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[Shoreline evaluations, 1991].

Prince William Sound EV-60 to EV-68

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REGION: PRINCE WILLIAM SOUND

SEGMENT: ST/EV-60 - REVISED

SUBDIVISIONS: A (1 OF 2)

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 (8/7 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 unilled 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
- 3A** 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 267-2208
- 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 (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)
7H-H 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 267-2350

SEGMENT ST1 EV 060 SUBDIVISION: A DATE 4/25/90

SCG

NAME SHAWN MAAS SIGNATURE DC² Shawn Maas

☐ NO TREATMENT RECOMMENDED
COMMENTS

☒ TREATMENT SUGGESTED

RECOMMEND MANUAL REMOVAL OF ASPHALT/PAVEMENT
TARBALLS AND PATCHES MOSTLY LOW ANGLE BEACHS
REMOVAL OF OILED DEBRIS NEEDED AT AIB SPLIT
SUBSURFACE OILS NOTED BIOREMEDIATION. AGAIN.
LOW ANGLE BEACHS.

ADEC

NAME Dave Sake. SIGNATURE Dave Sake

☐ NO TREATMENT RECOMMENDED
COMMENTS

☒ TREATMENT SUGGESTED

- ① MANUALLY REMOVE TARBALLS, ASPHALT AND PATCHES FROM IMPAIRED AREAS
- ② REMOVE OILED SEDIMENTS AND GRAVELS OR CLEAN, IF POSSIBLE; IN PARTICULAR THE SEDIMENTS NEAR SALMON STREAMS
- ③ EITHER REMOVE OILED BAND OF TARTAN ROCKS (COBBLES) FROM BEACH BOULDERS ON HIGHER ANGLE SHORELINES, OR ALL PARTIES SHOULD SIGN A PUBLIC DOCUMENT NOTING OIL THAT REMAINS AND THAT IT WILL NOT BE REMOVED.
- ④ REMOVE SUBSURFACE OIL FROM SAND/SILT BEACH
- ⑤ REMOVE OILED DEBRIS + POOLED OIL FROM LOW ANGLE BEACH.

LAND MANAGER

NAME Don Kempkoff Jr. SIGNATURE Don P. Kempkoff Jr.

☐ NO TREATMENT RECOMMENDED
COMMENTS

☒ TREATMENT SUGGESTED

SHORELINE OILING SUMMARY

REVISION NO. 06/13/88

OG R. Marty USCG S. Maas SEGMENT ST/ 2V-60
 BIO B. Lemen LAND REP D. Kumpf Jr. SUBDIVISION A (A OF 2)
 BY J. Chermak ADEC D. Sale TIME 19 05 10 02 00
 TAM NO. 10 TIDE LEVEL +0.17m -> -0.09m DATE 12-26/ April / 90
 EST. SUBDIVISION LENGTH: 1772 m ☐ Sun ☒ Clouds ☐ Fog ☐ Rain ☐ Snow
 UPLANDS DESCRIPTION: ☐ Grass ☒ Forest ☐ Rock
 SURVEYED FROM: ☒ Foot ☒ Boat ☐ Helo WORKING DIRECTION: to Varies
 SURFACE SEDIMENTS: R 80 % B 10 % C 15 % P 20 % G 5 % S — % M — % V — %
 SLOPE: Lang 80 % Hang 20 % Vert — % WAVE EXPOSURE: ☐ Low ☒ Med ☐ High
 OIL CATEGORY LENGTH: W 0 m M 194 m N 427 m VL 228 m NO 1005 m

SURFACE OIL

CHARACTER	DISTRIBUTION					OIL / FILM COLOR					IMPACTED ZONES			
	10	20	30	40	50	60	70	80	90	100	SU	U	M	U
ASPHALT PAVEMENT			P								P	P	P	
POOLED														
COVER			P	S				P			P	P	P	
COAT														
STAIN														
MOUSSE														
PATTIES				T				T			T	T	T	
TARBALLS				B				B						
FILM														
NO OIL														X

PAVEMENT H F 9 45 sq. m by 4 cmPATTIES / TARBALLS 5 BAGSNEAR SHORE SHEEN? ☒ NO BR RW SL TL
 Sheen only on tide pools

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

DID YOU COLLECT DEBRIS?

YES ☒ NO ☐TYPE Misc.#BAGS 1Concentrated at:
 Photographs: east end.Roll No. ST/10/14Frames 14-21

2 of 46

SUBSURFACE OIL

PIT NO.	PIT DEPTH (cm)	SUBSURFACE OIL CHARACTER					OILED INTERVAL	BELOW		OIL / FILM COLOR					PIT ZONE				AN A	SHEEN (Y/N)	V	SURFACE - SUBSURFACE SEDIMENTS
		OF	OR	OL	OF	NO		US	US	60	70	80	90	100	SU	U	M	U				
1	43					X									X				N	N	38	P&S-S&P
2	30	X					0.30	X				X			X				N		N	P&G-S&G
3	19					X									X				N		N	P, G-S, P
4	20	X					0.20		?			X			X				N		N	P, G-R
5	20	X					0.6		X			X			X				N	Y	17	C, P, G-G, S
6	20					X	0.4		X			X	X						N		N	P, G-G, V

Note: segment lengths reflect normalization to length in memo RBC/2mr 032990.1
 This appears to be the ADEC length and not the Exxon length.

COMMENTS

The most severe oiling in the segment is found 1) along the west side of the cleft shown in figure 2 and at the east end of the segment. In the former area asphalt pavement has formed and there is subsurface oil. The latter area has large amounts of oiled flotsam/jotsam in the storm berm. The rest of the segment

TW 4/27/90

SUBSURFACE OIL (CONTINUED)

[illegible]

COMMENTS

38 46

REVIEWED 7w DATE 4/27/90

...

1

—

—

1

2

—

—

V. —

1

Can We
RNT

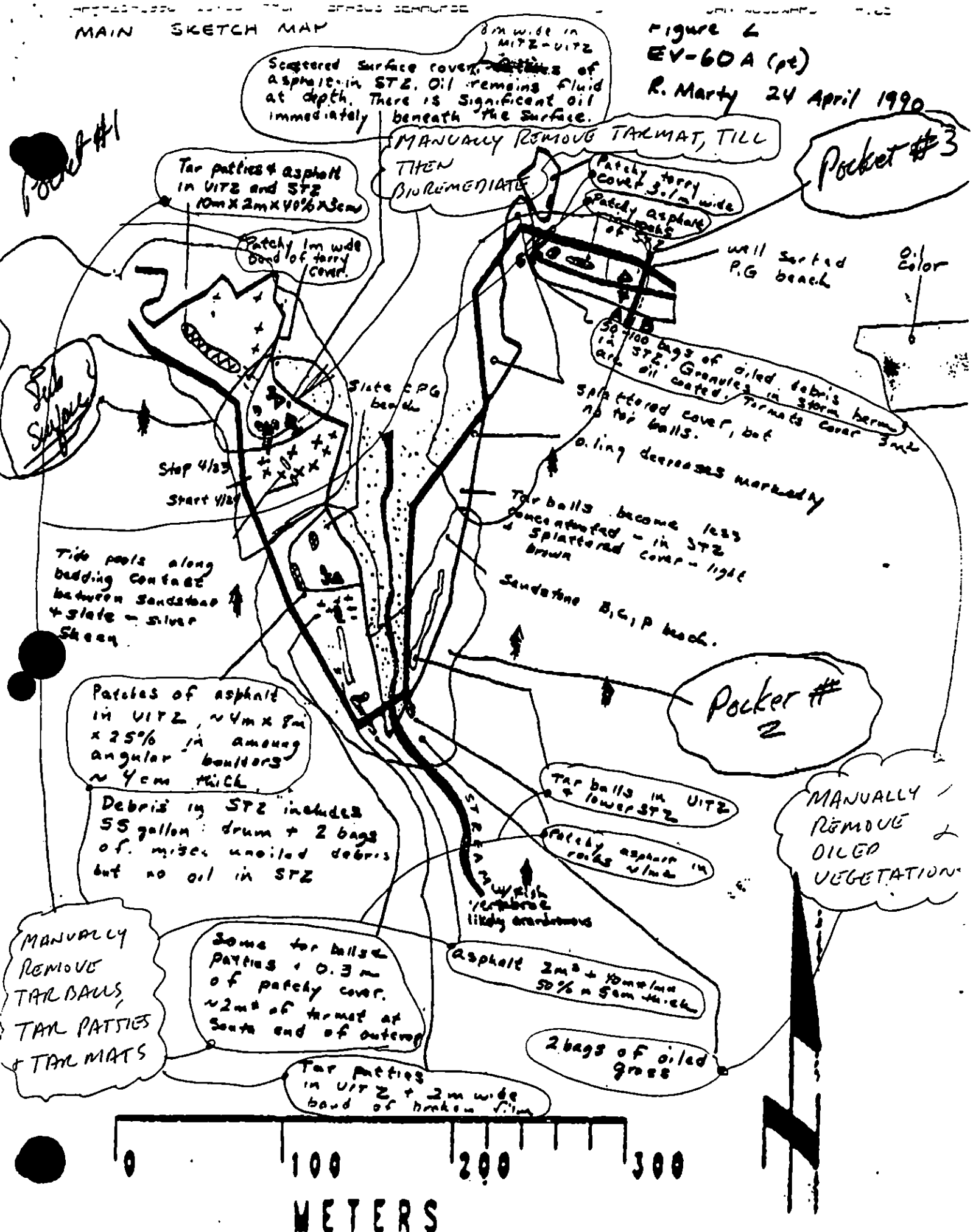
1

OK

6 of 46

MAIN SKETCH MAP

Figure 2
EV-60A (pt)
R. Marty 24 April 1990



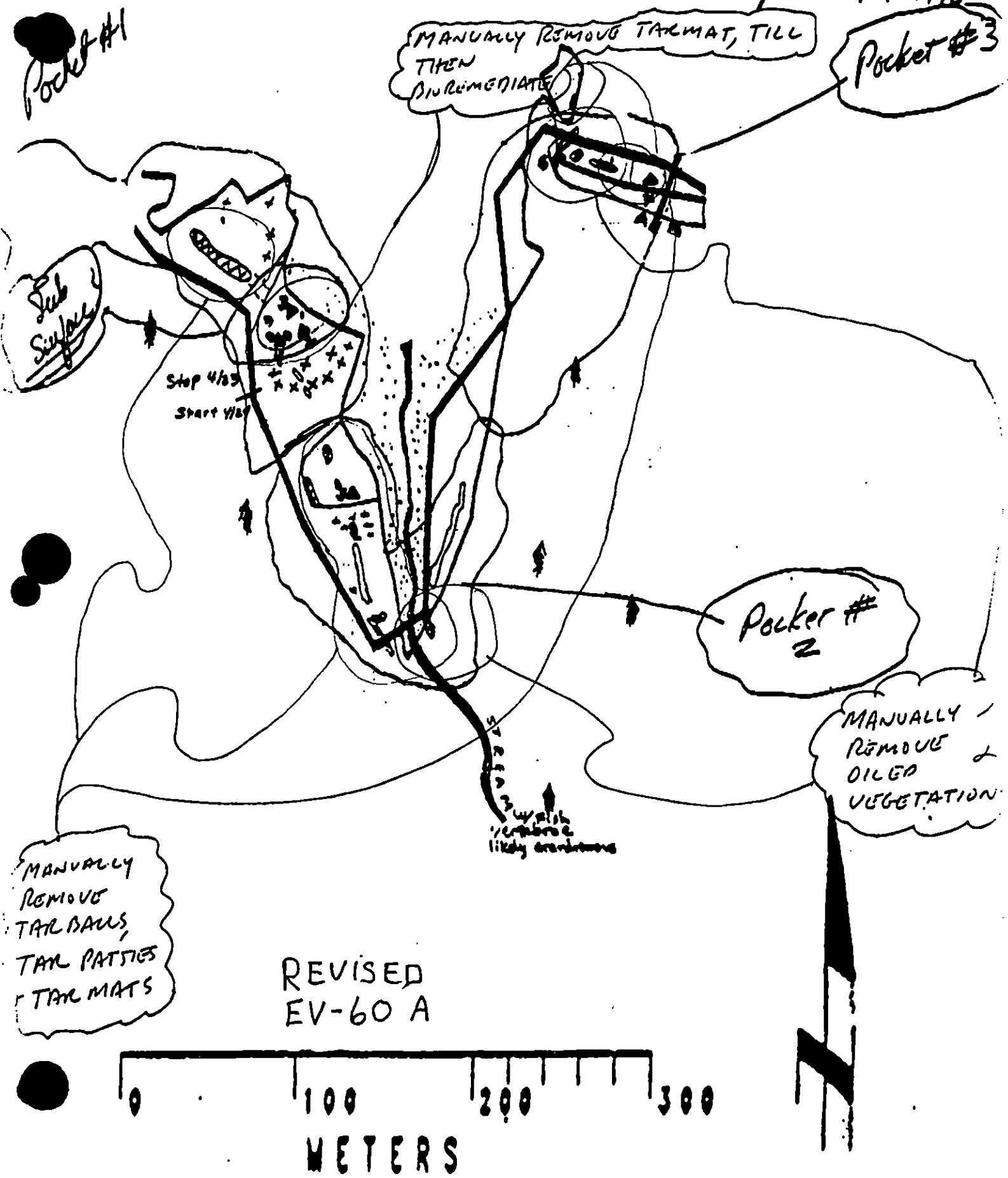
x one oiled log + oiled debris

50/46

MAIN SKETCH MAP

Figure 2
EV-60 A (pt)

R. Marty 24 April 1990



50/4/90

SHORELINE ECOLOGICAL SUMMARY

REVISION: 08/28/90

Segment ST/10/EV60 Subdivision A Date (mo/day/yr) 4/23/90

Time (24 hr) 1900-2020 Biologist Lemon Temp 9°C, cloudy 4/24/90
Wind 0 seas 0

(A) Substrate type and % of segments:
(1) Bedrock 50 (2) Boulder 10 (3) Cobble 15 (4) Pebble 20 (5) Sand 5 (6) Silt 0

(B) Overall % cover of biota (% of segment): Dense Moderate 40% 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 14-21

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: Littorina eggs; other ^{fish} eggs unknown origin.

2 eagles 2 crows

22 otters including 2 pups on offshore rock. "Clam digging" holes; Prototheca shells; live Prototheca too.

3 gulls

2 Mytilus bakers 1 loon

Biological Considerations:

No pinnipeds seen on offshore rocks; however otters, invertebrates, and algae were abundant here.

One of 2 reported eagle nests was seen on 24 Apr 90; see map.

A substantial stream had fish vertebrae; perhaps from adult salmon.

This is a subsistence deer harvest area and a hatchery release route.

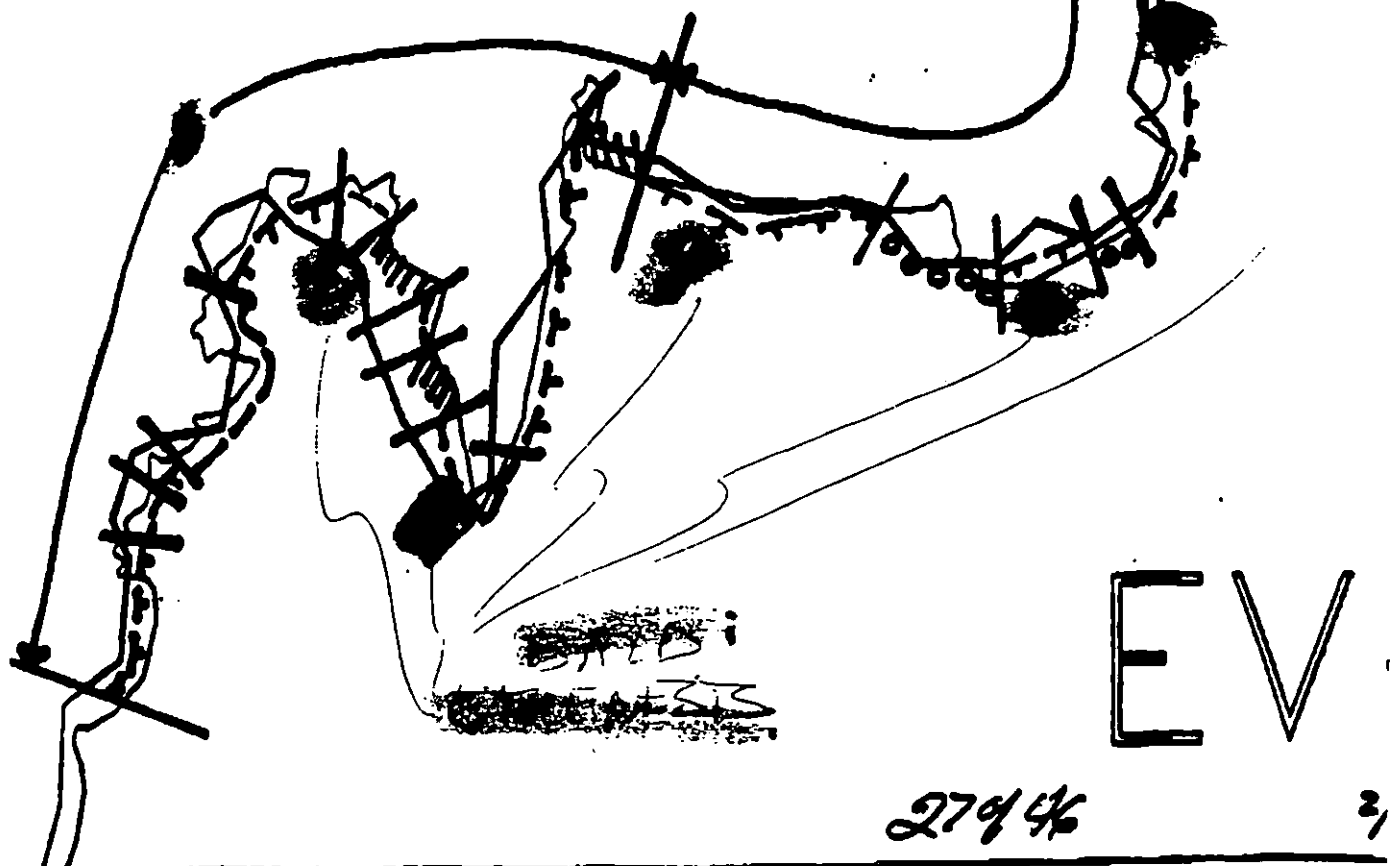
1mm and 2mm barnacles in a few places.
Tidepool with sheen had healthy Ralphsia, Littorina,
Callisella, and Mytilus. 2-3mm alive in oiled band;
yet larger sizes were dead gaping.

Low zone was very rich in life, 90% coverage; mixed reds and greens

60/46

ECOLOGICAL MAP
EV-60A (1 of 2)

EV-60



EV

2744

2

XXXX Wide

//// Medium

--- Narrow

TTTT Very light

EV-60

ADEC Segment Length: 3688m

Map Key: PWS-260c

Name: R. Marty

Date: 24 April 1971



// unobj. normal.

No	375°	563	487
VL	6.0"	900	778
L	3.3"	495	428
M	1.5"	225	194
No	4.2"	630	544
VL	9.4"	1410	1218
L	0.3	45	39
		4268	3688

Note segment length from memo
REC/smr. 032990.1 appears to
be ADGC length and not
Exxon length.



26 of 46

1/4

XXXX Wide
//// Medium
--- Narrow

EV-60

ADEC Segment Length: 3688m

TTTT Very Light



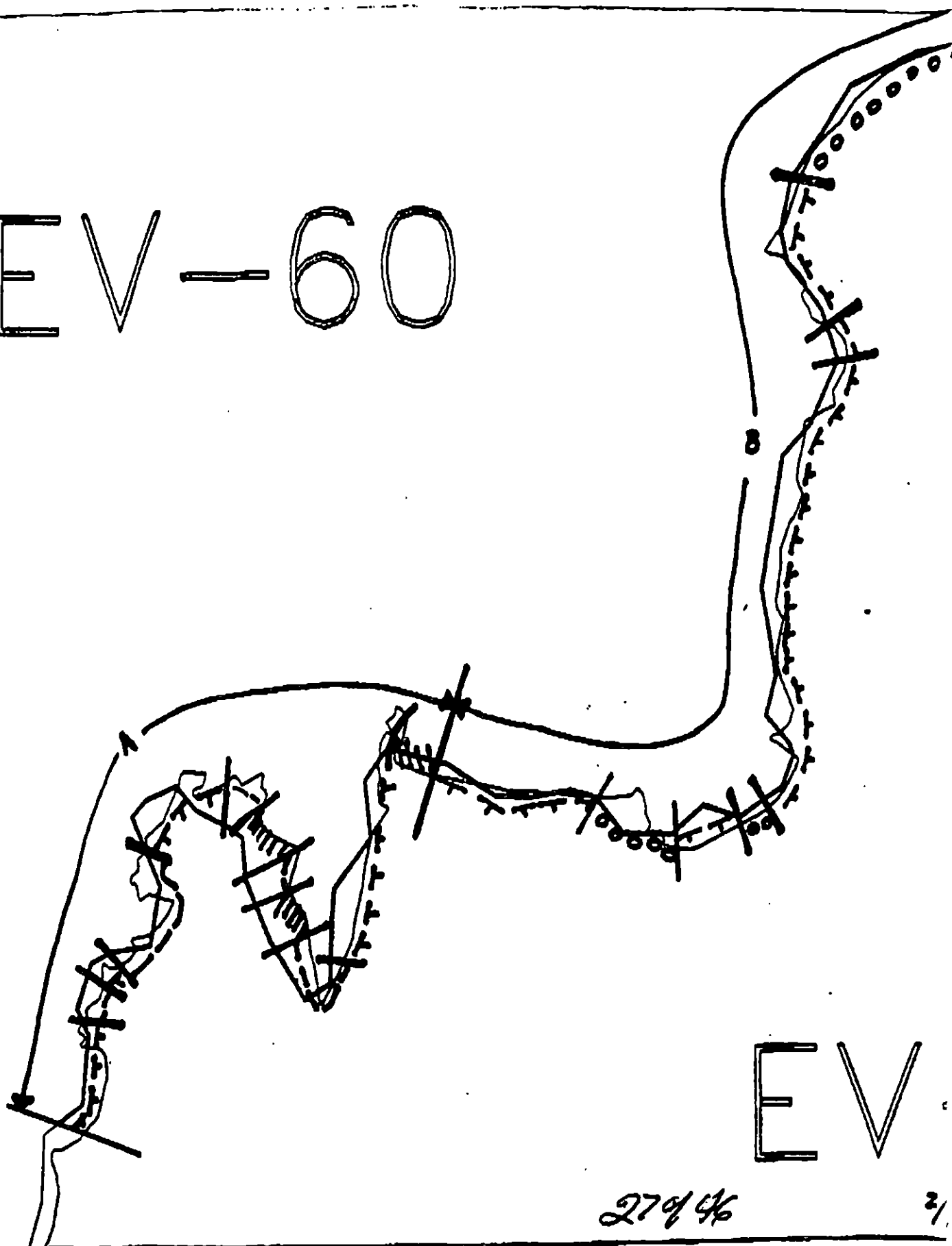
Map Key: PWS-280c

Name: R. Marty

Date: 24 April 1990

Date Entered:

EV-60



EV

27 of 46

2/

XXXX Wide
 //// Medium
 --- Narrow

EV-60

ADEC Segment Length: 3688m

Map Key: PWS-2600

Name: R. Marty

Date: 24 April 1978



REGION: PRINCE WILLIAM SOUND

SEGMENT: ST/EV-60 - REVISED

SUBDIVISIONS: B (2 OF 2)

SHORELINE EVALUATION

SEGMENT ST/ EV-60 SUBDIVISION B (2 OF 2) DATE 4/24/90

SEGMENT ENVIRONMENTAL SENSITIVITIES AND TIME CONSTRAINTS:

1F Sawmill Bay Hatchery release (4/15 to 6/1)
5T-5 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-3 and 2 adjacent nests.

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 40 m: V.Light 1498 m: No Oil 580 m
Subsurface Oil Observed: Yes _____ No X Maximum Depth _____

RECOMMENDATIONS:

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

COMMENTS: Recommended treatment includes 1) manual removal of tarmats and patties in areas indicated on sketch map, and 2) bioremediation of areas indicated on sketch map. Work should be conducted after 6/1 with approval of USFWS due to eagle nest constraint.

TAG COMMENTS: _____

TAG APPROVAL DATE: _____

ADEC _____
EXXON _____
NOAA _____
USCG _____

FOSC: _____ DATE: _____

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ADF&G Don Calkins 267-2403
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ADF&G Tom Rothy 267-2206
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AGENCY CONTACT PERSON: ADF&G Jim Fall 267-2359

SEGMENT ST EV060 SUBDIVISION: B of B DATE 4/25/90

USCG

NAME Shawn MARS SIGNATURE [Signature]

☐ NO TREATMENT RECOMMENDED
COMMENTS

☒ TREATMENT SUGGESTED

MANUAL REMOVAL OF PARTIES STRAWS POCKETED
IN LOW ANGLE BEACH. NO OILED DEBRIS. AND
BIOREMEDIATION OF LOW ANGLE BEACH AND
SUBSURFACE OILS NOTED.

ADEC

NAME Dave Sale SIGNATURE [Signature]

☐ NO TREATMENT RECOMMENDED
COMMENTS

☒ TREATMENT SUGGESTED

- ① MANUALLY REMOVE TAIL PARTIES, BARS & ASPHALT
- ② REMOVE OILED COBBLES & SEDIMENTS FROM BELOW BOULDERS
AND/OR CLEAN; OTHERWISE, ALL PARTIES SHOULD AGREE TO
SIGN PUBLIC DOCUMENT NOTING EXISTENCE AND LOCATION OF
ALL OIL NOT REMOVED.
- ③ REMOVE AND/OR CLEAN SUBSURFACE OIL FROM SEDIMENTS
(PIT 2) AND ANY OTHER LOCATIONS NOTED.
- ④ WORK CREWS SHOULD NOT DISTURB, HAUL OUT OTHERS OR PINNIPED
ROCKS

LAND MANAGER

NAME Don Komphoff Jr. SIGNATURE [Signature]

☐ NO TREATMENT RECOMMENDED
COMMENTS

☒ TREATMENT SUGGESTED

2 of 46

SHORELINE OILING SUMMARY

REVISION NO. 06/13/80

OG R. Marty USCG S. Maas SEGMENT ST/ 2V-60
 BIO B. Lemen LAND REP D. Kumpkoff Jr. SUBDIVISION B (8 OF 8)
 EXXON J. Carver ADEC D. Sale TIME 09:00 10/10/85
 TAM NO. 10 TIDE LEVEL -0.09m → +1.52m DATE 24 April / 90
 ST. SUBDIVISION LENGTH: 1001 m ☐ Sun ☒ Clouds ☐ Fog ☐ Rain ☐ Snow
 UPLANDS DESCRIPTION: ☐ Grass ☒ Forest ☐ Rock
 SURVEYED FROM: ☒ Foot ☒ Boat ☐ Helo WORKING DIRECTION: to Varied
 SURFACE SEDIMENTS: R 70 % B 10 % C 10 % P 10 % G 0 % S 0 % M 0 % V 0 %
 SLOPE: Lang % Hang % Vert % WAVE EXPOSURE: ☐ Low ☒ Med ☐ High
 OIL CATEGORY LENGTH: W 0 m M 0 m N 39 m VL 1818 m NO 544 m

SURFACE OIL

CHARACTER	DISTRIBUTION				OIL / FILM COLOR				IMPACTED ZONES			
	W	M	N	VL	W	M	N	VL	W	M	N	VL
ASPHALT PAVEMENT												
POOLED												
COVER												
COAT												
STAIN												
MOUSSE												
PATTIES												
TARBALLS												
NO OIL												

PAVEMENT H F S None sq. m by 0 cmPATTIES / TARBALLS 15 BAGSNEAR SHORE SHEEN? NO BR RW SL TL

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

DID YOU COLLECT DEBRIS?

YES ☐ NO ☒TYPE D#BAGS 0

Photographs:

Roll No. ST/10/14Frames 22-24

SUBSURFACE OIL

PIT NO.	PIT DEPTH (cm)	SUBSURFACE OIL CHARACTER					OILED INTERVAL	BELOW		OIL / FILM COLOR				PIT ZONE				A N A	SHEEN (Y/N)	V	SURFACE - SUBSURFACE SEDIMENTS
		OP	OR	OL	OF	NO		UO	US	W	M	N	VL	W	M	N	VL				
1	15					X			X						X		N		N		GP-GCR
2	37					X									X		N		N		GP-PS
3	9	X					0.3	X		X					X		N		N		GP-SG

COMMENTS The segment is primarily high angle rocks. These have splattered to broken cast. There are also tar balls in some low angle areas. This subsegment has two generations of tar also. One pre-Exxon Valdez (hard friable etc) and soft E. Valdez tar.

Note: segment lengths reflect normalization to length in memo RRC/Smr 03790.1. This appears to be the ADEC length and not the Exxon length.

12 of 46

REVIEWED _____ DATE _____

OG E. Marty

SEGMENT ST/EN-60

SUBDIVISION A/B/C/D

DATE 27 April 90

CHECKLIST

N Arrow
 Approx. Scale
 Sample Int. Int.
 Oil Int.
 Int. Int.
 Length
 % Cover
 Sediment Character
 Est. HPA/LWL
 SCL
 Profile Location(s)
 Profile(s)
 Profile Location(s)
 Profile Location(s)

LEGEND

1 A

PM: No Substrate On

2 A

PM: Substrate On

CT/C

CT/B

Broken Distribution

CT/P

Patchy Distribution

CT/S

Scattered Distribution

Dead Vegetation

1

Photo location, direction, and number

On Character (in file) AP

Continued on Page 3

EV-60

BIOREMEDIATE

Splattered band of coat.

No Oil

high angle rock faces

high angle rock face

C, B, P Pocket beach

C, B, P Pocket beach

Splattered band 1/2 m wide

Tar patties

No Oil

No oil

Tar patties become more concentrated
 Splattered coat - No evidence for penetration.

Tar patties widely scattered + some splattered coat.

MANUALLY REMOVE TAR MATS/PATTIES

Eagle nest Confirmed 24 Apr 90

C, B, P Pocket beach

Splattered coat (on the S)

Tar balls to splatter - quite a bit of older pre-E. Valdez tar also. Becomes more tarry just below the surface.

Stream vertebrate abundance w/ fish likely

UNCONFIRMED EAGLE NESTS 24 Apr 90 and

P, G born

C, P pocket beach: Dark gray slate

P, G, SC pocket beach Slate bedrock

Fig. 2

Eagle nest Confirmed 24 Apr 90

patchy tar cover to 2m wide. This is heaviest under rocks

Scattered cover

Band of tarry cover; patchy 1/2 m wide

Splattered tar cover. Silver Sheen on tide

0 100 200 300 METERS

2/3

C2M/OK

OG: R. M. M. M. M.

SEGMENT ST/ EV-60

SUBDIVISION A/B/C/D

DATE 28 April 90

CHECKLIST

- Map Area
- Approx. Scale
- Scale Bar
- Or Data
- Length
- Width
- Area
- Subsistence Character
- Est. 1984/85
- SS
- Produce Location(s)
- Produce(s)
- Produce Location(s)
- Produce Location(s)

LEGEND

1 A

2 A

3 A

4 A

5 A



6 A

7 A

8 A

9 A

10 A

11 A

12 A

13 A

14 A

BIOREMEDIATE

EV-60_B

REVISED

MANUALLY REMOVE TARNISHED PATTIES

Eagle nest confirmed 24 Apr 90

UNCONFIRMED EAGLE NESTS 24 Apr 90

Strong vegetation on ground

High risk likely

Fig. 2

Eagle nest confirmed 24 Apr 90



2/3

60446

SHORELINE ECOLOGICAL SUMMARY

REVISION: 08/22/88

Segment ST/10/EV-60 Subdivision B Date (mo / day / yr) 4 / 24 / 90

Time (24 hr) 0900 - 1100 Biologist Lemon

(A) Substrate type and % of segments:
(1) Bedrock 70 (2) Boulder 10 (3) Cobble 10 (4) Pebble 10 (5) Sand — (6) Silt —

(B) Overall % cover of biota (% of segment): Dense — Moderate 55% 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 22-24

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	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: Fucus reproductive at all levels.
2 eagles, , & schools of "minnows". Fresh set barnacles on oily substrate!
2 sea otter; 1 dead otter by worn out teeth, see map.
1 loon

Ecological Considerations: One of 3 expected eagle nests was seen, see map. A substantial stream by evidence of spawner remains was located in this subdivision. This is a subsistence deer harvest area and hatchery release route.

SKETCH MAP

SEGMENT ST/ EV-60

SUBMISSION BC (pt)

DATE 24 April 90

CHECKLIST

☐ N. Area
☐ Approx. Scale
☐ Surveyed Area
☐ Oil Out
☐ Width
☐ Length
☐ % Cover
☐ Substrate Character
☐ Soil Moisture
☐ Soil
☐ Profile Location(s)
☐ Profile(s)
☐ Photo Location(s)
☐ Photo Location(s)

LEGEND

1 A

PI - No Substrate Oil

2 A

PI - Substrate Oil

CT/C

Continuous Distribution

CT/B

Broken Distribution

CT/P

Patchy Distribution

CT/S

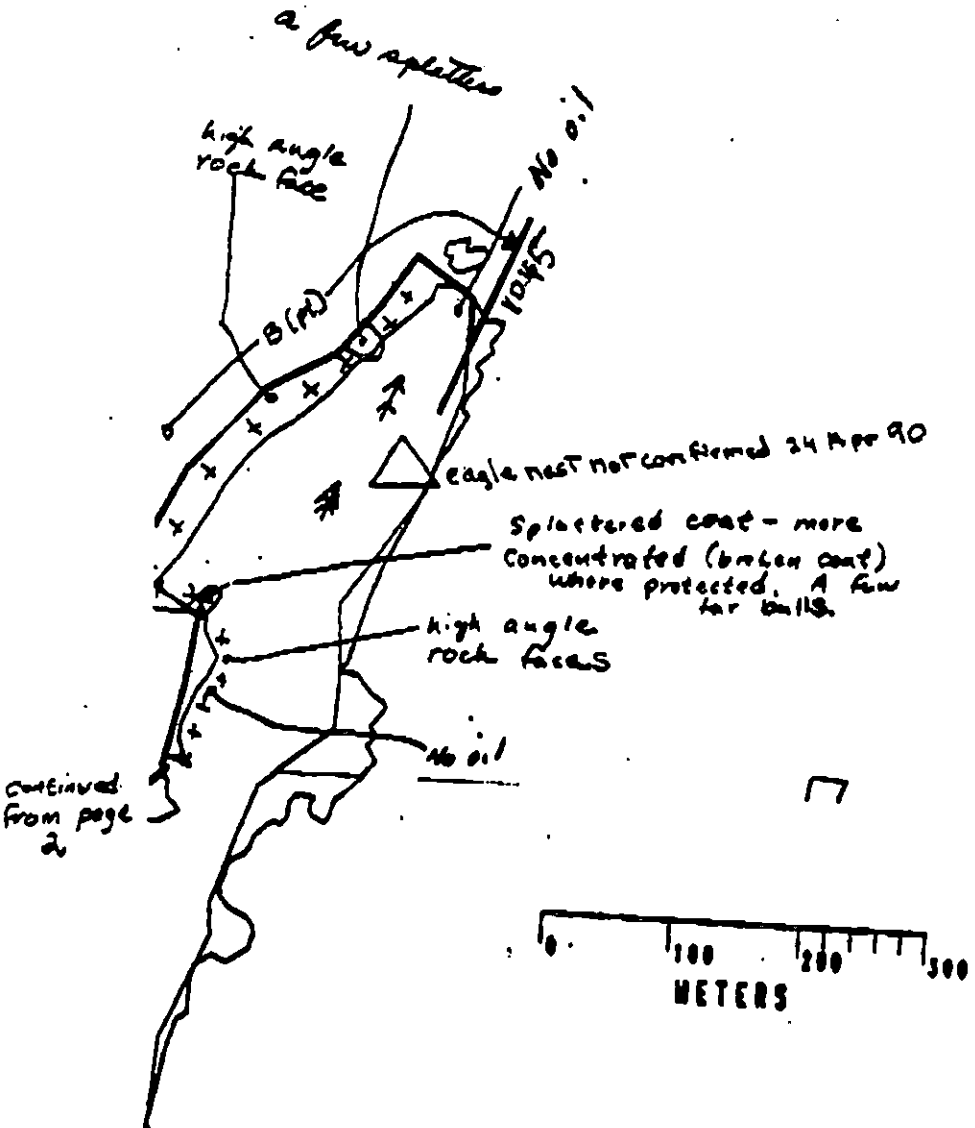
Spaced Distribution

222

Oil Vegetation

1 6-7

Photo location, direction, and number

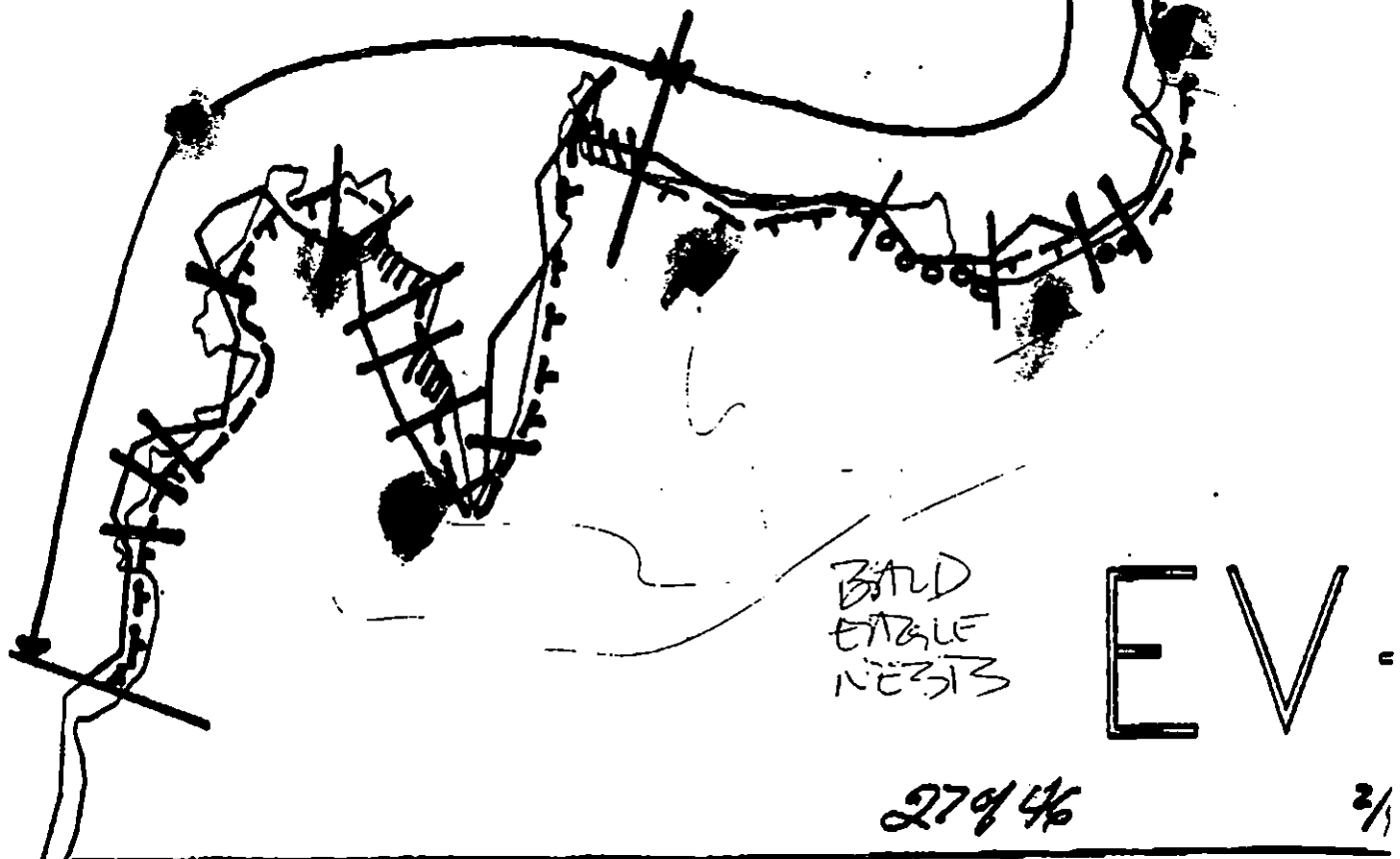


OF Character (m): AP PO CV CT ST MS T TB FL NO
 1 6-7

(CCECICAL MAP 1000 1000)

EV-60B (2012)

EV-60



XXXX Wide

//// Medium

--- Narrow

TTTT Very Light

EV-60

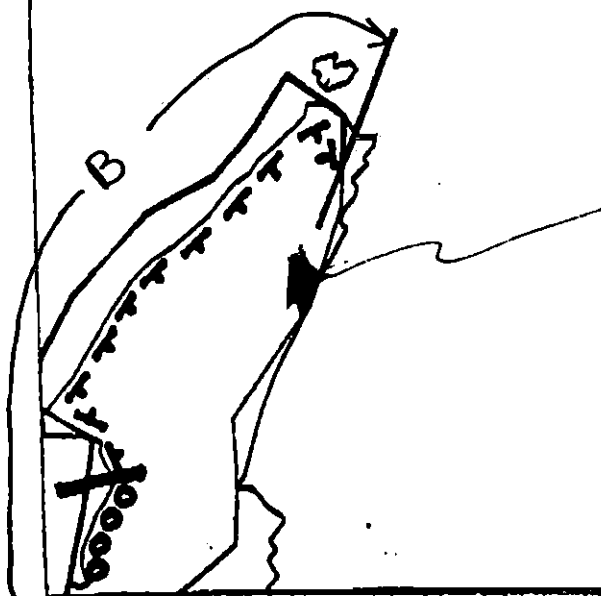
ADEC Segment Length: 3688m

Map Key: PWS-260c

Name: R. Marty

Date: 24 April 1970

(1000) AL
 1.111
 51111
 (2 11 2)



BALD EAGLE
 NEST

28 of 46

4/4

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

EV-60

ADEC Segment Length: 3688m

0 100 200 300



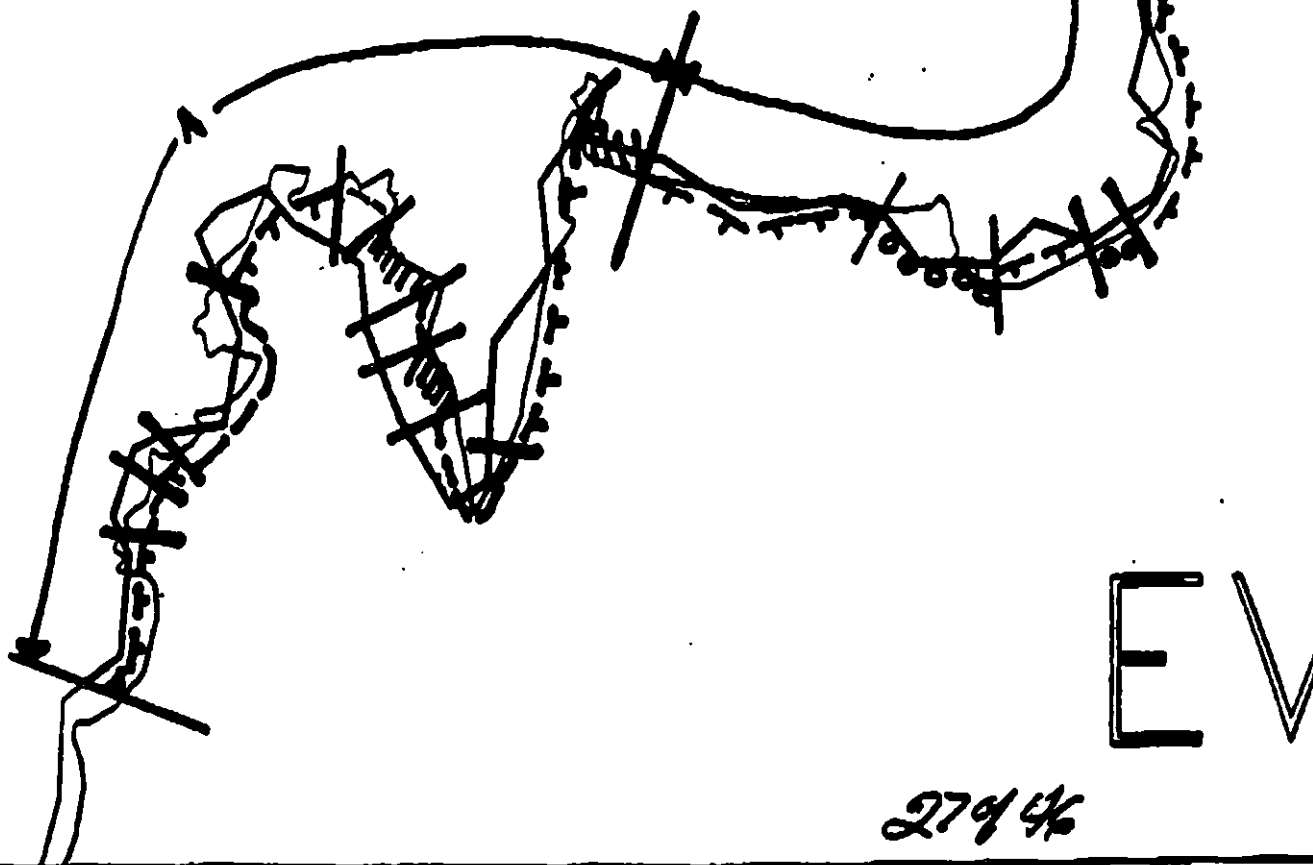
Map Key: PWS-2606

Name: R. Marty

Date: 24 April 1990

Date Entered:

EV-60



EV

274 4/6

2/

XXXX Wide

//// Medium

--- Narrow

TTTT Very Light

EV-60

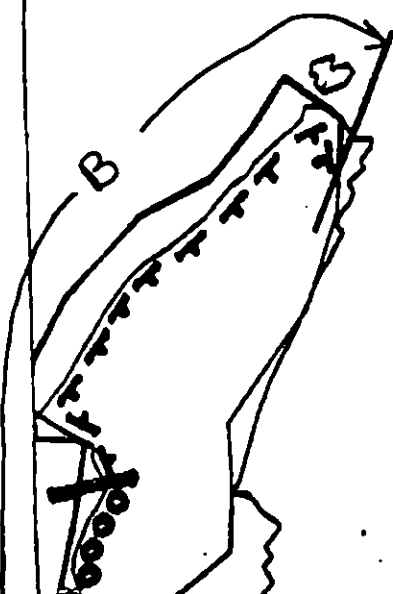
ADEC Segment Length: 3688m

Map Key: PWS-260a

Name: R. Marty

Date: 24 April 1978





28 g. 4%

4/4

XXX Wide

//// Medium

--- Narrow

TTTT Very Light

EV-60

ADEC Segment Length: 3688m



Map Key: PWS-2604

Name: R. Marty

Date: 24 April 1990

REGION: PRINCE WILLIAM SOUND

SEGMENT: ST/EV-60

SUBDIVISIONS: A (1 OF 2)

SHORELINE EVALUATION

SEGMENT ST/ EV-60 SUBDIVISION A (1 OF 2) DATE 4/24/90

SEGMENT ENVIRONMENTAL SENSITIVITIES AND TIME CONSTRAINTS:

1F Sawmill Bay Hatchery release (4/15 to 6/1)
5T-5 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-2 3 in adjacent segment (subdivision)

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 170 m: Narrow 396 m: V.Light 591 m: No Oil 0 m
Subsurface Oil Observed: Yes X No _____ Maximum Depth 30+ cm

RECOMMENDATIONS:

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

COMMENTS: Recommended treatment includes 1) manual pickup of oiled vegetation in areas indicated on sketch maps, 2) manual removal of tar balls, patties and tarmats in areas indicated on sketch maps, and 3) manually till and bioremediate areas indicated on sketch map. Work should be conducted after 6/1 with approval of USFWS due to 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 Morrison 267-2324

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 (8/7 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 uncultivated 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

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 (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 Fish harvesting

7I Deer harvesting (8/15 to 2/25)

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 267-2350

SEGMENT ST EV060 SUBDIVISION: A DATE 4/25/90

USCG

NAME SHAWN MAAS SIGNATURE PC² Shawn Maas

☐ NO TREATMENT RECOMMENDED
COMMENTS

☒ TREATMENT SUGGESTED

RECOMMEND MANUAL REMOVAL OF ASPHALT/PAVEMENT
TARBALLS AND PATCHES MOSTLY LOW ANGLE BEACHS
REMOVAL OF OILED DEBRIS NEEDED AT AIR SPLIT
SUBSURFACE OILS NOTED BIOREMEDIATION. AGAIN.
LOW ANGLE BEACHS.

ADEC

NAME Dave Sake. SIGNATURE Dave Sake

☐ NO TREATMENT RECOMMENDED
COMMENTS

☒ TREATMENT SUGGESTED

- ① MANUALLY REMOVE TAR BALLS, ASPHALT AND PATCHES FROM IMPACTED AREAS
REMOVE OILED SEDIMENTS AND GRAVELS OR CLEAN, IF POSSIBLE; IN
PARTICULAR THE SEDIMENTS NEAR SALMON STREAMS
- ③ EITHER REMOVE OILED BAND OF TARRY ROCKS (COBBLES) FROM BENEATH
BOULDERS ON HIGHER ANGLE SHORELINES, OR ALL PATCHES SHOULD
SIGN A PUBLIC DOCUMENT NOTING OIL THAT REMAINS AND
THAT IT WILL NOT BE REMOVED.

- ④ REMOVE SUBSURFACE OIL FROM GRAVE/SLATE BEACH
- ⑤ REMOVE OILED DEBRIS + POOLED OIL FROM LOW-ANGLE BEDROCK.

LAND MANAGER

NAME Don Kompkoff Jr. SIGNATURE Don Kompkoff Jr.

☐ NO TREATMENT RECOMMENDED
COMMENTS

☒ TREATMENT SUGGESTED

10 of 46

SHORELINE OILING SUMMARY

REVISION NO. 04/13/90

OG R. Marty USCG S. Maas SEGMENT ST/ EV-60
 BIO B. Lemon LAND REP D. Humphreys Jr. SUBDIVISION A (A OF E)
 EXXON J. Carmichael ADEC D. Sale TIME 19:05 to 01:00
 TEAM NO. 10 TIDE LEVEL +0.17m -> -0.09m DATE 23-24 April / 90
 ST. SUBDIVISION LENGTH: 1717 m² ☐ Sun ☒ Clouds ☐ Fog ☐ Rain ☐ Snow
 PLANDS DESCRIPTION: ☐ Grass ☒ Forest ☐ Rock
 SURVEYED FROM: ☒ Foot ☒ Boat ☐ Helo WORKING DIRECTION: to Varies
 SURFACE SEDIMENTS: R 80 % B 10 % C 15 % P 20 % G 5 % S — % M — % V — %
 SLOPE: Long 80 % Hang 20 % Vert — % WAVE EXPOSURE: ☐ Low ☒ Med ☐ High
 OIL CATEGORY LENGTH: W 0 m M 194 m N 428 m VL 778 m NO 1005 m

SURFACE OIL

CHARACTER	DISTRIBUTION					OIL / FILM COLOR					IMPACTED ZONES				
	C	N	P	S	T	W	X	Y	Z	AA	SU	U	M	U	
ASPHALT PAVEMENT			P							P	P	P	P	P	
POOLED															
COVER			P	S						P	P	P	P	P	
COAT															
STAIN															
MOUSSE															
PATTIES				T						T	T	T	T	T	
TARBALLS				B						B	B	B	B	B	
NO OIL															X

PAVEMENT H F (S) 45 sq. m by 4 cmPATTIES / TARBALLS 5 BAGSNEAR SHORE SHEEN? NO BR RW (S) TL
 Sheen only on tide pools

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

DID YOU COLLECT DEBRIS?

YES ☒ NO ☐TYPE Misc.#BAGS 1Concentrated at
 Photographs: east end.Roll No. ST/10/14Frames 14-21

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	W	X	Y	Z	AA	SU	U	M	U			
1	43					X									X				N	N	3B PG-SFG
2	30	X					0.30	X				X			X				N	N	PG-C-SG
3	19					X										X			N	N	P, C-S, P
4	20	X					0.20		?			X			X				N	N	P, G-R
5	20	X					0.6		X			X				X			N	Y	17 C, P, G-G, S
6	20					X	0.4		X			X	X						N	N	P, G-G, V

COMMENTS

The most severe oiling in the segment is found 1) along the west side of the cleft shown in figure 2 and

2) at the east end of the segment. In the former area asphalt pavement has formed and there is subsurface oil. The latter area has large amounts of oiled flotsam/jetson in the storm berm. The rest of the segment has tar balls - tarry splatter. Oiling is minor on the offshore.

REVIEWED JWDATE 4/27/90

Note: segment lengths reflect normalization to length in memo REC/2mr 03770.1. This appears to be the ADEC length and not the Exxon length.

20 of 46

SHORELINE ECOLOGICAL SUMMARY

REVISION: 05/22/88

Segment ST/10/ev60 Subdivision A Date (mo/day/yr) 4/23/90
 (24 hr) 1900-2020 0700-0900 Biologist Lemon 9°C, cloudy 4/24/90
 wind 0 seas 0

- (A) Substrate type and % of segments:
 (1) Bedrock 50 (2) Boulder 10 (3) Cobble 15 (4) Pebble 20 (5) Sand 5 (6) Silt 0
- (B) Overall % cover of biota (% of segment): Dense Moderate 40% 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 14-21

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	NOT PRESENT
5	5	5	5	5	5	5	5	5	5	5	5	
6	6	6	6	6	6	6	6	6	6	6	6	

MYTILUS

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

GASTROPODS

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

FUCUS

Dense			Moderate			Sparse			Rare			
1U	1M	1L	1U	1M	1L	1U	1M	1L	1U	1M	1L	
2	2	2	2	2	2	2	2	2	2	2	2	
3	3	3	3	3	3	3	3	3	3	3	3	
4	4	4	4	4	4	4	4	4	4	4	4	NOT PRESENT
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: Littorina eggs; other ^{fish} eggs unknown origin.

2 eagles 2 crows
 22 others including 2 pups on offshore rock. "Clam digging" holes; Protothaca shells; live Protothaca too.
 3 gulls
 2 oystercatchers 1 loon

Ecological Considerations:

No Minipeds seen on offshore
 however others, invertebrates,
 and algae were abundant here.

1mm and 2mm barnacles in a few places.
 Tidepool with sheer had healthy Ralphsia, Littorina,
Galligella, & Mytilus. 2-3mm alive in oiled band;
 yet larger sizes were dead gaping.
 Low zone was very rich in life, 90% coverage; mixed reds and greens.

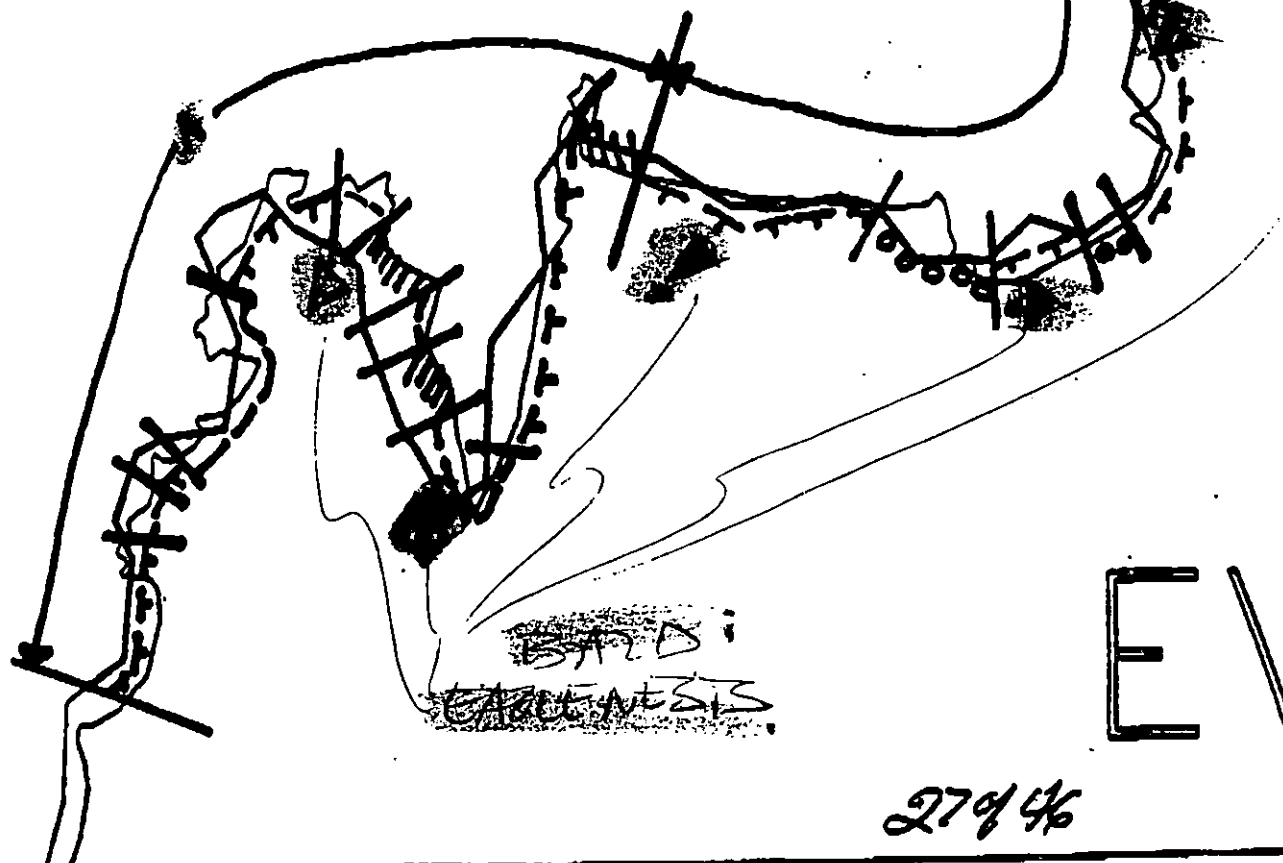
One of 2 reported eagle nests was seen on 24 Apr 90; see map.

A substantial stream had fish vertebrae; perhaps from adult spawners.
 This is a subsistence deer harvest area and a hatchery release route.

6 of 46

ECOLOGICAL MAP
EV-60A (1c+2)

EV-60



EV

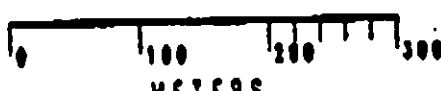
27 of 46

2/

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

EV-60

ADEC Segment Length: 3688m



Map Key: PWS-260c
Name: R. Marty
Date: 24 April 1978
Date Entered:

// unadj. normal.

A	No	3.75"	563	487
	VL	6.0"	900	778
	L	3.3"	495	420
	M	1.5"	225	194
B	No	4.2"	630	544
	VL	9.4"	1910	1218
	L	0.3	45	39
			4268	3688

Note segment length from memo
REC/Smr. 032990.1 appears to
be ADEC length and not
Exxon length.



26 of 46

1/4

XXXX Wide

//// Medium

--- Narrow

TTTT Very Light

0000 No Oil

EV-60

ADEC Segment Length: 3888m



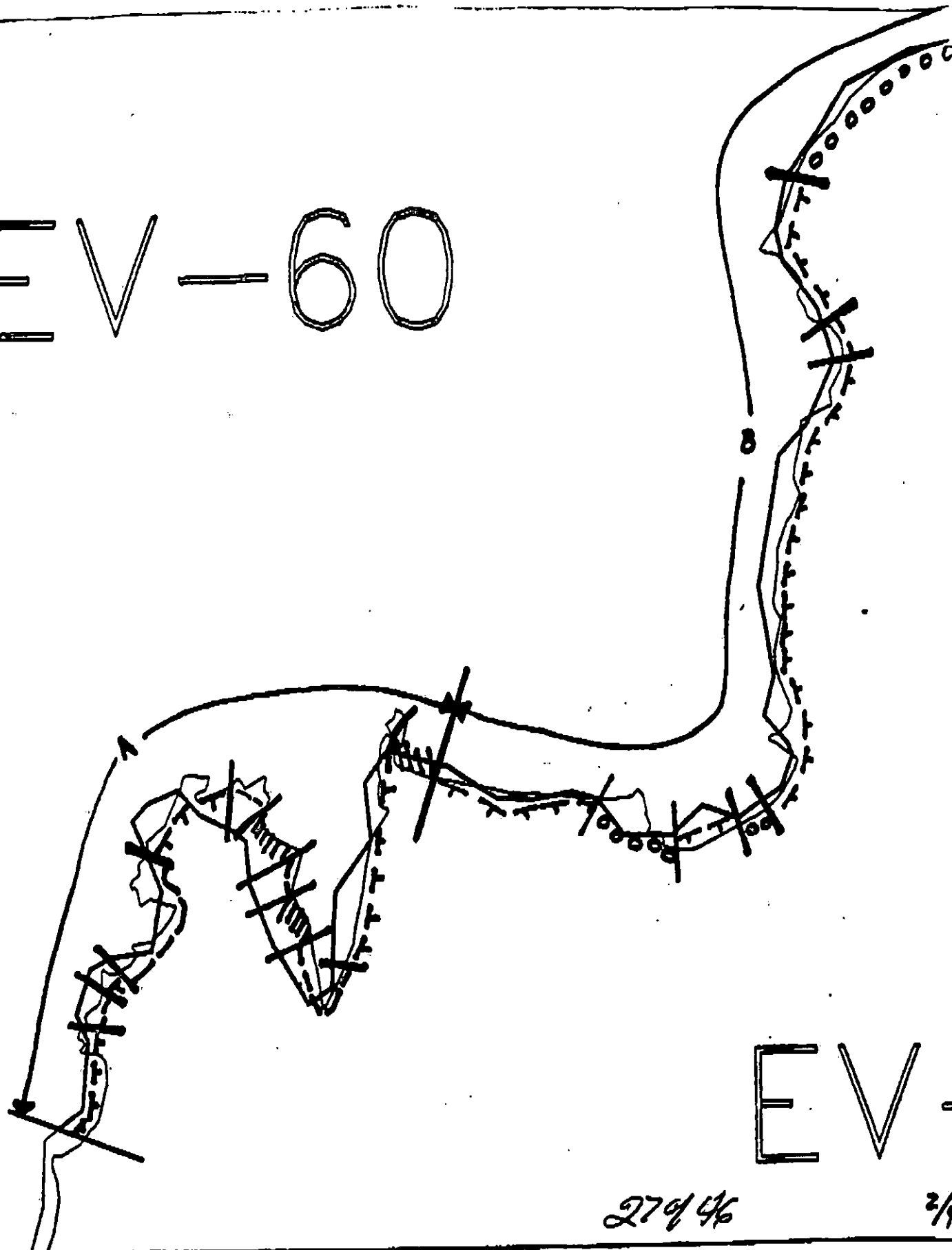
Map Key: PWS-280c

Name: R. Marty

Date: 24 April 1990

Date Entered:

EV-60



EV-

27 of 46

2/4

XXXX Wide

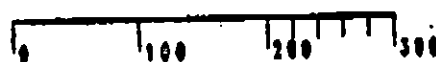
//// Medium

--- Narrow

TTTT Very Light

EV-60

ADEC Segment Length: 3688m



Map Key: PWS-260a

Name: R. Marty

Date: 24 April 1970

Date Entered:

REGION: PRINCE WILLIAM SOUND

SEGMENT: ST/EV-60

SUBDIVISIONS: B (2 OF 2)

SHORELINE EVALUATION

SEGMENT ST/ EV-60 SUBDIVISION B (2 OF 2) DATE 4/24/90

SEGMENT ENVIRONMENTAL SENSITIVITIES AND TIME CONSTRAINTS:

1F Sawmill Bay Hatchery release (4/15 to 6/1)
5T-5 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-3 and 2 adjacent nests.

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 40 m: V.Light 1498 m: No Oil 580 m
Subsurface Oil Observed: Yes _____ No X Maximum Depth _____

RECOMMENDATIONS:

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

COMMENTS: Recommended treatment includes 1) manual removal of tarmats and patties in areas indicated on sketch map, and 2) bioremediation of areas indicated on sketch map. Work should be conducted after 6/1 with approval of USFWS due to 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 uncoiled intertidal and subtidal algae and eelgrass. 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
- 3H Harbor seal and sea lion pupping (5/15 to 7/1)**
3J 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

R

SEGMENT ST1 EV060 SUBDIVISION: B of B DATE 4/25/90

USCG

NAME Shawn MARS SIGNATURE [Signature]

☐ NO TREATMENT RECOMMENDED ☒ TREATMENT SUGGESTED
COMMENTS

MANUAL REMOVAL OF PARTIES MARBLES POCKETED
IN LOW ANGLE BEACH. NO OILED DEBRIS. AND
BIOREMEDIATION OF COAST LOW ANGLE BEACH AND
SUBSURFACE OILS NOTED.

ADEC

NAME Dave Sale SIGNATURE [Signature]

☐ NO TREATMENT RECOMMENDED ☒ TREATMENT SUGGESTED
COMMENTS

- ① MANUALLY REMOVE TAR PARTIES, SAWS + ASPHALT
- ② REMOVE OILCO CIRCLES + SEDIMENTS FROM BELOW BOULGERS
AND/OR CLEAN; OTHERWISE, ALL PARTIES SHOULD AGREE TO
SIGN PUBLIC DOCUMENT NOTING EXISTENCE AND LOCATION OF
ALL OIL NOT REMOVED.
- ③ REMOVE AND/OR CLEAN SUBSURFACE OIL FROM SEDIMENTS
(PIT 3) AND ANY OTHER LOCATIONS NOTED.
- ④ WORK CREWS SHOULD NOT DISTURB, HAULED OUT OTTERS ON PINNIPED
ROCKS

LAND MANAGER

NAME Don Kompkoff Jr. SIGNATURE [Signature]

☐ NO TREATMENT RECOMMENDED ☒ TREATMENT SUGGESTED
COMMENTS

ref 46

SHORELINE OILING SUMMARY

REVISION NO. 02/13/90

OG R. Marty USCG S. Maas SEGMENT ST/ SV-60
 BIO B. Lemon LAND REP D. Kempf Jr. SUBDIVISION B (2 OF 2)
 EXXON J. Czarowski ADEC D. Sale TIME 09:00 to 10:10 YE
 TEAM NO. 10 TIDE LEVEL -0.09m to +1.58m DATE 24 April / 90
 T. SUBDIVISION LENGTH: 1001 m ☐ Sun ☒ Clouds ☐ Fog ☐ Rain ☐ Snow
 UPLANDS DESCRIPTION: ☐ Grass ☒ Forest ☐ Rock
 SURVEYED FROM: ☒ Foot ☒ Boat ☐ Helo WORKING DIRECTION: to Varied
 SURFACE SEDIMENTS: R 70 % B 10 % C 10 % P 10 % G 0 % S 0 % M 0 % V 0 %
 SLOPE: Long % Hang % Vert % WAVE EXPOSURE: ☐ Low ☒ Med ☐ High
 OIL CATEGORY LENGTH: W 0 m M 0 m N 39 m VL 1212 m NO 544 m

SURFACE OIL

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

PAVEMENT H F S None sq. m by 0 cmPATTIES / TARBALLS 15 BAGSNEAR SHORE SHEEN? NO BR RW SL TL

OILED DEBRIS	NO	AMOUNT			DID YOU COLLECT DEBRIS?
		SM	MD	LG	
Logs	X				YES ☐ NO ☒
Vegetation	X				
Trash	X				
Debris	X				
					TYPE <u>D</u>
					#BAGS <u>0</u>

Photographs:

Roll No. ST/10/14Frames 22-24

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	100% OP	100% OR	100% OL	100% OF	100% NO	100% UG	100% UC	SU	U	M	U				
1	15					X		X									X	-	N	-	N	GP-GCR		
2	37					X										X	-	N	-	N	GP-PS			
3	9	X					0.3	X				X				X			N	-	N	CSP-SG		
							.																	
							.																	
							.																	

COMMENTS The segment is primarily high angle rocks. These have splattered to broken cast. There are also tar balls in some low angle areas. This subsegment has two generations of tar also. One pre-Exxon Valdez (hard friable etc) and soft E. Valdez tar.

Note: segment lengths reflect normalization to length in memo RRC/smr 03770.1. This appears to be the ADEC length and not the Exxon length.

12 of 46

REVIEWED _____ DATE _____

OG 2. Mary

SEGMENT ST/ EV-60

SUBDIVISION A-2 (A)

DATE 29 April 90

CHECKLIST

- M Answer
- Approx. Beach
- Seafloor Bedrock
- On Day
- Width
- Length
- % Cover
- Seafloor Character
- Est. HML/ML
- SSL
- Particle Location(s)
- Profile(s)
- PH Location(s)
- Photo Location(s)

LEGEND

1 A

PH - No Subsurface Oil

2 A

PH - Subsurface Oil

CT/C

CT/B

Broken Oceanfront

CT/P

Patchy Oceanfront

CT/S

Scattered Oceanfront

Oil Vegetation

Oil

Photo location, direction, and number

Oil Character L

Continued on Page 3

EV-60

BIOREMEDIATE

Splattered band of coat.

No Oil

high angle rock faces

high angle rock face

C, B, P Pocket beach

C, B, P Pocket beach

splattered coat

MANUALLY REMOVE TAR MATS/PATTIES

Eagle nest Confirmed 24 Apr 90 Rn2

C, B, P beach

splattered coat (patties)

Tar balls & splatter - quite a bit of older pre-E. Valdez tar also. Becomes more tarry just below the surface

Stream vertebrate anadromous w/ fish likely

dead otter

UNCONFIRMED EAGLE NESTS 24 Apr 90 Rn2

P, G, C beach: Dark gray slate

P, G, C pocket beach: Slate bedrock

P, G, C beach: fairly well sorted

0 100 200 300 METERS

2/3

23 of 46

1.67m wide band of broken coat becomes more concentrated in shallow subsurface tarry & sticky

Octagonal splattered coat

Splattered coat

Tar patties

No Oil

Tar patties become more concentrated. Splattered coat - No evidence for penetration.

Tar patties widely scattered + some splattered coat.

splattered tarry cover

patchy tar cover to 2m wide. This is heaviest under rocks

Scattered cover

Band of tarry cover; patchy 1/2m wide

Splattered tar cover. Silver sheen on tide pools.

Fig. 2

Eagle nest Confirmed Rn2

P, G, C pocket beach

SHORELINE ECOLOGICAL SUMMARY

REVISION: 08/22/98

Segment ST/10/EV-60 Subdivision B Date (mo / day / yr) 4 / 24 / 90

Time (24 hr) 0900 - 1100 Biologist Lemon

(A) Substrate type and % of segments:
(1) Bedrock 70 (2) Boulder 10 (3) Cobble 10 (4) Pebble 10 (5) Sand — (6) Silt —

(B) Overall % cover of biota (% of segment): Dense — Moderate 55% 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 22-24

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	3	3	3	3	3	3	NOT PRESENT
4	4	4	4	4	4	4	4	4	4	4	4	
5	5	5	5	5	5	5	5	5	5	5	5	
6	6	6	6	6	6	6	6	6	6	6	6	

MYTILUS

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

GASTROPODS

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

FUCUS

Dense			Moderate			Sparse			Rare			
1U	1M	1L	1U	1M	1L	1U	1M	1L	1U	1M	1L	
2	2	2	2	2	2	2	2	2	2	2	2	
3	3	3	3	3	3	3	3	3	3	3	3	NOT PRESENT
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: Fucus reproductive at all levels.

2 eagles, 8 schools of "minnows". Fresh set barnacles on oily substrate?
2 Sea otter; 1 dead otter by worn out teeth, see map.
1 loon

Ecological Considerations: one of 3 expected eagle nests was seen, see map. A substantial stream w/ evidence of spawner remains was located in this subdivision. This is a subsistence deer harvest area and hatchery release route.

16 of 46

OG K. Marty

SEGMENT ST/ EV-60

SUBMISSION B(PT)

DATE 24 April 90

CHECKLIST

☐ Name
☐ Approx. Scale
☐ Sample Grid
☐ Oil Det.
☐ Notes
☐ Length
☐ % Cover
☐ Substrate Character
☐ Est. 1989/1990
☐ Soil
☐ Profile Location(s)
☐ Profile(s)
☐ Pit Location(s)
☐ Photo Location(s)

LEGEND

1 Δ

Pit - No Substrate Oil

2 Δ

Pit - Substrate Oil

CT/C

Continuous Distribution

CT/B

Broken Distribution

CT/P

Patchy Distribution

CT/S

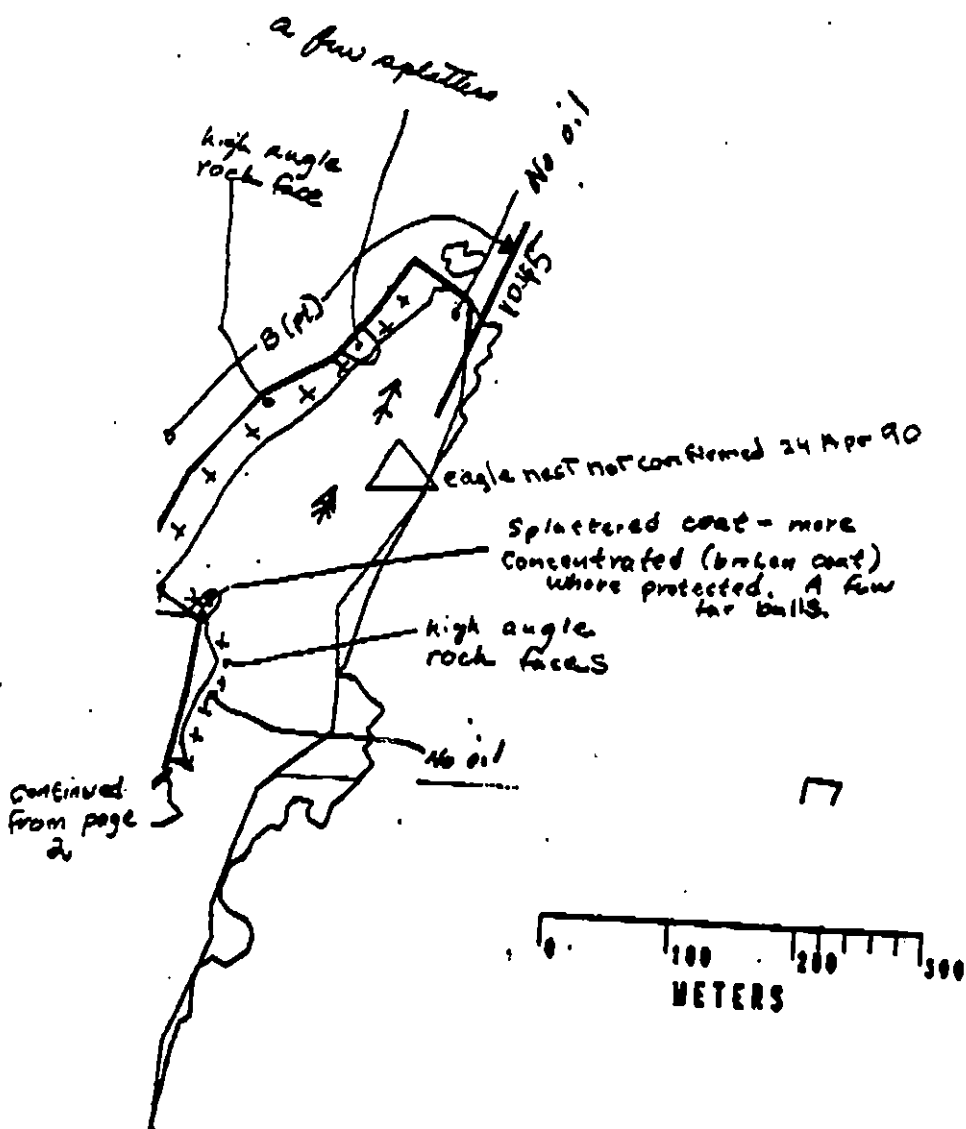
Spurred Distribution

Oil Vegetation

1 $\rightarrow$

Photo location, direction,
and number

SKETCH MAP



3/5

24 of 46

Oil Character Legend

AP

PO

CV

CT

ST

MS

TB

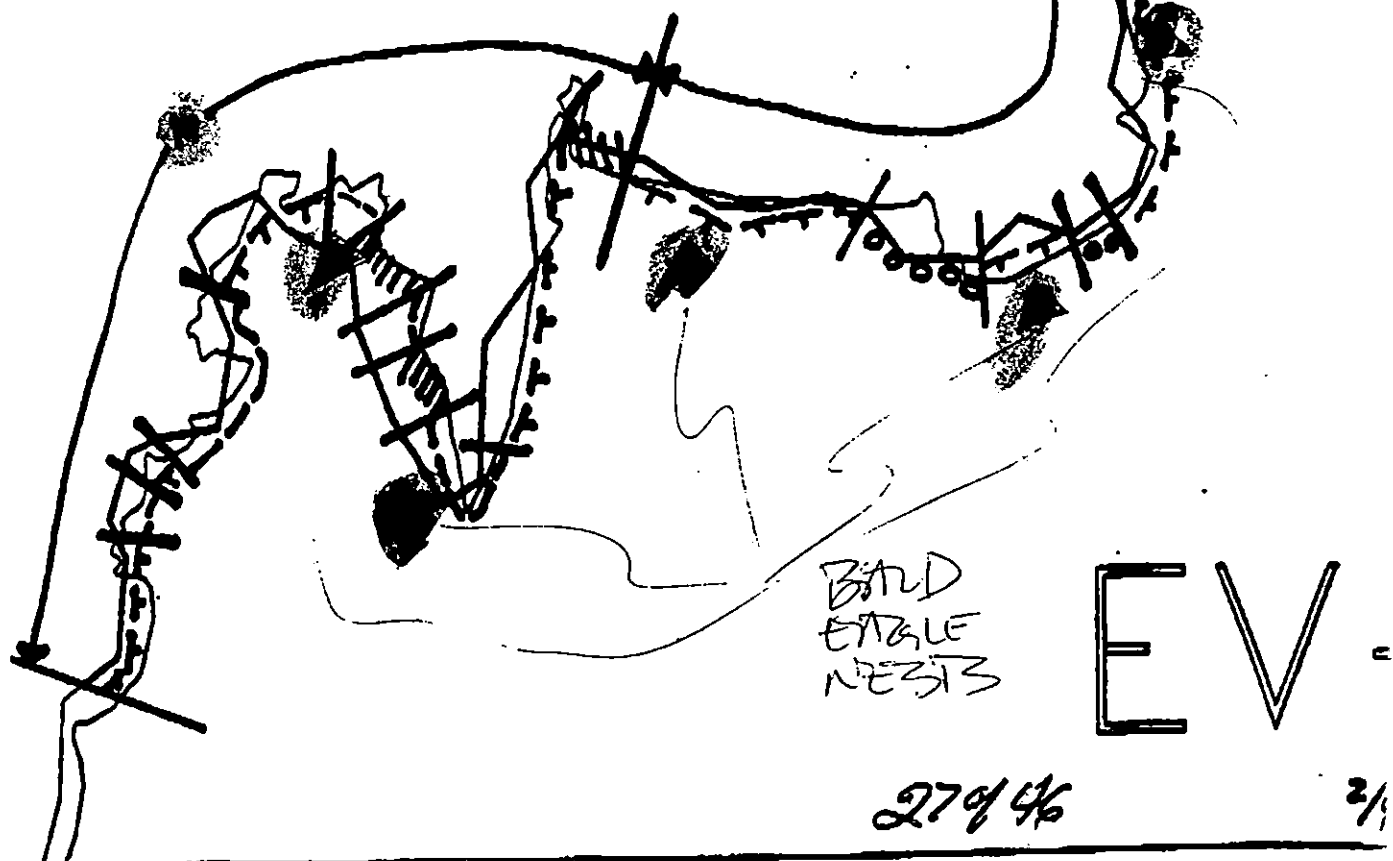
FL

NO

ECOLOGICAL MAP (Sheet 1 of 2)

EV-60B (cont)

EV-60



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

EV-60

ADEC Segment Length: 3688m

0 100 200 300
METERS

Map Key: PWS-2600

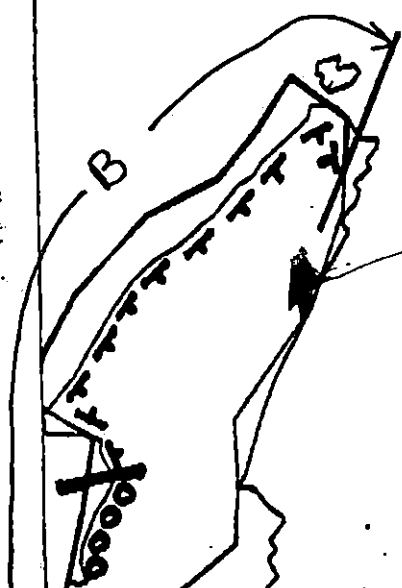
Name: R. Marty

Date: 24 April 1996

Date Entered:

ECC1061072

1471
Sheet
(2 of 2)



BARD EAGLE
NEST

28 of 46

4/4

XXXX Wide

//// Medium

--- Narrow

TTTT Very Light

0000 No Oil

EV-60

ADEC Segment Length: 3688m

0 100 200 300
METERS

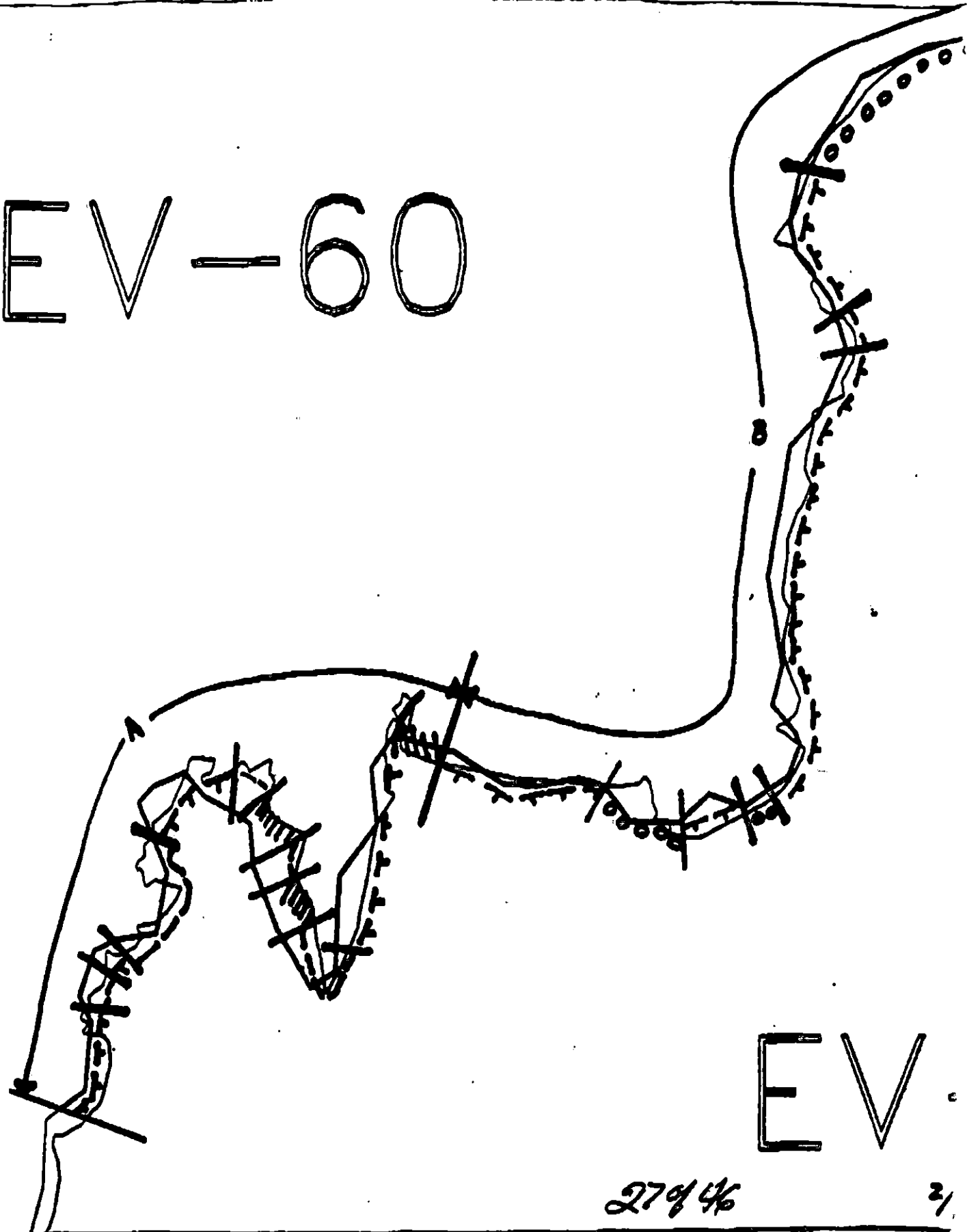
Map Key: PWS-260d

Name: R. Marty

Date: 24 April 1990

Date Entered:

EV-60



EV

2744

2/

XXXX Wide

//// Medium

--- Narrow

TTTT Very Light

OOOO No Oil

EV-60

ADEC Segment Length: 3688m

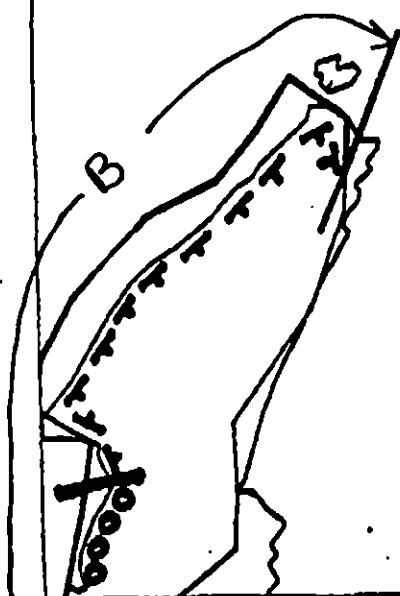


Map Key: PWS-260a

Name: R. Marty

Date: 24 April 1971

Date Entered:



28 g. 4%

4/4

XXXX Wide

//// Medium

--- Narrow

TTTT Very Light

0000 No Oil

EV-60

ADEC Segment Length: 3688m



Map Key: PWS-2604

Name: R. Marty

Date: 24 April 1990

Date Entered:

ADDENDUM: SUBDIVISION CONSTRAINTS

SEGMENT EV-60 SUBDIVISION A (1 of 2)

WORK WINDOW	
Manual Pickup Tarmat Removal	OPEN
Bioremediation & Manually Till	WORK PRIOR TO 8/15

ARCHAEOLOGICAL STANDARD CONSTRAINT

If cultural resources are uncovered, PHONE 564-3274.

APPLICABLE ECOLOGICAL TIME CONSTRAINTS

1F	Sawmill Bay Hatchery Release	No constraint to manual pickup, tarmat removal, bioremediation and manual tilling.
3N,3O	Harbor Seal and Seal Lion pupping	No time constraint. Authorized per memorandum dated 5/14/90 from Kathryn Frost/ADF&G to Mark Kuwada/ADF&G.
3O,3Q	Harbor Seal and Seal Lion molting	
5T	All Bald Eagle nests (3/1 to 6/1)	No constraint. USFWS 6/1/90 map indicates no active nest within 400m of subdivision A work areas.
7II	Subsistence area: Deer harvesting	Closed to bioremediation and manual tilling after 8/15. No constraint to manual pickup and tarmat removal.

OTHER ECOLOGICAL CONSIDERATIONS

Do not apply bioremediation to specific areas where seals are observed to haulout. 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. 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.

FOSC

Date

6-25-90

Prepared by

Rev P. C. C. C.

Date

6-25-90

EV-06^A

EV-60

EV-10

WORK
AREAS

EV-09

EV-08

ECOLOGY MAP SEGMENT EV-80

SUBDIVISION A (1 of 2)

METERS

0 505 1010

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

1 inch = 1657 feet



Exxon Company, USA
Map Key: PMS-EV-60
June 09, 1990



SHORELINE EVALUATION

SEGMENT ST/ EV-60 SUBDIVISION A (1 OF 2) DATE 4/24/90

SEGMENT ENVIRONMENTAL SENSITIVITIES AND TIME CONSTRAINTS:

1F Sawmill Bay Hatchery release (4/15 to 6/1)
5T-5 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-2 3 in adjacent segment (subdivision)

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: Reche Jan. Jan DATE: 5/22/90

OILING CATEGORIZATION:

Wide 0 m: Medium 170 m: Narrow 396 m: V. Light 591 m: No Oil 0 m
Subsurface Oil Observed: Yes X No Maximum Depth 30+ cm

RECOMMENDATIONS:

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

TRASH + DEBRIS

COMMENTS: Recommended treatment includes 1) manual pickup of oiled vegetation in areas indicated on sketch maps, 2) manual removal of tar balls, patties and tarmats in areas indicated on sketch maps, and 3) manually till and bioremediate areas indicated on sketch map. Work should be conducted after 6/1 with approval of USFWS due to eagle nest constraint.

SEE CONSTRAINT ADDENDUM
DATED 6-25-90 Ray C.

TAG COMMENTS: MONITORS TO ASSESS LOGS

TAG APPROVAL DATE: 5/21/90

ADEC Art Weimer Art Weimer

EXXON Andy Jan Andy Jan

NOAA Joseph T. Galt Joseph T. Galt

USCG G.A. Reiter G.A. Reiter

FOSC: DATE: 6-17-90

ADDENDUM: SUBDIVISION CONSTRAINTS

SEGMENT EV-60 SUBDIVISION B (2 of 2)

WORK WINDOW	
Manual Pickup Tarmat Removal	OPEN
Bioremediation & Manually Till	WORK PRIOR TO 8/15

ARCHAEOLOGICAL STANDARD CONSTRAINT

If cultural resources are uncovered, PHONE 564-3274.

APPLICABLE ECOLOGICAL TIME CONSTRAINTS

1F	Sawmill Bay Hatchery Release	No constraint to manual pickup, tarmat removal, and bioremediation.
3N,3O	Harbor Seal and Seal lion pupping	No time constraint. Authorized per memorandum dated 5/14/90 from Kathryn Frost/ADF&G to Mark Kuwada/ADF&G.
3O,3Q	Harbor Seal and Seal Lion molting	
5T	All Bald Eagle nests (3/1 to 6/1)	No constraint. USFWS 6/1/90 map indicates no active nest within 400m of subdivision A work areas.
7II	Subsistence area: Deer harvesting	Closed to bioremediation after 8/15. No constraint to manual pickup and tarmat removal.

OTHER ECOLOGICAL CONSIDERATIONS

Do not apply bioremediation to specific areas where seals are observed to haulout. 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. 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.

FOSC

Date

6-25-90

Prepared by

R. R. Chilton

Date

6-25-90

EV-06A

EV-60

WORK
AREAS

EV-10

EV-09

EV-08



Exxon Company, USA
Map Key: PMS-EV-60
June 09, 1990

ECOLOGY MAP
SEGMENT EV-60
SUBDIVISION B (2 of 2)
METERS

0 500 1010

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

1 inch = 1657 feet

SHORELINE EVALUATION

SEGMENT ST/ EV-60 SUBDIVISION B (2 OF 2) DATE 4/24/90

SEGMENT ENVIRONMENTAL SENSITIVITIES AND TIME CONSTRAINTS:

1F Sawmill Bay Hatchery release (4/15 to 6/1)
5T-5 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-3 and 2 adjacent nests.

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: Rachel Jones Dine DATE: 5/22/90

OILING CATEGORIZATION:

Wide 0 m: Medium 0 m: Narrow 40 m: V. Light 1498 m: No Oil 580 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>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: Recommended treatment includes 1) manual removal of tarmats and patties in areas indicated on sketch map, and 2) bioremediation of areas indicated on sketch map. Work should be conducted after 6/1 with approval of USFWS due to eagle nest constraint.

SEE CONSTRAINT ADDENDUM
DATED 6-25-90. Rev C.

TAG COMMENTS:

TAG APPROVAL DATE: 5/21/90

ADEC Ant Weiner Ant Weiner

EXXON AMY BL AMY BL

NOAA Gregg Tallon Gregg Tallon

USCG G.A. REITER G.A. REITER

FOSC: DATE: 6.17.90

SHORELINE EVALUATION

SEGMENT ST/ EV-60 SUBDIVISION A (1 OF 2) DATE 4/24/90

SEGMENT ENVIRONMENTAL SENSITIVITIES AND TIME CONSTRAINTS:

1F Sawmill Bay Hatchery release (4/15 to 6/1)
5T-5 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-2 3 in adjacent segment (subdivision)

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: Reckie Jan Dale DATE: 5/22/90

OILING CATEGORIZATION:

Wide 0 m: Medium 170 m: Narrow 396 m: V.Light 591 m: No Oil 0 m
Subsurface Oil Observed: Yes X No Maximum Depth 30+ 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 Removal	<u> </u> Beach Cleaner
	<u> </u> Other (see comments)

TRASH + DEBRIS

COMMENTS: Recommended treatment includes 1) manual pickup of oiled vegetation in areas indicated on sketch maps, 2) manual removal of tar balls, patties and tarmats in areas indicated on sketch maps, and 3) manually till and bioremediate areas indicated on sketch map. Work should be conducted after 6/1 with approval of USFWS due to eagle nest constraint.

TAG COMMENTS: MONITORS TO ASSESS LOGS

TAG APPROVAL DATE: 5/21/90

ADEC Art Weiner Art Weiner

EXXON Tracy Tracy

NOAA Joseph Joseph

FOSC: DATE: 6-17-90

OC: R. Marty

SEGMENT ST/ EV-60

SUBDIVISION A/P/10

DATE 27 April 90

CHECKLIST

- N. Area
- Approx. Scale
- Seafloor Study
- On Deck
- Watch
- Length
- % Cover
- Substrate Character
- East of W/L
- SS
- Profile Location(s)
- Photo Location(s)
- Photo Location(s)

LEGEND

- 1 A
- 2 A
- Fr. Subsurface Oil
- CT/C
- Continuous Distribution
- CT/B
- Broken Distribution
- CT/P
- Patchy Distribution
- CT/S
- Scattered Distribution
- Obs. Vegetation
- Photo location, direction, and number

1.67m wide band of broken coat becomes more concentrated in shallow subsurface. Tarry & sticky.

BIOREMEDIATION

Splattered band of coat.

No Oil

high angle rock faces

high angle rock face

C, B, P Pocket beach

C, B, P Pocket beach

Splattered coat

MANUALLY REMOVE TAR WATS/PATTIES

Eagle nest confirmed 24 Apr 90

C, B, P Pocket beach

Splattered coat

Tar balls & splatter - quite a bit of older pre-B. Valdez tar also. Becomes more tarry just below the surface

EV-60

Splattered tarry cover

Tar patties become more concentrated. Splattered coat. No evidence for penetration.

Tar patties widely scattered + some splattered coat.

No Oil

Tar patties

Splattered band near wide

patchy tar cover to 2m wide. This is heaviest under rocks

Fig. 2

Eagle nest confirmed 24 Apr 90

Scattered cover

Band of tarry cover, patchy 1/2m wide

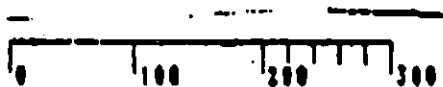
Splattered tar cover. Silver Sheen tide

P, G, SC pocket beach. Slate bedrock

UNCONFIRMED EAGLE NESTS 24 Apr 90

P, G berm C, P pocket beach. Dark gray slate

Stream venting ornaments



CRG R. Mayby

SEGMENT ST/ EV-60

SUBDIVISION A0 Mayby

DATE 28 April 90

CHECKLIST

- Map Area
- Approx. Scale
- Seg/Div Boundary
- On Data
- Notes
- Length
- S. Corner
- Subarea Orientation
- E in NW/AVE
- SS
- Public Location(s)
- Private Location(s)
- Private Location(s)

LEGEND

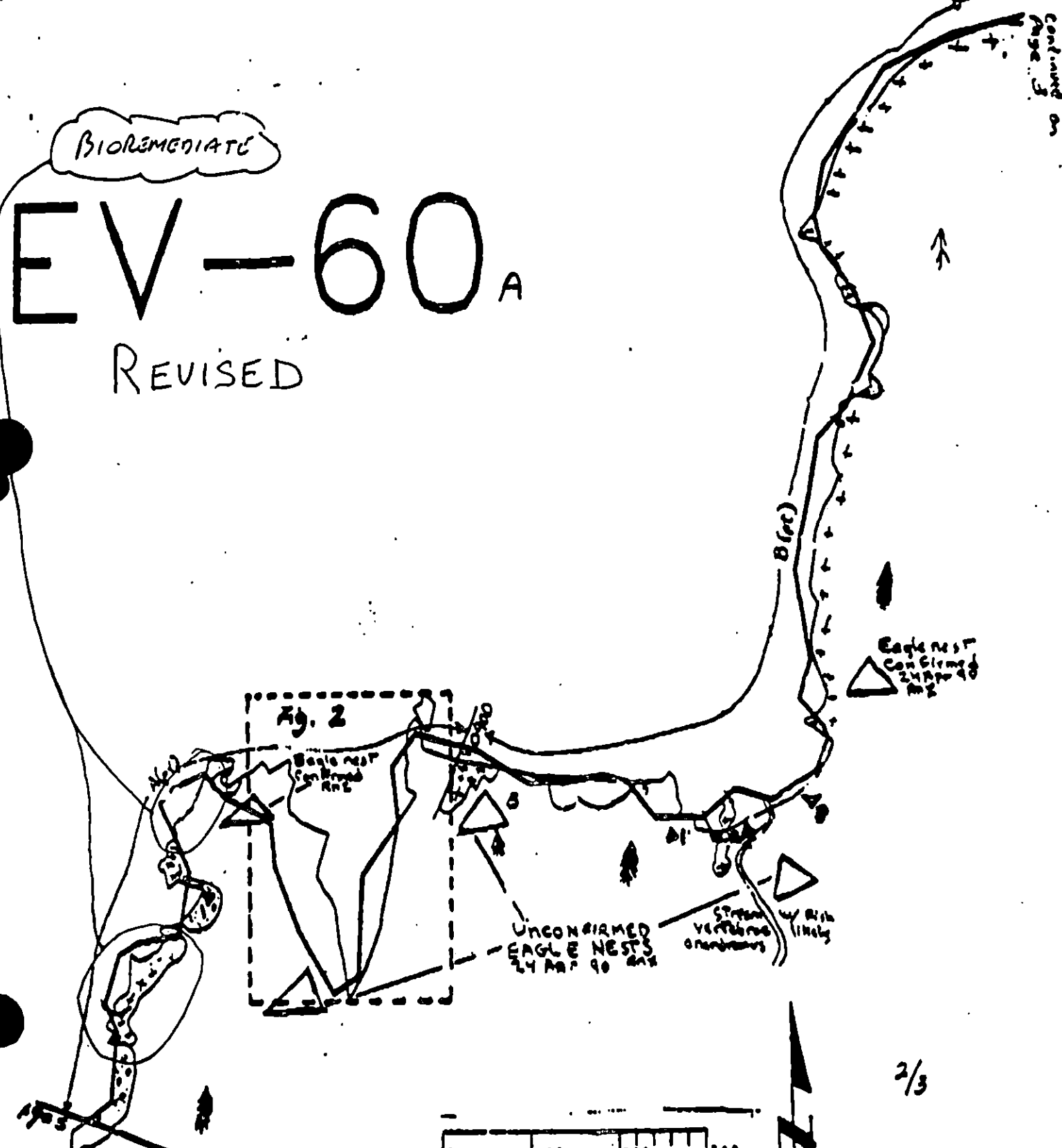
- 1 A
- 2 A
- Pr: Substation On
- CT/C
- Onshore Distribution
- CT/B
- Subarea Distribution
- CT/P
- Pr: Distribution
- CT/S
- Special Distribution
- CT/C
- Other Vegetation
- 0 00
- Pr: Location, Orientation, and number

Continued on
Page 3

BIOREMEDIATE

EV-60_A

REVISED



—

R. Marty 24 April 1990

Pocket #1

Pocket #3

MANUALLY REMOVE TAR MAT, TILL
THEN
BIR REMEDIATE

Tar patches & asphalt
in VITZ and STZ
10m x 2m x 40% x 3cm

Patchy 1m wide
band of terry
cover.

State CP
beach

Stop 4/25
Start 4/26

Tide pools along
bedding contact
between sandstone
+ slate - Silver
Sheen.

Patches of asphalt
in V12, ~4m x 8m
x 25% in among
angular boulders
~4cm thick.

Debris in STZ includes
55 gallon drum + 2 bags
of misc. uncoiled debris
but no oil in STZ

MANUALLY
REMOVE
TAR BALLS,
TAR PATSIES
& TAR MATS

Some for bullseye
parties + 0.3 m
of patchy cover.
~2m of forest at
South end of outcrop

Tar patches
in VITZ + 2m wide
band of broken film

Tar balls in Uitz
+ lower str

patchy asphalt in
rocks w/ mud

Asphalt 2m³ + 10m³/m²
50% = 5m³ m.e.k

2 bags of oiled
grass

Poker #
2

MANUALLY
REMOVE
OILED
VEGETATION

well sorted
P.G beach

2:10r

Spotted cover, but
no fair balls.

...ing decreases markedly

For balls become 1223
concentrated - in ST2
splattered brown cover - light
Sand

Send the B, C, P back.

likely and somewhat



MAIN SKETCH MAP

Figure 2
EV-60A (pt)

R. Marty 24 April 1990

Pocket #1

MANUALLY REMOVE TARMAT, TILL
THEN
DISPERSE

Pocket #3

Sub
Surface

Stop 4/23
Start 4/24

Pocket #2

MANUALLY
REMOVE
OILED
VEGETATION

stream
likely overflows

MANUALLY
REMOVE
TAR BALLS,
TAR PATCHES
& TAR MATS

REVISED
EV-60 A

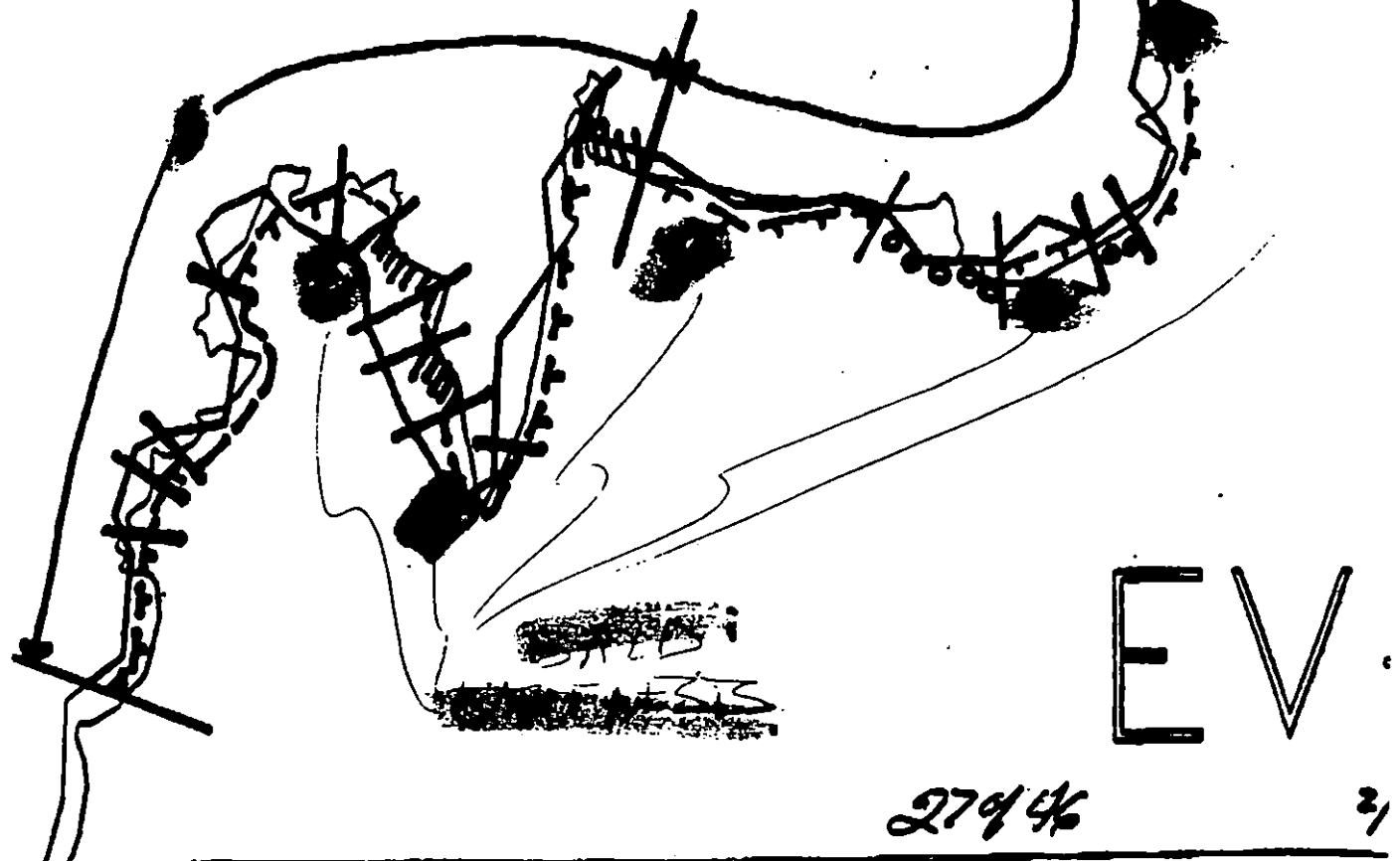


METERS



ECOLOGICAL MAP
EV-60A (1 of 2)

EV-60



XXXX Wide
//// Medium
--- Narrow

EV-60

ADEC Segment Length: 3688m

Map Key: PWS-260e

Name: R. Marty

" unadj. normal.

A	No	3.75"	563	487
	VL	6.0"	900	778
	L	3.3"	495	428
	M	1.5"	225	194
B	No	4.2"	630	544
	VL	9.4"	1410	1218
	L	0.3	45	39
			4168	3688

Note segment length from memo REC/smr. 032990.1 appears to be ADGC length and not Exxon length.



26 of 46

1/4

XXXX Wide

//// Medium

--- Narrow

TTTT

EV-60

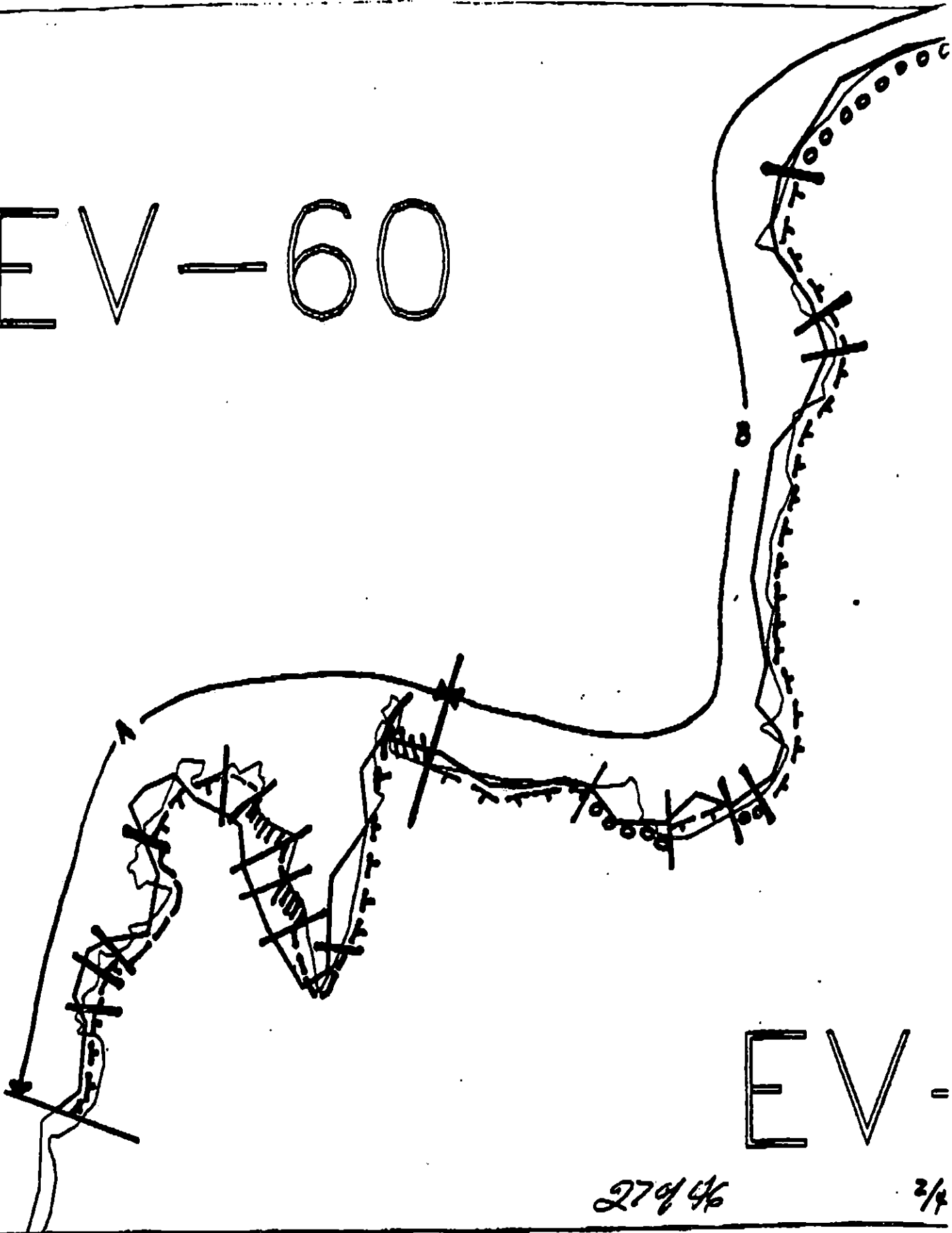
ADEC Segment Length: 3688m

Map Key: PWS-280c

Name: R. Marty

Date: 24 April 1990

EV-60



EV-

27 1/4

2/4

XXXX Wide
 //// Medium
 --- Narrow

EV-60

ADEC Segment Length: 3688m

Map Key: PWS-2600

Name: R. Marty

Date: 24 April 1990



SHORELINE EVALUATION

SEGMENT ST/ EV-60 SUBDIVISION B (2 OF 2) DATE 4/24/90

SEGMENT ENVIRONMENTAL SENSITIVITIES AND TIME CONSTRAINTS:

1F Sawmill Bay Hatchery release (4/15 to 6/1)
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SHPO SIGNATURE: Rachel Joan Oale DATE: 5/22/90

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Wide 0 m: Medium 0 m: Narrow 40 m: V.Light 1498 m: No Oil 580 m
Subsurface Oil Observed: Yes No X Maximum Depth

RECOMMENDATIONS:

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<u>X</u> Treatment Recommended	<u> </u> Oil Snares (pom poms)
<u>X</u> Manual Pickup	<u> </u> Absorbents (pads, rolls, etc)
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	<u> </u> Other (see comments)

COMMENTS: Recommended treatment includes 1) manual removal of tarmats and patties in areas indicated on sketch map, and 2) bioremediation of areas indicated on sketch map. Work should be conducted after 6/1 with approval of USFWS due to eagle nest constraint.

TAG COMMENTS:

TAG APPROVAL DATE: 5/21/90
ADEC Art Weimer Art Weimer
EXXON Amv Paul
NOAA Joseph Tallon
FOSC: DATE: 6-17-90

Conf. use on
Page 3.

71-62-60

[illegible]

1957

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BIOREMEDIATION

EV-60_B

REVISED

MANUALLY
REMOVE
TAR WATS/
PATIES

Eagle nest
Confirmed
24 Apr 90
AMZ

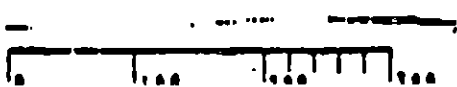
Fig. 2

Boyle War
Continued
RUE

UNCONFIRMED
EAGLE NESTS
24 APR 90 222

SPINAL W/ RISK
VERTEBRAL likely
anatomical

2/3



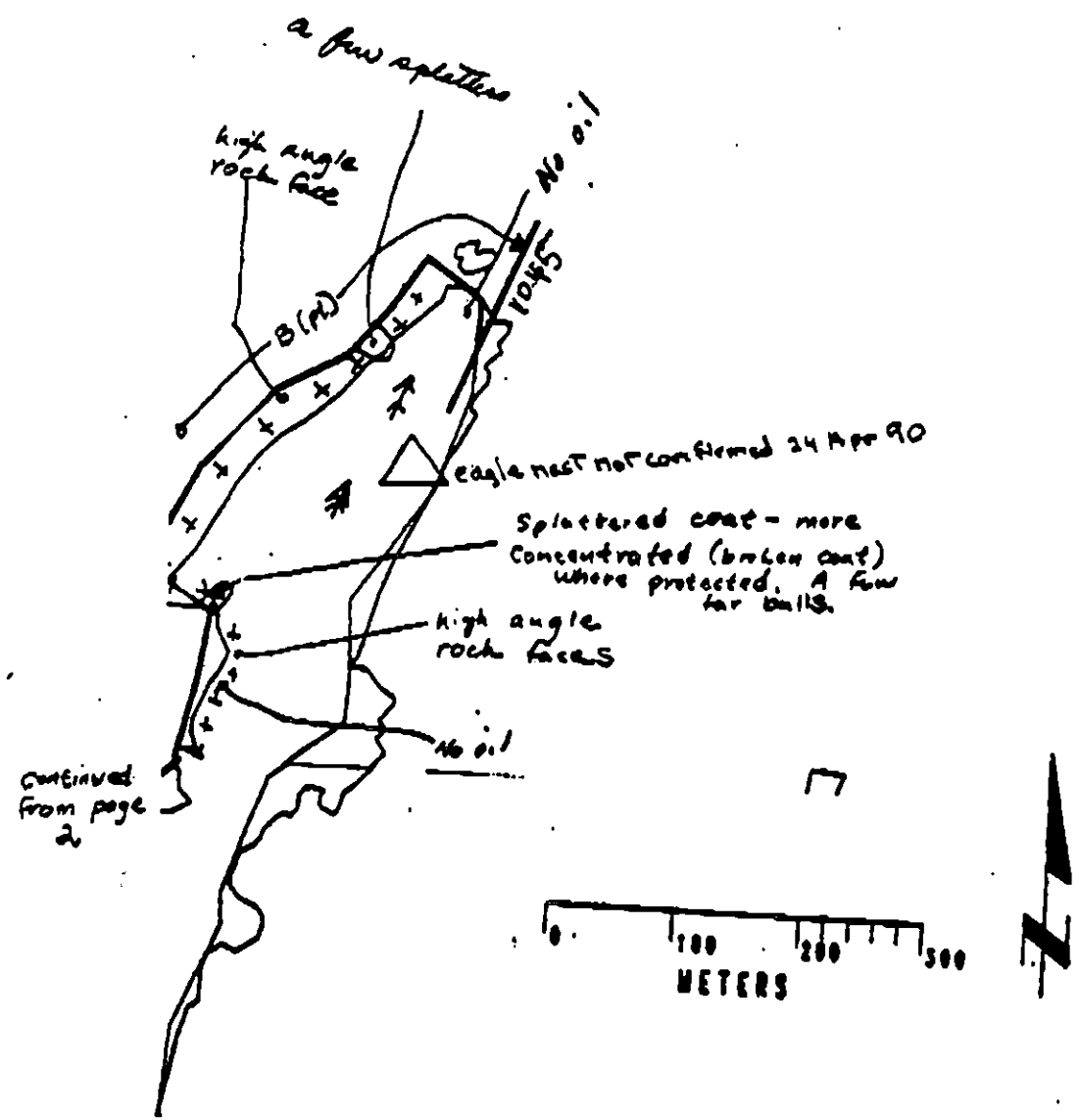
CHECKLIST

- Area
- Approx. Scale
- Surveyed Area
- Or Data
- Length
- % Cover
- Substrate Character
- Est. 1000 A.M.
- SS
- Profile Location(s)
- Profile(s)
- Photo Location(s)
- Photo Location(s)

LEGEND

- 1 Δ
- 2 Δ
- Pr. Substrate Or
- CT/C
- Continuous Distribution
- CT/B
- Broken Distribution
- CT/P
- Patchy Distribution
- CT/S
- Spotted Distribution
- 200
- Clad Vegetation
- 1 0-1
- Photo location, direction, and number

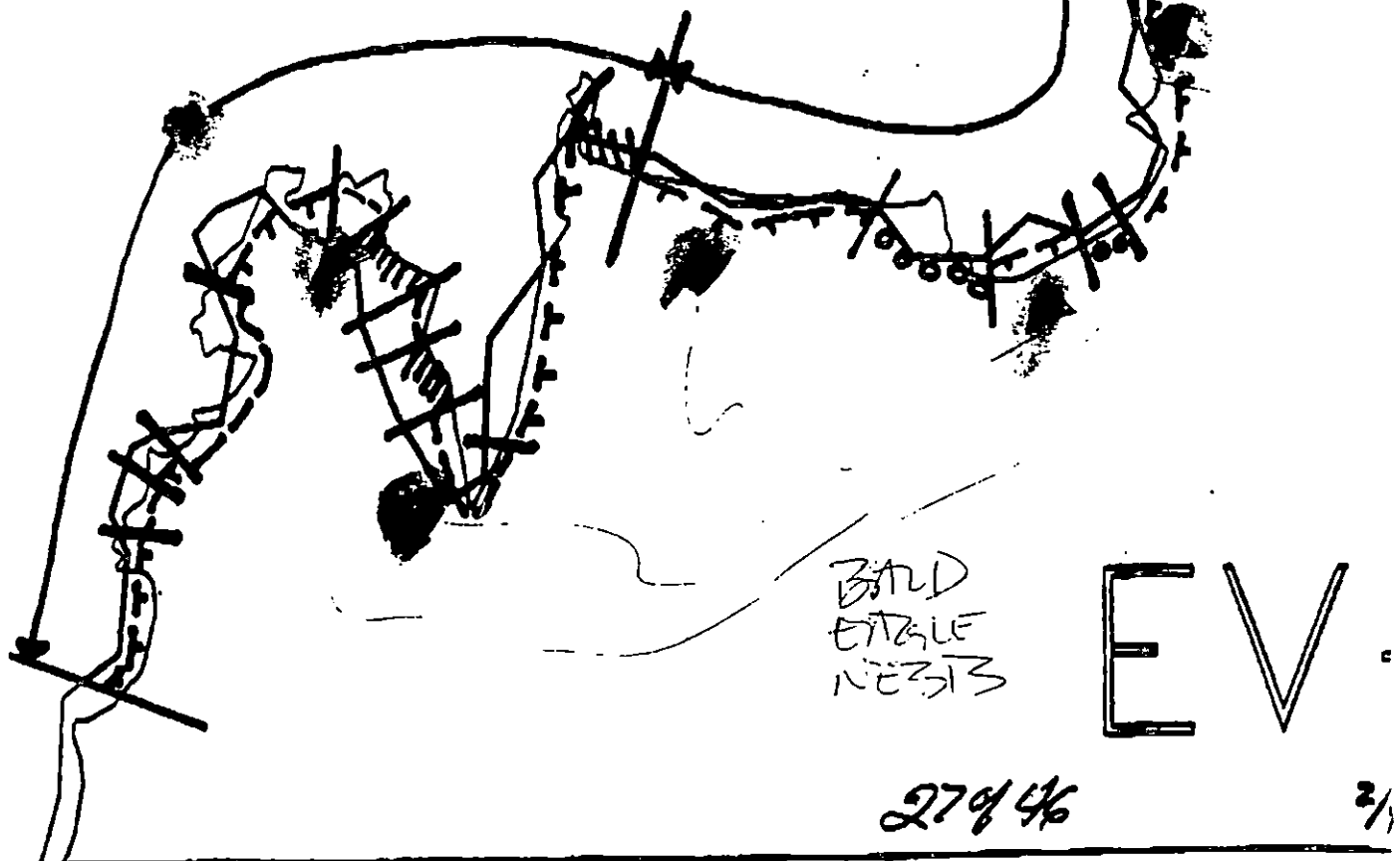
SKETCH MAP



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

(ORIGINAL MAP 1000000)
EV-60B (2 of 2)

EV-60



BIRD
EATLE
NESTS

EV

27 of 46

2/1

XXXX Wide
//// Medium
--- Narrow
... ..

EV-60

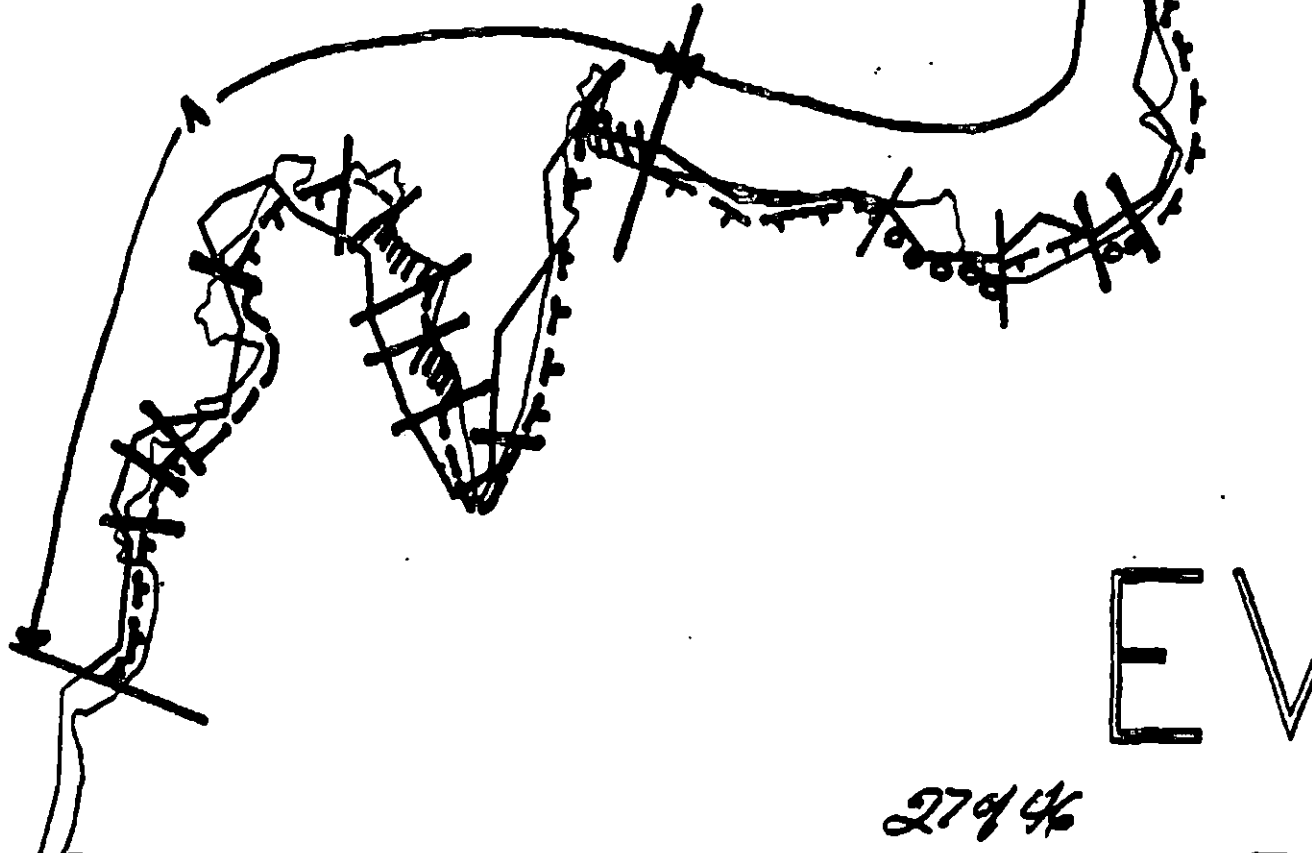
ADEC Segment Length: 3688m

Map Key: PWS-2600

Name: R. Marty

Date: 24 April 1996

EV-60



EV

27 of 46

2/

XXXX Wide

//// Medium

--- Narrow

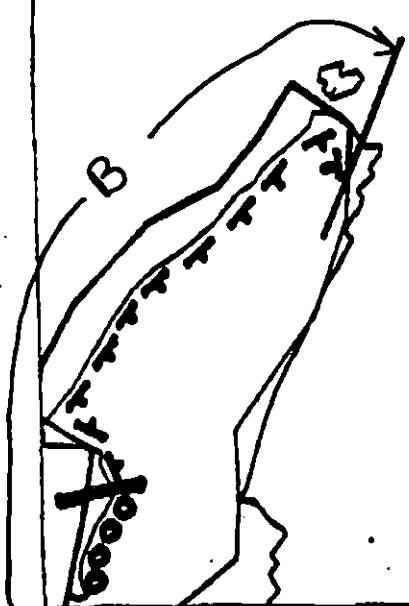
EV-60

ADEC Segment Length: 3688m

Map Key: PWS-260c

Name: B. Marty

20 April 1992



28 g. 46

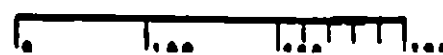
4/4

XXXX Wide
 //// Medium
 --- Narrow
 TTTT Very Light

EV-60

ADEC Segment Length: 3688m

Map Key: PWS-2604
 Name: R. Marty
 Date: 34 April 1990



1991 MAYSAP EVALUATION

SEGMENT: EV 060 **SUB:** A **REGION:** PWS **SURVEY DATE:** 5/1/91

ENVIRONMENTAL SENSITIVITIES:

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

Ecological/Constraints (see page two for details) Eagle nest,
Fry release, 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:** _____

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.

Fry Release: Unlimited treatment unless otherwise directed by ADF&G. Sheen containment/recovery procedures required for mechanical treatment.

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.

WAYSAP FIELD SHORELINE COMMENT SHEET

TEAM NO. 5 SEGMENT EV - 60 SUBDIVISION A DATE 5/1/91

ADEC

NAME _____

SIGNATURE _____

☒ NTR

Oiling observed on this site was AP/SOR/CU/CT most of the AP observed on portions surveyed was picked up. No subsurface oiling observed on this segment. No treatment recommended here at this time.

EXXON

NAME Martinez N.J.

SIGNATURE N.J. Martinez

☒ NTR

Worked this site last year. Site looks good & is recovering well. Very little if any recovery oil. Most AP was picked up. Found to be digg & breaking down. I don't believe further work is warranted on this site.

LANDMANAGER

NAME Steve Wink

OF CUC

SIGNATURE Steve Wink

☐ NTR

NO major amount of oil. Surface or Sub-Surface on this section. Lite patches of asphalt were picked up by team. thin strip of oil on vertical Rock Face. Spewer needles present.

USCG/NOAA

NAME Dreher / Hodges

SIGNATURE CWO K.L. Dreher

☒ NTR

Scattered tar balls observed in upper birm. Isolated tar patches and oil splatter in and on some large rocks.

REMOVED: 5/9/91 MC

TEAM NO. _____

OG CHANEYBIO CRANKSEGMENT EV 60ADEC HAYESLANDMANAGER WARD for CVCSUBDIVISION AKON MARTINEZUSCG/NOAA DREHER/HODGESDATE May 1, 1991TIME 06:50 to 09:40TIDE LEVEL +4 ft. to -1 ft.ENERGY LEVEL: ☐ H ☒ M ☐ LSURVEYED FROM: ☒ FOOT ☐ BOAT ☐ HELOWEATHER: ☐ SUN ☒ CLOUDS ☐ FOG ☒ RAIN ☐ SNOWTOTAL LENGTH SHORELINE SURVEYED: 758 mNEAR SHORE SHEEN: ☐ BR ☐ RB ☐ SL ☒ NONEEST. OIL CATEGORY LENGTH: W — m M 13 m N 90 m VL 390 m NO 265 m US 398 m

LOC	SURFACE OIL CHARACTER										SURFACE SEDIMENT TYPE	SHORE SLOPE V H M L	AREA		ZONE				NOTES
	AP	MS	TB	SOF	CV	CT	ST	FL	DB	NO			WIDTH m	LENGTH m	S	UI	MI	LI	
A	T				T	T					BC	M	15	130		✓	✓		Random Drip & Splatter
B						T					BC	M	1	20		✓			" "
C	T				T	S					BCR	M	2	20		✓			
D	P			S							BC	M	1	2		✓			
E	S				S	S					BC	M	2	3		✓			
F					T	S					BC	M	2	20		✓			
G	P										B	M	2	8		✓			
H	S				S	S					BC	M	0.5	60		✓			
I	S				S	P					BC	M	3	13		✓			
J	S			S							B	M	0.3	20		✓			
K				P							V	L	1	5		✓			Grass
L	T				T	S					BC	M	2	100		✓			
M	T				T	T					BC	M	1	100		✓			
N	S				T	S					BR	M	10	10		✓	✓		Surveyed as EV-60B in field

DISTRIBUTION: C = 91-100%; B = 51-80%; P = 11-50%; S = 1-10%; T = <1%

SLOPE: V = VERTICAL; H = HIGH ANGLE; M = MEDIUM ANGLE; L = LOW ANGLE PHOTO ROLL # MAYSAP- 5-7 FRAMES 1-13

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		
6	15							✓	-	-	-	-	✓				PG-P&B	
									-									
1	30			✓					10 - 15	Y	25	S		✓			PG - PG	Done as EV-60B
2	15				✓				10 - 15	N	10	SR		✓			PG - PGB	"
3	20						✓		- ?	?	15	S		✓			CP - PGB	"
4	30						✓		- ?	?	25	S		✓			CP - PGB	"
5	35							✓	-					✓			PC - PGC	"
									-									
									-									

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

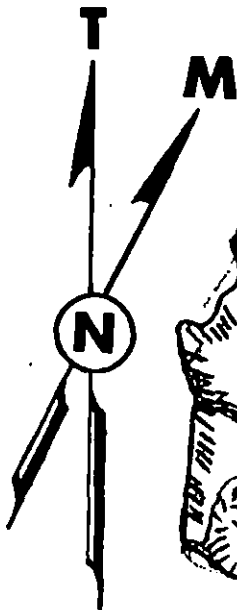
OG COMMENTS: FOR THE PURPOSE OF THIS SURVEY THE PROMINENT ROCK HEADLAND WAS USED TO DIVIDE SUBDIVISIONS A & B, THIS IS NOT THE SAME AS THE COMPUTER MAP SHOWS BUT THE ENTIRE TEAM'S NOTES WERE TAKEN BASED ON MY ENCLOSED SKETCH MAP, SO THE "NEW" DIVISION APPLIES TO THESE REPORTS.

SMALL ISOLATED PATCHES OF ASPHALT WERE OBSERVED AT THE LOCATIONS INDICATED ALONG THE HITZ OF THIS SUBDIVISION.

REVIEWED: 5/9/91 MC EV revised, May 8

MAP 1991
OG SKETCH MAP
GREG CHANEY
TEAM 5

SEGMENT: EVGO A
DATE: MAR 1 1991
AIR P.W. PIM 005 229



LEGEND

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

SCALE
30 METERS

ROUGHLY

(B) CT Trace
1x20
DRIPS AND
SPLATTERS

(C) 2x20m
CT 5%
CV < 1%
AP Trace

(D) 1x20m
AP 20%
SOR 10%
2 Patties PU

(E) 2x3m
AP 5%
CT 10%
CV 10%
2 Patties PU

(F) 2x20m
CT 5%
CV < 1%

(G) 2x8m
AP 20%
BETWEEN
BOULDERS
PU 2 Patties

(H) 0.5x60m
AP 2%
BETWEEN
BOULDERS
SMALL PATCHES
CT 5%
CV 5%
ISOLATED
PATTIES

(A) AP Trace
CV < 1%, CT < 1%
DRIPS AND SPLATTERS
ALONG MATZ to HITZ
1.5m x 130m

AP 2 patties
PU

(I) 3x13m
AP 10%
CT 20%
CV 5%

AP 3 PATTIES PU

(J) 0.3x20m SOR 10% ISOLATED

NOTE: PRE VALDER OIL SPATTERED
ALONG THIS SHORE LINE

EVGO B

SEE COMMENT
SECTION

(M) 1x100m
TRACE AP, CT, CV

OILING REPORTED
ON THIS MAP IS
REPRESENTED AFTER
MANUAL TREATMENT
WAS COMPLETED

MAP 1 of 2

(L) 2x100m CT 2% CV < 1%
ISOLATED PATCHES AP < 1%

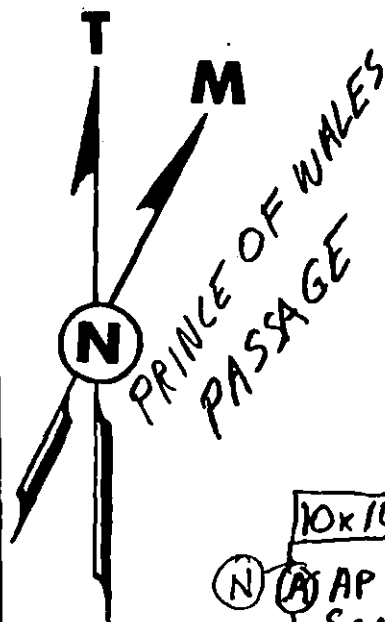
REVIEWED:
ML 5/1/91

MAP 1991
 DRAFT MAP
 GREG CHANEY

TEAM 5
 SEGMENT: EV-60A/B
 DATE: APRIL 29 1991
 AIR P.N. FIMC 005-229

(Copied for small section
 corresponding to EV-60A)

Map 2 of 2



LEGEND

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

SCALE
 40 METERS
 APPROX.

10x10m
 (N) AP 2%
 SCATTERED
 PATCHES
 CV < 1% CT 5%

SEE
 COMMENT
 SECTION

2x12m
 (B) RANDOM TAR
 SPLATTERS
 CV 2% CT 2%
 ST ~ 20%

(C) RANDOM
 TAR
 SPLATTERS
 0.5 x 4m
 CV 5%

(D) 5x30m
 CV TRACE
 CT TRACE

2x20m
 (G) CT 5% CV 1%
 AP/SOR TRACE
 BAND ON ROCKS

X APPROXIMATE
 EAGLE NEST
 LOCATION

(F) 5x5
 SOR TRACE

3 patches AP
 PU

(E) 5x10m
 TRACE SOR

EVANS ISLAND

NAYSAP BIOLOGICAL SUMMARY FORM

pg 1 of 2

TEAM # 5

DATE 1 MAY 1991

SEGMENT # EV-40

TIDAL HEIGHT (Range) +4 → 0'

SUBDIVISION A

BIOLOGIST Crank

SEA STATE 0 → 1'

WIND SPEED/DIRECTION 5 knots / E

PHOTOGRAPHS: ROLL #

FRAME #

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

(A) Area is located from the SUPRA to the high part of the MITZ. In the SUPRA and UITZ there is rare Fucus (sporelings are present), sparse Littorina, oligochaete worms (~2cm long) and isopods. The biota cover is less than 1%. In the high MITZ portion of site A, the biota cover is ~10% including a sparse concentration of barnacles and a dense concentration of Littorina. Most of biota below 'A' is similar to that found in upper MITZ. There is a ~8mx4m Fucus patch in a small runoff stream with ~75% cover and the rock outcrops have ~75% biota cover including moderate Fucus with maturing conceptacles (sporelings are present); dense Littorina; sparse Timipets; sparse to rare barnacles and Odonthalia (alga). Approx. 30m west of A there is a 3mx10m pocket of clams and mussel shells found between rock outcrops.

(B) Area is located on a separate pocket beach traveling east, in the UITZ. The beach is cobble with low rock outcrops. Within the site biota cover is ~30%. Fucus and Littorina are dominant. Sporelings and maturing conceptacles are present. Below the site, in the MITZ, biota cover remains ~30% with Fucus, Littorina, sparse barnacles and sparse intercobble mussels. The LITZ has ~60% biota cover. There is a moderate intercobble mussel bed, moderate Fucus, moderate barnacles and algae including Scytosiphon and filamentous and bladed reds. The biota appears to be healthy. There is an eagle nest approx. 30m west of site 'B'. Immature eagle observed flying - no matures observed.

WILDLIFE OBSERVATIONS

TO BE COMPLETED IN ALL SUBDIVISIONS

BIRDS	# OF SPECIES	TOTAL BIRDS	FISH OBSERVED SPECIES PRESENT
Eagles	1	1	
Seabirds	1	3	
Waterfowl	1	3	
Gulls/Kittiwakes	2	27	
Shorebirds			
Corvids	1	1	
Other Birds			

LAND MAMMALS

MARINE MAMMALS	# OBSERVED	SPECIES	# OBSERVED
Sea Otters			
Pinnipeds (specify)			
Es (specify)			

Shoreline subdivision map showing important biological features attached.

Team #5

Date: 1 May 1991

pg 2 of 5

Segment: EV-60

Tidal Height +4 → 0'

Subdivision: A

Biologist Crank

Sea State 0 → 1'

Wind Speed/Direction 5 knots/E

Comments (cont)

(C) Area is located in UITZ boulders on the next beach east of 'B'. There is ~5% biota cover within the site including tur spot algae, sparse corallines that tightly secrete their rock plates when stimulated, sparse mussels and patches of Fucus. Below the site in the MITZ, there is a dense patch of mussel bed with sparse to moderate Littorina and limpets. In the LITZ Odontalia, an alga, dominates. There is sparse Fucus and anemones in the few small tidepools. Biota cover below the site is ~70%. Flora and fauna both appear to be healthy.

(D) Area is located in the SUPRA and high UITZ. Within the site there is sprouting rye grass, green grass and black lichen covering about 5% of the surface area. In the MITZ, biota cover is ~40% on the rock outcrops, Fucus dominates on the northern rock and barnacles dominate on the ~~southern~~ rock. There are rare to sparse intercobble mussels from MITZ to LITZ. The LITZ has a 20% barnacle cover, various age classes, including a new set. Littorina and limpets have a moderate to sparse concentration.

Team #5

Date 1 May 1991

pg 3 of 5

Segment EV-60

Tidal Height +4 → 0'

Division A

Biologist Crank

Sea State 0 → 1'

Wind Speed/Direction 5 knots/E

Comments (cont.)

(E) Area is located high in the UITZ. Filamentous green algae and oligochaete worms are only macro-biota found in site. Less than 1% biota cover. Twenty meters below site, in the LITZ, there is a 60% biota cover. Fucus is predominant, mussels are sparse and gastropods (Littorina and limpets) are sparse to moderate.

(F) Area is located in the UITZ along a rock face. There is < 5% biota cover including rare concentrations of barnacles, Fucus sporelings, Littorina, limpets and Oligochaetes. Three meters below site in the MITZ there is approx. 5% cover including rare concentrations of Fucus sporelings and mussels, sparse to rare barnacles (a new set is present), and sparse Littorina and limpets. Seven meters below site, in the LITZ, there is approx 30% biota cover with Fucus dominant. LITZ is also a clam bed with Protetheca, Macoma and Hiatella clams.

(G) Area is located high in the UITZ along small angular boulders and cobbles. Drift Fucus, filamentous green algae and oligochaete worms are present within the site. There is less than 1% biota cover. The MITZ below site is boulder and cobble with ~20% biota cover including sparse barnacles, filamentous green algae, moderate Littorina and limpets, rare Fucus and rare mussels. The LITZ has a 30% biota cover including moderate barnacles, sparse Fucus, rare Littorina, dense Littorina (with eggs), Lepasterias (six arm seastar) and bladed filamentous green algae.

Team #5

Date: 1 May 1991

pg 4 of 8

Segment EV-60

Tidal Height +4 $\rightarrow$ 0'

Division A

Biologist Crank

Sea State 0 $\rightarrow$ 1'

Wind Speed/Direction 5 knots/E

Comments (cont)

(H) Area is located in the UITZ along boulders. Rare barnacles and sparse Fucus is concentrated along the bottom margin of the site covering $\sim 10\%$ of the surface. Rusty mussels are present in the UITZ 1m below site biota cover is $\sim 50\%$. A moderate concentration of barnacles is the dominant species and a sparsely concentrated intercobble mussel bed is present. The LITZ is a dense clam bed with Saxidomus (butter clam), Prototheca (little neck) and Macoma (pump nose). Otters have been digging in the clam bed. There is $\sim 25\%$ surface biota cover including sparse barnacles (new set present), dense Littorina, bladed red and green algae, filamentous red and green algae, amphipods and isopods.

(I) Area is located high in UITZ. Amphipods, filamentous green algae, black lichen and mosses are present. Less than 1% biota cover. Below area to stream are dense Littorina and egg masses, rare mussels and patches of moderately concentrated barnacles. Biota cover $\sim 20\%$.

(J) Area is located in the UITZ ~ 5 m west of stream. There are filamentous green algae and amphipods in the site and rare barnacles and Fucus below the site with approx 1% biota cover.

Team #5

Date 1 May 1991

pg 5 of 8

Segment EV-60

Tidal Height +4 $\rightarrow$ 0'

Subdivision A

Biologist Crank

Sea State 0 $\rightarrow$ 1'

Wind Speed / Direction 5 knots / E

Comments (cont)

(K) Area is located ~15m upstream from J behind log in the SUPRA.
There is a small patch of SOR silt in the rye grass. Plants are sprouting.

(L) Area is located in the UITZ. There are rare barnacles, rare to sparse Littorina, sparse to moderate limpets and filamentous green algae.
Biota cover is less than 1%. The MITZ has ~30% cover with dominant barnacles. Littorina and limpets are dense.

(M) Area is located high in the UITZ along a steep angle boulder beach. There are barnacles and Fucus present within the site; ~1% biota cover. The MITZ (~2m below) has a 20% biota cover. Barnacles and Fucus are the major species. There are a few 'stipe-only' Fucus plants present. The LITZ is a lush field of algae with a 95% biota cover. Palmaria, Polysiphonia, Pterasiphonia, Ulva, Enteromorpha, Urosperma and other red and green algae are present. Fucus is present and Littorina are dense.

This subdivision has a near shore kelp bed (Laminaria) and a lush algae cover in LITZ (except at 'D'). There are various sediment profiles and beach angles included in subdivision EV-60 A. Intertidal biota communities are, therefore, described in each area. The beach appears to be healthy.

MAYSAP BIOLOGICAL SUMMARY FORM

pg 1 of 3

TEAM # 5

DATE 1 May 1991

SEGMENT # EV-60

TIDAL HEIGHT (Range) 0 → -1.5

SUBDIVISION B A

BIOLOGIST Crank

SEA STATE 0 → 1'

WIND SPEED/DIRECTION 5 knots/E

PHOTOGRAPHS: ROLL # MAYSAP 7

FRAME # 16

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

(A) Area is in the UITZ, includes pits 1-5. There is a <1% biota cover within the site, including tar spot algae, amphipods and rare *Fucus*. Rich LITZ ~80% algae cover.

(B) Area is located in the UITZ and high MITZ. There is a ~10% biota cover. There is a rare to sparse barnacle concentration, approx. 20% of the shells are empty; live animals tightly sealed their inner plates when stimulated. Patches of sparse *Fucus* with sporelings, rare mussels and sparse *Littorina* and limpets are present. In LITZ below site is a clam bed.

(C) Area is located in the UITZ on fine gravel 15m NW of anadromous stream. No biota was found in site. Approx. 40% cover below site next to stream including sparse → moderate *Fucus* and barnacles and mod *Littorina*.

(D) Area is located in cobble and boulder UITZ. There is ~10% biota cover in the site including sparse barnacles (spot present), rare mussels, rare *Fucus* (sporelings present), tar spot algae, *Endocladia* (algae) and dense *Littorina* and limpets. Large *Pycnopodia* (seastar) 5m below site (see photo # roll 7 frame 16). In the MITZ there is ~30% biota cover. On a rock outcrop there is a 2m x 3m patch of 'stipe-only' *Fucus* plants. In the LITZ there is both a rock and sand area. The rock has 100% algae cover including filamentous and banded reds and greens, *Fucus*, *Halosaccion* and *Laminaria*. In the sand there is surfgrass, sand collars (moon snail egg cases) and many seastars (*Pycnopodia*). Half of the seastars are fresh dead.

WILDLIFE OBSERVATIONS

TO BE COMPLETED IN ALL SUBDIVISIONS

BIRDS	# OF SPECIES	TOTAL BIRDS	FISH OBSERVED SPECIES PRESENT
Eagles	1	1	
Seabirds	1	6	
Waterfowl			
Gulls/kittiwakes	1	12	
Shorebirds			
Corvids	1	1	
Other Birds			

MARINE MAMMALS	# OBSERVED	LAND MAMMALS SPECIES	# OBSERVED
Sea Otters			
Pinnipeds (specify)	3 Harbor Seals		
es (specify)	4 Seals		

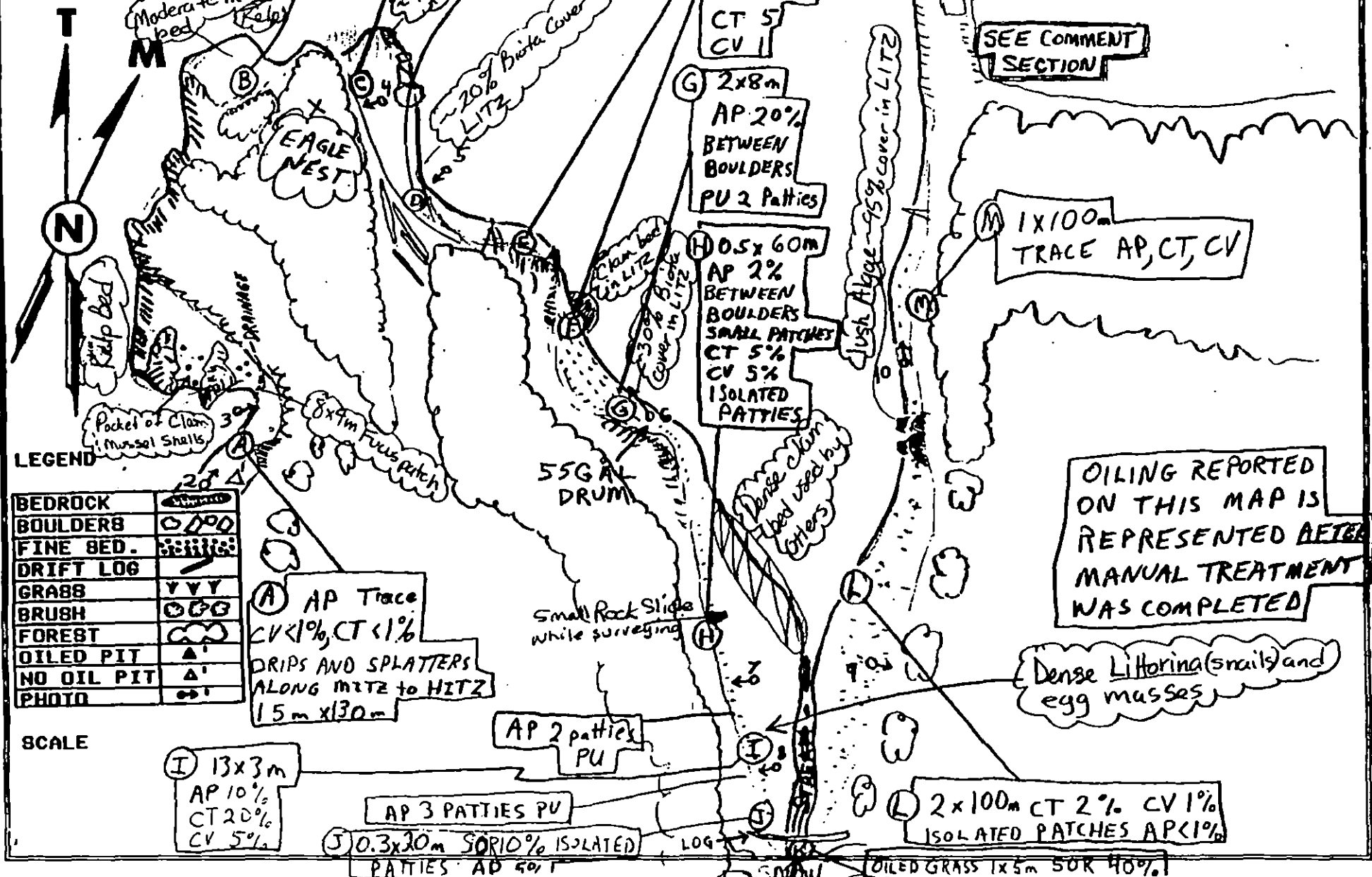
Shoreline subdivision map showing important biological features attached.

MAY 1991
 Bio: OG SKETCH MAP
 Crank: GREG CHANEY
 TEAM 5

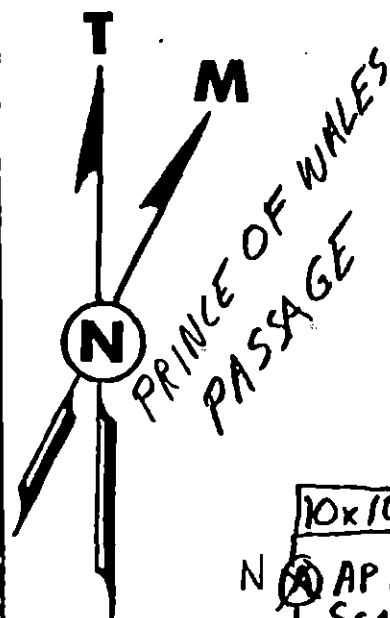
SEGMENT: EV60 A
 DATE: APRIL 29 1991
 AIR P.N.: PIMC005229

NOTE: PREVALDEZ OIL SPLATTERED
 ALONG THIS SHORE LINE

EV60 B



MAY 1991
 06 BATH MAP: Bio Skater Map
 GREG CHANEY: Crank
 TEAM 5
 SEGMENT: EV-60 B
 DATE: APRIL 29 1991
 AIR P.#: FIMC 005-229

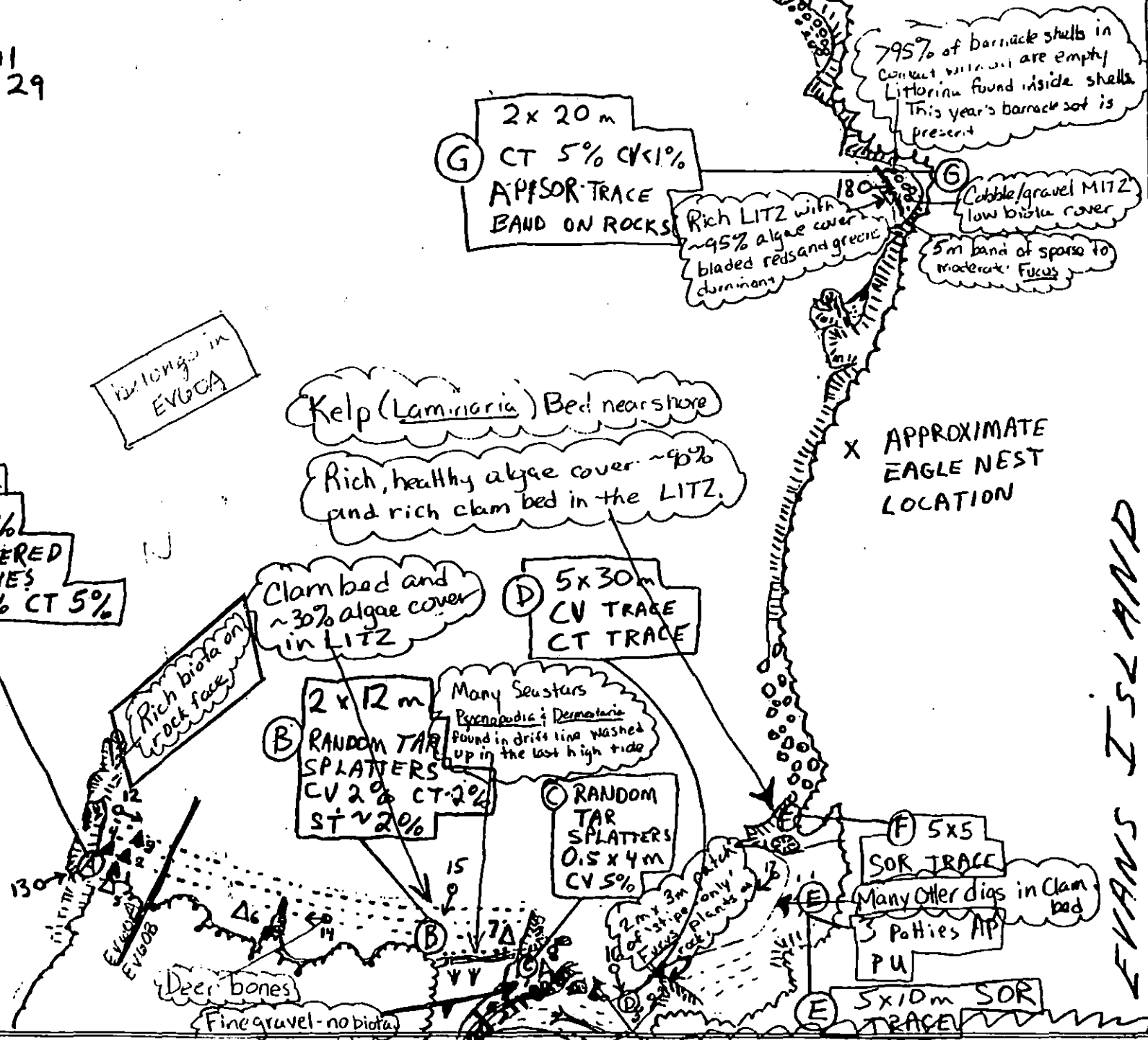


LEGEND

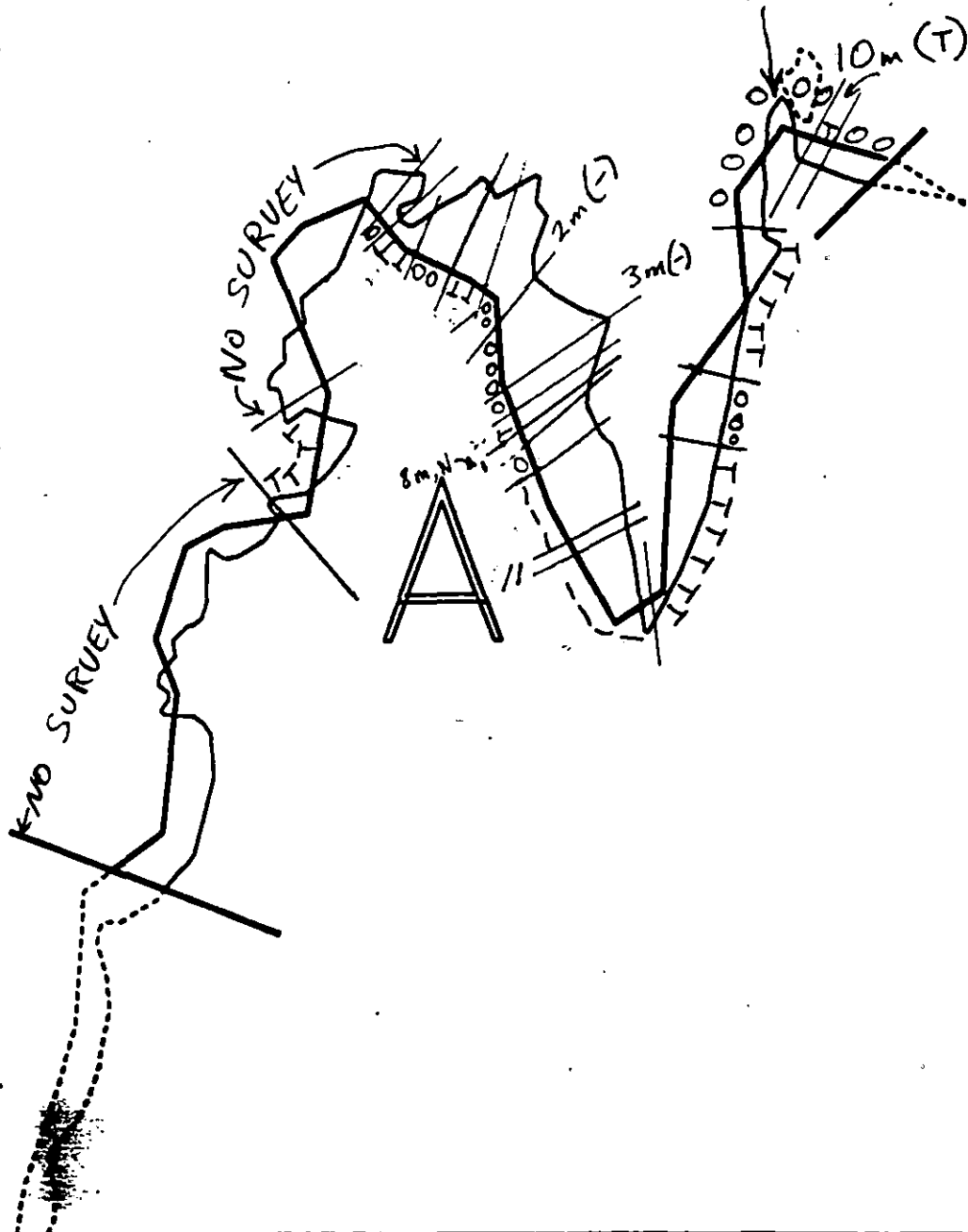
BEDROCK	
BOULDERS	
FINE BED.	
DRIFT LOG	
GRASS	
BRUSH	
FOREST	
OILED PIT	
NO OIL PIT	
PHOTO	

SCALE
 40 METERS

APPROX.



NOTE: IN THE
FIELD I THOUGHT
THAT THE SEGMENT
DIVISION BETWEEN 60
A & B WAS HERE



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

EV060 A
ADEC Subsegment Length: 1156m
METERS
0 100 200
AK State Plane Zone 4
psv0000



Subdivision Field Map
Map Key: PWSEV000A
Name: Thay Chaney
Date: April 29 1991
Date Entered:

Reviewed 5/19/91 WC
ET revised, May 8

1991 MAYSAP EVALUATION

SEGMENT: EV 060 SUB: B REGION: PWS SURVEY DATE: 5/1/91

ENVIRONMENTAL SENSITIVITIES:

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

Ecological/Constraints (see page two for details) Eagle nest, Fry release, 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: _____

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.

Fry Release: Unlimited treatment unless otherwise directed by ADF&G. Sheen containment/recovery procedures required for mechanical treatment.

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.

AYSAP FIELD SHORELINE COMMENT SHEET

TEAM NO. 5 SEGMENT EV-60 SUBDIVISION B DATE 5/1/91

ADEC

NAME

John Hayer

SIGNATURE

[Signature]

☒ NTR

Most of the oiling here was located in section A see sketch map the rest of the segment had light oiling that consisted of SOR, CV-splatters. Reassessment of section A subsurface oiling is advisable for the future. No immediate manual or mechanical work recommended at this time.

EXXON

NAME

Martinez M.J.

SIGNATURE

[Signature]

☒ NTR

Area looks good, no recoverable oil any additional work would not benefit the environment.

LANDMANAGER

NAME

Steve Ward

OF

CVR

SIGNATURE

[Signature]

☐ NTR

Some Sub-Surface Located, Long History of Sub-Surface in Site-A. Oil Located as small asphalt patches, saw picked this up during survey. No visible track. See ADEC Notes for Sub-Surface in one pocket

USCG/NOAA

NAME

DREHER / HODGES

SIGNATURE

[Signature]

☒ NTR

Some pits showed light oiling- very light spatter in upper beach area. Some oil cont/coverage with pine needles observed. No mobile oil.

MAYSAP SHORELINE OILING SUMMARY

 TEAM NO. 6

 OG CHANEY

 BIO CRANK

 SEGMENT EV 60

 ADEC HAYES

 LANDMANAGER WARD for CVC

 SUBDIVISION B

 ON MARTINEZ

 USCG/NOAA DREHER/HODGES

 DATE May 11 1991

 TIME 08:37 to 10:10

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

 EST. OIL CATEGORY LENGTH: W 0 m M 0 m N 0 m VL 81 m NO 607 m US 1430 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	S				T	S					BR	M	10	10	✓	✓			THIS AREA IS ACTUALLY IN EV 60 A
B					S	S	S				B	M	2	12		✓			
C					S						R	M	0.5	4		✓			
D					T	T					B	M	5	30		✓			
E				T							CB	M	5	10		✓			
F				T							R	M	5	5		✓			IN BED ROCK CRACKS
G	T			T	T	S					BR	M	2	20		✓			

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- 5-7 FRAMES 14-18

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	30			✓					10-15	Y	25	S		✓			PG-PG	PITS 1-5 WERE ACTUALLY IN EV 60 A. SEE BEL
2	15				✓				10-15	N	10	SR		✓			PG-PGR	
3	20							✓	?	?	15	S		✓			CP-PGB	
4	30							✓	?	?	25	S		✓			CP-PGB	
5	35							✓	-	-	-	-		✓			PG-PGC	
6	25							✓	-	-	20	N		✓			P-PGB	
7	20							✓	-	-	-	-		✓			P-PR	
									-	-	-	-						

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

OG COMMENTS:

SEVERAL PATCHES OF NON EXXON VALDEZ OIL WERE OBSERVED ALONG THIS SEGMENT BUT THE LOCATION OF THESE PATCHES WERE NOT NOTED.

FOR THE PURPOSE OF THIS SURVEY THE PROMINENT ROCK HEADLAND WAS USED TO DIVIDE SUBDIVISIONS A & B. THIS IS NOT THE SAME AS THE COMPUTER MAP SHOWS BUT THE ENTIRE TEAM'S NOTES WERE TAKEN BASED ON MY ENCLOSED SKETCH MAP, SO THE NEW DIVISION APPLIES TO THESE REPORTS.

ET revised, May 8

Team #5

Segment #EV-60

Subdivision B

Sea State 0 $\rightarrow$ 1

Date 1 May 1991

Tidal Height 0 $\rightarrow$ -1.5

Biologist Frank

Wind Speed / Direction 5 knots / E

pg 2 of 3

Comments (cont)

(E) Area is located high in the MITZ. There is ~40% biota cover; Barnacles are dominant and Littorina are moderate. Below site there is ~60% cover with sparse intercobble mussels, dense Littorina and moderate barnacles. The LITZ is a clam bed with many otter digs. Biota cover is ~40%. Bladed red and green algae is predominant.

(F) Area is in the UITZ in angular cobble and rock outcrops. There is ~25% biota cover including tar spot algae, sparse barnacles with tightly sealing inner plates, rare $\rightarrow$ sparse Fucus with sporelings, sparse Littorina and limpets with Littorina eggs present and rare mussels < 2 years old. LITZ below site is a dense clam bed and has rich dense algae cover (~90%).

(G) Area is ~~6~~ 1m band along a rockface in the UITZ. More than 95% of the adult barnacles shells in contact with the CT oil are empty. Rare juvenile barnacles and a new set are present. Sparse Littorina are present, many occupying the empty barnacle shells. Rare limpets are present. In MITZ below site is a 5m wide Fucus band with a sparse to moderate concentration. The LITZ has ~95% rich algae cover.

MAYSAP BIOLOGICAL SUMMARY FORM

pg 1 of 3

TEAM # 5

DATE 1 May 1991

SEGMENT # EV-60

TIDAL HEIGHT (Range) 0 → -1.5

SUBDIVISION B

BIOLOGIST Crank

SEA STATE 0 → 1'

WIND SPEED/DIRECTION 5 knots / E

PHOTOGRAPHS: ROLL # MAYSAP 7

FRAME # 110

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

- ⇒ belongs in EV-60
(A) Area is in the UITZ, includes pits 1 & 5. There is a <1% biota cover within the site, including tar spot algae, amphipods and rare *Fucus*. Rich LITZ ~80% algae cover.
- (B) Area is located in the UITZ and high MITZ. There is a ~10% biota cover. There is a rare to sparse barnacle concentration, approx. 20% of the shells are empty; live animals tightly sealed their inner plates when stimulated. Patches of sparse *Fucus* with sporelings, rare mussels and sparse *Littorina* and limpets are present. In LITZ below site is a clam bed.
- (C) Area is located in the UITZ on fine gravel 15m NW of anadromous stream. No biota was found in site. Approx. 40% cover below site next to stream including sparse → moderate *Fucus* and barnacles and mod *Littorina*.
- (D) Area is located in cobble and boulder UITZ. There is ~10% biota cover in the site including sparse barnacles (spat present), rare mussels, rare *Fucus* (sporelings present), tar spot algae, *Endocladia* (alga) and dense *Littorina* and limpets. Large *Pycnopodia* (seastar) 5m below site (see photo # roll 7 frame 110). In the MITZ there is ~30% biota cover. On a rock outcrop there is a 2m x 3m patch of 'stipe-only' *Fucus* plants. In the LITZ there is both a rock and sand area. The rock has 100% algae cover including filamentous and bladed reds and greens, *Fucus*, *Halosaccion* and *Laminaria*. In the sand there is surfgrass, sand collars (moon snail egg cases) and many seastars (*Pycnopodia*). Half of the seastars are fresh dead.

WILDLIFE OBSERVATIONS

TO BE COMPLETED IN ALL SUBDIVISIONS

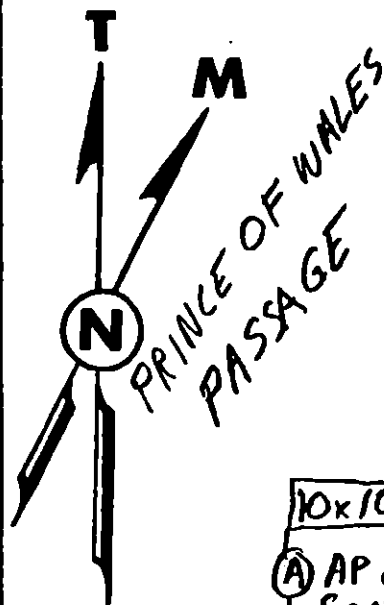
BIRDS	# OF SPECIES	TOTAL BIRDS	FISH OBSERVED SPECIES PRESENT
Eagles	1	1	
Seabirds	1	6	
Waterfowl			
Gulls/Kittiwakes	1	12	
Shorebirds			
Corvids	1	1	
Other Birds			

MARINE MAMMALS	# OBSERVED	LAND MAMMALS SPECIES	# OBSERVED
Sea Otters			
Pinnipeds (specify)	3 Harbor Seals		
Es (specify)	4 Seals		

Shoreline subdivision map showing important biological features attached.

Round algal r.m.

MAY 1991
 OG SKETCH MAP
 GREG CHANEY
 TEAM 5
 SEGMENT: EV-60 B
 DATE: APRIL 29 1991
 AIR P.H. FIMC 005-229



LEGEND

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

SCALE
 40 METERS
 APPROX.

10x10m
 (A) AP 2%
 SCATTERED
 PATCHES
 CV<1% CT 5%

SEE
 COMMENT
 SECTION

2x12m
 (B) RANDOM TAR
 SPLATTERS
 CV 2% CT 2%
 ST ~20%

(D) 5x30m
 CV TRACE
 CT TRACE

(C) RANDOM
 TAR
 SPLATTERS
 0.5x4m
 CV 5%

2x20m
 (G) CT 5% CV<1%
 APPSOR TRACE
 BAND ON ROCKS

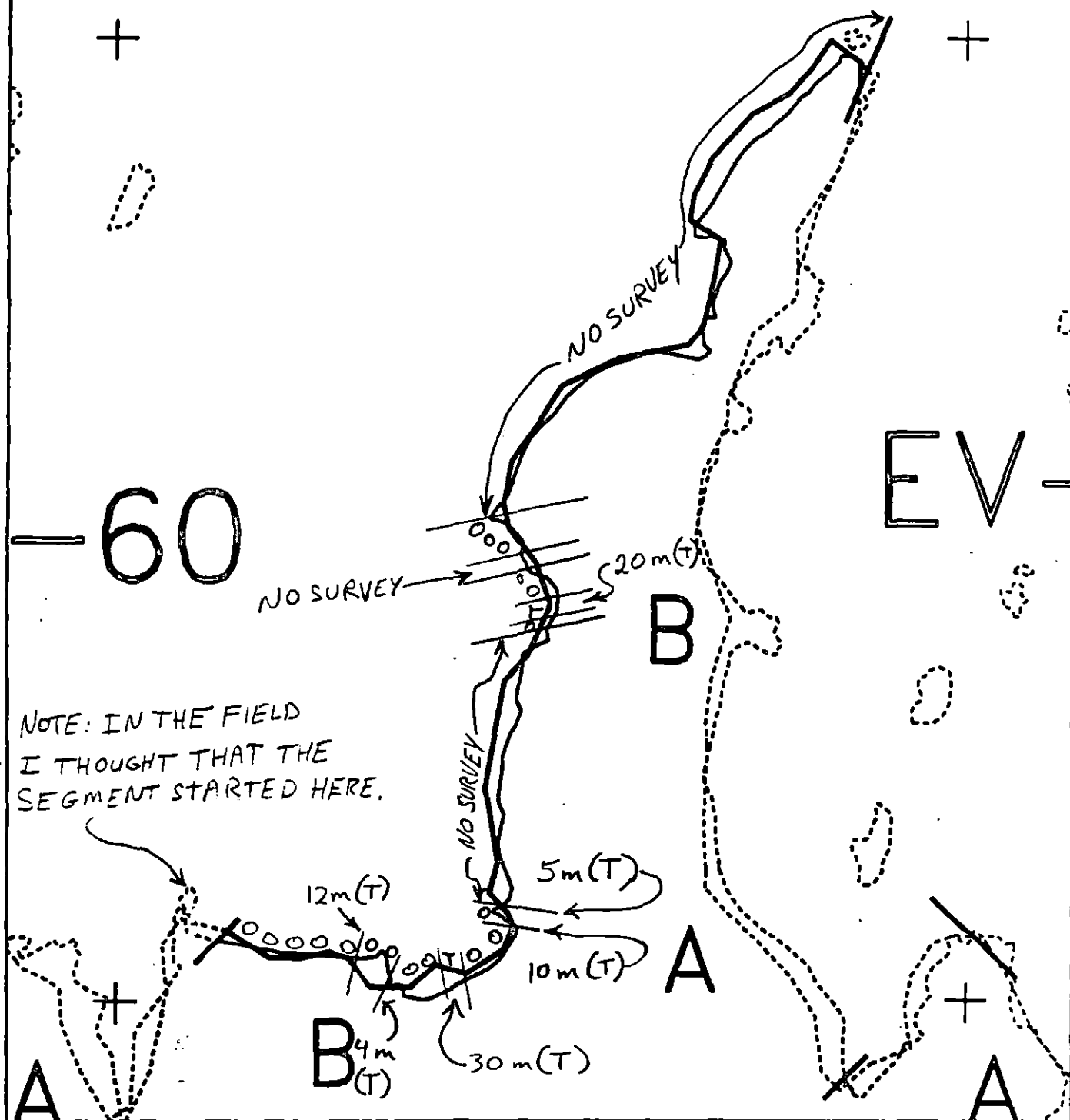
X APPROXIMATE
 EAGLE NEST
 LOCATION

(F) 5x5
 SOR TRACE

3 patches AP
 PU

(E) 5x10m SOR
 TRACE

EVANS ISLAND



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

EV060 B
 ADEC Subsegment Length: 2110m
 METERS
 0 200 200
 AK State Plane Zone 4
 psv060b

Subdivision Field Map
 Map Key: PWSEV060B
 Name: Chaney
 Date: April 29 1991
 Date Entered:

Reviewed: MC 5/9/91

ET revised, May 8

Team #5

Date 1 May 1991

pg 3 of 3

Segment #EV-60

Tidal Height 0 $\rightarrow$ -1.5

Division B

Biologist Crank

Sea State 0 $\rightarrow$ 1'

Wind Speed/Direction 5 knots/E

Comment (cont)

There is a kelp (Laminaria) bed near shore. The LITZ along this subdivision has a rich, dense and diverse algae cover including many bladed and filamentous reds and greens. There are many sea stars including Pycnopodia (sunflower), Leptasterias (six-armed) and Dermasteria (leather).

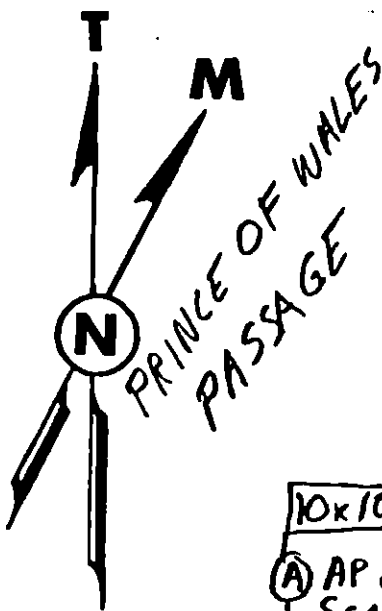
Ribbon worms, peanut worms and juvenile eels are found under cobbles. Much of the LITZ is also a clam bed with Prototheca (little neck), Hiatella, Macoma (bent-nose) and Saxidomus (butter).

The MITZ has a 10-40% cover dominated by barnacles and Fucus. Most of the UITZ has a low biota cover ($<10\%$).

Along the drift line are many sunflower seastars washed up in the last high tide, most are still alive. However half of the seastars below area 'D' are fresh dead (arms turned up at tips, tube feet present but not functioning).

There is an eagle nest located in the subdivision. Unable to tell if active.

AP 1991
 OG SKETCH MAP: Bio Station Map
 GREG CHANEY - Crank
 TEAM 5
 SEGMENT: EV-60 B
 DATE: APRIL 29 1991
 AIR P.#: FIMC 005-229



LEGEND

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

SCALE
 40 METERS
 APPROX.

10x10m
 (A) AP 2%
 SCATTERED
 PATCHES
 CV<1% CT 5%

2x20m
 (G) CT 5% CV<1%
 APPSOR TRACE
 BAND ON ROCKS

Rich LITZ with
 ~95% algae cover
 bladed reds and greens
 dominant

795% of barnacle shells in
 contact with oil are empty
 Littorina found inside shells
 This year's barnacle set is
 present

(6) Cobble/gravel MITZ
 low biota cover
 5m band of sparse to
 moderate Fucus

Kelp (*Laminaria*) Bed near shore
 Rich, healthy algae cover ~95%
 and rich clam bed in the LITZ

X APPROXIMATE
 EAGLE NEST
 LOCATION

Clam bed and
 ~30% algae cover
 in LITZ

(D) 5x30m
 CV TRACE
 CT TRACE

2x12m
 (B) RANDOM TAR
 SPLATTERS
 CV 2% CT 2%
 ST ~20%

Many Seastars
Pyrenopoda & *Dermasteria*
 found in drift line washed
 up in the last high tide

(C) RANDOM
 TAR
 SPLATTERS
 0.5x4m
 CV 5%

(F) 5x5
 SOR TRACE
 Many other digs in Clam
 bed
 3 Pothies AP
 PU

(E) 5x10m SOR
 TRACE

Rich biota on
 rock face
 130
 14
 15
 16
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 99
 100

Deer bones

Fine gravel - no biota
 observed

EVANS ISLAND

1991 MAYSAP EVALUATION

SEGMENT: EV 060 SUB: B REGION: PWS SURVEY DATE: 5/1/91

ENVIRONMENTAL SENSITIVITIES:

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

Ecological/Constraints (see page two for details) Eagle nest,
Fry release, Fish harvest area, Subsistence - Deer harvesting

ARCHAEOLOGICAL CONSTRAINTS:

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

SHPO Signature: Rachel Dan Owe Date: 5/17/91

RECOMMENDATIONS:

INITIAL

TAG

FOSC

TREATMENT REQUIRED (Y or N)

N



4

Manual Pickup (Check as Req.)

Spot Washing

Bio-Customblen Only

Bio-Inipol/Custombien

Other

Other

COMMENTS:

INITIAL:

TAG:

FOSC:

TAG APPROVAL DATE: 11/17/1991

FOSC APPROVAL DATE: 25 MAY 1991

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.

Fry Release: Unlimited treatment unless otherwise directed by ADF&G. Sheen containment/recovery procedures required for mechanical treatment.

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-60 SUBDIVISION B DATE 5/1/91

ADEC

NAME

John Hayes

SIGNATURE

[Signature]

☒ NTR

Most of the oiling here was located in section A see sketch map the rest of the segment had light oiling that consisted of SOR, CV + splatters. Reversesuit of section A subsurface oiling is advisable for the future. No immediate manual or mechanical work recommended at this time.

EXXON

NAME

Martinez N.J.

SIGNATURE

[Signature]

☒ NTR

Area looks good, no recoverable oil any additional work would not benefit the environment.

LANDMANAGER

NAME

Steve WARD

OF

CV

SIGNATURE

[Signature]

☐ NTR

Some Sub-Surface Located, Long History of Sub-Surface in Site-A. Oil Located as small asphalt patches, saw picked this up during survey. No visible trash. See ADEC Notes for Sub-Surface in one pocket

USCG/NOAA

NAME

DREHER/HODGES

SIGNATURE

[Signature]

☒ NTR

Some pits showed light oiling - very light spatter in upper beach area. Some oil cont/coverage with pine needles observed. No mobile oil.

5

MAYSAP SHORELINE OILING SUMMARY

PAGE 1 OF 1

TEAM NO.

OG CHANEY

BIO CRANK

SEGMENT EV 60

ADEC HAYES

LANDMANAGER WARD for CVC

SUBDIVISION B

ON MARTINEZ

USCG/NOAA DREHER/HODGES

DATE May 11 / 91

TIME 08:37 to 10:10

TIDE LEVEL 0 ft. to -1 ft.

ENERGY LEVEL: ☒ H ☐ M ☐ LSURVEYED FROM: ☒ FOOT ☐ BOAT ☐ HELOWEATHER: ☐ SUN ☒ CLOUDS ☐ FOG ☐ RAIN ☐ SNOW

TOTAL LENGTH SHORELINE SURVEYED: 688 m

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

EST. OIL CATEGORY LENGTH:

W 0 m M 0 m N 0 m VL 81 m NO 607 m US 1430 m

L O C	SURFACE OIL CHARACTER										SURFACE SEDIMENT TYPE	SHORE SLOPE V H M L	AREA		ZONE				NOTES
	AP	MS	TB	SO	CV	CT	ST	FL	DB	NO			WIDTH m	LENGTH m	S	UI	MI	LI	
A	S				T	S					BR	M	10	10	✓	✓			THIS AREA IS ACTUALLY IN EV 60 A.
B					S	S	S				B	M	2	12		✓			
C					S						R	M	0.5	4		✓			
D					T	T					B	M	5	30		✓			
E					T						CB	M	5	10		✓			
F					T						R	M	5	5		✓			IN BED ROCK CRACKS
G	T				T	T	S				BR	M	2	20		✓			

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-

5

7

FRAMES

14 - 18

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	30			✓					10-15	Y	25	S		✓			PG-PG	PITS 1-5 WERE
2	15				✓				10-15	N	10	SR		✓			PG-PGB	ACTUALLY IN
3	20							✓	?	?	15	S		✓			CP-PGB	EV 60 A. SEE BELD.
4	30							✓	?	?	25	S		✓			CP-PGB	
5	35							✓	-	-	-	-		✓			PG-PGB	
6	25							✓	-	-	20	N		✓			P-PGB	
7	20							✓	-	-	-	-		✓			P-PR	

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

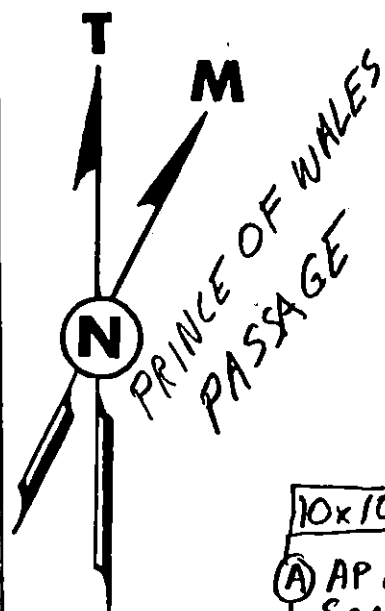
OG COMMENTS:

SEVERAL PATCHES OF NON EXXON VALDEZ OIL WERE OBSERVED ALONG THIS SEGMENT BUT THE LOCATION OF THESE PATCHES WERE NOT NOTED.

FOR THE PURPOSE OF THIS SURVEY THE PROMINENT ROCK HEADLAND WAS USED TO DIVIDE SUBDIVISIONS A & B. THIS IS NOT THE SAME AS THE COMPUTER MAP SHOWS BUT THE ENTIRE TEAM'S NOTES WERE TAKEN BASED ON MY ENCLOSED SKETCH MAP, SO THE NEW DIVISION APPLIES TO THESE REPORTS.

ES revised, May 8

MAP 1991
 06 WATCH MAP
 GREG CHANEY
 TEAM 5
 SEGMENT: EV-60 B
 DATE: APRIL 29 1991
 AIR P.#: PIMC 005-229



LEGEND

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

SCALE
 40 METERS
 APPROX.

10x10m
 A AP 2%
 SCATTERED
 PATCHES
 CV<1% CT 5%

EV 60 A
 EV 60 B

SEE
 COMMENT
 SECTION

2x12m
 B RANDOM TAR
 SPLATTERS
 CV 2% CT 2%
 ST ~ 20%

D 5x30m
 CV TRACE
 CT TRACE

C RANDOM
 TAR
 SPLATTERS
 0.5x4m
 CV 5%

F 5x5
 SOR TRACE

3 patches AP
 PU

E 5x10m SOR
 TRACE

G 2x20m
 CT 5% CV<1%
 APPSOR TRACE
 BAND ON ROCKS

X APPROXIMATE
 EAGLE NEST
 LOCATION

EVANS ISLAND

MAYSAP BIOLOGICAL SUMMARY FORM

pg 1 of 3

TEAM # 5

DATE 1 May 1991

SEGMENT # EV-40

TIDAL HEIGHT (Range) 0 → -1.5

SUBDIVISION B

BIOLOGIST Crank

SEA STATE 0 → 1'

WIND SPEED/DIRECTION 5 knots / E

PHOTOGRAPHS: ROLL # MAYSAP 7

FRAME # 10

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

→ (A) Area is in the UITZ, includes pits 1 & 5. There is a <1% biota cover within the site, including tar spot algae, amphipods and rare Fucus. Rich LITZ ~80% algae cover.

(B) Area is located in the UITZ and high MITZ. There is a ~10% biota cover. There is a rare to sparse barnacle concentration, approx. 20% of the shells are empty; live animals tightly sealed their inner plates when stimulated. Patches of sparse Fucus with sporelings, rare mussels and sparse Littorina and limpets are present. In LITZ below site is a clam bed.

(C) Area is located in the UITZ on fine gravel 15m NW of anadromous stream. No biota was found in site. Approx. 40% cover below site next to stream including sparse → moderate Fucus and barnacles and mod Littorina.

(D) Area is located in cobble and boulder UITZ. There is ~10% biota cover in the site including sparse barnacles (spot present), rare mussels, rare Fucus (sporelings present), tar spot algae, Endocladia (alga) and dense Littorina and limpets. Large Pycnopodia (seastar) 5m below site (see photo #roll 7 frame 16). In the MITZ there is ~30% biota cover. On a rock outcrop there is a 2m x 3m patch of 'stipe-only' Fucus plants. In the LITZ there is both a rock and sand area. The rock has 100% algae cover including filamentous and bladed reds and greens, Fucus, Halosaccion and Laminaria. In the sand there is surfgrass, sand collars (moon snail egg cases) and many seastars (Pycnopodia). Half of the seastars are fresh dead.

WILDLIFE OBSERVATIONS

TO BE COMPLETED IN ALL SUBDIVISIONS

BIRDS	# OF SPECIES	TOTAL BIRDS	FISH OBSERVED SPECIES PRESENT
Eagles	1	1	
Seabirds	1	6	
Waterfowl			
Gulls/Kittiwakes	1	12	
Shorebirds			
Corvids	1	1	
Other Birds			

LAND MAMMALS

MARINE MAMMALS	# OBSERVED	SPECIES	# OBSERVED
Sea Otters			
Pinnipeds (specify)	3 Harbor Seals		
Es (specify)	4 Seals		

Shoreline subdivision map showing important biological features attached.

David Holm N.M.

Team #5

Date 1 May 1991

pg 2 of 3

Segment #EV-60

Tidal Height 0 $\rightarrow$ -1.5

Division B

Biologist Frank

Sea State 0 $\rightarrow$ 1'

Wind Speed / Direction 5 knots / E

Comments (cont)

(E) Area is located high in the MITZ. There is ~40% biota cover. Barnacles are dominant and Littorina are moderate. Below site there is ~60% cover with sparse intercobble mussels, dense Littorina and moderate barnacles. The LITZ is a clam bed with many other digs. Biota cover is ~40%. Bladed red and green algae is predominant.

(F) Area is in the UITZ in angular cobble and rock outcrops. There is ~25% biota cover including tar spot algae, sparse barnacles with tightly sealing inner plates, rare $\rightarrow$ sparse Fucus with sporelings, sparse Littorina and limpets with Littorina eggs present and rare mussels < 2 years old. LITZ below site is a dense clam bed and has rich dense algae cover (~90%).

(G) Area is a 1m band along a rockface in the UITZ. More than 95% of the adult barnacles shells in contact with the CT oil are empty. Rare juvenile barnacles and a new set are present. Sparse Littorina are present, many occupying the empty barnacle shells. Rare limpets are present. In MITZ below site is a 5m wide Fucus band with a sparse to moderate concentration. The LITZ has ~95% rich algae cover.

Team #5

Date 1 May 1991

pg 3 of 3

Segment #EV-60

Tidal Height 0 $\rightarrow$ -1.5

Division B

Biologist Crank

Sea State 0 $\rightarrow$ 1'

Wind Speed/Direction 5 knots/E

Comment (cont)

There is a kelp (Laminaria) bed near shore. The LITZ along this subdivision has a rich, dense and diverse algae cover including many bladed and filamentous reds and greens. There are many sea stars including Pycnopodia (sunflower), Leptasterias (six-armed) and Dermasteria (leather).

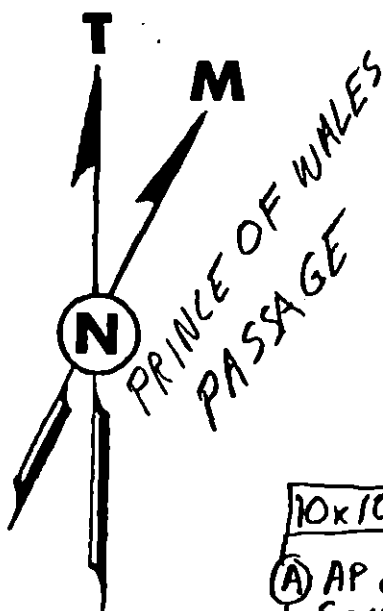
Ribbon worms, peanut worms and juvenile eels are found under cobbles. Much of the LITZ is also a clam bed with Prototheca (little neck), Hiatella, Macoma (bent-nose) and Saxidomus (butter).

The MITZ has a 10-40% cover dominated by barnacles and Fucus. Most of the UITZ has a low biota cover (<10%).

Along the drift line are many sunflower seastars washed up in the last high tide, most are still alive. However half of the seastars below area 'D' are fresh dead (arms turned up at tips, tube feet present but not functioning).

There is an eagle nest located in the subdivision. Unable to tell if active.

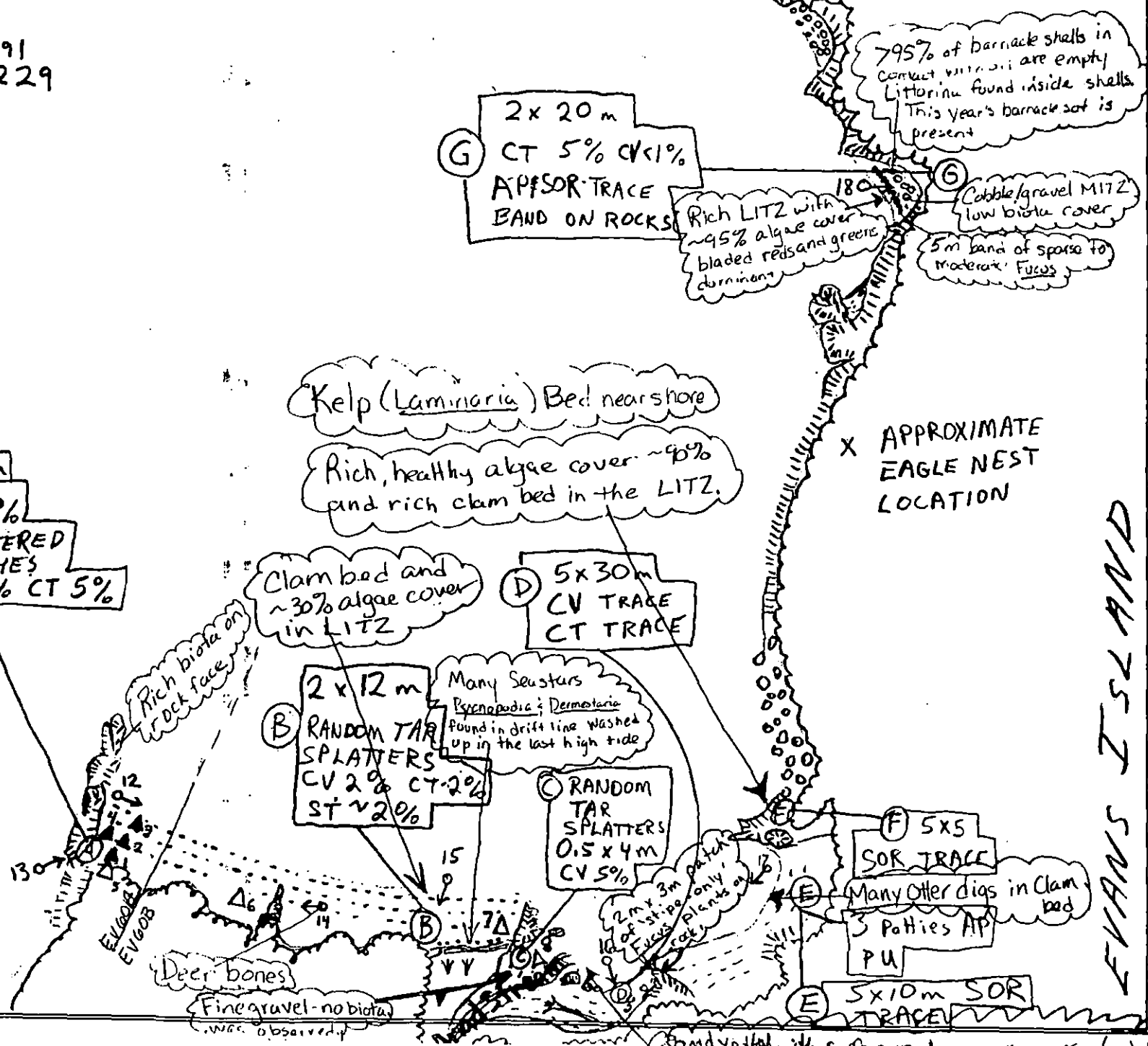
MAY 1991
 OG SKETCH MAP: Bio Sketch Map
 GREG CHANEY: Crank
 TEAM 5
 SEGMENT: EV-60B
 DATE: APRIL 29 1991
 AIR P.#: PIMC 005-229

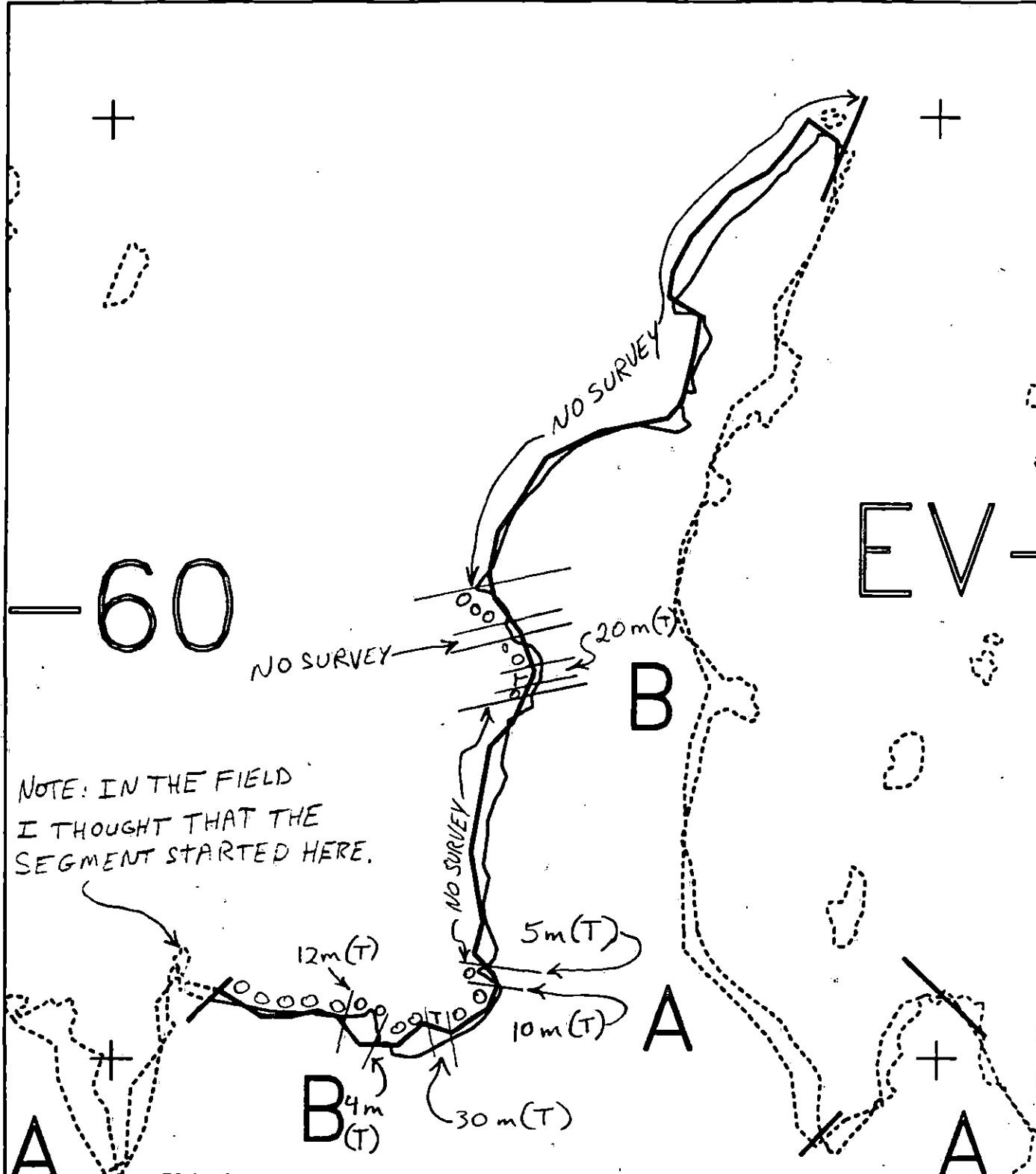


LEGEND

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

SCALE
 40 METERS
 APPROX.





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

EV060 B
 ADEC Subsegment Length: 2118m
 METERS
 0 200 400
 AK State Plane Zone 4
 pov060b



Subdivision Field Map
 Map Key: PWSEV060B
 Name: Chaney
 Date: April 29 1991
 Date Entered:

Reviewed: MC 5/9/91

ET revised, May 8

1991 MAYSAP EVALUATION

SEGMENT: EV 060 SUB: A REGION: PWS SURVEY DATE: 5/1/91

ENVIRONMENTAL SENSITIVITIES:

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

Ecological/Constraints (see page two for details) Eagle nest, Fry release, Fish harvest area, Subsistence - Deer harvesting

ARCHAEOLOGICAL CONSTRAINTS:

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

SHPO Signature: Rachel da O... Date: 5/17/91

RECOMMENDATIONS:

	INITIAL	TAG	FOSC
TREATMENT REQUIRED (Y or N)	<u>N</u>	<u>N</u>	<u>N</u>
Manual Pickup (Check as Req.)	<u> </u>	<u> </u>	<u> </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> </u>	<u> </u>	<u> </u>
Other	<u> </u>	<u> </u>	<u> </u>

COMMENTS:

INITIAL:

TAG:

FOSC:

TAG APPROVAL DATE: MAY 17 1991 FOSC APPROVAL DATE: 25 MAY 1991

ADEC [Signature] FOSC [Signature]

EXXON [Signature] E. E. PAGE, ODR, USCG

USCG [Signature] CHIEF OF STAFF, FOSC

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.

Fry Release: Unlimited treatment unless otherwise directed by ADF&G. Sheen containment/recovery procedures required for mechanical treatment.

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-60 SUBDIVISION A DATE 5/1/91

ADEC

NAME _____

SIGNATURE _____

☒ NTR

Oiling observed on this site was AP/SOR/CU/CT most of the AP observed on portions surveyed was picked up. No subsurface oiling observed on this segment. No treatment recommended here at this time.

EXXON

NAME Martinez N.J.

SIGNATURE N.J. Martinez

☒ NTR

Worked this site last year. Site looks good + is recovering well. Very little if any recoverable oil. Most AP was picked up. Found to be dig + breaking down. I don't believe further work is warranted on this site.

LANDMANAGER

NAME Steve Ward

OF CUC

SIGNATURE Steve Ward

☐ NTR

NO major amount of oil. Surface or Sub-Surface on this section. Lite patches of asphalt were picked up by team. thin strip of oil on vertical Rock Face. Spikes needles present.

USCG/NOAA

NAME Dreher / Hodges

SIGNATURE CWO K.L. Dreher

☒ NTR

Scattered tar balls observed in upper berm. Isolated tar patches and oil splatter in and on some large rocks.

REMOVED: 5/9/91 MC

MAYSAP SHORELINE OILING SUMMARY

PAGE 1 OF 1

TEAM NO. 5

OG CHANEY

BIO CRANK

SEGMENT EV 60

ADEC HAYES

LANDMANAGER WARD for CVC

SUBDIVISION A

ON MARTINEZ

USCG/NOAA DREHER/HODGES

DATE May 1, 1991

TIME 06:50 to 09:40

TIDE LEVEL +4 ft. to -1 ft.

ENERGY LEVEL: ☐ H ☒ M ☐ L

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

TOTAL LENGTH SHORELINE SURVEYED: 750 m NEAR SHORE SHEEN: ☐ BR ☐ RB ☐ SL ☒ NONE

EST. OIL CATEGORY LENGTH: W — m M 13 m N 90 m VL 390 m NO 265 m US 398 m

L O C	SURFACE OIL CHARACTER										SURFACE SEDIMENT TYPE	SHORE SLOPE VHML	AREA		ZONE				NOTES
	AP	MS	TB	SOR	CV	CT	ST	FL	DB	NO			WIDTH m	LENGTH m	S	UI	MI	LI	
A	T				T	T					BC	M	15	130		✓	✓		Random Drip & Splatter
B					T	T					BC	M	1	20		✓			" " "
C	T				T	S					BCR	M	2	20		✓			
D	P			S							BC	M	1	2		✓			
E	S				S	S					BC	M	2	3		✓			
F					T	S					BC	M	2	20		✓			
G	P										B	M	2	8		✓			
H	S				S	S					BC	M	0.5	60		✓			
I	S				S	P					BC	M	3	13		✓			
J	S			S							B	M	0.3	20		✓			
K				P						Vg	V	L	1	5		✓			Grass
L					T	S					BC	M	2	100		✓			
M					T	T					BC	M	1	100		✓			
N	S				T	S					BR	M	10	10	✓	✓			Surveyed as EV-60B in field

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- 5 - 7 FRAMES 1-13

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		
6	15							✓	-		-	-	✓				PG-PGB	
1	30			✓					10-15	Y	25	S	✓				PG-PG	Done as EV-60B
2	15				✓				10-15	N	10	SR	✓				PG-PGB	"
3	20							✓	- ?	?	15	S	✓				CP-PGB	"
4	30							✓	- ?	?	25	S	✓				CP-PGB	"
5	35							✓	-				✓				PC-PGC	"

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

OG COMMENTS: FOR THE PURPOSE OF THIS SURVEY THE PROMINENT ROCK HEADLAND WAS USED TO DIVIDE SUBDIVISIONS A & B, THIS IS NOT THE SAME AS THE COMPUTER MAP SHOWS BUT THE ENTIRE TEAM'S NOTES WERE TAKEN BASED ON MY ENCLOSED SKETCH MAP, SO THE "NEW" DIVISION APPLIES TO THESE REPORTS.

SMALL ISOLATED PATCHES OF ASPHALT WERE OBSERVED AT THE LOCATIONS INDICATED ALONG THE H/TZ OF THIS SUBDIVISION.

REVIEWED: 5/9/91 MC ER revised, May 8

MAP 1991
OG WATCH MAP
GREG CHANEY
TEAM 5

SEGMENT: EVGO A
DATE: May 1 1991
AIR P.#: PIM 005 229



LEGEND

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

SCALE
30 METERS
ROUGHLY

(B) CT Trace
1x20
DRIPS AND
SPLATTERS

(C) 2x20m
CT 5
CV<1
AP Trace

(D) 1x2m
AP 20%
SOR 10%
2 Patties PU

2x3m
AP 5%
CT 10%
CV 10%
2 Patties PU

(F) 2x20m
CT 5%
CV<1%

(G) 2x8m
AP 20%
BETWEEN
BOULDERS
PU 2 Patties

(H) 0.5x60m
AP 2%
BETWEEN
BOULDERS
SMALL PATCHES
CT 5%
CV 5%
ISOLATED
PATTIES

NOTE: PREVALDER OIL SPATTERED
ALONG THIS SHORELINE

EVGO B

SEE COMMENT
SECTION

(M) 1x100m
TRACE AP, CT, CV

OILING REPORTED
ON THIS MAP IS
REPRESENTED AFTER
MANUAL TREATMENT
WAS COMPLETED

MAP 1 of 2

(A) AP Trace
CV<1%, CT<1%
DRIPS AND SPLATTERS
ALONG MITZ to HITZ
15m x 130m

AP 2 patties
PU

(I) 3x13m
AP 10%
CT 20%
CV 5%

AP 3 PATTIES PU

(J) 0.3x20m SOR 10% ISOLATED
PATTIES: AP 5%

(L) 2x100m CT 2% CV<1%
ISOLATED PATCHES AP<1%

REVIEWED:
ML 5/9/91

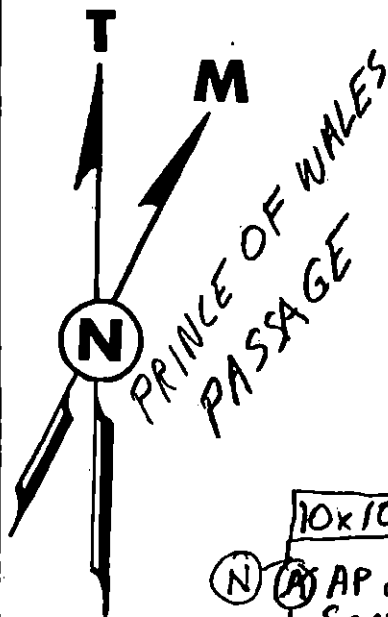
OILED GRASS 1x5m SOR 40%

SA revised, Mar 8

MAY 1991
 06 CH MAP
 GREG CHANEY
 TEAM 5
 SEGMENT: EV-60A/B
 DATE: APRIL 29 1991
 AIR P.N: FIMC 005-229

(Copied for small section
 corresponding to Ev-60A)

Map 2 of 2



LEGEND

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

SCALE
 40 METERS
 APPROX.

10x10m
 (N) AP 2%
 SCATTERED
 PATCHES
 CV<1% CT 5%

EV 60 A
 EV 60 B

SEE
 COMMENT
 SECTION

2x12m
 (B) RANDOM TAR
 SPLATTERS
 CV 2% CT 2%
 ST ~ 20%

(D) 5x30m
 CV TRACE
 CT TRACE

(C) RANDOM
 TAR
 SPLATTERS
 0.5 x 4m
 CV 5%

(G) 2x20m
 CT 5% CV<1%
 APPSOR-TRACE
 BAND ON ROCKS

X APPROXIMATE
 EAGLE NEST
 LOCATION

(F) 5x5
 SOR TRACE

3 patches AP
 PU

(E) 5x10m SOR
 TRACE

EVANS ISLAND

MAYSAP BIOLOGICAL SUMMARY FORM

pg 1 of 2

TEAM # 5

DATE 1 MAY 1991

SEGMENT # EV-60

TIDAL HEIGHT (Range) +4 → 0'

SUBDIVISION A

BIOLOGIST Crank

SEA STATE 0 → 1'

WIND SPEED/DIRECTION 5 knots / E

PHOTOGRAPHS: ROLL #

FRAME #

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

(A) Area is located from the SUPRA to the high part of the MITZ. In the SUPRA and UITZ there is rare Fucus (sporelings are present), sparse Littorina, oligochaete worms (~2cm long) and isopods. The biota cover is less than 1%. In the high MITZ portion of site A, the biota cover is ~10% including a sparse concentration of barnacles and a dense concentration of Littorina. Most of biota below 'A' is similar to that found in upper MITZ. There is a ~8m x 4m Fucus patch in a small runoff stream with ~75% cover and the rock outcrops have ~75% biota cover including moderate Fucus with maturing conceptacles (sporelings are present); dense Littorina, sparse Timpets, sparse to rare barnacles and Odonthalia (alga). Approx. 30m west of A there is a 3m x 10m pocket of clam and mussel shells found between rock outcrops.

(B) Area is located on a separate pocket beach traveling east, in the UITZ. The beach is cobble with low rock outcrops. Within the site biota cover is ~30%. Fucus and Littorina are dominant. Sporelings and maturing conceptacles are present. Below the site, in the MITZ, biota cover remains ~30% with Fucus, Littorina, sparse barnacles and sparse intercobble mussels. The LITZ has ~60% biota cover. There is a moderate intercobble mussel bed, moderate Fucus, moderate barnacles and algae including Scytosiphon and filamentous and bladed reds. The biota appears to be healthy. There is an eagle nest approx. 30m west of site 'B'. Immature eagle observed flying - no matures observed.

WILDLIFE OBSERVATIONS

TO BE COMPLETED IN ALL SUBDIVISIONS

BIRDS	# OF SPECIES	TOTAL BIRDS	FISH OBSERVED SPECIES PRESENT
Eagles	1	1	
Seabirds	1	3	
Waterfowl	1	3	
Gulls/kittiwakes	2	27	
Shorebirds			
Corvids	1	1	
Other Birds			

MARINE MAMMALS

OBSERVED

LAND MAMMALS

SPECIES

OBSERVED

Sea Otters	1		
Pinnipeds (specify)			
Es (specify)			

Shoreline subdivision map showing important biological features attached.

Team #5

Date: 1 May 1991

pg 2 of 6

Segment: EV-600

Tidal Height +4 $\rightarrow$ 0'

Subdivision: A

Biologist Crank

Sea State 0 $\rightarrow$ 1'

Wind Speed/Direction 5 knots/E

Comments (cont)

(C) Area is located in UITZ boulders on the next beach east of 'B'. There is ~5% biota cover within the site including tur spot algae, sparse barnacles that tightly seal their inner plates when stimulated, sparse mussels and patches of Fucus. Below the site in the MITZ, there is a dense intertidal mussel bed with sparse to moderate Littorina and limpets. In the LITZ Odontalia, an alga, dominates. There is sparse Fucus and anenomes in the few small tidepools. Biota cover below the site is ~70%. Flora and fauna both appear to be healthy.

(D) Area is located in the SUPRA and high UITZ. Within the site there is sprouting rye grass, green grass and black lichen covering about 5% of the surface area. In the MITZ, biota cover is ~40% on the rock outcrops, Fucus dominates on the northern rock and barnacles dominate on the southern rock. There are rare to sparse intercobble mussels from MITZ to LITZ. The LITZ has a 20% barnacle cover, various age classes, including a new set. Littorina and limpets have a moderate to sparse concentration.

Team #5

Date 1 May 1991

pg 3 of 6

Segment EV-60

Tidal Height +4 → 0'

division A

Biologist Crank

Sea State 0 → 1'

Wind Speed/Direction 5 knots / E

Comments (cont.)

(E) Area is located high in the UITZ. Filamentous green algae and oligochaete worms are only macro-biota found in site. Less than 1% biota cover. Twenty meters below site, in the LITZ, there is a 60% biota cover. Fucus is predominant, mussels are sparse and gastropods (Littorina and limpets) are sparse to moderate.

(F) Area is located in the UITZ along a rock face. There is < 5% biota cover including rare concentrations of barnacles, Fucus sporelings, Littorina, limpets and Oligochaetes. Three meters below site in the MITZ there is approx. 5% cover including rare concentrations of Fucus sporelings and mussels, sparse to rare barnacles (a new set is present), and sparse Littorina and limpets. Seven meters below site, in the LITZ, there is approx 30% biota cover with Fucus dominant. LITZ is also a clam bed with Prototheca, Macoma and Hiatella clams.

(G) Area is located high in the UITZ along small angular boulders and cobble. Drift Fucus, filamentous green algae and oligochaete worms are present within the site. There is less than 1% biota cover. The MITZ below site is boulder and cobble with ~20% biota cover including sparse barnacles, filamentous green algae, moderate Littorina and limpets, rare Fucus and rare mussels. The LITZ has a 30% biota cover including moderate barnacles, sparse Fucus, rare mussels, dense Littorina (with eggs), Lepasterias (six arm seastar) and bladed, filamentous green algae.

Team #5

Date: 1 May 1991

pg 4 of 6

Segment EV-60

Tidal Height +4 → 0'

Division A

Biologist Crank

Sea State 0 → 1'

Wind Speed/Direction 5 knots/E

Comments (cont)

(H) Area is located in the UITZ along boulders. Rare barnacles and sparse Fucus is concentrated along the bottom margin of the site covering ~10% of the surface. Customblen casings are present. In the MITZ 1m below site biota cover is ~50%. A moderate concentration of barnacles is the dominant species and a sparsely concentrated intercobble mussle bed is present. The LITZ is a dense clam bed with Saxidomus (butter clam), Prototheca (little neck) and Macoma (bent nose). Otters have been digging in the clam bed. There is ~25% surface biota cover including sparse barnacles (new set present), dense Littorina, bladed red and green algae, filamentous red and green algae, amphipods and isopods.

(I) Area is located high in UITZ. Amphipods, filamentous green algae, black lichen and mosses are present. Less than 1% biota cover. Below area to stream are dense Littorina and egg masses, rare mussels and patches of moderately concentrated barnacles. Biota cover ~20%.

(J) Area is located in the UITZ ~5m west of stream. There are filamentous green algae and amphipods in the site and rare barnacles and Fucus below the site with approx a 1% biota cover.

Team #5
Segment EV-60
Division A
Sea State 0 $\Rightarrow$ 1'

Date 1 May 1991
Tidal Height +4 $\Rightarrow$ 0'
Biologist Crank
Wind Speed/Direction 5 knots/E

pg 5 of 5⁶

Comments (cont)

(K) Area is located ~15m upstream from J behind log in the SUPRA.
There is a small patch of SOR oil in the rye grass. Plants are sprouting.

(L) Area is located in the UITZ. There are rare barnacles; rare to sparse Littorina, sparse to moderate limpets and filamentous green algae. Biota cover is less than 1%. The MITZ has ~30% cover with dominant barnacles. Littorina and limpets are dense

(M) Area is located high in the UITZ along a steep angle boulder beach. There are barnacles and Fucus present within the site; ~1% biota cover. The MITZ (~2m below) has a 20% biota cover. Barnacles and Fucus are the major species. There are a few 'stipe-only' Fucus plants present. The LITZ is a lush field of algae with a 95% biota cover. Palmaria, Polysiphonia, Pterasiphonia, Ulva, Enteromorpha, Urosperma and other red and green algae are present. Fucus is present and Littorina are dense.

This subdivision has a near shore kelp bed (Laminaria) and a lush algae cover in LITZ (except at 'D'). There are various sediment profiles and beach angles included in subdivision EV-60 A. Intertidal biota communities are, therefore, described in each area. The beach appears to be healthy.

MAYSAP BIOLOGICAL SUMMARY FORM

pg 1 of 3

TEAM # 5

DATE 1 May 1991

SEGMENT # EV-60

TIDAL HEIGHT (Range) 0 → -1.5

SUBDIVISION B A

BIOLOGIST Crank

SEA STATE 0 → 1'

WIND SPEED/DIRECTION 5 knots / E

PHOTOGRAPHS: ROLL # MAYSAP 7

FRAME # 110

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

(A) Area is in the UITZ, includes pits 1→5. There is a <1% biota cover within the site, including tar spot algae, amphipods and rare *Fucus*. Rich LITZ ~80% algae cover.

(B) Area is located in the UITZ and high MITZ. There is a ~10% biota cover. There is a rare to sparse barnacle concentration, approx. 20% of the shells are empty; live animals tightly sealed their inner plates when stimulated. Patches of sparse *Fucus* with sporelings, rare mussels and sparse *Littorina* and limpets are present. In LITZ below site is a clam bed.

(C) Area is located in the UITZ on fine gravel 15m NW of anadromous stream. No biota was found in site. Approx. 40% cover below site next to stream including sparse → moderate *Fucus* and barnacles and mod *Littorina*.

(D) Area is located in cobble and boulder UITZ. There is ~10% biota cover in the site including sparse barnacles (spot present), rare mussels, rare *Fucus* (sporelings present), tar spot algae, *Endocladia* (alga) and dense *Littorina* and limpets. Large *Pycnopodia* (seastar) 5m below site (see photo # roll 7 frame 116). In the MITZ there is ~30% biota cover. On a rock outcrop there is a 2m x 3m patch of 'stipe-only' *Fucus* plants. In the LITZ there is both a rock and sand area. The rock has 100% algae cover including filamentous and banded reds and greens, *Fucus*, *Halosaccion* and *Laminaria*. In the sand there is soft grass, sand collars (moon snail egg cases) and many seastars (*Pycnopodia*). Half of the seastars are fresh dead.

WILDLIFE OBSERVATIONS

TO BE COMPLETED IN ALL SUBDIVISIONS

BIRDS	# OF SPECIES	TOTAL BIRDS	FISH OBSERVED SPECIES PRESENT
Eagles	1	1	
Seabirds	1	6	
Waterfowl			
Gulls/Kittiwakes	1	12	
Shorebirds			
Corvids	1	1	
Other Birds			

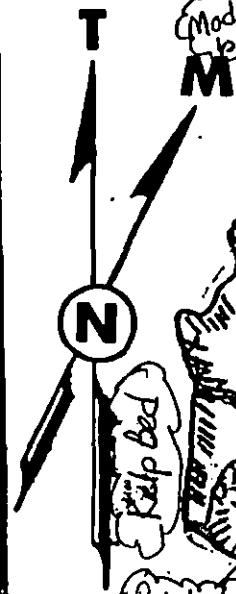
MARINE MAMMALS	# OBSERVED	LAND MAMMALS SPECIES	# OBSERVED
Sea Otters			
Pinnipeds (specify)	3 Harbor Seals		
	4 Seabears		
Wolves (specify)			

Shoreline subdivision map showing important biological features attached.

MAY 8 1991
Bio: OG SKETCH MAP
Crank: GREG CHANEY
TEAM 5

SEGMENT: EV60 A

DATE: APRIL 29 1991
AIR P.#: PIMC005 229



LEGEND

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

SCALE

(B) CT Trace
1x20
DRIPS AND
SPLATTERS

(C) 2x20m
CT 5
CV 1
AP Trace

(D) 1x2m
AP 20%
SOR 10%
2 Patties PU

(E) 1x3m
AP 5%
CT 10%
CV 10%
2 Patties PU

(F) 2x20m
CT 5
CV 1

(G) 2x8m
AP 20%
BETWEEN
BOULDERS
PU 2 Patties

(H) 0.5x60m
AP 2%
BETWEEN
BOULDERS
SMALL PATCHES
CT 5%
CV 5%
ISOLATED
PATTIES

(A) AP Trace
CV <1%, CT <1%
DRIPS AND SPLATTERS
ALONG M1TZ to H1TZ
1.5m x 130m

(I) 13x3m
AP 10%
CT 20%
CV 5%

(J) 0.3x20m SOR 10% ISOLATED
PATTIES AP 5%

AP 2 patties
PU

AP 3 PATTIES PU

NOTE: PRE VALDEZ OIL SPLATTERED
ALONG THIS SHORE LINE
See additional map
for bio remarks
EV60 B

SEE COMMENT
SECTION

(M) 1x100m
TRACE AP, CT, CV

OILING REPORTED
ON THIS MAP IS
REPRESENTED AFTER
MANUAL TREATMENT
WAS COMPLETED

Dense Littorina (snails) and
egg masses

(L) 2x100m CT 2% CV 1%
ISOLATED PATCHES AP <1%

OILED GRASS 1x5m SOR 40%

Small Rock Slide
while surveying

LOG

SMALL

Jush Algae - 95% cover in LITZ

Dense clam
bed used by
otters

Clam bed
in LITZ
30% to 50%
cover in LITZ

70% biota cover
in LITZ

20% Biota Cover in
LITZ

Moderate mussel
bed

EAGLE
NEST

Pocket of Clam
mussel shells

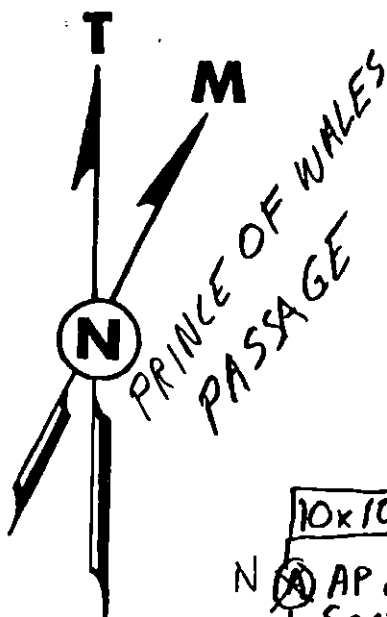
DRAINAGE

6x9m Fucus patch

55 GAL
DRUM

LOG

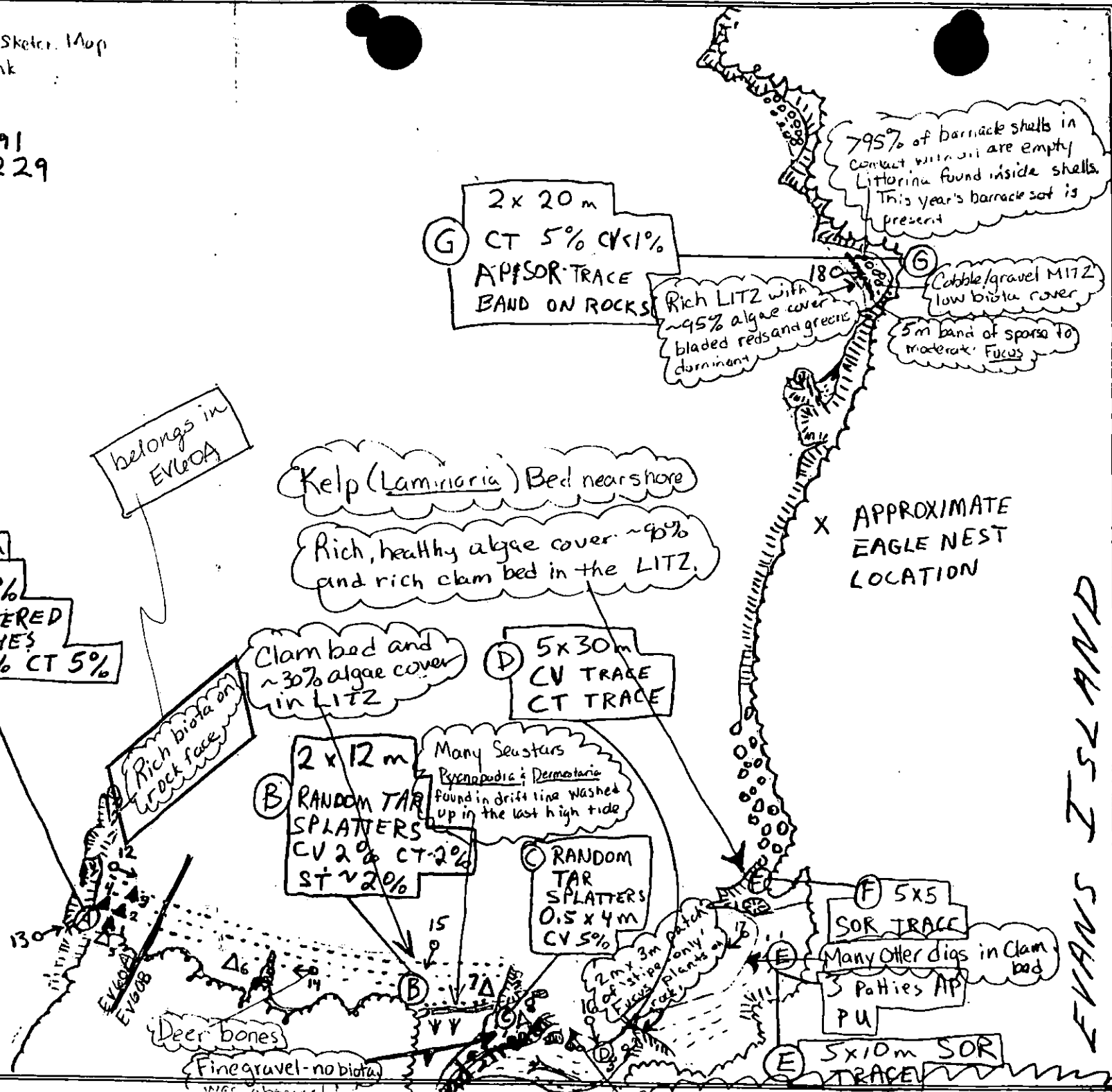
MAY 1991
 OG BENCH MAP: Bio Skater Map
 GREG CHANEY: Crank
 TEAM 5
 SEGMENT: EV-60 B
 DATE: APRIL 29 1991
 AIR P.#: PIMC 005-229



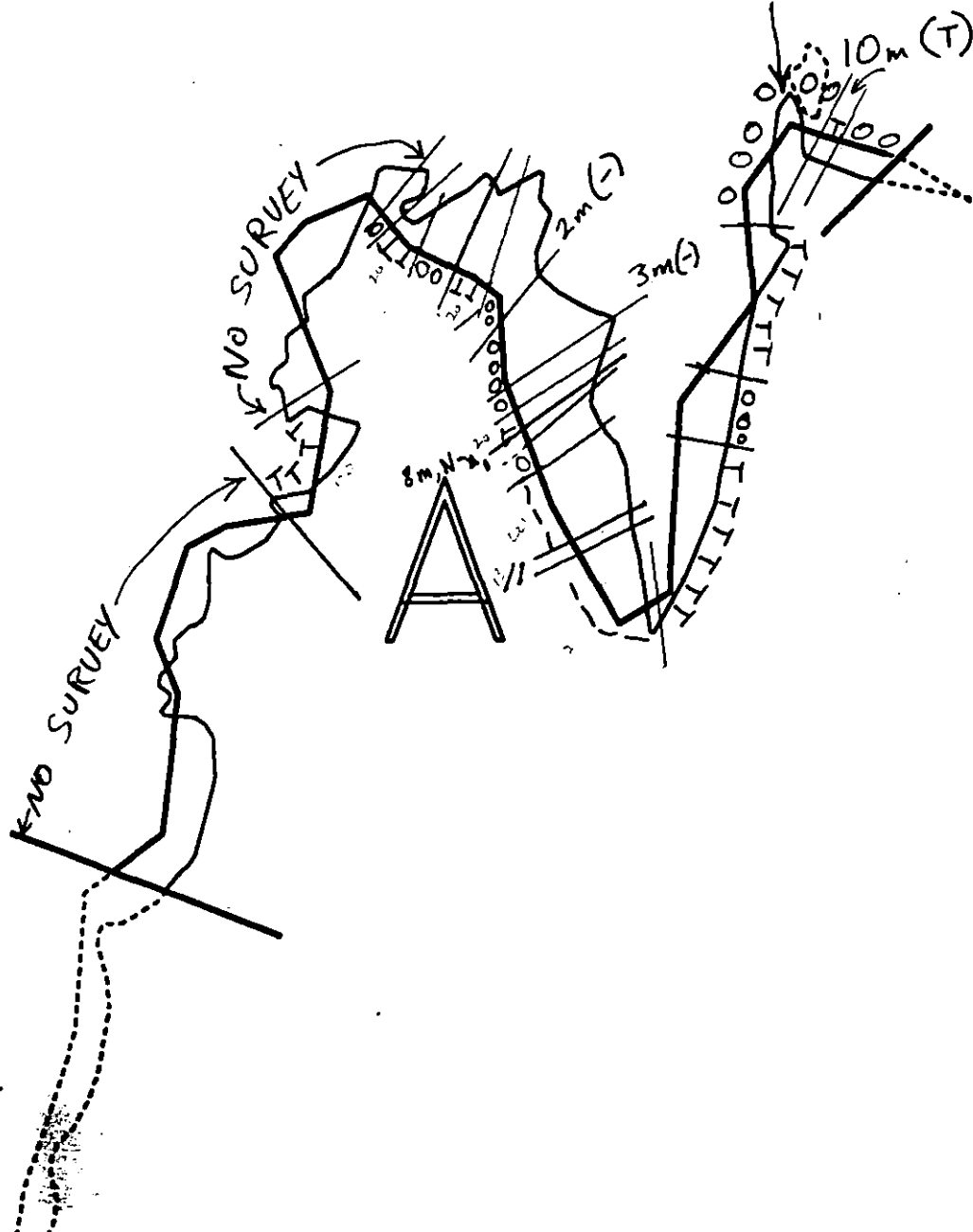
LEGEND

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

SCALE
 40 METERS
 APPROX.

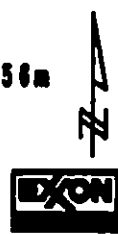


NOTE: IN THE FIELD I THOUGHT THAT THE SEGMENT DIVISION BETWEEN GO A & B WAS HERE.



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

EV060 A
 ADEC Subsegment Length: 1156m
 METERS
 0 100 200
 AK State Plane Zone 4
 proj880a



Subdivision Field Map
 Map Key: PWSEV060A
 Name: Greg Chaney
 Date: April 29 1991
 Date Entered:

REVIEWED: 5/9/91 WC
 ET revised, May 8

SHORELINE EVALUATION

SEGMENT ST/ EV-61 SUBDIVISION A (1 OF 3) DATE 3/30/90

SEGMENT ENVIRONMENTAL SENSITIVITIES AND TIME CONSTRAINTS:

Near Sawmill Bay Hatchery (1F) - 4/15 to 6/1; Deer harvesting
(7II) - 8/15 to 2/28.

SUBDIVISION ECOLOGICAL CONSTRAINTS: No specific subdivision con-
straints identified.

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

SHPO SIGNATURE: *Charles E. Johnson* DATE: April 9, 1990

OILING CATEGORIZATION:

Wide 0 m: Medium 0 m: Narrow 0 m: V.Light 13 m: No Oil 657m
Subsurface Oil Observed: Yes No X Maximum Depth

RECOMMENDATIONS:

☒ 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: No treatment recommended due to the only surface oil
observed being a sporadic stain in area shown on sketch map.

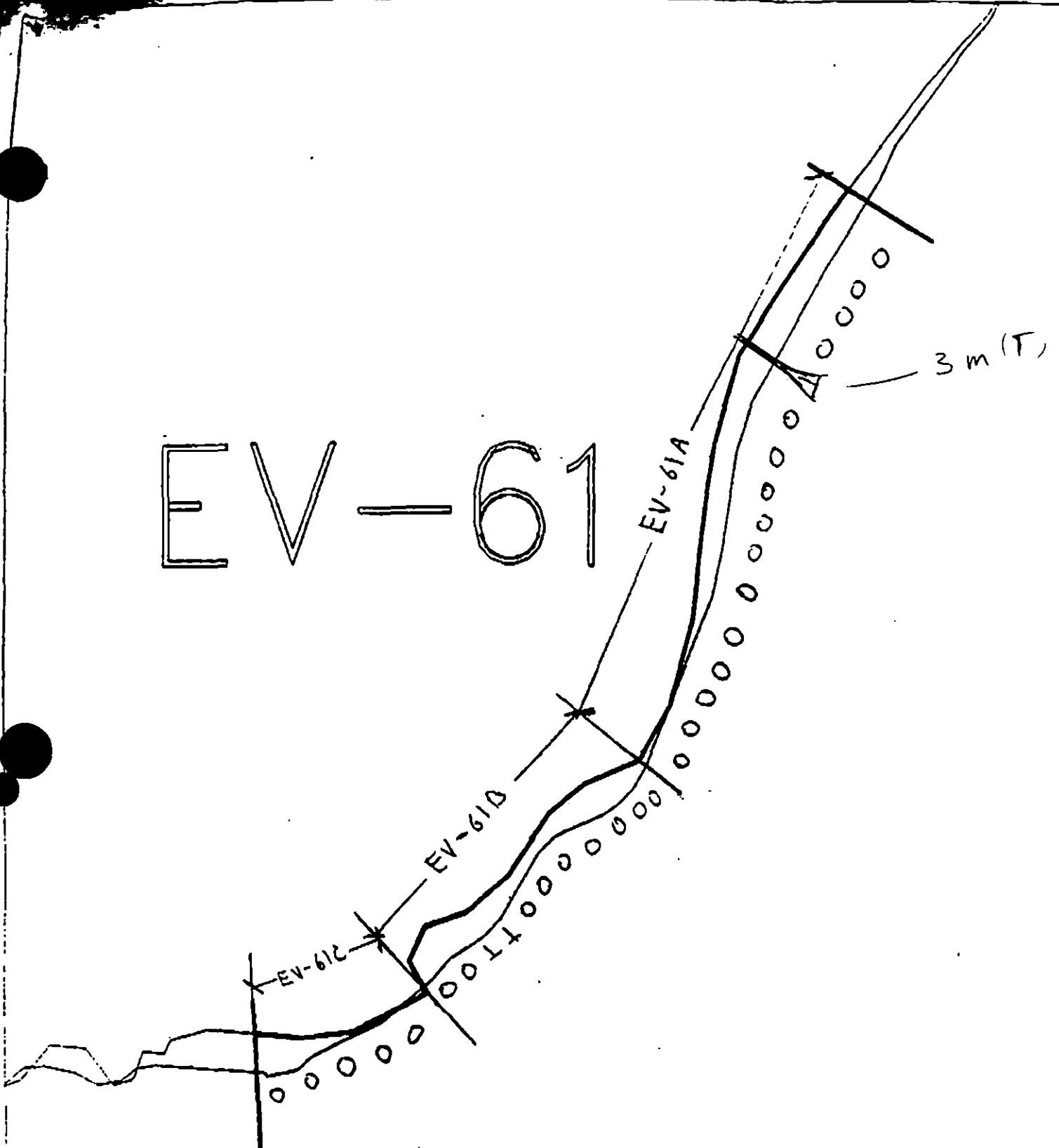
TAG COMMENTS:

TAG APPROVAL DATE: 4/9/90

ADEC JOHN BAUER
EXXON ANDY TEE
NOAA Burt Wescott
USCG G.A. REITER

FOSC: *by L* DATE: 4-19-90

EV-61



XXXX Wide

/// Medium

--- Narrow

TTTT Very Light

0000 No Oil

EV-61A

ADEC Segment Length: 1231m



Map Key: PWS-261

Name: FOGET

Date: 3-30-90

Data Entered:

SHORELINE EVALUATION

SEGMENT ST/ EV-61 SUBDIVISION B (2 OF 3) DATE 3/30/90

SEGMENT ENVIRONMENTAL SENSITIVITIES AND TIME CONSTRAINTS:

Near Sawmill Bay Hatchery (1F) - 4/15 to 6/1; Deer harvesting
(7II) - 8/15 to 2/28.

SUBDIVISION ECOLOGICAL CONSTRAINTS: No specific subdivision con-
straints identified.

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

SHPO SIGNATURE: Charles Hoffman DATE: April 9, 1990

OILING CATEGORIZATION:

Wide 0 m: Medium 0 m: Narrow 46 m: V.Light 14 m: No Oil 327m
Subsurface Oil Observed: Yes X No Maximum Depth 30

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: No treatment recommended in this subdivision as only
isolated and sporadic surface coat was found. This area is not
considered a high human use location, therefore treatment of this
small patch is not recommended.

TAG COMMENTS:

TAG APPROVAL DATE: 4/9/90

ADEC JOHN BAUER FOSC: DATE: 4-19-90
EXXON ANDY GIL
NOAA Burt Wescott
USCG G.A. REITER

OG Mik pyet

SEGMENT ST/ EV-61

SUBDIVISION B (1 of 3)

DATE 3, 30 90

CHECKLIST

☐ N Arrow
☐ Approx. Scale
☐ Seg/Sub Entry
☐ Oil Dist
☐ Width
☐ Length
☐ % Cover
☐ Substrate Character
☐ Est. HWM/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

Oil Vegetation

1 $\Rightarrow$

Photo location, direction,
and number

SKETCH MAP (2)

Legend

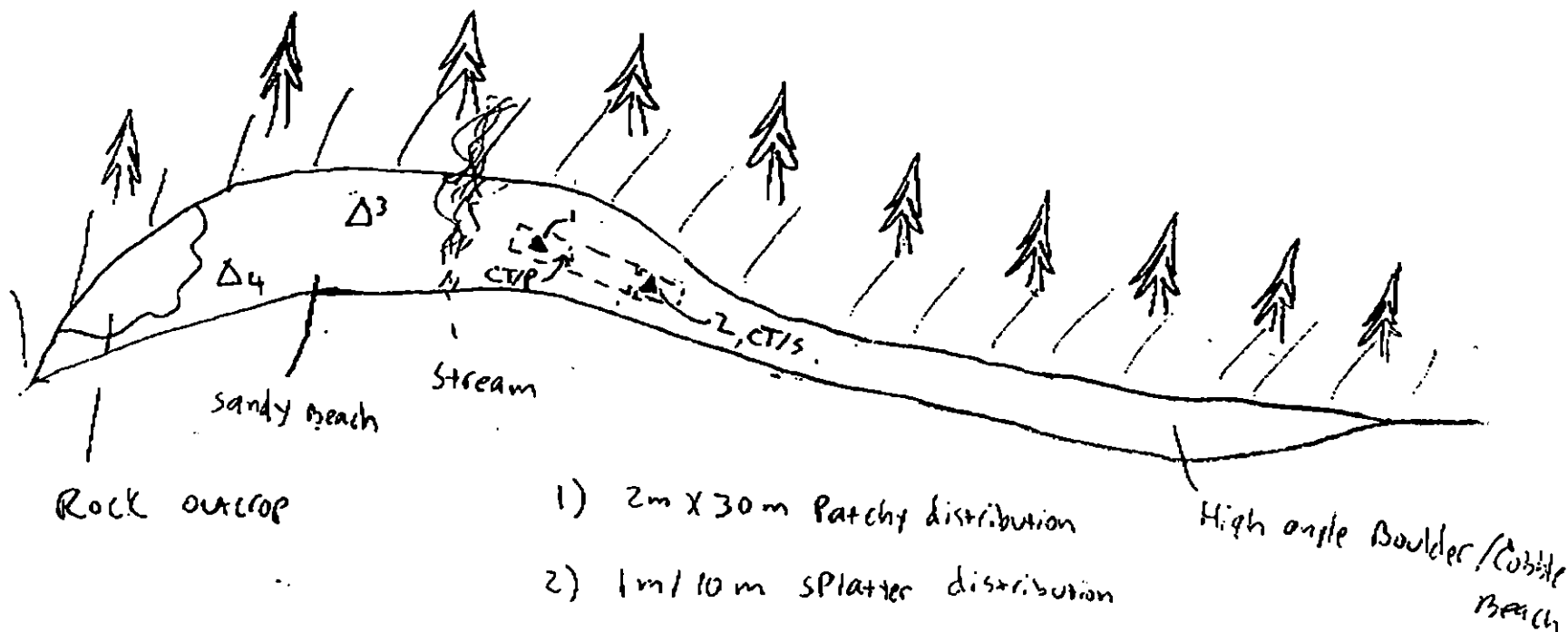
- stream

- steep rocky backshore

- forested

Scale

40 m



- 1) 2m X 30m Patchy distribution
- 2) 1m/10m splatter distribution

Oil Character Length (m): AP PO CV CT 40m ST MS PT TB FL NO 320

REVISION: 20/24/00

OG Mike Folet

SEGMENT EV-61

SUBDIVISION -

DATE 3 / 30 90

CHECKLIST

- ☐ N Arrow
- ☐ Approx. Scale
- ☐ Seg/Sub Bndry
- ☐ 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

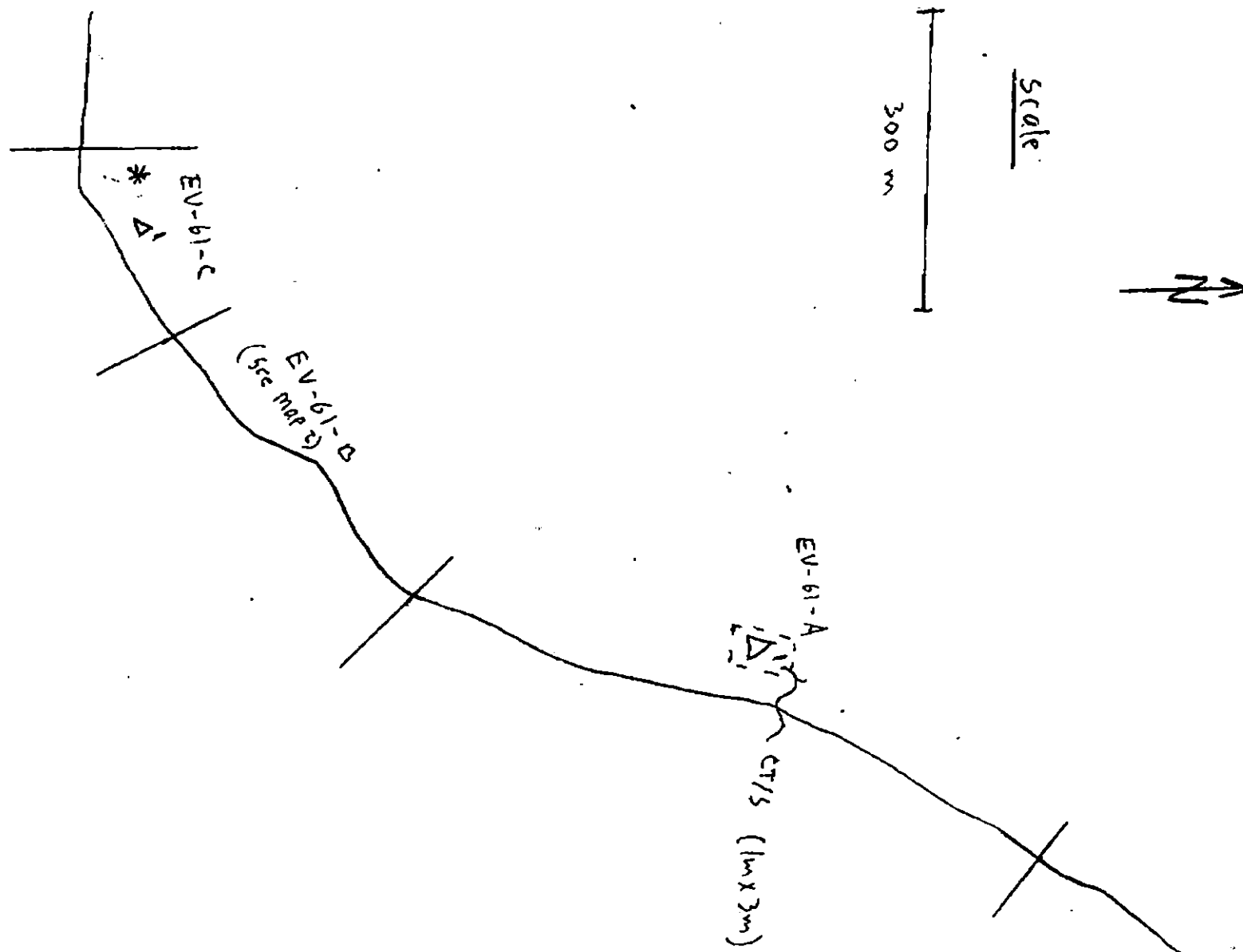
Oiled Vegetation

1 $\Rightarrow$

Photo location, direction,
and number

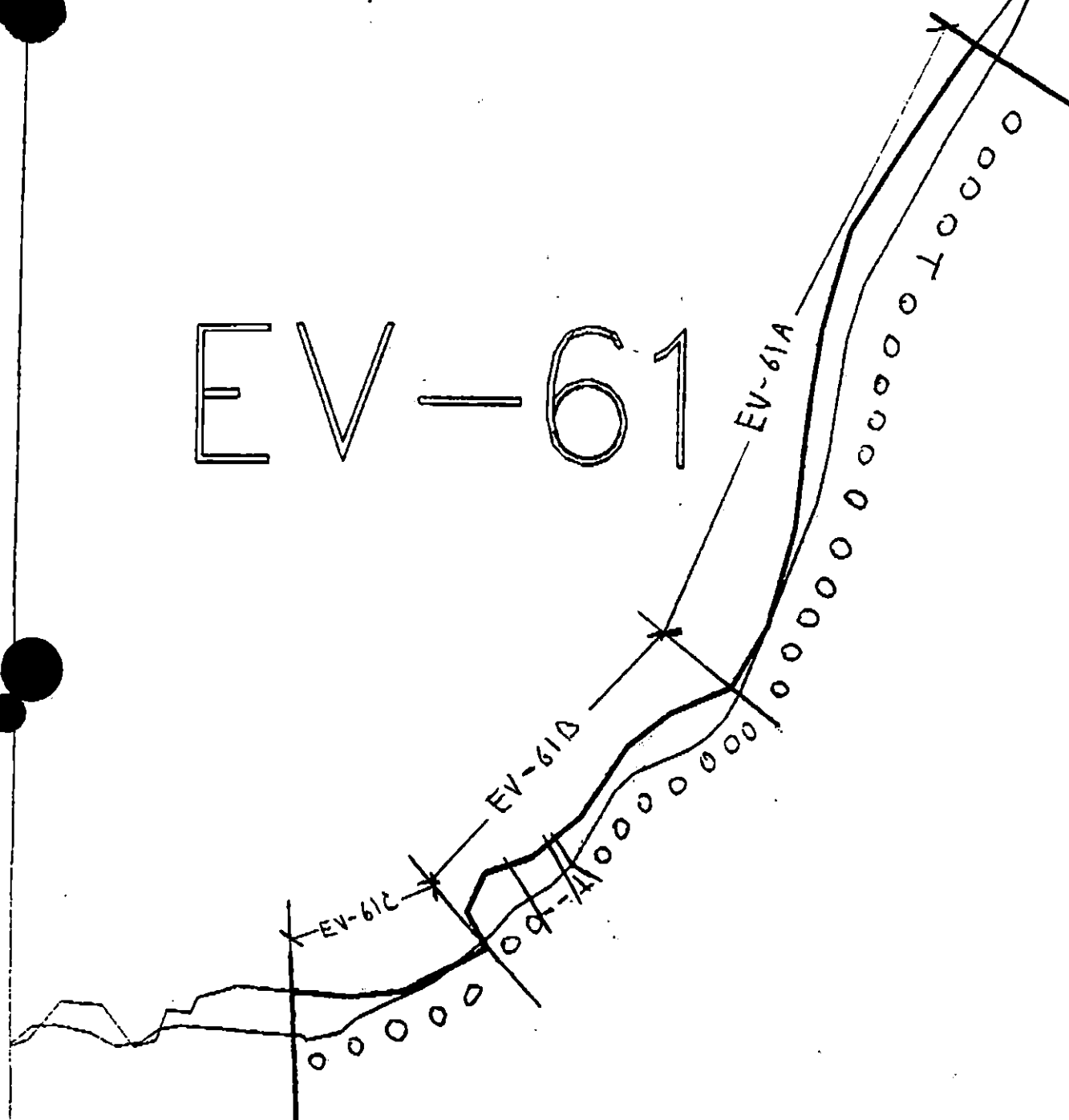
* - Location of
oiled boom

ETCH MAP (1)



Oil Character Length (m): AP - PO - CV - CT 40 ST 3 MS - PT - TB - FL - NO 1188

EV-61



XXXX Wide

/// Medium

--- Narrow

TTTT Very Light

0000 No Oil

EV-61B

ADEC Segment Length: 1231m



Map Key: PWS-261

Name: FOGET

Date: 3-30-90

Data Entered:

SHORELINE EVALUATION

SEGMENT ST/ EV-61 SUBDIVISION C (3 OF 3) DATE 3/30/90

SEGMENT ENVIRONMENTAL SENSITIVITIES AND TIME CONSTRAINTS:

Near Sawmill Bay Hatchery (1F) - 4/15 to 6/1; Deer harvesting
(7II) - 8/15 to 2/28.

SUBDIVISION ECOLOGICAL CONSTRAINTS: No specific subdivision con-
straints identified.

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

SHPO SIGNATURE: Charles J. Holmes DATE: April 9, 1990

OILING CATEGORIZATION:

Wide 0 m: Medium 0 m: Narrow 0 m: V. Light 0 m: No Oil 199m
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: No treatment recommended in this subdivision due to no
oil being found during survey. DEC suggested work applies to sub-
division "B" in Field Shoreline Comments.

TAG COMMENTS:

TAG APPROVAL DATE: 4/9/90

ADEC JOHN BAUER John Bauer

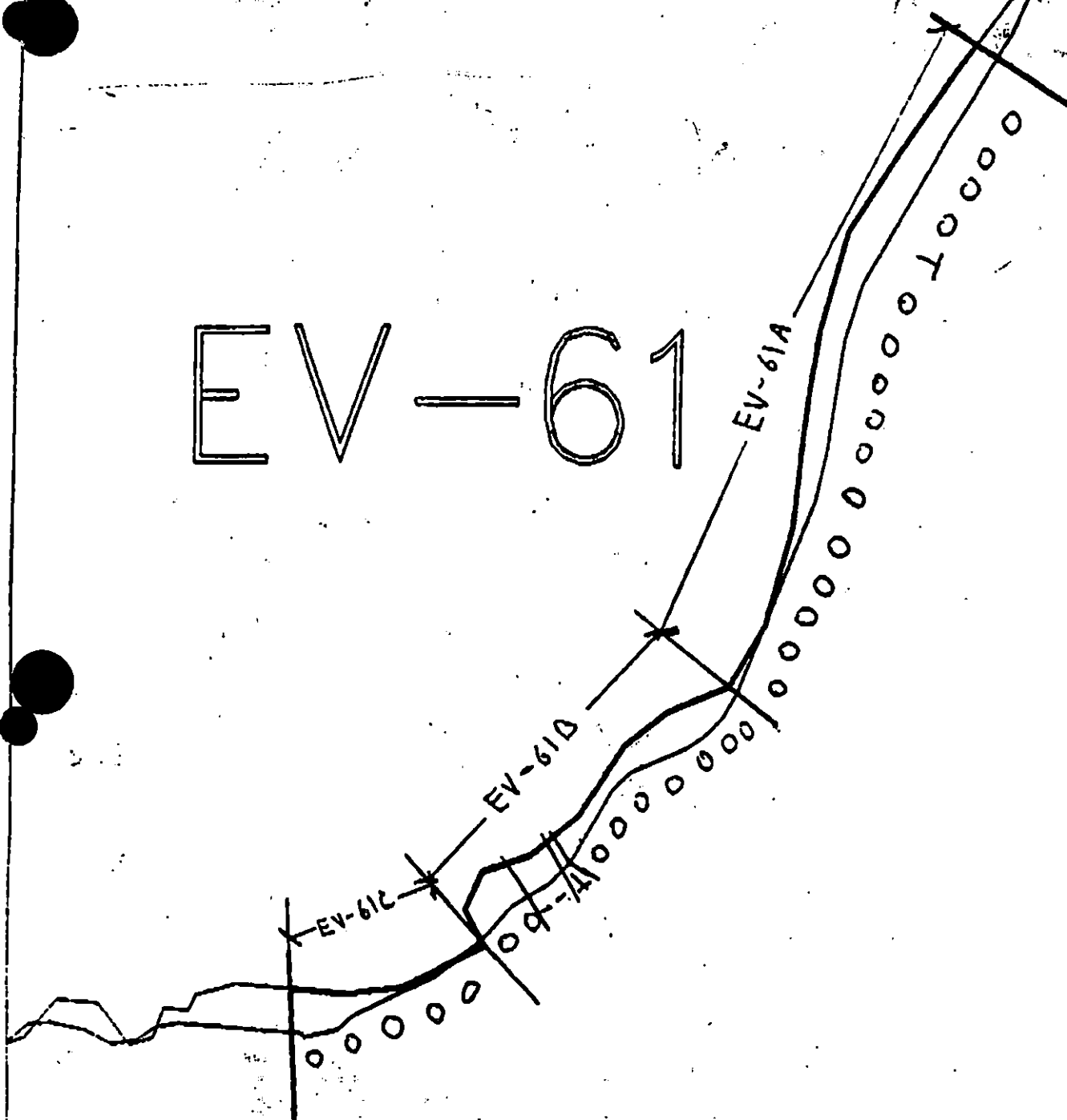
EXXON ANDY TETL Andy Tetl

NOAA Burt Wescott Burt Wescott

USCG G.A. REITER G.A. Reiter

FOSC: My L DATE: 4-19-90

EV-61



XXXX Wide

/// Medium

--- Narrow

TTTT Very Light

0000 No Oil

EV-61C

ADEC Segment Length: 1231m



Map Key: PWS-261

Name: FOGET

Date: 3-30-90

Date Entered:

REGION: PRINCE WILLIAM SOUND

SEGMENT: ST/ EV-62

SUBDIVISIONS: A (1 OF 1)

SHORELINE EVALUATION

SEGMENT ST/ EV-62 SUBDIVISION A (1 OF 1) DATE 3/31/90

SEGMENT ENVIRONMENTAL SENSITIVITIES AND TIME CONSTRAINTS:

Near Sawmill Bay Hatchery (1F) - 4/15 to 6/1; Active bald eagle
nest (5T) - 3/1 to 6/1; Deer harvesting (7II) - 8/15 to 2/28.

SUBDIVISION ECOLOGICAL CONSTRAINTS: No specific subdivision con-
straints.

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 689m
Subsurface Oil Observed: Yes _____ No X Maximum Depth _____

RECOMMENDATIONS:

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

COMMENTS: No treatment recommended due to no oil being found
during the survey.

TAG COMMENTS: _____

TAG APPROVAL DATE: _____

ADEC _____

EXXON _____

NOAA _____

USCG _____

FOSC: _____ DATE: _____

FIELD SHORELINE COMMENT SHEET

SEGMENT ST / EV-62

SUBDIVISION: _____

DATE 3/31/90

USEG NOAA

NAME GARY SHIGENAKA

SIGNATURE *Gary Shigenaka*

☐ NO TREATMENT RECOMMENDED

☐ TREATMENT SUGGESTED

COMMENTS

SEGMENT CONSISTED OF TWO DISCRETE BEACH TYPES, ONE A WELL-SORTED PORTION WITH BOULDERS RANGING DOWN TO FINE ROCKS AND CORBLE, THE OTHER LARGE ROCKS AND BOULDERS. NO OIL WAS ENCOUNTERED ON THE SEGMENT. BARNACLES, MUSSELS, FUCUS RESIDENT AT CENTRAL POINT OF SEGMENT. NEKTOCYSTIS OFFSHORE. LOWER INTERTIDAL WAS COVERED AT THE TIME OF OBSERVATION.

ADEC

NAME John Hayes

SIGNATURE *John Hayes*

☒ NO TREATMENT RECOMMENDED

☐ TREATMENT SUGGESTED

COMMENTS

Heavy concentration of Iron in rocks + boulders along this segment. Iron + minerals resembled weathered oil, although on inspection no oil was found on this segment. Vegetation where land was healthy.

LAND MANAGER

NAME _____

SIGNATURE _____

☐ NO TREATMENT RECOMMENDED

☐ TREATMENT SUGGESTED

COMMENTS

SHORELINE OILING SUMMARY

REVISION NO. 03/22/90

OG Mike Foget NOAA useg Gary shigenaka SEGMENT ST/ EV-62
 BIO Richard Ambrose LAND REP useg SUBDIVISION A (1 OF 1)
 EXXON Larry Olsen ADEC John Hayes TIME 6:50 to 7:15
 TEAM NO.: 11 TIDE LEVEL: 7.1 to 5.7 DATE 3/31/90
 EST. SUBDIVISION LENGTH: 612 m ☐ Sun ☒ Clouds ☐ Fog ☒ Rain ☐ Snow
 UPLANDS DESCRIPTION: ☐ Grass ☒ Forest ☒ Rock steep rocky forested back shore
 SURVEYED FROM: ☒ Foot ☒ Boat ☐ Helo WORKING DIRECTION: E to W
 SURFACE SEDIMENTS: R 50 % B 10 % C 15 % P 5 % G — % S — % M — % V — %
 SLOPE: Long 15 % Hang 15 % Vert 70 % WAVE EXPOSURE: ☐ Low ☒ Med ☐ High
 OIL CATEGORY LENGTH: W — m M — m N — m VL — m NO 612 m

SURFACE OIL

CHARACTER	DISTRIBUTION				OIL / FILM COLOR								IMPACTED ZONES				
	C	B	P	S	SB	BR	DL	RW	GY	SL	DB	TL	LB	SU	UI	M	U
ASPHALT PAVEMENT																	
POOLED																	
COVER																	
COAT																	
STAIN																	
MOUSSE																	
PATTIES																	
TARBALLS																	
FILM																	
NO OIL														X	X	X	X

PAVEMENT: H F S — sq. m by — cr

PATTIES / TARBALLS — BAGS

NEAR SHORE SHEEN? ☒ NO BR RW SL TL

OILED DEBRIS	AMOUNT		
	SM	MD	LG
Logs			
Vegetation			
Trash			
Debris			

DEBRIS COLLECTED
☐ YES ☒ NO

TYPE —

#BAGS —

Photographs:

Roll No. —

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	SO BR	CO RW	GY SL	DB TL	LB	SU	UR	ME	U						
1	20					X	-		X								X							C, P
							.																	
							.																	
							.																	
							.																	
							.																	
							.																	

COMMENTS

No oil was located in this segment. The most eastern end of the segment has a low angle cobble beach, the rest of the segment is vertical rock wall with some high angle pocket boulder beaches. Pit #1 is located on the eastern most cobble beach in the upper inter-tidal.

SHORELINE ECOLOGICAL SUMMARY

REVISION: 10/22/90

Segment ST/ EV062 Subdivision A Date (mo / day / yr) 3/31/90Time (24 hr) 0650 hrs Biologist Ambrose

(A) Substrate type and % of segments:

(1) Bedrock 70 (2) Boulder 10 (3) Cobble 15 (4) Pebble 5 (5) Sand — (6) Silt —(B) Overall % cover of biota (% of segment): Dense 0 Moderate 50 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	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	X	X	2	2	2	X	2	2	2
3	3	3	X	X	3	3	3	X	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: *

Nereocystis off shore.

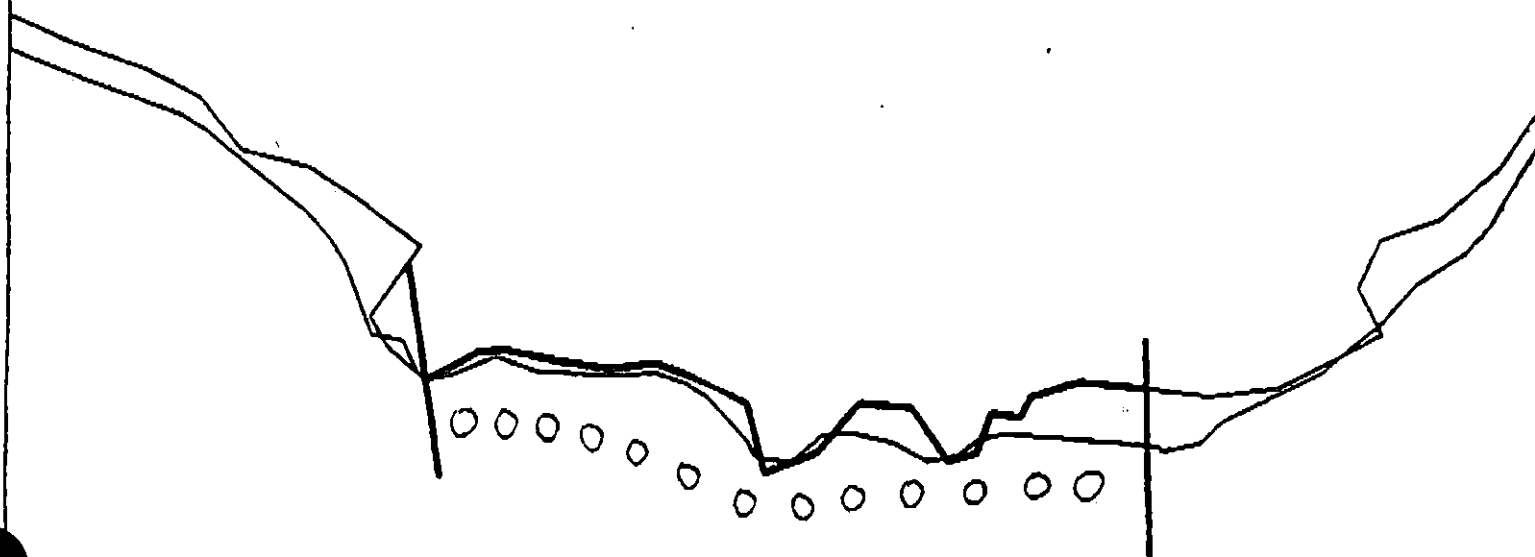
Ecological Considerations:

1F, 711, 5T: No eagles or nests seen.

*Note: (1) Could not survey lower tidal zone because of tide; could see some Fucus through water.

(2) Surveyed by boat, so could not see smaller organisms.

EV-62



EV-62

XXXX Wide

//// Medium

--- Narrow

TTTT Very Light

0000 No Oil

EV-62

ADEC Segment Length: 612m



Map Key: PWS-262

Name: Mike Foget

Date: 3/31/90

Date Entered:

SHORELINE EVALUATION

SEGMENT ST/ EV-62 SUBDIVISION A (1 OF 1) DATE 3/31/90

SEGMENT ENVIRONMENTAL SENSITIVITIES AND TIME CONSTRAINTS:

Near Sawmill Bay Hatchery (1F) - 4/15 to 6/1; Active bald eagle nest (5T) - 3/1 to 6/1; Deer harvesting (7II) - 8/15 to 2/28.

SUBDIVISION ECOLOGICAL CONSTRAINTS: No specific subdivision constraints.

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

SHPO SIGNATURE: Abraham Zeffman DATE: April 6 1990

OILING CATEGORIZATION:

Wide 0 m: Medium 0 m: Narrow 0 m: V.Light 0 m: No Oil 689m
Subsurface Oil Observed: Yes No X Maximum Depth

RECOMMENDATIONS:

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

COMMENTS: No treatment recommended due to no oil being found during the survey.

TAG COMMENTS:

TAG APPROVAL DATE: 4/6/90

ADEC JOHN BAUER John Bauer

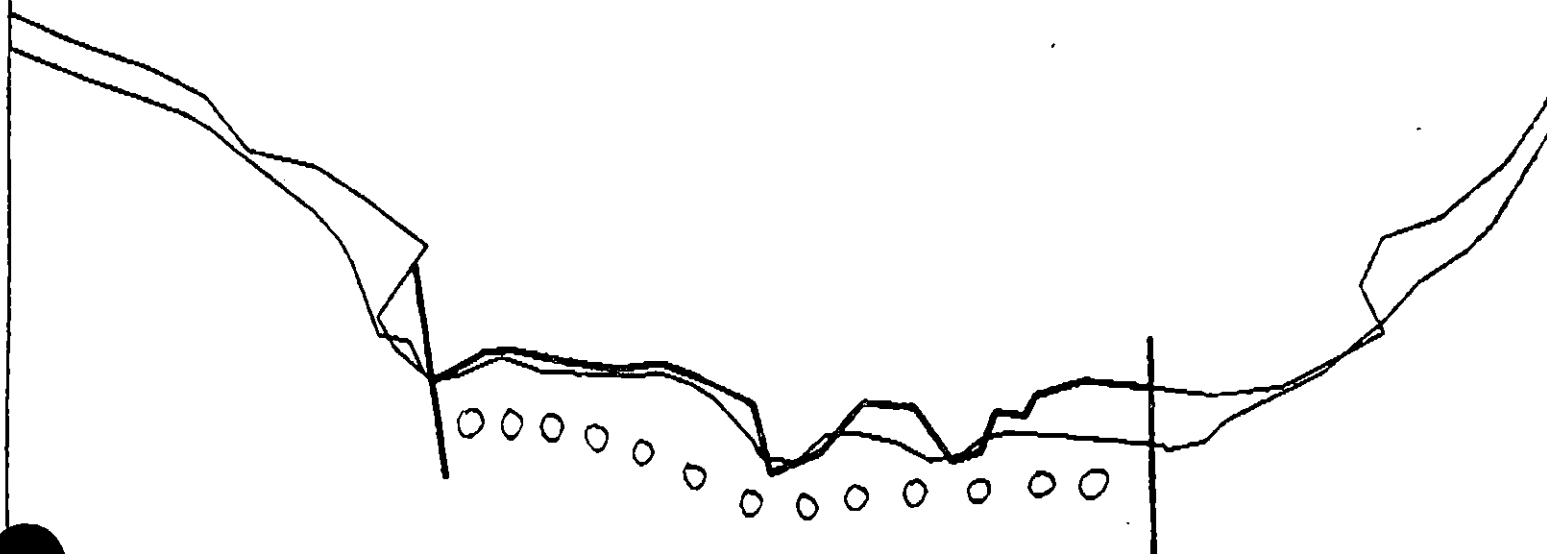
EXXON ANDY TGR Andy TGR

NOAA Burt Westcott Burt Westcott

USCG G.A. REITER G.A. Reiter

FOSC: DATE: 4-19-90

EV-



EV-62

XXXX Wide

//// Medium

--- Narrow

TTTT Very Light

0000 No Oil

EV-62

ADEC Segment Length: 612m



Map Key: PWS-262

Name: Mike Fogar

Date: 3/31/90

Date Entered:

REGION: PRINCE WILLIAM SOUND

SEGMENT: ST/ EV-63

SUBDIVISIONS: A (1 OF 2)

SHORELINE EVALUATION

SEGMENT ST/ EV-63 SUBDIVISION A (1 OF 2) DATE 3/31/90

SEGMENT ENVIRONMENTAL SENSITIVITIES AND TIME CONSTRAINTS:

Near Sawmill Bay Hatchery (1F) - 4/15 to 6/1; Anchorages (6V) - 6/1 to 9/15; Deer harvesting (7II) - 8/15 to 2/28.

SUBDIVISION ECOLOGICAL CONSTRAINTS: Maintain minimal disturbance as possible, eagle nest in vicinity. Restrict air traffic to essential minimum. Approach and takeoff from and to seaward only.

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 259 m: No Oil 441 m
Subsurface Oil Observed: Yes _____ No X Maximum Depth _____

RECOMMENDATIONS:

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

COMMENTS: No treatment recommended due to only light amount of sporadic coat and stain found in this subdivision. Please review Shoreline Comment Sheet.

TAG COMMENTS: _____

TAG APPROVAL DATE: _____

ADEC _____
EXXON _____
NOAA _____
USCG _____

FOSC: _____ DATE: _____

FIELD SHORELINE COMMENT SHEET

SEGMENT ST / EV-63

SUBDIVISION: A

DATE 3/31/90

USCG NOAA

NAME GARY SHIGENAKA

SIGNATURE *Gary Shigenaka*

☐ NO TREATMENT RECOMMENDED

☐ TREATMENT SUGGESTED

COMMENTS

SEGMENT CHARACTERIZED BY BOULDER BEACH. EVIDENCE OF OIL-STAINING WAS PRESENT ON BOULDERS. OIL ON SEAWARD FACES WAS WEATHERED, WHILE THAT ON LANDWARD SIDE WAS MUCH LESS SO, STILL TACKY WITH PINE OR FIR NEEDLES EMBEDDED. IMPACTED ZONE APPEARED TO BE ABOUT 1M ABOVE FOCUS. RECRUITMENT OF MUSSELS ON UPPER BEACH WAS GOOD. ONE BOULDER WITH POPULATIONS OF BOTH MUSSELS AND BARNACLES COATED WITH OIL, BOTH POPULATIONS APPEARED TO BE DOING OKAY.

ADEC

NAME John Hayes

SIGNATURE *John Hayes*

☒ NO TREATMENT RECOMMENDED

☐ TREATMENT SUGGESTED

COMMENTS

Light oiling indicated on map. Oiling was on boulders with cobble, gravel matrix below them. Surface coat was 20-40% coverage with a maximum thickness of 2mm. This beach is a high energy beach with exposure to swell from the gulf. All indications were that natural weathering was working well in this segment. No treatment recommended.

LAND MANAGER

NAME _____

SIGNATURE _____

☐ NO TREATMENT RECOMMENDED

☐ TREATMENT SUGGESTED

COMMENTS

SHORELINE OILING SUMMARY

REVISION NO. 02/22/88

OG Mike Foget NOAA Gary Shigenaka SEGMENT ST/ EV-63
 BIO Richard Ambrose LAND REP — SUBDIVISION A (1 OF 2)
 EXXON Larry Olson ADEC John Hayes TIME 7:15 to 8:00
 TEAM NO.: 11 TIDE LEVEL: 5.7 to 3.9 DATE 3/31/90
 EST. SUBDIVISION LENGTH: 750 m ☐ Sun ☒ Clouds ☐ Fog ☒ Rain ☒ Snow
 UPLANDS DESCRIPTION: ☐ Grass ☒ Forest ☒ Rock steep rocky back shore with trees
 SURVEYED FROM: ☒ Foot ☒ Boat ☐ Helo WORKING DIRECTION: E to W
 SURFACE SEDIMENTS: R 20 % B 40 % C 25 % P 5 % G 5 % S 5 % M — % V — %
 SLOPE: Long 60 % Hang 20 % Vert 20 % WAVE EXPOSURE: ☐ Low ☒ Med ☐ High
 OIL CATEGORY LENGTH: W — m M — m N — m VL 250 m NO 500 m

SURFACE OIL

CHARACTER	DISTRIBUTION				OIL / FILM COLOR					IMPACTED ZONES			
	C	B	P	B	SW	FW	GY	BL	LT	SU	U	MS	U
ASPHALT PAVEMENT													
POOLED													
COVER													
COAT				X				X				X	
STAIN				✓				✓				✓	
MOUSSE													
PATTIES													
TARBALLS													
FILM													
NO OIL										X	X		X

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

OILED DEBRIS	AMOUNT		
	SM	MD	LG
Logs			
Vegetation			
Trash			
Debris			

DEBRIS COLLECTED
☐ YES ☒ NOTYPE —#BAGS —

Photographs:

Roll No. ST-11-1Frames 6, 8-10

SUBSURFACE OIL

PIT NO.	PIT DEPTH (cm)	SUBSURFACE OIL CHARACTER					OILED INTERVAL (cm)	BELOW		OIL / FILM COLOR								PIT ZONE				A N A	SUBSURFACE SEDIMENTS
		OP	OR	OL	OF	NO		VO	UC	SU SP	OR RW	OT P	OR TL	OR L	SU	U	M	L					
1	15					X	-		X							X							C, P, G
2	20					X	-		X							X							P, G
							.																
							.																
							.																
							.																

COMMENTS

the Oiling is: a dark brown coat [CT/5] with a discontinuous splashed distribution. It is located in the Mid ITZ and runs along the shoreline segment 5m x 250m. Oil shows signs of weathering, the exposed oil appears as a dark stain on the rocks, while oil on the backside of boulders and underneath cobble is dark brown in color and is still slicky. There is a localized vertical discontinuous oil banding on the boulders in the MIZ 1m x 20m patch.

SHORELINE ECOLOGICAL SUMMARY

REVISION: 03/22/90

Segment ST/ EVO63 Subdivision A Date (mo/day/yr) 3/31/90Time (24 hr) 07:5hrs Biologist Ambrose(A) Substrate type and % of segments:
(1) Bedrock 20 (2) Boulder 40 (3) Cobble 25 (4) Pebble 5 (5) Sand 10 (6) Silt —(B) Overall % cover of biota (% of segment): Dense 10 Moderate 35 Low 55

(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-11-1Frames 7

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	3	3	3	3	X	3	3	3	3
4	4	4	4	4	4	4	4	4	4	4	4
5	5	5	5	5	5	5	5	5	5	5	5
6	6	6	6	6	6	6	6	6	6	6	6

NOT PRESENT

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	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

FUCUS

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

NOT PRESENT

Wildlife Observations/ General Comments:

All juv/adult Mytilus are juveniles; no adults found. Oiled barnacles and mussels found on a few boulders.Saw 1 sealion, 1 otter, 1 eagle, 2 gulls. Nereocystis occurs offshore.

Ecological Considerations:

IF, 711, 6V: No specific location is relevant.

*Note: much of this subdivision was surveyed by boat.

g Mike

SKETCH MAP

SEGMENT ST/ EV-63

SUBDIVISION A

DATE 3 / 31 90

CHECKLIST

- N Arrow
- Approx. Scale
- Seq/Sub Grid
- Oil Dist.
- Width
- Length
- % Cover
- Substrate Character
- Est. HWA/LWL
- SSI
- Profile Location(s)
- Profile(s)
- Pit Location(s)
- Photo Location(s)

LEGEND

1 Δ
PU - No Subsurface Oil

2 Δ
PU - Subsurface Oil

CT/C
Continuous Distribution

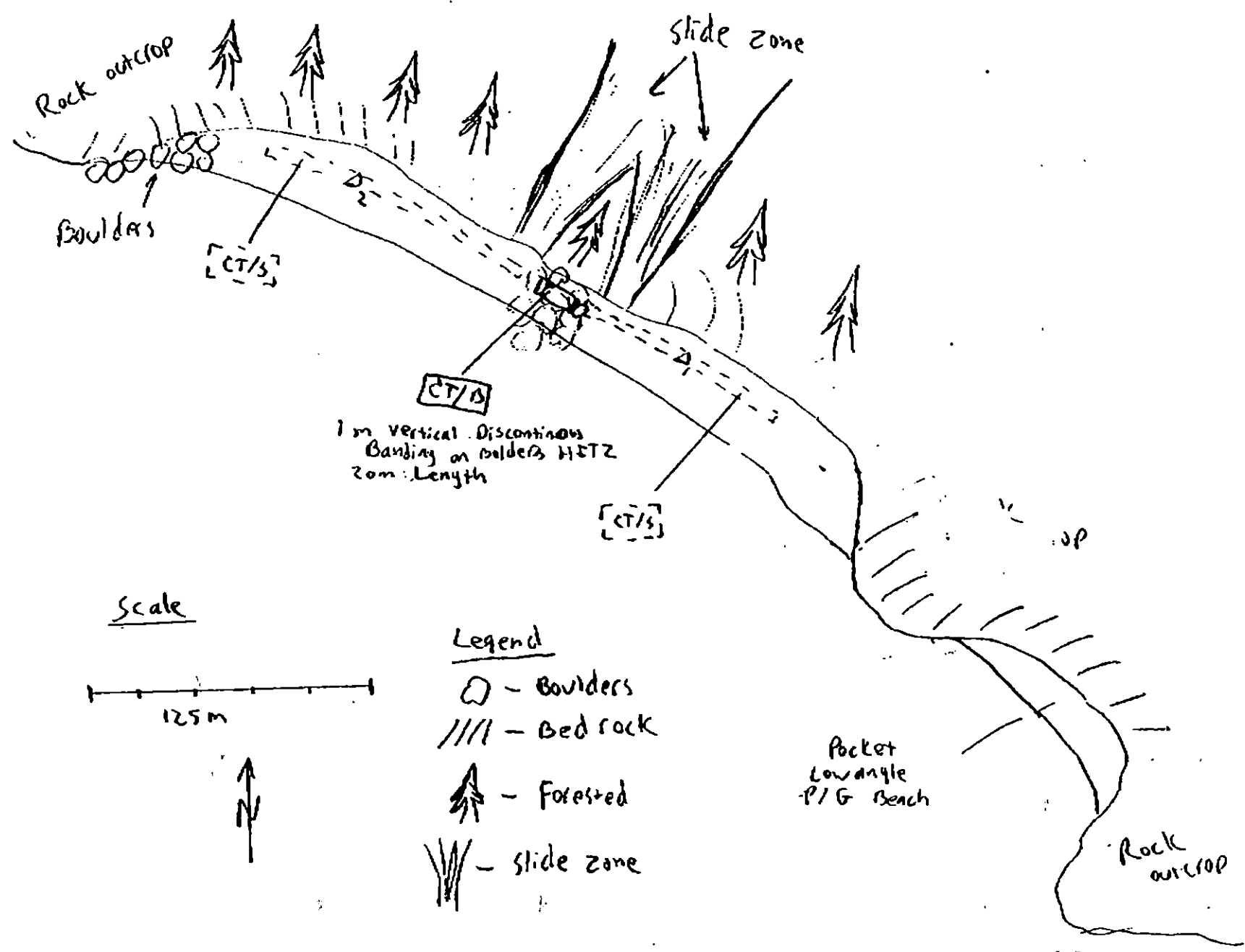
CT/B
Broken Distribution

CT/P
Patchy Distribution

CT/S
Splashed Distribution

Oil Vegetation

1 ●
Photo location, direction, and number



Oil Character Length (m): AP — PO — CV — CT 250 ST — MS — PT — TB — FL — NO 500

REVISION: 00/00/00

EV-64

Δ'
Pit Location

EV-63B

EV-63

XXXX Wide

//// Medium

---- Narrow

TTTT Very Light

OOOO No Oil

EV-63

ADEC Segment Length: 2284m

0 100 200 300
METERS

Map Key: PWS-2630

Name: Mike Fogel

Date: 3/31/10

Data Entered:

EV-64

NO OIL TO
END OF SEGMENT

EV-63B

EV-63A

EV-63

XXXX Wide

//// Medium

--- Narrow

TTTT Very Light

OOOO No Oil

EV-63

ADEC Segment Length: 2284m



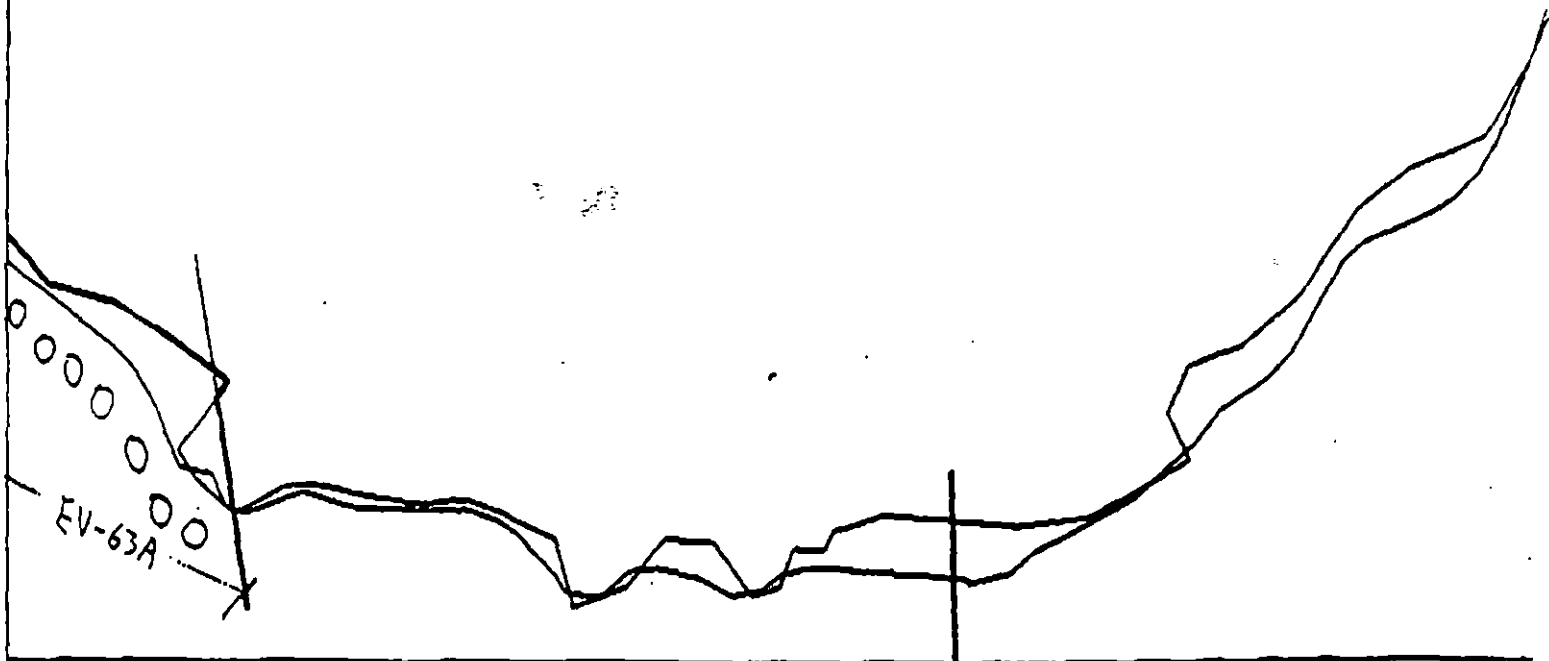
Map Key: PWS-283a

Name: Mike Fogel

Date: 3/31/90

Date Entered:

EV-61



XXXX Wide

//// Medium

--- Narrow

TTTT Very Light

OOOO No Oil

EV-63

ADEC Segment Length: 2284m



Map Key: PWS-203b

Name: Mike Fager

Date: 3/30/90

Date Entered:

SHORELINE EVALUATION

SEGMENT ST/ EV-63 SUBDIVISION A (1 OF 2) DATE 3/31/90

SEGMENT ENVIRONMENTAL SENSITIVITIES AND TIME CONSTRAINTS:

Near Sawmill Bay Hatchery (1F) - 4/15 to 6/1; Anchorages (6V) - 6/1 to 9/15; Deer harvesting (7II) - 8/15 to 2/28.

SUBDIVISION ECOLOGICAL CONSTRAINTS: Maintain minimal disturbance as possible, eagle nest in vicinity. Restrict air traffic to essential minimum. Approach and takeoff from and to seaward only.

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

SHPO SIGNATURE: Rachel Don Dan DATE: 4/10/90

OILING CATEGORIZATION:

Wide 0 m: Medium 0 m: Narrow 0 m: V. Light 259 m: No Oil 441 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> <u> </u> Removal	<u> </u> Other (see comments)

COMMENTS: No treatment recommended due to only light amount of sporadic coat and stain found in this subdivision. Please review Shoreline Comment Sheet.

TAG COMMENTS: NOT ACTUAL ANCHORAGE SITE, ANCHORAGE IN ADJACENT BAY

TAG APPROVAL DATE: 4/10/90
ADEC JOHN BAUER
EXXON ANDY TEAL FOSC: [Signature] DATE: 4-19-90
NOAA Burl Wesselt
USCG G.A. DETER G.A. Rutter

OG M/V 50901

SEGMENT ST/ EV-13

SUBDIVISION A

DATE 3 / 31 / 90

CHECKLIST

- ☐ N Arrow
- ☐ Approx. Scale
- ☐ Seq/Sub Bndry
- ☐ Oil Out
- ☐ Width
- ☐ Length
- ☐ % Cover
- ☐ Substrate Character
- ☐ Est. HML/AWL
- ☐ SSL
- ☐ Profile Location(s)
- ☐ Profile(s)
- ☐ Pit Location(s)
- ☐ Photo Location(s)

LEGEND

1 ▲

Pit - No Subsurface Oil

2 ▲

Pit - Subsurface Oil

CT/C

Continuous Distribution

CT/B

Broken Distribution

CT/P

Patchy Distribution

CT/S

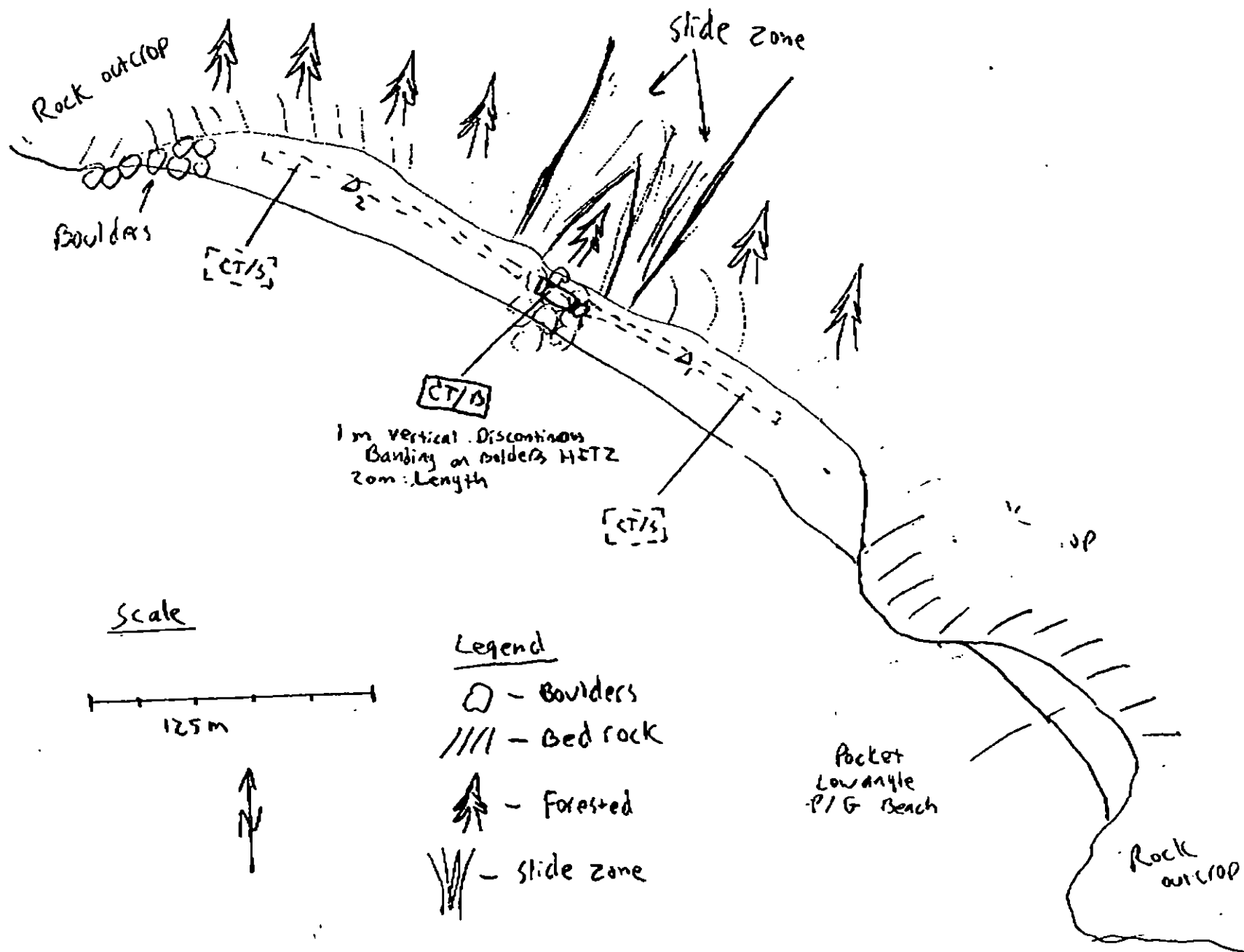
Splashed Distribution

Oil Vegetation

1 ➡

Photo location, direction, and number

SKETCH MAP



Oil Character Length (m): AP PO CV CT 250 ST MS PT TB FL NO 500

REVISION 02/2000

EV-64

Δ'
Pit Location

EV-13B

EV-63

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

EV-63

ADEC Segment Length: 2284m

0 100 200 300
METERS

Map Key: PWS-263a

Name: Mike Fogel

Date: 3/31/90

Date Entered:

EV-64

NO OIL TO
END OF SEGMENT

EV-63B

EV-63A

EV-63

XXXX Wide

//// Medium

--- Narrow

TTTT Very Light

OOOO No Oil

EV-63

ADEC Segment Length: 2284m



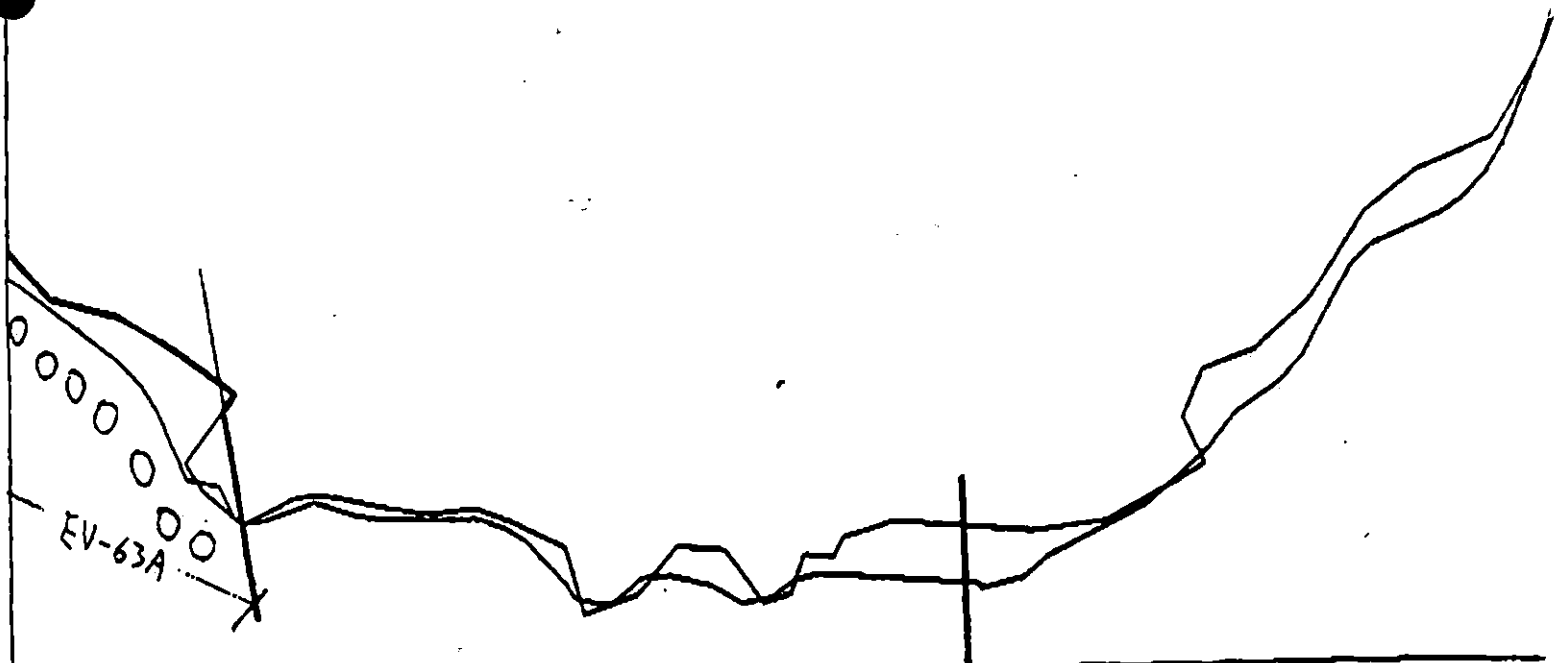
Map Key: PWS-283a

Name: Mike Fogel

Date: 3/31/90

Date Entered:

EV-61



XXXX Wide

/// Medium

--- Narrow

TTTT Very Light

0000 No Oil

EV-63

ADEC Segment Length: 2284m



Map Key: PWS-263b

Name: Mike Foxe

Date: 3/30/90

Date Entered:

SHORELINE EVALUATION

SEGMENT ST/ EV-63 SUBDIVISION B (2 OF 2) DATE 3/31/90

SEGMENT ENVIRONMENTAL SENSITIVITIES AND TIME CONSTRAINTS:

Near Sawmill Bay Hatchery (1F) - 4/15 to 6/1; Anchorages (6V) -
6/1 to 9/15; Deer harvesting (7II) - 8/15 to 2/28.

SUBDIVISION ECOLOGICAL CONSTRAINTS: Maintain minimum disturbance.
Possible eagle nest. Restrict air traffic to essential minimum,
with approach and takeoff from and to seaward only.

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

SHPO SIGNATURE: Rachel Jean Owen DATE: 4/10/90

OILING CATEGORIZATION:

Wide 0 m: Medium 0 m: Narrow 0 m: V.Light 0 m: No Oil 1591 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> <u> </u> Removal	<u> </u> Other (see comments)

COMMENTS: No treatment recommended. No oil found during survey.

TAG COMMENTS:

TAG APPROVAL DATE: 4/10/90

ADEC JOHN BAUER ODH/Ba

EXXON ANDY BIE Realty

NOAA Bry/Wasatt Bull/Wasatt

USCG G.A. REITER G.A. Reiter

FOSC: DATE: 4-19-90

EV-64

Δ'

Pit Location

EV-63-B

EV-63

XXXX Wide

//// Medium

---- Narrow

TTTT Very Light

OOOO No Oil

EV-63

ADEC Segment Length: 2204m



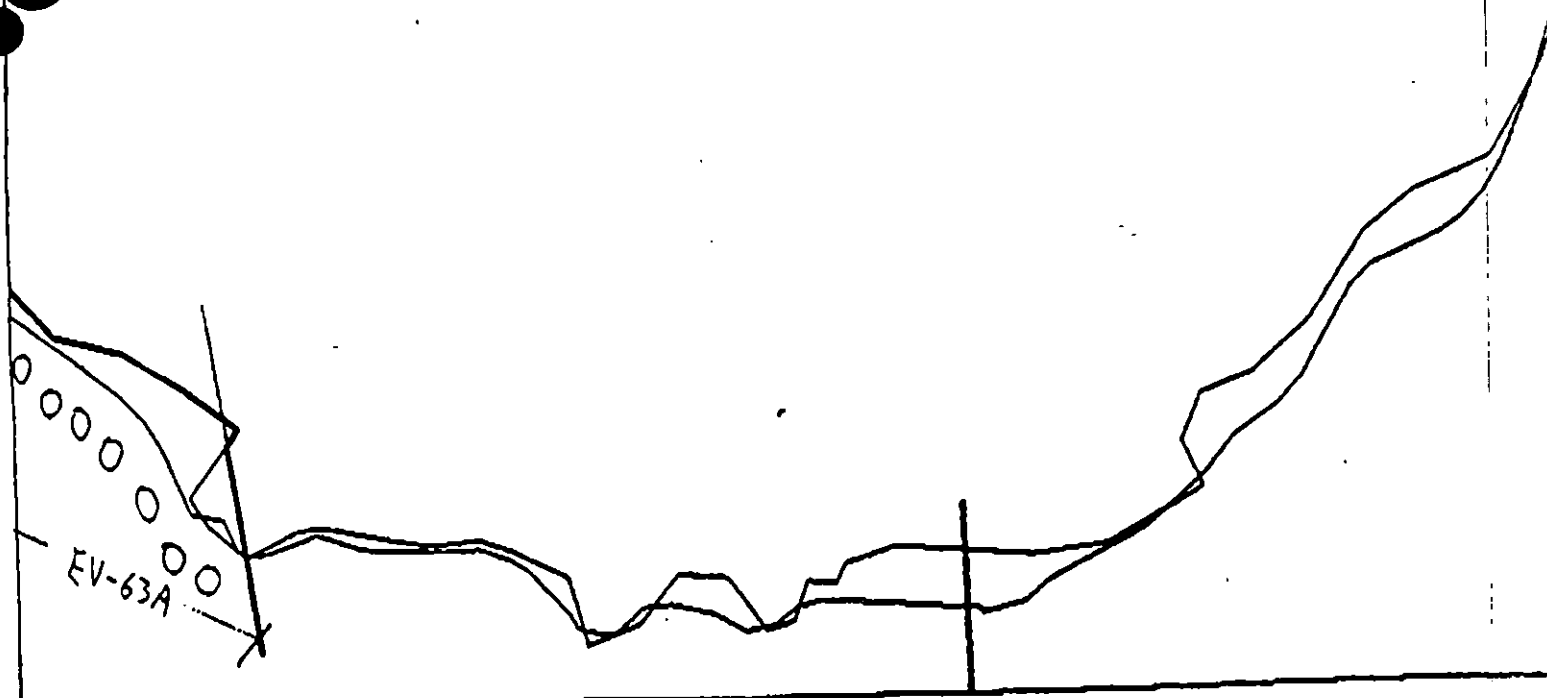
Map Key: PWS-263a

Name: Mike Fogel

Date: 3/31/90

Date Entered:

EV-61



XXXX Wide

//// Medium

--- Narrow

TTTT Very Light

OOOO No Oil

EV-63

ADEC Segment Length: 2284m



Map Key: PWS-263b

Name: Mike Foxe

Date: 3/31/90

Data Entered:

EV-64

EV-63B

EV-63A

EV-63

XXXX Wide

//// Medium

--- Narrow

TTTT Very Light

0000 No Oil

EV-63

ADEC Segment Length: 2284m



Map Key: PWS-263a

Name: Mike Foret

Date: 3/31/90

Date Entered:

REGION: PRINCE WILLIAM SOUND

SEGMENT: ST/ EV-63

SUBDIVISIONS: B (2 OF 2)

SHORELINE EVALUATION

SEGMENT ST/ EV-63 SUBDIVISION B (2 OF 2) DATE 3/31/90

SEGMENT ENVIRONMENTAL SENSITIVITIES AND TIME CONSTRAINTS:

Near Sawmill Bay Hatchery (1F) - 4/15 to 6/1; Anchorages (6V) -
6/1 to 9/15; Deer harvesting (7II) - 8/15 to 2/28.

SUBDIVISION ECOLOGICAL CONSTRAINTS: Maintain minimum disturbance.
Possible eagle nest. Restrict air traffic to essential minimum,
with approach and takeoff from and to seaward only.

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 1591 m
Subsurface Oil Observed: Yes _____ No X Maximum Depth _____

RECOMMENDATIONS:

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

COMMENTS: No treatment recommended. No oil found during survey.

TAG COMMENTS: _____

TAG APPROVAL DATE: _____

ADEC _____

EXXON _____

NOAA _____

USCG _____

FOSC: _____ DATE: _____

FIELD SHORELINE COMMENT SHEET

SEGMENT ST / EV-63 SUBDIVISION: B DATE 3/31/90

NOAA
NAME GARY SHIGENAKA SIGNATURE *Gary Shigenaka*

☐ NO TREATMENT RECOMMENDED

☐ TREATMENT SUGGESTED

COMMENTS

MIXED COBBLE/GRAVEL BEACH

NO EVIDENCE OF OILING.

ADEC
NAME John Hayer SIGNATURE *John Hayer*

☒ NO TREATMENT RECOMMENDED

☐ TREATMENT SUGGESTED

COMMENTS

No oil seen/observed on this segment.

LAND MANAGER

NAME _____ SIGNATURE _____

☐ NO TREATMENT RECOMMENDED

☐ TREATMENT SUGGESTED

COMMENTS

SHORELINE OILING SUMMARY

REVISION NO. 02/22/90

OG Mike Foget NOAA Gary Shigenaka SEGMENT ST/ EV-63
 BIO Richard Ambrose USCG LAND REP SUBDIVISION B (2 of 2)
 EXXON Larry Olson ADEC John Hayes TIME 8:00 to 8:35
 TEAM NO.: 11 TIDE LEVEL: 3.9 to 2.3 DATE 3/31/90
 SUBDIVISION LENGTH: 1534 m ☐ Sun ☒ Clouds ☐ Fog ☒ Rain ☒ Snow
 LANDS DESCRIPTION: ☐ Grass ☒ Forest ☒ Rock Rocky Backshore with some forest
 SURVEYED FROM: ☒ Foot ☒ Boat ☐ Helo WORKING DIRECTION: E to W
 SURFACE SEDIMENTS: R 20 % B 30 % C 30 % P 10 % G 5 % S 5 % M — % V — %
 SLOPE: Long 45 % Hang 35 % Vert 20 % WAVE EXPOSURE: ☐ Low ☐ Med ☒ High
 OIL CATEGORY LENGTH: W — m M — m N — m VL 30 m NO 1504 m

SURFACE OIL

CHARACTER	DISTRIBUTION				OIL / FILM COLOR								IMPACTED ZONES			
	IC	IB	IF	IS	SL	SR	SW	ST	TL	TR	UR	UL	SU	UI	MI	U
ASPHALT PAVEMENT																
POOLED																
COVER																
COAT																
STAIN																
MOUSSE																
PATTIES																
TARBALLS																
FILM																
NO OIL													X	X	X	X

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

OILED DEBRIS	AMOUNT		
	SM	MD	LG
Logs			
Vegetation			
Trash			
Debris			

DEBRIS COLLECTED
☐ YES ☒ NOTYPE —#BAGS —

Photographs:

Roll No. —Frames —

SUBSURFACE OIL

PIT NO.	PIT DEPTH (cm)	SUBSURFACE OIL CHARACTER					OILED INTERVAL (CM-CM)	BELOW		OIL / FILM COLOR								PIT ZONE				A N A	SUBSURFACE SEDIMENTS
		OP	OR	OL	OF	NO		VO	UC	SL	SR	SW	ST	TL	TR	UR	UL	SU	UI	MI	U		
1	15					X	.		X									X					G, S, R
							.																
							.																
							.																
							.																
							.																

COMMENTS

No oil was observed in this segment, the shore zone consists of Rocky headlands w/ pocket Boulder / cobble beaches

SHORELINE ECOLOGICAL SUMMARY

REVISION: 03/22/90

Segment ST/EV 063 Subdivision B Date (mo / day / yr) 3 / 31 / 90

Time (24 hr) 0800 hrs. Biologist Ambrose

Substrate type and % of segments:

(1) Bedrock 20 (2) Boulder 30 (3) Cobble 30 (4) Pebble 10 (5) Sand 10 (6) Silt —

(B) Overall % cover of biota (% of segment): Dense 15 Moderate 45 Low 40

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

Photographs: —

Roll No. —

Frames —

BARNACLES

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

ASTROPODS

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	X	X	2	2	2	2	2	2	2	
3	3	3	X	X	3	3	3	3	3	3	3	
4	4	4	4	4	4	4	4	4	4	4	4	
5	5	5	5	5	5	5	5	5	5	5	5	
6	6	6	6	6	6	6	6	6	6	6	6	

Wildlife Observations/ General Comments: *

3otters, 1 sea lion, 1 eagle, 3 cormorants, 2 surf scoters; Nereocystis off shore. Nearly all Mytilus are juveniles or new recruits.

Ecological Considerations:

1F, 711, 6V: Not relevant.

*Note: much of this subdivision surveyed by boat.

EV-64

Δ'

Pit Location

EV-63B

EV-63

XXXX Wide

/// Medium

--- Narrow

TTTT Very Light

0000 No Oil

EV-63

ADEC Segment Length: 2284m



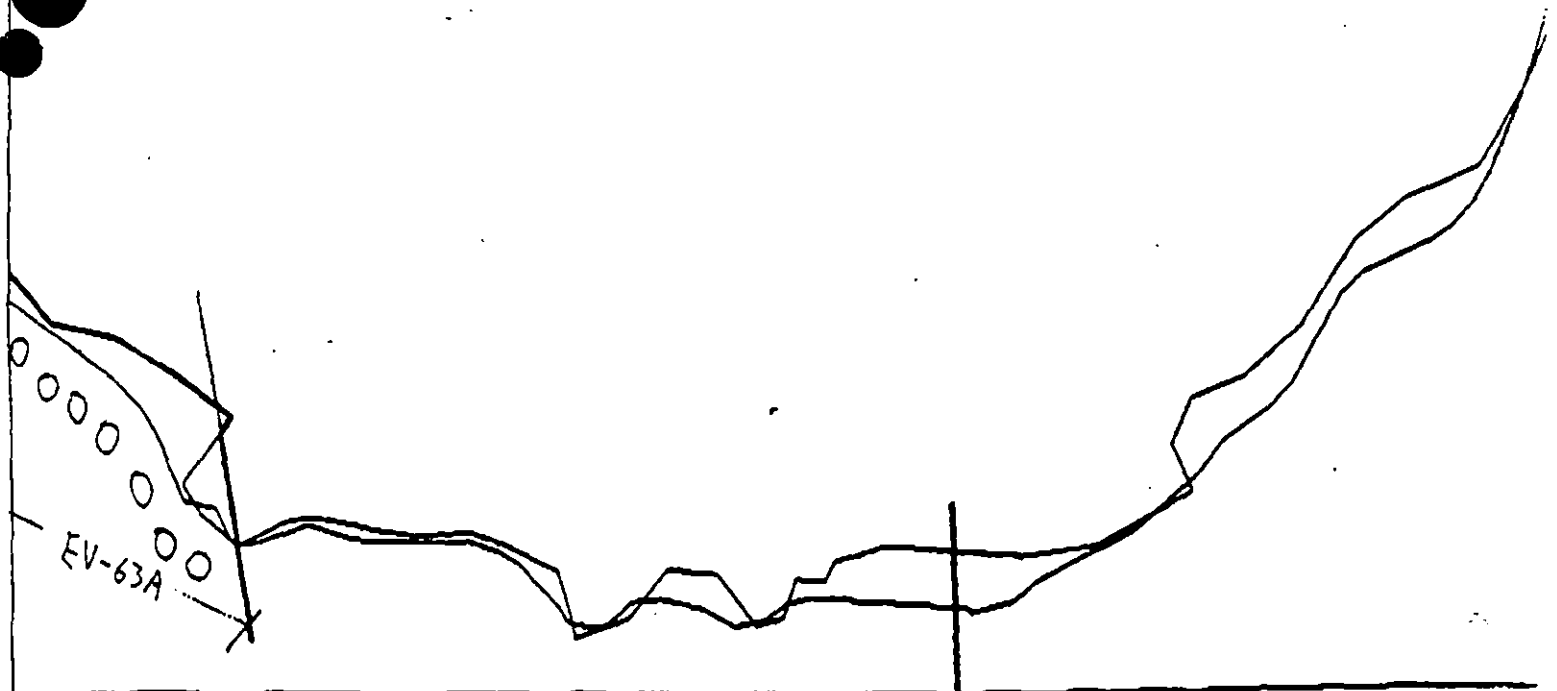
Map Key: PWS-263a

Name: Mike Fogel

Date: 3/31/40

Date Entered:

EV-61



XXXX Wide

//// Medium

--- Narrow

TTTT Very Light

0000 No Oil

EV-63

ADEC Segment Length: 2284m



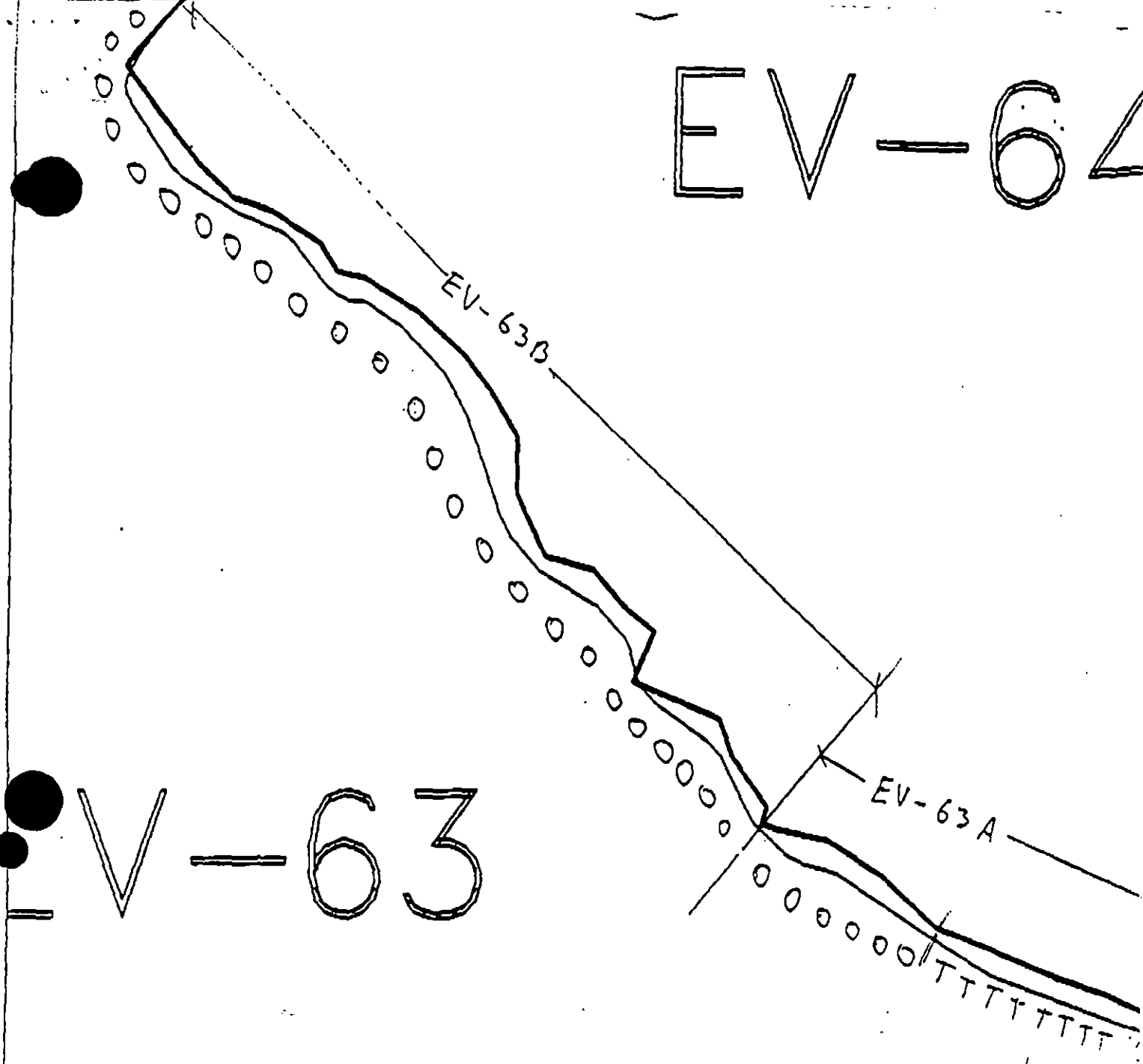
Map Key: PWS-263b

Name: Mike Foye

Date: 3/30/90

Date Entered:

EV-64



XXXX Wide

/// Medium

--- Narrow

TTTT Very Light

0000 No Oil

EV-63

ADEC Segment Length: 2284m



Map Key: PWS-263a

Name: Mike Foret

Date: 3/31/90

Date Entered:

REGION: PRINCE WILLIAM SOUND

SEGMENT: ST/ EV-64

SUBDIVISIONS: A (1 OF 1)

SHORELINE EVALUATION

SEGMENT ST/ EV-64 SUBDIVISION A (1 OF 1) DATE 3/31/90

SEGMENT ENVIRONMENTAL SENSITIVITIES AND TIME CONSTRAINTS:

Near Sawmill Bay Hatchery (1F) - 4/15 to 6/1; Active bald eagle
nest (5T) - 3/1 to 6/1; Deer harvesting (7II) - 8/15 to 2/28.

SUBDIVISION ECOLOGICAL CONSTRAINTS: No specific subdivision con-
straints.

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 1066m
Subsurface Oil Observed: Yes _____ No X Maximum Depth _____

RECOMMENDATIONS:

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

COMMENTS: No treatment recommended on EV-64 (A) due to no oil
being found during survey. Please see Field Shoreline Comment
Sheet.

TAG COMMENTS: _____

TAG APPROVAL DATE: _____

ADEC _____

EXXON _____

NOAA _____

USCG _____

FOSC: _____ DATE: _____

FIELD SHORELINE COMMENT SHEET

SEGMENT ST / EV-64 SUBDIVISION: _____ DATE 3/31/90

USCG NOAA

NAME GARY SHIGENAKA

SIGNATURE *Gary Shigenaka*

☐ NO TREATMENT RECOMMENDED

☐ TREATMENT SUGGESTED

COMMENTS

LOCATION = SQUIREEL BAY, BOULDER AND LARGE COBBLE BEACH. NO SIGN OF OILING. DEER
OBSERVED ON BEACH, MATURE BALD EAGLE IN WOODS JUST ABOVE BEACH.

ADEC

NAME John Hayes

SIGNATURE *John Hayes*

☒ NO TREATMENT RECOMMENDED

☐ TREATMENT SUGGESTED

COMMENTS

*No oil on this segment, noted Deer + Bald Eagle on segment
both healthy.*

LAND MANAGER

NAME _____

SIGNATURE _____

☐ NO TREATMENT RECOMMENDED

☐ TREATMENT SUGGESTED

COMMENTS

SHORELINE OILING SUMMARY

REVISION NO. 001/002

OG Mike Foget NOAA Gary Shigenaka SEGMENT ST/ EU-64
 BIO Richard Ambrose LAND REP USCG SUBDIVISION A (10F1)
 EXXON Larry Olson ADEC John Hayes TIME 8:35 to 8:50
 TEAM NO.: 11 TIDE LEVEL: 2.3 to 1.1 DATE 3/31 /90
 EST. SUBDIVISION LENGTH: 1034 m ☐ Sun ☐ Clouds ☐ Fog ☒ Rain ☒ Snow
 UPLANDS DESCRIPTION: ☐ Grass ☒ Forest ☒ Rock steep rocky forested backshore
 SURVEYED FROM: ☒ Foot ☒ Boat ☐ Helo WORKING DIRECTION: W to E
 SURFACE SEDIMENTS: R 5 % B 20 % C 40 % P 20 % G 10 % S 5 % M - % V - %
 SLOPE: Long 65 % Hang 30 % Vert 5 % WAVE EXPOSURE: ☐ Low ☒ Med ☐ High
 OIL CATEGORY LENGTH: W - m M - m N - m VL - m NO 1034 m

SURFACE OIL

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

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

OILED DEBRIS	AMOUNT		
	SM	MD	LG
Logs			
Vegetation			
Trash			
Debris			

DEBRIS COLLECTED

☐ YES ☒ NOTYPE -#BAGS -

Photographs:

Roll No. -Frames -

SUBSURFACE OIL

PIT NO.	PIT DEPTH (cm)	SUBSURFACE OIL CHARACTER					OILED INTERVAL (CM-CH)	BELOW		OIL / FILM COLOR							PIT ZONE				A N A	SUBSURFACE SEDIMENTS	
		OP	OR	OL	OF	NO		UC	UC	SP BR	OP RW	OL SL	OR TL	OR LR	SU	UI	MR	LI					
1	15					X	.		X								X						P, G
							.																
							.																
							.																
							.																
							.																
							.																

COMMENTS

No oil was observed in this segment, shore zone consists mostly of low angle Boulder / cobble beach.

SHORELINE ECOLOGICAL SUMMARY

REVISION: 02/23/90

Segment ST/ EVO64 Subdivision A Date (mo / day / yr) 3/31/90

Time (24 hr) 0835 hrs Biologist Ambrose

(A) Substrate type and % of segments:
(1) Bedrock 5 (2) Boulder 20 (3) Cobble 40 (4) Pebble 20 (5) Sand 15 (6) Silt -

(B) Overall % cover of biota (% of segment): Dense 10 Moderate 20 Low 70

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

Photographs: -
Roll No. -

Frames -

BARNACLES

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

NOT PRESENT

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	X	2	X	2	2	2	2	2
3	3	3	3	X	3	X	3	3	3	3	3
4	4	4	4	4	4	4	4	4	4	4	4
5	5	5	5	5	5	5	5	5	5	5	5
6	6	6	6	6	6	6	6	6	6	6	6

NOT PRESENT

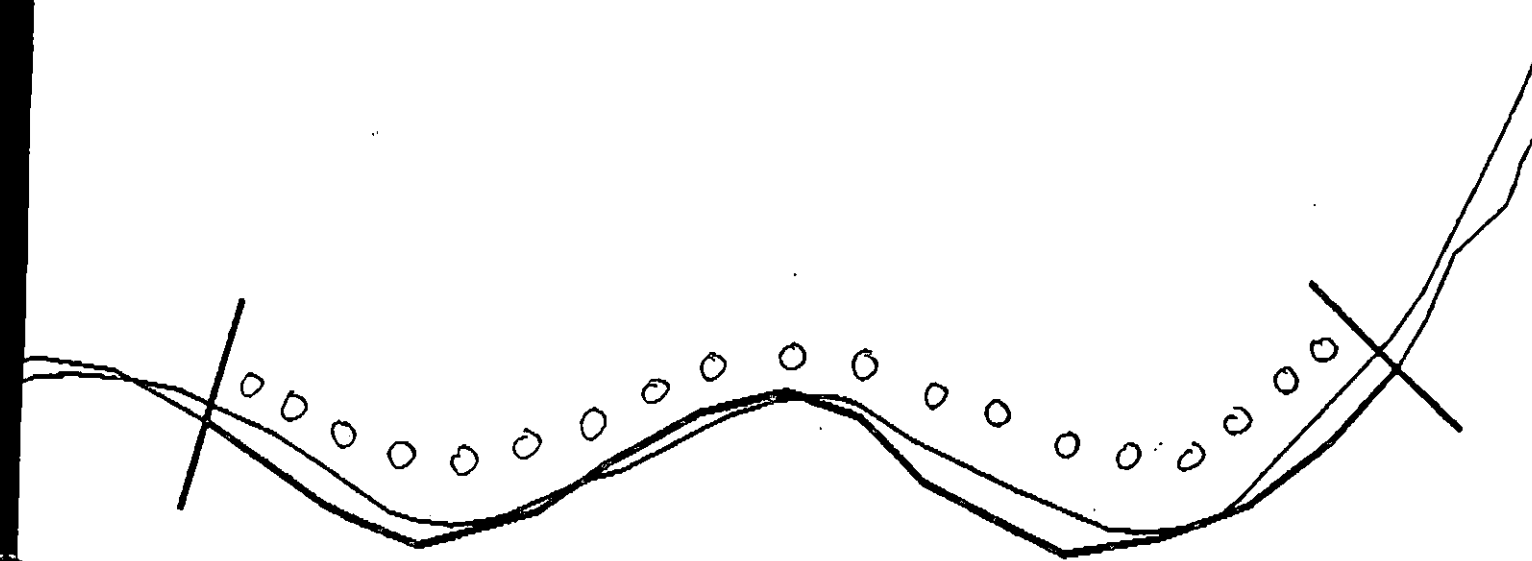
Wildlife Observations/ General Comments: *

5 adult Harlequin ducks and 4 young, 1 deer, 2 eagles (1 mature, 1 immature)
Red algae dense cover in low intertidal.

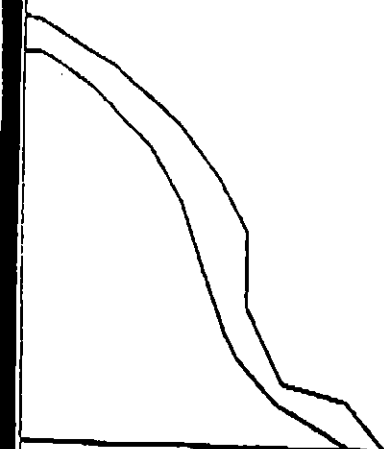
Ecological Considerations:

IF, 711, 6V: Not relevant.

*Note: Surveyed by boat.



EV-64



XXXX Wide

//// Medium

---- Narrow

TTTT Very Light

0000 No Oil

EV-64

ADEC Segment Length: 1034m



Map Key: PWS-264

Name: Mike Fogel

Date: 3/31/90

Data Entered:

SHORELINE EVALUATION

SEGMENT ST/ EV-64 SUBDIVISION A (1 OF 1) DATE 3/31/90

SEGMENT ENVIRONMENTAL SENSITIVITIES AND TIME CONSTRAINTS:

Near Sawmill Bay Hatchery (1F) - 4/15 to 6/1; Active bald eagle nest (5T) - 3/1 to 6/1; Deer harvesting (7II) - 8/15 to 2/28.

SUBDIVISION ECOLOGICAL CONSTRAINTS: No specific subdivision constraints.

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

SHPO SIGNATURE: Charles J. Adams DATE: April 6, 1990

OILING CATEGORIZATION:

Wide 0 m: Medium 0 m: Narrow 0 m: V.Light 0 m: No Oil 1066 m
Subsurface Oil Observed: Yes No X Maximum Depth

RECOMMENDATIONS:

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

COMMENTS: No treatment recommended on EV-64 (A) due to no oil being found during survey. Please see Field Shoreline Comment Sheet.

TAG COMMENTS:

TAG APPROVAL DATE: 4-6-90

ADEC JOHN BRAUER

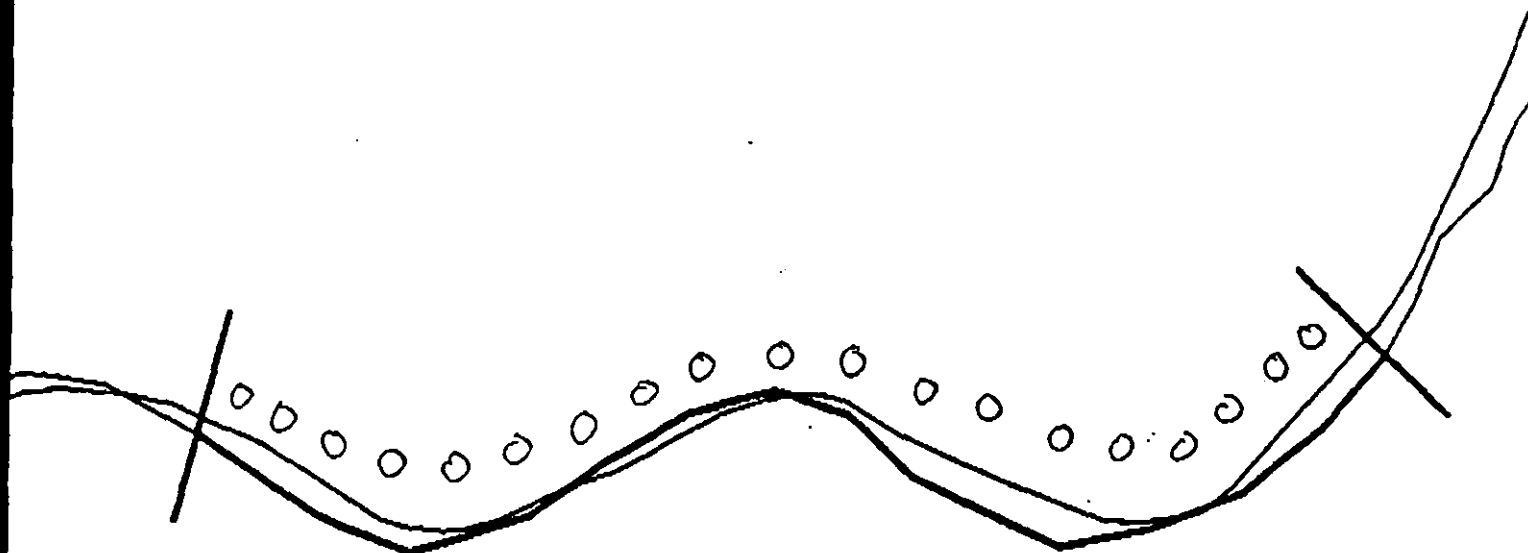
EXXON ANDY GIL

NOAA BUSI WESCOTT

USCG G.A. REITER

FOSC:

DATE: 4-19-90



EV-64

XXXX Wide

/// Medium

--- Narrow

TTTT Very Light

0000 No Oil

EV-64

ADEC Segment Length: 1034m



Map Key: PWS-264

Name: Mike Ford

Date: 3/31/90

Data Entered:

REGION: PRINCE WILLIAM SOUND

SEGMENT: ST/ EV-65

SUBDIVISIONS: A (1 OF 1)

SHORELINE EVALUATION

SEGMENT ST/ EV-65 SUBDIVISION A (1 OF 1) DATE 3/31/90

SEGMENT ENVIRONMENTAL SENSITIVITIES AND TIME CONSTRAINTS:

Near Sawmill Bay Hatchery (1F) - 4/15 to 6/1; Anchorages (6V) -
6/1 to 9/15; Deer harvesting (7II) - 8/15 to 2/28.

SUBDIVISION ECOLOGICAL CONSTRAINTS: No specific subdivision con-
straints.

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 785m
Subsurface Oil Observed: Yes _____ No X Maximum Depth _____

RECOMMENDATIONS:

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

COMMENTS: No treatment recommended on EV-65 (A) due to no oil
being found during survey. Please see Field Shoreline Comment
Sheet.

TAG COMMENTS: _____

TAG APPROVAL DATE: _____

ADEC _____
EXXON _____
NOAA _____
USCG _____

FOSC: _____ DATE: _____

FIELD SHORELINE COMMENT SHEET

SEGMENT ST / EV-65 SUBDIVISION: _____ DATE 3/31/90

USCG NOAA

NAME GARY SHIGENAKA SIGNATURE *Gary Shigenaka*

☐ NO TREATMENT RECOMMENDED

☐ TREATMENT SUGGESTED

COMMENTS

COBBLE, GRAVEL, BLACK SAND BEACH. NO OIL OBSERVED.

ADEC

NAME John Hayes SIGNATURE *John Hayes*

☒ NO TREATMENT RECOMMENDED

☐ TREATMENT SUGGESTED

COMMENTS

No oil observed on this segment.

LAND MANAGER

NAME _____ SIGNATURE _____

☐ NO TREATMENT RECOMMENDED

☐ TREATMENT SUGGESTED

COMMENTS

SHORELINE OILING SUMMARY

REVISION NO. 03/23/88

OG Mike Foget NOAA Gary Shigenaka SEGMENT ST/ EV-65
 BIO Richard Ambrose USCG LAND REP SUBDIVISION A (1 OF 1)
 EXXON Larry Olson ADEC John Hayes TIME 8:50 to 9:10
 TEAM NO.: 11 TIDE LEVEL: 1.1 to 0.4 DATE 3/31/90
 EST. SUBDIVISION LENGTH: 727 m ☐ Sun ☒ Clouds ☐ Fog ☒ Rain ☐ Snow
 UPLANDS DESCRIPTION: ☐ Grass ☒ Forest ☒ Rock Rocky Forested Backshore
 SURVEYED FROM: ☒ Foot ☒ Boat ☐ Helo WORKING DIRECTION: S to N
 SURFACE SEDIMENTS: R - % B 5 % C 15 % P 20 % G 20 % S 40 % M - % V - %
 SLOPE: Long 95 % Hang 5 % Vert - % WAVE EXPOSURE: ☐ Low ☒ Med ☐ High
 OIL CATEGORY LENGTH: W - m M - m N - m VL - m NO 727 m

SURFACE OIL

CHARACTER	DISTRIBUTION				OIL / FILM COLOR								IMPACTED ZONES			
	IC	IS	IP	IS	BR	BL	OW	OR	TL	LR			SU	U	M	LI
ASPHALT PAVEMENT																
POOLED																
COVER																
COAT																
STAIN																
MOUSSE																
PATTIES																
TARBALLS																
FILM																
NO OIL													X	X	X	X

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

OILED DEBRIS	AMOUNT		
	SM	MD	LG
Logs			
Vegetation			
Trash			
Debris			

DEBRIS COLLECTED

☐ YES ☒ NOTYPE -#BAGS -

Photographs:

Roll No. -Frames -

SUBSURFACE OIL

PIT NO.	PIT DEPTH (cm)	SUBSURFACE OIL CHARACTER					OILED INTERVAL (CM-CM)	BELOW		OIL / FILM COLOR								PIT ZONE				A N A	SUBSURFACE SEDIMENTS
		OP	OR	OL	OF	NO		UO	UC	BR	BL	OW	OR	TL	LR			SU	U	M	LI		
1	20					X	-		X									X					P, G, S
2	30					X	-		X									X					S
							-																
							-																
							-																
							-																

COMMENTS

No oil was observed on this segment. The shore zone is mostly a low angle black sand beach.

SHORELINE ECOLOGICAL SUMMARY

Segment ST/ EVO65 Subdivision A Date (mo / day / yr) 3/31/90

Time (24 hr) 0850 hrs Biologist Ambrose

(A) Substrate type and % of segments:
(1) Bedrock — (2) Boulder 5 (3) Cobble 15 (4) Pebble 20 (5) Sand 60 (6) Silt —

(B) Overall % cover of biota (% of segment): Dense 0 Moderate 0 Low 100

(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: *

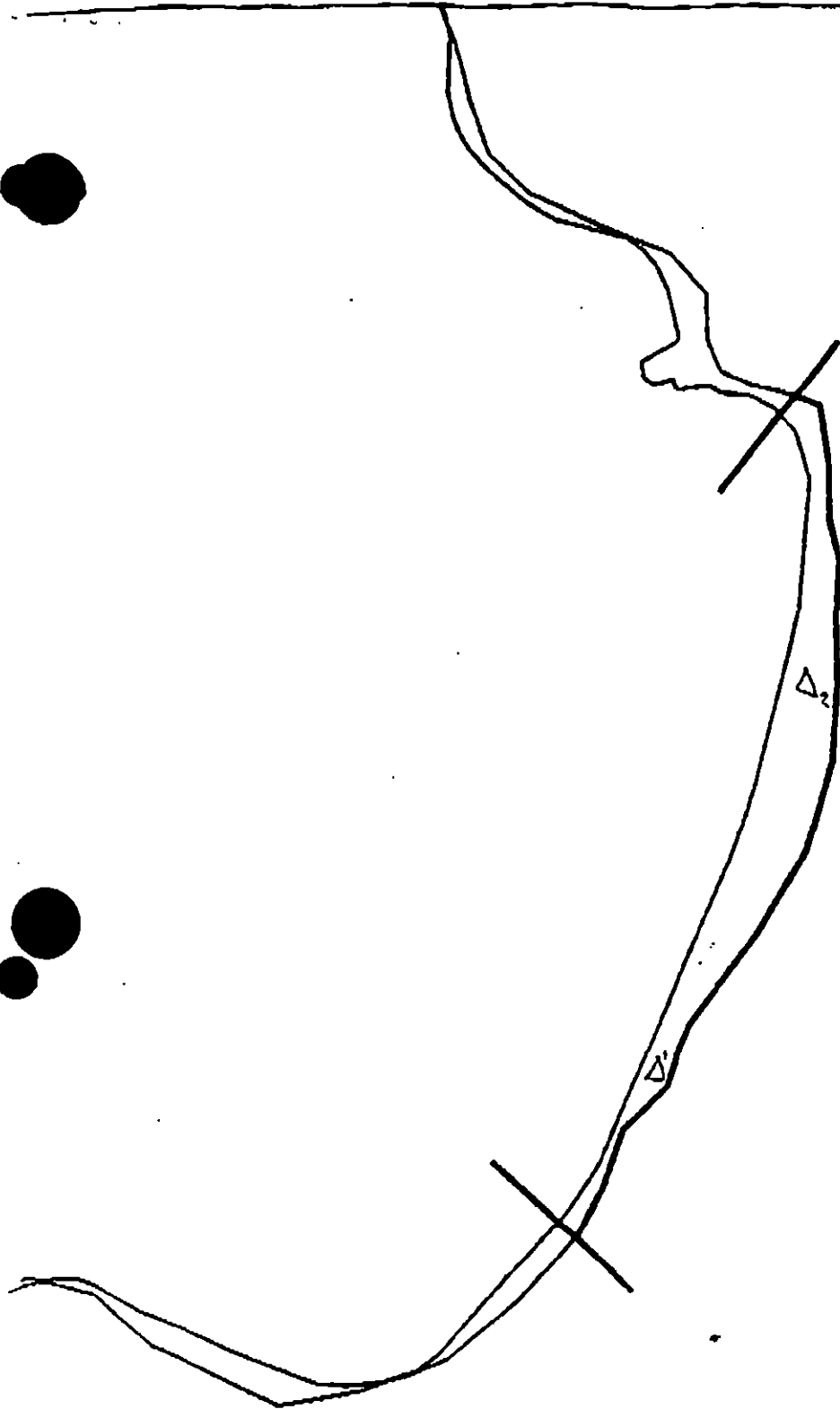
2 eagles.

Pebble/sand beach, no visible biota!

Ecological Considerations:

IF, 711, 6V: Not relevant

* Note: surveyed by boat.



EV-65

XXXX Wide

/// Medium

--- Narrow

TTTT Very Light

EV-65

ADEC Segment Length: 727m

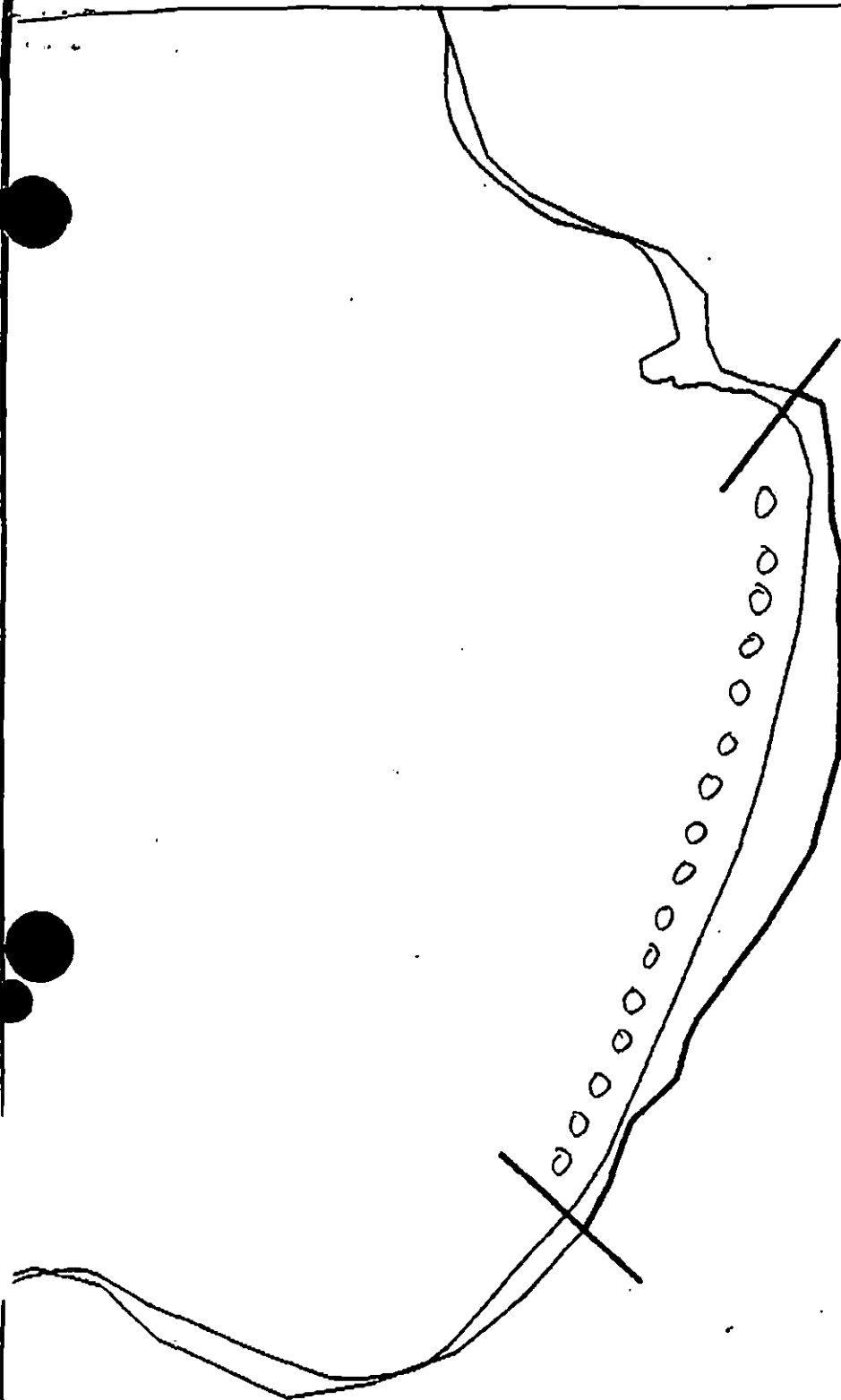


Map Key: PWS-265

Name: Mike Fojet

Date: 3/31/90

Data Released:



EV-65

XXXX Wide

/// Medium

--- Narrow

TTTT Very Light

OOOO No Oil

EV-65

ADEC Segment Length: 727m



Map Key: PWS-265

Name: Mike Fogel

Date: 3/31/90

Date Entered:

SHORELINE EVALUATION

SEGMENT ST/ EV-65 SUBDIVISION A (1 OF 1) DATE 3/31/90

SEGMENT ENVIRONMENTAL SENSITIVITIES AND TIME CONSTRAINTS:

Near Sawmill Bay Hatchery (1F) - 4/15 to 6/1; Anchorages (6V) -
6/1 to 9/15; Deer harvesting (7II) - 8/15 to 2/28.

SUBDIVISION ECOLOGICAL CONSTRAINTS: No specific subdivision con-
straints.

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

SHPO SIGNATURE: Charles E. Hohner DATE: April 6, 1990

OILING CATEGORIZATION:

Wide 0 m: Medium 0 m: Narrow 0 m: V.Light 0 m: No Oil 785m
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> <u> </u> Removal	<u> </u> Other (see comments)

COMMENTS: No treatment recommended on EV-65 (A) due to no oil
being found during survey. Please see Field Shoreline Comment
Sheet.

TAG COMMENTS:

TAG APPROVAL DATE: 4/6/90

ADEC JOHN BAUER John Bauer

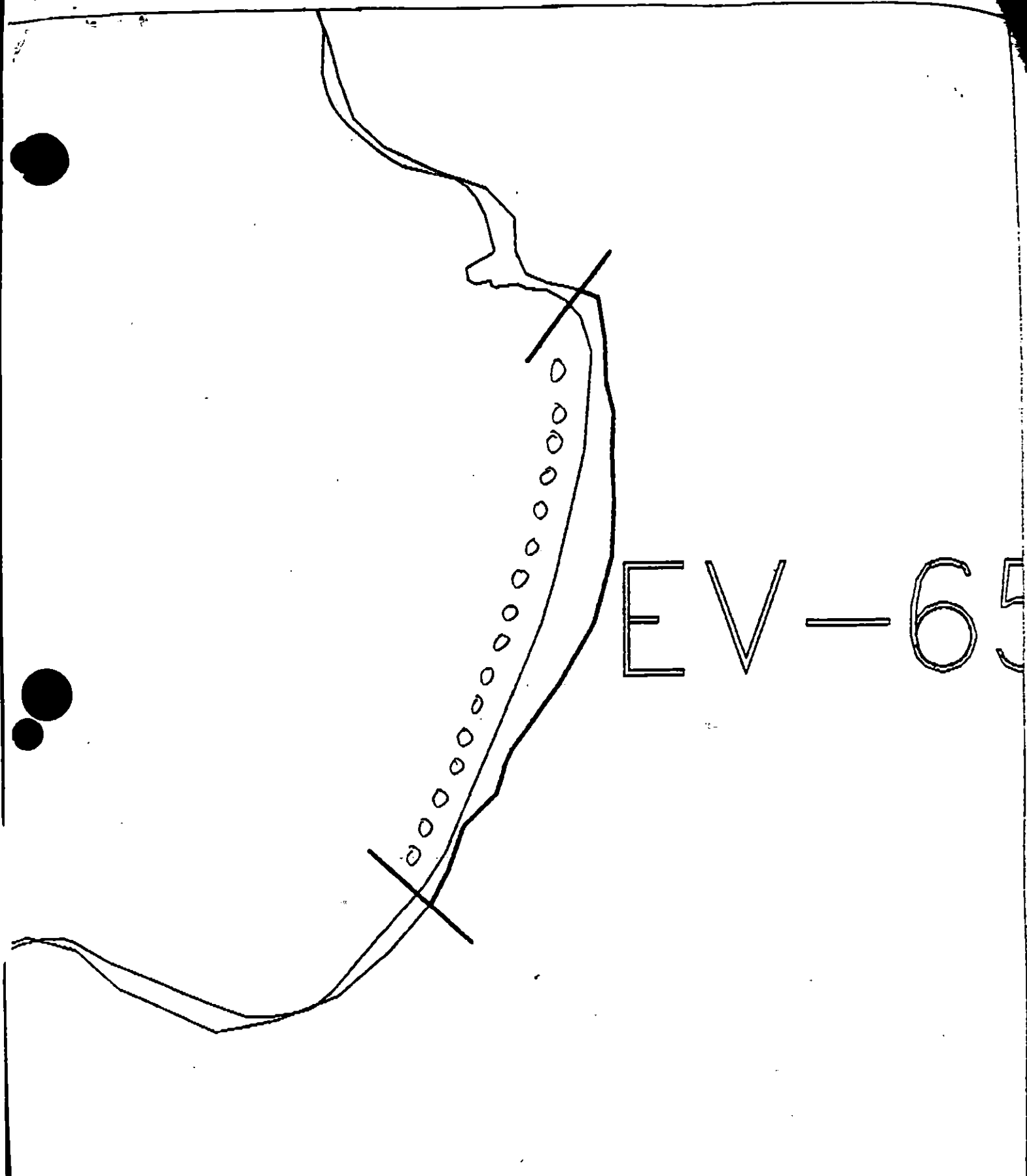
EXXON ANDY TER Andy Ter

NOAA Burl Wescott Burl Wescott

USCG G.A. REITER G.A. Reiter

FOSC:

DATE: 4-19-90



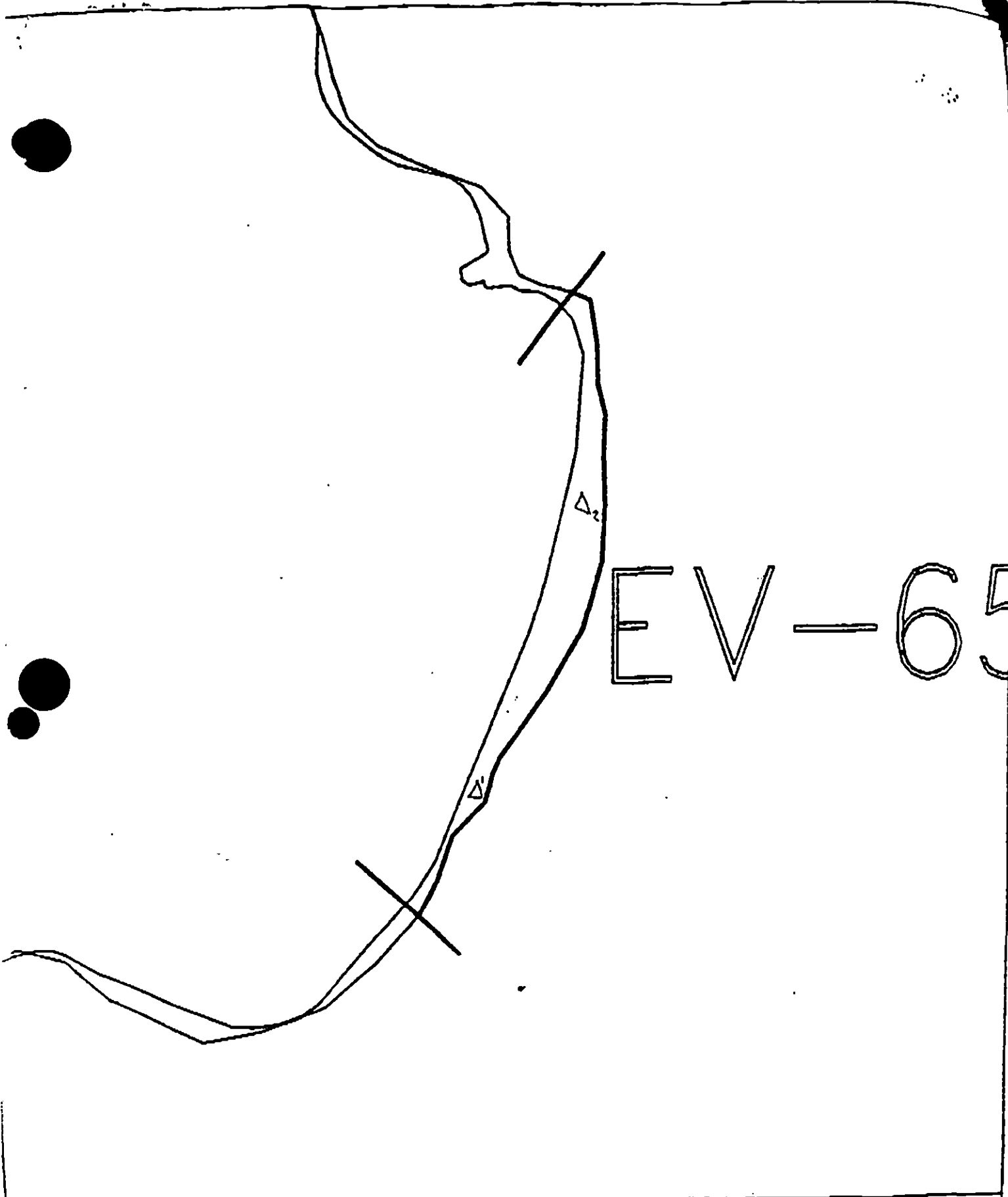
XXXX Wide
 // Medium
 --- Narrow
 TTTT Very Light
 OOOO No

EV-65

ADEC Segment Length: 727m



Map Key: PWS-265
 Name: Mike Fogel
 Date: 3/31/90
 Data Entered:



XXXX Wide

//// Medium

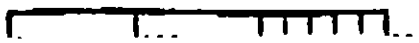
--- Narrow

TTTT Very Light

EV-65

ADEC Segment Length: 727m





Map Key: PWS-265

Name: Mike Foyet

Date: 3/31/90

REGION: PRINCE WILLIAM SOUND

SEGMENT: ST/ EV-67

SUBDIVISIONS: A (1 OF 1)

SHORELINE EVALUATION

SEGMENT ST/ EV-67 SUBDIVISION A (1 OF 1) DATE 3/31/90

SEGMENT ENVIRONMENTAL SENSITIVITIES AND TIME CONSTRAINTS:

Near Sawmill Bay Hatchery (1F) - 4/15 to 6/1; Active bald eagle nest (5T) - 3/1 to 6/1; Deer harvesting (7II) - 8/15 to 2/28.

SUBDIVISION ECOLOGICAL CONSTRAINTS: No specific subdivision constraints identified.

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 3334 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: No treatment recommended. No oil found during survey.
Please see Field Shoreline Comment Sheet.

TAG COMMENTS: _____

TAG APPROVAL DATE: _____

ADEC _____

EXXON _____

NOAA _____

USCG _____

FOSC: _____ DATE: _____

FIELD SHORELINE COMMENT SHEET

SEGMENT ST / EV-67 SUBDIVISION: — DATE 3/31/95

USCG NOAA

NAME SAEY SHIGENAKA SIGNATURE [Signature]

☐ NO TREATMENT RECOMMENDED. ☐ TREATMENT SUGGESTED

COMMENTS

NO OIL OBSERVED IN SEGMENT. GOOD GROWTH OF MUSSELS, BARNACLES AND LIMPETS, AS WELL AS FUCUS AND OTHER ALGAE. OBSERVED DEER INGESTING ALGAE ON BEACH. OTTERS, EAGLES.

RECOVERED NON-OILED BOOM MATERIAL FROM SHORE.

ADEC

NAME John Hoyer SIGNATURE [Signature]

☒ NO TREATMENT RECOMMENDED ☐ TREATMENT SUGGESTED

COMMENTS

No oil observed, segment had healthy vegetation.

LAND MANAGER

NAME — SIGNATURE —

☐ NO TREATMENT RECOMMENDED ☐ TREATMENT SUGGESTED

COMMENTS

SHORELINE OILING SUMMARY

REVISION NO. 03/22/90

OG Mike Foget NOAA Gary Shigenaka SEGMENT ST/ EV-67
 BIO Richard Ambrose LAND REP USGG SUBDIVISION A (1 OF 1)
 EXXON Larry Olson ADEC John Hayes TIME 11:00 to 12:15
 TEAM NO.: 11 TIDE LEVEL: -1.0 to 0.9 DATE 3/31/90
 EST. SUBDIVISION LENGTH: 2272 m ☐ Sun ☒ Clouds ☐ Fog ☐ Rain ☐ Snow
 UPLANDS DESCRIPTION: ☐ Grass ☒ Forest ☒ Rock Low angle Forested bedrock backshore
 SURVEYED FROM: ☒ Foot ☒ Boat ☐ Helo WORKING DIRECTION: S to N
 SURFACE SEDIMENTS: R 25 % B 40 % C 20 % P 5 % G 5 % S 5 % M - % V - %
 SLOPE: Lang 20 % Hang 50 % Vert 30 % WAVE EXPOSURE: ☐ Low ☒ Med ☐ High
 OIL CATEGORY LENGTH: W - m M - m N - m VL - m NO 2272 m

SURFACE OIL

CHARACTER	DISTRIBUTION				OIL / FILM COLOR						IMPACTED ZONES			
	C	B	P	S	SP	BR	OR	OL	OF	NO	SU	U	M	V
ASPHALT PAVEMENT														
POOLED														
COVER														
COAT														
STAIN														
MOUSSE														
PATTIES														
TARBALLS														
FILM														
NO OIL											X	X	X	X

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

DEBRIS	AMOUNT		
	SM	MD	LG
Logs			
Vegetation			
Trash			
Debris	X		

DEBRIS COLLECTED

☒ YES ☐ NOTYPE Non oiled Boon#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			SP	BR	OR	OL	OF	NO	SU	U	M	V		
1	20					X	-	X							X					P, G, S
2	20					X	-	X							X					P
3	15					X	-	X							X					C
4	20					X	-	X							X					P, G, S
							-													
							-													

COMMENTS

No Oil was observed in this segment, the shore zone consists mostly of High angle Boulder / Cobble beaches with vertical rocky headlands and some pocket cobble beaches.

OG Mike

SEGMENT ST/ EV-67

SUBDIVISION A

DATE 3/31/90

CHECKLIST

- ☐ N Arrow
- ☐ Approx. Scale
- ☐ Seg/Sub Bndry
- ☐ Oil Dist.
- ☐ Width
- ☐ Length
- ☐ % Cover
- ☐ Substrate Character
- ☐ Est. HWLAWL
- ☐ 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

Oil Vegetation

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

Legend

mm - Bedrock / Boulder

c - cobble

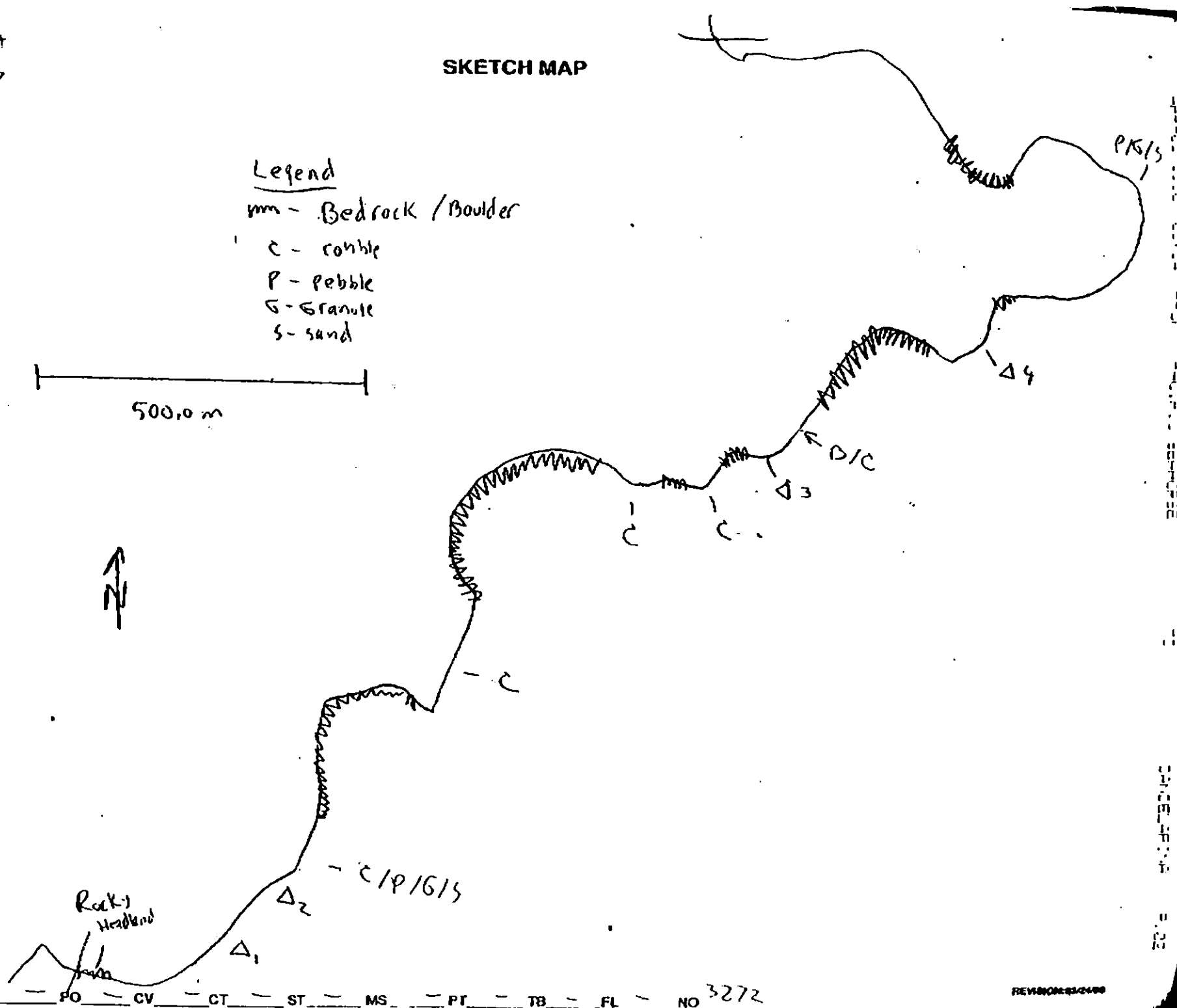
P - pebble

G - Granite

S - sand

SKETCH MAP

500.0 m



Oil Character Length (m): AP — PO — CV — CT — ST — MS — PT — TB — FL — NO 3272

REVISION 8/24/90

SHORELINE ECOLOGICAL SUMMARY

REVISION: 02/27/90

Segment ST/ EVOG7 Subdivision A Date (mo / day / yr) 3 / 31 / 90

Time (24 hr) 1105 hrs Biologist Ambrose

(A) Substrate type and % of segments:
(1) Bedrock 25 (2) Boulder 40 (3) Cobble 20 (4) Pebble 5 (5) Sand 10 (6) Silt -

(B) Overall % cover of biota (% of segment): Dense 40 Moderate 40 Low 20

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

Photographs:
Roll No. -

Frames -

BARNACLES

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

NOT PRESENT

MYTILUS

Dense			Moderate			Sparse			Rare		
1U	1M	1L	1U	1M	1L	1U	1M	1L	1U	1M	1L
2	2	2	X	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	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

FUCUS

Dense			Moderate			Sparse			Rare		
1U	1M	1L	1U	1M	1L	1U	1M	1L	1U	1M	1L
2	2	2	X	X	2	X	X	X	2	2	2
3	3	3	X	X	3	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

Wildlife Observations/ General Comments: *

Red algae abundant in low intertidal. *Mytilus* are small and occur in dense patches. In much of the middle to low intertidal there is 80-100% cover, though not of the species we record. In addition to eagles (below), saw 2 otters, 3 sea lions, 3 pigeon guillemots, 3 unid. ducks, 1 gull, 1 common merganser, 3 deer (eating algae), 5 Harlequin ducks.

Ecological Considerations:

IF, 711, 5T: 3 bald eagles seen, but no nests.

* Note: a portion surveyed by boat.



↓ PWS 267A

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

EV-67A

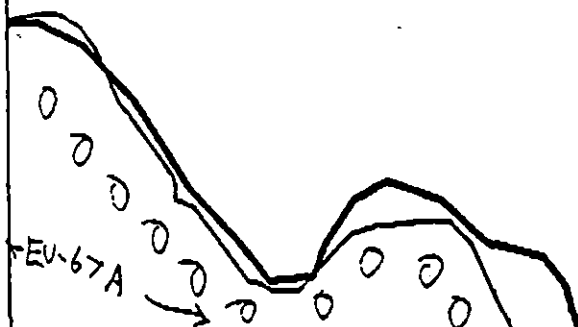
ADEC Segment Length: 3272m



Map Key: PWS-267c
 Name: Mike Foye
 Date: 3/31/90
 Data Entered:

EV-68

← PWS 267C



↓ PWS 267B

XXXX Wide

//// Medium

---- Narrow

TTTT Very Light

0000 No Oil

EV-67A

ADEC Segment Length: 3272m



Map Key: PWS-267d

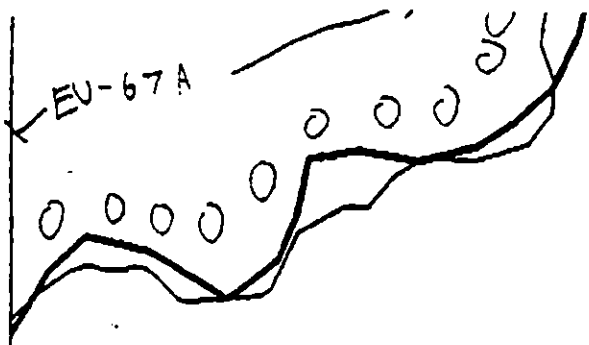
Name: Mike Foret

Date: 3/31/90

Date Entered:



PWS
2670



← PWS
267A

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

EV-67A

ADEC Segment Length: 3272m



Map Key: PWS-267b

Name: Mike Foret

Date: 3/31/10

Date Entered:

PWS
267C

EV

EV-67A

PWS
267B-

XXXX Wide

//// Medium

---- Narrow

TTTT Very Light

0000 No Oil

EV-67A

ADEC Segment Length: 3272m



Map Key: PWS-267a

Name: Mike Foyet

Date: 3/31/90

Data Entered:

SHORELINE EVALUATION

SEGMENT ST/ EV-67 SUBDIVISION A (1 OF 1) DATE 3/31/90

SEGMENT ENVIRONMENTAL SENSITIVITIES AND TIME CONSTRAINTS:

Near Sawmill Bay Hatchery (1F) - 4/15 to 6/1; Active bald eagle nest (5T) - 3/1 to 6/1; Deer harvesting (7II) - 8/15 to 2/28.

SUBDIVISION ECOLOGICAL CONSTRAINTS: No specific subdivision constraints identified.

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

SHPO SIGNATURE: Rachel Jean Oren DATE: 4/10/90

OILING CATEGORIZATION:

Wide 0 m: Medium 0 m: Narrow 0 m: V.Light 0 m: No Oil 3334 m
Subsurface Oil Observed: Yes No X Maximum Depth

RECOMMENDATIONS:

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

COMMENTS: No treatment recommended. No oil found during survey.
Please see Field Shoreline Comment Sheet.

TAG COMMENTS:

TAG APPROVAL DATE: 4/10/90.

ADEC JOHN BAUER John Bauer

EXXON ANDY TETZ Andy Tetz

NOAA Burt Wescott Burt Wescott

USCG G.A. REITER G.A. Reiter

FOSC:

DATE: 4-19-90

OG Mike 09et

SEGMENT ST/ EV-67

SUBDIVISION A

DATE 3/31/90

CHECKLIST

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

LEGEND

1 Δ

Pht - No Subsurface Oil

2 ▲

Pht - Subsurface Oil

CT/C

Continuous Distribution

CT/B

Broken Distribution

CT/P

Patchy Distribution

CT/S

Spashed Distribution

Oil & Vegetation

1 ●→

Photo location, direction, and number

SKETCH MAP

Legend

mm - Bedrock / Boulder

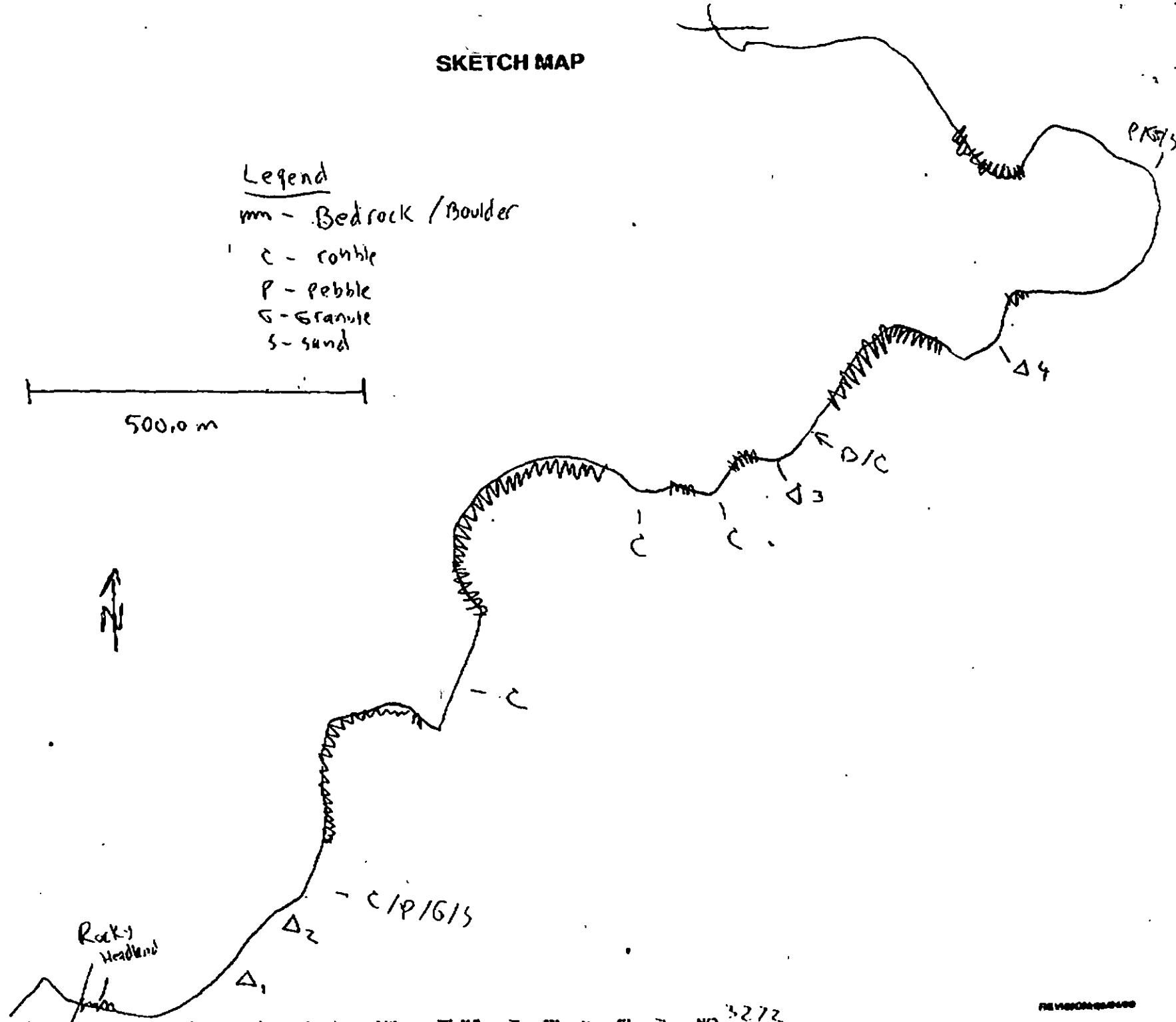
c - cobble

p - pebble

G - Granule

S - sand

500.0 m



Oil Character Length (m): AP PO CV OT BT MG PT TI FL NO 3272

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

EV-67A

ADEC Segment Length: 3272m

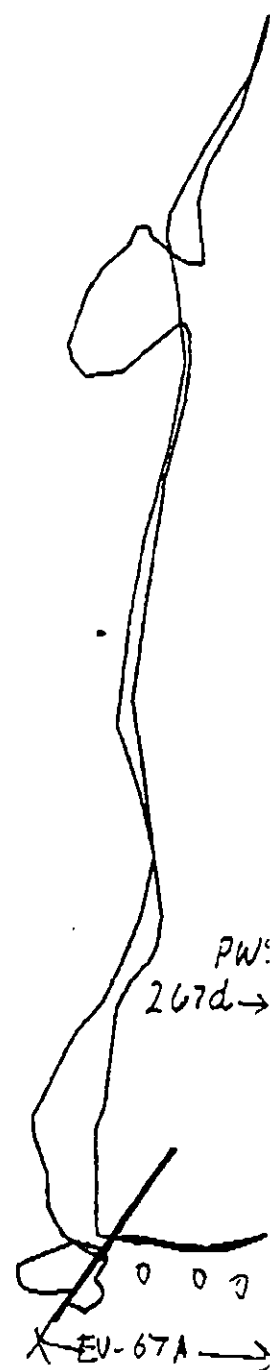


Map Key: PWS-267c

Name: Mike Foyet

Date: 3/21/90

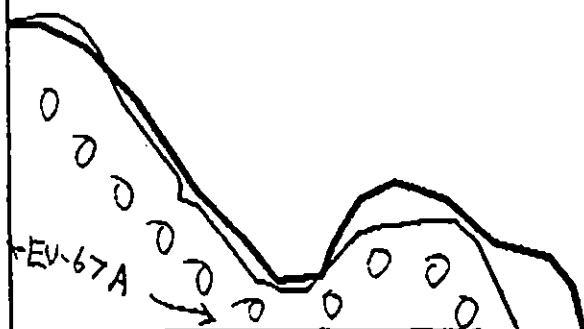
Data Entered:



↓ PWS 267A

EV-68

← PWS 267C



↓ PWS 267B

XXXX Wide

//// Medium

---- Narrow

TTTT Very Light

0000 No Oil

EV-67A

ADEC Segment Length: 3272m



Map Key: PWS-267d

Name: Mike Foret

Date: 3/31/90

Data Entered:



PWS
267D

← PWS
267A

XXXX Wide

//// Medium

---- Narrow

TTTT Very Light

OOOO No Oil

EV-67A

ADEC Segment Length: 3272m



Map Key: PWS-267b

Name: Mike Foree

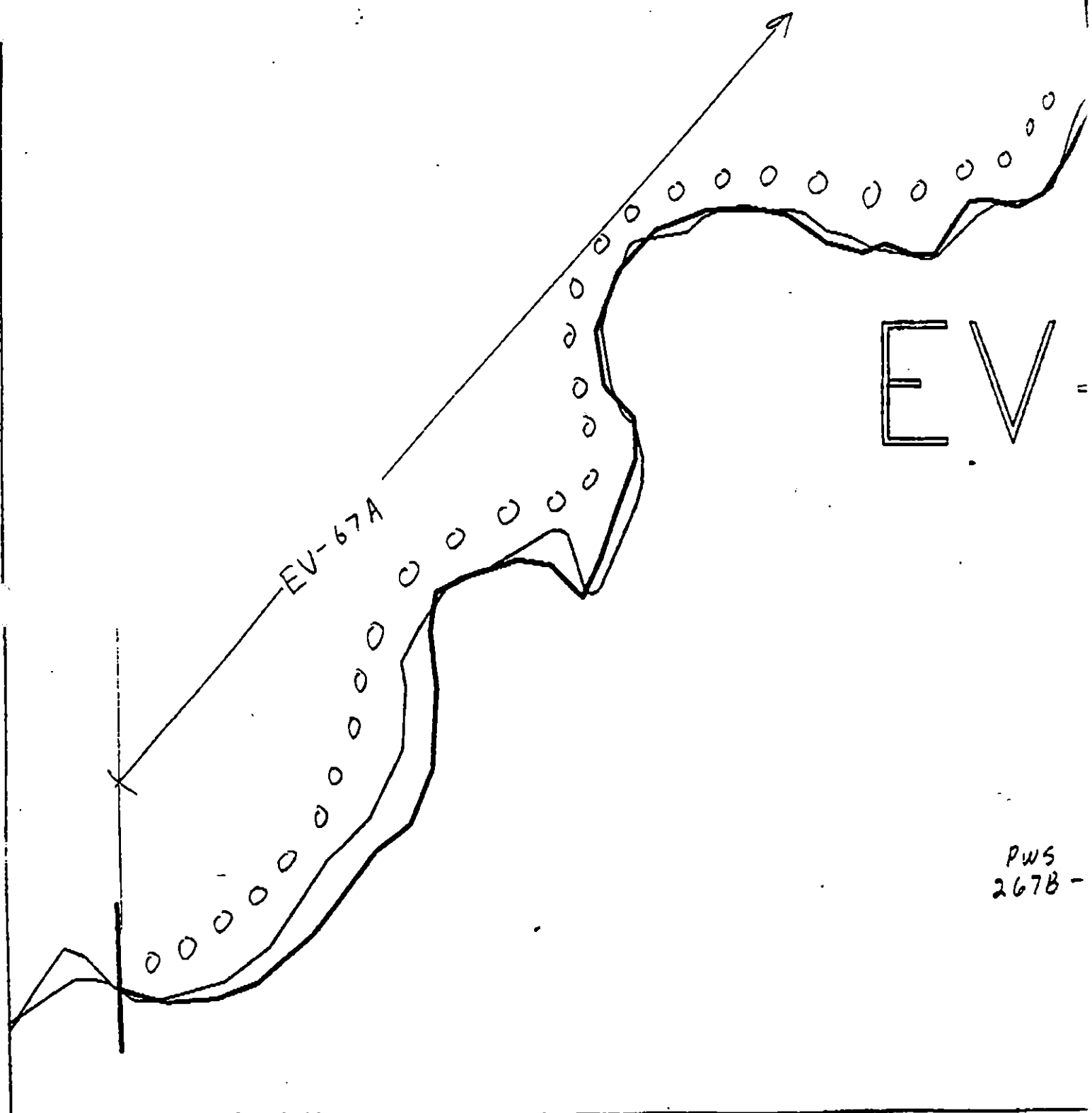
Date: 3/31/90

Data Entered:

PWS
267C

EV

PWS
267B-



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

EV-67A

ADEC Segment Length: 3272m



Map Key: PWS-267a

Name: Mike Foyet

Date: 3/31/90

Date Entered:

REGION: PRINCE WILLIAM SOUND

SEGMENT: ST/ EV-66

SUBDIVISIONS: A (1 OF 2)

SHORELINE EVALUATION

SEGMENT ST/ EV-66 SUBDIVISION A (1 OF 2) DATE 3/31/90

SEGMENT ENVIRONMENTAL SENSITIVITIES AND TIME CONSTRAINTS:

Near Sawmill Bay Hatchery (1F) - 4/15 to 6/1; Special use designa-
tion (6Y) - 6/1 to 9/15; Deer harvesting (7II) - 8/15 to 2/28.

SUBDIVISION ECOLOGICAL CONSTRAINTS: No specific subdivision con-
straints.

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 0 m: V.Light 120 m: No Oil 122m
Subsurface Oil Observed: Yes _____ No X Maximum Depth _____

RECOMMENDATIONS:

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

COMMENTS: Recommend bioremediation of patchy surface coat on
cobble/beach in area indicated on sketch map. Recommend all work
be conducted after 6/1 based on constraints.

TAG COMMENTS: _____

TAG APPROVAL DATE: _____

ADEC _____

EXXON _____

NOAA _____

USCG _____

FOSC: _____ DATE: _____

FIELD SHORELINE COMMENT SHEET

SEGMENT ST / EV-66 SUBDIVISION: A DATE 3/31/98

USCG NOAA

NAME GARY SHIGENAKA

SIGNATURE

Gary Shigenaka

☐ NO TREATMENT RECOMMENDED

☐ TREATMENT SUGGESTED

COMMENTS

BOULDER BEACH ALONG NORTHERN PORTION OF SQUIRREL BAY. SPORADIC SPLASHES OF WEATHERED OIL NOTED ON BOULDERS IN UPPER INTERTIDAL. NORTHERN PART OF SEGMENT CONTAINED LARGE BOULDERS WITH COAT AND/OR COVER, ALSO SPORADIC OCCURRENCE.

ADEC

NAME

John Hayes

SIGNATURE

John Hayes

☒ NO TREATMENT RECOMMENDED

☐ TREATMENT SUGGESTED

COMMENTS

Light stain and oil splash on boulders in U-72. No treatment recommended. Oil splash partially weathering from boulders.

LAND MANAGER

NAME

SIGNATURE

☐ NO TREATMENT RECOMMENDED

☐ TREATMENT SUGGESTED

COMMENTS

SHORELINE ECOLOGICAL SUMMARY

Segment ST/ EVO 66 Subdivision A Date (mo / day / yr) 3 / 31 / 90

Time (24 hr) 0900 hrs Biologist Ambrose

- (A) Substrate type and % of segments:
 (1) Bedrock 10 (2) Boulder 40 (3) Cobble 30 (4) Pebble 10 (5) Sand 10 (6) Silt —
- (B) Overall % cover of biota (% of segment): Dense 25 Moderate 50 Low 25
- (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	3	3	X	X	3	3	3	3
4	4	4	4	4	4	X	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

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	X	2	2	2	2	2	2	2	X
3	3	3	3	3	3	3	X	3	3	3	3
4	4	4	4	4	4	4	4	4	4	4	4
5	5	5	5	5	5	5	5	5	5	5	5
6	6	6	6	6	6	6	6	6	6	6	6

NOT PRESENT

FUCUS

Dense			Moderate			Sparse			Rare		
1U	1M	1L	1U	1M	1L	1U	1M	1L	1U	1M	1L
2	2	2	X	X	2	X	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: *

Red algae (esp. Palmaria palmata) common in low intertidal; Alaria marginata locally abundant in places.

Ecological Considerations:

IF, 711, 6Y: Not relevant.

*Note: some of this subdivision surveyed by boat.

OG Mike Fogel

SEGMENT ST/ EV-66

SUBDIVISION A

DATE 3 / 31 / 90

CHECKLIST

- ☐ N Arrow
- ☐ Approx. Scale
- ☐ Seg/Sub Bndry
- ☐ Oil Dist
- ☐ Width
- ☐ Length
- ☐ % Cover
- ☐ Substrate Character
- ☐ Est. HML/LWL
- ☐ SSL
- ☐ Profile Location(s)
- ☐ Profile(s)
- ☐ Pt 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

Oiled Vegetation

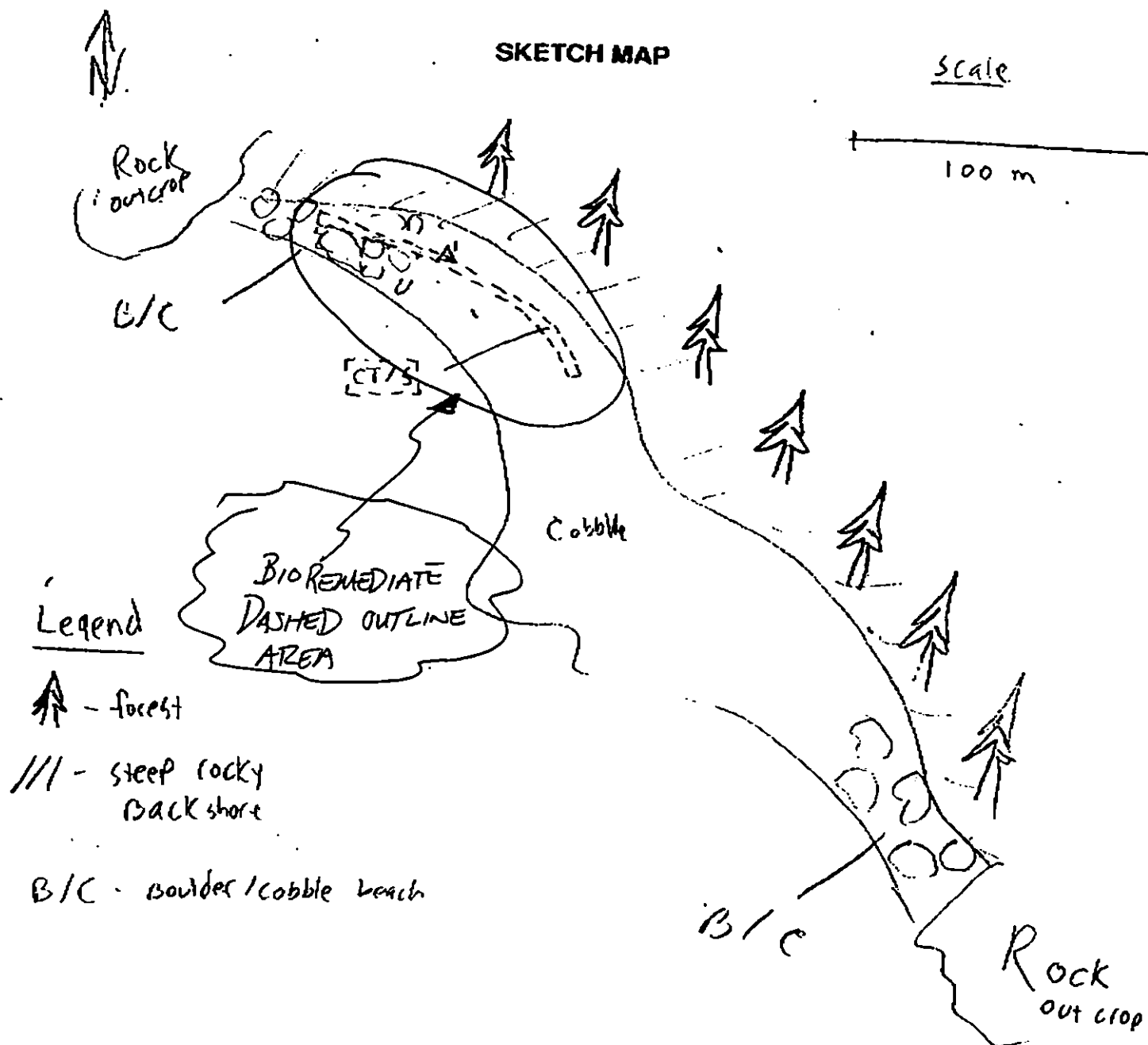
1 ➡

Photo location, direction,
and number

SKETCH MAP

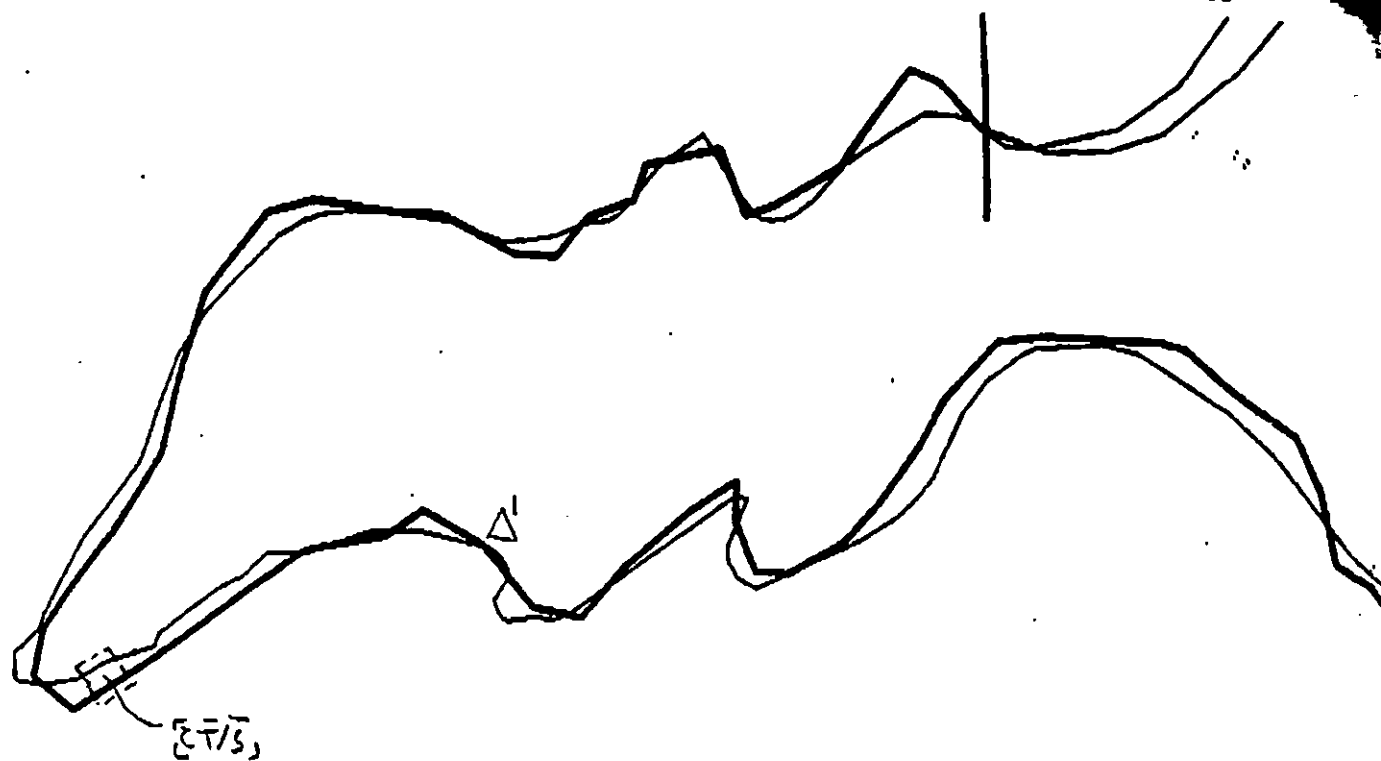
Scale

100 m



Oil Character Length (m): AP PO CV CT 100 ST MS PT TB FL NO 200

REVISION 002000



Legend

△ Pit Location, no oil

ET/S - splashed distribution

XXXX Wide

//// Medium

--- Narrow

TTTT Very Light

0000 No Oil

EV-66B

ADEC Segment Length: 3574m



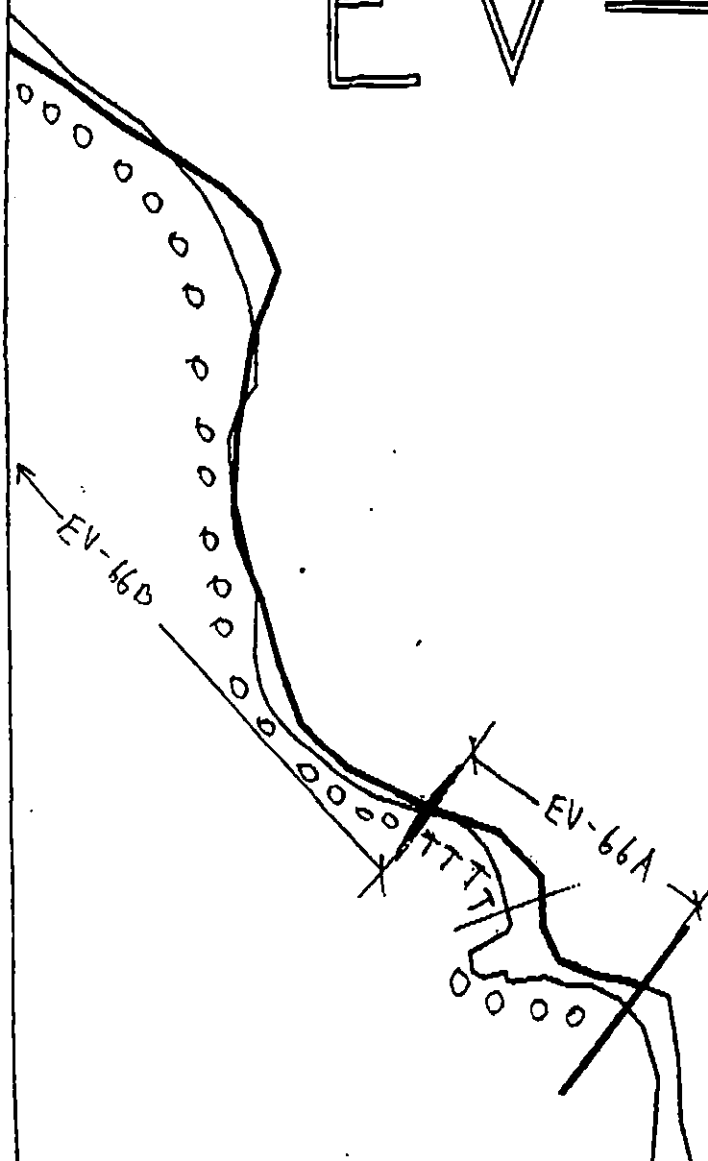
Map Key: PWS-266a

Name: Mike Folet

Date: 3/31/90

Date Entered:

EV-66



XXXX Wide

//// Medium

---- Narrow

TTTT Very Light

0000 No Oil

EV-66

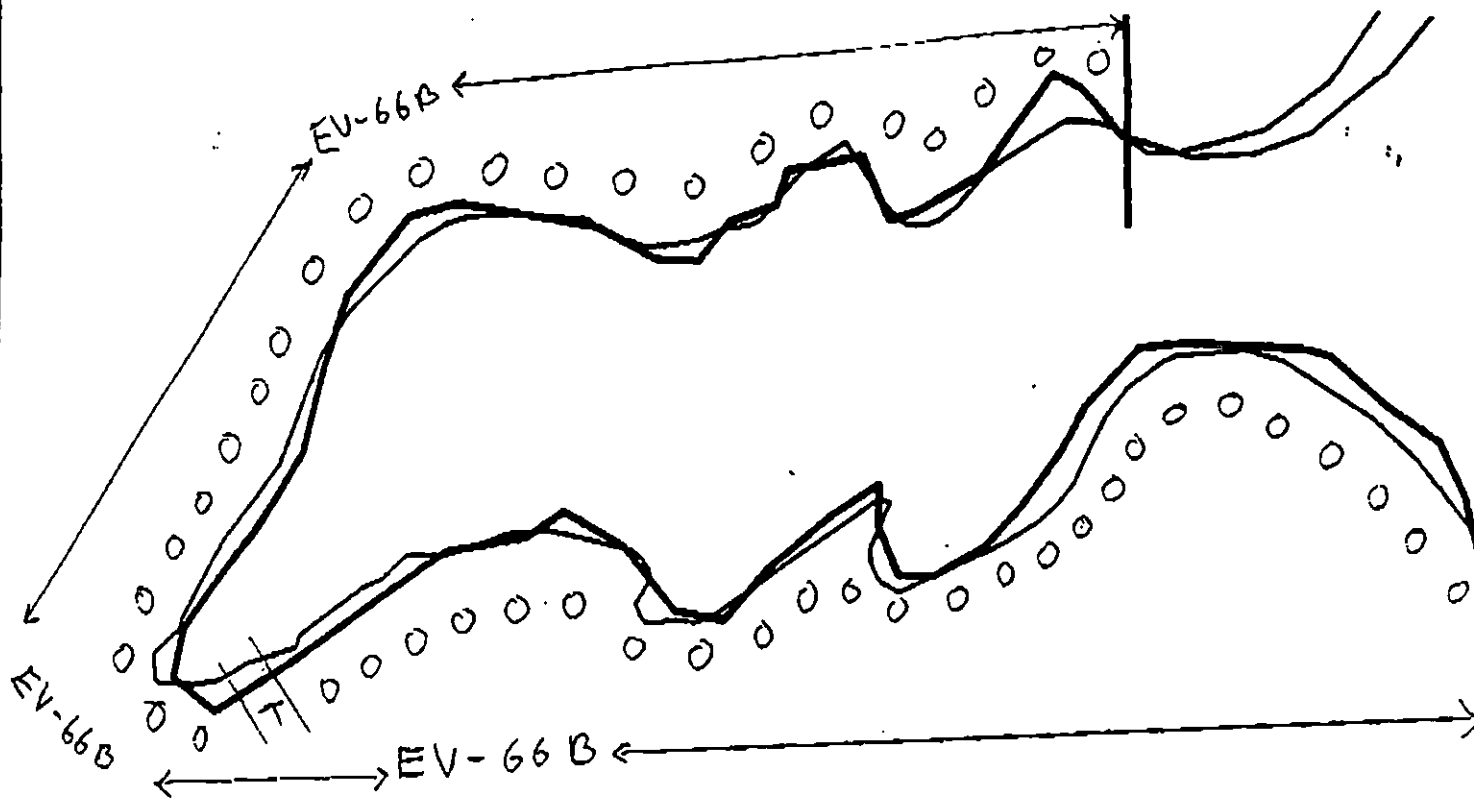
ADEC Segment Length: 3374m



Map Key: PWS-266b

Name: Mike FogarDate: 3/31/00

Data Entered:



XXXX Wide

//// Medium

---- Narrow

TTTT Very Light

0000 No Oil

EV-66

ADEC Segment Length: 3574m



Map Key: PWS-266a

Name: Mike Roger

Date: 3/31/90

Date Entered:

REGION: PRINCE WILLIAM SOUND

SEGMENT: ST/ EV-66

SUBDIVISIONS: B (2 OF 2)

SHORELINE EVALUATION

SEGMENT ST/ EV-66 SUBDIVISION B (2 OF 2) DATE 3/31/90

SEGMENT ENVIRONMENTAL SENSITIVITIES AND TIME CONSTRAINTS:

Near Sawmill Bay Hatchery (1F) - 4/15 to 6/1; Special use designa-
tion (6Y) - 6/1 to 9/15; Deer harvesting (7II) - 8/15 to 2/28.

SUBDIVISION ECOLOGICAL CONSTRAINTS: No specific subdivision con-
straints.

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 35 m: No Oil 3290m
Subsurface Oil Observed: Yes _____ No X Maximum Depth _____

RECOMMENDATIONS:

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

COMMENTS: No treatment recommended on EV-66 (B). Sporadic stain
on vertical rock face does not lend itself to bioremediation.
Please review Shoreline Comment Sheet.

TAG COMMENTS: _____

TAG APPROVAL DATE: _____

ADEC _____
EXXON _____
NOAA _____
USCG _____

FOSC: _____ DATE: _____

FIELD SHORELINE COMMENT SHEET

SEGMENT ST / EV-66 SUBDIVISION: B DATE 3/31/90

USCG NOAA

NAME GARY SHIGENAKA SIGNATURE Gary Shigenaka

☐ NO TREATMENT RECOMMENDED

☐ TREATMENT SUGGESTED

COMMENTS

SAND, COBBLE, BOULDER BEACH PORTIONS OF SEGMENT SHOWED NO OILING. SOME WEATHERED STAIN OBSERVED FROM INFLATABLE ALONG SHIP ROCK FACE. PORTION OF SEGMENT NORTH OF SQUIRREL BAY SHOWED NO EVIDENCE OF OILING.

ADEC

NAME John Hoyer SIGNATURE John Hoyer

☒ NO TREATMENT RECOMMENDED

☐ TREATMENT SUGGESTED

COMMENTS

Stain on vertical face in S.I.T. isolated spattering that was discontinuous over a 5m.W x 100m L. section. No treatment recommended.

LAND MANAGER

NAME _____ SIGNATURE _____

☐ NO TREATMENT RECOMMENDED

☐ TREATMENT SUGGESTED

COMMENTS

SHORELINE OILING SUMMARY

OG Mike Foget NOAA Gary Shigenaka SEGMENT ST/ EV-66
 BIO Richard Ambrose LAND REP — SUBDIVISION B (20P2)
 EXXON Larry Olson ADEC John Hayes TIME 9:30 to 10:30
 TEAM NO.: 11 TIDE LEVEL: -0.1 to -1.1 DATE 3/31/90
 EST. SUBDIVISION LENGTH: 3274 m ☐ Sun ☒ Clouds ☐ Fog ☒ Rain ☐ Snow
 UPLANDS DESCRIPTION: ☐ Grass ☒ Forest ☒ Rock steep Rocky Forested Backshore
 SURVEYED FROM: ☒ Foot ☒ Boat ☐ Helo WORKING DIRECTION: S to N
 SURFACE SEDIMENTS: R 50 % B 30 % C 10 % P 5 % G 5 % S — % M — % V — %
 SLOPE: Lang 15 % Hang 35 % Vert 50 % WAVE EXPOSURE: ☐ Low ☒ Med ☐ High
 OIL CATEGORY LENGTH: W — m M — m N — m VL 30 m NO 3244 m

SURFACE OIL

CHARACTER	DISTRIBUTION				OIL / FILM COLOR								IMPACTED ZONES			
	FC	FB	FP	FS	BR	OR	OL	OF	NO	TL	LA	—	SU	U	M	L
ASPHALT PAVEMENT																
POOLED																
COVER																
COAT																
STAIN				X		X							X			
MOUSSE																
PATTIES																
TARBALLS																
FILM																
NO OIL													X	X	X	

PAVEMENT: H F S — sq. m by — cm

PATTIES / TARBALLS — BAGS

NEAR SHORE SHEEN? ☒ NO BR RW SL TL

OILED DEBRIS	AMOUNT		
	SM	MD	LG
Logs			
Vegetation			
Trash			
Debris			

DEBRIS COLLECTED
☐ YES ☒ NO

TYPE —

#BAGS —

Photographs:

Roll No. —

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		VO	UC	BR	OR	OL	OF	NO	TL	LA	—	SU	U	M	L		
1	30					X	—		X									X					S
							—																
							—																
							—																
							—																
							—																
							—																

COMMENTS

Oil was located on the southern part of the western tip in the supra ITZ on a vertical rock wall. The distribution was a splashed stain of dull black oil. The pit was located in a small pocket semi beach. Most of the shore zone consisted of Rocky headlands w/ small pocket B/C beaches.

SHORELINE ECOLOGICAL SUMMARY

REVISION: 02/23/90

Segment ST/ EVOGG Subdivision B Date (mo / day / yr) 3/31/90Time (24 hr) 0930hrs Biologist Ambrose

(A) Substrate type and % of segments:

(1) Bedrock 50 (2) Boulder 30 (3) Cobble 10 (4) Pebble 5 (5) Sand 5 (6) Silt —(B) Overall % cover of biota (% of segment): Dense 10 Moderate 50 Low 40

(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 (⊙)

Photographs:

Roll No. ST-11-1Frames 12

BARNACLES

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

NOT PRESENT

MYTILUS

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

NOT PRESENT

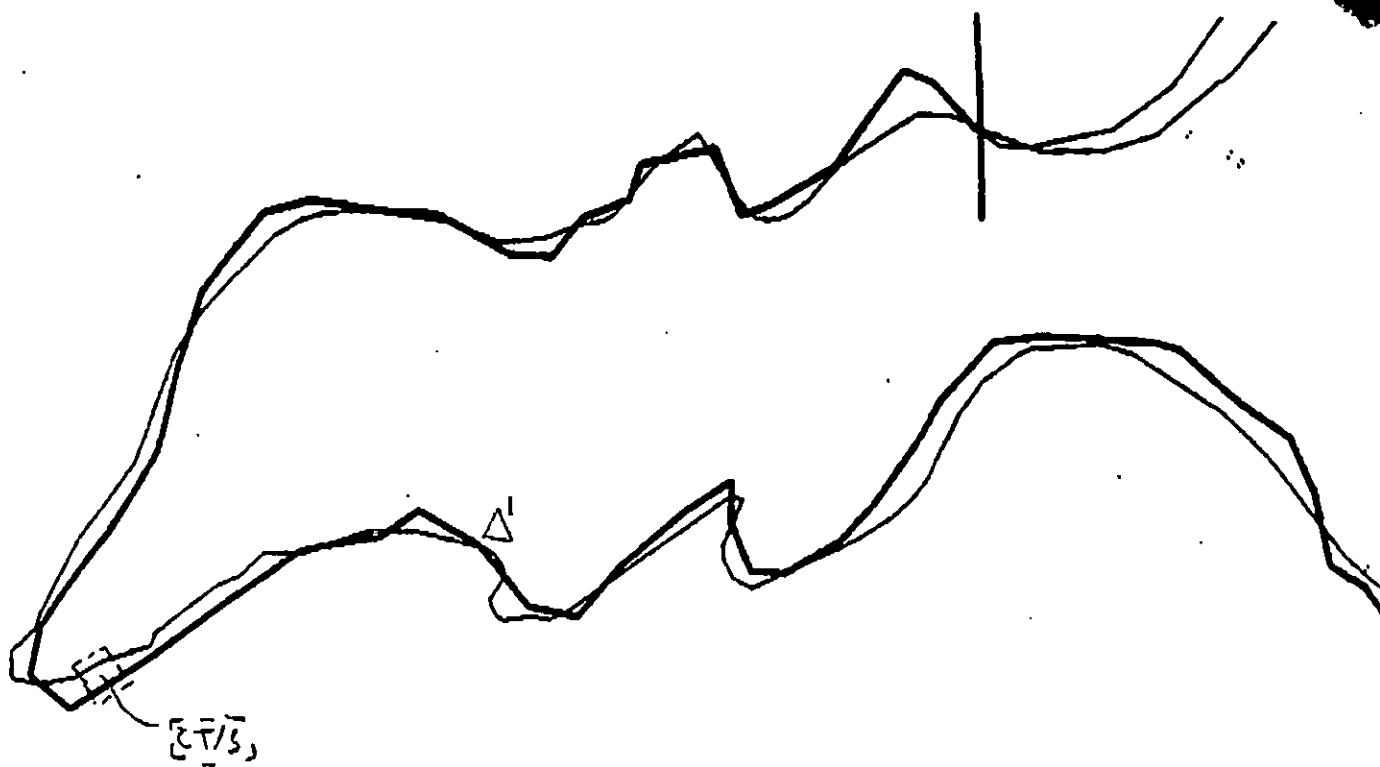
Wildlife Observations/ General Comments: *

Red algae (esp. P. palmata) common in low intertidal. Mytilus occurs as dense patches of juveniles & new recruits (or as a narrow band). Alaria common in low intertidal in some areas, some Postelsia. Saw 2 otters, 2 deer (1 eating kelp) and 1 set of deer tracks; 2 sea lions, 2 cormorants, and 13 unid. birds.

Ecological Considerations:

IF, 7 II, 6Y: Not relevant.

* Note: portions of this subdivision surveyed by boat.



Legend

△ Pit Location, no oil

[T/S] - splash distribution

XXXX Wide

//// Medium

---- Narrow

TTTT Very Light

0000 No Oil

EV-66B

ADEC Segment Length: 3574m



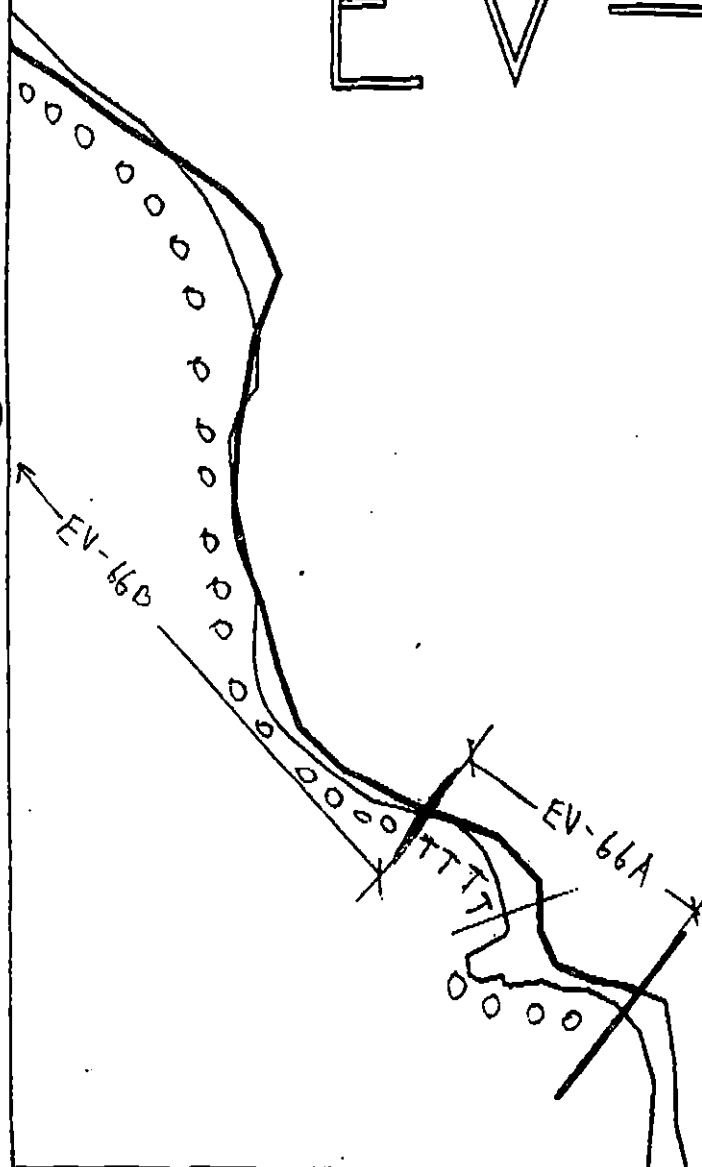
Map Key: PWS-266c

Name: Mike Foyle

Date: 3/3/90

Date Entered:

EV-666



EV-66A

XXXX Wide

//// Medium

--- Narrow

TTTT Very Light

0000 No Oil

EV-66

ADEC Segment Length: 3574m



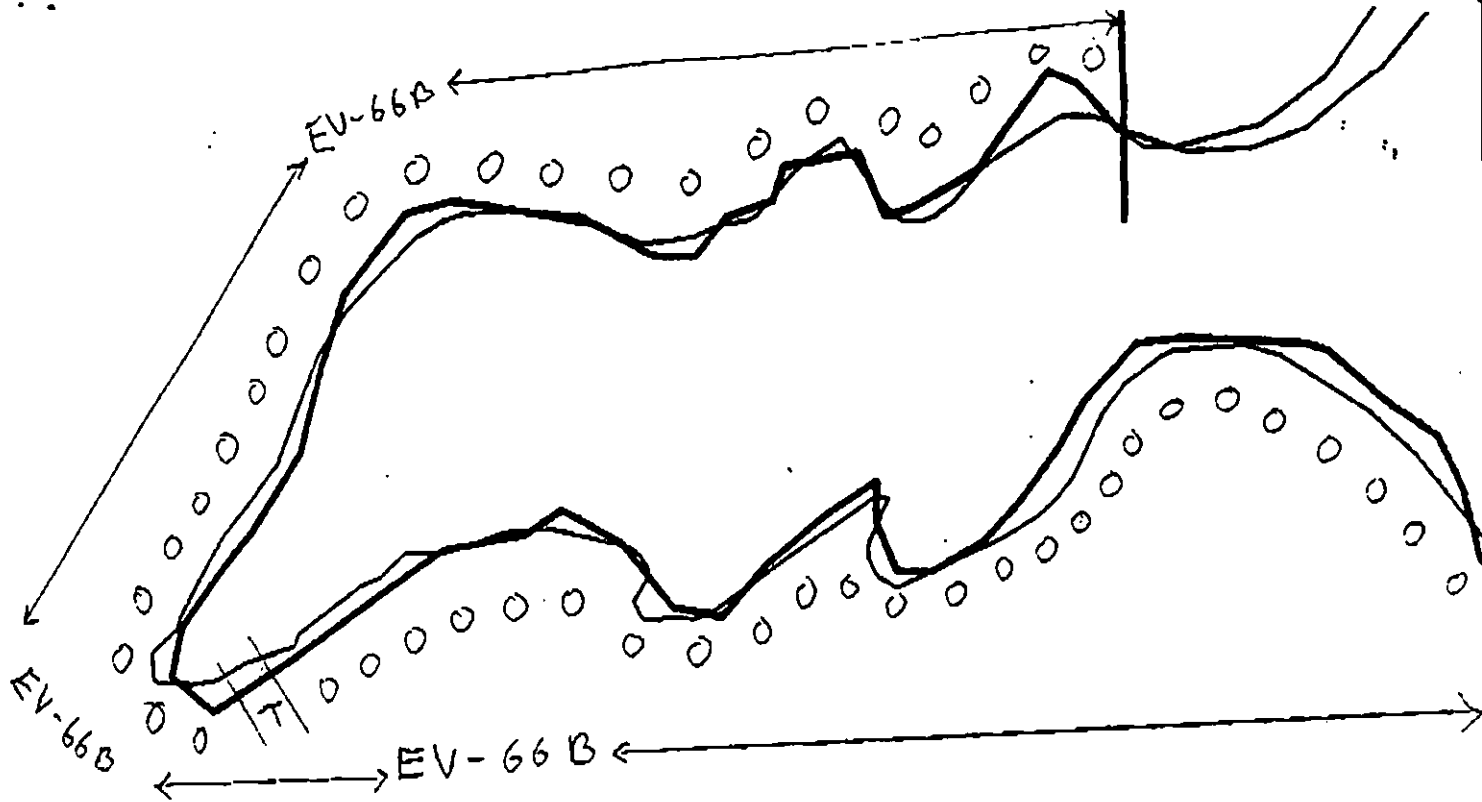
METERS

Map Key: PWS-286b

Name: Mike Forget

Date: 3/31/00

Date Entered:



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

EV-66

ADEC Segment Length: 3574m



Map Key: PWS-256e
 Name: Mike Roger
 Date: 3/31/90
 Date Entered:

SHORELINE EVALUATION

SEGMENT ST/ EV-66 SUBDIVISION A (1 OF 2) DATE 3/31/90

SEGMENT ENVIRONMENTAL SENSITIVITIES AND TIME CONSTRAINTS:

Near Sawmill Bay Hatchery (1F) - 4/15 to 6/1; Special use designa-
tion (6Y) - 6/1 to 9/15; Deer harvesting (7II) - 8/15 to 2/28.

SUBDIVISION ECOLOGICAL CONSTRAINTS: No specific subdivision con-
straints.

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. Himes* DATE: April 6, 1990

If treatment is planned, the above constraint applies.

OILING CATEGORIZATION:

Wide 0 m: Medium 0 m: Narrow 0 m: V. Light 120 m: No Oil 122 m
Subsurface Oil Observed: Yes No X Maximum Depth

RECOMMENDATIONS:

☒ No Treatment Recommended	<u> </u> Snare/Absorbent Booms
☒ Treatment Recommended	<u> </u> Oil Snares (pom poms)
<u> </u> Manual Pickup	<u> </u> Absorbents (pads, rolls, etc)
☒ 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: Recommend bioremediation of patchy surface coat on
cobble/beach in area indicated on sketch map. Recommend all work
be conducted after 6/1 based on constraints.

TAG COMMENTS: No treatment recommended

TAG APPROVAL DATE: 4-6-90

ADEC JOHN BAUER *John Bauer*

EXXON ANDY TON *Andy Ton*

NOAA Burt Wessott *Burt Wessott*

USCG G.A. REITER *G.A. Reiter*

FOSC: *lyl* DATE: 4-19-90

OG Mine Fogee

SEGMENT ST/ EV-66

SUBDIVISION A

DATE 3 / 31 / 90

CHECKLIST

- ☐ N Arrow
- ☐ Approx. Scale
- ☐ Seg/Sub Bndry
- ☐ Oil Dist
- ☐ Width
- ☐ Length
- ☐ % Cover
- ☐ Substrate Character
- ☐ Est. HNT/L/WL
- ☐ SSL
- ☐ Profile Location(s)
- ☐ Profile(s)
- ☐ PI Location(s)
- ☐ Photo Location(s)

LEGEND

1 Δ

PI - No Subsurface Oil

2 Δ

PI - Subsurface Oil

CT/C

Continuous Distribution

CT/B

Broken Distribution

CT/P

Patchy Distribution

CT/S

Splashed Distribution

Oiled Vegetation

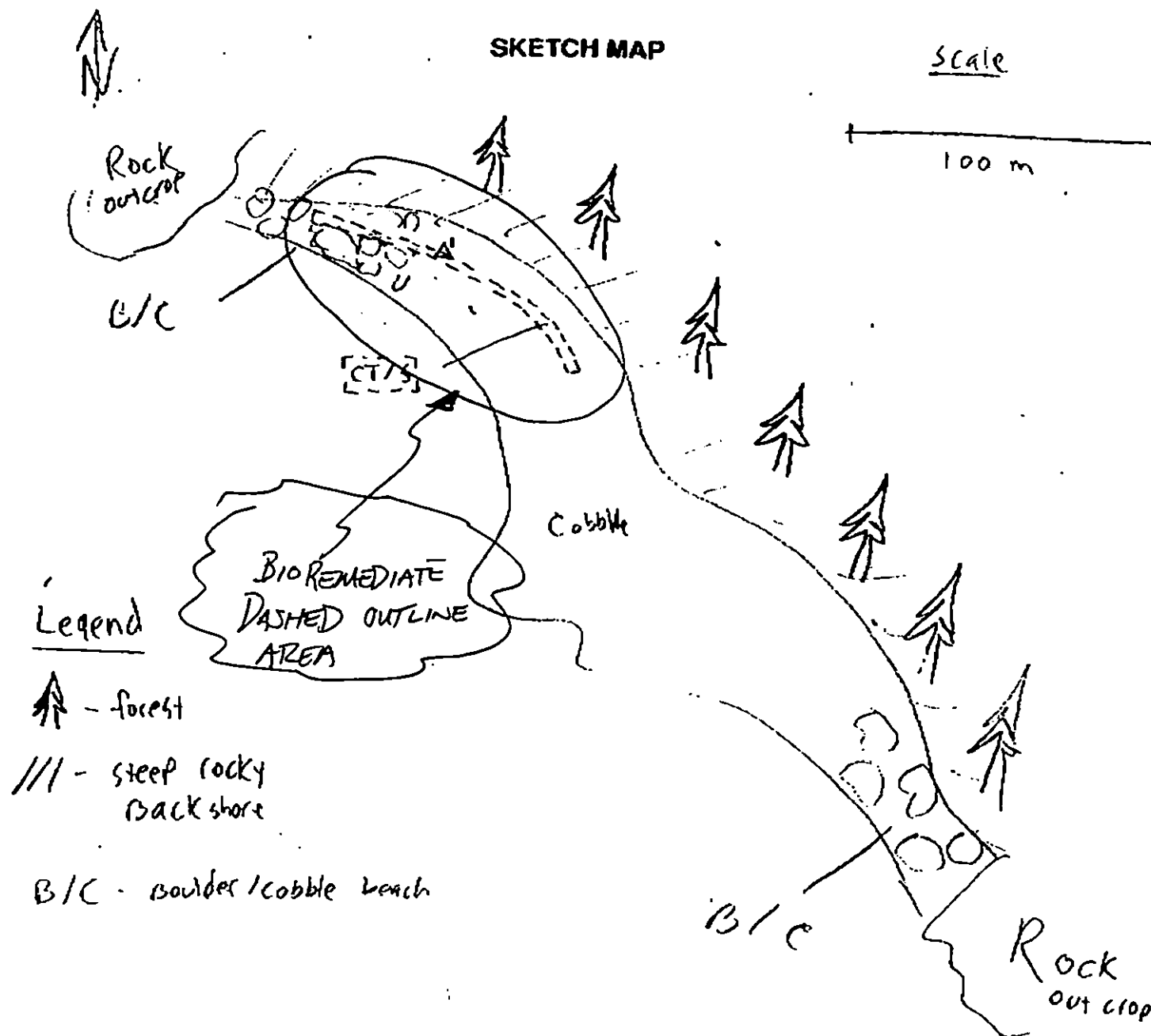
1 ●→

Photo location, direction,
and number

SKETCH MAP

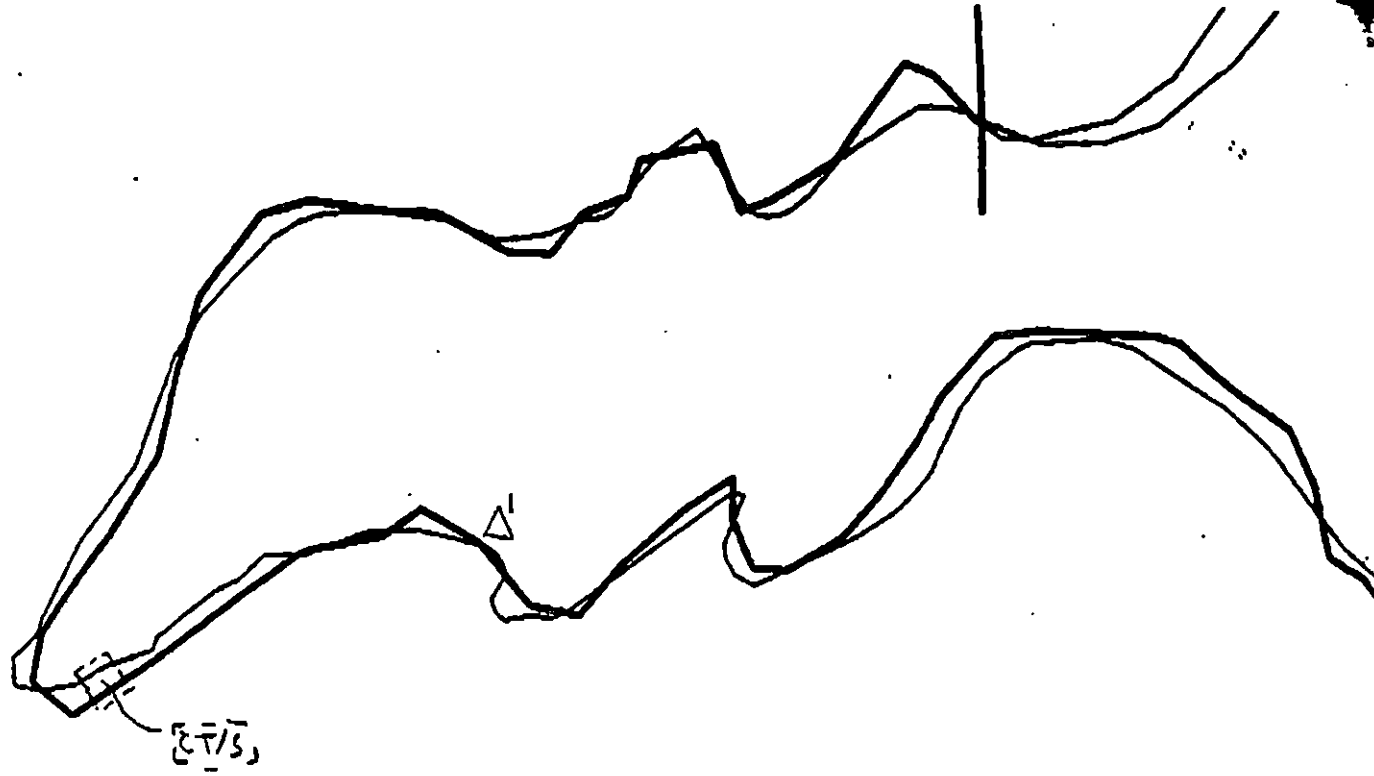
Scale

100 m



Oil Character Length (m): AP PO CV CT 100 ST MS PT TB FL NO 200

REVISION: 000000



Legend

△ Pit Location, no oil

[crs] - splashed distribution

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

EV-66B

ADEC Segment Length: 3574m



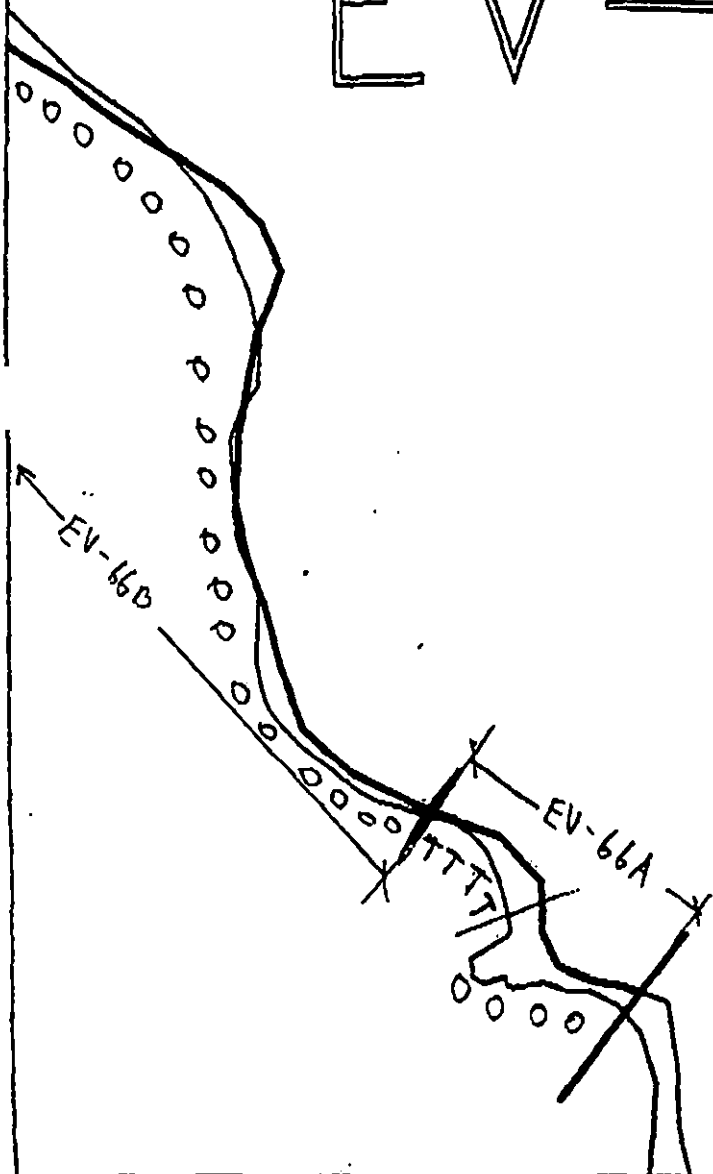
Map Key: PWS-266c

Name: Mike Foley

Date: 3/31/90

Date Entered:

EV-66



XXXX Wide

//// Medium

--- Narrow

TTTT Very Light

oooo

EV-66

ADEC Segment Length: 3574m

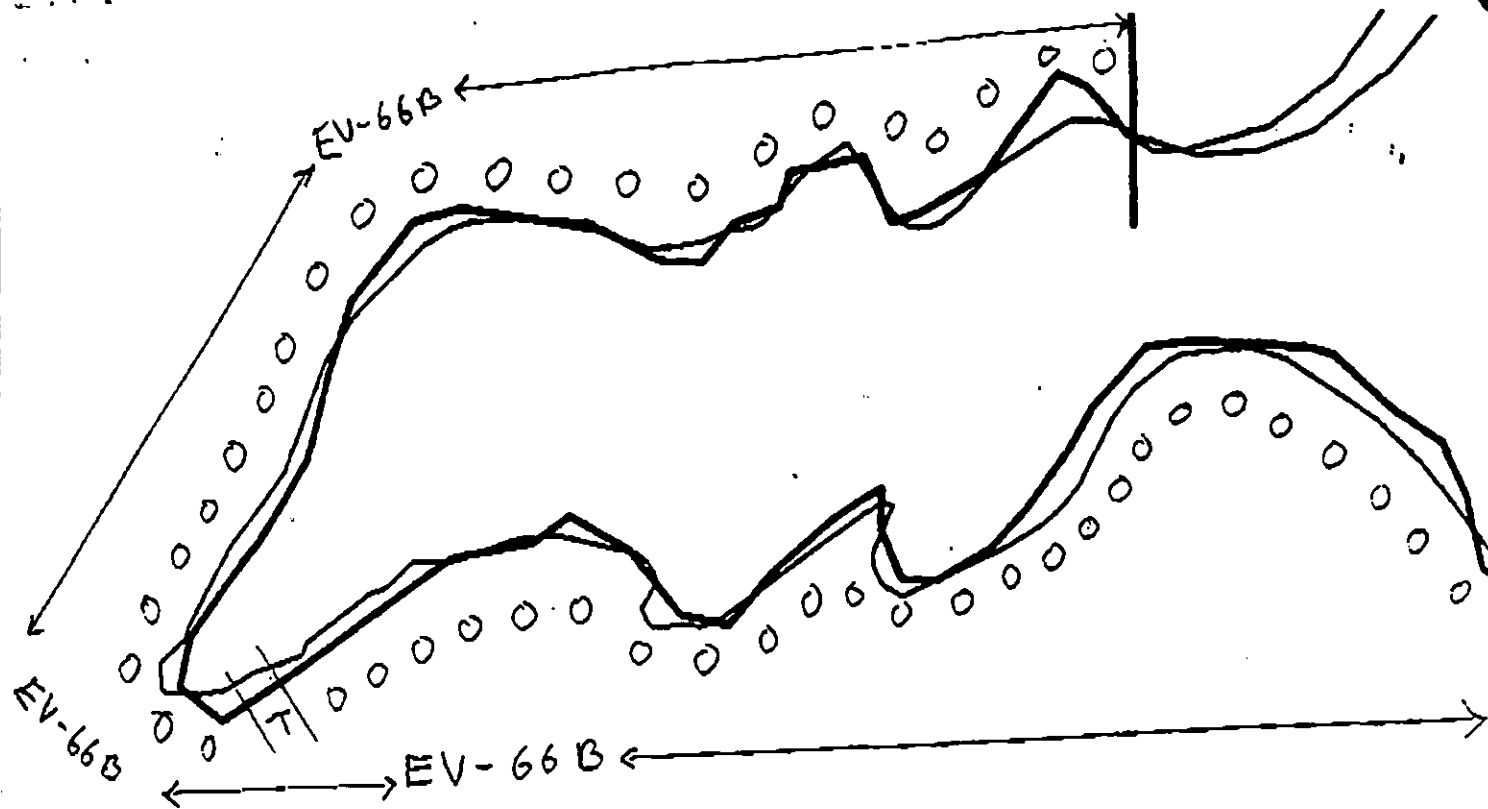


Map Key: PWS-266b

Name: Mike Fogot

Date: 3/31/00

Data Entered:



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

EV-66

ADEC Segment Length: 3574m



Map Key: PWS-266a
 Name: Mike Fogar
 Date: 3/31/90
 Date Entered: _____

SHORELINE EVALUATION

SEGMENT ST/ EV-66 SUBDIVISION B (2 OF 2) DATE 3/31/90

SEGMENT ENVIRONMENTAL SENSITIVITIES AND TIME CONSTRAINTS:

Near Sawmill Bay Hatchery (1F) - 4/15 to 6/1; Special use designation (6Y) - 6/1 to 9/15; Deer harvesting (7II) - 8/15 to 2/28.

SUBDIVISION ECOLOGICAL CONSTRAINTS: No specific subdivision constraints.

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

SHPO SIGNATURE: Charles E. Holmes DATE: April 6, 1990

OILING CATEGORIZATION:

Wide 0 m: Medium 0 m: Narrow 0 m: V.Light 35 m: No Oil 3290m
Subsurface Oil Observed: Yes No X Maximum Depth

RECOMMENDATIONS:

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

COMMENTS: No treatment recommended on EV-66 (B). Sporadic stain on vertical rock face does not lend itself to bioremediation. Please review Shoreline Comment Sheet.

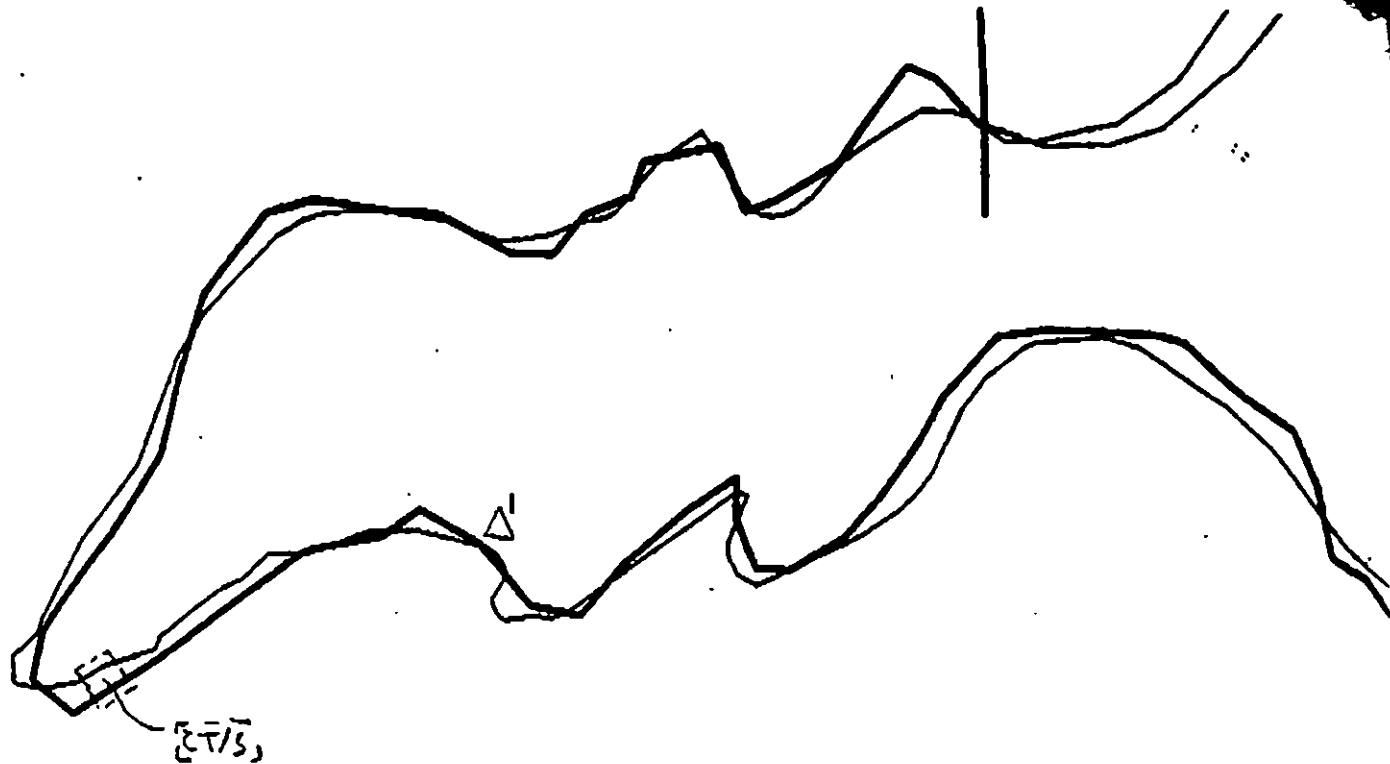
TAG COMMENTS:

TAG APPROVAL DATE: 4/6/90

ADEC JOHN BAUER
EXXON ANDY TER
NOAA Burt Wescott
USCG G.A. REITER

FOSC:

DATE: 4-19-90



Legend

△ Pit Location, no oil

[ET/S] - splashed distribution

XXXX Wide

//// Medium

--- Narrow

TTTT Very Light

0000 No Oil

EV-66B

ADEC Segment Length: 3574m



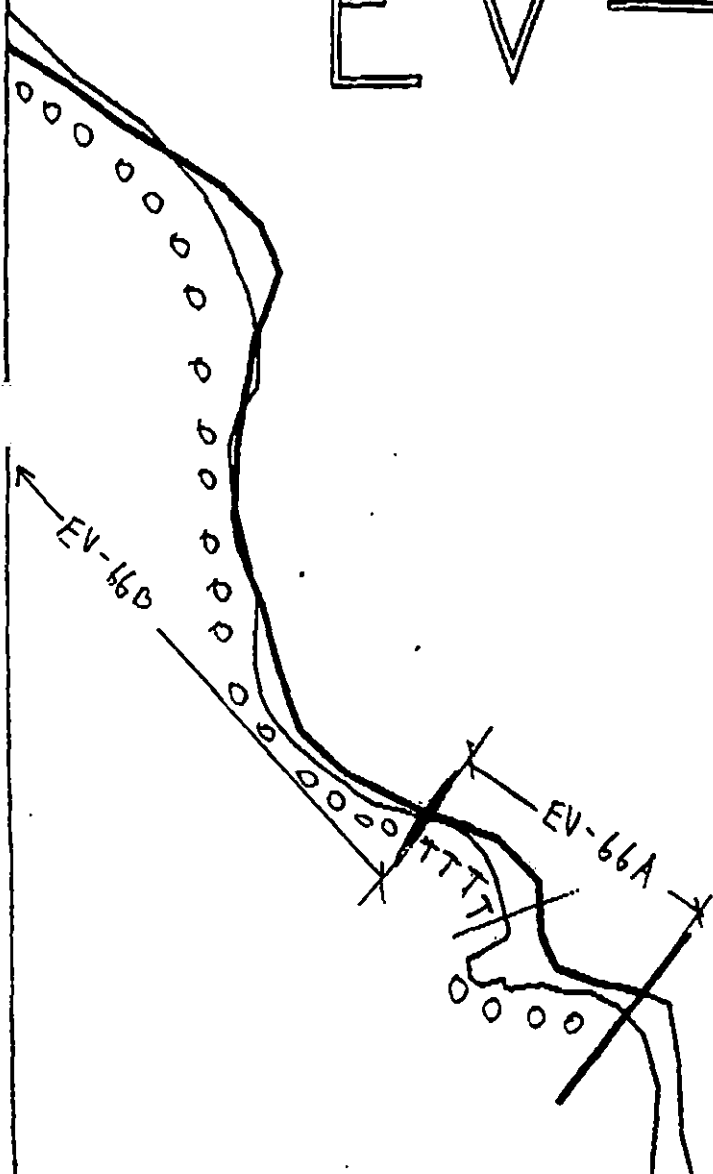
Map Key: PWS-266a

Name: Mike Foster

Date: 3/3/90

Date Entered:

EV-66



XXXX Wide

//// Medium

--- Narrow

TTTT Very Light

OOOO No Oil

EV-66

ADEC Segment Length: 3374m

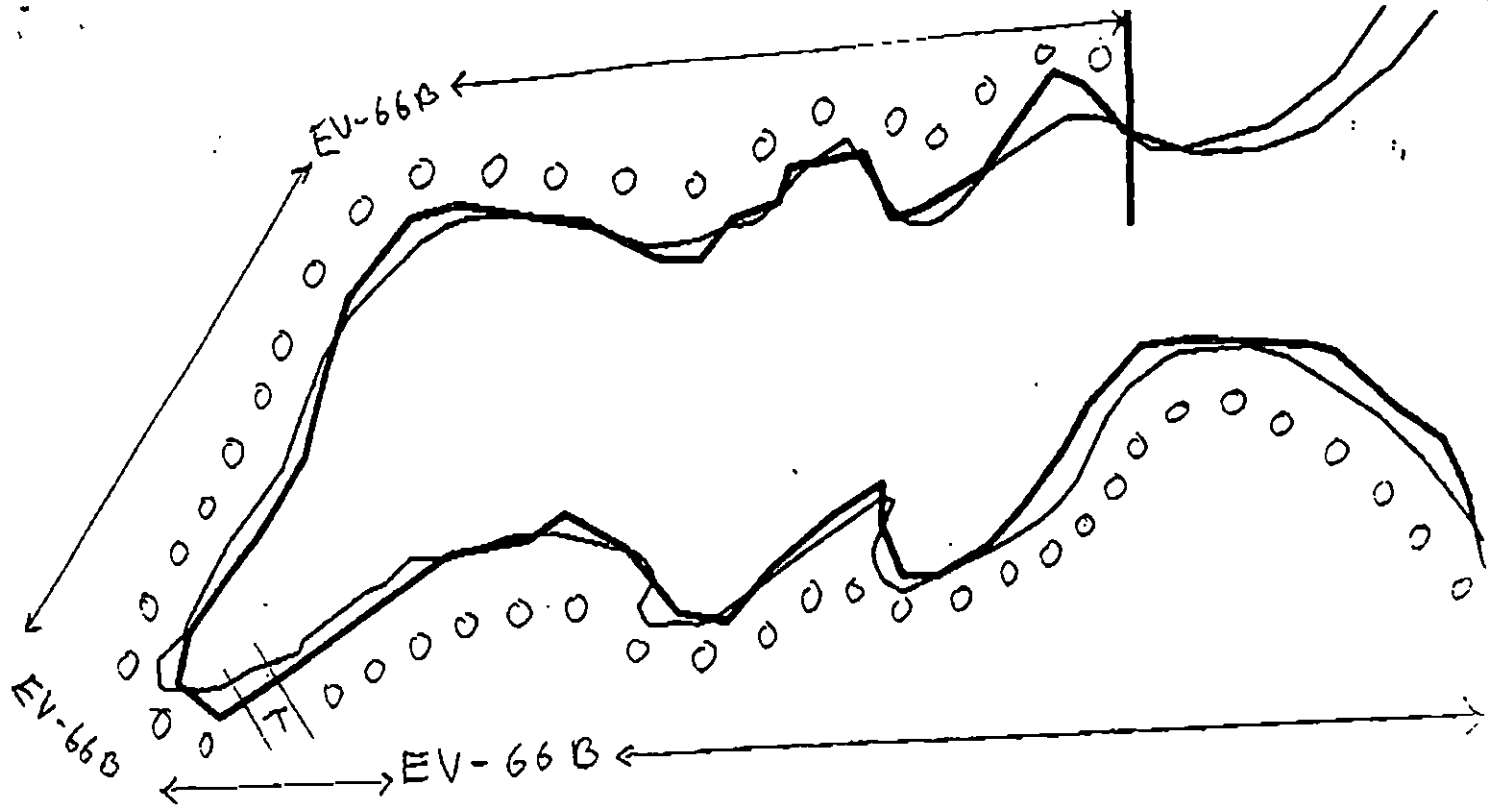


Map Key: PWS-256b

Name: Mike Fogel

Date: 3/31/00

Data Entered:



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

EV-66

ADEC Segment Length: 3574m

0 100 200 300
 METERS



Map Key: PWS-256a
 Name: Mike Fogar
 Date: 3/31/90
 Date Entered:

1991 MAYSAP EVALUATION

SEGMENT: EV 066 SUB: B REGION: PWS SURVEY DATE: 5/15/91

ENVIRONMENTAL SENSITIVITIES:

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

Ecological/Constraints (see page two for details) Eagle nest,
Fish harvest area

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.

Fish Harvest Area: Unlimited treatment unless otherwise directed by ADF&G. Sheen containment/recovery procedures required for mechanical treatment.

TEAM NO. 5 SEGMENT EU-66 SUBDIVISION B DATE 5/15/91

ADEC

NAME John Hayes SIGNATURE [Signature]

- ☒ NTR Oiling observed here was light no treatment recommended at this time.
Observed a lot of debris along storm berm.

EXXON

NAME JOHN DEAN SIGNATURE [Signature]

- ☒ NTR ONLY TRACES OF OILING REMAIN, NONE IN RECOVERABLE STATE

LANDMANAGER

NAME Steve WARD OF CUC/FS SIGNATURE [Signature]

- ☒ NTR VERY Lite oil was found - A Little Asphalt - Very small stain + cover. - Lots of trash.
this area Recovering well -
No Bio -

USCG/NOAA

NAME DREHER/CLINE SIGNATURE CWO K. R. Dreher

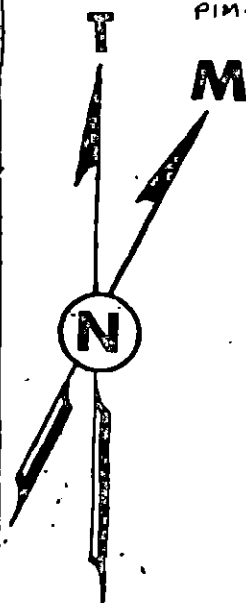
- ☒ NTR No subsurface oiling found. Only traces of SOR, CV, CT, & ST were found.

No significant oiling in this subdivision. Some of the beaches have difficult access. Biota near oiling site A is very diverse and abundant.
No further treatment recommended. DRE

Reviewed 5.19 94
REVIEWED 10 19 MAY

MAYSAP 1991
OG SKETCH MAP
GREG CHANEY / DON CUNE
TEAM 5

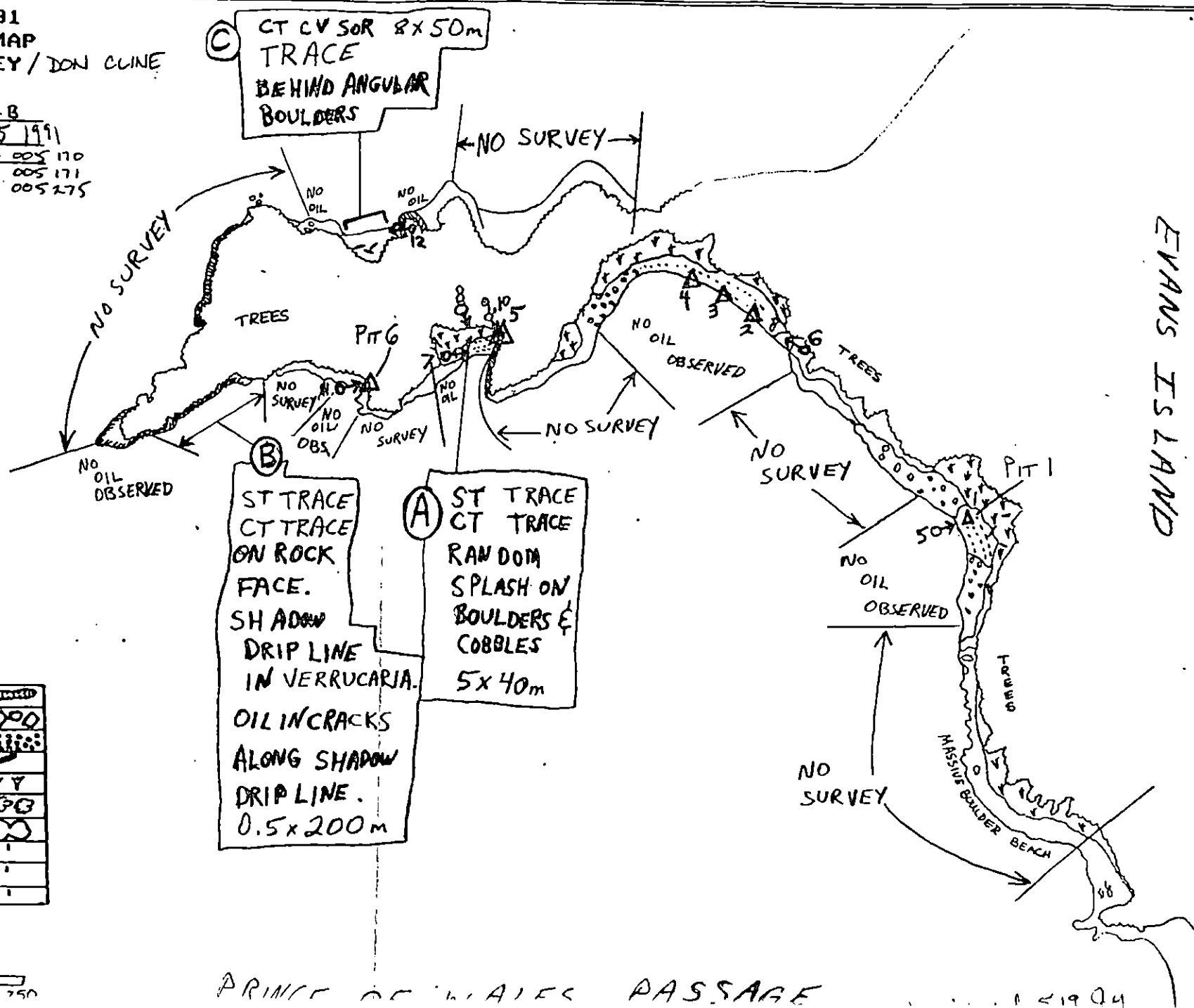
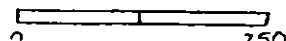
SEGMENT: EV66-B
DATE: MAY 15 1991
AIR P.#: PIM-C 005 170
PIM-C 005 171
PIM-C 005 175



LEGEND

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

SCALE



PRINCE OF WALES PASSAGE

1994

TEAM # 5

DATE 15 May 1991

SEGMENT # EV-66

TIDAL HEIGHT(Range) -2 → -3.5

SUBDIVISION B

BIOLOGIST Crank

SEA STATE 1'

WIND SPEED/DIRECTION 10 knots/N

PHOTOGRAPHS: ROLL #

FRAME #

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

(A) Area is on a pocket beach, located high in the U1TZ. Black lichen and moss cover <1% of the surface sediments.

The cobble MITZ also has a rare biota cover. Lirinea, filamentous and green algae cover less than 1% of the sediment surface.

The LITZ is a dense, diverse intertidal community with greater than 90% surface cover. Algae are dominant including the kelps: *Alaria*, *Laminaria*, *Costaria*; sea palms; bladder red: *Palmaria*; *Cryptosiphonia*; *Desmarestia*; *Identhalla* & corallines. The fauna included sea stars: *Pisaster*, *Pycnopodia*; *Littor*; 2 species of sponge; 2 species of tunicates; Chitons: *Katharina tunicata* and *Tonicella*; *Anemones*; aggregating *Anthropleura* and *Telia*; Mussels; *Barracina*; *Littorina* and limpets. There is a nearshore Bull Kelp bed.

(B) Area is an oil stain in the SUPRA across a vertical face. There are 'oil-drip' shadows in the black when (bare rock showing through a *Verrucaria* patch in the shape of an oil drip). In the U1TZ there is a continuous 2m band of dense bare rock recruits, no adults. In the MITZ, there is a discontinuous 2m band of *Fucus* and below that a 1/2 m discontinuous band of mussels. The LITZ has similar species as described in site (A).

WILDLIFE OBSERVATIONS

TO BE COMPLETED IN ALL SUBDIVISIONS

BIRDS	# OF SPECIES	TOTAL BIRDS	FISH OBSERVED SPECIES PRESENT
Eagles	1	1	
Seabirds	2 Pigeon Guillemot / Laysan Albatross	20	
Waterfowl	2 Merganser / Harlequin	5	
Gulls/Kittiwakes	1 Glaucous-winged	15	
Shorebirds	1 Sandpiper	1	
Corvids	1 Crow	1	
Other Birds			

MARINE MAMMALS	# OBSERVED	LAND MAMMALS SPECIES	# OBSERVED
Sea Otters		Deer	1
Pinnipeds (specify)	1 Harbor Seal	River Otter tracks	
Cetaceans (specify)	4 Sperm whales		

Shoreline subdivision map showing important biological features attached.

Revised 5/19/91

Team # 5

Date 15 May 1991

pg 2 of 2

Segment # EV-Ule

Tidal Height - 2 → -3.5

Subdivision B

Biologist Crank

Sea State 1'

Wind Speed / Direction 10 knots/N

Comments (cont.)

(C) Area is on a pocket beach, located high in the UITZ & SUPRA.

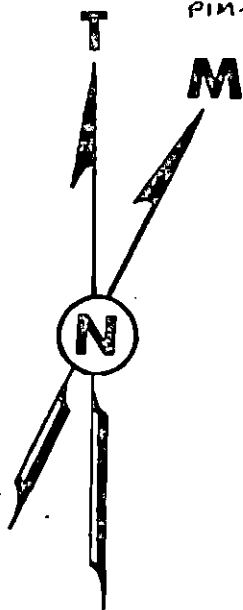
Black lichen covers ~50% of the clasts surfaces. Moss and oligochaete worms cover <1% of the surfaces. Lower in the UITZ there is a sparsely concentrated Fucus band with sporelings and maturing conceptacles; tar spot algae; moderately concentrated Littorina and limpets and a few barnacles and mussels. Biota cover is ~10%.

The MITZ has a moderate concentration of intergravel mussels with various age classes. Sparse barnacles and moderate concentrations of Littorina and limpets cover ~10% of the surfaces. LITZ is similar to site A. There is a nearshore Bull kelp bed.

The biota in this subdivision do not appear to be adversely affected by the present giling conditions. The LITZ is extremely rich and diverse. Recruitment is occurring, particularly noticeable along the vertical face in the 2 m wide barnacle band.

MAYSAP 1991
 BIL ~~SS~~ SKETCH MAP
 GREG CHANEY / DON CUNE PATTY CEMUK
 TEAM 5

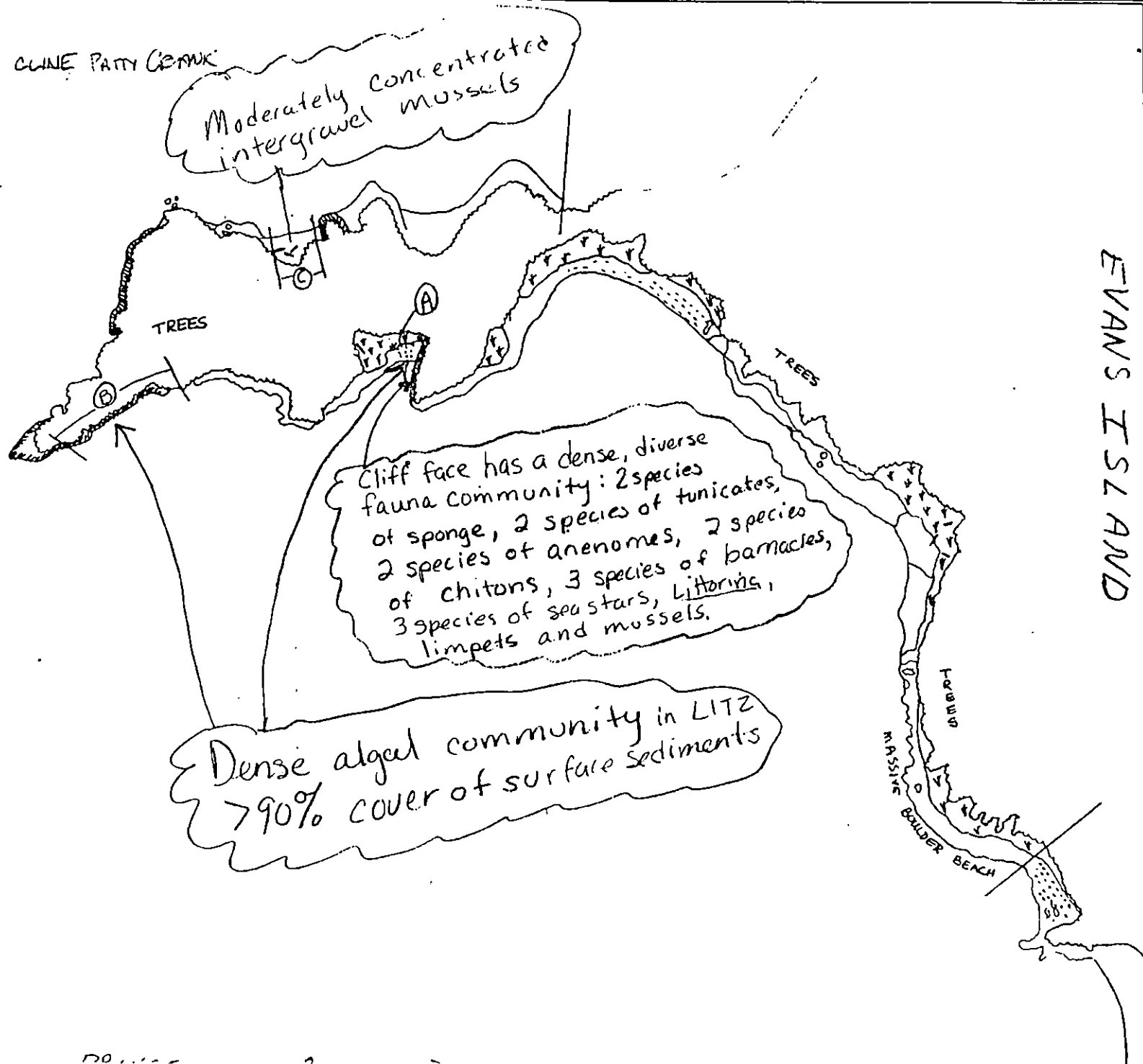
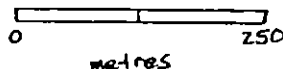
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 DATE: MAY 15 1991
 AIR P.#: PIM-C 005 170
 PIM-C 005 171
 PIM-C 005 275

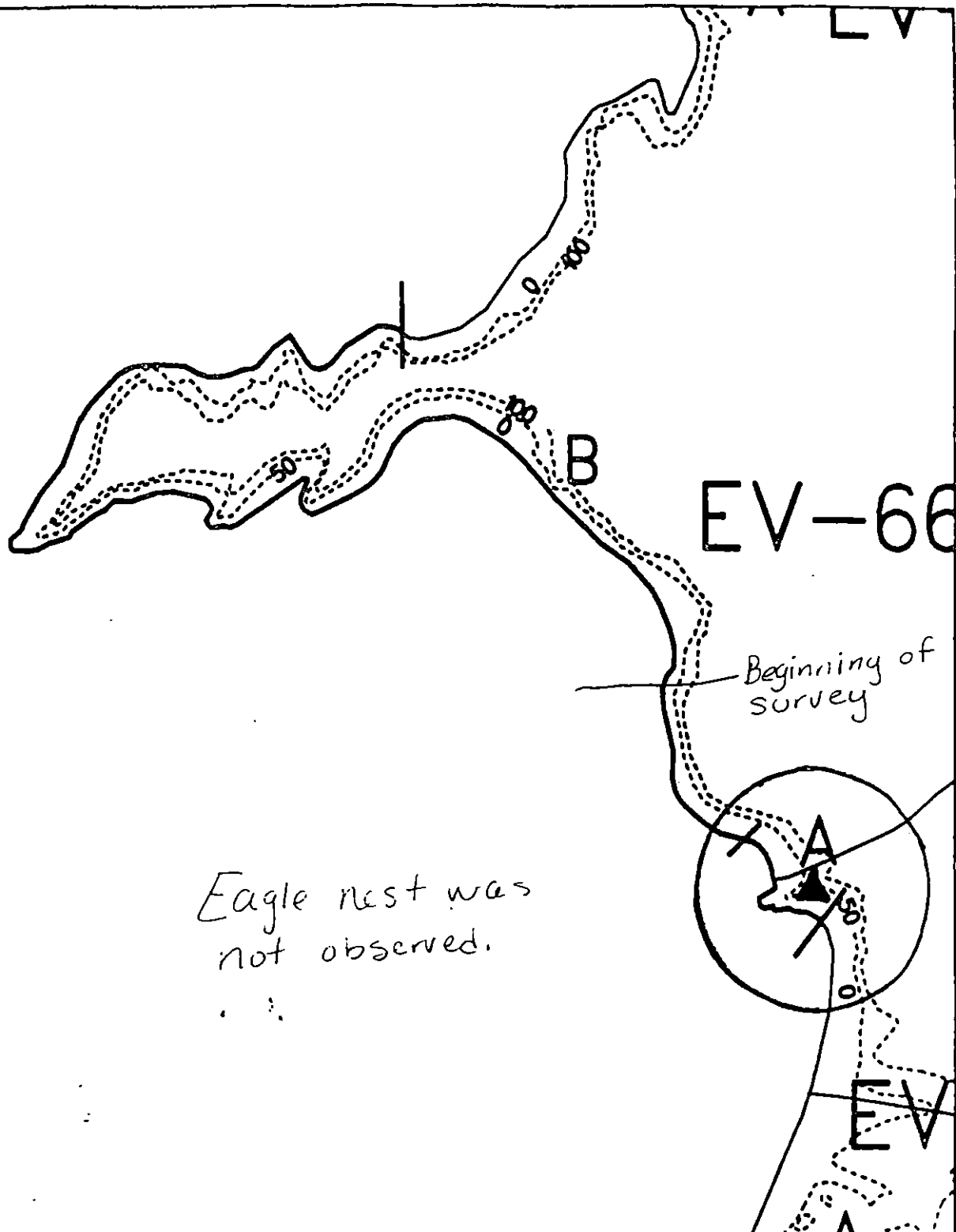


LEGEND

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

SCALE





EV066

METERS



AK State Plane Zone 4
600000

Segment Reference Map
Map Key: PVSEV066

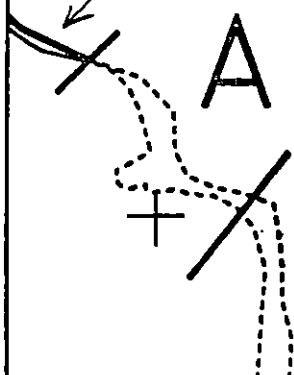


EAGLE NEST

P. CRANK 5/15/91

EV-66

NO SURVEY



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

EV066 B
ADEC Subsegment Length: 3325m
METERS

5 200 400
AK State Plane Zone 4
per066b



Subdivision Field Map
Map Key: PWSEV066Bb
Name: CHANEY
Date: MAY 15, 77
Data Entered:

reviewed 5.19 94
REVIEWED CB 12 MAY

1991 MAYSAP EVALUATION

SEGMENT: EV 066 SUB: A REGION: PWS SURVEY DATE: NONE

ENVIRONMENTAL SENSITIVITIES:

Work Window(s) _____

Ecological/Constraints (see page two for details) _____

ARCHAEOLOGICAL CONSTRAINTS:

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

SHPO Signature: Timothy A. Smith Date: 6/20/91

RECOMMENDATIONS:

	INITIAL	TAG	FOSC
TREATMENT REQUIRED (Y or N)	<u>N</u>	<u>N</u>	<u>2</u>
Manual Pickup (Check as Req.)	_____	_____	_____
Spot Washing	_____	_____	_____
Bio-Customblen Only	_____	_____	_____
Bio-Inipol/Customblen	_____	_____	_____
Other	_____	_____	_____
Other	_____	_____	_____

COMMENTS:

INITIAL: _____

TAG: _____

FOSC: _____

TAG APPROVAL DATE: JUNE 19 1991 FOSC APPROVAL DATE: 6/21/91

ADEC Bob Bauer FOSC E. E. PAGE, CDR, USCG

EXXON Bob CHIEF OF STAFF, FOSC

USCG Edna

NOAA Long

MAYSAP FIELD SHORELINE COMMENT SHEET

TEAM NO. 2 SEGMENT EU-66 SUBDIVISION A DATE 2/5/91

ADEC

NAME _____ SIGNATURE _____

☐ NTR

EXXON

NAME _____ SIGNATURE _____

☒ NTR

*Exxon oil spill - 1/2 mile
from shore - 1/2 mile
from shore - 1/2 mile*

LANDMANAGER

NAME Dennis S Kennedy OF VSPS SIGNATURE D.S. Kennedy

☐ NTR

No survey. 2/5/91.

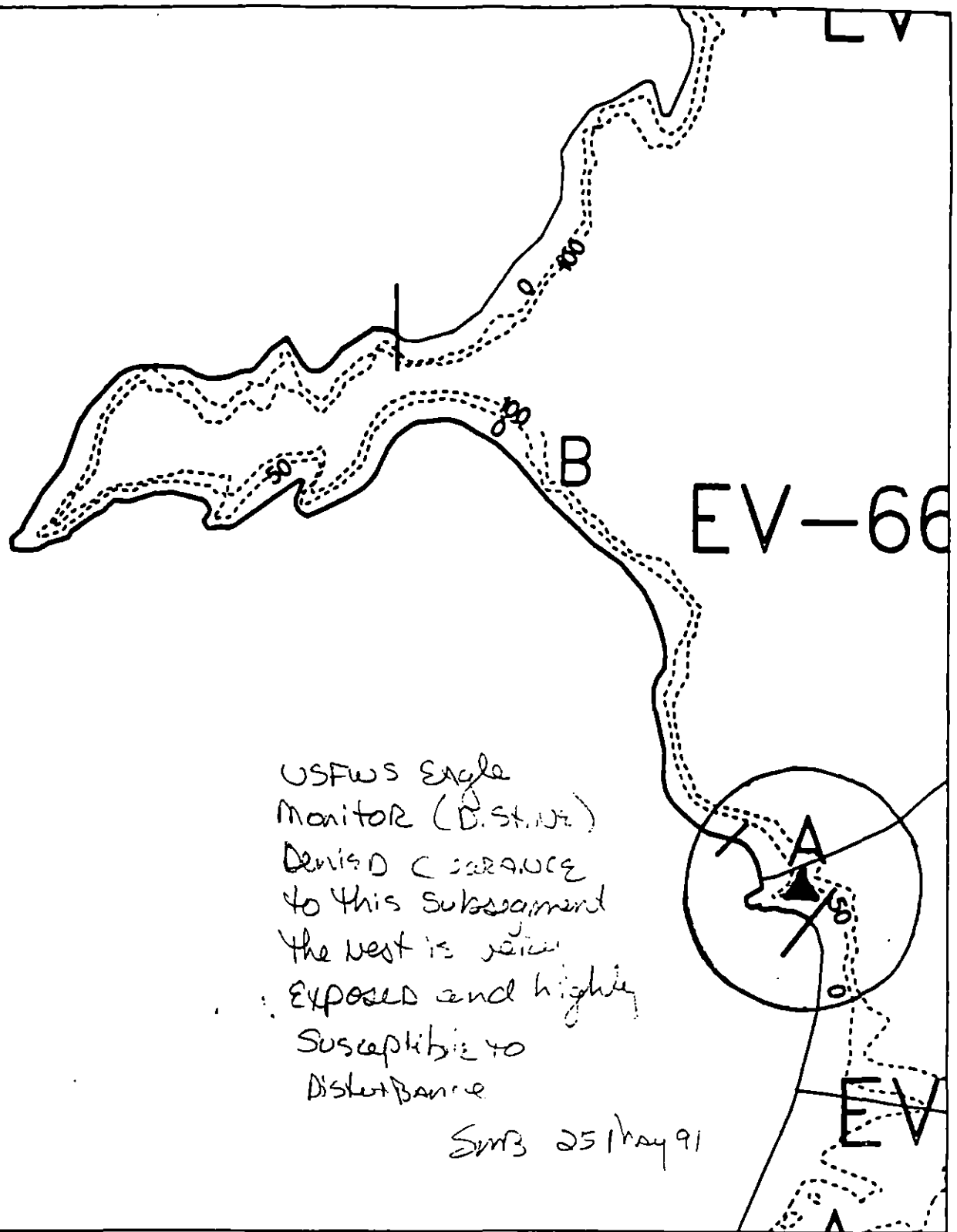
USCG/NOAA *NOAA D. SIMPSON 30-A-77 12-10-90-10-10-90*

NAME Bill M.P. Zervone USCG SIGNATURE Bill M.P. Zervone

☐ NTR

110 survey - 1/5-13

No Treatment Recommended. 3



USFWS Eagle
Monitor (B. St. W.)
Denied clearance
to this Subsegment
The nest is
Exposed and highly
susceptible to
Disturbance

SMB 25 May 91



EV066

METERS



AK State Plane Zone 4
GCS NAD83

Segment Reference Map

Map Key: PWSRV066



EAGLE NEST

EXXON MAYSAP

May Shoreline Assessment Program

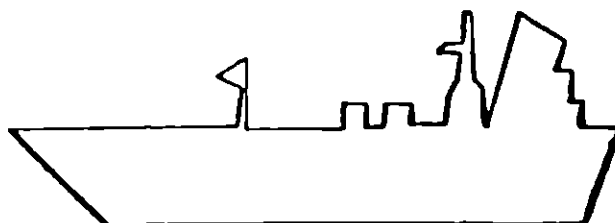
1991



SEGMENT: EU-66

SUBDIVISION: A

DATE: 26 May 91



Team #2 Adele Candies

18 June 1991

TO: TAG

FROM: A. R. Teal

SUBJECT: Subdivisions Unsurveyed during MAYSAP because of Eagle Restrictions

After MAYSAP, two subdivisions that had shown little or no oil during SSAT (Spring 1990) were left partially or completely unsurveyed. At EV-66A, no survey was made because the USFWS monitor denied access to the subdivision because of an exposed eagle nest. In SSAT, EV-66A had a splash of coat, but no other surface oil and no subsurface oil. At LA-37A, no survey was made because the eagle monitor noticed an agitated eagle at the western end of the subdivision. In SSAT, no oil had been found in the area unsurveyed during MAYSAP. Because the eagles remain active at EV-66A and LA-37A and little or no oil was located in the unsurveyed areas during SSAT, we recommend no further survey and no treatment of these three subdivisions. Attached are two "1991 MAYSAP Evaluation" sheets recommending no treatment of EV-66A and LA-37A. Please acknowledge agreement with this statement by signing in the appropriate blank.

TAG APPROVAL DATE: June 18 1991

ADEC

EXXON

USCG

NOAA

1991 MAYSAP EVALUATION

SEGMENT: EV 066 SUB: A REGION: PWS SURVEY DATE: NONE

ENVIRONMENTAL SENSITIVITIES:

Work Window(s) _____

Ecological/Constraints (see page two for details) _____

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 _____

TEAM NO. 2 SEGMENT EU-66 SUBDIVISION A DATE 26/5/91

ADEC
NAME _____ SIGNATURE _____

☐ NTR

EXXON
NAME _____ SIGNATURE _____

☐ NTR

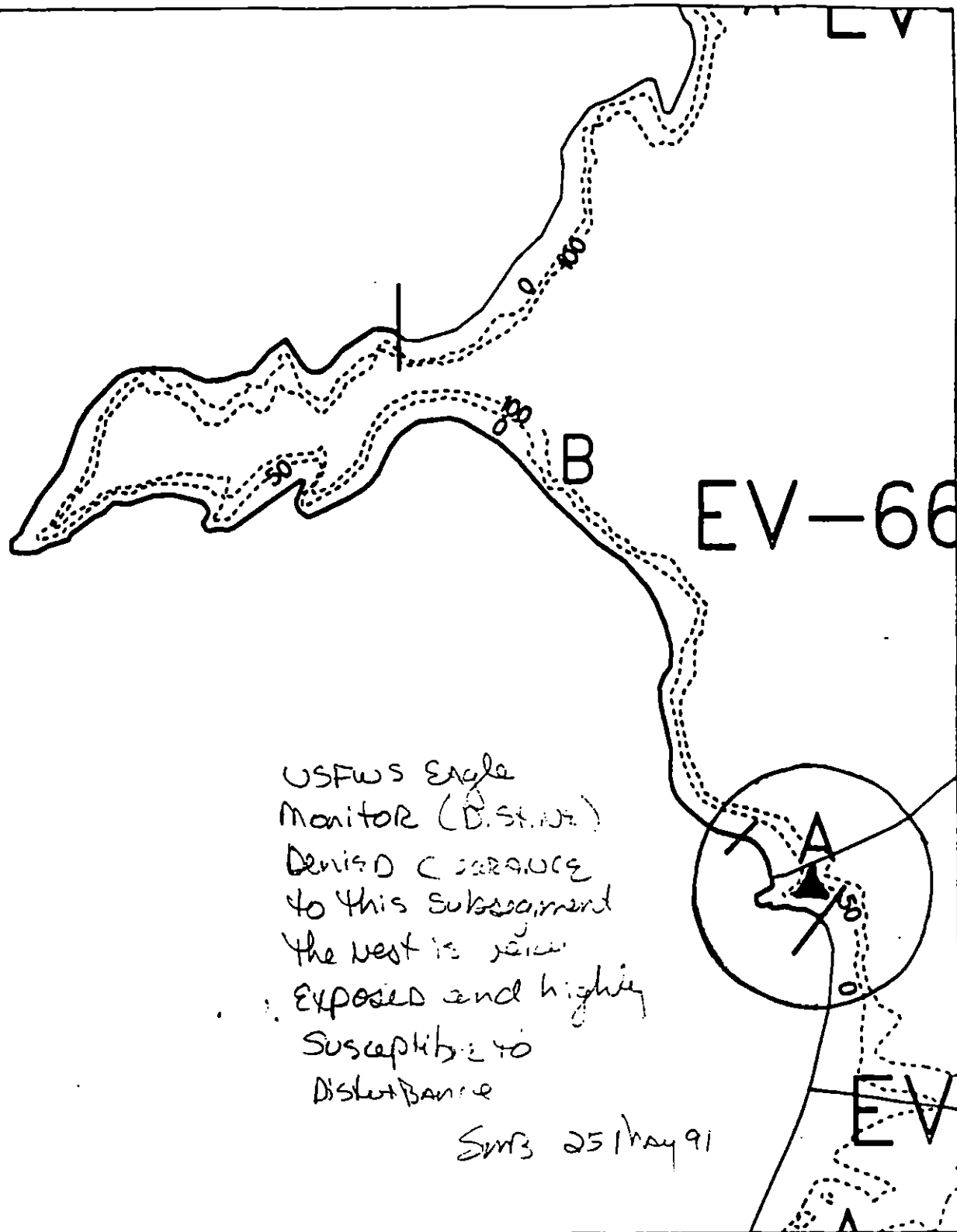
☒ **MANAGER**
NAME DENNIS S KOHIOLO OF VSPS SIGNATURE N.S. Kennedy

☐ NTR No finding. 2002

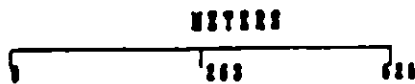
ISCG/NOAA LARA D. SIMPSON USCG 77 N. Harbor St - Seattle
NAME Paul M.P. Zeigler USCG SIGNATURE Paul M.P. Zeigler

☐ NTR 110.2000g - DS-13

6: 10 Treatment Recommended. 3



EV066



AK State Plane Zone 4
projected

Segment Reference Map
Map Key: PWSRV066



EAGLE NEST

EXXON MAYSAP

May Shoreline Assessment Program

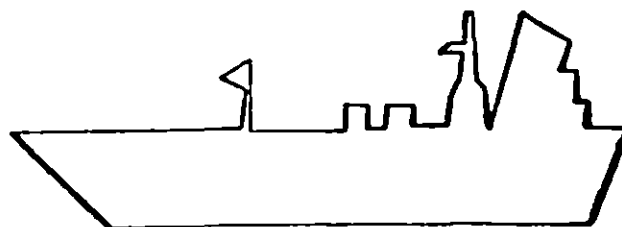
1991



SEGMENT: EU-66

SUBDIVISION: A

DATE: 26 May 91



Team #2 Adele Candies

SEGMENT: EV 066 SUB: B REGION: PWS SURVEY DATE: 5/15/91

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

Ecological/Constraints (see page two for details) Eagle nest,
Fish harvest area

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

SHPO Signature: Charles E. Holmes Date: 5/30/91

FOSC

N

N

OSC

Other

INITIAL:

TAG:

FOSC:

TAG APPROVAL DATE: MAY 29 1991

FOSC APPROVAL DATE: 6/3/91

ADEC

FOSC

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

MAYSAP FIELD SHORELINE COMMENT SHEET

TEAM NO. 5 SEGMENT EU-66 SUBDIVISION B DATE 5/15/91

ADEC

NAME John Hayes SIGNATURE [Signature]

- ☒ NTR Oiling observed here was light no treatment recommended at this time.
Observed a lot of debris along storm berm.

EXXON

NAME John Denny SIGNATURE [Signature]

- ☒ NTR ONLY TRACES OF OILING REMAIN, NONE IN RECOVERABLE STATE

LANDMANAGER

NAME Steve Ward OF CVC/FS SIGNATURE [Signature]

- ☒ NTR Very lite oil was found - A Little asphalt - very small stain + cover. Lots of trash.
this area recovering well -
No Bio -

USCG/NOAA

NAME DREHER/CLINE SIGNATURE CWO K. R. Disher

- ☒ NTR No subsurface oiling found. Only traces of SOR, CV, CT, & ST were found.

No significant oiling in this subdivision. Some of the beaches have difficult access. Biota near oiling site A is very diverse and abundant.
No further treatment recommended. DCR

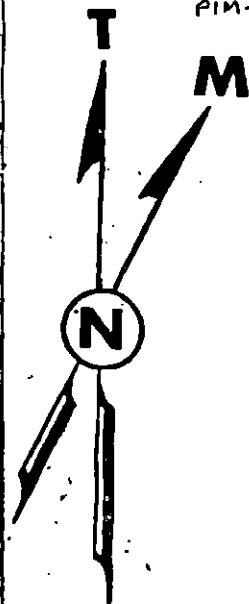
reviewed 5.19 94
REVIEWED CD 19 MAY

MAYSAP 1991
 DG SKETCH MAP
 GREG CHANEY / DON CLINE
 TEAM 5

SEGMENT: EV66-8

DATE: MAY 15 1991

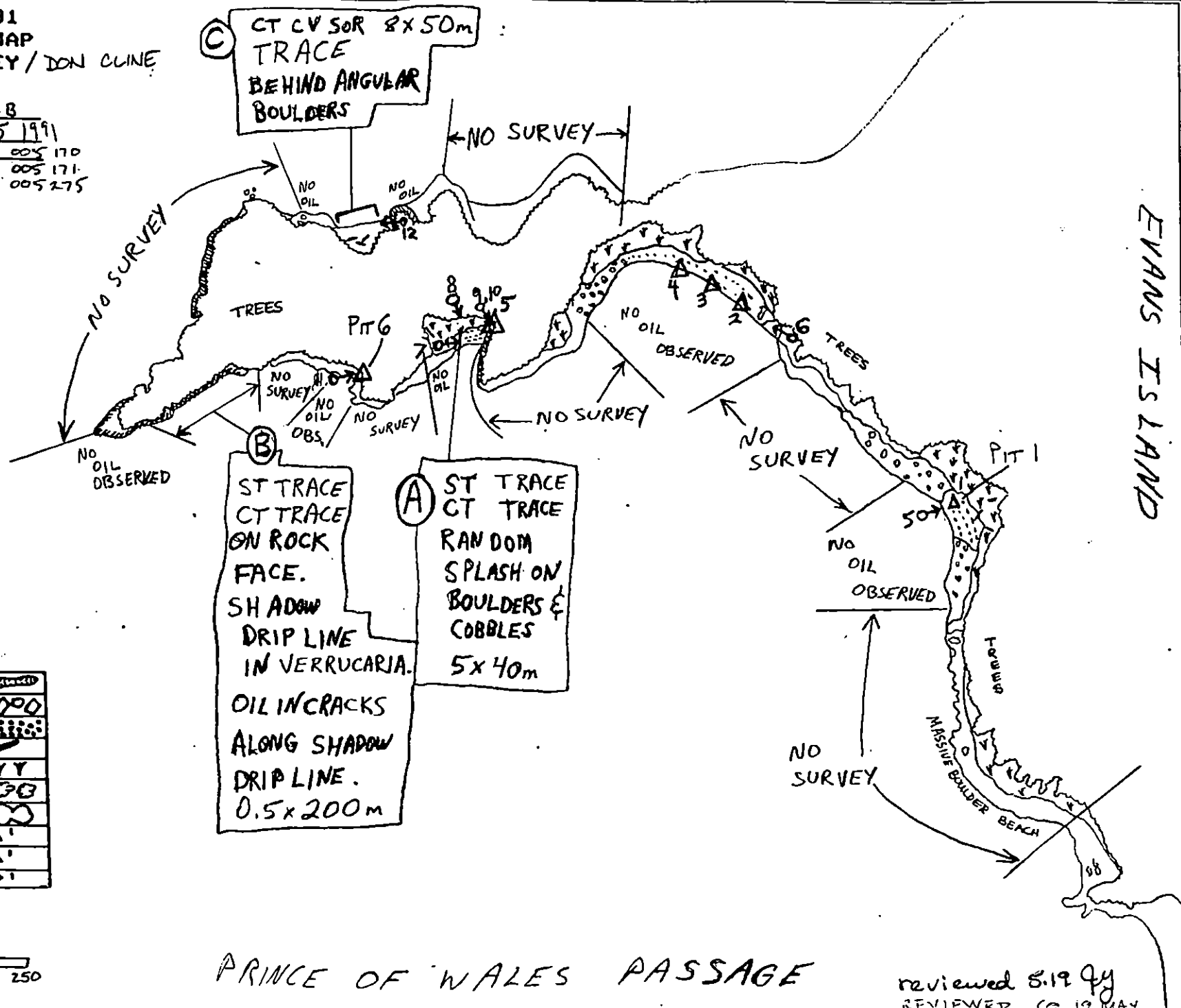
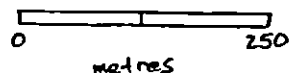
AIR P.H: PIM-C 005 170
 PIM-C 005 171
 PIM-C 005 275



LEGEND

BEDROCK	
BOULDER8	
FINE BED.	
DRIFT LOG	
GRASS	
BRUSH	
FOREST	
OILED PIT	
NO OIL PIT	
PHOTO	

SCALE



PRINCE OF WALES PASSAGE

reviewed 8.19.94
 REVIEWED 10.19.94

MAYSAP BIOLOGICAL SUMMARY FORM

pg 1 of 2

TEAM # 5

DATE 15 May 1991

SEGMENT # EV-666

TIDAL HEIGHT (Range) -2 → -3.5

SUBDIVISION B

BIOLOGIST Crank

SEA STATE 1'

WIND SPEED/DIRECTION 10 knots/N

PHOTOGRAPHS: ROLL #

FRAME #

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

(A) Area is on a pocket beach, located high in the UITZ. Black lichen and moss cover <1% of the surface. Sediments. The robbled MITZ also has a no-rare biota cover. Littorina, filamentous and green algae cover less than 1% of the sediment surface. The LITZ is a dense, diverse intertidal community with greater than 90% surface cover. Algae are dominant including the kelps: *Alaria*, *Laminaria*, *Costaria*; Sea palms; bladed red: *Palmaria*; *Cryptosiphonia*; *Desmarestia*; *Idonthea*; corallines. The fauna included sea stars: *Pisaster*, *Pycnopodia*; *Lottia*; 2 species of sponge; 2 species of tunicates; Chitons: *Katharina tunicata* and *Tonicella*; *Anenomes*; aggregating *Anthopleura* and *Telia*; Mussels; *Barnacles*; *Littorina* and limpets. There is a nearshore Bull Kelp bed.

(B) Area is an oil stain in the SUPRA along a vertical face. There are 'oil-drip' shadows in the black lichen (Bare rock showing through a *Verrucaria* patch in the shape of an oil drip). In the UITZ there is a continuous 2m band of dense barnacle recruits, no adults. In the MITZ, there is discontinuous 2m band of *Fucus* and below that a 1/2 m discontinuous band of mussels. The LITZ has similar species as described in site (A).

WILDLIFE OBSERVATIONS

TO BE COMPLETED IN ALL SUBDIVISIONS

BIRDS	# OF SPECIES	TOTAL BIRDS	FISH OBSERVED SPECIES PRESENT
Eagles	1	1	
Seabirds	2 Pigeon Guillemot / Murre	26	
Waterfowl	2 Merganser / Harlequin	5	
Gulls/Kittiwakes	1 Glaucous-winged	15	
Shorebirds	1 Sandpiper	1	
Corvids	1 Crow	1	
Other Birds			

MARINE MAMMALS	# OBSERVED	LAND MAMMALS SPECIES	# OBSERVED
Sea Otters		Deer	1
Pinnipeds (specify)	1 Harbor Seal	River Otter tracks	
	4 Seals		
Reptiles (specify)			

Shoreline subdivision map showing important biological features attached.

Team # 5

Date 15 May 1991

pg 2 of 2

Segment # EV-UL6

Tidal Height - 2 → -35

Subdivision B

Biologist Crank

Sea State 1'

Wind Speed / Direction 10 knots/N

Comments (cont.)

(C) Area is on a pocket beach, located high in the UITZ & SOPRA.

Black lichen covers ~50% of the clasts surfaces. Moss and oligochaete worms cover <1% of the surfaces. Lower in the UITZ there is a sparsely concentrated Fucus band with sporelings and maturing conceptacles; tar spot algae; moderately concentrated Littorina and limpets and a few barnacles and mussels. Biota cover is ~10%.

The MITZ has a moderate concentration of intergravel mussels with various age classes. Sparse barnacles and moderate concentrations of Littorina and limpets cover ~10% of the surfaces. LITZ is similar to site A. There is a nearshore Bull kelp bed.

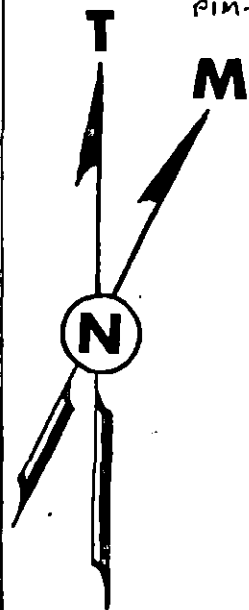
The biota in this subdivision do not appear to be adversely affected by the present oiling conditions. The LITZ is extremely rich and diverse. Recruitment is occurring, particularly noticeable along the vertical face in the 2 m wide barnacle band.

MAYSAP 1991
 BIO ~~SC~~ SKETCH MAP
 GREG CHANEY / DON CLINE PATTY CEMK
 TEAM 5

SEGMENT: EV66-B

DATE: MAY 15 1991

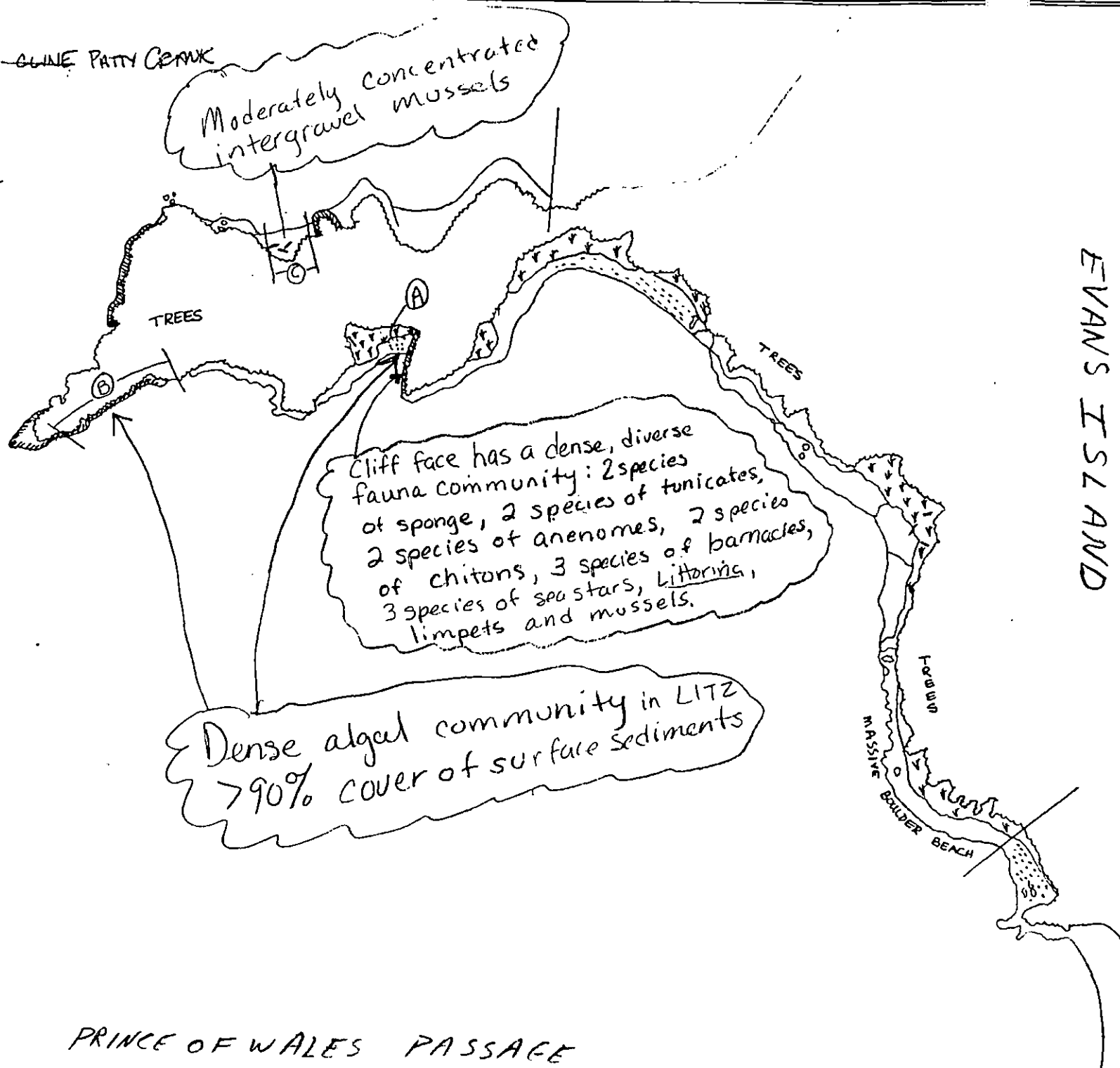
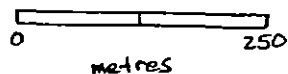
AIR P.#: PIM-C 005 170
 PIM-C 005 171
 PIM-C 005 275

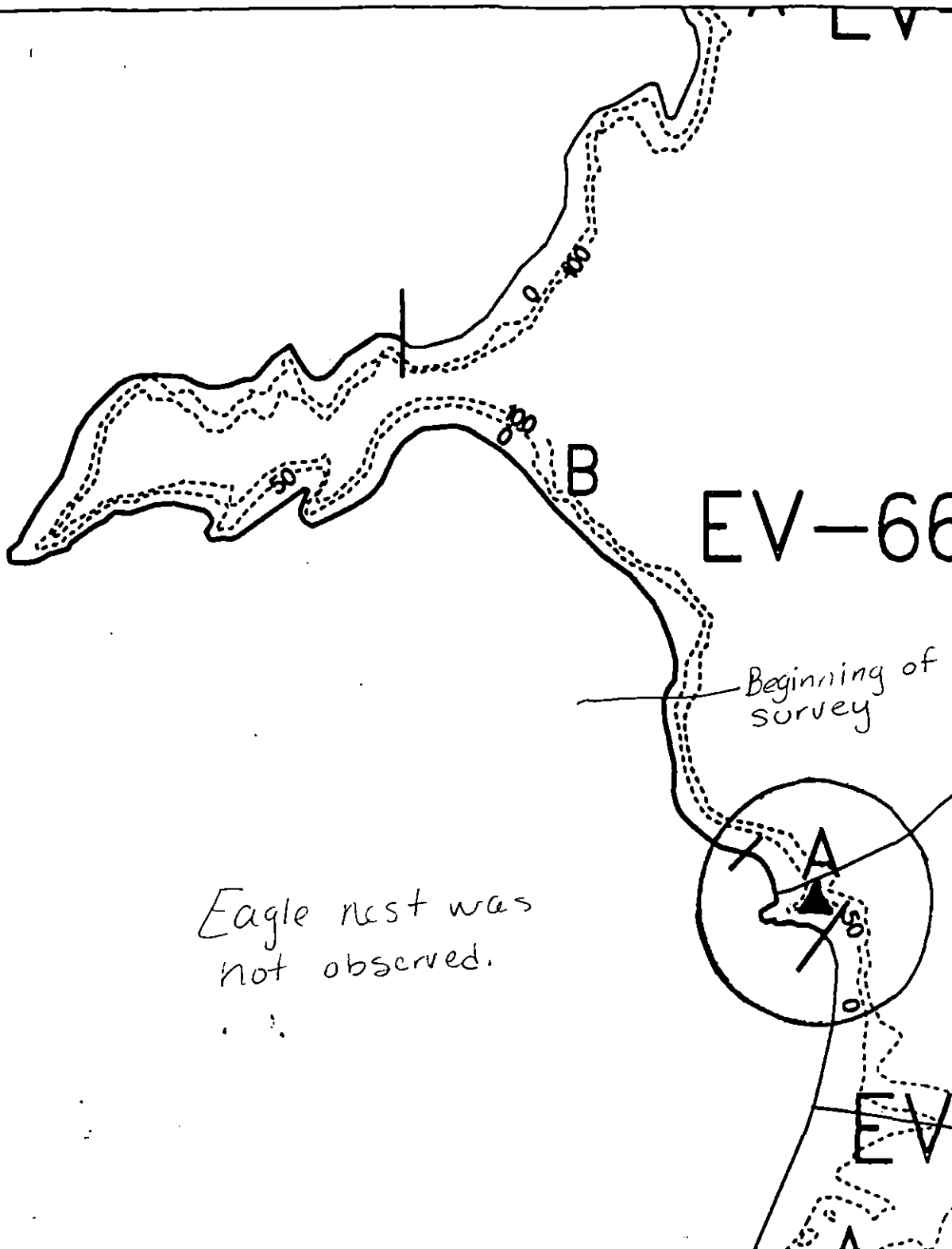


LEGEND

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

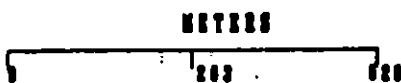
SCALE





EV066

Segment Reference Map
Map Key: PVS EV066

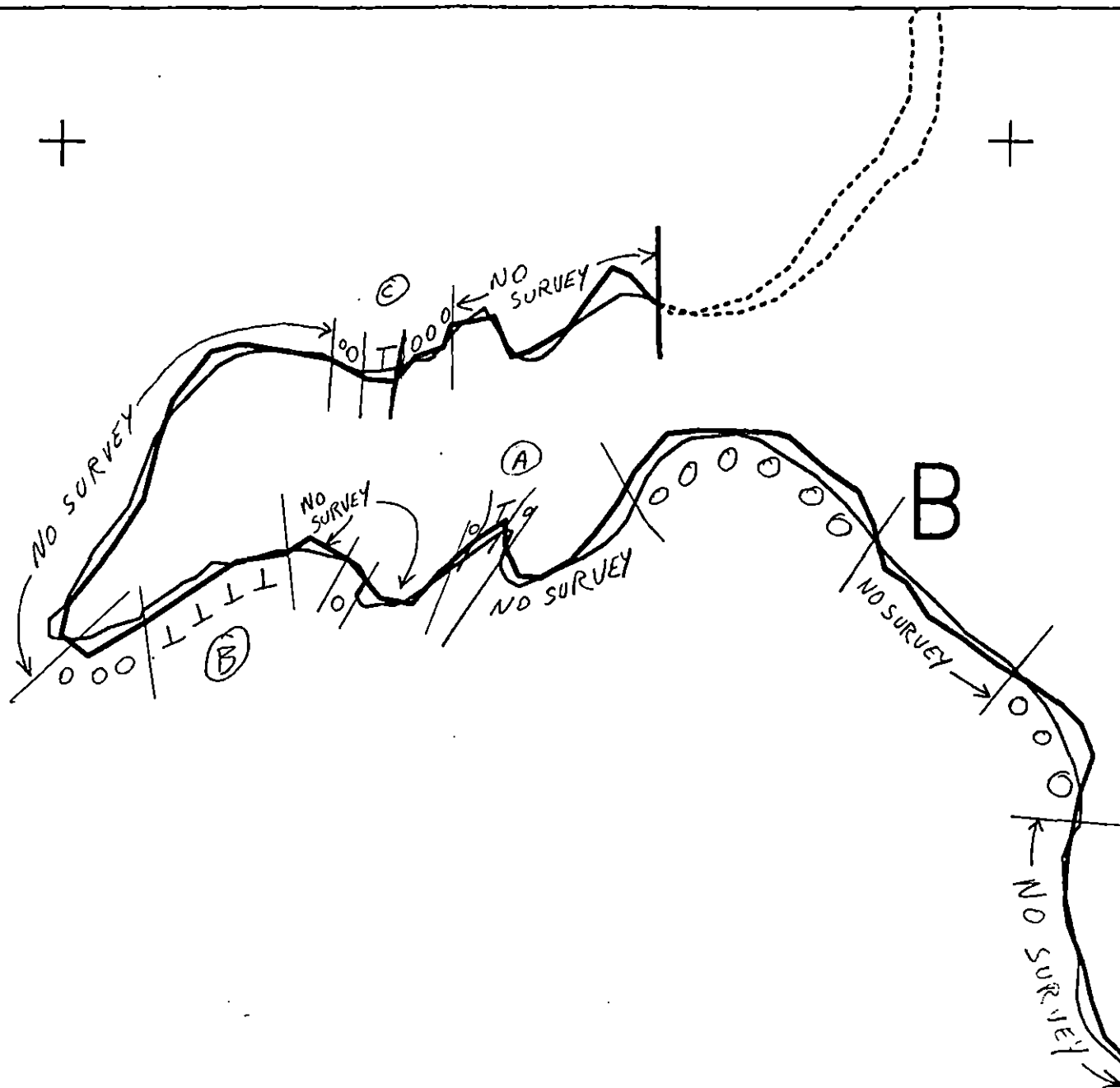


AK State Plane Zone 4
project



EAGLE NEST

P. CRANK 5/15/91



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

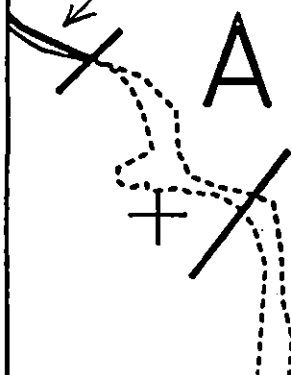
EV066 B
 ADEC Subsegment Length: 3325m
 METERS
 0 200 400
 AK State Plane Zone 4
 pr066ba

Subdivision Field Map
 Map Key: PWSEV0668a
 Name: CHANEY
 Date: MAY 15 1991
 Date Entered:

revised 5.19 94
 REVIEWED CB 19 MAY

EV-66

NO SURVEY



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

EV066 B
ADEC Subsegment Length: 3325m
METERS

0 200 400
AK State Plane Zone 4
par0666b



Subdivision Field Map
Map Key: PWSEV066Bb
Name: CHANEY
Date: MAY 15 1977
Data Entered:

reviewed 5.19 77
REVIEWED CB 15 MAY

SEGMENT NUMBER: EV-066

STREAM NUMBER: 226-50-16452

This stream was surveyed during the Pre-ANAD survey by a cooperative effort of ADF&G and Exxon on April 12, 1990. As a result of this pre-survey, the ANAD Fish Stream Team decided NOT to survey the stream, but simply to review the results of the pre-survey. The FIELD SHORELINE COMMENT SHEET was prepared from the review of the pre-survey. Also attached is a copy of the pre-survey for your consideration.

The ANAD Fish Stream Team recommends: NO TREATMENT

TAG Concurrence Date:

ADEC	<u>Art Weimer</u>	<u>Art Weimer</u>
EXXON	<u>Andy Earl</u>	<u>Andy Earl</u>
NOAA	<u>Burt Warrick</u>	<u>Burt Warrick</u>
USCG	<u>Mr. J. Hall</u>	<u>Mr. J. Hall</u>

FOSC: W L

Date: 5-24-90

NO. 100 THE FOLLOWING INFORMATION IS FOR THE USE OF THE FIELD SHORELINE COMMENT SHEET
PRESURVEY ~~NOT~~ DOCUMENTATION OF THIS STREAM BY Tom CROWE 138
4/12/90 REVIEWED BY USCG & ADFG. PRESURVEY DOCUMENTATION IS ATTACHED.
AL SNOOK
EXXON REP.

ASC#:

SEGMENT ST 1 EV-066 SUBDIVISION: Z26-50-16452 DATE 4/27/90

USCG

NAME KERWIN L. DREHER SIGNATURE CWO K. L. Dreher

☒ NO TREATMENT RECOMMENDED
COMMENTS

☐ TREATMENT SUGGESTED

~~ADFG~~ ADFG

NAME Tom CROWE

SIGNATURE

☒ NO TREATMENT RECOMMENDED
COMMENTS

☐ TREATMENT SUGGESTED

~~LAND MANAGER~~

NAME

SIGNATURE

☐ NO TREATMENT RECOMMENDED
COMMENTS

☐ TREATMENT SUGGESTED

ADPAC MULTI-ASSESSMENT DATA FORM

16453
or
16452

1 SURVEY TYPE: ES ES DS TS AVS SCM MSB PTA2 REGION: PVE IP,CI K,APMETHOD: Aerial Ground Boat3 DATE: 4/12/9015 HIGH TIDE TIMES: 1

21 TEAM RECORDER: _____

4 START TIME: 115516 HIGH TIDE HTS: 122 OBSERVERS: TOM CRANE5 STOP TIME: 120517 LOW TIDE TIMES: 1

23 AGENCY: _____

6 SEGMENT #: E006618 LOW TIDE HTS: 124 PHOTOS TAKEN: Y N

7 STATION #: _____

19 TIDE HT AT SURVEY: _____

Roll #: _____ Frames: _____

8 K-UNIT: _____

EDS Slack Flood Slack

25 VIDEO TAKEN: Y N TAPES: _____

9 STAT AREA: _____

20 USGS QUAD: _____

Start: _____ End: _____

10 LAT: _____

11 LONG: _____

26 SAMPLES TAKEN Y N Number _____12 SOURCE: Map Loran

Oil _____

13 LOCATION: _____

Sediment _____

14 DESCRIPTION: _____

Biological _____

Water _____

EXTENT OF OIL

	SHORELINE				STREAM			
	L	V	H	N	L	V	H	N
27 SURFACE COVERAGE								
28 SURFACE THICKNESS								
29 PENETRATION								

30 OVERALL OIL IMPACT: N VL L N H36 CATALOGED ANAD. FISH STREAM? Y N37 CATALOG #: 164532

38 STREAM NAME: _____

31 OIL TYPE: Pooled Mousse Tar Asphalt Sticky SEATH39 OIL IN STREAM BED? Y N40 OIL ON STREAM BANKS? Y N32 OILED DEBRIS? Y N41 OIL ON BEACH ADJACENT TO MOUTH? Y N
(within 50 meters)42 OIL WITHIN 1 MILE OF STREAM? Y N

Where: _____

33 SHORELINE TYPE: Headland Low-lying Rocks Beach Cove
Lagoon Marsh43 ANADROMOUS FISH PRESENT? Y N34 WAVE EXPOSURE: High Moderate Low44 ANADROMOUS FISH OBSERVATION
Species Aerial Ground35 SUBSTRATE TYPE: Bedrock _____ Boulder X Cobble _____

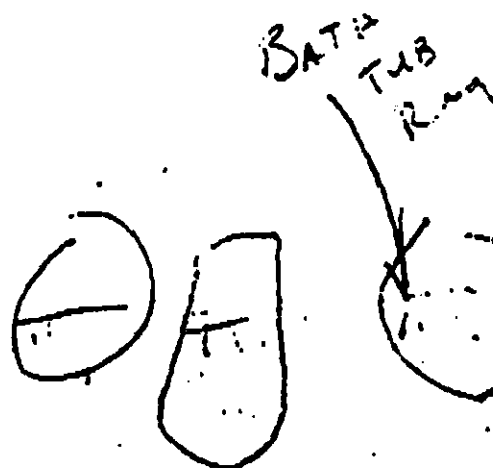
Gravel _____ Sand _____ Mud/silt _____

COMMENTS: BATH -43 R.M. STAIN ON ROLL 5

FRAME(S)

DESCRIPTION

48 OIL DISTRIBUTION DIAGRAM



16452

124.66

7wc

4/12/90

CLF

- Sample taken
- Photo frame # and shot direction.

REGION: PRINCE WILLIAM SOUND

SEGMENT: ST/ EV-68

SUBDIVISIONS: A (1 OF 1)

SHORELINE EVALUATION

SEGMENT ST/ EV-68 SUBDIVISION A (1 OF 1) DATE 3/31/90

SEGMENT ENVIRONMENTAL SENSITIVITIES AND TIME CONSTRAINTS:

Near Sawmill Bay Hatchery (1F) - 4/15 to 6/1; Special use designa-
tion (6Y) - 6/1 to 9/15; Deer harvesting (7II) - 8/15 to 2/28.

SUBDIVISION ECOLOGICAL CONSTRAINTS: No specific subdivision con-
straints identified.

ARCHAEOLOGICAL CONSTRAINTS: If treatment is planned, a cultural re-
source 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 2888 m
Subsurface Oil Observed: Yes _____ No X Maximum Depth _____

RECOMMENDATIONS:

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

COMMENTS: No treatment recommended. No oil found during survey.
Please review Field Shoreline Comment Sheet.

TAG COMMENTS: _____

TAG APPROVAL DATE: _____

ADEC _____
EXXON _____
NOAA _____
USCG _____

FOSC: _____ DATE: _____

FIELD SHORELINE COMMENT SHEET

SEGMENT ST / EV-68 SUBDIVISION: — DATE 3/3/90

USCG NCAA

NAME GARY SHIGEMURA SIGNATURE *Gary Shigemura*

☐ NO TREATMENT RECOMMENDED
COMMENTS

☐ TREATMENT SUGGESTED

NO OIL OBSERVED IN THIS SEGMENT.

ADEC

NAME John Hoyer SIGNATURE *John Hoyer*

☒ NO TREATMENT RECOMMENDED
COMMENTS No oil observed.

☐ TREATMENT SUGGESTED

LAND MANAGER

NAME — SIGNATURE —

☐ NO TREATMENT RECOMMENDED
COMMENTS

☐ TREATMENT SUGGESTED

SHORELINE OILING SUMMARY

REVISION NO. 00/22/88

OG. Mike Foget ^{NOAA} USCG Gary Shigenaka SEGMENT ST/ EV-68
 BIO Richard Ambrose LAND REP — SUBDIVISION A (1 OF 1)
 EXXON Larry Olson ADEC John Hayes TIME 12:15 to 13:00
 TEAM NO.: 11 TIDE LEVEL: +0.9 to +2.9 DATE 3/31 /90
 EST. SUBDIVISION LENGTH: 3128 m ☐ Sun ☒ Clouds ☐ Fog ☒ Rain ☐ Snow
 UPLANDS DESCRIPTION: ☐ Grass ☐ Forest ☒ Rock Rocky back shore
 SURVEYED FROM: ☒ Foot ☒ Boat ☐ Helo WORKING DIRECTION: S to N
 SURFACE SEDIMENTS: R 60 % B 35 % C 5 % P — % G — % S — % M — % V — %
 SLOPE: Long 5 % Hang 30 % Vert 65 % WAVE EXPOSURE: ☐ Low ☐ Med ☐ High
 OIL CATEGORY LENGTH: W — m M — m N — m VL — m NO 3128 m

SURFACE OIL

CHARACTER	DISTRIBUTION				OIL / FILM COLOR							IMPACTED ZONES			
	C	B	P	R	OR	BR	OL	OF	NO	TL	LR	SU	U	M	L
ASPHALT PAVEMENT															
POOLED															
COVER															
COAT															
STAIN															
MOUSSE															
PATTIES															
TARBALLS															
FILM															
NO OIL												X	X	X	X

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

OILED DEBRIS	AMOUNT		
	SM	MD	LG
Logs			
Vegetation			
Trash			
Debris			

DEBRIS COLLECTED
☐ YES ☒ NOTYPE —#BAGS —

Photographs:

Roll No. —Frames —

SUBSURFACE OIL

PIT NO.	PIT DEPTH (cm)	SUBSURFACE OIL CHARACTER					OILED INTERVAL (CM-CM)	BELOW		OIL / FILM COLOR							PIT ZONE				A N A	SUBSURFACE SEDIMENTS
		OF	OR	OL	OF	NO		UD	UC	OR	BR	OL	OF	NO	TL	LR	SU	U	M	L		

COMMENTS

No oil was observed in this segment. No pits were dug. The shore zone consisted mostly of vertical rock walls with some high angle Boulder Pocket Beaches.

SHORELINE ECOLOGICAL SUMMARY

REVISION 06/3/90

Segment ST/EVOGR Subdivision A Date (mo/day/yr) 3/31/90Time (24 hr) 1215 hrs Biologist Ambrose

(A) Substrate type and % of segments:

(1) Bedrock 100 (2) Boulder 35 (3) Cobble 5 (4) Pebble — (5) Sand — (6) Silt —(B) Overall % cover of biota (% of segment): Dense 30 Moderate 40 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:

Roll No. ST-11-1Frames 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

ASTROPODS

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: *

Red algae abundant in low intertidal. Small Mytilus form discontinuous band; v. dense in band.

Ecological Considerations:

IF, 711, 64: Not relevant.

*Note: surveyed by boat, so small organisms (such as gastropods) could not be surveyed.

PWS
↓ 268B



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

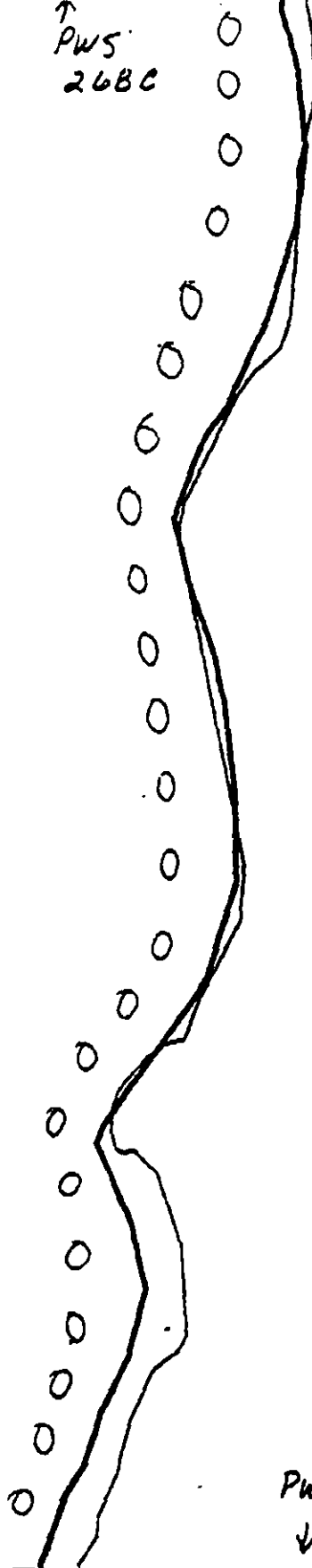
EV-68A

ADEC Segment Length: 3128m



Map Key: PWS-268c
Name: Mike Egert
Date: 3/31/90
Date Entered:

↑ PWS
268C



PWS
↓ 268A

XXXX Wide

//// Medium

--- Narrow

TTTT Very Light

0000 No Oil

EV-68

ADEC Segment Length: 3128m



Map Key: PWS-268b

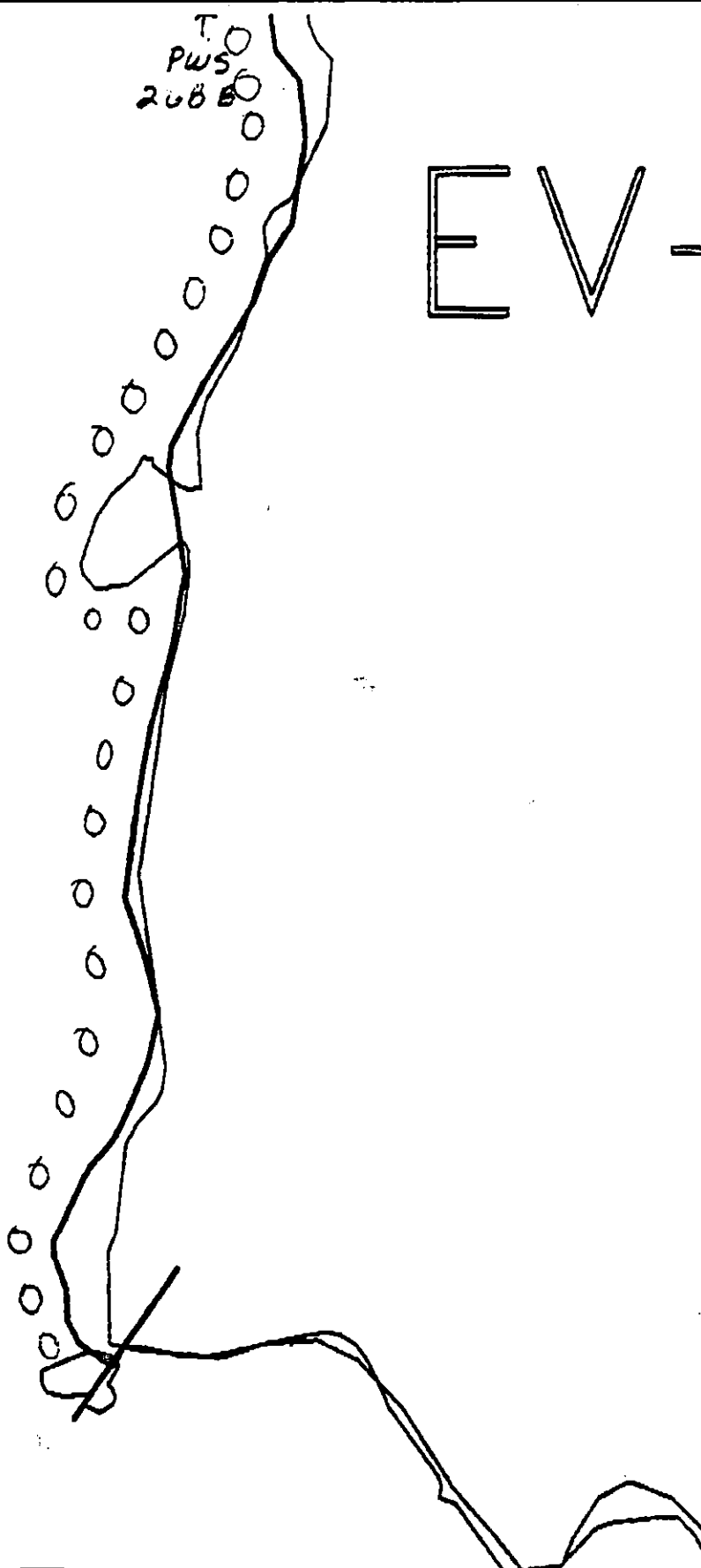
Name: Mike Fojet

Date: 3/31/30

Data Entered:

T
PWS
268B

EV-



XXXX Wide

//// Medium

---- Narrow

TTTT Very Light

0000 No Oil

EV-68

ADEC Segment Length: 3128m



Map Key: PWS-268a

Name: M. L. P. Roper

Date: 3/31/90

Data Entered:

SHORELINE EVALUATION

SEGMENT ST/ EV-68 SUBDIVISION A (1 OF 1) DATE 3/31/90

SEGMENT ENVIRONMENTAL SENSITIVITIES AND TIME CONSTRAINTS:

Near Sawmill Bay Hatchery (1F) - 4/15 to 6/1; Special use designa-
tion (6Y) - 6/1 to 9/15; Deer harvesting (7II) - 8/15 to 2/28.

SUBDIVISION ECOLOGICAL CONSTRAINTS: No specific subdivision con-
straints identified.

ARCHAEOLOGICAL CONSTRAINTS: If treatment is planned, a cultural re-
source evaluation is required prior to shoreline treatment.

SHPO SIGNATURE: Rachel Joan Darr DATE: 4/10/90

OILING CATEGORIZATION:

Wide 0 m: Medium 0 m: Narrow 0 m: V.Light 0 m: No Oil 2888 m
Subsurface Oil Observed: Yes No X Maximum Depth

RECOMMENDATIONS:

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

COMMENTS: No treatment recommended. No oil found during survey.
Please review Field Shoreline Comment Sheet.

TAG COMMENTS:

TAG APPROVAL DATE: 4/10/90

ADEC JOHN BAUER

EXXON ANDI TEAL

NOAA Bull Wescott

USCG G.A. REITER

FOSC: [Signature]

DATE: 4-19-90

PWS
↓ 268B



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

EV-68A

ADEC Segment Length: 3128m



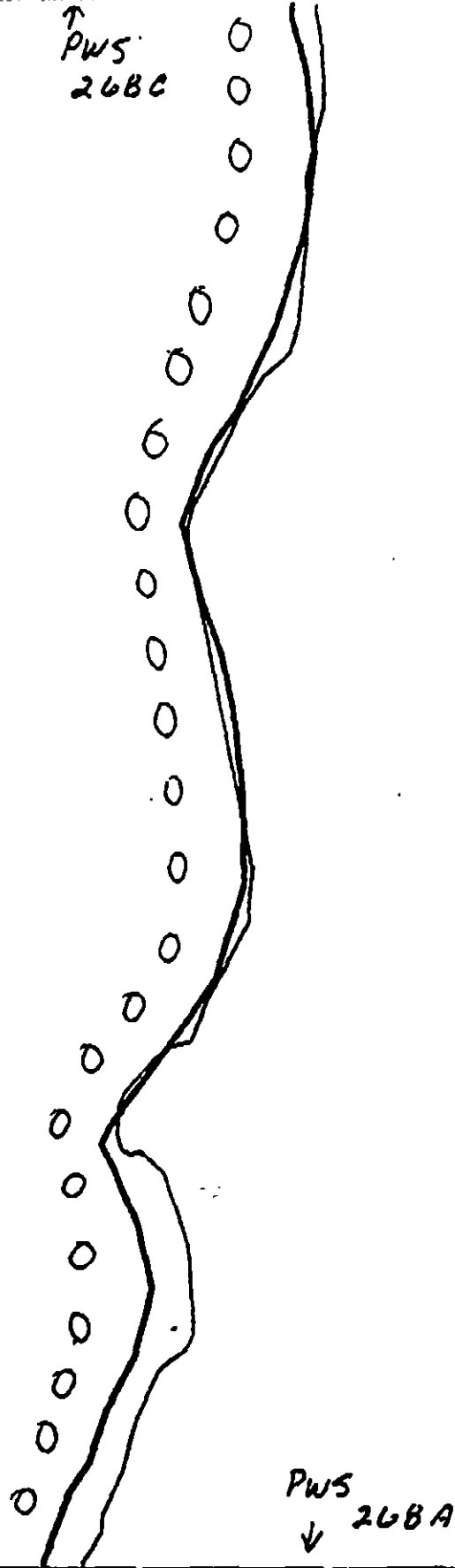
Map Key: PWS-268c

Name: Mike Foget

Date: 3/21/90

Date Entered:

PWS
268C



PWS
↓ 268A

XXXX Wide

//// Medium

--- Narrow

TTTT Very Light

0000 No Oil

EV-68

ADEC Segment Length: 3128m



Map Key: PWS-268b

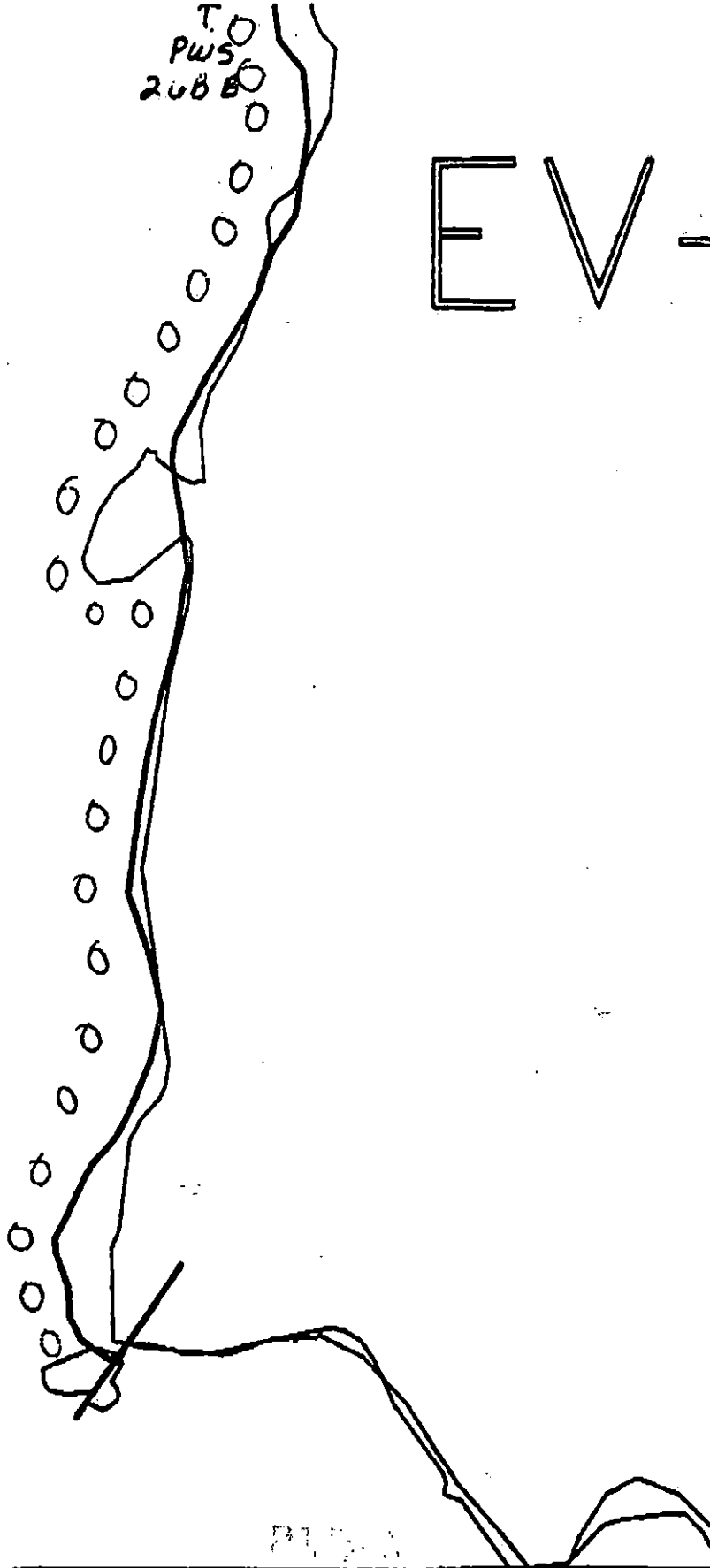
Name: Mike Fojet

Date: 3/31/30

Data Entered:

T
PWS
268B

EV-



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

EV-68

ADEC Segment Length: 3128m



Map Key: PWS-268a

Name: Mike Engel

Date: 3/31/90

Date Entered:

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