1

Est. Oil Thickness where > 1cm: 1 cm SU / SP / UP / MID / LO

Est. Oil Penetration: 1 cm SU / SP / UP / MID / LO

Layers? Yes/No No. Layers 1 Oil Weathering 1

Drift Debris Oiled? Yes/No Supra/Upper/Mid/Lower Amount: H / U / L / V

OIL MORPHOLOGY

Pooled Oil 1 "Free" Oil 1 Spattered 1 H/H/L/VL Sheen 1

OIL WEATHERING (OW)

Fresh Oil 1 SU/SP/VP/MID/LO Choc Mousse 1 SU/SP/VP/MID/LO

Pancake Mousse 1 SU/SP/VP/MID/LO Asphalt Mousse 1 SU/SP/VP/MID/LO

Tar Formation 1

Comments:

No oil observed in unit K-4-24-SP-10. If false oil is observed notify Point SCPT recommended.

DOCUMENTATION:

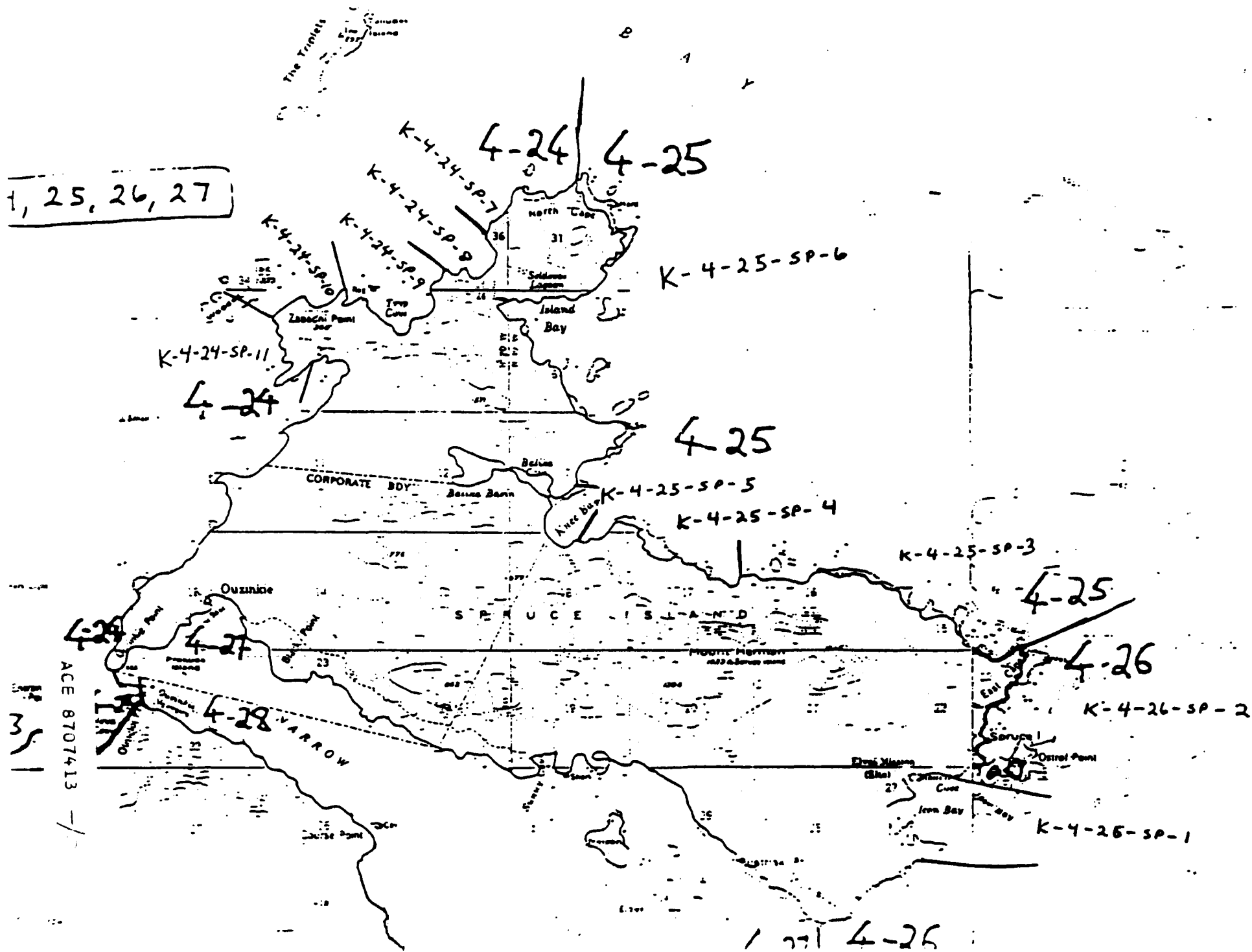
Map/Aerial photo marking segment boundaries See Attached

VTR: Y/N Tape Number(s) _____

Photography: Y/N Roll Number(s) _____

Sample Numbers Collected: N/A

1, 25, 26, 27



K-04-24

(version 6/14/89)

SHORELINE CLEANUP PROGRAM

DATE 6/21/89

SHORELINE SEGMENT SP-11

LOCATION: (see enclosed map) SPRUCE ISLAND-WEST ZAPADNI POINT

ADEC NO. _____ SHORELINE ASSESSMENT DATE: 6/12/89

Recommended Cleanup Activity(ies):

- Manually remove patches of mousse from the high and middle intertidal zones.

If approved, use moderate pressure hot water wash with wands and vacuum or sorbents to remove oil penetrated into the angular cobbles on beach 3.

Use other approved methods as appropriate

Priorities Considerations:

Class 4: light oiling.

Class A: resources present.

Ecological Constraints (from site survey): Work at mid tide and/or take appropriate measures to protect lower intertidal zone. Gently wash snails into lower intertidal zone of beach 3 before washing with hot water and moderate pressure.

Archeological Constraints (from site survey):

No access above high tide line. If heretofore undiscovered cultural materials are uncovered during cleanup, contact Exxon's Archeological Field Director and take actions prescribed in the Operational Guidelines for Shoreline Cleanup dated 4/21/89 as amended.



State Historic Preservation Officer *

Date: June 24, 1989

ISCC: _____

Date: _____

EXXON: _____

Date: _____

FOSC: _____

Date: _____

* Signature required to satisfy stipulations in Alaska DNR land use permits for tide and submerged lands.

(version 5/02/89)

SHORELINE CLEANUP PROGRAM

DATE 6/21/89

SHORELINE SEGMENT K4-24-SP-11

LOCATION: (see enclosed map) Spruce Island - West Zapadni Point

ADEC NO. _____ SHORELINE ASSESSMENT DATE: 6/12/89

Recommended Cleanup Activity(ies):

- Manually remove patches of mousse from the high and middle intertidal zones.
- If approved, use moderate pressure hot water wash with wands and vacuum or sorbents to remove oil penetrated into the angular cobbles on beach #3.
- Use other approved methods as appropriate.

Priorities/ Considerations: Class 4-A

- Light oiling, resources present.

Ecological Constraints (from site survey):

- Work at mid tide and/or take appropriate measures to protect lower intertidal zone. Gently wash snails into lower intertidal zone of beach #3 before washing with hot water and moderate pressure.

Archeological Constraints (from site survey):

- No access above high tide line.
- If heretofore undiscovered cultural materials are uncovered during cleanup, contact Exxon's Archeological Field Director and take actions prescribed in the Operational Guidelines for Shoreline Cleanup dated 4/21/89 as amended.

State Historic Preservation Officer *

Date: _____

EXXON: _____

Date: _____

FOSC: _____

Date: _____

*Signature required to satisfy stipulations in Alaska DNR land use permits for tide and submerged lands.

(version 5/16/89)

SHORELINE OIL EVALUATION FORM - KONIAK

Date: 6-12-89 / Time: 1200

Observer: S. Portland

Surveyed From: Foot/Boat/Helio/Plane

Weather: Sun, Cloud, Rain, Snow, Fog

LOCATION

LOCATION Spice Island - West Zapadni Point SEGMENT I.D. K-4-24-SP-11

LENGTH OF SHORELINE SEGMENT: 1969 m

ACCESS: Foot/Vehicle/Boat/Barge/Helio/Float Plane

SHORELINE:

Shoreline Type: SPI/SEA/COV/HID/STRT

Slope: LANG/HANG/VER

Wave Exposure: High/Med/Low

Sediment: B/D / C60 / P12 / G12 / S12 / M / R

Drift Debris on Beach: Yes/No Supra/Upper/Mid/Lower Type Log / k.p.

OIL

Degree of Oiling: Heavy/Moderate/Light/No Oil/Unobserved

Total Area of Beach Impact: SU / SP / H / M / L

IL DISTRIBUTION

Continuous: Y/N Segment 4 No. Bands 1 Width 1

Sporadic: Y/N Segment 40 Min/Max Dia 5-22 Impact Width 15

Est. Oil Thickness where > 1cm: 1-3 cm SU / SP / UP / HID / LO

Est. Oil Penetration: 12-20 cm SU / SP / UP / HID / LO

Layers? Yes/No No. layers 1 Oil Weathering 1

Drift Debris Oiled? Yes/No Supra/Upper/Mid/Lower Amount: 1 / 1 / 1 / 1

OIL MORPHOLOGY

Pooled Oil 1 "Free" Oil 100 Spattered 1 H/H/L/VL Shown 1

OIL WEATHERING (ON)

Fresh Oil 1 SU/SP/VP/HID/LO Choc Mousse 100 SU/SP/VP/HID/LO

Pancake Mousse 1 SU/SP/VP/HID/LO Asphalt Mousse 1 SU/SP/VP/HID/LO

Tar Formation 1

Comments:

Spit K-4-24-SP-11 is a complete shore zone of alternating headland and pocket beaches. See
notes on description. Beaches 1-4. Beach 1 is a small, narrow, sandy beach. Beach 2 is a small, narrow, sandy beach. Beach 3 is a small, narrow, sandy beach. Beach 4 is a small, narrow, sandy beach.
Beach 1 is a small, narrow, sandy beach. Beach 2 is a small, narrow, sandy beach. Beach 3 is a small, narrow, sandy beach. Beach 4 is a small, narrow, sandy beach.
Beach 1 is a small, narrow, sandy beach. Beach 2 is a small, narrow, sandy beach. Beach 3 is a small, narrow, sandy beach. Beach 4 is a small, narrow, sandy beach.
Beach 1 is a small, narrow, sandy beach. Beach 2 is a small, narrow, sandy beach. Beach 3 is a small, narrow, sandy beach. Beach 4 is a small, narrow, sandy beach.

ACE 8707415

DOCUMENTATION:

Map Aerial photo marking segment boundaries See Attached

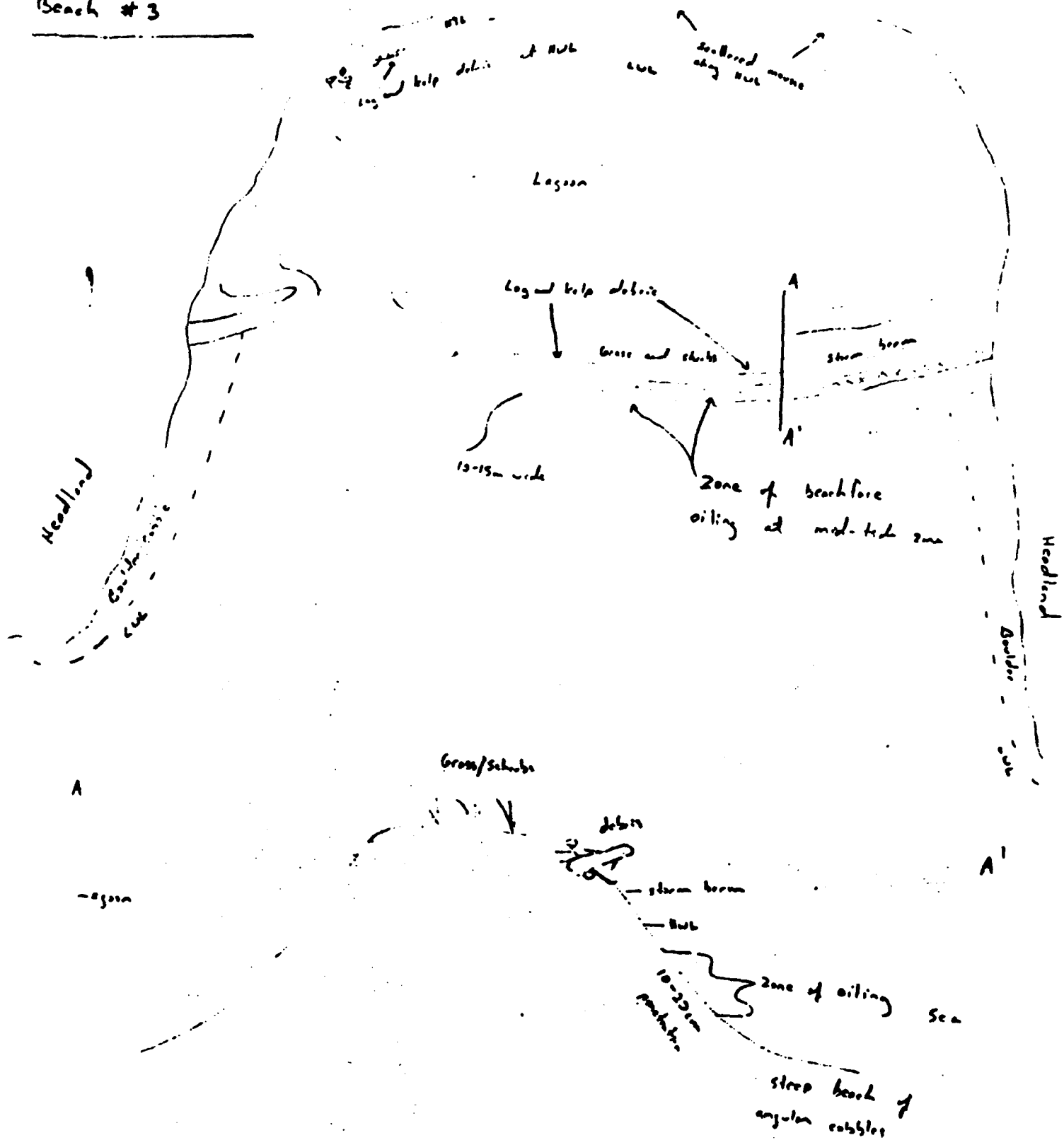
VTR: Y/N Tape Number(s) _____

Photography: Y/N Roll Number(s) DMC-14

Sample Numbers Collected: N/A

K-4-24-SP-11

Beach #3



ACE 8707418

POOR QUALITY ORIGINAL

ECOLOGICAL EVALUATION

Spruce Island

LOCATION West of Zepher Pt SITE: _____ OBSERVER: D. McCormick

LOCATION PREFIX: SP SEG. NO.: 11 LENGTH: 1968 (M)

DATE: 6/12/89 TIME (HHMM): 1250 TIDE HT.: +1.5 (M)

OILED ZONE: Splash High Medium Low

SUBSTRATUM: Rocks Boulder' Cobble Gravel Sand Mud

LIVE BIOTA

Fucus (algae): Patchy Y/N Contin. Y/N Dense Y/N Sparse Y/N None Y/N

Mytilus (Mussels): Patchy Y/N Contin. Y/N Dense Y/N Sparse Y/N None Y/N

Balanus (Barnacles): Patchy Y/N Contin. Y/N Dense Y/N Sparse Y/N None Y/N

Littorina

Patchy ☒ **Contn.** ☒ **Dense** ☒ **Sparse** ☒ **None** ☒

Limpets: Patchy ☒ Contin. ☒ Dense ☒ Sparse ☒ None ☒

OTHER OBSERVATIONS: whelks, Modiolus mussels. Oil occurs in rocks
to a depth of several cm. ~~Not~~ The sand population here.

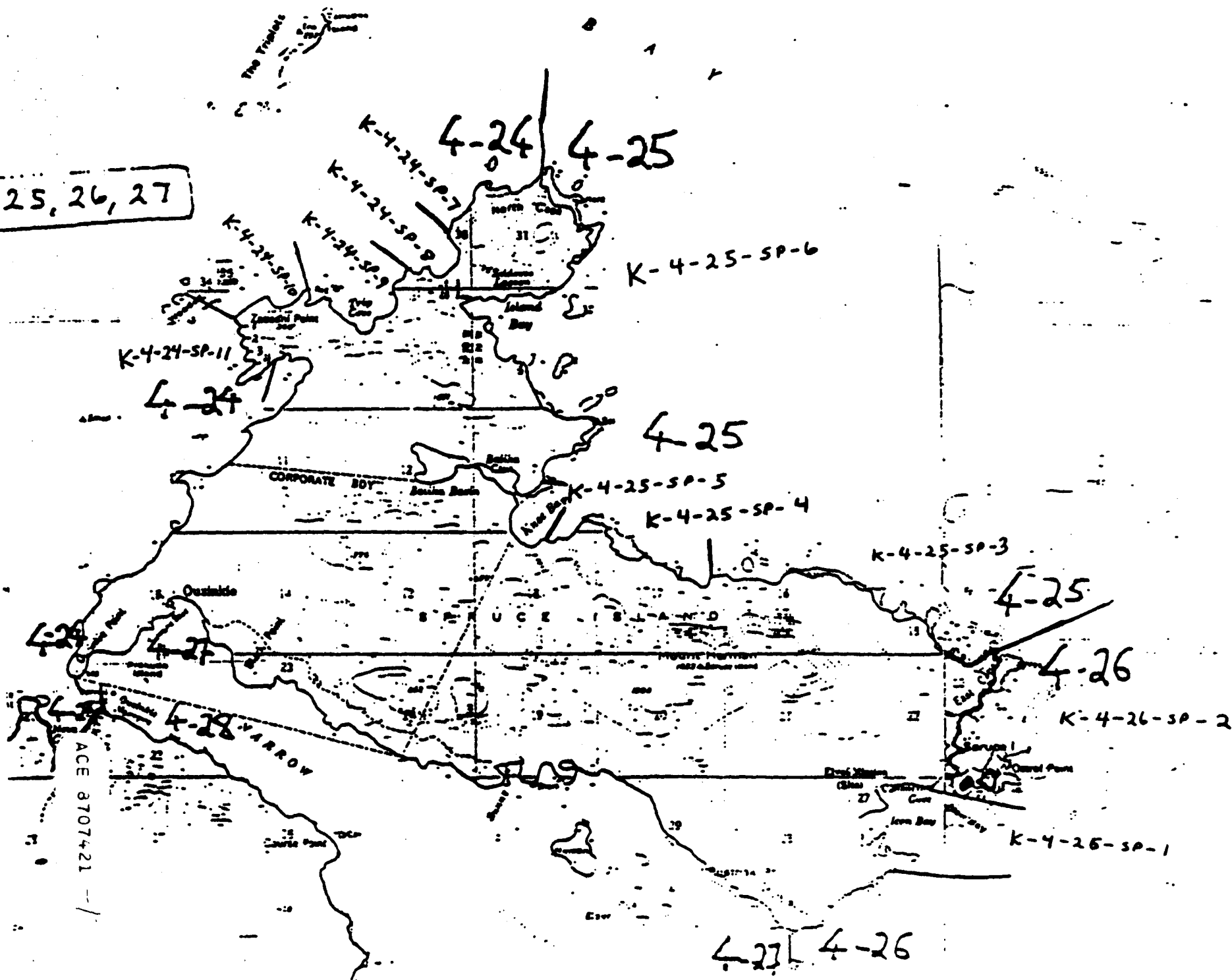
CLEANUP PRECAUTIONS: Clean at mid-tide time only to avoid
oiling of lower I T Z. Start wash with cold/warm water + low
pressure to blow snails out of area if possible before applying high press/hot.

MAMMALS: Otters ____ Harbor Seals ____ Sea Lions ____ Whales ____ *under*
Other _____

BIRDS:

GENERAL OBSERVATIONS: 4 beaches in this segment - Beach # 3 has
heaviest occurrence of oil in mid tide zone, others have at most a
few mousse patches in high zone debris. Manual cleanup is already taking
place on Beach # 3. no constraints for manual cleanup.

25, 26, 27



(version 6/14/89)

SHORELINE CLEANUP PROGRAM

DATE 6/21/89

SHORELINE SEGMENT SP-11

LOCATION: (see enclosed map) SPRUCE ISLAND-WEST ZAPADNI POINT

ADEC NO. K4-24 SHORELINE ASSESSMENT DATE: 6/12/89

Recommended Cleanup Activity(ies):

- Manually remove patches of mousse from the high and middle intertidal zones.

If approved, use moderate pressure hot water wash with wands and vacuum or sorbents to remove oil penetrated into the angular cobbles on beach 3.

Use other approved methods as appropriate

Priorities Considerations:

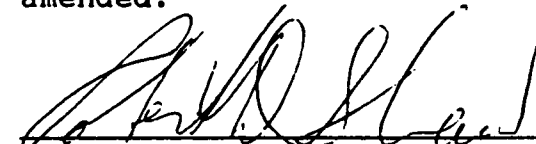
Class 4: light oiling.

Class A: resources present.

Ecological Constraints (from site survey): Work at mid tide and/or take appropriate measures to protect lower intertidal zone. Gently wash snails into lower intertidal zone of beach 3 before washing with hot water and moderate pressure.

Archeological Constraints (from site survey):

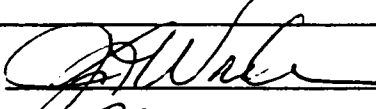
No access above high tide line. If heretofore undiscovered cultural materials are uncovered during cleanup, contact Exxon's Archeological Field Director and take actions prescribed in the Operational Guidelines for Shoreline Cleanup dated 4/21/89 as amended.


State Historic Preservation Officer *

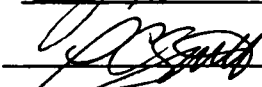
Date: June 24, 1989

ISCC: 

Date: _____

EXXON: 

Date: 7/7/89.

FOSC: 

Date: 7/10/89

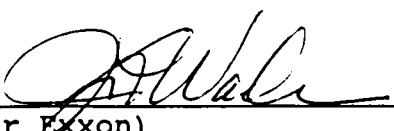
Approved for Type A cleanup to remove surface contamination. Prior to any Type B washing operation route through ISCC.
* Signature required to satisfy stipulations in Alaska DNR land use permits for tide and submerged lands. 

(version 6/04/89)

SHORELINE PRE-CLEANUP ASSESSMENT BLOCK REPORT

Location (see enclosed map): KODIAK-SPRUCE ISLAND NORTHWEST BLOCK

Includes Shoreline Segments: SP-9, SP-10, SP-11

Submitted:  Date: 7/7/89
(for Exxon)

ISCC Recommendation: _____ Date: _____

FOSC Approval:  Date: 7/14/89

See note on SP-11

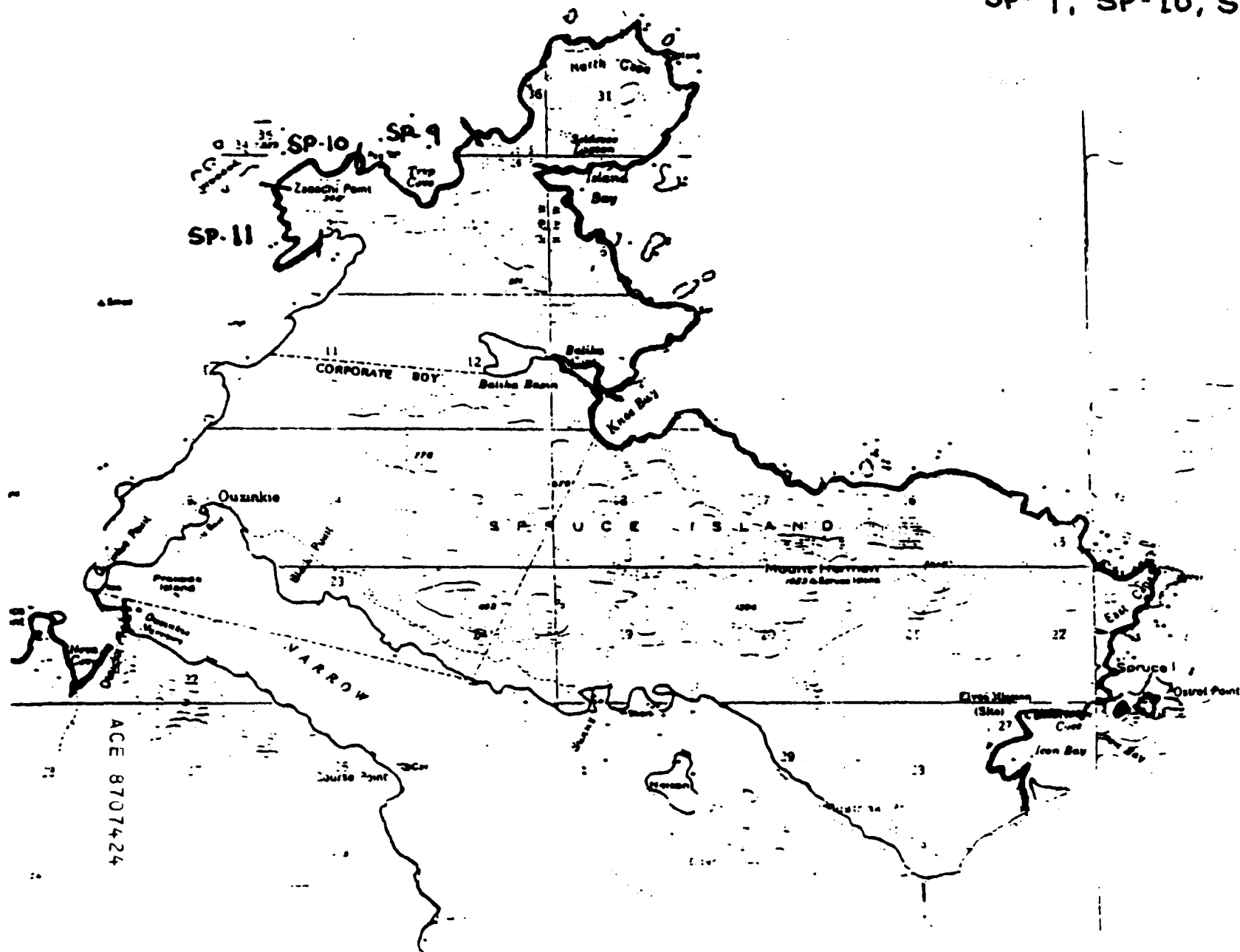
The cleanup procedures identified in the Shoreline Cleanup Program are recommended. Modifications to these systems can be made in the field. Exxon and other field personnel are encouraged to suggest innovations and productivity enhancements to the OSC's on-scene representative. The OSC's representative has the authority to approve on-site modifications. The Field Resource Team should be consulted if these actions do not fit within the Ecological Constraints of the Shoreline Cleanup Program. Requirements for safety and the protection of cultural material must be observed.

Distribution:

Exxon Shoreline Coordinator
Exxon Shoreline Supervisor
Exxon SCAT file

FOSC
CDFU
NOAA
EPA
USDA (FS)
USFW
A.DEC
A.FG
A.DNR
CAC
PWSCA
USFS
SHPO

SP-9, SP-10, SP-11



ACE 8707424

(version 5/16/89)

SHORELINE OIL EVALUATION FORM - KONTAK

Date: 6-12-89 / Time: 1200

Observer: S. Portland

Surveyed From: Foot/Boat/Helio/Plane

Weather: Sun/Cloud/Rain/Snow/Ice

LOCATION

LOCATION Spice Island - West Zapadne P. SEGMENT I.D. K-4-24-SP-11

LENGTH OF SHORELINE SEGMENT: 1968 m

ACCESS: Foot/Vehicle/Boat/Barge/Helio/Float Plane

SHORELINE:

Shoreline Type: SPI/BEA/COV/HLD STRT

Slope: LAUS/HANG/VER

Wave Exposure: High/Med/Low

Sediment: B/O / C60 / P/O / G/O / S/O / M / R

Drift Debris on Beach: Yes/No Supra/Upper/Mid/Lower Type Log / k.p.

OIL

Degree of Oiling: Heavy/Moderate/Light/No Oil/Unobserved

Total Area of Beach Impact: SU / SP / H / M / L

OIL DISTRIBUTION

Continuous: Y/N Segment 1 No. Bands _____ Width _____

Sporadic: Y/N Segment 1 40 Min/Max Dia 5-20 cm Impact Width 10-15 m

Est. Oil Thickness where > 1cm: 1-3 cm SU / SP / UP / HID / LO

Est. Oil Penetration: 10-20 cm SU / SP / UP / HID / LO

Layers? Yes/No No. Layers _____ Oil Weathering _____

Drift Debris Oiled? Yes/No Supra/Upper/Mid/Lower Amount: H / M / L

OIL MORPHOLOGY

Pooled Oil _____ "Free" Oil 100 % Spattered _____ H/H/L/VL Shown _____

OIL WEATHERING (OW)

Fresh Oil _____ SU/SP/VP/MID/LO Choc Mousse 100 % SU/SP/VP/HID/LO

Pancake Mousse _____ SU/SP/VP/MID/LO Asphalt Mousse _____ SU/SP/VP/MID/LO

Tar Formation _____

Comments:

ACE 8707425

Up. 1 K-4-24-SP-11 is a composite shore zone of alternating headlands and pocket beaches. See
location map description section 1-4. Beach # 1 had no oil. Beach # 2 had chocolate and pancake
mousse along the mid and high tide lines. The oil at beach # 2 was very light.
Beach # 3 was heavily oiled along the mid-tide zone. The beach is primarily coarse cobble, the
red-orange stain had manually removed the surface oil, however the oil had penetrated 10-20
into the beach. No oil was observed at beach # 4.
* - see drawing

POOR QUALITY ORIGINAL

DOCUMENTATION:

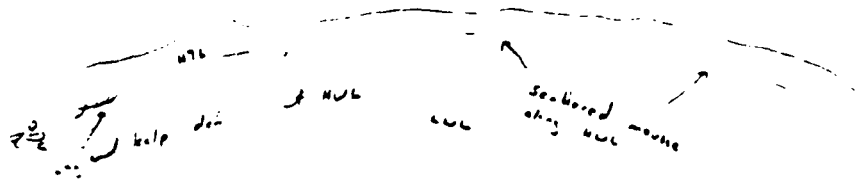
Map/Aerial photo marking segment boundaries See Attached

VTR: Y/N Tape Number(s) _____

Photography: Y/N Roll Number(s) DMC-14

Sample Numbers Collected: 15

Beach #3



Lagoon

Log and debris debris

Grass and debris

Grass and debris

10-15m wide

Zone of scrubby
oiling at mid-tide zone

Headland

Grass and debris

Grass and debris

Grass/scrub

debris

storm berm

HUB

10-20cm
partially

Zone of oiling

Sea

steep beach of
angular rocks

A

Lagoon

A'

ECOLOGICAL EVALUATION

Spruce Island

LOCATION: West of Zapadni Pt SITE: _____ OBSERVER: D. McCormick
 LOCATION PREFIX: SP SEG. NO.: 11 LENGTH: 1968 (M)
 DATE: 6/12/89 TIME (HHMM): 1250 TIDE HT.: +1.5 (M)

OILED ZONE: Splash High Medium Low

SUBSTRATUM: Rocks Boulder Cobble Gravel Sand Mud

LIVE BIOTA

Fucus (algae): Patchy Y/N Contin. Y/N Dense Y/N Sparse Y/N None Y/N

Mytilus (Mussels): Patchy Y/N Contin. Y/N Dense Y/N Sparse Y/N None Y/N

Balanus (Barnacles): Patchy Y/N Contin. Y/N Dense Y/N Sparse Y/N None Y/N

Littorina

Patchy Y/N Contin. Y/N Dense Y/N Sparse Y/N None Y/N

Limpets: Patchy Y/N Contin. Y/N Dense Y/N Sparse Y/N None Y/N

OTHER OBSERVATIONS: whelks, Modiolus mussels. Oil occurs in rocks
to a depth of several cm. Healthy snail coculation here.

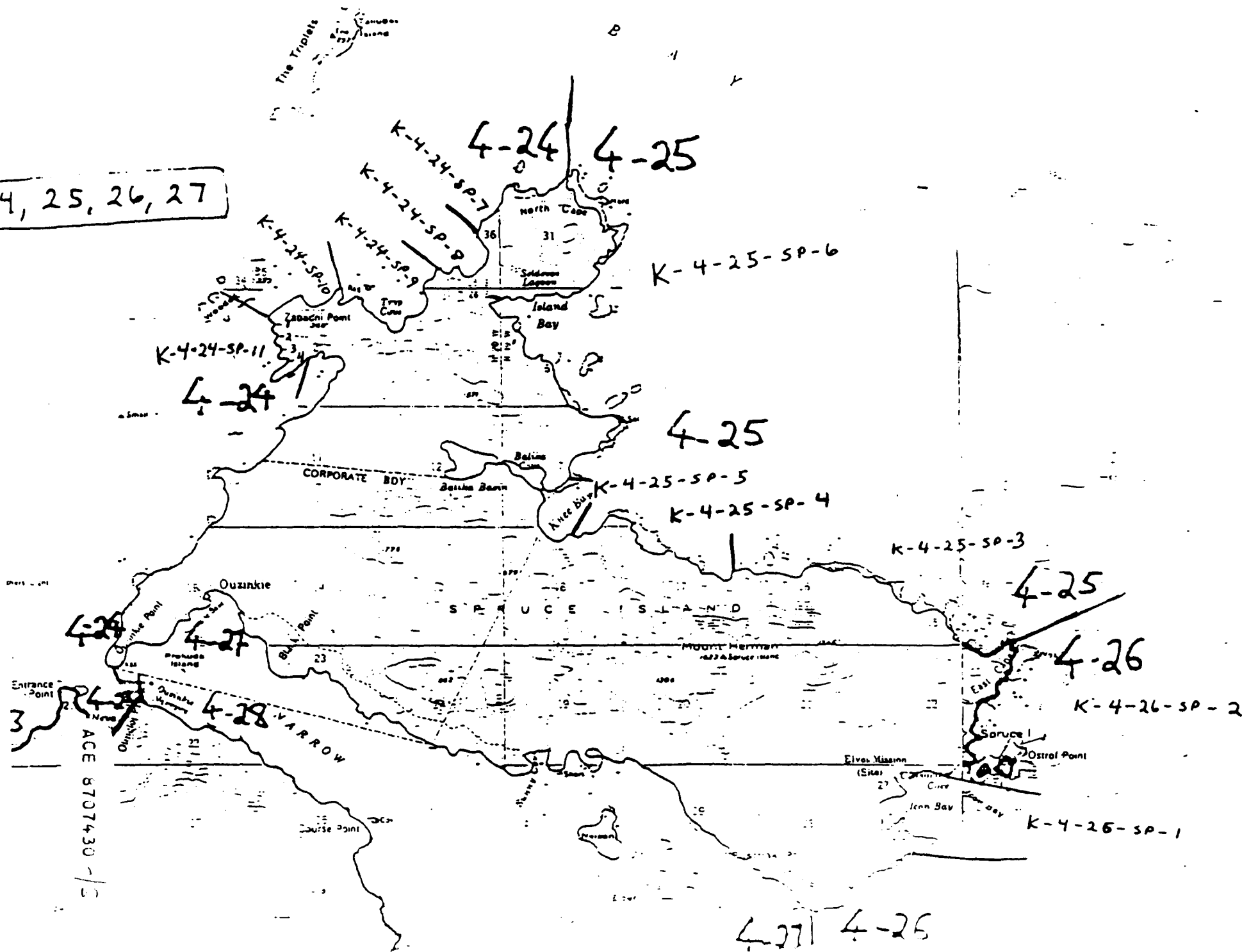
CLEANUP PRECAUTIONS: Clean at mid-tide time only to avoid
oiling of lower ITZ. Start wash with cold/warm water + low
pressure to blow snails out of area if possible before applying high pressure.

MAMMALS: Otters _____ Harbor Seals _____ Sea Lions _____ Whales _____
 other _____

BIRDS: _____

GENERAL OBSERVATIONS: 4 black oiler - 1st segment - Beach # 3 has
highest occurrence of oil in mid tide zone, others have at most a
few mossy patches in high zone areas. Manual cleanup - already taking
place on Beach # 3 - no constraints for manual cleanup.

4, 25, 26, 27



(version 5/02/89)

SHORELINE CLEANUP PROGRAM

DATE 6/29/89 SHORELINE SEGMENT SP-12

LOCATION: (see enclosed map) WEST SIDE SPRUCE ISLAND

ADEC NO. _____ SHORELINE ASSESSMENT DATE: 6/15/89

Recommended Cleanup Activity(ies):

Manually remove chocolate mousse in beach areas.

Use sorbents to manually clean oiled rocky head and areas.

Priorities Considerations:

Low, due to degree of oiling (light) and minor to no impact to biota.

Ecological Constraints (from site survey):

Manual removal of mousse patches and sorbent wiping of rocky surfaces will not adversely impact biota.

Archeological Constraints (from site survey):

Exxon supervisor required during cleanup activity to ensure that crew activity is restricted to the beach zone as per "Operational Guidelines for Shoreline Cleanup" (p.54), Kodiak Response Plan (May 2, 1989). If heretofore undiscovered cultural materials are uncovered during cleanup, contact Exxon's Archeological Field Director and take actions prescribed in the Operational Guidelines for Shoreline Cleanup dated 4/21/89 as amended.

Douglas Reger
State Historic Preservation Officer *

Date: 6/29/89

EXXON: _____

Date: _____

FOSC: _____

Date: _____

* Signature required to satisfy stipulations in Alaska DNR land use permits for tide and submerged lands.

ACE 8707431 +/3

SHORELINE OIL EVALUATION FORM - KODIAK

observer: S. Penland

Weather: Sun/Cloud/Rain/Snow/Drizzle

SEGMENT I.D. K-4-24-SP-12

ACCESS: Foot/Vehicle/Boat/Barge/Helio/Float. Plane

Slope: LANG, UNIG, VER

Sediment: B/O : / C3O : / P2O : / G2O : / S2O : / M. : / R. :

Drift Debris on Beach: Yes/No Supra/Upper/Mid/Lower Type 2 // kelp.

OIL
Degree of oiling: Heavy/Moderate/Light/No Oil/Unobserved

Total Area of Beach Impact: SU / SP / (H) / (N) / (L)

OIL DISTRIBUTION
Continuous: Y (N) Segment 4 No. Bands Width

Sporadic: ☒ N Segment 4-5 Min/Max Dia 2-6 cm Impact Width

Est. Oil Thickness where ≥ 1 cm: _____ cm SU / SP / UP / MI / B

Est. Oil Penetration: 0 cm SU / SP / UP / MID / LO

Layers? Yes ☒ No ☐ No Layers ☐ Old Weathering ☐

Drift Debris Oiled ? Yes/No Supra/Upper/Mid/Lower Amount: 11 1/2

OIL MORPHOLOGY
Pooled Oil _____; "Free" Oil _____; Spattered no; H/H/I. VD Starch _____.

OIL WEATHERING (OW)
Fresh Oil _____ & SU/SP/VP/MID/LO Choc Mousse (90) & SU/SP/VP/MID/LO

Pancake Mousse____} SU/SP/VP/HIN/LO Asphalt Housse ____} SU/SP/VP/HIN/LO

Tar Formation_____

Comments:

ACE 8707432

K-4-24-SP-12 inst - primary morphology in pocket beneath
separated by small narrow heart-shaped pits. The air is very lightly
inflated throughout the whole body. The air is very lightly
observed & the inflated part of the body is observed
in the small heart-shaped pits. The large pocket beneath was
observed in the small pits.

DOCUMENTATION:

Map Aerial photo marking segment boundaries See Attached

VTR: Y/N Tape Number(s) ?

Photography: Y/N Roll Number(s) DMC-14

Sample Numbers Collected: N/A

4, 25, 26, 27

4-24 | 4-25

K-4-24 4

K-4-24

K-4-24-

K. 4-22

K-4-25-SP-6

K-4-24-SP-11

4-24

K-4-24-12

425

K-4-25-SP-4

K-4-25-SP-3

-4-25

4-26

K-4-26-SP-2

K-4-25-SA-

42714-26

ACE 8707435 -/G

(version 5/02/89)

SHORELINE CLEANUP PROGRAM

DATE 6/29/89

SHORELINE SEGMENT SP-12

LOCATION: (see enclosed map) WEST SIDE SPRUCE ISLAND

ADEC NO. K4-24 SHORELINE ASSESSMENT DATE: 6/15/89

Recommended Cleanup Activity(ies):

Manually remove chocolate mousse in beach areas.

Use sorbents to manually clean oiled rocky head and areas.

Priorities Considerations:

Low, due to degree of oiling (light) and minor to no impact to biota.

Ecological Constraints (from site survey):

Manual removal of mousse patches and sorbent wiping of rocky surfaces will not adversely impact biota.

Archeological Constraints (from site survey):

Exxon supervisor required during cleanup activity to ensure that crew activity is restricted to the beach zone as per "Operational Guidelines for Shoreline Cleanup" (p.54), Kodiak Response Plan (May 2, 1989). If heretofore undiscovered cultural materials are uncovered during cleanup, contact Exxon's Archeological Field Director and take actions prescribed in the Operational Guidelines for Shoreline Cleanup dated 4/21/89 as amended.

Douglas Reger
State Historic Preservation Officer *

Date: 6/29/89

EXXON: [Signature]

Date: 7/1/89

* FOSC: [Signature] Rev 7/1/89

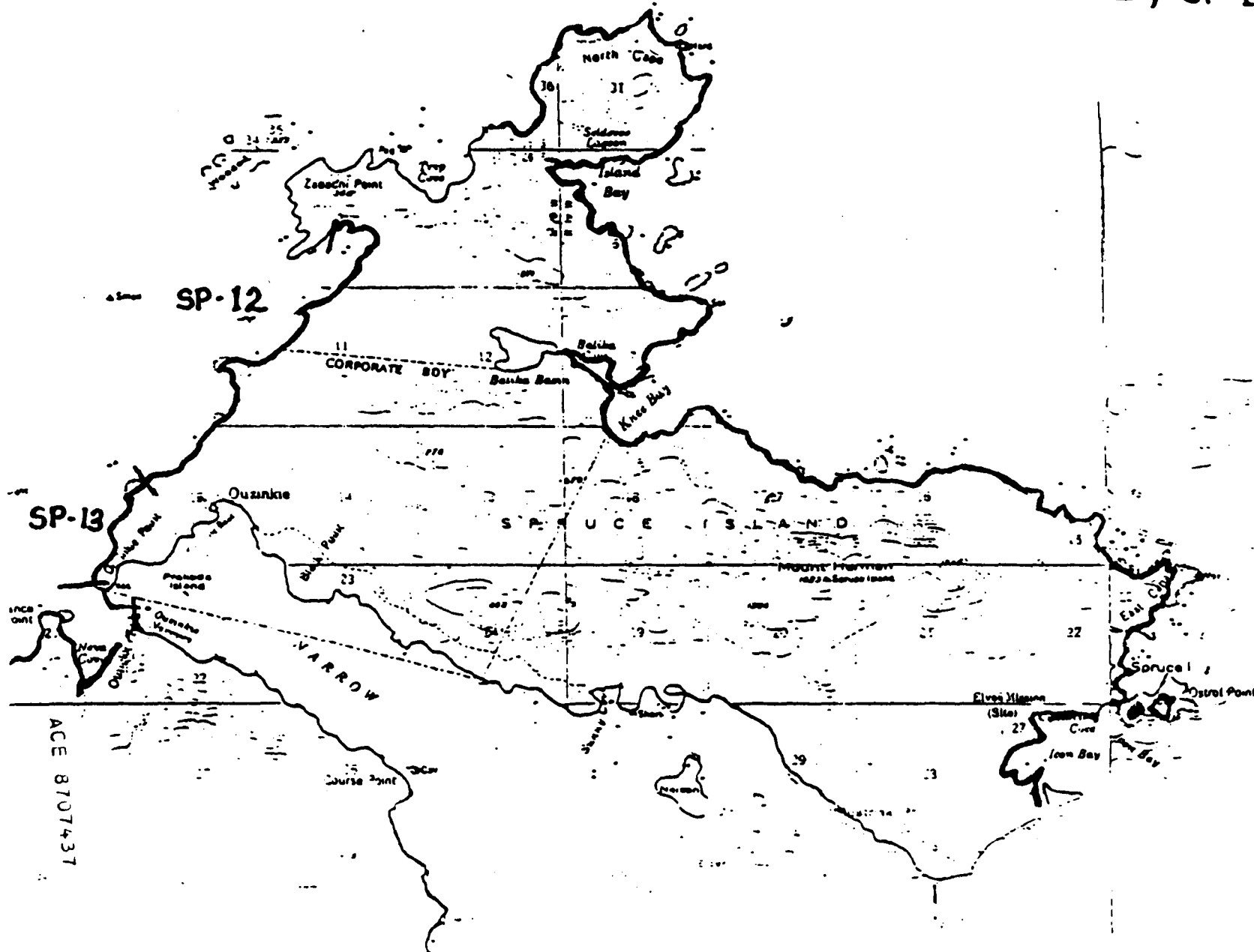
Date: 7/1/89

* Signature required to satisfy stipulations in Alaska DNR land use permits for tide and submerged lands.

ACE 8707435 +/-

SPRUCE ISLAND WEST BLOCK

SP-12 , SP-13



SHORELINE OIL EVALUATION FORM - KONTAK

Date: 6-15-89 Time: 0857

Observer: S. Penland

Surveyed From: Foot/Boat/Helio/Plane

Weather: Sun/Cloud/Rain/Snow (100)

LOCATION

LOCATION Spruce Island

SEGMENT I.D. K-4-24-SP-12

LENGTH OF SHORELINE SEGMENT: 5250 m

ACCESS: Foot/Vehicle/Boat/Barge/Helio/Float Plane

SHORELINE:

Shoreline Type: SPI/BEA/COV/HLI/STET

Slope: LAUG/LAUG/VER

Wave Exposure: High/Med/Low

Sediment: B/O ? / C30 ? / P20 ? / G20 ? / S20 ? / M ? / R ?

Drift Debris on Beach: Yes/No Supra/Upper/Mid/Lower Type Log / kelp

OIL

Degree of Oiling: Heavy/Moderate/Light/No Oil/Unobserved

Total Area of Beach Impact: SU / SP / H / M / L

OIL DISTRIBUTION

Continuous: Y/N Segment ? No. Bands ? Width ?

Sporadic: Y/N Segment ? Min/Max Dia 2-6 cm Impact Width ?

Est. Oil Thickness where > 1cm: ? cm SU / SP / UP / MID / LO

Est. Oil Penetration: 0 cm SU / SP / UP / MID / LO

Layers? Yes/No No# Layers ? Oil Weathering ?

Drift Debris Oiled? Yes/No Supra/Upper/Mid/Lower Amount: H / M / L / N

OIL MORPHOLOGY

Pooled Oil ? "Free" Oil ? Spattered ? H/H/L/VP Sheen ?

OIL WEATHERING (OVI)

Fresh Oil ? SU/SP/VP/MID/LO Choc Mousse ? SU/SP/VP (H) (L)

Pancake Mousse ? SU/SP/VP/MID/LO Asphalt Mousse ? SU/SP/VP/MID/LO

Tar Formation ?

Comments:

K-4-24-SP-12 unit - primary morphology in pocket beaches
separated by small narrow headlands. The oil is very lightly
dispersed throughout the beach. Some of the debris was
observed to be oiled. No penetration of the beach sediment was observed.
In the small headlands separately the larger pocket beaches some oil
was observed on the rocks.

DOCUMENTATION:

Map Aerial photo marking segment boundaries See Attached

VTR: Y/N Tape Number(s) ?

Photography: Y/N Roll Number(s) DMC-14

Sample Numbers Collected: N/A

ECOLOGICAL EVALUATION

LOCATION: west Side Spruce Island SITE: _____ OBSERVER: D. McGemick

LOCATION PREFIX: SP SEG. NO.: 12 LENGTH: 5250 (M)

DATE: 6/15/89 TIME (HHMM): 0900 TIDE HT.: +1.0 (M)

OILED ZONE: Splash High Medium Low

SUBSTRATUM: Rocks Boulder Cobble Gravel Sand Mud

LIVE BIOTA

Fucus (algae): Patchy Y/N Contin. Y/N Dense Y/N Sparse Y/N None Y/N

Mytilus (Mussels): Patchy Y/N Contin. Y/N Dense Y/N Sparse Y/N None Y/N

Balanus (Barnacles): Patchy Y/N Contin. Y/N Dense Y/N Sparse Y/N None Y/N

Dense on rocky outcroppings

Littorina

Patchy Y/N Contin. Y/N Dense Y/N Sparse Y/N None Y/N

Dense on rocky headlands

Limpets: Patchy Y/N Contin. Y/N Dense Y/N Sparse Y/N None Y/N

OTHER OBSERVATIONS: green & red anemones in tide pools, sculpin, Katharenes, encrusting sponges, starfish subtidal

CLEANUP PRECAUTIONS: None.

MAMMALS: Otters _____ Harbor Seals _____ Sea Lions _____ Whales _____
Other _____

BIRDS: _____

GENERAL OBSERVATIONS: oil occurs mostly as mouse patches in high, mid & low ITZ; some light oiling on rocky areas;

SHORELINE OIL EVALUATION FORM - KONTAK

Date: 6-15-89 / Time: 1300

Observer: S. Penland

Surveyed From: Foot/Boat/Helio/Plane

Weather: Sun/Cloud/Rain/Snow Yes

LOCATION

LOCATION West side of Spruce Island

SEGMENT I.D. K-4-24-SP-13

LENGTH OF SHORELINE SEGMENT: 1525 m

ACCESS: Foot/Vehicle/Boat/Barge/Helio/Float Plane

SHORELINE:

Shoreline Type: SPI/SEA/COV/HID/STRT

Slope: LAUG/HIGH/VER

Wave Exposure: High/Med/Low

Sediment: B20 / C20 / P25 / G25 / S ___ / M ___ / R ___

Drift Debris on Beach: Yes/No Supra/Upper/Mid/Lower Type Log/kelp

OIL

Degree of Oiling: Heavy/Moderate/Light/No Oil/Unobserved

Total Area of Beach Impact: SU / SP / H / M / L

OIL DISTRIBUTION

Continuous: Y/N Segment 1 No. Bands ___ Width ___

Sporadic: Y/N Segment 50 Min/Max Dia ___ Impact Width 5-10 m

Est. Oil Thickness where > 1cm: 1 cm SU / SP / UP / HID / LO

Est. Oil Penetration: 0-20 cm SU / SP / UP / HID / LO

Layers? Yes/No No# Layers ___ Oil Weathering ___

Drift Debris Oiled? Yes/No Supra/Upper/Mid/Lower Amount: H / M / L

OIL MORPHOLOGY

Pooled Oil ___ "Free" Oil ___ Spattered 20 % H/H/L/V Shown ___

OIL WEATHERING

Fresh Oil ___ SU/SP/VP/MID/LO Choc Mousse 20 % SU/SP/UP / HID / LO

Pancake Mousse ___ SU/SP/VP/MID/LO Asphalt Mousse ___ SU/SP/VP/MID/LO

Tar Formation ___

Comments:

The primary morphology of unit K-4-24-SP-13 is low rocky headland cliff with poorly developed pocket beaches. Most of the oil occurrence is smeared on the high/mid tidal zone. There is the occurrence of the oil in the paddy where boulder/cobble overlies the headland surface, there is penetration of 12-22 cm.

(version 5/02/89)

SHORELINE CLEANUP PROGRAM

DATE 6/29/89

SHORELINE SEGMENT SP-13

LOCATION: (see enclosed map) WEST SIDE OF SPRUCE ISLAND

ADEC NO. _____ SHORELINE ASSESSMENT DATE: 6/15/89

Recommended Cleanup Activity(ies):

Manually remove the mousse from the high and mid tide areas.
Use sorbents to remove oil from stained rock surfaces in rocky areas.

Priorities Considerations:

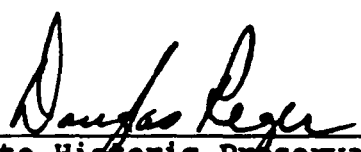
Low, due to degree of oiling (light) and minor no impact to biota.

Ecological Constraints (from site survey):

Manual cleanup using sorbent pads is preferred to washing oil from rocky headland to avoid wholesale removal of tide pool organisms.

Archeological Constraints (from site survey):

If cleanup is conducted and heretofore undiscovered cultural materials are uncovered, contact Exxon's Archeological Field Director and take actions prescribed in the Operational Guidelines for Shoreline Cleanup dated 4/21/89 as amended.



State Historic Preservation Officer *

Date: 6/29/89

EXXON: _____

Date: _____

FOSC: _____

Date: _____

* Signature required to satisfy stipulations in Alaska DNR land use permits for tide and submerged lands.

(version 5/16/89)

SHORELINE OIL EVALUATION FORM - KODIAK

Date: 6-15-89 / Time: 1000

Observer: S. Pealand

Surveyed From: Foot/Boat/Helicopter/Plane

Weather: Sun/Cloud/Rain/Snow/Ice

LOCATION

LOCATION West side of Spruce Island

SEGMENT I.D. K-4-24-SP-13

LENGTH OF SHORELINE SEGMENT: 1525 m

ACCESS: Foot/Vehicle/Boat/Barge/Helicopter/Float Plane

SHORELINE:

Shoreline Type: SPI/BEA/COV/HID/STRT

Slope: LANG/HIGH/VER

Wave Exposure: High/Med/Low

Sediment: B20 / C20 / P25 / G25 / S / M / R

Drift Debris on Beach: Yes/No

Supra/Upper/Mid/Lower Type Log / kelp

OIL

Degree of Oiling: Heavy/Moderate/Light/No Oil/Unobserved

Total Area of Beach Impact: SU / SP / H / M / L

OIL DISTRIBUTION

Continuous: Y/N Segment 50 No. Bands 1 Width 5-10

Sporadic: Y/N Segment 50 Min/Max Dia — Impact Width 5-10

Est. Oil Thickness where > 1cm: < 1 cm SU / SP / UP / HID / LO

Est. Oil Penetration: 0-20 cm SU / SP / UP / HID / LO

Layers? Yes/No No. Layers 1 Oil Weathering 1

Drift Debris Oiled? Yes/No Supra/Upper/Mid/Lower Amount: 11 / 11 / 1

OIL MORPHOLOGY

Pooled Oil — "Free" Oil — Spattered 0.2 H/H/L/V Shown —

OIL WEATHERING (OW)

Fresh Oil — SU/SP/VP/MID/LO Choc Mousse 0.2 SU/SP/UP/HID/LO

Pancake Mousse — SU/SP/VP/MID/LO Asphalt Mousse — SU/SP/VP/MID/LO

Tar Formation —

ACE 8707445

Comments:

The primary morphology of unit K-4-24-SP-13 is low rocky beachland cliff with patchy developed pocket beaches. Most of the oil occurrence is smeared on the high/med tidal zone. Some of the occurrence of the oil is in the middle of the beach. Where beach is low, the beachland surface, there is penetration of 10-20 cm.

DOCUMENTATION:

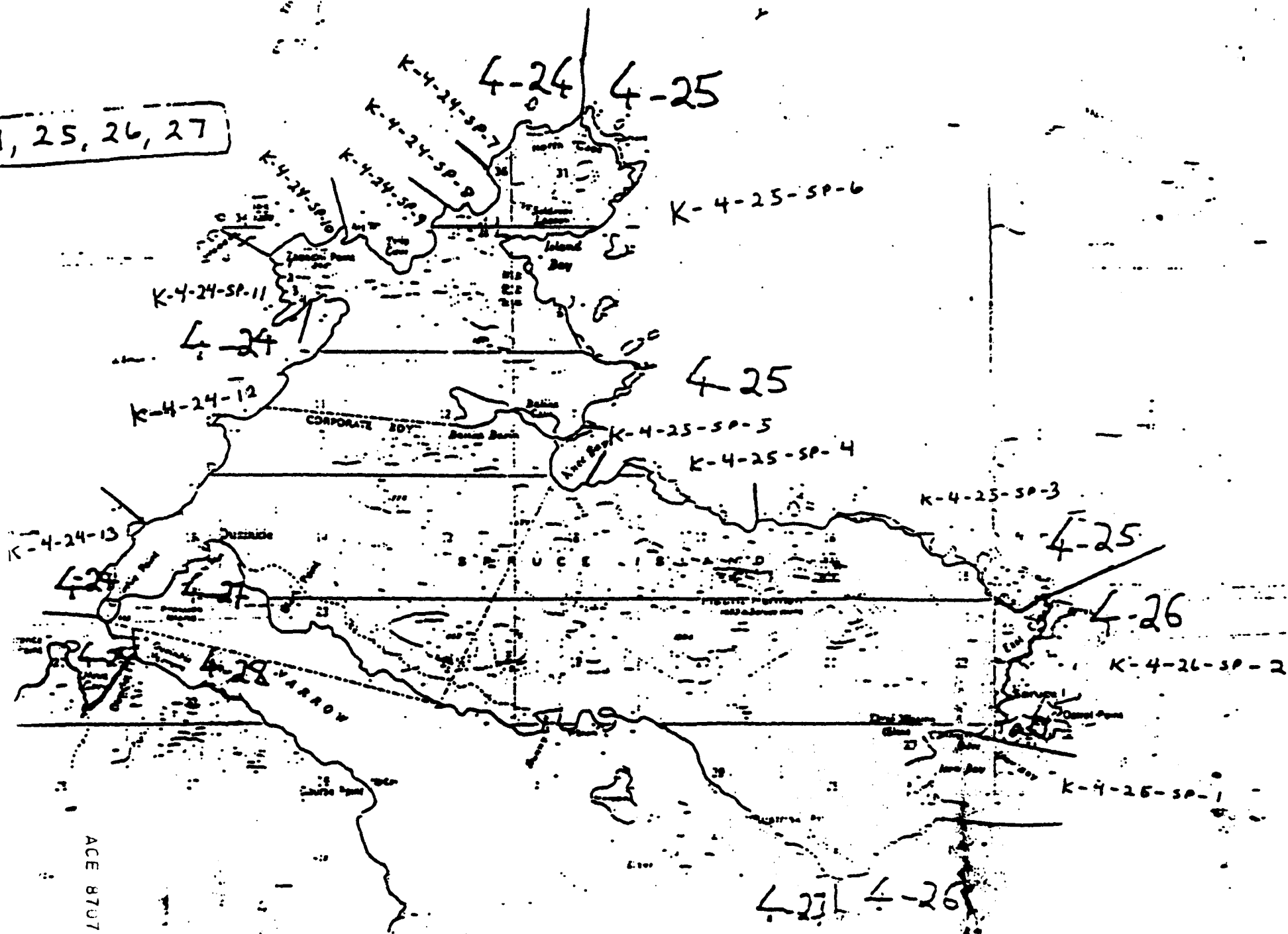
Map Aerial photo marking segment boundaries See Attached

VTR: (Y)N Tape Number(s) ?

Photography: Y/N Roll Number(s) DMC-14

Sample Numbers Collected: N/A

1, 25, 26, 27



ACE 8707447-1

(version 5/02/89)

SHORELINE CLEANUP PROGRAM

DATE 6/29/89

SHORELINE SEGMENT SP-13

LOCATION: (see enclosed map) WEST SIDE OF SPRUCE ISLAND

ADEC NO. 64-20 SHORELINE ASSESSMENT DATE: 6/15/89

Recommended Cleanup Activity(ies):

Manually remove the mousse from the high and mid tide areas.
Use sorbents to remove oil from stained rock surfaces in rocky areas.

Priorities Considerations:

Low, due to degree of oiling (light) and minor no impact to biota.

Ecological Constraints (from site survey):

Manual cleanup using sorbent pads is preferred to washing oil from rocky headland to avoid wholesale removal of tide pool organisms.

Archeological Constraints (from site survey):

If cleanup is conducted and heretofore undiscovered cultural materials are uncovered, contact Exxon's Archeological Field Director and take actions prescribed in the Operational Guidelines for Shoreline Cleanup dated 4/21/89 as amended.

Douglas Reger
State Historic Preservation Officer *

Date: 6/29/89

EXXON: *[Signature]*

Date: 7/1/89

* FOSC: *[Signature]*
REC'D 7/1/89

Date: 7/12/89

* Signature required to satisfy stipulations in Alaska DNR land use permits for tide and submerged lands.

ACE 8707443 +/.

DOCUMENTATION:

Map/Aerial photo marking segment boundaries See Attached

VTR: (Y)N Tape Number(s) 7

Photography: Y/N Roll Number(s) DMC-14

Sample Numbers Collected: N/A

ECOLOGICAL EVALUATION

LOCATION: West Side SPRUCE ISLAND SITE: _____ OBSERVER: D McCoemick
 LOCATION PREFIX: SP SEG. NO.: 13 LENGTH: 1525 (M)
 DATE: 6/15/89 TIME (HHMM): 1000 TIDE HT.: +1.0 (M)

OILED ZONE: Splash High Medium Low

SUBSTRATUM: Rocks Boulder Cobble Gravel Sand Mud

LIVE BIOTA

Fucus (algae): Patchy (Y/N) Contin. (Y/N) Dense (Y/N) Sparse (Y/N) None (Y/N)

Mytilus (Mussels): Patchy (Y/N) Contin. (Y/N) Dense (Y/N) Sparse (Y/N) None (Y/N)

Balanus (Barnacles): Patchy (Y/N) Contin. (Y/N) Dense (Y/N) Sparse (Y/N) None (Y/N)

Littorina
 Patchy (Y/N) Contin. (Y/N) Dense (Y/N) Sparse (Y/N) None (Y/N)

Limpets: Patchy (Y/N) Contin. (Y/N) Dense (Y/N) Sparse (Y/N) None (Y/N)

OTHER OBSERVATIONS: green anemones; a few oiled barnacles & snails on
rocky headland

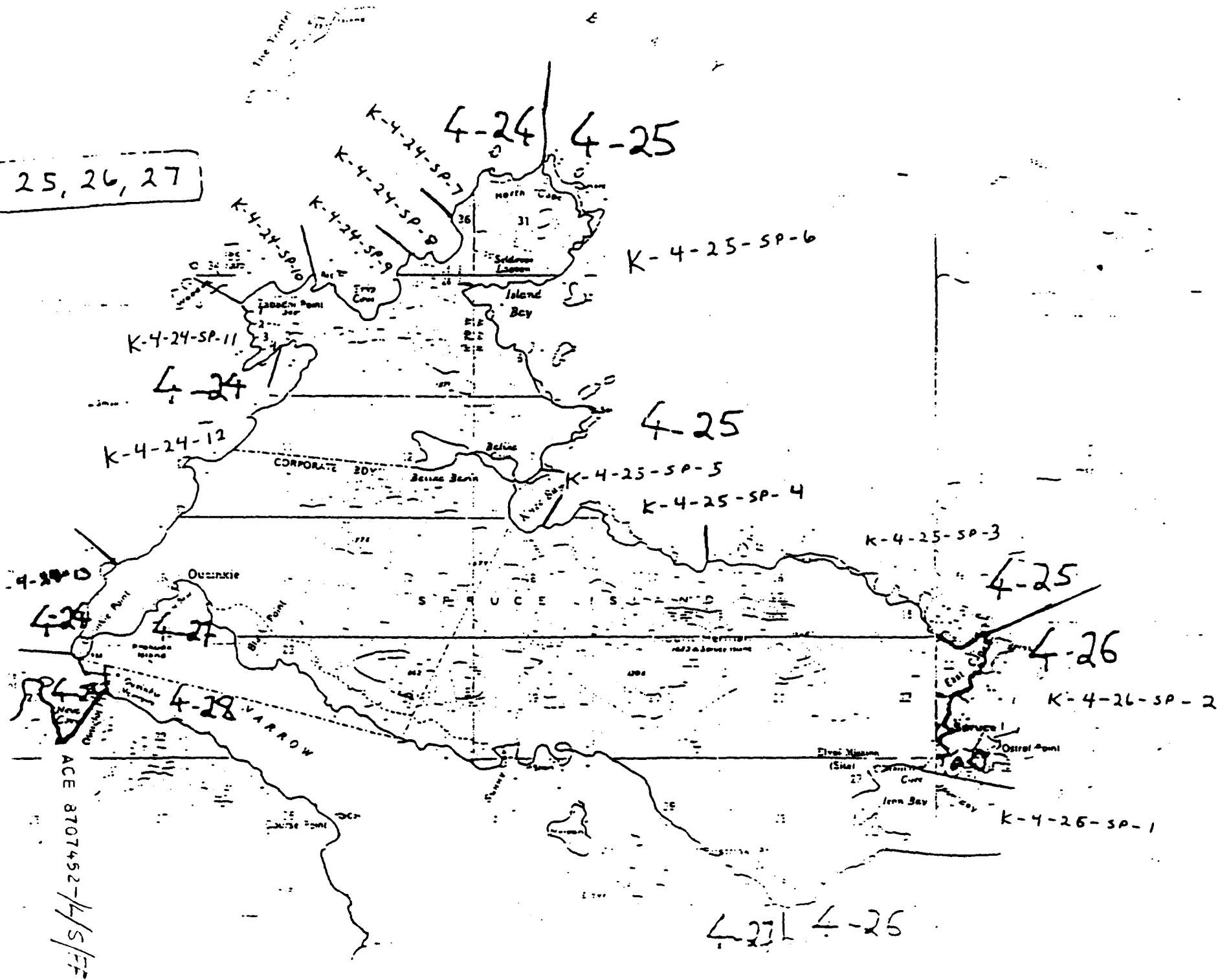
CLEANUP PRECAUTIONS: _____

MAMMALS: Otters _____ Harbor Seals _____ Sea Lions _____ Whales _____
 Other _____

BIRDS: _____

GENERAL OBSERVATIONS: mousse on rocky headland - should be removed with
solvent rather than washing; one mousse patch in splash zone

25, 26, 27



K-04-25

ACE 7963938

(version 5/02/89)

SHORELINE CLEANUP PROGRAM

DATE 7/31/89

SHORELINE SEGMENT K4-25-SP-3

LOCATION: (see enclosed map) North east side Spruce Island

ADEC NO. _____ SHORELINE ASSESSMENT DATE: 6/10/89

Recommended Cleanup Activity(ies):

- No cleanup is recommended due to very light oiling (3 mousse patties) and ecological constraints discussed below. Subject to FOSC reassessment at a later date.

Priorities/ Considerations:

Ecological Constraints (from site survey):

- Due to the very light oiling a cleanup effort should not be undertaken. There is no evidence of oil stressed biota in this diverse segment and the mid - low intertidal zone should not be disturbed.

Archeological Constraints (from site survey):

- If cleanup is conducted an archaeological monitor is required during cleanup.
- If cleanup is conducted and heretofore undiscovered cultural materials are uncovered, contact Exxon's Archeological Field Director and take actions prescribed in the Operational Guidelines for Shoreline Cleanup dated 4/21/89 as amended.

Douglas Regier
State Historic Preservation Officer *

Date: 8/16/89

EXXON: _____

Date: _____

FOSC: _____

Date: _____

*Signature required to satisfy stipulations in Alaska DNR land use permits for tide and submerged lands.

(version 5/16/89)

SHORELINE OIL EVALUATION FORM - KONIAK

Date: 6-12-89 / Time: 1500

Observer: S. Portland

Surveyed From: Foot / Boat / Helio / Plane

Weather: Sun / Cloud / Rain / Snow / Fog

LOCATION

LOCATION Sevise Island - NE corner

SEGMENT I.D. K-4-25-SP-3

LENGTH OF SHORELINE SEGMENT: 4800 m

ACCESS: Foot / Vehicle / Boat / Barge / Helio / Float Plane

SHORELINE:

Shoreline Type: SPI / SEA / COV / HID / STRT

Slope: LAUG / UANG / VER

Wave Exposure: High / Med / Low

Sediment: B/O / C / P / G / S / M / R

Drift Debris on Beach: Yes / No Supra / Upper / Mid / Lower Type Log / wood

OIL

Degree of Oiling: Heavy / Moderate / Light / No Oil / Unobserved

Total Area of Beach Impact: SU / SP / H / M / L

OIL DISTRIBUTION

Continuous: Y / N Segment # _____ No. Bands _____ Width _____

Sporadic: Y / N Segment # < 5 Min/Max Dia _____ Impact Width _____

Est. Oil Thickness where > 1cm: _____ cm SU / SP / UP / HID / LO

Est. Oil Penetration: 0 cm SU / SP / UP / MID / LO

Layers? Yes / No No. Layers _____ Oil Weathering _____

Drift Debris Oiled? Yes / No Supra / Upper / Mid / Lower Amount: H / U / L / VI

OIL MORPHOLOGY

Pooled Oil _____ % "Free" Oil 100 % Spattered 0 % H/U/L/VI Sheen 5 % X

OIL WEATHERING (OW)

Fresh Oil _____ % SU/SP/VP/MID/LO Choc Mousse 100 % SU/SP/VP / HID / LO

Pancake Mousse _____ % SU/SP/VP/MID/LO Asphalt Mousse _____ % SU/SP/VP/MID/LO

Tar Formation _____ %

Comments:

ACE 8707454

K-4-25-SP-3 is a low cliff with well developed pockets of beach. The beach is lying on a rock platform which consists of sand. Only 3 houses were observed on this beach. The island is very small. The complex nature of the beach, no debris.

DOCUMENTATION:

Map Aerial photo marking segment boundaries See Attached

VTR: Y/N Tape Number(s) _____

Photography: Y/N Roll Number(s) DMC-14

Sample Numbers Collected: N/A

ECOLOGICAL EVALUATION

SPRUCE ISLAND

LOCATION: NORTH EAST SIDE SITE: _____ OBSERVER: D. McCornell

LOCATION PREFIX: SP SEG. NO.: 3 LENGTH: 4800 (M)

DATE: 6/10/89 TIME (HHMM): 1500 TIDE HT.: + 1.0 (M)

OILED ZONE: Splash High Medium Low

SUBSTRATUM: Rocks Boulder Cobble Gravel Sand Mud

LIVE BIOTA

Ulcus (algae): Patchy Y/N Contin. Y/N Dense Y/N Sparse Y/N None Y/N

Mytilus (Mussels): Patchy Y/N Contin. Y/N Dense Y/N Sparse Y/N None Y/N

Balanus (Barnacles): Patchy Y/N Contin. Y/N Dense Y/N Sparse Y/N None Y/N

Attorina
Patchy Y/N Contin. Y/N Dense Y/N Sparse Y/N None Y/N

Limpets: Patchy Y/N Contin. Y/N Dense Y/N Sparse Y/N None Y/N

OTHER OBSERVATIONS: Endocladia, green red anemones; Kallirosoma, Hippolyte,
Halichondria sponges,

CLEANUP PRECAUTIONS: None

MAMMALS: Otters _____ Harbor Seals _____ Sea Lions _____ Whales _____
Other _____

BIRDS: gulls, bald eagle

GENERAL OBSERVATIONS: 3 mouse pelties observed by SCAT Team in this segment
very rich in biota; very dense; degree of oiling does not warrant the
cleanup effort.

The Triple
C 21

25, 26, 27

4-24 4-25

4-24

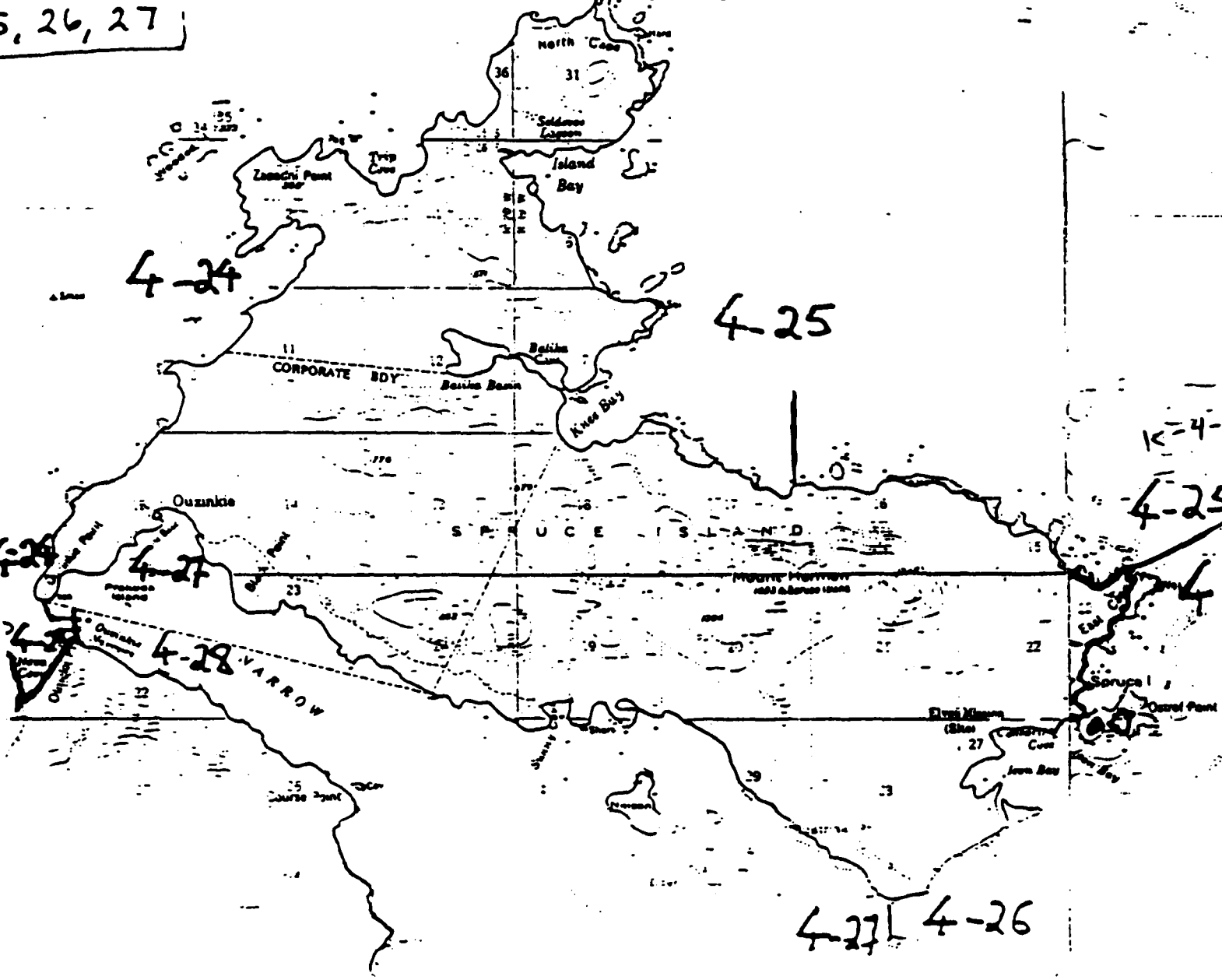
4-25

K-4-25-SP-3

4-25

4-26

4-27 4-26



(version 5/02/89)

SHORELINE CLEANUP PROGRAM

DATE 6/11/89

SHORELINE SEGMENT K4-25-SP-4

LOCATION: (see enclosed map) Spruce Island - east side of Knee
Cove

ADEC NO. _____ SHORELINE ASSESSMENT DATE: 6/11/89

Recommended Cleanup Activity(ies):

-No cleanup is recommended due to very light oiling and ecological constraints listed below. Subject to FOSC reassessment at a later date.

Priorities/ Considerations: Class 5-A

Ecological Constraints (from site survey):

-This segment is too dense with healthy, non-oil stressed biota to warrant cleanup of three patches of mousse.

Archeological Constraints (from site survey):

-If cleanup is conducted and heretofore undiscovered cultural materials are uncovered, contact Exxon's Archeological Field Director and take actions prescribed in the Operational Guidelines for Shoreline Cleanup dated 4/21/89 as amended.

Angelo Rega
State Historic Preservation Officer *

Date: 8/14/89

EXXON: _____

Date: _____

FOSC: _____

Date: _____

*Signature required to satisfy stipulations in Alaska DNR land use permits for tide and submerged lands.

(version 5/16/89)

SHORELINE OIL EVALUATION FORM - KODIAK

Date: 6-11-89 Time: 1030

Observer: S. Peacock

Surveyed From: (Foot)/Boat/(Helio)/Plane

Weather: (Sun) Cloud/Rain/Snow/ fog

LOCATION

LOCATION Spruce Island - east of Koon Cove

SEGMENT I.D. K-4-25-SP-4

LENGTH OF SHORELINE SEGMENT: 2625 m

ACCESS: (Foot)/Vehicle/(Boat)/Barge/(Helio)/Float Plane

SHORELINE:

Shoreline Type: SPI/(BEA)/(COV)/(HID)/STRT

Slope: LANG/HANG/(VER)

Wave Exposure: (High)/Med/Low

Sediment: B35% / C35% / P10% / G10% / S10% / M % / R %

Drift Debris on Beach: (Yes)/No (Supra)/(Upper)/Mid/Lower Type Log/kelp

OIL

Degree of Oiling: Heavy/Moderate/(Light)/No Oil/Unobserved

Total Area of Beach Impact: SU / SP / (H) / M / L

OIL DISTRIBUTION

Continuous: Y/(N) Segment No. Bands Width

Sporadic: (Y)/N Segment Min/Max Dia 3-4 cm Impact Width

Est. Oil Thickness where > 1cm: cm SU / SP / (UP) / MID / LO

Est. Oil Penetration: 0 cm SU / SP / UP / MID / LO

Layers? Yes/(NO) No# Layers Oil Weathering

Drift Debris Oiled? Yes/(NO) Supra/Upper/Mid/Lower Amount: H / U / L / VL

OIL MORPHOLOGY

Pooled Oil % "Free" Oil 100% Spattered % H/H/L/VL Sheen %

OIL WEATHERING (OW)

Fresh Oil % SU/SP/VP/MID/LO Choc Mousse 100% SU/SP/(VP)/MID/LO

Pancake Mousse % SU/SP/VP/MID/LO Asphalt Mousse % SU/SP/VP/MID/LO

Tar Formation %

Comments:

ACE 8707460

K-4-25-SP-4 This unit is a high cliff area (10-50m) with poorly developed pocket beaches. When beaches occur they are primarily composed of boulders and rubble with a lower % of pebbles, gravel, and sand. The oil is almost non-existent, a total of three chocolate mousse patches were observed. No drawing made due to the complex character of this shoreline, no cross drawing or profile would be representative. The mousse patches were found at high water line.

DOCUMENTATION:

Map Aerial photo marking segment boundaries See Attached

VTR: Y/N Tape Number(s) _____

Photography: Y/N Roll Number(s) DMC-14

Sample Numbers Collected: N/A

ECOLOGICAL EVALUATION

EAST Side of

LOCATION: SPRUCE ISLAND SITE: _____ OBSERVER: D. McCORMILL

LOCATION PREFIX: SP SEG. NO.: 4 LENGTH: 2625 (M)

DATE: 6/11/89 TIME (HHMM): 1110 TIDE HT.: + 1.5 (M)

SOILED ZONE: Splash High Medium Low

SUBSTRATUM: Rocks Boulder Cobble Gravel Sand Mud

LIVE BIOTA

Fucus (algae): Patchy Y/N Contin. Y/N Dense Y/N Sparse Y/N None Y/N

Mytilus (Mussels): Patchy Y/N Contin. Y/N Dense Y/N Sparse Y/N None Y/N

Dense clumps on boulders

Balanus (Barnacles): Patchy Y/N Contin. Y/N Dense Y/N Sparse Y/N None Y/N

Dense on boulders

Littorina

Patchy Y/N Contin. Y/N Dense Y/N Sparse Y/N None Y/N

Limpets: Patchy Y/N Contin. Y/N Dense Y/N Sparse Y/N None Y/N

OTHER OBSERVATIONS: Helicoverpa sp. eggs, bull kelp, Katharina, red
excreta, dense kelp (rotting) on beach

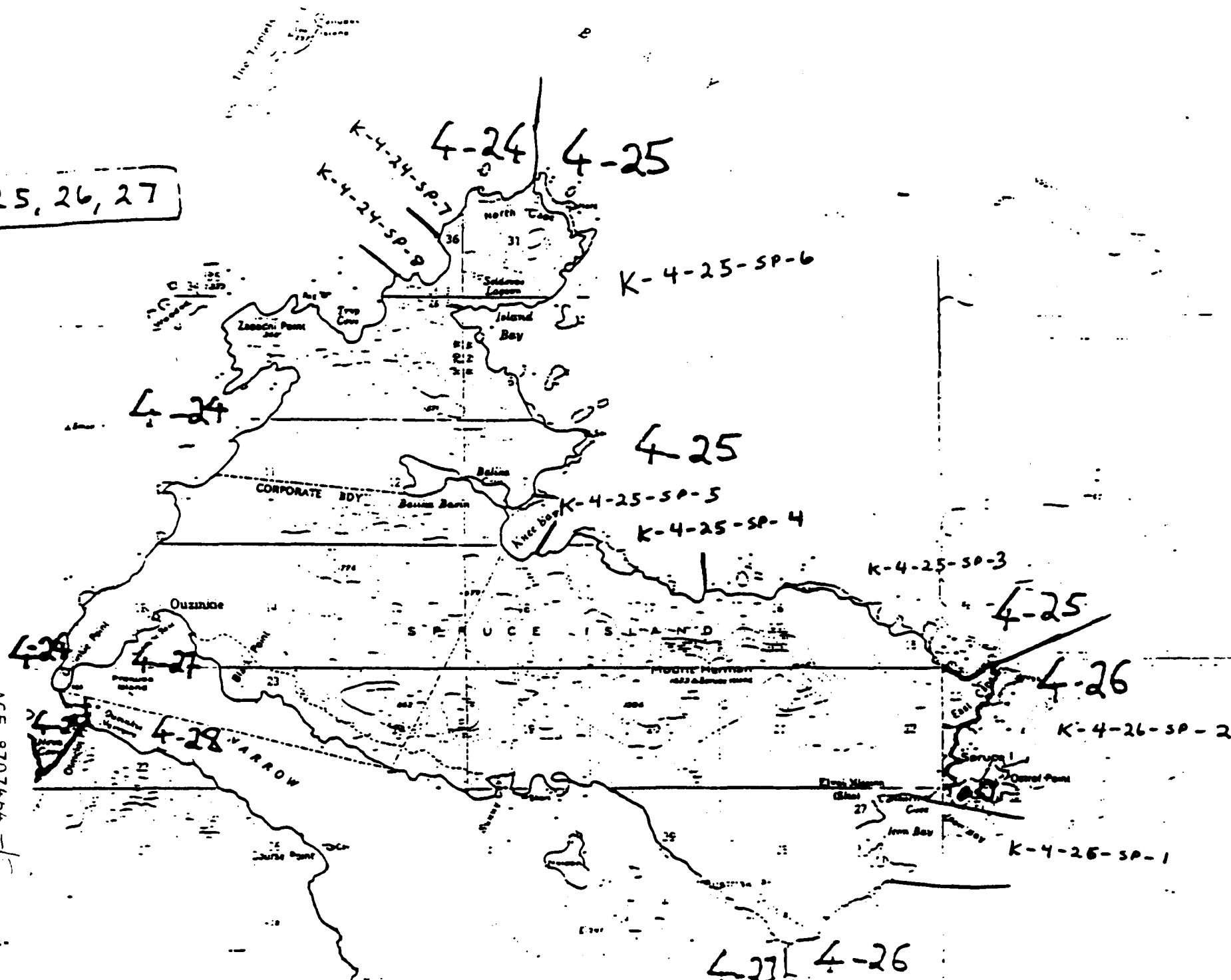
CLEANUP PRECAUTIONS: None

MAMMALS: Otters _____ Harbor Seals _____ Sea Lions _____ Whales _____
Other Fox, few tracks on one beach.

BIRDS: _____

GENERAL OBSERVATIONS: 3 mouse patties observed in this segment. Segment
rich in biota to warrant a cleanup effort.

4, 25, 26, 27



(version 5/02/89)

SHORELINE CLEANUP PROGRAM

DATE 6/11/89

SHORELINE SEGMENT K4-25-SP-4

LOCATION: (see enclosed map) Spruce Island - east side of Knee
Cove

ADEC NO. _____ SHORELINE ASSESSMENT DATE: 6/11/89

Recommended Cleanup Activity(ies):

-No cleanup is recommended due to very light oiling and ecological constraints listed below. Subject to FOSC reassessment at a later date.

Priorities/ Considerations: Class 5-A

Ecological Constraints (from site survey):

-This segment is so dense with healthy, non-oil stressed biota to warrant cleanup of three patches of mousse.

Archeological Constraints (from site survey):

-If cleanup is conducted and heretofore undiscovered cultural materials are uncovered, contact Exxon's Archeological Field Director and take actions prescribed in the Operational Guidelines for Shoreline Cleanup dated 4/21/89 as amended.

Angelo Reger
State Historic Preservation Officer *

Date: 8/14/89

EXXON: _____

Date: _____

FOSC: _____

Date: _____

*Signature required to satisfy stipulations in Alaska DNR land use permits for tide and submerged lands.

ACE 8707465 +/-

(version 5/16/89)

SHORELINE OIL EVALUATION FORM - KONTAK

Date: 6-11-89 Time: 1230

Observer: S. Pealock

Surveyed From: Foot/Boat/Helio/Plane

Weather: Sun Cloud/Rain/Snow/Log

LOCATION

LOCATION Spruce Island - east of Koon Cove

SEGMENT I.D. K-4-25-SP-4

LENGTH OF SHORELINE SEGMENT: 2625 m

ACCESS: Foot/Vehicle/Boat/Barge/Helio/Float Plane

SHORELINE:

Shoreline Type: SPI/BEA/COV/HLD/STRT

Slope: LANG/HANG/VER

Wave Exposure: High/Med/Low

Sediment: B35% / C35% / P10% / G10% / S10% / M % / R %

Drift Debris on Beach: Yes/No Supra/Upper/Mid/Lower Type Log/kelp

OIL

Degree of Oiling: Heavy/Moderate/Light/No Oil/Unobserved

Total Area of Beach Impact: SU / SP / H / M / L

OIL DISTRIBUTION

Continuous: Y/N Segment No. Bands Width

Sporadic: Y/N Segment < 1 Min/Max Dia 3-4 cm Impact Width

Est. Oil Thickness where > 1cm: cm SU / SP / UP / MID / LO

Est. Oil Penetration: 0 cm SU / SP / UP / MID / LO

Layers? Yes/No No# Layers Oil Weathering

Drift Debris Oiled? Yes/No Supra/Upper/Mid/Lower Amount: H / H / L / VL

OIL MORPHOLOGY

Pooled Oil % "Free" Oil 100% Spattered % H/H/L/VL Sheen

OIL WEATHERING (OW)

Fresh Oil % SU/SP/VP/MID/LO Choc Mousse 100% SU/SP/VP/MID/LO

Pancake Mousse % SU/SP/VP/MID/LO Asphalt Mousse % SU/SP/VP/MID/LO

Tar Formation %

ACE 8707460

Comments:

K-4-25-SP-4 This unit is a high cliff area (10-50m) with poorly developed pocket beaches. When beaches occur they are primarily composed of boulders and cobbles with a lower % of pebbles, gravel, and sand. The oil is almost non-existent, a total of three chocolate mousse pancakes were observed. No drawing made due to the complex character of this shoreline, no one drawing or profile would be representative. The mousse pancakes were found at high water line.

POOR QUALITY ORIGINAL

DOCUMENTATION:

Map Aerial photo marking segment boundaries See Attached

VTR: Y/N Y Tape Number(s) _____

Photography: Y/N _____ Roll Number(s) DMC-14

Sample Numbers Collected: N/A

ACE 8707467

ECOLOGICAL EVALUATION

LOCATION: EAST SIDE of SPRUCE ISLAND SITE: _____ OBSERVER: D. McCoemick

LOCATION PREFIX: SP SEG. NO.: 4 LENGTH: 2625 (M)

DATE: 6/11/89 TIME (HHMM): 1110 TIDE HT.: +1.5 (M)

SOILED ZONE: Splash High Medium Low

SUBSTRATUM: Rocks Boulder Cobble Gravel Sand Mud

LIVE BIOTA

Fucus (algae): Patchy Y/N Contin. Y/N Dense Y/N Sparse Y/N None Y/N

Mytilus (Mussels): Patchy Y/N Contin. Y/N Dense Y/N Sparse Y/N None Y/N

Dense clumps on boulders

Balanus (Barnacles): Patchy Y/N Contin. Y/N Dense Y/N Sparse Y/N None Y/N

Dense on boulders

Littorina

Patchy Y/N Contin. Y/N Dense Y/N Sparse Y/N None Y/N

Limpets: Patchy Y/N Contin. Y/N Dense Y/N Sparse Y/N None Y/N

OTHER OBSERVATIONS: Helichondria sponges, bull kelp, Kallernias, red
excrements, dense kelp (rotting) on beach

CLEANUP PRECAUTIONS: None

MAMMALS: Otters _____ Harbor Seals _____ Sea Lions _____ Whales _____
other Fox, few tracks on one beach

BIRDS: _____

GENERAL OBSERVATIONS: 3 mouse paths observed in this segment. Segment
rich in biota to warrant a cleanup effort.

ACE 8707470 -/3
MNI

K-4-25-SP-6

4-24

425

5-5P-5
K-4-25-SP-4

K-4-25-SP-3

-4-25

4-26

K-4-26-SP-2

K-4-25-SP-

4-26

(version 5/02/89)

SHORELINE CLEANUP PROGRAM

DATE 7/31/89

SHORELINE SEGMENT K4-25-SP-6

LOCATION: (see enclosed map) East side Spruce Island

ADEC NO. _____ SHORELINE ASSESSMENT DATE: 6/11/89

Recommended Cleanup Activity(ies):

-No cleanup is recommended due to apparent absence of oil.
Subject to FOSC reassessment at a later date.

Priorities/ Considerations:

Ecological Constraints (from site survey):

-No ecological evaluation form is included in this report because this segment was surveyed by helicopter only. If oil becomes evident in this area in the future, an ecological assessment must be done in this segment.

Archeological Constraints (from site survey):

-If cleanup is conducted and heretofore undiscovered cultural materials are uncovered, contact Exxon's Archeological Field Director and take actions prescribed in the Operational Guidelines for Shoreline Cleanup dated 4/21/89 as amended.

Douglas Regier
State Historic Preservation Officer *

Date: 8/14/89

EXXON: _____

Date: _____

FOSC: _____

Date: _____

*Signature required to satisfy stipulations in Alaska DNR land use permits for tide and submerged lands.

(version 5/16/89)

SHORELINE OIL EVALUATION FORM - KONTAK

Date: 6-11-89 / Time: 1620

Observer: S. Peeland

Surveyed From: Foot/Boat/Helio/Plane

Weather: Sun/Cloud/Rain/Snow/Hail

LOCATION

LOCATION Spice Island - East N. H. Cape

SEGMENT I.D. K-4-25-50-6

LENGTH OF SHORELINE SEGMENT: 7875 m

ACCESS: Foot/Vehicle/Boat/Barge/Helio/Float Plane

SHORELINE:

Shoreline Type: SPI/BEA/COV/HID/STET

Slope: LAUG/HANG/VER

Wave Exposure: High/Med/Low

Sediment: B35 / C35 / P10 / G10 / S10 / M / R

Drift Debris on Beach: Yes/No Supra/Upper/Mid/Lower Type

OIL

Degree of Oiling: Heavy/Moderate/Light/No Oil/Unobserved

Total Area of Beach Impact: SU / SP / H / M / L

OIL DISTRIBUTION

Continuous: Y/N Segment # _____ No. Bands _____ Width _____

Spuradic: Y/N Segment # _____ Min/Max Dia _____ Impact Width _____

Est. Oil Thickness where > 1cm: _____ cm SU / SP / UP / MID / LO

Est. Oil Penetration: _____ cm SU / SP / UP / MID / LO

Layers? Yes/No No. Layers _____ Oil Weathering _____

Drift Debris Oiled? Yes/No Supra/Upper/Mid/Lower Amount: H / M / L

OIL MORPHOLOGY

Pooled Oil _____ % "Free" Oil _____ % Spattered _____ % H/H/L/VL Shown _____

OIL WEATHERING (OW)

Fresh Oil _____ % SU/SP/VP/MID/LO Choc Mousse _____ % SU/SP/VP/MID/LO

Pancake Mousse _____ % SU/SP/VP/MID/LO Asphalt Mousse _____ % SU/SP/VP/MID/LO

Tar Formation _____ %

Comments:

ACE 8707472

DOCUMENTATION:

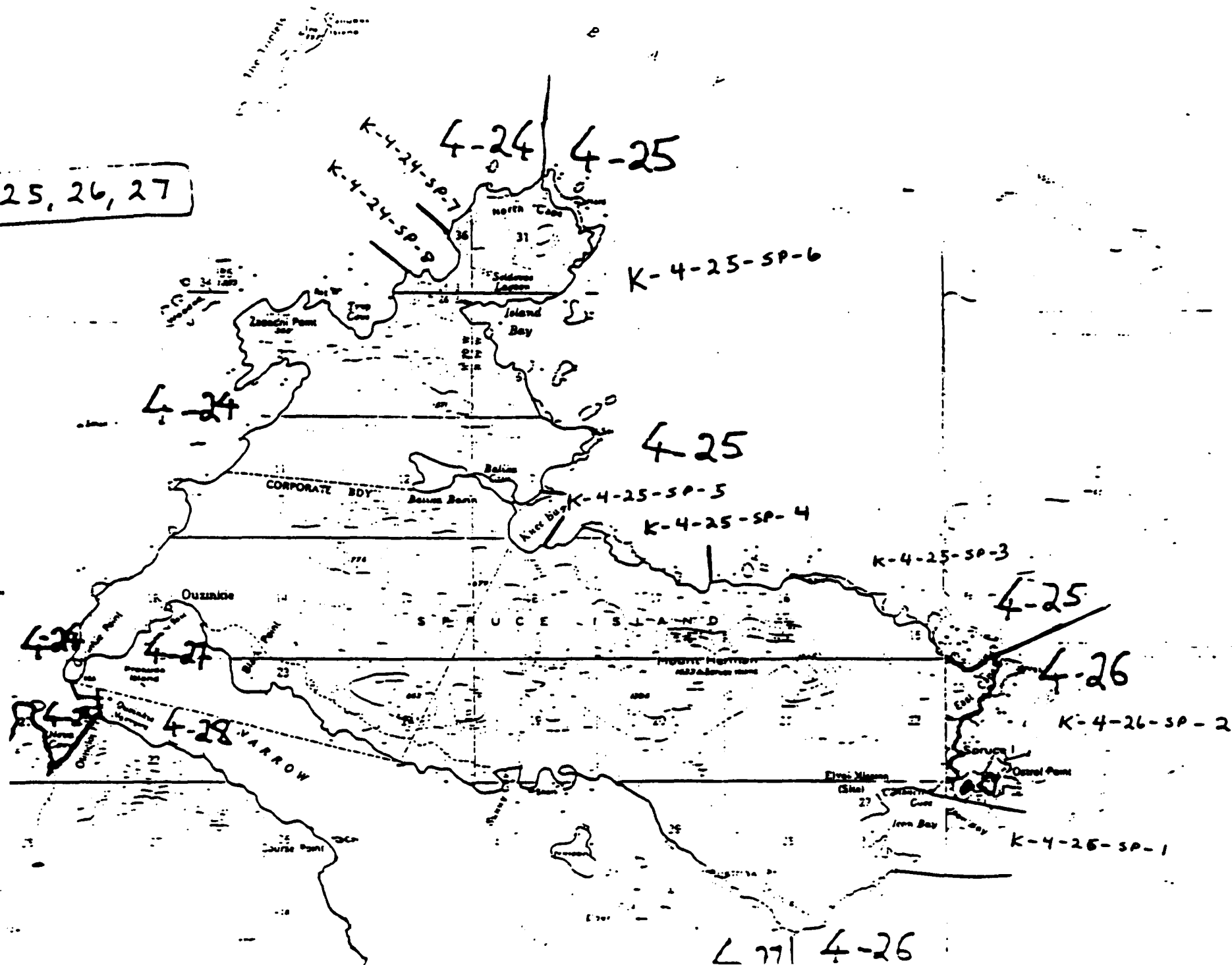
Map/Aerial photo marking segment boundaries See Attached

VTR: Y/N Tape Number(s) _____

Photography: Y/N Roll Number(s) _____

Numbers Collected: N/A

ACE 8707475 -/S



(version 5/02/89)

SHORELINE CLEANUP PROGRAM

DATE 7/31/89

SHORELINE SEGMENT K4-25-SP-5

LOCATION: (see enclosed map) Spruce Island - Knee Cove

ADEC NO. _____ SHORELINE ASSESSMENT DATE: 6/11/89

Recommended Cleanup Activity(ies):

-No cleanup is recommended due to very light oiling and ecological constraints listed below. Subject to FOSC reassessment at a later date.

Priorities/ Considerations: Class 5-B

Ecological Constraints (from site survey):

-This segment is too dense with healthy, non-oil stressed biota to warrant cleanup of a few patches of mousse.

Archeological Constraints (from site survey):

-If cleanup is conducted an archaeological monitor is required prior to and during cleanup.

-If cleanup is conducted and heretofore undiscovered cultural materials are uncovered, contact Exxon's Archeological Field Director and take actions prescribed in the Operational Guidelines for Shoreline Cleanup dated 4/21/89 as amended.

Douglas Reger
State Historic Preservation Officer *

Date: 8/16/89

EXXON: _____

Date: _____

FOSC: _____

Date: _____

*Signature required to satisfy stipulations in Alaska DNR land use permits for tide and submerged lands.

ACE 8707476 +/

(version 5/16/89)

SHORELINE OIL EVALUATION FORM - KONIAR

Date: 6-11-89 / Time: 1405

Observer: S. Pealard

Surveyed From: Foot/Boat/Helio/Plane

Weather: Sun/Cloud/Rain/Snow/Icy

LOCATION

LOCATION Spruce Island - Kneec Cove

SEGMENT I.D. K-4-25-SF-5

LENGTH OF SHORELINE SEGMENT: 2000 m

ACCESS: Foot/Vehicle/Boat/Barge/Helio/Float Plane

SHORELINE:

Shoreline Type: SPI/BEA/COV/HID/STET

Slope: LANG/LANG/VER

Wave Exposure: High/Med/Low

Sediment: B/O / CSO / PIS / G/S / S/O / M / R

Drift Debris on Beach: Yes/No

Supra/Upper/Mid/Lower Type 4

OIL

Degree of Oiling: Heavy/Moderate/Light/No Oil/Unobserved

Total Area of Beach Impact: SU / SP / H / M / L

6 DISTRIBUTION

Continuous: Y/N Segment 1 No. Bands Width

Sporadic: Y/N Segment 1 Min/Max Dia 2-6cm Impact Width

Est. Oil Thickness where > 1cm: cm SU / SP / UP / MID / LO

Est. Oil Penetration: 0 cm SU / SP / UP / MID / LO

Layers? Yes/No No. Layers Oil Weathering

Drift Debris Oiled? Yes/No Supra/Upper/Mid/Lower Amount: H / U / L

OIL MORPHOLOGY

Pooled Oil "Free" Oil 100 % Spattered H/H/L/VL Sheen

OIL WEATHERING (OW)

Fresh Oil SU/SP/VP/MID/LO Choc Mousse 100 % SU/SP/VP/MID/LO

Pancake Mousse SU/SP/VP/MID/LO Asphalt Mousse SU/SP/VP/MID/LO

Tar Formation

Comments:

ACE 8707477

K-4-25-SF-5 unit is a cove surrounded by low sloping cliffs. The exposed beaches are made up of round cobbles and the interior beaches are made up of angular cobbles rubble. Mousse was only found at the drainage divide between Balika Cove and Balika Bay. The oil was found at high water.

DOCUMENTATION:

Map/Aerial photo marking segment boundaries See Attached

VTR: Y/N Tape Number(s) _____

Photography: Y/N Roll Number(s) DMC-14

Sample Numbers Collected: N/A

ECOLOGICAL EVALUATION

LOCATION: Knee Bay
E. Side Spruce Is. SITE: _____ OBSERVER: J. M. Corbett

LOCATION PREFIX: SP SEG. NO.: 5 LENGTH: 2000 (M)

DATE: 6/11/89 TIME (HHMM): 1405 TIDE HT.: +1.0 (M)

OILED ZONE: Splash High Medium Low

SUBSTRATUM: Rocks Boulder Cobble Gravel Sand Mud

LIVE BIOTA

Fucus (algae): Patchy (Y/N) Contin. (Y/N) Dense (Y/N) Sparse (Y/N) None (Y/N)

Mytilus (Mussels): Patchy (Y/N) Contin. (Y/N) Dense (Y/N) Sparse (Y/N) None (Y/N)

Dense in Balika Cove, discontinuous in Knee Bay

Balanus (Barnacles): Patchy (Y/N) Contin. (Y/N) Dense (Y/N) Sparse (Y/N) None (Y/N)

Dense in Balika Cove, discontinuous in Knee Bay

Littorina

Patchy (Y/N) Contin. (Y/N) Dense (Y/N) Sparse (Y/N) None (Y/N)

Limpets: Patchy (Y/N) Contin. (Y/N) Dense (Y/N) Sparse (Y/N) None (Y/N)

OTHER OBSERVATIONS: few leg only; tube worms, Eucalyptus, Pteraster etc. fresh
crab, Modiolus mussels; extensive clam beds in Balika Cove

CLEANUP PRECAUTIONS: None

MAMMALS: Otters _____ Harbor Seals _____ Sea Lions _____ Whales _____
 Other _____

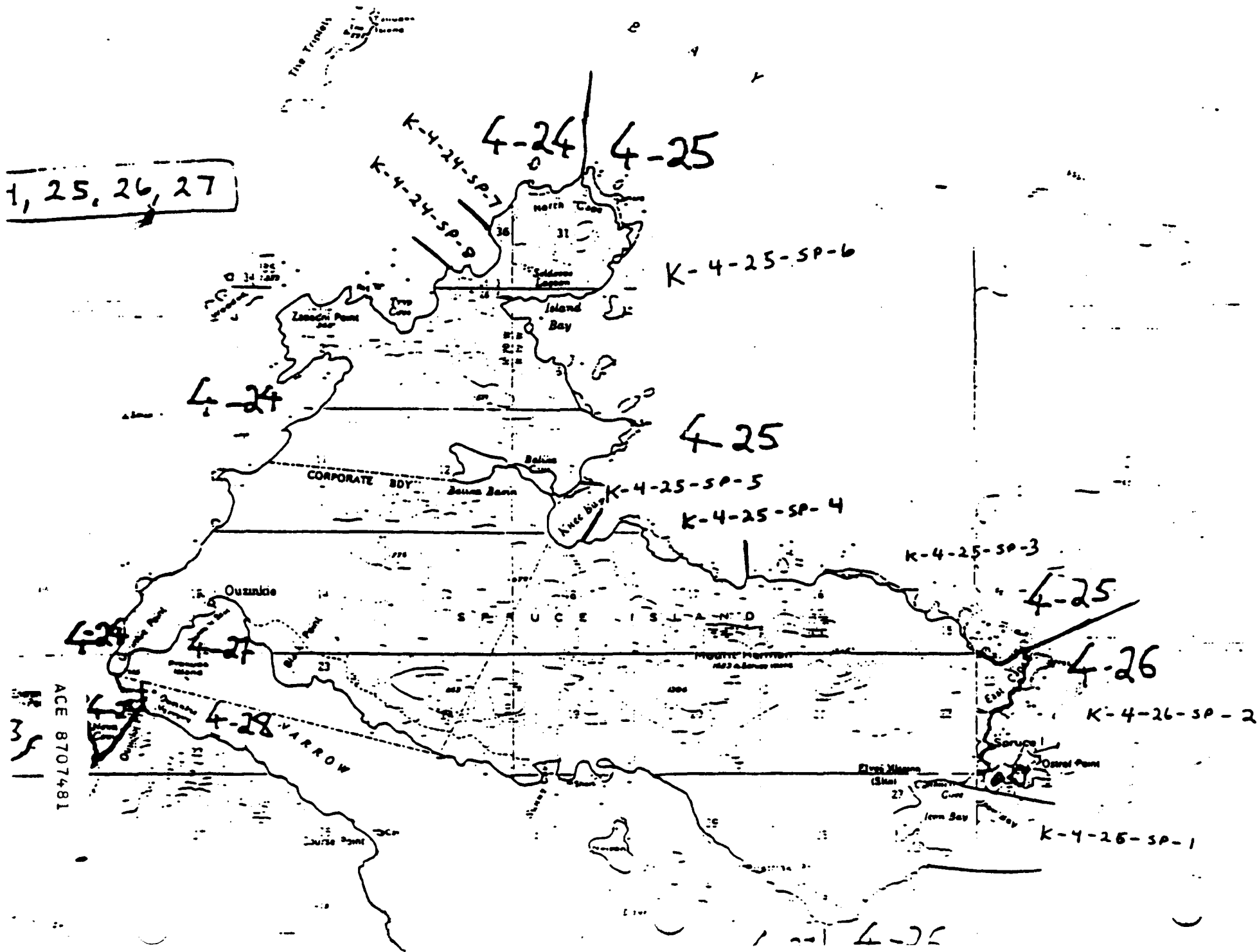
BIRDS: _____

GENERAL OBSERVATIONS: Only very light mouse patches seen in Balika Cove. The
signs of dense with biota and cleanup activities should not be undertaken

ACE 8707479

POOR QUALITY ORIGINAL

ACE 8707481



(version 5/02/89)

SHORELINE CLEANUP PROGRAM

DATE 7/31/89

SHORELINE SEGMENT K4-25-SP-6

LOCATION: (see enclosed map) East side Spruce Island

ADEC NO. _____ SHORELINE ASSESSMENT DATE: 6/11/89

Recommended Cleanup Activity(ies):

- No cleanup is recommended due to apparent absence of oil. Subject to FOSC reassessment at a later date.

Priorities/ Considerations:

Ecological Constraints (from site survey):

- No ecological evaluation form is included in this report because this segment was surveyed by helicopter only. If oil becomes evident in this area in the future, an ecological assessment must be done in this segment.

Archeological Constraints (from site survey):

- If cleanup is conducted and heretofore undiscovered cultural materials are uncovered, contact Exxon's Archeological Field Director and take actions prescribed in the Operational Guidelines for Shoreline Cleanup dated 4/21/89 as amended.

Douglas Regier
State Historic Preservation Officer *

Date: 8/14/89

EXXON: _____

Date: _____

FOSC: _____

Date: _____

*Signature required to satisfy stipulations in Alaska DNR land use permits for tide and submerged lands.

(version 5/16/89)

SHORELINE OIL EVALUATION FORM - KODIAK

Date: 6-11-89 / Time: 1620

Observer: S. Penland

Surveyed From: Foot/Boat/Helio/Plane

Weather: Sun/Cloud/Rain/Snow/ fog

LOCATION

LOCATION Spruce Island - East N. H. Cape

SEGMENT I.D. K-4-25-SP-6

LENGTH OF SHORELINE SEGMENT: 7875 m

ACCESS: Foot/Vehicle/Boat/Barge/Helio/Float Plane

SHORELINE:

Shoreline Type: SPI/BEA/COV/HLD/STET

Slope: LAAG/HANG/VER

Wave Exposure: High/Med/Low

Sediment: B35 / C35 / P10 / G10 / S10 / M / R

Drift Debris on Beach: Yes/No Supra/Upper/Mid/Lower Type

OIL

Degree of Oiling: Heavy/Moderate/Light/No Oil/Unobserved

Total Area of Beach Impact: SU / SP / H / M / L

OIL DISTRIBUTION

Continuous: Y/N Segment # No. Bands Width

Sporadic: Y/N Segment # Min/Max Dia Impact Width

Est. Oil Thickness where > 1cm: cm SU / SP / UP / MID / LO

Est. Oil Penetration: cm SU / SP / UP / MID / LO

Layers? Yes/No No# Layers Oil Weathering

Drift Debris Oiled? Yes/No Supra/Upper/Mid/Lower Amount: H / M / L

OIL MORPHOLOGY

Pooled Oil % "Free" Oil % Spattered % H/H/L/VL Sheen

OIL WEATHERING (OW)

Fresh Oil % SU/SP/VP/MID/LO Choc Mousse % SU/SP/VP/MID/LO

Pancake Mousse % SU/SP/VP/MID/LO Asphalt Mousse % SU/SP/VP/MID/LO

Tar Formation %

Comments:

ACE 8707483

DOCUMENTATION:

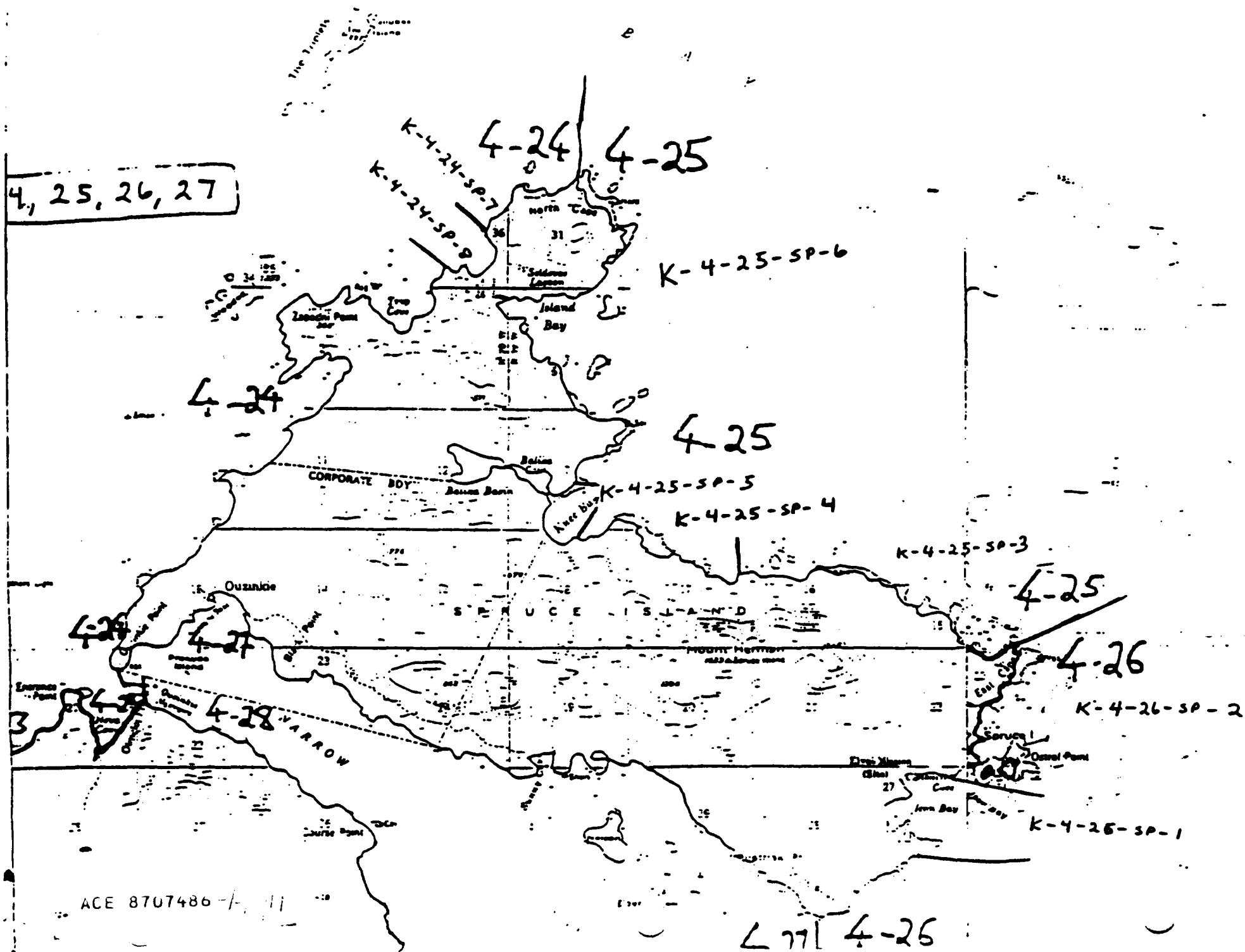
lap/Aerial photo marking segment boundaries See Attached

VTR: Y/N Tape Number(s) _____

Photography: Y/N Roll Number(s) - , - _____

Sample Numbers Collected: N/A

4, 25, 26, 27



K4-26

ACE 7963939

(version 6/05/89)

4.26

SHORELINE CLEANUP REASSESSMENTDATE 6/22/89 REASSESSMENT DATE: 6/11/89SHORELINE SEGMENT SP-1R

PURPOSE FOR REASSESSMENT _____

Revised Recommended Cleanup Activity(ies):
Manually remove patches of mousse.

Revised Ecological Constraints: Work at mid tide + or take appropriate measures to protect middle and lower intertidal zone. Cleanup crews should avoid rocky areas on south end of beach. Limit size of cleanup crews to minimize damage to diverse dense biota. No ATV's allowed on beach.

Revised Archeological Constraints:
Backshore areas extremely sensitive from both cultural resources and current ownership status. Absolutely keep personnel on seaward side of storm berms, if cleanup becomes necessary. If cleanup is conducted and heretofore undiscovered cultural materials are uncovered, contact Exxon's Archeological Field Director and take actions prescribed in the Operational Guidelines for Shoreline Cleanup dated 4/21/89 as amended.



State Historic Preservation Officer *

Date: 6/27/89

EXXON: _____

Date: _____

FOSC: _____

Date: _____

* Signature required to satisfy stipulations in Alaska DNR land use permits for tide and submerged lands.

(version 5/02/89)

SHORELINE CLEANUP PROGRAM

K-4-26

DATE 6-10-89

SHORELINE SEGMENT SP-1

LOCATION: (see enclosed map) Southeast End SPRUCE ISLAND - Icon Bay

ADEC NO. _____ SHORELINE ASSESSMENT DATE: 6/10/89

Recommended Cleanup Activity(ies):

No manual cleanup of the mussel spats and periwinkles.

Priorities Considerations: *None.*

Ecological Constraints (from site survey): This segment is very diverse and very dense with mid-low ITZ biota. Cleanup activities of the very patchy mussel patches would disturb biota in tide pool areas and mussel beds. Although there are no threatened or endangered species occurring here, the diversity & density of ITZ biota precludes cleanup activities.

Archeological Constraints (from site survey):

If heretofore undiscovered cultural materials are uncovered during cleanup, contact Exxon's Archeological Field Director and take actions prescribed in the Operational Guidelines for Shoreline Cleanup dated 4/21/89 as amended.

BACKSHORE AREAS EXTREMELY SENSITIVE FROM BOTH CULTURAL RESOURCE AND CURRENT OWNERSHIP STATUS. ABSOLUTELY KEEP PERSONNEL ON SEAWARD SIDE OF STORM BARRIERS IF CLEAN-UP BECOMES NECESSARY.

[Signature]
State Historic Preservation Officer *

Date: 8/6/89

EXXON: _____

Date: _____

FOSC: _____

Date: _____

* Signature required to satisfy stipulations in Alaska DNR land use permits for tide and submerged lands .

ACE 8707488

K-4-26-SP-1

(version 5/16/89)

SHORELINE OIL EVALUATION FORM - KODIAK

Date: 6-10-89 / Time: 1000

Observer: S. Poulson

Surveyed From: (Foot) / (Boat) / (Helio) / Plane

Weather: (Sun) / Cloud / Rain / Snow / Fog

LOCATION

LOCATION Spruce Island - Ison Bay

SEGMENT I.D. SP-1

LENGTH OF SHORELINE SEGMENT: 2625 m

ACCESS: (Foot) / Vehicle / Boat / Barge / (Helio) / Float Plane

SHORELINE

Shoreline Type: SPI / (BEA) / (COV) / (HLD) / STET

Slope: LAAG / HANG / (VER)

Wave Exposure: High / Med / (Low)

Sediment: B₂₀ / C₂₀ / P₂₀ / G₂₀ / S₂₀ / M₂₀ / R₂₀

Drift Debris on Beach: (Yes) / No (Supra) / (Upper) / (Mid) / (Lower) Type Log / Weed

OIL

Degree of Oiling: Heavy / Moderate / (Light) / No Oil / Unobserved

Total Area of Beach Impact: SU / SP / (H) / (M) / (L)

OIL DISTRIBUTION

Continuous: (Y) / N Segment # _____ No. Bands _____ Width _____

Sporadic: (Y) / N Segment # > 5 Min/Max Dia. 1/25cm Impact Width 15-20m

Est. Oil Thickness where > 1cm: _____ cm SU / SP / (UP) / (MID) / (LO)

Est. Oil Penetration: 0 cm SU / SP / UP / MID / LO

Layers? Yes (No) No# Layers _____ Oil Weathering _____

Drift Debris Oiled? (Yes) / No (Supra) / (Upper) / (Mid) / (Lower) Amount: H / M / L / (V)

OIL MORPHOLOGY

Pooled Oil _____ % "Free" Oil 100 % Spattered 0 % H/H/L/VL Shores 5 %

OIL WEATHERING (OW)

Fresh Oil _____ % SU/SP/VP/MID/LO Choc Mousse 90 % SU/SP/VP/ (MID) / (LO)

Pancake Mousse 10 % SU/SP/VP/ (MID) / (LO) Asphalt Mousse _____ % SU/SP/VP/MID/LO

Tar Formation _____ %

Comments:

ACE 8707489

K-4-26-SP-1 is a very complex morphologic unit comprised of a large core backed by low vertical cliffs and flower pots, connected by terraces. The beaches are built of boulders, rubble, pebbles, gravel, and sand mixed with the entire beach from a covered by kelp weed and logs are found along the high tide line. All of the moraine spits and peninsulas around Ison Bay, no evidence of old oil or buried oil. No spills were observed on Ison Bay. In the very protected areas, mouse perennials were observed. Due to the complex nature of the shoreline no representative data

DOCUMENTATION:

Map Aerial photo marking segment boundaries See Attached

VTR: Y/N Tape Number(s) _____

Photography: Y/N Roll Number(s) DMC-14

Sample Numbers Collected: N/A

ECOLOGICAL EVALUATION

ICON BAY

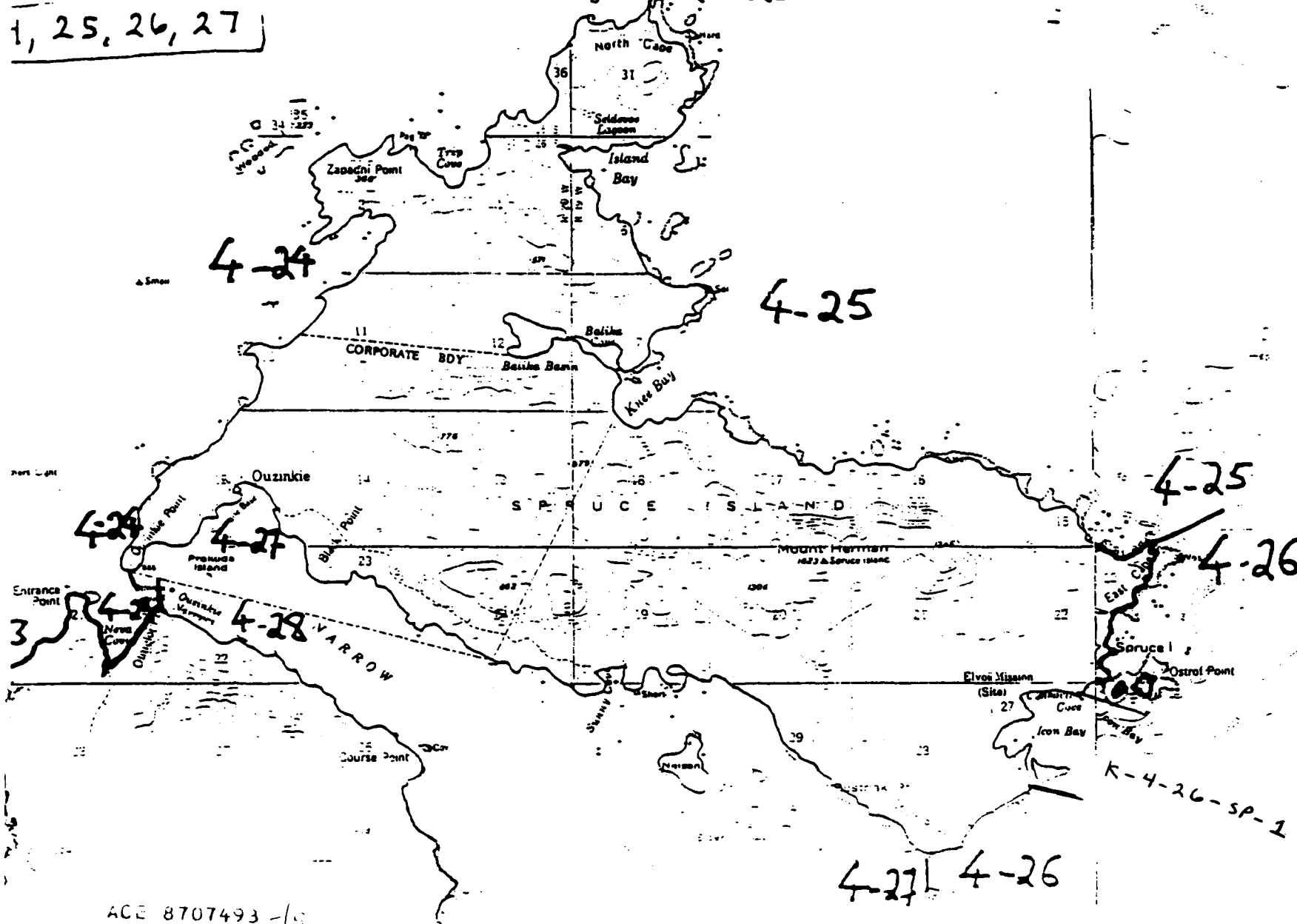
SOUTH EAST SIDE

LOCATION: of SPRUCE ISLAND SITE: _____ OBSERVER: D. McCoemickLOCATION PREFIX: SP SEG. NO.: 1 LENGTH: 2625 (M)DATE: 6/10/89 TIME (HHMM): 1050 TIDE HT.: +1.5 (M)OILED ZONE: Splash High Medium LowSUBSTRATUM: Rocks Boulder Cobble Gravel Sand MudLIVE BIOTAFucus (algae): Patchy Y/N Contin. Y/N Dense Y/N Sparse Y/N None Y/NMytilus (Mussels): Patchy Y/N Contin. Y/N Dense Y/N Sparse Y/N None Y/NBalanus (Barnacles): Patchy Y/N Contin. Y/N Dense Y/N Sparse Y/N None Y/NLittorinaPatchy Y/N Contin. Y/N Dense Y/N Sparse Y/N None Y/NLimpets: Patchy Y/N Contin. Y/N Dense Y/N Sparse Y/N None Y/NOTHER OBSERVATIONS: Seaweed; mulpin in tide pools, jellyfish, red & green anemones, Halichorus sponges, Katharina tunicata, ulva, kelp, mussels, clam shells, crab shellsCLEANUP PRECAUTIONS: No clean-up should take place here. Although there are no threatened or endangered species here, the biota in the mid-low ITZ will be disturbed by a group of people walking all over the tide pool areas & mussel beds looking for the occasional mouse party.MAMMALS: Otters _____ Harbor Seals _____ Sea Lions _____ Whales _____
Other _____BIRDS: Hald eagle, gulls on offshore rocky islandsGENERAL OBSERVATIONS: Oil occurring here is from chocolate mouse. Has come in since previous day - no sign of weathered oil patches and no sign of oil-stressed biota. This segment is very rich in diverse biota; and the very light occurrence of mouse here is not enough to warrant clean-up.

The Tropic

1, 25, 26, 27

4-24 | 4-25



(version 5/02/89)

SHORELINE CLEANUP PROGRAM

DATE 7/31/89

SHORELINE SEGMENT K4-26-SP-2

LOCATION: (see enclosed map) East side Spruce Island - Icon Bay

ADEC NO. _____ SHORELINE ASSESSMENT DATE: 6/10/89

Recommended Cleanup Activity(ies):

-No cleanup is recommended due to very light oiling (one mousse patty only) and ecological constraints discussed below. Subject to FOSC reassessment at a later date.

Priorities/ Considerations:

Ecological Constraints (from site survey):

-This segment is very diverse and very dense with mid-low intertidal biota and no evidence of oil stress. This, in conjunction with the extremely light oiling does not warrant a cleanup effort.

Archeological Constraints (from site survey):

-No acces to upland zone.
-If heretofore undiscovered cultural materials are uncovered during cleanup, contact Exxon's Archeological Field Director and take actions prescribed in the Operational Guidelines for Shoreline Cleanup dated 4/21/89 as amended.


State Historic Preservation Officer *

Date: 8/6/89

EXXON: _____

Date: _____

FOSC: _____

Date: _____

*Signature required to satisfy stipulations in Alaska DNR land use permits for tide and submerged lands.

(version 5/16/89)

SHORELINE OIL EVALUATION FORM - KONIAK

Date: 6-10-89 / Time: 1405

Observer: S. Poland

Surveyed From: Foot/Boat/Helio/Plane

Weather: Sun/Cloud/Rain/Snow/Log

LOCATION

LOCATION Spruce Island: Ostroff Point to East Cape SEGMENT I.D. K-4-26-SP-2

LENGTH OF SHORELINE SEGMENT: 2180 m

ACCESS: Foot/Vehicle/Boat/Barge/Helio/Float Plane

SHORELINE:

Shoreline Type: SPI/BEA/COV/HLD/STRT

Slope: LAUG/HANG/VER

Wave Exposure: High/Med/Low

Sediment: B 25% / C 25% / P 20% / G 20% / S 10% / M 0% / R 0%

Drift Debris on Beach: Yes/No Supra/Upper/Mid/Lower Type logs/wood

OIL

Degree of Oiling: Heavy/Moderate/Light/No Oil/Unobserved

Total Area of Beach Impact: SU / SP / H / M / L

OIL DISTRIBUTION

Continuous: Y/N Segment # 1 No. Bands 1 Width 3cm

Sporadic: Y/N Segment # 1 Min/Max Dia 3cm Impact Width 3cm

Est. Oil Thickness where > 1cm: 1 cm SU / SP / UP / HLD / LO

Est. Oil Penetration: 0 cm SU / SP / UP / MID / LO

Layers? Yes/No No# Layers 1 Oil Weathering 1

Drift Debris Oiled? Yes/No Supra/Upper/Mid/Lower Amount: H / H / L / VL

OIL MORPHOLOGY

Pooled Oil 0% "Free" Oil 100% Spattered 0% H/H/L/VL Sheen 0%

OIL WEATHERING (OW)

Fresh Oil 0% SU/SP/VP/MID/LO Choc Mousse 100% SU/SP/VP/HLD/LO

Pancake Mousse 0% SU/SP/VP/MID/LO Asphalt Mousse 0% SU/SP/VP/MID/LO

Tar Formation 0%

Comments:

ACE 8707495

K-4-26-SP-2 is a rock cliff unit with a seaward sloping surface (15-45°). The intertidal zone is covered with a veneer of boulders, pebbles, gravel, and sand. Only one moraine patch was found in the entire unit at mid tide level. There is very complex, in a cross-section, a plan map was constructed.

DOCUMENTATION:

Map Aerial photo marking segment boundaries See Attached

VTR: Y/N Tape Number(s) _____

Photography: Y/N Roll Number(s) DMC-14

Sample Numbers Collected: N/A

ICON BAY
EAST Side of

ECOLOGICAL EVALUATION

LOCATION: SPRUCE ISLAND SITE: _____ OBSERVER: D. McCormick

LOCATION PREFIX: SP SEG. NO.: 2 LENGTH: 2180 (M)

DATE: 6/10/89 TIME (HMM): 1355 TIDE HT.: +0.5 (M)

OILED ZONE: Splash High Medium Low

SUBSTRATUM: Rocks Boulder Cobble Gravel Sand Mud

LIVE BIOTA

Fucus (algae): Patchy Y/N Contin. Y/N Dense Y/N Sparse Y/N None Y/N

Mytilus (Mussels): Patchy Y/N Contin. Y/N Dense Y/N Sparse Y/N None Y/N

Balanus (Barnacles): Patchy Y/N Contin. Y/N Dense Y/N Sparse Y/N None Y/N

Littorina

Patchy Y/N Contin. Y/N Dense Y/N Sparse Y/N None Y/N

Limpets: Patchy Y/N Contin. Y/N Dense Y/N Sparse Y/N None Y/N

OTHER OBSERVATIONS: Euscleria, Katharina tunicata, bull kelp, anemones (green/red), Halichondria sponges, Leptasterias starfish; red fox (2)

CLEANUP PRECAUTIONS: None

MAMMALS: Otters _____ Harbor Seals _____ Sea Lions _____ Whales _____
Other red fox (2)

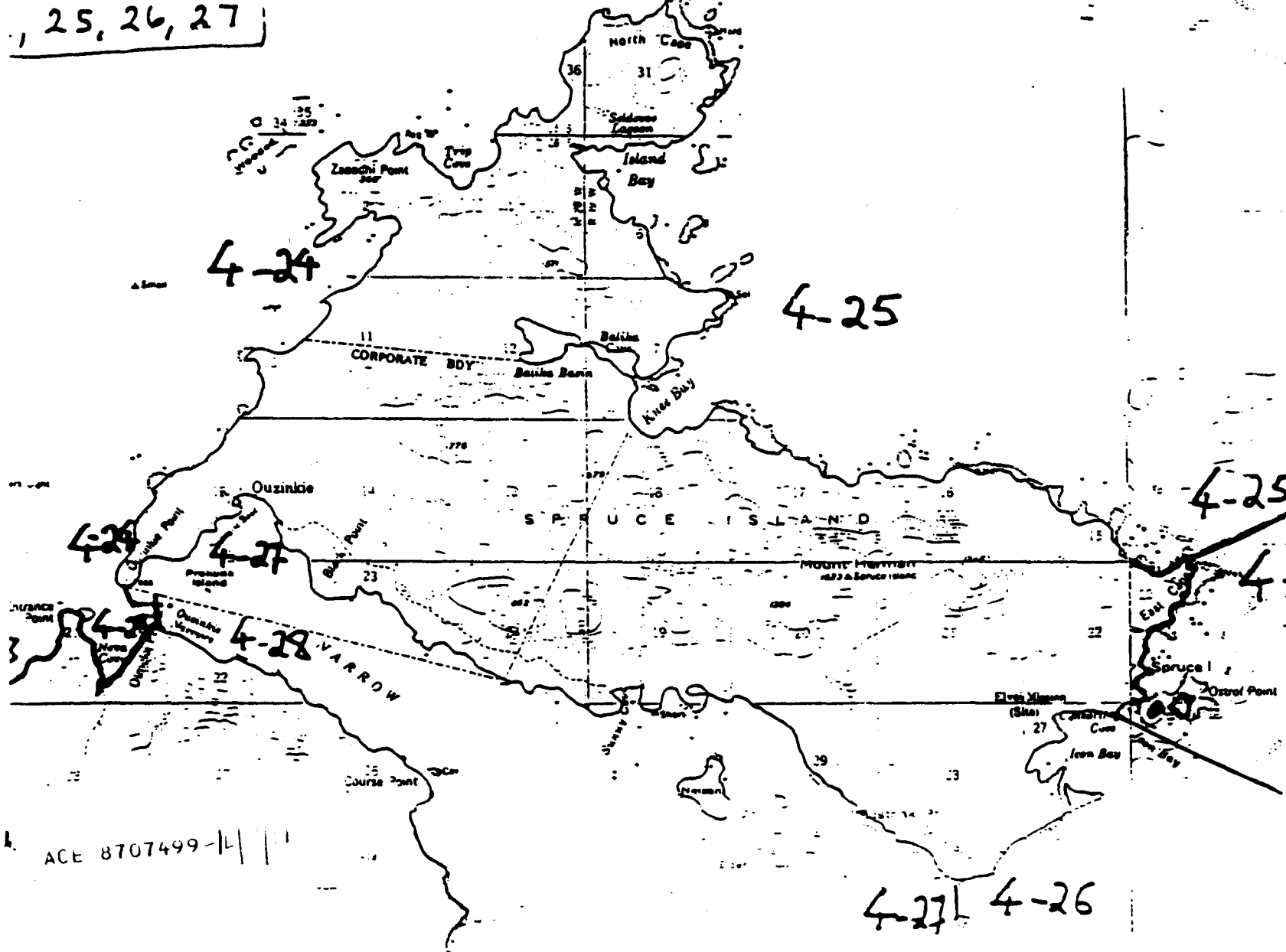
BIRDS: _____

GENERAL OBSERVATIONS: One mouse patty observed by SCAT Team;
Due to the density and diversity of mixed low T12 biota - another survey effort should take place for this segment

The Triple Islands

25, 26, 27

4-24 | 4-25



ACE 8707499-1

K-05-07

ACE 7963940

(version 5/02/89)

SHORELINE CLEANUP PROGRAM

DATE 8/21/89

SHORELINE SEGMENT K5-7-KN-1

LOCATION: (see enclosed map) Kalsin Island

ADEC NO. _____ SHORELINE ASSESSMENT DATE: 7/09/89

Recommended Cleanup Activity(ies):

-No cleanup recommended due to very light oiling and ecological constraints.

Priorities/Considerations: Class 5-A

Ecological Constraints (from site survey):

-No cleanup is recommended due to the sensitivity of the area: dense, healthy intertidal zone fauna and bird populations; very little oiling on the entire island.

Archaeological Constraints (from site survey):

-Access to vegetated upland areas is restricted. Restrict personnel from cabins or other structures on island.
-If heretofore undiscovered cultural materials are uncovered during cleanup, contact Exxon's Archaeological Field Director and take actions prescribed in the Operational Guidelines for Shoreline Cleanup dated 21 April, 1989 as amended.

J. David M. McKinnon
State Historic Preservation Officer *

Date: 8/27/89

EXXON: _____

Date: _____

FOSC: _____

Date: _____

*Signature required to satisfy stipulations in Alaska DNR land use permits for tide and submerged lands.

SHORELINE OIL EVALUATION

Date: 9 July 89 / Time: 0939
Surveyed From: Foot/Boat/Helio/Plane

Observer: BRYAN TRIMM
Weather: Sun/Cloud/Rain/Snow/Fog

LOCATION

Location: KALISIN ISLAND EAST COAST KODIAK ISLAND Segment ID: KS-7-KM-1
Segment Length: 3320 m. Access: Vehicle/Boat/Barge/Helio/Float Plane
Access Restrictions: WATCH OUT FOR BIRD ROOSTERY

SHORELINE

Shoreline Type: SPI/BEA/COV/HLD/STRT Slope: Lo/Med/Hi/Vert
Wave Exposure: High/Med/Low
Sediment: B 25 % / C 25 % / P 25 % / G&S 5 % / M % / R 20 %

OIL

Avg. Degree of Oiling: HEAVY / MODERATE / LIGHT / VERY LIGHT / NONE OBSERVED
Area of Impact: SU/SP/H/M/L

OIL DISTRIBUTION

Continuous % of Segment 0 SU/SP/H/M/L H/M/L/VL
Sporadic % of Segment 0.1 SU/SP/H/M/L H/M/L/VL

Total	Length(m)	Width(m)	Thickness >1cm:	cm	SU/SP/H/M/L
Very light:	<u>1</u>	<u>1/2</u>	Penetration/Rework:	<u>0</u>	SU/SP/H/M/L
Light:			Burial Depth:	<u>0</u>	SU/SP/H/M/L
Moderate:					
Heavy:					

Mobilization Potential: High/Medium/Low

Drift Debris Oiled? Y/N Amount: H/M/L/VL SU/SP/H/M/L Type:

OIL MORPHOLOGY

Pooled Oil: <u> </u> %		SU/SP/H/M/L
"Free" Oil: <u> </u> %		SU/SP/H/M/L
Splattered: <u> </u> %	H/M/L/VL	SU/SP/H/M/L
Coated: <u> </u> %	H/M/L/VL	SU/SP/H/M/L
Pancakes/Balls: <u>100</u> %		SU/SP/ <u>H/M/L</u>

Preliminary Cleanup Est.

Total TYPE A: 1/2 m
Total TYPE B: m
Total TYPE A/B: m

OIL WEATHERING

Fresh: <u> </u> %	SU/SP/H/M/L
Mousse: <u>100</u> %	SU/SP/ <u>H/M/L</u>
Weathered Mousse: <u> </u> %	SU/SP/H/M/L
Asphalt Mousse: <u> </u> %	SU/SP/H/M/L
Tar: <u> </u> %	SU/SP/H/M/L

COMMENTS

VERY FEW MOUSSE PATCHES. A MODERATE AMOUNT OF OIL DEPOSITS ARE NOT BURIED, REWORKED, OR PENETRATED INTO THE BEACH SUBSTRATE. ONLY FOUND PATCHY DEPOSITS OF ONE PATCH PER 15 TO 50 M. PATCHES HAVE A DIAMETER OF 3 TO 15 CM.

DOCUMENTATION:

Map/Aerial photo marking segment boundaries See Attached

VTR: Y/N Tape Number(s) _____

Photography: Y/N Roll Number(s) DMC-19 / LMC-20

Sample Numbers Collected: N/A

ECOLOGICAL EVALUATION

EAST COAST KODIAK IS.

LOCATION: KALSIN IS. SITE: _____ OBSERVER: D. McCORMICK
 LOCATION PREFIX: K5-7- SEG. NO.: 1 LENGTH: 3320 (M)
 DATE: 7/9/89 TIME (HHMM): 0945 TIDE HT.: +1.0 (M)

OILED ZONE: Splash High Medium Low

SUBSTRATUM: Rocks Boulder Cobble Gravel Sand Mud

LIVE BIOTA

Fucus (algae): Patchy Y/N Contin. Y/N Dense Y/N Sparse Y/N None Y/N

Mytilus (Mussels): Patchy Y/N Contin. Y/N Dense Y/N Sparse Y/N None Y/N

Balanus (Barnacles): Patchy Y/N Contin. Y/N Dense Y/N Sparse Y/N None Y/N

Littorina Patchy Y/N Contin. Y/N Dense Y/N Sparse Y/N None Y/N

Limpets: Patchy Y/N Contin. Y/N Dense Y/N Sparse Y/N None Y/N

OTHER OBSERVATIONS: Black chitonid, limpets, barnacles, mussels, etc. on rocks.

Intertidal zone: Littorina, Chthamalus, etc. on rocks. Also, Ulva, Enteromorpha, etc. on rocks.

CLEANUP PRECAUTIONS: No cleanup should take place due to the tight timing of oiling and sensitivity of the area, especially the bird populations.

MAMMALS: Otters _____ Harbor Seals _____ Sea Lions _____ Whales _____
 Other _____

BIRDS: gulls, cormorants, black murre, pigeon guillemot, forster's shearwater, etc.

GENERAL OBSERVATIONS: This island is very sensitive due to the timing of ITZ funds and bird sightings. Counted several murrelets on the entire island. No oil cleanup was observed.

ACE 8707503

POOR QUALITY ORIGINAL

9 July 89

SUNDAY

0700 TALK TO NAT (523EH PILOT) ABOUT

TODAY'S FLT SCHEDULE

0730 MOVE FURNITURE

0800 OFFICE TAPER WORK

0900 EXRON COMMAND - FLT PLAN W/ SARA

0929 LV ADQ IN ROUTE TO KALSIN¹
QUEER IS0939 LD KALSIN IS PK 5-7 - KI-1FEW MOUSSE PATTIES (CHOC MOUSSE)^M/HITZ

ON C/B/P BEACH LD ENERGY WAVE CLOUDY

OCCASIONAL 3/C/P BEACH - CLEEN

3/C/P HAVE CHOC MOUSSE PATTIES

3-15cm. ONE PATTY AVG 15-50m

APART (OIL RAGE) BIRD ROCKERY (E. SIDE)

WALK AROUND KALSIN IS. V. LT SPLOT

ON ALL - BUT MOUSSE PATTY AVG IS TO

50m APART w/ 3-15cm. D.A.

1105 I FLY TO QUEER IS. LD & WALK
WHILE REST TEAM ON KALSIN IS.

LEVEL

(version 6/04/89)

SHORELINE PRE-CLEANUP ASSESSMENT BLOCK REPORT

Block (see enclosed map): K5-7

Includes Shoreline Segments: KS-1, KS-2, KN-1, QI-1

Location: Kalsin Bay, Kalsin Island, Queer Island

Submitted: _____ Date: _____
(for Exxon)

FOSC Approval: _____ Date: _____

The cleanup procedures identified in the Shoreline Cleanup Program are recommended. Exxon and other field personnel are encouraged to suggest innovations and productivity enhancements to the OSC's on-scene representative. Requirements for safety and the protection of cultural material must be observed.

CC: KISCC

(version 5/02/89)

SHORELINE CLEANUP PROGRAM

DATE 8/20/89

SHORELINE SEGMENT K5-7-KS-1

LOCATION: (see enclosed map) Kalsin Bay

ADEC NO. _____ SHORELINE ASSESSMENT DATE: 7/19/89

Recommended Cleanup Activity(ies):

-No cleanup recommended due to very light oiling and presence of ecological constraints. This determination is subject to FOSC reassessment at a later date.

Priorities/Considerations: Class 5-A

-No access by helicopter.

Ecological Constraints (from site survey):

-Sensitive resources/species present include dense bird population, anadromous fish, and rich clam beds. Any cleanup activities are expected to be more detrimental to these resources than the present minimal impact of oil.

Archaeological Constraints (from site survey):

-If cleanup is conducted an archaeological monitor is required during cleanup.

-If cleanup is conducted and heretofore undiscovered cultural materials are uncovered, contact Exxon's Archaeological Field Director and take actions prescribed in the Operational Guidelines for Shoreline Cleanup dated 21 April, 1989 as amended.

Paul M. Nelson
State Historic Preservation Officer *

Date: 8/23/89

EXXON: _____

Date: _____

FOSC: _____

Date: _____

*Signature required to satisfy stipulations in Alaska DNR land use permits for tide and submerged lands.

SHORELINE OIL EVALUATIOND. General

1. Date: 8/7 & 8/8/89 2. Time: 12:25-15:45 3. Observer: KAROLIN DEBUSSCHE
 4. Surveyed From: Foot/Boat/Helio/Plane 5. Weather: Sun/Cloud/Rain/Snow/Fog
 6. Location: S-SHORE OF MALSIN BAY 7. Segment #: MS-7 SEGMENT MB-1
 8. Length of shoreline segment: 11440 yds 9. Tidal Stage $\pm$ 2-3 ft.
 10. Access: Foot/Vehicle/Boat/Barge/Helio/Float Plane
 11. Total Percentage of Segment Accessible: 100 %
 12. Access Restrictions: NO ACCESS BY HELIO B/C OF CABINS, HOUSES, CAMPS...

B. Shoreline

13. Shoreline Type: SPI/BEA/COV/HLD/STRT/CLE/DAF
 14. Slope: LANG/HANG/VERT
 15. Wave Exposure: High/Med/Low
 16. Sediment: B/S / C/S / P/S / G/S / S/S / M/S / R/S
 17. Drift Debris on Beach: Yes/No Supra/Upper/Mid/Lower Type: HLANE, LOGS, TRAP
ENCUS, SEA URGENTS

Oil Summary

18. Degree of Oiling: Heavy/Moderate/Light/Very Light/No Oil Observed
 19. Area of Beach Impact: Width of Band: 3 yds
 Continuous: Total % of Segment 0
 Sporadic: Total % of Segment .5
 No Oil: Total % of Segment 99.5
 20. Est. Oil Thickness where >1in: 0 in 21. Est. Oil Penetration: 0 in
 22. Pooled Oil: 0 % "Free" Oil: 0 % Coated: H/S / M/S / L/S
 23. Fresh 0 % Mousse 65 % Tar Formation: 35 %
 24. Drift Debris Oiled? Yes/No Sup/Up/Mid/Low Amount: H/M/L

Comments:

SEGMENT CONSISTS MOSTLY OF GRP BEACHES. OILING IS
VERY LIGHT & SPORADIC AND HAS POTENTIAL FOR NATURAL
WASHING

SEE PAGE 2 FOR SUPPLEMENTAL INFORMATION

SUPPLEMENTAL SHORELINE OIL EVALUATION25. Oil Type

Fresh	<u>0</u>	%
Mousse	<u>0</u>	%
Weathered	<u>65</u>	%
Tar	<u>35</u>	%
	<u>100</u>	%

26. Total Oil Coverage

	Length(yd)	Width (yd)
Very Light:	<u>60</u>	<u>3</u>
Light:	<u> </u>	<u> </u>
Moderate:	<u> </u>	<u> </u>
Heavy:	<u> </u>	<u> </u>

27. Oil Distribution

pooled/continuous
coating/ splat
cracks / crevices
patties (>10cm diameter)
balls (< 10cm diameter)
asphalt pavement

SP	H	M	M	Thick >1in	Length(yd)	Width(yd)	Burial Depth
	X				<u>53</u>	<u>3</u>	
	X				<u>7</u>	<u>3</u>	

28. Preliminary Cleanup Est.

Total TYPE A: 0 yds.
Total TYPE B: 0 yds.
Total TYPE A/B: 0 yds.

29. Remobilization Potential: High/Medium/Low

DOCUMENTATION:

Map Aerial photo marking segment boundaries A Harbor

VTR: Y/N Tape Number (s) None

Photography: Y/N Roll Number (s) SMB-21

FIG 10 NOTES + MAP OF DEGREE OF OILING

Additional Comments:

3/8/89 K5-7 SEGMENT KB-1

① 12:25

STARTED WITH CAR

6. DEBOSS CATCHES

LOCATION ① - WALK

LEAVE INTENTIONAL RASH - GHT H, P/G/C AT H, G AT L

DIRECT FLIGHT H/HT - LOGS H/HT

LOW EMBARK/EMBARKMENT

ON SPAREC WENT-4-22 HOUSE-377, HT H/HT

" TRK SPARE- H-11/H

-1-17 LIGHT

STATION 11 STATION 6 WENT-4-22 HOUSE-377, HT H/HT

STATION 11 STATION 6 WENT-4-22 HOUSE-377, HT H/HT

STATION 11 STATION 6 WENT-4-22 HOUSE-377, HT H/HT

G/S/P BEAM - SPARE-2-22 - CLASH H/HT

STATION 6 BEAM

H/ST OF 22 IS ON LA-5

LOCATION ③

CLIFF WITH- G/S/P/A/C/B PLATFORM HT H & R AT L.

ALPHABET STATIONS ③

LOCATION ④

LEAVE INTENTIONAL RASH - DELTA G/P

F. H/HTS TO THE ST STATIONS ⑤

STATION 11 CLIFF W/ R. OUTCROP H/HT

H/HTS TO THE ST STATIONS

STATION 11

STATION 11 CLIFF

LOCATION ⑤ G-BEACH

RDIVE ⑥ - STATION 11 ⑤

LOCATION ⑦

G-BEACH W P. HT H-TIG - BEAMS

W/HT BEET

ACE 8707510

POOR QUALITY ORIGINAL

1/8/59 K5.2 SEGMENT KB-1

CONT (2)

M. DE BUSSCHER

R. LOCATION (8) : CLIFF W. A PLATFORM 5 E.C.

SPARKS ON FADING SECTION LINE & SOME M/M 3Y501,

- THE CLIFFS - 1000 ON LOG,

- VERY NORTHERLY POSITION (M/M 1000)

FLAME 1 - 11, - 1000 M -

* UNDER THE SPARKS - M - 1000 / 10000

10000

10000

15145

5/5/59 CONTINUE KB-1 1125

CLIFFS WITH S/P ROCKET REMAINS

R. LOCATION (9)

CLIFFS W. REFS F/C RT 1, C/P/B RT M/L - 1000

LOCATION 10

CLIFFS INTERMEDIATE 6 - 1000 M/L

CLIFFS 1000 M/L

1000 M/L 1000 M/L 1000 M/L

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1000 M/L 1000 M/L

1000 M/L 1000 M/L

R. LOCATION (12)

1000 M/L 1000 M/L 1000 M/L

1000 M/L 1000 M/L 1000 M/L

1000 M/L 1000 M/L 1000 M/L

ACE 8707511

POOR QUALITY ORIGINAL

KS-7 - KB-1

CONT (2)

15 DECEMBER

REMARKS: SERIES OF COVES W R/P/S B & R N/K/L

ON SPORADIC HOUSE LATT - 14

(VERY WEATHERED)

RI - ESTIMATED -

CLIFF W R/D IN N - - VERY WEATHERED HOUSES

PHOTO

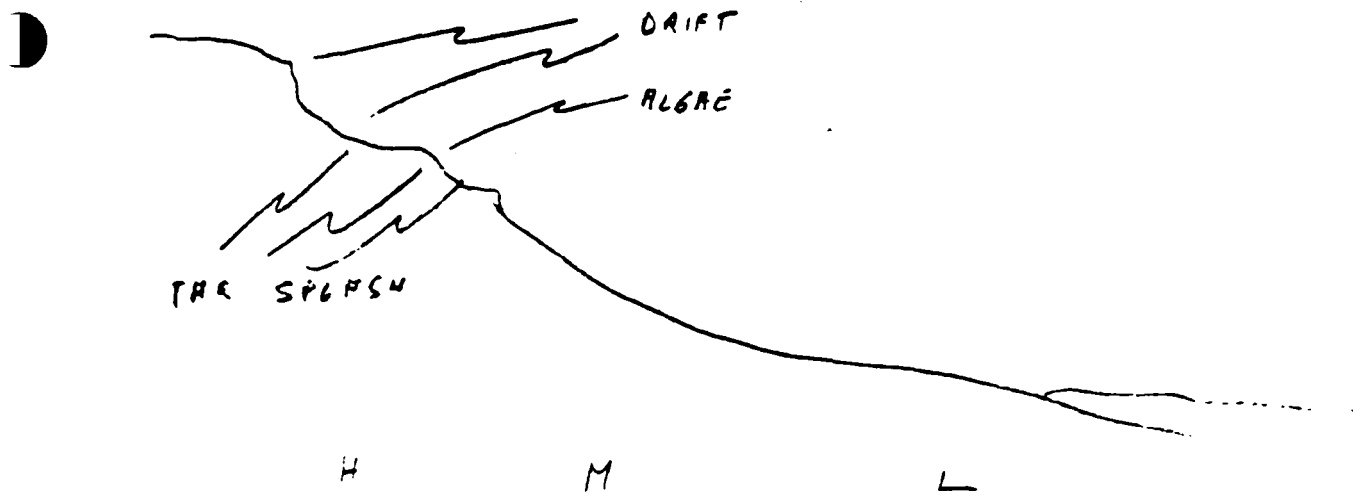
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ACE 8707512

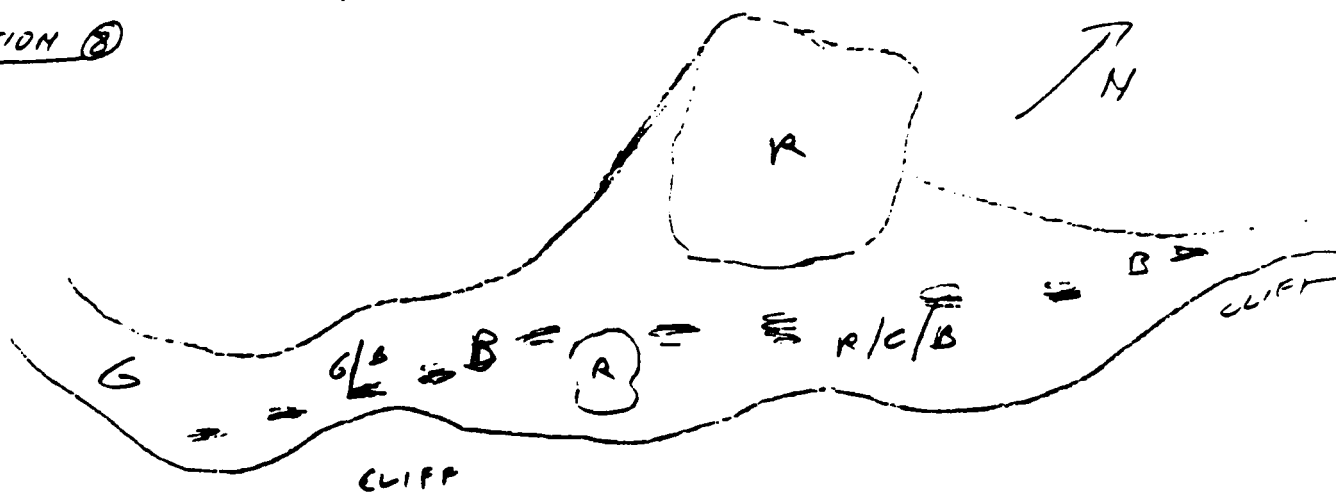
POOR QUALITY ORIGINAL

8/7/89 145-7 SEGMENT KB-1

LOCATION ②



LOCATION ②



— = SPORADIC OIL

ECOLOGICAL EVALUATION

LOCATION: Kalsin Bay SITE: S. Shore Kalsin Bay OBSERVER: SM BAN
 LOCATION PREFIX: K-5-7 SEG. NO.: KB-1 LENGTH: 10460 (M)
 DATE: 8/7-8/89 TIME (HHMM): 1225 (5/7) TIDE HT.: + 2/3 (M)
 OILED ZONE: Splash High Medium Low Extremely light and discontinuous.
 SUBSTRATUM: Rocks Boulder Cobble Gravel Sand Mud

LIVE BIOTA

Fucus (algae): Patchy Y/N Contin. Y/N Dense Y/N Sparse Y/N None Y/N

Generally sparse with a few dense patches on rock outcrops
None oiled. Also Halosaccion and dense blue

Mytilus (Mussels): Patchy Y/N Contin. Y/N Dense Y/N Sparse Y/N None Y/N

Generally sparse; however very dense beds in gravel at head of
Lagoon. None oiled.

Balanus (Barnacles): Patchy Y/N Contin. Y/N Dense Y/N Sparse Y/N None Y/N

Adults dense especially on boulder areas. Spots dense in localized
patches often on cobble/pebble beaches. Very few Nuclea.

Littorina
 Patchy Y/N Contin. Y/N Dense Y/N Sparse Y/N None Y/N

Very dense in some tidal pools and on small drift wood pieces in
upper ITZ. Also found on Fucus fronds. None oiled.

Limpets: Patchy Y/N Contin. Y/N Dense Y/N Sparse Y/N None Y/N

Several individuals found in upper ITZ. None oiled.

OTHER OBSERVATIONS: many stronglocentrotus tests on shore also surf, cockle and

butler clam shells on beaches - indicative of clam patches in beds offshore. Tidal pools
in rocky areas support Pseudosquilla, Anthopleura, and coralline algae. Pools numerous but
not highly diverse in fauna.

CLEANUP PRECAUTIONS: No cleanup recommended. Sensitive resources

in the area include dense bird population, numerous fish and offshore
clam beds. Restrict access to the entire segment.

MAMMALS: Otters Harbor Seals Sea Lions Whales
 Deer skull Other 3 Dall porpoise - 1 of which was juvenile

BIRDS: Left of birds offshore - see map for location and attached page for
details of birds population in segment.

GENERAL OBSERVATIONS:

No organisms in this segment are impacted by oil

K-5-7-KB-1 Ecological Evaluation
(con)

BIRDS: Birds observed on 8/7/89 in a large
raft formation included:

Tufted Puffins
Pigeon Guillemots
Black legged Kittiwakes
Cormorants
Scoters
and Glaucous-winged gulls.

Other birds seen in segment included:

Oystercatchers
Crows
Arctic terns
Greater Yellowlegs
Marbled Murrelet
and Mew gulls

KS-7

ACE 8707518

11

4005

SEGMENT MAP

KS-7 SEGMENT KB-1

AUGUST 7 : 12:25-15:45

AUGUST 8 : 11:25-13:30

KAROLIN DEBOSSCHERE

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MS-7

ACE 8707519

SEGMENT MAP

MS-7 SEGMENT KB-1

AUGUST 7 : 12:25-15:45

AUGUST 8 : 11:25-13:30

KRDLIGN HOBBS CHANG

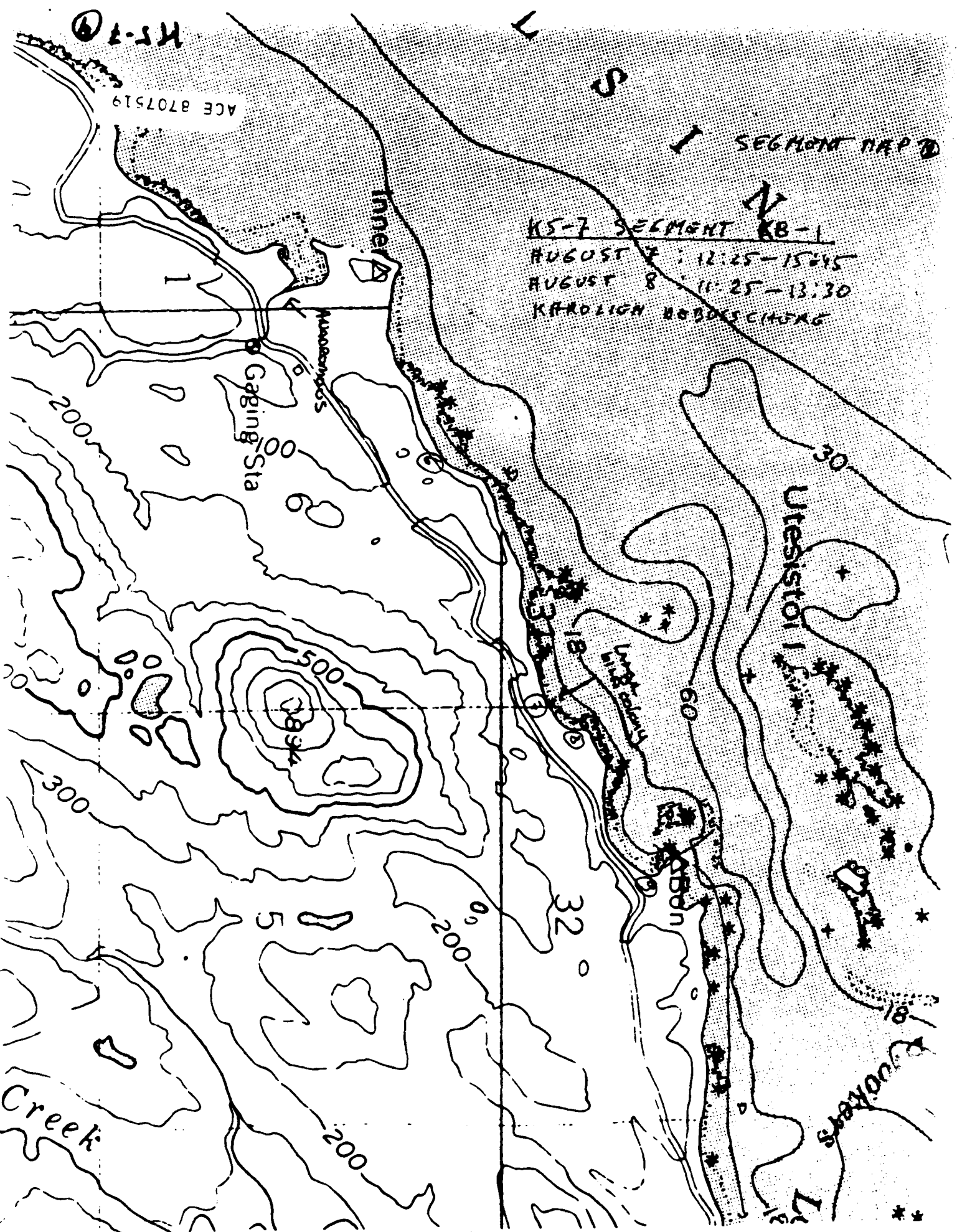
Gaging Sta

Inner

Utesistoi

Quakers

Creek



KIS-7 ③

ACE 8707520 -/S

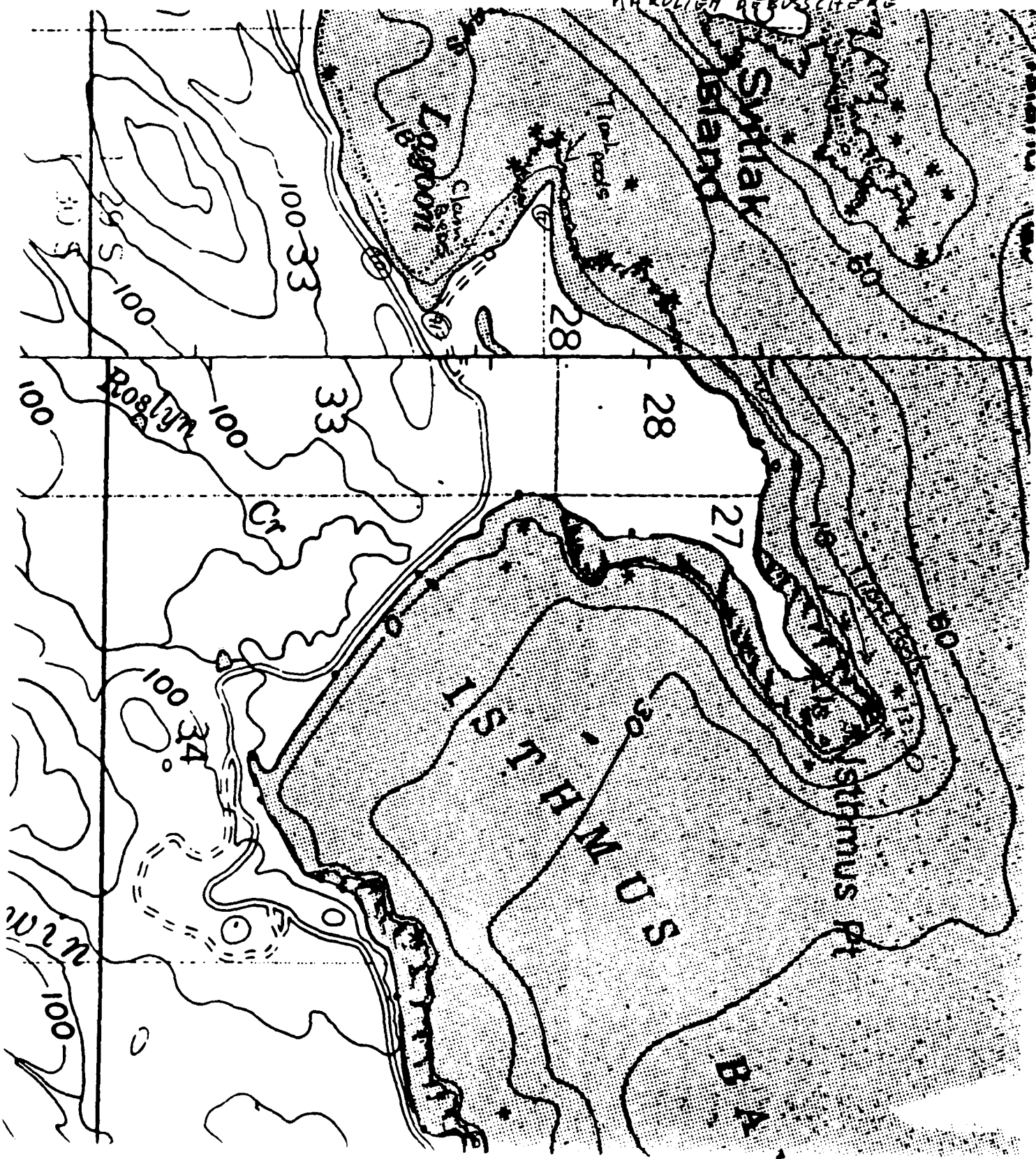
SEGMENT HMP ③

KIS-7 SEGMENT HMP-1

AUGUST 7 : 12:25 - 15:45

AUGUST 8 : 11:25 - 13:30

KAROLIGH AFBUSCIT-AG



(version 5/02/89)

SHORELINE CLEANUP PROGRAM

DATE 8/21/89

SHORELINE SEGMENT K5-7-QI-1

LOCATION: (see enclosed map) Queer Island

ADEC NO. _____ SHORELINE ASSESSMENT DATE: 7/09/89

Recommended Cleanup Activity(ies):

-No cleanup recommended, no oil observed.

Priorities/Considerations:

Ecological Constraints (from site survey):

-No ecological assessment form is included in this report because team biologist was not present in helicopter when survey was done.

Archaeological Constraints (from site survey):

-Archaeological assessment not conducted. If cleanup is planned, a full archaeological assessment must be conducted prior to cleanup.

-If cleanup is conducted and heretofore undiscovered cultural materials are uncovered, contact Exxon's Archaeological Field Director and take actions prescribed in the Operational Guidelines for Shoreline Cleanup dated 21 April, 1989 as amended.


State Historic Preservation Officer *

Date: 8/23/89

EXXON: _____

Date: _____

FOSC: _____

Date: _____

*Signature required to satisfy stipulations in Alaska DNR land use permits for tide and submerged lands.

SHORELINE OIL EVALUATION

Date: 9 July 89 / Time: 1109
Surveyed From: Foot/Boat/Helio/Plane

Observer: BRYAN TRIMM
Weather: Sun/Cloud/Rain/Snow/Fog

CATION

Location: Super Island, Kals. Bay E. Coast Kordak Is. Segment ID: K5-7-Q1
Segment Length: 2510 m. Access: Vehicle/Boat/Barge/Helio/Float Pla.
Access Restrictions: Bird Roosting

SHORELINE

Shoreline Type: SPI/SEA/COV/NLD/STRT Slope: Lo/Med/Hi/Vert
Wave Exposure: High/Med/Low
Sediment: B 25 % / C 25 % / P 25 % / G&S 5 % / M % / R 20 %

OIL

Avg. Degree of Oiling: HEAVY / MODERATE / LIGHT / VERY LIGHT / NONE OBSERVED
Area of Impact: SU/SP/H/M/L

OIL DISTRIBUTION

Continuous	% of Segment		SU/SP/H/M/L	H/M/L/VL
Sporadic	% of Segment		SU/SP/H/M/L	H/M/L/VL

Total	Length(m)	Width(m)	Thickness >1cm:	cm	SU/SP/H/M/L
Very light:			Penetration/Rework:	cm	SU/SP/H/M/L
Light:			Burial Depth:	cm	SU/SP/H/M/L
Moderate:					
Heavy:					

Mobilization Potential: High/Medium/Low
Drift Debris Oiled? Y/N Amount: H/M/L/VL SU/SP/H/M/L Type:

OIL MORPHOLOGY

Pooled Oil:	%	SU/SP/H/M/L	Preliminary Cleanup Est. Total TYPE A: <u> 0 </u> m Total TYPE B: <u> 0 </u> m Total TYPE A/B: <u> 0 </u> m
"Free" Oil:	%	SU/SP/H/M/L	
Splattered:	%	H/M/L/VL SU/SP/H/M/L	
Coated:	%	H/M/L/VL SU/SP/H/M/L	
Pancakes/Balls:	%	SU/SP/H/M/L	

OIL WEATHERING

Fresh:	%	SU/SP/H/M/L
Mousse:	%	SU/SP/H/M/L
Weathered Mousse:	%	SU/SP/H/M/L
Asphalt Mousse:	%	SU/SP/H/M/L
Tar:	%	SU/SP/H/M/L

COMMENTS

NO OIL OBSERVED FROM A VERY LOW ALTITUDE (20 FEET) AND SLOW, EXCEPT NEAR BIRD ROOSTS. NO ARCHEOLOGICAL & BIOLOGICAL SURVEY.

9 JULY 89

SUNDAY

REST TEAM WILL JOIN ME WHEN THEY
FINISH W/ KALIN IS.

1109 FLY OVER GUER IS K5-7-Q1-1
TUCKER BEACHES W/ VERT & LA & COC
OUTCROPS. SD/PIC/B BIRD ROCKERY
FLYING AT 3000 FT & 20 FT
NO OBSERVED OILING! CAN SEE MANY
LAYMAN CONFUSE GLOSSY BLACK & BROWN
ROCKS WITH OIL.
ANOTHER INGC.

1116 PICK UP REST OF TEAM GO TO
CAMPBELL LAC-SON & MINER'S PT

1152 K6-17-MP 7 CAPE UGAT -
TO MINER'S PT

CLOUDY, FLY OVER
CAPE UGAT - ROCKY VERT HOLD

FLYING @ 20 FT @

PTA CLEAN UP HITZ BEACH
ID ABOVE CLEAN UP, TALK TO THEM

9 JULY 89

SUNDAY

LAND BY SET NET SITE. THEY ARE CLEANING
THIS SEGMENT WITH TIFAR (SPELLING)
USCG SUPPLIED THEM. EFFECTIVELY REMOVES
WEATHERED & CHOC MOUSSE (~25% REMOVAL)
FROM ROCK FACES.

BOULDER/CORAL/PEB BEACH HAS A 2 TO
3M WIDE ZONE OF IMPACT IN HITZ
WEATHERED (50%) & CHOC (50%) MOUSSE
FOUND FROM LT SPLAT TO MODERAT
(GREATEST ACCUMULATIONS IN BETWEEN
BOULDERS & IN CRACKS & CREVICES).

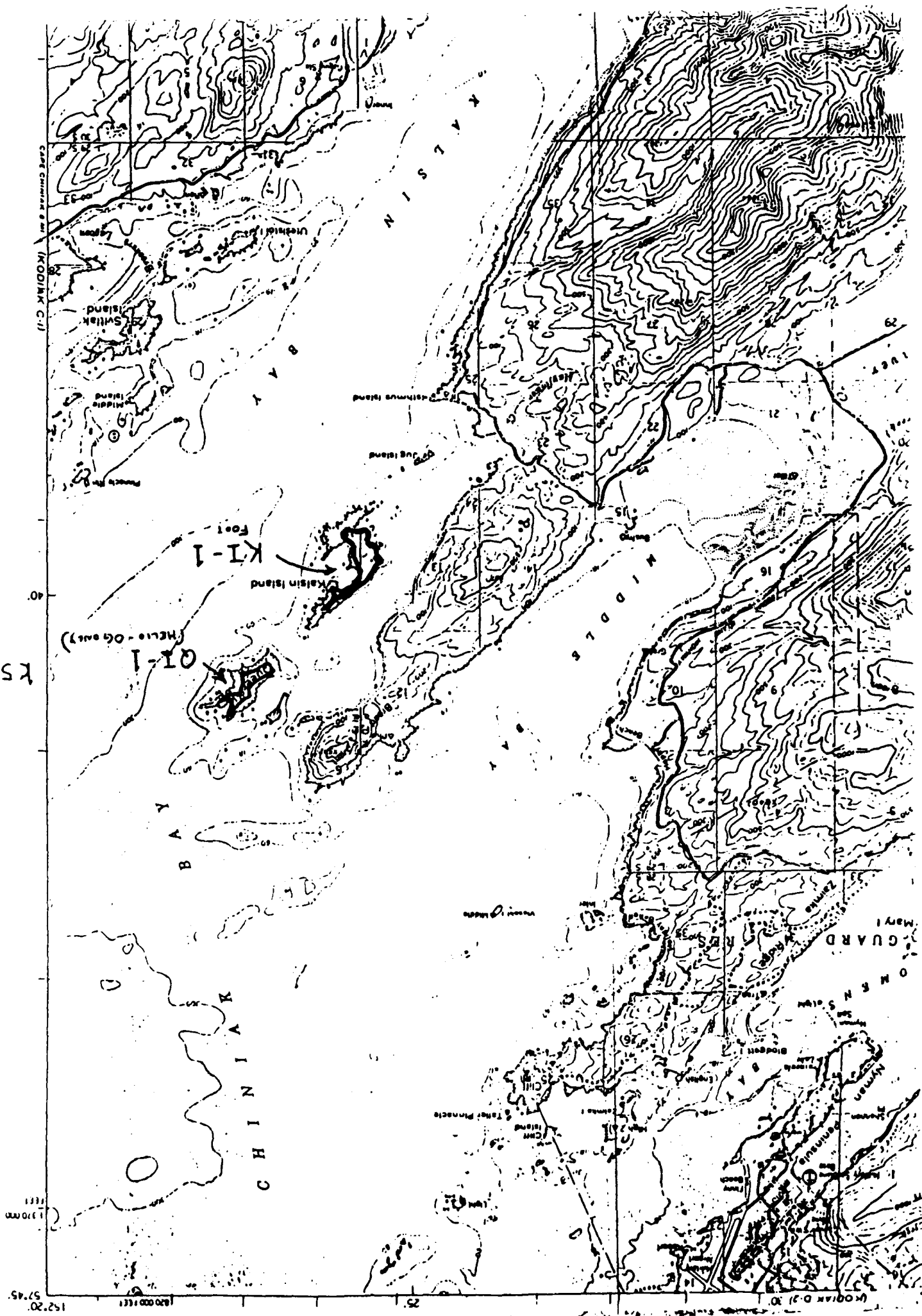
EVEN ON COOL CLOUDY DAY, A SLIGHT
HYDROCARBON SMELL APPARENT (YES - I'M
FAR FROM THE HELIO).

PENETRATION TO 5 CM, NO REWORK/BURIAL
MOUSSE UP TO 2.5 CM THICK (IN BETWEEN
BOULDERS)

SET NETTERS REPORT A "WAXY/SOAPY" SUBSTANCE
IN H₂O. THEY WILL TRY TO GIVE US SAMPLE
BEFORE WE LEAVE THEIR SITE.

LEVEL

ACE 8707523



(version 5/02/89)

SHORELINE CLEANUP PROGRAM

DATE 8/21/89

SHORELINE SEGMENT K5-7-KS-2

LOCATION: (see enclosed map) Kalsin Bay

ADEC NO. _____ SHORELINE ASSESSMENT DATE: 7/13/89

Recommended Cleanup Activity(ies):

- Remove 15 polybags of oiled stones and debris stored under tree on beach at site #2 (see map, OG notes).
- Remove oiled debris and mousse patties at sites #5 and #7 within the segment (see map).

Priorities/Considerations: Class 5-A

Ecological Constraints (from site survey):

- Remove debris bags. Keep cleanup crew number to a minimum.

Archaeological Constraints (from site survey):

- If heretofore undiscovered cultural materials are uncovered during cleanup, contact Exxon's Archaeological Field Director and take actions prescribed in the Operational Guidelines for Shoreline Cleanup dated 21 April, 1989 as amended.


State Historic Preservation Officer *

Date: 8/23/89

EXXON: _____

Date: _____

FOSC: _____

Date: _____

*Signature required to satisfy stipulations in Alaska DNR land use permits for tide and submerged lands.

SHORELINE OIL EVALUATION

A. General

1. Date: AUG 13/89 2. Time: ^{11:47}15:34 3. Observer: RICK GILLIE
4. Surveyed From: Foot Boat Helio Plane 5. Weather: Sun Cloud Rain Snow Fog
6. Location: KALIN BAY 7. Segment #: K5-7-K8-02
8. Length of shoreline segment: 16,190 yds 9. Tidal Stage: 864 ft.
10. Access: Foot Vehicle Boat Barge Helio Float Plane
11. Total Percentage of Segment Accessible: 100 %
12. Access Restrictions: NEARSHORE ROCKS, STEEP CLIFFS

B. Shoreline

13. Shoreline Type: SPI BEA COV HLD STRT CLF DAF
14. Slope: LANG HANG VERT
15. Wave Exposure: High Med Low
16. Sediment: B₃₀ / C₁₀ / P₁₀ / G₁₀ S₅ / M / R₃₅
17. Drift Debris on Beach: Yes No Supra Upper Mid Lower Type Logs Driftwood

C. Oil Summary

18. Degree of Oiling: Heavy Moderate Light Very Light No Oil Observed
19. Area of Beach Impact: Width of Band: N/A yds
Continuous: Total % of Segment _____
Sporadic: Total % of Segment 10
No Oil: Total % of Segment 90
20. Est. Oil Thickness where >1in: — in 21. Est. Oil Penetration: — in
22. Pooled Oil: — % "Free" Oil: — % Coated: H / M / L %
23. Fresh — % Mousse 70 % Tar Formation: 30 %
24. Drift Debris Oiled? Yes No Sup Up Mid Low Amount: V. LK H M L

Comments:

SEE PAGE 2 FOR SUPPLEMENTAL INFORMATION

ACE 8707527

Aug 13/89

SEGMENT K5-7-KB-02

11:47 Commence JCAT survey
Start at Broad Point

- 10-20 m rock cliff / boulder beach
- Very inaccessible
- NO OIL OBSERVED on rocks

Stop # ① @ 11:55

- 200 m long, pebble/cobble beach
- narrow (10-20 m) HTZ.
- Very little debris
- 1-2 tar balls (1-2" dia)
- 2-3 pieces of oiled driftwood
- VERY LIGHT OIL (extremely light)

Stop # ② @ 12:15

- 400 m long, pebble/cobble beach
- driftwood logs on bank and offshore
- beach has oiled stones only
- it appears that mouse potholes have been cleared up and covered

Rich Gilhe

leaving oiled stones in small depressions
- mostly pebble sized oiled stones - HTZ

- scattered, sporadic oiled stems
- V LIGHT OIL
- minor, sporadic oil penetration

N.B. Approx 10-15 poly bags of oiled pebbles have been stored temporarily at the base of the only tree along the shore at the south end of beach
- must be recovered!

Stop # ③ @ 12:45

- 400 m long, pebble beach
- 20 m HTZ
- NO OIL OBSERVED

Aug 13/89

Rick Collier

KS-7-KB-02 CONT

Stop #④ @ 13:15

- 400 m long bayhead beach
- cobble / boulder / pebble
- ROAD ACROSS behind
- beach has been cleaned.
- NO new oiling, only residue
- NO OIL OBSERVED.

Stop #⑤ @ 13:35

- 100 m beach, SE of Mayflower Ch. mouth
- gravel / sand
- low tide sand flat
- very minor oil splatter on cobble in HTE
- essentially NO OIL
- some oil debris has been removed

- also survey 200 m gravel beach to the east
- NO OIL OBSERVED
- evidence of previous clean-up.

Stop #⑥ @ 14:10

- 200 m long beach on ochreous rock cliffs / steep boulder shore
- gravel / cobble / boulder
- large stream culvert and clear approach of road to Kalsin Bay
- culvert has pool with about 50 salmon trying to go upstream
- oil residue (extremely light)
- NO clean-up recommendations

- Between ⑥ and ⑤ is a steep cliff with narrow boulder beach
- NO OIL

Stop ⑦ @ 14:40

- walk 1/2 mile along beach to head of bay
- boulder / cobble / pebble substrate
- narrow shoreline
- v. little driftwood
- very rare oil splatter
- NO CLEANUP!

Aug 13/89

Rick Grille

Stop # ⑦ (CONT)

- continue walking head of bay
- cobble / pebble beach with wide berm and backspine
- essentially NO OIL
- ROAD Across
- some cleanup appears to have occurred at the head of the bay
- very light oil residue
- very light oil of driftwood
- oil spatter on cobbles in HTZ berm

15:39 Check out gannet
at east end of segment
- NO OIL OBSERVED.

ECOLOGICAL EVALUATION

LOCATION: Kodiak Isl. SITE: Kalsin Bay OBSERVER: Amdur
 LOCATION PREFIX: K5-7 SEG. NO.: KB-2 LENGTH: 16,190 (M)
 DATE: 08/13/1 TIME (HHMM): 11:50 TIDE HT.: +1.5 (M)

OILED ZONE: Splash High Medium Low

SUBSTRATUM: Rocks Boulder Cobble Gravel Sand Mud

LIVE BIOTA

Fucus (algae): Patchy Y/N Contin. Y/N Dense Y/N Sparse Y/N None Y/N

Towards point dense fucus in bands, in bay less fucus, patchy on cobble beaches.
Phylosopodia beds subtidal. Nereocystis towards point.

Mytilus (Mussels): Patchy Y/N Contin. Y/N Dense Y/N Sparse Y/N None Y/N

Balanus (Barnacles): Patchy Y/N Contin. Y/N Dense Y/N Sparse Y/N None Y/N

Dense bands towards point. Less dense, but continuous in bay. Found on larger cobble.

Littorina

Patchy Y/N Contin. Y/N Dense Y/N Sparse Y/N None Y/N

Often under rocks, dense in areas with shift 100p.

Limpets: Patchy Y/N Contin. Y/N Dense Y/N Sparse Y/N None Y/N

Few small limpets found under rocks

OTHER OBSERVATIONS: Gammaridea most prevalent in cobble beaches

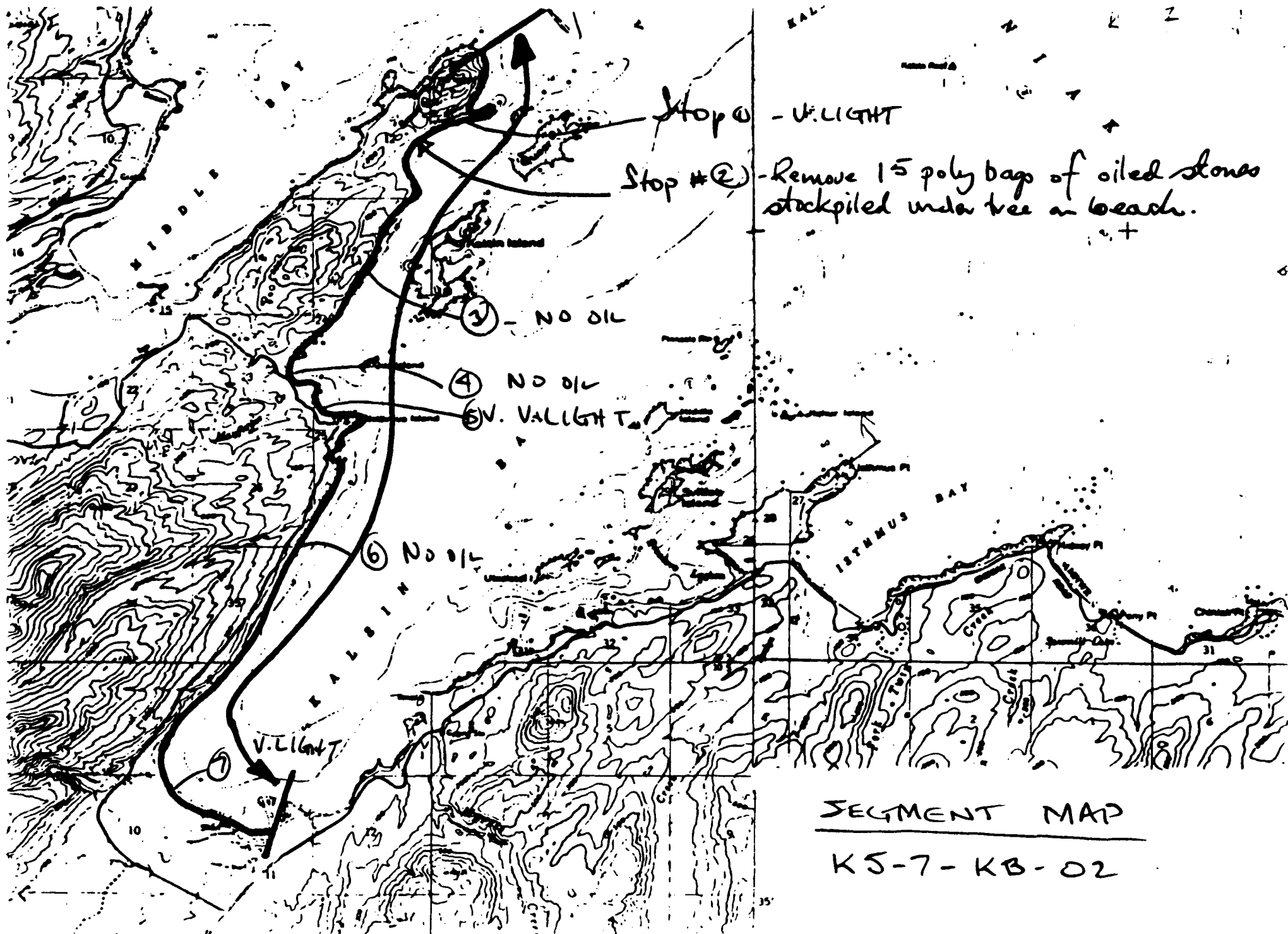
CLEANUP PRECAUTIONS: No precautions other than removal of debris bags;

Keep Cleanup Crews small and remove top 3cm only.

MAMMALS: Otters _____ Harbor Seals _____ Sea Lions _____ Whales _____
 Other Harbor Porpoise

BIRDS: Gullinets, Kittiwake, Gulls, ^{Tufted} Puffins, 5+ eagles, Aleutic Cormorants,

GENERAL OBSERVATIONS: _____



SEGMENT MAP

K5-7-KB-02

K6-5

ACE 7963941

(version 5/02/89)

SHORELINE CLEANUP PROGRAM

DATE 8/02/89

SHORELINE SEGMENT K6-5-UP-1

LOCATION: (see enclosed map) Mesa rocks - East point, Uganik
Passage, Kodiak Island

ADEC NO. _____ SHORELINE ASSESSMENT DATE: 7/07/89

Recommended Cleanup Activity(ies):

- No cleanup recommended due to the ecological constraints listed below and the very small accumulations of oil deposits. Subject to FOSC reassessment at a later date.

Priorities/Considerations: Class 5-A

Ecological Constraints (from site survey):

- No oil stressed fauna were seen in this segment.
- Area is too sensitive biologically to warrant cleanup.

Archaeological Constraints (from site survey):

- If cleanup is planned, inspection by an archaeological monitor is required in this segment.


State Historic Preservation Officer *

Date: 8/6/89

EXXON: _____

Date: _____

FOSC: _____

Date: _____

*Signature required to satisfy stipulations in Alaska DNR land use permits for tide and submerged lands.

ACE 8707535+/7

SHORELINE OIL EVALUATION

Date: 7 July 89 / Time: 1122
 Surveyed From: Foot/Boat/Helio/Plane

Observer: BRYAN TRIMM
 Weather: Sun/Cloud/Rain/Snow/Fog

LOCATION

Location: Mesa Rocks - East Pt. Umanu Rmacc-Koonu Is. Segment ID: K6-5-UP-1
 Segment Length: 300 m. Access: Vehicle/Boat/Barge/Helio/Float Plane
 Access Restrictions: None

SHORELINE

Shoreline Type: SPI/BEA/COV/HLD/STRT Slope: Lo/Med/Hi/Vert
 Wave Exposure: High/Med/Low
 Sediment: B 20 % / C 10 % / P 5 % / G&S 5 % / M % / R 60 %

OIL

Avg. Degree of Oiling: HEAVY / MODERATE / LIGHT / VERY LIGHT / NONE OBSERVED
 Area of Impact: SU/SP/H/M/L

OIL DISTRIBUTION

Continuous % of Segment 0 SU/SP/H/M/L H/M/L/VL
 Sporadic % of Segment 0.01 SU/SP/H/M/L H/M/L/VL

Total	Length(m)	Width(m)	Thickness >1cm:	cm	SU/SP/H/M/L
Very light:	<u>1</u>	<u>1/2</u>	Penetration/Rework:	<u> </u> cm	SU/SP/H/M/L
Light:	<u> </u>	<u> </u>	Burial Depth:	<u> </u> cm	SU/SP/H/M/L
Moderate:	<u> </u>	<u> </u>			
Heavy:	<u> </u>	<u> </u>			

Mobilization Potential: High/Medium/Low

Drift Debris Oiled? Y/N Amount: H/M/L/VL SU/SP/H/M/L Type:

OIL MORPHOLOGY

Pooled Oil: % SU/SP/H/M/L
 "Free" Oil: % SU/SP/H/M/L
 Splattered: 100 % H/M/L/VL SU/SP/H/M/L
 Coated: % H/M/L/VL SU/SP/H/M/L
 Pancakes/Balls: % SU/SP/H/M/L

Preliminary Cleanup Est.

Total TYPE A: 1/2 m
 Total TYPE B: m
 Total TYPE A/B: m

OIL WEATHERING

Fresh: % SU/SP/H/M/L
 Mousse: % SU/SP/H/M/L
 Weathered Mousse: 100 % SU/SP/H/M/L
 Asphalt Mousse: % SU/SP/H/M/L
 Tar: % SU/SP/H/M/L

COMMENTS

VERY LIGHT SPLATTERING OF WEATHERED MOUSSE IN HIGH INTER-TIDAL (SPASH STORM) ZONES. OILING IS VERY HARD TO FIND & AMOUNTS SHOULD NOT WARRANT A CLEAN UP CREW. NOTE NEAR A SET-NET CABIN.

DOCUMENTATION:

1ap/Aerial photo marking segment boundaries See Hirsch

VTR: Y/N Tape Number(s) _____

Photography: Y/N Roll Number(s) DMC-19

Sample Numbers Collected: N/A

7 JULY 89

FRIDAY

(15)

0730 - OFFICE COLLATE MAPS

- CALL IN TIME

0815 - LV FOR AIRPORT

0843 - LV ADR → UGONIK IS

0915 - LD UGONIK IS (UG-2?) WORK CREW

(EXXON/VECO) BY SET NETTERS. FIND OUT

(" / ") GAMEPLAN FOR THIS AREA

SHAWNEE

WAIT TIL 1020 FOR EXXON REP

TALK BEACH CREW THEY ESTIMATE

7 DAYS (1 WK) TO CLEAN UG-2

- TALK SHAWNEE (EXXON REP - NOT YET LATER) ^{R+D}

- PLANS TO WORK UGONIK, HAS NO

KNOWLEDGE WHERE TO GO NEXT.

1044 - LV FOR OTHER SCAT TEAM (COPTER)

! TELL THEM WE ARE DOING EAST PT

EAST ON S. COAST UGONIK PASSAGE

1048 - LD & TALK TO DUNCAN'S SCAT TEAM.

1106 - FLY TO EAST PT

1118 - LD AT EAST PT (S. COAST UGONIK PASSAGE)
(ON KODIAK ISLAND COAST).

(46)

1122 UP-1 (UGANIK PASSAGE)

EAST PT → EAST ALONG S. COAST
OF KODIAK ISLAND

EAST PT (MESA ROCK) V.LT SALT HITZ/SP

LESS THAN 1m WIDE ZONE IMPACT

MESA ROCKS IS V.LT SALT IN HITZ/SP

APPROX. 0.01% OF BEACH WEATHERED MESA

HOLD - VT ROCK / 60% R 20% B 10% C 5% P
5% S+G1450 E UP-2 (boundary broken - We Arch)
(No oiling)

DRIFT LOGS - SP V.LT OIL

LO 1/2 VERT ROCK B/C / P/S/G BEACH

1 SMALL CHICKEN NOSE PATTY

OCCASIONAL V.LT SPLAT HITZ 0.1%
SAME AS UP-1

1235 - UP-3

10% S+G 30% P 40% C 20% B

LT/MED COAT OIL 1m WIDE BURIED 5cm

5cm THICK IN SP/BEACH LO & BEACH

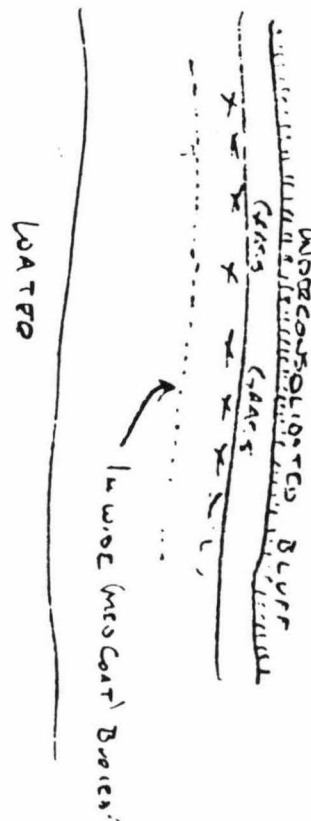
UNDER CONSOLIDATED BLUFF ERODING IN BACK

DRIFT LOGS - CLON - SP ZONE

C-WD DRIFT - LT/MED COAT - HITZ/SP

QUESTION IN C-WD OILED OR DECAY

(47)

PLANE VICIN
TYPICAL BEACH SEGMENT
UP-3

SET NETTERS CLAIM DECAYING C-WD IS OILED.
COULD NOT ALWAYS AGREE (I THINK DECOMPOSITION)
BUT IN SEVERAL PLACES PER BEACH W/ & W/OUT
C-WD DRIFT IS OILED

ECOLOGICAL EVALUATION

EAST POINT

Mesa Rock

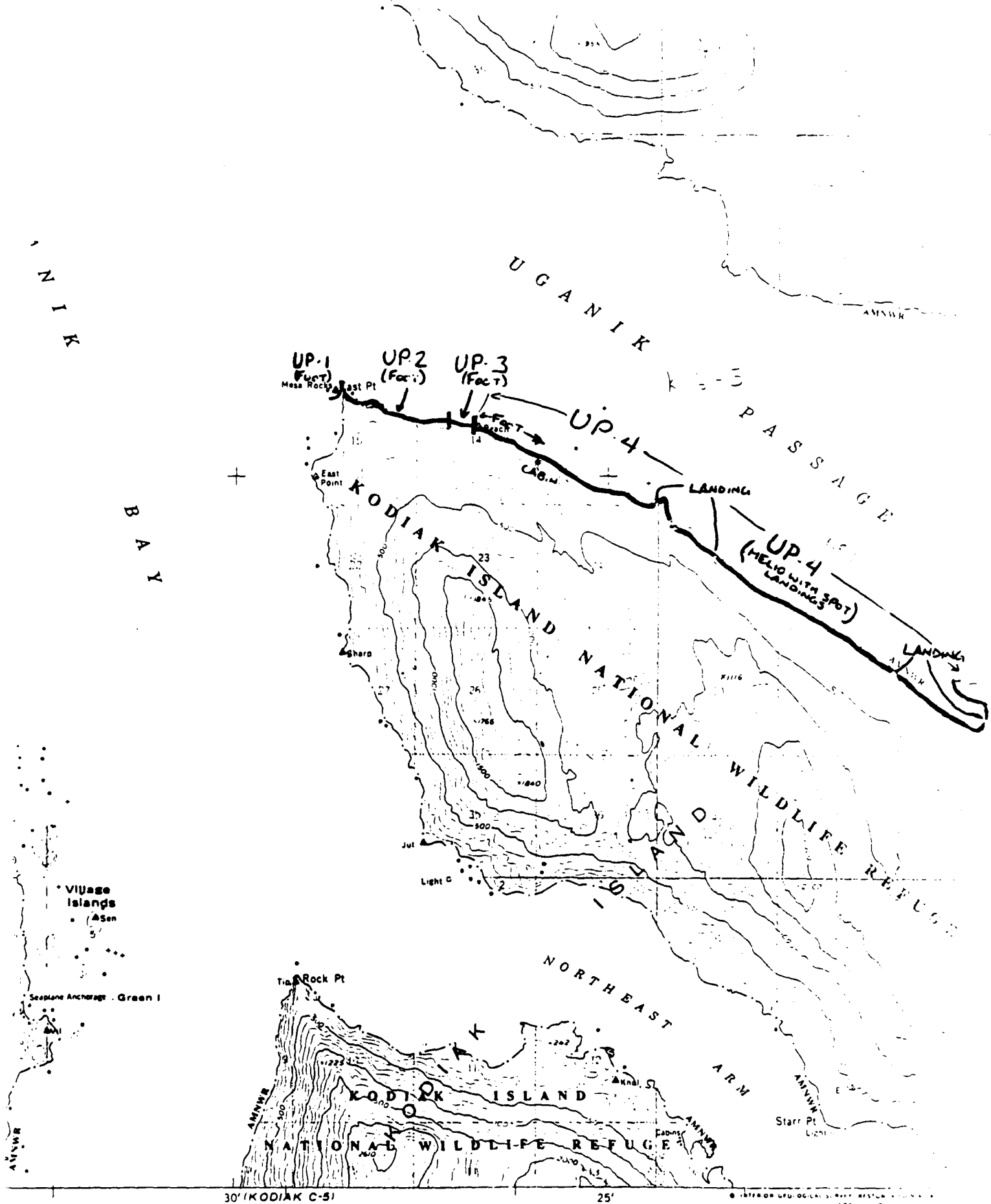
LOCATION: USANIK PASSAGE SITE: _____ OBSERVER: D McCoemick

KODIAK IS K6-5

LOCATION PREFIX: UP SEG. NO.: 1 LENGTH: 300 (M)DATE: 7/7/89 TIME (HHMM): 1120 TIDE HT.: +0.25 (M)OILED ZONE: Splash High Medium LowSUBSTRATUM: Rocks Boulder Cobble Gravel Sand Mud

LIVE BIOTA

Fucus (algae): Patchy Y/N Contin. Y/N Dense Y/N Sparse Y/N None Y/NMytilus (Mussels): Patchy Y/N Contin. Y/N Dense Y/N Sparse Y/N None Y/NDense clumps on boulders & rock facesBalanus (Barnacles): Patchy Y/N Contin. Y/N Dense Y/N Sparse Y/N None Y/NLittorinaPatchy Y/N Contin. Y/N Dense Y/N Sparse Y/N None Y/NLimpets: Patchy Y/N Contin. Y/N Dense Y/N Sparse Y/N None Y/NOTHER OBSERVATIONS: Chthamalus: clam beds, shells, Tridacna in high T2 zone
Ulva, Gelidium, Ulva, Enteromorpha, Enteromorpha, single shells; Tide pool fauna
Intolopura, Leptodermis, pink encrusting algaeCLEANUP PRECAUTIONS: None. Do not attempt to clean.MAMMALS: Otters 1 Harbor Seals _____ Sea Lions _____ Whales _____
Other _____BIRDS: several gulls, etc.GENERAL OBSERVATIONS: Oil conditions are very light - splash / paint like marks
patches on a few boulders. No oil stressed biota observed. Too sensitive
an area to warrant cleanup.

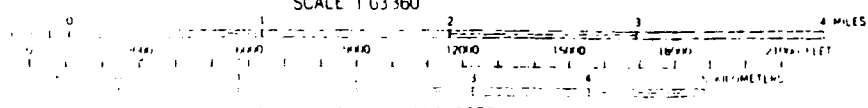


30' (KODIAK C-51)

25'

© INTERIOR GEOLOGICAL SURVEY, RESTON, VIRGINIA 20192
470 100 E

SCALE 1:63360



ACE 8707542 -/5

(version 5/02/89)

SHORELINE CLEANUP PROGRAM

DATE 8/02/89

SHORELINE SEGMENT K6-5-UP-2

LOCATION: (see enclosed map) East point, Uganik Passage,

Kodiak

ADEC NO. _____ SHORELINE ASSESSMENT DATE: 7/07/89

Recommended Cleanup Activity(ies):

-No cleanup recommended due to archaeological and ecological constraints, as well as very light oiling. Subject to FOSC reassessment at a later date.

Priorities/Considerations: Class 5-A

Ecological Constraints (from site survey):

-This segment is too sensitive biologically to warrant cleanup of very light oiling.

Archaeological Constraints (from site survey):

-If cleanup is planned, inspection by an archaeological monitor is required in this segment.


State Historic Preservation Officer *

Date: 8/6/89

EXXON: _____

Date: _____

FOSC: _____

Date: _____

*Signature required to satisfy stipulations in Alaska DNR land use permits for tide and submerged lands.

SHORELINE OIL EVALUATION

Date: 7 July 89 / Time: 1150
 Surveyed From: Foot / Boat / Helio / Plane

Observer: BRYAN TRIMM
 Weather: Sun / Cloud / Rain / Snow / Fog

LOCATION

Location: EAST POINT UGAKIC PASSAGE, KODIAK ISLAND Segment ID: K6-5-UP-2
 Segment Length: 1600 m. Access: Vehicle / Boat / Barge / Helio / Float / Plane
 Access Restrictions: NONE

SHORELINE

Shoreline Type: SPI / BEA / COV / HLD / STRT Slope: Lo / Med / Hi / Vert
 Wave Exposure: High / Med / Low
 Sediment: B 20 % / C 20 % / P 20 % / G&S 20 % / M % / R 20 %

OIL

Avg. Degree of Oiling: HEAVY / MODERATE / LIGHT / VERY LIGHT / NONE OBSERVED
 Area of Impact: SU / SP / H / M / L

OIL DISTRIBUTION

Continuous % of Segment 0 SU/SP/H/M/L H/M/L/VL
 Sporadic % of Segment 0.1 SU/SP/H/M/L H/M/L/VL

Total	Length(m)	Width(m)	Thickness >1cm:	cm	SU/SP/H/M/L
Very light:	<u>1</u>	<u>1/2</u>	Penetration/Rework:	<u> </u>	SU/SP/H/M/L
Light:	<u> </u>	<u> </u>	Burial Depth:	<u> </u>	SU/SP/H/M/L
Moderate:	<u> </u>	<u> </u>			
Heavy:	<u> </u>	<u> </u>			

Mobilization Potential: High / Medium / Low
 Drift Debris Oiled? Y / N Amount: H / M / L / VL SU/SP/H/M/L Type: Seaweed

OIL MORPHOLOGY

Pooled Oil:	"Free" Oil:	Splattered:	Coated:	Pancakes/Balls:	H/M/L/VL	SU/SP/H/M/L	Preliminary Cleanup Est.
<u> </u>	<u> </u>	<u>99</u>	<u> </u>	<u>1</u>	<u>VL</u>	<u> </u>	Total TYPE A: <u>1/2</u> m
							Total TYPE B: <u> </u> m
							Total TYPE A/B: <u> </u> m

OIL WEATHERING

Fresh:	Mousse:	Weathered Mousse:	Asphalt Mousse:	Tar:	SU/SP/H/M/L
<u> </u>	<u>1</u>	<u>99</u>	<u> </u>	<u> </u>	<u> </u>

COMMENTS

OCCASIONAL VERY LIGHT SPLATTER IN HIGH-INTERSTIAL ZONE. ONE SMALL CHOCOLATE MOUSSE PATTY IN MID-INTERSTIAL ZONE VERY LIGHT SPLATTER (A COUPLE OF SPLATTERS) ON SPLASH LOGS.

DOCUMENTATION:

Map/Aerial photo marking segment boundaries See Attached

VTR: Y/N Tape Number(s) _____

Photography: Y/N Roll Number(s) DMC-19

Sample Numbers Collected: N/A

(46)

1122 UP-1 (UGANIK PASSAGE)
EAST PT → EAST ALONG S. COAST
OF KODIAK ISLAND.

FIRST PT (MESA ROCK) V.LT SALT HITZ/SP
LESS THAN 1m WIDE ZONE IMPACT

MESA ROCK IS V.LT SALT IN HITZ/SP
APPROX. 0.01% OF BEACH WEATHERED MESA
HOLD-VT ROCK / 60% R 20% B 10% C 5% P
5% S/G

1050 E UP-2 (boundary broken by Arch)
(not oiled)

DRIFT LOGS - SP V.LT OIL
LO 1/2 VERT ROCK B/C / P/S/G BEACH
1 SMALL (MESA ROCK) PATTY
OCCASIONAL V.LT SPLAT HITZ 0.1%
SAME AS UP-1

1235 - UP-3

10% S/G 30% P 40% C 20% B

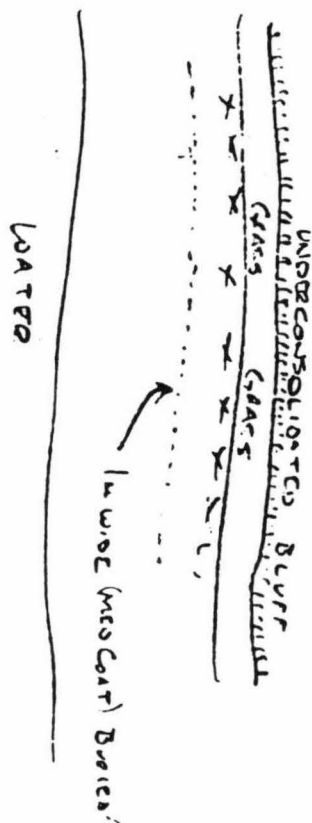
LT/MED COAT OIL 1m WIDE BURIED 5cm
5cm THICK IN SP/BEACH LO & BEACH

UNDERCONSOLIDATED BLUFF ERODING IN BACK
DRIFT LOGS - CLON - SP ZONE

C-WD DRIFT - LT/MED COAT - HITZ/SP
QUESTION IN C-WD OILED OR DECAY

(47)

PLANE VIEW
TYPICAL BEACH SEGMENT
UP-3



SET NETTERS CLAIM DECAYING C-WD IS OILED.
COULD NOT ALWAYS AGREE (I THINK DECOMPOSITION)
BUT IN SEVERAL PLACES PER BEACH W/ & W/OUT
C-WD DRIFT IS OILED

ACE 8707546

ECOLOGICAL EVALUATION

EAST POINT

LOCATION: UGANIK PASSAGE SITE: _____ OBSERVER: D. McCORRICK
KODIAK ISLAND
 LOCATION PREFIX: K-54P SEG. NO.: 2 LENGTH: 1600 (M)
 DATE: 7/7/89 TIME (HHMM): 1150 TIDE HT.: -0.3 (M)

OILED ZONE: Splash High Medium LowSUBSTRATUM: Rocks Boulder Cobble Gravel Sand Mud

LIVE BIOTA

Fucus (algae): Patchy Y/N Contin. Y/N Dense Y/N Sparse Y/N None Y/N

Mytilus (Mussels): Patchy Y/N Contin. Y/N Dense Y/N Sparse Y/N None Y/N

Balanus (Barnacles): Patchy Y/N Contin. Y/N Dense Y/N Sparse Y/N None Y/N

Littorina

Patchy Y/N Contin. Y/N Dense Y/N Sparse Y/N None Y/N

Limpets: Patchy Y/N Contin. Y/N Dense Y/N Sparse Y/N None Y/N

Lamea and Notosimea

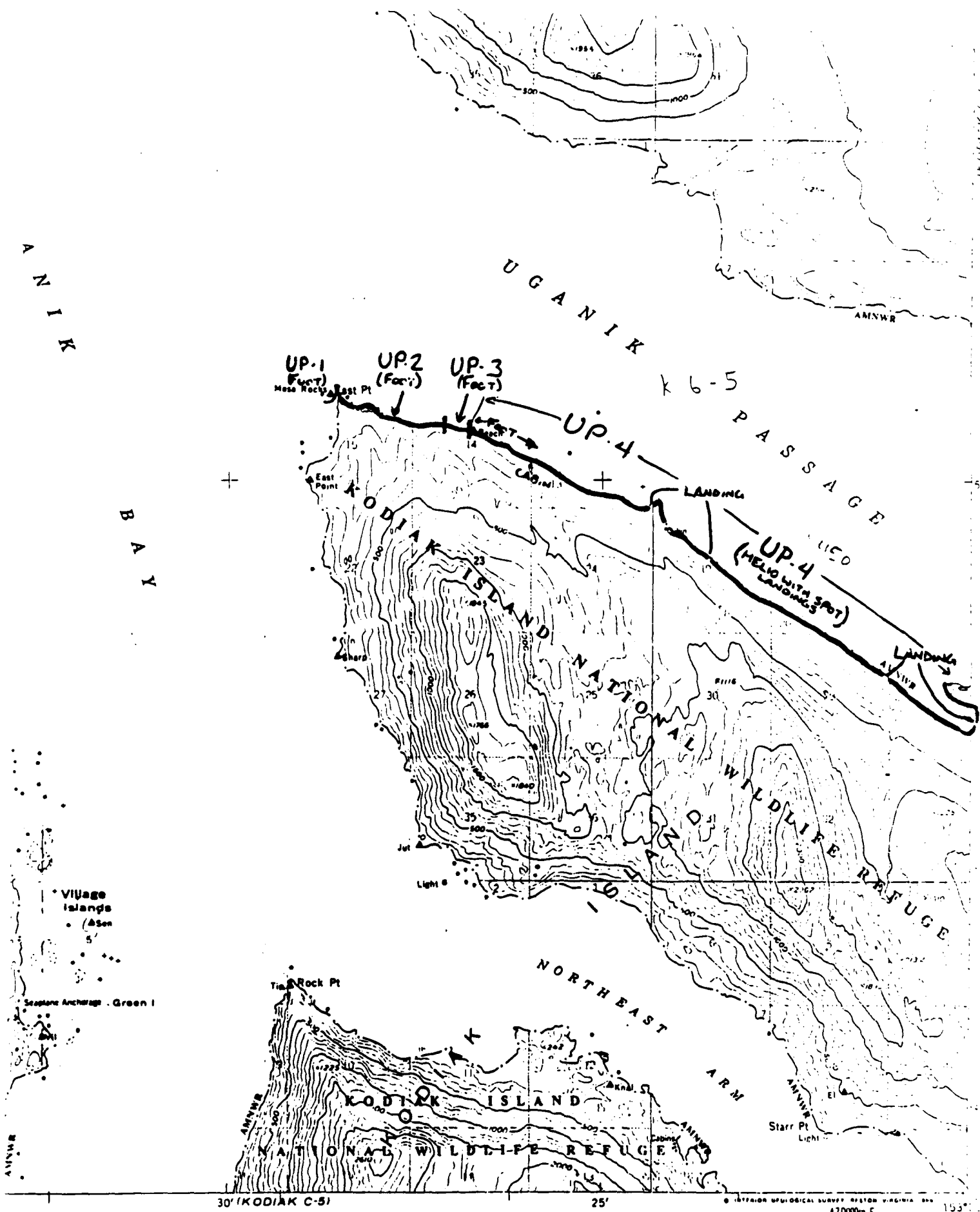
OTHER OBSERVATIONS: Tidepool fauna: Eurytemora, Anthopleura, Ulva, Littorina, Helicoverpa, Littorina, pink encrusting algae. Others: Lamea, Notosimea, Trentopora, Podoceros, Protocera,

CLEANUP PRECAUTIONS: None, since no cleanup is recommended. Area is too sensitive to warrant cleanup of very light occurrence of oil.

MAMMALS: Otters 1 Harbor Seals _____ Sea Lions _____ Whales _____
 Other _____

BIRDS: gulls, Harlequin ducks.

GENERAL OBSERVATIONS: One chocolate mousee pretty seen in entire segment
Some very light splatter in drift debris.



ACE 8707549 -/S

ROAD CLASSIFICATION

No road signs or traffic lights

(version 5/02/89)

SHORELINE CLEANUP PROGRAM

DATE 8/02/89

SHORELINE SEGMENT K6-5-UP-3

LOCATION: (see enclosed map) Uganik Passage, east of "Beach"
bench mark, Kodiak Island

ADEC NO. _____ SHORELINE ASSESSMENT DATE: 7/07/89

Recommended Cleanup Activity(ies):

- Determine the effectiveness of set-netters cleanup.
- Manual removal of oiled seaweed drift. Note: check to determine if decaying seaweed is oiled or not before removal.
- Manual removal of lightly to medium coated pebble beach material.
- Removal of greater than one inch of beach sediments may be required to clean beach.

Priorities/Considerations: Class 4-A

Ecological Constraints (from site survey):

- No constraints for manual cleanup.

Archaeological Constraints (from site survey):

- If heretofore undiscovered cultural materials are uncovered during cleanup, contact Exxon's Archaeological Field Director and take actions prescribed in the Operational Guidelines for Shoreline Cleanup dated 4/21/89 as amended.


State Historic Preservation Officer *

Date: 8/6/89

EXXON: _____

Date: _____

FOSC: _____

Date: _____

*Signature required to satisfy stipulations in Alaska DNR land use permits for tide and submerged lands.

SHORELINE OIL EVALUATION

Date: 7 July 89 / Time: 1235
 Surveyed From: Foot/Boat/Helio/Plane

Observer: BRYAN TRIMM
 Weather: Sun/Cloud/Rain/Snow/Fog

LOCATION

Location: UGAN (PAGAN) EAST OF "BEACH" 3M, KODAK ISLAND Segment ID: K6-5 - UP-3
 Segment Length: 400 m. Access: Vehicle/Boat/Barge/Helio/Float Plane
 Access Restrictions: NONE

SHORELINE

Shoreline Type: SPI/BEA/COV/HLD/STRT Slope: Lo/Med/Hi/Vert
 Wave Exposure: High/Med/Low
 Sediment: B 20% / C 40% / P 30% / G&S 10% / M —% / R —%

OIL

Avg. Degree of Oiling: HEAVY / MODERATE / LIGHT / VERY LIGHT / NONE OBSERVED
 Area of Impact: SU/SP/H/M/L

OIL DISTRIBUTION

Continuous % of Segment 50 SU/SP/H/M/L H/M/L/VL
 Sporadic % of Segment — SU/SP/H/M/L H/M/L/VL

Total	Length(m)	Width(m)	Thickness >1cm:	cm	SU/SP/H/M/L
Very light:	<u>1</u>	<u>—</u>	Penetration/Rework:	<u>5</u> cm	SU/ <u>SP</u> /H/M/L
Light:	<u>150</u>	<u>1</u>	Burial Depth:	<u>5</u> cm	SU/ <u>SP</u> /H/M/L
Moderate:	<u>50</u>	<u>2</u>			
Heavy:	<u>—</u>	<u>—</u>			

Mobilization Potential: High/Medium/Low
 Drift Debris Oiled? Y/N Amount: H/M/L/VL SU/SP/H/M/L Type: SEAWEED ? (SEE COMMENTS)

OIL MORPHOLOGY

Pooled Oil:	<u>2</u>	%	SU/SP/H/M/L
"Free" Oil:	<u>—</u>	%	SU/SP/H/M/L
Splattered:	<u>15</u>	%	SU/ <u>SP</u> /H/M/L
Coated:	<u>25</u>	%	SU/ <u>SP</u> /H/M/L
Pancakes/Balls:	<u>—</u>	%	SU/SP/H/M/L

H/M/L/VL
 H/M/L/VL

Preliminary Cleanup Est.

Total TYPE A: 250 m
 Total TYPE B: — m
 Total TYPE A/B: — m

OIL WEATHERING

Fresh:	<u>—</u>	%	SU/SP/H/M/L
Mousse:	<u>85</u>	%	SU/ <u>SP</u> /H/M/L
Weathered Mousse:	<u>15</u>	%	SU/ <u>SP</u> /H/M/L
Asphalt Mousse:	<u>—</u>	%	SU/SP/H/M/L
Tar:	<u>—</u>	%	SU/SP/H/M/L

COMMENTS

SPLASH (STORM) 4/02 HIGH INTERTIDAL ZONE (BERMS) HAVE A ONE TO TWO METER WIDE ZONE OF LIGHT TO MODERATE COATING OF OIL DEPOSITS. BURIAL IN BERMS IS UP TO 5 CM. THIS SAND IS PRESENTLY BEING TREATED BY LOCAL SET NETTERS. ALSO SEAWEED DRIFT IS LIGHTLY OILED. DECOMPOSITION OF SEAWEED MAKES IT HARD TO DETERMINE SEAWEED OILING. SET NETTERS COULD THEREFORE REMOVE UNOILED SEAWEED BY MISTAKE. UNCONSOLIDATED (ERODING) BLUFFS (10M HEIGHT) ARE ADJACENT TO THE BEACH.

DOCUMENTATION:

Map Aerial photo marking segment boundaries See Attachment

VTR: Y/N Tape Number(s) _____

Photography: Y/N Roll Number(s) DMC-19

Sample Numbers Collected: N/A

(46)

1122 UP-1 (UGANIK PASSAGE)

EAST PT. → EAST ALONG S. COAST
OF KODIAK ISLAND.

EAST PT (MESA ROCK) V.LT SALT HITZ/SP

LTHAN 1m WIDE ZONE IMPACT

MESA ROCKS IS V.LT SALT IN HITZ/SP

APPROX. 0.01% OF BEACH WEATHERED MESS

HOLD-VT ROCK / CO₂R 25%, B 10% C 5% P
5% S₂G1050 E UP-2 (boundary broken by Arch)
(not oiling)

DRIFT LOGS - SP V.LT OIL

LO 1/2 VERT ROCK B/C / P / S₂G BEACH

1 SMALL (MUCK) MESS PATTY

OCCASIONAL V.LT SALT HITZ 0.1%
SAME AS UP-1

1235 - UP-3

10% S₂G 30% P 40% C 20% B

LT/MED COAT OIL 1m WIDE BURIED 5cm

5cm THICK IN SP/BEACH LO & BEACH

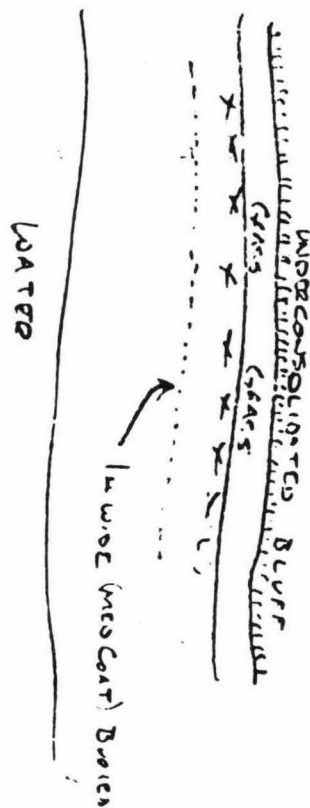
UNDER CONSOLIDATED BLUFF ERODING IN BACK

DRIFT LOGS - CLON - SP ZONE

C-WD DRIFT - LT/MED COAT - HITZ/SP

QUESTION IN C-WD OILED OR DECAY

(47)

PLANE VIEW
TYPICAL BEACH SEGMENT
UP-3

SET NETTERS CLAIM DECAYING C-WD IS OILED.
COULD NOT ALWAYS AGREE (I THINK DECOMPOSITION)
BUT IN SEVERAL PLACES PER BEACH W/ & W/OUT
C-WD DRIFT IS OILED

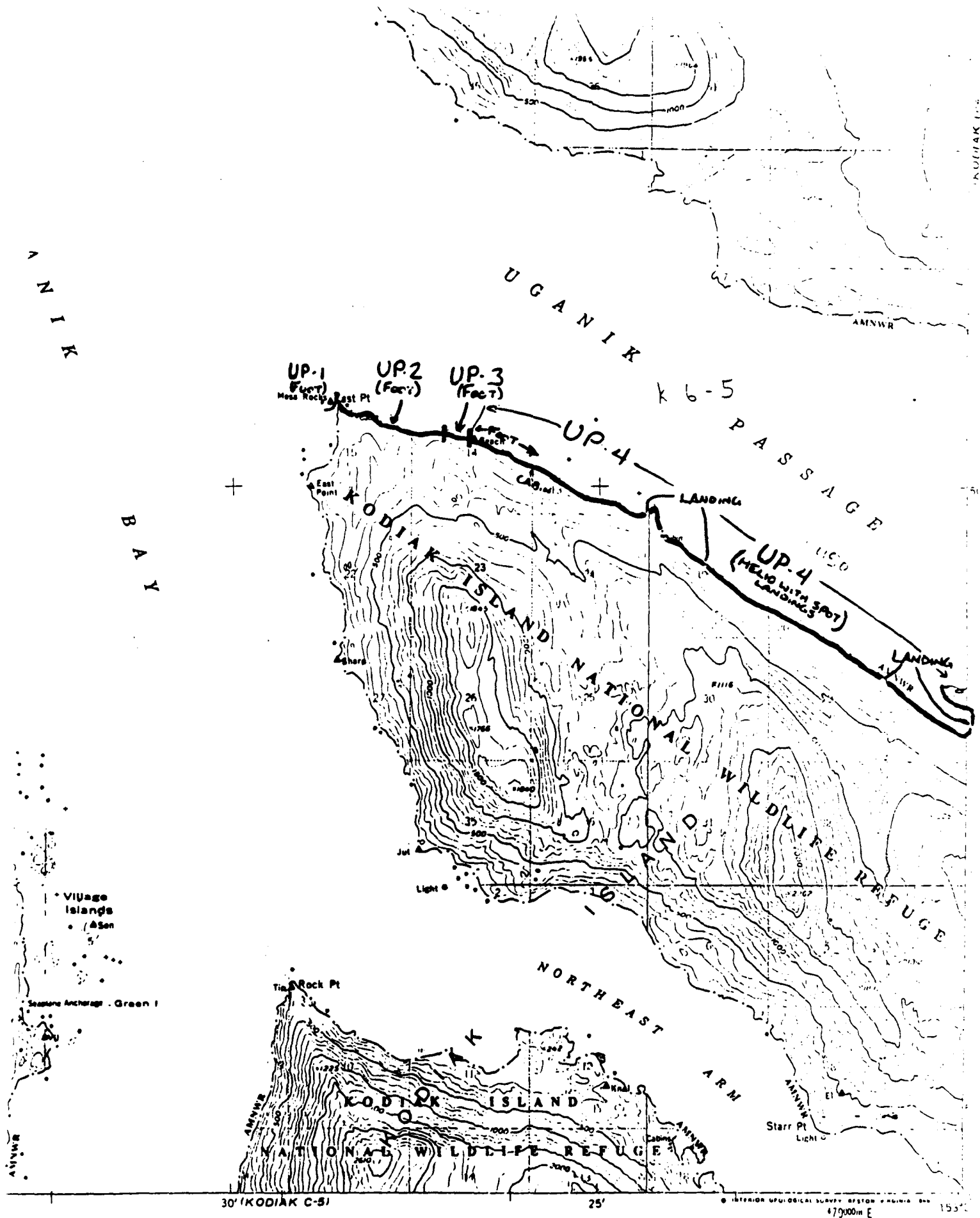
ECOLOGICAL EVALUATION

EAST POINT

LOCATION: UGANIK PASSAGE SITE: _____ OBSERVER: D. McCormickLOCATION PREFIX: KODIAK IS. UP SEG. NO.: 3 LENGTH: 400 (M)DATE: 7/7/89 TIME (HHMM): 1235 TIDE HT.: +0.3 (M)OILED ZONE: Splash High Medium LowSUBSTRATUM: Rocks Boulder Cobble Gravel Sand Mud

LIVE BIOTA

Fucus (algae): Patchy Y/N Contin. Y/N Dense Y/N Sparse Y/N None Y/NMytilus (Mussels): Patchy Y/N Contin. Y/N Dense Y/N Sparse Y/N None Y/NBalanus (Barnacles): Patchy Y/N Contin. Y/N Dense Y/N Sparse Y/N None Y/NLittorina
Patchy Y/N Contin. Y/N Dense Y/N Sparse Y/N None Y/NLimpets: Patchy Y/N Contin. Y/N Dense Y/N Sparse Y/N None Y/NOTHER OBSERVATIONS: clam, mussel, single xill rib, 20-25 sized high zone,
Sarcosia, Alaria, Ulva, clam ribs, deep green, Helosaccus, Anthracina
pink encrusting algae.CLEANUP PRECAUTIONS: None. Sex-netters are already cleaning this
segment and are not impacting lower ITZ fauna.MAMMALS: Otters 1 Harbor Seals _____ Sea Lions _____ Whales _____
Other _____BIRDS: gulls, pigeon guillemotsGENERAL OBSERVATIONS: Oil present as light/very light mouse under debris
at high ITZ, near stream at net set site, approx. 1 m wide.



ACE 8707556

ROAD C. ADJ. 127. 174

Photo: 100 ft. 100 ft. 100 ft.

(version 5/02/89)

SHORELINE CLEANUP PROGRAM

DATE 8/02/89

SHORELINE SEGMENT K6-5-UP-4

LOCATION: (see enclosed map) Uganik Passage, (south coast)

ADEC NO. _____ SHORELINE ASSESSMENT DATE: 7/07/89

Recommended Cleanup Activity(ies):

-No cleanup recommended due to apparent absence of oil.
Subject to FOSC reassessment at a later date.

Priorities/Considerations:

Ecological Constraints (from site survey):

Archaeological Constraints (from site survey):

-If cleanup is planned, inspection by an archaeological
monitor is required in the archaeologically sensitive
portion of the segment.


State Historic Preservation Officer *

Date: 8/6/89

EXXON: _____

Date: _____

FOSC: _____

Date: _____

*Signature required to satisfy stipulations in Alaska DNR land use permits for tide and submerged lands.

SHORELINE OIL EVALUATION

Date: 7 JULY 89 / Time: 1400
Surveyed From: Foot/Boat/Helio/Plane

Observer: Bryan T. mm
Weather: Sun/Cloud/Rain/Snow/Fog

LOCATION

Location: UGAN PASSAGE KODIAK ISLAND Segment ID: K6-5-UP.4
Segment Length: 9450 m. Access: Vehicle/Boat/Barge/Helio/Float Plane
Access Restrictions: NONE

SHORELINE

Shoreline Type: SPI/BEA/COV/HLD/STRT Slope: Lo/Med/Hi/Vert
Wave Exposure: High/Med/Low
Sediment: B % / C % / P % / G&S % / M % / R %

OIL

Avg. Degree of Oiling: HEAVY / MODERATE / LIGHT / VERY LIGHT / NONE OBSERVED
Area of Impact: SU/SP/H/M/L

OIL DISTRIBUTION

Continuous % of Segment 0 SU/SP/H/M/L H/M/L/VL
Sporadic % of Segment 0 SU/SP/H/M/L H/M/L/VL

Total	Length(m)	Width(m)	Thickness >1cm:	cm	SU/SP/H/M/L
Very light:			Penetration/Rework:	cm	SU/SP/H/M/L
Light:			Burial Depth:	cm	SU/SP/H/M/L
Moderate:					
Heavy:					

Mobilization Potential: High/Medium/Low

Drift Debris Oiled? Y/N Amount: H/M/L/VL SU/SP/H/M/L Type:

OIL MORPHOLOGY

Pooled Oil:	%	SU/SP/H/M/L
"Free" Oil:	%	SU/SP/H/M/L
Splattered:	%	H/M/L/VL SU/SP/H/M/L
Coated:	%	H/M/L/VL SU/SP/H/M/L
Pancakes/Balls:	%	SU/SP/H/M/L

Preliminary Cleanup Est.

Total TYPE A: m
Total TYPE B: m
Total TYPE A/B: m

OIL WEATHERING

Fresh:	%	SU/SP/H/M/L
Mousse:	%	SU/SP/H/M/L
Weathered Mousse:	%	SU/SP/H/M/L
Asphalt Mousse:	%	SU/SP/H/M/L
Tar:	%	SU/SP/H/M/L

COMMENTS

DOCUMENTATION:

Map/Aerial photo marking segment boundaries See Attached

VTR: Y/N Tape Number(s) _____

Photography: Y/N Roll Number(s) Disc - 2

Sample Numbers Collected: N/A

40 7 JULY 89

FRIDAY

1400

UP-4 - SAME AS UP-3 EXCEPT CLEAN

FOUND 1 DRIFT LOG W/ A LOGMA 25cm

PATCH TAG & 1 SURF-PT AD IN SP.

WILL HOP & SKIP DOWN BEACH

20% B 20% C 35% P 30% G & S

SM AMT PEAT MITZ

WENT TO SMALL COVE - NO OBSERVED OIL

1450 - LV UP-4, FLY OVER UP-1 RICH TAKES PICTURES

- FLY & FIND EAGLE

1505 - FIND EAGLE - LAND & WAIT FOR OTHER SCAT TEAM

BK TIME 523EH TAKES OFF TO REFILE

FLT PLAN. NO CONTACT ISLAND AIR &

PT. LENS. FLY BACK - > EAGLE WAIT

FOR TEAM.

1534 LV FOR ADR

1554 AR ADR

- G. CALL FROM EXXON COMMAND

- WRITE UP UP1 - 4

1900 - STAFF MTG -

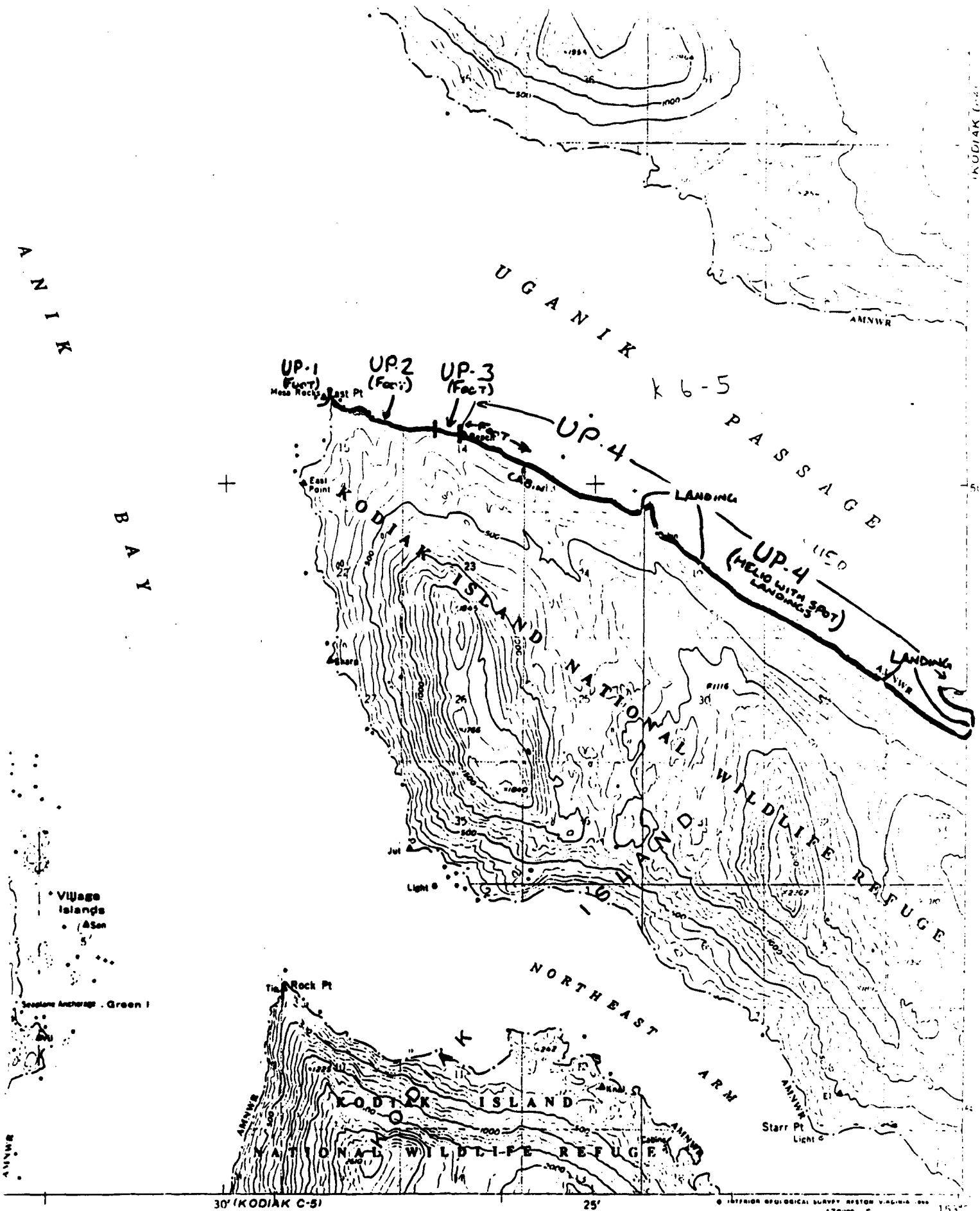
1845 LV 2030H

ACE 8707560

POOR QUALITY ORIGINAL

ECOLOGICAL EVALUATION

EAST POINT
 LOCATION: UGANK PASSAGE SITE: _____ OBSERVER: D. McCormick
 KODIAK IS
 LOCATION PREFIX: W-8-1P SEG. NO.: 4 LENGTH: 9450 (M)
 DATE: 7/7/89 TIME (HHMM): 1400 TIDE HT.: +20 (M)
 OILED ZONE: Splash High Medium Low None
 SUBSTRATUM: Rocks Boulder Cobble Gravel Sand Mud
 LIVE BIOTA
 Fucus (algae): Patchy (Y/N) Contin. (Y/N) Dense (Y/N) Sparse (Y/N) None (Y/N)
 Mytilus (Mussels): Patchy (Y/N) Contin. (Y/N) Dense (Y/N) Sparse (Y/N) None (Y/N)
Dense in clumps on larger boulders
 Balanus (Barnacles): Patchy (Y/N) Contin. (Y/N) Dense (Y/N) Sparse (Y/N) None (Y/N)
 Littorina
 Patchy (Y/N) Contin. (Y/N) Dense (Y/N) Sparse (Y/N) None (Y/N)
 Limpets: Patchy (Y/N) Contin. (Y/N) Dense (Y/N) Sparse (Y/N) None (Y/N)
 OTHER OBSERVATIONS: Enteromorpha, Calothrix, Endocladia, Anthopleura,
Laminaria,
 CLEANUP PRECAUTIONS: None, since no oil was observed.
 MAMMALS: Otters 6 Harbor Seals _____ Sea Lions _____ Whales _____
 Other _____
 BIRDS: Gulls, Harlequin ducks. Eagle nest approx. 500 m south of 1st landing
 (see OG map)
 GENERAL OBSERVATIONS: No oil observed in this segment.



SCALE 1:63,360

ACE 8707563 - / -

ROAD CLASSIFICATION
The road is a single track road.

517-6A1-9A

- KODIAK SCAT
K10-6

DEC 29 1989

ACE 7963942

On-Beach Assessment

ATTN: S.C.A.T.

L-M

K
06/01/0302
unit subunit segment
7.25.89 12:15
date: time:

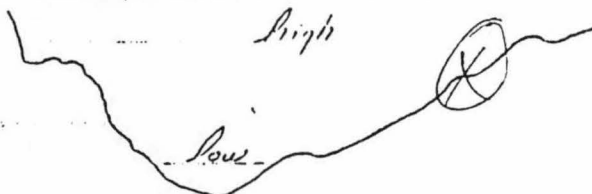
ATK-25

Cleanup	Resources	access	stabilized
B	(protect)	(good)	above tide
(X) 3		---	3 ---
2 (X)		---	2 ---
1		---	1 ---
0	(ave.) (X)	---	0 ---
1		---	1 (X)
2		---	2 (X)
3		---	3 ---

loran / map fix

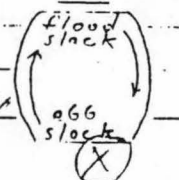
SHUYIAK HARBOR E SIDE
beach descriptive name:

WHERE IS OIL FOUND TODAY?



WEST
site faces to:

SAND - GRAVEL
geomorphic type:



SAND, CORAL 75' 175' 22'
surrounding on foot survey
geo. types vs.
beach extent

Continuous Oil? n (y)

Interpolation to next site seems valid n (y)

critical resource/habitat
observations:

Log on back of
beach

OIL/MOUSSE DESCRIPTION:

HEAVY
FRESH OIL OIL IN
HIGH TIDE TALE

Subsurface? n (y)

OVER 6"

Attachment pages:

samples: 89 89 89

Comments (weather, etc):

OTHER BEACHES IN HARBOR HEAVILY IMPACTED



ACE 8707564

SCAT

7/25/89 (y)

TYPE A SHORELINE CLEANUP WORK ORDER

KL-6

12/89

Shoreline Segment: NPR, 3, 4, 5

Location: (Attach map) KODIAK - Ugashik Is. - Northwest Block

ADEC No. KL-6

Shoreline Assessment Date: 6/19/89

Recommended Cleanup Activity(ies):

Manual removal of oiled debris

Priority Considerations:

Sensitive Area - major seabird colonies on Haring Island.

Ecological Constraints (from site survey):

Seabird Contamination and Vegetated Areas.

Archaeological Constraints:

If any archaeological or historical sites or artifacts are discovered during the cleanup activity, they must remain undisturbed and the Exxon archaeologist C. Mobley contacted (as per procedures in the "Guideline for Shoreline Cleanup") and the State historic Preservation Office notified as soon as possible.

Submitted by:

[Signature]
Exxon

Date: 7/7/89.

State Historic Preservation Officer Telephone Approval (Required)

See attached
Date: _____

Approved:

See attached
Assistant OSC Western Alaska (If appropriate)

Date: _____

Approved:

[Signature]
Federal On-Scene Coordinator

Date: 7/13/89

4/30/89

ACE 8707565

TYPE A SHORELINE CLEANUP WORK ORDER

12/89 ^{K6-6} Shoreline Segment: NP2, 3, 4, 5
Location: (Attach map) KODIAK - Uganik Is. - Northwest Block

ADEC No. K6-6 Shoreline Assessment Date: 6/19/89

Recommended Cleanup Activity(ies):
Manual removal of oiled debris

Priority Considerations:

Sensitive Area - major seabird colonies on Uganik Island.

Ecological Constraints (from site survey):

Avoid Contamination Avoid Vegetated Areas.

Archaeological Constraints:

If any archaeological or historical sites or artifacts are discovered during the cleanup activity, they must remain undisturbed and the Exxon archaeologist C. Mobley contacted (as per procedures in the "Guideline for Shoreline Cleanup") and the State historic Preservation Office notified as soon as possible.

Submitted by: [Signature]
Exxon

Date: 7/7/89

State Historic Preservation Officer Telephone Approval (Required)

See attachments
Date: _____

Approved: See attached
Assistant OSC Western Alaska (If appropriate)

Date: _____

Approved: [Signature]
Federal On-Scene Coordinator

Date: 7/7/89

4/30/89

ACE 8707566

K6-6

(version 6/04/89)

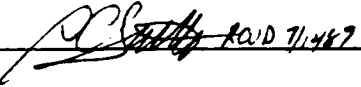
SHORELINE PRE-CLEANUP ASSESSMENT BLOCK REPORT

Location (see enclosed map): KODIAK-UGANIK ISLAND NORTHWEST BLOCK

Includes Shoreline Segments: NP-1, NP-2, NP-3, NP-4, NP-5

Submitted:  Date: 7/1/89
(for Exxon)

* ISCC Recommendation: _____ Date: _____

* FOSC Approval:  7/1/89 Date: 7/1/89

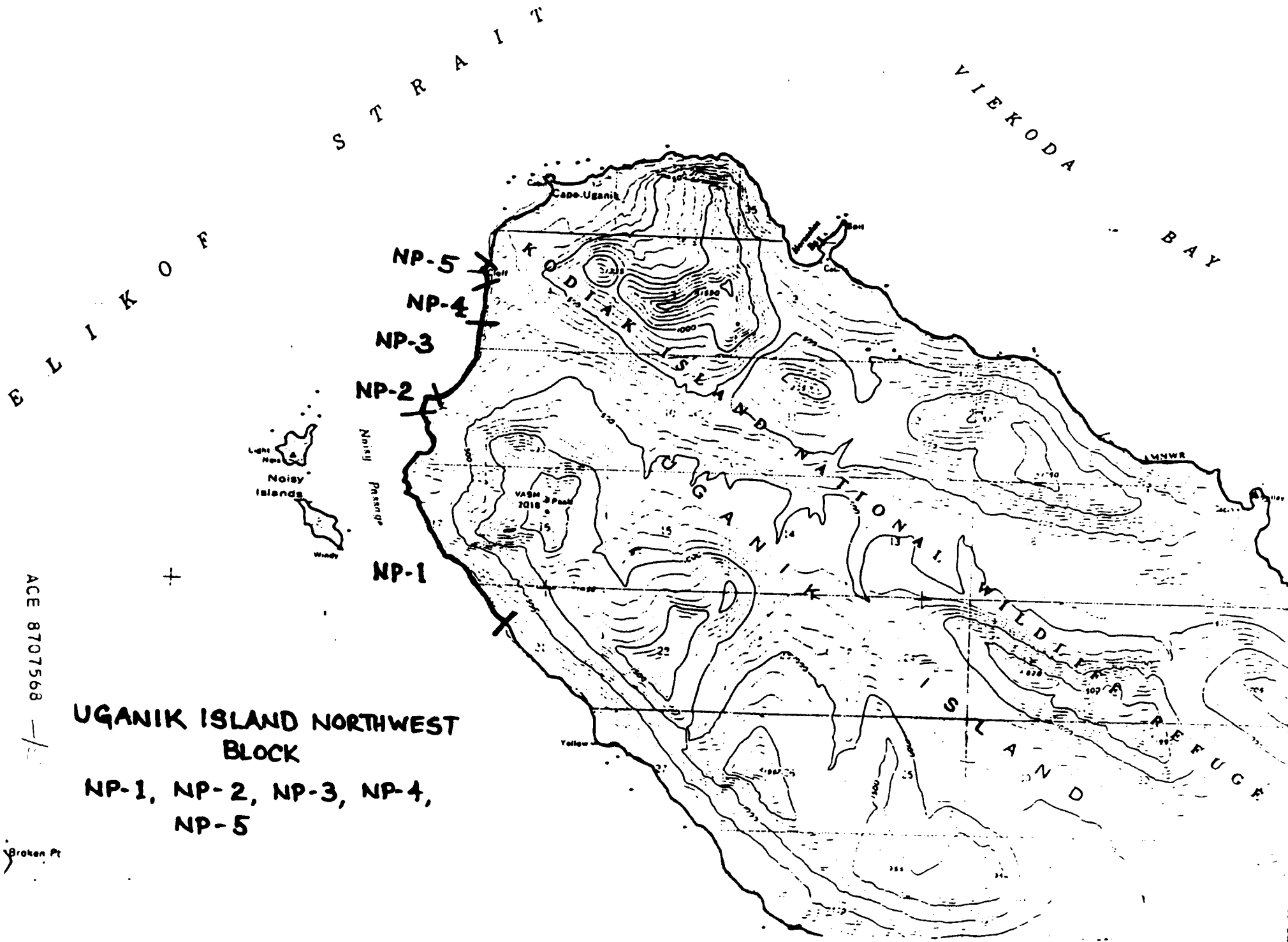
The cleanup procedures identified in the Shoreline Cleanup Program are recommended. Modifications to these systems can be made in the field. Exxon and other field personnel are encouraged to suggest innovations and productivity enhancements to the OSC's on-scene representative. The OSC's representative has the authority to approve on-site modifications. The Field Resource Team should be consulted if these actions do not fit within the Ecological Constraints of the Shoreline Cleanup Program. Requirements for safety and the protection of cultural material must be observed.

Distribution:

Exxon Shoreline Coordinator
Exxon Shoreline Supervisor
Exxon SCAT file

FOSC
CDFU
NOAA
EPA
USDA (FS)
USFW
A.DEC
A.FG
A.DNR
CAC
PWSCA
USFS
SHPO

ACE 8707567



UGANIK ISLAND NORTHWEST BLOCK

NP-1, NP-2, NP-3, NP-4,
NP-5

ACE 8707568

Broken Pt

(version 5/02/89)

SHORELINE CLEANUP PROGRAM

DATE 7/02/89

SHORELINE SEGMENT K6-6-UG-1

LOCATION: (see enclosed map) Uganik Island, SW coast

ADEC NO. _____ SHORELINE ASSESSMENT DATE: 7/02/89

Recommended Cleanup Activity(ies):

-Use hand/manual cleanup of very light to light splatter of oil deposits in high intertidal zone. Low priority.

Priorities/Considerations: Class 5-A

Ecological Constraints (from site survey):

Archaeological Constraints (from site survey):

-If heretofore undiscovered cultural materials are uncovered during cleanup, contact Exxon's Archaeological Field Director and take actions prescribed in the Operational Guidelines for Shoreline Cleanup dated 4/21/89 as amended.

Douglas Rege
State Historic Preservation Officer *

Date: 8/14/89

EXXON: _____

Date: _____

FOSC: _____

Date: _____

*Signature required to satisfy stipulations in Alaska DNR land use permits for tide and submerged lands.

(version 5/16/89)

SHORELINE OIL EVALUATION FORM - KONIAK

Date: 2 July 89 / Time: 1030

Observer: BRYAN TRIMM

Surveyed From: Foot/Boat/Helio/Plane

Weather: Sun/Cloud/Rain/Snow/Fog

LOCATION

LOCATION UGANIK ISLAND SW COAST

SEGMENT I.D. UG-1

LENGTH OF SHORELINE SEGMENT: 1400 m

ACCESS: Foot/Vehicle/Boat/Barge/Helio/Float Plane

SHORELINE:

Shoreline Type: SPI/BEA/COV/HID/STRT

Slope: LAUG/HANG/VER

Wave Exposure: High/Med/Low

Sediment: DS / CL / PG / G / S / M / RZ

Drift Debris on Beach: Yes/No Supra/Upper/Mid/Lower Type Logs/Seaweed

OIL

Degree of Oiling: Heavy/Moderate/Light/No Oil/Unobserved

Total Area of Beach Impact: SU / SP / H / M / L

IL DISTRIBUTION

Continuous: Y/N Segment 1 No. Bands 1 Width 1

Sporadic: Y/N Segment 5 Min/Max Dia 0.03m Impact Width 2m

Est. Oil Thickness where > 1cm: 1 cm SU / SP / UP / HID / LO

Est. Oil Penetration: 5 cm SU / SP / UP / HID / LO

Layers? Yes/No No. Layers 1 Oil Weathering 1

Drift Debris Oiled? Yes/No Supra/Upper/Mid/Lower Amount: 1 / 1 / 1 / 1

OIL MORPHOLOGY

Pooled Oil 1 "Free" Oil 1 Spattered 100 H/H/UP Sheen 1

OIL WEATHERING (OW)

Fresh Oil 1 SU/SP/VP/HID/LO Choc Mousse 1 SU/SP/VP/HID/LO

Pancake Mousse 1 SU/SP/VP/HID/LO Asphalt Mousse 100 SU/SP/VP/HID/LO

Tar Formation 1

Comments:

ACE 8707570

THE MOUSSE IS LIGHT TO VERY LIGHTLY SPATTERED OVER 5% OF SEGMENT. THE MOUSSE HAS WEATHERED TO A THIN DRIED TARRY MATERIAL. LITTLE TO NO CHANCE OF REMOBILIZATION W/SEW CREW ON BEACH - HAND/MANUAL CLEANUP. VERY LITTLE SUCCESS - TOO LITTLE OIL.

DOCUMENTATION:

g/Aerial photo marking segment boundaries See Attached

VTR: YN Tape Number(s) KOS-3

Photography: YN Roll Number(s) DMC-18

Sample Numbers Collected: N/A

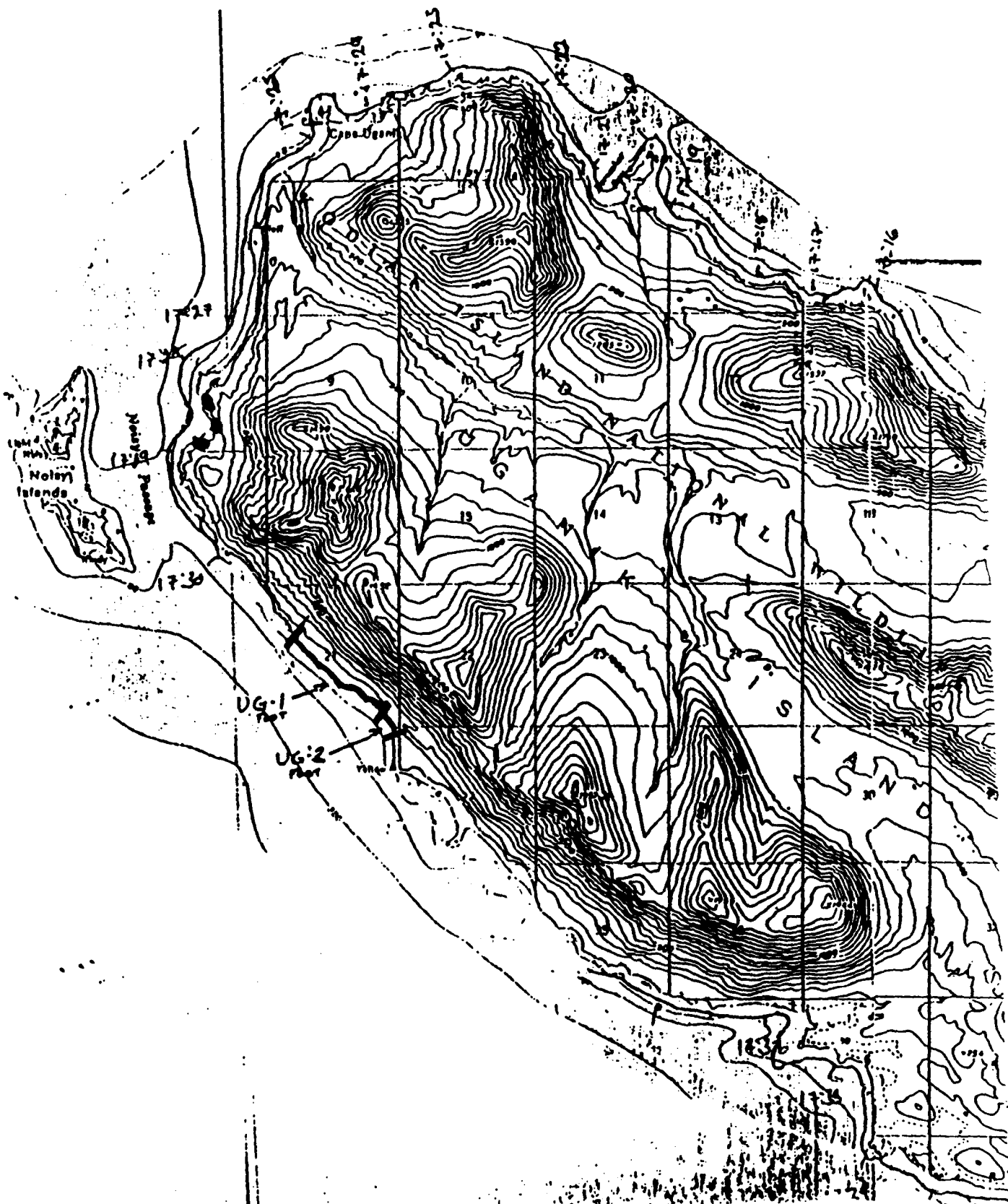
ECOLOGICAL EVALUATION

South Side

LOCATION: Uprik Island SITE: _____ OBSERVER: D. McCORMICKLOCATION PREFIX: KG-6-4G SEG. NO.: 1 LENGTH: 1408 (M)DATE: 7/2/89 TIME (HHMM): 1030 TIDE HT.: +0.75 (M)OILED ZONE: Splash High Medium LowSUBSTRATUM: Rocks Boulder Cobble Gravel Sand Mud

LIVE BIOTA

Fucus (algae): Patchy Y/N Contin. Y/N Dense Y/N Sparse Y/N None Y/NMytilus (Mussels): Patchy Y/N Contin. Y/N Dense Y/N Sparse Y/N None Y/NBalanus (Barnacles): Patchy Y/N Contin. Y/N Dense Y/N Sparse Y/N None Y/NLittorina
Patchy Y/N Contin. Y/N Dense Y/N Sparse Y/N None Y/NLimpets: Patchy Y/N Contin. Y/N Dense Y/N Sparse Y/N None Y/NOTHER OBSERVATIONS: Tide pool fauna: Katlaria, tunicata, anemones, sculpins,
Ulva, Sargassum, Leptasterias; Eudromedusa Calothrix on boulders; Clam shells
& kelp debris on beaches.CLEANUP PRECAUTIONS: NoneMAMMALS: Otters 1 Harbor Seals _____ Sea Lions _____ Whales _____
Other _____BIRDS: eagles, gulls, kittiwakes, oystercatchersGENERAL OBSERVATIONS: Clean up crew working in this segment using sorbents
& wipe light to very-lightly oiled rocks. No oil-stressed biota noted.



(version 5/02/89)

SHORELINE CLEANUP PROGRAM

DATE 7/02/89

SHORELINE SEGMENT K6-6-UG-2

LOCATION: (see enclosed map) Uganik Island, SW coast

ADEC NO. _____ SHORELINE ASSESSMENT DATE: 7/02/89

Recommended Cleanup Activity(ies):

-Use hand/manual cleanup of chocolate mousse deposits.

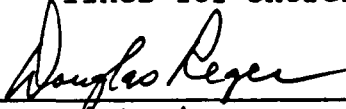
Priorities/Considerations: Class 4-A

Ecological Constraints (from site survey):

-Avoid attacking mousse to uncontaminated areas.

Archaeological Constraints (from site survey):

-If heretofore undiscovered cultural materials are uncovered during cleanup, contact Exxon's Archaeological Field Director and take actions prescribed in the Operational Guidelines for Shoreline Cleanup dated 4/21/89 as amended.


State Historic Preservation Officer *

Date: 8/14/89

EXXON: _____

Date: _____

FOSC: _____

Date: _____

*Signature required to satisfy stipulations in Alaska DNR land use permits for tide and submerged lands.

(version 5/16/89)

SHORELINE OIL EVALUATION FORM - KODIAK

Date: 2 July 89 Time: 1210

Observer: BRYAN TRIMM

Surveyed From: FOOT Boat/Helio/Plane

Weather: SMO Cloud/Rain/Snow/Fog

LOCATION

LOCATION UGANIK ISLAND, SL-1 Coast - KODIAK SEGMENT I.D. K-6-6-
UG-2

LENGTH OF SHORELINE SEGMENT: 250 m

ACCESS: Foot/Vehicle/Boat/Barge/Helio/Float Plane

SHORELINE:

Shoreline Type: SPI/BEA/COV/HID/STRT

Slope: AUG/HANG/VER

Wave Exposure: High/Med/Low

Sediment: B 60% / C 20% / P 10% / G 2% / S 3% / M 1% / R 5%

Drift Debris on Beach: Yes/No Supra/Upper/HID/Lower Type Logs/Seaweed
SPLASH

OIL

Degree of Oiling: Heavy/Moderate/Light/No Oil/Unobserved

Total Area of Beach Impact: SU / SP / II / III / L

OIL DISTRIBUTION

Continuous: Y/N Segment 20 No. Bands 1 Width 2 m

Spuradic: Y/N Segment 40 Min/Max Dia 0.01/0.03 Impact Width 2 m

Est. Oil Thickness where > 1cm: — cm SU / SP / UP / HID / LO

Est. Oil Penetration: — cm SU / SP / UP / HID / LO

Layers? Yes/No No. Layers — Oil Weathering —

Drift Debris Oiled? Yes/No Supra/Upper/HID/Lower Amount: II / III / L / N

OIL MORPHOLOGY

Pooled Oil — "Free" Oil — Spattered 00 % II/HID/VI Shown —

OIL WEATHERING (OW)

Fresh Oil — SU/SP/VP/HID/LO Choc Mousse 50 % SU/SP/VI/HID/LO

Pancake Mousse — SU/SP/VP/HID/LO Asphalt Mousse 50 % SU/SP/VI/HID/LO

Tar Formation —

Comments:

A small 30x2 m patch of chocolate mousse in between boulders is in high/middle
tidal zone. Very light splatter 1 m above & below mousse. Recently - set
sticks are cleaning area with hand/manual methods. Pebble/granule and
substrate below boulders

③

View
Boulevard

NORTH

PLANE VIEW

UG-2

MED/HI ENERGY WAVE

1-1/2' SPOT
MED CENT CH MASTS
2-1/2' wide H/WAVE

BOULDER BANCH

SPLIT

25 JUL 89

ACE 8707577

ECOLOGICAL EVALUATION

South Side

LOCATION: UGANIK IS SITE: _____ OBSERVER: D. Mc CoenickLOCATION PREFIX: ^{KG-6-}UG SEG. NO.: 2 LENGTH: 250 (M)DATE: 7/2/89 TIME (HHMM): _____ TIDE HT.: _____ (M)OILED ZONE: Splash High Medium LowSUBSTRATUM: Rocks Boulder Cobble Gravel Sand Mud

LIVE BIOTA

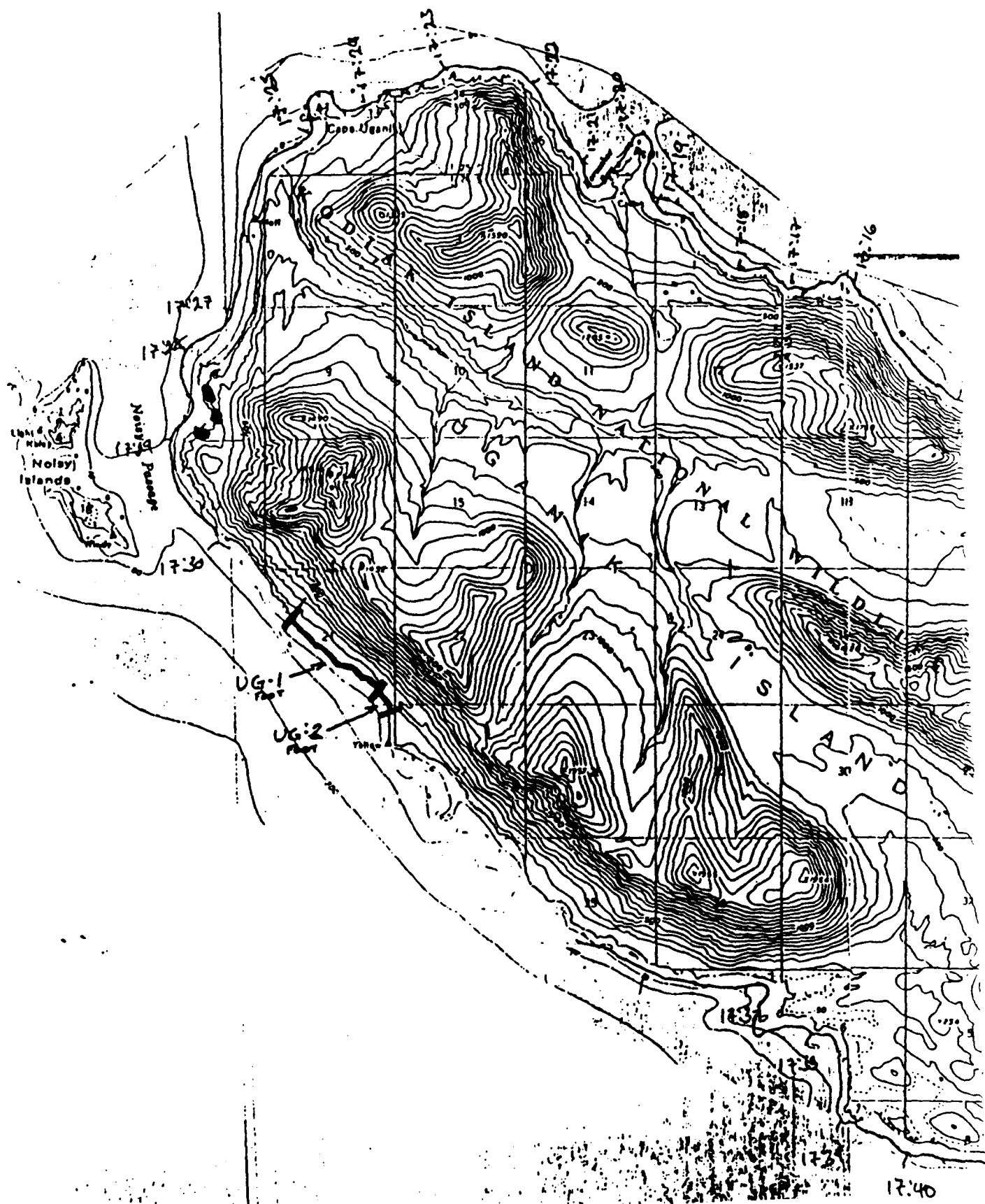
Fucus (algae): Patchy Y/N Contin. Y/N Dense Y/N Sparse Y/N None Y/NMytilus (Mussels): Patchy Y/N Contin. Y/N Dense Y/N Sparse Y/N None Y/NBalanus (Barnacles): Patchy Y/N Contin. Y/N Dense Y/N Sparse Y/N None Y/NLittorinaPatchy Y/N Contin. Y/N Dense Y/N Sparse Y/N None Y/NLimpets: Patchy Y/N Contin. Y/N Dense Y/N Sparse Y/N None Y/NOTHER OBSERVATIONS: Endocladia, Clam shells.

CLEANUP PRECAUTIONS: _____

MAMMALS: Otters 1 Harbor Seals _____ Sea Lions _____ Whales _____
Other _____

BIRDS: _____

GENERAL OBSERVATIONS: Beach is boomed off with absorbent boom. Set-net fishermen are cleaning oiled (mousse) section of beach with sorbents.



ACE 8707580 -/-

(version 5/02/89)

SHORELINE CLEANUP PROGRAM

DATE 7/05/89

SHORELINE SEGMENT K6-6-UG-3

LOCATION: (see enclosed map) Uganik Island, SW coast

ADEC NO. _____ SHORELINE ASSESSMENT DATE: 7/05/89

Recommended Cleanup Activity(ies):

-No cleanup recommended due to the very light oiling and biological constraints given below. Subject to FOSC reassessment at a later date.

Priorities/Considerations: Class 5-A

Ecological Constraints (from site survey):

-This segment is very dense with healthy intertidal fauna which should not be disturbed for the minor amount of oil present in this segment.

Archaeological Constraints (from site survey):

-If cleanup is planned, inspection by an archaeological monitor is required in archaeological sensitive portions of this segment.

Douglas Regier
State Historic Preservation Officer *

Date: 8/14/89

EXXON: _____

Date: _____

FOSC: _____

Date: _____

*Signature required to satisfy stipulations in Alaska DNR land use permits for tide and submerged lands.

ACE 8707581 7/-

(version 5/16/89)

SHORELINE OIL EVALUATION FORM - KODIAK

Date: 5 Jun 89 / Time: 1136

Observer: BRYAN Tamm

Surveyed From: FOOT / Boat / Helio / Plane

Weather: Sun / Cloud / Rain / Snow / Fog

LOCATION

LOCATION UGANDA Is. SW COAST

SEGMENT I.D. UG-3

LENGTH OF SHORELINE SEGMENT: 2400 m

ACCESS: Foot / Vehicle / Boat / Barge / Helio / Float Plane

SHORELINE:

Shoreline Type: SPI / BEA / COV / HLD / STRT

Slope: LANG / HANG / VER

Wave Exposure: High / Med / Low

Sediment: B 20 / C 20 / P 30 / G 2 / S 8 / M 1 / R 20

Drift Debris on Beach: Yes / No Supra / Upper / Mid / Lower Type Logs / SEAWEED

OIL

Degree of Oiling: Heavy / Moderate / Light / No Oil / Unobserved

VERY LIGHT

Total Area of Beach Impact: SU / SP / H / M / L

OIL DISTRIBUTION

Continuous: Y / N Segment 1 No. Bands 1 Width 1m

Sporadic: Y / N Segment 5 Min/Max Dia 200 / 200 Impact Width 1m

Est. Oil Thickness where > 1cm: — cm SU / SP / UP / MID / LO

Est. Oil Penetration: — cm SU / SP / UP / MID / LO

Layers? Yes / No No. Layers — Oil Weathering —

Drift Debris Oiled? Yes / No Supra / Upper / Mid / Lower Amount: H / H / I / VI

OIL MORPHOLOGY

Pooled Oil — % "Free" Oil — % Spattered 100 % H / H / I / VL Sheen —

OIL WEATHERING (OW)

Fresh Oil — % SU / SP / VP / MID / LO Choc Mousse — % SU / SP / VP / MID / LO

Pancake Mousse — % SU / SP / VP / MID / LO Asphalt Mousse 100 % SU / SP / VP / MID / LO

Tar Formation — %

Comments:

ACE 8707582

ASPHALT MOUSSE IS WEATHERED CHOC MOUSSE WITH A TERRY TEXTURE. VERY LIGHT SPLATTER
HIGH INTERTIDAL & STORM (SPLASH) ZONES. VERY LOW PROBABILITY OF MOBILITY
VERY LOW PRIORITY. GRAND RETREAT BAR (SPIT) IS COVERED DURING HIGH TIDE

DOCUMENTATION:

Map Aerial photo marking segment boundaries See Attached

VTR: ☒ Y ☐ N Tape Number(s) KOS-3

Photography: ☒ Y ☐ N Roll Number(s) LMC-18

Sample Numbers Collected: N/A

ECOLOGICAL EVALUATION

SW Coast
 LOCATION: UKANUK ISLAND SITE: _____ OBSERVER: L. McCOEN - K
 LOCATION PREFIX: R6-6- SEG. NO.: 3 LENGTH: 2400 (M)
 DATE: 7/5/89 TIME (HHMM): 1100 TIDE HT.: -1.0 (M)
 OILED ZONE: Splash High Medium Low
 SUBSTRATUM: Rocks Boulder Cobble Gravel Sand Mud

LIVE BIOTA

Fucus (algae): Patchy (Y/N) Contin. (Y/N) Dense (Y/N) Sparse (Y/N) None (Y/N)

Mytilus (Mussels): Patchy (Y/N) Contin. (Y/N) Dense (Y/N) Sparse (Y/N) None (Y/N)

Balanus (Barnacles): Patchy (Y/N) Contin. (Y/N) Dense (Y/N) Sparse (Y/N) None (Y/N)

B. varians and glandula

Littorina

Patchy (Y/N) Contin. (Y/N) Dense (Y/N) Sparse (Y/N) None (Y/N)

Limpets: Patchy (Y/N) Contin. (Y/N) Dense (Y/N) Sparse (Y/N) None (Y/N)

OTHER OBSERVATIONS: Tidepool fauna: Kallinectes, Anthopleura, Testes, Loricaris, Ulva,
Sertulariidae, Alaria, Metandrocarpa, Annelids, sculpin sea urchins, Nucella, yugli
shells. Litter clam beach; Prototheca + Scaevola. Everlasting algae on boulders. Red crab, ridges, etc.

CLEANUP PRECAUTIONS: This is a sensitive biological area showing no signs of oil
stressed biota. Very light oil does not warrant disturbing fauna.

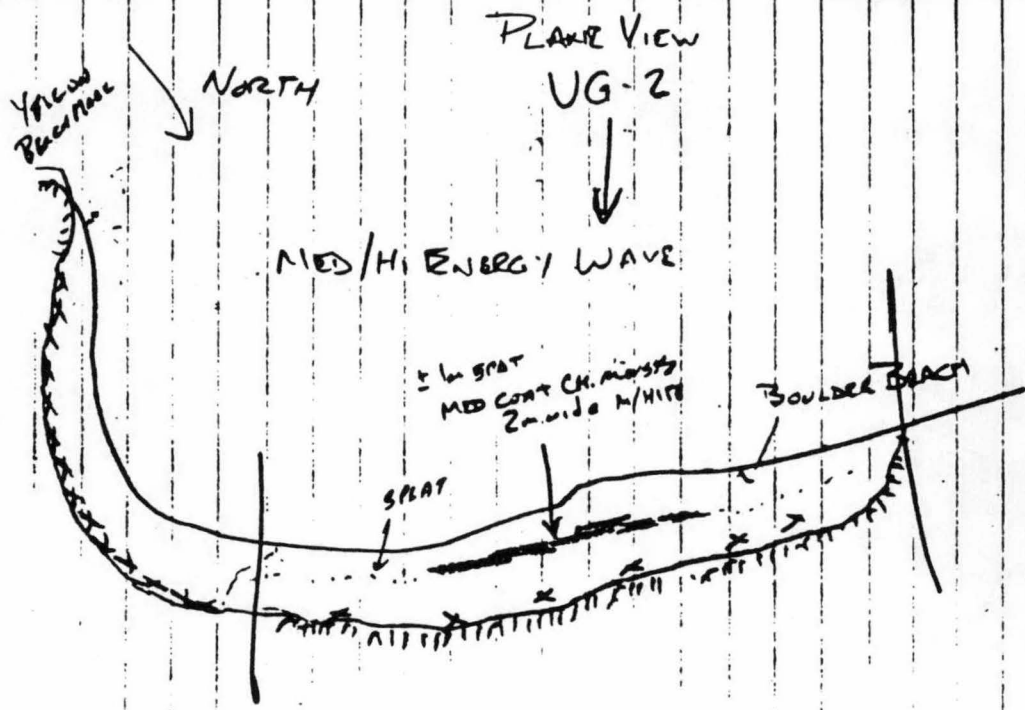
MAMMALS: Otters _____ Harbor Seals _____ Sea Lions _____ Whales _____
 Other _____

BIRDS: Bald eagle nest (see map); offshore birds: oystercatchers, harlequin ducks, gulls

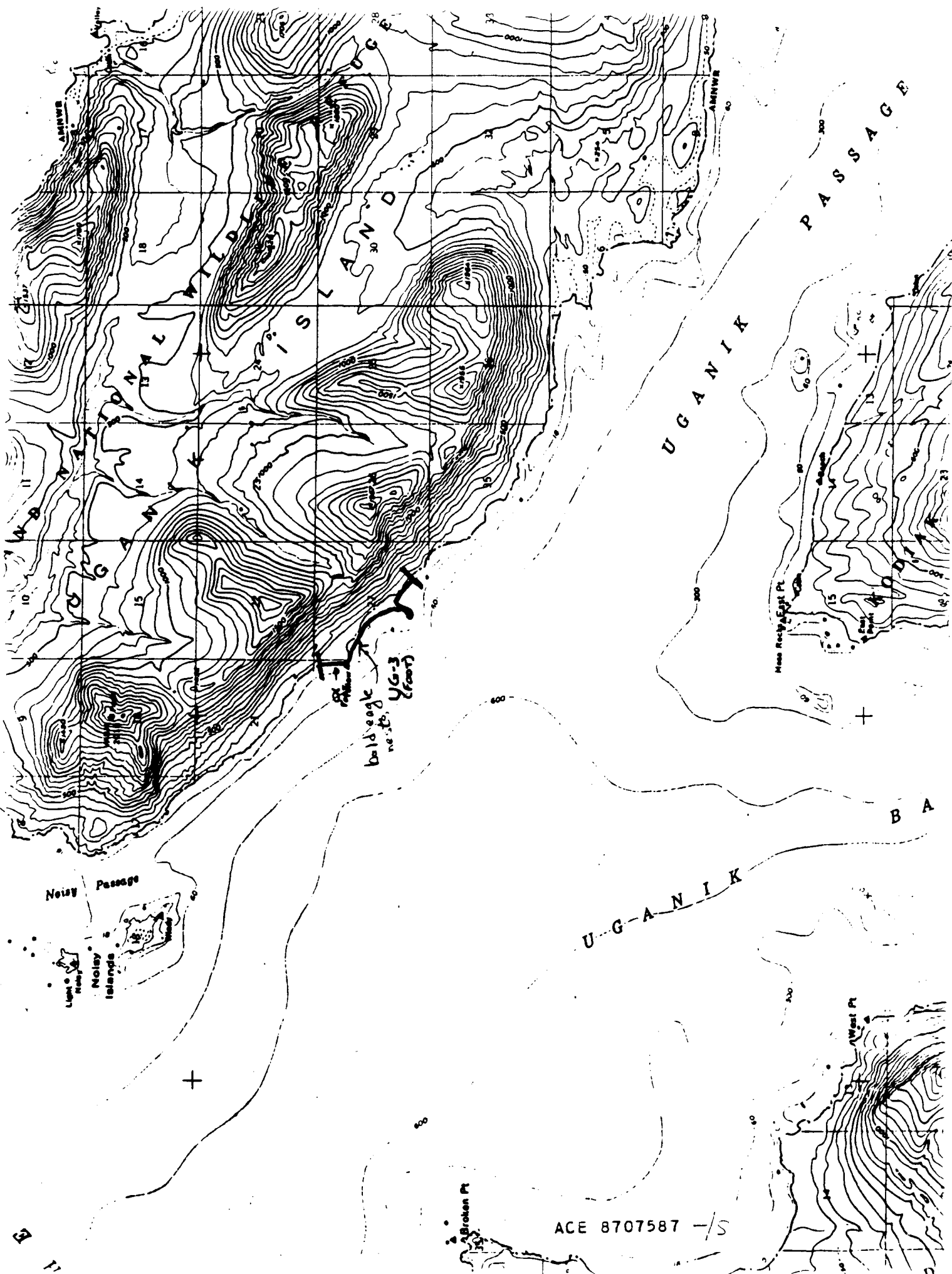
GENERAL OBSERVATIONS: Oil present as very light slicks in upper intertidal zone.

Very dense lower ITZ fauna.

②



2 July 89



(version 5/02/89)

SHORELINE CLEANUP PROGRAM

DATE 7/05/89

SHORELINE SEGMENT K6-6-UG-4

LOCATION: (see enclosed map) Uganik Island, SW coast

ADEC NO. _____ SHORELINE ASSESSMENT DATE: 7/05/89

Recommended Cleanup Activity(ies):

-No cleanup recommended due to apparent absence of oil.
Subject to FOSC reassessment at a later date.

Priorities/Considerations:

Ecological Constraints (from site survey):

-No ecological assessment form is included in this report
because this segment was surveyed by helicopter only.

Archaeological Constraints (from site survey):

-If heretofore undiscovered cultural materials are uncovered
during cleanup, contact Exxon's Archaeological Field Director and take actions prescribed in the Operational Guidelines for Shoreline Cleanup dated 4/21/89 as amended.

Douglas Reger
State Historic Preservation Officer *

Date: 8/14/89

EXXON: _____

Date: _____

FOSC: _____

Date: _____

*Signature required to satisfy stipulations in Alaska DNR land use permits for tide and submerged lands.

(version 5/16/89)

SHORELINE OIL EVALUATION FORM - KONTAK

Date: 5 July 89 Time: 1350

Observer: Bryan Trimm

Surveyed From: Foot/Boat/Helio/Plane

Weather: Sun/Cloud/Rain/Snow/Fog

LOCATION

LOCATION UGA Is - SW Coast

SEGMENT I.D. K6-6-UG-4

LENGTH OF SHORELINE SEGMENT: 1600 m

ACCESS: Foot/Vehicle/Boat/Barge/Helio/Float Plane

SHORELINE:

Shoreline Type: SPI/BEA/COV/HLM/STET

Slope: LAUG/HANG/VER

Wave Exposure: High/Med/Low

Sediment: B 20% / C 20% / P 30% / G 2% / S 3% / M 1% / R 20%

Drift Debris on Beach: Yes/No Supra/Upper/Mid/Lower Type Logs/Seaweed

OIL

Degree of Oiling: Heavy/Moderate/Light/No Oil/Unobserved

Total Area of Beach Impact: SU / SP / H / M / L

OIL DISTRIBUTION

Continuous: Y/N Segment 1 No. Bands 1 Width 1

Sporadic: Y/N Segment 1 Min/Max Dia 1 Impact Width 1

Est. Oil Thickness where > 1cm: 1 cm SU / SP / UP / MID / LO

Est. Oil Penetration: 1 cm SU / SP / UP / MID / LO

Layers? Yes/No No. Layers 1 Oil Weathering 1

Drift Debris Oiled? Yes/No Supra/Upper/Mid/Lower Amount: H / U / L / VL

OIL MORPHOLOGY

Pooled Oil 1 % "Free" Oil 1 % Spattered 1 % H/U/L/VL Shown 1

OIL WEATHERING (OW)

Fresh Oil 1 % SU/SP/VP/MID/LO Chee Mousse 1 % SU/SP/VP/MID/LO

Pancake Mousse 1 % SU/SP/VP/MID/LO Asphalt Mousse 1 % SU/SP/VP/MID/LO

Tar Formation 1 %

Comments:

ACE 8707589

No OIL OBSERVED IN AIR & ON THE 2 LANDINGS.

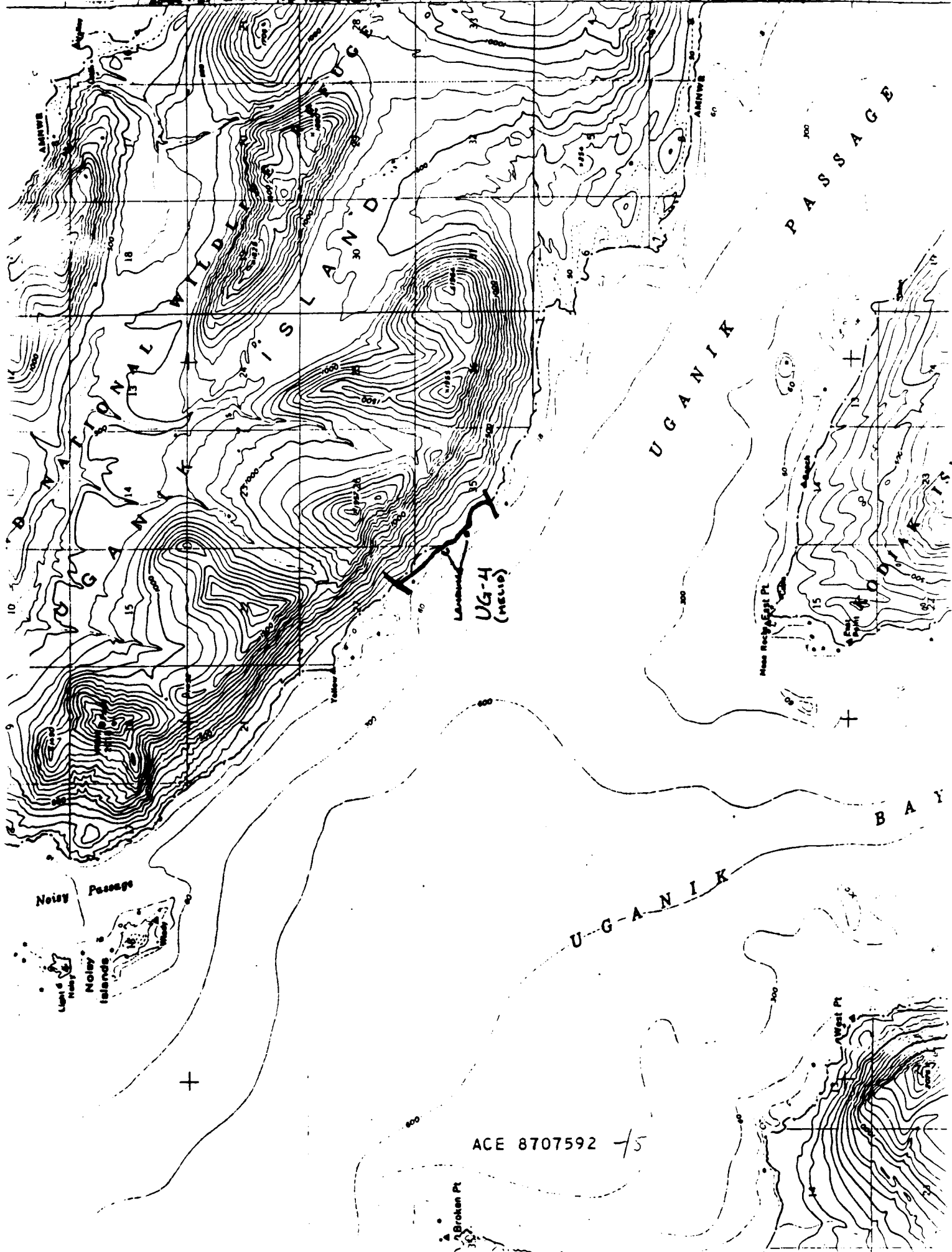
DOCUMENTATION:

Map Aerial photo marking segment boundaries See Attached

VTR: YN Tape Number(s) KOS-3

Topography: YN Roll Number(s) _____

Sample Numbers Collected: N/A



ACE 8707592 15

(version 5/02/89)

SHORELINE CLEANUP PROGRAM

DATE 7/05/89

SHORELINE SEGMENT K6-6-UG-5

LOCATION: (see enclosed map) Uganik Island, SW coast

ADEC NO. _____ SHORELINE ASSESSMENT DATE: 7/05/89

Recommended Cleanup Activity(ies):

-No cleanup recommended due to the very light oiling and biological constraints. Subject to FOSC reassessment at a later date. Note: Set netters have and probably will continue to clean this segment.

Priorities/Considerations: Class 5-A

Ecological Constraints (from site survey):

-This segment is dense with healthy intertidal fauna which should not be disturbed for the minor amount of oil present.

Archaeological Constraints (from site survey):

-If cleanup is planned, inspection by an archaeological monitor is required in this segment.

Douglas Reger
State Historic Preservation Officer *

Date: 8/14/89

EXXON: _____

Date: _____

FOSC: _____

Date: _____

*Signature required to satisfy stipulations in Alaska DNR land use permits for tide and submerged lands.

ACE 8707593

(version 5/16/89)

SHORELINE OIL EVALUATION FORM - KODIAK

Date: 5 July 89 Time: 1410

Observer: BRYAN TRIMM

Surveyed From: Foot/Boat/Helio/Plane

Weather: Sun/Cloud/Rain/Snow/Fog

LOCATION

LOCATION SW Coast - UGAK Is.

SEGMENT I.D. K6-6-UG-5

LENGTH OF SHORELINE SEGMENT: 200 m

ACCESS: Foot/Vehicle/Boat/Barge/Helio/Float Plane

SHORELINE:

Shoreline Type: SPI/BEA/COV/WLD/STRT

Slope: LAUG/HANG/VER

Wave Exposure: High/Med/Low

Sediment: B20% / C20% / P30% / G2% / S8% / M / R20%

Drift Debris on Beach: Yes/No Supra/Upper/Mid/Lower Type Logs/Seaweed

OIL

Degree of Oiling: Heavy/Moderate/Light/No Oil/Unobserved
VERY LIGHT

Total Area of Beach Impact: SU / SP / H / M / L

OIL DISTRIBUTION

Continuous: Y/N Segment 1 No. Bands 1 Width 1m

Sporadic: Y/N Segment 5 Min/Max Dia 0.001 Impact Width 1m

Est. Oil Thickness where > 1cm: 1 cm SU / SP / UP / MID / LO

Est. Oil Penetration: 1 cm SU / SP / UP / MID / LO

Layers? Yes/No No. Layers 1 Oil Weathering 1

Drift Debris Oiled? Yes/No Supra/Upper/Mid/Lower Amount: H / U / L 1

OIL MORPHOLOGY

Pooled Oil 1 "Free" Oil 1 Spattered 100% H/U/L/VL Shown 1

OIL WEATHERING (OW)

Fresh Oil 1 SU/SP/VP/MID/LO Choc Mousse 0 SU/SP/VP/MID/LO

Pancake Mousse 1 SU/SP/VP/MID/LO Asphalt Mousse 90 SU/SP/VP/MID/LO

Tar Formation 1

Comments:

ACE 8707594

SET NETTERS STATE THEY EARLIER HAVE REMOVED 50 TO 100 BAGS OF LIGHTLY
OILED SEAWEED DRIFT IN THE HIGH INTERTIDAL & STORM (SPLASH) ZONES. VERY
LIGHT SPLATTERING IN A ONE METER WIDTH VARYING FROM HIGH INTERTIDAL & STORM
(SPLASH) ZONES. LOW PROBABILITY OF MOBILITY. VERY LOW PRIORITY.

DOCUMENTATION:

Map/Aerial photo marking segment boundaries See Attached

VTR: Y/N Tape Number(s) KOS-4

Photography: Y/N Roll Number(s) DMC-18

Sample Numbers Collected: N/A

ECOLOGICAL EVALUATION

LOCATION: SW Shore
Ugavik Island SITE: _____ OBSERVER: D. McCormick
 LOCATION PREFIX: K6-6-
UG SEG. NO.: 5 LENGTH: 200 (M)
 DATE: 7/5/89 TIME (HHMM): 1410 TIDE HT.: +2.0 (M)
 OILED ZONE: Splash High Medium Low
 SUBSTRATUM: Rocks Boulder Cobble Gravel Sand Mud

LIVE BIOTA

Fucus (algae): Patchy Y/N Contin. Y/N Dense Y/N Sparse Y/N None Y/N

Mytilus (Mussels): Patchy Y/N Contin. Y/N Dense Y/N Sparse Y/N None Y/N

Balanus (Barnacles): Patchy Y/N Contin. Y/N Dense Y/N Sparse Y/N None Y/N

Littorina

Patchy Y/N Contin. Y/N Dense Y/N Sparse Y/N None Y/N

Dense on larger boulders only

Limpets: Patchy Y/N Contin. Y/N Dense Y/N Sparse Y/N None Y/N

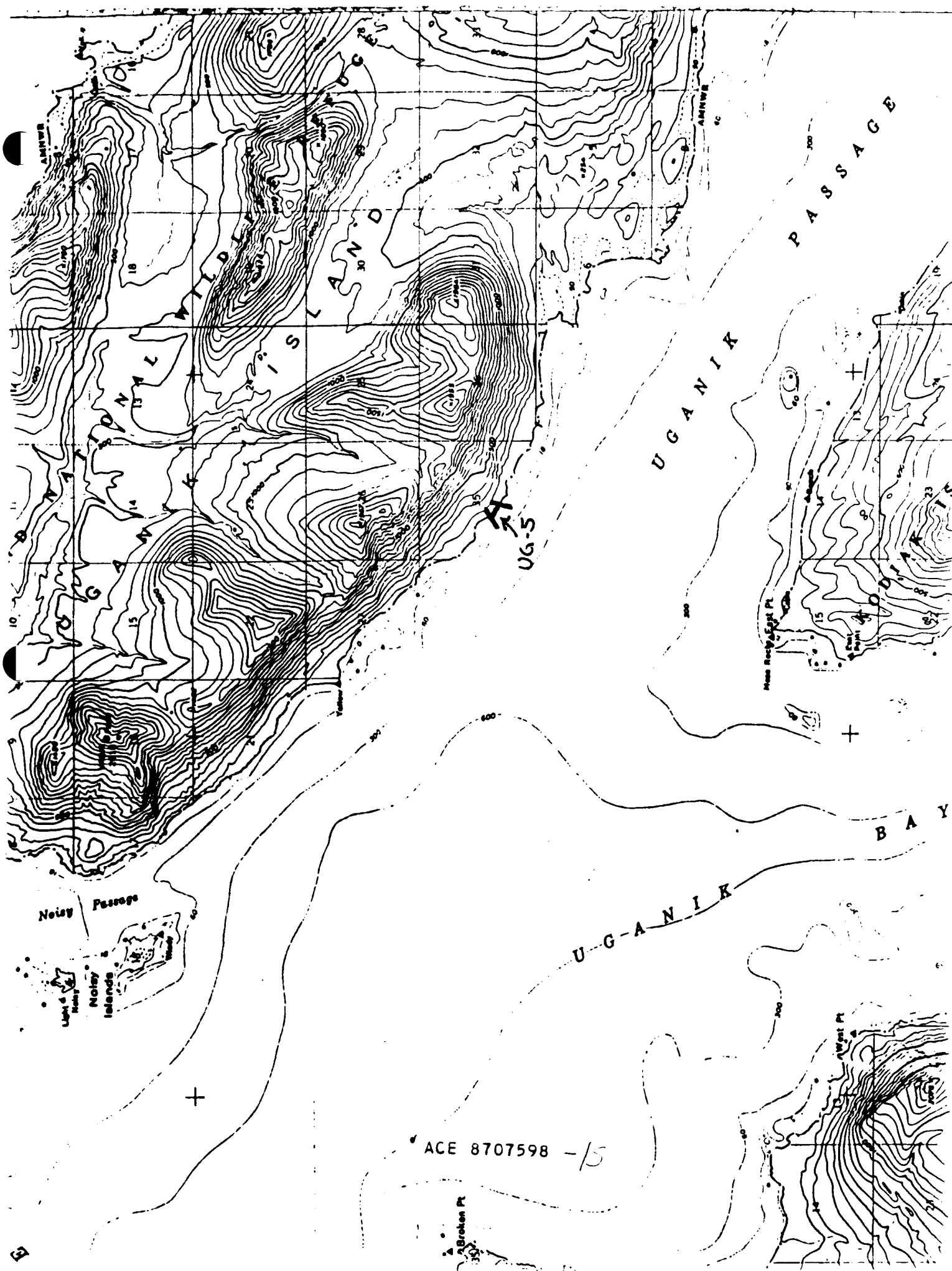
OTHER OBSERVATIONS: Clamshells: Protellaca, Saxidomus, Calothrix on
headland boulders, Trepostoma, Endocladia

CLEANUP PRECAUTIONS: Some healthy ITZ fauna should not be disturbed
for the minor amount of oil in this segment

MAMMALS: Otters _____ Harbor Seals _____ Sea Lions _____ Whales _____
 other Dolly Varden in stream

BIRDS: _____

GENERAL OBSERVATIONS: Oil here is present as very light pancake splatter in upper
ITZ.



ACE 8707598 -15

(version 5/02/89)

SHORELINE CLEANUP PROGRAM

DATE 7/13/89

SHORELINE SEGMENT K6-6-UG-6

LOCATION: (see enclosed map) Uganik Island Southeast Block

ADEC NO. _____ SHORELINE ASSESSMENT DATE: 7/07/89

Recommended Cleanup Activity(ies):

- No cleanup recommended due to apparent absence of oil and ecological constraints. Subject to FOSC reassessment at a later date.

Priorities/Considerations: Class 5-A

- Exposed rocky beaches may preclude boat access in foul weather.

Ecological Constraints (from site survey):

- No cleanup recommended due to high diversity and abundance of marine inverts in rocky intertidal areas.

Archaeological Constraints (from site survey):

- If heretofore undiscovered cultural materials are uncovered during cleanup, contact Exxon's Archeological Field Director and take actions prescribed in the Operational Guidelines for Shoreline Cleanup dated 4/21/89 as amended.

Douglas Reger
State Historic Preservation Officer *

Date: 8/14/89

EXXON: _____

Date: _____

FOSC: _____

Date: _____

*Signature required to satisfy stipulations in Alaska DNR land use permits for tide and submerged lands.

ACE 8707599 +/5

SHORELINE OIL EVALUATION

Date: 7 July 1989 / Time: 10:00
Surveyed From: Foot/Boat/Helio/Plane

Observer: Duncan M. Fikeland + Bryan Tamm
Weather: Sun/Cloud/Rain/Snow/Fog

LOCATION

Location: South central side of Ugarik Island Segment ID: K-6-6
Segment Length: 2500 m. Access: Vehicle/Boat/Barge/Helio/Float Plane
Access Restrictions: fairly protected but high energy waves could restrict boat landing

SHORELINE

Shoreline Type: SPI/BEA/COV/HLD/STRT Slope: Lo/Med/Hi/Vert
Wave Exposure: High/Med/Low
Sediment: B 20 % / C 20 % / P 20 % / G&S 20 % / M % / R 10 %

OIL

Avg. Degree of Oiling: HEAVY / MODERATE / LIGHT / VERY LIGHT / NONE OBSERVED
Area of Impact: SU/SP/H/M/L

OIL DISTRIBUTION

Continuous % of Segment SU/SP/H/M/L H/M/L/VL
Sporadic % of Segment SU/SP/H/M/L H/M/L/VL

Total	Length(m)	Width(m)	Thickness >1cm:	
Very light:	<u> </u>	<u> </u>	<u> </u> cm	SU/SP/H/M/L
Light:	<u> </u>	<u> </u>	Penetration/Rework:	<u> </u> cm SU/SP/H/M/L
Moderate:	<u> </u>	<u> </u>	Burial Depth:	<u> </u> cm SU/SP/H/M/L
Heavy:	<u> </u>	<u> </u>		

Mobilization Potential: High/Medium/Low

Drift Debris Oiled? Y/N Amount: H/M/L/VL SU/SP/H/M/L Type:

OIL MORPHOLOGY

Pooled Oil:	<u> </u> %	SU/SP/H/M/L
"Free" Oil:	<u> </u> %	SU/SP/H/M/L
Splattered:	<u> </u> %	H/M/L/VL SU/SP/H/M/L
Coated:	<u> </u> %	H/M/L/VL SU/SP/H/M/L
Pancakes/Balls:	<u> </u> %	SU/SP/H/M/L

Preliminary Cleanup Est.

Total TYPE A: m
Total TYPE B: m
Total TYPE A/B: m

OIL WEATHERING

Fresh:	<u> </u> %	SU/SP/H/M/L
Mousse:	<u> </u> %	SU/SP/H/M/L
Weathered Mousse:	<u> </u> %	SU/SP/H/M/L
Asphalt Mousse:	<u> </u> %	SU/SP/H/M/L
Tar:	<u> </u> %	SU/SP/H/M/L

COMMENTS

ECOLOGICAL EVALUATION

LOCATION: SOUTHWEST UGANDA
IN, KADUNA SITE: _____ OBSERVER: S. BULLSTONE
 LOCATION PREFIX: UG. SEG. NO.: 6 LENGTH: 2500 (M)
 DATE: 7 / 7 / 89 TIME (HHMM): 0755 - 1105 HRS TIDE HT.: 1.62 - 0.66 (M)
 OILED ZONE: Splash High Medium Low (IF ANY) ← NONE
 SUBSTRATUM: Rocks Boulder Cobble Gravel Sand Mud

LIVE BIOTA

Fucus (algae): Patchy (Y/N) Contin. (Y/N) Dense (Y/N) Sparse (Y/N) None (Y/N)
 LOCALLY IN MITE AND LITE IN ASSOCIATION W/ PERIDOCLEA SA MORE ABUNDANT AT HEADLANDS
 AND IN ROCKY TIDEPOOLS, LESS CONTINUOUS ALONG COBBLES AND SAND BEACHES

Mytilus (Mussels): Patchy (Y/N) Contin. (Y/N) Dense (Y/N) Sparse (Y/N) None (Y/N)
 IN ASSOC W/ Fucus, PERIDOCLEA AND Balanus sp. POSSIBLE MODIOLUS sp. LOCALLY? DENSITY VARIES
 W/ LOCATION.

Balanus (Barnacles): Patchy (Y/N) Contin. (Y/N) Dense (Y/N) Sparse (Y/N) None (Y/N)
 LOCALLY PATCHY AND CONTINUOUS DOMINANT IN LOWER TO MID I.T.E. MAJORLY SPINUS AUBUS,
 W/ Balanus CRUCIATUS AND SMALLER Balanus sp. IN LITE.

Littorina

Patchy (Y/N) Contin. (Y/N) Dense (Y/N) Sparse (Y/N) None (Y/N)
 ABUNDANT TO MOD IN LITE, FOUND AROUND Fucus AND UNDER ROCKS. MORE
 ABUNDANT ON SANDIER, FINER SUBSTRATE BEACHES, YET PRESENT ON ALL.

Limpets: Patchy (Y/N) Contin. (Y/N) Dense (Y/N) Sparse (Y/N) None (Y/N)
NOTOACMEA sp. and COLLISA sp., MITE AND LITE.

OTHER OBSERVATIONS: NUMEROUS BIVALVE SHELLS ON BEACHES WHERE SUBSTRATE IS SANDY OFFSHORE
Remnant of Saxidomus sp. rocky HEADLANDS FORMED FROM BEDROCK OUTCROPS. NUMEROUS PAIRS TABANORACE
+ FREQUENCY

CLEANUP PRECAUTIONS: VERY PRODUCTIVE AREAS. LACK OF CONTAMINATION SHOULD WARRANT
A "NO CLEAN-UP" OPTION. ALSO, EXPOSED BEACHFRONT WOULD MAKE ACCESS TOUGH FOR
ANYTHING BUT HAND PICK-UP.

MAMMALS: Otters 0 Harbor Seals 0 Sea Lions 0 Whales 0
 Other SOME DEER PRINTS AND UNKNOWN FECS IN HIGH UPPER
INTERTIDAL ZONES

BIRDS: LARUS sp. SIAMED

GENERAL OBSERVATIONS: NO OIL SIGHTED; CLEAN; NO CLEAN-UP
NECESSARY

(version of 4/29/89)

CULTURAL RESOURCE EVALUATION

Date 7-JULY-1989 Location KODIAK ISLAND D-5 Site SECTION K6-6

Location Prefix U.G. Segment # 6 Length 200 m

Survey Method:

Air - (A - indicate on map) Boat - (A - indicate on map)

Ground 100% (G - indicate on map)

Known cultural resources (AHRS #) NONE Data Source _____

Oil conditions/beach visibility NO OIL OBSERVED; EXCELLENT BEACH VISIBILITY

Width of beach zone surveyed 10-30 m Tree fringe surveyed 0-25 m

Cultural resources observed in beach zone (AHRS code) NONE

Cultural resources observed in tree fringe (AHRS code) JE-1 (SHELL MIDDEN)

General observations justifying survey method and segment's site probability:

Shore Profile VARIABLE: STEEP ROCKY HEADLANDS AND LOW ANGLE BEACHES IN Coves

Fresh Water Sources SMALL STREAMS + RIVULETS ONLY

Sea Exposure GENERALLY SOUTHERLY EXPOSURES

Access/Safety GENERALLY ACCESSIBLE, PROTECTED BAY SHORELINE

Probability of undiscovered sites in beach zone (circle one) 1 2 3 4 5

Monitoring during cleanup needed yes no Collection yes no

Photos: Color Roll # _____ Frames _____

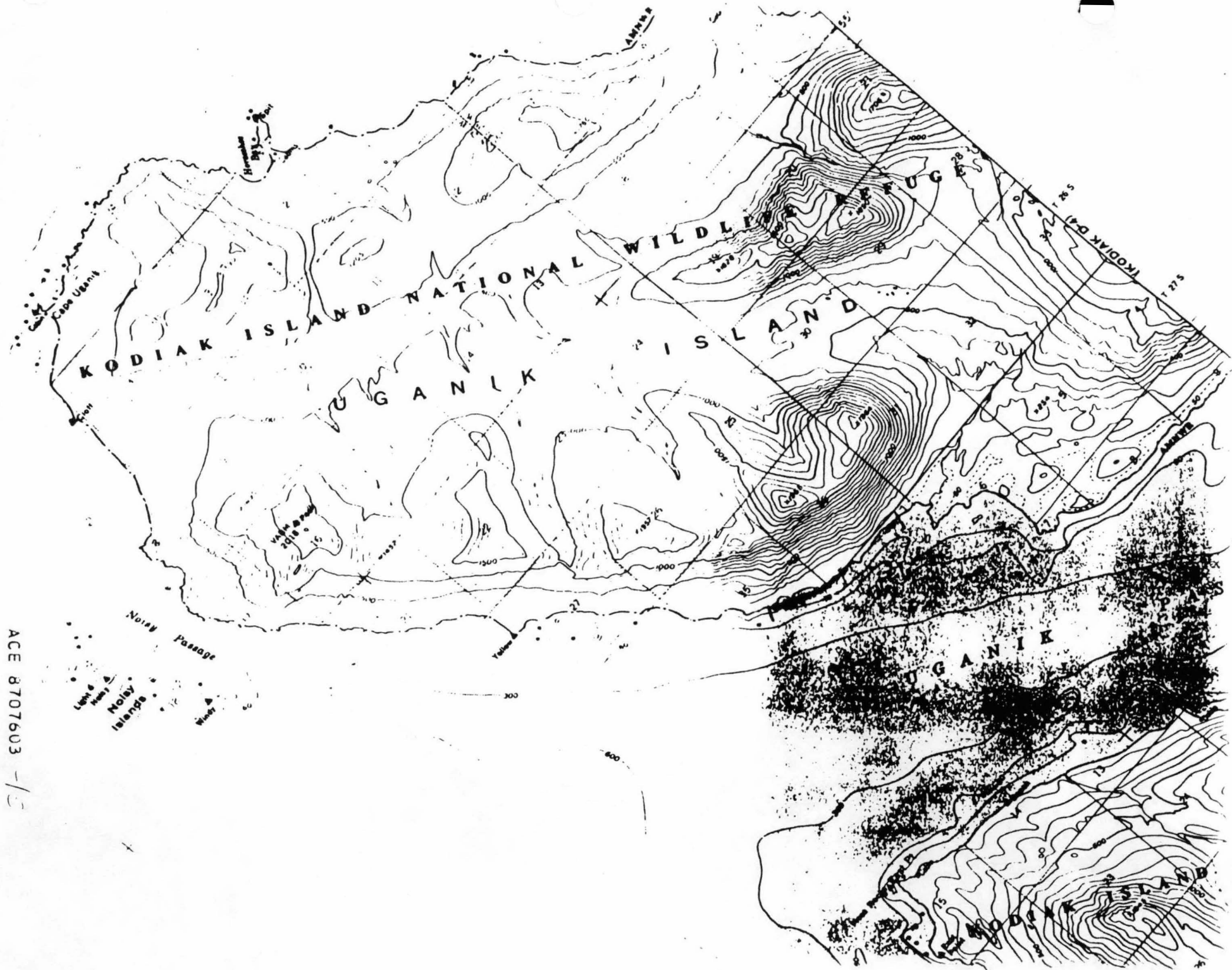
B/W Roll # JE #1 Frames 1, 2, 3, + 4

Observer(s) JOHN ERLANDSON

Time survey started 9:30 AM Time survey ended ~ 11:30 AM

Cultural resource considerations/restraints:

STANDARD CONSTRAINTS



ACE 8707603 -1-

(version 5/02/89)

SHORELINE CLEANUP PROGRAM

DATE 7/07/89

SHORELINE SEGMENT K6-6-UG-7

LOCATION: (see enclosed map) South central coast of Uganik
Island

ADEC NO. _____ SHORELINE ASSESSMENT DATE: 7/07/89

Recommended Cleanup Activity(ies):

- No cleanup recommended due to the very light oiling condition and the biological sensitivity of the region. Subject to FOSC reassessment at a later date.

Priorities/Considerations: Class 4-A

Ecological Constraints (from site survey):

- Nesting bald eagles, local high abundance of rocky intertidal invertebrates and extremely light, intermittent oiling precludes cleanup at this site.

Archaeological Constraints (from site survey):

- If cleanup is planned, inspection by an archaeological monitor is required in archaeologically sensitive portions of this segment.

Douglas Reger
State Historic Preservation Officer *

Date: 8/14/89

EXXON: _____

Date: _____

FOSC: _____

Date: _____

*Signature required to satisfy stipulations in Alaska DNR land use permits for tide and submerged lands.

(version July 05, 1989)

SHORELINE OIL EVALUATION

Date: 7 July 1989 / Time: 11:05-14:45
Surveyed From: Foot/Boat/Helio/Plane

Observer: Duncan R. Fitzgerald
Weather: Sun/Cloud/Rain/Snow/Fog

LOCATION

Location: Southeast-central Ugavik Island Segment ID: K-6-6-UG-7
Segment Length: 3800 m. Access: Vehicle/Boat/Barge/Helio/Float Plane
Access Restrictions: fairly protected, boat access except during extreme wave cond.

SHORELINE

Shoreline Type: SPI/BEA/COV/HLD/STRT Slope: Lo/Med/Hi/Vert
Wave Exposure: High/Med/Low
Sediment: B 10 % / C 40 % / P 10 % / G&S 30 % / M ____ % / R 10 %

OIL

Avg. Degree of Oiling: HEAVY / MODERATE / LIGHT / VERY LIGHT + NONE OBSERVED
Area of Impact: SU/SP/H/M/L *see map*

OIL DISTRIBUTION

Continuous % of Segment _____ SU/SP/H/M/L H/M/L/VL
Sporadic % of Segment 50% SU/SP/H/M/L H/M/L/VL

Total	Length(m)	Width(m)	Thickness >1cm: _____ cm	SU/SP/H/M/L
Very light:	<u>1200</u>	<u>1-3</u>	_____ cm	SU/SP/H/M/L
Light:	_____	_____	Penetration/Rework: _____ cm	SU/SP/H/M/L
Moderate:	_____	_____	Burial Depth: _____ cm	SU/SP/H/M/L
Heavy:	_____	_____		

Mobilization Potential: High/Medium/Low

Drift Debris Oiled? Y(N) Amount: H/M/L/VL SU/SP/H/M/L Type: _____

OIL MORPHOLOGY

Pooled Oil: _____ %		SU/SP/H/M/L
"Free" Oil: _____ %		SU/SP/H/M/L
Splattered: <u>97</u> %	H/M/L/VL	SU/SP/H/M/L
Coated: _____ %	H/M/L/VL	SU/SP/H/M/L
Pancakes/Balls: <u>3</u> %		SU/SP/H/M/L

Preliminary Cleanup Est.

Total TYPE A: 1200 m
Total TYPE B: _____ m
Total TYPE A/B: _____ m

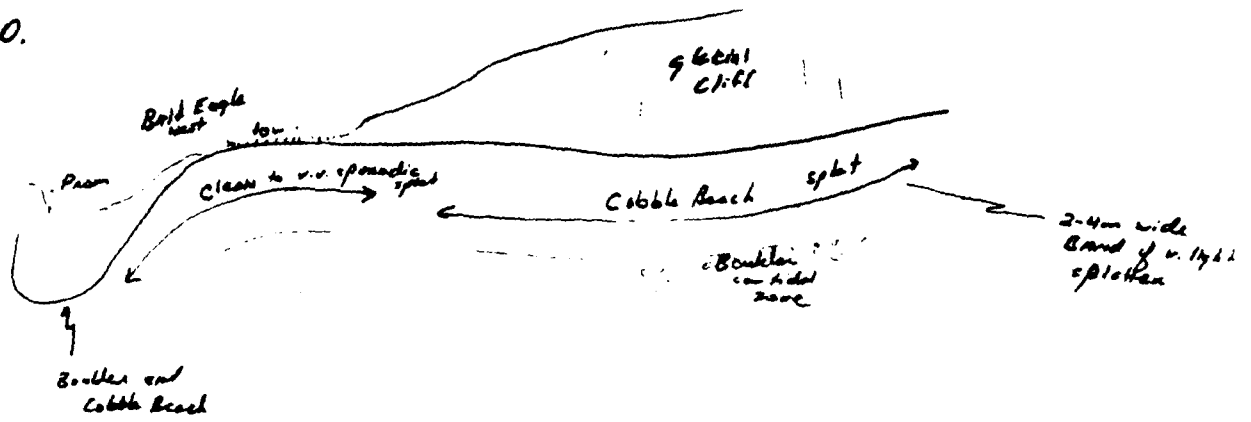
OIL WEATHERING

Fresh: _____ %	SU/SP/H/M/L
Mousse: _____ %	SU/SP/H/M/L
Weathered Mousse: <u>3</u> %	SU/SP/H/M/L
Asphalt Mousse: _____ %	SU/SP/H/M/L
Tar: <u>97</u> %	SU/SP/H/M/L

COMMENTS

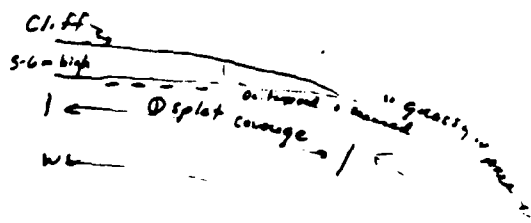
Sites where splat occurs are shown on the accompanying maps. Details of the splatter are given on the maps.

Map 0.

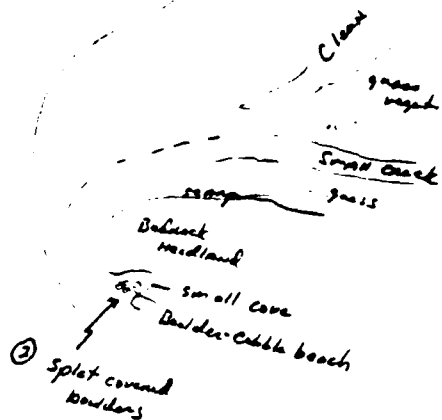


ACE 8707600

map A.

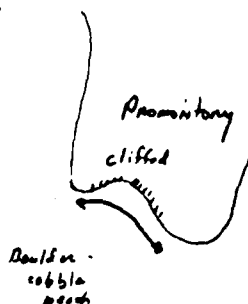


- ① Splat covered boulders and cobbles, 2-4m wide band at high mid-tide line next to cliff section of beach. Very light accumulation



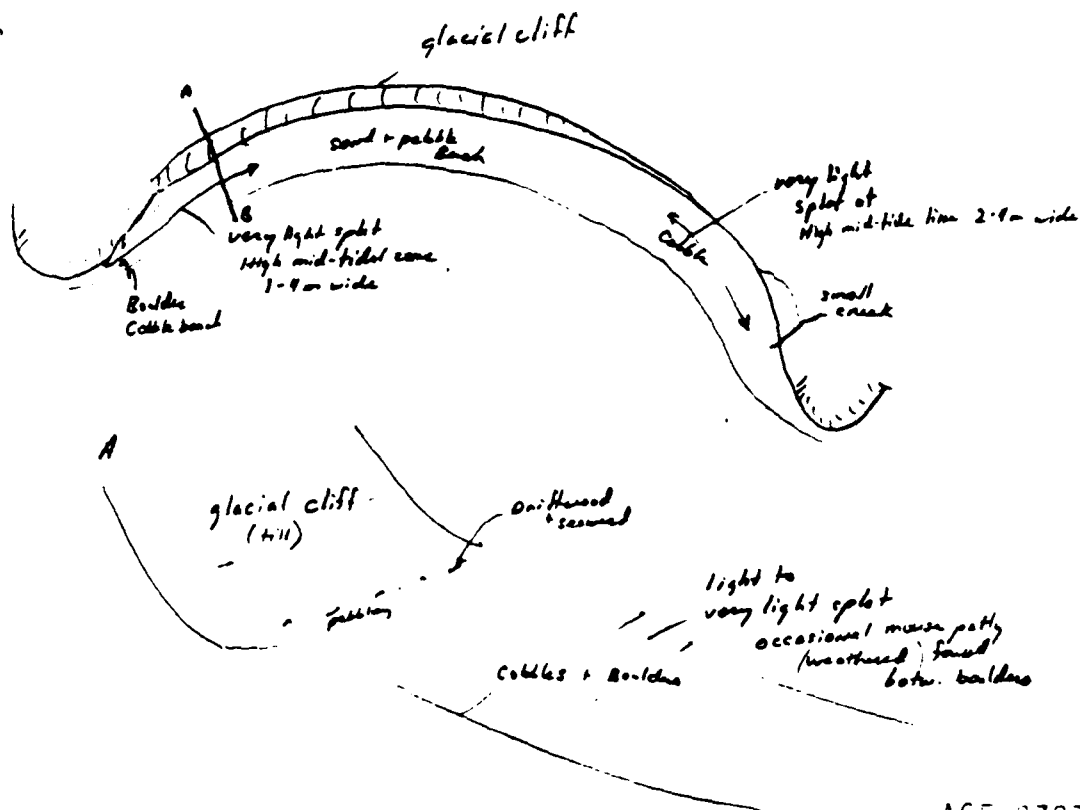
- ② Boulder and cobble cove in bedrock cliff. Splat covered, very light accumulation at the high. mid-tide line, band 2-4m wide

map B.



light to very lightly splattered boulders and cobbles, are on two patches of mouse (800 diam).

map C.



ACE 8707607

ECOLOGICAL EVALUATION

LOCATION: SOUTHSIDE OF MANUA
ISLAND, KODIAN SITE: _____ OBSERVER: S. BLUMSTONE

LOCATION PREFIX: UG SEG. NO.: 7 LENGTH: 2800 (M)

DATE: 7/7/89 TIME (HHMM): 11:05-11:45 TIDE HT.: 0.66 - 1.82 (M)

OILED ZONE: Splash High Medium Low (very light)

SUBSTRATUM: (Rocks Boulder Cobble Gravel Sand) Mud

LIVE BIOTA

Fucus (algae): Patchy Y/N Contin. Y/N ^{locally} Dense Y/N ^{top of south} Sparse Y/N None Y/N

ABUNDANT ON ROCKY HEADLANDS Y/NLUA IN LITZ, AND ABUND LITONIA IN UITEZ. FOUND
THROUGHOUT SECTION; MORE DOMINANTLY IN HEADLANDS. LOWERS, LAMINATED AND ~~FRAGMENTARY~~
AT LITZ IN COVES. ~~COASTAL 30' or less.~~
Mytilus (Mussels): Patchy Y/N Contin. Y/N Dense Y/N Sparse Y/N None Y/N
FOUND DOMINANTLY IN NORTHERN AND CENTRAL PART OF SECTION. PROBABLY Y/N FROM
UITEZ, INFLU, SECOND MYTILUS COLONIES SPREADS OF TRACE FOLDS AND OTHER PHACOPHYTES.

Balanus (Barnacles): Patchy ☒ Y/N Contin. Y ☒ N Dense ^{locally} ☒ Y/N Sparse ^{DWARDS SAND} ☒ Y/N None Y ☒ N
B. cariosus dominant in LITE and M.LITE B. glandula in UITE

Littorina

Littorina
Patchy (Y)/N Contin. (Y)/N Dense (Y)/N Sparse (Y)/N None (Y)/N
In WITE and MITE; FOUND BELOW ALGAL DETRITUS AND BETWEEN
OBBLE SUBSTRATE. Occasional Nuclea. found w/ Littorina.

Limpets: Patchy (Y/N) Contin. Y/N Dense Y/N Sparse (Y/N) None Y/N
Sparse distribution in LITZ and MLITZ. Notodacma sp. & others locally.

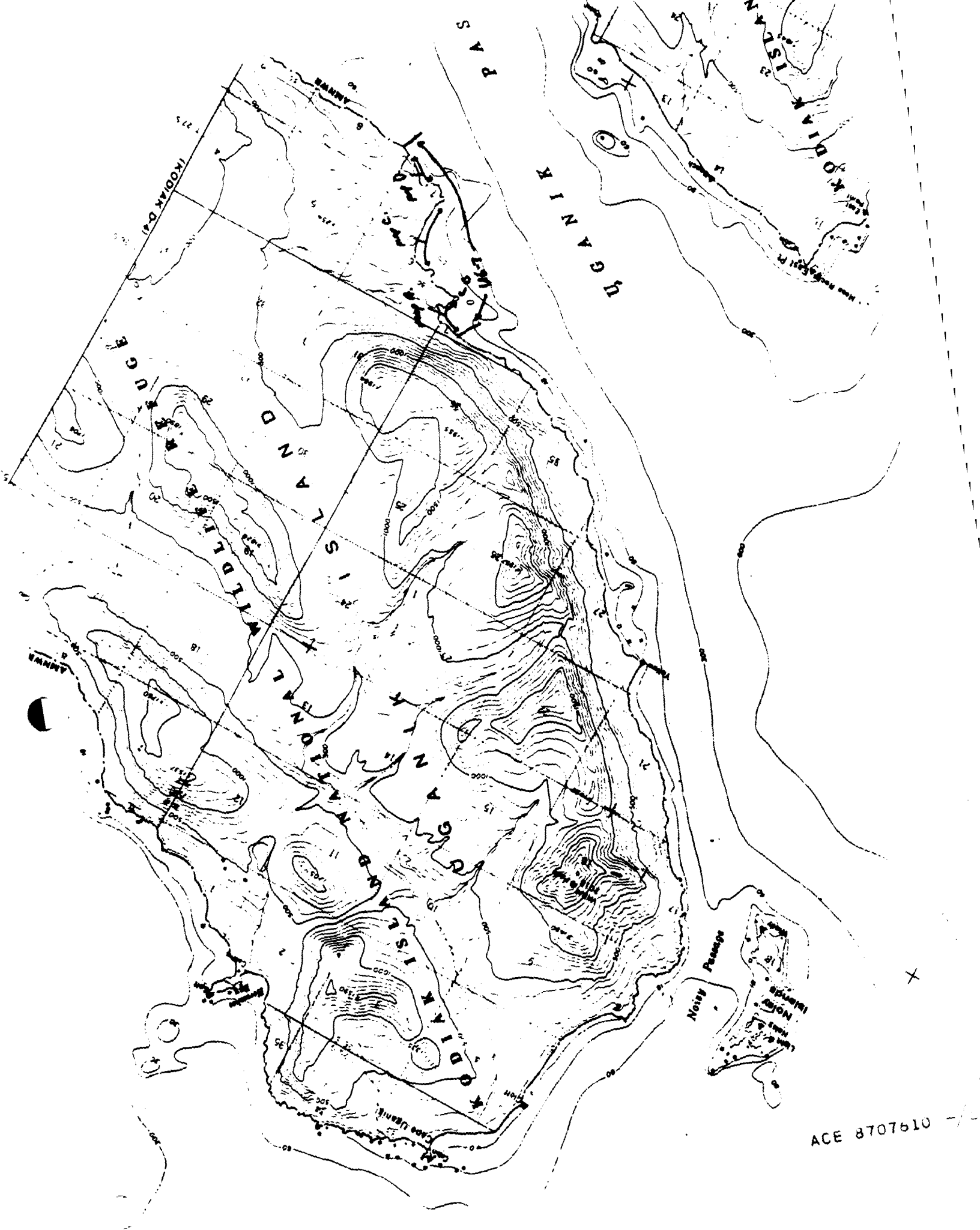
OTHER OBSERVATIONS: Abundant signatures mostly sandy strata; camer oves;
Clinochasma of (few); abundant Saxidomus offshore, large Mya marina and Entodesma sp.
Used bird boxes in 3 sites; 2 were nesting comple. Also, over observations

CLEANUP PRECAUTIONS: NO clean-up recommended; GREAT DIVERSITY IN
LOWLY INTERIORS AND ABUNDANCE IN COVES; VERY LITTLE OIL; FINE AS IS.

MAMMALS: Otters _____ Harbor Seals _____ Sea Lions _____ Whales _____
Other GAD ENGLER: DEER AND BEAR TRACKS.

BIRDS: BLACK OYSTERCATCHERS AND BIRD EAGLES

GENERAL OBSERVATIONS: SOME SCATTERED TRASH IN LITS ON SANDY
STRETCHES; NO TO VERY MINOR OIL CONTAMINATION.



ACE 8707610

(version 5/02/89)

SHORELINE CLEANUP PROGRAM

DATE 7/07/89

SHORELINE SEGMENT K6-6-UG-8

LOCATION: (see enclosed map) Southeast central coast of
Uganik Island

ADEC NO. _____ SHORELINE ASSESSMENT DATE: 7/07/89

Recommended Cleanup Activity(ies):

-No cleanup recommended due to apparent absence of oil.
Subject to FOSC reassessment at a later date.

Priorities/Considerations: Class 5-B

Ecological Constraints (from site survey):

-Possible bald eagles nests in headland wooded areas.

Archaeological Constraints (from site survey):

-If cleanup is planned, a full archaeological assessment of
this segment must be conducted.

Douglas Reger
State Historic Preservation Officer *

Date: 8/14/89

EXXON: _____

Date: _____

FOSC: _____

Date: _____

*Signature required to satisfy stipulations in Alaska DNR land
use permits for tide and submerged lands.

SHORELINE OIL EVALUATION

Date: 7 July 1989 / Time: 14:00
 Surveyed From: Foot/Boat/Helio/Plane

Observer: DUNCAN M. F. FLEWELL
 Weather: Sun/Cloud/Rain/Snow/Fog

LOCATION

Location: Southeast end of Ugarik Island Segment ID: K-6-6-Ug-8
 Segment Length: 7200 m. Access: Vehicle/Boat/Barge/Helio/Float Plane
 Access Restrictions: very low wave energy

SHORELINE

Shoreline Type: SPI/BEA/COV/HLD/STRT

Slope: Lo/Med/Hi/Vert

Wave Exposure: High/Med/Low

Sediment: B 20 % / C 30 % / P % / G&S 40 % / M % / R 10 %

OIL

Avg. Degree of Oiling: HEAVY / MODERATE / LIGHT / VERY LIGHT / NONE OBSERVED

Area of Impact: SU/SP/H/M/L

OIL DISTRIBUTION

Continuous % of Segment

SU/SP/H/M/L

H/M/L/VL

Sporadic % of Segment

SU/SP/H/M/L

H/M/L/VL

Total Length(m) | Width(m)

Very light:

Thickness >1cm: cm

SU/SP/H/M/L

Light:

Penetration/Rework: cm

SU/SP/H/M/L

Moderate:

Burial Depth: cm

SU/SP/H/M/L

Heavy:

Mobilization Potential: High/Medium/Low

Drift Debris Oiled? Y/N Amount: H/M/L/VL SU/SP/H/M/L Type:

OIL MORPHOLOGY

Pooled Oil: %

SU/SP/H/M/L

"Free" Oil: %

SU/SP/H/M/L

Splattered: %

H/M/L/VL

SU/SP/H/M/L

Coated: %

H/M/L/VL

SU/SP/H/M/L

Pancakes/Balls: %

SU/SP/H/M/L

 Preliminary Cleanup Est.

Total TYPE A: m

Total TYPE B: m

Total TYPE A/B: m

OIL WEATHERING

Fresh: %

SU/SP/H/M/L

Mousse: %

SU/SP/H/M/L

Weathered Mousse: %

SU/SP/H/M/L

Asphalt Mousse: %

SU/SP/H/M/L

Tar: %

SU/SP/H/M/L

COMMENTS

ECOLOGICAL EVALUATION

LOCATION: SOUTHSIDE OF UMANA ISLAND, KODIAK SITE: _____ OBSERVER: S. BLUESTONE

LOCATION PREFIX: UG SEG. NO.: 8 LENGTH: _____ (M)

DATE: 7/7/89 TIME (HHMM): 14:45-15:30 TIDE HT.: 1.9 - ~ 3.1 (M)

OILED ZONE: Splash High Medium Low NONE VISIBLE

SUBSTRATUM: Rocks Boulder Cobble Gravel Sand Mud

LIVE BIOTA

Fucus (algae): Patchy (Y/N) Contin. (Y/N) Dense (Y/N) Sparse (Y/N) None (Y/N)
LOCALLY
 GENERALLY MUCH LESS ABUNDANCE AND SLIGHTLY LOWER ABUNDANCE OF
 ANOMOPHYTES AND CHLOROPHYTES. BROWN, FLATTER SPECIES; ZOSTERA, ABUNDANT IN LAGOON.

Mytilus (Mussels): Patchy (Y/N) Contin. (Y/N) Dense (Y/N) Sparse (Y/N) None (Y/N)
LOCALLY
GENERALLY & LOCALLY
 Mussels found covering occasional large boulder in LITE. GENERALLY,
 SCATTERED & SPARSE

Balanus (Barnacles): Patchy (Y/N) Contin. (Y/N) Dense (Y/N) Sparse (Y/N) None (Y/N)
 MOST EVIDENT IN LITE. B. glandula appears throughout section in low
 abundances. B. cariosus found in LITE, in fewer numbers

Littorina

Patchy (Y/N) Contin. (Y/N) Dense (Y/N) Sparse (Y/N) None (Y/N)
 Found between cobbles in LITE and underneath detrital debris.

Limpets: Patchy (Y/N) Contin. (Y/N) Dense (Y/N) Sparse (Y/N) None (Y/N)
LOCALLY
 ONLY IN LITE, TRACE AMOUNTS. FEW MOUNDS IN GENERAL.

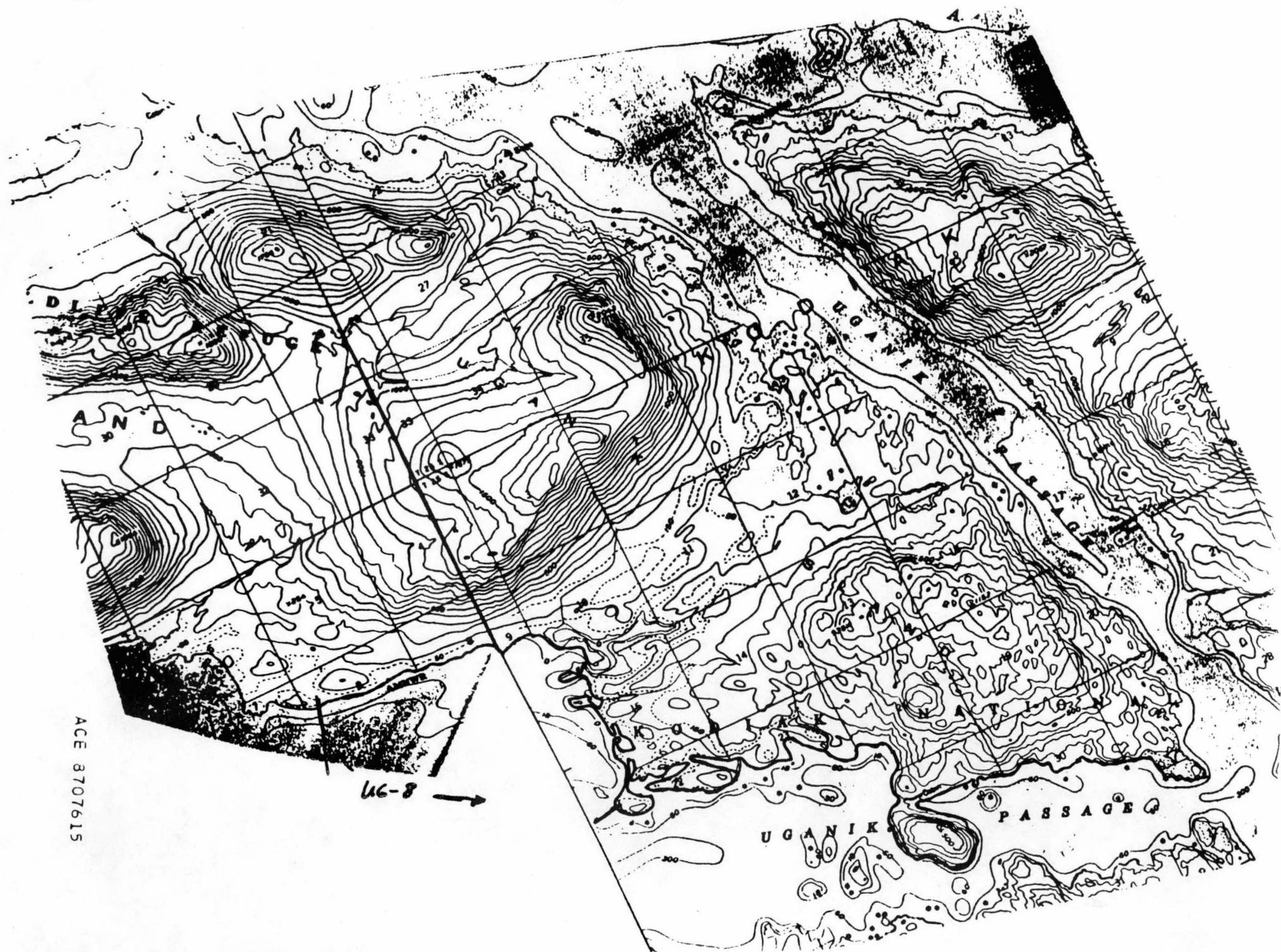
OTHER OBSERVATIONS: LOWER ABUNDANCES AND DIVERSITIES; MUCH CALMER ENVIRONMENT. LESS PHYSICAL EXPOSURE. GREATER # OF FRESHWATER INFUX

CLEANUP PRECAUTIONS: NO CLEANUP RECOMMENDED, DUE TO LACK OF OIL.

MAMMALS: Otters _____ Harbor Seals _____ Sea Lions _____ Whales _____
 Other _____

BIRDS: LARUS sp and black oystercatchers viewed.

GENERAL OBSERVATIONS: LOW TO NO IMPACT AREA.



ACE 8707615

(version 5/02/89)

SHORELINE CLEANUP PROGRAM

DATE 7/08/89

SHORELINE SEGMENT K6-6-UG-9

LOCATION: (see enclosed map) Southeast end of Uganik

ADEC NO. _____ SHORELINE ASSESSMENT DATE: 7/08/89

Recommended Cleanup Activity(ies):

-No cleanup recommended due to very light oiling and ecological constraints given below. Subject to FOSC reassessment at a later date.

Priorities/Considerations: Class 5-A

Ecological Constraints (from site survey):

-Cleanup not recommended due to high diversity and abundances of intertidal invertebrates in rocky headlands, as well as presence of bald eagles.

Archaeological Constraints (from site survey):

-If cleanup is planned, a full archaeological assessment of this segment must be conducted.

Douglas Reger
State Historic Preservation Officer *

Date: 8/14/89

EXXON: _____

Date: _____

FOSC: _____

Date: _____

*Signature required to satisfy stipulations in Alaska DNR land use permits for tide and submerged lands.

SHORELINE OIL EVALUATION

Date: 8 July 1989 / Time: 11
Surveyed From: Foot Boat Helio Plane

Observer: RUNCAN M. FITZGERALD
Weather: Sun/Cloud/Rain/Snow/Fog

LOCATION

Location: Southeast end of Uganik Island Segment ID: K-6-6-Ug-9
Segment Length: 113 Km. Access: Vehicle/Boat/Barge/Helio/Float Plane
Access Restrictions: protected

SHORELINE

Shoreline Type: SPI/BEA/COV/HLD/STRT Slope: Lo/Med/Hi/Vert
Wave Exposure: High/Med/Low
Sediment: B 20 % / C 25 % / P 5 % / G&S 15 % / M % / R 35 %

OIL

Avg. Degree of Oiling: HEAVY / MODERATE / LIGHT VERY LIGHT / NONE OBSERVED
Area of Impact: SU/SP/H/M/L

OIL DISTRIBUTION

Continuous % of Segment SU/SP/H/M/L H/M/L/VL
Sporadic % of Segment 0.15 SU/SP/H/M/L H/M/L/VL

Total	Length(m)	Width(m)	Thickness >1cm:	cm	SU/SP/H/M/L
Very light:	<u>500-</u>	<u>1-2</u>			
Light:			Penetration/Rework:	cm	SU/SP/H/M/L
Moderate:			Burial Depth:	cm	SU/SP/H/M/L
Heavy:					

Mobilization Potential: High/Medium/Low

Drift Debris Oiled? Y/N Amount: H/M/L/VL SU/SP/H/M/L Type:

OIL MORPHOLOGY

Pooled Oil:	%	SU/SP/H/M/L
"Free" Oil:	%	SU/SP/H/M/L
Splattered:	<u>100</u> %	SU/SP/ <u>H/M/L</u>
Coated:	%	SU/SP/H/M/L
Pancakes/Balls:	%	SU/SP/H/M/L

Preliminary Cleanup Est.

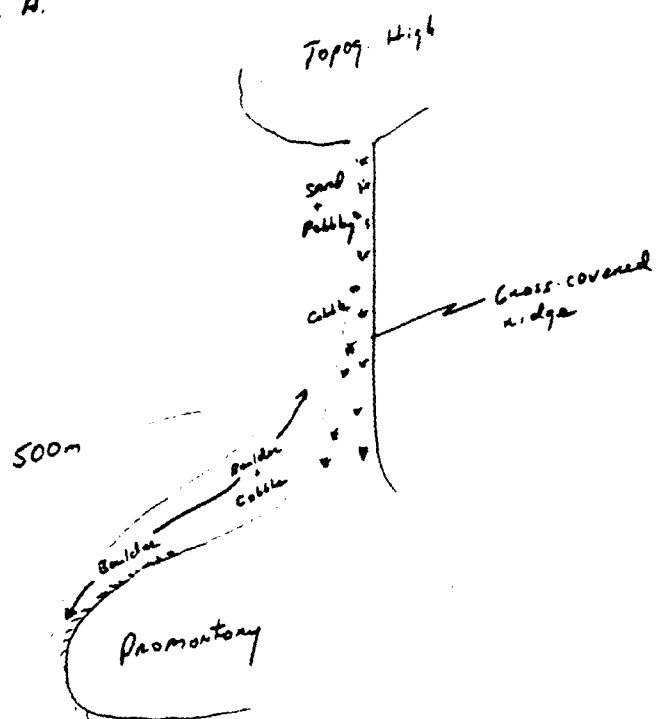
Total TYPE A: m
Total TYPE B: m
Total TYPE A/B: m

OIL WEATHERING

Fresh:	%	SU/SP/H/M/L
Mousse:	%	SU/SP/H/M/L
Weathered Mousse:	%	SU/SP/H/M/L
Asphalt Mousse:	%	SU/SP/H/M/L
Tar:	<u>100</u> %	SU/SP/ <u>H/M/L</u>

COMMENTS

map A.



Splat found on a section of beach 500m long 1-2m wide bank. Silver dollar-sized splats occurring every 10-15m

ACE 8707619

ECOLOGICAL EVALUATION

LOCATION: SOUTH SIDE URBANIX ISLAND, KODIAK SITE: UG-9 OBSERVER: S. BLUESTONE
 LOCATION PREFIX: UG SEG. NO.: 9 LENGTH: _____ (M)
 DATE: 7/08/89 TIME (HHMM): 1010-1447 TIDE HT.: 1.49 - ~2.01 (M)
11.5 - ~63
 OILED ZONE: Splash High Medium Low VERY VERY LIGHT TO NONEXISTENT
 SUBSTRATUM: Rocks Boulder Cobble Gravel Sand Mud

LIVE BIOTA

Fucus (algae): Patchy Y/N Contin. Y/N Dense Y/N Sparse Y/N None Y/N
ABUNDANT THROUGHOUT SECTION; GREATER ON S. SIDES OF BAYS (FACING N) IN HEADLAND AREAS. ALSO ULVA SP, ENDOLICHA SP, and local HABSSICUM SP. SCATTER TO SPARSE ON SANDY COVES
LYMAKIA SP in LITZ & PANDORUS SP washed up on beach.

Mytilus (Mussels): Patchy Y/N Contin. Y/N Dense Y/N Sparse Y/N None Y/N
LOW Abundance of M. edulis in sandy coves otherwise throughout section in LITZ and M.LITZ. WELL DEVELOPED STANDS in ROCKY LITZ HEADLANDS

Balanus (Barnacles): Patchy Y/N Contin. Y/N Dense Y/N Sparse Y/N None Y/N
Abundant B. crenatus and B. glandulosa in LITZ and ULITZ, respectively. Greater abundances in ROCKY LITZ'S.

Littorina
 Patchy Y/N Contin. Y/N Dense Y/N Sparse Y/N None Y/N
UPPER Abundance THROUGHOUT SECTION -> found grazing on detrital debris in ULITZ.

Limpets: Patchy Y/N Contin. Y/N Dense Y/N Sparse Y/N None Y/N
found C. digitalis and N. Scutum, very intermittent in LITZ & M.LITZ in pools, grazing on algal debris

OTHER OBSERVATIONS: VARIED HABITAT BETWEEN COASTAL ROCKY HEADLANDS AND CALM COVES. ALL WELL ESTABLISHED w/ 1 div. & abundances.
LOCAL FRESH WATER INFUX IN SMALL TO MOD VOLUMES. via ATLANTIC SOURCES

CLEANUP PRECAUTIONS: THIS AREA DOES NOT WARRANT ANY CLEANUP ACTION. PRISTINE, SENSITIVE HABITAT; SHOULD NOT BE DISTURBED.

MAMMALS: Otters 1 Harbor Seals 1 Sea Lions 1 Whales 1
Other DEER in UPPER GRASSES ABOVE BEACH; ALSO, 1 BROWN BEAR DEN.
 BIRDS: 2 EAGLES SIGHTED; NESTING, AT N END OF SECTION & ONE AT S. end

GENERAL OBSERVATIONS: _____

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