

KN-211 C ASC 16880 site #1
NORTH FROM THE BAY OF ISLES

ACE 1369628



OFFICIAL PHOTOGRAPH

ADEC

Date: 10/11/89 Time: _____

Location (segment #): Knight Island
KN-211

Reason for taking photo: Ferdy Creek aerial
intertidal. Undoc salmon
spawning stream

Taken by: Rick Gustin ACE 7378982/8

Roll #: 89RLG010 Frame #: 2

N





OFFICIAL PHOTOGRAPH

ADF&G EXXON VALDEZ OIL SPILL

OFFICE: VALDEZ

DATE: 09/06/89

TIME: -0-

SEGMENT#: KN 211

STATION#: -0-

LOCATION: HERRING BAY, KNIGHT ISLAND

REASON FOR TAKING PHOTO: UNCATALOGED ANADROMOUS FISH STREAM. OILED
DEBRIS (INCLUDING POMPOMS) LEFT BY STREAM AFTER
TREATMENT.

TAKEN BY: AIMEE WESEMAN

INITIALS: _____

ROLL #: 89AW015V

FRAME #: 07

EVIDENCE ID#: 10194

Taken by: _____

Roll #: _____ Frame #: 7

ACE 7378984



OFFICIAL PHOTOGRAPH

ADF&G EXXON VALDEZ OIL SPILL

OFFICE: VALDEZ

DATE: 09/06/89

TIME: -0-

SEGMENT#: KN 211

STATION#: -0-

LOCATION: HERRING BAY, KNIGHT ISLAND

REASON FOR TAKING PHOTO: UNCATALOGED ANADROMOUS FISH STREAM. OILY DEBRIS (INCLUDING POMPOMS) LEFT AFTER TREATMENT.

TAKEN BY: AIMEE WESEMAN

INITIALS: _____

ROLL #: 89AW015V FRAME #: 08

EVIDENCE ID#: 10194

ACE 7378985

Roll #: _____ Frame #: 8



OFFICIAL PHOTOGRAPH

OFFICIAL PHOTOGRAPH ADF&G EXXON VALDEZ OIL SPILL

OFFICE: VALDEZ DATE: 09/06/89 TIME: -0-

SEGMENT#: KN 211 STATION#: -0-
LOCATION: HERRING BAY, KNIGHT ISLAND

REASON FOR TAKING PHOTO: UNCATALOGED ANADROMOUS FISH STREAM. OILY
DEBRIS LEFT BY STREAM AFTER TREATMENT. (DON BREITINGER,
USFS; AND PETER MONTESANO, DEC, ARE PRESENT).

TAKEN BY: AIMEE WESEMAN

INITIALS: _____

ROLL #: 89AW015V FRAME #: 09

EVIDENCE ID#: 10194

Roll #:

Frame #:

ACE 7378986





OFFICIAL PHOTOGRAPH ADF&G EXXON VALDEZ OIL SPILL

OFFICE: VALDEZ

DATE: 09/06/89

TIME: -0-

SEGMENT#: KN 211

STATION#: -0-

LOCATION: HERRING BAY, KNIGHT ISLAND

REASON FOR TAKING PHOTO: UNCATALOGED ANADROMOUS FISH STREAM. TAR
BALLS BY STREAM AFTER TREATMENT.

TAKEN BY: AIMEE WESEMAN

INITIALS: _____

ROLL #: 89AW015V

FRAME #: 10

EVIDENCE ID#: 10194

ACE 7378987



OFFICIAL PHOTOGRAPH

ADEC

OFFICIAL PHOTOGRAPH ADF&G EXXON VALDEZ OIL SPILL

OFFICE: VALDEZ

DATE: 09/06/89

TIME: -0-

SEGMENT#: KN 211

STATION#: -0-

LOCATION: HERRING BAY, KNIGHT ISLAND

REASON FOR TAKING PHOTO: UNCATALOGED ANADROMOUS FISH STREAM. TAR
BALLS BY STREAM AFTER TREATMENT.

TAKEN BY: AIMEE WESEMAN

INITIALS: _____

ROLL #: 89AW015V

FRAME #: 11

EVIDENCE ID#: 10194

Roll #: _____ Frame #: 11

ACE 7378988



OFFICIAL PHOTOGRAPH ADF&G EXXON VALDEZ OIL SPILL

OFFICE: VALDEZ

DATE: 09/06/89

TIME: -0-

SEGMENT#: KN 211

STATION#: -0-

LOCATION: HERRING BAY, KNIGHT ISLAND

REASON FOR TAKING PHOTO: UNCATALOGED ANADROMOUS FISH STREAM. TAR BALLS ADJACENT TO STREAM AFTER TREATMENT.

TAKEN BY: AIMEE WESEMAN

INITIALS: _____

ROLL #: 89AW015V

FRAME #: 12

EVIDENCE ID#: 10194

Taken by: _____

Roll #: _____ Frame #: 12

ACE 7378989





OFFICIAL PHOTOGRAPH

ADEC

OFFICIAL PHOTOGRAPH ADF&G EXXON VALDEZ OIL SPILL

OFFICE: VALDEZ

DATE: 09/06/89

TIME: -0-

SEGMENT#: KN 211

STATION#: -0-

LOCATION: HERRING BAY, KNIGHT ISLAND

REASON FOR TAKING PHOTO: LAKE ABOVE UNCATALOGED ANADROMOUS FISH
STREAM. PINK SALMON SPAWNING AREA.

ACE 7378990

TAKEN BY: AIMEE WESEMAN

INITIALS: _____

ROLL #: 89AW015V FRAME #: 13

EVIDENCE ID#: 10194

Taken by: _____

Roll #: _____ Frame #: 13



OFFICIAL PHOTOGRAPH ADF&G EXXON VALDEZ OIL SPILL

OFFICE: VALDEZ DATE: 09/06/89 TIME: -0-

SEGMENT#: KN 211 STATION#: -0-
LOCATION: HERRING BAY, KNIGHT ISLAND

REASON FOR TAKING PHOTO: PINK SALMON SPAWNING IN LAKE ABOVE
UNCATALOGED ANADROMOUS FISH STREAM.

TAKEN BY: AIMEE WESEMAN

INITIALS: _____

ROLL #: 89AW015V FRAME #: 14

EVIDENCE ID#: 10194

Taken by: _____

Roll #: _____ Frame #: 14

ACE 7378991



OFFICIAL PHOTOGRAPH ADF&G EXXON VALDEZ OIL SPILL

OFFICE: VALDEZ

DATE: 09/06/89

TIME: -0-

SEGMENT#: KN 211

STATION#: -0-

LOCATION: HERRING BAY, KNIGHT ISLAND

REASON FOR TAKING PHOTO: LAKE ABOVE UNCATALOGED ANADROMOUS FISH
STREAM. PINK SALMON SPAWNING AREA.

TAKEN BY: AIMEE WESEMAN

INITIALS: _____

ROLL #: 89AW015V FRAME #: 15

EVIDENCE ID#: 10194

ACE 7378992

Roll #: _____ Frame #: 15





OFFICIAL PHOTOGRAPH ADF&G EXXON VALDEZ OIL SPILL

OFFICE: VALDEZ

DATE: 09/06/89

TIME: -0-

SEGMENT#: KN 211

STATION#: -0-

LOCATION: HERRING BAY, KNIGHT ISLAND

REASON FOR TAKING PHOTO: OILED BEACH (UITZ) ADJACENT TO UNCATALOGED
ANADROMOUS FISH STREAM AFTER TREATMENT.

TAKEN BY: AIMEE WESEMAN

INITIALS: _____

ROLL #: 89AW015V FRAME #: 16

EVIDENCE ID#: 10194

Roll #: _____ Frame #: 16

ACE 7378993



OFFICIAL PHOTOGRAPH ADF&G EXXON VALDEZ OIL SPILL

OFFICE: VALDEZ

DATE: 09/06/89

TIME: -0-

SEGMENT#: KN 211

STATION#: -0-

LOCATION: HERRING BAY, KNIGHT ISLAND

REASON FOR TAKING PHOTO: OILED BEACH (UITZ) ADJACENT TO UNCATALOGED
ANADROMOUS FISH STREAM AFTER TREATMENT.

TAKEN BY: AIMEE WESEMAN

INITIALS: _____

ROLL #: 89AW015V FRAME #: 17

EVIDENCE ID#: 10194

Taken by: _____

Roll #: _____ Frame #: 17

ACE 7378994



OFFICIAL PHOTOGRAPH ADF&G EXXON VALDEZ OIL SPILL

OFFICE: ANCHORAGE DATE: 06/29/89 TIME: 1030

SEGMENT#: KN018 STATION#: 226-30
LOCATION: BAY OF ISLES, KNIGHT ISLAND 166880

REASON FOR TAKING PHOTO: CHECKING FOR OILED AREAS NEAR THE STREAM MOUTH.

TAKEN BY: LEE ROGERS

INITIALS: LR

ROLL #: 89LBR002V FRAME #: 21

EVIDENCE ID#: _

ACE 7378995



ANADROMOUS FISH STREAMS/OILING CONDITION
PWS

Segment # KN211E ASC# 226-10-16880 Location Cove above Bay of Isles

Date 8/4/90 Recorder/Observer Aimee Weseman

Oil in streambed yes Oil on streambanks yes

Oil within 50m of mouth yes Anadromous Fish present None sighted

Video taken AU 882-1063

Description of oil and comments

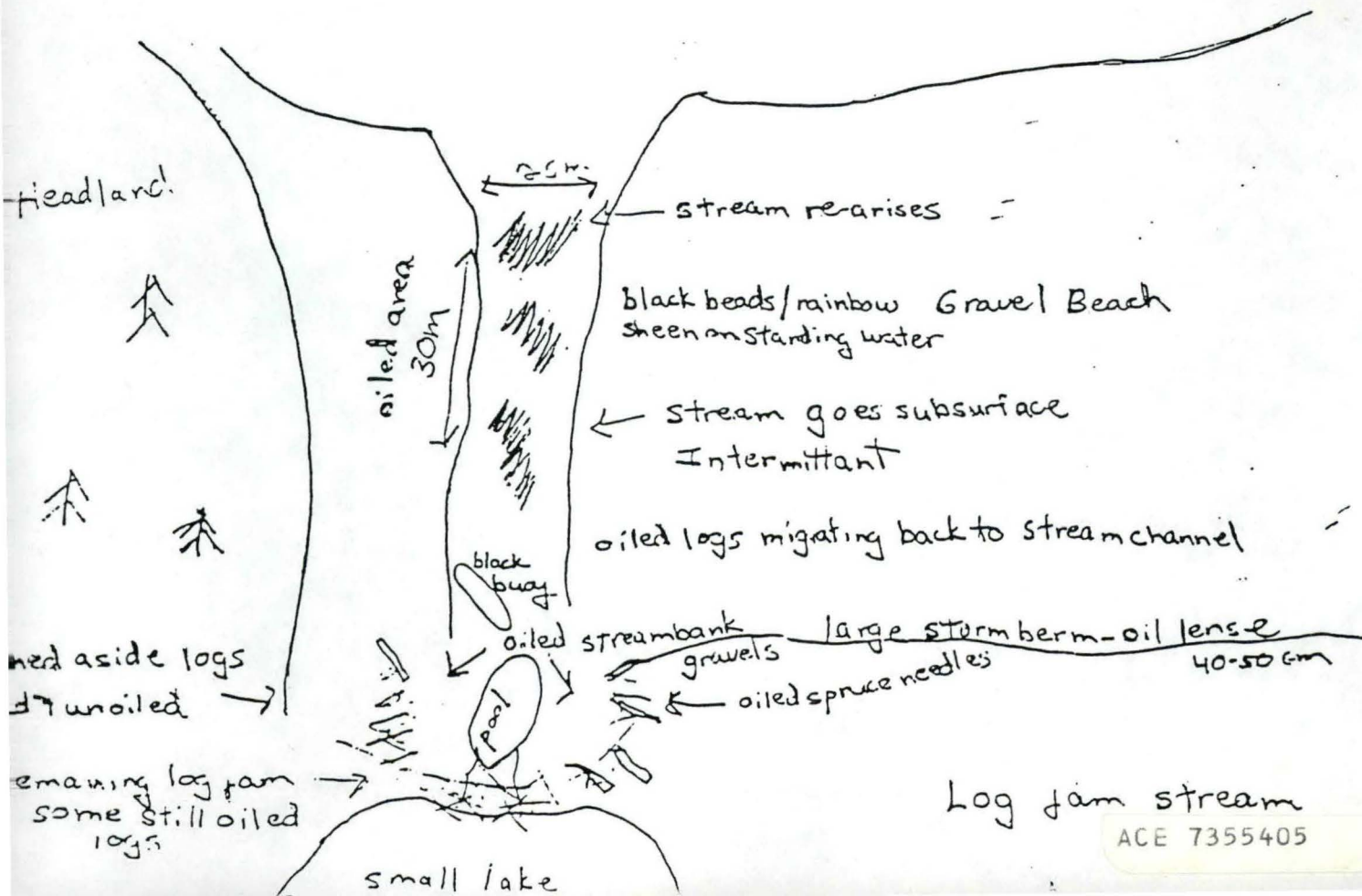
Stream banks & bed still heavily oiled - 30m long x 25m wide area of stream bed has heavy tarred OR - Blackheads and Rainbow sheen in pits dug in spawning area. Streambanks adjacent to pool are OR sediments with oiled organics. Oiled logs that had been pushed aside are already migrating to stream bed. Subsurface oil lense in storm berm on east side. Possible heavy oil under piled up logs on banks.

Rec - manual removal heavier sediments & hot water wash combined with mechanical tilling. Relocation of oiled logs & or burning.

Storm berm relocation to expose oil lense.

Re-assess next spring.

Oil Distribution Diagram



* DUP

ANADROMOUS FISH STREAMS/OILING CONDITION
PWS

Segment # KN211E ASC# 226-10-16880 Location Cove above Bay of Isles

Date 8/4/90 Recorder/Observer Aimee Weseman

Oil in streambed yes Oil on streambanks yes

Oil within 50m of mouth yes Anadromous Fish present none sighted

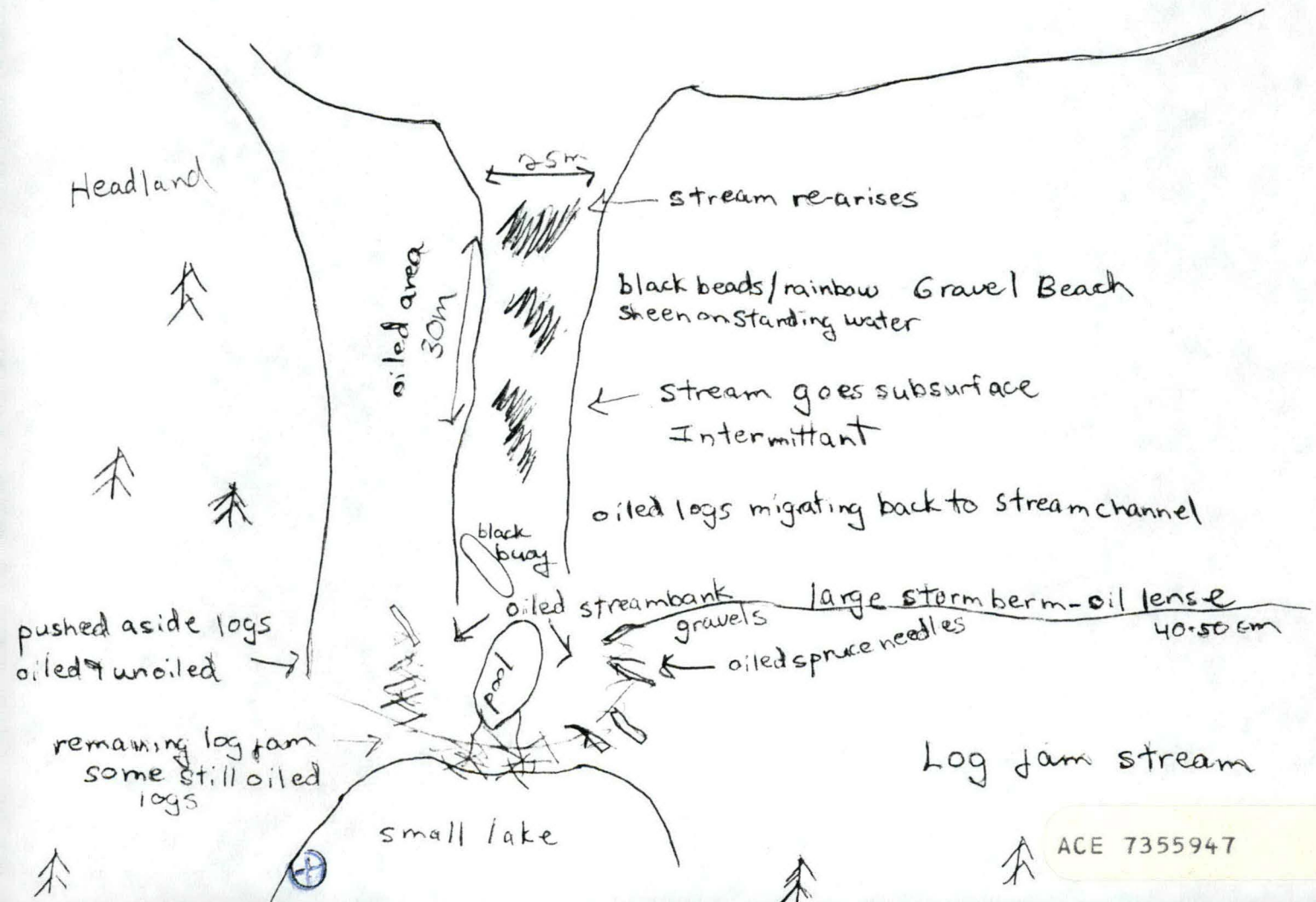
Video taken AW 882-1063

Description of oil and comments

Stream banks & bed still heavily oiled - 30m long x 25m wide area of streambed has heavy tomod OR - Blackheads and Rainbow sheen in pits dug in spawning area. Streambanks adjacent to pool are OR sediments with oiled organics. Oiled logs that had been pushed aside are already migrating to stream bed. Subsurface oil lense in storm berm on east side. Possible heavy oil under piled up logs on banks.

Rec - manual removal heavier sediments & hot water wash combined with mechanical tilling. Relocation of oiled logs & or burning. Storm berm relocation to expose oil lense. Re-assess next spring.

Oil Distribution Diagram



ACE 7355947

DOCUMENTS IN STREAM FILES

ASC# _____ Segment # _____

____ '89 Intertidal Assessment Survey, Sport/Com. Fish
____ '89 Shoreline Clean-Up Program (SAT)
____ '89 Anadromous Fish Stream Authorization, for instream work
____ '89 Stream Treatment Reports
____ '89 Demobilization Reports ____ Bioremediation ____ other
____ '89 RLS Sheet ____ Oil sed. sample ____ Egg sample
____ '89 Fall Walk-a-thon Survey, ADEC
____ '89 Winter Assess. Study Site ____ Winter Stream Survey Form
____ '89 Other Documents _____

____ '90 Pre-Anadscat Survey, multi-assessment form
____ '90 Anadscat Survey
____ '90 Anadromous Fish Stream Evaluation (work order)
____ '90 Anadromous Fish Stream Addendum to work order
____ '90 Shoreline Evaluation, SAT and work order for segment
____ '90 Anadromous Fish Stream Authorization, Title 16 permit
____ '90 Stream Treatment Report
____ '90 ADEC Demobilization Report for Bio
____ '90 ADF&G Oiling Condition Survey, for ASAP use (Aug. Surv.)
____ '90 ASAP Survey ____ ASAP Rec. ____ ADEC Rec. (____)
____ '90 Other Documents _____

ADW
Pre-A1 OSCAT-90

ADF&G MULTI-ASSESSMENT DATA FORM

1 SURVEY TYPE: BS SS DS TS AVS SCHA MMS PTA

2 REGION: PWS KP,CI K,AP

METHOD: Aerial Ground Boat

3 DATE: 4-12-90

15 HIGH TIDE TIMES: 1

21 TEAM RECORDER: R. Gustia

4 START TIME: 0720

16 HIGH TIDE HTS: 1

22 OBSERVERS: 1 - pilot

5 STOP TIME: 0730

17 LOW TIDE TIMES: 1

23 AGENCY: ADFG HAB

6 SEGMENT #: KN 211

18 LOW TIDE HTS: 1

24 PHOTOS TAKEN: Y (N)

7 STATION #:

19 TIDE HT AT SURVEY:

Roll #: Frame:

8 K-UNIT:

Ebb Slack Flood Slack

25 VIDEO TAKEN: Y (N) TAPE#:

9 STAT AREA:

20 USCG QUAD:

Start: End:

10 LAT:

11 LONG:

26 SAMPLES TAKEN? Y (N) Number

12 SOURCE: Map Loran

Oil

13 LOCATION: KNIGHT IS.

Sediment

14 DESCRIPTION: OUTER COAST ABOVE BAY OF ISLANDS

Biological

Water

EXTENT OF OIL

	SHORELINE				STREAM			
	L	W	M ²	%	L	W	M ²	%
27 SURFACE COVERAGE								
28 SURFACE THICKNESS								
29 PENETRATION								

36 CATALOGED ANAD. FISH STREAM? (Y) N

37 CATALOG #: 226-10-16880

38 STREAM NAME:

39 OIL IN STREAM BED? Y (N)

40 OIL ON STREAM BANKS? (Y) N

30 OVERALL OIL IMPACT: N VL L M H

41 OIL ON BEACH ADJACENT TO MOUTH? (Y) N
(within 50 meters)

31 OIL TYPE: Pooled Mousse Tar Asphalt Sticky Stain

42 OIL WITHIN 1 MILE OF STREAM? (Y) N

32 OILED DEBRIS? (Y) N

Where: cliffs/driftwood

33 SHORELINE TYPE: Headland Low-lying Rocks Beach Cove
Lagoon Marsh

43 ANADROMOUS FISH PRESENT? Y N

34 WAVE EXPOSURE: High Moderate Low

44 ANADROMOUS FISH OBSERVATION
Species Aerial Ground

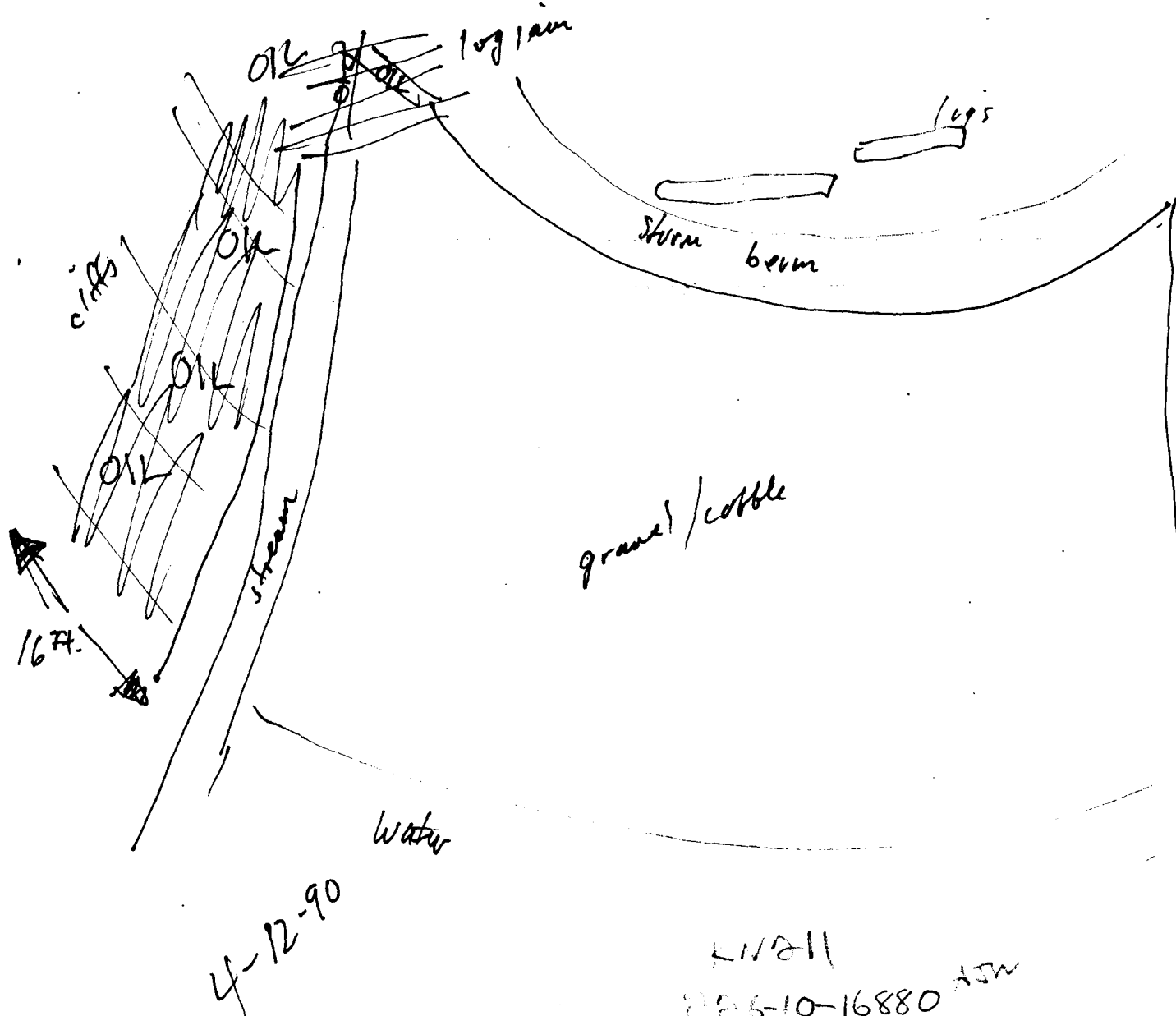
35 SUBSTRATE TYPE: Bedrock ✓ Boulder Cobble
Gravel ✓ Sand Mud/silt

COMMENTS: Thick bands 1-2 mm thick from stream edge
to 16' high on cliffs needles/oil/mousse

(stream)

ACE 7379101 +15

FRAME(S)	DESCRIPTION

46 OIL DISTRIBUTION DIAGRAM

= Sample taken
 = Photo frame # and
 shot direction.

ACE 7379102 -15

ADEC EXXON VALDEZ POST-TREATMENT SURVEY REPORT

SEGMENT#: KN211
LOCATION: NE KNIGHT ISLAND

DATE: 09/20/89
TIME: 10:15

Survey Type: Boat, Ground
Team: B. Fitzsimons

WEATHER AND SEA CONDITIONS

Weather: Cloudy Wind Direction: SE
Sea State: Moderate Knots: 0-15

Low Tide: 11:12 Feet: 3.23 High Tide: 17:15 Feet: 13.3
Low Tide: -0- Feet: -0- High Tide: 5:38 Feet: 10.4

SHORELINE DESCRIPTION

Shoretypes: H,LR,B,C
(H=headland, LR=low-lying rock, B=beach, C=cove, L=lagoon, M=marsh)

Wave Exposure: H,M (H=high, M=moderate, L=low)

Shoreline Composition: R,B,C,G,S
(R=bedrock, B=boulder, C=cobble, G=gravel, S=sand, M=silt)

OIL CHARACTERISTICS

Degree of Oiling: VL,L,H
(N=none, VL=very light, L=Light, M=moderate, H=heavy)

Area of Impact: H,M,L
(S=supratidal, H=high intertidal, M=mid tidal, L=low intertidal)

Max. Oil Thickness: 5 mm (1 = 1 mm or less, 0 = no oil)

Max. Oil Penetration: 50 cm (35 = 35 cm or greater)

Percent Segment Categorized as Oiled: 100%

Presence of Oiled Driftwood (y/n): y

Oil Types: P,SY,T,A,ST

(P=pooled, M=mousse, SY=sticky, T=tar, A=asphalt, ST=stain)

Samples: KN211-1 / KN211-2 / none / none

DAMAGED OR OILED ORGANISMS

Fucus (y/n): y Barnacles (y/n): n Mussels (y/n): y

Dead Mammals: 0 Dead Birds: 0

SOLID WASTE FOUND

Type: Few localities

Bags Collected: 0

Draft

Printed: 12/12/89 11:35

ACE 7378978

Walk-a-thon

ASAP Follow-Up Recommendations
TAG Recommendations - August 13, 1990

SEGMENT			
CH-00	II	Site 1	Manual pickup of tarmats, rake and bioremediate* H.P.
		Site 2	Manual pickup of tarmats, rake and bioremediate* H.P.
EL-57	II		NTR
EL-58	A		Manual till - mop up mobile oil with snare and bioremediate - low priority
EL-58	C		Storm berm relocation (mechanical if necessary)
EL-58	C		NTR - Reassessment in '91
EL-58	D		Customblen application and reassessment in '91
ER-07	A	Site 1	NTR
		Site 2	Manual pickup of tarmat and bioremediation (low priority)
EV-05	A		Limited manual pickup followed by bioremediation - Customblen (low priority)
EV-05	II		Manual pickup of mousse/AP followed by bioremediation. Manual till in heaviest areas if necessary (H.P.)
EV-12	A		Access and remove heaviest concentration of AP/OP/HOR manual removal followed by bioremediate
EV-15	A		Manual removal of MS/AP/OP/HOR where accessible - bioremediate (H.P.)
EV-26	A		Manual removal of AP and bioremediate (M.P.)
EV-37	A		Manual pickup of OP/HOR sediments (relocate armor to access)
EV-39	A		Bioremediate
FL-01	A		NTR - work done
GR-301	B	Site 1	Manual pickup of mousse (H.P.)
		Site 2	NTR
		Site 3	NTR
GR-301	II	New Site	Manual pickup of mousse (H.P.)
KN-07	A		Manual pickup of AP/OP/mousse and bioremediate (H.P.) both areas
KN-08	A		Manual pickup followed by bioremediation (L.P.)
KN-201	A		Manual removal of AP followed by bioremediation (M.P.)
KN-211	I	Site 1	Manual pickup of oiled debris at stream mouth next to small pool, use chain saw as necessary to access.
		Site 2	NTR
		Site 3	NTR
		Site 4	NTR
KN-400	A	Site 1	Manual removal of accessible AP followed by rake and bioremediation (L.P.)
		Site 3	NTR
KN-404	A		Bioremediate and assessment in '91
KN-405	A		Further TAG evaluation - bioremediate and assessment in '91
NK-02	A		Manual pickup AP/mousse - bioremediation (M.P.)
PD-04	A		Manual pickup of mousse patties and bioremediation, Inipol and Customblen (M.P.)
PN-01	A		Manual pickup of AP and bioremediation (L.P.)

ANADROMOUS STREAM CONSTRAINT

TAG
 EXXON
 ADEC
 USCG
 NOAA

DATED

Aug 15 1990

FOSC

DATED

ACE 7378980

ASAP Follow-Up Recommendations
TAG Recommendations - August 23, 1990

SEGMENT

PWS

KN-24 A Site 1-4 Pickup accessible heavy AP rake and bioremediate where applicable (M.P.)
KN-110 A Site 2 Reapply bioremediation (L.P.)
KN-111 A Site 1 Reapply bioremediation (L.P.)
KN-113 A Site 1 NTR - Reassessment in 1991
KN-135 A Site 1 Reassessment in 1991
KN-206 A Site 1 NTR
Site 3 NTR
KN-300 A Site 1 NTR - Reassessment in 1991
KN-508 A Site 1 Reapply bioremediation and reassessment in 1991 (L.P.)
KN-701 B Site 1 NTR - Reassessment in 1991
KN-702 A Site 1 Bioremediation and reassessment in 1991 (L.P.)
KN-702 B Site 1-5 Reapply bioremediation and reassessment in 1991 (L.P.)
GR-09 A Site 1 NTR - Reassessment in 1991
GR-103 A Site 1 Reapply bioremediation and reassessment in 1991
Site 2 Reapply bioremediation and reassessment in 1991
BP-04 ANAD Site 4 Reapplication of bioremediation with approval from ADF&G - reassessment in 1991 (L.P.)
GR-103 C Site 1 Reapplication of bioremediation and reassessment in 1991 (L.P.)
Site 2 Manual pickup of AP followed by bioremediation (M.P.)
KN-209 B Site 1 NTR
KN-209 D Site 1 Reapply bioremediation
Site 2 NTR
SM-05 B Site 1 NTR - Reassessment in 1991
SM-06 A Site 1 NTR - Reassessment in 1991
SM-06 B Site 1 NTR - Reassessment in 1991
SM-06 C Site 1 NTR - Reassessment in 1991
KN-211 B Site B NTR - Reassessment in 1991

Kenai

PY-06 A Site 1 NTR - Reassessment in 1991
TB-03 A Site 1 NTR - Reassessment in 1991
Site 2 NTR - Reassessment in 1991
US-09 A Site 1 NTR
WA-01 A Site 1 NTR

Kodiak

K10-5 AS-4 Site 1 Pickup small patch of mousse

TAG APPROVAL DATE

Aug 23 1990

SHPO

EXXON

Amoy Ten Real

ADEC

Ron Manner's R. Manner's

USCG

G.A. BEITER G.A. Beiter

FOSC

NOAA

Burl Wiscott Burl Wiscott

DATE

Final Anadromous Stream Treatment Information

Segment ID - Stream ID	NTR	Bio	Bio Start	Bio End	Man	Man Start	Man End
K0911-CD020 262-10-10080					X	6/28/90	6/28/90
K0911-CD020 262-10-10092					X	6/28/90	6/28/90
K0917-CC100 262-15-10040	X						
K0919-HB001 262-20-10040					X	6/12/90	6/14/90
K0919-HB004 262-20-10030	X						
K1002-AB002 262-65-655					X	7/7/90	7/8/90
K1007-PB001 262-70-10025					X	6/23/90	6/24/90
K1007-PB016 262-70-10010					X	7/10/90	7/10/90
K1009-DB008 262-75-10020	X						
KN0103 226-10-16922		X	7/7/90	9/1/90	X	7/7/90	7/7/90
KN0106 226-10-16890					X	6/30/90	6/30/90
KN0110 226-10-16928	X						
KN0120 226-10-16940	X						
KN0129 226-10-16975					X	5/30/90	5/30/90
KN0129 KN0129-UNCAT		X	6/19/90	6/19/90	X	5/30/90	5/30/90
KN0132 226-10-16982		X	6/19/90	9/11/90	X	5/26/90	5/29/90
KN0134 226-30-16865		X	6/23/90	6/23/90	X	6/23/90	6/23/90
KN0201 226-30-16872					X	6/1/90	6/1/90
KN0205 226-30-16860					X	6/1/90	6/3/90
KN0211 226-10-16875		X	7/1/90	7/9/90	X	7/1/90	7/9/90
KN0211 226-10-16880					X	7/1/90	7/1/90
KN0213 226-30-16853		X	7/1/90	7/6/90	X	7/1/90	7/6/90
KN0401 226-30-16820					X	6/30/90	6/30/90
KN0500 226-10-16992		X	7/5/90	9/11/90	X	7/5/90	7/7/90
KN0500 226-10-16996		X	7/7/90	9/11/90	X	7/5/90	7/7/90
KN0601 226-40-16855	X						
KN0602 226-40-16851	X						
KN0602 226-40-16853	X						
KN0701 226-30-16840		X	6/30/90	9/13/90	X	6/30/90	7/27/90
KN0704 226-30-16844	X						
LA015 226-40-16782		X	7/3/90	7/8/90	X	7/3/90	7/8/90
LA018 226-40-16780		X	7/3/90	8/26/90	X	6/15/90	7/4/90
LA021 226-40-16774		X	6/17/90	6/17/90	X	6/13/90	6/14/90
LA021 226-40-16776	X						
LA023 226-40-16772	X						
LA029 226-40-16788	X						
LA031 226-40-16785	X						
MA009 226-20-15044	X						
MN001 227-20-17570	X						
NA026 226-40-12950	X						
NK001 232-21-10230		X	7/3/90	7/4/90	X	7/3/90	7/4/90
PD002 242-42-10450					X	6/21/90	6/23/90
PD003 242-42-10460					X	6/21/90	6/23/90
TB002 232-10-10340					X	7/1/90	7/1/90
TB003 232-10-10342					X	6/20/90	7/1/90
WB001 242-32-10155					X	6/19/90	6/19/90
WB003 242-32-10160					X	6/19/90	6/19/90
WH003 226-40-16322		X	7/8/90	7/8/90	X	7/8/90	7/8/90

SUMMARY SHEET
FOR DIFFICULT-TO-COPY ITEMS

ALASKA/CIVIL EXXON

Folder ACE # 1369628

CDP BOX # 12306

Begin ACE Number 7378984 End ACE Number 7378995

DOCUMENT TYPE:

☐ BOOK	☐ BLUEPRINT
☒ PHOTOS	☐ VIDEO
☐ SLIDES	☐ AUDIO CASSETTE
☐ MAP OR CHART	☐ OTHER-Identify document type
☐ COMPUTER PRINTOUT	

MARGINALIA: YES ☐ NO ☒

AUTHOR: _____

DATE OF PUBLICATION: _____

VERBATIM TITLE: _____

INFERRED TITLE: 12 Photos, Exxon, Valdez Oil Spill,
Office: Valdez, Date 9/6/89, Time: -0-
Location: Herring Bay, Knight Island
Official Photograph AD # 28

ADDITIONAL INFORMATION: Reason for taking Photos:

ACE # 7378984 - Frame 7: Uncataloged Anadromous
stream. Oiled Debris (including pompons) Left by
stream after treatment. ACE # 7378985
Frame # 08: Uncataloged Anadromous fish
stream. Oiled debris (including pompons) Left after
treatment. ACE # 7378986, Frame # 9, Uncataloged
fish stream. Oiled debris left by stream after
treatment. (Don Breitingen, USFS, & Peter
Montesano, Dec, are Present).
ACE 7378987, Frame # 10,
Uncataloged anadromous fish stream. Tar balls
over →

ACE 7378983/A

Additional information Cont'd.

by stream after treatment. ACE 7378988,
Frame #: 11, Uncataloged Anadromous fish stream,
Tar balls by stream after treatment. ACE 7378989,
Frame #: 12, Uncataloged Anadromous fish stream,
Tar balls adjacent to stream after treatment.
ACE 7378990, Frame #: 13, Lake above Uncataloged
Anadromous fish stream, Pink Salmon Spawning
Area. ACE 7378991 Frame #: 14, pink Salmon spawning
in lake above Uncataloged Anadromous fish stream.
ACE 7378992, Frame #: 15, Lake above Uncataloged
Anadromous fish stream, Pink Salmon spawning Area.
ACE 7378993, Frame #: 16, Oiled Beach (Vitz) Adjacent
to Uncataloged Anadromous fish stream after
treatment. ACE # 7378994, Frame #: 17, Oiled beach
(Vitz) adjacent to Uncataloged Anadromous fish
stream after treatment. ACE # 7378995, Frame #: 21
16880, checking for Oiled areas near the stream
mouth.

ACE 7378983/B

SUMMARY SHEET
FOR DIFFICULT-TO-COPY ITEMS

ALASKA/CIVIL EXXON

Folder ACE # 1369628

CDP BOX # 12,306

Begin ACE Number 737898/B End ACE Number — Bun

DOCUMENT TYPE:

☐ BOOK	☐ BLUEPRINT
☒ PHOTOS	☐ VIDEO
☐ SLIDES	☐ AUDIO CASSETTE
☐ MAP OR CHART	☐ OTHER-Identify document type
☐ COMPUTER PRINTOUT	

MARGINALIA: YES ☒ NO ☐

AUTHOR: Rick Austin

DATE OF PUBLICATION: _____

VERBATIM TITLE: _____

INFERRED TITLE: 1 Photo - 10/11/89 - Location:
Knights Island KN-211 - Taken by Rick Austin
Roll # 89RL 8010, Frame # 2
Official Photograph ADEC

ADDITIONAL INFORMATION: Reason for taking photo:
Ferdy Creek Aerial Interstitial Under Salmon
Spawning stream).

TEAM NO 3 EXXON AL SNOOK SEGMENT AS KN 211
 CG LINDSEY NAKASHIMA USCG ORINS SUBDIV SIC TEAM 16830
 ADEC BOB McCREARY LAND RE JOHN CHAMBER TOTAL NO 1
 DATE 8/19/90 TIME 11:25 to 11:35 TIDE LEVEL 7.3
 TOTAL EST LENGTH OF SHORELINE SURVEYED: 150 m
 SURVEYED FROM: ☒ Foot ☐ Boat ☐ Helo WEATHER: ☐ Sun ☐ Clouds ☐ Fog ☒ Rain ☐ snow
 JIL CATEGORY LENGTH: W m M m N m VL 3 m NO 142 m US 5716 m

SURFACE OIL

SITE 1

CHARACTER	DISTRIBUTION				OILED ZONES			
	/C	/B	/P	/S	SU	UI	MI	LI
ASPHALT								
S.O.R.								
POOLED								
COVER								
COAT			I			X		
STAIN								
MOUSSE								
PATTIES T.B.								
FILM								
NO OIL					X		X	X
EST. SITE LENGTH					150 m			

SITE 2

[illegible]

SITE 3

[illegible]

BAT
24 Aug 90

SUBSURFACE OIL

[illegible]

Photographs

SOUP.

COMMENTS

- SITE CONSISTED OF A GRAVEL/PEBBLE/SAND/COBBLE BEACH WITH A 3x1m PIT CT ON THE CLIFFFACE. OIL WAS NOT RECOVERABLE.

ACE 7378997

SEGMENT AS / KN-211 SUBDIVISION: 226-10-16880 SITE: 1 DATE 8-19-90

SCGNAME Don R. O'Neil, USCGSIGNATURE [Signature]☐ YES☒ NO

PRIORITY SITE FOR REASSESSMENT IN 1991

REASON:

LIGHT PATCH OF STAIN NOTED ON VERTICAL ROCK CLIFF ON LEFT SIDE OF COVE
TOWARD ANADROMOUS STREAM. ONE PIT DUG 20cm @ CENTER OF BEACH (MIE)
NO OILING ISSUES. LOGS BEHIND STORM BERM APPEAR CLEAN. NO TREATMENT
REQUIRED. NO REASSESSMENT IN 1991 RECOMMENDED

ADECNAME Bob McReadySIGNATURE [Signature]☒ YES☐ NO

PRIORITY SITE FOR REASSESSMENT IN 1991

REASON:

No recoverable oil on this Anad. segment. Only oiling
is patchy coat on bedrock at South end / beach on bedrock.
No further treatment recommended in '90. Reassess in '91.

LAND MANAGER NOAA / USFSNAME Don O'NeilSIGNATURE [Signature]☐ YES☒ NO

PRIORITY SITE FOR REASSESSMENT IN 1991

REASON:

No signif. oil oiled; high energy conditions should be sufficient
over time to remove staining (slight).

EXXONNAME Al SnookSIGNATURE [Signature]☒ YES☐ NO

PRIORITY SITE FOR REASSESSMENT IN 1991

REASON:

Patchy coat on vertical bedrock on east side of Anad
stream, & oily film on a few logs jammed into stream mouth.
No other oil observed on shoreline. High energy beach faces
North. Reassess in 1991

PWS
3373

SITE 1

C D
← →

PWS
337E →

NO - ASC E

No 91 Dredge Can NOAA

YES - 400 -

YES - E - 11

XXX Wide

/// Medium

--- Narrow

TTTT Very Light

KN-211C

ADEC Segment Length: 6061m

ACE-7378999 -/S

Map Key: PWS-339d

Name: NIS/14/11/11

Date: 8/19/90

WORK PLAN MODIFICATION RECOMMENDATION

SEGMENT KN 211 SUBDIVISION E Site #1 DATE 8-3-90

MODIFICATION

1. REASON FOR MODIFICATION

SIGNIFIKANT AMOUNT OF SUBSURFACE OIL. NUMEROUS PITS REVEALED OR OIL THAT RELEASED COPIOUS AMOUNTS OF OIL. WATER FLOWING THROUGH TIDELANDS FROM LAKE IN UPLANDS PICKS UP OIL FROM SEDIMENTS WHICH APPEARS AS A SURFACE SHEEN. MAP IN SPRING SAT REPORT DEPICTED A 170x30 METER AREA PROPOSED FOR BIOREMEDIATION BUT ONLY A FEW PELLETS WERE DISCOVERED. DECISION TREE CALLS FOR TAG EVALUATION OF RECURRENT SHEEN. EVALUATION OF BIOREMEDIATION WAS NOT POSSIBLE BECAUSE IT DID NOT TAKE PLACE. SITE CONTAINS A CATALOGED ANTHROPIC STREAM THAT MAY BE RECEIVING OIL FROM THESE SEDIMENTS.

2. SUGGESTED ADJUSTMENT TO WORK PLAN

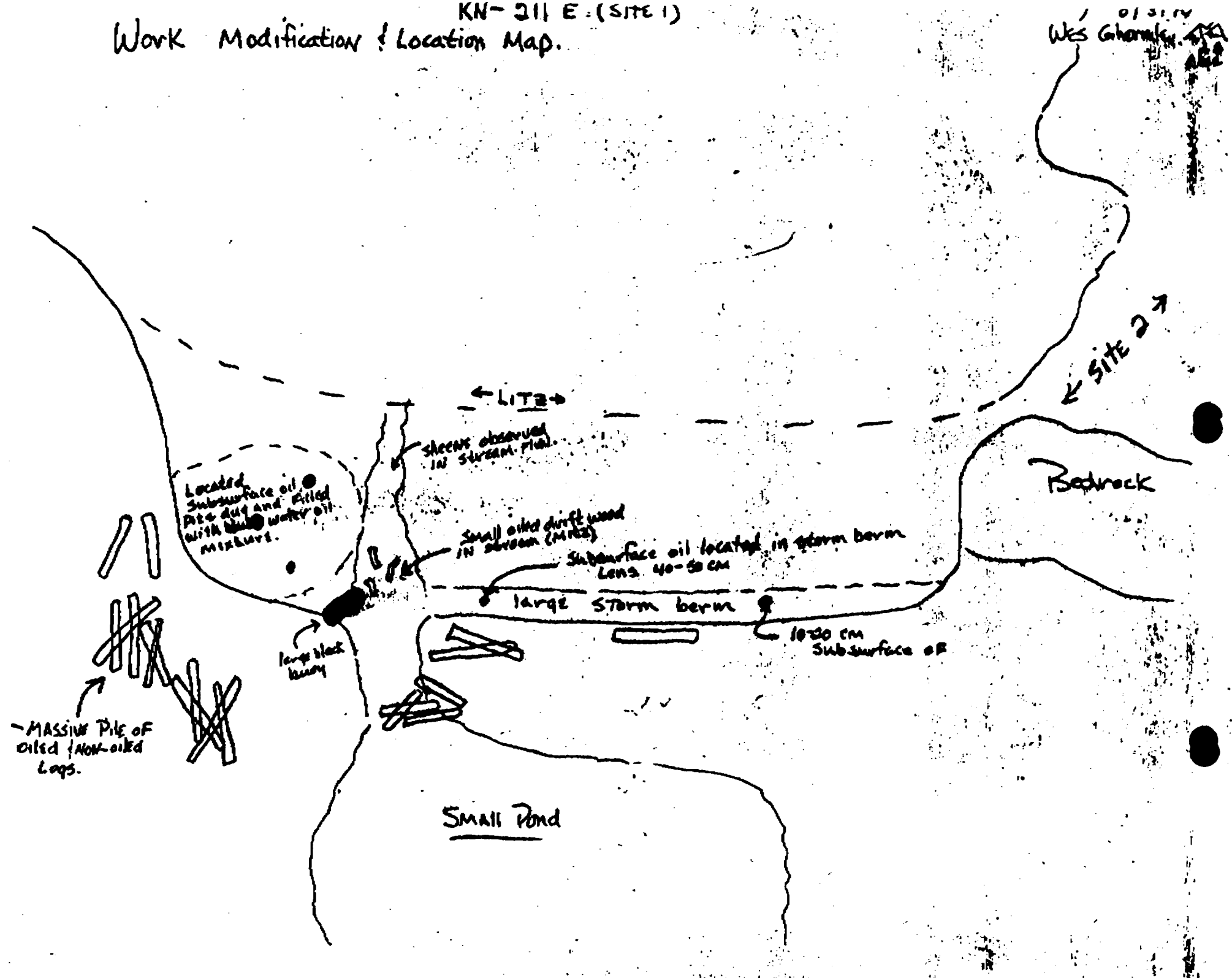
- a) TAG "ON-SCENE" EVALUATION, AS PER DECISION TREE. REDEFINE PROBLEM AREA.
- b) MECHANICALLY TILL AREA OF SUBSURFACE SEDIMENTS DOWN TO LOWER LIMIT OF OIL REMEDIATION.
- + c) HOT WATER FLOOD WITH ABSORBENT BOOM AND CONTAINMENT BOOM.
- d) TREAT WITH CUSTOMERLED.
- e) REASSESS IN 1991.
- * F) TAG should evaluate situation with oiled drift wood & oiled logs
- * WAS GROUND, ADD (40HR)

3. TIMING ISSUES

COORDINATE WITH RDF+G ON USE OF CUSTOMERLED IN STREAM AREA.

KN-211 E (SITE 1)
Work Modification & Location Map.

01/31/14
Wes Gharab, AK
AGE



3 DEMOBILIZATION REPORT
FOR PHYSICAL/MECHANICAL TREATMENT AND CUSTOMER

To: Alaska Department of Environmental Conservation
Oil Spill Response Center
Anchorage, Alaska
Attn: John Bauer
FAX 265-4666, 265-4656

RE: SEGMENT NUMBER KN-211 SUBSEGMENT NUMBER KN-211 326-10-16850
DEC REP Bob McLeod USCG REP Larry Raymond
EXXON REP Randy Beyer BOAT NAME/SQUAD NUMBER Bentley #6

Has work been completed as stated on the work order? If your answer is no please explain in detail how the work performed was different from the work order language.

Yes. Cites were removed from logbook. However, no tankers were found as indicated on sketch map/work order.

Is there additional oil remaining which can be removed with further physical/mechanical treatment? If yes what is the recommended treatment method.

No

Describe the amount of oil remaining (type, size of area and location).

Additional Comments (keep objective)

signature Robert B McLeod
Date and time of demobilization from segment 7/1/90
Shoremon\55 5-12-90

06/11/90

Demolition
KV-211 22610-11880

Rocky Shoreline

West Line

#1
Mud Lagoon

Gravel Beach,

#1 - Area where approx 10 pon pon
tires boom was tangled in
lagoon and removed

Rocky Shoreline

ACE 7379004 -15

ANALYSIS FISH STREAM EVALUATION

SEGMENT ST/ KN-211 STREAM NO: 226-10-16880 DATE 4/22/90

SEGMENT ENVIRONMENTAL SENSITIVITIES AND TIME CONSTRAINTS:

Subject stream and 226-10-16875

1A Salmon stream mouth - fry outmigration (3/1 to 5/15)

1B Salmon stream mouth - spawning (7/10 to 8/31)

5T-3 All bald eagle nests (3/1 to 6/1)-Active eagle nests (3/1 to 9/1)

6Y Recreation: Special use destination

See attached Ecological Constraint sheet for specific constraints and contacts.

SUBDIVISION ECOLOGICAL CONSTRAINTS:

Avoid any unnecessary disturbance or damage to unoiled biota and substrate. Subject stream is located in Subdivision C (3 of 6).

ARCHAEOLOGICAL CONSTRAINTS:

If cultural resources are uncovered during shoreline treatment, stop work in the vicinity, mark the location of the find and contact a member of Exxon's Cultural Resource Program immediately (564-3657; 564-3658 or 564-3276).

SHPO SIGNATURE: [Signature] DATE: 5/10/90

Subsurface Oil Observed: Yes No X Maximum Depth

RECOMMENDATIONS:

 No Treatment Recommended

X Treatment Recommended

X Manual Pickup

 Bioremediation

X Tarmat Removal

 Snare/Absorbent Booms

 Oil Snares (pom poms)

 Absorbents (pads, rolls, etc)

 Spot Washing: Wands

 Beach Cleaner

 Other (see comments)

COMMENTS: Recommended treatment includes 1) manual pickup of oiled pom poms in area indicated on sketch map, and 2) manual removal of tarballs in area indicated on sketch map. Work should be conducted between 6/1 and 7/10 with approval of USFWS regarding eagle nest constraint.

TAG COMMENTS:

TAG APPROVAL DATE: 5/10/90

ADEC Art Wagon [Signature]

EXXON Art Telle [Signature]

NOAA Burt Warratt [Signature]

USCG D.D. Rowe [Signature]

FOSC: [Signature] DATE: 5-15-90

PWS, SEWARD AND OTHER ECOLOGICAL CONSTRAINTS

- ✓ 1A Salmon stream mouth - fry outmigration (3/1 to 5/15)
✓ 1B Salmon stream mouth - spawning (7/10 to 8/31)
No disturbance of stream bed or banks unless authorized by ADF&G. No beach flushing into stream drainage. No bioremediation or other chemical application within 100m of stream without authorization from ADF&G. No use of methods which might affect nearshore oil or toxicity levels, such as hot water wash or Inipol application, prior to at least July 1 unless authorized by ADF&G. Treatment which is not intrusive and which will not affect nearshore oil or toxicity levels, such as manual removal, can probably proceed without adherence to time constraints. In any case, contact ADF&G Habitat Division prior to treatment for consultation and/or permit application.
AGENCY CONTACT PERSON: ADF&G John Morrison 267-2324
- 1C Salmon fry nursery area (4/31 to 7/31)
No use of methods which might affect nearshore oil or toxicity levels, such as hot water wash or Inipol application, prior to July 31 unless authorized by ADF&G. Treatment which will not affect nearshore oil or toxicity levels, such as manual or mechanical removal, can probably proceed without adherence to time constraints. Contact ADF&G prior to treatment for confirmation and advice.
AGENCY CONTACT PERSON: ADF&G Larry Peltz 424-3214
- 1D Esther Hatchery release (4/15 to 6/15)
1E Main Bay Hatchery release (4/20 to 6/15)
1F Sawmill Bay Hatchery release (4/15 to 6/1)
1G Cannery Creek Hatchery release (4/21 to 6/1)
1H Remote release site
No use of methods which might affect nearshore oil or toxicity levels, such as hot water wash or Inipol application, prior to at least July 1 unless authorized by ADF&G and/or PWS Aquaculture Association. Treatment which will not affect nearshore oil or toxicity levels, such as manual or mechanical removal, can probably proceed without adherence to time constraints. Contact ADF&G or PWS Aquaculture Association for confirmation and authorization.
AGENCY CONTACT PERSON: 1E ADF&G Larry Peltz 424-3214
1D 1F 1G PWS Aquaculture Association John McMillan or Bruce Suzumoto 424-7511
- 1I Gill net area (5/7 to 8/31)
1J Purse seine area (7/20 to 9/30)
1K Purse seine hook-off (7/20 to 9/30)
1L Set net sites (5/11 to 7/25)
Contact ADF&G for specific dates, locations and constraints. Restrict boat and air traffic to essential minimum. When set net sites are present (1L) restrict beach operations to essential minimum as authorized by ADF&G. If plans for treatment include methods such as hot water wash or Inipol application which might affect nearshore oil or toxicity levels, contact ADF&G for consultation and authorization.
AGENCY CONTACT PERSON: ADF&G James Brady 424-3212
- 2M Herring spawning (4/1 to 6/15)
Contact ADF&G for confirmation - dates and locations may vary. Restrict boat traffic to essential minimum. Avoid damage to unopened intertidal and subtidal algae and seagrass. If plans for treatment include methods such as hot water wash or Inipol application which might affect nearshore oil or toxicity levels, contact ADF&G for consultation and authorization.
AGENCY CONTACT PERSON: ADF&G Evelyn Biggs 424-3235
- 3N, 3P Harbor seal and sea lion pupping (5/15 to 7/1)
3O, 3Q Harbor seal and sea lion molting (5/15 to 9/15)
Restrict boat and air traffic to essential minimum. No personnel within 400m. Aircraft to maintain 800m horizontal and 300m vertical distance from haulouts. No application of Inipol within two weeks of arrival dates (work window at these sites is limited to 7/2 to 7/31). Contact ADF&G and USFWS prior to treatment for confirmation.
AGENCY CONTACT PERSON: US National Marine Fisheries Service Steve Zimmerman 586-7235
ADF&G Don Calkins 267-2403
- 5R Seabird colony (5/1 to 9/1)
Restrict air and boat traffic to essential minimum. No personnel within 800m. Aircraft to maintain 800m horizontal, 300m vertical distance from colony. Contact USFWS prior to treatment.
AGENCY CONTACT PERSON: USFWS Jill Parker 786-3377
- 5S Shorebird/waterfowl concentration (4/1 to 5/15)
Restrict all activity to essential minimum, especially air traffic. Contact USFWS and ADF&G for confirmation.
AGENCY CONTACT PERSON: USFWS Jill Parker 786-3377
ADF&G Tom Rothly 267-2206
- ✓ 5B All Bald Eagle nests (3/1 to 6/1)
Active Bald Eagle nests (3/1 to 9/1)
Restrict air traffic and all disturbance to essential minimum. No personnel within 400m 3/1 to 6/1. Air approach and takeoff from and to seaward only; maintain 800m horizontal, 300m vertical distance from nests. Contact USFWS prior to treatment for confirmation of dates.
AGENCY CONTACT PERSON: USFWS Jill Parker 786-3377
- 6U Recreation: Tent sites (5/1 to 9/15)
6V Anchorages (5/1 to 9/15)
6W Forest Service cabins (5/1 to 9/15)
✓ 6X Lodge (5/1 to 9/15)
6Y Special use destination
- 7Z Subsistence area: Salmon harvesting (5/1 to 9/30)
7-H Finfish harvesting
7I Deer harvesting (5/15 to 2/25)
7J Invertebrate harvesting
Contact ADF&G and appropriate Native Corporation for specific dates, locations, and constraints. Restrict boat and air traffic and beach disturbance to essential minimum. If plans for treatment include methods such as hot water wash or application of Inipol which might affect intertidal or nearshore oil or toxicity levels, contact ADF&G and appropriate Native Corporation for authorization - see Native Corporation Contact List for each Native Corporation's contact person.
AGENCY CONTACT PERSON: ADF&G Jim Fall 267-2369

ACE 7379006

35
/4

FIELD SHORELINE COMMENT SHEET

SEGMENT ST / KN-211 SUBDIVISION: ASCth 226-10-16880 DATE 22 APR 90

USCG

NAME Kerwin L. Draher SIGNATURE CWO M. L. Draher

☐ NO TREATMENT RECOMMENDED
COMMENTS

☒ TREATMENT SUGGESTED

Manual removal only.

~~ADEC~~ → ADFG

NAME Aimee Weseman SIGNATURE Aimee Weseman

☐ NO TREATMENT RECOMMENDED
COMMENTS

☒ TREATMENT SUGGESTED

Treat during window period.

Remove oiled debris from log jam over creek mouth

- string of oiled pom-poms, oiled rope

- oiled spruce needle clumps & other organic matter

Perform a quick survey of beach surface and upper intertidal storm berm & recover any oiled debris.

No bio remediation recommended

~~LAND MANAGER~~ → NAME

NAME _____ SIGNATURE _____

☐ NO TREATMENT RECOMMENDED
COMMENTS

☐ TREATMENT SUGGESTED

HORELINE OILING SUMMARY (UAD)

REVISION NO. 1

OG CAL LARSEN USCG DREHER, CWE SEGMENT ST/ KN211 12/6
 BIO REN CRITCHLOW LAND REP STREAM 26-10-16880 OF 1
 EXXON DARIN YOE ADFG 20 K. MARTIN - ALICE WESEMAN TIME 25 10 13:25
 TEAM NO. 75 TIDE LEVEL +2 FT DATE 4/22/90
 EST. SUBDIVISION LENGTH: 120 m ☒ Sun ☐ Clouds ☐ Fog ☐ Rain ☐ Snow
 UPLANDS DESCRIPTION: ☒ Grass ☐ Forest ☐ Rock
 SURVEYED FROM: 27 Foot ☐ Boat ☐ Helo
 SURFACE SEDIMENTS: R 5 % B 5 % C 5 % P 85 % G 5 % S 5 % M 5 % V 5
 SLOPE: Long 70 % Hang 30 % Vert 5 % WAVE EXPOSURE: ☐ Low ☐ Med ☒ High
 OIL CATEGORY LENGTH: W 45 m M 45 m N 45 m VL 45 m NO 75

SURFACE OIL

CHARACTER	DISTRIBUTION				OIL / FILM COLOR				IMPACTED ZONES			
	A	B	P	S	1	2	3	4	SW	W	SE	U
ASPHALT PAVEMENT												
POOLED												
COVER												
COAT	✓				✓				✓	✓		
STAIN												
MOUSSE												
PATTIES												
TARBALLS				✓	✓				✓	✓		
FILM												
NO OIL												✓

PAVEMENT H F S 1 sq. m by 1

PATTIES / TARBALLS 1 BA

NEAR SHORE SHEEN? ☒ NO BR RW SL

OILED DEBRIS	AMOUNT		
	SM	MD	LG
Logs			
Vegetation			
Trash	✓		
Debris			

Did You Coll DEBRIS

☐ YES ☒ NO

TYPE

#BAGS

Photographs:

Roll No. 1

Frames 1

SUBSURFACE OIL

PIT NO.	PIT DEPTH (cm)	SUBSURFACE OIL CHARACTER					OILED INTERVAL	BELOW		OIL / FILM COLOR				PIT ZONE				A N A	SHEEN (Y/N)	V	SURFACE SUBSURFA SEDIMENT
		OP	OR	OL	OF	NO		NO	DE	1	2	3	4	SW	W	SE	U				
1	125					✓	.							✓							SD/PB/SD
2	50					✓	.							✓							SD/PB
3	60					✓	.							✓							PB/PB/SD
4	45					✓	.							✓							PB/PB/SD
5	35					✓	.							✓							CB/PB/SD

COMMENTS VERY SPARADIL TAR/MOUSSE BALLS 5cm TO .5cm ALONG URTZ TO MTZ
BAND. LOTS ON ROCKS TO THE NORTH; OIL DRY TO TOUCH NON MOBL.

REVIEWED JW DATE 4-27-90

ACE 7379008

OG CALLARSON

SEGMENT ST/ KN 211

STR # 226-10-16800

DATE 4/22/90

CHECKLIST

- ☐ N Arrow
- ☐ Approx. Scale
- ☐ Seg/Sub Entry
- ☐ Oil Dist.
- ☐ Width
- ☐ Length
- ☐ % Cover
- ☐ Substrate Character
- ☐ Est. MWLA/VOL
- ☐ SSL
- ☐ Profile Location(s)
- ☐ Profile(s)
- ☐ PR Location(s)
- ☐ Photo Location(s)

LEGEND

- Δ
- PH - No Subsurface Oil
- Δ
- PH - Subsurface Oil
- CT/C

Continuous Distribution
- CT/B

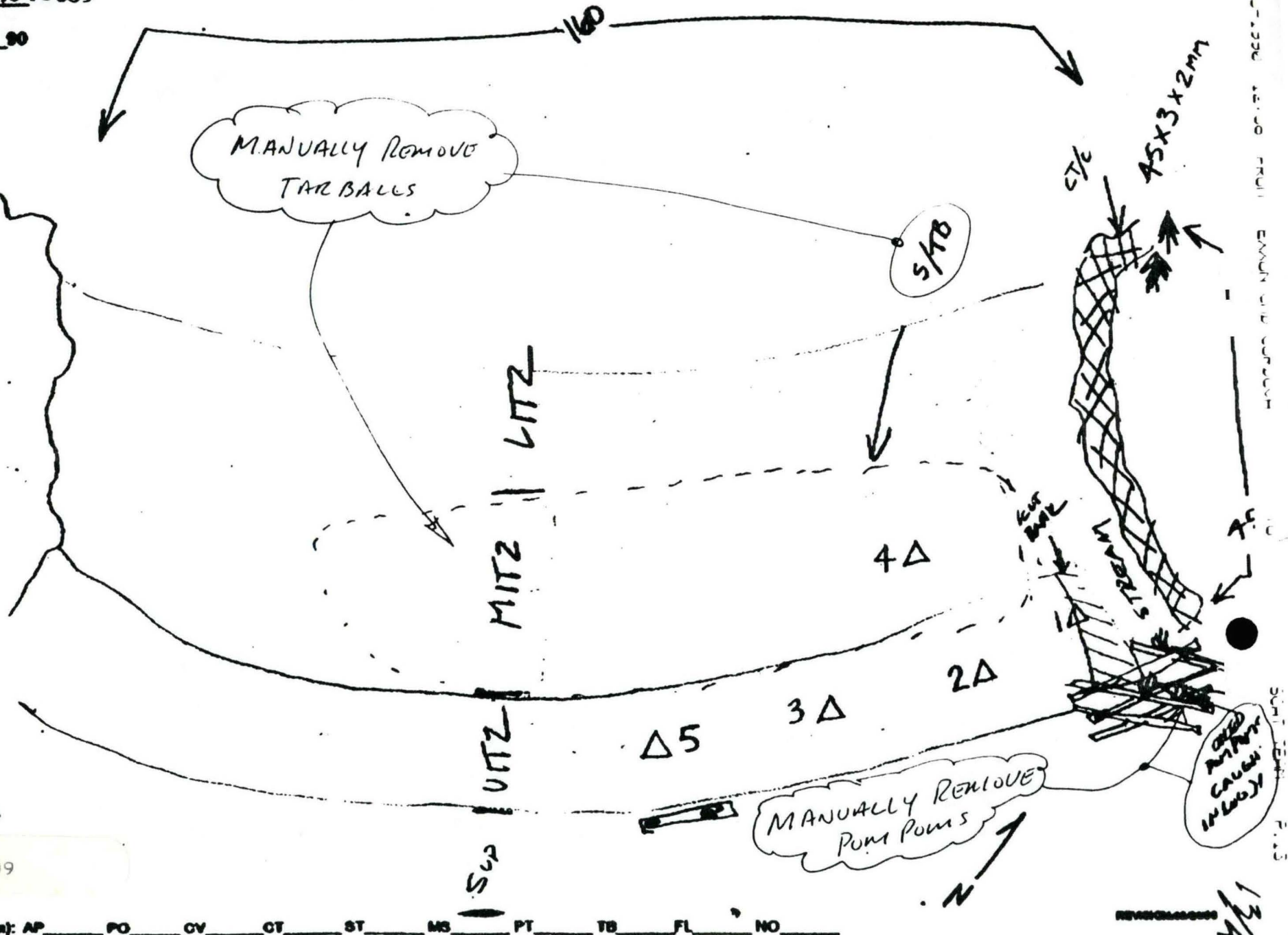
Broken Distribution
- CT/P

Pachy Distribution
- CT/S

Splashed Distribution
- eee
Oiled Vegetation
- $\rightarrow$
- Photo location, direction, and number

ACE 7379009

SKETCH MAP



Oil Character Length (m): AP PO CV CT ST MS PT TB FL NO

44
Recommendations

Perform work during proper tidal window.
Remove oiled debris from log jam over
creek mouth (Pompano string, rope etc oiled net)
Perform a quick survey of beach and upper inter-
tidal storm berm and pick up any oiled
debris.

No bio remediation recommended.

Comments by Ken Critchlow:
Agree with ADFG recommendations
KRC

ENCLOSURE 1 AT
(SHOOT 3000)

KN-211

South (20 ft)

← PWS
3340

200 meters

KN-211-E

↓ PWS 3398

↑ PWS
3345

KN-211-F

← PWS
3345

ANTHROPOMORPHIC
SITE
226 10 16075

Pt 1

1 = 1m

character length.

ACE 7379015 -/5

26

21

ANA MESS FISH STREAM EVALUAT.

SEGMENT ST/ KN-211 STREAM NO: 226-10-16880 DATE 4/22/90

SEGMENT ENVIRONMENTAL SENSITIVITIES AND TIME CONSTRAINTS:

Subject stream and 226-10-16875

1A Salmon stream mouth - fry outmigration (3/1 to 5/15)

1B Salmon stream mouth - spawning (7/10 to 8/31)

5T-3 All bald eagle nests (3/1 to 6/1)-Active eagle nests (3/1 to 9/1)

6Y Recreation: Special use destination

See attached Ecological Constraint sheet for specific constraints and contacts.

SUBDIVISION ECOLOGICAL CONSTRAINTS:

Avoid any unnecessary disturbance or damage to unoiled biota and substrate. Subject stream is located in Subdivision C (3 of 6).

ARCHAEOLOGICAL CONSTRAINTS:

If cultural resources are uncovered during shoreline treatment, stop work in the vicinity, mark the location of the find and contact a member of Exxon's Cultural Resource Program immediately (564-3657; 564-3658 or 564-3276).

SHPO SIGNATURE: *J. D. ...* DATE: 5/10/90

Subsurface Oil Observed: Yes No X Maximum Depth

RECOMMENDATIONS:

 No Treatment Recommended

X Treatment Recommended

X Manual Pickup

 Bioremediation

X Tarmat Removal

 Snare/Absorbent Booms

 Oil Snares (pom poms)

 Absorbents (pads, rolls, etc)

 Spot Washing: Wands

 Beach Cleaner

 Other (see comments)

COMMENTS: Recommended treatment includes 1) manual pickup of oiled pom poms in area indicated on sketch map, and 2) manual removal of tarballs in area indicated on sketch map. Work should be conducted between 6/1 and 7/10 with approval of USFWS regarding eagle nest constraint.

TAG COMMENTS:

TAG APPROVAL DATE: 5/10/90

ADEC *Art Weimer*

EXXON *Andy ...*

NOAA *Burt ...*

USCG *D.D. Rowe*

FOSC: *ML* DATE: 5-15-90

RECEIVED
MAY 07 1990

U.S. DEPT. OF
ENVIRONMENTAL CONSERVATION

ANADROMOUS FISH STREAM ASSESSMENT

REGION: PRINCE WILLIAM SOUND

SEGMENT: KN-211

STREAM NO: 226-10-16880

not mentioned - manual removal of oiled organics sitting on
top of log jam otherwise ok

ACE 7379017 +/S

SEGMENT ST/ KN-211 STREAM NO: 226-10-16880 DATE 4/22/90**SEGMENT ENVIRONMENTAL SENSITIVITIES AND TIME CONSTRAINTS:**

Subject stream and 226-10-16875

- 1A Salmon stream mouth - fry outmigration (3/1 to 5/15)
1B Salmon stream mouth - spawning (7/10 to 8/31)
5T-3 All bald eagle nests (3/1 to 6/1)-Active eagle nests (3/1 to 9/1)
6Y Recreation: Special use destination

See attached Ecological Constraint sheet for specific constraints and contacts.

SUBDIVISION ECOLOGICAL CONSTRAINTS:

Avoid any unnecessary disturbance or damage to uncoiled biota and substrate. Subject stream is located in Subdivision C (3 of 6).

ARCHAEOLOGICAL CONSTRAINTS:

If cultural resources are uncovered during shoreline treatment, stop work in the vicinity, mark the location of the find and contact a member of Exxon's Cultural Resource Program immediately (564-3657; 564-3658 or 564-3276).

SHPO SIGNATURE: _____ DATE: _____

Subsurface Oil Observed: Yes _____ No X Maximum Depth _____**RECOMMENDATIONS:**

- | | |
|---|--|
| ☐ No Treatment Recommended | ☐ Snare/Absorbent Booms |
| ☒ Treatment Recommended | ☐ Oil Snares (pom poms) |
| ☒ Manual Pickup | ☐ Absorbents (pads, rolls, etc) |
| ☐ Bioremediation | ☐ Spot Washing: _____ Wands |
| ☒ Tarmat Removal | ☐ Beach Cleaner |
| | ☐ Other (see comments) |

COMMENTS: Recommended treatment includes 1) manual pickup of oiled pom poms in area indicated on sketch map, and 2) manual removal of tarballs in area indicated on sketch map. Work should be conducted between 6/1 and 7/10 with approval of USFWS regarding eagle nest constraint.

TAG COMMENTS: _____

TAG APPROVAL DATE: _____

ADEC _____

EXXON _____

NOAA _____

USCG _____

FOSC: _____ DATE: _____

- 1A Salmon stream mouth - fry outmigration (3/1 to 6/15)
 1B Salmon stream mouth - spawning (7/10 to 8/31)
 No disturbance of stream bed or banks unless authorized by ADF&G. No beach flushing into stream drainage. No bioremediation or other chemical application within 100m of stream without authorization from ADF&G. No use of methods which might affect nearshore oil or toxicity levels, such as hot water wash or Inipol application, prior to at least July 1 unless authorized by ADF&G. Treatment which is not intrusive and which will not affect nearshore oil or toxicity levels, such as manual removal, can probably proceed without adherence to time constraints. In any case, contact ADF&G Habitat Division prior to treatment for consultation and/or permit application.
 AGENCY CONTACT PERSON: ADF&G John Morison 267-2324
- 1C Salmon fry nursery area (4/31 to 7/31)
 No use of methods which might affect nearshore oil or toxicity levels, such as hot water wash or Inipol application, prior to July 31 unless authorized by ADF&G. Treatment which will not affect nearshore oil or toxicity levels, such as manual or mechanical removal, can probably proceed without adherence to time constraints. Contact ADF&G prior to treatment for confirmation and advice.
 AGENCY CONTACT PERSON: ADF&G Larry Peltz 424-3214
- 1D Esther Hatchery release (4/15 to 6/15)
 1E Main Bay Hatchery release (4/20 to 6/15)
 1F Sawmill Bay Hatchery release (4/15 to 6/1)
 1G Cannery Creek Hatchery release (4/21 to 6/1)
 1H Remote release site
 No use of methods which might affect nearshore oil or toxicity levels, such as hot water wash or Inipol application, prior to at least July 1 unless authorized by ADF&G and/or PWS Aquaculture Association. Treatment which will not affect nearshore oil or toxicity levels, such as manual or mechanical removal, can probably proceed without adherence to time constraints. Contact ADF&G or PWS Aquaculture Association for confirmation and authorization.
 AGENCY CONTACT PERSON: 1E ADF&G Larry Peltz 424-3214
 1D 1F 1G PWS Aquaculture Association John McMillan or Bruce Suzumoto 424-7511
- 1I Gill net area (6/7 to 8/31)
 1J Purse seine area (7/20 to 9/30)
 1K Purse seine hook-off (7/20 to 9/30)
 1L Set net sites (6/11 to 7/25)
 Contact ADF&G for specific dates, locations and constraints. Restrict boat and air traffic to essential minimum. When set net sites are present (1L) restrict beach operations to essential minimum as authorized by ADF&G. If plans for treatment include methods such as hot water wash or Inipol application which might affect nearshore oil or toxicity levels, contact ADF&G for consultation and authorization.
 AGENCY CONTACT PERSON: ADF&G James Brady 424-3212
- 2M Herring spawning (4/1 to 6/15)
 Contact ADF&G for confirmation - dates and locations may vary. Restrict boat traffic to essential minimum. Avoid damage to uncoiled intertidal and subtidal algae and seagrass. If plans for treatment include methods such as hot water wash or Inipol application which might affect nearshore oil or toxicity levels, contact ADF&G for consultation and authorization.
 AGENCY CONTACT PERSON: ADF&G Evelyn Biggs 424-3235
- 3N, 3P Harbor seal and sea lion pupping (5/15 to 7/1)
 3O, 3Q Harbor seal and sea lion molting (8/15 to 9/15)
 Restrict boat and air traffic to essential minimum. No personnel within 400m. Aircraft to maintain 800m horizontal and 300m vertical distance from haulouts. No application of Inipol within two weeks of arrival dates (work window at these sites is limited to 7/2 to 7/31). Contact ADF&G and USFWS prior to treatment for confirmation.
 AGENCY CONTACT PERSON: US National Marine Fisheries Service Steve Zimmerman 586-7235
 ADF&G Don Calkins 267-2403
- 5R Seabird colony (5/1 to 9/1)
 Restrict air and boat traffic to essential minimum. No personnel within 800m. Aircraft to maintain 800m horizontal, 300m vertical distance from colony. Contact USFWS prior to treatment.
 AGENCY CONTACT PERSON: USFWS Jill Parker 786-3377
- 5S Shorebird/waterfowl concentration (4/1 to 5/15)
 Restrict all activity to essential minimum, especially air traffic. Contact USFWS and ADF&G for confirmation.
 AGENCY CONTACT PERSON: USFWS Jill Parker 786-3377
 ADF&G Tom Roth 267-2206
- 5T All Bald Eagle nests (3/1 to 6/1)
 Active Bald Eagle nests (3/1 to 9/1)
 Restrict air traffic and all disturbance to essential minimum. No personnel within 400m 3/1 to 6/1. Air approach and takeoff from and to seaward only; maintain 800m horizontal, 300m vertical distance from nests. Contact USFWS prior to treatment for confirmation of dates.
 AGENCY CONTACT PERSON: USFWS Jill Parker 786-3377
- 6U Recreation: Tent sites (6/1 to 9/15)
 6V Anchorages (6/1 to 9/15)
 6W Forest Service cabins (6/1 to 9/15)
 6X Lodge (6/1 to 9/15)
 6Y Special use destination
- 7Z Subsistence area: Salmon harvesting (5/1 to 9/30)
 7HH Finfish harvesting
 7I Deer harvesting (8/15 to 2/28)
 7JJ Invertebrate harvesting
 Contact ADF&G and appropriate Native Corporation for specific dates, locations, and constraints. Restrict boat and air traffic and beach disturbance to essential minimum. If plans for treatment include methods such as hot water wash or application of Inipol which might affect intertidal or nearshore oil or toxicity levels, contact ADF&G and appropriate Native Corporation for authorization - see Native Corporation Contact List for each Native Corporation's contact person.
 AGENCY CONTACT PERSON: ADF&G Jim Fall 267-2359

ACE 7379019

SHORELINE OILING SUMMARY (A) (AD)

REVISION NO. 04-12

OG GAL LARSON USCG DREHER, CWE SEGMENT ST/ KAL211 12/4
 BIO KEN CRITCHLOW LAND REP STREAM 126-10-16880 OF
 EXXON DARLHL YOE3 ADFG 22-K-AUSTIN-AIMEE WISEMAN TIME 15:25
 TEAM NO. 14 TIDE LEVEL +2 FT DATE 4/22/90
 EST. SUBDIVISION LENGTH: 120 m ☒ Sun ☐ Clouds ☐ Fog ☐ Rain ☐ Snow
 UPLANDS DESCRIPTION: ☒ Grass ☐ Forest ☒ Rock
 SURVEYED FROM: ☒ Foot ☐ Boat ☐ Helo
 SURFACE SEDIMENTS: R 5 % B 5 % C 5 % P 85 % G 5 % S 5 % M 5 % V 5
 SLOPE: Long 70 % Hang 90 % Vert 5 % WAVE EXPOSURE: ☐ Low ☐ Med ☒ High
 OIL CATEGORY LENGTH: W 45 m M 45 m N 45 m VL 45 m NO 75

SURFACE OIL

CHARACTER	DISTRIBUTION				OIL / FILM COLOR				IMPACTED ZONES			
	C	N	P	R	1	2	3	4	SW	W	SE	E
ASPHALT PAVEMENT												
POOLED												
COVER												
COAT	✓				✓				✓	✓		
STAIN												
MOUSSE												
PATTIES												
TARBALLS				✓	✓				✓	✓		
FILM												
NO OIL												✓

PAVEMENT H F S sq. m by

PATTIES / TARBALLS 1 BAG

NEAR SHORE SHEEN? ☒ BR RW SL TL

OILED DEBRIS	AMOUNT		
	SM	MD	LG
Logs			
Vegetation			
Trash	✓		
Debris			

Did you COLLECT DEBRIS
☐ YES ☐ NO

TYPE

#BAGS

Photographs:

Roll No.

Frames

SUBSURFACE OIL

PIT NO.	PIT DEPTH (cm)	SUBSURFACE OIL CHARACTER					OILED INTERVAL	BELOW		OIL / FILM COLOR				PIT ZONE				A N A	SHEEN (Y/N)	↓	SURFACE SUBSURFACE SEDIMENTS
		OP	OR	OL	OF	NO		VO	UC	1	2	3	4	SW	W	SE	E				
1	125					✓	.							✓							SD, PB/SD, PC
2	50					✓	.							✓							SD/ PB, SD
3	60					✓	.							✓							PB/ PB, SD
4	45					✓	.							✓							PB/ PB, SD
5	35					✓	.							✓							CBP/ CBP

COMMENTS VERY SPREADIL TAR/MOUSSE BALLS 5cm TO .5cm ALONG URTZ TO MITZ BAND. COAT ON ROCKS TO THE NORTH; OIL DRY TO TOUCH NON MUSH.

REVIEWED SW

DATE 4-27-90

35/
43

FIELD SHORELINE COMMENT SHEET

SEGMENT ST / KN-211 SUBDIVISION: ^{ASC#} 226-10-16880 DATE 22 APR 90

USCG

NAME Kerwin L. Droher SIGNATURE CWO K. L. Droher

☐ NO TREATMENT RECOMMENDED
COMMENTS

☒ TREATMENT SUGGESTED

Manual removal only.

~~ADEC~~ → ADFCG

NAME Aimee Weseman SIGNATURE Aimee Weseman

☐ NO TREATMENT RECOMMENDED
COMMENTS

☒ TREATMENT SUGGESTED

Treat during window period.

Remove oiled debris from log jam over creek mouth

- string of oiled pom-poms, oiled rope

- oiled spruce needle clumps & other organic matter

Perform a quick survey of beach surface and upper intertidal storm berm & recover any oiled debris.

No bio remediation recommended

~~LAND MANAGER~~ → NAME

NAME _____ SIGNATURE _____

☐ NO TREATMENT RECOMMENDED
COMMENTS

☐ TREATMENT SUGGESTED

DATE 4 / 22 90

SKETCH MAP

CHECKLIST

- ☐ H Area
- ☐ Approx. Scale
- ☐ Seg/Sub Entry
- ☐ OS Dist.
- ☐ Width
- ☐ Length
- ☐ % Cover
- ☐ Substrate Character
- ☐ Est. HML/LVL
- ☐ SSL
- ☐ Profile Location(s)
- ☐ Profile(s)
- ☐ PR Location(s)
- ☐ Photo Location(s)

LEGEND

1 ▲
PH - No Subsurface Oil

2 ▲
Pt - Subsurface Oil

CT/C
Concentrated Distribution

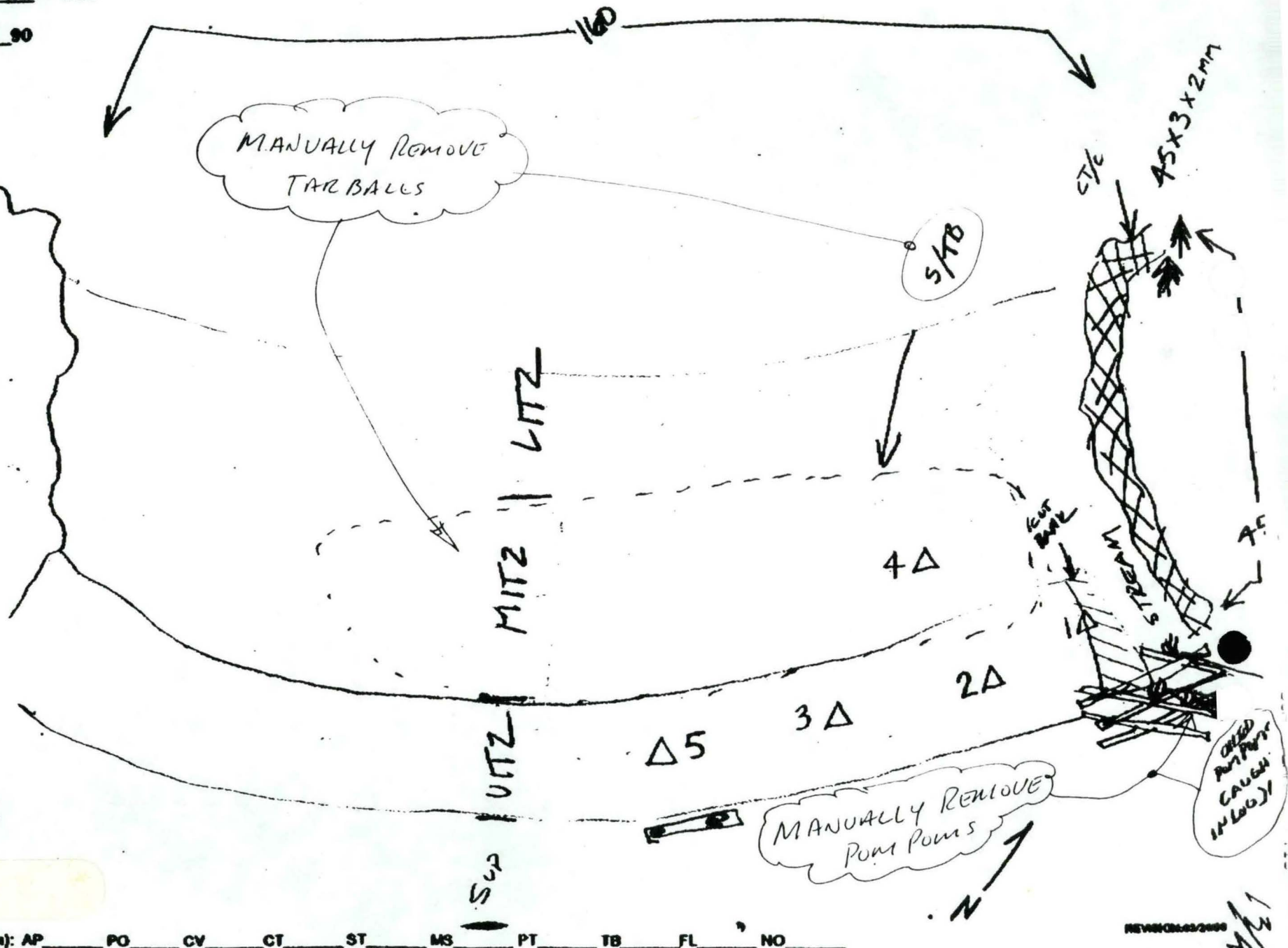
CT/B
Broken Distribution

CT/P
Patchy Distribution

CT/S
Spotted Distribution

eee
Oiled Vegetation

1 ➡
Photo location, direction,
and number



ACE 7379022

Oil Character Length (m): AP PO CV CT ST MS PT TB FL NO

REVISED 04-02-2009

G. MACDONALD

4/2/90

Date
Entered: _____

ECOLOGICAL DATA

Sheet 1 of 3

1A, 1B
ST (3)
64

BALD EAGLE NEST
SUBDIV. A

SUBDIV. B.

↓ PWS
3340

SUBDIVISION C.

ANADROMOUS SILVER

226 10-1088C

(15, 11, 12, 13)

KN-211 C (306)

PWS
3340

KN-211

(north) 142

TEAM 4
SURVEY

← PWS
3340

SUBDIV. BOUNDARY

oil category boundary.

Recommendations

Perform work during proper tidal window.

Remove oiled debris from log jam over creek mouth (Dumpon string, rope etc oiled nettle)

Perform a quick survey of beach and upper inter-tidal storm berm and pick up any oiled debris.

No bio remediation recommended.

Comments by Ken Critchlow:

Agree with ADFG recommendations

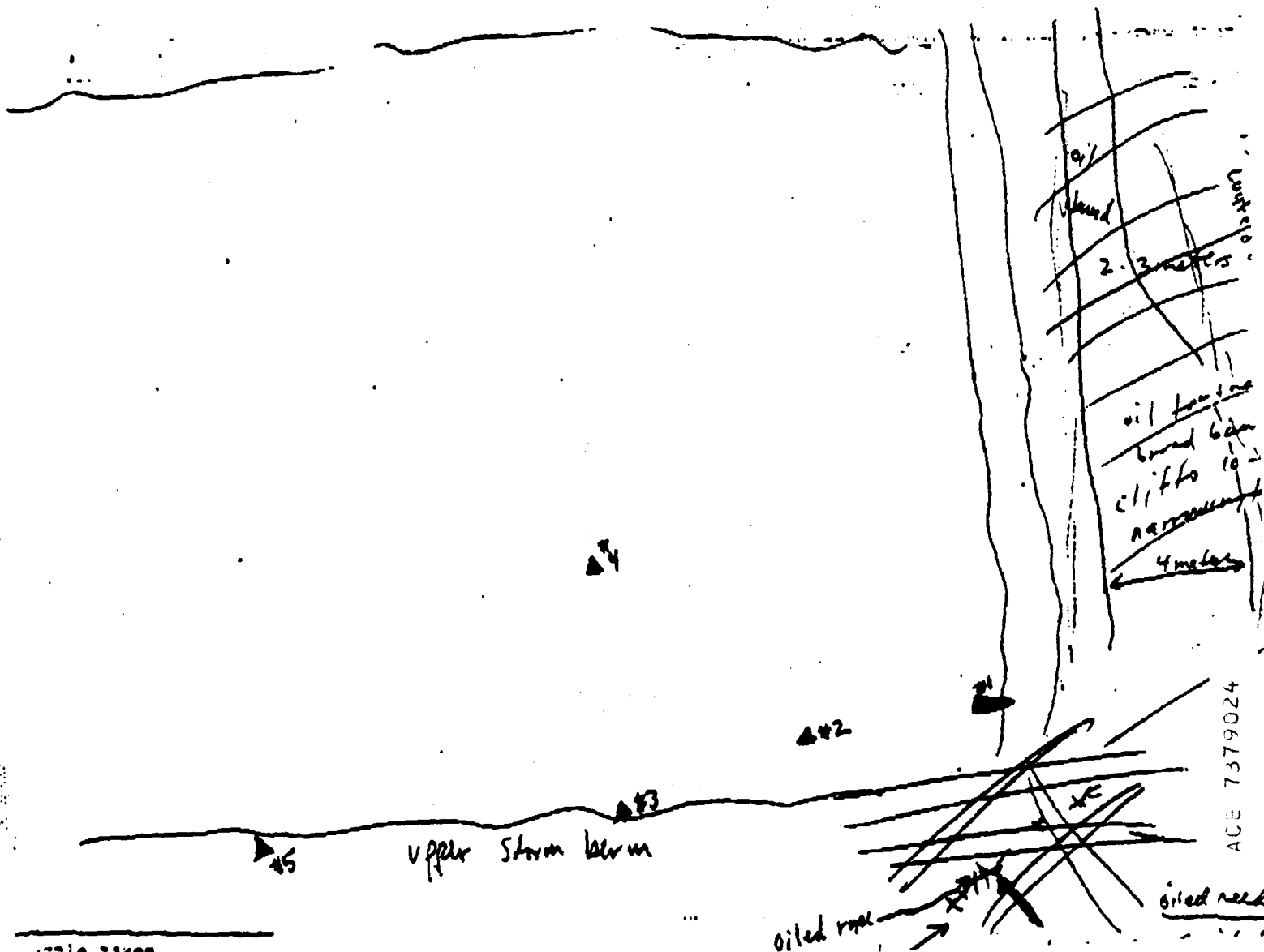
KRC

48 PHOTOLOG

FRAME(S)	DESCRIPTION
125 cm	pit #1 No oil visible
150 cm	pit #2 No oil visible
160 cm	pit #3 No oil
185 cm	pit #4 Small amount of highly viscous soft brown/black oil
350 cm	pit #5 oil coated rocks found in pit no oil band visible - assorted randomly oiled rocks

48 OIL DISTRIBUTION DIAGRAM

on top of log jam - clumps oiled spruce needles
oiled rope - with string of pom pom.



32/43

ADP&G MULTI-ASSESSMENT DATA FORM

1 SURVEY TYPE: BS SS DS TS AVS SCM HNS PTA 2 REGION: PW KP, CI K, AP
 METHOD: Aerial Ground Boat
 3 DATE: 4-27-90 15 HIGH TIDE TIMES: 1 21 TEAM RECORDER: R. Gustin
 4 START TIME: 1425 16 HIGH TIDE HTS: 1 22 OBSERVERS: A. W. Seaman
 5 STOP TIME: 1535 17 LOW TIDE TIMES: 1 23 AGENCY: ADP&G
 6 SEGMENT #: KN211 18 LOW TIDE HTS: 1 24 PHOTOS TAKEN: Y (N)
 7 STATION #: _____ 19 TIDE HT AT SURVEY: _____ Roll #: _____ Frame: _____
 8 K-UNIT: _____ Ebb Slack Flood Slack 25 VIDEO TAKEN: (Y) N TAPES: 90AJW-01
 9 STAT AREA: _____ 20 USCG QUAD: _____ Start: 0129 End: 0235
 10 LAT: _____ 11 LONG: _____ 26 SAMPLES TAKEN: Y (N) Number
 12 SOURCE: Log Loran Oil
 13 LOCATION: Abaco Bay Isles Sediment
 14 DESCRIPTION: Knight Island Biological
 Water

EXTENT OF OIL

	SHORELINE				STREAM			
	L	V	H	S	L	V	H	S
27 SURFACE COVERAGE								
28 SURFACE THICKNESS	1-2mm							
29 PENETRATION	1-2mm							
30 OVERALL OIL IMPACT:	N	VL	L	<u>(H)</u>	N			
31 OIL TYPE:	Pooled	Mousse	<u>Tar</u>	Asphalt	Slack	Stain		
32 OILED DEBRIS?	<u>(Y)</u>	N	pump/rope					
33 SHORELINE TYPE:	Headland	Low-lying Rocks	Beach	<u>Cove</u>				
		Lagoon	Marsh					
34 WAVE EXPOSURE:	<u>High</u>	Moderate	Low					
35 SUBSTRATE TYPE:	Bedrock <u>25%</u>	Boulder	Cobble					
	Gravel <u>35%</u>	Sand	Mud/silt					
36 CATALOGED ANAD. FISH STREAM?	<u>(Y)</u>	N						
37 CATALOG #:	<u>226-10-16800</u>							
38 STREAM NAME:								
39 OIL IN STREAM BED?	Y	<u>(N)</u>						
40 OIL ON STREAM BANKS?	<u>(Y)</u>	N						
41 OIL ON BEACH ADJACENT TO MOUTH? (within 30 meters)	<u>(Y)</u>	N						
42 OIL WITHIN 1 MILE OF STREAM?	<u>(Y)</u>	N						
Where:								
43 ANADROMOUS FISH PRESENT?	Y	N						
44 ANADROMOUS FISH OBSERVATION								
Species	Aerial	Ground						

COMMENTS: in top part of creek - ~~the~~ oiled pump/pump caught in logs
 pits dug in UITE showed no oil observed. Apparent UITE was worked over.
 oil on east cliff face weathered/shed
 No oil noticed on logs in jam | small amount of oil scattered over surface
 of beach. Some buried oil. UITE (1.46) All. ...

ACE 7379023

GEOLOGICAL SURVEY

$$147^{\circ}45'$$

$$60^{\circ}30' + \text{---}$$

460000 m. E.

40

706000 m. N.

HERRING

22c-10

BAY

Louis Bay

Passage

Foul Pass

25 Index

36

Cabins ••

BM (Tidal) X⁺

5.

46880

16875

0010

18

0010

Otter Lake

!Ssr

88

25

ACE 7379027

KN-211

South (20 ft)

Handwritten notes in top right corner.

← PWS 3340

KN-211-E

200 meters

↓ PWS 3398

↑ PWS 3345

KN-211-F

← PWS 3343

Handwritten notes: 226-10 168-75

Pt 1

1/100

36

Character Length.

ACE 7379028
-15/58

21

AP O PO O CV O CT O ST L MS O PTO TO O FI O NO

*Princess
425
RT*

RECEIVED
APR 23 1990

DEPT. OF
ENVIRONMENTAL CONSERVATION

REGION: PRINCE WILLIAM SOUND

SEGMENT: ST/KN-211

SUBDIVISIONS: B (2 OF 6)

*Have flag team inspect
picking and taking
2 bio samples each
HAI with mesh
bure sifted debris
no useless
value*

*snarls
evaluate need
for log removal*

SHC LINE EVALUATION

SEGMENT ST/ KN-211 SUBDIVISION B (2 OF 6) DATE 4/2/90

SEGMENT ENVIRONMENTAL SENSITIVITIES AND TIME CONSTRAINTS:

1A Salmon stream mouth - fry outmigration (3/1 to 5/15)
1B Salmon stream mouth - spawning (7/10 to 8/31)
5T-3 All bald eagle nests (3/1 to 6/1)-Active eagle nests (3/1 to 9/1)
6Y Recreation: Special use destination
See attached Ecological Constraint sheet for specific constraints and contacts.

SUBDIVISION ECOLOGICAL CONSTRAINTS:

Avoid any unnecessary disturbance or damage to unoiled biota and substrate.

ARCHAEOLOGICAL CONSTRAINTS:

If cultural resources are uncovered during shoreline treatment, stop work in the vicinity, mark the location of the find and contact a member of Exxon's Cultural Resource Program immediately (564-3657; 564-3658 or 564-3276).

SHPO SIGNATURE: _____ DATE: _____

OILING CATEGORIZATION:

Wide _____ m: Medium _____ m: Narrow _____ m: V.Light _____ m: No Oil _____ m
Subsurface Oil Observed: Yes X No _____ Maximum Depth 35+ cm

RECOMMENDATIONS:

☐ No Treatment Recommended	☐ Snare/Absorbent Booms
☒ Treatment Recommended	☐ Oil Snares (pom poms)
☒ Manual Pickup	☐ Absorbents (pads, rolls, etc)
☒ Bioremediation	☐ Spot Washing: _____ Wands
☐ Tarmat: _____ Removal	☐ Beach Cleaner
	☐ Other (see comments)

COMMENTS: Recommended treatment includes 1) manual removal of oiled debris, 2) bioremediation of areas shown on attached sketch map. Work should be conducted between 6/1 and 7/10 based on eagle nest and salmon constraints, after approval of USFWS and ADP&S regarding eagle nests. ✓

TAG COMMENTS: _____

TAG APPROVAL DATE: _____

ADEC _____
EXXON _____
NOAA _____
USCG _____

FOSC: _____ DATE: _____



Salmon stream mouth - fry outmigration (3/1 to 5/15)

Salmon stream mouth - spawning (7/10 to 8/31)

No disturbance of stream bed or banks unless authorized by ADF&G. No beach flushing into stream drainage. No bioremediation or other chemical application within 100m of stream. Contact ADF&G Habitat Division prior to treatment for permits.

1C Salmon fry nursery area (4/31 to 7/31)

1D Esther Hatchery release (4/15 to 6/1)

1E Main Bay Hatchery release (4/20 to 5/10)

1F Sawmill Bay Hatchery release (4/15 to 6/1)

1G Cannery Creek Hatchery release (4/21 to 6/1)

1H Remote release site

1I Gill net area (6/7 to 8/31)

1J Purse seine area (7/20 to 9/30)

1K Purse seine hook-off (7/20 to 9/30)

1L Set net sites (6/11 to 7/25)

For Codes 1C through 1L contact ADF&G for specific dates, locations and constraints.

2M Herring spawning (4/1 to 6/15)

Restrict boat traffic to essential minimum. Avoid damage to unopened intertidal and subtidal algae and seagrass. Contact ADF&G for specific dates and locations.

3N, 3P Harbor seal and sea lion pupping (5/15 to 7/1)

3O, 3Q Harbor seal and sea lion molting (8/15 to 9/15)

Restrict boat and air traffic to essential minimum. No personnel within 400m. Aircraft to maintain 800m horizontal and 300m vertical distance from haulouts.

5R Seabird colony (5/1 to 9/1)

Restrict air traffic to essential minimum. No personnel within 800m. Aircraft to maintain 800m horizontal, 300m vertical distance. Contact ADF&G and USFWS prior to treatment.

5S Shorebird/waterfowl concentration (4/1 to 5/15)

Restrict all activity to essential minimum, especially air traffic.



All Bald Eagle nests (3/1 to 6/1)

Active Bald Eagle nests (3/1 to 9/1)

Restrict air traffic to essential minimum. No personnel within 400m 3/1 to 6/1. Air approach and takeoff from and to seaward only; maintain 800m horizontal, 300m vertical distance from nests. Contact USFWS prior to treatment for confirmation of dates.

6U Recreation: Tent sites (6/1 to 9/15)

6V Anchorages (6/1 to 9/15)

6W Forest Service cabins (6/1 to 9/15)

6X Lodge (6/1 to 9/15)



Special use destination

7Z Subsistence area: Salmon harvesting (5/1 to 9/30)

7HH Finfish harvesting

7H Deer harvesting (8/15 to 2/28)

7JJ Invertebrate harvesting

For Codes 7Z through 7JJ contact ADF&G and Chenega Corporation for specific dates, locations, and constraints.

.

FIELD SHOPLINE COMMENT SHEET

SEGMENT ST/ KN-211 SUBDIVISION: B DATE 4/2/90

USCG

NAME SCOTT RAINSFORD SIGNATURE Scott Rainford MST1

☐ NO TREATMENT RECOMMENDED

☒ TREATMENT SUGGESTED

COMMENTS

ADEC

NAME Wesley Ghormley SIGNATURE Wesley Ghormley

☐ NO TREATMENT RECOMMENDED

☒ TREATMENT SUGGESTED

COMMENTS

Heavily impacted beach with significant subsurface oil. The subsurface oil is located thru-out beach, Located by digging numerous pits over the entire beach. THE oil is between 5 & 30cm in depth & seems to be quite heavy in places. IF this oil is to be removed some type of mechanical operation needs to be deployed. Surface mussel patches & numerous tar balls need to be removed manually. This beach also acquires quite the collection of debris. There is quite a bit of oiled debris that needs to be removed. I highly recommend a team from Anchorage visit this site for further review if need be. It is quite a unique beach in terms of different types of oil makeup and a decision might be easier to make once the subsurface oil is studied more.

LAND MANAGER

NAME LORA JOHNSON (CAC) SIGNATURE Lora Johnson

☐ NO TREATMENT RECOMMENDED

☐ TREATMENT SUGGESTED

COMMENTS

THIS IS USFS LAND. RESURVEY OF UPLANDS RECOMMENDED DUE TO SNOW COVER.

SHORELINE ECOLOGICAL SUMMARY

REVISION: 02/28/90

Segment ST / 2-11 Subdivision _____ Date (mo / d / yr) 4/2/90

Time (24 hr) 11:10-1320 Biologist MA SCOTT

(A) Substrate type and % of segments:
(1) Bedrock 15 (2) Boulder 10 (3) Cobble 35 (4) Pebble 45 (5) Sand 5 (6) Silt —

(B) Overall % cover of biota (% of segment): Dense _____ Moderate _____ Low 1

(C) Density, substrate preference (by number from A, above), & vertical zonation of major taxa: (upper-U; mid-M; low tidal-L); juveniles / adults (X), new settlement (3)

Photographs:
Roll No. ST-3-2

Frames 3-10

BARNACLES

Dense			Moderate			Sparse			Rare		
1U	1M	1L	1U	1M	1L	1U	1M	1L	1U	1M	1L
2	2	2	2	2	2	2	2	2	2	2	2
3	3	3	3	3	3	3	3	3	3	3	3
4	4	4	4	4	4	4	4	4	4	4	4
5	5	5	5	5	5	5	5	5	5	5	5
6	6	6	6	6	6	6	6	6	6	6	6

NOT PRESENT

MYTILUS

Dense			Moderate			Sparse			Rare		
1U	1M	1L	1U	1M	1L	1U	1M	1L	1U	1M	1L
2	2	2	2	2	2	2	2	2	2	2	2
3	3	3	3	3	3	3	3	3	3	3	3
4	4	4	4	4	4	4	4	4	4	4	4
5	5	5	5	5	5	5	5	5	5	5	5
6	6	6	6	6	6	6	6	6	6	6	6

NOT PRESENT

GASTROPODS

Dense			Moderate			Sparse			Rare		
1U	1M	1L	1U	1M	1L	1U	1M	1L	1U	1M	1L
2	2	2	2	2	2	2	2	2	2	2	2
3	3	3	3	3	3	3	3	3	3	3	3
4	4	4	4	4	4	4	4	4	4	4	4
5	5	5	5	5	5	5	5	5	5	5	5
6	6	6	6	6	6	6	6	6	6	6	6

NOT PRESENT

FUCUS

Dense			Moderate			Sparse			Rare		
1U	1M	1L	1U	1M	1L	1U	1M	1L	1U	1M	1L
2	2	2	2	2	2	2	2	2	2	2	2
3	3	3	3	3	3	3	3	3	3	3	3
4	4	4	4	4	4	4	4	4	4	4	4
5	5	5	5	5	5	5	5	5	5	5	5
6	6	6	6	6	6	6	6	6	6	6	6

NOT PRESENT

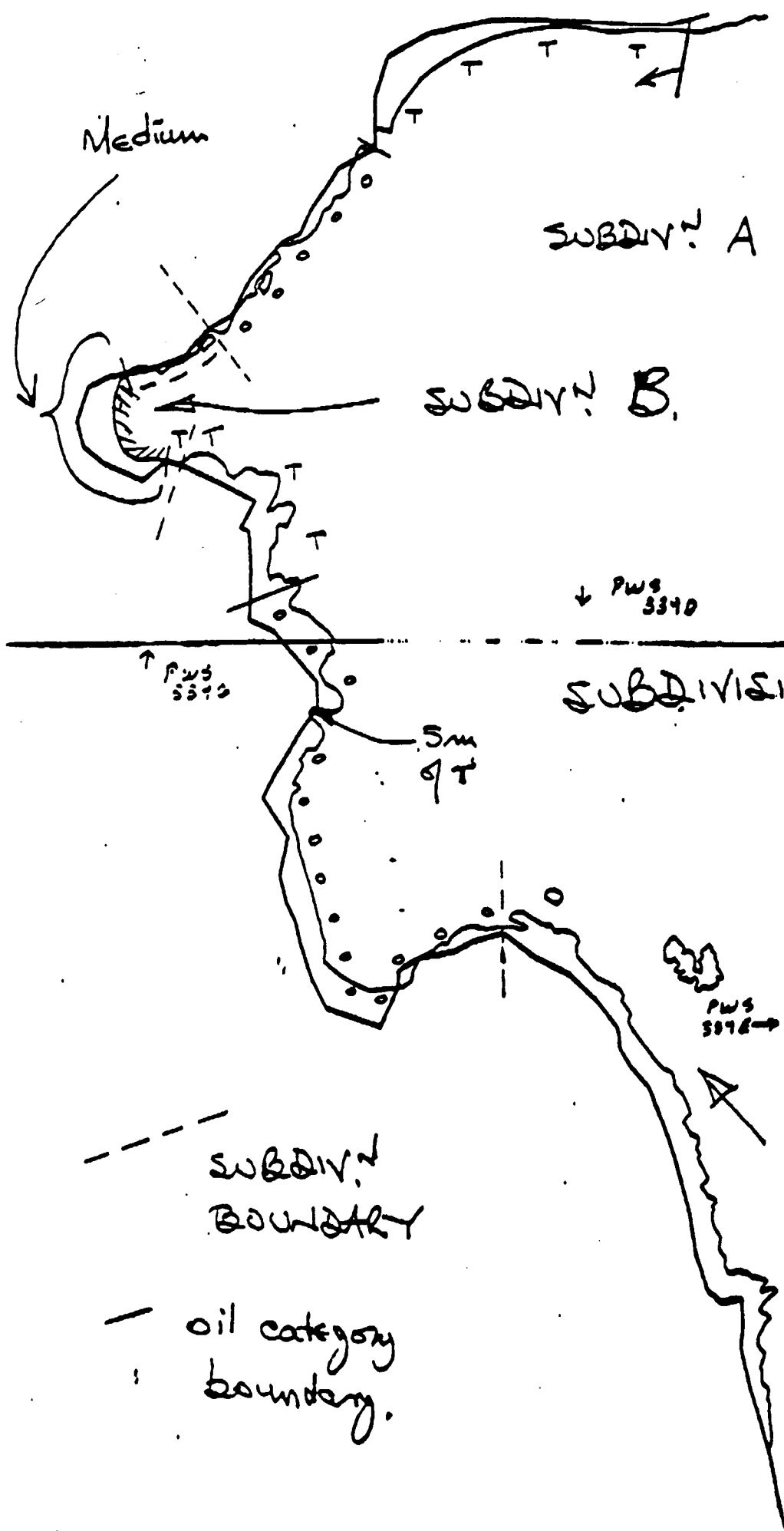
Wildlife Observations/ General Comments:

HTB barnacles - oiled covered in HTB (mostly)
cobble &
1 water ouzel

Ecological Considerations:

G. MACDONALD
4/2/90

Data
Entered: _____



KN-211
(north) 142

TEAM 4
SURVEY
← PWS 3340

Eagle Nest

G. MACDONALD

4/2/90

Date _____
Entered: _____

ECOLOGY
MAP

Medium

SUBDIV. A

SUBDIV. B.

↓ PWS 3340

SUBDIVISION C.

↑ PWS 3340

5m
9T

PWS 3340 →

KN-211

(North) 192

TEAM 4
SURVEY

← PWS 3340

SUBDIVISION E

ANADROMOUS STREAM
226-10-16880

ACE 7379038

ANADROMOUS STREAM
226-10-16880

SUBDIV. BOUNDARY

oil category boundary.

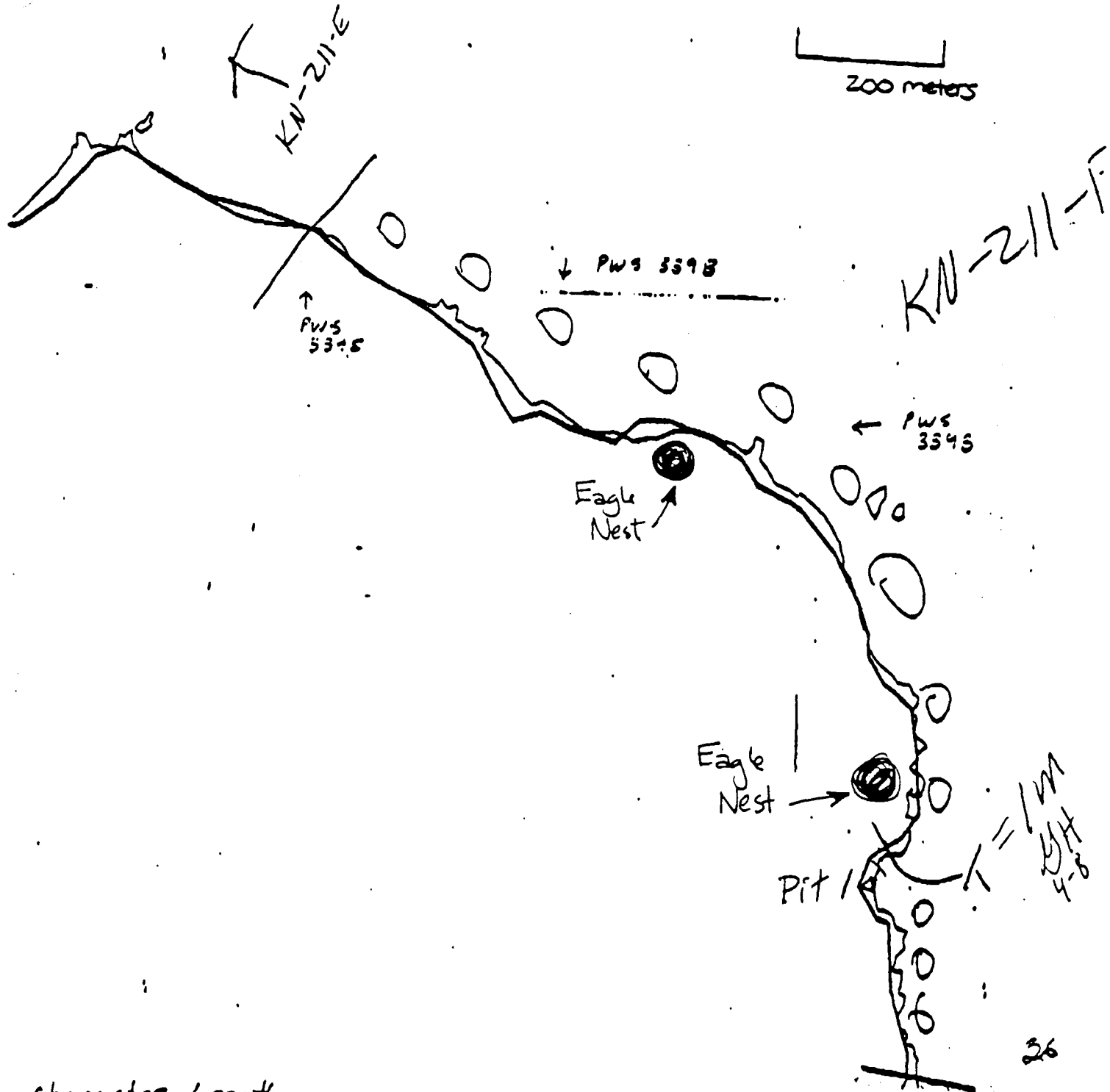
SUBDIVISION D

KN-211

South (2082)

ECOLOGY
MAP

← PWS
3340



Oil character Length.

AP 0 PO 0 CV 0 CT 0 ST 1 45 0 PT 0 TB 0 FI 0 NO 1

ACE 7379039 -/5

*Processed
9/25
RH*

RECEIVED
APR 23 1990

DEPT. OF
ENVIRONMENTAL CONSERVATION

REGION: PRINCE WILLIAM SOUND

SEGMENT: ST/KN-211

SUBDIVISIONS: A (1 OF 6)

Can't be paid.

ACE 7379040 +/S

SH LINE EVALUATION

SEGMENT ST/ KN-211 SUBDIVISION A (1 OF 6) DATE 4/2/90

SEGMENT ENVIRONMENTAL SENSITIVITIES AND TIME CONSTRAINTS:

1A Salmon stream mouth - fry outmigration (3/1 to 5/15)
1B Salmon stream mouth - spawning (7/10 to 8/31)
5T-3 All bald eagle nests (3/1 to 6/1)-Active eagle nests (3/1 to 9/1)
6Y Recreation: Special use destination

See attached Ecological Constraint sheet for specific constraints and contacts.

SUBDIVISION ECOLOGICAL CONSTRAINTS:

Avoid any unnecessary disturbance or damage to uncoiled biota and substrate. One bald eagle nest in Subdivision A.

ARCHAEOLOGICAL CONSTRAINTS:

If treatment is planned, a cultural resource evaluation is required prior to shoreline treatment.

SHPO SIGNATURE: _____ DATE: _____

OILING CATEGORIZATION:

Wide 0 m: Medium 0 m: Narrow 0 m: V.Light 549 m: No Oil 348 m
Subsurface Oil Observed: Yes _____ No X Maximum Depth _____

RECOMMENDATIONS:

<u>X</u> No Treatment Recommended	_____ Snare/Absorbent Booms
_____ Treatment Recommended	_____ Oil Snares (pom poms)
_____ Manual Pickup	_____ Absorbents (pads, rolls, etc)
_____ Bioremediation	_____ Spot Washing: _____ Wands
_____ Tarmat: _____ Removal	_____ Beach Cleaner
	_____ Other (see comments)

COMMENTS: _____

TAG COMMENTS: _____

TAG APPROVAL DATE: _____

ADEC _____
EXXON _____
NOAA _____
USCG _____

FOSC: _____ DATE: _____

PWS, SEWARD AND CHENEGA CORPORATION ECOLOGICAL CONSTRAINTS

	Salmon stream mouth - fry outmigration (3/1 to 5/15)
	Salmon stream mouth - spawning (7/10 to 8/31)
	No disturbance of stream bed or banks unless authorized by ADF&G. No beach flushing into stream drainage. No bioremediation or other chemical application within 100m of stream. Contact ADF&G Habitat Division prior to treatment for permits.
1C	Salmon fry nursery area (4/31 to 7/31)
1D	Esther Hatchery release (4/15 to 6/1)
1E	Main Bay Hatchery release (4/20 to 5/10)
1F	Sawmill Bay Hatchery release (4/15 to 6/1)
1G	Cannery Creek Hatchery release (4/21 to 6/1)
1H	Remote release site
1I	Gill net area (6/7 to 8/31)
1J	Purse seine area (7/20 to 9/30)
1K	Purse seine hook-off (7/20 to 9/30)
1L	Set net sites (6/11 to 7/25)
	For Codes 1C through 1L contact ADF&G for specific dates, locations and constraints.
2M	Herring spawning (4/1 to 6/15)
	Restrict boat traffic to essential minimum. Avoid damage to unholed intertidal and subtidal algae and seagrass. Contact ADF&G for specific dates and locations.
3N, 3P 3O, 3Q	Harbor seal and sea lion pupping (5/15 to 7/1)
	Harbor seal and sea lion molting (8/15 to 9/15)
	Restrict boat and air traffic to essential minimum. No personnel within 400m. Aircraft to maintain 800m horizontal and 300m vertical distance from haulouts.
5R	Seabird colony (5/1 to 9/1)
	Restrict air traffic to essential minimum. No personnel within 800m. Aircraft to maintain 800m horizontal, 300m vertical distance. Contact ADF&G and USFWS prior to treatment.
5S	Shorebird/waterfowl concentration (4/1 to 5/15)
	Restrict all activity to essential minimum, especially air traffic.
	All Bald Eagle nests (3/1 to 6/1)
	Active Bald Eagle nests (3/1 to 9/1)
	Restrict air traffic to essential minimum. No personnel within 400m 3/1 to 6/1. Air approach and takeoff from and to seaward only; maintain 800m horizontal, 300m vertical distance from nests. Contact USFWS prior to treatment for confirmation of dates.
6U	Recreation: Tent sites (6/1 to 9/15)
6V	Anchorage (6/1 to 9/15)
6W	Forest Service cabins (6/1 to 9/15)
6X	Lodge (6/1 to 9/15)
	Special use destination
7Z	Subsistence area: Salmon harvesting (5/1 to 9/30)
7HH	Finfish harvesting
7I	Deer harvesting (8/15 to 2/28)
7JJ	Invertebrate harvesting
	For Codes 7Z through 7JJ contact ADF&G and Chenega Corporation for specific dates, locations, and constraints.

FIELD SHEET COMMENT SHEET

SEGMENT ST / KN-211 SUBDIVISION: A DATE 4/2/90

USCG
NAME SCOTT RAINFORD SIGNATURE Scott Rainford

☒ NO TREATMENT RECOMMENDED
COMMENTS

☐ TREATMENT SUGGESTED

ADEC
NAME Wesley Ghormley SIGNATURE Wesley Ghormley

☒ NO TREATMENT RECOMMENDED
COMMENTS

☐ TREATMENT SUGGESTED

LAND MANAGER
NAME LORRA JOHNSON (CAC) SIGNATURE Lorra L. Johnson

☐ NO TREATMENT RECOMMENDED
COMMENTS

☐ TREATMENT SUGGESTED

THIS IS USFS LANDS.

SHIP OILING SUMMARY

REVISION NO. 000000

OG G. MACDONALD USCG S. RAINSFORD SEGMENT ST/ K4-211
 BIO MA. SCOTT LAND REP L. JOHNSON SUBDIVISION A
 EXXON J BUTLER ADEC W. GHORMLEY TIME 10:20 10:11 : 00
 TEAM NO.: 3 TIDE LEVEL: +6 to +4 DATE 4 / 2 / 90
 EST. SUBDIVISION LENGTH: 915 m ☒ Sun ☒ Clouds ☐ Fog ☐ Rain ☐ Snow
 UPLANDS DESCRIPTION: ☐ Grass ☒ Forest ☒ Rock
 SURVEYED FROM: ☒ Foot ☒ Boat ☐ Helo WORKING DIRECTION: N to S
 SURFACE SEDIMENTS: R 40 % B 20 % C 20 % P 15 % G 5 % S - % M - % V - %
 SLOPE: Long 40 % Hang 20 % Vert 40 % WAVE EXPOSURE: ☐ Low ☒ Med ☐ High
 OIL CATEGORY LENGTH: W - m M - m N - m VL 55 m NO 3/5 m

SURFACE OIL

CHARACTER	DISTRIBUTION				OIL / FILM COLOR						IMPACTED ZONES			
	1C	1B	1P	1S	2	3	4	5	6	7	SU	U	M	U
ASPHALT PAVEMENT														
POOLED														
COVER														
COAT				X				X			X			
STAIN														
MOUSSE														
PATTIES														
TARBALLS														
FILM														
NO OIL											X	X	X	

PAVEMENT: H F S - sq. m by - cm

PATTIES / TARBALLS - BAGS

NEAR SHORE SHEEN? ☒ NO BR RW SL TL

OILED DEBRIS	AMOUNT		
	SM	MD	LG
Logs			
Vegetation			
Trash			
Debris			

DEBRIS COLLECTED
☐ YES ☒ NO

TYPE -

#BAGS -

Photographs:

Roll No. ST-3-2

Frames 2

SUBSURFACE OIL

PIT NO.	PIT DEPTH (cm)	SUBSURFACE OIL CHARACTER					OILED INTERVAL (CM/CS)	BELOW		OIL / FILM COLOR						PIT ZONE				A N A	SUBSURFACE SEDIMENTS
		OP	OR	OL	OF	NO		VO	UC	2	3	4	5	6	7	SU	U	M	U		
1	30					X	.										X			N	CP
2	30					X	.											X		N	CP
							.														
							.														
							.														
							.														

COMMENTS Steep rocky shore w/ boulder jumble and coral strand. Oil as CT/S @ up. HITZ. Wave energy here is Medium and could be High.

ACE 7379044

SHORELINE ECOLOGICAL SUMMARY

REVISION: 02/20/90

Segment ST / 211 Subdivision 13 Date (mo / day / yr) 4/2/90

Time (24 hr) 1020-4:10 Biologist MASUT

(A) Substrate type and % of segments:
 (1) Bedrock 40 (2) Boulder 20 (3) Cobble 20 (4) Pebble 20 (5) Sand - (6) Silt -

(B) Overall % cover of biota (% of segment): Dense - Moderate 4 Low 1

(C) Density, substrate preference (by number from A, above), & vertical zonation of major taxa: (upper-U; mid-M; low tidal-L); juveniles / adults (X), new settlement (3)

Photographs:
 Roll No. ST-3-2

Frames 2

BARNACLES

Dense			Moderate			Sparse			Rare			
1U	1M	1L	1U	1M	1L	1U	1M	1L	1U	1M	1L	
2	2	2	2	2	2	2	2	2	2	2	2	NOT PRESENT
3	3	3	3	3	3	3	3	3	3	3	3	
4	4	4	4	4	4	4	4	4	4	4	4	
5	5	5	5	5	5	5	5	5	5	5	5	
6	6	6	6	6	6	6	6	6	6	6	6	

MYTILUS

Dense			Moderate			Sparse			Rare			
1U	1M	1L	1U	1M	1L	1U	1M	1L	1U	1M	1L	
2	2	2	2	2	2	2	2	2	2	2	2	NOT PRESENT
3	3	3	3	3	3	3	3	3	3	3	3	
4	4	4	4	4	4	4	4	4	4	4	4	
5	5	5	5	5	5	5	5	5	5	5	5	
6	6	6	6	6	6	6	6	6	6	6	6	

GASTROPODS

Dense			Moderate			Sparse			Rare			
1U	1M	1L	1U	1M	1L	1U	1M	1L	1U	1M	1L	
2	2	2	2	2	2	2	2	2	2	2	2	NOT PRESENT
3	3	3	3	3	3	3	3	3	3	3	3	
4	4	4	4	4	4	4	4	4	4	4	4	
5	5	5	5	5	5	5	5	5	5	5	5	
6	6	6	6	6	6	6	6	6	6	6	6	

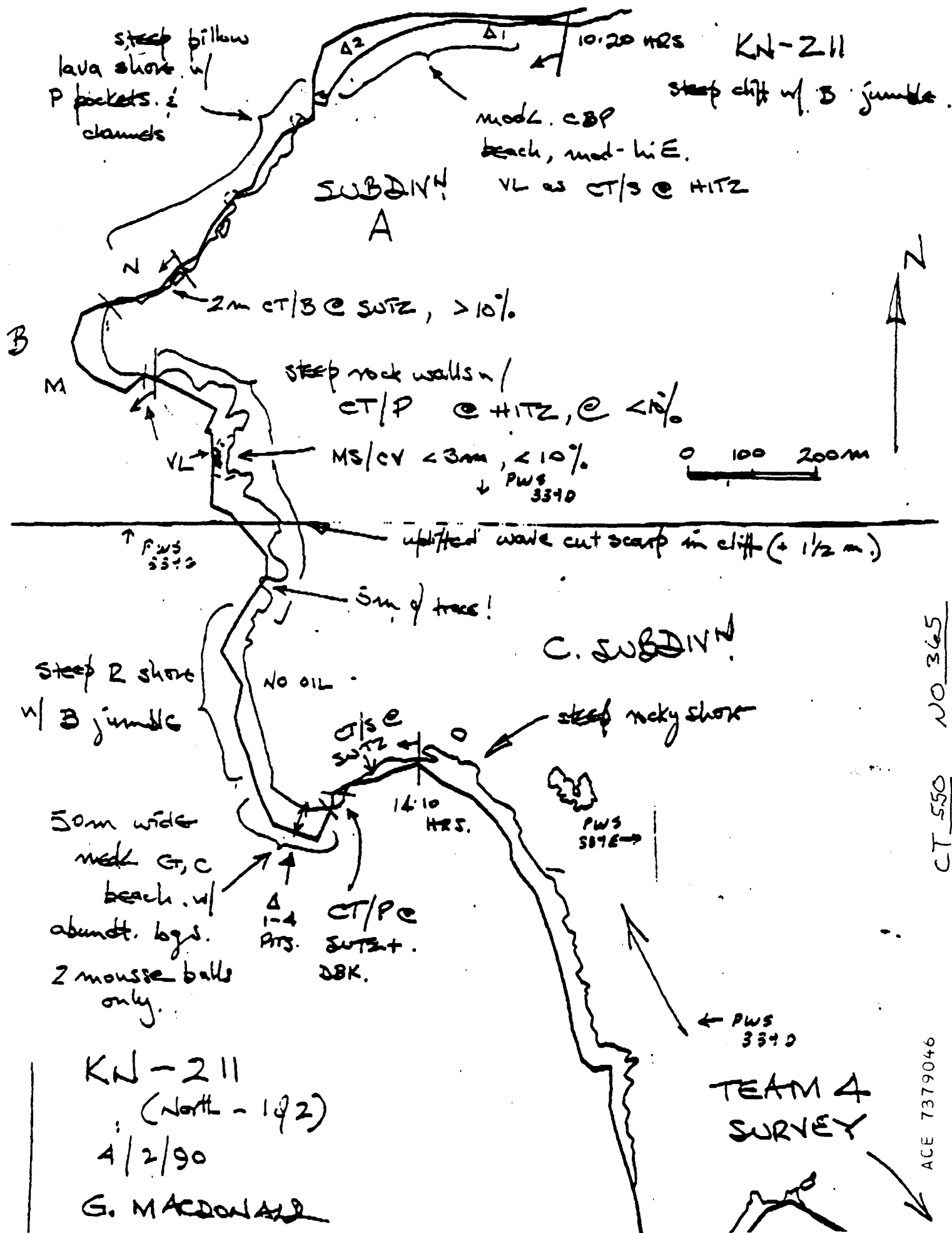
FUCUS

Dense			Moderate			Sparse			Rare			
1U	1M	1L	1U	1M	1L	1U	1M	1L	1U	1M	1L	
2	2	2	2	2	2	2	2	2	2	2	2	NOT PRESENT
3	3	3	3	3	3	3	3	3	3	3	3	
4	4	4	4	4	4	4	4	4	4	4	4	
5	5	5	5	5	5	5	5	5	5	5	5	
6	6	6	6	6	6	6	6	6	6	6	6	

Wildlife Observations/ General Comments:

Observations from boat; only high and some mid tidal zone exposed
 rare patches barnacle scars - bare

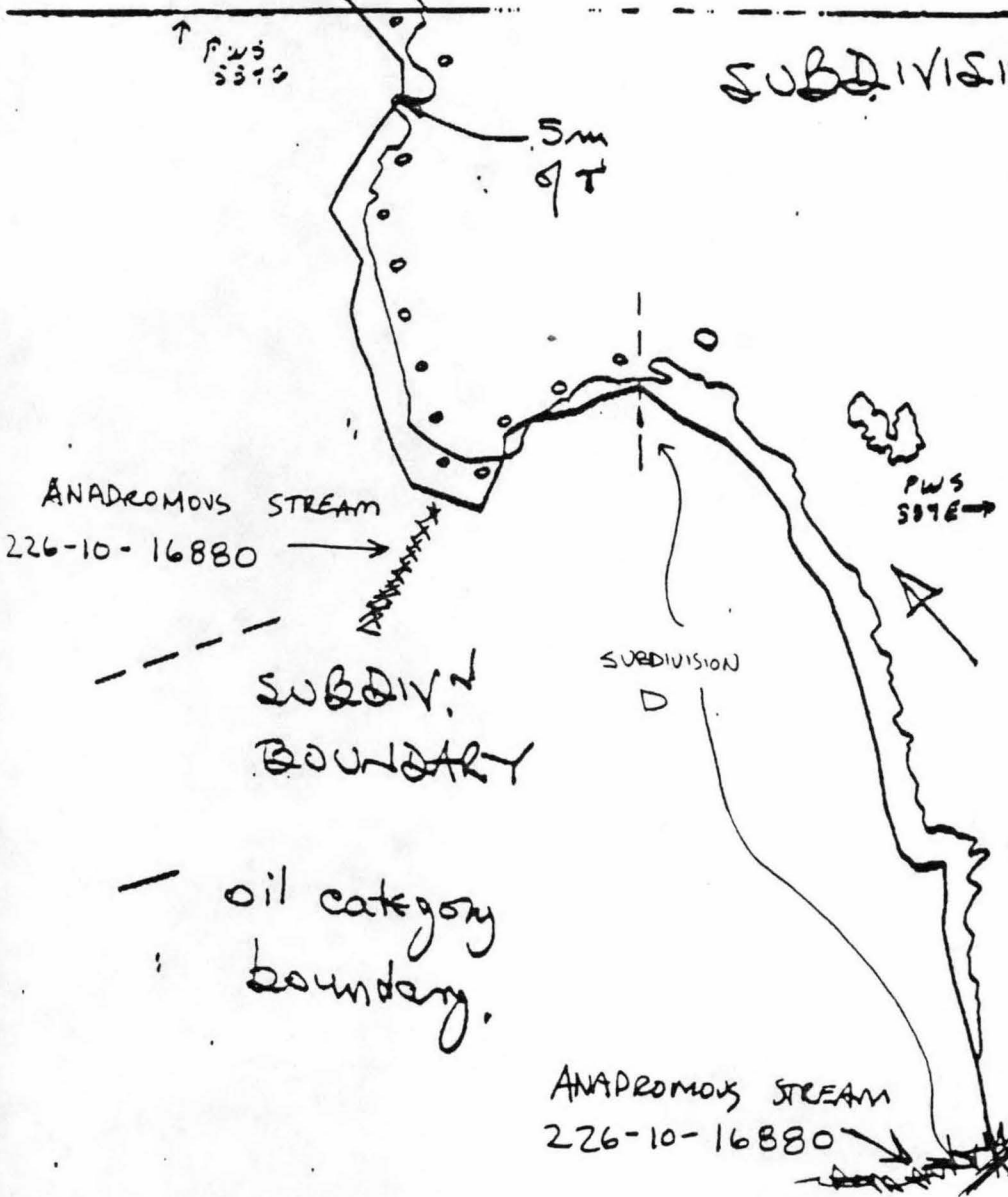
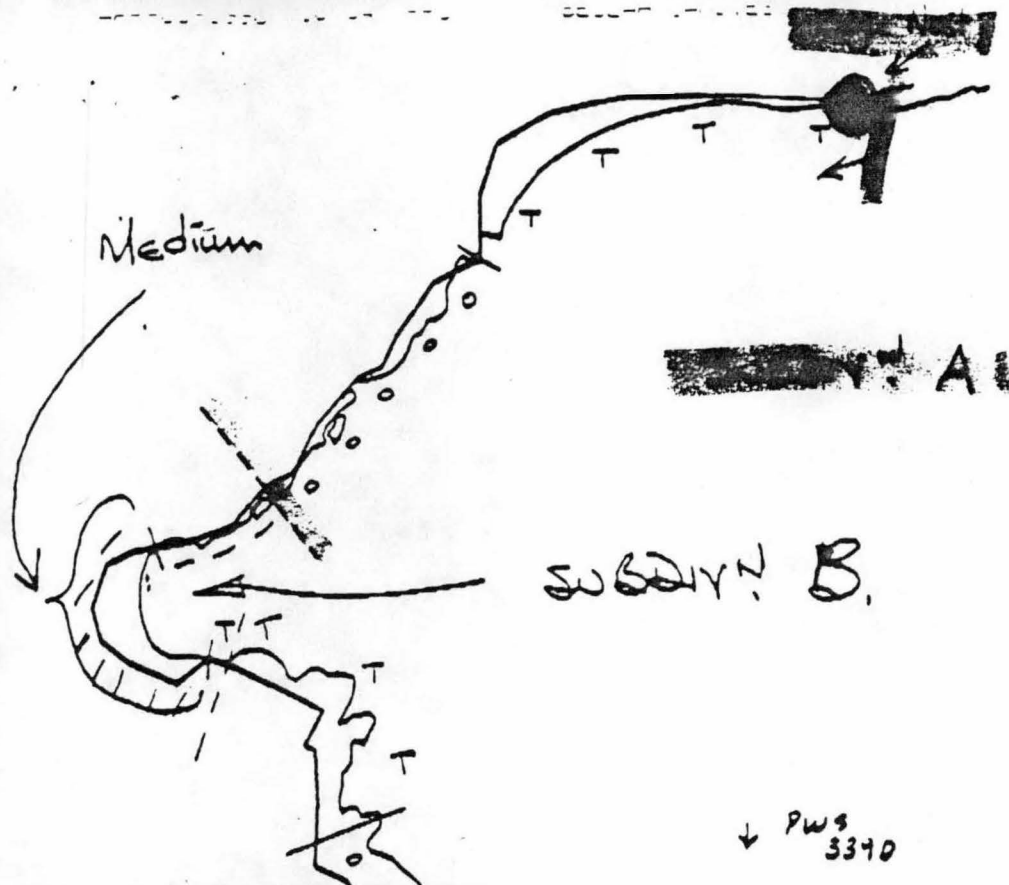
Ecological Considerations:



G. MACDONALD

4/2/90

Date Entered: _____



KN-211

(north) 192

TEAM 4 SURVEY

← PWS 3340

ACE 7379047

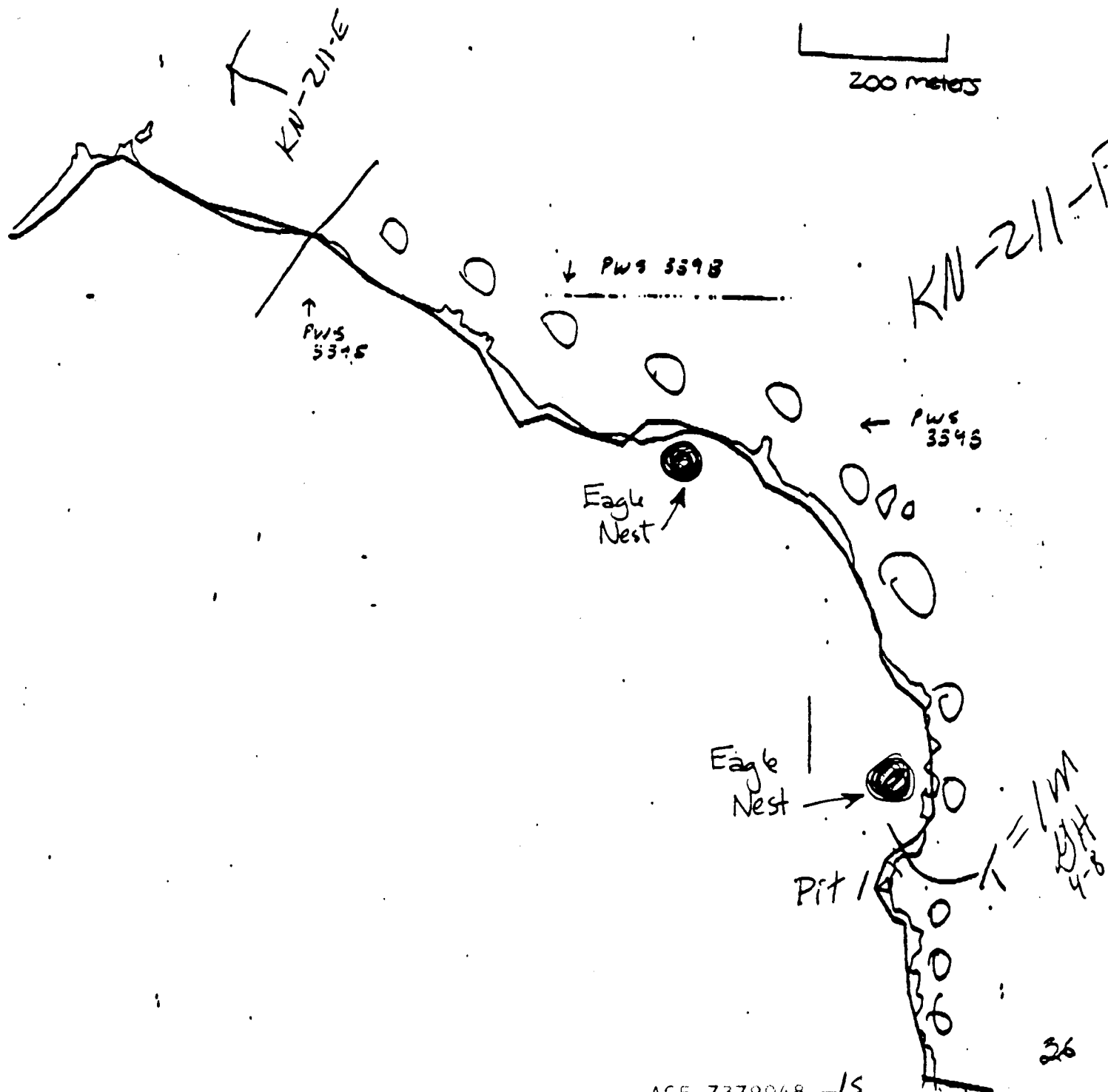
SUBDIVISION E

KN-211

South (2082)



← PWS
3342



oil character Length.

ACE 7379048 -/S

AP 0 PO 0 CV 0 CT 0 ST 1 MS 0 PT 0 TB 0 FI 0 NO 1

*Process
H/E
RH*

RECEIVED
APR 23 1990

DEPT. OF
ENVIRONMENTAL CONSERVATION

REGION: PRINCE WILLIAM SOUND

SEGMENT: ST/KN-211

SUBDIVISIONS: D (4 OF 6)

*Can
e read.*

SHORELINE EVALUATION

SEGMENT ST/ KN-211 SUBDIVISION D (4 OF 6) DATE 4/2/90

SEGMENT ENVIRONMENTAL SENSITIVITIES AND TIME CONSTRAINTS:

1A Salmon stream mouth - fry outmigration (3/1 to 5/15)
1B Salmon stream mouth - spawning (7/10 to 8/31)
5T-3 All bald eagle nests (3/1 to 6/1)-Active eagle nests (3/1 to 9/1)
6Y Recreation: Special use destination
See attached Ecological Constraint sheet for specific constraints and contacts.

SUBDIVISION ECOLOGICAL CONSTRAINTS:

Avoid any unnecessary disturbance or damage to uncoiled biota and substrate. Anadromous stream no. 226-10-16880 on border of Subdivision D/E.

ARCHAEOLOGICAL CONSTRAINTS:

If treatment is planned, a cultural resource evaluation is required prior to shoreline treatment.

SHPO SIGNATURE: _____ DATE: _____

OILING CATEGORIZATION:

Wide 0 m: Medium 0 m: Narrow 0 m: V.Light 0 m: No Oil 963 m
Subsurface Oil Observed: Yes _____ No X Maximum Depth _____

RECOMMENDATIONS:

<u>X</u> No Treatment Recommended	_____ Snare/Absorbent Booms
_____ Treatment Recommended	_____ Oil Snares (pom poms)
_____ Manual Pickup	_____ Absorbents (pads, rolls, etc)
_____ Bioremediation	_____ Spot Washing: _____ Wands
_____ Tarmat: _____ Removal	_____ Beach Cleaner
	_____ Other (see comments)

COMMENTS: _____

TAG COMMENTS: _____

TAG APPROVAL DATE: _____

ADEC _____
EXXON _____
NOAA _____
USCG _____

FOSC: _____ DATE: _____

PWS SEWARD AND HOMER ECOLOGICAL CONSTRAINTS



Salmon stream mouth - fry outmigration (3/1 to 5/15)

Salmon stream mouth - spawning (7/10 to 8/31)

No disturbance of stream bed or banks unless authorized by ADF&G. No beach flushing into stream.
No bioremediation or other chemical application within 100m of stream. Contact ADF&G Habitat Dept. for treatment for permits.

1C Salmon fry nursery area (4/31 to 7/31)

1D Esther Hatchery release (4/15 to 6/1)

1E Main Bay Hatchery release (4/20 to 5/10)

1F Sawmill Bay Hatchery release (4/15 to 6/1)

1G Cannery Creek Hatchery release (4/21 to 6/1)

1H Remote release site

1I Gill net area (6/7 to 8/31)

1J Purse seine area (7/20 to 9/30)

1K Purse seine hook-off (7/20 to 9/30)

1L Set net sites (6/11 to 7/25)

For Codes 1C through 1L contact ADF&G for specific dates, locations and constraints.

2M Herring spawning (4/1 to 6/15)

Restrict boat traffic to essential minimum. Avoid damage to unholed intertidal and subtidal algae and
Contact ADF&G for specific dates and locations.

3N, 3P

3O, 3Q

Harbor seal and sea lion pupping (5/15 to 7/1)

Harbor seal and sea lion molting (8/15 to 9/15)

Restrict boat and air traffic to essential minimum. No personnel within 400m. Aircraft to maintain
horizontal and 300m vertical distance from haulouts.

5R

Seabird colony (5/1 to 9/1)

Restrict air traffic to essential minimum. No personnel within 800m. Aircraft to maintain 800m horizontal
vertical distance. Contact ADF&G and USFWS prior to treatment.

5S

Shorebird/waterfowl concentration (4/1 to 5/15)

Restrict all activity to essential minimum, especially air traffic.



All Bald Eagle nests (3/1 to 6/1)

Active Bald Eagle nests (3/1 to 9/1)

Restrict air traffic to essential minimum. No personnel within 400m 3/1 to 6/1. Air approach and takeoff
and to seaward only; maintain 800m horizontal, 300m vertical distance from nests. Contact USFWS
for treatment for confirmation of dates.

6U

Recreation:

Tent sites (6/1 to 9/15)

6V

Anchorage (6/1 to 9/15)

6W

Forest Service cabins (6/1 to 9/15)

6X

Lodge (6/1 to 9/15)



Special use destination

7Z

Subsistence area: Salmon harvesting (5/1 to 9/30)

7HH

Finfish harvesting

7II

Deer harvesting (8/15 to 2/28)

7JJ

Invertebrate harvesting

For Codes 7Z through 7JJ contact ADF&G and Chenega Corporation for specific dates, locations, and constraints.

FIELD SHEET RELINE COMMENT SHEET

SEGMENT ST / KN-211 SUBDIVISION: 0 DATE 7.2.90

USCG

NAME W. J. Smith SIGNATURE [Signature]

☒ NO TREATMENT RECOMMENDED
COMMENTS

☐ TREATMENT SUGGESTED

ADEC

NAME G. Ferguson SIGNATURE [Signature]

☒ NO TREATMENT RECOMMENDED
COMMENTS

☐ TREATMENT SUGGESTED

LAND MANAGER

NAME M. C. T. Smith SIGNATURE [Signature]

☐ NO TREATMENT RECOMMENDED
COMMENTS

☐ TREATMENT SUGGESTED

SHORELINE OILING SUMMARY

REVISION NO. 000000

OG K. RANSEY USCG R. Sharpe SEGMENT ST/ KN-211
 BIO G. Penn LAND REP M. SMITH SUBDIVISION D 496
 EXXON S. Reid ADEC S. Ferguson TIME 1:45 to 2:00
 TEAM NO.: 4 TIDE LEVEL: 1.0' to 1.5' DATE 4/2/90
 EST. SUBDIVISION LENGTH: 1281 m ☐ Sun ☒ Clouds ☐ Fog ☐ Rain ☐ Snow
 UPLANDS DESCRIPTION: ☐ Grass ☒ Forest ☒ Rock
 SURVEYED FROM: ☐ Foot ☒ Boat ☐ Helo WORKING DIRECTION: S to N
 SURFACE SEDIMENTS: R 95 % B 5 % C — % P — % G — % S — % M — % V — %
 SLOPE: Long — % Hang — % Vert 100 % WAVE EXPOSURE: ☐ Low ☐ Med ☒ High
 OIL CATEGORY LENGTH: W — m M — m N — m VL — m NO 1281 m

SURFACE OIL

CHARACTER	DISTRIBUTION				OIL / FILM COLOR								IMPACTED ZONES			
	C	B	P	R	SP	BP	GP	OP	TP	LP	UP	LP	SU	U	M	U
ASPHALT PAVEMENT																
POOLED																
COVER																
COAT																
STAIN																
MOUSSE																
PATTIES																
TARBALLS																
FILM																
NO OIL	e. b. c. v. d.												X	X	X	X

PAVEMENT: H F S 0 sq. m by 0 cm

PATTIES / TARBALLS 0 BAGS

NEAR SHORE SHEEN? NO BR RW SL TL

OILED DEBRIS	AMOUNT		
	SM	MD	LG
Logs			
Vegetation			
Trash			
Debris			

DEBRIS COLLECTED

☐ YES ☒ NO

TYPE —

#BAGS —

Photographs:

Roll No. —

Frames —

SUBSURFACE OIL

PIT NO.	PIT DEPTH (cm)	SUBSURFACE OIL CHARACTER					OILED INTERVAL (CM-DM)	BELOW	OIL / FILM COLOR								PIT ZONE				A N A	SUBSURFACE SEDIMENTS
		OP	OR	OL	OF	NO			VO	UC	SP BR	BP FW	GP TW	OP W	TP L	LP L	SU	U	M	U		
							.															
							.															
							.															
							.															
							.															
							.															
							.															

COMMENTS

This segment was all vertical bedrock. No oil was observed from the cliff. Limited to distance from face able to observe due to Rocks in the surf.

OG K. RAMSEY

SKETCH MAP

SEGMENT ST/ KN-211

SUBDIVISION D

DATE 4/2/90

CHECKLIST

- ☒ N Arrow
- ☒ Approx. Scale
- ☒ Beg/Sub Endry
- ☒ Oil Dist.
- ☒ Width
- ☒ Length
- ☒ % Cover
- ☒ Substrate Character
- ☒ Est. MWL/LWL
- ☒ SGL
- ☒ Profile Location(s)
- ☒ Profile(s)
- ☒ Pk Location(s)
- ☒ Photo Location(s)

LEGEND

1 Δ

Pk - No Subsurface Oil

2 Δ

Pk - Subsurface Oil

CT/C

Continuous Distribution

CT/B

Broken Distribution

CT/P

Patchy Distribution

CT/S

Splashed Distribution

Offed Vegetation

1 →

Photo location, direction,
and number

no pit locations



ACE 7379064

Oil Character Length (m): AP 0 PO 0 CV 0 CT 0 ST 0 MS 0 PT 0 TB 0 FL 0 NO 128

REVISION 23/24/90

SHORE E ECOLOGICAL SUMMARY

REVISION: 03/03/90

Segment ST KN-211 Subdivision D Date (mo / day / yr) 04/02/90
 Time (24 hr) 1345 Biologist PENN

- (A) Substrate type and % of segments:
 (1) Bedrock 95 (2) Boulder 5 (3) Cobble — (4) Pebble — (5) Sand — (6) Silt —
- (B) Overall % cover of biota (% of segment): Dense 1 Moderate 2 Low 70
- (C) Density, substrate preference (by number from A, above), & vertical zonation of major taxa: (upper-U; mid-M; low tidal-L); juveniles / adults (X), new settlement (3)

Photographs: —
 Roll No. —
 Frames —

BARNACLES

Dense			Moderate			Sparse			Rare			NOT PRESENT
1U	1M	1L	1U	1M	1L	1U	1M	1L	1U	1M	1L	
2	2	2	2	2	2	2	2	2	2	2	2	
3	3	3	3	3	3	3	3	3	3	3	3	
4	4	4	4	4	4	4	4	4	4	4	4	
5	5	5	5	5	5	5	5	5	5	5	5	
6	6	6	6	6	6	6	6	6	6	6	6	

MYTILUS

Dense			Moderate			Sparse			Rare			NOT PRESENT
1U	1M	1L	1U	1M	1L	1U	1M	1L	1U	1M	1L	
2	2	2	2	2	2	2	2	2	2	2	2	
3	3	3	3	3	3	3	3	3	3	3	3	
4	4	4	4	4	4	4	4	4	4	4	4	
5	5	5	5	5	5	5	5	5	5	5	5	
6	6	6	6	6	6	6	6	6	6	6	6	

GASTROPODS

Dense			Moderate			Sparse			Rare			NOT PRESENT
1U	1M	1L	1U	1M	1L	1U	1M	1L	1U	1M	1L	
2	2	2	2	2	2	2	2	2	2	2	2	
3	3	3	3	3	3	3	3	3	3	3	3	
4	4	4	4	4	4	4	4	4	4	4	4	
5	5	5	5	5	5	5	5	5	5	5	5	
6	6	6	6	6	6	6	6	6	6	6	6	

FUCUS

Dense			Moderate			Sparse			Rare			NOT PRESENT
1U	1M	1L	1U	1M	1L	1U	1M	1L	1U	1M	1L	
2	2	2	2	2	2	2	2	2	2	2	2	
3	3	3	3	3	3	3	3	3	3	3	3	
4	4	4	4	4	4	4	4	4	4	4	4	
5	5	5	5	5	5	5	5	5	5	5	5	
6	6	6	6	6	6	6	6	6	6	6	6	

Wildlife Observations/ General Comments:

Ecological Considerations:

Eagle Nest

G. MACDONALD

4/2/90

Date
Extend: _____

ECOLOGY
MAP

Medium

SUBDIV. A

SUBDIV. B.

PWS
3340

SUBDIVISION C.

PWS
3340

5m
of T

PWS
3340

KN-211

(North) 192

TEAM 4
SURVEY

PWS
3340

SUBDIVISION
E

17

ACE 7379066

ANADROMOUS STREAM
226-10-16880

SUBDIV. B
BOUNDARY

oil category
boundary.

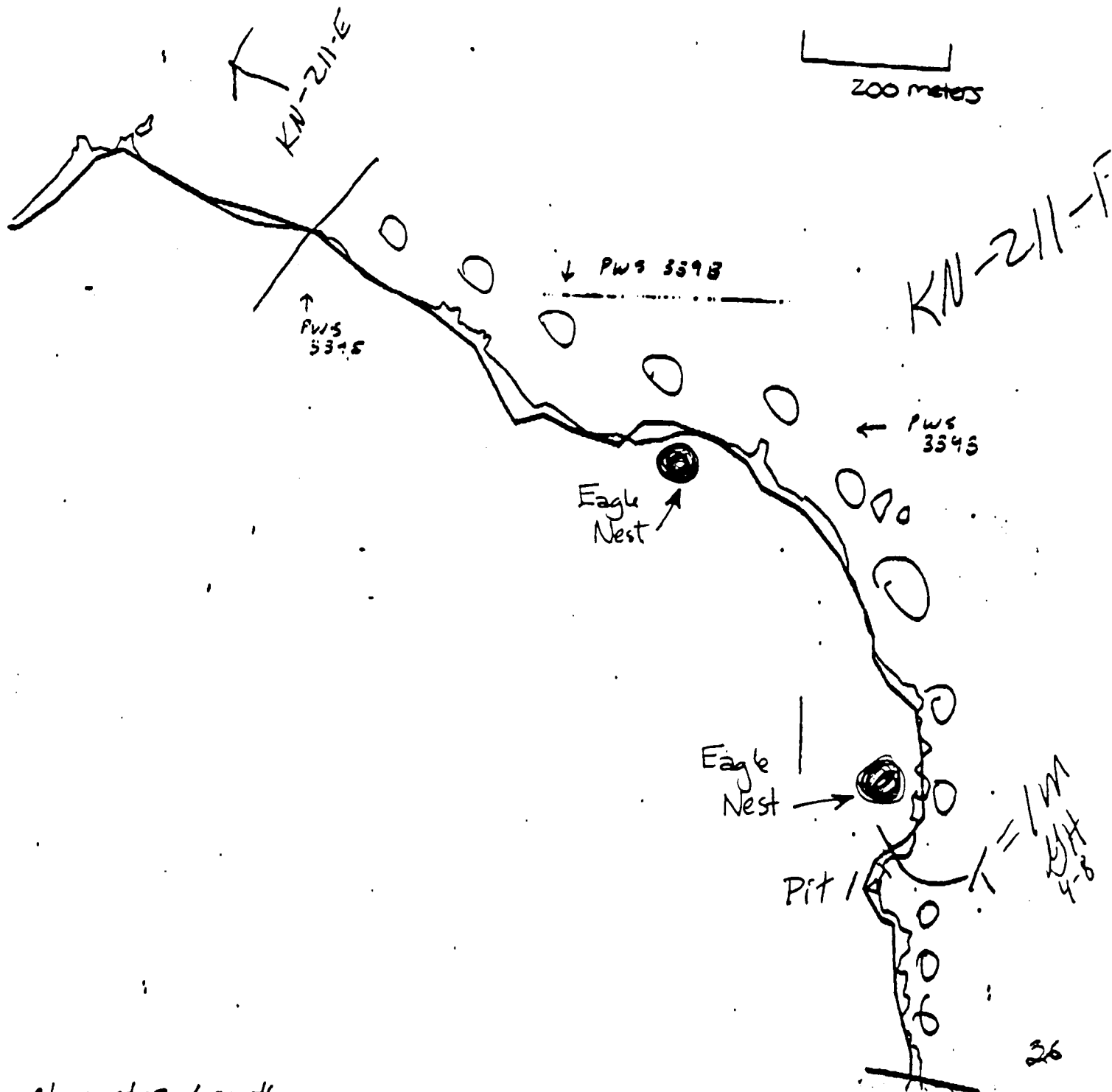
ANADROMOUS STREAM
226-10-16880

KN-211

South (20 fa)

ECOLOGY
MAP

← PWS
3340



oil character Length.

AP 0 PO 0 CV 0 CT 0 ST 1 445 0 PTO 0 TB 0 FI 0 NO. 1

Processing
H25
RH

RECEIVED
APR 23 1990

DEPT. OF
ENVIRONMENTAL CONSERVATION

REGION: PRINCE WILLIAM SOUND

SEGMENT: ST/KN-211

SUBDIVISIONS: E (5 OF 6)

Concurrence

SH ELINE EVALUATION

SEGMENT ST/ KN-211 SUBDIVISION E (5 OF 6) DATE 4/2/90

SEGMENT ENVIRONMENTAL SENSITIVITIES AND TIME CONSTRAINTS:

1A Salmon stream mouth - fry outmigration (3/1 to 5/15)
1B Salmon stream mouth - spawning (7/10 to 8/31)
5T-3 All bald eagle nests (3/1 to 6/1)-Active eagle nests (3/1 to 9/1)
6Y Recreation: Special use destination
See attached Ecological Constraint sheet for specific constraints and contacts.

SUBDIVISION ECOLOGICAL CONSTRAINTS:

Avoid any unnecessary disturbance or damage to unoiled biota and substrate. Anadromous stream no. 226-10-16880 on border of Subdivision D/E.

ARCHAEOLOGICAL CONSTRAINTS:

If cultural resources are uncovered during shoreline treatment, stop work in the vicinity, mark the location of the find and contact a member of Exxon's Cultural Resource Program immediately (564-3657; 564-3658 or 564-3276).

SHPO SIGNATURE: _____ DATE: _____

OILING CATEGORIZATION:

Wide 0 m: Medium 515 m: Narrow 133 m: V.Light 0 m: No Oil 0 m
Subsurface Oil Observed: Yes X No _____ Maximum Depth 32+ cm

RECOMMENDATIONS:

☐ No Treatment Recommended	☐ Snare/Absorbent Booms
☒ Treatment Recommended	☐ Oil Snares (pom poms)
☒ Manual Pickup	☐ Absorbents (pads, rolls, etc)
☒ Bioremediation	☐ Spot Washing: _____ Wands
☐ Tarmat: _____ Removal	☐ Beach Cleaner
	☐ Other (see comments)

COMMENTS: Recommended treatment includes 1) manual pick up of mousse patties, 2) bioremediation of areas shown on attached sketch map. Work should be conducted between 6/1 and 7/10 based on eagle nest and salmon constraints, after approval of USFWS regarding eagle nests. Do not bioremediate within 100m of anadromous stream without approval from ADF&G.

TAG COMMENTS: _____

TAG APPROVAL DATE: _____

ADEC _____
EXXON _____
NOAA _____
USCG _____

FOSC: _____ DATE: _____

PWS, SEWARD AND HOMER ECOLOGICAL CONSTRAINTS

	Salmon stream mouth - fry outmigration (3/1 to 5/15)
	Salmon stream mouth - spawning (7/10 to 8/31)
	No disturbance of stream bed or banks unless authorized by ADF&G. No beach flushing into stream drainage. No bioremediation or other chemical application within 100m of stream. Contact ADF&G Habitat Division prior to treatment for permits.
1C	Salmon fry nursery area (4/31 to 7/31)
1D	Esther Hatchery release (4/15 to 6/1)
1E	Main Bay Hatchery release (4/20 to 5/10)
1F	Sawmill Bay Hatchery release (4/15 to 6/1)
1G	Cannery Creek Hatchery release (4/21 to 6/1)
1H	Remote release site
1I	Gill net area (6/7 to 8/31)
1J	Purse seine area (7/20 to 9/30)
1K	Purse seine hook-off (7/20 to 9/30)
1L	Set net sites (6/11 to 7/25)
	For Codes 1C through 1L contact ADF&G for specific dates, locations and constraints.
2M	Herring spawning (4/1 to 6/15)
	Restrict boat traffic to essential minimum. Avoid damage to uncoiled intertidal and subtidal algae and seagrass. Contact ADF&G for specific dates and locations.
3N, 3P	Harbor seal and sea lion pupping (5/15 to 7/1)
3O, 3Q	Harbor seal and sea lion molting (8/15 to 9/15)
	Restrict boat and air traffic to essential minimum. No personnel within 400m. Aircraft to maintain 800m horizontal and 300m vertical distance from haulouts.
5R	Seabird colony (5/1 to 9/1)
	Restrict air traffic to essential minimum. No personnel within 800m. Aircraft to maintain 800m horizontal, 300m vertical distance. Contact ADF&G and USFWS prior to treatment.
5S	Shorebird/waterfowl concentration (4/1 to 5/15)
	Restrict all activity to essential minimum, especially air traffic.
	All Bald Eagle nests (3/1 to 6/1)
	Active Bald Eagle nests (3/1 to 9/1)
	Restrict air traffic to essential minimum. No personnel within 400m 3/1 to 6/1. Air approach and takeoff from and to seaward only; maintain 800m horizontal, 300m vertical distance from nests. Contact USFWS prior to treatment for confirmation of dates.
6U	Recreation: Tent sites (6/1 to 9/15)
6V	Anchorage (6/1 to 9/15)
6W	Forest Service cabins (6/1 to 9/15)
6X	Lodge (6/1 to 9/15)
	Special use destination
7Z	Subsistence area: Salmon harvesting (5/1 to 9/30)
7HH	Finfish harvesting
7II	Deer harvesting (8/15 to 2/28)
7JJ	Invertebrate harvesting
	For Codes 7Z through 7JJ contact ADF&G and Chenega Corporation for specific dates, locations, and constraints.

ACE 7379071

FIELD SHOPPELINE COMMENT SHEET

SEGMENT ST 11211 SUBDIVISION: E DATE 2 APR 90

USCG

NAME MAURICE J. SITAR SIGNATURE [Signature]

☐ NO TREATMENT RECOMMENDED
COMMENTS

~~☐~~ TREATMENT SUGGESTED

ADEC

NAME C. F. - 1000 SIGNATURE [Signature]

* OILED PAGE (MAGNETS WERE COLLECTED)

☐ NO TREATMENT RECOMMENDED
COMMENTS

TREATMENT SUGGESTED

COMMENTS

COMMENTS

THE STORM BEACH EXPOSED NEAR THE HITZ (NO SNOW COVERAGE AS ON REST SW) HAD A LIGHT FILM (10CM) ON THE SURFACE WITH OR FURTHER DOWN → DEPTH OF THE OIL PENETRATION WAS $> 1\frac{1}{2}$ ("). DUE TO THE THIN OIL SURFACE ~~WAS~~ NOT RECOMMEND WASHING / RATHER MANUAL REMOVAL OF OIL SURFACE OILING BEACH THE BEACH PROFILE IN FRONT OF THIS STORM BEACH AREA [HITZ] HAD (OR → UP TO 20 CM). TREATMENT IS NEEDED → BECAUSE OF BEACH STRATA BK WITH GRAVELS IN INTERFICES UNSURE AS TO WHAT TYPE OF TREATMENT WOULD WORK HERE. SUGGEST MANUAL CLEAN-UP OF MOUSSE PADDIES + PAUPEMENT IN HITZ OF SOUTH BEACH. → ALSO SAME TREATMENT FOR NORTH BEACH AREA. SOME MOUSSE REMOVAL W AREA BETWEEN N+S BEACHES IS ALSO POSSIBLE.

LAND MANAGER

NAME M. C. T. Smith SIGNATURE Michael C. T. Smith

☐ NO TREATMENT RECOMMENDED
COMMENTS

☐ TREATMENT SUGGESTED

SNOW ATOP STUMP BOLMS MADE ASSESSMENT OF WILCO DEBRIS, AND IN SOME CASES OF UPLAND EXTENT OF WILING, IMPOSSIBLE. THESE AREAS SHOULD BE REASSESSED AFTER SNOW HAS MELTED.

SHOPPINE OILING SUMMARY

REVISION NO. 000000

OG K. RAMSEY USCG R. SHARPE SEGMENT ST/ KN-211
 BIO G. PENN LAND REP M. SMITH SUBDIVISION E 39.6 sq. mts
 EXXON S. Reid ADEC S. FERGUSON TIME 11:30 to 1:45
 TEAM NO.: 4 TIDE LEVEL: 4' to 1' DATE 7/2/90
 EST. SUBDIVISION LENGTH: 822 m ☐ Sun ☒ Clouds ☐ Fog ☐ Rain ☐ Snow
 UPLANDS DESCRIPTION: ☐ Grass ☒ Forest ☒ Rock
 SURVEYED FROM: ☒ Foot ☐ Boat ☐ Helo WORKING DIRECTION: S to N
 SURFACE SEDIMENTS: R 5 % B 50 % C 23 % P 2 % G 10 % S 10 % M — % V .5 %
 SLOPE: Long 95 % Hang 5 % Vert — % WAVE EXPOSURE: ☐ Low ☐ Med ☒ High
 OIL CATEGORY LENGTH: W — m M 1022 m N 200 m VL — m NO — m

SURFACE OIL

CHARACTER	DISTRIBUTION				OIL / FILM COLOR				IMPACTED ZONES			
	N	E	S	W	1	2	3	4	SW	SE	NE	NW
ASPHALT PAVEMENT			X			X					X	
POOLED												
COVER	•	X			•		X		X	X	•	
COAT		•	X	X		X					X	
STAIN			X	•		X					X	
MOUSSE			X						X	X		
PATTIES			X								X	
TARBALLS												
FILM	X				X	X			X	X		
NO OIL												X

PAVEMENT: ☒ F S 21 sq. m by 5 cm

PATTIES / TARBALLS 5 BAGS

NEAR SHORE SHEEN? ☒ NO BR RW SL TL
 However some sheen from stream coming from tidal flats RW to a SL

OILED DEBRIS	AMOUNT		
	SM	MD	LG
Logs			
Vegetation	X		
Trash	X		
Debris			

DEBRIS COLLECTED
☐ YES ☒ NO

TYPE gom gom s

#BAGS 1

Photographs:

Roll No. ST-4-1

Frames 18, 19

SUBSURFACE OIL

PIT NO.	PIT DEPTH (cm)	SUBSURFACE OIL CHARACTER					OILED INTERVAL (cm)	BELOW	OIL / FILM COLOR					PIT ZONE				A N A	SUBSURFACE SEDIMENTS
		OF	OR	OL	OF	NO			1	2	3	4	5	SW	SE	NE	NW		
1	15					X	0-5	X	X					X				N	P, G
2	32	X					0-32	X	X					X				N	C, P, G
3	20	X					0-20	X	X							X		N	C, P, G
4	17.5	X					0-10	X	X							X		N	C, P, G
5	20					X	0-5	X	X							X		N	C, P, G
6	17.5	X					0-17.5	X	X					X				N	P, C, P, G

COMMENTS

Rainbow sheen in water coming from Tidal flat but the flat itself is covered in snow. All the UF in front from bedrock outcrop to the flat has CT, STAIN splash. Mousse in area around Rocky over to A 2-3m wide x 40m length - 6.5cm deep C/P in storm berm by oiled otter. Coiled Boupons - no oiled logs.

Page 1 of 2

REVIEWED YW

DATE 4/7/90

ACE 7379073

SEGMENT KN-211 SUBDIVISION E

SUBSURFACE OIL (CONTINUED)

PIT NO.	PIT DEPTH (cm)	SUBSURFACE OIL CHARACTER					OILED INTERVAL (cm)	BELOW		OIL / FILM COLOR						PIT ZONE				A N A	SUBSURFACE SEDIMENTS
		OP	OR	OL	OF	NO		UO	UC	1/2	3/4	5/8	1/2	3/4	5/8	SU	U	M	L		
7	17.5		X				0-17.5	X			X					X				N	S, P, G
8	6.5					X	0-2.5		X		X					X				N	S, P, G
							.														
							.														
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COMMENTS

This section had a coat + stain all in the U.I.
 Mousse patties in U.I. + M.I. A 2-3m wide
 40m length of CV/P in storm berm by the oiled
 otters. On the Bedix outcrop, coat + stain splashes
 were found in U.I.

REVIEWED _____ DATE _____

KEYWORDS: 53/7450

SHOREL ECOLOGICAL SUMMARY

REVISION: 02/28/90

Segment ST/KN-211 Subdivision E Date (mo / day / yr) 04/02/90
 Time (24 hr) 11:30 Biologist PENN

- (A) Substrate type and % of segments:
 (1) Bedrock 5 (2) Boulder 50 (3) Cobble 23 (4) Pebble 12 (5) Sand 10 (6) Silt 0.5
- (B) Overall % cover of biota (% of segment): Dense 1 Moderate 3 Low 70
- (C) Density, substrate preference (by number from A, above), & vertical zonation of major taxa: (upper-U; mid-M; low tidal-L); juveniles / adults (X), new settlement (3)
- Photographs: Roll No. ST-4-1
 Frames 20, 21, 22, 23

BARNACLES

Dense			Moderate			Sparse			Rare			NOT PRESENT
1U	1M	1L	1U	1M	1L	1U	1M	1L	1U	1M	1L	
2	2	2	2	2	2	2	2	2	2	2	2	
3	3	3	3	3	3	3	3	3	3	3	3	
4	4	4	4	4	4	4	4	4	4	4	4	
5	5	5	5	5	5	5	5	5	5	5	5	
6	6	6	6	6	6	6	6	6	6	6	6	

MYTILUS

Dense			Moderate			Sparse			Rare			NOT PRESENT
1U	1M	1L	1U	1M	1L	1U	1M	1L	1U	1M	1L	
2	2	2	2	2	2	2	2	2	2	2	2	
3	3	3	3	3	3	3	3	3	3	3	3	
4	4	4	4	4	4	4	4	4	4	4	4	
5	5	5	5	5	5	5	5	5	5	5	5	
6	6	6	6	6	6	6	6	6	6	6	6	

GASTROPODS

Dense			Moderate			Sparse			Rare			NOT PRESENT
1U	1M	1L	1U	1M	1L	1U	1M	1L	1U	1M	1L	
2	2	2	2	2	2	2	2	2	2	2	2	
3	3	3	3	3	3	3	3	3	3	3	3	
4	4	4	4	4	4	4	4	4	4	4	4	
5	5	5	5	5	5	5	5	5	5	5	5	
6	6	6	6	6	6	6	6	6	6	6	6	

FUCUS

Dense			Moderate			Sparse			Rare			NOT PRESENT
1U	1M	1L	1U	1M	1L	1U	1M	1L	1U	1M	1L	
2	2	2	2	2	2	2	2	2	2	2	2	
3	3	3	3	3	3	3	3	3	3	3	3	
4	4	4	4	4	4	4	4	4	4	4	4	
5	5	5	5	5	5	5	5	5	5	5	5	
6	6	6	6	6	6	6	6	6	6	6	6	

Wildlife Observations/ General Comments:

1 Dead eagle - oiled - retrieved
 1 Dead deer - no visible oiling

2 Dead otter - ^{previously} tagged w/ flags & tape

Ecological Considerations:

1 - Humpback whale
 3 Sea lions
 3 eagles
 2 murrelets
 1 Cormorant
 2 deer
 6 Herring gulls
 2 seals

ACE 7379076

Eagle Nest

G. MACDONALD

4/2/90

Date

Entered: _____

ECOLOGY
MAP

Medium

SUBDIV. A

SUBDIV. B.

↓ PWS
3340

SUBDIVISION C.

↑ PWS
3340

5m
of T

PWS
3340 →

ANADROMOUS STREAM
226-10-16880 →

SUBDIV. N
BOUNDARY

SUBDIVISION
D

KN-211
(North) 192

TEAM 4
SURVEY
← PWS
3340

oil category
boundary.

SUBDIVISION
E

ANADROMOUS STREAM
226-10-16880 →

ACE 7379077

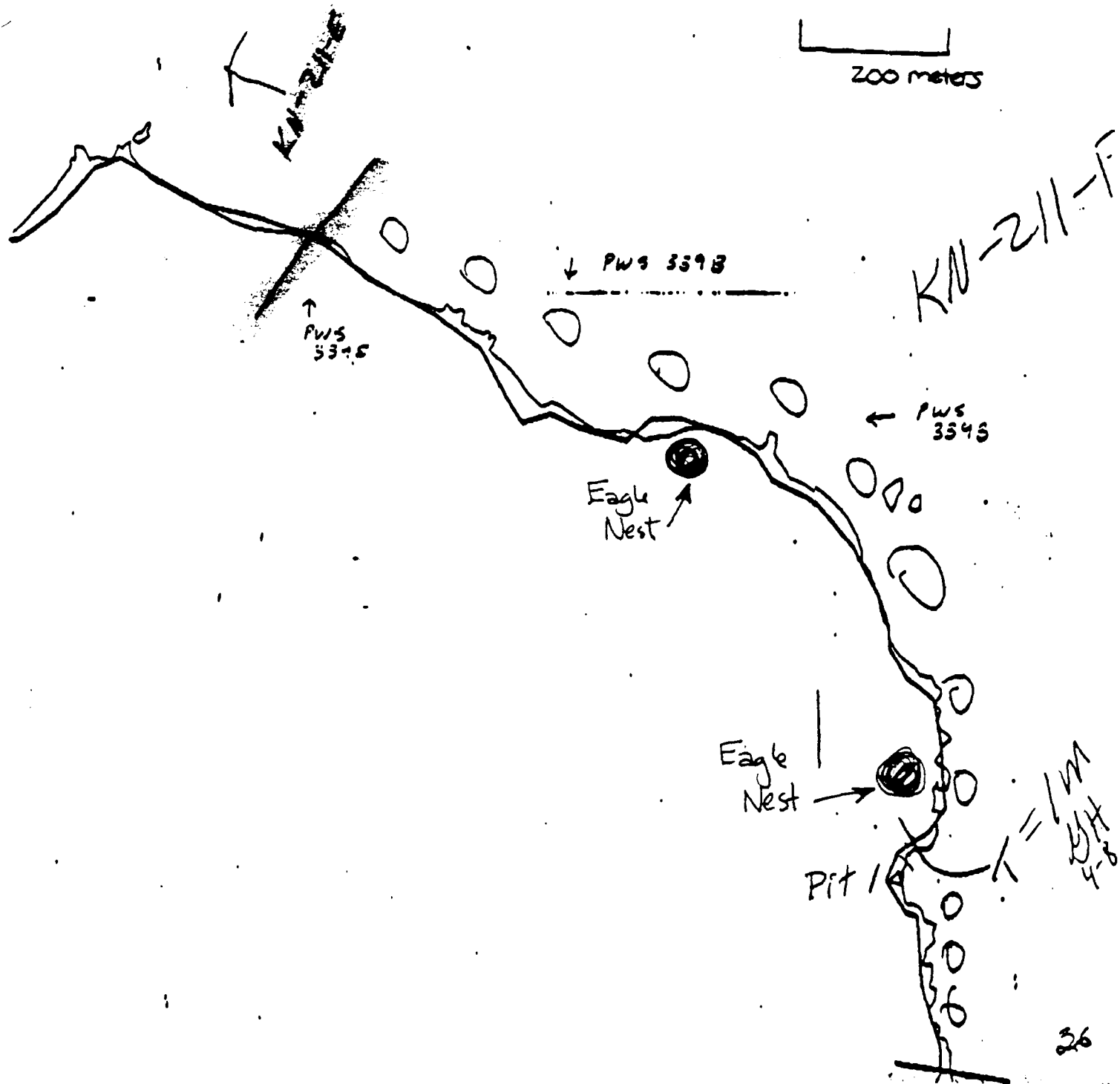
KN-211

South (20fa)

ECOLOGY
MAP

← PWS
3340

200 meters



oil character Length.

AP 0

PO 0

CV 0

CT 0

ST 1

MS 0

PT 0

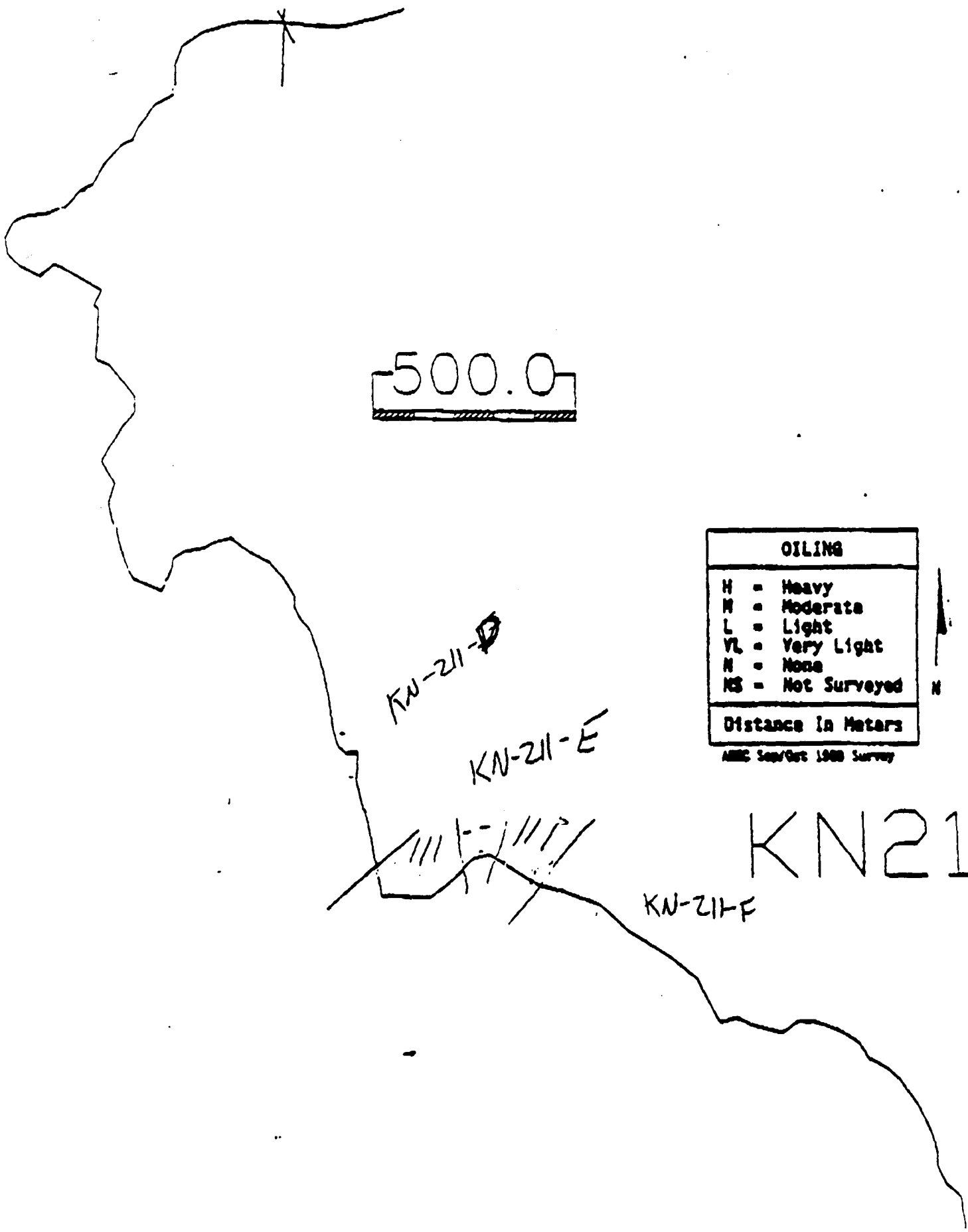
TO 0

FI 0

21

NO.

ACE 7379078



500.0

OILING	
H	Heavy
M	Moderate
L	Light
VL	Very Light
N	None
NS	Not Surveyed
Distance in Meters	

AMC Sep/Oct 1988 Survey

KN211

↑ PWS
339G

PWS
339E →

211-E
4-9-90

XXXX Wide

//// Medium

---- Narrow

TTTT Very Light

0000 No Oil

KN-211E

ADEC Segment Length: 6061m



Map Key: PWS-339d

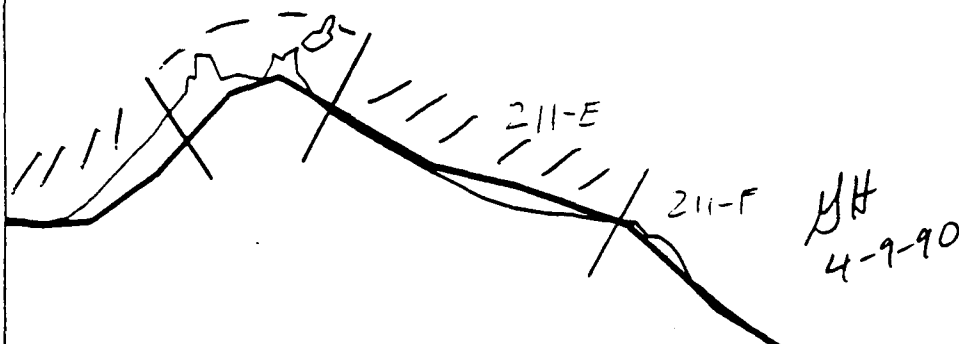
Name: _____

Date: _____

Data Entered: _____

KN-211

← PWS
334.0



↓ PWS 334.3

XXXX Wide

//// Medium

---- Narrow

TTTT Very Light

0000 No Oil

KN-211E

ADEC Segment Length: 6061m



Map Key: PWS-339e

Name: _____

Date: _____

Data Entered: _____

ACE 7379081 -/S

*Discussed
4/25
R.H.*

RECEIVED

APR 23 1990

DEPT. OF
ENVIRONMENTAL CONSERVATION

REGION: PRINCE WILLIAM SOUND

SEGMENT: ST/KN-211

SUBDIVISIONS: F (6 OF 6)

*Concern
to per'ed.*

S RELINE EVALUATION

SEGMENT ST/ KN-211 SUBDIVISION F (6 OF 6) DATE 4/2/90

SEGMENT ENVIRONMENTAL SENSITIVITIES AND TIME CONSTRAINTS:

1A Salmon stream mouth - fry outmigration (3/1 to 5/15)
1B Salmon stream mouth - spawning (7/10 to 8/31)
5T-3 All bald eagle nests (3/1 to 6/1)-Active eagle nests (3/1 to 9/1)
6Y Recreation: Special use destination
See attached Ecological Constraint sheet for specific constraints and contacts.

SUBDIVISION ECOLOGICAL CONSTRAINTS:

Avoid any unnecessary disturbance or damage to uncoiled biota and substrate. Two bald eagle nest in Subdivision F.

ARCHAEOLOGICAL CONSTRAINTS:

If treatment is planned, a cultural resource evaluation is required prior to shoreline treatment.

SHPO SIGNATURE: _____ DATE: _____

OILING CATEGORIZATION:

Wide 0 m: Medium 0 m: Narrow 0 m: V.Light 33 m: No Oil 1844 m
Subsurface Oil Observed: Yes _____ No X Maximum Depth _____

RECOMMENDATIONS:

☒ No Treatment Recommended	_____ Snare/Absorbent Booms
_____ Treatment Recommended	_____ Oil Snares (pom poms)
_____ Manual Pickup	_____ Absorbents (pads, rolls, etc)
_____ Bioremediation	_____ Spot Washing: _____ Wands
_____ Tarmat: _____ Removal	_____ Beach Cleaner
	_____ Other (see comments)

COMMENTS: _____

TAG COMMENTS: _____

TAG APPROVAL DATE: _____

ADEC _____
EXXON _____
NOAA _____
USCG _____

FOSC: _____ DATE: _____

ACE 7379083

PWS, SEWARD AND HOMER ECOLOGICAL CONSTRAINTS

- Salmon stream mouth - fry outmigration (3/1 to 5/15)**
Salmon stream mouth - spawning (7/10 to 8/31)
 No disturbance of stream bed or banks unless authorized by ADF&G. No beach flushing into stream drainage.
 No bioremediation or other chemical application within 100m of stream. Contact ADF&G Habitat Division prior to treatment for permits.
- 1C Salmon fry nursery area (4/31 to 7/31)
- 1D Esther Hatchery release (4/15 to 6/1)
- 1E Main Bay Hatchery release (4/20 to 5/10)
- 1F Sawmill Bay Hatchery release (4/15 to 6/1)
- 1G Cannery Creek Hatchery release (4/21 to 6/1)
- 1H Remote release site
- 1I Gill net area (6/7 to 8/31)
- 1J Purse seine area (7/20 to 9/30)
- 1K Purse seine hook-off (7/20 to 9/30)
- 1L Set net sites (6/11 to 7/25)
 For Codes 1C through 1L contact ADF&G for specific dates, locations and constraints.
- 2M Herring spawning (4/1 to 6/15)
 Restrict boat traffic to essential minimum. Avoid damage to unholed intertidal and subtidal algae and seagrass.
 Contact ADF&G for specific dates and locations.
- 3N, 3P Harbor seal and sea lion pupping (5/15 to 7/1)
 3O, 3Q Harbor seal and sea lion molting (8/15 to 9/15)
 Restrict boat and air traffic to essential minimum. No personnel within 400m. Aircraft to maintain 800m horizontal and 300m vertical distance from haulouts.
- 5R Seabird colony (5/1 to 9/1)
 Restrict air traffic to essential minimum. No personnel within 800m. Aircraft to maintain 800m horizontal, 300m vertical distance. Contact ADF&G and USFWS prior to treatment.
- 5S Shorebird/waterfowl concentration (4/1 to 5/15)
 Restrict all activity to essential minimum, especially air traffic.
- All Bald Eagle nests (3/1 to 6/1)**
Active Bald Eagle nests (3/1 to 9/1)
 Restrict air traffic to essential minimum. No personnel within 400m 3/1 to 6/1. Air approach and takeoff from and to seaward only; maintain 800m horizontal, 300m vertical distance from nests. Contact USFWS prior to treatment for confirmation of dates.
- 6U Recreation: Tent sites (6/1 to 9/15)
- 6V Anchorages (6/1 to 9/15)
- 6W Forest Service cabins (6/1 to 9/15)
- 6X Lodge (6/1 to 9/15)
- Special use destination
- 7Z Subsistence area: Salmon harvesting (5/1 to 9/30)
- 7HH Finfish harvesting
- 7II Deer harvesting (8/15 to 2/28)
- 7JJ Invertebrate harvesting
 For Codes 7Z through 7JJ contact ADF&G and Chenega Corporation for specific dates, locations, and constraints.

FIELD SHORELINE COMMENT SHEET

SEGMENT ST / KN-211 SUBDIVISION: F DATE 1.2.90

USCG

NAME Maurice J. Spitzer SIGNATURE [Signature]

☒ NO TREATMENT RECOMMENDED
COMMENTS

☐ TREATMENT SUGGESTED

ADEC

NAME S. Ferguson SIGNATURE [Signature]

☒ NO TREATMENT RECOMMENDED
COMMENTS

☐ TREATMENT SUGGESTED

LAND MANAGER

NAME M.C.T. Smith SIGNATURE [Signature]

☐ NO TREATMENT RECOMMENDED
COMMENTS

☐ TREATMENT SUGGESTED

33

REVISION NO. 12/81-88

ACE 7379085

TOTAL P 39

SHI ELINE OILING SUMMARY

REVISION NO. 00/29/90

OG K Ramsey USCG R. Sharpe SEGMENT ST/ KN-211
 BIO G. PENN LAND REP M. Smith SUBDIVISION F 696
 EXXON S. Reid ADEC S. Ferguson TIME 10:30 to 11:30
 TEAM NO.: 4 TIDE LEVEL: 6 to 4 DATE 4/2/90
 EST. SUBDIVISION LENGTH: 2101 m ☒ Sun ☒ Clouds ☐ Fog ☐ Rain ☐ Snow
 UPLANDS DESCRIPTION: ☐ Grass ☒ Forest ☒ Rock
 SURVEYED FROM: ☒ Foot ☒ Boat ☐ Helo WORKING DIRECTION: S to N
 SURFACE SEDIMENTS: R 87 % B 5 % C 3 % P — % G — % S — % M — % V — %
 SLOPE: Long — % Hang 5 % Vert 90 % WAVE EXPOSURE: ☐ Low ☐ Med ☒ High
 OIL CATEGORY LENGTH: W — m M — m N — m VL 1 m NO 2100 m

SURFACE OIL

CHARACTER	DISTRIBUTION				OIL / FILM COLOR								IMPACTED ZONES			
	C	B	P	R	SW	SE	NE	NW	TE	TL	TR	LR	SW	SE	NE	NW
ASPHALT PAVEMENT																
POOLED																
COVER																
COAT																
STAIN				X									X			
MOUSSE																
PATTIES																
TARBALLS																
FILM																
NO OIL													X		X	X

PAVEMENT: H F S — sq. m by — cmPATTIES / TARBALLS — BAGSNEAR SHORE SHEEN? (NO) BR RW SL TL

OILED DEBRIS	AMOUNT		
	SM	MD	LG
Logs			
Vegetation			
Trash			
Debris			

DEBRIS COLLECTED

☐ YES ☒ NOTYPE —#BAGS —

Photographs:

Roll No. —Frames —

SUBSURFACE OIL

PIT NO.	PIT DEPTH (cm)	SUBSURFACE OIL CHARACTER					OILED INTERVAL (CM)	BELOW		OIL / FILM COLOR								PIT ZONE				A N A	SUBSURFACE SEDIMENTS
		OP	OR	OL	OF	NO		VO	UC	SW	SE	NE	NW	TE	TL	TR	LR	SW	SE	NE	NW		
1	10					X	.											X					C, Bedrx
							.																
							.																
							.																
							.																
							.																

COMMENTS

Small stain ^{1m in length + 2-3m width trace} on vert. bedrx where indicated on map.No oil observed ^{otherwise} ~~on~~ vertical bedrock. Skiff into

Pocket beaches + found no oil

ACE 7379086

SHORELINE ECOLOGICAL SUMMARY

REVISION: 02/22/90

Segment ST KN-211 Subdivision F Date (mo / day / yr) 04/02/90Time (24 hr) 10:30 Biologist PENN

(A) Substrate type and % of segments:

(1) Bedrock 87 (2) Boulder 5 (3) Cobble 3 (4) Pebble — (5) Sand — (6) Silt —(B) Overall % cover of biota (% of segment): Dense 1 Moderate 3 Low 20

(C) Density, substrate preference (by number from A, above), & vertical zonation of major taxa: (upper-U; mid-M; low tidal-L); juveniles / adults (X), new settlement (3)

Photographs:

Roll No. —Frames —

BARNACLES

Dense			Moderate			Sparse			Rare		
1U	1M	1L	1U	1M	1L	1U	1M	1L	1U	1M	1L
2	2	2	2	2	2	2	2	2	2	2	2
3	3	3	3	3	3	3	3	3	3	3	3
4	4	4	4	4	4	4	4	4	4	4	4
5	5	5	5	5	5	5	5	5	5	5	5
6	6	6	6	6	6	6	6	6	6	6	6

NOT PRESENT

MYTILUS

Dense			Moderate			Sparse			Rare		
1U	1M	1L	1U	1M	1L	1U	1M	1L	1U	1M	1L
2	2	2	2	2	2	2	2	2	2	2	2
3	3	3	3	3	3	3	3	3	3	3	3
4	4	4	4	4	4	4	4	4	4	4	4
5	5	5	5	5	5	5	5	5	5	5	5
6	6	6	6	6	6	6	6	6	6	6	6

NOT PRESENT

GASTROPODS

Dense			Moderate			Sparse			Rare		
1U	1M	1L	1U	1M	1L	1U	1M	1L	1U	1M	1L
2	2	2	2	2	2	2	2	2	2	2	2
3	3	3	3	3	3	3	3	3	3	3	3
4	4	4	4	4	4	4	4	4	4	4	4
5	5	5	5	5	5	5	5	5	5	5	5
6	6	6	6	6	6	6	6	6	6	6	6

NOT PRESENT

FUCUS

Dense			Moderate			Sparse			Rare		
1U	1M	1L	1U	1M	1L	1U	1M	1L	1U	1M	1L
2	2	2	2	2	2	2	2	2	2	2	2
3	3	3	3	3	3	3	3	3	3	3	3
4	4	4	4	4	4	4	4	4	4	4	4
5	5	5	5	5	5	5	5	5	5	5	5
6	6	6	6	6	6	6	6	6	6	6	6

NOT PRESENT

Wildlife Observations/ General Comments:

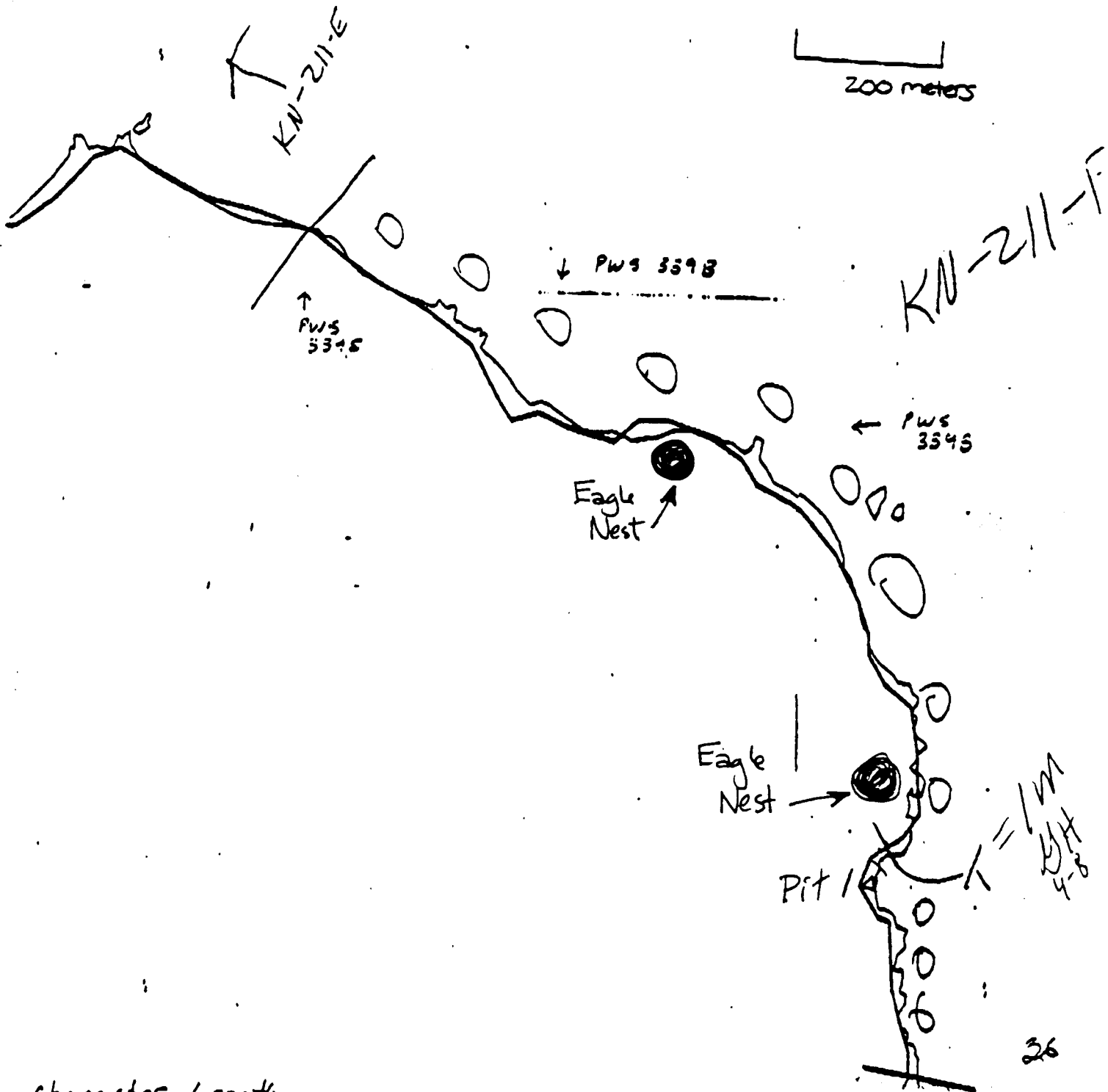
Ecological Considerations:

KN-211

South (20 ft)

ECOLOGY
MAP

← PWS
3340



oil character Length.

AP 0 PO 0 SV 0 CT 0 ST 1 MS 0 PR 0 TB 0 FI 0 NO 1

ACE 7379088

Eagle Nest

G. MACDONALD

4/2/90

Date

Entered: _____

ECOLOGY
MAP

Medium

SUBDIV. A

SUBDIV. B.

↓ PWS
3340

SUBDIVISION C.

↑ PWS
3340

5m
of T

PWS
3340 →

ANADROMOUS STREAM
226-10-16880 →

SUBDIV. N
BOUNDARY

SUBDIVISION
D

KN-211
(North) 142

TEAM 4
SURVEY
← PWS
3340

oil category
boundary.

SUBDIVISION
E

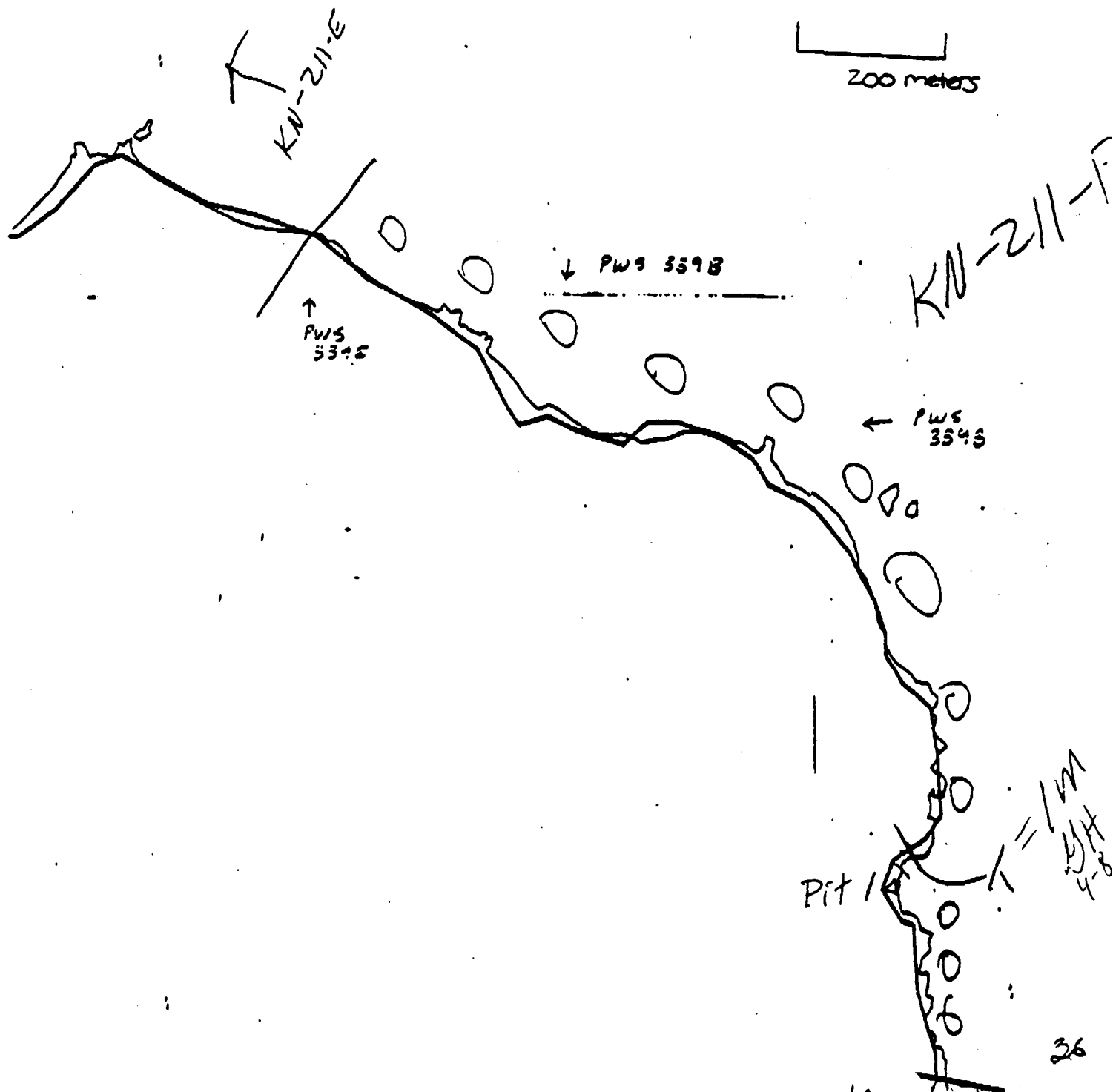
ANADROMOUS STREAM
226-10-16880 →

ACE 7379089

KN-211

South (2082)

← PWS
3340



oil character Length.

ACE 7379090 -/S

26

AP 0 PO 0 CV 0 CT 0 ST 1 MS 0 PTO 0 TO 0 FI 0 NO 0

31

FIELD SHORELINE COMMENT SHEET

SEGMENT ST / KN-211 SUBDIVISION: ^{ASC#} 226-10-16880 DATE 22 APR 90

USCG

NAME Kerwin L. Dreher SIGNATURE CWO K. L. Dreher

☐ NO TREATMENT RECOMMENDED
COMMENTS

☒ TREATMENT SUGGESTED

Manual removal only.

ADEC → ADF&G

NAME Aimee Weseman SIGNATURE Aimee Weseman

☐ NO TREATMENT RECOMMENDED
COMMENTS

☒ TREATMENT SUGGESTED

Treat during window period.

Remove oiled debris from log jam over creek mouth

- string of oiled pom-poms, oiled rope

- oiled spruce needle clumps & other organic matter

Perform a quick survey of beach surface and upper intertidal storm berm & recover any oiled debris.

No bio remediation recommended

LAND MANAGER → NONE

NAME _____ SIGNATURE _____

☐ NO TREATMENT RECOMMENDED
COMMENTS

☐ TREATMENT SUGGESTED

DATE 4 122 90

SKETCH MAP

CHECKLIST

- ___ N Arrow
 ___ Approx. Scale
 ___ Seg/Sub Bndry
 ___ Oil Dist.
 ___ Width
 ___ Length
 ___ % Cover
 ___ Substrate Character
 ___ Est. HWL/LWL
 ___ SSL
 ___ Profile Location(s)
 ___ Profile(s)
 ___ Pit Location(s)
 ___ Photo Location(s)

LEGEND

- 1 
Pit - No Subsurface Oil
- 2 
Pit - Subsurface Oil
- 
Continuous Distribution
- 
Broken Distribution
- 
Patchy Distribution
- 
Splashed Distribution
- 
Oiled Vegetation
- 1 
Photo location, direction
and number

ACE 7379095

Oil Character Length (m): AP PO CV CT ST MS PT TB FL NO

REVISION: 03/24/00

SKETCH MAP

SEGMENT ST/ KN 211

STREAM 226-10-16880

DATE 4 / 22 90

CHECKLIST

- N Arrow
Approx. Scale
Seg/Sub Bndry
Oil Dist.

- % Cover
Substrate Character
Est. HWL/LWL
SSL
Profile Location(s)
Profile(s)
Pli Location(s)
Photo Location(s)

LEGEND

- 1 Δ

Plt - No Subsurface Oil

- 2 ▲

Plt - Subsurface Oil

CT/C

Continuous Distribution

3

Broken Distribution

CT/P

Patchy Distribution

CT/5

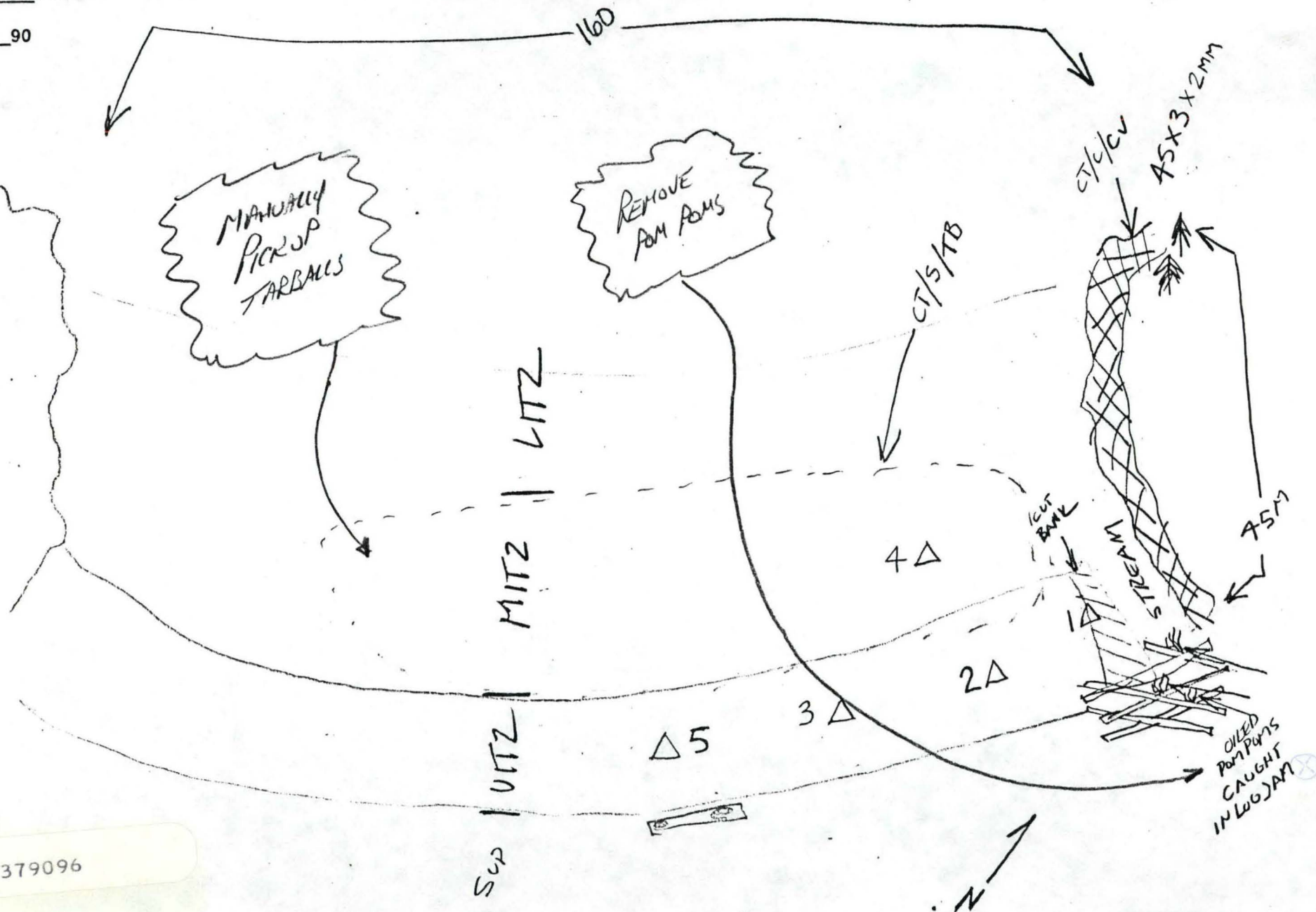
Splashed Distribution

Oiled Vegetation

- 14

Photo location, direction,
and number

ACE 7379096



Oil Character Length (m): AP _____ PO _____ CV _____ CT _____ ST _____ MS _____ PT _____ TB _____ FL _____ NO _____

REVISION:03/24/90

OPERATIONS FIELD NOTES

See Back for Instructions

30

SEGMENT ID ANAD KH-211
 STREAM ID # 226-10-16880
 ANNOTATED MAP INCLUDED ☒ N

DATE 4-22-90
 NAME DARYL JOES
 TEAM # 14

SURFACE OIL	Quantities in Meters			None	Treatment Recommendation					
					Bioremediation		Tilling		Spot Hot Water	
	Length	Width	Area		Y/N	% Treat	Y/N	% Treat	Y/N	% Treat
Wide Band										
Medium Band										
Narrow Band										
Very Light	45	3	135	✓	N	—	N	—	N	—
TOTAL MANDAYS						0		0		0

SUBSURFACE OIL

Other (Describe)?	<u>NONE</u>

TARMATS	Quantities in Meters			Treatment Rec			# of Bags	Mandays Required	
	Length	Width	Thick(cm)	None	Breakup	Remove		Breakup	Remove
Area #1	<u>NONE</u>							<u>—</u>	<u>—</u>
Area #2								<u>—</u>	<u>—</u>
Area #3								<u>—</u>	<u>—</u>
Area #4								<u>—</u>	<u>—</u>
Sporadic Mats								<u>—</u>	<u>—</u>

MANUAL PICKUP	Type of Debris			In Meters		# of Bags	Pickup Y/N	Manday Estimate
	Mousse Tarballs	Oiled Veget	Cleanup Debris	Length	Width			
Pocket #1	☒			<u>60</u>	<u>20</u>	<u><1</u>	<u>Y</u>	<u>1</u>
Pocket #2			☒	<u>(POM PMS)</u>		<u>1</u>	<u>Y</u>	<u>1</u>
Pocket #3								
Random/Continuous								

OILED LOGS ☒ Y/N	OILING <u>H/M/L</u>	QUANTITY <u>L/M/S</u>	BURN ☒ Y/N
--	---------------------	-----------------------	--

Is there Other Debris on the Beach? ☒ Y/N How Many Bags? 2 Is it mingled with the Oiled Debris? ☒ Y/N

GENERAL

Snow covering 0 % of the Supratidal Zone?

Wave Exposure ☒ H/M/L

Access Limitations: GOOD ACCESS

Snare Boom/Pom Poms Recommended? No

Would the production Craft have to be relocated to complete work on this subdivision? ☒ Y/N # of Times —

COMMENTS:

ALL WORK SHOULD BE PLANNED FOR PERIOD 5-15 -> 7-10
NOTIFY ADE & G BEFORE STARTING WORK

SHORELINE OILING SUMMARY (ANAD)

REVISION NO. 04/13/90

OG CAL LARSON USCI REHER, CWE SEGMENT KN211 36
 BIO KEN CRITCHLOW LAND REP STREAM 226-10-16880 (OF)
 EXXON DARLYL YOE ADFG ELK GUSTIN-AIMEE WESEMAN TIME 14:25 to 15:25
 TEAM NO. 14 TIDE LEVEL +2 FT DATE 4 12 190
 EST. SUBDIVISION LENGTH: 120 m ☒ Sun ☐ Clouds ☐ Fog ☐ Rain ☐ Snow
 UPLANDS DESCRIPTION: ☒ Grass ☐ Forest ☐ Rock
 SURVEYED FROM: ☒ Foot ☐ Boat ☐ Helo
 SURFACE SEDIMENTS: R 5 % B 5 % C 5 % P 85 % G 5 % S 5 % M 5 % V 5 %
 SLOPE: Lang 70 % Hang 30 % Vert 5 % WAVE EXPOSURE: ☐ Low ☐ Med ☒ High
 OIL CATEGORY LENGTH: W 45 m M 45 m N 75 m VL 75 m NO 75 m

SURFACE OIL

CHARACTER	DISTRIBUTION				OIL / FILM COLOR						IMPACTED ZONES					
	C	B	P	S	BR	DBL	FW	GY	SL	DBR	TL	LR	SU	U	M	L
ASPHALT PAVEMENT																
POOLED																
COVER																
COAT	✓						✓						✓	✓		
STAIN																
MOUSSE																
PATTIES																
TARBALLS				✓	✓								✓	✓		
FILM																
NO OIL																

PAVEMENT H F S sq. m by cmPATTIES / TARBALLS BAGSNEAR SHORE SHEEN? ☒ NO BR RW SL TL

OILED DEBRIS	AMOUNT		
	SM	MD	LG
Logs			
Vegetation			
Trash	✓		
Debris			

Did you collect
DEBRIS
☐ YES ☐ NO

TYPE #BAGS

Photographs:

Roll No. Frames

SUBSURFACE OIL

PIT NO.	PIT DEPTH (cm)	SUBSURFACE OIL CHARACTER					OILED INTERVAL (CM)	BELOW		OIL / FILM COLOR								PIT ZONE				A N A	SHEEN (Y/N)	▼	SURFACE - SUBSURFACE SEDIMENTS
		OP	OR	OL	OF	NO		UO	UC	BR	BL	FW	GY	SL	DR	TL	LR	SU	U	M	L				
1	125					✓	.										✓								SD, PB/SD, PB
2	50					✓	.										✓								SD/PB, SP
3	60					✓	.										✓								PB/PB, SD
4	45					✓	.											✓							PB/PB, SD
5	35					✓	.										✓								CB PB/CB, PB/
							.																		

COMMENTS VERY SPORADIC TAR/MOUSSE BALLS 5cm TO .5cm^{DIA} ALONG U1T2 TO M1T2 BAND. COAT ON ROCKS TO THE NORTH; OIL DRY TO TOUCH NON MUBIL.

REVIEWED DATE

ACE 7379098

GENERAL DATA

226-10
SEG ID: KN-211 SUBDIV: 16880 TEAM: 14 SURVEY DATE: 4/22/90
PAVEMENT: CHAR — AREA — THICKNESS — TARBALLS X
OILED: LGS — VEG — TRH SM DBR — WAVE EXP: LW — MD — HG X
FAX RCVD: — DT: — AGENCY DISAGREE: —
EST SUBDIV LGTH: 120 OIL CATEGORY: W — M 45 N — VL — NO 75 U —

SURFACE DATA

SURFACE SEDIMENT: BRK — BLD — COB 5 PEB 85 GRN 5 SAN 5 MUD — VEG —CHAR #: 1 OIL CHAR: CT OIL DIST: CONT X BRKN — PTCH — SPLH —
OIL CLR: DBL FILM CLR: RW TIDAL ZONE: SU X UI X MI — LI —CHAR #: 2 OIL CHAR: TB OIL DIST: CONT — BRKN — PTCH — SPLH X
OIL CLR: SBL FILM CLR: BR TIDAL ZONE: SU — UI X MI X LI —CHAR #: — OIL CHAR: — OIL DIST: CONT — BRKN — PTCH — SPLH —
OIL CLR: — FILM CLR: — TIDAL ZONE: SU — UI — MI — LI —CHAR #: — OIL CHAR: — OIL DIST: CONT — BRKN — PTCH — SPLH —
OIL CLR: — FILM CLR: — TIDAL ZONE: SU — UI — MI — LI —CHAR #: — OIL CHAR: — OIL DIST: CONT — BRKN — PTCH — SPLH —
OIL CLR: — FILM CLR: — TIDAL ZONE: SU — UI — MI — LI —CHAR #: — OIL CHAR: — OIL DIST: CONT — BRKN — PTCH — SPLH —
OIL CLR: — FILM CLR: — TIDAL ZONE: SU — UI — MI — LI —CHAR #: — OIL CHAR: — OIL DIST: CONT — BRKN — PTCH — SPLH —
OIL CLR: — FILM CLR: — TIDAL ZONE: SU — UI — MI — LI —CHAR #: — OIL CHAR: — OIL DIST: CONT — BRKN — PTCH — SPLH —
OIL CLR: — FILM CLR: — TIDAL ZONE: SU — UI — MI — LI —

35

ANAD
SSAT DATA ENTRY FORM

SUBSURFACE DATA

PAGE 1 OF 1

SEGMENT ID: KN-211 SUBDIV: 226-10
16880

PIT # 1 PIT DEPTH 125 OIL CHARACTER NO OIL INTVAL: FROM — TO —
QUANT: — OIL CLR: — FLM CLR: — ZONE: SU — UI X MI — LI —
SUBSURF SEDIMENT: BRK — BLD — COB — PEB X GRN — SAN X MUD — VEG —

PIT # 2 PIT DEPTH 50 OIL CHARACTER NO OIL INTVAL: FROM — TO —
QUANT: — OIL CLR: — FLM CLR: — ZONE: SU — UI X MI — LI —
SUBSURF SEDIMENT: BRK — BLD — COB — PEB X GRN — SAN X MUD — VEG —

PIT # 3 PIT DEPTH 60 OIL CHARACTER NO OIL INTVAL: FROM — TO —
QUANT: — OIL CLR: — FLM CLR: — ZONE: SU — UI X MI — LI —
SUBSURF SEDIMENT: BRK — BLD — COB — PEB X GRN — SAN X MUD — VEG —

PIT # 4 PIT DEPTH 45 OIL CHARACTER NO OIL INTVAL: FROM — TO —
QUANT: — OIL CLR: — FLM CLR: — ZONE: SU — UI — MI X LI —
SUBSURF SEDIMENT: BRK — BLD — COB — PEB X GRN — SAN X MUD — VEG —

PIT # 5 PIT DEPTH 35 OIL CHARACTER NO OIL INTVAL: FROM — TO —
QUANT: — OIL CLR: — FLM CLR: — ZONE: SU — UI X MI — LI —
SUBSURF SEDIMENT: BRK — BLD — COB X PEB X GRN — SAN — MUD — VEG —

PIT # — PIT DEPTH — OIL CHARACTER — OIL INTVAL: FROM — TO —
QUANT: — OIL CLR: — FLM CLR: — ZONE: SU — UI — MI — LI —
SUBSURF SEDIMENT: BRK — BLD — COB — PEB — GRN — SAN — MUD — VEG —

PIT # — PIT DEPTH — OIL CHARACTER — OIL INTVAL: FROM — TO —
QUANT: — OIL CLR: — FLM CLR: — ZONE: SU — UI — MI — LI —
SUBSURF SEDIMENT: BRK — BLD — COB — PEB — GRN — SAN — MUD — VEG —

PIT # — PIT DEPTH — OIL CHARACTER — OIL INTVAL: FROM — TO —
QUANT: — OIL CLR: — FLM CLR: — ZONE: SU — UI — MI — LI —
SUBSURF SEDIMENT: BRK — BLD — COB — PEB — GRN — SAN — MUD — VEG —

PROBLEMS: —

ACE 7379100 -15

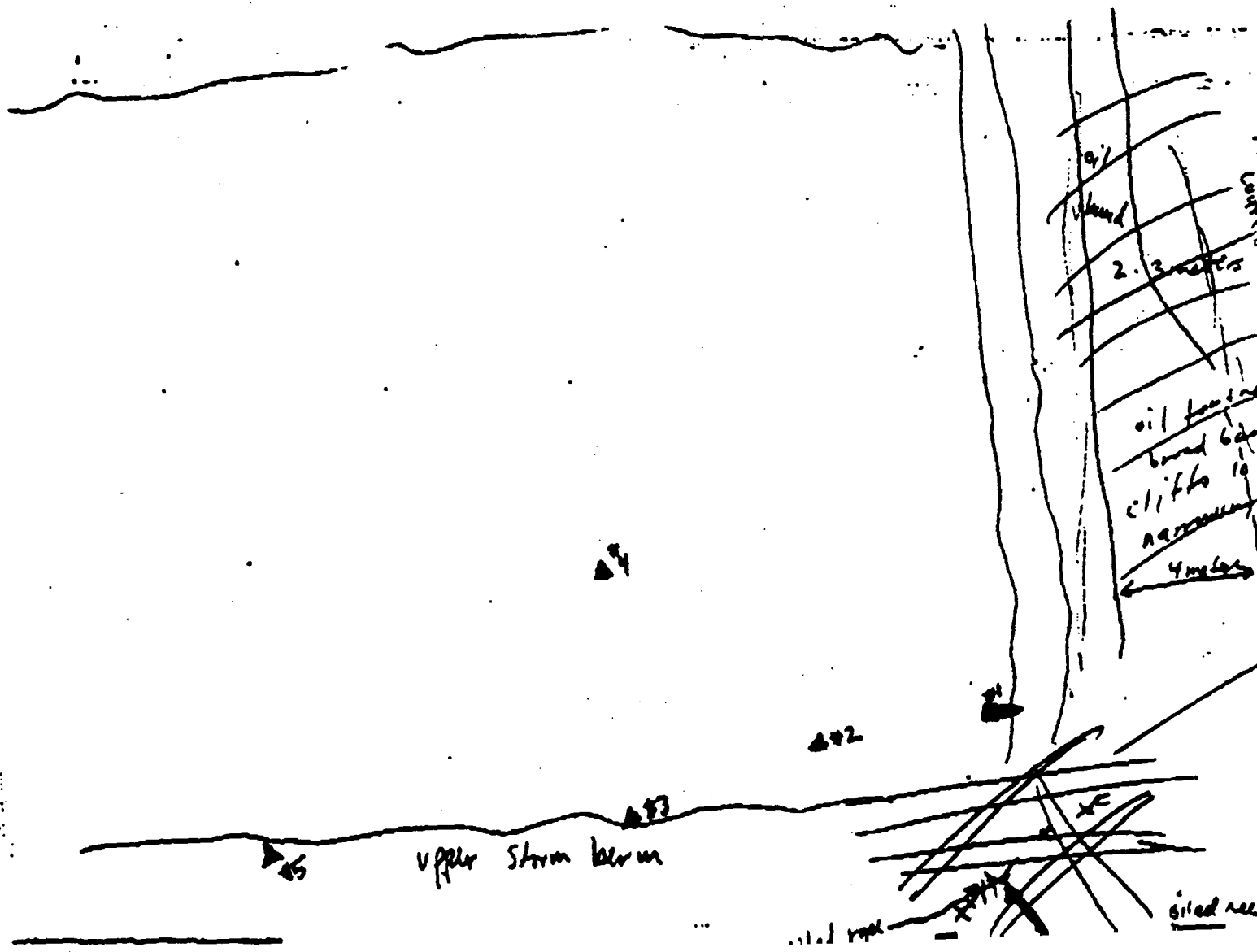
37/4

48 PHOTOLOG

FRAME(S)	DESCRIPTION
125 cm	pit #1 No oil visible
150 cm	pit #2 No oil visible
160 cm	pit #3 No oil
175 cm	pit #4 small amount of highly visible soft brown/black oil
35 cm	pit #5 oil coated rocks found in pit no oil band visible - assorted randomly oiled rocks

48 OIL DISTRIBUTION DIAGRAM

on top of log jam - clumps oiled spruce needles
oiled rope - with string of pom pom.



G. MACDONALD

4/2/90

Date Entered: _____

ECOLOGICAL MAP

SHEET 1 of 3

1A, 1B
5T(3)
64

BALE EAGLE NEST
SUBDIV. A

SUBDIV. B.

↓ PWS
3310

SUBDIVISION C.

↑ PWS
3312

5m
9T

ANADROMOUS STREAM

226-10-16880

(Ps, 12/89)

KN-211-C (3 of 6)

PWS
3316

KN-211

(North) 142

TEAM 4
SURVEY

← PWS
3310

ANADROMOUS
STREAM
226-10-16875
(Ps, 12/89)
KN-211-E (5 of 6)

ACE 7379012

17

Medium

SUBDIV. B
BOUNDARY

oil category
boundary.

40'

706000m. N.

HERRING

22c-10

BAY

Louis Bay

Passage

Cabins ..

BM Tidal X⁺
5.

[illegible]
$$i \in I \leq \dots$$

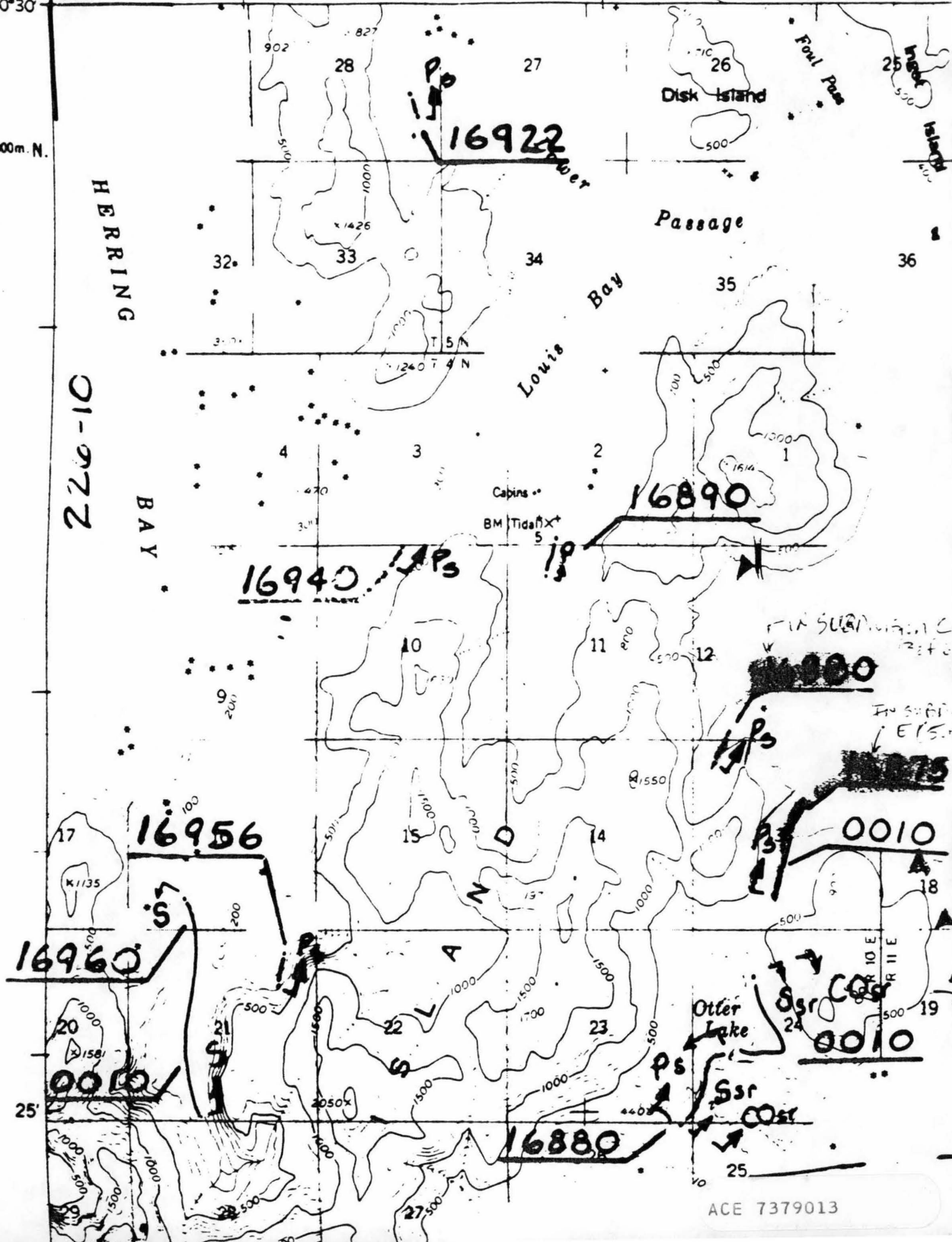
0010

0010

Otter
Lake

Sir

ACE 7379013



ADF&G MULTI-ASSESSMENT DATA FORM

1 SURVEY TYPE: BS (SS) DS TS AVS SCH MMHS PTA2 REGION: (PWS) KP, CI K, APMETHOD: Aerial (Ground) Boat3 DATE: 4-22-9015 HIGH TIDE TIMES: 121 TEAM RECORDER: R. Gustin4 START TIME: 142516 HIGH TIDE HTS: 122 OBSERVERS: A. W. Seaman5 STOP TIME: 153517 LOW TIDE TIMES: 123 AGENCY: ADFG6 SEGMENT #: KN21118 LOW TIDE HTS: 124 PHOTOS TAKEN: Y (N)

7 STATION #:

19 TIDE HT AT SURVEY:

Roll #: Frame:

8 K-UNIT:

Ebb Slack Flood Slack

25 VIDEO TAKEN: (Y) N TAPE#: 90AW-01555

9 STAT AREA:

20 USCG QUAD:

Start: 0129 End: 0235

10 LAT:

11 LONG:

26 SAMPLES TAKEN? Y (N) Number12 SOURCE: (Map) Loran

Oil

13 LOCATION: Abaco Bay Isles.

Sediment

14 DESCRIPTION: Knight Island

Biological

Water

EXTENT OF OIL

	SHORELINE				STREAM			
	L	W	M ²	%	L	W	M ²	%
27 SURFACE COVERAGE								

36 CATALOGED ANAD. FISH STREAM? (Y) N

	L	W	M ²	%
28 SURFACE THICKNESS	1-2mm			
29 PENETRATION	1-2mm			

37 CATALOG #: 226-10-16880

38 STREAM NAME:

30 OVERALL OIL IMPACT: N VL L (M) H39 OIL IN STREAM BED? Y (N)31 OIL TYPE: Pooled Mousse (Tar) Asphalt Sticky Stain40 OIL ON STREAM BANKS? (Y) N32 OILED DEBRIS? (Y) N pumpkin/rope41 OIL ON BEACH ADJACENT TO MOUTH? (Y) N
(within 50 meters)42 OIL WITHIN 1 MILE OF STREAM? (Y) N

Where:

33 SHORELINE TYPE: Headland Low-lying Rocks Beach (Cove)
Lagoon Marsh

43 ANADROMOUS FISH PRESENT? Y N

34 WAVE EXPOSURE: (High) Moderate Low44 ANADROMOUS FISH OBSERVATION
Species Aerial Ground35 SUBSTRATE TYPE: Bedrock 25% Boulder Cobble

Gravel 75% Sand Mud/siltCOMMENTS: in log jam of creek - # of oiled pumpkin caught in logs.pits dug in UITE showed no oil observed. Appears UITE was worked over by storms
oil on east cliff faces weathered/stickyNo oil noticed in logs in jam | small amounts of oil scattered over surface
of beach. Some buried oil in UITE (right) thin distribution of oiled pebbles
lucos and rock clumps over 50-60% of beach length.

ACE 7379091 +/S

KN 211

45 PHOTOLOG

226-10-16880

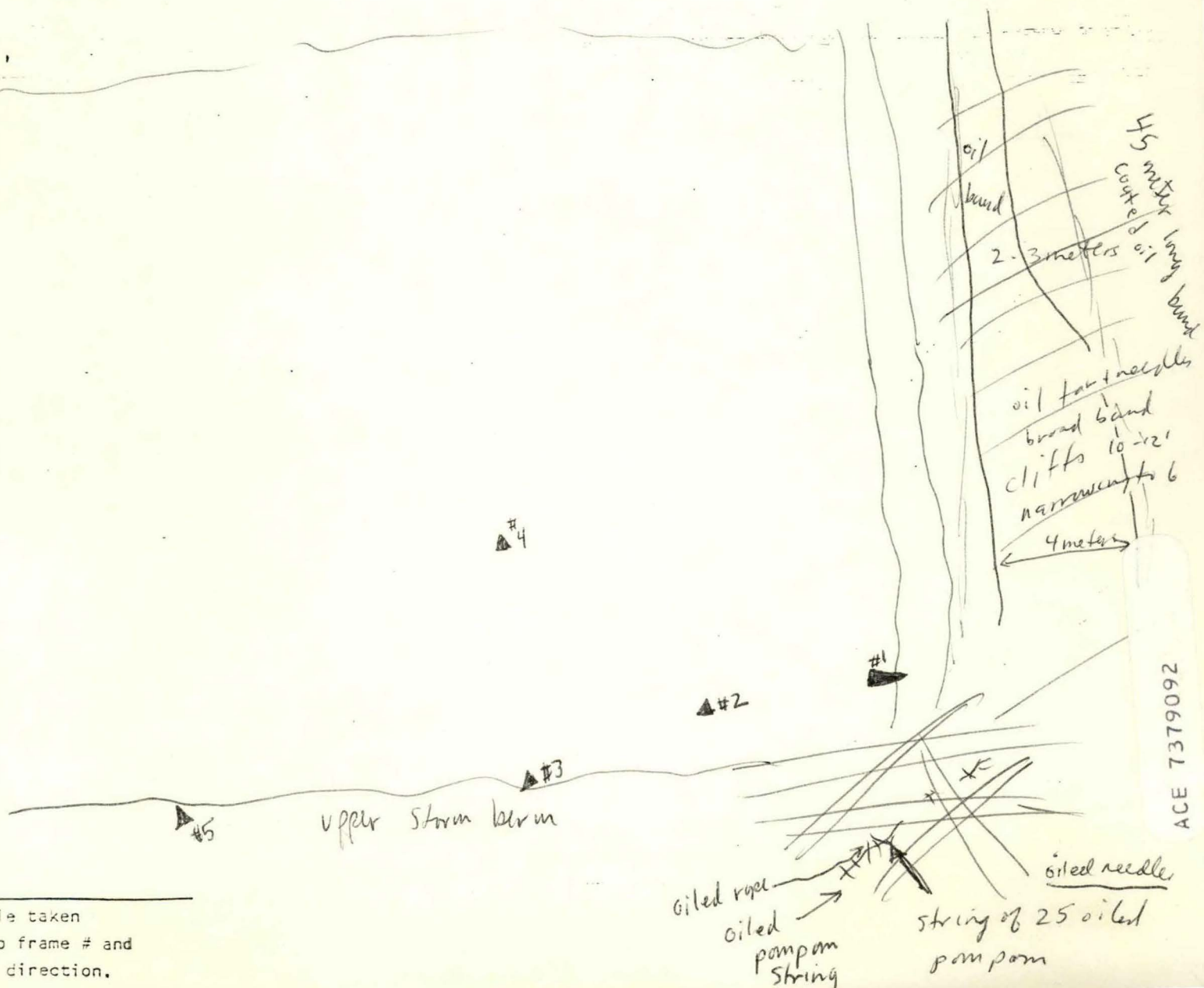
FRAME(S)

DESCRIPTION

125 cm	pit #1	No oil visible
150 cm	pit #2	No oil visible
60 cm	pit #3	No oil
45 cm	pit #4	Small amount of highly mobile soft brown/black oil.
35 cm	pit #5	oil coated rocks found in pit no oil band visible - assorted randomly oiled rocks.

46 OIL DISTRIBUTION DIAGRAM

on top of log jam - clumps oiled spruce needles
oiled rope - with string of pom pom.



ACE 7379092

Recommendations

Perform work during proper tidal window.

Remove oiled debris from log jam over creek mouth (Pom Pom string, rope etc oiled needles)

Perform a quick survey of beach and upper inter-tidal storm berm and pick up any oiled debris.

No bio remediation recommended.

Comments by Ken Critchlaw:

Agree with ADFG recommendations

KRC

*Processed
4/25
RH*

RECEIVED
APR 23 1990

DEPT. OF
ENVIRONMENTAL CONSERVATION

REGION: PRINCE WILLIAM SOUND

SEGMENT: ST/KN-211

SUBDIVISIONS: C (3 OF 6)

Canine & feed.

ACE 7379049 +/S

SH LINE EVALUATION

SEGMENT ST/ KN-211 SUBDIVISION C (3 OF 6) DATE 4/2/90

SEGMENT ENVIRONMENTAL SENSITIVITIES AND TIME CONSTRAINTS:

1A Salmon stream mouth - fry outmigration (3/1 to 5/15)
1B Salmon stream mouth - spawning (7/10 to 8/31)
5T-3 All bald eagle nests (3/1 to 6/1)-Active eagle nests (3/1 to 9/1)
6Y Recreation: Special use destination
See attached Ecological Constraint sheet for specific constraints and contacts.

SUBDIVISION ECOLOGICAL CONSTRAINTS:

Avoid any unnecessary disturbance or damage to unoiled biota and substrate. 1A, 1B. Anadromous stream no. 226-10-16880 is in Subdivision C.

ARCHAEOLOGICAL CONSTRAINTS:

If treatment is planned, a cultural resource evaluation is required prior to shoreline treatment.

SHPO SIGNATURE: _____ DATE: _____

OILING CATEGORIZATION:

Wide 0 m: Medium 0 m: Narrow 0 m: V.Light 285 m: No Oil 960 m
Subsurface Oil Observed: Yes _____ No X Maximum Depth _____

RECOMMENDATIONS:

<u>X</u> No Treatment Recommended	_____ Snare/Absorbent Booms
_____ Treatment Recommended	_____ Oil Snares (pom poms)
_____ Manual Pickup	_____ Absorbents (pads, rolls, etc)
_____ Bioremediation	_____ Spot Washing: _____ Wands
_____ Tarmat: _____ Removal	_____ Beach Cleaner
	_____ Other (see comments)

COMMENTS: _____

TAG COMMENTS: _____

TAG APPROVAL DATE: _____

ADEC _____
EXXON _____
NOAA _____
USCG _____

FOSC: _____ DATE: _____

PWS, SEWARD AND HOMER ECOLOGICAL CONSTRAINTS



Salmon stream mouth - fry outmigration (3/1 to 5/15)

Salmon stream mouth - spawning (7/10 to 8/31)

No disturbance of stream bed or banks unless authorized by ADF&G. No beach flushing into stream drainage. No bioremediation or other chemical application within 100m of stream. Contact ADF&G Habitat Division prior to treatment for permits.

1C Salmon fry nursery area (4/31 to 7/31)

1D Esther Hatchery release (4/15 to 6/1)

1E Main Bay Hatchery release (4/20 to 5/10)

1F Sawmill Bay Hatchery release (4/15 to 6/1)

1G Cannery Creek Hatchery release (4/21 to 6/1)

1H Remote release site

1I Gill net area (6/7 to 8/31)

1J Purse seine area (7/20 to 9/30)

1K Purse seine hook-off (7/20 to 9/30)

1L Set net sites (6/11 to 7/25)

For Codes 1C through 1L contact ADF&G for specific dates, locations and constraints.

2M Herring spawning (4/1 to 6/15)

Restrict boat traffic to essential minimum. Avoid damage to unholed intertidal and subtidal algae and seagrass. Contact ADF&G for specific dates and locations.

3N, 3P Harbor seal and sea lion pupping (5/15 to 7/1)

3O, 3Q Harbor seal and sea lion molting (8/15 to 9/15)

Restrict boat and air traffic to essential minimum. No personnel within 400m. Aircraft to maintain 800m horizontal and 300m vertical distance from haulouts.

5R Seabird colony (5/1 to 9/1)

Restrict air traffic to essential minimum. No personnel within 800m. Aircraft to maintain 800m horizontal, 300m vertical distance. Contact ADF&G and USFWS prior to treatment.

5S Shorebird/waterfowl concentration (4/1 to 5/15)

Restrict all activity to essential minimum, especially air traffic.



All Bald Eagle nests (3/1 to 6/1)

Active Bald Eagle nests (3/1 to 9/1)

Restrict air traffic to essential minimum. No personnel within 400m 3/1 to 6/1. Air approach and takeoff from and to seaward only; maintain 800m horizontal, 300m vertical distance from nests. Contact USFWS prior to treatment for confirmation of dates.

6U Recreation: Tent sites (6/1 to 9/15)

6V Anchorages (6/1 to 9/15)

6W Forest Service cabins (6/1 to 9/15)

6X Lodge (6/1 to 9/15)



Special use destination

7Z Subsistence area: Salmon harvesting (5/1 to 9/30)

7HH Finfish harvesting

7H Deer harvesting (8/15 to 2/28)

7JJ Invertebrate harvesting

For Codes 7Z through 7JJ contact ADF&G and Chenega Corporation for specific dates, locations, and constraints.

FIELD SHEET COMMENT SHEET

SEGMENT ST/ KN-211 SUBDIVISION: C DATE 4/2/90**USCG**NAME SCOTT RAINSFORD SIGNATURE Scott Rainsford MST1☒ NO TREATMENT RECOMMENDED
COMMENTS☐ TREATMENT SUGGESTED**ADEC**NAME Wesley Ghorrmley SIGNATURE Wesley Ghorrmley☒ NO TREATMENT RECOMMENDED
COMMENTS☐ TREATMENT SUGGESTED**LAND MANAGER**NAME LORA JOHNSON (CAC) SIGNATURE Lora L. Johnson☐ NO TREATMENT RECOMMENDED
COMMENTS☐ TREATMENT SUGGESTED

SNOW COVER IN THE UPLANDS. THIS IS USFS LANDS.

SHO...LINE OILING SUMMARY

REVISION NO. 02/28/90

OG G. MACDONALD USCG S. RAINSFORD SEGMENT ST/ KN-211
BIO MA. SCOTT LAND REP L. JOHNSON SUBDIVISION C
EXXON I BUTLER ADEC W. GHORALEY TIME 13:00 to 14:10
TEAM NO.: 8 TIDE LEVEL: +1 to +1 DATE 4/2/90
EST. SUBDIVISION LENGTH: 1290 m ☒ Sun ☒ Clouds ☐ Fog ☐ Rain ☐ Snow
UPLANDS DESCRIPTION: ☐ Grass ☒ Forest ☒ Rock
SURVEYED FROM: ☐ Foot ☐ Boat ☐ Helo WORKING DIRECTION: N to S
SURFACE SEDIMENTS: R 50 % B 20 % C 15 % P 10 % G 5 % S TL % M - % V - %
SLOPE: Long 25 % Hang 55 % Vert 20 % WAVE EXPOSURE: ☐ Low ☒ Med ☐ High
OIL CATEGORY LENGTH: W - m M - m N - m VL 400 m NO 390 m

SURFACE OIL

CHARACTER	DISTRIBUTION				OIL / FILM COLOR					IMPACTED ZONES			
	C	R	P	B	1	2	3	4	5	SU	U	M	U
ASPHALT PAVEMENT													
POOLED													
COVER				X				X		X			
COAT				X		X				X			
STAIN													
MOUSSE													
PATTIES													
TARBALLS				X				X		X			
FILM													
NO OIL										X	X	X	

PAVEMENT: H F S - sq. m by - cm

PATTIES / TARBALLS < 1/2 BAGS

NEAR SHORE SHEEN? NO BR RW SL TL

OILED DEBRIS	AMOUNT		
	SM	MD	LG
Logs			
Vegetation			
Trash			
Debris			

DEBRIS COLLECTED
☐ YES ☒ NO

TYPE -

#BAGS -

Photographs:

(2 ANCHORS)

Roll No. -

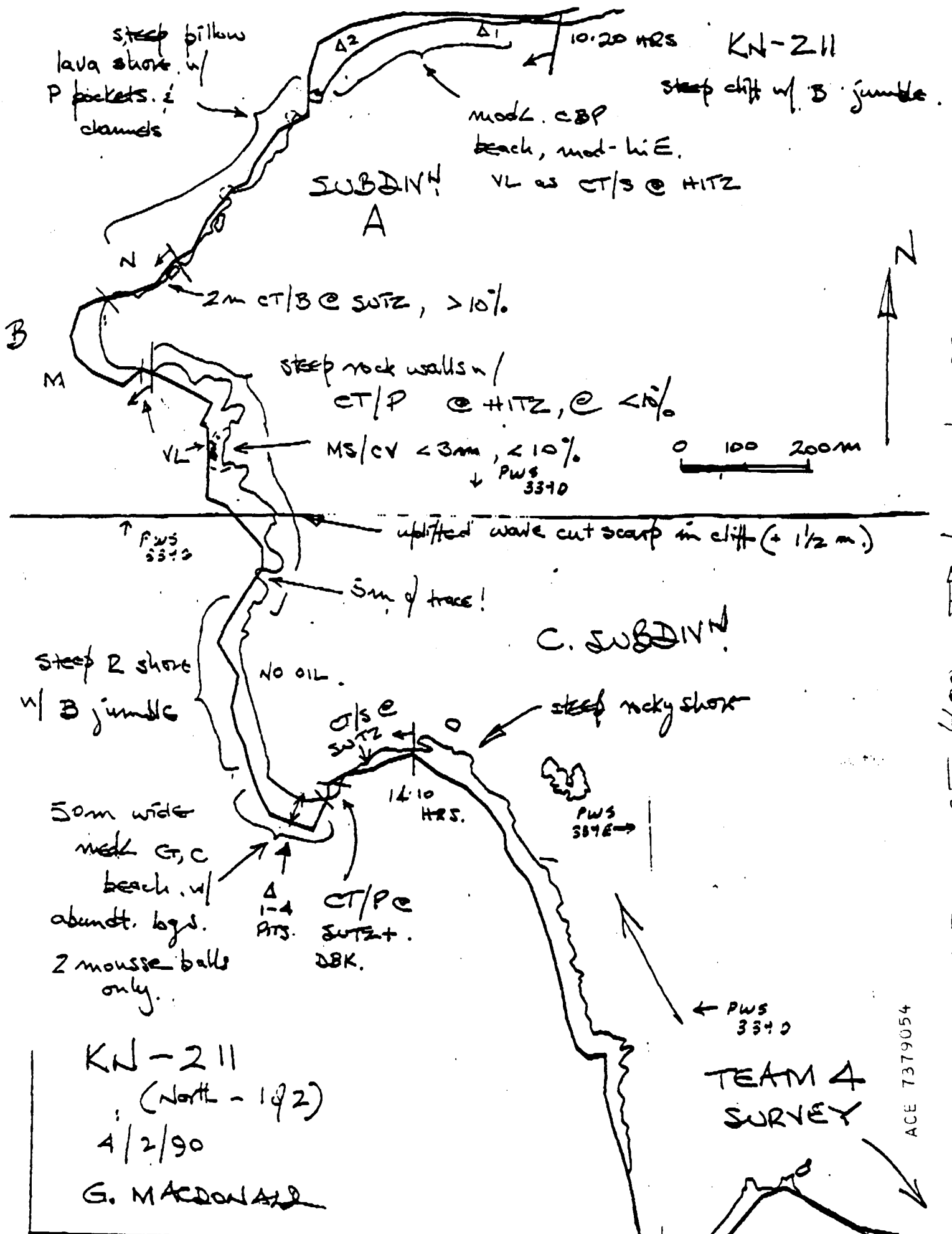
Frames -

SUBSURFACE OIL

PIT NO.	PIT DEPTH (cm)	SUBSURFACE OIL CHARACTER					OILED INTERVAL (CM)	BELOW		OIL / FILM COLOR	PIT ZONE				A N A	SUBSURFACE SEDIMENTS
		OF	OR	OL	OF	NO		UO	UC		SU	U	M	U		
1	20					X	-				X				N	PG
2	15					X	-					X			N	PGS
3	25					X	-						X		N	GSP
4	20					X	-							X	N	GS
							-									
							-									

COMMENTS Steep rocky shore w/ pristine GC beach. Trace of surface oil 90 CT/5 @ SUTZ on steep rock walls and 2 mouseballs @ SUTZ berm on beach.

ACE 7379053



G. MACDONALD

4/2/90

Date Entered: _____

ECOLOGY
MAP

Medium

SUBDIV. A

SUBDIV. B.

PWS 3340

SUBDIVISION C.

PWS 3340

5m
9T

PWS 3340

KN-211

(North) 152

TEAM 4
SURVEY

PWS 3340

SUBDIVISION D

SUBDIVISION E

17

ANADROMOUS STREAM
226-10-16880

SUBDIV. BOUNDARY

oil category boundary.

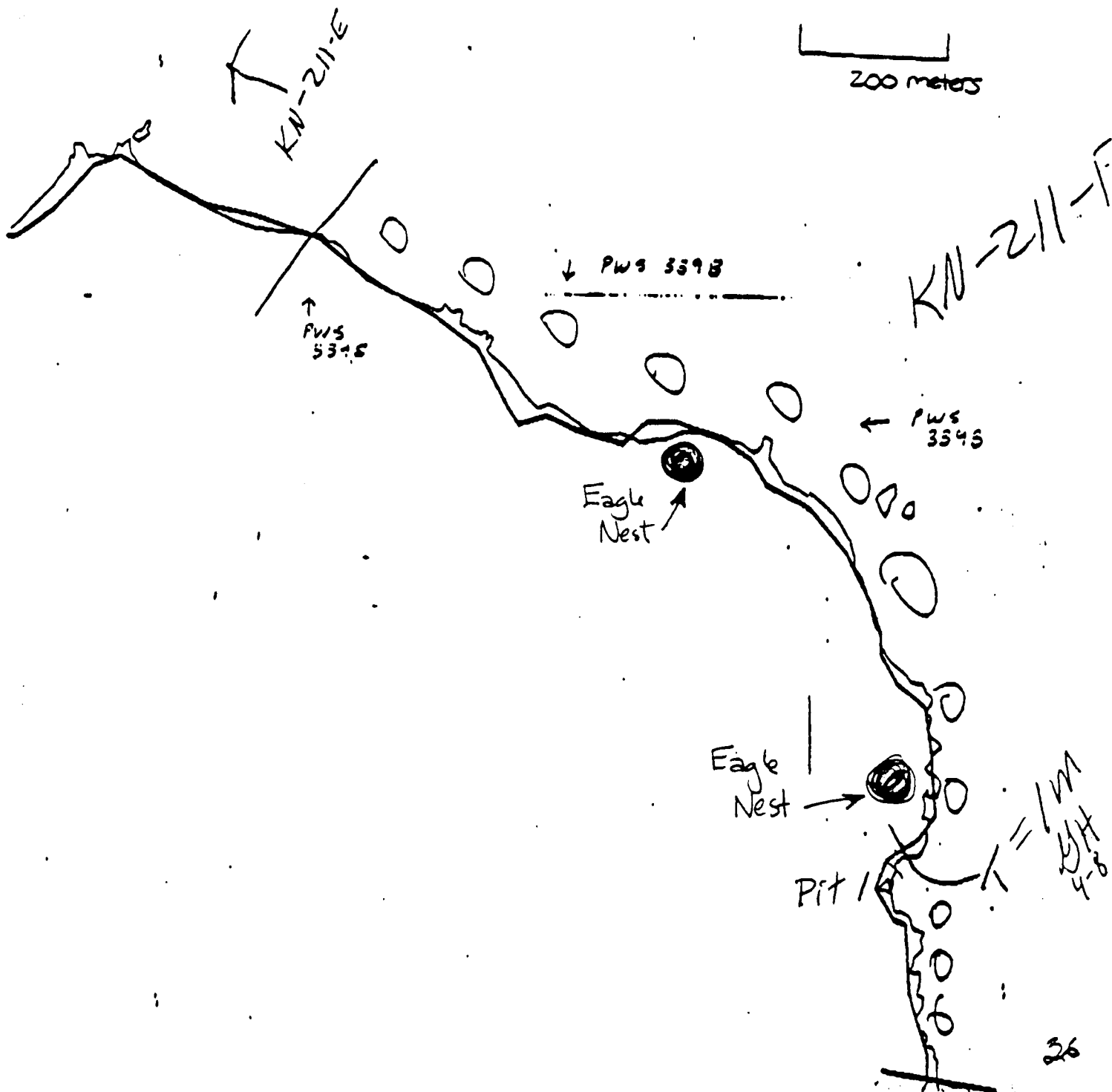
ANADROMOUS STREAM
226-10-16880

KN-211

South (2092)

ECOLOGY
MAP

← PWS
3342



oil character Length.

AP 0 PO 0 CV 0 CT 0 ST 1 MS 0 PT 0 TB 0 FI 0 NO 1

SHORE ECOLOGICAL SUMMARY

REVISION: 02/89

Segment ST / 211 Subdivision C Date (mo / day / yr) 4/2/90

Time (24 hr) 1320 - 1410 Biologist MASCOIT

(A) Substrate type and % of segments:
(1) Bedrock 50 (2) Boulder 20 (3) Cobble 15 (4) Pebble 15 (5) Sand — (6) Silt —

(B) Overall % cover of biota (% of segment): Dense — Moderate ~2% Low 1

(C) Density, substrate preference (by number from A, above), & vertical zonation of major taxa: (upper-U; mid-M; low tidal-L); juveniles / adults (X), new settlement (3)

Photographs:
Roll No. ST-3-2

Frames Ø

BARNACLES

Dense			Moderate			Sparse			Rare		
1U	1M	1L	1U	1M	1L	1U	1M	1L	1U	1M	1L
2	2	2	X	X	2	2	2	2	2	2	2
3	3	3	X	X	3	3	3	3	3	3	3
4	4	4	4	4	4	4	4	4	4	4	4
5	5	5	5	5	5	5	5	5	5	5	5
6	6	6	6	6	6	6	6	6	6	6	6

NOT PRESENT

MYTILUS

Dense			Moderate			Sparse			Rare		
1U	1M	1L	1U	1M	1L	1U	1M	1L	1U	1M	1L
2	2	2	2	2	2	2	X	2	X	2	2
3	3	3	3	3	3	3	X	3	3	3	3
4	4	4	4	4	4	4	4	4	4	4	4
5	5	5	5	5	5	5	5	5	5	5	5
6	6	6	6	6	6	6	6	6	6	6	6

NOT PRESENT

GASTROPODS

Dense			Moderate			Sparse			Rare		
1U	1M	1L	1U	1M	1L	1U	1M	1L	1U	1M	1L
2	2	2	2	2	2	2	2	2	X	X	2
3	3	3	3	3	3	3	3	3	X	3	3
4	4	4	4	4	4	4	4	4	4	4	4
5	5	5	5	5	5	5	5	5	5	5	5
6	6	6	6	6	6	6	6	6	6	6	6

NOT PRESENT

FUCUS

Dense			Moderate			Sparse			Rare		
1U	1M	1L	1U	1M	1L	1U	1M	1L	1U	1M	1L
2	2	2	2	X	2	X	2	2	2	2	2
3	3	3	3	X	3	X	3	3	3	3	3
4	4	4	4	4	4	4	4	4	4	4	4
5	5	5	5	5	5	5	5	5	5	5	5
6	6	6	6	6	6	6	6	6	6	6	6

NOT PRESENT

Wildlife Observations/ General Comments:

2 common mergansers

Ecological Considerations:

possible spawning stream

G. MACDONALD

4/2/90

Date
Entered: _____

Medium

SUBDIV'N A

SUBDIV'N B

↓ PWS 3340

SUBDIVISION C.

↑ PWS 3340

5m
9T

PWS 3340 →

KN-211

(north) 192

TEAM 4
SURVEY

← PWS 3340

SUBDIV'N
BOUNDARY

oil category
boundary.

ACE 7379058 -/5

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

Year of Revision

KN 211C

Anadromous Water Catalog Volume

USGS Quad Seward R-2, Alaska T4N R10E

Name of Waterway

Anadromous Water Catalog Number of Waterway

Change to Atlas

Catalog

Both

Addition ✓

Deletion

Correction

Name addition:

USGS name Aimee Creek

Local name

For Office Use

Nomination #

Regional Supervisor

Date

Drafted

Date

Species	Date(s) Observed	Spawning	Rearing	Migration
<u>Pink Salmon</u>	<u>Sept 6, 1989</u>	<u>✓</u>		

Located on the northeast side of Knight Island, above Bay of Isles

Comments: Provide any clarifying information, including number of fish observed, location of fish survey data, etc. I observed pink salmon spawning in both inlet and outlet streams and in the lake. Approximately 20 five pinks were present in the outlet stream, 75-100 pinks in the lake and 15-20 in the mouth of the inlet stream. I did not walk up the inlet stream to check for more. Numerous dead, washed ashore fish were in all 3 locations

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

Name of Observer (please print) Aimee Weseman

Date: 9-3-89 Signature: Aimee Weseman

Address: ADFG - Oil Spill Response
Box 812 Valdez AK 99686

Signature of Area Biologist:

ACE 7379103 +/5

DEPARTMENT OF FISH AND GAME

333 RASPBERRY ROAD
ANCHORAGE, ALASKA 99518-1599
PHONE: (907) 344-0541

EXXON Valdez Oilspill Cleanup

Anadromous Fish Stream Authorization

Date 6/14/90

EXXON Authorized Representative _____

Shoreline Segment KN-211

Anadromous Fish Stream Number(s) 226-10-16875

226-10-16880

Approved Cleanup Techniques are to be in accordance with the AnadScat stream work order approved by the FOSC with special emphasis on manual removal of all oil of any form within the stream channel and bottom substrate, and on the stream banks within the high water limits. Minimize removal of stream bank substrate and surface components to that required for removing oiled materials.

Approved Cleanup Period 5/15/90 to 7/10/90

Alaska Department of Fish and Game

[Signature]
Authorized Officer

[Signature]
Permittee's Signature

Approved Cleanup techniques have been reviewed and complied with: _____

EXXON Authorized Field Representative

Date _____

ANADROMOUS FISH STREAM EVALUATION ADDENDUM

CONSTRAINTS FOR STREAM NO. 226-10-16880

SEGMENT KN-211 SUBDIVISION B

WORK WINDOW

Manual Pickup
Tarmat Removal

OPEN

ARCHAEOLOGICAL STANDARD CONSTRAINT

If cultural resources are uncovered, PHONE 564-3274.

APPLICABLE ECOLOGICAL TIME CONSTRAINTS

1A,1B Salmon Stream

ADF&G catalogued anadromous streams (226-10-16880 and 226-10-16875) are in Subdivision B. No constraint to manual pickup and tarmat removal.

5T Bald Eagle Nest

NO CONSTRAINT. USFWS 6/1/90 map indicates no active nest within 400m of Subdivision B work site.

OTHER ECOLOGICAL CONSIDERATIONS

No disturbance to stream bed or banks. Avoid any unnecessary disturbance or damage to unloiled biota and substrate.

SEE SUBDIVISION CONSTRAINT ADDENDUM KN-211B
FOR ADDITIONAL CONSTRAINT INFORMATION.

FOSC

[Signature]

Date

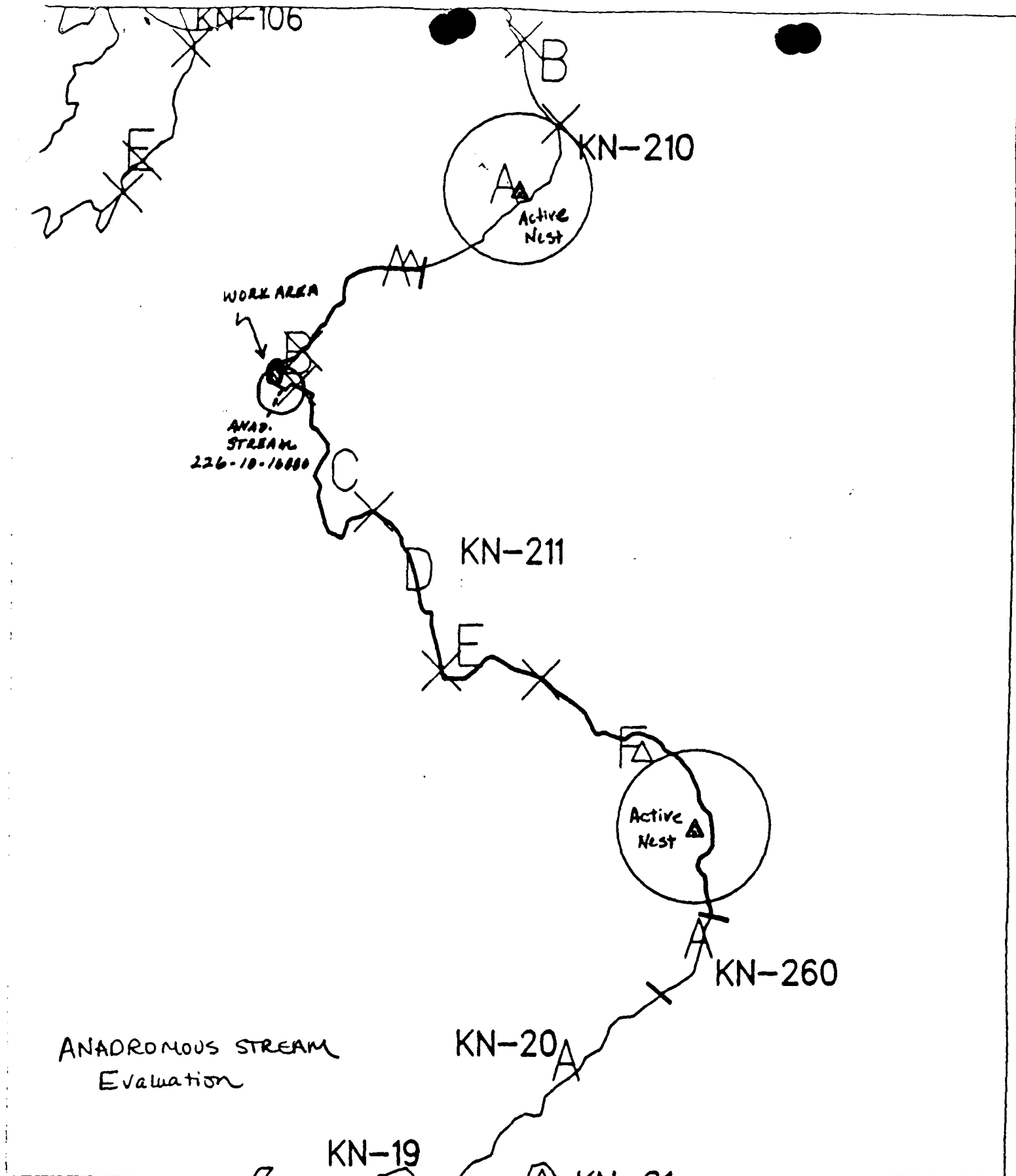
6/14/90

Prepared by

[Signature]

Date

6/14/90



Exxon Company, USA

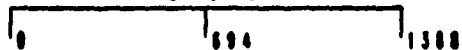
Map Key: PMS-KN-211

June 09, 1990



ECOLOGY MAP SEGMENT KN-211 SUBDIVISION B (2016)

METERS



- ★ Seabird Colony
- ▲ Active Eagle Nest
- △ Inactive Eagle Nest

1 inch = 2276 feet

ANADROMOUS FISH STREAM EVALUATION

SEGMENT ST/ KN-211 STREAM NO: 226-10-16880 DATE 4/22/90

SEGMENT ENVIRONMENTAL SENSITIVITIES AND TIME CONSTRAINTS:

Subject stream and 226-10-16875

1A Salmon stream mouth - fry outmigration (3/1 to 5/15)

1B Salmon stream mouth - spawning (7/10 to 8/31)

5T-3 All bald eagle nests (3/1 to 6/1)-Active eagle nests (3/1 to 9/1)

6Y Recreation: Special use destination

See attached Ecological Constraint sheet for specific constraints and contacts.

SUBDIVISION ECOLOGICAL CONSTRAINTS:

Avoid any unnecessary disturbance or damage to unoiled biota and substrate. Subject stream is located in Subdivision C (3 of 6).

ARCHAEOLOGICAL CONSTRAINTS:

If cultural resources are uncovered during shoreline treatment, stop work in the vicinity, mark the location of the find and contact a member of Exxon's Cultural Resource Program immediately (564-3657; 564-3658 or 564-3276).

SHPO SIGNATURE: [Signature] DATE: 5/10/90Subsurface Oil Observed: Yes No X Maximum Depth

RECOMMENDATIONS:

 No Treatment RecommendedX Treatment RecommendedX Manual Pickup BioremediationX Tarmat Removal Snare/Absorbent Booms Oil Snares (pom poms) Absorbents (pads, rolls, etc) Spot Washing: Wands Beach Cleaner Other (see comments)

COMMENTS: Recommended treatment includes 1) manual pickup of oiled pom poms in area indicated on sketch map, and 2) manual removal of tarballs in area indicated on sketch map. Work should be conducted between 6/1 and 7/10 with approval of USFWS regarding eagle nest constraint.

See CONSTRAINTS ADDENDUM dated 6/14/90/PP.TAG COMMENTS: TAG APPROVAL DATE: 5/10/90ADEC Art Wagon [Signature]EXXON Art Tetz [Signature]NOAA Bruce Warratt [Signature]USCG D.D. Rowe [Signature]FOSC: [Signature] DATE: 5-15-90

ANADROMOUS FISH STREAM EVALUATION

SEGMENT ST/ KN-211 STREAM NO: 226-10-16880 DATE 4/22/90

SEGMENT ENVIRONMENTAL SENSITIVITIES AND TIME CONSTRAINTS:

Subject stream and 226-10-16875

1A Salmon stream mouth - fry outmigration (3/1 to 5/15)

1B Salmon stream mouth - spawning (7/10 to 8/31)

5T-3 All bald eagle nests (3/1 to 6/1)-Active eagle nests (3/1 to 9/1)

6Y Recreation: Special use destination

See attached Ecological Constraint sheet for specific constraints and contacts.

SUBDIVISION ECOLOGICAL CONSTRAINTS:

Avoid any unnecessary disturbance or damage to unoiled biota and substrate. Subject stream is located in Subdivision C (3 of 6).

ARCHAEOLOGICAL CONSTRAINTS:

If cultural resources are uncovered during shoreline treatment, stop work in the vicinity, mark the location of the find and contact a member of Exxon's Cultural Resource Program immediately (564-3657; 564-3658 or 564-3276).

SHPO SIGNATURE: [Signature] DATE: 5/10/90Subsurface Oil Observed: Yes No X Maximum Depth

RECOMMENDATIONS:

 No Treatment RecommendedX Treatment RecommendedX Manual Pickup BioremediationX Tarmat Removal Snare/Absorbent Booms Oil Snares (pom poms) Absorbents (pads, rolls, etc) Spot Washing: Wands Beach Cleaner Other (see comments)

COMMENTS: Recommended treatment includes 1) manual pickup of oiled pom poms in area indicated on sketch map, and 2) manual removal of tarballs in area indicated on sketch map. Work should be conducted between 6/1 and 7/10 with approval of USFWS regarding eagle nest constraint.

TAG COMMENTS: TAG APPROVAL DATE: 5/10/90ADEC Art Wagoner [Signature]EXXON Andy Tetz [Signature]NOAA Russ Warratt [Signature]USCG D.D. Rome [Signature]FOSC: [Signature] DATE: 5-15-90

SEGMENT STI KN 211

STRAH 226-10-16893

DATE 4/22/90

CHECKLIST

☐ N Area
☐ Approx. Scale
☐ Seg/Sub Entry
☐ Oil Dist.
☐ Length
☐ % Cover
☐ Substrate Character
☐ Est. HULL/VOL
☐ SBL
☐ Profile Location(s)
☐ Profile(s)
☐ PB Location(s)
☐ Photo Location(s)

LEGEND

1 Δ

PB - No Subsurface Oil

2 Δ

PB - Subsurface Oil

CT/C

Continuous Distribution

CT/B

Broken Distribution

CT/P

Patchy Distribution

CT/S

Splotched Distribution

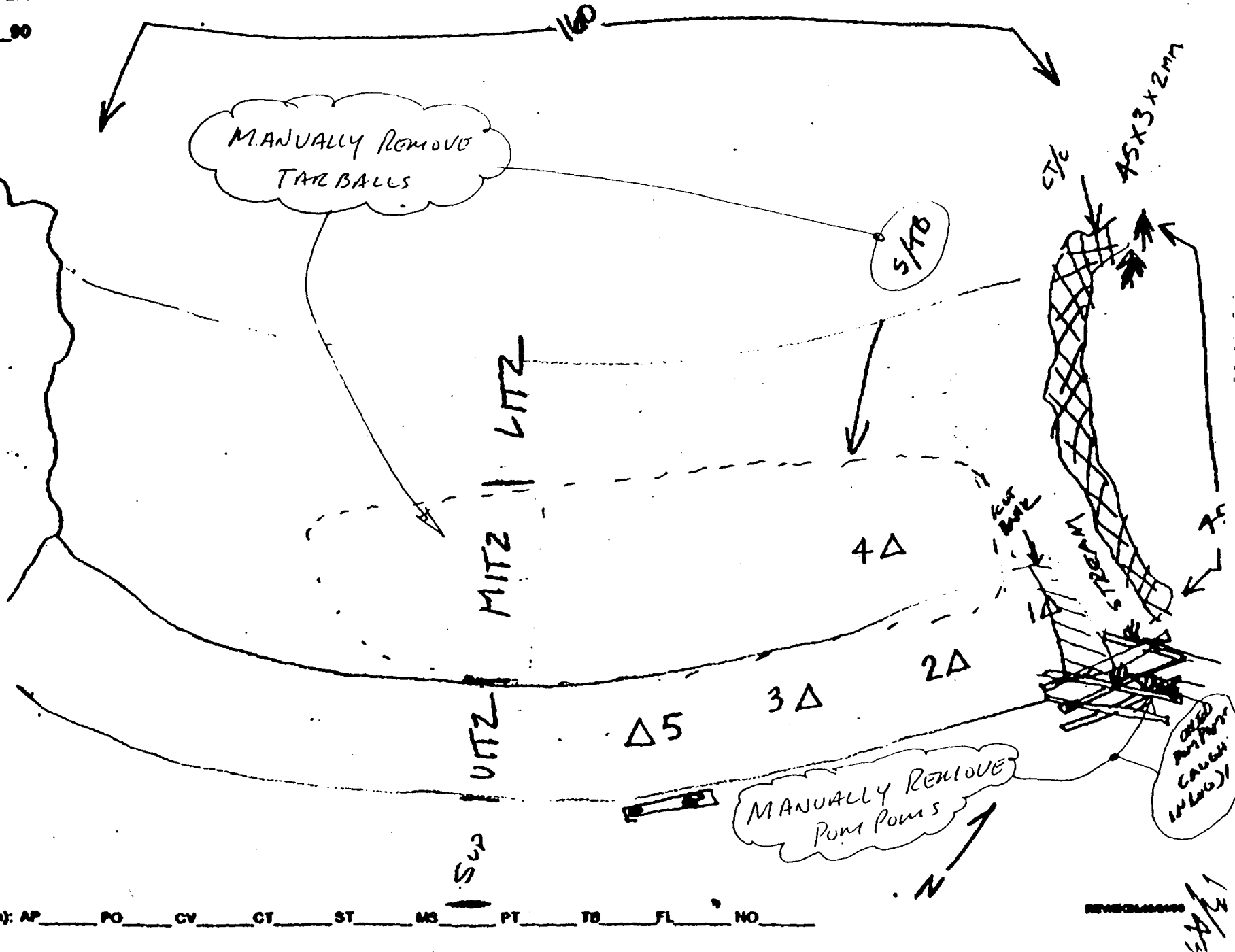
lll

Oiled Vegetation

1 →

Photo location, direction,
and number

Oil Character Length (m): AP PO CV CT ST MS PT TB FL NO



REVISION 01/0000

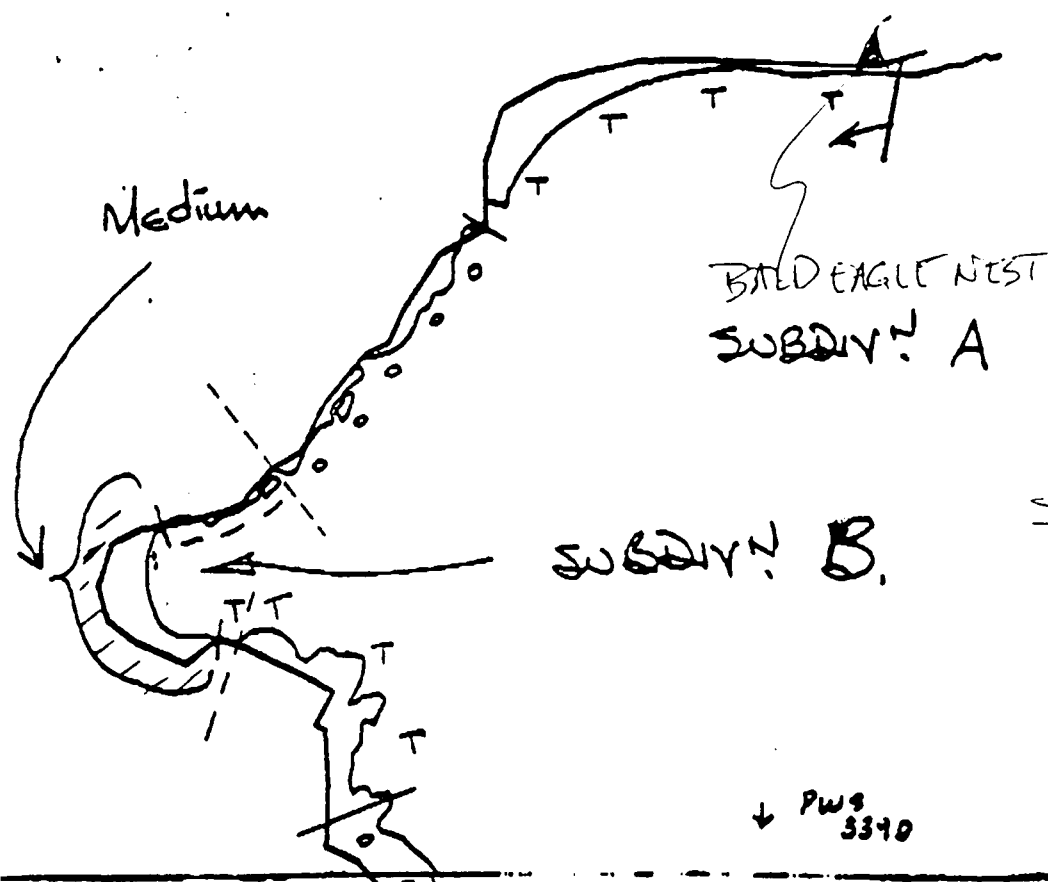
4/21

G. MACDONALD
4/2/90
Data Entered: _____

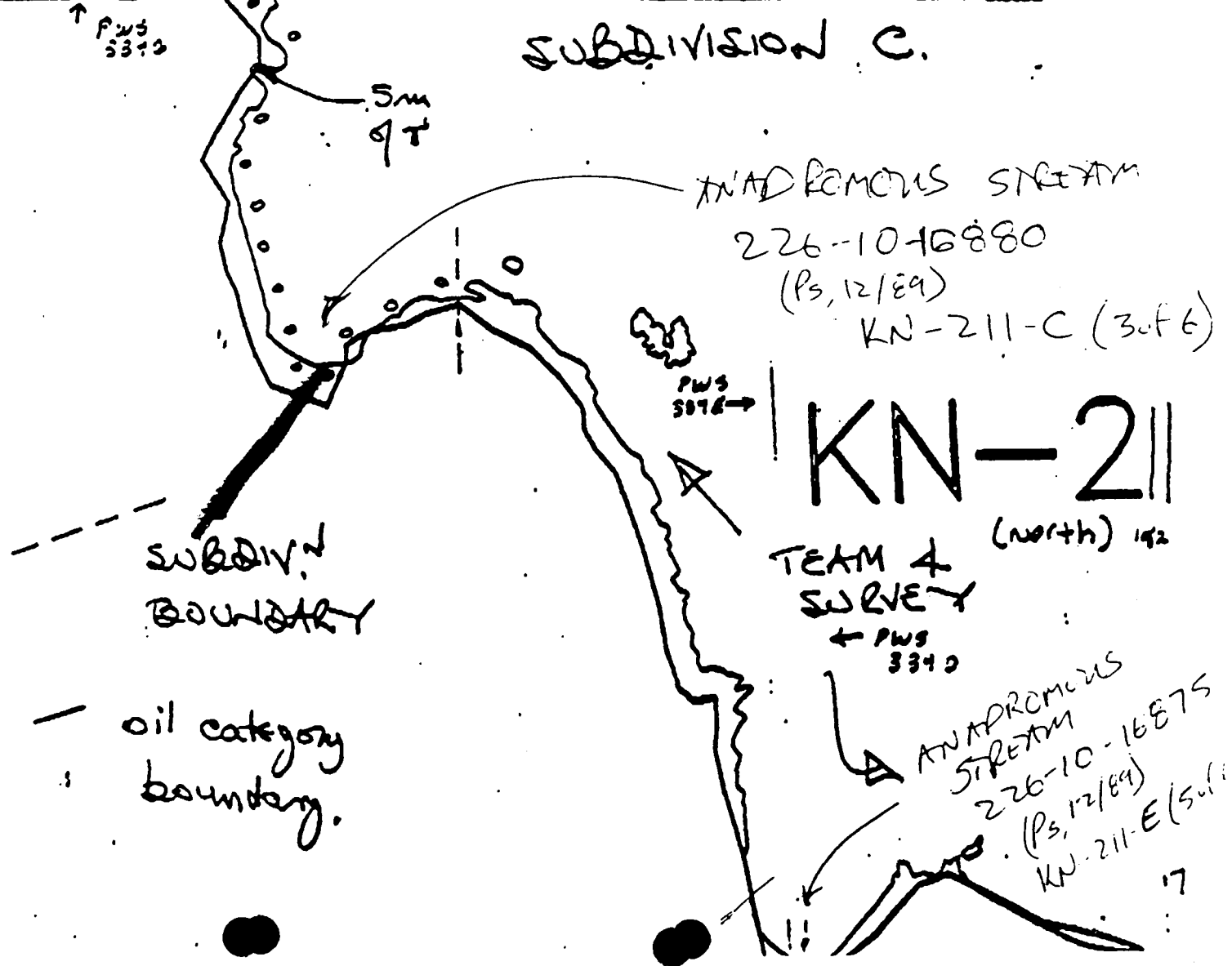
ECOLOGICAL MAP

SHEET 1 of 3

1A, 1B
5T(3)
64



SUBDIVISION C.



GEOLOGICAL SURVEY

FOURTH EDITION
(SHEET 2 OF 2)

147°45'
60°30'

460000m. E.

40'

060000m. N.

HERRING

01-0722

BAY

Louis Bay

Passage

Foul Pass

Disk Island

Island

16922

16890

16940

16956

16960

0010

0010

16880

BM Tidal

Cabins

FIN SUBM. (C) Ref. C

FIN SUBM. (E) (S.F.)

Otter Lake

Ssr Csr

Ssr Csr

18

19

25

25

27

28

32

33

34

35

36

4

3

2

1

9

10

11

12

17

15

14

20

21

22

23

19

25

25

South (20 ft)

← PWS
3342

T
KN-211-E

200 meters

↓ PW 3 339B

↑
PWS
534.5

KN-211-F

← PWS
3345

ANTHEMUS
GRTM
226.10 168.75

Pit 1

11/11

26

Character Length.

ΔG° ΔH° ΔS° ΔG° ΔH° ΔS° ΔG° ΔH° ΔS° ΔG° ΔH° ΔS°

(00)

SEGMENT ST/KN-211 (ANADROMOUS)
KN-211C

SUBDIVISION 226-10-16380

DATE AUG 19 / 90

CHECKLIST

N Arrow
Approx Scale
Seg/Sub Bndry
Oil Dist
Width
Length
% Cover
Substrate Character
Est HWL/LWL
SSL
Profile Location(s)
Profile(s)
Pit Location(s)
Photo Location(s)

LEGEND

1 Δ

Pit No Subsurface Oil

2 ▲

Pit Subsurface Oil

CT/C

Continuous Distribution

CT/B

Broken Distribution

CT/P

Patchy Distribution

CT/S

Splashed Distribution

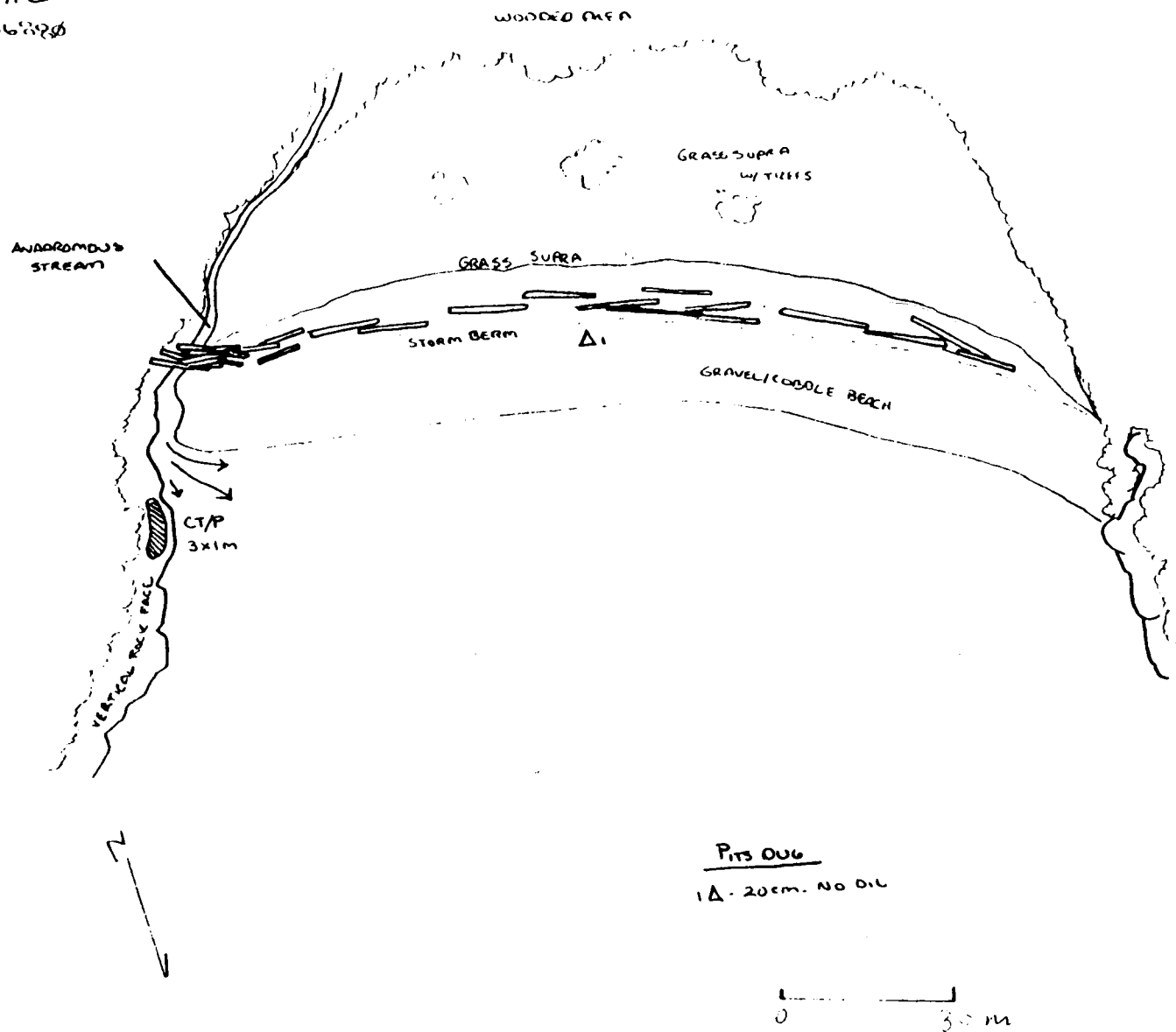
lll

Oiled Vegetation

1 →

Photo location, direction,
and number

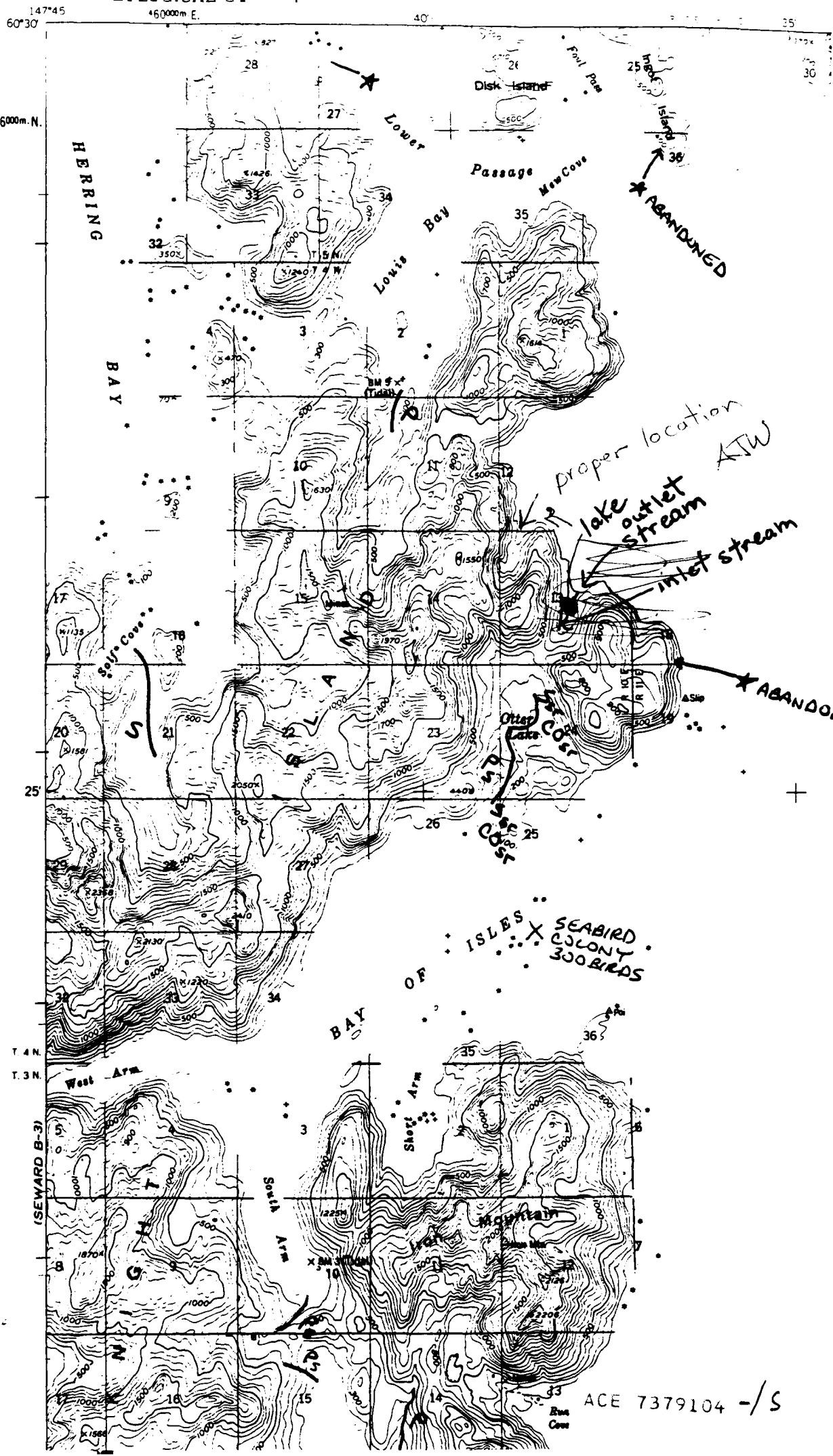
SKETCH MAP



ACE 7378998

Oil Character Length (m): AP _____ PO _____ CV _____ CT 3 ST _____ MS _____ PT _____ TB _____ FL _____ NO 117

REVISION: 000000



ACE 7379104 -/S

Aimee Weseman
ADF&G - Valdez
835-8048

P2.

Aug 21, 1989

To Charlie Thompson
Exxon - Task Force IV

I recieved a call yesterday from The Tongass Ranger Rat team about an oiled salmon stream in the southeast portion of segment KN211. This is an uncatalogued stream, but there are pink salmon reported in it and the adjoining lake.

The RAT team informed me that your task force and the USCG SCOT in the area are seeking a recommendation from the AK Dept of Fish & Game on treating the stream area.

I was able to contact Mr Valadez - USCG SCOT IV yesterday with our recommendations but was unable to reach you.

ADF&G's recommendations are as follows:
manually remove as much oiled biotic material and mousse as possible near the stream.

maintain a 10 foot buffer from the stream for washing activities - hot water wash outside that buffer is ok.

Place rows of snare boom along the banks of the stream (at waters edge) to deflect stray oil

To Charlie Thompson
Exxon-Task Force IV

Take care to keep saltwater deluge & hoses
out of stream - try to direct oily deluge/
hose water away from stream with hoses.

Accomplish treatment ASAP to minimize
disturbance to spawning salmon

Place containment boom around stream mouth
when treating nearby areas - placement should
be such that it allows fish passage at low tide.

Remove containment boom when through treating
in area.

If you have any further questions please feel
free to contact me at 835-8048.

Thanks for your concern

Aimee Weseman
ADFG

4/3/89

Knight Island
KN-211
STEVE COWPER, GOVERNOR

DEPARTMENT OF FISH AND GAME

1-in file

FILE 000

VALDEZ OFFICE
Phone Number (907) 835-8067
Telefax Number (907) 835-8071

TRANSMITTAL SHEET

TO DISTRIBUTION:

Anchorage x
Cordova F&G _____
Cordova OSA _____
Fairbanks _____
Homer _____
Juneau _____
Kodiak _____
Seward _____

FROM: Robin - Valdez

NUMBER OF PAGES FOLLOWING COVER SHEET: 6

COMMENTS: Mark - Kathy F. said harbor
seals may be present in small numbers
(1-4) but needn't worry about at this
time.

(version 5/02/89)

SHORELINE CLEANUP PROGRAM

DATE 6/03/89

SHORELINE SEGMENT KN-211

LOCATION: (see enclosed map) Knight Island-Northeast Tip

ADEC NO. _____ SHORELINE ASSESSMENT DATE: 5/24/89

Recommended Cleanup Activity(ies):

- Manually collect all oiled logs/algae and boom.
- Manually collect/scrape up asphalt like sediments.
- Hot water/high pressure flushing on boulder/cobble sediments.
- Hot water/low pressure flushing on pebble/sand sediments.
- Cleaning recommended for oil stain on headlands/straights because it has high wave exposure.

Priorities Considerations:

Class 2A

- Heavily oiled boom on beaches #4 & #5 should be removed as soon as possible, if possible, prior to cleanup crew mobilization.

Ecological Constraints (from site survey): Avoid stream areas and mytilus beds outside oiled zone. Harbor seal cow and pup on beach #2.

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. Adams
State Historic Preservation Officer *

Date: June 3, 1989

EXXON: _____

Date: _____

FOSC: _____

Date: _____

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

④ KN-211 Branch 4 1125-1150

Survey: flat w/ partly sunny
access: b/hg/held/fit place
ff wave exp: high 100T

VELT

Peach	5	1155	1210
-------	---	------	------

Wave exp high
Survey foot
Access: bit log / helo of flat plane
(rocks)

46

Lange Rocks

rocks

M-UITZ is moderately coated with tar (dried oil). M. & U rocks are only spattered

1A 177 has a moderate amount of oiled logs.

No pools free
No penetration

large oiled
cont. bones

M-U ITZ is heavily oiled. Mostly thick fresh black oil. (5% manasse) > 10 cm pen.

5% B / 90% C / 10% P

High amount of oiled debris on U 472. Includes some algae, several logs and a very long section of absorb. boom as well as 20' of cont. boom.

No free pooled oil.

Continuous band 200m
long x 10-50m wide

Very good access
for equipment.
Gravel bottom

7
FANG

70% B / 25% C / 5% P

1005

ACE 7379110

Boulders

VERTICAL CLIFFS

ACE 7379109

SHORELINE OIL EVALUATION

Date: 5/24/89 Time: 0945-1730

Observer: C. Dillon

Surveyed From: Foot/Boat/Helio/Plane

Weather: Sun/Cloud/Rain/Snow/Fog

LOCATION

LOCATION KNIGHT ISLAND

SEGMENT NUMBER KN-211

LENGTH OF SHORELINE SEGMENT: 15,000 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 20%

Sediment: B % / C % / P % / G % / S % / M % / R 80 %

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

OIL

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

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

Continuous: Y/N % of Segment 100 Width of Band: <1 - 75 m

Sporadic: Y/N % of Segment

Est. Oil Thickness where > 1cm: 1 cm Est. Oil Penetration: 0 - >15 cm

Pooled Oil: 0 % "Free" Oil: 0 % Coated: H 75 % / M 20 % / L 5 %

Fresh 30 % Mousse 30 % Tar Formation: 40 %

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

Comments:

This is a generalized Segment evaluation form. Most of this segment consists of rocky headlands and straight Rock face with a 1 m wide dried/stained oil band. There are 5 large beaches with varying conditions. They are evaluated on the following sheets. Diagrams of each are attached. Their locations are identified on the attached map.

1 RESERVE OIL EVALUATION

Date: 5/24/89 Time: 1125-1150

Observer: C. J. Olson

Surveyed From: Foot/Boat/Helio/Plane

Weather: Sun/Cloud/Rain/Snow/Fog

LOCATION

LOCATION KNIGHT ISLAND SEGMENT NUMBER 1A-2 Beach 4

LENGTH OF SHORELINE ^{Beach} SEGMENT: 200-300 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 80 % / P 10 % / G % / S % / M % / R %

Drift Debris on Beach: Yes/No Supra/Upper/Mid/Lower Type logs/algae
oiled containment boom
oil saturated absorbent boom

OIL

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

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

Continuous: Y/N % of ^{Beach} Segment 100 Width of Band: 10-50 m

Sporadic: Y/N % of Segment

Est. Oil Thickness where > 1cm: 1 cm Est. Oil Penetration: >10 cm

Pooled Oil: 0 % "Free" Oil: 0 % Coated: H 100 % / M % / L %

Fresh 95 % Mousse 5 % Tar Formation: 0 %

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

Comments:

Access to beach is very good. Bottom is a low
angle slope and is very sandy.
approximately 200 feet of oil saturated absorbent boom
and 20 ft. of containment boom have washed onto the
Upper ITZ.
See diagram for details.

ECOLOGICAL EVALUATION

LOCATION: KNIGHT ISLAND SITE: KN-211 OBSERVER: MEYER

LOCATION PREFIX: KN SEG. NO.: 211 LENGTH: 15,000 (M)

DATE: 05/24/89 TIME (HDDM): 0945 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

Generally unoiled and healthy throughout area and on beaches.

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

Particularly dense in stream area Beach #2; None on Beach #5

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

Present in oiled and un-oiled zones.

Littorina

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

Beach #2, patchy in LTZ, not in oiled area; None on Beach #5. ^{extend into oiled zone} Dense worm snails Beaches #1, #4.

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

Sparse throughout beaches, none on Beach #5

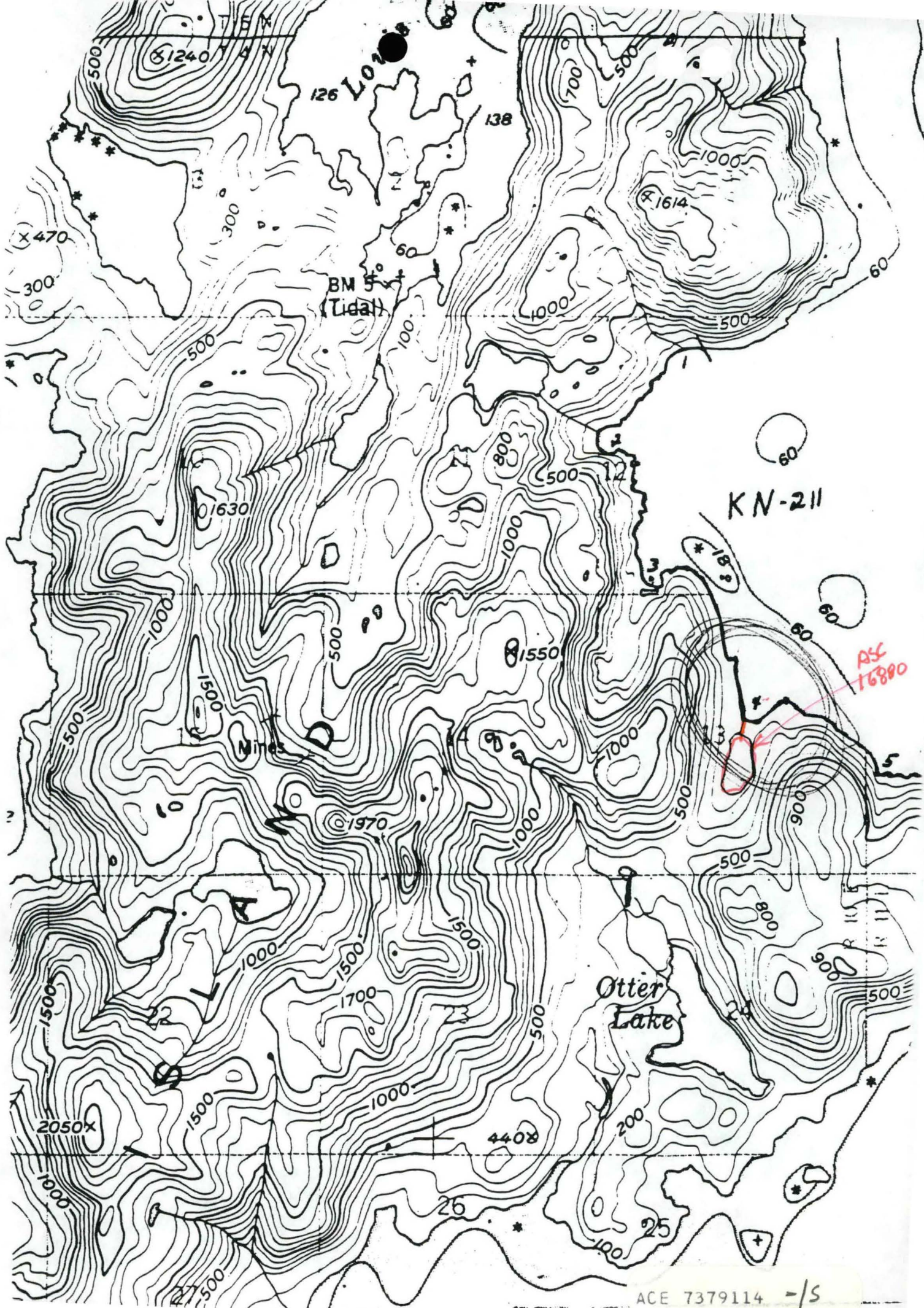
OTHER OBSERVATIONS: Non-aquatic stream on beaches #1, 2 & 4. White particulate in H₂O off E #5 - seems to be same as private individuals' dispersant seen last week. Mousse in water off heavily oiled Beach #2. Heavily oiled boom on Beaches #4 & #5.

CLEANUP PRECAUTIONS: LTZ below oiled zones generally with sparse biota - ecological constraints limited to stream areas and boulders on ends of beaches. Avoid mytilus beds outside oiled areas as much as possible.

MAMMALS: Otters _____ Harbor Seals ♀ + pup Sea Lions _____ Whales _____
Other _____

BIRDS: _____

GENERAL OBSERVATIONS: Beach #3: Harbor seal + pup 20 yards off shore, unoiled; pup trying to beach, cow nudging it back into water watching us unceasingly.



(version 5/02/89)

SHORELINE CLEANUP PROGRAM

DATE 5/24/89

SHORELINE SEGMENT KN-211

LOCATION: (see enclosed map) KNIGHT ISLAND - NORTHEAST TIP.

ADEC NO. _____ SHORELINE ASSESSMENT DATE: _____

Recommended Cleanup Activity(ies):

- 1. Manually collect all oiled logs/algae and boom.*
- 2. Manually collect/scrape up asphalt-like sediments.
- 3. Hot water, high pressure flushing on boulder/cobble sediments.
- 4. Hot water, low pressure flushing on ~~smaller~~ pebble/sand/sediment.
- 5. ~~Oil stain~~ on headlands/straights is non recoverable stain. High energy wave

Priorities Considerations: ~~action with clean this off better in~~

cleaning recommended for
Class 2A

because it ~~is~~ has high wave exposure.
if possible

* Heavily oiled boom on beaches #4 + #5 should be removed as soon as possible, ~~even~~ prior
Ecological Constraints (from site survey): to cleanup crew mobilization, if necessary.

Avoid stream areas and mytilus beds outside oiled zone. Harbor seal cow and pup on Beach #3.

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: _____

EXXON: _____

Date: _____

FOSC: _____

Date: _____

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

ACE 7379115 +15

SHORELINE OIL EVALUATION

Date: 5/24/89 Time: 0945-1730

Observer: C. Dillon

Surveyed From: Foot/Boat/Helio/Plane

Weather: Sun/Cloud/Rain/Snow/

LOCATION

LOCATION KNIGHT ISLAND SEGMENT NUMBER KN-211

LENGTH OF SHORELINE SEGMENT: 15,000 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 20%

Sediment: B % / C % / P % / G % / S % / M % / R 80 %

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

OIL

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

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

Continuous: Y/N % of Segment 100 Width of Band: <1 - 75

Sporadic: Y/N % of Segment

Est. Oil Thickness where > 1cm: 1 cm Est. Oil Penetration: 0 - >15 c

Pooled Oil: 0 % "Free" Oil: 0 % Coated: H 75 % / M 20 % / L 5 %

Fresh 30 % Mousse 30 % Tar Formation: 40 %

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

Comments:

This is a generalized Segment evaluation form. Most of this segment consists of rocky headlands and straight Rock face with a 1m wide dried/stained oil bar. There are 5 large beaches with varying condition. They are evaluated on the following sheets. Diagrams of each are attached. Their locations are identified on the attached map.

SHORELINE OIL EVALUATIONDate: 5/24/89 Time: 1030-1100Observer: N. DillonSurveyed From: Foot/Boat/Helio/PlaneWeather: Sun/Cloud/Rain/Snow/FLOCATIONLOCATION Knight Island SEGMENT NUMBER KN-21 BeachLENGTH OF SHORELINE ^{Beach} SEGMENT: 200 mACCESS: Foot/Vehicle/Boat/Barge/Helio/Float PlaneSHORELINE:

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

Slope: LANG/HANG/VER

Wave Exposure: High/Med/LowSediment: B25 / C25 / P45 / G__ / S__ / M__ / R5Drift Debris on Beach: Yes/No Supra/Upper/Mid/Lower Type large / small / EGSS / algae +OILDegree of Oiling: Heavy/Moderate/Light/No Oil/UnobservedArea of Beach Impact: SU / SP / H / M / LContinuous: Y/N % of ^{Beach} Segment 90 Width of Band: 75 mSporadic: Y/N % of Segment _____Est. Oil Thickness where > 1cm: 1 cm Est. Oil Penetration: >15 cmPooled Oil: 0 % "Free" Oil: 0 % Coated: H100 / M__ / L__Fresh 0 % Mousse 30 % Tar Formation: 70 %Drift Debris Oiled? Yes/No Supra/Upper/Mid/Lower Amount: H/M/L/Comments:

Majority of beach is covered with a thick tarry/mousse asphalt-like pavement of pebbles and algae mixed oil. This varies from 2cm thick to >12cm in places.

Boulders on North end of beach have heavy tar coating but no pools or free oil.

The stream area has almost cleaned itself completely.

Refer to diagram for details.

SEGMENT ST/ KJ-211SUBDIVISION BDATE 4/2 90

SKETCH MAP



CHECKLIST

☐ N Arrow
☐ Approx. Scale
☐ Seg/Sub Bdry
☐ Oil Dist.
☐ Width
☐ Length
☐ % Cover
☐ Substrate Character
☐ Est. HAZ/L.A.M.
☐ SSL
☐ Profile Location(s)
☐ Profile(s)
☐ PH Location(s)
☐ Photo Location(s)

LEGEND

1 Δ
 PH - No Subsurface Oil

2 Δ
 PH - Subsurface Oil

CT/C
 Continuous Distribution

CT/B
 Even Distribution

CT/P
 Patchy Distribution

CT/S
 Splashed Distribution

Oiled Vegetation

1 ●
 Photo location, direction, and number

M mousse patch
 < 1 m², 5 m thick.

conspicuous debris train with
 (incoming tide -
 logs; seaweed.

occas. mouse balls
 across beachface.

steep
rock.

Remove
Oiled
Debris

CT/B E 2m @ SWTZ < 10%
 oiled trash - chain,
 rope & boom joint.

CV, PO/I, as mouse.
 light br.

Bio/Rake Here

Debris/LG as
 logs, veg, trash.

P, B, R beach,
 b - med L, med-L to E.

Oil Character Length (m): AP 20 PO - CV 80 CT 300 ST 50 MS - PT - TB - FL 10 NO -

REVISION: 09/2000

ACE 7379036

SHORELINE OILING SUMMARY

REVISION NO. 03/28/90

OG E. MACDONALD USCG S. RAINSFORD SEGMENT ST/ KW - 211
 BIO M.A. SCOTT LAND REP L. JOHNSON SUBDIVISION B
 EXXON J. BUTLER ADEC W. GORMLEY TIME 11:00 to 13:00
 TEAM NO.: 3 TIDE LEVEL: +5 to +1 DATE 4/2/90
 EST. SUBDIVISION LENGTH: 350 m ☒ Sun ☒ Clouds ☐ Fog ☐ Rain ☐ Snow
 UPLANDS DESCRIPTION: ☐ Grass ☒ Forest ☒ Rock
 SURVEYED FROM: ☒ Foot ☐ Boat ☐ Helo WORKING DIRECTION: N to S
 SURFACE SEDIMENTS: R 15 % B 10 % C 35 % P 25 % G 10 % S 5 % M - % V - %
 SLOPE: Long 80 % Hang 10 % Vert 10 % WAVE EXPOSURE: ☐ Low ☒ Med ☐ High
 OIL CATEGORY LENGTH: W - m M 150 m N 130 m VL 70 m NO - m

SURFACE OIL

CHARACTER	DISTRIBUTION				OIL / FILM COLOR								IMPACTED ZONES			
	R	B	P	C	W	U	M	V	S	G	P	N	SW	U	M	U
MOUSSE																
PAVEMENT				X									X	X		
POOLED			X								X	X	X	X		
COVER			X								X	X	X	X		
COAT				X						X	X	X	X	X		
STAIN			X							X	X	X	X	X		
MOUSSE																
PATTIES																
TARBALLS			X								X	X	X	X		
FILM				X							X	X	X	X		
NO OIL																X

PAVEMENT: H F (S) <5 sq. m by <10 cm

PATTIES / TARBALLS <1 BAGS

NEAR SHORE SHEEN? (NO) BR RW SL TL

OILED DEBRIS	AMOUNT		
	SM	MD	LG
Logs			X
Vegetation		X	
Trash	X		
Debris			X

DEBRIS COLLECTED

☒ YES ☐ NO

TYPE TS, rpe, pom-

#BAGS 1

Photographs:

(1 drift buoy)

Roll No. ST-3-2

Frames 3-10

SUBSURFACE OIL

PIT NO.	PIT DEPTH (cm)	SUBSURFACE OIL CHARACTER					OILED INTERVAL (cm)	BELOW		OIL / FILM COLOR								PIT ZONE	A N A	SUBSURFACE SEDIMENTS
		OP	OR	OL	OF	NO		VO	UC	W	U	M	V	S	G	P	N			
1	30					X	.											X	N	GCB
2	35					X	.											X	N	PGS
3	30					X	.											X	N	PG
4	30			X			10-15	X					X	X					N	PG
4	30		X				15-30	X					X						N	G.
5	35		X				20-36	X					X	X					N	GC

COMMENTS Rocky beach of considerable aesthetic and recreational value, set in steep rocky shore. Remains of wide surface oiling as medium category CT, ST, PO, CV @ MTTZ-SUTZ. Extensive subsurface oiling as OL/P; OR/FL; CT mixed w/ organics. Sticky light brown mousse sheens very sparingly.

The beach is a natural debris trap.

REVIEWED JW DATE 4/7/90

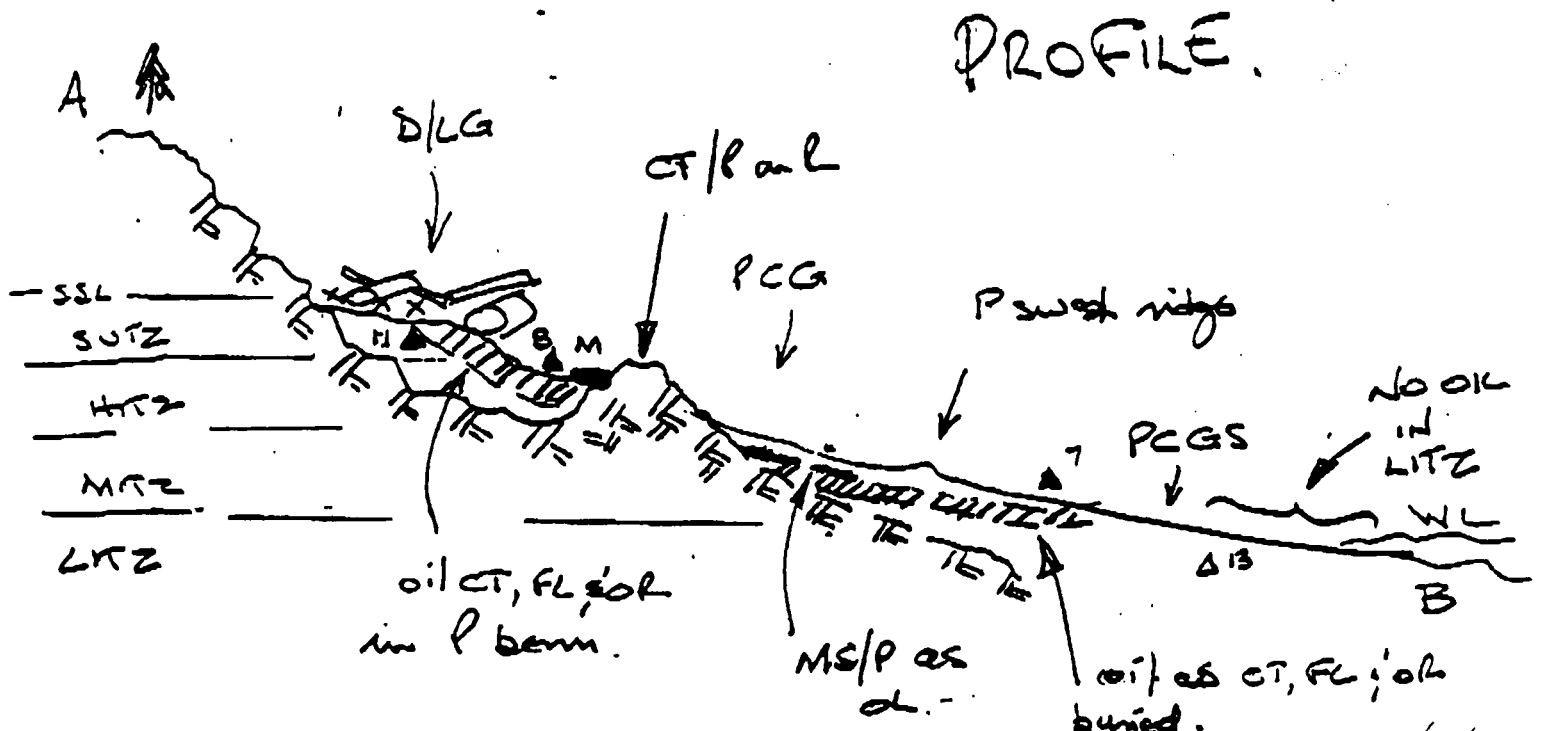
ACE 7379033

SEGMENT ST/ KN-211 SUBDIVISION B

SUBSURFACE OIL (CONTINUED)

PIT NO.	PIT DEPTH (cm)	SUBSURFACE OIL CHARACTER					OILED INTERVAL (CM-DM)	BELOW		OIL / FILM COLOR						PIT ZONE				A N A	SUBSURFACE SEDIMENTS
		OP	OR	OL	OF	NO		VO	UC	1	2	3	4	5	6	SU	U	M	U		
6	35		X				25-35	X							X			X		N	GSC
7	35		X				30-35	X							X			X		N	PGS
8	30		X				25-30	X							X	X				N	GP
9	30		X				10-30	X							X	X				N	PG
10	40		X				5-30		X					X			X			N	G.P. peat
11	20		X		X		5-20	X						X		X				N	P
12	25		X				20-25	X							X		X			N	GP
13	35					X	.												X	N	PGS
							.														
							.														
							.														
							.														
							.														
							.														
							.														

COMMENTS

REVIEWED 7W DATE 4/7/90

SHORELINE OIL EVALUATION

Date: 5/24/89 Time: 1105-1115

Observer: C. E. Hox

Surveyed From: Foot/Boat/Helio/Plane

Weather: Sun/Cloud/Rain/Snow/F

LOCATION

LOCATION KNIAH ISLAND

SEGMENT NUMBER EN-2 Beach?

LENGTH OF SHORELINE ^{Beach} SEGMENT: 200 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 10 % / P 90 % / G % / S 40 % / M % / R %

→ underlies bp sediments.

Drift Debris on Beach: Yes/No

Supra/Upper/Mid/Lower Type logs/algae

OIL

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

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

Continuous: Y/N % of Beach Segment Width of Band: 13-15 m

Sporadic: Y/N % of Segment

Est. Oil Thickness where > 1cm: 0 cm Est. Oil Penetration: >12 cm

Pooled Oil: 0 % "Free" Oil: 0 % Coated: H 15 % / M 15 % / L 70 %

Fresh 70 % Mousse 15 % Tar Formation: 15 %

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

Comments:

Small patches of thin "asphalt-like" sediments on upper ITZ. Also some oiled logs and algae on U ITZ. Penetration is >12 cm.

Middle ITZ is lightly coated with <4 cm penetration. Some oiled algae + twigs in this zone.

Lower ITZ is unoiled.

High wave action is cleaning the small sediments of the middle I

SHORELINE OIL EVALUATION

Date: 5/24/89 Time: 1125-1150

Observer: C. E. Hox

Surveyed From: Foot/Boat/Helio/Plane

Weather: Sun/Cloud/Rain/Snow/F

LOCATION

LOCATION KNIGHT ISLAND

SEGMENT NUMBER KN-2 Beach 4

LENGTH OF SHORELINE ^{Beach} SEGMENT: 200-300 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 80 / P 10 / G / S / M / R

Drift Debris on Beach: Yes/No

Supra/Upper/Mid/Lower Type logs/algae
oiled containment boom
oil saturated absorbent boom

OIL

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

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

Continuous: Y/N % of ^{Beach} Segment 100 Width of Band: 10-50 m

Sporadic: Y/N % of Segment

Est. Oil Thickness where > 1cm: 1 cm Est. Oil Penetration: >10 cm

Pooled Oil: 0 % "Free" Oil: 0 % Coated: H 100 % / M % / L %

Fresh 95 % Mousse 5 % Tar Formation: 0 %

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

Comments:

Access to beach is very good. Bottom is a low angle slope and is very sandy.

approximately 200 feet of oil saturated absorbent boom and 20 ft. of containment boom have washed onto the upper ITZ.

See diagram for details.

SHORELINE OIL EVALUATION

Date: 5/24/89 Time: 1155-1200

Observer: C. Dillon

Surveyed From: Foot/Boat/Helio/Plane

Weather: Sun/Cloud/Rain/Snow/F

LOCATION

LOCATION KNIGHT ISLAND SEGMENT NUMBER KN 2: Beach 5

LENGTH OF SHORELINE ^{Beach} SEGMENT: 150 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 70% / C 25% / P 5% / G ___% / S ___% / M ___% / R ___%

Drift Debris on Beach: Yes/No Supra/Upper/Mid/Lower Type logs ^{oiled} _{containment boom}

OIL

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

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

Continuous: Y/N % of Segment 100 Width of Band: 15-50 m

Sporadic: Y/N % of Segment _____

Est. Oil Thickness where > 1cm: 1 cm Est. Oil Penetration: 2 cm

Pooled Oil: 0% "Free" Oil: 0% Coated: H 50% / M 50% / L ___%

Fresh 0% Mousse 0% Tar Formation: 100%

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

Comments:

Lower ITZ is unoiled. Approx. 300' or more of oiled
containment boom is washed up on the south end of
the beach.

See diagram for details.

DOCUMENTATION: KN-1

Map/Aerial photo marking segment boundaries Attached

VTR: Y/N Tape Number(s) _____

Photography: Y/N Roll Number(s) _____

Sample Numbers Collected: None

ACE 7379122

VERTICAL

unaided

(13)

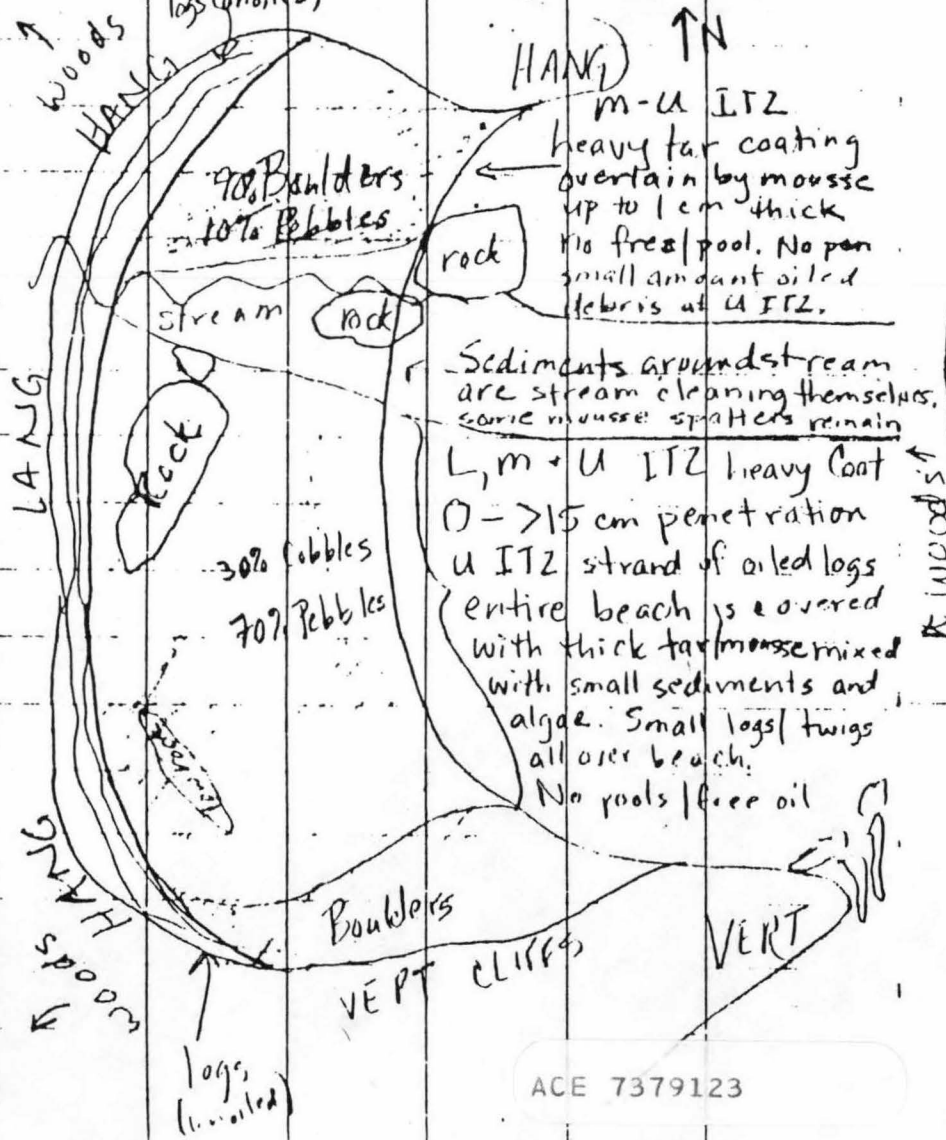
KN-211 Beach 2: 1030-1100

WX: (cloudy) Sunny

wave exposure: high

Survey foot access: bt/bg/helo/ft plane

logs (unroiled)



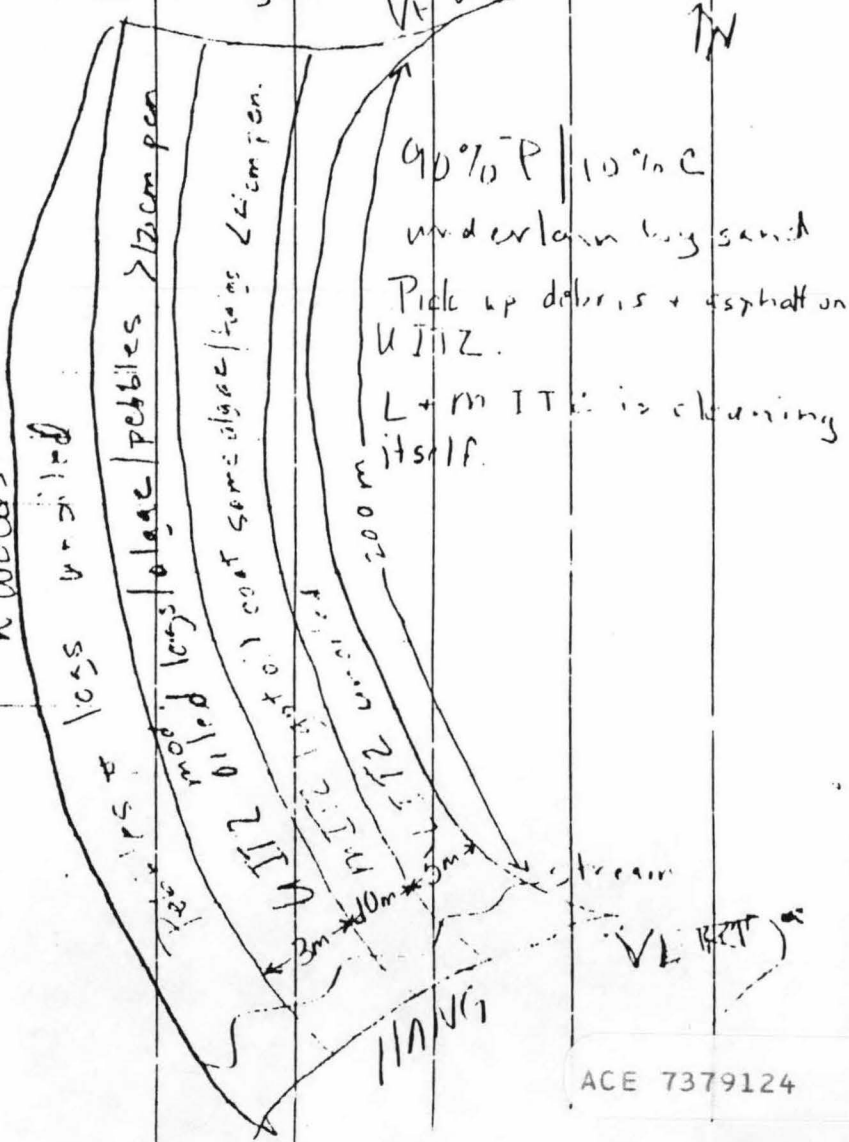
ACE 7379123

Beach 3: 1105-1115

Survey foot WX: cloudy

Access: boat/halo/ft pl

Wave exp: high-med



ACE 7379124

④ KN-211 Branch 4 1125-1150

Survey: flat w/ partly sunny
Access: b / lg / held / flt plank
ff. Wave exp: high 100T

Welt

Peach	5.1155	1210
-------	--------	------

Wx: sun wave exp high
Survey foot (4)
Access: bit/box/helof flat plane
rocks

Large Rocks

rocks.

M-U ITZ is heavily oiled. Mostly thick fresh black oil. (5% manasse) > 10 cm pen.

57. B / 90% C / 10% P

High amount of oiled debris on U I T2. Includes some algae, several logs and a very long section of aboomb, boom as well as 20' of boom.

No free pooled oil.

Continuous band 200m
long x 10-50 m wide

Very good access
for equipment.
Sandy bottom

STTZ pebbles and loss (unfilled)

70% B / 15% C / 15% P

viled
Tpgs

M-UITZ is moderately coated with tar (dried oil).
Mud cracks are only spattered.

11/17. Was a moderate amount of oiled logs.

No pools / free
No penetration

large oiled
cont. beams:

Boulders

VERTICAL CLIFFS

ECOLOGICAL EVALUATION

LOCATION: KNIGHT ISLAND SITE: KN-211 OBSERVER: MEYER

LOCATION PREFIX: KN SEG. NO.: 211 LENGTH: 15,000 (M)

DATE: 05/24/89 TIME (HHMM): 0945 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

Generally unoiled and healthy throughout area and on beaches.

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

Particularly dense in stream area Beach #2; None on Beach #5

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

Present in oiled and un-oiled zones.

Littorina

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

Beach #2, patchy in LTZ, not in oiled area; None on Beach #5. Dense moon snails Beaches #1, #4. extend into oiled zone

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

Sparse throughout beaches, none on Beach #5

OTHER OBSERVATIONS: Non-audacious stream on beaches #1, 2 & 4. White particulate in H₂O off Be #5 - seems to be same as private individuals' dispersant seen last week. Mousse in water off heavily oiled Beach #2. Heavily oiled boom on Beaches #4 & #5.

CLEANUP PRECAUTIONS: LTZ below oiled zones generally with sparse biota - ecological constraints limited to stream areas and boulders on ends of beaches. Avoid mytilus beds outside oiled areas as much as possible.

MAMMALS: Otters _____ Harbor Seals ♀ + pup Sea Lions _____ Whales _____
Other _____

BIRDS: _____

GENERAL OBSERVATIONS: Beach #3: Harbor seal + pup 20 yards off shore, unoiled; pup trying to beach, cow nudging it back into water watching us unceasingly.

(version of 4/29/89)

CULTURAL RESOURCE EVALUATION

Date 5/24/89 Location Knight Island Site _____

Location Prefix KN Segment # KN-211 Length 1500m

Survey Method:

Air _____ (A - indicate on map) Boat ✓ (A - indicate on map)

Ground ✓ (G - indicate on map)

Known cultural resources (AHRS #) None Data Source None

Oil conditions/beach visibility light to moderate

Width of beach zone surveyed 0-10m Tree fringe surveyed 0-10m

Cultural resources observed in beach zone (AHRS code) None

Cultural resources observed in tree fringe (AHRS code) None

General observations justifying survey method and segment's site probability:

Shore Profile most beaches have moderate slopes and are lightly cobbled; the rest is steep wall face and cobble fill

Fresh Water Sources several streams

Sea Exposure open to east

Access/Safety good on beaches; poor elsewhere

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 # _____ Frames _____

Observer(s) C. Wilson

Time survey started 0950 Time survey ended 1230

Cultural resource considerations/restraints:

If hitherto undiscovered cultural material is uncovered during cleanup contact Byron archaeologist, C. Mobley, immediately.

