MAYSAP – Windy Bay "Right Hand Creek"

ADF&G MULTI-ASSESSMENT DATA FORM

ANAD 5

DDH 10/9/91

1) SURVEY TYPE: (BS) SS

2) REGION: PWS KP,CI K,AP

3) METHOD: Aerial (Ground) Boat

DATE: 5/15/91

16) HIGH TIDE TIME: 0341 / 1649

22) TEAM RECORDER: Doug Hill (ADF&G) Duncan Fitgerald (OE

5) START TIME: 0825

17) HIGH TIDE HTS: 20.7 / 18.7

23) OBSERVERS: Lee Glenn (ADF&G)

6) STOP TIME: 0920

18) LOW TIDE TIMES: 0935 / 2140

24) AGENCY:

7) SEGMENT #: WB-3B

19) LOW TIDE HTS: -4.7 / 1.5

25) PHOTOS TAKEN: (Y) N

8) K-UNIT:

20) TIDE HT AT SURVEY: -3 / -3

ROLL #: 91OOH002 FRAMES: 22-25

9) LAT: 59 14 7

Ebb Slack Flood Slack

26) VIDEO TAKEN: Y N

10) LONG: 151 33 34

21) USCG QUAD: Seldovia A-5

TAPE #

11) ASC #: 242-32-10160

START: STOP:

12) STREAM NAME: Windy Bay "Right Hand Creek"

27) SAMPLES TAKEN? Y (N)

13) LOCATION: KPOC, Windy Bay

SAMPLE I.D.

14) WAVE EXPOSURE: High (Moderate) Low

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

28) EXTENT OF OIL

	LENGTH m	WIDTH m	M2	%	THICK cm	PEN cm	OIL TYPE
SITE 1	20	1-2	30	1%	<3.5	—	MS/AP
SITE 2	30	2	60	1%	<3.5	—	AP
SITE 3	100	6	600	1%	—	—	ST
SITE 4	20	1	20	1%	—	—	MSOR/Sheen
SITE 5							

29) OVERALL OIL IMPACT:

H = >6m band with ≥50% oil coverage

M = >6m band with ≤ 50% oil coverage or ≥3m to ≤6m with ≥10% oil coverage

L = <3m band with >10% oil coverage

(VL) = ≤10% oil coverage regardless of band width

N = No oil observed

30) OIL IN STREAMBED: Y (N)

31) OIL ON BEACH ADJACENT TO MOUTH: (Y) N

32) SUBSTRATE TYPE (PERCENT):

Bedrock ____ Boulder 10% Gravel 30% Sand 20% Cobble 30% Mud/Silt 10%

33) ANADROMOUS FISH PRESENT: Y ? N

34) WILDLIFE OBSERVATION

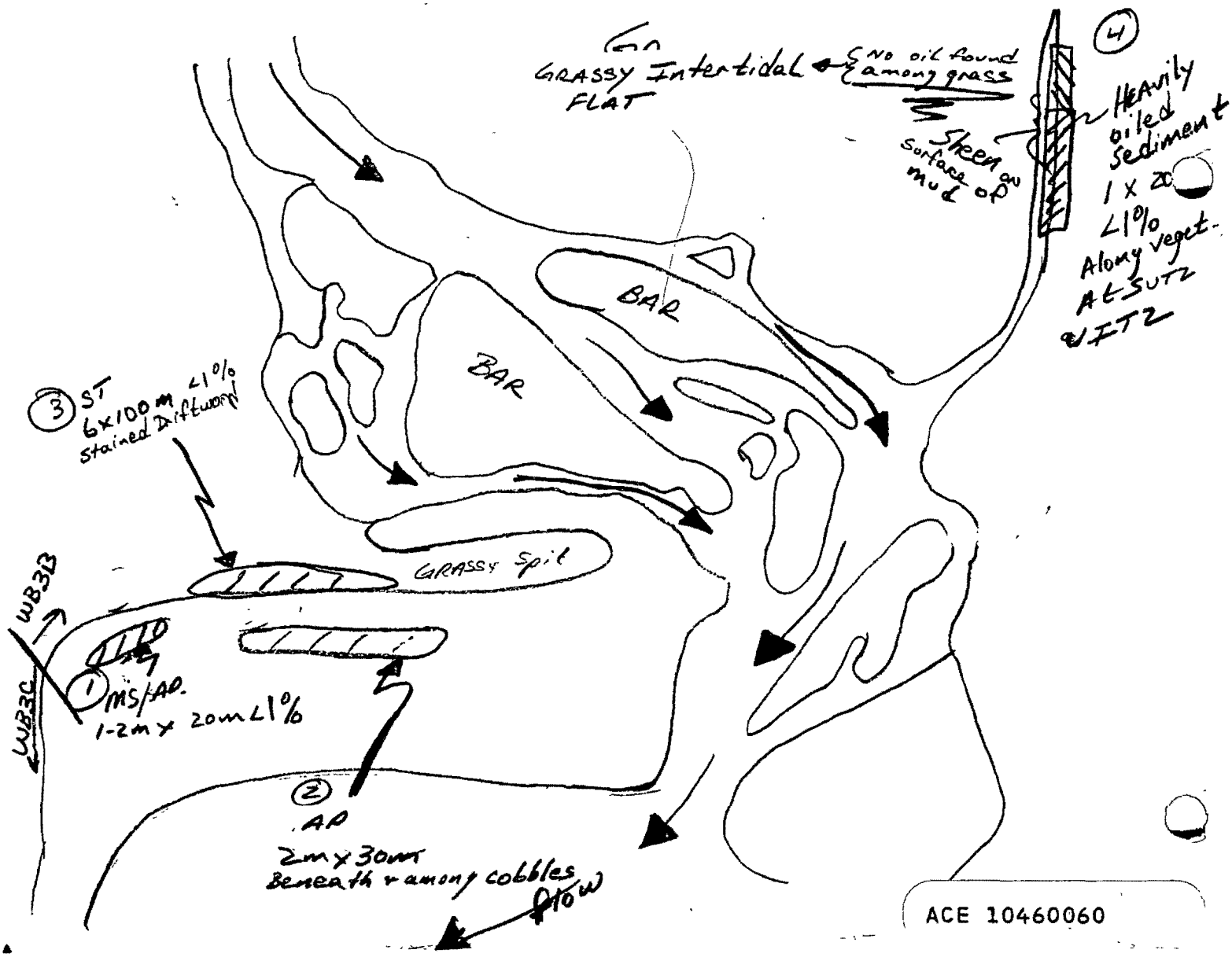
Species	Number
Coyote tracks	(1)
Western Sandpiper	

ACE 10460059 HP

35) COMMENTS: Veco workers collected approx. 15 pounds of oiled sediment and mousse. Further exploration among cobble on beach would turn up more oil, further exploration in vegetation & among mud & rocks would reveal more oil most [illegible] in the area of site 4 on MAP (other side). Oil was stomped into mud in side channel in vicinity of site 4 in 1990 by Exxon work crew (they did a poor job) however the area looks better this year. Sediment along bank of side channel still smells of oil. Softshell clams in this area. Oiled sediment observed in side channel (slough) across

36) PHOTOLOG

FRAME(S)	DESCRIPTION
	See MAYSAP Photo location MAP, Gary Shigenaka (NOAA) took photos, Roll 6-15, frames 7-11.



2. - Photo Frame # and Shot Direction

A:EDDATFO
April 3, 1991

EXXON MAYSAP

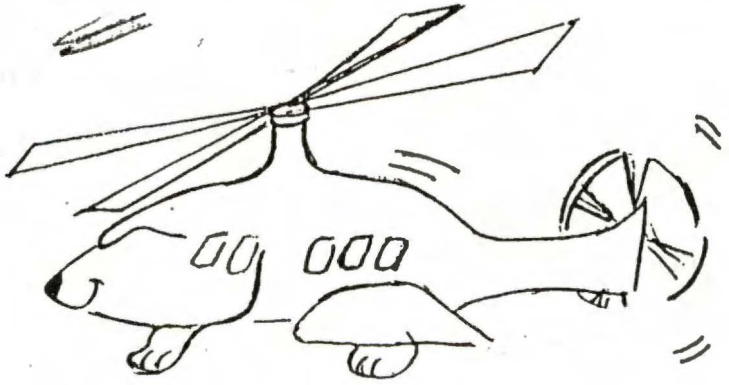
May Shoreline Assessment Program

1991

SEGMENT: WB-3

SUBDIVISION: B

DATE: 15 MAY 1991



Team # 6 Pumas

ACE 10460061 HS

MAYSAP FIELD SHORELINE COMMENT SHEET

TEAM NO. 6 Helo SEGMENT WB-003 SUBDIVISION B DATE 5/15/91

ADEC
NAME Doug Hill - ADF&G SIGNATURE Douglas D Hill

☒ NTR Patches of AP remain on the beach ("Main Beach") to the South of the stream mouth — A more detailed exploration would most likely reveal more oil. Trace oil remains on the north shore approximately 200 meters upstream of the stream mouth.

EXXON
NAME Rex Coulter SIGNATURE Rex R. Coulter

☑ NTR THE SURFACE LOOKS EXCELLENT. AN EXERCISE IN TURNING OVER COBBLES REVEALED SMALL, SPORADIC AREAS OF VERY LIGHT SOR. ADF&G REP. RECOVERED 2 POM POMS, AND THE VECO WORKERS COLLECTED ALL OTHER RECOVERABLE OILED SEDIMENTS, DEBRIS AND ONE SMALL PATCH OF MOUSSE.

LANDMANAGER
NAME Seraphim Megranick OF Port Graham SIGNATURE Seraphim Megranick

☒ NTR By The Dead Trees Mousse/SOR 1X2 meters wide & 20 meters Long upper INTERTidal zone going BACK TOWARD The COPTERS Mid INTERTIDAL ZONE 2X4 METERS Wide 2 METERS Long SOR PRIOR One STAINED Wood 100 Meters Crossed The STREAM 1X20 meter SOR IN FREQUENT ALONG GRASS HIGH ANGLE SLOPE Supra Tidal Zone

USCG/NOAA
NAME Chief Jensen/Gary Shigenaka SIGNATURE Chief D Jensen Gary Shigenaka

☒ NTR 1/2 bag removed from this site. Have to search very closely for any traces of oil. Further removal operations would cause more environmental harm than the trace of oil to be removed.

SURVEYED PORTION OF THE SEGMENT CONSISTED OF A COBBLE BEACH THAT OPENED OUT ONTO A BROAD TIDAL FLAT WITH AN EELGRASS BED, AND A WIDE SALT MARSH THROUGH WHICH A MULTI-CHANNEL STREAM FLOWED. THIS AREA WAS HEAVILY OILED IN 1989. SOME PATCHY SOR WAS OBSERVED AND RECOVERED/BROKEN UP ON THE COBBLE BEACH. THE ONLY OTHER AREA WHERE OILING WAS EVIDENT WAS IN COBBLE RUBBLE BORDERING THE NORTHERN SIDE OF THE SALT MARSH, WHERE SOR AND A WEATHERED MOUSSE PATTY WERE FOUND.

ACE 10460062

MAYSAP SHORELINE OILING SUMMARY

TEAM NO. 6-Helo

SEGMENT WB03

OG D. FitzGerald BIO T. Schroeder

SUBDIVISION B

ADEC Doug Hill of ADF6 LANDMANAGER S. McGranick for Port Graham

DATE 15 / May / 91

EXXON R. Coulter USCG/NOAA Chief Jensen / G. Shigenaka

TIME 8:25 to 9:20 TIDE LEVEL -3 ft. to -3 ft. ENERGY LEVEL: ☐ H ☒ M ☒ L

SURVEYED FROM: ☒ FOOT ☐ BOAT ☐ HELO WEATHER: ☐ SUN ☒ CLOUDS ☐ FOG ☒ RAIN ☐ SNOW

TOTAL LENGTH SHORELINE SURVEYED: 1092 m NEAR SHORE SHEEN: ☐ BR ☒ RB ☒ SL ☐ NONE

EST. OIL CATEGORY LENGTH: W ____ m M ____ m N ____ m VL 140 m NO 952 m US ____ m

LOC	SURFACE OIL CHARACTER										SURFACE SEDIMENT TYPE	SHORE SLOPE	AREA WIDTH m	AREA LENGTH m	ZONE S	ZONE UI	ZONE MI	ZONE LI	NOTES
	AP	MS	TB	SOR	CV	CT	ST	FL	DB	NO		V H M L							
A		T		T							B-S-P-G	L	2	20		X			I/u around dead trees
B							T				V - Logs	L	6	100	X				Storm wrack line
C (Light)				T							B-C	L	3	70			X		I/u middle of Beach above Fu
D (Light)				T							V-grass	L	1	20	X				SUTZ IN GRASS slope LOCATED O

DISTRIBUTION: C = 91–100%; B = 51–90%; P = 11–50%; S = 1–10%; T = <1%

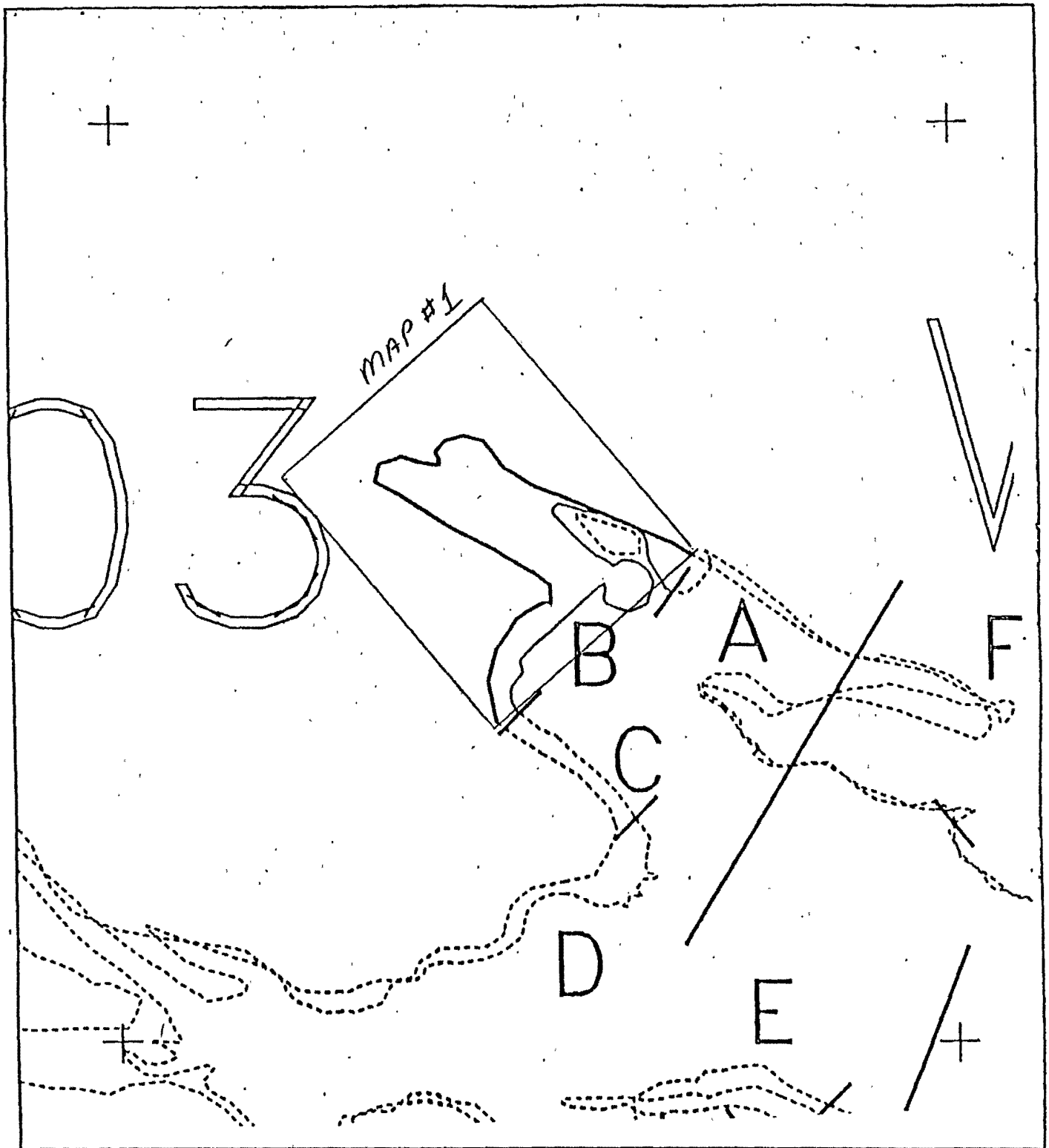
SLOPE: V = VERTICAL; H = HIGH ANGLE; M = MEDIUM ANGLE; L = LOW ANGLE PHOTO ROLL # MAYSAP- 6 - 15 FRAMES 7-11

PIT NO.	PIT DEPTH (cm)	SUBSURFACE OIL CHARACTER OP	HOR	MOR	LOR	OF	TR	NO	OILED ZONE cm-cm	CLEAN BELOW Y/N	H2O LEVEL (cm)	SHEEN COLOR B R S N	PIT ZONE S	UI	MI	LI	SURFACE-SUBSURFACE SEDIMENTS	NOTES
									-									
									-									
									-									
									-									
									-									
									-									
									-									
									-									
									-									

SHEEN COLOR: B = BROWN; R = RAINBOW; S = SILVER; N = NONE

OG COMMENTS: This segment is located at the west end and head of Windy Bay, consisting of a short beach with an indented anan. stream embayment. The stream is braided and empties into a broad tidal flat region. The oiling of this area was documented at four sites including: 1) SOR and MS at the southern end of the beach between and under boulders, 2) stained driftwood in the SUTZ (100m length), 3) Trace amounts of SOR along 70m of b-c Beach in the MHTL above the fucus zone, and 4) a narrow 20m length of SOR along the northern slope of the Anad. Stream. VECO workers collected a 1/2 bag of mousse and oiled sediment from this segment and removed all seen and accessible oil.

ACE 10460063



WB003 B

METERS

0 200 400

AK State Plane Zone 4

EXXON

Subdivision Field Map

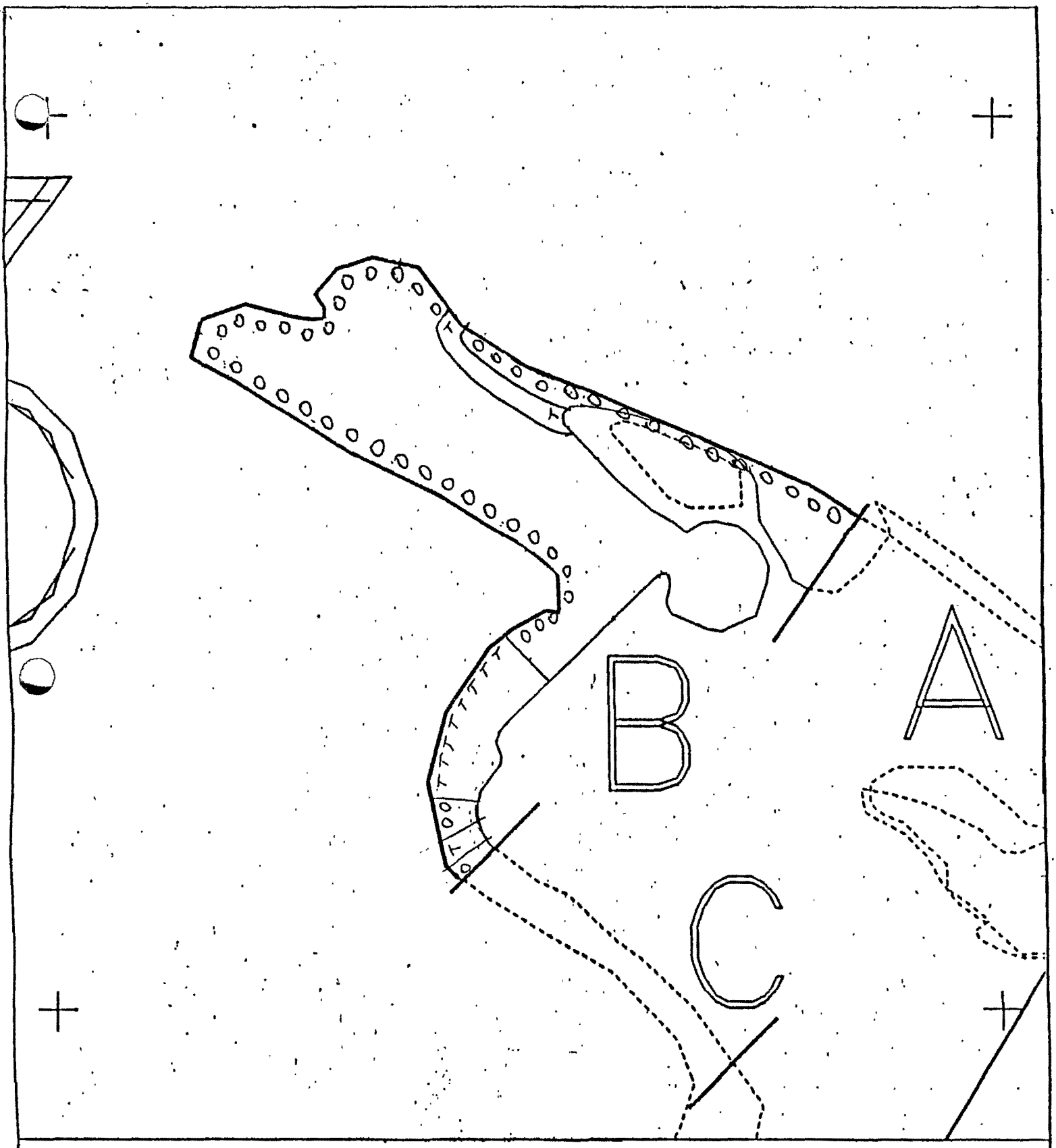
Map Key: KENWB003Ba

Name: D. Fitzgerald

Date: 15 May 1991

ACE 10460064

ACE 10460065



XXXX Wide
//// Medium
--- Narrow
TTTT Very Light
0000 No Oil

WB-3 B

ADEC Subsegment Length: 1092m

METERS

0 88 177

AK State Plane Zone 4 : 113484
nwb-3b

EXXON

Subdivision Field Map
Map Key: KENWB-3B
Name: D. FitzGerald
Date: 15 May 1991
Date Entered:

ACE 10460066

MAYSAP BIOLOGICAL SUMMARY FORM

TEAM # 6 **DATE** 5/15/91

SEGMENT # WB-003 **TIDAL HEIGHT(Range)** -3.5 ft

SUBDIVISION B **BIOLOGIST** T. R. Schroeder

SEA STATE light chop **WIND SPEED/DIRECTION** West = 5-10 mph

PHOTOGRAPHS: ROLL # **FRAME #**

COMMENTS/OBSERVATIONS (to be completed in oiled subdivisions only):

(A, B & C) = Fucus kelp mixed with sea lettuce is growing very well along the entire beach segment south of the anadromous stream. Limpets, sand fleas and barnacles are abundant throughout the Fucus beds. Some mussel regrowth is occurring and littorine snails and egg masses were present but not numerous. The remaining oil does not appear to be effecting reestablishment of the plant and animal communities in this area. The [illegible] and extensive mud flats were being utilized by large flocks of sandpipers and were extremely rich environments. None of this oil is within 300 yards of the intertidal spawning area of the stream.

(D) = Intertidal beach grasses and Fucus kelp were thriving on the north side of the anadromous stream. A large bed of soft shell clams were located in a back, mud slough.

This is an extremely good producing anadromous stream which supports several species of salmon. The intertidal spawning gravels were never affected by the spill and the area appears clean and as good as new. None of the remaining traces of oil will effect salmon spawning.

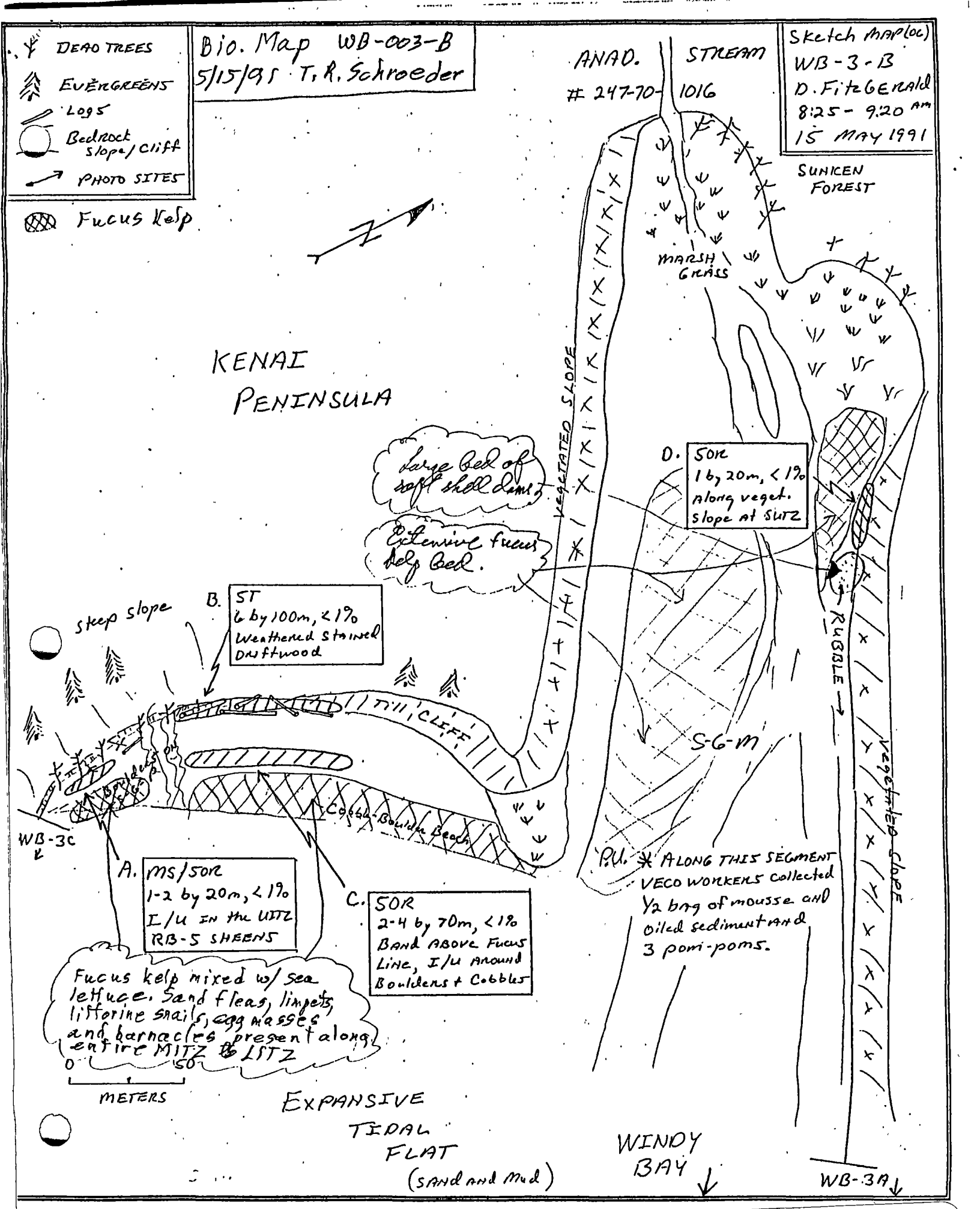
WILDLIFE OBSERVATIONS
TO BE COMPLETED IN ALL SUBDIVISIONS

BIRDS	# OF SPECIES	TOTAL BIRDS	FISH OBSERVED SPECIES PRESENT
Eagles			
Seabirds			
Waterfowl			
Gulls/kittiwakes	1 gull	12	
Shorebirds	1 sandpipers	250	
Corvids			
Other Birds			

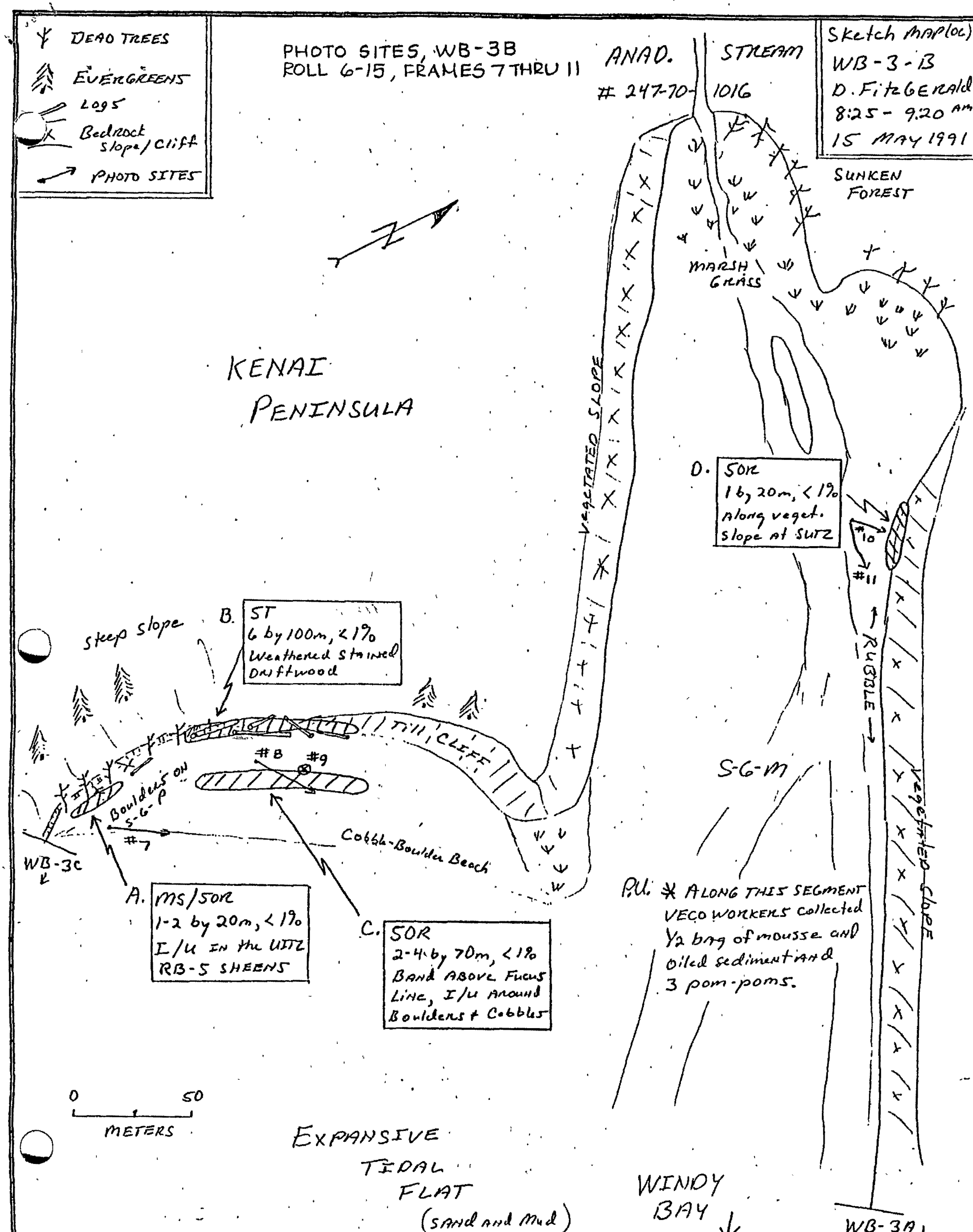
MARINE MAMMALS	# OBSERVED	LAND MAMMALS SPECIES	# OBSERVED
Sea Otters			
Pinnipeds(specify)			
Whales(specify)			

Shoreline subdivision map showing important biological features attached.

ACE 10460067



ACE 10460068



ACE 10460069-

ADF&G MULTI-ASSESSMENT FORM
1991 GENERAL ENTRY CHECKLIST

STREAM#: 2423210160
SEGMENT: WB003

PAGE 29 DATE PRINTED: 06/21/91

LOCATION: WINDY BAY

SURVEY TYPE: 90 PRE SCREEN - SS METHOD: GROUND

DATE: 04/07/90 TEAM RECORDER: HILL

START TIME: 0825 OBSERVERS: GLENN
END TIME: 0925

AGENCY: FG

OG/HAB DISCREPANCIES: -

PHOTOS TAKEN: Y

STATION: 2423210160 ROLL#: 90DDH001H
FRAME: 11-17

VIDEO TAKEN: Y TAPE#: 90LPG022H
START: 1699 END: 1845

SAMPLES TAKEN: N

SAMPLE NUMBERS: -0- -0-

-0- -0-

-0- -0-

OIL IN STREAM BED: Y

OVERALL OIL IMPACT: M OIL ON BEACH BY MOUTH: Y

WAVE EXPOSURE: LOW SHORELINE TYPE: BEACH

SUBSTRATE TYPE: BEDROCK -0- BOULDER 10 COBBLE 30 VEGETAT -0-

GRAVEL 30 SAND 20 MUD/SILT 10 GRANULE -0-

ANADROMOUS FISH PRESENT: Y

SPECIES: CHUM FRY COUNT: 60

-0- -0-

-0- -0-

-0- -0-

-0- -0-

ACE 10460018 HSPG

ADF&G MULTI-ASSESSMENT FORM
1991 OILING ENTRY CHECKLIST

PAGE 33

DATE PRINTED: 06/21/91

STREAM# : 2423210160
SEGMENT#: WB003

SURVEY TYPE : 90 PRE SCREEN - SS LOCATION: WINDY BAY
DATE: 04/07/90
TIMES: 0825 - 0925 TEAM RECORDER: HILL

-- OILING EXTENT --

SITE#	SITE TYPE	DEPTH (cm)	LENGTH (m)	WIDTH (m)	AREA (m)	%	THICK (cm)	PEN (cm)	OIL TYPE CODES
1	-0-	-0-	152	1.5	228	50	2.5	7.7	TB PT OR ST
2	-0-	-0-	15	15	225	5	2.5	1.5	TB CV
3	-0-	-0-	46	1	46	5	2.5	5	AP TB ST CT-OR
4	-0-	-0-	152	18	2736	5	2.5	5	AP TB ST CT
5	-0-	-0-	274	1	274	5	1.5	2.5	AP TB ST CT

ACE 10460019

ADF&G MULTI-ASSESSMENT FORM
1991 OILING ENTRY CHECKLIST

PAGE 34 DATE PRINTED: 06/21/91

COMMENTS:
CHUM, PINK AND COHO RIVER, FLATS USED BY OTTER (SEA & RIVER), MOOSE, MIGRATORY WATERFOWL UTILIZE THIS AREA. BALD EAGLES FREQUENT (NEST WITHIN 1/8 MILE). EELGRASS AND CLAM BED AT MOUTH OF STREAM. ANADSCAT RECOMMENDED. MAIN BEACH INIPOLED IN 1989. 1990 - TAR PATTIES OBSERVED FREQUENTLY IN INTERSTICES. OIL STAINED ROCKS, UITZ. IN 1989 BOULDERS AND COBBLES WERE PICKED AND PLACED INTO PILES OVER MUCH OF THIS BEACH - IN ORDER TO GET AT THE HEAVY POOLED OIL BENEATH AND IN THE INTERSTICES. CREWS WERE LATER TOLD TO CEASE MOVING ROCKS (CHANGING THE BEACH MORPHOLOGY) AS NOAA/EXXON STATED CONCERNS THAT IT COULD CAUSE AN EROSIONAL PROBLEM. IN 1990 NONE OF THE CAIRN/GRAVEL YARD LIKE PILES WERE EVIDENT - ONLY A UNIFORM RANDOM NATURAL LOOKING BEACH WAS OBSERVED. 'AP', 'OR', AND 'PT' OBSERVED FROM STREAM MOUTH TO THE FLOWAGE THAT CUTS THROUGH THE BEACH TO THE WEST 10-20% COVERAGE OF A 15' WIDE SWATH RUNNING LATERALLY ALONG THE BEACH. THIS OIL IS NOT READILY NOTICEABLE AS IT IS BENEATH THE COBBLE. THE 1989 CREW CREATED ROCK PILES ALONG THE LENGTH OF THIS BEACH. THE PILES WERE CREATED TO GET AT THE OIL BENEATH THE COBBLES/BOULDERS. THE PILES WERE NO WHERE TO BE FOUND ON THIS SRUVEY - THE WINTER SURF DISTRIBUTED THESE ROCKS EVENLY OVER THE BEACH. SITE 1A-1 OF 1989 A.F.H.A.
OIL ON STREAM BANKS: YES
OIL WITH 1 MILE OF STREAM: YES

delete A

Redundant comments among MAD + Trans-form. Leave until Doug ok's to delete. KE.

10/9/91
Edits found on pages with blue tags attatched - blue ink.

DONE

ACE 10460020 -15

ASC NUMBER: 242-39-10160 SEGMENT NUMBER: WB-003 YR CATALOGED:
LOCATION: OCKP, Windy Bay
STREAM NAME: Windy Right Crk
LATITUDE: 59 14 7
KODIAK K-UNIT: . LOCAL STREAM #: LONGITUDE: 151 33 34
USGS QUADRANGLE: Seldovia A-5 LEGAL:
SHORELINE TYPE: BEACH, low lying Rocks ALL SEGMENTS:
WAVE EXPOSURE: Low

ASC NUMBER: 242-20-10160
SURVEY TYPE: Prescreening
METHOD: Foot
DATE: 4/7/90
START TIME: 0825
STOP TIME: 0925

TEAM RECORDER: Doug Hill
OBSERVERS: Lee Glenn

AGENCY(IES): ADF&G

PHOTOS TAKEN? Y
Roll #: 9000H001 Frames: 11, 12, 13, 14, 15, 16, 17
VIDEO TAKEN? Y Tape Number: 90LPG0222H
Counter Start: 1699 → 1845

SAMPLES TAKEN? N
SAMPLE I.D. NUMBERS: 1. 2. 3.
4. 5. 6.

	LENGTH m	WIDTH m	M2	%	THICK cm	PEN cm	OIL TYPE
SITE 1	152 m	1.5m	228m	50%	2.5 cm	7.7cm	TB, PT, OR, ST, CT, CV
SITE 2	15m	15m	225m	5%	2.5cm	1.5cm	TB, CV
SITE 3	46 m	1m	46m	5%	2.5cm	5cm	~~AP, TB, ST, CT, PT, OR~~
SITE 4	152 m	18m	2736m	5%	2.5cm	5cm	AP, TB, ST, CT
SITE 5	274m	1 m	274m	5%	1.5cm	2.5cm	AP, TB, ST, CT

OVERALL OIL IMPACT: M

OIL IN STREAM CHANNEL? Y

OIL ON BEACH WITHIN 50M OF STREAM MOUTH? Y

SUBSTRATE

Bedrock 10%	Granule
Boulder	Sand 20%
Cobble 30%	Silt 10%
Pebble 30%	Veget.

SPECIES					
COUNT					

COMMENTS: See attached MAD FORM
AP, OR, and PT observed from stream mouth to the flowage that cuts through the beach to the west (10-20% coverage of a 15' wide swath running laterally along the beach. This oil is not readily noticeable as, it is beneath the cobble.

The 1989 crew created rock piles along the length of this beach the piles were created to get at the oil beneath the cobbles/boulders the piles were no where to be found on this survey - the winter surf distributed these rocks evenly over the beach.

Cont'd →

Doug - delete? This is redundant. The MAD form describes this in better detail, JE

OK * Site 1A-1 of 1989 A. F. H. A.
* See field log for further info

ACE 10460021 HS

GROUP A

Prescreening

ADF&G MULTI-ASSESSMENT DATA FORM

1 SURVEY TYPE: BS (SS) DS TS AVS SCHA MMHS PTA 2 REGION: PWS (KP,CI) K,AP

METHOD: Aerial (Ground) Boat

3 DATE: 4/7/90 15 HIGH TIDE TIMES: / 21 TEAM RECORDER: Doug Hill

4 START TIME: 0825 16 HIGH TIDE HTS: / 22 OBSERVERS: Lee Glenn

5 STOP TIME: 0925 17 LOW TIDE TIMES: 0702 / 23 AGENCY: ADF&G

6 SEGMENT #: WB-003 18 LOW TIDE HTS: 1.3 / 24 PHOTOS TAKEN: (Y) N

7 STATION #: _____ 19 TIDE HT AT SURVEY: _____ Roll #: 90-DOH-001 Frame: 11,12,13

8 K-UNIT: _____ Ebb Slack (Flood) Slack 25 VIDEO TAKEN: Y (N) TAPE#: _____

9 STAT AREA: 242-20 20 USCG QUAD: SELDOVIA A-5 Start: _____ End: _____

10 LAT: 59°13'80" 11 LONG: 151°30'90" 26 SAMPLES TAKEN? (Y) (N) Number

12 SOURCE: (Map) Loran Oil _____

13 LOCATION: AES#242-20-10160; HEAD of Windy BAY Sediment _____

14 DESCRIPTION: North Shore, Right HAND Creek Biological _____

EXTENT OF OIL Water _____

	SHORELINE L	W	M²	%	STREAM L	W	M²	%
27 SURFACE COVERAGE								
28 SURFACE THICKNESS								
29 PENETRATION								

30 OVERALL OIL IMPACT: N VL L M H

31 OIL TYPE: Pooled Mousse (Tar) Asphalt (Sticky) (Stain)

32 OILED DEBRIS? Y (N)

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

34 WAVE EXPOSURE: High Moderate (Low)

35 SUBSTRATE TYPE: Bedrock _____ Boulder 10 Cobble 30 Gravel 30 Sand 20 Mud/silt 10

36 CATALOGED ANAD. FISH SREAM? (Y) N

37 CATALOG #: 242-20-10160

38 STREAM NAME: Windy Bay Right Creek

39 OIL IN STREAM BED? (Y) N

40 OIL ON STREAM BANKS? (Y) N

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

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

Where: _____

43 ANADROMOUS FISH PRESENT? (Y) N

44 ANADROMOUS FISH OBSERVATION

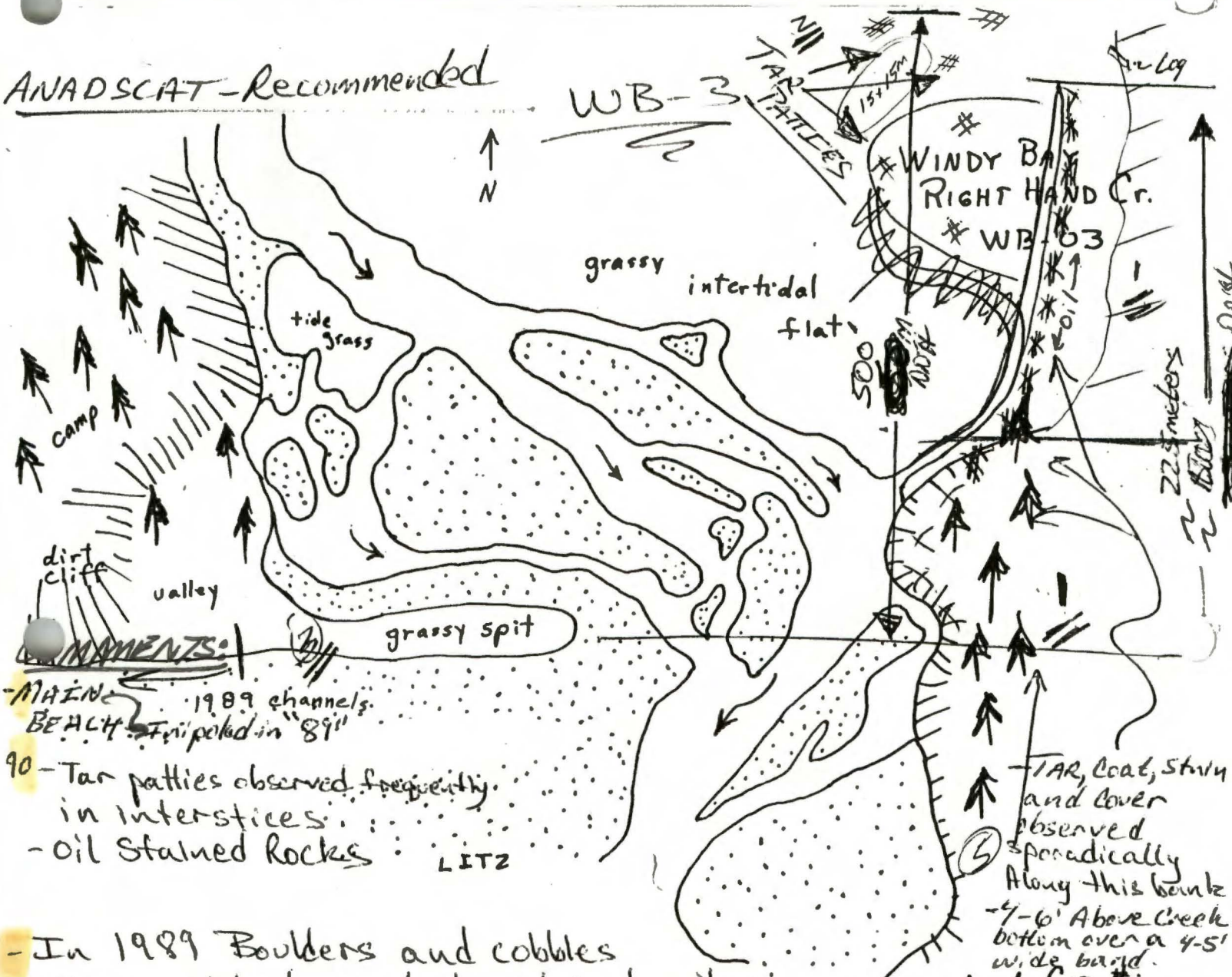
Species	Aerial	Ground
Chum Z FRY		60

COMMENTS: Chum, Pink and Coho Rivers, Flats used by otter/sea and River), moose, ~~or~~ Migratory waterfowl utilize this area, Bald Eagles frequent (Nest within 1/8 mile). Eelgrass and clam bed at mouth of stream. cont'd →

ACE 1941224

ACE 10460022

FRAME(S) 11,12,13—Sorbent boom left on flat DESCRIPTION from 1989



-MAINE BEACH Tripoded in "89"

90 - Tar patties observed frequently in interstices.
- Oil Stained Rocks

- In 1989 Boulders and cobbles were picked and placed into piles over much of this beach - in order to get at the heavy pooled oil beneath and in the interstices. Crews were later told to cease moving rocks (changing the beach morphology) - As NOAA/Exxon stated concerns that it could cause an erosional problem. ACE 1941225

In 1990 none of the cairn/graveyard-like piles were evident - only a uniform-random natural looking beach was observed.

ACE 10460023 15

ADF&G MULTI-ASSESSMENT FORM
1991 GENERAL ENTRY CHECKLIST

STREAM#: 2423210160
SEGMENT: WB003

PAGE 30 DATE PRINTED: 06/21/91

LOCATION: WINDY BAY

SURVEY TYPE: 90 PRE SCREEN - SS METHOD: GROUND

DATE: 04/11/90 TEAM RECORDER: HILL

START TIME: 0755 OBSERVERS: MCLANE
END TIME: 0847

AGENCY: FG

OG/HAB DISCREPANCIES: -

PHOTOS TAKEN: Y

STATION: 2423210160 ROLL#: 90DDH002H
FRAME: 8-9

VIDEO TAKEN: N TAPE#: -0-
START: -0- END: -0-

SAMPLES TAKEN: N

SAMPLE NUMBERS: -0- -0-

-0- -0-

-0- -0-

OIL IN STREAM BED: N

OVERALL OIL IMPACT: N OIL ON BEACH BY MOUTH: N

WAVE EXPOSURE: LOW SHORELINE TYPE: -0-

SUBSTRATE TYPE: BEDROCK -0- BOULDER 10 COBBLE 20 VEGETAT -0-

GRAVEL 60 SAND -0- MUD/SILT -0- GRANULE -0- 10%

ANADROMOUS FISH PRESENT: N OK

SPECIES: -0- COUNT: -0-
-0- -0-
-0- -0-
-0- -0-
-0- -0-

ACE 10460024 +/S

ADF&G MULTI-ASSESSMENT FORM
1991 OILING ENTRY CHECKLIST

PAGE 35 DATE PRINTED: 06/21/91

STREAM# : 2423210160
SEGMENT#: WB003

SURVEY TYPE : 90 PRE SCREEN - SS LOCATION: WINDY BAY
DATE: 04/11/90
TIMES: 0755 - 0847 TEAM RECORDER: HILL

-- OILING EXTENT --

SITE#	SITE TYPE	DEPTH (cm)	LENGTH (m)	WIDTH (m)	AREA (m)	%	THICK (cm)	PEN (cm)	OIL TYPE CODES
1	-0-	-0-	-0-	-0-	-0-	-0-	-0-	-0-	NO OIL

COMMENTS:
WALKED UPSTREAM ON BOTH BANKS OF CREEK TO NARROWS (AREA WHERE APPROX 30' CLIFFS RISE FROM CREEKBED). WALKED TIDE FLATS AT MOUTH (BELOW NARROWS). WALKED APPROX 150 YARDS OF STREAM BANK ON N SHORE. SOUTH SHORE - SURVEYED ENTIRE BANK BETWEEN CENTER AND LEFT HAND CREEK - OBSERVED NO OIL. NO ANADSCAT RECOMMENDED.
OIL ON STREAM BANKS: NO
OIL WITHIN 1 MILE OF STREAM: YES, WITHIN WB-3 - WOMANS BEACH OK, POINT AND MAIN BEACH TO ~~NAME A FEW~~ + WB-2

ACE 10460025 -15

ASC NUMBER: 242-32-10160 SEGMENT NUMBER: YR CATALOGED:
LOCATION: KP, OC, Windy Bay
STREAM NAME: Windy center creek
KODIAK K-UNIT: . LOCAL STREAM #:
USGS QUADRANGLE: Seldovia A-5
SHORELINE TYPE: Low lying Rocks, Beach ALL SEGMENTS:
WAVE EXPOSURE: Low

LATITUDE: 59 13 52
LONGITUDE: 151 34 19
LEGAL:

ASC NUMBER:
SURVEY TYPE:
METHOD:
DATE: 4/11/90
START TIME: 0755
STOP TIME: 0847

TEAM RECORDER: Doug Hill
OBSERVERS: Susan McLane

AGENCY(IES): ADF+G

PHOTOS TAKEN? 9000H0026
Roll #: 9000H0026 Frames: 8,9
VIDEO TAKEN? Tape Number: Aerials taken on 4/12/90
Counter Start:

SAMPLES TAKEN? NO
SAMPLE I.D. NUMBERS: 1. 2. 3.
4. 5. 6.

	LENGTH m	WIDTH m	M2	%	THICK cm	PEN cm	OIL TYPE
SITE 1							
SITE 2							
SITE 3							
SITE 4							
SITE 5							

OVERALL OIL IMPACT: N

OIL IN STREAM CHANNEL? N

SUBSTRATE OK

Bedrock	Granule 10%
Boulder 10%	Sand
Cobble 20%	Silt
Pebble 60%	Veget.

OIL ON BEACH WITHIN 50M OF STREAM MOUTH? N

SPECIES					
COUNT					

COMMENTS: See 1990 MAD form comments

Asite 1A-2 1989 AFHS

OK

ACE 10460026 +/S

4/16/90 Anch-

GROUP B

ADF&G MULTI-ASSESSMENT DATA FORM

PRE-SCREENING

1 SURVEY TYPE: BS (SS) DS TS AVS SCHA MMHS PTA

2 REGION: PWS (KP,CI) K,AP

METHOD: Aerial (Ground) Boat

3 DATE: 4/11/90

4 START TIME: 0755

5 STOP TIME: 0847

6 SEGMENT #: WB-3

7 STATION #:

8 K-UNIT:

9 STAT AREA: 242-20

10 LAT: 59° 14' 12"

11 LONG: 151° 33' 60"

12 SOURCE: (Map) Loran

13 LOCATION: AFS 242-20-10160/Windy Bay Center Creek

14 DESCRIPTION: Mouth of Stream

15 HIGH TIDE TIMES: Cordova 1450 / —

16 HIGH TIDE HTS: 13.0 / —

17 LOW TIDE TIMES: 0917 / —

18 LOW TIDE HTS: -1.0 / 1.9

19 TIDE HT AT SURVEY:

(Ebb) Slack Flood Slack

20 USCG QUAD: Seldovia A-5

21 TEAM RECORDER: Doug Hill

22 OBSERVERS: Susan McLane

23 AGENCY: ADF&G

24 PHOTOS TAKEN: (Y) N

Roll #: 90-00H-002 Frame: 8,9

25 VIDEO TAKEN: Y (N) TAPE#:

Start: End:

26 SAMPLES TAKEN? Y (N) Number

Oil

Sediment

Biological

Water

EXTENT OF OIL

	SHORELINE L	SHORELINE W	SHORELINE M²	SHORELINE %	STREAM L	STREAM W	STREAM M²	STREAM %
27 SURFACE COVERAGE								
28 SURFACE THICKNESS								
29 PENETRATION								

30 OVERALL OIL IMPACT: (N) VL L M H

31 OIL TYPE: Pooled Mousse Tar Asphalt Sticky Stain

32 OILED DEBRIS? Y (N)

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

34 WAVE EXPOSURE: High Moderate (Low)

35 SUBSTRATE TYPE: Bedrock ____ Boulder 10% Cobble 20% (Gravel) 60% Sand 10% Mud/silt ____

36 CATALOGED ANAD. FISH SREAM? (Y) N

37 CATALOG #: 242-20-10160

38 STREAM NAME: Windy Bay Center Creek

39 OIL IN STREAM BED? Y (N)

40 OIL ON STREAM BANKS? Y (N)

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

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

Where: within WB-3-womans Point and Main Beach to name a Few.

43 ANADROMOUS FISH PRESENT? Y (N)

44 ANADROMOUS FISH OBSERVATION

Species	Aerial	Ground

COMMENTS: Walked upstream on both banks of creek to Narrows (area where ≈30' Cliffs rise from creek bed. Walked tide flats at mouth (below Narrows) Walked ≈150 yds of stream bank on N shore. South shore - surveyed entire bank between center and left hand creek - Observed No oil.

ACE 1941226

ACE 10460027

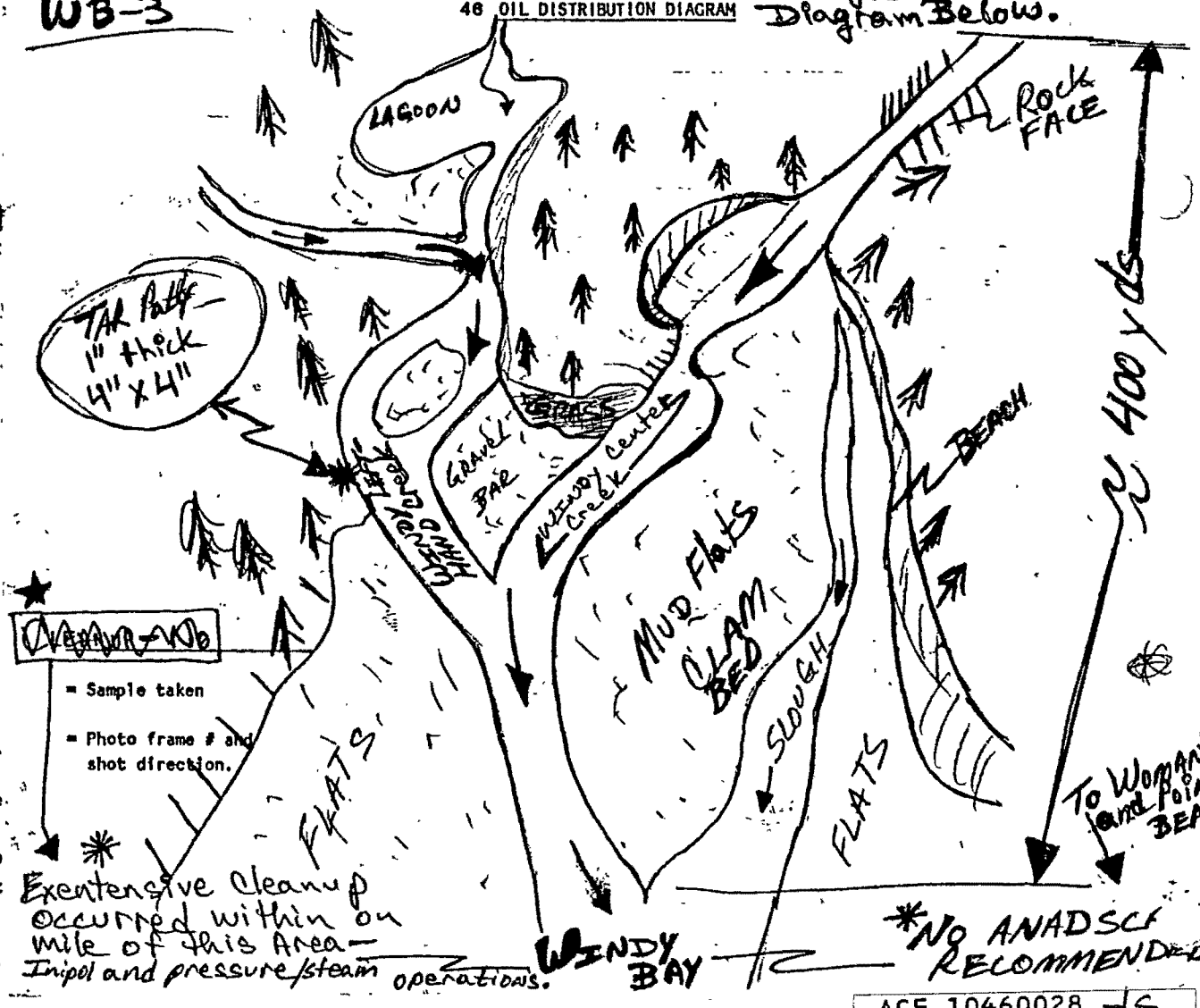
45 PHOTOLOG

FRAME(S)	DESCRIPTION
8,9	Aerials of Creek Mouth & Intertidal

WB-3

46 OIL DISTRIBUTION DIAGRAM

Surveyed Entire AREA IN Diagram Below.



Exentensive cleanup occurred within on mile of this Area — Inipol and pressure/steam operations.

*NO ANADSCA RECOMMEND

ACE 10460028 -S

ACE 1941227

*NO ANADSCAT Recommended

ANADROMOUS FISH STREAM EVALUATION

Right Hand Creek

SEGMENT ST/ WB-003 STREAM NO: 242-32-10160 DATE 4/29/90

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)
1J Purse seine area (7/1 TO 8/31)
7JJ Subsistence area: Invertebrate harvesting
8AA Sensitive estuary
5T All bald eagle nests (3/1 to 6/1)
Active eagle nests (3/1 to 9/1)

See attached Ecological Constraint sheet for specific constraints and contacts.

SUBDIVISION ECOLOGICAL CONSTRAINTS:

Subject stream is located within subdivision B (2 of 5). Eagle nest within 400m of stream no. 242-32-10160

ARCHAEOLOGICAL CONSTRAINTS:
If cultural resources are uncovered during shoreline treatment, stop work in the vicinity, mark the location of the find and contact Exxon's Cultural Resource Program immediately (564-3276 (Anchorage) or 229-1508 (24 hrs.)).

SHPO SIGNATURE: Rachel Jacobsen DATE: 5/22/90

Subsurface Oil Observed: Yes____ No X Maximum Depth____

RECOMMENDATIONS:

____No Treatment Recommended	____Snare/Absorbent Booms
X Treatment Recommended	____Oil Snares (pom poms)
X Manual Pickup	____Absorbents (pads,rolls,etc)
X Bioremediation	____Spot Washing:____Wands
X Tarmat Removal	____Beach Cleaner
	____Other (see comments)

+ TARBALLS

COMMENTS: Recommend manual removal of pavement and oiled vegetation as indicated on attached sketch map. Work from 6/2 to 7/1 with approval of USFWS regarding eagle nests.

TAG COMMENTS: BIOREMEDIATE (CULTIVATE) AS REQUIRED FOLLOWING TARMAT REMOVAL

TAG APPROVAL DATE: 5/18/90.
ADEC Art Weiner Art Weiner
EXXON Andy Tear Andy Tear FOSC: [signature] DATE: 6-June 90
NOAA Gary Petrae Gary Petrae
USCG G.A. Reiter G.A. Reiter

ACE 10460029 +/S/P

ACE 1941205 +/S

PWS, SEWARD AND HOMER 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 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 Suzomoto 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 unoiled 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 Rothy 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)**
7H **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 10460030

ACE 1941206

5/18/90

RECEIVED
MAY 15 1990
DEPT. OF
ENVIRONMENTAL CONSERVATION

ANADROMOUS FISH STREAM ASSESSMENT

REGION: KENAI

SEGMENT: WB-003

SUBDIVISION: B

STREAM NO: 242-32-10160

Concur

ACE 10460031

ACE 1941207

GROUP A

Prescreening

ADF&G MULTI-ASSESSMENT DATA FORM

1 SURVEY TYPE: BS (SS) DS TS AVS SCHA HHNS PTA   2 REGION: PWS (KP,CI) K,AP

Revisions As per ANADSCAT of 4/28/90 - See MAP DDH

METHOD: Aerial (Ground) Boat

3 DATE: 4/7/90   15 HIGH TIDE TIMES: /   21 TEAM RECORDER: Doug Hill

4 START TIME: 0825   16 HIGH TIDE HTS: /   22 OBSERVERS: Lee Gibson

5 STOP TIME: 0925   17 LOW TIDE TIMES: 0702 /   23 AGENCY: ADF&G

6 SEGMENT #: WB-003   18 LOW TIDE HTS: 1.3 /   24 PHOTOS TAKEN: (Y) N

7 STATION #: ______   19 TIDE HT AT SURVEY: ______   Roll #: 90-DDH-001 Frame: 11,12,13

8 K-UNIT: ______   Ebb Slack (Flood) Slack   25 VIDEO TAKEN: Y (N) TAPE#: ______

9 STAT AREA: 242-20   20 USGS QUAD: SELDOVIA A-5   Start: ______ End: ______

10 LAT: 59°13'80"   11 LONG: 151°30'90"   26 SAMPLES TAKEN? Y (N) Number

12 SOURCE: (Map) Loran   Oil ______

13 LOCATION: AFS#242-20-10160; HEAD of Windy BAY   Sediment ______

14 DESCRIPTION: North Shore, Right HAND Creek   Biological ______

EXTENT OF OIL   Water ______

	SHORELINE L	SHORELINE W	SHORELINE M²	SHORELINE %	STREAM L	STREAM W	STREAM M²	STREAM %
27 SURFACE COVERAGE								
28 PENETRATION								

36 CATALOGED ANAD. FISH STREAM? (Y) N

37 CATALOG #: 242-20-10160 (32) (38)

[illegible]

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: ______

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

43 ANADROMOUS FISH PRESENT? (Y)

34 WAVE EXPOSURE: High Moderate (Low)

44 ANADROMOUS FISH OBSERVATION

Species	Aerial	Ground
Chum? FRY?		60

35 SUBSTRATE TYPE: Bedrock ______ Boulder 10 Cobble 30 Gravel 30 Sand 20 Mud/silt 10

ACE 1941208

COMMENTS: Chum, Pink and COHO River; Flats used by otter (sea and River), moose, Migratory waterfowl utilize this area, Bald Eagles frequent (Nest within 1/2 mile). Eelgrass and clam bed at mouth of stream.

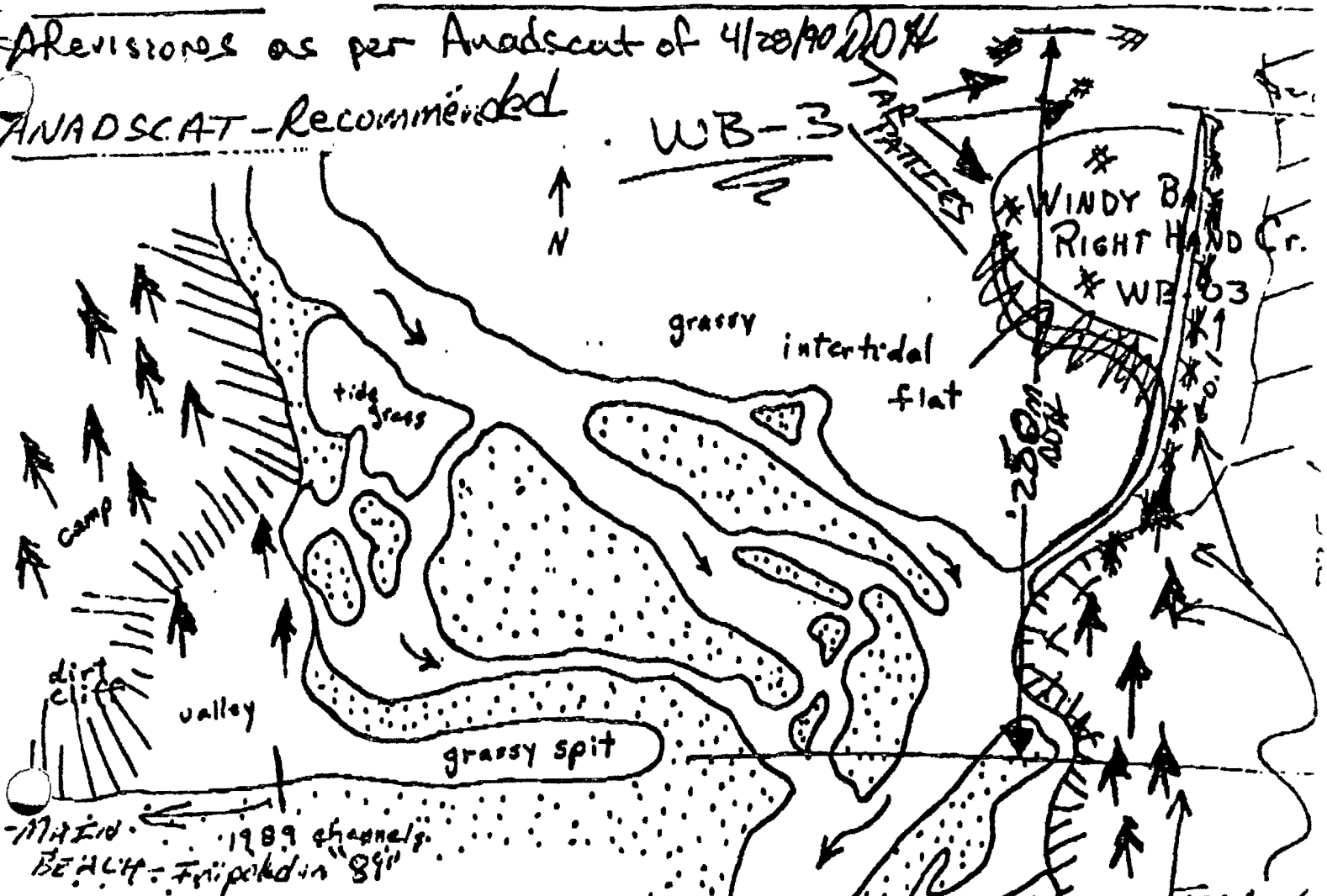
ACE 10460032

N Douglas Hill

FRAME(S) 11,12,13—Sackett boom left on flat DESCRIPTION from 1989

Revisions as per Anadscat of 4/28/90 20K

ANADSCAT-Recommended



90 - Tar patties observed frequently in interstices.
- Oil Stained Rocks : LITZ

In 1989 Boulders and cobbles were picked and placed into piles over much of this beach-in order to get at the heavy packed oil beneath and in the interstices. Crews were later told to cease moving rocks (changing the beach morphology) - As NOAA/Exxon stated concerns that it could cause an erosional problem.

ACE 10460033

ACE 1941209

In 1990 none of the cairn/graveyard-like piles were evident - only a uniform-random [illegible]

FIELD SHORELINE COMMENT SHEET

SEGMENT ST / WB-003 SUBDIVISION: ASC# 242-20-10160 DATE 29 APR 90

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

☐ NO TREATMENT RECOMMENDED ☒ TREATMENT SUGGESTED
COMMENTS

Type A manual removal.

~~ADEC~~ → ADF&G
NAME LEE GLENN SIGNATURE Lee Glenn

☐ NO TREATMENT RECOMMENDED ☑ TREATMENT SUGGESTED
COMMENTS Manual pick up is recommended for oil along the east side of stream and salt marsh. Oil extends 250 meters up this side. Remove patches of oil in grass flats located approx 250 meters from stream mouth. Remove mousse and asphalt along north beach. This subdivision area is also a subsistance food gathering area

Contact Lee Glenn prior to work so that A.D.F.&G. can place an observer on site.
The attached ADF&G assessment completed on 4-7-90 has not changed from the 4-29-90 Aerial Scat survey.

~~LAND MANAGER~~ → NONE
NAME _____ SIGNATURE _____

☐ NO TREATMENT RECOMMENDED ☐ TREATMENT SUGGESTED
COMMENTS

ACE 10460034

ACE 1941210

REVISION NO. 03/21/90

Seg ID: WB-003 Subdiv: 242-20-10160
Survey Date: 4/29/90
Comments by: Ken Critchlow

The area surveyed was behind the main beach berm. Most of the oil observed was located in two areas. One area, characterized by dead and new emerging grass, contained several areas of scattered patties or tarballs. Some of these oiled spots were staked and flagged to facilitate relocation; in one or two weeks the oil would be very difficult to find. The other oiled area was located along the east side of the site adjacent to a small stream channel. Oil in this location was located in a broken band of stain and asphalt pavement in the MITZ and UITZ.

I recommend that patties and tarballs in both oiled areas be removed by shovel for disposal. No other treatment is recommended.

KR Critchlow

ACE 10460035
ACE 1941211

SEGMENT S 1803

STREAM 242-20-10160

DATE 4 /29 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 △
Pit - No Subsurface Oil

2 ▲
Pit - Subsurface Oil

CT/C
Continuous Distribution

CT/B
Broken Distribution

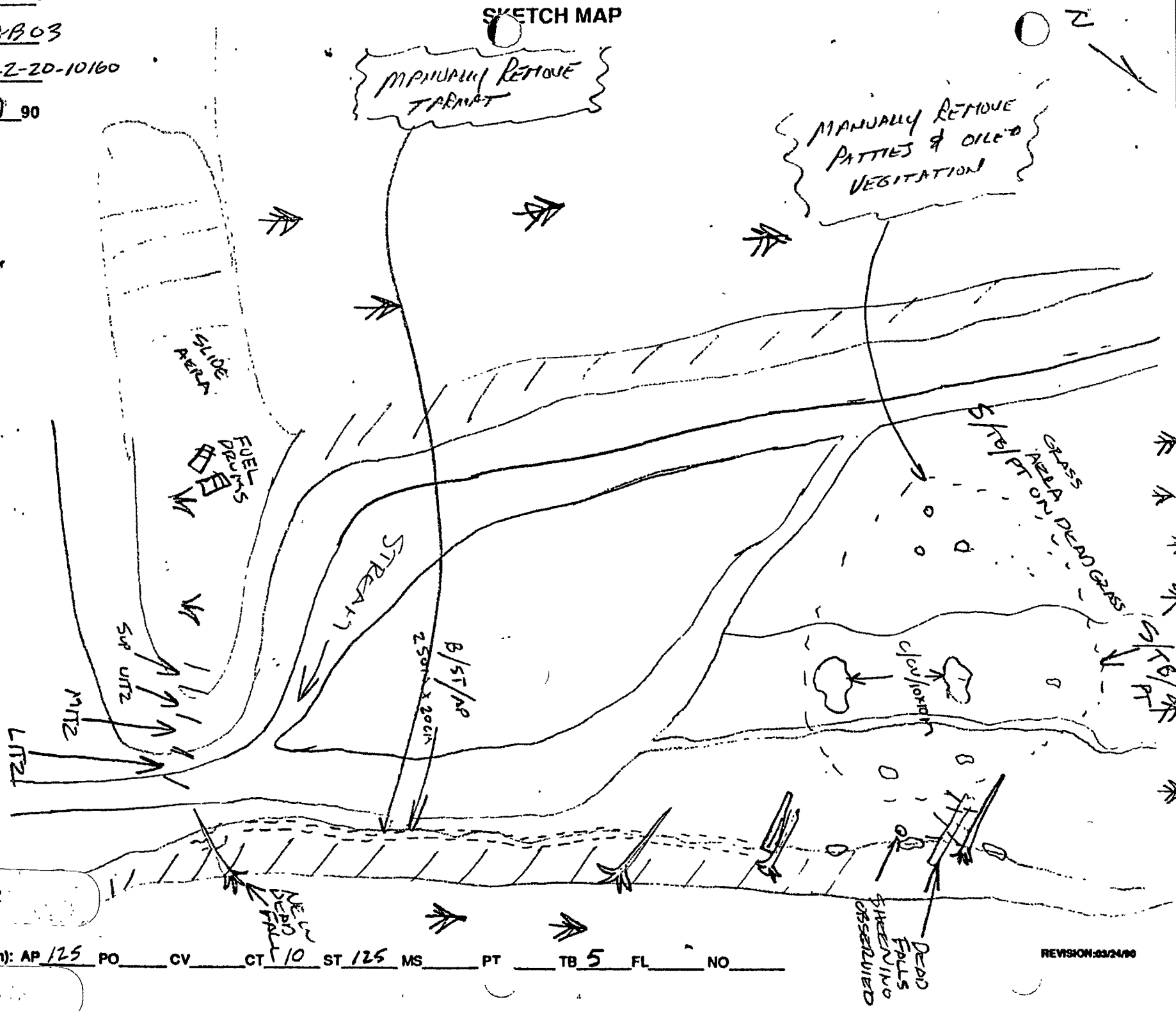
CT/P
Patchy Distribution

CT/S
Splashed Distribution

Oiled Vegetation

1 ●→
Photo location, direction, and number

SKETCH MAP



ACE 1941212

Oil Character Length (m): AP 125 PO____ CV____ CT 10 ST 125 MS____ PT____ TB 5 FL____ NO____

REVISION:03/24/90

ACE 10460036

OG CALCASIEU

SEGMENT STI UB03

STREAM 242-26-10160

DATE 4/29/90

SKETCH MAP

CHECKLIST

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

LEGEND

1 ▲ Pit - No Subsurface Oil

2 ▲ Pit - Subsurface Oil

CT/C Continuous Distribution

CT/B Broken Distribution

CT/P Patchy Distribution

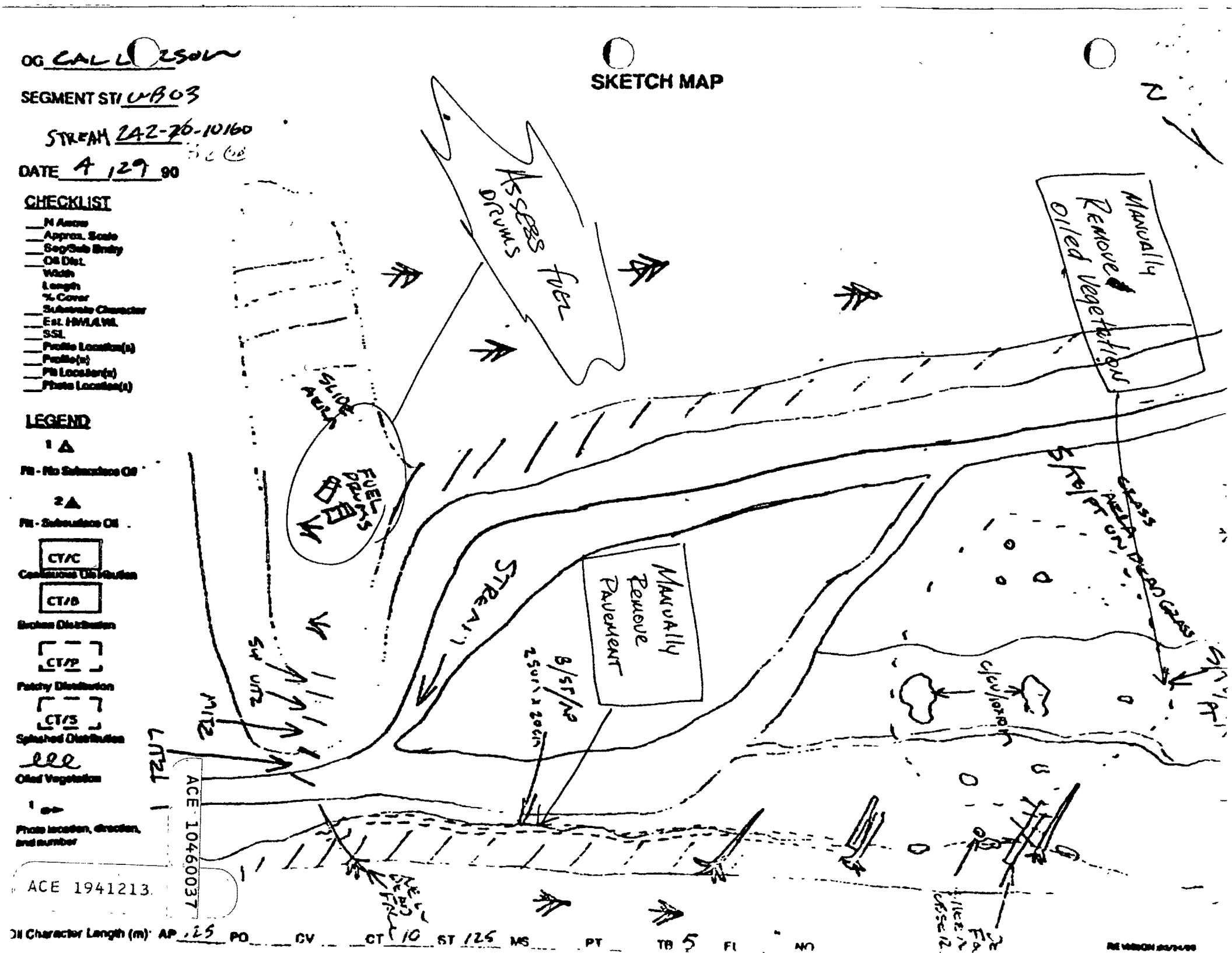
CT/S Splashed Distribution

Oiled Vegetation

Photo location, direction, and number

ACE 1941213

ACE 10460037



Oil Character Length (m): AP .25 PO ___ CV ___ CT 10 ST 125 MS ___ PT ___ TB 5 FL ___ NO ___

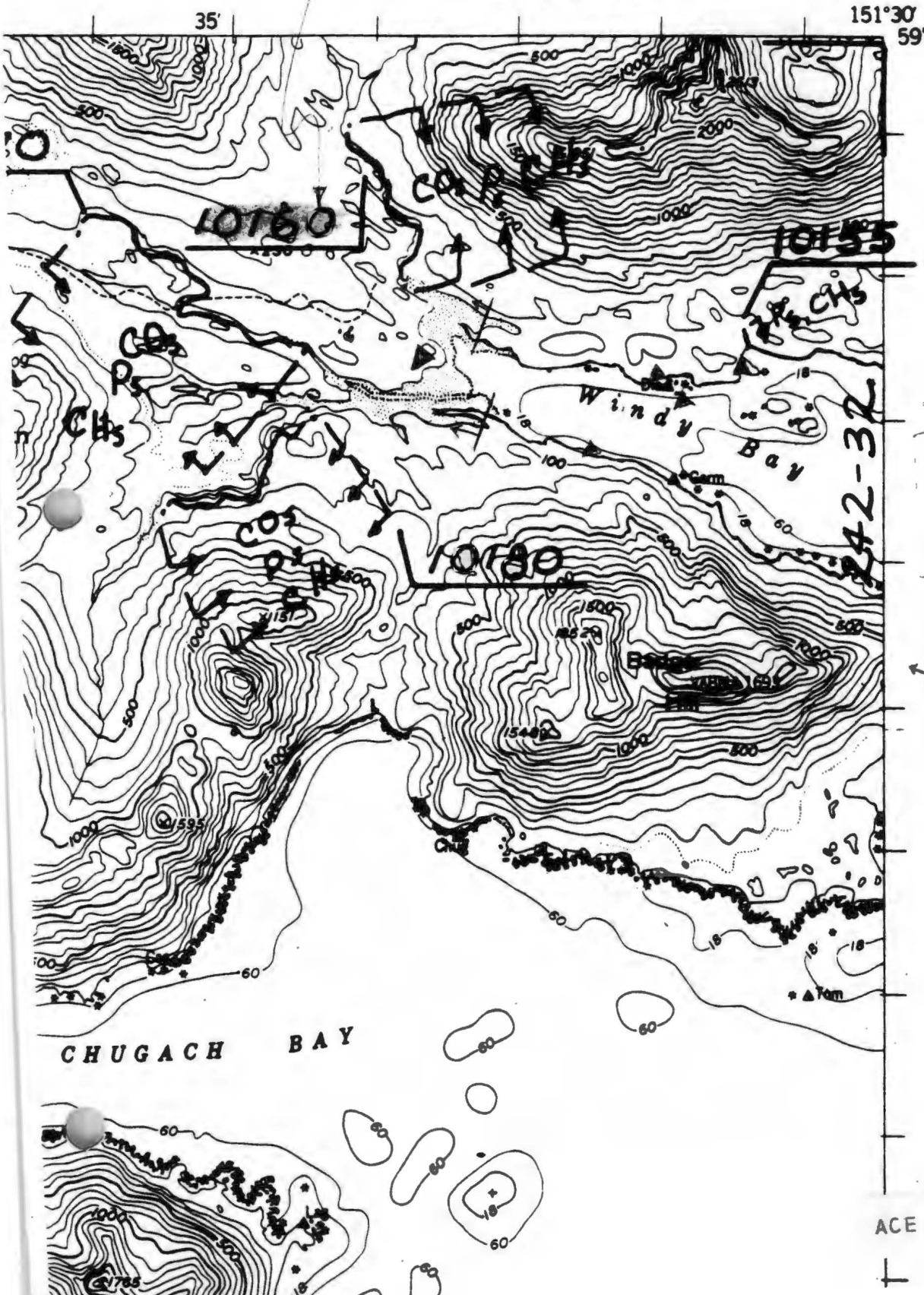
SUBJECT STRATUM:
= 242-32-10160 (CCs, Ps, CHs, 2/90)

SELDOVIA (A-5) QUADRANGLE

ALASKA-THIRD JUDICIAL DIVISION

1:63 360 SERIES (TOPOGRAPHIC)

(SELDOVIA B-4)



WB-C5
(SUBDIV. B, 1 of 5)
ECOLOGICAL MAP

1A, 1B 1T+
MJJ SAH

▲ = BALD EAGL NESTS
✓ = SEDIMENT DIVISION

ACE 10460038

ACE 1941214

SHORELINE OILING SUMMARY (NAD)

REVISION NO. 04/13/90

OG CAL LARSON USCG DREHER, CWE SEGMENT ST/ WB-03
BIO KEN CRITCHLOW LAND REP _____ STREAM 242-20-10160 (__ OF __)
EXXON DARRYL YOES ADFG: LEE GLENN TIME 3:15 to 3:45
TEAM NO. 14 TIDE LEVEL -0- FT. DATE 4/29/90
EST. SUBDIVISION LENGTH: 300 m ☐ Sun ☑ Clouds ☐ Fog ☐ Rain ☐ Snow
UPLANDS DESCRIPTION: ☑ Grass ☑ Forest ☑ Rock _____
SURVEYED FROM: ☑ Foot ☐ Boat ☐ Helo
SURFACE SEDIMENTS: R 10 % B 10 % C 10 % P 10 % G 10 % S 20 % M 30 % V ____ %
SLOPE: Lang 100 % Hang ____ % Vert ____ % WAVE EXPOSURE: ☑ Low ☐ Med ☐ High
OIL CATEGORY LENGTH: W ____ m M ____ m N 250 m VL 50 m NO ____ m

SURFACE OIL

CHARACTER	DISTRIBUTION /C	/B	/P	/S	OIL / FILM COLOR SHEN BR	DBL RW	GY SL	DBRL TL	LBR	IMPACTED ZONES SU	UI	MI	LI
ASPHALT PAVEMENT		✓				✓					✓		
POOLED													
COVER													
COAT													
STAIN		✓				✓				✓	✓		
MOUSSE													
PATTIES				✓		✓					✓		
TARBALLS				✓	✓	✓					✓		
FILM													
NO OIL												✓	✓

PAVEMENT H (F) S 10 sq. m by .1 cm
PATTIES / TARBALLS 5 BAGS
NEAR 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 OP	OR	OL	OF	NO	OILED INTERVAL (CM-CM)	BELOW UO	UC	OIL / FILM COLOR SHEN BR	DBL RW	GY SL	DBRL TL	LBR	PIT ZONE SU	UI	MI	LI	ANA	SHEEN (Y/N)	▼	SURFACE - SUBSURFACE SEDIMENTS
							-															
							-															
							-															
							-															
							-															
							-															

COMMENTS NO PITS DUG DUE TO LACK OF OIL PENETRATION. EXTREMELY WEATHERED OIL AT SITE. SPORADIC PATTIES, TARBALL SETTLING ON GRASSES IN UPPER TIDAL GRASS FLATS.

ACE 10460039

REVIEWED _____ DATE _____

ACE 1941215

OPERATIONS FIELD NOTES

See Back for Instructions

SEGMENT ID AHAD WR-003 (WINDY BAY)
STREAM ID # 241-20-10160
ANNOTATED MAP INCLUDED (Y) N

DATE 4-29-90
NAME DARRIL YOES
TEAM # 14

SURFACE OIL	Quantities in Meters			Treatment Recommendation: None	Bioremediation		Tilling		Spot Hot Water	
	Length	Width	Area		Y/N	% Treat	Y/N	% Treat	Y/N	% Tre.
Wide Band	10	10	100	✓						
Medium Band										
Narrow Band										
Very Light										
		TOTAL MANDAYS								

SUBSURFACE OIL

Other (Describe)?	

TARMATS	Quantities in Meters			Treatment Rec			# of Bags	Mandays Required		
	Length	Width	Thick(cm)	None	Breakup	Remove		Breakup	Remove	
Area #1	250	20	<1			✓	10		1	WIDELY DISPER
Area #2										
Area #3										
Area #4										
Sporadic Mats										

MANUAL PICKUP	Type of Debris: ~~Mousse~~ Tarballs	Oiled Veget	Cleanup Debris	In Meters: Length	Width	# of Bags	Pickup Y/N	Manday Estimate
"Pocket" #1	✓					20	Y	2
"Pocket" #2		✓				10	Y	1
"Pocket" #3								
Random/Continuous								

OILED LOGS Y/(N)	OILING H/M/L	QUANTITY L/M/S	BURN Y/N	

Is there Other Debris on the Beach? (Y) / N How Many Bags? 1065 Is it mingled with the Oiled Debris Y/(N)
↳ ADF&G FUEL DRUMS

GENERAL

Snow covering 0 % of the Supratidal Zone?

Wave Exposure (H)/M/L Access Limitations: LONG BEACH / LONG STREAM - APPROX 500 METERS FROM BAY
↳ STREAM SHELTERED

Snare Boom/Pom Poms Recommended? NO

Would the production Craft have to be relocated to complete work on this subdivision? (Y) N, # of Times 3

COMMENTS:

ALL WORK SHOULD BE PLANNED FOR LATER THAN 5-15 → 7-10
CONTACT ADF&G BEFORE STARTING WORK

ACE 10460040

ACE 1941216

No Pits Dug ANAD

SSAT DATA ENTRY FORM

SUBSURFACE DATA

SEGMENT ID: WB-003 SUBDIV: 242-20 10160

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____

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____

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

ACE 10460041

PROBLEMS:______________________________

ACE 1941217

ANAD
SSAT DATA ENTRY FORM

GENERAL DATA

SEG ID: WB-003 SUBDIV: ~~10160~~ 242-20 TEAM: 14 SURVEY DATE: 4/29/90

PAVEMENT: CHAR F AREA 10 THICKNESS / TARBALLS X

OILED: LGS — VEG SM TRH — DBR — WAVE EXP: LW X MD — HG —

FAX RCVD: ______ DT: ______ AGENCY DISAGREE: ______

EST SUBDIV LGTH: 300 OIL CATEGORY: W — M — N 250 VL 50 NO — U —

SURFACE DATA

SURFACE SEDIMENT: BRK 10 BLD 10 COB 10 PEB 10 GRN 10 SAN 20 MUD 30 VEG —

CHAR #: 1 OIL CHAR: AP OIL DIST: CONT — BRKN X PTCH — SPLH —
OIL CLR: DBL FILM CLR: RW TIDAL ZONE: SU — UI X MI — LI —

CHAR #: 2 OIL CHAR: ST OIL DIST: CONT — BRKN X PTCH — SPLH —
OIL CLR: DBL FILM CLR: RW TIDAL ZONE: SU X UI X MI — LI —

CHAR #: 3 OIL CHAR: PT OIL DIST: CONT — BRKN — PTCH — SPLH X
OIL CLR: DBL FILM CLR: RW TIDAL ZONE: SU — UI X MI — LI —

CHAR #: 4 OIL CHAR: TB OIL DIST: CONT — BRKN — PTCH — SPLH X
OIL CLR: SBL / DBL FILM CLR: BR / RW TIDAL ZONE: SU — UI X 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 ____

ACE 10460042 -ISP

ACE 1941218 -15

WB-03B PHOTOTRANSECT
Windy Bay - Main Beach

ADF&G MULTI-ASSESSMENT DATA FORM

1 SURVEY TYPE: (BS) SS DS TS AVS SCHA MMHS PTA 2 REGION: PWS (KP,C) K,AP

METHOD: Aerial (Ground) Boat

3 DATE: 5/13/90
4 START TIME: 1000
5 STOP TIME: 1240
6 SEGMENT #: WB-3B
7 STATION #:
8 K-UNIT:
9 STAT AREA:
10 LAT: 59 14 7
11 LONG: 151 33 34
12 SOURCE: Map Loran
13 LOCATION: KP, OC, Windy Bay, Windy Right Creek
14 DESCRIPTION: Cobble beach on south side of Windy Right Creek's mouth.

15 HIGH TIDE TIMES: 0348 / 1715
16 HIGH TIDE HTS: 12.4 / 9.7
17 LOW TIDE TIMES: 1043 / 2235
18 LOW TIDE HTS: -0.4 / 4.4
19 TIDE HT AT SURVEY:
Ebb Slack Flood Slack
20 USCG QUAD: Seldovia A-5

21 TEAM RECORDER: Doug Hill
22 OBSERVERS: Lee Glenn
23 AGENCY: ADF&G
24 PHOTOS TAKEN: (Y) N
Roll #: 9000H08H Frame: 1-11
25 VIDEO TAKEN: (Y) N TAPE#: 90LPG023H
Start: 0431 End: 1650
26 SAMPLES TAKEN? Y (N) Number
Oil
Sediment
Biological
Water

1657

EXTENT OF OIL

	SHORELINE L	W	M²	%	STREAM L	W	M²	%
27 SURFACE COVERAGE								
28 SURFACE THICKNESS								
29 PENETRATION								

30 OVERALL OIL IMPACT: N VL (L) M H

31 OIL TYPE: Pooled Mousse (Tar) (Asphalt) (Sticky) (Stain)

32 OILED DEBRIS? (Y) N

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

34 WAVE EXPOSURE: High (Moderate) Low

35 SUBSTRATE TYPE: Bedrock ____ Boulder ____ Cobble 50
Gravel 20 Sand ____ Mud/silt 30

36 CATALOGED ANAD. FISH STREAM? (Y) N
37 CATALOG #: 242-32-10160
38 STREAM NAME: Windy Right Crk
39 OIL IN STREAM BED? Y (N)
40 OIL ON STREAM BANKS? (Y) N
41 OIL ON BEACH ADJACENT TO MOUTH? (Y) N (within 50 meters)
42 OIL WITHIN 1 MILE OF STREAM? (Y) N
Where: WB-02, WB-03ABC
43 ANADROMOUS FISH PRESENT? Y ? N

44 ANADROMOUS FISH OBSERVATION

Species	Aerial	Ground

This phototransect was along "Main Beach" which is immediately to the south of Windy Right Creek's mouth.

COMMENTS: RAN Phototransect - Able to find transect markers with a bit of searching. A # of rocks (cobbles & boulders) have been significantly rearranged since the transect was ran last fall. A closer look at this beach reveals numerous tar patties and AP beneath & between the cobbles & boulders. Oil saturated sediment (LOP-HOR) found within substrate also. Reviewing the photos & memories of 1989 the amount of oil over →

ACE 10460043

48 PHOTOLOG

FRAME(S)	DESCRIPTION
1-11	Photo sites=>0, 4, 5, 5, 15, 15, 25, 45, 55 & 60 meter Plot (½ meter squared plots)

48 OIL DISTRIBUTION DIAGRAM

present has apparently decreased.

Boulders & cobbles were moved, against the wishes of Exxon & the intellect of NOAA, in 1989 to effectively get at the oil that had seeped beneath & between. Rock piles were created. NOAA reps said moving these rocks was bad medicine & would disrupt the geomorphology of the beach & surrounding. In spite of this "wisdom" the beach has been sorted out nicely over the winter. The amount of wave energy that reaches this seemingly protected beach is suprising. I guess this must be "Windy" Bay.

= Sample taken
= Photo frame # and shot direction.

COMMENTS:
CREW RECENTLY WORKED THE NORTH SHORE FROM THE CREEK MOUTH TO THE HEAD OF THE SMALL DRAINAGE BENEATH THE ROCK WALL. THIS DRAINAGE IS OFTEN UTILIZED BY PINK AND CHUM FRY. THE AREA LOOKS MUCH WORSE THAN IT DID PRIOR TO CLEANUP. OIL SHEEN AND GLOBS OF OIL ARE NOW PRESENT OVER A LARGER AREA THAN PRIOR TO TREATMENT. TARBALLS AND 'HOR' PRESENT AND VERY APPARENT. THE CREW DID A LOT OF ROOTING AROUND BUT PICKED UP LITTLE OIL RELATIVE TO THE QUANTITY OF OIL PRESENT. OIL AND OILED SEDIMENT HAS BEEN TRANSPORTED BY THE CLEANUP EFFORT FROM THE STREAM BANK TO THE LOWER STREAM BANK AND INTO THE CHANNEL BELOW - CHUM FRY ARE PRESENTLY SWIMMING BENEATH THE OIL SHEENED SURFACE. BLUE-GRAY SHEEN COVERS THE SURFACE OF NEARLY AN ENTIRE AREA OF APPROXIMATELY 8 X 50 YARDS. IT LOOKS LIKE FUEL OIL HAS BEEN POURED OVER THE AREA. BOOT TRACKS FILLED WITH OIL SHEENED WATER POCKMARK MUCH OF THE AREA. ROOTING AROUND AND DECREASING THE % OF OIL IN A PARTICULAR AREA IS A COMMON PRACTICE (IE, STORM BERM RELOCATION). THE EFFECT IS THE SPREADING OF A CONDENSED POCKET OF OIL - A DILUTION, RENDERING REMOVEABLE OIL INACCESSIBLE. ~~CLEANUP SHOULD FOCUS ON HAZARDS AND NOT ON REMOVING OIL THAT CAN BE REMOVED EASILY AND CHEAPLY~~.

STREAM: 2423210160 S#: 1A-1 SEGMENT#: WB003 B WINDY BAY RIGHT CREEK OIL w/i 50m: Y OIL IN STREAM: Y

DATE	SURVEY	SITE	W x L (m) AREA	PERCENT OIL	THICKNESS & PENETR. (cm)	OIL TYPES, DEPTH INTERVAL(cm)	SITE SPECIFIC COMMENTS
06/20/90	STREAM SURVEY	1	SURFACE			MS TB LOR SOR ST CT	Please edit comments & delete entry for KCIOIL. I'll move comments into LOGINDEX.

COMMENTS:
CHUM AND PINK FRY OBSERVED IN THE STREAM. TIDE IS UP AND COVERING THE NORTH SHORE DRAINAGE THAT THE WORK CREW RECENTLY ~~FOULED~~ CONTAMINATED WITH OIL - THIS SMALL DRAINAGE WHICH IS PART OF WINDY CREEK IS USED BY CHUM & PINK FRY. DUE TO POOR CLEANUP TECHNIQUES, OIL AND OILED DEBRIS AND SEDIMENT WERE TRANSPORTED DOWNSLOPE AND INTO THE DRAINAGE. SHEEN IS QUITE VISIBLE ON THIS DRAINAGE AT THIS TIME (SHEEN ON TIDE WATER). THE SMELL OF OIL FILLS THE AIR. THE BOTTOM OF THE UPPER END OF THIS SMALL DRAINAGE IS MUD/SILT. OIL HAS BEEN TRAMPED INTO THE MUD/SILT AND SHEEN EMANATES FROM THE MUD/SILT. PLUM-SIZED BALLS OF MOUSSE OBSERVED ON THE CHANNELS BANKS - BELOW THE ROCK WALL, AMONG AND ON ROCKS (THEY ARE QUITE OBVIOUS). THE CREW COULD HAVE EASILY PICKED THESE BALLS OF MOUSSE UP. LEE SAYS HE WILL NOT HAVE THE CREW RETURN AND ~~"MUCK"~~ REMOVE THE AREA UP ANYMORE THAN THEY ALREADY HAVE. SALMON OBSERVED ALONG THE LENGTH OF THIS SMALL SIDE CHANNEL - SWIMMING BENEATH THE SHEEN AND IN THE SHEEN. OIL WAS TRANSPORTED FROM OILED TO UNOILED AREAS BY THE CREW'S POOR WORK TECHNIQUES. 3' X 4' PATCH OF OIL IN GRASS FLATS. THERE IS MORE OIL IN THE FLATS IN THE VICINITY OF 3' X 4' PATCH OF OIL (TAR PATTIES) WHICH IS MAPPED ON THE 6/19/90 SURVEY FORM. THIS OIL (THE TAR PATTY) WAS DOCUMENTED BY 1990 SSAT.

STREAM: 2423210160 S#: 1A-1 SEGMENT#: WB003 B WINDY BAY RIGHT CREEK OIL w/i 50m: Y OIL IN STREAM: N

DATE	SURVEY	SITE	W x L (m) AREA	PERCENT OIL	THICKNESS & PENETR. (cm)	OIL TYPES, DEPTH INTERVAL(cm)	SITE SPECIFIC COMMENTS
05/15/91	MAYSAP - SS	1	1-2 x20 SURFACE 30	1	<3.5	MS AP	
05/15/91	MAYSAP - SS	2	2 x30 SURFACE 60	1	<3.5	AP	
05/15/91	MAYSAP - SS	3	6 x100 SURFACE 600	1		ST	
05/15/91	MAYSAP - SS	4	1 x20 SURFACE 20	1		MSOR SHEEN	

ACE 10460045

COMMENTS:
VECO WORKERS COLLECTED APPROX 15 POUNDS OF OILED SEDIMENT AND MOUSSE. FURTHER EXPLORATION AMONG COBBLE ON BEACH WOULD TURN UP MORE OIL, FURTHER EXPLORATION IN VEGETATION AND AMONG MUD AND ROCKS WOULD REVEAL MORE OIL MOST PROBABLY IN THE AREA OF SITE #4 ON MAP (OTHER SIDE). OIL WAS STOMPED INTO MUD IN SIDE CHANNEL IN VICINITY OF SITE #4 IN 1990 BY EXXON WORK CREW (THEY DID A POOR JOB), HOWEVER, THE AREA LOOKS BETTER THIS YEAR. SEDIMENT ALONG BANK OF SIDE CHANNEL STILL SMELLS OF OIL. SOFT SHELL CLAMS IN THIS AREA. OILED SEDIMENT OBSERVED IN SIDE CHANNEL (SLOUGH) APPROX 500M UPSTREAM. COYOTE TRACKS OBSERVED ON SHORE OF STREAM.

ACE 10460046

ADF&G MULTI-ASSESSMENT FORM
1991 GENERAL ENTRY CHECKLIST

("important clean-up")

STREAM#: 2422010160 (32)
SEGMENT:

Windy B. flight H Cr

PAGE 35

DATE PRINTED: 08/14/91

LOCATION:

SURVEY TYPE: 90 POST TREATMENT - SS

METHOD: ~~GROUND~~ FOOT

DATE: 06/19/90

TEAM RECORDER: HILL

START TIME: 1505
END TIME: 1644

OBSERVERS: GLENN

TIDES: FLOOD SLACK E66
OG/HAB DISCREPANCIES:

AGENCY: FG

PHOTOS TAKEN: Y

STATION: 2422010160

ROLL#: 90DDH015H 90DDH016H
FRAME: ~~13-24~~ OK 1->8

VIDEO TAKEN: N
START:

TAPE#:
END:

SAMPLES TAKEN: N

SAMPLE NUMBERS:

OIL IN STREAM BED: Y

OVERALL OIL IMPACT: L

OIL ON BEACH BY MOUTH: Y

WAVE EXPOSURE: LOW

SHORELINE TYPE: BEACH

SUBSTRATE TYPE: BEDROCK 10 BOULDER COBBLE 30 VEGETAT

GRAVEL 15 SAND 20 MUD/SILT 10 GRANULE 15

ANADROMOUS FISH PRESENT: Y

SPECIES: PINK

COUNT: 30

ACE 10460047 #5

ADF&G MULTI-ASSESSMENT FORM
1991 OILING ENTRY CHECKLIST

ok

PAGE 38 DATE PRINTED: 08/14/91

STREAM# : 2422010160
SEGMENT#:

SURVEY TYPE : 90 POST TREATMENT - SS LOCATION:
DATE: 06/19/90
TIMES: 1505 - 1644 TEAM RECORDER: HILL

-- OILING EXTENT --

SITE#	SITE TYPE	DEPTH (cm)	LENGTH (m)	WIDTH (m)	AREA (m)	%	THICK (cm)	PEN (cm)	OIL TYPE CODES
1									TP ST

COMMENTS:
CREW RECENTLY WORKED THE NORTH SHORE FROM THE CREEK MOUTH TO THE HEAD OF THE SMALL DRAINAGE BENEATH THE ROCK WALL. THIS DRAINAGE IS OFTEN UTILIZED BY PINK AND CHUM FRY. THE AREA LOOKS MUCH WORSE THAN IT DID PRIOR TO CLEANUP. OIL SHEEN AND GLOBS OF OIL ARE NOW PRESENT OVER A LARGER AREA THAN PRIOR TO TREATMENT. TARBALLS AND 'HOR' PRESENT AND VERY APPARENT. THE CREW DID A LOT OF ROOTING AROUND BUT PICKED UP LITTLE OIL RELATIVE TO THE QUANTITY OF OIL PRESENT. OIL AND OILED SEDIMENT HAS BEEN TRANSPORTED BY THE CLEANUP EFFORT FROM THE STREAM BANK TO THE LOWER STREAM BANK AND INTO THE CHANNEL BELOW - CHUM FRY ARE PRESENTLY SWIMMING BENEATH THE OIL SHEENED SURFACE. BLUE-GRAY SHEEN COVERS THE SURFACE OF NEARLY AN ENTIRE AREA OF APPROXIMATELY 8 X 50 YARDS. IT LOOKS LIKE FUEL OIL HAS BEEN POURED OVER THE AREA. BOOT TRACKS FILLED WITH OIL SHEENED WATER POCKMARK MUCH OF THE AREA. ROOTING AROUND AND DECREASING THE % OF OIL IN A PARTICULAR AREA IS A COMMON PRACTICE (IE, STORM BERM RELOCATION). THE EFFECT IS THE SPREADING OF A CONDENSED POCKET OF OIL - A DILUTION, IF YOU WILL RENDERING RMOVEABLE OIL INNACCESSIBLE. CLEANUP SHOULD FOCUS ON HAZARDS AND NOT ON REMOVING OIL THAT CAN BE REMOVED EASILY AND CHEAPLY.

ACE 10460048 -15

Windy Right Creek
+Post Treatment Survey of upstream work area

ADF&G MULTI-ASSESSMENT DATA FORM

1 SURVEY TYPE: (BS) SS DS TS AVS SCHA MMHS PTA, 2 REGION: PWS (KP,CI) K,AP

METHOD: Aerial (Ground) Boat

3 DATE: 6/19/90
4 START TIME: 1505
5 STOP TIME: 1644
6 SEGMENT #: WB-3B
7 STATION #: Creek OOH
8 K-UNIT:
9 STAT AREA:
10 LAT: 59 14 7
11 LONG: 151 33 34
12 SOURCE: Map (Loran)
13 LOCATION: Windy Bay, Head of Bay, North Shore
14 DESCRIPTION:

16 HIGH TIDE TIMES: 1148 1732Z
16 HIGH TIDE HTS: 9.2 13.5
17 LOW TIDE TIMES: 0526 1708
18 LOW TIDE HTS: -0.4 13.3
19 TIDE HT AT SURVEY: Ebb Slack Flood Slack
20 USCG QUAD: Seldovia A-5

21 TEAM RECORDER: Doug Hill
22 OBSERVERS: Lee Glenn
23 AGENCY: ADF&G
24 PHOTOS TAKEN: (Y) N
Roll #: 9000H15H 9000H16H Frame: 13→24 1-8
25 VIDEO TAKEN: Y (N) TAPE#:
Start: End:
26 SAMPLES TAKEN? Y (N) Number
Oil
Sediment
Biological
Water

EXTENT OF OIL

	SHORELINE L	W	M²	%	STREAM L	W	M²	%
27 SURFACE COVERAGE								
28 SURFACE THICKNESS								
29 PENETRATION								

30 OVERALL OIL IMPACT: N VL (L) M H
31 OIL TYPE: Pooled Mousse (Tar) Asphalt Sticky (Stain)
32 OILED DEBRIS? Y (N) TP, ST
33 SHORELINE TYPE: Headland Low-lying Rocks (Beach) Cove Lagoon Marsh
34 WAVE EXPOSURE: High Moderate (Low)
35 SUBSTRATE TYPE: Bedrock Boulder 10 Cobble 30 Gravel 30 Sand 20 Mud/silt 10

36 CATALOGED ANAD. FISH STREAM? (Y) N
37 CATALOG #: 242-20-10160 32
38 STREAM NAME: Windy Right Creek
39 OIL IN STREAM BED? (Y)
40 OIL ON STREAM BANKS? (Y) N
41 OIL ON BEACH ADJACENT TO MOUTH? (Y) N (within 50 meters)
42 OIL WITHIN 1 MILE OF STREAM? (Y) N
Where: WB-02, WB-03
43 ANADROMOUS FISH PRESENT? (Y) ? N

44 ANADROMOUS FISH OBSERVATION

Species	Aerial	Ground
Chum Ay		~200

COMMENTS: Met by Rich Hagen (COPS) (who is a Kodiak Fisherman). Creek has recently worked the North Shore from the creek mouth upstream to the head of the small drainage below the rock wall. This area looks worse than it did prior to the cleanup activity. Looks as if the crew did a lot of rooting around but picked up little oil. As we observed much heavily oiled sediment and balls of mousse (which are very apparent). The oil has been transported from the Stream bank.

over

ACE 10460049 H/S

45 PHOTOLOG

FRAME(S)	DESCRIPTION

46 OIL DISTRIBUTION DIAGRAM

Comments cont'd.

down into the water below + to the lower portion of the slope. ROOTING around + decreasing the % of oil per area is a common practice used by EXXON crews (e.g., storm berm relocation, tilling etc). MOST of the boot tracks in the mud/silt below the slope are filled with water (water saturated oiled sediment) - nearly all of these pods of water are surfaced with oil sheen. The blue-gray sheen is covering nearly all mud/si in this area - the blue gray oil sheen is present every where the place has been ~~total~~ disturbed (≈ 8 yds ~~wide~~ x 50 yds - Area). Chum fry are visible in the drainage below the oiled slope - swimming beneath the oil sheen. Fry observed throughout the slough. Clara Crosby (ADEC) says she already asked the crew to come back and rework this area. We (ADF&G + ADEC) asked the OOPS man and J. Dean (EXXON) to keep the crew out of the drainage where the fry are --- the drainage is now heavily impacted with sheen filled boot tracks. The oil saturated sediment (looks like someone poured motor oil all over the beach) seems to be a bigger threat than "easily" removed tarmats. Cleanup should focus on long term hazards and not on oil that can most cheaply + easily be removed. The tarmats are picked up because of the greater % of oil and the ease with which they can be picked up. Also, the removal of a tarmat is an immediate visual reward - whereas oil saturated pliable sediment is not. One would have to remove the top 8" to get most of the oil ~~saturated~~ sediment.

A crew of four is presently working the North Shore from the mouth of the creek east toward the slough. Trowels + Bags, sitting cross-legged, moving rocks and scraping up oil as per the "rules of this GAME."

After speaking with us at WB-01 John Dean (EXXON) says he will speak with the crew about improving the quality of their work. At WB-03 the crew could have worked the oil from the bottom up preventing ~~slow down~~ to some degree the downward transport of oil into salmon waters.

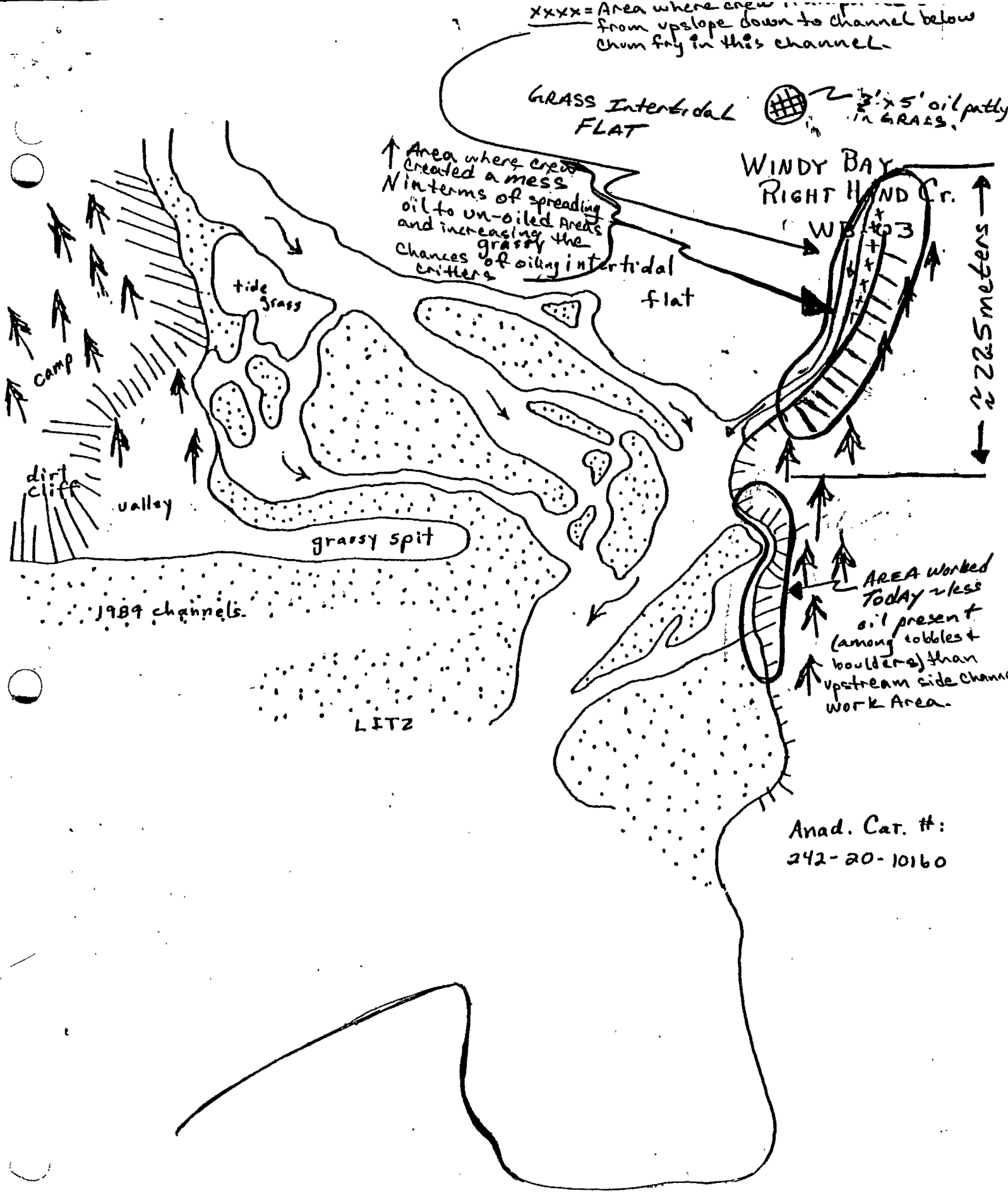
I found a 3' X 4' oil patty in the grass flats at WB-03

= Sample taken

= Photo frame # and shot direction.

* At WB-03 oil was transported by crew to un-oiled portions of the beach

ACE 10460050



ACE 10460051

Condensed Comments

Doug Hill

6/19/91 - WB-3B - Windy Right Creek - Post Treatment Survey

Crew recently worked the North Shore from the creek mouth to the head of the small drainage beneath the rock wall. This drainage is often utilized by pink and chum fry. The area looks much worse than it did prior to cleanup. Oil sheen and globs of oil are now present over a larger area than prior to treatment... Tarballs and HOR present and very apparent. The crew did a lot of rooting around but picked up little oil, relative to the quantity of oil present.

Oil and oiled sediment has been transported by the cleanup effort from the stream bank to the lower stream bank and into the channel below - Chum fry are presently swimming beneath the oil sheened surface. Blue-gray sheen covers the surface of ± nearly an entire area of ≈ 8 x 50 yds. Its looks like fuel oil has been poured over the area. Roof tracks filled with oil sheened water pockmark much of the area.

Rooting around and decreasing the % of oil in a particular area is a common practice (i.e., storm berm relocations). The effect is the spreading of a condensed pocket of oil - a dilution if you will, rendering removeable oil innaccessible.

Cleanup should focus on hazards and not on removing oil that can be removed most easily & cheaply.

ADF&G MULTI-ASSESSMENT FORM
1991 GENERAL ENTRY CHECKLIST

STREAM#: 2422010160 (32)
SEGMENT: ~~-0-~~ WB-03B

PAGE 13

DATE PRINTED: 07/25/91

LOCATION: ~~Bay~~ Windy Bay

SURVEY TYPE: 90 STREAM SURVEY

METHOD: GROUND

DATE: 06/20/90

TEAM RECORDER: HILL

START TIME: 1451
END TIME: 1537

OBSERVERS: GLENN

TIDES: FLOOD
OG/HAB DISCREPANCIES: -

AGENCY: FG

PHOTOS TAKEN: Y

STATION: 2422~~0~~10160
32

ROLL#: 90DDH016H
FRAME: 19-22

VIDEO TAKEN: N TAPE#: -0-
START: -0- END: -0-

SAMPLES TAKEN: N

SAMPLE NUMBERS: -0- -0-
-0- -0-
-0- -0-

OIL IN STREAM BED: Y

OVERALL OIL IMPACT: L

OIL ON BEACH BY MOUTH: Y

WAVE EXPOSURE: LOW

SHORELINE TYPE: BEACH

SUBSTRATE TYPE: BEDROCK -0- BOULDER 10 COBBLE 30 VEGETAT -0-
GRAVEL 30 SAND 20 MUD/SILT 10 GRANULE -0-

ANADROMOUS FISH PRESENT: -

SPECIES:	COUNT:
-0-	-0-
-0-	-0-
-0-	-0-
-0-	-0-
-0-	-0-

WINDY BAY, HEAD, NORTH SHORE

ACE 10460053 4/5

ADF&G MULTI-ASSESSMENT FORM
1991 OILING ENTRY CHECKLIST

DATE PRINTED: 07/26/91

STREAM# : 2422010160
SEGMENT#: ~~-0-~~ WB-03B

SURVEY TYPE : 90 STREAM SURVEY LOCATION: -0-
DATE: 06/20/90
TIMES: 1451 - 1537 TEAM RECORDER: HILL

-- OILING EXTENT --

SITE#	SITE TYPE	DEPTH (cm)	LENGTH (m)	WIDTH (m)	AREA (m)	%	THICK (cm)	PEN (cm)	OIL TYPE CODES
1	-0-	-0-	-0-	-0-	-0-	-0-	-0-	-0-	-0- MS AND ... ? TB, LOR, SOR ST, CT

COMMENTS:
CHUM AND PINK FRY OBSERVED in stream. TIDE IS UP AND COVERING THE NORTH SHORE DRAINAGE THAT THE WORK CREW RECENTLY FOULED WITH OIL - THIS SMALL DRAINAGE WHICH IS PART OF WINDY CREEK IS USED BY CHUM & PINK FRY. DUE TO POOR CLEANUP TECHNIQUES, OIL AND OILED DEBRIS AND SEDIMENT WERE TRANSPORTED DOWNSLOPE AND INTO THE DRAINAGE. SHEEN IS QUITE VISIBLE ON THIS DRAINAGE AT THIS TIME (SHEEN ON TIDE WATER). THE SMELL OF OIL FILLS ~~???~~. THE BOTTOM OF THE UPPER END OF THIS SMALL DRAINAGE IS MUD/SILT. OIL HAS BEEN TRAMPED INTO THE MUD/SILT AND SHEEN EMANATES FROM THE MUD/SILT. PLUM-SIZED BALLS OF MOUSSE OBSERVED ON THE CHANNELS BANKS - BELOW THE ROCK WALL, AMONG AND ON ROCKS (THEY ARE QUITE OBVIOUS). THE CREW COULD HAVE EASILY PICKED THESE BALLS OF MOUSSE UP. LEE SAYS HE WILL NOT HAVE THE CREW RETURN AND "MUCK" THE AREA UP ANYMORE THAN THEY ALREADY HAVE. SALMON OBSERVED ALONG THE LENGTH OF THIS SMALL SIDE CHANNEL - SWIMMING BENEATH THE SHEEN AND IN THE SHEEN. OIL WAS TRANSPORTED FROM OILED TO UNOILED AREAS BY THE CREWS' POOR WORK TECHNIQUES. 3' X 4' PATCH OF OIL IN GRASS FLATS. THERE IS MORE OIL IN THE FLATS IN THE VICINITY OF 3' X 4' PATCH OF OIL (TAR PATTIES) WHICH IS MAPPED ON THE 6/19/90 SURVEY FORM. THIS OIL (THE TAR PATTY) WAS DOCUMENTED BY 1990 SSAT.

DISCONTINUED ACROSS PAGE

The Air.

WB-3B
Windy Right Creek
Post Treatment Survey
OK

ADF&G MULTI-ASSESSMENT DATA FORM

1 SURVEY TYPE: (EVOS) SS DS TS AVS SCHA MMIS PTA 2 REGION: PWS (KP,CI) K,AP

METHOD: Aerial (Ground) Boat

3 DATE: 6/20/90
4 START TIME: 1451
5 STOP TIME: 1537
6 SEGMENT #: WB-03B
7 STATION #:
8 K-UNIT:
9 STAT AREA:
10 LAT: 59 14 7
11 LONG: 151 33 34
12 SOURCE: Map Loran
13 LOCATION: Windy Bay, Head of Bay, North Shore
14 DESCRIPTION:

15
16 HIGH TIDE TIMES: 1252pm 1117am
16 HIGH TIDE HTS: 9.9 , 14.2
17 LOW TIDE TIMES: 0625 , 1811
18 LOW TIDE HTS: -1.7 , 3.3
19 TIDE HT AT SURVEY:
Ebb Slack (Flood) Slack
20 USCG QUAD: Seldovia A-5

21 TEAM RECORDER: Doug Hill
22 OBSERVERS: Lee Glenn
23 AGENCY: ADF&G
24 PHOTOS TAKEN: (Y) N
Roll #: 9000H16H Frame: 19→22
25 VIDEO TAKEN: Y (N) TAPE#:
Start: End:
26 SAMPLES TAKEN? Y (N) Number
Oil
Sediment
Biological
Water

EXTENT OF OIL

	SHORELINE L	W	M²	%	STREAM L	W	M²	%
27 SURFACE COVERAGE								
28 SURFACE THICKNESS								
29 PENETRATION								

30 OVERALL OIL IMPACT: N VL (L) M H

31 OIL TYPE: Pooled Mousse Tar Asphalt Sticky Stain

32 OILED DEBRIS? Y (N) TB, AP, SOR, ST, CT

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

34 WAVE EXPOSURE: High Moderate (Low)

35 SUBSTRATE TYPE: Bedrock Boulder 10 Cobble 30 Gravel 30 Sand 20 Mud/silt 10

36 CATALOGED ANAD. FISH STREAM? (Y) N
37 CATALOG #: 242-32-10160
38 STREAM NAME: Windy Right Creek
39 OIL IN STREAM BED? (Y) N
40 OIL ON STREAM BANKS? (Y) N
41 OIL ON BEACH ADJACENT TO MOUTH? (Y) N (within 50 meters)
42 OIL WITHIN 1 MILE OF STREAM? (Y) N
Where: ~~WB-02~~, WB-03
43 ANADROMOUS FISH PRESENT? (Y) N

44 ANADROMOUS FISH OBSERVATION

Species	Aerial	Ground
Chum fry		✓
pink fry		✓

ACE 10460055

COMMENTS: Tide is up & covering the north shore drainage that the work crew recently ~~fouled~~ fouled with oil - this small drainage which is part of ~~the~~ Windy Creek is used by Chum & Pink fry. Due to poor cleanup techniques Oil & oiled debris & sediment was transported downslope and into the drainage. Sheen is quite visible on this drainage at this time (sheen on tide water). The smell of oil fills

48 PHOTOLOG

FRAME(S)	DESCRIPTION
19	Oil transported down-slope by Cleanup crew-trampling has pushed oil into sediment
20,21,22	more Oil found in grass flats

48 OIL DISTRIBUTION DIAGRAM

Comments Cont'd: The bottom of the upper end of this small drainage is mud/silt. Oil has been tramped into the mud silt + sheen emanates from the mud/silt.

Plum sized balls of mousse observed on the channel's banks -- below the rock wall, among ~~and~~ on rocks (they are quite obvious). The crew could have easily picked these balls of mousse up. Lee says he will not have the crew return and "muck" the area up any more than they already have.

Salmon observed along the the length of this small side channel swimming beneath the sheen and in the sheen.

Oiled gravel, silt, rocks + sheened over boot tracks.

Oil was transported from oiled to unoiled areas by the crews poor work techniques

3'x4' patch of oil in grass flats. There is more oil in the flats in the vicinity of 3'x4' patch of oil (tar patties) which is mapped on the 6/19/90 survey form. This oil ~~was~~ (the tar patty) was documented by 1990 SSAT.

= Sample taken

= Photo frame # and shot direction.

ACE 10460056

WB-3B
Windy Right Creek
Post Treatment Survey

ADF&G MULTI-ASSESSMENT DATA FORM

1 SURVEY TYPE: (BS) SS DS TS AVS SCHA MMHS PTA 2 REGION: PWS (KP,CI) K,AP

DNR 10/9/91

METHOD: Aerial (Ground) Boat

3 DATE: 6/20/90
4 START TIME: 1451
5 STOP TIME: 1537
6 SEGMENT #: WB-03B
7 STATION #:
8 K-UNIT:
9 STAT AREA:
10 LAT: 59 14 7
11 LONG: 151 33 34
12 SOURCE: Map Loran
13 LOCATION: Windy Bay, Head of Bay, North Shore
14 DESCRIPTION:

15 HIGH TIDE TIMES: 1252pm 1117am
16 HIGH TIDE HTS: 9.9 , 14.2
17 LOW TIDE TIMES: 0623 , 1811
18 LOW TIDE HTS: -1.7 , 3.3
19 TIDE HT AT SURVEY:
Ebb Slack (Flood) Slack
20 USCG QUAD: Seldovia A-5

21 TEAM RECORDER: Doug Hill
22 OBSERVERS: Lee Glenn
23 AGENCY: ADF&G
24 PHOTOS TAKEN: (Y) N
Roll #: 9000H16H Frame: 19→22
25 VIDEO TAKEN: Y (N) TAPE#:
Start: End:
26 SAMPLES TAKEN? Y (N) Number
Oil
Sediment
Biological
Water

EXTENT OF OIL

	SHORELINE L	W	M²	%	STREAM L	W	M²	%
27 SURFACE COVERAGE								
28 SURFACE THICKNESS								
29 PENETRATION								

30 OVERALL OIL IMPACT: N VL (L) M H
31 OIL TYPE: Pooled Mousse Tar Asphalt Sticky Stain
32 OILED DEBRIS? Y (N)
33 SHORELINE TYPE: Headland Low-lying Rocks (Beach) Cove Lagoon Marsh
34 WAVE EXPOSURE: High Moderate (Low)
35 SUBSTRATE TYPE: Bedrock Boulder 10 Cobble 30 Gravel 30 Sand 20 Mud/silt 10

36 CATALOGED ANAD. FISH STREAM? (Y) N
37 CATALOG #: 242-~~33~~-10160
38 STREAM NAME: Windy Right Creek
39 OIL IN STREAM BED? (Y) N
40 OIL ON STREAM BANKS? (Y) N
41 OIL ON BEACH ADJACENT TO MOUTH? (Y) N (within 50 meters)
42 OIL WITHIN 1 MILE OF STREAM? (Y) N
Where: WB-02, WB-03
43 ANADROMOUS FISH PRESENT? Y N

44 ANADROMOUS FISH OBSERVATION

Species	Aerial	Ground
Chum fry		✓
pink fry		✓

ACE 10460057

COMMENTS: Tide is up & covering the north shore drainage that the work crew recently ~~mapped~~ fouled with oil - this small drainage which is part of ~~the~~ Windy Creek is used by Chum & Pink fry. Due to poor cleanup techniques Oil & oiled debris & sediment was transported downslope and into the drainage. Sheen is quite visible on this drainage at this time (sheen on tide water). The smell of oil fills

→over

46 PHOTOLOG

FRAME(S)	DESCRIPTION
19	Oil transported down-slope by Cleanup crew - trampling has pushed oil into sediment
20, 21, 22	more Oil found in grass flats

46 OIL DISTRIBUTION DIAGRAM

Comments Con't'd: The bottom of the upper end of this small drainage is mud/silt. Oil has been tramped into the mud silt + sheen emanates from the mud/silt.

Plum sized balls of mousse observed on the channel's banks.--- below the rock wall, among and on rocks (they are quite obvious). The crew could have easily picked these balls of mousse up. Lee says he will not have the crew return and "muck" the area up any more than they already have.

Salmon observed along the the length of this small side channel--- swimming beneath the sheen and in the sheen.

Oiled gravel, silt, rocks + sheened over boot tracks.

Oil was transported from oiled to unoiled areas by the crews poor work techniques

3'x4' patch of oil in grass flats. There is more oil in the flats in the vicinity of 3'x4' patch of oil (tar patties) which is mapped on the 6/19/90 survey form. This oil (the tar patty) was documented by 1990 SSAT.

= Sample taken
= Photo frame # and shot direction.

ACE 10460058 - PG

ASC NUMBER: 242-32-10100 SEGMENT NUMBER: YR CATALOGED:
LOCATION: KPOC, Windy Bay
STREAM NAME: Windy Center Creek LATITUDE: 59 13 52
KODIAK K-UNIT: . LOCAL STREAM #: LONGITUDE: 151 34 19
USGS QUADRANGLE: Seldovia A-5 LEGAL:
SHORELINE TYPE: Low lying Rocks, Beach ALL SEGMENTS:
WAVE EXPOSURE: Low

ASC NUMBER:
SURVEY TYPE:
METHOD:
DATE: 4/11/90
START TIME: 0755
STOP TIME: 0847

TEAM RECORDER: Doug Hill
OBSERVERS: Susan McLane

AGENCY(IES): ADF+G

PHOTOS TAKEN? C
Roll #: 9000H002 Frames: 8,9
VIDEO TAKEN? Tape Number: Aerials taken on 4/12/90
Counter Start:

SAMPLES TAKEN? NO
SAMPLE I.D. NUMBERS: 1. 2. 3.
4. 5. 6.

	LENGTH m	WIDTH m	M2	%	THICK cm	PEN cm	OIL TYPE
SITE 1							
SITE 2							
SITE 3							
SITE 4							
SITE 5							

OVERALL OIL IMPACT: M

OIL IN STREAM CHANNEL? N

OIL ON BEACH WITHIN 50M OF STREAM MOUTH? N

SUBSTRATE

Bedrock		Granule	10%
Boulder	10%	Sand	
Cobble	20%	Silt	
Pebble	60%	Veget.	

SPECIES					
COUNT					

COMMENTS: See 1990 MAO form comments

Asite 1A-2 1989 AFHS

OK

ACE 10460084 4/S/P

4/16/90 Arch-

GROUP B

ADF&G MULTI-ASSESSMENT DATA FORM

PRE-SCREENING

1 SURVEY TYPE: BS (SS) DS TS AVS SCHA MMHS PTA

2 REGION: PWS (KP,C) K,AP

METHOD: Aerial (Ground) Boat

3 DATE: 4/11/90

4 START TIME: 0755

5 STOP TIME: 0847

6 SEGMENT #: WB-3

7 STATION #:

8 K-UNIT:

9 STAT AREA: 242-20

10 LAT: 59°14'.12"

11 LONG: 151° 33'.60"

12 SOURCE: (Map) Loran

13 LOCATION: AFS 242-20-10160/Windy Bay Center Creek

14 DESCRIPTION: Mouth of Stream

15 HIGH TIDE TIMES: 1450 / —

16 HIGH TIDE HTS: 13.0 / —

17 LOW TIDE TIMES: 0917 / —

18 LOW TIDE HTS: -1.0 / 1.9

19 TIDE HT AT SURVEY:

(Ebb) Slack Flood Slack

20 USCG QUAD: Seldovia A-5

CORDOVA

21 TEAM RECORDER: Doug Hill

22 OBSERVERS: Susan McLane

23 AGENCY: ADF&G

24 PHOTOS TAKEN: (Y) N

Roll #: 90-MH-002 Frame: 8,9

25 VIDEO TAKEN: Y (N) TAPE#:

Start: End:

26 SAMPLES TAKEN? Y (N) Number

Oil

Sediment

Biological

Water

EXTENT OF OIL

	SHORELINE L	W	M²	%	STREAM L	W	M²	%
27 SURFACE COVERAGE								
28 SURFACE THICKNESS								
29 PENETRATION								

30 OVERALL OIL IMPACT: (N) VL L M H

31 OIL TYPE: Pooled Mousse Tar Asphalt Sticky Stain

32 OILED DEBRIS? Y (N)

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

34 WAVE EXPOSURE: High Moderate (Low)

35 SUBSTRATE TYPE: Bedrock Boulder ~10% Cobble ~20% (Gravel) 60% Sand Mud/silt

36 CATALOGED ANAD. FISH SREAM? (Y) N

37 CATALOG #: 242-20-10180

38 STREAM NAME: Windy Bay Center Creek

39 OIL IN STREAM BED? Y (N)

40 OIL ON STREAM BANKS? Y (N)

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

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

Where: within WB-3-Womans, Point and Main Beach to name a few

43 ANADROMOUS FISH PRESENT? Y (N)

44 ANADROMOUS FISH OBSERVATION

Species	Aerial	Ground

COMMENTS: Walked upstream on both banks of creek to Narrows (area where ~30' Cliffs rise from creek bed. Walked tide flats at mouth/below Narrows) Walked ~150 yds off stream bank on N shore. South shore - surveyed entire bank between center and left hand creek - Observed No oil.

ACE 10460085

ACE 1941226

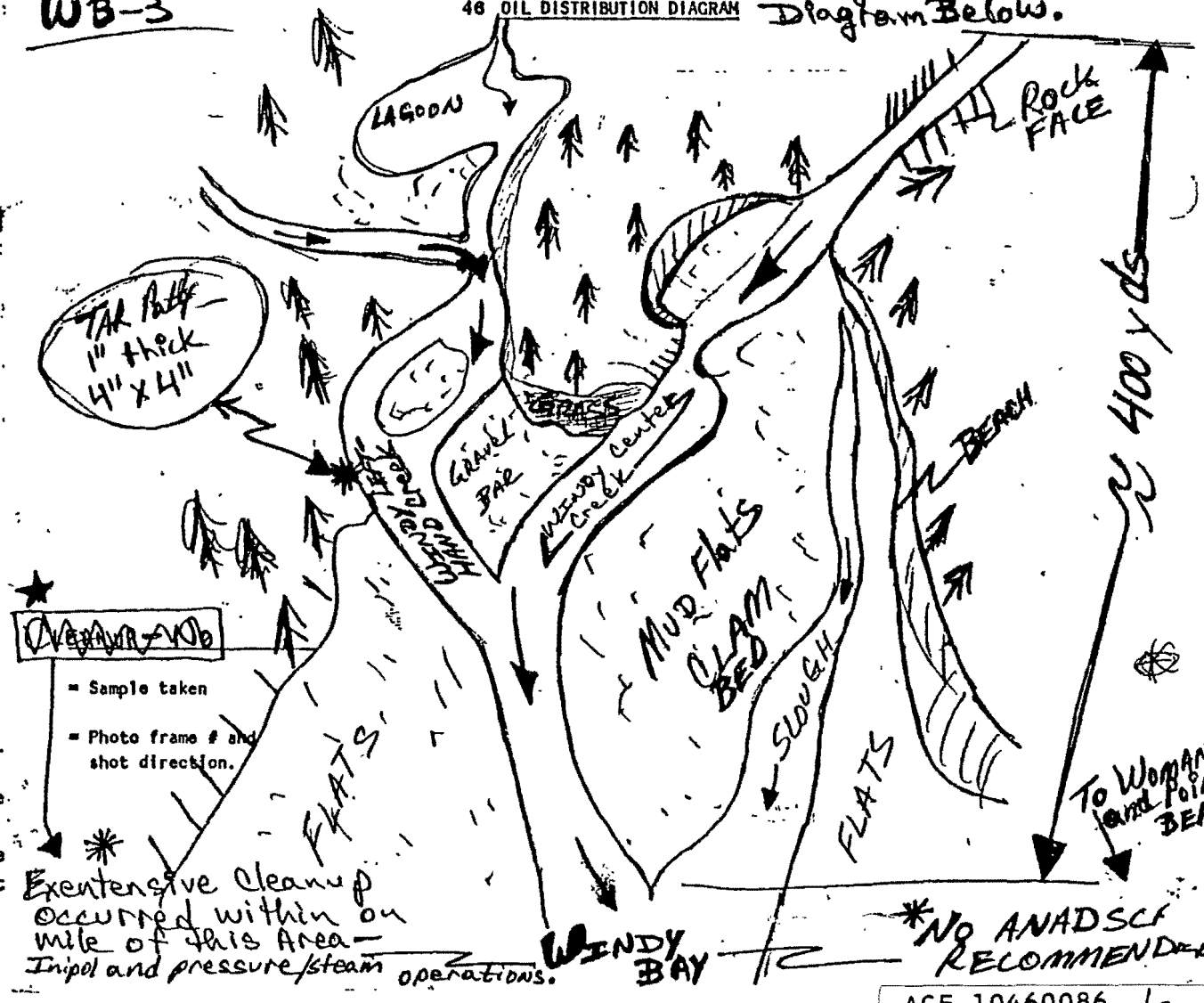
45 PHOTOLOG

FRAME(S)	DESCRIPTION
8,9	Aerials of Creek Mouth & Intertidal

WB-3

46 OIL DISTRIBUTION DIAGRAM

Surveyed Entire AREA IN Diagram Below.



Exentensive Cleanup Occurred within on mile of this Area— Inipol and pressure/steam operations.

*No ANADSCAT RECOMMENDED

ACE 10460086 -15

ACE 1941227

*NO ANADSCAT Recommended

4/16/90 Faxed (4/17/90) Anch-

GROUP B

ADF&G MULTI-ASSESSMENT DATA FORM

PRE-SCREENING

1 SURVEY TYPE: BS (SS) DS TS AVS SCHA MMHS PTA

2 REGION: PWS (KP,C) K,AP

METHOD: Aerial (Ground) Boat

CORDOVA

3 DATE: 4/11/90

4 START TIME: 0755

5 STOP TIME: 0847

6 SEGMENT #: WB-3

7 STATION #:

8 K-UNIT:

9 STAT AREA: 242-20

10 LAT: 59°14'.12"

11 LONG: 151° 33'.60"

12 SOURCE: (Map) Loran

13 LOCATION: AFS 242-20-10160/Windy Bay Center Creek

14 DESCRIPTION: Mouth of Stream

15 HIGH TIDE TIMES: 1450 / —

16 HIGH TIDE HTS: 13.0 / —

17 LOW TIDE TIMES: 0917 / —

18 LOW TIDE HTS: -1.0 / 1.9

19 TIDE HT AT SURVEY:

(Ebb) Slack Flood Slack

20 USCG QUAD: Seldovia A-5

21 TEAM RECORDER: Doug Hill

22 OBSERVERS: Susan McLane

23 AGENCY: ADF&G

24 PHOTOS TAKEN: (Y) N

Roll #: 90-001H-002 Frame: 8,9

25 VIDEO TAKEN: Y (N) TAPE#:

Start: End:

26 SAMPLES TAKEN? Y (N) Number

Oil

Sediment

Biological

Water

EXTENT OF OIL

	SHORELINE L	W	M²	%	STREAM L	W	M²	%
27 SURFACE COVERAGE								
28 SURFACE THICKNESS								
29 PENETRATION								

30 OVERALL OIL IMPACT: (N) VL L M H

31 OIL TYPE: Pooled Mousse Tar Asphalt Sticky Stain

32 OILED DEBRIS? Y (N)

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

34 WAVE EXPOSURE: High Moderate (Low)

35 SUBSTRATE TYPE: Bedrock Boulder ~~10%~~ Cobble 20%

(Gravel) 60% Sand Mud/silt

36 CATALOGED ANAD. FISH SREAM? (Y) N

37 CATALOG #: 242-20-10160

38 STREAM NAME: Windy Bay Center Creek

39 OIL IN STREAM BED? Y (N)

40 OIL ON STREAM BANKS? Y (N)

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

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

Where: within WB-3-Womans Point and Main Beach to name a few

43 ANADROMOUS FISH PRESENT? Y (N)

44 ANADROMOUS FISH OBSERVATION

Species	Aerial	Ground

COMMENTS: Walked upstream on both banks of creek to Narrows (area where ≈30' Cliffs rise from creek bed. Walked tide flats at mouth (below narrows) Walked ≈150 yds of stream bank on N shore. South shore - surveyed entire bank between center and left hand creek - Observed No oil.

ACE 1941226

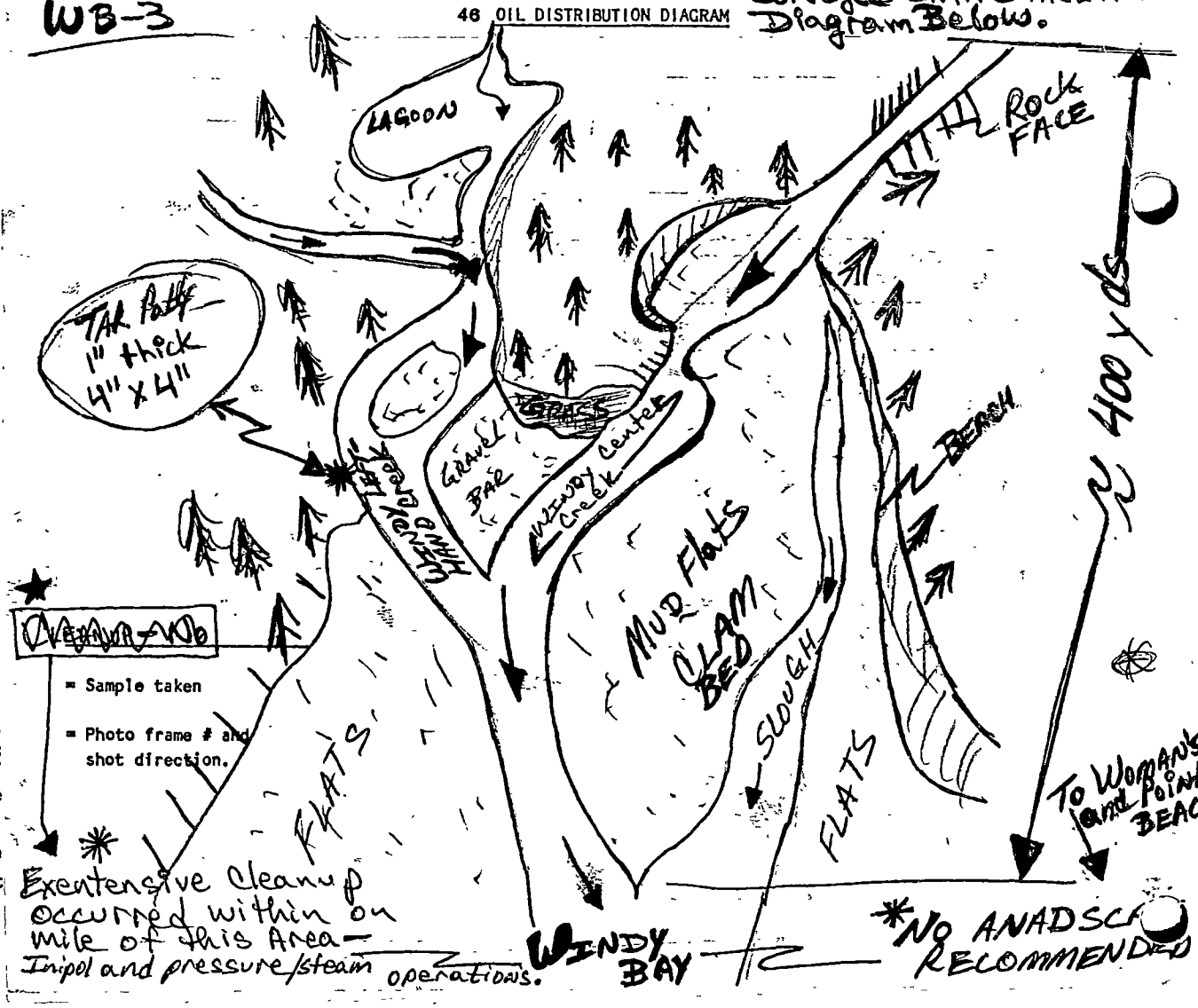
45 PHOTOLOG

FRAME(S)	DESCRIPTION
8,9	Aerials of Creek Mouth + Intertidal

WB-3

46 OIL DISTRIBUTION DIAGRAM

Surveyed Entire AREA IN Diagram Below.



ACE 1941227

*NO ANADSCAT Recommended

FIELD SHORELINE COMMENT SHEET

SEGMENT AS / WB-3 SUBDIVISION: C SITE: 01 DATE 07 Aug 1990

ISCG
NAME AEC Vandepels SIGNATURE AEC Vandepels

☐ YES ☒ NO PRIORITY SITE FOR REASSESSMENT IN 1991
REASON: This rocky point was clean. No more work or reassessment required.

ADEC
NAME Clara S. Crosby SIGNATURE Clara S. Crosby

☐ YES ☒ NO PRIORITY SITE FOR REASSESSMENT IN 1991
REASON: No treatment suggested @ this time.

LAND MANAGER
NAME PATTI NORMAN SIGNATURE Patti Norman

☒ YES ☐ NO PRIORITY SITE FOR REASSESSMENT IN 1991
REASON: There is enough remaining residual oil and mousse in this segment to reassess in 1991 for further work.

EXXON
NAME JON CZARNECKI SIGNATURE Jon Czarnecki

☒ YES ☐ NO PRIORITY SITE FOR REASSESSMENT IN 1991
REASON:
This is the point area between two very active salmon streams. The SOR and mousse which remains needs to be checked in 1991

ACE 10460087 +/S/90

REVISION NO. 7/24/90

ACE 1941268 +/S

ASAP SHORELINE OILING SUMMARY

TEAM NO. 04 EXXON Jon Czarnecki SEGMENT AS/ WB-3
OG Rick Marty ~~USCG~~ USCG AEC Vandepels SUBDIVISION C
ADEC Clara Crosby LAND REP Pat Norman (P.Gr) TOTAL NO. SITES 1
DATE 0 7/Aug /90 TIME 19:35 to 20:05 TIDE LEVEL +3' to +2'
TOTAL EST LENGTH OF SHORELINE SURVEYED: 225 m
SURVEYED FROM: ☒ Foot ☐ Boat ☐ Helo WEATHER: ☐ Sun ☒ Clouds ☐ Fog ☒ Rain ☐ Snow
OIL CATEGORY LENGTH: W — m M — m N 146 m VL 79 m NO — m US — m

SURFACE OIL

CHARACTER	SITE 1 DISTRIBUTION /C	/B	/P	/S	SITE 1 OILED ZONES SU	UI	MI	LI	SITE 2 DISTRIBUTION /C	/B	/P	/S	SITE 2 OILED ZONES SU	UI	MI	LI	SITE 3 DISTRIBUTION /C	/B	/P	/S	SITE 3 OILED ZONES SU	UI	MI	LI
ASPHALT																								
S.O.R.	—	—	U XI	—	—	U XI	U I	—																
POOLED																								
COVER																								
COAT																								
STAIN																								
MOUSSE	—	—	U I		—	U I	U I	—																
PATTIES/T.B.	—	—	—	X	—	X	X	—																
FILM																								
NO OIL					X	—	—	X																
EST. SITE LENGTH					225 m																			

SUBSURFACE OIL

SITE NO.	PIT NO.	PIT DEPTH (cm)	SUBSURFACE OIL CHARACTER OP	OR	OF	NO	OILED INTERVAL (CM-CM)	CLEAN BELOW (Y/N)	PIT ZONE SU	UI	MI	LI	SURFACE-SUBSURFACE SEDIMENTS
1	1	55				X	—	Y		X			S/S
							•						
							•						
							•						
							•						
							•						
							•						
							•						
							•						
							•						
							•						
							•						

Photographs: ASAP-04-CC
Roll No. —
Frames —

COMMENTS

ACE 10460088

REVISION NO. 7/27/90

ACE 1941269

OG Randy Siegel

SEGMENT WB-3

SUBDIVISION C

DATE 4/6/90

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

CT/C Continuous Distribution

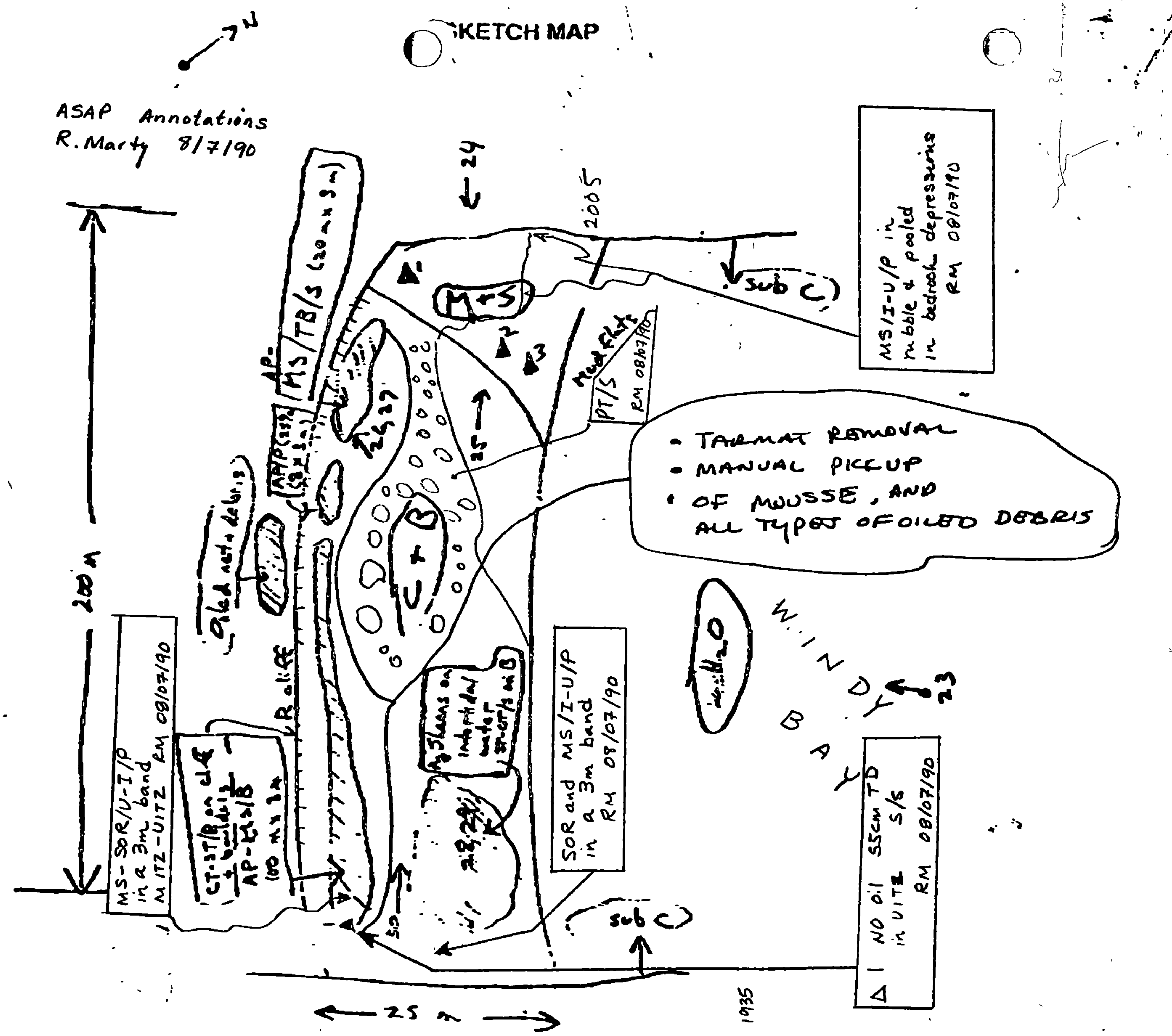
CT/B Broken Distribution

CT/P Patchy Distribution

CT/S Splashed Distribution

Oiled Vegetation

1 Photo location, direction, and number



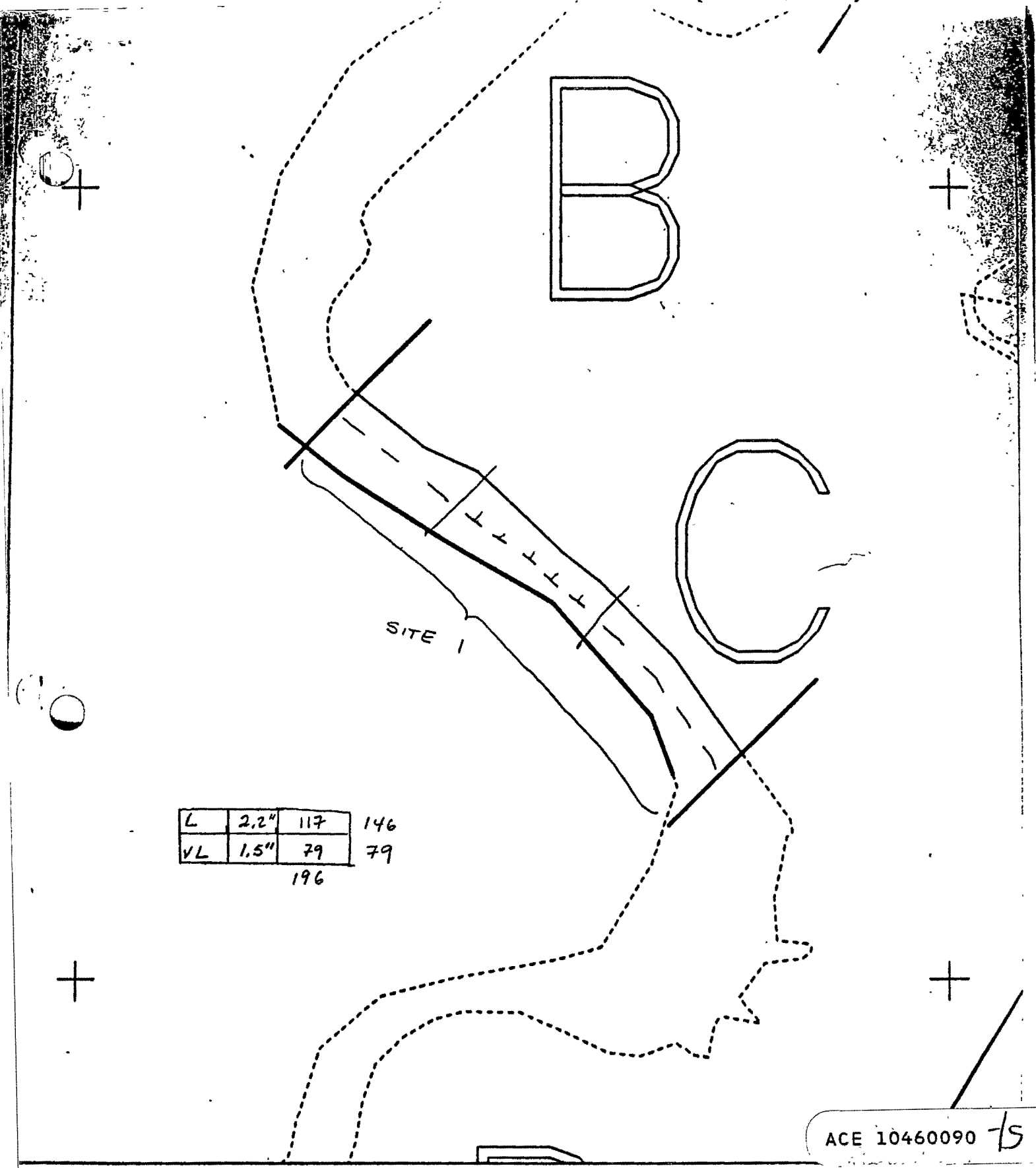
ACE 10460089

ACE 1941270

Oil Character Length (m): AP____ PO____ CV____ CT____ ST____ MS 146 PT 71 TB____ FL____ NO____

ASAP Totals SOR 50

REVISION



L	2.2"	117	146
VL	1.5"	79	79
		196	

ACE 10460090 -S

XXXX Wide
// Medium
--- Narrow
TTTT Very Light
0000 No Oil

WB-3 C

ADEC Subsegment Length: 225m

METERS

0 53 107

AK State Plane Zone 4 1:2102
nwb-3c

Subdivision Field Map
Map Key: KENWB-3C
Name: R. Marty
Date: 8/7/90
Data Entered:

ACE 1941271 -S

STATE OF ALASKA
FIELD MEMO

Permit Number: ASAP | Serial Number: 1005

To (Name and Organization): Jon Czarnecki (EXXON) CHIEF AEC VANDEPELS (USCG)

Date and Time: 8/10/90 1510 | Area: GOA, KENAI, Homer Zone.

Location and Section of Work: WB003D WINDY BAY ASAP SITES 1&2

__ Authorization to Proceed __ Non Conformance __ ADEC Permit __ ADF&G Permit

__ ADNR Permit __ Problem Identification X Other

ADEC Recommends the following treatment for WB003D:

A) MANUAL REMOVAL OF AP/MS/HSOR.
B) ACCESS MS/AP/HSOR BY ROLLING B/C WHEN POSSIBLE.
C) FOLLOW SEAMS OF OILING (MS/AP/HSOR) UNTIL THEY DISSIPATE OR BECOME INACCESSIBLE.
D) USE pom poms AS NEEDED TO Recover oil (WIPING ROCKS)
E) ACCESS ANY SUBSURFACE MS/AP/HSOR MANUALLY BY SHOVELING OVERBURDEN of (Sm & PG)
F) Remove MANUALLY SUBSURFACE MS/AP/HSOR.

Permit Expiration Date

State Representative: Clara S. Crosby | Recipient

Action Taken by Recipient

ACE 10460091

ACE 1941272

DISTRIBUTION: EXXON Representative Date/Time

WHITE: ADEC-VALDEZ GREEN: ADEC YELLOW: EXXON GOLDENROD: EXXON PINK: COAST GUARD

FIELD SHORELINE COMMENT SHEET

SEGMENT AS/ WB-3 SUBDIVISION: D SITE: 01/02 DATE 07 Aug 1990

SCG
NAME AEC Vandepels SIGNATURE AEC Vandepels

☒ YES ☐ NO PRIORITY SITE FOR REASSESSMENT IN 1991
REASON: Some AP/MS found on segment. Reassess in 91.

ADEC
NAME Clara S. Crosby SIGNATURE Clara S. Crosby

☒ YES ☐ NO PRIORITY SITE FOR REASSESSMENT IN 1991
REASON: Manual removal of AP & MS incomplete. It is adjacent to an anadromous stream. Subsurface oiling was observed in the berm @ pit site #2. A thorough reassessment & delination & treatment of subsurface oiling is needed. Area has been Bioremediated.

LAND MANAGER
NAME Patrick Norman SIGNATURE Patrick Norman

☒ YES ☐ NO PRIORITY SITE FOR REASSESSMENT IN 1991
REASON: The western end of this segment still has subsurface mousse, and is an Archeological site that is important to us also a subsistence area

EXXON
NAME JON CZARNECKI SIGNATURE Jon Czarnecki

☒ YES ☐ NO PRIORITY SITE FOR REASSESSMENT IN 1991
REASON: This area is next to an active salmon stream and used for subsistance fishing reassessment in 91 would be helpful.

ACE 10460092 +/S

ACE 1941273 +/S

ASAP SHORELINE OILING SUMMARY

TEAM NO. 04 EXXON Jon Czarnecki SEGMENT AS/ WB — 3
OG Rick Marty ~~USGS~~ USCG AEC Vandepeis SUBDIVISION D
ADEC Clair Crosby LAND REP Pat Norman (PGr) TOTAL NO. SITES 1
DATE 07 Aug 90 TIME 19:05 to 19:35 TIDE LEVEL +4' to +3'
TOTAL EST LENGTH OF SHORELINE SURVEYED: 516 m
SURVEYED FROM: ☒ Foot ☐ Boat ☐ Helo WEATHER: ☐ Sun ☒ Clouds ☐ Fog ☒ Rain ☐ Snow
OIL CATEGORY LENGTH: W — m M 269 m N 194 m VL 54 m NO — m US — m

SURFACE OIL

SITE 1

CHARACTER	DISTRIBUTION /C	/B	/P	/S	OILED ZONES SU	UI	MI	LI
ASPHALT	—	—	V	I	V_I	V_I	V_I	—
S.O.R.	—	—	—	H	—	H^X	V_I H^X	—
POOLED								
COVER								
COAT								
STAIN								
MOUSSE	—	—	V	I	V_I	I^V	I^V	—
PATTIES/T.B.	—	—	—	X	—	X	X	—
FILM								
NO OIL					—	—	—	X
EST. SITE LENGTH					421 m			

SITE 2

DISTRIBUTION /C	/B	/P	/S	OILED ZONES SU	UI	MI	LI
—	—	V_I	—	—	V_I	V_I	—
—	—	V_I	—	—	V_I	V_I	—
				X	—	—	X
				95m			

SITE 3

DISTRIBUTION /C	/B	/P	/S	OILED ZONES SU	UI	MI	LI

SUBSURFACE OIL

SITE NO.	PIT NO.	PIT DEPTH (cm)	SUBSURFACE OIL CHARACTER OP	OR	OF	NO	OILED INTERVAL (CM-CM)	CLEAN BELOW (Y/N)	PIT ZONE SU	UI	MI	LI	SURFACE-SUBSURFACE SEDIMENTS
1	1	55	—	—	—	X	—	Y	—	X	—	—	SG/S
1	2	12		X			5 - 11	Y	X	—	—	—	PC/SG

Photographs: ASAP-04 - CC
Roll No. _____
Frames _____

COMMENTS All comments are presented on the annotated sketch.

ACE 10460093

ACE 1941274

REVISION NO. 7/27/90

ASAP FOLLOWUP RECOMMENDATIONS

Segment: AS/WB003 Subd.: D Site: 1 & 2 Date: 8/08 1990

Conditions Observed: Asphalt & Mousse = 4 m Band - U&P Asphalt & Mousse / U-I/P 3-5 m Band - Site #1 MS & SOR/P in VITE & MITE / U-I as a 2 meter Band at Site #2.

Followup Recommendations: Manual Removal of Mousse & Asphalt

Completed by Pickup Crew: ☐ YES ☒ NO

Priority for Addressing in 1990: ☐ High ☐ Mod. ☒ Low

ADEC Clara Crosby (name) Clara L. Crosby. (signature)

Comments: I feel that work order cc. was incomplete - Bands are relatively easily recovered & while work crews are in Windy Bay - mod. request for ^{2}COE - these subdivisions can be addressed as well.

Exxon CZARNECKI (name) Jon Czarnecki (signature)

Comments: the oil which remains is about 1/2 days work for a 9 man crew. Could be picked up in 1 Supersacks

USCG (name) (signature)

Comments:

Land Rep. Patrick Norman (name) Patrick Norman (signature)

Comments: Asphalt and mousse is mostly exposed and can be picked up.

ACE 10460094

ACE 1941275

SKETCH MAP

ASAP Annotations 8/7/90 R. Marty

SEGMENT ST/ WB-3

SUBDIVISION D

DATE 8 / 7 / 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 △ Pit - No Subsurface Oil

2 ▲ Pit - Subsurface Oil

CT/C Continuous Distribution

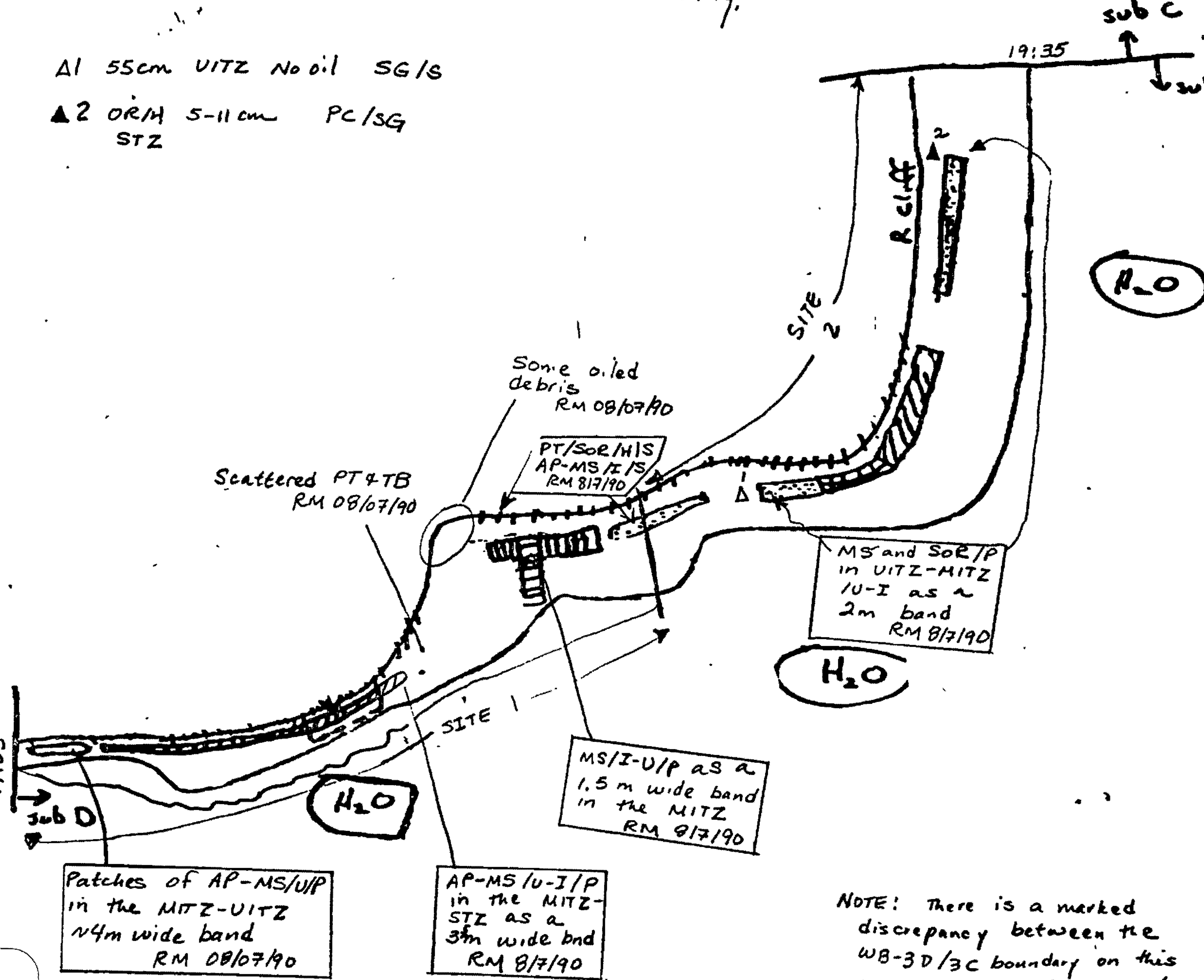
CT/B Broken Distribution

CT/P Patchy Distribution

CT/S Splashed Distribution

Oiled Vegetation

1 ●→ Photo location, direction, and number

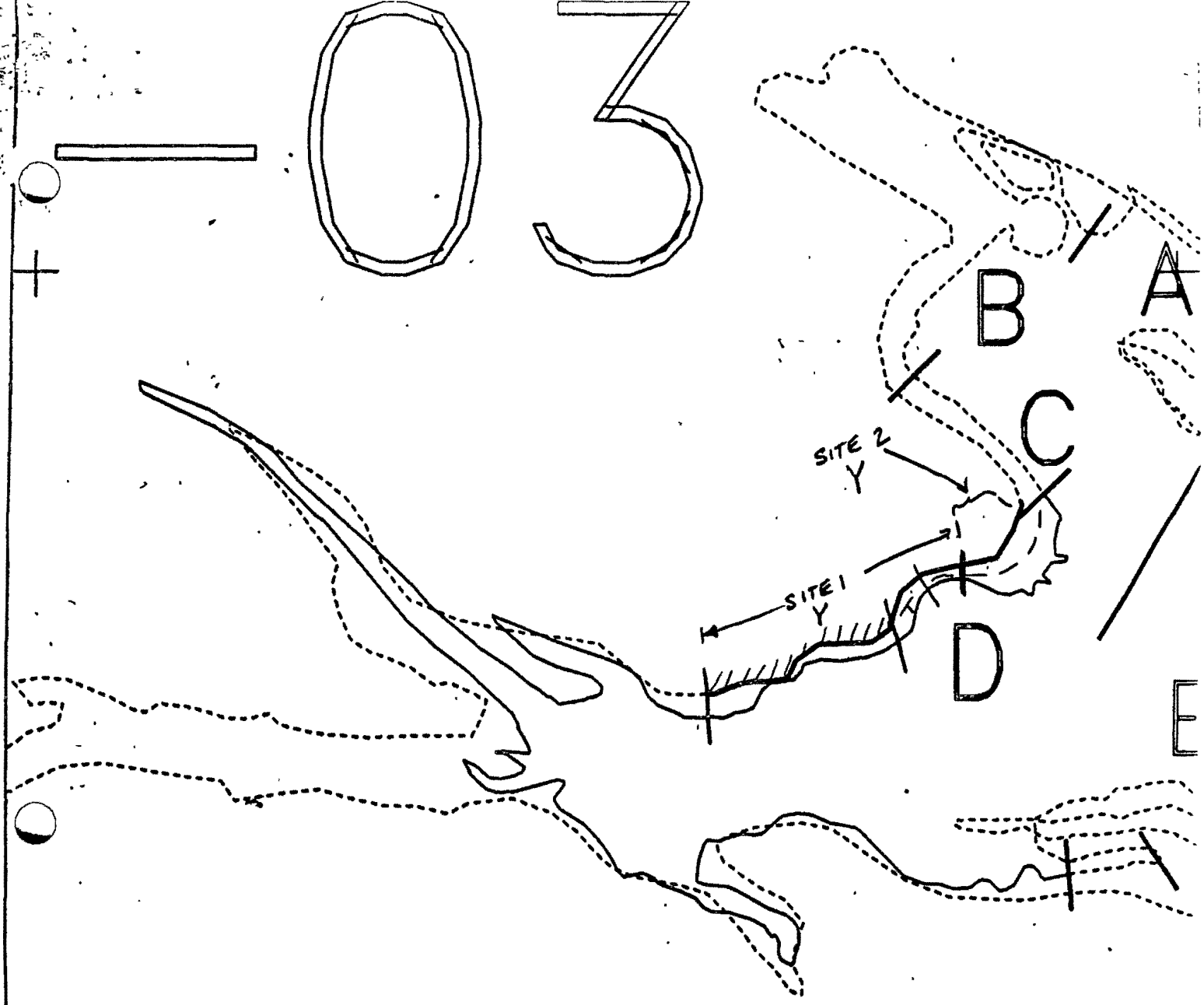


NOTE: There is a marked discrepancy between the WB-3D/3C boundary on this map and on the computer map. RM 08/07/90

ACE 10460095

ACE 1941276

Oil Character (m) AP_____ PO_____ CV_____ CT_____ ST_____ MS_____ PT_____ TB_____ FL_____ NO_____



				Site 1	Site 2
VL	0.25	47	54	54	0
L	0.9"	170	194	99m	0.5" | 95"m
M	1.25	236	268	268m	0
		453	516	421m	95m

OILING SEVERITY

ACE 10460096

XXXX Wide
/// Medium
--- Narrow
TTTT Very Light
0000 No Oil

WB-3 D

ADEC Subsegment Length: 516m

METERS

0 189 378

AK State Plane Zone 4 1:7438

nwb-3d

N

Subdivision Field Map

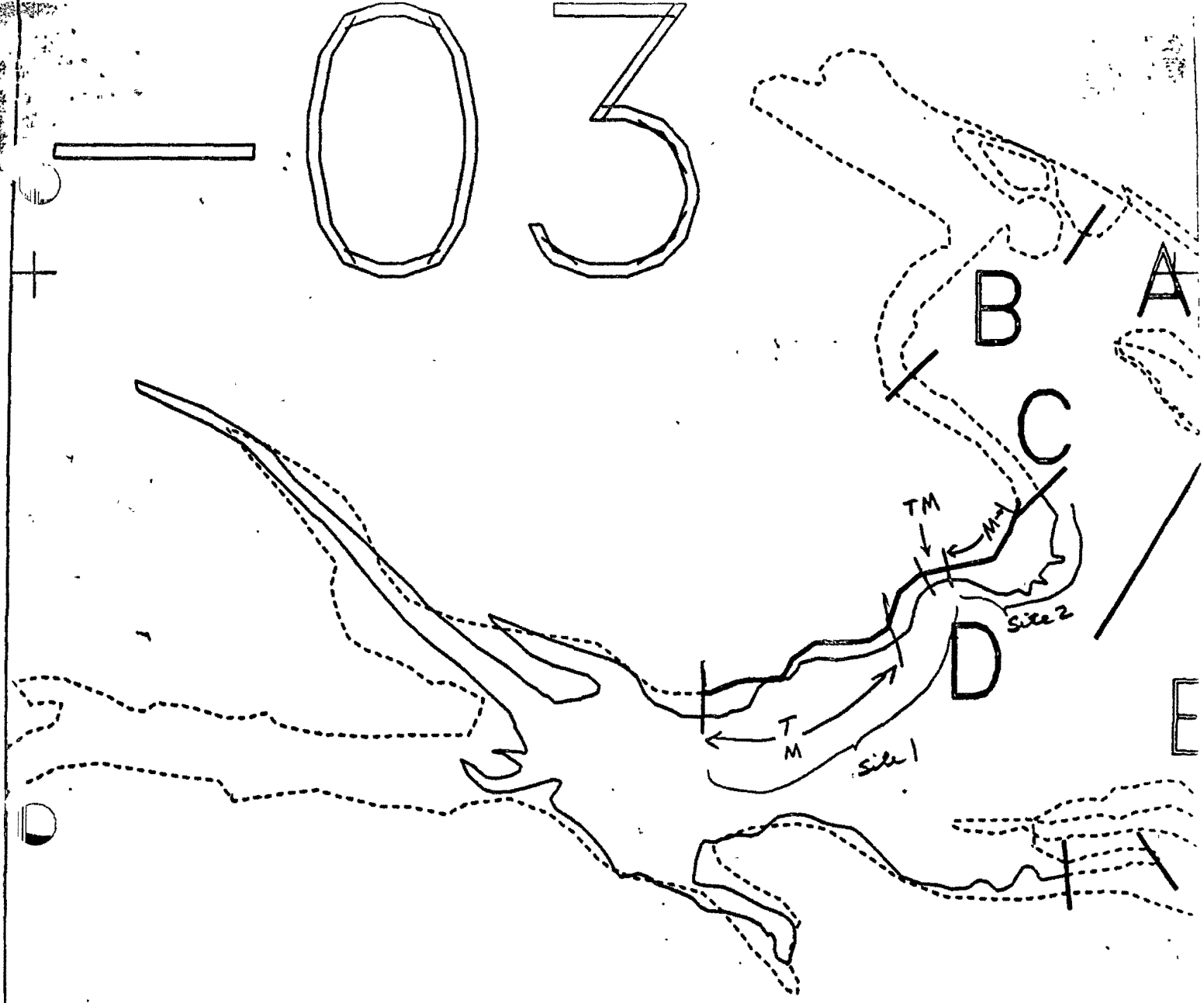
Map Key: KENWB-3D

Name: R. Marty

Date: 8/7/90

Data Entered:

ACE 1941277



ACE 10460097 -15

DISTRIBUTION OF "SIGNIFICANT" OILING

XXXX	Wide
/////	Medium
-----	Narrow
TTTT	Very Light
0000	No Oil

WB-3 D

ADEC Subsegment Length: 516m

METERS

0 189 378

AK State Plane Zone 4 1:7438

nvb-3d

EXXON

Subdivision Field Map

Map Key: KENWB-3D

Name: R. Marty

Date: 8/7/90

Data Entered:

ACE 1941278 -15

FIELD SHORELINE COMMENT SHEET

SEGMENT AS / WB-3 SUBDIVISION: E SITE: 01 DATE 7 Aug 1990

SCG

NAME AEC Vandepels SIGNATURE AEC Vandepels

☐ YES ☒ NO PRIORITY SITE FOR REASSESSMENT IN 1991

REASON: Clean. No more work or reassessment required.

ADEC

NAME Clara Crosby SIGNATURE Clara S Crosby.

☐ YES ☒ NO PRIORITY SITE FOR REASSESSMENT IN 1991

REASON:

No treatment Suggested at this time. Although a thorough Survey was inhibited ~~f~~ by newly deposited granules.

LAND MANAGER

NAME PATRICK NORMAN SIGNATURE Patrick Norman

PO
☐ YES ☒ NO PRIORITY SITE FOR REASSESSMENT IN 1991

REASON:

EXXON

NAME JON CZARNECKI SIGNATURE Jon Czarnecki

☐ YES ☒ NO PRIORITY SITE FOR REASSESSMENT IN 1991

REASON:

ACE 10460098 +/S

ACE 1941279 +/S

REVISION NO. 7/26/90

ASAP SHORELINE OILING SUMMARY

TEAM NO. 04 EXXON Jon Czarnecki SEGMENT AS/ WB-3
OG Rich Marty ~~USCG~~ USCG AEC Vandepels SUBDIVISION E
ADEC Clara Crosby LAND REP Pat Norman (P.Gr) TOTAL NO. SITES 1
DATE ~~08~~ 7/ Aug / 90 TIME 18:30 to 19:05 TIDE LEVEL +5' to +4'
TOTAL EST LENGTH OF SHORELINE SURVEYED: 854 m
SURVEYED FROM: ☒ Foot ☐ Boat ☐ Helo WEATHER: ☐ Sun ☒ Clouds ☐ Fog ☒ Rain ☐ Snow
OIL CATEGORY LENGTH: W — m M — m N 50 m VL 465 m NO 339 m US — m

SURFACE OIL

SITE 1

CHARACTER	DISTRIBUTION /C	/B	/P	/S	OILED ZONES SU	UI	MI	LI
ASPHALT								
S.O.R.	—	—	I	X	—	I	—	—
POOLED								
COVER								
COAT								
STAIN								
MOUSSE								
PATTIES/T.B.	—	—	—	X	—	X	X	—
FILM								
NO OIL					X	—	—	X
EST. SITE LENGTH					854			

SITE 2

DISTRIBUTION /C	/B	/P	/S	OILED ZONES SU	UI	MI	LI

SITE 3

DISTRIBUTION /C	/B	/P	/S	OILED ZONES SU	UI	MI	LI

SUBSURFACE OIL

SITE NO.	PIT NO.	PIT DEPTH (cm)	SUBSURFACE OIL CHARACTER OP	OR	OF	NO	OILED INTERVAL (CM-CM)	CLEAN BELOW (Y/N)	PIT ZONE SU	UI	MI	LI	SURFACE-SUBSURFACE SEDIMENTS
	NO	PITS					.						
							.						
							.						
							.						
							.						
							.						
							.						
							.						
							.						
							.						
							.						
							.						

Photographs:
ASAP-04-
Roll No. - CC
Frames

COMMENTS Comments are on the sketch map.

ACE 10460099

ACE 1941280

REVISION NO. 7/27/90

OG Randy Siegel

SEGMENT ST/ WB-3

SUBDIVISION E

DATE 4 / 7 90

SKETCH MAP

CHECKLIST

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

LEGEND

1 △ Pit - No Subsurface Oil

2 ▲ Pit - Subsurface Oil

CT/C Continuous Distribution

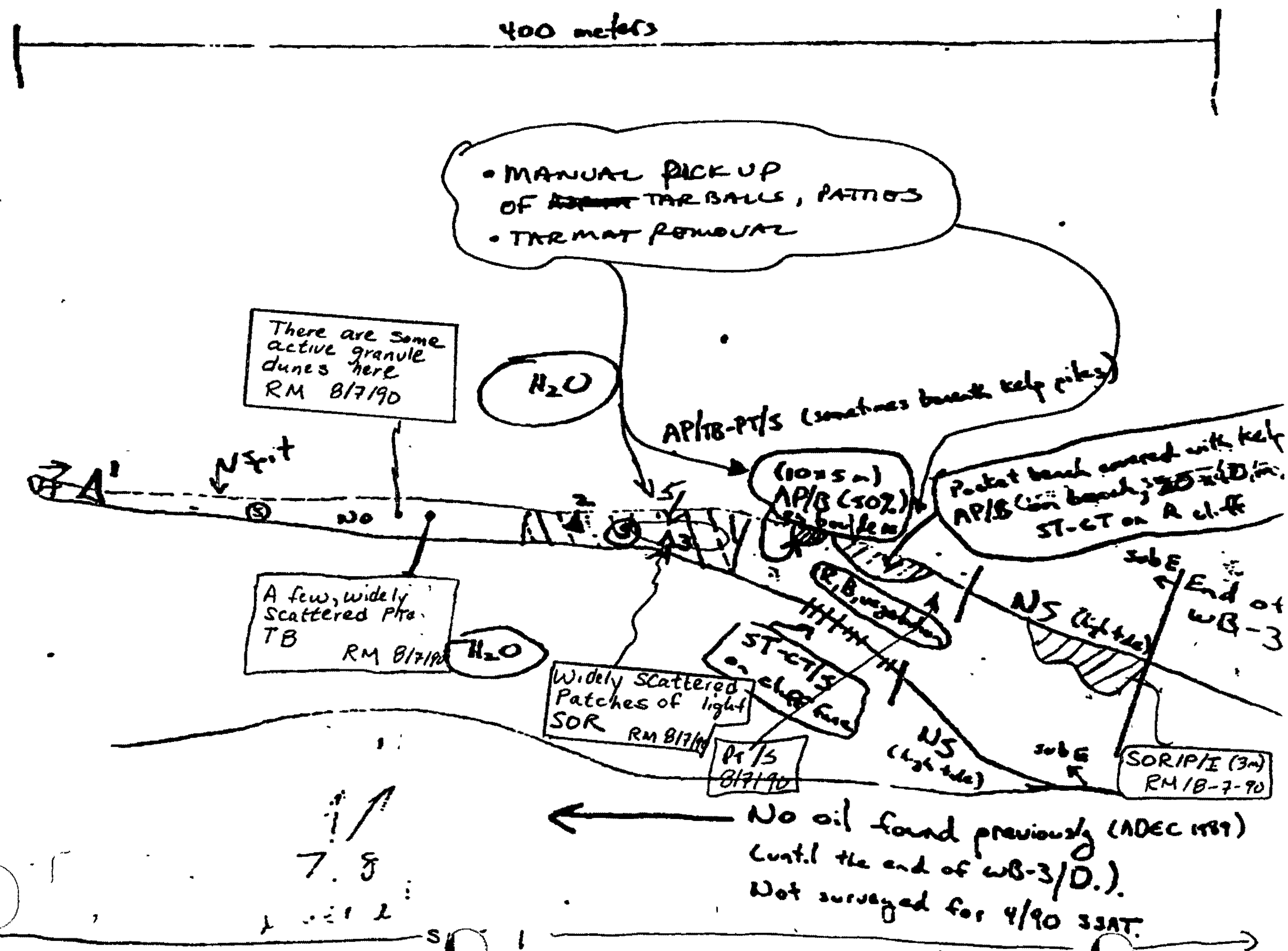
CT/B Broken Distribution

CT/P Patchy Distribution

CT/S Splashed Distribution

Oiled Vegetation

Photo location, direction, and number



N
400 meters
• MANUAL PICKUP OF TARBALLS, PATTIES
• TARMAT REMOVAL
There are some active granule dunes here RM 8/7/90
H2O
AP/TB-PT/S (sometimes beneath kelp piles)
(10 x 5 m) AP/B (50%)
Pocket beach covered with kelp
ST-CT on R cliff
NO
A few, widely scattered Ptb TB RM 8/7/90
Widely Scattered Patches of light SOR RM 8/7/90
Pt/S 8/7/90
NS (light tide)
NS (light tide)
Sub E
End of WB-3
SOR IP/I (3m) RM/8-7-90
No oil found previously (ADEC 1989) (until the end of WB-3/D.). Not surveyed for 4/90 SSAT.
S
475
339
SOR 40

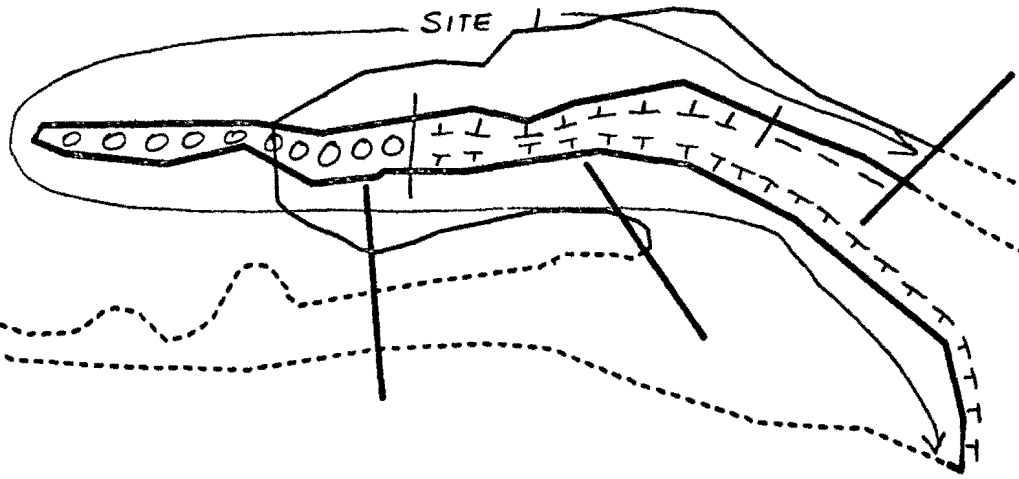
ACE 10460100

ACE 1941281

Oil Character Length (m) AP______ PO______ CV______ CT______ ST______ MS______ PT______ TB______ FL______ NO______

D

E



NO	4.0"	320m	339
VL	5.5"	440m	465
L	0.6"	48m	50
		809	854

1.06

ACE 10460101

OILING SEVERITY

XXXX Wide
'/// Medium
--- Narrow
TTTT Very Light
0000 No Oil

WB-3 E

ADEC Subsegment Length: 854m

METERS

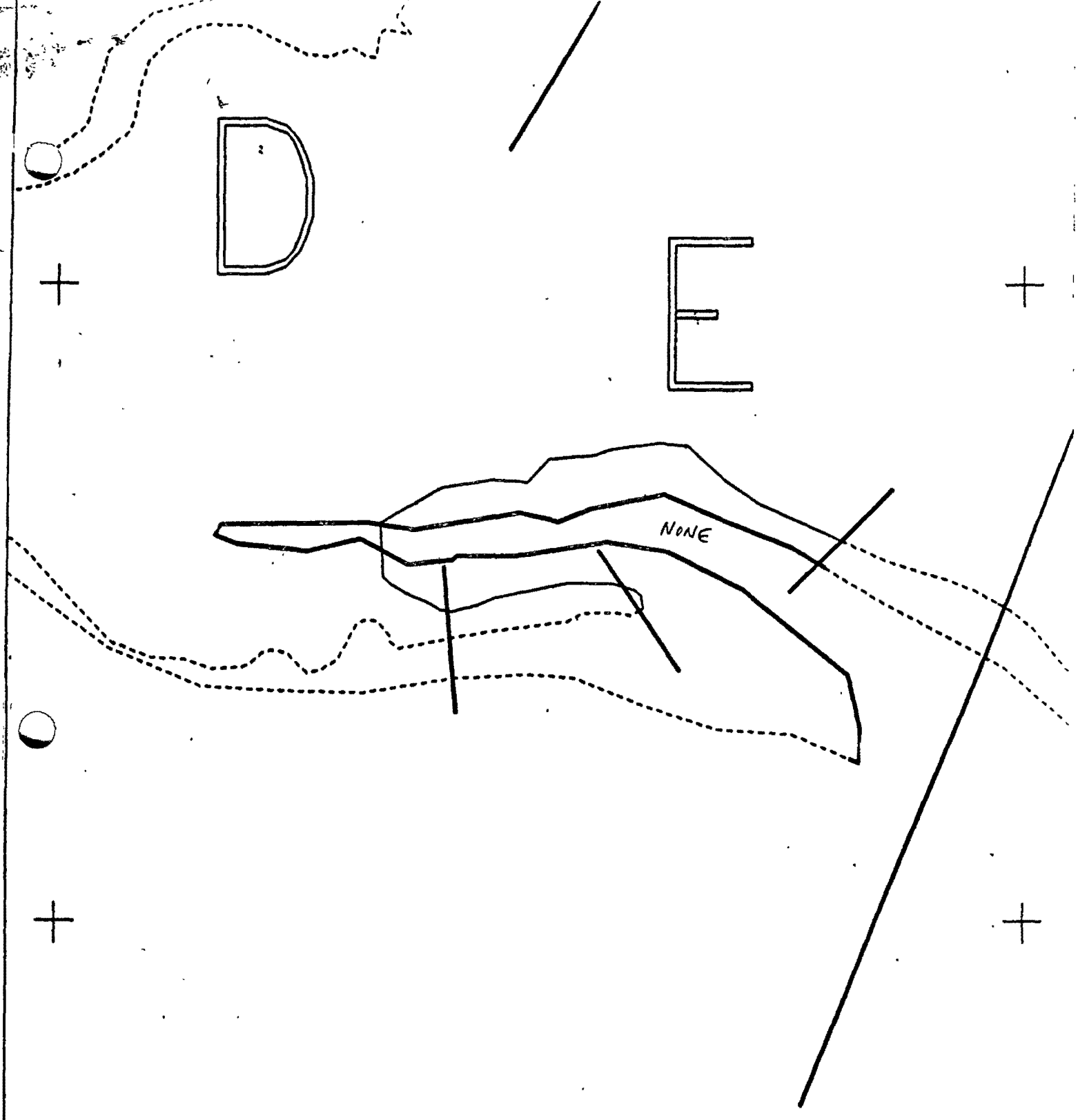
0 80 160

AK State Plane Zone 4 1:3140
nvb-3e

EXXON

Subdivision Field Map
Map Key: KENWB-3E
Name: Richard Marty
Date: 07 Aug 1990
Date Entered:

ACE 1941282



DISTRIBUTION OF "SIGNIFICANT" OILING

ACE 10460102 -1/S/SG/P/HF

XXXX	Wide
//	Medium
---	Narrow
TTTT	Very Light
0000	No Oil

WB-3 E

ADEC Subsegment Length: 854m

METERS

0 80 160

AK State Plane Zone 4 1:3149

nwb-3e

N

EXXON

Subdivision Field Map

Map Key: KENWB-3E

Name: R. Marty

Date: 07 Aug. 1990

Data Entered:

ACE 1941283 -1S

ADF&G MULTI-ASSESSMENT FORM
1991 GENERAL ENTRY CHECKLIST

DDH 10/2/91

OK

STREAM#: 2423210170
SEGMENT: WB003

PAGE 43

DATE PRINTED: 08/14/91

LOCATION: WINDY BAY

SURVEY TYPE: 89 AFHS - BS /SS

METHOD: ~~GROUND~~ FOOT

DATE: 06/23/89

TEAM RECORDER: HILL

START TIME: 1300
END TIME: 1400

OBSERVERS:

TIDES: FLOOD
OG/HAB DISCREPANCIES:

AGENCY: FG

PHOTOS TAKEN: N

STATION: 2423210170

ROLL#:
FRAME:

VIDEO TAKEN: N
START:

TAPE#:
END:

SAMPLES TAKEN: N

SAMPLE NUMBERS:

OIL IN STREAM BED: Y

OVERALL OIL IMPACT: VL

OIL ON BEACH BY MOUTH: Y

WAVE EXPOSURE: L/M

SHORELINE TYPE: BEACH

SUBSTRATE TYPE: BEDROCK BOULDER 10 COBBLE 20 VEGETAT
GRAVEL 50 SAND MUD/SILT GRANULE 20

ANADROMOUS FISH PRESENT: Y

SPECIES: ~~Chum~~

COUNT: ~~18~~

Gus
Deleted spp & count from this page because the ~~~~ observations were made on a different date
DD Hill
10/2/91

ACE 10460070 H/S/P

ADF&G MULTI-ASSESSMENT FORM
1991 OILING ENTRY CHECKLIST

ok

PAGE 48

DATE PRINTED: 08/14/91

STREAM# : 2423210170
SEGMENT#: WB003

SURVEY TYPE : 89 AFHS - BS
DATE: 06/23/89
TIMES: 1300 - 1400

LOCATION: WINDY BAY

TEAM RECORDER: HILL

-- OILING EXTENT --

SITE#	SITE TYPE	DEPTH (cm)	LENGTH (m)	WIDTH (m)	AREA (m)	%	THICK (cm)	PEN (cm)	OIL TYPE CODES
1			.6	.6		100	2.5		MS

COMMENTS:
SITE 1A-2. OIL DEFLECTION BOOMS (BLADDER TYPE AND PARKER 24'S) WERE STRUNG ACROSS THE HEAD OF THE BAY FROM APPROXIMATELY SEGMENT WB-2F TO EAST END OF WB-3E (SAND SPIT - FUEL CACHE SITE). THE F/V MURRELET (SKIPPER ROBERT PELKEY OF HOMER) WAS IN THE BAY AT THE TIME OF INITIAL OILING. THE MURRELET DEPLOYED THE BOOMS. BEACH WITHIN ¼ MILE OF THIS STREAM WERE HEAVILY OILED (WB-02, WB-03 A, B, C, D). CLEANUP CREWS WORKED ON THESE BEACHES THROUGHOUT THE SUMMER OF 1989. SEE ? ? FOR A LITTLE MORE INFO. OIL STAINS OBSERVED ON YELLOW OIL DEFLECTION BOOM ON 6/23/89 SURVEY. OBSERVED LENGTH OF BOOM. OIL STAINING AND COAT OBSERVED ON SORBENT BOOM, ALSO (LIGHT STAIN/COAT). 7/7/89 - OBSERVED 18 CHUM SALMON (WATER MARKED).

Disregard

Windy Bay Right Hand Correct DAH 8/29/91

Is this the Center Creek info you were referring to in Right Creek?

es

ACE 10460071 /S

1989-AFHS Site 1A-2 Windy Center Crk

ASC NUMBER: 242-32-10170 SEGMENT NUMBER: WB-3E YR CATALOGED:
LOCATION: Windy Bay, Head of Bay
STREAM NAME: Windy Center Creek
KODIAK K-UNIT: . LOCAL STREAM #:
USGS QUADRANGLE: Seldovia A-5
SHORELINE TYPE: Beach ALL SEGMENTS:
WAVE EXPOSURE: Low to moderate

LATITUDE: 59 13 52 ok
LONGITUDE: 151 34 19
LEGAL:

ASC NUMBER:
SURVEY TYPE: BS/SS
METHOD: Ground
DATE: 6/23/89
START TIME: 1300
STOP TIME: 1400

TEAM RECORDER: Doug Hill
OBSERVERS:

AGENCY(IES): ADF&G

PHOTOS TAKEN? N
Roll #: Frames:
VIDEO TAKEN? N Tape Number:
Counter Start:

SAMPLES TAKEN? NO
SAMPLE I.D. NUMBERS: 1. 2. 3.
4. 5. 6.

	LENGTH m	WIDTH m	M2	%	THICK cm	PEN cm	OIL TYPE
SITE 1	.6 ~~60 cm~~	.6 ~~60 cm~~		100	2.5	—	MS
SITE 2							
SITE 3							
SITE 4							
SITE 5							

OVERALL OIL IMPACT: VL

OIL IN STREAM CHANNEL? UITZ

OIL ON BEACH WITHIN 50M OF STREAM MOUTH? Yes, VL

SUBSTRATE			
Bedrock		Granule	10
Boulder	10	Sand	
Cobble	20	Silt	
Pebble	60	Veget.	

7/7/89 – comments

SPECIES	Chum – saltwater marked				
COUNT	18				

COMMENTS: Oil deflection booms (bladder type + corker 24") were strung across the head of the bay from approximately segment WB-2F to east end of WB-3E (sand spit - fuel cache sites). The F/V Murrelet (skpr Robert Pelkey of Homer) was in the bay at the time of initial oiling. The Murrelet deployed the booms. Beaches within 1/4 mile of this stream were heavily oiled (WB-02, WB-03 A, B, C, D). Clean up crews worked on these beaches throughout the summer of 1989. See Windy Right creek for a little more info.

Oil stains observed on yellow oil deflection boom on 6/23/89 survey ... observed length of boom. Oil staining + coat observed on sorbent boom also (light stain/coat)

ACE 10460072 HS

FISH HABITAT ASSESSMENT FORM

[1]REGION: [2]PWS (3)KP,CI [4]K,AP [5]OBSERVER(S) Doug Hill

[6]SITE NO. 1A-2 [7]AERIAL PHOTO NO. _____ [8]CAT NO. 242-80-10170

[9]STREAM NAME Windy Center Ck [10]LAT ___°___.___' [11]LONG ___°___.___'

[12]DATE 6/23/89 [13]TIME 1300 [14]TIDE: Low slack Flood High slack Ebb

[15]CATALOGED ANADROMOUS STREAM? (Y) N [16]ANAD. FISH FOUND? (Y) N

[17]OIL FOUND IN STREAM? Y (N) [18]OIL FOUND NEAR STREAM (1 MI.)? (Y) N

[19]OIL SAMPLES TAKEN? (Y) N [20]ID NOS. NONE

[21]35 MM PICTURES TAKEN? (Y) N [22]ROLL NO(S). _____

[23]EXPOSURE NO.	[24]DESCRIPTION
	See Photos on Following Page

[25]VIDEO FOOTAGE TAKEN? Y N [26]CASSETTE NO(S). _____

[27]DESCRIPTION: _____

ACE 10460073

ACE 7380053

ANADROMOUS FISH OBSERVATIONS

		PINK	CHUM	RED	KING	COHO	DOLLY		
28	Aerial		18*						
29	Ground								

30 COMMENTS: ~~[illegible]~~ 18* - 7/7/89 (chum salmon) (watermarked)

OIL OBSERVATIONS

EXTENT OF OIL:

	WITHIN STREAM	OUTSIDE STREAM
31 SURFACE COVERAGE		
32 SURFACE THICKNESS		
33 PENETRATION		

34 OIL DISTRIBUTION DIAGRAM (SHOW SAMPLING SITES)

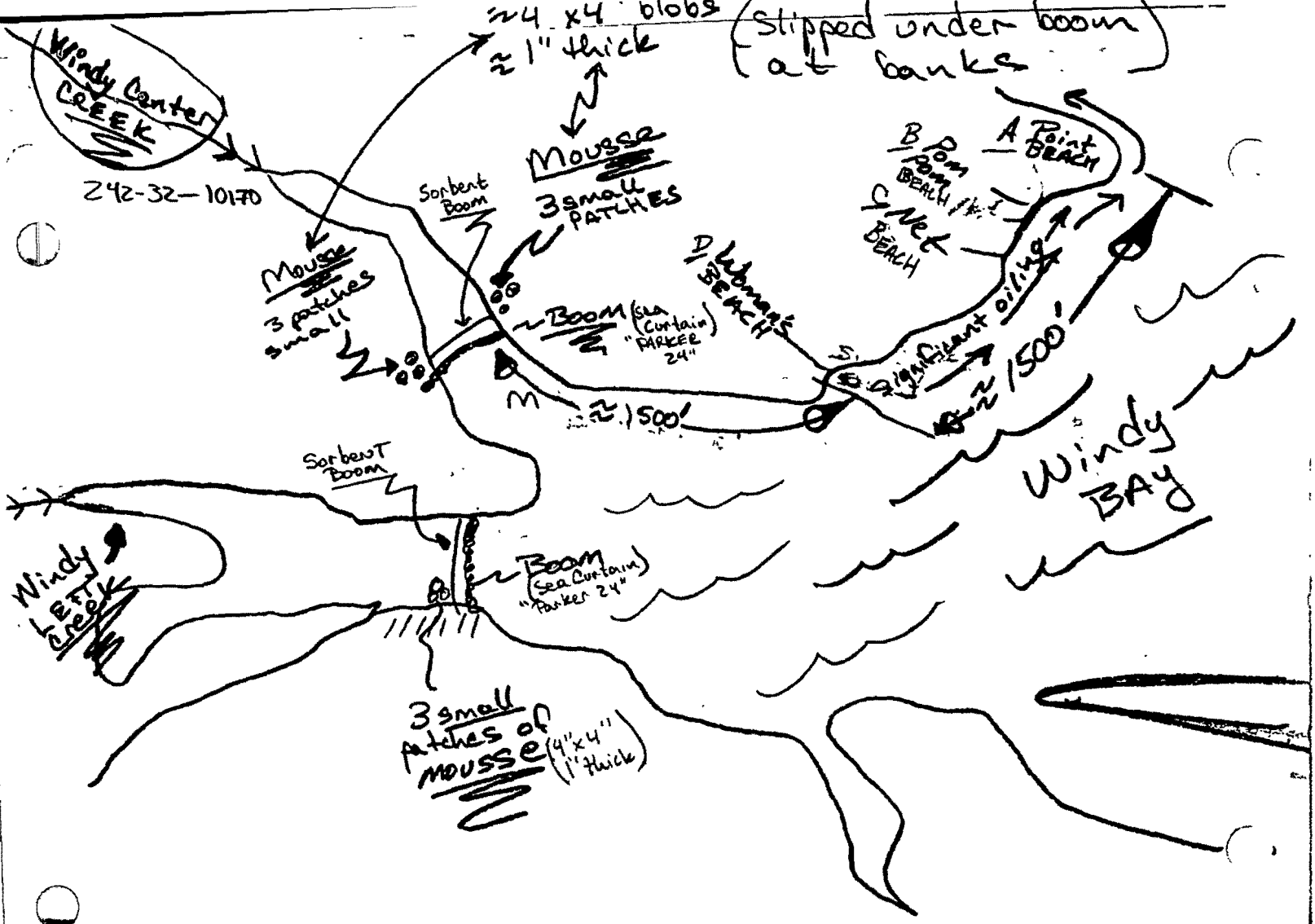
35 PREDOMINANT SUBSTRATE TYPE:

1. Bedrock
2. Boulder
3. Cobble
4. Gravel
5. Sand
6. Mud
7. Other_____

— SEE Map (hand drawn) on following page

36 COMMENTS: _____ ACE 7380054

ACE 10460074

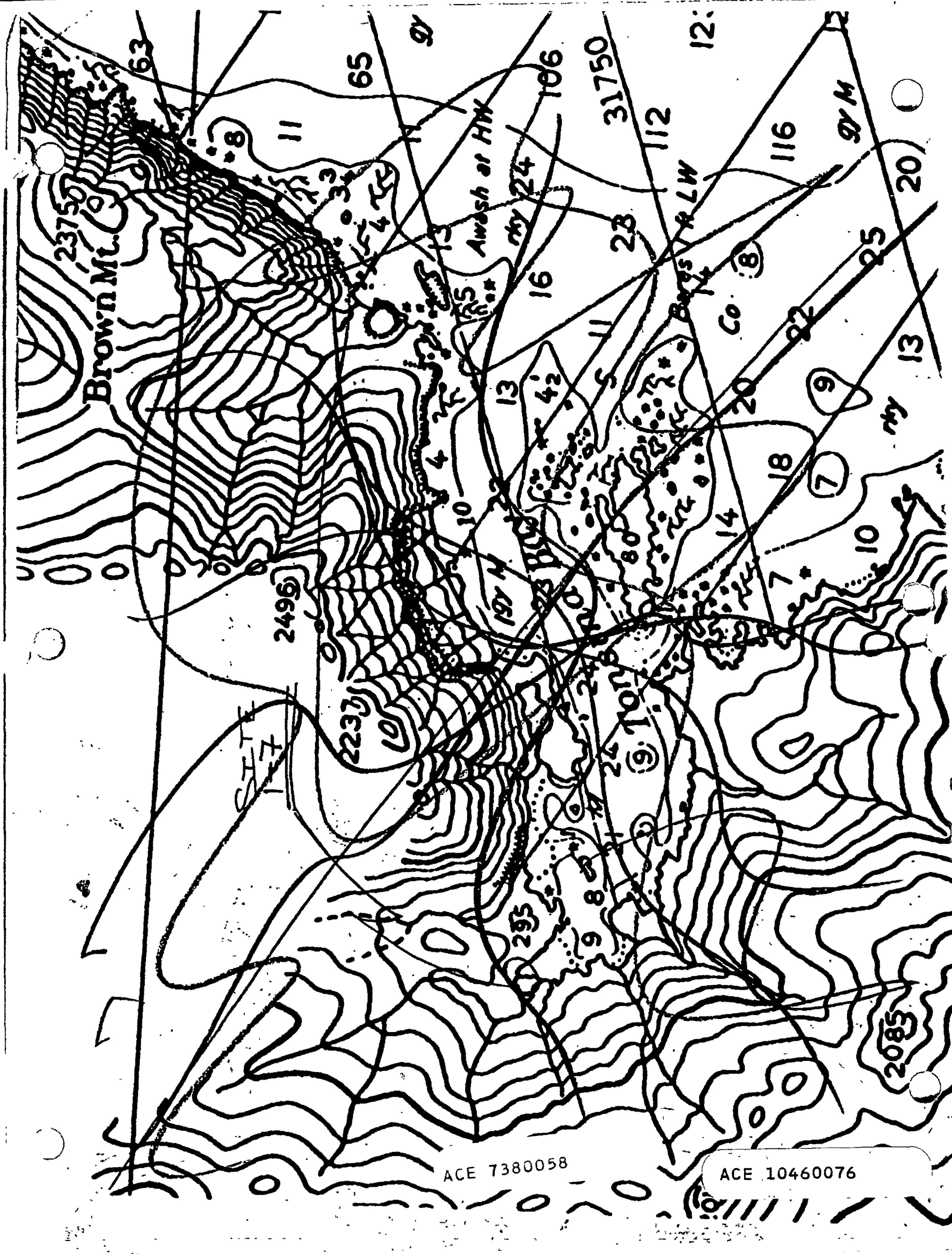


~~Mousse areas picked up~~

- The boom at Windy Center is oiled stained/coated (sea curtain)

ACE 10460075

ACE 7380057



ACE 7380058
ACE 10460076


SITE 1A-2
Windy Center Creek
ASCM 212-32-1017D
Windy Bay
Cone Mt.
1800
Rock Mt
2000
2375
Chugach
Bay
Rocky River
Mills
(chart 16645)
CHATHAM
(chart 16646)
OBSCURED
LIGHT
2800
2400
3000
2200
2600
2518
1818
7900
2526
2250
1740
820
875
3500
2712
ACE 10460077 -15

1989-AFHS site 1A-2 Windy Center Crk

ASC NUMBER: 242-32-10170 SEGMENT NUMBER: WB-3E YR CATALOGED:
LOCATION: Windy BAY, HEAD of BAY
STREAM NAME: Windy Center Creek LATITUDE: 59 13 52
KODIAK K-UNIT: . LOCAL STREAM #: LONGITUDE: 151 34 19
USGS QUADRANGLE: Seldovia A-5 LEGAL:
SHORELINE TYPE: Beach ALL SEGMENTS:
WAVE EXPOSURE: Low to moderate

ASC NUMBER:
SURVEY TYPE: BS/SS
METHOD: ~~Ground~~ Foot
DATE: 6/23/89
START TIME: 1300
STOP TIME: 1400

TEAM RECORDER: Doug Hill
OBSERVERS:
AGENCY(IES): ADF&G

DRM 10/2/91

PHOTOS TAKEN? N
Roll #: Frames:
VIDEO TAKEN? N Tape Number:
Counter Start:

SAMPLES TAKEN? NO
SAMPLE I.D. NUMBERS: 1. 2. 3.
4. 5. 6.

	LENGTH M	WIDTH M	M2	%	THICK cm	PEN cm	OIL TYPE
SITE 1	60cm	60 cm		100	2.5	—	MS
SITE 2							
SITE 3							
SITE 4							
SITE 5							

OVERALL OIL IMPACT: VL

OIL IN STREAM CHANNEL? VITZ

OIL ON BEACH WITHIN 50M OF STREAM MOUTH? yes, VL

SUBSTRATE

Bedrock	10	Granule	20
Boulder	10	Sand	
Cobble	20	Silt	
Pebble	50	Veget.	

7/7/89 This is in comments on computer ENTRY

SPECIES	Chum → watermarked			
COUNT	18			

COMMENTS: Oil deflection booms (bladder type parker 24") were strung across the head of the bay from approximately segment WB-2F to east end of WB-3E (sand spit. fuel caiche sites). The F/V Murrelet (Skpr Robert Pelkey of Homer) was in the bay at the time of initial oiling. The Murrelet deployed the booms. Beaches within ¼ mile of this stream were heavily oiled (WB-02, WB-08A, B, C, D). Cleanup crews worked on these beaches throughout the summer of 1989. See Windy Right creek for a little more info.

Oil stains observed on yellow oil deflection boom on 6/23/89 survey - stains observed length of boom. Oil staining + coat observed on sorbent boom also (light stain/coat)

ACE 10460078 + 5

FISH HABITAT ASSESSMENT FORM

[1]REGION: [2]PWS (3)KP,CI [4]K,AP [5]OBSERVER(S) Doug Hill

[6]SITE NO. IA-2 [7]AERIAL PHOTO NO. _____ [8]CAT NO. 242-32-10170

[9]STREAM NAME Windy Center Ck [10]LAT ___°___.___' [11]LONG ___°___.___'

[12]DATE 6/23/89 [13]TIME 1300 [14]TIDE: Low slack Flood High slack Ebb

[15]CATALOGED ANADROMOUS STREAM? (Y) N [16]ANAD. FISH FOUND? (Y) N

[17]OIL FOUND IN STREAM? Y (N) [18]OIL FOUND NEAR STREAM (1 MI.)? (Y) N

[19]OIL SAMPLES TAKEN? Y (N) [20]ID NOS. NONE

[21]35 MM PICTURES TAKEN? Y N [22]ROLL NO(S). _____

[23]EXPOSURE NO. [24]DESCRIPTION

See Photos on Following Pages

[25]VIDEO FOOTAGE TAKEN? Y N [26]CASSETTE NO(S). _____

[27]DESCRIPTION: _____

ACE 10460079

ACE 7380053

ANADROMOUS FISH OBSERVATIONS

		PINK	CHUM	RED	KING	COHO	DOLLY		
28	Aerial		18*						
29	Ground								

30 COMMENTS: ~~7/4/89~~ 18* - 7/7/89 (chum salmon X watermarked)

OIL OBSERVATIONS

EXTENT OF OIL:

	WITHIN STREAM	OUTSIDE STREAM
31 SURFACE COVERAGE		
32 SURFACE THICKNESS		
33 PENETRATION		

34 OIL DISTRIBUTION DIAGRAM (SHOW SAMPLING SITES)

35 PREDOMINANT SUBSTRATE TYPE:

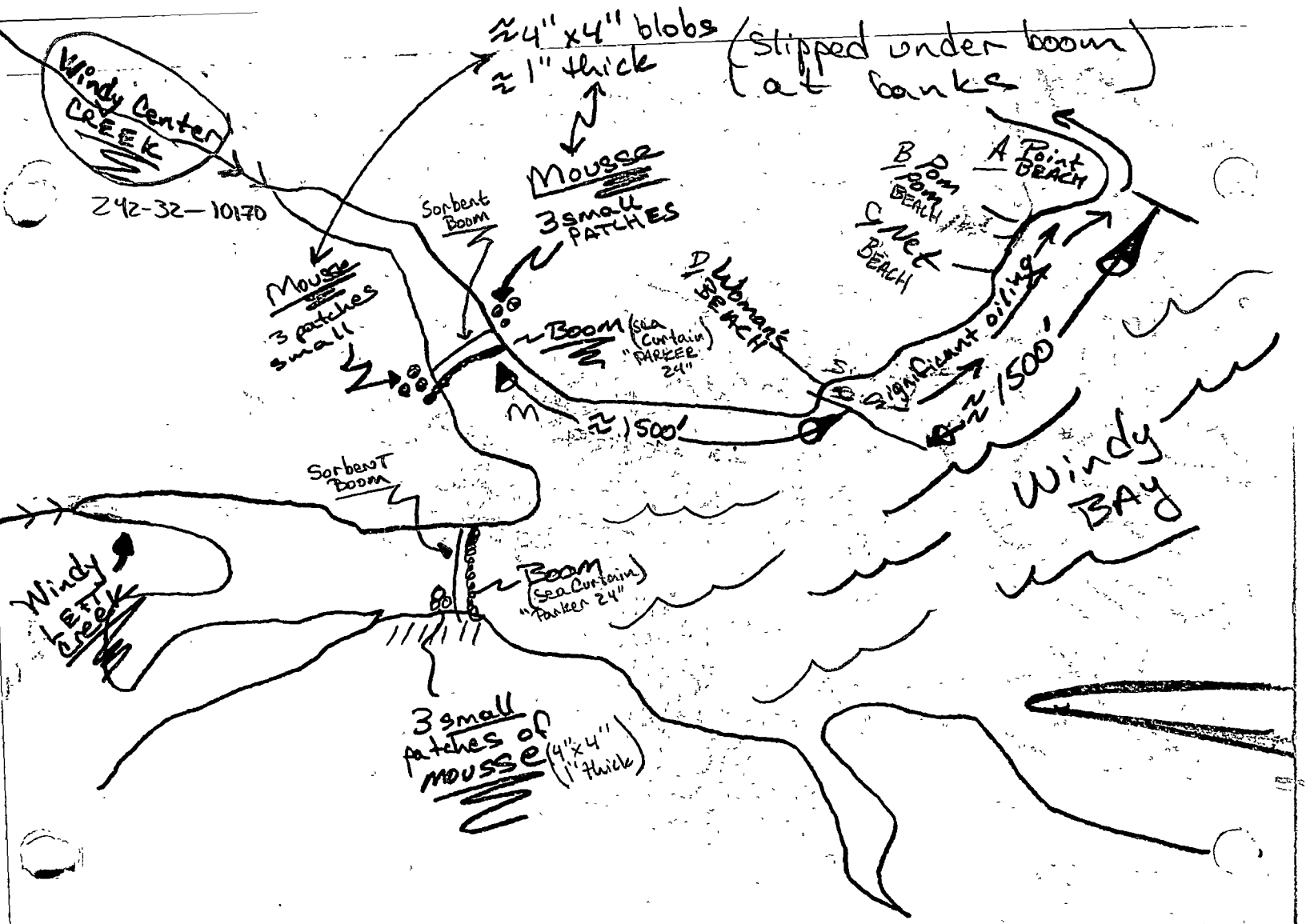
1. Bedrock
2. Boulder
3. Cobble
4. Gravel
5. Sand
6. Mud
7. Other_____

— SEE Map (hand drawn) ON following page

ACE 10460080

ACE 7380054

36 COMMENTS: _____

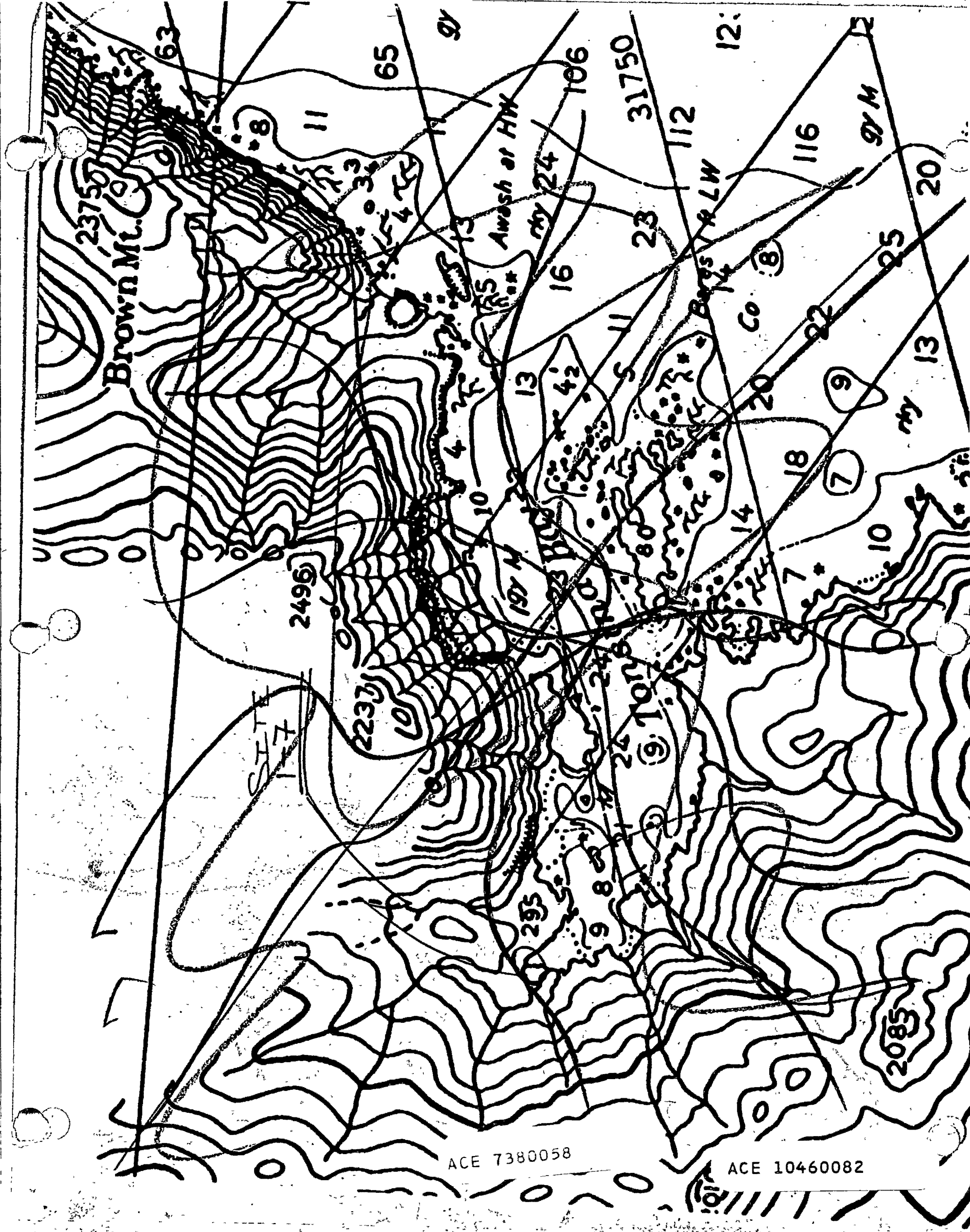


~~Boom crew picked up~~

- The boom at Windy Center is oiled stained/coated (sea curtain)

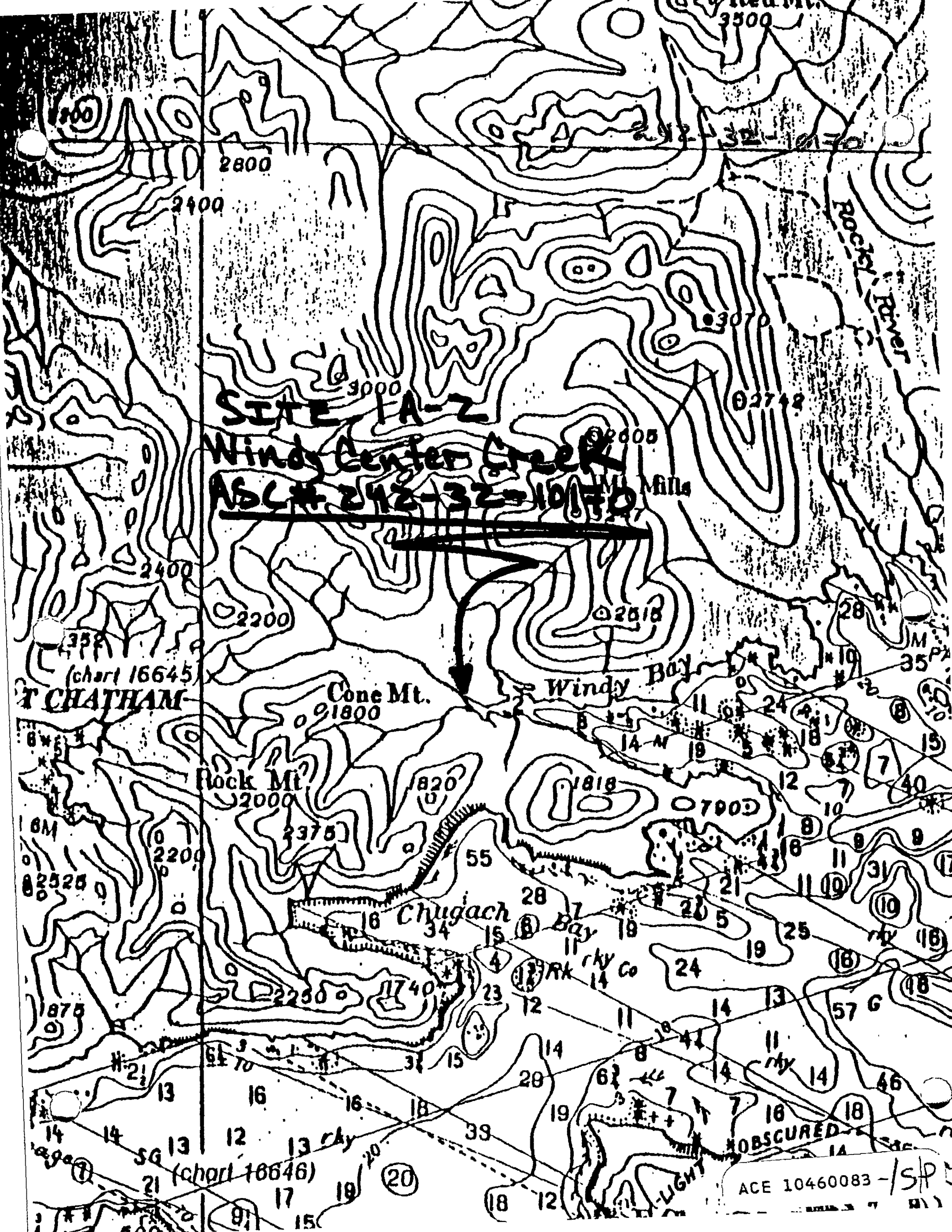
ACE 10460081

ACE 7380057



ACE 7380058

ACE 10460082



ACE 10460083 -/SHP