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[Shoreline evaluations, 1991].

Prince William Sound EV-06 to EV-17

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REGION: PRINCE WILLIAM SOUND

SEGMENT: ST/EV-06

SUBDIVISIONS: A (1 OF 1)

SHORELINE EVALUATION

SEGMENT ST/ EV-06 SUBDIVISION A (1 OF 1) DATE 4/7/90

SEGMENT ENVIRONMENTAL SENSITIVITIES AND TIME CONSTRAINTS:

5T All bald eagle nests (3/1 to 6/1)-Active eagle nests (3/1 to 9/1)
6V Recreation: Anchorages (6/1 to 9/15)
7II Subsistence area: Deer harvesting (8/15 to 2/28)
See attached Ecological Constraint sheet for specific constraints and contacts.

SUBDIVISION ECOLOGICAL CONSTRAINTS:

Avoid any unnecessary disturbance or damage to uncoiled biota and substrate. Stream not listed in anadromous catalogue (USGS Seward A-3 Revision 12/89).

ARCHAEOLOGICAL CONSTRAINTS:

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

SHPO SIGNATURE: _____ DATE: _____

OILING CATEGORIZATION:

Wide 0 m: Medium 0 m: Narrow 0 m: V.Light 0 m: No Oil 1299 m
Subsurface Oil Observed: Yes _____ No X Maximum Depth _____

RECOMMENDATIONS:

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

COMMENTS: _____

TAG COMMENTS: _____

TAG APPROVAL DATE: _____

ADEC _____
EXXON _____
NOAA _____
USCG _____

FOSC: _____ DATE: _____

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

FIELD SHORELINE COMMENT SHEET

SEGMENT ST / EV-6 SUBDIVISION: _____ DATE 4/7/90

NOAA

NAME GARY SHIGENAKA

SIGNATURE *Gary Shigenaka*

☐ NO TREATMENT RECOMMENDED

☐ TREATMENT SUGGESTED

COMMENTS

SEGMENT CONSISTED OF ROCKY SHORELINE, SOMETIMES WITH VERTICAL ROCK WALLS. AN EAGLE NEST AND AT LEAST ONE ANADROMOUS STREAM WERE INCLUDED IN THE AREA SURVEYED.
NO EVIDENCE OF OILING WAS OBSERVED IN THIS SEGMENT.

ADEC

NAME

John Hayes

SIGNATURE

John Hayes

☒ NO TREATMENT RECOMMENDED

☐ TREATMENT SUGGESTED

COMMENTS

No oil was observed on this segment.

We saw a small possibly anadromous stream. (fish bones, jaws) present along side stream. Dog pits in L.M.U. T2's and in stream bed. No sheering or evidence of oiling in or around stream. No S.S. oiling observed on this segment.

LAND MANAGER

NAME JAMES A BARKER

SIGNATURE

James A Barker

☒ NO TREATMENT RECOMMENDED

☐ TREATMENT SUGGESTED

COMMENTS

NO OIL OBSERVED ON THIS BEACH SEGMENT

SHORELINE OILING SUMMARY

REVISION NO. 03/22/90

OG Mike Foget NOAA USCG Gary Shigenaka SEGMENT ST/ EV-06
 BIO Richard Ambrose LAND REP James A. Carter SUBDIVISION A (10+1)
 EXXON Larry Olson ADEC John Hayes CVC TIME 8:45 to 9:30
 TEAM NO.: 1 TIDE LEVEL: 3.8 to 5.6 DATE 4/17/90
 EST. SUBDIVISION LENGTH: 1810 m ☒ Sun ☐ Clouds ☐ Fog ☐ Rain ☐ Snow
 UPLANDS DESCRIPTION: ☐ Grass ☒ Forest ☒ Rock 3m rocky back shore w/ snow in supra ITZ
 SURVEYED FROM: ☒ Foot ☒ Boat ☐ Helo WORKING DIRECTION: N to S Pocket Dec.
 SURFACE SEDIMENTS: R 50 % B 25 % C 15 % P 5 % G 5 % S 2 % M 0 % V 0 %
 SLOPE: Long 20 % Hang 30 % Vert 50 % WAVE EXPOSURE: ☐ Low ☒ Med ☐ High
 OIL CATEGORY LENGTH: W 0 m M 0 m N 0 m VL 0 m NO 1810 m

SURFACE OIL

CHARACTER	DISTRIBUTION				OIL / FILM COLOR								IMPACTED ZONES			
	C	N	P	R	SB	BR	FW	GY	SL	DR	TL	LR	SU	UI	M	U
ASPHALT																
PAVEMENT																
POOLED																
COVER																
COAT																
STAIN																
MOUSSE																
PATTIES																
TARBALLS																
FILM																
NO OIL													X	X	X	X

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

 PATTIES / TARBALLS 0 BAGS

 NEAR SHORE SHEEN? ☒ NO BR RW SL TL

OILED DEBRIS	AMOUNT		
	SM	MD	LG
Logs			
Vegetation			
Trash			
Debris			

 DEBRIS COLLECTED
☐ YES ☒ NO

 TYPE 0

 #BAGS 0

Photographs:

 Roll No. 0

 Frames 0

SUBSURFACE OIL

PIT NO.	PIT DEPTH (cm)	SUBSURFACE OIL CHARACTER					OILED INTERVAL (CM-CM)	BELOW		OIL / FILM COLOR								PIT ZONE				A N A	SUBSURFACE SEDIMENTS
		OP	OR	OL	OF	NO		UO	UC	SB	BR	FW	GY	SL	DR	TL	LR	SU	UI	M	U		
1	30					X	.		X									X					C, P, G, S
2	40					X	.		X									X					P, G, S
3	30					X	.		X									X					P, G, S
4	60					X	.		X									X					P, G
5	10					X	.		X										X				P, G, S
6	30					X	.		X										X				C, P, S, C

COMMENTS No oil was observed in this segment. shore zone mostly
 bedrock / boulders w/ a few small pocket cobble & pebble beaches.
 These beaches had snow in the supra ITZ.

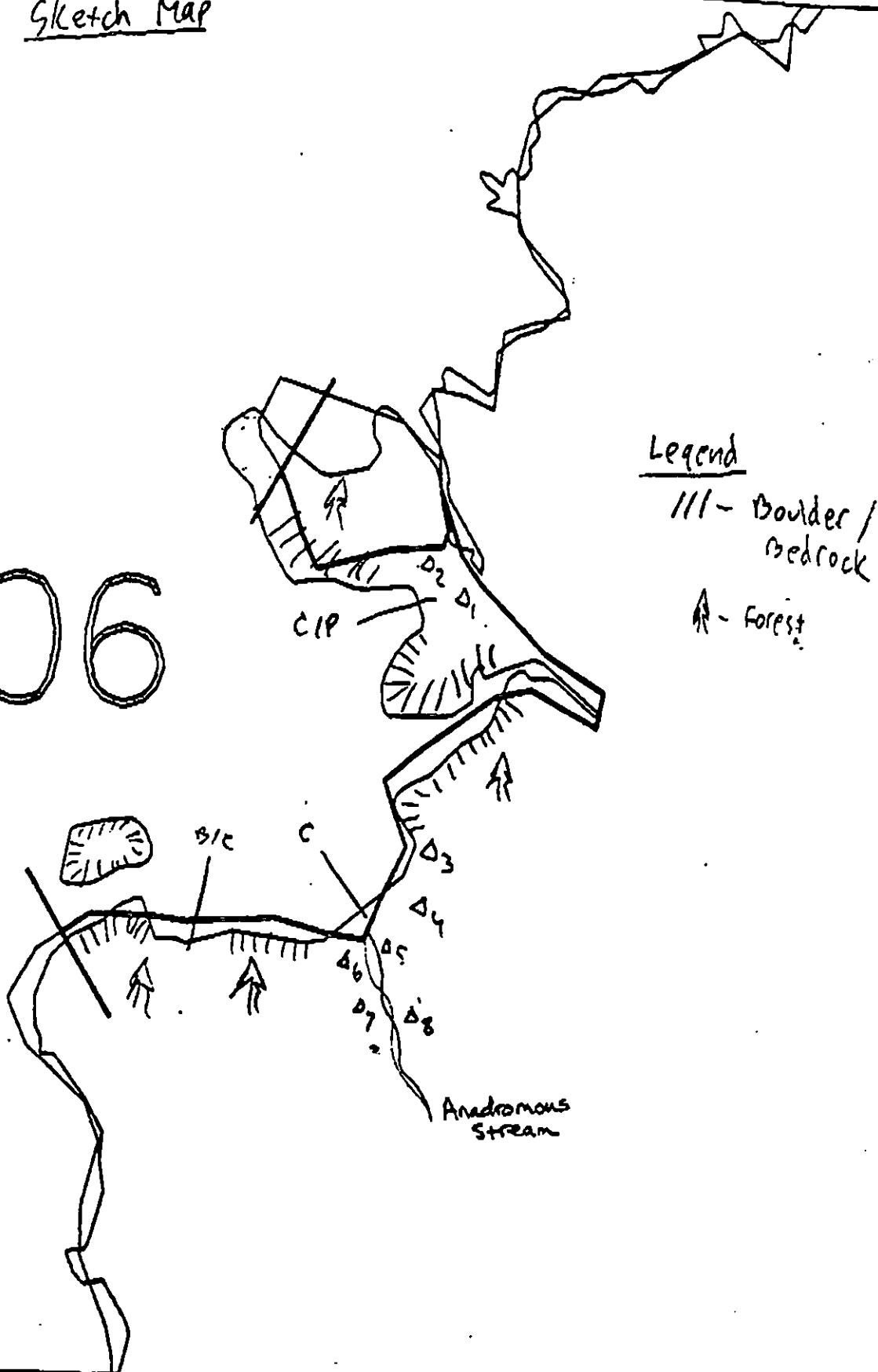
REVISION 03/22/80

[illegible]

COMMENTS

REVIEWED 7w DATE 4/12/90

V-06



0.000 No Oil

EV-6A

ADEC Segment Length: 1810m



Map Key: PWS-259

Name: Mike Fogert

Date: 4/7/90

Data Entered:

SHORELINE ECOLOGICAL SUMMARY

REVISION: 08/22/90

Segment ST/ E006 Subdivision A

Date (mo/day/yr) 4/7/90

Time (24 hr) 0850 hrs Biologist Ambrose

- (A) Substrate type and % of segments:
 (1) Bedrock 50 (2) Boulder 25 (3) Cobble 15 (4) Pebble 5 (5) Sand 5 (6) Silt -
- (B) Overall % cover of biota (% of segment): Dense 10 Moderate 25 Low 65
- (C) Density, substrate preference (by number from A, above), & vertical zonation of major taxa: (upper-U; mid-M; low tidal-L); juveniles / adults (X), new settlement (3)

Photographs:
Roll No. -

Frames -

BARNACLES

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

NOT PRESENT

MYTILUS

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

NOT PRESENT

ASTROPODS

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

NOT PRESENT

FUCUS

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

NOT PRESENT

Wildlife Observations/ General Comments: Eagles (see below), 2 otters, 4 gulls, 2 Canada geese, 4 cormorants, 2 Harlequin ducks.
Moderate cover on high-angle beaches; moderate barnacles and littorines on cobble in pocket beaches, but no Fucus or Mytilus.

Ecological Considerations:

6V, 7II, 5T-2: One pair of mature bald eagles w/ nest nearby.

One anadromous stream occurs in segment (salmon bones found on bank of stream). No oil found nearby.

* Note: part surveyed by boat.

SHORELINE EVALUATION

SEGMENT ST/ EV-06 SUBDIVISION A (1 OF 1) DATE 4/7/90

SEGMENT ENVIRONMENTAL SENSITIVITIES AND TIME CONSTRAINTS:

5T All bald eagle nests (3/1 to 6/1)-Active eagle nests (3/1 to 9/1)
6V Recreation: Anchorages (6/1 to 9/15)
7II Subsistence area: Deer harvesting (8/15 to 2/28)
See attached Ecological Constraint sheet for specific constraints and contacts.

SUBDIVISION ECOLOGICAL CONSTRAINTS:

Avoid any unnecessary disturbance or damage to uncoiled biota and substrate. Stream not listed in anadromous catalogue (USGS Seward A-3 Revision 12/89).

ARCHAEOLOGICAL CONSTRAINTS:

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

SHPO SIGNATURE: Charles E. Brown DATE: 4/20/90

OILING CATEGORIZATION:

Wide 0 m: Medium 0 m: Narrow 0 m: V.Light 0 m: No Oil 1299 m
Subsurface Oil Observed: Yes No X Maximum Depth

RECOMMENDATIONS:

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

COMMENTS:

TAG COMMENTS:

TAG APPROVAL DATE: 4/20/90.

ADEC ART WEINER Art Weiner

EXXON ANDY TAYLOR Andy Taylor

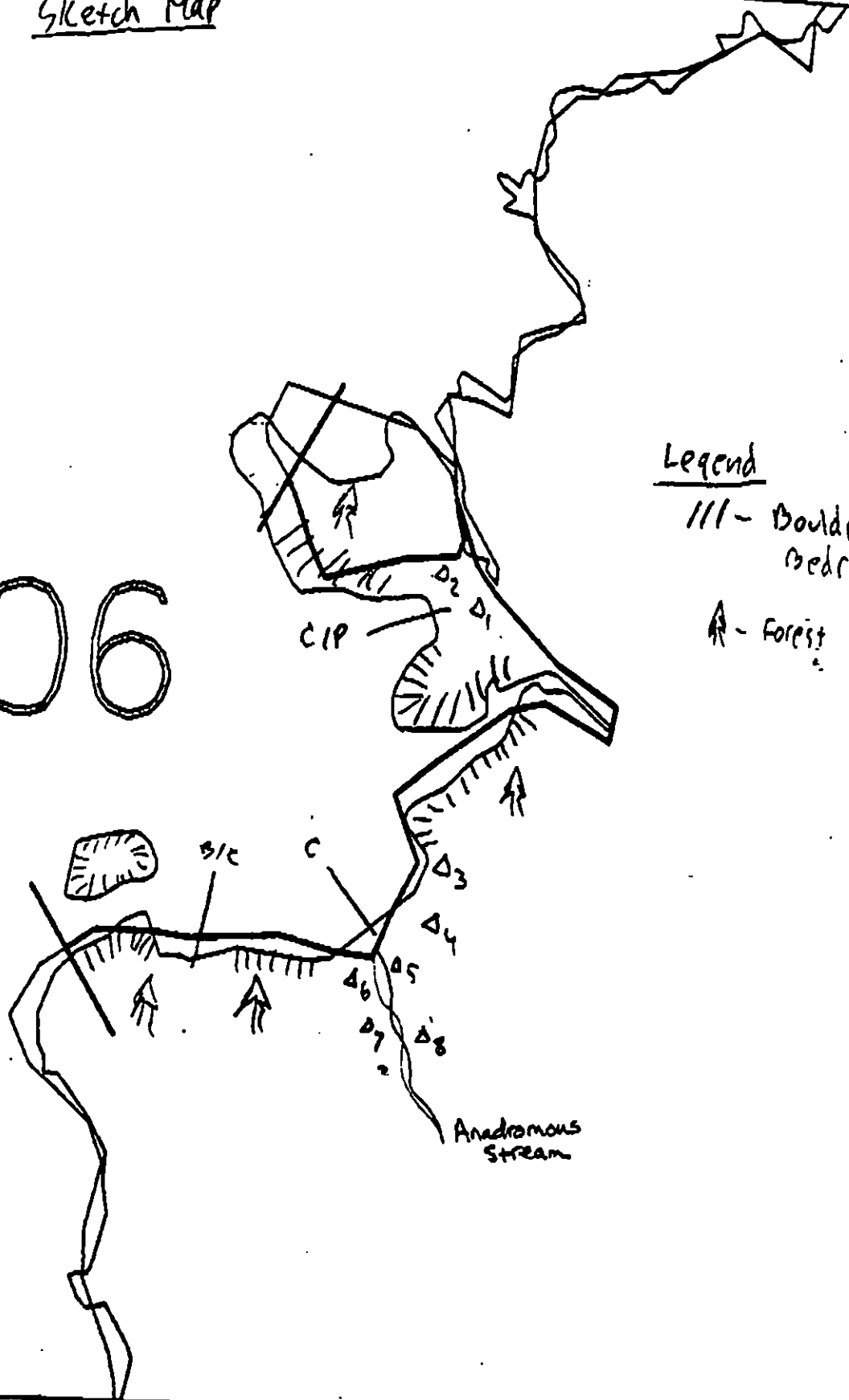
NOAA Burt Wescott Burt Wescott

USCG KENNETH KEANE Kenneth Keane

FOSC: DATE: 5-1-90

Sketch Map

V-06



Legend

/// - Boulder / Bedrock

A - Forest

XXXX Wide

/// Medium

--- Narrow

TTTT Very Light

0000 No Oil

EV-6A

ADEC Segment Length: 1810m



Map Key: PWS-259

Name: Mike Roger

Date: 4/7/90

Date Entered:

V-06

EV-6A



XXXX Wide

/// Medium

--- Narrow

TTTT Very Light

0000 No Oil

EV-6A

ADEC Segment Length: 1810m



Map Key: PWS-259

Name: Mike Foget

Date: 4/7/90

Date Entered:

OILING LENGTHS
TO BE PROVIDED
AT A LATER DATE

ST/EU-7A

REGION: PRINCE WILLIAM SOUND

SEGMENT: ST/EV-07

SUBDIVISIONS: A (1 OF 1)

SHORELINE EVALUATION

SEGMENT ST/ EV-07 SUBDIVISION A (1 OF 1) DATE 4/7/90

SEGMENT ENVIRONMENTAL SENSITIVITIES AND TIME CONSTRAINTS:

ADF&G anadromous stream no. 226-40-16550, 16557, 16561, 16559, 16563.

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

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

6Y Recreation: Special use destination

7II Subsistence area: Deer harvesting (8/15 to 2/28)

See attached Ecological Constraint sheet for specific constraints and contacts.

SUBDIVISION ECOLOGICAL CONSTRAINTS:

Avoid any unnecessary disturbance or damage to unopened biota and substrate. If treatment is planned, avoid damage to mussel beds.

ARCHAEOLOGICAL CONSTRAINTS:

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

SHPO SIGNATURE: _____ DATE: _____

OILING CATEGORIZATION:

Wide _____ m: Medium _____ m: Narrow _____ m: V. Light _____ m: No Oil _____ m

Subsurface Oil Observed: Yes _____ No X Maximum Depth _____

RECOMMENDATIONS:

X No Treatment Recommended

_____ Treatment Recommended

_____ Manual Pickup

_____ Bioremediation

_____ Tarmat: _____ Breakup

_____ Removal

_____ Snare/Absorbent Booms

_____ Oil Snares (pom poms)

_____ Absorbents (pads, rolls, etc)

_____ Spot Washing: _____ Wands

_____ Beach Cleaner

_____ Other (see comments)

COMMENTS: _____

TAG COMMENTS: _____

TAG APPROVAL DATE: _____

ADEC _____

EXXON _____

NOAA _____

USCG _____

FOSC: _____ DATE: _____

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

FIELD SHORELINE COMMENT SHEET

SEGMENT ST / EV-7 SUBDIVISION: _____ DATE 4/7/90

NOAA

NAME GARY SHIGENAKASIGNATURE Gary Shigenaka☐ NO TREATMENT RECOMMENDED☐ TREATMENT SUGGESTED

COMMENTS

SEGMENT CONSISTED OF A LARGELY ROCKY SHORELINE OCCASIONALLY INTERRUPTED BY POCKET BEACHES, ON THE NORTHERN END OF EVANS ISLAND. LITTLE EVIDENCE OF OILING WAS ENCOUNTERED ON THIS SEGMENT. AT THE FIRST POCKET BEACH FOUND AT THE SOUTH END OF THE SEGMENT, A VERY LIGHT SHEEN WAS FOUND IN ONE PIT DUG INTO THE PEBBLE BEACH, BUT NO OTHER SIGN OF OIL WAS FOUND IN THIS PIT OR ANY OTHER. THE ONLY OTHER OILING SEEN IN THE SEGMENT WAS A BAND OF ASPHALT IN THE UPPER INTERSTIAL ZONE BETWEEN TWO ANADROMOUS STREAMS, MEASURING APPROXIMATELY 1 M WIDE BY ABOUT 50 M IN LENGTH. THE NATURE OF THE DISTRIBUTION WAS DISCONTINUOUS, AND VARIED FROM WEATHERED STAIN TO COVER. MUCH OF THE SUPRATIDAL ON BEACHES OF THE SEGMENT WAS COVERED BY SNOW.

ADEC

NAME John HayesSIGNATURE John Hayes☐ NO TREATMENT RECOMMENDED☒ TREATMENT SUGGESTED

COMMENTS

Oiling observed on this segment consisted of an asphalt band approx 1-50m. This band was between two Anadromous Streams (flowing in streambeds) although it was approx 40-60m from stream banks. No surface or subsurface contamination was found in or near streams. If the Anad-seat team is in this area these streams should be assessed for oiling although marginal is within 100yds. Also observed was a very light translucent sheen in the cobbles on one of the pocket beaches, this was isolated or nearby pits revealed no sheen. Treatment suggested is to have ANAD-SEAT look at streams and make recommendations although this is not a priority area.

LAND MANAGER

NAME JAMES A BARKERSIGNATURE James A. Barker☐ NO TREATMENT RECOMMENDED☒ TREATMENT SUGGESTED

COMMENTS

TEAM OBSERVED INTERMITTENT PATCHES AND ASPHALT BAND 1-10M LENGTHS, NEAR STREAM BANKS. DUE TO THE SENSITIVITY OF THESE STREAMS RAKES & SHOVELS SHOULD BE USED AS CLEAN UP AGENT. NOTE THAT ANAD-SEAT SHOULD MAKE RECOMMENDATIONS CONCERNING DECONTAMINATION.

SHORELINE OILING SUMMARY

REVISION NO. 03/22/90

OG Mike Foget NOAA USCG Gary Shigemoto SEGMENT ST/ EU-07
 BIO Richard Ambrose LAND REP James A. Barker SUBDIVISION A (1041)
 EXXON Larry Olson ADEC John Hayes TIME 16:00 to 17:50
 TEAM NO.: 11 TIDE LEVEL: 5.5 to 1.0 DATE 4/7/90
 EST. SUBDIVISION LENGTH: 5439 m ☒ Sun ☐ Clouds ☐ Fog ☐ Rain ☐ Snow
 UPLANDS DESCRIPTION: ☐ Grass ☒ Forest ☐ Rock snow in the SUPRA FTZ
 SURVEYED FROM: ☒ Foot ☐ Boat ☐ Helo WORKING DIRECTION: S to N
 SURFACE SEDIMENTS: R 60 % B 20 % C 10 % P 5 % G 5 % S 0 % M 0 % V 0 %
 SLOPE: Lang 15 % Hang 25 % Vert 60 % WAVE EXPOSURE: ☐ Low ☒ Med ☐ High
 OIL CATEGORY LENGTH: W 0 m M 0 m N 0 m VL 30 m NO 5409 m

SURFACE OIL

CHARACTER	DISTRIBUTION				OIL / FILM COLOR						IMPACTED ZONES			
	IC	IB	IP	IS	SBL BR	DBL RW	GY SL	DBR TL	LBR	SU	UI	M	U	
ASPHALT PAVEMENT														
POOLED														
COVER														
COAT														
STAIN														
MOUSSE														
PATTIES				X		X					X			
TARBALLS														
FILM														
NO OIL										X		X	X	

PAVEMENT: H F ⑤ 2 sq. m by 3 cmPATTIES / TARBALLS 0 BAGSNEAR SHORE SHEEN? NO BR RW SL TL

OILED DEBRIS	AMOUNT		
	SM	MD	LG
Logs			
Vegetation			
Trash			
Debris			

DEBRIS COLLECTED

☐ YES ☒ NOTYPE 0#BAGS 0

Photographs:

Roll No. —Frames —

SUBSURFACE OIL

PIT NO.	PIT DEPTH (cm)	SUBSURFACE OIL CHARACTER					OILED INTERVAL (CM-CM)	BELOW	OIL / FILM COLOR							PIT ZONE				A N A	SUBSURFACE SEDIMENTS			
		OP	OR	OL	OF	NO			UO	UC	SBL BR	DBL RW	GY SL	DBR TL	LBR	SU	UI	M	U					
1	30					X	-		X						X								P, G (H ₂ O @ 20cm)	
2	60					X	-		X						X									P, G (H ₂ O @ 30cm)
3	20					X	-		X							X								P, G
4	20					X	-		X								X							P, G
5	25					X	-		X										X	X				M (H ₂ O @ 10cm)
6	30					X	-		X						X									P, S, M

COMMENTS

Most of the segment was clean w/ the exception of a 1m x 30.
 CT/S asphalt patties distribution in the 1:27Z (see map), this is located
 on a low angle D/C beach. The rest of the segment consists mostly of
 Bedrock/Boulders with some Low angle Pocket Cobble beaches.

SEGMENT ST/ EV-7 SUBDIVISION A

SUBSURFACE OIL (CONTINUED)

PIT NO.	PIT DEPTH (cm)	SUBSURFACE OIL CHARACTER					OILED INTERVAL (CM-CM)	BELOW		OIL / FILM COLOR						PIT ZONE				A N A	SUBSURFACE SEDIMENTS
		OP	OR	OL	OF	NO		UD	UC	SBL BR	TBL RW	GY SL	DBR TL	LBR		SU	UI	M	U		
7	20					X	-		X							X					G, R
8	30					X	-		X							X					P, G
9	15					X	-		X									X			P, G (H ₂ O @ 10cm)
10	20					X	-		X							X					P, G, S
11	25					X	-		X							X					P, G
12	20					X	-		X							X					P, G
13	15					X	-		X									X			G, M (H ₂ O @ 5cm)
							-														
							-														
							-														
							-														
							-														
							-														
							-														
							-														

COMMENTS

REVIEWED YW DATE 4/13/98

OG M. Fogt

SEGMENT ST/ EV-7

SUBDIVISION A

DATE 4 / 7 90

SKETCH MAP

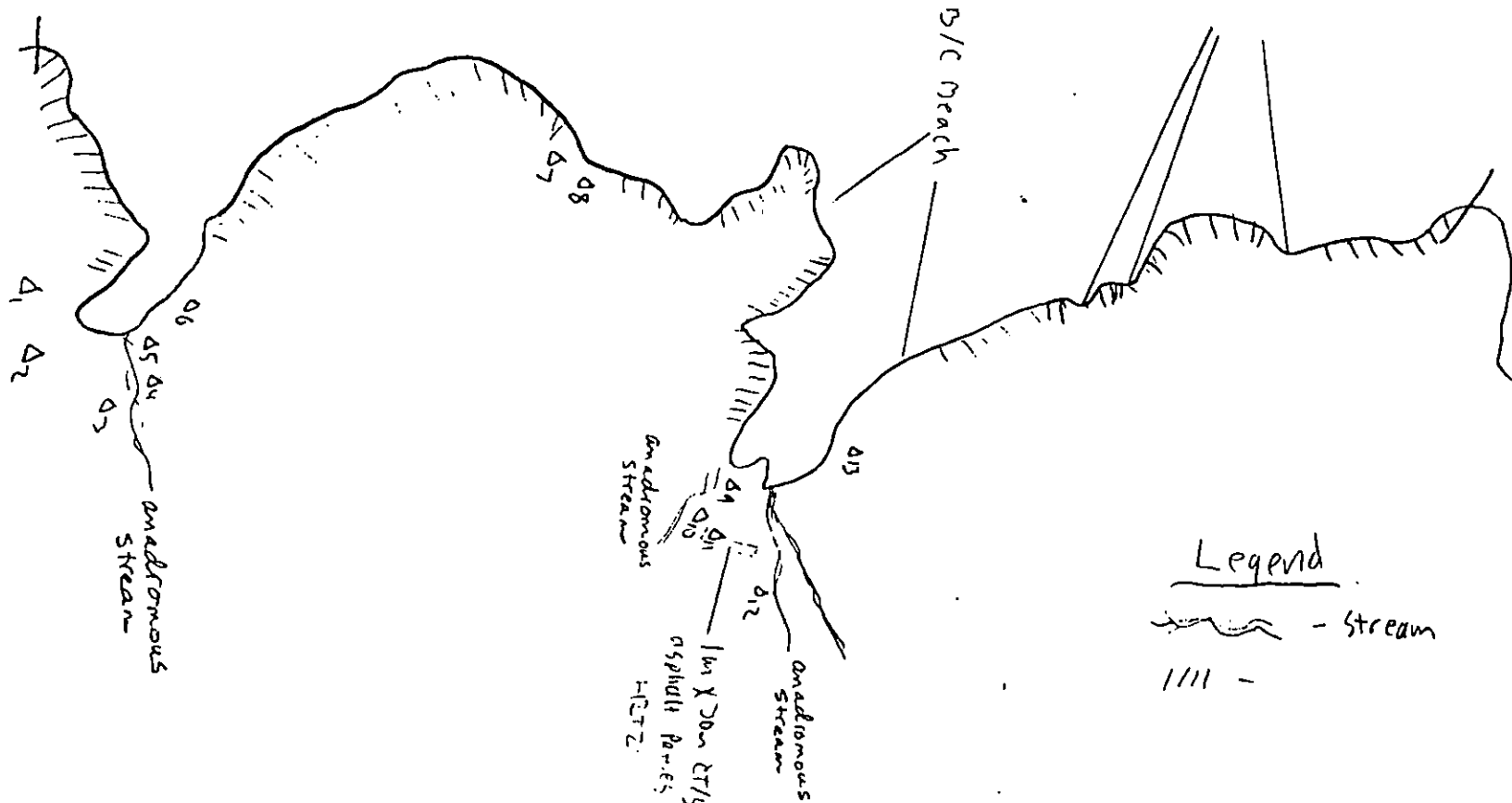
CHECKLIST



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

LEGEND

- 1 Δ
Pit - No Subsurface Oil
- 2 $\blacktriangle$
Pit - Subsurface Oil
- $\boxed{\text{CT/C}}$
Continuous Distribution
- $\boxed{\text{CT/B}}$
Broken Distribution
- $\boxed{\text{CT/P}}$
Patchy Distribution
- $\boxed{\text{CT/S}}$
Splashed Distribution
- $\bullet$
Oiled Vegetation
- 1 $\rightarrow$
Photo location, direction, and number



Legend
~~~~~ - Stream  
//// -

Oil Character Length (m): AP - PO - CV - CT - ST - MS - PT 30 TB - FL - NO 5404

## SHORELINE ECOLOGICAL SUMMARY

Bio: page 1 of 2

REVISION: 03/22/90

Segment ST / EVOO7 Subdivision A

Date (mo / day)

4/7/90  
**DRAFT**Time (24 hr) 1545 hrs Biologist Ambrose

- (A) Substrate type and % of segments:  
 (1) Bedrock 60 (2) Boulder 20 (3) Cobble 10 (4) Pebble 5 (5) Sand 5 (6) Silt —
- (B) Overall % cover of biota (% of segment): Dense 15 Moderate 45 Low 50
- (C) Density, substrate preference (by number from A, above), & vertical zonation of major taxa: (upper-U; mid-M; low tidal-L); juveniles / adults (X), new settlement (3)

Photographs:

Roll No. —Frames —

## BARNACLES

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

NOT PRESENT

## MYTILUS

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

NOT PRESENT

## GASTROPODS

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

NOT PRESENT

## FUCUS

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

NOT PRESENT

Wildlife Observations/ General Comments\*: 1 otter, 1 deer (plus deer tracks (2 sets) and scat), 13 Barrow's goldeneyes, 6 Harlequin ducks, 2 cormorants.  
 Many sections (esp. high angle beaches and walls) have moderate density, but cover is sparse on cobble beaches.

## Ecological Considerations:

1B, 711, 6V: 3 (possibly four) anadromous streams (see next page)

\* Note: part surveyed by boat.

Ambrose

segment EV007A

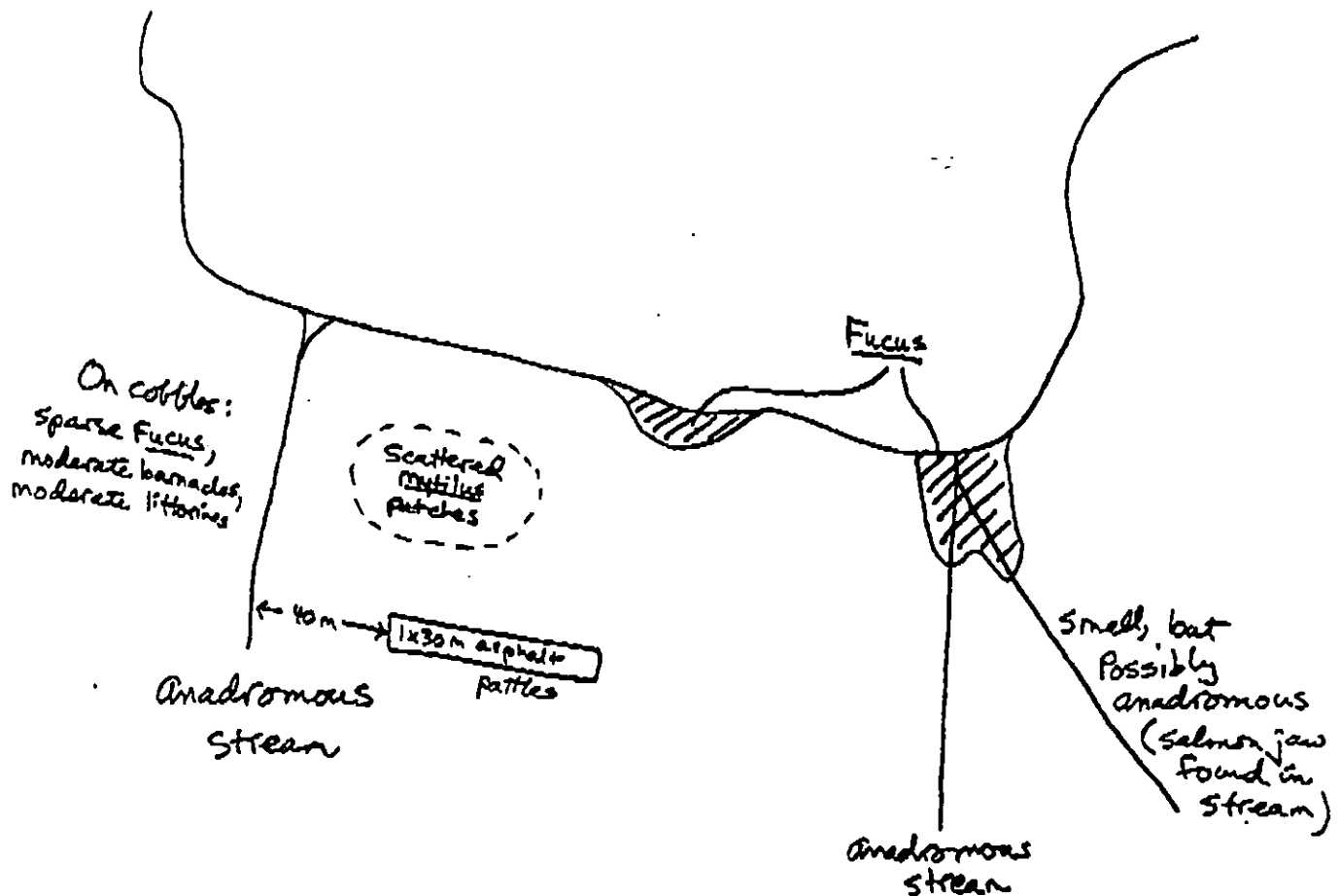
Bio: page 2 of 2

4/7/90

Three anadromous streams are in EV007A, as identified by salmon bones found in or nearby the streams.

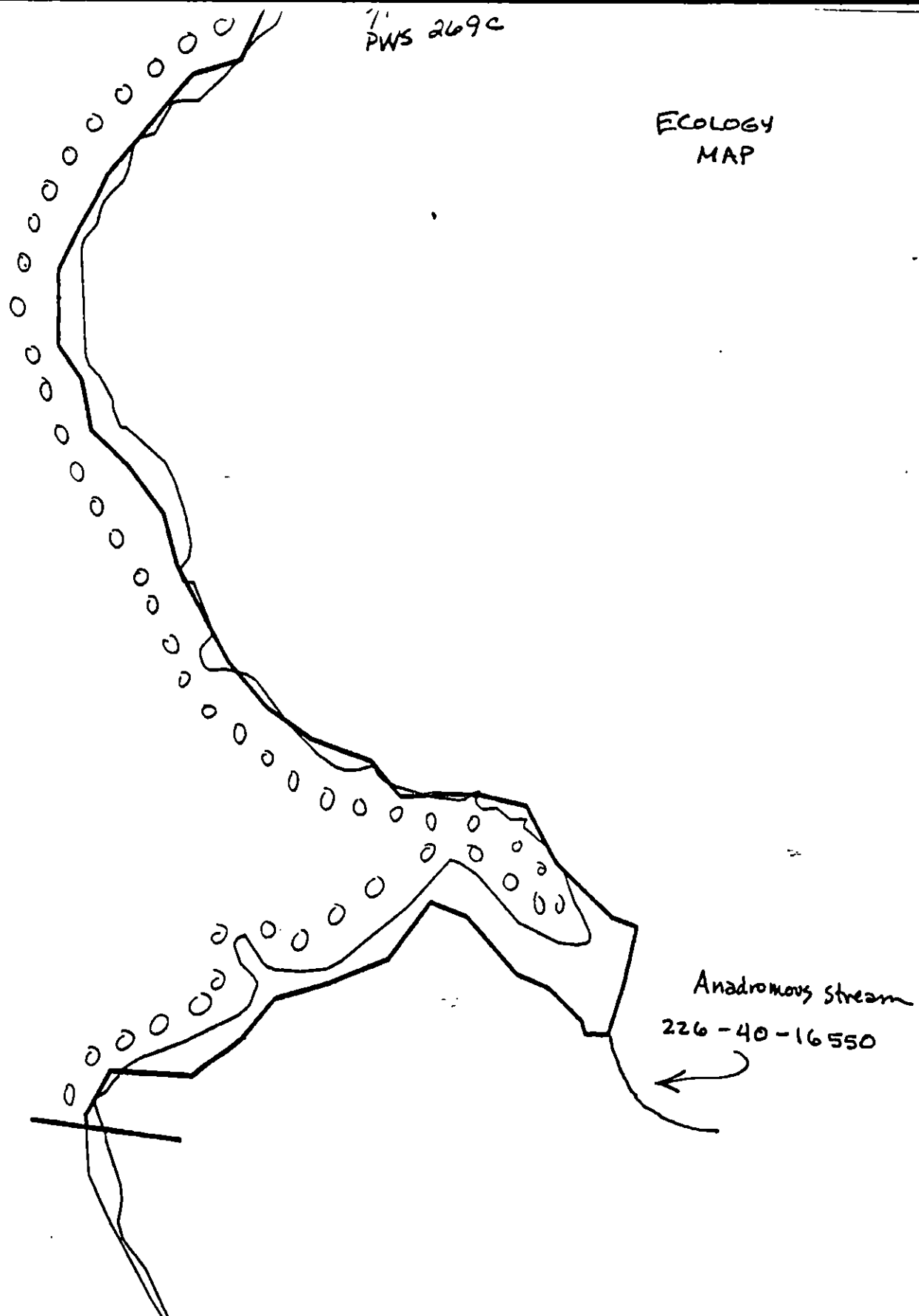
At the first stream there was an extensive beach comprised of cobbles and pebbles. There were some barnacles on cobbles, and Fucus has accumulated (as drift) near the mouth of the stream, but the beach was mostly barren. No oil was found nearby.

Two (and possibly three) anadromous streams were in one cove, as noted below. A band of asphalt was found 40m from one stream, with a scattered mussel bed below.



PWS 269C

# ECOLOGY MAP



XXXX Wide

//// Medium

---- Narrow

TTTT Very Light

0000 No Oil

EV-7

ADEC Segment Length: 5439m



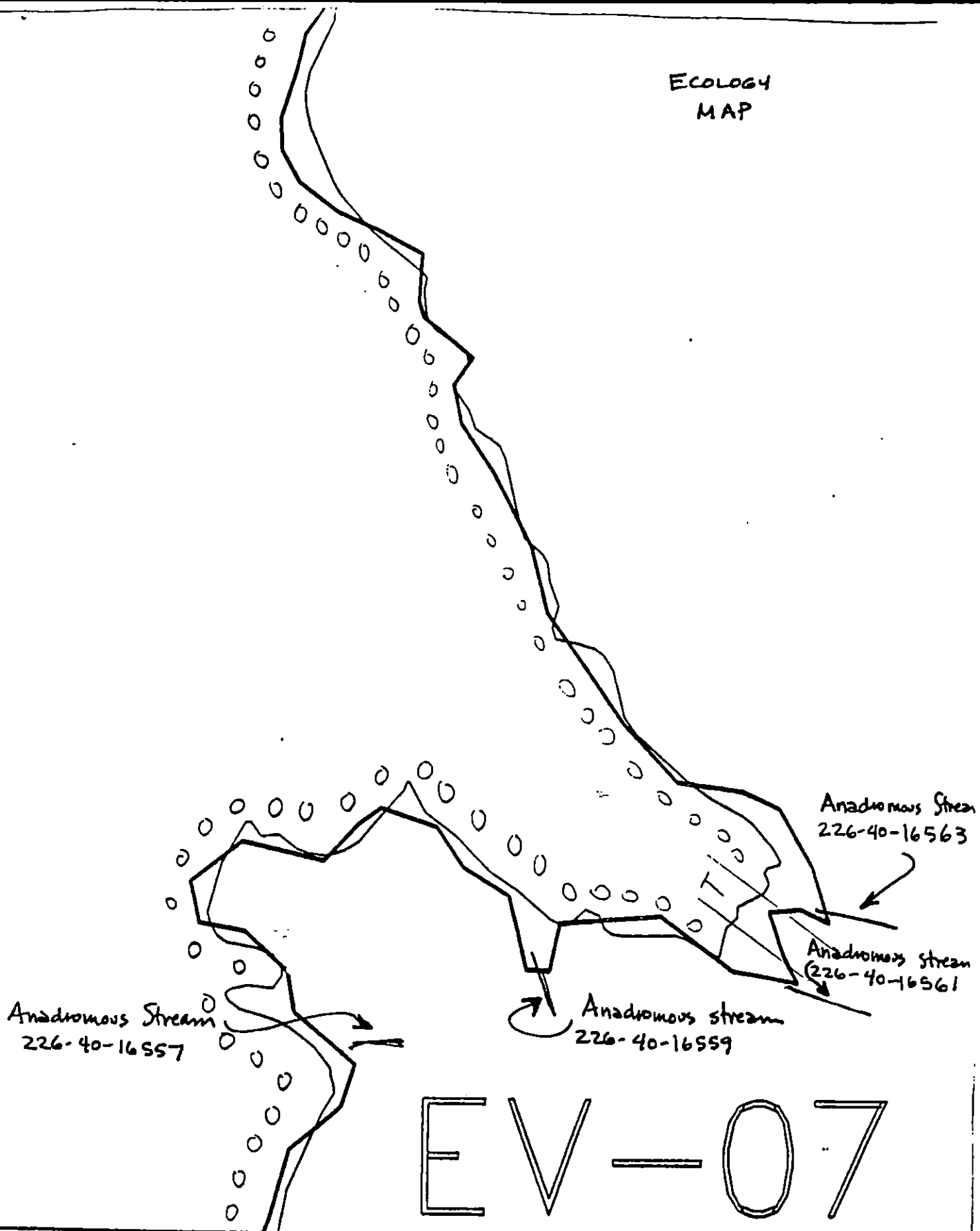
Map Key: PWS-269a

Name: Mike Foyer

Date: 4/7/90

Data Entered:

ECOLOGY  
MAP



XXXX Wide

//// Medium

--- Narrow

TTTT Very Light

0000 No Oil

EV-7

ADEC Segment Length: 5439m

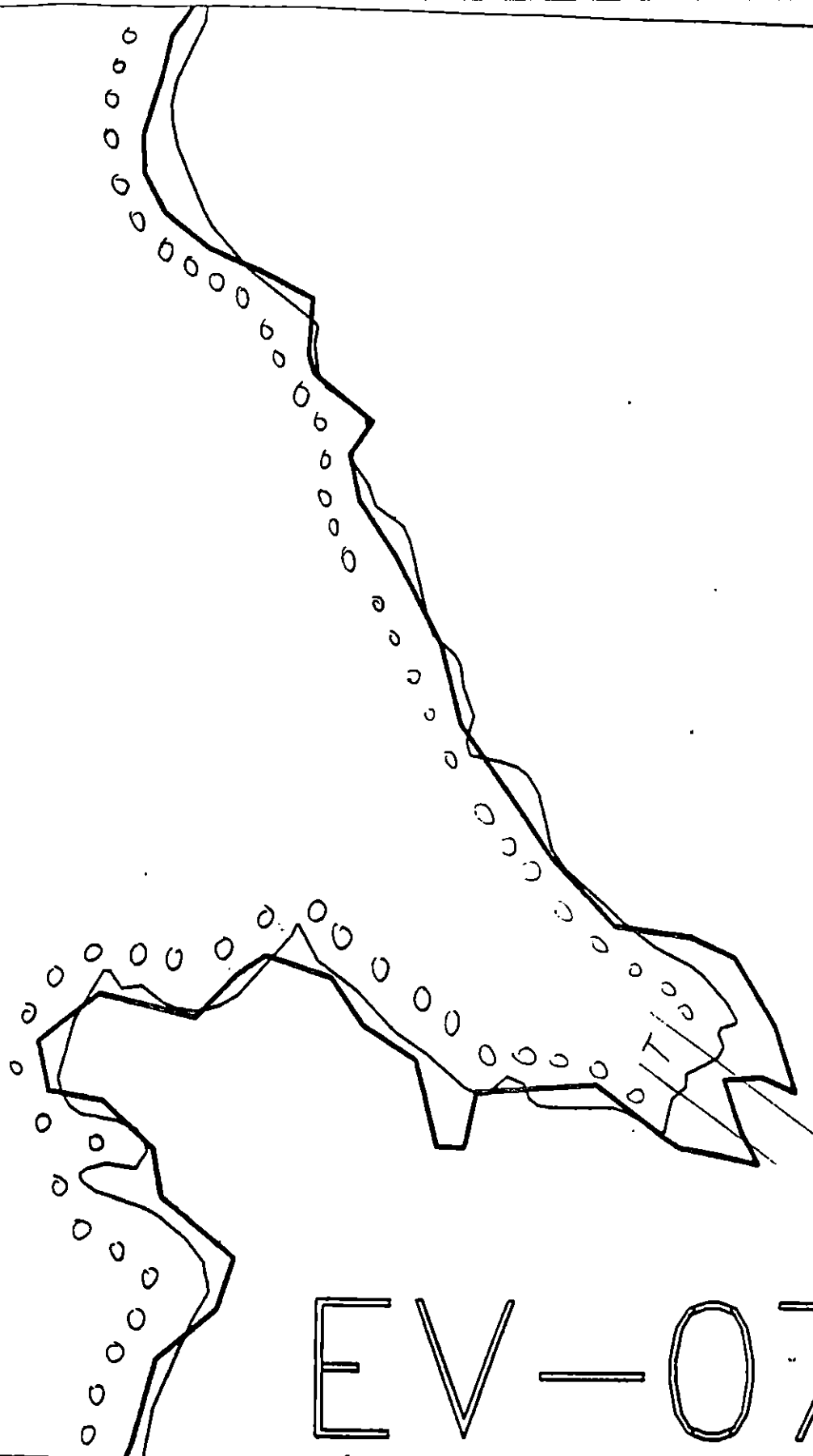


Map Key: PWS-269c

Name: Mike Fogel

Date: 4/7/90

Data Entered:



EV-07

XXXX Wide

//// Medium

--- Narrow

TTTT Very Light

0000 No Oil

EV-7

ADEC Segment Length: 5439m



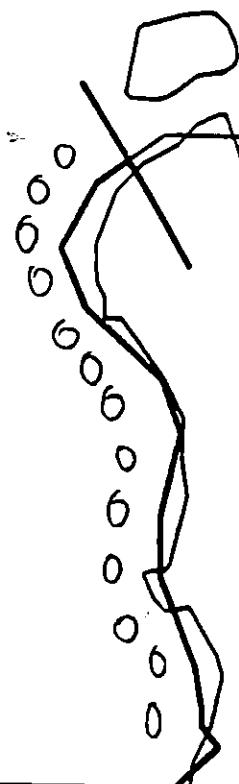
Map Key: PWS-269c

Name: Mike Fogel

Date: 4/7/90

Data Entered:

EV-06



XXXX Wide

//// Medium

--- Narrow

TTTT Very Light

0000 No Oil

EV-7

ADEC Segment Length: 5439m



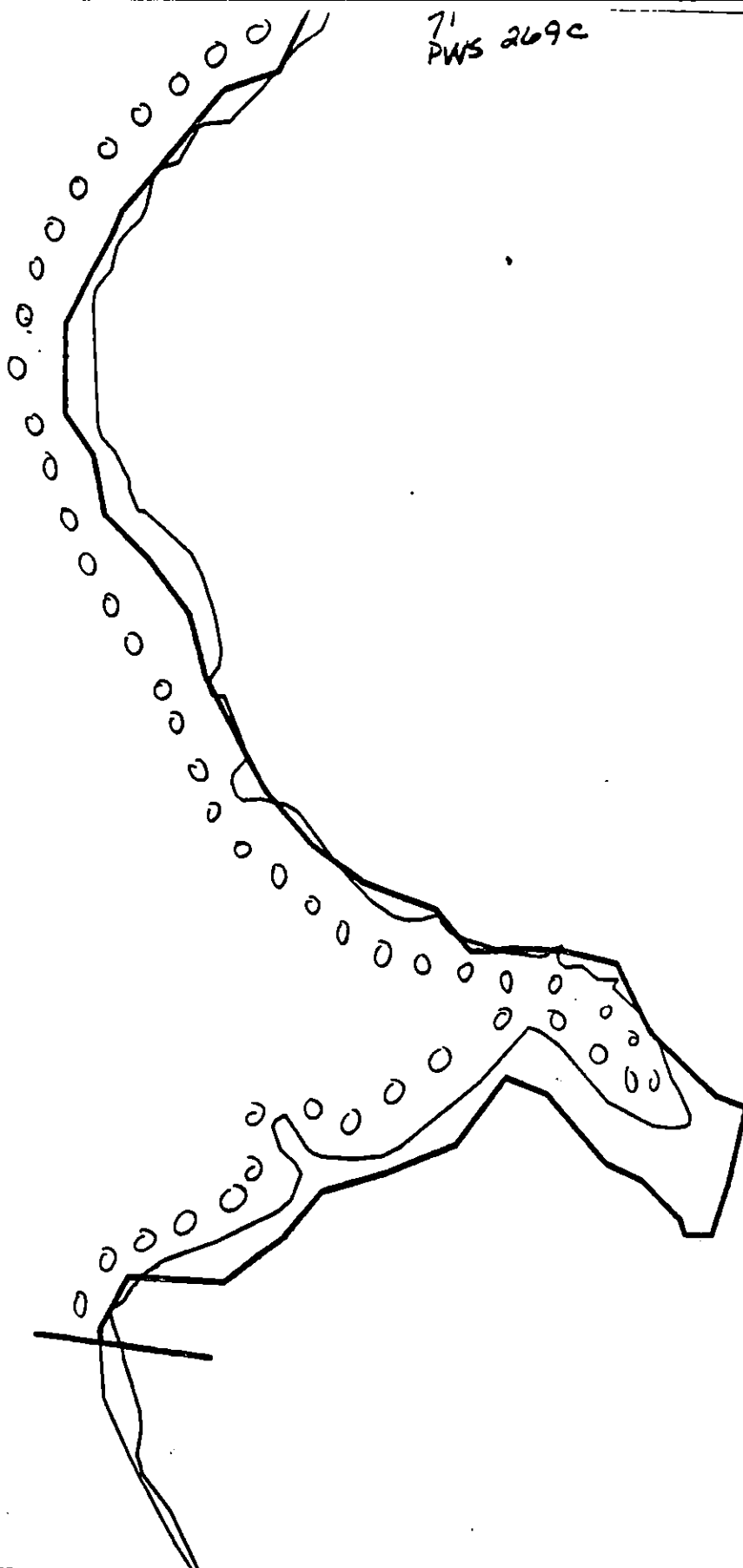
Map Key: PWS-269e

Name: Mike Fogel

Date: 4/7/90

Data Entered:

71  
PWS 269c



XXXX Wide

//// Medium

---- Narrow

TTTT Very Light

0000 No Oil

EV-7

ADEC Segment Length: 5439m



Map Key: PWS-269a

Name: Mike Foyet

Date: 4/7/90

Date Entered:

SHORELINE EVALUATION

SEGMENT ST/ EV-07 SUBDIVISION A (1 OF 1) DATE 4/7/90

**SEGMENT ENVIRONMENTAL SENSITIVITIES AND TIME CONSTRAINTS:**

ADF&G anadromous stream no. 226-40-16550, 16557, 16561, 16559, 16563.

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

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

6Y Recreation: Special use destination

7II Subsistence area: Deer harvesting (8/15 to 2/28)

See attached Ecological Constraint sheet for specific constraints and contacts.

**SUBDIVISION ECOLOGICAL CONSTRAINTS:**

Avoid any unnecessary disturbance or damage to uncoiled biota and substrate. If treatment is planned, avoid damage to mussel beds.

**ARCHAEOLOGICAL CONSTRAINTS:**

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

SHPO SIGNATURE: *Charles E. Hume* DATE: 4/28/90

**OILING CATEGORIZATION:**

Wide 0 m: Medium 0 m: Narrow 0 m: V.Light 83 m: No Oil 5603 m  
Subsurface Oil Observed: Yes        No X Maximum Depth       

**RECOMMENDATIONS:**

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

COMMENTS:         
        
        
      

TAG COMMENTS:         
        
        
      

TAG APPROVAL DATE: 4/26/90.

ADEC *JOHN BAUER* *JOHN BAUER*

EXXON *AMY T. H. O'NEAL*

NOAA *GARY PETRAE* *RAY DELANEY*

USCG *KENNETH KEANE* *KEVIN KEANE*

FOSC: *WJL* DATE: 5-12-90

OG M. f. 096-  
 SEGMENT ST/ EV-7  
 SUBDIVISION A  
 DATE 4 / 7 90

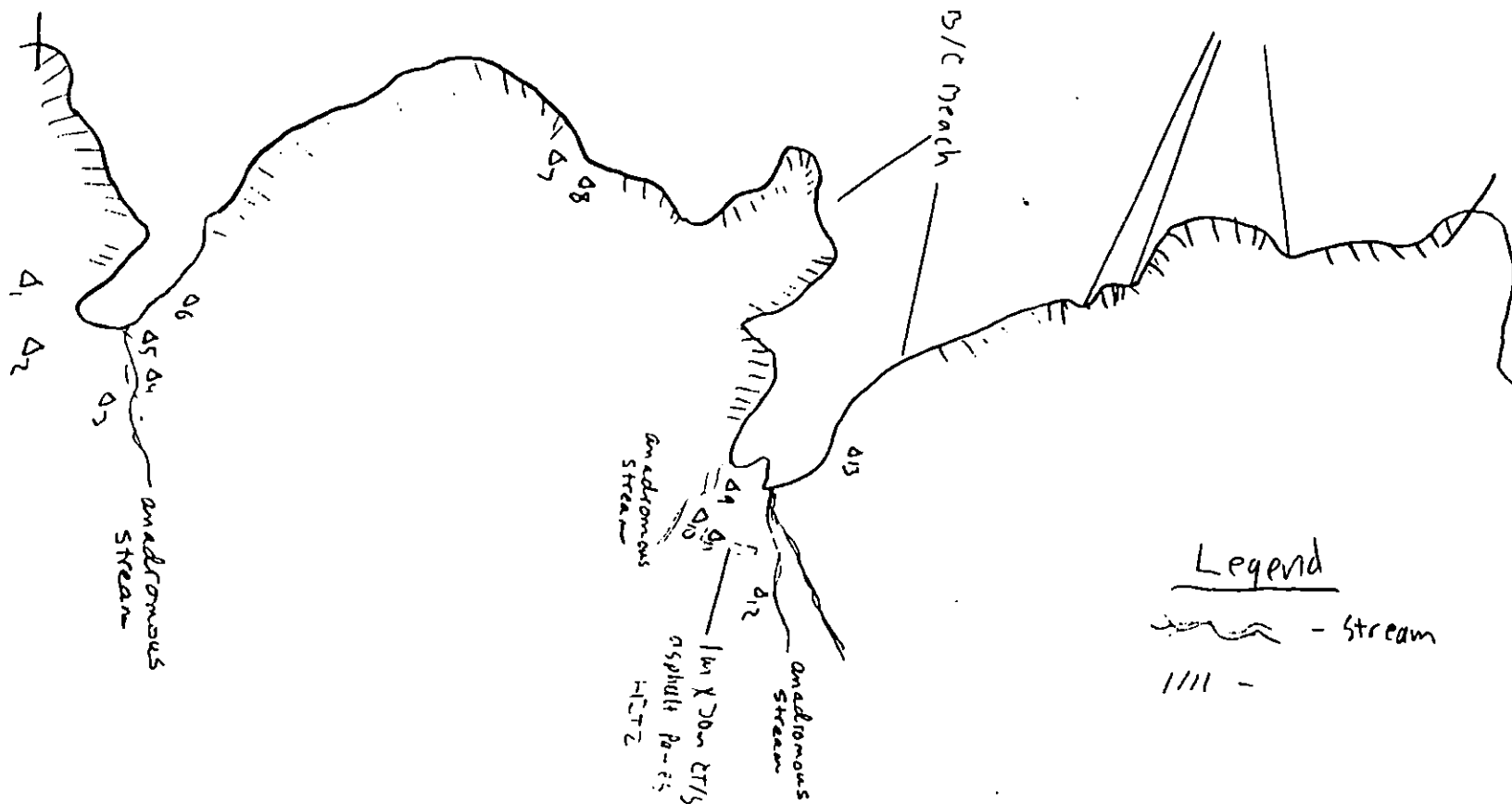
# SKETCH MAP

## CHECKLIST

- ☒ N Arrow
- ☐ Approx Scale
- ☐ Seg/Sub Bndry
- ☐ Oil Dist
- ☐ Width
- ☐ Length
- ☐ % Cover
- ☐ Substrate Character
- ☐ Est HWL/WL
- ☐ SS
- ☐ Profile Location(s)
- ☐ Profile(s)
- ☐ Pit Location(s)
- ☐ Photo Location(s)

## LEGEND

- 1  $\Delta$   
Pit - No Subsurface Oil
- 2  $\blacktriangle$   
Pit - Subsurface Oil
- CT/C  
Continuous Distribution
- CT/B  
Broken Distribution
- CT/P  
Patchy Distribution
- CT/S  
Splashed Distribution
- Oiled Vegetation
- 1  $\rightarrow$   
Photo location, direction, and number



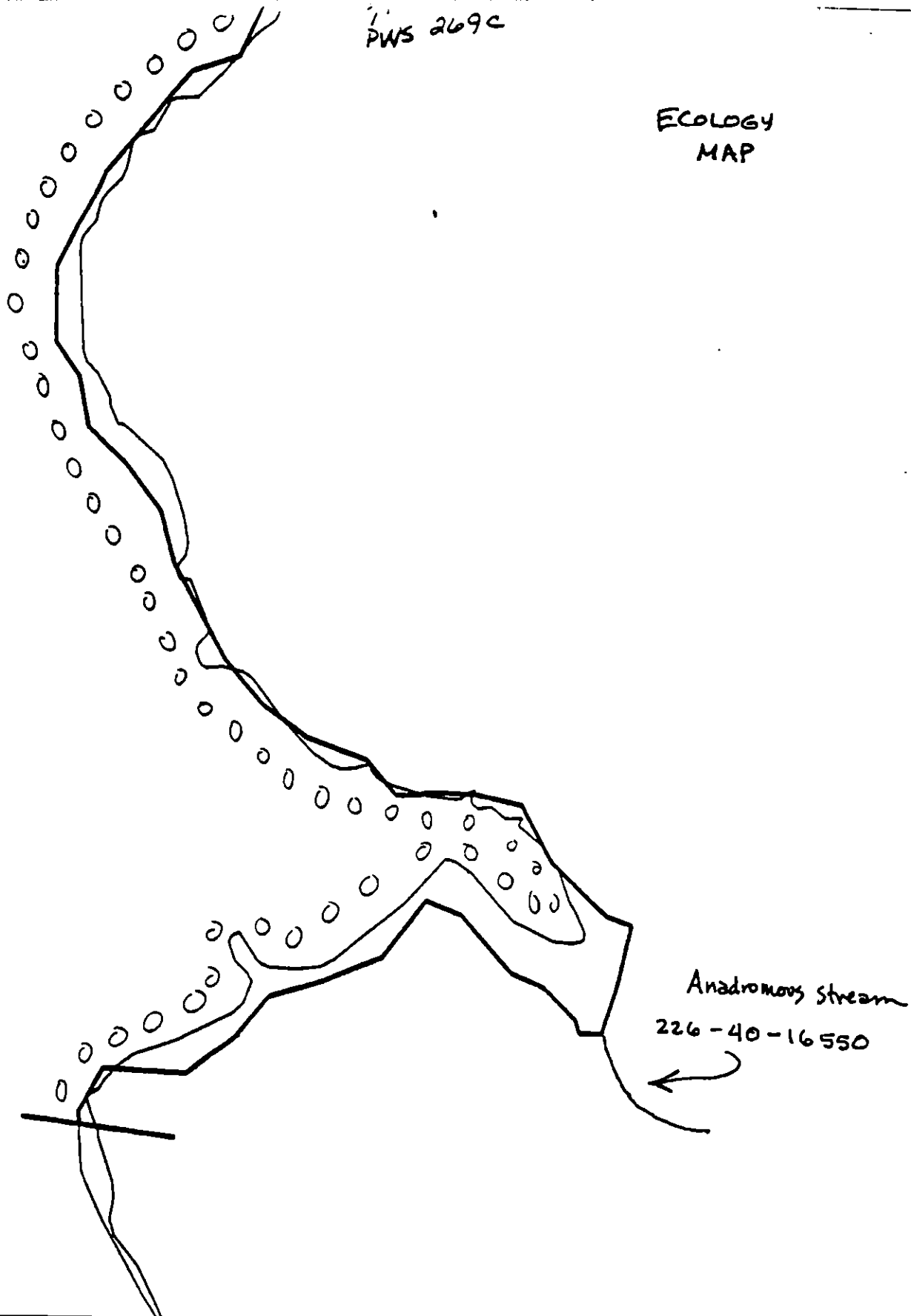
## Legend

- Stream
- 

Oil Character Length (m): AP    PO    CV    CT    ST    MS    PT 30 TB    FL    NO 5404

PWS 269C

# ECOLOGY MAP



XXXX Wide

//// Medium

---- Narrow

TTTT Very Light

OOOO No Oil

EV-7

AOEC Segment Length: 5439m



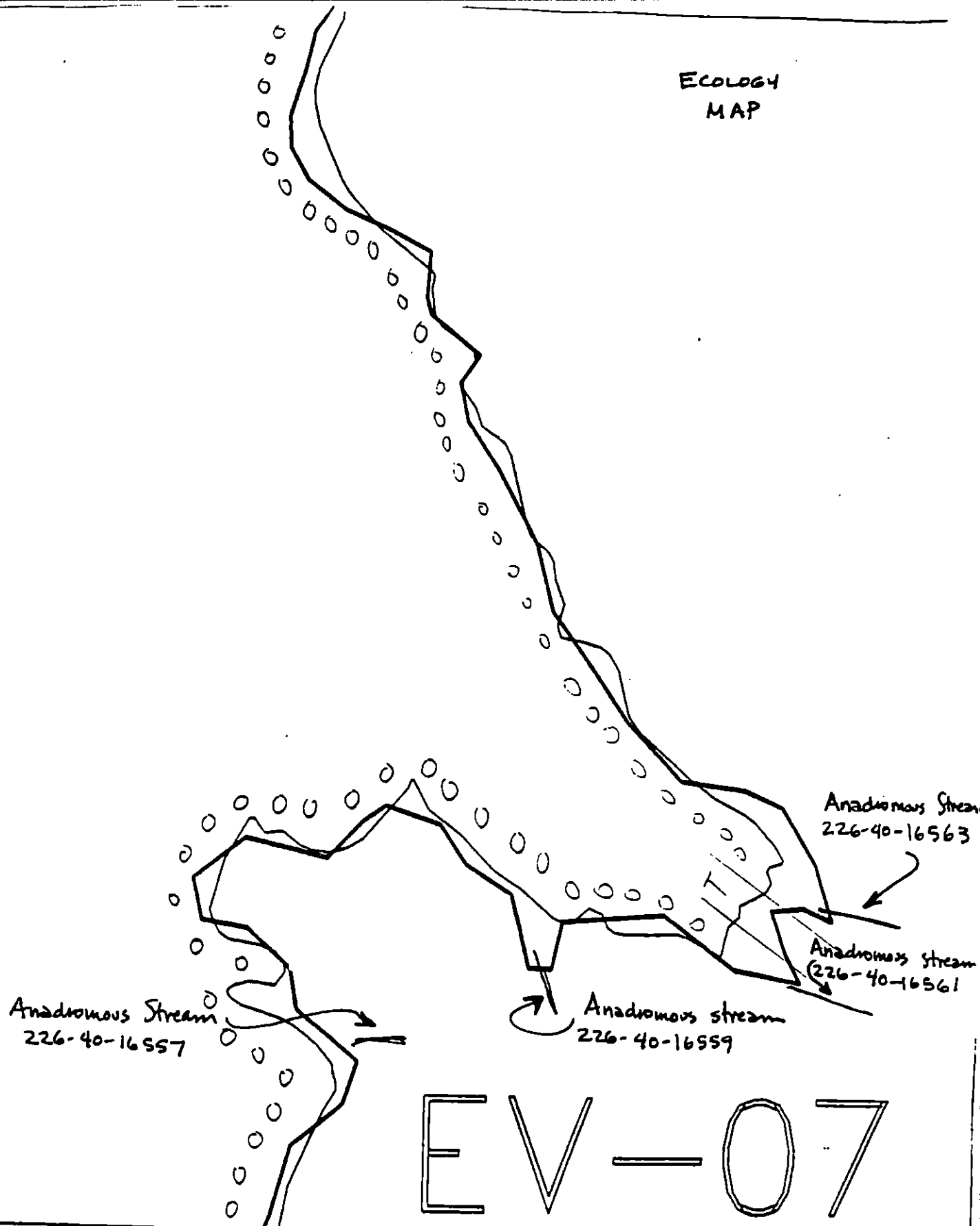
Map Key: PWS-269a

Name: Mike Foyer

Date: 4/7/90

Data Entered:

# ECOLOGY MAP



EV-07

XXXX Wide

//// Medium

--- Narrow

TTTT Very Light

0000 No Oil

EV-7

ADEC Segment Length: 5439m

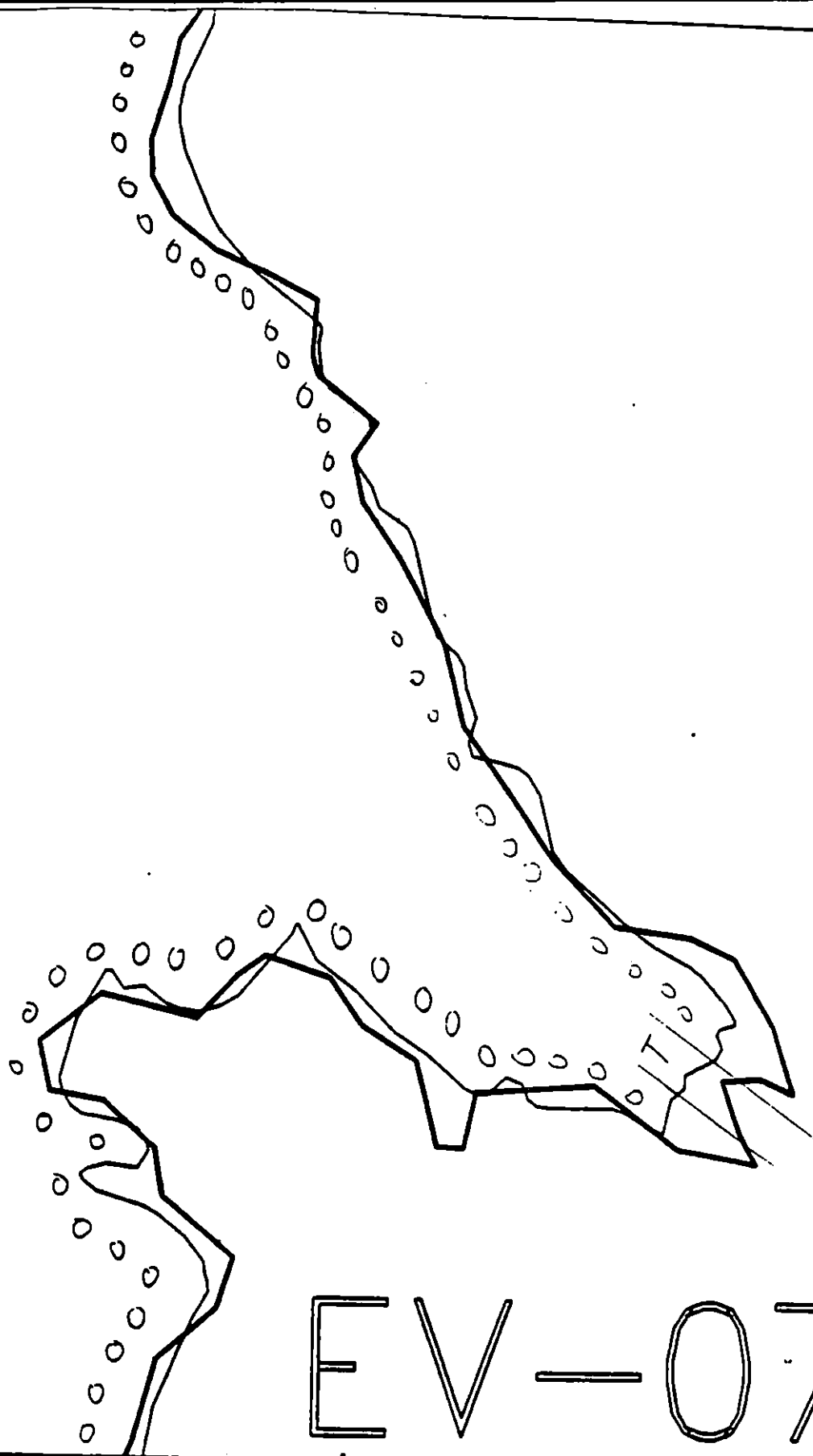


Map Key: PWS-269c

Name: Mike Fogel

Date: 4/7/90

Data Entered:



EV-07

XXXX Wide

/// Medium

--- Narrow

TTTT Very Light

0000 No oil

EV-7

ADEC Segment Length: 5439m



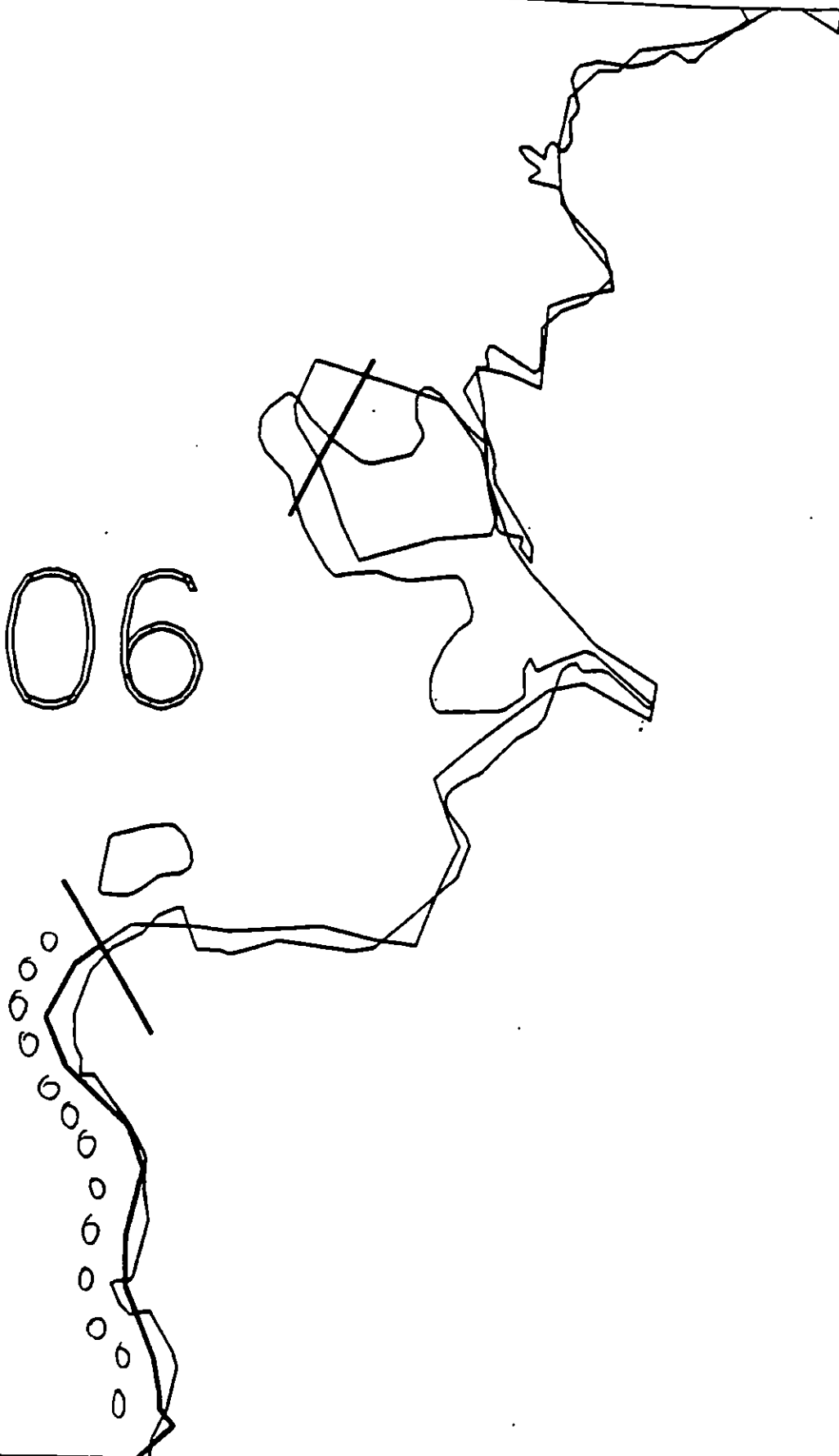
Map Key: PWS-269c

Name: Mike Fogel

Date: 4/7/90

Data Entered:

EV-06



XXXX Wide

//// Medium

---- Narrow

TTTT Very Light

0000 No Oil

EV-7

ADEC Segment Length: 5439m



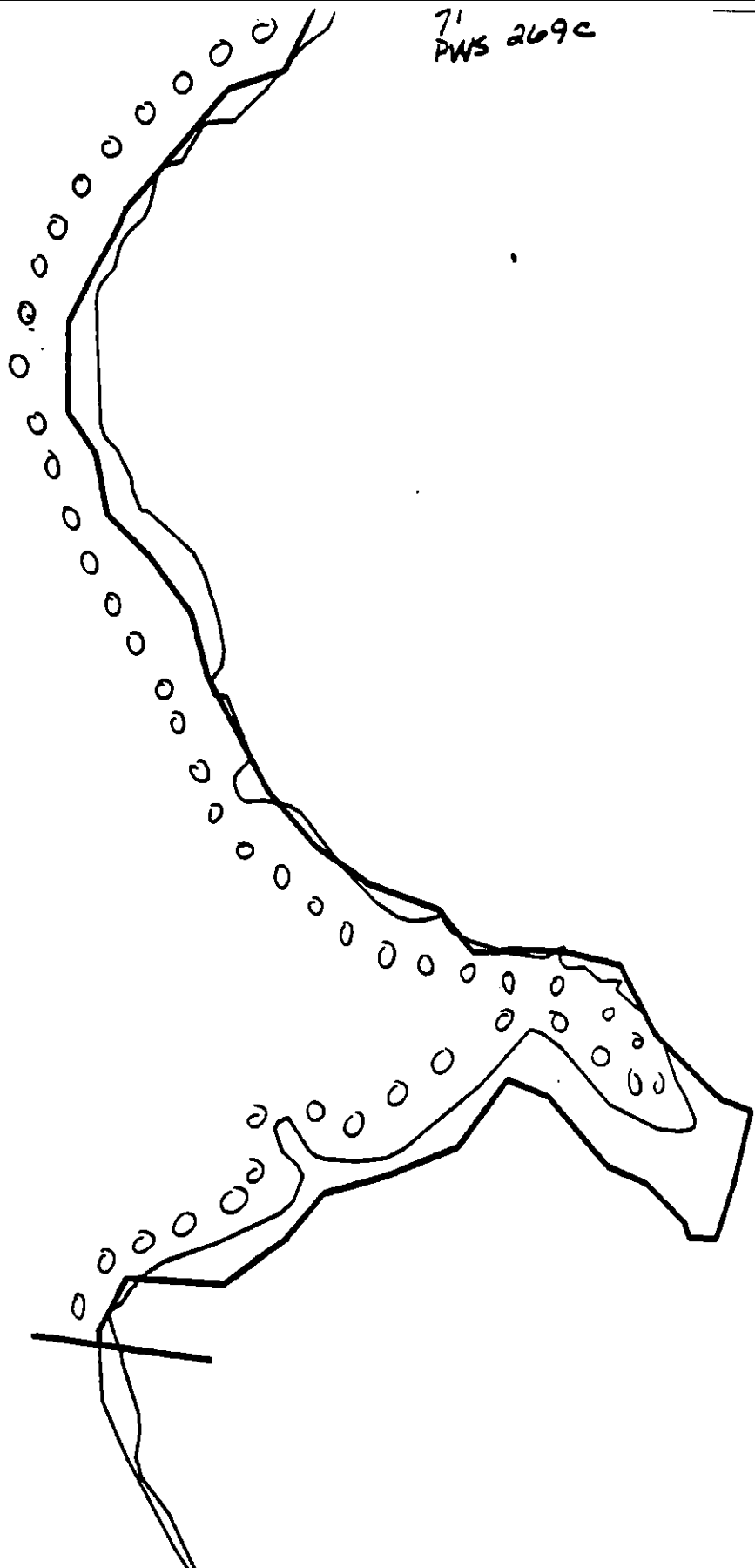
Map Key: PWS-269e

Name: Mike Fogel

Date: 4/7/90

Data Entered:

71  
PWS 269c



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

EV-7

ADEC Segment Length: 5439m



Map Key: PWS-269a  
Name: Mike Foyet  
Date: 4/7/90  
Data Entered:

1991 MAYSAP EVALUATION

SEGMENT: EV 007 SUB: A REGION: PWS SURVEY DATE: 4/26/91

ENVIRONMENTAL SENSITIVITIES:

Work Window(s) RESTRICTED 3/1 - 9/1

Ecological/Constraints (see page two for details) Eagle nest

ARCHAEOLOGICAL CONSTRAINTS:

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

SHPO Signature: \_\_\_\_\_ Date: \_\_\_\_\_

RECOMMENDATIONS:

INITIAL

TAG

FOSC

TREATMENT REQUIRED (Y or N)

N

Manual Pickup (Check as Req.)

Spot Washing

Bio-Customblen Only

Bio-Inipol/Customblen

Other \_\_\_\_\_

Other \_\_\_\_\_

COMMENTS:

INITIAL: \_\_\_\_\_

TAG: \_\_\_\_\_

FOSC: \_\_\_\_\_

TAG APPROVAL DATE: \_\_\_\_\_

FOSC APPROVAL DATE: \_\_\_\_\_

ADEC \_\_\_\_\_

FOSC \_\_\_\_\_

EXXON \_\_\_\_\_

USCG \_\_\_\_\_

NOAA \_\_\_\_\_

**ECOLOGICAL CONSTRAINTS  
1991 FIELD ACTIVITIES**

**Eagle Nest:** Access restricted from 3/1 to 9/1. USF&WS authorization required. Maintain 1000' vertical and 1/4 mile horizontal buffer.

# MAYSAP FIELD SHORELINE COMMENT SHEET

TEAM NO. 5 SEGMENT EV-7 SUBDIVISION A DATE 4/26/91

## ADEC

NAME John Hoyer SIGNATURE [Signature]

☒ NTR

Swirled portion of segment identified as previously having light oiling. Survey team identified 1 TB that was picked up. No further treatment recommended at this time.

## EXXON

NAME Martinez N.J. SIGNATURE [Signature]

☒ NTR

No treatable or recoverable oil. Team removed a few scattered asphalt patties. No further treatment recommended.

## LANDMANAGER

NAME Steve Ward OF CUC SIGNATURE [Signature]

☒ NTR

The asphalt that was present as patties was picked up. No sub-surface oil present. This area needs no further treatment.

## USCG/NOAA

NAME DREHER/HODGES

SIGNATURE [Signature]

☒ NTR

The tar patties found were recovered. No further oil found and no indication of subsurface oil.

5

**BIO** \_\_\_\_\_ **CRANK**

SEGMENT EV-7

LANDMANAGER WARD for CVC

SUBDIVISION A

USCG/NOAA DREHER/HODGES

DATE Apr. 1, 1961

TIME 06:14:     to 06:50

TIDE LEVEL 0 ft. to -1 ft.

ENERGY LEVEL: ☐ H ☐ M ☒ L

SURVEYED FROM: ☒ FOOT ☐ BOAT ☐ HELO

WEATHER: ☐ SUN ☒ CLOUDS ☐ FOG ☒ RAIN ☐ SNOW

**TOTAL LENGTH SHORELINE SURVEYED:** 475 m

NEAR SHORE SHEEN: ☐ BR ☐ RB ☐ SL ☒ NONE

EST. OIL CATEGORY LENGTH: W 0m M 0m N 0m VL 1m NO 474m US 5210m

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-**

FRAMES 1-5

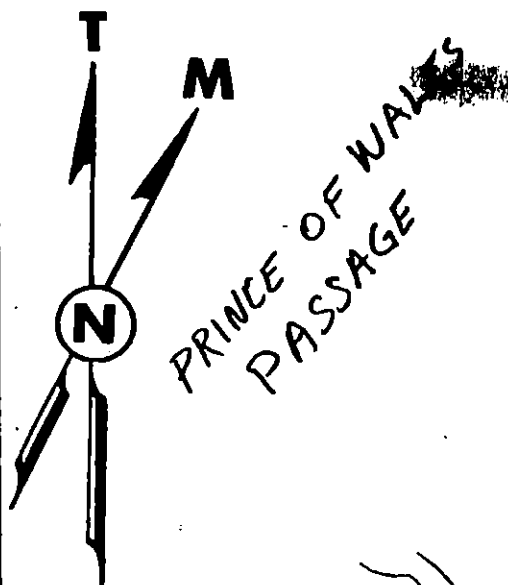
**SHED COLOR:** B = BROWN; R = RAINBOW; S = SILVER; N = NONE

OG COMMENTS: ONE TAR PATTIE RECOVERED. 20 cm  
DIAMETER PATCH OF SOR (MEDIUM) REMAINING

REVIEWED: F.W. 5/2/91

REVISOR: M.C. 5/8/91

MAYBAP 1991  
 OG SKETCH MAP  
 GREG CHANEY  
 TEAM 5  
 SEGMENT: EV-7-A  
 DATE: April 26 91  
 AIR P.#: PIM-C-005-372

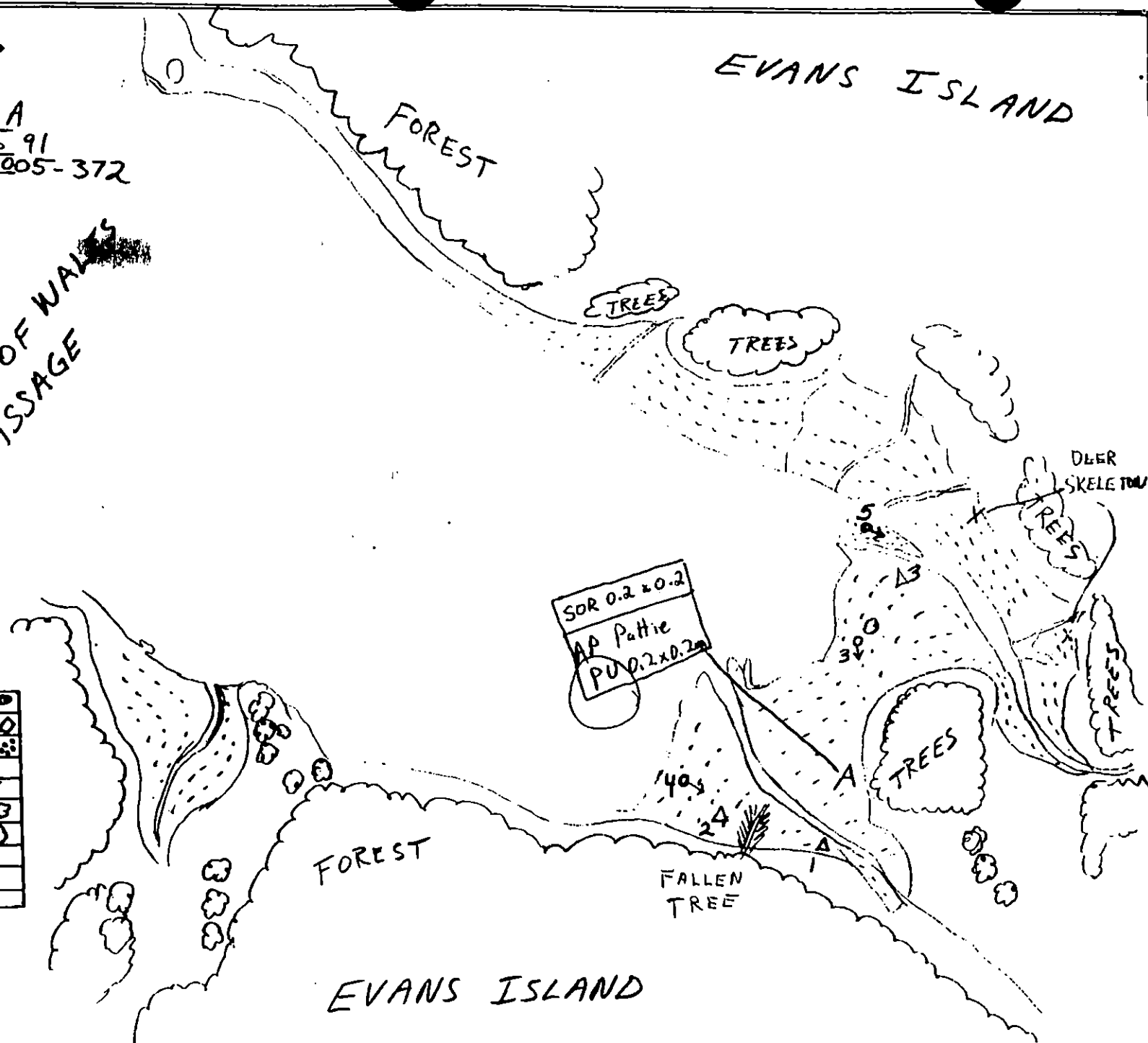


LEGEND

|            |  |
|------------|--|
| BEDROCK    |  |
| BOULDER    |  |
| FINE BED.  |  |
| DRIFT LOG  |  |
| GRASS      |  |
| BRUSH      |  |
| FOREST     |  |
| OILED PIT  |  |
| NO OIL PIT |  |
| PHOTO      |  |

SCALE

APPROX  
 70  
 METERS



REVIEWED: F.W. 5/2/91  
 REVISOR: M.C. 5/3/91

# MAYSAP BIOLOGICAL SUMMARY FORM

TEAM # 5

DATE 27 Apr '91

SEGMENT # EV-7

TIDAL HEIGHT (Range) ~0 → -1

SUBDIVISION A

BIOLOGIST Crank

SEA STATE 0

WIND SPEED/DIRECTION 0

PHOTOGRAPHS: ROLL #

FRAME #

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

(A) Area is located low in U1TZ, approximately 15 m North of stream bed. Rare barnacles located at site. No other biota in immediate vicinity. Five meters South of site there is a sparse *Fucus* and tar-spot algae patch. AP pathtis were picked up without disturbance to the biota.

L1TZ is a dense clam bed utilized by others (digs were present). Clam species present includes *Protothaca*, *Saxidomus*, *Hiatella*, *Tresas* (horn clam) and *Macoma* (barnacle). Continuous moderate barnacles along cobble in L1TZ; sparse in MITZ, rare barnacles in the U1TZ (set present). Sparse intercobble mussle bed in the MITZ. Sparse *Fucus* in L1TZ and rare patches in MITZ increasing to moderate density along stream beds. Conceptacles just beginning to show signs of maturation. Sparse concentration of *Littorina* and limpets, rare *Nucella* and eggs present. *Ulva* present in L1TZ. *Scytosiphon* is present in L1TZ and MITZ. Two sunflower stars (*Pycnopodia*) were present in L1TZ. Eelgrass beds begin at -2' tide level. Deer skeleton found in U1TZ.

The clam bed and eelgrass bed makes this area sensitive to both foot and boat traffic. Intertidal biota appears to be healthy.

## WILDLIFE OBSERVATIONS

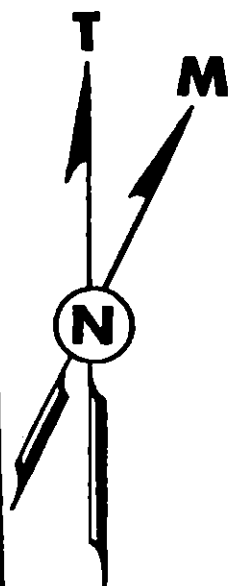
TO BE COMPLETED IN ALL SUBDIVISIONS

| BIRDS            | # OF SPECIES | TOTAL BIRDS | FISH OBSERVED SPECIES PRESENT |
|------------------|--------------|-------------|-------------------------------|
| Eagles           |              |             | 1 dead Irish Lord juv.        |
| Seabirds         |              |             | 3 dead Majestic Squids        |
| Waterfowl        | 2            | 10          | Deer tracks                   |
| Gulls/kittiwakes | 1            | 4           |                               |
| Shorebirds       |              |             |                               |
| Corvids          | 2            | 5           |                               |
| Other Birds      |              |             |                               |

| MARINE MAMMALS      | # OBSERVED | LAND MAMMALS SPECIES | # OBSERVED |
|---------------------|------------|----------------------|------------|
| Sea Otters          |            | River Otter 1        | 1          |
| Pinnipeds (specify) |            |                      |            |
| Whales (specify)    |            |                      |            |
|                     |            |                      |            |

Shoreline subdivision map showing important biological features attached.

MAYBAP 1991  
 OG SKETCH MAP: Bio Sketch Map  
 GREG CHANEY: Crank  
 TEAM 5  
 SEGMENT: EV-7-A  
 DATE: April 26 91  
 AIR P.N: PIM-C-005-372

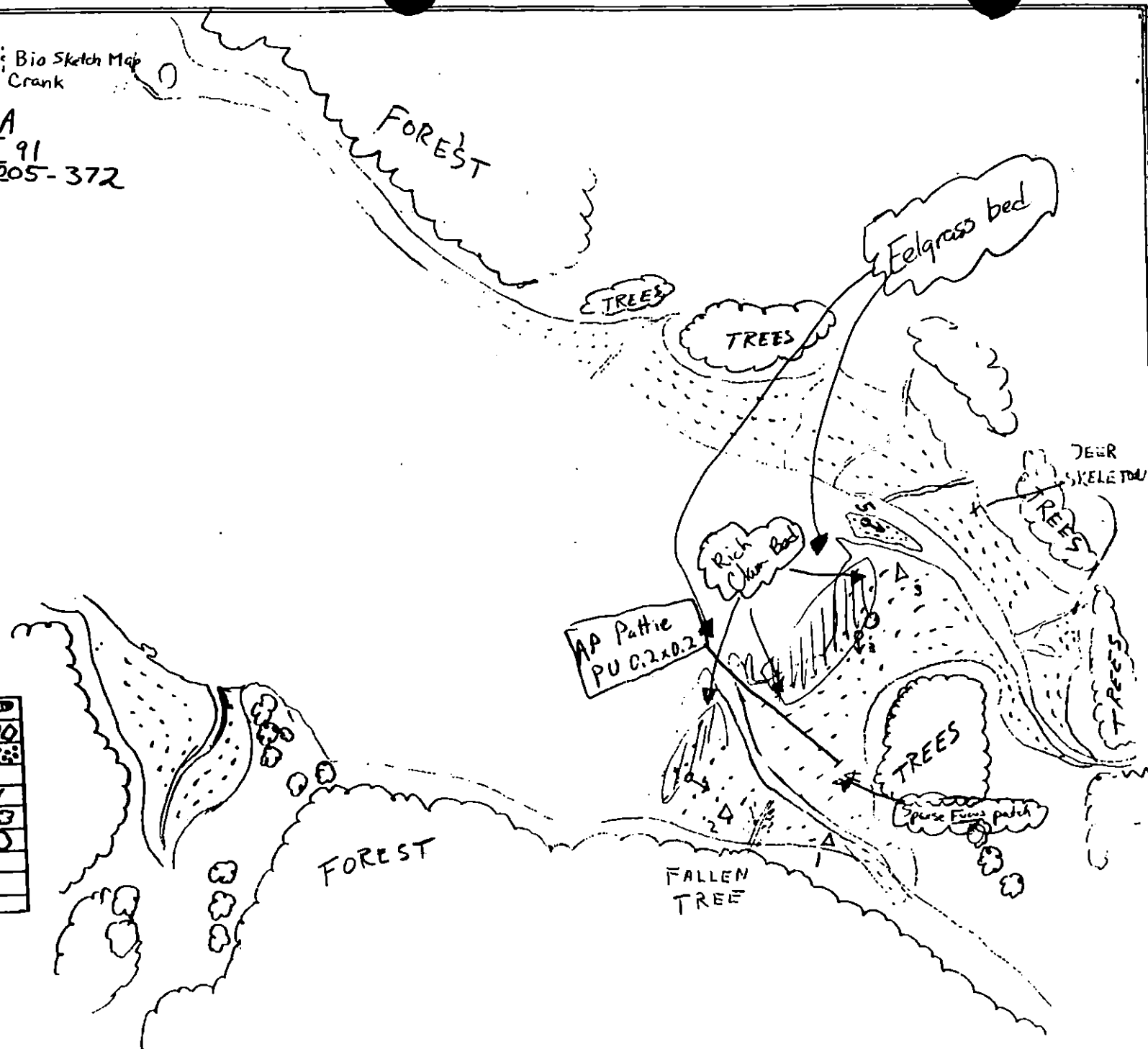


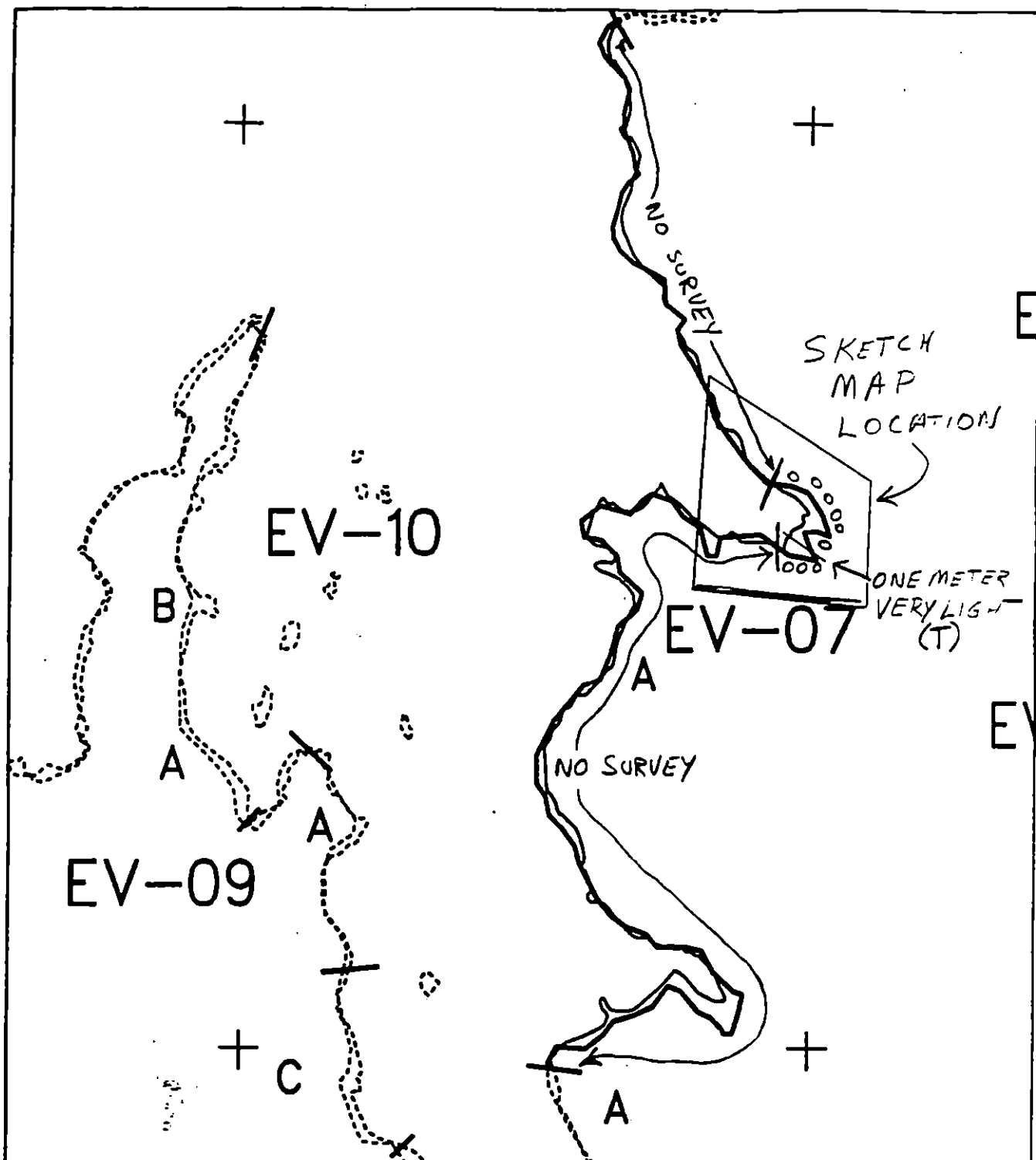
# LEGEND

|            |  |
|------------|--|
| BEDROCK    |  |
| BOULDERS   |  |
| FINE BED.  |  |
| DRIFT LOG  |  |
| GRASS      |  |
| BRUSH      |  |
| FOREST     |  |
| OILED PIT  |  |
| NO OIL PIT |  |
| PHOTO      |  |

## SCALE

APPROX  
 70  
 METERS





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

EV007 A  
 ADEC Subsegment Length: 5885m  
 METERS  
 0 400 800  
 AK State Plane Zone 4  
 pr00700



Subdivision Field Map  
 Map Key: PWSEV007Ae  
 Name: Greg Chaney  
 Date: April 27/91  
 Date Entered:

REVIEWED: F.W. 5/2/91  
 REVIEWED: M.C. 5/3/91

# 1991 MAYSAP EVALUATION

SEGMENT: EV 007 SUB: A REGION: PWS SURVEY DATE: 4/26/91

## ENVIRONMENTAL SENSITIVITIES:

Work Window(s) RESTRICTED 3/1 - 9/1

Ecological/Constraints (see page two for details) Eagle nest

## ARCHAEOLOGICAL CONSTRAINTS:

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

SHPO Signature: Charles E. Holmes Date: 5/10/91

## RECOMMENDATIONS:

|                               | INITIAL  | TAG | FOSC     |
|-------------------------------|----------|-----|----------|
| TREATMENT REQUIRED (Y or N)   | <u>N</u> |     | <u>N</u> |
| Manual Pickup (Check as Req.) |          |     |          |
| Spot Washing                  |          |     |          |
| Bio-Customblen Only           |          |     |          |
| Bio-Inipol/Customblen         |          |     |          |
| Other                         |          |     |          |
| Other                         |          |     |          |

## COMMENTS:

INITIAL: \_\_\_\_\_

TAG: \_\_\_\_\_

FOSC: \_\_\_\_\_

TAG APPROVAL DATE: MAY 10 1991 FOSC APPROVAL DATE: 5/15/91

ADEC [Signature]

FOSC

[Signature]  
E. E. PAGE, CDR, USCG  
CHIEF OF STAFF, FOSC

EXXON [Signature]

USCG [Signature]

NOAA [Signature]

**ECOLOGICAL CONSTRAINTS  
1991 FIELD ACTIVITIES**

**Eagle Nest:** Access restricted from 3/1 to 9/1. USF&WS authorization required. Maintain 1000' vertical and 1/4 mile horizontal buffer.

# MAYSAP FIELD SHORELINE COMMENT SHEET

TEAM NO. 5 SEGMENT EV-7 SUBDIVISION A DATE 4/26/91

## ADEC

NAME

John Hayes

SIGNATURE

*[Signature]*

☒ NTR

Sampled portion of segment identified as previously having light oiling. Survey team identified 1 TB that was picked up. No further treatment recommended at this time.

## EXXON

NAME

Martinez N.J.

SIGNATURE

*[Signature]*

☒ NTR

No treatable or recoverable oil. Team removed a few scattered asphalt patches. No further treatment recommended.

## LANDMANAGER

NAME

Steve Ward

OF

CUC

SIGNATURE

*[Signature]*

☒ NTR

The asphalt that was present as patches was picked-up. No sub-surface oil present. This area needs no further treatment.

## USCG/NOAA

NAME

DREHER/HODGES

SIGNATURE

*[Signature]*

☒ NTR

The tar patches found were recovered. No further oil found and no indication of subsurface oil.

SEGMENT EV-7

SUBDIVISION A

DATE April 26, 1911

ENERGY LEVEL: ☐ H ☐ M ☒ L

TOTAL LENGTH SHORELINE SURVEYED: 475 m NEAR SHORE SHEEN: ☐ BR ☐ RB ☐ SL ☒ NONE

EST. OIL CATEGORY LENGTH: W 0 m M 0 m N 0 m VL 1 m NO 474 m US 5210 m

DISTRIBUTION: C = 91-100%; S = 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-**

5 - 2 FRAMES 1-5

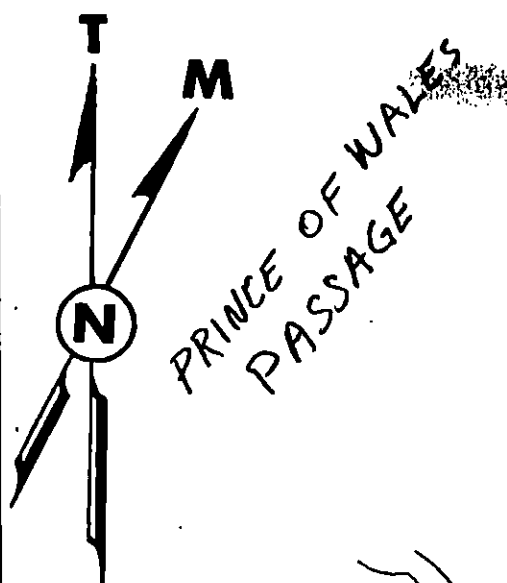
SHEEN COLOR: B = BROWN; R = RAINBOW; S = SILVER; N = NONE

OG COMMENTS: ONE TAR PATTIE RECOVERED. 20 cm DIAMETER PATCH OF SOR (MEDIUM) REMAINING.

REVIEWED: F.W. 5/2/91

REVIEWED: M.C. 5/8/91

MAYBAP 1991  
 DG SKETCH MAP  
 GREG CHANEY  
 TEAM 5  
 SEGMENT: EV-7-A  
 DATE: April 26 91  
 AIR P.#: PIM-C-005-372

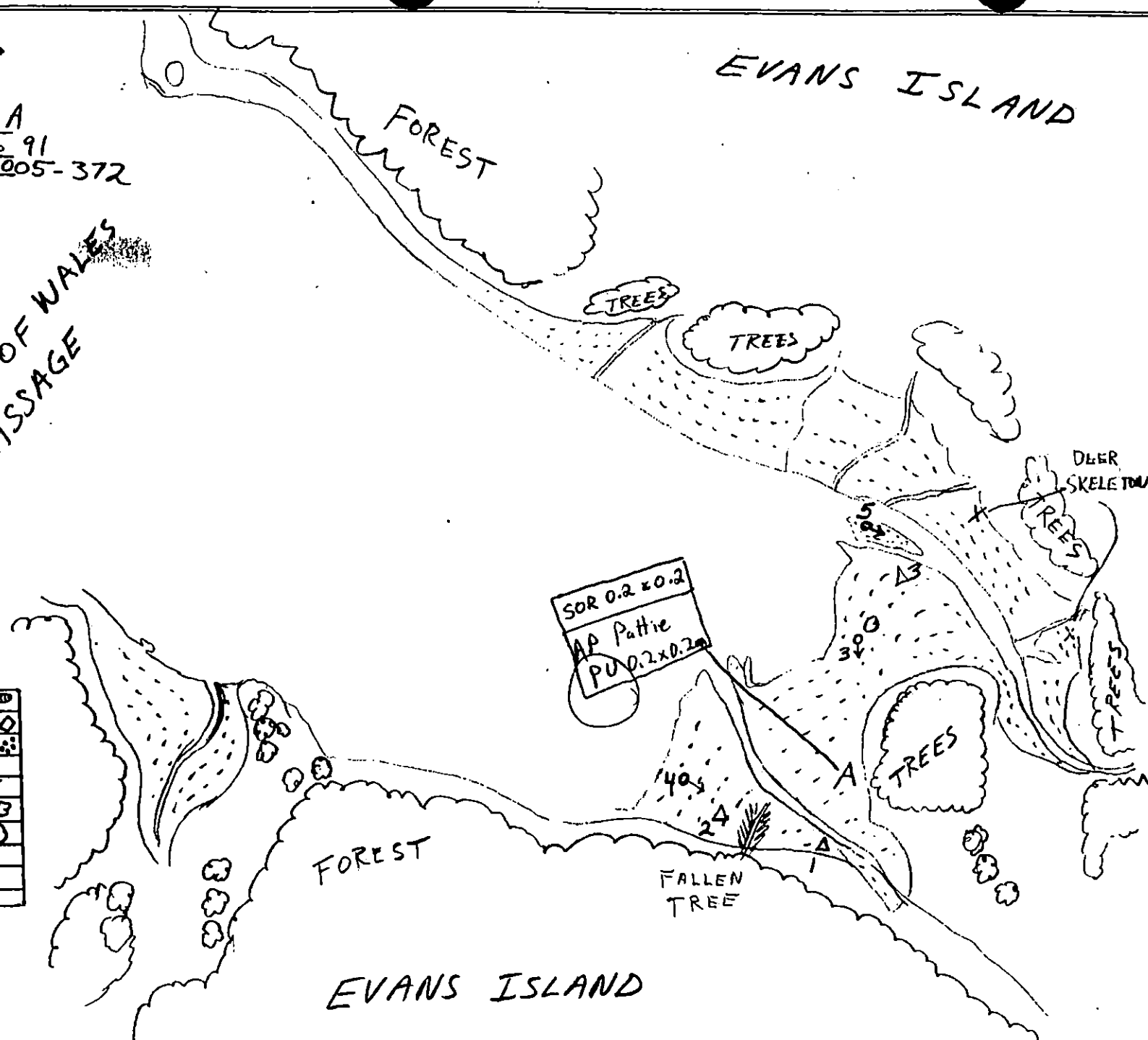


LEGEND

|            |  |
|------------|--|
| BEDROCK    |  |
| BOULDERS   |  |
| FINE BED.  |  |
| DRIFT LOG  |  |
| GRASS      |  |
| BRUSH      |  |
| FOREST     |  |
| OILED PIT  |  |
| NO OIL PIT |  |
| PHOTO      |  |

SCALE

APPROX  
70  
METERS



Reviewed: F.W. S/a/91  
 Reviewed: M.C. S/a/91

## MAYSAP BIOLOGICAL SUMMARY FORM

TEAM # 5

DATE 27 Apr '91

SEGMENT # EV-7

TIDAL HEIGHT(Range) ~ 0 → -1

SUBDIVISION A

BIOLOGIST Crank

SEA STATE 0

WIND SPEED/DIRECTION 0

PHOTOGRAPHS: ROLL #

FRAME #

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

(A) Area is located low in U1TZ approximately 15 m North of stream bed. Rare barnacles located at site. No other biota in immediate vicinity. Five meters South of site there is a sparse *Fucus* and tar-spot algae patch. AP pathtis were picked-up without disturbance to the biota.

L1TZ is a dense clam bed utilized by otters (digs were present). Clam species present includes *Protothaca*, *Saxidomus*, *Hiatella*, *Tresas* (horse clam) and *Macoma* (bartholomew). Continuous moderate barnacles along cobble in L1TZ; sparse in MITZ, rare barnacles in the U1TZ (set present). Sparse intercobble mussle bed in the MITZ. Sparse *Fucus* in L1TZ and rare patches in MITZ increasing to moderate density along stream beds. Conceptacles just beginning to show signs of maturation. Sparse concentration of *Littorina* and limpets, rare *Nucella* and eggs present. *Ulva* present in L1TZ. *Scytosiphon* is present in L1TZ and MITZ. Two sunflower stars (*Pycnopodia*) were present in L1TZ. Eelgrass beds begin at -2' tide level. Deer skeleton found in U1TZ.

The clam bed and eelgrass bed makes this area sensitive to both foot and boat traffic. Intertidal biota appears to be healthy.

## WILDLIFE OBSERVATIONS

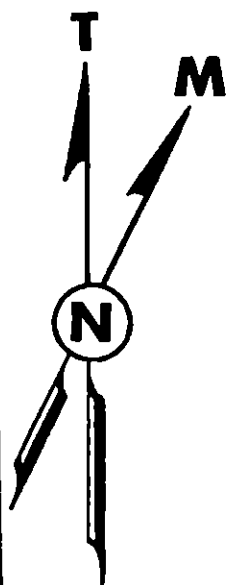
TO BE COMPLETED IN ALL SUBDIVISIONS

| BIRDS            | # OF SPECIES | TOTAL BIRDS | FISH OBSERVED<br>SPECIES PRESENT |
|------------------|--------------|-------------|----------------------------------|
| Eagles           |              |             | 1 dead Irish Lord juv.           |
| Seabirds         |              |             | 3 dead Majestic Squids           |
| Waterfowl        | 2            | 10          | Deer tracks                      |
| Gulls/Kittiwakes | 1            | 4           |                                  |
| Shorebirds       |              |             |                                  |
| Corvids          | 2            | 5           |                                  |
| Other Birds      |              |             |                                  |

| MARINE MAMMALS     | # OBSERVED | LAND MAMMALS<br>SPECIES | # OBSERVED |
|--------------------|------------|-------------------------|------------|
| Sea Otters         |            | River Otter 1           | 1          |
| Pinnipeds(specify) |            |                         |            |
| Whales(specify)    |            |                         |            |
|                    |            |                         |            |

Shoreline subdivision map showing important biological features attached.

MAYSAP 1991  
 06 SKETCH MAP: Bio Sketch Map  
 GREG CHANEY: Crank  
 TEAM 5  
 SEGMENT: EV-7-A  
 DATE: April 26 91  
 AIR P.H.: PIM-C-005-372

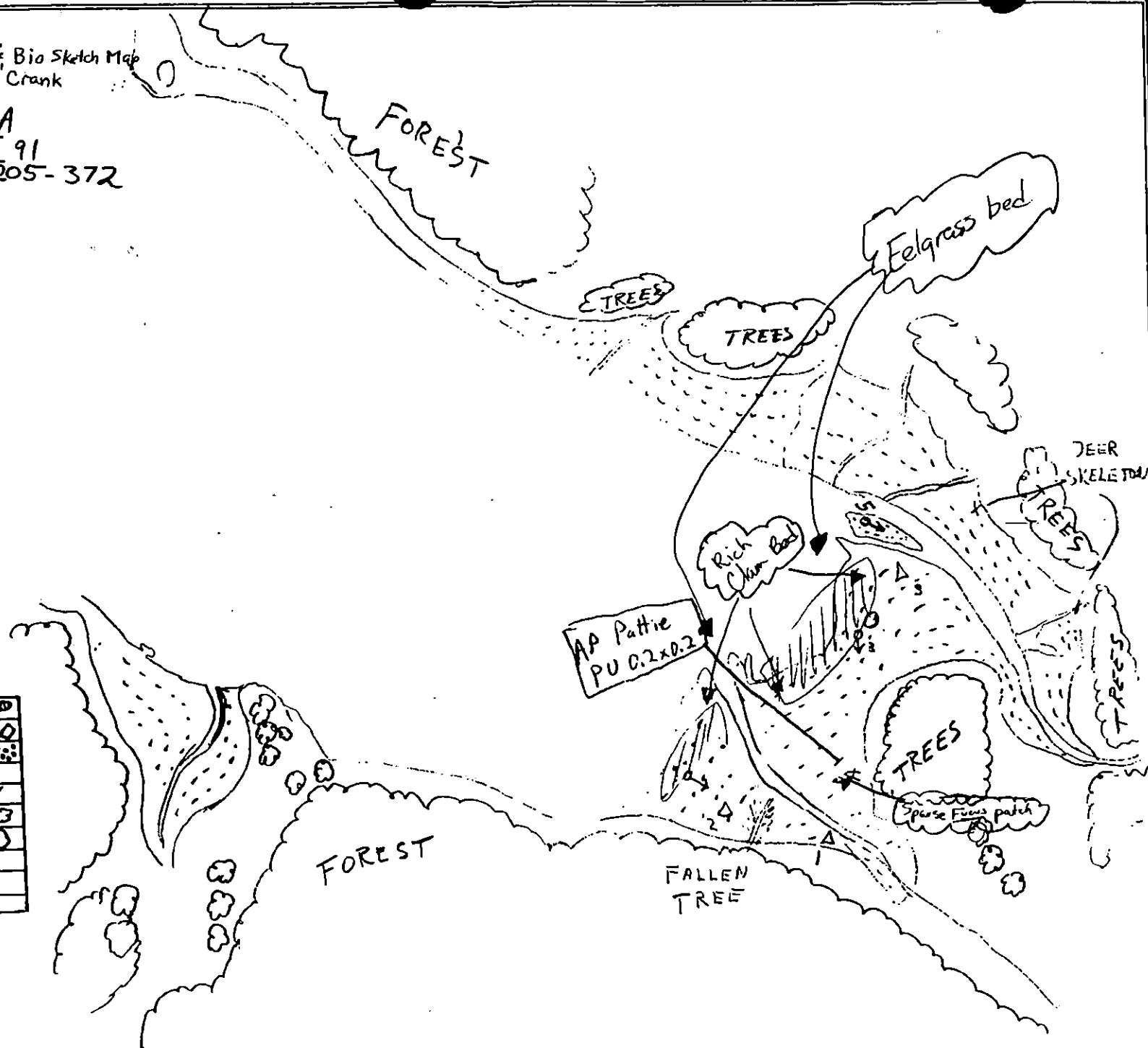


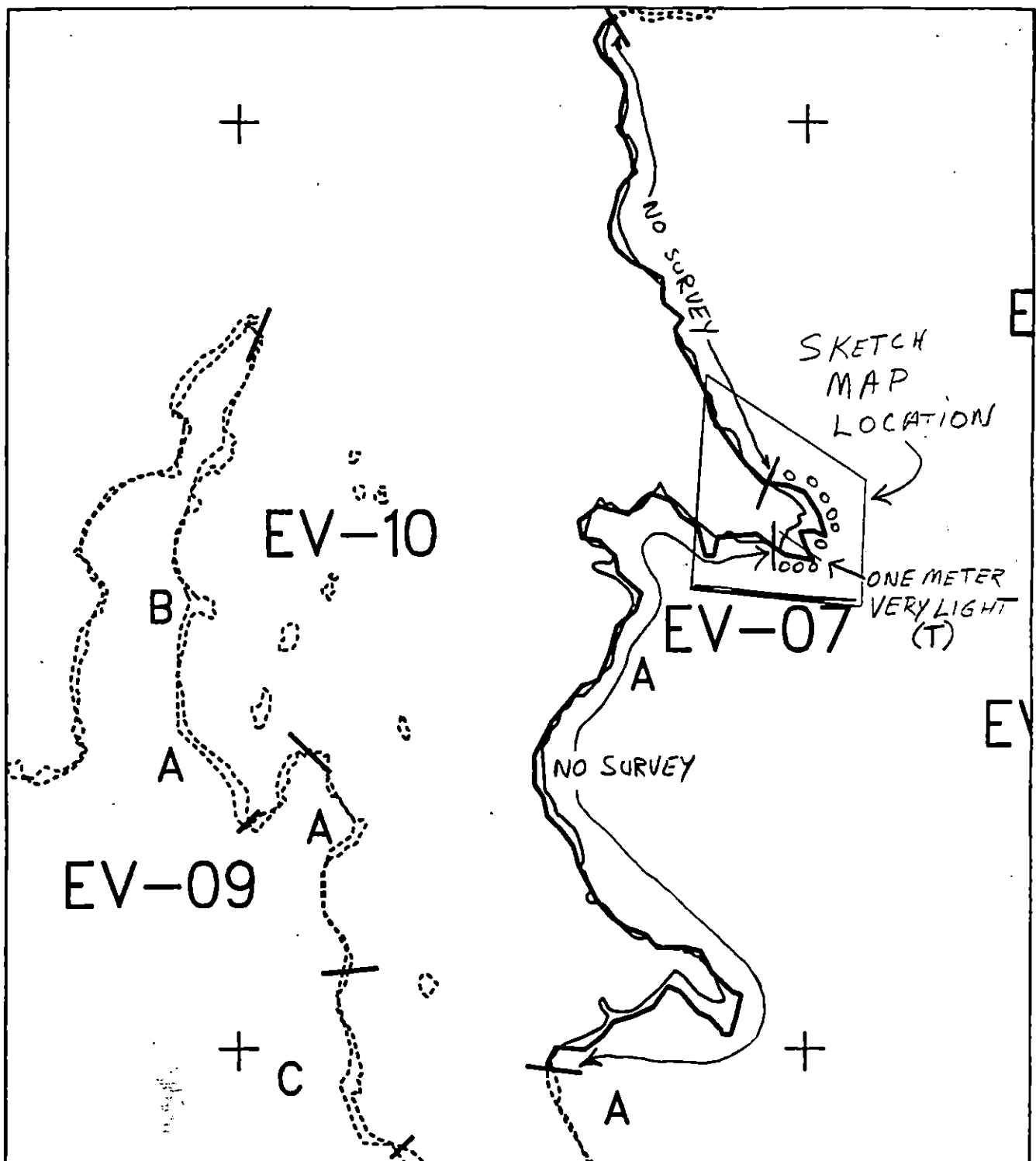
LEGEND

|            |  |
|------------|--|
| BEDROCK    |  |
| BOULDERS   |  |
| FINE SED.  |  |
| DRIFT LOG  |  |
| GRASS      |  |
| BRUSH      |  |
| FOREST     |  |
| OILED PIT  |  |
| NO OIL PIT |  |
| PHOTO      |  |

SCALE

APPROX  
 70  
 METERS





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

EV007 A  
 ADEC Subsegment Length: 5885m  
 METERS  
 0 400 800  
 AK State Plane Zone 4  
 pr007aa



Subdivision Field Map  
 Map Key: PWSEV007Aa  
 Name: Leg. Chaney  
 Date: April 27/91  
 Data Entered:

REVIEWED: F.W. 5/2/91  
 REVIEWED: M.C. 5/3/91

ANADROMOUS FISH STREAM EVALUATION

SEGMENT ST/ EV-07 STREAM NO: 226-40-16559 DATE 4/22/90

**SEGMENT ENVIRONMENTAL SENSITIVITIES AND TIME CONSTRAINTS:**

Salmon stream no's: 226-40-16550 (P, 12/89), 226-40-16563 (Ps, 12/89),  
226-40-16557 (Ps, 12/89), 226-40-16561 (Ps, 12/89)

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

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

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

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

7II Subsistence area: Deer harvesting (8/15 to 2/28)

See attached Ecological Constraint sheet for specific constraints and contacts.

**SUBDIVISION ECOLOGICAL CONSTRAINTS:**

Avoid any unnecessary disturbance or damage to unoiled biota and substrate. Subject stream is located within Subdivision A (1 of 1).

**ARCHAEOLOGICAL CONSTRAINTS:**

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

SHPO SIGNATURE: J. David McMahon

DATE: 5/8/90

Subsurface Oil Observed: Yes \_\_\_\_\_ No X Maximum Depth \_\_\_\_\_

**RECOMMENDATIONS:**

X No Treatment Recommended

\_\_\_\_\_ Treatment Recommended

\_\_\_\_\_ Manual Pickup

\_\_\_\_\_ Bioremediation

\_\_\_\_\_ Tarmat Removal

\_\_\_\_\_ Snare/Absorbent Booms

\_\_\_\_\_ Oil Snares (pom poms)

\_\_\_\_\_ Absorbents (pads, rolls, etc)

\_\_\_\_\_ Spot Washing: \_\_\_\_\_ Wands

\_\_\_\_\_ Beach Cleaner

\_\_\_\_\_ Other (see comments)

COMMENTS: \_\_\_\_\_

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

TAG COMMENTS: \_\_\_\_\_

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

TAG APPROVAL DATE: 5/7/90

ADEC Art Weimer Art Weimer

EXXON Andy Tish Andy Tish

NOAA Gary Pattee Gary Pattee

USCG G.A. Reiter G.A. Reiter

FOSC: W L

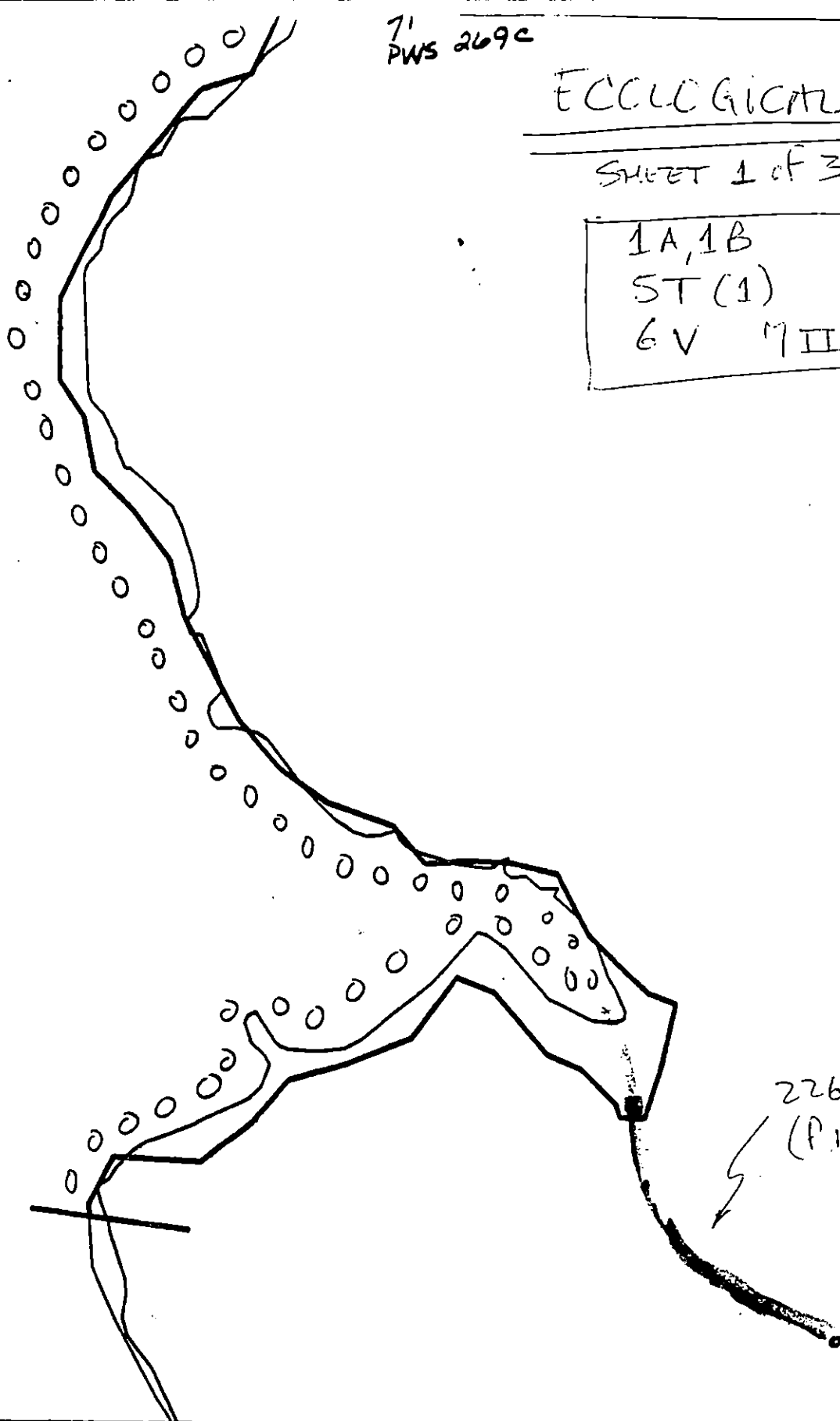
DATE: 5-8-90

71  
PWS 269c

# ECCOLOGICAL MAP

SHEET 1 of 3

1A, 1B  
ST (1)  
6V 7II



226-40-165X  
(P.12/E-1)

XXXX Wide

//// Medium

---- Narrow

TTTT Very Light

0000 No Oil

EV-7

ADEC Segment Length: 5439m



Map Key: PWS-269a

Name: Mike Foyer

Date: 4/7/90

Data Entered:

226-40-16557  
(P. 12/89)

226-40-1656  
(P. 12/89)

226-40-1656  
(P. 12/89)

226-40-16559  
(P. 12/89)

EV-07

XXXX Wide

/// Medium

--- Narrow

TTTT Very Light

0000 No Oil

EV-7

ADEC Segment Length: 5439m



Map Key: PWS-269c

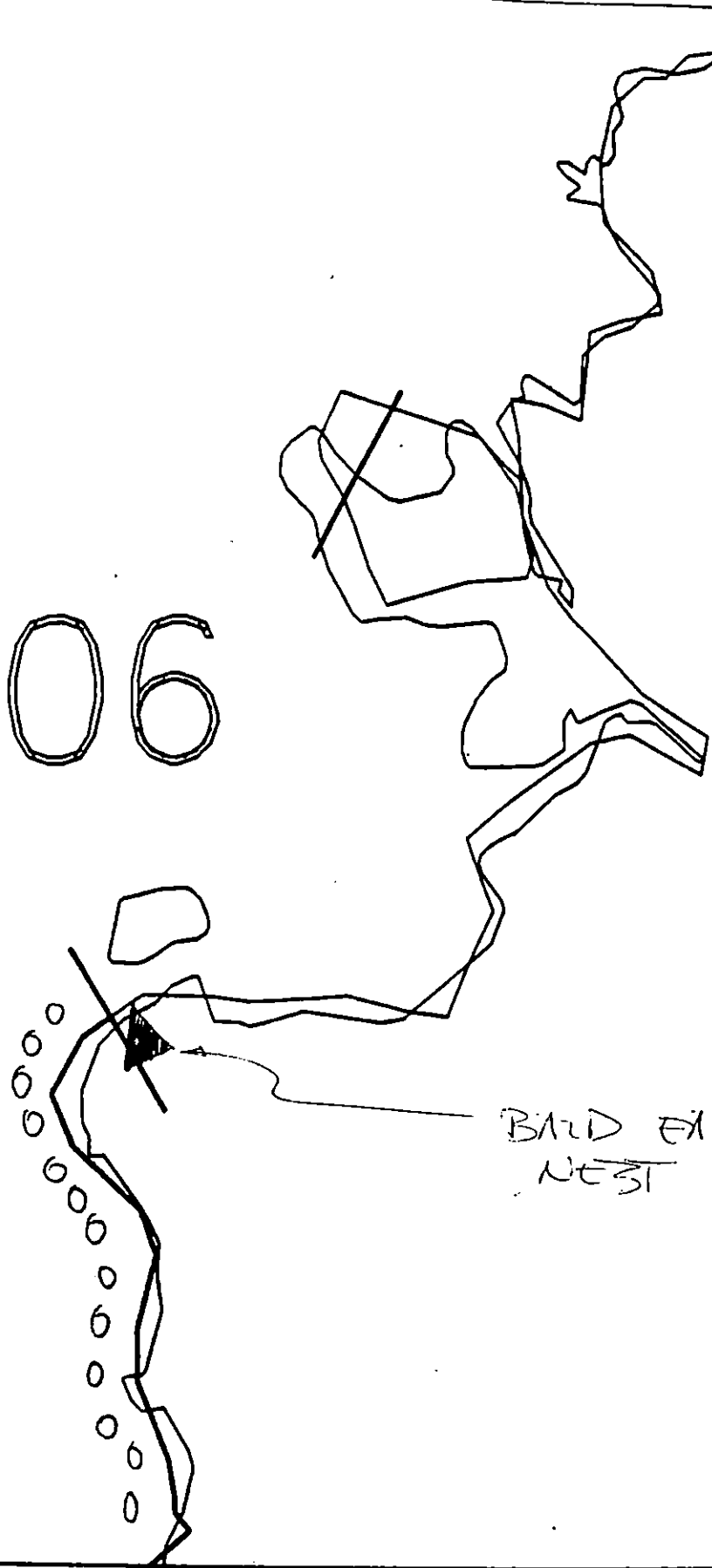
Name: Mike Fogel

Date: 4/7/90

Data Entered:



EV-06



BIRD EAGLE  
NEST

XXXX Wide

//// Medium

---- Narrow

TTTT Very Light

0000 No Oil

EV-7

ADEC Segment Length: 5439m



Map Key: PWS-269e

Name: Mike Fogel

Date: 4/7/90

Data Entered:

400  
One

## DESCRIPTION

RECOMMENDATIONS: NO TREATMENT REQUIRED

I agree with recommendations, M. A. FORTIN

## 48 OIL DISTRIBUTION DIAGRAM

3-4 TAR SPATTERS (MAXIMUM DIAMETER  
10 CM) FOUND IN ENTIRE INTERTIDAL  
ZONE

VEGETATION

BEDROCK

VEGETATION

ANADROMOUS FISH STREAM ASSESSMENT

REGION: PRINCE WILLIAM SOUND

SEGMENT: EV-07

STREAM NO: 226-40-16559

ANADROMOUS FISH STREAM EVALUATION

SEGMENT ST/ EV-07 STREAM NO: 226-40-16559 DATE 4/22/90

**SEGMENT ENVIRONMENTAL SENSITIVITIES AND TIME CONSTRAINTS:**

Salmon stream no's: 226-40-16550 (P, 12/89), 226-40-16563 (Ps, 12/89),  
226-40-16557 (Ps, 12/89), 226-40-16561 (Ps, 12/89)

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

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

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

7II Subsistence area: Deer harvesting (8/15 to 2/28)

See attached Ecological Constraint sheet for specific constraints and contacts.

**SUBDIVISION ECOLOGICAL CONSTRAINTS:**

Avoid any unnecessary disturbance or damage to unoiled biota and substrate. Subject stream is located within Subdivision A (1 of 1).

**ARCHAEOLOGICAL CONSTRAINTS:**

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

SHPO SIGNATURE: \_\_\_\_\_ DATE: \_\_\_\_\_

Subsurface Oil Observed: Yes \_\_\_\_\_ No X Maximum Depth \_\_\_\_\_

**RECOMMENDATIONS:**

X No Treatment Recommended

\_\_\_\_\_ Treatment Recommended

\_\_\_\_\_ Manual Pickup

\_\_\_\_\_ Bioremediation

\_\_\_\_\_ Tarmat Removal

\_\_\_\_\_ Snare/Absorbent Booms

\_\_\_\_\_ Oil Snares (pom poms)

\_\_\_\_\_ Absorbents (pads, rolls, etc)

\_\_\_\_\_ Spot Washing: \_\_\_\_\_ Wands

\_\_\_\_\_ Beach Cleaner

\_\_\_\_\_ Other (see comments)

COMMENTS: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

TAG COMMENTS: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

TAG APPROVAL DATE: \_\_\_\_\_

ADEC \_\_\_\_\_

EXXON \_\_\_\_\_

NOAA \_\_\_\_\_

USCG \_\_\_\_\_

FOSC: \_\_\_\_\_ DATE: \_\_\_\_\_

# 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 Suzumoto 424-7511
- 1I Gill net area (6/7 to 8/31)  
 1J Purse seine area (7/20 to 9/30)  
 1K Purse seine hook-off (7/20 to 9/30)  
 1L Set net sites (6/11 to 7/25)  
 Contact ADF&G for specific dates, locations and constraints. Restrict boat and air traffic to essential minimum. When set net sites are present (1L) restrict beach operations to essential minimum as authorized by ADF&G. If plans for treatment include methods such as hot water wash or Inipol application which might affect nearshore oil or toxicity levels, contact ADF&G for consultation and authorization.  
 AGENCY CONTACT PERSON: ADF&G James Brady 424-3212
- 2M Herring spawning (4/1 to 6/15)  
 Contact ADF&G for confirmation - dates and locations may vary. Restrict boat traffic to essential minimum. Avoid damage to unopened intertidal and subtidal algae and seagrass. If plans for treatment include methods such as hot water wash or Inipol application which might affect nearshore oil or toxicity levels, contact ADF&G for consultation and authorization.  
 AGENCY CONTACT PERSON: ADF&G Evelyn Biggs 424-3235
- 3N Harbor seal and sea lion pupping (5/15 to 7/1)  
 3O, 3Q Harbor seal and sea lion molting (8/15 to 9/15)  
 Restrict boat and air traffic to essential minimum. No personnel within 400m. Aircraft to maintain 800m horizontal and 300m vertical distance from haulouts. No application of Inipol within two weeks of arrival dates (work window at these sites is limited to 7/2 to 7/31). Contact ADF&G and USFWS prior to treatment for confirmation.  
 AGENCY CONTACT PERSON: US National Marine Fisheries Service Steve Zimmerman 586-7235  
 ADF&G Don Calkins 267-2403
- 5R Seabird colony (5/1 to 9/1)  
 Restrict air and boat traffic to essential minimum. No personnel within 800m. Aircraft to maintain 800m horizontal, 300m vertical distance from colony. Contact USFWS prior to treatment.  
 AGENCY CONTACT PERSON: USFWS Jill Parker 786-3377
- 5S Shorebird/waterfowl concentration (4/1 to 5/15)  
 Restrict all activity to essential minimum, especially air traffic. Contact USFWS and ADF&G for confirmation.  
 AGENCY CONTACT PERSON: USFWS Jill Parker 786-3377  
 ADF&G Tom Roth 267-2206
- ✓ 5T All Bald Eagle nests (3/1 to 6/1)  
 Active Bald Eagle nests (3/1 to 9/1)  
 Restrict air traffic and all disturbance to essential minimum. No personnel within 400m 3/1 to 6/1. Air approach and takeoff from and to seaward only; maintain 800m horizontal, 300m vertical distance from nests. Contact USFWS prior to treatment for confirmation of dates.  
 AGENCY CONTACT PERSON: USFWS Jill Parker 786-3377
- 6U Recreation: Tent sites (8/1 to 9/15)  
 6V Anchorages (8/1 to 9/15)  
 6W Forest Service cabins (8/1 to 9/15)  
 6X Lodge (8/1 to 9/15)  
 6Y Special use destination
- 7Z Subistence area: Salmon harvesting (5/1 to 9/30)  
 7HH Finfish harvesting  
 Deer harvesting (8/15 to 2/28)  
 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

6/55

## FIELD SHORELINE COMMENT SHEET

SEGMENT ST 1 EV 007 SUBDIVISION: 16 55 9 DATE 4/22/90

USCG

NAME

Capt McMAHON

SIGNATURE

[Signature]☒ NO TREATMENT RECOMMENDED  
COMMENTS☐ TREATMENT SUGGESTED

ADDFLT

REC

MICHAEL WIEDNER

NAME

No team member

SIGNATURE

[Signature]☒ NO TREATMENT RECOMMENDED  
COMMENTS☐ TREATMENT SUGGESTED

LAND MANAGER

NAME

No team member

SIGNATURE

[Signature]☐ NO TREATMENT RECOMMENDED  
COMMENTS☐ TREATMENT SUGGESTED

4/55

ASC # 226-40-16539

Segment EV-007

Observations The only observed oil impacts at this site were 3 to 4 widely scattered tar splatters and one asphalt chunk 8 cm in diameter.

Treatment Recommendations If future observations do not reveal significant quantities of buried oil, no treatment is recommended.

WATERLINE OILING SUMMARY (ANAD.) 4/55 REVISION NO. 0

OG WILLIAM LEID USCG McMAHON SEGMENT ST/ EV007  
BIO MICHAEL FAWCETT LAND REP Tom CROWE ADFG STRIP 226-40-165591 OF  
EXXON GUS GARCIA ADFG MIKE WIDMER TIME 18:00 to 19:20  
TEAM NO. 15 TIDE LEVEL 1 FT DATE 22 / APR / 90  
EST. SUBDIVISION LENGTH: 40 m ☒ Sun ☐ Clouds ☐ Fog ☐ Rain ☐ Snow  
UPLANDS DESCRIPTION: ☐ Grass ☒ Forest ☒ Rock  
SURVEYED FROM: Foot ☐ Boat ☐ Helo  
SURFACE SEDIMENTS: R 10 % B 10 % C 45 % P 45 % G 0 % S 0 % M 0 % V 0  
SLOPE: Long 25 % Hang 25 % Vert 0 % WAVE EXPOSURE: ☒ Low ☐ Med ☐ High  
OIL CATEGORY LENGTH: W 0 m M 0 m N 0 m VL 0 m NO 4

SURFACE OIL

| CHARACTER        | DISTRIBUTION |   |   |    | OIL / FILM COLOR |   |   |   | IMPACTED ZONES |   |   |   |
|------------------|--------------|---|---|----|------------------|---|---|---|----------------|---|---|---|
|                  | R            | B | P | NO | 1                | 2 | 3 | 4 | CU             | U | U | U |
| ASPHALT PAVEMENT |              |   |   |    |                  |   |   |   |                |   |   |   |
| POOLED           |              |   |   |    |                  |   |   |   |                |   |   |   |
| COVER            |              |   |   |    |                  |   |   |   |                |   |   |   |
| COAT             |              |   |   |    |                  |   |   |   |                |   |   |   |
| STAIN            |              |   |   |    |                  |   |   |   |                |   |   |   |
| MOUSSE           |              |   |   |    |                  |   |   |   |                |   |   |   |
| PATTIES          |              |   |   |    |                  |   |   |   |                |   |   |   |
| TARBALLS         |              |   |   |    |                  |   |   |   |                |   |   |   |
| FILM             |              |   |   |    |                  |   |   |   |                |   |   |   |
| NO OIL           |              |   |   |    |                  |   |   |   | X              | X | X | X |

PAVEMENT H F S 0 sq. m by 0  
PATTIES / TARBALLS 0 BA  
NEAR SHORE SHEEN? (NO) BR RW SL :

| OILED DEBRIS | AMOUNT |    |    |
|--------------|--------|----|----|
|              | SM     | MD | LG |
| Logs         |        |    |    |
| Vegetation   |        |    |    |
| Trash        |        |    |    |
| Debris       |        |    |    |

Did you Coll DEBRIS  
☐ YES ☒ NO  
TYPE \_\_\_\_\_  
#BAGS \_\_\_\_\_

Photographs:  
Roll No. \_\_\_\_\_  
Frames \_\_\_\_\_

SUBSURFACE OIL

| PIT NO. | PIT DEPTH (cm) | SUBSURFACE OIL CHARACTER |    |    |    |    | OILED INTERVAL | BELOW |    | OIL / FILM COLOR |   |   |   | PIT ZONE |   |   |   | A N A | SHEEN (Y/N) | ↓ | SURFACE SUBSURFA SEDIMENT |
|---------|----------------|--------------------------|----|----|----|----|----------------|-------|----|------------------|---|---|---|----------|---|---|---|-------|-------------|---|---------------------------|
|         |                | OP                       | OR | OL | OF | NO |                | NO    | NC | 1                | 2 | 3 | 4 | CU       | U | U | U |       |             |   |                           |
| 1       | 70             |                          |    |    |    | X  | .              |       |    |                  |   |   |   |          |   |   |   |       | N           |   | PICK                      |
| 2       | 25             |                          |    |    |    | X  | .              |       |    |                  |   |   |   |          |   |   |   |       | N           |   | PICK                      |
|         |                |                          |    |    |    |    | .              |       |    |                  |   |   |   |          |   |   |   |       |             |   |                           |
|         |                |                          |    |    |    |    | .              |       |    |                  |   |   |   |          |   |   |   |       |             |   |                           |
|         |                |                          |    |    |    |    | .              |       |    |                  |   |   |   |          |   |   |   |       |             |   |                           |
|         |                |                          |    |    |    |    | .              |       |    |                  |   |   |   |          |   |   |   |       |             |   |                           |
|         |                |                          |    |    |    |    | .              |       |    |                  |   |   |   |          |   |   |   |       |             |   |                           |
|         |                |                          |    |    |    |    | .              |       |    |                  |   |   |   |          |   |   |   |       |             |   |                           |

COMMENTS

13/55

Segment EV 007  
Stream 226-40-16559  
Ecological Summary

4/22/90

Michael Fawcett

This small stream has vertical bedrock walls at the mouth on the east side, and a boulder/cobble/gravel beach on the west side. There are very dense barnacle populations on the bedrock from LTZ to UTZ and on the cobbles and boulders in LTZ. Two harbor seals swimming nearby. No cleanup needed.

M. Fawcett

71  
PWS 269c

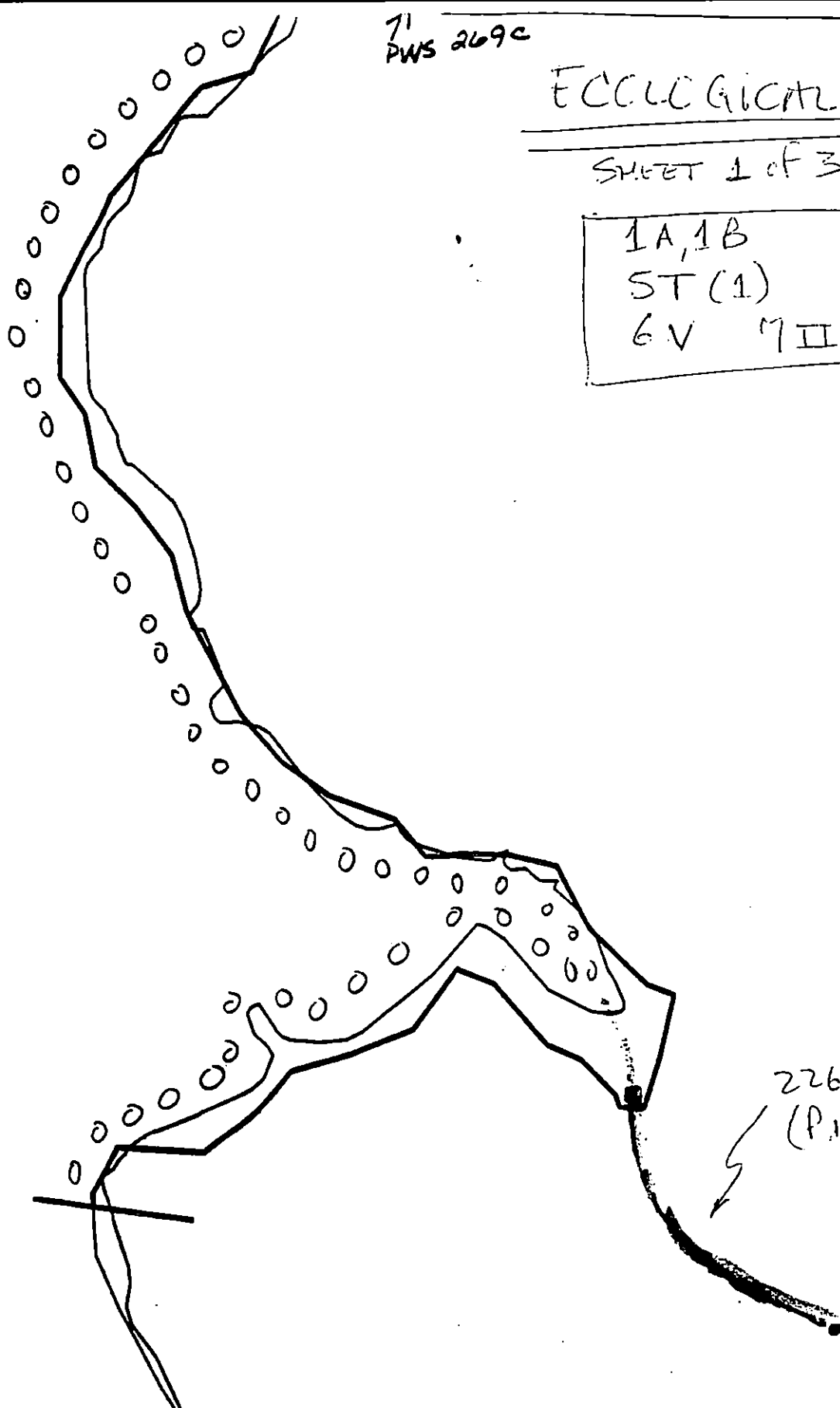
# ECOLOGICAL MAP

SHEET 1 of 3

1A, 1B

ST (1)

6V 7II



226-40-1650  
(P12/80)

XXXX Wide

//// Medium

---- Narrow

TTTT Very Light

OOOO No Oil

EV-7

ADEC Segment Length: 5439m



METERS



Map Key: PWS-269a

Name: Mike Foyet

Date: 4/7/90

Data Entered:

226-40-16557  
(P, 12/89)

226-40-1656  
(P, 12/89)

226-40-1656  
(P, 12/89)

226-40-16559  
(P, 12/89)

EV-07

EV-07  
(P, 12/89)

XXXX Wide

/// Medium

--- Narrow

TTTT Very Light

0000 No Oil

EV-7

ADEC Segment Length: 5439m



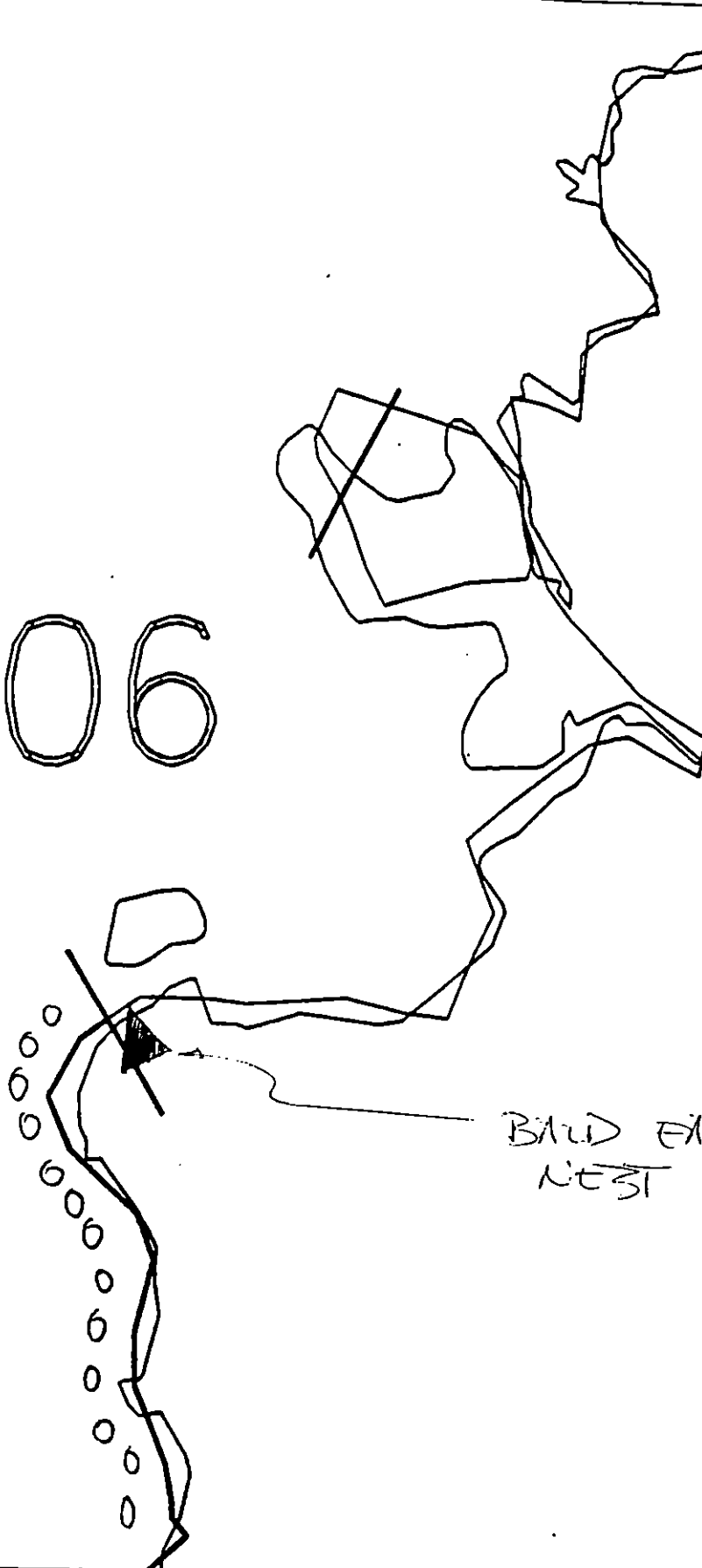
Map Key: PWS-269c

Name: Mike Foget

Date: 4/7/90

Data Entered:

EV-06



BALD EAGLE  
NEST

XXXX Wide

//// Medium

---- Narrow

TTTT Very Light

0000 No Oil

EV-7

ADEC Segment Length: 5439m



Map Key: PWS-269e

Name: Mike Fogel

Date: 4/7/90

Date Entered:

7/55

## ADPAC MULTI-ASSESSMENT DATA FORM

1 SURVEY TYPE: SS SS TS AVS SCOR MMS PTA2 REGION: PYS KP,CI K,APMETHOD: Aerial Ground Boat3 DATE: 4/22/9015 HIGH TIDE TIMES: 1205 / -21 TEAM RECORDER: M. WIEDNER4 START TIME: 165016 HIGH TIDE HTS: 10.0' / -22 OBSERVERS: T. CROW5 STOP TIME: 170517 LOW TIDE TIMES: 0603 / 181423 AGENCY: ADPAC6 SEGMENT #: EV-00718 LOW TIDE HTS: 1.0' / 0.7'24 PHOTOS TAKEN: Y (N)7 STATION #: 226-40-1659

19 TIDE HT AT SURVEY: \_\_\_\_\_

Roll #: \_\_\_\_\_ Frame: \_\_\_\_\_

8 K-UNIT: \_\_\_\_\_

Ebb Slack Flood Slack

25 VIDEO TAKEN: Y (N) TAPE: \_\_\_\_\_

9 STAT AREA: \_\_\_\_\_

20 USCG QUAD: SEWARD A3

Start: \_\_\_\_\_ End: \_\_\_\_\_

10 LAT: \_\_\_\_\_

11 LONG: \_\_\_\_\_

26 SAMPLES TAKEN: Y (N) Number \_\_\_\_\_

12 SOURCE: Near Loran

011 \_\_\_\_\_

13 LOCATION: IKTUA BAY, WEST SIDE EVANS IS.

Sediment \_\_\_\_\_

14 DESCRIPTION: \_\_\_\_\_

Biological \_\_\_\_\_

Water \_\_\_\_\_

## EXTENT OF OIL

28 CATALOGED ANAD. FISH BREAK: Y (N)27 CATALOG #: 226-40-1659

29 STREAM NAME: \_\_\_\_\_

30 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)

FISH PRESUMED

44 ANADROMOUS FISH OBSERVATION

Species Aerial Ground

|  |  |  |
|--|--|--|
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |

|                     | SHORELINE |    |   |      | STREAM |   |   |   |
|---------------------|-----------|----|---|------|--------|---|---|---|
|                     | L         | H  | N |      | L      | H | N |   |
| 27 SURFACE COVERAGE | 100       | 60 |   | 40.1 | 60     | 2 |   | 0 |

|                      |  |  |  |  |  |  |  |  |
|----------------------|--|--|--|--|--|--|--|--|
| 28 SURFACE THICKNESS |  |  |  |  |  |  |  |  |
| 29 PENETRATION       |  |  |  |  |  |  |  |  |

30 OVERALL OIL IMPACT: N (VL) L N H31 OIL TYPE: Pooled Mousse Tar Asphalt Secky Stain32 OILED DEBRIS: Y (N)33 SHORELINE TYPE: Headland Low-lying Rocks Beach Grass

Lagoon Marsh

34 WAVE EXPOSURE: High Moderate Low35 SUBSTRATE TYPE: Bedrock 10 Boulder 20 Cobble 35Gravel 35 Sand \_\_\_\_\_ Mud/silt \_\_\_\_\_COMMENTS: 3-4 TAR SPATTERS WIDELY SCATTEREDTHROUGH INTERTIDAL ZONE. EXTREMELY LOW IMPACT OBSERVED.

48 PHOTOLOG

EV - 00 ↑

226 - 40 - 16559

400

Jue

## DESCRIPTION

RECOMMENDATIONS: NO TREATMENT REQUIRED

I agree with recommendations. M.B. Fawcett

48 OIL DISTRIBUTION DIAGRAM

3-4 TAR SPATTERS (MAXIMUM DIAMETER  
10 CM) FOUND IN ENTIRE INTERTIDAL  
ZONE

VEGETATION

BEDROCK

VEGETATION

REGION: PRINCE WILLIAM SOUND

SEGMENT: ST/EV-08

SUBDIVISIONS: A (1 OF 3)

SHORELINE EVALUATION

SEGMENT ST/ EV-08 SUBDIVISION A (1 OF 3) DATE 4/20/90

**SEGMENT ENVIRONMENTAL SENSITIVITIES AND TIME CONSTRAINTS:**

ADF&G anadromous stream no. 226-40-16543, Ps, 12/89 & 226-40-16545, Ps, 12/89

- 1A Salmon stream mouth - fry outmigration (3/1 to 5/15)
- 1B Salmon stream mouth - spawning (7/10 to 8/31)
- 5T-2 All bald eagle nests (3/1 to 6/1)-Active eagle nests (3/1 to 9/1)
- 6V Recreation: Anchorages (6/1 to 9/15)
- 7II Subsistence area: Deer harvesting (8/15 to 2/28)

See attached Ecological Constraint sheet for specific constraints and contacts.

**SUBDIVISION ECOLOGICAL CONSTRAINTS:**

Avoid any unnecessary disturbance or damage to unoiled biota and substrate. Salmon stream 226-40-16545, Ps, 12/89 located near boundary of EV-08 B. Eagle nests located across embayment.

**ARCHAEOLOGICAL CONSTRAINTS:**

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

SHPO SIGNATURE: \_\_\_\_\_ DATE: \_\_\_\_\_

**OILING CATEGORIZATION:**

Wide 0 m: Medium 0 m: Narrow 0 m: V.Light 0 m: No Oil 462 m  
Subsurface Oil Observed: Yes \_\_\_\_\_ No X Maximum Depth \_\_\_\_\_

**RECOMMENDATIONS:**

|                                                              |                                     |
|--------------------------------------------------------------|-------------------------------------|
| <input checked="" type="checkbox"/> No Treatment Recommended | _____ Snare/Absorbent Booms         |
| _____ Treatment Recommended                                  | _____ Oil Snares (pom poms)         |
| _____ Manual Pickup                                          | _____ Absorbents (pads, rolls, etc) |
| _____ Bioremediation                                         | _____ Spot Washing: _____ Wands     |
| _____ Tarmat Removal                                         | _____ Beach Cleaner                 |
|                                                              | _____ Other (see comments)          |

COMMENTS: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

TAG COMMENTS: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

TAG APPROVAL DATE: \_\_\_\_\_

ADEC \_\_\_\_\_  
EXXON \_\_\_\_\_  
NOAA \_\_\_\_\_  
USCG \_\_\_\_\_

FOSC: \_\_\_\_\_ DATE: \_\_\_\_\_

# PWS, SEWARD AND HOMER ECOLOGICAL CONSTRAINTS

- 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 Suzumoto 424-7511
- 1J Gill net area (6/7 to 8/31)  
 1K Purse seine area (7/20 to 9/30)  
 1L Purse seine hook-off (7/20 to 9/30)  
 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 unopened intertidal and subtidal algae and seagrass. If plans for treatment include methods such as hot water wash or Inipol application which might affect nearshore oil or toxicity levels, contact ADF&G for consultation and authorization.  
 AGENCY CONTACT PERSON: ADF&G Evelyn Biggs 424-3235
- 30, 3Q Harbor seal and sea lion pupping (5/15 to 7/1)  
 Harbor seal and sea lion molting (8/15 to 9/15)  
 Restrict boat and air traffic to essential minimum. No personnel within 400m. Aircraft to maintain 800m horizontal and 300m vertical distance from haulouts. 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
- SR 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
- SS Shorebird/waterfowl concentration (4/1 to 5/15)  
 Restrict all activity to essential minimum, especially air traffic. Contact USFWS and ADF&G for confirmation.  
 AGENCY CONTACT PERSON: USFWS Jill Parker 786-3377  
 ADF&G Tom Roth 267-2206
- ✓ 5T All Bald Eagle nests (3/1 to 6/1)  
 Active Bald Eagle nests (3/1 to 9/1)  
 Restrict air traffic and all disturbance to essential minimum. No personnel within 400m 3/1 to 6/1. Air approach and takeoff from and to seaward only; maintain 800m horizontal, 300m vertical distance from nests. Contact USFWS prior to treatment for confirmation of dates.  
 AGENCY CONTACT PERSON: USFWS Jill Parker 786-3377
- ✓ 6U Recreation: Tent sites (6/1 to 9/15)  
 6V Anchorages (6/1 to 9/15)  
 6W Forest Service cabins (6/1 to 9/15)  
 6X Lodge (6/1 to 9/15)  
 6Y Special use destination
- 7Z Subistence area: Salmon harvesting (5/1 to 9/30)  
 7HH Finfish harvesting  
 7I Deer harvesting (8/15 to 2/28)  
 7J Invertebrate harvesting  
 Contact ADF&G and appropriate Native Corporation for specific dates, locations, and constraints. Restrict boat and air traffic and beach disturbance to essential minimum. If plans for treatment include methods such as hot water wash or application of Inipol which might affect intertidal or nearshore oil or toxicity levels, contact ADF&G and appropriate Native Corporation for authorization - see Native Corporation Contact List for each Native Corporation's contact person.  
 AGENCY CONTACT PERSON: ADF&G Jim Fall 267-2359

SEGMENT ST1 GU08 SUBDIVISION: A DATE 4/23/90

USCG

NAME SHAWN MAAS SIGNATURE DC [Signature]

☒ NO TREATMENT RECOMMENDED  
COMMENTS

☐ TREATMENT SUGGESTED

NO FURTHER OILS FOUND ON BEACH. TARBALLS  
FOUND WERE REMOVED BY SSAT TEAM. NO  
SUBSURFACE OILS NOTED IN THIS SUBDIVISION.

ADEC

NAME DAVE SALE SIGNATURE Dave M Sale

☐ NO TREATMENT RECOMMENDED  
COMMENTS

☒ TREATMENT SUGGESTED  
TO VERIFY ALL TAR WAS REMOVED

TAR PATTIES FOUND ON BEACH WERE PICKED UP BY  
SSAT TEAM, SO THERE MAY NOT BE ANY NEED FOR WORK  
HERE. TREATMENT WOULD SIMPLY REQUIRE VERIFYING THAT  
ALL TAR WAS PICKED UP AND REMOVED WHILE CLEANUP  
CREWS ARE PICKING UP SUBDIVISION B.

LAND MANAGER

NAME DOU HOMPKEFF JR SIGNATURE [Signature]

☐ NO TREATMENT RECOMMENDED  
COMMENTS

☒ TREATMENT SUGGESTED

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# SHORELINE OILING SUMMARY

REVISION NO. 36/13/90

OG R. Marty USCG S. Maas SEGMENT ST/ EV-08  
 BIO B. Lemen LAND REP D. Kempt SUBDIVISION A (A OF C)  
 EXXON J. Czarneski ADEC D. Sak TIME 18:50 to 20:05  
 TEAM NO. 10 TIDE LEVEL +1.01m → +1.67m DATE 20 / April / 90  
 EST. SUBDIVISION LENGTH: 302 m ☒ Sun ☐ Clouds ☐ Fog ☐ Rain ☐ Snow  
 UPLANDS DESCRIPTION: ☐ Grass ☒ Forest ☐ Rock  
 SURVEYED FROM: ☒ Foot ☐ Boat ☐ Helo WORKING DIRECTION: N to S  
 SURFACE SEDIMENTS: R 10 % B 20 % C 50 % P 15 % G 5 % S 0 % M 0 % V 0 %  
 SLOPE: Lang 100 % Hang 0 % Vert 0 % WAVE EXPOSURE: ☐ Low ☒ Med ☐ High  
 OIL CATEGORY LENGTH: W 0 m M 0 m N 0 m VL 0 m NO 382 m

## SURFACE OIL

| CHARACTER        | DISTRIBUTION |    |    |    | OIL / FILM COLOR |    |    |    | IMPACTED ZONES |   |   |   |
|------------------|--------------|----|----|----|------------------|----|----|----|----------------|---|---|---|
|                  | 10           | 20 | 30 | 40 | 50               | 60 | 70 | 80 | SU             | U | M | L |
| ASPHALT PAVEMENT |              |    |    |    |                  |    |    |    |                |   |   |   |
| POOLED           |              |    |    |    |                  |    |    |    |                |   |   |   |
| COVER            |              |    |    |    |                  |    |    |    |                |   |   |   |
| COAT             |              |    |    |    |                  |    |    |    |                |   |   |   |
| STAIN            |              |    |    |    |                  |    |    |    |                |   |   |   |
| MOUSSE           |              |    |    |    |                  |    |    |    |                |   |   |   |
| PATTIES          |              |    |    |    |                  |    |    |    |                |   |   |   |
| TARBALLS         |              |    |    |    |                  |    |    |    |                |   |   |   |
| FILM             |              |    |    |    |                  |    |    |    |                |   |   |   |
| NO OIL           |              |    |    |    |                  |    |    |    |                |   |   |   |

PAVEMENT H F S 102 sq. m by 0 cm

PATTIES / TARBALLS 1.5 BAGS

\* All patties and balls removed.  
 NEAR SHORE SHEEN? ☒ NO BR RW SL TL

| OILED DEBRIS | AMOUNT |    |    |    |
|--------------|--------|----|----|----|
|              | NO     | SM | MD | LG |
| Logs         | X      |    |    |    |
| Vegetation   | X      |    |    |    |
| Trash        | X      |    |    |    |
| Debris       | X      |    |    |    |

DID YOU COLLECT DEBRIS?

YES ☒ NO ☐

TYPE TB

#BAGS 2

Photographs:

Roll No. ST/10/13

Frames 23, 24

## SUBSURFACE OIL

| PIT NO. | PIT DEPTH (cm) | SUBSURFACE OIL CHARACTER |    |    |    |    | OILED INTERVAL (cm) | BELOW |    | OIL / FILM COLOR |    |    |    | PIT ZONE |   |   |   | A N A | SHEEN (VIN) | ↓ cm | SURFACE SUBSURFACE SEDIMENTS |
|---------|----------------|--------------------------|----|----|----|----|---------------------|-------|----|------------------|----|----|----|----------|---|---|---|-------|-------------|------|------------------------------|
|         |                | OP                       | OR | OL | OF | NO |                     | UO    | UO | 50               | 60 | 70 | 80 | SU       | U | M | L |       |             |      |                              |
| 1       | 27             |                          |    |    |    | X  |                     | X     |    |                  |    |    |    |          |   | X |   | N     | N           | 20   | C, S-2, M                    |
| 2       | 41             |                          |    |    |    | X  |                     | X     |    |                  |    |    |    | X        |   |   |   | N     |             | N    | P, G-CCP, SM                 |
|         |                |                          |    |    |    |    |                     |       |    |                  |    |    |    |          |   |   |   |       |             |      |                              |
|         |                |                          |    |    |    |    |                     |       |    |                  |    |    |    |          |   |   |   |       |             |      |                              |
|         |                |                          |    |    |    |    |                     |       |    |                  |    |    |    |          |   |   |   |       |             |      |                              |
|         |                |                          |    |    |    |    |                     |       |    |                  |    |    |    |          |   |   |   |       |             |      |                              |
|         |                |                          |    |    |    |    |                     |       |    |                  |    |    |    |          |   |   |   |       |             |      |                              |
|         |                |                          |    |    |    |    |                     |       |    |                  |    |    |    |          |   |   |   |       |             |      |                              |
|         |                |                          |    |    |    |    |                     |       |    |                  |    |    |    |          |   |   |   |       |             |      |                              |
|         |                |                          |    |    |    |    |                     |       |    |                  |    |    |    |          |   |   |   |       |             |      |                              |

COMMENTS Tar patties become concentrated at south end of Segment.  
 The segment is primarily a low angle beach front with local shallow point. All detected oil was removed.

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REVIEWED JW

DATE 4/25/90



## SHORELINE ECOLOGICAL SUMMARY

REVISION: 03/22/90

Segment ST/EY-8 Subdivision A Date (mo / day / yr) 4 / 20 / 90  
 Time (24 hr) 1930-1930 Biologist Lemon clear, calm, no seas

- (A) Substrate type and % of segments:  
 (1) Bedrock 10 (2) Boulder 20 (3) Cobble 50 (4) Pebble 15 (5) Sand 5 (6) Silt \_\_\_\_\_
- (B) Overall % cover of biota (% of segment): Dense \_\_\_\_\_ Moderate \_\_\_\_\_ Low 30%
- (C) Density, substrate preference (by number from A, above), & vertical zonation of major taxa: (upper-U; mid-M; low tidal-L); juveniles / adults (X), new settlement (3)

Photographs: ST/10/13  
 Roll No. \_\_\_\_\_

Frames 23, 24

## BARNACLES

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

NOT PRESENT

## MYTILUS

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

NOT PRESENT

## GASTROPODS

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

NOT PRESENT

## FUCUS

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

NOT PRESENT

## Wildlife Observations/ General Comments:

6 gulls 2 scolopacidae (sandpipers)  
 1 stellers jay  
 2 waterfowl

This low energy, small angular substrate bay head probably is greatly diluted by freshwater, perhaps limiting the diversity and density of marine forms - the water appeared clearer here than outside the bay and this is bloom time

Ecological Considerations: This is a good anchorage area; a pleasure craft was anchored during our survey. Subsistence deer harvest also takes place here. Anadromous stream # 226 - 40 - 16545 flows through here too. Though not formerly documented; Prothaca or Saxidomus clam shells are abundant on the beach indicating rich beds nearby of subsistence, recreation or commercial value.

# E COLOGICAL MAP

1A 1B  
ST (2)  
6V 7IL

|      |      |      |       |
|------|------|------|-------|
| No   | 1.7" | 255m | 280m  |
| V.L. | 0.9" | 135m | 138m  |
| No   | 1.2" | 180m | 176m  |
| V.L. | 2.3" | 345m | 338m  |
| Mod. | 1.7" | 255m | 250m  |
| No   | 3.7" | 555m | 544m  |
| V.L. | 1.5" | 225m | 220m  |
|      |      | 1950 | 1910m |

~~RAID~~  
~~EX~~  
~~NLS~~

~~ANDRIMONS~~  
~~STATION~~  
#226-40-4654

V-08

#226-40-4654 26 of 59

XXXX Wide

//// Medium

--- Narrow

TTTT Very Light

0000 No Oil

EV-8 A

ADEC Segment Length: 1910m



Map Key: PWS-273

Name: L. Marty

Date: 23 April 1990

Date Entered:

|      |      |      |       |
|------|------|------|-------|
| No   | 1.2" | 255m | 250m  |
| V.L. | 0.9" | 135m | 132m  |
| No   | 1.2" | 180m | 176m  |
| V.L. | 2.3" | 345m | 338m  |
| Med. | 1.7" | 255m | 250m  |
| NO   | 3.7" | 555m | 544m  |
| V.L. | 1.5" | 225m | 220m  |
|      |      | 1950 | 1910m |

← PWS

V-08

26 of 59

XXXX Wide

//// Medium

--- Narrow

TTTT Very Light

0000 No Oil

EV-8

ADEC Segment Length: 1910m



Map Key: PWS-273

Name: L. Marty

Date: 23 April 1990

Date Entered:

**REGION: PRINCE WILLIAM SOUND**

**SEGMENT: ST/EV-08**

**SUBDIVISIONS: B (2 OF 3)**

# SHORELINE EVALUATION

SEGMENT ST/ EV-08 SUBDIVISION B (2 OF 3) DATE 4/23/90

## SEGMENT ENVIRONMENTAL SENSITIVITIES AND TIME CONSTRAINTS:

ADF&G anadromous stream no. 226-40-16543, Ps, 12/89 and 226-40-15545, Ps, 12/89

- 1A Salmon stream mouth - fry outmigration (3/1 to 5/15)
- 1B Salmon stream mouth - spawning (7/10 to 8/31)
- 5T-2 All bald eagle nests (3/1 to 6/1)-Active eagle nests (3/1 to 9/1)
- 6V Recreation: Anchorages (6/1 to 9/15)
- 7II Subsistence area: Deer harvesting (8/15 to 2/28)

See attached Ecological Constraint sheet for specific constraints and contacts.

## SUBDIVISION ECOLOGICAL CONSTRAINTS:

Avoid any unnecessary disturbance or damage to unoiled biota and substrate. Salmon stream 226-40-16545, Ps, 12/89 located at boundary of EV-08A, and 226-40-16543 located within subdivision. 5T(2) 1 nest located within subdivision, another <400 M in subdivision C.

## ARCHAEOLOGICAL CONSTRAINTS:

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

SHPO SIGNATURE: \_\_\_\_\_ DATE: \_\_\_\_\_

## OILING CATEGORIZATION:

Wide 0 m: Medium 263 m: Narrow 0 m: V.Light 451 m: No Oil 174 m  
Subsurface Oil Observed: Yes \_\_\_\_\_ No X Maximum Depth \_\_\_\_\_

## RECOMMENDATIONS:

- |                                                           |                                                        |
|-----------------------------------------------------------|--------------------------------------------------------|
| <input type="checkbox"/> No Treatment Recommended         | <input type="checkbox"/> Snare/Absorbent Booms         |
| <input checked="" type="checkbox"/> Treatment Recommended | <input type="checkbox"/> Oil Snares (pom poms)         |
| <input type="checkbox"/> Manual Pickup                    | <input type="checkbox"/> Absorbents (pads, rolls, etc) |
| <input type="checkbox"/> Bioremediation                   | <input type="checkbox"/> Spot Washing: _____ Wands     |
| <input checked="" type="checkbox"/> Tarmat Removal        | <input type="checkbox"/> Beach Cleaner                 |
|                                                           | <input type="checkbox"/> Other (see comments)          |

COMMENTS: Recommend removal of asphalt mats where indicated on sketch map. Work should be conducted after 6/1 and with USFWS approval based on eagle nest constraints.

TAG COMMENTS: \_\_\_\_\_

TAG APPROVAL DATE: \_\_\_\_\_

ADEC \_\_\_\_\_  
EXXON \_\_\_\_\_  
NOAA \_\_\_\_\_  
USCG \_\_\_\_\_

FOSC: \_\_\_\_\_ DATE: \_\_\_\_\_

SEGMENT ST EVOX SUBDIVISION: B DATE April 23-1990

ISCG

NAME Sharon - MAB

SIGNATURE

Dr. Sharon A. Mabe☐ NO TREATMENT RECOMMENDED  
COMMENTS☒ TREATMENT SUGGESTED

MANUAL REMOVAL OF ASPHALT/PAVEMENT RECOMMENDED FOR THIS SUBDIVISION. ALSO A REINSPECTION OF SUPRATIDAL. SNOW COVERED MUCH AND MOST OILS FOUND IN UPPER INTERTIDAL. NO SUBSURFACE OILS NOTED.

ADEC

NAME DAVE SAMP.

SIGNATURE

David Samp.☐ NO TREATMENT RECOMMENDED  
COMMENTS☒ TREATMENT SUGGESTED

MANUAL REMOVAL OF TAR PATCHES AND TARBAHS (AT L+H TIDE)  
 ② REMOVE ANY DEBRIS FOUND IN SUPRATIDAL WE WERE UNABLE TO VIEW BECAUSE OF SNOW.

LAND MANAGER

NAME Don Humphreys Jr.

SIGNATURE

Donald P. Humphreys Jr.☐ NO TREATMENT RECOMMENDED  
COMMENTS☒ TREATMENT SUGGESTED

OG R. Marty USCG S. Mass SEGMENT ST/ SV-08  
 BIO S. Leman LAND REP D. Kempt SUBDIVISION 8 ( 1 OF 5 )  
 EXXON J. Exonesski ADEC D. Sale TIME 19:00 to 20:00  
 TEAM NO. 10 TIDE LEVEL +1.5m to +1.25m DATE 2002/04/11/90  
 EST. SUBDIVISION LENGTH: 750 m ☒ Sun ☐ Clouds ☐ Fog ☐ Rain ☐ Snow  
 UPLANDS DESCRIPTION: ☐ Grass ☒ Forest ☐ Rock  
 SURVEYED FROM: ☒ Foot ☐ Boat ☐ Helo WORKING DIRECTION: 8 to W  
 SURFACE SEDIMENTS: R 0 % B 5 % C 40 % P 40 % G 15 % S 0 % M 0 % V 0 %  
 SLOPE: Long 100 % Hang 0 % Vert 0 % WAVE EXPOSURE: ☒ Low ☐ Med ☐ High  
 OIL CATEGORY LENGTH: W 0 m M 250 m N 0 m VL 250 m NO 176 m

### SURFACE OIL

| CHARACTER        | DISTRIBUTION |   |   |   |   | OIL / FILM COLOR |   |   |   |   | IMPACTED ZONES |   |   |   |
|------------------|--------------|---|---|---|---|------------------|---|---|---|---|----------------|---|---|---|
|                  | C            | N | R | S | P | 1                | 2 | 3 | 4 | 5 | S              | U | M | L |
| ASPHALT PAVEMENT |              |   |   |   | P | S                |   |   |   |   | P              | S |   |   |
| POOLED           |              |   |   |   |   |                  |   |   |   |   |                |   |   |   |
| COVER            |              |   |   |   |   |                  |   |   |   |   |                |   |   |   |
| COAT             |              |   |   |   |   |                  |   |   |   |   |                |   |   |   |
| STAIN            |              |   |   |   |   |                  |   |   |   |   |                |   |   |   |
| MOUSSE           |              |   |   |   |   |                  |   |   |   |   |                |   |   |   |
| PATTIES          |              |   |   |   |   |                  |   |   |   |   |                | S |   |   |
| TARBALLS         |              |   |   |   |   |                  |   |   |   |   |                | N |   |   |
| FILM             |              |   |   |   |   |                  |   |   |   |   |                | O |   |   |
| NO OIL           |              |   |   |   |   |                  |   |   |   |   |                | N |   | X |

PAVEMENT: H F S 602 sq. m by 3 cm

PATTIES / TARBALLS \_\_\_\_\_ BAGS

NEAR SHORE SHEEN? (NO) BR RW SL TL

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

DID YOU COLLECT DEBRIS?

YES ☒ NO ☐

TYPE Tar mat

#BAGS 1

Photographs:

Roll No. ST/10/13 Frames 25, 26

Frames ST/10/14 frame 8

### SUBSURFACE OIL

| PIT NO. | PIT DEPTH (cm) | SUBSURFACE OIL CHARACTER |    |    |    |    | OILED INTERVAL (cm) | BELOW |    | OIL / FILM COLOR |   |   |   |   | PIT ZONE |   |   |   | A | N | SHEEN (V/M) | Y  | SURFACE - SUBSURFACE SEDIMENTS |
|---------|----------------|--------------------------|----|----|----|----|---------------------|-------|----|------------------|---|---|---|---|----------|---|---|---|---|---|-------------|----|--------------------------------|
|         |                | CP                       | OR | OL | OP | NO |                     | UG    | UG | 1                | 2 | 3 | 4 | 5 | S        | U | M | L |   |   |             |    |                                |
| 1       | 27             |                          |    |    |    | X  |                     |       |    |                  |   |   |   |   |          |   |   |   | X | N | N           | 20 | C, S-3M                        |
| 2       | 29             |                          |    |    |    | X  |                     |       |    |                  |   |   |   |   |          |   |   |   | X | N | -           | N  | P, G-6, S                      |
| 3       | 35             |                          |    |    |    | X  |                     |       |    |                  |   |   |   |   |          |   |   |   | X | N | -           | N  | GPE-6SP                        |
|         |                |                          |    |    |    |    |                     |       |    |                  |   |   |   |   |          |   |   |   |   |   |             |    |                                |
|         |                |                          |    |    |    |    |                     |       |    |                  |   |   |   |   |          |   |   |   |   |   |             |    |                                |
|         |                |                          |    |    |    |    |                     |       |    |                  |   |   |   |   |          |   |   |   |   |   |             |    |                                |
|         |                |                          |    |    |    |    |                     |       |    |                  |   |   |   |   |          |   |   |   |   |   |             |    |                                |

COMMENTS A low angle pebble, cobble, granule beach. Initial oiling was in the form of mousse patties which are now changing to tar. There is no evidence of any oil below about 3cm depth. Tar mats are quite soft and are easily removed. No evidence for any oiling in ST2, but Area was snow covered.

REVIEWED 7W DATE 4/25/90  
 9 of 59

DATE 20 / April / 90

## CHECKLIST

\_\_\_\_\_ H Answer  
 \_\_\_\_\_ Approx. Size  
 \_\_\_\_\_ Day/Shift Study  
 \_\_\_\_\_ On Dist.  
 \_\_\_\_\_ Width  
 \_\_\_\_\_ Length  
 \_\_\_\_\_ % Cover  
 \_\_\_\_\_ Substrate Character  
 \_\_\_\_\_ Est. HAP/LA/ML  
 \_\_\_\_\_ SSJ  
 \_\_\_\_\_ Profile Location(s)  
 \_\_\_\_\_ Profile(s)  
 \_\_\_\_\_ FH Location(s)  
 \_\_\_\_\_ Photo Location(s)

## LEGEND

**1 Δ**  
**Pr - No Subscription On**

**2A**  
**Per - Subsurface Oil**

**CT/C**  
Continuing Distribution

**CT/B**  
**Broken Disks**

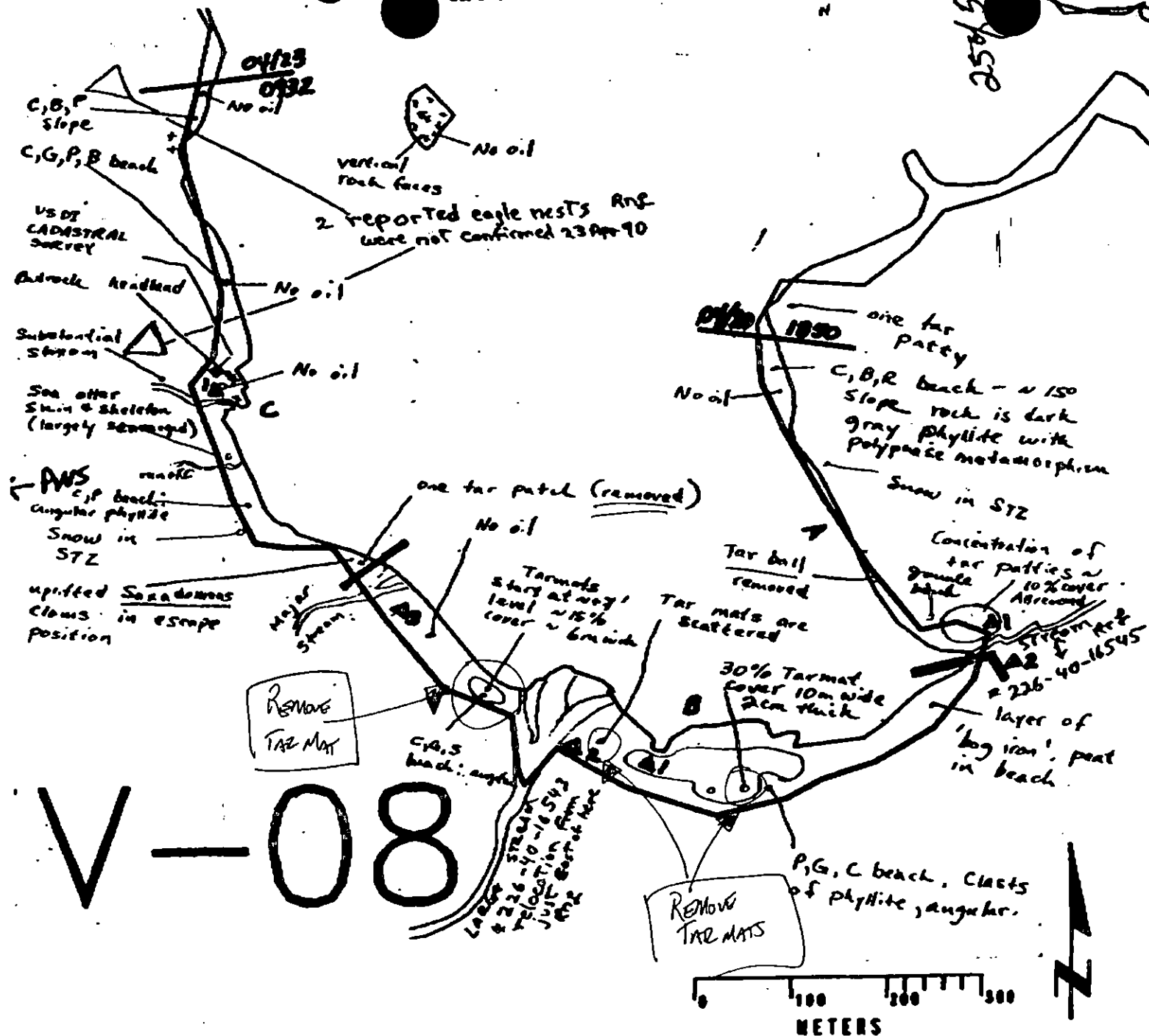
**CT/P**  
**Patchy Distribution**

**CT/S**  
**Splunked Distribution**

lll  
Olas Vegetation

From location, direction,  
and number

## SKETCH READ



A 0 0 0 0 0 0 132m 0 0 250m  
 Character Length (m) SAP 588 PO 0 CV 0 CT 0 ST 0 MB 0 PT 0 TB 0 FL 0 NO 176m  
 C 0 0 0 0 0 0 280m 0 0 544m

# SHORELINE ECOLOGICAL SUMMARY

REVISION: 09-28-78

Segment ST/EV-08 Subdivision B Date (mo / day / yr) 4/20/90  
 Time (24 hr) 1935-2015 and 4/23/90  
0730-0830 Biologist Leman clear, calm, no seas

- (A) Substrate type and % of segments:  
 (1) Bedrock 0 (2) Boulder 5 (3) Cobble 40 (4) Pebble 40 (5) Sand 15 (6) Silt 0
- (B) Overall % cover of biota (% of segment): Dense        Moderate        Low 20%
- (C) Density, substrate preference (by number from A, above), & vertical zonation of major taxa: (upper-U; mid-M; low tidal-L); juveniles / adults (X), new settlement (3)

Photographs:  
 Roll No. ST/10/13

Frames 25-26

## BARNACLES

ST/10/14 frame 8

| Dense |    |    | Moderate |              |    | Sparse       |              |              | Rare         |    |    |
|-------|----|----|----------|--------------|----|--------------|--------------|--------------|--------------|----|----|
| 1U    | 1M | 1L | 1U       | 1M           | 1L | 1U           | 1M           | 1L           | 1U           | 1M | 1L |
| 2     | 2  | 2  | 2        | <del>2</del> | 2  | <del>2</del> | <del>2</del> | 2            | 2            | 2  | 2  |
| 3     | 3  | 3  | 3        | 3            | 3  | 3            | <del>3</del> | <del>3</del> | 3            | 3  | 3  |
| 4     | 4  | 4  | 4        | 4            | 4  | 4            | <del>4</del> | <del>4</del> | <del>4</del> | 4  | 4  |
| 5     | 5  | 5  | 5        | 5            | 5  | 5            | 5            | 5            | 5            | 5  | 5  |
| 6     | 6  | 6  | 6        | 6            | 6  | 6            | 6            | 6            | 6            | 6  | 6  |

NOT PRESENT

## MYTILUS

| Dense |    |    | Moderate |    |    | Sparse |              |    | Rare |              |              |
|-------|----|----|----------|----|----|--------|--------------|----|------|--------------|--------------|
| 1U    | 1M | 1L | 1U       | 1M | 1L | 1U     | 1M           | 1L | 1U   | 1M           | 1L           |
| 2     | 2  | 2  | 2        | 2  | 2  | 2      | <del>2</del> | 2  | 2    | 2            | 2            |
| 3     | 3  | 3  | 3        | 3  | 3  | 3      | <del>3</del> | 3  | 3    | <del>3</del> | 3            |
| 4     | 4  | 4  | 4        | 4  | 4  | 4      | 4            | 4  | 4    | <del>4</del> | <del>4</del> |
| 5     | 5  | 5  | 5        | 5  | 5  | 5      | 5            | 5  | 5    | 5            | 5            |
| 6     | 6  | 6  | 6        | 6  | 6  | 6      | 6            | 6  | 6    | 6            | 6            |

NOT PRESENT

## GASTROPODS

| Dense |    |    | Moderate |    |    | Sparse |              |              | Rare |    |    |
|-------|----|----|----------|----|----|--------|--------------|--------------|------|----|----|
| 1U    | 1M | 1L | 1U       | 1M | 1L | 1U     | 1M           | 1L           | 1U   | 1M | 1L |
| 2     | 2  | 2  | 2        | 2  | 2  | 2      | <del>2</del> | <del>2</del> | 2    | 2  | 2  |
| 3     | 3  | 3  | 3        | 3  | 3  | 3      | <del>3</del> | <del>3</del> | 3    | 3  | 3  |
| 4     | 4  | 4  | 4        | 4  | 4  | 4      | <del>4</del> | <del>4</del> | 4    | 4  | 4  |
| 5     | 5  | 5  | 5        | 5  | 5  | 5      | 5            | 5            | 5    | 5  | 5  |
| 6     | 6  | 6  | 6        | 6  | 6  | 6      | 6            | 6            | 6    | 6  | 6  |

NOT PRESENT

## FUCUS

| Dense |    |    | Moderate |              |    | Sparse |              |    | Rare |    |              |
|-------|----|----|----------|--------------|----|--------|--------------|----|------|----|--------------|
| 1U    | 1M | 1L | 1U       | 1M           | 1L | 1U     | 1M           | 1L | 1U   | 1M | 1L           |
| 2     | 2  | 2  | 2        | <del>2</del> | 2  | 2      | <del>2</del> | 2  | 2    | 2  | 2            |
| 3     | 3  | 3  | 3        | 3            | 3  | 3      | <del>3</del> | 3  | 3    | 3  | <del>3</del> |
| 4     | 4  | 4  | 4        | 4            | 4  | 4      | <del>4</del> | 4  | 4    | 4  | <del>4</del> |
| 5     | 5  | 5  | 5        | 5            | 5  | 5      | 5            | 5  | 5    | 5  | 5            |
| 6     | 6  | 6  | 6        | 6            | 6  | 6      | 6            | 6  | 6    | 6  | 6            |

NOT PRESENT

Wildlife Observations/ General Comments: Imm barnacles in mid zone.  
 10 waterfowl "clam" digging holes low zone; empty shells 30, mostly  
 2 Alcidae Saxidomus  
 2 Oystercatchers lots of fresh water coming into this bay.

Ecological Considerations: this area is used for deer harvest, boat anchorages and lies  
 between 2 substantial streams # 226-40 16543.  
 226-40 16545

10 of 59

# 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 Suzumoto 424-7511
- 1I Gill net area (6/7 to 8/31)  
 1J Purse seine area (7/20 to 9/30)  
 1K Purse seine hook-off (7/20 to 9/30)  
 1L Set net sites (8/11 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 unrolled 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
- 30, 3Q Harbor seal and sea lion pupping (5/15 to 7/1)  
 Harbor seal and sea lion molting (8/15 to 9/15)  
 Restrict boat and air traffic to essential minimum. No personnel within 400m. Aircraft to maintain 800m horizontal and 300m vertical distance from haulouts. No application of Inipol within two weeks of arrival dates (work window at these sites is limited to 7/2 to 7/31). Contact ADF&G and USFWS prior to treatment for confirmation.  
 AGENCY CONTACT PERSON: US National Marine Fisheries Service Steve Zimmerman 586-7235  
 ADF&G Don Calkins 267-2403
- 5R Seabird colony (5/1 to 9/1)  
 Restrict air and boat traffic to essential minimum. No personnel within 800m. Aircraft to maintain 800m horizontal, 300m vertical distance from colony. Contact USFWS prior to treatment.  
 AGENCY CONTACT PERSON: USFWS Jill Parker 786-3377
- 5S Shorebird/waterfowl concentration (4/1 to 5/15)  
 Restrict all activity to essential minimum, especially air traffic. Contact USFWS and ADF&G for confirmation.  
 AGENCY CONTACT PERSON: USFWS Jill Parker 786-3377  
 ADF&G Tom Roth 267-2206
- ✓ 5T All Bald Eagle nests (3/1 to 8/1)  
 Active Bald Eagle nests (3/1 to 9/1)  
 Restrict air traffic and all disturbance to essential minimum. No personnel within 400m 3/1 to 6/1. Air approach and takeoff from and to seaward only; maintain 800m horizontal, 300m vertical distance from nests. Contact USFWS prior to treatment for confirmation of dates.  
 AGENCY CONTACT PERSON: USFWS Jill Parker 786-3377
- ✓ 6U Recreation: Tent sites (6/1 to 9/15)  
 6V Anchorages (6/1 to 9/15)  
 6W Forest Service cabins (6/1 to 9/15)  
 6X Lodge (6/1 to 9/15)  
 6Y Special use destination
- 7Z Subsistence area: Salmon harvesting (5/1 to 9/30)  
 7HH Finfish harvesting  
 7I Deer harvesting (8/15 to 2/28)  
 7J Invertebrate harvesting  
 Contact ADF&G and appropriate Native Corporation for specific dates, locations, and constraints. Restrict boat and air traffic and beach disturbance to essential minimum. If plans for treatment include methods such as hot water wash or application of Inipol which might affect intertidal or nearshore oil or toxicity levels, contact ADF&G and appropriate Native Corporation for authorization - see Native Corporation Contact List for each Native Corporation's contact person.  
 AGENCY CONTACT PERSON: ADF&G Jim Fall 267-2359



|      |      |      |       |     |
|------|------|------|-------|-----|
| No   | 1.7" | 255m | 280m  |     |
| V.L. | 0.9" | 135m | 138m  | 182 |
| No   | 1.2" | 180m | 176m  |     |
| V.L. | 2.3" | 345m | 338m  | 264 |
| Med. | 1.7" | 255m | 250m  |     |
| No   | 3.7" | 555m | 544m  | 264 |
| V.L. | 1.5" | 225m | 220m  |     |
|      |      | 1950 | 1910m |     |

← PWS

V-08

26 of 59

XXXX Wide

//// Medium

--- Narrow

TTTT Very Light

0000 No Oil

EV-8

ADEC Segment Length: 1910m

0 100 200 300  
METERS

Map Key: PWS-273

Name: L. Marty

Date: 23 April 1990

Date Entered:

**REGION: PRINCE WILLIAM SOUND**

**SEGMENT: ST/EV-08**

**SUBDIVISIONS: C (3 OF 3)**

# SHORELINE EVALUATION

SEGMENT ST/ EV-08 SUBDIVISION C (3 OF 3) DATE 4/23/90

## SEGMENT ENVIRONMENTAL SENSITIVITIES AND TIME CONSTRAINTS:

ADF&G anadromous stream no. 226-40-16543, Ps, 12/89 & 226-40-16545, Ps, 12/89

- 1A Salmon stream mouth - fry outmigration (3/1 to 5/15)
- 1B Salmon stream mouth - spawning (7/10 to 8/31)
- 5T-2 All bald eagle nests (3/1 to 6/1)-Active eagle nests (3/1 to 9/1)
- 6V Recreation: Anchorages (6/1 to 9/15)
- 7II Subsistence area: Deer harvesting (8/15 to 2/28)

See attached Ecological Constraint sheet for specific constraints and contacts.

## SUBDIVISION ECOLOGICAL CONSTRAINTS:

Avoid any unnecessary disturbance or damage to unoilied biota and substrate. 5T (2) located proximal to boundary with Subdivision B and with Subdivision C.

## ARCHAEOLOGICAL CONSTRAINTS:

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

SHPO SIGNATURE: \_\_\_\_\_ DATE: \_\_\_\_\_

## OILING CATEGORIZATION:

Wide 0 m: Medium 0 m: Narrow 0 m: V.Light 0 m: No Oil 635 m  
Subsurface Oil Observed: Yes \_\_\_\_\_ No X Maximum Depth \_\_\_\_\_

## RECOMMENDATIONS:

- |                                                              |                                                        |
|--------------------------------------------------------------|--------------------------------------------------------|
| <input checked="" type="checkbox"/> No Treatment Recommended | <input type="checkbox"/> Snare/Absorbent Booms         |
| <input type="checkbox"/> Treatment Recommended               | <input type="checkbox"/> Oil Snares (pom poms)         |
| <input type="checkbox"/> Manual Pickup                       | <input type="checkbox"/> Absorbents (pads, rolls, etc) |
| <input type="checkbox"/> Bioremediation                      | <input type="checkbox"/> Spot Washing: _____ Wands     |
| <input type="checkbox"/> Tarmat Removal                      | <input type="checkbox"/> Beach Cleaner                 |
|                                                              | <input type="checkbox"/> Other (see comments)          |

COMMENTS: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

TAG COMMENTS: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

TAG APPROVAL DATE: \_\_\_\_\_

ADEC \_\_\_\_\_  
EXXON \_\_\_\_\_  
NOAA \_\_\_\_\_  
USCG \_\_\_\_\_

FOSC: \_\_\_\_\_ DATE: \_\_\_\_\_

# 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 Suzumoto 424-7511
- 1I Gill net area (6/7 to 8/31)  
 1J Purse seine area (7/20 to 9/30)  
 1K Purse seine hook-off (7/20 to 9/30)  
 1L Set net sites (6/11 to 7/25)  
 Contact ADF&G for specific dates, locations and constraints. Restrict boat and air traffic to essential minimum. When set net sites are present (1L) restrict beach operations to essential minimum as authorized by ADF&G. If plans for treatment include methods such as hot water wash or Inipol application which might affect nearshore oil or toxicity levels, contact ADF&G for consultation and authorization.  
 AGENCY CONTACT PERSON: ADF&G James Brady 424-3212
- 2M Herring spawning (4/1 to 6/15)  
 Contact ADF&G for confirmation - dates and locations may vary. Restrict boat traffic to essential minimum. Avoid damage to unloiled 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
- 3P Harbor seal and sea lion pupping (5/15 to 7/1)  
 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)  
 7HH Finfish harvesting  
 7I Deer harvesting (8/15 to 2/28)  
 7J Invertebrate harvesting  
 Contact ADF&G and appropriate Native Corporation for specific dates, locations, and constraints. Restrict boat and air traffic and beach disturbance to essential minimum. If plans for treatment include methods such as hot water wash or application of Inipol which might affect intertidal or nearshore oil or toxicity levels, contact ADF&G and appropriate Native Corporation for authorization - see Native Corporation Contact List for each Native Corporation's contact person.  
 AGENCY CONTACT PERSON: ADF&G Jim Fall 267-2359

REPORT 1330 10-10 1701 07000 0000000 10 000 0000000 0.21

SEGMENT ST EV08 SUBDIVISION: C DATE 4/23/90

**USCG**

NAME SHAWN MARS SIGNATURE DC - Shawn Mars

☒ NO TREATMENT RECOMMENDED  
COMMENTS

☐ TREATMENT SUGGESTED

PATTIES FOUND WERE REMOVED BY SSAT TEAM  
NO FURTHER OILS NOTED

NO SUBSURFACE OILS NOTED

**ADEC**

NAME Dave Spile SIGNATURE Dave Spile

☒ NO TREATMENT RECOMMENDED

☐ TREATMENT SUGGESTED

COMMENTS: EXCEPT VERIFICATION BY TREATMENT TEAMS THAT  
ALL THE PATTIES ARE GONE.

No oil was found on this SUBDIVISION, EXCEPT FOR  
SOME THE PATTIES THAT WERE REMOVED.

**LAND MANAGER**

NAME DON KOMPKEFF, Jr SIGNATURE Donald P Kompkeff Jr

☐ NO TREATMENT RECOMMENDED  
COMMENTS

☒ TREATMENT SUGGESTED

27 of 59

## SURFACE OIL

Frames 9, 10

## SUBSURFACE OIL

### COMMENTS

DATE \_\_\_\_\_



## SHORELINE ECOLOGICAL SUMMARY

REVISION: 07/22/90

Segment ST / EV-08 Subdivision C Date (mo / day / yr) 23 Apr 90Time (24 hr) 0630-0930 Biologist Lemon(A) Substrate type and % of segments:  
(1) Bedrock 10 (2) Boulder 10 (3) Cobble 40 (4) Pebble 20 (5) Sand 20 (6) Silt 0(B) Overall % cover of biota (% of segment): Dense        Moderate 35% Low       

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

Photographs:  
Roll No. ST/10/14Frames 9, 10

## BARNACLES

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

## MYTILUS

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

## GASTROPODS

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

## FUCUS

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

Wildlife Observations/ General Comments: Bedded clams, *Littorina* eggs, Fucus is reproductive and dead otter (sea?) gear teeth, picture has sparkles on bedrock. Bedrock did not extend into low zone.

## Ecological Considerations:

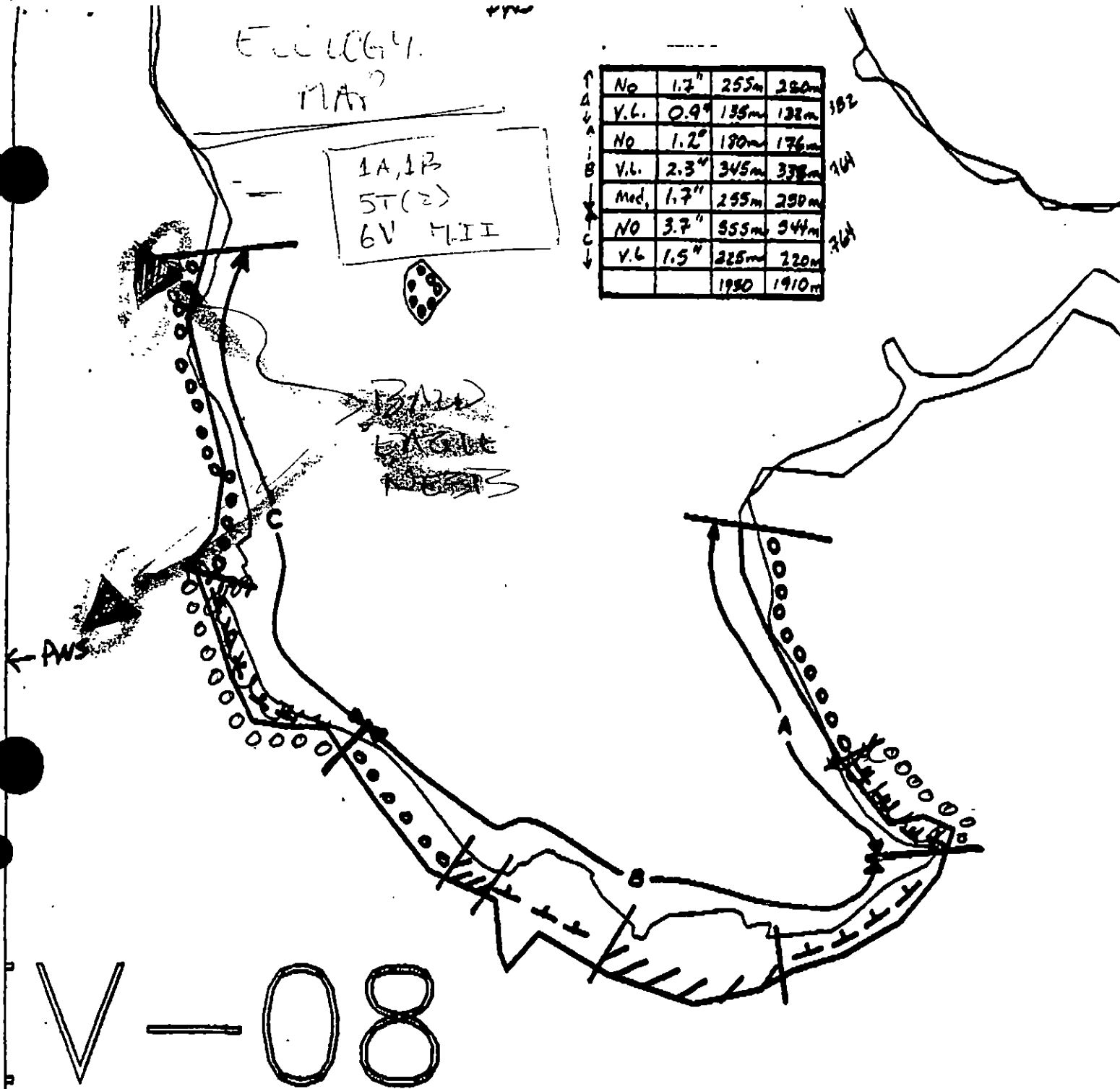
Eagle nests could not be confirmed; no eagles seen 23 Apr 90. Good anchorage and deer harvest area. Uplifted clam beds may indicate newer beds below. Another stream in this area may also be a spawning.

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ENCLOSURE  
MAP

1A, 1B  
5T(2)  
6V FLII

|      |      |      |       |
|------|------|------|-------|
| No   | 1.7" | 255m | 280m  |
| V.L. | 0.9" | 138m | 138m  |
| No   | 1.2" | 180m | 176m  |
| V.L. | 2.3" | 345m | 338m  |
| Mod. | 1.7" | 255m | 290m  |
| NO   | 3.7" | 555m | 544m  |
| V.L. | 1.5" | 225m | 220m  |
|      |      | 1930 | 1910m |



26 of 59

XXXX Wide

//// Medium

--- Narrow

TTTT Very Light

0000 No Oil

EV-8C

ADEC Segment Length: 1910m



Map Key: PWS-273

Name: L. Marty

Date: 23 April 1990

Date Entered:

|      |      |      |       |     |
|------|------|------|-------|-----|
| No   | 1.7" | 255m | 250m  |     |
| V.L. | 0.9" | 135m | 132m  | 182 |
| No   | 1.2" | 180m | 176m  |     |
| V.L. | 2.3" | 345m | 338m  | 164 |
| Mod. | 1.7" | 255m | 250m  |     |
| No   | 3.7" | 555m | 544m  | 164 |
| V.L. | 1.5" | 225m | 220m  |     |
|      |      | 1930 | 1910m |     |

← PWS

V-08

26 of 59

XXXX Wide

//// Medium

--- Narrow

TTTT Very Light

0000 No Oil

EV-8

ADEC Segment Length: 1910m



Map Key: PWS-273

Name: R. Marty

Date: 23 April 1990

Date Entered:

**1991 MAYSAP EVALUATION**

**SEGMENT:** EV 008 **SUB:** C **REGION:** PWS **SURVEY DATE:** 4/27/91

**ENVIRONMENTAL SENSITIVITIES:**

Work Window(s) RESTRICTED 3/1 - 9/1

**Ecological/Constraints** (see page two for details) Eagle nest

**ARCHAEOLOGICAL CONSTRAINTS:**

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

**SHPO Signature:** \_\_\_\_\_ **Date:** \_\_\_\_\_

**RECOMMENDATIONS:**

**INITIAL**

**TAG**

**FOSC**

**TREATMENT REQUIRED (Y or N)**

N

Manual Pickup (Check as Req.)

Spot Washing

Bio-Customblen Only

Bio-Inipol/Customblen

Other \_\_\_\_\_

Other \_\_\_\_\_

**COMMENTS:**

**INITIAL:** \_\_\_\_\_

**TAG:** \_\_\_\_\_

**FOSC:** \_\_\_\_\_

**TAG APPROVAL DATE:** \_\_\_\_\_

**FOSC APPROVAL DATE:** \_\_\_\_\_

**ADEC** \_\_\_\_\_

**FOSC** \_\_\_\_\_

**EXXON** \_\_\_\_\_

**USCG** \_\_\_\_\_

**NOAA** \_\_\_\_\_

**ECOLOGICAL CONSTRAINTS  
1991 FIELD ACTIVITIES**

**Eagle Nest:** Access restricted from 3/1 to 9/1. USF&WS authorization required. Maintain 1000' vertical and 1/4 mile horizontal buffer.

# MAYSAP FIELD SHORELINE COMMENT SHEET

TEAM NO. 5 SEGMENT EV-8 SUBDIVISION C DATE 4/27/91

## ADEC

NAME

John Hoyer

SIGNATURE

[Signature]

☒ NTR

Only trace oiling observed on the southern portion of the segment that we surveyed. No further treatment recommended at this time.

## EXXON

NAME

Martinez N.J.

SIGNATURE

[Signature]

☒ NTR

No oiling, 100% treatment.

## LANDMANAGER

NAME

Steve Waco

OF

CVC

SIGNATURE

[Signature]

☒ NTR

No oil in Sub-pits - Small patches of asphalt located were picked up as we surveyed. No further treatment at this time.

## USCG/NOAA

NAME

Dreher / Bridges

SIGNATURE

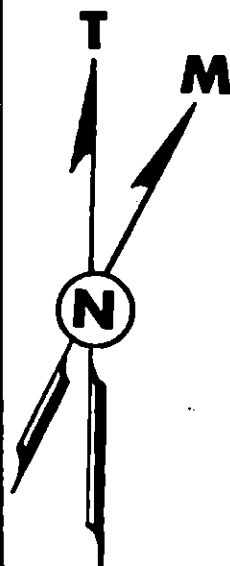
CWO K.L. Dreher [Signature]

☒ NTR

No oil observed. Lush fucus/barnacles in lower tidal zone. This beach segment (as well as EV-8B) had increased signs of animal predation (otter, fish, deer bones).



MAYBAP 1991  
 OG SKETCH MAP  
 GREG CHANEY  
 TEAM 5  
 SEGMENT: EV-8-C  
 DATE: APRIL 27 '91  
 AIR P.N: 91M-C-005-374



EVANS ISLAND

IKTUA BAY

WATER FALL

FOREST

FOREST

NO  
OIL  
OBSERVED

LEGEND

|            |  |
|------------|--|
| BEDROCK    |  |
| BOULDERS   |  |
| FINE SED.  |  |
| DRIFT LOG  |  |
| GRASS      |  |
| BRUSH      |  |
| FOREST     |  |
| OILED PIT  |  |
| NO OIL PIT |  |
| PHOTO      |  |

SCALE

APPROX  
100  
METERS

DEER SKELETON

FOREST

FOREST

REVISOR: F.W. 5/4/91  
 REVISOR: J.C. 5/4/91

# MAYSAP BIOLOGICAL SUMMARY FORM

TEAM # 5

DATE 27 April 91

SEGMENT # EV-8

TIDAL HEIGHT(Range) ~ 0 → +1.0

SUBDIVISION C

BIOLOGIST Crank

SEA STATE 0

WIND SPEED/DIRECTION 0

PHOTOGRAPHS: ROLL #

FRAME #

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

No oil present / No intertidal observations made.

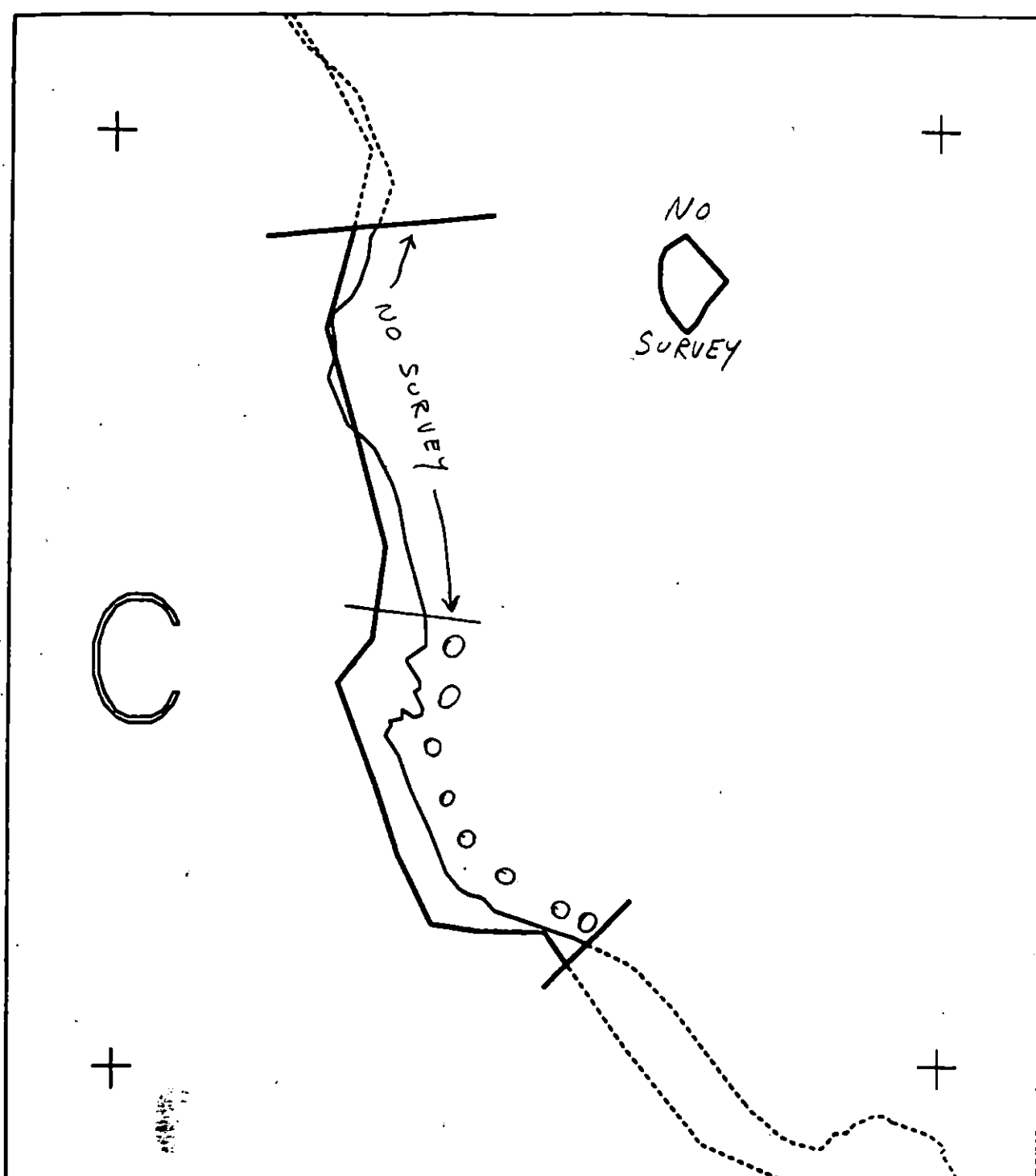
## WILDLIFE OBSERVATIONS

TO BE COMPLETED IN ALL SUBDIVISIONS

| BIRDS            | # OF SPECIES | TOTAL BIRDS | FISH OBSERVED<br>SPECIES PRESENT |
|------------------|--------------|-------------|----------------------------------|
| Eagles           | 1            | 1           |                                  |
| Seabirds         |              |             |                                  |
| Waterfowl        |              |             |                                  |
| Gulls/kittiwakes |              |             |                                  |
| Shorebirds       |              |             |                                  |
| Corvids          |              |             |                                  |
| Other Birds      | 1            | 1           |                                  |

| MARINE MAMMALS     | # OBSERVED | LAND MAMMALS<br>SPECIES | # OBSERVED                    |
|--------------------|------------|-------------------------|-------------------------------|
| Sea Otters         | 2          | (Deer)                  | (Partial Skeletons 2 animals) |
| Pinnipeds(specify) |            |                         |                               |
| Whales(specify)    |            |                         |                               |
|                    |            |                         |                               |

Shoreline subdivision map showing important biological features attached.



|      |            |                                                                                                                                                                                          |                          |
|------|------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------|
| XXXX | Wide       | <p align="center"><b>EV008 C</b></p> <p>ADEC Subsegment Length: 800m</p> <p align="center">METERS</p> <p align="center">0      100      200</p> <p>AK State Plane Zone 4<br/>psv008c</p> | Subdivision Field Map    |
| //// | Medium     |                                                                                                                                                                                          | Map Key: PVSEV008C       |
| ---- | Narrow     |                                                                                                                                                                                          | Name: <u>Greg Chaney</u> |
| TTTT | Very Light |                                                                                                                                                                                          | Date: <u>April 27 91</u> |
| 0000 | No Oil     |                                                                                                                                                                                          | Date Entered:            |

REVIEWED: F.W. 5/2/91  
 REVISORS: MC 5/2/91

## ADDENDUM: SUBDIVISION CONSTRAINTS

SEGMENT EV-8 SUBDIVISION B ( 2 of 3 )

| WORK WINDOW    |      |
|----------------|------|
| Tarmat Removal | OPEN |

### ARCHAEOLOGICAL STANDARD CONSTRAINT

If cultural resources are uncovered, PHONE 564-3274.

### APPLICABLE ECOLOGICAL TIME CONSTRAINTS

1A,1B Salmon Stream

ADF&G catalogued anadromous stream (226-40-16543) is located in this subdivision. No constraint to tarmat removal.

5T Bald Eagle Nest

NO CONSTRAINT. Work area is more than 400m from nest.

7II Subsistence: Deer Harvesting

No constraint to tarmat removal.

### OTHER ECOLOGICAL CONSIDERATIONS

No disturbance of stream bed or banks. Restrict boat and air traffic and beach disturbance to essential minimum after 8/15. Avoid any unnecessary disturbance or damage to unloiled biota and substrate.

TAG APPROVAL DATE 5/29/90.  
ADEC AET Werner Art Weimer  
EXXON AMT USA  
NOAA B. Wascott  
USCG G.A. Reiter G.A. Reiter

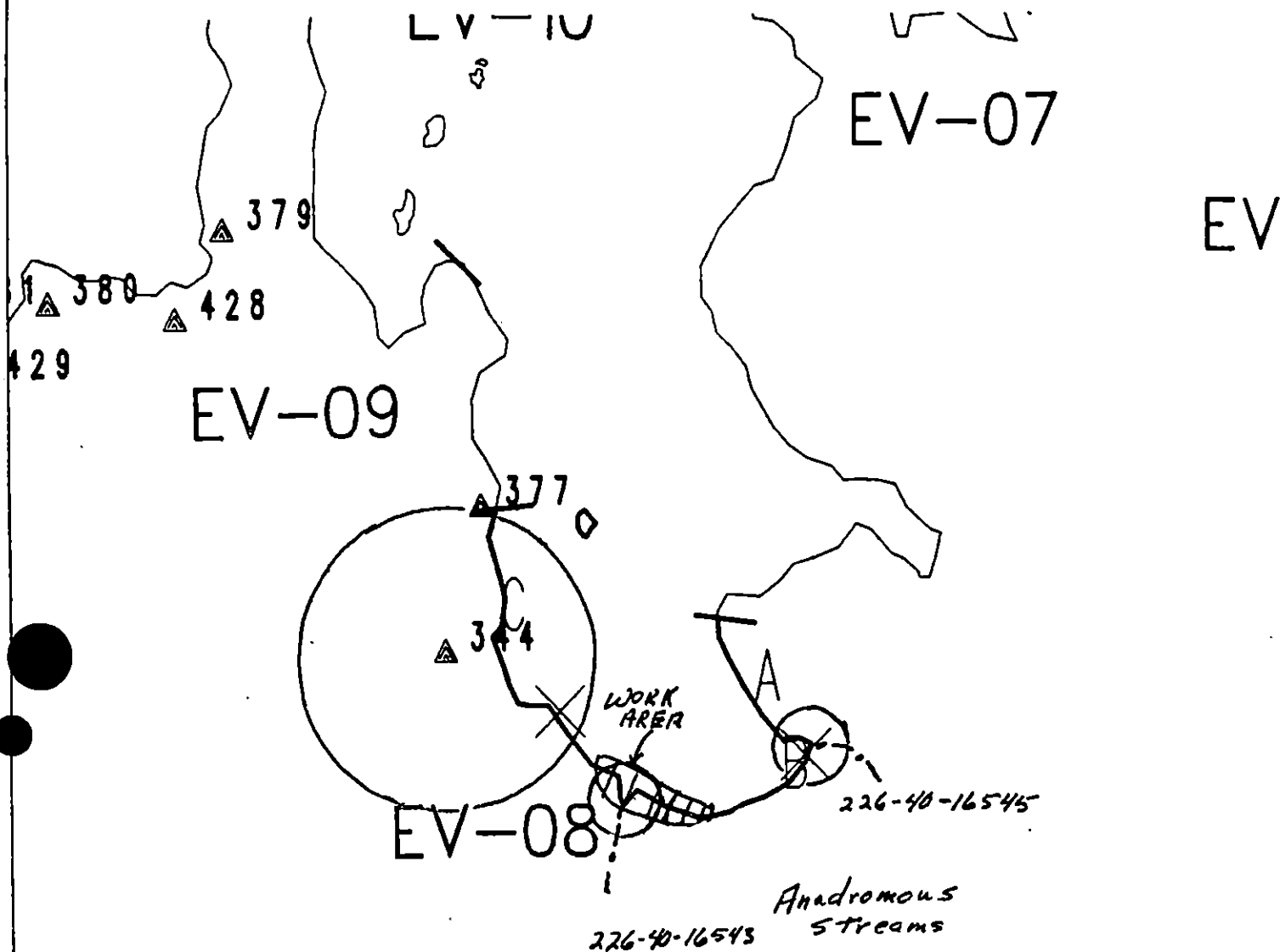
FOSC

DATE

MAY 29 1990

Prepared By: Andrew Meyer WTK

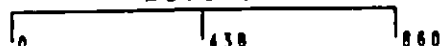
Date 5/24/90



Exxon Company, USA  
Map Key: PWS-EV-8  
Nov. 11, 1990



ECOLOGY MAP  
SEGMENT EV-8  
SUBDIVISION B (2 of 3)  
METERS



- ★ Seabird Colony
- ▲ Eagle Nest

1 inch = 1412 feet

# SHORELINE EVALUATION

SEGMENT ST/ EV-08 SUBDIVISION B (2 OF 3) DATE 4/23/90

## SEGMENT ENVIRONMENTAL SENSITIVITIES AND TIME CONSTRAINTS:

ADF&G anadromous stream no. 226-40-16543, Ps, 12/89 and 226-40-15545, Ps, 12/89

- 1A Salmon stream mouth - fry outmigration (3/1 to 5/15)
- 1B Salmon stream mouth - spawning (7/10 to 8/31)
- 5T-2 All bald eagle nests (3/1 to 6/1)-Active eagle nests (3/1 to 9/1)
- 6V Recreation: Anchorages (6/1 to 9/15)
- 7II Subsistence area: Deer harvesting (8/15 to 2/28)

See attached Ecological Constraint sheet for specific constraints and contacts.

## SUBDIVISION ECOLOGICAL CONSTRAINTS:

Avoid any unnecessary disturbance or damage to unoiled biota and substrate. Salmon stream 226-40-16545, Ps, 12/89 located at boundary of EV-08A, and 226-40-16543 located within subdivision. 5T(2) 1 nest located within subdivision, another <400 M in subdivision C.

## ARCHAEOLOGICAL CONSTRAINTS:

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

SHPO SIGNATURE: Charles E. H. Jones DATE: 5/3/90

## OILING CATEGORIZATION:

Wide 0 m: Medium 263 m: Narrow 0 m: V.Light 451 m: No Oil 174 m  
Subsurface Oil Observed: Yes        No X Maximum Depth       

## RECOMMENDATIONS:

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

COMMENTS: Recommend removal of asphalt mats where indicated on sketch map. Work should be conducted after 6/1 and with USFWS approval based on eagle nest constraints.

See Constraint Addendum 5/24/90  
WTK

TAG COMMENTS: MONITORS TO ASSESS SUITZ DURING TREATMENT

TAG APPROVAL DATE: 5/3/90  
ADEC ART WEINER  
EXXON ANDY TEAL  
NOAA GARY PETERSON  
USCG KENNETH KENNEDY

FOSC:        DATE: 5-18-90  
Assess need for bioremediation following TARMAT removal  
NOTIFY CVC 24 HRS. IN ADVANCE OF WORK

# SHORELINE EVALUATION

SEGMENT ST/ EV-08 SUBDIVISION A (1 OF 3) DATE 4/20/90

## SEGMENT ENVIRONMENTAL SENSITIVITIES AND TIME CONSTRAINTS:

ADF&G anadromous stream no. 226-40-16543, Ps, 12/89 & 226-40-16545, Ps, 12/89

- 1A Salmon stream mouth - fry outmigration (3/1 to 5/15)
- 1B Salmon stream mouth - spawning (7/10 to 8/31)
- 5T-2 All bald eagle nests (3/1 to 6/1)-Active eagle nests (3/1 to 9/1)
- 6V Recreation: Anchorages (6/1 to 9/15)
- 7II Subsistence area: Deer harvesting (8/15 to 2/28)

See attached Ecological Constraint sheet for specific constraints and contacts.

## SUBDIVISION ECOLOGICAL CONSTRAINTS:

Avoid any unnecessary disturbance or damage to unoiled biota and substrate. Salmon stream 226-40-16545, Ps, 12/89 located near boundary of EV-08 B. Eagle nests located across embayment.

## ARCHAEOLOGICAL CONSTRAINTS:

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

SHPO SIGNATURE: Charles E. H. H. H.

DATE: 5/3/90

## OILING CATEGORIZATION:

Wide 0 m: Medium 0 m: Narrow 0 m: V.Light 0 m: No Oil 462 m  
Subsurface Oil Observed: Yes      No X Maximum Depth     

## RECOMMENDATIONS:

- |                                                              |                                                          |
|--------------------------------------------------------------|----------------------------------------------------------|
| <input checked="" type="checkbox"/> No Treatment Recommended | <input type="checkbox"/> Snare/Absorbent Booms           |
| <input type="checkbox"/> Treatment Recommended               | <input type="checkbox"/> Oil Snares (pom poms)           |
| <input type="checkbox"/> Manual Pickup                       | <input type="checkbox"/> Absorbents (pads, rolls, etc)   |
| <input type="checkbox"/> Bioremediation                      | <input type="checkbox"/> Spot Washing: <u>    </u> Wands |
| <input type="checkbox"/> Tarmat Removal                      | <input type="checkbox"/> Beach Cleaner                   |
|                                                              | <input type="checkbox"/> Other (see comments)            |

COMMENTS:       
      
      
    

TAG COMMENTS: MONITORS TO CHECK SUITZ WHILE IN THE VICINITY  
      
      
    

TAG APPROVAL DATE: 5/3/90

ADEC ART WEINER  
EXXON AMY TATE  
NOAA GARY PETRO  
USCG KENNETH KOWNS

FOSC:     

DATE: 5-18-90

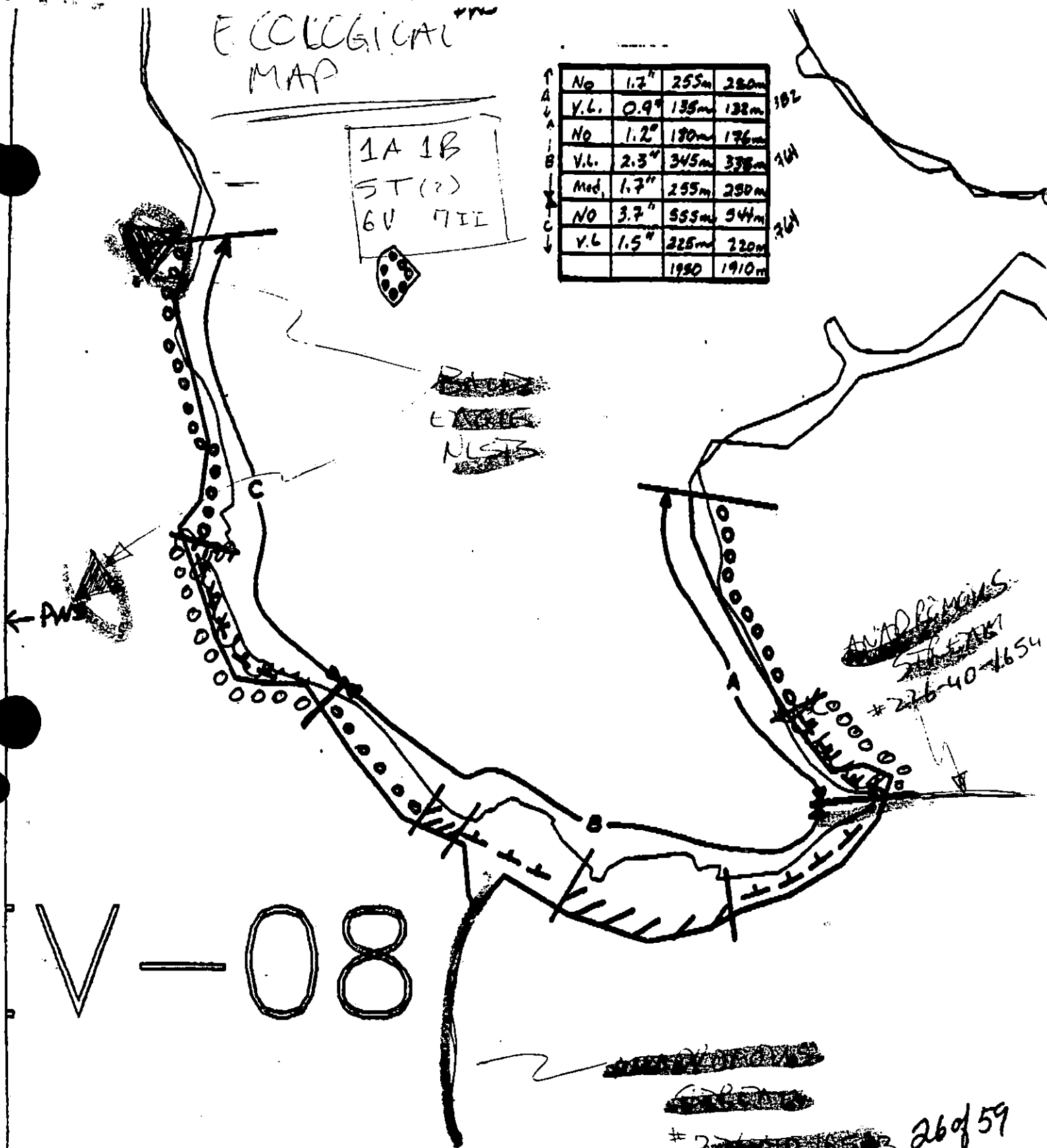
ADVIS 24 HRS. IN ADVANCE OF WORK



# ECOLOGICAL MAP

1A 1B  
5T(?)  
6V 7II

|      |      |      |       |
|------|------|------|-------|
| No   | 1.7" | 255m | 280m  |
| V.L. | 0.9" | 135m | 132m  |
| No   | 1.2" | 190m | 176m  |
| V.L. | 2.3" | 345m | 338m  |
| Med. | 1.7" | 255m | 250m  |
| No   | 3.7" | 555m | 544m  |
| V.L. | 1.5" | 225m | 220m  |
|      |      | 1980 | 1910m |



V-08

XXXX Wide

//// Medium

--- Narrow

TTTT Very Light

0000 No Oil

EV-8A

ADEC Segment Length: 1910m



Map Key: PWS-273

Name: L. Marty

Date: 23 April 1990

Date Entered:

# 226-40-4654 26 of 59

|      |      |      |       |     |
|------|------|------|-------|-----|
| No   | 1.7" | 255m | 280m  |     |
| V.L. | 0.9" | 195m | 138m  | 182 |
| No   | 1.2" | 180m | 176m  |     |
| V.L. | 2.3" | 345m | 338m  | 264 |
| Mod. | 1.7" | 255m | 250m  |     |
| NO   | 3.7" | 555m | 544m  | 364 |
| V.L. | 1.5" | 225m | 220m  |     |
|      |      | 1980 | 1910m |     |

← PWS

V-08

26 of 59

XXXX Wide

EV-8

//// Medium

--- Narrow

ADEC Segment Length: 1910m

TTTT Very Light

0000 No Oil



Map Key: PWS-273

Name: L. Marty

Date: 23 April 1990

Date Entered:

# SHORELINE EVALUATION

SEGMENT ST/ EV-08 SUBDIVISION B (2 OF 3) DATE 4/23/90

## SEGMENT ENVIRONMENTAL SENSITIVITIES AND TIME CONSTRAINTS:

ADF&G anadromous stream no. 226-40-16543, Ps, 12/89 and 226-40-15545, Ps, 12/89

- 1A Salmon stream mouth - fry outmigration (3/1 to 5/15)
- 1B Salmon stream mouth - spawning (7/10 to 8/31)
- 5T-2 All bald eagle nests (3/1 to 6/1)-Active eagle nests (3/1 to 9/1)
- 6V Recreation: Anchorages (6/1 to 9/15)
- 7II Subsistence area: Deer harvesting (8/15 to 2/28)

See attached Ecological Constraint sheet for specific constraints and contacts.

## SUBDIVISION ECOLOGICAL CONSTRAINTS:

Avoid any unnecessary disturbance or damage to unoiled biota and substrate. Salmon stream 226-40-16545, Ps, 12/89 located at boundary of EV-08A, and 226-40-16543 located within subdivision. 5T(2) 1 nest located within subdivision, another <400 M in subdivision C.

## ARCHAEOLOGICAL CONSTRAINTS:

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

SHPO SIGNATURE: Charles E. Hines DATE: 5/3/90

## OILING CATEGORIZATION:

Wide 0 m: Medium 263 m: Narrow 0 m: V.Light 451 m: No Oil 174 m  
Subsurface Oil Observed: Yes      No X Maximum Depth     

## RECOMMENDATIONS:

- |                                                           |                                                          |
|-----------------------------------------------------------|----------------------------------------------------------|
| <input type="checkbox"/> No Treatment Recommended         | <input type="checkbox"/> Snare/Absorbent Booms           |
| <input checked="" type="checkbox"/> Treatment Recommended | <input type="checkbox"/> Oil Snares (pom poms)           |
| <input type="checkbox"/> Manual Pickup                    | <input type="checkbox"/> Absorbents (pads, rolls, etc)   |
| <input type="checkbox"/> Bioremediation                   | <input type="checkbox"/> Spot Washing: <u>    </u> Wands |
| <input checked="" type="checkbox"/> Tarmat Removal        | <input type="checkbox"/> Beach Cleaner                   |
|                                                           | <input type="checkbox"/> Other (see comments)            |

COMMENTS: Recommend removal of asphalt mats where indicated on sketch map. Work should be conducted after 6/1 and with USFWS approval based on eagle nest constraints.

TAG COMMENTS: MONITORS TO ASSESS SUITZ DURING TREATMENT

TAG APPROVAL DATE: 5/3/90  
ADEC ART WEINER  
EXXON ANDY TEAL  
NOAA GARY PETERSON  
USCG KENNETH KEMM

FOSC: King L DATE: 5-15-90  
Cessaro need for bioremediation following TARMAT removal.  
NOTIFY CVC 24 HRS. IN ADVANCE OF WORK

Character Length (m) SAP 508 PO CV CT ST MS FT TB FL NO

A 0 0 0 0 0 0 132 m 0 0 250 m

C 0 0 0 0 0 0 220 m 0 0 544 m

**Abstract**

# ECOLOGICAL MAP

1A, 1B  
5T(2)  
6U  
7II

|      |      |      |       |
|------|------|------|-------|
| No   | 1.2" | 255m | 280m  |
| V.L. | 0.9" | 135m | 138m  |
| No   | 1.2" | 180m | 176m  |
| V.L. | 2.3" | 345m | 338m  |
| Med. | 1.7" | 255m | 250m  |
| No   | 3.7" | 555m | 544m  |
| V.L. | 1.5" | 225m | 220m  |
|      |      | 1930 | 1910m |

EXPOSED  
NESTS



V-08

# 226-40-1654

ANADROMOUS STREAMS

#226-40-16543

26 of 59

XXXX Wide

//// Medium

--- Narrow

TTTT Very Light

0000 No Oil

EV-8B

ADEC Segment Length: 1910m



Map Key: PWS-273

Name: L. Marty SB

Date: 23 April 1990

Date Entered:

|      |      |      |       |     |
|------|------|------|-------|-----|
| No   | 1.2" | 255m | 280m  |     |
| V.L. | 0.9" | 135m | 132m  | 182 |
| No   | 1.2" | 180m | 176m  |     |
| V.L. | 2.3" | 345m | 338m  | 164 |
| Med. | 1.7" | 255m | 290m  |     |
| NO   | 3.7" | 555m | 544m  | 162 |
| V.L. | 1.5" | 225m | 220m  |     |
|      |      | 1950 | 1910m |     |

← AWS

V-08

26 of 59

XXXX Wide

//// Medium

--- Narrow

TTTT Very Light

0000 No Oil

EV-8

ADEC Segment Length: 1910m



Map Key: PWS-273

Name: L. Marty

Date: 23 April 1990

Date Entered:

# SHORELINE EVALUATION

SEGMENT ST/ EV-08 SUBDIVISION C (3 OF 3) DATE 4/23/90

## SEGMENT ENVIRONMENTAL SENSITIVITIES AND TIME CONSTRAINTS:

ADF&G anadromous stream no. 226-40-16543, Ps, 12/89 & 226-40-16545, Ps, 12/89

- 1A Salmon stream mouth - fry outmigration (3/1 to 5/15)
- 1B Salmon stream mouth - spawning (7/10 to 8/31)
- 5T-2 All bald eagle nests (3/1 to 6/1)-Active eagle nests (3/1 to 9/1)
- 6V Recreation: Anchorages (6/1 to 9/15)
- 7II Subsistence area: Deer harvesting (8/15 to 2/28)

See attached Ecological Constraint sheet for specific constraints and contacts.

## SUBDIVISION ECOLOGICAL CONSTRAINTS:

Avoid any unnecessary disturbance or damage to unoiled biota and substrate. 5T (2) located proximal to boundary with Subdivision B and with Subdivision C.

## ARCHAEOLOGICAL CONSTRAINTS:

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

SHPO SIGNATURE: Charles E. Hume DATE: 5/3/90

## OILING CATEGORIZATION:

Wide 0 m: Medium 0 m: Narrow 0 m: V.Light 0 m: No Oil 635 m  
Subsurface Oil Observed: Yes      No X Maximum Depth     

## RECOMMENDATIONS:

- |                                                              |                                                          |
|--------------------------------------------------------------|----------------------------------------------------------|
| <input checked="" type="checkbox"/> No Treatment Recommended | <input type="checkbox"/> Snare/Absorbent Booms           |
| <input type="checkbox"/> Treatment Recommended               | <input type="checkbox"/> Oil Snares (pom poms)           |
| <input type="checkbox"/> Manual Pickup                       | <input type="checkbox"/> Absorbents (pads, rolls, etc)   |
| <input type="checkbox"/> Bioremediation                      | <input type="checkbox"/> Spot Washing: <u>    </u> Wands |
| <input type="checkbox"/> Tarmat Removal                      | <input type="checkbox"/> Beach Cleaner                   |
|                                                              | <input type="checkbox"/> Other (see comments)            |

COMMENTS:       
      
      
    

TAG COMMENTS:       
      
      
    

TAG APPROVAL DATE: 5/3/90  
ADEC Art Weiner  
EXXON Andy Tate  
NOAA Gary DeFries  
USCG Kenneth Keane

FOSC:      DATE: 5-18-90

~~"Not a review of the Advanced of work"~~

|                         |     |     |    |   |    |   |    |       |    |   |       |   |    |   |    |   |    |   |    |      |
|-------------------------|-----|-----|----|---|----|---|----|-------|----|---|-------|---|----|---|----|---|----|---|----|------|
|                         | A   | O   | O  | O | O  | O | O  | 132 m | O  | O | 250 m |   |    |   |    |   |    |   |    |      |
| OS Character Length (m) | SAP | 585 | PO | O | CV | O | CT | O     | ST | O | MS    | O | PT | O | TB | O | FL | O | NO | 176m |
|                         | C   | O   | O  | O | O  | O | O  | 220m  | O  | O | 544m  |   |    |   |    |   |    |   |    |      |

|      |      |      |       |     |
|------|------|------|-------|-----|
| No   | 1.7" | 255m | 250m  |     |
| V.L. | 0.9" | 135m | 132m  | 182 |
| No   | 1.2" | 180m | 176m  |     |
| V.L. | 2.3" | 345m | 338m  | 764 |
| Mod. | 1.7" | 255m | 250m  |     |
| NO   | 3.7" | 555m | 544m  | 764 |
| V.L. | 1.5" | 225m | 220m  |     |
|      |      | 1980 | 1910m |     |

← PWS

V-08

XXXX Wide

//// Medium

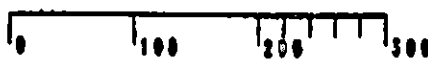
---- Narrow

TTTT Very Light

0000 No Oil

EV-8

ADEC Segment Length: 1910m


  
METERS

Map Key: PWS-273

Name: R. MartyDate: 23 April 1990

Data Entered:

26 of 59

# 1991 MAYSAP EVALUATION

SEGMENT: EV 008 SUB: B REGION: PWS SURVEY DATE: 4/27/91

## ENVIRONMENTAL SENSITIVITIES:

Work Window(s) RESTRICTED 3/1 - 9/15

Ecological/Constraints (see page two for details) Eagle nest,  
Anadromous stream, Subsistence - Deer harvesting

## ARCHAEOLOGICAL CONSTRAINTS:

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

SHPO Signature: [Signature]

Date: 5/8/91

## RECOMMENDATIONS:

INITIAL

TAG

FOSC

TREATMENT REQUIRED (Y or N)

N

N

Manual Pickup (Check as Req.)

Spot Washing

Bio-Customblen Only

Bio-Inipol/Customblen

Other

Other

## COMMENTS:

INITIAL:

TAG:

FOSC:

TAG APPROVAL DATE: MAY 8 1991

FOSC APPROVAL DATE: 5/13/91

ADEC

FOSC

EXXON

E. E. PAGE, CDR, USCG  
CHIEF OF STAFF, FOSC

USCG

NOAA

**ECOLOGICAL CONSTRAINTS  
1991 FIELD ACTIVITIES**

**Eagle Nest:** Access restricted from 3/1 to 9/1. USF&WS authorization required. Maintain 1000' vertical and 1/4 mile horizontal buffer.

**Anadromous Stream:** Unlimited treatment up to stream bank between May 15 and July 10. ADF&G approval required for work after July 10. Fish Habitat Permit required for instream work. ADF&G approval required for bioremediation within 100 meters of anadromous stream after July 10.

**Subsistence, Deer Harvesting:** Unlimited treatment prior to 8/15.

# MAYSAP FIELD SHORELINE COMMENT SHEET

TEAM NO. 5 SEGMENT EV-08B SUBDIVISION B DATE 4/27/91

ADEC

NAME

John Hayer

SIGNATURE

*[Signature]*

☒ NTR

Survey crew walked segment and oiling observed. Consisted of 2 small bands of AP and 1 isolated tarball. Very crew recovered oiling identified. Remaining oiling here is CV/SOR and stain. No further treatment recommended at this site.

EXXON

NAME

Martinez N.J.

SIGNATURE

*[Signature]*

☒ NTR

Found very little oiling. A few scattered asphalt patties were picked up by the team. Recommend no further treatment.

LANDMANAGER

NAME

Joe Ward

OF

CVC

SIGNATURE

*[Signature]*

☒ NTR

No history or subsurface oil - AREA walked showed intermediate patches of asphalt which were removed during survey. No surface or subsurface oil present. No further treatment recommended at this time.

USCG/NOAA

NAME

HODGES / DREHER

SIGNATURE

*[Signature]*

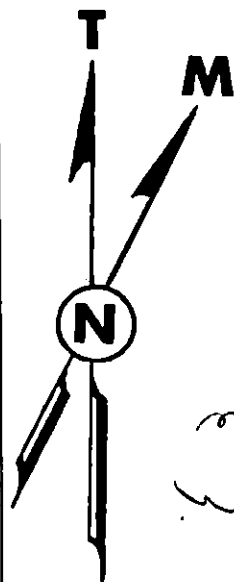
☒ NTR

Tar patties were found and were picked up. No indications of subsurface oil. No further treatment required.

REVIEWED: F.W. 5/2/91  
REVIEWED: MC 5/2/91

MAYBAP 1991  
 OG SKETCH MAP  
 GREG CHANEY  
 TEAM 5  
 SEGMENT: EV-08B  
 DATE: APRIL 27 1991  
 AIR P.#: PIMC 005 374

IKTUA  
 BAY



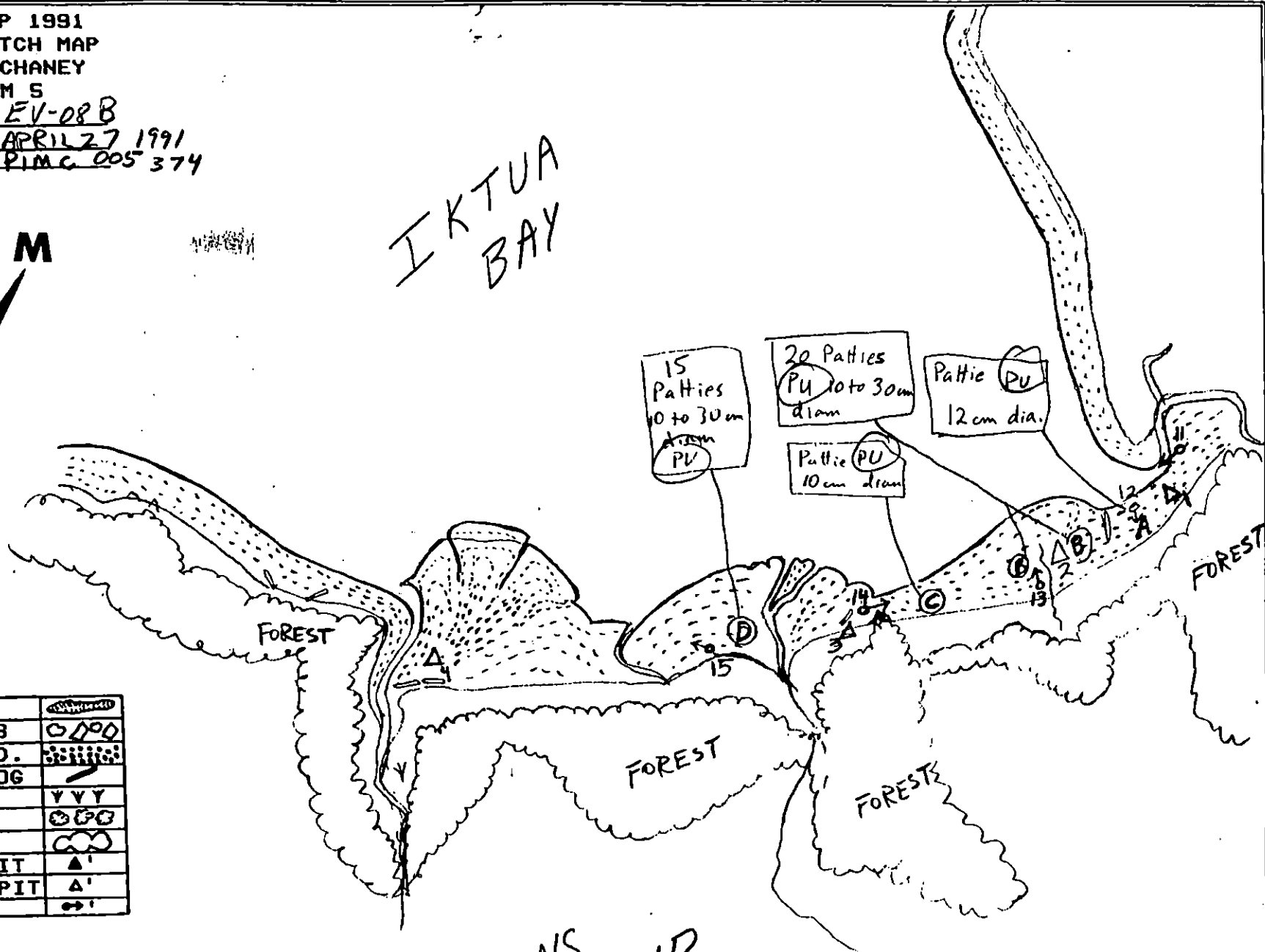
LEGEND

|            |  |
|------------|--|
| BEDROCK    |  |
| BOULDERS   |  |
| FINE BED.  |  |
| DRIFT LOG  |  |
| GRASS      |  |
| BRUSH      |  |
| FOREST     |  |
| OILED PIT  |  |
| NO OIL PIT |  |
| PHOTO      |  |

SCALE

APPROX 100  
 METERS

EVANS  
 ISLAND



Reviewed: E.W. 5/2/91  
 Reviewed: M.C. 5/7/91

# MAYSAP BIOLOGICAL SUMMARY FORM

TEAM # 5

DATE 27 Apr '91

SEGMENT # EV-8

TIDAL HEIGHT(Range) ~ -1 → 0

SUBDIVISION B

BIOLOGIST Crank

SEA STATE 0

WIND SPEED/DIRECTION 0

PHOTOGRAPHS: ROLL #

FRAME #

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

(A) Area is located high in the UITZ. Rare barnacles, isopods and sparse pockets of Littorina found under small boulders. Two meters down beach there are sparse adult barnacles, sparse Littorina and rare Fucus.

(B) Area is located in the UITZ. In the immediate there is sparse Fucus with conceptacles just beginning to mature & sparse healthy barnacles. Below area in the MITZ and LITZ is a dense clam bed with sparse barnacles; moderate Odonthalia (alga); sparse Fucus with sporelings present; sparse Ulva (alga); rare mussels and Scytosiphon (alga). Rich eelgrass bed present. Tar patties were removed without disturbing sensitive biota.

(C) Area is in the UITZ. Recently hatched Littorina and juvenile limpets present within area. Ten meters below area there are sparse to moderate barnacles and a patch of Fucus. Amphipods present.

(D) Area is low in UITZ. There is sparse Fucus and sparse barnacles within the area. Five meters below: Fucus is dense, sporelings are present. There are sparse Littorina and limpets. Rare mussels (majority are juveniles) present under small boulders and cobble. There is an intercobble mussel bed (majority adults) in the LITZ as well as a rich clam bed. Eelgrass bed and Ulva are present at approx +1' tide level.

EV-8 A & B located in same cove with similar biota coverage. LITZ sensitive due to clam and eelgrass beds. Subdivision has recruitment occurring in the Littorina & Fucus population. Other skull w/one tooth in slough - reported by ADEC.

## WILDLIFE OBSERVATIONS

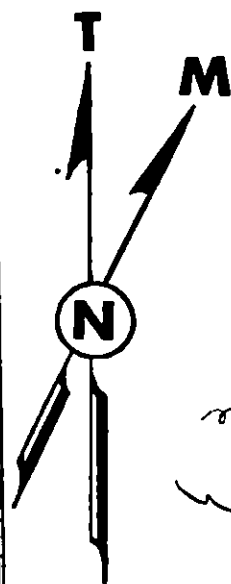
TO BE COMPLETED IN ALL SUBDIVISIONS

| BIRDS            | # OF SPECIES       | TOTAL BIRDS                   | FISH OBSERVED SPECIES PRESENT |
|------------------|--------------------|-------------------------------|-------------------------------|
| Eagles           |                    |                               | 1 dead Herring                |
| Seabirds         |                    |                               | Salmon vertebrae              |
| Waterfowl        | (1)                | (45 (Same birds as in EV-8A)) |                               |
| Gulls/kittiwakes |                    |                               |                               |
| Shorebirds       | 1 (Orstercatblers) | 2                             |                               |
| Corvids          |                    |                               |                               |
| Other Birds      |                    |                               |                               |

| MARINE MAMMALS      | # OBSERVED          | LAND MAMMALS SPECIES | # OBSERVED |
|---------------------|---------------------|----------------------|------------|
| Sea Otters          | 1 Skull w/one tooth | Deer leg             |            |
| Pinnipeds (specify) | 2 Harbor Seals      |                      |            |
| Whales (specify)    |                     |                      |            |
|                     |                     |                      |            |

Shoreline subdivision map showing important biological features attached.

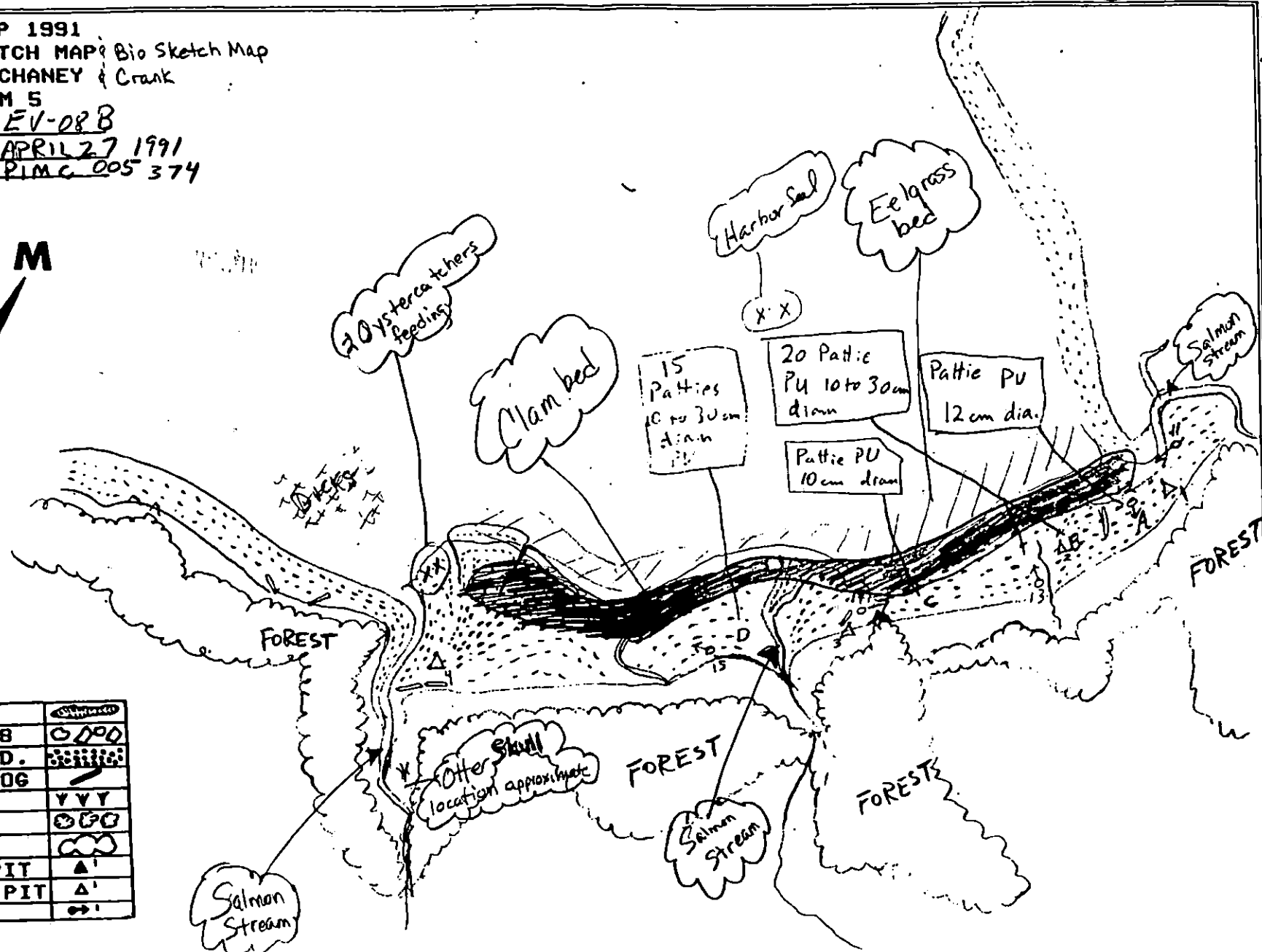
MAYSAP 1991  
 OG SKETCH MAP: Bio Sketch Map  
 GREG CHANEY & Crank  
 TEAM 5  
 SEGMENT: EV-08B  
 DATE: APRIL 27 1991  
 AIR P.#: PIMC 005 374

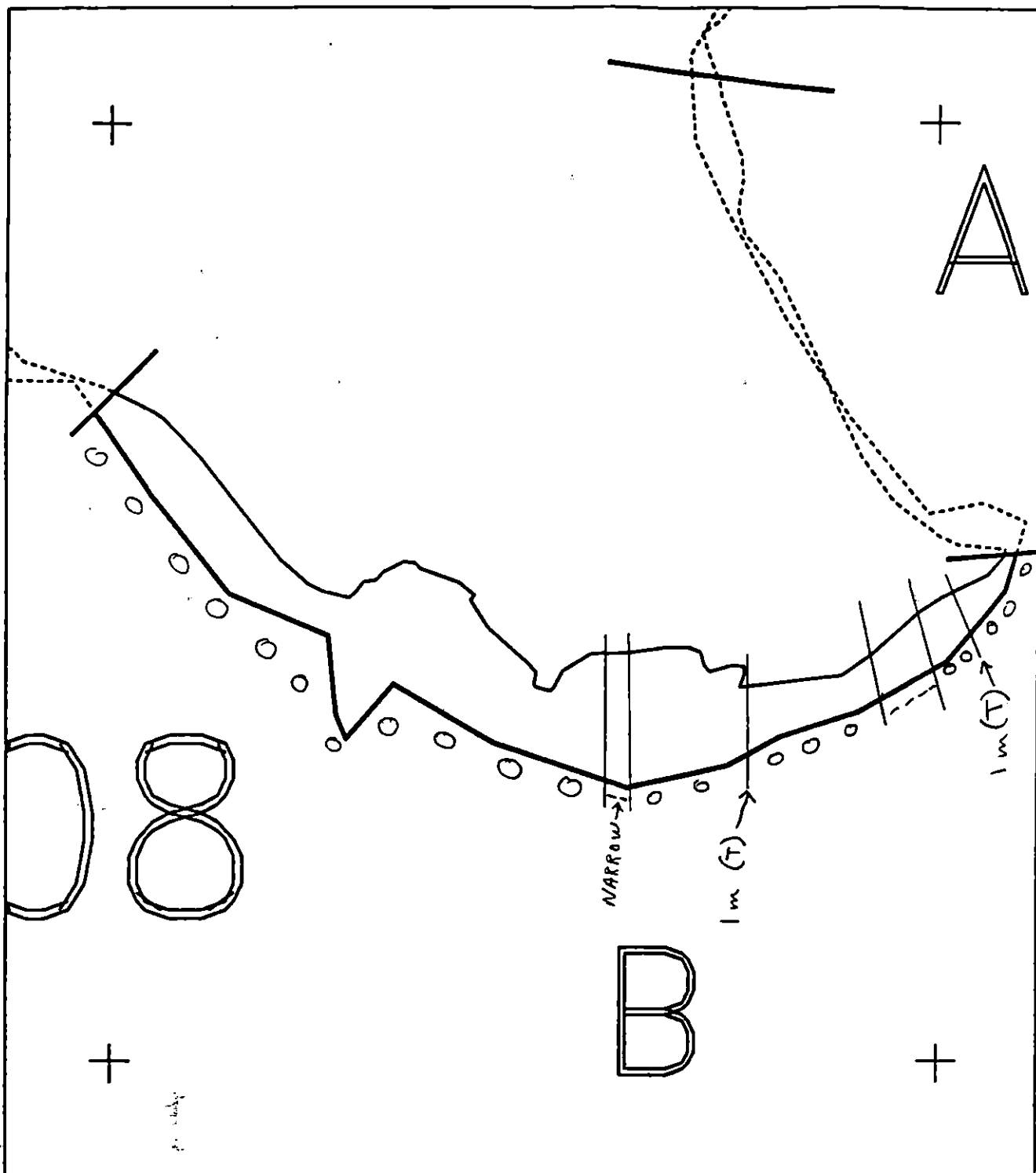


# LEGEND

|            |  |
|------------|--|
| BEDROCK    |  |
| BOULDERS   |  |
| FINE BED.  |  |
| DRIFT LOG  |  |
| GRASS      |  |
| BRUSH      |  |
| FOREST     |  |
| OILED PIT  |  |
| NO OIL PIT |  |
| PHOTO      |  |

SCALE





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

**EVO08 B**

ADEC Subsegment Length: 887m  
 METERS

5 100 200  
 AK State Plane Zone 4  
 pr00086



Subdivision Field Map

Map Key: PWSEVO08Bc

Name: Greg Cheney

Date: April 27 '91

Date Entered:

REVIEWED: F.W. 5/2/91  
 REVIEWED: M.C. 5/2/91

1991 MAYSAP EVALUATION

SEGMENT: EV 008 SUB: A REGION: PWS SURVEY DATE: 4/27/91

ENVIRONMENTAL SENSITIVITIES:

Work Window(s) OPEN

Ecological/Constraints (see page two for details) None

ARCHAEOLOGICAL CONSTRAINTS:

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

SHPO Signature: *Michael E. Hoffman* Date: 5/8/91

RECOMMENDATIONS:

INITIAL

TAG

FOSC

TREATMENT REQUIRED (Y or N)

N

Manual Pickup (Check as Req.)

Spot Washing

Bio-Customblen Only

Bio-Inipol/Customblen

Other

Other

COMMENTS:

INITIAL:

TAG:

FOSC:

TAG APPROVAL DATE: MAY 8 1991

FOSC APPROVAL DATE: 5/13/91

ADEC

FOSC

EXXON

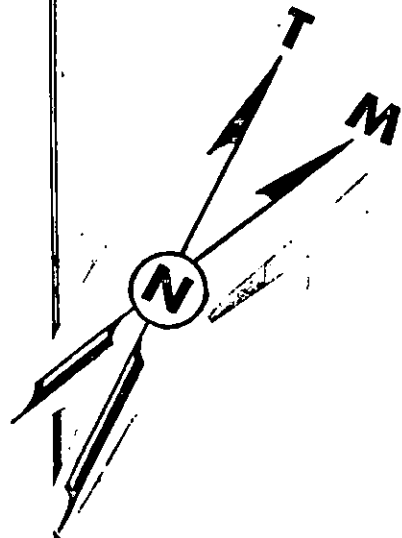
E. E. PAGE, CDR, USCG  
CHIEF OF STAFF, FOSC

USCG

NOAA

REVIEWED: M.C. 5/1/91  
REVIEWED: F.W. 5/1/91

MAYSAP 1991  
 OG SKETCH MAP  
 GREG CHANEY  
 TEAM 5  
 SEGMENT: EV-8-A  
 DATE: APRIL 27 1991  
 AIR P.#: PIM-C-005-374



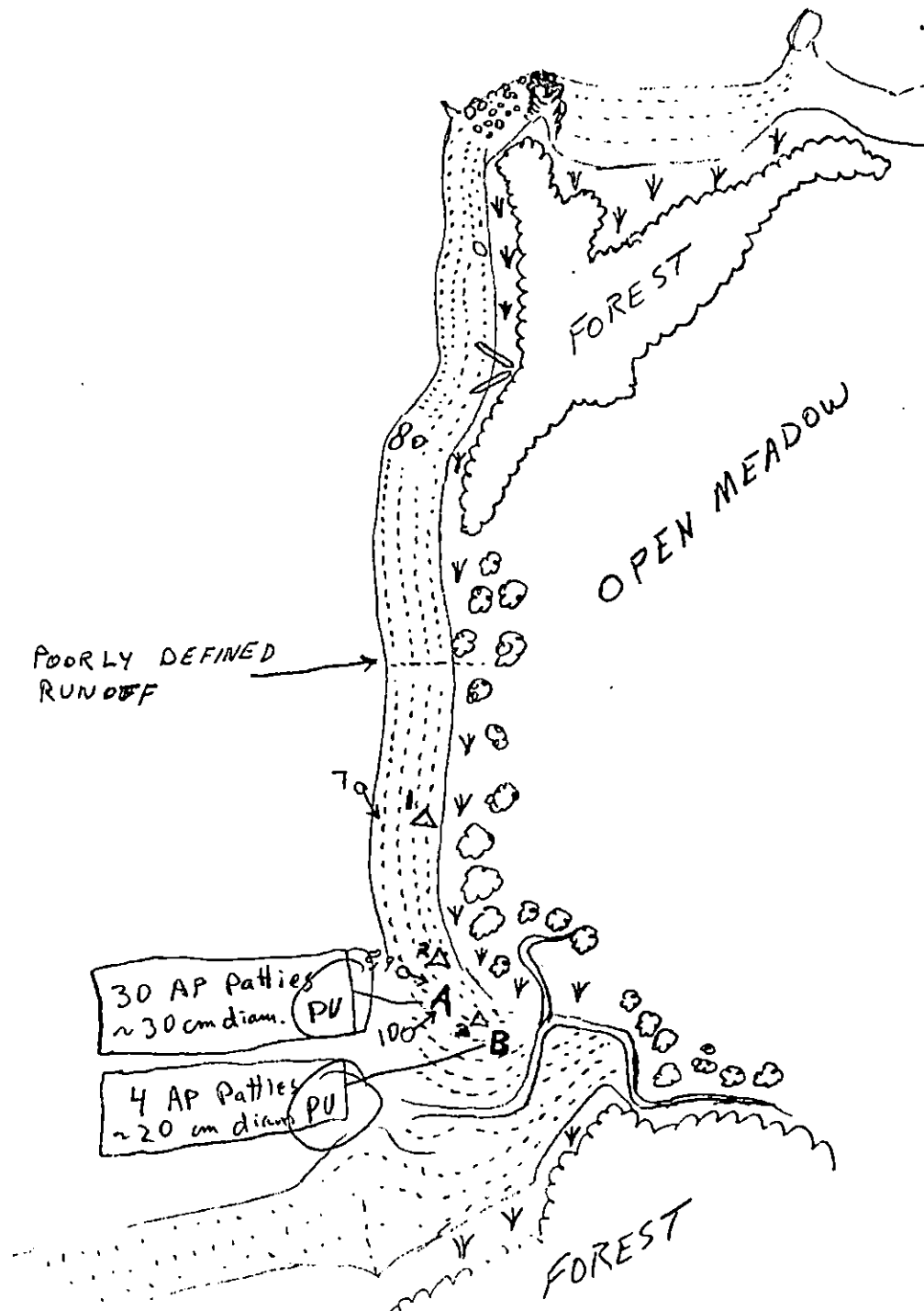
LEGEND

|            |  |
|------------|--|
| BEDROCK    |  |
| BOULDERS   |  |
| FINE BED.  |  |
| DRIFT LOG  |  |
| GRASS      |  |
| BRUSH      |  |
| FOREST     |  |
| OILED PIT  |  |
| NO OIL PIT |  |
| PHOTO      |  |

SCALE

APPROX. 75 METERS

POORLY DEFINED  
 RUNOFF



Reviewed: F.W. 5/1/91  
 Reviewed: M.C. 5/1/91

## MAYSAP BIOLOGICAL SUMMARY FORM

TEAM # 5

DATE 27 Apr '91

SEGMENT # EV-8

TIDAL HEIGHT (Range) ~ -1

SUBDIVISION A

BIOLOGIST Crank

SEA STATE 0

WIND SPEED/DIRECTION 0

PHOTOGRAPHS: ROLL #

FRAME #

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

(A) Area is a band of tar patches in the low LITZ; high MITZ.

Barnacles are sparse on the cobble, they tightly closed their inner plates when stimulated. *Littorina* and limpets are sparse. *Fucus* within the area is rare;4 m below area concentrations increase to sparse. Ten meters below site there is a stream mouth with eelgrass, *Ulva*, a dense clam bed, other digs and dense *Littorina*. Five Sunflower stars (*Pycnopodia*) were present in the LITZ below area. Patches were removed without disturbance to lower zones.(B) Area is located in the MITZ adjacent to anadromous stream. Sparse barnacle and *Scytosiphon* (alga) coverage. Mussels are rare. *Littorina* and limpets are sparse. Patches were removed without disturbance to biota.Site is a low energy cobble beach with continuous sparse barnacles on cobble. In MITZ sparse continuous *Fucus* with pockets of moderate concentration. *Littorina* and limpets are sparse and mussels are rare.The LITZ is a rich clam bed utilized by others (digs present). Filamentous green algae and *Ulva* present. Eelgrass bed begin ~ -1' tide level.

The clam bed and eelgrass bed makes this area sensitive to both foot and boat traffic. Intertidal biota appears to be healthy.

## WILDLIFE OBSERVATIONS

TO BE COMPLETED IN ALL SUBDIVISIONS

## BIRDS

## # OF SPECIES

## TOTAL BIRDS

FISH OBSERVED  
SPECIES PRESENT

| BIRDS            | # OF SPECIES | TOTAL BIRDS | FISH OBSERVED<br>SPECIES PRESENT |
|------------------|--------------|-------------|----------------------------------|
| Eagles           |              |             |                                  |
| Seabirds         | 1            | 2           |                                  |
| Waterfowl        | 1            | 45          |                                  |
| Gulls/Kittiwakes | 1            | 4           |                                  |
| Shorebirds       |              |             |                                  |
| Corvids          |              |             |                                  |
| Other Birds      |              |             |                                  |

## MARINE MAMMALS

## # OBSERVED

## LAND MAMMALS

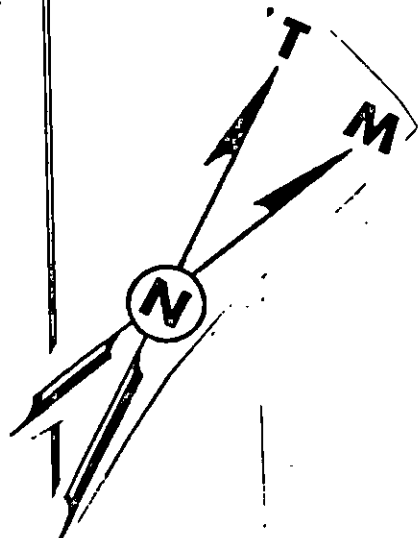
## SPECIES

## # OBSERVED

| MARINE MAMMALS      | # OBSERVED       | LAND MAMMALS<br>SPECIES | # OBSERVED |
|---------------------|------------------|-------------------------|------------|
| Sea Otters          |                  | Deer tracks             |            |
| Pinnipeds (specify) | 10 - Harbor Seal |                         |            |
| Whales (specify)    |                  |                         |            |
|                     |                  |                         |            |

Shoreline subdivision map showing important biological features attached.

MAYSAP 1991  
 OG SKETCH MAP & Bio Sketch Map  
 GREG CHANEY & Crank  
 TEAM 5  
 SEGMENT: EV-8-A  
 DATE: APRIL 27 1991  
 AIR P.#: PIM-C-005-374

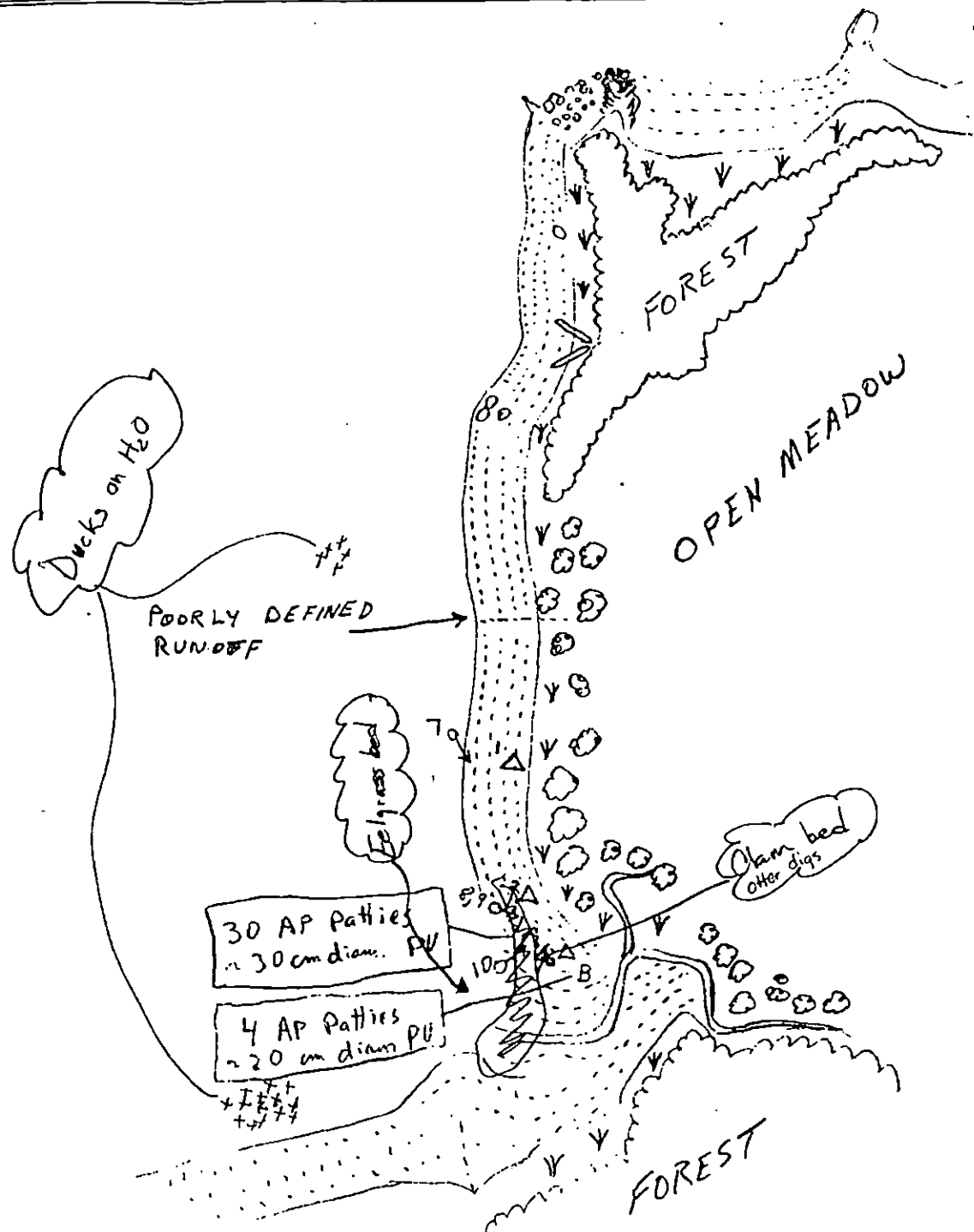


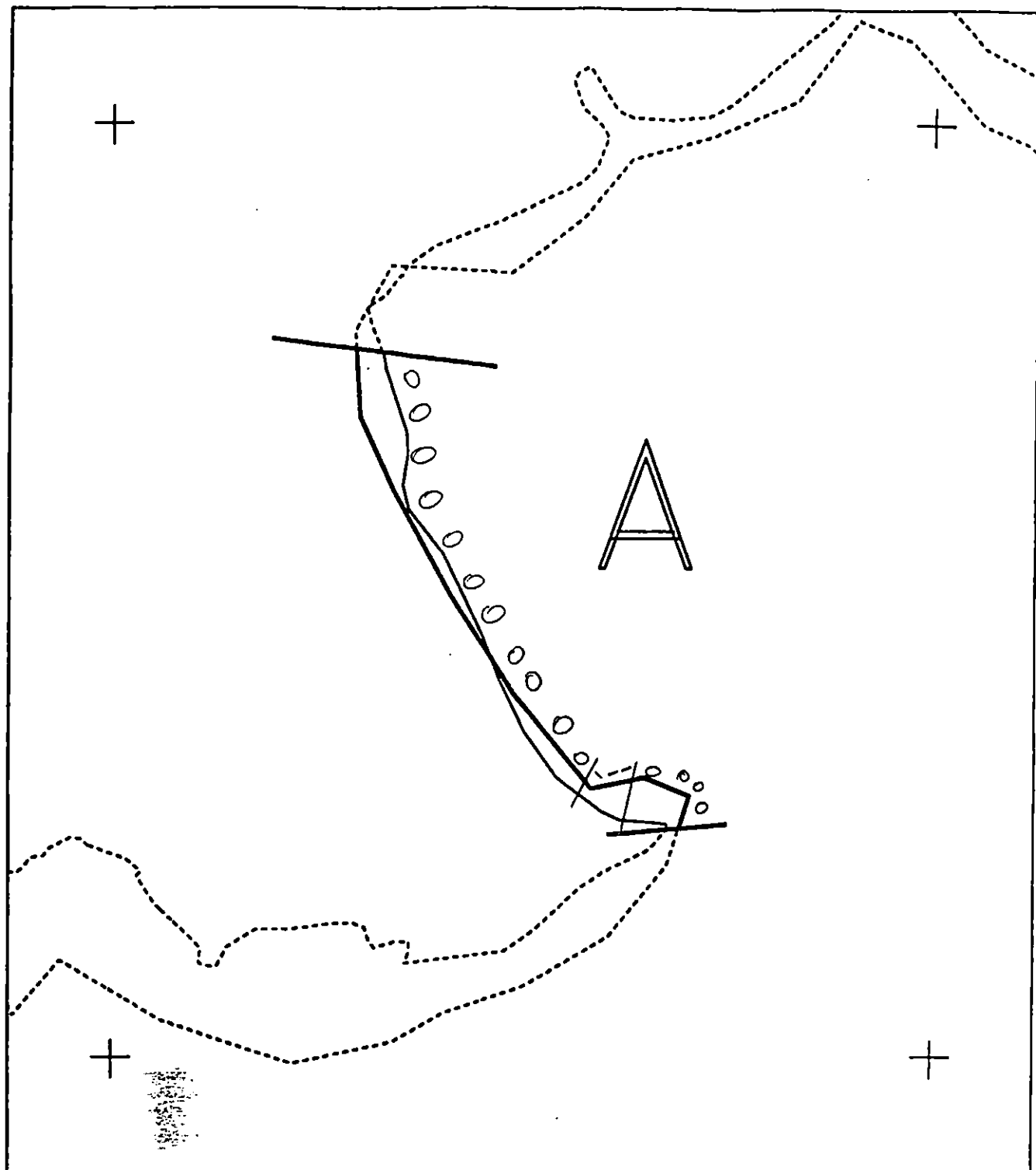
# LEGEND

|            |  |
|------------|--|
| BEDROCK    |  |
| BOULDERS   |  |
| FINE BED.  |  |
| DRIFT LOG  |  |
| GRASS      |  |
| BRUSH      |  |
| FOREST     |  |
| OILED PIT  |  |
| NO OIL PIT |  |
| PHOTO      |  |

## SCALE

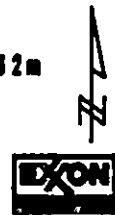
APPROX. 75 METERS





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

**EV008 A**  
 ADEC Subsegment Length: 482m  
 METERS  
 0 100 200  
 AK State Plane Zone 4  
 per000a



Subdivision Field Map  
 Map Key: PWSEV008A  
 Name: Greg Choney  
 Date: April 27 '91  
 Date Entered:

REVIEWED: F.W. 5/1/91  
 REVIEWED: M.C. 5/1/91

**1991 MAYSAP EVALUATION**

**SEGMENT:** EV 008 **SUB:** B **REGION:** PWS **SURVEY DATE:** 4/27/91

**ENVIRONMENTAL SENSITIVITIES:**

Work Window(s) RESTRICTED 3/1 - 9/15

Ecological/Constraints (see page two for details) **Eagle nest,**  
**Anadromous stream, Subsistence - Deer harvesting**

**ARCHAEOLOGICAL CONSTRAINTS:**

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

SHPO Signature: \_\_\_\_\_ Date: \_\_\_\_\_

**RECOMMENDATIONS:**

|                                    | <b>INITIAL</b> | <b>TAG</b> | <b>FOSC</b> |
|------------------------------------|----------------|------------|-------------|
| <b>TREATMENT REQUIRED (Y or N)</b> | <u>N</u>       | _____      | _____       |
| Manual Pickup (Check as Req.)      | _____          | _____      | _____       |
| Spot Washing                       | _____          | _____      | _____       |
| Bio-Customblen Only                | _____          | _____      | _____       |
| Bio-Inipol/Customblen              | _____          | _____      | _____       |
| Other _____                        | _____          | _____      | _____       |
| Other _____                        | _____          | _____      | _____       |

**COMMENTS:**

**INITIAL:** \_\_\_\_\_

**TAG:** \_\_\_\_\_

**FOSC:** \_\_\_\_\_

**TAG APPROVAL DATE:** \_\_\_\_\_ **FOSC APPROVAL DATE:** \_\_\_\_\_

**ADEC** \_\_\_\_\_ **FOSC** \_\_\_\_\_

**EXXON** \_\_\_\_\_

**USCG** \_\_\_\_\_

**NOAA** \_\_\_\_\_

**ECOLOGICAL CONSTRAINTS  
1991 FIELD ACTIVITIES**

**Eagle Nest:** Access restricted from 3/1 to 9/1. USF&WS authorization required. Maintain 1000' vertical and 1/4 mile horizontal buffer.

**Anadromous Stream:** Unlimited treatment up to stream bank between May 15 and July 10. ADF&G approval required for work after July 10. Fish Habitat Permit required for instream work. ADF&G approval required for bioremediation within 100 meters of anadromous stream after July 10.

**Subsistence, Deer Harvesting:** Unlimited treatment prior to 8/15.

## MAYSAP FIELD SHORELINE COMMENT SHEET

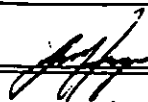
TEAM NO. 5 SEGMENT EV-08B SUBDIVISION B DATE 4/27/91

## ADEC

NAME

John Hayer

SIGNATURE

☒ NTR

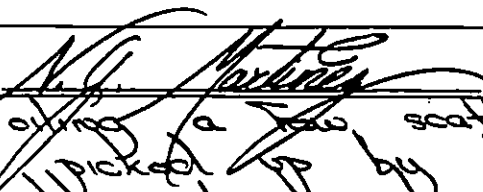
Survey crew walked segment and oiling observed. Consisted of 2 small bands of AP and 1 isolated tarball. Vew crew recovered oiling identified. Remaining oiling here is CV/SOR and stain. No further treatment recommended at this site.

## EXXON

NAME

Martinez N.J.

SIGNATURE

☒ NTR

Found very little oiling. A few scattered asphalt patties were picked up by the team. Recommend no further treatment.

## LANDMANAGER

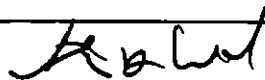
NAME

Steve Ward

OF

CVC

SIGNATURE

☒ NTR

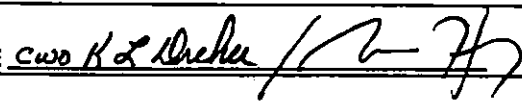
No history of Sub Surface oil. Area walked showed Intermediate patches of asphalt which were removed during survey. No Surface or Sub Surface oil present. No further treatment recommended at this time.

## USCG/NOAA

NAME

HODGES / OREHER

SIGNATURE

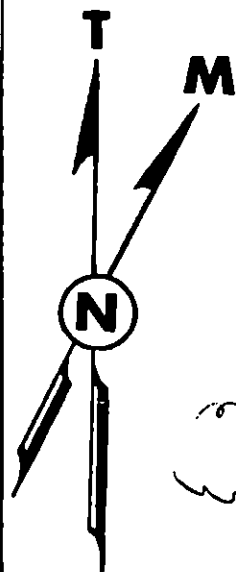
☒ NTR

Tar patties were found and were picked up. No indications of subsurface oil. No further treatment required.



MAY8AP 1991  
 OG SKETCH MAP  
 GREG CHANEY  
 TEAM 5  
 SEGMENT: EV-08B  
 DATE: APRIL 27 1991  
 AIR P.#: PIMC 005 374

IKTUA  
 BAY

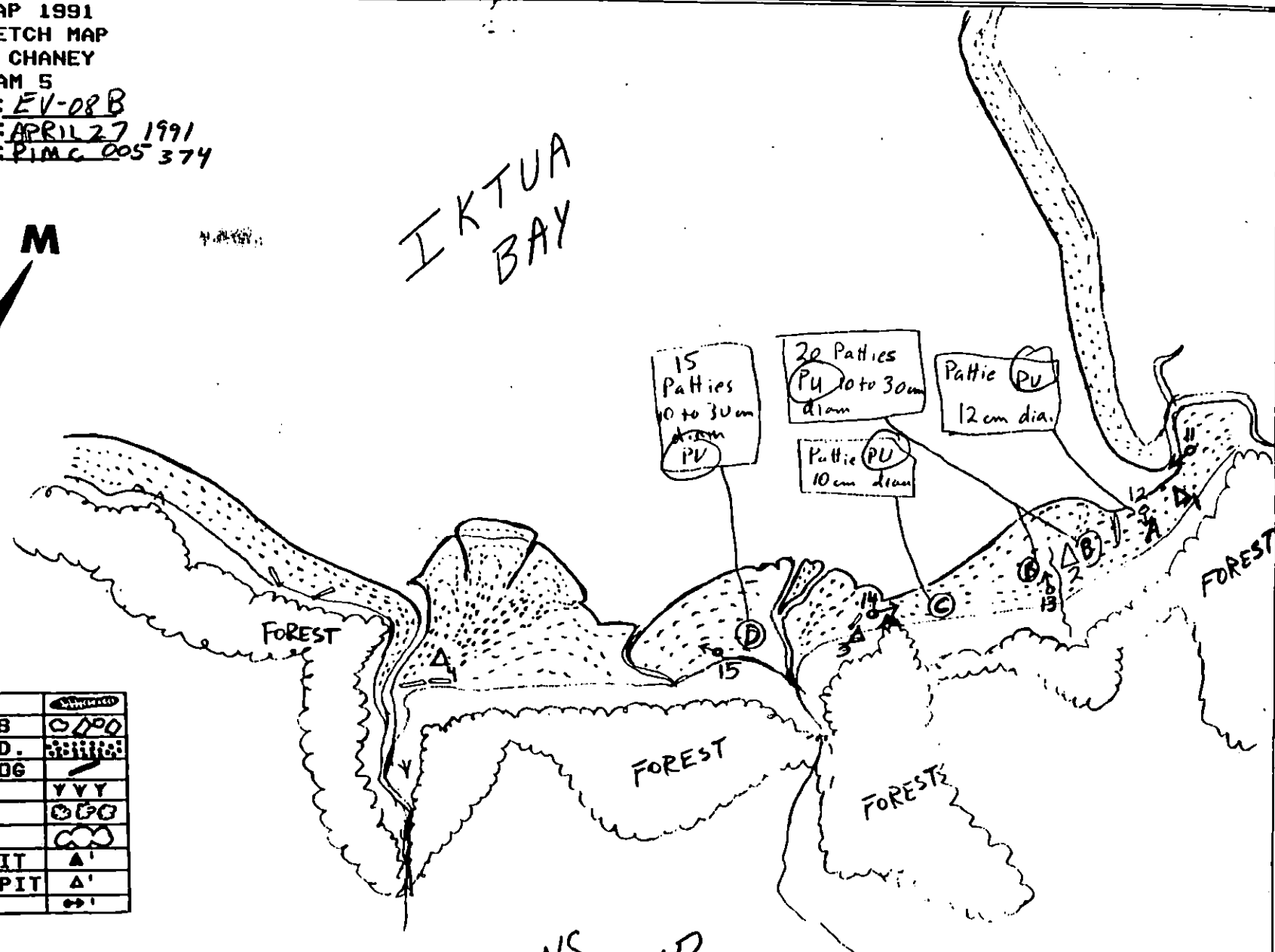


LEGEND

|            |  |
|------------|--|
| BEDROCK    |  |
| BOULDERS   |  |
| FINE BED.  |  |
| DRIFT LOG  |  |
| GRASS      |  |
| BRUSH      |  |
| FOREST     |  |
| OILED PIT  |  |
| NO OIL PIT |  |
| PHOTO      |  |

SCALE

APPROX 100  
 METERS



EVANS  
 ISLAND

Reviewed: E.W. 5/2/91  
 Reviewed: M.C. 5/2/91

# **WAYSAP BIOLOGICAL SUMMARY FORM**

**TEAM #** 5

**DATE** 27 Apr '91

**SEGMENT #** EV-8

**TIDAL HEIGHT (Range)** ~ -1 → 0

**SUBDIVISION** B

**BIOLOGIST** Crank

**SEA STATE** 0

**WIND SPEED/DIRECTION** 0

**PHOTOGRAPHS: ROLL #**

**FRAME #**

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

(A) Area is located high in the UITZ. Rare barnacles, isopods and sparse pockets of Littorina found under small boulders. Two meters down beach there are sparse adult barnacles, sparse Littorina and rare Fucus.

(B) Area is located in the UITZ. In the immediate there is sparse Fucus with conceptacles just beginning to mature; sparse healthy barnacles. Below area in the MITZ and LITZ is a dense clam bed with sparse barnacles; moderate Odonthalia (alga); sparse Fucus with sporlings present; sparse Ulva (alga); rare mussels and Scytosiphon (alga). Rich eelgrass bed present. Tar patties were removed without disturbing sensitive biota.

(C) Area is in the UITZ. Recently hatched Littorina and juvenile limpets present within area. Ten meters below area there are sparse to moderate barnacles and a patch of Fucus. Amphipods present.

(D) Area is low in UITZ. There is sparse Fucus and sparse barnacles within the area. Five meters below: Fucus is dense, sporlings are present. There are sparse Littorina and limpets. Rare mussels (majority are juveniles) present under small boulders and cobble. There is an intercobble mussel bed (majority adults) in the LITZ as well as a rich clam bed. Eelgrass bed and Ulva are present at approx +1' tide level.

EV-8 A; B located in same cove with similar biota coverage. LITZ sensitive due to clam and eelgrass beds. Subdivision has recruitment occurring in the Littorina; Fucus population. Otter skull w/one tooth in slough - reported by ADEC.

## **WILDLIFE OBSERVATIONS**

### **TO BE COMPLETED IN ALL SUBDIVISIONS**

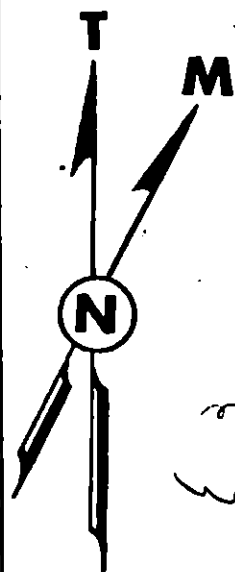
| BIRDS            | # OF SPECIES      | TOTAL BIRDS                     | FISH OBSERVED SPECIES PRESENT |
|------------------|-------------------|---------------------------------|-------------------------------|
| Eagles           |                   |                                 | 1 dead Herring                |
| Seabirds         |                   |                                 | Salmon vertebrae              |
| Waterfowl        | (1)               | (45 (Strong birds as in EV-8A)) |                               |
| Gulls/kittiwakes |                   |                                 |                               |
| Shorebirds       | 1 (Oystercatcher) | 2                               |                               |
| Corvids          |                   |                                 |                               |
| Other Birds      |                   |                                 |                               |

## **LAND MAMMALS**

| MARINE MAMMALS      | # OBSERVED          | SPECIES  | # OBSERVED |
|---------------------|---------------------|----------|------------|
| Sea Otters          | 1 Skull w/one tooth | Deer leg |            |
| Pinnipeds (specify) | 2 Harbor Seals      |          |            |
| Whales (specify)    |                     |          |            |
|                     |                     |          |            |

Shoreline subdivision map showing important biological features attached.

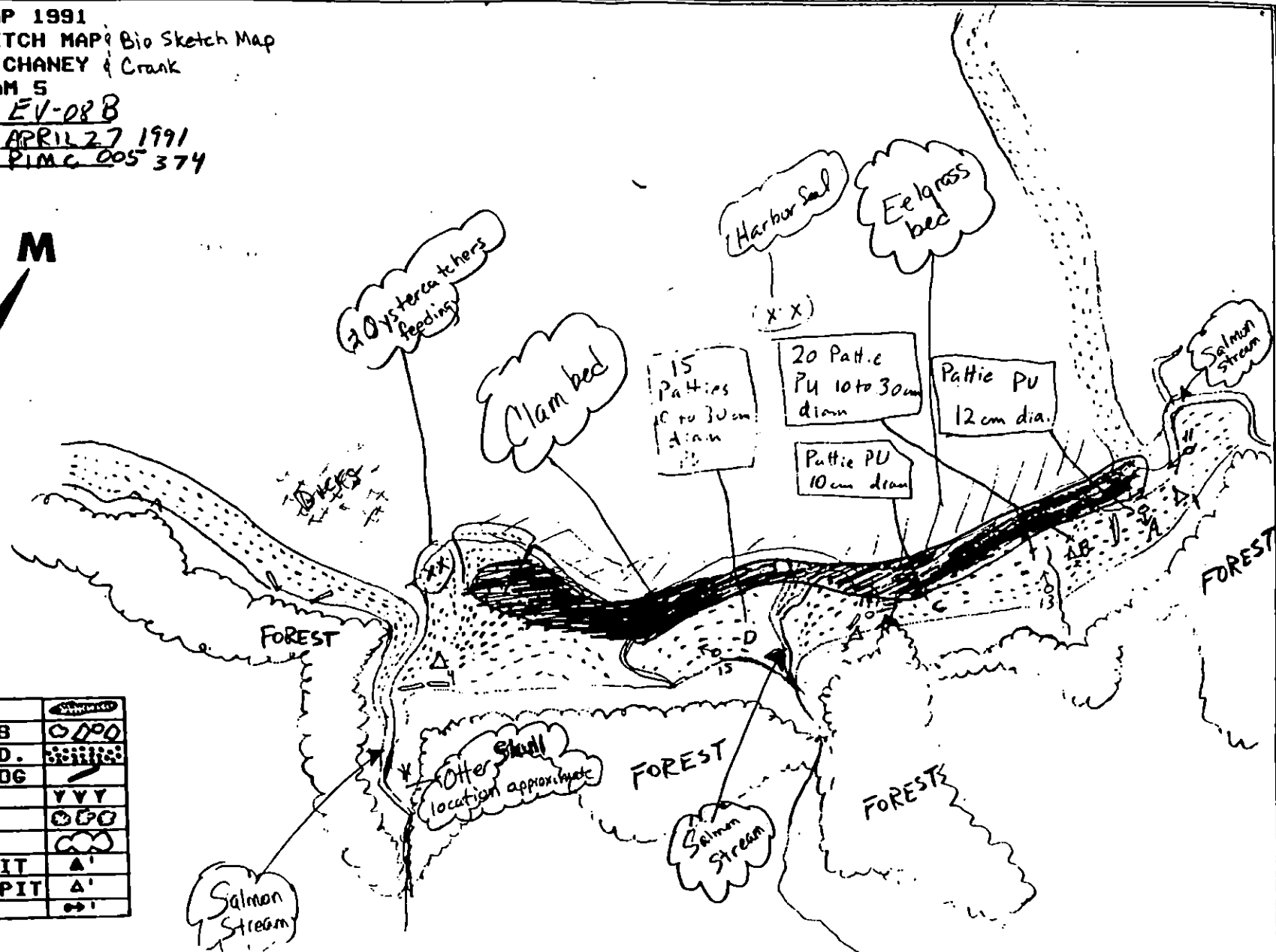
MAY8AP 1991  
 OG SKETCH MAP: Bio Sketch Map  
 GREG CHANEY & Crank  
 TEAM 5  
 SEGMENT: EV-08B  
 DATE: APRIL 27 1991  
 AIR P.#: PIMC 005 374

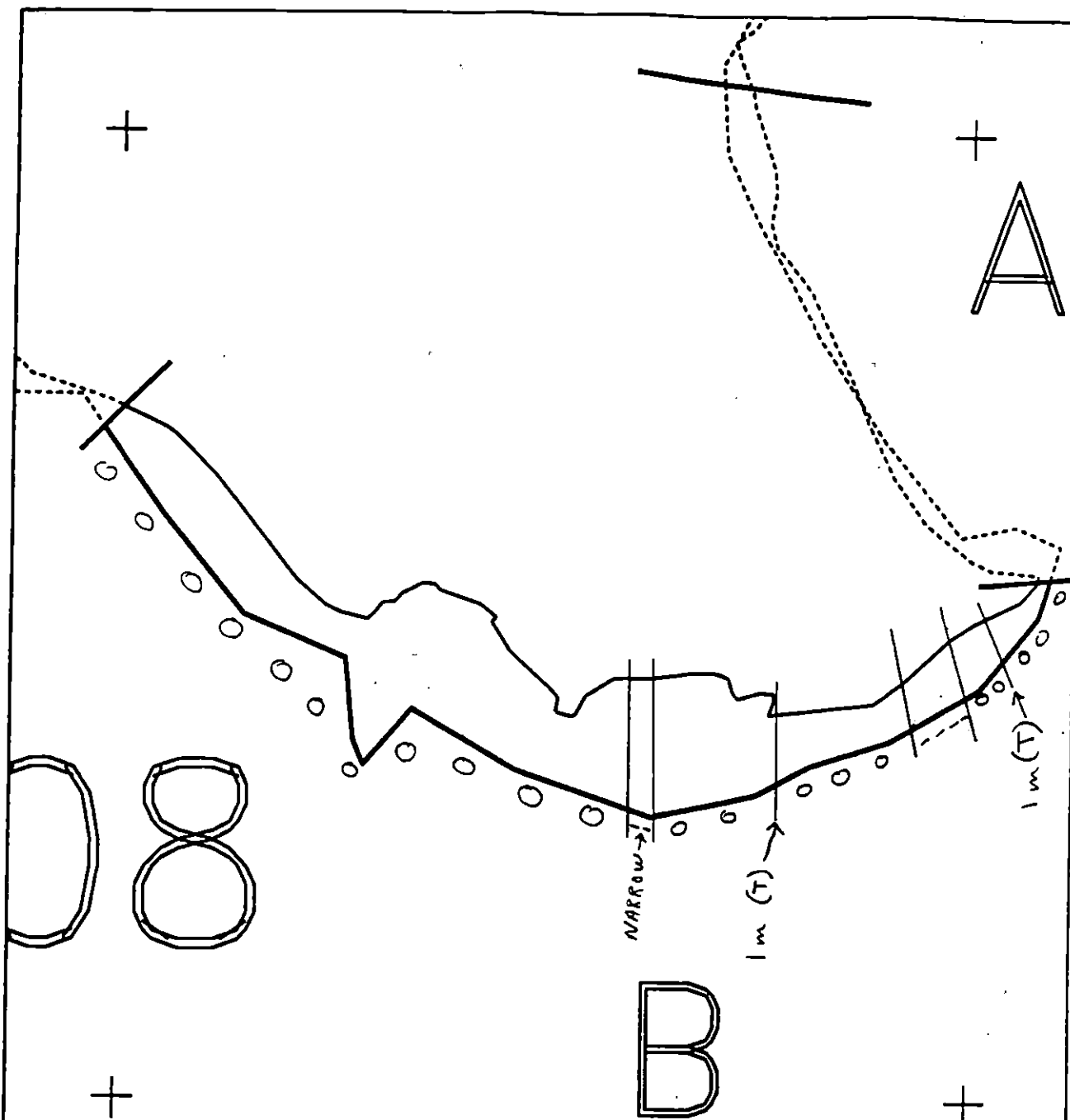


# LEGEND

|            |  |
|------------|--|
| BEDROCK    |  |
| BOULDERS   |  |
| FINE BED.  |  |
| DRIFT LOG  |  |
| GRASS      |  |
| BRUSH      |  |
| FOREST     |  |
| OILED PIT  |  |
| NO OIL PIT |  |
| PHOTO      |  |

SCALE





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

**EV008 B**

ADEC Subsegment Length: 887m

METERS

5 100 200  
 AK State Plane Zone 4  
 pr0088a



Subdivision Field Map

Map Key: PWSEV0088a

Name: *Greg Chavey*

Date: *April 27 '91*

Date Entered:

REVIEWED: F.W. 5/2/91

REVIEWED: MC. 5/2/91

**1991 MAYSAP EVALUATION**

**SEGMENT:** EV 008 **SUB:** A **REGION:** PWS **SURVEY DATE:** 4/27/91

**ENVIRONMENTAL SENSITIVITIES:**

Work Window(s) OPEN

Ecological/Constraints (see page two for details) None

**ARCHAEOLOGICAL CONSTRAINTS:**

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

SHPO Signature: \_\_\_\_\_ Date: \_\_\_\_\_

**RECOMMENDATIONS:**

|                               | <b>INITIAL</b> | <b>TAG</b> | <b>FOSC</b> |
|-------------------------------|----------------|------------|-------------|
| TREATMENT REQUIRED (Y or N)   | <u>N</u>       | _____      | _____       |
| Manual Pickup (Check as Req.) | _____          | _____      | _____       |
| Spot Washing                  | _____          | _____      | _____       |
| Bio-Customblen Only           | _____          | _____      | _____       |
| Bio-Inipol/Customblen         | _____          | _____      | _____       |
| Other _____                   | _____          | _____      | _____       |
| Other _____                   | _____          | _____      | _____       |

**COMMENTS:**

INITIAL: \_\_\_\_\_

TAG: \_\_\_\_\_

FOSC: \_\_\_\_\_

TAG APPROVAL DATE: \_\_\_\_\_

FOSC APPROVAL DATE: \_\_\_\_\_

ADEC \_\_\_\_\_

FOSC \_\_\_\_\_

EXXON \_\_\_\_\_

USCG \_\_\_\_\_

NOAA \_\_\_\_\_

# MAYSAP FIELD SHORELINE COMMENT SHEET

TEAM NO. 5 SEGMENT EV-8 SUBDIVISION A DATE 4/27/91

## ADEC

NAME John Hoyer SIGNATURE [Signature]

☒ NTR

Survey team identified AP band East of stream sites A+B. This oiling was recovered by deck crew. No further treatment recommended here at this time. Entire segment was walked by Survey team.

## EXXON

NAME Martinez N.J. SIGNATURE [Signature]

☒ NTR

Not enough oil to warrant any work, it would be for not environmental benefit.

## LANDMANAGER

NAME Steve Ward OF CVC SIGNATURE [Signature]

☒ NTR

no Sub-Surface oil found - no history of Sub-oil  
All Asphalt Located was manually Removed during Survey.  
No Further treatment Required.

## USCG/NOAA

NAME Hodges/Dreher SIGNATURE [Signature] CWO K.L. Dreher

☒ NTR

Tar patties observed in ~~mid~~ (upper) inner tidal zone ranging from 4cm to 10 cm in diameter. All patties retrieved. Pits showed no oil or sheen.

DATE April 27, 191

EST. OIL CATEGORY LENGTH: W 0 m M 0 m N 40 m VL 0 m NO 422 m US 0 m

FRAMES 1-10

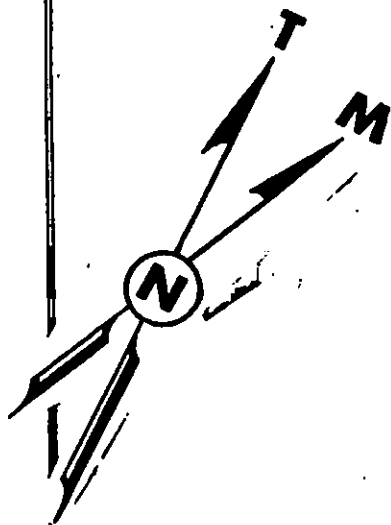
**SHEEN COLOR: B = BROWN: R = RAINBOW: S = SILVER: N = NONE**

**OG COMMENTS:**

RECEIVED: M.C. 5/1/91

REVIEWED: F.W. 5/1/91

MAYBAP 1991  
 OG SKETCH MAP  
 GREG CHANEY  
 TEAM 5  
 SEGMENT: EV-8-A  
 DATE: APRIL 27 1991  
 AIR P.N. PIM-C-005-374

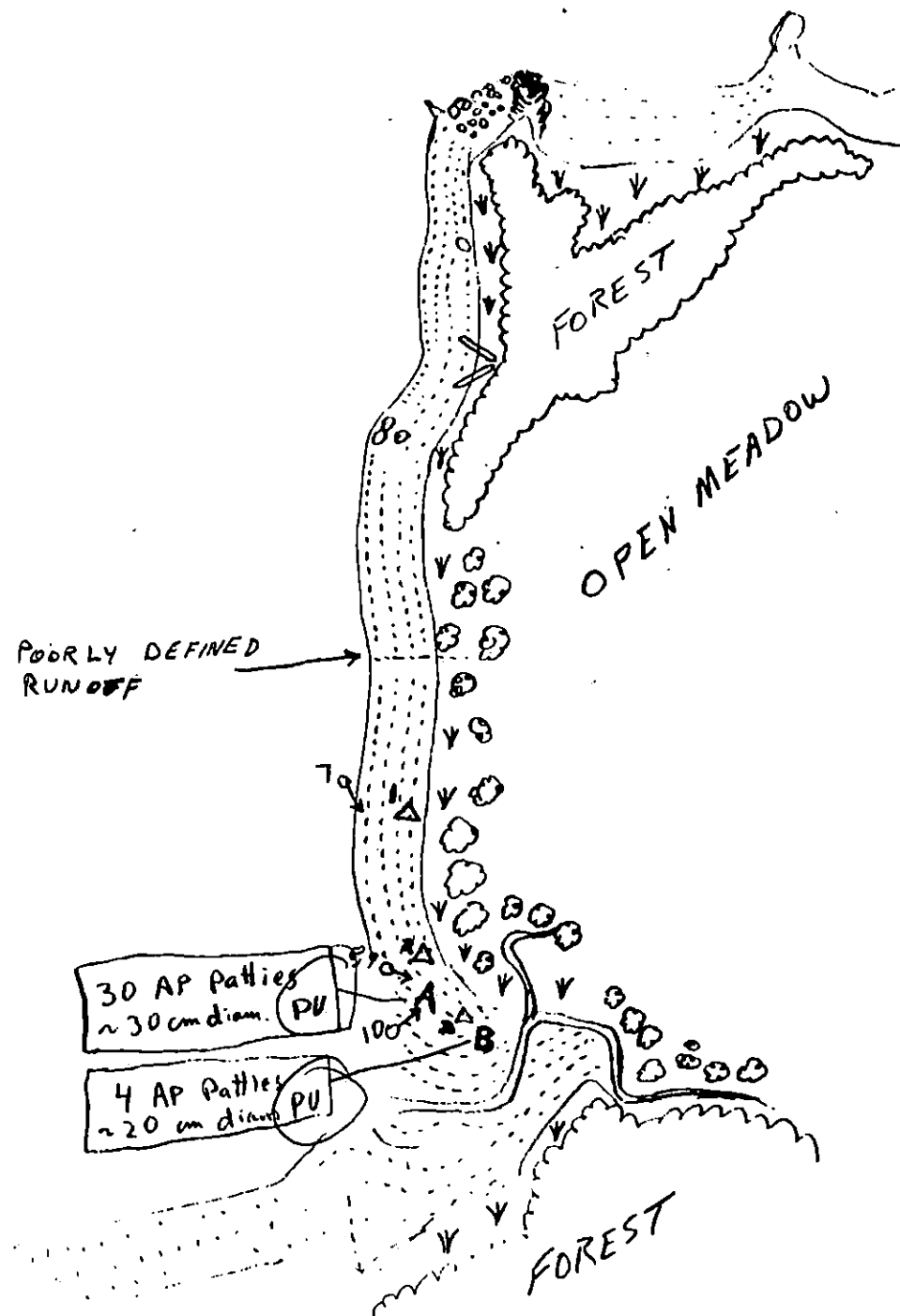


# LEGEND

|            |  |
|------------|--|
| BEDROCK    |  |
| BOULDERS   |  |
| FINE BED.  |  |
| DRIFT LOG  |  |
| GRASS      |  |
| BRUSH      |  |
| FOREST     |  |
| OILED PIT  |  |
| NO OIL PIT |  |
| PHOTO      |  |

## SCALE

APPROX. 75 METERS



Reviewed: R.W. 5/1/91  
 Approved: M.C. 5/1/91

## MAYSAP BIOLOGICAL SUMMARY FORM

TEAM # 5

DATE 27 Apr '91

SEGMENT # EV-8

TIDAL HEIGHT (Range) ~ -1

SUBDIVISION A

BIOLOGIST Crank

SEA STATE 0

WIND SPEED/DIRECTION 0

PHOTOGRAPHS: ROLL #

FRAME #

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

(A) Area is a band of tar patties in the low LITZ; high MITZ.

Barnacles are sparse on the cobble, they tightly closed their inner plates when

stimulated. Littorina and limpets are sparse. Fucus within the area is rare;

4 m below area concentrations increase to sparse. Ten meters below site there is

a stream mouth with eelgrass, Ulva, a dense clam bed, other digs anddense Littorina. Five Sunflower stars (Pycnopodia) were present in the LITZ below area.

Patties were removed without disturbance to lower zones.

(B) Area is located in the MITZ adjacent to anadromous stream. Sparse barnacle and Scytosiphon (alga) coverage. Mussels are rare. Littorina and limpets are sparse. Patties were removed without disturbance to biota.

Site is a low energy cobble beach with continuous sparse barnacles

on cobble. In MITZ sparse continuous Fucus with pockets of moderateconcentration. Littorina and limpets are sparse and mussels are rare.The LITZ is a rich clam bed utilized by others (digs present). Filamentous green algae and Ulva present. Eelgrass bed began ~ -1' tide level.

The clam bed and eelgrass bed makes this area sensitive to both foot and boat traffic. Intertidal biota appears to be healthy.

## WILDLIFE OBSERVATIONS

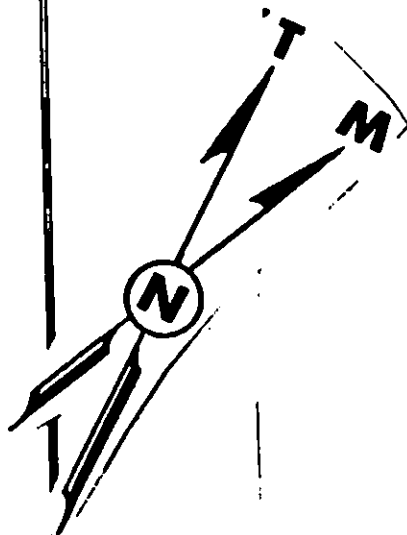
TO BE COMPLETED IN ALL SUBDIVISIONS

| BIRDS            | # OF SPECIES | TOTAL BIRDS | FISH OBSERVED<br>SPECIES PRESENT |
|------------------|--------------|-------------|----------------------------------|
| Eagles           |              |             |                                  |
| Seabirds         | 1            | 2           |                                  |
| Waterfowl        | 1            | 45          |                                  |
| Gulls/Kittiwakes | 1            | 4           |                                  |
| Shorebirds       |              |             |                                  |
| Corvids          |              |             |                                  |
| Other Birds      |              |             |                                  |

| MARINE MAMMALS      | # OBSERVED       | LAND MAMMALS<br>SPECIES | # OBSERVED |
|---------------------|------------------|-------------------------|------------|
| Sea Otters          |                  | Deer tracks             |            |
| Pinnipeds (specify) | 10 - Harbor Seal |                         |            |
| Whales (specify)    |                  |                         |            |
|                     |                  |                         |            |

Shoreline subdivision map showing important biological features attached.

MAY8AP 1991  
 OG SKETCH MAP & Bio Sketch Map  
 GREG CHANEY & Crank  
 TEAM 5  
 SEGMENT: EV-8-A  
 DATE: APRIL 27 1991  
 AIR P.#: PIM-C-005-374

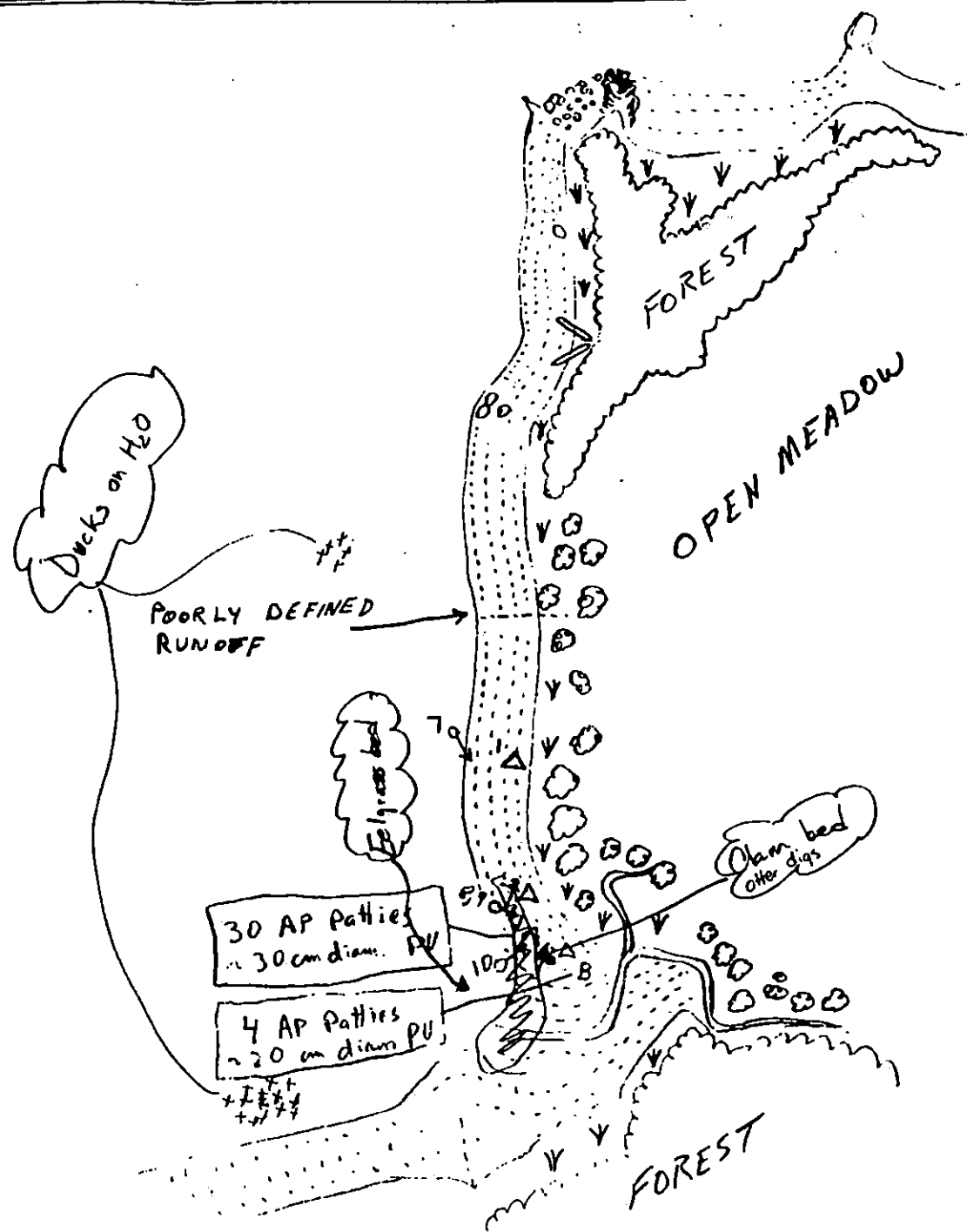


# LEGEND

|            |  |
|------------|--|
| BEDROCK    |  |
| BOULDERS   |  |
| FINE BED.  |  |
| DRIFT LOG  |  |
| GRASS      |  |
| BRUSH      |  |
| FOREST     |  |
| OILED PIT  |  |
| NO OIL PIT |  |
| PHOTO      |  |

## SCALE

APPROX 75 METERS





REGION: PRINCE WILLIAM SOUND

SEGMENT: ST/EV-09

SUBDIVISIONS: A (1 OF 1)

# SHORELINE EVALUATION

SEGMENT ST/ EV-09 SUBDIVISION A (1 OF 1) DATE 4/25/90

## SEGMENT ENVIRONMENTAL SENSITIVITIES AND TIME CONSTRAINTS:

5T-1 All bald eagle nests (3/1 to 6/1)-Active eagle nests (3/1 to 9/1)  
Eagle nest within 400 M of segment

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

7II Subsistence area: Deer harvesting (8/15 to 2/28)

See attached Ecological Constraint sheet for specific constraints and contacts.

## SUBDIVISION ECOLOGICAL CONSTRAINTS:

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

## ARCHAEOLOGICAL CONSTRAINTS:

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

SHPO SIGNATURE: \_\_\_\_\_ DATE: \_\_\_\_\_

## OILING CATEGORIZATION:

Wide 0 m: Medium 0 m: Narrow 125 m: V.Light 347 m: No Oil 257 m  
Subsurface Oil Observed: Yes \_\_\_\_\_ No X Maximum Depth \_\_\_\_\_

## RECOMMENDATIONS:

|                                                           |                                                        |
|-----------------------------------------------------------|--------------------------------------------------------|
| <input type="checkbox"/> No Treatment Recommended         | <input type="checkbox"/> Snare/Absorbent Booms         |
| <input checked="" type="checkbox"/> Treatment Recommended | <input type="checkbox"/> Oil Snares (pom poms)         |
| <input checked="" type="checkbox"/> Manual Pickup         | <input type="checkbox"/> Absorbents (pads, rolls, etc) |
| <input type="checkbox"/> Bioremediation                   | <input type="checkbox"/> Spot Washing: _____ Wands     |
| <input checked="" type="checkbox"/> Tarmat Removal        | <input type="checkbox"/> Beach Cleaner                 |
|                                                           | <input type="checkbox"/> Other (see comments)          |

COMMENTS: Recommend manual pickup of scattered tar patties and removal of tarmats as shown on sketch map. Work should be conducted after 6/1 and with USFWS approval based on eagle nest constraints.

TAG COMMENTS: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

TAG APPROVAL DATE: \_\_\_\_\_

ADEC \_\_\_\_\_  
EXXON \_\_\_\_\_  
NOAA \_\_\_\_\_  
USCG \_\_\_\_\_

FOSC: \_\_\_\_\_ DATE: \_\_\_\_\_

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

# FIELD SHORELINE COMMENT SHEET

SEGMENT ST EVO 9 SUBDIVISION: A DATE 4/23/90

ISCG  
NAME SHAWN-MARS SIGNATURE DC [Signature]

☐ NO TREATMENT RECOMMENDED  
COMMENTS

☒ TREATMENT SUGGESTED

MANUAL REMOVAL OF TAR BALLS AND ASPHALT/PAVEMENT.  
IN POCKET BEACHS DETAILED ON DRAWINGS.  
NTR ON COVER WHICH IS SPORADIC AND ON VERTICAL  
ROCK FACE.

ADEC  
NAME DAVE SALE SIGNATURE Dave M Sale

☐ NO TREATMENT RECOMMENDED  
COMMENTS

☒ TREATMENT SUGGESTED

SPLATTER ON HI-ANGLE ROCKS PROBABLY NOT REMOVABLE.  
② ALL ASPHALT AND TAR PATCHES SHOULD BE REMOVED MANUALLY  
AND ANY PENETRATION INTO SEDIMENTS BY MORE <sup>FLUID</sup> ~~ASPHALT~~ <sub>ONE</sub>  
UNDERSIDES OF PATCHES & ASPHALT.

LAND MANAGER  
NAME Don Kompkoff Jr. SIGNATURE Donald P Kompkoff Jr.

☐ NO TREATMENT RECOMMENDED  
COMMENTS

☒ TREATMENT SUGGESTED

37 of 59

OG R. Marty USCG S. Mass SEGMENT ST/ EV-09  
 BIO B. Lomen LAND REP D. Kempf Jr. SUBDIVISION A ( A OF A )  
 EXXON J. Garza ADEC D. Sale TIME 09:32 to 10:15  
 TEAM NO. 10 TIDE LEVEL +1.25m → +1.92m DATE 28 / April / 90  
 EST. SUBDIVISION LENGTH: 847 m ☒ Sun ☐ Clouds ☐ Fog ☐ Rain ☐ Snow  
 UPLANDS DESCRIPTION: ☐ Grass ☒ Forest ☐ Rock  
 SURVEYED FROM: ☐ Foot ☐ Boat ☐ Helo WORKING DIRECTION: S to N  
 SURFACE SEDIMENTS: R 46% % B 27% % C 17% % P 5% % G 5% % S 0% % M 0% % V 0%  
 SLOPE: Long 40% % Hang 30% % Vert 10% WAVE EXPOSURE: ☒ Low ☐ Med ☐ High  
 OIL CATEGORY LENGTH: W 0 m M 0 m N 100 m VL 177 m NO 270 m

### SURFACE OIL

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

PAVEMENT H F 5 <sup>1.5m x 4m x 30%</sup>  
<sup>+ 0.2m x 20m x 50%</sup>  
<sup>1.5m x 2m x 50%</sup> sq. m by 3 cm

PATTIES / TARBALLS 1 BAGS

NEAR SHORE SHEEN? (NO) BR RW SL TL

| OILED DEBRIS | NO | AMOUNT |    |    | DID YOU COLLECT DEBRIS?                                                                                                         |
|--------------|----|--------|----|----|---------------------------------------------------------------------------------------------------------------------------------|
|              |    | SM     | MD | LG |                                                                                                                                 |
| Logs         | X  |        |    |    | YES <input checked="" type="checkbox"/> NO <input type="checkbox"/><br>united from p<br>TYPE <u>tar balls</u><br>#BAGS <u>2</u> |
| Vegetation   | X  |        |    |    |                                                                                                                                 |
| Trash        | X  |        |    |    |                                                                                                                                 |
| Debris       | X  |        |    |    |                                                                                                                                 |

Photographs:

Roll No. ST/10/14

Frames 11, 12

### SUBSURFACE OIL

| PIT NO.  | PIT DEPTH (cm) | SUBSURFACE OIL CHARACTER |    |    |    |    | OILED INTERVAL | BELOW |    | OIL / FILM COLOR |    |    |    | PIT ZONE |    |    |    | A N A    | SHEEN (Y/N) | SURFACE - SUBSURFACE SEDIMENTS |
|----------|----------------|--------------------------|----|----|----|----|----------------|-------|----|------------------|----|----|----|----------|----|----|----|----------|-------------|--------------------------------|
|          |                | OP                       | OR | OL | OF | NO |                | US    | US | 2C               | 2B | 2P | 2S | 3U       | 3U | 3M | 3U |          |             |                                |
| <u>1</u> | <u>12</u>      |                          |    |    |    | X  | <u>0.4</u>     |       | X  |                  |    |    | X  |          |    | X  |    | <u>N</u> | <u>-</u>    | <u>P.G.C-G.S.C</u>             |
|          |                |                          |    |    |    |    |                |       |    |                  |    |    |    |          |    |    |    |          |             |                                |
|          |                |                          |    |    |    |    |                |       |    |                  |    |    |    |          |    |    |    |          |             |                                |
|          |                |                          |    |    |    |    |                |       |    |                  |    |    |    |          |    |    |    |          |             |                                |
|          |                |                          |    |    |    |    |                |       |    |                  |    |    |    |          |    |    |    |          |             |                                |
|          |                |                          |    |    |    |    |                |       |    |                  |    |    |    |          |    |    |    |          |             |                                |
|          |                |                          |    |    |    |    |                |       |    |                  |    |    |    |          |    |    |    |          |             |                                |
|          |                |                          |    |    |    |    |                |       |    |                  |    |    |    |          |    |    |    |          |             |                                |
|          |                |                          |    |    |    |    |                |       |    |                  |    |    |    |          |    |    |    |          |             |                                |
|          |                |                          |    |    |    |    |                |       |    |                  |    |    |    |          |    |    |    |          |             |                                |

COMMENTS Note: all observed oil removed (except very widely spaced splatters) from S half of the segment (see map).  
 A few areas of tar mat remain in the northern half of the segment (as mapped).  
 28 of 59  
 REVIEWED BAF DATE 25 Apr 90

Note: Debris and Tar, other than widely  
scattered splatter, was removed from  
area south of the 'run off' stream.  
Oil/Tar remaining to the north of the  
stream.

# SHORELINE ECOLOGICAL SUMMARY

Segment ST/6V-09 Subdivision A Date (mo/day/yr) 4/23/90  
 Time (24 hr) 0930-1030 Biologist Lemon

- (A) Substrate type and % of segments:  
 (1) Bedrock 5 (2) Boulder 30 (3) Cobble 20 (4) Pebble 5 (5) Sand 5 (6) Silt
- (B) Overall % cover of biota (% of segment): Dense        Moderate 50% Low
- (C) Density, substrate preference (by number from A, above), & vertical zonation of major taxa: (upper-U; mid-M; low tidal-L); juveniles/adults (X) new settlement (3)

Photographs:  
 Roll No. SV10/14  
 Frames 11, 12

## BARNACLES

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

NOT PRESENT

## MYTILUS

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

NOT PRESENT

## GASTROPODS

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

NOT PRESENT

## FUCUS

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

NOT PRESENT

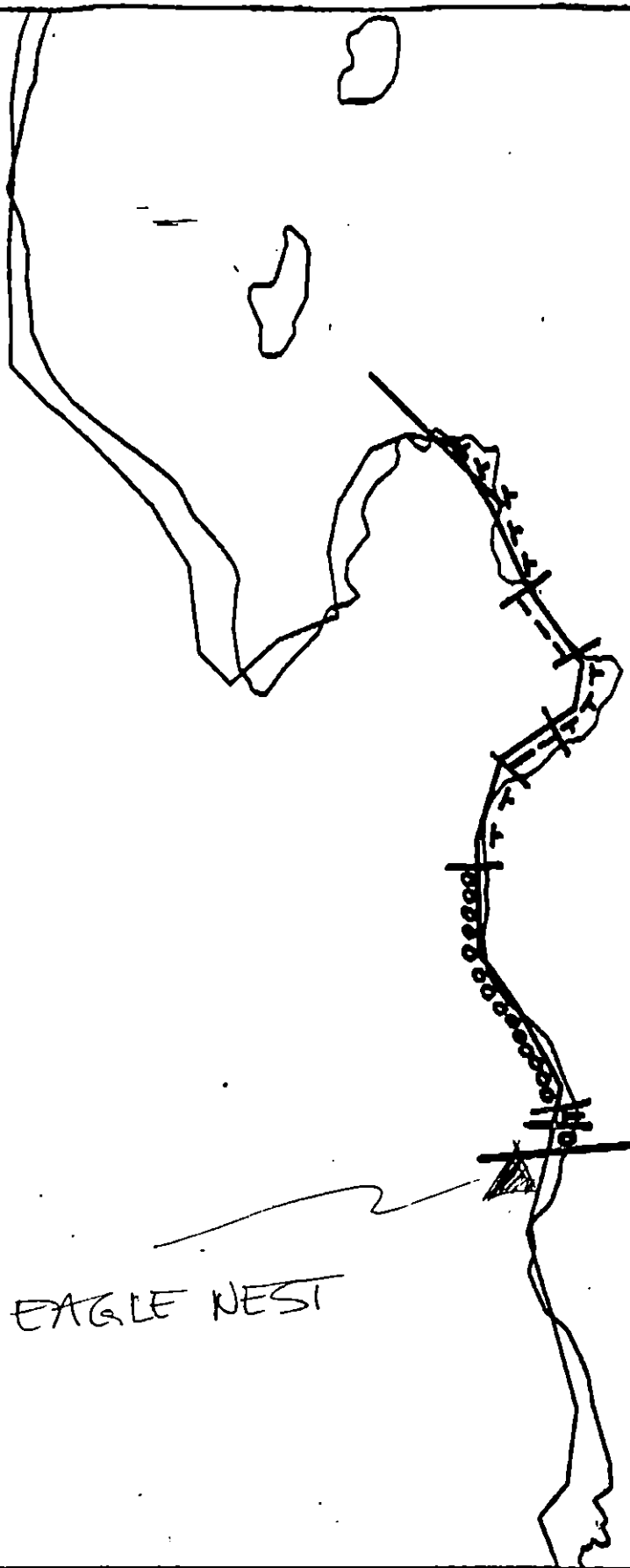
Wildlife Observations/ General Comments: many dead bedded clams, Fucus conceptacles swollen  
3 sea urchins  
2 gulls  
herring on eggs

## Ecological Considerations:

Eagle nest was not confirmed 23 Apr 90, no eagles seen. Other research was done earlier and may have disturbed eagles.

29 of 59

# ECCOLOGY MAP



BALD EAGLE NEST

36 of 59

|      |      |     |     |
|------|------|-----|-----|
| No   | 1.75 | 263 | 280 |
| V.L. | 3.1  | 463 | 472 |
| L    | 0.65 | 98  | 100 |
|      |      | 826 | 847 |

XXXX Wide

/// Medium

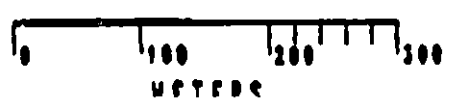
--- Narrow

TTTT Very Light

OOOO No Oil

EV-9

ADEC Segment Length: 847m

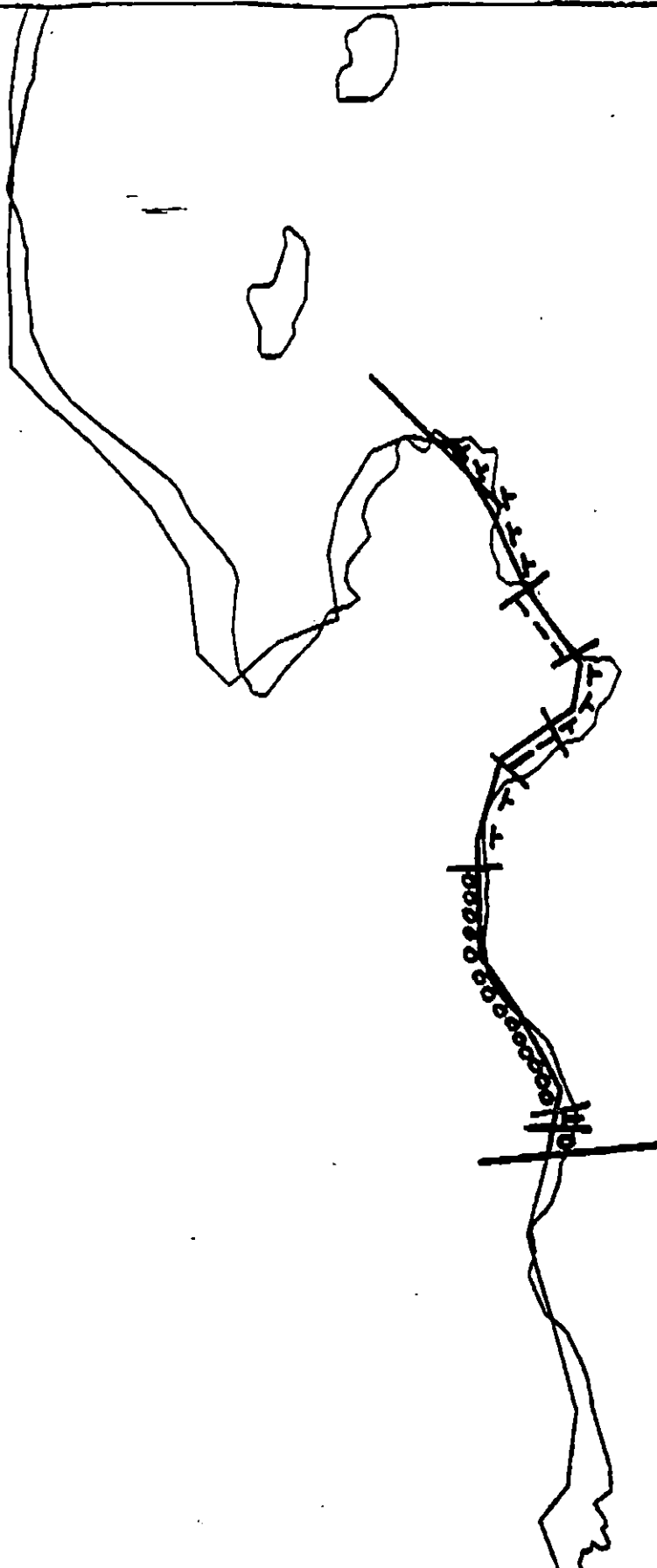


Map Key: PWS-283

Name: R. Marty

Date: 23 April 1990

Data Entered:



|      |      |     |     |
|------|------|-----|-----|
| No   | 1.75 | 263 | 280 |
| V.L. | 3.1  | 455 | 477 |
| L    | 0.65 | 98  | 100 |
|      |      | 826 | 847 |

36 of 59

XXXX Wide

//// Medium

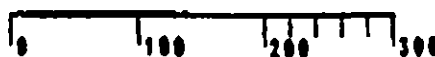
--- Narrow

TTTT Very Light

OOOO

EV-9

ADEC Segment Length: 847m



Map Key: PWS-283

Name: R. Marty

Date: 23 April 1990

Date Entered:

## ADDENDUM: SUBDIVISION CONSTRAINTS

SEGMENT EV-9 SUBDIVISION A (1 of 1)

### WORK WINDOW

Manual Pickup  
Tarmat Removal

OPEN

### ARCHAEOLOGICAL STANDARD CONSTRAINT

If cultural resources are uncovered, PHONE 564-3274.

### APPLICABLE ECOLOGICAL TIME CONSTRAINTS

|     |                              |                                                         |
|-----|------------------------------|---------------------------------------------------------|
| 1K  | Purse Seine Hook-off         | No constraint to manual pickup and tarmat removal.      |
| 5T  | Bald Eagle Nest              | NO CONSTRAINT. Work areas are more than 400m from nest. |
| 7II | Subsistence: Deer Harvesting | No constraint to manual pickup and tarmat removal.      |

### OTHER ECOLOGICAL CONSIDERATIONS

Restrict boat and air traffic to essential minimum after 7/20. Restrict beach disturbance to essential minimum after 8/15. Avoid any unnecessary disturbance or damage to unrolled biota and substrate.

TAG APPROVAL DATE 5/29/90

ADEC Art Weiner Art Weiner

EXXON Timothy T. Galt Timothy T. Galt

NOAA Burke Burke

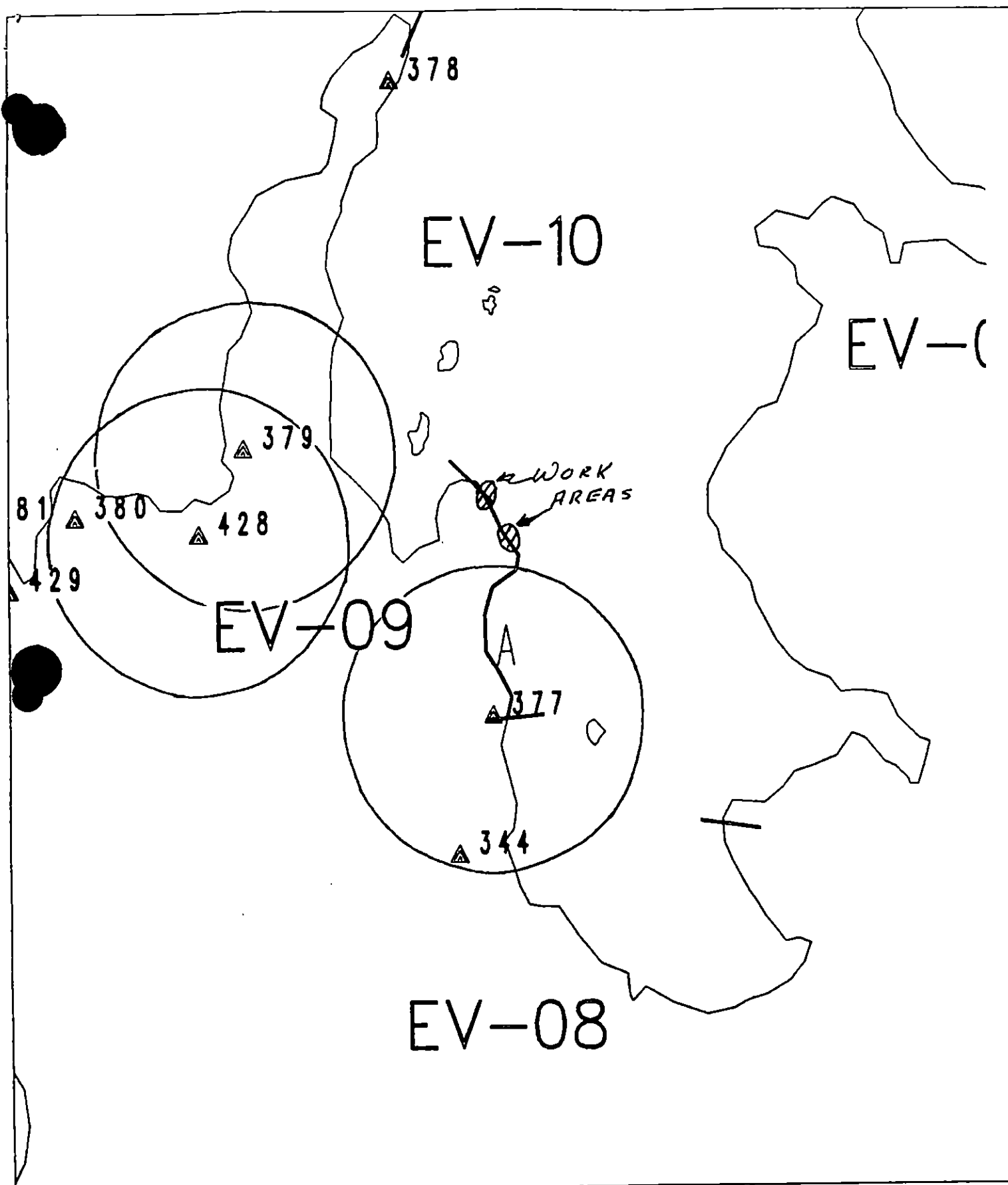
USCG G.A. Dieter G.A. Dieter

FOSC [Signature]

DATE MAY 29 1990

Prepared By: Andrea Meyer WTS

Date 5/27/90

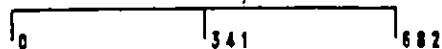


# ECOLOGY MAP

SEGMENT EV-9

SUBDIVISION *A* (1 of 1)

METERS



Seabird Colony



Eagle Nest

1 inch = 1119 feet



Exxon Company, USA

Map Key: PWS-EV-9

May 11, 1990



# SHORELINE EVALUATION

SEGMENT ST/ EV-09 SUBDIVISION A (1 OF 1) DATE 4/25/90

## SEGMENT ENVIRONMENTAL SENSITIVITIES AND TIME CONSTRAINTS:

ST-1 All bald eagle nests (3/1 to 6/1)-Active eagle nests (3/1 to 9/1)  
Eagle nest within 400 M of segment  
6V Recreation: Anchorages (6/1 to 9/15)  
7II Subsistence area: Deer harvesting (8/15 to 2/28)  
See attached Ecological Constraint sheet for specific constraints and contacts.

## SUBDIVISION ECOLOGICAL CONSTRAINTS:

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

## ARCHAEOLOGICAL CONSTRAINTS:

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

SHPO SIGNATURE: Charles E. Hume DATE: 5/3/90

## OILING CATEGORIZATION:

Wide 0 m: Medium 0 m: Narrow 125 m: V. Light 347 m: No Oil 257 m  
Subsurface Oil Observed: Yes      No X Maximum Depth     

## RECOMMENDATIONS:

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

COMMENTS: Recommend manual pickup of scattered tar patties and removal of tarmats as shown on sketch map. Work should be conducted after (6/1) and with USFWS approval based on eagle nest constraints.

See Constraint Addendum dated 5/25/90  
Wdk

TAG COMMENTS:       
      
      
    

TAG APPROVAL DATE: 5/3/90  
ADEC ART WEINER Dyt/Waivers  
EXXON ANDY TEAR  
NOAA GARY PETERSON Amy Peterson  
USCG KENNETH KIRKUS Kenneth Kirks

FOSC:      DATE: 5-18-90  
Assess need for bioremediation following Tarmat removal  
"NOTIFY CVC 24 HRS. IN ADVANCE OF WORK"

SHORELINE EVALUATION

SEGMENT ST/ EV-09 SUBDIVISION A (1 OF 1) DATE 4/25/90

**SEGMENT ENVIRONMENTAL SENSITIVITIES AND TIME CONSTRAINTS:**

5T-1 All bald eagle nests (3/1 to 6/1)-Active eagle nests (3/1 to 9/1)  
Eagle nest within 400 M of segment

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

7II Subsistence area: Deer harvesting (8/15 to 2/28)

See attached Ecological Constraint sheet for specific constraints and contacts.

**SUBDIVISION ECOLOGICAL CONSTRAINTS:**

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

**ARCHAEOLOGICAL CONSTRAINTS:**

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

SHPO SIGNATURE: Charles E. Hume DATE: 5/3/90

**OILING CATEGORIZATION:**

Wide 0 m: Medium 0 m: Narrow 125 m: V.Light 347 m: No Oil 257 m  
Subsurface Oil Observed: Yes        No X Maximum Depth       

**RECOMMENDATIONS:**

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

COMMENTS: Recommend manual pickup of scattered tar patties and removal of tarmats as shown on sketch map. Work should be conducted after 6/1 and with USFWS approval based on eagle nest constraints.

TAG COMMENTS:       

TAG APPROVAL DATE: 5/3/90  
ADEC Art Weiner  
EXXON Andy Tera  
NOAA Gary Petras  
USCG Kenneth Keane

FOSC:        DATE: 5-18-90  
Assess need for bioremediation following TARMAT removal  
"Notify CVC 24 HRS. IN ADVANCE of work"

OG R. Marty

SEGMENT ST/ EV-09

SUBMISSION A

DATE 29 April 90

# CHECKLIST

- ✓ N Answer
- ✓ Approx. Scale
- ✓ Sample Study
- ✓ Oil Dist.
- ✓ Width
- ✓ Length
- ✓ % Cover
- ✓ Substrate Character
- ✓ Est. ILM/LVL
- ✓ SST
- ✓ Profile Location(s)
- ✓ Profile(s)
- ✓ Pn Location(s)
- ✓ Photo Location(s)

## LEGEND

1 A

Pn: No Substrates Oil

2 A

Pn: Substrates Oil

CT/C

Continuous Distribution

CT/B

Broken Distribution

CT/P

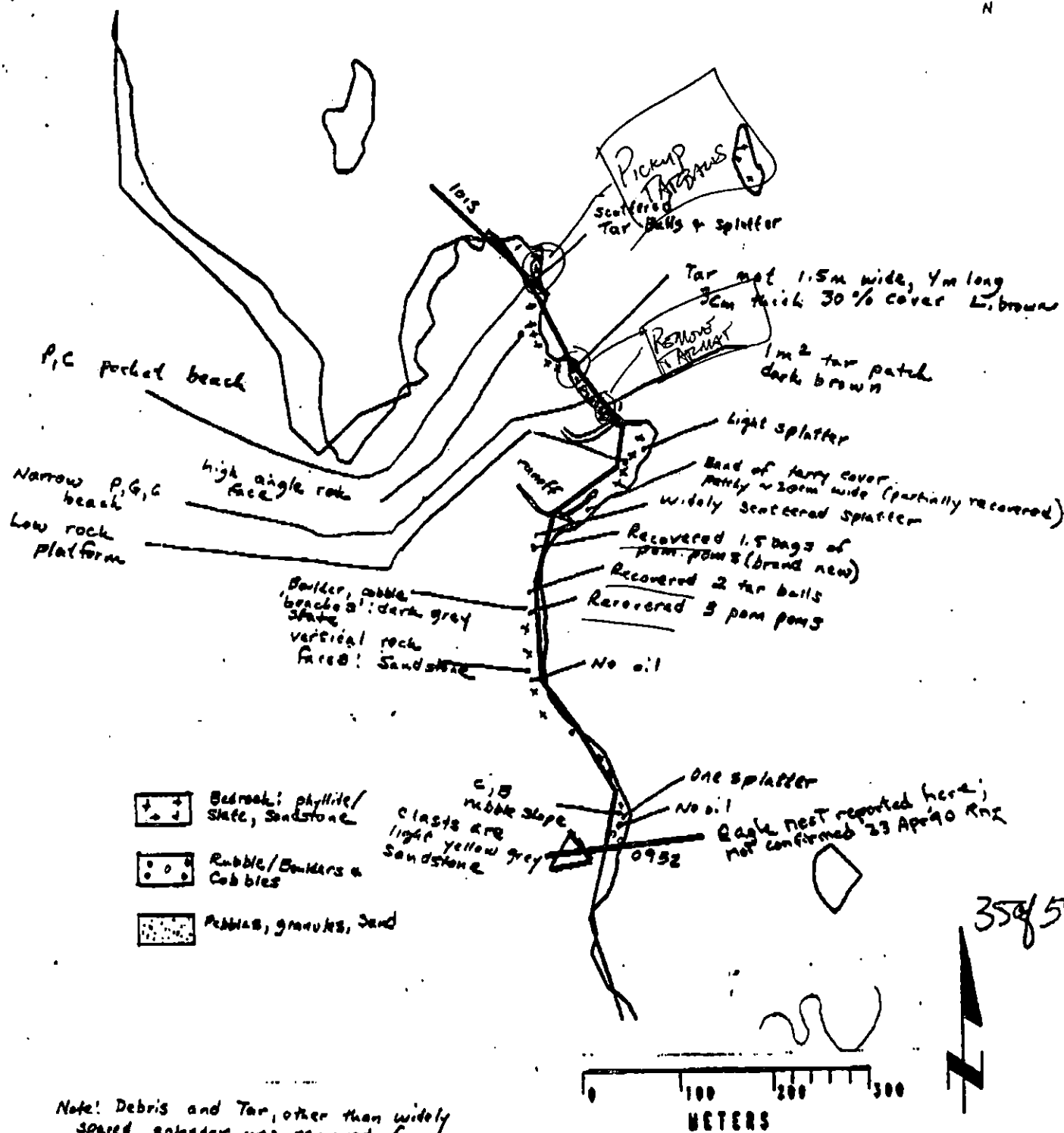
Patchy Distribution

CT/S

Spaced Distribution

Oil Vegetation

Photo location, direction, and number



Note: Debris and Tar, other than widely spaced splatter, was removed from area south of the 'run off' stream. Oil/Tar remains to the north of the stream.

# ECOLOGY MAP

BALD EAGLE NEST

36454

|      |      |     |     |
|------|------|-----|-----|
| No   | 1.75 | 263 | 280 |
| Y.L. | 3.1  | 463 | 473 |
| L    | 0.63 | 98  | 100 |
|      |      | 826 | 847 |

XXXX Wide

/// Medium

--- Narrow

TTTT Very Light

0000 No Oil

EV-9

ADEC Segment Length: 847m

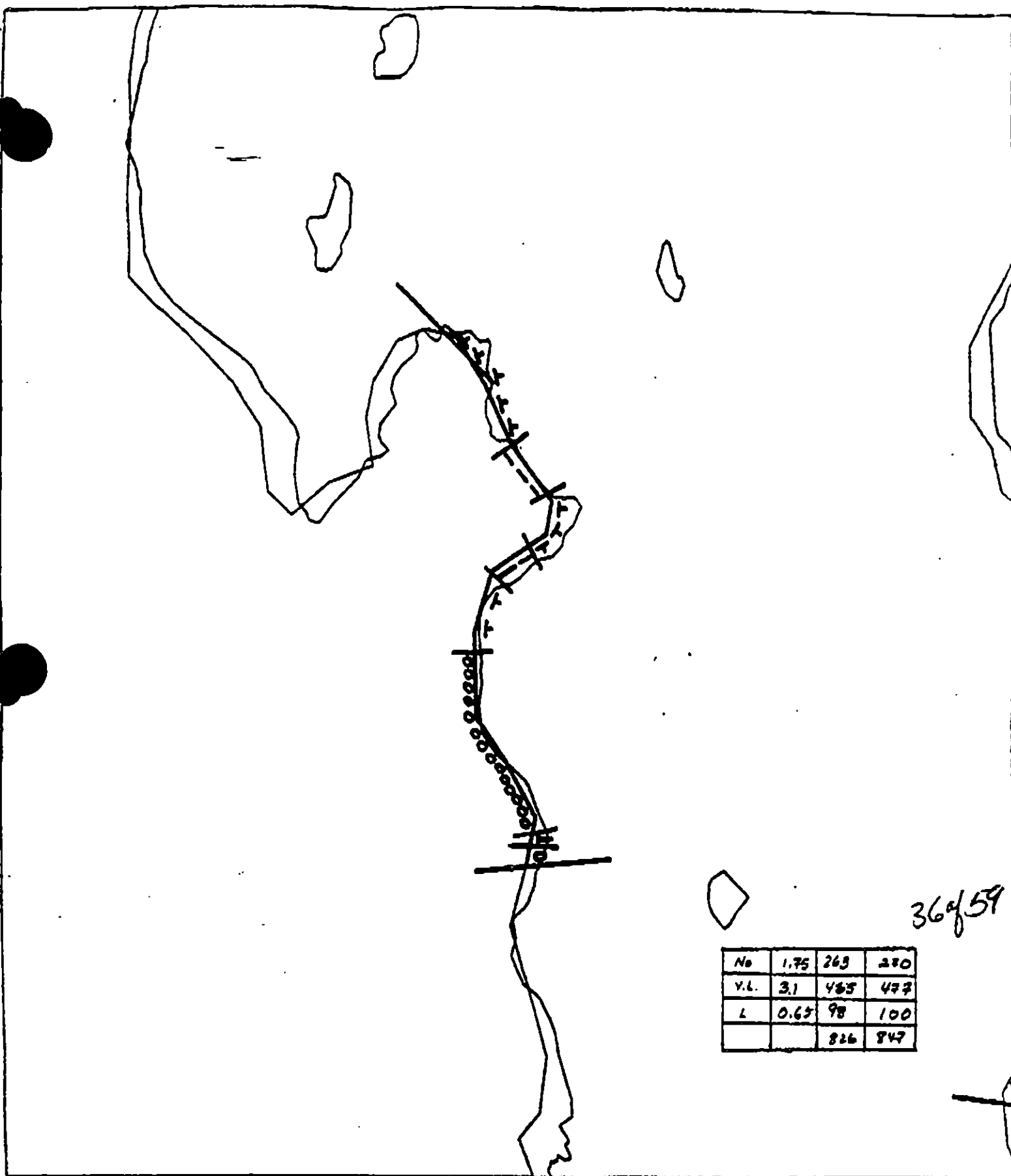


Map Key: PWS-283

Name: R. Marty

Date: 23 April 1990

Data Entered:



36 of 59

XXXX Wide

/// Medium

--- Narrow

TTTT Very Light

OOOO " " " "

EV-9

ADEC Segment Length: 847m



Map Key: PWS-283

Name: R. Marty

Date: 23 April 1990

Note Entered:

# 1991 MAYSAP EVALUATION

SEGMENT: EV 009 SUB: A REGION: PWS SURVEY DATE: 4/27/91

## ENVIRONMENTAL SENSITIVITIES:

Work Window(s) RESTRICTED 3/1 - 9/15

Ecological/Constraints (see page two for details) Eagle nest,  
Subsistence - Deer harvesting

## ARCHAEOLOGICAL CONSTRAINTS:

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

SHPO Signature: \_\_\_\_\_ Date: \_\_\_\_\_

## RECOMMENDATIONS:

INITIAL

TAG

FOSC

TREATMENT REQUIRED (Y or N)

N

Manual Pickup (Check as Req.)

Spot Washing

Bio-Customblen Only

Bio-Inipol/Customblen

Other

Other

## COMMENTS:

INITIAL: \_\_\_\_\_

TAG: \_\_\_\_\_

FOSC: \_\_\_\_\_

TAG APPROVAL DATE: \_\_\_\_\_ FOSC APPROVAL DATE: \_\_\_\_\_

ADEC \_\_\_\_\_ FOSC \_\_\_\_\_

EXXON \_\_\_\_\_

USCG \_\_\_\_\_

NOAA \_\_\_\_\_

**ECOLOGICAL CONSTRAINTS  
1991 FIELD ACTIVITIES**

**Eagle Nest:** Access restricted from 3/1 to 9/1. USF&WS authorization required. Maintain 1000' vertical and 1/4 mile horizontal buffer.

**Subsistence - Deer Harvesting:** Unlimited treatment prior to 8/15.

# MAYSAP FIELD SHORELINE COMMENT SHEET

TEAM NO. 5 SEGMENT FN-9 SUBDIVISION A DATE 4/28/91

## ADEC

NAME John Hoyer SIGNATURE [Signature]

☒ NTR AP and TB's were observed and recovered by Uco crew, our team surveyed the northern half of this segment and the only remaining oil is SOR + trace oiling. No treatment recommended at this time.

## EXXON

NAME Martinez N.J. SIGNATURE [Signature]

☒ NTR No oil observed No treatment needed.

## LANDMANAGER

NAME Steve Wink OF CVC SIGNATURE [Signature]

☒ NTR No Sub-Surface or Foul. Slight stain with spruce needles was present on Rock faces. Not present in any sizeable amount. Small patches were removed. No treatment recommended at this time.

## USCG/NOAA

NAME HODGES/DREHER SIGNATURE [Signature]

☒ NTR No oil observed.

## PAGE \_\_\_\_ OF \_\_\_\_

SEGMENT EV-9

SUBDIVISION A

DATE April, 27, 191

ENERGY LEVEL: ☐ H ☐ M ☒ L

**WEATHER:** ☐ SUN ☒ CLOUDS ☐ FOG ☒ RAIN ☐ SNOW

NEAR SHORE SHEEN: ☐ BR ☐ RB ☐ SL ☒ NONE

EST. OIL CATEGORY LENGTH: W 1 m M 1 m N 10 m VL 1 m NO 239 m US 478 m

DISTRIBUTION: C = 91-100%; B = 61-90%; P = 11-50%; S = 1-10%; T = <1%

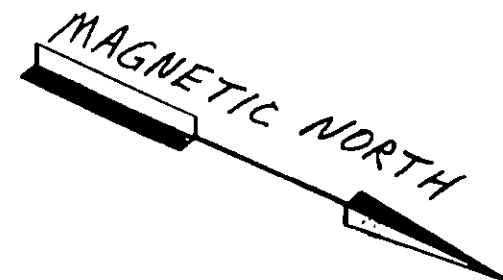
**SLOPE: V = VERTICAL; H = HIGH ANGLE; M = MEDIUM ANGLE; L = LOW ANGLE**

PHOTO ROLL # MAYSAP- 5 - 2 FRAMES 18-22

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

Reviewed: F.W. 5/2/91  
Reviewed: M.C. 5/4/91

MAYBAP 1991  
 OG SKETCH MAP  
 GREG CHANEY  
 TEAM 5  
 SEGMENT: EV-9-A  
 DATE: April 27 1991  
 AIR P.#: NONE

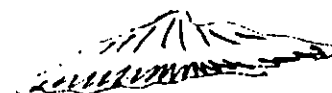


LEGEND

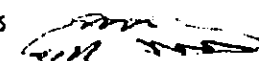
|            |  |
|------------|--|
| BEDROCK    |  |
| BOULDERS   |  |
| FINE SED.  |  |
| DRIFT LOG  |  |
| GRASS      |  |
| BRUSH      |  |
| FOREST     |  |
| OILED PIT  |  |
| NO OIL PIT |  |
| PHOTO      |  |

IKTUA  
 BAY

SCALE APPROX. 65  
 METERS

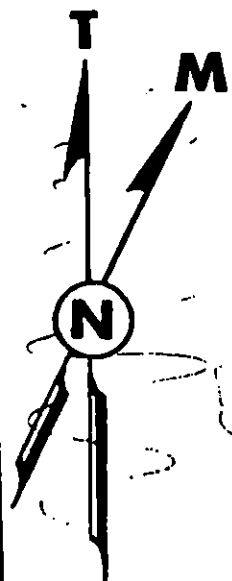


LOW ROCKS



Reviewed: F.W. 5/2/91  
 Reviewed: M.C. 5/7/91

MAYSAP 1991  
 OG SKETCH MAP: Bio Sketch  
 GREG CHANEY: Crank  
 TEAM 5  
 SEGMENT: EV-9-A  
 DATE: April 27 1991  
 AIR P.N.: NONE

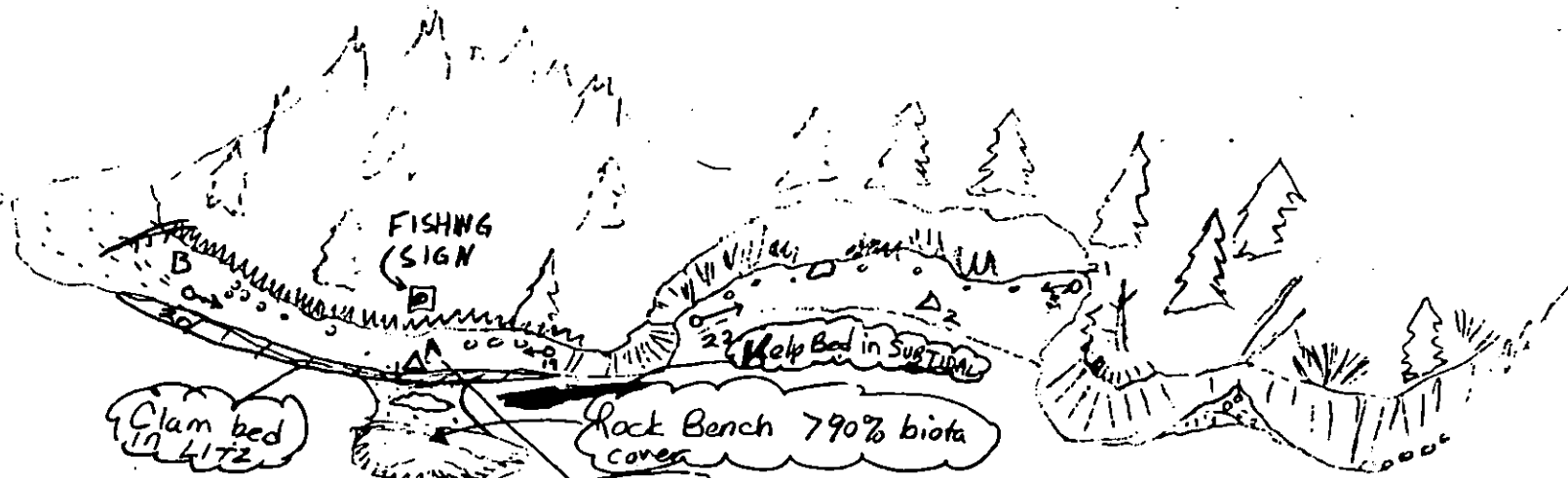


MAG NORTH →

# LEGEND

|            |  |
|------------|--|
| BEDROCK    |  |
| BOULDERS   |  |
| FINE BED.  |  |
| DRIFT LOG  |  |
| GRASS      |  |
| BRUSH      |  |
| FOREST     |  |
| OILED PIT  |  |
| NO OIL PIT |  |
| PHOTO      |  |

SCALE



LOW ROCKS

# MAYSAP BIOLOGICAL SUMMARY FORM

TEAM # 5

DATE 27 Apr

SEGMENT # EV-9

TIDAL HEIGHT (Range) +1.5 → +3.0

SUBDIVISION A

BIOLOGIST Crank

SEA STATE 0

WIND SPEED/DIRECTION 0

PHOTOGRAPHS: ROLL #

FRAME #

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

(A) Area is high in VITZ located 5m behind a rock bench. In the angular cobble and gravel there are sparse barnacles, *Littorina* and limpets. Mussels are rare. Three meters SE of area barnacles are moderate, *Fucus* sporadically are rare and mussels are sparse.

(B) Area is in the VITZ consisting of angular small boulders and cobble. Rare barnacles and *Littorina* are present within the area. One meter below, barnacles, mussels, *Littorina* and limpets are sparse. Five meters below there are patches of *Fucus* and *Scytosiphon*.

This is a rich, diverse and healthy intertidal zone. Subtidal *Laminaria* (Kelp) beds begin just offshore. There are clam beds in the LITZ with at least 4 spp (*Prothaca*, *Trexus*, *Maroma*, *Saxidomus*). Scallop and oyster shells were also present. Barnacles were moderate in the LITZ; MITZ decreasing to sparse in the VITZ. Mussels were sparse on the beach. *Littorina* juveniles were moderate and adults sparse.

There is a rock bench approx 5m east of area A with 79% biota coverage including *Ulva*, *Odonthalia*, *Scytosiphon* (algae), moderate mussels, *Fucus*, barnacles, *Littorina* and limpets.

Oystercatchers were feeding in LITZ and other scat found in VITZ

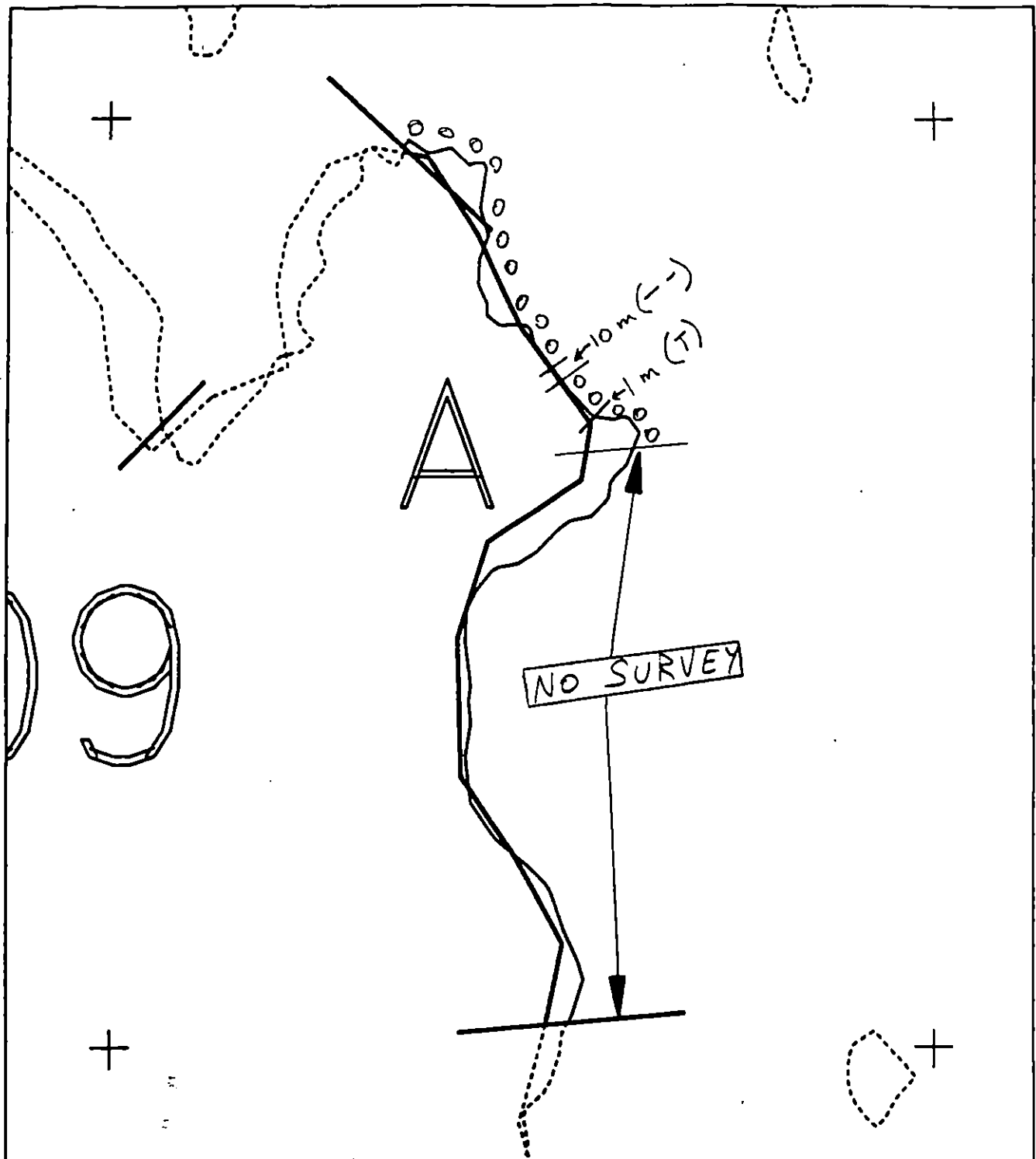
## WILDLIFE OBSERVATIONS

TO BE COMPLETED IN ALL SUBDIVISIONS

| BIRDS            | # OF SPECIES | TOTAL BIRDS | FISH OBSERVED SPECIES PRESENT |
|------------------|--------------|-------------|-------------------------------|
| Eagles           |              |             | Juvenile eels                 |
| Seabirds         | 2            | 4           |                               |
| Waterfowl        |              |             |                               |
| Gulls/kittiwakes | 2            | 30          |                               |
| Shorebirds       |              |             |                               |
| Corvids          |              |             |                               |
| Other Birds      |              |             |                               |

| MARINE MAMMALS      | # OBSERVED                     | LAND MAMMALS SPECIES | # OBSERVED     |
|---------------------|--------------------------------|----------------------|----------------|
| Sea Otters          | 7                              | Deer                 | 1 - also bones |
| Pinnipeds (specify) | 2 Harbor Seals in the 16 Seals |                      |                |
| Whales (specify)    |                                |                      |                |
|                     |                                |                      |                |

Shoreline subdivision map showing important biological features attached.



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

**EV009 A**

ADEC Subsegment Length: 728m

METERS

0 100 200

AK State Plane Zone 4  
per009a



Subdivision Field Map

Map Key: PWSEV009A

Name: Greg Chaney

Date: April 27/91

Date Entered:

REVIEWED: F.W. 5/2/91

Reviewed: M.C. 5/4/91

# ASAP TAG REVIEW SHEET

Segment: EV12 Subd: A Site: 1 Date  
PRE-Review 11 AUG 90

## Priority For Addressing In 1990

☒ HIGH ☐ MEDIUM ☐ LOW ☐ NTR

Treatment

Recommended: MANUALLY REMOVE - POOLED OIL / AP / SOR  
and BIO

NO OG SHEET PROVIDED

## Priority Site For Reassessment In 1991

YES ☒ NO ☐ YES ☒ NO ☐ YES ☒ NO ☐ YES ☒ NO ☐  
☒ CG ☐ ADEC ☐ EXXON ☐ LAND MGR ☐  
4  
NOAA

TAB 13 AUG 90  
Access AP/OP/HOR & BIO  
see sketch

# ASAP FOLLOWUP RECOMMENDATIONS

Segment: AS/EV-12 Subd.: A (ANAD.) Site: \_\_\_\_\_ Date: 8-7-90 1990

Conditions Observed: On west side of stream is an area of AP, SOR left after Summer '90 treatment. On East side of stream is an area approx 15m x 3m of AP and OR/OR from 15cm-20cm surface penetration.

Followup Recommendations: ASAP/Survey crew recommends the manual removal of surface AP and subsurface OR and heavier oil to a depth of 15cm-20cm. Area on EAST side of stream should be thoroughly tilled and bioremediated as should area requiring manual removal.

Completed by Pickup Crew: ☐ YES ☒ NO

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

ADEC

BOB MCCREAN  
(name)

Robert G. McC  
(signature)

Comments: For area East of stream, the mechanical removal of small boulders covering oiled OR and OR sediments would greatly facilitate treatment.

Exxon

JOHN DEAN  
(name)

J Dean  
(signature)

Comments: PREVIOUS WORK IN AREA RATHER INTENSIVE. RE-DIVING ~~THE~~ SOURCE SEEMS TO BE UNDER LARGE COBBLE/SMALL BOULDERS. MANUAL CROW SHOULD BE ABLE TO ROLL ROCKS ADEQUATELY TO REMOVE THIS SOURCE AND BIO REMEDIATE.

USCG

DON OREIS GM  
(name)

[Signature]  
(signature)

Comments: MANUAL REMOVAL OF OILY GRAVEL IN EFFECTIVE AREA BY WORK CREW WOULD EXPOSE TO PIT OIL BY ASAP TEAM SHOWING ONLY LIGHT FILM. REAPPLICATION OF "BIO" FOLLOWING MANUAL WORK REQUIRED.

Land Rep.

Steve WARD CUC  
(name)

[Signature]  
(signature)

Comments: Agree with local comments and recommendations - Above

SEGMENT AS / EV-012 SUBDIVISION: A SITE: 1 DATE 8-7-90

USCG

NAME David Nae NOAA  
Don Davis, GM, USCGSIGNATURE David Nae Davis☒ YES☐ NO

PRIORITY SITE FOR REASSESSMENT IN 1991

REASON:

Area to east of stream was broken up by ASAP crew and contains little free oil. In contrast, a 3x15m area to the west of the stream contains a large amount of mobile oil despite earlier work efforts. This area should be treated (manual removal, bio, raking) in 1990 and checked in 1991.

ADEC

NAME Bob McCreedySIGNATURE Robert McCreedy☒ YES☐ NO

PRIORITY SITE FOR REASSESSMENT IN 1991

REASON:

An area east of stream approx 3m x 20m light AP and OR oil requires thorough tillage, distributing down beach, and bio remediation. An area west of stream requires manual removal of surface AP and subsurface oil to 20cm followed by thorough tillage and bio remediation. An ASAP Follow-up Recommendations form was submitted calling for this treatment recommendations.

MANAGER

NAME Steve Ward CRSIGNATURE Steve Ward☒ YES☐ NO

PRIORITY SITE FOR REASSESSMENT IN 1991

REASON:

Enough oil west of the stream to need more manual in 90. Check Sub Surface oil.

XXON

NAME John DeanSIGNATURE John Dean☒ YES☐ NO

PRIORITY SITE FOR REASSESSMENT IN 1991

REASON: THE AREA WEST OF STREAM JUSTIFIES ADDITIONAL WORK IN '90 PER "ASAP FOLLOW-UP RECOMMENDATIONS" AND REASSESSMENT IN '91

OG R

SEGMENT ST F

SUBDIVISION

DATE

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# LEGEND

1  $\Delta$   
Pt - No Suburban

2  $\Delta$   
Pt - Suburban Q8

CT/C  
Controlled Distribution

CT/B  
Broken Distribution

CT/P  
Patchy Distribution

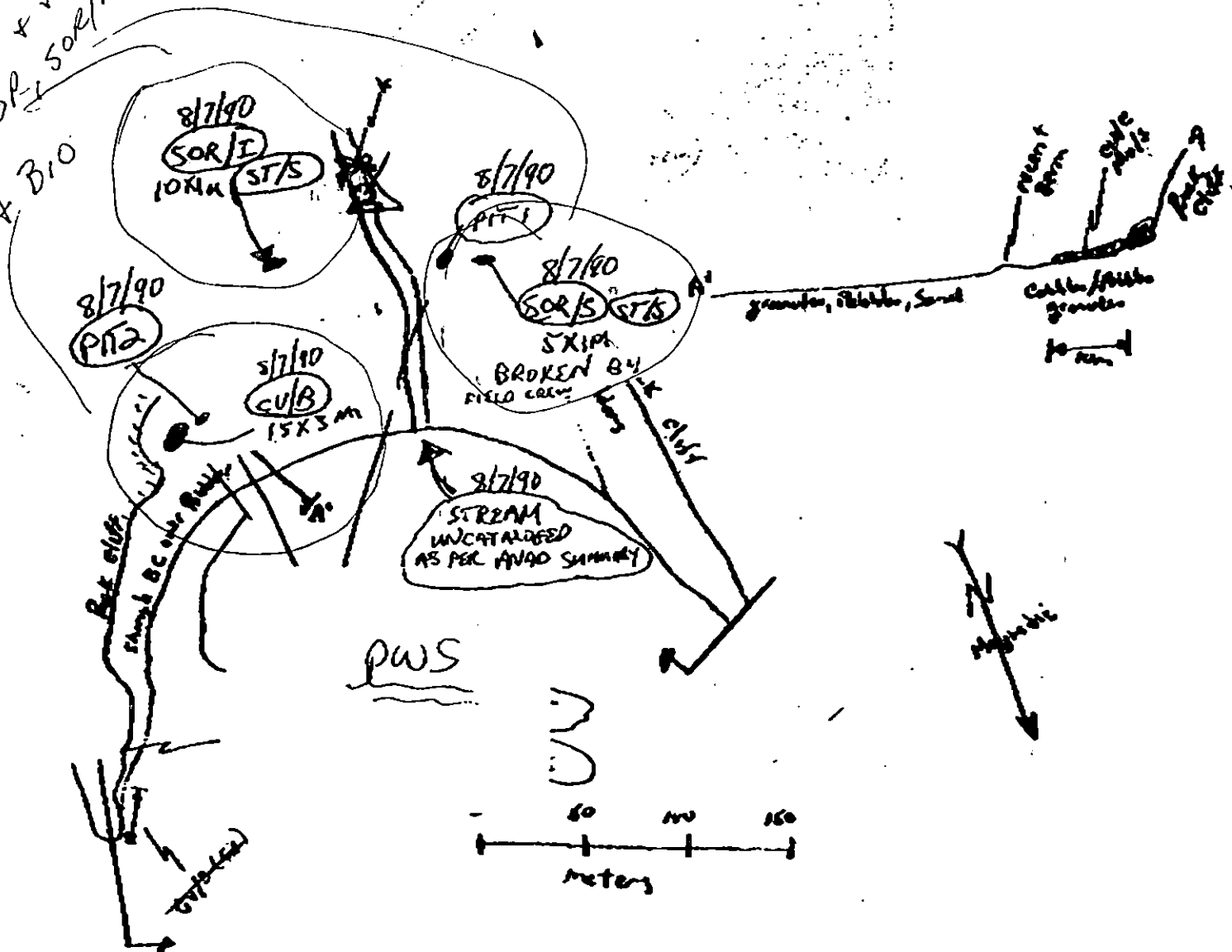
CT/S  
Sporadic Distribution

Old Vegetation

1  $\circ$   
Photo location, direction,  
and number

EVANS  
ISLAND

Access + remove  
AP 1 OP 2 SOR/14  
+ Bio



Character Length (m): AP 8 PO - CV 185 CT - ST - MS 25 PT - TB - FL - NO 332

# ASAP FOLLOWUP RECOMMENDATIONS

Segment: AS/ EV-12 Subd.: A (Anad.) Site: \_\_\_\_\_ Date: 8-7-90 1990

Conditions Observed: On west side of stream is an area of AP, SOR left after Summer '90 treatment. On East side of stream is an area approx 15m x 3m of AP and OP/OR from 15m-20m surface penetration.

Followup Recommendations: ASAP/ Survey crew recommends the manual removal of surface AP and subsurface OR and heavier oil to a depth of 15cm-70cm. Area on West side of stream should be thoroughly tilled and bioremediated as should area requiring manual removal.

Completed by Pickup Crew: ☐ YES ☒ NO

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

ADEC

BOB McCREAK  
(name)

Robert B. McCreack  
(signature)

Comments: For area East of stream the mechanical removal of small boulders covering oiled OP and OR sediments would greatly facilitate treatment.

Exxon

JOHN DEAN  
(name)

[Signature]  
(signature)

Comments: PREVIOUS WORK IN AREA RATHER INTENSIVE. RE-OILING ~~THE~~ SOURCE SEEMS TO BE UNDER LARGE COBBLE/SMALL BOULDERS. MANUAL CREW SHOULD BE ABLE TO ROLL ROCKS ADEQUATELY TO REMOVE THIS SOURCE AND BIO REMEDIATE.

USCG

DON CARVIL GM  
(name)

[Signature]  
(signature)

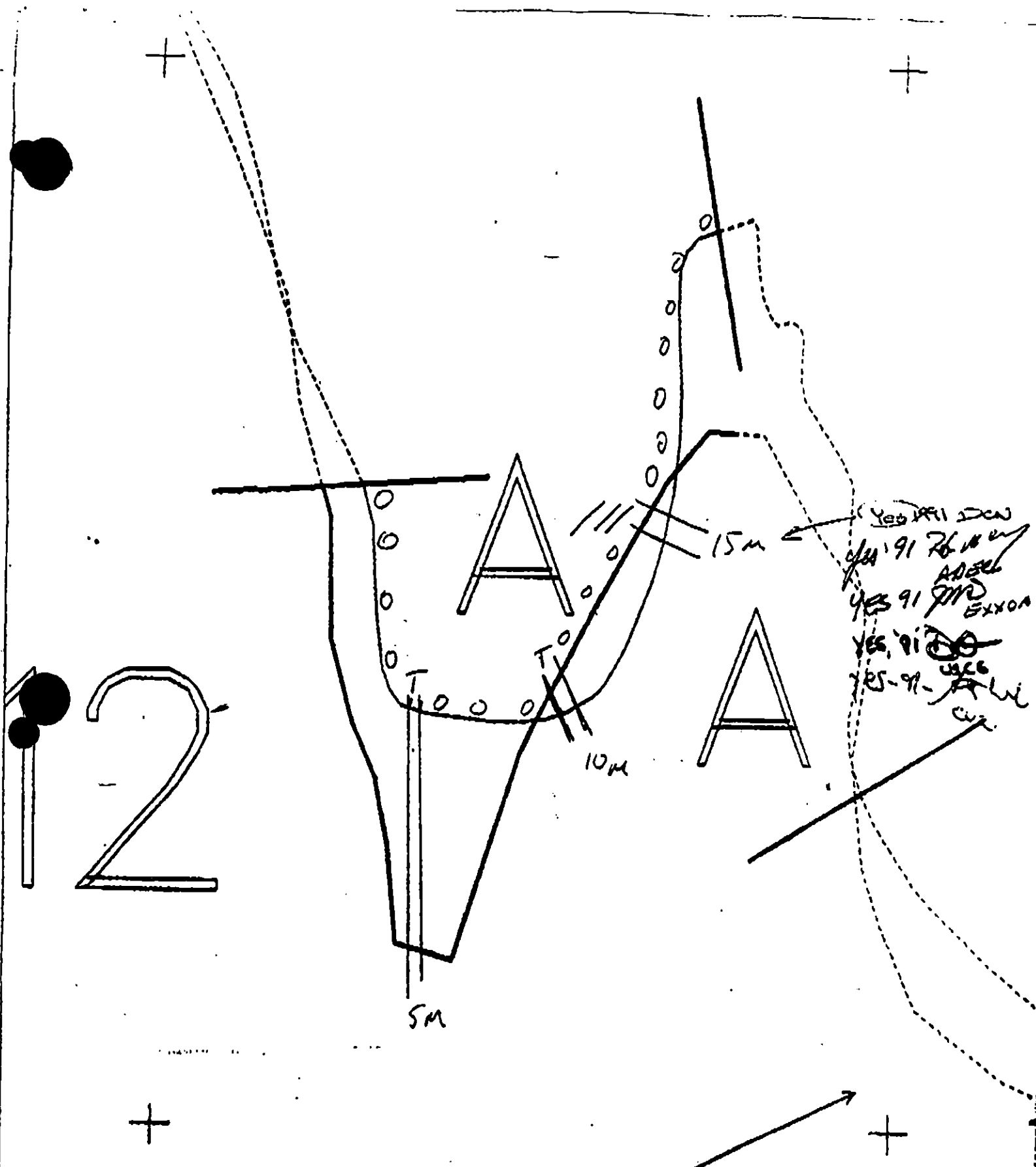
Comments: MANUAL REMOVAL OF OILED GRAVEL IN AFFECTED AREA ON WORK AREA WITH EXCESSIVE PIT OIL BY ASAP TEAM SHOWED ONLY LIGHT FILM. REAPPLICATION OF "BIO" FOLLOWING MANUAL WORK REQUIRED.

Land Rep.

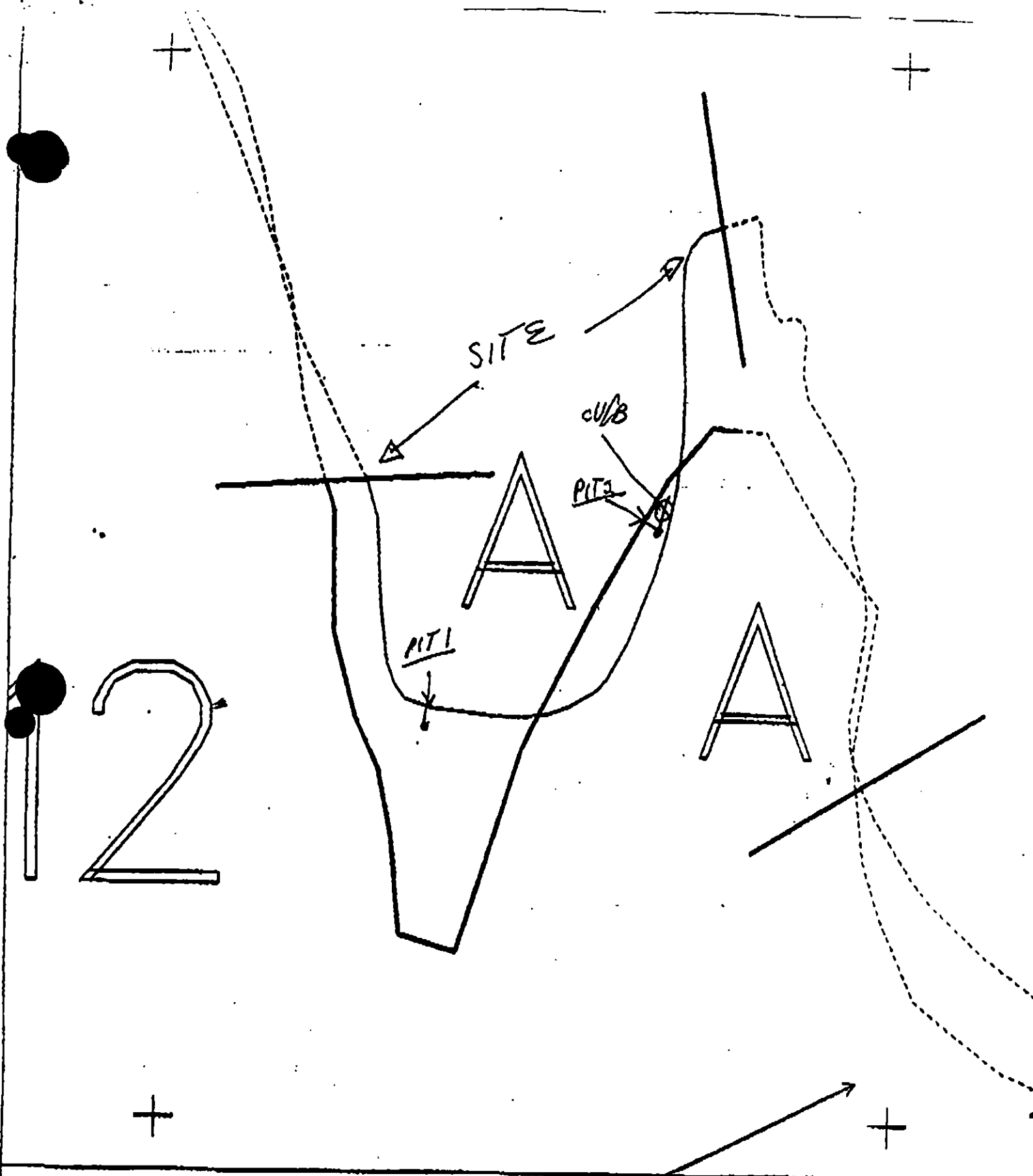
Steve WARD CUC  
(name)

[Signature]  
(signature)

Comments: Agree with above comments and recommendations - H/W



|      |            |                              |                        |
|------|------------|------------------------------|------------------------|
| XXXX | Wide       | EV-12 A                      | Subdivision Field Map  |
| ---- | Medium     | ADEC Subsegment Length: 667m | Map Key: PWSEV-12A     |
| TTTT | Narrow     | METERS                       | Name: <u>NAKASHIMA</u> |
| 0000 | Very Light | 0 76 152                     | Date: <u>NAKASHIMA</u> |
|      | No Oil     | AK State Plane Zone 4 1:2998 | Date Entered:          |
|      |            | EXXON                        |                        |

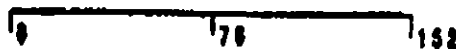


XXXX Wide  
 --- Medium  
 TTTT Narrow  
 0000 Very Light  
 No Oil

# EV-12 A

ADEC Subsegment Length: 667m

METERS



AZ State Plane Zone 4 1:2988  
 pev-12a



Subdivision Field Map

Map Key: PWSEV-12A

Name: NAKASHIMA

Date: 8/7/90

Date Entered:

GENERAL DATA

SEG ID: EV012 SBOV: 1A SITE: 1 TEAM: 3 DATE: 8/7/90  
SITE LGTH 667 OIL CATEGORIES: W — M 15 N — VLIS NO 637U —  
1991 REASSESSMENT: USCG: Y ADEC: Y LONGR: Y EXXON: Y

SURFACE DATA

CHAR #: 1 OIL CHAR: SOR OIL DIST: CONT — BRKN — PTCH — SPLH 15  
TIDAL ZONE: SU — UI X MI — LI —

CHAR #: 2 OIL CHAR: CV OIL DIST: CONT — BRKN 15 PTCH — SPLH —  
TIDAL ZONE: SU — UI X MI — LI —

CHAR #: 3 OIL CHAR: ST OIL DIST: CONT — BRKN — PTCH — SPLH 15  
TIDAL ZONE: SU — UI X MI — LI —

CHAR #: 4 OIL CHAR: NO OIL DIST: CONT — BRKN — PTCH — SPLH —  
TIDAL ZONE: SU X UI — MI X LI X

CHAR #: — OIL CHAR: — OIL DIST: CONT — BRKN — PTCH — SPLH —  
TIDAL ZONE: SU — UI — MI — LI —

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CHAR #: — OIL CHAR: — OIL DIST: CONT — BRKN — PTCH — SPLH —  
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CHAR #: — OIL CHAR: — OIL DIST: CONT — BRKN — PTCH — SPLH —  
TIDAL ZONE: SU — UI — MI — LI —

## ASAP DATA ENTRY FORM

## SUBSURFACE DATA

PAGE 2 OF 2SEGMENT ID: EV012 SUBDIV: A SITE: 1PIT # 1 PIT DEPTH 20 OIL CHARACTER OR OIL INTVAL: FROM 0 TO 7  
CLEAN BELOW: Y PIT ZONE: SU — UI X MI — LI —SUBSURF SEDIMENT: BRK — BLD — COB — PEB X GRN X SAN X MUD — VEG —PIT # 2 PIT DEPTH 20 OIL CHARACTER OR OIL INTVAL: FROM 0 TO 17CLEAN BELOW: Y PIT ZONE: SU — UI X MI — LI —SUBSURF SEDIMENT: BRK — BLD — COB X PEB X GRN X SAN X MUD — VEG —PIT #     PIT DEPTH     OIL CHARACTER     OIL INTVAL: FROM     TO    CLEAN BELOW:     PIT ZONE: SU     UI     MI     LI    SUBSURF SEDIMENT: BRK     BLD     COB     PEB     GRN     SAN     MUD     VEG    PIT #     PIT DEPTH     OIL CHARACTER     OIL INTVAL: FROM     TO    CLEAN BELOW:     PIT ZONE: SU     UI     MI     LI    SUBSURF SEDIMENT: BRK     BLD     COB     PEB     GRN     SAN     MUD     VEG    PIT #     PIT DEPTH     OIL CHARACTER     OIL INTVAL: FROM     TO    CLEAN BELOW:     PIT ZONE: SU     UI     MI     LI    SUBSURF SEDIMENT: BRK     BLD     COB     PEB     GRN     SAN     MUD     VEG    PIT #     PIT DEPTH     OIL CHARACTER     OIL INTVAL: FROM     TO    CLEAN BELOW:     PIT ZONE: SU     UI     MI     LI    SUBSURF SEDIMENT: BRK     BLD     COB     PEB     GRN     SAN     MUD     VEG    PIT #     PIT DEPTH     OIL CHARACTER     OIL INTVAL: FROM     TO    CLEAN BELOW:     PIT ZONE: SU     UI     MI     LI    SUBSURF SEDIMENT: BRK     BLD     COB     PEB     GRN     SAN     MUD     VEG    PIT #     PIT DEPTH     OIL CHARACTER     OIL INTVAL: FROM     TO    CLEAN BELOW:     PIT ZONE: SU     UI     MI     LI    SUBSURF SEDIMENT: BRK     BLD     COB     PEB     GRN     SAN     MUD     VEG    PIT #     PIT DEPTH     OIL CHARACTER     OIL INTVAL: FROM     TO    CLEAN BELOW:     PIT ZONE: SU     UI     MI     LI    SUBSURF SEDIMENT: BRK     BLD     COB     PEB     GRN     SAN     MUD     VEG

CONSISTING OF CURSOR WAS LOCATED ON BOTH SIDES OF THE  
 REAR. THE SQR WAS LOOSE, GRANULAR MATERIAL THAT WAS BROKEN  
 IN THE FIELD BY THE CREW. THE CU WAS SET IN Boulders IN THE S/E PORTION OF THE SITE. THIS AREA SHOW SIGNS OF PREVIOUS  
 TREATMENT. THE STREAM WAS NOT CAPTURED AS PER THE ARMY. MAD/KUM, FORM

REVISION NO. 1/17/00

REGION: PRINCE WILLIAM SOUND

SEGMENT: ST/EV-10

SUBDIVISIONS: A (1 OF 2)

# SHORELINE EVALUATION

SEGMENT ST/ EV-10 SUBDIVISION A (1 OF 2) DATE 4/23/90

## SEGMENT ENVIRONMENTAL SENSITIVITIES AND TIME CONSTRAINTS:

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)  
5T-1 All bald eagle nests (3/1 to 6/1)-Active eagle nests (3/1 to 9/1)  
7II Subsistence area: Deer harvesting (8/15 to 2/28)

See attached Ecological Constraint sheet for specific constraints and contacts.

## SUBDIVISION ECOLOGICAL CONSTRAINTS:

Avoid any unnecessary disturbance or damage to unoiled biota and substrate. 5T within 400M.

## ARCHAEOLOGICAL CONSTRAINTS:

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

SHPO SIGNATURE: \_\_\_\_\_ DATE: \_\_\_\_\_

## OILING CATEGORIZATION:

Wide 0 m: Medium 0 m: Narrow 121 m: V.Light 58 m: No Oil 161 m  
Subsurface Oil Observed: Yes \_\_\_\_\_ No X Maximum Depth \_\_\_\_\_

## RECOMMENDATIONS:

|                                                           |                                                        |
|-----------------------------------------------------------|--------------------------------------------------------|
| <input type="checkbox"/> No Treatment Recommended         | <input type="checkbox"/> Snare/Absorbent Booms         |
| <input checked="" type="checkbox"/> Treatment Recommended | <input type="checkbox"/> Oil Snares (pom poms)         |
| <input checked="" type="checkbox"/> Manual Pickup         | <input type="checkbox"/> Absorbents (pads, rolls, etc) |
| <input type="checkbox"/> Bioremediation                   | <input type="checkbox"/> Spot Washing: _____ Wands     |
| <input type="checkbox"/> Tarmat Removal                   | <input type="checkbox"/> Beach Cleaner                 |
|                                                           | <input type="checkbox"/> Other (see comments)          |

COMMENTS: Recommend manual pickup of debris, tarballs and patties. Work should be conducted between 7/1 and 8/15 based on above listed constraints.

TAG COMMENTS: \_\_\_\_\_

TAG APPROVAL DATE: \_\_\_\_\_

ADEC \_\_\_\_\_  
EXXON \_\_\_\_\_  
NOAA \_\_\_\_\_  
USCG \_\_\_\_\_

FOSC: \_\_\_\_\_ DATE: \_\_\_\_\_

# 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 Suzumoto 424-7511
- 1I Gill net area (6/7 to 8/31)  
 1J Purse seine area (7/20 to 9/30)  
 1K Purse seine hook-off (7/20 to 9/30)  
 1L Set net sites (6/11 to 7/25)  
 Contact ADF&G for specific dates, locations and constraints. Restrict boat and air traffic to essential minimum. When set net sites are present (1L) restrict beach operations to essential minimum as authorized by ADF&G. If plans for treatment include methods such as hot water wash or Inipol application which might affect nearshore oil or toxicity levels, contact ADF&G for consultation and authorization.  
 AGENCY CONTACT PERSON: ADF&G James Brady 424-3212
- 2M Herring spawning (4/1 to 6/15)  
 Contact ADF&G for confirmation - dates and locations may vary. Restrict boat traffic to essential minimum. Avoid damage to unopened intertidal and subtidal algae and seagrass. If plans for treatment include methods such as hot water wash or Inipol application which might affect nearshore oil or toxicity levels, contact ADF&G for consultation and authorization.  
 AGENCY CONTACT PERSON: ADF&G Evelyn Biggs 424-3235
- 3Q Harbor seal and sea lion pupping (5/15 to 7/1)  
 Harbor seal and sea lion molting (8/15 to 9/15)  
 Restrict boat and air traffic to essential minimum. No personnel within 400m. Aircraft to maintain 800m horizontal and 300m vertical distance from haulouts. No application of Inipol within two weeks of arrival dates (work window at these sites is limited to 7/2 to 7/31). Contact ADF&G and USFWS prior to treatment for confirmation.  
 AGENCY CONTACT PERSON: US National Marine Fisheries Service Steve Zimmerman 586-7235  
 ADF&G Don Calkins 267-2403
- 5R Seabird colony (5/1 to 9/1)  
 Restrict air and boat traffic to essential minimum. No personnel within 800m. Aircraft to maintain 800m horizontal, 300m vertical distance from colony. Contact USFWS prior to treatment.  
 AGENCY CONTACT PERSON: USFWS Jill Parker 786-3377
- 5S Shorebird/waterfowl concentration (4/1 to 5/15)  
 Restrict all activity to essential minimum, especially air traffic. Contact USFWS and ADF&G for confirmation.  
 AGENCY CONTACT PERSON: USFWS Jill Parker 786-3377  
 ADF&G Tom Roth 267-2206
- 5T All Bald Eagle nests (3/1 to 6/1)  
 Active Bald Eagle nests (3/1 to 9/1)  
 Restrict air traffic and all disturbance to essential minimum. No personnel within 400m 3/1 to 6/1. Air approach and takeoff from and to seaward only; maintain 800m horizontal, 300m vertical distance from nests. Contact USFWS prior to treatment for confirmation of dates.  
 AGENCY CONTACT PERSON: USFWS Jill Parker 786-3377
- 6U Recreation: Tent sites (6/1 to 9/15)  
 6V Anchorages (6/1 to 9/15)  
 6W Forest Service cabins (6/1 to 9/15)  
 6X Lodge (6/1 to 9/15)  
 6Y Special use destination
- 7Z Subsistence area: Salmon harvesting (5/1 to 9/30)  
 7HH Finfish harvesting  
 7I Deer harvesting (8/15 to 2/28)  
 7J Invertebrate harvesting  
 Contact ADF&G and appropriate Native Corporation for specific dates, locations, and constraints. Restrict boat and air traffic and beach disturbance to essential minimum. If plans for treatment include methods such as hot water wash or application of Inipol which might affect intertidal or nearshore oil or toxicity levels, contact ADF&G and appropriate Native Corporation for authorization - see Native Corporation Contact List for each Native Corporation's contact person.  
 AGENCY CONTACT PERSON: ADF&G Jim Fall 267-2359

SEGMENT ST EVU SUBDIVISION: A DATE 4/33/90

**USCG**

NAME Shawn Maas SIGNATURE DC Shawn Maas

☐ NO TREATMENT RECOMMENDED  
COMMENTS

☒ TREATMENT SUGGESTED

MANUAL REMOVAL OF PATCHES AND TARBALLS AND OILED  
DEBRIS.

BIOREMEDIATION OF THICKER COVER.

NO SUBSURFACE OILS NOTED

**ADEC**

NAME Dave Sale SIGNATURE Dave Sale

☐ NO TREATMENT RECOMMENDED  
COMMENTS

☒ TREATMENT SUGGESTED

- ① REMOVE HEAVIEST COAT FROM HI-ANGLE ROCK FACES
- ② REMOVE MANUALLY ALL TARBALLS, TARMAT AND/OR ASPHALT FROM SHELVES ON HIGH ANGLE ROCK, AND LOW-ANGLE BEACHES WHERE OILED BAND INTERSECTS.
- ③ REMOVE OILED DEBRIS, LOGS AND GRASSES IN SUPRATIDAL ZONE
- ④ REMOVE OR TURN OVER <sup>FOR AERATION + WEATHERING</sup> ANY SEDIMENTS COATED WITH OIL

**LAND MANAGER**

NAME Dom Houphre Jr. SIGNATURE Donald P. Houphre Jr.

☐ NO TREATMENT RECOMMENDED  
COMMENTS

☒ TREATMENT SUGGESTED

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## SHORELINE OILING SUMMARY

REVISION NO. 36/13/98

OG R. Marty USCG S. Maas SEGMENT ST/ RY-10  
 BIO B. Landa LAND REP D. Kempf SUBDIVISION A (A OF B)  
 EXXON J. Casarachi ADEC D. Sale TIME 16:15 to 17:45  
 TEAM NO. 10 TIDE LEVEL +1.64m → +0.10m DATE 23 April 90  
 EST. SUBDIVISION LENGTH: 2.46 m ☐ Sun ☒ Clouds ☐ Fog ☐ Rain ☐ Snow  
 UPLANDS DESCRIPTION: ☐ Grass ☒ Forest ☐ Rock  
 SURVEYED FROM: ☒ Foot ☒ Boat ☐ Helo WORKING DIRECTION: N to S  
 SURFACE SEDIMENTS: R 50 % B 25 % C 10 % P 10 % G 5 % S 0 % M 0 % V 0 %  
 SLOPE: Long 30 % Hang 70 % Vert — % WAVE EXPOSURE: ☒ Low ☐ Med ☐ High  
 OIL CATEGORY LENGTH: W 0 m M 0 m N 94 m VL 32 m NO 120 m

## SURFACE OIL

| CHARACTER        | DISTRIBUTION |    |    |     | OIL / FILM COLOR |    |    |     | IMPACTED ZONES |    |       |     |
|------------------|--------------|----|----|-----|------------------|----|----|-----|----------------|----|-------|-----|
|                  | 1C           | 1B | 1P | 1S  | 2C               | 2B | 2P | 2S  | 3C             | 3B | 3P    | 3S  |
| ASPHALT PAVEMENT |              |    |    |     |                  |    |    |     |                |    |       |     |
| POOLED           |              |    |    |     |                  |    |    |     |                |    |       |     |
| COVER            |              |    |    | P S |                  |    |    | P S |                |    |       | P S |
| COAT             |              |    |    |     |                  |    |    |     |                |    |       |     |
| STAIN            |              |    |    |     |                  |    |    |     |                |    |       |     |
| MOUSSE           |              |    |    |     |                  |    |    |     |                |    |       |     |
| PATTIES          |              |    |    | S   |                  |    |    | S   |                |    | S S S |     |
| TARBALLS         |              |    |    |     |                  |    |    |     |                |    |       |     |
| FILM             |              |    |    |     |                  |    |    |     |                |    |       |     |
| NO OIL           |              |    |    |     |                  |    |    |     |                |    |       | X   |

PAVEMENT H F S None sq. m by 0 cmPATTIES / TARBALLS 5-20 BAGSNEAR SHORE SHEEN? ☒ NO BR RW SL TL

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

DID YOU COLLECT DEBRIS?

YES ☒ NO ☐TYPE Misc.#BAGS 3

Photographs:

Roll No. ST/10/14Frames 13

## SUBSURFACE OIL

| PIT NO. | PIT DEPTH (cm) | SUBSURFACE OIL CHARACTER |    |    |    |    | OILED INTERVAL (CM) | BELOW |    | OIL / FILM COLOR |    |    |    | PIT ZONE |    |    |    | A N A | SHEEN (Y/N) | ↓ | SURFACE - SUBSURFACE SEDIMENTS |
|---------|----------------|--------------------------|----|----|----|----|---------------------|-------|----|------------------|----|----|----|----------|----|----|----|-------|-------------|---|--------------------------------|
|         |                | OP                       | OR | OL | OF | NO |                     | UC    | UG | 2C               | 2B | 2P | 2S | 3C       | 3B | 3P | 3S |       |             |   |                                |
| 1       | 20             | X                        |    |    |    | X  | 0.2                 | X     |    |                  |    | X  |    | X        |    |    |    | N     |             | N | CSP-3G                         |
|         |                |                          |    |    |    |    |                     |       |    |                  |    |    |    |          |    |    |    |       |             |   |                                |
|         |                |                          |    |    |    |    |                     |       |    |                  |    |    |    |          |    |    |    |       |             |   |                                |
|         |                |                          |    |    |    |    |                     |       |    |                  |    |    |    |          |    |    |    |       |             |   |                                |
|         |                |                          |    |    |    |    |                     |       |    |                  |    |    |    |          |    |    |    |       |             |   |                                |
|         |                |                          |    |    |    |    |                     |       |    |                  |    |    |    |          |    |    |    |       |             |   |                                |

COMMENTS Tar patties are quite abundant in this subsegment. During the survey ~3 bags of debris and tar were removed, but additional patties remain. The STZ was snow covered on the pocket beaches during the survey & may contain additional debris and/or tar patties.

©Tides are for Chenega Island.

REVIEWED WDATE 4/25/90

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# SHORELINE ECOLOGICAL SUMMARY

REVISION: 03/23/90

Segment ST/EV-10 Subdivision A Date (mo/day/yr) 4/23/90  
 Time (24 hr) 1600-1700 Biologist Lemon cloudy, wind 0

- (A) Substrate type and % of segments:  
 (1) Bedrock 50 (2) Boulder 25 (3) Cobble 10 (4) Pebble 10 (5) Sand 5 (6) Silt 0
- (B) Overall % cover of biota (% of segment): Dense        Moderate 50% Low
- (C) Density, substrate preference (by number from A, above), & vertical zonation of major taxa: (upper-U; mid-M; low tidal-L); juveniles/adults (X), new settlement (3)

Photographs:  
 Roll No. ST/10/14  
 Frames 13

## BARNACLES

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

NOT PRESENT

## MYTILUS

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

NOT PRESENT

## GASTROPODS

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

NOT PRESENT

## FUCUS

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

NOT PRESENT

Wildlife Observations/ General Comments: reproductive Fucus Egg cluster unknown fish origin.  
2 sea otter S. oligochaete Worms living with oil at pit 1.  
1 cormorant

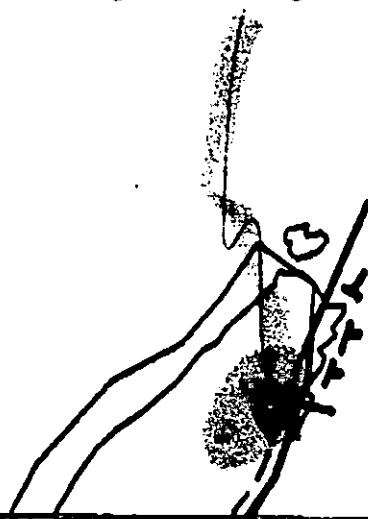
Ecological Considerations: deer harvest area.

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ECOLOGICAL  
MAP (1 of 2)

5T  
3NP, 30Q  
7II

~~BAUD EAGLE BESE~~



54 1/2 59

↓ PWS 177A

XXXX Wide

/// Medium

--- Narrow

TTTT Very Light

0000 No Oil

EV-10

ADEC Segment Length: 1876m



Map Key: PWS-177b

Name: R. Marty

Date: 23 April 1990

Date Entered:

↑ PWS 1778  
ECOLOGICAL MAP  
(2 of 2)

EV

|   |    |      |      |      |
|---|----|------|------|------|
| A | N1 | 0.95 | 149  | 120  |
|   | VL | 0.25 | 38   | 32   |
| B | L  | 0.75 | 113  | 94   |
|   | N0 | 4.2  | 705  | 589  |
| C | VL | 10.7 | 1605 | 1342 |
|   | L  | 0.5  | 75   | 63   |
|   |    |      | 2677 | 2240 |

246

1994

53 of 54

XXXX Wide

/// Medium

--- Narrow

TTTT Very Light

0000 No Oil

EV-10

ADEC Segment Length: 1876m



Map Key: PWS-177e

Name: R. Marty

Date: 23 April 1990

Date Entered:

↑  
PWS 177B

EV

|   |    |      |      |      |
|---|----|------|------|------|
| A | No | 0.95 | 143  | 120  |
|   | VL | 0.25 | 38   | 32   |
|   | L  | 0.75 | 113  | 94   |
| B | No | 4.7  | 705  | 589  |
|   | VL | 10.7 | 1605 | 1342 |
|   | L  | 0.5  | 75   | 63   |
|   |    |      | 2671 | 2240 |

246

1994

53 of 54

XXXX Wide

//// Medium

--- Narrow

TTTT Very Light

0000 No Oil

EV-10

ADEC Segment Length: 1876m



Map Key: PWS-177a

Name: R. Marty

Date: 23 April 1990

Date Entered:

**REGION: PRINCE WILLIAM SOUND**

**SEGMENT: ST/EV-10**

**SUBDIVISIONS: B (2 OF 2)**

SHORELINE EVALUATION

SEGMENT ST/ EV-10 SUBDIVISION B (2 OF 2) DATE 4/23/90

**SEGMENT ENVIRONMENTAL SENSITIVITIES AND TIME CONSTRAINTS:**

3N,3P Harbor seal and sea lion pupping (5/15 to 7/1)  
30,3Q Harbor seal and sea lion molting (8/15 to 9/15)  
5T-2 All bald eagle nests (3/1 to 6/1)-Active eagle nests (3/1 to 9/1)  
(one eagle nest within 400 M)  
7II Subsistence area: Deer harvesting (8/15 to 2/28)  
See attached Ecological Constraint sheet for specific constraints and contacts.

**SUBDIVISION ECOLOGICAL CONSTRAINTS:**

Avoid any unnecessary disturbance or damage to unoiled biota and substrate. (1 eagle nest within 400M)

**ARCHAEOLOGICAL CONSTRAINTS:**

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

SHPO SIGNATURE: \_\_\_\_\_ DATE: \_\_\_\_\_

**OILING CATEGORIZATION:**

Wide 0 m: Medium 0 m: Narrow 104 m: V.Light 1354 m: No Oil 808 m  
Subsurface Oil Observed: Yes \_\_\_\_\_ No X Maximum Depth \_\_\_\_\_

**RECOMMENDATIONS:**

|                                                              |                                                        |
|--------------------------------------------------------------|--------------------------------------------------------|
| <input checked="" type="checkbox"/> No Treatment Recommended | <input type="checkbox"/> Snare/Absorbent Booms         |
| <input type="checkbox"/> Treatment Recommended               | <input type="checkbox"/> Oil Snares (pom poms)         |
| <input type="checkbox"/> Manual Pickup                       | <input type="checkbox"/> Absorbents (pads, rolls, etc) |
| <input type="checkbox"/> Bioremediation                      | <input type="checkbox"/> Spot Washing: _____ Wands     |
| <input type="checkbox"/> Tarmat Removal                      | <input type="checkbox"/> Beach Cleaner                 |
|                                                              | <input type="checkbox"/> Other (see comments)          |

COMMENTS: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

TAG COMMENTS: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

TAG APPROVAL DATE: \_\_\_\_\_

ADEC \_\_\_\_\_  
EXXON \_\_\_\_\_  
NOAA \_\_\_\_\_  
USCG \_\_\_\_\_

FOSC: \_\_\_\_\_ DATE: \_\_\_\_\_

# 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 Suzumoto 424-7511
- 1I Gill net area (6/7 to 8/31)**  
**1J Purse seine area (7/20 to 9/30)**  
**1K Purse seine hook-off (7/20 to 9/30)**  
**1L Set net sites (6/11 to 7/25)**  
 Contact ADF&G for specific dates, locations and constraints. Restrict boat and air traffic to essential minimum. When set net sites are present (1L) restrict beach operations to essential minimum as authorized by ADF&G. If plans for treatment include methods such as hot water wash or Inipol application which might affect nearshore oil or toxicity levels, contact ADF&G for consultation and authorization.  
 AGENCY CONTACT PERSON: ADF&G James Brady 424-3212
- 2M Herring spawning (4/1 to 6/15)**  
 Contact ADF&G for confirmation - dates and locations may vary. Restrict boat traffic to essential minimum. Avoid damage to unopened intertidal and subtidal algae and seagrass. If plans for treatment include methods such as hot water wash or Inipol application which might affect nearshore oil or toxicity levels, contact ADF&G for consultation and authorization.  
 AGENCY CONTACT PERSON: ADF&G Evelyn Biggs 424-3235
- 3D Harbor seal and sea lion pupping (5/15 to 7/1)**  
**3Q Harbor seal and sea lion molting (8/15 to 9/15)**  
 Restrict boat and air traffic to essential minimum. No personnel within 400m. Aircraft to maintain 800m horizontal and 300m vertical distance from haulouts. No application of Inipol within two weeks of arrival dates (work window at these sites is limited to 7/2 to 7/31). Contact ADF&G and USFWS prior to treatment for confirmation.  
 AGENCY CONTACT PERSON: US National Marine Fisheries Service Steve Zimmerman 586-7235  
 ADF&G Don Calkins 267-2403
- 5R Seabird colony (5/1 to 9/1)**  
 Restrict air and boat traffic to essential minimum. No personnel within 800m. Aircraft to maintain 800m horizontal, 300m vertical distance from colony. Contact USFWS prior to treatment.  
 AGENCY CONTACT PERSON: USFWS Jill Parker 786-3377
- 5S Shorebird/waterfowl concentration (4/1 to 5/15)**  
 Restrict all activity to essential minimum, especially air traffic. Contact USFWS and ADF&G for confirmation.  
 AGENCY CONTACT PERSON: USFWS Jill Parker 786-3377  
 ADF&G Tom Roth 267-2206
- 5T All Bald Eagle nests (3/1 to 6/1)**  
**Active Bald Eagle nests (3/1 to 9/1)**  
 Restrict air traffic and all disturbance to essential minimum. No personnel within 400m 3/1 to 6/1. Air approach and takeoff from and to seaward only; maintain 800m horizontal, 300m vertical distance from nests. Contact USFWS prior to treatment for confirmation of dates.  
 AGENCY CONTACT PERSON: USFWS Jill Parker 786-3377
- 6U Recreation:**  
**6V Tent sites (6/1 to 9/15)**  
**6W Anchorages (6/1 to 9/15)**  
**6X Forest Service cabins (6/1 to 9/15)**  
**6Y Lodge (6/1 to 9/15)**  
**Special use destination**
- 7Z Subsistence area: Salmon harvesting (5/1 to 9/30)**  
**7HH Finfish harvesting**  
**7I Deer harvesting (8/15 to 2/28)**  
**7J Invertebrate harvesting**  
 Contact ADF&G and appropriate Native Corporation for specific dates, locations, and constraints. Restrict boat and air traffic and beach disturbance to essential minimum. If plans for treatment include methods such as hot water wash or application of Inipol which might affect intertidal or nearshore oil or toxicity levels, contact ADF&G and appropriate Native Corporation for authorization - see Native Corporation Contact List for each Native Corporation's contact person.  
 AGENCY CONTACT PERSON: ADF&G Jim Fall 267-2359

SEGMENT ST EV10 SUBDIVISION: B DATE 4/23/90

**USCG**

NAME SHAWN MAAS SIGNATURE DC2 Shawn Maas

☒ NO TREATMENT RECOMMENDED  
COMMENTS

☐ TREATMENT SUGGESTED

COVER IS PATCHY SPORADIC ALONG VERTICAL ROCK  
FACE. HARD TO GET AT.

NO SUBSURFACE ONS NOTED

**ADEC**

NAME DAVE SALE SIGNATURE Dave Sale

☒ NO TREATMENT RECOMMENDED  
COMMENTS

☐ TREATMENT SUGGESTED

THERE IS A STAIN / COVER ON HI-ANGLE ROCKS THAT IS  
SPOTTY AND PROBABLY CANNOT BE CLEANED OFF. SOME TARRY  
COVER REMAINS IN BAND.

**LAND MANAGER**

NAME Don Kompkoff JR. SIGNATURE Don P. Kompkoff Jr.

☐ NO TREATMENT RECOMMENDED  
COMMENTS

☒ TREATMENT SUGGESTED

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# SKETCH MAP

SEGMENT ST/ EV-10

SUBDIVISION B (pt)

DATE 25 April 90

## CHECKLIST

- ☐ Name
- ☐ Approx. Scale
- ☐ Significant Features
- ☐ On Date
- ☐ Which
- ☐ Length
- ☐ % Cover
- ☐ Substrate Character
- ☐ Eel H/W/L/W/L
- ☐ SSL
- ☐ Pseudo Location(s)
- ☐ Product(s)
- ☐ P/L Location(s)
- ☐ Photo Location(s)

## LEGEND

1 A

P/L - No Substrate OR

2 A

P/L - Substrate OR

CT/C

Continuous Distribution

CT/B

Broken Distribution

CT/P

Patchy Distribution

CT/S

Spotted Distribution

000

Other Vegetation

1 0-0

Photo location, direction, and number

520454

Of Character Length (cm): AP PO CV CT ST MS PT TB FL NO

oiling reduced to splatter

25% cover band ~ 20cm wide

vertical rock face

reported eagle nest not confirmed 23 Apr 90

Continued from page 1

0 100 200 300 METERS

## SHORELINE ECOLOGICAL SUMMARY

REVISION: 03/22/88

Segment ST/EV 10 Subdivision B Date (mo/day/yr) 4/23/90Time (24 hr) 1615-1900 Biologist Lemon(A) Substrate type and % of segments:  
(1) Bedrock 50 (2) Boulder 30 (3) Cobble 10 (4) Pebble 5 (5) Sand 5 (6) Silt 0(B) Overall % cover of biota (% of segment): Dense \_\_\_\_\_ Moderate 50% Low \_\_\_\_\_

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

Photographs:  
Roll No. none

Frames \_\_\_\_\_

## BARNACLES

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

NOT PRESENT

## MYTILUS

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

NOT PRESENT

## GASTROPODS

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

NOT PRESENT

## FUCUS

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

NOT PRESENT

Wildlife Observations/ General Comments: Littorine eggs, Medolite (Nudibranch), Fucus is reproductive

18 gulls 1 river otter

4 sea otters including pup

eagle sound, none seen

live Prototrocha dug from low zone

School of "minnows"

## Ecological Considerations:

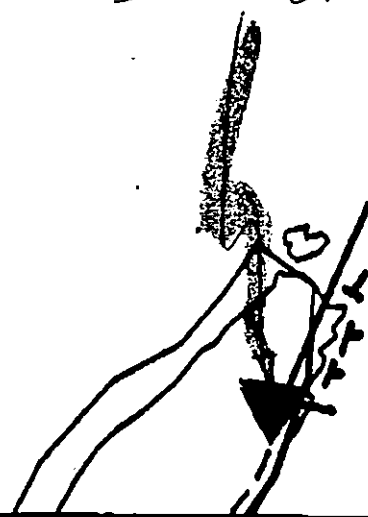
Reported eagle nest and pinned haulout could not be confirmed 23 Apr 90  
 however an eagle was heard during the survey. The largest offshore rock  
 appeared to be developing a gull nesting area.  
 This is a subsistence deer harvest area.

47 of 59

ECOLOGICAL  
MAP (1 of 2)

5T.  
3NP, 30Q  
7II

~~BALDWIN AGL~~



54 of 59

↓ PWS 177A

XXXX Wide

/// Medium

--- Narrow

TTTT Very Light

0000 No Oil

EV-10

ADEC Segment Length: 1876m



Map Key: PWS-177b

Name: R. Marty

Date: 23 April 1990

Date Entered:

↑ PWS 1778  
 ECOLOGICAL MAP  
 (2 of 2)

EV



|   |    |      |      |      |
|---|----|------|------|------|
| A | NI | 0.95 | 143  | 120  |
|   | VL | 0.25 | 38   | 32   |
| B | L  | 0.75 | 113  | 94   |
|   | NO | 4.2  | 705  | 589  |
|   | VL | 10.7 | 1605 | 1342 |
|   | L  | 0.5  | 75   | 63   |
|   |    |      | 2679 | 2240 |

246  
 1994

53 of 54

XXXX Wide

//// Medium

--- Narrow

TTTT Very Light

0000 No Oil

EV-10

ADEC Segment Length: 1876m



Map Key: PWS-177a

Name: R. Marty

Date: 23 April 1990

Date Entered:

↑  
PWS 177B



53 of 54

XXXX Wide

//// Medium

--- Narrow

TTTT Very Light

0000 No Oil

EV-10

ADEC Segment Length: 1878m

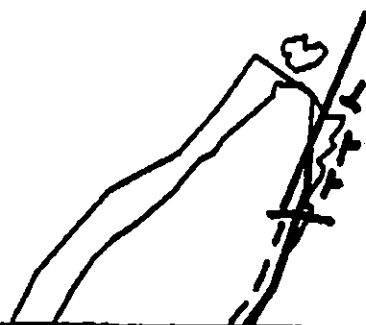


Map Key: PWS-177c

Name: R. Marty

Date: 23 April 1990

Date Entered:



54 of 59

↓ PWS 177A

XXXX Wide

EV-10

/// Medium

--- Narrow

ADEC Segment Length: 1876m

TTTT Very Light

0000 No Oil



Map Key: PWS-177b

Name: R. MartyDate: 23 April 1990

Date Entered:

## ADDENDUM: SUBDIVISION CONSTRAINTS

SEGMENT EV-10 SUBDIVISION A (1 of 2)

| WORK WINDOW   |      |
|---------------|------|
| Manual Pickup | OPEN |

### ARCHAEOLOGICAL STANDARD CONSTRAINT

If cultural resources are uncovered, PHONE 564-3274.

### APPLICABLE ECOLOGICAL TIME CONSTRAINTS

|          |                                            |                                                                                                            |
|----------|--------------------------------------------|------------------------------------------------------------------------------------------------------------|
| 3N,O,P,Q | Harbor Seal & Sea Lion Pupping and Molting | NO TIME CONSTRAINT. Authorized per memorandum dated 5/14/90 from Kathryn Frost/ADF&G to Mark Kuwada/ADF&G. |
| 5T       | Bald Eagle Nest                            | NO CONSTRAINT. Work area is more than 400m from nest.                                                      |
| 1K       | Purse Seine Hook-off                       | No constraint to manual pickup.                                                                            |
| 7II      | Subsistence: Deer Harvesting               | No constraint to manual pickup.                                                                            |

### OTHER ECOLOGICAL CONSIDERATIONS

Restrict boat and air traffic to essential minimum after 7/20. Restrict beach disturbance to essential minimum after 8/15. Do not chase or harass seals or sea lions, and do not approach pups under any circumstances. When working on or near haulouts, complete the job as quickly as possible with minimum personnel, equipment, noise and disturbance. Keep boats and personnel as far from actual haulouts as is practical to do the work specified. Minimize air traffic near haulouts, maintain elevation as is practical, and avoid repeated overflights of the same haulout areas. Avoid any unnecessary disturbance or damage to unrolled blots and substrate. Restrict air traffic and all disturbance to essential minimum. Air approach and takeoff from and to seaward only; maintain 800m horizontal, 300m vertical distance from nests.

TAG APPROVAL DATE 5/29/90  
ADEC ART WENNER  
EXXON ANDY TGAZ  
NOAA B. WILSON  
USCG G.A. BEITER

FOSC

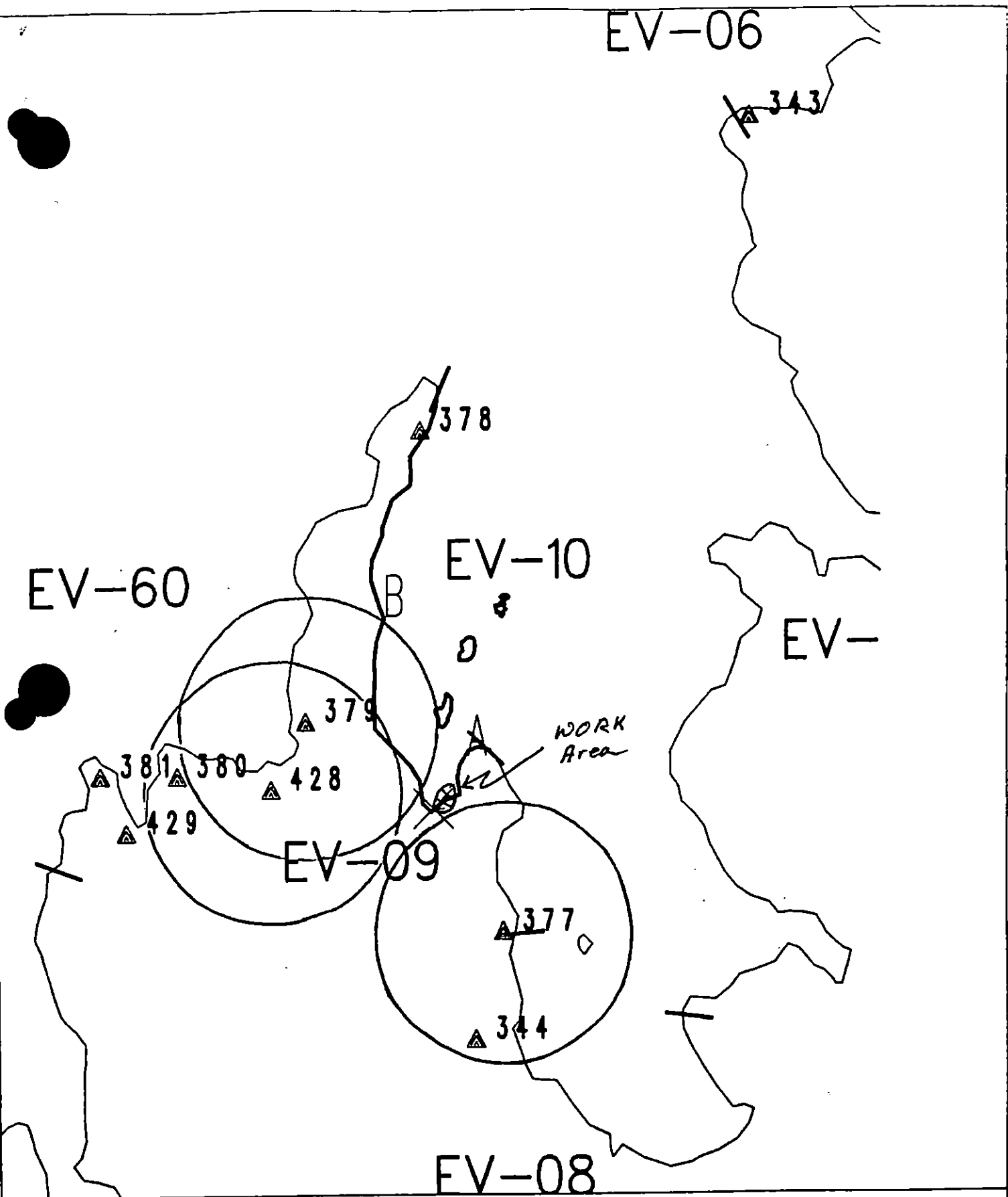
Date MAY 29 1990

Prepared by

Anden Meyer WK

Date

5/24/90

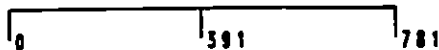


Exxon Company, USA  
Map Key: PWS-EV-10  
May 11, 1990



ECOLOGY MAP  
SEGMENT EV-10  
SUBDIVISION A (1 of 2)

METERS



- ★ Seabird Colony
- ▲ Eagle Nest

1 inch = 1282 feet

SHORELINE EVALUATION

SEGMENT ST/ EV-10 SUBDIVISION A (1 OF 2) DATE 4/23/90

**SEGMENT ENVIRONMENTAL SENSITIVITIES AND TIME CONSTRAINTS:**

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)  
5T-1 All bald eagle nests (3/1 to 6/1)-Active eagle nests (3/1 to 9/1)  
7II Subsistence area: Deer harvesting (8/15 to 2/28)  
See attached Ecological Constraint sheet for specific constraints and contacts.

**SUBDIVISION ECOLOGICAL CONSTRAINTS:**

Avoid any unnecessary disturbance or damage to unoiled biota and substrate. 5T within 400M.

**ARCHAEOLOGICAL CONSTRAINTS:**

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

SHPO SIGNATURE: Charles E. Holmes DATE: 5/3/90

**OILING CATEGORIZATION:**

Wide 0 m: Medium 0 m: Narrow 121 m: V.Light 58 m: No Oil 161 m  
Subsurface Oil Observed: Yes        No X Maximum Depth       

**RECOMMENDATIONS:**

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

COMMENTS: Recommend manual pickup of debris, tarballs and patties. Work should be conducted between 7/1 and 8/15 based on above listed constraints.

→ See Constraint Addendum 5/24/90 wtk

TAG COMMENTS: MONITORS TO CHECK SUITZ ON POCKET BEACHES AND  
OILED LOGS.

TAG APPROVAL DATE: 5/3/90.

DEC ART WEINER Art Weiner  
EXXON ANDY TEAL Andy Teal  
NOAA GARY PETROS Gary Petros  
USCG KENNETH KEANE Kenneth Keane

FOSC: hgl DATE: 5-15-90

\*NOTIFY CVC 24 HRS. IN ADVANCE OF WORK\*

# SHORELINE EVALUATION

SEGMENT ST/ EV-10 SUBDIVISION A (1 OF 2) DATE 4/23/90

## SEGMENT ENVIRONMENTAL SENSITIVITIES AND TIME CONSTRAINTS:

3N,3P Harbor seal and sea lion pupping (5/15 to 7/1)  
30,3Q Harbor seal and sea lion molting (8/15 to 9/15)  
5T-1 All bald eagle nests (3/1 to 6/1)-Active eagle nests (3/1 to 9/1)  
7II Subsistence area: Deer harvesting (8/15 to 2/28)  
See attached Ecological Constraint sheet for specific constraints and contacts.

## SUBDIVISION ECOLOGICAL CONSTRAINTS:

Avoid any unnecessary disturbance or damage to unoiled biota and substrate. 5T within 400M.

## ARCHAEOLOGICAL CONSTRAINTS:

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

SHPO SIGNATURE: Charles E. Holmes DATE: 5/3/90

## OILING CATEGORIZATION:

Wide 0 m: Medium 0 m: Narrow 121 m: V.Light 58 m: No Oil 161 m  
Subsurface Oil Observed: Yes        No X Maximum Depth       

## RECOMMENDATIONS:

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

COMMENTS: Recommend manual pickup of debris, tarballs and patties. Work should be conducted between 7/1 and 8/15 based on above listed constraints.

TAG COMMENTS: MONITORS TO CHECK SUITZ ON POCKET BEACHES AND  
OILED LOGS

TAG APPROVAL DATE: 5/3/90  
ADEC ART WEINER Art Weiner  
EXXON ANDY TEAL Andy Teal  
NOAA GARY PETROSE Gary Petrose  
USCG KENNETH KEANE Kenneth Keane

FOSC: HL DATE: 5-15-90

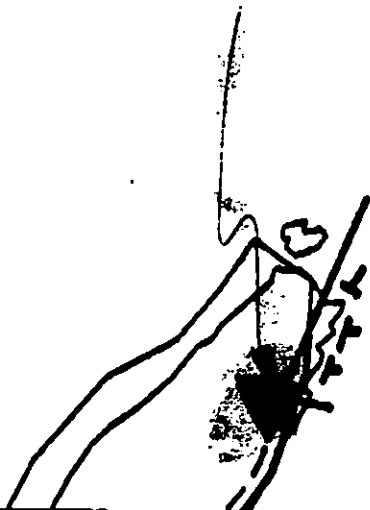
NOTIFY CVC 24 HRS. IN ADVANCE OF WORK

$\frac{1}{2}$

ECOLOGICAL  
MAP (1 of 2)

5T  
3NP, 30Q  
7II

BAUD EAGLE NEST



54 of 59

↓ PWS 177A

XXXX Wide

/// Medium

--- Narrow

TTTT Very Light

0000 No Oil

EV-10

ADEC Segment Length: 1876m



METERS



Map Key: PWS-177b

Name: R. Marty

Date: 23 April 1990

Date Entered:

↑ PWS 1778  
 ECOLOGICAL MAP  
 (2 of 2)

EV

BALD  
 EAGLE  
 NEST

|   |    |      |      |      |
|---|----|------|------|------|
| A | N1 | 0.95 | 143  | 120  |
|   | VL | 0.25 | 38   | 32   |
|   | L  | 0.75 | 113  | 94   |
|   | N0 | 4.2  | 705  | 589  |
| B | VL | 10.7 | 1605 | 1342 |
|   | L  | 0.5  | 75   | 63   |
|   |    |      | 2679 | 2240 |
|   |    |      |      |      |

246

1994

53 of 54

XXXX Wide

//// Medium

--- Narrow

TTTT Very Light

0000 No Oil

EV-10

ADEC Segment Length: 1876m



Map Key: PWS-177a

Name: R. Marty

Date: 23 April 1990

Date Entered:

↑  
PWS 177B

EV



|   |    |      |      |      |
|---|----|------|------|------|
| A | No | 0.95 | 143  | 120  |
|   | VL | 0.25 | 38   | 32   |
|   | L  | 0.75 | 113  | 94   |
| B | No | 4.2  | 705  | 589  |
|   | VL | 10.7 | 1605 | 1342 |
|   | L  | 0.5  | 75   | 63   |
|   |    |      | 2671 | 2240 |

1994

530/54

XXXX Wide

//// Medium

--- Narrow

TTTT Very Light

0000 No Oil

EV-10

ADEC Segment Length: 1876m



Map Key: PWS-177a

Name: R. Marty

Date: 23 April 1990

Date Entered:

# SHORELINE EVALUATION

SEGMENT ST/ EV-10 SUBDIVISION B (2 OF 2) DATE 4/23/90

## SEGMENT ENVIRONMENTAL SENSITIVITIES AND TIME CONSTRAINTS:

3N,3P Harbor seal and sea lion pupping (5/15 to 7/1)  
30,3Q Harbor seal and sea lion molting (8/15 to 9/15)  
5T-2 All bald eagle nests (3/1 to 6/1)-Active eagle nests (3/1 to 9/1)  
(one eagle nest within 400 M)  
7II Subsistence area: Deer harvesting (8/15 to 2/28)  
See attached Ecological Constraint sheet for specific constraints and contacts.

## SUBDIVISION ECOLOGICAL CONSTRAINTS:

Avoid any unnecessary disturbance or damage to uncoiled biota and substrate. (1 eagle nest within 400M)

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

SHPO SIGNATURE: J. Paul M. Mohan DATE: 5/8/90

## OILING CATEGORIZATION:

Wide 0 m: Medium 0 m: Narrow 104 m: V.Light 1354 m: No Oil 808 m  
Subsurface Oil Observed: Yes      No X Maximum Depth     

## RECOMMENDATIONS:

|                                                              |                                                          |
|--------------------------------------------------------------|----------------------------------------------------------|
| <input checked="" type="checkbox"/> No Treatment Recommended | <input type="checkbox"/> Snare/Absorbent Booms           |
| <input type="checkbox"/> Treatment Recommended               | <input type="checkbox"/> Oil Snares (pom poms)           |
| <input checked="" type="checkbox"/> Manual Pickup            | <input type="checkbox"/> Absorbents (pads, rolls, etc)   |
| <input type="checkbox"/> Bioremediation                      | <input type="checkbox"/> Spot Washing: <u>    </u> Wands |
| <input type="checkbox"/> Tarmat Removal                      | <input type="checkbox"/> Beach Cleaner                   |
|                                                              | <input type="checkbox"/> Other (see comments)            |

COMMENTS: MANUAL PICKUP OF TAR BALLS + DEER  
SEE SKETCH ATTACHED TO EV-10-A

TAG COMMENTS:     

TAG APPROVAL DATE: 5/3/90  
ADEC ART WENGER  
EXXON ANDY GIL  
NOAA GARY PATRICK  
USCG KENNETH KERRICK

FOSC: WJL DATE: 5-18-90

NOTIFY CVC 24 HRS PRIOR TO WORK



US Navy

SEGMENT ST/ CV-10

SUBDIVISION 8 (2)

DATE 23 April 90

CHECKLIST

- Map Area
- Approx. Scale
- Seafloor Survey
- CR Data
- Width
- Length
- % Cover
- Substrate Character
- Est. HML/ALR
- SSL
- Photos (Location)
- Print(s)
- Photo Location
- Photo Location

LEGEND

1 A

Pl - No Substrate CR

2 A

Pl - Substrate CR

CT/C

Continuous Distribution

CT/B

Broken Distribution

CT/P

Patchy Distribution

CT/S

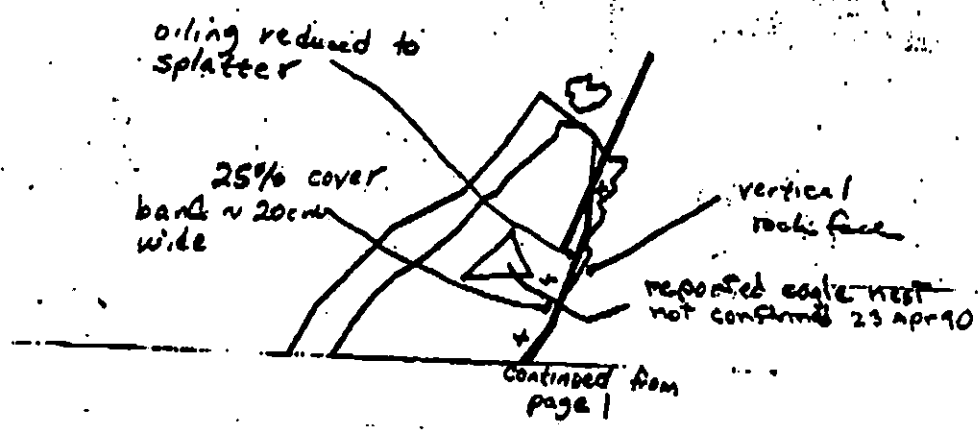
Spotted Distribution

222

1 6-2

Photo location, elevation, and number

SKETCH MAP

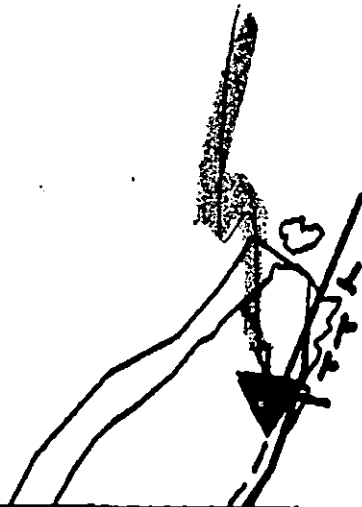


CR Character Legend: AP, PO, CV, CT, ST, NS, TB, FL, NO

ECOLOGICAL  
MAP (1 of 2)

5T.  
3NP, 30Q  
7II

~~BALD EAGLE NEST~~



54 of 59

↓ PWS 177A

XXXX Wide

/// Medium

--- Narrow

TTTT Very Light

0000 No Oil

EV-10

ADEC Segment Length: 1876m



Map Key: PWS-177b

Name: R. Marty

Date: 23 April 1990

Date Entered:

↑ PWS 1778  
 ECOLOGICAL MAP  
 (2 of 2)

EV



|   |    |      |      |      |
|---|----|------|------|------|
| A | No | 0.95 | 143  | 120  |
|   | VL | 0.25 | 38   | 32   |
|   | L  | 0.75 | 113  | 94   |
| B | No | 4.2  | 705  | 589  |
|   | VL | 10.7 | 1605 | 1342 |
|   | L  | 0.5  | 75   | 63   |
|   |    |      | 2679 | 2340 |

246  
 1994

53 of 54

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

ADEC Segment Length: 1876m

0 100 200 300  
 METERS

Map Key: PWS-177e  
 Name: R. Marty  
 Date: 23 April 1990  
 Date Entered:

↑  
PWS 177B



53 of 54

XXXX Wide

/// Medium

--- Narrow

TTTT Very Light

0000 No Oil

EV-10

ADEC Segment Length: 1876m

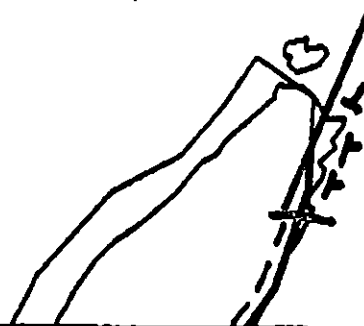


Map Key: PWS-177e

Name: R. Marty

Date: 23 April 1990

Date Entered:



54 of 59

↓ PWS 177A

XXXX Wide

/// Medium

--- Narrow

TTTT Very Light

0000 No Oil

EV-10

ADEC Segment Length: 1876m



METERS

Map Key: PWS-177b

Name: R. MartyDate: 23 April 1990

Date Entered:

## ADDENDUM: SUBDIVISION CONSTRAINTS

SEGMENT EV-10 SUBDIVISION B (2 of 2)

| WORK WINDOW   |      |
|---------------|------|
| Manual Pickup | OPEN |

### ARCHAEOLOGICAL STANDARD CONSTRAINT

If cultural resources are uncovered, PHONE 564-3274.

### APPLICABLE ECOLOGICAL TIME CONSTRAINTS

|          |                                            |                                                                                                            |
|----------|--------------------------------------------|------------------------------------------------------------------------------------------------------------|
| 1K       | Purse Seine Hook-off                       | No constraint to manual pickup.                                                                            |
| 3N,O,P,Q | Harbor Seal & Sea Lion Pupping and Molting | NO TIME CONSTRAINT. Authorized per memorandum dated 5/14/90 from Kathryn Frost/ADF&G to Mark Kuwada/ADF&G. |
| 5T       | Bald Eagle Nest                            | NO CONSTRAINT. USFWS 6/1/90 map indicates no active nest within 400m of Subdivision B work site.           |
| 7II      | Subsistence: Deer Harvesting               | No constraint to manual pickup.                                                                            |

### OTHER ECOLOGICAL CONSIDERATIONS

Restrict boat and air traffic to essential minimum after 7/20. Restrict beach disturbance to essential minimum after 8/15. Do not chase or harass seals or sea lions, and do not approach pups under any circumstances. When working on or near haulouts, complete the job as quickly as possible with minimum personnel, equipment, noise and disturbance. Keep boats and personnel as far from actual haulouts as is practical to do the work specified. Minimize air traffic near haulouts, maintain elevation as is practical, and avoid repeated overflights of the same haulout areas. Avoid any unnecessary disturbance or damage to unrolled biota and substrate.

TAG APPROVAL DATE  
ADEC Ran Morris  
EXXON ANDY TEAL  
NOAA W. K. Kelly  
USCG ST

FOSC W. K. Kelly

DATE 8 June 90

Prepared By: J. P. Phillips

Date 6/7/90

EV-06A

EV-60

WORK  
AREAS

EV-10

EV-

EV-09

EV-08

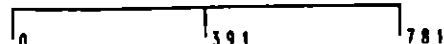


Exxon Company, USA  
Map Key: PMS-EV-10  
June 04, 1990



ECOLOGY MAP  
SEGMENT EV-10  
SUBDIVISION B (2 of 2)

METERS



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

1 inch = 1282 feet

# SHORELINE EVALUATION

SEGMENT ST/ EV-10 SUBDIVISION B (2 OF 2) DATE 4/23/90

## SEGMENT ENVIRONMENTAL SENSITIVITIES AND TIME CONSTRAINTS:

3N,3P Harbor seal and sea lion pupping (5/15 to 7/1)  
30,3Q Harbor seal and sea lion molting (8/15 to 9/15)  
5T-2 All bald eagle nests (3/1 to 6/1)-Active eagle nests (3/1 to 9/1)  
(one eagle nest within 400 M)  
7II Subsistence area: Deer harvesting (8/15 to 2/28)  
See attached Ecological Constraint sheet for specific constraints and contacts.

## SUBDIVISION ECOLOGICAL CONSTRAINTS:

Avoid any unnecessary disturbance or damage to uncoiled biota and substrate. (1 eagle nest within 400M)

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

SHPO SIGNATURE: J. Daniel McManis

DATE: 5/8/90

## OILING CATEGORIZATION:

Wide 0 m: Medium 0 m: Narrow 104 m: V.Light 1354 m: No Oil 808 m  
Subsurface Oil Observed: Yes      No X Maximum Depth     

## RECOMMENDATIONS:

|                                                              |                                                          |
|--------------------------------------------------------------|----------------------------------------------------------|
| <input checked="" type="checkbox"/> No Treatment Recommended | <input type="checkbox"/> Snare/Absorbent Booms           |
| <input type="checkbox"/> Treatment Recommended               | <input type="checkbox"/> Oil Snares (pom poms)           |
| <input checked="" type="checkbox"/> Manual Pickup            | <input type="checkbox"/> Absorbents (pads, rolls, etc)   |
| <input type="checkbox"/> Bioremediation                      | <input type="checkbox"/> Spot Washing: <u>    </u> Wands |
| <input type="checkbox"/> Tarmat Removal                      | <input type="checkbox"/> Beach Cleaner                   |
|                                                              | <input type="checkbox"/> Other (see comments)            |

COMMENTS: MANUAL PICKUP OF TARBALLS + DEBRIS

SEE SKETCH ATTACHED TO EV-10-A

See ADDENDUM dated 6/7/90/PP

TAG COMMENTS:     

TAG APPROVAL DATE: 5/3/90

ADEC ART WENNER  
EXXON AMY TAT  
NOAA SEAN PATRICK  
USCG KENNETH KOWAL

FOSC: W L

DATE: 5-18-90

NOTIFY CVC 24 HRS PRIOR TO WORK

REGION: PRINCE WILLIAM SOUND

SEGMENT: ST/EV-11

SUBDIVISIONS: A (1 OF 1)

SHORELINE EVALUATION

SEGMENT ST/ EV-11 SUBDIVISION A (1 OF 1) DATE 4/20/90

**SEGMENT ENVIRONMENTAL SENSITIVITIES AND TIME CONSTRAINTS:**

5T-1 All bald eagle nests (3/1 to 6/1)-Active eagle nests (3/1 to 9/1)  
7II Subsistence area: Deer harvesting (8/15 to 2/28)

See attached Ecological Constraint sheet for specific constraints and contacts.

**SUBDIVISION ECOLOGICAL CONSTRAINTS:**

Avoid any unnecessary disturbance or damage to unoiled biota and substrate. Bald eagle nest in adjacent segment.

**ARCHAEOLOGICAL CONSTRAINTS:**

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

SHPO SIGNATURE: \_\_\_\_\_ DATE: \_\_\_\_\_

**OILING CATEGORIZATION:**

Wide 0 m: Medium 0 m: Narrow 0 m: V.Light 26 m: No Oil 223 m  
Subsurface Oil Observed: Yes \_\_\_\_\_ No X Maximum Depth \_\_\_\_\_

**RECOMMENDATIONS:**

|                                                              |                                     |
|--------------------------------------------------------------|-------------------------------------|
| <input checked="" type="checkbox"/> No Treatment Recommended | _____ Snare/Absorbent Booms         |
| _____ Treatment Recommended                                  | _____ Oil Snares (pom poms)         |
| _____ Manual Pickup                                          | _____ Absorbents (pads, rolls, etc) |
| _____ Bioremediation                                         | _____ Spot Washing: _____ Wands     |
| _____ Tarmat Removal                                         | _____ Beach Cleaner                 |
|                                                              | _____ Other (see comments)          |

COMMENTS: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

TAG COMMENTS: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

TAG APPROVAL DATE: \_\_\_\_\_

ADEC \_\_\_\_\_  
EXXON \_\_\_\_\_  
NOAA \_\_\_\_\_  
USCG \_\_\_\_\_

FOSC: \_\_\_\_\_ DATE: \_\_\_\_\_

# PWS, SEWARD AND HOMER ECOLOGICAL CONSTRAINTS

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

## FIELD SHORELINE COMMENT SHEET

SEGMENT ST/ EV-11 SUBDIVISION: EV-11A (1011) DATE 4-20-90**VOAA**NAME Michael Buchman SIGNATURE [Signature]☒ NO TREATMENT RECOMMENDED☐ TREATMENT SUGGESTED

## COMMENTS

Majority of this segment (~90%) is a vertical rock wall with focus covered boulders at water line. Very light stain/splatters were seen from boat in this area. The small pocket beach of boulders/cobbles also had a band of light staining. (This beach was walked.)

**ADEC**NAME John Hayes SIGNATURE [Signature]☒ NO TREATMENT RECOMMENDED☐ TREATMENT SUGGESTED

## COMMENTS

Light tar stain + random tar splashes observed on this segment. Segment is very lightly oiled no treatment recommended.

**LAND MANAGER**NAME Steve Ward - Chenega Corp. SIGNATURE [Signature]☒ NO TREATMENT RECOMMENDED☐ TREATMENT SUGGESTED

## COMMENTS

Above information is accurate. I agree with above comments.

# SHORELINE OILING SUMMARY

REVISION NO. 04/12/88

OG MIKE FOLLET ~~NOAA~~ Michael Bullman SEGMENT ST/ EU-11  
 BIO KATHLEEN Conlin LAND REP STEVE WARD SUBDIVISION A (1 OF 1)  
 XXON LARRY OLSON ADEC JOHN HAYES TIME 12:05:10 P : 30  
 TEAM NO. 11 TIDE LEVEL +2.4 DATE 4/20/90  
 EST. SUBDIVISION LENGTH: 385 m ☒ Sun ☐ Clouds ☐ Fog ☐ Rain ☐ Snow  
 UPLANDS DESCRIPTION: ☐ Grass ☐ Forest ☒ Rock very rocky cliff back shore  
 SURVEYED FROM: ☒ Foot ☒ Boat ☐ Helo WORKING DIRECTION: N to S  
 SURFACE SEDIMENTS: R 70 % B 25 % C 5 % P 0 % G 0 % S 0 % M 0 % V 0 %  
 SLOPE: Long 20 % Hang 10 % Vert 70 % WAVE EXPOSURE: ☐ Low ☐ Med ☒ High  
 OIL CATEGORY LENGTH: W 0 m M 0 m N 0 m VL 20 m NO 365 m

## SURFACE OIL

| CHARACTER        | DISTRIBUTION |   |   |    | OIL / FILM COLOR |    |    |    | IMPACTED ZONES |    |   |   |
|------------------|--------------|---|---|----|------------------|----|----|----|----------------|----|---|---|
|                  | W            | M | N | VL | SW               | BL | GR | BR | SU             | UI | M | U |
| ASPHALT PAVEMENT |              |   |   |    |                  |    |    |    |                |    |   |   |
| POOLED           |              |   |   |    |                  |    |    |    |                |    |   |   |
| COVER            |              |   |   |    |                  |    |    |    |                |    |   |   |
| COAT             |              |   |   |    |                  |    |    |    |                |    |   |   |
| STAIN            |              |   |   | X  | X                |    |    |    |                | X  |   |   |
| MOUSSE           |              |   |   |    |                  |    |    |    |                |    |   |   |
| PATTIES          |              |   |   |    |                  |    |    |    |                |    |   |   |
| TARBALLS         |              |   |   |    |                  |    |    |    |                |    |   |   |
| FILM             |              |   |   |    |                  |    |    |    |                |    |   |   |
| NO OIL           |              |   |   |    |                  |    |    |    | X              |    | X | X |

 PAVEMENT H F S 0 sq. m by 0 cm

 PATTIES / TARBALLS 0 BAGS

 NEAR SHORE SHEEN? (NO) BR RW SL TL

| OILED DEBRIS | AMOUNT |    |    |
|--------------|--------|----|----|
|              | SM     | MD | LG |
| Logs         |        |    |    |
| Vegetation   |        |    |    |
| Trash        |        |    |    |
| Debris       |        |    |    |

DID YOU COLLECT DEBRIS?

 YES ☐ NO ☒

 TYPE 0

 #BAGS 0

Photographs:

Roll No. \_\_\_\_\_

Frames \_\_\_\_\_

## SUBSURFACE OIL

| PIT NO. | PIT DEPTH (cm) | SUBSURFACE OIL CHARACTER |    |    |    |    | OILED INTERVAL (cm) | BELOW |    | OIL / FILM COLOR |    |    |    | PIT ZONE |    |   |   | A N A | SHEEN (Y/N) | SURFACE - SUBSURFACE SEDIMENTS |
|---------|----------------|--------------------------|----|----|----|----|---------------------|-------|----|------------------|----|----|----|----------|----|---|---|-------|-------------|--------------------------------|
|         |                | OP                       | OR | OL | OF | NO |                     | UG    | UC | SW               | BL | GR | BR | SU       | UI | M | U |       |             |                                |
|         |                |                          |    |    |    |    |                     |       |    |                  |    |    |    |          |    |   |   |       |             |                                |
|         |                |                          |    |    |    |    |                     |       |    |                  |    |    |    |          |    |   |   |       |             |                                |
|         |                |                          |    |    |    |    |                     |       |    |                  |    |    |    |          |    |   |   |       |             |                                |
|         |                |                          |    |    |    |    |                     |       |    |                  |    |    |    |          |    |   |   |       |             |                                |
|         |                |                          |    |    |    |    |                     |       |    |                  |    |    |    |          |    |   |   |       |             |                                |
|         |                |                          |    |    |    |    |                     |       |    |                  |    |    |    |          |    |   |   |       |             |                                |
|         |                |                          |    |    |    |    |                     |       |    |                  |    |    |    |          |    |   |   |       |             |                                |
|         |                |                          |    |    |    |    |                     |       |    |                  |    |    |    |          |    |   |   |       |             |                                |
|         |                |                          |    |    |    |    |                     |       |    |                  |    |    |    |          |    |   |   |       |             |                                |

COMMENTS No pits were excavated due to the nature of the shore zone, only some very light staining was observed in the H172 among the rock face. No oiling was observed underneath the cobble. Shore zone consists mostly of vertical rock face w/ a small pocketed r/c beach at the southern end of the segment.

 REVIEWED JW DATE 4-23-9

OG M. Foget

SEGMENT ST/ EV-11

SUBDIVISION A

DATE 4 / 20 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)
- ☐ PR 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

### ETCH MAP

scale

100 m

### Legend

/// - vert rock cliff

○ - Large Boulder

▲ - trees

10m vert rock  
cliff

vert rock cliff w/ some  
Large Boulders and  
a 1m x 10m ST/S in the  
HITZ on the rock face

Low angle D/C Beach  
1m x 10m ST/S staining in  
the HITZ

Oil Character Length (m): AP 0 PO 0 CV 0 CT 0 ST 20 MS 0 PT 0 TB 0 FL 0 NO 365

REVISION: 03/24/90

# SHORELINE ECOLOGICAL SUMMARY

REVISION: 03/22/90

Segment ST/ EV-11 Subdivision A (1 OF 1) Date (mo / day / yr) 4 / 20 / 90

Time (24 hr) 1812- Biologist KATHLEEN CONLAN  
1825

(A) Substrate type and % of segments:  
(1) Bedrock 70 (2) Boulder 25 (3) Cobble 5 (4) Pebble 0 (5) Sand 0 (6) Silt 0

(B) Overall % cover of biota ( % of segment ): Dense 90 Moderate 10 Low     

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

Photographs:  
Roll No.                     

Frames                     

## BARNACLES

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

NOT PRESENT

## MYTILUS

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

NOT PRESENT

## GASTROPODS

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

NOT PRESENT

## FUCUS

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

NOT PRESENT

Wildlife Observations/ General Comments:

3 BALD EAGLES

Ecological Considerations:

EV-13

EV-11

E

EV-40

F

XXXX Wide

//// Medium

--- Narrow

TTTT Very Light

0000 No Oil

EV-11A

ADEC Segment Length: 249m



Mar

Date



SEGMENT ST/ EV-11 SUBDIVISION A (1 OF 1) DATE 4/20/90

### SEGMENT ENVIRONMENTAL SENSITIVITIES AND TIME CONSTRAINTS:

5T-1 All bald eagle nests (3/1 to 6/1)-Active eagle nests (3/1 to 9/1)  
7II Subsistence area: Deer harvesting (8/15 to 2/28)

See attached Ecological Constraint sheet for specific constraints and contacts.

**SUBDIVISION ECOLOGICAL CONSTRAINTS:**

Avoid any unnecessary disturbance or damage to uncoiled biota and substrate. Bald eagle nest in adjacent segment.

**ARCHAEOLOGICAL CONSTRAINTS:**

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

SHPO SIGNATURE: Charles E. Hines DATE: 5/2/90

**OILING CATEGORIZATION:**

Wide 0 m: Medium 0 m: Narrow 0 m: V.Light 26 m: No Oil 223 m  
Subsurface Oil Observed: Yes \_\_\_\_\_ No X Maximum Depth \_\_\_\_\_

**RECOMMENDATIONS:**

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

COMMENTS: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

TAG COMMENTS: \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

TAG APPROVAL DATE: 5/2/90.

|       |               |               |
|-------|---------------|---------------|
| ADEC  | ART WEINER    | Art Weiner    |
| EXXON | ANDY TEAL     | Andy Teal     |
| NOAA  | GARY PETOZ    | Gary Peto     |
| USCG  | KENNETH KEANE | Kenneth Keane |

FOSC: h L DATE: 6-19-80

OG M. Foget

SEGMENT ST/EV-11

SUBDIVISION A

DATE 4/20/90

### CHECKLIST

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

### LEGEND

1  $\Delta$   
Plt - No Subsurface Oil

2  $\Delta$   
Plt - Subsurface Oil

CT/C  
Continuous Distribution

CT/B  
Broken Distribution

CT/P  
Patchy Distribution

CT/S  
Splashed Distribution

Oiled Vegetation

1  $\Rightarrow$   
Photo location, direction,  
and number

### ETCH MAP

scale

100 m

### Legend

/// - vert rock cliff

○ - Large Boulder

↑ - trees

10m vert rock cliff

vert rock cliff w/ some  
Large Boulders and  
a 1m x 10m ST/S in the  
HITZ on the rock face

Low angle D/C Beach  
1m x 10m ST/S staining in  
the HITZ

Oil Character Length (m): AP 0 PO 0 CV 0 CT 0 ST 20 MS 0 PT 0 TB 0 FL 0 NO 365

REV180000022400

EV-13

EV-11

EV

EV-40

F

XXXX Wide

//// Medium

---- Narrow

TTTT Very Light

0000 No Oil

EV-11A

AOEC Segment Length: 249m

0 100 200 300  
METERS

Mar

Date

REGION: PRINCE WILLIAM SOUND

SEGMENT: ST/EV-12

SUBDIVISIONS: A (1 OF 1)

# SHORELINE EVALUATION

SEGMENT ST/ EV-12 SUBDIVISION A (1 OF 1) DATE 4/7/90

## SEGMENT ENVIRONMENTAL SENSITIVITIES AND TIME CONSTRAINTS:

7II Subsistence area: Deer harvesting (8/15 to 2/28)

See attached Ecological Constraint sheet for specific constraints and contacts.

## SUBDIVISION ECOLOGICAL CONSTRAINTS:

Avoid any unnecessary disturbance or damage to unoiled biota and substrate. Stream in segment not in ADF&G anadromous catalogue (USGS Seward A-3; Rev. 12/89).

## ARCHAEOLOGICAL CONSTRAINTS:

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

SHPO SIGNATURE: \_\_\_\_\_ DATE: \_\_\_\_\_

## OILING CATEGORIZATION:

Wide 147 m: Medium 47 m: Narrow 71 m: V.Light 30 m: No Oil 361 m  
Subsurface Oil Observed: Yes X No \_\_\_\_\_ Maximum Depth 15 cm

## RECOMMENDATIONS:

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

COMMENTS: Recommended treatment includes 1) manual tarmat removal, 2) manual pick up of mousse and oiled pom pom, 3) bioremediation of cover and subsurface oil in areas around pit locations 1 and 2, 4) do not bioremediate around pits 4 and 5 due to the proximity to the stream unless approved by ADF&G and, 5) \*Remove oiled logs if >10% coverage or burn in place if too numerous to remove. No specific time constraints identified.

TAG COMMENTS: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

TAG APPROVAL DATE: \_\_\_\_\_

ADEC \_\_\_\_\_  
EXXON \_\_\_\_\_  
NOAA \_\_\_\_\_  
USCG \_\_\_\_\_

FOSC: \_\_\_\_\_ DATE: \_\_\_\_\_

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

# FIELD SHORELINE COMMENT SHEET

SEGMENT ST EV - 12 SUBDIVISION: \_\_\_\_\_ DATE 4/07/90

**USCG**

NAME

R. Hubbard

SIGNATURE

[Signature]

☐ NO TREATMENT RECOMMENDED  
COMMENTS

☒ TREATMENT SUGGESTED

I feel some type of manual clean up be done to eliminate sporadic oil patch.

**ADEC**

NAME

J. LYNN MARTIN

SIGNATURE

[Signature]

☐ NO TREATMENT RECOMMENDED  
COMMENTS

☒ TREATMENT SUGGESTED

AGREE WITH EXXON OPS. RECOMMENDATION FOR MANUAL REMOVAL OF ASPHALT AND POOLED MOUSE AREAS. DUE TO THE SIZE OF BEACH I WOULD ALSO SUGGEST MANUAL REMOVAL OF SUBSURFACE OIL ON EAST SIDE OF STREAM. STREAM SHOULD ALSO BE REVIEWED BY ANAD SCAT. SUPER-TIDAL SHOULD REVIEWED AFTER SNOW MELT

**LAND MANAGER**

NAME

Robert Selinger

SIGNATURE

[Signature]

☐ NO TREATMENT RECOMMENDED  
COMMENTS

☒ TREATMENT SUGGESTED

Agree with ADEC

## SHORELINE OILING SUMMARY

REVISION NO. 02/22/90

OG Reimer USCG Hubbard SEGMENT ST/ EV-12  
 BIO Zamora LAND REP Selanoff (cvc) SUBDIVISION \_\_\_\_\_  
 EXXON Garcia ADEC Martin TIME 18:30 to 19:20  
 TEAM NO.: 16 TIDE LEVEL: +0.5 to +1 DATE 4/7/90  
 EST. SUBDIVISION LENGTH: SAZ m ☒ Sun ☐ Clouds ☐ Fog ☐ Rain ☐ Snow  
 UPLANDS DESCRIPTION: ☒ Grass ☐ Forest ☒ Rock SNOW  
 SURVEYED FROM: ☒ Foot ☐ Boat ☐ Helo WORKING DIRECTION: East to West  
 SURFACE SEDIMENTS: R 10 % B 30 % C 20 % P 10 % G 25 % S 5 % M - % V - %  
 SLOPE: Lang 40 % Hang 60 % Ver - % WAVE EXPOSURE: ☐ Low ☒ Med ☐ High  
 OIL CATEGORY LENGTH: W 150 m M 15 m N 20 m VL 25 m NO 332 m

## SURFACE OIL

| CHARACTER        | DISTRIBUTION |    |    |    | OIL / FILM COLOR |    |    |    |    |    |    |    | IMPACTED ZONES |    |   |    |
|------------------|--------------|----|----|----|------------------|----|----|----|----|----|----|----|----------------|----|---|----|
|                  | IC           | IS | IP | IS | SB               | SB | SB | SB | SB | SB | SB | SB | SU             | UI | M | LI |
| ASPHALT PAVEMENT |              | X  | ✓  |    |                  |    |    |    |    |    |    |    | X              | ✓  |   |    |
| POOLED           |              |    |    |    |                  |    |    |    |    |    |    |    |                |    |   |    |
| COVER            | ✓            |    |    | X  |                  |    |    |    |    |    |    |    | X              | ✓  |   |    |
| COAT             |              |    |    |    |                  |    |    |    |    |    |    |    |                |    |   |    |
| STAIN            |              |    |    |    |                  |    |    |    |    |    |    |    |                |    |   |    |
| MOUSSE           |              |    |    | X  |                  |    |    |    |    |    |    |    | X              |    |   |    |
| PATTIES          |              |    |    |    |                  |    |    |    |    |    |    |    |                |    |   |    |
| TARBALLS         |              |    |    | X  |                  |    |    |    |    |    |    |    | X              |    |   |    |
| FILM             |              |    |    |    |                  |    |    |    |    |    |    |    |                |    |   |    |
| NO OIL           |              |    |    |    |                  |    |    |    |    |    |    |    |                |    |   | X  |

PAVEMENT: H F (S) 10 sq. m by 3 cmPATTIES / TARBALLS 1 BAGS

NEAR SHORE SHEEN? NO BR RW SL TL

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

DEBRIS COLLECTED  
☐ YES ☐ NO

TYPE \_\_\_\_\_

#BAGS \_\_\_\_\_

Photographs:

Roll No. \_\_\_\_\_

Frames \_\_\_\_\_

## SUBSURFACE OIL

| PIT NO. | PIT DEPTH (cm) | SUBSURFACE OIL CHARACTER |    |    |    |    | OILED INTERVAL (CM-CH) | BELOW |    | OIL / FILM COLOR |    |    |    |    |    | PIT ZONE |   |   |   | A N A | SUBSURFACE SEDIMENTS |      |
|---------|----------------|--------------------------|----|----|----|----|------------------------|-------|----|------------------|----|----|----|----|----|----------|---|---|---|-------|----------------------|------|
|         |                | OP                       | OR | OL | OF | NO |                        | UO    | UC | SP               | SB | FW | BL | TR | LR | SU       | U | M | U |       |                      |      |
| 1       | 10             | X                        |    |    |    |    | S - 10                 | X     |    |                  |    |    |    | X  |    | X        |   |   |   |       |                      | PG B |
| 2       | 12             | X                        |    |    |    |    | S - 12                 | X     |    |                  |    |    |    | X  |    |          | X |   |   |       |                      | PG C |
| 3       | 30             |                          |    |    |    | X  | -                      |       |    |                  |    |    |    |    |    |          |   | X |   |       |                      | PG   |
| 4       | 50             | X                        |    |    |    |    | 7 - 15                 |       | X  |                  |    |    |    | X  |    |          | X |   |   |       |                      | PG   |
| 5       | 15             |                          | X  |    |    |    | S - 10                 |       | X  |                  |    |    |    | X  |    |          |   | X |   |       |                      | PG   |
| 6       | 30             |                          |    |    |    | X  | -                      |       |    |                  |    |    |    |    |    |          | X |   |   |       |                      | PG   |

## COMMENTS

Small pocket beach with rocky headlands on either side and fresh water stream in center of bay. Sporadic oil cover on rocky headland on east side of segment. Asphalt mats along east rocky cliff in upper/super tidal zone and on beach just to west of stream. A sporadic cover of oil was found across most of beach (3-10%) in mid-upper tidal zone. From pit observations this oiling is heavier and wider on east side of stream. This subsurface band appears to connect with asphalt along rocky cliffs.

# SHORELINE EVALUATION

SEGMENT ST/ EV-12 SUBDIVISION A (1 OF 1) DATE 4/7/90

## SEGMENT ENVIRONMENTAL SENSITIVITIES AND TIME CONSTRAINTS:

711 Subsistence area: Deer harvesting (8/15 to 2/28)

See attached Ecological Constraint sheet for specific constraints and contacts.

## SUBDIVISION ECOLOGICAL CONSTRAINTS:

Avoid any unnecessary disturbance or damage to unoiled biota and substrate. Stream in segment not in ADF&G anadromous catalogue (USGS Seward A-3; Rev. 12/89).

## ARCHAEOLOGICAL CONSTRAINTS:

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

SHPO SIGNATURE: [Signature]

DATE: 4/25/90

## OILING CATEGORIZATION:

Wide 147 m: Medium 47 m: Narrow 71 m: V.Light 30 m: No Oil 361 m  
Subsurface Oil Observed: Yes X No      Maximum Depth 15 cm

## RECOMMENDATIONS:

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

COMMENTS: Recommended treatment includes 1) manual tarmat removal, 2) manual pick up of mousse and oiled pom pom, 3) bioremediation of cover and subsurface oil in areas around pit locations 1 and 2, 4) do not bioremediate around pits 4 and 5 due to the proximity to the stream unless approved by ADF&G and, 5) \*Remove oiled logs if >10% coverage or burn in place if too numerous to remove. No specific time constraints identified.

TAG COMMENTS: ADF&G Approves P/O IN AREA OF PITS 4+5 AND UP TO THE STREAM

TAG APPROVAL DATE: 4/25/90  
ADEC [Signature]  
EXXON [Signature]  
NOAA [Signature]  
USCG [Signature]

FOSC: [Signature]

DATE: 5-4-90

OG Re

CH MAP

SEGMENT ST/ EV-12

SUBDIVISION

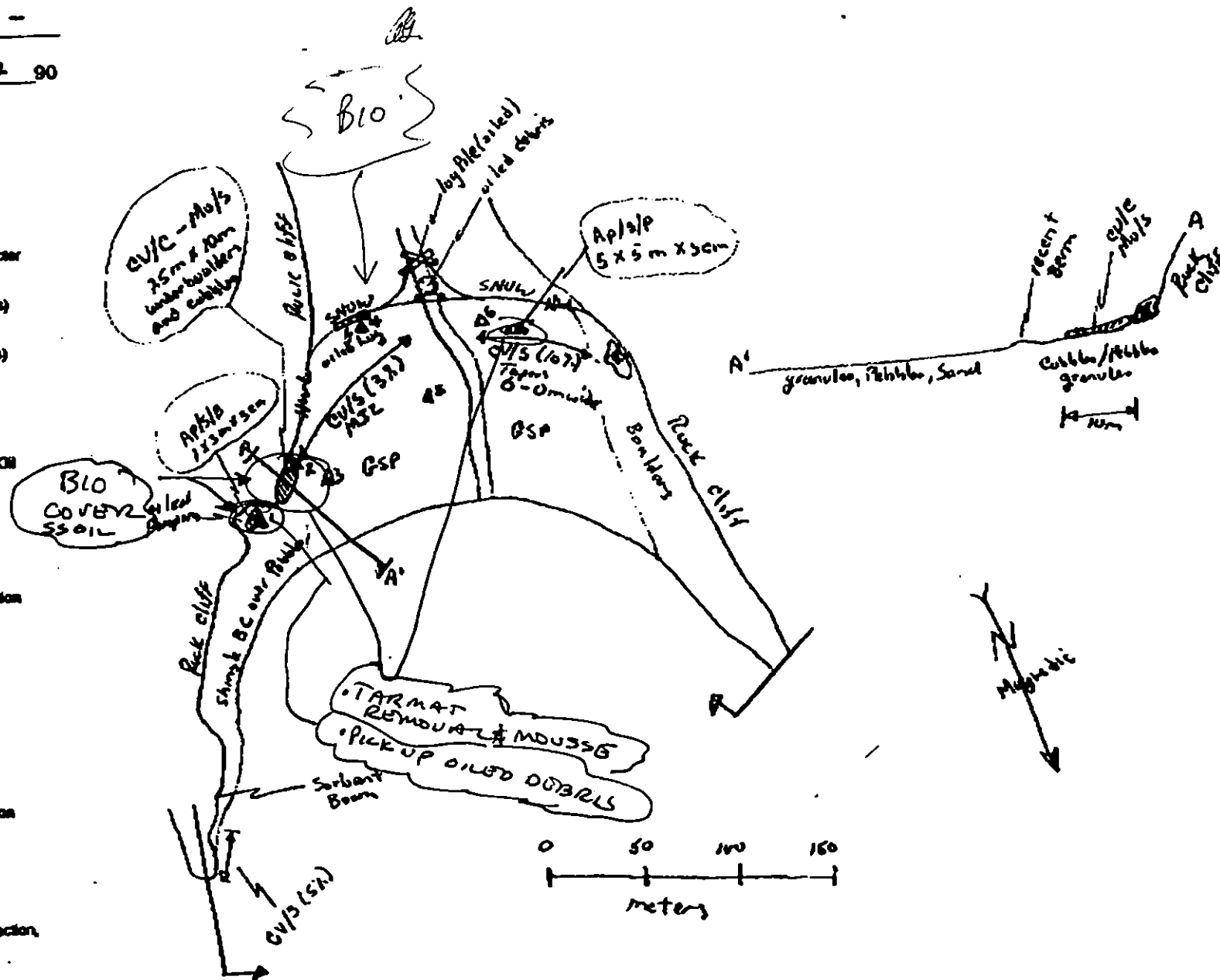
DATE 4 / 7 90

## CHECKLIST

- ☒ N Arrow
- ☒ Approx. Scale
- ☒ Seg/Sub Entry
- ☒ Oil Dist.
- ☒ Width
- ☒ Length
- ☒ % Cover
- ☒ Substrate Character
- ☒ Est. NWL/LWL
- ☒ SSI
- ☒ Profile Location(s)
- ☒ Photo Location(s)
- ☒ Photo Location(s)

## LEGEND

- 1  $\Delta$   
Pi - No Subsurface Oil
- 2  $\Delta$   
Pi - Subsurface Oil
- CT/C  
Continuous Distribution
- CT/B  
Broken Distribution
- CT/P  
Patched Distribution
- CT/S  
Splashed Distribution
- Oiled Vegetation
- 1  $\Rightarrow$   
Photo location, direction, and number



Oil Character Length (m): AP 8 PO - CV 185 CT - ST - MS 25 PT - TB - FL - NO 332

REVISION: 0324/90

EV-13

EV-

V-12

EV-40

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

EV-12

ADEC Segment Length: 667m



Map Key: PWS-180  
Name: Reimer  
Date: 4/7/90  
Data Entered:

# SHORELINE ECOLOGICAL SUMMARY

REVISION: 03/22/90

Segment ST / EV12 Subdivision 1870 on Date (mo / day / yr) 4 / 7 / 90

Time (24 hr) 1930 off Biologist TONY RAMORA

- (A) Substrate type and % of segments:  
 (1) Bedrock 0 (2) Boulder 20 (3) Cobble 20 (4) Pebble 35 (5) Sand 5 (6) Silt 10
- (B) Overall % cover of biota (% of segment): Dense 5 Moderate 15 Low 80
- (C) Density, substrate preference (by number from A, above), & vertical zonation of major taxa: (upper-U; mid-M; low tidal-L); juveniles / adults (X), new settlement (3)

Photographs:  
 Roll No. ST-16-6

Frames 1-10

## BARNACLES

| Dense |    |    | Moderate       |    |    | Sparse         |                |    | Rare |    |    |
|-------|----|----|----------------|----|----|----------------|----------------|----|------|----|----|
| 1U    | 1M | 1L | 1U             | 1M | 1L | 1U             | 1M             | 1L | 1U   | 1M | 1L |
| 2     | 2  | 2  | <del>X</del> 2 | 2  | 2  | <del>X</del> 2 | <del>X</del> 2 | 2  | 2    | 2  | 2  |
| 3     | 3  | 3  | 3              | 3  | 3  | <del>X</del> 3 | <del>X</del> 3 | 3  | 3    | 3  | 3  |
| 4     | 4  | 4  | 4              | 4  | 4  | 4              | 4              | 4  | 4    | 4  | 4  |
| 5     | 5  | 5  | 5              | 5  | 5  | 5              | 5              | 5  | 5    | 5  | 5  |
| 6     | 6  | 6  | 6              | 6  | 6  | 6              | 6              | 6  | 6    | 6  | 6  |

NOT PRESENT

## MYTILUS

| Dense |    |    | Moderate       |    |    | Sparse |                |    | Rare |    |    |
|-------|----|----|----------------|----|----|--------|----------------|----|------|----|----|
| 1U    | 1M | 1L | 1U             | 1M | 1L | 1U     | 1M             | 1L | 1U   | 1M | 1L |
| 2     | 2  | 2  | <del>X</del> 2 | 2  | 2  | 2      | <del>X</del> 2 | 2  | 2    | 2  | 2  |
| 3     | 3  | 3  | 3              | 3  | 3  | 3      | 3              | 3  | 3    | 3  | 3  |
| 4     | 4  | 4  | 4              | 4  | 4  | 4      | 4              | 4  | 4    | 4  | 4  |
| 5     | 5  | 5  | 5              | 5  | 5  | 5      | 5              | 5  | 5    | 5  | 5  |
| 6     | 6  | 6  | 6              | 6  | 6  | 6      | 6              | 6  | 6    | 6  | 6  |

NOT PRESENT

## GASTROPODS

| Dense |    |    | Moderate       |                |    | Sparse |    |    | Rare |    |    |
|-------|----|----|----------------|----------------|----|--------|----|----|------|----|----|
| 1U    | 1M | 1L | 1U             | 1M             | 1L | 1U     | 1M | 1L | 1U   | 1M | 1L |
| 2     | 2  | 2  | <del>X</del> 2 | <del>X</del> 2 | 2  | 2      | 2  | 2  | 2    | 2  | 2  |
| 3     | 3  | 3  | 3              | <del>X</del> 3 | 3  | 3      | 3  | 3  | 3    | 3  | 3  |
| 4     | 4  | 4  | 4              | 4              | 4  | 4      | 4  | 4  | 4    | 4  | 4  |
| 5     | 5  | 5  | 5              | 5              | 5  | 5      | 5  | 5  | 5    | 5  | 5  |
| 6     | 6  | 6  | 6              | 6              | 6  | 6      | 6  | 6  | 6    | 6  | 6  |

NOT PRESENT

## FUCUS

| Dense |    |    | Moderate       |                |                | Sparse         |                |    | Rare |    |                |
|-------|----|----|----------------|----------------|----------------|----------------|----------------|----|------|----|----------------|
| 1U    | 1M | 1L | 1U             | 1M             | 1L             | 1U             | 1M             | 1L | 1U   | 1M | 1L             |
| 2     | 2  | 2  | <del>X</del> 2 | <del>X</del> 2 | <del>X</del> 2 | <del>X</del> 2 | <del>X</del> 2 | 2  | 2    | 2  | 2              |
| 3     | 3  | 3  | 3              | 3              | <del>X</del> 3 | 3              | <del>X</del> 3 | 3  | 3    | 3  | 3              |
| 4     | 4  | 4  | 4              | 4              | 4              | 4              | 4              | 4  | 4    | 4  | <del>X</del> 4 |
| 5     | 5  | 5  | 5              | 5              | 5              | 5              | 5              | 5  | 5    | 5  | 5              |
| 6     | 6  | 6  | 6              | 6              | 6              | 6              | 6              | 6  | 6    | 6  | 6              |

NOT PRESENT

## Wildlife Observations/ General Comments:

- OBSERVED 4 OTTERS, 1 CORMORANT
  - EGGS - GASTRO UNID. IN MI, POLLINICES egg CASE
  - LG CLAM SHELLS SEEN, PTEROPODA IN LI
- Ecological Considerations: 7II, 7JJ, 1A/B

(MAP ON REVERSE)

OG Re  
 SEGMENT ST/ EV-12  
 SUBDIVISION -  
 DATE 4 / 7 90

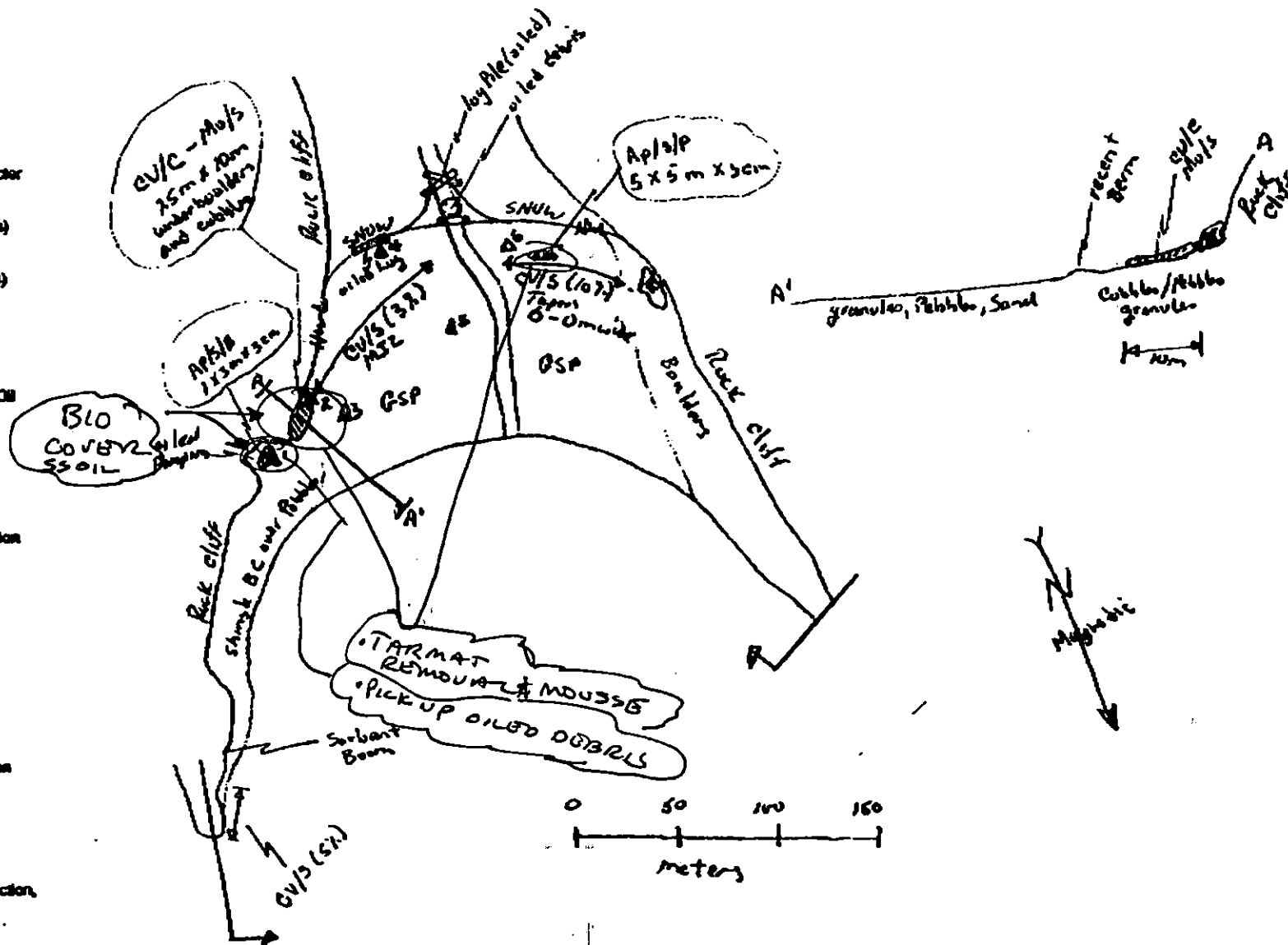
# TCH MAP

## CHECKLIST

- ☒ N Arrow
- ☒ Approx. Scale
- ☒ Seg/Sub Entry
- ☒ Oil Dist.
- ☒ Width
- ☒ Length
- ☒ % Cover
- ☒ Substrate Character
- ☒ Est. INH/LAVL
- ☒ SSL
- ☒ Profile Location(s)
- ☒ Profile(s)
- ☒ Pic Location(s)
- ☒ Photo Location(s)

## LEGEND

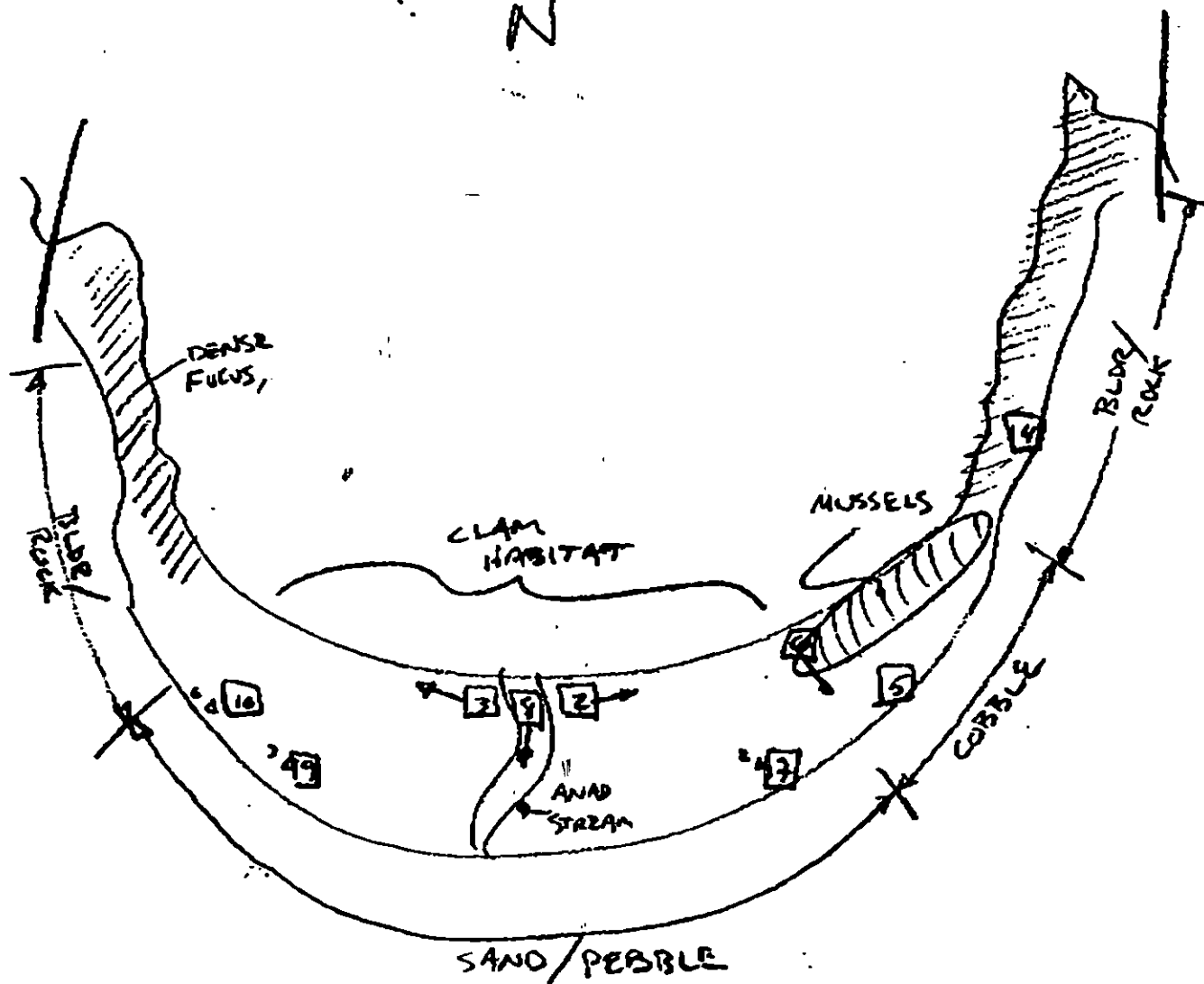
- 1  $\Delta$   
 P1 - No Subsurface Oil
- 2  $\Delta$   
 P1 - Subsurface Oil
- CT/C  
 Continuous Distribution
- CT/B  
 Broken Distribution
- CT/P  
 Patchy Distribution
- CT/S  
 Splashed Distribution
- Oiled Vegetation
- 1  $\Rightarrow$   
 Photo location, direction, and number



Oil Character Length (m): AP 8 PO - CV 185 CT - ST - MS 25 PT - TB - FL - NO 332

EV-12

PHOTO LOCATIONS



EV-13

EV-

EV-12

EV-40

XXXX Wide

//// Medium

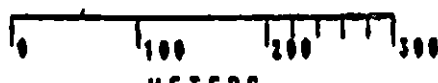
--- Narrow

TTTT Very Light

OOOO No Oil

EV-12

ADEC Segment Length: 667m



Map Key: PWS-180

Name: Reimer

Date: 4/7/90

Date Entered:

## ADDENDUM: SUBDIVISION CONSTRAINTS

### SEGMENT EV-12 SUBDIVISION A (1 of 1)

| WORK WINDOW                                                  |                    |
|--------------------------------------------------------------|--------------------|
| Manual Pickup<br>Tarmat Removal<br>Oiled Log Removal/Burning | OPEN               |
| Bioremediation Over 100m From Stream                         | WORK PRIOR TO 7/25 |
| Bioremediation Less Than 100m From Stream                    | PERMIT REQUIRED    |

#### ARCHAEOLOGICAL STANDARD CONSTRAINT

If cultural resources are uncovered, PHONE 564-3274.

#### APPLICABLE ECOLOGICAL TIME CONSTRAINTS

|       |                                 |                                                                                                                                                                                                                                                                                                              |
|-------|---------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1A,1B | Salmon Stream                   | ADF&G uncatalogued anadromous stream is present in Subdivision A. Subdivision is closed to bioremediation less than 100m from stream without ADF&G authorization. No constraint to bioremediation more than 100m from stream. No constraint to manual pickup, tarmat removal, and oiled log removal/burning. |
| 1K    | Purse Seine<br>Hook-off         | No constraint to Manual Pickup, Tarmat Removal, and oiled log removal/burning; closed to bioremediation after 7/25.                                                                                                                                                                                          |
| 7II   | Subsistence:<br>Deer Harvesting | No constraint to manual pickup, tarmat removal, and oiled log removal/burning; closed to bioremediation after 8/15.                                                                                                                                                                                          |

#### OTHER ECOLOGICAL CONSIDERATIONS

No disturbance of stream bed or banks. No flushing of pollutants or sediments into stream drainage. Restrict boat and air traffic to essential minimum after 7/25. Restrict beach disturbance to essential minimum after 8/15. Avoid any unnecessary disturbance or damage to unloiled biota and substrate.

SEE ANADROMOUS FISH STREAM EVALUATION ADDENDUM (SEGMENT EV-12)  
FOR ADDITIONAL CONSTRAINT INFORMATION

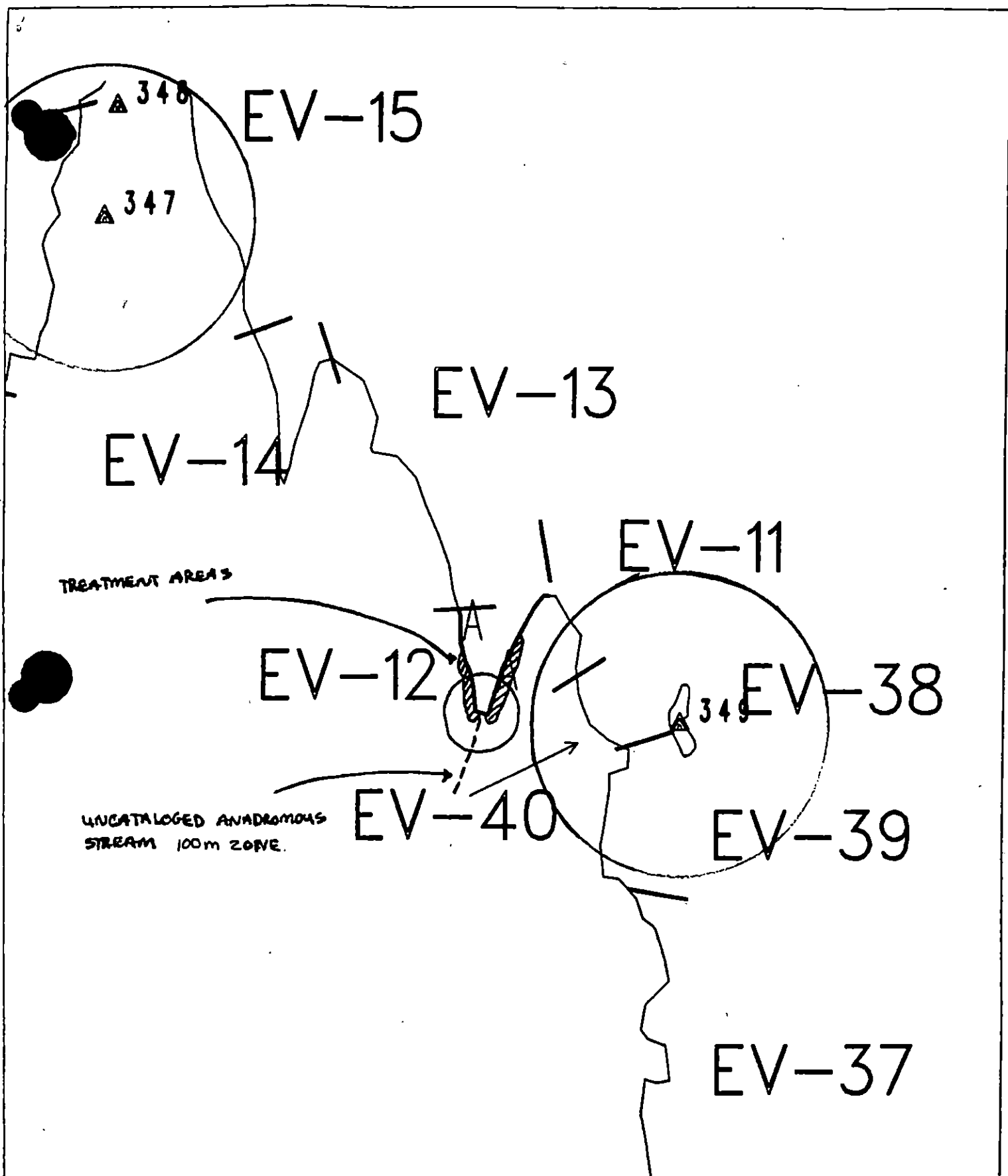
TAG ADDENDUM DATE 5/24/90  
ADEC Art Weimer  
EXXON Amoy  
NOAA B. Berrett  
USCG M. J. Hall

FOSC h

DATE 5-24-90

Prepared by: Andra Meyer

Date: 5/22/90



Exxon Company, USA  
 Map Key: PMS-EV-12  
 May 11, 1990



ECOLOGY MAP  
 SEGMENT EV-12  
 SUBDIVISION A (1 of 1)  
 METERS  
 0 347 695

- ★ Seabird Colony
- ▲ Eagle Nest

1 inch = 1139 feet

# SHORELINE EVALUATION

SEGMENT ST/ EV-12 SUBDIVISION A (1 OF 1) DATE 4/7/90

## SEGMENT ENVIRONMENTAL SENSITIVITIES AND TIME CONSTRAINTS:

II Subsistence area: Deer harvesting (8/15 to 2/28)  
See attached Ecological Constraint sheet for specific constraints and contacts.

## SUBDIVISION ECOLOGICAL CONSTRAINTS:

Avoid any unnecessary disturbance or damage to uncoiled biota and substrate. Stream in segment not in ADF&G anadromous catalogue (USGS Seward A-3; Rev. 12/89).

## ARCHAEOLOGICAL CONSTRAINTS:

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

SHPO SIGNATURE: [Signature] DATE: 4/25/90

## OILING CATEGORIZATION:

Wide 147 m: Medium 47 m: Narrow 71 m: V. Light 30 m: No Oil 361 m  
Subsurface Oil Observed: Yes X No      Maximum Depth 15 cm

## RECOMMENDATIONS:

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

COMMENTS: Recommended treatment includes 1) manual tarmat removal, 2) manual pick up of mousse and oiled pom pom, 3) bioremediation of cover and subsurface oil in areas around pit locations 1 and 2, 4) do not bioremediate around pits 4 and 5 due to the proximity to the stream unless approved by ADF&G and, 5) \*Remove oiled logs if >10% coverage or burn in place if too numerous to remove. No specific time constraints identified.  
[See Constraint Addendum Dated 5/24/90] WTK

TAG COMMENTS: ADF+G Approves PLO IN AREA OF PITS 4+5 AND UP TO THE STREAM

TAG APPROVAL DATE: 4/25/90  
ADEC [Signature]  
EXXON [Signature]  
NOAA [Signature]  
USCG [Signature]

FOSC: [Signature] DATE: 5-4-90

**ADDENDUM: SUBDIVISION CONSTRAINTS****SEGMENT EV-12 SUBDIVISION A (1 of 1)****WORK WINDOW**

|                                           |                                                        |
|-------------------------------------------|--------------------------------------------------------|
| Manual Pickup                             | <b>OPEN</b>                                            |
| Tarmat Removal                            |                                                        |
| Oiled Log Removal/Burning                 |                                                        |
| Bioremediation More Than 100m From Stream | <b>WORK PRIOR TO 7/25</b>                              |
| Bioremediation Less Than 100m From Stream | <b>WORK PRIOR TO 7/10<br/>(ADF&amp;G MONITOR REQ.)</b> |

**ARCHAEOLOGICAL STANDARD CONSTRAINT**

If cultural resources are uncovered, PHONE 564-3274.

**APPLICABLE ECOLOGICAL TIME CONSTRAINTS**

|                                             |                                                                                                                                                                                                                                                                                                                                                                                                                              |
|---------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>1A,1B Salmon Stream</b>                  | ADF&G uncatalogued anadromous stream is present in Subdivision A. This subdivision is closed to bioremediation less than 100m from stream 7/10 to 8/31. Before 7/10, bioremediation is permitted less than 100m from stream with on-site ADF&G monitor or ADEC alternate present. No constraint to bioremediation more than 100m from stream. No constraint to manual pickup, tarmat removal, and oiled log removal/burning. |
| <b>1K Purse Seine Hook-off</b>              | No constraint to manual pickup, tarmat removal, and oiled log removal/burning; closed to bioremediation after 7/25.                                                                                                                                                                                                                                                                                                          |
| <b>7II Subsistence:<br/>Deer Harvesting</b> | No constraint to manual pickup, tarmat removal, and oiled log removal/burning; closed to bioremediation after 8/15.                                                                                                                                                                                                                                                                                                          |

**OTHER ECOLOGICAL CONSIDERATIONS**

No disturbance to stream bed or banks. No flushing of pollutants or sediments into stream drainage. Restrict boat and air traffic to essential minimum after 7/25. Restrict beach disturbance to essential minimum after 8/15. Avoid any unnecessary disturbance or damage to unrolled biota and substrate.

**SEE ANADROMOUS FISH STREAM EVALUATION ADDENDUM (SEGMENT EV-12)  
FOR ADDITIONAL CONSTRAINT INFORMATION**

TAG APPROVAL DATE 6/04/90  
 ADEC Ray Morris  
 EXXON Andy TEAR  
 NOAA Joseph Tallant  
 USCG G. H. Heiter

FOSC

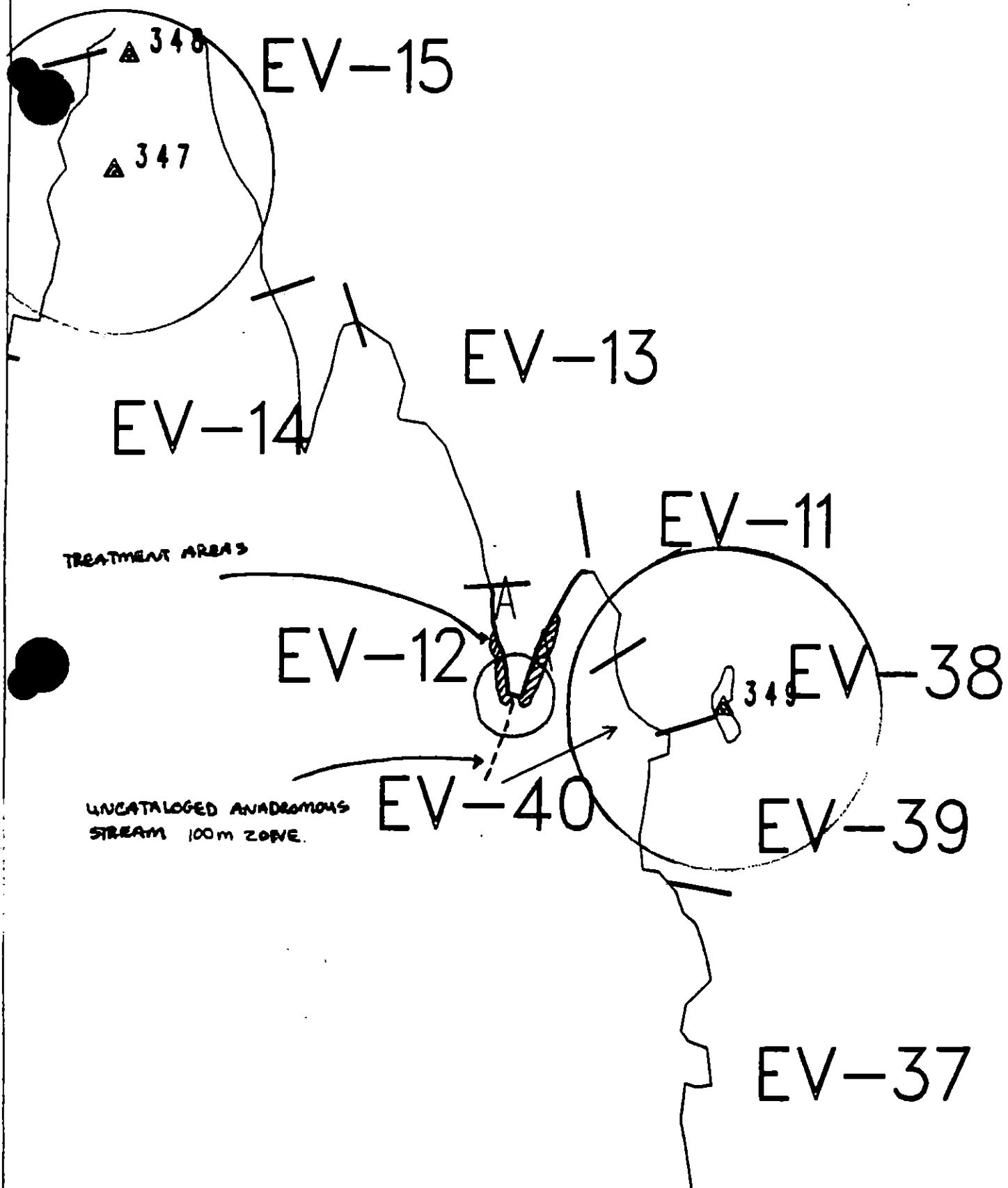
[Signature] Date 6/7/90

Prepared by

Anda Meyer AP

Date

6/3/90



Exxon Company, USA  
 Map Key: PMS-EV-12  
 May 11, 1990



**ECOLOGY MAP**  
 SEGMENT EV-12  
 SUBDIVISION A (1 of 1)  
 METERS  
 0 347 695

- ★ Seabird Colony
- ▲ Eagle Nest

1 inch = 1139 feet

# SHORELINE EVALUATION

SEGMENT ST/ EV-12 SUBDIVISION A (1 OF 1) DATE 4/7/90

## SEGMENT ENVIRONMENTAL SENSITIVITIES AND TIME CONSTRAINTS:

711 Subsistence area: Deer harvesting (8/15 to 2/28)  
See attached Ecological Constraint sheet for specific constraints and contacts.

## SUBDIVISION ECOLOGICAL CONSTRAINTS:

Avoid any unnecessary disturbance or damage to unoiled biota and substrate. Stream in segment not in ADF&G anadromous catalogue (USGS Seward A-3; Rev. 12/89).

## ARCHAEOLOGICAL CONSTRAINTS:

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

SHPO SIGNATURE: [Signature] DATE: 4/25/90

## OILING CATEGORIZATION:

Wide 147 m: Medium 47 m: Narrow 71 m: V. Light 30 m: No Oil 361 m  
Subsurface Oil Observed: Yes X No      Maximum Depth 15 cm

## RECOMMENDATIONS:

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

COMMENTS: Recommended treatment includes 1) manual tarmat removal, 2) manual pick up of mousse and oiled pom pom, 3) bioremediation of cover and subsurface oil in areas around pit locations 1 and 2, 4) do not bioremediate around pits 4 and 5 due to the proximity to the stream unless approved by ADF&G and, 5) \*Remove oiled logs if >10% coverage or burn in place if too numerous to remove. No specific time constraints identified.  
[See Constraint Addendum Dated 5/26/90] WTK  
See REVISION 1, Addendum dated 6/3/90/PP

TAG COMMENTS: ADF&G APPROVES PRO IN AREA OF PITS 4 & 5 AND UP TO THE STREAM

TAG APPROVAL DATE: 4/25/90

ADEC [Signature]  
EXXON [Signature]  
NOAA [Signature]  
USCG [Signature]

FOSC: [Signature] DATE: 5-4-90

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

| <u>SEGMENT</u> |            |                                                                                                          |
|----------------|------------|----------------------------------------------------------------------------------------------------------|
| CH-09          | B Site 1   | Manual pickup of tarmats, rake and bioremediate* H.P. <i>B.</i>                                          |
|                | Site 2     | Manual pickup of tarmats, rake and bioremediate* H.P.                                                    |
| EL-52          | B          | NTR                                                                                                      |
| EL-55          | A          | Manual till - mop up mobile oil with snare and bioremediate - low priority                               |
| EL-56          | C          | Storm berm relocation (mechanical if necessary)                                                          |
| EL-58          | C          | NTR - Reassessment in '91                                                                                |
| EL-58          | D          | Customblen application and reassessment in '91                                                           |
| ER-07          | A Site 1   | NTR                                                                                                      |
|                | Site 2     | Manual pickup of tarmat and bioremediation (low priority)                                                |
| EV-05          | A          | Limited manual pickup followed by bioremediation - Customblen (low priority)                             |
| EV-05          | B          | Manual pickup of mousse/AP followed by bioremediation. Manual till in heaviest areas if necessary (H.P.) |
| EV-12          | A          | Access and remove heaviest concentration of AP/OP/HOR manual removal followed by bioremediate            |
| EV-15          | A          | Manual removal of MS/AP/OP/HOR where accessible - bioremediate (H.P.)                                    |
| EV-26          | A          | Manual removal of AP and bioremediate (M.P.)                                                             |
| EV-37          | A          | Manual pickup of OP/HOR sediments (relocate armor to access)                                             |
| EV-39          | A          | Bioremediate                                                                                             |
| FL-01          | A          | NTR - work done                                                                                          |
| GR-301         | B Site 1   | Manual pickup of mousse (H.P.)                                                                           |
|                | Site 2     | NTR                                                                                                      |
|                | Site 3     | NTR                                                                                                      |
| GR-301         | B New Site | Manual pickup of mousse (H.P.)                                                                           |
| KN-07          | A          | Manual pickup of AP/OP/mousse and bioremediate (H.P.) both areas                                         |
| KN-08          | A          | Manual pickup followed by bioremediation (L.P.)                                                          |
| KN-201         | A          | Manual removal of AP followed by bioremediation (M.P.)                                                   |
| KN-211         | E Site 1   | Manual pickup of oiled debris at stream mouth next to small pool, use chain saw as necessary to access.  |
|                | Site 2     | NTR                                                                                                      |
|                | Site 3     | NTR                                                                                                      |
|                | Site 4     | NTR                                                                                                      |
| KN-400         | A Site 1   | Manual removal of accessible AP followed by rake and bioremediation (L.P.)                               |
|                | Site 3     | NTR                                                                                                      |
| KN-404         | A          | Bioremediate and assessment in '91                                                                       |
| KN-405         | A          | Further TAG evaluation - bioremediate and assessment in '91                                              |
| NK-02          | A          | Manual pickup AP/mousse - bioremediation (M.P.)                                                          |
| PD-04          | A          | Manual pickup of mousse patties and bioremediation, Inipol and Customblen (M.P.)                         |
| PN-01          | A          | Manual pickup of AP and bioremediation (L.P.)                                                            |

\* ANADROMOUS STREAM CONSTRAINT

TAG

EXXON

ADEC

USCG

NOAA

DATED

*Aug 15 1990*  
(See attached Archaeological Constraintsheet) *WTK 8/16/90*

FOSC

DATED

*17 August 1990*

*Work with land manager in effecting the above*

ASAP FOLLOW-UP RECOMMENDATIONS  
TAG RECOMMENDATIONS AUGUST 13, 1990  
ARCHAEOLOGICAL CONSTRAINTS

EL-56C Addition of: storm berm relocation (mechanical if necessary).

SHPO Rolfe Buzzell DATE 8/16/90  
*Archaeological Monitor required!*

ARCHAEOLOGICAL CONSTRAINT: An Exxon archaeological monitor is required on-site during shoreline treatment.

>>> PHONE 564-3274 (Anchorage) OR 229-1508 (24 hrs.) <<<

EV-12A Addition of: access and remove heaviest concentrations of AP/OP/HOR manual removal followed by bioremediation.

SHPO Rolfe Buzzell DATE 8/16/90

ARCHAEOLOGICAL CONSTRAINT: 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 (564-3274 (Anchorage) or 229-1508 (24 hrs.)).

EV-15A Addition of: Manual removal of MS/AP/OP/HOR where accessible - bioremediate.

SHPO Rolfe Buzzell DATE 8/16/90

ARCHAEOLOGICAL CONSTRAINT: 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 (564-3274 (Anchorage) or 229-1508 (24 hrs.)).

EV-39A Addition of: Manual pickup of OP/HOR sediments (relocate armor to access).

SHPO Rolfe Buzzell DATE 8/16/90

ARCHAEOLOGICAL CONSTRAINT: 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 (564-3274 (Anchorage) or 229-1508 (24 hrs.)).



# 1991 MAYSAP EVALUATION

SEGMENT: EV 012 SUB: A REGION: PWS SURVEY DATE: 5/2/91

## ENVIRONMENTAL SENSITIVITIES:

Work Window(s) OPEN 5/1 - 7/10; RESTRICTED 7/10 - 9/15

Ecological/Constraints (see page two for details) Fish harvest stream, Anadromous stream, Subsistence - Deer harvesting

## ARCHAEOLOGICAL CONSTRAINTS:

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

SHPO Signature: \_\_\_\_\_ Date: \_\_\_\_\_

## RECOMMENDATIONS:

INITIAL

TAG

FOSC

TREATMENT REQUIRED (Y or N)

N

Manual Pickup (Check as Req.)

Spot Washing

Bio-Customblen Only

Bio-Inipol/Customblen

Other

Other

## COMMENTS:

INITIAL: \_\_\_\_\_

TAG: \_\_\_\_\_

FOSC: \_\_\_\_\_

TAG APPROVAL DATE: \_\_\_\_\_

FOSC APPROVAL DATE: \_\_\_\_\_

ADEC

FOSC

EXXON

USCG

NOAA

**ECOLOGICAL CONSTRAINTS  
1991 FIELD ACTIVITIES**

**Fish Harvest Area:** Unlimited treatment unless otherwise directed by ADF&G. Sheen containment/recovery procedures required for mechanical treatment.

**Anadromous Stream:** Unlimited treatment up to stream bank between May 15 and July 10. ADF&G approval required for work after July 10. Fish Habitat Permit required for instream work. ADF&G approval required for bioremediation within 100 meters of anadromous stream after July 10.

**Subsistence - Deer Harvesting:** Unlimited treatment prior to 8/15.

# MAYSAF FIELD SHORELINE COMMENT SHEET

TEAM NO. 6 SEGMENT EV-012 SUBDIVISION A DATE 05/02/91

ADEC / AOTG

NAME Aimee Weseman SIGNATURE Aimee Weseman

- ☐ NTR ☒ Treatment Recommended Anadromous Fish Stream, Commercial Tourism  
The areas in need of treatment at this site are A & C, the heavier contaminated sediment being located in C. Located in a somewhat protected area of the beach, the oil is still in a liquid state & slopes generally down towards the stream. Approximately 50% of the SOR(H) was removed. The remaining heavily oiled sediments should be manually removed & lighter oily sediments-filled

EXXON

NAME RANDALL K. BOYER SIGNATURE Randall K. Boyer

- ☒ NTR OILING CONDITIONS ON THIS SUBDIVISION HAVE IMPROVED SIGNIFICANTLY THIS YEAR. 1990 TREATMENT AND WEATHERING HAVE HAD AN EFFECT. VECO TREATED SURFACE OILING CONDITIONS THROUGH COLLECTION AND DISRUPTING THE SURFACE. LOW CONCENTRATIONS IN SMALL OILED (EOL) AREAS WARRANT NO FURTHER TREATMENT. AREAS OF AP THAT PREVIOUSLY EXISTED HAVE BEEN REDUCED TO RESIDUE. THIS MEDIUM ENERGY ZONE EXHIBITS HEALTHY BGA THROUGH OUT THE BEACH FACE.

LANDMANAGER

NAME CHARLES SELANOFF OF CHENECA BAY SIGNATURE Charles Selanoff

- ☐ NTR Observed oil in test pits along side of stream and shore berm. Also a lot of tar balls was noticed in the heavier rocks. Oily debris on storm berm should be picked up manually (at the mouth of stream). It is my recommendation that this area be more thoroughly cleaned-up.

USCG/NOAA

NAME CWO SPURR / Rebecca Hoff SIGNATURE R.P. Spurr / Rebecca Hoff

- ☒ NTR Small patches of remaining asphalt in the upper intertidal were picked up, leaving some surface oil residue that should weather fine naturally. No oil was found near the anadromous stream.

PAGE 1 OF 1

SEGMENT EV-012

SUBDIVISION           A          

DATE 05 / 02 / 91

ENERGY LEVEL: ☐ H ☒ M ☐ L

WEATHER: ☐ SUN ☐ CLOUDS ☐ FOG ☒ RAIN ☐ SNOW

NEAR SHORE SHEEN: ☐ BR ☐ RB ☐ SL ☒ NONE

EST. OIL CATEGORY LENGTH: W    m M    m N 6 m VL 21 m NO 64 m US    m

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 - 05 FRAMES 1-4

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

Surface oil detailed on map was almost all treated during the survey—typically AP was reduced to 50R or less. Only in location B on the eastern point was there a very small patch which was not picked up.

No subsurface oil was observed in 8 logged pits and numerous shallow "scrapers"

Revised: 5/9/91 mc  
reviewed 5/8/91

0 50 100

meters

KNIGHT ISLAND PASSAGE

EV-012-A

05/02/91

OG Map

D.I. Little

0745 — 0845

N

EV-13

B 0.1 x 0.1  
AP/SOR 50%

EV-11-A

start

boulder  
talus

C 1 x 5  
30% AP

PU leaving SOR (H)

A 1 x 20 m  
AP < 10%

PU leaving SOR (L)

D AP/SOR  
0.1 x 0.5  
10%  
PU

EVANS  
ISLAND

ANADROMOUS  
STREAM

# PIT TO OIL CLEAN below sebs wt sheer bowl

|   |    |   |   |         |    |   |      |
|---|----|---|---|---------|----|---|------|
| ① | 35 | N | Y | pg/gps  | —  | — | MITZ |
| ② | 30 | N | Y | gp-gps  | —  | — | MITZ |
| ③ | 25 | N | Y | gp-gps  | —  | — | MITZ |
| ④ | 30 | N | Y | gp-gps  | —  | — | MITZ |
| ⑤ | 20 | N | Y | cp-gps  | 15 | — | MITZ |
| ⑥ | 25 | N | Y | pg-gs   | 20 | — | MITZ |
| ⑦ | 20 | N | Y | bcp-gps | 15 | — | MITZ |
| ⑧ | 25 | N | Y | pg-gps  | —  | — | MITZ |

Reviewed: MC 5/4/91

reviewed

MC

Photo Locations  
Map 6-05 # 1-4

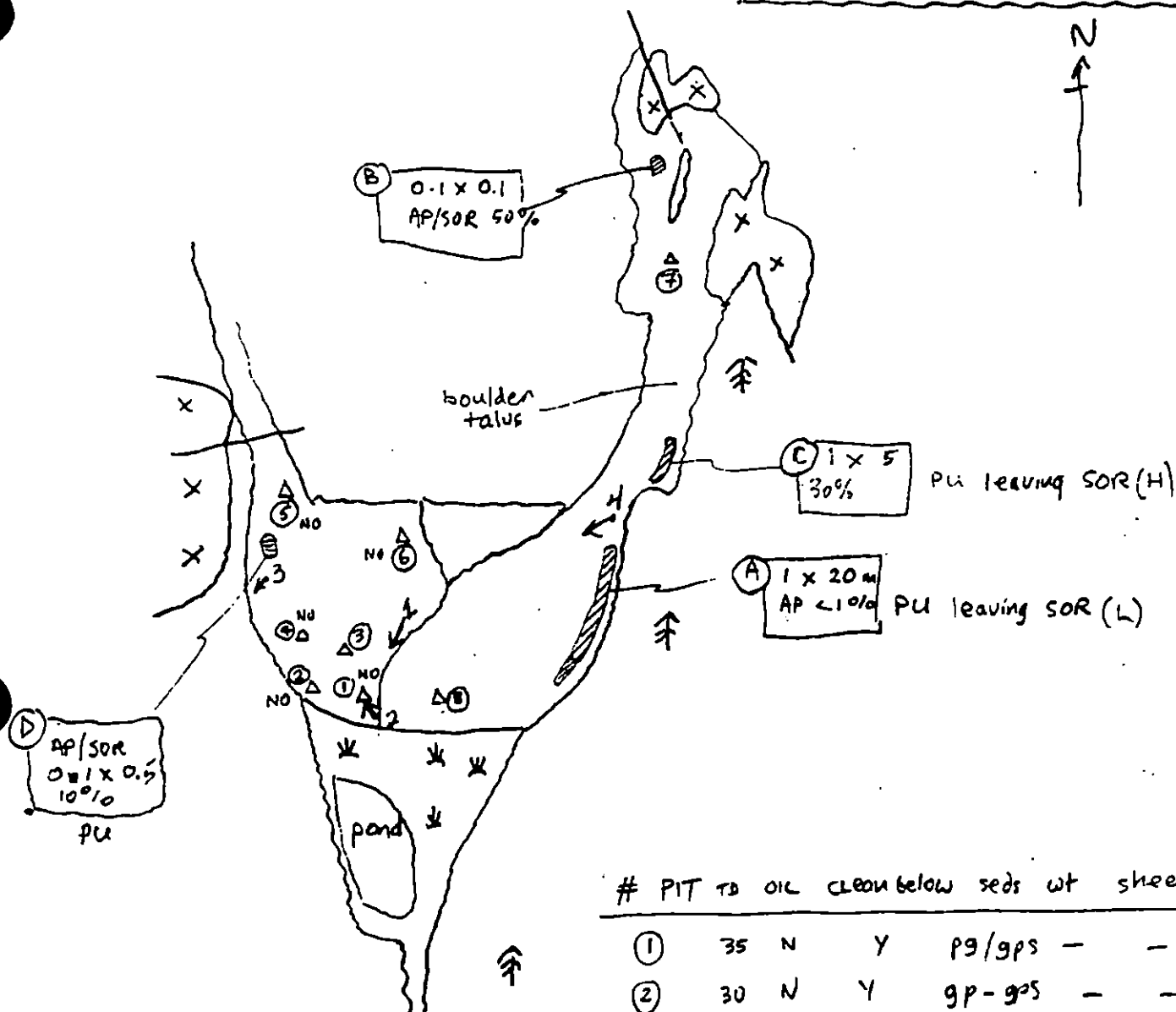
EV-012-A

05/02/91

06. Map

D.I. Little

0745 — 0845



| # | PIT | TD | OIL | clean below | sed's | wt | sheen | level |
|---|-----|----|-----|-------------|-------|----|-------|-------|
| ① | 35  | N  | Y   | pg/gps      | —     | —  | UITZ  |       |
| ② | 30  | N  | Y   | gp-gps      | —     | —  | SUTZ  |       |
| ③ | 25  | N  | Y   | gp-gps      | —     | —  | UITZ  |       |
| ④ | 30  | N  | Y   | gp-gps      | —     | —  | UITZ  |       |
| ⑤ | 20  | N  | Y   | cp-gps      | —     | —  | MITZ  |       |
| ⑥ | 25  | N  | Y   | pg-gs       | —     | —  | LITZ  |       |
| ⑦ | 20  | N  | Y   | bc-p-gps    | —     | —  | MITZ  |       |
| ⑧ | 25  | N  | Y   | pg-gps      | —     | —  | UITZ  |       |

## MAYSAP BIOLOGICAL SUMMARY FORM

TEAM # 6

DATE 5/2/91

SEGMENT # EV-012

TIDAL HEIGHT(Range) +4 1/4 ft to +1 ft

SUBDIVISION A

BIOLOGIST T.R. Schroeder

SEA STATE 1-2 ft. chop

WIND SPEED/DIRECTION E-15 mph

PHOTOGRAPHS: ROLL #

FRAME #

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

(A, C & D) = Intertidal area around and below these areas very clean and unproductive. Black sand/shale beach probably is in continual shifting mode during any major westerly storms.

(B) = Extreme eastern end of this section has a very thick lush growth of fucus spp, red and green algae. Barnacles, sand fleas, mussels and rock blennies are abundant in this area. Larger, more stable rocks and protective reef are providing an excellent shelter for numerous animals.

In general, this beach is one of the least productive surveyed to date. Most likely, this is due to the substrate composed of shale to fine black sand that does not provide a stable environment.

## WILDLIFE OBSERVATIONS

TO BE COMPLETED IN ALL SUBDIVISIONS

| BIRDS            | # OF SPECIES | TOTAL BIRDS | FISH OBSERVED<br>SPECIES PRESENT |
|------------------|--------------|-------------|----------------------------------|
| Eagles           |              |             | 12 dead shrimp                   |
| Seabirds         |              |             | on beach                         |
| Waterfowl        | 2            | 2           | 3-rock blennies                  |
| Gulls/Kittiwakes | 1            | 3           |                                  |
| Shorebirds       |              |             |                                  |
| Corvids          |              |             |                                  |
| Other Birds      |              |             |                                  |

## MARINE MAMMALS

# OBSERVED

## LAND MAMMALS

SPECIES

# OBSERVED

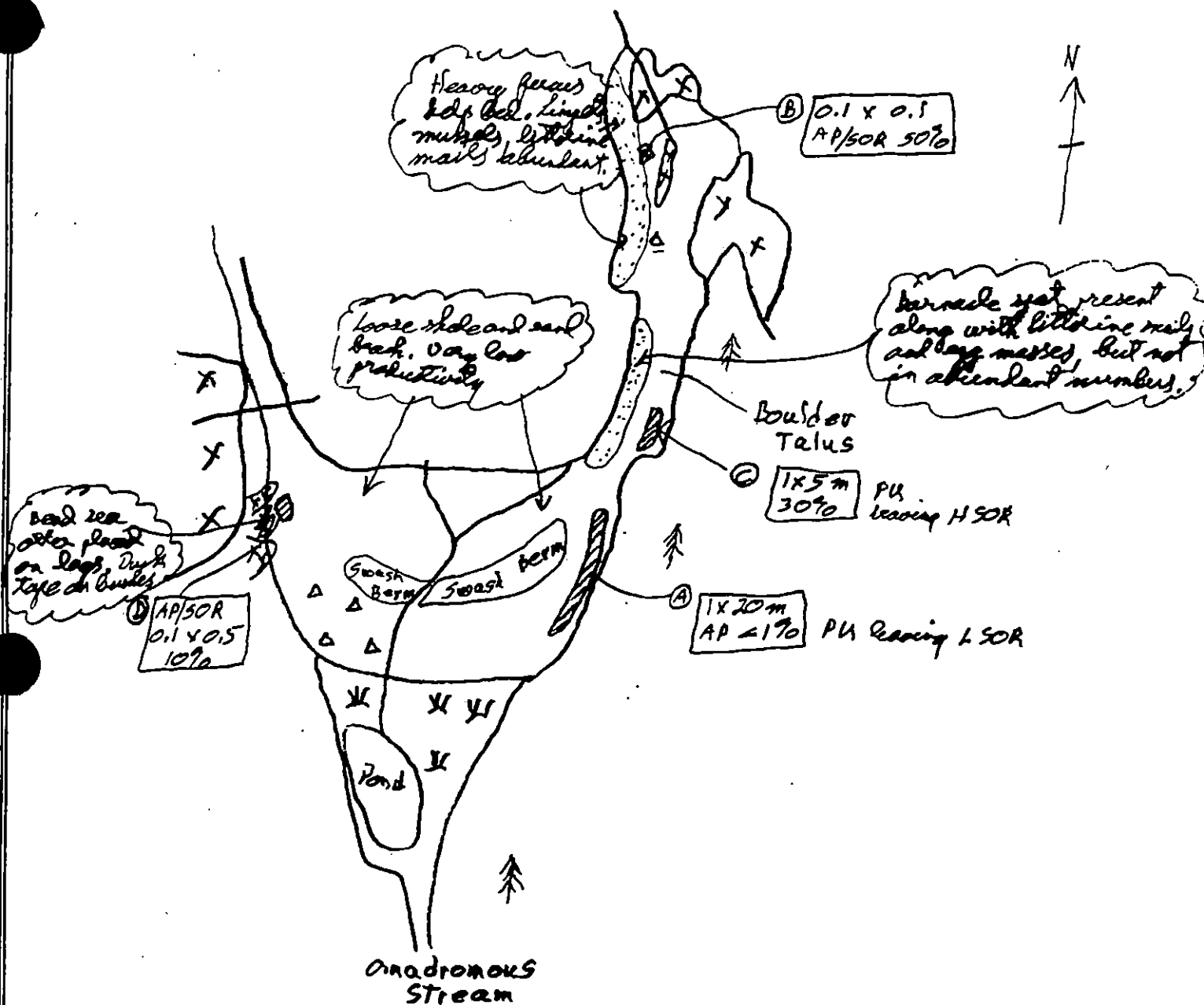
|                    |          |                     |  |
|--------------------|----------|---------------------|--|
| Sea Otters         | (1 dead) | Lots of deer tracks |  |
| Pinnipeds(specify) |          |                     |  |
| les(specify)       |          |                     |  |

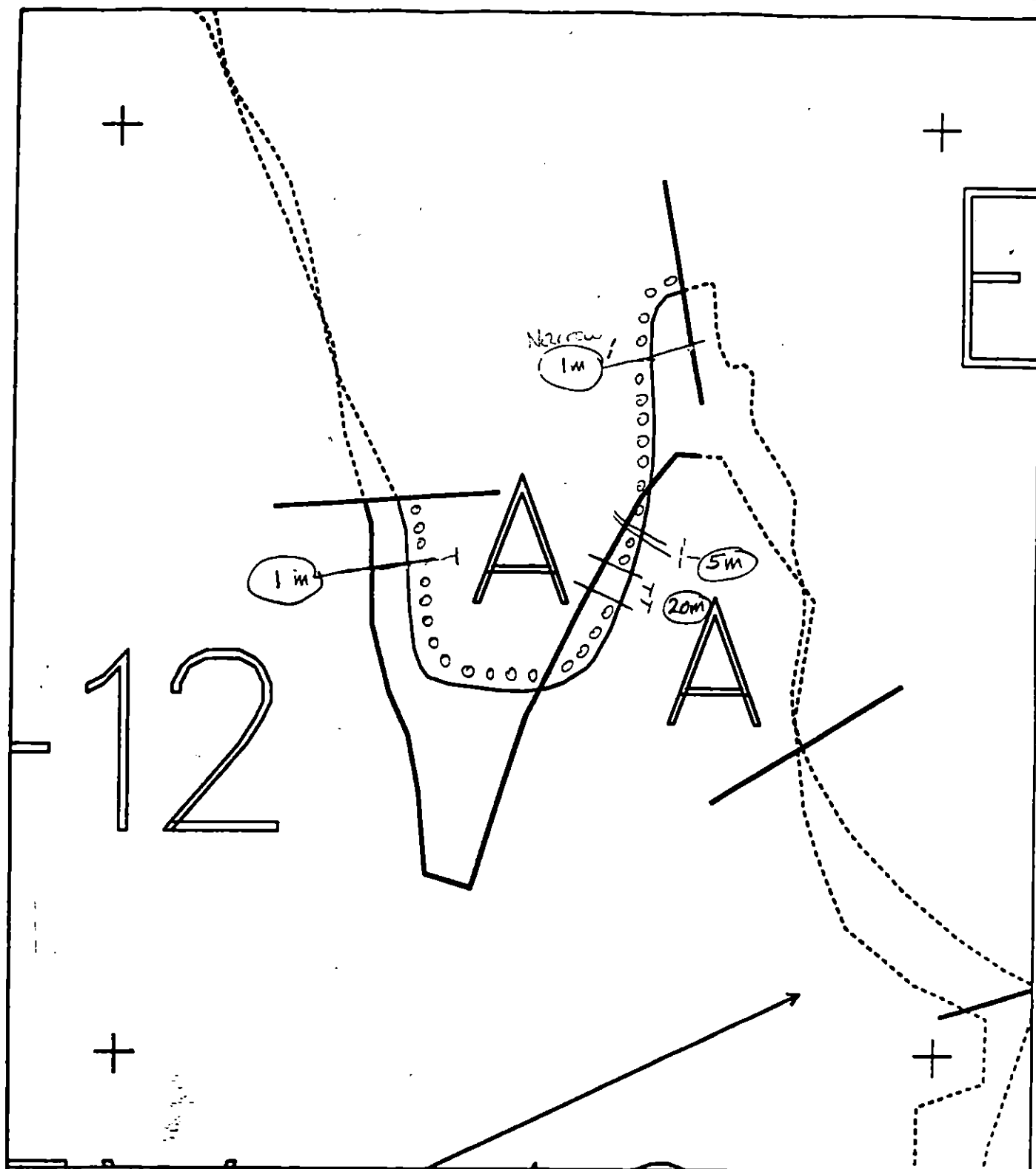
Shoreline subdivision map showing important biological features attached.

REVIEWED: MC 5/9/91

0 50 100  
meters

EV-012-A 5/2/91  
Bio. Map J.R. Schroeder  
0745-0845





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

**EV012 A**

ADEC Subsegment Length: 887m  
 METERS

0 100 200  
 AK State Plane Zone 6  
 prv012a



Subdivision Field Map  
 Map Key: PWSEV012A  
 Name: DAVID LITTLE  
 Date: 05/02/91  
 Date Entered:

Revised: MC 5/9/91  
 revised 5/8/91 KC

## 1991 MAYSAP EVALUATION

SEGMENT: EV 012 SUB: A REGION: PWS SURVEY DATE: 5/2/91

**ENVIRONMENTAL SENSITIVITIES:**

Work Window(s) OPEN 5/1 - 7/10; RESTRICTED 7/10 - 9/15

**Ecological/Constraints (see page two for details). Fish harvest**  
**stream, Anadromous stream, Subsistence - Deer harvesting**

### ARCHAEOLOGICAL CONSTRAINTS:

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

SHPO Signature: Rachel L. Olen Date: 5/17/91

**RECOMMENDATIONS:**

**INITIAL**

**TAG**

**FOSC**

TREATMENT REQUIRED (Y or N)

**N**

2

Manual Pickup (Check as Req.)

Spot Washing

Bio-Customblen Only

Bio-Inipol/Custombien

Other

Other

**COMMENTS:**

INITIAL:

**TAG:**

**FOSC:**

TAG APPROVAL DATE: MAY 17 1991

**FOSC APPROVAL DATE:**

~~2 5 MAY 1991~~

ADEC

**FOSC**

E. E. PAGE, CDR, USCG  
CHIEF OF STAFF, FO SC

**EXXON**

USCG

NOAA

CHIEF OF STAFF, FOBC  
The state will evaluate the need  
for further treatment.

**ECOLOGICAL CONSTRAINTS  
1991 FIELD ACTIVITIES**

**Fish Harvest Area:** Unlimited treatment unless otherwise directed by ADF&G. Sheen containment/recovery procedures required for mechanical treatment.

**Anadromous Stream:** Unlimited treatment up to stream bank between May 15 and July 10. ADF&G approval required for work after July 10. Fish Habitat Permit required for instream work. ADF&G approval required for bioremediation within 100 meters of anadromous stream after July 10.

**Subsistence - Deer Harvesting:** Unlimited treatment prior to 8/15.

# MAYSAP FIELD SHORELINE COMMENT SHEET

TEAM NO. 6 SEGMENT EV-012 SUBDIVISION A DATE 05/02/91

ADEC / ADFTG

NAME Aimee Weseman

SIGNATURE Aimee Weseman

☐ NTR ☒ Treatment Recommended Anadromous Fish Stream, Commercial Tourism  
The areas in need of treatment at this site are A+C, the heavier contaminated sediment being located in C. Located in a somewhat protected area of the beach, the oil is still in a liquid state & slopes generally down towards the stream. Approximately 50% of the SOR(H) was removed. The remaining heavily oiled sediments should be manually removed & lighter oily sediments-filled

EXXON

NAME RANDALL E. BOYER

SIGNATURE Randall E. Boyer

☒ NTR Oiling conditions on this subdivision have improved significantly this year. 1990 treatment and weathering have had an effect. VECO TREATED SURFACE OILING CONDITIONS THROUGH COLLECTION AND DISRUPTING THE SURFACE. LOW CONCENTRATIONS IN SMALL OILED (EOL) AREAS WARRANT NO FURTHER TREATMENT. AREAS OF AP THAT PREVIOUSLY EXISTED HAVE BEEN REDUCED TO RESIDUE. THIS MEDIUM ENERGY ZONE EXHIBITS HEALTHY BETA THROUGH OUT THE BEACH FACE.

LANDMANAGER

NAME CHARLES SELANOFF OF CHENECA BAY

SIGNATURE Charles Selanoff

☐ NTR Observed oil in test pits along side of stream and shore berm. Also a lot of tar balls was noticed in the heavier rocks. Oily debris on storm berm should be picked up manually (at the mouth of stream). It is my recommendation that this area be more thoroughly cleaned-up.

USCG/NOAA

NAME CWO SPURR / Rebecca Hoff

SIGNATURE R.P. Spurr / Rebecca Hoff

☒ NTR Small patches of remaining asphalt in the upper intertidal were picked up, leaving some surface oil residue that should weather fine naturally. No oil was found near the anadromous stream.

PAGE 1 OF 1

SEGMENT EV-012

SUBDIVISION A

DATE 05 / 02 / 91

ENERGY LEVEL: ☐ H ☒ M ☐ L

NEAR SHORE SHEEN: ☐ BR ☐ RB ☐ SL ☒ NONE

[illegible]

PHOTO ROLL # MAYSAP- 6-05 FRAMES 1-4

| PIT NO. | PIT DEPTH (cm) | SUBSURFACE OIL CHARACTER |     |     |     |    |    |    | OILED ZONE cm-cm | CLEAN BELOW Y/N | H2O LEVEL (cm) | SHEEN COLOR BRS N | PIT ZONE |    |    |    | SURFACE-SUBSURFACE SEDIMENTS | NOTES |
|---------|----------------|--------------------------|-----|-----|-----|----|----|----|------------------|-----------------|----------------|-------------------|----------|----|----|----|------------------------------|-------|
|         |                | OP                       | HOR | MOR | LOR | OF | TR | NO |                  |                 |                |                   | PIT ZONE |    |    |    |                              |       |
|         |                |                          |     |     |     |    |    |    |                  |                 |                |                   | S        | UI | MI | LI |                              |       |
| 1       | 35             |                          |     |     |     |    |    | X  | —                | Y               | —              | N                 |          | X  |    |    | pg - gps                     |       |
| 2       | 30             |                          |     |     |     |    |    | X  | —                | Y               | —              | N                 | X        |    |    |    | gp - gps                     |       |
| 3       | 25             |                          |     |     |     |    |    | X  | —                | Y               | —              | N                 |          | X  |    |    | gp - gps                     |       |
| 4       | 30             |                          |     |     |     |    |    | X  | —                | Y               | —              | N                 |          | X  |    |    | gp - gps                     |       |
| 5       | 20             |                          |     |     |     |    |    | X  | —                | Y               | 15             | N                 |          |    | X  |    | cp - gps                     |       |
| 6       | 25             |                          |     |     |     |    |    | X  | —                | Y               | 20             | N                 |          |    |    | X  | pg - gs                      |       |
| 7       | 20             |                          |     |     |     |    |    | X  | —                | Y               | 15             | N                 |          |    | X  |    | bcp - gps                    |       |
| 8       | 25             |                          |     |     |     |    |    | X  | —                | Y               | —              | N                 |          | X  |    |    | pg - gps                     |       |

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

Surface oil detailed on map was almost all treated during the survey—typically AP was reduced to 50R or less. Only in location B on the eastern point was there a very small patch which was not picked up.

No subsurface oil was observed in 8 logged pits and numerous shallow "scrapes"

Revises: 5/9/91 mc  
reviewed 5/8/91 KG

0 50 100  
meters

KNIGHT ISLAND PASSAGE

EV-012-A

05/02/91

OG. Map

D.I. Little

0745 - 0845

N  
↑

EV-13  
↑

(B) 0.1 x 0.1  
AP/SOR 50%

→ EV-11-A

start

boulder  
talus

(C) 1 x 5  
30% AP

PU leaving SOR (H)

(A) 1 x 20 m  
AP < 10%

PU leaving SOR (L)

(D) AP/SOR  
0.1 x 0.5  
10%  
PU

EVANS  
ISLAND

ANADROMOUS  
STREAM

# PIT TO OIL CLEAN below sed's wt shren (ave)

|     |    |   |   |         |    |   |      |
|-----|----|---|---|---------|----|---|------|
| (1) | 35 | N | Y | pg/gps  | -  | - | UITZ |
| (2) | 30 | N | Y | gp-gps  | -  | - | SUTZ |
| (3) | 25 | N | Y | gp-gps  | -  | - | UITZ |
| (4) | 30 | N | Y | gp-gps  | -  | - | UITZ |
| (5) | 20 | N | Y | cp-gps  | 15 | - | MITZ |
| (6) | 25 | N | Y | pg-gs   | 20 | - | UITZ |
| (7) | 20 | N | Y | bcp-gps | 15 | - | MITZ |
| (8) | 25 | N | Y | pg-gps  | -  | - | UITZ |

Reviewed: MC 5/9/91

reviewed 5/8/91 KC

# Photo Locations

Maypap 6-05 # 1-4

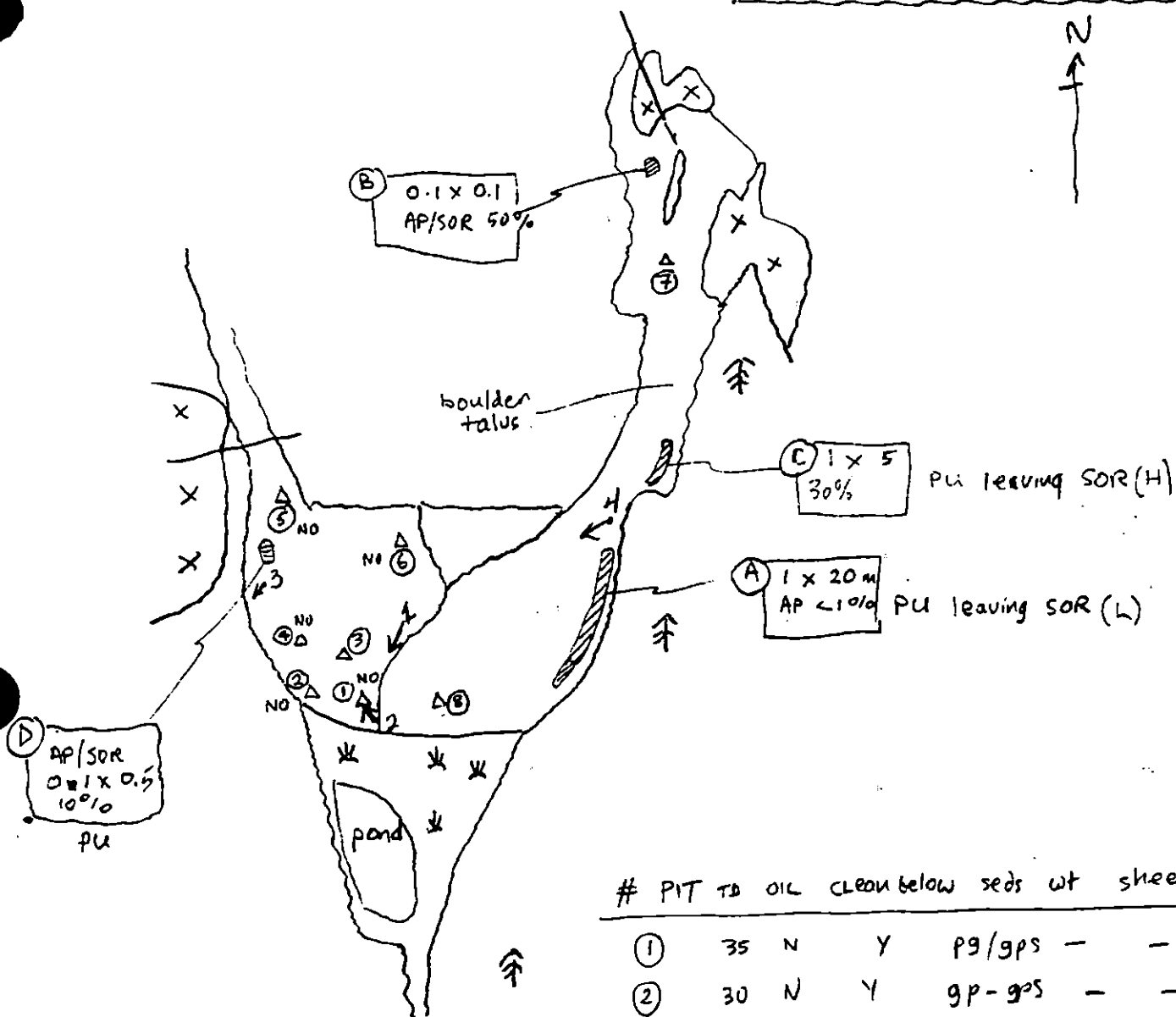
EV-012-A

05/02/91

OG Map

D. I. Little

0745 - 0845



ANADROMOUS  
STREAM

# PIT TO OIL CLEAN below seeds wt sheen level

| # | PIT | TO | OIL | CLEAN    | below | seeds | wt   | sheen | level |
|---|-----|----|-----|----------|-------|-------|------|-------|-------|
| ① | 35  | N  | Y   | pg-gps   | -     | -     | UITZ |       |       |
| ② | 30  | N  | Y   | gp-gps   | -     | -     | SUTZ |       |       |
| ③ | 25  | N  | Y   | gp-gps   | -     | -     | UITZ |       |       |
| ④ | 30  | N  | Y   | gp-gps   | -     | -     | UITZ |       |       |
| ⑤ | 20  | N  | Y   | cp-gps   | -     | -     | MITZ |       |       |
| ⑥ | 25  | N  | Y   | pg-gs    | -     | -     | LITZ |       |       |
| ⑦ | 20  | N  | Y   | bc-p-gps | -     | -     | MITZ |       |       |
| ⑧ | 25  | N  | Y   | pg-gps   | -     | -     | UITZ |       |       |

# MAYSAP BIOLOGICAL SUMMARY FORM

TEAM # 6  
 DATE 5/2/91  
 SEGMENT # EV-012  
 TIDAL HEIGHT(Range) +4 1/4 ft to +1ft  
 SUBDIVISION A  
 BIOLOGIST T.R. Schroeder  
 SEA STATE 1-2 ft. chop  
 WIND SPEED/DIRECTION E-15 mph  
 PHOTOGRAPHS: ROLL #  
 FRAME #

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

(A, C + D) = Intertidal area around and below these areas very clean and unproductive. Black sand/shale beach probably is in continual shifting mode during any major westerly storms.

(B) = Extreme eastern end of this section has a very thick, lush growth of fucus spp, red and green algae. Barnacles, sand fleas, snails and rock blennies are abundant in this area. Larger, more stable rocks and protective reef are providing an excellent shelter for numerous animals.

In general this beach is one of the least productive surveyed to date. Most likely this is due to the substrate composed of shale to fine black sand that does not provide a stable environment.

## WILDLIFE OBSERVATIONS

TO BE COMPLETED IN ALL SUBDIVISIONS

| BIRDS            | # OF SPECIES | TOTAL BIRDS | FISH OBSERVED SPECIES PRESENT |
|------------------|--------------|-------------|-------------------------------|
| Eagles           |              |             | 12 dead shrimp on beach       |
| Seabirds         |              |             |                               |
| Waterfowl        | 2            | 2           | 3-rock blennies               |
| Gulls/Kittiwakes | 1            | 3           |                               |
| Shorebirds       |              |             |                               |
| Corvids          |              |             |                               |
| Other Birds      |              |             |                               |

## LAND MAMMALS

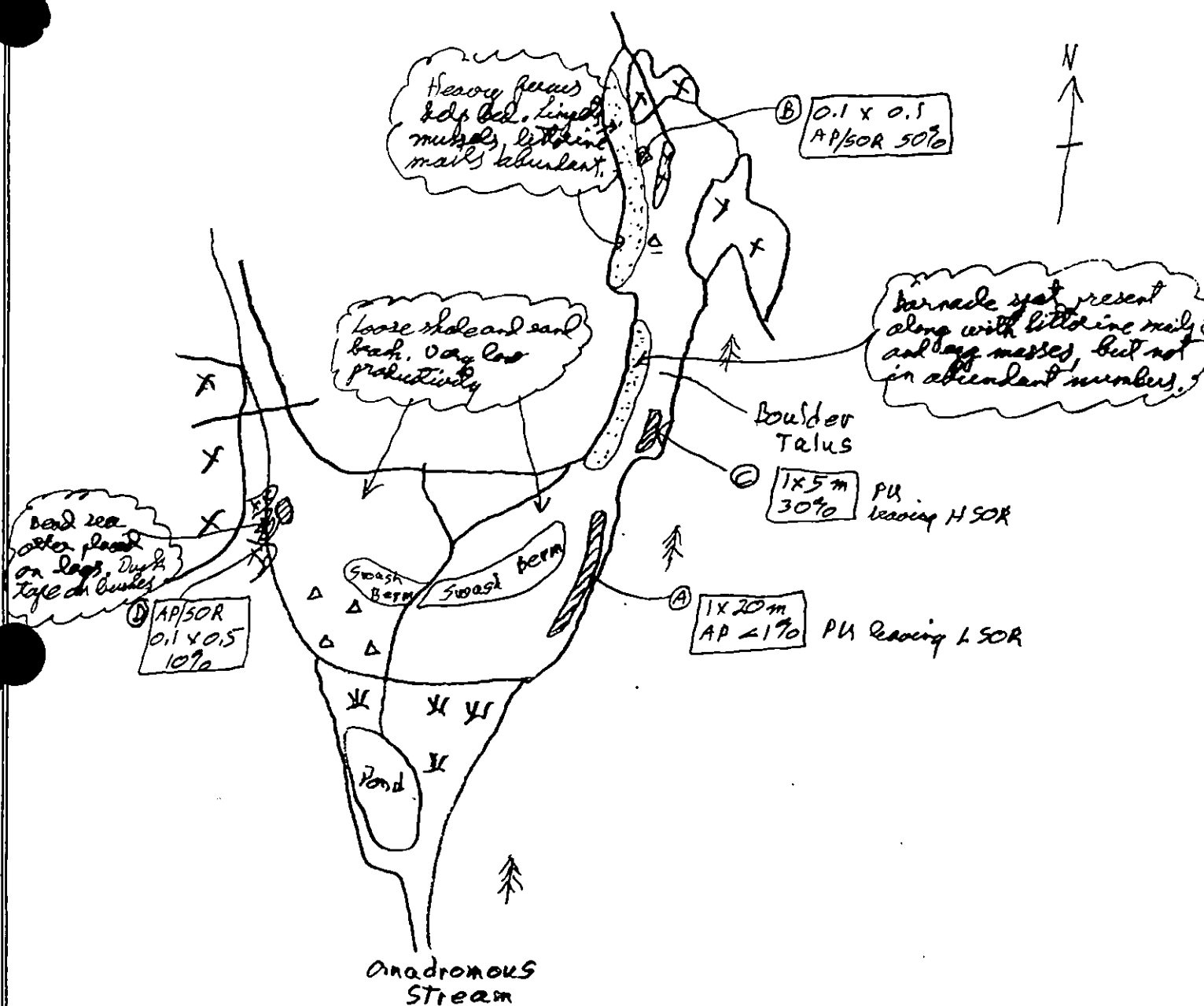
| MARINE MAMMALS      | # OBSERVED | SPECIES             | # OBSERVED |
|---------------------|------------|---------------------|------------|
| Sea Otters          | (1 dead)   | Lots of deer tracks |            |
| Pinnipeds (specify) |            |                     |            |
| Es (specify)        |            |                     |            |

REVIEWED: MC 5/9/91

Shoreline subdivision map showing important biological features attached.

0 50 100  
meters

EV-012-A 5/2/91  
Bio. Map J.R. Schroeder  
0745-0845



Revised: MC 5/9/91  
revised 5/8/91 KG

ANADROMOUS FISH STREAM EVALUATION

SEGMENT ST/ EV-12 STREAM NO: UNCATALOGUED DATE 4/22/90

**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)  
7II Subsistence area: Deer harvesting (8/15 to 2/28)  
See attached Ecological Constraint sheet for specific constraints and contacts.

**SUBDIVISION ECOLOGICAL CONSTRAINTS:**

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

**ARCHAEOLOGICAL CONSTRAINTS:**

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

SHPO SIGNATURE: J. David McManis DATE: 5/8/90

Subsurface Oil Observed: Yes X No        Maximum Depth 10 cm

**RECOMMENDATIONS:**

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

COMMENTS: Recommended treatment includes 1) manual pickup of tar patties and debris, 2) bioremediation of areas of surface and subsurface oil shown on attached sketch map. Work should be conducted between 5/15 and 7/10 based on anadromous stream constraints.

TAG COMMENTS: IN AREA INDICATED ON THE SKETCH: MANUAL PICKUP SURFACE MATERIAL TO EXPOSE SUBSURFACE MOUSSE, MANUALLY REMOVE MOUSSE IN THIS BECM, FOLLOWUP WITH BIOREMEDIATION.

TAG APPROVAL DATE: 5/17/90

ADEC ART WELSH

EXXON ANDY TOL

NOAA GARY PATRICK

USCG G.A. REITER

FOSC: W L DATE: 5-18-90

NOTIFY CVA 24 HRS PRIOR TO WORK

OG LAH REID

# SKETCH MAP

20/55 SEGMENT ST/ EVQ12

STREAM: NO NUMBER

DATE 22/ APR 90

## CHECKLIST

- ☐ N Area
- ☐ Approx. Scale
- ☐ Seg/Sub Entry
- ☐ Oil Dist.
- ☐ Width
- ☐ Length
- ☐ % Cover
- ☐ Substrate Character
- ☐ Est. HULL/WL
- ☐ SBL
- ☐ Profile Location(s)
- ☐ Profile(s)
- ☐ P/L Location(s)
- ☐ Photo Location(s)

## LEGEND

1 Δ  
PK - No Subsurface Oil

2 Δ  
PK - Subsurface Oil

CT/C  
Carapace Distribution

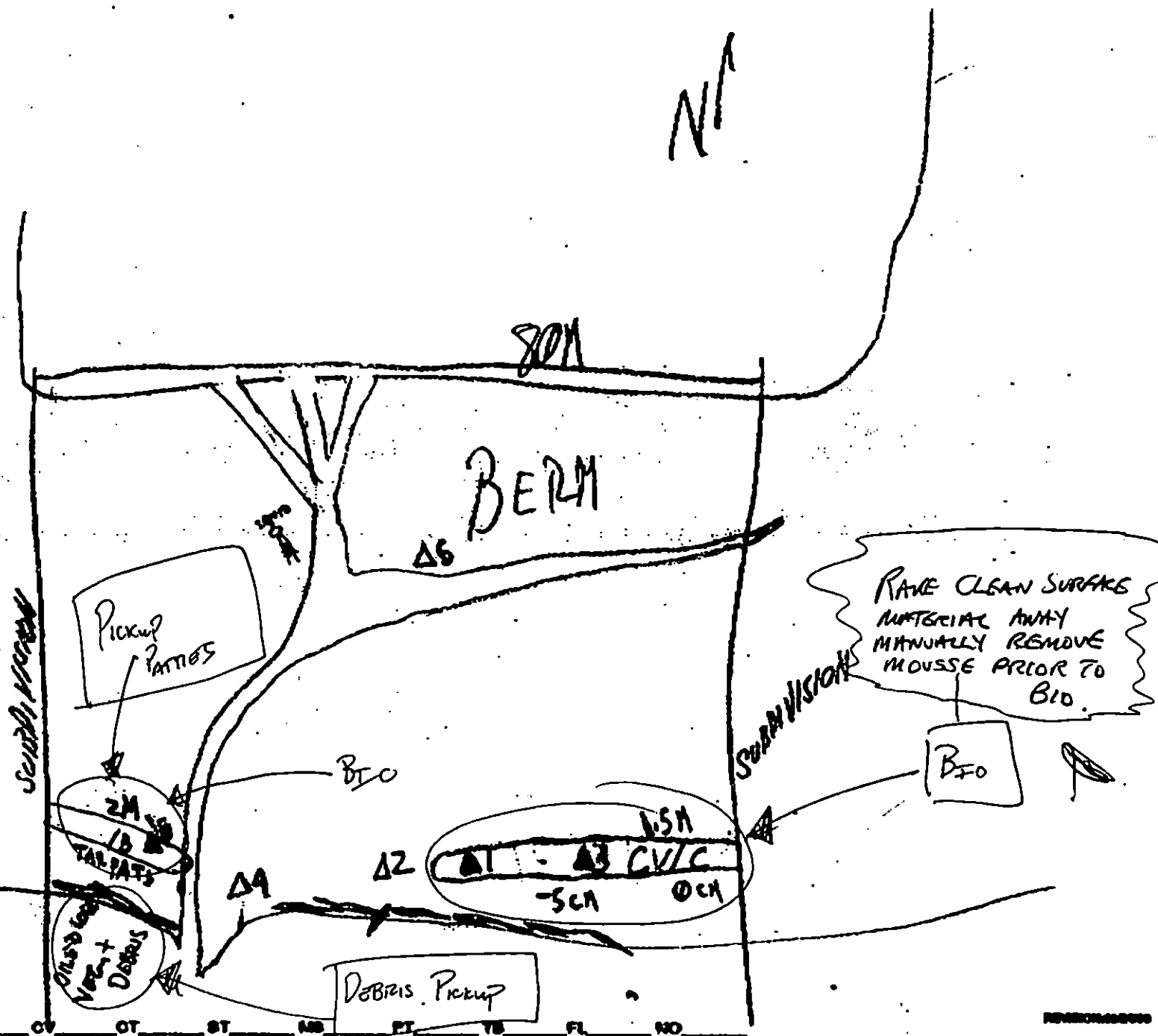
CT/B  
Broken Distribution

CT/P  
Pecdy Distribution

CT/S  
Splashed Distribution

eee  
Oiled Vegetation

1 →  
Photo location, direction,  
and number



Oil Character Length (m): AP PO OV OT ST MS PT TS FL NO

REF: 00000000

P.19

SCAT TEAM

TO

EXXON CMD CORDOVA

FROM

18:59

APR-23-1990

18/55

48 PHOTOLOG

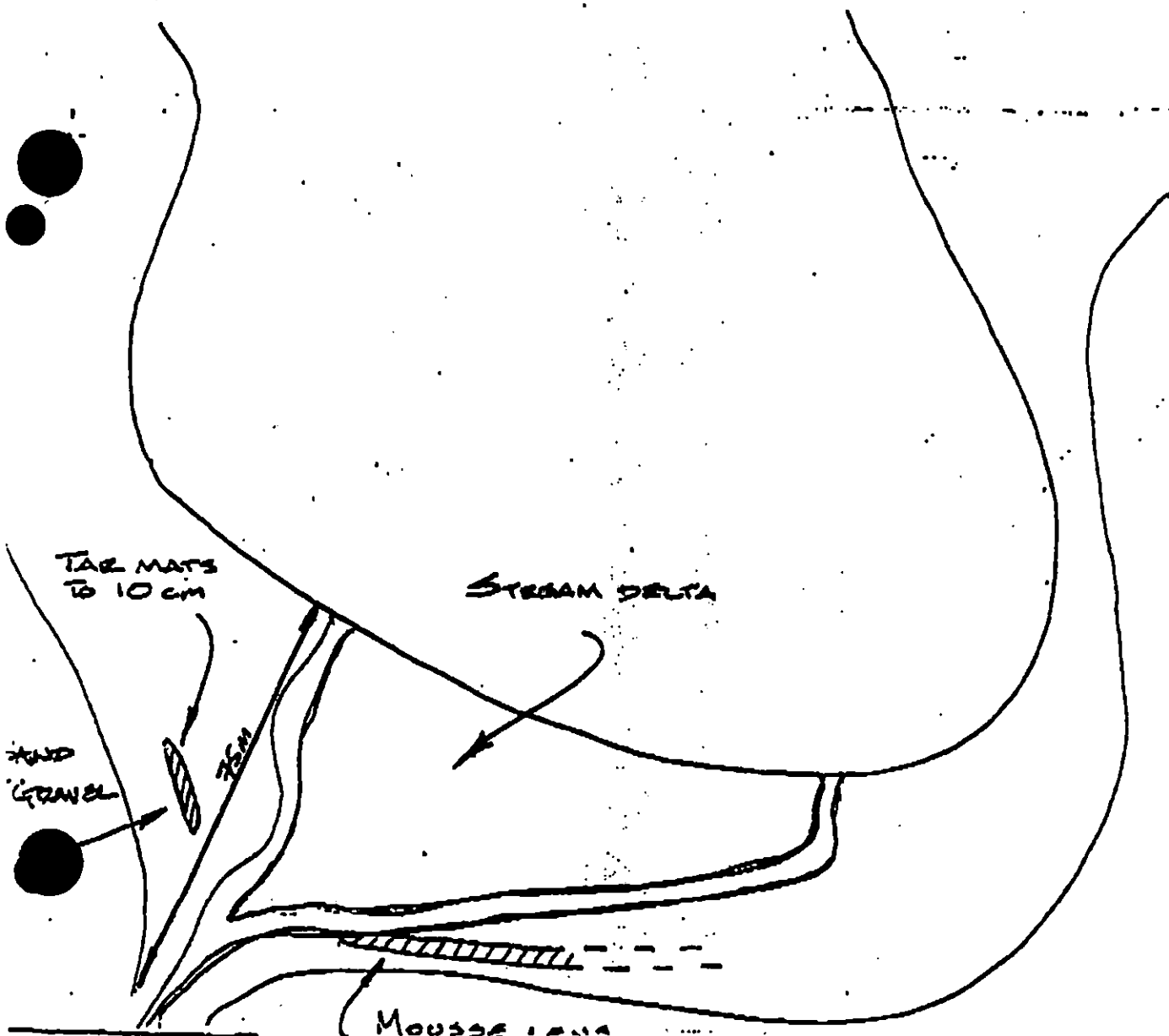
FR 18-55

## DESCRIPTION

RECOMMENDATIONS: MANUAL REMOVAL OF SURFACE  
TAR MATS. MANUALLY REMOVE BUBBLED MOUSSE LENS  
(REMOVE ONLY OILED LENS, NOT CLEAN OVERBURDEN)

I agree with recommendations.

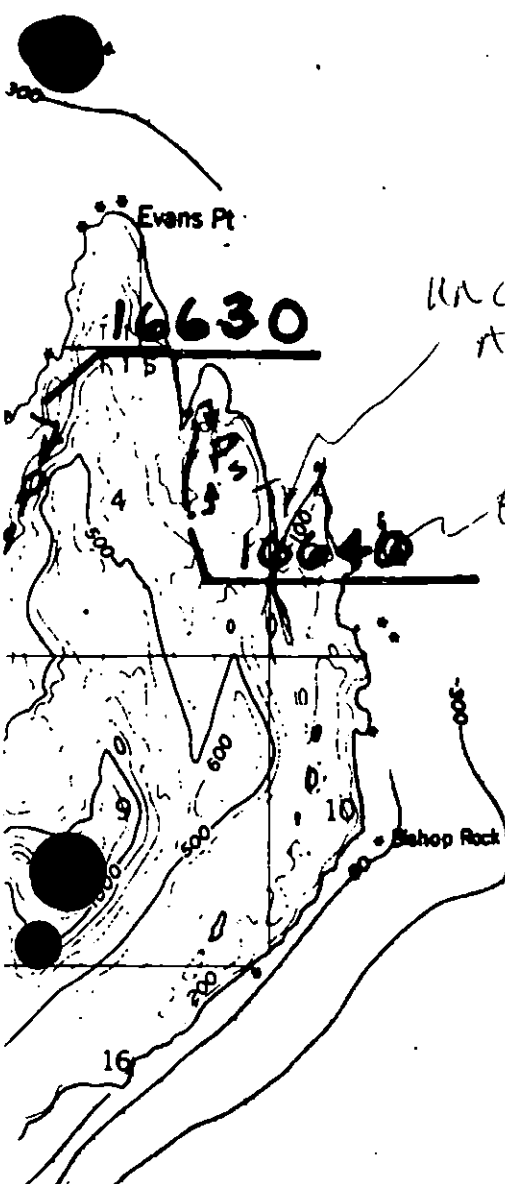
M. H. FURDY

48 OIL DISTRIBUTION DIAGRAM

ECOLOGICAL  
MAP

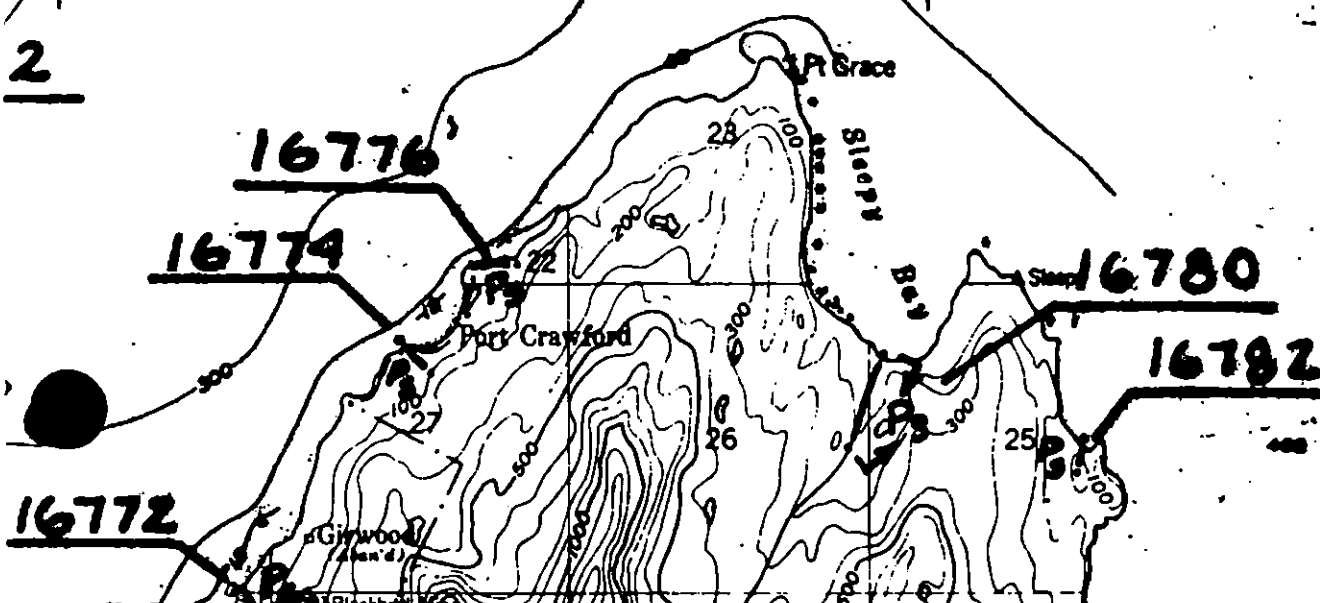
EV-012

P  
A  
S  
S  
A  
G  
E



226-40

Upper portion documents  
limits of fish surveys  
and usually not the  
extent of fish habitat



(50)

EV-13

EV-

V-12

SUBJECT SITE  
WITHIN EV-12 A  
(1 OF 2)

EV-40

XXXX Wide

//// Medium

--- Narrow

TTTT Very Light

OOOO No

EV-12

ADEC Segment Length: 667m

0 100 200 300

Map Key: PWS-180

Name: Reimer

Date: 4/7/90

Data Entered:

# ANADROMOUS FISH STREAM EVALUATION ADDENDUM

## CONSTRAINTS FOR STREAM NO. UNCATALOGUED

### SEGMENT EV-12 SUBDIVISION A

| WORK WINDOW                                                    |                                            |
|----------------------------------------------------------------|--------------------------------------------|
| Manual Pickup                                                  | OPEN                                       |
| Bioremediation and Manual Raking<br>Less Than 100m From Stream | WORK PRIOR TO 7/10<br>(ADF&G MONITOR REQ.) |

#### ARCHAEOLOGICAL STANDARD CONSTRAINT

If cultural resources are uncovered, PHONE 564-3274.

#### APPLICABLE ECOLOGICAL TIME CONSTRAINTS

##### 1A,1B Salmon Stream

An ADF&G uncatalogued anadromous stream is in Subdivision A. This subdivision is closed to bioremediation less than 100m from stream 7/10 to 8/31. Before 7/10, bioremediation is permitted less than 100m from stream with on-site ADF&G monitor or ADEC alternate present. No constraint to bioremediation more than 100m from stream. No constraint to manual pickup.

##### 1K Purse Seine Area

Closed to bioremediation and manual raking after 7/25. No constraint to manual pickup.

##### 7II Subsistence: Deer Harvesting

Closed to bioremediation and manual raking after 8/15. No constraint to manual pickup.

#### OTHER ECOLOGICAL CONSIDERATIONS

No disturbance to stream bed or banks. No flushing of pollutants or sediments into stream drainage; do not allow Inpol to enter stream flow. On-site examination and consultation by ADF&G monitor is required prior to bioremediation in order to authorize a setback distance from the stream during chemical application; if ADF&G monitor's presence is impossible, authorization may be given by the ADEC monitor. Restrict boat and air traffic and beach disturbance to essential minimum after 7/20. Avoid any unnecessary disturbance or damage to uncollected biota and substrate.

SEE SUBDIVISION CONSTRAINT ADDENDUM EV-12A  
FOR ADDITIONAL CONSTRAINT INFORMATION.

FOSC

*[Signature]*

Date

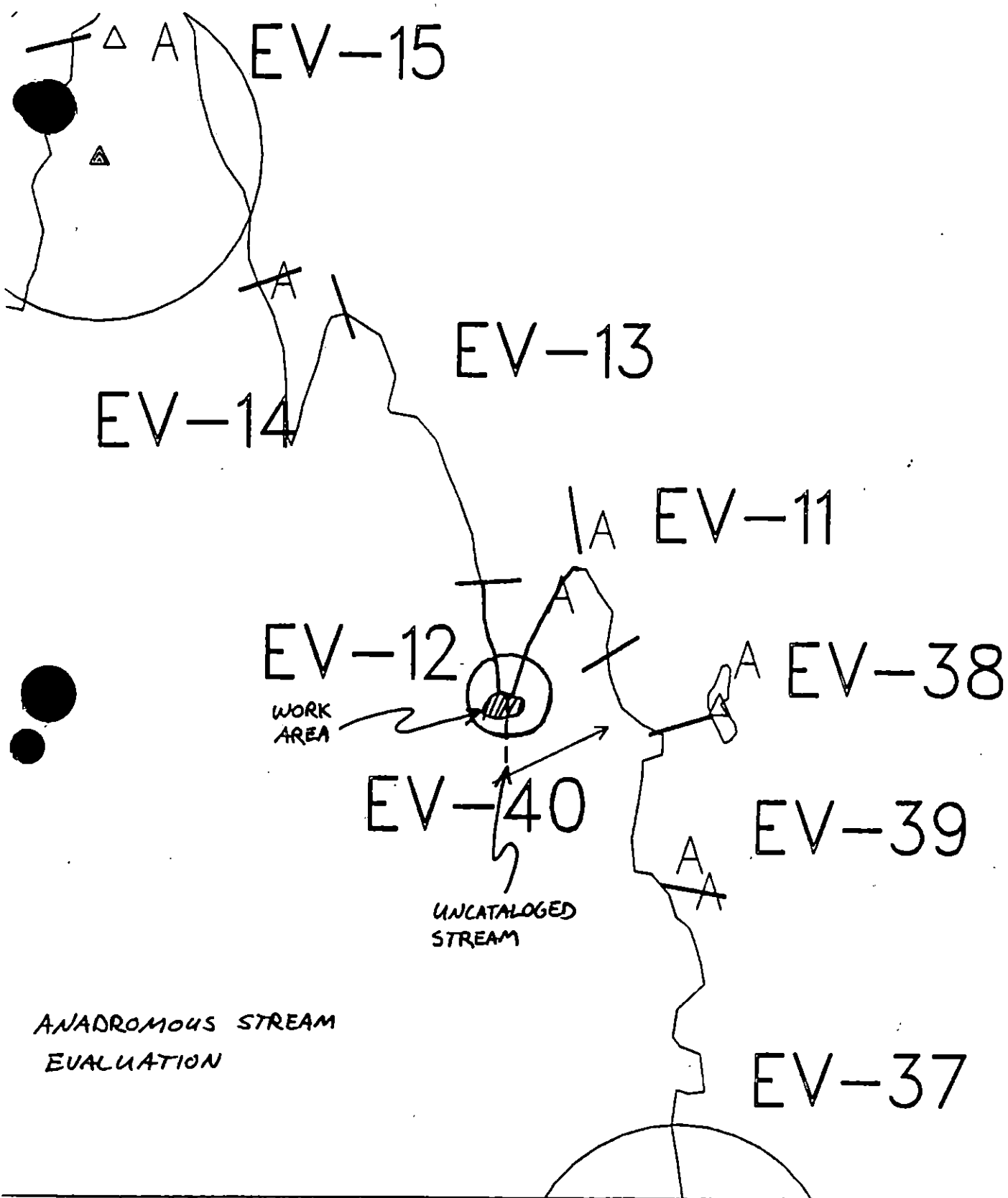
6/6/90

Prepared by

*[Signature]*

Date

6/14/90



ANADROMOUS STREAM  
EVALUATION



# ECOLOGY MAP SEGMENT EV-12

SUBDIVISION A (1 of 1)

METERS



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

1 inch = 1000 feet

ANADROMOUS FISH STREAM ASSESSMENT

REGION: PRINCE WILLIAM SOUND

SEGMENT: EV-12

STREAM NO: UNCATALOGUED

ANADROMOUS FISH STREAM EVALUATION

SEGMENT ST/ EV-12 STREAM NO: UNCATALOGUED DATE 4/22/90

**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)

7II Subsistence area: Deer harvesting (8/15 to 2/28)

See attached Ecological Constraint sheet for specific constraints and contacts.

**SUBDIVISION ECOLOGICAL CONSTRAINTS:**

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

**ARCHAEOLOGICAL CONSTRAINTS:**

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

SHPO SIGNATURE: \_\_\_\_\_ DATE: \_\_\_\_\_

Subsurface Oil Observed: Yes X No \_\_\_\_\_ Maximum Depth 10 cm

**RECOMMENDATIONS:**

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

COMMENTS: Recommended treatment includes 1) manual pickup of tar  
patties and debris, 2) bioremediation of areas of surface and subsur-  
face oil shown on attached sketch map. Work should be conducted be-  
tween 5/15 and 7/10 based on anadromous stream constraints.

TAG COMMENTS: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

TAG APPROVAL DATE: \_\_\_\_\_

ADEC \_\_\_\_\_

EXXON \_\_\_\_\_

NOAA \_\_\_\_\_

USCG \_\_\_\_\_

FOSC: \_\_\_\_\_ DATE: \_\_\_\_\_

# 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 Suzumoto 424-7511
- 1I Gill net area (6/7 to 8/31)  
1J Purse seine area (7/20 to 9/30)  
1K Purse seine hook-off (7/20 to 9/30)  
1L Set net sites (6/11 to 7/25)  
Contact ADF&G for specific dates, locations and constraints. Restrict boat and air traffic to essential minimum. When set net sites are present (1L) restrict beach operations to essential minimum as authorized by ADF&G. If plans for treatment include methods such as hot water wash or Inipol application which might affect nearshore oil or toxicity levels, contact ADF&G for consultation and authorization.  
AGENCY CONTACT PERSON: ADF&G James Brady 424-3212
- 2M Herring spawning (4/1 to 6/15)  
Contact ADF&G for confirmation - dates and locations may vary. Restrict boat traffic to essential minimum. Avoid damage to uncoiled intertidal and subtidal algae and seagrass. If plans for treatment include methods such as hot water wash or Inipol application which might affect nearshore oil or toxicity levels, contact ADF&G for consultation and authorization.  
AGENCY CONTACT PERSON: ADF&G Evelyn Biggs 424-3235
- 3P Harbor seal and sea lion pupping (5/15 to 7/1)  
3Q Harbor seal and sea lion molting (8/15 to 9/15)  
Restrict boat and air traffic to essential minimum. No personnel within 400m. Aircraft to maintain 800m horizontal and 300m vertical distance from haulouts. No application of Inipol within two weeks of arrival dates (work window at these sites is limited to 7/2 to 7/31). Contact ADF&G and USFWS prior to treatment for confirmation.  
AGENCY CONTACT PERSON: US National Marine Fisheries Service Steve Zimmerman 586-7235  
ADF&G Don Calkins 267-2403
- 5R Seabird colony (5/1 to 9/1)  
Restrict air and boat traffic to essential minimum. No personnel within 800m. Aircraft to maintain 800m horizontal, 300m vertical distance from colony. Contact USFWS prior to treatment.  
AGENCY CONTACT PERSON: USFWS Jill Parker 786-3377
- 5S Shorebird/waterfowl concentration (4/1 to 5/15)  
Restrict all activity to essential minimum, especially air traffic. Contact USFWS and ADF&G for confirmation.  
AGENCY CONTACT PERSON: USFWS Jill Parker 786-3377  
ADF&G Tom Roth 267-2206
- 5T All Bald Eagle nests (3/1 to 6/1)  
Active Bald Eagle nests (3/1 to 9/1)  
Restrict air traffic and all disturbance to essential minimum. No personnel within 400m 3/1 to 6/1. Air approach and takeoff from and to seaward only; maintain 800m horizontal, 300m vertical distance from nests. Contact USFWS prior to treatment for confirmation of dates.  
AGENCY CONTACT PERSON: USFWS Jill Parker 786-3377
- 6U Recreation: Tent sites (6/1 to 9/15)  
6V Anchorages (6/1 to 9/15)  
6W Forest Service cabins (6/1 to 9/15)  
6X Lodge (6/1 to 9/15)  
6Y Special use destination
- 7Z Subsistence area: Salmon harvesting (5/1 to 9/30)  
7HH Finfish harvesting  
7II 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

16/53

## FIELD SHORELINE COMMENT SHEET

SEGMENT ST/ EV 012 SUBDIVISION: NO ASCA DATE 4/22/98

USCG

NAME

AND J. MC MAHON

SIGNATURE

[Signature]☐ NO TREATMENT RECOMMENDED☒ TREATMENT SUGGESTED

COMMENTS

1. MANUAL CLEAN-UP; REMOVAL TIRE BALLS  
+ ASPHALT.
2. BIOREMEDIATION OF LEFT BERM (LOOKING  
ON SHORE)

ADFC

ADEC

NAME

Michael Wiedmer

SIGNATURE

[Signature]☐ NO TREATMENT RECOMMENDED☒ TREATMENT SUGGESTED

COMMENTS

BIOREMEDIATION NOT SUGGESTED.

LAND MANAGER

NAME

NO Team member

SIGNATURE

☐ NO TREATMENT RECOMMENDED☐ TREATMENT SUGGESTED

COMMENTS

## SHORELINE OILING SUMMARY (ANAD.) 19/55

OR WILLIAM LEID USCG McMAHON SEGMENT ST/ EY012  
 BIO MICHAEL FAWCETT LAND REP TOM CROWE ADPC 5 STRAIN No NUMBER ( OF )  
 EXXON GUS GARCIA ADPG MIKE WIDNER TIME 16:48/13:15  
 TEAM NO. 15 TIDE LEVEL 2 FT DATE 22 / APR / 90  
 EST. SUBDIVISION LENGTH: 80 m ☒ Sun ☐ Clouds ☐ Fog ☐ Rain ☐ Snow  
 UPLANDS DESCRIPTION: ☒ Grass ☒ Forest ☒ Rock  
 SURVEYED FROM: ☒ Foot ☐ Boat ☐ Helo  
 SURFACE SEDIMENTS: R 0 % S 0 % C 2.5 % P 75 % G 0 % M 0 % V  
 SLOPE: Long 90 % Hang 10 % Vert 0 % WAVE EXPOSURE: ☐ Low ☒ Med ☐ High  
 OIL CATEGORY LENGTH: W 0 m M 0 m N 50 m VL 0 m NO 30

## SURFACE OIL

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

PAVEMENT H F S 0 sq. m by 0PATTIES / TARBALLS 10 BAGNEAR SHORE SHEEN? NO BR RW SL T

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

Did You Collect DEBRIS  
☐ YES ☒ NO

TYPE \_\_\_\_\_  
 BAGS \_\_\_\_\_

Photographs:

Roll No. \_\_\_\_\_

Frames \_\_\_\_\_

## SUBSURFACE OIL \* OILED INTERVAL &lt; 5cm IN PIT 5 DOES NOT CONSTITUTE SUBSURFACE OIL

| PIT NO. | PIT DEPTH (cm) | SUBSURFACE OIL CHARACTER |    |    |    |    | OILED INTERVAL | BELOW |    | OIL / FILM COLOR |   |   |   | PIT ZONE |   |   |   | A N A | SHEEN (%) | Y | SURFACE SUBSURFACE SEDIMENT |
|---------|----------------|--------------------------|----|----|----|----|----------------|-------|----|------------------|---|---|---|----------|---|---|---|-------|-----------|---|-----------------------------|
|         |                | OP                       | ON | OL | OF | NO |                | NO    | NO | 1                | 2 | 3 | 4 | SW       | W | W | U |       |           |   |                             |
| 1       | 35             |                          |    | X  |    |    | 5-10           | X     |    |                  |   | X |   | X        |   |   |   |       | N         |   | P/G/C                       |
| 2       | 30             |                          |    |    |    | X  | .              |       |    |                  |   |   |   | X        |   |   |   |       | N         |   | P/G/C                       |
| 3       | 20             |                          |    | X  |    |    | 5-10           | X     |    |                  |   | X |   | X        |   |   |   |       | N         |   | P/G/C                       |
| 4       | 35             |                          |    |    |    | X  | .              |       |    |                  |   |   |   | X        |   |   |   |       | N         |   | P/G/C                       |
| * 5     | 25             | X                        |    |    |    |    | 0-10           | X     |    |                  |   | X |   | X        |   |   |   |       | Y         |   | P/G/C                       |
| 6       | 40             |                          |    |    |    | X  | .              |       |    |                  |   |   |   | X        |   |   |   |       | N         |   | P/G                         |

COMMENTS

REVIEWED JW DATE 4-25-90

00 AM REID

# SKETCH MAP

20/53 SEGMENT ST/ EVQ12

STREAM: NO NUMBER

DATE 22 APR 80

## CHECKLIST

- ☐ N Area
- ☐ Approx. Size
- ☐ Day/Star Study
- ☐ Oil Out
- ☐ Width
- ☐ Length
- ☐ % Cover
- ☐ Substrate Character
- ☐ Est. HWS/LA/VL
- ☐ BBL
- ☐ Profile Location(s)
- ☐ Profile(s)
- ☐ Pit Location(s)
- ☐ Photo Location(s)

## LEGEND

△  
Pit - No Subsurface Oil

△  
Pit - Subsurface Oil

CT/C  
Continuous Distribution

CT/B  
Broken Distribution

CT/P  
Patchy Distribution

CT/S  
Splashed Distribution

eee  
Oiled Vegetation

1 →  
Photo location, direction, and number

P.19

SCAT TEAM

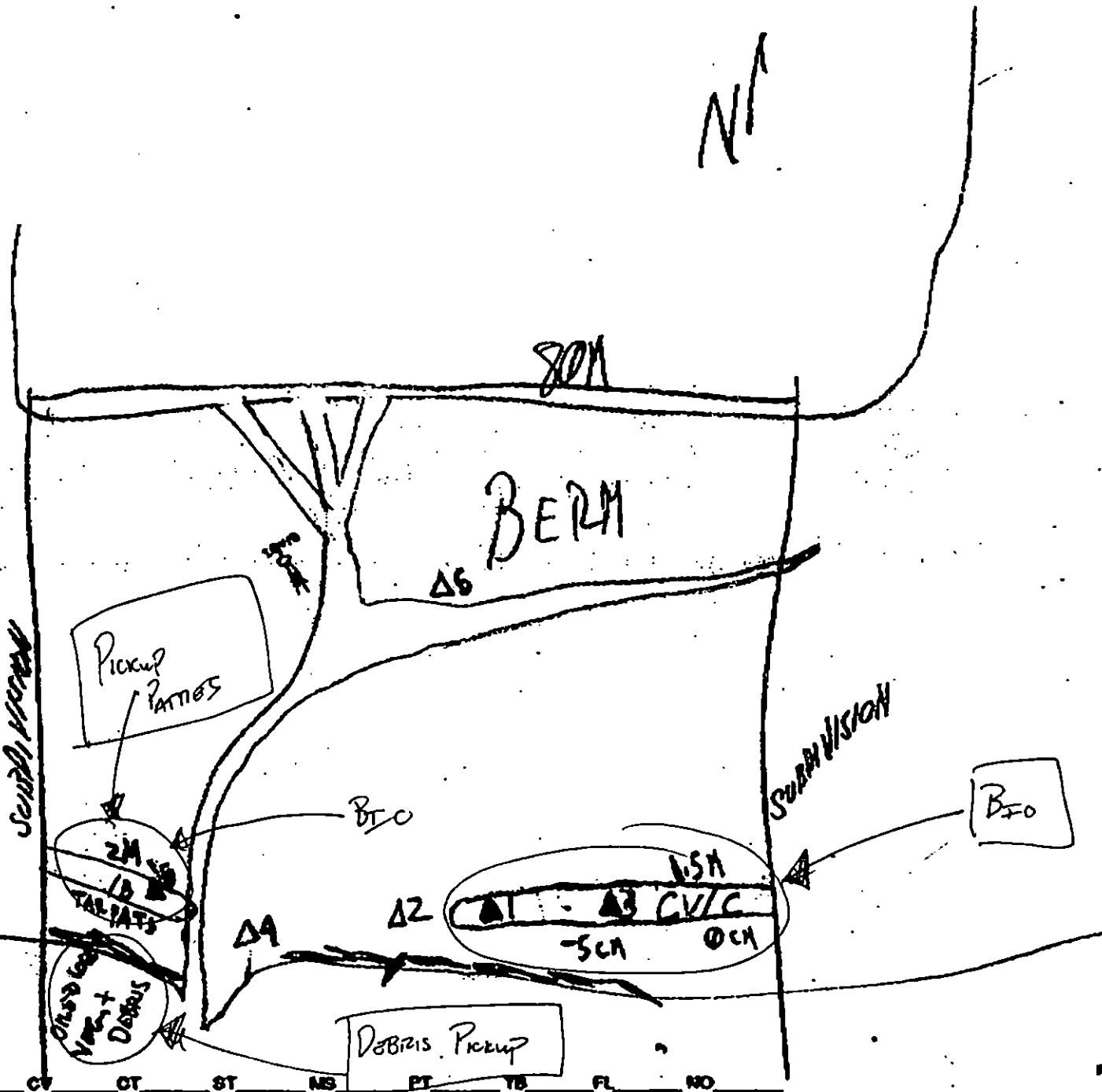
TO

EXXON CMD CORDOVA

FROM

APR-23-1990 18:59

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



REVISION 000000

17/55

## ADFG MULTI-ASSESSMENT DATA FORM

1 SURVEY TYPE: CS 33 CS TS AVS SCA MMMS PTA 2 REGION: PNS XP CI KAP

METHOD: Aerial Ground Boat

3 DATE: 4/22/90 15 HIGH TIDE TIMES: 1205 1 — 21 TEAM RECORDER: M. WISSEMER

4 START TIME: 1645 16 HIGH TIDE HTS: 10.0' 1 — 22 OBSERVERS: T. CROWE

5 STOP TIME: 1710 17 LOW TIDE TIMES: 0603 1 1314 23 AGENCY: ADFG

6 SEGMENT #: EV-012 18 LOW TIDE HTS: 1.0' 1 10.7' 24 PHOTOS TAKEN: Y (N)

7 STATION #: EV-012A 19 TIDE HT AT SURVEY: 1.50' Roll #: \_\_\_\_\_ Frames: \_\_\_\_\_

8 K-UNIT: \_\_\_\_\_ Ebb Stack Flood Stack 25 VIDEO TAKEN: Y (N) Tapes: \_\_\_\_\_

9 STAT AREA: \_\_\_\_\_ 20 USCG QUAD: SEWARD A3 Starts: \_\_\_\_\_ Ends: \_\_\_\_\_

10 LAT: \_\_\_\_\_ 11 LONG: \_\_\_\_\_ 26 SAMPLES TAKEN Y (N) Number \_\_\_\_\_

12 SOURCE: Map Loran 27 OIL \_\_\_\_\_

13 LOCATION: NORTHEAST GND, LAGOON EVANS IS. Sediment: \_\_\_\_\_

14 DESCRIPTION: \_\_\_\_\_ Biological: \_\_\_\_\_

Water: \_\_\_\_\_

## EXTENT OF OIL

27 SURFACE COVERAGE

| SHORELINE |    |   |   | STREAM |   |   |    |
|-----------|----|---|---|--------|---|---|----|
| L         | V  | H | S | L      | V | H | S  |
| 100       | 75 |   | 1 | 75     | 3 |   | <1 |

28 SURFACE THICKNESS

|     |     |     |   |   |   |
|-----|-----|-----|---|---|---|
| 5mm | 5mm | 0mm | 0 | 0 | 0 |
|-----|-----|-----|---|---|---|

29 PENETRATION

|     |     |      |   |   |   |
|-----|-----|------|---|---|---|
| 5cm | 5cm | 10cm | 0 | 0 | 0 |
|-----|-----|------|---|---|---|

30 OVERALL OIL IMPACT: N YL (L) N H

31 OIL TYPE: Pooled House Tar Asphalt Sticky Seal

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 25  
Gravel 50 Sand 25 Mud/silt \_\_\_\_\_

36 CATALOGED ANAD. FISH STREAM? Y (N)  
NOMINATED, NOT CATALOGED

37 CATALOG #: NONE

38 STREAM NAME: \_\_\_\_\_

39 OIL IN STREAM BED? Y (N)

40 OIL ON STREAM BANKS? Y (N)

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

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

Wharf: \_\_\_\_\_

43 ANADROMOUS FISH PRESENT? Y (N)  
FRY PRESUMED

44 ANADROMOUS FISH OBSERVATION

| Species | Aerial | Ground |
|---------|--------|--------|
|         |        |        |
|         |        |        |
|         |        |        |

COMMENTS: PREDOMINANTLY FINE GRAINED SUBSTRATE ON LOW  
EXPOSURE BEACH. TAR MATS 20m x 2m N.W. OF STREAM.  
BURIED HOUSE: LENS (5-15cm BELOW SURFACE; 5-10cm THICK)  
E OF STREAM (25m x 1m). TAR MATS IN SMALL GRAYEL

18/55

**43 PHOTOLCC**

451

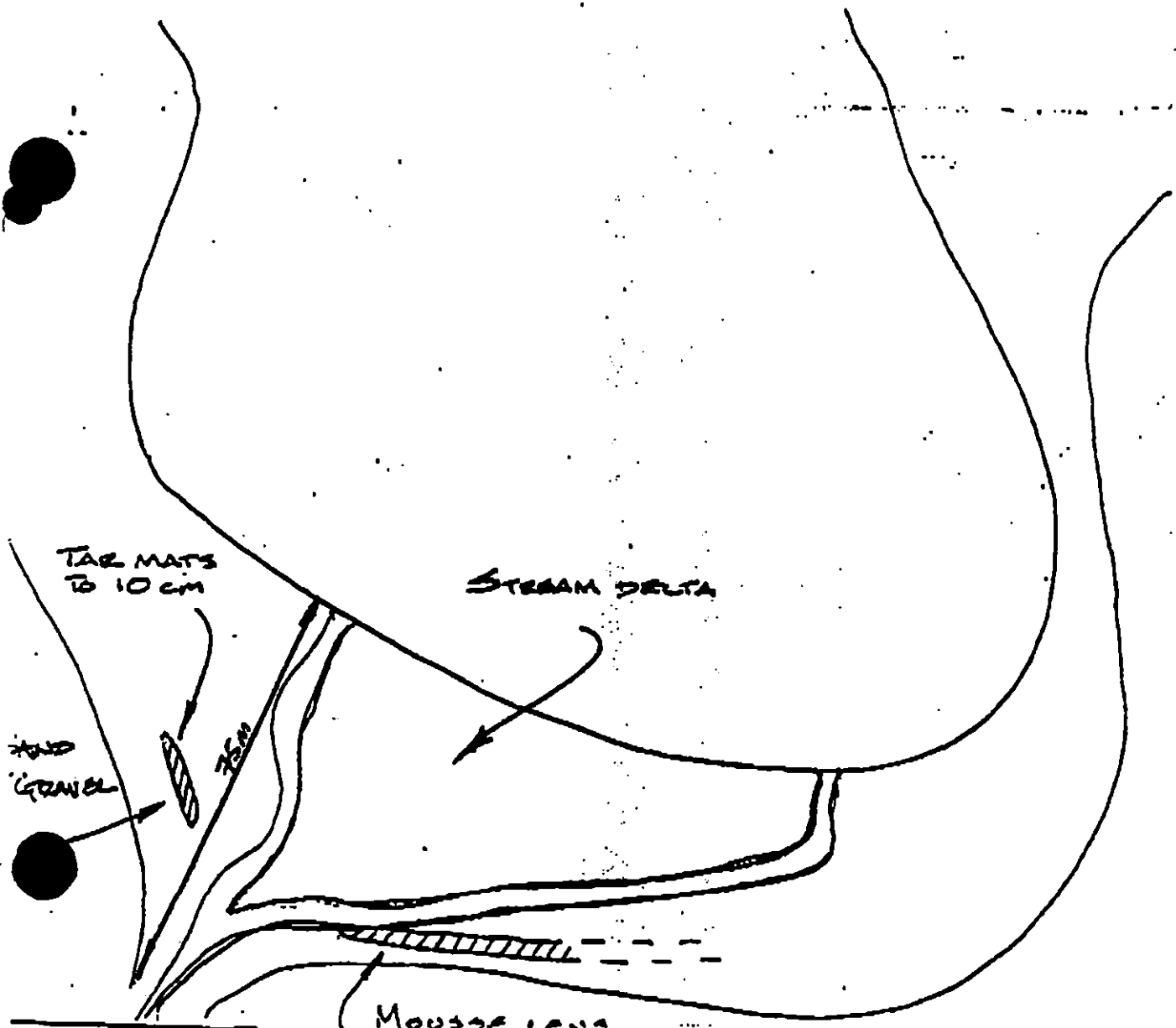
**DESCRIPTION**

RECOMMENDATIONS: MANUAL REMOVAL OF SURFACE  
TAR MATS. MANUALLY REMOVE BURIED MOUSSE LENS  
(REMOVE ONLY OILED LENS, NOT CLEAN OVERBURDEN)

I agree with recommendations.

184 2nd Floor

#### 40 OIL DISTRIBUTION DIAGRAM



23/55

Segment EV 012

4/22/90

no stream number

Michael Fawcett

Ecological Summary

This small stream enters via a biologically barren boulder/cobble/pebble/gravel beach in a small cove. More stable sediments and boulder on either end of cove have healthy community of Fucus, barnacles, mussels, etc. Two or three harbor seals were hauled out on rocky point at east end of cove when we arrived. One sea otter and a pair of red-breasted mergansers were also seen.

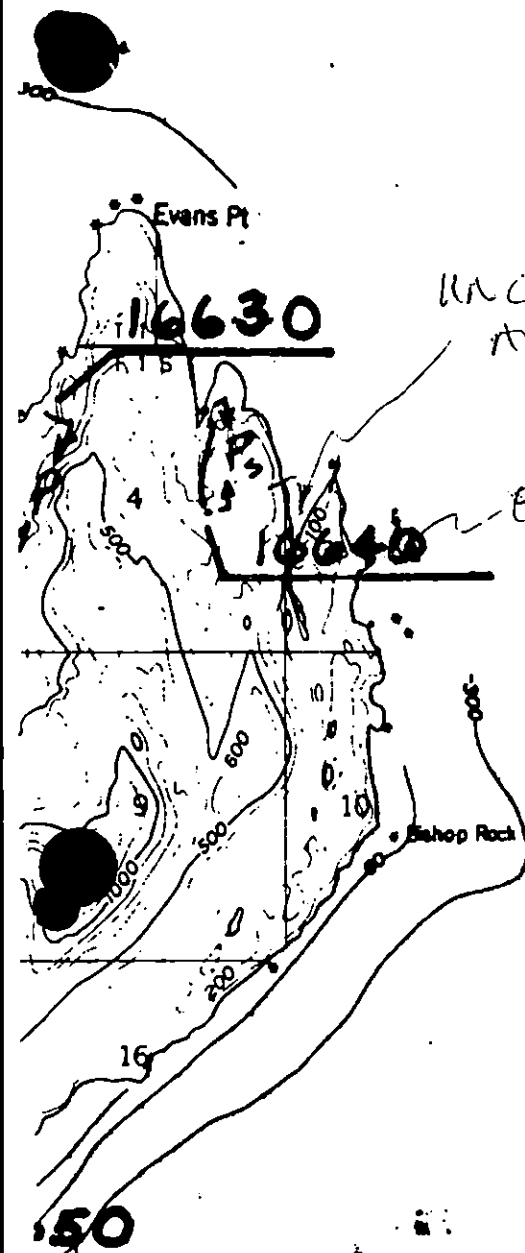
No ecological constraints re; cleanup procedures

*M. Fawcett*

ECOLOGICAL  
MAP

EV-012

P  
A  
S  
S  
A  
G  
E



UNCATALOGUED  
ANTHROPOLOGICAL  
STATION

EAGLE NEST

226-40

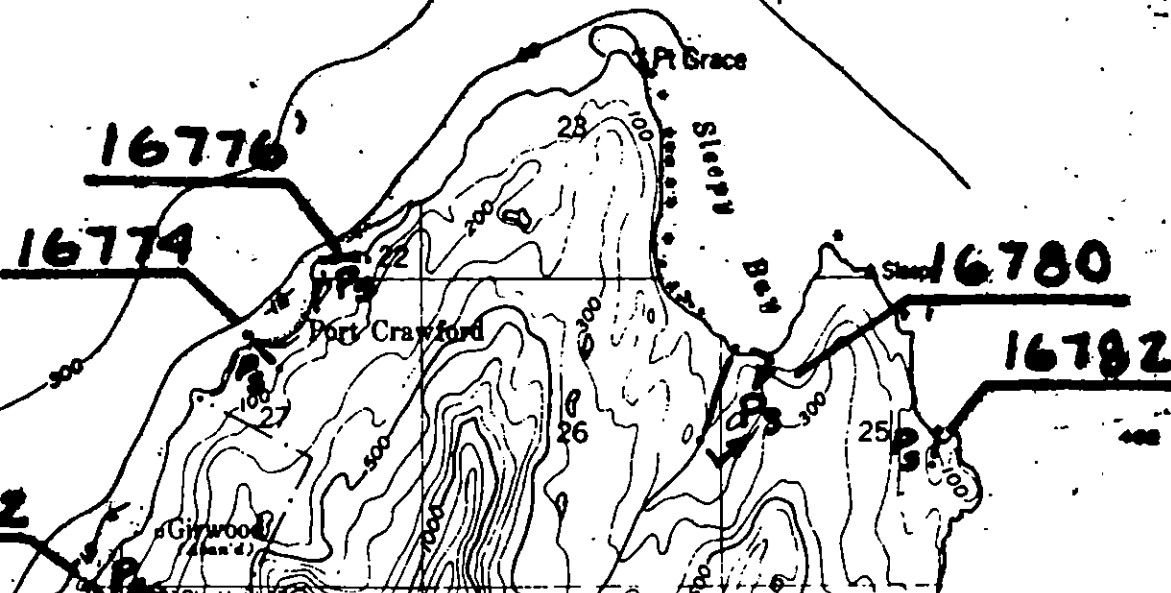
Upper points document  
limits of fish surveys  
and usually not the  
extent of fish habitat

50  
2

16776

16774

16772



EV-13

EV-

V-12

SUBJECT SITE  
LOCATED EV-12 A  
(1 OF 2)

EV-40

XXXX Wide

//// Medium

--- Narrow

TTTT Very Light

EV-12

ADEC Segment Length: 667m

0 100 200 300

Map Key: PWS-180

Name: Reimer

Date: 4/7/90

REGION: PRINCE WILLIAM SOUND

SEGMENT: ST/EV-014

SUBDIVISIONS: A (1 OF 1)

SHORELINE EVALUATION

SEGMENT ST/ EV-014 SUBDIVISION A (1 OF 1) DATE 4/6/90

**SEGMENT ENVIRONMENTAL SENSITIVITIES AND TIME CONSTRAINTS:**

Salmon stream mouth no. (226-40 #16640)

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

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

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

7II Subsistence area: Deer harvesting (8/15 to 2/28)

See attached Ecological Constraint Sheet for specific constraints and contacts.

**SUBDIVISION ECOLOGICAL CONSTRAINTS:**

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

**ARCHAEOLOGICAL CONSTRAINTS:**

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

SHPO SIGNATURE: \_\_\_\_\_ DATE: \_\_\_\_\_

**OILING CATEGORIZATION:**

Wide 0 m: Medium 98 m: Narrow 48 m: V.Light 39 m: No Oil 591 m  
Subsurface Oil Observed: Yes \_\_\_\_\_ No X Maximum Depth \_\_\_\_\_

**RECOMMENDATIONS:**

|                                                           |                                                        |
|-----------------------------------------------------------|--------------------------------------------------------|
| <input type="checkbox"/> No Treatment Recommended         | <input type="checkbox"/> Snare/Absorbent Booms         |
| <input checked="" type="checkbox"/> Treatment Recommended | <input type="checkbox"/> Oil Snares (pom poms)         |
| <input type="checkbox"/> Manual Pickup                    | <input type="checkbox"/> Absorbents (pads, rolls, etc) |
| <input checked="" type="checkbox"/> Bioremediation        | <input type="checkbox"/> Spot Washing: _____ Wands     |
| <input checked="" type="checkbox"/> Tarmat: _____ Breakup | <input type="checkbox"/> Beach Cleaner                 |
| <input checked="" type="checkbox"/> Removal               | <input type="checkbox"/> Other (see comments)          |

COMMENTS: The recommended treatment activities are as follows: 1) Bioremediation of area shown on attached sketch map, 2) Removal of tarmat along stream (see map) and, 3) Manual pick up of oiled vegetation. Treatment activities should be conducted 5/15 to 7/10 based on above anadromous stream constraints.

**TAG COMMENTS:**

TAG APPROVAL DATE: \_\_\_\_\_

ADEC \_\_\_\_\_  
EXXON \_\_\_\_\_  
NOAA \_\_\_\_\_  
USCG \_\_\_\_\_

FOSC: \_\_\_\_\_ DATE: \_\_\_\_\_

# FIELD SHORELINE COMMENT SHEET

SEGMENT ST/ EV-14 SUBDIVISION: \_\_\_\_\_ DATE 4-6-90

USCG  
NAME Randolph Hubbard SIGNATURE Randolph Hubbard

☐ NO TREATMENT RECOMMENDED ☐ TREATMENT SUGGESTED  
COMMENTS

1. AREA appears to be fairly free of oil damage, maybe in small spot where oil stain occurred I believe natural environment will decay most substances remaining.

ADEC  
NAME J. LYNN MARTIN SIGNATURE J. Lynn Martin

☐ NO TREATMENT RECOMMENDED ☒ TREATMENT SUGGESTED  
COMMENTS

AGREE WITH EXXON OPS. RECOMMENDATION TO ONLY USE MANUAL CLEANUP TECHNIQUES AROUND STREAM BED TO REMOVE TARMATS AND OIL COATED GRASS.  
NO TREATMENT RECOMMENDED FOR LIGHT BANDS OF OIL FOUND IN ROCKY HEADLANDS ON EITHER SIDE OF SEGMENT, DUE TO ACCESSIBILITY.  
SUPER-TIDAL NEEDS TO BE LOOKED AT AFTER SNOW MELT

## LAND MANAGER

NAME PATRICK SELAWIE SIGNATURE Patrick Selawie

☒ NO TREATMENT RECOMMENDED ☐ TREATMENT SUGGESTED  
COMMENTS

BECAUSE oil was found so far up the stream, I would recommend the super-tidal zone be removed coated over. If oil is found, I would reconsider my recommendation decision, if it is a sensitive salmon creek.

## SHORELINE OILING SUMMARY

REVISION NO. 08/23/90

OG Reimer USCG Hubbard SEGMENT ST/ EV-14  
 BIO Zamora LAND REP Selanoff (CVC) SUBDIVISION A  
 EXXON Garcia ADEC Martin TIME 17:27 to 18:25  
 TEAM NO.: 16 TIDE LEVEL: +1 to +2.5 DATE 4/16/90  
 EST. SUBDIVISION LENGTH: 382 m ☒ Sun ☒ Clouds ☐ Fog ☐ Rain ☐ Snow  
 UPLANDS DESCRIPTION: ☒ Grass ☒ Forest ☒ Rock Snow  
 SURVEYED FROM: ☒ Foot ☐ Boat ☐ Helo WORKING DIRECTION: East to West  
 SURFACE SEDIMENTS: R 10 % B 30 % C 20 % P 20 % G 15 % S 5 % M - % V - %  
 SLOPE: Long 80 % Hang 20 % Vert - % WAVE EXPOSURE: ☐ Low ☒ Med ☐ High  
 OIL CATEGORY LENGTH: W 0 m MAS m N 140 m VL 50 m NO 192 m

## SURFACE OIL

| CHARACTER        | DISTRIBUTION |   |   |   | OIL / FILM COLOR |     |    |     |    |    |    |    | IMPACTED ZONES |   |   |   |
|------------------|--------------|---|---|---|------------------|-----|----|-----|----|----|----|----|----------------|---|---|---|
|                  | R            | B | P | N | NO               | OR  | CL | OP  | NO | OR | CL | OP | SU             | U | M | L |
| ASPHALT PAVEMENT |              |   | X |   |                  | X   |    |     |    |    |    |    | X              |   |   |   |
| POOLED           |              |   |   |   |                  |     |    |     |    |    |    |    |                |   |   |   |
| COVER            |              | X |   | ✓ |                  | X/✓ |    | X/✓ |    |    |    |    | X/✓            |   |   |   |
| COAT             |              | X |   |   |                  |     |    |     |    | X  |    |    | X              |   |   |   |
| STAIN            |              |   |   |   |                  |     |    |     |    |    |    |    |                |   |   |   |
| MOUSSE           |              |   |   |   |                  |     |    |     |    |    |    |    |                |   |   |   |
| PATTIES          |              |   |   |   |                  |     |    |     |    |    |    |    |                |   |   |   |
| TARBALLS         |              |   |   |   |                  |     |    |     |    |    |    |    |                |   |   |   |
| FILM             |              |   |   |   |                  |     |    |     |    |    |    |    |                |   |   |   |
| NO OIL           |              |   |   |   |                  |     |    |     |    |    |    |    | -              |   | X | X |

PAVEMENT: H F (S) / sq. m by 1' cm

PATTIES / TARBALLS 0 BAGS

NEAR SHORE SHEEN? (NO) BR RW SL TL

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

DEBRIS COLLECTED  
☒ YES ☐ NOTYPE Pom pom#BAGS 1

Photographs:

Roll No. ST-16-5Frames 32-36

## SUBSURFACE OIL

| PIT NO. | PIT DEPTH (cm) | SUBSURFACE OIL CHARACTER |    |    |    |    | OILED INTERVAL (CM-CM) | BELOW |    | OIL / FILM COLOR |    |    |    |    |    |    |    | PIT ZONE |   |   |   | A N A | SUBSURFACE SEDIMENTS |
|---------|----------------|--------------------------|----|----|----|----|------------------------|-------|----|------------------|----|----|----|----|----|----|----|----------|---|---|---|-------|----------------------|
|         |                | OP                       | OR | CL | OP | NO |                        | UO    | UO | NO               | OR | CL | OP | NO | OR | CL | OP | SU       | U | M | L |       |                      |
| 1       | 20             |                          |    |    |    | X  | -                      |       |    |                  |    |    |    |    |    |    |    |          |   | X |   |       | G-PC                 |
| 2       | 30             |                          |    |    |    | X  | -                      |       |    |                  |    |    |    |    |    |    |    |          | X |   |   |       | GP                   |
| 3       | 25             |                          |    |    |    | X  | -                      |       |    |                  |    |    |    |    |    |    |    |          | X |   |   |       | GP                   |
| 4       | 25             |                          |    |    |    | X  | -                      |       |    |                  |    |    |    |    |    |    |    |          | X |   |   |       | GP                   |
| 5       | 30             |                          |    |    |    | X  | -                      |       |    |                  |    |    |    |    |    |    |    |          |   | X |   |       | G-PC                 |
| 6       | 20             |                          |    |    |    | X  | -                      |       |    |                  |    |    |    |    |    |    |    |          |   | X |   |       | GP                   |

COMMENTS Packet beach with rocky headlands on either side, wide tidal flats at stream mouth. Broken oil cover under and around boulders and rock in the east and west side of segment along UIZ. Small (1x3m. x 1cm) pavement patch in UIZ along east side of stream, oiled grass along sides of stream in the backshore. No oil was found on the tidal flats, Super-tidal cover with snow.

## SHORELINE OILING SUMMARY (PAGE 2 of 2)

REVISION 02/22/90

SEGMENT ST/ EV-14 SUBDIVISION A

## SUBSURFACE OIL (CONTINUED)

| PIT NO. | PIT DEPTH (cm) | SUBSURFACE OIL CHARACTER |    |    |    |    | OILED INTERVAL (CM-CM) | BELOW |    | OIL / FILM COLOR |    |    |    |    |    |    |    | PIT ZONE |   |   |   | A N A | SUBSURFACE SEDIMENTS |
|---------|----------------|--------------------------|----|----|----|----|------------------------|-------|----|------------------|----|----|----|----|----|----|----|----------|---|---|---|-------|----------------------|
|         |                | OP                       | OR | OL | OF | NO |                        | UO    | UC | SL               | BR | OR | WA | ST | BL | TL | LR | SU       | U | M | L |       |                      |
| 7       | 30             |                          |    |    |    | X  | .                      |       |    |                  |    |    |    |    |    |    |    |          |   |   | X |       | CSP                  |
| 8       | 30             |                          |    |    |    | X  | .                      |       |    |                  |    |    |    |    |    |    |    |          |   |   | X |       | CSP                  |
| 9       | 30             |                          |    |    |    | X  | .                      |       |    |                  |    |    |    |    |    |    |    |          |   |   | X |       | CPS                  |
| 10      | 35             |                          |    |    |    | X  | .                      |       |    |                  |    |    |    |    |    |    |    |          |   |   | X |       | CPS                  |
|         |                |                          |    |    |    |    | .                      |       |    |                  |    |    |    |    |    |    |    |          |   |   |   |       |                      |
|         |                |                          |    |    |    |    | .                      |       |    |                  |    |    |    |    |    |    |    |          |   |   |   |       |                      |
|         |                |                          |    |    |    |    | .                      |       |    |                  |    |    |    |    |    |    |    |          |   |   |   |       |                      |
|         |                |                          |    |    |    |    | .                      |       |    |                  |    |    |    |    |    |    |    |          |   |   |   |       |                      |
|         |                |                          |    |    |    |    | .                      |       |    |                  |    |    |    |    |    |    |    |          |   |   |   |       |                      |
|         |                |                          |    |    |    |    | .                      |       |    |                  |    |    |    |    |    |    |    |          |   |   |   |       |                      |
|         |                |                          |    |    |    |    | .                      |       |    |                  |    |    |    |    |    |    |    |          |   |   |   |       |                      |
|         |                |                          |    |    |    |    | .                      |       |    |                  |    |    |    |    |    |    |    |          |   |   |   |       |                      |
|         |                |                          |    |    |    |    | .                      |       |    |                  |    |    |    |    |    |    |    |          |   |   |   |       |                      |
|         |                |                          |    |    |    |    | .                      |       |    |                  |    |    |    |    |    |    |    |          |   |   |   |       |                      |
|         |                |                          |    |    |    |    | .                      |       |    |                  |    |    |    |    |    |    |    |          |   |   |   |       |                      |
|         |                |                          |    |    |    |    | .                      |       |    |                  |    |    |    |    |    |    |    |          |   |   |   |       |                      |
|         |                |                          |    |    |    |    | .                      |       |    |                  |    |    |    |    |    |    |    |          |   |   |   |       |                      |

COMMENTS

REVIEWED

JW

DATE

4/9/90

# SHORELINE ECOLOGICAL SUMMARY

REVISION: 02/22/90

Segment ST / EU-14 Subdivision 1927 ON Date (mo / day / yr) 4 / 6 / 90  
 Time (24 hr) 1825 OFF Biologist TONY ZAMORA

- (A) Substrate type and % of segments:  
 (1) Bedrock 10 (2) Boulder 30 (3) Cobble 20 (4) Pebble 35 (5) Sand 45 (6) Silt —
- (B) Overall % cover of biota (% of segment): Dense — Moderate — Low —
- (C) Density, substrate preference (by number from A, above), & vertical zonation of major taxa: (upper-U; mid-M; low tidal-L); juveniles / adults (X), new settlement (O)
- Photographs: ST-16-5  
 Roll No. 32-36  
 Frames 32-36

## BARNACLES

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

NOT PRESENT

## MYTILUS

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

NOT PRESENT

## GASTROPODS

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

NOT PRESENT

## FUCUS

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

NOT PRESENT

## Wildlife Observations/ General Comments:

- BEDROCK OVERALL ALGA COVERING IS DENSE, FUCUS ~50% WITH PALMARIA, FIL. GRN. (FILAMENTOUS GREEN ALGAE)
- BIOTA DENSE ONLY ON ROCKY POINTS BORDERING SAND/PEBBLE BEACH
- LITTLE SEEN ON BEACH EXCEPT: FEW LAMINARIAS ANCHORED TO PEBBLES AND BARNACLES ON LH. PEBBLE.
- 30% MORTALITY OBSERVED OF OIL COATED BARNACLES
- UNDER COBBLE IN LOW TIDE: LEPASTERIIDS, URCHIN, ACMAEIDS, BRYOZOIDS, GU SPIRORCHIDS, OLIGOCHATES, NEMERTANS, AMPHIPODS
- WILDLIFE: SEA LION.
- ECOLOGICAL CONSIDERATIONS: 1 AB, 7 JT GU.

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

OG Reimer

SEGMENT ST/ EV-14

SUBDIVISION A

DATE 4 / 6 90

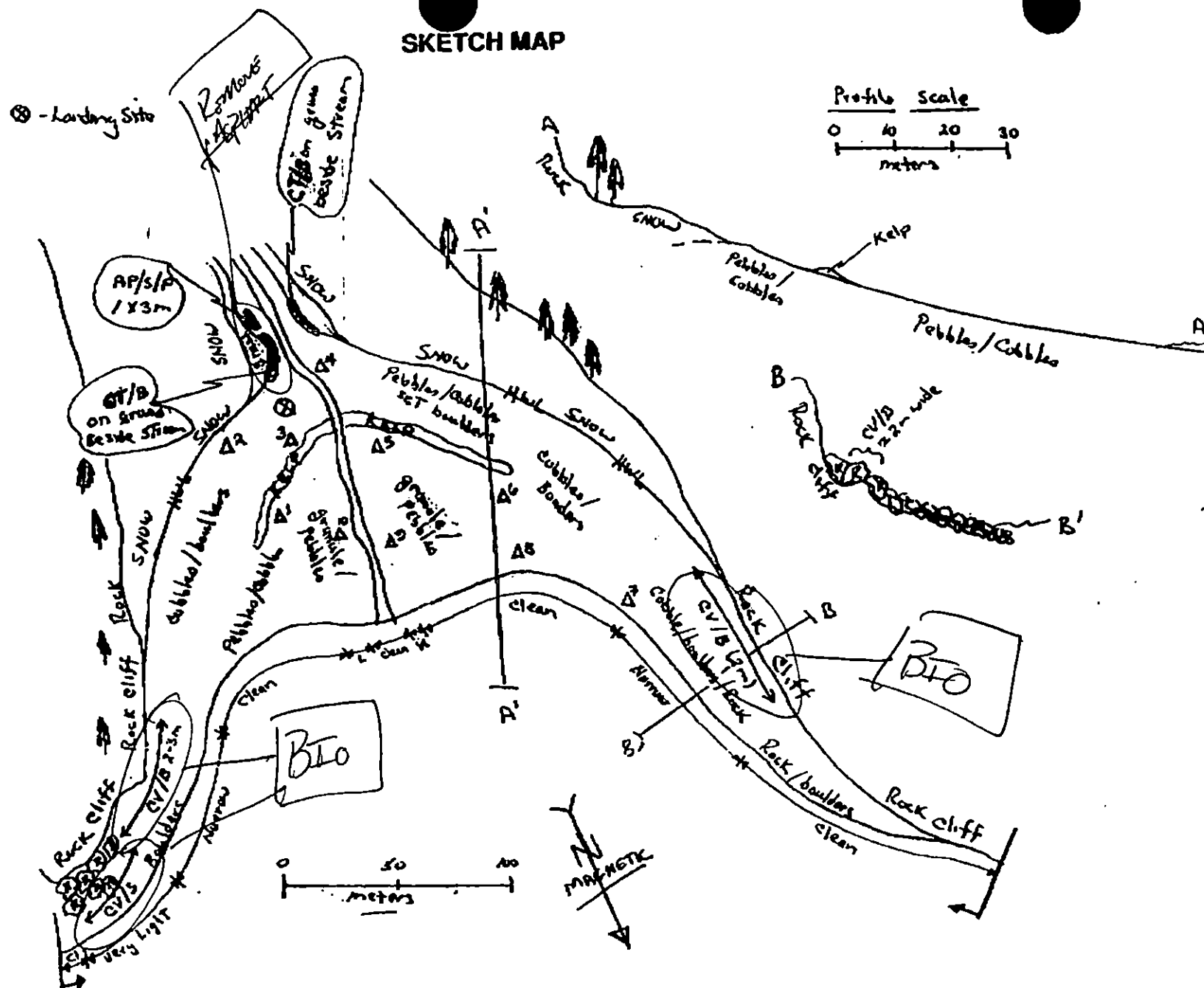
# CHECKLIST

- ☒ Arrow
- ☒ Approx. Scale
- ☒ Seg/Sub Entry
- ☒ Oil Dist
- ☒ Width
- ☒ Length
- ☒ % Cover
- ☒ Substrate Character
- ☒ Est. HML/LWL
- ☒ SS
- ☒ Profile Location(s)
- ☒ Photo(s)
- ☒ Pit Location(s)
- ☒ Photo Location(s)

## LEGEND

- 1  $\Delta$   
Pit - No Subsurface Oil
- 2  $\Delta$   
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

## SKETCH MAP



EV-4

BOULDER  
ROCK OUTCROP

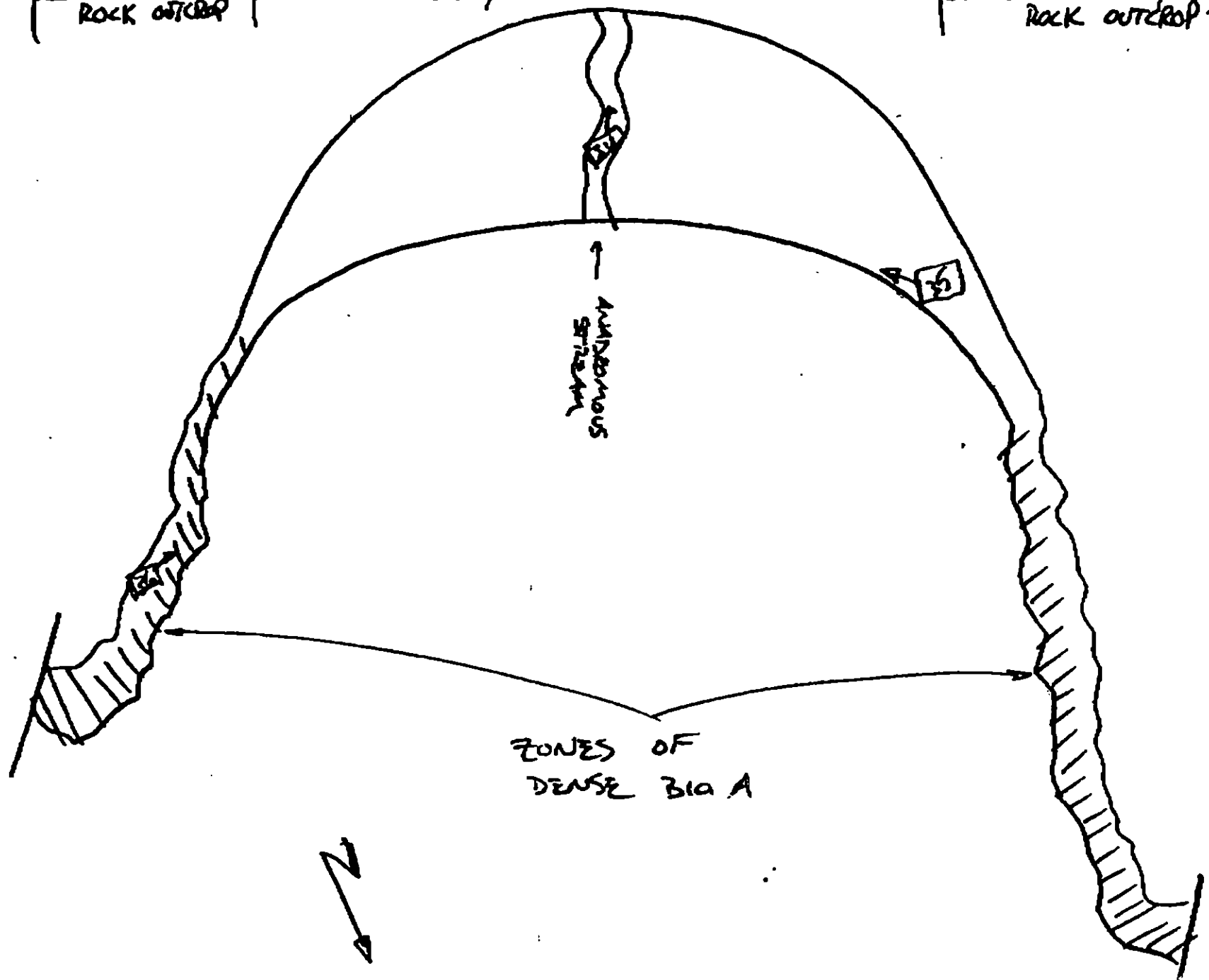
SAND/PEBBLE BEACH

BOULDER  
ROCK OUTCROP

← AUTIGENOUS  
SPHATE

35

ZONES OF  
DENSE BIA A



EV-14

EV

EV-14

XXXX Wide

//// Medium

--- Narrow

TTTT Very Light

OOOO No

ADEC Segment Length: 777m

0 100 200 300

Map Key: PWS-182

Name: Reimer

Date: 4/6/90

Data Entered:

# SHORELINE EVALUATION

SEGMENT ST/ EV-014 SUBDIVISION A (1 OF 1) DATE 4/6/90

## SEGMENT ENVIRONMENTAL SENSITIVITIES AND TIME CONSTRAINTS:

Salmon stream mouth no. (226-40 #16640)

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

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

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

7II Subsistence area: Deer harvesting (8/15 to 2/28)

See attached Ecological Constraint Sheet for specific constraints and contacts.

## SUBDIVISION ECOLOGICAL CONSTRAINTS:

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

## ARCHAEOLOGICAL CONSTRAINTS:

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

SHPO SIGNATURE: Charles E. Holmes DATE: 4/17/90

## OILING CATEGORIZATION:

Wide 0 m: Medium 98 m: Narrow 48 m: V.Light 39 m: No Oil 591 m  
Subsurface Oil Observed: Yes        No X Maximum Depth       

## RECOMMENDATIONS:

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

COMMENTS: The recommended treatment activities are as follows: 1) Bioremediation of area shown on attached sketch map, 2) Removal of tarmat along stream (see map) and, 3) Manual pick up of oiled vegetation. Treatment activities should be conducted 5/15 to 7/10 based on above anadromous stream constraints.

## TAG COMMENTS:

AT TIME OF TREATMENT MONITORS TO ASSESS SUITZ.

TAG APPROVAL DATE: 4/17/90.

ADEC Art Weiner  
EXXON Andy Teal  
NOAA Burl Wescott  
USCG Kenneth Keane

FOSC: [Signature] DATE: 5-1-90

Do not bioremediate IAW km's desire.

OG Reimer

SEGMENT ST/ EV-14

SUBDIVISION A

DATE 4 / 6 90

# CHECKLIST

- ☒ H Arrow
- ☒ Approx. Scale
- ☒ Sub/Div Bdry
- ☒ Oil Dist.
- ☒ Width
- ☒ Length
- ☒ % Cover
- ☒ Substrate Character
- ☒ Est. HMLAYR
- ☒ SS
- ☒ Profile Location(s)
- ☒ Photo(s)
- ☒ Pit Location(s)
- ☒ Photo Location(s)

## LEGEND

1 Δ

Pit - No Subsurface Oil

2 Δ

Pit - Subsurface Oil

CT/C

Continuous Distribution

CT/B

Broken Distribution

CT/P

Patchy Distribution

CT/S

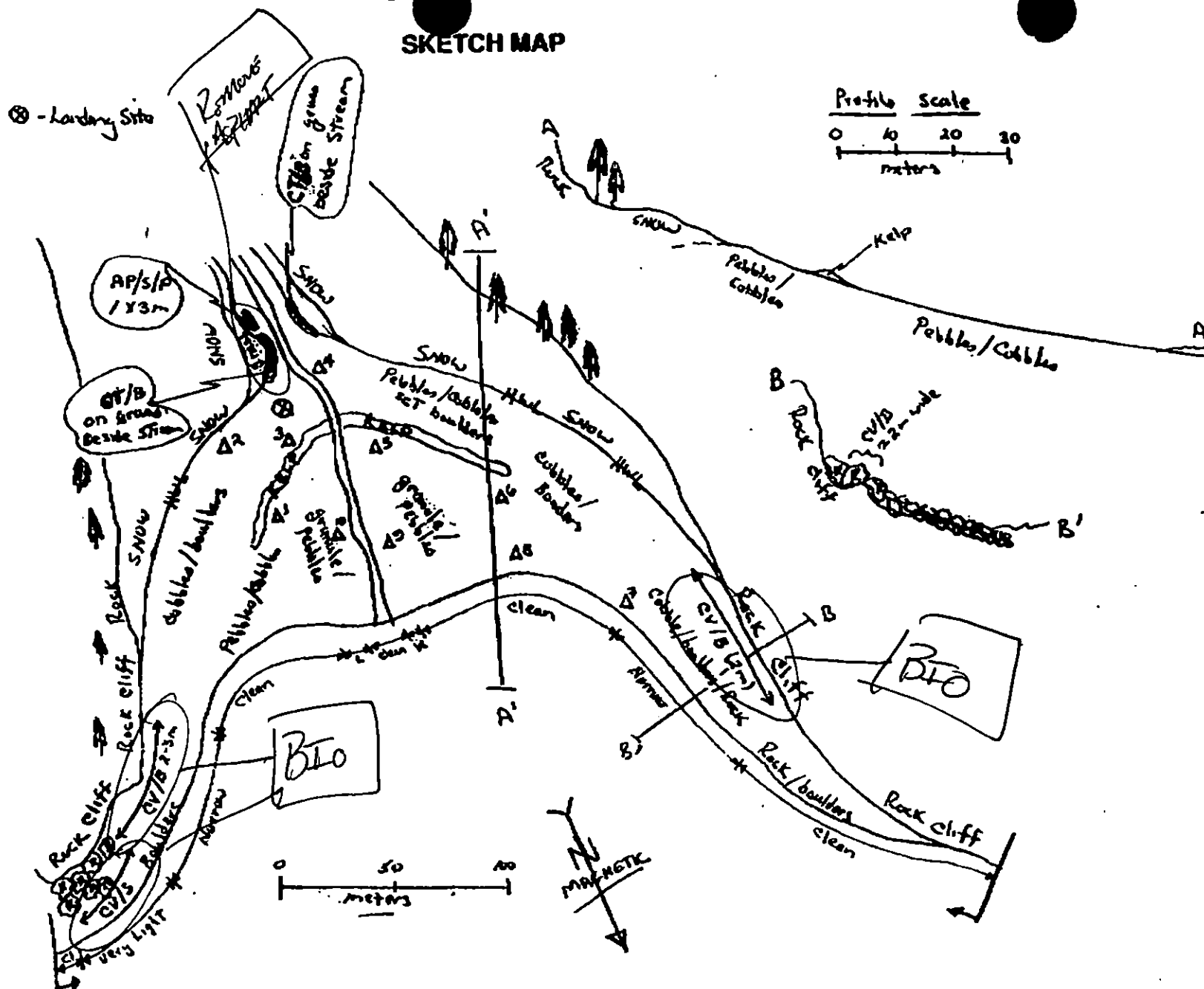
Splashed Distribution

Oiled Vegetation

1 ●

Photo location, direction, and number

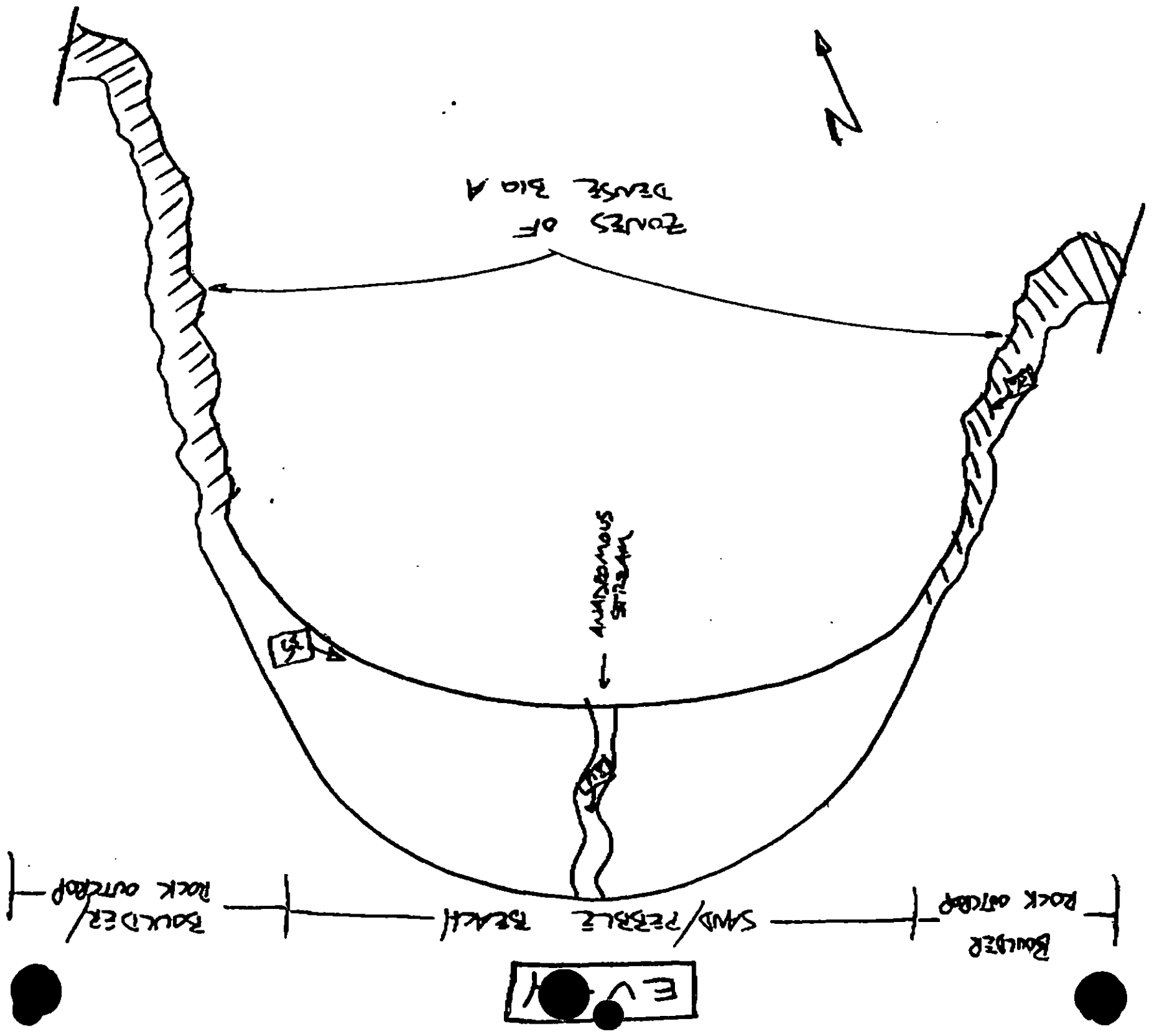
## SKETCH MAP



Oil Character Length (m): AP 1 PO 0 CV 190 CT 0 ST 0 MS 0 PT 0 TB 0 FL 0 NO 101

REVISION: 08/24/90

UNIVERSITY OF CALIFORNIA, BERKELEY



EV-14 EV

XXXX Wide

//// Medium

--- Narrow

TTTT Very Light

OOOO No

EV-14

ADEC Segment Length: 777m

0 100 200 300

Map Key: PWS-182

Name: Reimer

Date: 4/6/90

data entered:

**1991 MAYSAP EVALUATION**

**SEGMENT:** EV 014 **SUB:** A **REGION:** PWS **SURVEY DATE:** 5/2/91

**ENVIRONMENTAL SENSITIVITIES:**

Work Window(s) OPEN 5/1 - 7/10; RESTRICTED 7/10 - 9/15

Ecological/Constraints (see page two for details) Fish harvest area, Anadromous stream, Subsistence - Deer harvesting

**ARCHAEOLOGICAL CONSTRAINTS:**

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

**SHPO Signature:** \_\_\_\_\_ **Date:** \_\_\_\_\_

**RECOMMENDATIONS:**

|                                    | <b>INITIAL</b> | <b>TAG</b> | <b>FOSC</b> |
|------------------------------------|----------------|------------|-------------|
| <b>TREATMENT REQUIRED (Y or N)</b> | <u>N</u>       | _____      | _____       |
| Manual Pickup (Check as Req.)      | _____          | _____      | _____       |
| Spot Washing                       | _____          | _____      | _____       |
| Bio-Customblen Only                | _____          | _____      | _____       |
| Bio-Inipol/Customblen              | _____          | _____      | _____       |
| Other _____                        | _____          | _____      | _____       |
| Other _____                        | _____          | _____      | _____       |

**COMMENTS:**

**INITIAL:** \_\_\_\_\_

**TAG:** \_\_\_\_\_

**FOSC:** \_\_\_\_\_

**TAG APPROVAL DATE:** \_\_\_\_\_ **FOSC APPROVAL DATE:** \_\_\_\_\_

**ADEC** \_\_\_\_\_ **FOSC** \_\_\_\_\_

**EXXON** \_\_\_\_\_

**USCG** \_\_\_\_\_

**NOAA** \_\_\_\_\_

**ECOLOGICAL CONSTRAINTS  
1991 FIELD ACTIVITIES**

**Fish Harvest Area:** Unlimited treatment unless otherwise directed by ADF&G. Sheen containment/recovery procedures required for mechanical treatment.

**Anadromous Stream:** Unlimited treatment up to stream bank between May 15 and July 10. ADF&G approval required for work after July 10. Fish Habitat Permit required for instream work. ADF&G approval required for bioremediation within 100 meters of anadromous stream after July 10.

**Subsistence - Deer Harvesting:** Unlimited treatment prior to 8/15.

TEAM NO. 6 SEGMENT EV-014 SUBDIVISION A DATE 05/02/91

**ADEC / ADF46**

NAME Aimee Weseman

SIGNATURE Aimee Weseman

☐ NTR ☒ Treatment Recommended Anadromous Fish Stream, Commercial Tourism  
The problem oiled area on this site is located 10m from the stream channel. Site B, contains HSOR & MOR sediments. Though 2 bags of oily material were removed during the survey, enough remains to pose a threat to both salmon eggs & fry should the oil migrate to the stream or the stream wander into the oil. Recommended treatment is the manual removal of HSOR sediments followed by a thorough manual tilling.

**EXXON**

NAME RANDALL K. BOYER

SIGNATURE Randall K. Boyer

☒ NTR Areas of AP (between large boulders) and highest concentrations of surface residual oiling were addressed by the VECO pickup crew. Referring to the OG sketch, Area B, highest concentrations of residual oiling and AP were collected. The remainder of the oiling in Area B was disrupted by tilling (manual). The minor oiling that remains would not achieve any environment or economical benefit to retreat. Deer tracks were noted on the subdivision and focus beds were prolific.

**NDMANAGER**

NAME CHARLES SELANOFF OF CHENEGA BAY

SIGNATURE Charles Selanoff

☐ NTR Due to the oiling near the stream, it poses a threat to the salmon eggs + fry this area should be worked over manually and mechanically. More emphasis on other team members should be more positive. Treatment is recommended.

**USCG/NOAA**

NAME CWO R. SPURR / Rebecca Hoff

SIGNATURE R. Spurr / Rebecca Hoff

☐ NTR One small problem area remains at this site with surface + some subsurface oil (Area B). This area could potentially impact the anadromous stream, though most toxic components in the oil have likely weathered by now, and this risk is low. If deemed necessary, area B could be turned over manually to promote depodation of the subsurface oil. No other areas in the segment indicate a need for further treatment.

~~REMOVED: 5/8/91 me~~  
~~revised 5/1/91~~

0 25 50  
meters



EV-014-A

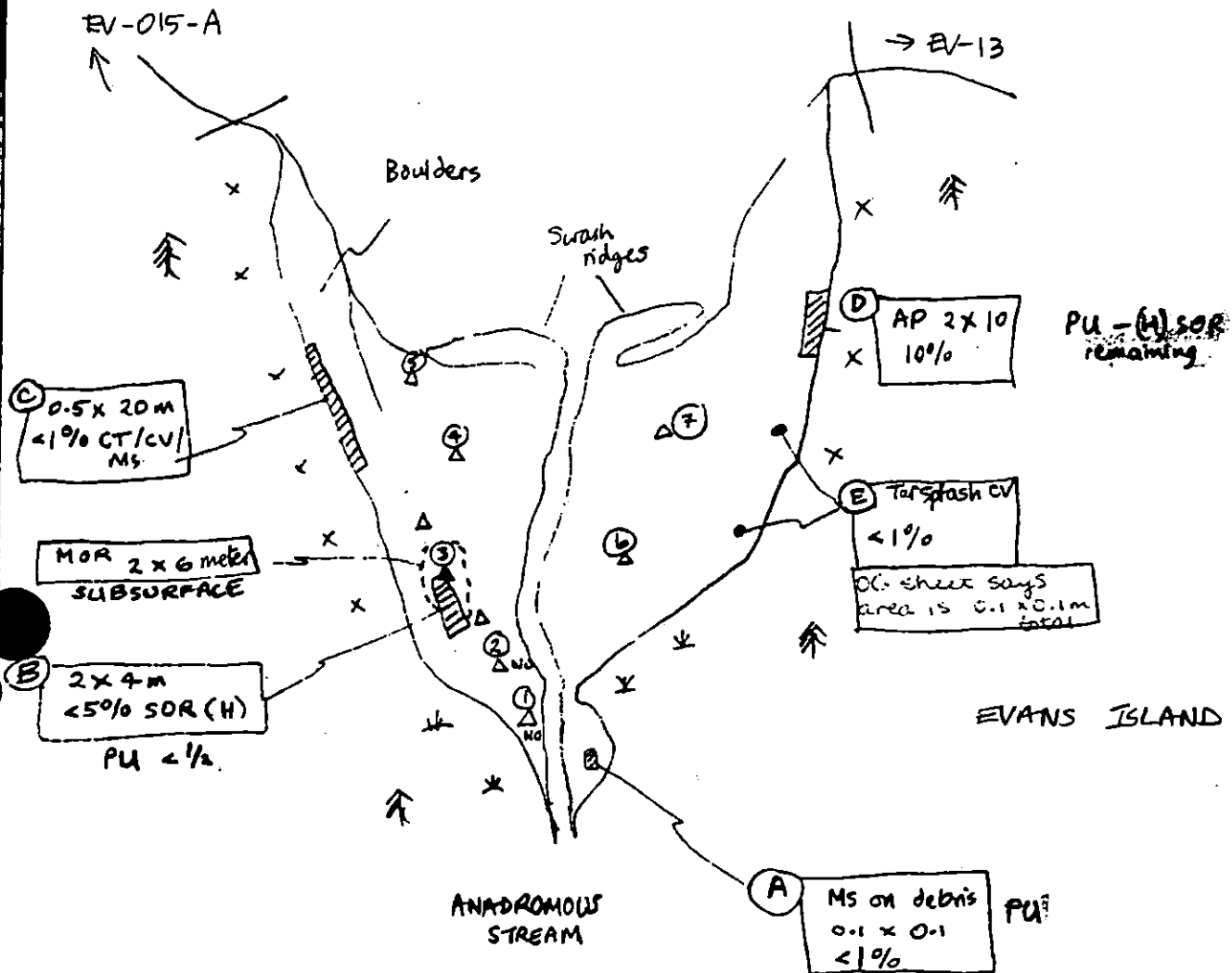
05/02/91

OG. Map

D. I. Little

0910 — 1015

# KNIGHT ISLAND PASSAGE



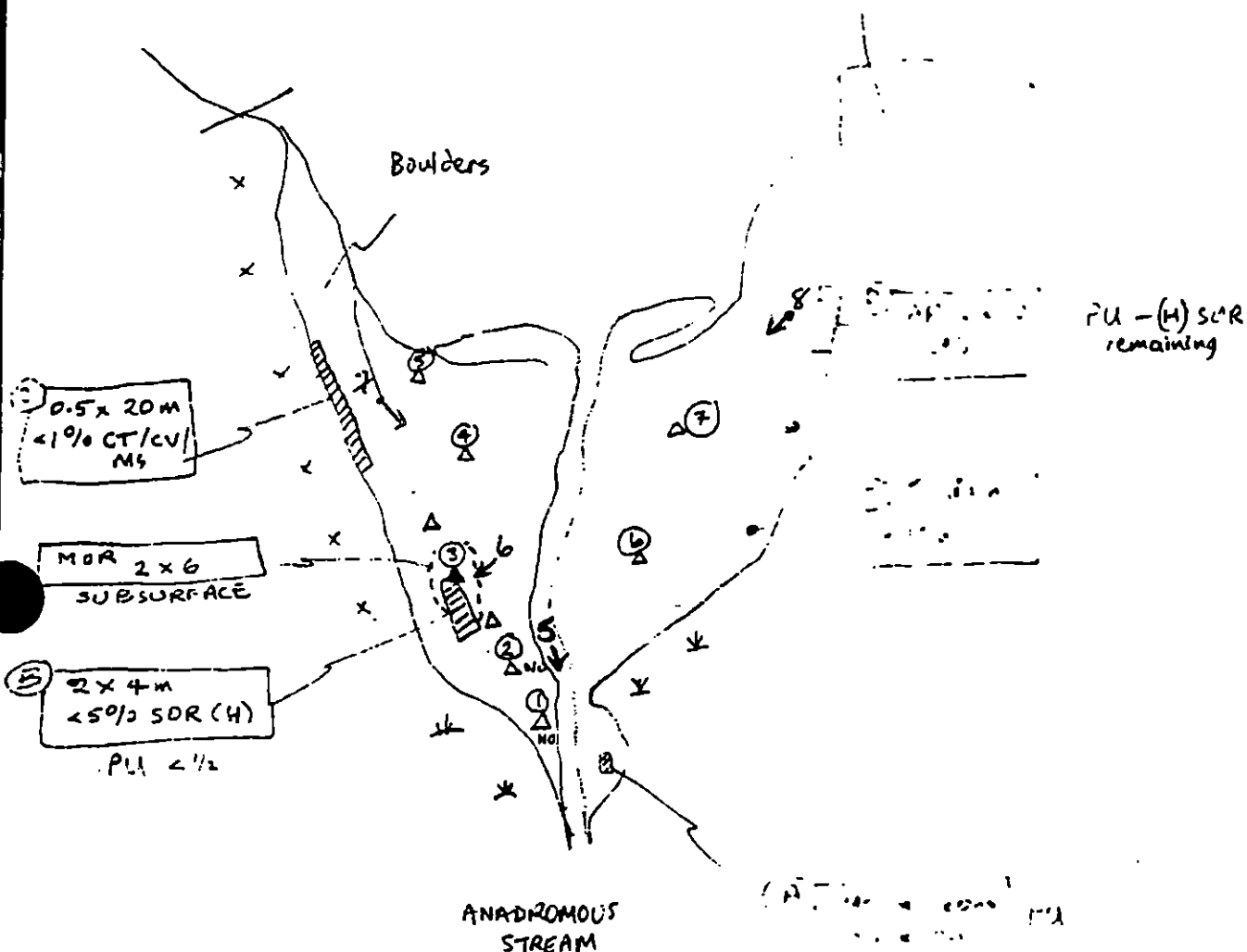
| # | PIT | TD | OIL | clean below | W/T   | seeds | sheen | Tide 2 |
|---|-----|----|-----|-------------|-------|-------|-------|--------|
| ① | 25  | N  | Y   | —           | 98-99 | —     | UITZ  |        |
| ② | 35  | N  | Y   | —           | 98-99 | —     | UITZ  |        |
| ③ | 20  | Y  | Y   | —           | pg-98 | R     | UITZ  |        |
| ④ | 20  | N  | Y   | 15          | pg-99 | —     | NITZ  |        |
| ⑤ | 25  | N  | Y   | 10          | pg-99 | —     | LITZ  |        |
| ⑥ | 24  | N  | Y   | 20          | 95-pg | —     | UITZ  |        |
| ⑦ | 30  | N  | Y   | 15          | 99-99 | —     | LITZ  |        |

REVIEWED: 5/8/91 ML  
revised sl:

Maypap 6-05 #5-8



EV-OK-A 05/02/91  
CG Map D.I. Little  
0910-1015



| # | PIT | TD       | OIL | clean below | w/T    | SDS | sheen | Tide 2 |
|---|-----|----------|-----|-------------|--------|-----|-------|--------|
| ① | 25  | N        | Y   | —           | gp-gp  | —   | UT2   |        |
| ② | 35  | N        | Y   | —           | gp-gp  | —   | UT2   |        |
| ③ | 20  | Y<br>MOR | Y   | —           | pg-gp  | R   | UT2   |        |
| ④ | 20  | N        | Y   | 15          | pg-sg  | —   | HT2   |        |
| ⑤ | 25  | N        | Y   | 10          | pg-sg  | —   | LIT2  |        |
| ⑥ | 24  | N        | Y   | 20          | gs-pg  | —   | HT2   |        |
| ⑦ | 30  | N        | Y   | 15          | sg-sgp | —   | LIT2  |        |
| ⑧ |     |          |     |             |        |     |       |        |

# MAYSAP BIOLOGICAL SUMMARY FORM

TEAM # 6

DATE 5/2/91

SEGMENT # EU-014

TIDAL HEIGHT (Range) + 3/4 ft - 3/4 ft

SUBDIVISION 4

BIOLOGIST T. R. Schroeder

SEA STATE 1-2 foot chop

WIND SPEED/DIRECTION E - 10-15 mph

PHOTOGRAPHS: ROLL #

FRAME #

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

Beach is composed of black shale and fine sand. area is quite unproductive throughout the majority of the beach due to the unstable surface. This is further evidenced by the swash ferns in the LITZ.

Only two areas contain productive biological communities. One is the large boulders on the western point of the subdivision and the second is the bush ferns growth on the eastern portion of the subdivision. Oil present in (D) does not appear to be affecting vegetation or animals in this area.

Oil present in (B) is located in a non-productive portion of the beach. Birds below this location is also almost non-existent. a portion of (B) has been classified as subsurface (MOB). No biological communities would be affected by any treatment procedure or method decided upon.

## WILDLIFE OBSERVATIONS

TO BE COMPLETED IN ALL SUBDIVISIONS

| BIRDS            | # OF SPECIES | TOTAL BIRDS | FISH OBSERVED SPECIES PRESENT |
|------------------|--------------|-------------|-------------------------------|
| Eagles           | 1            | 3           | 1- Rock Blenny                |
| Seabirds         |              |             |                               |
| Waterfowl        | 3            | 46          |                               |
| Gulls/Kittiwakes | 1            | 5           |                               |
| Shorebirds       |              |             |                               |
| Corvids          | 1            | 1           |                               |
| Other Birds      | 1            | 3           |                               |

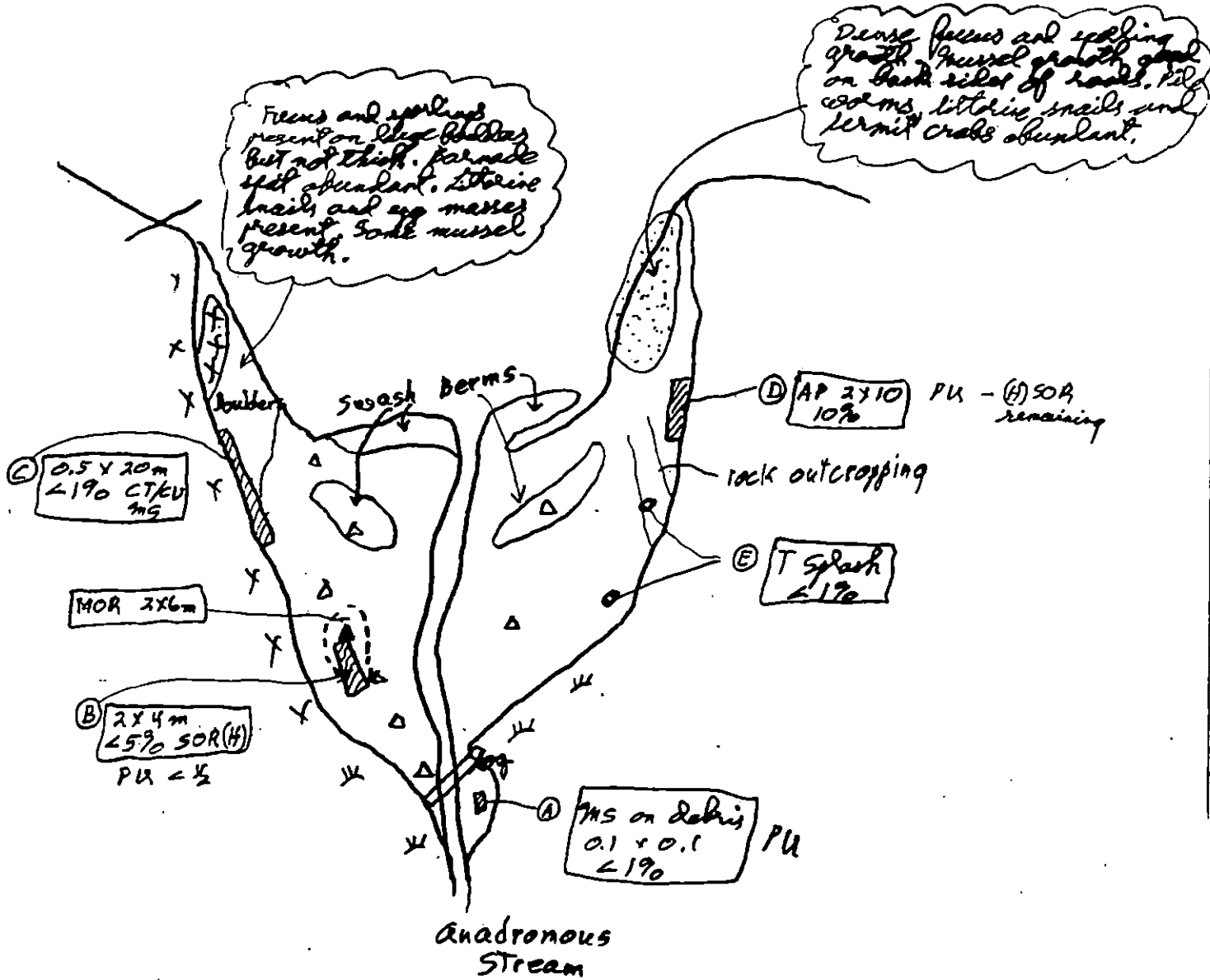
| MARINE MAMMALS      | # OBSERVED | LAND MAMMALS SPECIES    | # OBSERVED |
|---------------------|------------|-------------------------|------------|
| Sea Otters          |            | Deer tracks & droppings |            |
| Pinnipeds (specify) |            |                         |            |
| Whales (specify)    |            |                         |            |

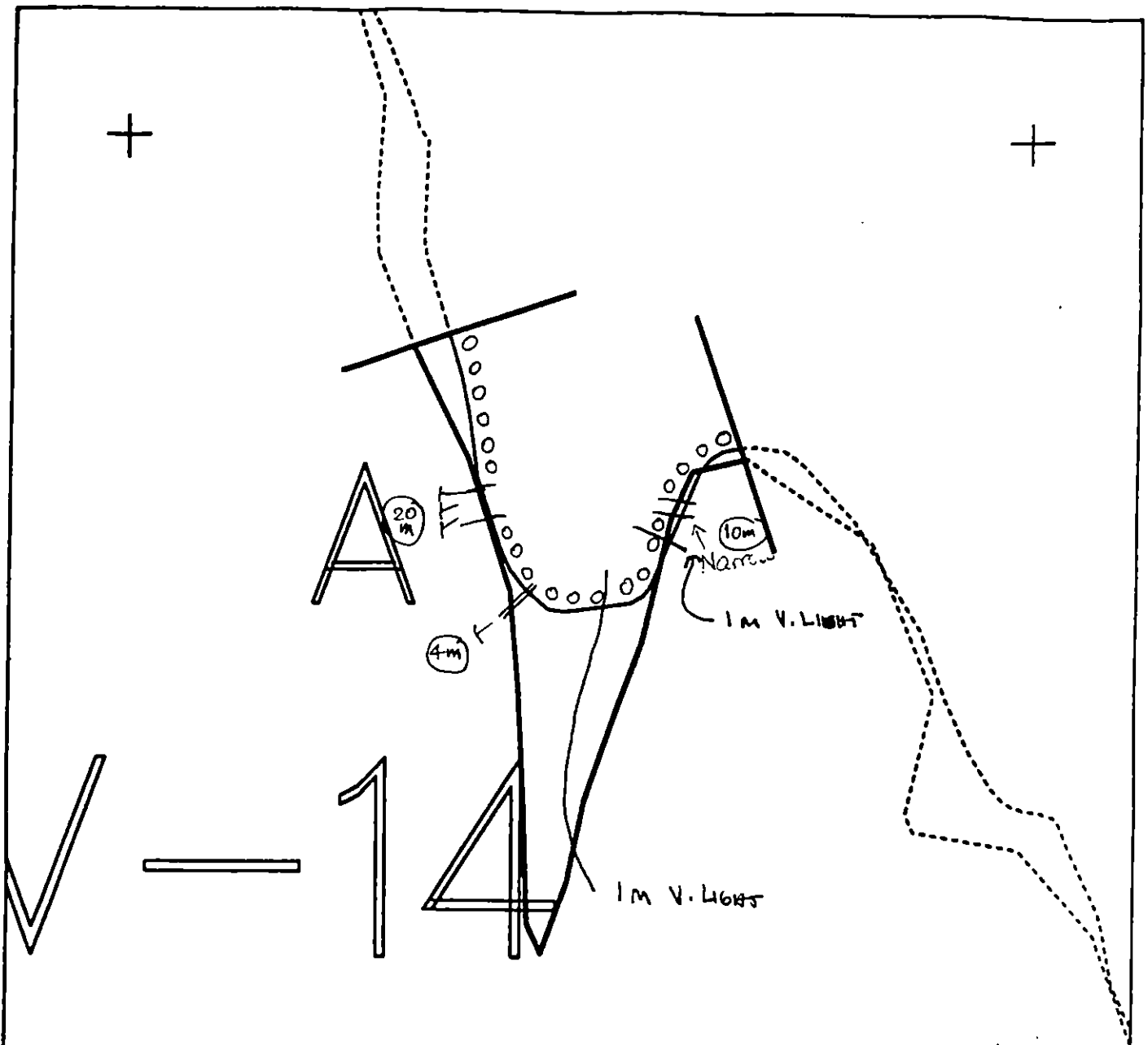
Shoreline subdivision map showing important biological features attached.

0 25 50  
meters



EV-014-A 5/2/91  
Bio. Map T.R. Schroeder  
0915-1015





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

EV014 A

ADEC Subsegment Length: 777m

METERS



AK State Plane Zone 4  
 pev014a



Subdivision Field Map

Map Key: PWSEV014A

Name: DAVID LITTLE

Date: 05/02/91

Date Entered:

REMOVED: MC 5/8/91  
 revised 5/8/91

# 1991 MAYSAP EVALUATION

SEGMENT: EV 014 SUB: A REGION: PWS SURVEY DATE: 5/2/91

## ENVIRONMENTAL SENSITIVITIES:

Work Window(s) OPEN 5/1 - 7/10; RESTRICTED 7/10 - 9/15

Ecological/Constraints (see page two for details) Fish harvest area, Anadromous stream, Subsistence - Deer harvesting

## 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; 564-3657; (Anchorage) or 229-1514 (24 hrs.). *Pro*

- *Rachel Jean Oate* 5/17/91

## RECOMMENDATIONS:

|                               | INITIAL      | TAG          | FOSC         |
|-------------------------------|--------------|--------------|--------------|
| TREATMENT REQUIRED (Y or N)   | <u>N</u>     | <u>Y</u>     | <u>Y</u>     |
| Manual Pickup (Check as Req.) | <u>_____</u> | <u>X</u>     | <u>X</u>     |
| Spot Washing                  | <u>_____</u> | <u>_____</u> | <u>_____</u> |
| Bio-Customblen Only           | <u>_____</u> | <u>_____</u> | <u>_____</u> |
| Bio-Inipol/Customblen         | <u>_____</u> | <u>_____</u> | <u>_____</u> |
| Other <u>MANUAL TILL</u>      | <u>_____</u> | <u>X</u>     | <u>X</u>     |
| Other <u>_____</u>            | <u>_____</u> | <u>_____</u> | <u>_____</u> |

## COMMENTS:

INITIAL: \_\_\_\_\_

TAG: MANUAL PICKUP OF HSOR AT LOCATIONS B + D  
RAKE/TILL AREA OF PIT #3

FOSC: \_\_\_\_\_

TAG APPROVAL DATE: MAY 17 1991

FOSC APPROVAL DATE: 6/25/91

ADEC *[Signature]*

FOSC *[Signature]*

EXXON *[Signature]*

E. E. PAGE, CDR, USCG  
CHIEF OF STAFF, FOSC

USCG *[Signature]*

NOAA *[Signature]*

**ECOLOGICAL CONSTRAINTS  
1991 FIELD ACTIVITIES**

**Fish Harvest Area:** Unlimited treatment unless otherwise directed by ADF&G. Sheen containment/recovery procedures required for mechanical treatment.

**Anadromous Stream:** Unlimited treatment up to stream bank between May 15 and July 10. ADF&G approval required for work after July 10. Fish Habitat Permit required for instream work. ADF&G approval required for bioremediation within 100 meters of anadromous stream after July 10.

**Subsistence - Deer Harvesting:** Unlimited treatment prior to 8/15.

# MAYSAP FIELD SHORELINE COMMENT SHEET

TEAM NO. 6 SEGMENT EV-014 SUBDIVISION A DATE 05/02/91

ADEC / ADF46

NAME Aimee Weseman

SIGNATURE Aimee Weseman

- ☐ NTR ☒ Treatment Recommended Anadromous Fish Stream, Commercial Tourism
- The problem oiled area on this site is located 10m from the stream channel - Site B, contains HSOR & MOR sediments. Though 2 bags of oily material were removed during the survey, enough remains to pose a threat to both salmon eggs & fry should the oil migrate to the stream or the stream wander into the oil. Recommended treatment is the manual removal of HSOR sediments followed by a thorough manual tilling.

EXXON

NAME RANDALL K. BOYER

SIGNATURE Randall K. Boyer

- ☒ NTR Areas of AP (between large boulders) and highest concentrations of surface residual oiling were addressed by the VECO pickup crew. Referring to the OG sketch, Area B, highest concentrations of residual oiling and AP were collected. The remainder of the oiling in Area B was disrupted by tilling (manual) then minor oiling that remains would not achieve any environment or economical benefit to retreat. Deer tracks were noted on the subdivision and fucus beds were prolific.

LANDMANAGER

NAME CHARLES SELANOFF OF CHENEGA BAY

SIGNATURE Charles Selanoff

- ☐ NTR Due to the oiling near the stream, it poses a threat to salmon eggs + fry this area should be worked over manually and mechanically. More emphasis on other team members should be more positive. Treatment is recommended.

USCG/NOAA

NAME CWO R. SPURR / Rebecca Hoff

SIGNATURE R. Spurr / Rebecca Hoff

- ☐ NTR One small problem area remains at this site with surface + some subsurface oil (Area B). This area could potentially impact the anadromous stream, though most toxic components in the oil have likely weathered by now, and this risk is low. If deemed necessary, area B could be turned over manually to promote degradation of the subsurface oil. No other areas in the segment indicate a need for further treatment.

PAGE 1 OF 1

DATE 05 / 02 / 91

ENERGY LEVEL: ☐ H ☒ M ☐ L

EST. OIL CATEGORY LENGTH: W      m M      m N 10 m VL 25 m NO 743 m US      m

Surface oil was restricted to five locations, one of which was completely picked up (A), two of which were not recoverable, but extremely minor (C and E) and the remaining two which were manually retrieved. Location B was probably less than half retrieved, however, the heavy SOR still visible at the surface. Location D consisted of AP which when retrieved left (H) SOR deposits in depth. Subsurface oil was found at (and around) one logged pit. (#3) and was <10cm in depth and about 12 m<sup>2</sup> in area.

REMOVED: 5/8/91 MC  
REVISED 5/8/91 KG

0 25 50  
meters



EV-014-A

05/02/91

OG. Map

D-I. Little

0910—1015

KNIGHT ISLAND  
PASSAGE

EV-015-A

→ EV-13

Boulders

Swash  
ridges

(C) 0.5 x 20 m  
<1% CT/CV/  
MS

MOR 2 x 6 meter  
SUBSURFACE

(B) 2 x 4 m  
<5% SOR (H)  
PU < 1/2

(D) AP 2 x 10  
100%

PU - (H) SOR  
remaining

(E) Tar splash CV  
<1%  
OG sheet says  
area is 0.1 x 0.1 m  
total

EVANS ISLAND

ANADROMOUS  
STREAM

(A) MS on debris  
0.1 x 0.1  
<1% PU

| # | PIT | TD       | OIL | clean below | w/T    | SCDS | sheen | Tide 2 |
|---|-----|----------|-----|-------------|--------|------|-------|--------|
| ① | 25  | N        | Y   | —           | gp-gp  | —    | UITZ  |        |
| ② | 35  | N        | Y   | —           | gp-gp  | —    | UITZ  |        |
| ③ | 20  | Y<br>MOR | Y   | —           | pg-gp  | R    | UITZ  |        |
| ④ | 20  | N        | Y   | 15          | pg-sg  | —    | MITZ  |        |
| ⑤ | 25  | N        | Y   | 10          | pg-sg  | —    | LITZ  |        |
| ⑥ | 24  | N        | Y   | 20          | gs-pg  | —    | UITZ  |        |
| ⑦ | 30  | N        | Y   | 15          | sg-sgp | —    | LITZ  |        |

REVIEWED: 5/8/91 MC  
revised 5/8/91 KG

# Photo locations

Mapap 6-05 # 5-8



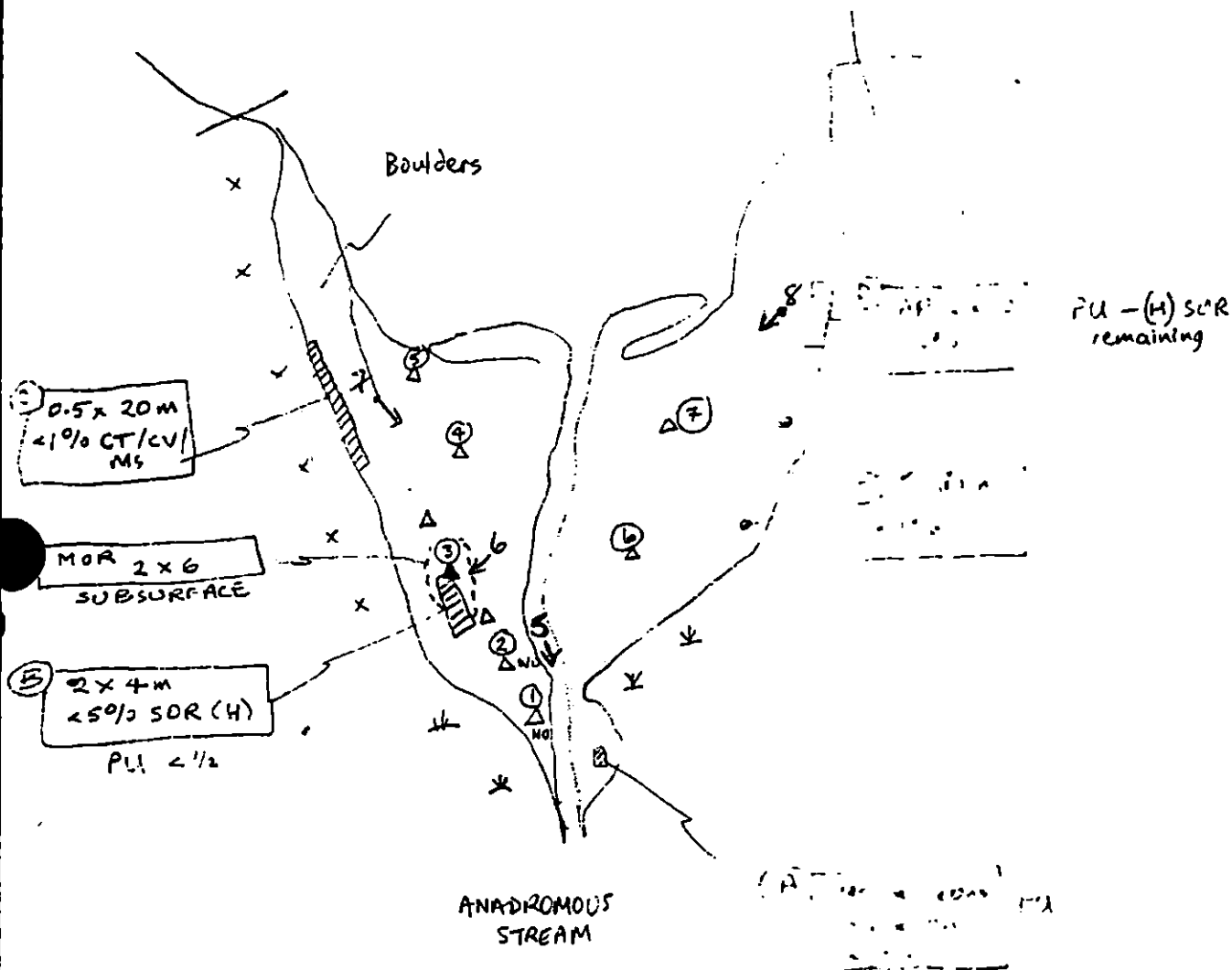
EV-OK-A

05/02/91

CG Map

D.I. Little

0910-1015



| # | PIT | TD               | OIL | clean below | w/T    | SDS | sheen | Tide 2 |
|---|-----|------------------|-----|-------------|--------|-----|-------|--------|
| ① | 25  | N                | Y   | —           | gp-gp  | —   | UITZ  |        |
| ② | 35  | N                | Y   | —           | gp-gp  | —   | UITZ  |        |
| ③ | 20  | Y<br>0-10<br>MOR | Y   | —           | pg-gp  | R   | UITZ  |        |
| ④ | 20  | N                | Y   | 15          | pg-sg  | —   | MITZ  |        |
| ⑤ | 25  | N                | Y   | 10          | pg-sg  | —   | LITZ  |        |
| ⑥ | 24  | N                | Y   | 20          | gs-pg  | —   | UITZ  |        |
| ⑦ | 30  | N                | Y   | 15          | sg-sgp | —   | LITZ  |        |
| ⑧ |     |                  |     |             |        |     |       |        |

# MAYSAP BIOLOGICAL SUMMARY FORM

TEAM # 6  
 SEGMENT # EU-014  
 SUBDIVISION 4  
 SEA STATE 1-2 foot chop  
 PHOTOGRAPHS: ROLL #  
 DATE 5/2/91  
 TIDAL HEIGHT (Range) + 3/4 ft - 3/4 ft  
 BIOLOGIST T. R. Schroeder  
 WIND SPEED/DIRECTION E - 10-15 mph  
 FRAME #

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

Beach is composed of black shale and fine sand. area is quite unproductive throughout the majority of the beach due to the unstable surface. This is further evidenced by the swash herms in the LITZ.

Only two areas contain productive biological communities. One is the large boulder on the western point of the subdivision and the second is the rush grass growth on the eastern portion of the subdivision. Oil present in (D) does not appear to be affecting vegetation or animals in this area.

Oil present in (B) is located in a non-productive portion of the beach. Eista below this location is also almost non-existent. a portion of (B) has been classified as subsurface (MOR). No biological communities would be affected by any treatment procedure or method decided upon.

## WILDLIFE OBSERVATIONS

TO BE COMPLETED IN ALL SUBDIVISIONS

| BIRDS            | # OF SPECIES | TOTAL BIRDS | FISH OBSERVED SPECIES PRESENT |
|------------------|--------------|-------------|-------------------------------|
| Eagles           | 1            | 3           | 1- Rock Blenny                |
| Seabirds         |              |             |                               |
| Waterfowl        | 3            | 46          |                               |
| Gulls/kittiwakes | 1            | 5           |                               |
| Shorebirds       |              |             |                               |
| Corvids          | 1            | 1           |                               |
| Other Birds      | 1            | 3           |                               |

## LAND MAMMALS

| MARINE MAMMALS      | # OBSERVED | SPECIES                 | # OBSERVED |
|---------------------|------------|-------------------------|------------|
| Sea Otters          |            | Deer tracks & droppings |            |
| Pinnipeds (specify) |            |                         |            |
| les (specify)       |            |                         |            |

Shoreline subdivision map showing important biological features attached.

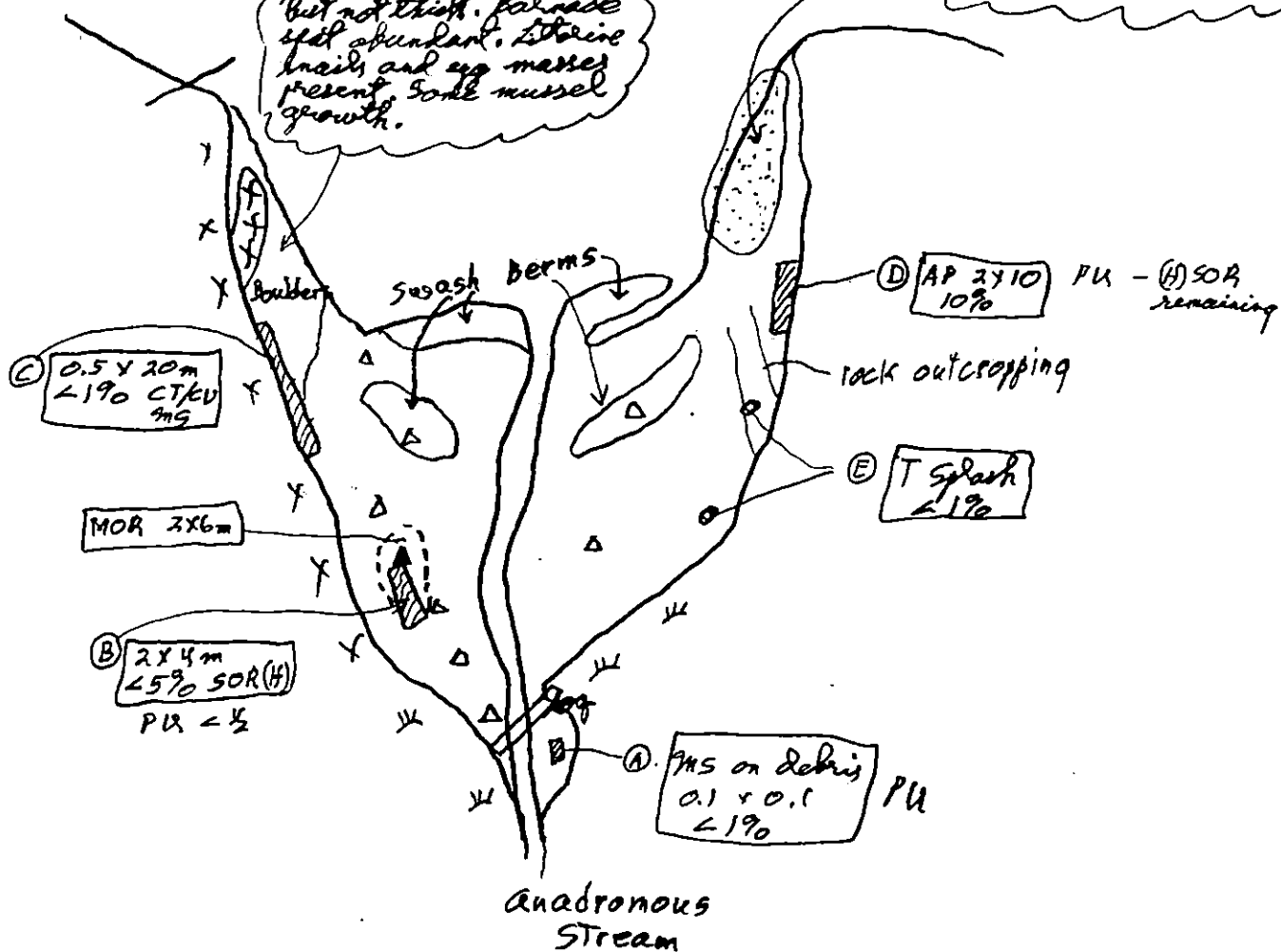
0 25 50  
meters

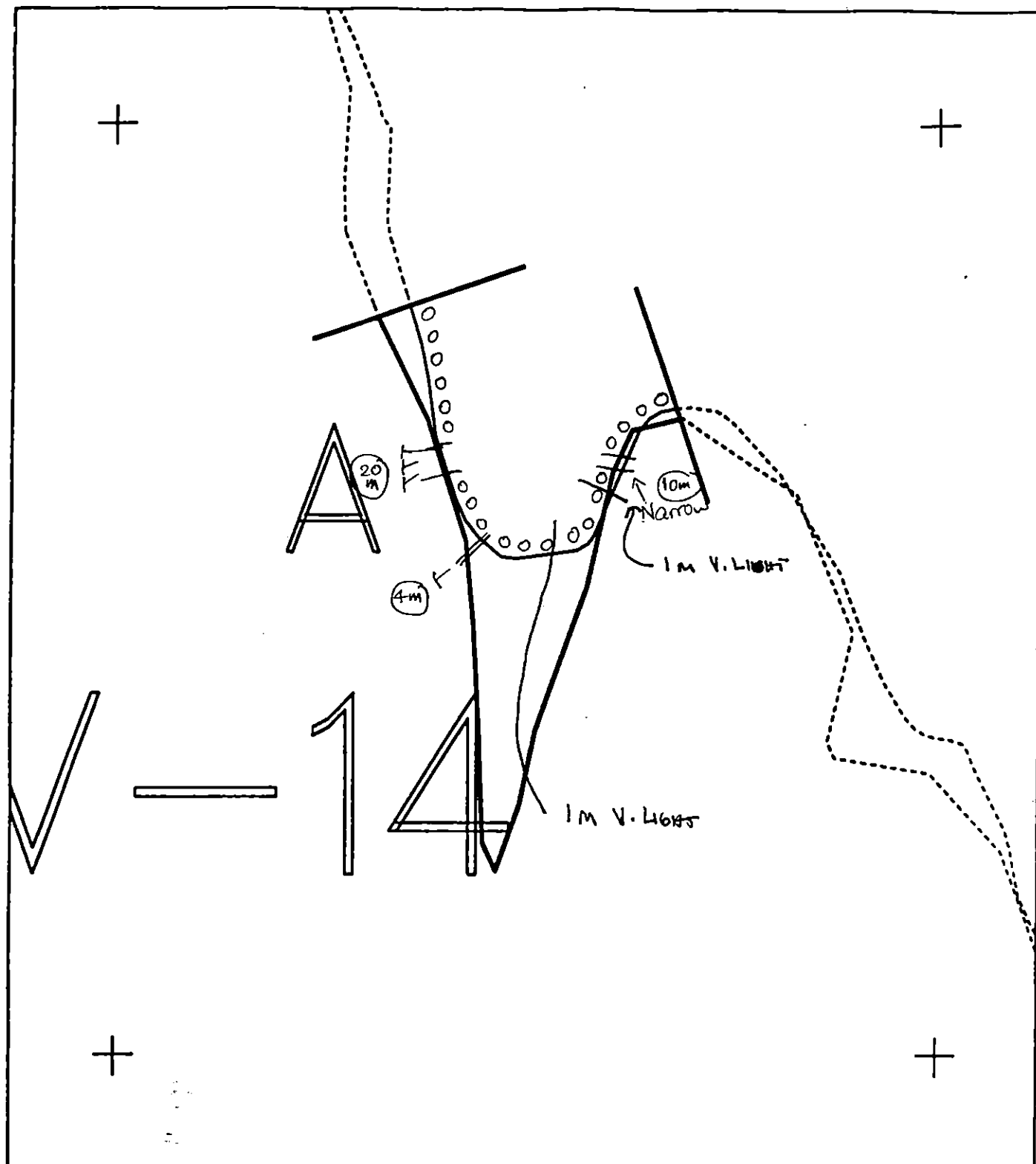


EU-014-A 5/2/91  
Bio. Map T.R. Schroeder  
0915-1015

Fucus and sponges  
present on ledge boulders  
but not thick. Barnacle  
soft abundant. Littorine  
snails and egg masses  
present. Some mussel  
growth.

Dense fucus and sponging  
growth. Mussel growth good  
on back side of rocks. File  
worms, littorine snails and  
hermit crabs abundant.





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

EVO14 A

ADEC Subsegment Length: 777m

METERS

0 100 200

AK State Plane Zone 4  
 proj14a



Subdivision Field Map

Map Key: PWSEVO14A

Name: DAVID LITTLE

Date: 05/02/91

Date Entered:

Revised: MC 5/8/91  
 revised 5/8/91 KCG

ANADROMOUS FISH STREAM EVALUATION

SEGMENT ST/ EV-14 STREAM NO: 226-40-16640 DATE 4/22/90

**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)  
7II Subsistence area: Deer harvesting (8/15 to 2/28)  
See attached Ecological Constraint sheet for specific constraints and contacts.

**SUBDIVISION ECOLOGICAL CONSTRAINTS:**

Avoid any unnecessary disturbance or damage to uncoiled biota and substrate. Subject stream located in Subdivision A (1 of 1).

**ARCHAEOLOGICAL CONSTRAINTS:**

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

SHPO SIGNATURE: J. Daniel M. Mahan DATE: 5/8/90

Subsurface Oil Observed: Yes        No X Maximum Depth       

**RECOMMENDATIONS:**

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

COMMENTS: Recommend manual removal of tarmats as indicated on sketch map. Work should be conducted between 5/15 and 7/10 based on anadromous stream constraints.

TAG COMMENTS:       

TAG APPROVAL DATE: 5/7/90

ADEC Art Weimer Art Weimer

EXXON Amy Petrac Amy Petrac

NOAA G.A. Reiter G.A. Reiter

USCG G.A. Reiter G.A. Reiter

FOSC: W L DATE: 5-18-90  
Access need for ~~base~~ <sup>custodian</sup> following tarmat removal. Notify CVC 24 Hrs prior to work.

P. 40

SCAT TEAM

TO

EXXON CMD CORDOVA

FROM

APR-23-1998 19:09

OG WILLIAM REID

SEGMENT ST/ EYDIA

STREAM 226-10-16640

DATE 22 APR 90

## SKETCH MAP

## CHECKLIST

☐ N Arrow  
☐ Approx. Scale  
☐ Top/Side Sndy  
☐ Oil Dist.  
☐ Width  
☐ Length  
☐ % Cover  
☐ Substrate Character  
☐ Est. HW/LA/VL  
☐ SSL  
☐ Profile Location(s)  
☐ Profile(s)  
☐ Pli Location(s)  
☐ Photo Location(s)

## LEGEND

1 Δ

Pl - No Subsurface Oil

2 Δ

Pl - Subsurface Oil

CT/C

Continuous Distribution

CT/B

Broken Distribution

CT/P

Patchy Distribution

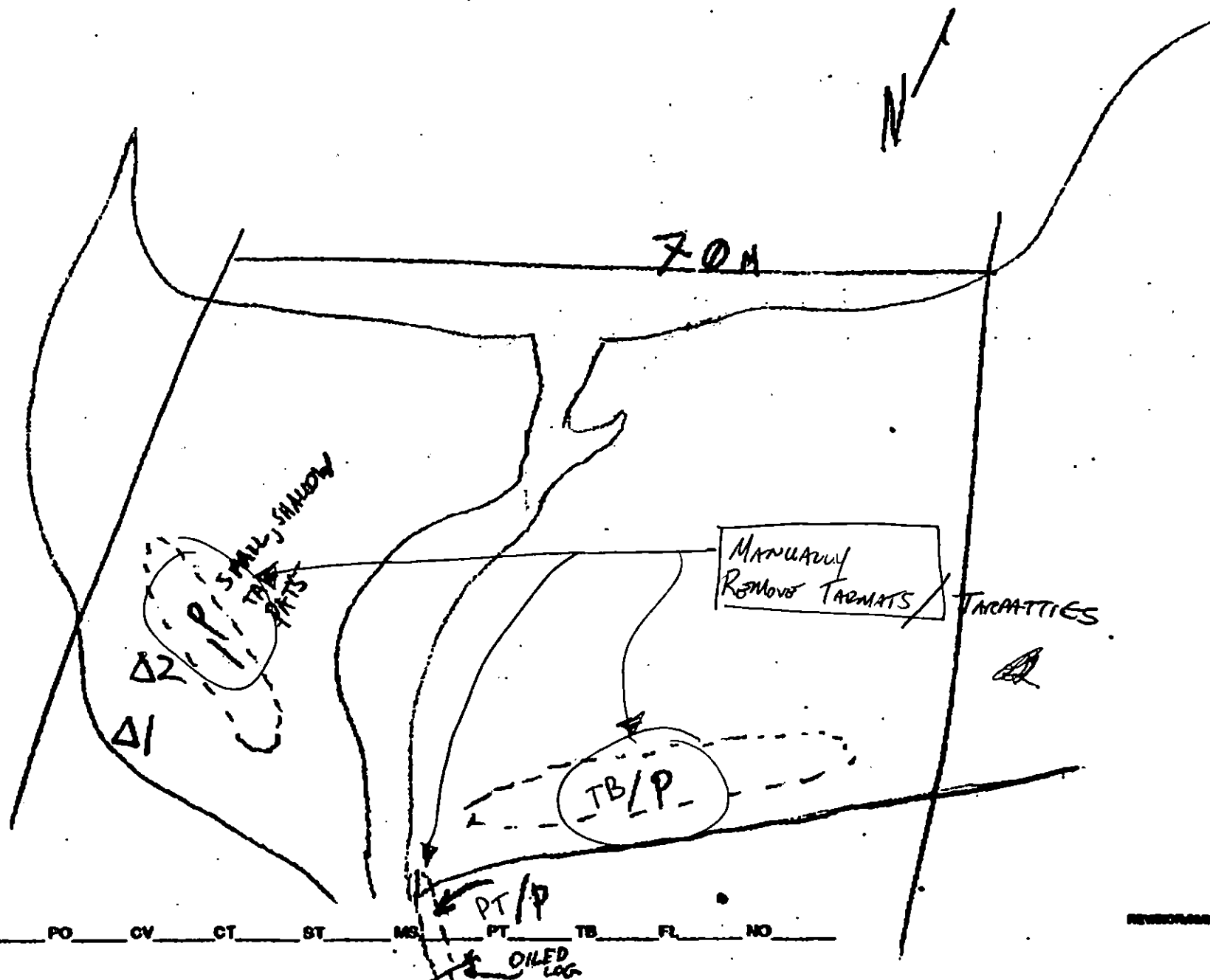
CT/S

Splashed Distribution

 eee  
 Old Vegetation

1 00

Photo location, direction, and number



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

226-40-16640

38/53

## 48 PHOTOLOG

## DESCRIPTION

RECOMMENDATIONS: MANUAL REMOVAL OF ALL TAR PATTIES  
AND MATS

I agree with recommendations. ~~NOT FURTHER~~

## 48 OIL DISTRIBUTION DIAGRAM

SCATTERED  
TAR PATTIES

75m

LONG SCATTERED  
OILED COBBLES &  
TRAVELS IN  
CHANNEL

Sample taken

TAR MATS

EV-14 EV

SUBJECT  
ANADROMOUS  
STREAM  
IN EV-14-A. (1 of 1)

XXXX Wide

/// Medium

--- Narrow

TTTT Very Light

OOOO No Oil

EV-14

ADEC Segment Length: 777m



Map Key: PWS-182

Name: Reimer

Date: 4/6/90

Date Entered:

# ANADROMOUS FISH STREAM EVALUATION ADDENDUM

CONSTRAINTS FOR STREAM NO. 226-40-16640

SEGMENT EV-14 SUBDIVISION A

## WORK WINDOW

Tarmat Removal

OPEN

Bioremediation Less Than 100m From Stream **WORK PRIOR TO 7/10\***  
(ADF&G MONITOR REQ.)

\*Assess need for custom blend following tarmat removal (FOSC comment)

### ARCHAEOLOGICAL STANDARD CONSTRAINT

If cultural resources are uncovered, PHONE 564-3274.

### APPLICABLE ECOLOGICAL TIME CONSTRAINTS

- |       |                             |                                                                                                                                                                                                                                                                                                                                                                                     |
|-------|-----------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1A,1B | Salmon Stream               | ADF&G catalogued anadromous stream (226-40-16640) is in Subdivision A. This subdivision is closed to bioremediation less than 100m from stream 7/10 to 8/31. Before 7/10, bioremediation is permitted less than 100m from stream with on-site ADF&G monitor or ADEC alternate present. No constraint to bioremediation more than 100m from stream. No constraint to tarmat removal. |
| 1K    | Purse Seine Area            | No constraint to tarmat removal.                                                                                                                                                                                                                                                                                                                                                    |
| 5T    | Bald Eagle Nest             | NO CONSTRAINT. USFWS 6/1/90 map indicates no active nest within 400m of Subdivision A work site.                                                                                                                                                                                                                                                                                    |
| 7II   | Sustenance: Deer Harvesting | No constraint to tarmat removal.                                                                                                                                                                                                                                                                                                                                                    |

### OTHER ECOLOGICAL CONSIDERATIONS

No disturbance to stream bed or banks. No flushing of pollutants or sediments into stream drainage; do not allow Inpol to enter stream flow. On-site examination and consultation by ADF&G monitor is required prior to bioremediation in order to authorize a setback distance from the stream during chemical application; if ADF&G monitor's presence is impossible, authorization may be given by the ADEC monitor. Restrict boat and air traffic and beach disturbance to essential minimum after 8/15. Avoid any unnecessary disturbance or damage to unrolled biota and substrate.

SEE SUBDIVISION CONSTRAINT ADDENDUM EV-14A  
FOR ADDITIONAL CONSTRAINT INFORMATION

FOSC

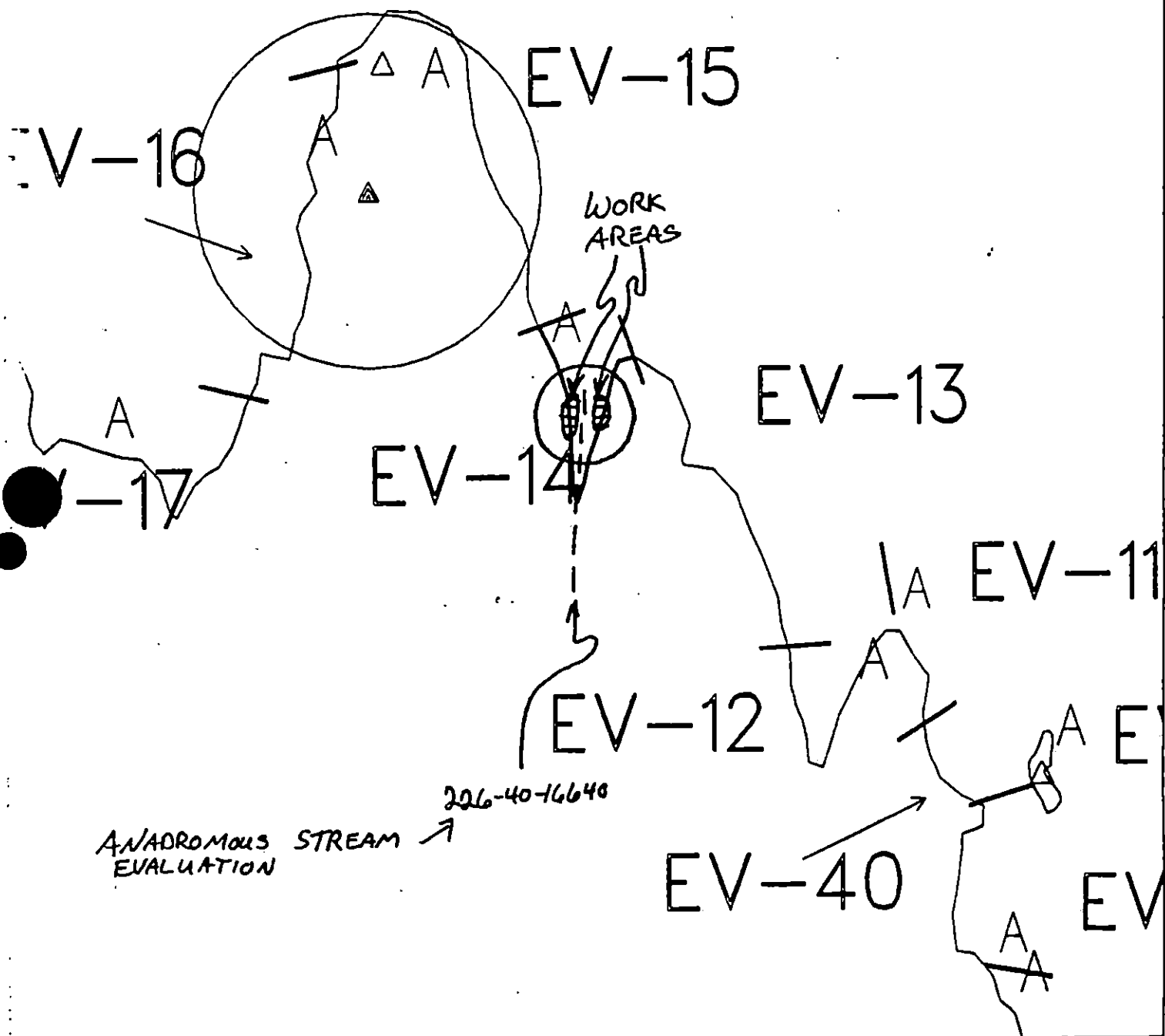
Prepared by

Date

Date

6/14/90

6/14/90



Exxon Company, USA  
Map Key: PWS-EV-14  
June 04, 1990



# ECOLOGY MAP SEGMENT EV-14 SUBDIVISION A (1 of 1)

METERS



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



ANADROMOUS FISH STREAM EVALUATION

SEGMENT ST/ EV-14 STREAM NO: 226-40-16640 DATE 4/22/90

**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)  
7II Subsistence area: Deer harvesting (8/15 to 2/28)  
See attached Ecological Constraint sheet for specific constraints and contacts.

**SUBDIVISION ECOLOGICAL CONSTRAINTS:**

Avoid any unnecessary disturbance or damage to uncoiled biota and substrate. Subject stream located in Subdivision A (1 of 1).

**ARCHAEOLOGICAL CONSTRAINTS:**

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

SHPO SIGNATURE: [Signature] DATE: 5/8/90

Subsurface Oil Observed: Yes        No X Maximum Depth       

**RECOMMENDATIONS:**

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

COMMENTS: Recommend manual removal of tarmats as indicated on sketch map. Work should be conducted between 5/15 and 7/10 based on anadromous stream constraints.

CONSTRAINTS  
SEE ADDENDUM dated 6/14/90

TAG COMMENTS:         
        
        
      

TAG APPROVAL DATE: 5/17/90

ADEC Art Wenzel Art Wenzel

EXXON Andy Galt Andy Galt

NOAA Gary Petrac Gary Petrac

USCG G.A. REITER G.A. Reiter

FOSC: [Signature] DATE: 5-18-90  
Access need for ~~contaminated~~  
following TARMAT removal. Notify CVC  
24 HRS prior to work.

ANADROMOUS FISH STREAM ASSESSMENT

REGION: PRINCE WILLIAM SOUND

SEGMENT: EV-14

STREAM NO: 226-40-16640

ANADROMOUS FISH STREAM EVALUATION

SEGMENT ST/ EV-14 STREAM NO: 226-40-16640 DATE 4/22/90

**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)

7II Subsistence area: Deer harvesting (8/15 to 2/28)

See attached Ecological Constraint sheet for specific constraints and contacts.

**SUBDIVISION ECOLOGICAL CONSTRAINTS:**

Avoid any unnecessary disturbance or damage to unoiled biota and substrate. Subject stream located in Subdivision A (1 of 1).

**ARCHAEOLOGICAL CONSTRAINTS:**

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

SHPO SIGNATURE: \_\_\_\_\_ DATE: \_\_\_\_\_

Subsurface Oil Observed: Yes \_\_\_\_\_ No X Maximum Depth \_\_\_\_\_

**RECOMMENDATIONS:**

|                                                           |                                                        |
|-----------------------------------------------------------|--------------------------------------------------------|
| <input type="checkbox"/> No Treatment Recommended         | <input type="checkbox"/> Snare/Absorbent Booms         |
| <input checked="" type="checkbox"/> Treatment Recommended | <input type="checkbox"/> Oil Snares (pom poms)         |
| <input type="checkbox"/> Manual Pickup                    | <input type="checkbox"/> Absorbents (pads, rolls, etc) |
| <input type="checkbox"/> Bioremediation                   | <input type="checkbox"/> Spot Washing: _____ Wands     |
| <input checked="" type="checkbox"/> Tarmat Removal        | <input type="checkbox"/> Beach Cleaner                 |
|                                                           | <input type="checkbox"/> Other (see comments)          |

COMMENTS: Recommend manual removal of tarmats as indicated on sketch map. Work should be conducted between 5/15 and 7/10 based on anadromous stream constraints.

\_\_\_\_\_

\_\_\_\_\_

TAG COMMENTS: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

TAG APPROVAL DATE: \_\_\_\_\_

ADEC \_\_\_\_\_

EXXON \_\_\_\_\_

NOAA \_\_\_\_\_

USCG \_\_\_\_\_

FOSC: \_\_\_\_\_ DATE: \_\_\_\_\_

# PWS, SEWARD AND HOMER ECOLOGICAL CONSTRAINTS

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

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

No disturbance of stream bed or banks unless authorized by ADF&G. No beach flushing into stream drainage. No bioremediation or other chemical application within 100m of stream 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 6/1)

1E

Main Bay Hatchery release (4/20 to 6/10)

1F

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

1G

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

1H

Remote release site

No use of methods which might affect nearshore oil or toxicity levels, such as hot water wash or Inipol application, prior to at least July 1 unless authorized by ADF&G and/or PWS Aquaculture Association. Treatment which will not affect nearshore oil or toxicity levels, such as manual or mechanical removal, can probably proceed without adherence to time constraints. Contact ADF&G or PWS Aquaculture Association for confirmation and authorization.

AGENCY CONTACT PERSON: 1E ADF&G Larry Peltz 424-3214

1D 1F 1G PWS Aquaculture Association John McMillan or Bruce Suzumoto 424-7511

1I

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

1J

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

1K

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

1L

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

Contact ADF&G for specific dates, locations and constraints. Restrict boat and air traffic to essential minimum. When set net sites are present (1L) restrict beach operations to essential minimum as authorized by ADF&G. If plans for treatment include methods such as hot water wash or Inipol application which might affect nearshore oil or toxicity levels, contact ADF&G for consultation and authorization.

AGENCY CONTACT PERSON: ADF&G James Brady 424-3212

2M

Herring spawning (4/1 to 6/15)

Contact ADF&G for confirmation - dates and locations may vary. Restrict boat traffic to essential minimum. Avoid damage to unopened intertidal and subtidal algae and seagrass. If plans for treatment include methods such as hot water wash or Inipol application which might affect nearshore oil or toxicity levels, contact ADF&G for consultation and authorization.

AGENCY CONTACT PERSON: ADF&G Evelyn Biggs 424-3235

Q, 3Q

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

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

Restrict boat and air traffic to essential minimum. No personnel within 400m. Aircraft to maintain 800m horizontal and 300m vertical distance from haulouts. No application of Inipol within two weeks of arrival dates (work window at these sites is limited to 7/2 to 7/31). Contact ADF&G and USFWS prior to treatment for confirmation.

AGENCY CONTACT PERSON: US National Marine Fisheries Service Steve Zimmerman 586-7235

ADF&G Don Calkins 267-2403

5R

Seabird colony (5/1 to 9/1)

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

AGENCY CONTACT PERSON: USFWS Jill Parker 786-3377

5S

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

Restrict all activity to essential minimum, especially air traffic. Contact USFWS and ADF&G for confirmation.

AGENCY CONTACT PERSON: USFWS Jill Parker 786-3377

ADF&G Tom Roth 267-2206

5T

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

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

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

AGENCY CONTACT PERSON: USFWS Jill Parker 786-3377

6U

Recreation:

Tent sites (6/1 to 9/15)

6V

Anchorage (6/1 to 9/15)

6W

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

6X

Lodge (6/1 to 9/15)

6Y

Special use destination

7Z

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

7HH

Finfish harvesting

Deer harvesting (8/15 to 2/28)

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

34/53

## FIELD SHORELINE COMMENT SHEET

SEGMENT ST 1 EV 014 SUBDIVISION: 16640 DATE 9/22/90

USCG

NAME CWO McMAHONSIGNATURE [Signature]☐ NO TREATMENT RECOMMENDED  
COMMENTS☒ TREATMENT SUGGESTED

1. MANUAL CLEAN-UP; REMOVE ASPHALT AT  
RED STAKE.

ADFC  
DECNAME Michael WiednerSIGNATURE [Signature]☐ NO TREATMENT RECOMMENDED  
COMMENTS☒ TREATMENT SUGGESTED

IN ADDITION TO ABOVE MANUAL CLEAN-UP OF  
TAR PATCHES ON WEST SIDE OF CHANNEL  
(SEE DIAGRAMS AND ADFC OBSERVATIONS AND  
RECOMMENDATION  
TREATMENT SUMMARY)

LAND MANAGER

NAME AD Team member SIGNATURE [Signature]☐ NO TREATMENT RECOMMENDED  
COMMENTS☐ TREATMENT SUGGESTED

3/55

ASC # None

Segment EV-012

Observations The intertidal zone surrounding the stream channel consists mostly of small-grained material. The site has low exposure to wind and waves. Northwest of the channel, in the upper-intertidal zone, tar mats are scattered within a 20 m x 2 m area. East of the channel a 25 m x 1 m lens (5 - 10 cm thick) of mousse is buried beneath 5 - 15 cm of clean sand.

Treatment Recommendations Manually remove surface tar mats. Uncover subsurface mousse lens and remove oiled sand. Do not remove clean overburden above subsurface lens.

ASC # 226-40-16640

Segment EV-014

Observations This is a well-protected, sandy, gravelly beach. Northwest of the stream channel in the upper-intertidal zone are scattered tar patches. Tar mats and patties are scattered on the east bank of the stream, within the extreme upper-intertidal zone. At this point, there are some oiled gravels and cobbles within the submerged portion of the stream channel. No buried oil was observed.

Treatment Recommendations Manually remove all tar mats and patties from the beach adjacent to the channel, from the stream bank, and from the stream channel.

ASC # 226-40-16590

Segment EV-005

Observations This site is a small pocket cove confined on either side by bedrock walls. Tar patties are scattered in a ring around the high tide line on either side of the channel. The bedrock outcrop at the western entrance to the cove has significant surface coverage of tar. Some living biota remains or has re-invaded these areas, although in lower concentrations than in nearby clean areas.

Treatment Recommendations Manual removal of tar mats on the high tide line. No treatment is recommended for the bedrock outcrop.

## SHORELINE OILING SUMMARY (ANAD.) 39/53 REVISION NO. 6

OG WILLIAM LEID USOG McMAHON SEGMENT STI EV014  
 BIO MICHAEL FAWCETT LAND REP TOM CROWE ADEG T. 5 STRIA 622640-166401 OF  
 EXXON GUS GARCIA ADFG MIKE WIEDER TIME 12:32 to 12:00  
 TEAM NO. 15 TIDE LEVEL 41.0 DATE 22 / APR / 90  
 EST. SUBDIVISION LENGTH: 700 m ☒ Sun ☐ Clouds ☐ Fog ☐ Rain ☐ Snow  
 UPLANDS DESCRIPTION: ☒ Grass ☒ Forest ☒ Rock  
 SURVEYED FROM: ☒ Foot ☐ Boat ☐ Helo  
 SURFACE SEDIMENTS: R 40 % B 60 % C 40 % P 60 % G 40 % S 40 % M 40 % V  
 SLOPE: Long 100 % Hang 40 % Vert 40 % WAVE EXPOSURE: ☐ Low ☒ Med ☐ High  
 OIL CATEGORY LENGTH: W 4.5 m M 4.5 m N 4.5 m VL 4.5 m NO 2.5

## SURFACE OIL

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

PAVEMENT H F S 1 sq. m by 1PATTIES / TARBALLS BANEAR SHORE SHEEN? NO BR RW SL

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

Did You Collect DEBRIS ☐ YES ☒ NOTYPE                     #BAGS                     Photographs:                     Roll No.                     Frames                     

## SUBSURFACE OIL

| PIT NO. | PIT DEPTH (cm) | SUBSURFACE OIL CHARACTER |    |    |    |    | OILED INTERVAL (cm) | BELOW |    | OIL / FILM COLOR |   |   |   |   | PIT ZONE |   |   |   | AN A | SHEEN (Y/N) | ↓ | SURFAC SUBSURF / SEDIMENT |
|---------|----------------|--------------------------|----|----|----|----|---------------------|-------|----|------------------|---|---|---|---|----------|---|---|---|------|-------------|---|---------------------------|
|         |                | OP                       | OR | OL | OF | NO |                     | DO    | UC | 1                | 2 | 3 | 4 | 5 | SU       | U | M | L |      |             |   |                           |
| 1       | 35             |                          |    |    |    | X  | •                   |       |    |                  |   |   |   |   | X        |   |   |   |      | N           |   | P/G-1                     |
| 2       | 35             |                          |    |    |    | X  | •                   |       |    |                  |   |   |   |   | X        |   |   |   |      | N           |   | P/G-1                     |
|         |                |                          |    |    |    |    | •                   |       |    |                  |   |   |   |   |          |   |   |   |      |             |   |                           |
|         |                |                          |    |    |    |    | •                   |       |    |                  |   |   |   |   |          |   |   |   |      |             |   |                           |
|         |                |                          |    |    |    |    | •                   |       |    |                  |   |   |   |   |          |   |   |   |      |             |   |                           |
|         |                |                          |    |    |    |    | •                   |       |    |                  |   |   |   |   |          |   |   |   |      |             |   |                           |
|         |                |                          |    |    |    |    | •                   |       |    |                  |   |   |   |   |          |   |   |   |      |             |   |                           |

COMMENTS                     REVIEWED JW DATE 4-24-90

OG WILLIAM REID

# SKETCH MAP

SEGMENT ST/ EYDIA

STREAM 226-10-16640

DATE 22 APR 90

## CHECKLIST

- ☐ N Arrow
- ☐ Approx. Scale
- ☐ Day/Tab Entry
- ☐ Oil Dist.
- ☐ Width
- ☐ Length
- ☐ % Cover
- ☐ Substrate Character
- ☐ Est. HW/LWL
- ☐ SSI
- ☐ Profile Location(s)
- ☐ Profile(s)
- ☐ P/L Location(s)
- ☐ Photo Location(s)

## LEGEND

1 Δ

PR - No Subsurface Oil

2 Δ

PR - Subsurface Oil

CT/C

Continuous Distribution

CT/B

Broken Distribution

CT/P

Patchy Distribution

CT/S

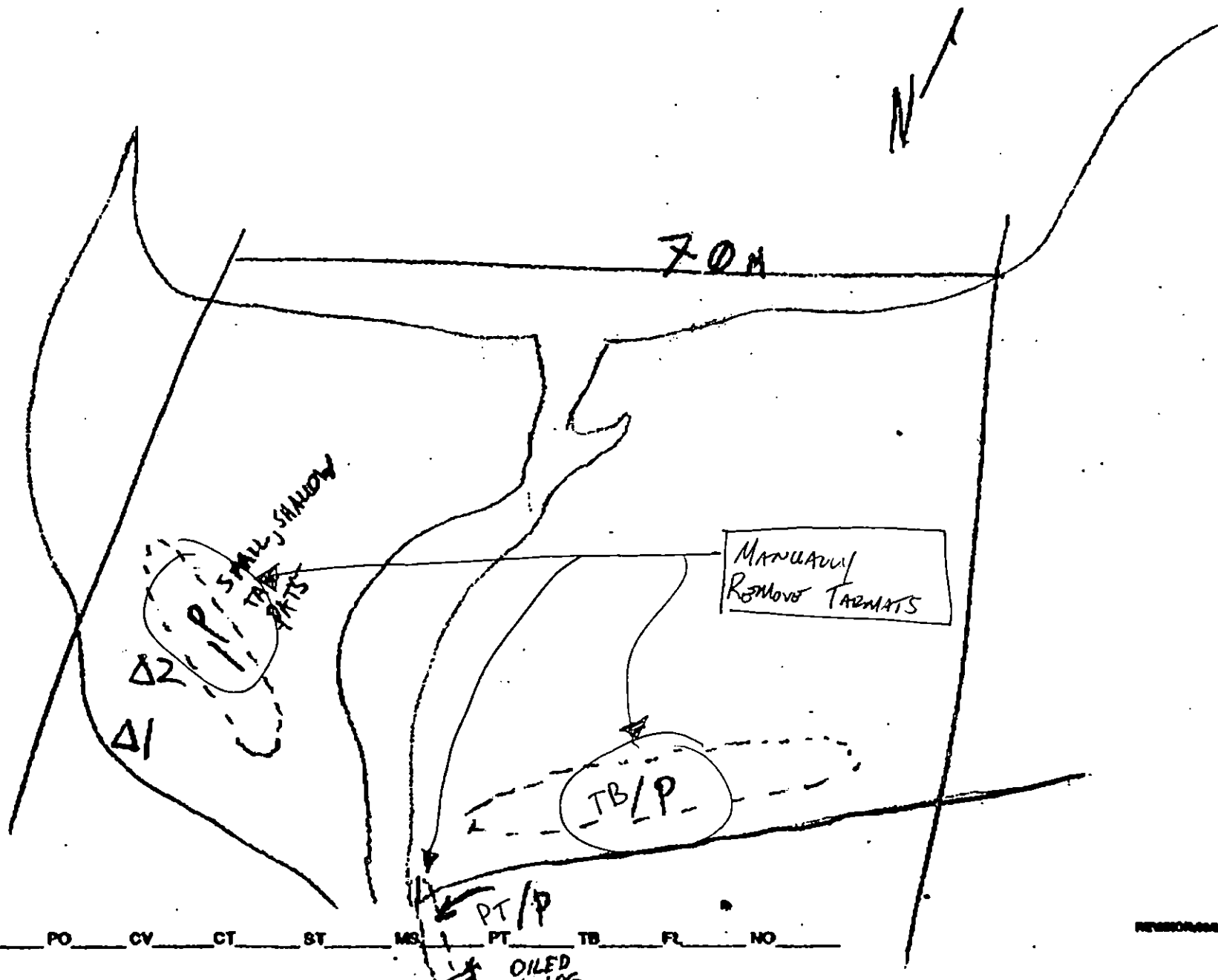
Splashed Distribution

eee

Oiled Vegetation

1 ●

Photo location, direction, and number



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

OILED LOG

REVISIONS

P.40

SCAT TEAM

TO

EXXON CMD CORDOVA

FROM

19:09

APR-23-1990

37/55

## ADP&amp;C MULTI-ASSESSMENT DATA FORM

1 SURVEY TYPE: ES SS DS TS AVS SCSA MOHS PTA2 REGION: PNS KP,CI K,APMETHOD: Aerial Ground Boat3 DATE: 4/22/9015 HIGH TIDE TIMES: 1205.1 -21 TEAM RECORDER: M. WIEDMER4 START TIME: 173016 HIGH TIDE HTS: 10.0' 1 -22 OBSERVERS: T. CROWL5 STOP TIME: 175517 LOW TIDE TIMES: 0603 181423 AGENCY: ADP&C6 SEGMENT #: EV-01418 LOW TIDE HTS: 1.0' 10.7'24 PHOTOS TAKEN: Y (N)7 STATION #: 226-40-1664019 TIDE HT AT SURVEY: 0.78'

Roll #: \_\_\_\_\_ Frames: \_\_\_\_\_

8 K-UNIT: \_\_\_\_\_

25 VIDEO TAKEN: Y (N) TAPES: \_\_\_\_\_

9 STAT AREA: \_\_\_\_\_

26 USCG QUAD: SEWARD A3

Starts: \_\_\_\_\_ Ends: \_\_\_\_\_

10 LAT: \_\_\_\_\_

11 LONG: \_\_\_\_\_

28 SAMPLES TAKEN: Y (N) Number: \_\_\_\_\_12 SOURCE: Map Loran13 LOCATION: NORTH END EVANS IS.

14 DESCRIPTION: \_\_\_\_\_

## EXTENT OF OIL

27 SURFACE COVERAGE

| SHORELINE |    |   |    | STREAM |   |   |    |
|-----------|----|---|----|--------|---|---|----|
| L         | Y  | M | S  | L      | Y | M | S  |
| 100       | 75 |   | <1 | 200    | 3 |   | <1 |

28 SURFACE THICKNESS

|     |     |     |     |      |  |
|-----|-----|-----|-----|------|--|
| 1cm | 1mm | 1mm | 1mm | <1mm |  |
| 5cm | 2cm | 1cm |     |      |  |

29 PENETRATION

30 OVERALL OIL IMPACT: N (V) L M H31 OIL TYPE: Pooled Mousse Tar Asphalt Sticky Stain32 OILED DEBRIS: Y (N)33 SHORELINE TYPE: Headland Low-lying Rocks Beach Cove34 WAVE EXPOSURE: High Moderate Low35 SUBSTRATE TYPE: Bedrock Boulder 10 Cobble 50Gravel 30 Sand 30 Mud/silt36 CATALOGED ANAD. FISH STREAM: Y (N)37 CATALOG #: 226-40-16640

38 STREAM NAME: \_\_\_\_\_

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)

FISH PRESENT

44 ANADROMOUS FISH OBSERVATION

Species: Aerial Ground

| Species | Aerial | Ground |
|---------|--------|--------|
|         |        |        |
|         |        |        |
|         |        |        |
|         |        |        |

COMMENTS: PREDOMINANTLY SMALL-GRAINED SHELTERED COVE.SCATTERED TAR PATCHES 20 M N.W. OF CHANNELUPPER-MID INTERTIDAL 20 M X 4 M. BAND OF TAR MATS

226-40-16640

48 PHOTOLOG

38/53

## DESCRIPTION

RECOMMENDATIONS: MANUAL REMOVAL OF ALL TAR PATTIES  
AND MATS

I agree with recommendations. ~~WTF~~ ~~FWD~~

## 48 OIL DISTRIBUTION DIAGRAM

SCATTERED  
TAR PATTIES

75m

TAR MATS

SCATTERED  
OILED COBBLES &  
TRAVELS IN  
CHANNEL  
sample taken

43/55

Segment EV014

4/22/90

Stream 226-40-16620

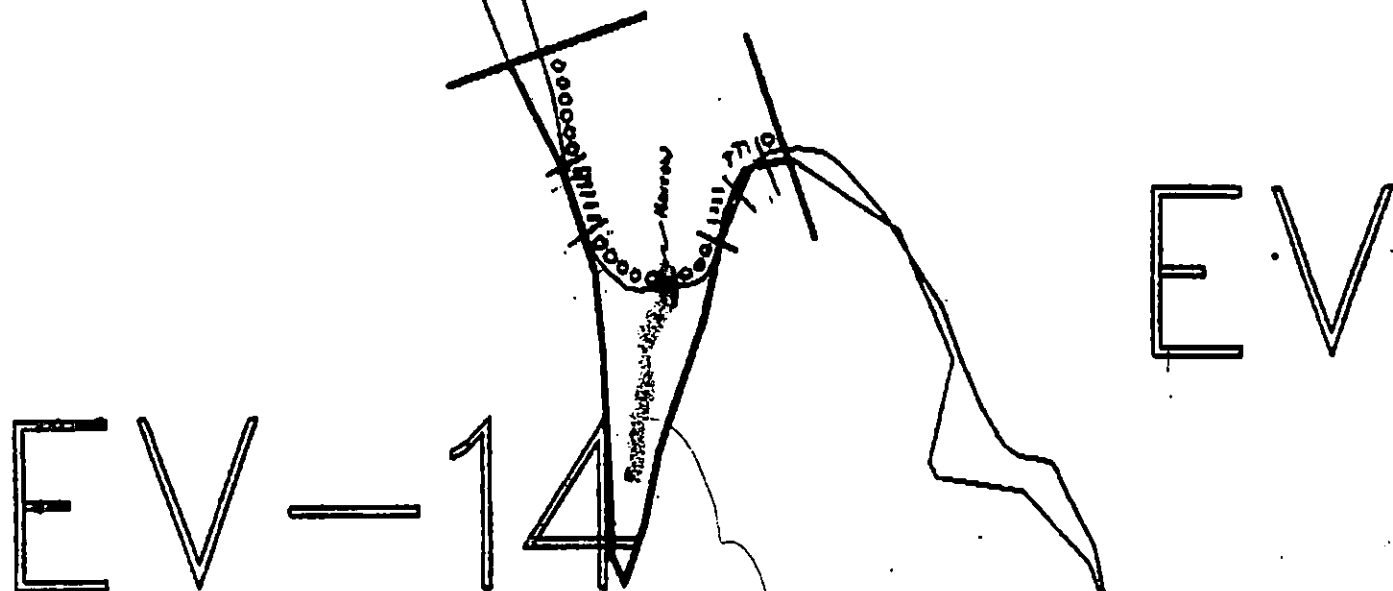
Michael Fawcett

Ecological Summary

This stream enters the sea in a small cove similar to EV 012 - sand/pebble/cobble beach with larger boulders at each end of cove.

Patches of Fucus, mussels, and barnacles occur on cobble around the stream mouth, and are more dense on boulders at either end of cove. Tar mats were found in UTZ on East and West sides of stream, manual removal recommended. No ecological constraints re: intertidal biota.

M. Fawcett



SUBJECT  
ANADROMOUS  
STREAM  
IN EV-14-A (1 of 1)

XXXX Wide

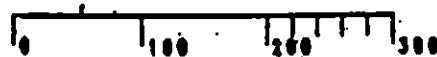
//// Medium

---- Narrow

TTTT Very Light

EV-14

ADEC Segment Length: 777m



Map Key: PWS-102

Name: Reimer

Date: 4/6/90

data entered.

**REGION: PRINCE WILLIAM SOUND**

**SEGMENT: ST/EV-15**

**SUBDIVISIONS: A (1 OF 1)**

# SHORELINE EVALUATION

SEGMENT ST/ EV-15 SUBDIVISION A (1 OF 1) DATE 4/20/90

## SEGMENT ENVIRONMENTAL SENSITIVITIES AND TIME CONSTRAINTS:

5T-1 All bald eagle nests (3/1 to 6/1)-Active eagle nests (3/1 to 9/1)  
(an eagle nest located in adjacent segment)

6Y Recreation: Special use destination

7II Subsistence area: Deer harvesting (8/15 to 2/28)

See attached Ecological Constraint sheet for specific constraints and contacts.

## SUBDIVISION ECOLOGICAL CONSTRAINTS:

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

## ARCHAEOLOGICAL CONSTRAINTS:

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

SHPO SIGNATURE: \_\_\_\_\_ DATE: \_\_\_\_\_

## OILING CATEGORIZATION:

Wide 0 m: Medium 66 m: Narrow 62 m: V.Light 43 m: No Oil 884 m  
Subsurface Oil Observed: Yes \_\_\_\_\_ No X Maximum Depth \_\_\_\_\_

## RECOMMENDATIONS:

|                                                           |                                                        |
|-----------------------------------------------------------|--------------------------------------------------------|
| <input type="checkbox"/> No Treatment Recommended         | <input type="checkbox"/> Snare/Absorbent Booms         |
| <input checked="" type="checkbox"/> Treatment Recommended | <input type="checkbox"/> Oil Snares (pom poms)         |
| <input type="checkbox"/> Manual Pickup                    | <input type="checkbox"/> Absorbents (pads, rolls, etc) |
| <input checked="" type="checkbox"/> Bioremediation        | <input type="checkbox"/> Spot Washing: _____ Wands     |
| <input type="checkbox"/> Tarmat Removal                   | <input type="checkbox"/> Beach Cleaner                 |
|                                                           | <input type="checkbox"/> Other (see comments)          |

COMMENTS: Recommend bioremediation in areas shown on sketch map (diffi-  
cult access - safety concerns). Work should be conducted after 6/1 and  
with USFWS approval regarding eagle nest constraint.

TAG COMMENTS: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

TAG APPROVAL DATE: \_\_\_\_\_  
ADEC \_\_\_\_\_  
EXXON \_\_\_\_\_  
NOAA \_\_\_\_\_  
USCG \_\_\_\_\_

FOSC: \_\_\_\_\_ DATE: \_\_\_\_\_

# 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 Suzumoto 424-7511
- 1I Gill net area (6/7 to 8/31)  
1J Purse seine area (7/20 to 9/30)  
1K Purse seine hook-off (7/20 to 9/30)  
1L Set net sites (6/11 to 7/25)  
Contact ADF&G for specific dates, locations and constraints. Restrict boat and air traffic to essential minimum. When set net sites are present (1L) restrict beach operations to essential minimum as authorized by ADF&G. If plans for treatment include methods such as hot water wash or Inipol application which might affect nearshore oil or toxicity levels, contact ADF&G for consultation and authorization.  
AGENCY CONTACT PERSON: ADF&G James Brady 424-3212
- 2M Herring spawning (4/1 to 6/15)  
Contact ADF&G for confirmation - dates and locations may vary. Restrict boat traffic to essential minimum. Avoid damage to unopened intertidal and subtidal algae and seagrass. If plans for treatment include methods such as hot water wash or Inipol application which might affect nearshore oil or toxicity levels, contact ADF&G for consultation and authorization.  
AGENCY CONTACT PERSON: ADF&G Evelyn Biggs 424-3235
- 3Q Harbor seal and sea lion pupping (5/15 to 7/1)  
Harbor seal and sea lion molting (8/15 to 9/15)  
Restrict boat and air traffic to essential minimum. No personnel within 400m. Aircraft to maintain 800m horizontal and 300m vertical distance from haulouts. No application of Inipol within two weeks of arrival dates (work window at these sites is limited to 7/2 to 7/31). Contact ADF&G and USFWS prior to treatment for confirmation.  
AGENCY CONTACT PERSON: US National Marine Fisheries Service Steve Zimmerman 586-7235  
ADF&G Don Calkins 267-2403
- 5R Seabird colony (5/1 to 9/1)  
Restrict air and boat traffic to essential minimum. No personnel within 800m. Aircraft to maintain 800m horizontal, 300m vertical distance from colony. Contact USFWS prior to treatment.  
AGENCY CONTACT PERSON: USFWS Jill Parker 786-3377
- 5S Shorebird/waterfowl concentration (4/1 to 5/15)  
Restrict all activity to essential minimum, especially air traffic. Contact USFWS and ADF&G for confirmation.  
AGENCY CONTACT PERSON: USFWS Jill Parker 786-3377  
ADF&G Tom Roth 267-2208
- 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)  
Special use destination
- 7Z Subsistence area: Salmon harvesting (5/1 to 9/30)  
7HH Finfish harvesting  
Deer harvesting (8/15 to 2/28)  
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

# FIELD SHORELINE COMMENT SHEET

SEGMENT ST/ EV-15

SUBDIVISION: A (1011)

DATE 4-20-90

**NOAA**

NAME Michael Buchanan

SIGNATURE [Signature]

☐ NO TREATMENT RECOMMENDED

☒ TREATMENT SUGGESTED

COMMENTS

NORTHERN TIP & Around toward SE is uplifted slate outcrop with very slight splinter. Rock walls on either side of NW'm pocket beach had a band of pebbly coating. Pocket beach had winter storm berm. No oil observed there. Eastern side of segment is rounded pebbles, to angle beach located by vertical rock wall. Winter storm berm here too. No surface oil observed. Rock fissure of tilted shale at southern end had 5m band of coating. A lg rock outcrop just south of that had covering of oil on backside. At very southern end, 2 ~~small~~ pockets of lg slate slabs over Boulder & cobble separated by a outcrop had a coat to cover of oil on surface. Cracks & fissures had greater oiling. Asphalt patches were seen in underlying gravel. Silver to rainbow sheen was seen in tide pools. Southern pocket had numerous patches of moss at bottom of cracks.

**ADEC**

NAME John Hoyer

SIGNATURE [Signature]

☐ NO TREATMENT RECOMMENDED

☒ TREATMENT SUGGESTED

COMMENTS

Most of segment is light to no oiling.

Two pocket beaches at southern end of segment need treatment. Oil is down below boulders + will be difficult to remove.

① Pumps, shovels, trowels, sorbant pads rec. for treatment on pocket beaches. See sketch map #2

**LAND MANAGER**

NAME Joe WARD-Chenega Corp.

SIGNATURE [Signature]

☐ NO TREATMENT RECOMMENDED

☒ TREATMENT SUGGESTED

COMMENTS

Manual cleanup? Hand Labor.

## SHORELINE OILING SUMMARY

REVISION NO. 04/13/90

OG MIKE FOLET NOAA Michael Buchman SEGMENT ST/ EU-15  
 BIO KATHLEEN COALIN LAND REP STEVE WOOD SUBDIVISION A (1 OF 1)  
 EXXON LARRY OLSON ADEC John Hayes TIME 16:40:18:05  
 TEAM NO. 11 TIDE LEVEL +1.5 DATE 4/20/90  
 EST. SUBDIVISION LENGTH: 1055 m ☒ Sun ☐ Clouds ☐ Fog ☐ Rain ☐ Snow  
 UPLANDS DESCRIPTION: ☐ Grass ☐ Forest ☒ Rock 3 meter rocky backshore forested  
 SURVEYED FROM: ☒ Foot ☒ Boat ☐ Helo WORKING DIRECTION: to  
 SURFACE SEDIMENTS: R 60 % B 20 % C 15 % P 5 % G 0 % S 0 % M 0 % V 0 %  
 SLOPE: Long 20 % Hang 20 % Vert 60 % WAVE EXPOSURE: ☐ Low ☒ Med ☐ High  
 OIL CATEGORY LENGTH: W 0 m M 60 m N 50 m VL 40 m NO 905 m

## SURFACE OIL

| CHARACTER        | DISTRIBUTION |   |   |   | OIL / FILM COLOR |   |   |   |   |   |   |   | IMPACTED ZONES |   |   |   |
|------------------|--------------|---|---|---|------------------|---|---|---|---|---|---|---|----------------|---|---|---|
|                  | C            | B | P | S | 1                | 2 | 3 | 4 | 5 | 6 | 7 | 8 | SU             | U | M | L |
| ASPHALT PAVEMENT |              |   | X |   |                  | X |   |   |   |   |   |   | X              | X |   |   |
| POOLED           |              |   |   |   |                  |   |   |   |   |   |   |   |                |   |   |   |
| COVER            |              |   | X |   |                  |   |   | X |   |   |   |   | X              | X |   |   |
| COAT             |              |   | X |   |                  | X |   |   |   |   |   |   | X              | X |   |   |
| STAIN            |              |   |   | ✓ |                  | ✓ |   |   |   |   |   |   |                | ✓ |   |   |
| MOUSSE           |              |   | X |   |                  |   |   | X |   |   |   |   | X              | X |   |   |
| PATTIES          |              |   |   |   |                  |   |   |   |   |   |   |   |                |   |   |   |
| TARBALLS         |              |   |   |   |                  |   |   |   |   |   |   |   |                |   |   |   |
| FILM             |              |   |   |   |                  |   |   |   |   |   |   |   |                |   |   |   |
| NO OIL           |              |   |   |   |                  |   |   |   |   |   |   |   |                |   | X | X |

PAVEMENT H (F) S 2 sq. m by 10 crPATTIES / TARBALLS (1) BAGSNEAR SHORE SHEEN? (NO) BR RW SL TL

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

DID YOU COLLECT DEBRIS?

YES ☒ NO ☐TYPE 17 ft of bent#BAGS 1

Photographs:

Roll No. \_\_\_\_\_

Frames \_\_\_\_\_

## SUBSURFACE OIL

| PIT NO. | PIT DEPTH (cm) | SUBSURFACE OIL CHARACTER |    |    |    |    | OILED INTERVAL (cm) | BELOW |    | OIL / FILM COLOR |   |   |   |   |   |   |   | PIT ZONE |   |   |   | A N A | SHEEN (Y/N) | ▽  | SURFACE-SUBSURFACE SEDIMENTS |
|---------|----------------|--------------------------|----|----|----|----|---------------------|-------|----|------------------|---|---|---|---|---|---|---|----------|---|---|---|-------|-------------|----|------------------------------|
|         |                | OP                       | OR | OL | OF | NO |                     | UO    | UC | 1                | 2 | 3 | 4 | 5 | 6 | 7 | 8 | SU       | U | M | L |       |             |    |                              |
| 1       | 30             |                          |    |    |    | X  | .                   |       | X  |                  |   |   |   |   |   |   |   | X        |   |   |   |       | N           | -  | P, C                         |
| 2       | 40             |                          |    |    |    | X  | .                   |       | X  |                  |   |   |   |   |   |   |   | X        |   |   |   |       | N           | -  | P                            |
| 3       | 35             |                          |    |    |    | X  | .                   |       | X  |                  |   |   |   |   |   |   |   | X        |   |   |   |       | N           | 30 | P, C                         |
| 4       | 25             |                          |    |    |    | X  | .                   |       | X  |                  |   |   |   |   |   |   |   |          | X |   |   |       | N           | -  | P, B                         |
| 5       | 50             |                          |    |    |    | X  | .                   |       | X  |                  |   |   |   |   |   |   |   | X        |   |   |   |       | N           | -  | C, P, C                      |
| 6       | 30             |                          |    |    |    | X  | .                   |       | X  |                  |   |   |   |   |   |   |   | X        |   |   |   |       | N           | -  | C, P, B                      |

COMMENTS some stain and coating occurred near the 1<sup>st</sup> beach located at the North Western end of the segment. 1m x 20m CT/P coat was observed along a rock wall on the Southern end of the 1<sup>st</sup> beach. (map 1), No oil was observed for a majority of the segment. The shore zone consisted mostly of High angle Rock, Boulder face w/ some low angle Boulder/cobble beaches. The Southern end of the segment (South, eastern) contained some substantial oiling. This area consisted of 3-4 Pocket B/C beaches. The Northern most of these beaches had a 5m x 30m CT/P coat among the R/B in the HITZ on the N. side of the beach, (map 1)

REVIEWED W DATE 4-23-90

SEGMENT ST/ EV-15 SUBDIVISION A ( 1 OF 1 )

### SUBSURFACE OIL (CONTINUED)

[illegible]

The other two pocket beaches (map 2) had some substantial oiling. They consisted of two Boulder Pocket coves separated by a 20m Rocky headland. Both coves have a CT/P tar coat on the exposed Boulder face but in the crevases between the boulders are asphalt patches, hardened mousse and tar cover. One cove has a 15m x 20m affected area, the other a 10m x 20m area. The rocky headland which separates the two coves has a 1m x 20m CT/P stain in the MIZ.

REVIEWED

DATE 4-23-90

OG Mike Rye

SEGMENT EV-15

SUBDIVISION A

DATE 4 / 20 90

## CHECKLIST

- ☐ N Arrow
- ☐ Approx. Scale
- ☐ Seg/Sub Bndry
- ☐ Oil Dist.
- ☐ Width
- ☐ Length
- ☐ % Cover
- ☐ Substrate Character
- ☐ Est. HMTZ/LWT
- ☐ SSL
- ☐ Profile Location(s)
- ☐ Photo Location(s)

## LEGEND

1 Δ  
Pit - No Subsurface Oil2 Δ  
Pit - Subsurface Oil

CT/C

  
 Continuous Distribution

CT/B

  
 Broken Distribution

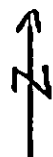
CT/P

  
 Patchy Distribution

CT/S

  
 Splashed Distribution

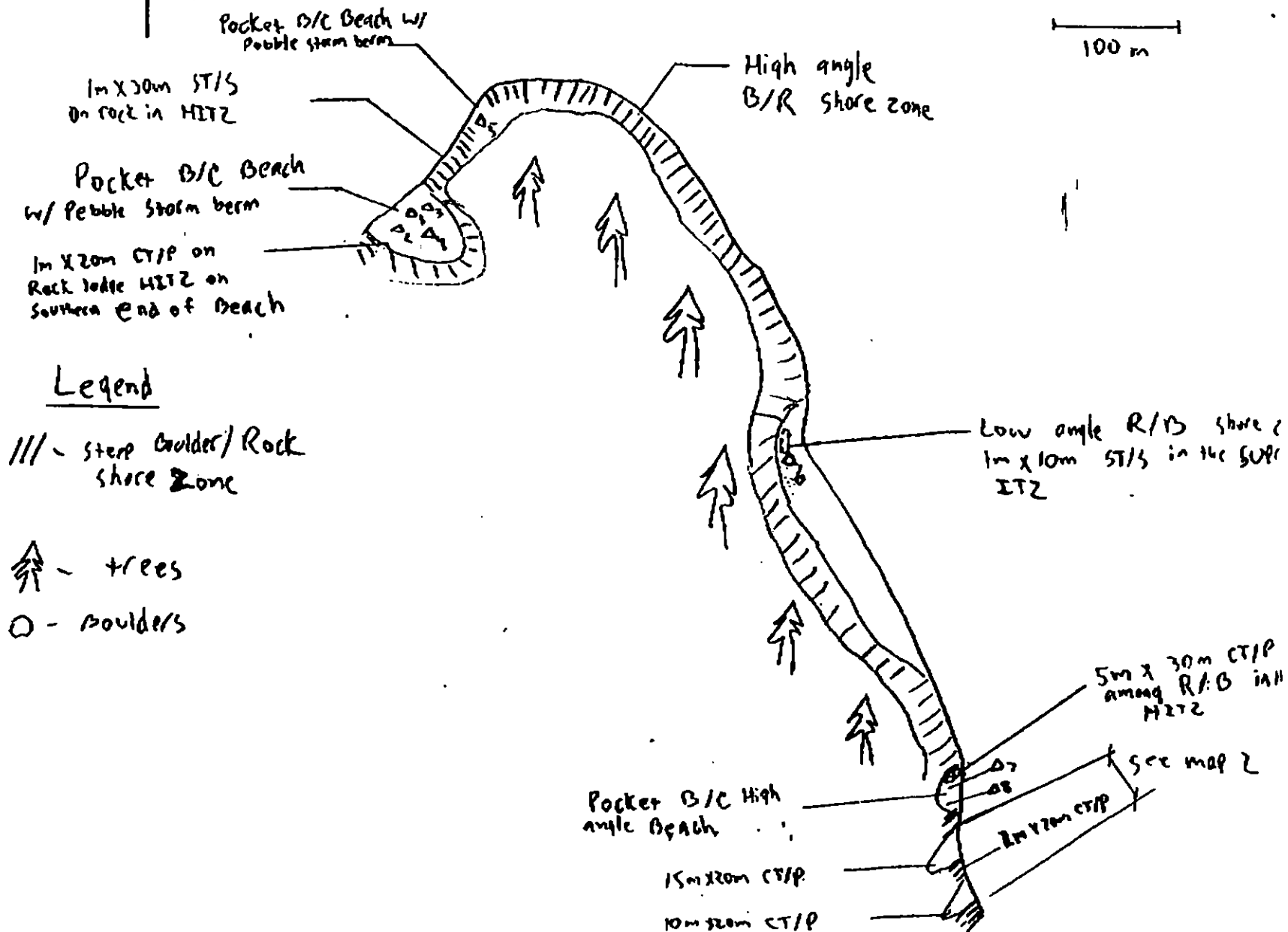
Oiled Vegetation

 1 →  
 Photo location, direction,  
 and number


SKETCH MAP 1

Scale

100 m



Oil Character Length (m): AP 5 PO 0 CV 5 CT 110 ST 40 MS 10 PT 0 TB 0 FL 0 NO 925

REVISION: 02/2000

OG Mike Toget

SEGMENT EV-15

SUBDIVISION A

DATE 4, 20 90

# SKETCH MAP 2

## CHECKLIST

- ☒ N Arrow
- ☐ Approx. Scale
- ☐ Seg/Sub Entry
- ☐ Oil Dist.
- ☐ Width
- ☐ Length
- ☐ % Cover
- ☐ Substrate Character
- ☐ Est. HML/LWL
- ☐ SSL
- ☐ Profile Location(s)
- ☐ Profile(s)
- ☐ Pit Location(s)
- ☐ Photo Location(s)

## LEGEND

1 Δ  
Pit - No Subsurface Oil

2 Δ  
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

## Legend

↑ - trees

/// - steep Bedrock  
Boulder Backshore

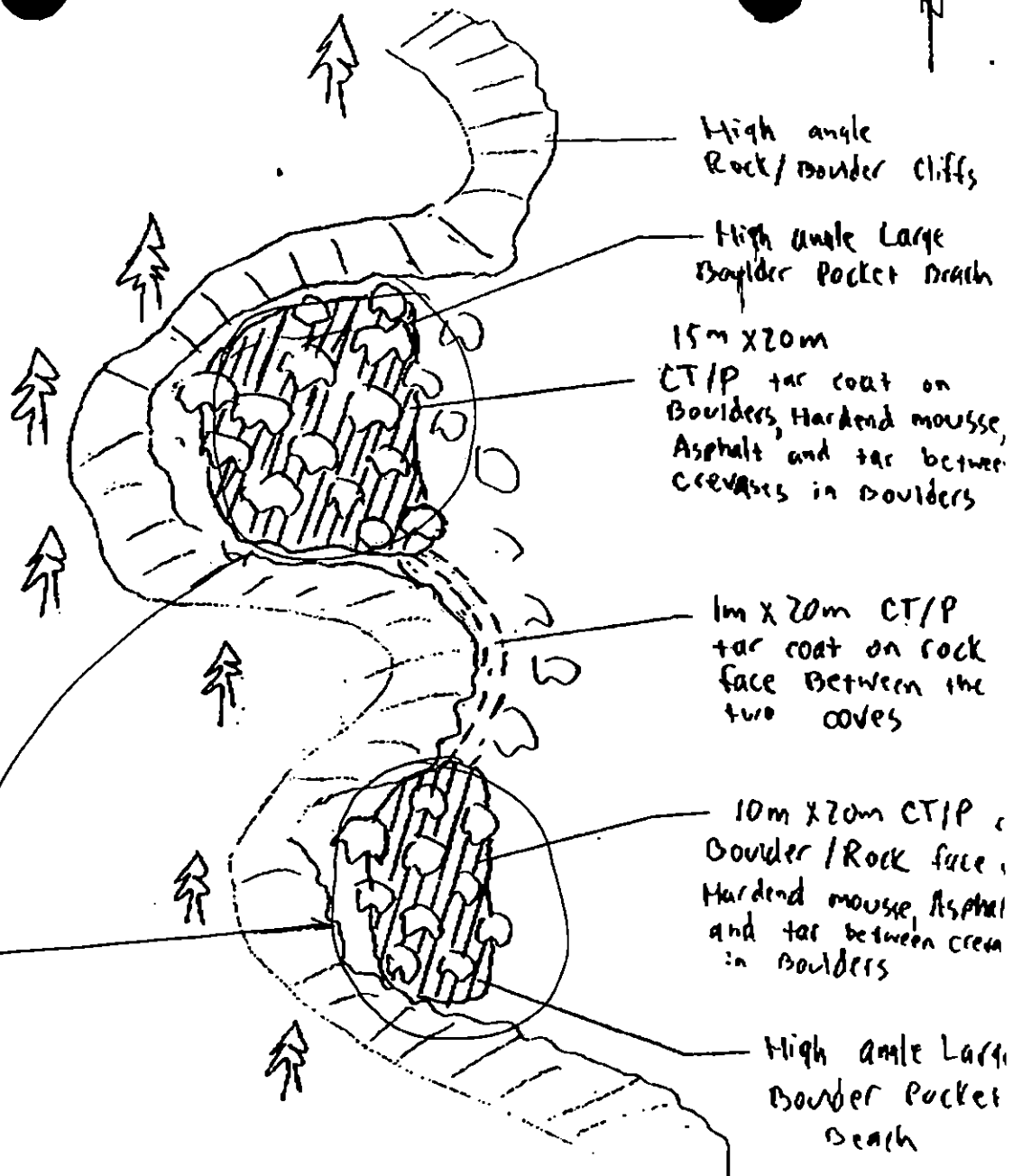
☪ - Large Boulder

|||| - mousse and  
Asphalt

Bio

Scale

10m



See map 1

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

REVISION: 01/2000

## SHORELINE ECOLOGICAL SUMMARY

REVISION: 03/22/90

Segment ST / EV-15 Subdivision A (1 OF 1) Date (mo / day / yr) 04 / 20 / 90Time (24 hr) 1650-1800 Biologist KATHLEEN COLLINS

- (A) Substrate type and % of segments:  
 (1) Bedrock 60 (2) Boulder 20 (3) Cobble 15 (4) Pebble 5 (5) Sand 0 (6) Silt 0
- (B) Overall % cover of biota (% of segment): Dense 80 Moderate 20 Low 0
- (C) Density, substrate preference (by number from A, above), & vertical zonation of major taxa: (upper-U; mid-M; low tidal-L); juveniles / adults (X), new settlement (O)

Photographs:  
Roll No. ST 11-3Frames 11, 12, 13

## BARNACLES

| Dense |    |          | Moderate |    |    | Sparse |    |    | Rare |    |    |
|-------|----|----------|----------|----|----|--------|----|----|------|----|----|
| 1U    | 1M | 1L       | 1U       | 1M | 1L | 1U     | 1M | 1L | 1U   | 1M | 1L |
| 2     | 2  | <u>X</u> | 2        | 2  | 2  | 2      | 2  | 2  | 2    | 2  | 2  |
| 3     | 3  | <u>X</u> | 3        | 3  | 3  | 3      | 3  | 3  | 3    | 3  | 3  |
| 4     | 4  | <u>X</u> | 4        | 4  | 4  | 4      | 4  | 4  | 4    | 4  | 4  |
| 5     | 5  | 5        | 5        | 5  | 5  | 5      | 5  | 5  | 5    | 5  | 5  |
| 6     | 6  | 6        | 6        | 6  | 6  | 6      | 6  | 6  | 6    | 6  | 6  |

NOT PRESENT

## MYTILUS

| Dense |          |    | Moderate |    |    | Sparse |    |    | Rare |    |    |
|-------|----------|----|----------|----|----|--------|----|----|------|----|----|
| 1U    | 1M       | 1L | 1U       | 1M | 1L | 1U     | 1M | 1L | 1U   | 1M | 1L |
| 2     | <u>X</u> | 2  | 2        | 2  | 2  | 2      | 2  | 2  | 2    | 2  | 2  |
| 3     | 3        | 3  | 3        | 3  | 3  | 3      | 3  | 3  | 3    | 3  | 3  |
| 4     | 4        | 4  | 4        | 4  | 4  | 4      | 4  | 4  | 4    | 4  | 4  |
| 5     | 5        | 5  | 5        | 5  | 5  | 5      | 5  | 5  | 5    | 5  | 5  |
| 6     | 6        | 6  | 6        | 6  | 6  | 6      | 6  | 6  | 6    | 6  | 6  |

NOT PRESENT

## GASTROPODS

| Dense |    |    | Moderate |          |          | Sparse |    |    | Rare |    |    |
|-------|----|----|----------|----------|----------|--------|----|----|------|----|----|
| 1U    | 1M | 1L | 1U       | 1M       | 1L       | 1U     | 1M | 1L | 1U   | 1M | 1L |
| 2     | 2  | 2  | 2        | <u>X</u> | <u>X</u> | 2      | 2  | 2  | 2    | 2  | 2  |
| 3     | 3  | 3  | 3        | <u>X</u> | <u>X</u> | 3      | 3  | 3  | 3    | 3  | 3  |
| 4     | 4  | 4  | 4        | 4        | 4        | 4      | 4  | 4  | 4    | 4  | 4  |
| 5     | 5  | 5  | 5        | 5        | 5        | 5      | 5  | 5  | 5    | 5  | 5  |
| 6     | 6  | 6  | 6        | 6        | 6        | 6      | 6  | 6  | 6    | 6  | 6  |

NOT PRESENT

## FUCUS

| Dense    |    |          | Moderate |          |    | Sparse |    |    | Rare |    |    |
|----------|----|----------|----------|----------|----|--------|----|----|------|----|----|
| 1U       | 1M | 1L       | 1U       | 1M       | 1L | 1U     | 1M | 1L | 1U   | 1M | 1L |
| <u>X</u> | 2  | <u>X</u> | 2        | <u>X</u> | 2  | 2      | 2  | 2  | 2    | 2  | 2  |
| 3        | 3  | 3        | 3        | <u>X</u> | 3  | 3      | 3  | 3  | 3    | 3  | 3  |
| 4        | 4  | 4        | 4        | 4        | 4  | 4      | 4  | 4  | 4    | 4  | 4  |
| 5        | 5  | 5        | 5        | 5        | 5  | 5      | 5  | 5  | 5    | 5  | 5  |
| 6        | 6  | 6        | 6        | 6        | 6  | 6      | 6  | 6  | 6    | 6  | 6  |

NOT PRESENT

## Wildlife Observations/ General Comments:

TIDE POOL SCULPINS ABUNDANT

2 SEA OTTERS

3 SHORE BIRDS

1 BALD EAGLE

## Ecological Considerations:

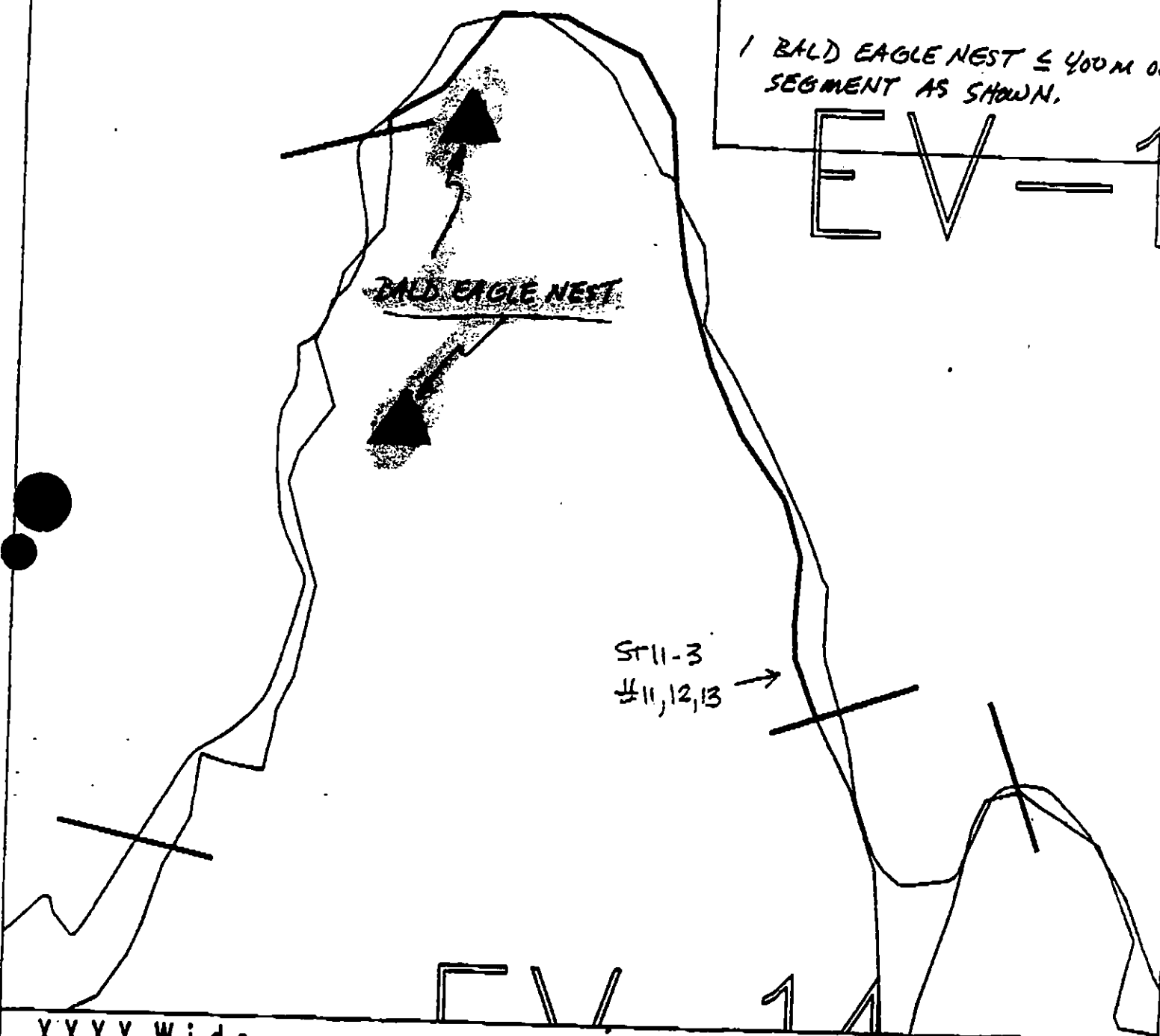
# ECOLOGY MAP (1 OF 1)

RESOURCE CODES FOR ENTIRE SEGMENT:



1 BALD EAGLE NEST  $\leq$  400M OF SEGMENT AS SHOWN.

EV-1



XXXX Wide

//// Medium

-- Narrow

TTTT Very Light

0000 No Oil

EV-15

ADEC Segment Length: 1055m



Map Key: PWS-183

Name: K. CONLAN

Date: 20 APRIL 1990

Data Entered:

EV -

EV-15A

XXXX Wide

//// Medium

--- Narrow

TTTT Very Light

0000 No Oil

ADEC Segment Length: 1055m



Map Key: PWS-183

Name: Mike Eger

Date: 4/20/40

Data Entered:

## ADDENDUM: SUBDIVISION CONSTRAINTS

SEGMENT EV-15 SUBDIVISION A (1 of 1)

| WORK WINDOW                     |                  |
|---------------------------------|------------------|
| Manual Pickup<br>Tarmat Removal | OPEN             |
| Bioremediation                  | WORK BEFORE 7/25 |

### ARCHAEOLOGICAL STANDARD CONSTRAINT

If cultural resources are uncovered, PHONE 564-3274.

### APPLICABLE ECOLOGICAL TIME CONSTRAINTS

|     |                              |                                                                                         |
|-----|------------------------------|-----------------------------------------------------------------------------------------|
| 1K  | Purse Seine Hook-off         | Closed to bioremediation after 7/25. No constraint to manual pickup and tarmat removal. |
| 5T  | Bald Eagle Nest              | NO CONSTRAINT. Work area is more than 400m from nest.                                   |
| 7II | Subsistence: Deer Harvesting | Closed to bioremediation after 8/15. No constraint to manual pickup and tarmat removal. |

### OTHER ECOLOGICAL CONSIDERATIONS

Restrict boat and air traffic to essential minimum after 7/25. Restrict beach disturbance to essential minimum after 8/15. Avoid any unnecessary disturbance or damage to unrolled biota and substrate.

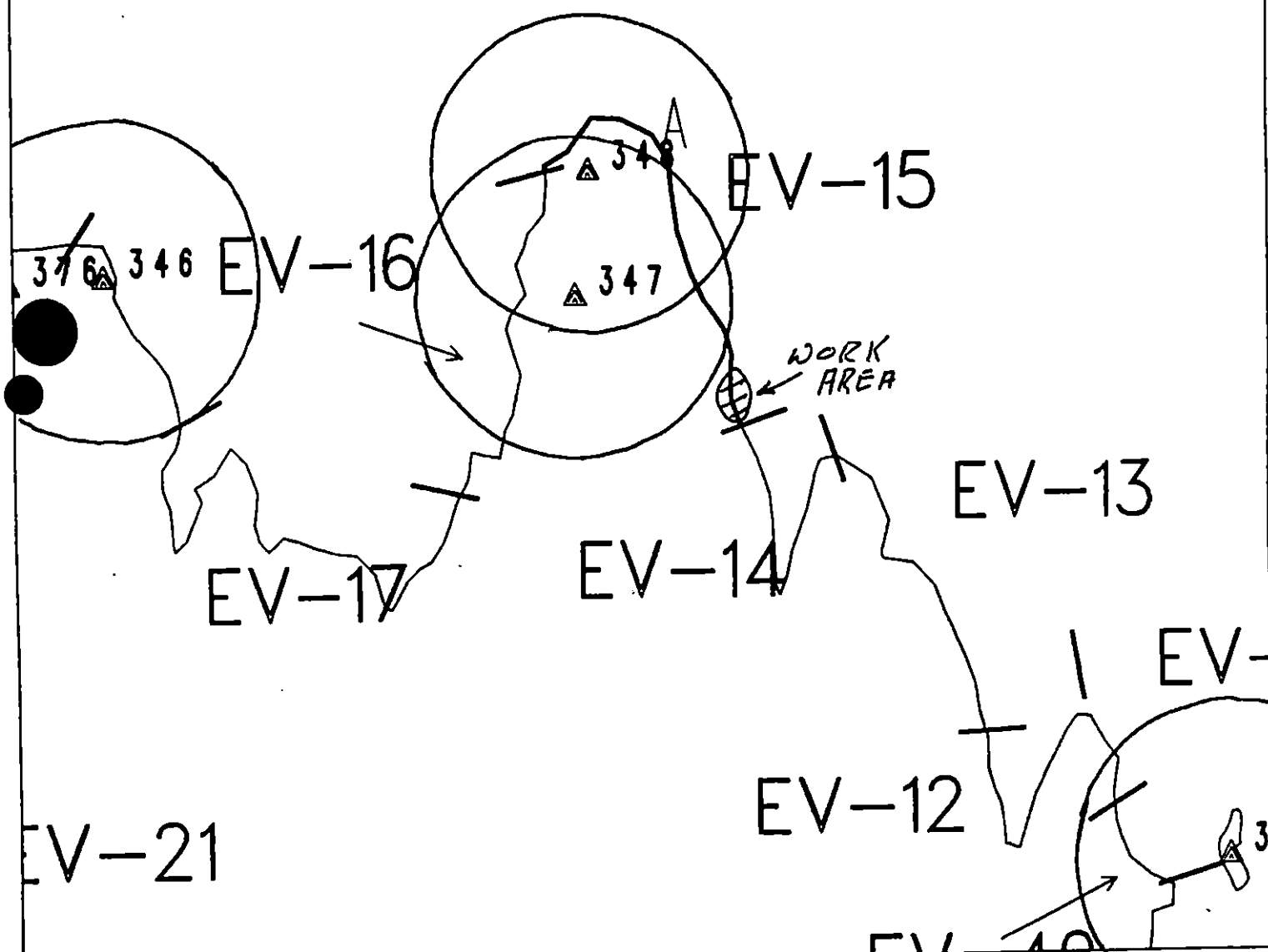
TAG APPROVAL DATE 5/29/90  
ADEC Art Weimer  
EXXON Andy TSK  
NOAA B. Prescott  
USCG G.A. Peter

FOSC [Signature]

DATE MAY 29 1990

Prepared By: Andra Meyer WRK

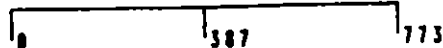
Date 5/27/90



Exxon Company, USA  
Map Key: PMS-EV-15  
May 11, 1990



ECOLOGY MAP  
SEGMENT EV-15  
SUBDIVISION *H* (1 of 1)  
METERS



- ★ Seabird Colony
- △ Eagle Nest

1 inch = 1269 feet

# SHORELINE EVALUATION

SEGMENT ST/ EV-15 SUBDIVISION A (1 OF 1) DATE 4/20/90

## SEGMENT ENVIRONMENTAL SENSITIVITIES AND TIME CONSTRAINTS:

ST-1 All bald eagle nests (3/1 to 6/1)-Active eagle nests (3/1 to 9/1)  
(an eagle nest located in adjacent segment)

6Y Recreation: Special use destination

7II Subsistence area: Deer harvesting (8/15 to 2/28)

See attached Ecological Constraint sheet for specific constraints and contacts.

## SUBDIVISION ECOLOGICAL CONSTRAINTS:

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

## ARCHAEOLOGICAL CONSTRAINTS:

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

SHPO SIGNATURE: Charles J. Adams DATE: 5/3/90

## OILING CATEGORIZATION:

Wide 0 m: Medium 66 m: Narrow 62 m: V.Light 43 m: No Oil 884 m  
Subsurface Oil Observed: Yes      No X Maximum Depth     

## RECOMMENDATIONS:

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

COMMENTS: Recommend bioremediation in areas shown on sketch map (difficult access - safety concerns). Work should be conducted after (6/1) and with USFWS approval regarding eagle nest constraint.

See Constraint Addendum, dated 5/27/90

TAG COMMENTS: MANUAL PICKUP OF ASPHALT + MOSS-E FROM INTERSECT  
BUILDERS IF FEASIBLE PRIOR TO BIO

TAG APPROVAL DATE: 5/3/90

ADEC ART WEAVER

EXXON ANDY TGM

NOAA GARY PATRICK

USCG KATHY HENNE

FOSC: my L DATE: 5

NOTIFY CVC 24 HRS IN

# SHORELINE EVALUATION

SEGMENT ST/ EV-15 SUBDIVISION A (1 OF 1) DATE 4/20/90

## SEGMENT ENVIRONMENTAL SENSITIVITIES AND TIME CONSTRAINTS:

5T-1 All bald eagle nests (3/1 to 6/1)-Active eagle nests (3/1 to 9/1)  
(an eagle nest located in adjacent segment)  
6Y Recreation: Special use destination  
7II Subsistence area: Deer harvesting (8/15 to 2/28)  
See attached Ecological Constraint sheet for specific constraints and contacts.

## SUBDIVISION ECOLOGICAL CONSTRAINTS:

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

## ARCHAEOLOGICAL CONSTRAINTS:

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

SHPO SIGNATURE: Charles J. H. Hines DATE: 5/3/90

## OILING CATEGORIZATION:

Wide 0 m: Medium 66 m: Narrow 62 m: V. Light 43 m: No Oil 884 m  
Subsurface Oil Observed: Yes        No X Maximum Depth       

## RECOMMENDATIONS:

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

COMMENTS: Recommend bioremediation in areas shown on sketch map (difficult access - safety concerns). Work should be conducted after 6/1 and with USFWS approval regarding eagle nest constraint.

TAG COMMENTS: MANUAL PICKUP OF ASPHALT + ROSS-E FROM INTERSECT  
BUILDERS IF FEASIBLE PRIOR TO BIO

TAG APPROVAL DATE: 5/3/90

ADEC ART WEINER  
EXXON ANDY TGA  
NOAA GARY DETROIT  
USCG KENNETH KEENE

FOSC: My L DATE: 5-18-90

NOTIFY EVC 24 HRS IN ADVANCE OF WORK

OG. MIKE RYCE  
 SEGMENT EV-15  
 SUBDIVISION A  
 DATE 4/20/90

# CHECKLIST

☐ N Area  
☐ Approx. Scale  
☐ Seg/Sub Entry  
☐ Oil Dist.  
☐ Width  
☐ Length  
☐ % Cover  
☐ Substrate Character  
☐ Est. HML/LWL  
☐ SSL  
☐ Profile Location(s)  
☐ Profile(s)  
☐ Pit Location(s)  
☐ Photo Location(s)

## LEGEND

1 Δ  
 Ph - No Subsurface Oil

2 Δ  
 Ph - Subsurface Oil

CT/C  
 Continuous Distribution

CT/B  
 Broken Distribution

CT/P  
 Patchy Distribution

CT/S  
 Splashed Distribution

Oil Vegetation

1 →  
 Photo location, direction,  
 and number

## Legend

/// - steep Boulder/Rock  
 shore zone

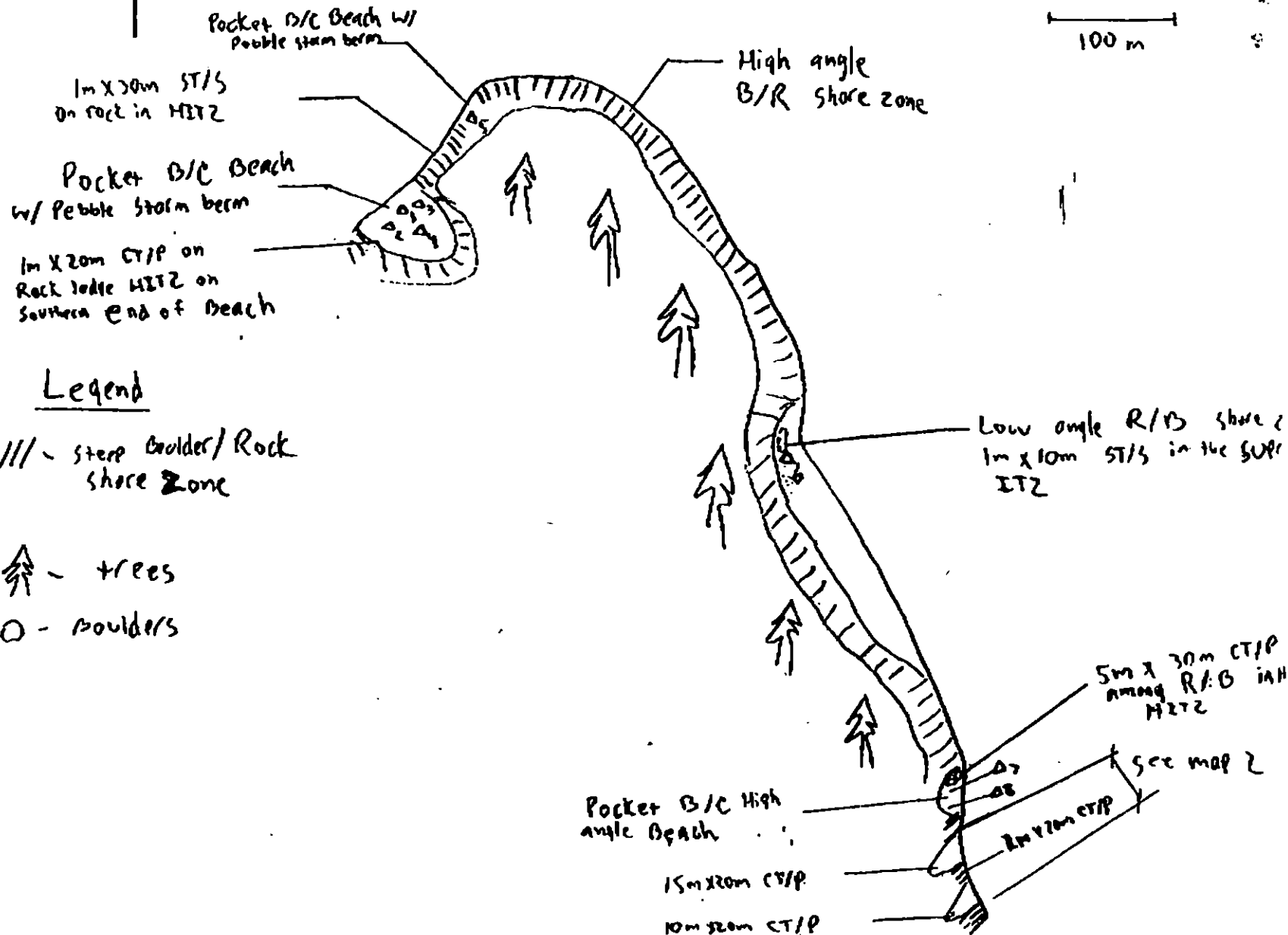
↑ - trees

○ - boulders

## SKETCH MAP

Scale

100 m



Oil Character Length (m): AP 5 PO 0 CV 5 CT 110 ST 40 MS 10 PT 0 TB 0 FL 0 NO 925

REVISION 02/90

OG Make Toget

SEGMENT ST/ EV-15

SUBDIVISION A

DATE 4, 20 90

# CHECKLIST

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

## LEGEND

1 Δ  
P1 - No Subsurface Oil

2 Δ  
P1 - Subsurface Oil

CT/C  
Continuous Distribution

CT/B  
Broken Distribution

CT/P  
Patched Distribution

CT/S  
Splashed Distribution

Oil on Vegetation

1 →  
Photo location, direction,  
and number

## Legend

↑ - trees

/// - steep Bedrock  
Boulder Backshore

○ - Large Boulder

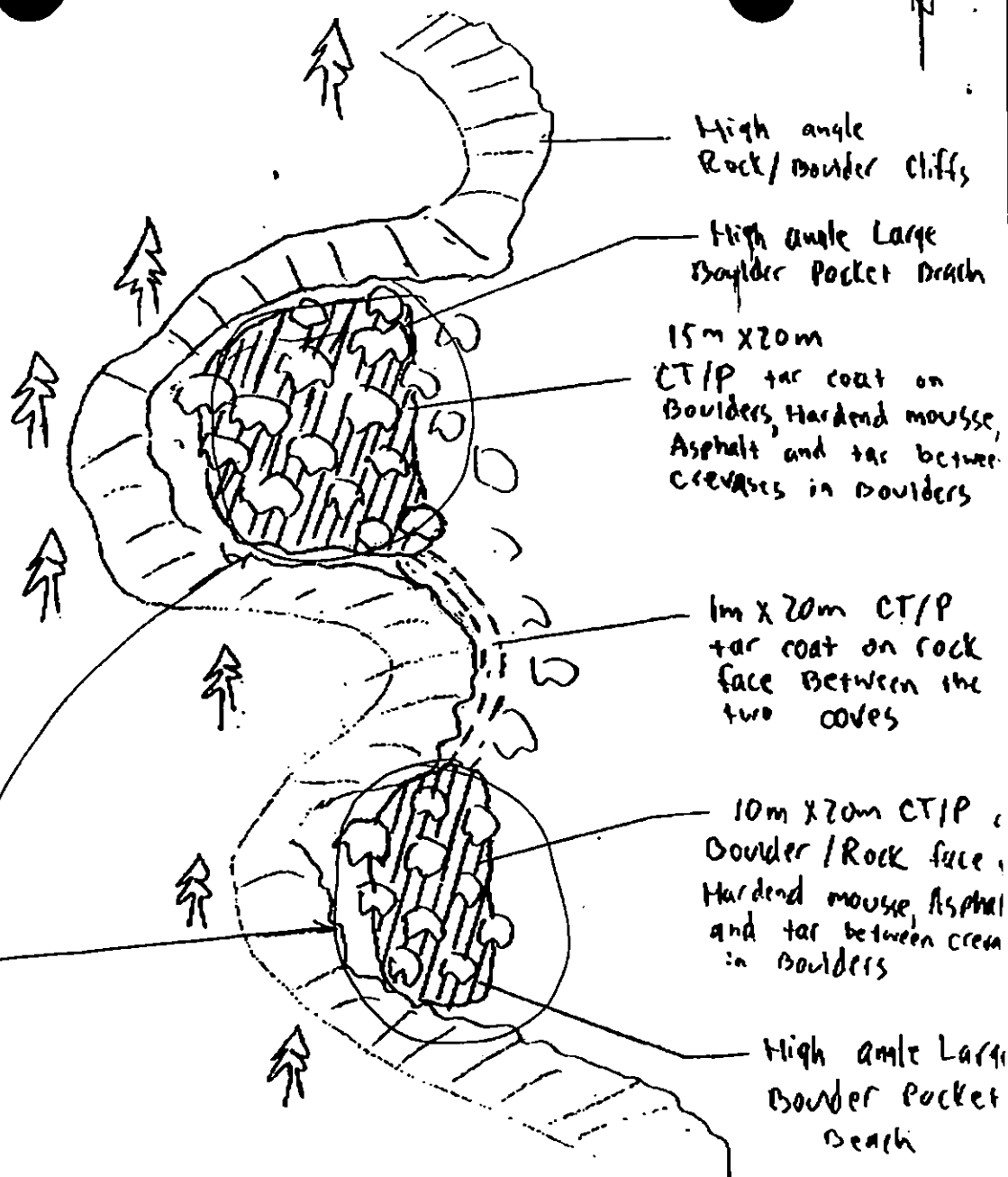
▨ - mousse and  
Asphalt

Bio

## SKETCH MAP 2

Scale

10 m



See map 1

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

REVISION 02/2000

ECOLOGY MAP (1 OF 1)

RESOURCE CODES FOR ENTIRE  
SEGMENT:



1 BALD EAGLE NEST  $\leq$  400M OF  
SEGMENT AS SHOWN.

EV-1

BALD EAGLE NEST

St 11-3  
±11,12,13 →

XXXX Wide

//// Medium

-- Narrow

TTTT Very Light

0000 No Oil

EV-15

ADEC Segment Length: 1035m



Map Key: PWS-183

Name: K. CONLAN

Date: 20 APRIL 1990

Date Entered:

EV -

EV 1

**Data Entered:**

**1991 MAYSAP EVALUATION**

SEGMENT: EV 015 SUB: A REGION: PWS SURVEY DATE: 4/30/91

**ENVIRONMENTAL SENSITIVITIES:**

Work Window(s) RESTRICTED 3/1 - 9/15

Ecological/Constraints (see page two for details) Eagle nest,  
Fish harvest area, Subsistence - Deer harvesting

**ARCHAEOLOGICAL CONSTRAINTS:**

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

SHPO Signature: \_\_\_\_\_ Date: \_\_\_\_\_

| <u>RECOMMENDATIONS:</u>       | <u>INITIAL</u> | <u>TAG</u> | <u>FOSC</u> |
|-------------------------------|----------------|------------|-------------|
| TREATMENT REQUIRED (Y or N)   | <u>N</u>       | _____      | _____       |
| Manual Pickup (Check as Req.) | _____          | _____      | _____       |
| Spot Washing                  | _____          | _____      | _____       |
| Bio-Customblen Only           | _____          | _____      | _____       |
| Bio-Inipol/Customblen         | _____          | _____      | _____       |
| Other _____                   | _____          | _____      | _____       |
| Other _____                   | _____          | _____      | _____       |

**COMMENTS:**

INITIAL: \_\_\_\_\_

TAG: \_\_\_\_\_

FOSC: \_\_\_\_\_

TAG APPROVAL DATE: \_\_\_\_\_ FOSC APPROVAL DATE: \_\_\_\_\_

ADEC \_\_\_\_\_ FOSC \_\_\_\_\_

EXXON \_\_\_\_\_

USCG \_\_\_\_\_

NOAA \_\_\_\_\_

**ECOLOGICAL CONSTRAINTS  
1991 FIELD ACTIVITIES**

**Eagle Nest:** Access restricted from 3/1 to 9/1. USF&WS authorization required. Maintain 1000' vertical and 1/4 mile horizontal buffer.

**Fish Harvest Area:** Unlimited treatment unless otherwise directed by ADF&G. Sheen containment/recovery procedures required for mechanical treatment.

**Subsistence - Deer Harvesting:** Unlimited treatment prior to 8/15.

# MAYSAP FIELD SHORELINE COMMENT SHEET

TEAM NO. 5 SEGMENT EV-15 SUBDIVISION A DATE 4/30/91

## ADEC

NAME John Hoyer SIGNATURE [Signature]

☐ NTR

☒ Reassessment Recommended.  
Oiling observed on portion of segment surveyed was a broken band of AP + CU along the pocket beaches difficult to access between A + B's. Subsurface oiling in the UZT2 was H/OR ranging from 10-20 cm. known. Beach should be watched for seepage and formation of AP from near surface contamination. This beach would be feasible for debris crew to do touch up work picking up surface oiling present.

## EXXON

NAME Martinez N.J. SIGNATURE [Signature]

☒ NTR

Some AP. 100 + surrounding large rocks + Bedrocks. Will be hard to pick up Possible CVC project.

## LANDMANAGER

NAME Steve Ward OF CVC SIGNATURE [Signature]

☐ NTR

This Area Containing Numerous Sites of oily deposits in pocket beaches. The oil is asphalt under and between cobbles. Hard to retrieve but possible CLR project. Subsurface oil is present and should be watched this summer to see if seepage is occurring in winter. Area notes are good and should be followed up.

## USCG/NOAA

NAME DREHER/HODGES SIGNATURE [Signature]

☒ NTR

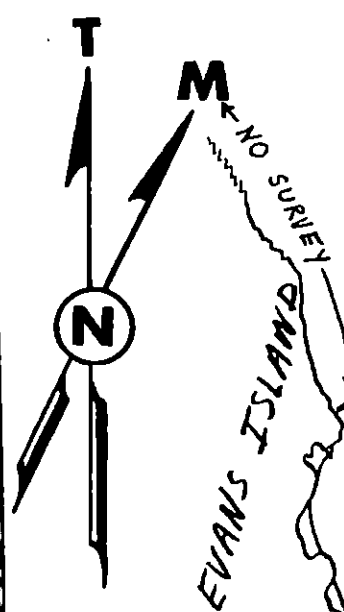
Small deposits of oil sediments would be too labor intensive to remove.

Some scattered tar patches and areas of oiled sediment in crevices. One meter band of oil coat/coverage w/ pine needles on some large rocks.



MAY8AP 1991 NOTE OILING CONDITIONS ARE PRESENTED  
 06 SKETCH MAP AS THEY LOOKED AFTER OUR MANUAL PICKUP  
 GREG CHANEY  
 TEAM 5

SEGMENT: EV-15-A  
 DATE: APRIL 30 1991  
 AIR P.#: PTM-C-006-14



LEGEND

|            |  |
|------------|--|
| BEDROCK    |  |
| BOULDERS   |  |
| FINE BED.  |  |
| DRIFT LOG  |  |
| GRASS      |  |
| BRUSH      |  |
| FOREST     |  |
| OILED PIT  |  |
| NO OIL PIT |  |
| PHOTO      |  |

SCALE

ROUGHLY 50  
 METERS

SMALL PEBBLE COBBLE BEACH

No Field Data  
 Assume:  
 2x2m HOR

LAYER OF  
 HOR ~ 4x10m  
 UNDER LARGE ANGULAR  
 BOULDERS

(B) AP 5% CV 10% CT 10%  
 DRIFT SEAWEED ON  
 ANGULAR BOULDERS  
 2m x 9m

SMALL  
 STREAM

FOREST

LOW JAGGED  
 ROCKS

(D) 4x10m  
 AP 10%  
 CV 40%  
 CT 10%

(C) AP 5%  
 CT 20%  
 CV 20%  
 5x20m

(E) 5x8m  
 AP 10%  
 CV 40%  
 CT 10%

AP 20x30cm  
 (PU)

(A) AP-TRACE  
 CV 10%  
 CT 10%  
 2x4m

AP 15x30cm  
 (PU)

AP 20x20cm  
 (PU) 3 PATCHES

NOTE: AREAS D&E ARE SMALL  
 FISSURE COVES WHICH CONTAIN  
 LARGE ANGULAR BOULDERS

WRIGHT ISLAND PASSAGE

REVIEWED: F.W. 5/2/91  
 REVISIONS: M.C. 5/2/91

TEAM # 5

DATE 30 April 1991

SEGMENT # EV-15

TIDAL HEIGHT(Range) +0.5 → -1.5

SUBDIVISION A

BIOLOGIST Crank

SEA STATE 1-2 ft

WIND SPEED/DIRECTION 10-20 knots/N

PHOTOGRAPHS: ROLL # MAYSAP 5

FRAME # 16

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

(A) Area is located high in the UITZ in a boulder field and on bedrock in the drift line. There is freshwater runoff. In and near runoff there is filamentous green algae. No other macro-biota observed within site. Three meters below site there are rare *Fucus* sporlings and moderate barnacles. Approx. 50% of barnacle shells are empty; live animals tightly sealed their inner plates when stimulated. *Littorina* and limpets are rare. Eight meters below site there is a rock outcrop with ~40% biota cover on protected side (facing site) and ~70% cover on exposed side. *Fucus* is the dominant species. Sparse juvenile mussels (~1 yr) are found in cracks and crevices. In tidepools coralline algae and moderate *Littorina* are present. Pit 1 below (A)

(B) Area is located in UITZ between rock outcrop and cliff. Near top of sediment are white lichen and moss with fruiting bodies. Filamentous green algae is found on sides and bottoms of sediments. Below this area is a high energy rubble/gravel beach with little biota. Five meters north a boulder field begins with 50% algae cover dominated by *Fucus* and filamentous greens.

(C) Area is located high in UITZ and SUPRA in the lee of a rock bench. White lichen, mosses with fruiting bodies and filamentous green algae is present. Extremely slippery. No other macro-biota observed in area. There is a main tidepool in the rockbench with moderate coralline algae and many anenomes. Rock bench has moderate barnacles with a new set present. *Fucus* with maturing conceptacles and sporling is present. Epiphytic plants are present on a small number of *Fucus* plants. In low part of LITZ the alga *Palmaria* is prominent (at ~1' tide level). One black chiton (*Katherina*) found.

## WILDLIFE OBSERVATIONS

TO BE COMPLETED IN ALL SUBDIVISIONS

| BIRDS            | # OF SPECIES M.B. <sup>5/3/91</sup> | TOTAL BIRDS     | FISH OBSERVED SPECIES PRESENT |
|------------------|-------------------------------------|-----------------|-------------------------------|
| Eagles           | 1                                   | 2               | Herring spawn in drift algae  |
| Seabirds         | 2                                   | 12 (2 on beach) |                               |
| Waterfowl        | 1                                   | 3               |                               |
| Gulls/kittiwakes | 2                                   | 7               |                               |
| Shorebirds       |                                     |                 |                               |
| Corvids          | 3                                   | 7               |                               |
| Other Birds      |                                     |                 |                               |

| MARINE MAMMALS      | # OBSERVED | LAND MAMMALS SPECIES       | # OBSERVED |
|---------------------|------------|----------------------------|------------|
| Sea Otters          | 1          | Possible River Otter trail |            |
| Pinnipeds (specify) | 3 - Seals  |                            |            |
| Whales (specify)    |            |                            |            |
|                     |            |                            |            |

Shoreline subdivision map showing important biological features attached.

Team #5  
Segment EV-15  
Subdivision A  
Sea State 1-2'

Date 30 April 1991  
Tidal Height  $+0.5 \rightarrow -1.5$   
Biologist Crank  
Wind Speed/Direction 15-20 knots/N

pg 2 of 2

### Comments (cont)

(D) <sup>and Pits</sup> Area is located in the UITZ in subarea 1. It is approx. 30 m SE of the  
Less than 1% biotic cover within the site including rare Fucus sporophytes and  
rare barnacles with ~50% empty shells; caracae scars are present. LITZ

Barnacles tightly sealed their opercula when stimulated. Ten meters from  
site, barnacles are sparse and Fucus is sparse on boulders and bedrock.

There is ~20% biotic cover; cover increases to ~30% @ -1.0' tide level.

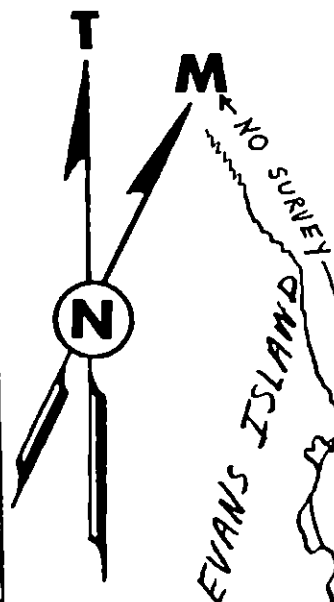
(E) Area is ~10 m SE of (D) in the high UITZ. Filamentous green algae and rare  
barnacles only <1% biota cover. Below (E) in the boulder field MITZ; UITZ biota cover is ~4%  
with barnacles dominant in MITZ; a new set is present. Fucus is  
dominant in the LITZ with bladed and filamentous red algae from  
Ulva (sea lettuce) and Scytosiphon (algae) also present.

Subdivision is a pocket cove bordered by boulder field and rock outcrops.

Beach is high energy with cobble/gravel in UITZ, cobble in MITZ and  
small boulders in LITZ. UITZ and MITZ substrate not expected to support  
much intertidal life. There are rare patches of filamentous green algae (more common  
in freshwater runoff), Scytosiphon (algae), Fucus, barnacles, Littorina and limpets.  
In the boulder fields and rock outcrops there is ~50% algae cover  
dominated by Fucus and filamentous greens; bladed reds also present;  
Ulva (sea lettuce), Scytosiphon and Gloiopeltis are present. Barnacles  
are moderate in MITZ (new set present) and sparse in LITZ. Littorina  
and limpets are rare. Mussels are present, various age classes.

Eagle nest not located.

MAYBAP 1991 NOTE DILING CONDITIONS ARE PRESENTED  
 OG SKETCH MAP; Bio Sketch Map  
 GREG CHANEY; AS THEY LOOKED AFTER OUR MANUAL PICKUP  
 TEAM 5 CRANK  
 SEGMENT: EV-15-A  
 DATE: APRIL 30 1991  
 AIR P.#: PIM-C-006-14



# LEGEND

|            |  |
|------------|--|
| BEDROCK    |  |
| BOULDERS   |  |
| FINE BED.  |  |
| DRIFT LOG  |  |
| GRASS      |  |
| BRUSH      |  |
| FOREST     |  |
| OILED PIT  |  |
| NO OIL PIT |  |
| PHOTO      |  |

## SCALE

ROUGHLY 50  
METERS

EV-15

EV-14

EV-13

SMALL PEBBLE COBBLE BEACH  
 Low biota cover - high energy, not  
 expected to support much life

Approx. 50% algae cover  
 in boulder fields and  
 rock outcrops

LAYER OF  
 HOR ~ 4x10m  
 UNDER LARGE ANGULAR  
 BOULDERS

(B) AP 5% CV 10% CT 10%  
 DRIFT SEAWEED ON  
 ANGULAR BOULDERS  
 9x2 m

SMALL  
 STREAM

FOREST

LOW JAGGED  
 ROCKS

Covered with  
 filamentous green  
 algae VERY SLIPPERY

(C) AP 5%  
 CT 20%  
 CV 20%  
 5x20m

(D) 4x10m  
 AP 10%  
 CV 40%  
 CT 10%

AP 20x30cm  
 PU

(E) 5x8m  
 AP 10%  
 CV 40%  
 CT 10%

(A) AP-TRACE  
 CV 100%  
 CT 10%  
 2x4 m

AP 15x30cm  
 PU

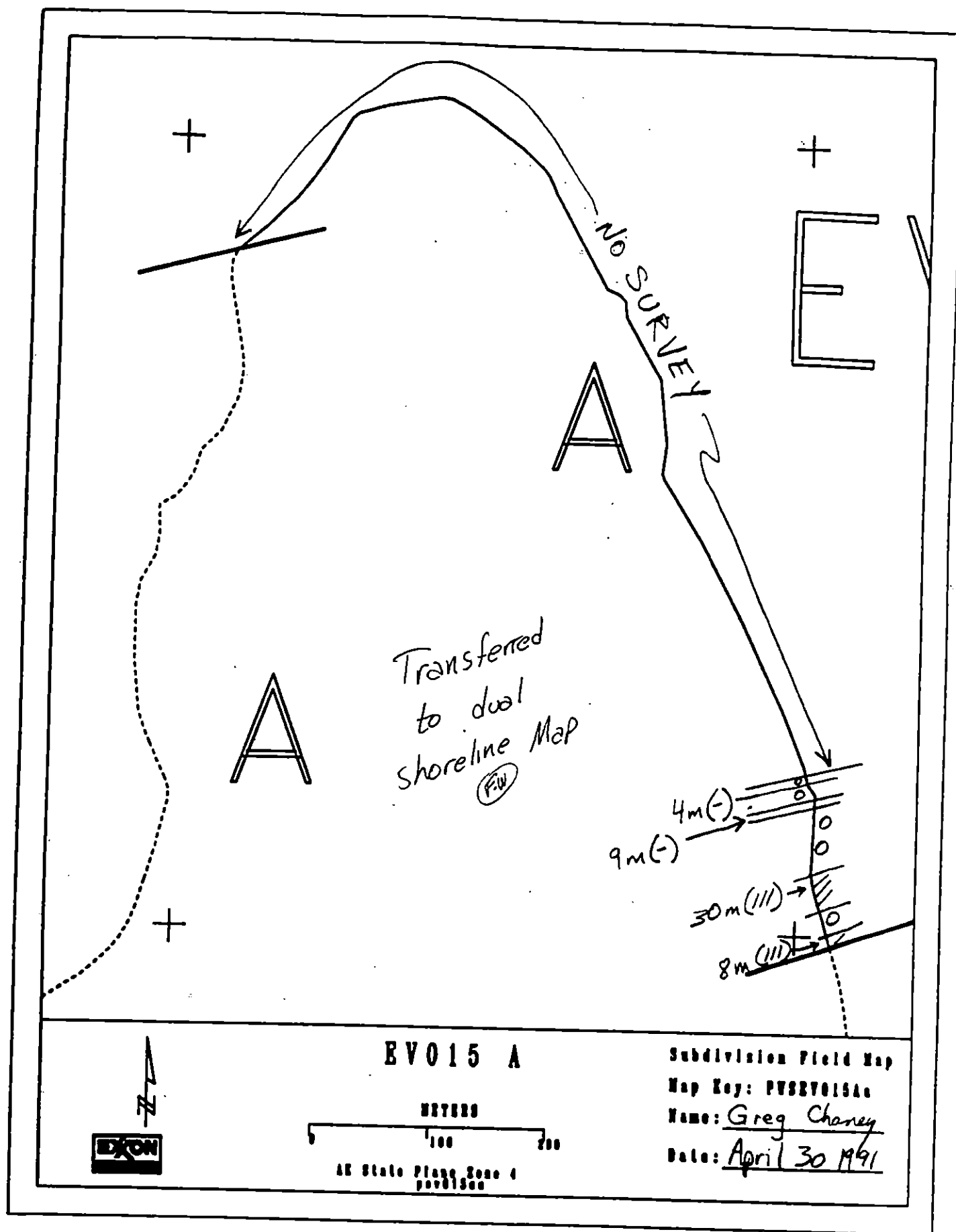
AP 20x20cm  
 PU 3 PATCHES

(E) 5x8m  
 AP 10%  
 CV 40%  
 CT 10%

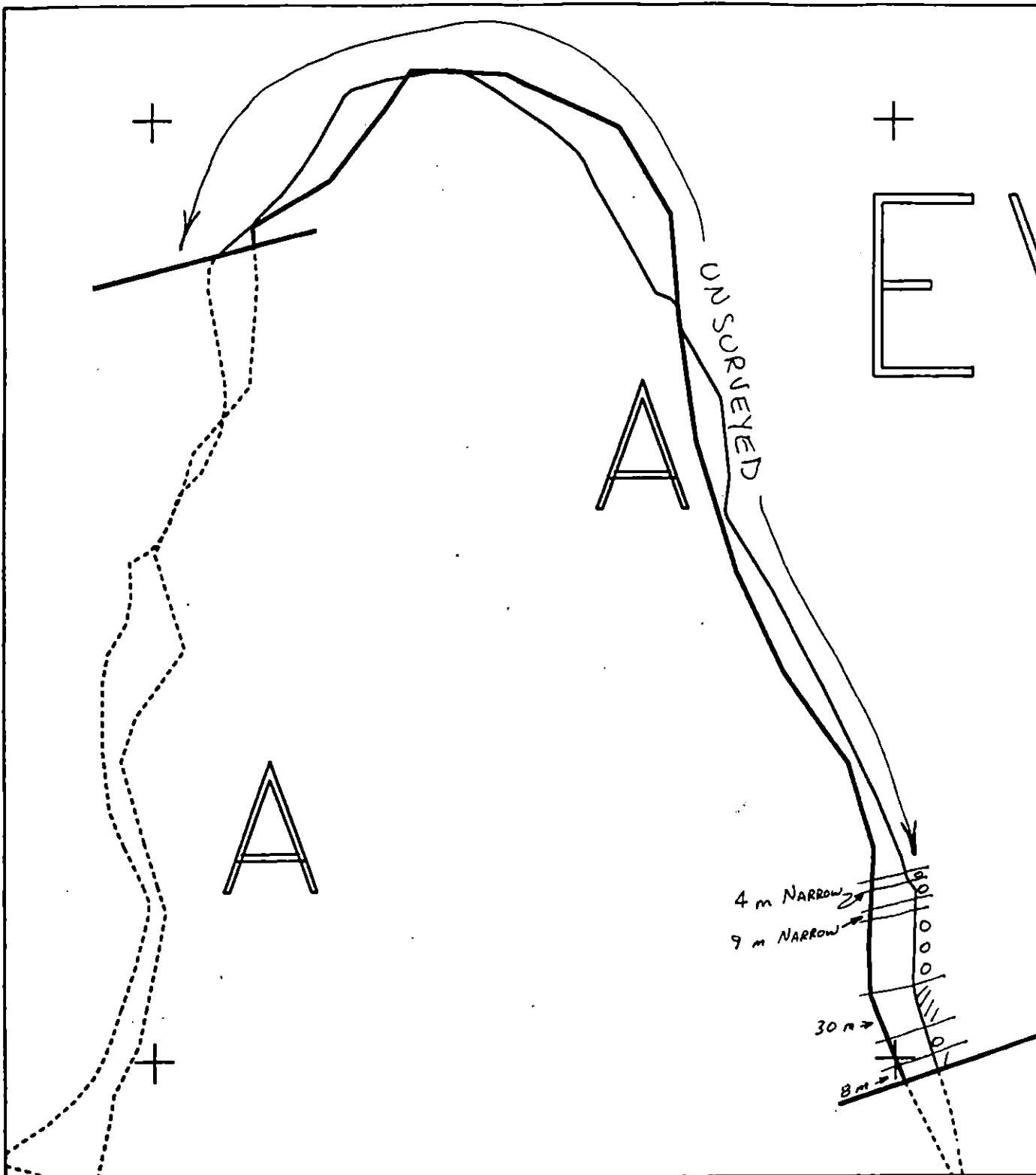
FOREST

NOTE: AREAS D&E ARE SMALL  
 FISSURE COVES WHICH CONTAIN  
 LARGE ANGULAR BOULDERS

EVANS ISLAND PASSAGE



Revised: F.W. 5/2/91  
Reviewed: M.C. 5/4/91



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

**EV015 A**  
 ADEC Subsegment Length: 1055m  
 METERS  
 0 100 200  
 AK State Plane Zone 6  
 proj1500

Subdivision Field Map  
 Map Key: PWSEV015Aa  
 Name: Greg Chaney  
 Date: April 30, 1991  
 Date Entered:

Revised: F.W. 5/2/91  
 REVISIONS: MC 5/4/91

# 1991 MAYSAP EVALUATION

SEGMENT: EV 015 SUB: A REGION: PWS SURVEY DATE: 4/30/91

**ENVIRONMENTAL SENSITIVITIES:**

Work Window(s) RESTRICTED 3/1 - 9/15

Ecological/Constraints (see page two for details) Eagle nest,  
Fish harvest area, Subsistence - Deer harvesting

**ARCHAEOLOGICAL CONSTRAINTS:**

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

SHPO Signature: Charles E. Holmes Date: 5/10/91

**RECOMMENDATIONS:**

**INITIAL**

**TAG**

FOSC

TREATMENT REQUIRED (Y or N)

N

2

2

Manual Pickup (Check as Req.)

Spot Washing

Bio-Customblen Only

Bio-Inipol/Customblen

Other

Other

**COMMENTS:**

INITIAL:

TAG:

FOSC:

TAG APPROVAL DATE: 11/10/1991

FOSC APPROVAL DATE: 5/20/21

ADEC

FOSC

**EXXON**

E. E. PAGE, CDR, USCG  
CHIEF OF STAFF, FOSC

USCG

NOAA

**ECOLOGICAL CONSTRAINTS  
1991 FIELD ACTIVITIES**

**Eagle Nest:** Access restricted from 3/1 to 9/1. USF&WS authorization required. Maintain 1000' vertical and 1/4 mile horizontal buffer.

**Fish Harvest Area:** Unlimited treatment unless otherwise directed by ADF&G. Sheen containment/recovery procedures required for mechanical treatment.

**Subsistence - Deer Harvesting:** Unlimited treatment prior to 8/15.

# MAYSAP FIELD SHORELINE COMMENT SHEET

TEAM NO. 5 SEGMENT EV-15 SUBDIVISION A DATE 4/30/91

## ADEC

NAME John Hoyer SIGNATURE [Signature]

☐ NTR ☒ Reassessment Recommended.  
Oiling observed on portion of segment surveyed was a broken band of AP + CV along the pocket beaches difficult to access between A + B's. Subsurface oiling in the UITE was H/OR ranging from 10-20 cm. lower. Beach should be watched for secondary oil formation of AP from near surface contamination. This beach would be feasible for debris crew to do touch up work picking up surface oiling present.

## EXXON

NAME Martinez N.J. SIGNATURE [Signature]

☒ NTR Some A/P. 110 + 2000000 large rocks + Bedrocks. Will be hard to pick up Possible CVC project.

## LANDMANAGER

NAME Steve WARD OF CVC SIGNATURE [Signature]

☐ NTR This Area Contains Numerous Sites of oily Deposits in pocket Beaches. The oil is Asphalt under and between Cobbles. Hard to Retrieve but Possible CLR Project. Sub-Surface oil is present and should be watched this Summer to see if shoaling is occurring in water. Area notes are good and should be followed.

## USCG/NOAA

NAME DREHER/HODGES SIGNATURE [Signature]

☒ NTR Small deposits of oil sediments would be too labor intensive to remove.

Some scattered tar patches and areas of oiled sediment in crevices. One meter band of oil coat/coverage w/ pine needles on some large rocks.

TEAM NO.

OG CHANEY

BIO CRANK

SEGMENT EV-15

ADEC HAYES

LANDMANAGER WARD for CVC

SUBDIVISION A

EXXON MARTINEZ

USCG/NOAA DREHER/HODGES

DATE April 130 / 91

TIME 07:25 to 08:28

TIDE LEVEL +0.5 ft. to -1.5 ft.

ENERGY LEVEL: ☒ H ☐ M ☐ LSURVEYED FROM: ☒ FOOT ☐ BOAT ☐ HELOWEATHER: ☐ SUN ☒ CLOUDS ☐ FOG ☒ RAIN ☐ SNOW

TOTAL LENGTH SHORELINE SURVEYED: 146 m

NEAR SHORE SHEEN: ☐ BR ☐ RB ☐ SL ☒ NONE

EST. OIL CATEGORY LENGTH: W 0 m M 38 m N 13 m VL 0 m NO 95 m US 909 m

| LOC | SURFACE OIL CHARACTER |    |    |     |    |    |    |    |    |    | SURFACE SEDIMENT TYPE | SHORE SLOPE V H M L | AREA    |          | ZONE |    |    |    | NOTES                  |
|-----|-----------------------|----|----|-----|----|----|----|----|----|----|-----------------------|---------------------|---------|----------|------|----|----|----|------------------------|
|     | AP                    | MS | TB | SOR | CV | CT | ST | FL | DB | NO |                       |                     | WIDTH m | LENGTH m | S    | UI | MI | LI |                        |
| A   | I                     |    |    |     | S  | S  |    |    |    |    | RB                    | H                   | 2       | 4        |      | ✓  |    |    | ANGULAR BOULDERS       |
| B   | S                     |    |    |     | S  | S  |    |    |    |    | BR                    | H                   | 2       | 9        |      | ✓  |    |    | LARGE ANGULAR BOULDERS |
| C   | S                     |    |    |     | P  | P  |    |    |    |    | BR                    | H                   | 5       | 20       |      | ✓  |    |    |                        |
| D   | S                     |    |    |     | P  | S  |    |    |    |    | BR                    | H                   | 4       | 10       |      | ✓  |    |    |                        |
| E   | S                     |    |    |     | P  | S  |    |    |    |    | BR                    | H                   | 5       | 8        |      | ✓  |    |    |                        |

DISTRIBUTION: C = 91-100%; B = 51-90%; P = 11-50%; S = 1-10%; T = &lt;1%

SLOPE: V = VERTICAL; H = HIGH ANGLE; M = MEDIUM ANGLE; L = LOW ANGLE PHOTO ROLL # MAYSAP- 5 - 5 FRAMES 1-6

| LOC.   | PIT NO. | PIT DEPTH (cm) | SUBSURFACE OIL CHARACTER |     |     |     |    |    |    | OILED ZONE cm-cm | CLEAN BELOW Y/N | H2O LEVEL (cm) | SHEEN COLOR B R S N | PIT ZONE |    |    |    | SURFACE-SUBSURFACE SEDIMENTS | NOTES         |
|--------|---------|----------------|--------------------------|-----|-----|-----|----|----|----|------------------|-----------------|----------------|---------------------|----------|----|----|----|------------------------------|---------------|
|        |         |                | OP                       | HOR | MOR | LOR | OF | TR | NO |                  |                 |                |                     | S        | UI | MI | LI |                              |               |
| Loc. A | 1       | 20             |                          |     | ✓   |     |    |    |    | 0-15             | Y               | -              | -                   |          | ✓  |    |    | BC-PC                        |               |
|        |         |                |                          | ✓   |     |     |    |    |    | 15-20            | Y               | -              | -                   |          | ✓  |    |    | PC-R                         | ANGULAR SED.  |
|        | 2       | 30             |                          |     |     |     |    |    | ✓  | -                |                 | -              | -                   |          | ✓  |    |    | PC-R                         |               |
| Loc. D | 3       | 10             |                          | ✓   |     |     |    |    |    | 0-10             | Y               | -              | -                   |          | ✓  |    |    | CP-R                         | BEDROCK CRACK |
|        |         |                |                          |     |     |     |    |    |    | -                |                 |                |                     |          |    |    |    |                              |               |
|        |         |                |                          |     |     |     |    |    |    | -                |                 |                |                     |          |    |    |    |                              |               |

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

## OG COMMENTS:

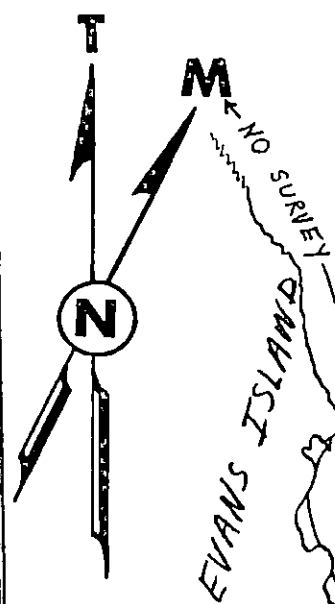
OIL IS CONCENTRATED BEHIND BEDROCK OUTCROPS UNDER LARGE ANGULAR BOULDERS. PATCHES OF CT & CV ON LEE SIDE OF PROTECTED BOULDERS

THIS SURVEY WAS CONDUCTED IN DRIVING RAIN, MAKING LIGHT OILING TYPES DIFFICULT TO DISTINGUISH,

REVISED: F.W. 5/2/91

REVIEWED: M.C. 5/4/91

MAYSAP 1991 NOTE OILING CONDITIONS ARE PRESENTED  
 OG SKETCH MAP AS THEY LOOKED AFTER OUR MANUAL PICKUP  
 GREG CHANEY TEAM 5  
 SEGMENT: EV-15-A  
 DATE: APRIL 30 1991  
 AIR P.#: PIM-C-006-14



# LEGEND

|            |  |
|------------|--|
| BEDROCK    |  |
| BOULDERS   |  |
| FINE SED.  |  |
| DRIFT LOG  |  |
| GRASS      |  |
| BRUSH      |  |
| FOREST     |  |
| OILED PIT  |  |
| NO OIL PIT |  |
| PHOTO      |  |

## SCALE

ROUGHLY 50  
METERS

EV-15

EV-14

EV-13

SMALL PEBBLE COBBLE BEACH

No Field Data  
Assume:  
2x2m HOR

LAYER OF  
HOR ~ 4x10m  
UNDER LARGE ANGULAR  
BOULDERS

(B) AP 5% CV 10% CT 10%  
DRIFT SEAWEED ON  
ANGULAR BOULDERS  
2m x 9m

SMALL  
STREAM

FOREST

LOW JAGGED  
ROCKS

(D) 4x10m  
AP 10%  
CV 40%  
CT 10%

(C) AP 5%  
CT 20%  
CV 20%  
5x20m

AP 20x30cm  
(PU)

(E) 5x8m  
AP 10%  
CV 40%  
CT 10%

FOREST

(A) AP-TRACE  
CV 10%  
CT 10%  
2x4m

AP 15x30cm  
(PU)

AP 20x20cm  
(PU) 3 PATCHES

NOTE: AREAS D&E ARE SMALL  
FISSURE COVES WHICH CONTAIN  
LARGE ANGULAR BOULDERS

WRIGHT ISLAND PASSAGE

TEAM # 5

DATE 30 April 1991

SEGMENT # EV-15

TIDAL HEIGHT (Range) +0.5 → -1.5

SUBDIVISION A

BIOLOGIST Crank

SEA STATE 1-2 ft

WIND SPEED/DIRECTION 10-20 knots/N

PHOTOGRAPHS: ROLL # MAYSAP 5

FRAME # 46

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

(A) Area is located high in the UITZ in a boulder field and on bedrock in the drift line. There is freshwater runoff. In and near runoff there is filamentous green algae. No other macro-biota observed within site. Three meters below site there are rare *Fucus* sporelings and moderate barnacles. Approx. 50% of barnacle shells are empty; live animals tightly sealed their inner plates when stimulated. *Littorina* and limpets are rare. Eight meters below site there is a rock outcrop with ~40% biota cover on protected side (facing site) and ~70% cover on exposed side. *Fucus* is the dominant species. Sparse juvenile mussels (~1 yr) are found in cracks and crevices. In tidepools coralline algae and moderate *Littorina* are present. Pit 1 below (A)

(B) Area is located in UITZ between rock outcrop and cliff. Near top of sediment are white lichen and moss with fruiting bodies. Filamentous green algae is found on sides and bottoms of sediments. Below this area is a high energy cobble/gravel beach with little biota. Five meters north a boulder field begins with 50% algae cover dominated by *Fucus* and filamentous greens.

(C) Area is located high in UITZ and SUPRA in the lee of a rock bench. White lichen, mosses with fruiting bodies and filamentous green algae is present. Extremely slippery. No other macro-biota observed in area. There is a main tidepool in the rockbench with moderate coralline algae and many anemones. Rock bench has moderate barnacles with a new set present. *Fucus* with maturing conceptacles and sporeling is present. Epiphytic plants are present on a small number of *Fucus* plants. In low part of LITZ the alga *Palmeria* is prominent (at -1' tide level). One black chiton (*Katherina*) found.

## WILDLIFE OBSERVATIONS

TO BE COMPLETED IN ALL SUBDIVISIONS

| BIRDS            | # OF SPECIES | M.B. <sup>3/3/91</sup> | TOTAL BIRDS               | FISH OBSERVED<br>SPECIES PRESENT |
|------------------|--------------|------------------------|---------------------------|----------------------------------|
| Eagles           | 1            |                        | 2                         | Herring spawn in drift algae     |
| Seabirds         | 2            | 1                      | 1 2 (one + dead on beach) |                                  |
| Waterfowl        | 1            |                        | 3                         |                                  |
| Gulls/kittiwakes | 2            |                        | 7                         |                                  |
| Shorebirds       |              |                        |                           |                                  |
| Corvids          | 3            |                        | 7                         |                                  |
| Other Birds      |              |                        |                           |                                  |

| MARINE MAMMALS      | # OBSERVED | LAND MAMMALS<br>SPECIES    | # OBSERVED |
|---------------------|------------|----------------------------|------------|
| Sea Otters          | 1          | Possible River otter trail |            |
| Pinnipeds (specify) | 3 - Seals  |                            |            |
| Whales (specify)    |            |                            |            |
|                     |            |                            |            |

Shoreline subdivision map showing important biological features attached.

Team #5  
Segment EV-15  
Subdivision A  
Sea State 1-2'

Date 30 April 1991  
Tidal Height  $+0.5 \rightarrow -1.5$   
Ecologist Crank  
Wind Speed/Direction 15-20 knots/N

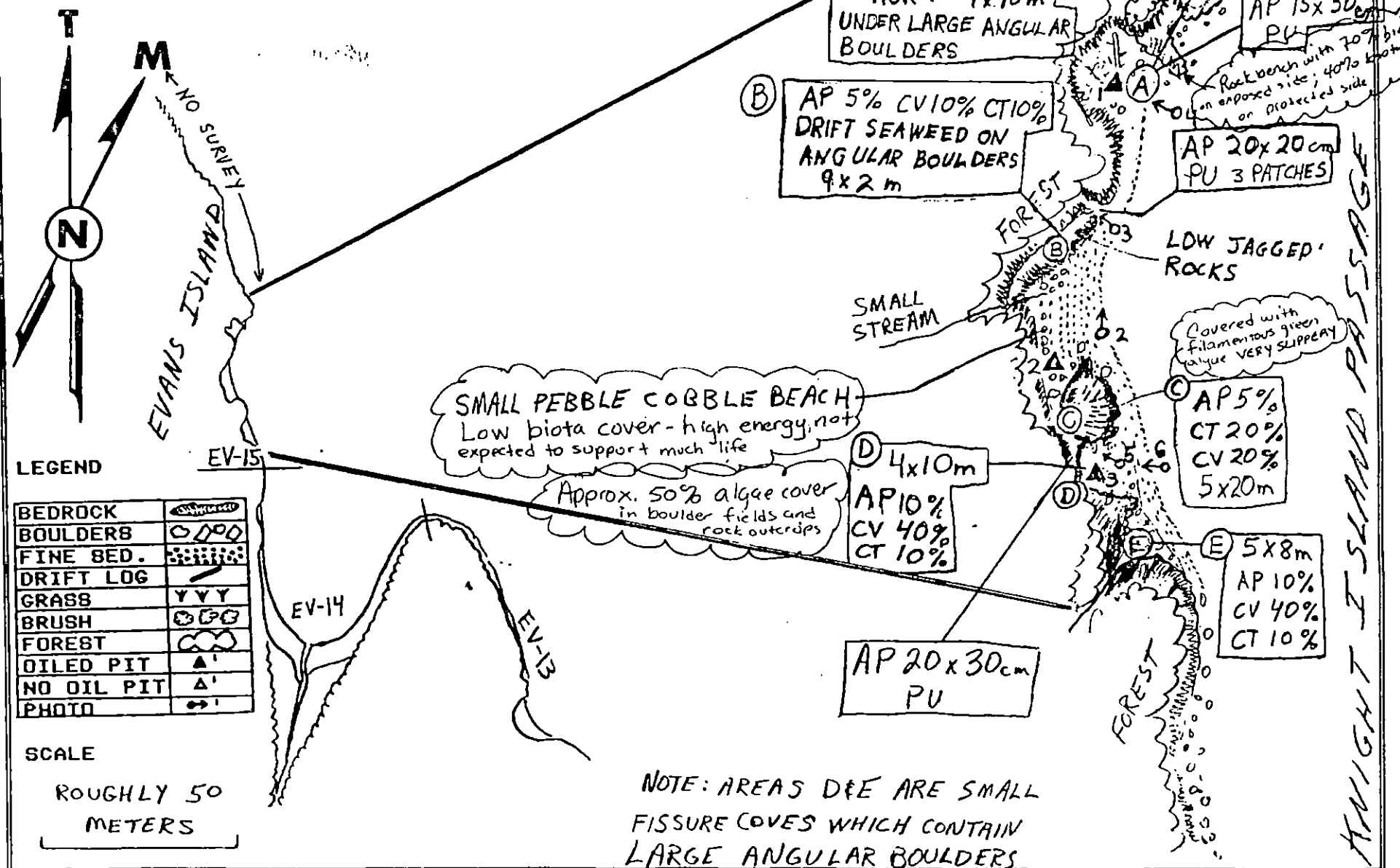
pg 2 of 2

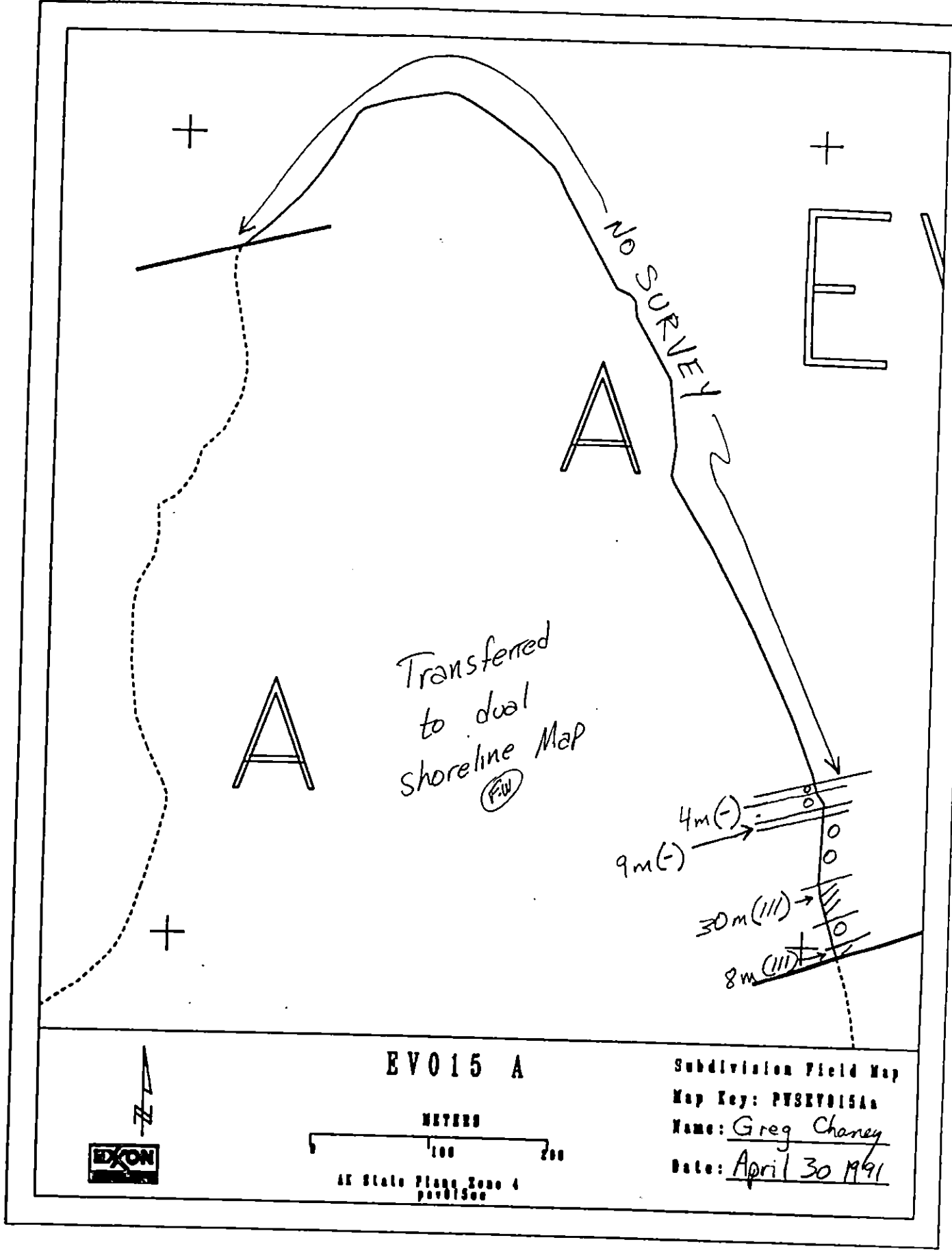
### Comments (cont)

- (D) <sup>and Pits</sup> Area is located in the UITZ in ~~sub~~ <sup>sub</sup> ~~area~~ <sup>area</sup> approx. 30 m SE  
Less than 1% biotic cover within the site including rare Fucus sporlings; rare  
rare barnacles with 50% empty space; Littorina scars are present. In  
barnacles tightly sealed their inner cover when stimulated. Ten meters away  
site, barnacles are sparse and Fucus is sparse on boulders and bedrock.  
There is ~20% biotic cover; cover increases to ~30% @ -1.0' tide level  
(E) Area is ~10 m SE of (D) in the high UITZ. Filamentous green algae and rare  
barnacles only <1% biotic cover. Below (E) in the boulder field MITZ; UITZ biotic cover is ~1%  
with barnacles dominant in MITZ. a new set is present. Fucus is  
dominant in the LITZ with bladed and filamentous red algae from  
Ulva (sea lettuce) and Scytosiphon (algae) also present

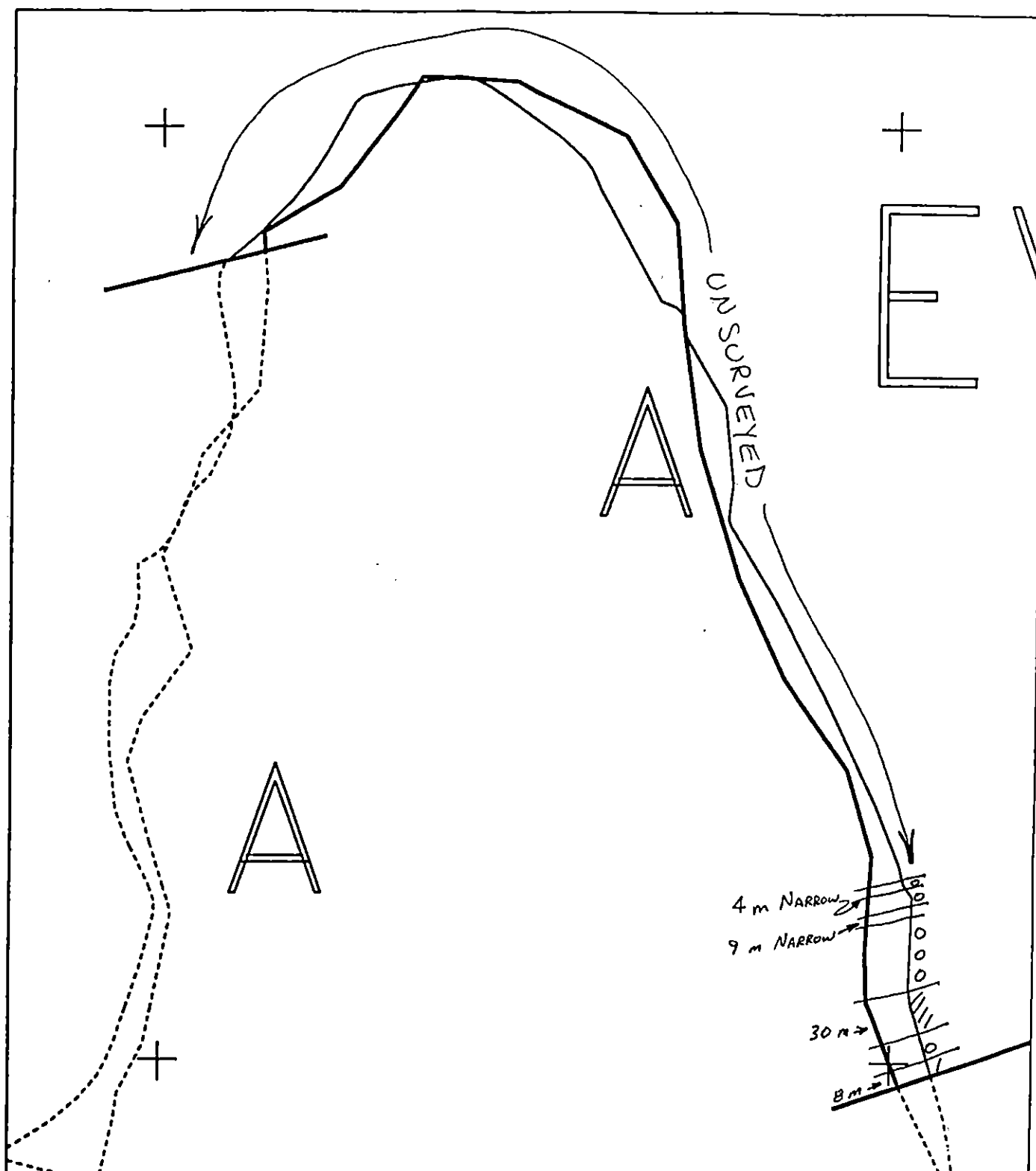
Subdivision is a pocket beach bordered by boulder field and rock outcrops.  
Beach is high energy with cobble/gravel in UITZ, cobble in MITZ and  
small boulders in LITZ. UITZ and MITZ substrate not expected to support  
much intertidal life. There are rare patches of filamentous green algae (more common  
in freshwater runoff), Scytosiphon (alga), Fucus, barnacles, Littorina and limpets.  
In the boulder fields and rock outcrops there is ~50% algae cover  
dominated by Fucus and filamentous greens; bladed reds also prominent;  
Ulva (sea lettuce), Scytosiphon and Gloiopeltis are present. Barnacles  
are moderate in MITZ (new set present) and sparse in LITZ. Littorina  
and limpets are rare. Mussels are present, various age classes.  
Eagle nest not located.

MAYSAP 1991 NOTE OILING CONDITIONS ARE PRESENTED  
 OG SKETCH MAP: Bio Sketch Map  
 GREG CHANEY: AS THEY LOOKED AFTER OUR MANUAL PICKUP  
 TEAM 5 CRANK  
 SEGMENT: EV-15-A  
 DATE: APRIL 30 1991  
 AIR P.#: PIM-C-006-14





Revised: F.W. 5/2/91  
REVIEWED: M.C. 5/4/91



|      |            |                                                                                                                                                                                                                                  |                                                                                                                                                                             |
|------|------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| XXXX | Wide       | <p style="text-align: center;"><b>EV015 A</b></p> <p>ADEC Subsegment Length: 1055m</p> <p style="text-align: center;">METERS</p> <p style="text-align: center;">0      100      200</p> <p>AK State Plane Zone 4<br/>proj15a</p> | <p style="text-align: center;">Subdivision Field Map</p> <p>Map Key: PWSEV015Aa</p> <p>Name: <u>Greg Chaney</u></p> <p>Date: <u>April 30, 1991</u></p> <p>Data Entered:</p> |
| //// | Medium     |                                                                                                                                                                                                                                  |                                                                                                                                                                             |
| ---- | Narrow     |                                                                                                                                                                                                                                  |                                                                                                                                                                             |
| TTTT | Very Light |                                                                                                                                                                                                                                  |                                                                                                                                                                             |
| 0000 | No Oil     |                                                                                                                                                                                                                                  |                                                                                                                                                                             |



Revised: F.W. 5/2/91  
 REEVIEW RS: MC 5/4/91

# ASAP TAG REVIEW SHEET

Segment: EVIS Subd: A Site:      Date  
PRE-Review 11 Aug

## Priority For Addressing In 1990

☒ HIGH ☐ MEDIUM ☐ LOW ☐ NTR

Treatment  
Recommended:

WAVE Action → med.

NTR

patch mouse med wave

NTR

## Priority Site For Reassessment In 1991

YES NO YES NO YES NO YES NO  
☒ CG ☐ ☒ ADEC ☐ ☒ EXXON ☐ ☒ LAND MGR ☐

TAB 13 AUG 90

Manual Remove Accessible Mouse.

+ BIO

# ASAP FOLLOWUP RECOMMENDATIONS

Segment: AS/ E1-15 Subd.: A Site: \_\_\_\_\_ Date: 8-7-90 1990

Conditions Observed: Asp in two boulders pocket beaches side  
by side. Several large areas of MS, AP, and OP and OR  
subsurface oil are located.

Followup Recommendations: Recommend removal of MS, AP,  
and OP and OR oil using trawls and shovels to be  
followed by manual picking where possible and  
hydroexcavation

Completed by Pickup Crew: ☐ YES ☒ NO

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

ADEC

Bob McCreedy  
 (name)

Robert F. McCreedy  
 (signature)

Comments: \_\_\_\_\_

Exxon

John Dean  
 (name)

[Signature]  
 (signature)

Comments: 1 DONE w/ RECOMMENDATIONS

USCG

Don Davis GM  
 (name)

[Signature]  
 (signature)

Comments: Agree w/ ADEC comments.

Land Rep.

Steve WARD eve  
 (name)

[Signature]  
 (signature)

Comments: Inadequate manual in 90 - go back and get the oil out  
B.B. - check in 91. Above Recommendations good.

SEGMENT AS / EV-15 SUBDIVISION: A SITE: 1 DATE 8-7-90

USCG

NAME David N. Noe, NOAA  
Don Davis, USCGSIGNATURE David N. Noe☒ YES☐ NO

PRIORITY SITE FOR REASSESSMENT IN 1991

REASON:

Oiling is pervasive in two small pocket beaches, with heavy accumulations found between large boulders and in bedrock cracks. Recommend additional treatment in 1990 and reassessment in 1991.

ADEC

NAME Bob McCreadySIGNATURE Bob McCready☒ YES☐ NO

PRIORITY SITE FOR REASSESSMENT IN 1991

REASON:

A substantial amount of MS, AP, and OP and OR subsurface oil remains on two boulder pocket beaches. Summer cleanup crews ('90) have been on site, but large amounts of gross contamination remain. An ASAP Followup Recommendation Form has been submitted calling for the removal of all mousse, AP, and OP and OR.

LAND MANAGER

NAME Steve Wingo CUCSIGNATURE Steve Wingo☒ YES☐ NO

PRIORITY SITE FOR REASSESSMENT IN 1991

REASON:

Lots of oil remaining to pick up in 90. Check Sub Surface carefully in 91.

EXXON

NAME John DeanSIGNATURE John Dean☒ YES☐ NO

PRIORITY SITE FOR REASSESSMENT IN 1991

REASON:

CANDIDATE FOR EARLY '91, HIGH PRIORITY, Assessment. See Follow Up Recommendation for '90



SEGMENT: EV-13

SUBJECT: A

DATE: 4, 20, 90

# CHECKLIST

- ☐ At Area
- ☐ Approx. Date
- ☐ Approx. Daily
- ☐ CT Box
- ☐ Width
- ☐ Length
- ☐ N. Coord
- ☐ Elevation Change
- ☐ For OBSERV. 1
- ☐ OBS
- ☐ Photo Location
- ☐ Photo
- ☐ PT Location
- ☐ Photo Location

# LEGEND

▲  
PT - Observation

▲  
PT - Observation

CTC  
Control Point

CTB  
Control Point

STC  
Control Point

STB  
Control Point

STC  
Control Point

STB  
Control Point

STC  
Control Point

STB  
Control Point

Scale

10m

EVANS ISLAND

8/7/90

CT 30

MS 30

US 989

NO 36

ST 30

2PWS

8/7/90

MS/P

CT/P-I

ST/P-I

10x2m

PWS

8/7/90

MS/P

ST/B

CT/B

10x20m

8/7/90

MS/P

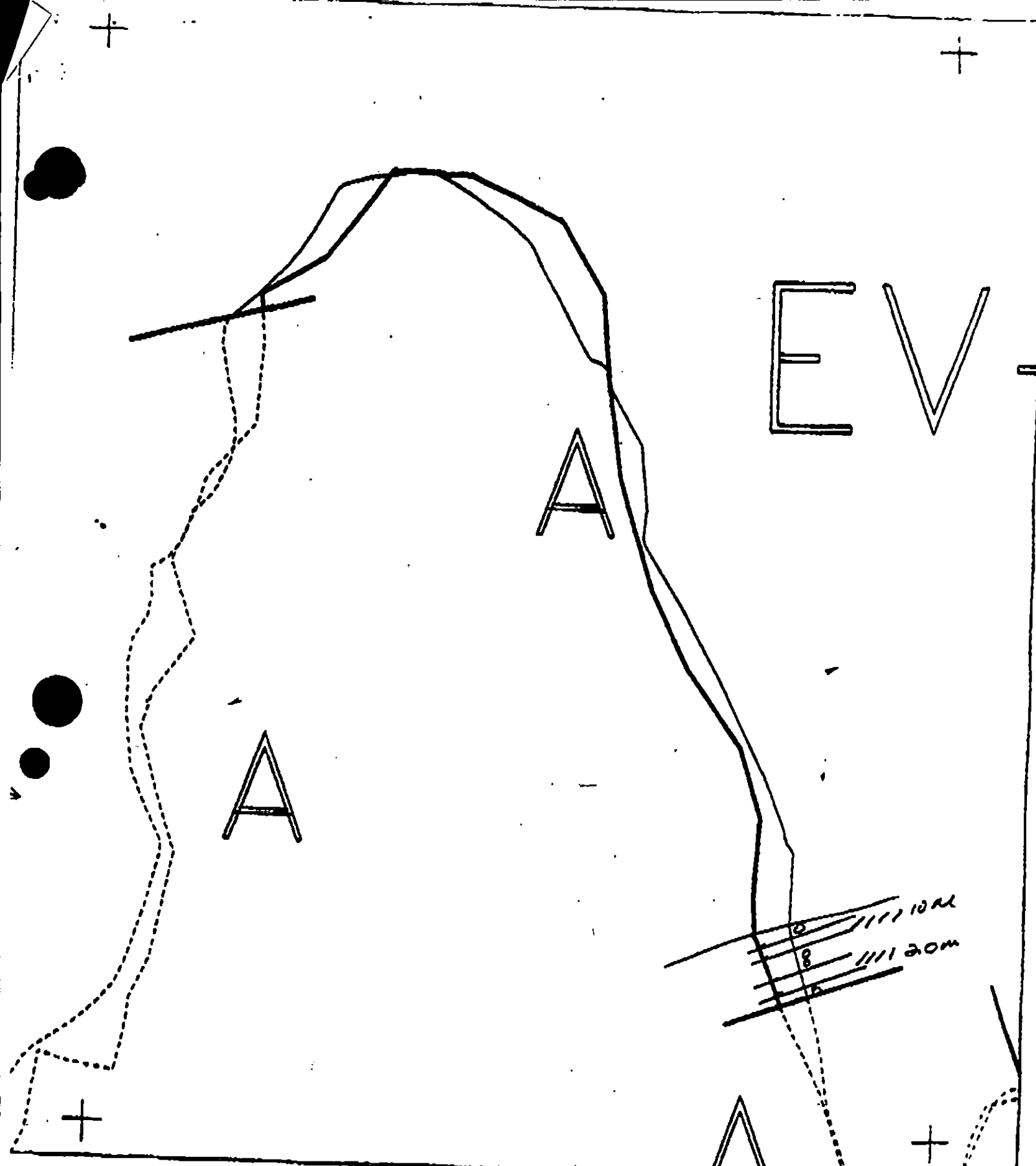
ST/B

CT/B

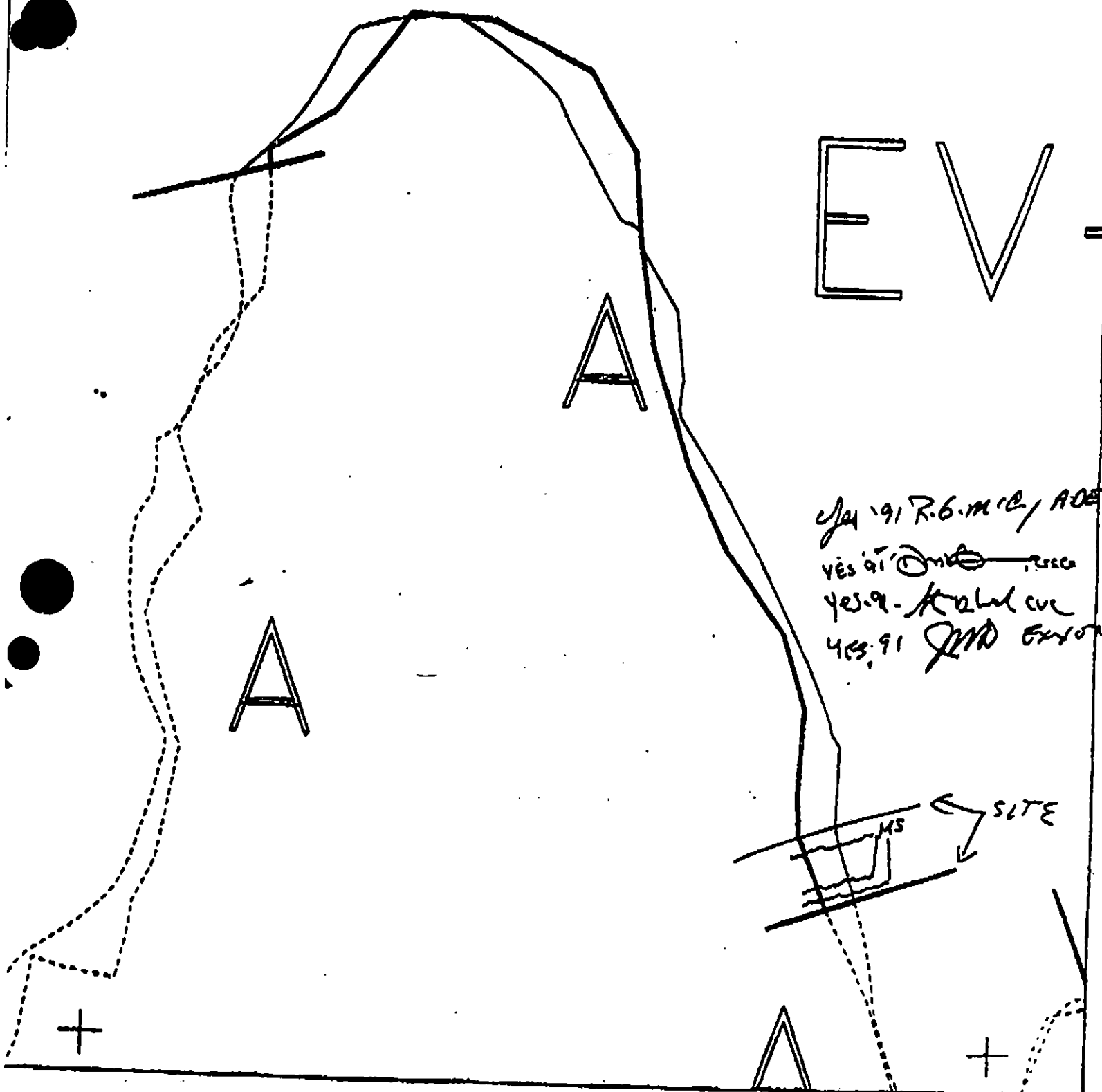
10x6m

Map 1

CT Box Length: AP PO CV CT ST MS PT TB FL NO



|      |            |                               |                        |
|------|------------|-------------------------------|------------------------|
| XXXX | Wide       | EV-15 A                       | Subdivision Field Map  |
| ///  | Medium     | ADEC Subsegment Length: 1055m | Map Key: PWSEV-15A     |
| -    | Narrow     | METERS                        | Name: <u>NAKASHIMA</u> |
| TIT  | Very Light | 0 112 223                     | Date: <u>8/7/90</u>    |
| 000  | No Oil     | AK State Plane Zone 4 1:4382  | Date Entered:          |
|      |            | per-15a                       |                        |



4/21/91 R.B.M.C. / AOC  
 YES 91 ~~Don't~~ ~~area~~  
 YES 91 - K. L. L. C. C.  
 YES 91 ~~MD~~ ~~EX-10~~

|     |            |                               |  |                        |
|-----|------------|-------------------------------|--|------------------------|
| XXX | Wide       | EV-15 A                       |  | Subdivision Field Map  |
| /   | Medium     | ADEC Subsegment Length: 1055m |  | Map Key: PWSEV-15A     |
| -   | Narrow     | METERS                        |  | Name: <u>NAKASHIMA</u> |
| TIT | Very Light | 0 112 223                     |  | Date: <u>8/7/90</u>    |
| 000 | No Oil     | AK State Plane Zone 4 1:4382  |  | Data Entered:          |
|     |            | pov-15a                       |  |                        |



## SUBSURFACE DATA

PAGE 2 OF 2SEGMENT ID: EV015 SUBDIV: A SITE: 1

PIT # 0 PIT DEPTH      OIL CHARACTER      OIL INTVAL: FROM      TO       
CLEAN BELOW:      PIT ZONE: SU      UI      MI      LI       
SUBSURF SEDIMENT: BRK      BLD      COB      PEB      GRN      SAN      MUD      VEG     

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

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

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

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

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

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

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

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

GENERAL DATA

SEG ID: EV015 SBOV: A SITE: 1 TEAM: 3 DATE: 8/7/90  
SITE LGTH 25 OIL CATEGORIES: W — M 30N VL — NO 36 U 989  
1991 REASSESSMENT: USCB: Y ADEC: Y LDMGR: Y EXXON: Y  
WATER CL

SURFACE DATA

CHAR #: 1 OIL CHAR: CT OIL DIST: CONT — BRKN 20 PTCH 10 SPLH —  
TIDAL ZONE: SU — UI X MI — LI —

CHAR #: 2 OIL CHAR: ST OIL DIST: CONT — BRKN 20 PTCH 10 SPLH —  
TIDAL ZONE: SU — UI X MI — LI —

CHAR #: 3 OIL CHAR: MS OIL DIST: CONT — BRKN — PTCH 30 SPLH —  
TIDAL ZONE: SU — UI X MI — LI —

CHAR #: 4 OIL CHAR: NO OIL DIST: CONT — BRKN — PTCH — SPLH —  
TIDAL ZONE: SU X UI — MI X LI X

CHAR #: — OIL CHAR: — OIL DIST: CONT — BRKN — PTCH — SPLH —  
TIDAL ZONE: SU — UI — MI — LI —

CHAR #: — OIL CHAR: — OIL DIST: CONT — BRKN — PTCH — SPLH —  
TIDAL ZONE: SU — UI — MI — LI —

CHAR #: — OIL CHAR: — OIL DIST: CONT — BRKN — PTCH — SPLH —  
TIDAL ZONE: SU — UI — MI — LI —

CHAR #: — OIL CHAR: — OIL DIST: CONT — BRKN — PTCH — SPLH —  
TIDAL ZONE: SU — UI — MI — LI —

CHAR #: — OIL CHAR: — OIL DIST: CONT — BRKN — PTCH — SPLH —  
TIDAL ZONE: SU — UI — MI — LI —

CHAR #: — OIL CHAR: — OIL DIST: CONT — BRKN — PTCH — SPLH —  
TIDAL ZONE: SU — UI — MI — LI —

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

| <u>SEGMENT</u> |            |                                                                                                          |
|----------------|------------|----------------------------------------------------------------------------------------------------------|
| CH-09          | B Site 1   | Manual pickup of tarmats, rake and bioremediate* H.P. <i>A.</i>                                          |
|                | Site 2     | Manual pickup of tarmats, rake and bioremediate* H.P.                                                    |
| EL-52          | B          | NTR                                                                                                      |
| EL-55          | A          | Manual till - mop up mobile oil with snare and bioremediate - low priority                               |
| EL-56          | C          | Storm berm relocation (mechanical if necessary)                                                          |
| EL-58          | C          | NTR - Reassessment in '91                                                                                |
| EL-58          | D          | Customblen application and reassessment in '91                                                           |
| ER-07          | A Site 1   | NTR                                                                                                      |
|                | Site 2     | Manual pickup of tarmat and bioremediation (low priority)                                                |
| EV-05          | A          | Limited manual pickup followed by bioremediation - Customblen (low priority)                             |
| EV-05          | B          | Manual pickup of mousse/AP followed by bioremediation. Manual till in heaviest areas if necessary (H.P.) |
| EV-12          | A          | Access and remove heaviest concentration of AP/OP/HOR manual removal followed by bioremediate            |
| EV-15          | A          | Manual removal of MS/AP/OP/HOR where accessible - bioremediate (H.P.)                                    |
| EV-26          | A          | Manual removal of AP and bioremediate (M.P.)                                                             |
| EV-37          | A          | Manual pickup of OP/HOR sediments (relocate armor to access)                                             |
| EV-39          | A          | Bioremediate                                                                                             |
| FL-01          | A          | NTR - work done                                                                                          |
| GR-301         | B Site 1   | Manual pickup of mousse (H.P.)                                                                           |
|                | Site 2     | NTR                                                                                                      |
|                | Site 3     | NTR                                                                                                      |
| GR-301         | B New Site | Manual pickup of mousse (H.P.)                                                                           |
| KN-07          | A          | Manual pickup of AP/OP/mousse and bioremediate (H.P.) both areas                                         |
| KN-08          | A          | Manual pickup followed by bioremediation (L.P.)                                                          |
| KN-201         | A          | Manual removal of AP followed by bioremediation (M.P.)                                                   |
| KN-211         | E Site 1   | Manual pickup of oiled debris at stream mouth next to small pool, use chain saw as necessary to access.  |
|                | Site 2     | NTR                                                                                                      |
|                | Site 3     | NTR                                                                                                      |
|                | Site 4     | NTR                                                                                                      |
| KN-400         | A Site 1   | Manual removal of accessible AP followed by rake and bioremediation (L.P.)                               |
|                | Site 3     | NTR                                                                                                      |
| KN-404         | A          | Bioremediate and assessment in '91                                                                       |
| KN-405         | A          | Further TAG evaluation - bioremediate and assessment in '91                                              |
| NK-02          | A          | Manual pickup AP/mousse - bioremediation (M.P.)                                                          |
| PD-04          | A          | Manual pickup of mousse patties and bioremediation, Inipol and Customblen (M.P.)                         |
| PN-01          | A          | Manual pickup of AP and bioremediation (L.P.)                                                            |

\* ANADROMOUS STREAM CONSTRAINT

TAG

EXXON

ADEC

USCG

NOAA

DATED

Aug 15 1990  
(See attached Archaeological Constraintsheet) *WKC 8/16/90*

FOSC

DATED

17 August 1990

*Work with land manager in effecting the above*

**ASAP FOLLOW-UP RECOMMENDATIONS**  
**TAG RECOMMENDATIONS AUGUST 13, 1990**  
**ARCHAEOLOGICAL CONSTRAINTS**

EL-56C Addition of: storm berm relocation (mechanical if necessary).

SHPO Rolfe Buzzell DATE 8/16/90  
*Archaeological Monitor required!*

**ARCHAEOLOGICAL CONSTRAINT:** An Exxon archaeological monitor is required on-site during shoreline treatment.

>>> PHONE 564-3274 (Anchorage) OR 229-1508 (24 hrs.) <<<

EV-12A Addition of: access and remove heaviest concentrations of AP/OP/HOR manual removal followed by bioremediation.

SHPO Rolfe Buzzell DATE 8/16/90

**ARCHAEOLOGICAL CONSTRAINT:** 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 (564-3274 (Anchorage) or 229-1508 (24 hrs.)).

EV-15A Addition of: Manual removal of MS/AP/OP/HOR where accessible - bioremediate.

SHPO Rolfe Buzzell DATE 8/16/90

**ARCHAEOLOGICAL CONSTRAINT:** 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 (564-3274 (Anchorage) or 229-1508 (24 hrs.)).

EV-39A Addition of: Manual pickup of OP/HOR sediments (relocate armor to access).

SHPO Rolfe Buzzell DATE 8/16/90

**ARCHAEOLOGICAL CONSTRAINT:** 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 (564-3274 (Anchorage) or 229-1508 (24 hrs.)).

- \_\_\_ 00 Answer
- \_\_\_ Answer Grade
- \_\_\_ English Grade
- \_\_\_ 00 Sex
- \_\_\_ Weight
- \_\_\_ Length
- \_\_\_ To Class
- \_\_\_ Subjects Chemistry
- \_\_\_ For CHEMISTRY :
- \_\_\_ 001
- \_\_\_ Family Learning
- \_\_\_ Family
- \_\_\_ 00 Learning
- \_\_\_ Family Learning

**LEADS**

**CT/C**

**CE/B**

**SQ**

**SQ**

Scale

10-2

4-15-A

EVANS  
ISLAND

8/7/90

CT 30

MS 30

US 989

NO 36

57-30

# MANUA

PICK UP OF MOUSSE  
AND OP/H. OR WHERE  
ACCESSIBLE FOLLOWED  
BY BIO.

08/13/90

ΣΡW5

8/7/90

MS/P  
CT/P  
ST/P

PWS

1/17/90

MS/A  
ST/0  
GT/0

8/2/90

HS/P  
ST/B  
G/B

102-2091

Settlement Length (yr) AP \_\_\_\_\_ PD \_\_\_\_\_ CV \_\_\_\_\_ CT \_\_\_\_\_ ST \_\_\_\_\_ MS \_\_\_\_\_ PT \_\_\_\_\_ TD \_\_\_\_\_ FL \_\_\_\_\_

REGION: PRINCE WILLIAM SOUND

SEGMENT: ST/EV-16

SUBDIVISIONS: A (1 OF 1)

SHORELINE EVALUATION

SEGMENT ST/ EV-16 SUBDIVISION A (1 OF 1) DATE 4/20/90

**SEGMENT ENVIRONMENTAL SENSITIVITIES AND TIME CONSTRAINTS:**

5T-2 All bald eagle nests (3/1 to 6/1)-Active eagle nests (3/1 to 9/1)  
7II Subsistence area: Deer harvesting (8/15 to 2/28)

See attached Ecological Constraint sheet for specific constraints and contacts.

**SUBDIVISION ECOLOGICAL CONSTRAINTS:**

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

**ARCHAEOLOGICAL CONSTRAINTS:**

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

SHPO SIGNATURE: \_\_\_\_\_ DATE: \_\_\_\_\_

**OILING CATEGORIZATION:**

Wide 0 m: Medium 141 m: Narrow 0 m: V.Light 742 m: No Oil 0 m  
Subsurface Oil Observed: Yes X No \_\_\_\_\_ Maximum Depth 45 cm

**RECOMMENDATIONS:**

|                                                           |                                                            |
|-----------------------------------------------------------|------------------------------------------------------------|
| <input type="checkbox"/> No Treatment Recommended         | <input type="checkbox"/> Snare/Absorbent Booms             |
| <input checked="" type="checkbox"/> Treatment Recommended | <input type="checkbox"/> Oil Snares (pom poms)             |
| <input checked="" type="checkbox"/> Manual Pickup         | <input type="checkbox"/> Absorbents (pads, rolls, etc)     |
| <input checked="" type="checkbox"/> Bioremediation        | <input type="checkbox"/> Spot Washing: _____ Wands         |
| <input type="checkbox"/> Tarmat Removal                   | <input type="checkbox"/> Beach Cleaner                     |
|                                                           | <input checked="" type="checkbox"/> * Other (see comments) |

COMMENTS: Recommended treatment includes 1) manual removal of patties,  
2) rake down storm berm and, 3) bioremediation per sketch map. Work  
should be conducted after 6/1 with USFWS approval based on eagle nest  
constraints.

TAG COMMENTS: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

TAG APPROVAL DATE: \_\_\_\_\_

ADEC \_\_\_\_\_  
EXXON \_\_\_\_\_  
NOAA \_\_\_\_\_  
USCG \_\_\_\_\_

FOSC: \_\_\_\_\_ DATE: \_\_\_\_\_

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

## FIELD SHORELINE COMMENT SHEET

SEGMENT ST / EV-16 SUBDIVISION: A (101) DATE 4-20-90

NOAA

NAME Michael Buchman SIGNATURE M Buchman☐ NO TREATMENT RECOMMENDED ☒ TREATMENT SUGGESTED

COMMENTS Entire Segment Alternates from rock walls to pocket beaches. All rock walls had bands of stain or coating. Beaches to the south were made of more angular cobble or pebbles (lower exposure), while those to north were more rounded. All beaches had light staining on cobble. Several had occasional asphalt patties. All beaches had significant winter storm berms at supra I.T.Z. (above current drift line). One beach was found to have a significant layer of relatively unweathered oil in pits dug in the winter storm berm. The storm berm at these pits was 25-30 cm thick.

ADEC

NAME John Hayes SIGNATURE J Hayes☐ NO TREATMENT RECOMMENDED ☒ TREATMENT SUGGESTED

COMMENTS

① Manual pick up of asphalt patties (small) on boulder/cobble pocket beaches. Also mop up of recoverable oil in bands with asphalt patties.

Three areas noted on sketch map N#5 ① 9x30m Band

② 5x60m Band ③ 6x40m Band.

The rest of segment is stain + VL oiling. NTR

LAND MANAGER

NAME Stone Island Chemical Corp. SIGNATURE Stone Island☐ NO TREATMENT RECOMMENDED ☒ TREATMENT SUGGESTED

COMMENTS

Manual pick up.

→ ADEC. One pocket beach had subsurface oiling in a 5cm lens below 30cm. of storm berm. Oil was mouse, that had not

# SHORELINE OILING SUMMARY

reviewed 4/23/90

REVISION NO. 06/12/90

OG MIKE FOGET NOAN Michael Buchman SEGMENT ST/ EV-16  
 BIO KATHLEEN CONLIN LAND REP STEVE WARD SUBDIVISION A (1 OF 1)  
 EXXON LARRY OLSON ADEC JOAN HAYES TIME 14:45 10:16:40  
 TEAM NO. 11 TIDE LEVEL +2.6 DATE 4/20/90  
 EST. SUBDIVISION LENGTH: 826 m ☐ Sun ☒ Clouds ☐ Fog ☐ Rain ☐ Snow  
 UPLANDS DESCRIPTION: ☐ Grass ☒ Forest ☒ Rock Vertical Rock Backshore w/ some trees  
 SURVEYED FROM: ☒ Foot ☒ Boat ☐ Helo WORKING DIRECTION: S to N  
 SURFACE SEDIMENTS: R 30 % B 20 % C 25 % P 15 % G 10 % S 0 % M 0 % V 0 %  
 SLOPE: Long 50 % Hang 30 % Vert 30 % WAVE EXPOSURE: ☐ Low ☒ Med ☐ High  
 OIL CATEGORY LENGTH: W 0 m M 140 m N 0 m VL 686 m NO 0 m

## SURFACE OIL

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

PAVEMENT H (F) S 3 sq. m by 2 cm

PATTIES / TARBALLS 0 BAGS

NEAR SHORE SHEEN? (NO) BR RW SL TL

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

DID YOU COLLECT DEBRIS?

YES ☒ NO ☐

TYPE Plastic

#BAGS 0

Photographs:

Roll No. \_\_\_\_\_

Frames \_\_\_\_\_

## SUBSURFACE OIL

| PIT NO. | PIT DEPTH (cm) | SUBSURFACE OIL CHARACTER |    |    |    |    | OILED INTERVAL (cm) | BELOW |    | OIL / FILM COLOR |    |    |    |    |    |    |    | PIT ZONE | A N A | SHEEN (Y/N) | ↓  | SURFACE SUBSURFACE SEDIMENTS |
|---------|----------------|--------------------------|----|----|----|----|---------------------|-------|----|------------------|----|----|----|----|----|----|----|----------|-------|-------------|----|------------------------------|
|         |                | OP                       | OR | OL | OF | NO |                     | VO    | VC | 2C               | 2B | 2P | 2S | 3C | 3B | 3P | 3S |          |       |             |    |                              |
| 1       | 30             |                          |    |    |    | X  | .                   |       | X  |                  |    |    |    |    |    |    |    | X        |       | N           | -  | P, G                         |
| 2       | 20             |                          |    |    |    | X  | .                   |       | X  |                  |    |    |    |    |    |    |    | X        |       | Y           | 10 | P, G                         |
| 3       | 30             |                          |    |    |    | X  | .                   |       | X  |                  |    |    |    |    |    |    |    | X        |       | Y           | 10 | P, C, P                      |
| 4       | 30             |                          |    |    |    | X  | .                   |       | X  |                  |    |    |    |    |    |    |    | X        |       | Y           | 20 | C, P, C                      |
| 5       | 50             | X                        |    |    |    |    | 20-25               |       | X  |                  |    |    | X  |    |    |    |    | X        |       | N           | -  | P                            |
| 6       | 40             |                          |    |    |    | X  | .                   |       | X  |                  |    |    |    |    |    |    |    | X        |       | Y           | -  | P                            |

## COMMENTS

The shore zone consists of bedrock/boulder w/ some pocket B/C beach that have pebble storm berms. The southern most pocket B/C beach has a 6m x 40m ripi coat w/ some asphalt patches on the B/C outcrop at the northern end of the beach. The next pocket beach contains a 2m x 10m pebble storm berm with or/ol subsurface oiling 30cm deep. The storm berm has a stream to the north and a moderate amount of drift logs to the south.

REVIEWED JW DATE 4-23-90

## SHORELINE OILING SUMMARY (PAGE 2)

REVISION 04-13-90

SEGMENT ST/ EV-16 SUBDIVISION A (LOF 1)

## SUBSURFACE OIL (CONTINUED)

| PIT NO. | PIT DEPTH (cm) | SUBSURFACE OIL CHARACTER |    |    |    |    | OILED INTERVAL (CM-DM) | BELOW |    | OIL / FILM COLOR |    |    |    |    |    |    |   | PIT ZONE |   |   |   | A N A | SCREEN (Y/N) | ▽  | SURFACE SUBSURFACE SEDIMENTS |
|---------|----------------|--------------------------|----|----|----|----|------------------------|-------|----|------------------|----|----|----|----|----|----|---|----------|---|---|---|-------|--------------|----|------------------------------|
|         |                | OP                       | OR | OL | OF | NO |                        | VO    | VC | BL               | BR | DR | GR | OR | TR | LR |   | SU       | W | M | U |       |              |    |                              |
| 7       | 40             |                          |    |    |    | X  | .                      | X     |    |                  |    |    |    |    |    |    |   | X        |   |   |   |       | N            | 35 | C, P                         |
| 8       | 40             |                          |    |    |    | X  | .                      | X     |    |                  |    |    |    |    |    |    |   | X        |   |   |   |       | N            | -  | P, C                         |
| 9       | 60             |                          | X  |    |    |    | 25-45                  | X     |    |                  |    |    | X  |    |    |    | X |          |   |   |   |       | N            | -  | P                            |
| 10      | 50             |                          |    |    |    | X  | .                      | X     |    |                  |    |    |    |    |    |    | X |          |   |   |   |       | N            | -  | P                            |
| 11      | 40             |                          |    |    |    | X  | .                      | X     |    |                  |    |    |    |    |    |    |   | X        |   |   |   |       | N            | 35 | P                            |
| 12      | 35             |                          |    |    |    | X  | .                      | X     |    |                  |    |    |    |    |    |    |   | X        |   |   |   |       | N            | 30 | P                            |
| 13      | 30             |                          |    |    |    | X  | .                      | X     |    |                  |    |    |    |    |    |    |   |          |   | X |   |       | N            | 20 | P, C                         |
| 14      | 30             |                          |    |    |    | X  | .                      | X     |    |                  |    |    |    |    |    |    | X |          |   |   |   |       | N            | -  | P, C                         |
| 15      | 30             |                          |    |    |    | X  | .                      | X     |    |                  |    |    |    |    |    |    |   | X        |   |   |   |       | N            | -  | C, P, C                      |
| 16      | 25             |                          |    |    |    | X  | .                      | X     |    |                  |    |    |    |    |    |    |   | X        |   |   |   |       | N            | 20 | C, P, C                      |
| 17      | 30             |                          |    |    |    | X  | .                      | X     |    |                  |    |    |    |    |    |    | X |          |   |   |   |       | N            | -  | C, P, C                      |
|         |                |                          |    |    |    |    | .                      |       |    |                  |    |    |    |    |    |    |   |          |   |   |   |       |              |    |                              |
|         |                |                          |    |    |    |    | .                      |       |    |                  |    |    |    |    |    |    |   |          |   |   |   |       |              |    |                              |
|         |                |                          |    |    |    |    | .                      |       |    |                  |    |    |    |    |    |    |   |          |   |   |   |       |              |    |                              |

## COMMENTS

At the Northern end of this Pocket beach is a B/C outcrop which has a 5m X 60m CT/P degree of oiling w/ some asphalt Patches. The rest of the shore zone has a ST/S distribution of stain in the I-LITZ.

OG Mike Fogel  
 SEGMENT EV-16  
 SUBDIVISION A  
 DATE 4 / 20 90

# SKETCH MAP 1

## CHECKLIST

☒ N Arrow  
☐ Approx. Scale  
☐ Seg/Sub Bndry  
☐ Oil Dist.  
☐ Width  
☐ Length  
☐ % Cover  
☐ Substrate Character  
☐ Est. HML/LVL  
☐ SSL  
☐ Profile Location(s)  
☐ Profile(s)  
☐ PH Location(s)  
☐ Photo Location(s)

## LEGEND

1 Δ  
 PH - No Subsurface Oil

2 Δ  
 PH - Subsurface Oil

CT/C  
 Continuous Distribution

CT/B  
 Broken Distribution

CT/P  
 Patchy Distribution

CT/S  
 Splashed Distribution

Oiled Vegetation

1 →  
 Photo location, direction,  
 and number

Scale

100m

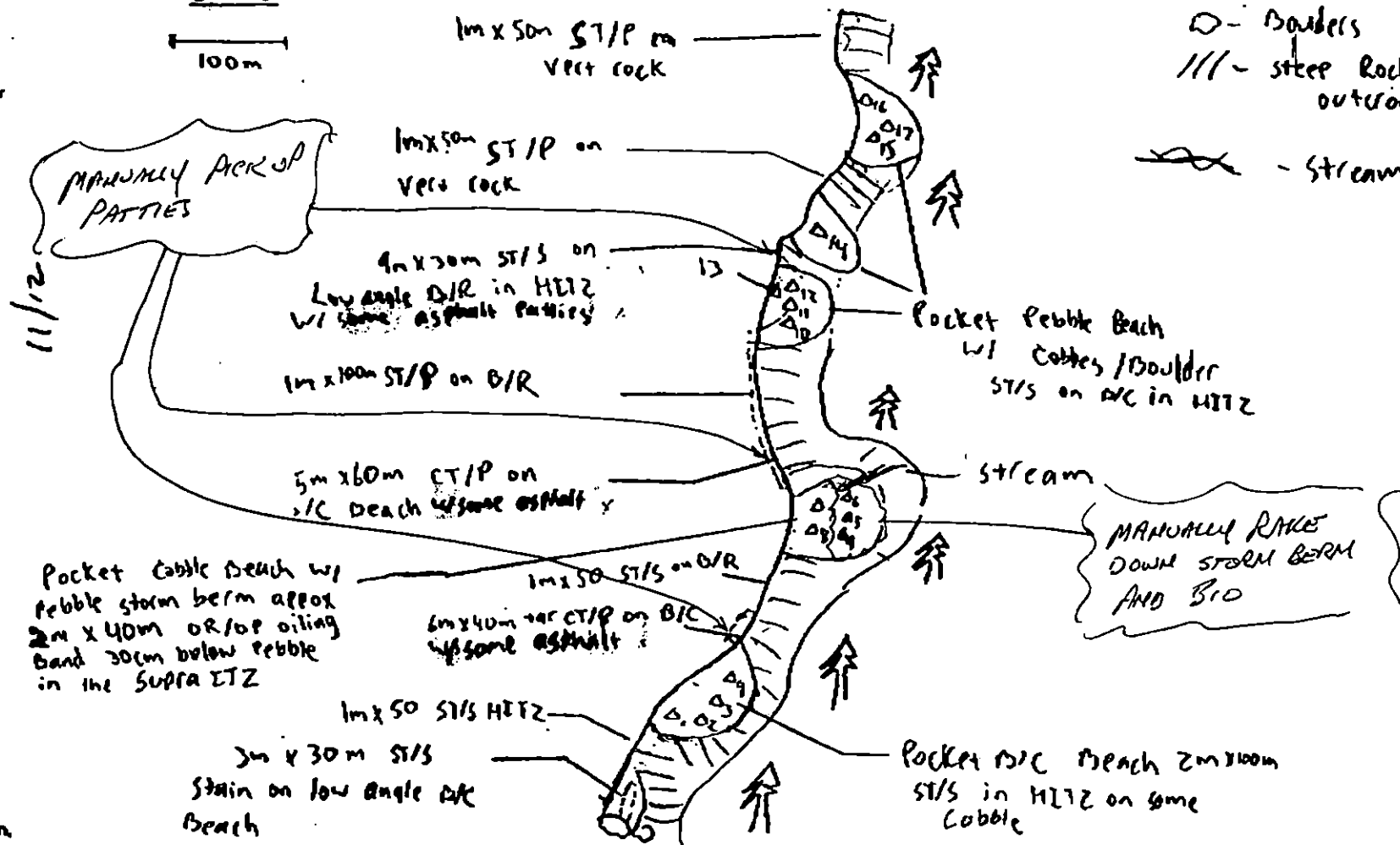
## Legend

↑ - trees

○ - Boulders

/// - steep Rock/Boulder outcrop

~ - Stream



Oil Character Length (m): AP 10 PO 0 CV 40 CT 100 ST 886 MS 0 PT 0 TB 0 FL 0 NO 0  
 ↳ subsurface

## SHORELINE ECOLOGICAL SUMMARY

REVISION: 03/22/90

Segment ST / EU-16 Subdivision A (1 OF 1) Date (mo / day / yr) 04 / 20 / 90Time (24 hr) 1448 - 1645 Biologist KATHLEEN CONLAN

(A) Substrate type and % of segments:

(1) Bedrock 30 (2) Boulder 20 (3) Cobble 25 (4) Pebble 15 (5) Sand 10 (6) Silt 0(B) ~~General~~ % cover of biota (% of segment): Dense 10 Moderate 90 Low 10

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

Photographs:

Roll No. ST 11-3Frames 5-10

## BARNACLES

|    | Dense                 | 1L |
|----|-----------------------|----|
| 1U | <del>2</del> <u>3</u> |    |
| 2  | <del>3</del> <u>4</u> |    |
| 3  | <del>4</del> <u>5</u> |    |
| 4  | <del>5</del> <u>6</u> |    |
| 5  | <del>6</del> <u>7</u> |    |
| 6  | <del>7</del> <u>8</u> |    |

|    | Moderate              | 1L |
|----|-----------------------|----|
| 1U | <del>2</del> <u>3</u> |    |
| 2  | <del>3</del> <u>4</u> |    |
| 3  | <del>4</del> <u>5</u> |    |
| 4  | <del>5</del> <u>6</u> |    |
| 5  | <del>6</del> <u>7</u> |    |
| 6  | <del>7</del> <u>8</u> |    |

|    | Sparse                | 1L |
|----|-----------------------|----|
| 1U | <del>2</del> <u>3</u> |    |
| 2  | <del>3</del> <u>4</u> |    |
| 3  | <del>4</del> <u>5</u> |    |
| 4  | <del>5</del> <u>6</u> |    |
| 5  | <del>6</del> <u>7</u> |    |
| 6  | <del>7</del> <u>8</u> |    |

|    | Rare                  | 1L |
|----|-----------------------|----|
| 1U | <del>2</del> <u>3</u> |    |
| 2  | <del>3</del> <u>4</u> |    |
| 3  | <del>4</del> <u>5</u> |    |
| 4  | <del>5</del> <u>6</u> |    |
| 5  | <del>6</del> <u>7</u> |    |
| 6  | <del>7</del> <u>8</u> |    |

NOT PRESENT

## MYTILUS

|    | Dense                 | 1L |
|----|-----------------------|----|
| 1U | <del>2</del> <u>3</u> |    |
| 2  | <del>3</del> <u>4</u> |    |
| 3  | <del>4</del> <u>5</u> |    |
| 4  | <del>5</del> <u>6</u> |    |
| 5  | <del>6</del> <u>7</u> |    |
| 6  | <del>7</del> <u>8</u> |    |

|    | Moderate              | 1L |
|----|-----------------------|----|
| 1U | <del>2</del> <u>3</u> |    |
| 2  | <del>3</del> <u>4</u> |    |
| 3  | <del>4</del> <u>5</u> |    |
| 4  | <del>5</del> <u>6</u> |    |
| 5  | <del>6</del> <u>7</u> |    |
| 6  | <del>7</del> <u>8</u> |    |

|    | Sparse                | 1L |
|----|-----------------------|----|
| 1U | <del>2</del> <u>3</u> |    |
| 2  | <del>3</del> <u>4</u> |    |
| 3  | <del>4</del> <u>5</u> |    |
| 4  | <del>5</del> <u>6</u> |    |
| 5  | <del>6</del> <u>7</u> |    |
| 6  | <del>7</del> <u>8</u> |    |

|    | Rare                  | 1L |
|----|-----------------------|----|
| 1U | <del>2</del> <u>3</u> |    |
| 2  | <del>3</del> <u>4</u> |    |
| 3  | <del>4</del> <u>5</u> |    |
| 4  | <del>5</del> <u>6</u> |    |
| 5  | <del>6</del> <u>7</u> |    |
| 6  | <del>7</del> <u>8</u> |    |

NOT PRESENT

## GASTROPODS

|    | Dense                 | 1L |
|----|-----------------------|----|
| 1U | <del>2</del> <u>3</u> |    |
| 2  | <del>3</del> <u>4</u> |    |
| 3  | <del>4</del> <u>5</u> |    |
| 4  | <del>5</del> <u>6</u> |    |
| 5  | <del>6</del> <u>7</u> |    |
| 6  | <del>7</del> <u>8</u> |    |

|    | Moderate              | 1L |
|----|-----------------------|----|
| 1U | <del>2</del> <u>3</u> |    |
| 2  | <del>3</del> <u>4</u> |    |
| 3  | <del>4</del> <u>5</u> |    |
| 4  | <del>5</del> <u>6</u> |    |
| 5  | <del>6</del> <u>7</u> |    |
| 6  | <del>7</del> <u>8</u> |    |

|    | Sparse                | 1L |
|----|-----------------------|----|
| 1U | <del>2</del> <u>3</u> |    |
| 2  | <del>3</del> <u>4</u> |    |
| 3  | <del>4</del> <u>5</u> |    |
| 4  | <del>5</del> <u>6</u> |    |
| 5  | <del>6</del> <u>7</u> |    |
| 6  | <del>7</del> <u>8</u> |    |

|    | Rare                  | 1L |
|----|-----------------------|----|
| 1U | <del>2</del> <u>3</u> |    |
| 2  | <del>3</del> <u>4</u> |    |
| 3  | <del>4</del> <u>5</u> |    |
| 4  | <del>5</del> <u>6</u> |    |
| 5  | <del>6</del> <u>7</u> |    |
| 6  | <del>7</del> <u>8</u> |    |

NOT PRESENT

## FUCUS

|    | Dense                 | 1L |
|----|-----------------------|----|
| 1U | <del>2</del> <u>3</u> |    |
| 2  | <del>3</del> <u>4</u> |    |
| 3  | <del>4</del> <u>5</u> |    |
| 4  | <del>5</del> <u>6</u> |    |
| 5  | <del>6</del> <u>7</u> |    |
| 6  | <del>7</del> <u>8</u> |    |

|    | Moderate              | 1L |
|----|-----------------------|----|
| 1U | <del>2</del> <u>3</u> |    |
| 2  | <del>3</del> <u>4</u> |    |
| 3  | <del>4</del> <u>5</u> |    |
| 4  | <del>5</del> <u>6</u> |    |
| 5  | <del>6</del> <u>7</u> |    |
| 6  | <del>7</del> <u>8</u> |    |

|    | Sparse                | 1L |
|----|-----------------------|----|
| 1U | <del>2</del> <u>3</u> |    |
| 2  | <del>3</del> <u>4</u> |    |
| 3  | <del>4</del> <u>5</u> |    |
| 4  | <del>5</del> <u>6</u> |    |
| 5  | <del>6</del> <u>7</u> |    |
| 6  | <del>7</del> <u>8</u> |    |

|    | Rare                  | 1L |
|----|-----------------------|----|
| 1U | <del>2</del> <u>3</u> |    |
| 2  | <del>3</del> <u>4</u> |    |
| 3  | <del>4</del> <u>5</u> |    |
| 4  | <del>5</del> <u>6</u> |    |
| 5  | <del>6</del> <u>7</u> |    |
| 6  | <del>7</del> <u>8</u> |    |

NOT PRESENT

## Wildlife Observations/ General Comments:

2 SHOREBIRDS; EUCALYPTUS, AMPHIBIANS AMONGST PEBBLES + COBBLES AT MID-TIDE LEVEL

## Ecological Considerations:

V-16

ST11-3

(PIT 5) #5,6  
 (PIT 9) #7,8  
 (Storm  
 Berm) #9,10

BALD EAGLE NEST

## ECOLOGY MAP (1 OF 1)

RESOURCE CODES FOR ENTIRE  
SEGMENT:

ST 21

TET

EV-1

XXXX Wide

/// Medium

--- Narrow

TTTT Very Light

0000 No Oil

EV-16

AOEC Segment Length: 883m

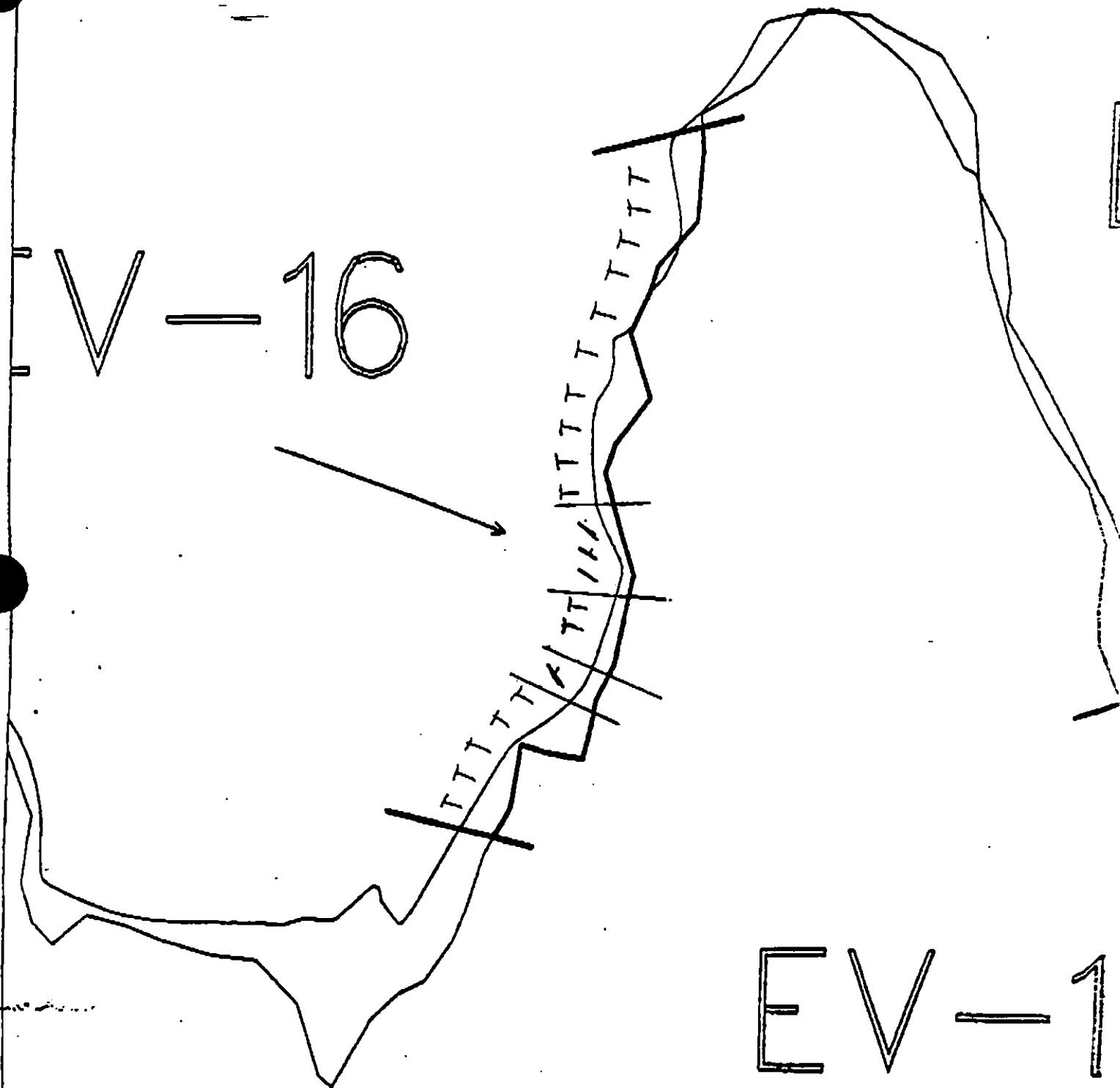
0 100 200 300  
 METERS

Map Key: PWS-184

Name: K.E. CONLAN

Date: 20 APRIL 1990

Data Entered:



XXXX Wide

//// Medium

--- Narrow

TTTT Very Light

0000 No Oil

EV-16

ADEC Segment Length: 883m



Map Key: PWS-184

Name: Mike Fager

Date: 4/20/90

Data Entered:

## ADDENDUM: SUBDIVISION CONSTRAINTS

-SEGMENT EV-16 SUBDIVISION A ( 1 of 1 )

| WORK WINDOW                     |        |
|---------------------------------|--------|
| Manual Pickup                   | CLOSED |
| Bioremediation<br>Manual Raking | CLOSED |

### ARCHAEOLOGICAL STANDARD CONSTRAINT

If cultural resources are uncovered, PHONE 564-3274.

### APPLICABLE ECOLOGICAL TIME CONSTRAINTS

5T Bald Eagle Nest

USFWS 6/1/90 map indicates an active nest in Subdivision A. Closed to manual pickup, manual raking, and bioremediation within 400m of active nest.

7II Subsistence: Deer Harvesting

Closed to bioremediation and manual raking after 8/15. No constraint to manual pickup.

### OTHER ECOLOGICAL CONSIDERATIONS

If eagle nest constraint is removed, other ecological considerations will apply.

FOSC

DATE

6-10-90

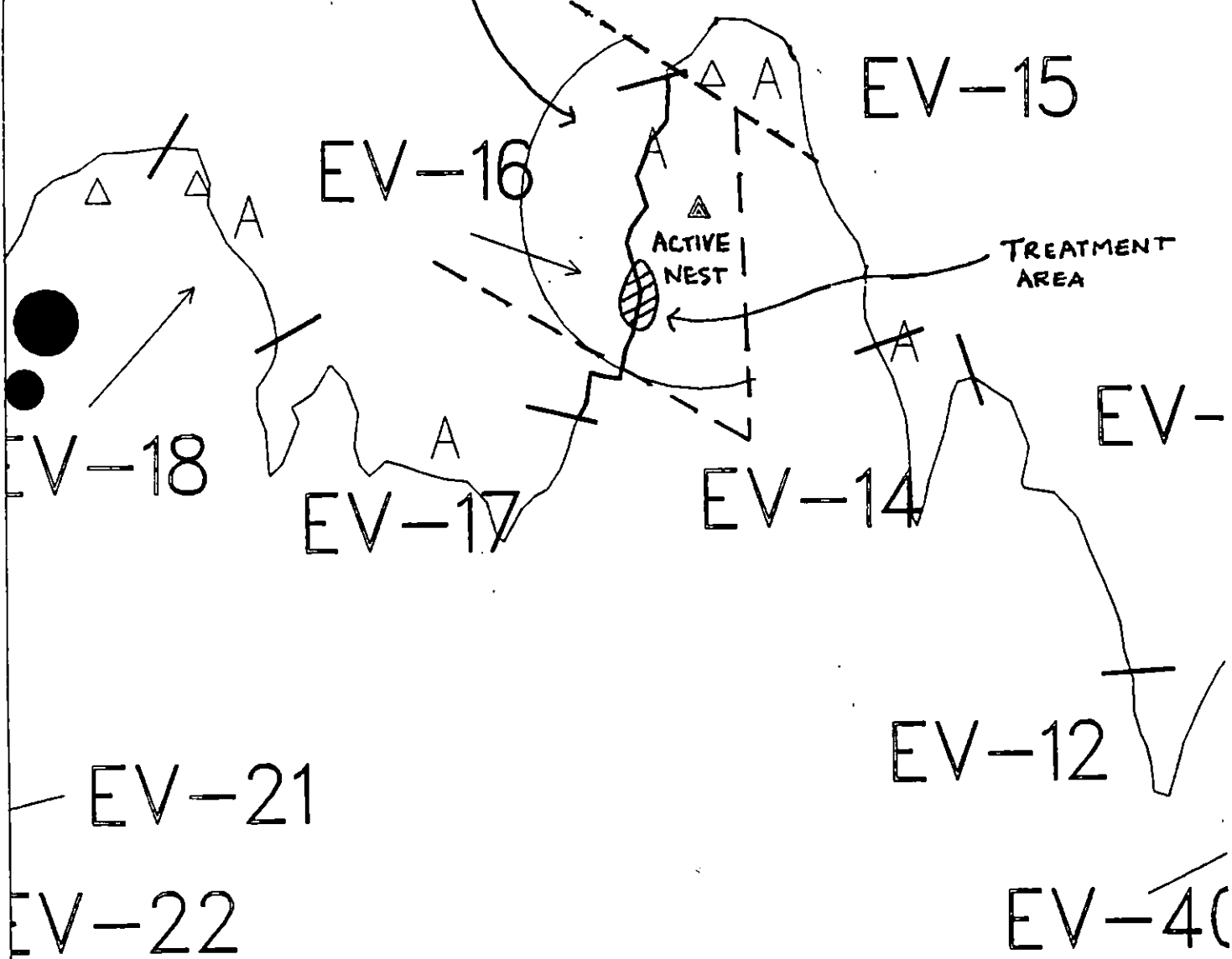
Prepared By:

J.P. Phillips

Date

6/9/90

No Beach, boat, aircraft  
access. USFWS Survey  
5/26/90 (Mike Lockhart)



# ECOLOGY MAP

SEGMENT EV-16

SUBDIVISION A (1 of 1)

METERS



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

1 inch = 1156 feet



Exxon Company, USA

Map Key: PWS-EV-16

# SHORELINE EVALUATION

SEGMENT ST/ EV-16 SUBDIVISION A (1 OF 1) DATE 4/20/90

## SEGMENT ENVIRONMENTAL SENSITIVITIES AND TIME CONSTRAINTS:

5T-2 All bald eagle nests (3/1 to 6/1)-Active eagle nests (3/1 to 9/1)  
7II Subsistence area: Deer harvesting (8/15 to 2/28)  
See attached Ecological Constraint sheet for specific constraints and contacts.

## SUBDIVISION ECOLOGICAL CONSTRAINTS:

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

## ARCHAEOLOGICAL CONSTRAINTS:

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

SHPO SIGNATURE: Charles E. Dumas DATE: 5/3/90

## OILING CATEGORIZATION:

Wide 0 m: Medium 141 m: Narrow 0 m: V.Light 742 m: No Oil 0 m  
Subsurface Oil Observed: Yes X No      Maximum Depth 45 cm

## RECOMMENDATIONS:

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

COMMENTS: Recommended treatment includes 1) manual removal of patties,  
2) rake down storm berm and, 3) bioremediation per sketch map. Work  
should be conducted after 6/1 with USFWS approval based on eagle nest  
constraints. SEE ADDENDUM DATED 6/9/90 JPP

TAG COMMENTS:       
      
      
    

TAG APPROVAL DATE: 5/3/90  
ADEC ART WEINER  
EXXON AMY TAYLOR  
NOAA GARY PETRAE  
USCG KENNETH KERR

FOSC: WGL DATE: 5-18-90

NOTIFY CUC 24 HRS. IN ADVANCE OF WORK

## SHORELINE EVALUATION

SEGMENT ST/ EV-16 SUBDIVISION A (1 OF 1) DATE 4/20/90

**SEGMENT ENVIRONMENTAL SENSITIVITIES AND TIME CONSTRAINTS:**

5T-2 All bald eagle nests (3/1 to 6/1)-Active eagle nests (3/1 to 9/1)  
7II Subsistence area: Deer harvesting (8/15 to 2/28)  
See attached Ecological Constraint sheet for specific constraints and  
contacts.

**SUBDIVISION ECOLOGICAL CONSTRAINTS:**

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

**ARCHAEOLOGICAL CONSTRAINTS:**

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

SHPO SIGNATURE: Charles E. Jones DATE: 5/3/20

**OILING CATEGORIZATION:**

Wide\_0\_m: Medium\_141\_m: Narrow\_0\_m: V.Light\_742\_m: No Oil\_0\_m  
Subsurface Oil Observed: Yes X No Maximum Depth 45 cm

**RECOMMENDATIONS:**

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

COMMENTS: Recommended treatment includes 1) manual removal of patties, 2) rake down storm berm and, 3) bioremediation per sketch map. Work should be conducted after 6/1 with USFWS approval based on eagle nest constraints.

**TAG COMMENTS:** \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

TAG APPROVAL DATE: 5/3/80.  
ADEC ART WEINER  
EXXON Amy Tate  
NOAA Gary Petras  
USCG KENNETH KEANE

FOSC: ML      DATE: 5-18-90

NOTIFY CVC 24 HRS. IN ADVANCE OF WORK

OG Mike Fogt  
 SEGMENT EV-16  
 SUBDIVISION A  
 DATE 4 / 20 90

# ETCH MAP 1

## CHECKLIST

☒ N Arrow  
☐ Approx. Scale  
☐ Seg/Sub Bdry  
☐ Oil Dist.  
☐ Width  
☐ Length  
☐ % Cover  
☐ Substrate Character  
☐ Est. HML/LVL  
☐ SSL  
☐ Profile Location(s)  
☐ Photo(s)  
☐ P/L Location(s)  
☐ Photo Location(s)

## LEGEND

1  $\Delta$   
 P/L - No Subsurface Oil

2  $\Delta$   
 P/L - Subsurface Oil

$\square$  CT/C  
 Continuous Distribution

$\square$  CT/B  
 Broken Distribution

$\square$  CT/P  
 Patchy Distribution

$\square$  CT/S  
 Splashed Distribution

Oil on Vegetation

1  $\bullet$   
 Photo location, direction,  
 and number



Scale  
 100m

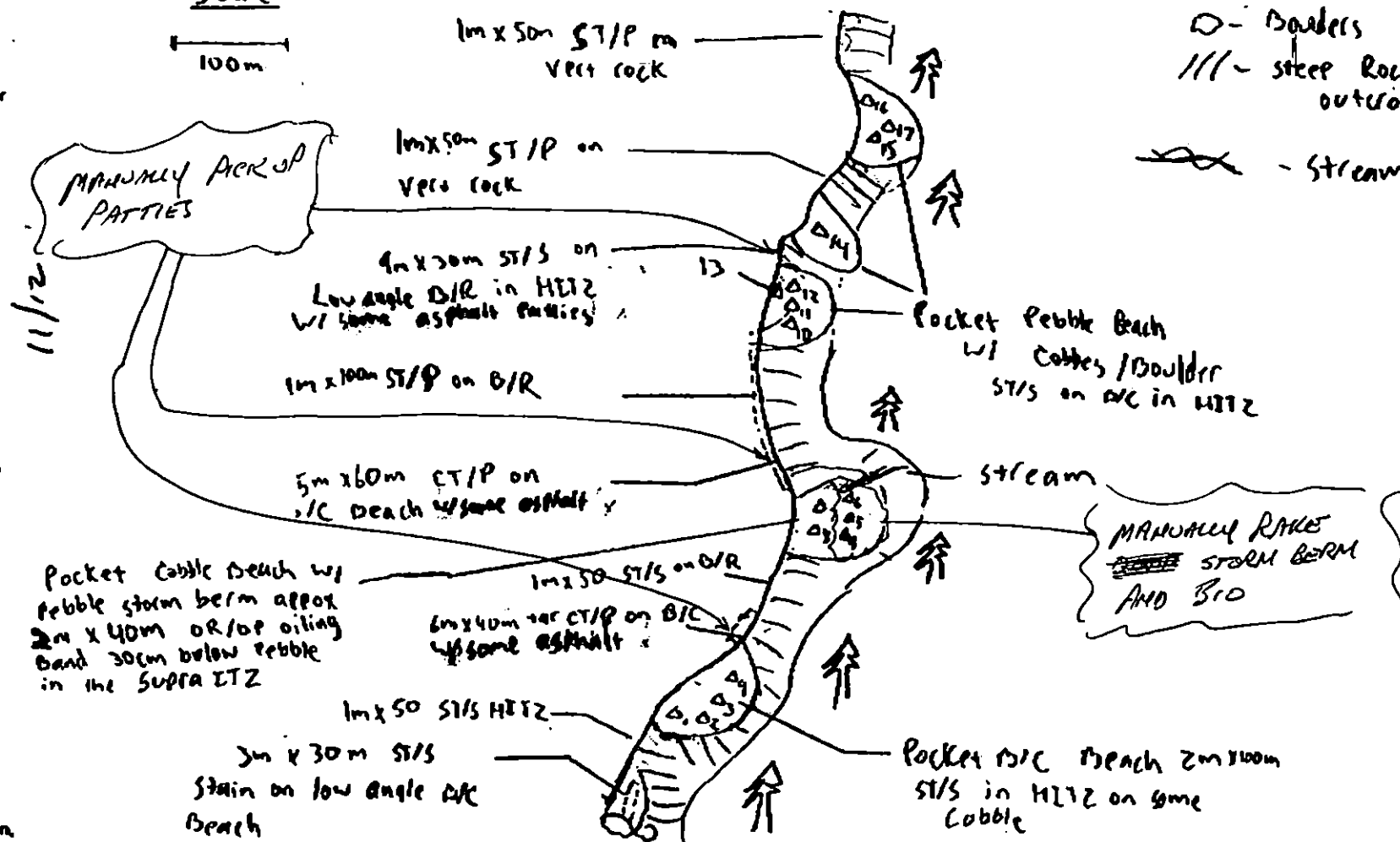
## Legend

$\uparrow$  - trees

$\circ$  - boulders

/// - steep Rock/Boulder outcrop

--- - Stream



Oil Character Length (m): AP 10 PO 0 CV 40 CT 100 ST 886 MS 0 PT 0 TB 0 FL 0 NO 0  
 ↳ subsurface

V-16

ST 11-3

(PIT 5) #5,6  
 (PIT 9) #7,8  
 (STORM BERM) #9,10

BIRD EAGLE NEST

## ECOLOGY MAP (1 OF 1)

RESOURCE CODES FOR ENTIRE SEGMENT:

EV-1

XXXX Wide

//// Medium

---- Narrow

TTTT Very Light

0000 No Oil

EV-16

ADEC Segment Length: 883m

0 100 200 300  
 METERS

Map Key: PWS-184

Name: K.E. CONLANDate: 20 April 1990

Data Entered:

V-16

EV-1

XXXX Wide

//// Medium

---- Narrow

TTTT Very Light

0000 No Oil

EV-16

ADEC Segment Length: 883m

  
METERS

Map Key: PWS-184

Name: Mike FogarDate: 4/20/90

Data Entered:

The ~~stater~~ CHIEF OF STAFF, FOSC associate for further treatment

**ECOLOGICAL CONSTRAINTS  
1991 FIELD ACTIVITIES**

**Anadromous Stream:** Unlimited treatment up to stream bank between May 15 and July 10. ADF&G approval required for work after July 10. Fish Habitat Permit required for instream work. ADF&G approval required for bioremediation within 100 meters of anadromous stream after July 10.

**Subsistence - Deer Harvesting:** Unlimited treatment prior to 8/15.

# MAYSAP FIELD SHORELINE COMMENT SHEET

TEAM NO. 6 SEGMENT EV-017-A SUBDIVISION A DATE 05/02/91

ADEC / ADF+G

NAME Aimee Weseman SIGNATURE Aimee Weseman

☐ NTR ☒ Treatment Recommended Anadromous Fish Stream, Commercial Tourism of the 3 streams in this subdivision, only 1 requires further treatment. ASC# 226-40-16630. An oiled area, sites B & B1 on the west bank of the stream, extends up to the water's edge & produces a steady sheen into the stream when agitated. A small amount of the oiled material was removed. The potential oil contamination of developing salmon eggs & fry exists if this material remains on the bank, or if the stream diverts into the oil patch. Treatment should consist of the manual removal of the AP/HSOR and a thorough manual tilling. Surface run-off has not removed oil to date, little or no adverse impacts to mid & lower intertidal zones would occur. Stream area would be returned to healthy state.

EXXON

NAME RANDALL K. BOYER SIGNATURE Randall K. Boyer

☒ NTR AREA OF AP - 1x4m - B1 WAS COLLECTED BY THE VECO CREW. THE AREA B - SOR - WAS NOT OF CONCENTRATIONS THAT WOULD WARRANT PICKUP. THE SURFACE WAS DISRUPTED TO ALLOW NATURAL WEATHERING. THE TWO SMALL AREAS OF AP NEAR THE MIDDLE STREAM WERE COLLECTED ALONG WITH THE .1 METRE X .1 METER PATCH OF AP NEAR THE WEST MOST STREAM. NO SUBSURFACE OILING WAS DETECTED. OVERALL, THE SUBDIVISION LOOKS HEALTHY WITH MINIMAL OILING. NO FURTHER REASSESSMENT IS NECESSARY.

LANDMANAGER

NAME CHARLES SELANOFF OF CHENEGA BAY SIGNATURE Charles Selanoff

☐ NTR Oil sheen was seen in the stream with tar balls approximately sixty feet from both sides. Just walking on it produced a sheen. Scraping the gravel showed a visible trace of oil. Did not want to dig any farther for fear of disturbing the terrain. I strongly recommend this area be worked over manually and thoroughly tilled.

USCG/NOAA

NAME CWO R. SPURR / Rebecca Hoff SIGNATURE R. Spurr / Rebecca Hoff

☒ NTR Small patches of asphalt in the upper intertidal were picked up, and remaining surface oil should weather quickly. Area B on map in the mid intertidal should also be left to weather naturally. This area has lots of freshwater runoff which should promote weathering. No physical disturbance of the sediments should be done in B since biota in mid & lower intertidal zones would be adversely impacted.

# MAYSAP SHORELINE OILING SUMMARY

PAGE 1 OF 1

TEAM NO. 6

OG D.I. LITTLE

BIO TOM SCHROEDER

SEGMENT EV-017

ADEC TOM CROWE/A. WEJEMAN

LANDMANAGER CHARLES SELANDOFF for CVC

SUBDIVISION A

XXON RANDY BOYER

USCG/NOAA CWO SPURR/REBECCA HOFF

DATE 05/02/91

TIME 10:30 to 12:30

TIDE LEVEL -0.5 ft. to 2.5 ft.

ENERGY LEVEL: ☐ H ☒ M ☐ L

SURVEYED FROM: ☒ FOOT ☐ BOAT ☐ HELO

WEATHER: ☐ SUN ☐ CLOUDS ☐ FOG ☒ RAIN ☐ SNOW

TOTAL LENGTH SHORELINE SURVEYED: 1500 m

NEAR SHORE SHEEN: ☐ BR ☐ RB ☐ SL ☒ NONE

EST. OIL CATEGORY LENGTH: W — m M 1 m N 16 m VL 15 m NO 1478 m US — m

| L<br>O<br>C    | SURFACE OIL CHARACTER |    |    |     |    |    |    |    |    |    | SURFACE<br>SEDIMENT<br>TYPE | SHORE<br>SLOPE<br>V H M L | AREA       |             | ZONE |    |    |    | NOTES                        |
|----------------|-----------------------|----|----|-----|----|----|----|----|----|----|-----------------------------|---------------------------|------------|-------------|------|----|----|----|------------------------------|
|                | AP                    | MS | TB | SOR | CV | CT | ST | FL | DB | NO |                             |                           | WIDTH<br>m | LENGTH<br>m | S    | UI | MI | LI |                              |
| A              |                       | S  |    |     | S  |    |    |    |    |    | rock c                      | M                         | 0.1        | 0.5         |      | X  |    |    |                              |
| B              |                       |    |    | S   |    |    |    |    |    |    | cp g                        | L                         | 25         | 10          |      |    | X  |    | Heavy SOR/disrupted          |
| B <sub>1</sub> |                       |    |    | P   |    |    |    |    |    |    | pc g                        | L                         | 4          | 1           |      |    | X  |    | AP picked up / SOR remaining |
| C              | S                     |    |    |     |    |    |    |    |    |    | cb p                        | M                         | 0.1        | 0.1         | X    |    |    |    |                              |
| D              |                       |    |    | P   |    |    |    |    |    |    | p, g, b                     | L                         | 0.5        | 1           |      | X  |    |    | AP picked up / SOR remaining |
| E              |                       |    |    | S   |    |    |    |    |    |    | pg                          | M                         | 0.2        | 1           | X    |    |    |    |                              |
| F              |                       |    |    | S   |    |    |    |    |    |    | gpc                         | L                         | 1          | 3           |      | X  |    |    | AP picked up / SOR remaining |
| G              |                       |    |    | S   |    |    |    |    |    |    | gp                          | M                         | 0.1        | 0.1         |      |    |    |    | AP picked up / SOR remaining |
| H              |                       |    |    | S   |    |    |    |    |    |    | cp b                        | M                         | 1          | 5           |      | X  |    |    |                              |

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- 6-05 FRAMES 9-15

| PIT NO. | PIT DEPTH (cm) | SUBSURFACE OIL CHARACTER |     |     |     |    |    |    | OILED ZONE cm-cm | CLEAN BELOW Y/N | H2O LEVEL (cm) | SHEEN COLOR B R S N | PIT ZONE |    |    |    | SURFACE-SUBSURFACE SEDIMENTS | NOTES |
|---------|----------------|--------------------------|-----|-----|-----|----|----|----|------------------|-----------------|----------------|---------------------|----------|----|----|----|------------------------------|-------|
|         |                | OP                       | HOR | MOR | LOR | OF | TR | NO |                  |                 |                |                     | S        | UI | MI | LI |                              |       |
| 1       | 35             |                          |     |     |     |    |    | X  | —                | Y               | —              | N                   |          | X  |    |    | gp - psg                     |       |
| 2       | 30             |                          |     |     |     |    |    | X  | —                | Y               | 25             | N                   |          |    |    | X  | pg - gs                      |       |
| 3       | 20             |                          |     |     |     |    |    | X  | —                | Y               | —              | N                   |          |    | X  |    | gp - gcp                     |       |
| 4       | 25             |                          |     |     |     |    |    | X  | —                | Y               | —              | N                   |          |    | X  |    | pg - gs                      |       |
| 5       | 20             |                          |     |     |     |    |    | X  | —                | Y               | —              | N                   |          |    | X  |    | cp - gsp                     |       |
| 6       | 20             |                          |     |     |     |    |    | X  | —                | Y               | —              | N                   |          |    |    | X  | pg - gsp                     |       |
| 7       | 25             |                          |     |     |     |    |    | X  | —                | Y               | —              | N                   |          |    | X  |    | cp - gsp                     |       |
|         |                |                          |     |     |     |    |    |    | —                |                 |                |                     |          |    |    |    |                              |       |
|         |                |                          |     |     |     |    |    |    | —                |                 |                |                     |          |    |    |    |                              |       |

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

## OG COMMENTS:

Most surface oil was found in MTR2 to UIT2 as AP and SOR deposits. These were picked up and removed, leaving only a light oil residue. Outside of these areas occasional patches were found (locations A, C, E, H), usually in high UIT2/SUT2. These deposits of surface oil did not extend below 5cm in depth, thus, no subsurface oil was logged.

Revised: MC 5/9/91  
revised 5/8/91 KG

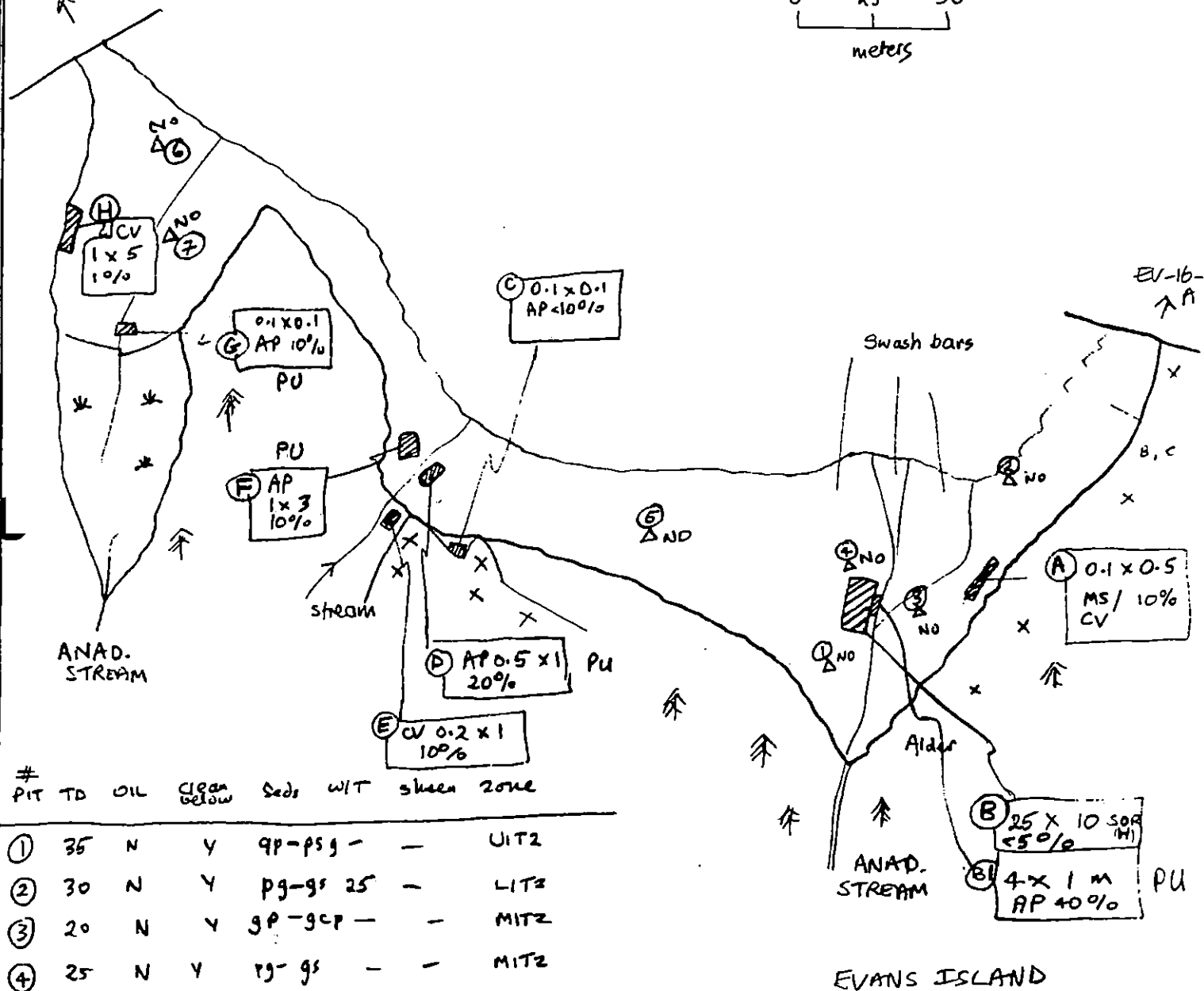
EV-017-A 05/02/91  
OG. Map D.I. Little  
1030 — 1230



0 25 50  
meters

# KNIGHT ISLAND PASSAGE

EV-18-A  
↑



| # | PIT | TD | OIL | Clear below | Seds | WIT | shaken zone |
|---|-----|----|-----|-------------|------|-----|-------------|
| ① | 35  | N  | Y   | qp-psg      | -    | -   | UIT2        |
| ② | 30  | N  | Y   | pg-gs       | 25   | -   | LIT2        |
| ③ | 20  | N  | Y   | gp-gcp      | -    | -   | MIT2        |
| ④ | 25  | N  | Y   | pg-gs       | -    | -   | MIT2        |
| ⑤ | 20  | N  | Y   | cp-gsp      | -    | -   | MIT2        |
| ⑥ | 20  | N  | Y   | plg-gsp     | -    | -   | LIT2        |
| ⑦ | 25  | N  | Y   | cp-gsp      | -    | -   | MIT2        |

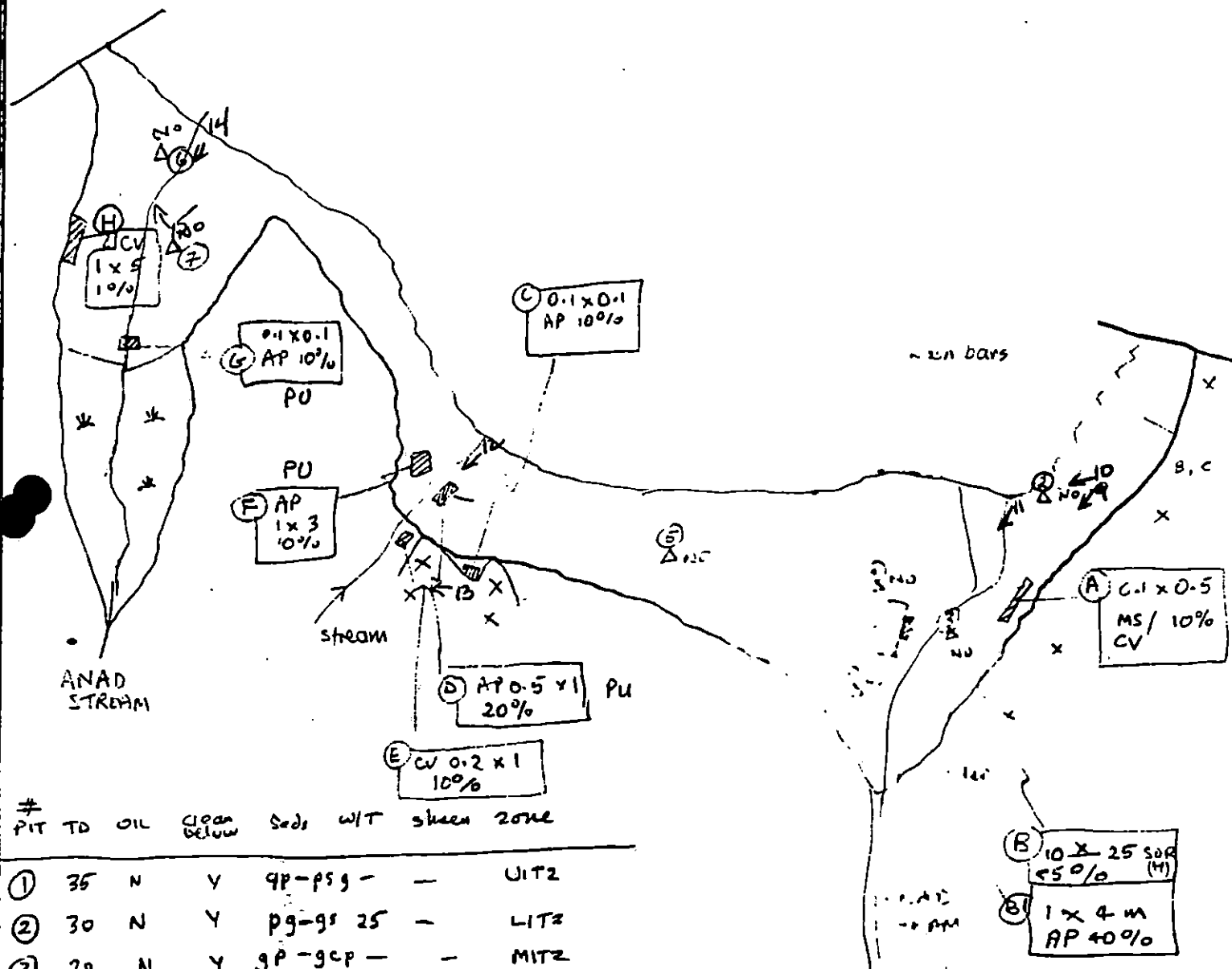
Reviewed: 5/9/91 me  
reviewed 5/8/91 KG

# Photo Locations

Mayap 6-05 # 9-15



EV-017-A 05/02/91  
OG Map D.I. Little  
1030 — 1230



## MAYSAP BIOLOGICAL SUMMARY FORM

TEAM # 6 DATE 5/2/91  
 SEGMENT # EU-017 TIDAL HEIGHT(Range) - 3/4 to + 2 1/2 feet  
 SUBDIVISION A BIOLOGIST T. A. Schroeder  
 SEA STATE 2 fast chop WIND SPEED/DIRECTION N.E. 20 mph +  
 PHOTOGRAPHS: ROLL # FRAME #

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

- (A, B & B<sub>1</sub>) = Most of beach area is very unproductive. Small sand and gravel provide suitable substrate for algae and other life forms. Two healthy fungus and mussel beds are located in the MITZ to LITZ behind swash berms below oil but do not appear to be affected. Any treatment should be the least intrusive possible to protect these beds.
- (C, D, E, F) = One large area of fungus, sporelings and mussels is thriving below thick concentrations of oil. Remainder of beach area is very low in productivity and existing life.
- (H & G) = Scattered fungus and sporelings present throughout beach but not thick. Very few mussels present.

In general, most of this subdivision is very low in productivity due to shifting, unstable beach sand and gravel and the overall exposure to northerly storms. Primary productive areas are behind swash berms and along protective reef or rock outcroppings.

## WILDLIFE OBSERVATIONS

TO BE COMPLETED IN ALL SUBDIVISIONS

| BIRDS            | # OF SPECIES | TOTAL BIRDS | FISH OBSERVED<br>SPECIES PRESENT |
|------------------|--------------|-------------|----------------------------------|
| Eagles           |              |             | Rock Bass, sculpin               |
| Seabirds         |              |             |                                  |
| Waterfowl        |              |             |                                  |
| Gulls/Kittiwakes | 2            | 18          |                                  |
| Shorebirds       | 2            | 4           |                                  |
| Corvids          | 1            | 3           |                                  |
| Other Birds      |              |             |                                  |

| MARINE MAMMALS      | # OBSERVED    | LAND MAMMALS<br>SPECIES | # OBSERVED |
|---------------------|---------------|-------------------------|------------|
| Sea Otters          |               |                         |            |
| Pinnipeds (specify) | 1 Harbor Seal |                         |            |
| Whales (specify)    |               |                         |            |
|                     |               |                         |            |

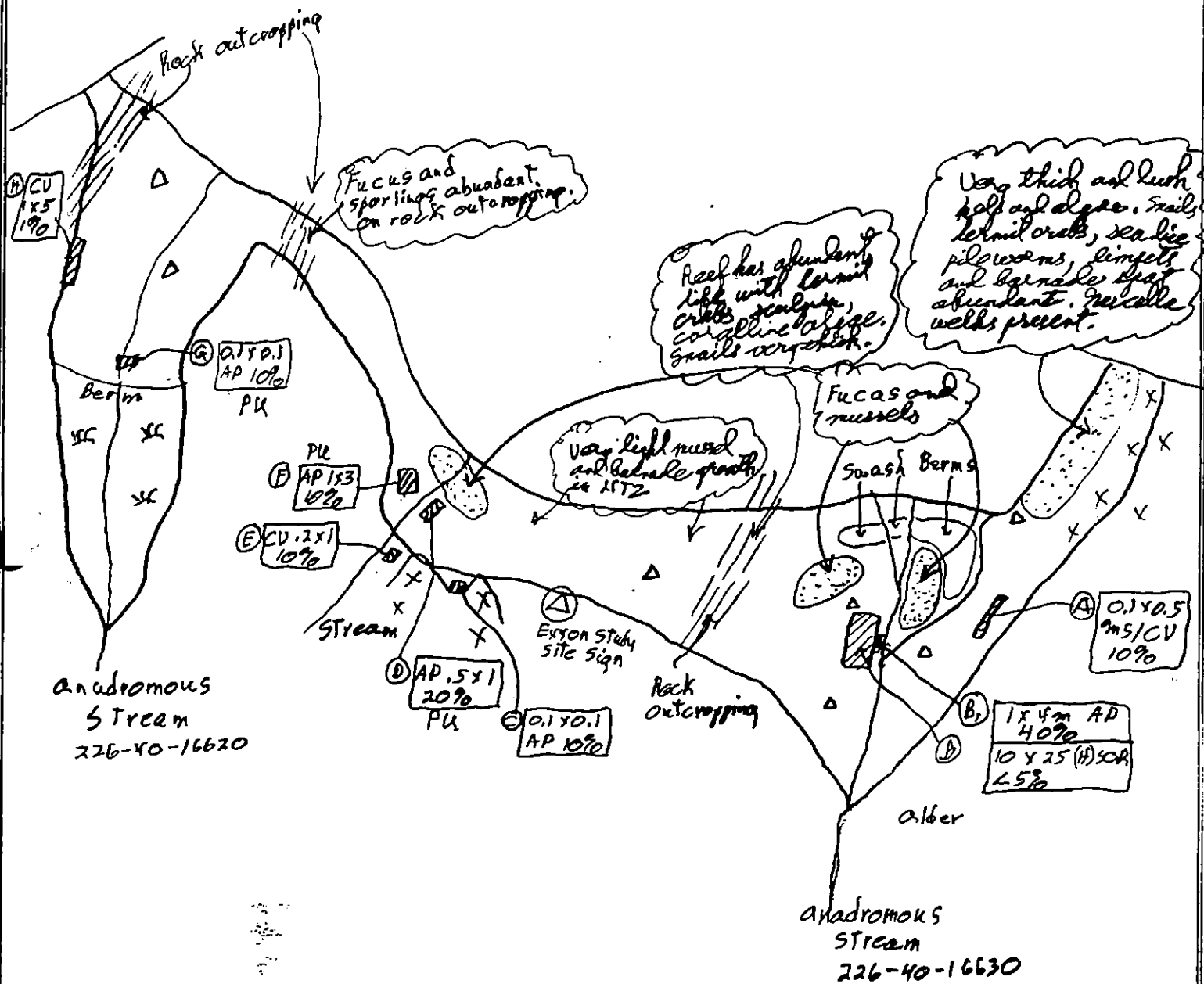
Shoreline subdivision map showing important biological features attached.

REVIEWED: MC 5/9/91

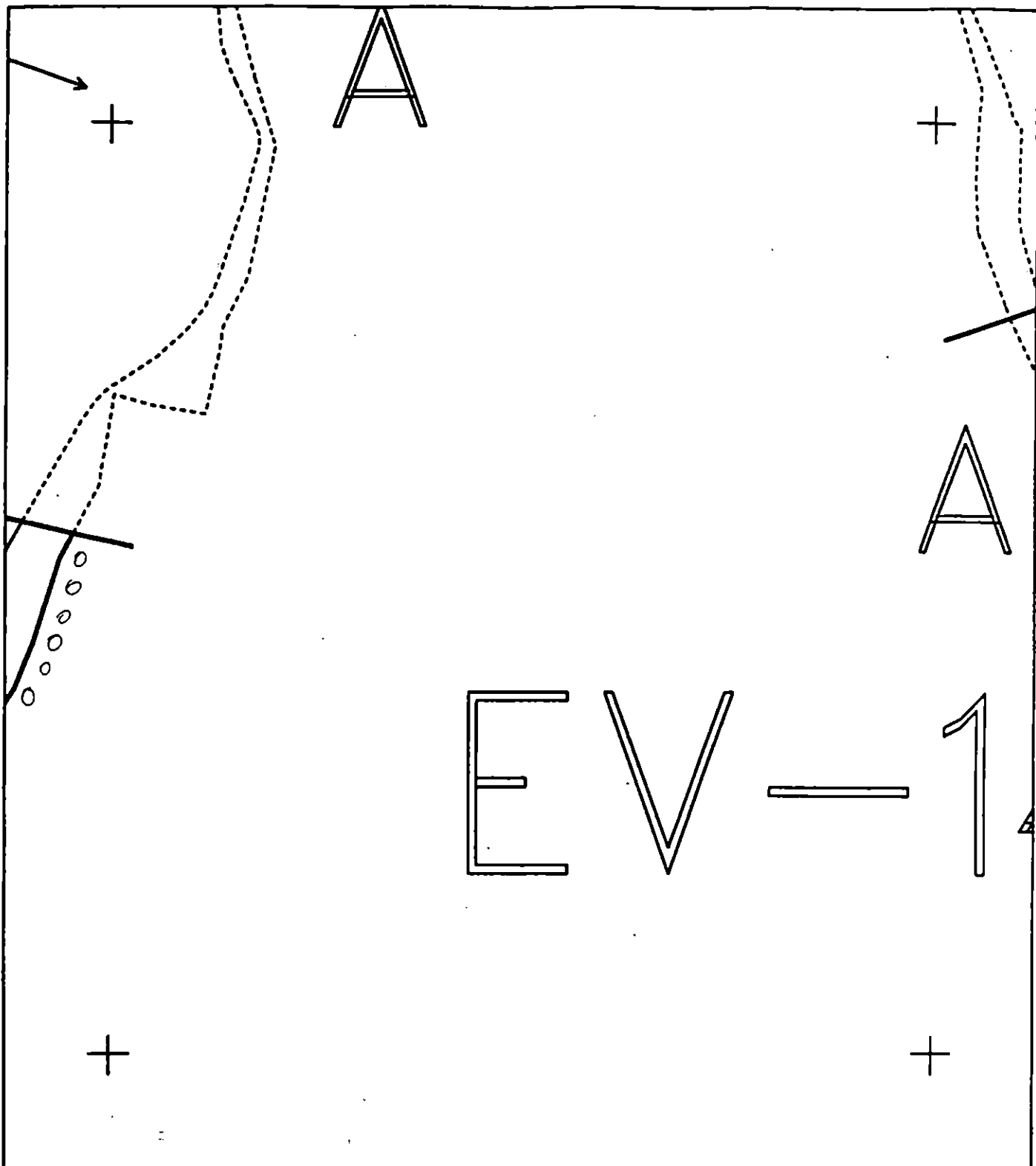
0 25 50  
meters



EU-017-A 5/2/91  
Bio. Map T.R. Schrader  
1030-1230



REVIEWED: MC 5/9/91



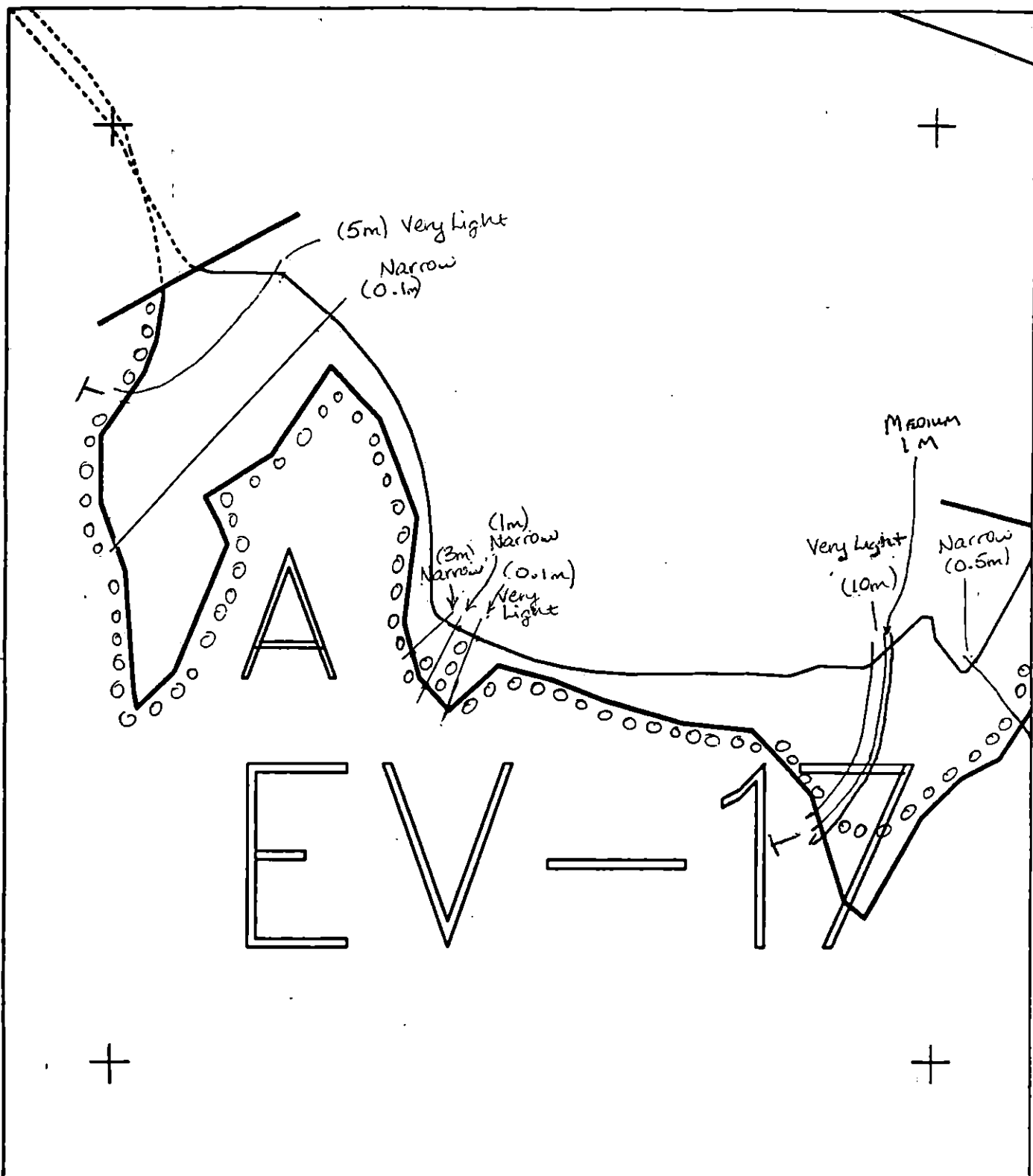
XXXX Wide  
 //// Medium  
 ---- Narrow  
 TTTT Very Light  
 0000 No Oil

**EV017 A**  
 ADEC Subsegment Length: 1814m  
 METERS  
 0 100 200  
 AK State Plane Zone 4  
 prv017ab



Subdivision Field Map  
 Map Key: PWSEV017Ab  
 Name: DAVID LITTLE  
 Date: 05/02/91  
 Date Entered:

Reviewed: MC 5/9/91  
 reviewed 5/8/91 K6



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

**EV017 A**  
 ADEC Subsegment Length: 1814m  
 METERS  
 0 100 200  
 AK State Plane Zone 4  
 pr01700

Subdivision Field Map  
 Map Key: PWSEV017A  
 Name: DAVID LITTLE  
 Date: 05/2/91  
 Date Entered:

REVISER: MC 5/9/91  
 revised 5/8/91 KG

## SHORELINE EVALUATION

SEGMENT ST/ EV-17 SUBDIVISION A (1 OF 1) DATE 4/9/90

### SEGMENT ENVIRONMENTAL SENSITIVITIES AND TIME CONSTRAINTS:

ADF&G anadromous stream no. 226-40-16620, 16630.

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

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

7II Subsistence area: Deer harvesting (8/15 to 2/28)

See attached Ecological Constraint sheet for specific constraints and contacts.

**SUBDIVISION ECOLOGICAL CONSTRAINTS:**

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

**ARCHAEOLOGICAL CONSTRAINTS:**

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

SHPO SIGNATURE: A. David McMahon DATE: 4/23/90

**OILING CATEGORIZATION:**

Wide 74 m: Medium 0 m: Narrow 88 m: V.Light 773 m: No Oil 679 m  
Subsurface Oil Observed: Yes X No        Maximum Depth 20+ cm

**RECOMMENDATIONS:**

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

COMMENTS: Recommended treatment includes 1) manual tar/mat removal, 2) manual pick up of oiled debris, 3) bioremediation of surface and sub-surface oil in areas shown on attached sketch map. Work should be conducted between 5/15 and 7/10 based on salmon constraints. No bioremediation within 100m. of stream without permit from ADF&G.

TAG COMMENTS: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

TAG APPROVAL DATE: 4/23/90.  
ADEC Art Weiner Art Weiner  
EXXON Andy Tate Andy Tate  
NOAA Joseph Talbott Joseph Talbott  
USCG Kenneth Keane Kenneth Keane

FOSC: myl DATE: 5-1-90  
Do not bioremediate FAW km's in line.

OG F es

SEGMENT ST/ EV-17

SUBDIVISION A

DATE 4 / 9 90

# CHECKLIST

- ☒ All Areas
- ☒ Approx. Scale
- ☒ Day/Date Entry
- ☒ Oil Dist.
- ☒ Width
- ☒ Length
- ☒ % Cover
- ☒ Substrate Character
- ☒ E.g. HWL, LVL
- ☒ SCL
- ☒ Profile Location(s)
- ☒ Profile(s)
- ☒ Pit Location(s)
- ☒ Photo Location(s)

## LEGEND

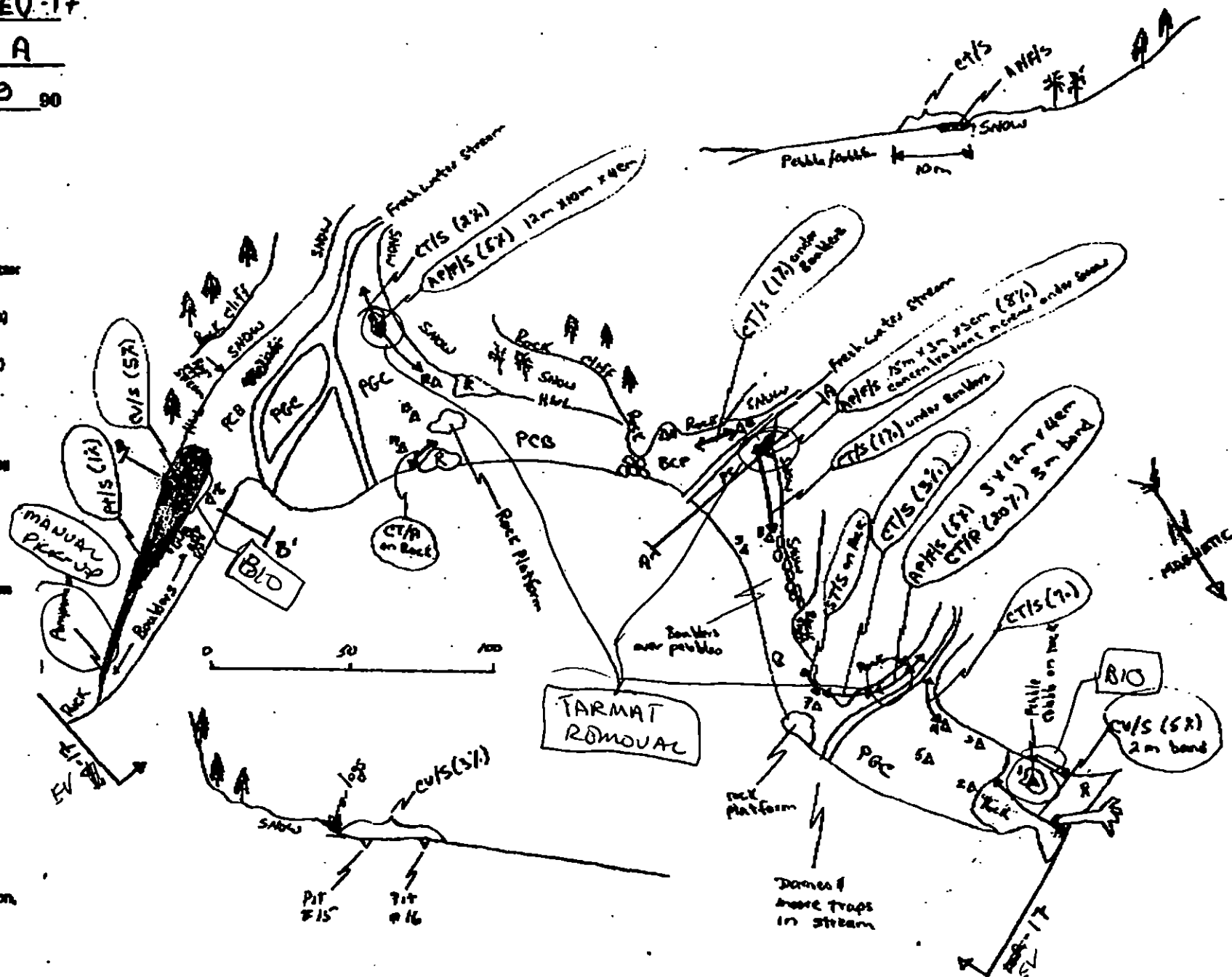
- 1  $\Delta$   
Pit - No Subsurface Oil
- 2  $\Delta$   
Pit - Subsurface Oil
- CT/C

  
Continuous Distribution
- CT/B

  
Broken Distribution
- CT/P

  
Patchy Distribution
- CT/S

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

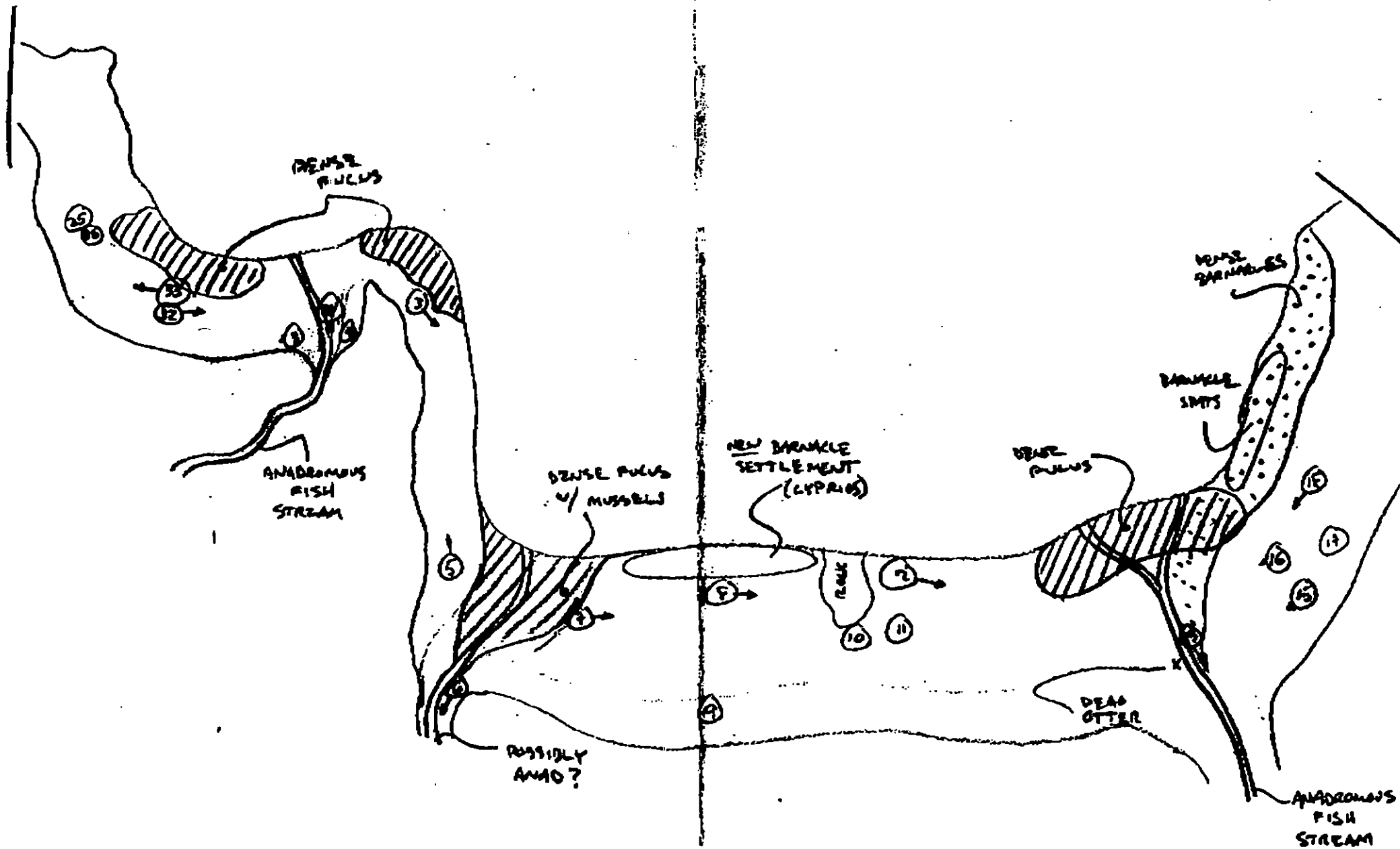


Oil Character Length (m): AP 27 PO - CV 160 CT 300 ST 25 MS - PT 35 TB - FL - NO 413

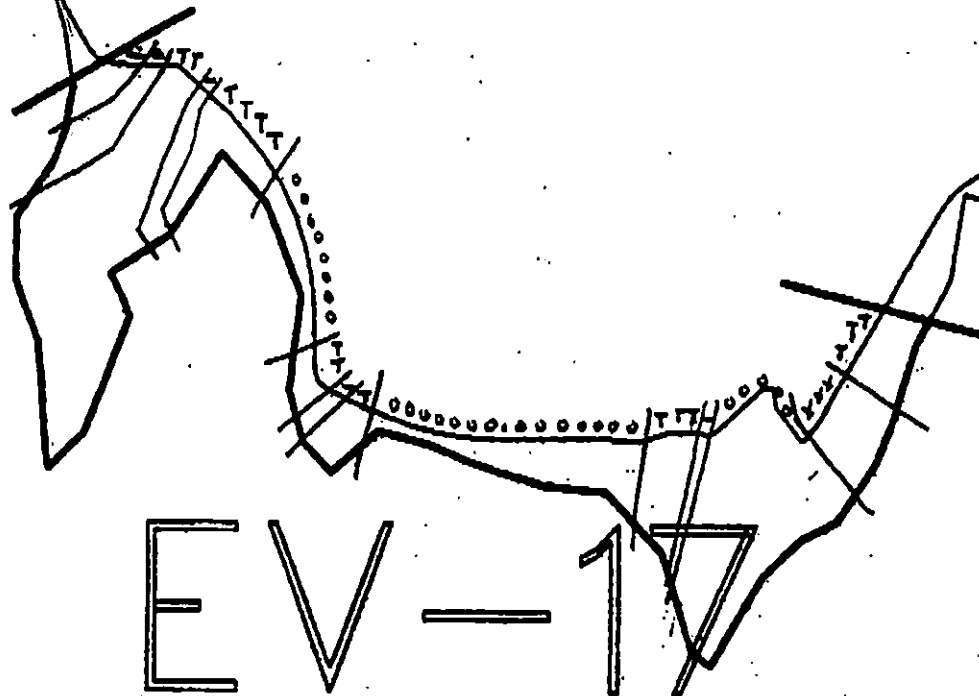
REVISIONS

EV 17

BIOLOGY SCHEMATIC  
WITH  
PHOTO LOCATIONS



EV-16



EV-17

XXXX Wide

/// Medium

--- Narrow

TTTT Very Light

0000 No Oil

EV-17

ADEC Segment Length: 1614m



Map Key: PWS-185

Name: Reimer

Date: 4/9/90

Date Entered:

**1991 MAYSAP EVALUATION**

**SEGMENT:** EV 017 **SUB:** A **REGION:** PWS **SURVEY DATE:** 5/2/91

**ENVIRONMENTAL SENSITIVITIES:**

Work Window(s) OPEN 5/1 - 7/10; RESTRICTED 7/10 - 9/15

Ecological/Constraints (see page two for details) Anadromous  
stream, Subsistence - Deer harvesting

**ARCHAEOLOGICAL CONSTRAINTS:**

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

SHPO Signature: \_\_\_\_\_ Date: \_\_\_\_\_

**RECOMMENDATIONS:**

|                               | <b>INITIAL</b> | <b>TAG</b> | <b>FOSC</b> |
|-------------------------------|----------------|------------|-------------|
| TREATMENT REQUIRED (Y or N)   | <u>N</u>       | _____      | _____       |
| Manual Pickup (Check as Req.) | _____          | _____      | _____       |
| Spot Washing                  | _____          | _____      | _____       |
| Bio-Customblen Only           | _____          | _____      | _____       |
| Bio-Inipol/Customblen         | _____          | _____      | _____       |
| Other _____                   | _____          | _____      | _____       |
| Other _____                   | _____          | _____      | _____       |

**COMMENTS:**

INITIAL: \_\_\_\_\_

TAG: \_\_\_\_\_

FOSC: \_\_\_\_\_

TAG APPROVAL DATE: \_\_\_\_\_ FOSC APPROVAL DATE: \_\_\_\_\_

ADEC \_\_\_\_\_ FOSC \_\_\_\_\_

EXXON \_\_\_\_\_

USCG \_\_\_\_\_

NOAA \_\_\_\_\_

**ECOLOGICAL CONSTRAINTS  
1991 FIELD ACTIVITIES**

**Anadromous Stream:** Unlimited treatment up to stream bank between May 15 and July 10. ADF&G approval required for work after July 10. Fish Habitat Permit required for instream work. ADF&G approval required for bioremediation within 100 meters of anadromous stream after July 10.

**Subsistence - Deer Harvesting:** Unlimited treatment prior to 8/15.

# MAYSAP FIELD SHORELINE COMMENT SHEET

TEAM NO. 6 SEGMENT EV-017-A SUBDIVISION A DATE 05/02/91

ADEC / ADF+G

NAME Aimee Weesman

SIGNATURE Aimee Weesman

☐ NTR ☒ Treatment Recommended Anadromous Fish Stream, Commercial Tourism of the 3 streams in this subdivision, only 1 requires further treatment. ASCR 226-40-16630. An oiled area, sites B & B1 on the west bank of the stream, extends up to the water's edge & produces a steady sheen into the stream when agitated. A small amount of the oiled material was removed. The potential oil contamination of developing salmon eggs & fry exists if this material remains on the bank, or if the stream diverts into the oil patch. Treatment should consist of the manual removal of the AB/HSOR and a thorough manual tilling. Surface run-off has not removed oil to date, little or no adverse impacts to mid & lower intertidal zones would occur. Stream area would be returned to healthy state.

EXXON

NAME RANDALL K. BOYER

SIGNATURE Randall K. Boyer

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LANDMANAGER

NAME CHARLES SELANOFF OF CHENEGA BAY

SIGNATURE Charles Selanoff

☐ NTR Oil sheen was seen in the stream with tar balls approximately sixty feet from both sides. Just walking on it produced a sheen. Scraping the gravel showed a visible trace of oil. Did not want to dig any farther for fear of disturbing the terrain. I strongly recommend this area be worked over manually and thoroughly tilled.

USCG/NOAA

NAME CWO R. SPURR / Rebecca Hoff

SIGNATURE R. Spurr / Rebecca Hoff

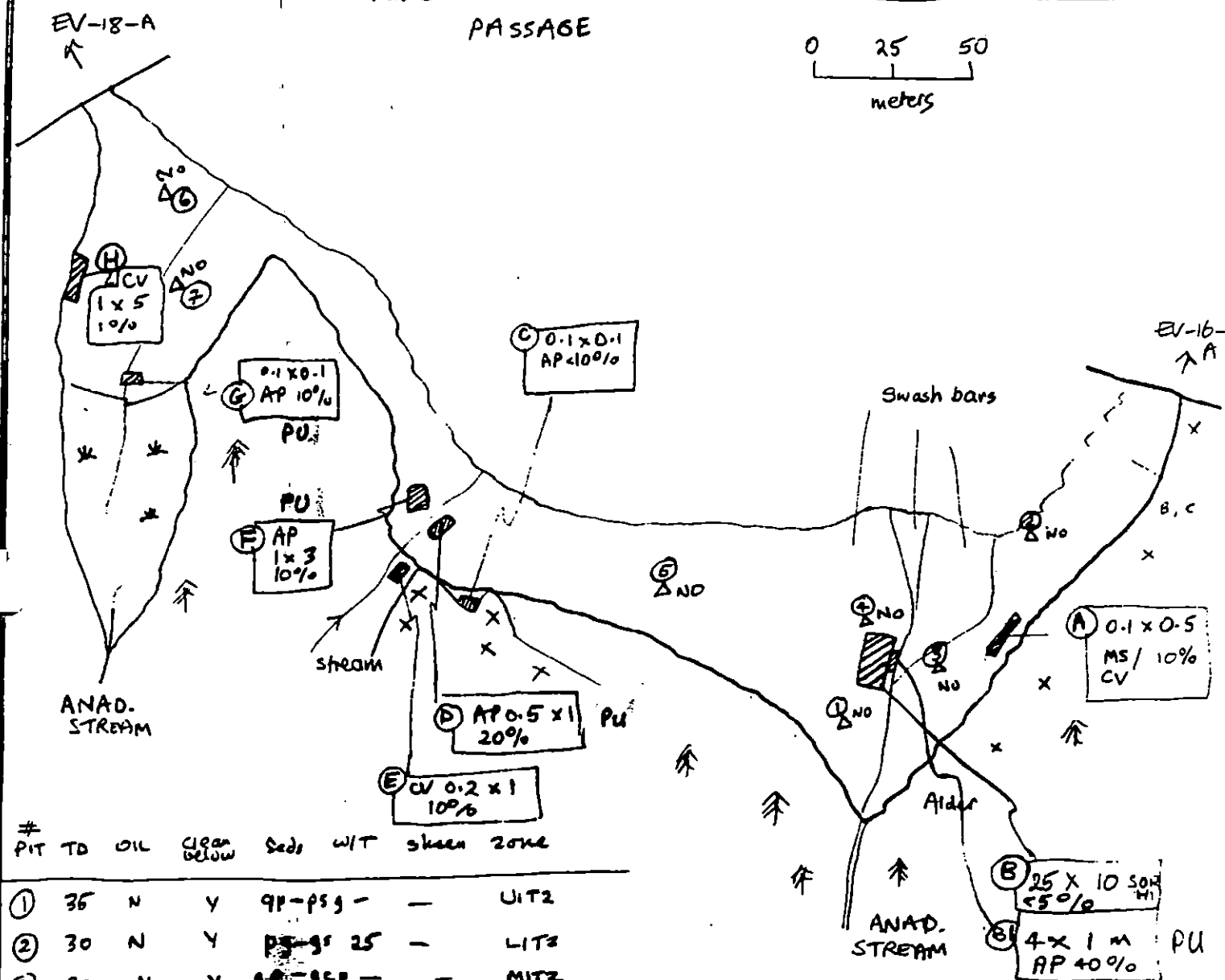
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Revises: MC 5/9/91  
revised 5/8

EV-017-A 05/02/91  
 Og. Map D.I. Little  
 1030 — 1230

# KNIGHT ISLAND PASSAGE

0 25 50  
 meters



#  
 PIT TD OIL Clean Seds W/T Shale zone

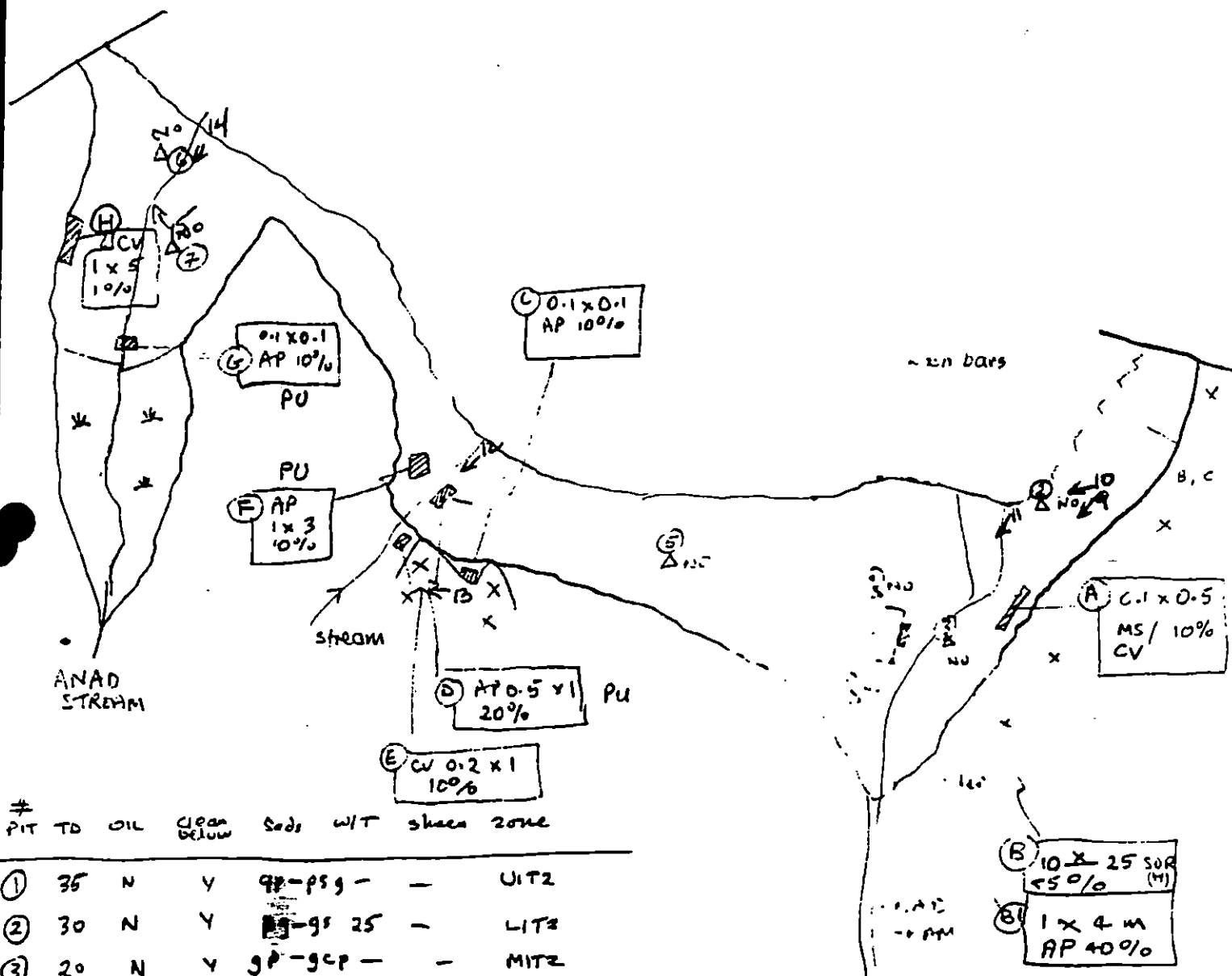
| # | PIT | TD | OIL | Clean   | Seds | W/T | Shale zone |
|---|-----|----|-----|---------|------|-----|------------|
| ① | 35  | N  | Y   | qf-psg  | -    | -   | UIT2       |
| ② | 30  | N  | Y   | ps-gs   | 25   | -   | LIT2       |
| ③ | 20  | N  | Y   | gs-gcp  | -    | -   | MIT2       |
| ④ | 25  | N  | Y   | rg-gs   | -    | -   | MIT2       |
| ⑤ | 26  | N  | Y   | cp-gsp  | -    | -   | MIT2       |
| ⑥ | 20  | N  | Y   | plg-gsp | -    | -   | LIT2       |
| ⑦ | 25  | N  | Y   | cp-gsp  | -    | -   | MIT2       |

EVANS ISLAND

REVIEWED: 5/9/91 me  
 reviewed 5/5/91

Photo Location  
Mayap 6-05 # 9-15

EV-017-A 05/02/91  
OG Map D.I. Little  
1030 — 1230



| # | PIT | TD | OIL | Clear   | Seds | WIT | shale | zone |
|---|-----|----|-----|---------|------|-----|-------|------|
| 1 | 35  | N  | Y   | gs-psg  | -    | -   | UITZ  |      |
| 2 | 30  | N  | Y   | gs-gs   | 25   | -   | LITZ  |      |
| 3 | 20  | N  | Y   | gs-gcp  | -    | -   | MITZ  |      |
| 4 | 25  | N  | Y   | gs-gs   | -    | -   | MITZ  |      |
| 5 | 26  | N  | Y   | cp-gsp  | -    | -   | MITZ  |      |
| 6 | 20  | N  | Y   | plg-gsp | -    | -   | LITZ  |      |
| 7 | 25  | N  | Y   | cp-gsp  | -    | -   | MITZ  |      |
| 9 |     |    |     |         |      |     |       |      |

# MAYSAP BIOLOGICAL SUMMARY FORM

TEAM # 6  
 SEGMENT # EV-017  
 SUBDIVISION A  
 SEA STATE 2 foot chop  
 PHOTOGRAPHS: ROLL #  
 DATE 5/2/91  
 TIDAL HEIGHT (Range) - 3/4 to + 2 1/2 feet  
 BIOLOGIST T. A. Schroeder  
 WIND SPEED/DIRECTION N.E. 20 mph +  
 FRAME #

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

(A, B & B,) = Most of beach area is very unproductive. Small sand and gravel provide suitable substrate for algae and other life forms. Two healthy fucus and mussel beds are located in the MITZ to KITZ behind marsh berms below oil but do not appear to be affected. Any treatment should be the least intrusive possible to protect these beds.

(C, D, E, F) = One large area of fucus, sporing and mussels is thriving below these concentrations of oil. Remainder of beach area is very low in productivity and existing biota.

(H & G) = Scattered fucus and sporing present throughout beach but not thick. Very few mussels present.

In general, most of this subdivision is very low in productivity due to shifting, unstable beach sand and gravel and the overall exposure to northerly storms. Primary productive areas are behind marsh berms and along protective reef or rock outcroppings.

## WILDLIFE OBSERVATIONS

TO BE COMPLETED IN ALL SUBDIVISIONS

| BIRDS            | # OF SPECIES | TOTAL BIRDS | FISH OBSERVED SPECIES PRESENT |
|------------------|--------------|-------------|-------------------------------|
| Eagles           |              |             | Rock Runy, sculpin            |
| Seabirds         |              |             |                               |
| Waterfowl        |              |             |                               |
| Gulls/Kittiwakes | 2            | 18          |                               |
| Shorebirds       | 2            | 4           |                               |
| Corvids          | 1            | 3           |                               |
| Other Birds      |              |             |                               |

| MARINE MAMMALS      | # OBSERVED    | LAND MAMMALS SPECIES | # OBSERVED |
|---------------------|---------------|----------------------|------------|
| Sea Otters          |               |                      |            |
| Pinnipeds (specify) | 1 Harbor Seal |                      |            |
| Whales (specify)    |               |                      |            |
|                     |               |                      |            |

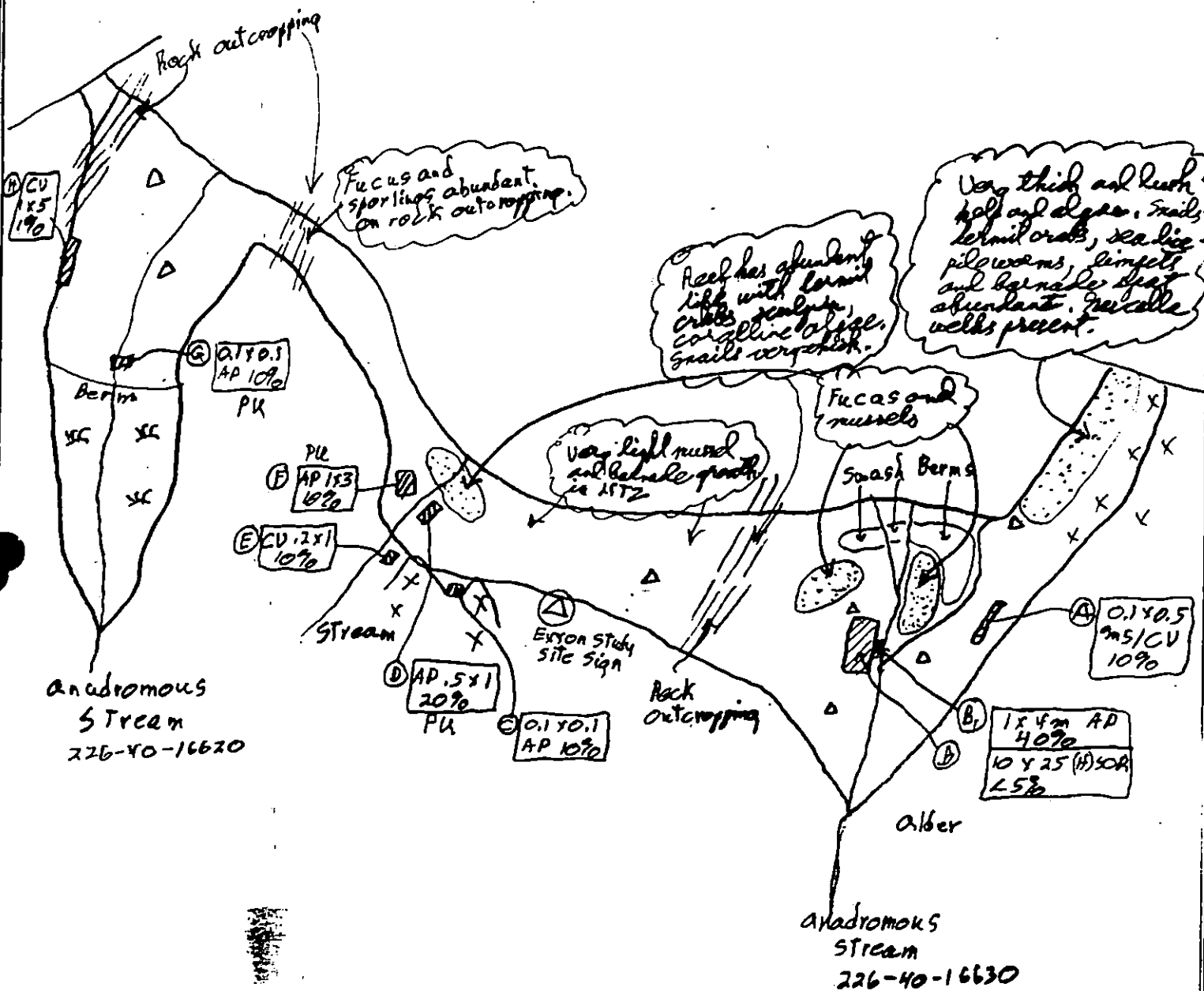
Shoreline subdivision map showing important biological features attached.

REVIEWED: MC 5/9/91

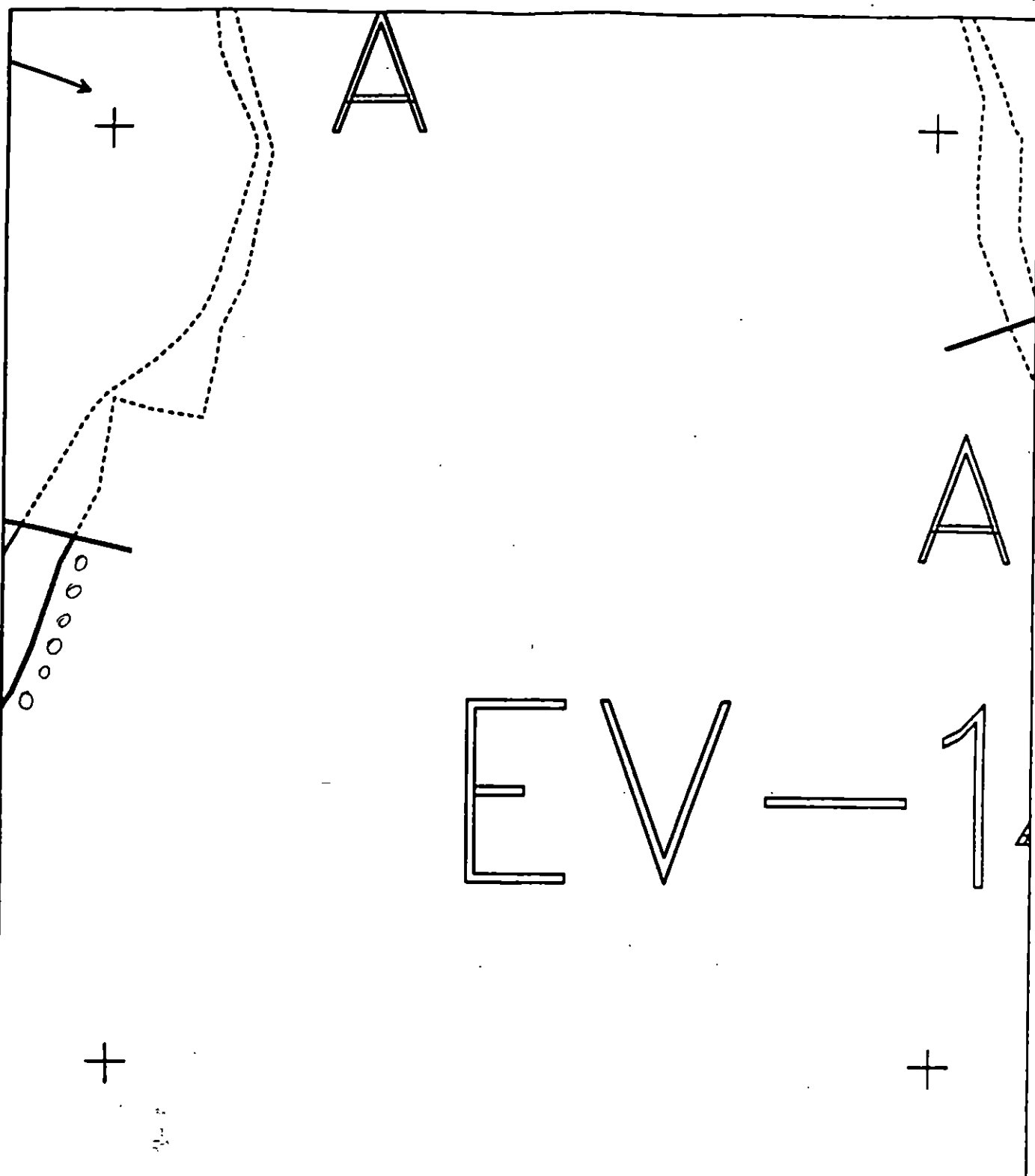
Rev'd 5/13/91

0 25 50  
meters

EV-017-A 5/2/91  
Bio. Map T.R. Schroeder  
1030-1230



REVIEWED: MC 5/9/91



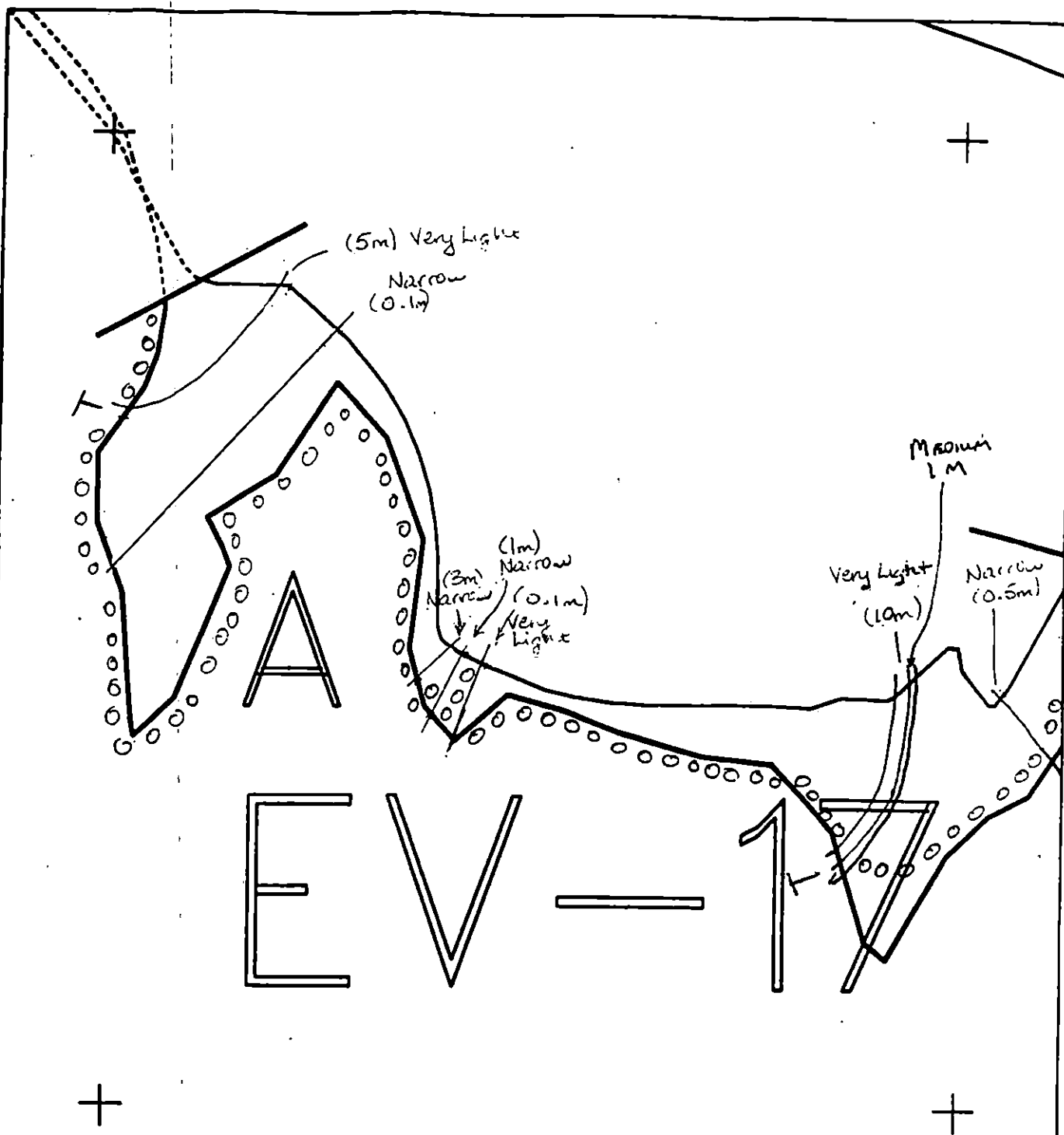
XXXX Wide  
 //// Medium  
 ---- Narrow  
 TTTT Very Light  
 0000 No Oil

**EV017 A**  
 ADEC Subsegment Length: 1614m  
 METERS  
 0 100 200  
 AK State Plane Zone 4  
 prv017ab

Subdivision Field Map  
 Map Key: PWSEV017Ab  
 Name: DAVID LITTLE  
 Date: 05/02/91  
 Data Entered:



Reviewed: MC 5/19/91  
 reviewed 5/16/91



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

**EV017 A**  
 ADEC Subsegment Length: 1814m  
 METERS  
 0 100 200  
 AK State Plane Zone 4  
 pr017a



Subdivision Field Map  
 Map Key: PWSEV017A  
 Name: DAVID LITTLE  
 Date: 05/2/91  
 Date Entered:

REVISED: MC 5/9/91  
 revised 5/8/91

REGION: PRINCE WILLIAM SOUND

SEGMENT: ST/EV-17

SUBDIVISIONS: A (1 OF 1)

SHORELINE EVALUATION

SEGMENT ST/ EV-17 SUBDIVISION A (1 OF 1) DATE 4/9/90

**SEGMENT ENVIRONMENTAL SENSITIVITIES AND TIME CONSTRAINTS:**

ADF&G anadromous stream no. 226-40-16620, 16630.

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

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

7II Subsistence area: Deer harvesting (8/15 to 2/28)

See attached Ecological Constraint sheet for specific constraints and contacts.

**SUBDIVISION ECOLOGICAL CONSTRAINTS:**

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

**ARCHAEOLOGICAL CONSTRAINTS:**

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

SHPO SIGNATURE: \_\_\_\_\_ DATE: \_\_\_\_\_

**OILING CATEGORIZATION:**

Wide 74 m: Medium 0 m: Narrow 88 m: V.Light 773 m: No Oil 679 m  
Subsurface Oil Observed: Yes X No \_\_\_\_\_ Maximum Depth 20+ cm

**RECOMMENDATIONS:**

|                                                           |                                                        |
|-----------------------------------------------------------|--------------------------------------------------------|
| <input type="checkbox"/> No Treatment Recommended         | <input type="checkbox"/> Snare/Absorbent Booms         |
| <input checked="" type="checkbox"/> Treatment Recommended | <input type="checkbox"/> Oil Snares (pom poms)         |
| <input checked="" type="checkbox"/> Manual Pickup         | <input type="checkbox"/> Absorbents (pads, rolls, etc) |
| <input checked="" type="checkbox"/> Bioremediation        | <input type="checkbox"/> Spot Washing: _____ Wands     |
| <input checked="" type="checkbox"/> Tarmat: _____ Breakup | <input type="checkbox"/> Beach Cleaner                 |
| <input checked="" type="checkbox"/> Removal               | <input type="checkbox"/> Other (see comments)          |

COMMENTS: Recommended treatment includes 1) manual tarmat removal, 2) manual pick up of oiled debris, 3) bioremediation of surface and sub-surface oil in areas shown on attached sketch map. Work should be conducted between 5/15 and 7/10 based on salmon constraints. No bioremediation within 100m. of stream without permit from ADF&G.

TAG COMMENTS: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

TAG APPROVAL DATE: \_\_\_\_\_

ADEC \_\_\_\_\_  
EXXON \_\_\_\_\_  
NOAA \_\_\_\_\_  
USCG \_\_\_\_\_

FOSC: \_\_\_\_\_ DATE: \_\_\_\_\_

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

# FIELD SHORELINE COMMENT SHEET

15

SEGMENT ST 1 EV-17 SUBDIVISION: \_\_\_\_\_ DATE 4/10/90

USCG  
NAME R. Hubbard SIGNATURE Randolph Hubbard

☐ NO TREATMENT RECOMMENDED ☒ TREATMENT SUGGESTED *see below*  
COMMENTS

1. Manual removal oil tainted particles & till under line area to allow natural process of nature.
2. Later observe to note process.

ADEC  
NAME J. LYNN MARTIN SIGNATURE J. Lynn Martin

☐ NO TREATMENT RECOMMENDED ☒ TREATMENT SUGGESTED  
COMMENTS

AGREE WITH EXXON OPS. RECOMMENDATION FOR MANUAL REMOVAL OF ASPHALT AREAS THROUGH OUT SEGMENT.  
ALSO AGREE WITH RECOMMENDATION FOR NO CLEAN UP ON NORTH END OF SEGMENT DUE TO ACCESSIBILITY OF AREA.  
ON EAST SIDE OF BAY (SEGMENT) THE LIGHT SURFACE COVER AND HEAVY SUBSURFACE SHOULD OIL SHOULD BE FURTHER REVIEWED AND SCAT ~~TO~~ DUE TO ITS LOCATION TO A ACTIVE STREAM.

## LAND MANAGER

NAME Patricia Selms FF SIGNATURE Patricia Selms

☐ NO TREATMENT RECOMMENDED ☒ TREATMENT SUGGESTED  
COMMENTS

*Refer to ADEC comment*

## SHORELINE OILING SUMMARY

REVISION NO. 02/28/90

OG Reimer USCG Hubbard SEGMENT ST/ EV-17  
 BIO Zamora LAND REP Selamoff (cuc) SUBDIVISION A (1 of 1)  
 EXXON Garcia ADEC MARTIN TIME/6 : 20 to 18 : 00  
 TEAM NO.: 16 TIDE LEVEL: +5 to +2 DATE 4 / 9 / 90  
 EST. SUBDIVISION LENGTH: 889 m ☒ Sun ☐ Clouds ☐ Fog ☐ Rain ☐ Snow  
 UPLANDS DESCRIPTION: ☒ Grass ☒ Forest ☒ Rock Snow  
 SURVEYED FROM: ☒ Foot ☐ Boat ☐ Helo WORKING DIRECTION: West to East  
 SURFACE SEDIMENTS: R 5 % B 20 % C 20 % P 40 % G 15 % S 0 % M 0 % V 0 %  
 SLOPE: Lang 95 % Hang 5 % Vert 0 % WAVE EXPOSURE: ☒ Low ☐ Med ☐ High  
 OIL CATEGORY LENGTH: W 75 m M 0 m N 20 m VL 381 m NO 413 m

## SURFACE OIL

| CHARACTER        | DISTRIBUTION |    |    |    |    | OIL / FILM COLOR |    |    |    |    | IMPACTED ZONES |   |   |   |
|------------------|--------------|----|----|----|----|------------------|----|----|----|----|----------------|---|---|---|
|                  | AC           | AS | FP | FS | SS | SP               | ST | SW | WS | WS | SU             | U | M | U |
| ASPHALT PAVEMENT |              |    |    | X  |    | X                |    | X  |    |    | X              | X |   |   |
| POOLED           |              |    |    |    |    |                  |    |    |    |    |                |   |   |   |
| COVER            |              |    |    | X  |    | X                |    | X  |    |    | X              | X |   |   |
| COAT             |              |    | ✓  | X  |    | X                |    |    |    |    | X              |   | ✓ |   |
| STAIN            |              |    |    | X  |    |                  |    | X  |    |    | X              |   |   |   |
| MOUSSE           |              |    |    |    |    |                  |    |    |    |    |                |   |   |   |
| PATTIES          |              |    |    | X  |    |                  |    | X  |    |    | X              |   |   |   |
| TARBALLS         |              |    |    |    |    |                  |    |    |    |    |                |   |   |   |
| FILM             |              |    |    |    |    |                  |    |    |    |    |                |   |   |   |
| NO OIL           |              |    |    |    |    |                  |    |    |    |    | -              |   |   | X |

PAVEMENT: H (F) S 2 sq. m by 4 cmPATTIES / TARBALLS 2 BAGS

NEAR SHORE SHEEN? NO BR RW SL TL

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

DEBRIS COLLECTED  
☐ YES ☒ NOTYPE 0#BAGS 0

Photographs:

Roll No. ST-16-718Frames 31-37, 1-18

## SUBSURFACE OIL

| PIT NO. | PIT DEPTH (cm) | SUBSURFACE OIL CHARACTER |    |    |    |    | OILED INTERVAL (CM-DM) | BELOW |    | OIL / FILM COLOR |    |    |    |    | PIT ZONE |   |   |   | A N A | SUBSURFACE SEDIMENTS |
|---------|----------------|--------------------------|----|----|----|----|------------------------|-------|----|------------------|----|----|----|----|----------|---|---|---|-------|----------------------|
|         |                | OP                       | OR | OL | OF | NO |                        | VO    | VO | SP               | ST | SW | WS | WS | SU       | U | M | U |       |                      |
| 1       | 20             |                          | X  |    |    |    | 0 - 20                 |       | X  |                  |    |    | X  |    |          | X |   |   |       | PG B                 |
| 2       | 20             |                          |    |    |    | X  | -                      |       |    |                  |    |    |    |    |          |   | X |   |       | PG                   |
| 3       | 15             |                          |    |    |    | X  | -                      |       |    |                  |    |    |    |    |          | X |   |   |       | PG                   |
| 4       | 45             |                          |    |    |    | X  | -                      |       |    |                  |    |    |    |    |          | X |   |   |       | PG                   |
| 5       | 15             |                          |    |    |    | X  | -                      |       |    |                  |    |    |    |    |          |   | X |   |       | PGC                  |
| 6       | 15             |                          |    |    |    | X  | -                      |       |    |                  |    |    |    |    |          | X |   |   |       | PGC                  |

COMMENTS Series of fresh water streams and wide intertidal flats separated by rocky highlands. The tidal flats are generally covered with pebbles, granules and scattered cobbles. Rocky areas typically have coarse substrate with cobbles and boulders. The majority of this segment has no to very light oiling in the form of spongy covers or crusts on rocky areas and under boulders on coarse sediment beaches. There are two areas which have pavement, one of them which extends under the snow and should be further investigated. The only wide oiling is along the eastern shore of the segment where pits show a subsurface band 20 m wide. Stream beds appear clean.

# SHORELINE OILING SUMMARY (PAGE 2 of 2)

SEGMENT ST/ EV-17 SUBDIVISION A

## SUBSURFACE OIL (CONTINUED)

| PIT NO. | PIT DEPTH (cm) | SUBSURFACE OIL CHARACTER |    |    |    |    | OILED INTERVAL (cm-08) | BELOW |    | OIL / FILM COLOR |              |              |              |              |              | PIT ZONE |   |   |    | A<br>N<br>A | SUBSURFACE SEDIMENTS |
|---------|----------------|--------------------------|----|----|----|----|------------------------|-------|----|------------------|--------------|--------------|--------------|--------------|--------------|----------|---|---|----|-------------|----------------------|
|         |                | OP                       | OR | OL | OF | NO |                        | VO    | UC | <del>1</del>     | <del>2</del> | <del>3</del> | <del>4</del> | <del>5</del> | <del>6</del> | 2U       | U | M | LI |             |                      |
| 7       | 65             |                          |    |    |    | X  | -                      |       |    |                  |              |              |              |              |              | X        |   |   |    |             | PF                   |
| 8       | 45             |                          |    |    |    | X  | -                      |       |    |                  |              |              |              |              |              | X        |   |   |    |             | PG                   |
| 9       | 10             |                          |    |    |    | X  | -                      |       |    |                  |              |              |              |              |              |          |   | X |    |             | PGC                  |
| 10      | 35             |                          |    |    |    | X  | -                      |       |    |                  |              |              |              |              |              | X        |   |   |    |             | PG                   |
| 11      | 45             |                          |    |    |    | X  | -                      |       |    |                  |              |              |              |              |              | X        |   |   |    |             | PG                   |
| 12      | 45             |                          |    |    |    | X  | -                      |       |    |                  |              |              |              |              |              | X        |   |   |    |             | PG                   |
| 13      | 20             |                          |    |    |    | X  | -                      |       |    |                  |              |              |              |              |              |          | X |   |    |             | PGC                  |
| 14      | 25             |                          |    |    |    | X  | -                      |       |    |                  |              |              |              |              |              |          |   | X |    |             | PGC                  |
| 15      | 20             |                          | X  |    |    |    | 0 - 20                 | X     |    |                  |              | X            |              |              |              |          | X |   |    |             | PGC                  |
| 16      | 20             |                          |    |    |    | X  | -                      |       |    |                  |              |              |              |              |              |          | X |   |    |             | PGC                  |
| 17      | 10             |                          | X  |    |    |    | 0 - 10                 | X     |    |                  |              | X            |              |              |              | X        |   |   |    |             | PC                   |
|         |                |                          |    |    |    |    | -                      |       |    |                  |              |              |              |              |              |          |   |   |    |             |                      |
|         |                |                          |    |    |    |    | -                      |       |    |                  |              |              |              |              |              |          |   |   |    |             |                      |
|         |                |                          |    |    |    |    | -                      |       |    |                  |              |              |              |              |              |          |   |   |    |             |                      |

COMMENTS

REVIEWED JW DATE 4/12/90

DATE 4 / 9 90

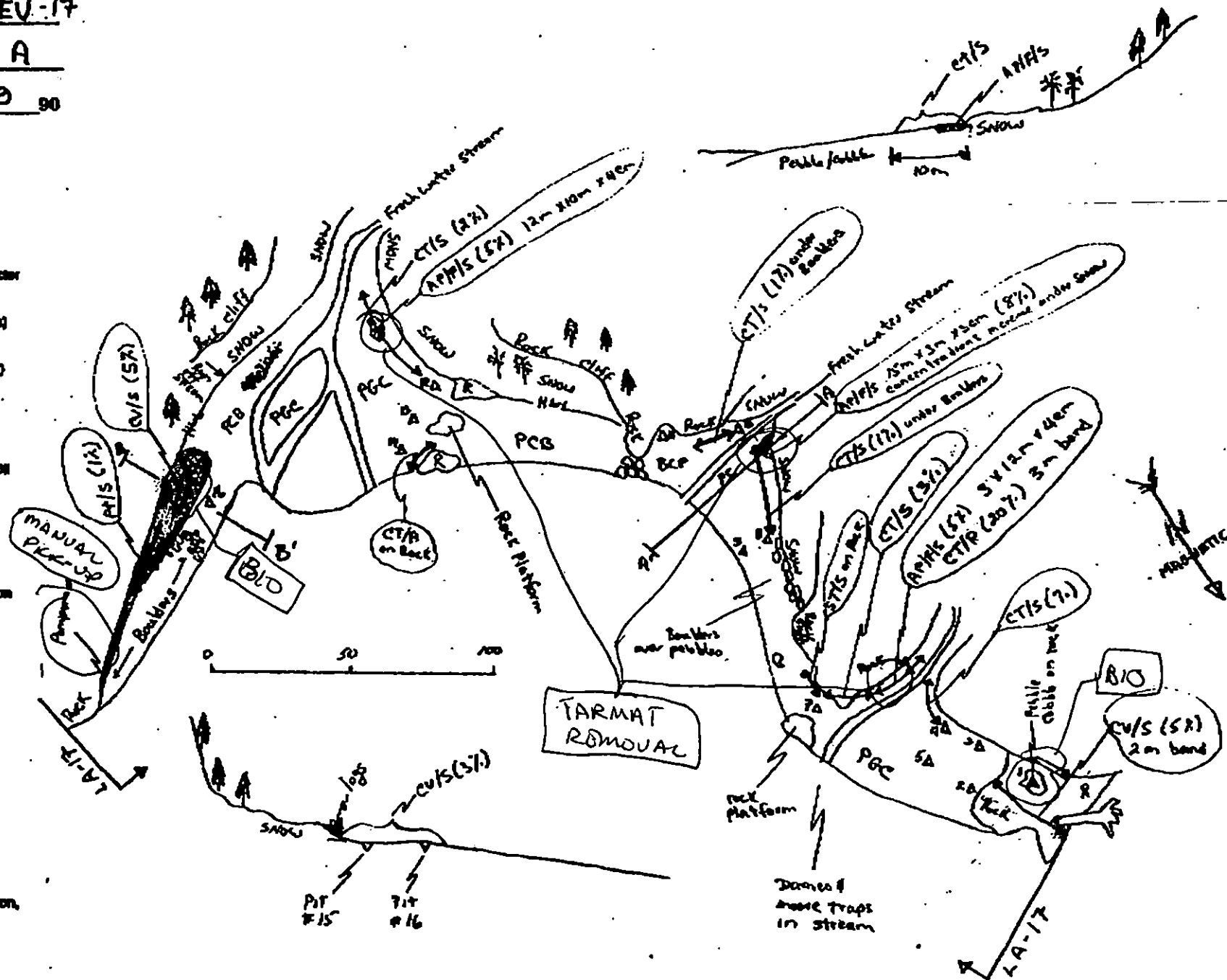
## SKETCH MAP

## CHECKLIST

- ☒ In Arson
- ☒ Approx. Scale
- ☒ Dog/Side Entry
- ☒ Oil Dist.
- ☐ Width
- ☐ Length
- ☒ X-Cover
- ☐ Substrate Character
- ☐ E.g. HWLA,YLA
- ☐ SGL
- ☐ Profile Location(s)
- ☐ Profile(s)
- ☐ PR Location(s)
- ☐ Photo Location(s)

## LEGEND

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

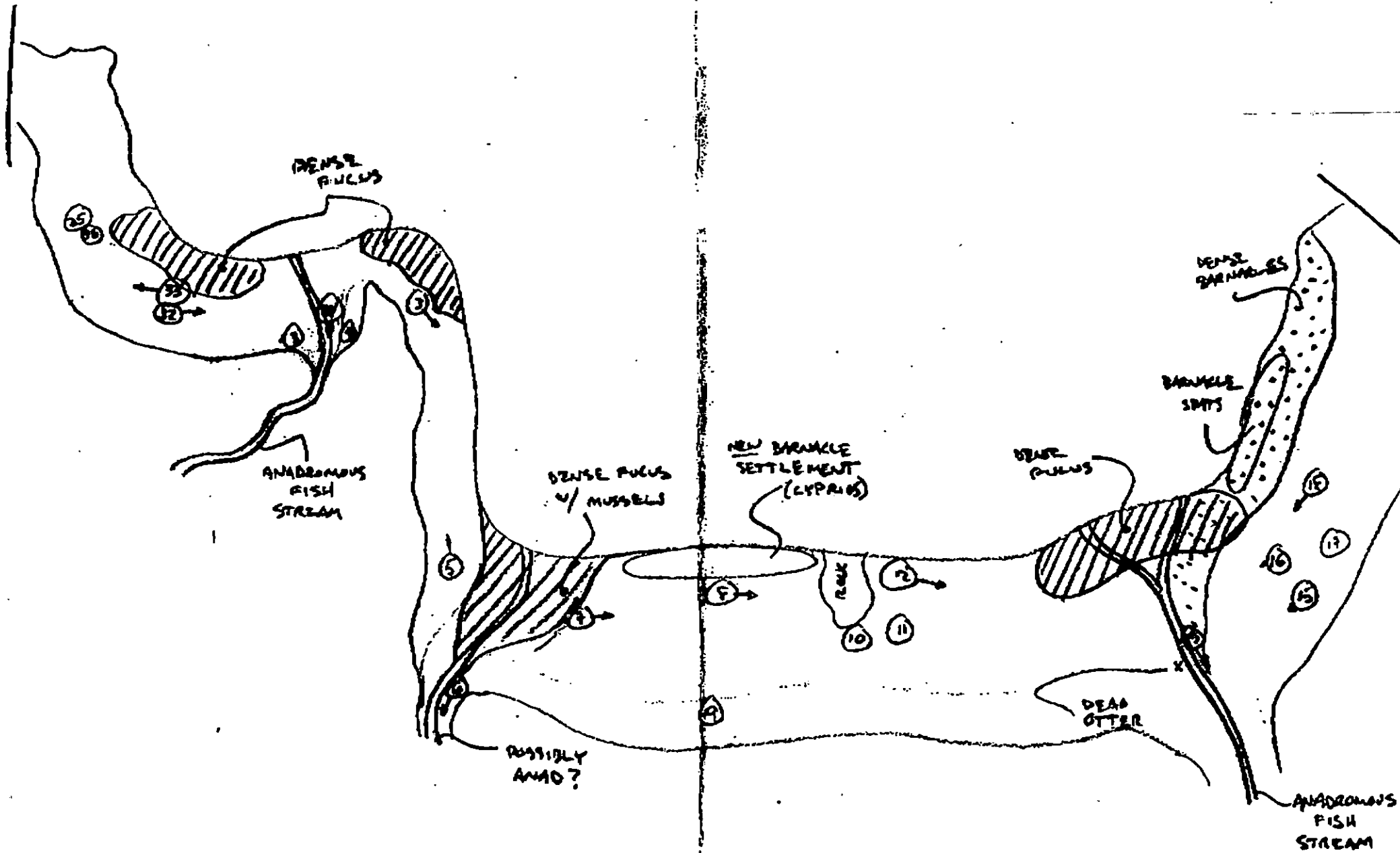


Oil Character Length (in): AP 27 PO - CV 150 CT 300 ST 25 MS - PT 35 TB - FL - NO 413

[illegible]

EV 17

BIOLOGY SCHEMATIC  
WITH  
PHOTO LOCATIONS



# SHORELINE ECOLOGICAL SUMMARY

13

REVISION: 06/28/91

Segment ST / EU 17 Subdivision 1000 Date (mo / day / yr) 4 / 9 / 90

Time (24 hr) 1500 off Biologist TONY RAMORA

- (A) Substrate type and % of segments:  
 (1) Bedrock 5 (2) Boulder 20 (3) Cobble 20 (4) Pebble 55 (5) Sand 15 (6) Silt —
- (B) Overall % cover of biota (% of segment): Dense 60 Moderate 35 Low 5
- (C) Density, substrate preference (by number from A, above), & vertical zonation of major taxa: (upper-U; mid-M; low tidal-L); juveniles / adults (X), new settlement (3)

Photographs:  
 Roll No. 57-14-748

Frames 31-37, 1-18

## BARNACLES

| Dense                       | Moderate                    | Sparse                      | Rare                        |
|-----------------------------|-----------------------------|-----------------------------|-----------------------------|
| 1U<br>2<br>3<br>4<br>5<br>6 | 1M<br>2<br>3<br>4<br>5<br>6 | 1L<br>2<br>3<br>4<br>5<br>6 | 1U<br>2<br>3<br>4<br>5<br>6 |

NOT PRESENT

## MYTILUS

| Dense                       | Moderate                    | Sparse                      | Rare                        |
|-----------------------------|-----------------------------|-----------------------------|-----------------------------|
| 1U<br>2<br>3<br>4<br>5<br>6 | 1M<br>2<br>3<br>4<br>5<br>6 | 1L<br>2<br>3<br>4<br>5<br>6 | 1U<br>2<br>3<br>4<br>5<br>6 |

NOT PRESENT

## GASTROPODS

| Dense                       | Moderate                    | Sparse                      | Rare                        |
|-----------------------------|-----------------------------|-----------------------------|-----------------------------|
| 1U<br>2<br>3<br>4<br>5<br>6 | 1M<br>2<br>3<br>4<br>5<br>6 | 1L<br>2<br>3<br>4<br>5<br>6 | 1U<br>2<br>3<br>4<br>5<br>6 |

NOT PRESENT

## FUCUS

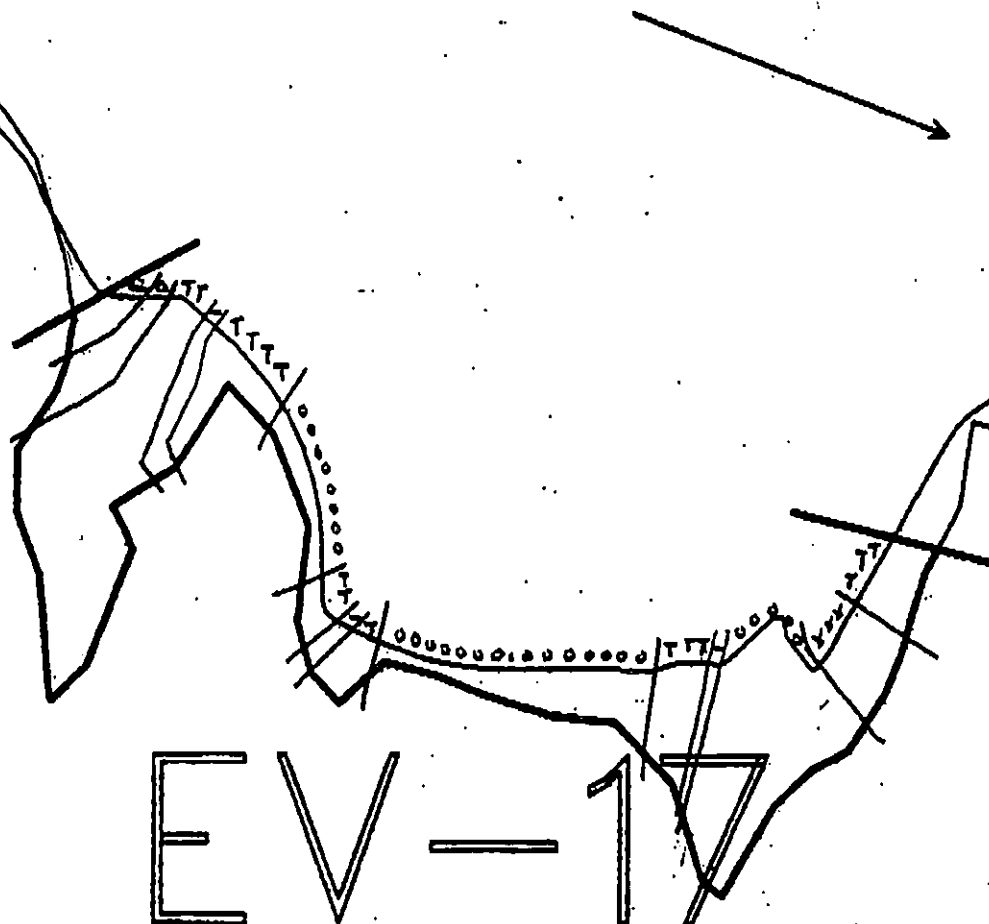
| Dense                       | Moderate                    | Sparse                      | Rare                        |
|-----------------------------|-----------------------------|-----------------------------|-----------------------------|
| 1U<br>2<br>3<br>4<br>5<br>6 | 1M<br>2<br>3<br>4<br>5<br>6 | 1L<br>2<br>3<br>4<br>5<br>6 | 1U<br>2<br>3<br>4<br>5<br>6 |

NOT PRESENT

## Wildlife Observations/ General Comments:

- SITES: GUILLEMOTS, DEER SCAT, OTTER
  - BARNACLE SPATS ABUNDANT - INCLUDING ONE AREA OF UNMETAMORPHOSSED EYED LARVAE.
  - LOW BONE WAS UNEXPOSED DURING SURVEY. SHELLS FOUND (P. STAMIN SALICORNIA, POLLINICES) MAY INDICATE CLAM HABITAT IN LOW BONE
  - 3 ANATROPHOUS STREAMS WITHIN SEGMENT - STREAM IN WEST SIDE HAS FRY TRAPS (DANDY & MOORE)
- ECOLOGICAL CONSIDERATIONS: 1A/B, 9II

EV-16



EV-17

XXXX Wide

/// Medium

--- Narrow

TTTT Very Light

0000 No Oil

EV-17

ADEC Segment Length: 1614m



Map Key: PWS-185

Name: Reimer

Date: 4/9/90

Data Entered:

## ADDENDUM: SUBDIVISION CONSTRAINTS

SEGMENT EV-17 SUBDIVISION A ( 1 of 1 )

### WORK WINDOW

Manual Pickup  
Tarmat Removal

OPEN

### ARCHAEOLOGICAL STANDARD CONSTRAINT

If cultural resources are uncovered, PHONE 564-3274

### APPLICABLE ECOLOGICAL TIME CONSTRAINTS

1A,1B Salmon Stream

Two ADF&G catalogued anadromous streams (226-40-16620 and 226-40-16630) are in Subdivision A. No constraint to manual pickup and tarmat removal.

7II Subsistence: Deer  
Harvesting

No constraint to manual pickup and tarmat removal.

### OTHER ECOLOGICAL CONSIDERATIONS

No disturbance to stream bed or banks. Restrict boat and air traffic and beach disturbance to essential minimum after 8/15. Avoid any unnecessary disturbance or damage to unrolled blots and substrate.

SEE ANADROMOUS FISH STREAM EVALUATION ADDENDUM (STREAM NOS. 226-40-16620 and 226-40-16630)  
FOR ADDITIONAL CONSTRAINT INFORMATION

TAG APPROVAL DATE 6/01/90

ADEC Ran Monrovia Ran Monrovia

EXXON Amoy Island

NOAA G.A. Reiter

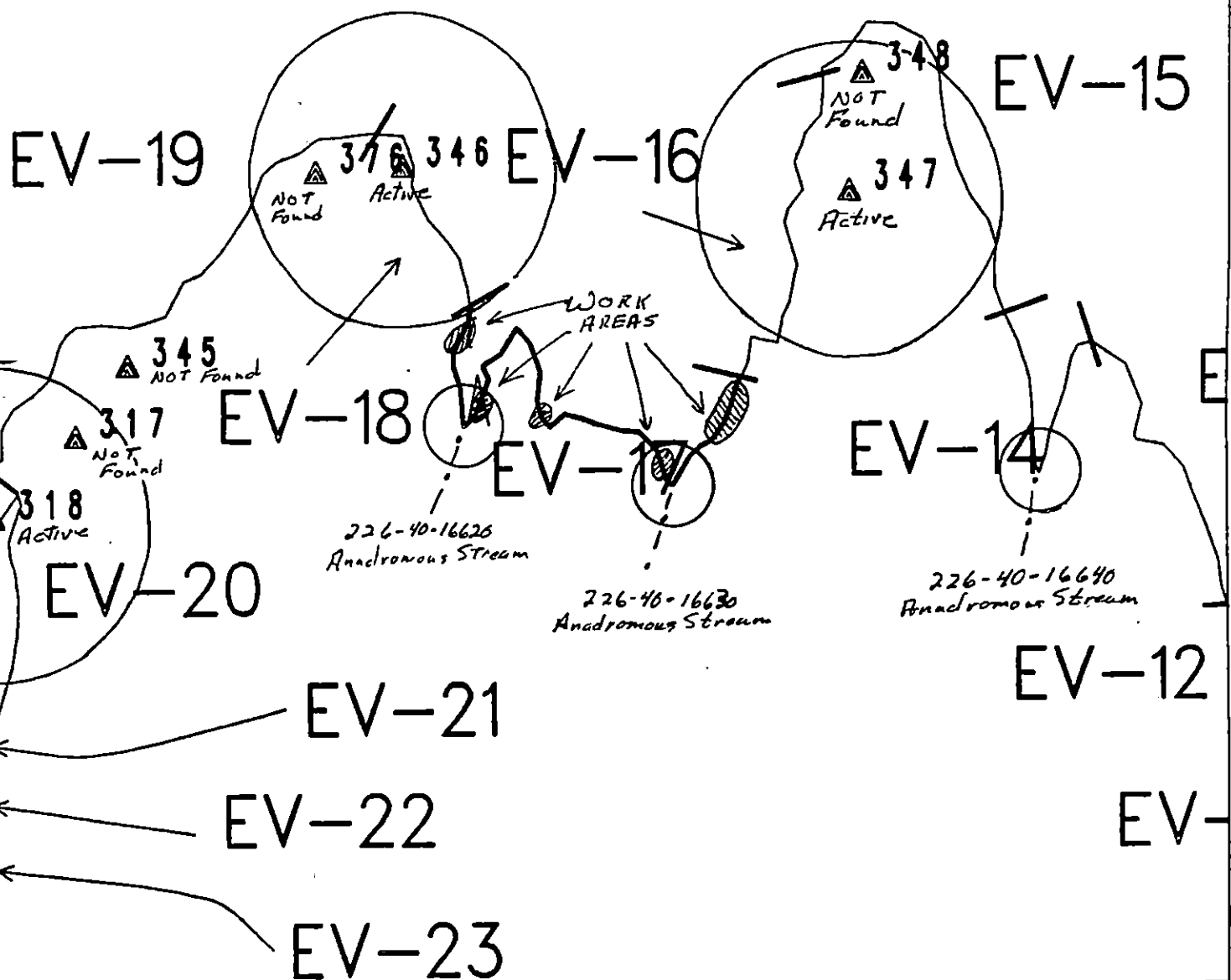
USCG G.A. Reiter

FOSC DD Rome, CDR, USCG DATE 6/2/90

Prepared By: Anders M. M. M.

Date 5/31/90

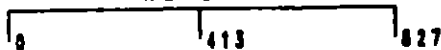
Incorporates information from  
USFWS bald eagle surveys  
5/12 & 5/26/90.



Exxon Company, USA  
Map Key: PWS-EV-17  
May 11, 1990

ECOLOGY MAP  
SEGMENT EV-17  
SUBDIVISION A (1 of 1)

METERS



★ Seabird Colony  
▲ Eagle Nest

1 inch = 1356 feet

# SHORELINE EVALUATION

SEGMENT ST/ EV-17 SUBDIVISION A (1 OF 1) DATE 4/9/90

## SEGMENT ENVIRONMENTAL SENSITIVITIES AND TIME CONSTRAINTS:

ADF&G anadromous stream no. 226-40-16620, 16630.

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

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

7II Subsistence area: Deer harvesting (8/15 to 2/28)

See attached Ecological Constraint sheet for specific constraints and contacts.

## SUBDIVISION ECOLOGICAL CONSTRAINTS:

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

## ARCHAEOLOGICAL CONSTRAINTS:

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

SHPO SIGNATURE: [Signature] DATE: 4/23/90

## OILING CATEGORIZATION:

Wide 74 m: Medium 0 m: Narrow 88 m: V.Light 773 m: No Oil 679 m  
Subsurface Oil Observed: Yes X No      Maximum Depth 20+ cm

## RECOMMENDATIONS:

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

COMMENTS: Recommended treatment includes 1) manual tarmat removal, 2) manual pick up of oiled debris, 3) bioremediation of surface and sub-surface oil in areas shown on attached sketch map. Work should be conducted between 5/15 and 7/10 based on salmon constraints. No bioremediation within 100m. of stream without permit from ADF&G.

TAG COMMENTS: SEE CONSTRAINT ADDENDUM Dated 5/31/90 UK

TAG APPROVAL DATE: 4/23/90

ADEC Art Weiner  
EXXON Andy Tate  
NOAA Joseph Talkott  
USCG Kenneth Keane

FOSC: [Signature] DATE: 5-1-90  
Do not bioremediate 1st 4 km's down.

# ANADROMOUS FISH STREAM EVALUATION ADDENDUM

CONSTRAINTS FOR STREAM NO. 226-40-16620

SEGMENT EV-17 SUBDIVISION A

## WORK WINDOW

Tarmat Removal

OPEN

### ARCHAEOLOGICAL STANDARD CONSTRAINT

If cultural resources are uncovered, PHONE 564-3274.

### APPLICABLE ECOLOGICAL TIME CONSTRAINTS

1A,1B Salmon Stream

ADF&G catalogued anadromous streams (226-40-16620 and -16630) are in Subdivision A. No constraint to tarmat removal.

7II Subsistence: Deer Harvesting

No constraint to tarmat removal.

### OTHER ECOLOGICAL CONSIDERATIONS

No disturbance to stream bed or banks. Restrict boat and air traffic and beach disturbance to essential minimum after 8/15. Avoid any unnecessary disturbance or damage to unrolled biota and substrate.

SEE SUBDIVISION CONSTRAINT ADDENDUM EV-17A  
FOR ADDITIONAL CONSTRAINT INFORMATION.

TAG APPROVAL DATE 6/01/90

ADEC Rammon's Rammon's

EXXON ARMY TEAM

NOAA G.A. Reiter

USCG G.A. REITER G.A. Reiter

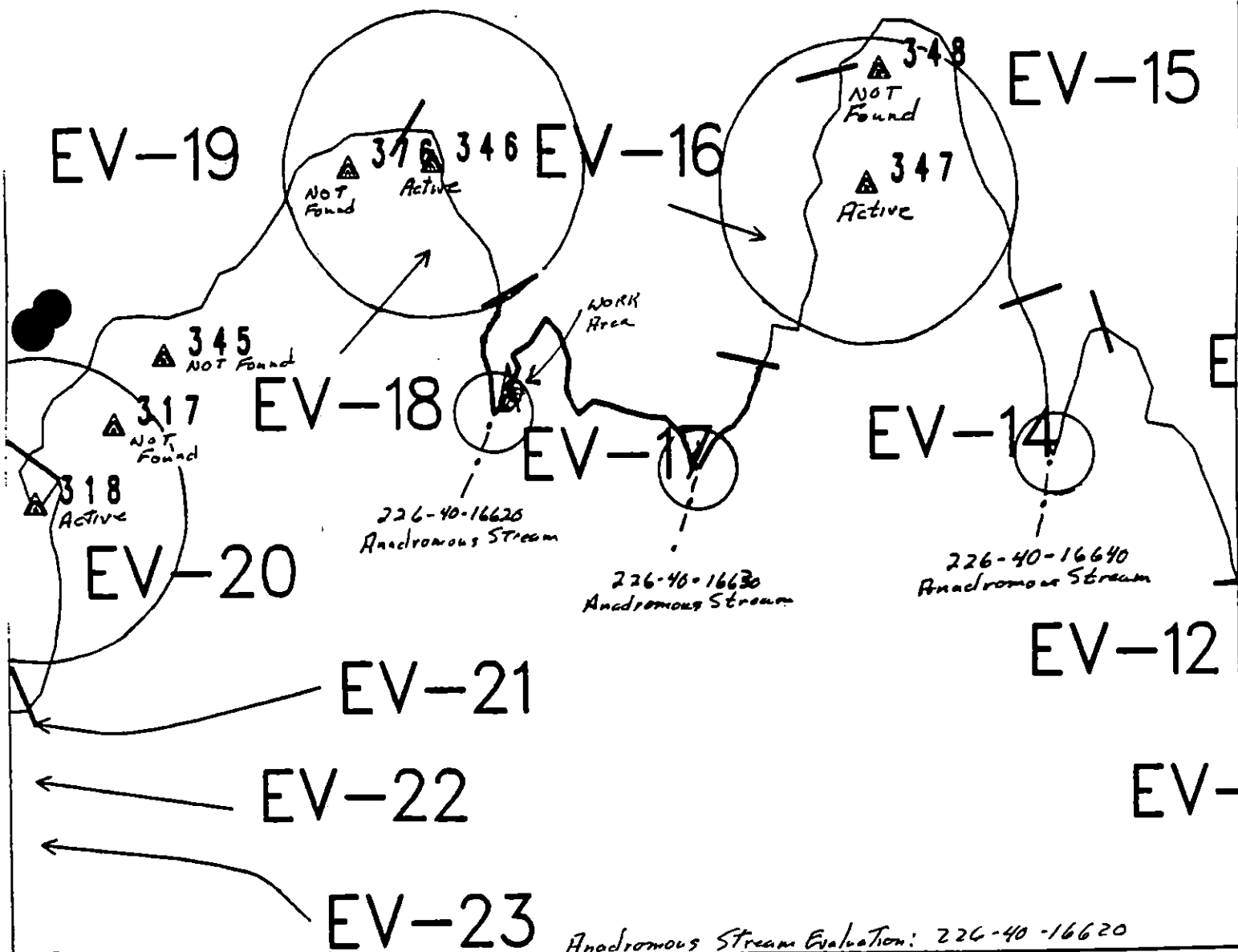
FOSC DD Rome, CDR, USCG DATE 6/2/90

Retiring

Prepared By: Andrea Meyer Wink

Date 5/31/90

Incorporates information from  
USFWS bald eagle surveys  
5/12 & 5/26/90.



Anadromous Stream Evaluation: 226-40-16620



Exxon Company, USA  
Map Key: PMS-EV-17  
Nov 11, 1990

ECOLOGY MAP  
SEGMENT EV-17  
SUBDIVISION A (1 of 1)  
METERS

0 413 827

- ★ Seabird Colony
- ▲ Eagle Nest

1 inch = 1356 feet

ANADROMOUS FISH STREAM EVALUATION

SEGMENT ST/ EV-17 A STREAM NO: 226-40-16620 DATE 4/21/90

**SEGMENT ENVIRONMENTAL SENSITIVITIES AND TIME CONSTRAINTS:**

Two anadromous streams are in EV-17: 226-40-16620, 226-40-16630.

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

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

7II Subsistence area: Deer harvesting (8/15 to 2/28)

See attached Ecological Constraint sheet for specific constraints and contacts.

**SUBDIVISION ECOLOGICAL CONSTRAINTS:**

Avoid any unnecessary disturbance or damage to uncoiled biota and substrate. Subject stream is located in Subdivision A (1 of 1). No ecological constraints re: intertidal biota.

**ARCHAEOLOGICAL CONSTRAINTS:**

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

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

Subsurface Oil Observed: Yes        No X Maximum Depth       

**RECOMMENDATIONS:**

       No Treatment Recommended  
X Treatment Recommended  
       Manual Pickup  
       Bioremediation  
X Tarmat Removal

       Snare/Absorbent Booms  
       Oil Snares (pom poms)  
       Absorbents (pads, rolls, etc)  
       Spot Washing:        Wands  
       Beach Cleaner  
       Other (see comments)

COMMENTS: Recommended treatment includes manual removal of small tar-  
mat as indicated on sketch map. Work should be conducted between (5/15)  
and (7/10) based on above listed constraints.

→ [ See Constraint Addendum Dated 5/31/90 ] WTK

TAG COMMENTS:         
        
        
      

TAG APPROVAL DATE: 5/10/90

ADEC [Signature]  
EXXON [Signature]  
NOAA [Signature]  
USCG [Signature]

FOSC: [Signature] DATE: 5-18-90  
Access need for custodial following TARMAT  
removal. Notify CVC 24 hrs in advance.

SEGMENT ST/ EV-17 A STREAM NO: 226-40-16620 DATE 4/21/90

**Two anadromous streams are in EV-17: 226-40-16620, 226-40-16630.**

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

See attached Ecological Constraint sheet for specific constraints and contacts.

Avoid any unnecessary disturbance or damage to uncoiled biota and substrate. Subject stream is located in Subdivision A (1 of 1). No ecological constraints re: intertidal biota.

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

SHPO SIGNATURE: J. David McManis DATE: 5/10/90

Subsurface Oil Observed: Yes \_\_\_\_\_ No X Maximum Depth \_\_\_\_\_

|                                                           |                                                        |
|-----------------------------------------------------------|--------------------------------------------------------|
| <input type="checkbox"/> No Treatment Recommended         | <input type="checkbox"/> Snare/Absorbent Booms         |
| <input checked="" type="checkbox"/> Treatment Recommended | <input type="checkbox"/> Oil Snares (pom poms)         |
| <input type="checkbox"/> Manual Pickup                    | <input type="checkbox"/> Absorbents (pads, rolls, etc) |
| <input type="checkbox"/> Bioremediation                   | <input type="checkbox"/> Spot Washing: _____ Wands     |
| <input checked="" type="checkbox"/> Tarmat Removal        | <input type="checkbox"/> Beach Cleaner                 |
|                                                           | <input type="checkbox"/> Other (see comments)          |

COMMENTS: Recommended treatment includes manual removal of small tar-  
mat as indicated on sketch map. Work should be conduted between 5/15  
and 7/10 based on above listed constraints.

**TAG COMMENTS:** \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

TAG APPROVAL DATE: 3/10/90

ADEC Art Weimer Int Weimer

EXXON ANDY 1542 Beal, O

NOAA Burt Wescott Burt Wescott

USCG D. D. ROME DA Rome

FOSC:                      DATE: 5-78-80

Accesses need for customized following TAE MAT removed. Notify CVC 24 HRS in advance.

SCAT TEAM P.48

TO

FROM EXXON CMD CORDOVA

APR-22-1990 11:54

48/52 WILLIAM REID  
SEGMENT ST/ EVQ17

STREAM 226.40 - 16620

DATE 21 APR 90

## CHECKLIST

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

## LEGEND

1 Δ

Pt - No Subsurface Oil

2 Δ

Pt - Subsurface Oil

CT/C

Continuous Distribution

CT/B

Broken Distribution

CT/P

Pachy Distribution

CT/S

Splashed Distribution

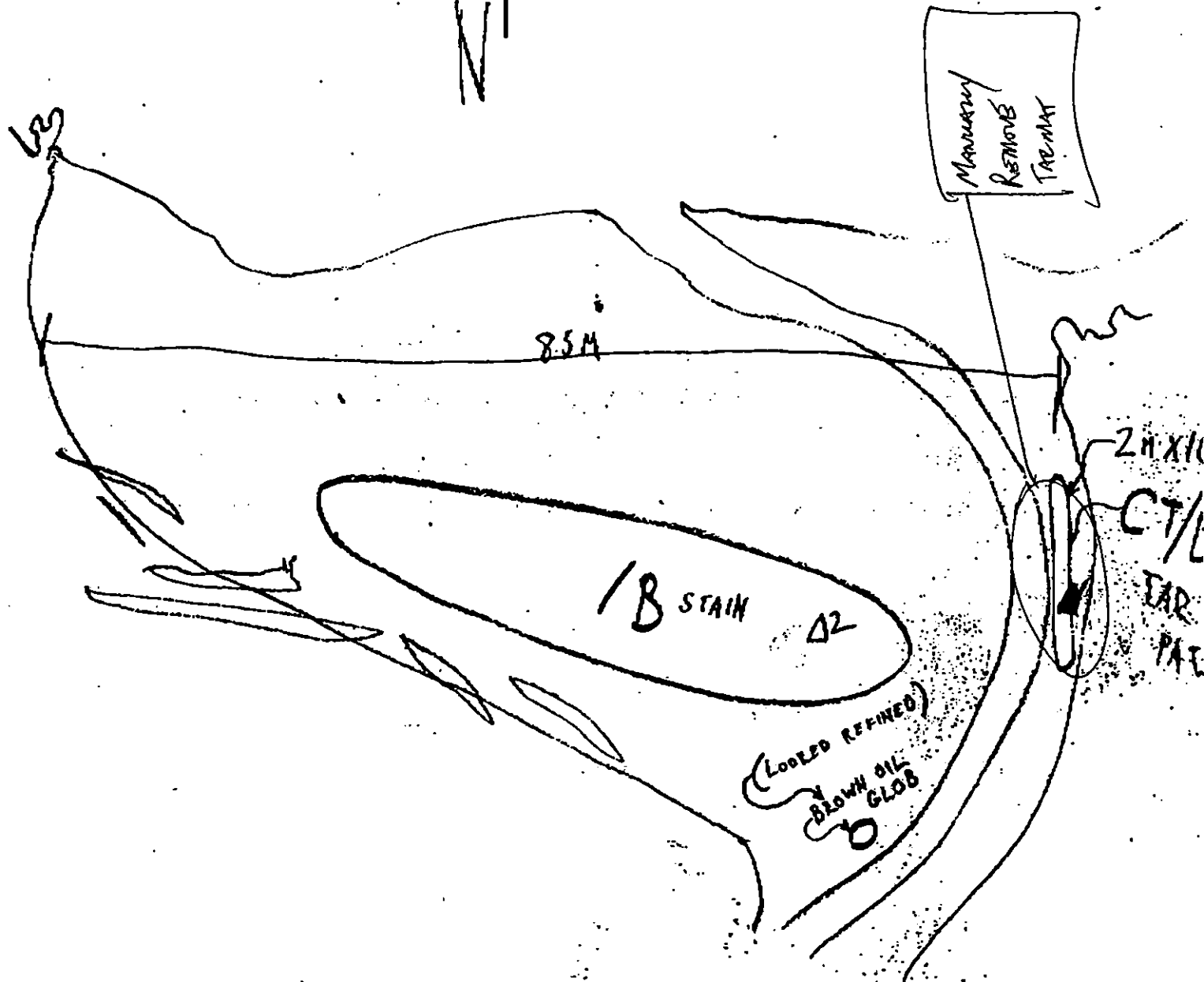
eee

Oiled Vegetation

1 ●

Photo location, direction, and number

## SKETCH MAP



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

NEWBOM 000000

EV-017 46/52  
226-40-16620

48 PHOTOLOG

## DESCRIPTION

RECOMMENDATIONS: MANUAL REMOVAL OF TAR MATS ON  
EAST SIDE OF STREAM.

## 48 OIL DISTRIBUTION DIAGRAM

PIT DUG BY PREVIOUS  
SURVEY. BURIED OIL  
(PIT OUTSIDE ANADROMOUS  
STREAM ZONE)

SCATTERED  
STAINED BOULDERS  
(COBBLES)

VEGETATION

PIT (NO BURIED OIL)

BAND OF  
TAR MATS  
(SURFACE TO 4cm)

PIT (TAR SURFACE TO 4cm)

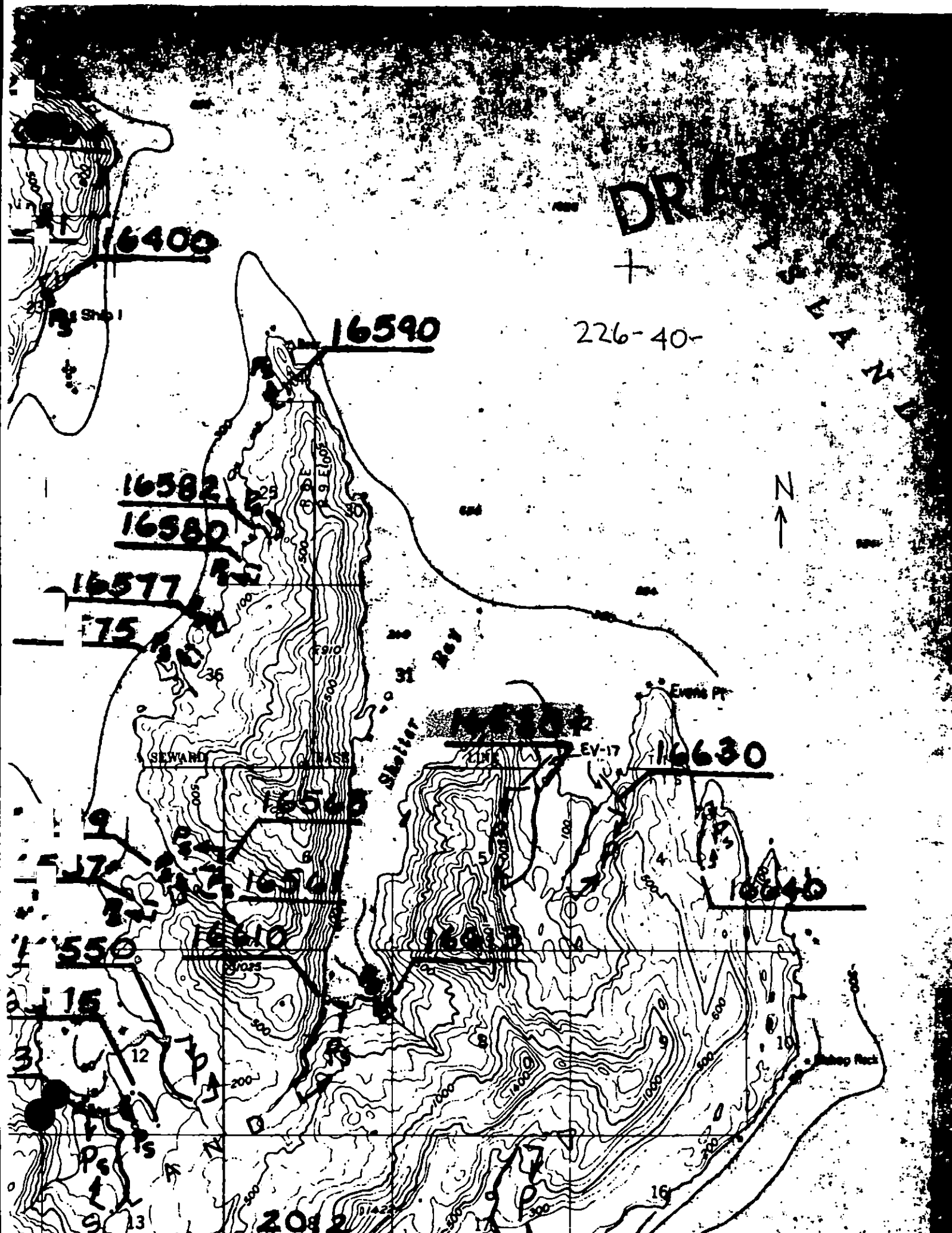
VEGETATION

MAX. WIDTH OF INTERTIDAL  
ZONE AS DRAWN ~ 100 M

DRAFT

226-40-

N  
↑



# EV-16

SUBJECT  
ANDREWS  
STREAM  
EV-17A (1 of 1)

# EV-17

XXXX Wide

//// Medium

--- Narrow

TTTT Very Light

0000 No Oil

## EV-17

ADEC Segment Length: 1614m



Map Key: PWS-185

Name: Reimer

Date: 4/9/90

Date Entered:



ANADROMOUS FISH STREAM ASSESSMENT

REGION: PRINCE WILLIAM SOUND

SEGMENT: EV-17 A

STREAM NO: 226-40-16620

ANADROMOUS FISH STREAM EVALUATION

SEGMENT ST/ EV-17 A STREAM NO: 226-40-16620 DATE 4/21/90

**SEGMENT ENVIRONMENTAL SENSITIVITIES AND TIME CONSTRAINTS:**

Two anadromous streams are in EV-17: 226-40-16620, 226-40-16630.

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

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

7II Subsistence area: Deer harvesting (8/15 to 2/28)

See attached Ecological Constraint sheet for specific constraints and contacts.

**SUBDIVISION ECOLOGICAL CONSTRAINTS:**

Avoid any unnecessary disturbance or damage to uncoiled biota and substrate. Subject stream is located in Subdivision A (1 of 1). No ecological constraints re: intertidal biota.

**ARCHAEOLOGICAL CONSTRAINTS:**

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

SHPO SIGNATURE: \_\_\_\_\_ DATE: \_\_\_\_\_

Subsurface Oil Observed: Yes \_\_\_\_\_ No X Maximum Depth \_\_\_\_\_

**RECOMMENDATIONS:**

|                                                           |                                                        |
|-----------------------------------------------------------|--------------------------------------------------------|
| <input type="checkbox"/> No Treatment Recommended         | <input type="checkbox"/> Snare/Absorbent Booms         |
| <input checked="" type="checkbox"/> Treatment Recommended | <input type="checkbox"/> Oil Snares (pom poms)         |
| <input type="checkbox"/> Manual Pickup                    | <input type="checkbox"/> Absorbents (pads, rolls, etc) |
| <input type="checkbox"/> Bioremediation                   | <input type="checkbox"/> Spot Washing: _____ Wands     |
| <input checked="" type="checkbox"/> Tarmat Removal        | <input type="checkbox"/> Beach Cleaner                 |
|                                                           | <input type="checkbox"/> Other (see comments)          |

COMMENTS: Recommended treatment includes manual removal of small tar-  
mat as indicated on sketch map. Work should be conducted between 5/15  
and 7/10 based on above listed constraints.

TAG COMMENTS: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

TAG APPROVAL DATE: \_\_\_\_\_  
ADEC \_\_\_\_\_  
EXXON \_\_\_\_\_  
NOAA \_\_\_\_\_  
USCG \_\_\_\_\_

FOSC: \_\_\_\_\_ DATE: \_\_\_\_\_

# PWS, SEWARD AND HOMER ECOLOGICAL CONSTRAINTS

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

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

No disturbance of stream bed or banks unless authorized by ADF&G. No beach flushing into stream drainage. No bioremediation or other chemical application within 100m of stream 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 6/1)

## 1E Main Bay Hatchery release (4/20 to 6/10)

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

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

## 1H Remote release site

No use of methods which might affect nearshore oil or toxicity levels, such as hot water wash or Inipol application, prior to at least July 1 unless authorized by ADF&G and/or PWS Aquaculture Association. Treatment which will not affect nearshore oil or toxicity levels, such as manual or mechanical removal, can probably proceed without adherence to time constraints. Contact ADF&G or PWS Aquaculture Association for confirmation and authorization.

AGENCY CONTACT PERSON: 1E ADF&G Larry Peltz 424-3214

1D 1F 1G PWS Aquaculture Association John McMillan or Bruce Suzumoto 424-7511

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

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

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

## 1L Set net sites (8/11 to 7/25)

Contact ADF&G for specific dates, locations and constraints. Restrict boat and air traffic to essential minimum. When set net sites are present (1L) restrict beach operations to essential minimum as authorized by ADF&G. If plans for treatment include methods such as hot water wash or Inipol application which might affect nearshore oil or toxicity levels, contact ADF&G for consultation and authorization.

AGENCY CONTACT PERSON: ADF&G James Brady 424-3212

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

Contact ADF&G for confirmation - dates and locations may vary. Restrict boat traffic to essential minimum. Avoid damage to uncoiled intertidal and subtidal algae and seagrass. If plans for treatment include methods such as hot water wash or Inipol application which might affect nearshore oil or toxicity levels, contact ADF&G for consultation and authorization.

AGENCY CONTACT PERSON: ADF&G Evelyn Biggs 424-3235

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

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

Restrict boat and air traffic to essential minimum. No personnel within 400m. Aircraft to maintain 800m horizontal and 300m vertical distance from haulouts. No application of Inipol within two weeks of arrival dates (work window at these sites is limited to 7/2 to 7/31). Contact ADF&G and USFWS prior to treatment for confirmation.

AGENCY CONTACT PERSON: US National Marine Fisheries Service Steve Zimmerman 586-7235

ADF&G Don Calkins 267-2403

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

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

AGENCY CONTACT PERSON: USFWS Jill Parker 786-3377

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

Restrict all activity to essential minimum, especially air traffic. Contact USFWS and ADF&G for confirmation.

AGENCY CONTACT PERSON: USFWS Jill Parker 786-3377

ADF&G Tom Rothy 267-2206

## 5T All Bald Eagle nests (3/1 to 8/1)

## 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)

### Finfish harvesting

### Deer harvesting (8/15 to 2/28)

### 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

42/52

FIELD SHORELINE COMMENT SHEET

EGMENT ST 1 EV 017 SUBDIVISION: 16620 DATE 4/21/90

USCG  
NAME CWO J. MC MAHON SIGNATURE [Signature]

☐ NO TREATMENT RECOMMENDED  
COMMENTS ☒ TREATMENT SUGGESTED

1. MANUAL REMOVAL OF TAR MATS (ASPHALT).

ADFG Michael Wiedner  
ADFG  
NAME No Team member SIGNATURE [Signature]

☐ NO TREATMENT RECOMMENDED  
COMMENTS ☒ TREATMENT SUGGESTED

REFER TO ADFG OBSERVATIONS AND  
RECOMMENDATIONS FOR THIS DATE.

LAND MANAGER  
NAME No Team member SIGNATURE \_\_\_\_\_

☐ NO TREATMENT RECOMMENDED  
COMMENTS ☐ TREATMENT SUGGESTED

OG William Reid USCG McMAHON SEGMENT ST/ EX 012  
 BIO MICHAEL FAWCETT LAND REP TON CROWE STRAM 26-40-6120 OF  
 EXXON Gus Garcia ADFG MIKE WEDMER TIME 17:40 to 18:00  
 TEAM NO. 15 TIDE LEVEL +1 FT DATE 21 APR 1990  
 EST. SUBDIVISION LENGTH: 5 m  
 UPLANDS DESCRIPTION: ☒ Grass ☒ Forest ☐ Sun ☒ Clouds ☐ Fog ☐ Rain ☐ Snow  
 SURVEYED FROM: ☐ Foot ☐ Boat ☐ Helo  
 SURFACE SEDIMENTS: R 0 % B 0 % C 70 % P 30 % G 0 % S 0 % M 0 % V 0  
 SLOPE: Long 100 % Hang 0 % Ven 0 %  
 OIL CATEGORY LENGTH: W 0 m M 2 m N 0 m VL 60 m NO 27  
 WAVE EXPOSURE: ☐ Low ☒ Med ☐ High

## SURFACE OIL

| CHARACTER        | DISTRIBUTION |   |   |   | OIL / FILM COLOR |   |   |   |   |   |   |   | IMPACTED ZONES |   |   |   |
|------------------|--------------|---|---|---|------------------|---|---|---|---|---|---|---|----------------|---|---|---|
|                  | C            | B | P | S | 1                | 2 | 3 | 4 | 5 | 6 | 7 | 8 | SU             | U | M | V |
| ASPHALT PAVEMENT |              |   |   |   |                  |   |   |   |   |   |   |   |                |   |   |   |
| POOLED           |              |   |   |   |                  |   |   |   |   |   |   |   |                |   |   |   |
| COVER            |              |   |   |   |                  |   |   |   |   |   |   |   |                |   |   |   |
| COAT             |              |   |   |   |                  |   |   |   |   |   |   |   |                |   |   |   |
| STAIN            |              | X |   |   |                  |   |   | X |   |   |   |   |                |   | X |   |
| MOUSSE           |              |   |   |   |                  |   |   |   |   |   |   |   |                |   |   |   |
| PATTIES          |              | X |   |   |                  |   |   | X |   |   |   |   |                |   | X |   |
| TARBALLS         |              |   |   |   |                  |   |   |   |   |   |   |   |                |   |   |   |
| FILM             |              |   |   |   |                  |   |   |   |   |   |   |   |                |   |   |   |
| NO OIL           |              |   |   |   |                  |   |   |   |   |   |   |   | X              | X | X |   |

PAVEMENT H F S 0 sq. m by 0PATTIES / TARBALLS 0 BANEAR SHORE SHEEN? (NO) BR RW SL

| OILED DEBRIS | AMOUNT |    |    |
|--------------|--------|----|----|
|              | SM     | MD | LG |
| Logs         |        |    |    |
| Vegetation   |        |    |    |
| Trash        |        |    |    |
| Debris       |        |    |    |

Did you collect DEBRIS  
☐ YES ☒ NO

TYPE

#BAGS

Photographs:

Roll No. AS-15-2Frames 27-32

## SUBSURFACE OIL

| PIT NO. | PIT DEPTH (cm) | SUBSURFACE OIL CHARACTER |    |    |    |    | OILED INTERVAL | BELOW |    | OIL / FILM COLOR |   |   |   |   |   |   |   | PIT ZONE | A<br>N<br>A | SHEEN | V<br>M<br>V | ↓ | SURFACE SUBSURF / SEDIMENT |
|---------|----------------|--------------------------|----|----|----|----|----------------|-------|----|------------------|---|---|---|---|---|---|---|----------|-------------|-------|-------------|---|----------------------------|
|         |                | CP                       | CR | CL | CF | CS |                | BO    | UC | 1                | 2 | 3 | 4 | 5 | 6 | 7 | 8 |          |             |       |             |   |                            |
| * 1     | 20             |                          | X  |    |    |    | 0-4            |       | X  |                  |   |   |   |   |   |   |   |          |             |       |             |   |                            |
| 2       | 20             |                          |    |    |    | X  | .              |       |    |                  |   |   |   |   |   |   |   |          |             | N     |             |   | P/G/C                      |
|         |                |                          |    |    |    |    | .              |       |    |                  |   |   |   |   |   |   |   |          |             | N     |             |   | G/P/C                      |
|         |                |                          |    |    |    |    | .              |       |    |                  |   |   |   |   |   |   |   |          |             |       |             |   |                            |
|         |                |                          |    |    |    |    | .              |       |    |                  |   |   |   |   |   |   |   |          |             |       |             |   |                            |
|         |                |                          |    |    |    |    | .              |       |    |                  |   |   |   |   |   |   |   |          |             |       |             |   |                            |

## COMMENTS

\* OILED INTERVAL < 5 cm IN PIT NO. 1 DOES NOT CONSTITUTE SUBSURFACE OIL.

REVIEWED JW DATE 4-23-90

48/52  
WILLIAM REID  
SEGMENT ST/ EVQ17

STREAM 226-10-16620

DATE 21 APR 90

### CHECKLIST

- ☐ N Arrow
- ☐ Approx. Scale
- ☐ Sep/Sub Bdry
- ☐ Oil Dist.
- ☐ Width
- ☐ Length
- ☐ % Cover
- ☐ Substrate Character
- ☐ Est. HML/LVL
- ☐ SSI
- ☐ Profile Location(s)
- ☐ Profile(s)
- ☐ Pfl Location(s)
- ☐ Photo Location(s)

### LEGEND

1 ▲

Pt. - No Subsurface Oil

2 ▲

Pt. - Subsurface Oil

CT/C

Continuous Distribution

CT/B

Broken Distribution

CT/P

Patchy Distribution

CT/S

Splashed Distribution

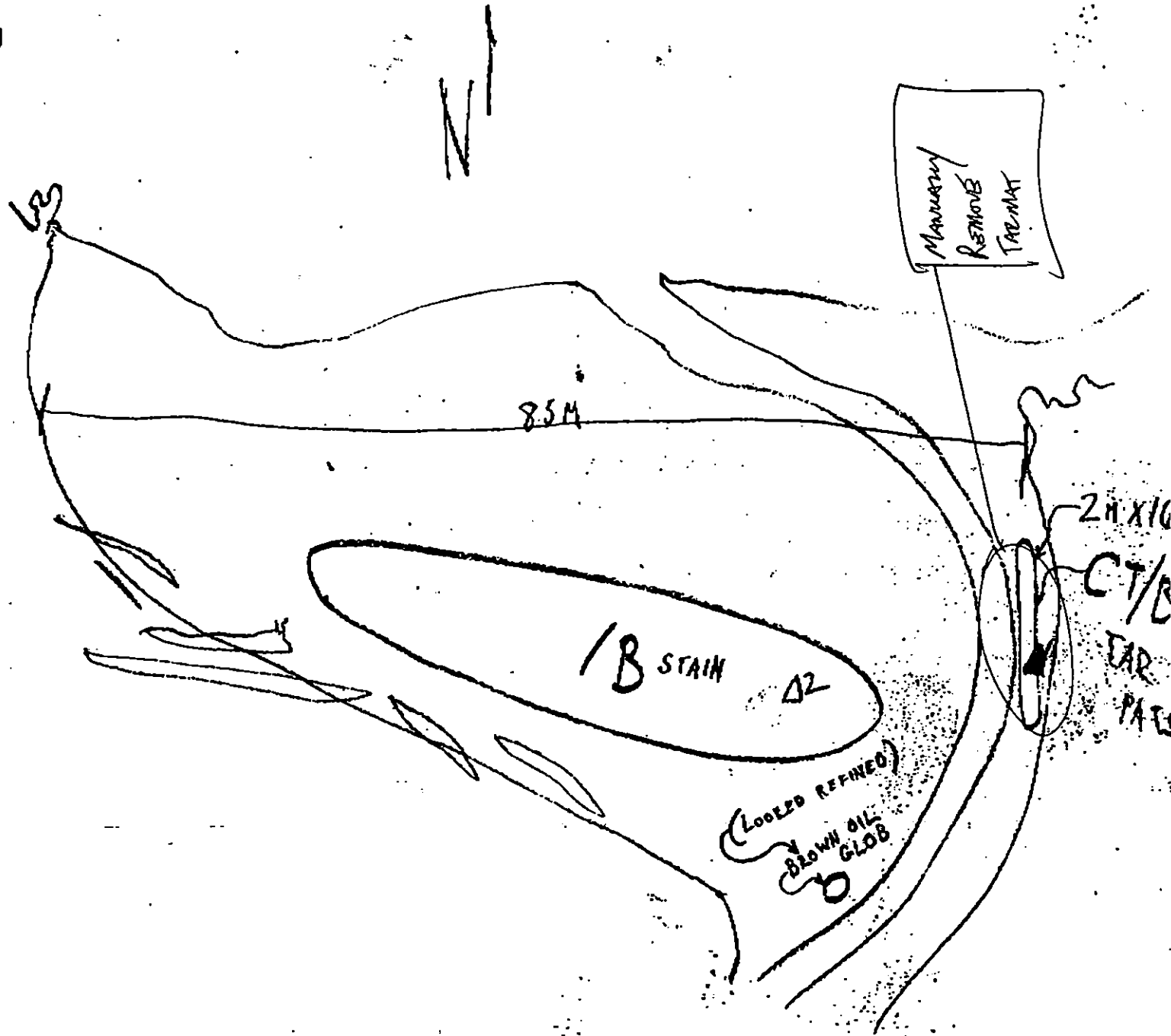
eee

Oiled Vegetation

1 ●

Photo location, direction, and number

### SKETCH MAP



Character

Sh (m): AP

PO

CV

CT

ST

MS

TB

FL

NO

REVISION 000000

45/52

## ADFG MULTI-ASSESSMENT DATA FORM

SURVEY TYPE: SS OS TS AVS SCHA MMS PTA 2 REGION: PWS XP,CI K,AP

METHOD: Aerial Ground Boat

3 DATE: 4/21/90 15 HIGH TIDE TIMES: 1109, 2344 21 TEAM RECORDER: M. Wiedmeyer

4 START TIME: 1720 16 HIGH TIDE HTS: 9.4, 10.3 22 OBSERVERS: T. Crows

5 STOP TIME: 1748 17 LOW TIDE TIMES: 0512, 1730 23 AGENCY: ADFG

6 SEGMENT #: EV-017 18 LOW TIDE HTS: 2.9, 1.1 24 PHOTOS TAKEN: Y N

7 STATION #: 226-20-16620 TIDE HT AT SURVEY: 1.1 Roll #: \_\_\_\_\_ Frames: \_\_\_\_\_

8 X-UNIT: \_\_\_\_\_ Ebb Slack Flood Slack 25 VIDEO TAKEN: Y N TAPE#: \_\_\_\_\_

9 STAT AREA: \_\_\_\_\_ 20 USCG QUAD: SEWARD A3 Starts: \_\_\_\_\_ Ends: \_\_\_\_\_

10 LAT: \_\_\_\_\_ 11 LONG: \_\_\_\_\_ 26 SAMPLES TAKEN: Y N Number: \_\_\_\_\_

12 SOURCE: Map Loran Oil: \_\_\_\_\_

13 LOCATION: NORTH END EVANS IS. Sediment: \_\_\_\_\_

14 DESCRIPTION: \_\_\_\_\_ Biological: \_\_\_\_\_

Water: \_\_\_\_\_

## EXTENT OF OIL

|                        | SHORELINE |                 |            |                | STREAM    |              |   |   |
|------------------------|-----------|-----------------|------------|----------------|-----------|--------------|---|---|
|                        | L         | V               | H          | S              | L         | V            | H | S |
| 27 SURFACE COVERAGE    | 100       | 100             |            | 5              | 100       | 3            |   | 0 |
| 28 SURFACE THICKNESS   | 2 mm      | 5 mm            | 10.1 mm    | 0              | 0         | 0            |   |   |
| 29 PENETRATION         | 4 cm      | 0 cm            |            | 0              | 0         | 0            |   |   |
| 30 OVERALL OIL IMPACT: | N         | VL              | <u>L</u>   | N              | H         |              |   |   |
| 31 OIL TYPE:           | Pooled    | Mousse          | <u>Tar</u> | <u>Asphalt</u> | Sticky    | <u>Stain</u> |   |   |
| 32 OILED DEBRIS:       | Y         | <u>N</u>        |            |                |           |              |   |   |
| 33 SHORELINE TYPE:     | Headland  | Low-lying Rocks | Beach      | <u>Cave</u>    |           |              |   |   |
|                        |           | Lagoon          | Marsh      |                |           |              |   |   |
| 34 WAVE EXPOSURE:      | High      | <u>Moderate</u> | Low        |                |           |              |   |   |
| 35 SUBSTRATE TYPE:     | Bedrock   | Boulder         | <u>30</u>  | Cobble         | <u>35</u> |              |   |   |
|                        | Gravel    | <u>35</u>       | Sand       |                | Mud/silt  |              |   |   |

36 CATALOGED ANAD. FISH BREAST? Y N

37 CATALOG #: 226-40-16620

38 STREAM NAME: \_\_\_\_\_

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  
VERY PRESUMED

44 ANADROMOUS FISH OBSERVATION:

| Species | Aerial | Ground |
|---------|--------|--------|
|         |        |        |
|         |        |        |
|         |        |        |
|         |        |        |

COMMENTS: TAR MAT BAND ALONG E. SIDE OF STREAM - VERY  
SPORADIC STAINING OF BOULDERS AND COBBLES ON W SIDE OF  
STREAM.

EV-017 4/52

226-40-16620

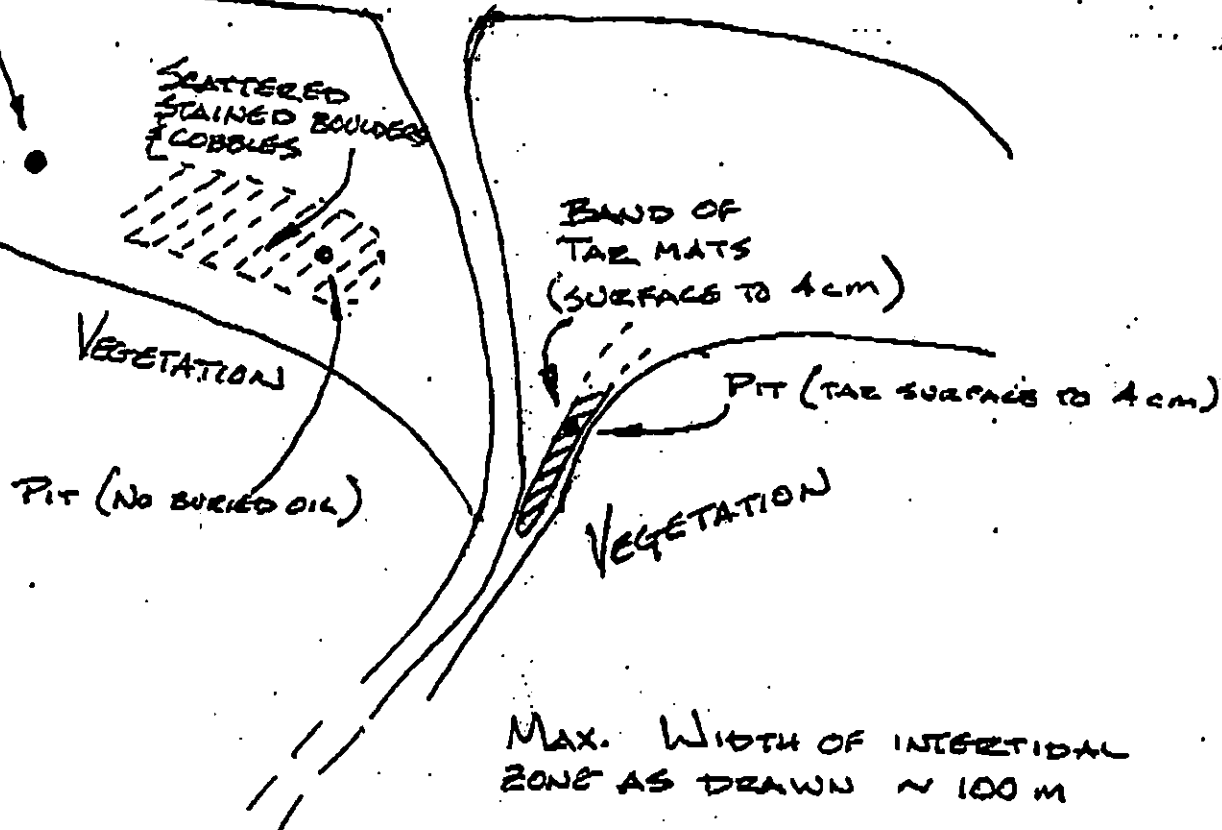
## 48 PHOTOLOG

## DESCRIPTION

RECOMMENDATIONS: MANUAL REMOVAL OF TAR MATS ON  
EAST SIDE OF STREAM.

## 48 OIL DISTRIBUTION DIAGRAM

PIT DUG BY PREVIOUS  
SURVEY. BURIED OIL  
(PIT OUTSIDE ANADROMOUS  
STREAM ZONE)



51/52

Segment EV 17

4/21/90

Stream 226-40-16620

Michael Fawcett

Ecological Summary

This stream enters an unstable gravel/pebble beach, with sparse biota (scattered barnacles, mussels, and Fucus). Light oil stains scattered in one area of VTZ, and some light surface tar mats were found in a 2 x 10m area on NW stream bank. Six James and Moore smolt traps are installed in the stream.

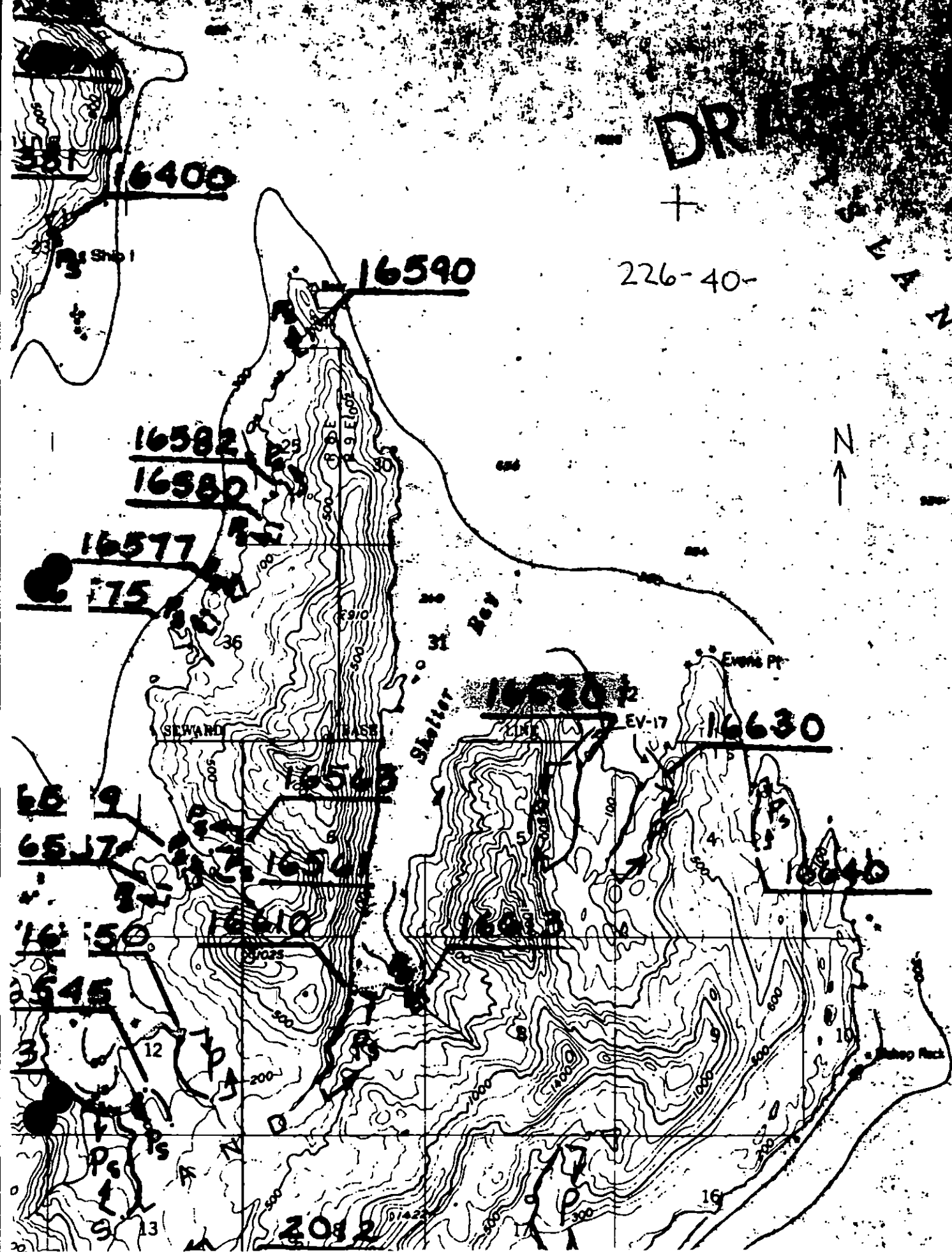
No ecological constraints re: intertidal biota. If manual cleanup of tar mats is conducted, crews should avoid causing stream bank to slump.

*M. Fawcett*

+

# WE ARE

N  
↑



# EV-16

SUBJECT  
ANDREMOUS  
STREAM  
EV-17A (1 of 1)

# EV-17

XXXX Wide

/// Medium

--- Narrow

TTTT Very Light

0000 No Oil

## EV-17

ADEC Segment Length: 1614m



METERS



Map Key: PWS-185

Name: Reimer

Date: 4/9/90

Date Entered:

# ANADROMOUS FISH STREAM EVALUATION ADDENDUM

CONSTRAINTS FOR STREAM NO. 226-40-16630

SEGMENT EV-17 SUBDIVISION A

## WORK WINDOW

Manual Pickup  
Tarmat Removal

OPEN

### ARCHAEOLOGICAL STANDARD CONSTRAINT

If cultural resources are uncovered, PHONE 564-3274

### APPLICABLE ECOLOGICAL TIME CONSTRAINTS

1A,B Salmon Stream

ADF&G catalogued anadromous streams (226-40-16620 and -16630) are in Subdivision A. No constraint to manual pickup and tarmat removal.

7II Subsistence: Deer Harvesting

No constraint to manual pickup and tarmat removal.

### OTHER ECOLOGICAL CONSIDERATIONS

No disturbance to stream bed or banks. Restrict boat and air traffic and beach disturbance to essential minimum after 8/15. Avoid any unnecessary disturbance or damage to uncoiled biota and substrate.

SEE SUBDIVISION CONSTRAINT ADDENDUM EV-17A  
FOR ADDITIONAL CONSTRAINT INFORMATION.

TAG APPROVAL DATE 6/01/90

ADEC Ray Monro Ray Monro

EXXON Amy Ten Amy Ten

NOAA C.A. Reiter C.A. Reiter

USCG C.A. Reiter C.A. Reiter

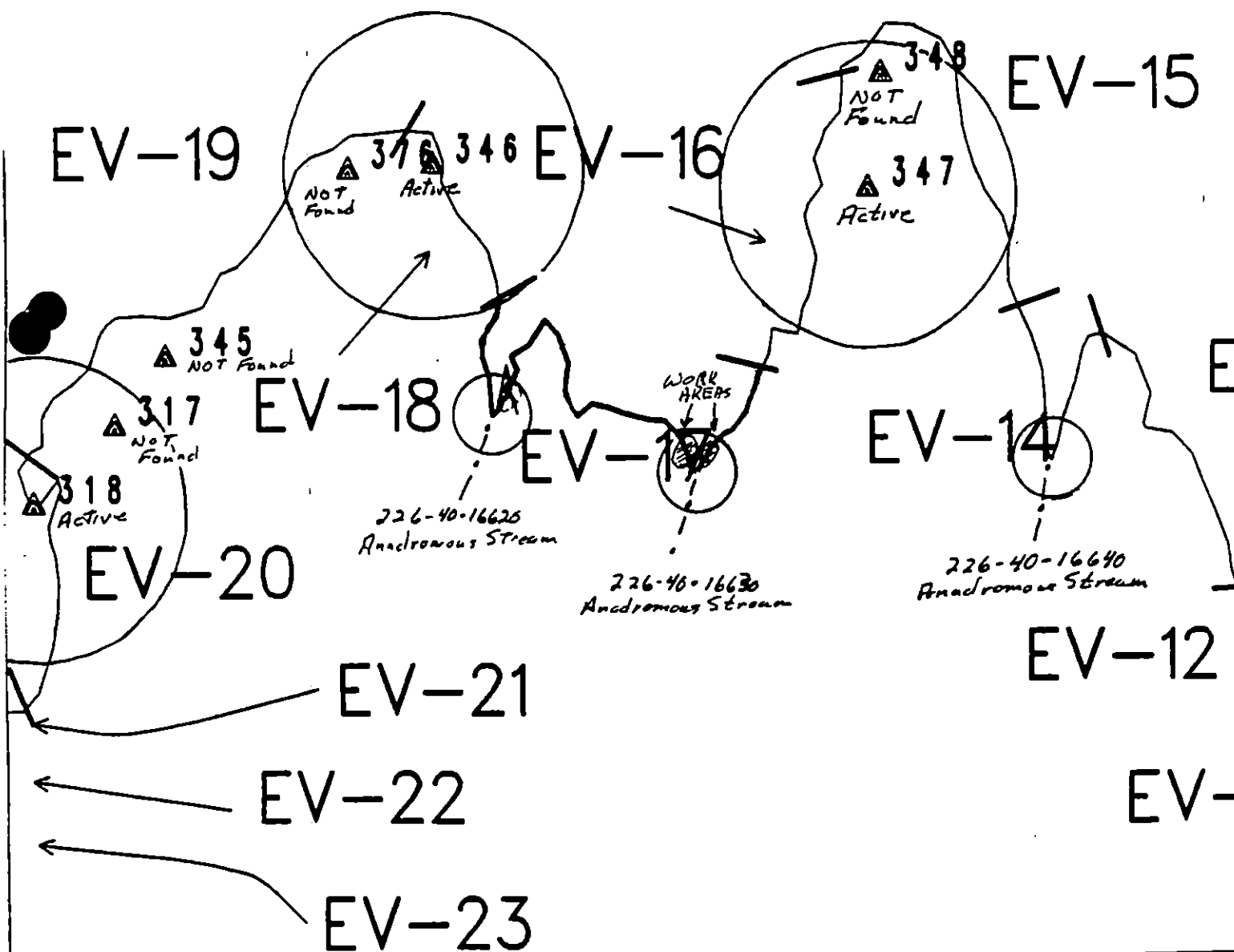
FOSC D. Rome, COB, USCG DATE 6/2/90

Acting

Prepared By: Anders Meyer wrk

Date 5/31/90

Incorporates information from  
USFWS bald eagle surveys  
5/12 & 5/26/90.



Exxon Company, USA  
Map Key: PMS-EV-17  
May 11, 1990



ECOLOGY MAP  
SEGMENT EV-17  
SUBDIVISION A (1 of 1)  
METERS  
0 413 827

|   |                |
|---|----------------|
| ★ | Seabird Colony |
| ▲ | Eagle Nest     |

1 Inch = 1356 feet

ANADROMOUS FISH STREAM EVALUATION

SEGMENT ST/ EV-17 STREAM NO: 226-40-16630 DATE 4/21/90

**SEGMENT ENVIRONMENTAL SENSITIVITIES AND TIME CONSTRAINTS:**

Two catalogued anadromous streams are in EV-17:  
226-40-16630 and 226-40-16620

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

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

7II Subsistence area: Deer harvesting (8/15 to 2/28)

See attached Ecological Constraint sheet for specific constraints and contacts.

**SUBDIVISION ECOLOGICAL CONSTRAINTS:**

Avoid any unnecessary disturbance or damage to unoiled biota and substrate. Avoid trampling and disturbance below the oiled areas in the dense beds of fucus and mussels.

**ARCHAEOLOGICAL CONSTRAINTS:**

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

SHPO SIGNATURE: [Signature]

DATE: 5/8/90

Subsurface Oil Observed: Yes X No        Maximum Depth 10 cm

**RECOMMENDATIONS:**

       No Treatment Recommended

  X   Treatment Recommended

  X   Manual Pickup

       Bioremediation

  X   Tarmat Removal

       Snare/Absorbent Booms

       Oil Snares (pom poms)

       Absorbents (pads, rolls, etc)

       Spot Washing:        Wands

       Beach Cleaner

       Other (see comments)

COMMENTS: Recommended treatment includes 1) manual removal of tarmat and debris. Work should be conducted between 5/15 and 7/10 based on salmon constraints.

[See Constraint Addendum Dated 5/31/90] WJK

TAG COMMENTS:

FOLLOWING MANUAL REMOVAL OF ASPHALT + SMALL  
ASPHALT PATCHES MONITORS TO ASSESS THE NEED TO TAKE  
IN CUSTOMER FOR ANY REMAINING OILED AREAS.

TAG APPROVAL DATE: 5/7/90.

ADEC ART WEINER Art Weiner

EXXON ANDY [Signature]

NOAA GARY PETRAE Gary Petrae

USCG G.A. REITER G.A. Reiter

FOSC: [Signature]

DATE: 5-18-90

NOTIFY OUR 24 HRS IN ADVANCE  
OF WORK

ANADROMOUS FISH STREAM EVALUATION

SEGMENT ST/ EV-17 STREAM NO: 226-40-16630 DATE 4/21/90

**SEGMENT ENVIRONMENTAL SENSITIVITIES AND TIME CONSTRAINTS:**

Two catalogued anadromous streams are in EV-17:

226-40-16630 and 226-40-16620

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

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

7II Subsistence area: Deer harvesting (8/15 to 2/28)

See attached Ecological Constraint sheet for specific constraints and contacts.

**SUBDIVISION ECOLOGICAL CONSTRAINTS:**

Avoid any unnecessary disturbance or damage to unoiled biota and substrate. Avoid trampling and disturbance below the oiled areas in the dense beds of fucus and mussels.

**ARCHAEOLOGICAL CONSTRAINTS:**

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

SHPO SIGNATURE: J. David McManis DATE: 5/8/90

Subsurface Oil Observed: Yes X No      Maximum Depth 10 cm

**RECOMMENDATIONS:**

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

COMMENTS: Recommended treatment includes 1) manual removal of tarmat and debris. Work should be conducted between 5/15 and 7/10 based on salmon constraints.

TAG COMMENTS: FOLLOWING MANUAL REMOVAL OF ASPHALT + SMALL ASHALT PATCHES MONITORS TO ASSESS THE NEED TO RAKE IN CUSTOMER FOR ANY REMAINING OILED AREAS.

TAG APPROVAL DATE: 5/7/90.

ADEC ART WEINER Art Weiner

EXXON ANDY TAN Andy Tan

NOAA GARY PETRAE Gary Petrae

USCG G.A. REITER G.A. Reiter

FOSC: [Signature] DATE: 5-18-90

NOTIFY CUB 24 HRS IN ADVANCE OF WORK

38/52  
OG WILIAM REID  
SEGMENT EV017

# ETCH MAP

STREAM 226-40-16630

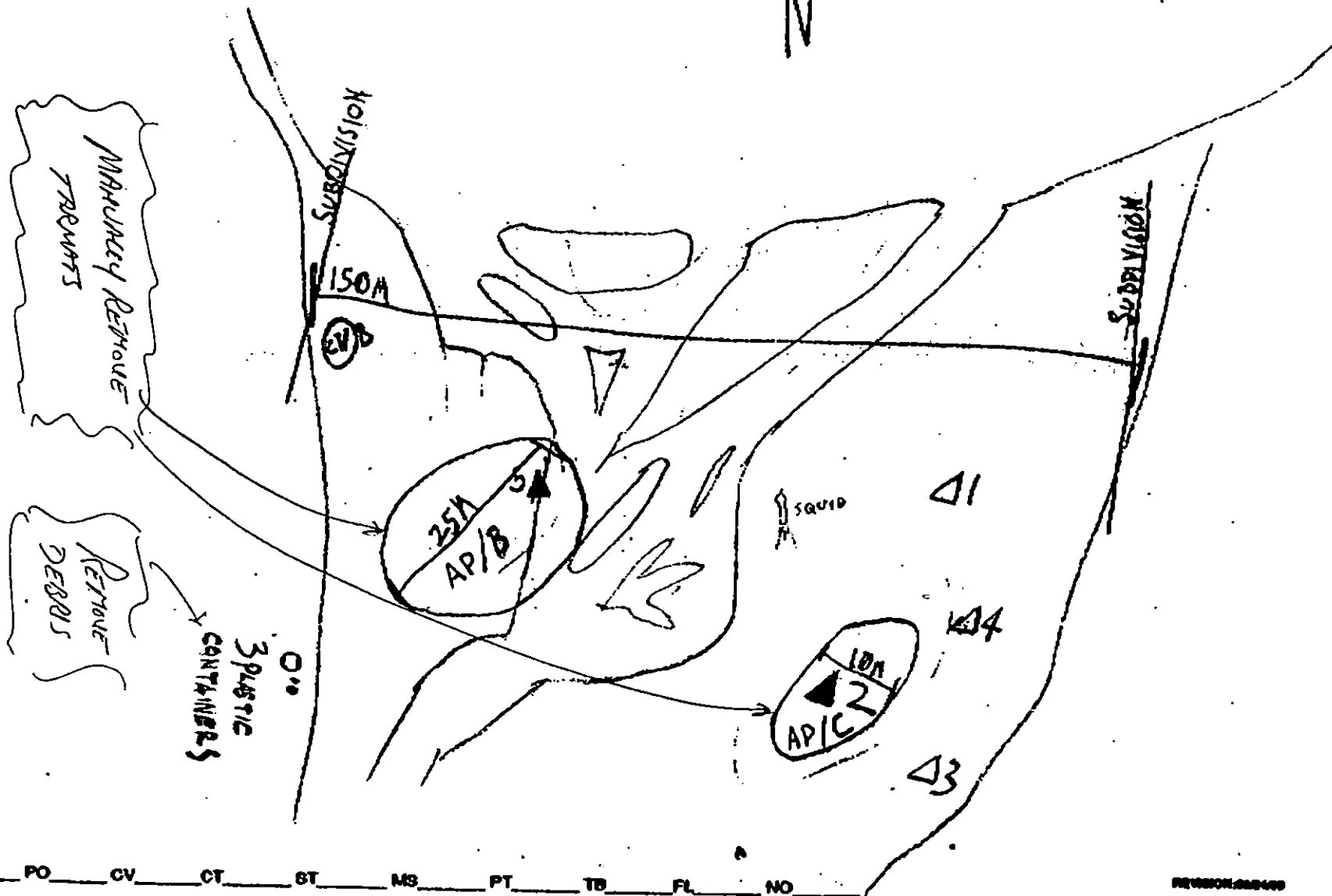
DATE 21 APR 90

## CHECKLIST

- ☐ N Area
- ☐ Approx. Scale
- ☐ Seg/Sub Bdry
- ☐ Oil Dist.
- ☐ Width
- ☐ Length
- ☐ % Cover
- ☐ Substrate Character
- ☐ Est. HML/LVR
- ☐ SST
- ☐ Profile Location(s)
- ☐ Profile(s)
- ☐ P/L Location(s)
- ☐ Photo Location(s)

## LEGEND

- 1  $\Delta$   
P/L - No Subsurface Oil
- 2  $\Delta$   
P/L - Subsurface Oil
- $\square$  CT/C  
Continuous Distribution
- $\square$  CT/D  
Broken Distribution
- $\square$  CT/P  
Patchy Distribution
- $\square$  CT/S  
Splashed Distribution
- eee  
Oiled Vegetation
- 1  $\bullet$   
Photo location, direction, and number



Oil Character Length (m): AP 45 PO CV CT ST MS PT TB FL NO

EV-017 36/52  
226-40-16630

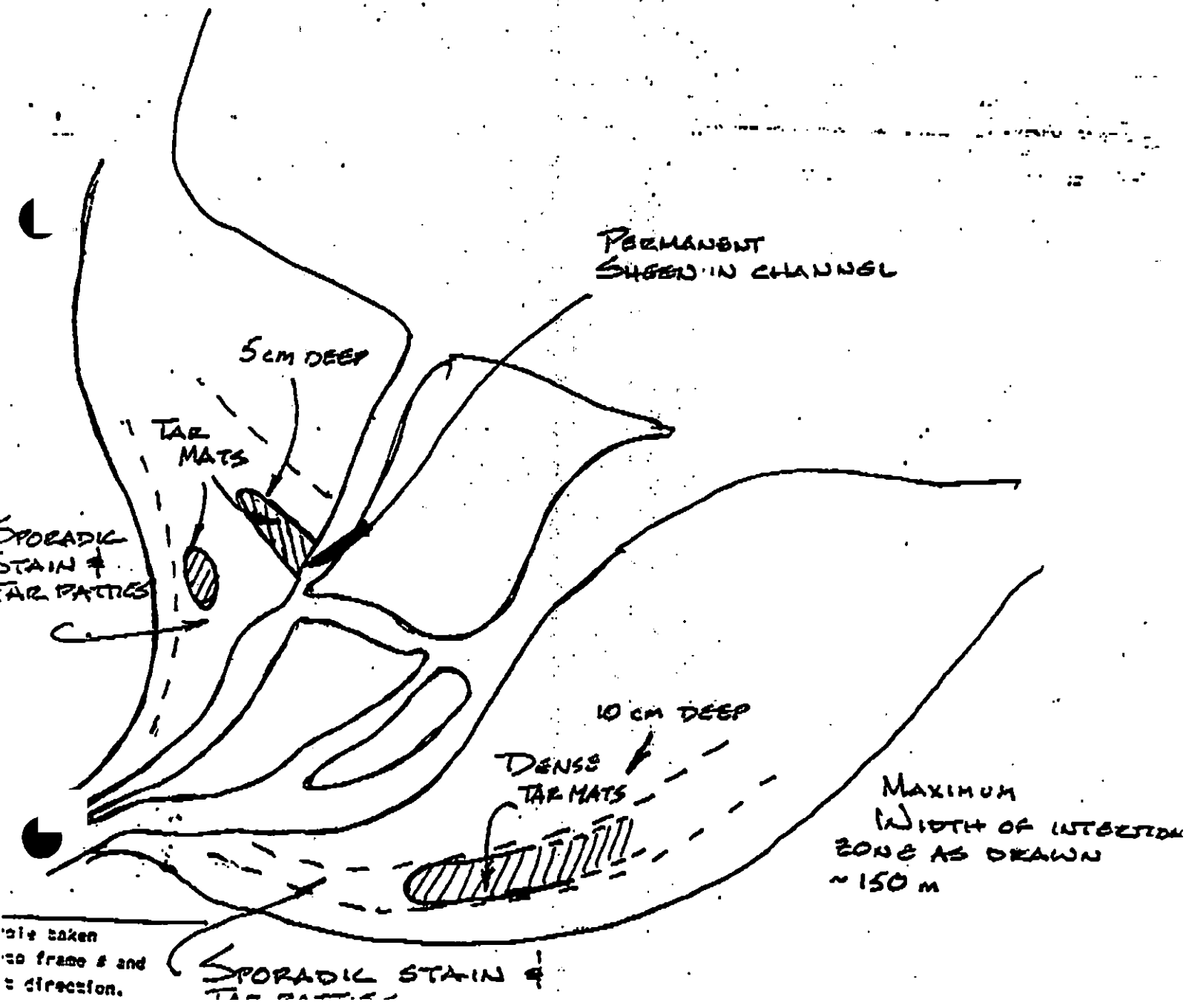
48 PHOTOLOG

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MANUALLY DESCRIPTION

RECOMMENDATIONS: ~~THIS~~ REMOVE SURFACE TAR MATS WHERE SHOWN IN DIAGRAM. BAG AND REMOVE ONLY OILED SUBSTRATE SMALLER THAN 5 CM. MANUALLY TILL LARGER SUBSTRATE TO SPEED WEATHERING.

48 OIL DISTRIBUTION DIAGRAM



4/52

Segment EV 17  
Stream 226-40-16630  
Ecological Summary

4/24/90  
Michael Fawcett

This stream has a fairly broad delta composed of shale cobbles/pebbles/sand, with dense beds of Fucus and mussels near the mouth; with clams and other infauna beneath the mussels in MTZ and LTZ. Splatters, stains, and surface tar mats were found in a wide area of UTZ among boulders and cobbles on SE side of the stream. Other intermittent surface oil and sheen was found among cobbles and sand in the MTZ of the stream delta, on north side of stream, directly above dense Fucus and mussel beds. Two sea otters were seen feeding nearshore. Manual pickup and bio-remediation recommended, with avoidance of trampling and disturbance below the oiled areas.

M. Fawcett

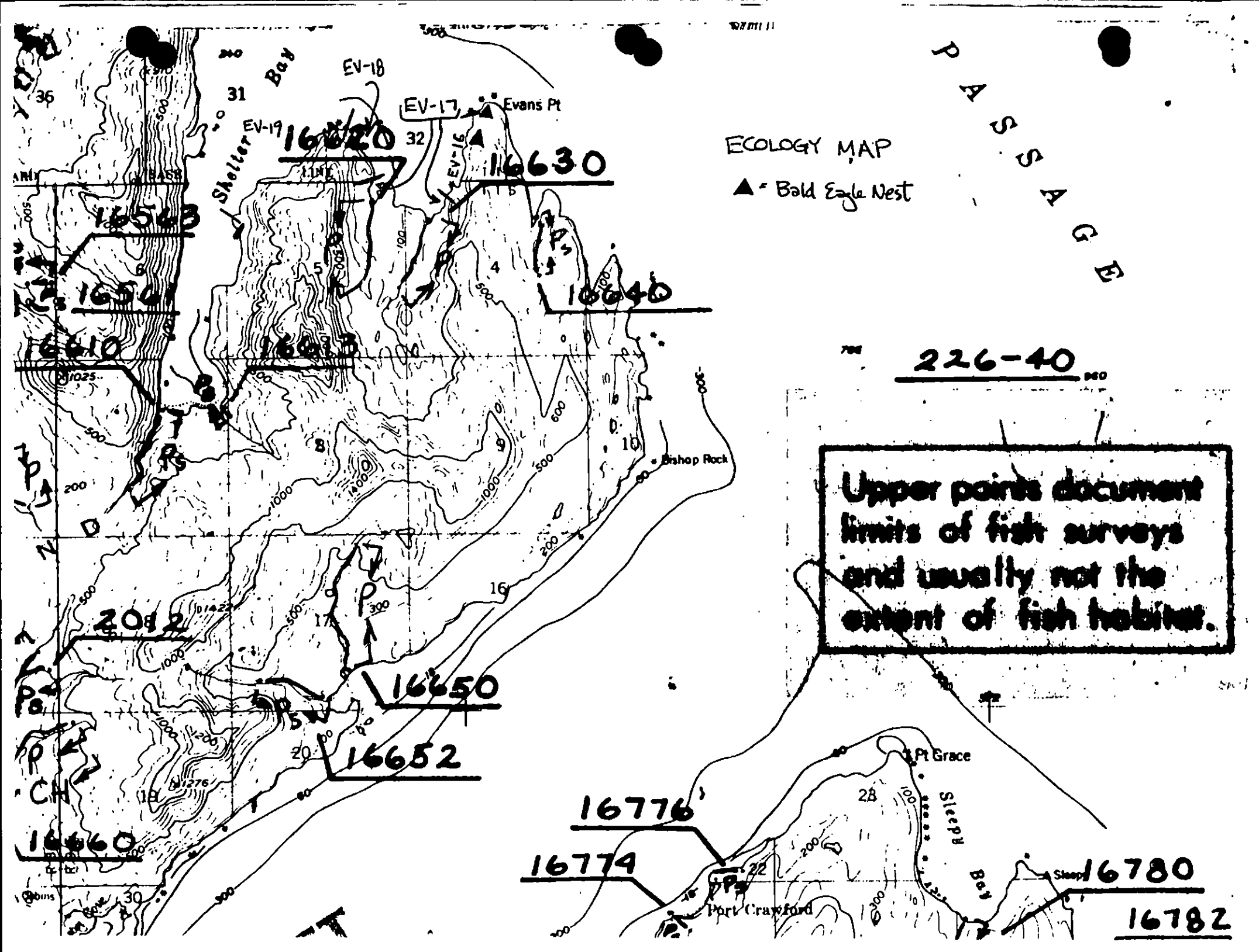
ECOLOGY MAP

▲ - Bald Eagle Nest

P  
A  
S  
S  
A  
G  
E

226-40

Upper points document  
limits of fish surveys  
and usually not the  
extent of fish habitat.



ANADROMOUS FISH STREAM ASSESSMENT

REGION: PRINCE WILLIAM SOUND

SEGMENT: EV-17

STREAM NO: 226-40-16630

ANADROMOUS FISH STREAM EVALUATION

SEGMENT ST/ EV-17 STREAM NO: 226-40-16630 DATE 4/21/90

**SEGMENT ENVIRONMENTAL SENSITIVITIES AND TIME CONSTRAINTS:**

Two catalogued anadromous streams are in EV-17:

226-40-16630 and 226-40-16620

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

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

7II Subsistence area: Deer harvesting (8/15 to 2/28)

See attached Ecological Constraint sheet for specific constraints and contacts.

**SUBDIVISION ECOLOGICAL CONSTRAINTS:**

Avoid any unnecessary disturbance or damage to unoiled biota and substrate. Avoid trampling and disturbance below the oiled areas in the dense beds of fucus and mussels.

**ARCHAEOLOGICAL CONSTRAINTS:**

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

SHPO SIGNATURE: \_\_\_\_\_ DATE: \_\_\_\_\_

Subsurface Oil Observed: Yes X No \_\_\_\_\_ Maximum Depth 10 cm

**RECOMMENDATIONS:**

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

COMMENTS: Recommended treatment includes 1) manual removal of tarmat and debris. Work should be conducted between 5/15 and 7/10 based on salmon constraints.

TAG COMMENTS: \_\_\_\_\_

TAG APPROVAL DATE: \_\_\_\_\_

ADEC \_\_\_\_\_  
EXXON \_\_\_\_\_  
NOAA \_\_\_\_\_  
USCG \_\_\_\_\_

FOSC: \_\_\_\_\_ DATE: \_\_\_\_\_

# PWS, SEWARD AND HOMER ECOLOGICAL CONSTRAINTS

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

## FIELD SHORELINE COMMENT SHEET

52/52

SEGMENT ST/ EV 017 SUBDIVISION: 16630 DATE 4/21/90

USCG

NAME Mr. J. McNamee SIGNATURE J. McNamee☐ NO TREATMENT RECOMMENDED  
COMMENTS☒ TREATMENT SUGGESTED

1. BIOREMEDIATION (SELECTED AREAS PER MAP)

ADFG

ADES

NAME Mr. Michael Wiedmer SIGNATURE Michael Wiedmer☐ NO TREATMENT RECOMMENDED  
COMMENTS☒ TREATMENT SUGGESTED

MANUAL REMOVAL ONLY. NO BIOREMEDIATION  
RECOMMENDED. SEE ADFG OBSERVATIONS  
AND RECOMMENDATION SUMMARY FOR THIS  
DATE. (EXXON REP. CONCURS WITH ADFG'S  
RECOMMENDATION)

LAND MANAGER

NAME no team member SIGNATURE \_\_\_\_\_☐ NO TREATMENT RECOMMENDED  
COMMENTS☐ TREATMENT SUGGESTED

OG WILLIAM LEID USCG McMAHON SEGMENT ST/ EV017  
 BIO MICHAEL FAWCETT LAND REP STRAM226-40-16632 OF  
 EXXON GUS GARCIA ADFG MIKE WIEDMER TIME 15:00 to  
 TEAM NO. 15 TIDE LEVEL +2 FT DATE 21 / APR / 90  
 EST. SUBDIVISION LENGTH: 150 m ☐ Sun ☒ Clouds ☐ Fog ☐ Rain ☐ Snow  
 UPLANDS DESCRIPTION: ☐ Grass ☒ Forest ☐ Rock  
 SURVEYED FROM: ☒ Foot ☐ Boat ☐ Helo  
 SURFACE SEDIMENTS: R 0 % B 1 % C 50 % P 40 % G 9 % S 0 % M 0 % V 0  
 SLOPE: Long 100 % Hang 0 % Vert 0 % WAVE EXPOSURE: ☐ Low ☒ Med ☐ High  
 OIL CATEGORY LENGTH: W 10 m M 35 m N 0 m VL 0 m NO 105

### SURFACE OIL

| CHARACTER        | DISTRIBUTION |   |   |   | OIL / FILM COLOR |   |   |   |   |   |   |   | IMPACTED ZONES |   |   |   |
|------------------|--------------|---|---|---|------------------|---|---|---|---|---|---|---|----------------|---|---|---|
|                  | C            | R | P | N | 1                | 2 | 3 | 4 | 5 | 6 | 7 | 8 | SU             | U | M | L |
| ASPHALT PAVEMENT | X            | X |   |   |                  | X |   |   |   |   |   |   |                |   | X | X |
| POOLED           |              |   |   |   |                  |   |   |   |   |   |   |   |                |   |   |   |
| COVER            |              |   |   |   |                  |   |   |   |   |   |   |   |                |   |   |   |
| COAT             |              |   |   |   |                  |   |   |   |   |   |   |   |                |   |   |   |
| STAIN            |              |   |   |   |                  |   |   |   |   |   |   |   |                |   |   |   |
| MOUSSE           |              |   |   |   |                  |   |   |   |   |   |   |   |                |   |   |   |
| PATTIES          |              |   |   |   |                  |   |   |   |   |   |   |   |                |   |   |   |
| TARBALLS         |              |   |   |   |                  |   |   |   |   |   |   |   |                |   |   |   |
| FILM             |              |   |   |   |                  |   |   |   |   |   |   |   |                |   |   |   |
| NO OIL           |              |   |   |   |                  |   |   |   |   |   |   |   | X              | X |   |   |

PAVEMENT H (F) S 625 sq. m by 10

PATTIES / TARBALLS 0 BAG

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. AS-15-2

Frames 17-26

### SUBSURFACE OIL \* OILED INTERVAL < 5 CM IN PITS 2 AND 5 DOES NOT CONSTITUTE SUBSURFACE OIL

| PIT NO. | PIT DEPTH (cm) | SUBSURFACE OIL CHARACTER |    |    |    |    | OILED INTERVAL (cm) | BELOW |    | OIL / FILM COLOR |   |   |   |   |   |   |   | PIT ZONE | A<br>N<br>A | SHEEN (Y/N) | ↓  | SURFACE SUBSURFACE SEDIMENTS |
|---------|----------------|--------------------------|----|----|----|----|---------------------|-------|----|------------------|---|---|---|---|---|---|---|----------|-------------|-------------|----|------------------------------|
|         |                | OP                       | OR | OL | OF | NO |                     | UO    | UC | 1                | 2 | 3 | 4 | 5 | 6 | 7 | 8 |          |             |             |    |                              |
| 1       | 35             |                          |    |    |    | X  |                     |       |    |                  |   |   |   |   |   |   |   |          |             |             |    |                              |
| * 2     | 35             |                          | X  |    |    |    | 0-10                |       | X  |                  | X |   |   |   |   |   |   | X        |             | N           |    | G/P                          |
| 3       | 30             |                          |    |    |    | X  |                     |       |    |                  |   |   |   |   |   |   |   | X        |             | N           | 15 | G/P                          |
| 4       | 35             |                          |    |    |    | X  |                     |       |    |                  |   |   |   |   |   |   |   | X        |             | N           |    | G/P                          |
| * 5     | 25             |                          | X  |    |    |    | 0-5                 |       | X  |                  | X |   |   |   |   |   |   | X        |             | N           | 20 | G/P/C                        |

COMMENTS

REVIEWED JW

DATE 4-25-90

25/8/02

OG WIL REID

SEGMENT STI & VQ17

STREAM 226-40-16630

DATE 21 APR 00

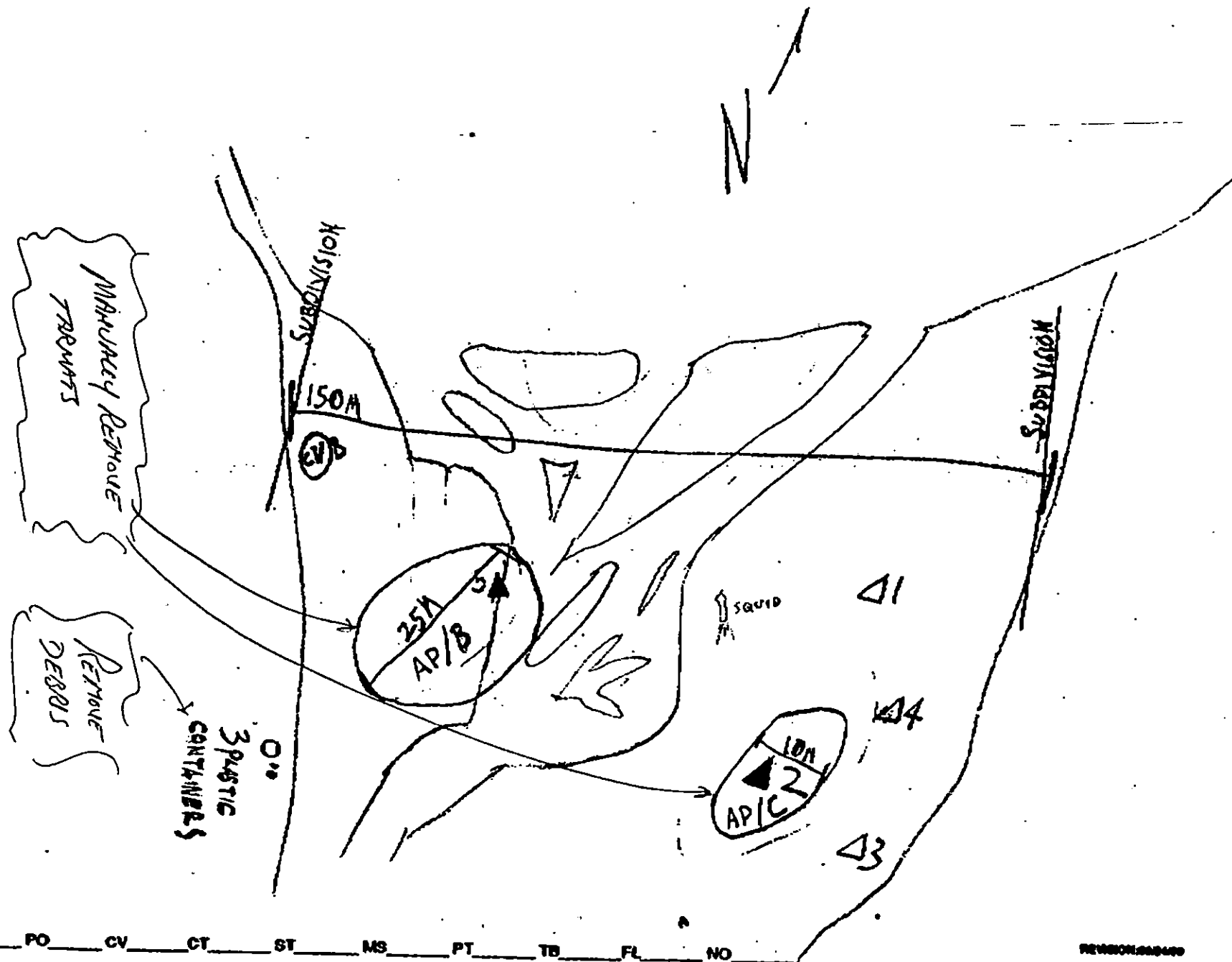


CHECKLIST

- ☐ N Area
- ☐ Approx. Scale
- ☐ Seg/Sub Bdry
- ☐ Oil Dist.
- ☐ Width
- ☐ Length
- ☐ % Cover
- ☐ Substrate Character
- ☐ Est. HUC/LVR
- ☐ SSI
- ☐ Profile Location(s)
- ☐ Profile(s)
- ☐ PII Location(s)
- ☐ Photo Location(s)

LEGEND

- 1 ▲  
PI - No Subsurface Oil
- 2 ▲  
PI - Subsurface Oil
- CT/C  
Continuous Distribution
- CT/B  
Broken Distribution
- CT/P  
Patchy Distribution
- CT/S  
Splashed Distribution
- eee  
Oiled Vegetation
- 1 ●→  
Photo location, direction, and number



Oil Character Length (m): AP 45 PO CV CT ST MS PT TB FL NO

35/52

## ADFG MULTI-ASSESSMENT DATA FORM

1 SURVEY TYPE: SS TS AVS SCIA MMS PTA 2 REGION: PWS KP, CI K, AP

METHOD: Aerial Ground Boat

3 DATE: 4/21/90 15 HIGH TIDE TIMES: 1109, 2344 21 TEAM RECORDER: M. WIGGNER

4 START TIME: 1600 16 HIGH TIDE HTS: 9.4, 10.3 22 OBSERVERS: T. CROWE

5 STOP TIME: 1700 17 LOW TIDE TIMES: 0512, 1730 23 AGENCY: ADFG

6 SEGMENT #: EV-017 18 LOW TIDE HTS: 2.9, 1.1 24 PHOTOS TAKEN: Y N

7 STATION #: 226-40-16630 19 TIDE HT AT SURVEY: 2.31' Roll #: \_\_\_\_\_ Frames: \_\_\_\_\_

8 X-UNIT: SS Stack Flood Stack 25 VIDEO TAKEN: Y N TAPES: 90THC001AND

9 STAT AREA: \_\_\_\_\_ 20 USCG QUAD: SEWARD A3 Start: 0824 End: 1108

10 LAT: \_\_\_\_\_ 11 LONG: \_\_\_\_\_ 26 SAMPLES TAKEN Y N Number

12 SOURCE: Map Loran 011 \_\_\_\_\_

13 LOCATION: SHELTER COVE, N. END EVANS IS. Sediment \_\_\_\_\_

14 DESCRIPTION: \_\_\_\_\_ Biological \_\_\_\_\_

Water \_\_\_\_\_

EXTENT OF OIL

|                                                                     | SHORELINE        |                |                |     | STREAM   |    |   |   |
|---------------------------------------------------------------------|------------------|----------------|----------------|-----|----------|----|---|---|
|                                                                     | L                | M              | H              | S   | L        | M  | H | S |
| 27 SURFACE COVERAGE                                                 | 300              | 150            |                | 15  | 200      | 10 |   | 2 |
| 28 SURFACE THICKNESS                                                | 2mm              | 1mm            | <1mm           | 1mm |          |    |   |   |
| 29 PENETRATION                                                      | 5cm              | 5cm            | 10cm           | 3cm |          |    |   |   |
| 30 OVERALL OIL IMPACT:                                              | N                | VL             | L              | M   | <u>N</u> |    |   |   |
| 31 OIL TYPE: Pooled Mousse Tar Asphalt Sticky Stain                 |                  |                |                |     |          |    |   |   |
| 32 OILED DEBRIS: Y <u>N</u>                                         |                  |                |                |     |          |    |   |   |
| 33 SHORELINE TYPE: Headland Low-lying Rocks Beach <u>Cove</u>       |                  |                |                |     |          |    |   |   |
|                                                                     |                  | Lagoon         | Marsh          |     |          |    |   |   |
| 34 WAVE EXPOSURE: High <u>Moderate</u> Low                          |                  |                |                |     |          |    |   |   |
| 35 SUBSTRATE TYPE: Bedrock _____ Boulder <u>30</u> Cobble <u>30</u> |                  |                |                |     |          |    |   |   |
|                                                                     | Gravel <u>30</u> | Sand <u>10</u> | Mud/silt _____ |     |          |    |   |   |

36 CATALOGED ANAD. FISH SKEWT Y N

37 CATALOG #: 226-40-16630

38 STREAM NAME: \_\_\_\_\_

39 OIL IN STREAM BED: Y N

40 OIL ON STREAM BANKS: Y N

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

42 OIL WITHIN 1 MILE OF STREAM: Y N

Where: \_\_\_\_\_

43 ANADROMOUS FISH PRESENT: Y N

FRY PRESUMED

44 ANADROMOUS FISH OBSERVATION

| Species | Aerial | Ground |
|---------|--------|--------|
|         |        |        |
|         |        |        |
|         |        |        |

THIS IS A LARGE INTERTIDAL ZONE WITH WIDELY DISTRIBUTED PATCHES OF OILED SUBSTRATE. THE OIL THAT REMAINS IS PREDOMINANTLY TAR SOAKED GRAVELS AND SAND UNDERNEATH AND BETWEEN RELATIVELY CLEAN COBBLES AND BOULDERS. TREATMENT AT THIS SITE WILL BE DIFFICULT. A LARVA CONCENTRATION OF FISH IS

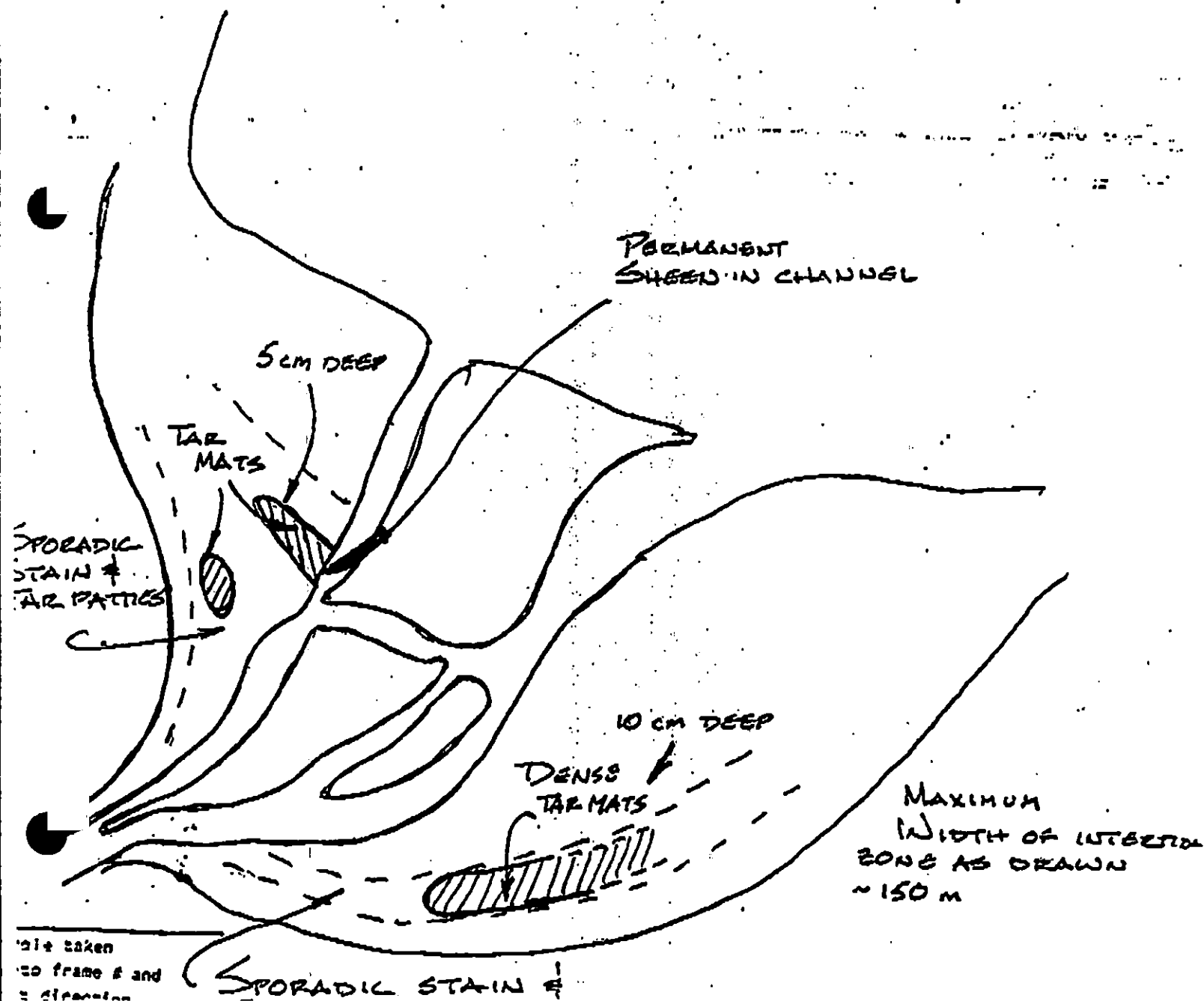
EV-017 36/52  
226-40-16630

48 PHOTOLOG

MANUAL DESCRIPTION

RECOMMENDATIONS: ~~TAR~~ REMOVE SURFACE TAR MATS WHERE SHOWN IN DIAGRAM. BAG AND REMOVE ONLY OILED SUBSTRATE SMALLER THAN 5 CM. MANUALLY TILL LARGER SUBSTRATE TO SPEED WEATHERING.

48 OIL DISTRIBUTION DIAGRAM



note taken  
to frame 8 and  
direction

4/1/52

Segment EV 17  
Stream 226-40-16630  
Ecological Summary

4/24/90  
Michael Fawcett

This stream has a fairly broad delta composed of shale cobbles/pebbles/sand, with dense beds of Fucus and mussels near the mouth, with clams and other infauna beneath the mussels in MTZ and LTZ. splatters, stains, and surface tar mats were found in a wide area of UTZ among boulders and cobbles on SE side of the stream. Other intermittent surface oil and sheen was found among cobbles and sand in the MTZ of the stream delta, on north side of stream, directly above dense Fucus and mussel beds. Two sea otters were seen feeding nearshore. Manual pickup and bio-remediation recommended, with avoidance of trampling and disturbance below the oiled areas.

M. Fawcett





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