

OIL SPILL PUBLIC INFO. CENTER



3 6653 00006413 3

EVOS
GC
1552
.P75
S42
1991
v.22

[Shoreline evaluations, 1991].

Prince William Sound BA-01 to BA-06

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REGION: PRINCE WILLIAM SOUND

SEGMENT: BA-01

SUBDIVISIONS: A (1 OF 6)

FIELD SHORELINE COMMENT SHEET

SEGMENT ST / BA-1 SUBDIVISION: A DATE 3/30/90
AA/
USCG
NAME GARY OTT SIGNATURE [Signature]

☒ NO TREATMENT RECOMMENDED
COMMENTS

☐ TREATMENT SUGGESTED

ADEC

NAME Michael J. Ebel SIGNATURE [Signature]

☒ NO TREATMENT RECOMMENDED
COMMENTS
BA-1A: No oil

☐ TREATMENT SUGGESTED

LAND MANAGER — U.S. D.A. Forest Service

NAME Don J. Breitinger SIGNATURE [Signature]

☒ NO TREATMENT RECOMMENDED
COMMENTS

☐ TREATMENT SUGGESTED

SHORELINE EVALUATION

SEGMENT ST/ BA-01 SUBDIVISION A (1 OF 6) DATE 4/1/90

SEGMENT ENVIRONMENTAL SENSITIVITIES AND TIME CONSTRAINTS:

Two bald eagle nests (5T) - 3/1 to 6/1; Salmon stream mouth (nos. 16446, 16442, 16414, 16372, 16369); Outmigration (1A) - 3/1 to 5/15 and spawning (1B) - 7/10 to 8/15; Finfish subsistence harvesting (7HH) - Consult ADF&G and Chenega Bay for appropriate dates.

SUBDIVISION ECOLOGICAL CONSTRAINTS: No disturbance of stream beds or banks unless authorized by ADF&G. Contact ADF&G Habitat Division and the Chenega Village Corp. prior to treatment for permits.

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 3571 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: _____

TAG COMMENTS: _____

TAG APPROVAL DATE: _____

ADEC _____
EXXON _____
NOAA _____
USCG _____

FOSC: _____ DATE: _____

SHORELINE OILING SUMMARY

REVISION NO. 03/22/90

OG Randy McBride ^{NOAA} used Gary Ott SEGMENT ST/ BA-1
 BIO Lewis Sharmen LAND REP Don Breitinger SUBDIVISION A
 EXXON Leonard Herbst ADEC Mike Edel TIME 09:30 to 13:30
 TEAM NO.: 12 TIDE LEVEL: -2.2' to +6.4' DATE 3/30/90
 EST. SUBDIVISION LENGTH: 3450 m ☐ Sun ☒ Clouds ☒ Fog ☒ Rain ☒ Snow
 UPLANDS DESCRIPTION: ☐ Grass ☒ Forest ☒ Rock
 SURVEYED FROM: ☒ Foot ☒ Boat ☐ Helo WORKING DIRECTION: South to North
 SURFACE SEDIMENTS: R 30 % B 40 % C 30 % P _____ % G _____ % S _____ % M _____ % V _____ %
 SLOPE: Long 20 % Hang 50 % Vert 30 % WAVE EXPOSURE: ☒ Low ☐ Med ☐ High
 OIL CATEGORY LENGTH: W _____ m M _____ m N _____ m VL _____ m NO 3450 m

SURFACE OIL

CHARACTER	DISTRIBUTION				OIL / FILM COLOR								IMPACTED ZONES			
	TC	TR	TP	TS	BR	BL	GR	GL	BR	BL	GR	GL	SU	U	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 _____ 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			BR	BL	GR	GL	BR	BL	GR	GL	SU	U	M	U		

COMMENTS

Had to return to MV Auriga at 10:30 due to intense snowstorm and near zero visibility. Warmed up and departed MV Auriga at 11:30 for beach.

SHORELINE ECOLOGICAL SUMMARY

REVISION: 03/22/90

Segment ST / BA-1 Subdivision A Date (mo / day / yr) 3/30/90

Time (24 hr) 0900-1330 Biologist SHARMAN

- (A) Substrate type and % of segments: SUBDIV.
 (1) Bedrock 30 (2) Boulder 40 (3) Cobble 30 (4) Pebble (5) Sand (6) Silt
- (B) Overall % cover of biota (% of segment): Dense Moderate X Low
SUBDIV.
- (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-12-1
 Frames NONE

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 (*Urosalpinx*, *Littorina*, *Limpeta*)

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:

Please see Addendum to this Shoreline Ecological Summary sent in afternoon of 4/1/90.

Ecological Considerations:

Same as for BA-1 (B). Sensitivity codes (entire segment): ST-2, 1B, 7HH.

BA-2-A

3/30/90

Shoreline Ecological Survey Addendum (Shannon)
Bam 12

General Comments: No oiling was observed within this subdivision, although VLT was reported for the northern portion in previous surveys. The intertidal zone appears normal and healthy. In the absence of observable oil, an abbreviated Shoreline Oiling Summary was completed, and no Shoreline Ecological Survey was formally compiled for the intertidal zone. However, field notes follow:

Wildlife: 1 river otter, 1 pair mergansers, 1 pair adult eagles (no visible nest), 1 sea otter, 1 sea lion.

Intertidal Community: Apparently normal and healthy. Substrate is primarily boulder/cobble. Moderate-to-dense Fucus on large boulders. Below Fucus is a 1-m vertical band of red foliose algae subtended by Phormidium. Lowest water during low tide today was at red foliose / Phormidium contact. Healthy Fucus and barnacles in MTZ. Pagurus not uncommon beneath LTZ boulders. Sparse to rare barnacle and mussel recruitment (thus far). Barnacles show $\approx 5\%$ mortality (empty tests). Limited Fucus sporophyte production in lower Fucus zone.

Apparently this general portion of the N.E. Bainbridge Island shoreline was uplifted ≈ 2 m in the 1964 earthquake. There is a 1-m broad (vertically) band of dead, white, crumbly barnacle tests at ≈ 1 m above MHHW (within and above supratidal), ≈ 2 m above highest live barnacles.

Important:

BA-1-A

Sent originally on
March 30, 1990
This is an Addendum!
Thanks

(7)

↑ PWS 11N

BA-1-B

BA-

BA-1-A

4 of 4

↓ PWS 11F

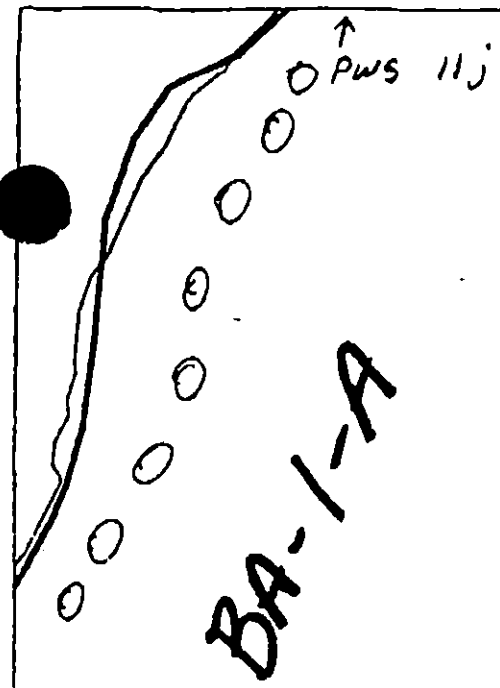
● XX Wide
 /// Medium
 --- Narrow
 TTTT Very Light

BA-1

ADEC Segment Length: 13318m

0 100 200 300 400 500 600 700 800 900 1000

Map Key: PWS-11i
 Name: Landy McBride
 Date: 3/30/90



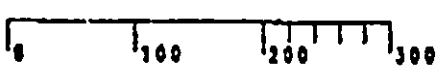
← PWS 11E

3 of 4

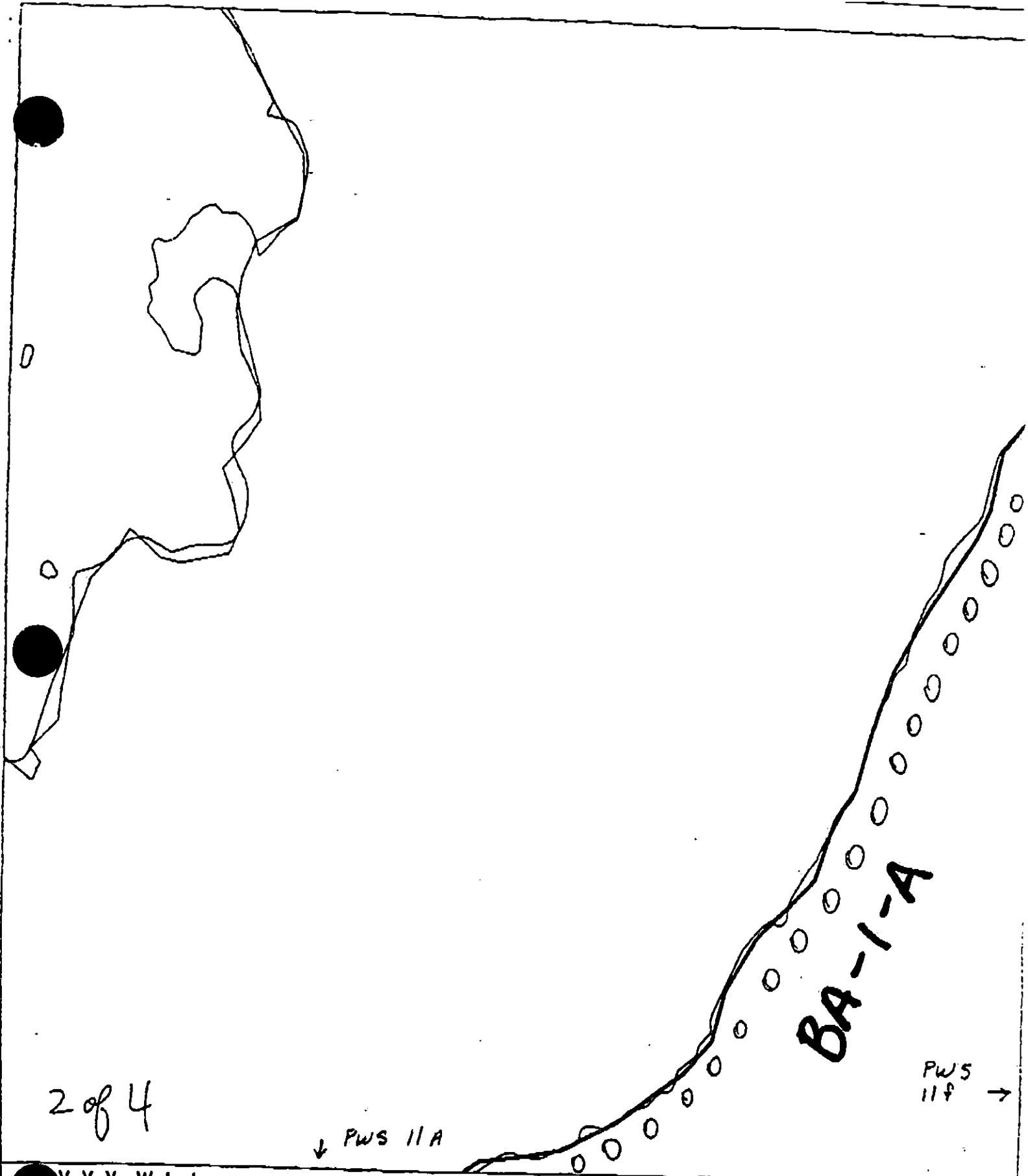
XXXX Wide
 /// Medium
 --- Narrow
 TTTT Very Light
 OOOO No Oil

BA-1

ADEC Segment Length: 13318m



Map Key: PWS-11j
 Name: Randy McBride
 Date: 3/30/90
 Data Entered:



XXX Wide
 Medium
 Narrow
 Very Light

BA-1

ADEC Segment Length: 13318m

1 1.44 1.88 2.32 2.76 3.20 3.64 4.08 4.52 4.96 5.40 5.84 6.28 6.72 7.16 7.60 8.04 8.48 8.92 9.36 9.80 10.24 10.68 11.12 11.56 12.00 12.44 12.88 13.32 13.76 14.20 14.64 15.08 15.52 15.96 16.40 16.84 17.28 17.72 18.16 18.60 19.04 19.48 19.92 20.36 20.80 21.24 21.68 22.12 22.56 23.00 23.44 23.88 24.32 24.76 25.20 25.64 26.08 26.52 26.96 27.40 27.84 28.28 28.72 29.16 29.60 30.04 30.48 30.92 31.36 31.80 32.24 32.68 33.12 33.56 34.00 34.44 34.88 35.32 35.76 36.20 36.64 37.08 37.52 37.96 38.40 38.84 39.28 39.72 40.16 40.60 41.04 41.48 41.92 42.36 42.80 43.24 43.68 44.12 44.56 45.00 45.44 45.88 46.32 46.76 47.20 47.64 48.08 48.52 48.96 49.40 49.84 50.28 50.72 51.16 51.60 52.04 52.48 52.92 53.36 53.80 54.24 54.68 55.12 55.56 56.00 56.44 56.88 57.32 57.76 58.20 58.64 59.08 59.52 59.96 60.40 60.84 61.28 61.72 62.16 62.60 63.04 63.48 63.92 64.36 64.80 65.24 65.68 66.12 66.56 67.00 67.44 67.88 68.32 68.76 69.20 69.64 70.08 70.52 70.96 71.40 71.84 72.28 72.72 73.16 73.60 74.04 74.48 74.92 75.36 75.80 76.24 76.68 77.12 77.56 78.00 78.44 78.88 79.32 79.76 80.20 80.64 81.08 81.52 81.96 82.40 82.84 83.28 83.72 84.16 84.60 85.04 85.48 85.92 86.36 86.80 87.24 87.68 88.12 88.56 89.00 89.44 89.88 90.32 90.76 91.20 91.64 92.08 92.52 92.96 93.40 93.84 94.28 94.72 95.16 95.60 96.04 96.48 96.92 97.36 97.80 98.24 98.68 99.12 99.56 100.00

Map Key: PWS-110

Name: Randy McBride

Date: _____

↑ PWS 11c

PRINCE OF WALES
PASSAGE

BA-1-A

BA-2-A

BA-2

1 of 4

XXXX Wide

//// Medium

---- Narrow

TTTT Very Light

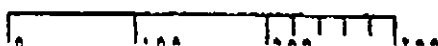
BA-1

ADEC Segment Length: 13318m

Map Key: PWS-11c

Name: _____

Date: _____



REGION: PRINCE WILLIAM SOUND

SEGMENT: BA-01

SUBDIVISIONS: B (2 OF 6)

SHORELINE EVALUATION

SEGMENT ST/ BA-01 SUBDIVISION B (2 OF 6) DATE 4/1/90

SEGMENT ENVIRONMENTAL SENSITIVITIES AND TIME CONSTRAINTS:

Two bald eagle nests (5T) - 3/1 to 6/1; Salmon stream mouth (nos. 16446, 16442, 16414, 16372, 16369); Outmigration (1A) - 3/1 to 5/15 and spawning (1B) - 7/10 to 8/15; Finfish subsistence harvesting (7HH) - Consult ADF&G and Chenega Bay for appropriate dates.

SUBDIVISION ECOLOGICAL CONSTRAINTS: No disturbance of stream beds or banks unless authorized by ADF&G. Contact ADF&G Habitat Division prior to treatment for permits. Re: bald eagle nests, restrict air traffic to essential minimum. Air approach and takeoff from and to seaward only. Contact USFWS prior to treatment for confirmation of dates and avoidance minimums.

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 2020m: No Oil 0 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: _____

TAG COMMENTS: _____

TAG APPROVAL DATE: _____

ADEC _____
EXXON _____
NOAA _____
USCG _____

FOSC: _____ DATE: _____

FIELD SHORELINE COMMENT SHEET

SEGMENT ST / BA1 SUBDIVISION: B DATE 3/31/90

USCG

NAME

GARY OTT

SIGNATURE

[Signature]☒ NO TREATMENT RECOMMENDED
COMMENTS☐ TREATMENT SUGGESTED

ADEC

NAME

Michael J. Ebel

SIGNATURE

[Signature]☒ NO TREATMENT RECOMMENDED
COMMENTS☐ TREATMENT SUGGESTEDBA-1-B

LAND MANAGER

U.S.D.A. - Forest Service

NAME

Don J. Breitinger

SIGNATURE

[Signature]☒ NO TREATMENT RECOMMENDED
COMMENTS☐ TREATMENT SUGGESTEDBA-1-sub. B

SHORELINE OILING SUMMARY

REVISION NO. 02/22/90

OG Randy McBride NOAA Gary Ott SEGMENT ST/ BA-1
 BIO Lewis Shorman LAND REP Don Bretinger SUBDIVISION B (2 OF 6)
 XON Leonard Herbst ADEC Mike Ebel TIME 07:26 to 08:05
 TEAM NO.: 12 TIDE LEVEL: +5.6 to +3.8 DATE 3/31/90
 EST. SUBDIVISION LENGTH: 5100 m ☐ Sun ☒ Clouds ☐ Fog ☐ Rain ☐ Snow
 UPLANDS DESCRIPTION: ☐ Grass ☒ Forest ☒ Rock
 SURVEYED FROM: ☒ Foot ☒ Boat ☐ Helo WORKING DIRECTION: South to North
 SURFACE SEDIMENTS: R 40 % B 55 % C 5 % P % G % S % M % V %
 SLOPE: Long % Hang 80 % Vert 20 % WAVE EXPOSURE: ☒ Low ☐ Med ☐ High
 OIL CATEGORY LENGTH: W m M m N m VC 5100 m NO m

SURFACE OIL

CHARACTER	DISTRIBUTION				OIL / FILM COLOR						IMPACTED ZONES			
	R	B	P	S	BR	RW	SL	TL	ABR		SU	U	M	L
ASPHALT PAVEMENT POOLED														
COVER			X					X				X		
COAT														
STAIN														
MOUSSE														
PATTIES														
TARBALLS														
FILM														
NO OIL											X		XX	

PAVEMENT: H F S sq. m by cmPATTIES / TARBALLS BAGS

NEAR SHORE SHEEN? NO BR RW SL TL

OILED DEBRIS	AMOUNT		
	SM	MD	LG
Logs			
Vegetation			
Trash	X		
Debris			

DEBRIS COLLECTED
☐ YES ☒ NOTYPE #BAGS

Photographs:

Roll No. ST-12-1Frames 11-120 14

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	RW	SL	TL	ABR		SU	U	M	L		

COMMENTS

An oil mark was found along the HWL that was 15 cm wide. The oil character was and distribution was patchy cover with drip marks along a wide variety of coastal geomorphological features.

SHORELINE ECOLOGICAL SUMMARY

REVISION: 02/22/90

Segment ST / BA-1 Subdivision B Date (mo / day / yr) 3/31/90Time (24 hr) 0715-0745 Biologist SHARMAN (Team 12)

- (A) Substrate type and % of segment: SUBDIV.
 (1) Bedrock 40 (2) Boulder 55 (3) Cobble 5 (4) Pebble (5) Sand (6) Silt
- (B) Overall % cover of biota (% of segment): Dense Moderate X Low
SUBDIV.
- (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-12-1Frames 11-16

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 (Nucella, Littorina, Limpets)

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: LTZ submerged (i.e. no observations), 3 sea lions, 3 sea otters, 1 pr. Barrow's goldeneyes, 1 pr. cormorants, Eagle nest - no adults in vicinity, appears to be inactive. Intertidal zone appears normal and healthy except for a 50% greater-than-normal barnacle mortality within LTZ tar band.

Ecological Considerations: Environmental priority 1 for the BA-1 segment according to Priorities and Windows Table. Work window is 6/1 - 7/10. High constraints (V1-2) due to salmon spawning stream (7/10 - 9/1) and finfish subsistence. Also, constraint (Eagle nests) give priority 2 weight. But higher constraints give overall treatment priority of 1-2.

Sensitivity Codes (entire segment): ST-2, 12, 7HH.

(7)

OG McBride

SEGMENT ST/ BA-1

SUBDIVISION B

DATE 3 / 31 90

CHECKLIST

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

LEGEND

1 Δ
Pht - No Subsurface Oil

2 Δ
Pht - Subsurface Oil

CT/C
Continuous Distribution

CT/B
Broken Distribution

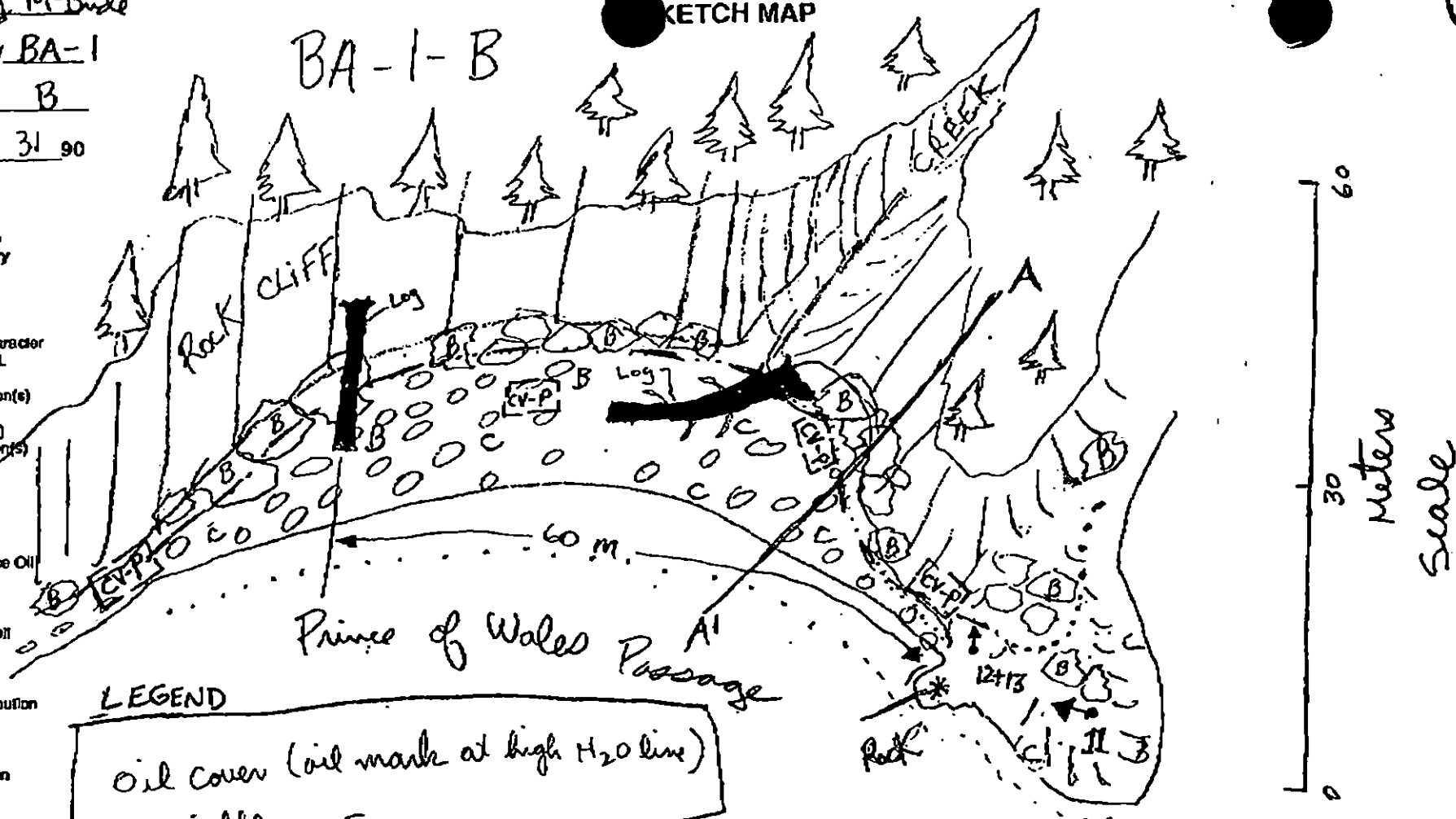
CT/P
Patchy Distribution

CT/S
Splashed Distribution

Oiled Vegetation

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

SKETCH MAP



LEGEND

Oil cover (oil mark at high H₂O line)

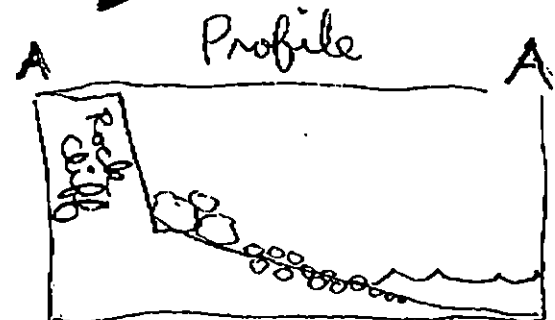
width - 15 cm

length - ~100 m patchy

% cover - < 5%

Note: No Pits!

N 23° E
353' (true)



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

REVISION: 01/26/90

Randy McBride

MENT ST/ BA-1

SUBDIVISION B

DATE 3 / 31 90

CHECKLIST

- ☒ N Arrow
- ☒ Approx. Scale
- ☒ Seg/Sub Bndry
- ☒ Oil Dist.
- ☒ Width
- ☒ Length
- ☒ % Cover
- ☒ Substrate Character
- ☒ Est. H₂O/LWL
- ☒ SSL
- ☒ Profile Location(s)
- ☒ Profile(s)
- ☒ Pic Location(s)
- ☒ Photo Location(s)

LEGEND

1 ▲

Pit - No Subsurface Oil

2 ▲

Pit - Subsurface Oil

CT/C

Continuous Distribution

CT/B

Broken Distribution

CT/P

Patchy Distribution

CT/S

Splashed Distribution

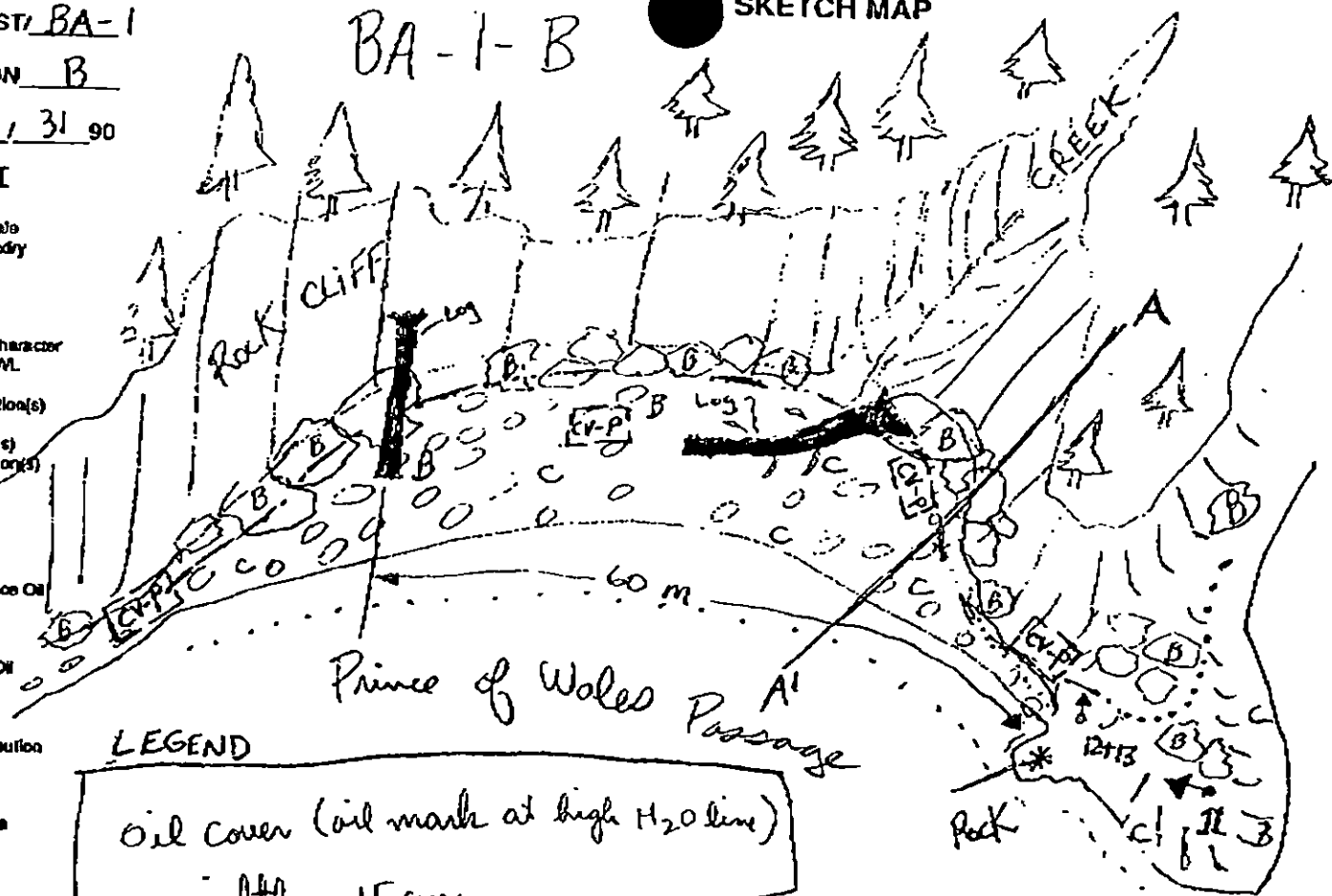
Oiled Vegetation

1 ➡

Photo location, direction, and number

SKETCH MAP

BA-1-B



LEGEND

Oil Cover (oil mark at high H₂O line)

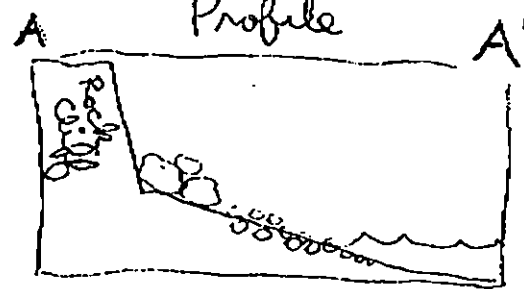
width - 15 cm

length - ~100 m patchy

% cover - < 5%

Note: No Pits!

N 23° E
353' (true)



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

REVISION: 03/24/90

↑
PWS
11 A A

Bainbridge
Island

Anderson
field stream

12:28

BA-1-F

NARROW

BA-1-E

BA-1
D

↓ PWS 115

XXXX Wide

/// Medium

--- Narrow

TTTT Very Light

OOOO No Oil

BA-1

ADEC Segment Length: 13318m

0 100 200 300
METERS

Map Key: PWS-11v --

Name: Randy McBride

Date: 3/3/90

Data Entered: (34)

BA-1-E

PRINCE of Wales
Passage

F L - 1

← PWS
11AA

XXXX Wide

//// Medium

----- Narrow

TTTT Very Light

А А А А И . А . 1

BA-1

ADEC Segment Length: 13318m



Map Key: PWS-11bb

Name: _____

Date: _____

Beta-Endorphin

*Bambridge
Island*

BA-1-D

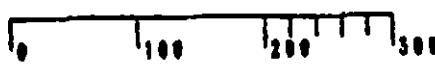
*PWS
11S -*

*PWS 11N
↓*

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

BA-1

ADEC Segment Length: 13318m



Map Key: PWS-11r -
Name: *Randy McBri*
Date: *3/31/90*
Data Entered: *(Z)*

↑ PWS
11w

Bainbridge
Island

BA-1-D

Prince of Wales Passage

← PWS
11R

↓ PWS 110

XXXX Wide

//// Medium

--- Narrow

TTTT Very Light

0000 No Oil

BA-1

ADEC Segment Length: 13318m



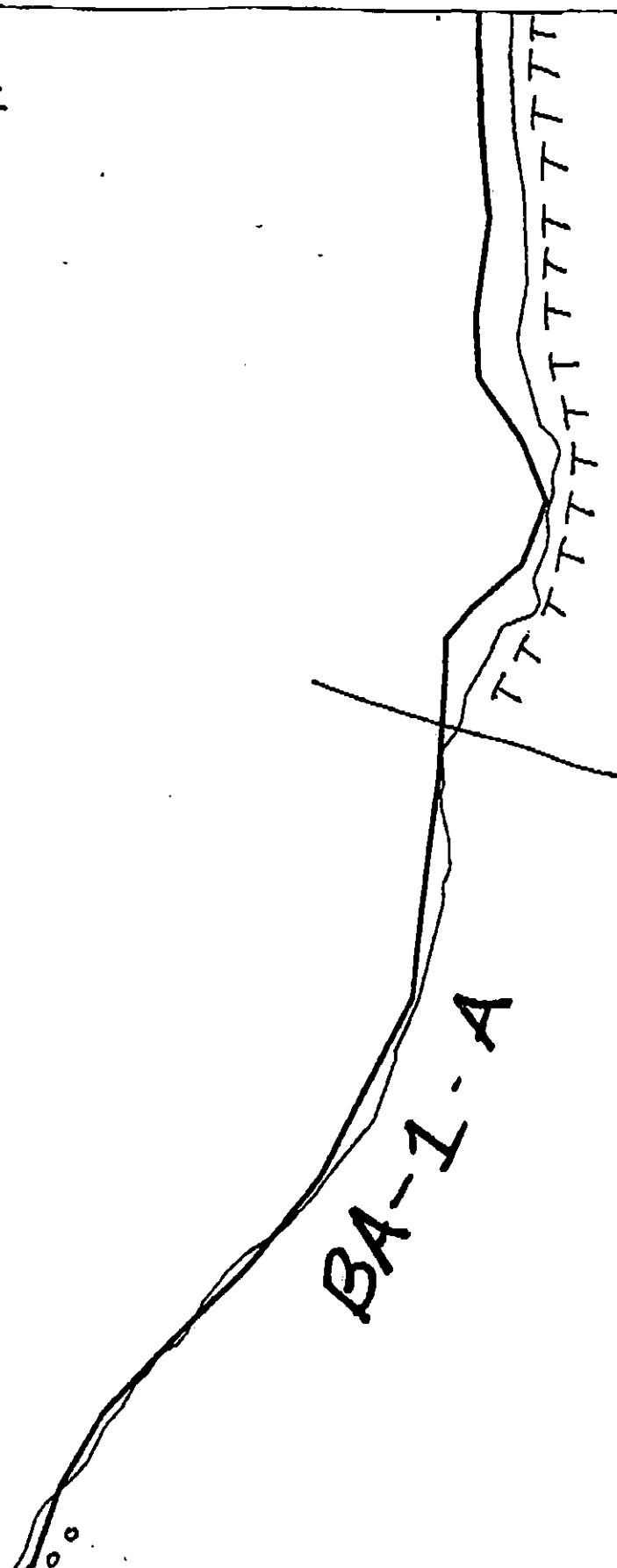
METERS

Map Key: PWS-11s

Name: Randy McBride

Date: 3/31/90

Date Entered: (22)



↑ PWS 11N

BA-1-B

BA-

Prince of Wales
Passage

↓ PWS 11f

Wide
Medium
Narrow
Very Light

BA-1

ADEC Segment Length: 13318m

0 100 200 300

Map Key: PWS-111

Name: Randy McBride

Date: 3/31/90

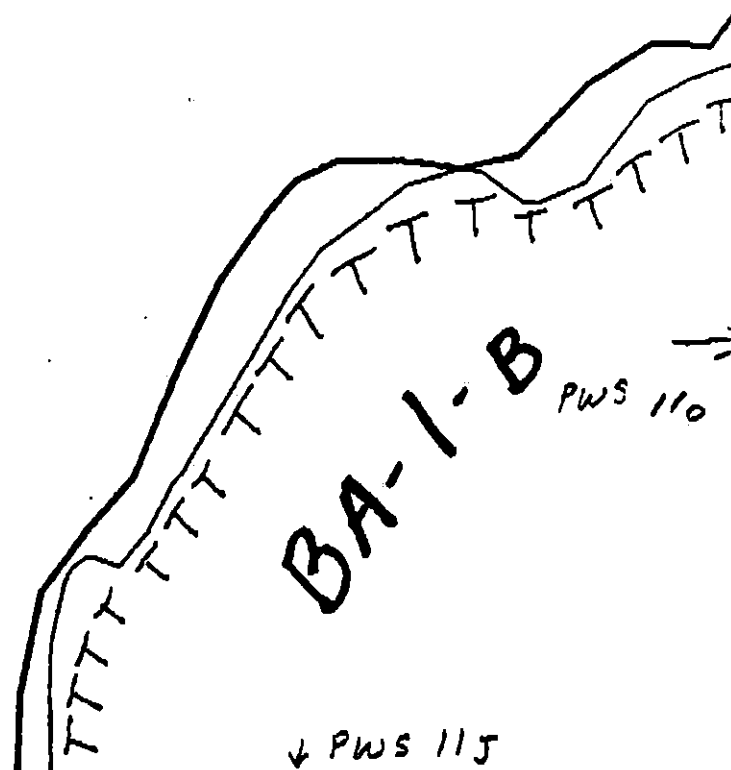
8

Bainbridge
Island

↑ PWS 11R

BA-1-D

BA-1-C



XXXX Wide

//// Medium

---- Narrow

TTTT Very Light

0000 No Oil

BA-1

ADEC Segment Length: 13318m



Map Key: PWS-11n

Name: Randy McBride

Date: 3/31/90

Date Entered: (15)

↑ PWS 115

BA-1-C

BA-1-B

← PWS 11n

XXXX Wide

● // Medium

--- Narrow

TTTT Very Light

0000 No Oil

BA-1

ADEC Segment Length: 13318m



Map Key: PWS-110

Name: Randy McBride

Date: 3/31/90

Data Entered: (signature)

REGION: PRINCE WILLIAM SOUND

SEGMENT: BA-01

SUBDIVISIONS: C (3 OF 6)

SHORELINE EVALUATION

SEGMENT ST/ BA-01 SUBDIVISION C (3 OF 6) DATE 4/1/90

SEGMENT ENVIRONMENTAL SENSITIVITIES AND TIME CONSTRAINTS:

Two bald eagle nests (5T) - 3/1 to 6/1; Salmon stream mouth (nos. 16446, 16442, 16414, 16372, 16369); Outmigration (1A) - 3/1 to 5/15 and spawning (1B) - 7/10 to 8/15; Finfish subsistence harvesting (7HH) - Consult ADF&G and Chenega Bay for appropriate dates.

SUBDIVISION ECOLOGICAL CONSTRAINTS: No disturbance of stream beds or banks unless authorized by ADF&G. Contact ADF&G Habitat Division and Chenega Village Corp. prior to treatment for permits.

ARCHAEOLOGICAL CONSTRAINTS: An Exxon archaeological monitor is required on-site during shoreline treatment.

SHPO SIGNATURE: _____ DATE: _____

OILING CATEGORIZATION:

Wide 0 m: Medium 235 m: Narrow 111 m: V.Light 101 m: No Oil 0 m
Subsurface Oil Observed: Yes X No _____ Maximum Depth 12 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: ☒ Breakup	☐ Beach Cleaner
☒ Removal	☐ Other (see comments)

COMMENTS: Breakup and removal of tarmats as shown on sketch map. Bioremediate cover and coat areas shown on map. Work to be performed between 6/1 and 7/10 based on constraints.

TAG COMMENTS: _____

TAG APPROVAL DATE: _____

ADEC _____
EXXON _____
NOAA _____
USCG _____

FOSC: _____ DATE: _____

FIELD SHORELINE COMMENT SHEET

MENT ST / BA 1 SUBDIVISION: C DATE 3/31/90

USCG
NAME

GARY OTT

SIGNATURE

[Signature]

☐ NO TREATMENT RECOMMENDED
COMMENTS

☒ TREATMENT SUGGESTED

MANUAL COLLECTION OF TAR MATS.

ADEC

NAME Michael J. Ebel

SIGNATURE

[Signature]

☐ NO TREATMENT RECOMMENDED
COMMENTS

☒ TREATMENT SUGGESTED

4-1-C Recommend small crew to walk this subdivision and manually remove the patches of asphalt and any patties or tarballs that can be found in this confined, discontinuous band — limiting
① sweep across the length of beach and picking up whatever can be seen at that pass.

LAND MANAGER

U.S.P.A. Forest Service

NAME Don J. Brubaker

SIGNATURE

[Signature]

☐ NO TREATMENT RECOMMENDED
COMMENTS

☒ TREATMENT SUGGESTED

BA 1 Sub. C - Manual collection of tar mats.

SHORELINE OILING SUMMARY

Temp. 38°

REVISION NO. 02/23/90

OG Randy McBride NoAA Gary Ott SEGMENT ST/ BA-1
 BIO Lewis Shannon LAND REP Don Breitingen SUBDIVISION C (3 of 6)
 EXXON Leonard Herbst ADEC Mike Ebel TIME 08:50 to 10:10
 TEAM NO.: 12 TIDE LEVEL: +0.9 to -1.0 ft. DATE 3/31/90
 EST. SUBDIVISION LENGTH: 700 m ☐ Sun ☒ Clouds ☐ Fog ☒ Rain ☒ Snow
 UPLANDS DESCRIPTION: ☒ Grass ☒ Forest ☒ Rock
 SURVEYED FROM: ☒ Foot ☒ Boat ☐ Helo WORKING DIRECTION: east to west
 SURFACE SEDIMENTS: R 5 % B 50 % C 50 % P 25 % G 15 % S 5 % M 5 % V 5 %
 SLOPE: Long 75 % Hang 25 % Vert 5 % WAVE EXPOSURE: ☒ Low ☐ Med ☐ High
 OIL CATEGORY LENGTH: W 190 m M 190 m N 355 m VL 155 m NO 155 m

SURFACE OIL

CHARACTER	DISTRIBUTION				OIL / FILM COLOR								IMPACTED ZONES			
	TC	FB	FP	FS	SB	SB	SB	SB	SB	SB	SB	SB	SU	U	M	U
ASPHALT PAVEMENT		0	X										X			
POOLED			X										X			
COVER			X										X			
COAT			X										X			
STAIN																
MOUSSE																
PATTIES				X									X			
TARBALLS				X									X			
FILM																
NO OIL													X	X	X	X

 PAVEMENT: H (F) S 280 sq. m by 4 cm

 PATTIES / TARBALLS BAGS

 NEAR SHORE SHEEN? (NO) BR RW SL TL

OILED DEBRIS	AMOUNT			
	SM	MD	LG	
Logs	X			DEBRIS COLLECTED ☐ YES ☒ NO
Vegetation				
Trash				
Debris				
				TYPE <u> </u>
				#BAGS <u> </u>

Photographs:

 Roll No. ST-12-1

 Frames 17-26

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			SB	SB	SB	SB	SB	SB	SB	SB	SU	U	
1	20				X		5-8	X					X				X		C, P, G
2	30				X		5-12	X					X				X		C, P, G
3	42					X	-	X									X		P, G
4	36.5				X		5-10	X					X				X		C, P, G
							-												
							-												

COMMENTS

Curvilinear pocket beach with rock cliffs and boulders occurring at either end of ~~sub~~ subdivision (Rock, boulders, cobbles) and fining ~~or~~ toward the center of the pocket beach. Air temperature was 38°. Medium oiling was found at eastern end of subdivision characterized patchy and broken asphalt pavement.

SHORELINE ECOLOGICAL SUMMARY

REVISION: 03/22/90

Segment ST / BA-2 Subdivision C Date (mo / day / yr) 3/31/90Time (24 hr) 0830 - 1015 Biologist SHARMAN (Team 12)(A) Substrate type and % of segment: SUBDIV.(1) Bedrock 5 (2) Boulder 1 (3) Cobble 49 (4) Pebble 25 (5) granules + sand 20 (6) Silt (B) Overall % cover of biota (% of segment): Dense Moderate Low X

(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-12-1Frames 17-26

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 (Nucella, Littorina, Lingula)

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: Note presence of Fucus in surface substrate types 4 and 5 - plants are attached to subsurface cobble. 1 pair of Salpae, 3 pairs Barnacles, 3 sea otters at Pan Hat Point. Sea otter carcass found 11/4/82 (bones + hide) - no oil visible. Active red squirrels in forest adjacent to beach. See page 2 for detailed comments.

Ecological Considerations: Same as for BA-2 (B). Sensitivity codes (entire segment): ST-2, 2B, 7HH.

(10)

BA-1-SC

3/31/90

Shoreline Ecological Summary(Shannon)
Team 12General Comments (cont.)

Subdivision embraces a moderately low-angle, protected "lagoon" dominated by shingley cobble/pebble surface sediments (pebbly/sandy in LTZ) supporting a typically depauperate epifauna. Some weathered oil (VLT) in wreck line. In MTZ, barnacles are young and small (3-8 mm dia.), spat are rare. Moderately abundant Fucus in MTZ (with Spirorbis on fronds), $\approx 50\%$ of which is unattached. Shells of Saxidomus, Protothaca, and Chlorocardium common on surface in MTZ and LTZ. Mytilus moderate $\rightarrow$ dense abundances in MTZ and LTZ. LTZ supports large Balanus cariosus on rare boulders, as well as rare Natica egg cases in fine sediment zone. Intertidal community appears quite normal and healthy.

(17)

OG Kararay M. Enne

STST/ BA-1

SUBDIVISION C

DATE 3/31/90

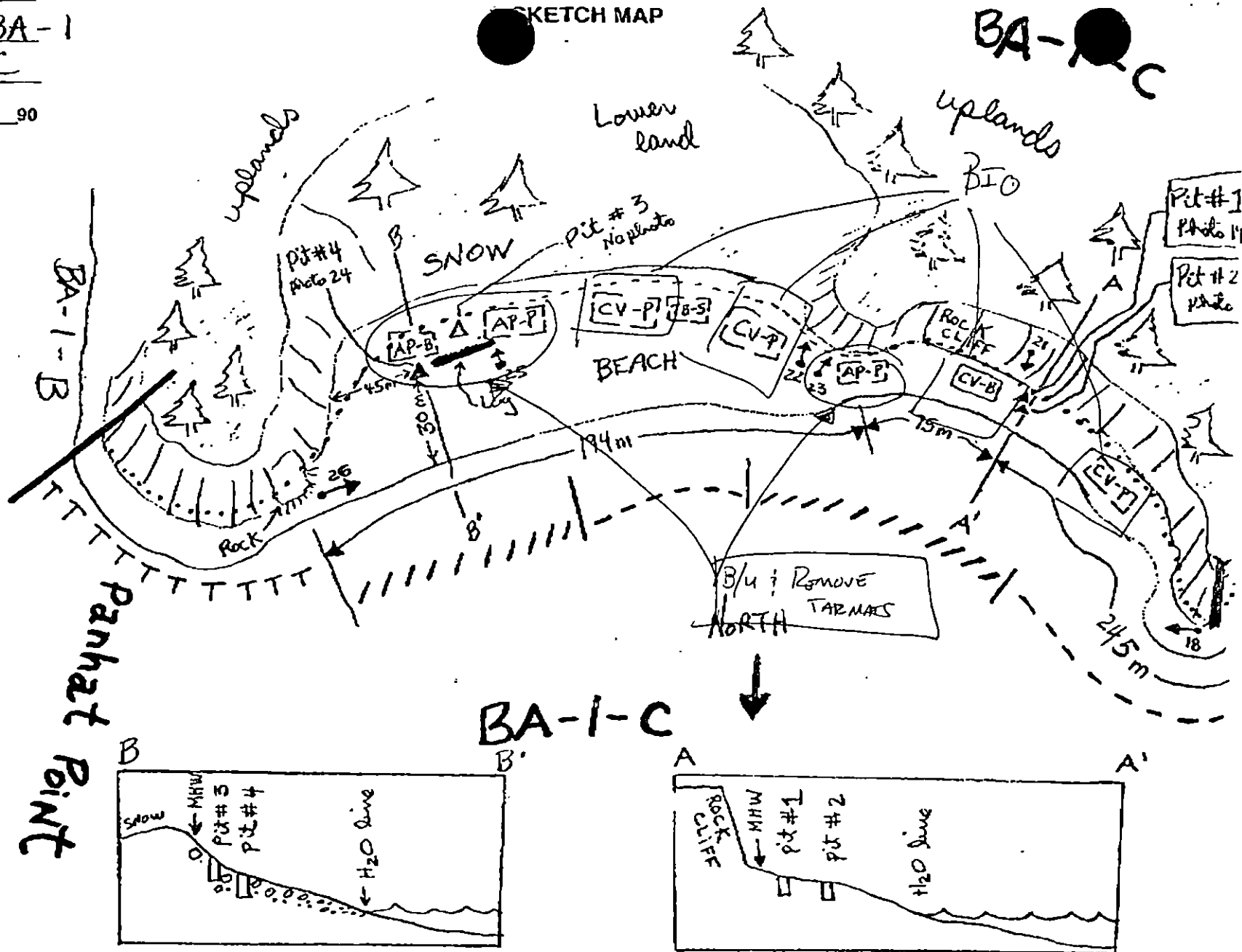
CHECKLIST

- ☒ Narrow
- ☒ Approx. Scale
- ☒ Sub-Bdry
- ☒ Oil Dist.
- ☒ Width
- ☒ Length
- ☒ % Cover
- ☒ Substrate Character
- ☒ Est. HW/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
- $\square$ CT/C
Continuous Distribution
- $\square$ CT/B
Broken Distribution
- $\square$ CT/P
Patchy Distribution
- $\square$ CT/S
Splashed Distribution
- $\square$ Oiled Vegetation
- 1 $\rightarrow$
Photo location, direction, and number

SKETCH MAP



APR-01-1990 13:16 FROM PWSH X TO 18-00150756437118

P.13

REVISION: 02/24/90

Oil Character Length (m): AP 190 PO 100 CV 100 CT 156 ST 25 MS 50 FL NO

13

↑
PWS
11 A A

Bainbridge
Island

Anchorage
field station

12:28

BA-1-F

NARROW

BA-1-E

BA-1
D

Prince of Wales Passage

↓ PWS 115

BA-1

XXX Wide

/// Medium

--- Narrow

TTTT Very Light

ADEC Segment Length: 13318m



Map Key: PWS-11v --
Name: Randy McBride
Date: 3/3/90
Data Entered: (34)

↑ PWS
11ee

BA-1-F

↓ PWS
11w

PWS
11BB -

XXXX Wide

//// Medium

---- Narrow

TTTT Very light

BA-1

ADEC Segment Length: 13318m

Map Key: PWS-11ee

Name: _____

Date: _____





XXXX Wide

//// Medium

---- Narrow

TTTT Very Light

BA-1

ADEC Segment Length: 13318m

Map Key: PWS-11bb

Name: _____

Date: _____



Bainbridge
Island

BA-1-D

PWS
113 -

PWS 11N
↓

XXXX Wide

//// Medium

--- Narrow

TTTT V

BA-1

ADEC Segment Length: 13318m

Map Key: PWS-11r -

Name: Randy McB

Date: 3/31/90

↑ PWS
11W

Bainbridge
Island

BA-1-D

Prince of Wales Passage

0000 PWS
11R

↓ PWS 110

XXXX Wide

//// Medium

--- Narrow

TTTT Very Light

0000 No Data

BA-1

ADEC Segment Length: 13318m

0 100 200 300

Map Key: PWS-11s.

Name: Randy McBr

Date: 3/31/90

Date Entered: 72

↑ PWS 11N

BA-1-B

BA -

Prince of Wales
Passage

BA-1-A

↓ PWS 11f

BA-1

Map Key: PWS-111

Name: Randy McBride

Date: 3/31/90



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

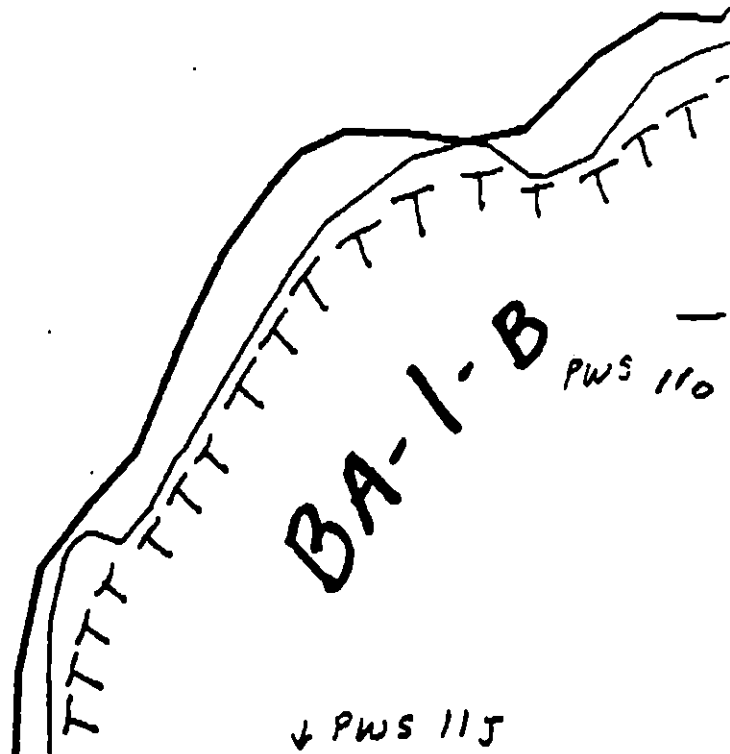
ADEC Segment Length: 13318m

Bainbridge Island

↑ PWS 11R

BA-1-D

BA-1-C



XXXX Wide

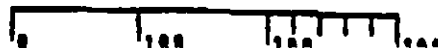
//// Medium

--- Narrow

TTTT Very Light

BA-1

ADEC Segment Length: 13318m



Map Key: PWS-11a

Name: Randy McBride

Date: 3/31/90

↑ PWS 115

BA-1-C

BA-1-B

← PWS 115

● XXX Wide

//// Medium

--- Narrow

TTTT Very Light

0000

BA-1

ADEC Segment Length: 13318m

0 100 200 300

Map Key: PWS-110

Name: Randy McBride

Date: 3/31/90

REGION: PRINCE WILLIAM SOUND

SEGMENT: BA-01

SUBDIVISIONS: D (4 OF 6)

FIELD SHORELINE COMMENT SHEET

SEGMENT ST / BA1 SUBDIVISION: D DATE 3/31/90USCGNAME GARY OTT SIGNATURE [Signature]☒ NO TREATMENT RECOMMENDED
COMMENTS☐ TREATMENT SUGGESTEDADECNAME Michael J. EbelSIGNATURE [Signature]☒ NO TREATMENT RECOMMENDED
COMMENTS☐ TREATMENT SUGGESTEDBA-1-DLAND MANAGER U.S.D.A. Forest ServiceNAME Don J. BreitingerSIGNATURE [Signature]☒ NO TREATMENT RECOMMENDED
COMMENTS☐ TREATMENT SUGGESTEDBA 1 - Sub. D

SHORELINE EVALUATION

SEGMENT ST/ BA-01 SUBDIVISION D (4 OF 6) DATE 4/1/90

SEGMENT ENVIRONMENTAL SENSITIVITIES AND TIME CONSTRAINTS:

Two bald eagle nests (5T) - 3/1 to 6/1; Salmon stream mouth (nos. 16446, 16442, 16414, 16372, 16369); Outmigration (1A) - 3/1 to 5/15 and spawning (1B) - 7/10 to 8/15; Finfish subsistence harvesting (7HH) - Consult ADF&G and Chenega Bay for appropriate dates.

SUBDIVISION ECOLOGICAL CONSTRAINTS: No disturbance of stream beds or banks unless authorized by ADF&G. Contact ADF&G Habitat Division prior to treatment for permits.

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 2419 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: _____

TAG COMMENTS: _____

TAG APPROVAL DATE: _____

ADEC _____
EXXON _____
NOAA _____
USCG _____

FOSC: _____ DATE: _____

SHORELINE OILING SUMMARY

REVISION NO. 04/2/90

OG Randy McBride NOAA Gary Ott SEGMENT ST/ BA-1
 BIO Levin Ashman LAND REPT Breitung SUBDIVISION D (4 of 6)
 EXXON Leonard Herlihy ADEC Mike Elrod TIME 10:30 to 11:15
 TEAM NO.: 12 TIDE LEVEL: -1.0 to -0.2 DATE 3/31/90
 EST. SUBDIVISION LENGTH: 4500 m ☐ Sun ☒ Clouds ☐ Fog ☒ Rain ☒ Snow
 UPLANDS DESCRIPTION: ☐ Grass ☒ Forest ☒ Rock
 SURVEYED FROM: ☒ Foot ☒ Boat ☐ Helo WORKING DIRECTION: South to North
 SURFACE SEDIMENTS: R 10 % B 60 % C 30 % P 0 % G 0 % S 0 % M 0 % V 0 %
 SLOPE: Long 0 % Hang 100 % Vert 0 % WAVE EXPOSURE: ☒ Low ☐ Med ☐ High
 OIL CATEGORY LENGTH: W 0 m M 0 m N 0 m VL 0 m NO 4500 m

SURFACE OIL

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

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

OILED DEBRIS	AMOUNT		
	SM	MD	LG
Logs			
Vegetation			
Trash			
Debris			

DEBRIS COLLECTED
☐ YES ☒ NOTYPE 0#BAGS 0

Photographs:

Roll No. ST-12-1Frames No picturesSUBSURFACE OIL NONE

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

COMMENTS

No oil, no Shoreline Ecological Summary.
No sketch

(70)

SHORELINE ECOLOGICAL SUMMARY

REVISION: 02/22/90

Segment ST / BA-1 Subdivision D Date (mo / day / yr) 3/31/90

Time (24 hr) 1030-1115 Biologist SHARMAN

(A) Substrate type and % of segments: SUBDIV.
(1) Bedrock 10 (2) Boulder 60 (3) Cobble 30 (4) Pebble (5) Sand (6) Silt

(B) Overall % cover of biota (% of segment): Dense Moderate X Low
SUBDIV.

(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-12-1

Frames None

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 (*muscula*, *fittorina*, *lingata*)

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 pairs common goldeneyes, 1 sea otter, 1 adult eagle. Healthy, normal boulder/cobble intertidal community. No oiling observed.

Ecological Considerations:

Same as for BA-1 (D). Sensitivity codes (entire segment): ST-2, 1B, 7HH.

↑ PWS
11ee

BA-1-F

↓ PWS
11w

PWS
11BB

XXXX Wide

//// Medium

---- Narrow

TTTT Very Light

BA-1

ADEC Segment Length: 13318m

Map Key: PWS-1100

Name: _____

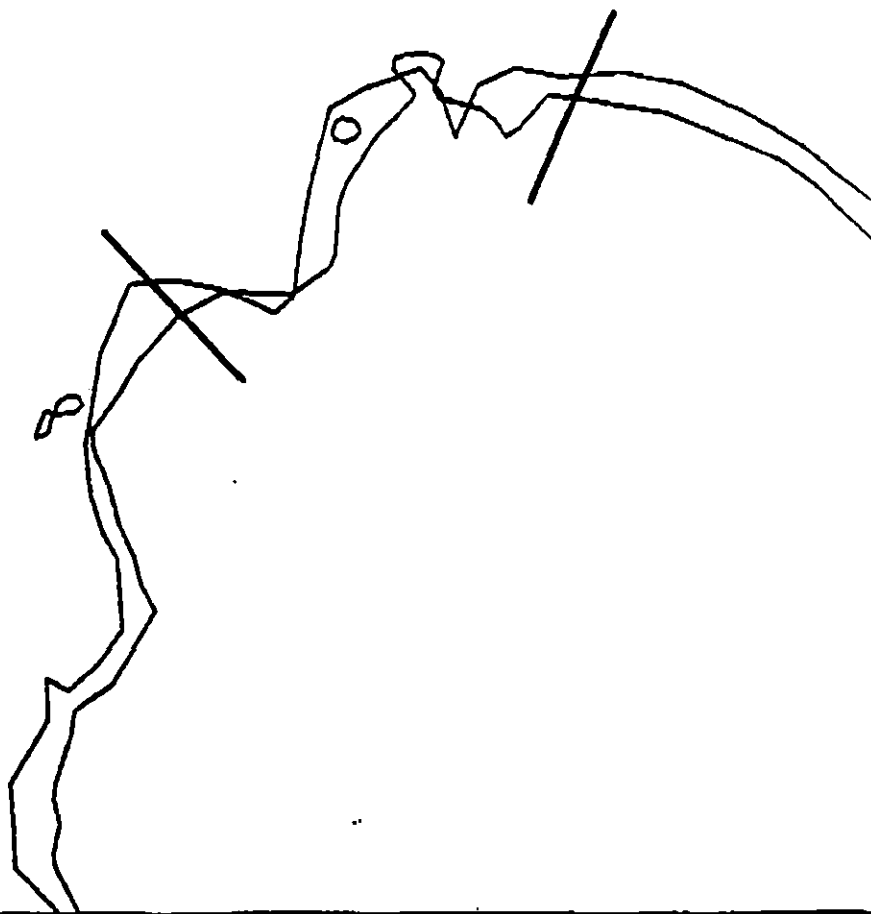
Date: _____

BA-1-F

PRINCE of Wales
Passage

FL-1

← PWS
11AA



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

ADEC Segment Length: 13318m

BA-1

Map Key: PWS-11bb

Name: _____

Date: _____



↑ PWS 11N

BA-1-B

BA -

Prince of Wales
Passage

BA-1-A

↓ PWS 11F

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

BA-1

ADEC Segment Length: 13318m

Map Key: PWS-111

Name: Randy McBride

Date: 3/31/90

(R)

↑ PWS 115

BA-1-C

BA-1-B

← PWS 11n

● XXX Wide

BA-1

//// Medium

--- Narrow

TTTT Very Light

ADEC Segment Length: 13518m

0 100 1000 1000

Map Key: PWS-110

Name: Randy McBride

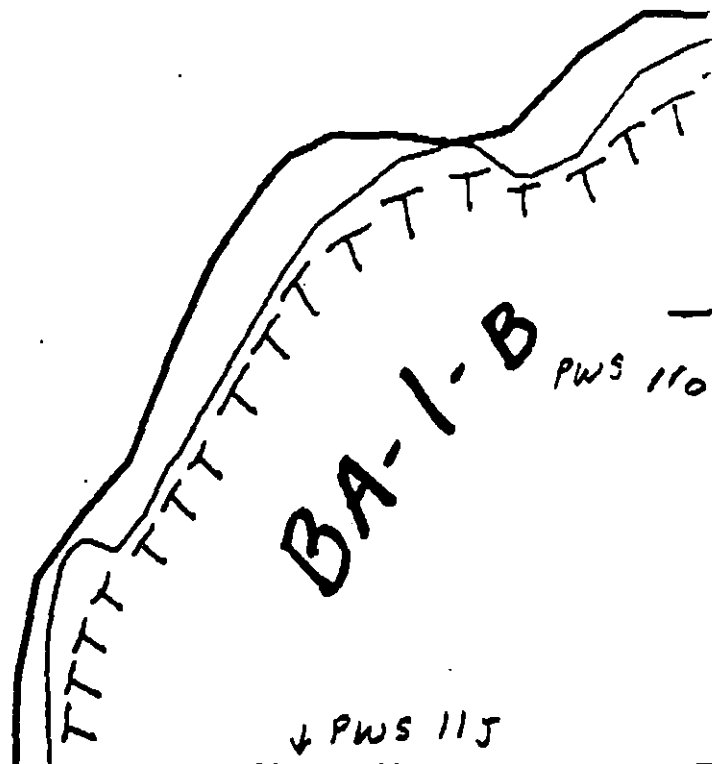
Date: 3/31/90

Bainbridge Island

↑ PWS 11R

BA-1-D

BA-1-C



XXXX Wide

//// Medium

--- Narrow

TTTT Very Light

BA-1

ADEC Segment Length: 13318m



Map Key: PWS-11a

Name: Randy McBride

Date: 3/31/90

(C)

*Banbridge
Island*

BA-1-D

*PWS
11S*

*PWS 11N
↓*

XXXX Wide

//// Medium

--- Narrow

TTTT Very Light

BA-1

ADEC Segment Length: 13318m

Map Key: PWS-11r -

Name: *Randy McBr*

Date: *3/31/90*

↑ PWS
11W

Bainbridge
Island

BA-1-D

Prince of Wales Passage

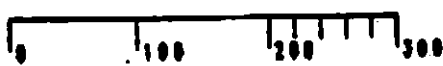
← PWS
11R

↓ PWS 110

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

BA-1

ADEC Segment Length: 13318m



Map Key: PWS-11s
Name: Randy McB
Date: 3/31/90
Data Entered: 77

↑
PWS
114A

12:28

Bainbridge
Island

Aradimon
field station

BA-1-F

NARROW

BA-1-E

BA-1
D

↓ PWS 115

Prince of Wales Passage

XXXX Wide

//// Medium

---- Narrow

TTTT Very Light

BA-1

ADEC Segment Length: 13318m

0 100 200 300

Map Key: PWS-114

Name: Randy McBride

Date: 3/3/90

not colored (24)

REGION: PRINCE WILLIAM SOUND

SEGMENT: BA-01

SUBDIVISIONS: E (5 OF 6)

SHORELINE EVALUATION

SEGMENT ST/ BA-01 SUBDIVISION E (5 OF 6) DATE 4/1/90

SEGMENT ENVIRONMENTAL SENSITIVITIES AND TIME CONSTRAINTS:

Two bald eagle nests (5T) - 3/1 to 6/1; Salmon stream mouth (nos. 16446, 16442, 16414, 16372, 16369); Outmigration (1A) - 3/1 to 5/15 and spawning (1B) - 7/10 to 8/15; Finfish subsistence harvesting (7HH) - Consult ADF&G and Chenega Bay for appropriate dates.

SUBDIVISION ECOLOGICAL CONSTRAINTS: No disturbance of stream beds or banks unless authorized by ADF&G. Contact ADF&G Habitat Division and Chenega Village Corp. prior to treatment for permits.

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 476 m: V.Light 0 m: No Oil 0 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: Bioremediation of surface oil as shown on sketch map.

TAG COMMENTS: _____

TAG APPROVAL DATE: _____

ADEC _____
EXXON _____
NOAA _____
USCG _____

FOSC: _____ DATE: _____

FIELD SHORELINE COMMENT SHEET

SEGMENT ST / BA 1 SUBDIVISION: E DATE 3/31/90

USCG

NAME GARY OTT SIGNATURE [Signature]

☒ NO TREATMENT RECOMMENDED
COMMENTS

☐ TREATMENT SUGGESTED

ADEC

NAME Michael J. Ebel SIGNATURE [Signature]

☒ NO TREATMENT RECOMMENDED ? ☐ TREATMENT SUGGESTED
COMMENTS

BA-1E * If there happens to be a BAT team in the area they could
mediate this discontinuous land in the heavier parts — but
I would not recommend a special trip by any group to
come here if not already within the vicinity.

LAND MANAGER

NAME Don J. Bentrager SIGNATURE [Signature]

☒ NO TREATMENT RECOMMENDED
COMMENTS

☐ TREATMENT SUGGESTED

BA1-Sub-E.

(29)

SHORELINE OILING SUMMARY

REVISION NO. 03/22/88

OG Randy McBride NoAA USEG Cary Ott SEGMENT ST/ BA-1
 BIO Leah J. Sharman LAND REP Dan Breitinges SUBDIVISION E (5 OF 6)
 EXXON Leonard Harbor ADEC Mil. F. 100 TIME 11:43 to 12:16
 TEAM NO.: 12 TIDE LEVEL: -0.2' to +0.5' DATE 3/31/90
 EST. SUBDIVISION LENGTH: 900 m ☐ Sun ☒ Clouds ☐ Fog ☒ Rain ☐ Snow
 UPLANDS DESCRIPTION: ☐ Grass ☒ Forest ☒ Rock
 SURVEYED FROM: ☒ Foot ☒ Boat ☐ Helo WORKING DIRECTION: SOUTH to NORTH
 SURFACE SEDIMENTS: R 5 % B 45 % C 45 % P 5 % G 0 % S 0 % M 0 % V 0 %
 SLOPE: Long 0 % Hang 65 % Vert 35 % WAVE EXPOSURE: ☒ Low ☐ Med ☐ High
 OIL CATEGORY LENGTH: W 0 m M 0 m N 900 m VL 0 m NO 0 m

SURFACE OIL

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

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

OILED DEBRIS	AMOUNT		
	SM	MD	LG
Logs			
Vegetation			
Trash			
Debris			

DEBRIS COLLECTED
☐ YES ☒ NOTYPE 0#BAGS 0

Photographs:

Roll No. ST-12-1Frames 27-31

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	9GL BR	ORL RW	GY SL	TL BL	SU	U	M	U						
1	10					X	— . —	X									X							B, C, P
							.																	
							.																	
							.																	
							.																	
							.																	
							.																	

COMMENTS

Narrow fairly straight beach with boulders, cobbles, and some pebbles as matrix. Oiling ~~was~~ 2.5 meters wide and characterized by patchy cover + coat. Rock cliff w/ sparse trees line the beach. One pit was dug but no oil found in subsurface.

SHORELINE ECOLOGICAL SUMMARY

REVISION: 02/22/90

Segment ST / BA-1 Subdivision E Date (mo / day / yr) 3/31/90Time (24 hr) 1120-1200 Biologist SHARMAN (Team 12)(A) Substrate type and % of segment: SUBDIV.
(1) Bedrock 5 (2) Boulder 45 (3) Cobble 45 (4) Pebble 5 (5) Sand (6) Silt (B) Overall % cover of biota (% of segment): Dense Moderate X Low
SUBDIV.

(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-12-1Frames 27-31

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 (Tridacna, Littorina, Lingula)

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: Oiled (tar) band is in UT2 immediately above top bound of Fucus zone. 50% barnacle mortality within tar band; 5% mortality elsewhere.Ecological Considerations: Same as for BA-1 (B). Sensitivity codes (entire segment): ST-2, 1B, 7HH.

(40)

OG Randy McBride

SKETCH MAP

APR-01-1990 13:26 FROM PWSA X

TO 1H-----0019075643771H

P.26

REVISION: 03/24/90

WIA

SEGMENT STATION -1
SUBDIVISION E
DATE 3/31/90

CHECKLIST

- ☒ N Arrow
- ☒ Approx. Scale
- ☒ Long Sub Bndry
- ☒ Oil Dist.
- ☒ Width
- ☒ Length
- ☒ % Cover
- ☒ Substrate Character
- ☒ Est. HWLAWL
- ☒ SST
- ☒ Profile Location(s)
- ☒ Profile(s)
- ☒ Pic Location(s)
- ☒ Photo Location(s)

LEGEND

1 Δ

Pit - No Subsurface Oil

2 Δ

Pit - Subsurface Oil

CT/C

Continuous Distribution

CT/B

Broken Distribution

CT/P

Patchy Distribution

CT/S

Splashed Distribution

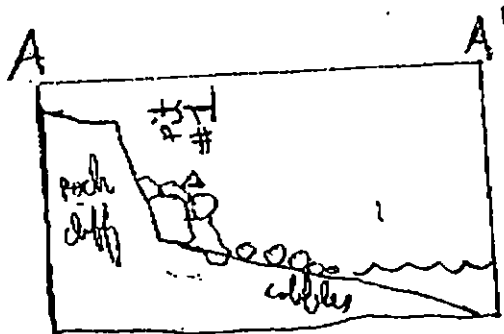
Oiled Vegetation

1 →

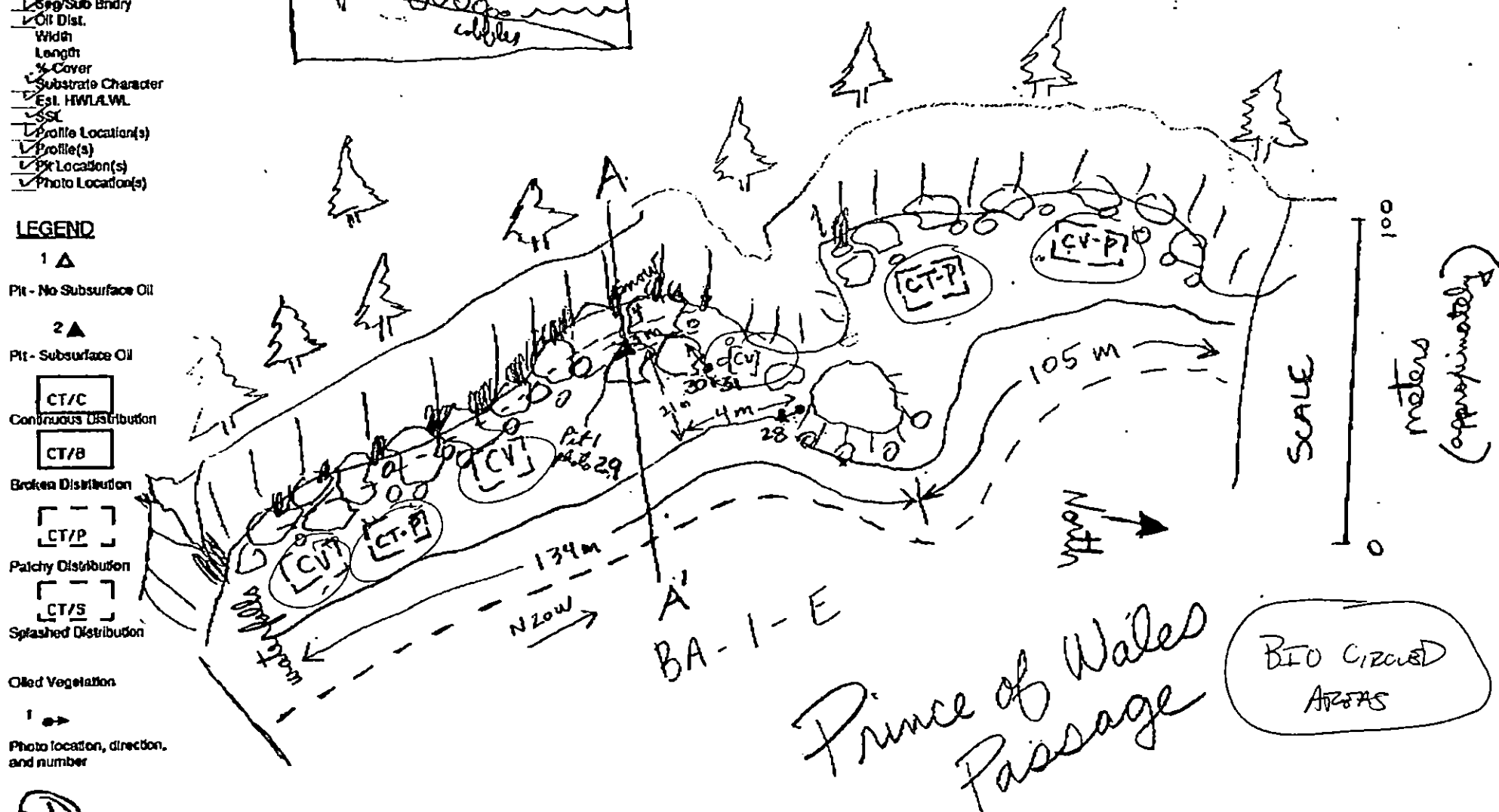
Photo location, direction, and number



Oil Character Length (m): AP _____ PO _____ CV 239 CT 239 ST _____ MS _____ PT _____ TB _____ FL _____ NO _____



* 2.80 meters oil band - patchy coat and cover of narrow oiling



BIO CIRCLED AREAS

Prince of Wales Passage

OG Randy McBride

SEGMENT ST/ BA-1

SUBDIVISION E

DATE 3/31/90

CHECKLIST

- ☒ Arrow
- ☒ Approx. Scale
- ☒ Seg/Sub Entry
- ☒ Oil Dist.
- ☒ Width
- ☒ Length
- ☒ % Cover
- ☒ Substrate Character
- ☒ Est. HWW/LWL
- ☒ CSL
- ☒ Profile Location(s)
- ☒ Profile(s)
- ☒ Pic Location(s)
- ☒ Photo Location(s)

LEGEND

1 Δ

PII - No Subsurface Oil

2 Δ

PII - Subsurface Oil

CT/C

Continuous Distribution

CT/B

Broken Distribution

CT/P

Patchy Distribution

CT/S

Splashed Distribution

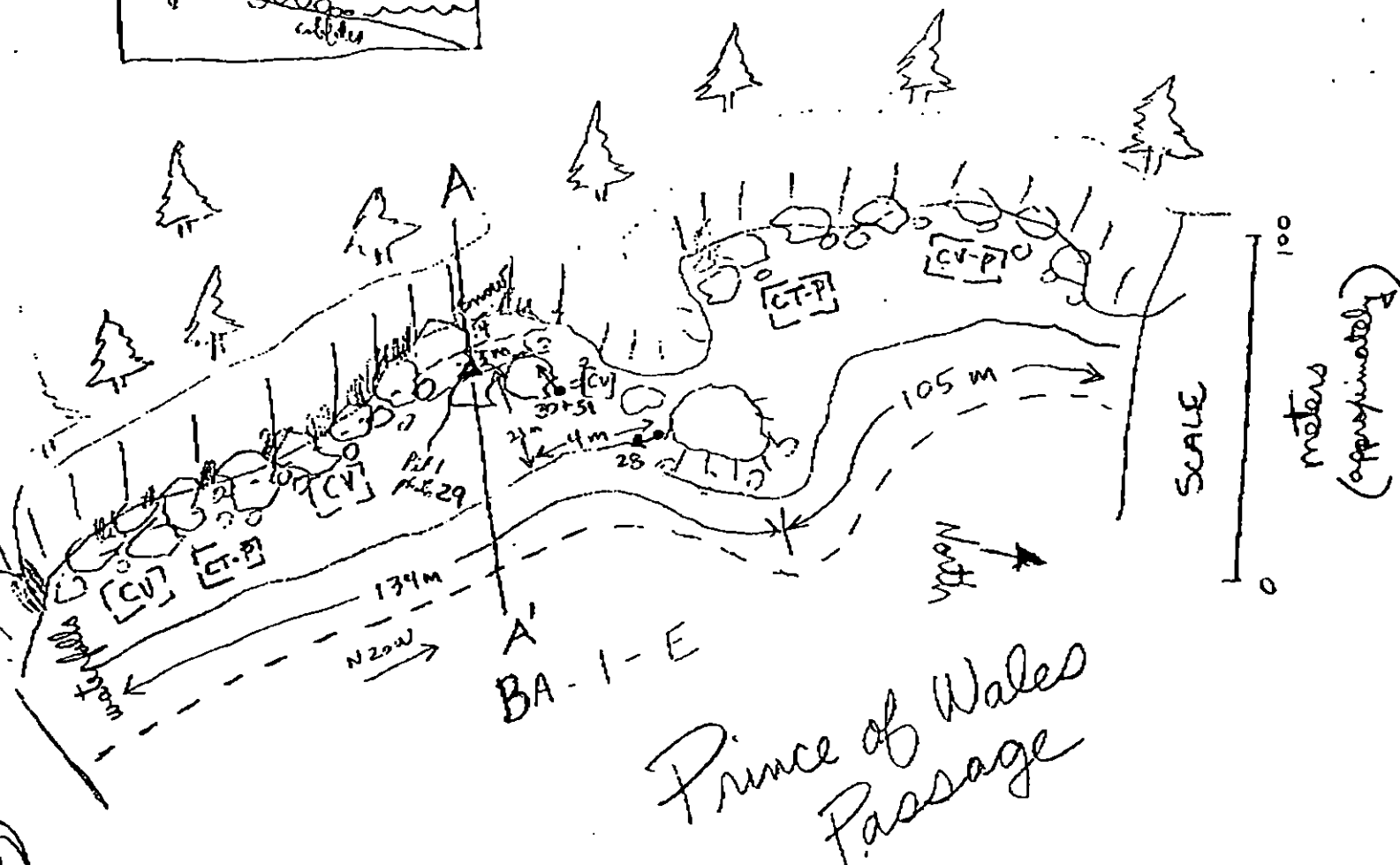
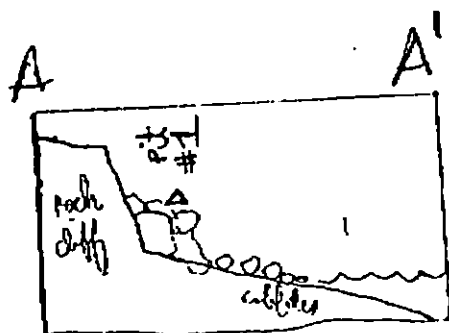
Oiled Vegetation

1 →

Photo location, direction, and number

SKETCH MAP

* 2.80 meters oil band - patchy coat and cover of narrow oiling



Oil Character Length (m): AP _____ PO _____ CV 239 CT 239 ST _____ MS _____ PT _____ TB _____ FL _____ NO _____

REVISION: 03/26/90

↑
PWS
114A

12:28

Bainbridge Island

Arachnoid
field station

BA-1-F

Prince of Wales Passage

NARROW

BA-1-E

BA-1 D

↓ PWS 115

● XXX Wide

BA-1

//// Medium

--- Narrow

TTTT Very Light

ADEC Segment Length: 13318m

0 100 200 300

Map Key: PWS-114

Name: Randy McBride

Date: 3/3/90

Data Entered: (34)

↑
pws
lee

BA-1-E

↓ PW3
11 W

PWS
1188

XXXX Wide

//// Medium

----- Narrow

TTTT Very light

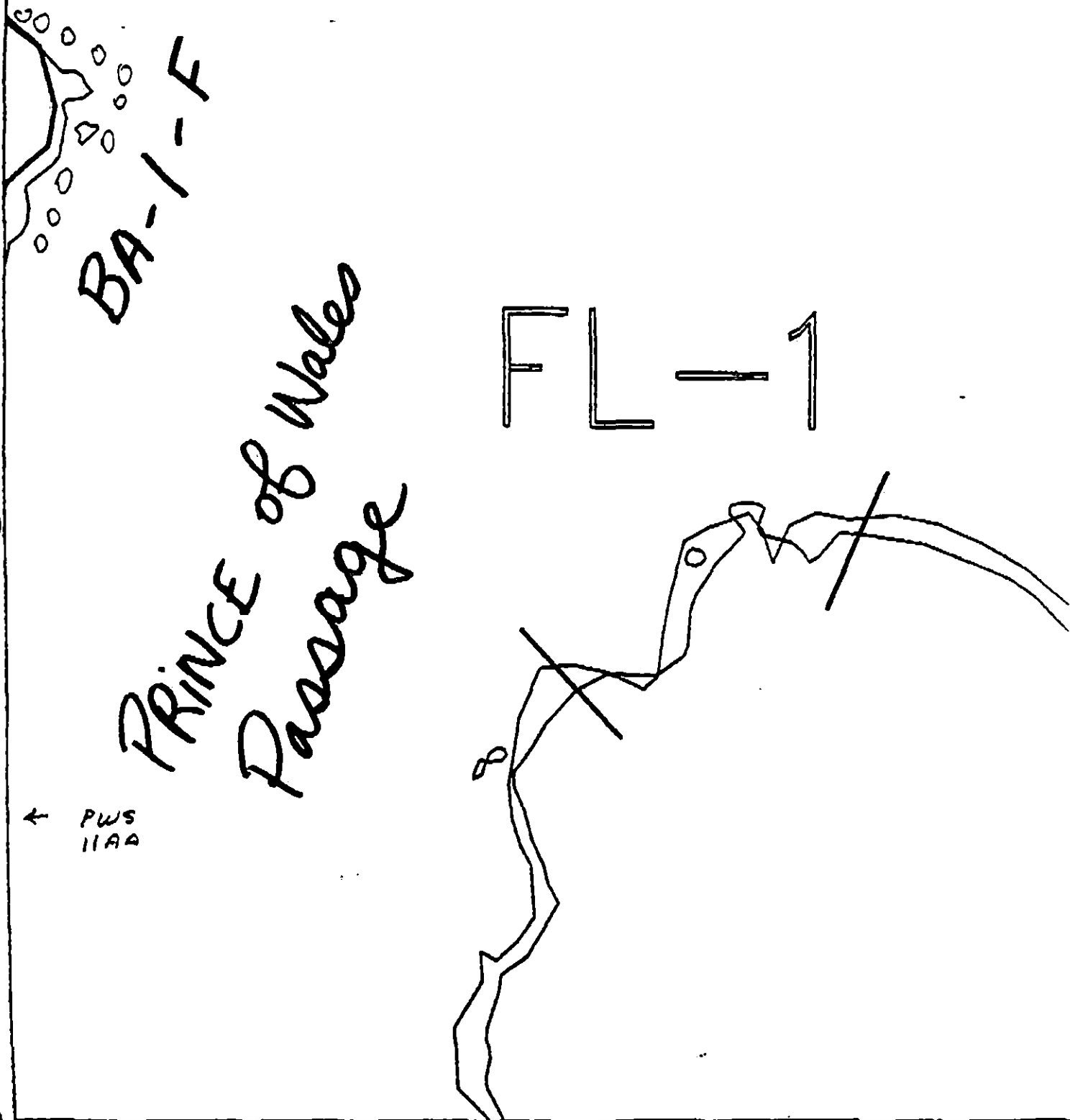
BA-1

ADEC Segment Length: 13318m

Map Key: PWS-1100

Name: _____

Date: _____



← PWS
11AA

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

BA-1

ADEC Segment Length: 13318m

Map Key: PWS-11bb

Name: _____

Date: _____

*Bambridge
Island*

BA-1-D

PWS
112

PWS 11N
↓

XXXX Wide

//// Medium

--- Narrow

TTTT Very light

BA-1

ADEC Segment Length: 13318m

Map Key: PWS-11r

Name: *Randy McB*

Date: *3/31/90*

↑ PWS
11w

Bainbridge
Island

BA-1-D

Prince of Wales Passage

← PWS
11R

↓ PWS 110

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

BA-1

ADEC Segment Length: 13318m

0 100 200 300

Map Key: PWS-11g
Name: Randy McB
Date: 3/31/90
Data Entered: 77

~~SECRET~~

PROCESSED UNDER PWS 11f
EXCLUDED FROM AUTOMATIC DOWNGRADING AND DECLASSIFICATION
P. 08

XXXX Wide
//// Medium
---- Narrow
TTTT

ADCC Segment Length: 13316m

BA-1



Map Key: PWS-11f
Name: Randy McBride
Date: 3/31/90



BA-1-A

BA-1-B

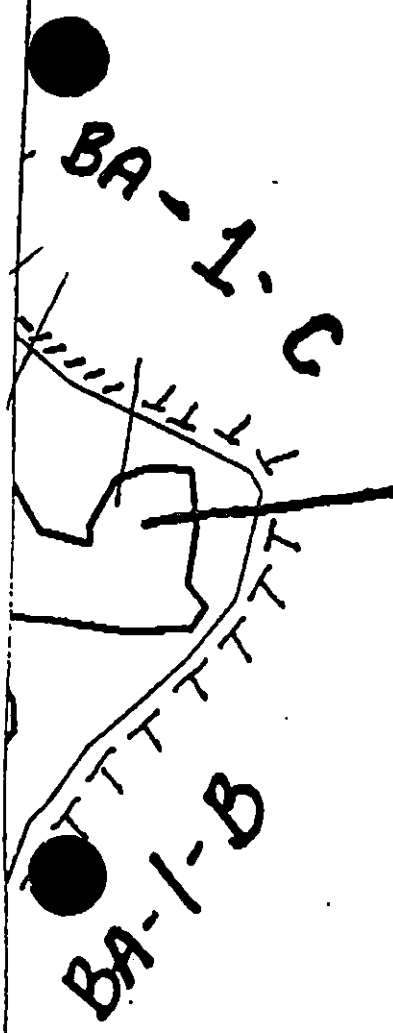
BA

Prince of Wales
Passage

↑ PWS 11f

↑ PWS 11f

↑ PWS 115



← PWS 115

● XX Wide
 /// Medium
 --- Narrow
 TTTT Very Light
 ADEC Segment Length: 13318m

BA-1

0 100 1000 10000

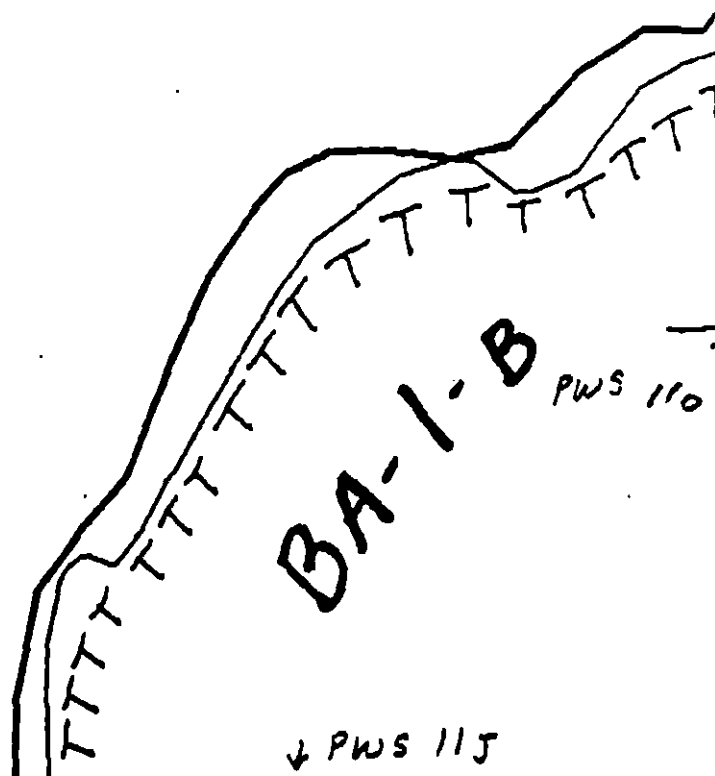
Map Key: PWS-110
 Name: Randy McBride
 Date: 3/31/90

Bainbridge
Island

↑ PWS 11R

BA-1-D

BA-1-C



XXXX Wide

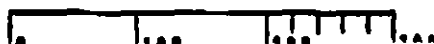
//// Medium

--- Narrow

TTTT Very Light

BA-1

ADEC Segment Length: 13318m



Map Key: PWS-11a

Name: Randy McBride

Date: 3/31/90

REGION: PRINCE WILLIAM SOUND

SEGMENT: BA-01

SUBDIVISIONS: F (6 OF 6)

SHORELINE EVALUATION

SEGMENT ST/ BA-01 SUBDIVISION F (6 OF 6) DATE 4/1/90

SEGMENT ENVIRONMENTAL SENSITIVITIES AND TIME CONSTRAINTS:

Two bald eagle nests (5T) - 3/1 to 6/1; Salmon stream mouth (nos. 16446, 16442, 16414, 16372, 16369); Outmigration (1A) - 3/1 to 5/15 and spawning (1B) - 7/10 to 8/15; Finfish subsistence harvesting (7HH) - Consult ADF&G and Chenega Bay for appropriate dates.

SUBDIVISION ECOLOGICAL CONSTRAINTS: No disturbance of stream beds or banks unless authorized by ADF&G. Contact ADF&G Habitat Division prior to treatment for permits. Re: bald eagle nests, restrict air traffic to essential minimum. Air approach and takeoff from and to seaward only. Contact USFWS prior to treatment for confirmation of dates and avoidance minimums.

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 1886m: No Oil 2350 m
Subsurface Oil Observed: Yes _____ No X Maximum Depth _____

RECOMMENDATIONS:

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

COMMENTS: _____

TAG COMMENTS: _____

TAG APPROVAL DATE: _____
ADEC _____
EXXON _____
NOAA _____
USCG _____

FOSC: _____ DATE: _____

FIELD SHORELINE COMMENT SHEET

SEGMENT ST / BA 1 SUBDIVISION: F DATE 3/31/90

USCG

NAME GARY OTT SIGNATURE [Signature]☒ NO TREATMENT RECOMMENDED
COMMENTS☐ TREATMENT SUGGESTED

ADEC

NAME Michael J. Ebel SIGNATURE [Signature]☒ NO TREATMENT RECOMMENDED
COMMENTS☐ TREATMENT SUGGESTEDBA-1-F

LAND MANAGER

U.S.D.A. Forest ServiceNAME Don T. Breitinger SIGNATURE [Signature]☒ NO TREATMENT RECOMMENDED
COMMENTS☐ TREATMENT SUGGESTEDBA1- Sub - F

(36)

SHORELINE OILING SUMMARY

REVISION NO. 03/22/90

OG Randy McBride NOAA USEG Gary Ott SEGMENT ST/ BA-1
 BIO Lewis Shermen LAND REP Dan Breittings SUBDIVISION F (6 OF 6)
 EXXON Leonard Herbert ADEC Mike Ebel TIME 12:20 to 13:21
 TEAM NO.: 12 TIDE LEVEL: +1.75 to +4.0 DATE 3/31/90
 EST. SUBDIVISION LENGTH: 8400 m ☐ Sun ☒ Clouds ☐ Fog ☐ Rain ☐ Snow
 UPLANDS DESCRIPTION: ☐ Grass ☒ Forest ☒ Rock
 SURVEYED FROM: ☒ Foot ☒ Boat ☐ Helo WORKING DIRECTION: South to north
 SURFACE SEDIMENTS: R 40 % B 40 % C 20 % P _____ % G _____ % S _____ % M _____ % V _____ %
 SLOPE: Long _____ % Hang 80 % Vert 20 % WAVE EXPOSURE: ☒ Low ☐ Med ☐ High
 OIL CATEGORY LENGTH: W _____ m M _____ m N _____ m VL 8400 m NO _____ m

SURFACE OIL

CHARACTER	DISTRIBUTION				OIL / FILM COLOR								IMPACTED ZONES			
	AC	AB	AP	AS	SB	SB	SB	SB	SB	SB	SB	SB	SU	UI	MI	U
ASPHALT PAVEMENT																
POOLED																
COVER			X													
COAT																
STAIN																
MOUSSE																
PATTIES																
TARBALLS																
FILM																
NO OIL													X	X	X	X

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

PATTIES / TARBALLS _____ BAGS

NEAR SHORE SHEEN? NO BR RW SL TL

OILED DEBRIS	AMOUNT		
	SM	MD	LG
Logs			
Vegetation			
Trash			
Debris			

DEBRIS COLLECTED
☐ YES ☐ NO

TYPE _____

#BAGS _____

Photographs:

Roll No. ST-12-1Frames No photos

SUBSURFACE OIL

PIT NO.	PIT DEPTH (cm)	SUBSURFACE OIL CHARACTER					OILED INTERVAL (CM-CH)	BELOW		OIL / FILM COLOR								PIT ZONE				A N A	SUBSURFACE SEDIMENTS
		OP	OR	OL	OF	NO		UO	UC	BL	BR	BL	BR	GY	BL	BL	TL	BL	SU	UR	ME		
							-																
							.																
							.																
							-																
							.																
							.																
							.																
							.																

COMMENTS

Oil mark was found along the high water line that averaged about 10-25 cm wide w/ drip marks. Oil character and distribution was patchy cover along a wide variety of coastal geomorphological features. No photos taken. No pits.

BA-1-F

3/31/90

Shoreline Ecological Summary
(Summary field notes)(Shorman)
Team 12

General Comments: This portion of BA-1 has been coded VLT oiling in previous surveys, but we observed only 2 small (0.1 m²) weathered mousee patches on the gravel delta of the salmon stream, which we removed. In the absence of any other observable oil, an abbreviated Shoreline Oiling form was completed, and a Shoreline Ecological Summary was not filled out. However, field notes follow: (except narrow the tar band)

Wildlife: 2 Sitka blacktail deer in ITZ - appeared to be in good health. In addition, deer tracks (and 1 deer rib) were observed at 2 additional locations within the subdivision, 1 sea otter, 1 harbor seal, 6 pairs Barrow's goldeneyes, 1 pair harlequin ducks, 1 merganser, 1 adult eagle, 1 raven, 1 crow. Deer scat on stream banks. This region from just S. of Gaff Pt. to just N. of and including the lagoon area with the salmon stream is very productive and probably very sensitive to human disturbance.

SHORELINE ECOLOGICAL SUMMARY

REVISION: 072270

Segment ST / BA-1 Subdivision F Date (mo / day / yr) 3/31/90

Time (24 hr) 1220-1320 Biologist SHARMAN

- (A) Substrate type and % of segments: SUBDIV.
 (1) Bedrock 40 (2) Boulder 40 (3) Cobble 20 (4) Pebble _____ (5) Sand _____ (6) Silt _____
- (B) Overall % cover of biota (% of segment): Dense _____ Moderate X Low _____
SUBDIV.
- (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-12-1

Frames NONE

BARNACLES

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

MYTILUS

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

GASTROPODS (*Tucella*, *Littoriana*, *Littorina*)

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

FUCUS

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

Wildlife Observations/ General Comments:

Please see Ecological Summary field notes sent in afternoon of 4/1/90.

Ecological Considerations:

Same as for BA-1 (B). Sensitivity codes (entire segment): ST-2, 1B, 7HH.
 This subdivision contains the anadromous fish stream. This entire segment is very productive and probably very sensitive to human disturbance.

↑
PWS
114A

Bainbridge
Island

Anchorage
field station

12:28

BA-1-F

NARROW

BA-1-E

BA-1
D

↓ PWS 115

BA-1

XXXX Wide

//// Medium

--- Narrow

TTTT Very Light

ADEC Segment Length: 13318m

0 100 200 300

Map Key: PWS-11v

Name: Randy McBride

Date: 3/3/90

Data Entered: (34)

↑ PWS
11ce

BA-1-F

↓ PWS
11w

PWS
11BB -

XXXX Wide

//// Medium

---- Narrow

TTTT Very light

BA-1

ADEC Segment Length: 13318m

Map Key: PWS-11ce

Name: _____

Date: _____



XXXX Wide

//// Medium

---- Narrow

TTTT Very Light

BA-1

ADEC Segment Length: 13318m

Map Key: PWS-11bb

Name: _____

Date: _____



BA-0

BA-4-A

BA-4-A

BA-1-F

3 of 10

↓ PWS 112a

XXXX Wide

//// Medium

--- Narrow

TTTT Very Light

OOOO No Oil

BA-1

ADEC Segment Length: 13318m



Map Key: PWS-112a

Name: Randy McBrideDate: 3/31/90

Data Entered:

ADDENDUM: SUBDIVISION CONSTRAINTS

- SEGMENT BA-1 SUBDIVISION B (2 of 6)

WORK WINDOW

Manual Pickup Less Than 400m From Active Nest **CLOSED**

Manual Pickup More Than 400m From Active Nest **OPEN**

ARCHAEOLOGICAL INSPECTION/CONSULTATION REQUIRED.

>>> PHONE 564-3274 (Anchorage) OR 229-1508 (24 hrs.) <<<

APPLICABLE ECOLOGICAL TIME CONSTRAINTS

1A,1B Salmon Stream

NO CONSTRAINT. ADF&G catalogued anadromous streams are located in adjacent subdivisions more than 100m from recommended treatment area: 226-40-16442 and 16446 in Subdivision A; 226-40-16414 in Subdivision D; and 226-40-1639 and 16372 in Subdivision F.

1K Purse Seine Hook-off

No constraint to manual pickup.

5T Bald Eagle Nest

USFWS 6/1/90 map indicates an active nest in Subdivision B. Closed to manual pickup within 400m of active nest.

7HH Subsistence: Finfish Harvesting

No constraint to manual pickup.

OTHER ECOLOGICAL CONSIDERATIONS

Restrict boat and air traffic and all disturbance to essential minimum. Air approach and takeoff from and to seaward only; maintain 400m horizontal, 300m vertical distance from nests. Avoid any unnecessary disturbance or damage to uncolled biota and substrate.

FOSC

DATE 6-10-90

Prepared By:

W. Kelley

Date

6/9/90

SHORELINE EVALUATION

SEGMENT ST/ BA-01 SUBDIVISION B (2 OF 6) DATE 4/1/90

SEGMENT ENVIRONMENTAL SENSITIVITIES AND TIME CONSTRAINTS:

Two bald eagle nests (5T) - 3/1 to 6/1; Salmon stream mouth (nos. 16446, 16442, 16414, 16372, 16369); Outmigration (1A) - 3/1 to 5/15 and spawning (1B) - 7/10 to 8/15; Finfish subsistence harvesting (7HH) - Consult ADF&G and Chenega Bay for appropriate dates.

SUBDIVISION ECOLOGICAL CONSTRAINTS: No disturbance of stream beds or banks unless authorized by ADF&G. Contact ADF&G Habitat Division prior to treatment for permits. Re: bald eagle nests, restrict air traffic to essential minimum. Air approach and takeoff from and to seaward only. Contact USFWS prior to treatment for confirmation of dates and avoidance minimums.

ARC ARCHAEOLOGICAL CONSTRAINTS: Consultation and ~~at se-~~
~~see~~ inspection with an Exxon archaeologist is required
prior to treatment. Specific on-site monitoring
requirements will be determined at that time.

SHPO SIGNATURE: Charles E. Hume DATE: April 14, 1990

OILING CATEGORIZATION:

Wide 0 m: Medium 0 m: Narrow 0 m: V.Light 2020m: No Oil 0 m
Subsurface Oil Observed: Yes No X Maximum Depth

RECOMMENDATIONS:

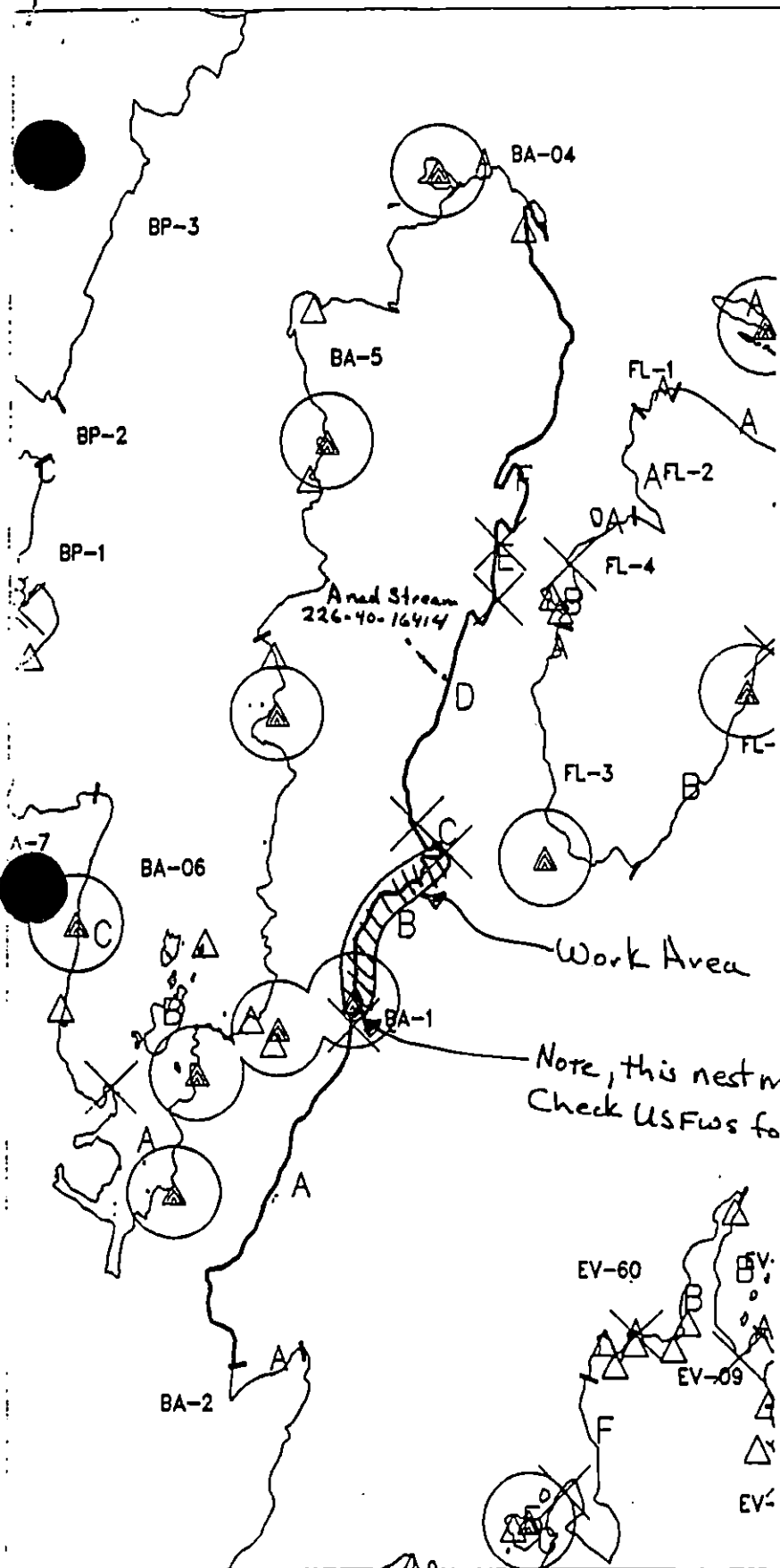
☒ No Treatment Recommended	☐ Snare/Absorbent Booms
☒ Treatment Recommended	☐ Oil Snares (pom poms)
☒ Manual Pickup	☐ Absorbents (pads, rolls, etc)
☐ Bioremediation	☐ Spot Washing: <u> </u> Wands
☐ Tarmat: <u> </u> Breakup	☐ Beach Cleaner
☐ Removal	☐ Other (see comments)

COMMENTS:

See Constraint Addendum Dated 6/9/90 WKK

TAG COMMENTS: CHECK FOR OILED DEBRIS/TRASH

TAG APPROVAL DATE: 4/13/90
ADEC JERRY BAKER
EXXON ANDY TATE FOSC: DATE:
NOAA Burt Wescott
USCG G.A. BELTER



Note, this nest may be inactive!
Check USFWS for followup survey.

ECOLOGY MAP
SEGMENT BA-1
SUBDIVISION B (2 of 6)



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

1 inch = 4258 feet



Exxon Company, USA
Map Key: PWS-BA-1
June 04, 1990

ADDENDUM: SUBDIVISION CONSTRAINTS

SEGMENT BA-1 SUBDIVISION C (3 of 6)

WORK WINDOW	
Tarmat Removal	OPEN
Bioremediation	WORK PRIOR TO 7/1

ARCHAEOLOGICAL MONITOR REQUIRED ON SITE.

>>> PHONE 564-3274 (Anchorage) OR 229-1508 (24 hrs.) <<<

APPLICABLE ECOLOGICAL TIME CONSTRAINTS

1A,1B	Salmon Stream	NO CONSTRAINT. ADF&G catalogued anadromous streams are located in adjacent subdivisions more than 100m from recommended treatment areas: 226-40-16442 and 16446 in Subdivision A; 226-40-16414 in Subdivision D; and 226-40-16369 and 16372 in Subdivision F.
1K	Purse Seine Hook-off	No constraint to tarmat removal; closed to bioremediation after 7/20.
5T	Bald Eagle Nest	NO CONSTRAINT. USFWS 6/1/90 map indicates no active nest within 400m of Subdivision C work site. C with
7HH	Subsistence: Finfish Harvesting	No constraint to tarmat removal. Closed to bioremediation after 7/1.

OTHER ECOLOGICAL CONSIDERATIONS

Restrict air traffic and all disturbance to essential minimum. No personnel or boat traffic within 400m of active nests. Air approach and takeoff from and to seaward only; maintain 400m horizontal, 300m vertical distance from active nests. Avoid any unnecessary disturbance or damage to unrolled biota and substrate.

FOSC

[Signature]

Date

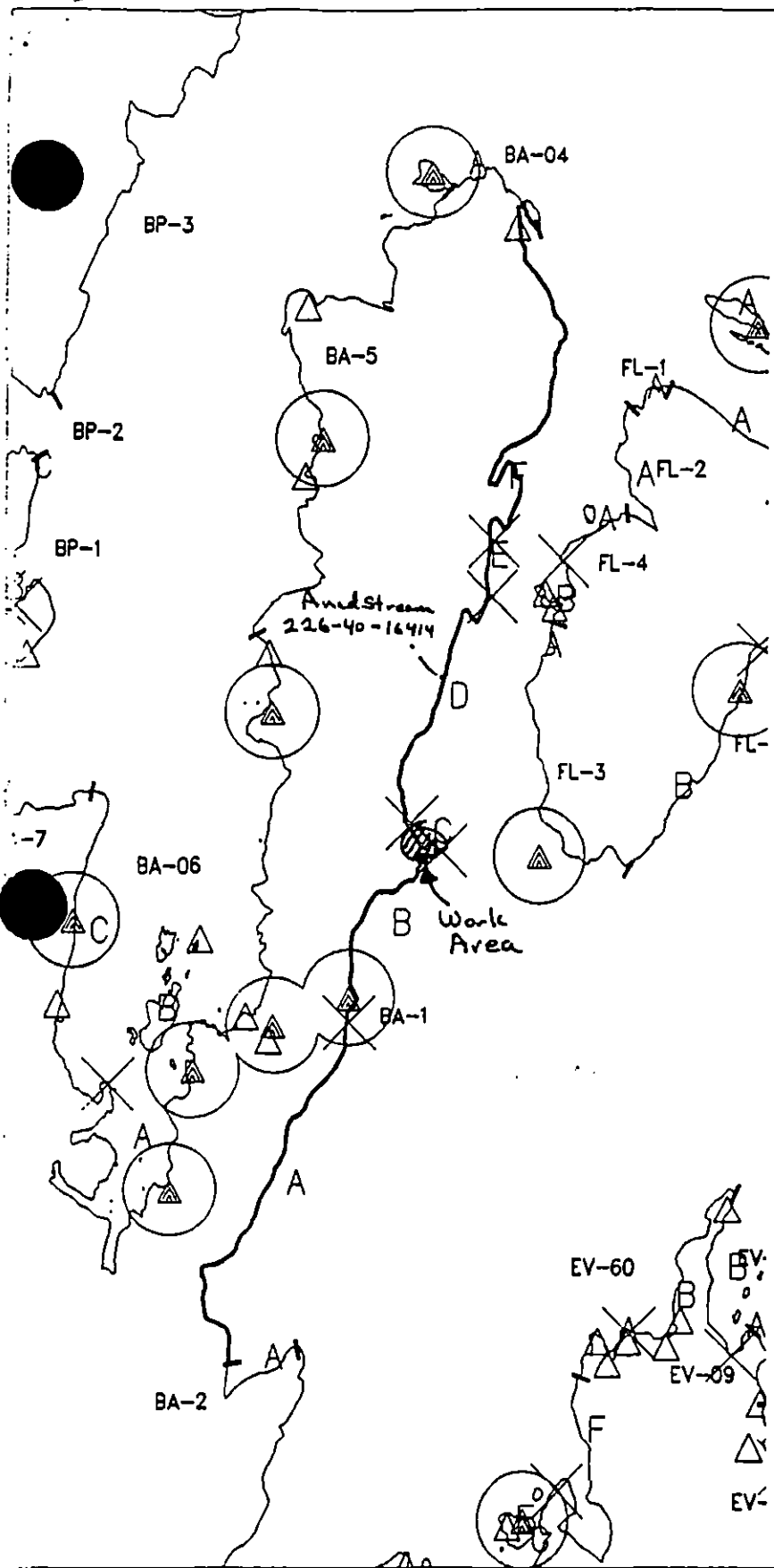
6-10-90

Prepared by

[Signature]

Date

6/9/90



Exxon Company, USA
 Map Key: PWS-BA-1
 June 04, 1990

ECOLOGY MAP
 SEGMENT BA-1
 SUBDIVISION C (3 of 6)
 METERS
 0 1250 2500

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

1 inch = 2538 feet

SHORELINE EVALUATION

SEGMENT ST/ BA-01 SUBDIVISION C (3 OF 6) DATE 4/1/90

SEGMENT ENVIRONMENTAL SENSITIVITIES AND TIME CONSTRAINTS:

Two bald eagle nests (5T) - 3/1 to 6/1; Salmon stream mouth (nos. 16446, 16442, 16414, 16372, 16369); Outmigration (1A) - 3/1 to 5/15 and spawning (1B) - 7/10 to 8/15; Finfish subsistence harvesting (7HH) - Consult ADF&G and Chenega Bay for appropriate dates.

SUBDIVISION ECOLOGICAL CONSTRAINTS: No disturbance of stream beds or banks unless authorized by ADF&G. Contact ADF&G Habitat Division and Chenega Village Corp. prior to treatment for permits.

ARCHAEOLOGICAL CONSTRAINTS: An Exxon archaeological monitor is required on-site during shoreline treatment.

SHPO SIGNATURE: Charles E. Hansen

DATE: April 14, 1990

OILING CATEGORIZATION:

Wide 0 m: Medium 235 m: Narrow 111 m: V. Light 101 m: No Oil 0 m
Subsurface Oil Observed: Yes X No Maximum Depth 12 cm

RECOMMENDATIONS:

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

COMMENTS: Breakup and Removal of tarmats as shown on sketch map. Bioremediate cover and coat areas shown on map. Work to be performed between 6/1 and 7/10 based on constraints.

[See Addendum Dated 6/9/90] wjk

TAG COMMENTS:

TAG APPROVAL DATE: 4/13/90

ADEC JOHN BAUER

EXXON ANDY TETA

NOAA Burt Wierhoff

USCG G.A. FEETER

FOSC:

DATE:

ADDENDUM: SUBDIVISION CONSTRAINTS

SEGMENT BA-1 SUBDIVISION E (5 of 6)

WORK WINDOW	
Manual Pickup	OPEN
Bioremediation	WORK PRIOR TO 7/1

ARCHAEOLOGICAL STANDARD CONSTRAINT

If cultural resources are uncovered, PHONE 564-3274.

APPLICABLE ECOLOGICAL TIME CONSTRAINTS

1A,1B	Salmon Stream	NO CONSTRAINT. ADF&G catalogued anadromous streams are located in adjacent subdivision more than 100m from recommended treatment areas: (226-40-16442) and 226-40-16446) in Subdivision A; (226-40-16414) in Subdivision D; and (226-40-16369 and 226-40-16372) in Subdivision F.
1K	Purse Seine Hook-off	No constraint to manual pickup; closed to bioremediation after 7/20.
5T	Bald Eagle Nest	NO CONSTRAINT. USFWS 6/1/90 map indicates no active nest within 400m of Subdivision E work site.
7HH	Subsistence: Finfish Harvesting	No constraint to manual pickup. Closed to bioremediation after 7/1.

OTHER ECOLOGICAL CONSIDERATIONS

Restrict boat and air traffic and beach disturbance to essential minimum after 7/1. Avoid any unnecessary disturbance or damage to uncollected biota and substrate.

FOSC

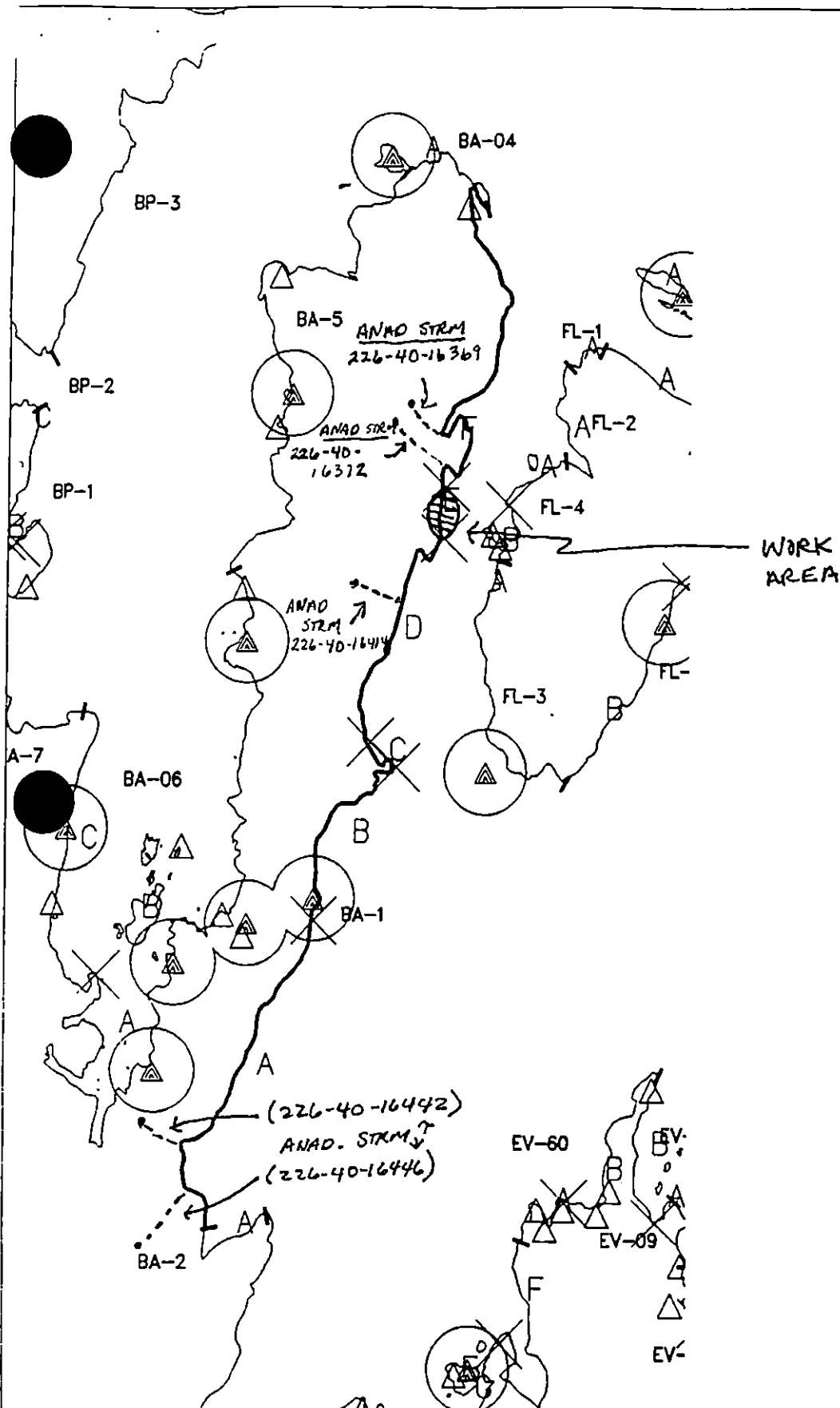
DATE

6-10-90

Prepared by: L. J. Keller

Date:

6/9/90

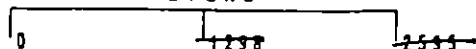


Exxon Company, USA

Map Key: PWS-BA-1

June 04, 1990

ECOLOGY MAP SEGMENT BA-1 SUBDIVISION E (5 of 6) METERS



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

1 inch = 4258 feet

SHORELINE EVALUATION

SEGMENT ST/ BA-01 SUBDIVISION E (5 OF 6) DATE 4/1/90

SEGMENT ENVIRONMENTAL SENSITIVITIES AND TIME CONSTRAINTS:

Two bald eagle nests (5T) - 3/1 to 6/1; Salmon stream mouth (nos. 16446, 16442, 16414, 16372, 16369); Outmigration (1A) - 3/1 to 5/15 and spawning (1B) - 7/10 to 8/15; Finfish subsistence harvesting (7HH) - Consult ADF&G and Chenega Bay for appropriate dates.

SUBDIVISION ECOLOGICAL CONSTRAINTS: No disturbance of stream beds or banks unless authorized by ADF&G. Contact ADF&G Habitat Division and Chenega Village Corp. prior to treatment for permits.

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 Z. H. Jones DATE: April 14, 1990

OILING CATEGORIZATION:

Wide 0 m: Medium 0 m: Narrow 476 m: V.Light 0 m: No Oil 0 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> </u> Tarmat: <u> </u> Breakup	<u> </u> Beach Cleaner
<u> </u> Removal	<u> </u> Other (see comments)

COMMENTS: Bioremediation of surface oil as shown on sketch map.
CHECK FOR TAR PATCHES AND PICKUP

See Constraint Addendum Dated 6/9/90

TAG COMMENTS:

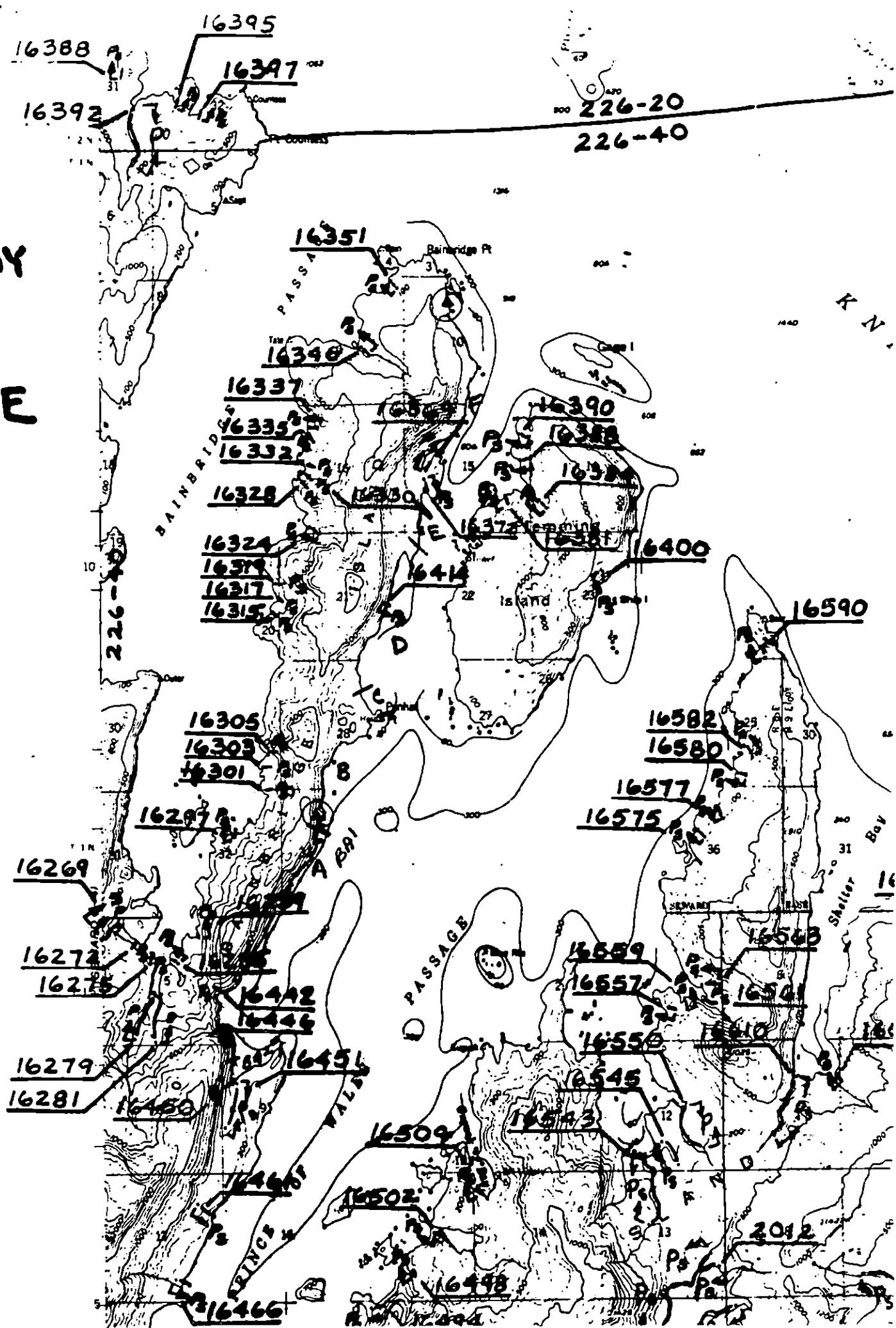
TAG APPROVAL DATE: 4/13/90

ADEC JOHN BAUER
EXXON W.D. Tate
NOAA Bruce W. Wright
USCG C.A. REITER

FOSC: DATE: 4-20-90

ECOLOGY
MAP

BA-1E



SHORELINE EVALUATION

SEGMENT ST/ BA-01 SUBDIVISION A (1 OF 6) DATE 4/1/90

SEGMENT ENVIRONMENTAL SENSITIVITIES AND TIME CONSTRAINTS:

Two bald eagle nests (5T) - 3/1 to 6/1; Salmon stream mouth (nos. 16446, 16442, 16414, 16372, 16369); Outmigration (1A) - 3/1 to 5/15 and spawning (1B) - 7/10 to 8/15; Finfish subsistence harvesting (7HH) - Consult ADF&G and Chenega Bay for appropriate dates.

SUBDIVISION ECOLOGICAL CONSTRAINTS: No disturbance of stream beds or banks unless authorized by ADF&G. Contact ADF&G Habitat Division and the Chenega Village Corp. prior to treatment for permits.

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

SHPO SIGNATURE: Charles E. Holmes DATE: April 14, 1990

OILING CATEGORIZATION:

Wide 0 m: Medium 0 m: Narrow 0 m: V.Light 0 m: No Oil 3571 m
Subsurface Oil Observed: Yes No X Maximum Depth

RECOMMENDATIONS:

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

COMMENTS:

TAG COMMENTS:

TAG APPROVAL DATE: 4/13/90

ADEC JOHN BAUER
EXXON ANDY TATE
NOAA Byrl Wescott
USCG G.A. REITER

FOSC: DATE: 4-20-90

↑ PWS 11N

BA-1-B

BA-

BA-1-A

4 of 4

↓ PWS 11F

XXX Wide

//// Medium

---- Narrow

TTTT Very Light

BA-1

ADEC Segment Length: 13318m

Map Key: PWS-11i

Name: Randy McBride

Date: 3/30/90

↑ PWS 11j

BA-1-A

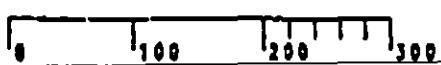
← PWS 11E

3 of 4

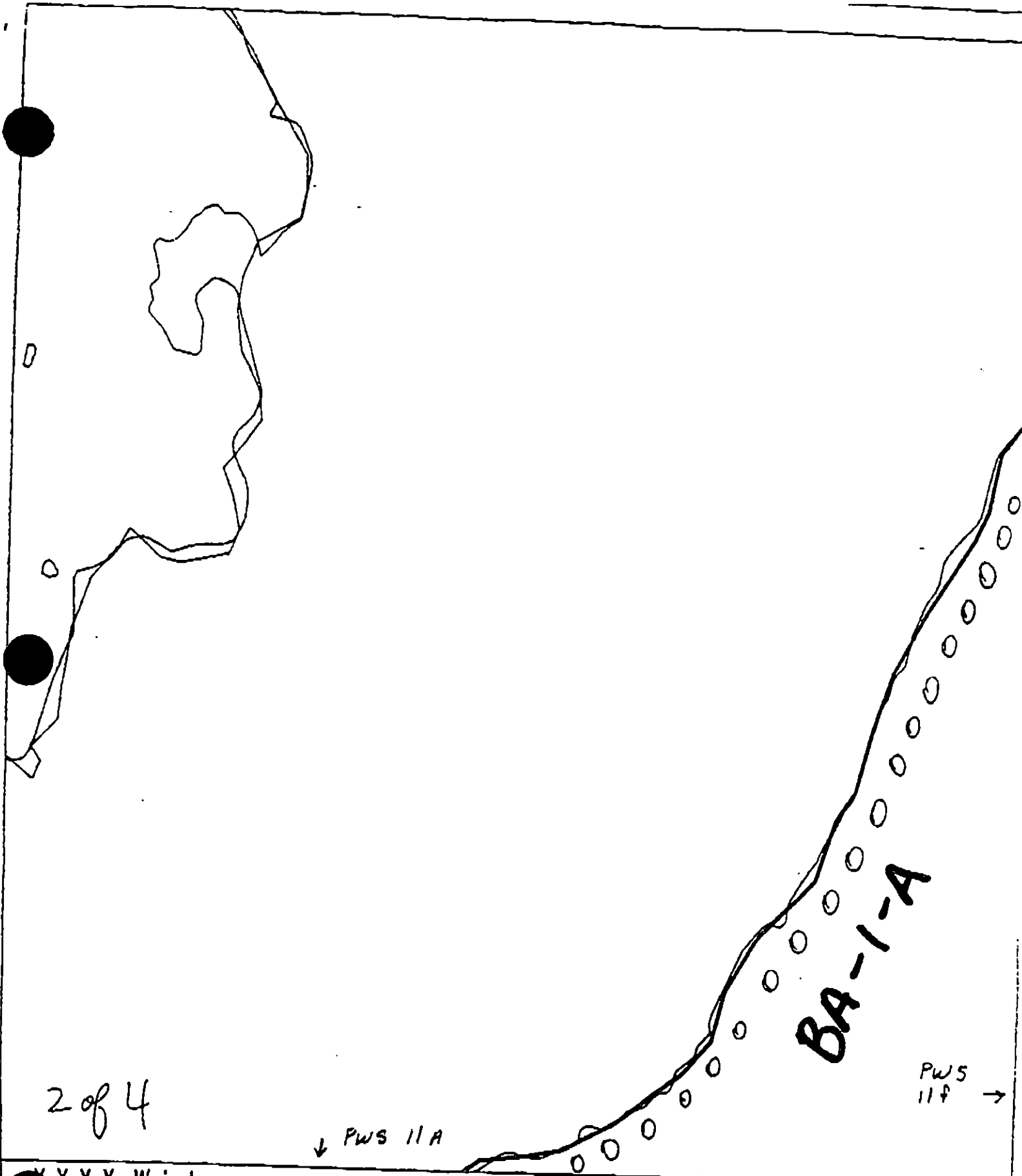
XXXX Wide
//// Medium
---- Narrow
TTTT Very Light

BA-1

ADEC Segment Length: 13318m



Map Key: PWS-111
Name: Randy McBride
Date: 3/30/90



2 of 4

↓ PWS 11A

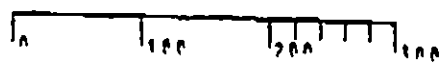
BA-1-A

PWS 11f →

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

BA-1

ADEC Segment Length: 13318m



Map Key: PWS-11e
Name: Randy McBride
Date: _____

↑ PWS 11c

PRINCE OF WALES
Passage

BA-1-A

BA-2-A

BA-2

1064

XXXX Wide

//// Medium

---- Narrow

TTTT Very Light

BA-1

ADEC Segment Length: 13318m

Map Key: PWS-11c

Name: _____

Date: _____

SHORELINE EVALUATION

SEGMENT ST/ BA-2 SUBDIVISION A* DATE 3/31/90

SEGMENT ENVIRONMENTAL SENSITIVITIES AND TIME CONSTRAINTS:

Tent sites (6U) - 6/1 to 9/5: Cataloged anadromous stream
(1B #16578) - 7/10 to 8/31.
16450

SUBDIVISION ECOLOGICAL CONSTRAINTS: Same as above.

ARCHAEOLOGICAL CONSTRAINTS: Consultation and inspection with
an Exxon Archaeologist is required prior to treatment.
Specific onsite monitoring requirements will be determined
at that time.

SHPO SIGNATURE: Charles J. H. Dineen DATE: April 5, 1990

OILING CATEGORIZATION:

0 m Wide, 246m Medium, 54m Narrow, 543m V. Light, 252m No Oil
Subsurface Oil Observed ☒ Yes ☐ No Maximum Depth 15 cm

RECOMMENDATIONS:

☐ No Treatment Recommended
☒ Treatment Recommended
☐ Manual Pickup ☐ Snare Booms/Sorbents ☒ Tarmat Breakup/REMOVAL
☐ Bioremediation SPOT WASHING ☐ Other
☐ Wands
☐ Beach Cleaner

Comments: only Treatment recommended is removal of tar mats in + oiled debris (leave logs)
area indicated on attached sketch map. Work prior to 7/10/90 due
to anadromous stream constraints. Bioremediate in area where surface
and subsurface oil remains. Anadromous stream restrictions apply (no application
within 100m of the stream) further clarification by Anad SCA in the form
of an addendum to this package. A.

TAG COMMENTS: As indicated above.

TAG APPROVAL DATE: 4/5/90

ADEC JOHN BAUER John Bauer

XXON ANDY TSN Andy TSN

DAA Burt Wescott Burt Wescott

USCG G.A. REITER G.A. Reiter

FOSC: Hy

DATE: 4-19-90

*Subdivision covers entire segment

OG R. M. M. Ebel

SEGMENT ST/BA-2

SUBDIVISION A

DATE 3/30/90

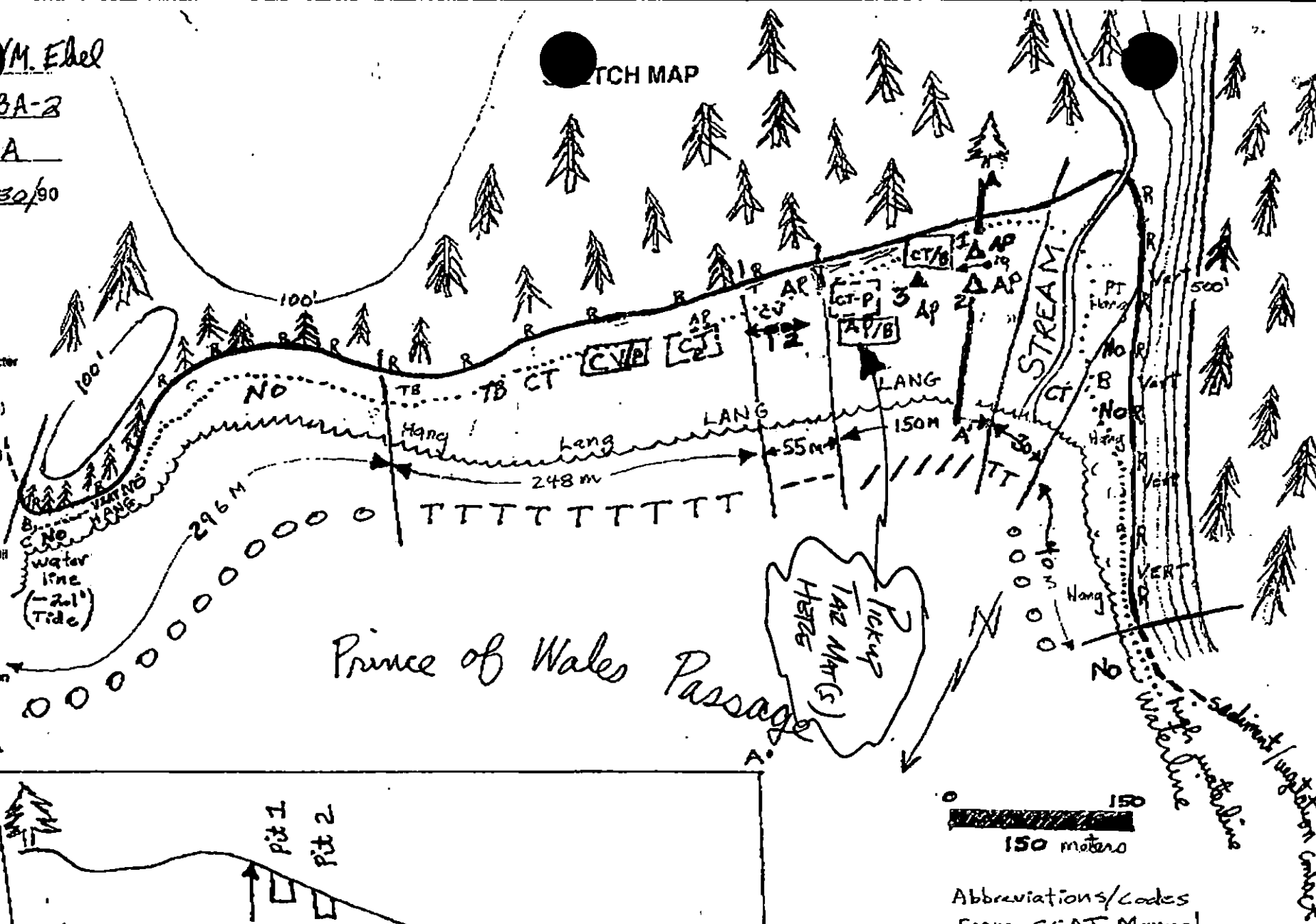
CHECKLIST

- ☒ N Arrow
- ☒ Approx. Scale
- ☒ Seg/Sub Bndy
- ☒ Oil Dist.
- ☒ Width
- ☒ Length
- ☒ % Cover
- ☒ Substrate Character
- ☒ Est. HW/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
- Ofed Vegetation
- 1
- Photo location, direction, and number

ATCH MAP



Profile A - A'

Oil Character Length (m): AP 160 PO — CV 139 CT 139 ST — MS — PT 10 TB 5 FL — NO 336

Abbreviations/Codes
From SSAT Manual
Attachment XIV

Beach Face not to scale
XXX wide TT - very light
/// medium 00 - No Oil
--- Narrow

REVISION: 8/24/90

BA-2-A

Prince of Wales Passage

1 of 3

XXXX Wide

/// Medium

--- Narrow

TTTT Very Light

0000 No Oil

BA-2

ADEC Segment Length: 1095m

0 100 200 300
METERS

Map Key: PWS-13

Name: Randy McBride

Date: 3/30/90

Date Entered:

SHORELINE EVALUATION

SEGMENT ST/ BA-04 SUBDIVISION A (1 OF 1) DATE 3/31/90

SEGMENT ENVIRONMENTAL SENSITIVITIES AND TIME CONSTRAINTS:

Possible active Bald Eagle nest (5T) - 3/1 to 6/1; Purse seine
hook off (1K) - 7/20 to 9/30.

SUBDIVISION ECOLOGICAL CONSTRAINTS: No specific subdivision con-
straints although should treatment be required, restrict substrate
disturbance to a minimum.

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

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

OILING CATEGORIZATION:

Wide 0 m: Medium 0 m: Narrow 0 m: V.Light 228m: No Oil 2076m
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 BA-4 (A) due to only very
light, sporadic oiling being observed. Please review Field
Shoreline Comment Sheet.

TAG COMMENTS:

TAG APPROVAL DATE: 4-6-90

ADEC JOHN BAUER John Bauer

EXXON ANDY BR Andy Br

NOAA Burl Wescott Burl Wescott

USCG G.A. REITER G.A. Reiter

FOSC:

DATE: 4-19-90

BA-0

BA-4-A

BA-4-A

BA-1-F

3 of 10

↓ PWS 112a

XXXX Wide

//// Medium

--- Narrow

TTTT Very Light

0000 No Oil

BA-1

ADEC Segment Length: 13318m



METERS

Map Key: PWS-1100

Name: McBride

Date: 3-31-90

Data Entered:



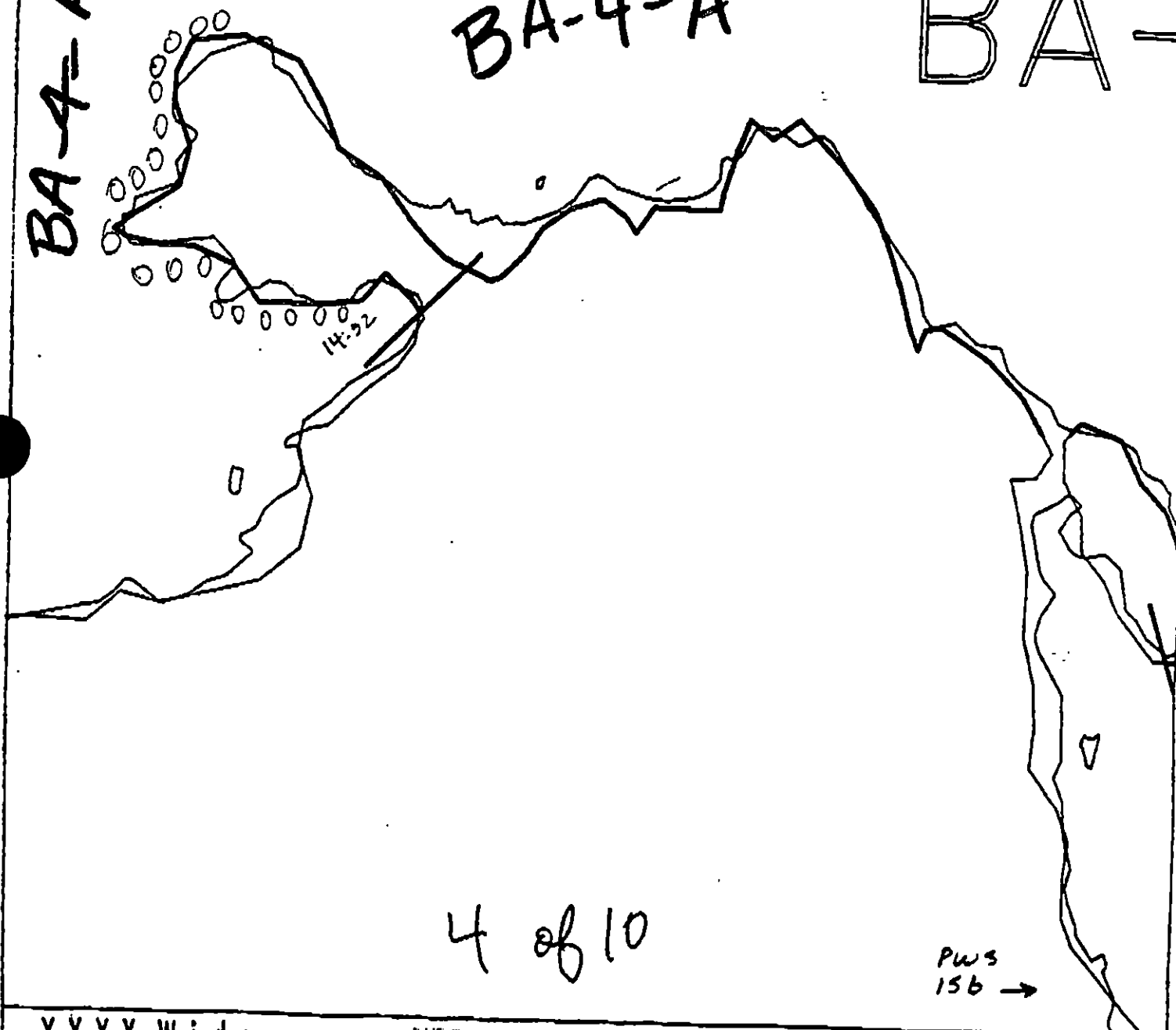
Note:

continued!

BA-4-A

BA-4-A

BA-



4 of 10

PWS
15b →

XXXX Wide

//// Medium

--- Narrow

TTTT Very Light

0000 No Oil

BA-4

ADEC Segment Length: 2284m



Map Key: PWS-15a

Name: Randy McBride

Date: 3/31/90

Data Entered:

SHORELINE EVALUATION

SEGMENT ST/ BA-01 SUBDIVISION B (2 OF 6) DATE 4/1/90

SEGMENT ENVIRONMENTAL SENSITIVITIES AND TIME CONSTRAINTS:

Two bald eagle nests (5T) - 3/1 to 6/1; Salmon stream mouth (nos. 16446, 16442, 16414, 16372, 16369); Outmigration (1A) - 3/1 to 5/15 and spawning (1B) - 7/10 to 8/15; Finfish subsistence harvesting (7HH) - Consult ADF&G and Chenega Bay for appropriate dates.

SUBDIVISION ECOLOGICAL CONSTRAINTS: No disturbance of stream beds or banks unless authorized by ADF&G. Contact ADF&G Habitat Division prior to treatment for permits. Re: bald eagle nests, restrict air traffic to essential minimum. Air approach and takeoff from and to seaward only. Contact USFWS prior to treatment for confirmation of dates and avoidance minimums.

ARC ARCHAEOLOGICAL CONSTRAINTS: Consultation and ~~at re-~~
~~son~~ inspection with an Exxon archaeologist is required
prior to treatment. Specific on-site monitoring
requirements will be determined at that time.

SHPO SIGNATURE: Charles E. Hume DATE: April 14, 1990

OILING CATEGORIZATION:

Wide 0 m: Medium 0 m: Narrow 0 m: V.Light 2020m: No Oil 0 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:

TAG COMMENTS: CHECK FOR OILED DEBRIS/TRASH

TAG APPROVAL DATE: 4/13/90
ADEC John Bauer
EXXON Andy Tate FOSC: DATE: 4-20-90
NOAA Bob Wescott
USCG G.A. Kelter

OG McBride

SEGMENT ST/ BA-1

SUBDIVISION B

DATE 3 / 31 90

CHECKLIST

- ☒ N Arrow
- ☒ Approx. Scale
- ☒ Seg/Sub Bndry
- ☒ L-Off Dist.
- ☒ Width
- ☒ Length
- ☒ % Cover
- ☒ Substrate Character
- ☒ Est. H₂O/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

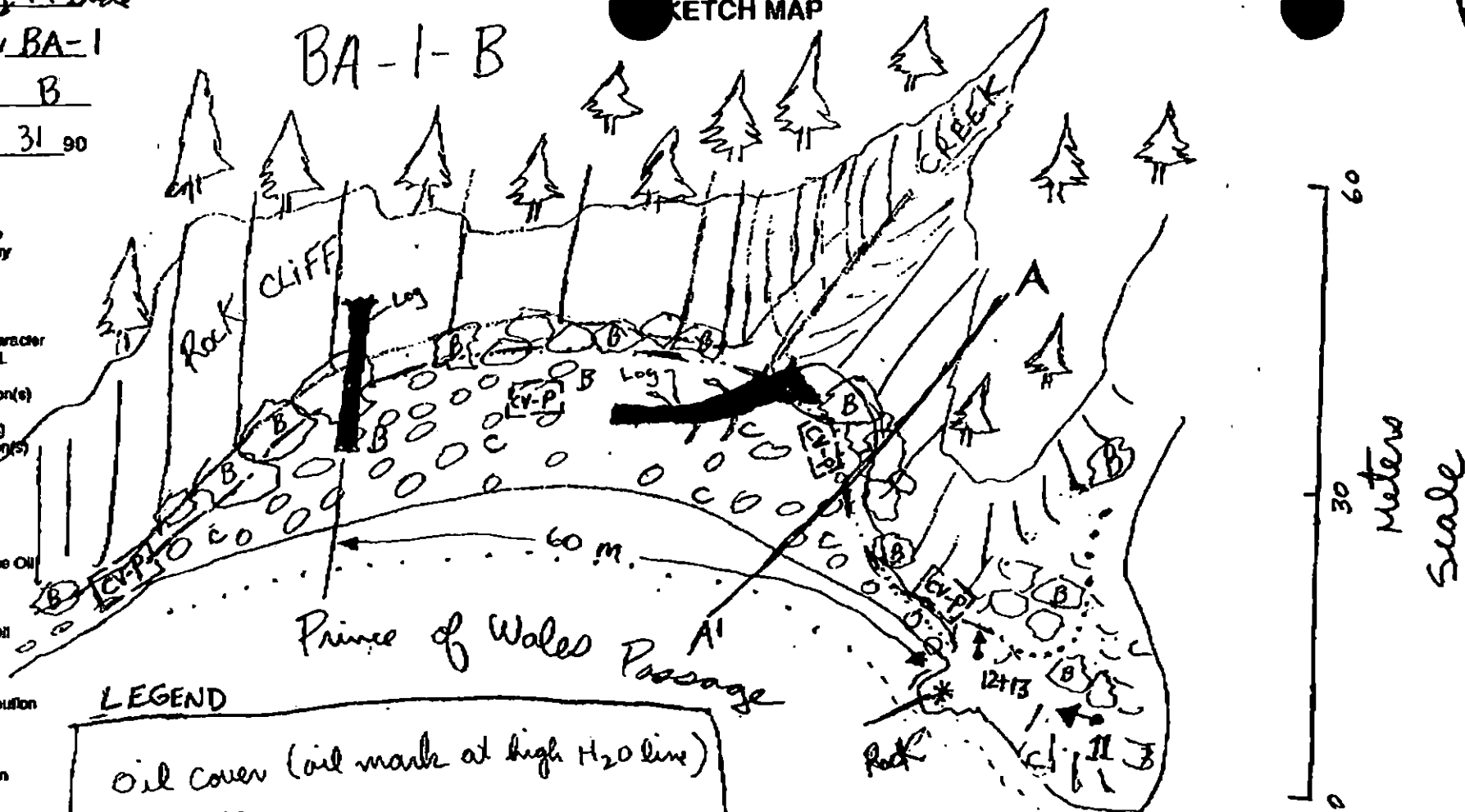
CT/P
Patched Distribution

CT/S
Splashed Distribution

Oiled Vegetation

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

SKETCH MAP



LEGEND

Oil cover (oil mark at high H₂O line)

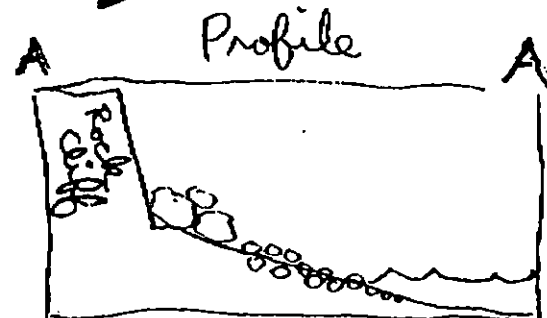
width - 15 cm

length - ~100 m patchy

% cover - < 5%

Note: No Pits!

N 23° E
353° (true)



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

REVISION 01/24/90

or Randy McBride

STATION ST/BA-1

SUBDIVISION B

DATE 3 / 31 90

CHECKLIST

- ☒ N Arrow
- ☒ Approx. Scale
- ☒ Seg/Sub Bdry
- ☒ Oil Dist.
- ☒ Width
- ☒ Length
- ☒ Cover
- ☒ Substrate Character
- ☒ Est. H₂O/LWL
- ☒ SSL
- ☒ Profile Location(s)
- ☒ Profile(s)
- ☒ P/L 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

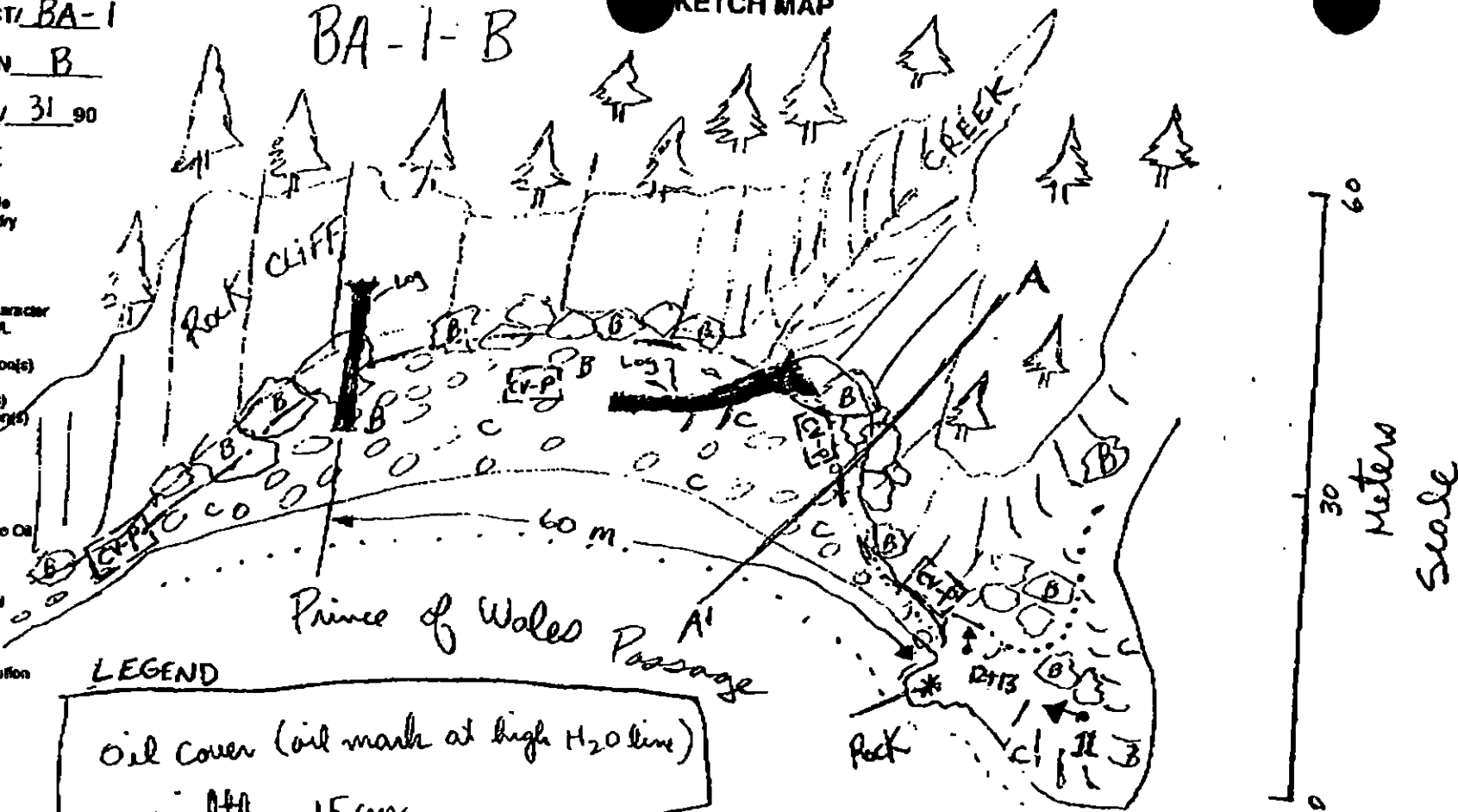
CT/S
Splashed Distribution

Dyed Vegetation

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

SKETCH MAP

BA-1-B



LEGEND

Oil cover (oil mark at high H₂O line)

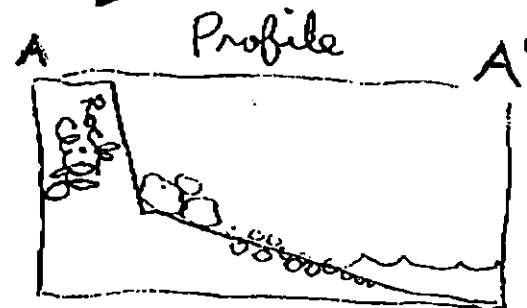
width - 15 cm

length - ~100 m patchy

% cover - < 5%

Note: No Pits!

N 23° E
353' (true)



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

REVISION: 03/24/88

↑
PWS
11AA

Bainbridge
Island

Anadromous
fish stream

12:28

BA-1-F

NARROW

BA-1-E

BA-1
D

↓ PWS 11S

Prince of Wales Passage

XXXX Wide

//// Medium

--- Narrow

TTTT Very Light

OOOO No Oil

BA-1

ADEC Segment Length: 13318m



Map Key: PWS-11v --

Name: Randy McBrade

Date: 3/3/90

Data Entered: (34)

↑ PWS
11ee

BA-1-F

↓ PWS
11w

PWS
1188 →

XXXX Wide

//// Medium

---- Narrow

TTTT Very Light

0000 No Oil

BA-1

ADEC Segment Length: 13318m

0 100 200 300

Map Key: PWS-11ee

Name: _____

Date: _____

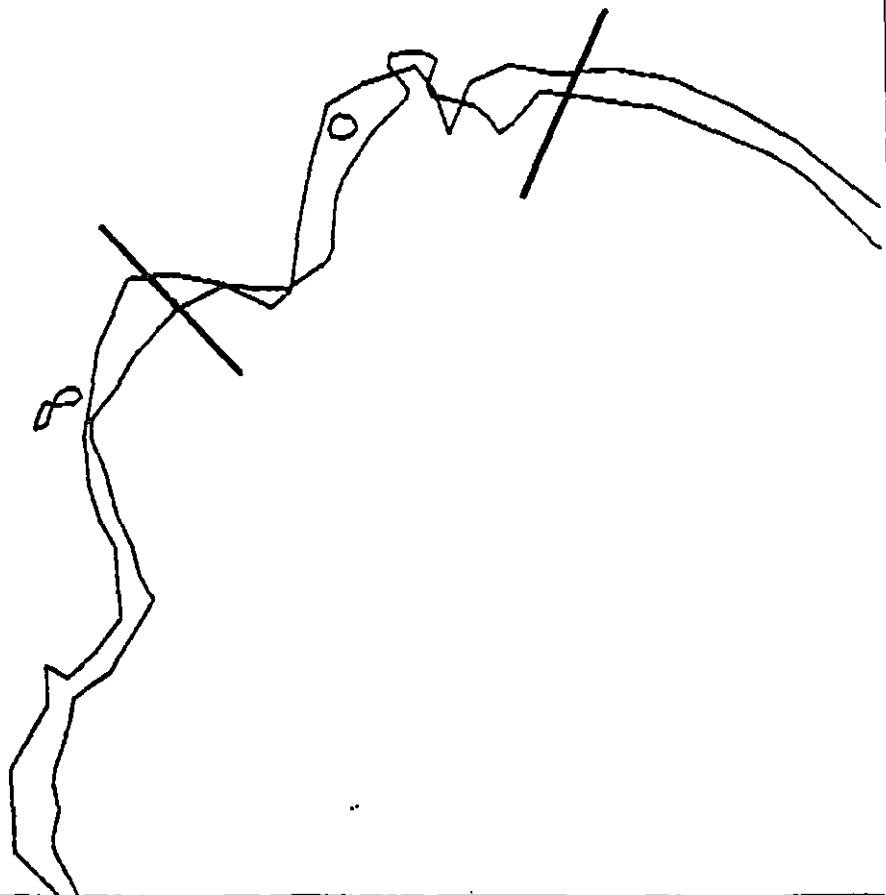
Date Entered: 73

BA-1-F

PRINCE OF WALES
Passage

FL-1

← PWS
11AA



XXXX Wide

//// Medium

--- Narrow

TTTT Very Light

BA-1

ADEC Segment Length: 13318m

Map Key: PWS-11bb

Name: _____

Date: _____

*Bambridge
Island*

BA-1-D

PWS
11S →

PWS 11N
↓

XXXX Wide

//// Medium

--- Narrow

TTTT Very Light

BA-1

ADEC Segment Length: 13318m

0 100 200 300

Map Key: PWS-11r -

Name: *Randy McBride*

Date: *3/31/90*

Date Entered: *(71)*

↑ PWS
11W

Bainbridge
Island

BA-1-D

Prince of Wales Passage

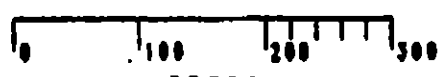
0000 PWS
11R

↓ PWS 110

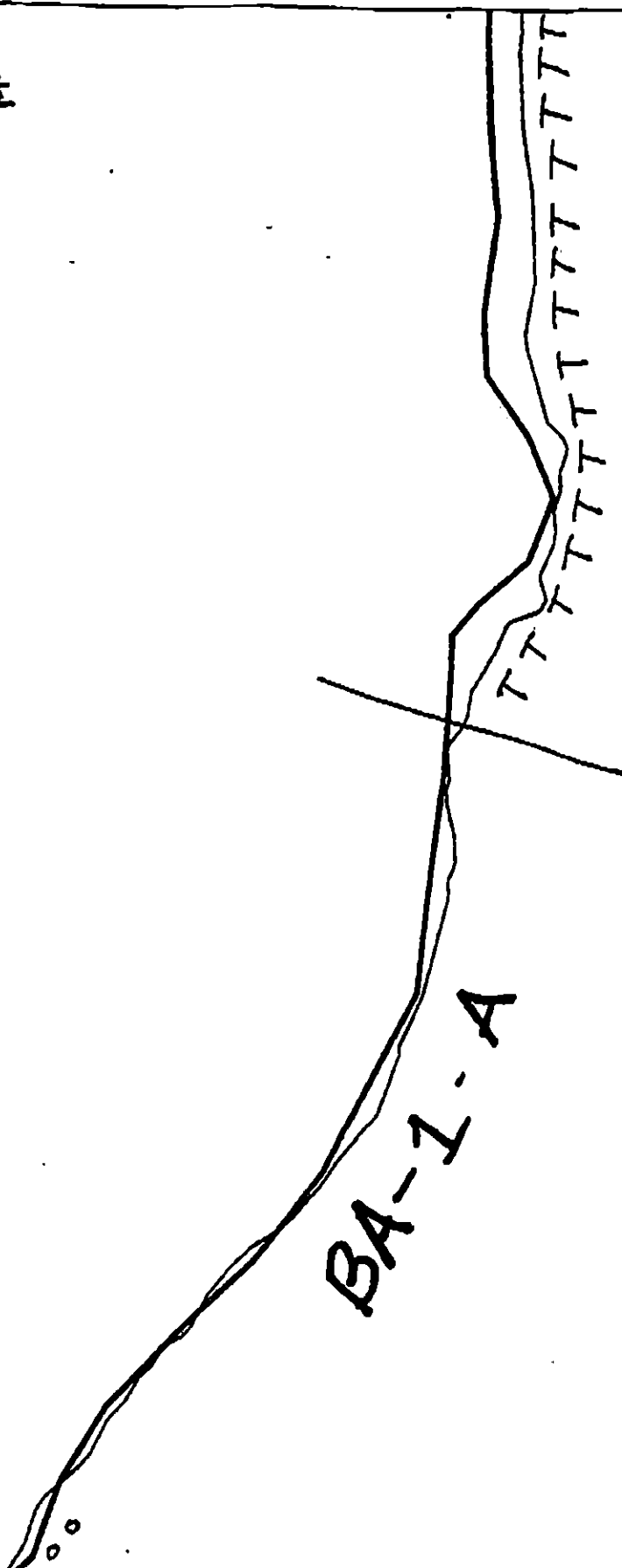
XXXX Wide
 /// Medium
 --- Narrow
 TTTT Very Light
 0000 No Oil

BA-1

ADEC Segment Length: 13318m



Map Key: PWS-11
 Name: Randy McBride
 Date: 3/31/90
 Data Entered: (72)



↑ PWS 11N

BA-1-B

BA-

Prince of Wales
Passage

BA-1-A

↓ PWS 11F

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

BA-1

ADEC Segment Length: 13318m

Map Key: PWS-11j

Name: Randy McBride

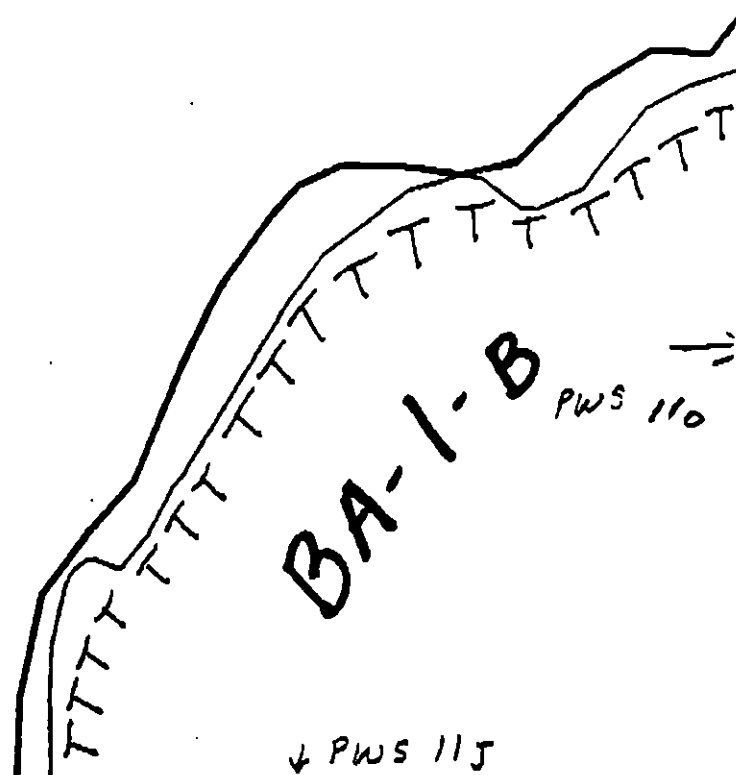
Date: 3/31/90

↑ PWS 11R

BA-1-D

BA-1-C

Bainbridge Island



XXXX Wide

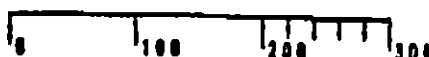
//// Medium

--- Narrow

TTTT Very Light

BA-1

ADEC Segment Length: 13318m



Map Key: PWS-11n

Name: Randy McBride

Date: 3/31/90

↑ PWS 115

BA-1-C

BA-1-B

← PWS 11n

BA-1

XXX Wide

//// Medium

--- Narrow

TTTT Very Light

ADEC Segment Length: 13318m



Map Key: PWS-110

Name: Randy McBride

Date: 3/31/90

SHORELINE EVALUATION

SEGMENT ST/ BA-01 SUBDIVISION C (3 OF 6) DATE 4/1/90

SEGMENT ENVIRONMENTAL SENSITIVITIES AND TIME CONSTRAINTS:

Two bald eagle nests (5T) - 3/1 to 6/1; Salmon stream mouth (nos. 16446, 16442, 16414, 16372, 16369); Outmigration (1A) - 3/1 to 5/15 and spawning (1B) - 7/10 to 8/15; Finfish subsistence harvesting (7HH) - Consult ADF&G and Chenega Bay for appropriate dates.

SUBDIVISION ECOLOGICAL CONSTRAINTS: No disturbance of stream beds or banks unless authorized by ADF&G. Contact ADF&G Habitat Division and Chenega Village Corp. prior to treatment for permits.

ARCHAEOLOGICAL CONSTRAINTS: An Exxon archaeological monitor is required on-site during shoreline treatment.

SHPO SIGNATURE: Charles H. Hume DATE: April 14, 1990

OILING CATEGORIZATION:

Wide 0 m: Medium 235 m: Narrow 111 m: V.Light 101 m: No Oil 0 m
Subsurface Oil Observed: Yes X No Maximum Depth 12 cm

RECOMMENDATIONS:

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

COMMENTS: Breakup and Removal of tarmats as shown on sketch map. Bioremediate cover and coat areas shown on map. Work to be performed between 6/1 and 7/10 based on constraints.

TAG COMMENTS:

TAG APPROVAL DATE: 4/13/90

ADEC JOHN BAUER John Bauer
EXXON ANDY TEE Andy Tee FOSC: DATE: 4-20-90
NOAA Burt Waroff Burt Waroff
USCG G.A. REITER G.A. Reiter

OG Kandy M. Mace

SEG ST/ BA-1

SUBDIVISION C

DATE 3/31/90

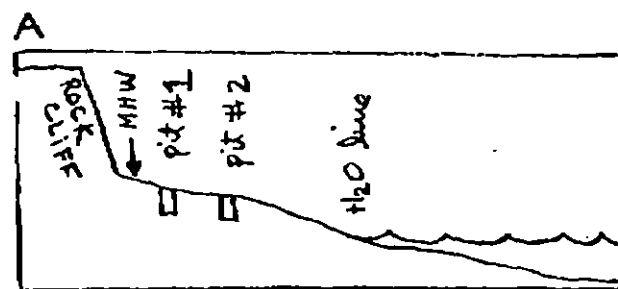
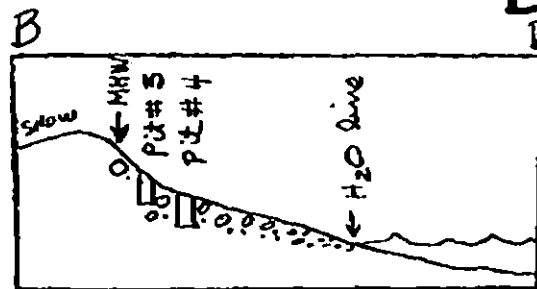
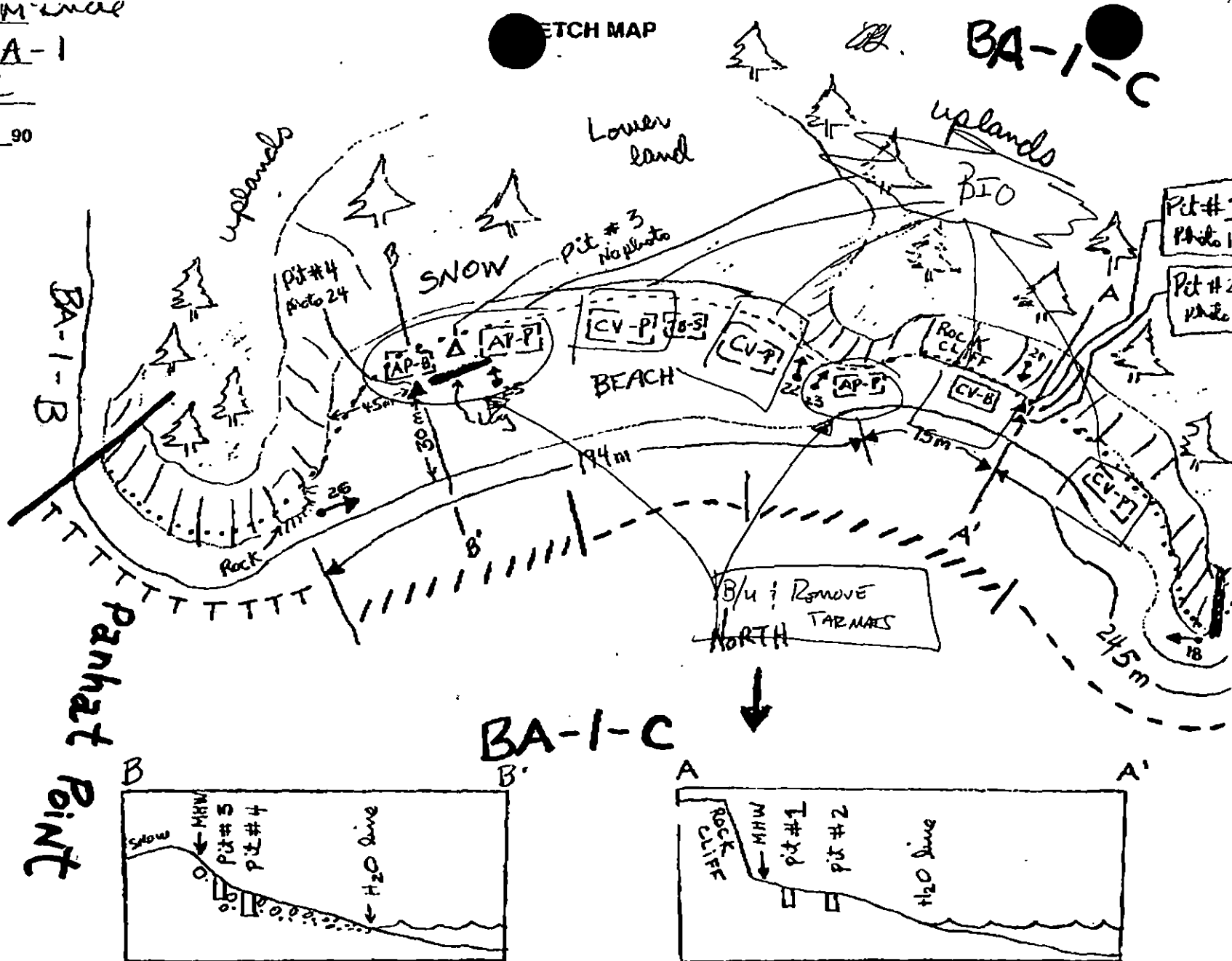
CHECKLIST

- ☒ Narrow
- ☒ Approx. Scale
- ☒ Seg/Sub Bndry
- ☒ Oil Dist.
- ☒ Width
- ☒ Length
- ☒ % Cover
- ☒ Substrate Character
- ☒ Est. HVM/LVL
- ☒ 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
Patching Distribution
- CT/S
Splashed Distribution
- Oiled Vegetation
- Photo location, direction, and number

ETCH MAP



Oil Character Length (m): AP 190 PO 100 CV 100 CT 156 ST 25 MS 50 FL NO

REVISION: 02/2000

APR-01-1990 13:15 FROM PWSH X

TO 1H-----0013075643771H

P. 13

↑
PWS
11 A A

Bainbridge Island

Anchorage
fuel station

12:28

BA-1-F

Prince of Wales Passage

NARROW

BA-1-E

BA-1
D

↓ PWS 11S

XXXX Wide

//// Medium

--- Narrow

TTTT Very Light

OOOO No Oil

BA-1

ADEC Segment Length: 13318m



Map Key: PWS-11v --

Name: Randy McBride

Date: 3/3/90

Data Entered: 34

↑ PWS
11ce

BA-1-F

↓ PWS
11w

PWS
11BB →

XXXX Wide

//// Medium

--- Narrow

TTTT Very light

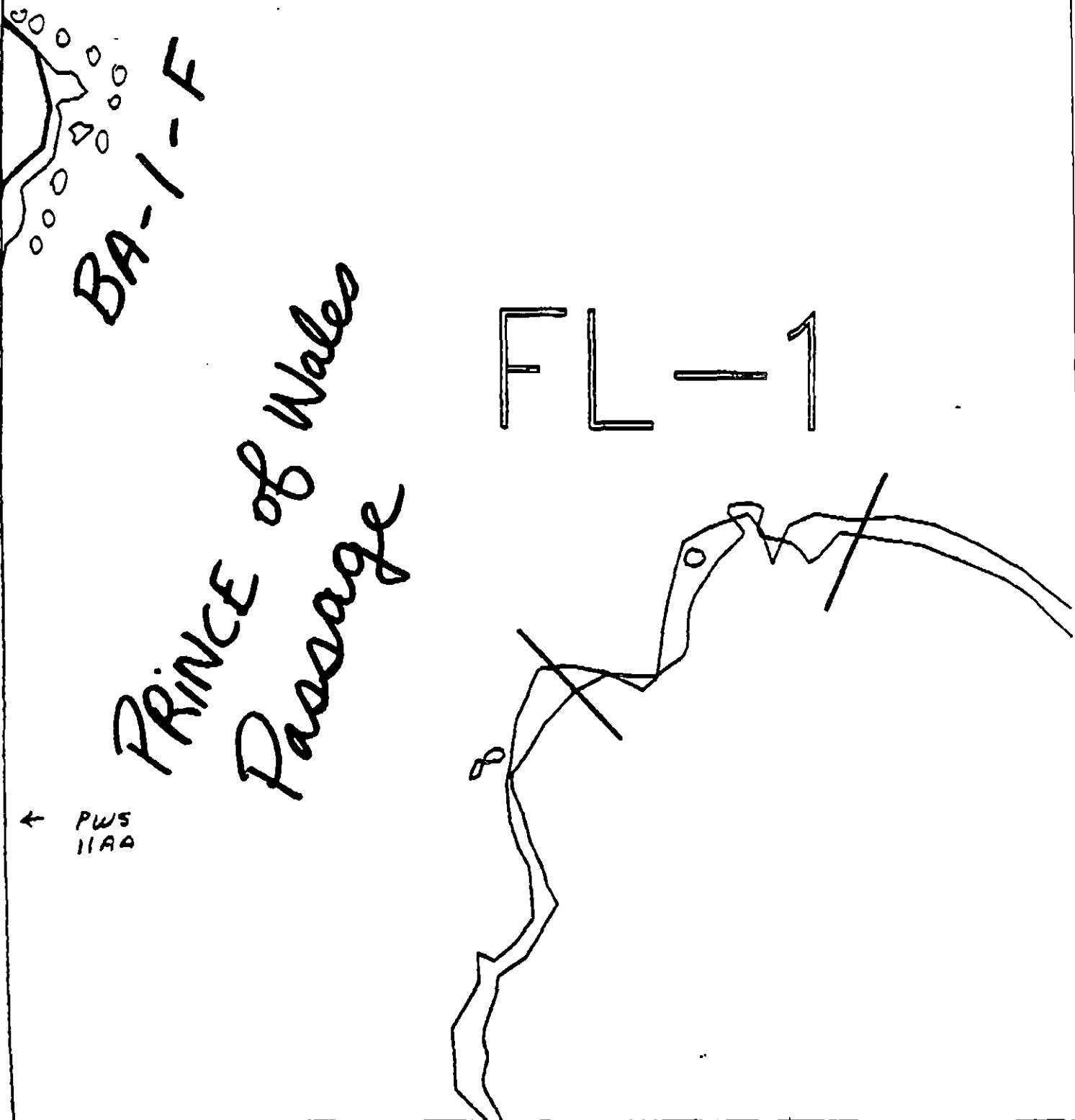
BA-1

ADEC Segment Length: 13318m

Map Key: PWS-11aa

Name: _____

Date: _____



XXXX Wide

//// Medium

---- Narrow

TTTT Very Light

BA-1

ADEC Segment Length: 13318m



Map Key: PWS-11bb

Name: _____

Date: _____

*Bambridge
Island*

BA-1-D

PWS
115 -

PWS 11N
↓

XXXX Wide

//// Medium

--- Narrow

TTT

BA-1

ADEC Segment Length: 13318m

Map Key: PWS-11r -

Name: *Randy McBry*

Date: *3/31/90*

↑ PWS
11WBainbridge
Island

BA-1-D

Prince of Wales Passage

PWS
11R

↓ PWS 110

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

BA-1

ADEC Segment Length: 13318m

0 100 200 300
METERS

Map Key: PWS-11s
Name: Randy McBride
Date: 3/31/90
Date Entered: 22

↑ PWS 11N

BA-1-B

BA -

Prince of Wales
Passage

BA-1-A

↓ PWS 11F

XXXX Wide

//// Medium

--- Narrow

TTTT Very Light

BA-1

ADEC Segment Length: 13318m

Map Key: PWS-111

Name: Randy McBride

Date: 3/31/90

8

↑ PWS 11R

BA-1-D

BA-1-C

Rainbridge Island

BA-1-B

PWS 110

↓ PWS 11J

XXXX Wide

//// Medium

---- Narrow

TTTT Very Light

BA-1

ADEC Segment Length: 13318m

Map Key: PWS-11a

Name: *Randy McBride*

Date: *3/31/90*



PWS 115

BA-1-C

BA-1-B

PWS
115

BA-1

XXXX Wide

/// Medium

--- Narrow

TTTT Very Light

0000 No Oil

ADEC Segment Length: 13518m



Map Key: PWS-110

Name: Randy McBride

Date: 3/31/90

Data Entered: (Signature)

SHORELINE EVALUATION

SEGMENT ST/ BA-01 SUBDIVISION D (4 OF 6) DATE 4/1/90

SEGMENT ENVIRONMENTAL SENSITIVITIES AND TIME CONSTRAINTS:

Two bald eagle nests (5T) - 3/1 to 6/1; Salmon stream mouth (nos. 16446, 16442, 16414, 16372, 16369); Outmigration (1A) - 3/1 to 5/15 and spawning (1B) - 7/10 to 8/15; Finfish subsistence harvesting (7HH) - Consult ADF&G and Chenega Bay for appropriate dates.

SUBDIVISION ECOLOGICAL CONSTRAINTS: No disturbance of stream beds or banks unless authorized by ADF&G. Contact ADF&G Habitat Division prior to treatment for permits.

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

SHPO SIGNATURE: Charles E. Holmes DATE: April 14, 1990

OILING CATEGORIZATION:

Wide 0 m: Medium 0 m: Narrow 0 m: V.Light 0 m: No Oil 2419 m
Subsurface Oil Observed: Yes No X Maximum Depth

RECOMMENDATIONS:

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

COMMENTS:

TAG COMMENTS:

TAG APPROVAL DATE: 4/13/90
ADEC JOHN BANERZ
EXXON ANDY TATE FOSC: My L DATE: 4-20-90
NOAA Burt Wescott
USCG G.A. REITER

↑
PWS
lee

BA-1-E

↓ PW3
11 W

PWS
1188 →

XXXX Wide

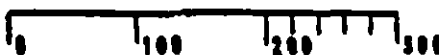
//// Medium

----- Narrow

TTTT Very Light

BA-1

ADEC Segment Length: 13318m



Map Key: PWS-1100

Name: _____

Date: _____

Ref. Page. (72)

BA-1-F

PRINCE of Wales
Passage

FL-1

← PWS
11AA

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

BA-1

ADEC Segment Length: 13318m

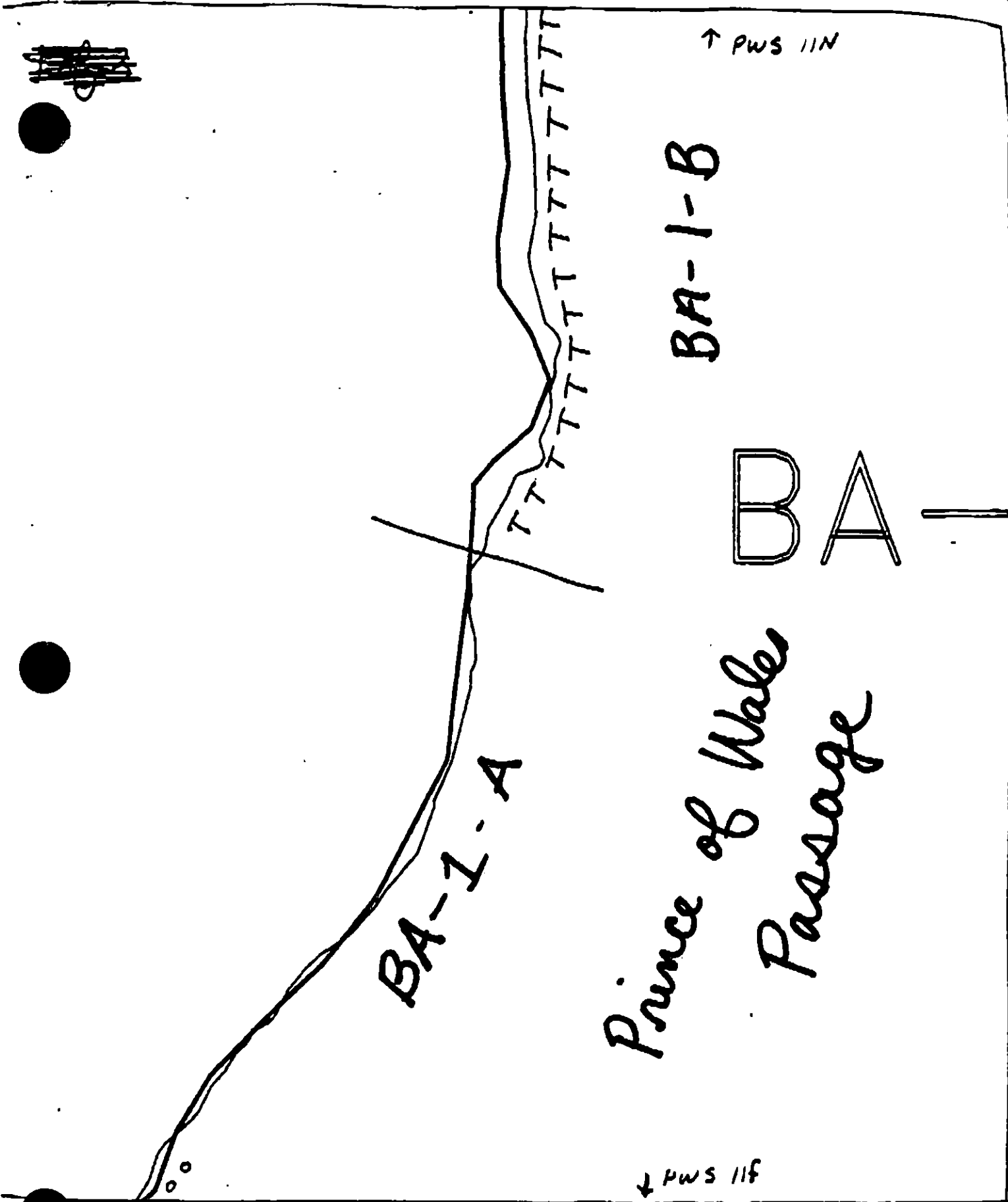
0 100 200 300

Map Key: PWS-11bb

Name: _____

Date: _____

Date Entered: 11



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

BA-1

ADEC Segment Length: 13318m

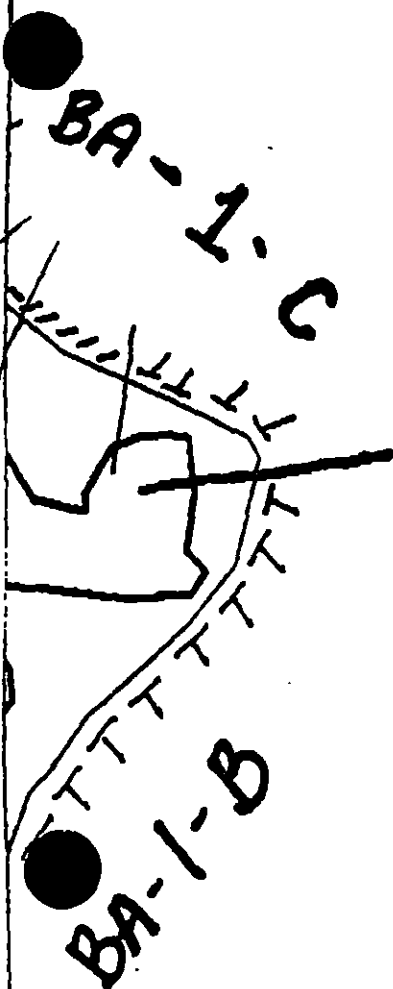
Map Key: PWS-111

Name: Randy McBride

Date: 3/31/90

8

↑ PWS 11S



XXXX Wide

BA-1

/// Medium

--- Narrow

ADEC Segment Length: 13318m

TTTT Very Light

0000 No Oil



Map Key: PWS-110 -

Name: Randy McBride

Date: 3/31/90

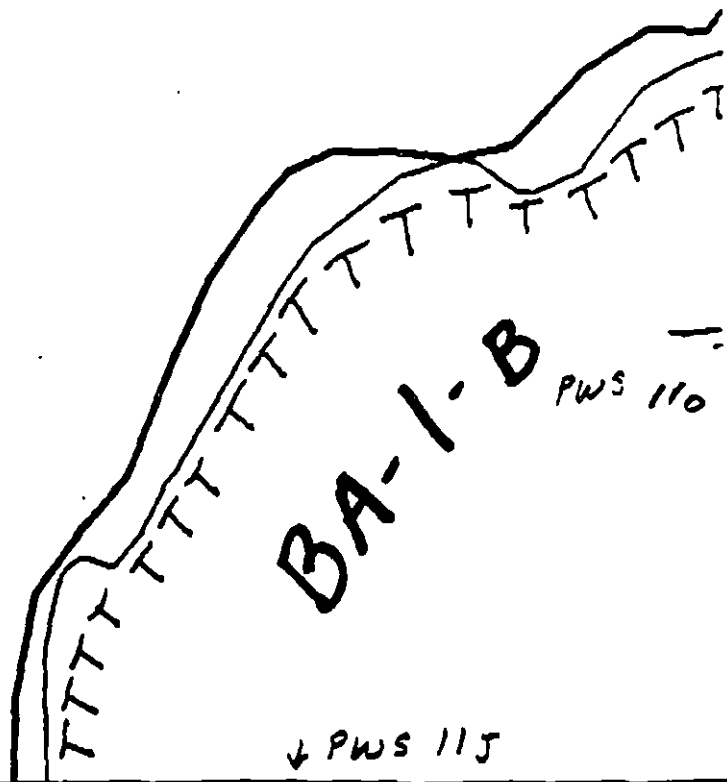
Date Entered: RL

Bainbridge Island

↑ PWS 11R

BA-1-D

BA-1-C



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

BA-1

ADEC Segment Length: 13318m



Map Key: PWS-11a
Name: Randy McBride
Date: 3/31/90
Data Entered: (15)

Bainbridge Island

BA-1-D

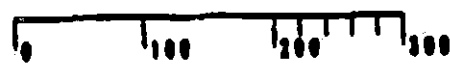
PWS
11S -

PWS 11N
↓

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

BA-1

ADEC Segment Length: 13318m



Map Key: PWS-11r
 Name: *Randy McB...*
 Date: *3/31/90*
 Date Entered: *(71)*

↑ PWS
11WBainbridge
Island

BA-1-D

Prince of Wales Passage

O O O O PWS
11R

↓ PWS 110

XXXX Wide

//// Medium

---- Narrow

TTTT Very Light

0000 No Oil

BA-1

ADEC Segment Length: 13318m

0 100 200 300
METERS

Map Key: PWS-11

Name: Randy McBrideDate: 3/31/90Date Entered: (22)

↑
PWS
11A A

Bainbridge
Island

Anderson
field station

12:28

BA-1-F

NARROW

BA-1-E

BA-1
D

↓ PWS 115

XXXX Wide

//// Medium

---- Narrow

TTTT Very Light

OOOO No Oil

BA-1

ADEC Segment Length: 13318m

0 100 200 300
METERS

Map Key: PWS-11v --

Name: Randy McBride

Date: 3/3/90

Date Entered: 34

SHORELINE EVALUATION

SEGMENT ST/ BA-01 SUBDIVISION E (5 OF 6) DATE 4/1/90

SEGMENT ENVIRONMENTAL SENSITIVITIES AND TIME CONSTRAINTS:

Two bald eagle nests (5T) - 3/1 to 6/1; Salmon stream mouth (nos. 16446, 16442, 16414, 16372, 16369); Outmigration (1A) - 3/1 to 5/15 and spawning (1B) - 7/10 to 8/15; Finfish subsistence harvesting (7HH) - Consult ADF&G and Chenega Bay for appropriate dates.

SUBDIVISION ECOLOGICAL CONSTRAINTS: No disturbance of stream beds or banks unless authorized by ADF&G. Contact ADF&G Habitat Division and Chenega Village Corp. prior to treatment for permits.

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 Hoffmann DATE: April 14, 1990

OILING CATEGORIZATION:

Wide 0 m: Medium 0 m: Narrow 476 m: V.Light 0 m: No Oil 0 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> </u> Tarmat: <u> </u> Breakup	<u> </u> Beach Cleaner
<u> </u> Removal	<u> </u> Other (see comments)

COMMENTS: Bioremediation of surface oil as shown on sketch map.
CHECK FOR TAR PARTIES AND PICKUP

TAG COMMENTS:

TAG APPROVAL DATE: 4/13/90.
ADEC JOHN BAUER
EXXON ANDY TATE
NOAA Burt Wesscott
USCG G.A. REITER

FOSC: DATE: 4-20-90

OG Randy McBride

SEGMENT SA-1

SUBDIVISION E

DATE 3/31/90

CHECKLIST

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

LEGEND

1 ▲

Pit - No Subsurface Oil

2 ▲

Pit - Subsurface Oil

CT/C

Continuous Distribution

CT/B

Broken Distribution

CT/P

Patchy Distribution

CT/S

Splashed Distribution

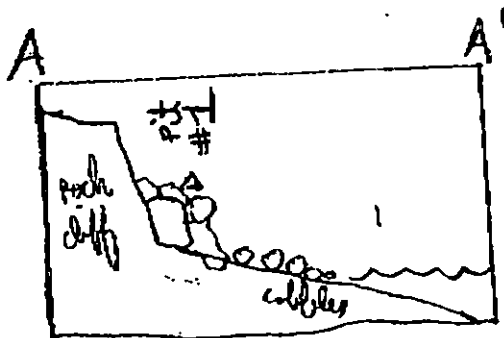
Oiled Vegetation

1 →

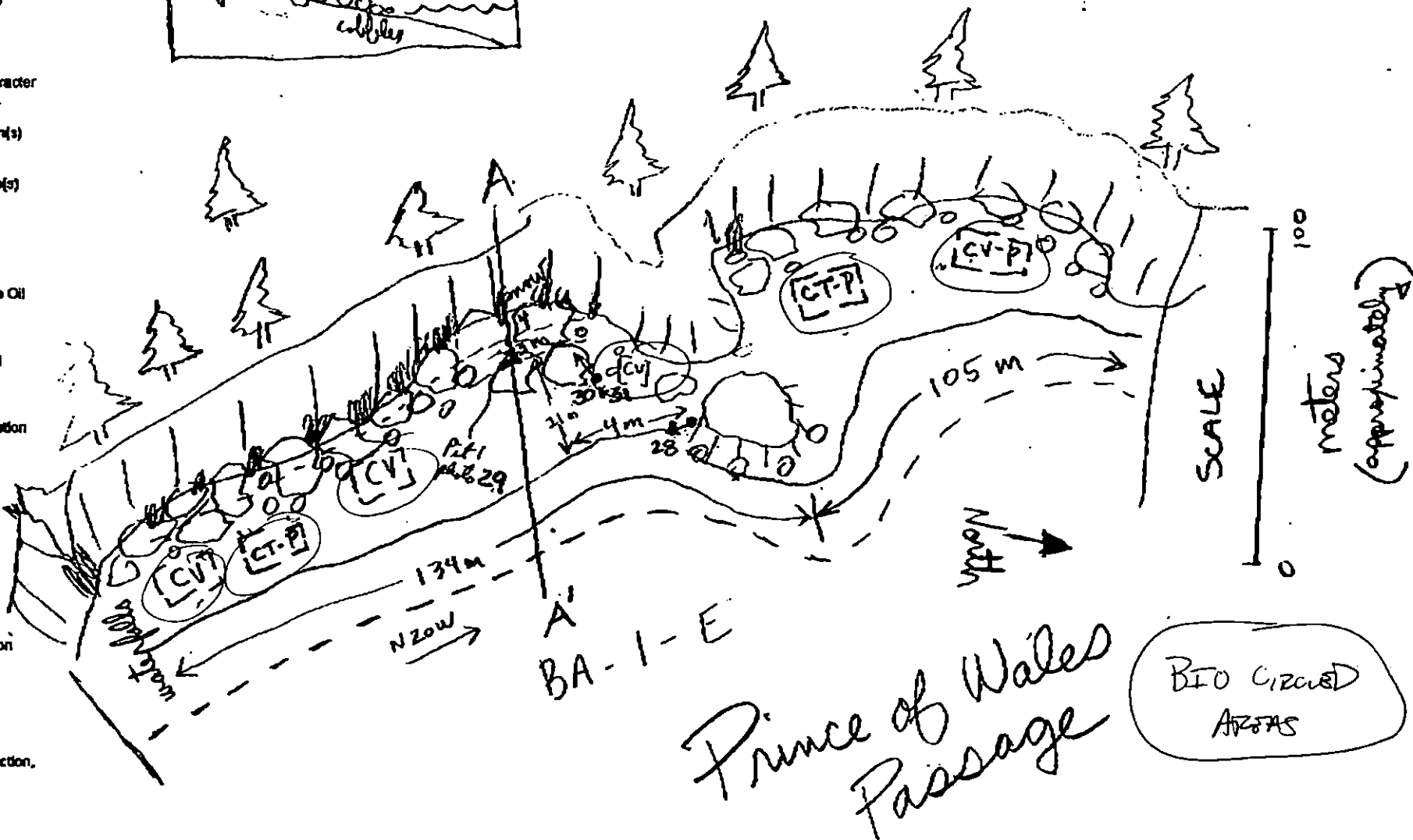
Photo location, direction, and number



SEARCH MAP



* 2.80 meters oil band - patchy coat and cover of narrow oiling



Oil Character Length (m): AP _____ PO _____ CV 239 CT 239 ST _____ MS _____ PT _____ TB _____ FL _____ NO _____

REVISION: 03/04/90

OG Randy McBride

SEGMENT ST/ BA-1

SUBDIVISION E

DATE 3/31/90

CHECKLIST

- ☒ N Arrow
- ☒ Approx. Scale
- ☒ Seg/Sub Entry
- ☒ Oil Dist.
- ☒ Width
- ☒ Length
- ☒ % Cover
- ☒ Substrate Character
- ☒ Est. H/W/L/V/L
- ☒ SSL
- ☒ Profile Location(s)
- ☒ Photo Location(s)
- ☒ Photo Location(s)

LEGEND

1 Δ

PII - No Subsurface Oil

2 Δ

PII - Subsurface Oil

CT/C

Continuous Distribution

CT/B

Broken Distribution

CT/P

Patchy Distribution

CT/S

Splashed Distribution

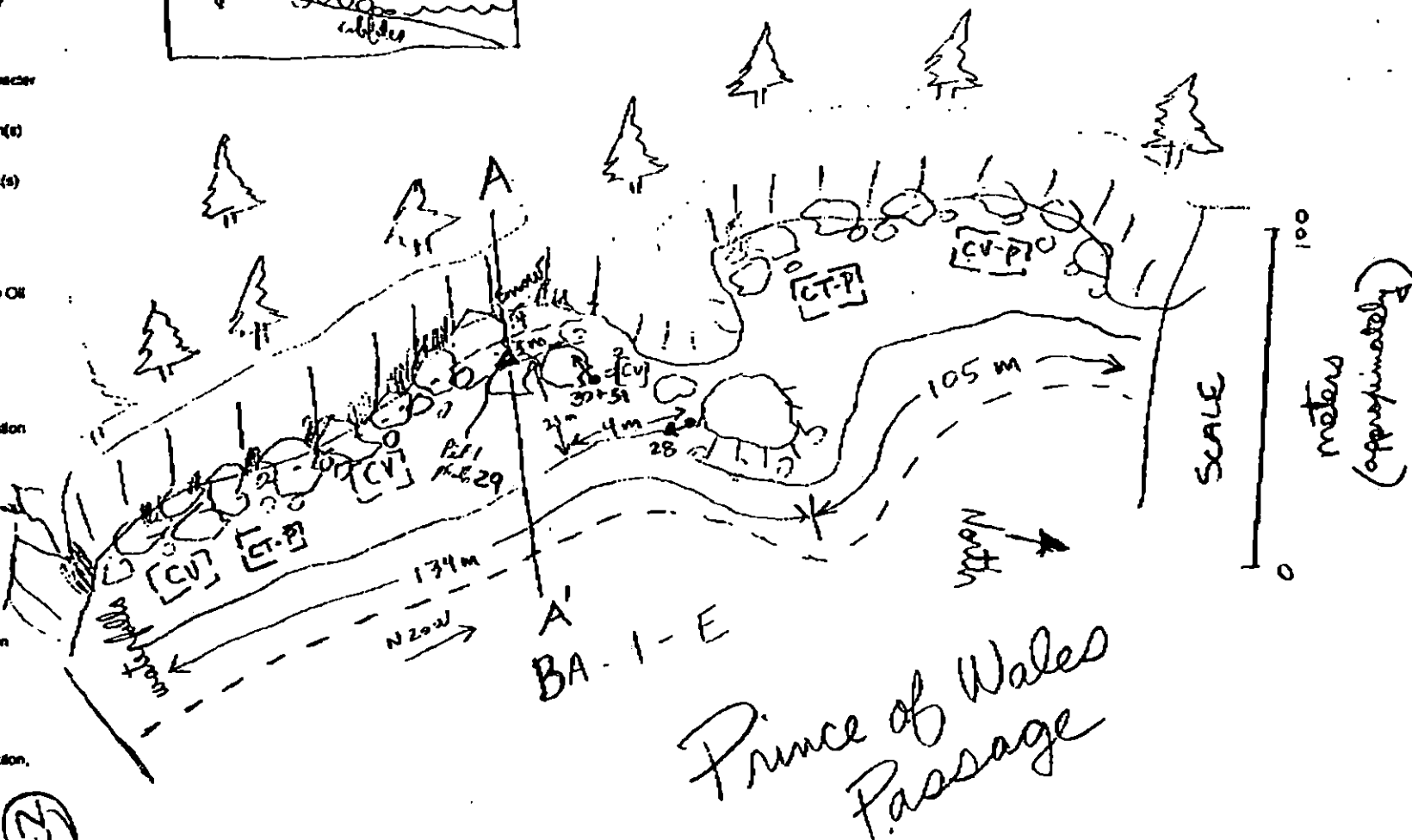
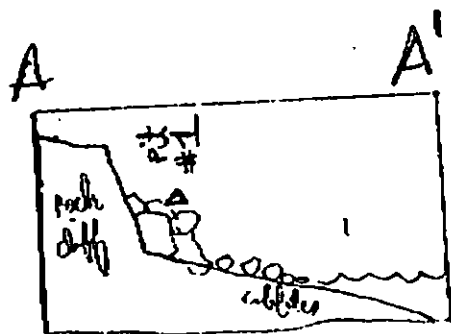
Oiled Vegetation

1 →

Photo location, direction,
and number

SKETCH MAP

* 2.80 meters oil band - patchy coat and
cover of narrow oiling



↑
PWS
11 A A

12:28

Bainbridge Island

Anderson
field station

BA-1-F

Prince of Wales Passage

NARROW

BA-1-E

BA-1
D

↓ PWS 11S

XXXX Wide

/// Medium

--- Narrow

TTTT Very Light

OOOO No Oil

BA-1

ADEC Segment Length: 13318m



Map Key: PWS-11v --
Name: Randy McBride
Date: 3/3/90
Data Entered: 34

↑ PWS
11ee

BA-1-F

↓ PWS
11w

PWS
11BB -

XXXX Wide

//// Medium

--- Narrow

TTTT Very Light

BA-1

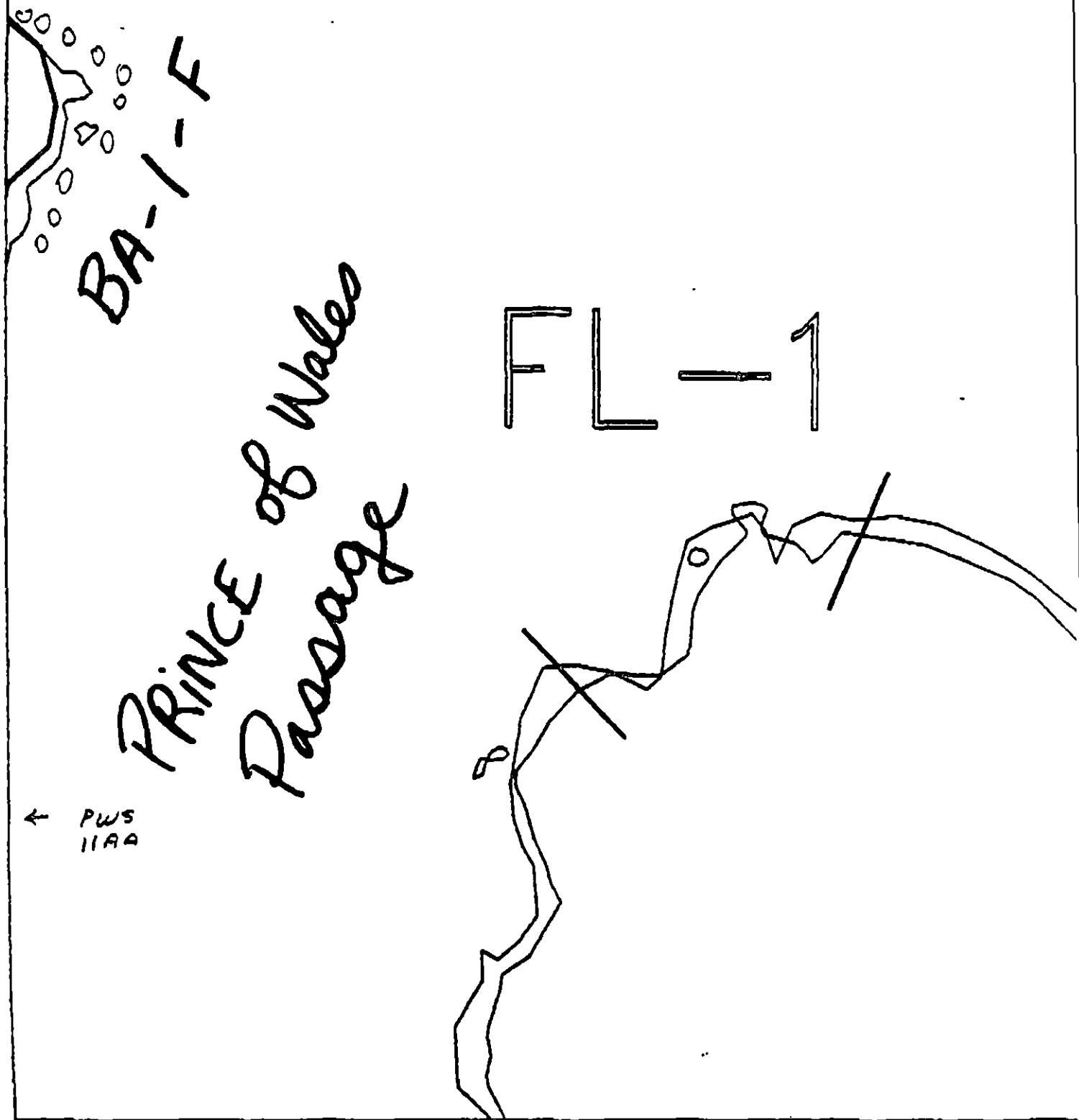
ADEC Segment Length: 13318m

Map Key: PWS-1100

Name: _____

Date: _____

0 100 200 300



XXXX Wide

//// Medium

---- Narrow

TTTT Very Light

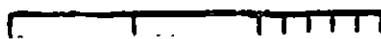
BA-1

ADEC Segment Length: 13318m

Map Key: PWS-11bb

Name: _____

Date: _____



Bainbridge
Island

BA-1-D

PWS
112 -

PWS 11N

XXXX Wide

//// Medium

--- Narrow

TTTT Very Light

BA-1

ADEC Segment Length: 13318m

Map Key: PWS-11r

Name: Randy McBri

Date: 3/31/90



↑ PWS
11w

Bainbridge
Island

BA-1-D

Prince of Wales Passage

← PWS
11R

↓ PWS 110

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

BA-1

ADEC Segment Length: 13318m



Map Key: PWS-11a
 Name: Randy McBris
 Date: 3/31/90
 Date Entered: 22

↑ PWS 11N

BA-1-B

BA -

Prince of Wales
Passage

BA-1-A

↓ PWS 11F

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

BA-1

ADEC Segment Length: 13318m

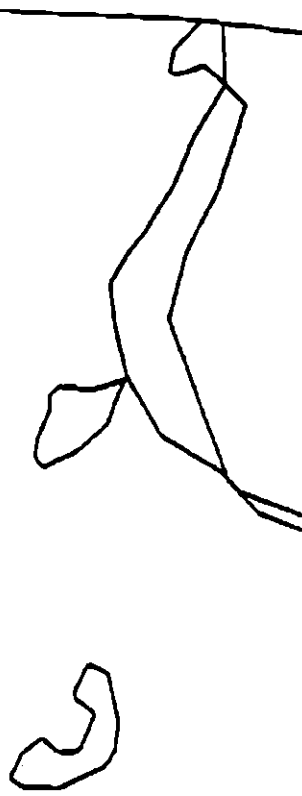
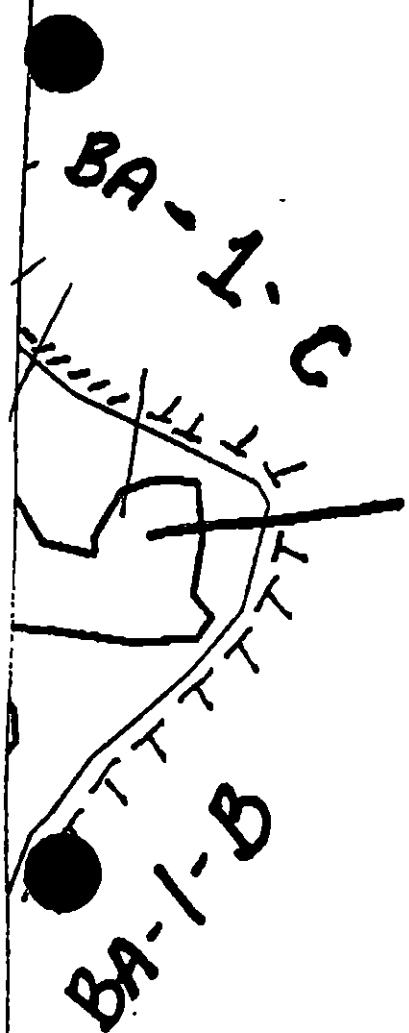
Map Key: PWS-111

Name: Randy McBride

Date: 3/31/90

8

↑ PWS 11S



● XXX Wide
 /// Medium
 --- Narrow
 TTTT Very Light
 OOOO No

BA-1

ADEC Segment Length: 13318m



Map Key: PWS-110
 Name: Randy McBride
 Date: 3/31/90

↑ PWS 11R

BA-1-D

BA-1-C

Bainbridge
Island

BA-1-B

PWS 110

↓ PWS 11J

XXXX Wide

//// Medium

---- Narrow

TTTT Very Light

0000 No Oil

BA-1

ADEC Segment Length: 13318m



Map Key: PWS-11a

Name: Randy McBrideDate: 3/31/90Data Entered: (15)

SHORELINE EVALUATION

SEGMENT ST/ BA-01 SUBDIVISION F (6 OF 6) DATE 4/1/90

SEGMENT ENVIRONMENTAL SENSITIVITIES AND TIME CONSTRAINTS:

Two bald eagle nests (5T) - 3/1 to 6/1; Salmon stream mouth (nos. 16446, 16442, 16414, 16372, 16369); Outmigration (1A) - 3/1 to 5/15 and spawning (1B) - 7/10 to 8/15; Finfish subsistence harvesting (7HH) - Consult ADF&G and Chenega Bay for appropriate dates.

SUBDIVISION ECOLOGICAL CONSTRAINTS: No disturbance of stream beds or banks unless authorized by ADF&G. Contact ADF&G Habitat Division prior to treatment for permits. Re: bald eagle nests, restrict air traffic to essential minimum. Air approach and takeoff from and to seaward only. Contact USFWS prior to treatment for confirmation of dates and avoidance minimums.

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

SHPO SIGNATURE: Charles Hoffman DATE: April 14, 1990

OILING CATEGORIZATION:

Wide 0 m: Medium 0 m: Narrow 0 m: V.Light 1886m: No Oil 2350 m
Subsurface Oil Observed: Yes No X Maximum Depth

RECOMMENDATIONS:

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

COMMENTS:

TAG COMMENTS:

TAG APPROVAL DATE: 4/13/90

ADEC JOHN BAUER

EXXON ANDY TALL

NOAA Burl Wescroft

USCG G.A. REITER

FOSC: DATE: 4-20-90

↑
PWS
11AA

Bainbridge Island

Anderson
field station

12:28

BA-1-F

NARROW

BA-1-E

BA-1
D

↓ PWS 11S

Prince of Wales Passage

XXXX Wide

//// Medium

--- Narrow

TTTT Very Light

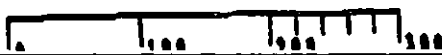
BA-1

ADEC Segment Length: 13318m

Map Key: PWS-11a

Name: Randy McBride

Date: 3/3/90



↑ PWS
11ee

BA-1-F

↓ PWS
11w

PWS
11BB →

XXXX Wide

//// Medium

--- Narrow

TTTT Very light

BA-1

ADEC Segment Length: 13318m

Map Key: PWS-11ee

Name: _____

Date: _____



XXXX Wide
//// Medium
---- Narrow
TTTT

BA-1

ADEC Segment Length: 13318m

Map Key: PWS-11bb

Name: _____

BA-0

BA-4-A

BA-4-A

BA-1-F

3 of 10

↓ PWS 11aa

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

BA-1

ADEC Segment Length: 13318m

0 100 200 300
 METERS



Map Key: PWS-11aa

Name: Randy McBride

Date: 3/31/90

Data Entered:

REGION: PRINCE WILLIAM SOUND

SEGMENT: ST/BA-02

SUBDIVISIONS: A

SHORELINE EVALUATION

SEGMENT ST/ BA-2 SUBDIVISION A* DATE 3/31/90

SEGMENT ENVIRONMENTAL SENSITIVITIES AND TIME CONSTRAINTS:

Tent sites (6U) - 6/1 to 9/5: Cataloged anadromous stream
(1B #16570) - 7/10 to 8/31.

SUBDIVISION ECOLOGICAL CONSTRAINTS: Same as above.

ARCHAEOLOGICAL CONSTRAINTS: Consultation and inspection with
an Exxon Archaeologist is required prior to treatment.
Specific onsite monitoring requirements will be determined
at that time.

SHPO SIGNATURE: _____ DATE: _____

OILING CATEGORIZATION:

0 m Wide, 246 m Medium, 54 m Narrow, 543 m V. Light, 252 m No Oil
Subsurface Oil Observed X Yes No Maximum Depth 15 cm

RECOMMENDATIONS:

 No Treatment Recommended
 X Treatment Recommended
 Manual Pickup Snare Booms/Sorbents X Tarmat Breakup/REMOVAL
 Bioremediation SPOT WASHING Other
 Wands
 Beach Cleaner

Comments: Only treatment recommended is removal of tar mats in
area indicated on attached sketch map. Work prior to 7/10/90 due
to anadromous stream constraints.

TAG COMMENTS: _____

TAG APPROVAL DATE: _____

ADEC _____
EXXON _____
NOAA _____
USCG _____

FOSC: _____ DATE: _____

*Subdivision covers entire segment

SHORELINE OILING SUMMARY

REVISION NO. 08/22/77

OG Randy McBride NOAA Gary Ott SEGMENT ST/ BA-2
 BIO Lewis Sherman LAND REP Don Breitingen SUBDIVISION A (entire segment)
 EXXON Leonard Herbert ADEC Mike Ebel TIME 07:15 to 09:20
 TEAM NO.: 12 TIDE LEVEL: +4' to -2' DATE 3/30/90
 EST. SUBDIVISION LENGTH: 519 m ☐ Sun ☒ Clouds ☐ Fog ☒ Rain ☒ Snow
 UPLANDS DESCRIPTION: ☐ Grass ☒ Forest ☒ Rock low bedrock cliffs in some areas
 SURVEYED FROM: ☒ Foot ☒ Boat ☐ Helo WORKING DIRECTION: east to west
 SURFACE SEDIMENTS: R 5 % B 15 % C 60 % P 10 % G 10 % S 0 % M 0 % V 0 %
 SLOPE: Long 60 % Hang 35 % Vert 5 % WAVE EXPOSURE: ☒ Low ☐ Med ☐ High
 OIL CATEGORY LENGTH: W 0 m M 150 m N 55 m VL 248 m NO 366 m

SURFACE OIL

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

PAVEMENT: H (F)S 560 sq. m by 6.25 crPATTIES / TARBALLS 0 BAGSNEAR SHORE SHEEN? (NO) BR RW SL TL

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

DEBRIS COLLECTED
☐ YES ☒ NOTYPE 0#BAGS 0

Photographs:

Roll No. ST-12-1Frames 1-10

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	5BL BT	5BL RW	6Y SL	7BL TL	7BL LR	SU	UI	ME	U					
1	50					X	- - -		X								X						P, G
2	50					X	- . -		X								X						P, G
3	20		X				5-15		X				X				X						C, P, G
							.																
							.																
							.																

COMMENTS

Curvilinear pocket beach with cobbles and boulders along low rock cliffs on either end of segment with grain size of sediments fining towards the center of the pocket beach (cobbles, pebbles, and granules). An anadromous stream

OG R. McBride/M. Ebel

SEGMENT ST/ BA-2

SUBDIVISION A

DATE 3/30/90

CHECKLIST

- ☒ Arrow
- ☒ Approx. Scale
- ☒ Seg/Sub Bndy
- ☒ Oil Dist.
- ☒ Width
- ☒ Length
- ☒ % Cover
- ☒ Substrate Character
- ☒ Est. HW/LA WL
- ☒ SSL
- ☒ Profile Location(s)
- ☒ Profile(s)
- ☒ PH Location(s)
- ☒ Photo Location(s)

LEGEND

1 Δ
PH - No Subsurface Oil

2 Δ
PH - Subsurface Oil

CT/C
Continuous Distribution

Broken Distribution

CT/P

Patchy Distribution

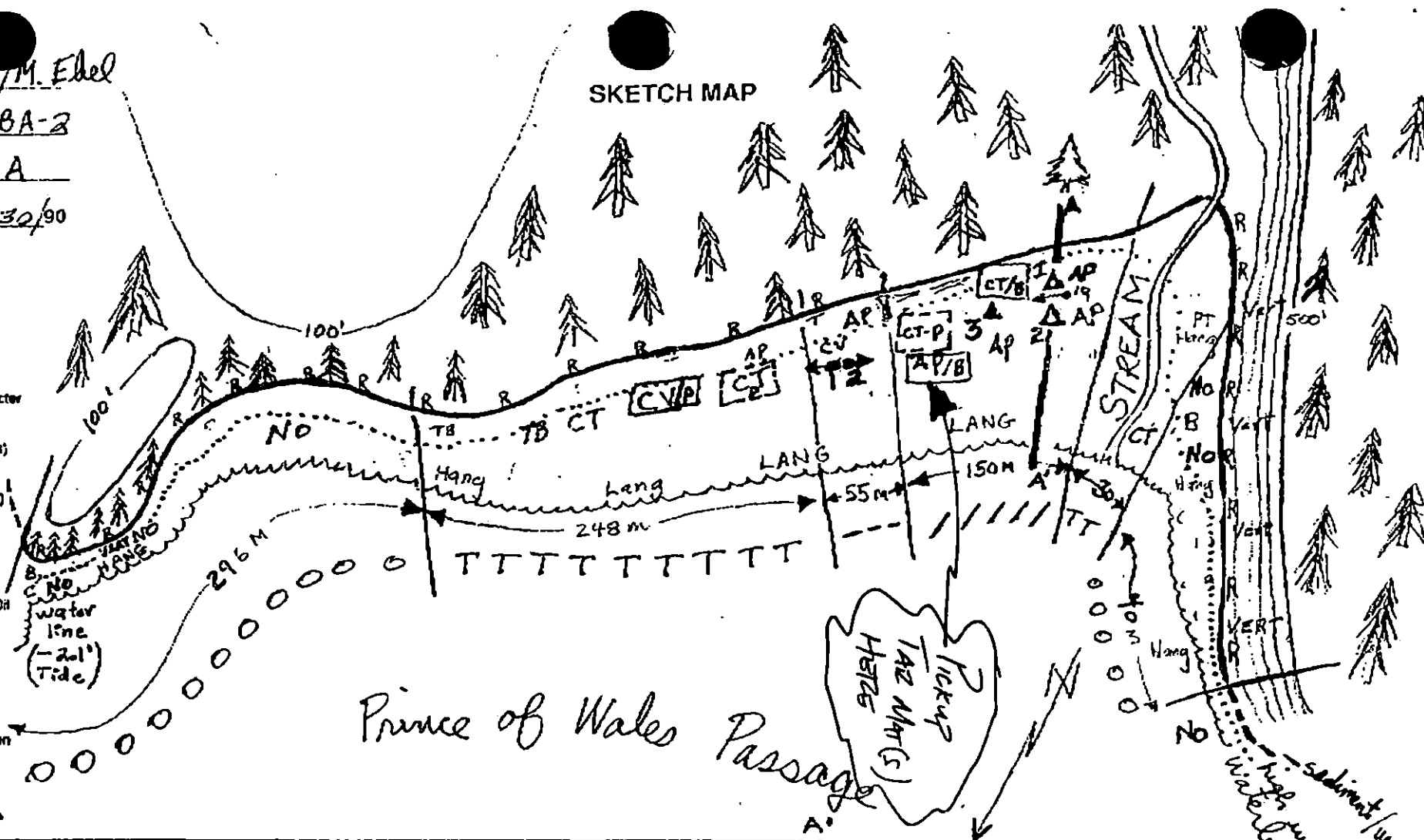
CT/S

Splashed Distribution

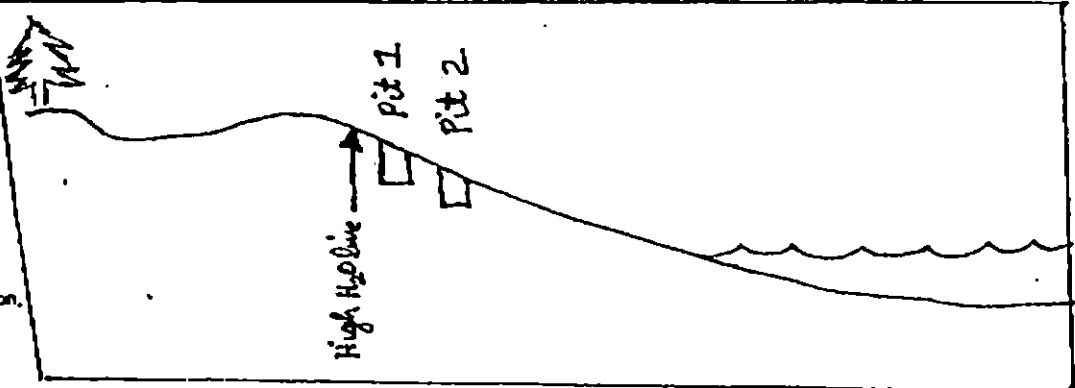
Ofed Vegetation

Photo location, direction,
and number

SKETCH MAP



Prince of Wales Passage



Profile A-A'

0 150
150 meters

Abbreviations/codes
From SSAT Manual
Attachment XIV

Beach face not to scale

XXX wide TT - very light
/// medium 00 - No Oil
--- Narrow

REVISION: 03/24/90

Oil Character Length (m): AP 160 PO - CV 139 CT 139 ST - MS - PT 10 TB 5 FL - NO 336

SHORELINE ECOLOGICAL SUMMARY

REVISION: 03/22/90

Segment ST / BA-2 Subdivision A Date (mo / day / yr) 3/30/90Time (24 hr) 0730-0830 Biologist SHARMAN(A) Substrate type and % of segment: SUBDIV. GRAVELS
(1) Bedrock 5 (2) Boulder 15 (3) Cobble 60 (4) Pebble 10 (5) Sand 10 (6) Silt(B) Overall % cover of biota (% of segment): Dense 15 Moderate 70 Low 15
SUBDIV.

(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-12-1Frames 1-10

BARNACLES

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

MYTILUS

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

GASTROPODS (Littorina and Nucella)

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

FUCUS

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

Wildlife Observations/ General Comments: 3 sea otters, 4 sea lions, 3 pr. Common Goldeneyes at stream mouth, 6 pr. surf scoters offshore, also 1 pelagic cormorant, 8 Canada Geese flew over in a group. Pair of Courtship Bald Eagles at E. end of segment at point - did not locate nest. Subtotal pelagic pollution + 1 (bird) in wrack line, center portion of segment - appear to be winterkill. See page 2 for intertidal comments.

Ecological Considerations: Environmental priority 1 according to Priorities and Windows Table. Work window in pre- 7/10. High constraint (1) due to salmon spawning stream 7/10 - 9/1. Treatment priority = 1.

General Comments: This segment supports a normally rich, diverse, and healthy intertidal biota. The most stable substrate types (bedrock and large boulders) occur at the E. end at the point, and support the most diverse epifauna. This appears to be a bit early for heavy barnacle settlement - spat are very rare throughout, but perhaps a bit less rare at this portion of the segment. Fucus is recruiting well, especially on bedrock / large boulders at this E. end as well as on isolated bedrock exposures in the central portion of the segment. Also at this E. end: several Pyropodia helianthoides (but small, ≈ 10 cm dia.) in LTZ, along with large Balanus cariacus, Anthopleura, common Halosaccion glandiforme, Ulva sp., Gelidium lemane (?), Rhodomychia sp., Poly/Poroiphonia sp., green filamentous. Beneath boulders are some Nucella ^{lanceolata} lanceolata (?), Tectura peruviana, amphipods, bryozoans. Spirorbis on tops of boulders + on bedrock. Except on large boulders + at the bedrock / large boulder E. point area, barnacles are young, ^(probably post-spill) 3-5 mm dia., but are not recruits-of-the-year. Tar mats in LTZ to E. of stream only, at MHW. No organisms found oiled. Stream mouth and lower banks free of oil. Concern with rest of team that Type A pickup of tar mat material will offer net benefit in terms of protection of stream spawning/incubating habitat, with minimal impact from envisioned treatment operation (10 people with bags and shovels). Finer sediments area below stream mouth have common Saxidomus + common small Clinocardium shells on surface. Of the barnacle coverage, approximately 5% is composed of dead individuals, empty tests.

SEGMENT ST / BA-2 SUBDIVISION: A (CERRAS SEGMENT) DATE 3/30/90NOAA/
USCGNAME GARY OTT SIGNATURE [Signature]☐ NO TREATMENT RECOMMENDED
COMMENTS☒ TREATMENT SUGGESTED

ADEC

NAME Michael T. EbelSIGNATURE [Signature]☐ NO TREATMENT RECOMMENDED
COMMENTS☒ TREATMENT SUGGESTED

BA-2 : Recommend manual removal of the surface asphalt found toward the west end of segment along with the scattered patches of weathered tar (splotches). The subsurface, sticky, weathered, brown tar was in a mostly small cobble/gravel matrix and apparently confined to isolated patches (see sketch) to a maximum observed depth of 15 cm. considering the amount of material involved I would suggest manual removal of these sediments and disposing of them or washing them after removal and replacing them.

LAND MANAGER

NAME Don J. Breitingen
U.S.D.A. Forest ServiceSIGNATURE [Signature]☐ NO TREATMENT RECOMMENDED
COMMENTS☒ TREATMENT SUGGESTED

Agree with treatment

Suggested by ADEC rep.

with the exception of removing sediments and disposal of and washing of some.

FIELD SHORELINE COMMENT SHEET

SEGMENT ST/ BA-2 SUBDIVISION: A (entire segment) DATE 3/30/90

NOAA/
USCG

NAME GARY OTT SIGNATURE [Signature]

☐ NO TREATMENT RECOMMENDED
COMMENTS

☒ TREATMENT SUGGESTED

ADEC

NAME Michael J. Ebel SIGNATURE [Signature]

☐ NO TREATMENT RECOMMENDED
COMMENTS

☒ TREATMENT SUGGESTED

BA-2 : Recommend manual removal of the surface asphalt found toward the west end of segment along with the scattered patches of weathered tar (splotches). The subsurface, sticky, weathered, brown tar was in a mostly small cobble/gravel matrix and apparently confined to isolated patches (see sketch) to a maximum observed depth of 15 cm. considering the amount of material involved I would suggest manual removal of these sediments and disposing of them or washing them after removal and replacing them.

LAND MANAGER

NAME Don J. Breitingen SIGNATURE [Signature]

U.S.D.A. Forest Service

☐ NO TREATMENT RECOMMENDED
COMMENTS

☒ TREATMENT SUGGESTED

Agree with treatment

Suggested by ADEC rep.

DJB 3/30/90

BA-2-A

Prince of Wales Passage

1 of 3

XXXX Wide

//// Medium

---- Narrow

TTTT Very Light

0000 No Oil

BA-2

ADEC Segment Length: 1095m



Map Key: PWS-13

Name: Randy McBride

Date: 3/30/90

Date Entered:

ADDENDUM: SUBDIVISION CONSTRAINTS

SEGMENT BA-2 SUBDIVISION A (1 of 1)

WORK WINDOW	
Manual Pickup Tarmat Removal	OPEN
Bioremediation over 100m from stream	WORK PRIOR TO 7/20
Bioremediation less than 100m from stream	CLOSED

ARCHAEOLOGICAL INSPECTION/CONSULTATION REQUIRED.

>>> PHONE 564-3274 (Anchorage) OR 229-1508 (24 hrs.) <<<

APPLICABLE ECOLOGICAL TIME CONSTRAINTS

1A,1B Salmon stream

Two ADF&G catalogued anadromous streams are present in Subdivision A (226-40-16450 and 226-40-16451). Subdivision is closed to bioremediation less than 100m from stream without ADF&G authorization. No constraint to Manual Pickup and Tarmat Removal; no constraint to bioremediation more than 100m from stream.

1K Purse seine hook-off

No constraint to Manual Pickup and Tarmat Removal; closed to bioremediation after 7/20.

OTHER ECOLOGICAL CONSIDERATIONS

No disturbance of stream bed or banks. No flushing of pollutants or sediments into stream drainage. Restrict boat and air traffic to essential minimum after 7/20. Avoid any unnecessary disturbance or damage to unrolled substrate and biota.

TAG ADDENDUM DATE 5/18/90

ADEC

EXXON

NOAA

USCG

FOSC

DATE 5-15-90

Prepared by: Anders Meyer wk

Date: 5/17/90

BA-2

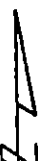


WORK
SITE

ANADROMOUS
STREAMS
(226-40-16450, 16451)
100m ZONE



Exxon Company, USA



ECOLOGY MAP
SEGMENT BA-2
SUBDIVISION A_ (1_ of 1_)



Seabird Colony



Eagle Nest

SHORELINE EVALUATION

SEGMENT ST/ BA-2 SUBDIVISION A* DATE 3/31/90

SEGMENT ENVIRONMENTAL SENSITIVITIES AND TIME CONSTRAINTS:

Tent sites (6U) - 6/1 to 9/5: Cataloged anadromous stream
(1B #16570) - 7/10 to 8/31.
16430

SUBDIVISION ECOLOGICAL CONSTRAINTS: Same as above.

ARCHAEOLOGICAL CONSTRAINTS: Consultation and inspection with
an Exxon Archaeologist is required prior to treatment.
Specific onsite monitoring requirements will be determined
at that time.

SHPO SIGNATURE: Charles E. Hines DATE: April 5, 1990

OILING CATEGORIZATION:

0 m Wide, 246m Medium, 54m Narrow, 543m V. Light, 252m No Oil
Subsurface Oil Observed X Yes No Maximum Depth 15 cm

RECOMMENDATIONS:

 No Treatment Recommended

X Treatment Recommended

 Manual Pickup Snare Booms/Sorbents X Tarmat Breakup/REMOVAL

 Bioremediation SPOT WASHING Other

 Wands

 Beach Cleaner

Comments: only Treatment recommended is removal of tar mats in area indicated on attached sketch map. Work prior to 7/10/90 due to anadromous stream constraints. Bioremediate in area where surface and subsurface oil remains. Anadromous stream restrictions apply (no application within 100m of the stream) further clarification by Anad. State in the form of an addendum to this package. + oiled debris (leave logs)

Dates Revised, see Addendum 5/17/90 wk

TAG COMMENTS: As indicated above.

APPROVAL DATE: 4/5/90

EXXON JOHN BAUER

NOAA ANDY ISL

USCG Burt Wescott

G.A. REITER

FOSC: DATE:

*Subdivision covers entire segment

ADDENDUM: SUBDIVISION CONSTRAINTS

SEGMENT BA-2 SUBDIVISION A (1 of 1)

WORK WINDOW	
Manual Pickup Tarmat Removal	OPEN
Bioremediation More Than 100m From Stream	WORK PRIOR TO 7/20
Bioremediation Less Than 100m From Stream	WORK PRIOR TO 7/10 (ADF&G MONITOR REQ.)

ARCHAEOLOGICAL INSPECTION/CONSULTATION REQUIRED.

>>> PHONE 564-3274 (Anchorage) OR 229-1508 (24 hrs.) <<<

APPLICABLE ECOLOGICAL TIME CONSTRAINTS

- 1A,1B Salmon stream** Two ADF&G catalogued anadromous streams are present in Subdivision A (226-40-16450 and 226-40-16451). This subdivision is closed to bioremediation less than 100m from stream 7/10 to 8/31. Before 7/10, bioremediation is permitted less than 100m from stream with on-site ADF&G monitor or ADEC alternate present. No constraint to bioremediation more than 100m from stream.
- 1K Purse seine hook-off** No constraint to Manual Pickup and Tarmat Removal; closed to bioremediation after 7/20.

OTHER ECOLOGICAL CONSIDERATIONS

No disturbance of stream bed or banks. No flushing of pollutants or sediments into stream drainage. Restrict boat and air traffic to essential minimum after 7/20. Avoid any unnecessary disturbance or damage to unrolled substrate and biota.

SEE ANADROMOUS FISH STREAM EVALUATION ADDENDA
(STREAM NOS. 226-40-16450 and 226-40-16451)
FOR ADDITIONAL CONSTRAINT INFORMATION

TAG ADDENDUM DATE 6/04/90

ADEC
EXXON
NOAA
USCG

Ray Morais
Paul
Josef Talbot
G. J. Reiter

FOSC

[Signature]

DATE

6/7/90

Prepared by:

Andie Meyer

Date:

6/4/90

BA-2

WORK
SITE

ANADROMOUS
STREAMS
(226-40-16450, 16451)
100m ZONE



Exxon Company, USA

Map Key: PMS-BA-2

MAY 11 1987



ECOLOGY MAP
SEGMENT BA-2
SUBDIVISION A (1 of 1)
METERS



Seabird Colony



Eagle Nest

1 inch = 1311 feet

SHORELINE EVALUATION

SEGMENT ST/ BA-2 SUBDIVISION A* DATE 3/31/90

SEGMENT ENVIRONMENTAL SENSITIVITIES AND TIME CONSTRAINTS:

Tent sites (6U) - 6/1 to 9/5: Cataloged anadromous stream
(1B #16579) - 7/10 to 8/31.
16430

SUBDIVISION ECOLOGICAL CONSTRAINTS: Same as above.

ARCHAEOLOGICAL CONSTRAINTS: Consultation and inspection with
an Exxon Archaeologist is required prior to treatment.
Specific onsite monitoring requirements will be determined
at that time.

SHPO SIGNATURE: Charles Hoffman DATE: April 5, 1990

OILING CATEGORIZATION:

0 m Wide, 246m Medium, 54m Narrow, 543m V. Light, 252m No Oil
Subsurface Oil Observed X Yes No Maximum Depth 15 cm

RECOMMENDATIONS:

 No Treatment Recommended
X Treatment Recommended
 Manual Pickup Snare Booms/Sorbents X Tarmat Breakup/REMOVAL
 Bioremediation SPOT WASHING Other
 Wands
 Beach Cleaner

Comments: and Treatment recommended is removal of tar mats in + oiled debris (leave logs)
area indicated on attached sketch map. Work prior to 7/10/90 due
to anadromous stream constraints. Bioremediate in area where surface
and subsurface oil remains. Anadromous stream restrictions apply (no application
within 100m of the stream) further clarification by Anad SCTR in the form
of an addendum to this package.

TAG COMMENTS: As indicated above.

Dates Revised, see Addendum 5/17/90 w/
See REVISION 1, Addendum dated 6/4/90

TAG APPROVAL DATE: 9/5/90

ADEC JOHN BAUER
 KON ANDY TSN
 AA Burt Westcott
 USCG G.A. REITER

FOSC: DATE:

*Subdivision covers entire segment

ANADROMOUS FISH STREAM EVALUATION

SEGMENT ST/ BA-02 STREAM NO: 226-40-16451 DATE 4/23/90

SEGMENT ENVIRONMENTAL SENSITIVITIES AND TIME CONSTRAINTS:

Two catalogued streams in BA-02: 226-40-16451, 226-40-16450.

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

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

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

See attached Ecological Constraint sheet for specific constraints and contacts.

SUBDIVISION ECOLOGICAL CONSTRAINTS:

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

ARCHAEOLOGICAL CONSTRAINTS:

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

SHPO SIGNATURE: J. David McManis DATE: 5/8/90

Subsurface Oil Observed: Yes No X Maximum Depth

RECOMMENDATIONS:

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

COMMENTS: Recommended treatment includes manual removal of tarmats and pickup of tarballs/patties as indicated on sketch map. Work should be conducted between 5/15 and 7/10 based on anadromous stream constraint.

TAG COMMENTS:

TAG APPROVAL DATE: 5/7/90.

ADEC Art Wemmer

EXXON Andy Tetz

NOAA Gary Petrac

USCG G.A. Reiter

FOSC: W L DATE: 5-15-90

33162

00 WILLIAM REID
SEGMENT BA002

STREAM 226-40-16451

DATE 23 APR 80

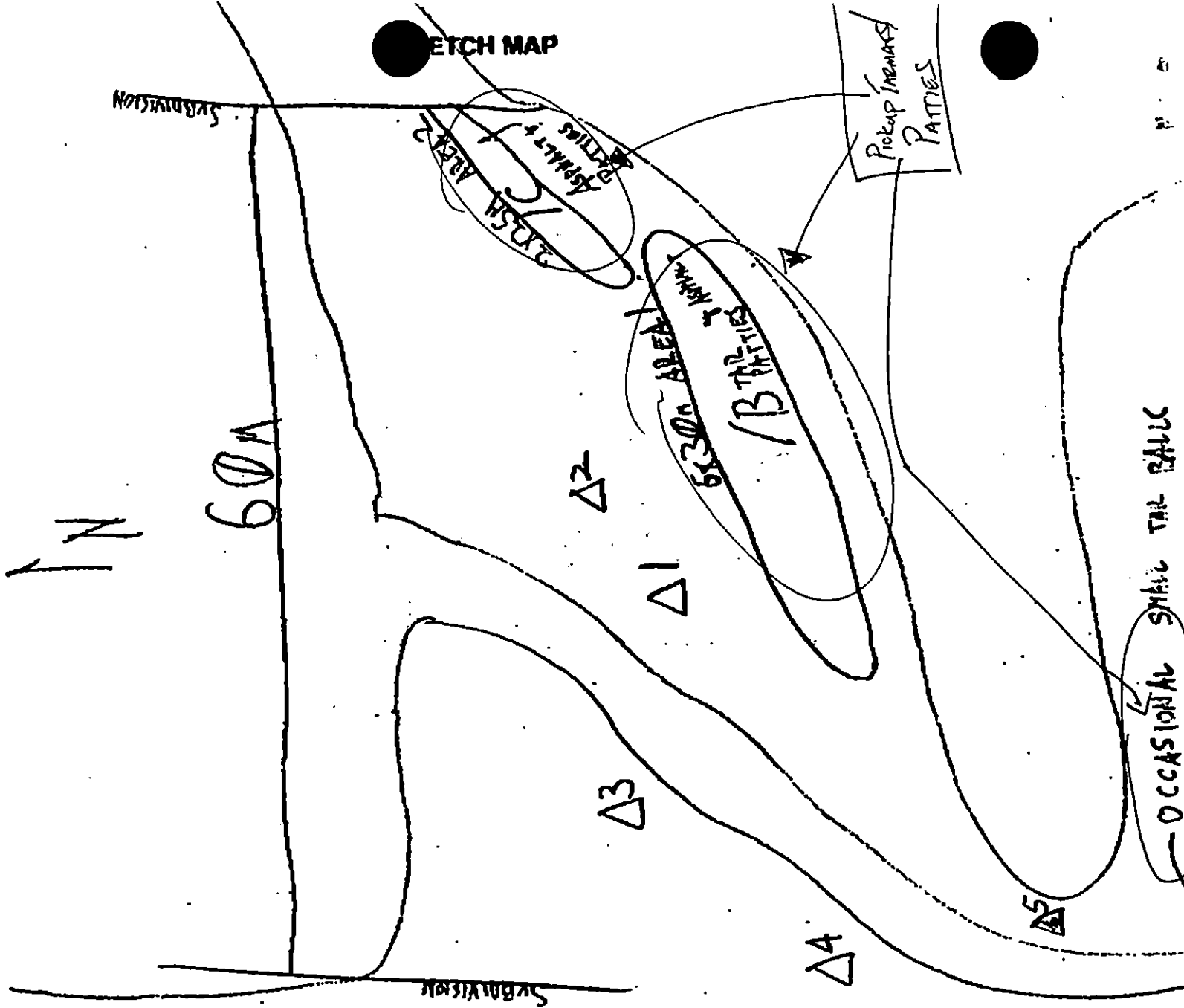
CHECKLIST

- ☐ N Arrow
- ☐ Approx. Scale
- ☐ Seg/Sub Entry
- ☐ Oil Dist.
- ☐ Width
- ☐ Length
- ☐ % Cover
- ☐ Substrate Character
- ☐ Est. HW/LW/LVL
- ☐ STL
- ☐ Profile Location(s)
- ☐ Profile(s)
- ☐ Pit Location(s)
- ☐ Photo Location(s)

LEGEND

- ☐ 1 Δ
- FR - No Subsurface Oil
- ☐ 2 Δ
- FR - Subsurface Oil
- ☐ CT/C
- Continuous Distribution
- ☐ CT/B
- Broken Distribution
- ☐ CT/P
- Patchy Distribution
- ☐ CT/S
- Spaced Distribution
- ☐ eee
- Clad Vegetation
- ☐ 1 00
- Photo location, direction, and number

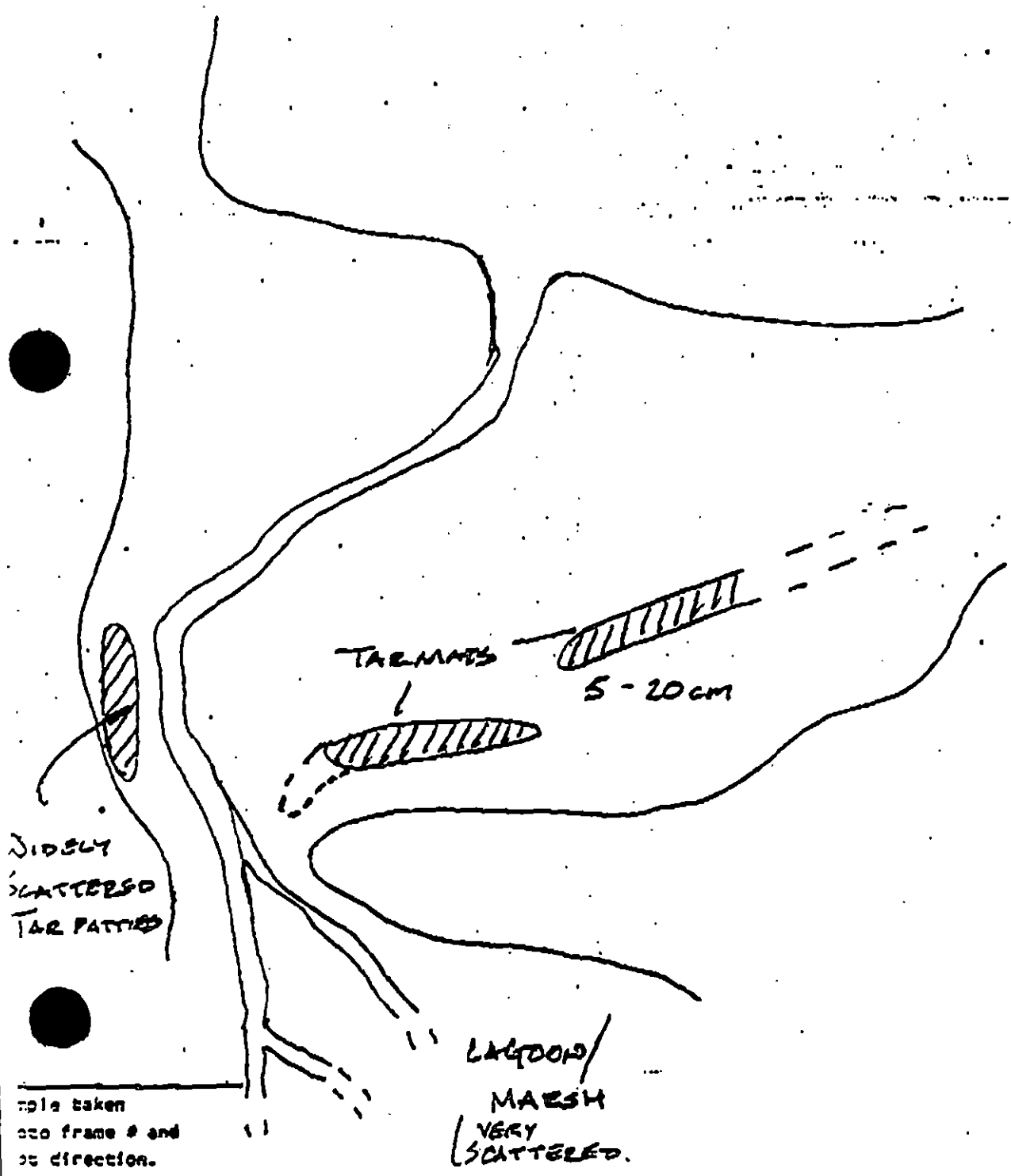
ETCH MAP



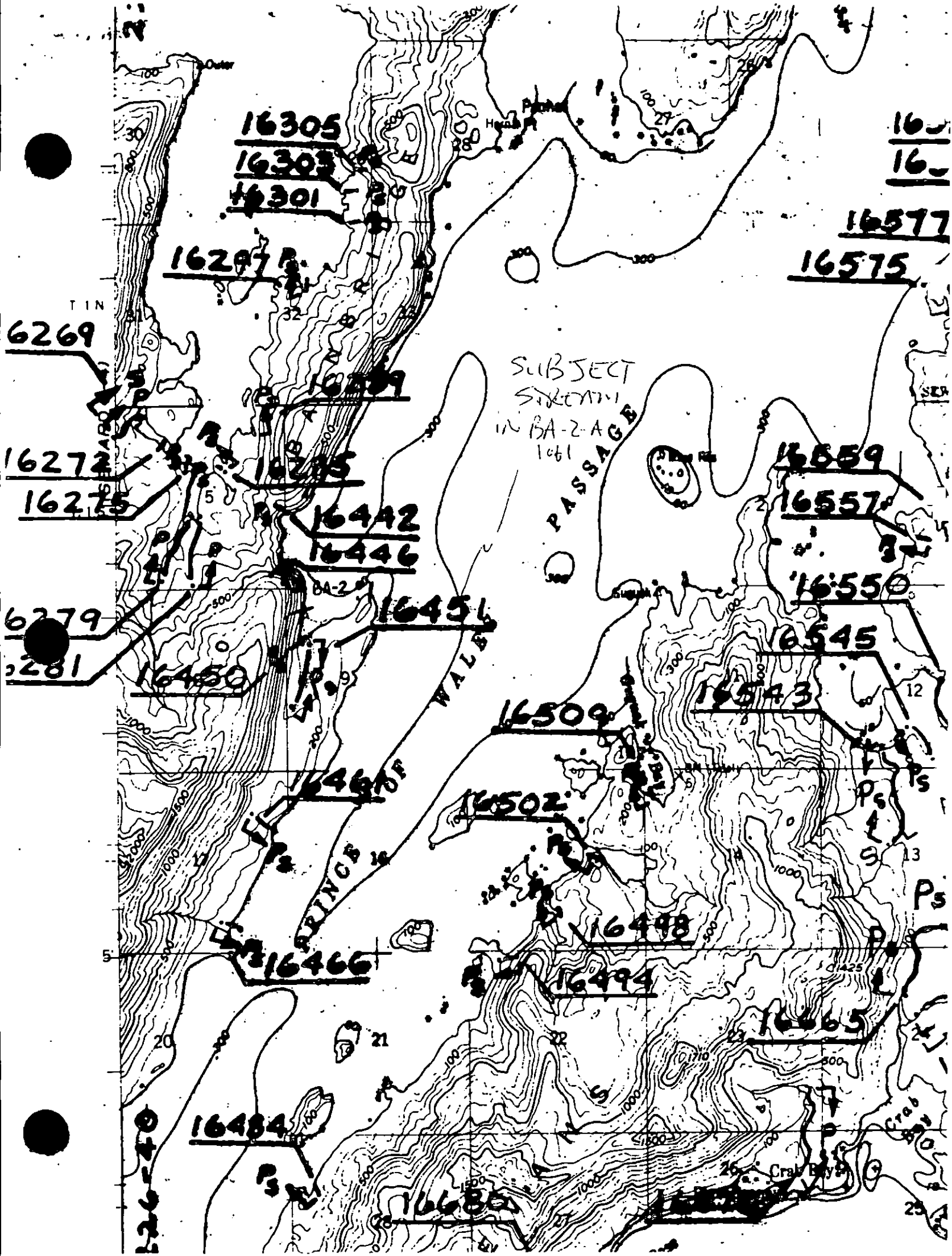
48 PHOTOLOG

NAME(S)	DESCRIPTION
	RECOMMENDATIONS: MANUAL REMOVAL OF TAR MATS
	I agree with recommendation. M. H. Fournier

48 OIL DISTRIBUTION DIAGRAM



note taken
on frame # and
on direction.



ANADROMOUS FISH STREAM EVALUATION

SEGMENT ST/ BA-02 A STREAM NO: 226-40-16450 DATE 4/24/90

SEGMENT ENVIRONMENTAL SENSITIVITIES AND TIME CONSTRAINTS:

Two catalogued anadromous streams in BA-02: 226-40-16450, 226-40-16451.

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

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

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

See attached Ecological Constraint sheet for specific constraints and contacts.

SUBDIVISION ECOLOGICAL CONSTRAINTS:

Avoid any unnecessary disturbance or damage to uncoiled biota and substrate. The subject stream is located in Subdivision A (1 of 1).

ARCHAEOLOGICAL CONSTRAINTS:

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

SHPO SIGNATURE: *J. David McMillan* DATE: 5/8/90

Subsurface Oil Observed: Yes No X Maximum Depth

RECOMMENDATIONS:

X No Treatment Recommended
 Treatment Recommended
 Manual Pickup
 Bioremediation
 Tarmat Removal

 Snare/Absorbent Booms
 Oil Snares (pom poms)
 Absorbents (pads, rolls, etc)
 Spot Washing: Wands
 Beach Cleaner
 Other (see comments)

COMMENTS:

TAG COMMENTS:

TAG APPROVAL DATE: 5/7/90

ADEC ART WEINER Art Weiner

EXXON ANDY TEAL Andy Teal

NOAA Gary Petree Gary Petree

USCG G.A. REITER G.A. Reiter

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

24/3

Film AS-15-5

OG WILSON REID

SEGMENT ST/ BA002

SKETCH MAP

STREAM: No #

DATE 21 APR 90

CHECKLIST

- ☐ N Area
- ☐ Approx. Size
- ☐ Substrate
- ☐ Oil Dist.
- ☐ Width
- ☐ Length
- ☐ % Cover
- ☐ Substrate Character
- ☐ Est. MWL/AVL
- ☐ 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

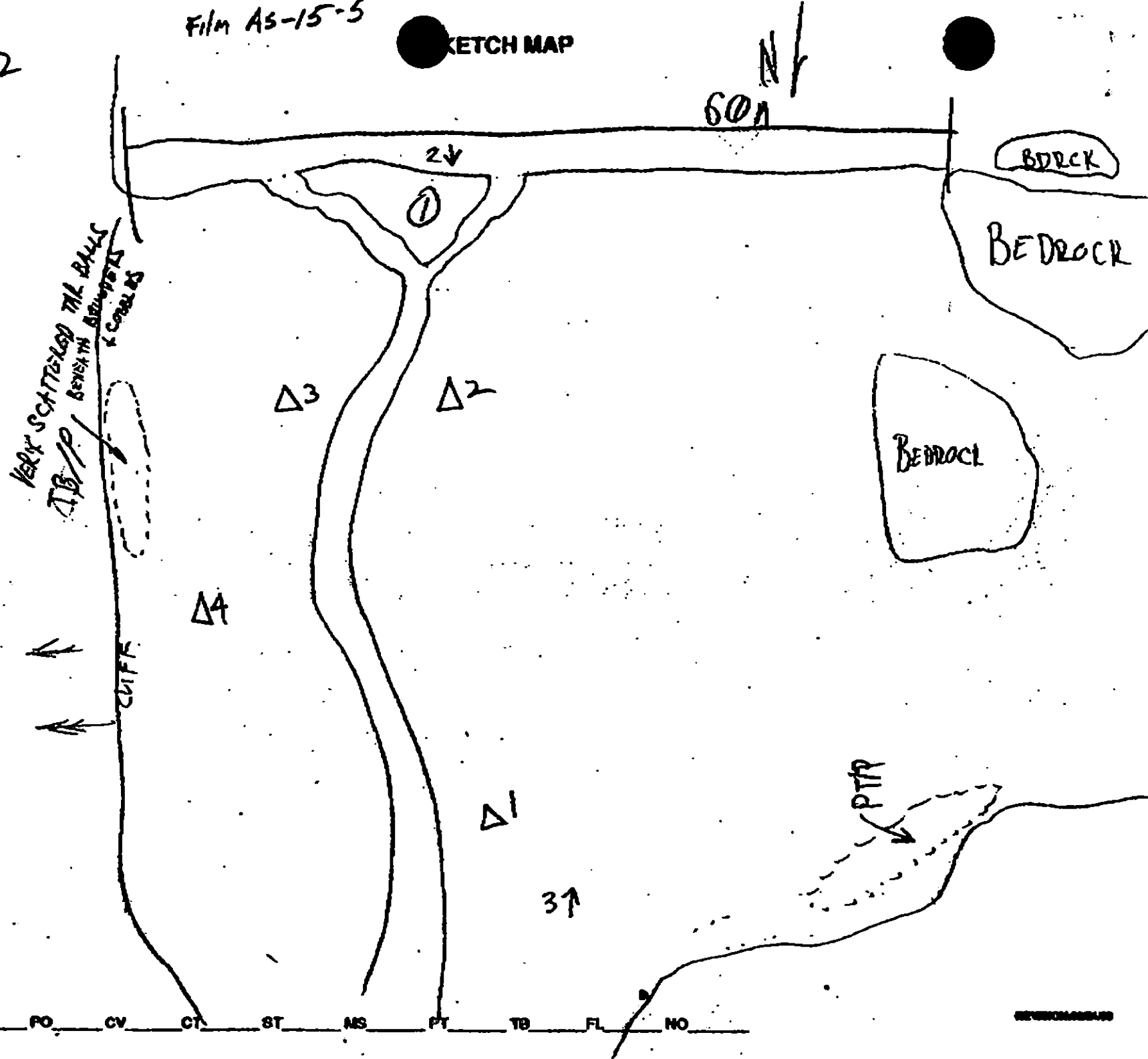
Splashed Distribution

Oil Vegetation

1 ●→

Photo location, direction, and number

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



27/32

48 PHOTOLOG

PAGE(S)

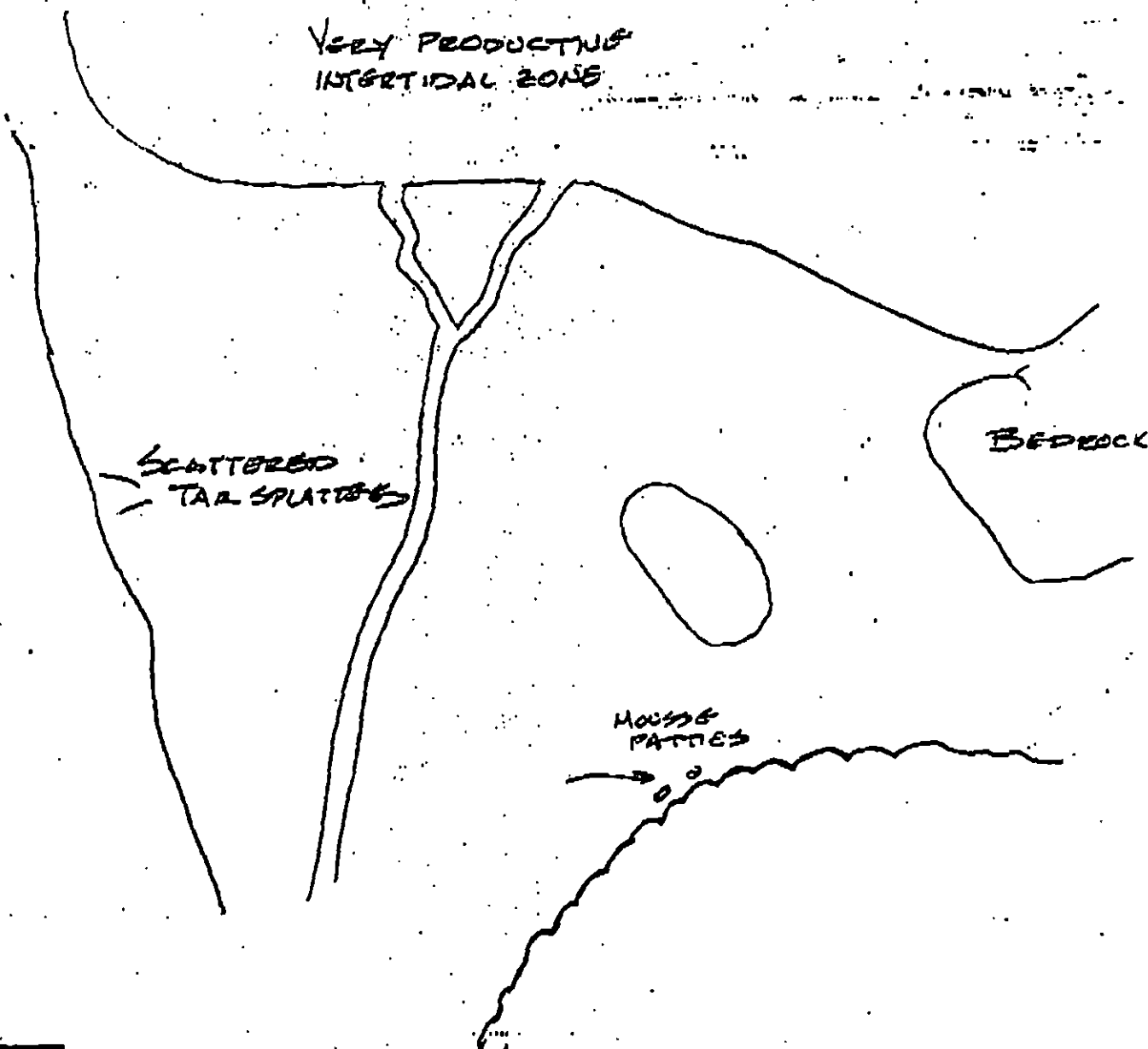
DESCRIPTION

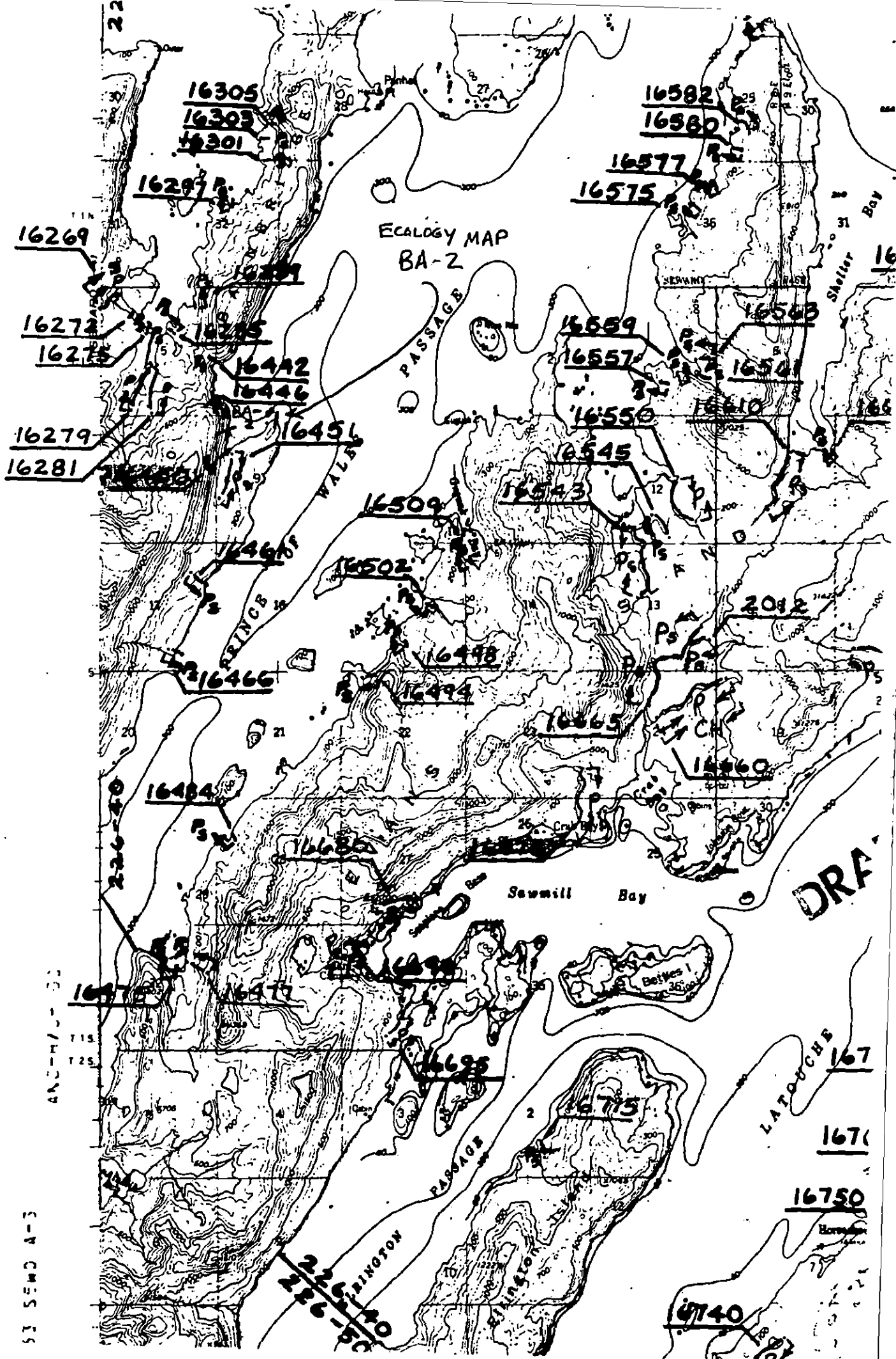
RECOMMENDATIONS: MANUAL REMOVAL OF HOUSE
PATIES - DONE BY CREW - NO FURTHER
TREATMENT REQUIRED.

I agree with recommendations. *M. H. Fawcett*

49 OIL DISTRIBUTION DIAGRAM

← N





SI 5500 A-3

ANCHOR-02

715
725

1991 MAYSAP EVALUATION

SEGMENT: BA 002 SUB: A REGION: PWS SURVEY DATE: 4/29/91

ENVIRONMENTAL SENSITIVITIES:

Work Window(s) OPEN 5/15- 7/10 (EXCEPT STREAM BED), RESTRICTED 7/10 - 9/15

Ecological/Constraints (see page two for details) Fish harvest area, Anadromous stream

ARCHAEOLOGICAL CONSTRAINTS:

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

SHPO Signature: Charles E. H. Jones Date: 5/8/91

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: Exxon Comment: IN EXXONS VIEW THERE IS NO NET ENVIRONMENTAL BENEFIT IN TREATING THIS MINIMAL REMNANT OIL.

FOSC:

TAG APPROVAL DATE: MAY 8 - 1991

FOSC APPROVAL DATE: 5/16/91

ADEC John Bauer

FOSC E. E. Page

EXXON Beal

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

USCG J. E. Marshall

NOAA J. E. Marshall

State will evaluate the need for treatment at this site John Bauer

**ECOLOGICAL CONSTRAINTS
1991 FIELD ACTIVITIES**

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

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

MAYSAP FIELD SHORELINE COMMENT SHEET

TEAM NO. 6 SEGMENT BA-002 SUBDIVISION A DATE 7/29/91

ADEC AND USF'S REPRESENTATIVE

NAME TOM CROWE

SIGNATURE [Signature]

☐ NTR

☒ TREATMENT RECOMMENDED

WITH LITTLE EFFORT THE SMALL AMOUNT OF REMAINING AP SURFACE OILING COULD BE ELIMINATED FROM THIS STREAM HABITAT AREA. A SMALL CREW WITH MINIMAL EFFORT COULD FINALIZE THE TREATMENT OF THIS SEGMENT BY PICKING UP REMAINING AP AND MANUALLY TILLING LIGHTER SCATTERED ASOR DEPOSITS.

EXXON

NAME RANDALL K. BOYER

SIGNATURE [Signature]

☒ NTR

CERTAINLY SIGNIFICANT IMPROVEMENT IN SHORELINE CONDITIONS IN 1991. PROLIFIC BIOTA IN THE INTERTIDE ZONE. GULLS AND OTHER WILDLIFE SIGNS IN ^{THE} VICINITY. SURFACE OILING IN THE UPPER INTERTIDE ZONE IN THE FORM OF "AP" WERE IDENTIFIED AND RETRIEVED BY THE VECO PICKUP SQUAD. IN THE FLOODING RAIN, IT WAS APPARENT THAT LESS SHEENING IS EVIDENT THIS YEAR. NO NEED FOR FURTHER REASSESSMENT. OILING (SURFACE) IN THE VEHICLE SHALE AREA WAS DISTURBED AS TO BE FLUSHED BY TIDAL MOVEMENT.

LANDMANAGER

NAME Aimee Weseman OF ADF+G

SIGNATURE [Signature]

☐ NTR

☒ Treatment Rec.

- Commercial Fishing & Recreation Area, Anad stream. To complete treatment, a crew of 2 workers should return mid-summer & manually till the remaining OR sediments in Area A. After the AP was removed & the remaining sediments agitated, a brown oil scum collected on surface waters. Any newly formed AP sediments could be picked up at the same time.

USCG/NOAA

NAME CWO R. SPURR / Rebecca Hoff

SIGNATURE [Signature]

☒ NTR

The small amounts of remaining asphalt & tar are weathering & do not represent a source of contamination to biological resources. This segment does not warrant further treatment and should continue to weather naturally.

PAGE 1 OF 1

DATE 04 / 29 / 91

ENERGY LEVEL: ☐ H ☒ M ☐ L

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

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

EST. OIL CATEGORY LENGTH: W m M m N m VL 125 m NO 925 m US m

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

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

PHOTO ROLL # MAYSAP- 6 - 02 FRAMES 6-9

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

The remaining surface oil was of two types: (1) AP patches of $< 1 \text{ m}^2$ on GP which were picked up, leaving only light SOR, (2) heavy SOR and AP in shale cleavage partings. About 50% of this was picked up, and the surface crusts disturbed to promote natural cleaning. No sheens observed until surface AP was disturbed.

REVIEWED M.C. 4/30/91

BA-002-A

07/29/91

OG. Map

0850 - 1740

D.I. Little

PRINCE OF WALES
PASSAGE

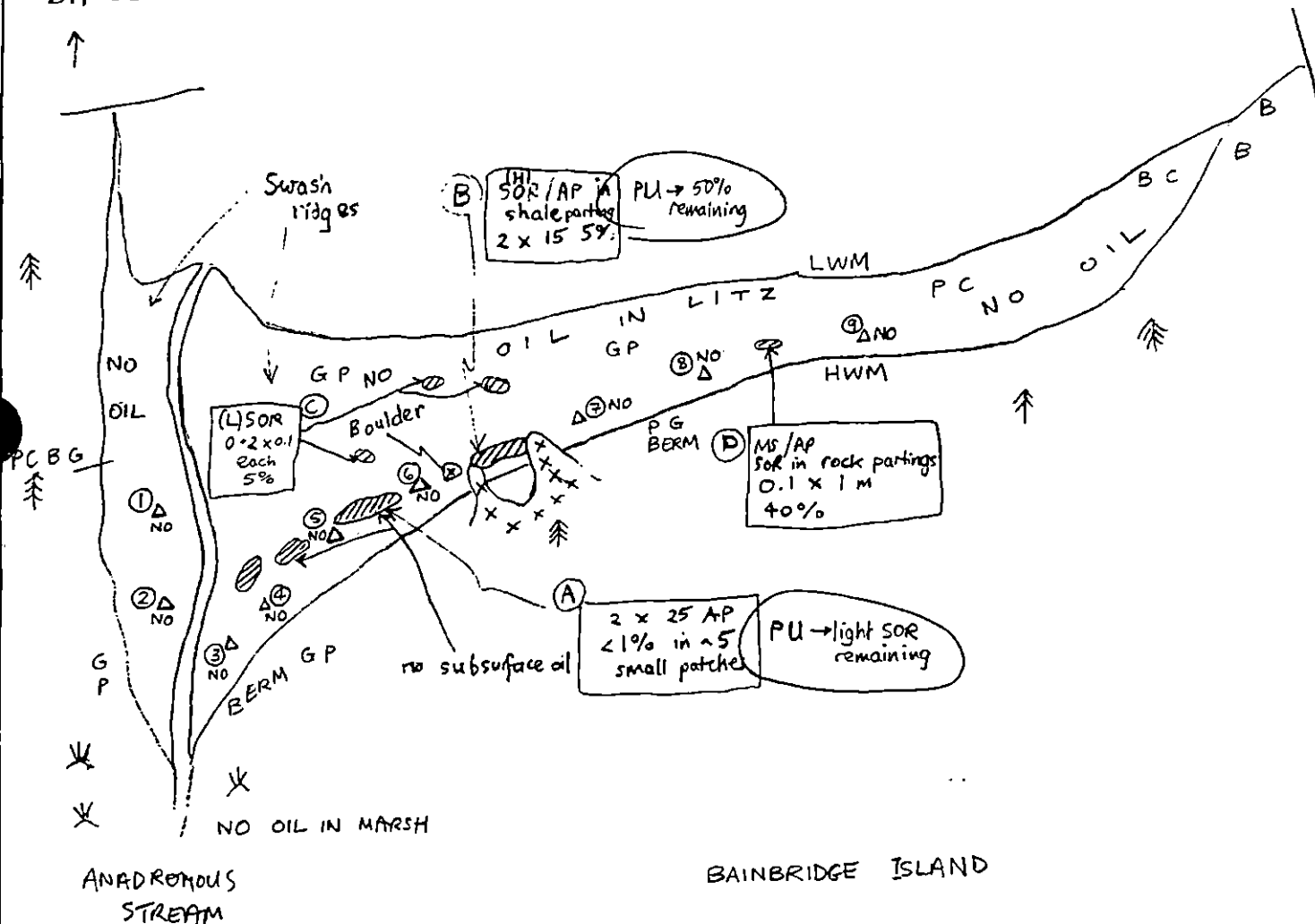
xx Bedrock

x Vegetation

0 50
meters

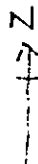
BA-003-A

BA-001-A



REVIEWED M.C. 4/30/91

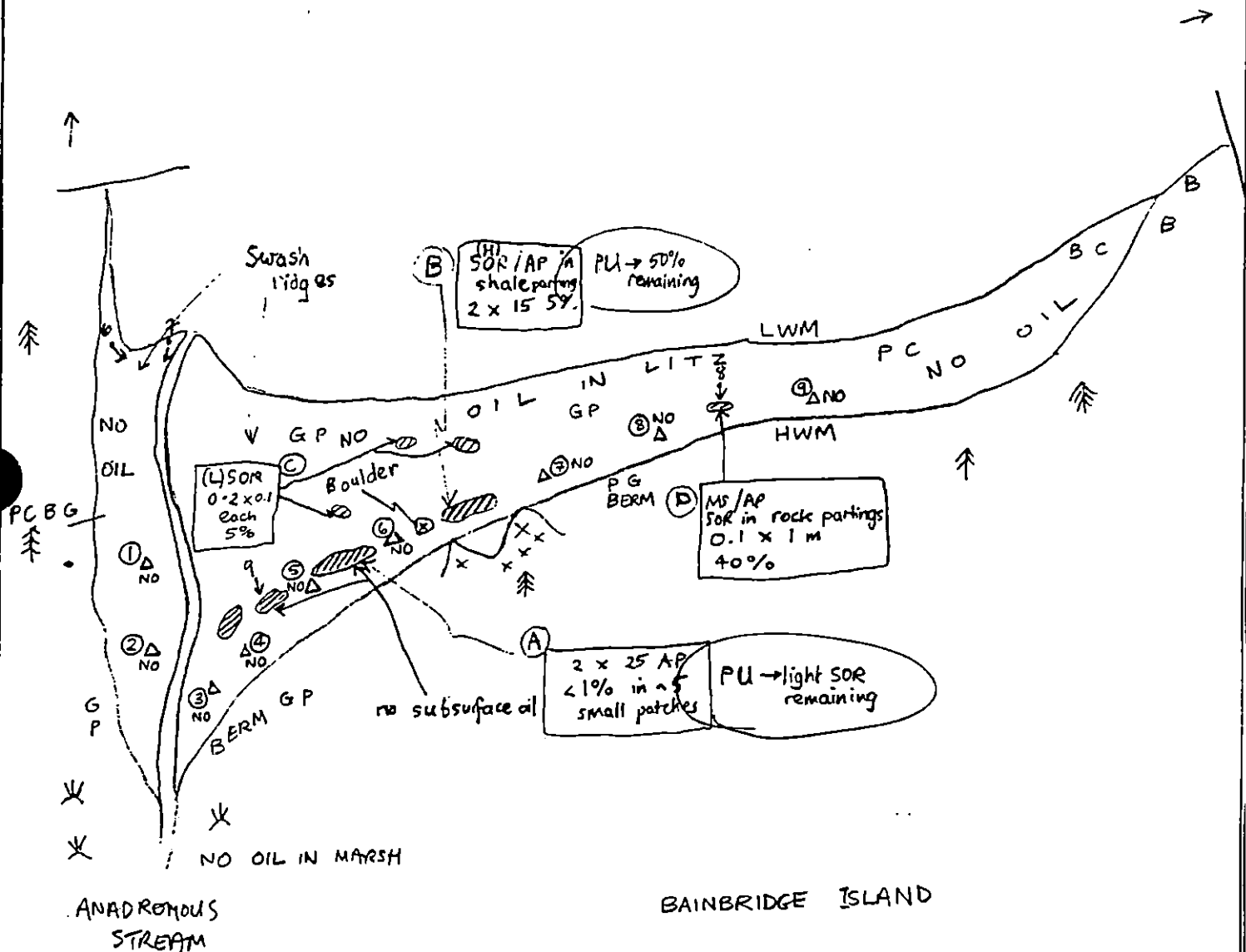
Photo locations

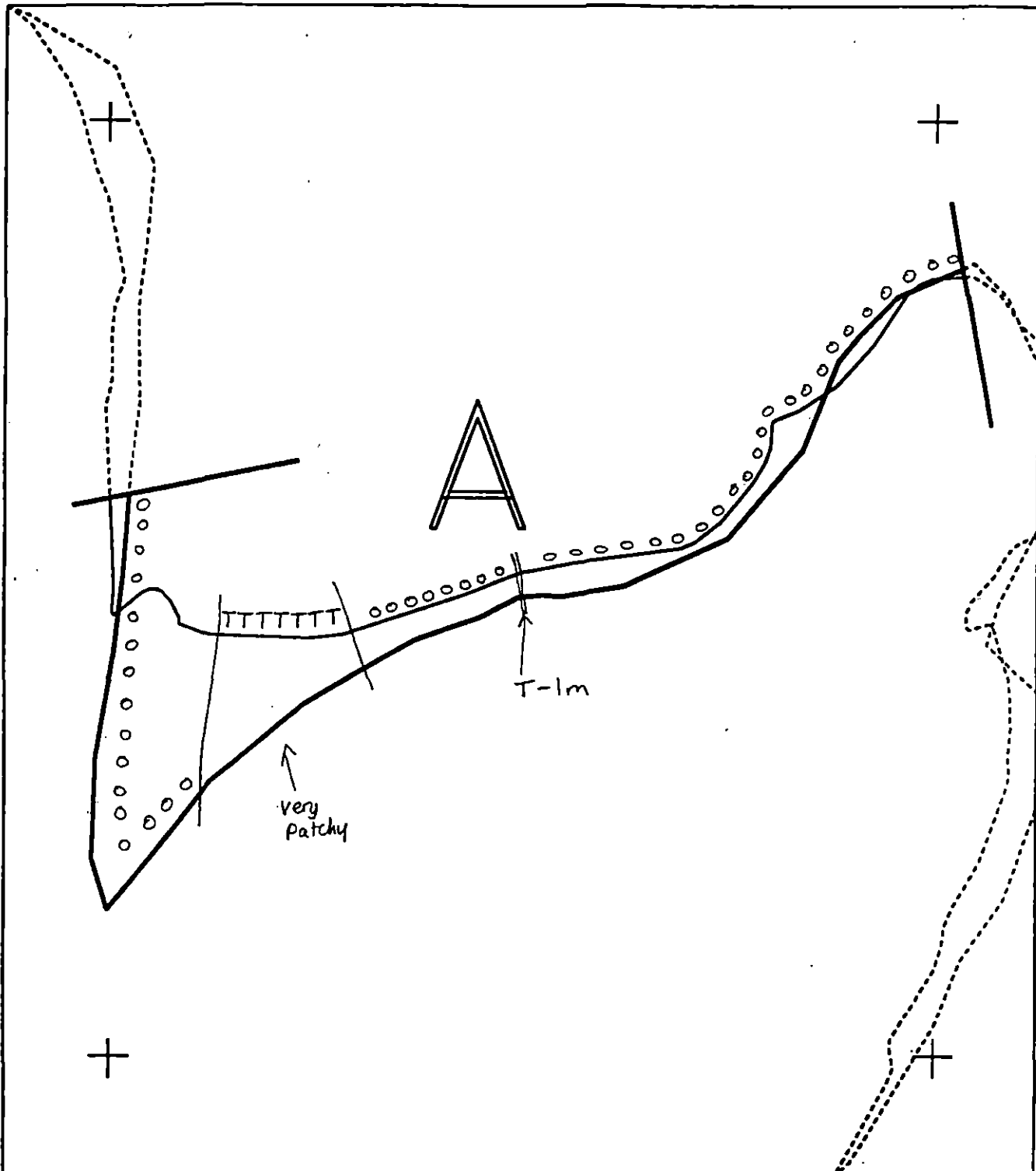


BA-002-A 04/29/91
OG. Map 0850 - 1040
D.I. Little

PRINCE OF WALES
PASSAGE

xx Bedrock
+ Vegetation





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

BA002 A
 ADEC Subsegment Length: 1005m
 METERS
 0 100 200
 AK State Plane Zone 4
 9600200



Subdivision Field Map
 Map Key: PWSBA002Aa
 Name: D-I. LITTLE
 Date: 04/29/91
 Date Entered:

Review MC. 4/30/91

MAYSAP BIOLOGICAL SUMMARY FORM

TEAM # 6

DATE 4/29/91

SEGMENT # BA-002

TIDAL HEIGHT(Range)

SUBDIVISION A

BIOLOGIST Schroeder

SEA STATE White capping

WIND SPEED/DIRECTION N-NE 25 mph +

PHOTOGRAPHS: ROLL #

FRAME #

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

(A-D) = oil spill and SOA located in MITZ to UITZ. Area is composed of loose, broken up shale. Most birds located in UITZ, so any activity near oil would have minimal impact if it occurred at a +2 foot or higher tide. Lower productivity around anadromous stream obviously is a result of continually shifting beach.

This is a medium energy beach. The mid to upper intertidal zone is low in productivity due to composition of shale and loose black sand. From the mid to lower intertidal zone, fucus kelp patches are scattered near the anadromous stream but become more plentiful away from the stream on both sides. Mussel beds are well established in the lower intertidal amongst the fucus kelp. Hard barnacle growth exists on all rock surfaces. Fucus abundant on lower portion of shale outcropping to east of stream.

WILDLIFE OBSERVATIONS

TO BE COMPLETED IN ALL SUBDIVISIONS

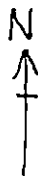
BIRDS	# OF SPECIES	TOTAL BIRDS	FISH OBSERVED SPECIES PRESENT
Eagles	1	1	
Seabirds			
Waterfowl	1	3	
Gulls/Kittiwakes	2	37	
Shorebirds	1	2	
Corvids	1	1	
Other Birds			

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

Shoreline subdivision map showing important biological features attached.

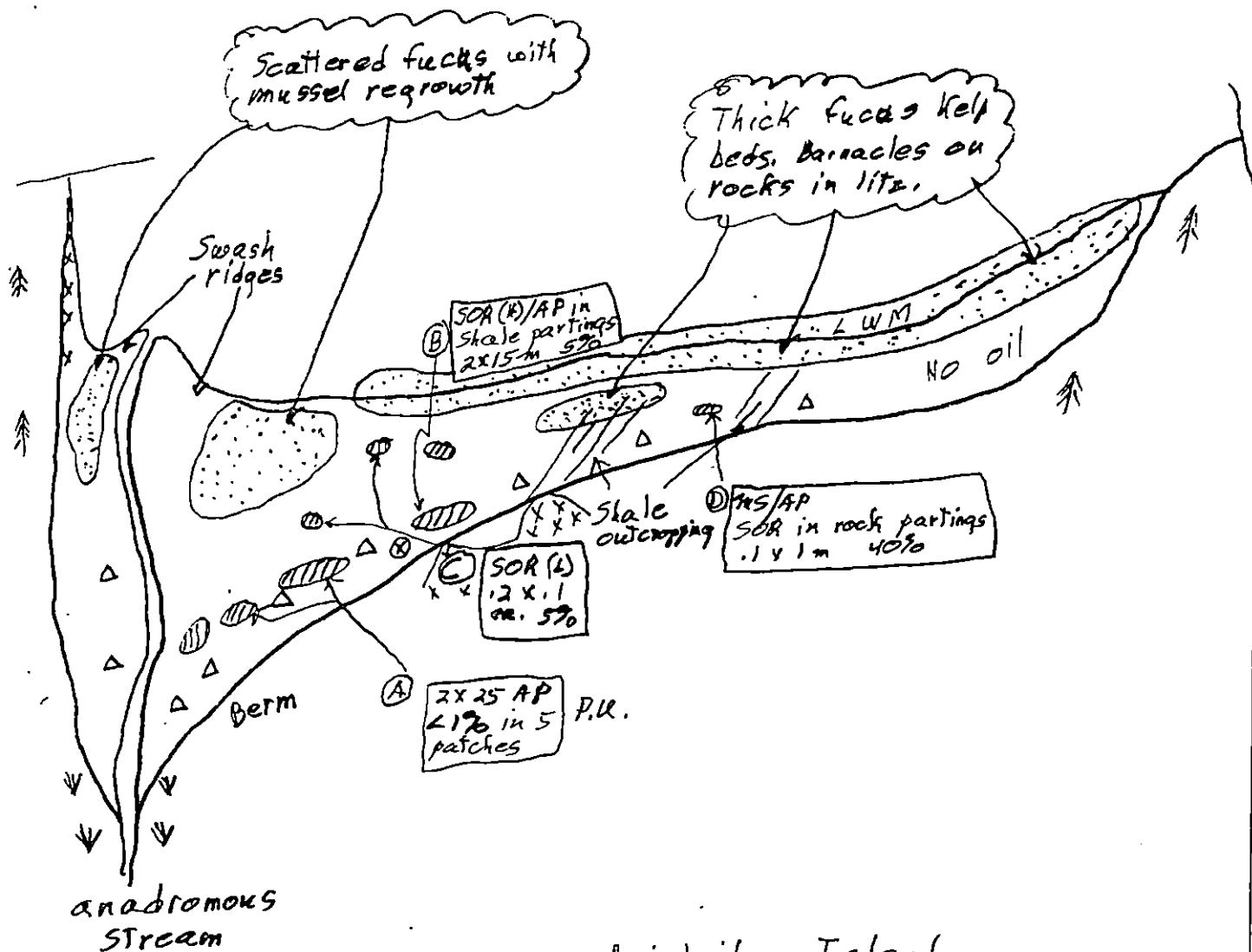
BA-002-A 4/29/91
 Bio. map 0850-1040
 T.R. Schroeder

Prince of Wales
 Passage



0 50
 meter

⊗ = rock
 ∇ = grass
 ⊙ = oil



Bainbridge Island

1991 MAYSAP EVALUATION

SEGMENT: BA 002 SUB: A REGION: PWS SURVEY DATE: 4/29/91

ENVIRONMENTAL SENSITIVITIES:

Work Window(s) OPEN 5/1 - 7/10 (EXCEPT STREAM BED), RESTRICTED
7/10 - 9/15

Ecological/Constraints (see page two for details) Fish harvest
area, Anadromous stream

ARCHAEOLOGICAL CONSTRAINTS:

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

SHPO Signature: _____ Date: _____

RECOMMENDATIONS:

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

COMMENTS:

INITIAL: _____

TAG: _____

FOSC: _____

TAG APPROVAL DATE: _____ FOSC APPROVAL DATE: _____

ADEC _____ FOSC _____

EXXON _____

USCG _____

NOAA _____

**ECOLOGICAL CONSTRAINTS
1991 FIELD ACTIVITIES**

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

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

MAYSAP FIELD SHORELINE COMMENT SHEET

TEAM NO. 6 SEGMENT BA-002 SUBDIVISION A DATE 9/29/91

ADEC AND USF'S REPRESENTATIVE

NAME Tom Crowe

SIGNATURE [Signature]

☐ NTR ☒ TREATMENT RECOMMENDED

WITH LITTLE EFFORT THE SMALL AMOUNT OF REMAINING AP SURFACE OILING COULD BE ELIMINATED FROM THIS STREAM HABITAT AREA. A SMALL CREW WITH MINIMAL EFFORT COULD FINALIZE THE TREATMENT OF THIS SEGMENT BY PICKING UP REMAINING AP AND MANUALLY TILLING LIGHTER SCATTERED OSOR DEPOSITS.

EXXON

NAME RANDALL K. BOYER

SIGNATURE [Signature]

☒ NTR

CERTAINLY SIGNIFICANT IMPROVEMENT IN SHORELINE CONDITIONS IN 1991. PROLIFIC BIOTA IN THE INTERTIDE ZONE. GULLS AND OTHER WILDLIFE SIGNS IN ^{THE} VICINITY. SURFACE OILING IN THE UPPER INTERTIDE ZONE IN THE FORM OF "AP" WERE IDENTIFIED AND RETRIEVED BY THE VECO PICKUP SQUAD. IN THE POURING RAIN, IT WAS APPARENT THAT LESS SHEENING IS EVIDENT THIS YEAR. NO NEED FOR FURTHER REASSESSMENT. OILING (SURFACE) IN THE VERTICAL SLURRY AREA WAS DISTURBED AS TO BE FLUSHED BY TIDAL MOVEMENT.

LANDMANAGER

NAME Aimee Weseman OF ADFG

SIGNATURE [Signature]

☐ NTR

☒ Treatment Rec. - Commercial Fishing & Recreation Area, A vad stream To complete treatment, a crew of 2 workers should return mid-summer & manually till the remaining OR sediments in Area A. After the AP was removed & the remaining sediments agitated, a brown oil scum collected on surface waters. Any newly formed AP sediments could be picked up at the same time

USCG/NOAA

NAME CWO R. SPURR / Rebecca Hoff

SIGNATURE [Signature]

☒ NTR

The small amounts of remaining asphalt & tar are weathering & do not represent a source of contamination to biological resources. This segment does not warrant further treatment and should continue to weather naturally.

PAGE 1 OF 1

DATE 04 / 29 / 91

ENERGY LEVEL: ☐ H ☒ M ☐ L

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

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

EST. OIL CATEGORY LENGTH: W m M m N m VL 125 m NO 925 m US m

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- 6 - 02 FRAMES 6-9

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

The remaining surface oil was of two types: (1) AP patches of $< 1 \text{ m}^2$ on GP which were picked up, leaving only light SOR, (2) heavy SOR and AP in shale cleavage partings. About 50% of this was picked up, and the surface crusts disturbed to promote natural cleaning. No sheens observed until surface AP was disturbed.

No subsurface oil was observed in nine pits and numerous other 'scraps'.

REVIEWED M.C. 4/30/91

21


 xx Bedrock
 ↑↓ Vegetation
 0 50
 meters

→

B) $\frac{100}{100} \times 100 = 100\%$
 SOR/AP in shale parting
 2 x 15 5%
 PU $\rightarrow$ 50% remaining

NO

V E

1

Δ(7)NL

2

↑

1

4

4

1

BAINBRIDGE ISLAND

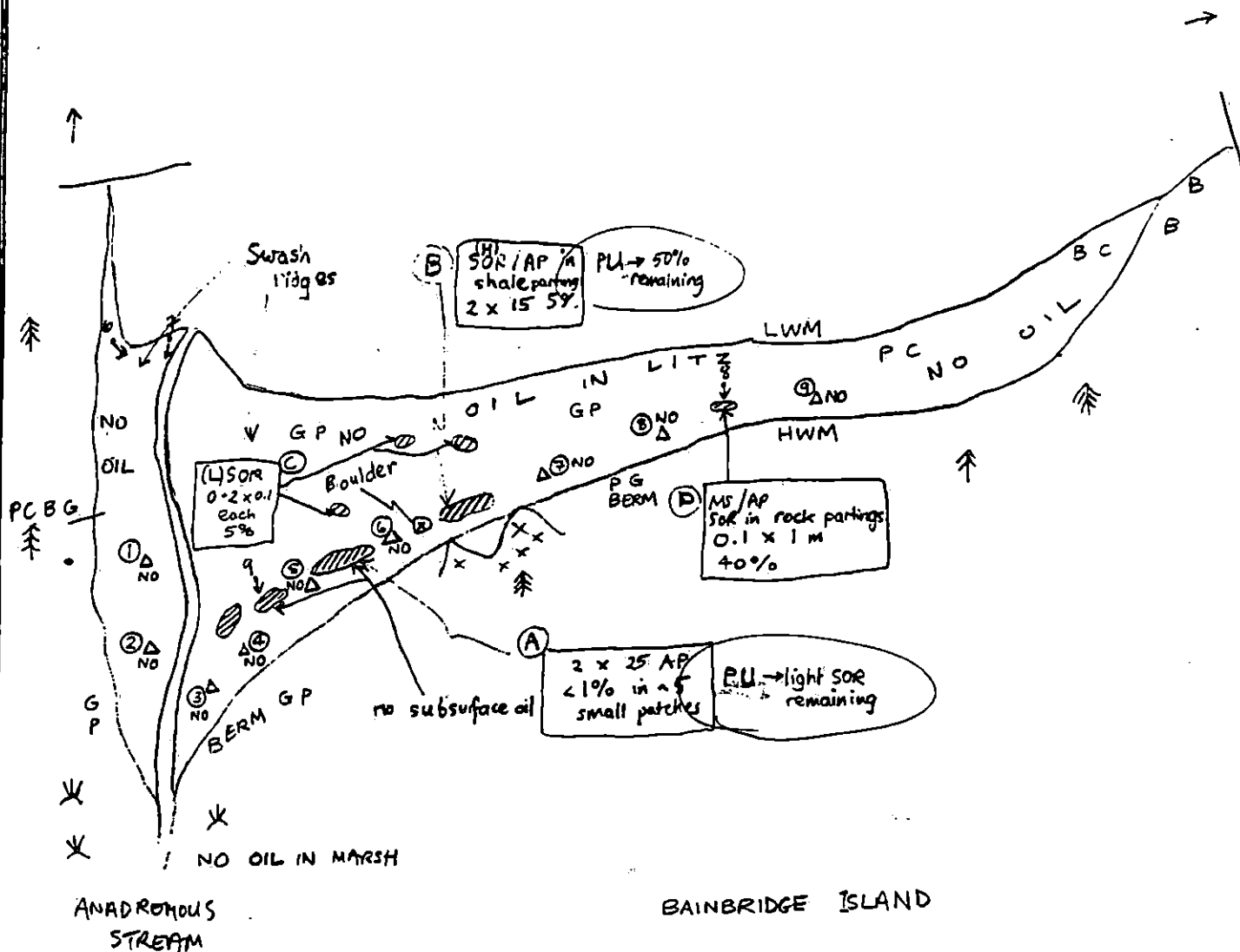
REWARDED M.C. 4/30/41

Photo Locations

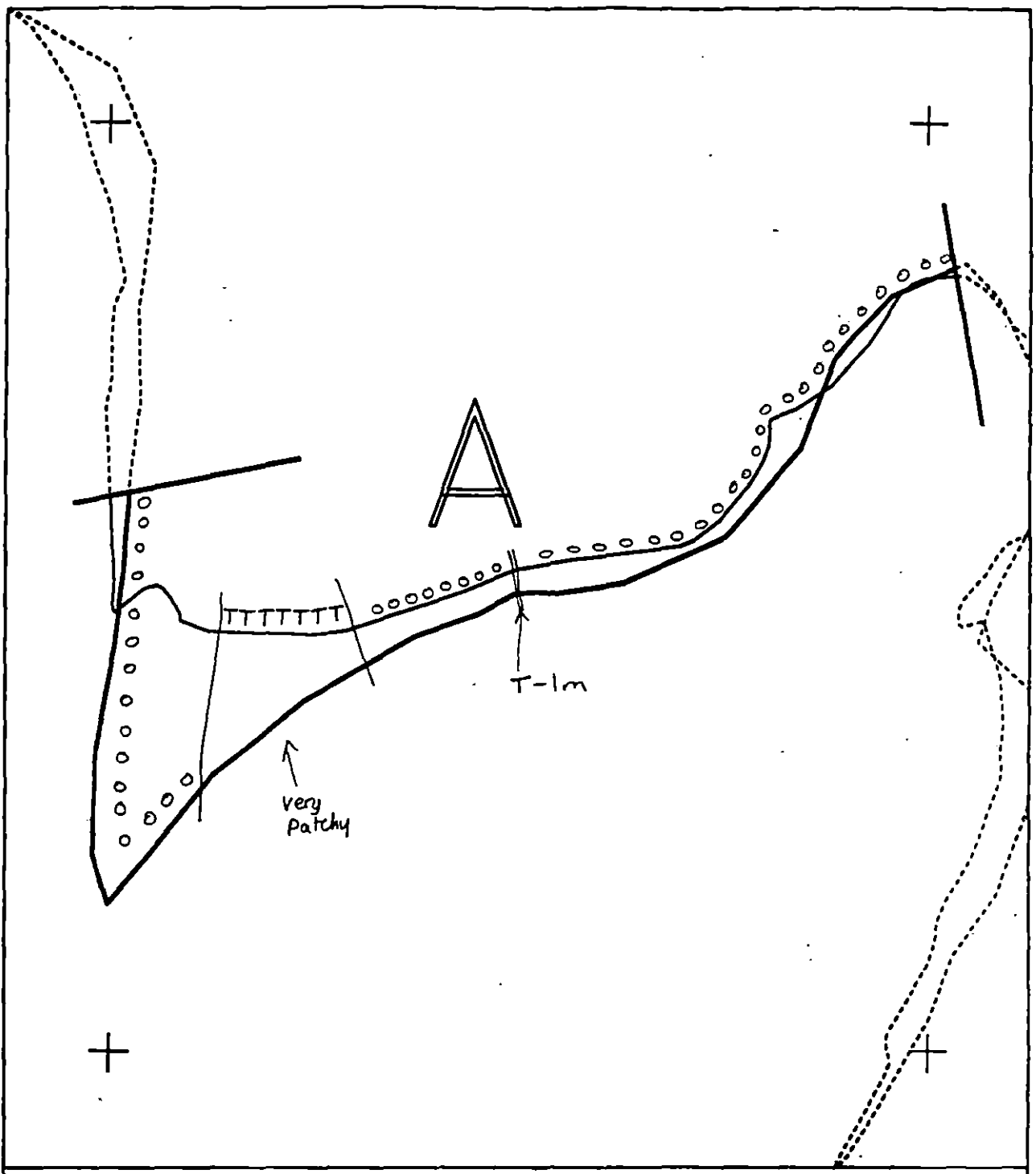
BA-002-A 04/29/91
OG Map 0850 - 1040
D.I. Little

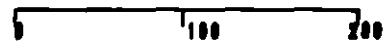
PRINCE OF WALES
PASSAGE

xx Bedrock
± Vegetation



Revised 4/30/91



XXXX	Wide	BA002 A ADEC Subsegment Length: 1095m METERS  AK State Plane Zone 6 ph000200	 Subdivision Field Map Map Key: PWSBA002Aa Name: <u>D-I-LITTLE</u> Date: <u>04/29/91</u> Date Entered:
////	Medium		
----	Narrow		
TTTT	Very Light		
0000	No Oil		

Revision MC. 4/30/91

MAYSAP BIOLOGICAL SUMMARY FORM

TEAM # 6

DATE

4/29/91

SEGMENT # BA-002

TIDAL HEIGHT (Range)

SUBDIVISION A

BIOLOGIST Schroeder

SEA STATE White capping

WIND SPEED/DIRECTION N-NE 25mph+

PHOTOGRAPHS: ROLL #

FRAME #

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

(A-D) = all asphalt and SCA located in MITZ to U1TZ. area is composed of loose, broken up shale. Most birds located in LITZ, so gump activity near oil would have minimal impact if it occurred at a +2 foot or higher tide. Lower productivity around anadromous stream obviously is a result of continually shifting beach.

This is a medium energy beach. The mid to upper intertidal zone is low in productivity due to composition of shale and loose black sand. From the mid to lower intertidal zone, fucus help patches are scattered near the anadromous stream but become more plentiful away from the stream on both sides. Mussel beds are well established in the lower intertidal amongst the fucus help. Dark brown algae growth exists on all rock surfaces. Fucus abundant on lower portion of shale outcropping to east of stream.

WILDLIFE OBSERVATIONS

TO BE COMPLETED IN ALL SUBDIVISIONS

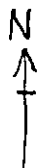
BIRDS	# OF SPECIES	TOTAL BIRDS	FISH OBSERVED SPECIES PRESENT
Eagles	1	1	
Seabirds			
Waterfowl		3	
Gulls/Kittiwakes	2	37	
Shorebirds	1	2	
Corvids	1	1	
Other Birds			

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

Shoreline subdivision map showing important biological features attached.

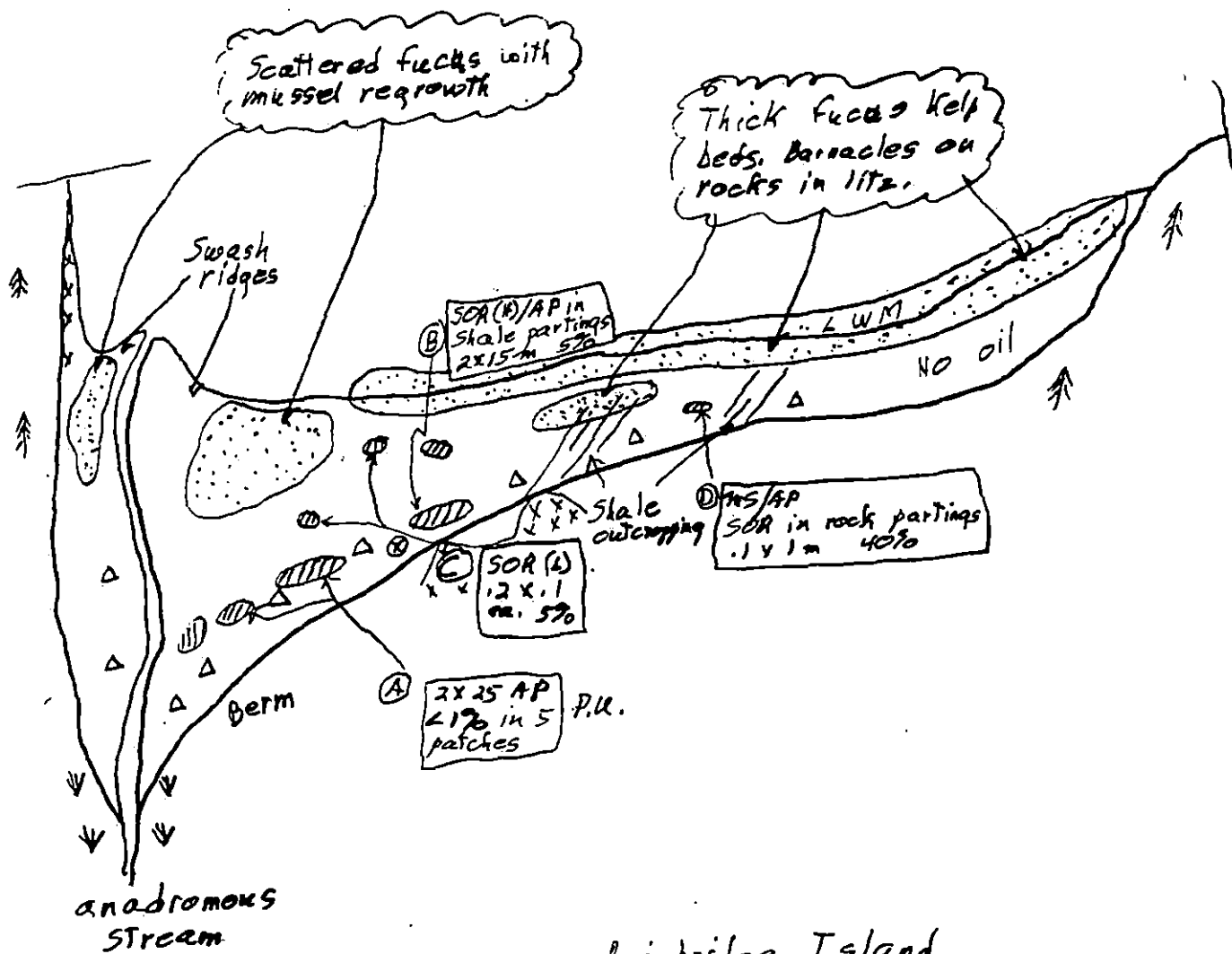
BA-002-A 4/29/91
 Bio. map 0850-1040
 T.R. Schroeder

Prince of Wales
 Passage



0 50
 meter

⊗ = rock
 ∇ = grass
 ⊙ = oil



Bainbridge Island

ANADROMOUS FISH STREAM ASSESSMENT

REGION: PRINCE WILLIAM SOUND

SEGMENT: BA-02 A

STREAM NO: 226-40-16450

ANADROMOUS FISH STREAM EVALUATION

SEGMENT ST/ BA-02 A STREAM NO: 226-40-16450 DATE 4/24/90

SEGMENT ENVIRONMENTAL SENSITIVITIES AND TIME CONSTRAINTS:

Two catalogued anadromous streams in BA-02: 226-40-16450, 226-40-16451.

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

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

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

See attached Ecological Constraint sheet for specific constraints and contacts.

SUBDIVISION ECOLOGICAL CONSTRAINTS:

Avoid any unnecessary disturbance or damage to unilled biota and substrate. The subject stream is located in Subdivision A (1 of 1).

ARCHAEOLOGICAL CONSTRAINTS:

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

SHPO SIGNATURE: _____ DATE: _____

Subsurface Oil Observed: Yes _____ No X Maximum Depth _____

RECOMMENDATIONS:

X No Treatment Recommended

_____ Treatment Recommended

_____ Manual Pickup

_____ Bioremediation

_____ Tarmat Removal

_____ Snare/Absorbent Booms

_____ Oil Snares (pom poms)

_____ Absorbents (pads, rolls, etc)

_____ Spot Washing: _____ Wands

_____ Beach Cleaner

_____ Other (see comments)

COMMENTS: _____

TAG COMMENTS: _____

TAG APPROVAL DATE: _____

ADEC _____

EXXON _____

NOAA _____

USCG _____

FOSC: _____ DATE: _____

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

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

No disturbance of stream bed or banks unless authorized by ADF&G. No beach flushing into stream drainage. No bioremediation or other chemical application within 100m of stream without authorization from ADF&G. No use of methods which might affect nearshore oil or toxicity levels, such as hot water wash or Inipol application, prior to at least July 1 unless authorized by ADF&G. Treatment which is not intrusive and which will not affect nearshore oil or toxicity levels, such as manual removal, can probably proceed without adherence to time constraints. In any case, contact ADF&G Habitat Division prior to treatment for consultation and/or permit application.

AGENCY CONTACT PERSON: ADF&G John Morison 267-2324

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

No use of methods which might affect nearshore oil or toxicity levels, such as hot water wash or Inipol application, prior to July 31 unless authorized by ADF&G. Treatment which will not affect nearshore oil or toxicity levels, such as manual or mechanical removal, can probably proceed without adherence to time constraints. Contact ADF&G prior to treatment for confirmation and advice.

AGENCY CONTACT PERSON: ADF&G Larry Peltz 424-3214

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

1E Main Bay Hatchery release (4/20 to 6/15)

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

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

1H Remote release site

No use of methods which might affect nearshore oil or toxicity levels, such as hot water wash or Inipol application, prior to at least July 1 unless authorized by ADF&G and/or PWS Aquaculture Association. Treatment which will not affect nearshore oil or toxicity levels, such as manual or mechanical removal, can probably proceed without adherence to time constraints. Contact ADF&G or PWS Aquaculture Association for confirmation and authorization.

AGENCY CONTACT PERSON: 1E ADF&G Larry Peltz 424-3214

1D 1F 1G PWS Aquaculture Association John McMillan or Bruce Suzumoto 424-7511

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

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

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

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

Contact ADF&G for specific dates, locations and constraints. Restrict boat and air traffic to essential minimum. When set net sites are present (1L) restrict beach operations to essential minimum as authorized by ADF&G. If plans for treatment include methods such as hot water wash or Inipol application which might affect nearshore oil or toxicity levels, contact ADF&G for consultation and authorization.

AGENCY CONTACT PERSON: ADF&G James Brady 424-3212

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

Contact ADF&G for confirmation - dates and locations may vary. Restrict boat traffic to essential minimum. Avoid damage to uncoiled intertidal and subtidal algae and seagrass. If plans for treatment include methods such as hot water wash or Inipol application which might affect nearshore oil or toxicity levels, contact ADF&G for consultation and authorization.

AGENCY CONTACT PERSON: ADF&G Evelyn Biggs 424-3235

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

Recreation:

Tent sites (6/1 to 9/15)

Anchorage (6/1 to 9/15)

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

Lodge (6/1 to 9/15)

Special use destination

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

Finfish harvesting

Deer harvesting (8/15 to 2/28)

Invertebrate harvesting

Contact ADF&G and appropriate Native Corporation for specific dates, locations, and constraints. Restrict boat and air traffic and beach disturbance to essential minimum. If plans for treatment include methods such as hot water wash or application of Inipol which might affect intertidal or nearshore oil or toxicity levels, contact ADF&G and appropriate Native Corporation for authorization - see Native Corporation Contact List for each Native Corporation's contact person.

AGENCY CONTACT PERSON: ADF&G Jim Fall 267-2359

FIELD SHORELINE COMMENT SHEET

SEGMENT ST / DA 002 SUBDIVISION: NO # DATE 1/24/90

USCG

NAME CMD MC MATTON SIGNATURE [Signature]☒ NO TREATMENT RECOMMENDED
COMMENTS☐ TREATMENT SUGGESTED

ADEC

NAME ADF+G TOM CROWE SIGNATURE [Signature]☒ NO TREATMENT RECOMMENDED
COMMENTS☐ TREATMENT SUGGESTED

LAND MANAGER

NAME ALL TEAM MEMBERS SIGNATURE _____☐ NO TREATMENT RECOMMENDED
COMMENTS☐ TREATMENT SUGGESTED

SHORELINE OILING SUMMARY (ANAD.)

REVISION NO

OG: WILLIAM LEID USCG: McMAHON SEGMENT ST/ BA 002 26
 BIO: MICHAEL FAWCETT LAND REP: 5 STRAIN 10TH OF
 EXXON: GUS GARCIA ADPC: MIKE WIEDNER TIME: 08:40
 TEAM NO. 15 TIDE LEVEL: -1 FT DATE: 24 / APR / 90
 EST. SUBDIVISION LENGTH: 60 m ☐ Sun ☒ Clouds ☐ Fog ☐ Rain ☐ Snow
 UPLANDS DESCRIPTION: ☒ Grass ☒ Forest ☒ Rock
 SURVEYED FROM: ☒ Foot ☐ Boat ☐ Helo
 SURFACE SEDIMENTS: R 4 % B 10 % C 25 % P 61 % G 0 % S 0 % M 0 % V 0
 SLOPE: Long 100 % Hang 0 % Vert 0 % WAVE EXPOSURE: ☒ Low ☐ Med ☐ Hk
 OIL CATEGORY LENGTH: W 0 m M 0 m N 0 m VL 2 m NO 58

SURFACE OIL

CHARACTER	DISTRIBUTION				OIL / FILM COLOR				IMPACTED ZONES			
	N	E	S	W	1	2	3	4	SU	U	M	L
ASPHALT PAVEMENT												
POOLED												
COVER												
COAT												
STAIN												
MOUSSE												
PATTIES			X					X		X		
TARBALLS			X					X		X		
FILM												
NO OIL									X	X	X	

PAVEMENT H F S 0 sq. m by 0

PATTIES / TARBALLS 1

NEAR SHORE SHEEN? (NO) BR RW SL

OILED DEBRIS	AMOUNT		
	SM	MD	LG
Logs			
Vegetation			
Trash			
Debris			

Did you Col DEBRIS 6
☐ YES ☒ NO
 TYPE 0
 #BAGS 0

Photographs:

Roll No. _____

Frames _____

SUBSURFACE OIL

PIT NO.	PIT DEPTH (cm)	SUBSURFACE OIL CHARACTER					OILED INTERVAL	BELOW		OIL / FILM COLOR				PIT ZONE				A N A	SHEEN	CYAN	↓	SURFA SUBSUR SEDIME
		OP	OR	OL	OF	NO		UO	UO	1	2	3	4	SU	U	M	L					
1	25					X	•							X					N			PIC/
2	35					X	•								X				N			PIC/
3	35					X	•								X				N			PIC/
4	35					X	•							X	X				N			PIC/
							•															
							•															

COMMENTS

REVIEWED JW DATE 4-25

04/22/80

00 WILLIAM REID

Film AS-15-5

SEGMENT 01 BA002

SKETCH MAP

STREAM No #

DATE 21 APR 80

CHECKLIST

- ☐ N Area
- ☐ Approx. Slope
- ☐ Sediment Bedry
- ☐ Oil Dist.
- ☐ Width
- ☐ Length
- ☐ % Cover
- ☐ Substrate Character
- ☐ Est. HW/LWL
- ☐ SSL
- ☐ Profile Location(s)
- ☐ Profile(s)
- ☐ PH Location(s)
- ☐ Photo Location(s)

LEGEND

1 Δ

PH - No Subsurface Oil

2 Δ

PH - Subsurface Oil

CT/C

Continuous Distribution

CT/B

Broken Distribution

CT/P

Patchy Distribution

CT/S

Splashed Distribution

Oil Vegetation

1 ●→

Photo location, direction, and number

VERY SCATTERED THE BALLS
TB/P / BEYOND THE BRIDGE
K COAST AS

CLIFF

PTP

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

REVISION 000000

BA 002

4/24/90

No Stream Number

Michael Fawcett

Ecological Summary

This stream enters cove via a cobble/pebble/gravel beach. Patchy dense Fucus and barnacles exist in MTZ. The entire LTZ has been recently turned over by sea otters digging for clams - many hundreds of holes side by side. Very little attached macro-fauna remains, as a result. A few small tar mats were found in UTZ and collected. No cleanup needed

M Fawcett

26/3

ASPEC MULTI-ASSESSMENT DATA FORM

1 SURVEY TYPE: BS SS DS TS AVS SCHS KMS PTA 2 REGION: PNS KP, CI K, AP

METHOD: Aerial Ground Boat

3 DATE: 4/24/90 15 HIGH TIDE TIMES: 0059, 1347 21 TEAM RECORDER: M. WIEDMER

4 START TIME: 0830 16 HIGH TIDE HTS: 12.5, 10.9 22 OBSERVERS: T. CROWE

5 STOP TIME: 0850 17 LOW TIDE TIMES: 0731, 1935 23 AGENCY: ADFG

6 SEGMENT #: BA-002 18 LOW TIDE HTS: -2.2, 0.7 24 PHOTOS TAKEN: Y N

7 STATION #: BA-002 A 19 TIDE HT AT SURVEY: -1.291 Roll #: _____ Frames: _____

8 K-UNIT: _____ Ebb Slack Flood Slack 25 VIDEOS TAKEN: Y N TAPES: _____

9 STAT AREA: _____ 20 USGS QUAD: _____ Starts: _____ Ends: _____

10 LAT: _____ 11 LONG: _____ 26 SAMPLES TAKEN: Y N Number: _____

12 SOURCE: Map Loran Oil: _____

13 LOCATION: RAINIER PASSAGE Sediment: _____

14 DESCRIPTION: _____ Biological: _____

Water: _____

EXTENT OF OIL

27 SURFACE COVERAGE

SHORELINE				STREAM			
L	V	N		L	V	N	
100	75		41	75	1		0

28 SURFACE THICKNESS

2cm							
-----	--	--	--	--	--	--	--

29 PENETRATION

--	--	--	--	--	--	--	--

30 OVERALL OIL IMPACT: N VL L N H

31 OIL TYPES: Pooled House Tar Asphalt Sticky Stain

32 OILED DISTRICT: Y N

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

34 WAVE EXPOSURE: High Moderate Low

35 SUBSTRATE TYPE: Bedrock 10 Boulder 10 Cobble 40
Gravel 402 Sand _____ Mud/silt _____

36 CATALOGED ANAD. FISH BREAST Y N

37 CATALOG #:

38 STREAM NAME:

39 OIL IN STREAM BED? Y N

40 OIL ON STREAM BANK? Y N

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

42 OIL WITHIN 1 MILE OF STREAM Y N

Where: _____

43 ANADROMOUS FISH PRESENT? Y N
ALEVINUS PRESUMED

44 ANADROMOUS FISH OBSERVATION

Species	Aerial	Ground

COMMENTS: VERY RICH BIOTA IN INTERTIDAL ZONE.

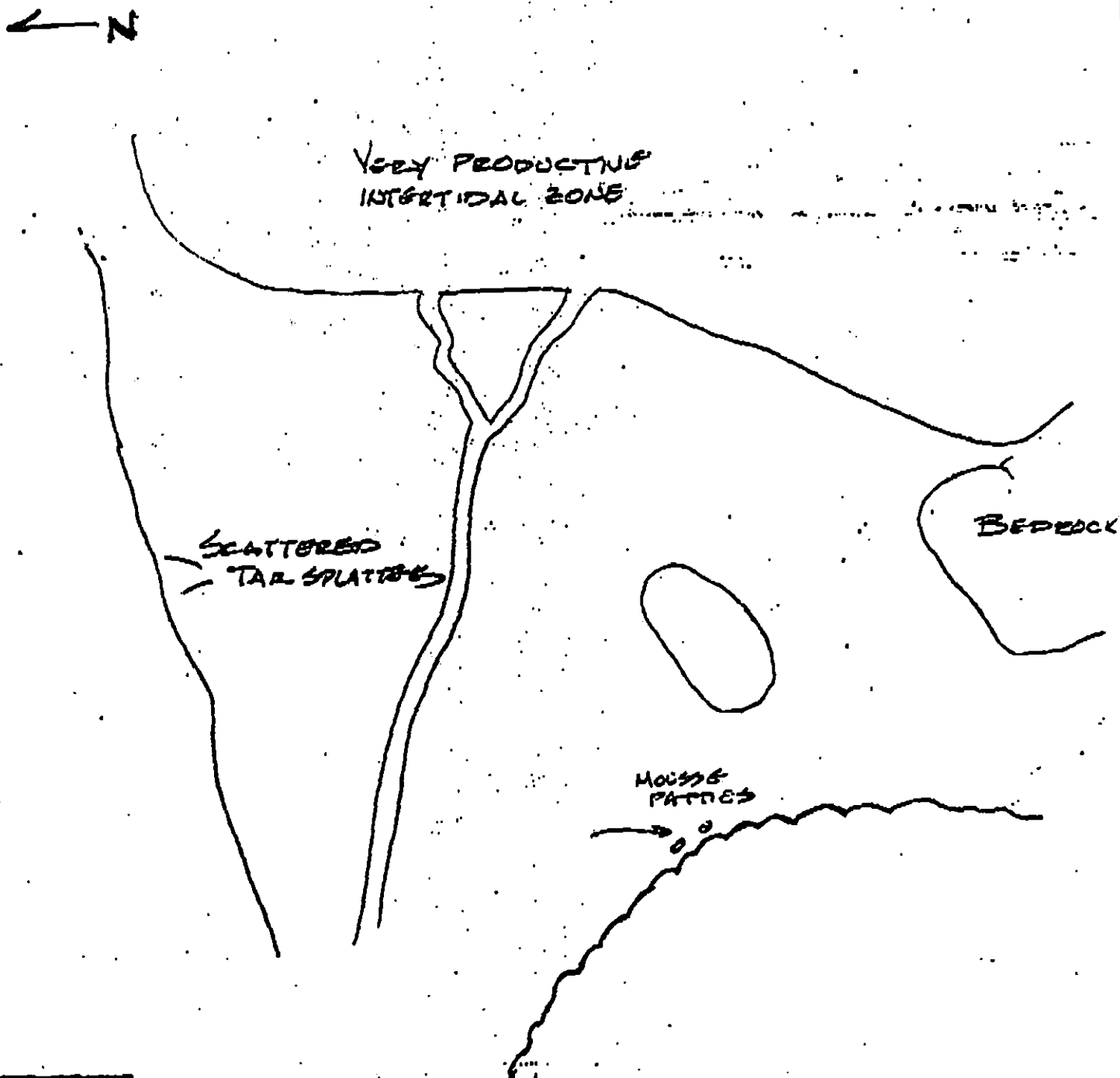
1-2 PATRES IN BOULDER RUBBLE SOUTH OF CHANNEL

2-3 TAR SPLATTERS IN BOULDER NORTH OF CHANNEL.

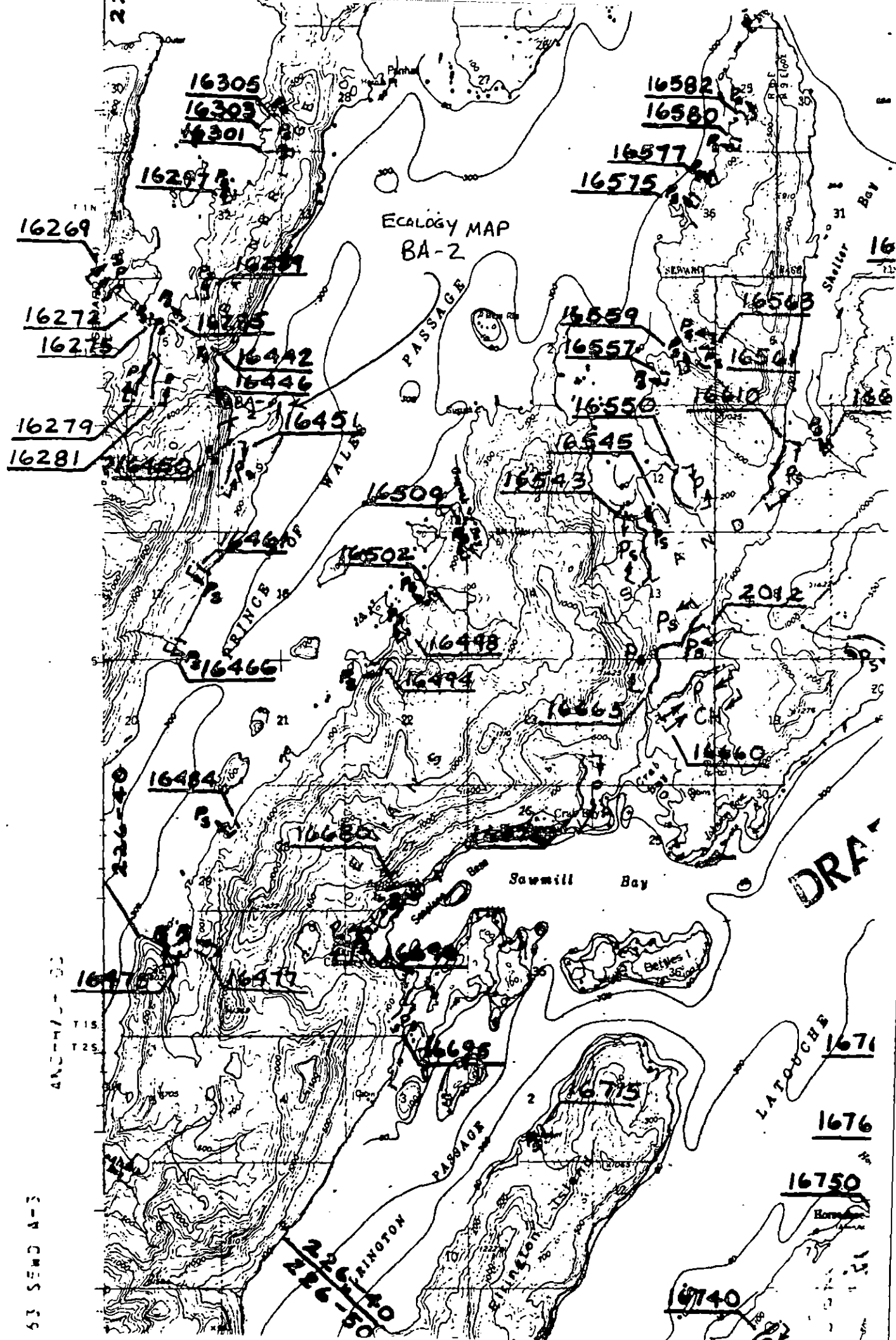
48 PHOTOLOG

FRAME(S)	DESCRIPTION
	RECOMMENDATIONS: MANUAL REMOVAL OF MOUSSE PATCHES - DONE BY CREW - NO FURTHER TREATMENT REQUIRED.
	I agree with recommendations. <i>M. H. Fawcett</i>

49 OIL DISTRIBUTION DIAGRAM



Sample taken
Loco frame # and
Loc direction.



ANADROMOUS FISH STREAM EVALUATION ADDENDUM

CONSTRAINTS FOR STREAM NO. 226-40-16451

SEGMENT BA-2 SUBDIVISION A

WORK WINDOW	
Manual Pickup Tarmat Removal	OPEN

ARCHAEOLOGICAL STANDARD CONSTRAINT

If cultural resources are uncovered, PHONE 564-3274.

APPLICABLE ECOLOGICAL TIME CONSTRAINTS

1A,1B Salmon Stream

ADF&G catalogued anadromous streams (226-40-16451 and 226-40-16450) are in Subdivision A and are more than 100m from work site. No constraint to manual pickup and tarmat removal.

OTHER ECOLOGICAL CONSIDERATIONS

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

**SEE SUBDIVISION CONSTRAINT ADDENDUM BA-2A
FOR ADDITIONAL CONSTRAINT INFORMATION.**

FOSC

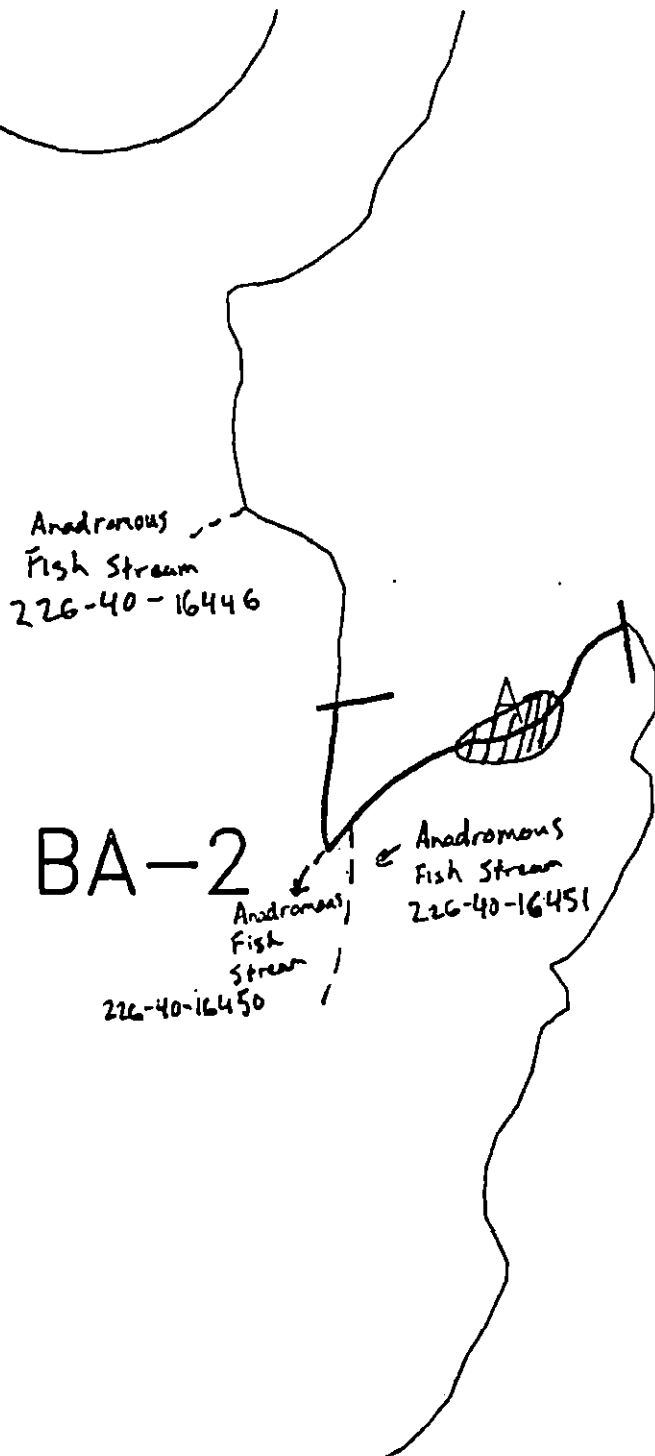
Date

6-20-90

Prepared by

Date

6/18/90



Exxon Company, USA
Map Key: PMS-BA-2
June 08, 1990



ECOLOGY MAP
SEGMENT BA-2
SUBDIVISION A (L of L)
METERS
0 400 799

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

1 inch = 1311 feet

ANADROMOUS FISH STREAM EVALUATION

SEGMENT ST/ BA-02 STREAM NO: 226-40-16451 DATE 4/23/90

SEGMENT ENVIRONMENTAL SENSITIVITIES AND TIME CONSTRAINTS:

Two catalogued streams in BA-02: 226-40-16451, 226-40-16450.

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

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

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

See attached Ecological Constraint sheet for specific constraints and contacts.

SUBDIVISION ECOLOGICAL CONSTRAINTS:

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

ARCHAEOLOGICAL CONSTRAINTS:

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

SHPO SIGNATURE: J. David McManis DATE: 5/8/90

Subsurface Oil Observed: Yes No X Maximum Depth

RECOMMENDATIONS:

 No Treatment Recommended

X Treatment Recommended

X Manual Pickup

 Bioremediation

X Tarmat Removal

 Snare/Absorbent Booms

 Oil Snares (pom poms)

 Absorbents (pads, rolls, etc)

 Spot Washing: Wands

 Beach Cleaner

 Other (see comments)

COMMENTS: Recommended treatment includes manual removal of tarmats and pickup of tarballs/patties as indicated on sketch map. Work should be conducted between 5/15 and 7/10 based on anadromous stream constraint.

 SEE CONSTRAINTS ADDENDUM DATED 6/18/90. J.P.

TAG COMMENTS:

TAG APPROVAL DATE: 5/7/90.

ADEC Art Wenzel

EXXON Amy Tate

NOAA Gary Petros

USCG C.A. Reiter

FOSC:

DATE: 5-15-90

ANADROMOUS FISH STREAM ASSESSMENT

REGION: PRINCE WILLIAM SOUND

SEGMENT: BA-02

STREAM NO: 226-40-16451

ANADROMOUS FISH STREAM EVALUATION

SEGMENT ST/ BA-02 STREAM NO: 226-40-16451 DATE 4/23/90

SEGMENT ENVIRONMENTAL SENSITIVITIES AND TIME CONSTRAINTS:

Two catalogued streams in BA-02: 226-40-16451, 226-40-16450.

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

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

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

See attached Ecological Constraint sheet for specific constraints and contacts.

SUBDIVISION ECOLOGICAL CONSTRAINTS:

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

ARCHAEOLOGICAL CONSTRAINTS:

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

SHPO SIGNATURE: _____ DATE: _____

Subsurface Oil Observed: Yes _____ No X Maximum Depth _____

RECOMMENDATIONS:

_____ No Treatment Recommended

X Treatment Recommended

X Manual Pickup

_____ Bioremediation

X Tarmat Removal

_____ Snare/Absorbent Booms

_____ Oil Snares (pom poms)

_____ Absorbents (pads, rolls, etc)

_____ Spot Washing: _____ Wands

_____ Beach Cleaner

_____ Other (see comments)

COMMENTS: Recommended treatment includes manual removal of tarmats and pickup of tarballs/patties as indicated on sketch map. Work should be conducted between 5/15 and 7/10 based on anadromous stream 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 seagrass. If plans for treatment include methods such as hot water wash or Inipol application which might affect nearshore oil or toxicity levels, contact ADF&G for consultation and authorization.

AGENCY CONTACT PERSON: ADF&G Evelyn Biggs 424-3235

30, 3Q Harbor seal and sea lion pupping (5/15 to 7/1)

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

Restrict boat and air traffic to essential minimum. No personnel within 400m. Aircraft to maintain 800m horizontal and 300m vertical distance from haulouts. No application of Inipol within two weeks of arrival dates (work window at these sites is limited to 7/2 to 7/31). Contact ADF&G and USFWS prior to treatment for confirmation.

AGENCY CONTACT PERSON: US National Marine Fisheries Service Steve Zimmerman 586-7235

ADF&G Don Calkins 267-2403

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

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

AGENCY CONTACT PERSON: USFWS Jill Parker 786-3377

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

Restrict all activity to essential minimum, especially air traffic. Contact USFWS and ADF&G for confirmation.

AGENCY CONTACT PERSON: USFWS Jill Parker 786-3377

ADF&G Tom Roth 267-2206

5T All Bald Eagle nests (3/1 to 6/1)

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

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

AGENCY CONTACT PERSON: USFWS Jill Parker 786-3377

✓ 6U Recreation:

6V Tent sites (6/1 to 9/15)

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

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

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

Special use destination

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

7HH Finfish harvesting

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

Invertebrate harvesting

Contact ADF&G and appropriate Native Corporation for specific dates, locations, and constraints. Restrict boat and air traffic and beach disturbance to essential minimum. If plans for treatment include methods such as hot water wash or application of Inipol which might affect intertidal or nearshore oil or toxicity levels, contact ADF&G and appropriate Native Corporation for authorization - see Native Corporation Contact List for each Native Corporation's contact person.

AGENCY CONTACT PERSON: ADF&G Jim Fall 267-2359

FIELD SHORELINE COMMENT SHEET

36/53

SEGMENT ST BA 002 SUBDIVISION: 16451 DATE 4/23/90

USCG

NAME CMD MCMAHON

SIGNATURE [Signature]

☐ NO TREATMENT RECOMMENDED
COMMENTS

☒ TREATMENT SUGGESTED

1. MANUAL REMOVAL ASPHALT
LEFT SIDE / LOOKING ONSHORE

ADFC

ADEC

NAME MICHAEL WIEDNER

SIGNATURE [Signature]

☐ NO TREATMENT RECOMMENDED
COMMENTS

☒ TREATMENT SUGGESTED

SOME PATTIES MAY BE FOUND ON RIGHT SIDE IN UPPER INTER-
TIDAL ZONE. IF FOUND, THEY SHOULD BE REMOVED.

LAND MANAGER

NAME NO TEAM MEMBER

SIGNATURE _____

☐ NO TREATMENT RECOMMENDED
COMMENTS

☐ TREATMENT SUGGESTED

SHORELINE OILING SUMMARY (ANAD.)

REVISION NO. 1

OG WILLIAM LEID USCG McMAHON SEGMENT ST/ BA002 3/5
 BIO MICHAEL FAWCETT LAND REP TOM CRAWFORD 5 STRAH 22640-16451 (OF
 EXXON GUS GARCIA ADFG MIKE WIEDMER TIME 15:45 to 16:15
 TEAM NO. 15 TIDE LEVEL 5.5 FT DATE 23 / APR / 90
 EST. SUBDIVISION LENGTH: 60 m ☐ Sun ☒ Clouds ☐ Fog ☐ Rain ☐ Snow
 UPLANDS DESCRIPTION: ☒ Grass ☒ Forest ☐ Rock
 SURVEYED FROM: ☒ Foot ☐ Boat ☐ Helo
 SURFACE SEDIMENTS: R 0 % B 0 % C 30 % P 60 % G 10 % S 0 % M 0 % V 0
 SLOPE: Long 100 % Hang 0 % Vert 0 % WAVE EXPOSURE: ☐ Low ☒ Med ☐ Hg
 OIL CATEGORY LENGTH: W 0 m M 0 m N 4.5 m VL 0 m NO 1.2

SURFACE OIL

CHARACTER	DISTRIBUTION				OIL / FILM COLOR				IMPACTED ZONES			
	R	B	P	M	SP	BR	OR	GR	SU	W	U	
ASPHALT PAVEMENT	X					X			X			
POOLED												
COVER												
COAT												
STAIN												
MOUSSE												
PATTIES		X				X			X	X		
TARBALLS												
FILM												
NO OIL									X			X

PAVEMENT H (F) S 60 sq. m by 5

PATTIES / TARBALLS 1 B

NEAR SHORE SHEEN? (NO) BR RW SL

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

Did you Col DEBRIS
☐ YES ☒ NO

TYPE _____

#BAGS _____

Photographs:

Roll No. _____

Frames _____

SUBSURFACE OIL

PIT NO.	PIT DEPTH (cm)	SUBSURFACE OIL CHARACTER					OILED INTERVAL	BELOW		OIL / FILM COLOR					PIT ZONE				A N A	SHEEN (Y/N)	T	SURFA SUBSUR SEDIME
		OP	OR	OL	OF	NO		SS	SB	SP	SR	SL	SF	SN	SU	SE	SW	U				
1	40					X	.								X				N			P/C
2	40					X	.									X			N			P/C
3	35					X	.									X			N	20		P/C
4	35					X	.								X				N			P/GH
5	60					X	.								X				N			P/GH
							.															

COMMENTS

Δ5: NO OIL LAYER, 1 GOLF BALL SIZE TAIL BALL FOUND

REVIEWED TW DATE 4-25

35/52

00 WILLIAM REID

SEGMENT ST/ BAC02

STREAM 226-AD-16451

DATE 23 APR 00

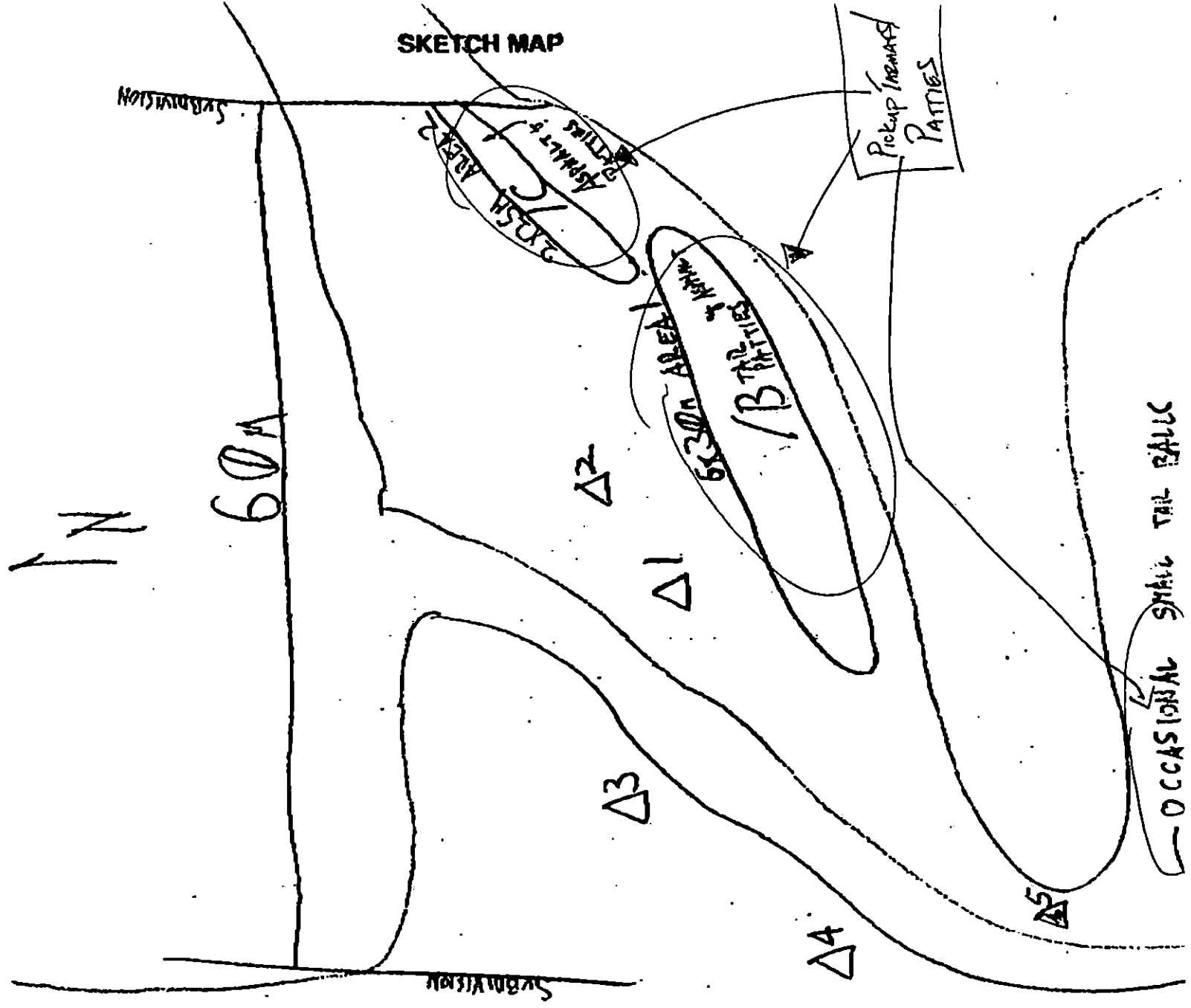
CHECKLIST

- ☐ N Area
- ☐ Approx. Size
- ☐ Beg/Sub Entry
- ☐ Oil Dist.
- ☐ Width
- ☐ Length
- ☐ % Cover
- ☐ Substrate Character
- ☐ Est. HWA/LWA
- ☐ STL
- ☐ 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/D
Broken Distribution
- CT/P
Patchy Distribution
- CT/S
Splashed Distribution
- eee
Oiled Vegetation
- 1 ●
Photo location, direction, and number

SKETCH MAP



ADFG MULTI-ASSESSMENT DATA FORM

SURVEY TYPE: ES SS OS TS AVS SCM MMS PTA 2 REGION: PNS KP, CI K, AP
 METHOD: Aerial Ground Boat
 3 DATE: 4/23/90 15 HIGH TIDE TIMES: 0021 11257 21 TEAM RECORDER: M. WIEDMER
 4 START TIME: 1545 16 HIGH TIDE HTS: 11.5' 110.5' 22 OBSERVERS: T. CROWE
 5 STOP TIME: 1610 17 LOW TIDE TIMES: 0648 11855 23 AGENCY: ADFG
 6 SEGMENT #: BA-002 18 LOW TIDE HTS: -0.8' 10.5' 24 PHOTOS TAKEN: Y (N)
 7 STATION #: 226-40-16451 19 TIDE HT AT SURVEY: 5.35' Roll #: _____ Frames: _____
 8 K-UNIT: _____ Ebb Slack Flood Slack 25 VIDEO TAKEN: Y (N) TAPES: _____
 9 STAT AREA: _____ 20 USCG QUAD: _____ Starts: _____ Ends: _____
 10 LAT: _____ 11 LONG: _____ 26 SAMPLES TAKEN: Y (N) Number: _____
 12 SOURCE: Map Loran Oil: _____
 13 LOCATION: EAST SIDE, BAINBRIDGE I. Sediment: _____
 14 DESCRIPTION: BATHING CAVE Biological: _____
 Water: _____

EXTENT OF OIL

27 SURFACE COVERAGE

SHORELINE				STREAM			
L	N	M	S	L	N	M	S
100	200		2	200	3		<1

28 SURFACE THICKNESS

5cm	5cm	3cm				
-----	-----	-----	--	--	--	--

29 PENETRATION

10cm	10cm	5cm				
------	------	-----	--	--	--	--

30 OVERALL OIL IMPACT: N VL L (N) N
 31 OIL TYPE: Pooled Masses Tar Asphalt Sticky Stain
 32 OILED DEBRIS: Y (N)
 33 SHORELINE TYPE: Headland Low-lying Rocks Beach (Cave)
Lagoon Marsh
 34 WAVE EXPOSURE: High (Moderate) Low
 35 SUBSTRATE TYPE: Bedrock Boulder Cobble 50
Gravel 50 Sand Mud/silt

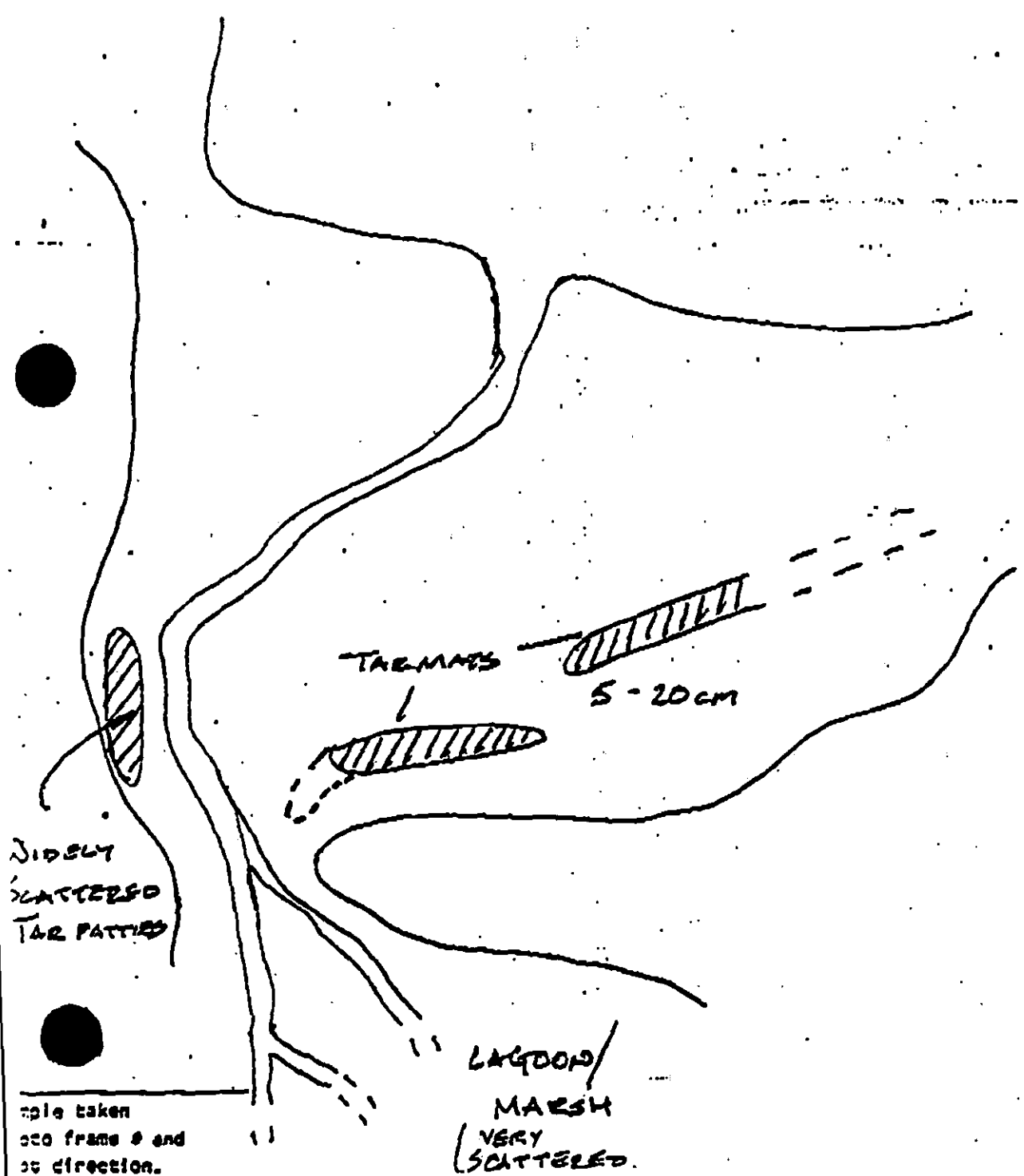
36 CATALOGED ANAD. FISH STREAM: (Y) N
 37 CATALOG #: 226-40-16451
 38 STREAM NAME: _____
 39 OIL IN STREAM BED? Y (N)
 40 OIL ON STREAM BANKS? (Y) N
 41 OIL ON BEACH ADJACENT TO MOUTH (within 50 meters): (Y) N
 42 OIL WITHIN 1 MILE OF STREAM: (Y) N
 Where: _____
 43 ANADROMOUS FISH PRESENT? (Y) N
Fry Presumed
 44 ANADROMOUS FISH OBSERVATION
 Species: _____ Aerial: _____ Ground: _____

COMMENTS: SHALEY GRAVEL & COBBLE INTERTIDAL ZONE

BAND OF ASPHALTIC TAR ALONG UPPER INTERTIDAL ZONE
EAST OF CHANNEL. NO OBVIOUS SUBSURFACE OIL.
VERY SCATTERED PATCHES IN LAGOON/MARSH AND UPSTREAM OF
STORM BERM.

NO(S)	DESCRIPTION
	RECOMMENDATIONS: MANUAL REMOVAL OF TAR MATS
	I agree with recommendation. <i>Mr. H. Fournier</i>

48 OIL DISTRIBUTION DIAGRAM



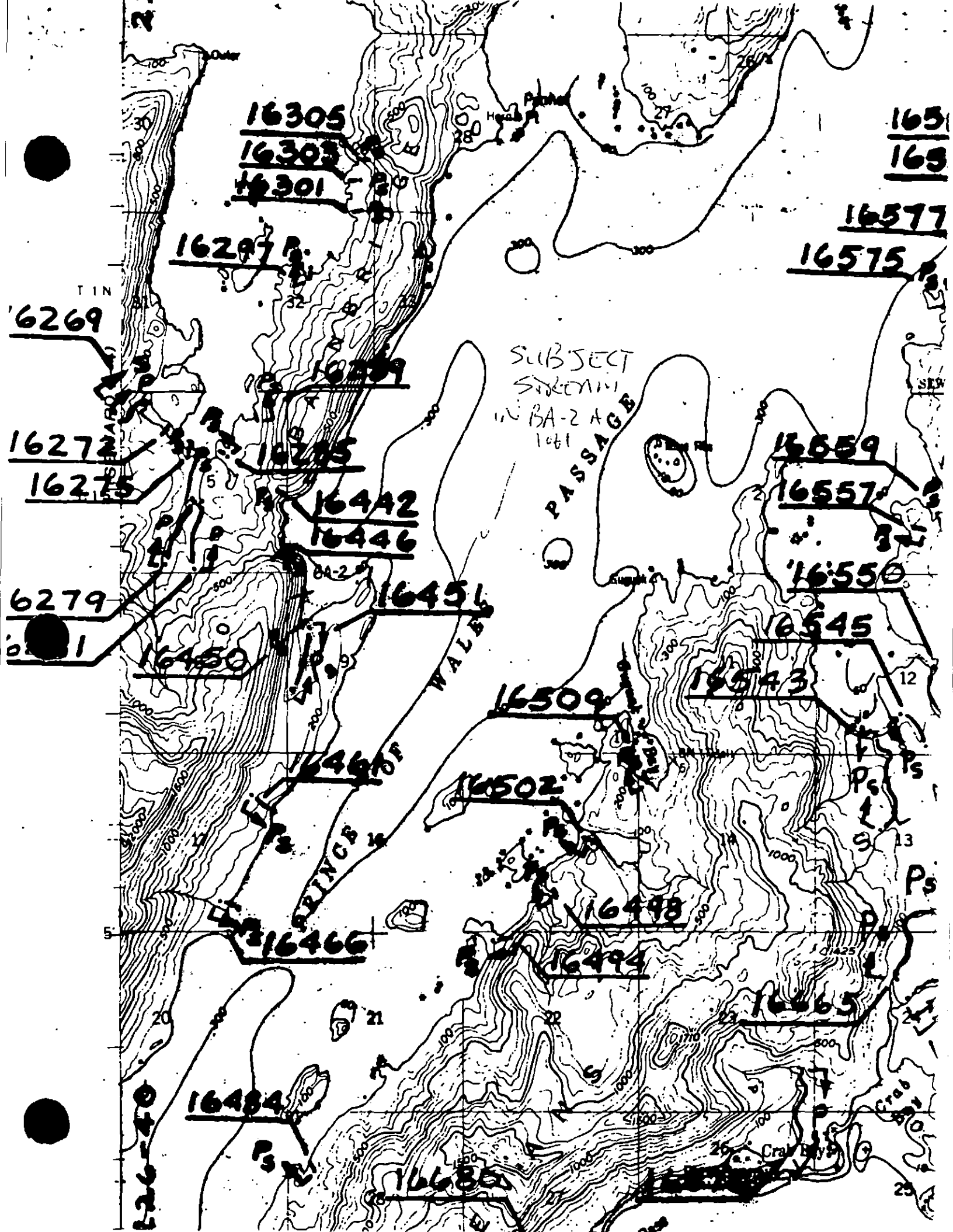
sample taken
see frame 8 and
for direction.

Segment BA002
Stream 226-40-16451
Ecological Summary

4/23/90
Michael Fawcett

The intertidal portion of this stream meanders through a grassy flat before reaching the cobble/pebble/gravel beach. A healthy Fucus-barnacle community exists on scattered cobbles around the stream mouth, becoming more dense toward each end of the cove as the sediments become more stable. Main silt consists of a band of tar mats in UTZ. No ecological constraints re: intertidal biota. One bald eagle sighted, flying by.

M Fawcett



16305
16303
16301

165
169

16577
16575

16297

TIN
16269

SUBJECT
STATION
IN BA-2 AGE
1461

PASSAGE

16272
16275

16289

16285
16442
16446

16559
16557
16550

16279
16450

16451

16545

16509

16543

16502

16465

16466

16498

16494

16465

16484

16685

ASAP

WORK PLAN MODIFICATION RECOMMENDATION

SEGMENT BA-2 SUBDIVISION A DATED 8/2/90MODIFICATION CLASS I _____ CLASS II ✓ CLASS III _____

1. REASON FOR MODIFICATION

SOR at OR/H+Subsurface oiling to 10cm. UITZ
See sketch map for location.

2. SUGGESTED ADJUSTMENT TO WORK PLAN

Reapplication of Bib. customblen

3. TIMING ISSUES

NOTE : ARCHAEOLOGICAL CONSTRAINTS

ADEC [Signature]

EXXON _____

USCG _____

LAND MANAGER Douglas Gibson (If field rep is on scene)

TAG: Bioremediate

FIELD SHORELINE COMMENT SHEET

SEGMENT AS/ BA 2 SUBDIVISION: A SITE: 1 DATE 8/2/90

SCG

NAME MSE Michael D. Brown SIGNATURE Michael D. Brown

☐ YES ☒ NO PRIORITY SITE FOR REASSESSMENT IN 1991
REASON:

ADEC

NAME John Hayer SIGNATURE John Hayer

☒ YES ☐ NO PRIORITY SITE FOR REASSESSMENT IN 1991
REASON:

North east end of segment has SOR/m with subsurface OR/m 5-10cm. Recommend reapplications of curbs to areas identified on sketch map in 1990. OR SS oiling on this segment not show signs of appreciable degradation.

LAND MANAGER

NAME DOUGLAS GIBSON SIGNATURE Douglas Gibson

☒ YES ☐ NO PRIORITY SITE FOR REASSESSMENT IN 1991
REASON:

NOTE: ARCHAEOLOGICAL CONSTRAINTS FOR BA 2

EXXON

NAME Martinez N.J. SIGNATURE Nelson J. Martinez

☐ YES ☒ NO PRIORITY SITE FOR REASSESSMENT IN 1991
REASON:

TAG: Bio remediate

TEAM NO ONE EXXON MARTINEZ SEGMENT AS CH-1
 OG Reimer USCG BROWN SUBDIVISION A
 ADEC HAYES LAND REP GIBSON TOTAL NO. SITES 1
 DATE 8/2/90 TIME 17:12 to 17:50 TIDE LEVEL 5.5 to 6
 TOTAL EST LENGTH OF SHORELINE SURVEYED: 720 m
 SURVEYED FROM: ☒ Foot ☐ Boat ☐ Helo WEATHER: ☐ Sun ☒ Clouds ☐ Fog ☒ Rain ☐ Snow
 OIL CATEGORY LENGTH: W 6 m M 10 m N 0 m VL 570 m NO 40 m US 375 m

SURFACE OIL

SITE 1

SITE 2

SITE 3

CHARACTER	DISTRIBUTION				OILED ZONES			
	/C	/B	/P	/S	SU	UI	MI	LI
ASPHALT								
S.O.R.		H _M	X	✓		H _M X _V		
POOLED								
COVER			✓	X		✓ _X		
COAT				X		X		
STAIN								
MOUSSE			I			I		
PATTIES/T.B.				X		X	X	
FILM		X				X	X	
NO OIL					X			X
EST. SITE LENGTH					720			

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

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

SUBSURFACE OIL

SITE NO.	PIT NO.	PIT DEPTH (cm)	SUBSURFACE OIL CHARACTER				OILED INTERVAL (cm)	CLEAN BELOW (Y/N)	PIT ZONE				SURFACE-SUBSURFACE SEDIMENTS
			OP	OR	OF	NO			SU	UI	MI	LI	
1	1	12		M			5-9	Y		X			P-GP
1	2	15		M			5-10	Y		X			P-GP
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Photographs:

Roll No. ASX201-2

Frames 23

COMMENTS The heaviest oiling conditions are just to the east of the canal stream (226-40-16450) in this site. Oiling is predominately SOR remaining after Tarmat removal and CV/CT on cobbles/pobbles associated with Tarmats. The area has been fairly well filled however the undersides of some cobbles are still coated.

ASAL SHORELINE LING SUMMARY

PAGE 1 OF 1

TEAM NO ONE EXXON MARTINEZ SEGMENT AS/ BA-2A
 OG Reimer USCG BROWN SUBDIVISION A
 ADEC HAYES LAND REP GIBSON TOTAL NO. SITES 1
 DATE 8/2/90 TIME 17:12 to 17:50 TIDE LEVEL 5.5 to 6
 TOTAL EST LENGTH OF SHORELINE SURVEYED: 720 m
 SURVEYED FROM: ☒ Foot ☐ Boat ☐ Helo WEATHER: ☐ Sun ☒ Clouds ☐ Fog ☒ Rain ☐ Snow
 OIL CATEGORY LENGTH: W 6 m M 10 m N 0 m VL 570 m NO 40 m US 375 m

SURFACE OIL

SITE 1

SITE 2

SITE 3

CHARACTER	DISTRIBUTION				OILED ZONES			
	/C	/B	/P	/S	SU	UI	MI	LI
ASPHALT								
S.O.R.		H	X	✓	HM	XV		
POOLED								
COVER			✓	X	✓	X		
COAT				X		X		
STAIN								
MOUSSE			I			I		
PATTIES/T.B.				X		X	X	
FILM		X				X	X	
NO OIL					X			X
EST. SITE LENGTH					720			

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

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

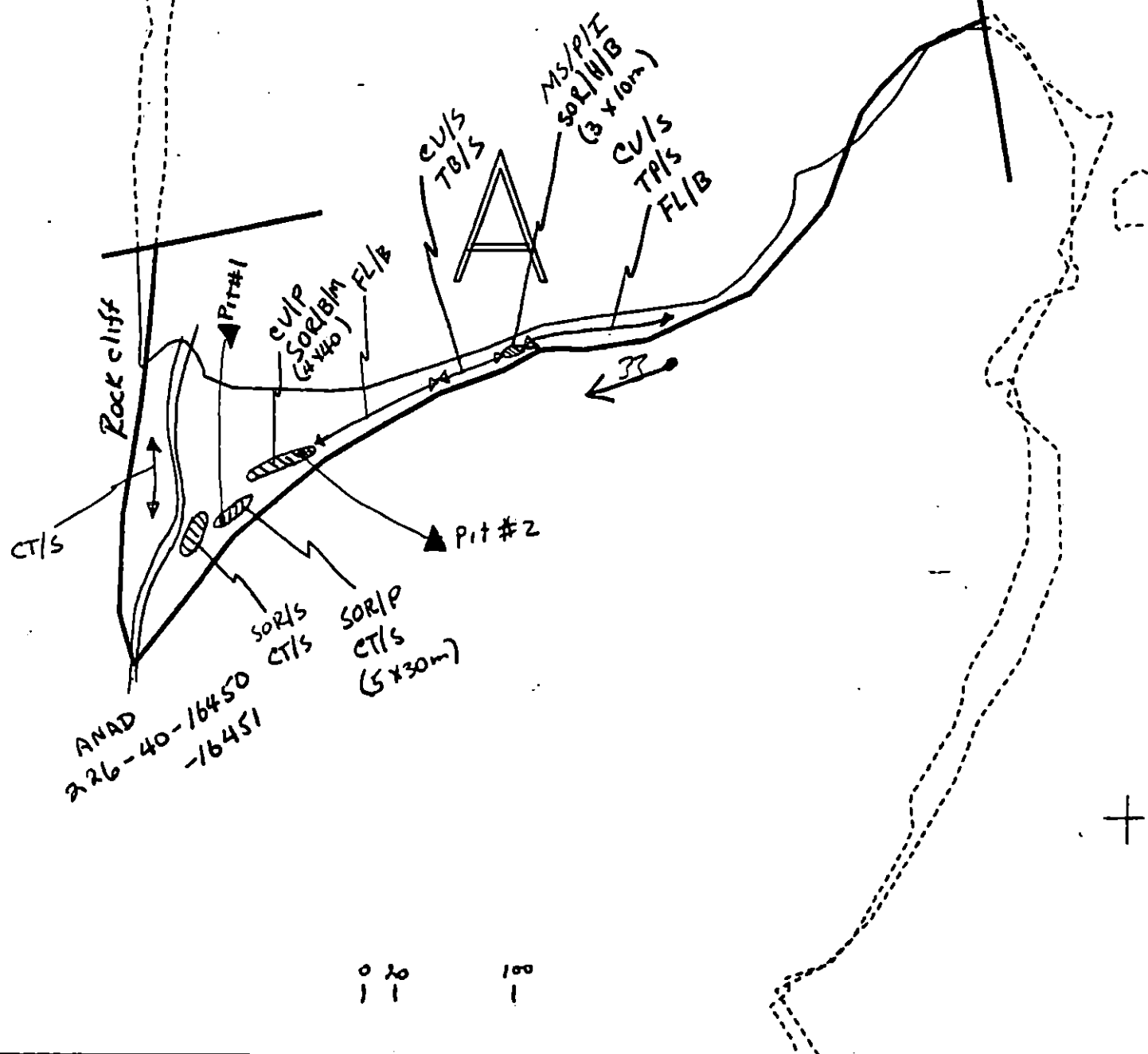
SUBSURFACE OIL

SITE NO.	PIT NO.	PIT DEPTH (cm)	SUBSURFACE OIL CHARACTER				OILED INTERVAL (cm)	CLEAN BELOW (Y/N)	PIT ZONE				SURFACE-SUBSURFACE SEDIMENTS
			OP	OR	OF	NO			SU	UI	MI	LI	
1	1	12		M			5-9	Y		X			P-GP
1	2	15		M			5-10	Y		X			P-GP
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Photographs:

Roll No. ASA201-21Frames 33
 Reviewed
 8/6/90 JW

COMMENTS The heaviest oiling conditions are just to the east of the canal stream (226-40-16450) in this site. Oiling is predominately SOR remaining after Tarmat removal and CU/CT on cobbles/pbbles associated with Tarmat. The area has been filled with fill.



XXXX
//

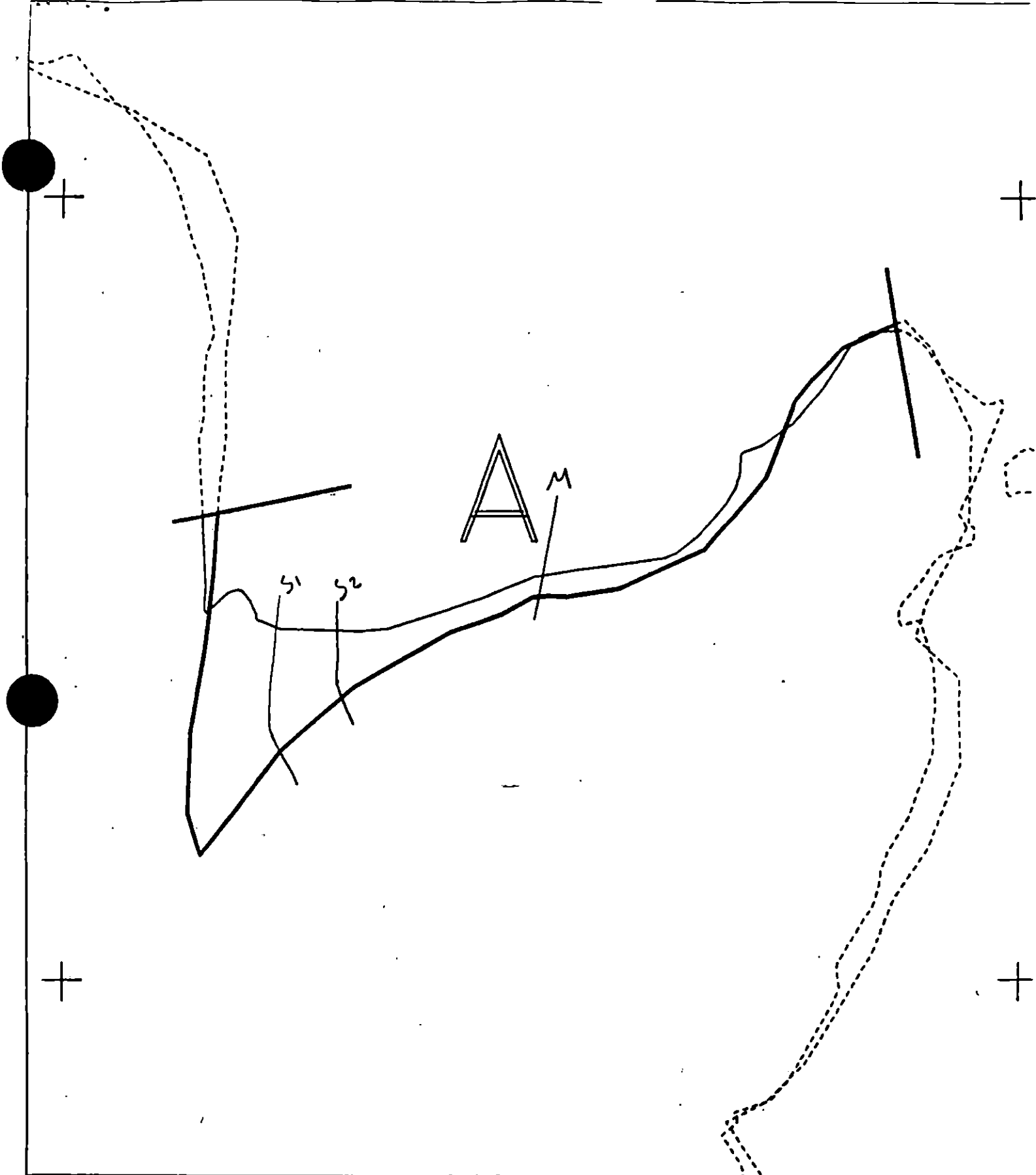
TTTT
0000

Wide
Medium
Narrow
Very Light
No Oil

BA-2 A
ADEC Subsegment Length: 1095m
METERS
0 112 225
AK State Plane Zone 4 1:4428
pba-2a



Subdivision Field Map
Map Key: PWSBA-2A
Name: Reimer
Date: 8/2/90
Data Entered:



XXXX
 //

 TTTT
 0000

Wide
 Medium
 Narrow
 Very Light
 No Oil

BA-2 A

ADEC Subsegment Length: 1095m

METERS

0 112 225

AK State Plane Zone 4 1:4428
 pba-2a



Subdivision Field Map

Map Key: PWSBA-2A

Name: Reimer

Date: 8/2/90

Date Entered:

REGION: PRINCE WILLIAM SOUND

SEGMENT: ST/BA-03

SUBDIVISIONS: A (1 OF 1)

SHORELINE EVALUATION

SEGMENT ST/ BA-03 SUBDIVISION A (1 OF 1) DATE 4/25/90

SEGMENT ENVIRONMENTAL SENSITIVITIES AND TIME CONSTRAINTS:

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

SUBDIVISION ECOLOGICAL CONSTRAINTS:

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

ARCHAEOLOGICAL CONSTRAINTS:

If 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 899 m: No Oil 2996 m
Subsurface Oil Observed: Yes _____ No X Maximum Depth _____

RECOMMENDATIONS:

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

COMMENTS: _____

TAG COMMENTS: _____

TAG APPROVAL DATE: _____

ADEC _____
EXXON _____
NOAA _____
USCG _____

FOSC: _____ DATE: _____

PWS, SEWARD AND HOMER ECOLOGICAL CONSTRAINTS

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

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

No disturbance of stream bed or banks unless authorized by ADF&G. No beach flushing into stream drainage. No bioremediation or other chemical application within 100m of stream 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 257-2324

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 (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 unrolled intertidal and subtidal algae and seagrass. If plans for treatment include methods such as hot water wash or Inipol application which might affect nearshore oil or toxicity levels, contact ADF&G for consultation and authorization.

AGENCY CONTACT PERSON: ADF&G Evelyn Biggs 424-3235

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

30 Harbor seal and sea lion molting (5/15 to 9/15)

Restrict boat and air traffic to essential minimum. No personnel within 400m. Aircraft to maintain 800m horizontal and 300m vertical distance from haulouts. No application of Inipol within two weeks of arrival dates (work window at these sites is limited to 7/2 to 7/31). Contact ADF&G and USFWS prior to treatment for confirmation.

AGENCY CONTACT PERSON: US National Marine Fisheries Service Steve Zimmerman 586-7235

ADF&G Don Calkins 267-2403

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

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

AGENCY CONTACT PERSON: USFWS Jill Parker 786-3377

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

Restrict all activity to essential minimum, especially air traffic. Contact USFWS and ADF&G for confirmation.

AGENCY CONTACT PERSON: USFWS Jill Parker 786-3377

ADF&G Tom Roth 267-2206

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

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

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

AGENCY CONTACT PERSON: USFWS Jill Parker 786-3377

6U Recreation:

Tent sites (3/1 to 9/15)

6V Anchorages (3/1 to 9/15)

6W Forest Service cabins (3/1 to 9/15)

6X Lodge (3/1 to 9/15)

6Y Special use destination

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

71-H Finfish harvesting

7I Deer harvesting (3/15 to 2/28)

Invertebrate harvesting

Contact ADF&G and appropriate Native Corporation for specific dates, locations, and constraints. Restrict boat and air traffic and beach disturbance to essential minimum. If plans for treatment include methods such as hot water wash or application of Inipol which might affect intertidal or nearshore oil or toxicity levels, contact ADF&G and appropriate Native Corporation for authorization - see Native Corporation Contact List for each Native Corporation's contact person.

AGENCY CONTACT PERSON: ADF&G Jim Fall 267-2359

FIELD SHORELINE COMMENT SHEET

17/44

SEGMENT ST / BA-3 SUBDIVISION: A DATE 4/25/90

USCG NAME RANDOLPH H. HARRIS SIGNATURE [Signature]

☒ NO TREATMENT RECOMMENDED ☐ TREATMENT SUGGESTED
 COMMENTS
 1. Very small amounts of oil found on rock wall of
 Steep Cliff.

ADEC NAME Patrick J. Endres SIGNATURE [Signature]

☒ NO TREATMENT RECOMMENDED ☐ TREATMENT SUGGESTED
 COMMENTS
 Oiling observed was too minimal to require treatment

LAND MANAGER NAME MARSHA MARTIN/DNR SIGNATURE [Signature]

☒ NO TREATMENT RECOMMENDED ☐ TREATMENT SUGGESTED
 COMMENTS
 Oiling observed was minimal.

SHORELINE OILING SUMMARY

REVISION NO. 04/12/90

OG Reimer USCG Hulbush SEGMENT ST/ BA-3
 BIO Lamora LAND REP M. MARTIN (DNR) SUBDIVISION A (1 OF 1)
 EXXON Arankle ADEC ENHRES TIME 08:25 to 11:55
 TEAM NO. 16 TIDE LEVEL +3 to +6 DATE 4 / 25 / 90
 ST. SUBDIVISION LENGTH: 3922 m ☒ Sun ☐ Clouds ☐ Fog ☐ Rain ☐ Snow
 UPLANDS DESCRIPTION: ☒ Grass ☒ Forest ☒ Rock
 SURVEYED FROM: ☒ Foot ☐ Boat ☐ Helo WORKING DIRECTION: South to North
 SURFACE SEDIMENTS: R 25 % B 40 % C 10 % P 15 % G 5 % S 2 % M 0 % V 0 %
 SLOPE: Long 45 % Hang 40 % Vert 25 % WAVE EXPOSURE: ☒ Low ☒ Med ☐ High
 OIL CATEGORY LENGTH: W 0 m M 0 m N 0 m VL 870 m NO 3052 m

SURFACE OIL

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

PAVEMENT H F S 0 sq. m by 0 cmPATTIES / TARBALLS 0 BAGSNEAR SHORE SHEEN? ☒ BR RW SL TL

OILED DEBRIS	AMOUNT		
	SM	MD	LG
Logs			
Vegetation			
Trash			
Debris			

DID YOU COLLECT DEBRIS?

YES ☒ NO ☐TYPE 3 from 60m#BAGS 1

Photographs:

Roll No. ST-16-11, 12Frames 23-37, 1-7

SUBSURFACE OIL

PIT NO.	PIT DEPTH (cm)	SUBSURFACE OIL CHARACTER					OILED INTERVAL	BELOW		OIL / FILM COLOR					PIT ZONE				A N A	SHEEN (Y/N)	T	SURFACE - SUBSURFACE SEDIMENTS
		OP	OR	OL	OF	NO		UO	UO	1	2	3	4	5	SU	U	M	L				
1	30					X	.											X		No	25	P-S-PGS
2	40					X	.										X					P-S-GSP
3	40					X	.									X						PG-GSP
4	35					X	.									X						P-GSP
5	30					X	.									X						S-SP
6	40					X	.									X						P-P

COMMENTS Long shore line Segment with predominantly pebble cobble beaches along the southern quarter of the segment. This grades into boulder cobble beaches to the north and then into steep, a boulder rubble shoreline near the center of the Segment. From here north to the end of the Segment is mostly rock cliff often mantled in the shore zone with large, angular lag deposits, with periodic pockets beaches of pebbles, cobbles, boulders and occasional small pockets of sand and gravel. The dominant oiling is a sporadic drip line of oil near the high tide line along sections of cliff and rubble shorelines.

REVIEWED 7/11DATE 4/26/90

OG Re
 SEGMENT SW BA-3
 SUBDIVISION A

DATE 4 / 25 90

ETCH MAP #1

☉ - Large boulders / rubble

CHECKLIST

☒ H Area
☒ Approx. Scale
☒ Top/Sub Entry
☒ Oil Dist.
☒ Width
☒ Length
☒ % Cover
☒ Substrate Character
☒ Est. HML/LWL
☒ SCL
☒ Profile Location(s)
☒ Photo(s)
☒ Photo Location(s)

LEGEND

1 ▲
 PH - No Subsurface Oil

2 ▲
 PH - Subsurface Oil

CT/C
 Continuous Distribution

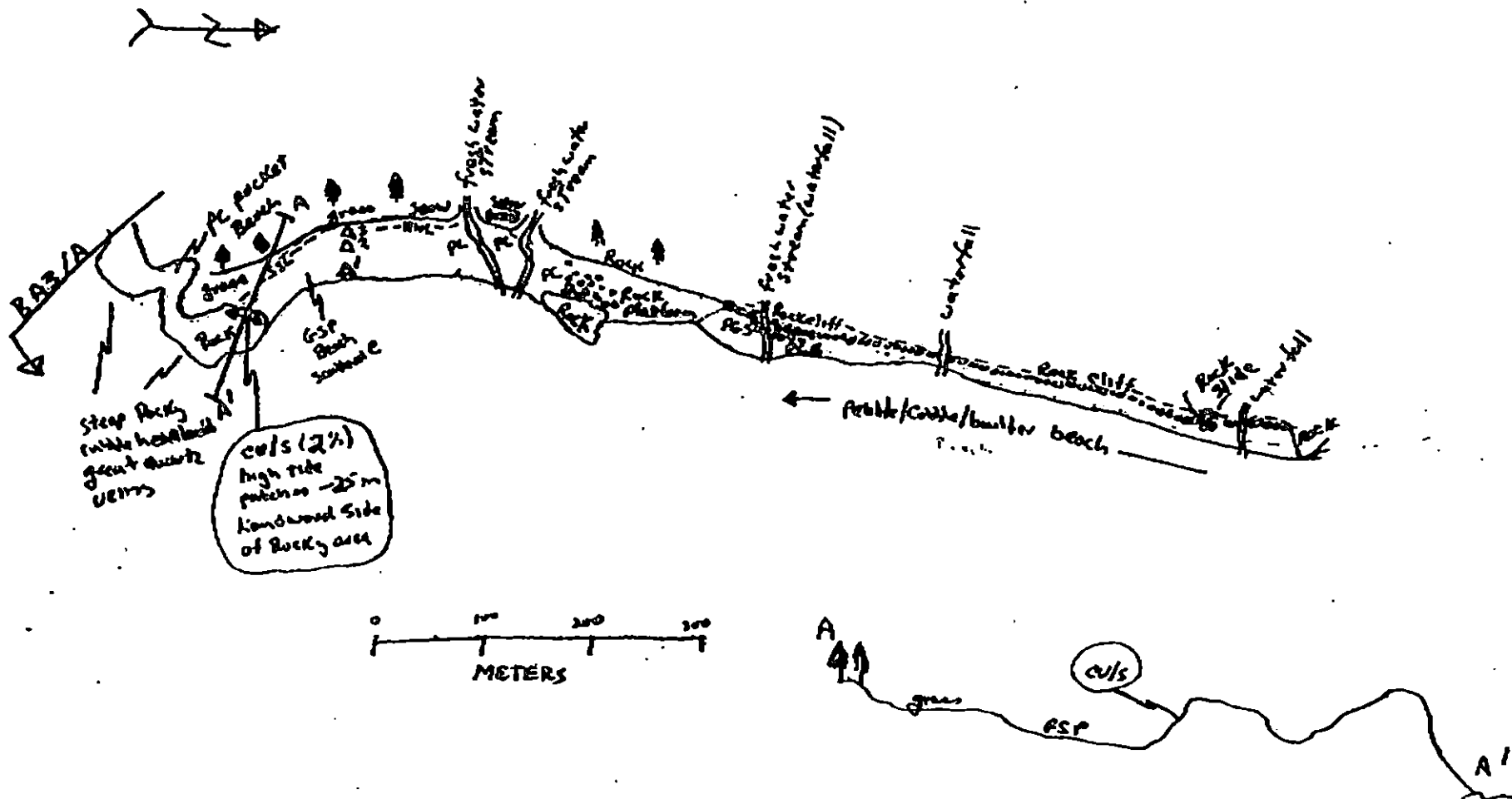
CT/B
 Broken Distribution

CT/P
 Patchy Distribution

CT/S
 Splashed Distribution

lll
 Old Vegetation

1 ➔
 Photo location, direction,
 and number



Oil Character Length (m): AP 0 PO 0 CV 25 CT 0 ST 0 MS 0 PT 0 TB 0 FL 0 NO 1240

REVISION: 02/24/90

DATE 4 / 25 90

ETCH MAP #2

CHECKLIST

- ☒ Arrow
- ☒ Approx. Scale
- ☒ Significant Body
- ☒ Cell Data
- ☒ Width
- ☒ Length
- ☒ % Cover
- ☒ Substrate Character
- ☒ Est. HAPPA/VNL
- ☒ SCL
- ☒ Profile Location(s)
- ☒ Profile(s)
- ☒ PR Location(s)
- ☒ Photo Location(s)

LEGEND

- 1 
 Fit - No Subsurface Oil
 2 
 Fit - Subsurface Oil

 Continuous Distribution

 Broken Distribution

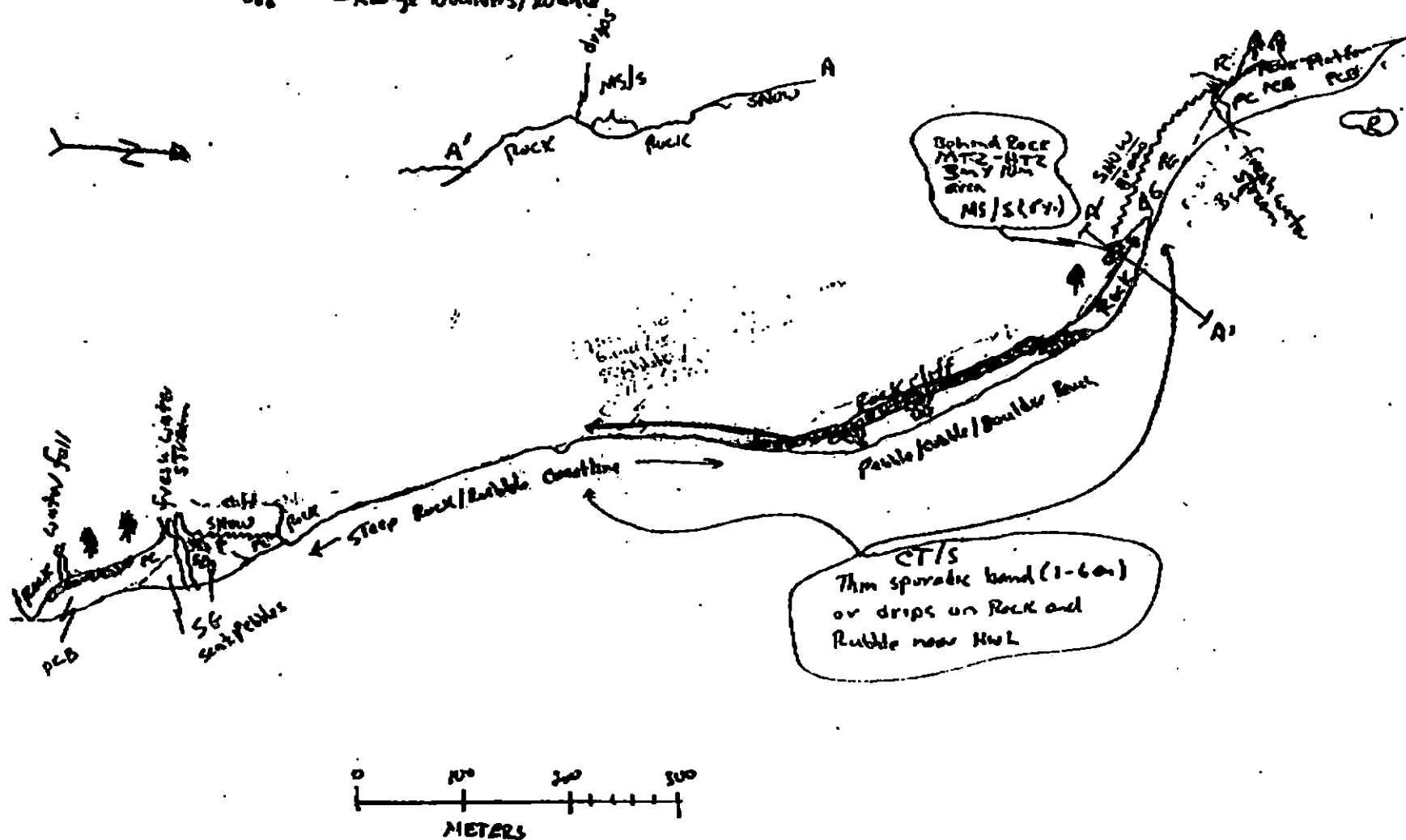
 Patchy Distribution

 Spotted Distribution

 Old Vegetation
 1 

~~~~~ - STORM BEAN

000 - Large boulders / Rubble



Oil Character Length (in): AP 0 PO 0 CV 0 CT 580 ST 0 MS 10 PT 0 TB 0 FL 0 NO 851

**Abstract**

23-5

OG Recon  
 SEGMENT BA-3  
 SUBDIVISION A  
 DATE 4 / 25 90

# CHECKLIST

☒ Area  
☒ Approx. Scale  
☒ Substrate Entry  
☒ Oil Dist.  
☒ Width  
☒ Length  
☒ % Cover  
☒ Substrate Character  
☒ Est. HULLAGE  
☒ SBL  
☒ Profile Location(s)  
☒ Profile(s)  
☒ Photo Location(s)  
☒ Photo Location(s)

## LEGEND

1 No Subsurface Oil

2 Subsurface Oil

CT/C  
 Contaminant Distribution

CT/D  
 Eichen Distribution

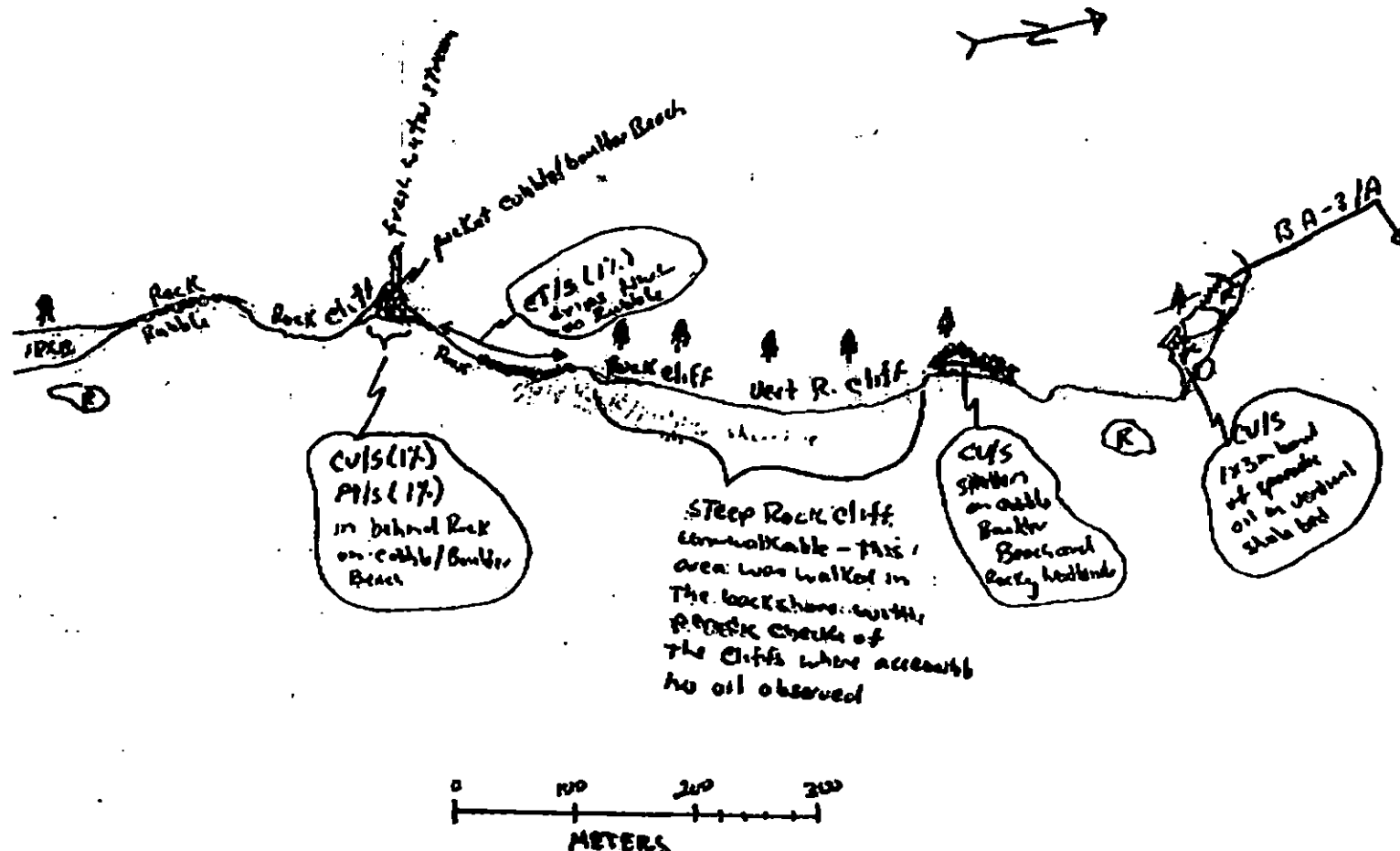
CT/P  
 Patchy Distribution

CT/S  
 Splashed Distribution

Oil Vegetation

Photo location, direction, and number

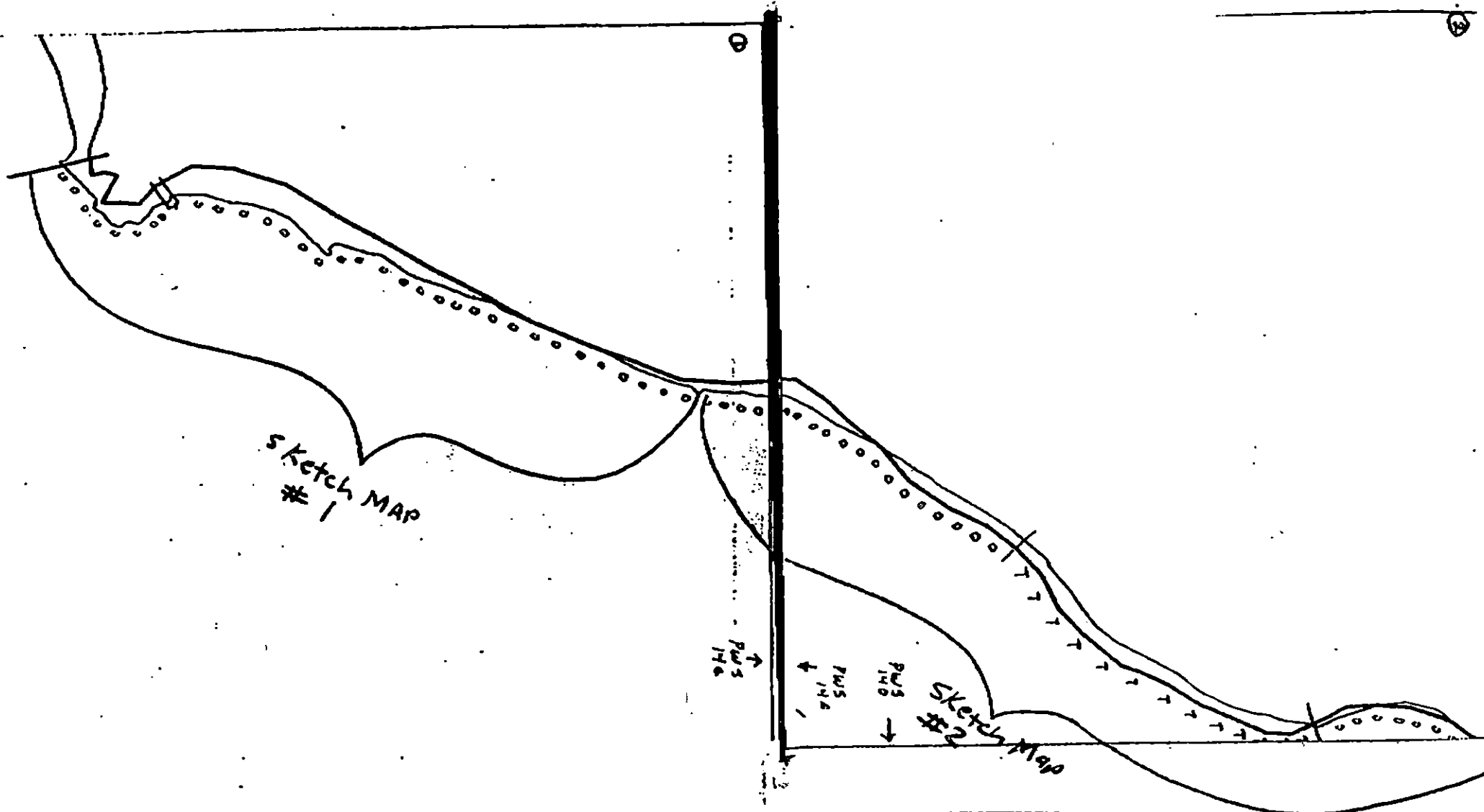
~~~~~ - Storm berm  
 o.o - large boulders / Rubble



Oil Character Length (m): AP 0 PO 0 CV 223 CT 0 ST 0 MS 0 PT 10 TB 0 FL 0 NO 1003

REVISIONS

AFR-25-1530 13:05 FROM EADDN CND CORRUCH TO SCRI 1211 F.05

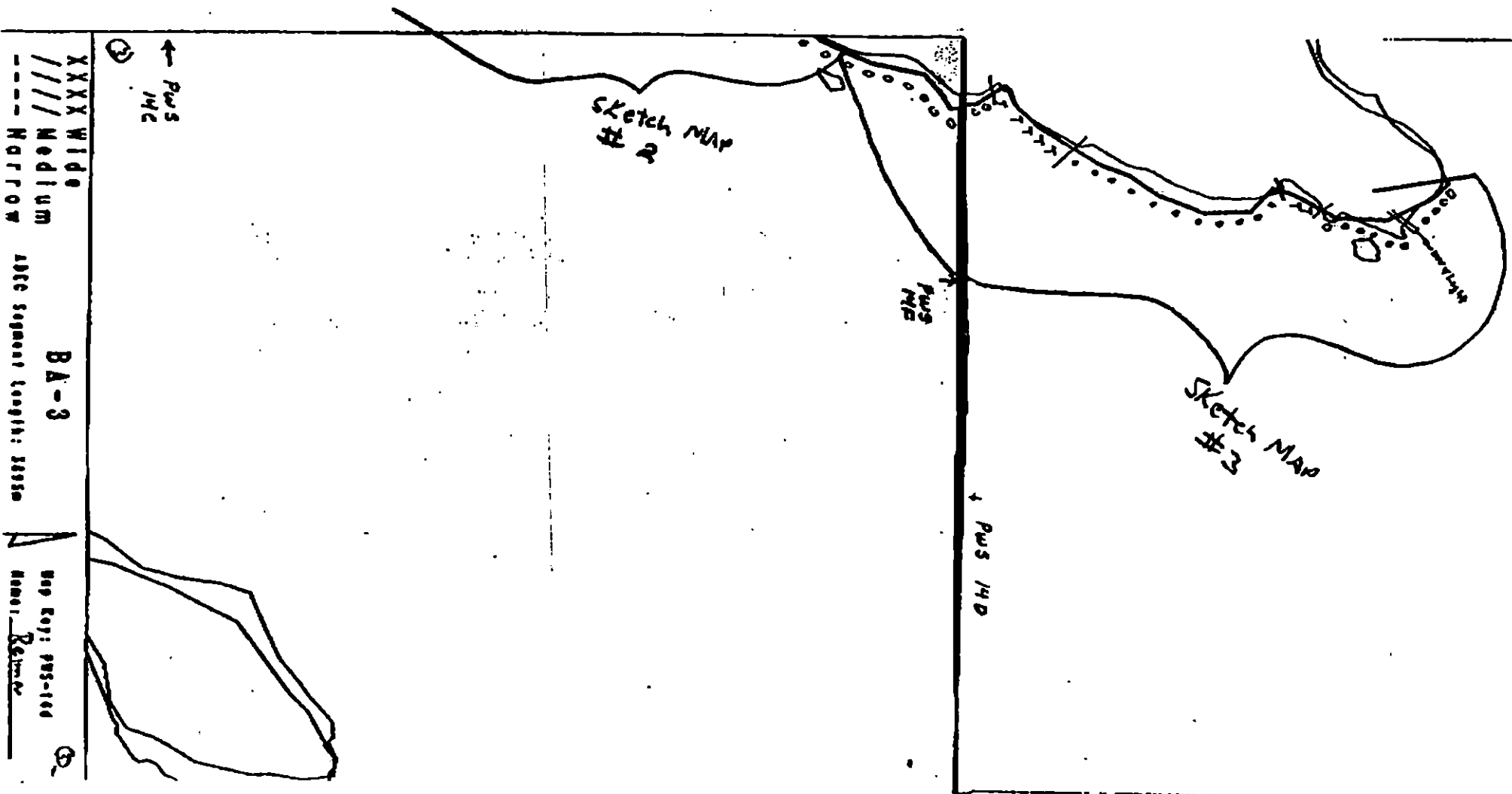


| | | |
|-----------------|----------------------------|----------------------|
| XXXX Wide | BA-3 | Map Key: PWS-146 ④ |
| //// Medium | | Date: <u>Reimer</u> |
| --- Narrow | ABEC Segment Length: 3885m | Date: <u>4/25/80</u> |
| TTTT Very Light | 100 200 300 METERS | Date Entered: |
| 0000 No Oil | | |

OG SKETCH MAP LOCATIONS

H/c

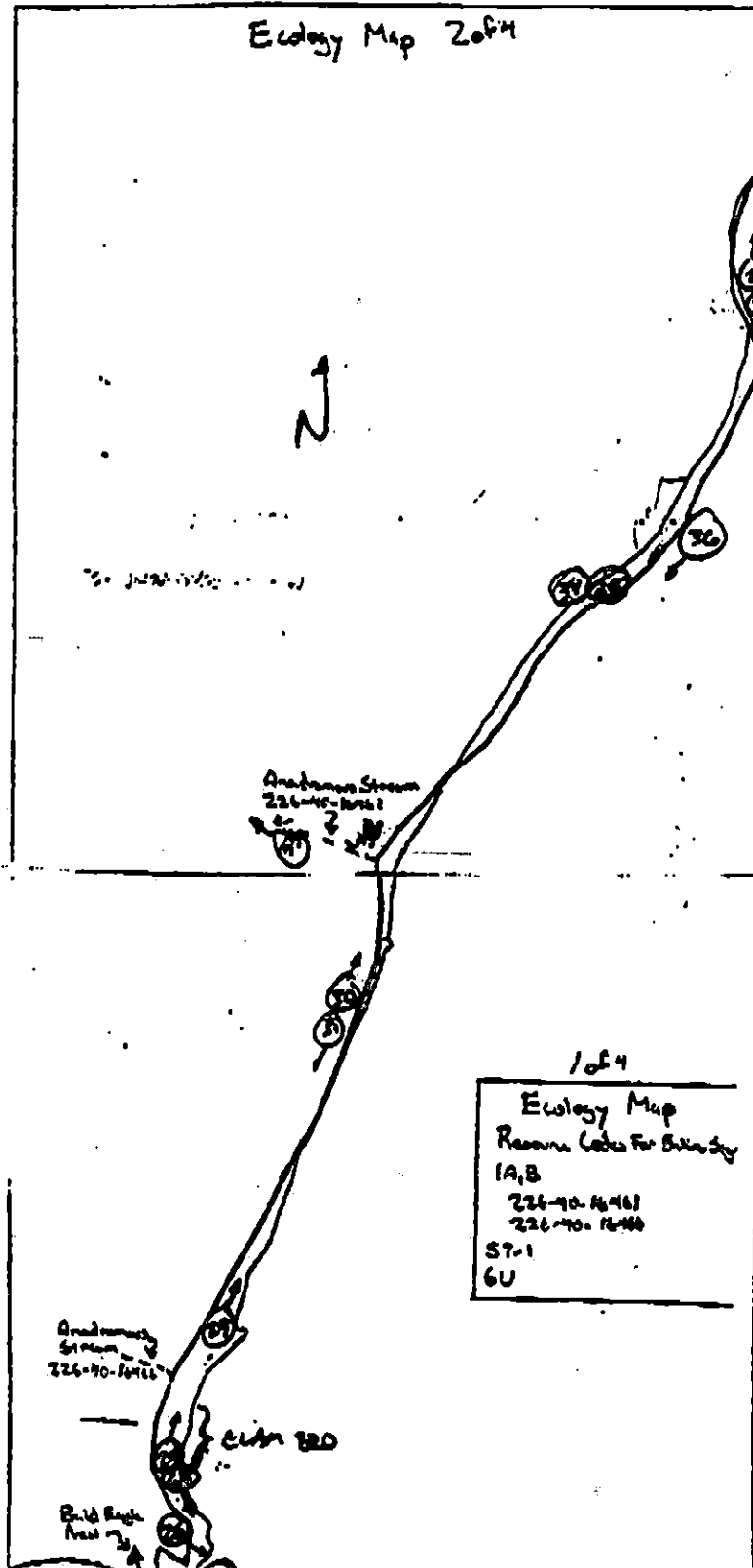
OG SKETCH MAP LOCATIONS



BAINBRIDGE ISLAND

RA3

PHOTO LOCATIONS



SHORELINE ECOLOGICAL SUMMARY

12/94
REVISION: 03/92

Segment ST / BAB Subdivision A Date (mo / day / yr) 4 / 25 / 90

Time (24 hr) _____ Biologist TONY ZAMORA

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

(B) Overall % cover of biota (% of segment): Dense 80 Moderate 20 Low 0

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

Photographs: ST-16-11, 12
Roll No. _____

Frames 23-37, 1-7

BARNACLES

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

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:

- 10 SEA LIONS, 1 OTTER, 1 EAGLE, 4 STELLAR'S JAYS, 1 GROUSE

Ecological Considerations:

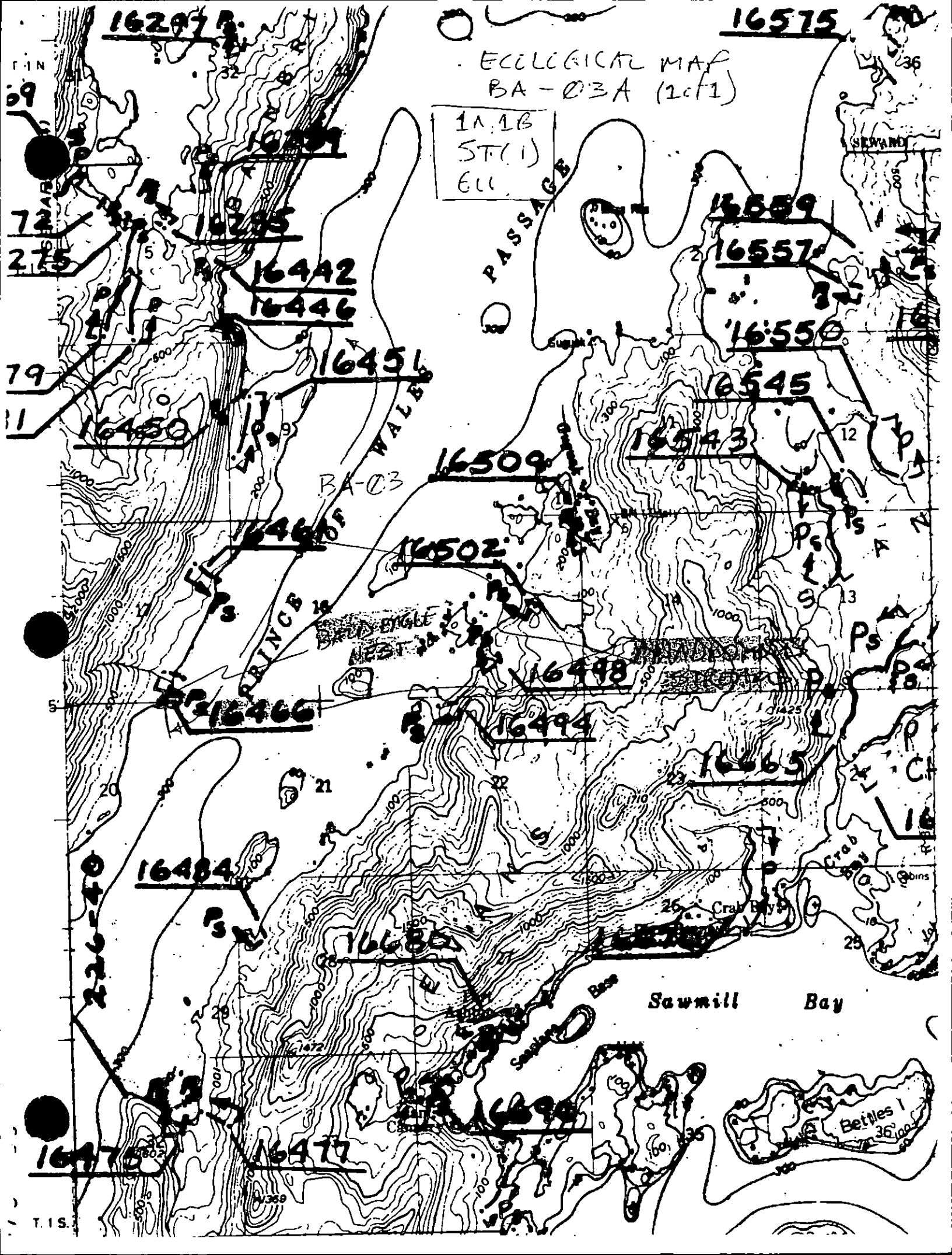
~~EAGLE NEST~~
ST-1, 1A/B, 6755

16297

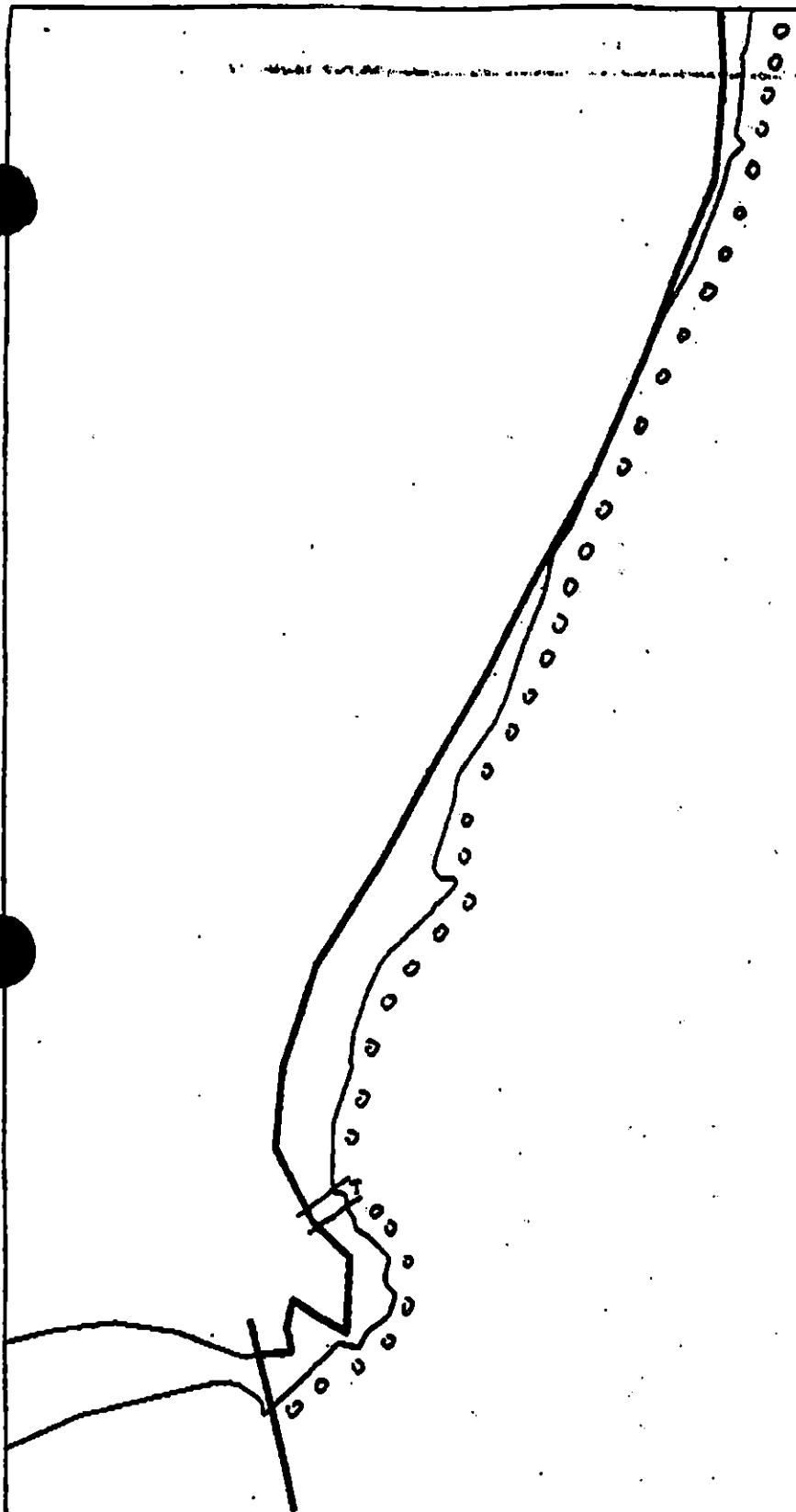
16575

ECOLOGICAL MAP
BA-03A (1 of 1)

1A, 1B
ST(1)
ELL



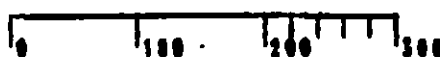
↑
PWS 8/44
14c



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

BA-3

ADEC Segment Length: 3893m



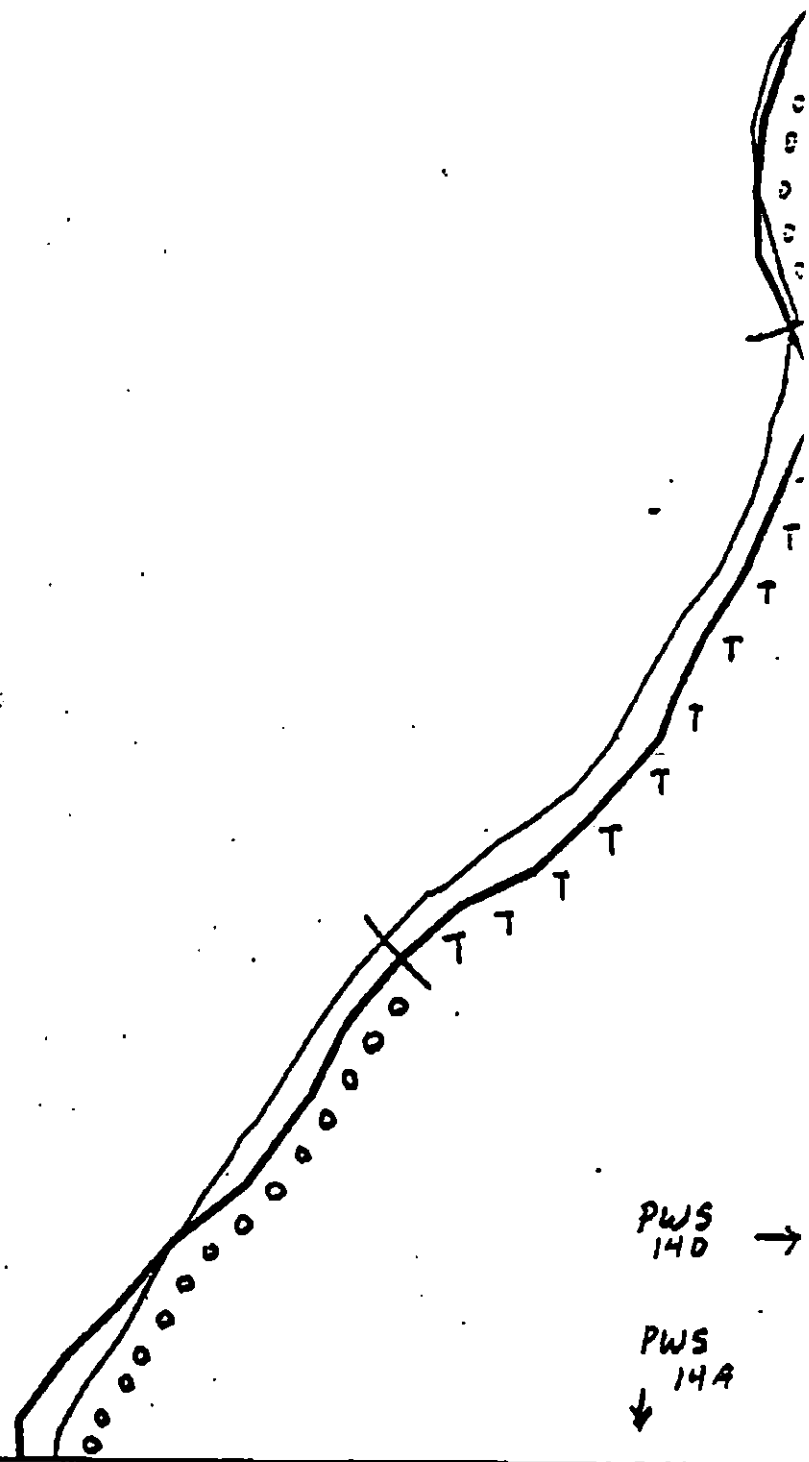
Map Key: PWS-14a

Name: Reimer

Date: 4/25/90

DATA ENTERED:

9/44



XXXX Wide

/// Medium

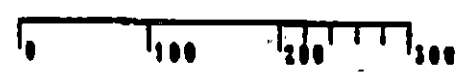
--- Narrow

TTTT Very Light

OOOO No

BA-3

ADEC Segment Length: 3895m



Map Key: PWS-14c

Name: Reimer

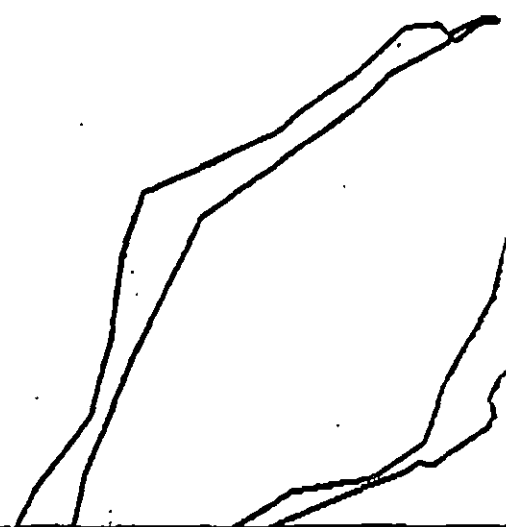
Date: 4/25/90

②

10/94

↑
PWS
14F

← PWS
14C



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

BA-3

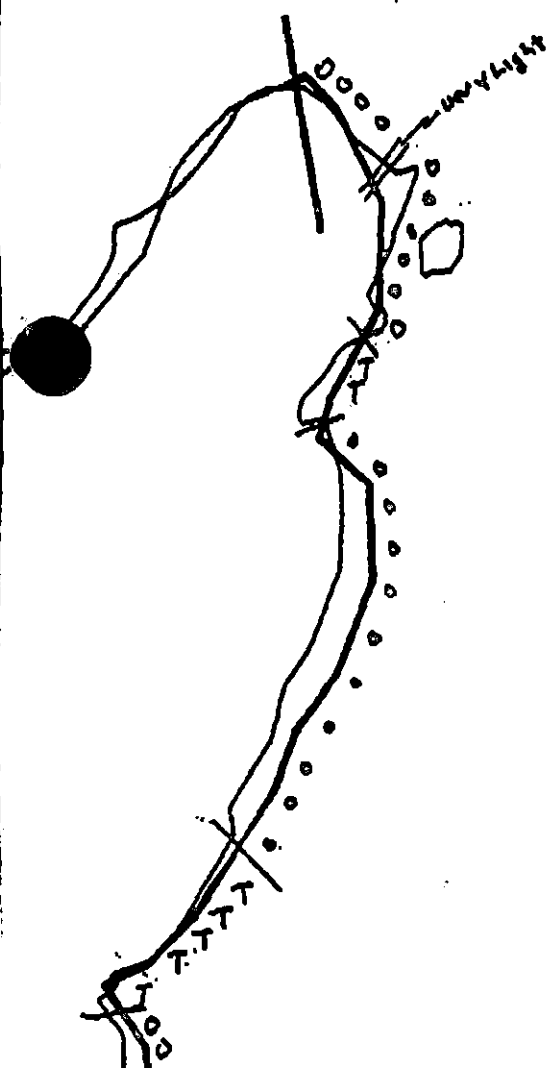
ADEC Segment Length: 3895m



Map Key: PWS-14d
 Name: Reimer
 Date: 4/25/90
 Data Entered:

③

11/44



PWS 140

XXXX Wide

// Medium

-- Narrow

TTTT Very Light

0000 No Oil

BA-3

ADEC Segment Length: 3895m



Map Key: PWS-141

Name: ReimerDate: 4/25/90

Date Entered:

④

SHORELINE EVALUATION

SEGMENT ST/ BA-03 SUBDIVISION A (1 OF 1) DATE 4/25/90

SEGMENT ENVIRONMENTAL SENSITIVITIES AND TIME CONSTRAINTS:

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

SUBDIVISION ECOLOGICAL CONSTRAINTS:

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

ARCHAEOLOGICAL CONSTRAINTS:

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

SHPO SIGNATURE: Charles E. Danner .. DATE: 5/5/90

OILING CATEGORIZATION:

Wide 0 m: Medium 0 m: Narrow 0 m: V.Light 899 m: No Oil 2996 m
Subsurface Oil Observed: Yes No X Maximum Depth

RECOMMENDATIONS:

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

COMMENTS: _____

TAG COMMENTS: _____

TAG APPROVAL DATE: May 5, 1990
 ADEC Art Wenzler Dist. 62 Regs
 EXXON Mark N. Silbert Mark N. Silbert FOSC: my L DATE: 5-9-90
 NOAA Gary Petros Gary Petros
 USCG G.A. Reiter G.A. Reiter

OG Re

SEGMENT ST/ BA-3

SUBDIVISION A

DATE 4 / 25 / 90

SKETCH MAP #1

☼ - Large boulders / rubble

CHECKLIST

- ☒ H Area
- ☒ Approx. Scale
- ☒ Top/Sub Entry
- ☒ Oil Dist.
- ☒ Width
- ☒ Length
- ☒ % Cover
- ☒ Substrate Character
- ☒ Est. INMLAWL
- ☒ SSI
- ☒ Profile Location(s)
- ☒ Photo(s)
- ☒ PR Location(s)
- ☒ Photo Location(s)

LEGEND

1 ▲

PR - No Substrate Oil

2 ▲

PR - Substrate Oil

CT/C

Continuous Distribution

CT/B

Broken Distribution

CT/P

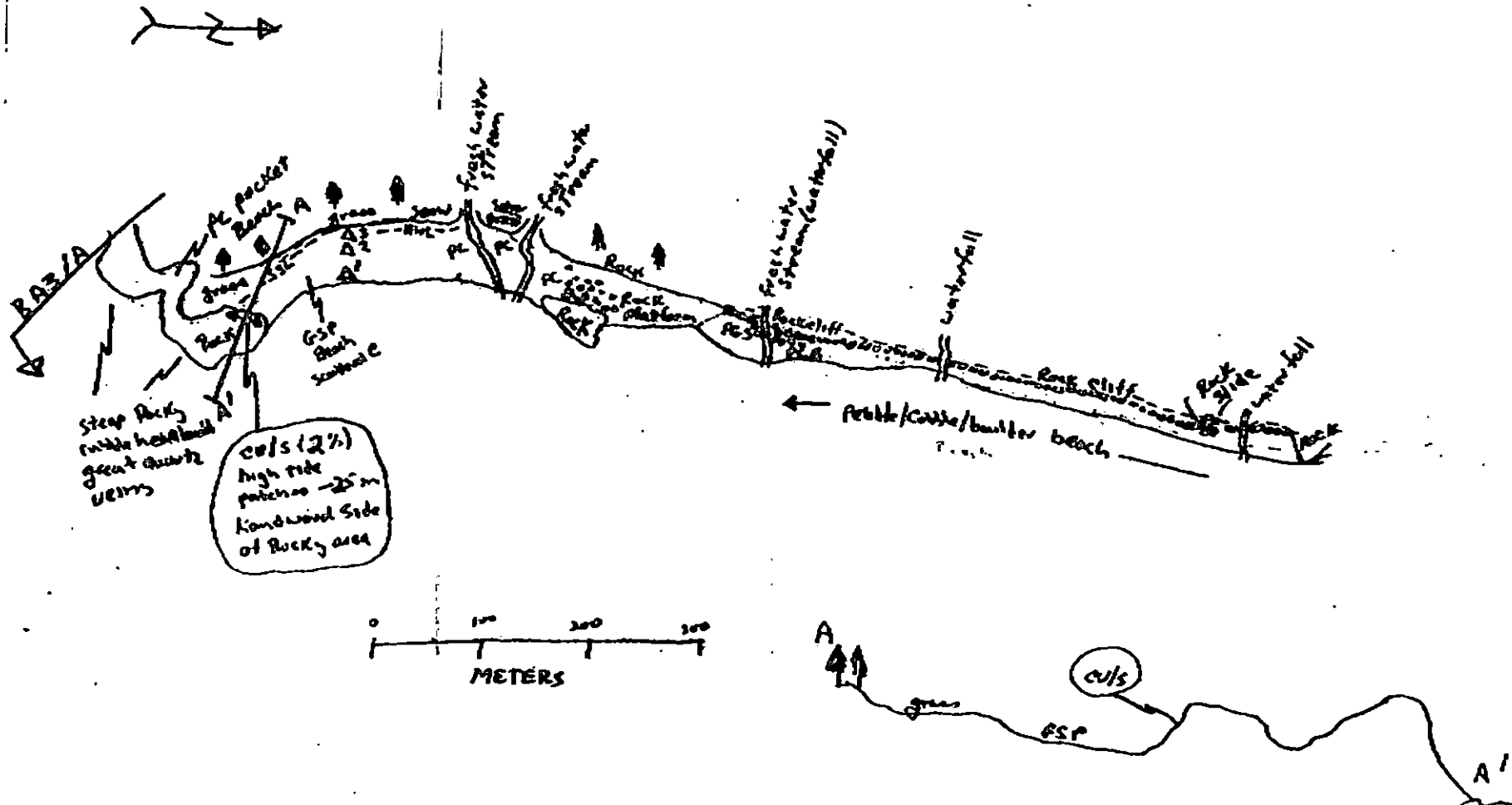
Patchy Distribution

CT/S

Splashed Distribution

lll
Old Vegetation

1 ➡
Photo location, direction,
and number



0 100 200 300
METERS

Oil Character Length (m): AP 0 PO 0 CV 25 CT 0 ST 0 MS 0 PT 0 TB 0 FL 0 NO 1240

REVISION 000000 5/4

OG Res

SEGMENT ST/BA-3

SUBDIVISION A (MS/2)

DATE 4 / 15 90

CHECKLIST

- ☒ Arrow
- ☒ Approx. Scale
- ☒ Seg/Sub Entry
- ☒ Oil Dist.
- ☒ Width
- ☒ Length
- ☒ % Cover
- ☒ Substrate Character
- ☒ Ext. HWR/LWR
- ☒ SCL
- ☒ Profile Location(s)
- ☒ Profile(s)
- ☒ PT Location(s)
- ☒ Photo Location(s)

LEGEND

1 Δ
PH - No Subsurface Oil

2 Δ
PH - Subsurface Oil

CT/C
Continuous Distribution

CT/B
Broken Distribution

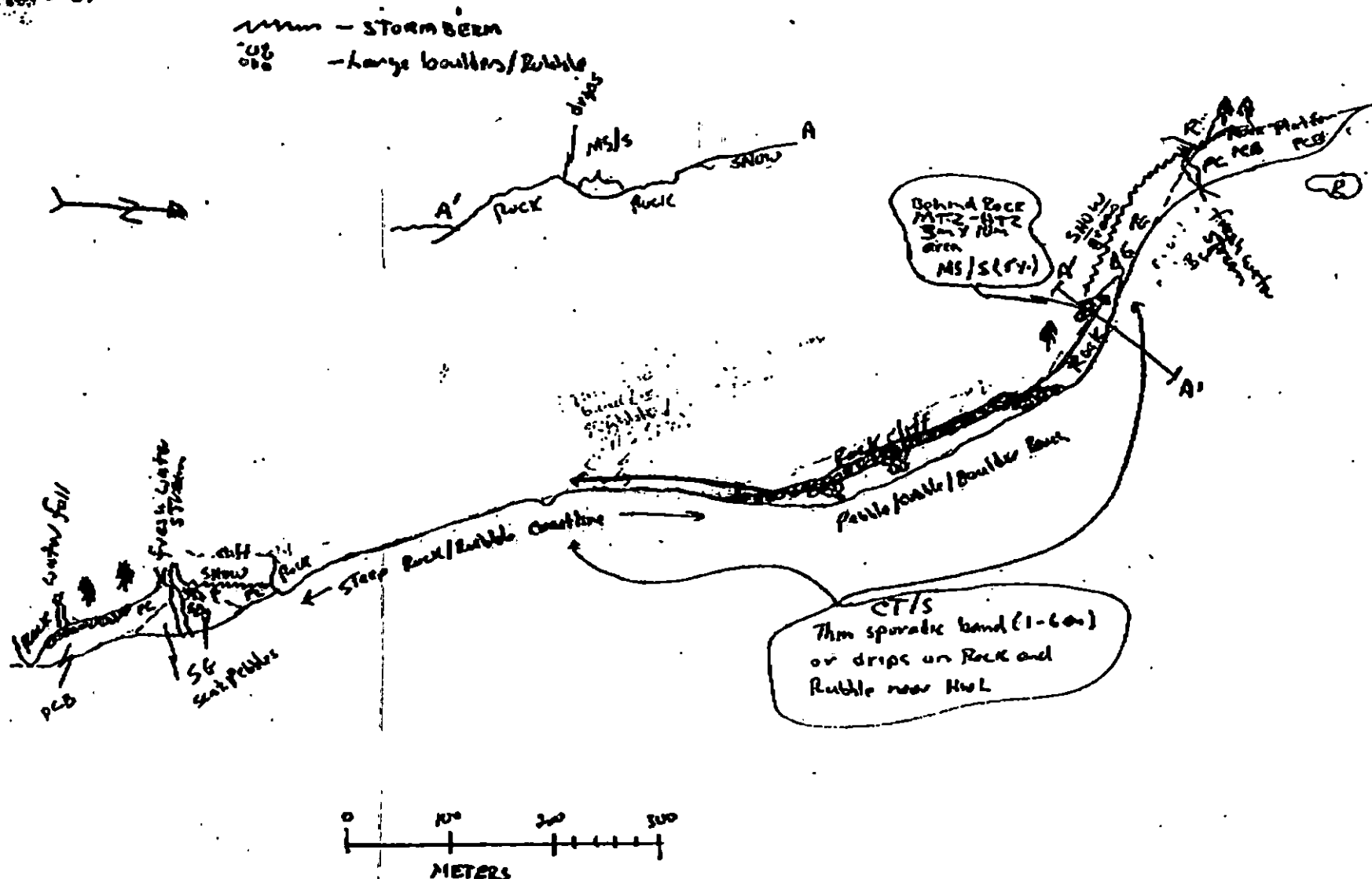
CT/P
Pecchy Distribution

CT/S
Spashed Distribution

ell
Oiled Vegetation

1 →
Photo location, direction,
and number

ETCH MAP #2



Oil Character Length (m): AP 0 PO 0 CV 0 CT 580 ST 0 MS 10 PT 0 TB 0 FL 0 NO 851

REVISION: 00/04/90

21/9

OG Rever
 SEGMENT BA-3
 SUBDIVISION A

DATE 4 / 25 80

CHECKLIST

☒ Area
☒ Approx. Scale
☒ Substr. Bndry
☒ Oil Dist.
☒ Width
☒ Length
☒ % Cover
☒ Substrate Character
☒ Est. HMR/LWR
☒ Soil
☒ Profile Location(s)
☒ Profile(s)
☒ Pit Location(s)
☒ Photo Location(s)

LEGEND

1 Δ
 Pt - No Subsurface Oil

2 Δ
 Pt - Subsurface Oil

$\square$ CT/C
 Continuous Distribution

$\square$ CT/B
 Broken Distribution

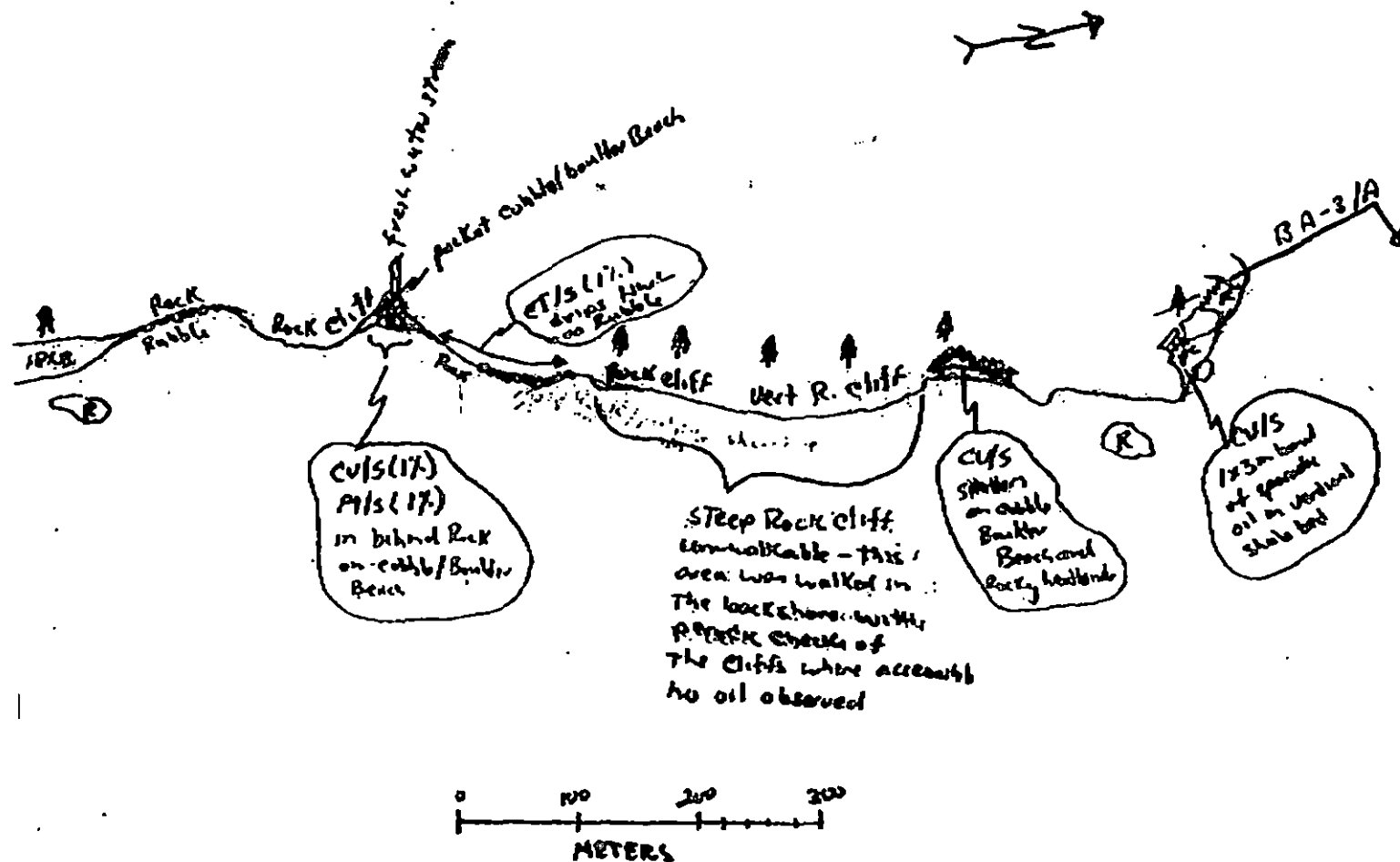
$\square$ CT/P
 Patchy Distribution

$\square$ CT/S
 Splashed Distribution

eee
 Oiled Vegetation

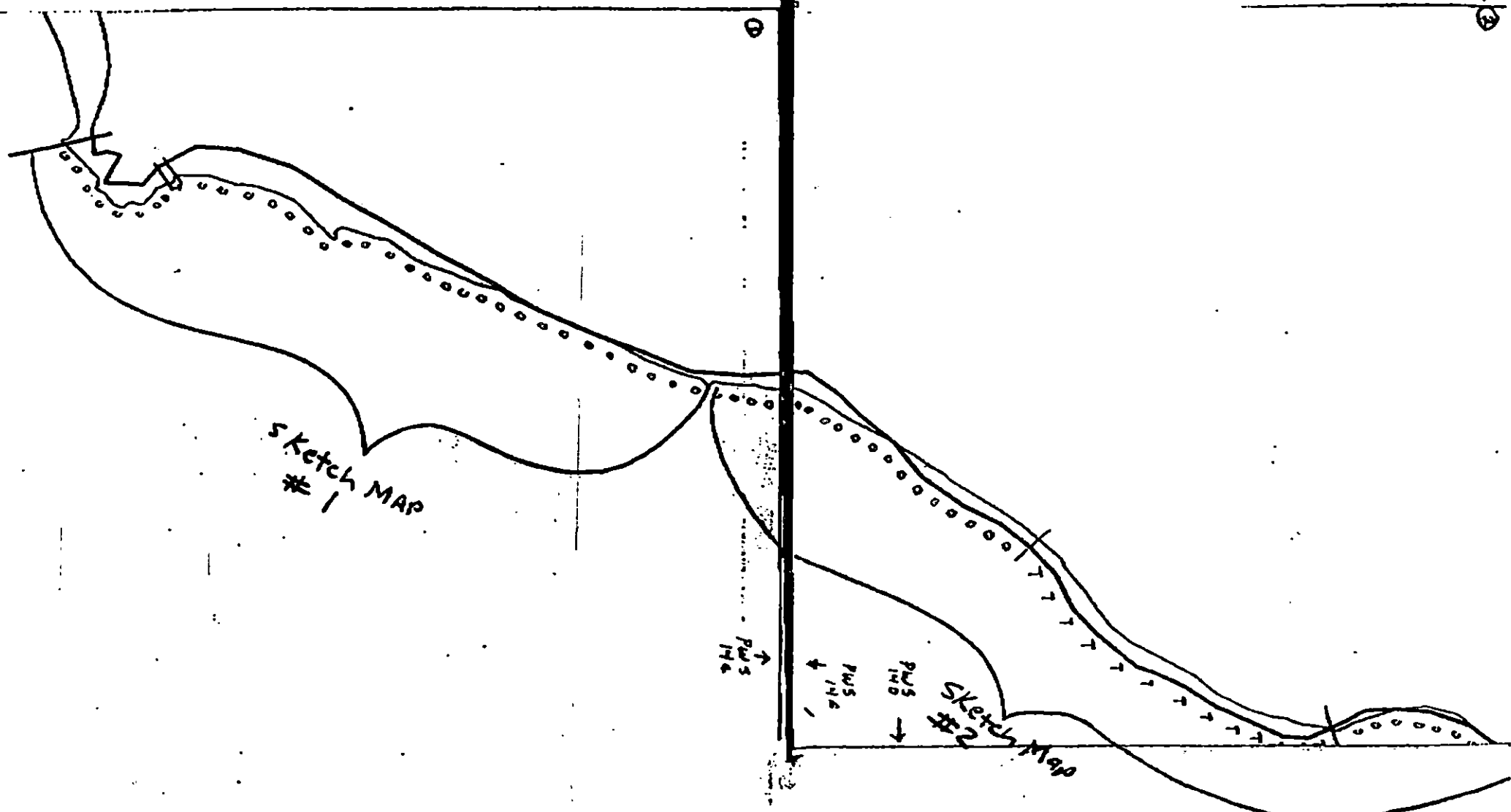
1 $\rightarrow$
 Photo location, direction,
 and number

~~~~~ - Storm berm  
 ooo - Large boulders / Rubble



Oil Character Length (m): AP 0 PO 0 CV 223 CT 0 ST 0 MS 0 PT 10 TB 0 FL 0 NO 1003

REVISED 10/80

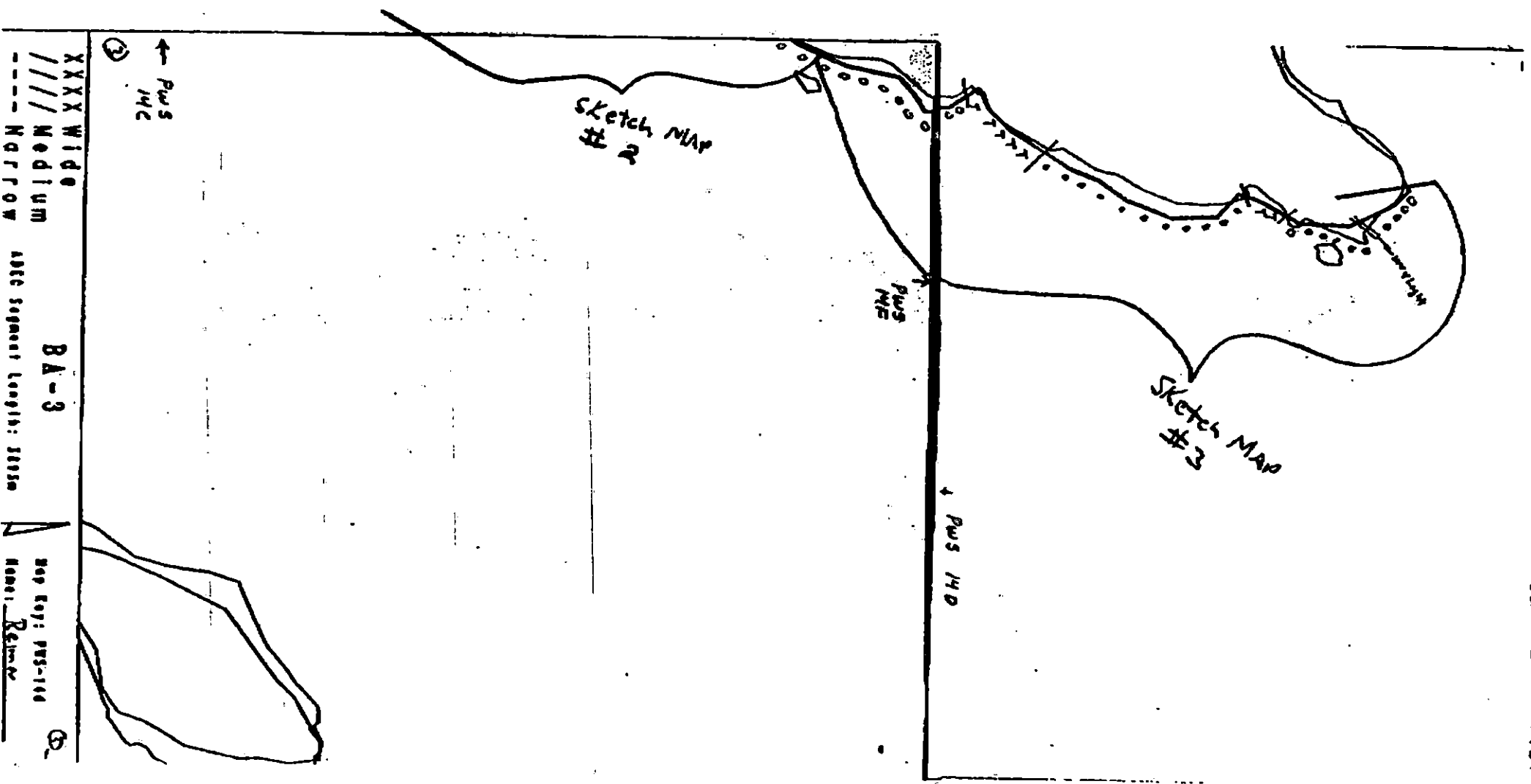


|                 |                                                                                |                      |
|-----------------|--------------------------------------------------------------------------------|----------------------|
| XXXX Wide       | <p>BA-3</p> <p>ADEC Segment Length: 3005m</p> <p>100 200 300</p> <p>METERS</p> | Map Key: PWS-166 ④   |
| //// Medium     |                                                                                | Name: <u>Remax</u>   |
| --- Narrow      |                                                                                | Date: <u>4/25/80</u> |
| TTTT Very Light |                                                                                | Date Entered:        |
| 0000 No Oil     |                                                                                |                      |

OG SKETCH MAP LOCATIONS

H/4

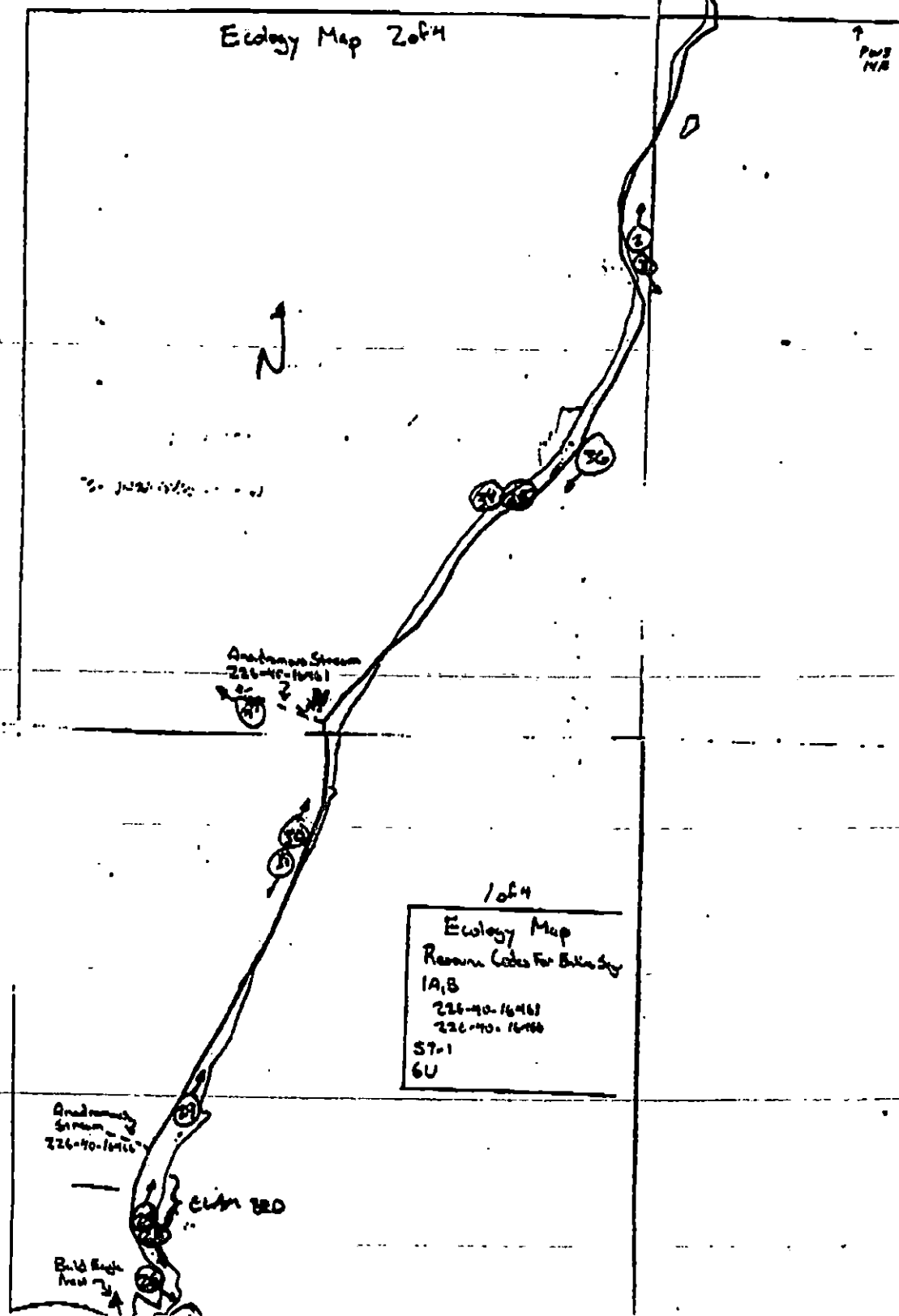
# OG SKETCH MAP LOCATIONS



# BAINBRIDGE ISLAND

BA3

PHOTO LOCATIONS



16297

16575

ECOLOGICAL MAP  
BA-03A (1 of 1)

1A, 1B  
ST(1)  
611

PASSAGE

BA-03

PRINCE

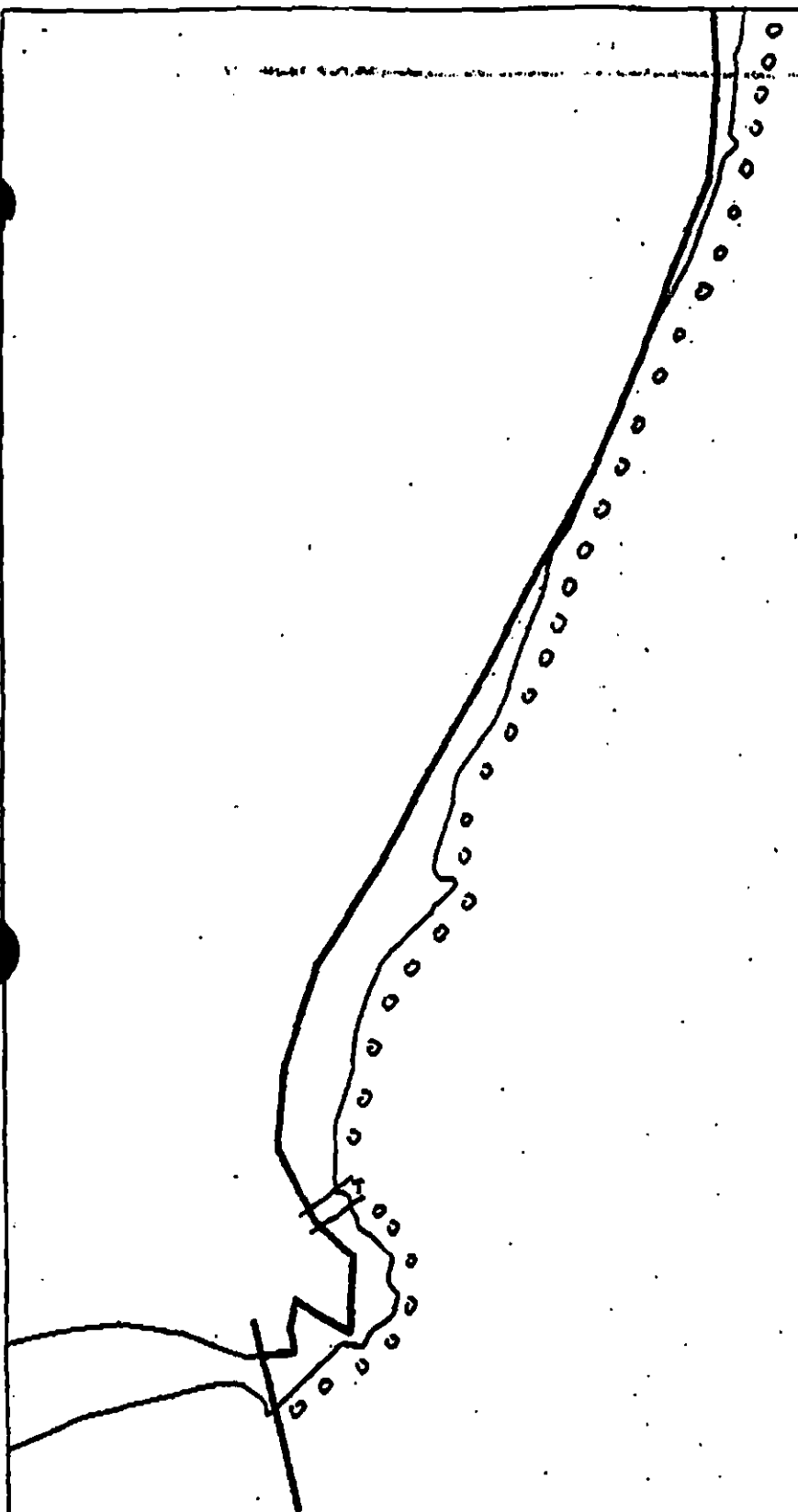
BALD EAGLE  
NEST

Sawmill Bay

Bettles I

T.15

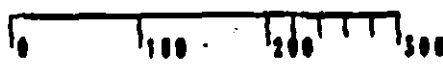
↑  
PWS 8/44  
14c



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

BA-3

ADEC Segment Length: 3895m

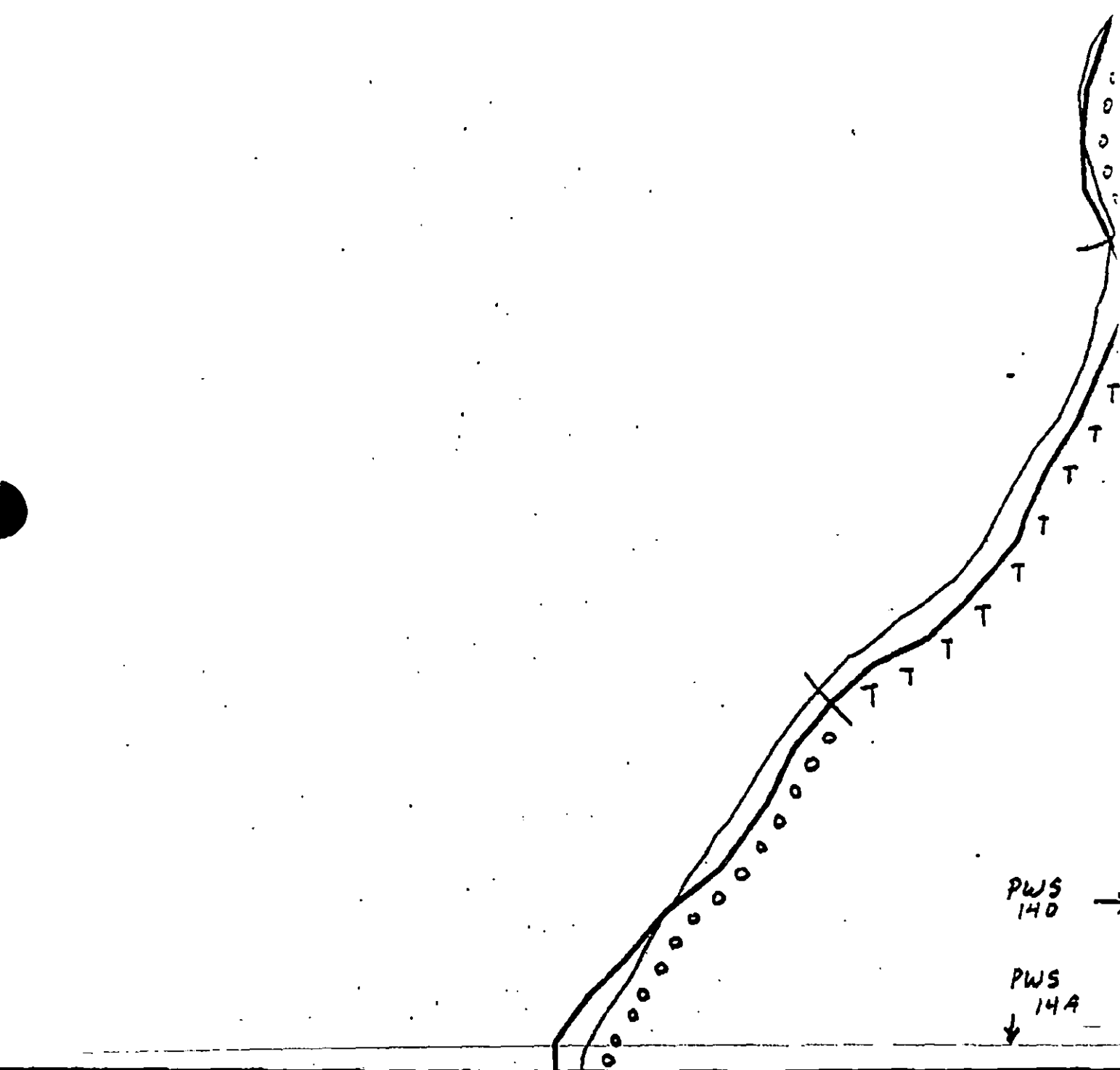


Map Key: PWS-14a

Name: Reimer

Date: 4/25/90

9/44



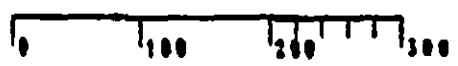
PWS 140 →

PWS 14A ↓

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

BA-3

ADEC Segment Length: 3895m



Map Key: PWS-14c

Name: Reimer

Date: 4/25/90

②

10/44

↑  
PWS  
14F

← PWS  
14C

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

BA-3

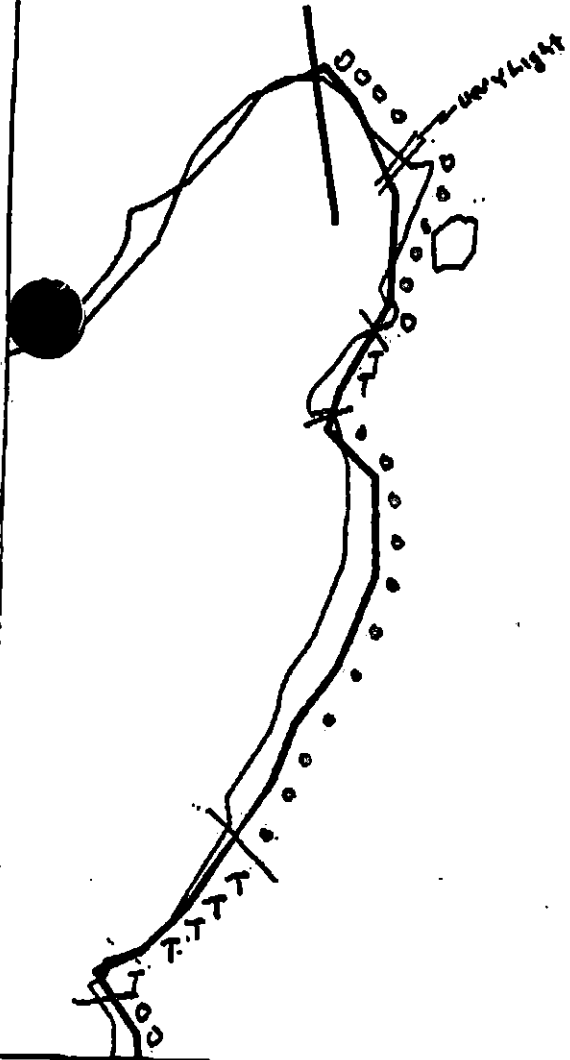
ADEC Segment Length: 3895m



Map Key: PWS-14d  
 Name: Reimer  
 Date: 4/25/90  
 Data Entered:

③

11/44



↓ PWS 14D

XXXX Wide

// Medium

--- Narrow

TTTT Very Light

0000 No Oil

BA-3

ADEC Segment Length: 3895m



Map Key: PWS-141

Name: Reimer

Date: 4/25/90

Data Entered:

④

1991 MAYSAP EVALUATION

SEGMENT: BA 003 SUB: A REGION: PWS SURVEY DATE: 5/26/91

ENVIRONMENTAL SENSITIVITIES:

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

Ecological/Constra (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: Timothy Adams Date: 6/27/91

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: JUNE 4 1991 FOSC APPROVAL DATE: 6/10/91

ADEC John Bauer FOSC E. E. PAGE

EXXON Edma CHIEF OF STAFF, FOSC

USCG Edma

NOAA John

**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. 2 SEGMENT BA-3 SUBDIVISION A DATE 5/21/91

☒ **NTR** ☐ **TREATMENT RECOMMENDED**  
 NAME Pete Montesano SIGNATURE Pete Montesano

Extremely light oiling observed. Nothing remotely treatable remains on Subdivision.

**EXXON**  
 NAME Frank Ray SIGNATURE Frank Ray

☒ **NTR** ☐ **TREATMENT RECOMMENDED**  
 Occasional tar splatters - extremely light - No treatment. No oil on this segment. Most of the tar splatters were picked up on site.

**LANDMANAGER**  
 NAME Dennis S. Kennedy OF USFS SIGNATURE D. S. Kennedy

☒ **NTR**

**USCG/NOAA** NOAA DSI MECER BEATTY D. Smith-Beatty  
 NAME Bruce M. Zerkow USCG SIGNATURE Bruce M. Zerkow

☐ **NTR** ☒ **TREATMENT RECOMMENDED**  
 Remnants of oil bulk tank ring was observed intermittently along the segment. This oil was mostly a very weathered coat/crust. One bag of oiled surface materials was picked up by VECO in area H. D5-B

CG - No TREATMENT Recommended. 3

## MAYSAP SHORELINE OILING SUMMARY

PAGE 1 OF 1TEAM NO. 2OG ReimerBIO BAWSEGMENT BA3DEC MontesanoLANDMANAGER Kennedy for USFSSUBDIVISION AEXXON BoxUSCG/NOAA Simerak - BentlyDATE 5/26/91TIME 07:20 to 09:25TIDE LEVEL -1.03 ft. to 2.65 ft.ENERGY LEVEL: ☐ H ☒ M ☐ LSURVEYED FROM: ☒ FOOT ☒ BOAT ☐ HELOWEATHER: ☐ SUN ☒ CLOUDS ☐ FOG ☒ RAIN ☐ SNOWTOTAL LENGTH SHORELINE SURVEYED: 3895 mNEAR SHORE SHEEN: ☐ BR ☐ RB ☐ SL ☒ NONEEST. OIL CATEGORY LENGTH: W 0 m M 0 m N 13 m VL 658 m NO 3224 m US 0 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  |     |    |    |    |    |    |    | B                     | H                   | 1       | 12       |      | X  |    |    |                     |
| B   |                       |    |    |     | B  | B  |    |    |    |    | R                     | V                   | 0.5     | 10       |      | X  |    |    |                     |
| C   |                       |    | T  |     |    |    |    |    |    |    | R                     | V                   | 0.1     | 0.1      |      | X  |    |    | INTAR BALL IN CRACK |
| D   |                       |    |    |     |    | T  |    |    |    |    | B                     | H                   | 1       | 5        |      | X  |    |    |                     |
| E   |                       |    |    |     |    | S  |    |    |    |    | PC                    | M                   | 2       | 4        |      | X  |    |    |                     |
| F   |                       |    |    |     | P  |    |    |    |    |    | R                     | V                   | 2       | 3        |      | X  |    |    | Vertical shale      |
| G   |                       |    |    |     | S  |    |    |    |    |    | R                     | V                   | 5       | 30       |      | X  |    |    | Vertical shale      |
| H   |                       |    |    | S   |    |    |    |    |    |    | COPL                  | M                   | 2       | 7        |      | X  |    |    |                     |
| I   |                       |    |    |     |    | T  |    |    |    |    | RB                    | N                   | 1       | 600      |      | X  |    |    |                     |

DISTRIBUTION: C = 91-100%; B = 51-90%; P = 11-50%; S = 1-10%; T = &lt;1%

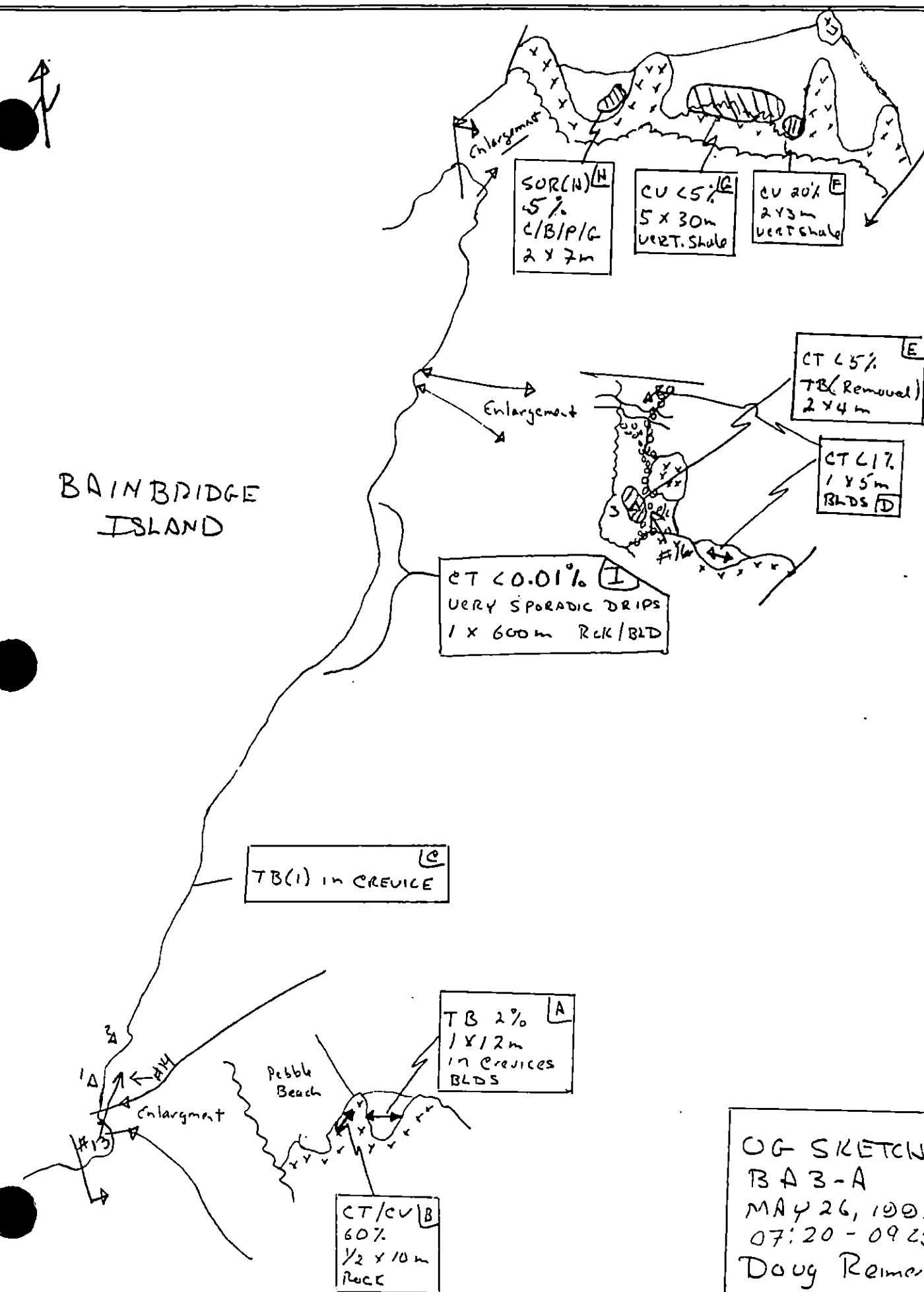
SLOPE: V = VERTICAL; H = HIGH ANGLE; M = MEDIUM ANGLE; L = LOW ANGLE PHOTO ROLL # MAYSAP- 2-27 FRAMES 13-16

| 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             |                          |     |     |     |    |    | X  | -                |                 |                |                     |          | X  |    |    | GP-GP                        |              |
| 2       | 20             |                          |     |     |     |    |    | X  | -                |                 | 15             |                     |          |    | X  |    | P-GP                         | ben ne. rock |
| 3       | 10             |                          |     |     |     |    |    | X  | -                |                 |                |                     |          | X  |    |    | B-PG                         | Rock below   |
|         |                |                          |     |     |     |    |    |    | -                |                 |                |                     |          |    |    |    |                              |              |
|         |                |                          |     |     |     |    |    |    | -                |                 |                |                     |          |    |    |    |                              |              |
|         |                |                          |     |     |     |    |    |    | -                |                 |                |                     |          |    |    |    |                              |              |
|         |                |                          |     |     |     |    |    |    | -                |                 |                |                     |          |    |    |    |                              |              |
|         |                |                          |     |     |     |    |    |    | -                |                 |                |                     |          |    |    |    |                              |              |

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

**OG COMMENTS:** Long shoreline of Pebble/cobble beaches along the southern half of Segment grading into steep Boulder Lag shoreline and vertical Rock cliff to the north. This segment has little to no oil except for trace CT on boulders/Rock and a few turballs. The only area with any degree of oil was the very North-end where patches of heavy Coat/SUR were found in vertical shale and surrounding sediments. Most of this material at location "N" was removed.

REVISOR: MC 5/30/91 revised 5/29/91 KG



OG SKETCH  
B A 3 - A  
MAY 26, 1991  
07:20 - 0925  
Doug Reimer

revised 5/29/91 KG

## MAYSAP BIOLOGICAL SUMMARY FORM

TEAM # 2 DATE 26 May 91  
 SEGMENT # BA-3 TIDAL HEIGHT (Range) - 1 to 3 ft  
 SUBDIVISION A BIOLOGIST SMRAN  
 SEA STATE 1-2 ft WIND SPEED/DIRECTION SKYS  
 PHOTOGRAPHS: ROLL # FRAME #

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

A: TB in lichen zone - lower ITZ on rock outcrop is dense with Fucus & mussels

B: CT/CV high in ITZ in lichen zone. Lower ITZ healthy & diverse

C+D: Oil is in lichen zone. Succession of brown pebble beaches with little to no biota. Lower zones have sparse clumps of Fucus and barnacles on intermittent cobbles/boulders.

E: CT reaches from lichen to barnacle zone. Surface biota near pit #3 includes Fucus adults & recruits, & sparse barnacles. Boulders in lower ITZ support dense Fucus, red & brown algae (Rhodomenale) & mussels. Pisaster in lowest zones

F+G - CV on vertical shale in lichen zone

H: zone reaches from lichen to barnacle zones. Dense Fucus adults and recruits in zone. Dense Littorina on Fucus & limpets under rocks. Small interbedded mussels found in lower ITZ.

→ Bear carcass on beach near pit #7 (Black bear) it has been skinned and likely has been the target of a hunter. 3 immature and 2 adult eagles were feeding on the carcass.

## WILDLIFE OBSERVATIONS

TO BE COMPLETED IN ALL SUBDIVISIONS

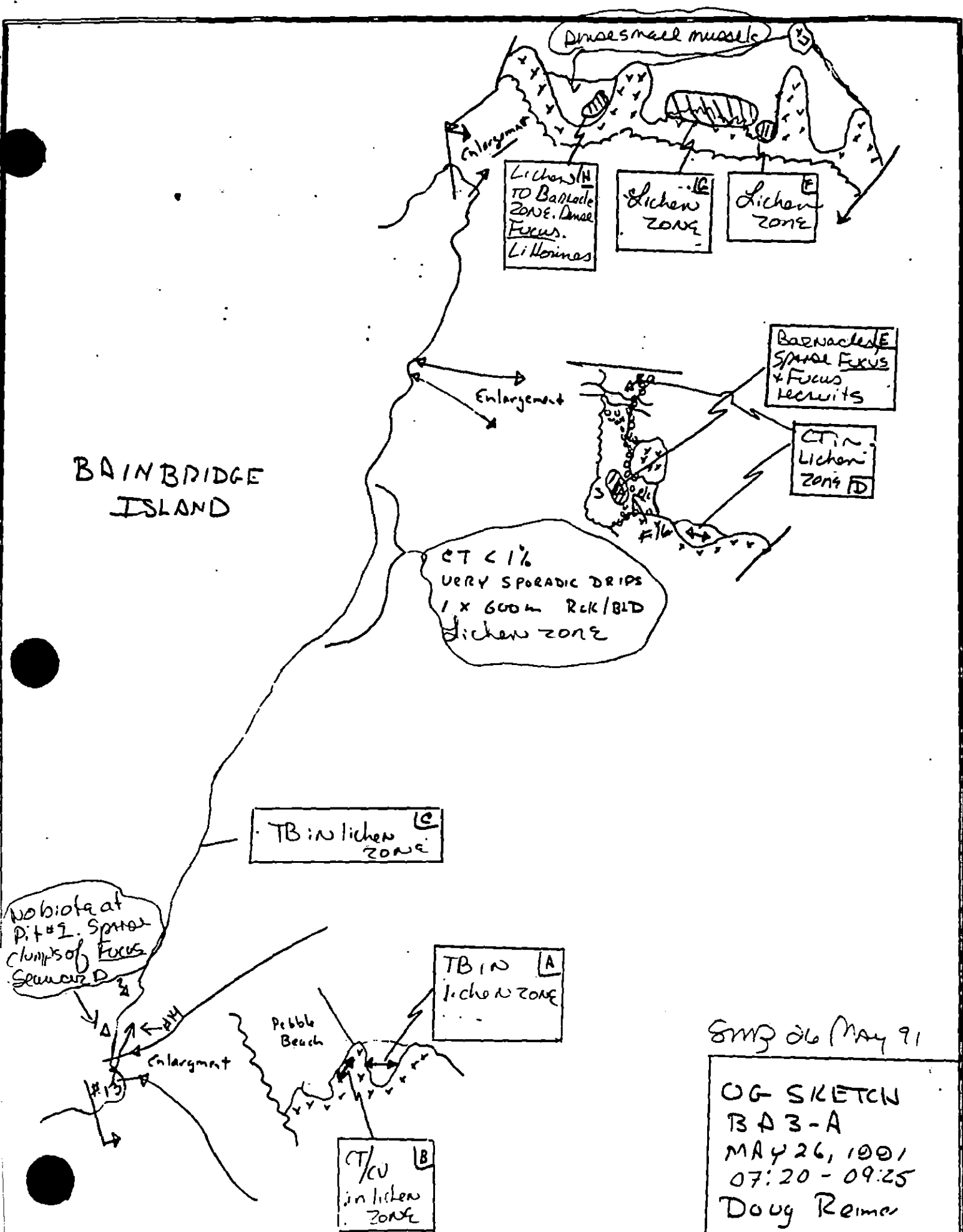
| BIRDS            | # OF SPECIES       | TOTAL BIRDS | FISH OBSERVED<br>SPECIES PRESENT |
|------------------|--------------------|-------------|----------------------------------|
| Eagles           | immature 3 Adult 2 | 5           |                                  |
| Seabirds         |                    |             |                                  |
| Waterfowl        | canvas back ducks  | 3           |                                  |
| Gulls/Kittiwakes |                    |             |                                  |
| Shorebirds       |                    |             |                                  |
| Corvids          | crow 1, raven 1    | 2           |                                  |
| Other Birds      | may p. 2           | 1           |                                  |

| MARINE MAMMALS      | # OBSERVED | LAND MAMMALS<br>SPECIES | # OBSERVED |
|---------------------|------------|-------------------------|------------|
| Sea Otters          |            | Deer, black bear        |            |
| Pinnipeds (specify) |            | 1 milk tracks on beach  |            |
| Whales (specify)    |            |                         |            |
| Sea lions           | # 10       |                         |            |

Shoreline subdivision map showing important biological features attached.

Reviewed M.B. 5/29/91

# BAINBRIDGE ISLAND

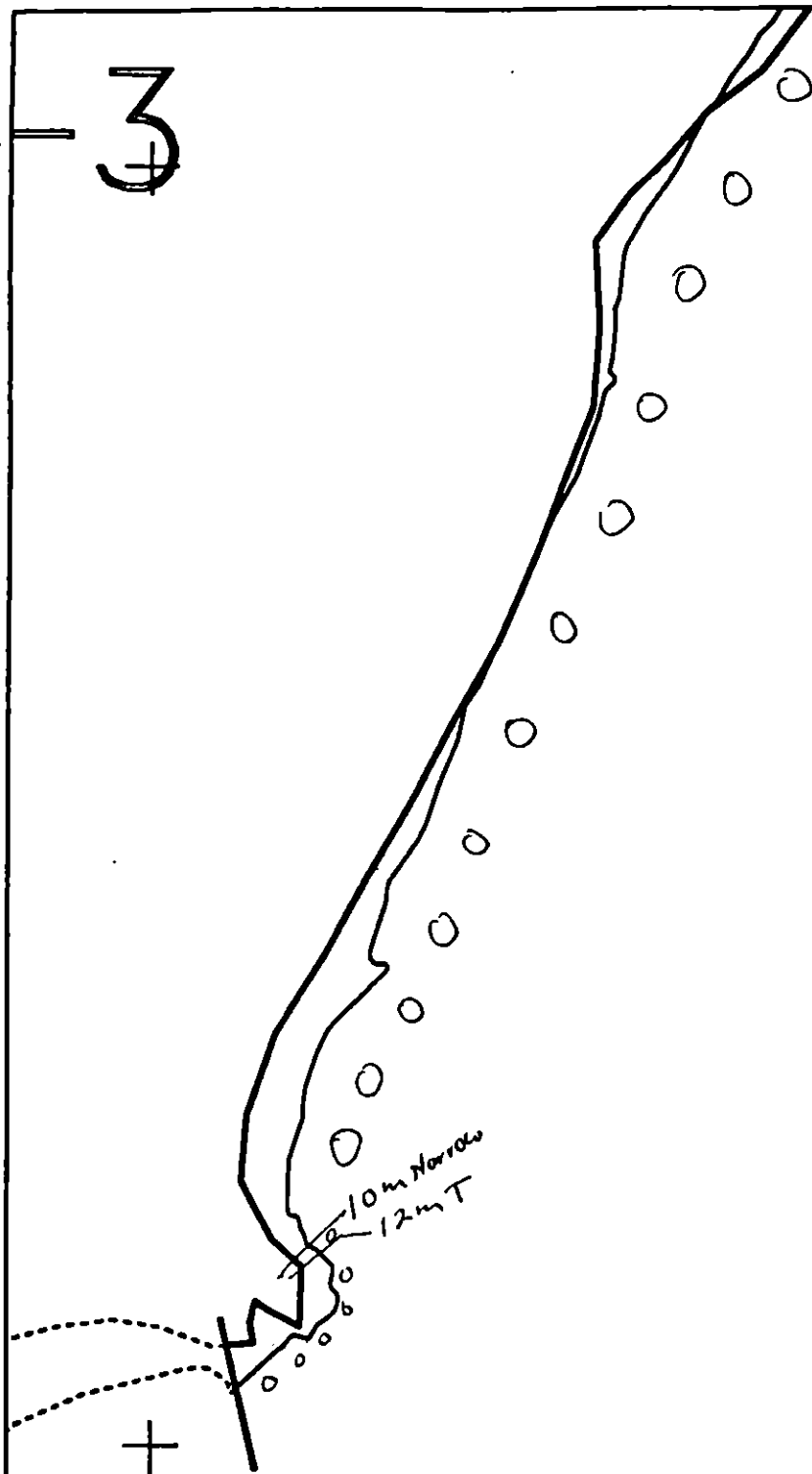


SMJ 06 May 91

OG SKETCH  
BA3-A  
MAY 26, 1991  
07:20 - 09:25  
Doug Reimer

Reviewed M.B. 5/29/91

3



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

BA003 A  
 ADEC Subsegment Length: 3895m  
 METERS

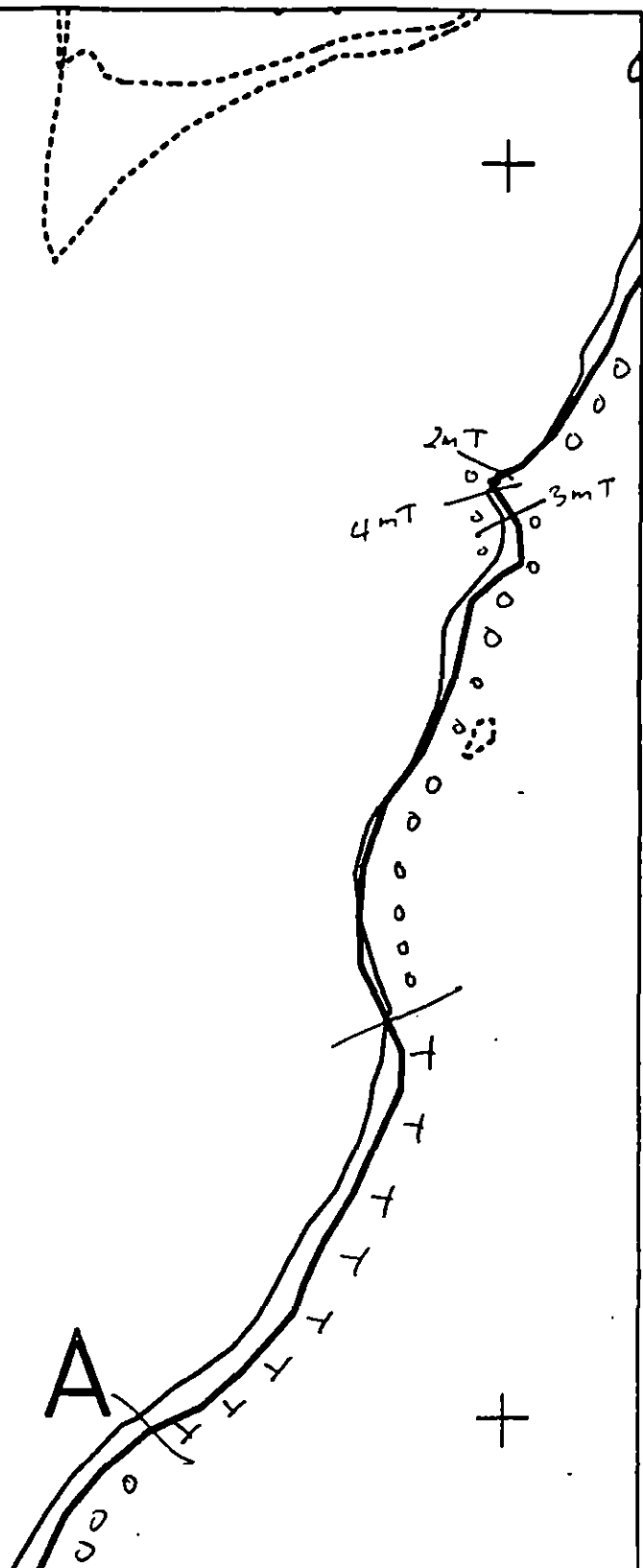
AK State Plane Zone 4  
 pbs00300



Subdivision Field Map  
 Map Key: PWSBA003Aa  
 Name: Reim  
 Date: 5/26/91  
 Date Entered:

REVIEWED: 5/30/91 MC revised 5/29/91 KG

# BA-2



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

**BA003 A**  
 ADEC Subsegment Length: 3895m  
 METERS

5 200 400  
 AK State Plane Zone 4  
 pba003aa



Subdivision Field Map  
 Map Key: PWSBA003Ac  
 Name: Reimer  
 Date: 5/26/91  
 Date Entered:

Reviewed: 5/30/91 MC  
 reviewed 5/29/91 RG

0000000000

+

+

+

+

-----

XXXX  
////  
----  
TTTT  
0000

Wide  
Medium  
Narrow  
Very Light  
No Oil

BA003 A

ADEC Subsegment Length: 3895m

METERS

5 1200 400

AK State Plane Zone 4  
pba003ad



Subdivision Field Map

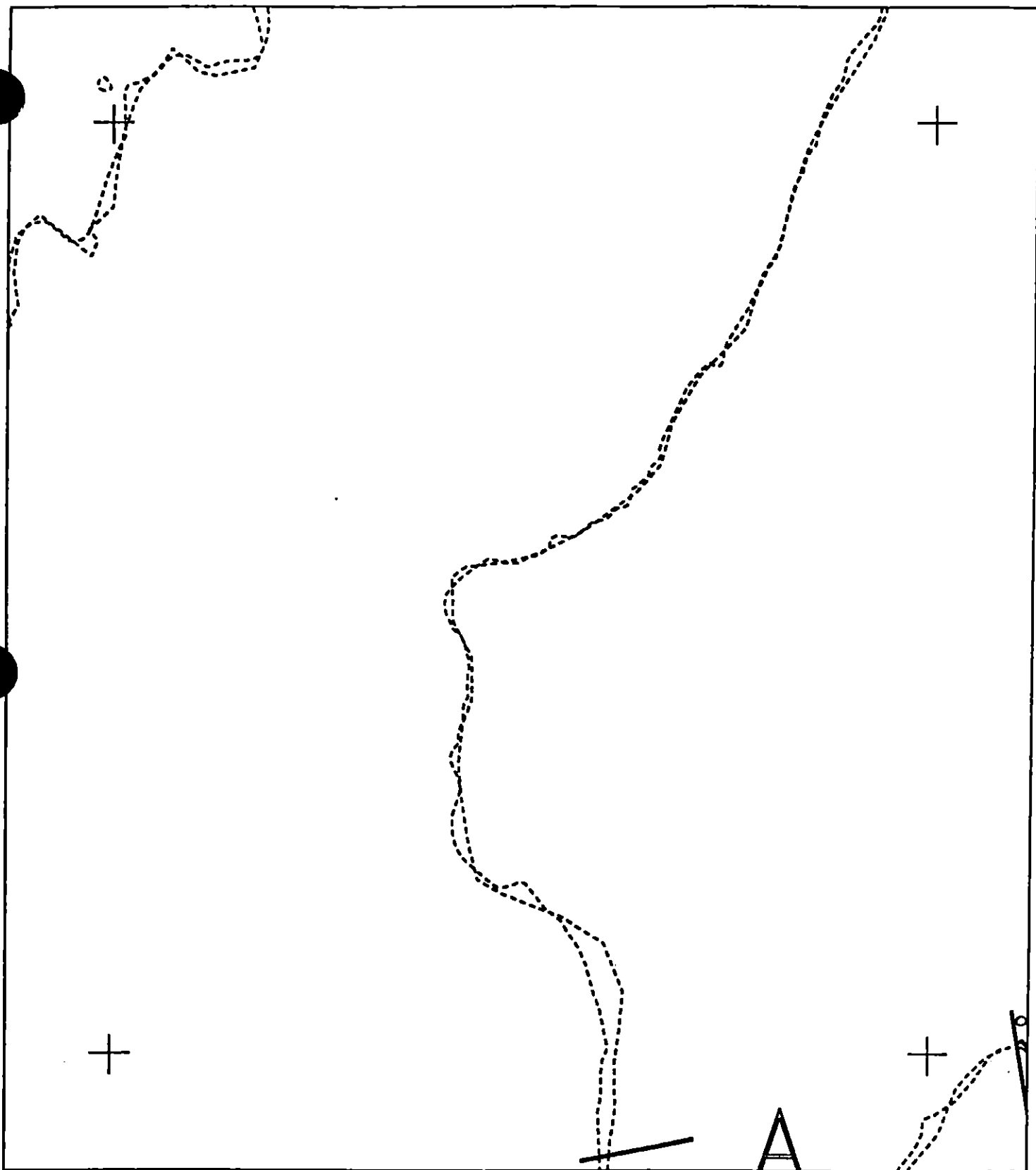
Map Key: PWSBA003Ad

Name: Reimer

Date: 5/26/91

Data Entered:

Revised: 5/30/91 MC revised 5/29/91 KG



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

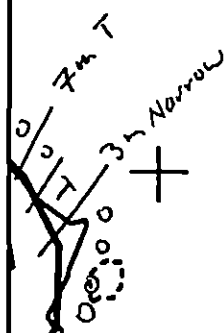
BA003 A  
 ADEC Subsegment Length: 3895m  
 METERS

0 1200 200  
 AK State Plane Zone 4  
 pba003aa



Subdivision Field Map  
 Map Key: PWSBA003Aa  
 Name: Reimer  
 Date: 5/26/91  
 Data Entered:

Reviewed: 5/30/91 mc revised 5/29/91 KG



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

BA003 A

ADEC Subsegment Length: 3895m

METERS

0 200 400

AK State Plane Zone 4  
psa003a1



Subdivision Field Map

Map Key: PWSBA003A1

Name: Reimer

Date: 5/26/91

Date Entered:

REVIEWED: 5/30/91 ML reviewed 5/29/91 RG

1991 MAYSAP EVALUATION

SEGMENT: BA 003 SUB: A REGION: PWS SURVEY DATE: 5/26/91

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.

# MAYSAP FIELD SHORELINE COMMENT SHEET

TEAM NO. 2 SEGMENT BA-3 SUBDIVISION A DATE 5/21/91

EC Pete Montezano SIGNATURE Pete Montezano

☒ NTR ☐ TREATMENT RECOMMENDED

Extremely light oiling observed. Nothing remotely treatable remains on subdivision.

EXXON NAME Exxon Bui SIGNATURE Exxon Bui

☒ NTR Occasional tar spots - extremely light - No treatment. No oil on this segment. Most of the tar spots were picked up on site.

LANDMANAGER NAME Dennis S. Kennedy OF USFS SIGNATURE D. S. Kennedy

☒ NTR

USCG/NOAA NAME NOAA D51MECCE-DEAT 15. Small Boat SIGNATURE Boat MP Zedene USCG

☐ NTR Remnants of oil bulk tank ring was observed intermittently along the segment. This oil was mostly a very weathered Coast/Crust. One bag of oiled surface sediments was picked up by USCG in area H. D573

CG - No TREATMENT Recommended. 3

## MAYSAP SHORELINE OILING SUMMARY

PAGE 1 OF 1TEAM NO. 2OG ReimerBIO BAWSEGMENT BA3ADEC MontesanoLANDMANAGER Kennedy for USFS  
ZenoneSUBDIVISION AEXXON BoxUSCG/NOAA Simecer - BarryDATE 5/26/91TIME 07:20 to 09:25TIDE LEVEL -1.03 ft. to 2.65 ft.ENERGY LEVEL: ☐ H ☒ M ☐ LSURVEYED FROM: ☒ FOOT ☒ BOAT ☐ HELOWEATHER: ☐ SUN ☒ CLOUDS ☐ FOG ☒ RAIN ☐ SNOWTOTAL LENGTH SHORELINE SURVEYED: 3895 mNEAR SHORE SHEEN: ☐ BR ☐ RB ☐ SL ☒ NONEEST. OIL CATEGORY LENGTH: W 0 m M 0 m N 13 m VL 658 m NO 3224 m US 0 m

| L<br>O<br>C | SURFACE OIL CHARACTER |    |    |     |    |    |    |    |    |    | SURFACE<br>SEDIMENT<br>TYPE | SHORE<br>SLOPE<br>VHML | AREA       |             | ZONE |    |    |    | NOTES                |
|-------------|-----------------------|----|----|-----|----|----|----|----|----|----|-----------------------------|------------------------|------------|-------------|------|----|----|----|----------------------|
|             | AP                    | MS | TB | SOR | CV | CT | ST | FL | DB | NO |                             |                        | WIDTH<br>m | LENGTH<br>m | S    | UI | MI | LI |                      |
| A           |                       |    | S  |     |    |    |    |    |    |    | B                           | H                      | 1          | 12          |      | X  |    |    |                      |
| B           |                       |    |    |     | B  | B  |    |    |    |    | R                           | V                      | 0.5        | 10          |      | X  |    |    |                      |
| C           |                       |    | T  |     |    |    |    |    |    |    | R                           | V                      | 0.1        | 0.1         |      | X  |    |    | (1) TARBALL INERTICE |
| D           |                       |    |    |     |    | T  |    |    |    |    | B                           | H                      | 1          | 5           |      | X  |    |    |                      |
| E           |                       |    |    |     |    | S  |    |    |    |    | PC                          | M                      | 2          | 4           |      | X  |    |    |                      |
| F           |                       |    |    |     | P  |    |    |    |    |    | R                           | V                      | 2          | 3           |      | X  |    |    | vertical shale       |
| G           |                       |    |    |     | S  |    |    |    |    |    | R                           | V                      | 5          | 30          |      | X  |    |    | vertical shale       |
| H           |                       |    |    | S   |    |    |    |    |    |    | COPL                        | M                      | 2          | 7           |      | X  |    |    |                      |
| I           |                       |    |    |     |    | T  |    |    |    |    | RB                          | N                      | 1          | 600         |      | X  |    |    |                      |

DISTRIBUTION: C = 91-100%; B = 51-90%; P = 11-50%; S = 1-10%; T = &lt;1%

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

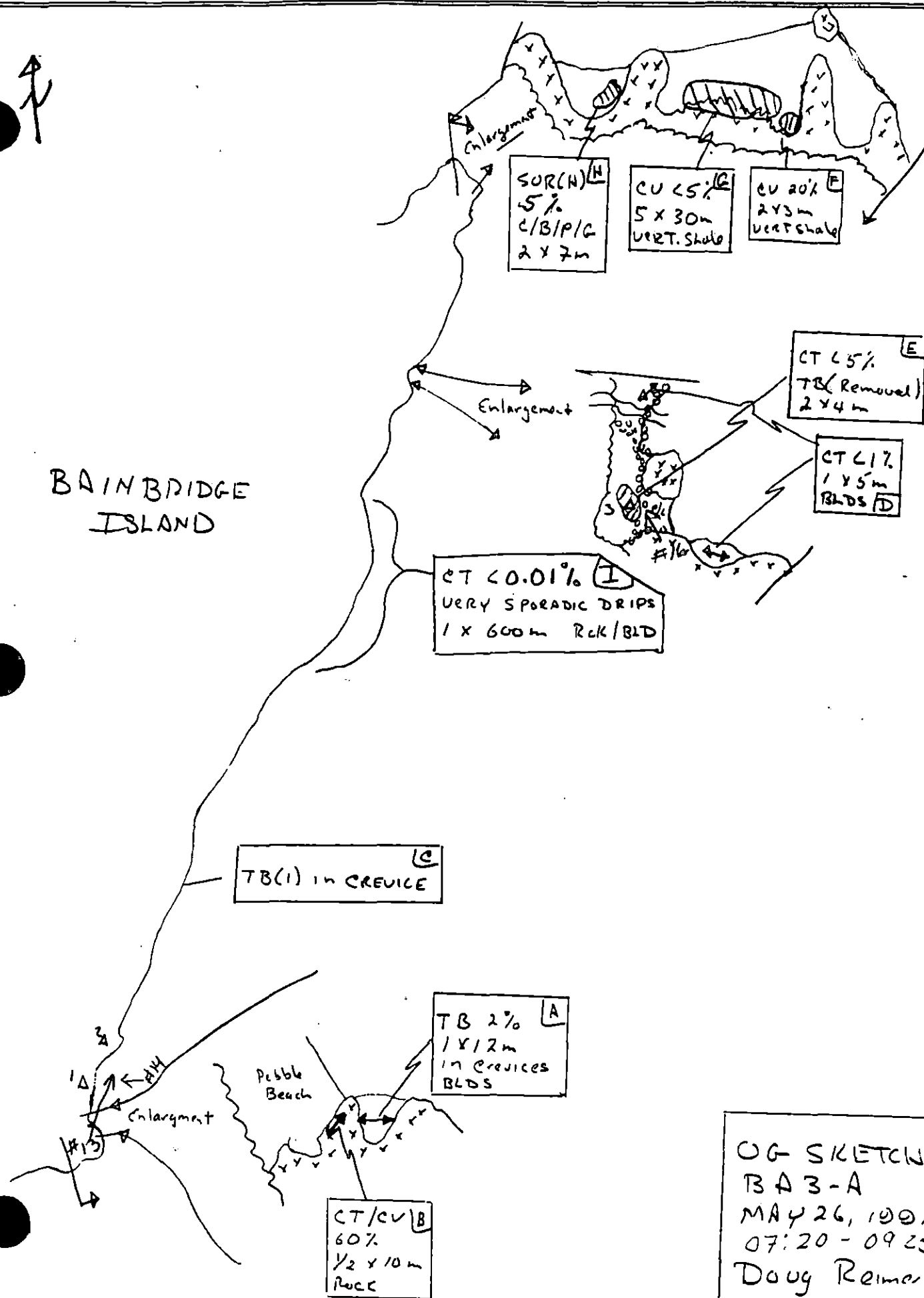
PHOTO ROLL # MAYSAP- 2-27 FRAMES 12-16

| PIT<br>NO. | PIT<br>DEPTH<br>(cm) | SUBSURFACE<br>OIL CHARACTER |     |     |     |    |    |    | OILED<br>ZONE<br>cm-cm | CLEAN<br>BELOW<br>Y/N | H2O<br>LEVEL<br>(cm) | SHEEN<br>COLOR<br>B R S N | PIT<br>ZONE |    |    |    | SURFACE-<br>SUBSURFACE<br>SEDIMENTS | NOTES                        |
|------------|----------------------|-----------------------------|-----|-----|-----|----|----|----|------------------------|-----------------------|----------------------|---------------------------|-------------|----|----|----|-------------------------------------|------------------------------|
|            |                      | OP                          | HOR | MOR | LOR | OF | TR | NO |                        |                       |                      |                           | S           | UI | MI | LI |                                     |                              |
| 1          | 30                   |                             |     |     |     |    |    | X  | -                      |                       |                      |                           |             | X  |    |    | GP-GP                               |                              |
| 2          | 20                   |                             |     |     |     |    |    | X  | -                      |                       | 15                   |                           |             |    | X  |    | P-GP                                | Ben inc. rock<br>21m inc. in |
| 3          | 10                   |                             |     |     |     |    |    | X  | -                      |                       |                      |                           |             | X  |    |    | B-PG                                | Rock below                   |
|            |                      |                             |     |     |     |    |    |    | -                      |                       |                      |                           |             |    |    |    |                                     |                              |
|            |                      |                             |     |     |     |    |    |    | -                      |                       |                      |                           |             |    |    |    |                                     |                              |
|            |                      |                             |     |     |     |    |    |    | -                      |                       |                      |                           |             |    |    |    |                                     |                              |
|            |                      |                             |     |     |     |    |    |    | -                      |                       |                      |                           |             |    |    |    |                                     |                              |
|            |                      |                             |     |     |     |    |    |    | -                      |                       |                      |                           |             |    |    |    |                                     |                              |
|            |                      |                             |     |     |     |    |    |    | -                      |                       |                      |                           |             |    |    |    |                                     |                              |

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

**OG COMMENTS:** Long shoreline of pebble/cobble beaches along the southern half of Segment grading into steep Boulder Lag shoreline and vertical Rock cliff to the north. This segment has little to no oil except for trace CT in boulders/Rock and a few tarballs. The only area with any degree of oil was the very northern end where patches of heavy Coat/SOR were found in vertical shale and surrounding sediments. Most of this material at location "N" was removed.

REVISOR: MC 5/30/91 revised 5/29/91 KCG



OG SKETCH  
BA3-A  
MAY 26, 1991  
07:20 - 09:25  
Doug Reimer

# MAYSAP BIOLOGICAL SUMMARY FORM

TEAM # 2 DATE 26 May 91  
 SEGMENT # BA-3 TIDAL HEIGHT (Range) - 1 to 3 ft  
 SUBDIVISION A BIOLOGIST SMRAN  
 SEA STATE 1-2 ft WIND SPEED/DIRECTION SKTS  
 PHOTOGRAPHS: ROLL # FRAME #

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

A: TB in lichen zone - lower ITZ on rock outcrop is dense with Fucus & mussels

B: CT/CU high in ITZ in lichen zone. Lower ITZ healthy & diverse

C+D: Oil is in lichen zone. Succession of bare pebble beaches with little to no biota. Lower zones have sparse clumps of Fucus and barnacles on intermittent cobbles/boulders.

E: CT reaches from lichen to barnacle zone. Surface biota near pit #3 includes Fucus recruits & recruits, & sparse barnacles. Boulders in lower ITZ support dense Fucus, red brown algae (Rhodospira) & mussels. Pisaster in lowest zones

F+G - CU on vertical shale in lichen zone

I zone reaches from lichen to barnacle zones. Dense Fucus recruits and recruits in zone. Dense Littorina on Fucus & limpets under rocks. Small interbedded mussels found in lower ITZ.

→ Bear carcass on beach near pit #7 (Black bear) it has been skinned and likely has been the target of a hunter. 3 immature and 2 adult eagles were feeding on the carcass.

## WILDLIFE OBSERVATIONS

TO BE COMPLETED IN ALL SUBDIVISIONS

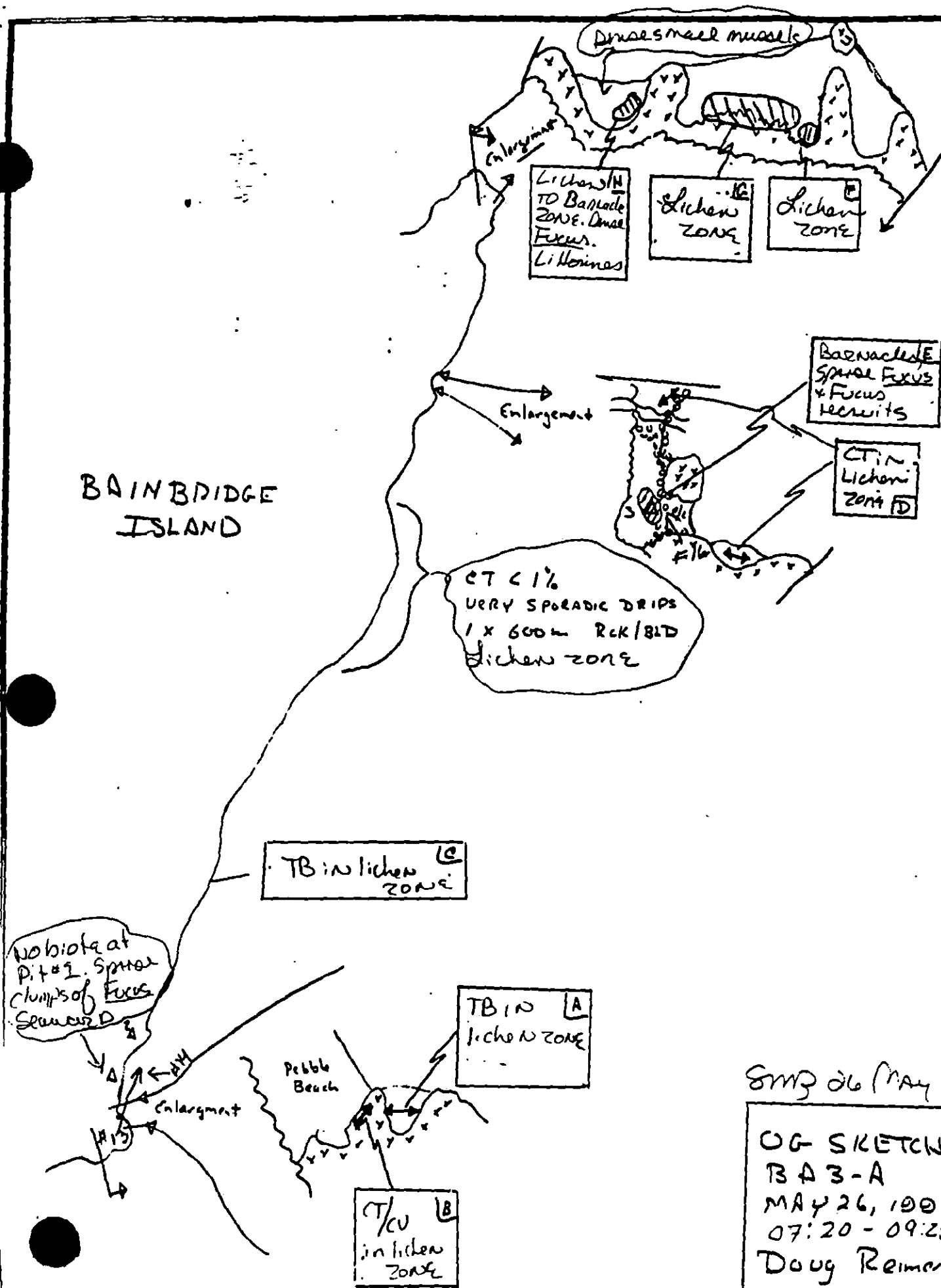
| BIRDS            | # OF SPECIES       | TOTAL BIRDS | FISH OBSERVED<br>SPECIES PRESENT |
|------------------|--------------------|-------------|----------------------------------|
| Eagles           | immature 3 Adult 2 | 5           |                                  |
| Seabirds         |                    |             |                                  |
| Waterfowl        | canvas back ducks  | 3           |                                  |
| Gulls/Kittiwakes |                    |             |                                  |
| Shorebirds       |                    |             |                                  |
| Corvids          | crow 1, raven 1    | 2           |                                  |
| Other Birds      | may piz            | 1           |                                  |

| MARINE MAMMALS      | # OBSERVED | LAND MAMMALS<br>SPECIES | # OBSERVED |
|---------------------|------------|-------------------------|------------|
| Sea Otters          |            | Deer, black bear        |            |
| Pinnipeds (specify) |            | & milk tracks           |            |
| Es (specify)        |            | on beach                |            |
| Sea lions           | # 10       |                         |            |

Shoreline subdivision map showing important biological features attached.

Reviewed M.B. 5/26/91

# BAINBRIDGE ISLAND

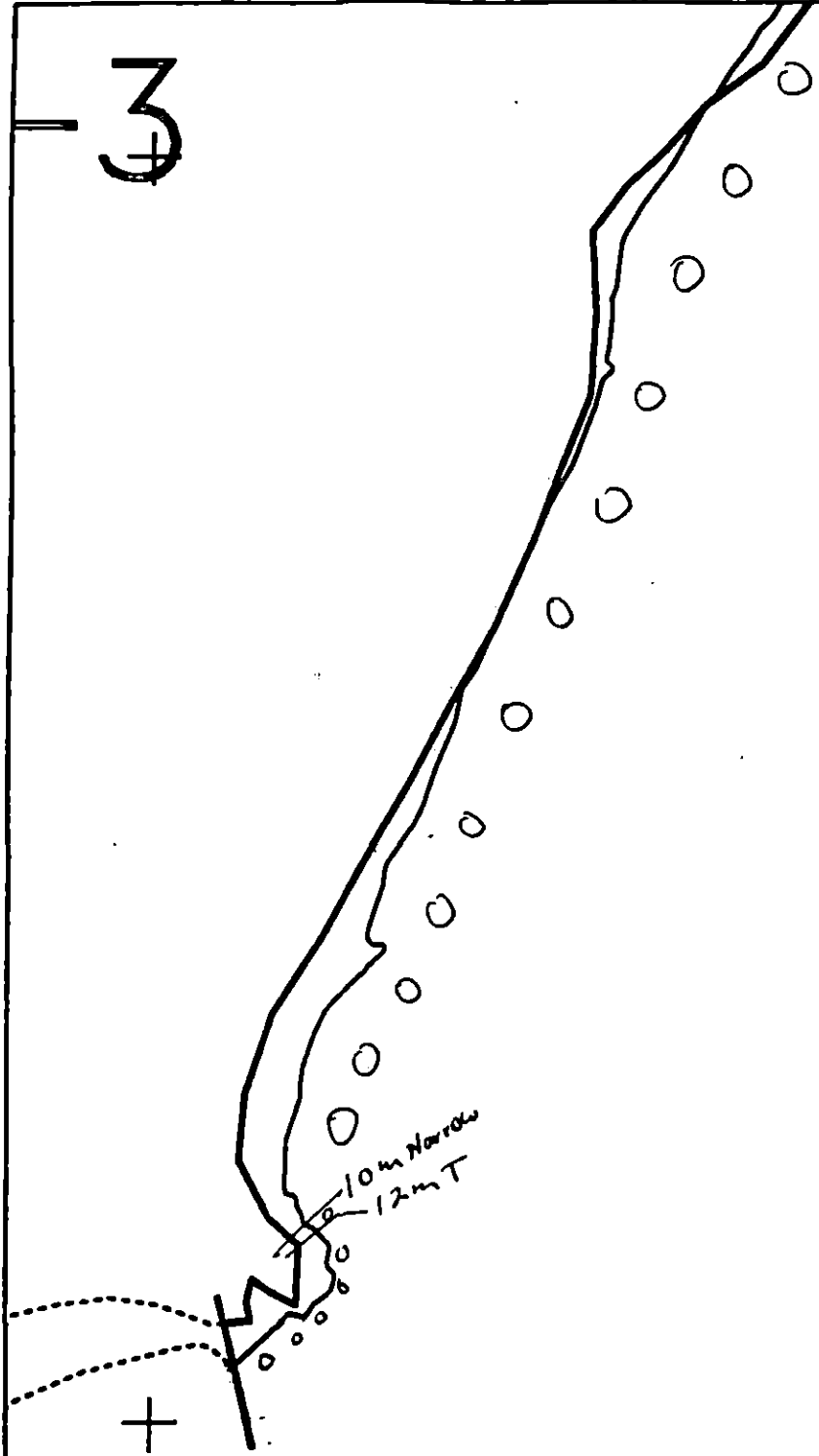


SMG 06 (May 91)

OG SKETCH  
B A 3-A  
MAY 26, 1991  
07:20 - 09:25  
Doug Reimer

3

+



+

+

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

BA003 A

ADEC Subsegment Length: 3895m

METERS

0 200 400

AK State Plane Zone 4  
 pbs003aa



Subdivision Field Map

Map Key: PWSBA003Aa

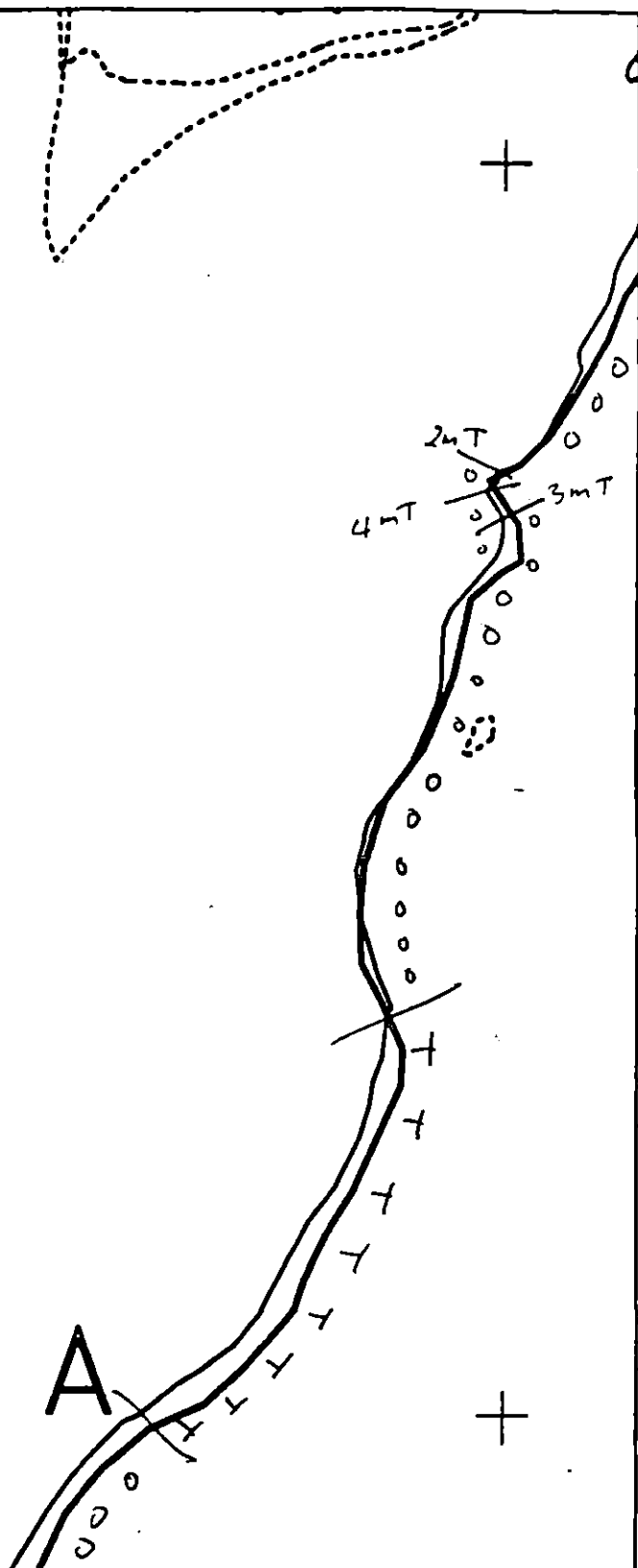
Name: Reim

Date: 5/26/91

Date Entered:

REVIEWED: 5/30/91 MC revised 5/29/91 KCG

# BA-2



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

BA003 A  
 ADEC Subsegment Length: 3895m  
 METERS

0 200 400

AK State Plane Zone 4  
 pbs003a



Subdivision Field Map

Map Key: PWSBA003Ac

Name: Reim

Date: 5/26/91

Date Entered:

Reviewed: 5/30/91 MC  
 reviewed 5/29/91 kg



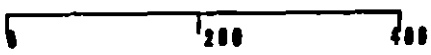
XXXX  
////  
---  
TTTT  
0000

Wide  
Medium  
Narrow  
Very Light  
No Oil

BA003 A

ADEC Subsegment Length: 3895m

METERS



AK State Plane Zone 4  
pk003ad



Subdivision Field Map

Map Key: PWSBA003Ad

Name: Reimer

Date: 5/26/91

Date Entered:



+

+

7m T  
3m Narrow  
+

+

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

BA003 A  
ADEC Subsegment Length: 3895m  
METERS  
AK State Plane Zone 4  
ph003at



Subdivision Field Map  
Map Key: PWSBA003A  
Name: Reimer  
Date: 5/26/91  
Date Entered:

1991 MAYSAP EVALUATION

SEGMENT: BA 004 SUB: A REGION: PWS SURVEY DATE: 5/26/91

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.

ADEC

NAME JEFF GINALIAS

SIGNATURE [Signature]

☒ NTR

NO RECOVERABLE OIL. ASPHALT PATTIES AT SITE 1 REMOVED BY MAYNARD SQUAD (HALF DOZEN, LARGEST 20 CM X 20 CM) SURFACE ONLY, SPREAD AT UITE, LAYER OF VOLCANIC ASH JUST BELOW PEBBLE COVER. SIMILAR, BUT SMALLER SCALE AT SITE 2. AT AREA B (SITE 4) MOUSSE CREVICE IN BEDROCK RECOVERED. ONLY OTHER OIL WAS COAT/STAIN ALONG BEDROCK WALLS. BEACH COVERS HIGH ENERGY W/ VOLCANIC LAYER BELOW, THUS NOT A GOOD TRAP FOR SUBSURFACE OIL.

EXXON

NAME LARRY D. OLSON

SIGNATURE [Signature]

☒ NTR

No treatable conditions were located.

LANDMANAGER

MARSHA HALL OF DNR

SIGNATURE [Signature]

☒ NTR

Asphalt pattys and patchy MOUSSE WERE RECOVERED. Camp site located at area B near logs just east of rock out crop. Majority of segment looked fresh and unaffected by the spill.

USCG/NOAA

NAME SCHWARTZ CHILDS

SIGNATURE [Signature]

☒ NTR

RECOVERABLE OIL WAS REMOVED, NO FURTHER INTRUSION WARRANTED

MODERATE TO HIGH ENERGY BEACH W/ BED ROCK OUTCROPPING BOUNDARIES. BED ROCK TENDS TO BE STEEPLY DIPPING SLATES THAT WEATHER TO PRODUCE POROUS SLAPES THAT TEND TO TRAP & HOLD OIL. MS/I ? CV, CT FOUND IN AREA SUCH AS THIS IN "B". REMAINING OIL LIMITED TO SPORADIC CT ? CV ASPHALT PATTIES WHICH WERE PU BY TEAM.

## MAYSAP SHORELINE OILING SUMMARY

PAGE 1 OF 2

TEAM NO. 1OG G. MARDONALDBIO M. FAWCETTSEGMENT BA-4ADEC J. GINALIASLANDMANAGER M. HALL for DNRSUBDIVISION AEXXON L. OLSONUSCG/NOAA SCHULTZ/CHILDSDATE 5 / 26 / 91TIME 16 : 30 to 19 : 00TIDE LEVEL +5 1/2 ft. to +2.9 ft.ENERGY LEVEL: ☐ ~~W~~ ☒ M ☐ LSURVEYED FROM: ☒ FOOT ☐ BOAT ☐ HELOWEATHER: ☐ SUN ☒ CLOUDS ☐ FOG ☐ RAIN ☐ SNOWTOTAL LENGTH SHORELINE SURVEYED: 1,684 mNEAR SHORE SHEEN: ☐ BR ☐ RB ☐ SL ☒ NONEEST. OIL CATEGORY LENGTH: W — m M — m N — m VL 120 m NO 1556 m US 620 m

| L<br>O<br>C | SURFACE OIL CHARACTER |    |    |     |    |    |    |    |    |    | SURFACE<br>SEDIMENT | SHORE<br>SLOPE | AREA |      | ZONE  |        |   |    | NOTES     |
|-------------|-----------------------|----|----|-----|----|----|----|----|----|----|---------------------|----------------|------|------|-------|--------|---|----|-----------|
|             | AP                    | MS | TB | SOR | CV | CT | ST | FL | DB | NO |                     |                | TYPE | VHML | WIDTH | LENGTH | S | UI |           |
|             |                       |    |    |     |    |    |    |    |    |    | m                   | m              |      |      |       |        |   |    |           |
| A           |                       |    |    |     |    | T  |    |    |    |    | R                   | V              | 0.05 | 3    |       | X      |   |    |           |
| B           |                       |    |    |     | S  | S  |    |    |    |    | R                   |                | <2   | 50   | X     |        |   |    |           |
|             |                       | B  |    |     |    |    |    |    |    |    | R                   | H              | 0.3  | 1    | X     |        |   |    |           |
| C           |                       |    |    |     |    | T  |    |    |    |    | R                   | V              | 0.03 | 15   | X     |        |   |    | dripline. |
| D           |                       |    | T  |     |    |    |    |    |    |    | C                   | L              | 10   | 20   | X     | X      | X |    | post PU.  |
| E           |                       |    |    |     |    | S  |    |    |    |    | R                   | H              | 3    | 10   | X     |        |   |    |           |
| F           |                       | T  |    |     |    |    |    |    |    |    | R                   | L              | 0.5  | 1    | X     |        |   |    |           |
| G           |                       |    |    |     |    | S  |    |    |    |    | R                   | V              | 1    | 10   |       | X      |   |    |           |
| H           | T                     |    |    | S   |    |    |    |    |    |    | CPR                 | M              | 2    | 20   |       | X      |   |    |           |
|             |                       |    |    |     |    |    |    |    |    |    |                     |                |      |      |       |        |   |    |           |
|             |                       |    |    |     |    |    |    |    |    |    |                     |                |      |      |       |        |   |    |           |
|             |                       |    |    |     |    |    |    |    |    |    |                     |                |      |      |       |        |   |    |           |
|             |                       |    |    |     |    |    |    |    |    |    |                     |                |      |      |       |        |   |    |           |
|             |                       |    |    |     |    |    |    |    |    |    |                     |                |      |      |       |        |   |    |           |
|             |                       |    |    |     |    |    |    |    |    |    |                     |                |      |      |       |        |   |    |           |
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|             |                       |    |    |     |    |    |    |    |    |    |                     |                |      |      |       |        |   |    |           |
|             |                       |    |    |     |    |    |    |    |    |    |                     |                |      |      |       |        |   |    |           |
|             |                       |    |    |     |    |    |    |    |    |    |                     |                |      |      |       |        |   |    |           |
|             |                       |    |    |     |    |    |    |    |    |    |                     |                |      |      |       |        |   |    |           |
|             |                       |    |    |     |    |    |    |    |    |    |                     |                |      |      |       |        |   |    |           |
|             |                       |    |    |     |    |    |    |    |    |    |                     |                |      |      |       |        |   |    |           |
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|             |                       |    |    |     |    |    |    |    |    |    |                     |                |      |      |       |        |   |    |           |
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|             |                       |    |    |     |    |    |    |    |    |    |                     |                |      |      |       |        |   |    |           |
|             |                       |    |    |     |    |    |    |    |    |    |                     |                |      |      |       |        |   |    |           |
|             |                       |    |    |     |    |    |    |    |    |    |                     |                |      |      |       |        |   |    |           |
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|             |                       |    |    |     |    |    |    |    |    |    |                     |                |      |      |       |        |   |    |           |
|             |                       |    |    |     |    |    |    |    |    |    |                     |                |      |      |       |        |   |    |           |
|             |                       |    |    |     |    |    |    |    |    |    |                     |                |      |      |       |        |   |    |           |
|             |                       |    |    |     |    |    |    |    |    |    |                     |                |      |      |       |        |   |    |           |
|             |                       |    |    |     |    |    |    |    |    |    |                     |                |      |      |       |        |   |    |           |
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|             |                       |    |    |     |    |    |    |    |    |    |                     |                |      |      |       |        |   |    |           |
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|             |                       |    |    |     |    |    |    |    |    |    |                     |                |      |      |       |        |   |    |           |
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|             |                       |    |    |     |    |    |    |    |    |    |                     |                |      |      |       |        |   |    |           |
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|             |                       |    |    |     |    |    |    |    |    |    |                     |                |      |      |       |        |   |    |           |
|             |                       |    |    |     |    |    |    |    |    |    |                     |                |      |      |       |        |   |    |           |
|             |                       |    |    |     |    |    |    |    |    |    |                     |                |      |      |       |        |   |    |           |
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|             |                       |    |    |     |    |    |    |    |    |    |                     |                |      |      |       |        |   |    |           |
|             |                       |    |    |     |    |    |    |    |    |    |                     |                |      |      |       |        |   |    |           |
|             |                       |    |    |     |    |    |    |    |    |    |                     |                |      |      |       |        |   |    |           |
|             |                       |    |    |     |    |    |    |    |    |    |                     |                |      |      |       |        |   |    |           |
|             |                       |    |    |     |    |    |    |    |    |    |                     |                |      |      |       |        |   |    |           |

DISTRIBUTION: C = 91-100%; B = 51-90%; P = 11-50%; S = 1-10%; T = &lt;1%

SLOPE: V = VERTICAL; H = HIGH ANGLE; M = MEDIUM ANGLE; L = LOW ANGLE PHOTO ROLL # MAYSAP- 1 - 32 FRAMES 4-10

| 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       | 20             |                          |     |     |     |    |    | X  | -                | -               |                |                     | X        |    |    | C-CPG  |                              |       |
| 2       | 20             |                          |     |     |     |    |    | X  | -                | -               |                |                     |          | X  |    | C-CP   |                              |       |
| 3       | 20             |                          |     |     |     |    |    | X  | -                | -               |                |                     |          |    | X  | C-CP   |                              |       |
| 4       | 30             |                          |     |     |     |    |    | X  | -                | -               |                |                     | X        |    |    | P-PG   |                              |       |
| 5       | 30             |                          |     |     |     |    |    | X  | -                | -               |                |                     |          | X  |    | PC-PCV | organic                      |       |
| 6       | 25             |                          |     |     |     |    |    | X  | -                | 4               | N              |                     | X        |    |    | PC-PC  |                              |       |
| 7       | 15             |                          |     |     |     |    |    | X  | -                | 7               | N              |                     |          | X  |    | CP-GPM |                              |       |
| 8       | 40             |                          |     |     |     |    |    | X  | -                | -               |                |                     |          | X  |    | P-PG   |                              |       |
| 9       | 35             |                          |     |     |     |    |    | X  | -                | -               |                |                     |          | X  |    | P-PGS  |                              |       |

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

OG COMMENTS: Exposed rocky shore, w/ steeply dipping shaly rocks and well sorted CPG low angle beach.

Surface oil only, as asphalt patches (P.U.), a patch of SOL and rare sightings of sporadic CT.

Revised: MC 5/28/91  
Reviewed 5:28 9/1

TEAM NO. 1

## MAY SAP SHORELINE OILING SUMMARY (cont.)

PAGE 2 OF 2

SEGMENT BA-4

SUBDIVISION     A    

DATE 5 / 26 / 91

**OG COMMENTS:**[illegible]

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

reviewed 5.28 9y.

BA 004 (cont) 5/26/91 Fawcett  
 1820 - SIG/P main beach, BC at  
 side, big outcrops, vertical reefs,  
 shelves in MIZ covered w/ Fucus -  
 CV/CT/AP? in UTZ reef area N/ (mostly  
 of tiny  
 creek)  
 sparse patchy young Fucus,  
 sparse barn - all stuck in cracks -  
 these rocks get sandblasted in  
 storms

- more CT/CV/SOR in shale reefs in  
 center of beach on back side - UTZ  
 - SUZ no biota (dense Fucus is a remnant  
 on front - also limacina, mussel,  
 mod/imp, litt) - picked up  
 - L1 has patches of large canosus  
 & mussels in protected sites behind  
 R, also beds of very very dense  
 young mussels along & overgrowing  
 Fucus & Rhodomenela on BK shelf +? for  
 small Metridium in tiny cave pool  
 - back side of massive Rock (14 ft to 12 ft)  
 has ~ 80% cover of 1 yr old Balanus  
 canosus, then a really 100% spat  
 cover on rock & older barnacles  
 - 2 sea lions

Finish survey 1900

Graham MacDonald notes re: biota at site 1;  
MF monitoring eagle from offshore

BA-4 Site #1

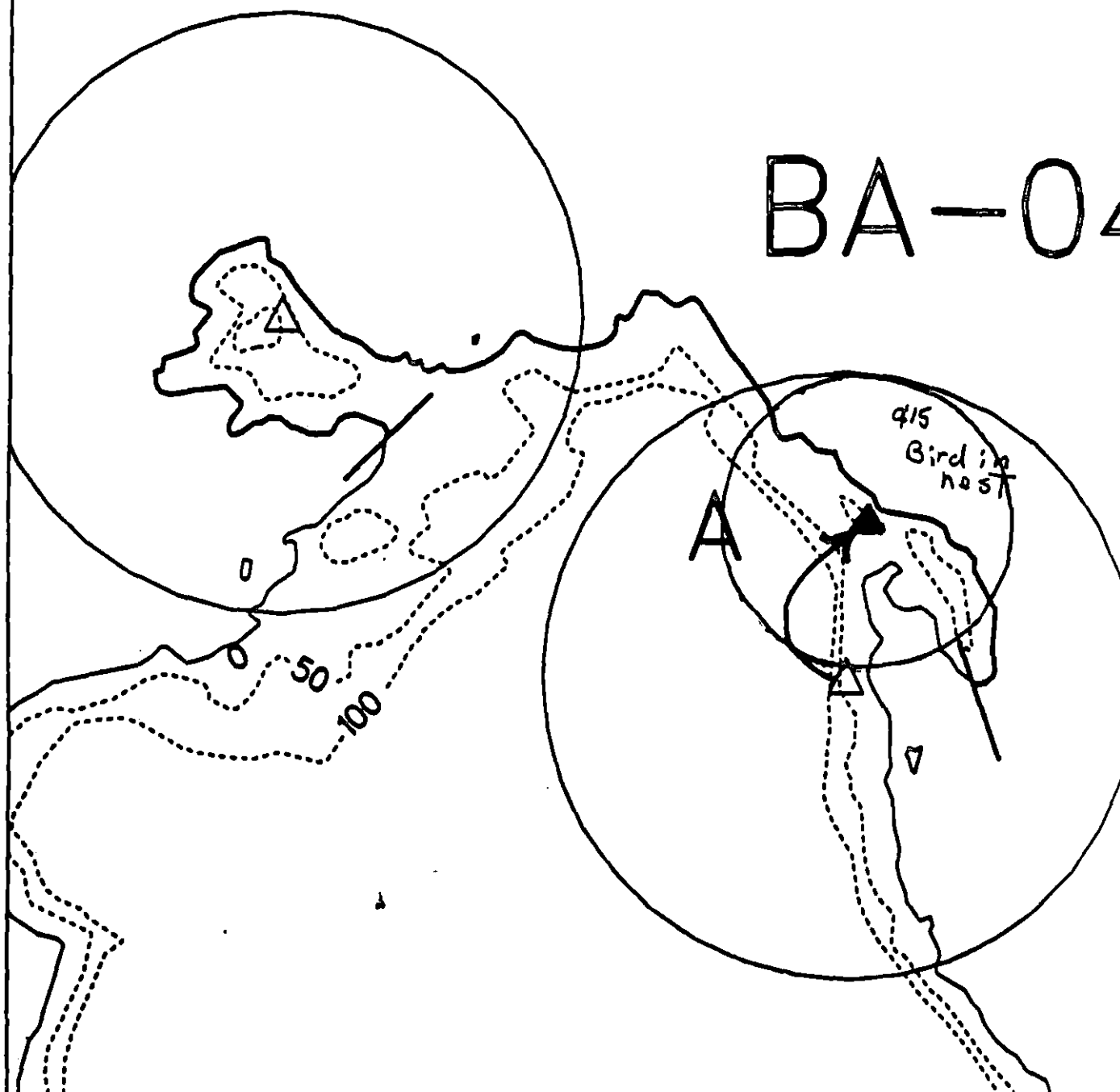
thin fucus @ rocky edge of beach;  
volcanic ash substrate, oolite.  
Fucus in beach face - 1 bedfast  
- peppering of tiny algal &  
littorina; good barnacle spots;  
Mussel bed; dominance of pebbles;  
cluster on rock up.

Bed of striped snails as delicate  
kelp? found @ WL; sparse  
red-brown alga @ LITZ; oiled  
relatively devoid of life compared  
to adjacent rock wall; of the  
small size of the barnacles;  
snails indicate a recent re-  
colonization / recruitment, this  
beachface is well populated.

Limpets on barnacles; 1 cm dia  
Mussels ~ 2 1/2 cm; broken  
fucus strip @ LITZ on exposed  
face,

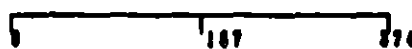
depart @ 17.20

BA-04



BA004

METERS



AS State Plane Zone 4  
220004

Segment Reference Map  
Map Key: PWSBA004



EAGLE NEST

U.S. FISH AND WILDLIFE SERVICE (FWS)  
SHORELINE ACTIVITY/BALD EAGLE IMPACT EVALUATION

Date 5/26/91 Shoreline Segment/subdivision BA 004 A

Shoreline activity MAYSAP SURVEY

Time - Begin

Time - End

FWS Observer Mike Fawcett auth by Distal 1640-1725

Surveyors/workers 4 in shore party

Nest in view/monitored: ☒ Y N Adult in nest: ☒ Y N Unk.

Adverse eagle response: Y ☒ N Adult left nest: Y N Unk.

Time

Type of human activity/eagle response

1640

eagle's head sticking up, watching,

no other response

Survey/work activities completed:

☒ Y N

Personnel withdrawn due to eagle conflict:

Y ☒ N

Recommendations:

FWS Observer

M. Fawcett

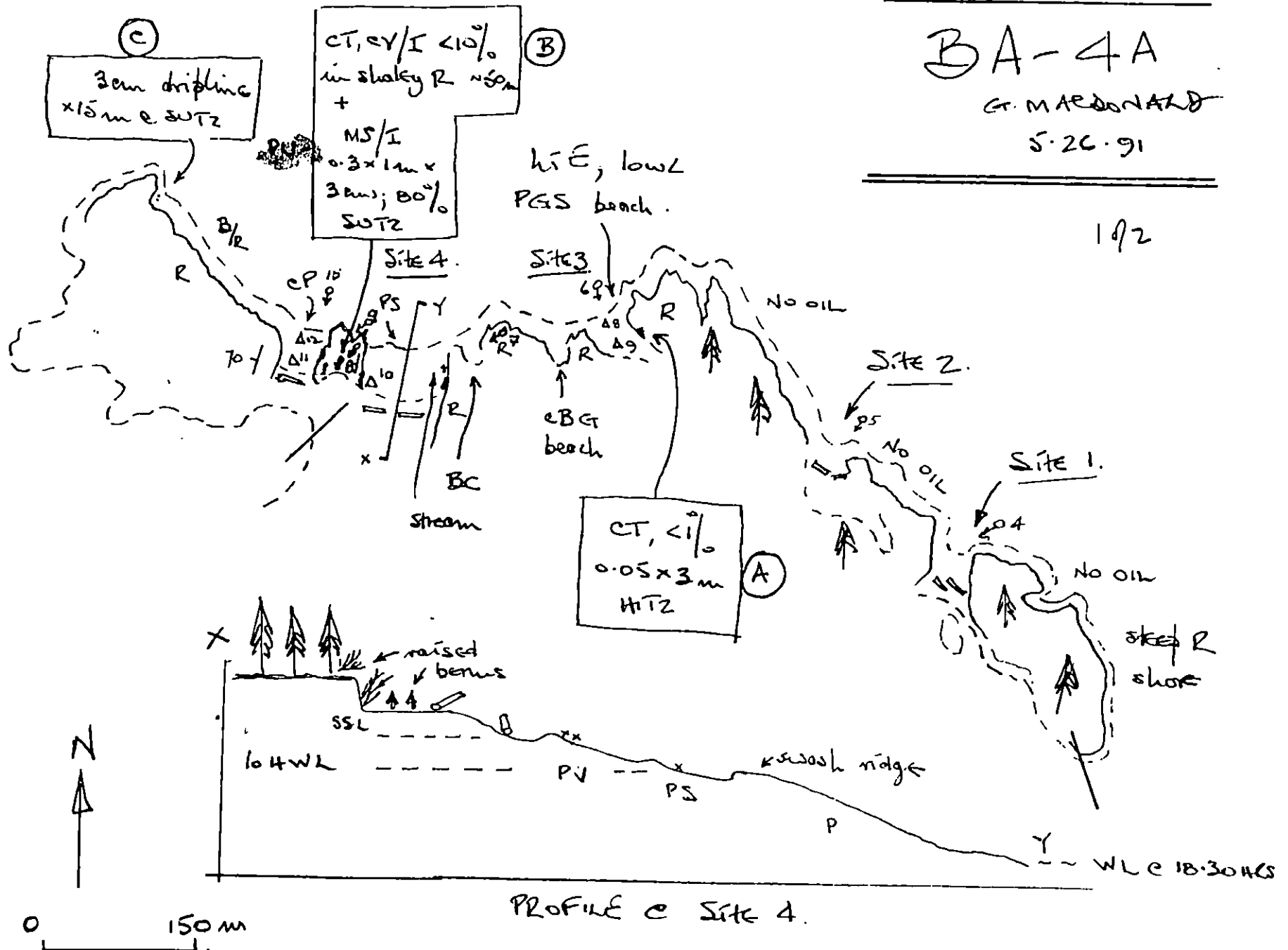
Date 5/26/91

BA-4A

G. M. McDONALD

5-26-91

192



PROFILE @ Site 4.

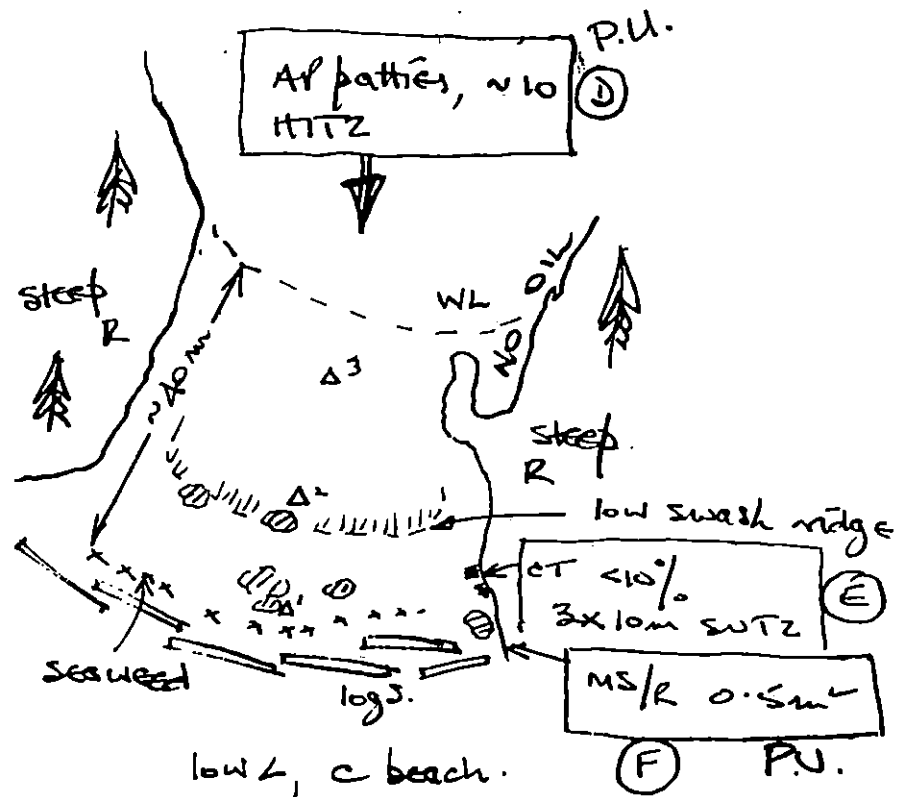
# Site 1.

BA-4A

GM. 5.26.91

20/2

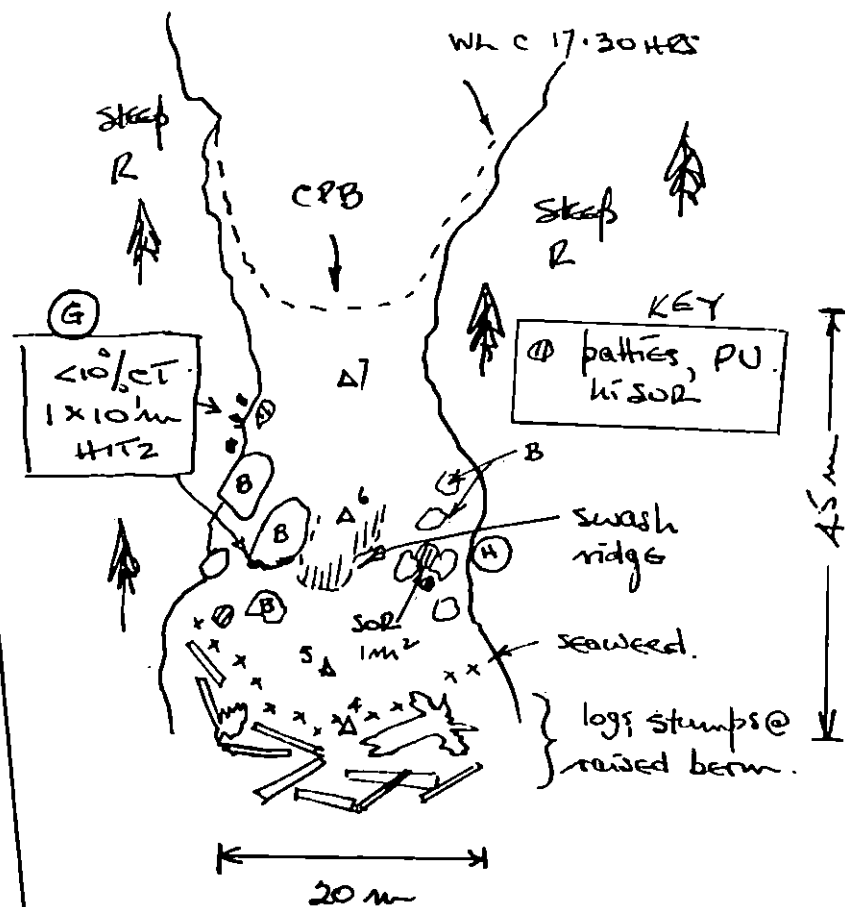
beach - 40 x 25 m long



no sub-surface oil; beach is sealed

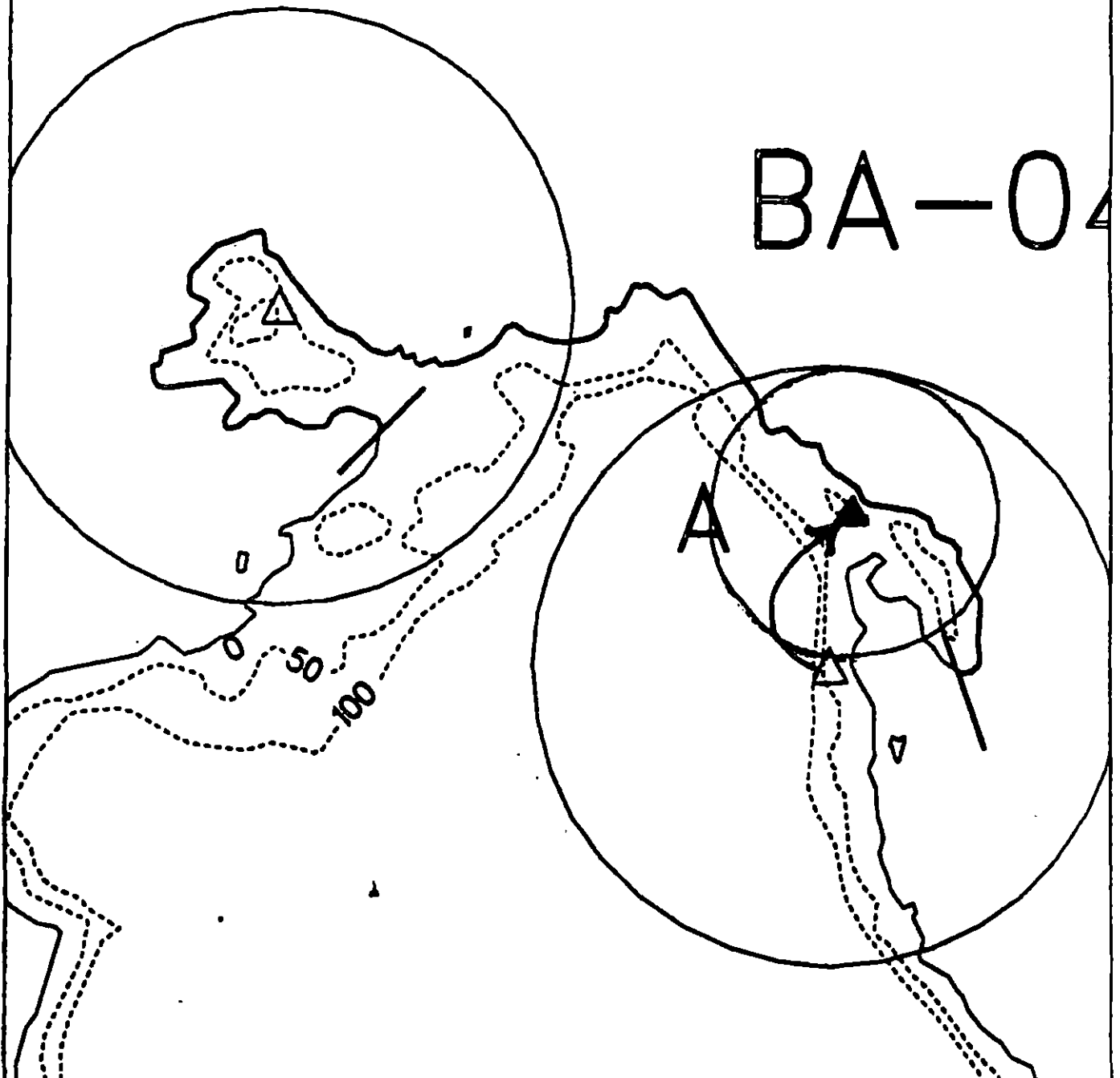
@ 3m by tight purple grey (volcanic?) ash-like layer.

# Site 2.



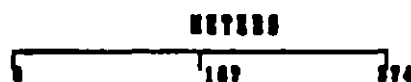
Reviewed: MC 5/28/91  
reviewed 5.28.91

BA-04



BA004

Segment Reference Map  
Map Key: PVSDA004



AR State Plane Zone 4  
PSC004



EAGLE NEST

## MAYSAP BIOLOGICAL SUMMARY FORM

TEAM # 1 DATE 26 May 91  
 SEGMENT # BA004 TIDAL HEIGHT (Range) +2.6 to +5.5 ft MLLW  
 SUBDIVISION A BIOLOGIST Michael Fawcett  
 SEA STATE 1/2 ft seas WIND SPEED/DIRECTION NW 10 knots  
 PHOTOGRAPHS: ROLL # FRAME #

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

Subdivision has mostly vertical rock walls, with some jumbled massive boulders and pocket beaches and coves with B/C/P/G/S. Steep E-rock & large boulders have dense cover of young barnacles and spat, young Fucus, young mussels in MTZ-UTZ, and a variety of algae and some old barnacles, mussels, and whelks in LTZ. LTZ also has abundant starfish (*Psaster*, *Evasterias*, *Luidia*, *Dermasterias*, *Pycnopodia*, *Lapasterias*, anemones (*Anthopleura*, *Tealia*, *Epiactis*, *Metridium*) plus chitons, limpets, hydroids, bryozoans, sponges, tidepool animals, etc. There has been heavy recruitment of mussels, barnacles, and littorinids throughout the area, including on high energy c/p beaches where they are unlikely to survive the winter storms.

See sketch map (2 sheets) for descriptions of biota near remaining oil.

## WILDLIFE OBSERVATIONS

TO BE COMPLETED IN ALL SUBDIVISIONS

| BIRDS            | # OF SPECIES    | TOTAL BIRDS | FISH OBSERVED<br>SPECIES PRESENT |
|------------------|-----------------|-------------|----------------------------------|
| Eagles           | 1               | 1 on nest   | tidepool sculpin                 |
| Seabirds         | 1 (murrelet sp) | 1           |                                  |
| Waterfowl        |                 |             |                                  |
| Gulls/kittiwakes | 1 (Gw gull)     | 3           |                                  |
| Shorebirds       |                 |             |                                  |
| Corvids          | 1 (raven)       | 1           |                                  |
| Other Birds      |                 |             |                                  |

| MARINE MAMMALS           | # OBSERVED  | LAND MAMMALS<br>SPECIES | # OBSERVED |
|--------------------------|-------------|-------------------------|------------|
| Sea Otters               |             |                         |            |
| Pinnipeds (specify)      | 3 Sea lions |                         |            |
| Marine Mammals (specify) |             |                         |            |

shoreline subdivision map showing important biological features attached.

BA 004A 5/26/91 Fawcett

1640 - started survey near eagle  
nest - MT watched eagle from  
shuff-shore party of 4 (GM,  
JOG, MH, Craig (Voco) -  
wind NW 10 knots, seas  $< 1/2$  ft

1725 - 2nd small cove

MTZ C/B/P - very dense young  
mussels, all 5mm - 10mm ( $< 1$  yr old)  
dense spat, dense young, limps,  
mod. litt. & eggs -

- dense barn on larger C/B &  
PR walls up to 5 ft

dense ~~Fucus~~ Fucus on BR & B  
near mouth up to +8 ft,  
moderate up here in BR - sparse  
in C/P

LTZ BR walls, ledges, channels  
w/ clumps of 10-15 Pinnacles

Tidepools & channels w/ rich  
pool biota: Lith, sponge,  
sculp, anem, hydroids, tunicates,  
hermies, U'ia

LTZ also include Halosaccion,  
fil. bryozooid, Rhodn, Pediculus,  
Laminaria - dense young  
CARIO. w. spat

CT UTZ-SUTZ, upper edge of  
sponge barn,

- SOR 1 P.U. ~~insane~~ as CT -

Tern. Isp. obs, amph, worris.

- LTZ - besides P. sacc, also E. vasterias,

Luidia, Pycnospira, T. lamellor

- Trella, Antho, Epiaelis, Leptasterias,

Katherina, bryozoans

~~fit~~ ~~in~~ ~~leaf~~ red, Dermasterias

by 1800 - Vertical walls with  
dense, rich biota

- 1 sea lion

GW gulls III

raven I

1805 - under S/G/P/C/B beach cove

w/ big outcrop in middle slough in MTZ,

G/S at base - has dense young

Fucus, spat, mussels, mod. Scyto

& Halosaccion small (1 yr) canyons

up to ~ 7 ft (mod) - dense, old

persona 18-20 ft

- long fetch to N - mod. high energy

- western half of beach is B/C/P

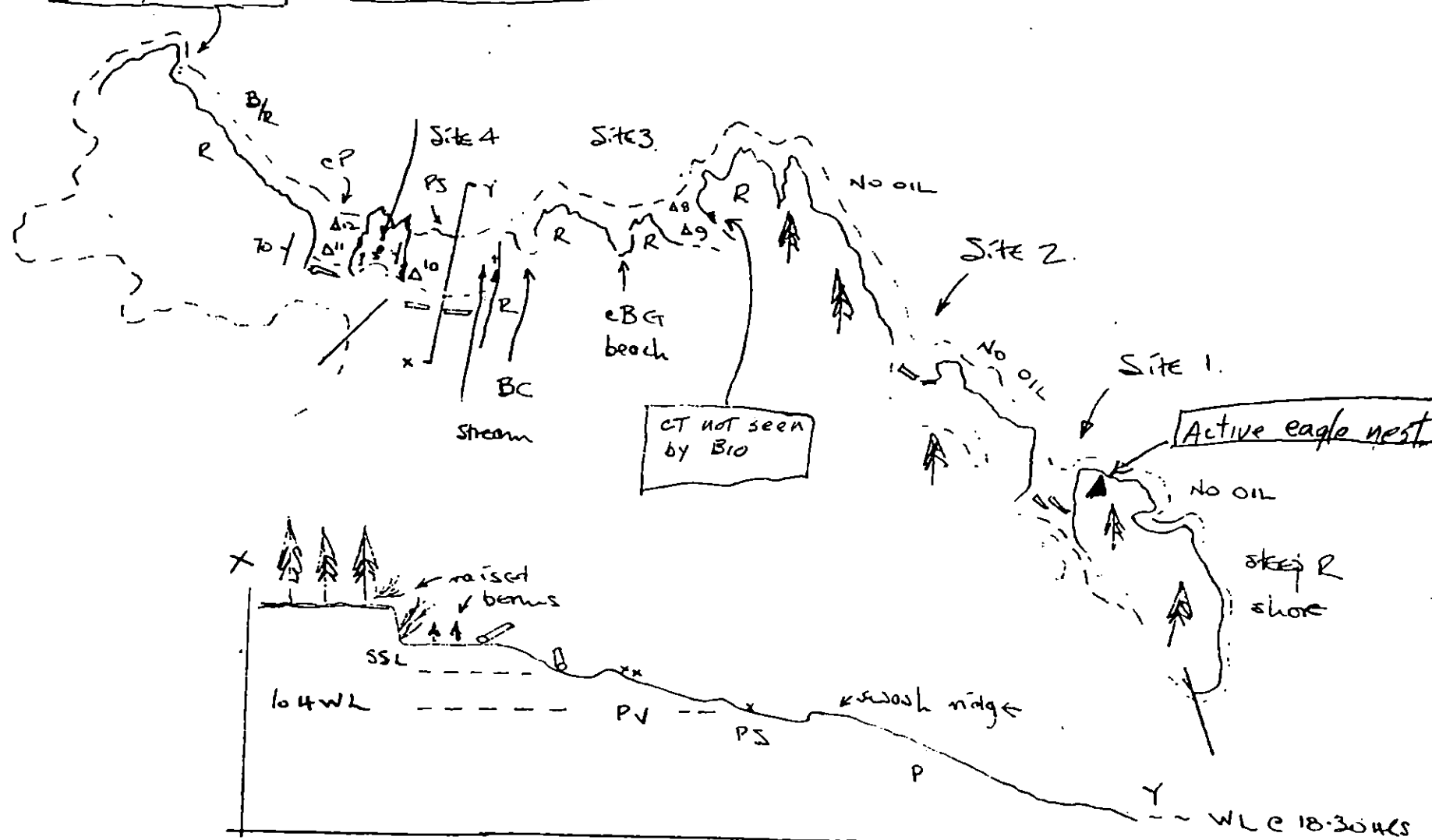
MTZ has dense Litt (mostly young),

dense young mussels

BIO SKETCH Map of 2  
BA 004A  
M. Fuxer H  
5/26/01

Drip line in lichen zone above barnacles, Fucus, etc

CT/CV/MS in SUTZ on lee side of outcrop -- no biota, loose P/c below; Exposed side of outcrop has dense biota UTZ-LTZ

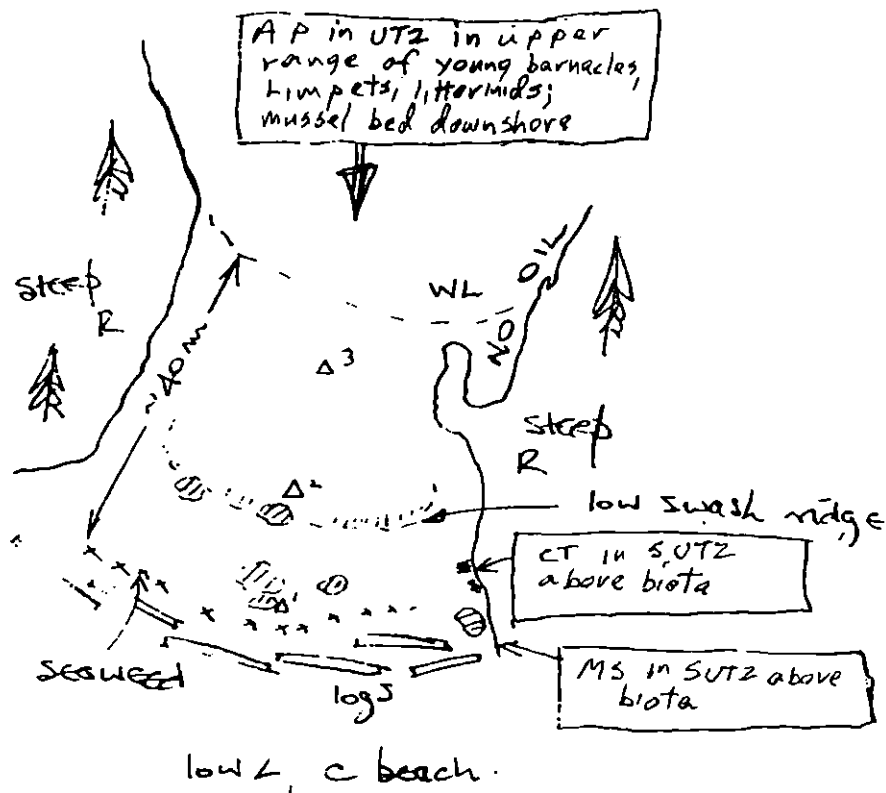


Profile at site 4

0 150m

# Site 1.

beach - 40 x 25 m long



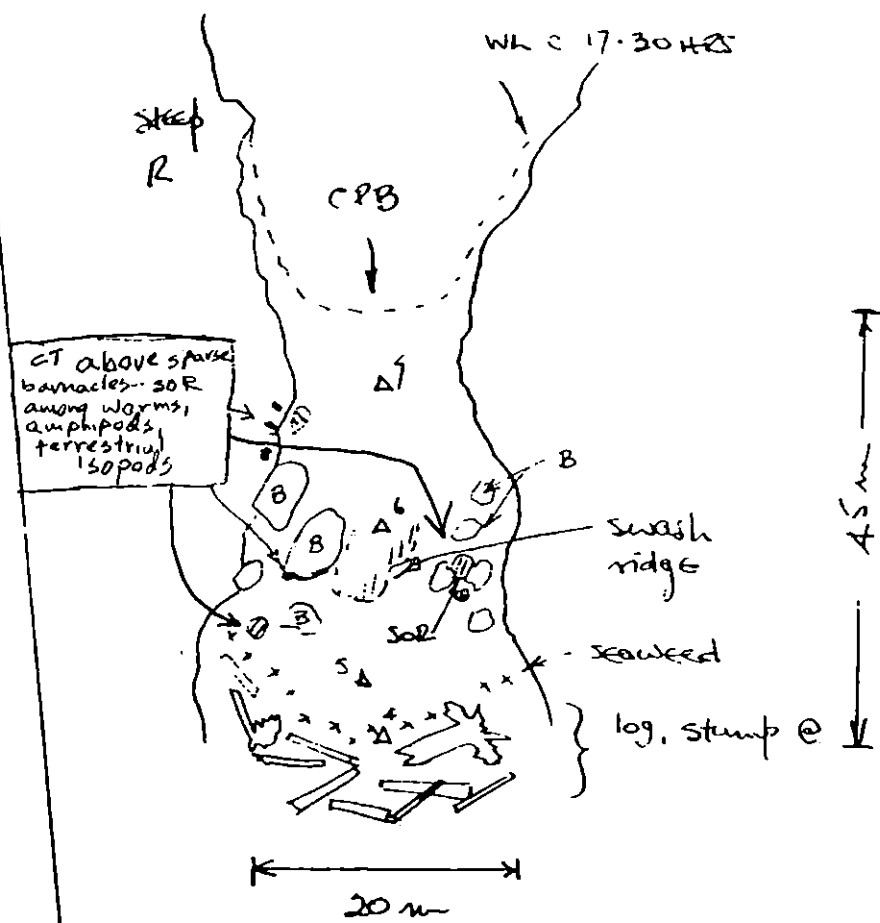
# Bio Sketch Map P. 2

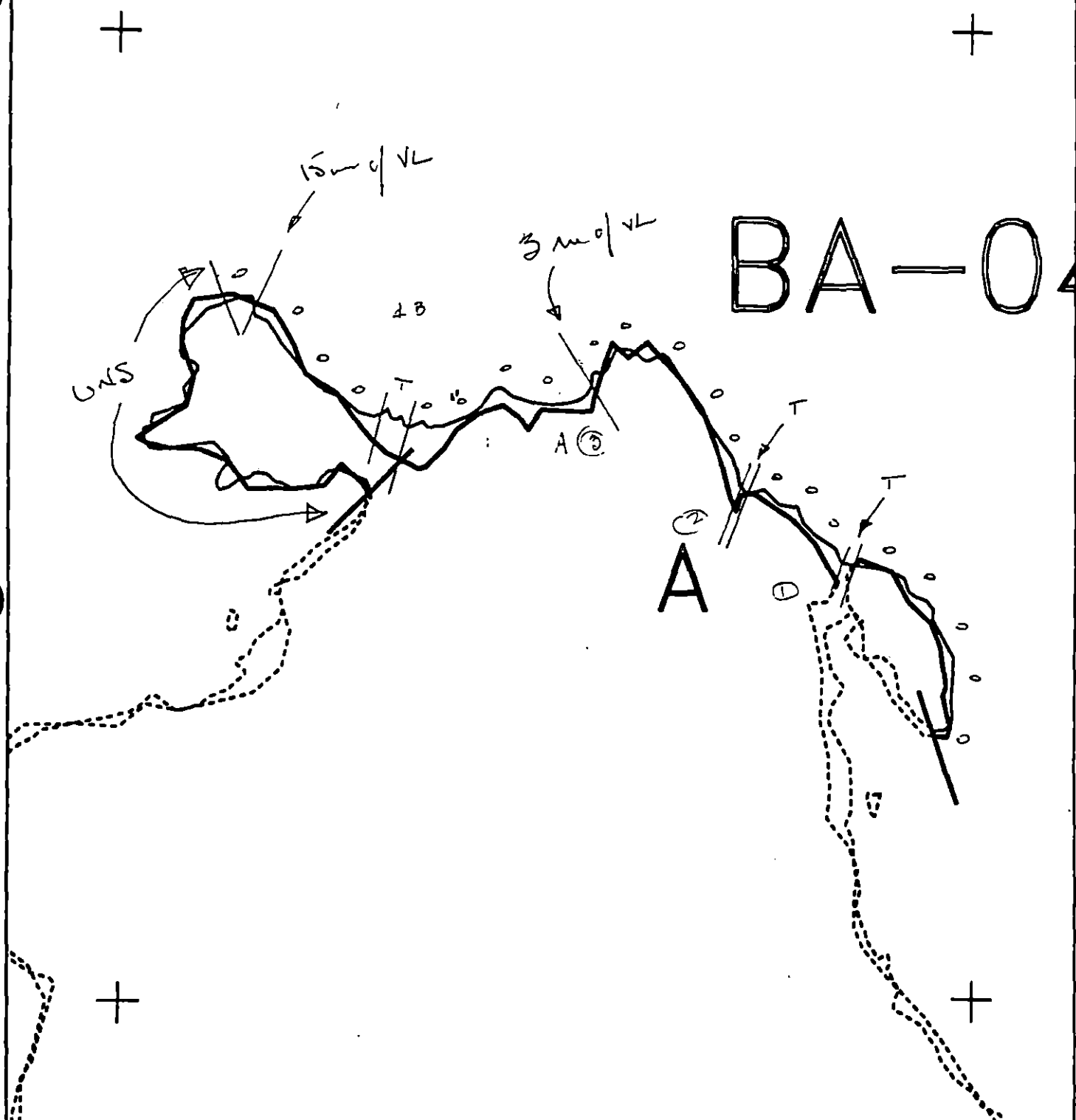
BA 004-A

M. Fawcett

5/26/91

# Site 2





BA-04

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

BA004 A  
 ADEC Subsegment Length: 2304m  
 METERS  
 0 200 400  
 AK State Plane Zone 4  
 ph004a



Subdivision Field Map  
 Map Key: PWSBA004A  
 Name: GM  
 Date: 5.26.91  
 Data Entered:

Reviews: 5/28/91 ML

REGION: PRINCE WILLIAM SOUND

SEGMENT: ST/ BA-04

SUBDIVISIONS: A (1 OF 1)

SHORELINE EVALUATION

SEGMENT ST/ BA-04 SUBDIVISION A (1 OF 1) DATE 3/31/90

SEGMENT ENVIRONMENTAL SENSITIVITIES AND TIME CONSTRAINTS:

Possible active Bald Eagle nest (5T) - 3/1 to 6/1; Purse seine  
hook off (1K) - 7/20 to 9/30.

SUBDIVISION ECOLOGICAL CONSTRAINTS: No specific subdivision con-  
straints although should treatment be required, restrict substrate  
disturbance to a minimum.

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 228m: No Oil 2076m  
Subsurface Oil Observed: Yes \_\_\_\_\_ No X Maximum Depth \_\_\_\_\_

RECOMMENDATIONS:

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

COMMENTS: No treatment recommended on BA-4 (A) due to only very  
light, sporadic oiling being observed. Please review Field  
Shoreline Comment Sheet.

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

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

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

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

FIELD SHORELINE COMMENT SHEET

SEGMENT ST / BA 4 SUBDIVISION: A - ENTIRE SEG. DATE 3/31/90

**USCG**

NAME

GARY OTT

SIGNATURE

[Signature]

☒ NO TREATMENT RECOMMENDED  
COMMENTS

☐ TREATMENT SUGGESTED

**ADEC**

NAME

Michael J. Ebel

SIGNATURE

[Signature]

☒ NO TREATMENT RECOMMENDED  
COMMENTS

☐ TREATMENT SUGGESTED

BA-4-A

**LAND MANAGER**

U.S.D.A. Forest Service

NAME

Don J. Breitinger

SIGNATURE

[Signature]

☒ NO TREATMENT RECOMMENDED  
COMMENTS

☐ TREATMENT SUGGESTED

BA4-Sab-A.

6 of 10

## SHORELINE OILING SUMMARY

REVISION NO. 62/22/90

OG Randy McBride USCGC NOAA Gary Ott SEGMENT ST/ BA-4  
 BIO Lewis Shannon LAND REP Don Breckinger SUBDIVISION A (LOFI)  
 EXXON Leonard Herkist ADEC Mike Ebel TIME 14:00 to 14:52  
 TEAM NO.: 12 TIDE LEVEL: +5.4 to +6.3 DATE 3/31/90  
 EST. SUBDIVISION LENGTH: 2263 m ☐ Sun ☒ Clouds ☐ Fog ☒ Rain ☐ Snow  
 UPLANDS DESCRIPTION: ☐ Grass ☒ Forest ☒ Rock  
 SURVEYED FROM: ☒ Foot ☒ Boat ☐ Helo WORKING DIRECTION: east to west  
 SURFACE SEDIMENTS: R 10 % B 35 % C 40 % P 15 % G % S % M % V %  
 SLOPE: Long 50 % Hang 50 % Vert % WAVE EXPOSURE: ☒ Low ☐ Med ☐ High  
 OIL CATEGORY LENGTH: W m M m N m VL 250 m NO 2013 m

## SURFACE OIL

| CHARACTER        | DISTRIBUTION |   |   |   | OIL / FILM COLOR |   |   |   |   |   |   |   | IMPACTED ZONES |   |   |   |
|------------------|--------------|---|---|---|------------------|---|---|---|---|---|---|---|----------------|---|---|---|
|                  | C            | S | P | B | 1                | 2 | 3 | 4 | 5 | 6 | 7 | 8 | SU             | U | M | L |
| ASPHALT PAVEMENT |              |   |   |   |                  |   |   |   |   |   |   |   |                |   |   |   |
| POOLED           |              |   |   | X |                  |   |   | X |   |   |   |   |                |   | X |   |
| COVER            |              |   | 6 | X |                  |   |   | 0 | X |   |   |   | X              |   | 0 |   |
| COAT             |              |   |   | X |                  |   |   | X |   |   |   |   | X              |   |   |   |
| STAIN            |              |   |   |   |                  |   |   |   |   |   |   |   |                |   |   |   |
| MOUSSE           |              |   |   |   |                  |   |   |   |   |   |   |   |                |   |   |   |
| PATTIES          |              |   |   |   |                  |   |   |   |   |   |   |   |                |   |   |   |
| TARBALLS         |              |   |   |   |                  |   |   |   |   |   |   |   |                |   |   |   |
| FILM             |              |   |   |   |                  |   |   |   |   |   |   |   |                |   |   |   |
| NO OIL           |              |   |   |   |                  |   |   |   |   |   |   |   | X              |   | X | X |

PAVEMENT: H F S sq. m by cm

PATTIES / TARBALLS BAGS

NEAR SHORE SHEEN? (NO) BR RW SL TL

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

DEBRIS COLLECTED  
☐ YES ☒ NO

TYPE

#BAGS

Photographs:

Roll No. ST-12-1Frames 33-35

## 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 | 1                | 2 | 3 | 4 | 5 | 6 | 7 | 8 | SU       | U | M | L |       |                      |
| 1       | 40             |                          |    |    |    | X  | -                      |       |    |                  |   |   |   |   |   |   |   | X        |   |   |   |       |                      |
|         |                |                          |    |    |    |    | -                      |       |    |                  |   |   |   |   |   |   |   |          |   |   |   |       |                      |
|         |                |                          |    |    |    |    | -                      |       |    |                  |   |   |   |   |   |   |   |          |   |   |   |       |                      |
|         |                |                          |    |    |    |    | -                      |       |    |                  |   |   |   |   |   |   |   |          |   |   |   |       |                      |
|         |                |                          |    |    |    |    | -                      |       |    |                  |   |   |   |   |   |   |   |          |   |   |   |       |                      |
|         |                |                          |    |    |    |    | -                      |       |    |                  |   |   |   |   |   |   |   |          |   |   |   |       |                      |
|         |                |                          |    |    |    |    | -                      |       |    |                  |   |   |   |   |   |   |   |          |   |   |   |       |                      |

## COMMENTS

(only 26 m wide)  
 Small pocket beach, dominated by cobble and boulder boulders with rock cliff on either side of pocket beach. Very light oiling along detrital organic wrackline and oil mark at the high water line on adjacent rock cliffs. Due to the very small amount of oiling, a sketch map was redundant. Saw wrackline w/ dead deer along high water line.

# SHORELINE ECOLOGICAL SUMMARY

REVISION: 09/20/90

Segment ST / BA-4 Subdivision A Date (mo / day / yr) 3/31/90

Time (24 hr) 1345-1500 Biologist SHARMAN (Dum 12)

(A) Substrate type and % of segment: SUBDIV.  
(1) Bedrock 15 (2) Boulder 35 (3) Cobble 35 (4) Pebble 15 (5) Sand      (6) Silt     

(B) Overall % cover of biota (% of segment): Dense      Moderate X Low       
SUBDIV.

(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-12-1

Frames 32-35

## BARNACLES

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

NOT PRESENT

## 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: Could not observe LTZ due to tide. Wolverine in brush above ITZ with deer (unwired) which it apparently dragged up from ITZ. Cause of death unknown - could have been starvation - dead < 2 day. Eagle nest (apparently inactive) with one adult flying nearby. Deer tracks in 2 locations. Mink prints, other scat in one location. One cormorant, one pair Barnes goldeneye. Herring gull at head on lagoon S.W. end of segment.

Ecological Considerations: Environmental Priority 1 according to Priorities and Window table. Work window is pre-7/10 due to pursue seine hook-off constraint (1-2) 7/20-9/30. Overall treatment priority = 1.

Sensitivity codes: 1K.

Buried under 30cm gravel in UTZ and MTZ. Intertidal community appear normal and healthy.

BA-0

BA-4-A

BA-4-A

BA-1-F

3810

↓ PWS 1122

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

BA-1

ADEC Segment Length: 13318m



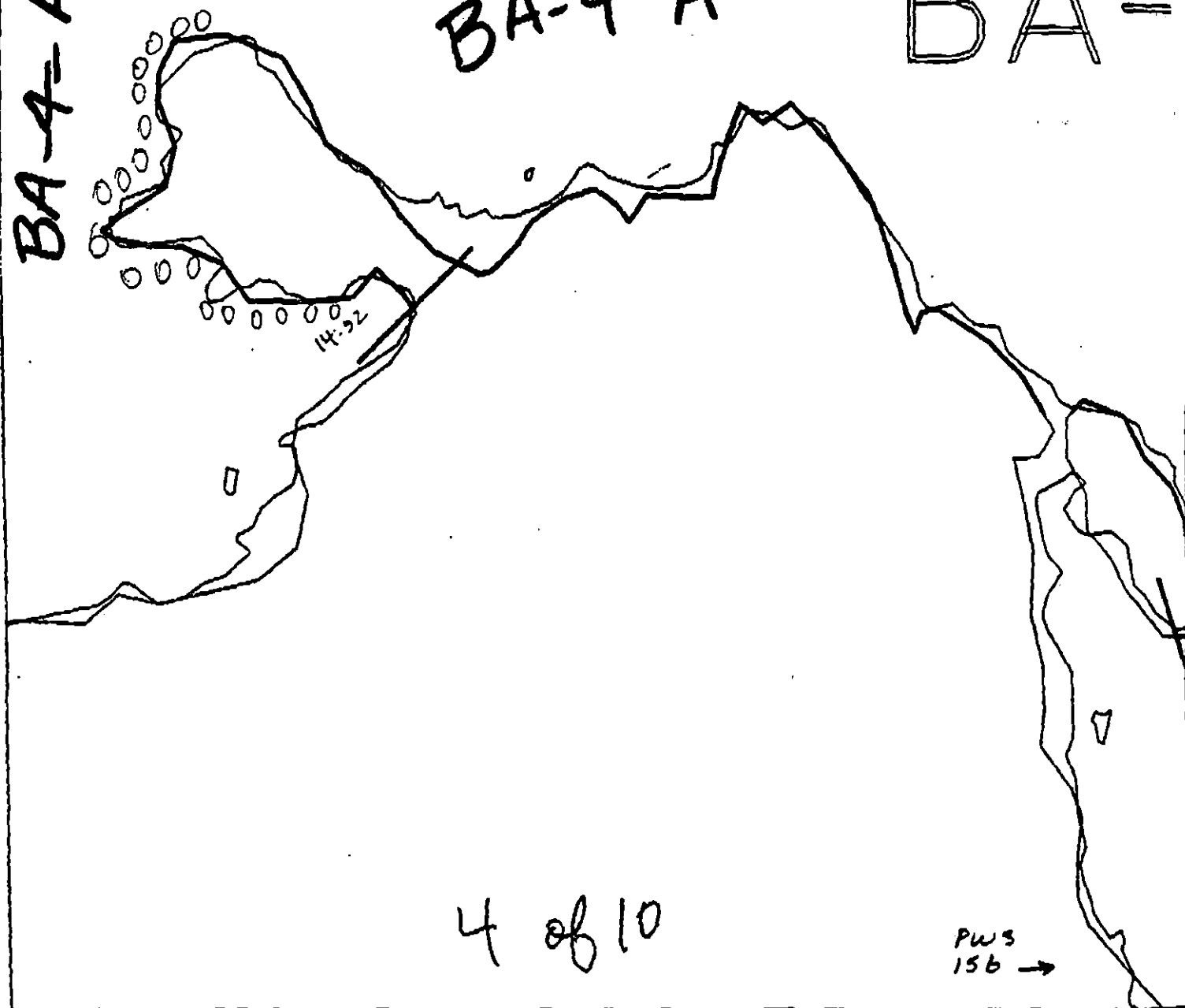
Map Key: PWS-1100  
 Name: McBride  
 Date: 3-31-90  
 Data Entered:

Note:  
continued!

BA-4-A

BA-4-A

BA-



4 of 10

PWS  
15b →

XXXX Wide

//// Medium

--- Narrow

TTTT Very Light

0000 No Oil

BA-4

ADEC Segment Length: 2284m



Map Key: PWS-15a

Name: Randy McBride

Date: 3/31/90

Date Entered:

## 1991 MAYSAP EVALUATION

SEGMENT: BA 004 SUB: A REGION: PWS SURVEY DATE: 5/26/91

**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: Timothy A. Smith Date: 6/04/91

**RECOMMENDATIONS:**

**INITIAL****TAG**

FOSC )

TREATMENT REQUIRED (Y or N)

## N

N



Manual Pickup (Check as Req.)

## Spot Washing

Bio-Customblen Only

Bio-Inipol/Customblen

Other

Other

**COMMENTS:**

**INITIAL:**

**TAG:**

**FOSC:**

TAG APPROVAL DATE: JUNE 4 1990

FOSC APPROVAL DATE: 6/8/91

**ADEC**

**FOSC**

**EXXON**

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

USCG

NOAA

**ECOLOGICAL CONSTRAINTS  
1991 FIELD ACTIVITIES**

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

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

TEAM NO. 1 SEGMENT BA-4 SUBDIVISION A DATE 5/26/91

ADEC  
NAME JEFF GINALIAS SIGNATURE [Signature]

☒ NTR NO RECOVERABLE OIL. ASPHALT PATTIES AT SITE 1 REMOVED BY MAYRAP SQUAD (HALF DOZEN, LARGEST 20 CM X 20 CM) SURFACE ONLY, SPREAD AT UITE, LAYER OF VOLCANIC ASH JUST BELOW PEBBLE COVER. SIMILAR, BUT SMALLER SCALE AT SITE 2. AT AREA B (SITE 4) MOUSSE CREVICE IN BEDROCK RECOVERED. ONLY OTHER OIL WAS COAT/SLAW ALONG BEDROCK WALLS. BEACH COVES HIGH ENERGY W/ VOLCANIC LAYER BELOW, THUS NOT A GOOD TRAP FOR SUBSURFACE OIL.

EXXON  
NAME LARRY D. OLSON SIGNATURE [Signature]

☒ NTR No treatable conditions were located.

MANAGER  
NAME MARSHA HALL OF DNR SIGNATURE [Signature]

☒ NTR Asphalt pattys and patchy MOUSSE WERE RECOVERED. Camp site located at area B near logs just east of rock out crop. Majority of segment looked fresh and unaffected by the spill.

USCG/NOAA  
NAME SCHWARTZ C. HILDS SIGNATURE [Signature]

☒ NTR RECOVERABLE OIL WAS REMOVED, NO FURTHER INTRUSION WARRANTED

MODERATE TO HIGH ENERGY BEACH W/ BED ROCK OUTCROPPING BOUNDARIES. BED ROCK TENDS TO BE STEEPLY DIPPING SLATED THAT WEATHER TO PRODUCE THOUGH SLABES THAT TEND TO TRAP & HOLD OIL. MS/I & CU, CT FOUND IN AREA SUCH AS THIS IN "B". REMAINING OIL LIMITED TO SPORADIC CT & CU & ASPHALT PATTIES WHICH WERE PU BY TEAM.

## MAYSAP SHORELINE OILING SUMMARY

PAGE 1 OF 2

TEAM NO. 1

OG G. MACDONALD

BIO M. FAWCETT

SEGMENT BA-4

ADEC J. GINALIAS

LANDMANAGER M. HALL for DNR

SUBDIVISION A

EXXON L. OLSON

USCG/NOAA SCHULTZ/CHILDS

DATE 5/26/91

TIME 16:30 to 19:00

TIDE LEVEL +5 1/2 ft. to +2.9 ft.

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

TOTAL LENGTH SHORELINE SURVEYED: 1,684 m

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

EST. OIL CATEGORY LENGTH: W — m M — m N — m VL 120 m NO 1556 m US 620 m

| L<br>O<br>C | SURFACE OIL CHARACTER |    |    |     |    |    |    |    |    |    | SURFACE<br>SEDIMENT<br>TYPE | SHORE<br>SLOPE<br>VHML | AREA       |             | ZONE |    |    |    | NOTES    |
|-------------|-----------------------|----|----|-----|----|----|----|----|----|----|-----------------------------|------------------------|------------|-------------|------|----|----|----|----------|
|             | AP                    | MS | TB | SOF | CV | CT | ST | FL | DB | NO |                             |                        | WIDTH<br>m | LENGTH<br>m | S    | UI | MI | LI |          |
| A           |                       |    |    |     |    | T  |    |    |    |    | R                           | V                      | 0.05       | 3           |      | X  |    |    |          |
| B           |                       |    |    |     | S  | S  |    |    |    |    | R                           | H                      | <2         | 50          | X    |    |    |    |          |
| C           |                       | B  |    |     |    |    |    |    |    |    | R                           | V                      | 0.3        | 1           | X    |    |    |    |          |
| D           |                       |    |    |     |    | T  |    |    |    |    | R                           | V                      | 0.03       | 15          | X    |    |    |    | diplume. |
| E           |                       |    |    |     |    |    |    |    |    |    | C                           | L                      | 10         | 20          | X    | X  | X  |    | post PV. |
| F           |                       |    |    |     |    | S  |    |    |    |    | R                           | H                      | 3          | 10          | X    |    |    |    |          |
| G           |                       | T  |    |     |    |    |    |    |    |    | R                           | L                      | 0.5        | 1           | X    |    |    |    |          |
| H           |                       |    |    |     |    | S  |    |    |    |    | R                           | V                      | 1          | 10          |      | X  |    |    |          |
| I           | T                     |    |    | S   |    |    |    |    |    |    | CPR                         | M                      | 2          | 20          |      | X  |    |    |          |

DISTRIBUTION: C = 91-100%; B = 51-90%; P = 11-50%; S = 1-10%; T = &lt;1%

SLOPE: V = VERTICAL; H = HIGH ANGLE; M = MEDIUM ANGLE; L = LOW ANGLE PHOTO ROLL # MAYSAP-1-32 FRAMES 9-10

| 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       | 20             |                          |     |     |     |    |    | X  | -                | -               |                |                     | X        |    |    |    | C-CPG                        |         |
| 2       | 20             |                          |     |     |     |    |    | X  | -                | -               |                |                     |          | X  |    |    | C-CP                         |         |
| 3       | 20             |                          |     |     |     |    |    | X  | -                | -               |                |                     |          |    |    | X  | C-CP                         |         |
| 4       | 30             |                          |     |     |     |    |    | X  | -                | -               |                |                     | X        |    |    |    | P-PG                         |         |
| 5       | 30             |                          |     |     |     |    |    | X  | -                | -               |                |                     |          | X  |    |    | PC-PCV                       | organic |
| 6       | 25             |                          |     |     |     |    |    | X  | -                | 4               | N              |                     | X        |    |    |    | PC-PC                        |         |
| 7       | 15             |                          |     |     |     |    |    | X  | -                | 7               | N              |                     |          | X  |    |    | CP-GPM                       |         |
| 8       | 40             |                          |     |     |     |    |    | X  | -                | -               |                |                     |          |    | X  |    | P-PG                         |         |
| 9       | 35             |                          |     |     |     |    |    | X  | -                | -               |                |                     |          | X  |    |    | P-PGS                        |         |

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

OG COMMENTS: Exposed rocky shore, w/ steeply dipping shaly rocks and well sorted CPG low angle beach.

Surface oil only, as asphalt patties (P.V.), a patch of SOL and rare sightings of sporadic CT.

Revised: MG 5/28/91  
reviewed 5/28/91



BA 004 (cont) 5/26/91 Fawcett

1820 - SIG/P main beach, BC at

sides, big outcrops, washed reefs,

shells in MIZ covered w/ Fucus -

CV/CT/AP? in UTZ reef area N/ (MIZ of tiny creek)

Sparse patchy young Fucus,

Sparse barn - all sheet in cracks -

these rocks get sandblasted in

storms

- more CT/CV/SOR in shale reefs in

center of beach on back side - UTZ

- SUZ no biota (dense Fucus is a scrub

on front - also dense barn, mussel,

mod (imp, litt) - picked up

- HI has patches of large carosus

& mussels in protected sites behind

R, also beds of very very dense

young mussels along & overgrowing

Fucus & Rhodomena on BK shelf + ? fr

small Metridium in tiny cave pool

- back side of massive rock (14 ft 12 ft)

has ~ 80% cover of 1 yr old Balanus

carosus, then a nearly 100% spat

cover on rock & also barnacles

- 2 sea lions

Finish survey 1900

Graham MacDonald notes re: biota at site 1;  
MK monitoring eagle from offshore

BA-4 Site #1

thin Fucus @ rocky edge of beach,  
volcanic ash substrate, ocean.

Fucus in beach face - 1 bedfast.

- peppering of tiny whetters &  
littorines; good barnacle spot.

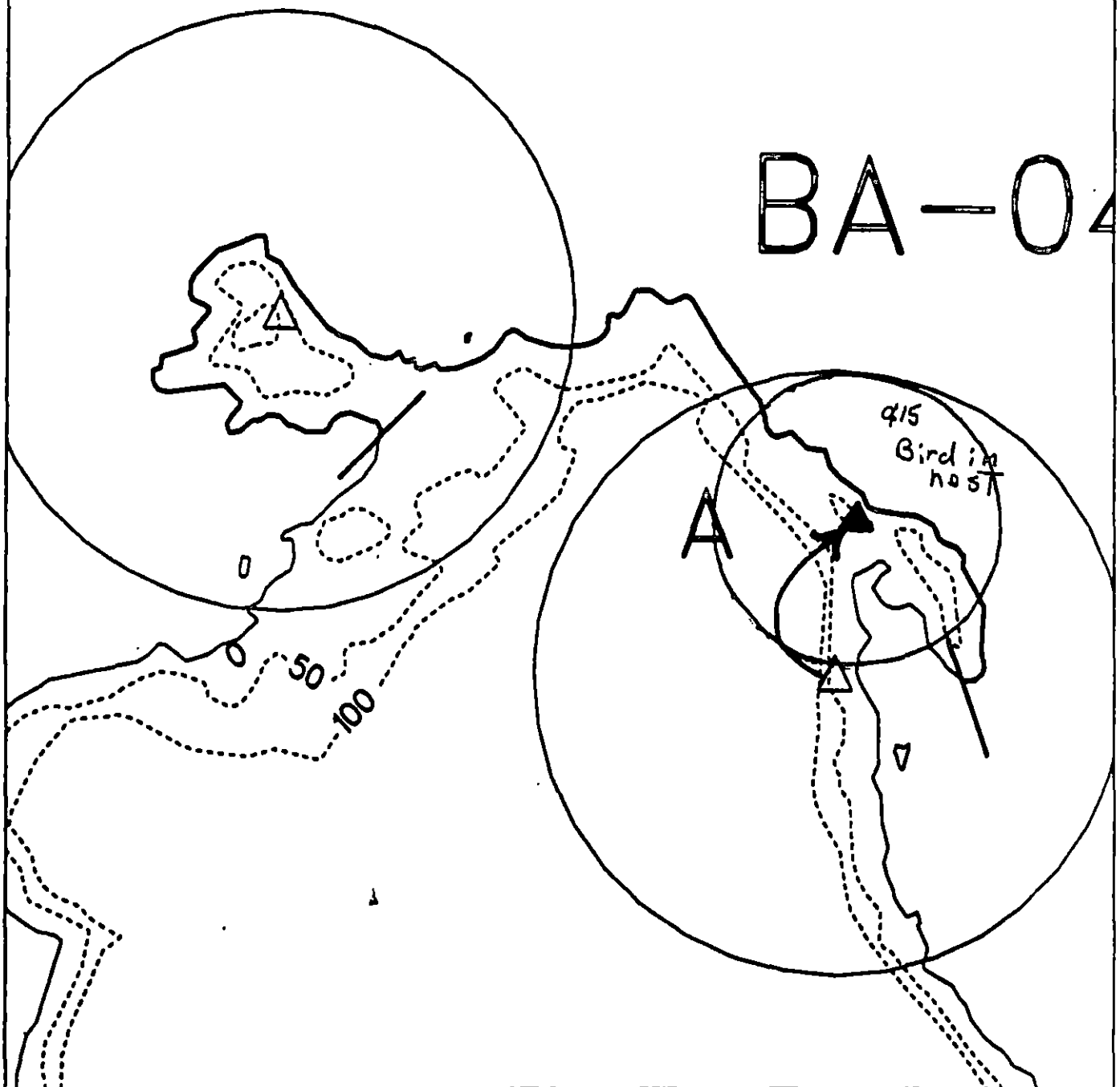
Mussels bed: domes of polyps;  
cluster on rock or.

Bed of striped snails as delicate  
kelp? found @ WL; sparse  
red-brown algae @ LITZ; Oiled  
relatively devoid of LK compared  
to adjacent rock wall; of the  
small size of the barnacles;  
snails indicate a recent re-  
colonization / recruitment, this  
beach face is well populated.

Limpets on barnacles; 1 cm dia  
Mussels ~ 2 1/2 cm; broken  
Fucus strips @ LITZ on exposed  
faces,

depart @ 17.20

BA-04



BA004

Segment Reference Map

Map Key: PUSBA004



METERS



AR State Plane Zone 4  
125000



EAGLE NEST

U.S. FISH AND WILDLIFE SERVICE (FWS)  
SHORELINE ACTIVITY/BALD EAGLE IMPACT EVALUATION

Date 5/26/91 Shoreline Segment/Subdivision BA004 A

Shoreline activity MAYSAP SURVEY

Time - Begin

Time - End

FWS Observer Mike Fawcett auth by Dist. 1640-1725

Surveyors/workers 4 in shore party

Nest in view/monitored: ☒ Y N Adult in nest: ☒ Y N Unk.

Adverse eagle response: Y ☒ N Adult left nest: Y N Unk.

Time

Type of human activity/eagle response

1640

eagle's head sticking up, watching,

no other response

Survey/work activities completed:

☒ Y N

Personnel withdrawn due to eagle conflict:

Y ☒ N

Recommendations:

FWS Observer

M. B. Fawcett

Date

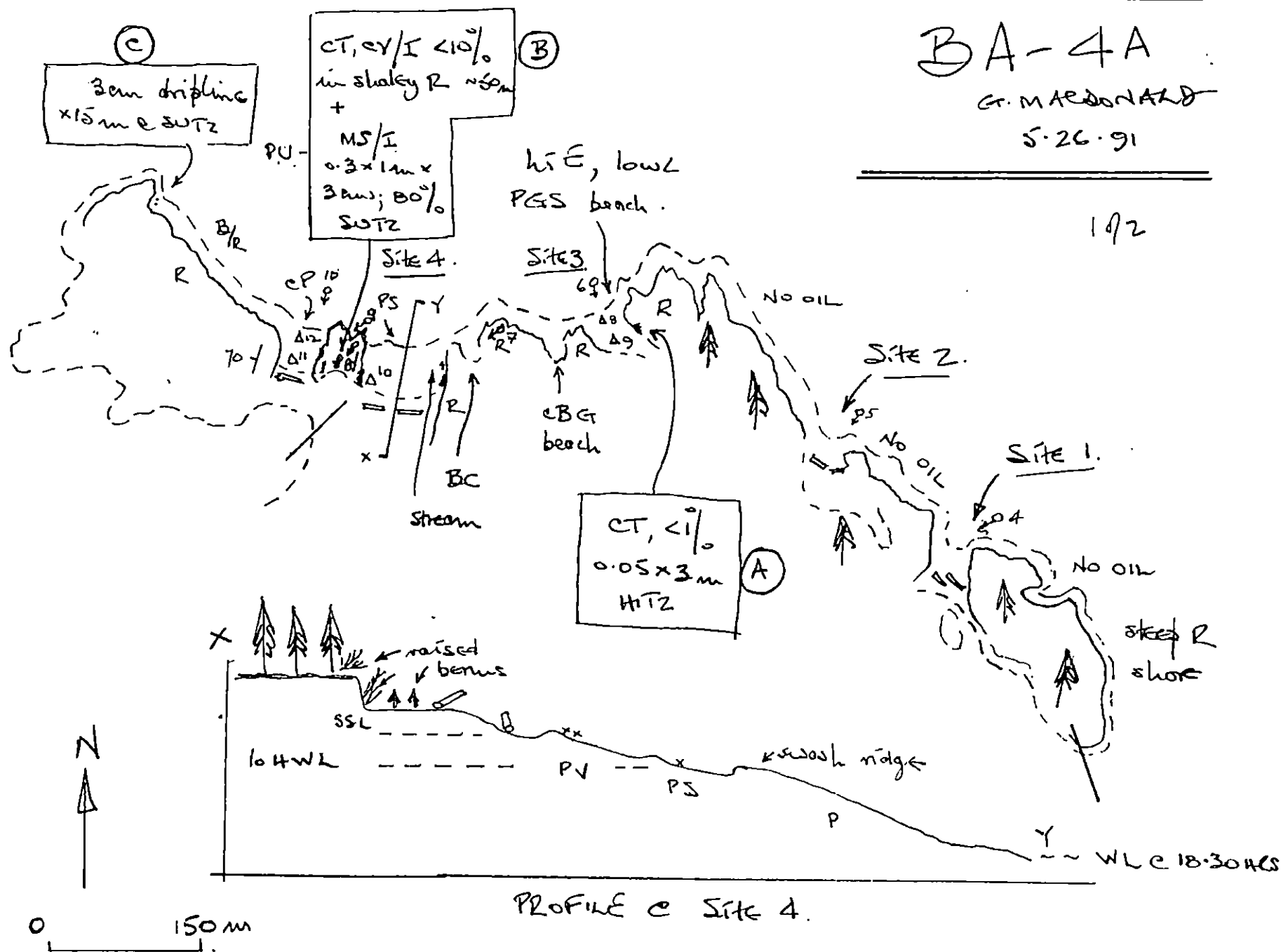
5/26/91

BA-4A

G. M. MASONARD

5-26-91

1/2

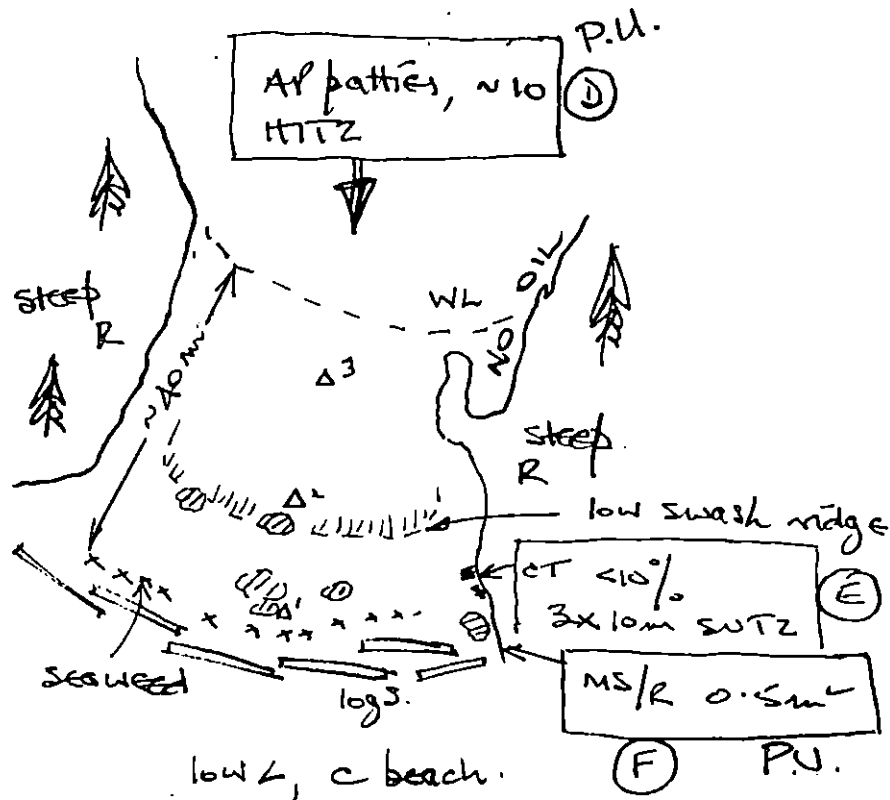


Revised: MC 5/28/91

Revised: 5/28/91

Site 1.

beach - 40 x 25 m long



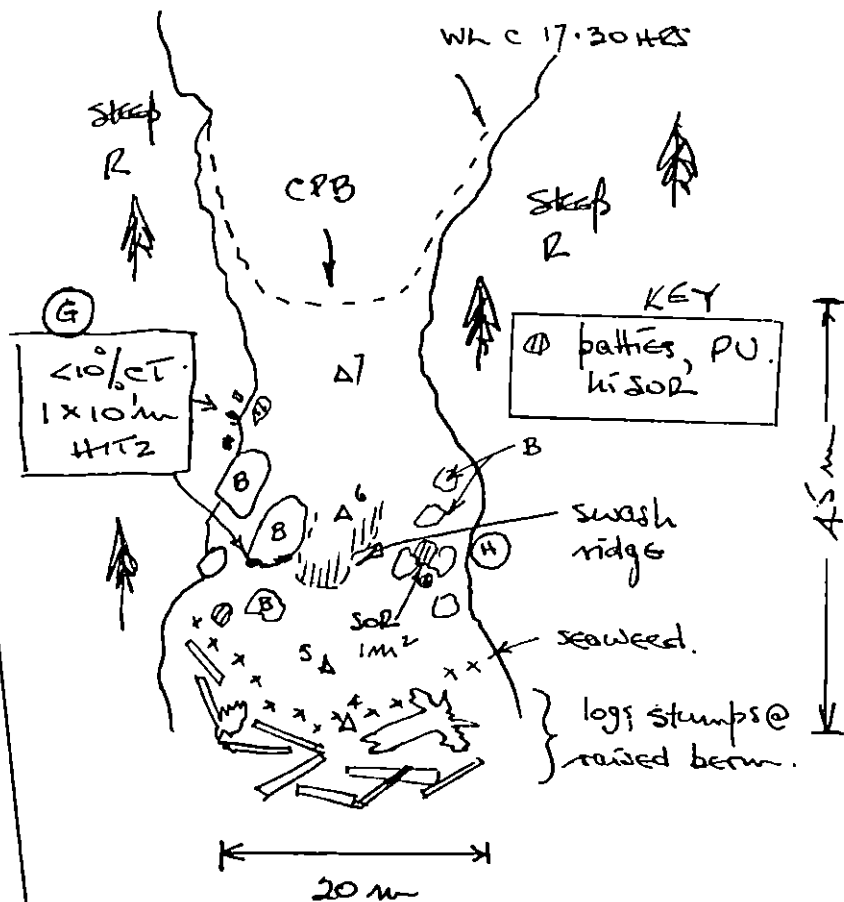
no subsurface oil; beach is sealed  
 @ 3cms by tight purple grey (volcanic?)  
 ash-like layer.

BA-4A

GM. 5.26.91

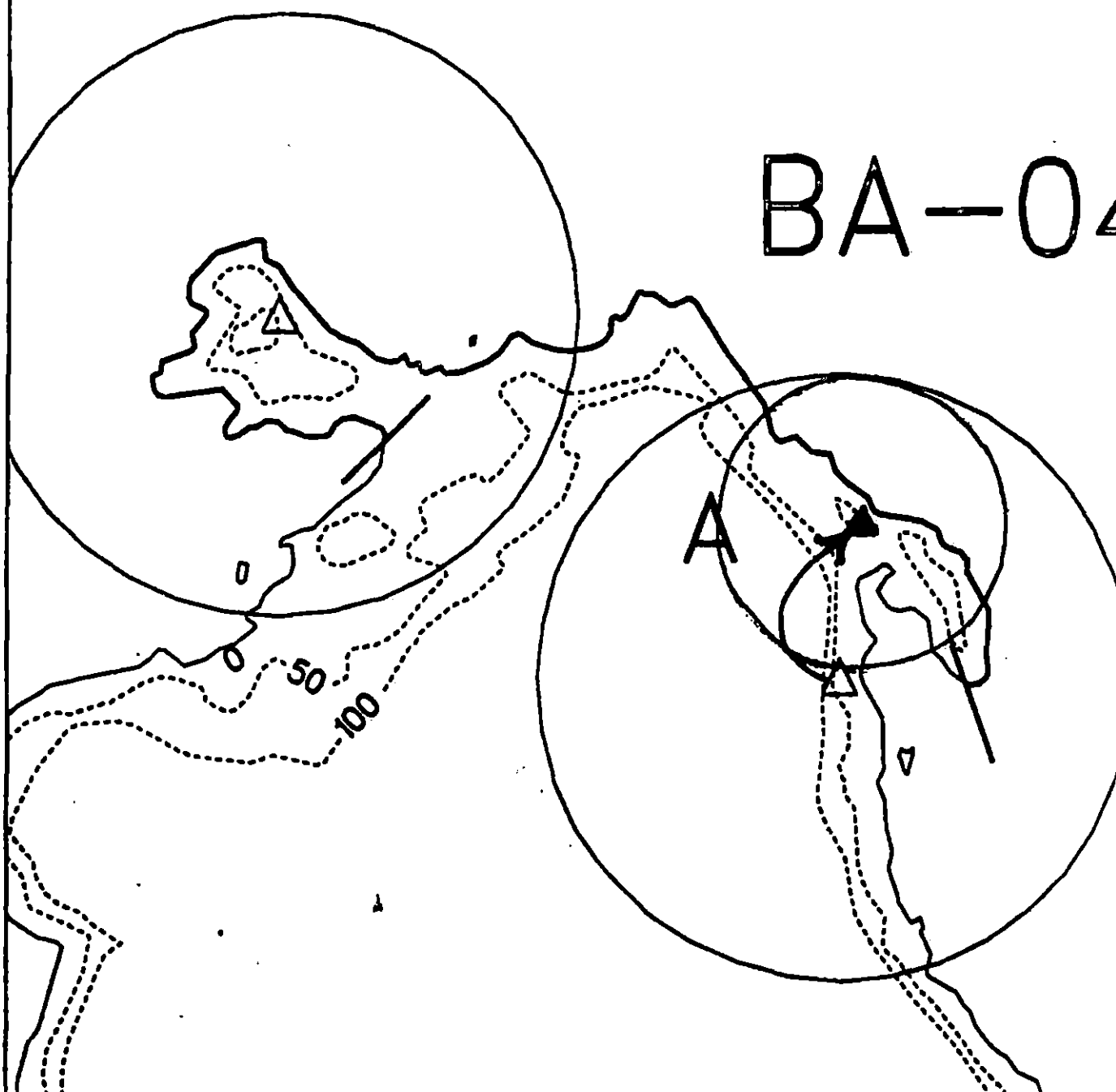
20/2

Site 2.



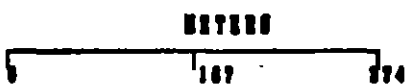
Reviewed: MC 5/28/91  
 reviewed 5.28.91

BA-04



BA004

Segment Reference Map  
Map Key: PWSBA004



AK State Planning Zone 4  
PWSBA004



EAGLE NEST

MAYSAP BIOLOGICAL SUMMARY FORM

TEAM # 1 DATE 26 May 91  
 SEGMENT # BA004 TIDAL HEIGHT (Range) +2.6 to +5.5 ft MLLW  
 SUBDIVISION A BIOLOGIST Michael Fawcett  
 STATE 1/2 ft seas WIND SPEED/DIRECTION NW 10 knots  
 PHOTOGRAPHS: ROLL # FRAME #

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

Subdivision has mostly vertical rock walls, with some jumbled massive boulders and pocket beaches and coves with B/C/P/G/S. Steep bedrock & large boulders have dense cover of young barnacles and spat, young *Fucus*, young mussels in MTZ-UTZ, and a variety of algae and some old barnacles, mussels, and whelks in LTZ. LTZ also has abundant starfish (*Pisaster*, *Evasterias*, *Luidia*, *Dermasterias*, *Pycnopodia*, *Leptasterias*, anemones (*Anthopleura*, *Tealia*, *Epiactis*, *Metridium*), plus chitons, limpets, hydroids, bryozoans, sponges, tidepool animals, etc. There has been heavy recruitment of mussels, barnacles, and littorinids throughout the area, including on high energy c/p beaches where they are unlikely to survive the winter storms. See sketch map (2 sheets) for descriptions of biota near remaining oil.

WILDLIFE OBSERVATIONS

TO BE COMPLETED IN ALL SUBDIVISIONS

| BIRDS            | # OF SPECIES    | TOTAL BIRDS | FISH OBSERVED<br>SPECIES PRESENT |
|------------------|-----------------|-------------|----------------------------------|
| Eagles           | 1               | 1 on nest   | tidepool sculpin                 |
| Seabirds         | 1 (murrelet sp) | 1           |                                  |
| Waterfowl        |                 |             |                                  |
| Gulls/Kittiwakes | 1 (Gw gull)     | 3           |                                  |
| Shorebirds       |                 |             |                                  |
| Corvids          | 1 (raven)       | 1           |                                  |
| Other Birds      |                 |             |                                  |

| MARINE MAMMALS      | # OBSERVED  | LAND MAMMALS<br>SPECIES | # OBSERVED |
|---------------------|-------------|-------------------------|------------|
| Sea Otters          |             |                         |            |
| Pinnipeds (specify) | 3 Sea lions |                         |            |
| Whales (specify)    |             |                         |            |
|                     |             |                         |            |

Shoreline subdivision map showing important biological features attached.

0. 11.2 7.1.1.1

BA 004A 5/26/91 Fawcett

1640 - started survey near eagle  
nest - MK watched eagle from  
shelf - shore party of 4 (GM,

JOG, MH, Craig (Voco) -  
Wind NW 10 knots, sea  $\leq 1/2$  ft

1725 - 2nd small cove

MTZ C/B/P - very dense young  
mussels, all same - 10 mm ( $\leq 1$  yr old)

dense spat, dense young, 1 imp,  
mod. litt. & eggs -

- dense barn on larger C/B &  
BR walls up to 5 ft

dense ~~Fucus~~ Fucus on BR & B  
near mouth up to +8-9 ft,  
moderate up here in BR - sparse  
in C/P

LTZ BR walls, ledges, channels  
w/ clumps of 10-15 Pinnacles

Tadpole-like channels w/ rich  
pool biota & Lith, sponge,  
sculp, anem, hydroids, tunicates,  
hermies, U'ia

LTZ algae include Halosaccion,  
Siphonoides, Rhod, Pediculus,  
Laminaria - dense young  
Caricose w/ spat

CT UTZ-SUTZ, upper edge of  
sponge barn,

- SOR 1 P.V. to same level as CT -

Tern. Isopods, amph., worms.

- LTZ - besides Pinnacles, also Euesterias,

Luidia, Pycnogonids, T. Laminaria

- Tealia, Antho, Epiactis, Leptasterias,  
Katherine, Bryozoa

~~Styrene~~ Styrene, red, Dermasterias

br 1800 - Vertical walls with  
dense, rich biota

- 1 sea lion

GW gulls III

raven I

1805 - walls S/C/P/C/P beach-cove

w/ big outcrop in middle sloping 14 mTZ

G/S at base - has dense young

Fucus, spat, mussels, mod. S. C. &

& Halosaccion small (1 yr) canyons

up to ~ 7 ft (mod) - dense, old

Persona +8-10 ft

- long fetch to N - mod. high energy

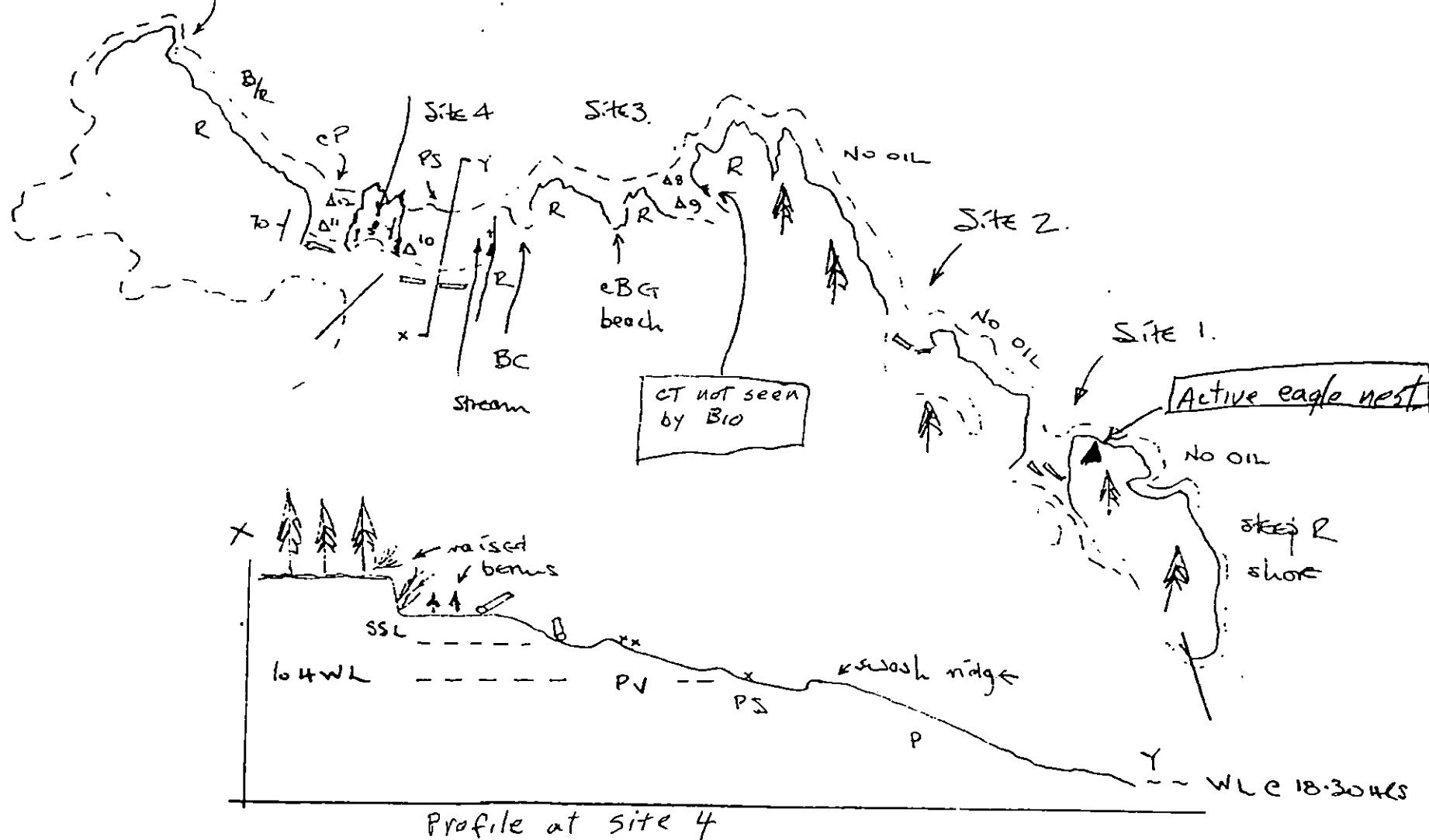
- western half of beach is B/C/P

MTZ has dense Litt (mostly young),  
dense young mussels

BIO Sketch Map 1 of 2  
BA 004 A  
M. Fawcett  
5/26/01

CT/CV/MS in SUTZ on lee  
side of outcrop -- no biota,  
loose P/C below; Exposed  
side of outcrop has dense biota  
UTZ-LTZ

Drip line in lichen  
zone above barnacles,  
Fucus, etc



Profile at Site 4

# BIO Sketch Map p. 2

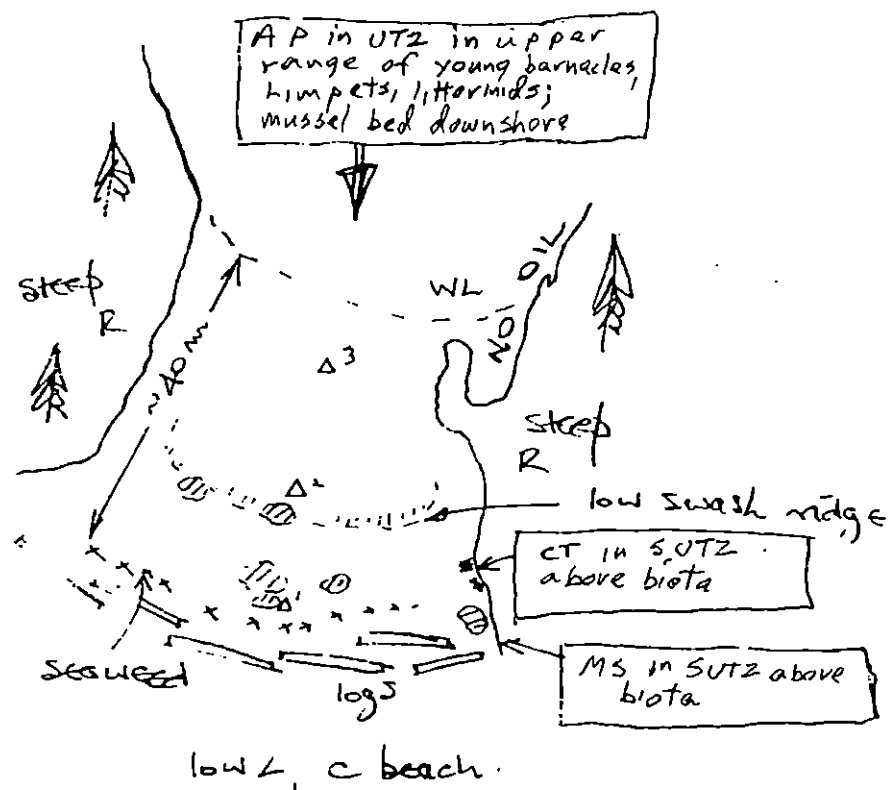
BA 004-A

M. Fawcett

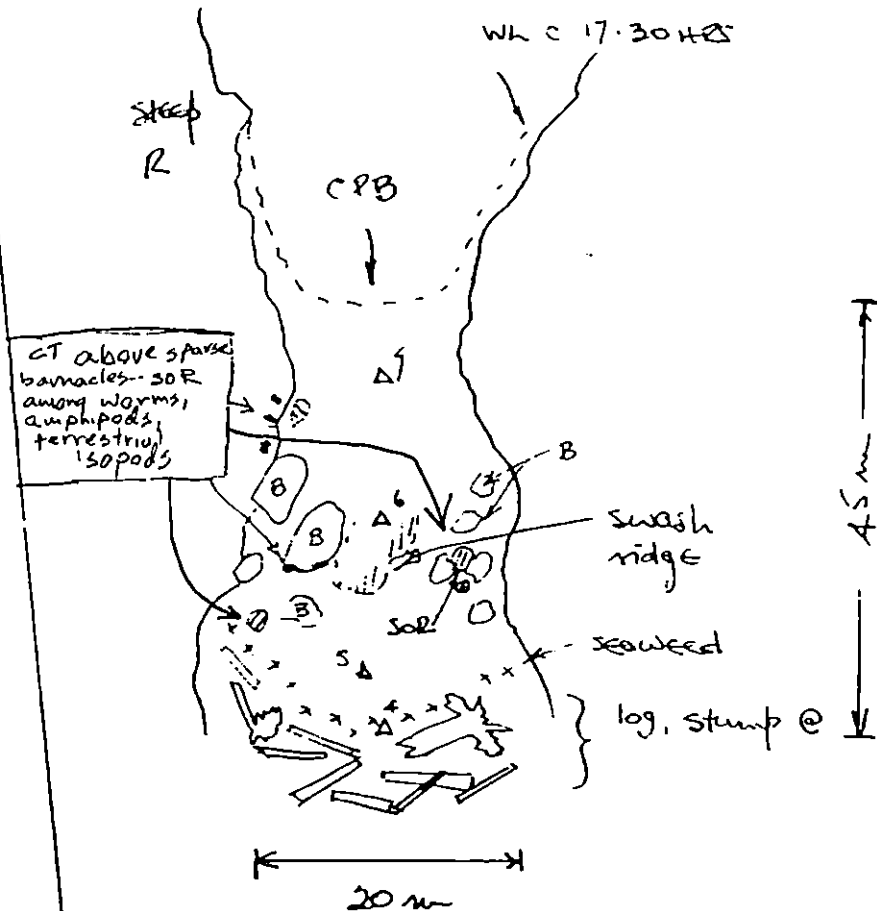
5/26/91

## Site 1.

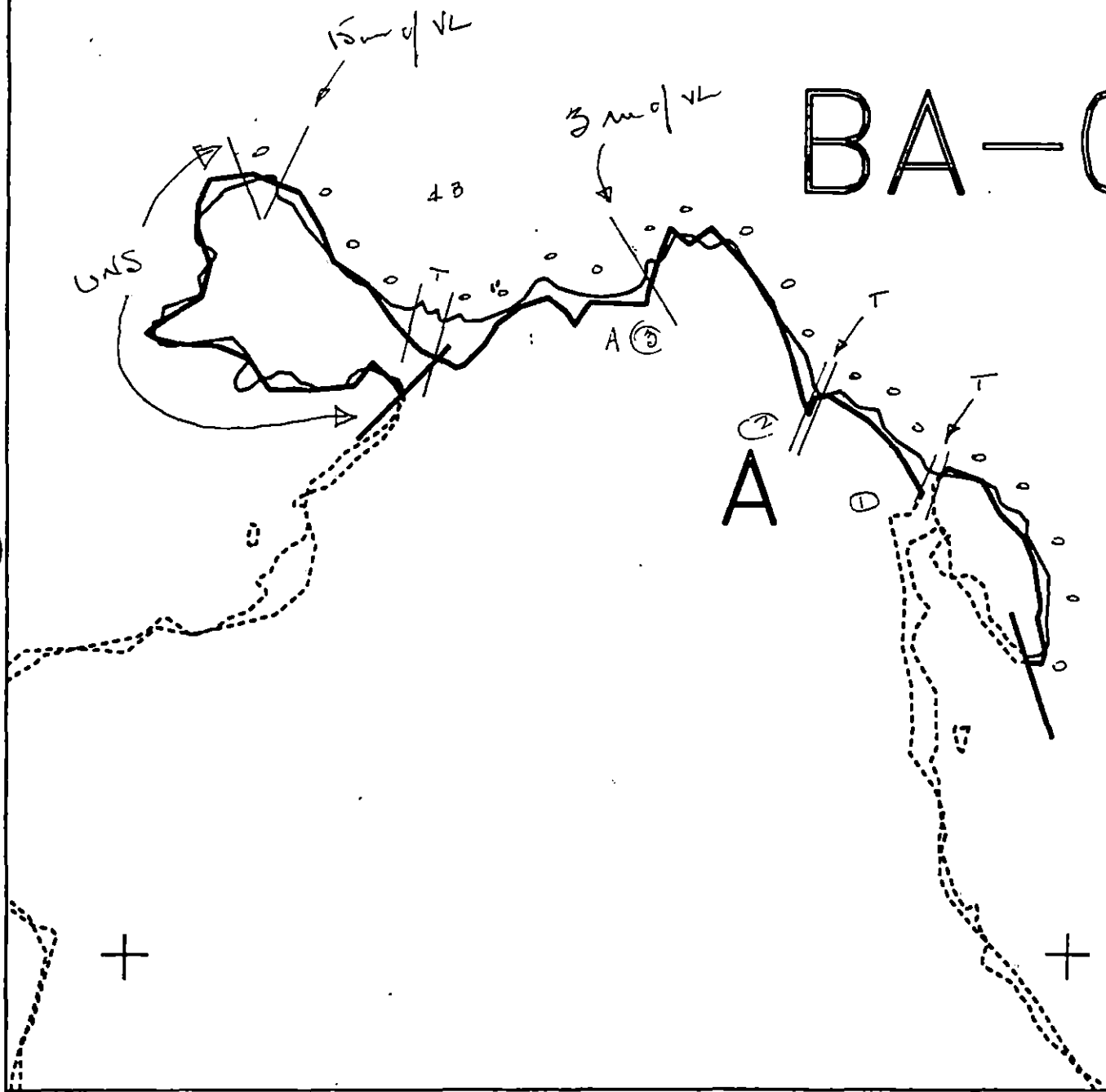
beach - 40 x 25 m long



## Site 2



# BA-04



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

**BA004 A**  
 ADEC Subsegment Length: 2304m  
 METERS  
 0 200 400  
 AK State Plane Zone 4  
 pbs004a

Subdivision Field Map  
 Map Key: PWSBA004A  
 Name: GM  
 Date: 5-26-91  
 Date Entered:

Reviewed: 5/28/91 MC  
 revised 5-28-91 5

**REGION: PRINCE WILLIAM SOUND**

**SEGMENT: ST/BA-06**

**SUBDIVISIONS: A (1 OF 3)**

# SHORELINE EVALUATION

SEGMENT ST/ BA-06 SUBDIVISION A (1 OF 3) DATE 4/23/90

## SEGMENT ENVIRONMENTAL SENSITIVITIES AND TIME CONSTRAINTS:

14 Catalogued ADF&G anadromous streams

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

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

5T-7 All bald eagle nests (3/1 to 6/1)-Active eagle nests (3/1 to 9/1)

See attached Ecological Constraint sheet for specific constraints and contacts.

## SUBDIVISION ECOLOGICAL CONSTRAINTS:

Avoid any unnecessary disturbance or damage to unoiled biota and substrate. 5T (5) streams: 226-40-16269, 226-40-16301, 226-40-16297, 226-40-16303, 226-40-16272, 226-40-16289, 226-40-275, 226-40-16305, 226-40-16279, 226-40-16285, 226-40-16281, 226-40-319, 226-40-315, 226-40-317.

## 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 224 m: No Oil 11453 m  
Subsurface Oil Observed: Yes \_\_\_\_\_ No X Maximum Depth \_\_\_\_\_

## RECOMMENDATIONS:

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

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

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

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

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

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

# PWS, SEWARD AND HOMER ECOLOGICAL CONSTRAINTS

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

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

No disturbance of stream bed or banks unless authorized by ADF&G. No beach flushing into stream drainage. No bioremediation or other chemical application within 100m of stream without authorization from ADF&G. No use of methods which might affect nearshore oil or toxicity levels, such as hot water wash or Inipol application, prior to at least July 1 unless authorized by ADF&G. Treatment which is not intrusive and which will not affect nearshore oil or toxicity levels, such as manual removal, can probably proceed without adherence to time constraints. In any case, contact ADF&G Habitat Division prior to treatment for consultation and/or permit application.

AGENCY CONTACT PERSON: ADF&G John Morison 267-2324

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

No use of methods which might affect nearshore oil or toxicity levels, such as hot water wash or Inipol application, prior to July 31 unless authorized by ADF&G. Treatment which will not affect nearshore oil or toxicity levels, such as manual or mechanical removal, can probably proceed without adherence to time constraints. Contact ADF&G prior to treatment for confirmation and advice.

AGENCY CONTACT PERSON: ADF&G Larry Peltz 424-3214

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

1E Main Bay Hatchery release (4/20 to 6/15)

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

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

1H Remote release site

No use of methods which might affect nearshore oil or toxicity levels, such as hot water wash or Inipol application, prior to at least July 1 unless authorized by ADF&G and/or PWS Aquaculture Association. Treatment which will not affect nearshore oil or toxicity levels, such as manual or mechanical removal, can probably proceed without adherence to time constraints. Contact ADF&G or PWS Aquaculture Association for confirmation and authorization.

AGENCY CONTACT PERSON: 1E ADF&G Larry Peltz 424-3214

1D 1F 1G PWS Aquaculture Association John McMillan or Bruce Suzumoto 424-7511

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

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

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

1L Set net sites (8/11 to 7/25)

Contact ADF&G for specific dates, locations and constraints. Restrict boat and air traffic to essential minimum. When set net sites are present (1L) restrict beach operations to essential minimum as authorized by ADF&G. If plans for treatment include methods such as hot water wash or Inipol application which might affect nearshore oil or toxicity levels, contact ADF&G for consultation and authorization.

AGENCY CONTACT PERSON: ADF&G James Brady 424-3212

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

Contact ADF&G for confirmation - dates and locations may vary. Restrict boat traffic to essential minimum. Avoid damage to uncoiled intertidal and subtidal algae and seagrass. If plans for treatment include methods such as hot water wash or Inipol application which might affect nearshore oil or toxicity levels, contact ADF&G for consultation and authorization.

AGENCY CONTACT PERSON: ADF&G Evelyn Biggs 424-3235

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

3O, 3P 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

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

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

Finfish harvesting

Deer harvesting (8/15 to 2/28)

Invertebrate harvesting

Contact ADF&G and appropriate Native Corporation for specific dates, locations, and constraints. Restrict boat and air traffic and beach disturbance to essential minimum. If plans for treatment include methods such as hot water wash or application of Inipol which might affect intertidal or nearshore oil or toxicity levels, contact ADF&G and appropriate Native Corporation for authorization - see Native Corporation Contact List for each Native Corporation's contact person.

AGENCY CONTACT PERSON: ADF&G Jim Fall 267-2359

# FIELD SHORELINE COMMENT SHEET

SEGMENT ST/ BA-06 SUBDIVISION: A one of three DATE 4/24/90

NOAA

NAME Michael Buckman SIGNATURE [Signature]

☒ NO TREATMENT RECOMMENDED  
COMMENTS

☐ TREATMENT SUGGESTED

*Minimal oiling seen. All patties observed were removed by  
SSC team*

ADEC

NAME John Hayes SIGNATURE [Signature]

☒ NO TREATMENT RECOMMENDED  
COMMENTS

☐ TREATMENT SUGGESTED

*Oiling observed consisted of 3 asphalt patties (approx.  
1/2 x 1/2 m) which we manually removed.  
Light to very light discontinuous sporadic stain observed  
on U.I.T.2.*

LAND MANAGER

NAME MARSHA MARTIN / DNR SIGNATURE [Signature]

☒ NO TREATMENT RECOMMENDED  
COMMENTS

☐ TREATMENT SUGGESTED

*RARE sighting of oil/stain splatter*

## SHORELINE OILING SUMMARY

REVISION NO 06/12/90

OG Mike Foyet NOAA Mike Buchman SEGMENT ST/ 13A-06  
 BIO Kathleen Conlin LAND REP Marsha Martin ONR SUBDIVISION A (1 OF 3)  
 EXXON Larry Olson ADEC John Hayes TIME 7:00 to 11:00  
 TEAM NO. 11 TIDE LEVEL -2.1 DATE 4/23/90  
 EST. SUBDIVISION LENGTH: 16.816 m ☐ Sun ☒ Clouds ☐ Fog ☐ Rain ☐ Snow  
 UPLANDS DESCRIPTION: ☐ Grass ☒ Forest ☒ Rock 2m rocky ledge w/ forest  
 SURVEYED FROM: ☒ Foot ☒ Boat ☐ Helo WORKING DIRECTION: N to S  
 SURFACE SEDIMENTS: R 30 % B 20 % C 30 % P 15 % G 5 % S 0 % M 0 % V 0 %  
 SLOPE: Long 30 % Hang 50 % Vert 20 % WAVE EXPOSURE: ☒ Low ☒ Med ☐ High  
 OIL CATEGORY LENGTH: W 0 m M 0 m N 0 m VL 150 m NO 16.666 m

## SURFACE OIL

\* ASPHALT PAVEMENT REMOVED BY SSAT TEAM

| CHARACTER        | DISTRIBUTION |    |    |    | OIL / FILM COLOR |    |    |    | IMPACTED ZONES |   |   |   |
|------------------|--------------|----|----|----|------------------|----|----|----|----------------|---|---|---|
|                  | 10           | 15 | 20 | 25 | 30               | 35 | 40 | 45 | SU             | U | M | L |
| ASPHALT PAVEMENT |              |    |    |    |                  |    |    |    |                |   |   |   |
| POOLED           |              |    |    |    |                  |    |    |    |                |   |   |   |
| COVER            |              |    |    |    |                  |    |    |    |                |   |   |   |
| COAT             |              |    |    |    |                  |    |    |    |                |   |   |   |
| STAIN            |              |    |    | X  |                  | X  |    |    |                |   | X |   |
| MOUSSE           |              |    |    |    |                  |    |    |    |                |   |   |   |
| PATTIES          |              |    |    |    |                  |    |    |    |                |   |   |   |
| TARBALLS         |              |    |    |    |                  |    |    |    |                |   |   |   |
| FILM             |              |    |    |    |                  |    |    |    |                |   |   |   |
| NO OIL           |              |    |    |    |                  |    |    |    | X              |   | X | X |

PAVEMENT H (P) S 4.5 sq. m by 2 cmPATTIES/TARBALLS 1 BAGSNEAR SHORE SHEEN? ☒ NO BR RW SL TL

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

DID YOU COLLECT DEBRIS?

YES ☒ NO ☐TYPE tar patties Pom Po#BAGS 1

Photographs:

Roll No. 0Frames 0

## 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) | F  | SURFACE SUBSURFACE SEDIMENTS |
|---------|----------------|--------------------------|----|----|----|----|---------------------|-------|----|------------------|----|----|----|----|----|----|----|----------|---|---|---|-------|-------------|----|------------------------------|
|         |                | OF                       | OR | OL | OF | NO |                     | VO    | UC | 30               | 35 | 40 | 45 | 50 | 55 | 60 | 65 | SU       | U | M | L |       |             |    |                              |
| 1       | 20             |                          |    |    |    | X  | .                   |       | X  |                  |    |    |    |    |    |    |    | X        |   |   |   |       | N           | -  | P, M, R                      |
| 2       | 30             |                          |    |    |    | X  | .                   |       | X  |                  |    |    |    |    |    |    |    | X        |   |   |   |       | N           | -  | P, S                         |
| 3       | 20             |                          |    |    |    | X  | .                   |       | X  |                  |    |    |    |    |    |    |    | X        |   |   |   |       | N           | -  | P, S, R                      |
| 4       | 25             |                          |    |    |    | X  | .                   |       | X  |                  |    |    |    |    |    |    |    | X        |   |   |   |       | N           | -  | P, S, R                      |
| 5       | 20             |                          |    |    |    | X  | .                   |       | X  |                  |    |    |    |    |    |    |    | X        |   |   |   |       | N           | 10 | P                            |
| 6       | 25             |                          |    |    |    | X  | .                   |       | X  |                  |    |    |    |    |    |    |    | X        |   |   |   |       | N           | -  | P                            |

COMMENTS Only some staining was observed in subdivision A. A few isolated tar patties were observed in the HITZ and were manually removed. A .5m X 1m AP/P asphalt patch was observed and manually removed. This was located on a high angle B/C/R shore zone that also had 2m X 20m STRs in the HITZ. The subdivision consists of high angle B/R shore zone w/ some Pocket Cobble/Pebble Beaches. Low wave exposure occurs in the Protected bays

REVIEWED JW DATE 4-26-90

## SHORELINE OILING SUMMARY (PAGE 2)

REVISION 04/12/88

SEGMENT ST/ BA-06 SUBDIVISION A (1 OF 3)

## SUBSURFACE OIL (CONTINUED)

| PIT NO. | PIT DEPTH (cm) | SUBSURFACE OIL CHARACTER |    |    |    |    | OILED INTERVAL (CM-CE) | BELOW |    | OIL / FILM COLOR |          |          |          |    |    |   | PIT ZONE |   |  |  | A<br>N<br>A | SHEEN (Y/N) | ! | SURFACE - SUBSURFACE SEDIMENTS |         |
|---------|----------------|--------------------------|----|----|----|----|------------------------|-------|----|------------------|----------|----------|----------|----|----|---|----------|---|--|--|-------------|-------------|---|--------------------------------|---------|
|         |                | OP                       | OR | OL | OF | NO |                        | VO    | UC | SP<br>BR         | DC<br>FW | GL<br>BL | DR<br>TL | LR | SU | U | M        | L |  |  |             |             |   |                                |         |
| 7       | 30             |                          |    |    |    | X  | .                      |       | X  |                  |          |          |          |    |    |   |          | X |  |  |             |             | N | 10                             | P, S, M |
| 8       | 30             |                          |    |    |    | X  | .                      |       | X  |                  |          |          |          |    |    |   |          | X |  |  |             |             | N | 25                             | P       |
| 9       | 25             |                          |    |    |    | X  | .                      |       | X  |                  |          |          |          |    |    |   |          | X |  |  |             |             | N | -                              | P       |
| 10      | 30             |                          |    |    |    | X  | .                      |       | X  |                  |          |          |          |    |    |   |          | X |  |  |             |             | N | 10                             | P, C    |
| 11      | 40             |                          |    |    |    | X  | .                      |       | X  |                  |          |          |          |    |    |   |          | X |  |  |             |             | N | 35                             | P       |
| 12      | 30             |                          |    |    |    | X  | .                      |       | X  |                  |          |          |          |    |    |   |          | X |  |  |             |             | N | -                              | P, S, C |
| 13      | 30             |                          |    |    |    | X  | .                      |       | X  |                  |          |          |          |    |    |   |          | X |  |  |             |             | N | -                              | P, G, M |
|         |                |                          |    |    |    |    | .                      |       |    |                  |          |          |          |    |    |   |          |   |  |  |             |             |   |                                |         |
|         |                |                          |    |    |    |    | .                      |       |    |                  |          |          |          |    |    |   |          |   |  |  |             |             |   |                                |         |
|         |                |                          |    |    |    |    | .                      |       |    |                  |          |          |          |    |    |   |          |   |  |  |             |             |   |                                |         |
|         |                |                          |    |    |    |    | .                      |       |    |                  |          |          |          |    |    |   |          |   |  |  |             |             |   |                                |         |
|         |                |                          |    |    |    |    | .                      |       |    |                  |          |          |          |    |    |   |          |   |  |  |             |             |   |                                |         |
|         |                |                          |    |    |    |    | .                      |       |    |                  |          |          |          |    |    |   |          |   |  |  |             |             |   |                                |         |
|         |                |                          |    |    |    |    | .                      |       |    |                  |          |          |          |    |    |   |          |   |  |  |             |             |   |                                |         |
|         |                |                          |    |    |    |    | .                      |       |    |                  |          |          |          |    |    |   |          |   |  |  |             |             |   |                                |         |
|         |                |                          |    |    |    |    | .                      |       |    |                  |          |          |          |    |    |   |          |   |  |  |             |             |   |                                |         |

COMMENTS

REVIEWED

*PCW*

DATE

4-26-90

OG M Foget  
 SEGMENT ST/ BA-06  
 SUBDIVISION A

DATE 4 / 24 90

# CHECKLIST

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

## LEGEND

- 1  $\Delta$   
 P1 - No Subsurface Oil
- 2  $\Delta$   
 P2 - Subsurface Oil
- $\boxed{CT/C}$   
 Continuous Distribution
- $\boxed{CT/B}$   
 Broken Distribution
- $\boxed{CT/P}$   
 Patchy Distribution
- $\boxed{CT/S}$   
 Splashed Distribution
- $\bullet \rightarrow$   
 Oiled Vegetation
- 1  $\bullet \rightarrow$   
 Photo location, direction,  
 and number

## ATCH MAP

■ - Eagles Nest

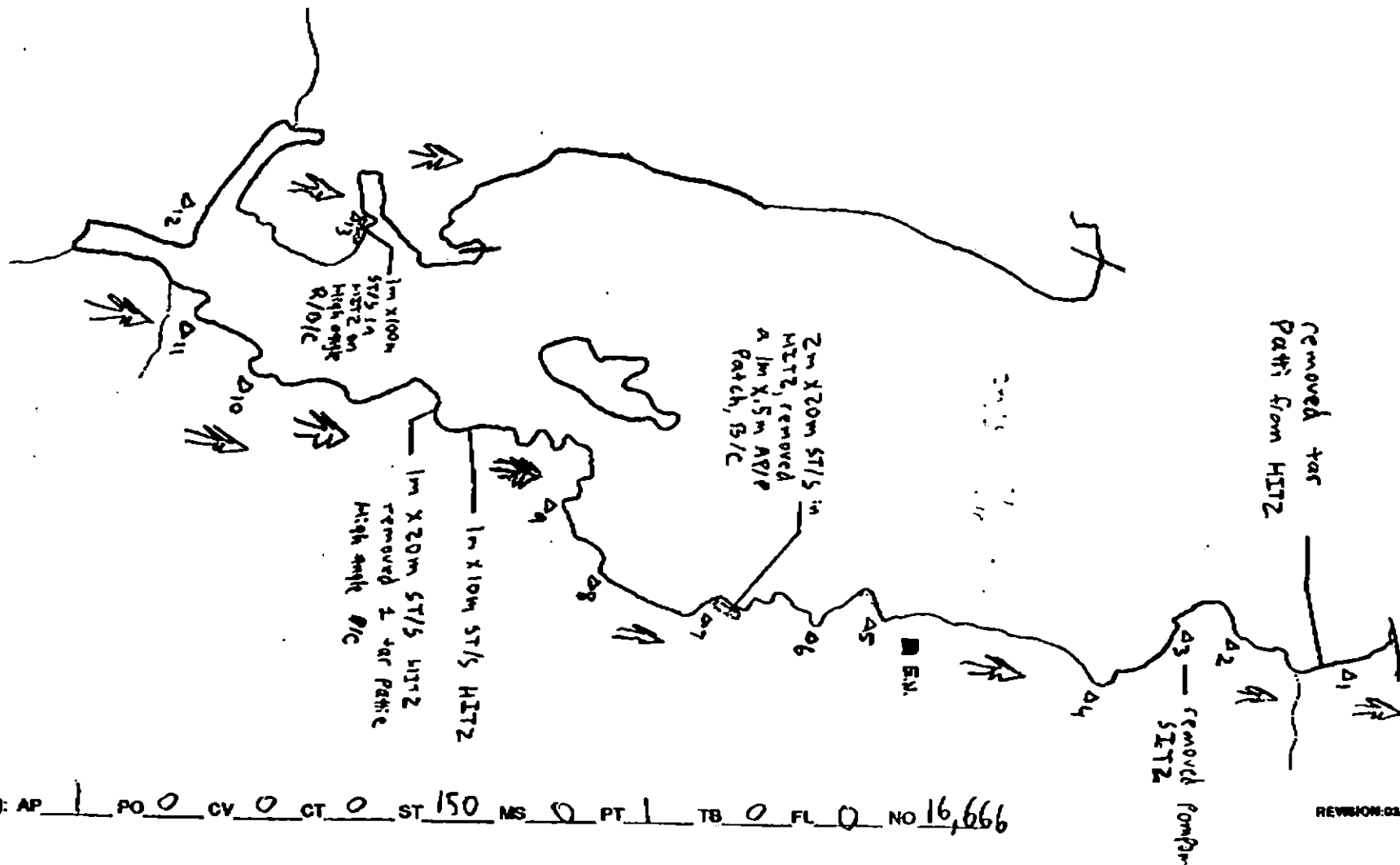
$\nearrow$  - trees

Legend



500m

Scale



Oil Character Length (m): AP 1 PO 0 CV 0 CT 0 ST 150 MS 0 PT 1 TB 0 FL 0 NO 16,666

# SHORELINE ECOLOGICAL SUMMARY

REVISION: 03/22/88

Segment ST/ BA-6 Subdivision A (1 of 3) Date (mo / day / yr) 04/24/90

Time (24 hr) 0700 - 1130 Biologist KATHLEEN CONLAN

(A) Substrate type and % of segments:  
(1) Bedrock 30 (2) Boulder 20 (3) Cobble 30 (4) Pebble 15 (5) Sand 5 (6) Silt 0

(B) Overall % cover of biota (% of segment): Dense 40 Moderate 30 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 (O)

Photographs:  
Roll No.             
Frames           

## BARNACLES

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

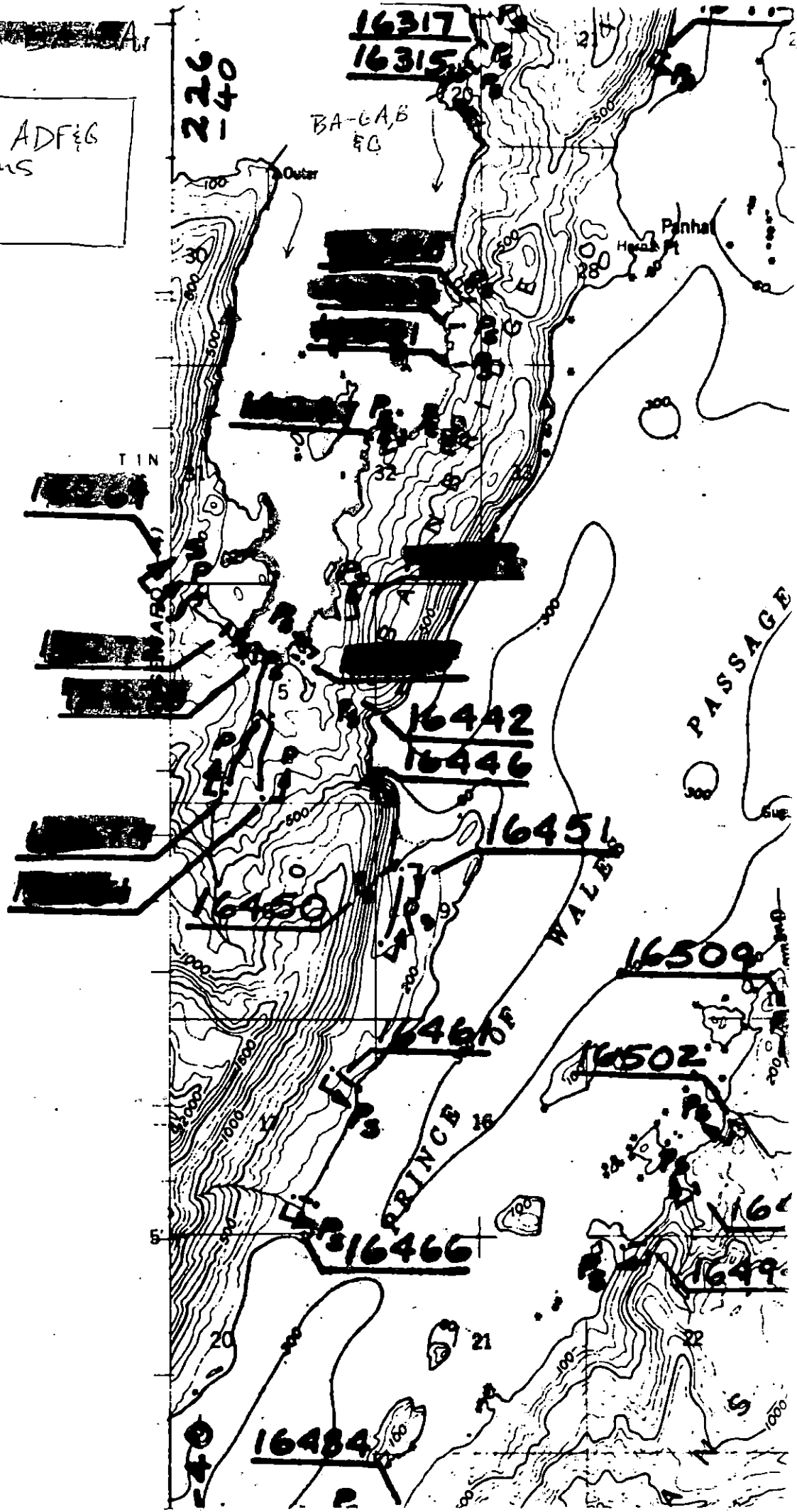
## Wildlife Observations/ General Comments:

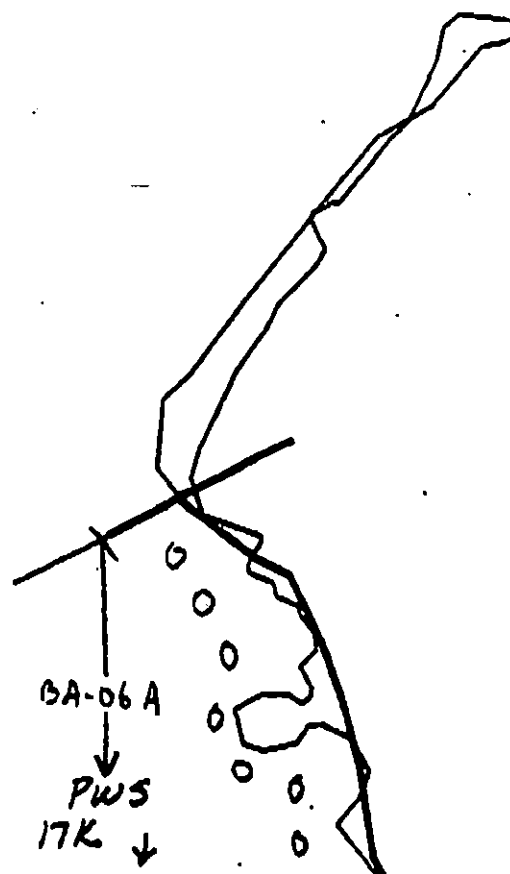
4 BALD EAGLES  
32 GOLDEN EYES  
3 GREYS  
Ecological Considerations:

9 SEALS  
9 SEA OTTERS  
18 CROWS

1 CORMORANT  
2 OYSTER CATCHE  
2 MEREASERS

11 CATALOGUED ADFEG  
SALMON STREAMS  
ST (7)





XXXX Wide

//// Medium

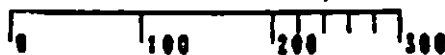
---- Narrow

TTTT Very Light

OOOO No Oil

BA-6A

ADEC Segment Length: 16653m



Map Key: PWS-17a

Name: Mike Foyer

Date: 4/24/90

Data Entered:

BA-6A

PWS 171 →

↓ PWS 17H

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

BA-6A

ADEC Segment Length: 16653m

0 100 200 300  
METERS

Map Key: PWS-17k

Name: Mike Fogar

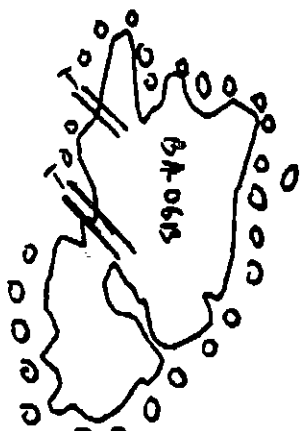
Date: 4/24/90

Data Entered:

A-06

BA-06A

PWS  
17K

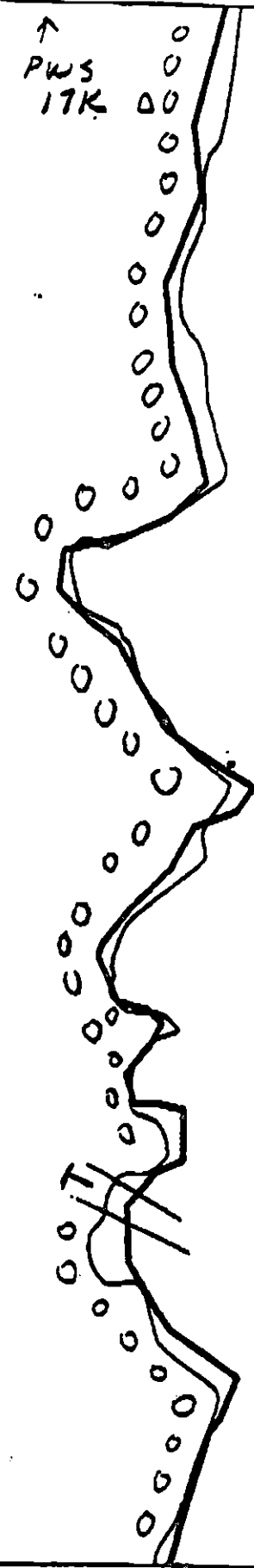


PWS  
17G



BA-06B

PWS  
17E



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

BA-6A

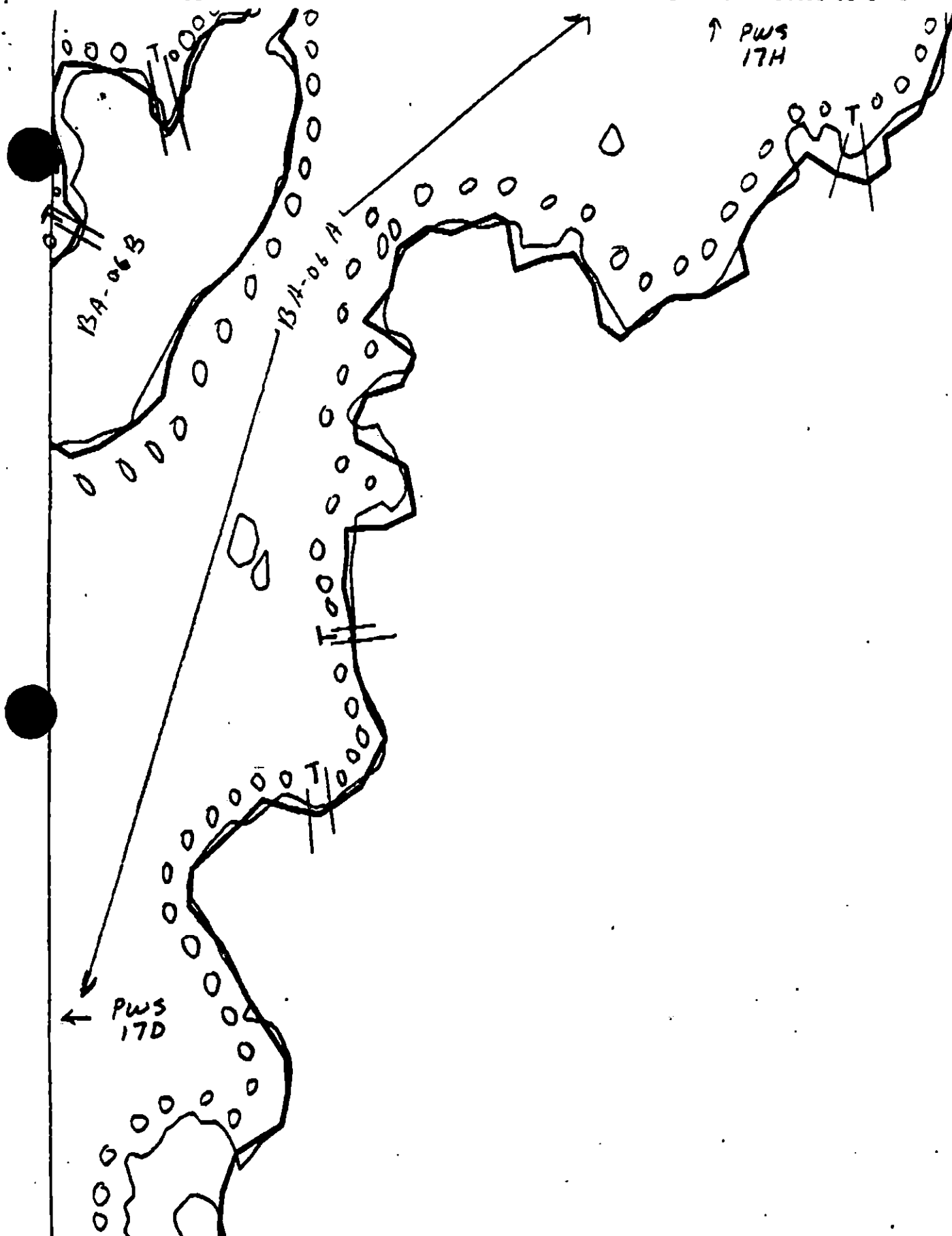
ADEC Segment Length: 16853m



Map Key: PWS-17h

Name: Mike Foye

Date: 4/24/90



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

BA-6,

ADEC Segment Length: 16653m

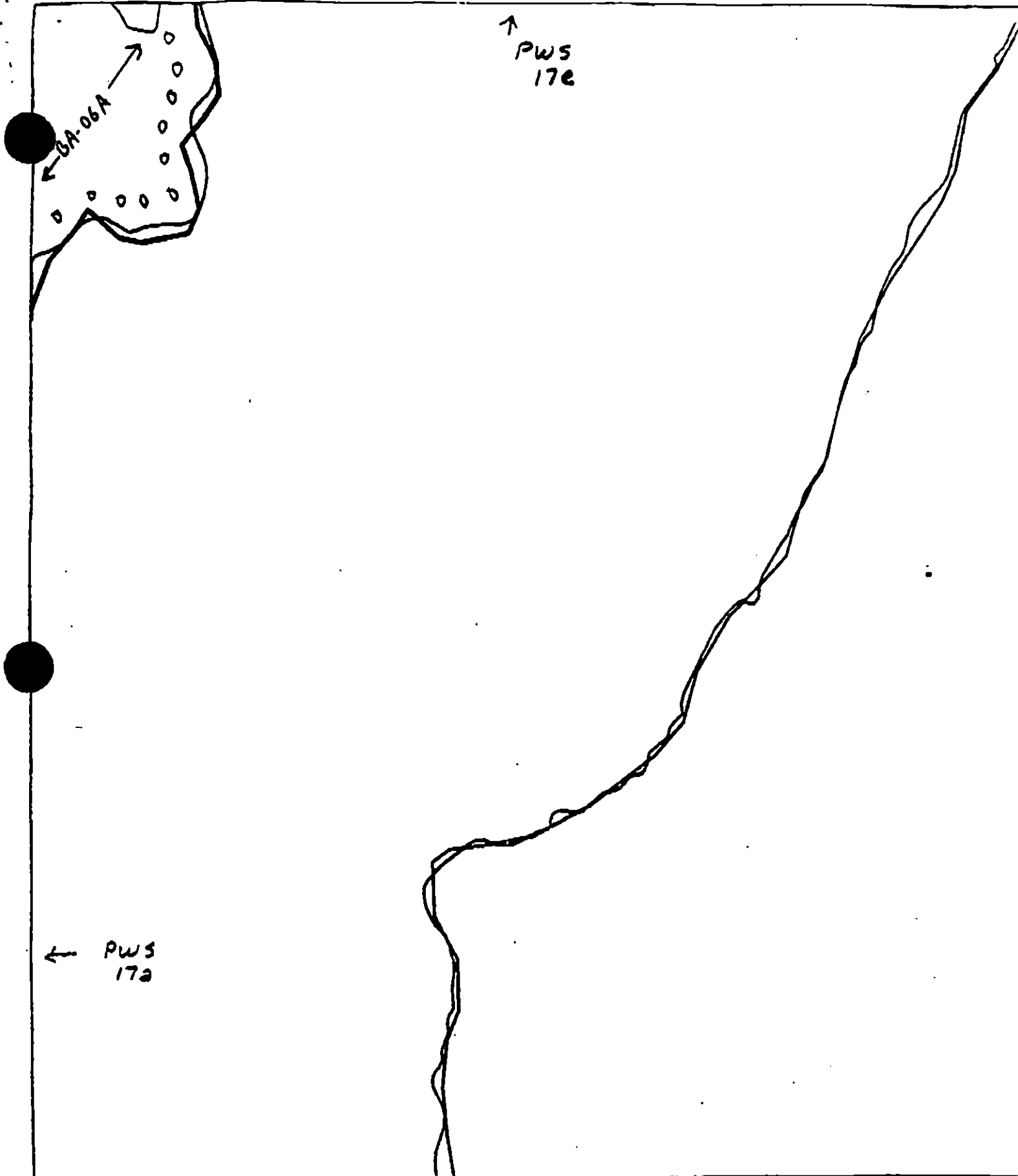


Map Key: PWS-17e

Name: Mike Foye

Date: 4/24/90

Data Entered:



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

BA-64

ADEC Segment Length: 16653m

0 100 200 300

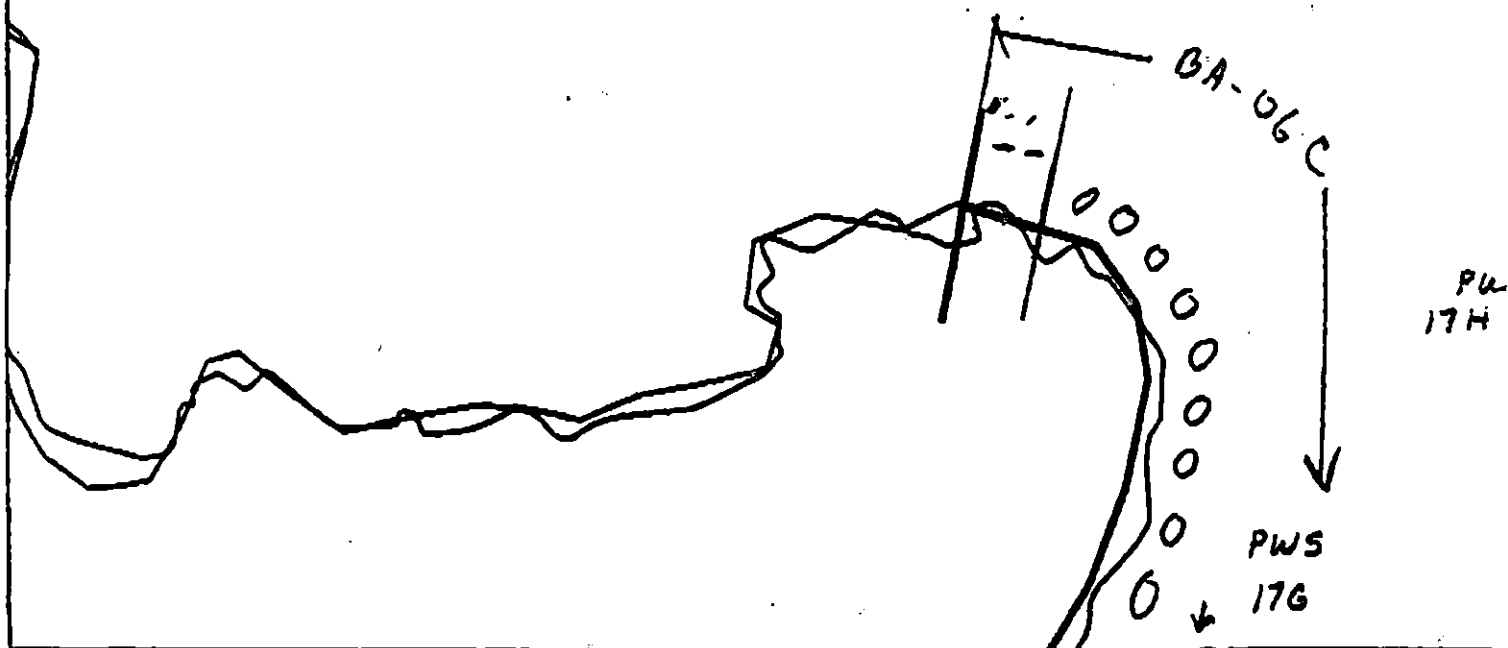


Map Key: PWS-17b

Name: Mike Foye

Date: 4/24/90

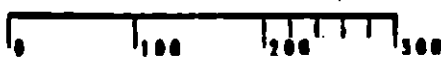
Not Related.



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

BA-6C

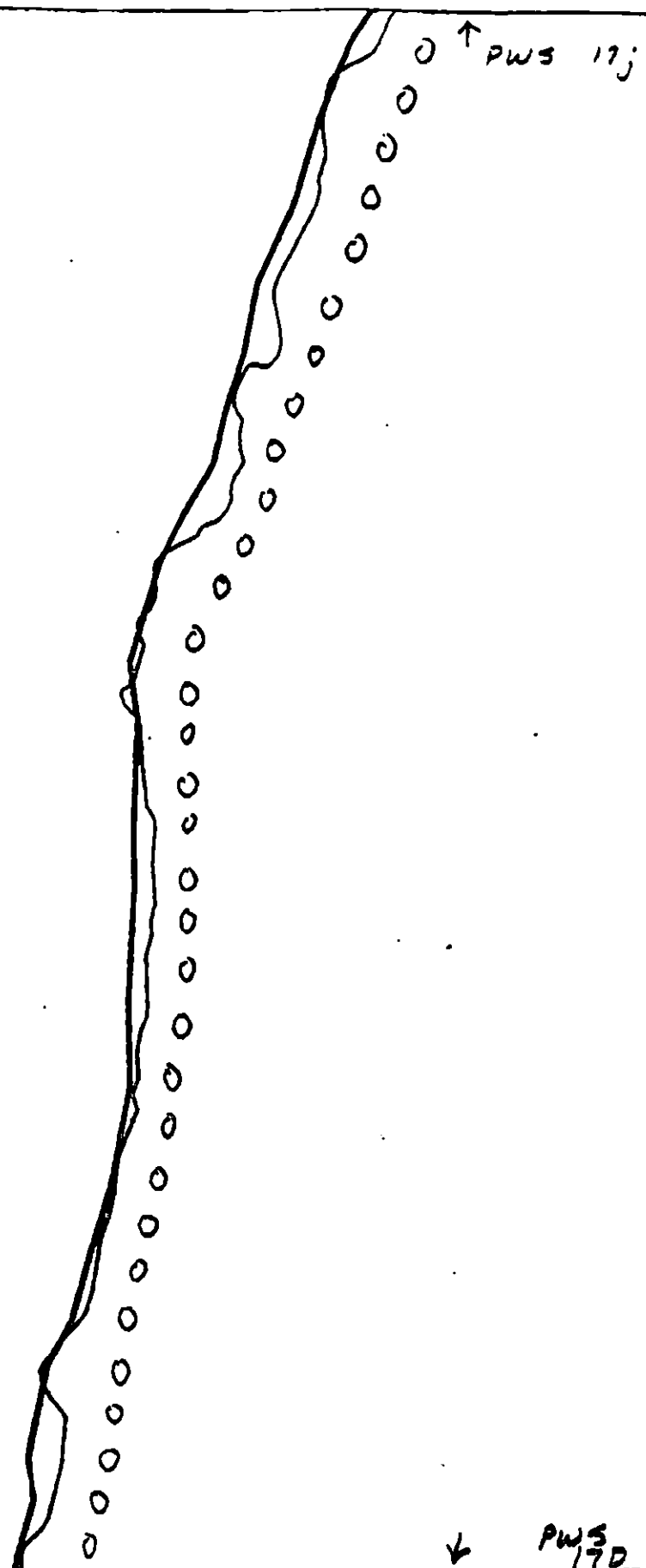
ADEC Segment Length: 16653m



Map Key: PWS-17j

Name: Mike Fogar

Date: 4/24/90



E

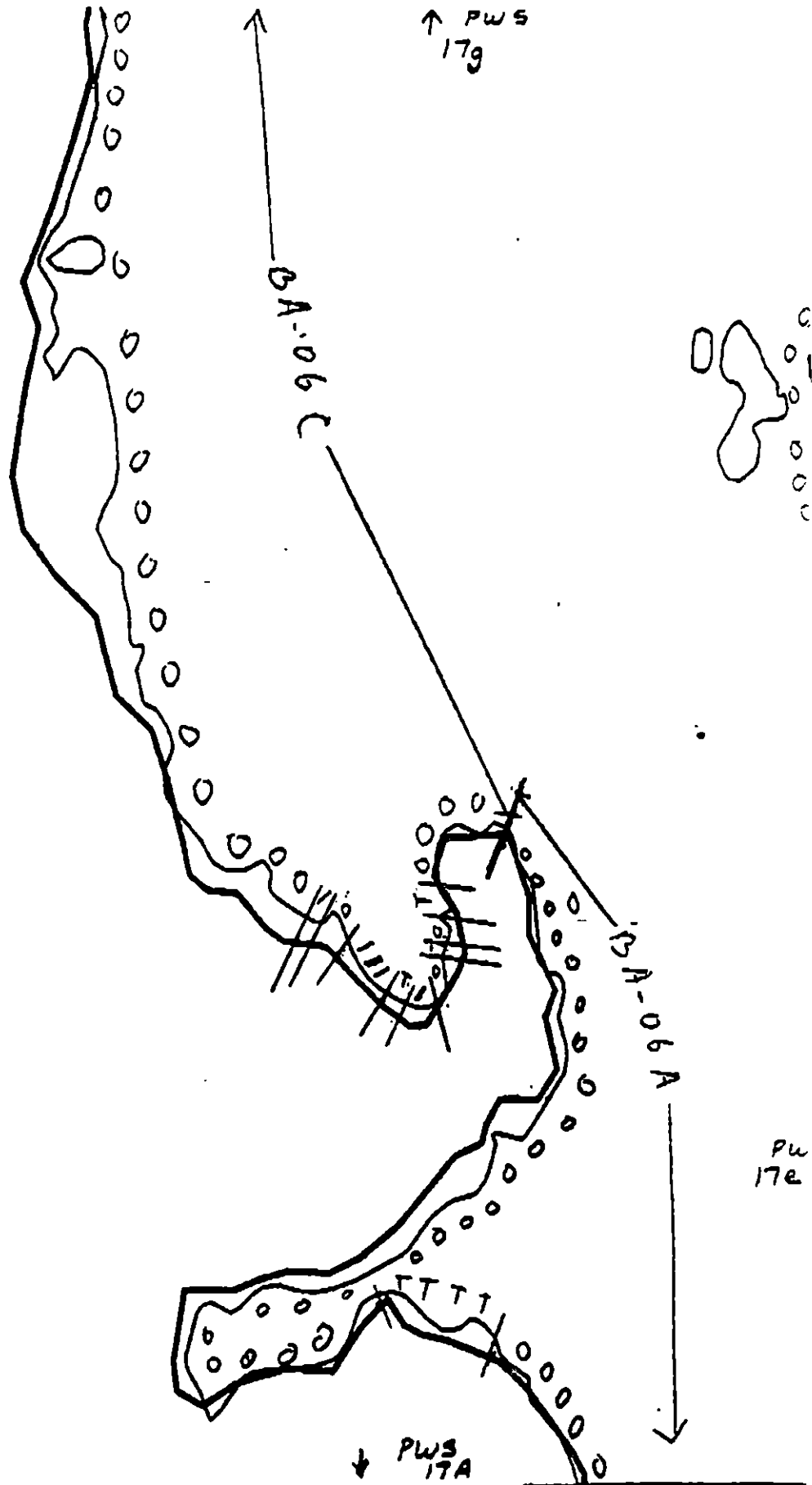
XXXX Wide  
//// Medium  
--- Narrow  
TTTT Very Light

BA-6C

ADEC Segment Length: 16653m



Map Key: PWS-17g  
Name: Mike Foget  
Date: 4/24/90  
Data Entered:



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

BA-6

ADEC Segment Length: 16653m

0 100 200 300

Map Key: PWS-17d

Name: Mike Foges

Date: 4/24/90

Data Entered:

↑ PWS  
17d

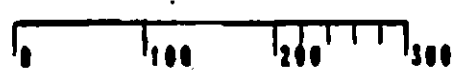
BA-06 A

PWS  
17b

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

BA-6A

ADEC Segment Length: 16653m



Map Key: PWS-17a

Name: Mike Foget

Date: 4/24/90

Notes: Followed

REGION: PRINCE WILLIAM SOUND

SEGMENT: ST/BA-06

SUBDIVISIONS: B (2 OF 3)

SHORELINE EVALUATION

SEGMENT ST/ BA-06 SUBDIVISION B (2 OF 3) DATE 4/24/90

**SEGMENT ENVIRONMENTAL SENSITIVITIES AND TIME CONSTRAINTS:**

14 Catalogued ADF&G anadromous streams

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

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

5T-7 All bald eagle nests (3/1 to 6/1)-Active eagle nests (3/1 to 9/1)

See attached Ecological Constraint sheet for specific constraints and contacts.

**SUBDIVISION ECOLOGICAL CONSTRAINTS:**

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

**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 102 m: No Oil 2682 m  
Subsurface Oil Observed: Yes \_\_\_\_\_ No X Maximum Depth \_\_\_\_\_

**RECOMMENDATIONS:**

X No Treatment Recommended  
\_\_\_\_\_ Treatment Recommended  
\_\_\_\_\_ Manual Pickup  
\_\_\_\_\_ Bioremediation  
\_\_\_\_\_ Tarmat Removal

\_\_\_\_\_ Snare/Absorbent Booms  
\_\_\_\_\_ Oil Snares (pom poms)  
\_\_\_\_\_ Absorbents (pads, rolls, etc)  
\_\_\_\_\_ Spot Washing: \_\_\_\_\_ Wands  
\_\_\_\_\_ Beach Cleaner  
\_\_\_\_\_ Other (see comments)

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

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

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

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

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

# PWS, SEWARD AND HOMER ECOLOGICAL CONSTRAINTS

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

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

No disturbance of stream bed or banks unless authorized by ADF&G. No beach flushing into stream drainage. No bioremediation or other chemical application within 100m of stream without authorization from ADF&G. No use of methods which might affect nearshore oil or toxicity levels, such as hot water wash or Inipol application, prior to at least July 1 unless authorized by ADF&G. Treatment which is not intrusive and which will not affect nearshore oil or toxicity levels, such as manual removal, can probably proceed without adherence to time constraints. In any case, contact ADF&G Habitat Division prior to treatment for consultation and/or permit application.

AGENCY CONTACT PERSON: ADF&G John Morison 267-2324

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

No use of methods which might affect nearshore oil or toxicity levels, such as hot water wash or Inipol application, prior to July 31 unless authorized by ADF&G. Treatment which will not affect nearshore oil or toxicity levels, such as manual or mechanical removal, can probably proceed without adherence to time constraints. Contact ADF&G prior to treatment for confirmation and advice.

AGENCY CONTACT PERSON: ADF&G Larry Peltz 424-3214

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

1E Main Bay Hatchery release (4/20 to 6/15)

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

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

1H Remote release site

No use of methods which might affect nearshore oil or toxicity levels, such as hot water wash or Inipol application, prior to at least July 1 unless authorized by ADF&G and/or PWS Aquaculture Association. Treatment which will not affect nearshore oil or toxicity levels, such as manual or mechanical removal, can probably proceed without adherence to time constraints. Contact ADF&G or PWS Aquaculture Association for confirmation and authorization.

AGENCY CONTACT PERSON: 1E ADF&G Larry Peltz 424-3214

1D 1F 1G PWS Aquaculture Association John McMillan or Bruce Suzumoto 424-7511

1I Gill net area (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 unrolled intertidal and subtidal algae and seagrass. If plans for treatment include methods such as hot water wash or Inipol application which might affect nearshore oil or toxicity levels, contact ADF&G for consultation and authorization.

AGENCY CONTACT PERSON: ADF&G Evelyn Biggs 424-3235

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 Rothy 267-2206

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

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

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

AGENCY CONTACT PERSON: USFWS Jill Parker 786-3377

6U Recreation: Tent sites (8/1 to 9/15)

6V Anchorages (8/1 to 9/15)

6W Forest Service cabins (8/1 to 9/15)

6X Lodge (8/1 to 9/15)

6Y Special use destination

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

7HH Finfish harvesting

7I Deer harvesting (8/15 to 2/26)

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

# FIELD SHORELINE COMMENT SHEET

SEGMENT ST/ BA-06 SUBDIVISION: B (243) DATE 4/24/90

NOAA

NAME Michael Buchman SIGNATURE [Signature]

☒ NO TREATMENT RECOMMENDED  
COMMENTS

☐ TREATMENT SUGGESTED

*Light staining & occasional tar patties (removed by SCAT team)*

ADEC

NAME Joh Hoyer SIGNATURE [Signature]

☒ NO TREATMENT RECOMMENDED  
COMMENTS

☐ TREATMENT SUGGESTED

*Oiling observed consisted of small asphalt putties which we manually removed and light staining in U.I.T.Z.*

LAND MANAGER

NAME [Signature] SIGNATURE [Signature]

☒ NO TREATMENT RECOMMENDED  
COMMENTS

☐ TREATMENT SUGGESTED

*Tar patties removed by SCAT team. Several (2 bags) picked up from nearly all north facing pocket beaches at MI.*

## SHORELINE OILING SUMMARY

REVISION NO 04.12.90

OG MIKE FOLET ~~NOAA~~ MICHAEL BUCKMAN SEGMENT ST/ BA-06  
 BIO KATHLEEN CONLIN LAND REP DON CRENSHAW (DNR) SUBDIVISION B (2 OF 3)  
 EXXON LARRY OLSON ADEC JOHN HAYES TIME 17:30 to 19:00  
 TEAM NO. 11 TIDE LEVEL +3.8 DATE 4/24/90  
 EST. SUBDIVISION LENGTH: 1667 m ☒ Sun ☐ Clouds ☐ Fog ☐ Rain ☐ Snow  
 UPLANDS DESCRIPTION: ☒ Grass ☒ Forest ☐ Rock forested back shore w/ grass  
 SURVEYED FROM: ☒ Foot ☒ Boat ☐ Helo WORKING DIRECTION: N to S  
 SURFACE SEDIMENTS: R 50 % B 30 % C 15 % P 5 % G 0 % S 0 % M 0 % V 0 %  
 SLOPE: Lang 30 % Hang 30 % Vert 40 % WAVE EXPOSURE: ☒ Low ☒ Med ☐ High  
 OIL CATEGORY LENGTH: W 0 m M 0 m N 0 m VL 80 m NO 1587 m

## SURFACE OIL

| CHARACTER        | DISTRIBUTION |   |   |    | OIL / FILM COLOR |   |   |   |    | IMPACTED ZONES |   |   |   |
|------------------|--------------|---|---|----|------------------|---|---|---|----|----------------|---|---|---|
|                  | W            | M | N | VL | SW               | W | M | N | VL | SW             | U | M | U |
| ASPHALT PAVEMENT |              |   |   |    |                  |   |   |   |    |                |   |   |   |
| POOLED           |              |   |   |    |                  |   |   |   |    |                |   |   |   |
| COVER            |              |   |   |    |                  |   |   |   |    |                |   |   |   |
| COAT             |              |   |   |    |                  |   |   |   |    |                |   |   |   |
| STAIN            |              |   |   | X  | X                |   |   |   |    | X              |   |   |   |
| MOUSSE           |              |   |   |    |                  |   |   |   |    |                |   |   |   |
| * PATTIES        |              |   |   | X  |                  |   |   | X |    | X              |   |   |   |
| TARBALLS         |              |   |   |    |                  |   |   |   |    |                |   |   |   |
| FILM             |              |   |   |    |                  |   |   |   |    |                |   |   |   |
| NO OIL           |              |   |   |    |                  |   |   |   |    | X              |   | X | X |

PAVEMENT H F S 0 sq. m by 0 cmPATTIES / TARBALLS 0 BAGSNEAR SHORE SHEEN? ☒ NO BR RW SL TL

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

DID YOU COLLECT DEBRIS?

\* YES ☒ NO ☐TYPE Asphalt Patties#BAGS 5

Photographs:

Roll No. —Frames —

\* PATTIES REMOVED

## SUBSURFACE OIL

| PIT NO. | PIT DEPTH (cm) | SUBSURFACE OIL CHARACTER |    |    |    |    | OILED INTERVAL (cm) | BELOW |   | OIL / FILM COLOR |   |   |   |    | PIT ZONE |   |   |   | AN A | SHEEN (Y/N) | ↓  | SURFACE SUBSURFACE SEDIMENTS |
|---------|----------------|--------------------------|----|----|----|----|---------------------|-------|---|------------------|---|---|---|----|----------|---|---|---|------|-------------|----|------------------------------|
|         |                | OF                       | OR | OL | OF | NO |                     | W     | U | SW               | W | M | N | VL | SW       | U | M | U |      |             |    |                              |
| 1       | 30             |                          |    |    |    | X  | .                   | X     |   |                  |   |   |   |    | X        |   |   |   | N    |             | 25 | P.G.S                        |
| 2       | 30             |                          |    |    |    | X  | .                   | X     |   |                  |   |   |   |    | X        |   |   |   | N    |             | —  | P.G                          |
| 3       | 20             |                          |    |    |    | X  | .                   | X     |   |                  |   |   |   |    | X        |   |   |   | N    |             | —  | P.G.P                        |
| 4       | 20             |                          |    |    |    | X  | .                   | X     |   |                  |   |   |   |    | X        |   |   |   | N    |             | —  | P.G                          |
|         |                |                          |    |    |    |    | .                   |       |   |                  |   |   |   |    |          |   |   |   |      |             |    |                              |
|         |                |                          |    |    |    |    | .                   |       |   |                  |   |   |   |    |          |   |   |   |      |             |    |                              |

## COMMENTS

Most of the shore zone consists of bedrock, with some pocket boulder / cobble beach. Some patties and staining was observed in the HITZ (see map). \*All patties were manually removed from the shore zone

Low wave exposure occurs on the southern part of the Islands (The protected side)

REVIEWED FW DATE 4-26-90

OG M. Y. Foget  
 SEGMENT ST/BA-06  
 SUBDIVISION B  
 DATE 4/24/90

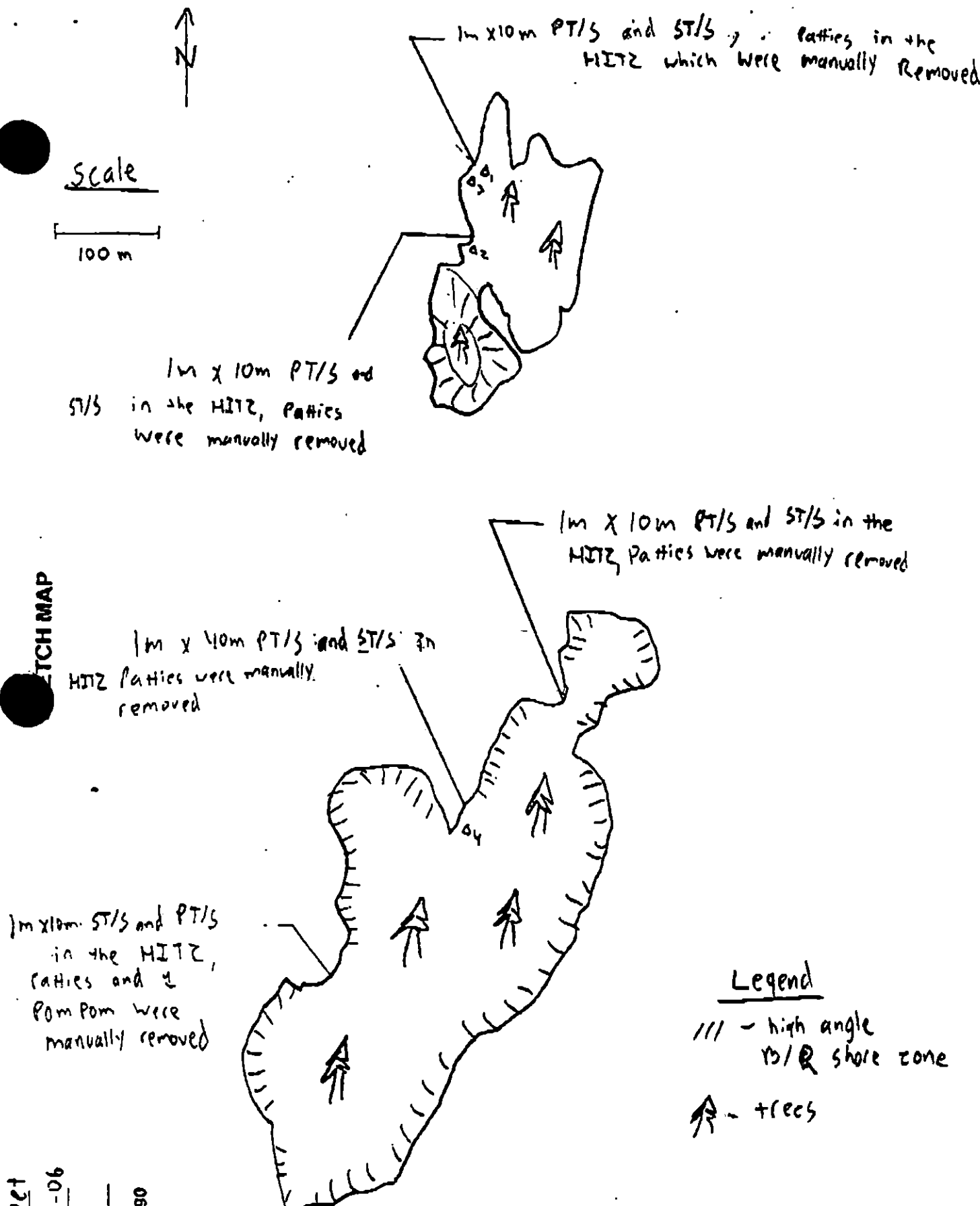
**CHECKLIST**

- ☐ N. Area
- ☐ Approx. Scale
- ☐ Seg/Sub Body
- ☐ Oil Dist.
- ☐ Width
- ☐ Length
- ☐ % Cover
- ☐ Substrate Character
- ☐ Est. HML/LML
- ☐ 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
- Old Vegetation
- Photo location, direction, and number

**ETCH MAP**



# SHORELINE ECOLOGICAL SUMMARY

REVISION: 03/28/90

Segment ST/BA-06 Subdivision B (2 OF 3) Date (mo / day / yr) 04/24/90

Time (24 hr) 1730-1900 Biologist KATHLEEN CONLAN

(A) Substrate type and % of segments:  
(1) Bedrock \_\_\_\_\_ (2) Boulder \_\_\_\_\_ (3) Cobble \_\_\_\_\_ (4) Pebble \_\_\_\_\_ (5) Sand \_\_\_\_\_ (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 (O)

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:

12 SEA OTTERS.

2 CORMORANTS

4 GLAUCOUS WINGED GULLS

8 CROWS

2 OYSTERCATCHERS.

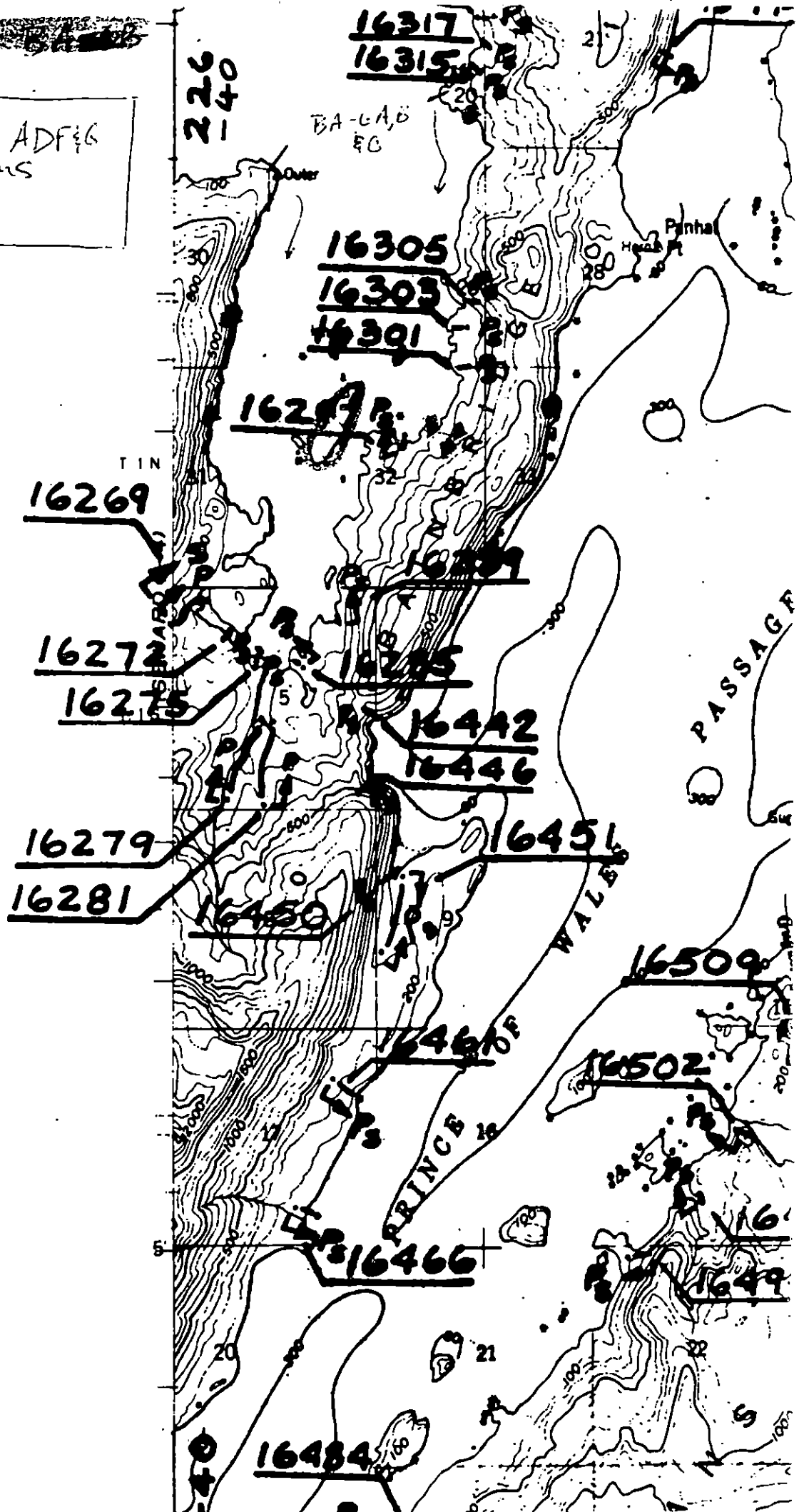
2 GOLDENCHIEFS.

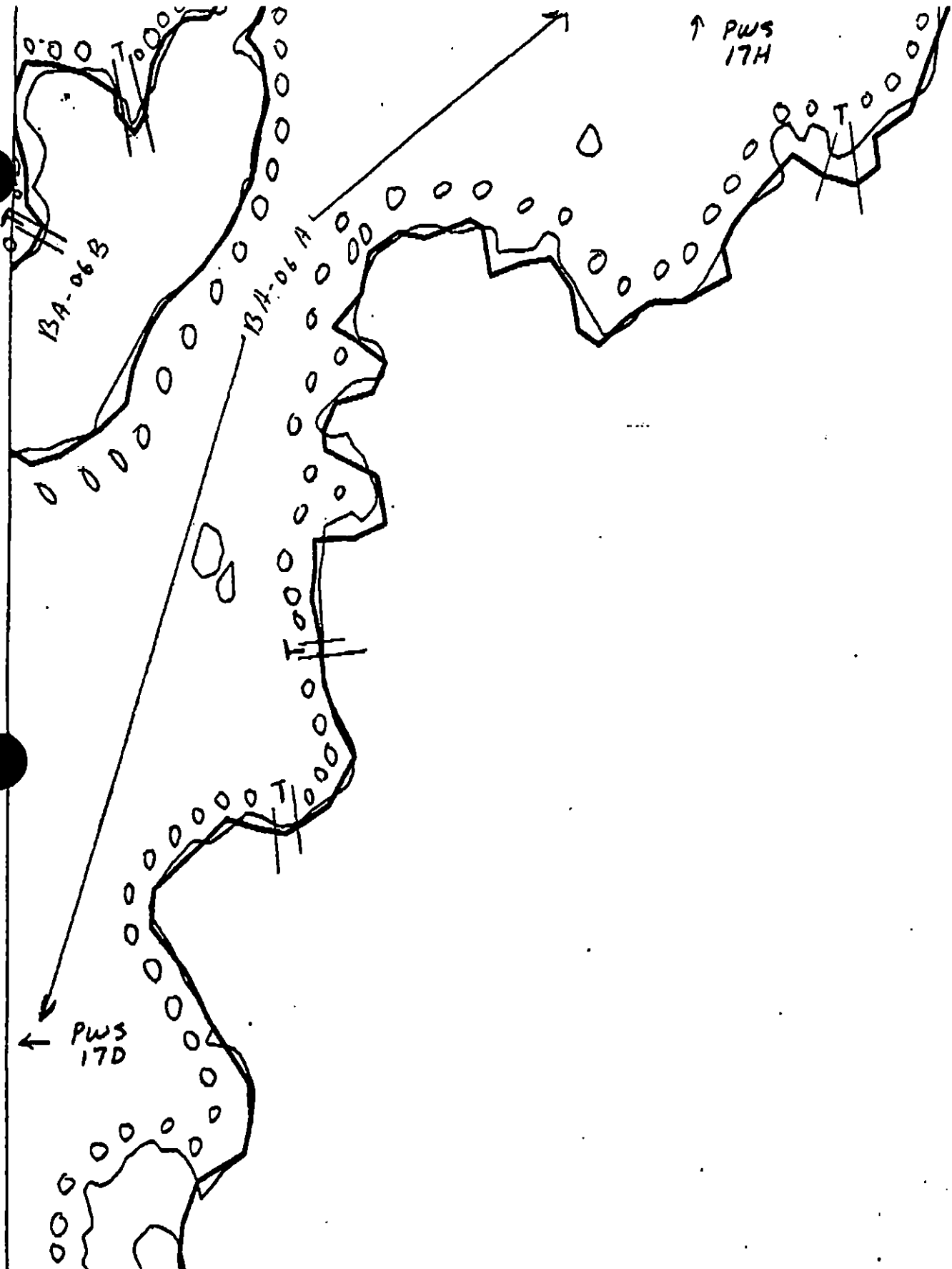
1 SEAL

## Ecological Considerations:

SALMON FINGERLINGS IN BAYS.

11 CATALOGUED ADFEG  
SALMON STREAMS  
ST (1)





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

BA-6,

ADEC Segment Length: 16653m



Map Key: PWS-17e  
Name: Mike Foye  
Date: 4/24/90  
Data Entered:

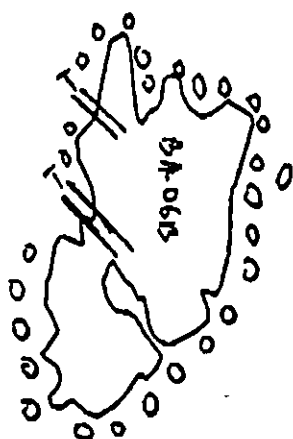
A-06

BA-06A

↑  
PWS  
17K



↓ PWS  
17E



PWS  
1:9



XXXX Wide

//// Medium

--- Narrow

TTTT Very Light

0000 No Oil

BA-6A

ADEC Segment Length: 16653m

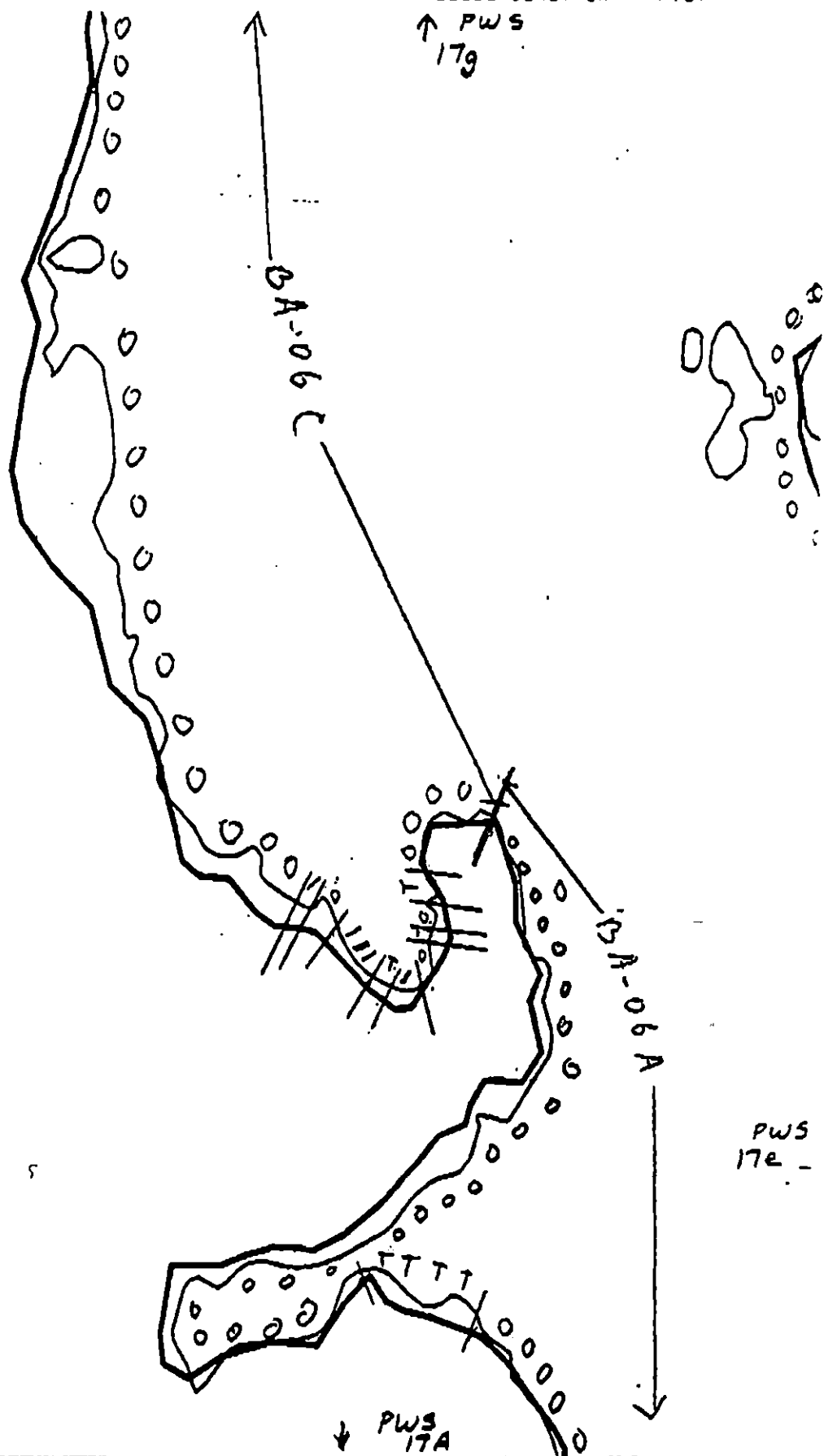


Map Key: PWS-17h

Name: Mike Foye

Date: 4/24/90

Date Entered:



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

BA-6

ADEC Segment Length: 16653m



Map Key: PWS-17d  
Name: Mike Foges  
Date: 4/24/90  
Data Entered:

## ADDENDUM: SUBDIVISION CONSTRAINTS

### SEGMENT BA-6 SUBDIVISION C (3 of 3)

| WORK WINDOW                     |      |
|---------------------------------|------|
| Manual Pickup<br>Tarmat Removal | OPEN |
| Bioremediation*                 | OPEN |

\*Customblen Only - No Inlpol

#### ARCHAEOLOGICAL STANDARD CONSTRAINT

If cultural resources are uncovered, PHONE 564-3274.

#### APPLICABLE ECOLOGICAL TIME CONSTRAINTS

|      |                 |                                                                                                                                                                                                                          |
|------|-----------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1A,B | Salmon Stream   | ADF&G catalogued anadromous streams (226-40-16269, 226-40-16272, 226-40-16275, 226-40-16281) are in Subdivision A and more than 100m from work site. No constraint to manual pickup, tarmat removal, and bioremediation. |
| 5T   | Bald Eagle Nest | NO CONSTRAINT. USFWS 6/1/90 map indicates no active nest within 400m of Subdivision C work site.                                                                                                                         |

#### OTHER ECOLOGICAL CONSIDERATIONS

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

FOSC

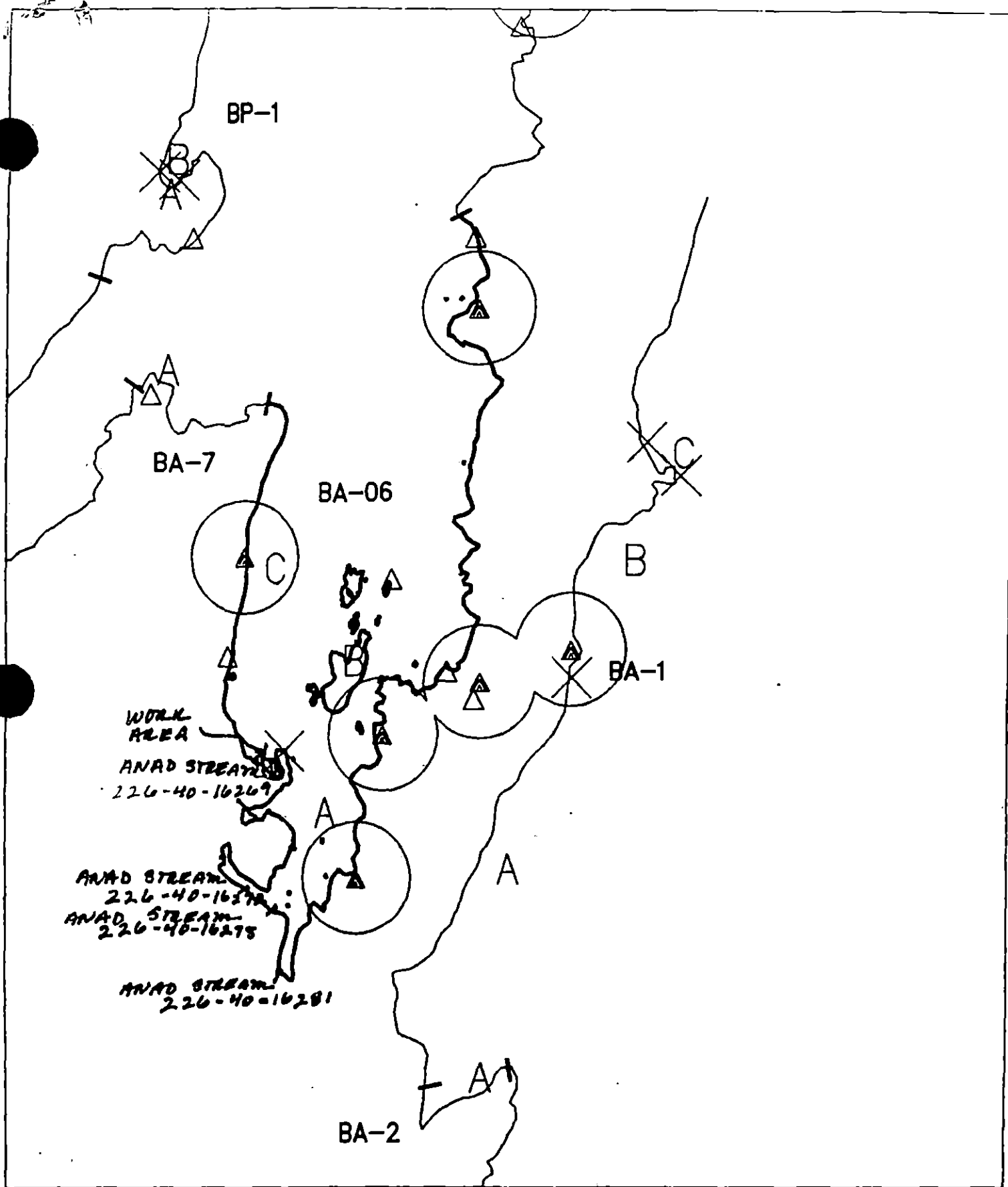
Date

7 Jul 90

Prepared by

Date

7/5/90



Exxon Company, USA

Map Key: PMS-BA-6

June 08, 1990

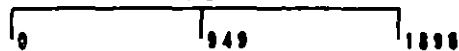


# ECOLOGY MAP

SEGMENT BA-6

SUBDIVISION C (3 of 3)

METERS



Seabird Colony



Active Eagle Nest



Inactive Eagle Nest

1 inch = 3114 feet

SHORELINE EVALUATION

SEGMENT ST/ BA-06 SUBDIVISION C (3 OF 3) DATE 4/24/90

**SEGMENT ENVIRONMENTAL SENSITIVITIES AND TIME CONSTRAINTS:**

14 Catalogued ADF&G anadromous streams

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

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

5T-7 All bald eagle nests (3/1 to 6/1)-Active eagle nests (3/1 to 9/1)

See attached Ecological Constraint sheet for specific constraints and contacts.

**SUBDIVISION ECOLOGICAL CONSTRAINTS:**

Avoid any unnecessary disturbance or damage to unoiled biota and substrate. 5T (2).

**ARCHAEOLOGICAL CONSTRAINT:** If cultural resources are uncovered during shoreline treatment, stop work in the vicinity, mark the location of the find and contact Exxon's Cultural Resource Program immediately (564-3274 (Anchorage) or 229-1508 (24 hrs.)).

SHPO SIGNATURE: Luella Jane Oane DATE: 6/20/90

**OILING CATEGORIZATION:**

Wide 0 m: Medium 120 m: Narrow 78 m: V.Light 57 m: No Oil 3007 m  
Subsurface Oil Observed: Yes X No      Maximum Depth 5 cm

**RECOMMENDATIONS:**

     No Treatment Recommended

X Treatment Recommended

X Manual Pickup

X Bioremediation

X Tarmat Removal

     Snare/Absorbent Booms

     Oil Snares (pom poms)

     Absorbents (pads, rolls, etc)

     Spot Washing:      Wands

     Beach Cleaner

     Other (see comments)

COMMENTS: Recommended treatment includes 1) manual removal of tarmats, 2) manual pickup of patties, 3) bioremediation of areas indicated on attached sketch maps. Work should be conducted between 6/1 and 7/10 based on eagle nest and salmon constraints after approval of USEWS regarding eagle nest.  
See Constraint Addendum dated 7/5/90 with

TAG COMMENTS:       
      
      
    

TAG APPROVAL DATE: 5/10/90

ADEC ART WENGER

EXXON DAVID BEN

NOAA Burt Wiercott

USCG D. D. Rome

\* Customarily only: NO In'po!  
FOSC: D. Zampieri DATE: 7/3/90

SHORELINE EVALUATION

SEGMENT ST/ BA-06 SUBDIVISION A (1 OF 3) DATE 4/23/90

**SEGMENT ENVIRONMENTAL SENSITIVITIES AND TIME CONSTRAINTS:**

14 Catalogued ADF&G anadromous streams

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

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

5T-7 All bald eagle nests (3/1 to 6/1)-Active eagle nests (3/1 to 9/1)

See attached Ecological Constraint sheet for specific constraints and contacts.

**SUBDIVISION ECOLOGICAL CONSTRAINTS:**

Avoid any unnecessary disturbance or damage to unoiled biota and substrate. 5T (5) streams: 226-40-16269, 226-40-16301, 226-40-16297, 226-40-16303, 226-40-16272, 226-40-16289, 226-40-275, 226-40-16305, 226-40-16279, 226-40-16285, 226-40-16281, 226-40-319, 226-40-315, 226-40-317.

**ARCHAEOLOGICAL CONSTRAINTS:**

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

SHPO SIGNATURE: J. Daniel McMan DATE: 5/10/90

**OILING CATEGORIZATION:**

Wide 0 m: Medium 0 m: Narrow 0 m: V.Light 224 m: No Oil 11453 m  
Subsurface Oil Observed: Yes      No X Maximum Depth     

**RECOMMENDATIONS:**

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

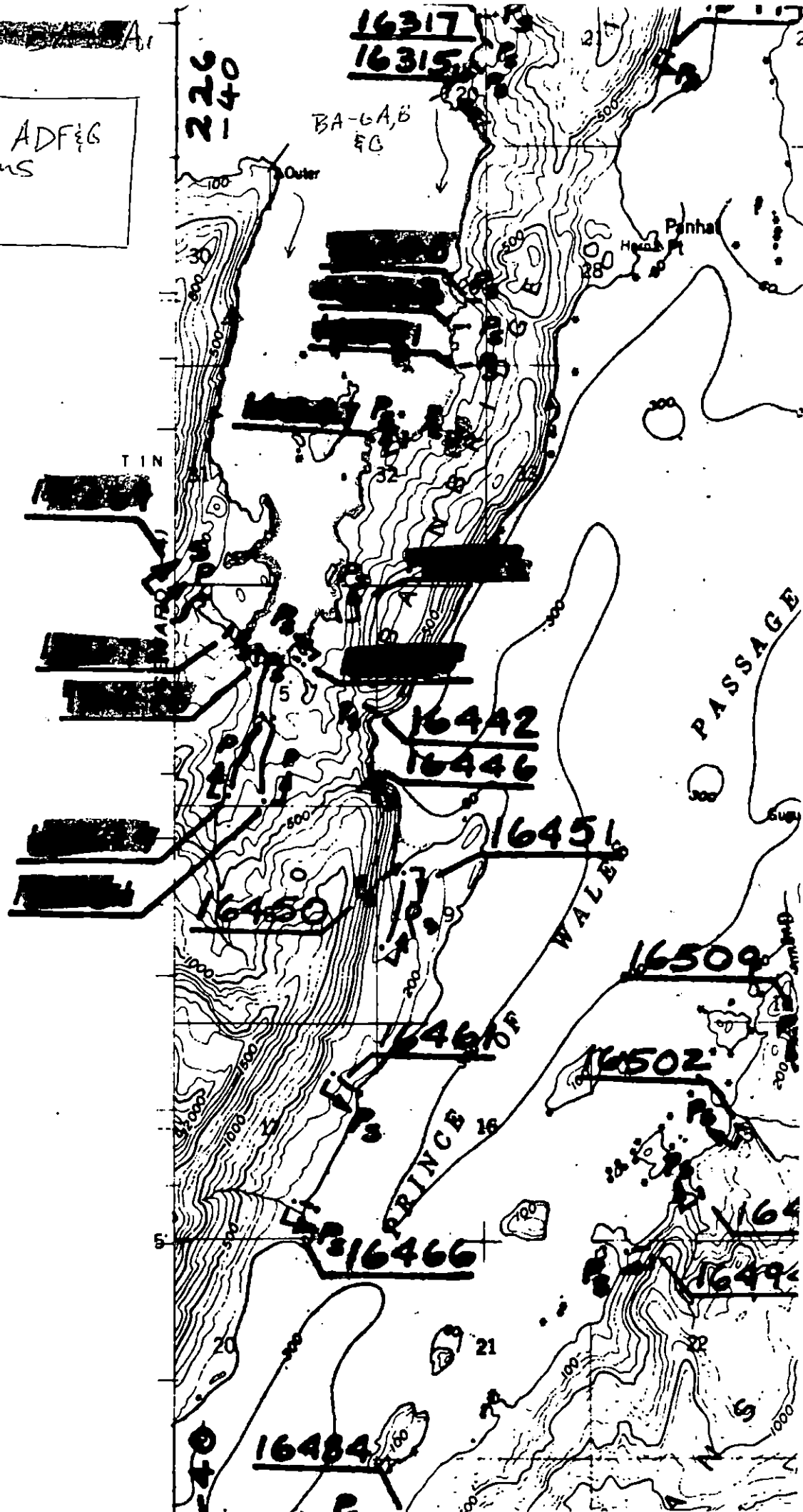
COMMENTS:       
      
      
      
    

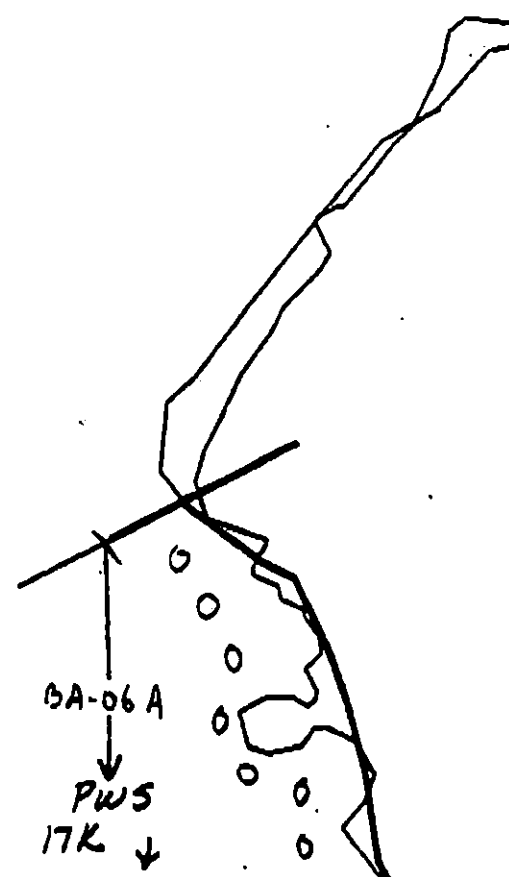
TAG COMMENTS:       
      
      
      
    

TAG APPROVAL DATE: 5/10/90  
ADEC Art Wenzel  
EXXON AMY TCA  
NOAA Burl Wescott  
USCG D. D. Rome

FOSC: ky DATE: 5-15-90

11 CATALOGUED ADFEG  
SALMON STREAMS  
5T (7)





XXXX Wide

//// Medium

--- Narrow

TTTT Very Light

OOOO NA O:I

BA-6A

AOEC Segment Length: 10053m



Map Key: PWS-17n

Name: Mike FoyerDate: 4/24/90

Data Entered:

BA-06A

PWS 171 →

↓ PWS 17H

XXXX Wide

/// Medium

--- Narrow

TTTT Very Light

0000 No Oil

BA-6A

ADEC Segment Length: 16653m



Map Key: PWS-17k

Name: Mike Fogert

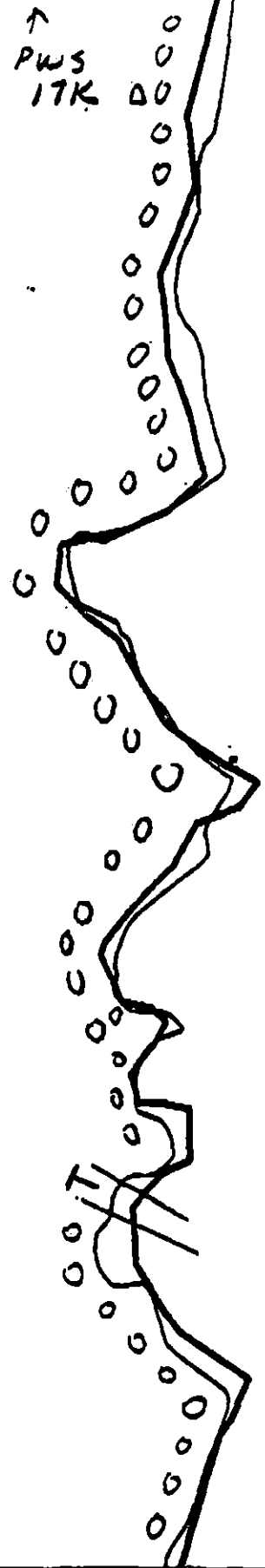
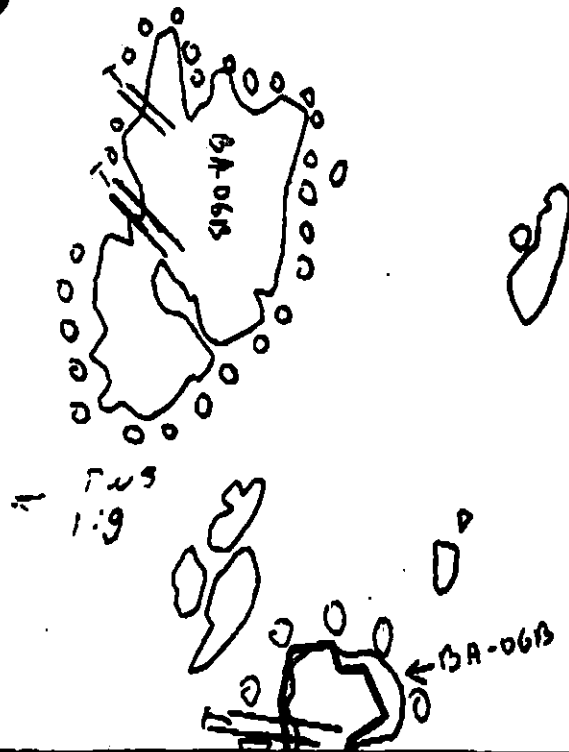
Date: 4/24/90

Date Entered:

A-06

BA-06A

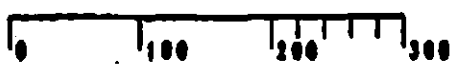
↑  
PWS  
17K



XXXX Wide  
//// Medium  
---- Narrow  
TTTT Very Light  
OOOO M. 0.1

BA-6A

ADEC Segment Length: 16653m

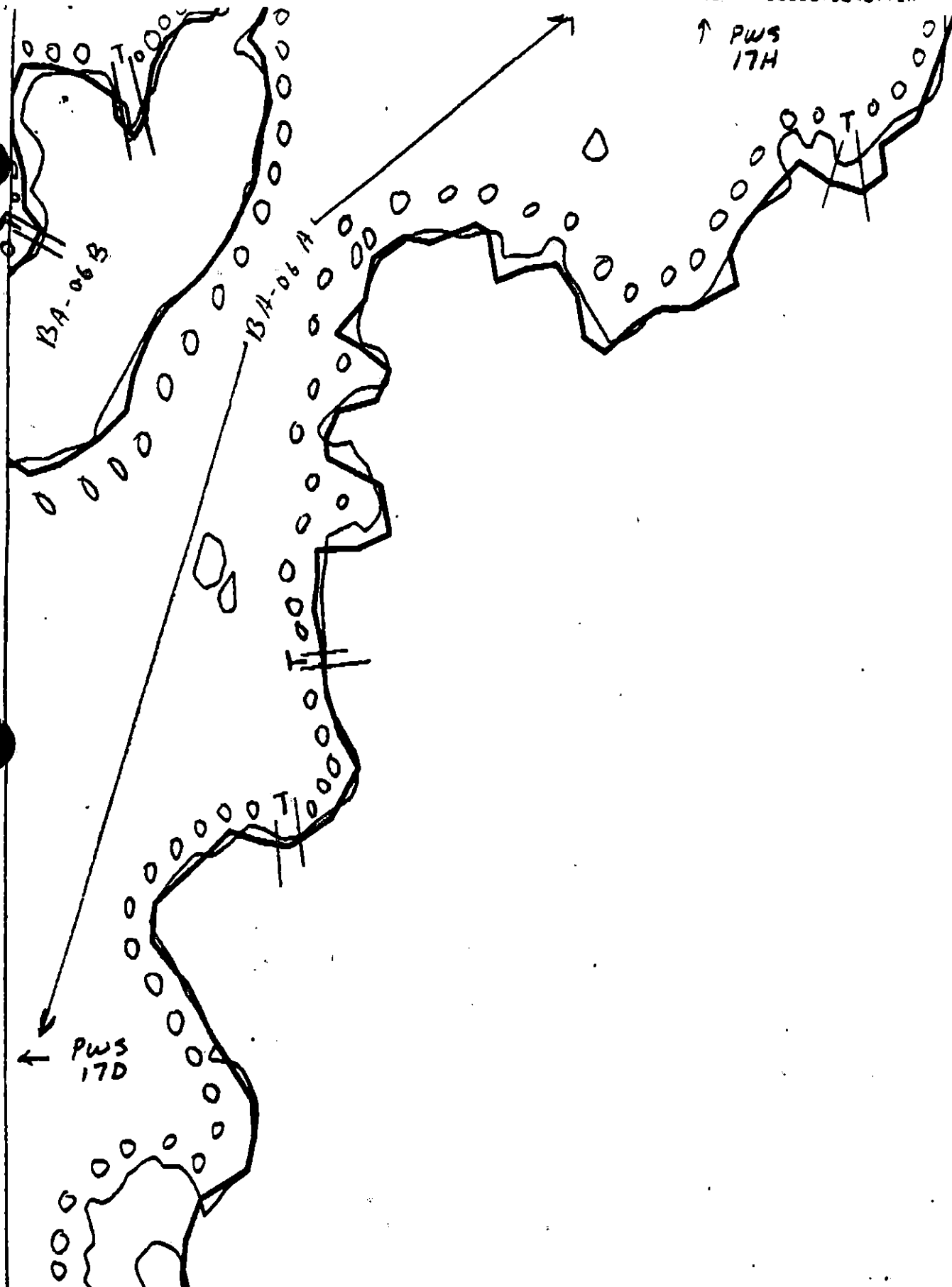


Map Key: PWS-17A

Name: Mike Foye

Date: 4/24/90

Note: Entailed.



XXXX Wide

//// Medium

---- Narrow

TTTT Very Light

^ ^ ^ ^

BA-6.

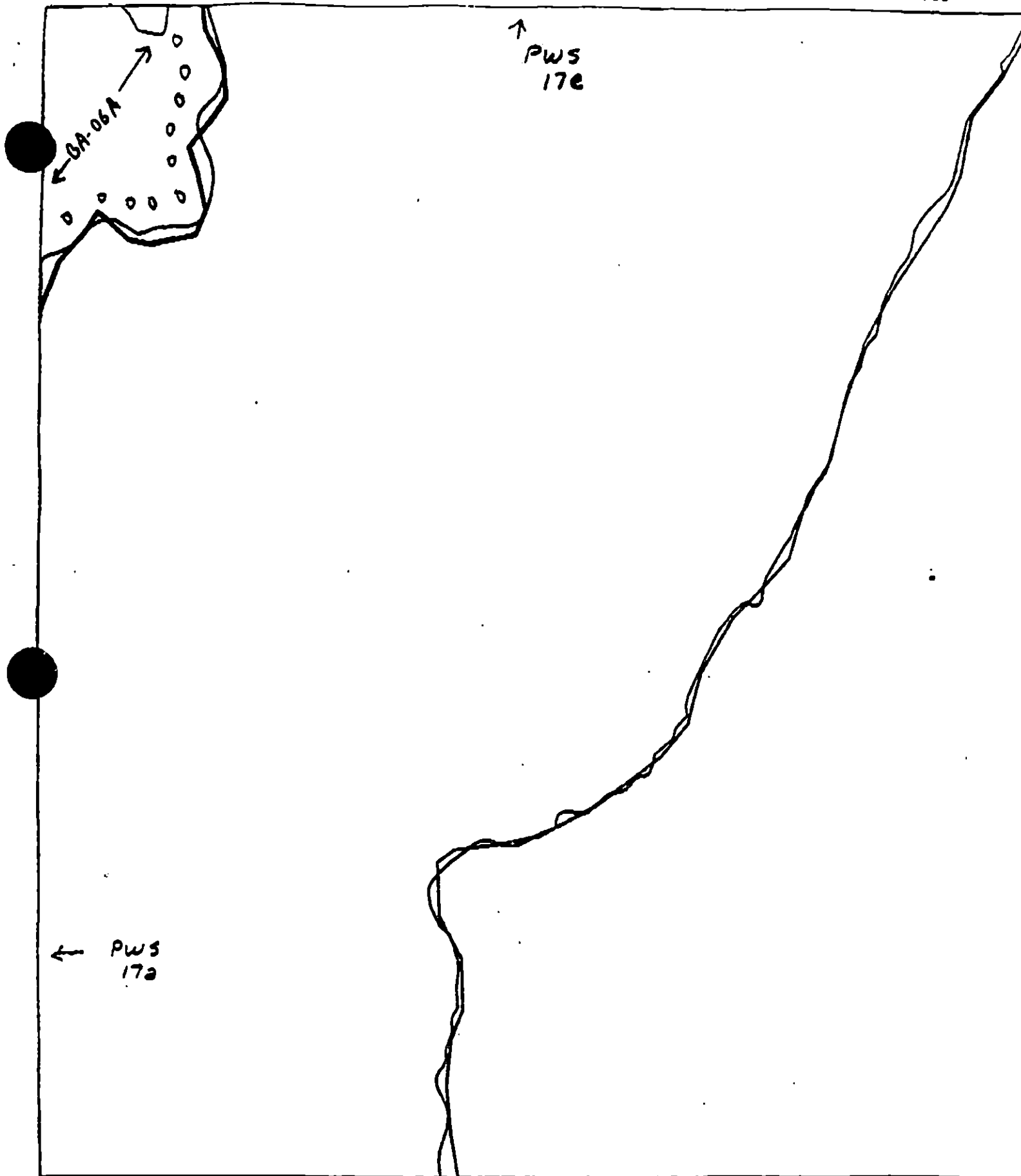
ADEC Segment Length: 18653m

0 100 200 300

Map Key: PWS-170

Name: Mike Foye

Date: 4/24/90



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

BA-64

ADEC Segment Length: 16653m

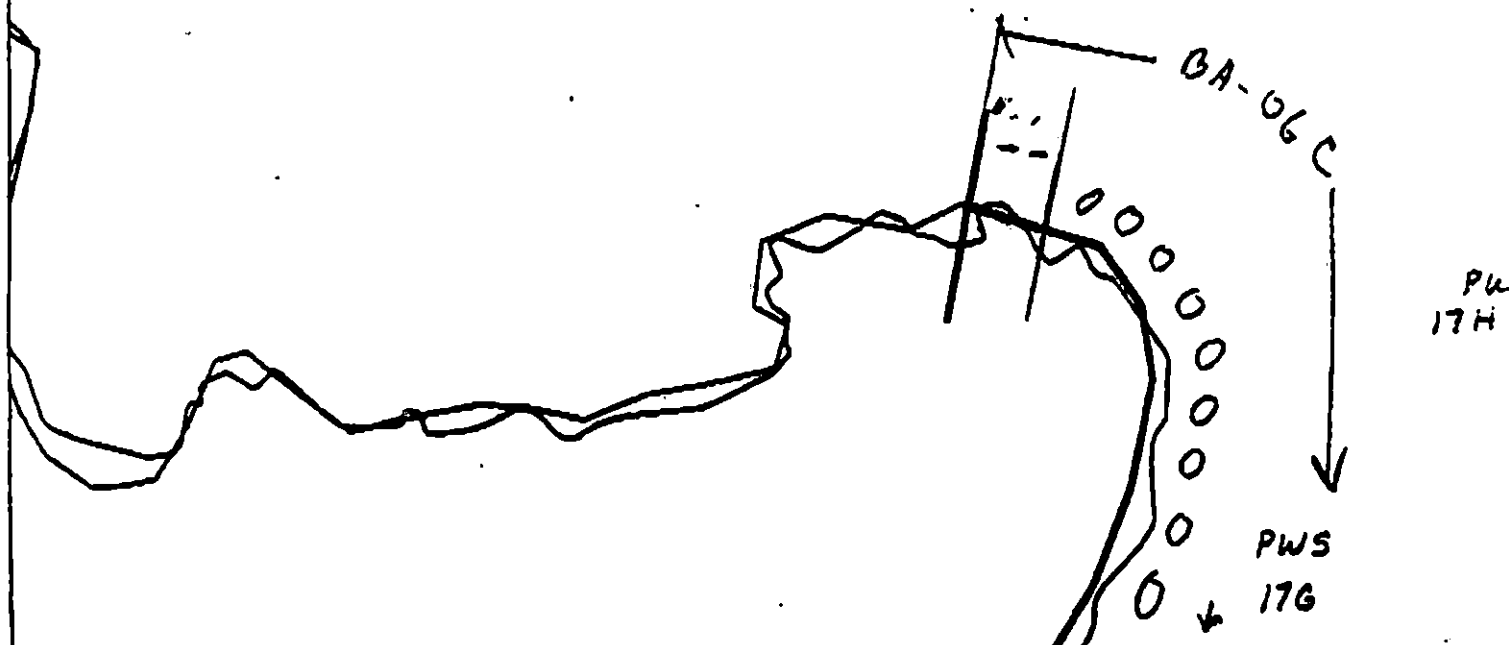
0 100 200 300



Map Key: PWS-17b

Name: Mike Foye

Date: 4/24/90



XXXX Wide

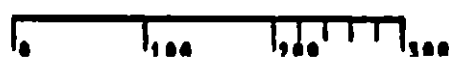
//// Medium

--- Narrow

TTTT Very Light

BA-6C

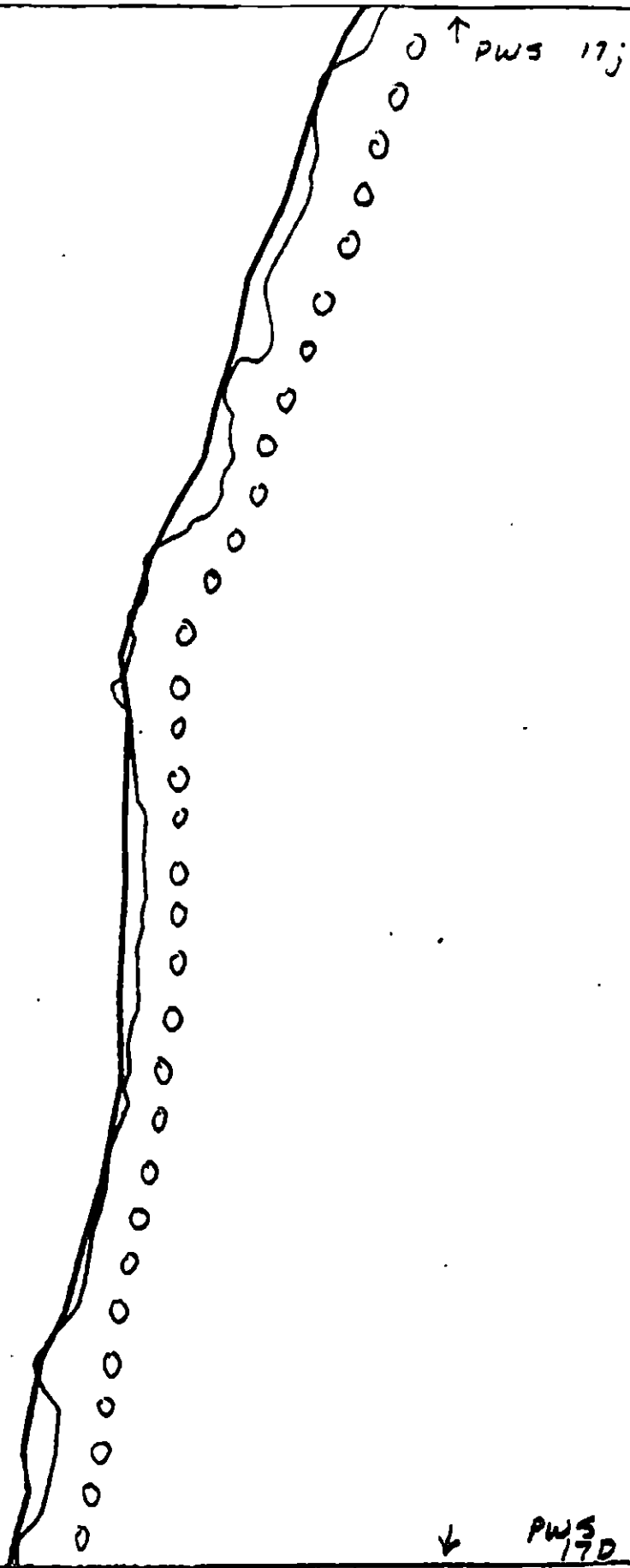
ADEC Segment Length: 16533m



Map Key: PWS-17j

Name: Mike Fogel

Date: 4/24/90



↑ PWS 17j

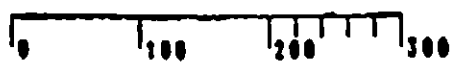
E

↓ PWS 17D

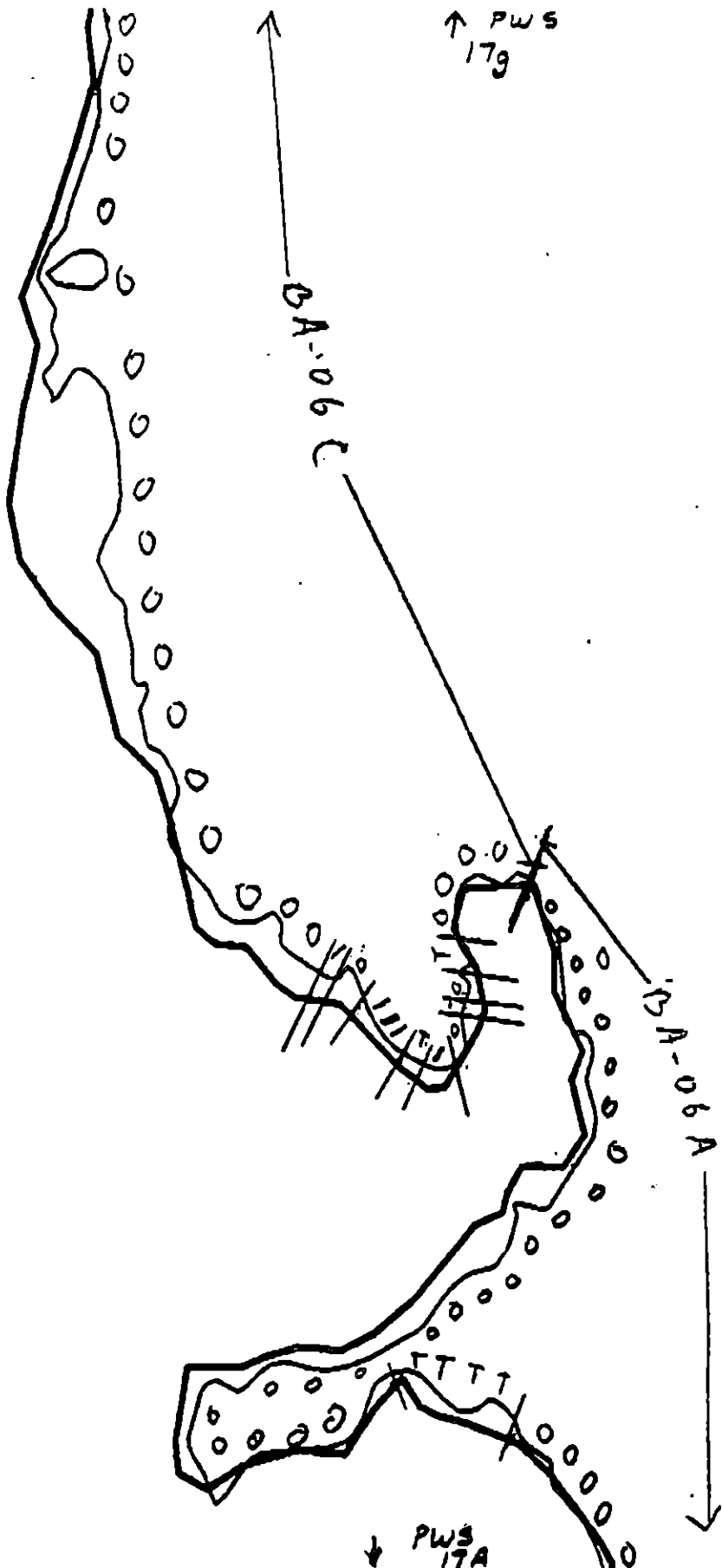
XXXX Wide  
//// Medium  
--- Narrow  
TTTT Very Light  
^ ^ ^ ^ "

BA-6C

ADEC Segment Length: 16653m



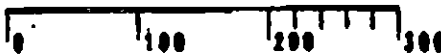
Map Key: PWS-17g  
Name: Mike Fogel  
Date: 4/24/90  
Data Entered:



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

BA-6

ADEC Segment Length: 16653m

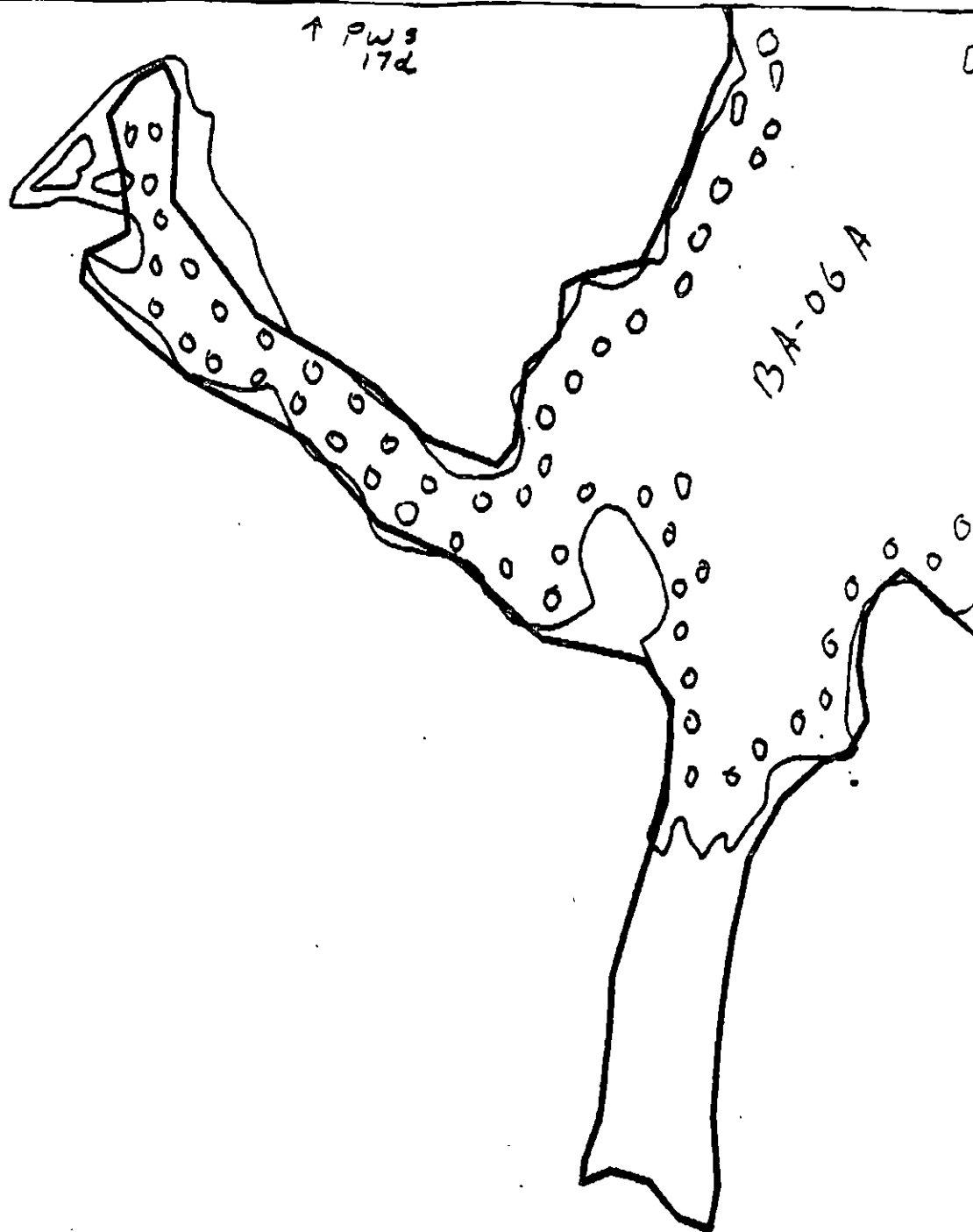


Map Key: PWS-17d

Name: Mike Fogel

Date: 4/24/90

Date Entered:



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

BA-6A

ADEC Segment Length: 16653m

0 100 200 300

Map Key: PWS-17a

Name: Mike Fogel

Date: 4/24/90

**REGION: PRINCE WILLIAM SOUND**

**SEGMENT: ST/BA-06**

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

SHORELINE EVALUATION

SEGMENT ST/ BA-06 SUBDIVISION C (3 OF 3) DATE 4/24/90

**SEGMENT ENVIRONMENTAL SENSITIVITIES AND TIME CONSTRAINTS:**

14 Catalogued ADF&G anadromous streams

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

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

5T-7 All bald eagle nests (3/1 to 6/1)-Active eagle nests (3/1 to 9/1)

See attached Ecological Constraint sheet for specific constraints and contacts.

**SUBDIVISION ECOLOGICAL CONSTRAINTS:**

Avoid any unnecessary disturbance or damage to uncoiled biota and substrate. 5T (2).

**ARCHAEOLOGICAL CONSTRAINTS:**

Cultural resource survey in progress. Shoreline treatment cannot proceed until field data have been assessed and a formal archaeological constraint entered on the shoreline evaluation form.

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

**OILING CATEGORIZATION:**

Wide 0 m: Medium 120 m: Narrow 78 m: V.Light 57 m: No Oil 3007 m

Subsurface Oil Observed: Yes X No \_\_\_\_\_ Maximum Depth 5 cm

**RECOMMENDATIONS:**

       No Treatment Recommended

  X   Treatment Recommended

  X   Manual Pickup

  X   Bioremediation

  X   Tarmat Removal

       Snare/Absorbent Booms

       Oil Snares (pom poms)

       Absorbents (pads, rolls, etc)

       Spot Washing: \_\_\_\_\_ Wands

       Beach Cleaner

       Other (see comments)

COMMENTS: Recommended treatment includes 1) manual removal of tarmats,  
2) manual pickup of patties, 3) bioremediation of areas indicated on  
attached sketch maps. Work should be conducted between 6/1 and 7/10  
based on eagle nest and salmon constraints after approval of USFWS  
regarding eagle nest.

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

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

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

ADEC \_\_\_\_\_

EXXON \_\_\_\_\_

NOAA \_\_\_\_\_

USCG \_\_\_\_\_

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

# PWS, SEWARD AND HOMER ECOLOGICAL CONSTRAINTS

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

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

No disturbance of stream bed or banks unless authorized by ADF&G. No beach flushing into stream drainage. No bioremediation or other chemical application within 100m of stream without authorization from ADF&G. No use of methods which might affect nearshore oil or toxicity levels, such as hot water wash or Inipol application, prior to at least July 1 unless authorized by ADF&G. Treatment which is not intrusive and which will not affect nearshore oil or toxicity levels, such as manual removal, can probably proceed without adherence to time constraints. In any case, contact ADF&G Habitat Division prior to treatment for consultation and/or permit application.

AGENCY CONTACT PERSON: ADF&G John Morison 267-2324

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

No use of methods which might affect nearshore oil or toxicity levels, such as hot water wash or Inipol application, prior to July 31 unless authorized by ADF&G. Treatment which will not affect nearshore oil or toxicity levels, such as manual or mechanical removal, can probably proceed without adherence to time constraints. Contact ADF&G prior to treatment for confirmation and advice.

AGENCY CONTACT PERSON: ADF&G Larry Peltz 424-3214

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

1E Main Bay Hatchery release (4/20 to 6/15)

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

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

1H Remote release site

No use of methods which might affect nearshore oil or toxicity levels, such as hot water wash or Inipol application, prior to at least July 1 unless authorized by ADF&G and/or PWS Aquaculture Association. Treatment which will not affect nearshore oil or toxicity levels, such as manual or mechanical removal, can probably proceed without adherence to time constraints. Contact ADF&G or PWS Aquaculture Association for confirmation and authorization.

AGENCY CONTACT PERSON: 1E ADF&G Larry Peltz 424-3214

1D 1F 1G PWS Aquaculture Association John McMillan or Bruce Suzumoto 424-7511

1I Gill net area (5/7 to 8/31)

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

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

1L Set net sites (8/11 to 7/25)

Contact ADF&G for specific dates, locations and constraints. Restrict boat and air traffic to essential minimum. When set net sites are present (1L) restrict beach operations to essential minimum as authorized by ADF&G. If plans for treatment include methods such as hot water wash or Inipol application which might affect nearshore oil or toxicity levels, contact ADF&G for consultation and authorization.

AGENCY CONTACT PERSON: ADF&G James Brady 424-3212

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

Contact ADF&G for confirmation - dates and locations may vary. Restrict boat traffic to essential minimum. Avoid damage to uncoiled intertidal and subtidal algae and seagrass. If plans for treatment include methods such as hot water wash or Inipol application which might affect nearshore oil or toxicity levels, contact ADF&G for consultation and authorization.

AGENCY CONTACT PERSON: ADF&G Evelyn Biggs 424-3235

30, 3Q Harbor seal and sea lion pupping (5/15 to 7/1)

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

Restrict boat and air traffic to essential minimum. No personnel within 400m. Aircraft to maintain 800m horizontal and 300m vertical distance from haulouts. No application of Inipol within two weeks of arrival dates (work window at these sites is limited to 7/2 to 7/31). Contact ADF&G and USFWS prior to treatment for confirmation.

AGENCY CONTACT PERSON: US National Marine Fisheries Service Steve Zimmerman 586-7235

ADF&G Don Calkins 267-2403

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

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

AGENCY CONTACT PERSON: USFWS Jill Parker 786-3377

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

Restrict all activity to essential minimum, especially air traffic. Contact USFWS and ADF&G for confirmation.

AGENCY CONTACT PERSON: USFWS Jill Parker 786-3377

ADF&G Tom Roth 267-2205

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

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

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

AGENCY CONTACT PERSON: USFWS Jill Parker 786-3377

6U Recreation:

6V Tent sites (8/1 to 9/15)

6W Anchorages (8/1 to 9/15)

6X Forest Service cabins (8/1 to 9/15)

6Y Lodge (8/1 to 9/15)

Special use destination

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

Finfish harvesting

Deer harvesting (8/15 to 2/28)

Invertebrate harvesting

Contact ADF&G and appropriate Native Corporation for specific dates, locations, and constraints. Restrict boat and air traffic and beach disturbance to essential minimum. If plans for treatment include methods such as hot water wash or application of Inipol which might affect intertidal or nearshore oil or toxicity levels, contact ADF&G and appropriate Native Corporation for authorization - see Native Corporation Contact List for each Native Corporation's contact person.

AGENCY CONTACT PERSON: ADF&G Jim Fall 267-2359

# FIELD SHORELINE COMMENT SHEET

SEGMENT ST/ BA-06 SUBDIVISION: C (3 of 3) DATE 4/24/90

NAME Michael Buchman SIGNATURE [Signature]

☐ NO TREATMENT RECOMMENDED ☒ TREATMENT SUGGESTED

## COMMENTS

Frequent Tarry asphalt patches on south end beach.  
(map 2) Thick tarry patches observed in rock fissures of beach lands at north end too. ~~Translucent~~ Translucent to silver sheen observed in tide pools there. Tide pools with asphalt were abiotic also. Coat to cover observed in this area of tilted uplifted slate rock outcrop.

## ADEC

NAME John Hayes SIGNATURE [Signature]

☐ NO TREATMENT RECOMMENDED ☒ TREATMENT SUGGESTED

## COMMENTS

① Manual removal and mop up of Asphalt patches U.I.T.Z.. See sketch map #'s 2+3

② Map 3 Oiling in U.I.T.Z. + S.T.Z. oiling is asphalt patches + weathered oil between cobbles. Manually remove + mop up. Shovels + Sorbats  
No S.S. Oiling

## LAND MANAGER

NAME Tom Cronan SIGNATURE [Signature]

☐ NO TREATMENT RECOMMENDED ☒ TREATMENT SUGGESTED

## COMMENTS

Tar patches on hot pocket beach on east end need manual pickup  
No treatment required on remainder of segment except at west end where a 20m x 2m cover of asphalt patches need manual p/u. No bio needed. Oiled veg also noted above 2012 patch in U.I.

## SHORELINE OILING SUMMARY

REVISION NO. 06/13/90

OG Mike Foget NORR Michael Bixbman SEGMENT ST/ BA-06  
 BIO Kathleen Carlin LAND REP (DNR) Ron Greenhow SUBDIVISION C (3 OF 3)  
 EXXON Larry Olson ADEC John Hayes TIME 11:00 to 20:00  
 TEAM NO. 11 TIDE LEVEL + 0.9 DATE 4/24/90  
 EST. SUBDIVISION LENGTH: 3200 m ☒ Sun ☐ Clouds ☐ Fog ☐ Rain ☐ Snow  
 UPLANDS DESCRIPTION: ☐ Grass ☐ Forest ☒ Rock steep rocky backshore  
 SURVEYED FROM: ☒ Foot ☒ Boat ☐ Helo WORKING DIRECTION: 5 to N  
 SURFACE SEDIMENTS: R 45 % B 40 % C 10 % P 5 % G 0 % S 0 % M 0 % V 0 %  
 SLOPE: Long 5 % Hang 55 % Vert 40 % WAVE EXPOSURE: ☐ Low ☒ Med ☐ High  
 OIL CATEGORY LENGTH: W 0 m M 80 m N 78 m VL 50 m NO 2992 m

## SURFACE OIL

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

PAVEMENT H (F) S 10 sq. m by 5 cmPATTIES/TARBALLS 10 BAGSNEAR SHORE SHEEN? ☒ NO BR RW SL TL

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

DID YOU COLLECT DEBRIS?

YES ☒ - NO ☐TYPE 2 tar Patties#BAGS 1

Photographs:

Roll No. ST-11-4Frames 1-8

## SUBSURFACE OIL

| PIT NO. | PIT DEPTH (cm) | SUBSURFACE OIL CHARACTER |    |    |    |    | OILED INTERVAL (CM) | BELOW |    | OIL / FILM COLOR |   |   |   |   |   | PIT ZONE |   |   |   | A N A | SHEEN (V/M) | T  | SURFACE - SUBSURFACE SEDIMENTS |
|---------|----------------|--------------------------|----|----|----|----|---------------------|-------|----|------------------|---|---|---|---|---|----------|---|---|---|-------|-------------|----|--------------------------------|
|         |                | OP                       | OR | OL | OF | NO |                     | VO    | VC | 1                | 2 | 3 | 4 | 5 | 6 | SU       | U | M | U |       |             |    |                                |
| 1       | 25             | X                        |    |    |    |    | 0-5                 | X     |    |                  |   |   | X |   |   | X        |   |   |   |       | Y           | 15 | C, P, G                        |
| 2       | 20             | X                        |    |    |    |    | 0-5                 | X     |    |                  |   |   | X |   |   | X        |   |   |   |       | Y           | 20 | C, P, G                        |
| 3       | 30             |                          |    |    |    | X  | -                   | X     |    |                  |   |   |   |   |   | X        |   |   |   |       | N           | -  | P                              |
| 4       | 30             |                          |    |    |    | X  | -                   | X     |    |                  |   |   |   |   |   | X        |   |   |   |       | N           | -  | P                              |
| 5       | 25             |                          |    |    | X  |    | 0-5                 | X     |    |                  |   | X |   |   |   | X        |   |   |   |       | Y           | 10 | C, P                           |
| 6       | 20             |                          |    |    |    | X  | -                   | X     |    |                  |   |   |   |   |   | X        |   |   |   |       | N           | -  | C, P                           |

## COMMENTS

Oiling was observed at the south end (map 2) and North end (map 3) of the segment, no oiling was observed for most of the segment. The shore zone consisted of high angle bedrock/boulder shore zone w/ a few pocket cobble/pebble beaches located at the southern end of the segment. Most of the oil observed was Asphalt/Patties in the HITZ,

REVIEWED WDATE 4-26-90

SEGMENT ST/ BA-06 SUBDIVISION C (3 OF 3)

[illegible]

REVIEWED SW DATE 4-26-90

SEGMENT BA-06

SUBDIVISION C

DATE 4/24/90

### CHECKLIST

☐ N Arrow  
☐ Approx. Scale  
☐ Seg/Sub Entry  
☐ Oil Dist.  
☐ Width  
☐ Length  
☐ % Cover  
☐ Substrate Character  
☐ Est. HW/LA/VL  
☐ SSL  
☐ Profile Location(s)  
☐ Photo(s)  
☐ Photo Location(s)

### LEGEND

1 ▲

PK - No Subsurface Oil

2 ▲

PK - Subsurface Oil

CT/C

Continuous Distribution

CT/B

Broken Distribution

CT/P

Patchy Distribution

CT/S

Splashed Distribution

Oiled Vegetation

1 ➡

Photo location, direction,  
and number

Scale

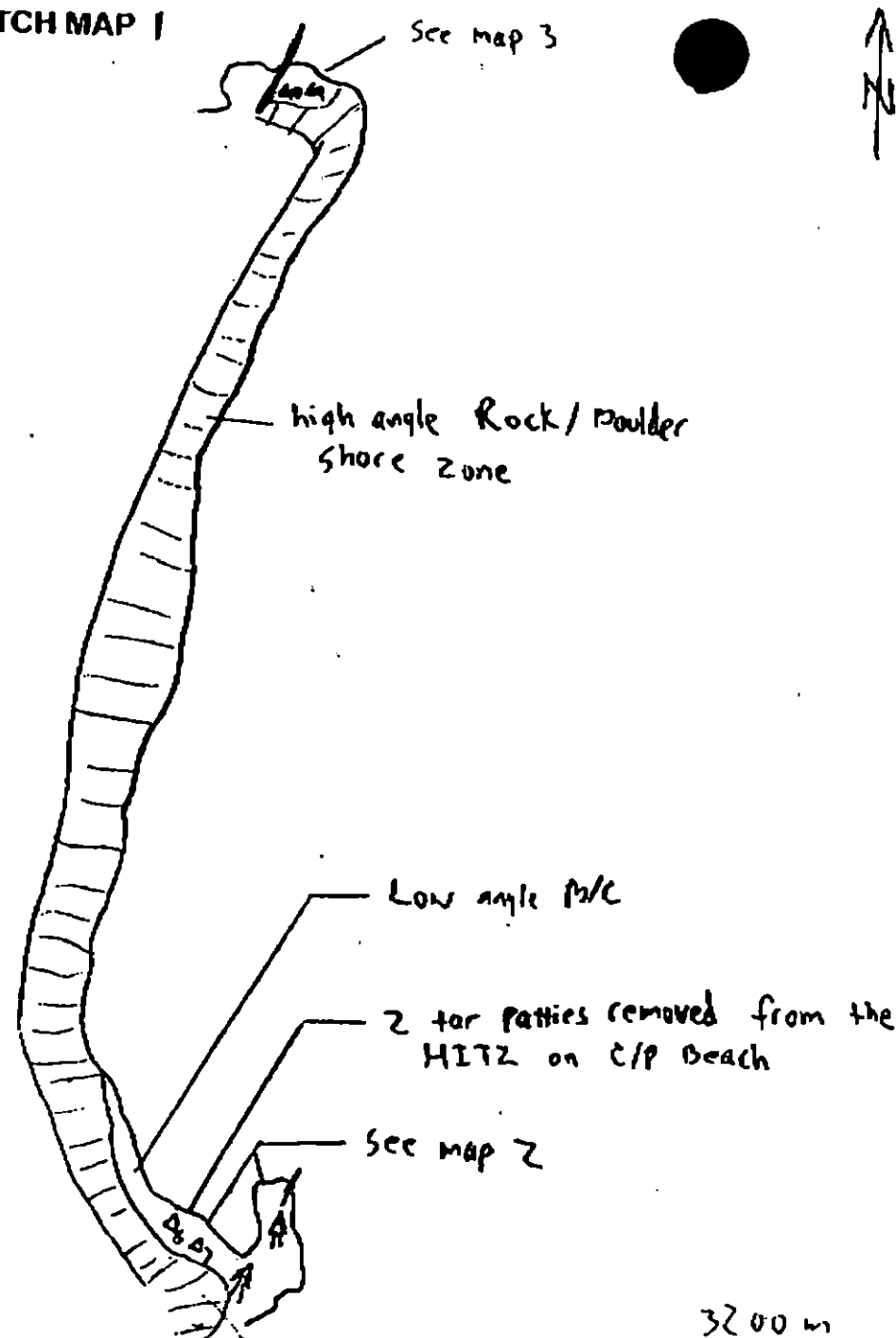
500 m

### Legend

/// - high angle Rock / Boulder  
shore zone

▲ - trees

### SKETCH MAP 1



3200 m

Oil Character Length (m): AP 168 PO 0 CV 0 CT 40 ST 0 MS 0 PT 0 TB 0 FL 0 NO 2992

REVISION: 03/20/90

SEGMENT GA-06SUBDIVISION CDATE 4, 24 90

Scale

50m

SKETCH MAP 2

Legend

/// - Low angle  
Rock outcrop

○ - Large Boulders/Rock

➔ - drift Logs  
supra ITZ

## CHECKLIST

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

## LEGEND

1 Δ

Pt - No Subsurface Oil

2 Δ

Pt - Subsurface Oil

CT/C

Continuous Distribution

CT/B

Broken Oil Infiltration

CT/P

Patchy Distribution

CT/S

Splashed Distribution

Oil Vegetation

1 ➔

Photo location, direction,  
and number3m x 8m  
AP/P in  
the HITZ on  
boulder/cobble1m x 10m  
CT/B on O/R  
in HITZ10m x 60m  
AP/P in the  
HITZ on  
P/C10m x 20m  
AP/S in  
the HITZ  
on P/C3m x 20m AP/S on Low angle  
P/C beach HITZ3m x 10m AP/P on Low angle  
P/C beach in HITZ10m x 20m AP/P on Cobble/pebble  
in the HITZMANUALLY RETRIEVE  
AP PATCHES & BIO

See map 1

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

REVISION: 02/2000

SEGMENT BA-06

SUBDIVISION C

DATE 4/24/90

CHECKLIST

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

LEGEND

1  $\Delta$   
Pt - No Subsurface Oil

2  $\Delta$   
Pt - Subsurface Oil

CT/C  
Continuous Distribution

CT/B  
Broken Distribution

CT/P  
Patchy Distribution

CT/S  
Splashed Distribution

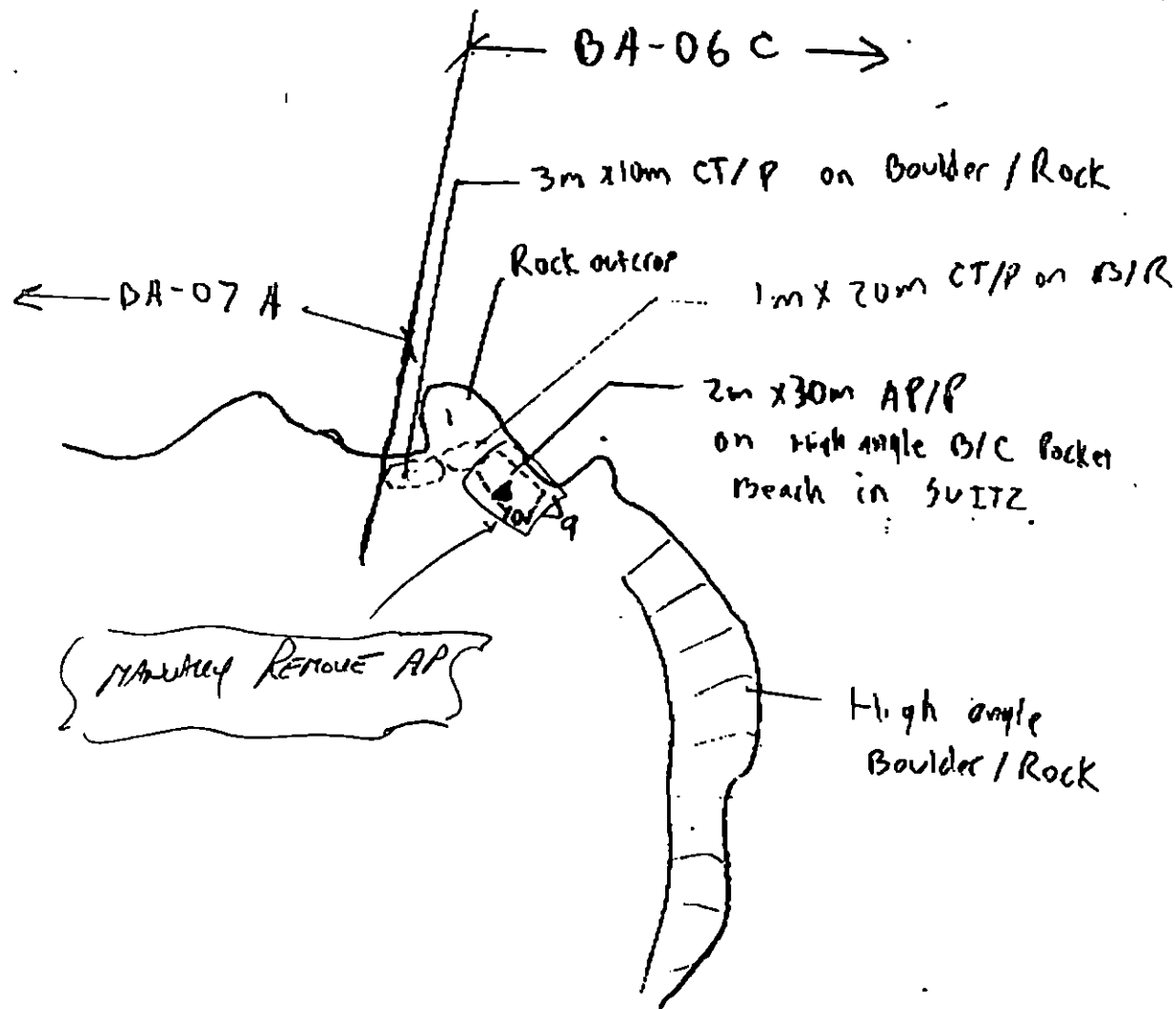
Oiled Vegetation

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

Scale

100m

SKETCH MAP 3



SEE MAP 1

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

REVISION: 022400

# SHORELINE ECOLOGICAL SUMMARY

REVISION: 03/22/90

Segment ST / BA-06 Subdivision C (3 of 3) Date (mo / day / yr) 4 / 24 / 90

Time (24 hr) 1900 Biologist KATHLEEN CONLAN

2006

(A) Substrate type and % of segments:  
(1) Bedrock 45 (2) Boulder 40 (3) Cobble 10 (4) Pebble 5 (5) Sand 0 (6) Silt 0

(B) Overall % cover of biota (% of segment): Dense 80 Moderate 10 Low 10

(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-11-4

Frames 1-8

## BARNACLES

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

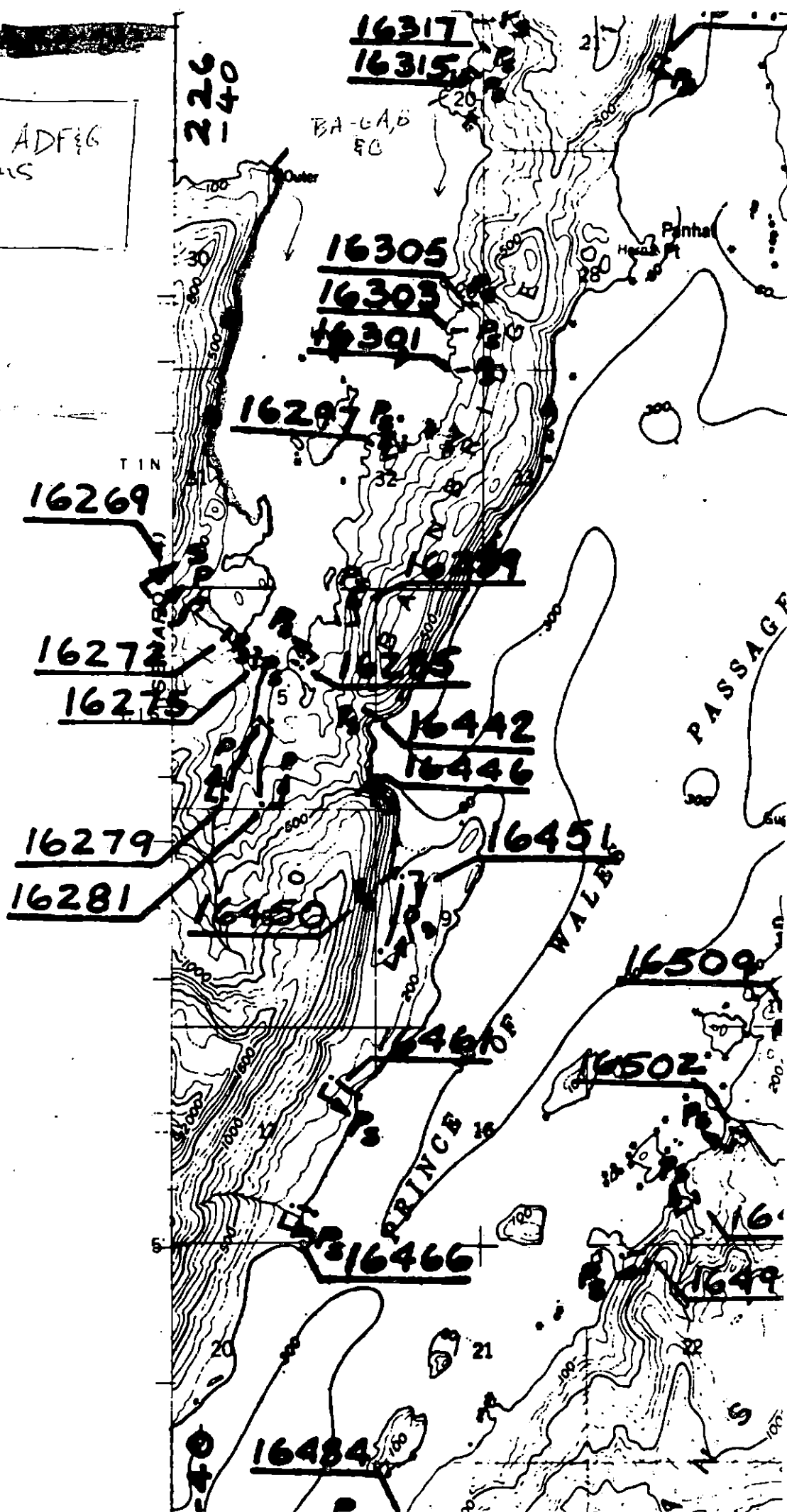
Wildlife Observations/ General Comments:

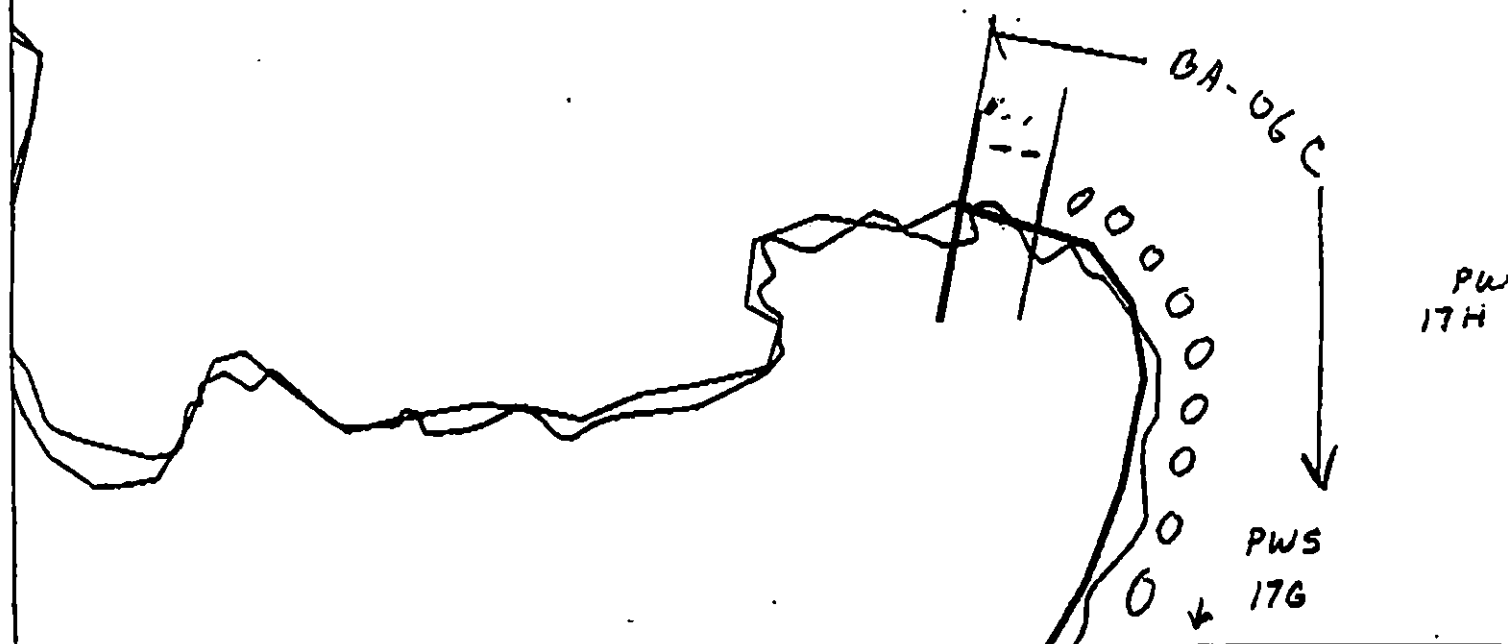
1 BALD EAGLE

Ecological Considerations:

11 CATALOGUED ADFEG  
SALMON STREAMS  
5T (7)

Eagle  
Nests





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

BA-6C

ADEC Segment Length: 16653m

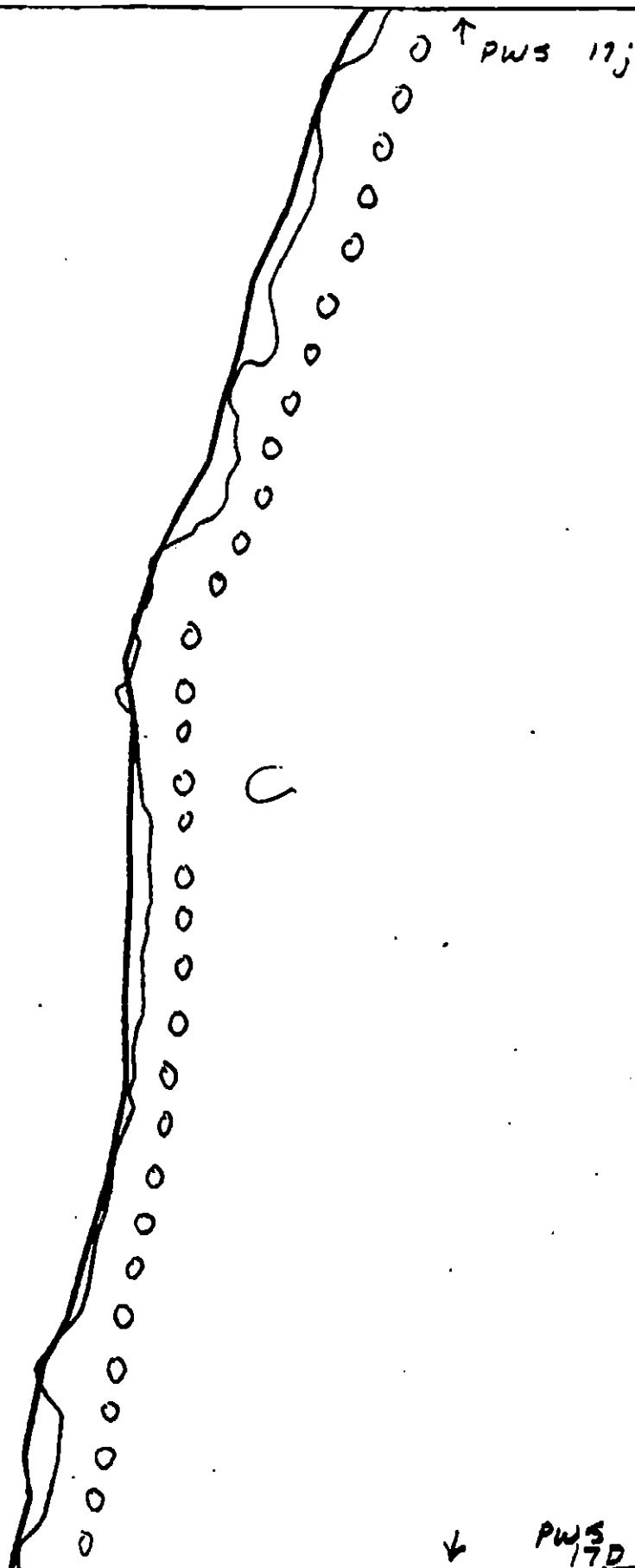


Map Key: PWS-17j

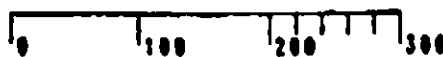
Name: Mike Fogel

Date: 4/24/90

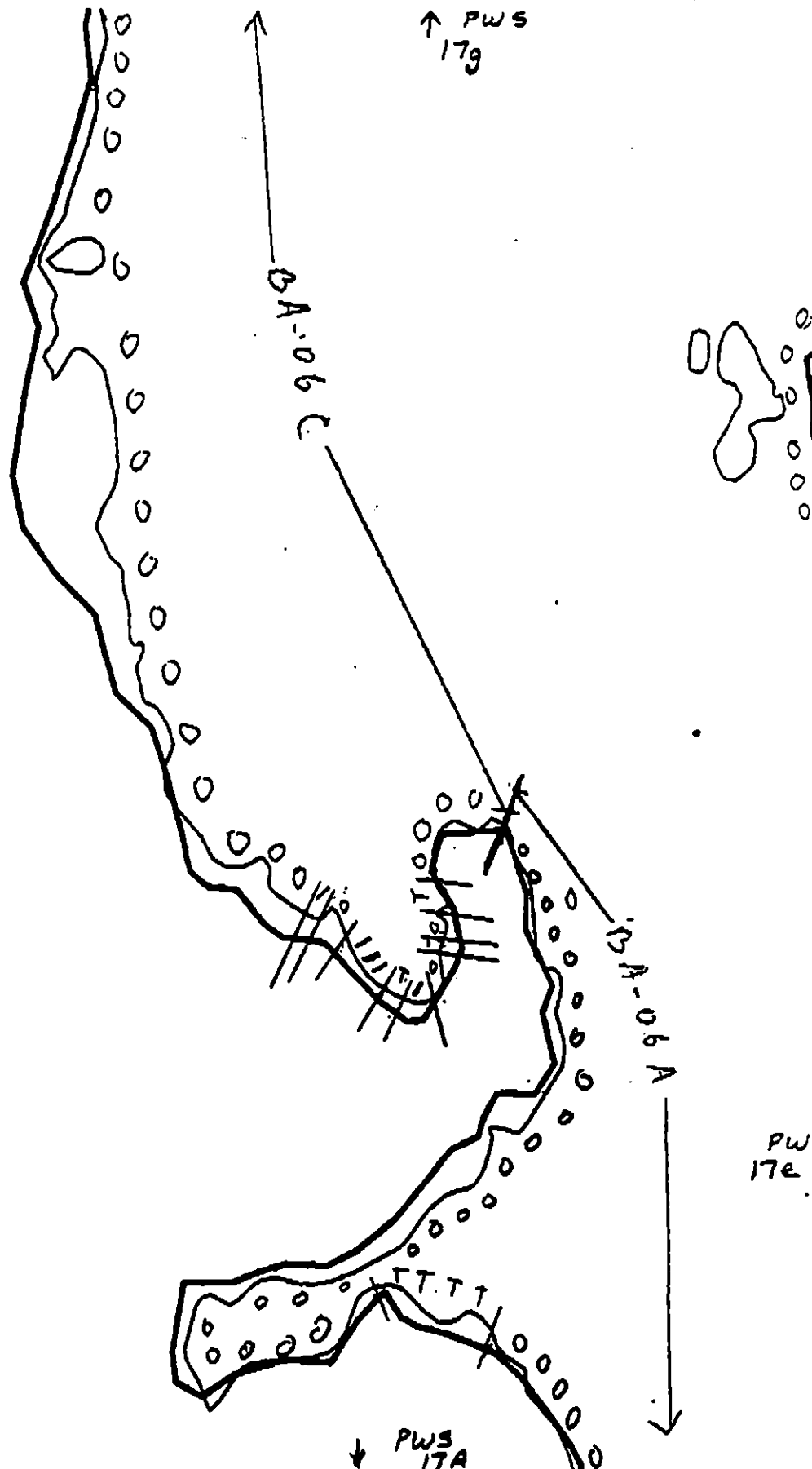
Notes: Entered.



BA-6C



**Data Entered:**



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

BA-6

ADEC Segment Length: 16653m

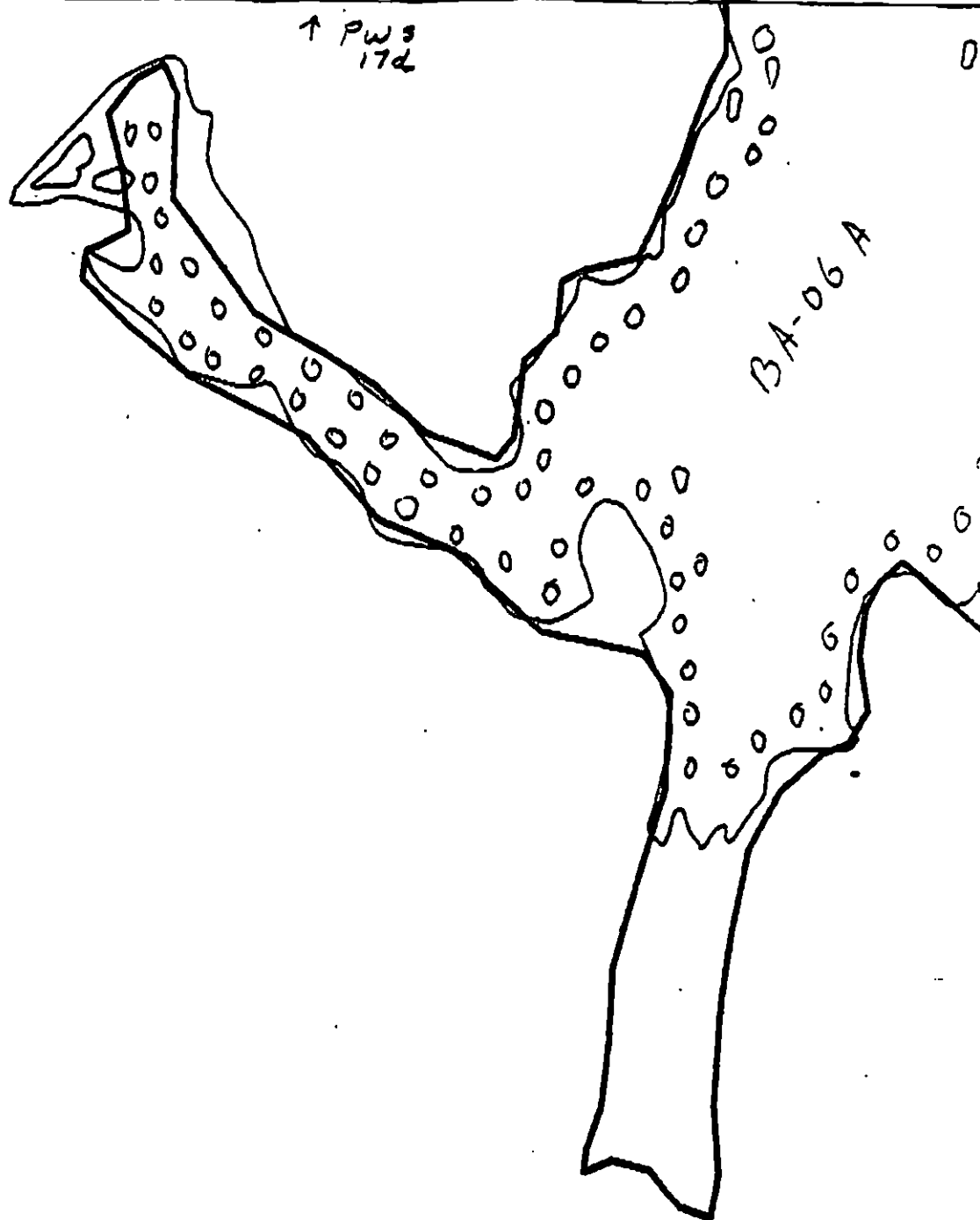


Map Key: PWS-17d

Name: Mike Fogel

Date: 4/24/90

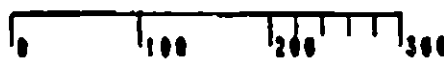
Data Entered:



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

BA-6A

ADEC Segment Length: 16653m



Map Key: PWS-17a

Name: Mike Foget

Date: 4/24/90

Date Entered:

↑  
PWS  
17c

← GA-06A

← PWS  
17a

XXXX Wide  
 /// Medium  
 --- Narrow  
 TTTT Very Light  
 OOOO N. 0:1

BA-64

ADEC Segment Length: 16653m

0 100 200 300

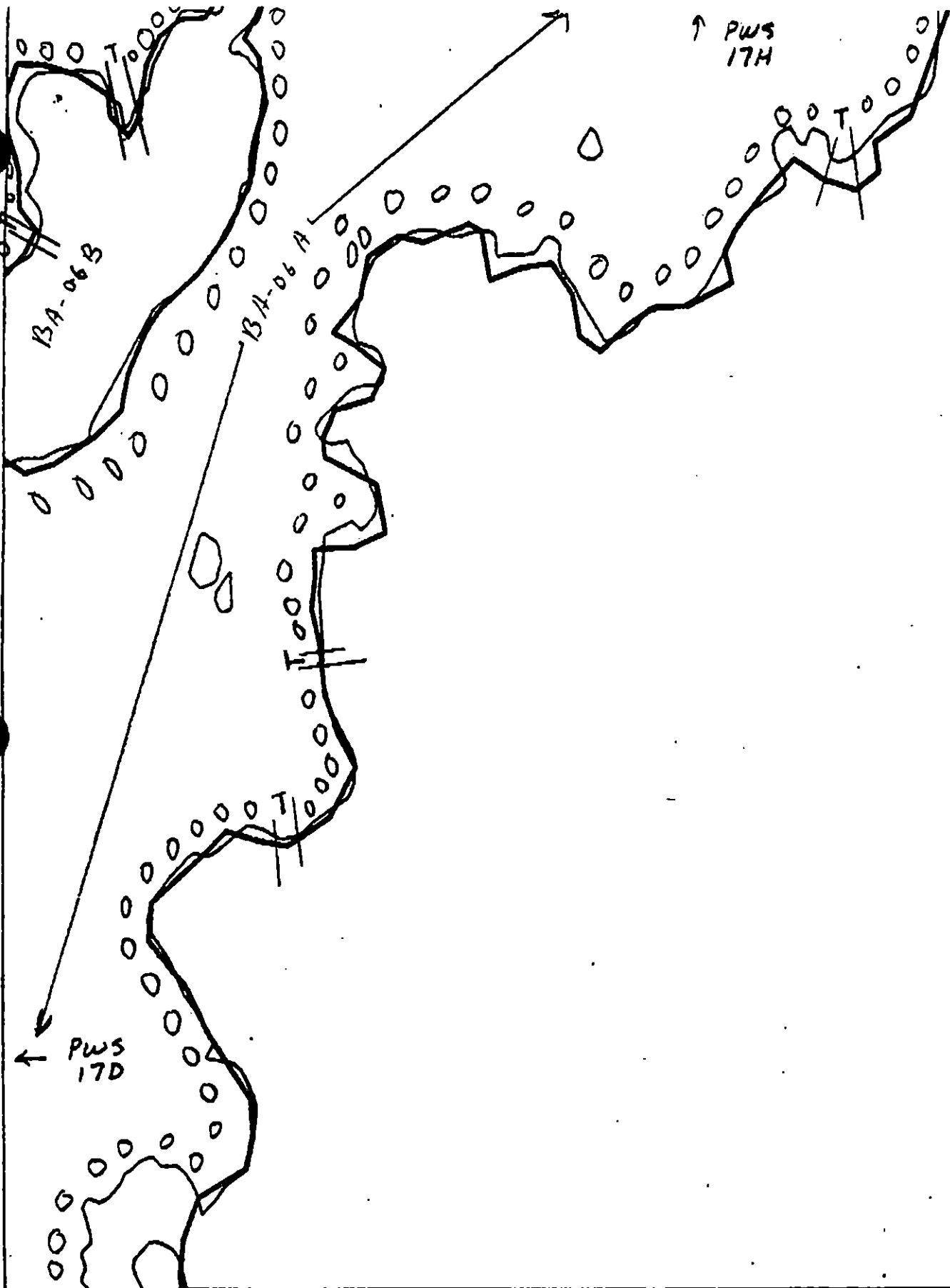
Map Key: PWS-17b

Name: Mike Foye

Date: 4/24/90

Data Entered:

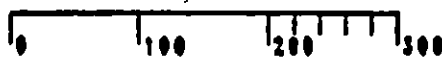
↑ PWS  
17H



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

BA-6

ADEC Segment Length: 16653m



Map Key: PWS-17e

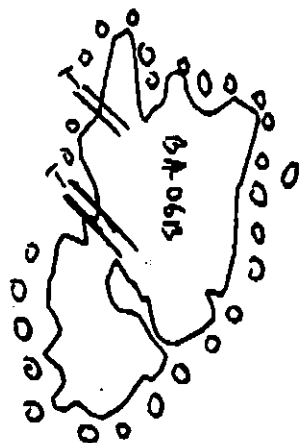
Name: Mike Foye

Date: 4/24/90

Data Entered:

A-06

BA-06A



PWS  
17g



BA-06B

PWS  
17e

XXXX Wide

//// Medium

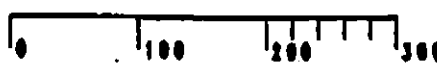
--- Narrow

TTTT Very Light

OOOO No Oil

BA-6A

ADEC Segment Length: 16653m

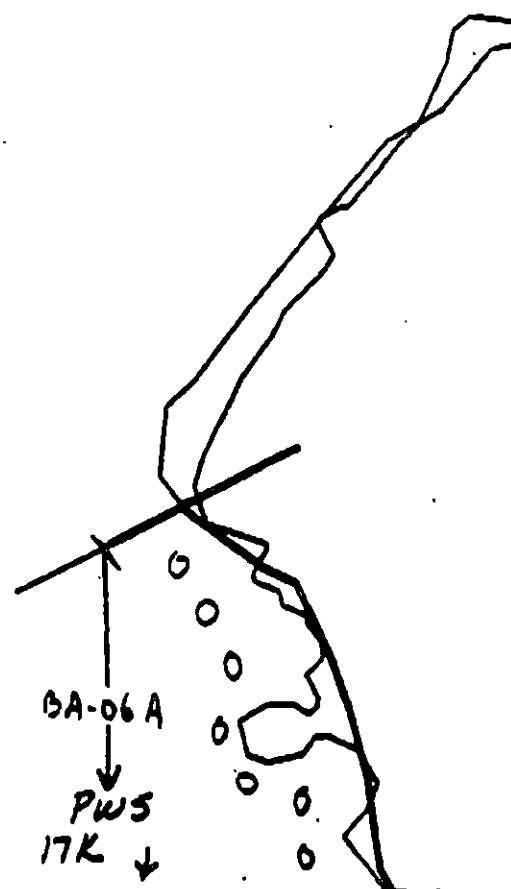


Map Key: PWS-17b

Name: Mike Foye

Date: 4/24/90

Date Entered:



XXXX Wide

//// Medium

--- Narrow

TTTT Very Light

BA-6A

ADEC Segment Length: 16653m

Map Key: PWS-17a

Name: Mike Foye

4/24/90

BA-6A

PWS 171 →

↓ PWS 17H

XXXX Wide

//// Medium

--- Narrow

TTTT Very Light

BA-6A

ADEC Segment Length: 16053m

0 100 200 300

Map Key: PWS-17k

Name: Mike Fogar

Date: 4/24/90

SHORELINE EVALUATION

SEGMENT ST/ BA-06 SUBDIVISION B (2 OF 3) DATE 4/24/90

**SEGMENT ENVIRONMENTAL SENSITIVITIES AND TIME CONSTRAINTS:**

14 Catalogued ADF&G anadromous streams

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

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

5T-7 All bald eagle nests (3/1 to 6/1)-Active eagle nests (3/1 to 9/1)

See attached Ecological Constraint sheet for specific constraints and contacts.

**SUBDIVISION ECOLOGICAL CONSTRAINTS:**

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

**ARCHAEOLOGICAL CONSTRAINTS:**

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

SHPO SIGNATURE: J. Paul McMillan

DATE: 5/10/90

**OILING CATEGORIZATION:**

Wide 0 m: Medium 0 m: Narrow 0 m: V.Light 102 m: No Oil 2682 m

Subsurface Oil Observed: Yes        No X Maximum Depth       

**RECOMMENDATIONS:**

X No Treatment Recommended

       Treatment Recommended

       Manual Pickup

       Bioremediation

       Tarmat Removal

       Snare/Absorbent Booms

       Oil Snares (pom poms)

       Absorbents (pads, rolls, etc)

       Spot Washing:        Wands

       Beach Cleaner

       Other (see comments)

COMMENTS:       

TAG COMMENTS:       

TAG APPROVAL DATE: 5/10/90

ADEC Art Wernick Art Wernick

EXXON Andy Tsch Andy Tsch

NOAA Burl Wernick Burl Wernick

USCG D. D. Rome D. D. Rome

FOSC: W L

DATE: 5-15-90

OG Mike Foget  
 SEGMENT 57 BA-06  
 SUBDIVISION B

DATE 4 / 24 / 90

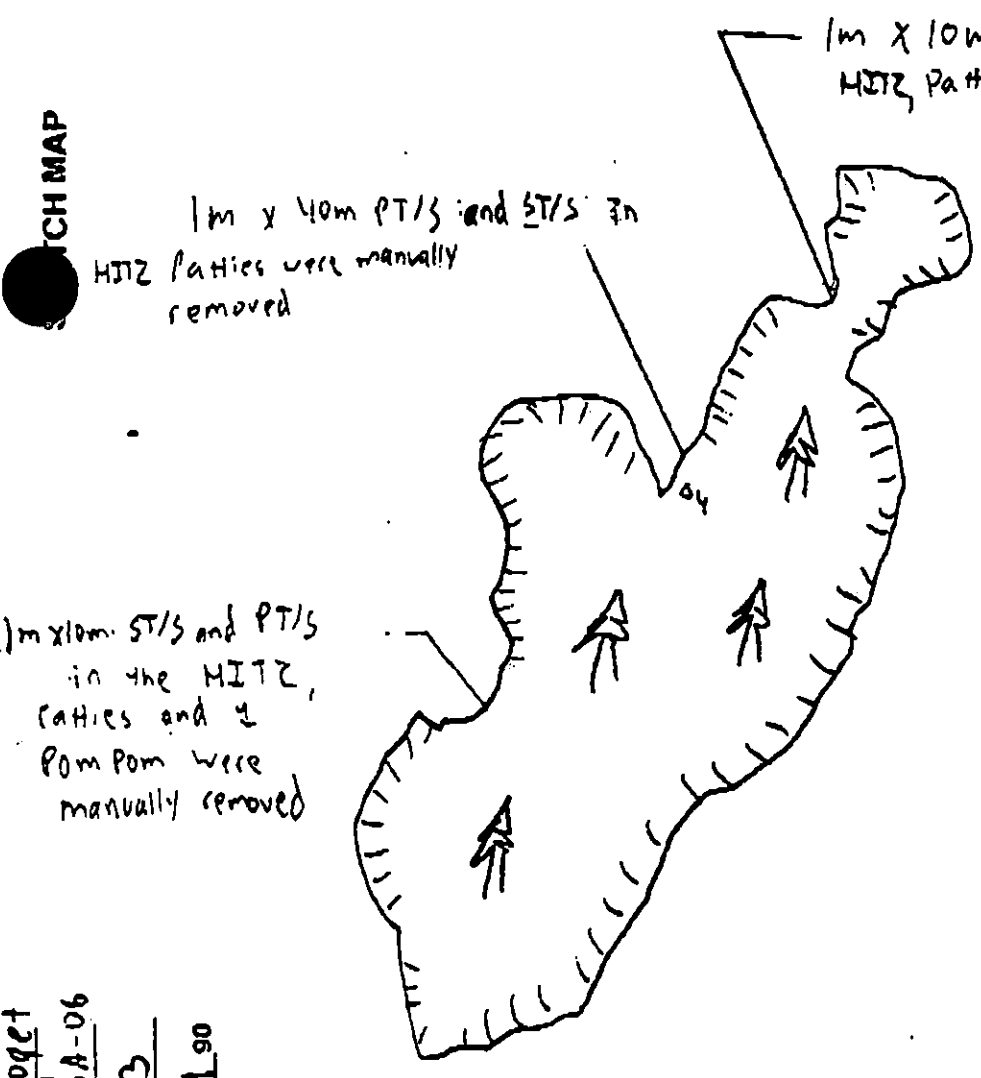
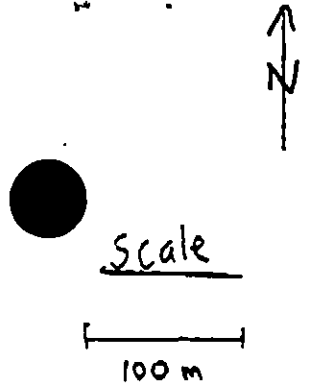
CHECKLIST

- \_\_\_ N Area
- \_\_\_ Approx. Scale
- \_\_\_ Seg/Sub Body
- \_\_\_ Oil Dist.
- \_\_\_ Width
- \_\_\_ Length
- \_\_\_ % Cover
- \_\_\_ Substrate Character
- \_\_\_ Ext. HMLA ML
- \_\_\_ SSL
- \_\_\_ Profile Location(s)
- \_\_\_ Profile(s)
- \_\_\_ Pt Location(s)
- \_\_\_ Photo Location(s)

LEGEND

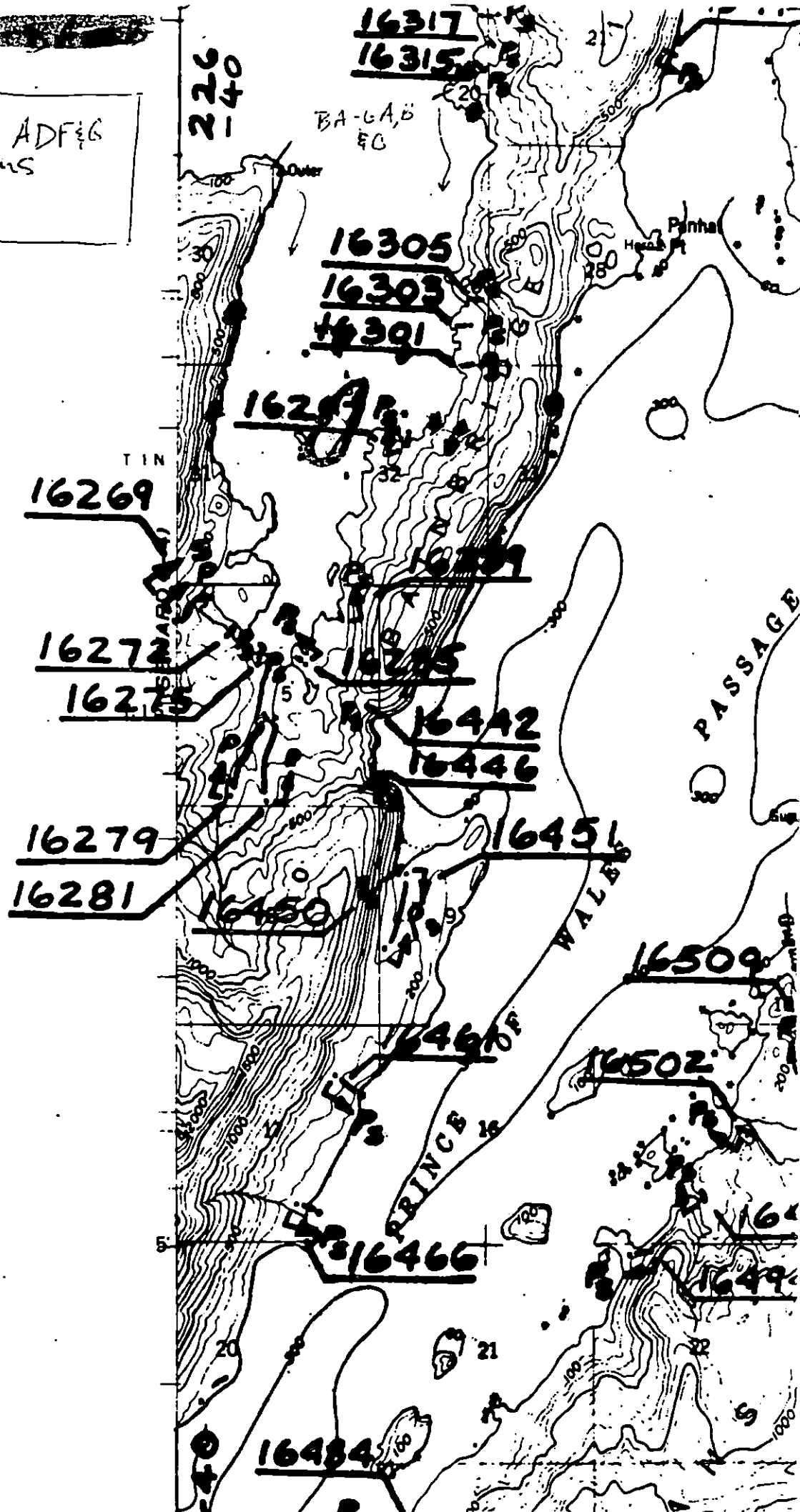
- 1 Δ Pt - No Subsurface Oil
- 2 Δ Pt - Subsurface Oil
- CT/C Continuous Distribution
- CT/B Broken Distribution
- CT/P Patchy Distribution
- CT/S Splashed Distribution
- Clad Vegetation
- Photo location, direction, and number

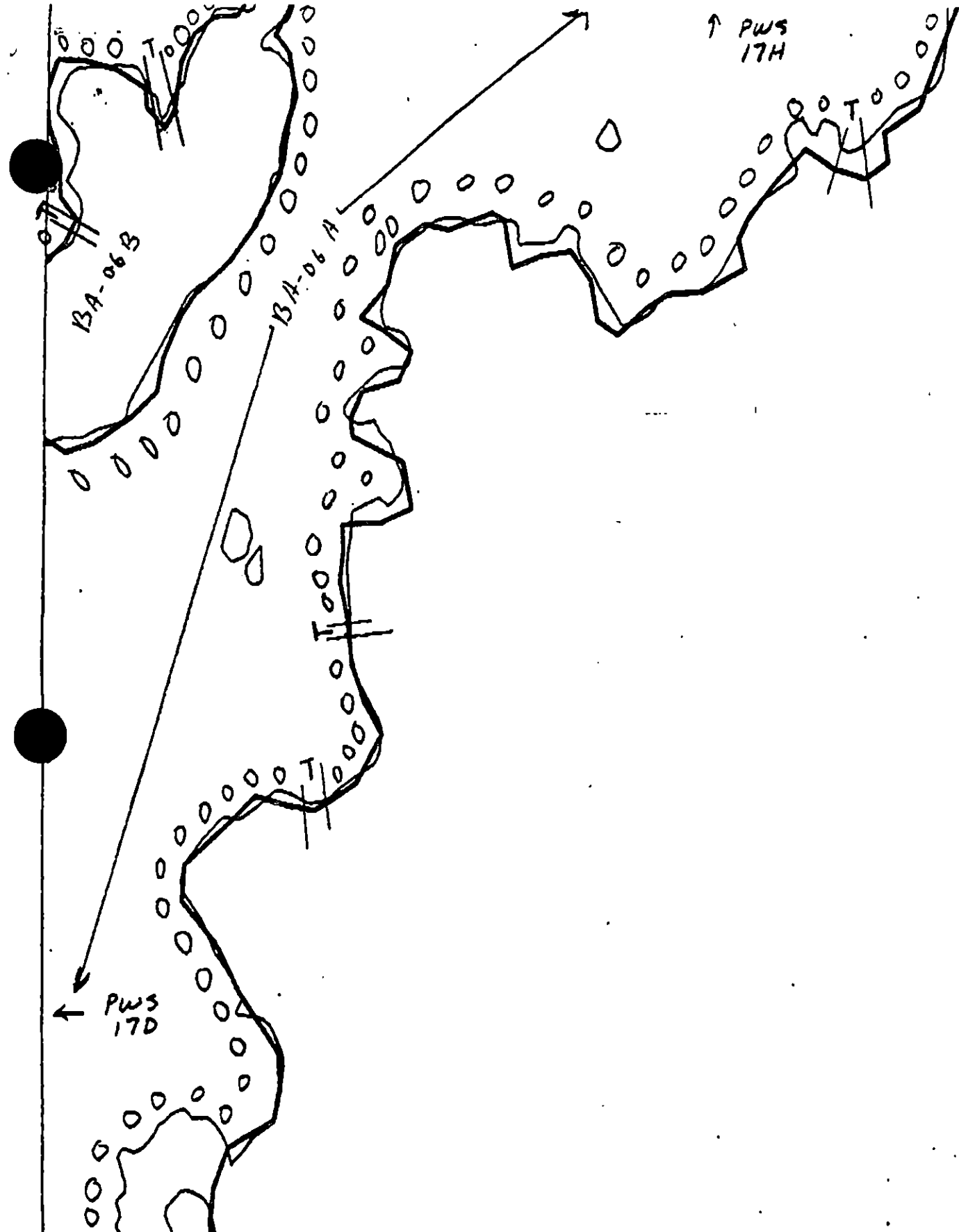
ATCH MAP



Legend  
 /// - high angle  
 B/R shore zone  
 Δ - trees

11 CATALOGUED ADFEG  
SALMON STREAMS  
5T (7)





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

BA-6,

ADEC Segment Length: 16653m

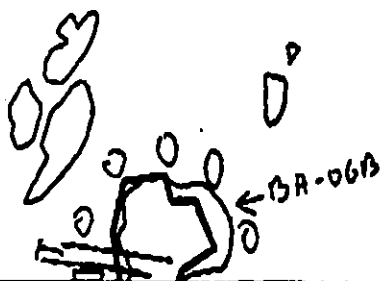
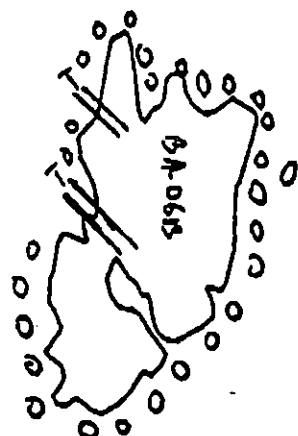


Map Key: PWS-17e  
Name: Mike Foye  
Date: 4/24/90  
Data Entered:

A-06

BA-06A

↑  
PWS  
17K



XXXX Wide

//// Medium

---- Narrow

TTTT Very Light

0000 No Oil

BA-6A

ADEC Segment Length: 16653m

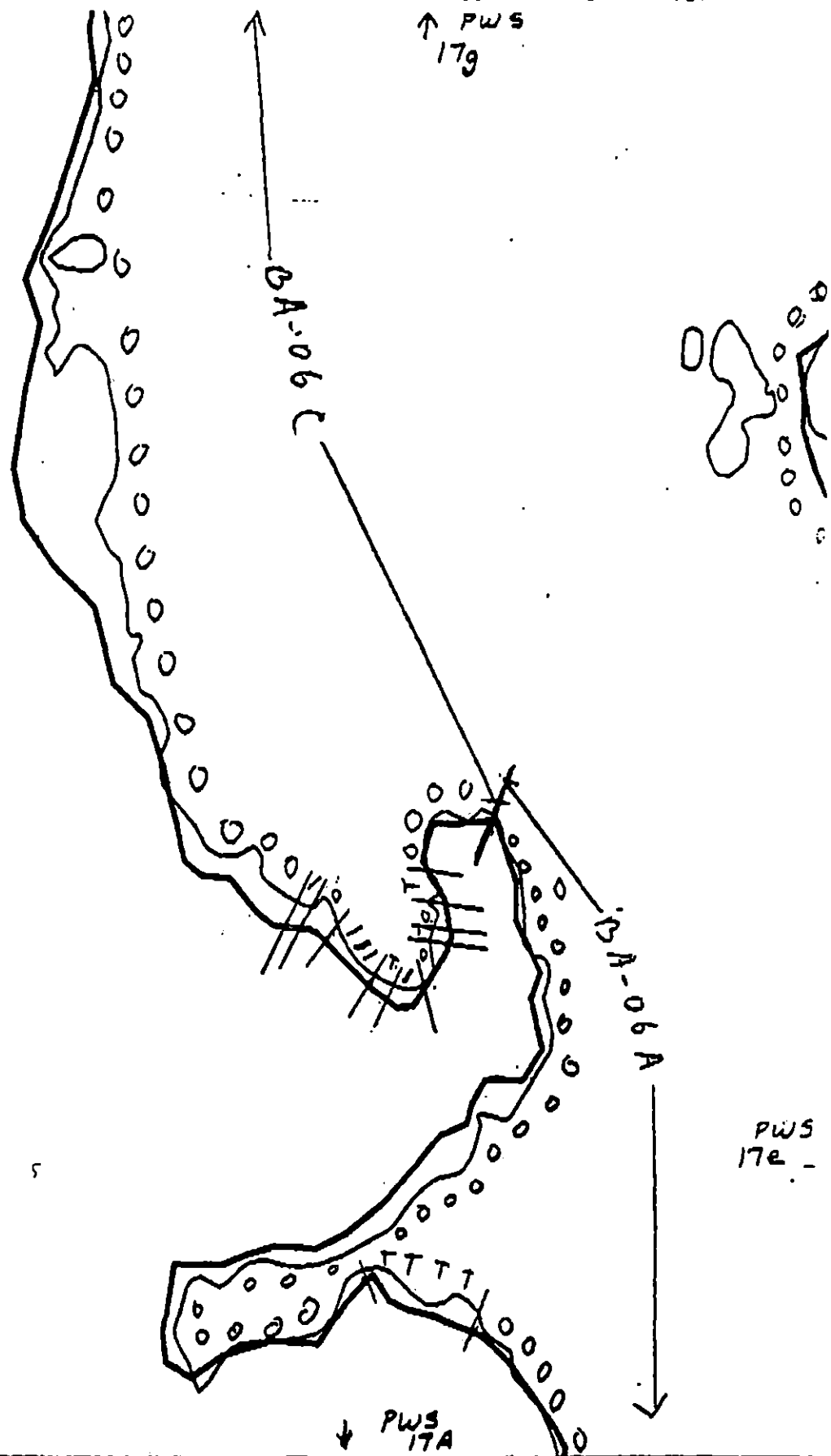


Map Key: PWS-17h

Name: Mike Fogel

Date: 4/24/90

Data Entered:



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

BA-6

ADEC Segment Length: 16653m



Map Key: PWS-17d

Name: Mike Fogert

Date: 4/24/90

Data Entered:

## SHORELINE EVALUATION

SEGMENT ST/ BA-06 SUBDIVISION C (3 OF 3) DATE 4/24/90

**SEGMENT ENVIRONMENTAL SENSITIVITIES AND TIME CONSTRAINTS:**

#### 14 Catalogued ADF&G anadromous streams

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

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

5T-7 All bald eagle nests (3/1 to 6/1)-Active eagle nests (3/1 to 9/1)

See attached Ecological Constraint sheet for specific constraints and contacts.

**SUBDIVISION ECOLOGICAL CONSTRAINTS:**

Avoid any unnecessary disturbance or damage to uncoiled biota and substrate. 5T (2).

**ARCHAEOLOGICAL CONSTRAINT:** If cultural resources are uncovered during shoreline treatment, stop work in the vicinity, mark the location of the find and contact Exxon's Cultural Resource Program immediately (564-3274 (Anchorage) or 229-1508 (24 hrs.)).

SHPO SIGNATURE: Richard Lee Oate DATE: 6/20/90

**OILING CATEGORIZATION:**

Wide\_0\_m: Medium\_120\_m: Narrow\_78\_m: V.Light\_57\_m: No Oil\_3007\_m  
Subsurface Oil Observed: Yes X No Maximum Depth 5 cm

**RECOMMENDATIONS:**

**No Treatment Recommended**

**X Treatment Recommended**

X Manual Pickup

X Bioremediation

X Tarmat Removal

           Snare/Absorbent Booms

Oil Snares (pom poms)

                     Absorbents (pads, rolls, etc)

Spot Washing:                      Wands

           Beach Cleaner

Other (see comments)

COMMENTS: Recommended treatment includes 1) manual removal of tarmats, 2) manual pickup of patties, 3) bioremediation of areas indicated on attached sketch maps. Work should be conducted between 6/1 and 7/10 based on eagle nest and salmon constraints after approval of USFWS regarding eagle nest.

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

TAG APPROVAL DATE: 5/10/90.

ADEC ART WIGNER Sit Wechs

EXXON *ARMY TSM*

NOAA Burk Wescott Burk Wescott

USCG D. D. Rome DA Rome

\* Customable only; NO Inipol

FOSC: A. J. Jaramila DATE: 7/3/80

# PWS, SEWARD AND HOMER ECOLOGICAL CONSTRAINTS

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

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

No disturbance of stream bed or banks unless authorized by ADF&G. No beach flushing into stream drainage. No bioremediation or other chemical application within 100m of stream without authorization from ADF&G. No use of methods which might affect nearshore oil or toxicity levels, such as hot water wash or Inipol application, prior to at least July 1 unless authorized by ADF&G. Treatment which is not intrusive and which will not affect nearshore oil or toxicity levels, such as manual removal, can probably proceed without adherence to time constraints. In any case, contact ADF&G Habitat Division prior to treatment for consultation and/or permit application.

AGENCY CONTACT PERSON: ADF&G John Morrison 267-2324

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

No use of methods which might affect nearshore oil or toxicity levels, such as hot water wash or Inipol application, prior to July 31 unless authorized by ADF&G. Treatment which will not affect nearshore oil or toxicity levels, such as manual or mechanical removal, can probably proceed without adherence to time constraints. Contact ADF&G prior to treatment for confirmation and advice.

AGENCY CONTACT PERSON: ADF&G Larry Peltz 424-3214

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

1E Main Bay Hatchery release (4/20 to 6/15)

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

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

1H Remote release site

No use of methods which might affect nearshore oil or toxicity levels, such as hot water wash or Inipol application, prior to at least July 1 unless authorized by ADF&G and/or PWS Aquaculture Association. Treatment which will not affect nearshore oil or toxicity levels, such as manual or mechanical removal, can probably proceed without adherence to time constraints. Contact ADF&G or PWS Aquaculture Association for confirmation and authorization.

AGENCY CONTACT PERSON: 1E ADF&G Larry Peltz 424-3214

1D 1F 1G PWS Aquaculture Association John McMillan or Bruce Suzumoto 424-7511

1I Gill net area (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 unrolled intertidal and subtidal algae and seagrass. If plans for treatment include methods such as hot water wash or Inipol application which might affect nearshore oil or toxicity levels, contact ADF&G for consultation and authorization.

AGENCY CONTACT PERSON: ADF&G Evelyn Biggs 424-3235

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

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

Restrict boat and air traffic to essential minimum. No personnel within 400m. Aircraft to maintain 800m horizontal and 300m vertical distance from haulouts. No application of Inipol within two weeks of arrival dates (work window at these sites is limited to 7/2 to 7/31). Contact ADF&G and USFWS prior to treatment for confirmation.

AGENCY CONTACT PERSON: US National Marine Fisheries Service Steve Zimmerman 586-7235

ADF&G Don Calkins 267-2403

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

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

AGENCY CONTACT PERSON: USFWS Jill Parker 786-3377

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

Restrict all activity to essential minimum, especially air traffic. Contact USFWS and ADF&G for confirmation.

AGENCY CONTACT PERSON: USFWS Jill Parker 786-3377

ADF&G Tom Roth 267-2208

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 designation

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

7H Finfish harvesting

Deer harvesting (8/15 to 2/28)

Invertebrate harvesting

Contact ADF&G and appropriate Native Corporation for specific dates, locations, and constraints. Restrict boat and air traffic and beach disturbance to essential minimum. If plans for treatment include methods such as hot water wash or application of Inipol which might affect intertidal or nearshore oil or toxicity levels, contact ADF&G and appropriate Native Corporation for authorization - see Native Corporation Contact List for each Native Corporation's contact person.

AGENCY CONTACT PERSON: ADF&G Jim Fall 267-2359

# FIELD SHORELINE COMMENT SHEET

SEGMENT ST/ BA-06 SUBDIVISION: C (3 of 3) DATE 4/24/90

NAME Michael Buchner SIGNATURE [Signature]

☐ NO TREATMENT RECOMMENDED

☒ TREATMENT SUGGESTED

## COMMENTS

Frequent Tarry asphalt patches on south end beach.  
(map 2) Thick Tarry patches observed in rock fissures of headlands at north end too. ~~Translucent~~ Translucent to silver sheen observed in tide pools there. Tide pools with asphalt were abiotic also. Coat to cover observed in this area of tilted uplifted slate rock outcrop.

## ADEC

NAME John Hayes SIGNATURE [Signature]

☐ NO TREATMENT RECOMMENDED

☒ TREATMENT SUGGESTED

## COMMENTS

① Manual removal and mop up of Asphalt patches U.I.T.Z.. See sketch map #'s 2+3

② Map 3 Oiling in U.I.T.Z. + S.T.Z. oiling is asphalt patches + weathered oil between cobbles. Manually remove + mop up. Shovels + Sorbats  
No S.S. Oiling

## LAND MANAGER

NAME Ben Cronan SIGNATURE [Signature]

☐ NO TREATMENT RECOMMENDED

☒ TREATMENT SUGGESTED

## COMMENTS

Tar patches on hot pocket beach on east end need manual pickup  
No treatment required on remainder of segment except at west end where a 20m x 2m cover of asphalt patches need manual p/u. No bio needed. Oiled veg also noted above 2012 patch in UI.

## SHORELINE OILING SUMMARY

REVISION NO. 06/12/90

OG Mike Foget NORR Michael Bixbman SEGMENT STI BA-06  
 BIO Kathleen Coolin LAND REP (DNR) Ron Crenshaw SUBDIVISION C (3 OF 3)  
 EXXON Larry Olson ADEC John Hayes TIME 11:00 to 22:00  
 TEAM NO. 11 TIDE LEVEL + 0.9 DATE 4/24/90  
 EST. SUBDIVISION LENGTH: 3200 m ☒ Sun ☐ Clouds ☐ Fog ☐ Rain ☐ Snow  
 UPLANDS DESCRIPTION: ☐ Grass ☐ Forest ☒ Rock steep rocky backshore  
 SURVEYED FROM: ☒ Foot ☒ Boat ☐ Helo WORKING DIRECTION: S to N  
 SURFACE SEDIMENTS: R 45 % B 40 % C 10 % P 5 % G 0 % S 0 % M 0 % V 0 %  
 SLOPE: Long 5 % Hang 55 % Vert 40 % WAVE EXPOSURE: ☐ Low ☒ Med ☐ High  
 OIL CATEGORY LENGTH: W 0 m M 80 m N 78 m VL 50 m NO 2992 m

## SURFACE OIL

| CHARACTER        | DISTRIBUTION |    |    |    | OIL / FILM COLOR |    |    |    |    |    | IMPACTED ZONES |    |   |   |
|------------------|--------------|----|----|----|------------------|----|----|----|----|----|----------------|----|---|---|
|                  | 10           | 15 | 10 | 15 | 10               | 15 | 10 | 15 | 10 | 15 | SU             | UI | M | U |
| ASPHALT PAVEMENT |              |    | X  | X  | X                |    |    |    |    |    | X              |    |   |   |
| POOLED           |              |    |    |    |                  |    |    |    |    |    |                |    |   |   |
| COVER            |              |    |    |    |                  |    |    |    |    |    |                |    |   |   |
| COAT             |              |    | X  |    | X                |    |    |    |    |    | X              |    |   |   |
| STAIN            |              |    |    |    |                  |    |    |    |    |    |                |    |   |   |
| MOUSSE           |              |    |    |    |                  |    |    |    |    |    |                |    |   |   |
| PATTIES          |              |    | X  | X  | X                |    |    |    |    |    | X              |    |   |   |
| TARBALLS         |              |    |    |    |                  |    |    |    |    |    |                |    |   |   |
| LM               |              |    |    |    |                  |    |    |    |    |    |                |    |   |   |
| NO OIL           |              |    |    |    |                  |    |    |    |    |    | X              |    | X | X |

PAVEMENT H ☒ S 10 sq. m by 5 cmPATTIES/TARBALLS 10 BAGSNEAR SHORE SHEEN? ☒ BR RW SL TL

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

DID YOU COLLECT DEBRIS?

YES ☒ NO ☐TYPE 2 tar Patties#BAGS 1

Photographs:

Roll No. ST-11-4Frames 1-8

## SUBSURFACE OIL

| PIT NO. | PIT DEPTH (cm) | SUBSURFACE OIL CHARACTER |    |    |    |    | OILED INTERVAL (CM) | BELOW |    | OIL / FILM COLOR |          |          |          |          |    | PIT ZONE |   |    |  | A<br>N<br>A | SHEEN (V/N) | ▽  | SURFACE - SUBSURFACE SEDIMENTS |         |
|---------|----------------|--------------------------|----|----|----|----|---------------------|-------|----|------------------|----------|----------|----------|----------|----|----------|---|----|--|-------------|-------------|----|--------------------------------|---------|
|         |                | OP                       | OR | OL | OF | NO |                     | UG    | UC | 10<br>15         | 10<br>15 | 10<br>15 | 10<br>15 | 10<br>15 | SU | UI       | M | LI |  |             |             |    |                                |         |
| 1       | 25             | X                        |    |    |    |    | 0-5                 |       | X  |                  |          |          | X        |          |    | X        |   |    |  |             | Y           | 15 |                                | C, P, G |
| 2       | 20             | X                        |    |    |    |    | 0-5                 |       | X  |                  |          |          | X        |          |    | X        |   |    |  |             | Y           | 20 |                                | C, P, G |
| 3       | 30             |                          |    |    |    | X  | .                   |       | X  |                  |          |          |          |          |    | X        |   |    |  |             | N           | -  |                                | P       |
| 4       | 30             |                          |    |    |    | X  | .                   |       | X  |                  |          |          |          |          |    | X        |   |    |  |             | N           | -  |                                | P       |
| 5       | 25             |                          |    |    | X  |    | 0-5                 |       | X  |                  |          | X        |          |          |    | X        |   |    |  |             | Y           | 10 |                                | C, P    |
| 6       | 20             |                          |    |    |    | X  | .                   |       | X  |                  |          |          |          |          |    | X        |   |    |  |             | N           | -  |                                | C, P    |

## COMMENTS

Oiling was observed at the south end (map 2) and North end (map 3) of the segment, no oiling was observed for most of the segment. The shore zone consisted of high angle bedrock/boulder shore zone w/ a few pocket cobble/pebble beaches located at the southern end of the segment. Most of the oil observed was Asphalt/Patties in the HITZ.

REVIEWED W DATE 4-26-90

SEGMENT ST/ BA-06 SUBDIVISION C (3 OF 3)

REVISION 04-13-20

[illegible]

## COMMENTS

REVIEWED fw DATE 4-26-90

SEGMENT BA-06

SUBDIVISION C

DATE 4 / 24 90

# CHECKLIST

- ☐ N Arrow
- ☐ Approx. Scale
- ☐ Seg/Sub Entry
- ☐ Oil Dist.
- ☐ Width
- ☐ Length
- ☐ % Cover
- ☐ Substrate Character
- ☐ Est. HPA/LA/VL
- ☐ SSL
- ☐ Profile Location(s)
- ☐ Profile(s)
- ☐ PH Location(s)
- ☐ Photo Location(s)

## LEGEND

1 ▲  
Pit - No Subsurface Oil

2 ▲  
Pit - Subsurface Oil

CT/C  
Continuous Distribution

CT/B  
Broken Distribution

CT/P  
Patchy Distribution

CT/S  
Splashed Distribution

Oiled Vegetation

1 →  
Photo location, direction,  
and number

Scale

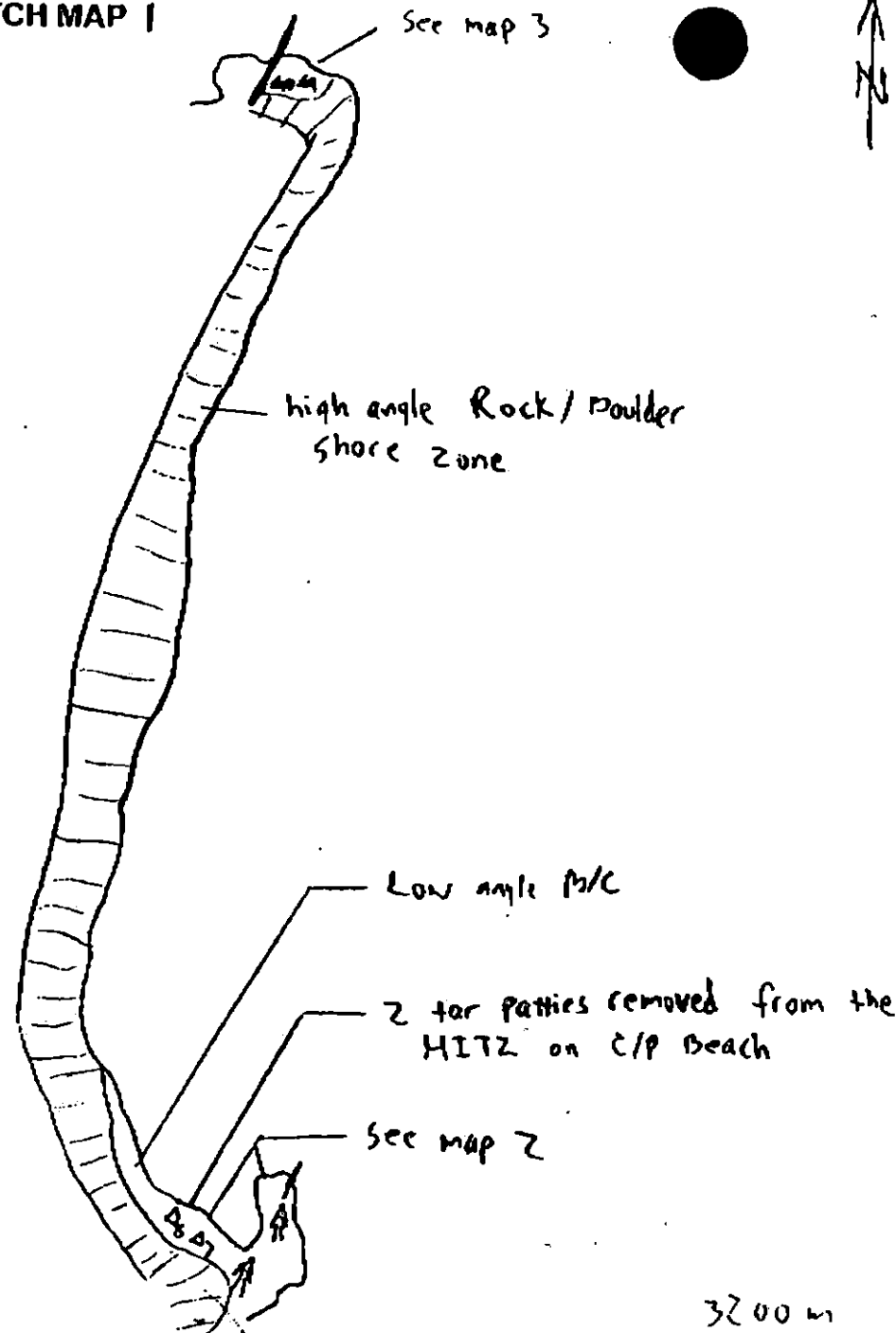
500 m

## Legend

/// - high angle Rock / Boulder  
Shore Zone

▲ - trees

## SKETCH MAP 1



Oil Character Length (m): AP 168 PO 0 CV 0 CT 40 ST 0 MS 0 PT 0 TB 0 FL 0 NO 2992

REVISION: 02/24/90

SEGMENT BA-06SUBDIVISION CDATE 4, 24 90

Scale

50m

SKETCH MAP 2

Legend

/// - Low angle  
Rock outcrop

○ - Large Boulders/Rock

➔ - drift Logs  
supra ITZ

## CHECKLIST

- ... N Arrow
- ... Approx. Scale
- ... Seg/Sub Bdry
- ... Ch Dist.
- ... Width
- ... Length
- ... % Cover
- ... Substrate Character
- ... Est HML/LWL
- ... SSI
- ... Profile Location(s)
- ... Profile(s)
- ... Pt Location(s)
- ... Photo Location(s)

## LEGEND

1 Δ

Pt - No Subsurface Oil

2 ▲

Pt - Subsurface Oil

CT/C

Continuous Distribution

CT/B

Broken Distribution

CT/P

Patchy Distribution

CT/S

Splashed Distribution

Circled Vegetation

1 ➔

Photo location, direction,  
and number3m X 8m  
AP/P in  
the HITZ on  
boulder/cobble1m X 10m  
CT/B on O/R  
in HITZ10m X 60m  
AP/P in the  
HITZ on  
P/C10m X 20m  
AP/S in  
the HITZ  
on P/C3m X 20m AP/S on Low angle  
P/C beach HITZ3m X 10m AP/P on Low angle  
P/C beach in HITZ10m X 20m AP/P on cobble/pebble  
in the HITZMANUALLY RETROFIT  
AP PARTIES & BIO

See map 1

GIL Character length (m): AP \_\_\_\_\_ PO \_\_\_\_\_ CV \_\_\_\_\_ CT \_\_\_\_\_ ST \_\_\_\_\_ MS \_\_\_\_\_ PT \_\_\_\_\_ TB \_\_\_\_\_ FL \_\_\_\_\_ NO \_\_\_\_\_

REVISION 03/2000

SEGMENT BA-06

SUBDIVISION C

DATE 4, 24 90

# CHECKLIST

- ☐ N Arrow
- ☐ Approx. Scale
- ☐ Seg/Sub Bndry
- ☐ Ol Dist.
- ☐ Width
- ☐ Length
- ☐ % Cover
- ☐ Substrate Character
- ☐ Est. HML/LML
- ☐ SSI
- ☐ Profile Location(s)
- ☐ Profile(s)
- ☐ Pt Location(s)
- ☐ Photo Location(s)

Scale

100m

# LEGEND

1 ▲  
Pt - No Subsurface Oil

2 ▲  
Pt - Subsurface Oil

CT/C  
Continuous Distribution

CT/B  
Broken Distribution

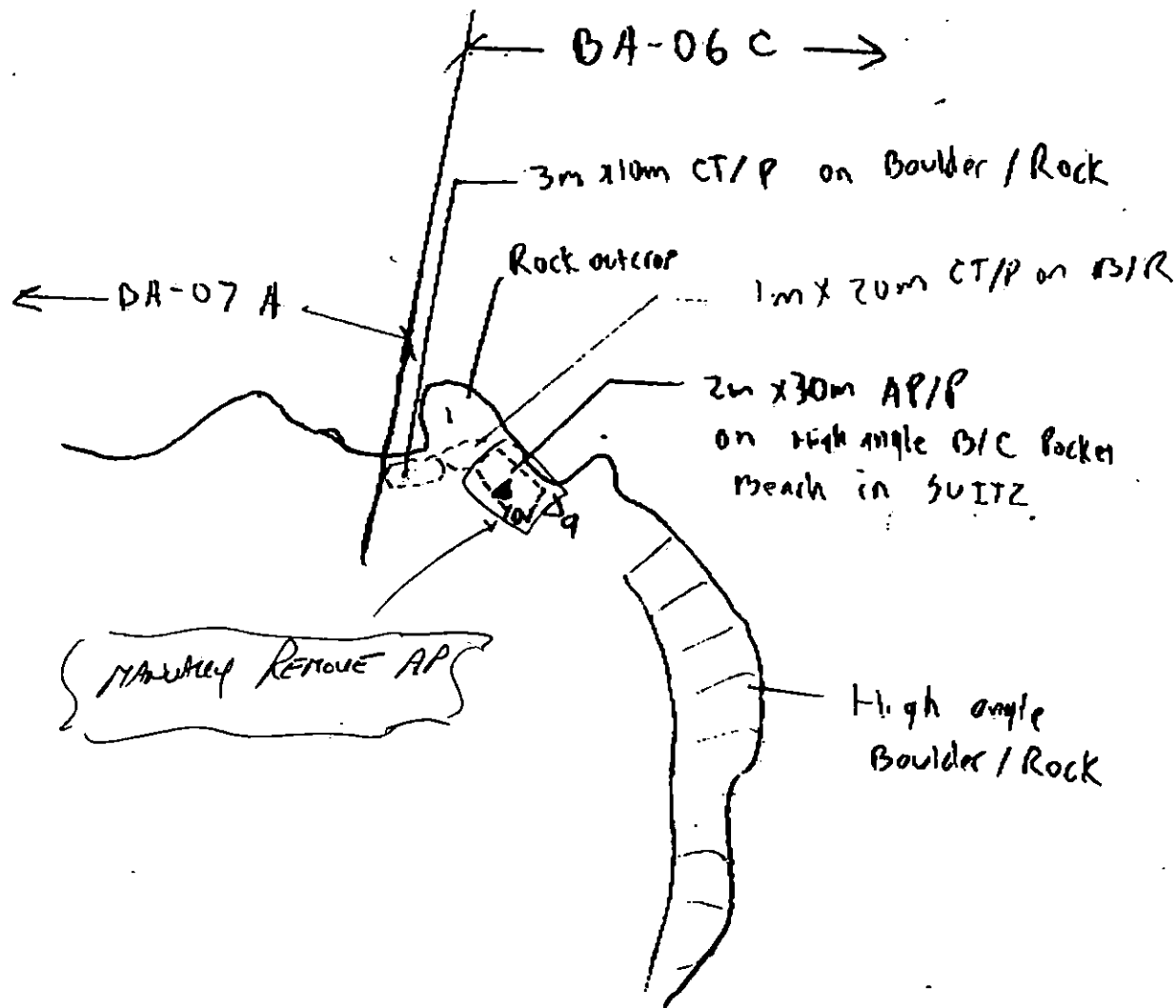
CT/P  
Patchy Distribution

CT/S  
Splashed Distribution

Oiled Vegetation

1 ➡  
Photo location, direction,  
and number

# SKETCH MAP 3



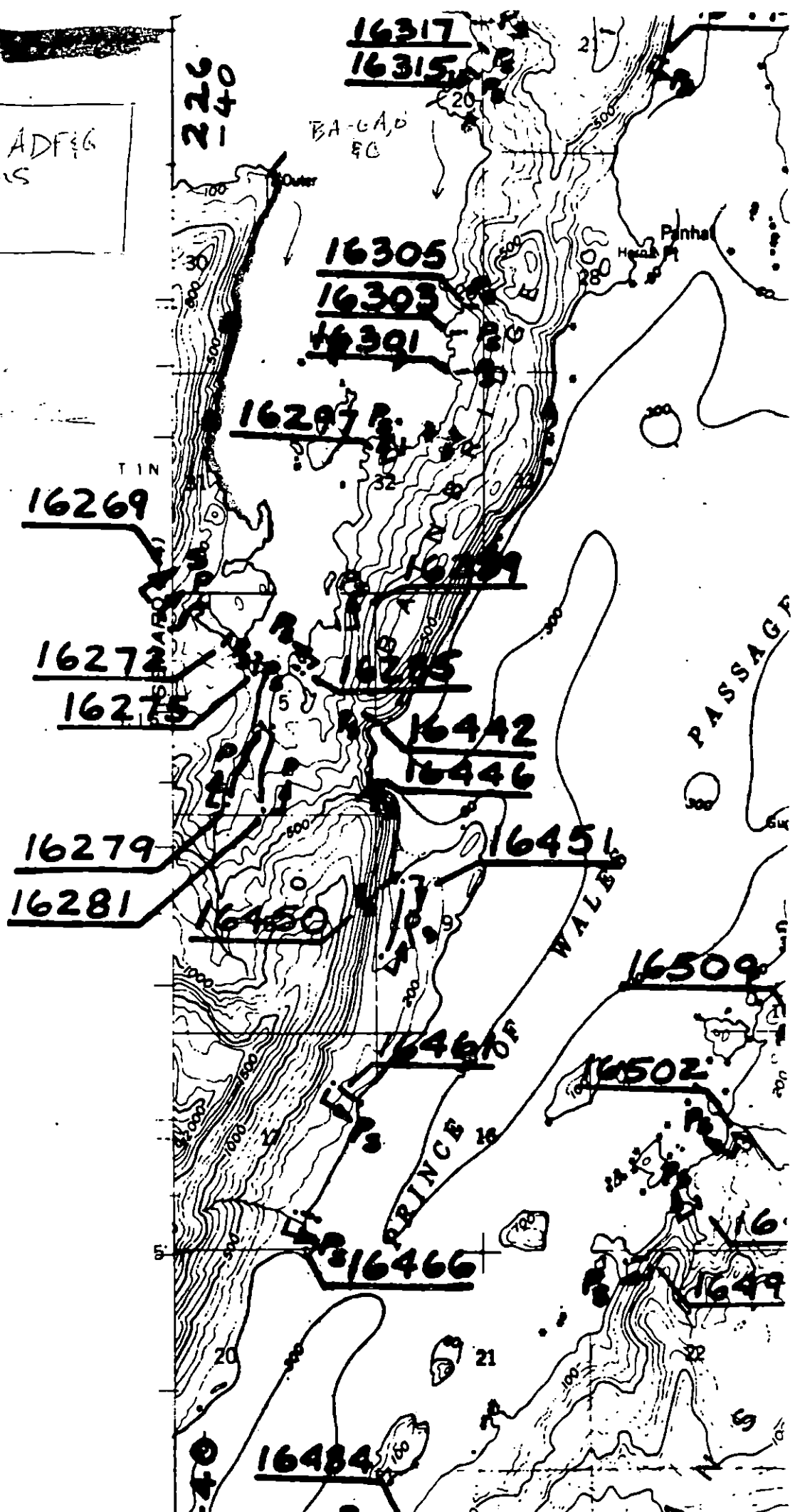
SEE MAP 1

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

REVISION: 03/24/90

11 CATALOGUED ADFEG  
SALMON STREAMS  
ST (7)

Eagle  
Nests



# SHORELINE ECOLOGICAL SUMMARY

REVISION: 03/22/90

Segment ST / BA-06 Subdivision C (3 OF 3) Date (mo/day/yr) 4/24/90

Time (24 hr) 1900- Biologist KATHLEEN CONLAN  
2006

(A) Substrate type and % of segments:  
(1) Bedrock 45 (2) Boulder 40 (3) Cobble 10 (4) Pebble 5 (5) Sand 0 (6) Silt 0

(B) Overall % cover of biota (% of segment): Dense 80 Moderate 10 Low 10

(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-11-4

Frames 1-8

## BARNACLES

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

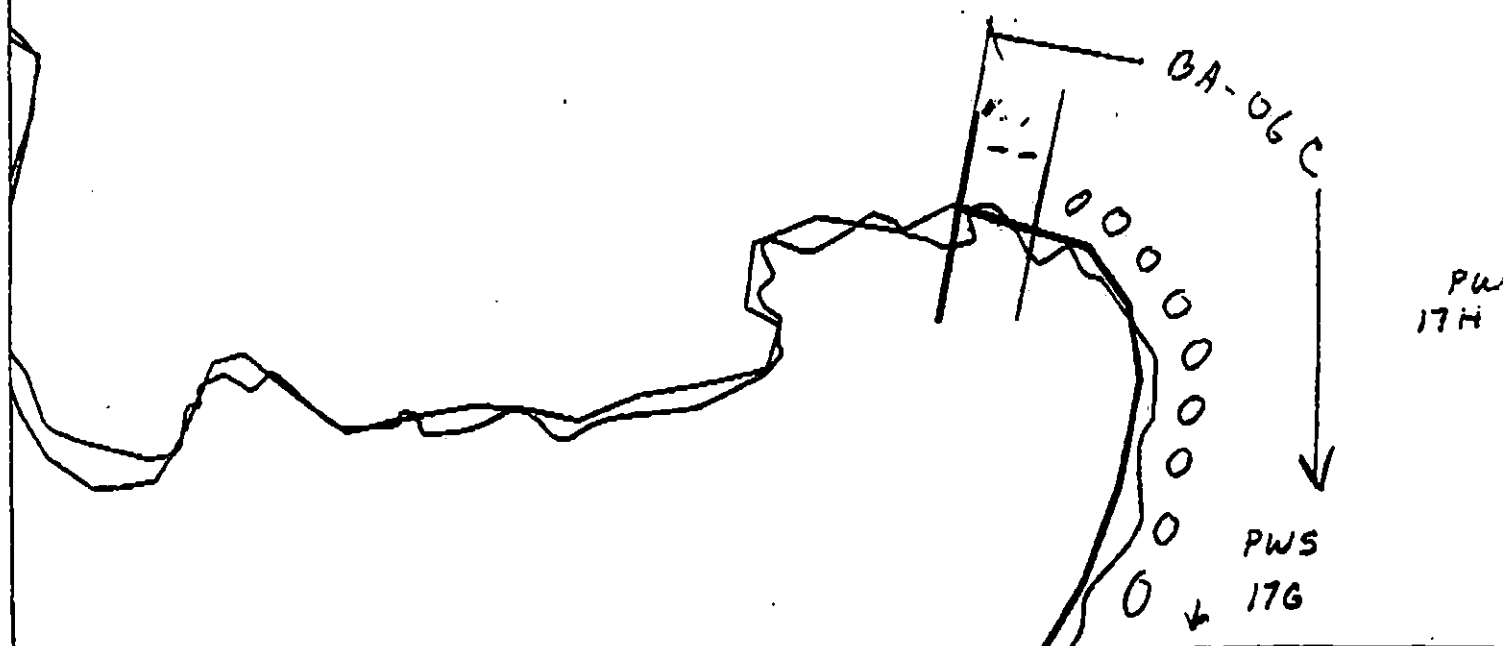
| Dense |    |    | Moderate |    |    | Sparse |    |    | Rare |    |    |
|-------|----|----|----------|----|----|--------|----|----|------|----|----|
| 1U    | 1M | 1L | 1U       | 1M | 1L | 1U     | 1M | 1L | 1U   | 1M | 1L |
| 2     | 2  | 2  | 2        | 2  | 2  | 2      | 2  | 2  | 2    | 2  | 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:

1 BALD EAGLE

Ecological Considerations:



XXXX Wide

//// Medium

---- Narrow

TTTT Very Light

BA-6C

ADEC Segment Length: 16653m

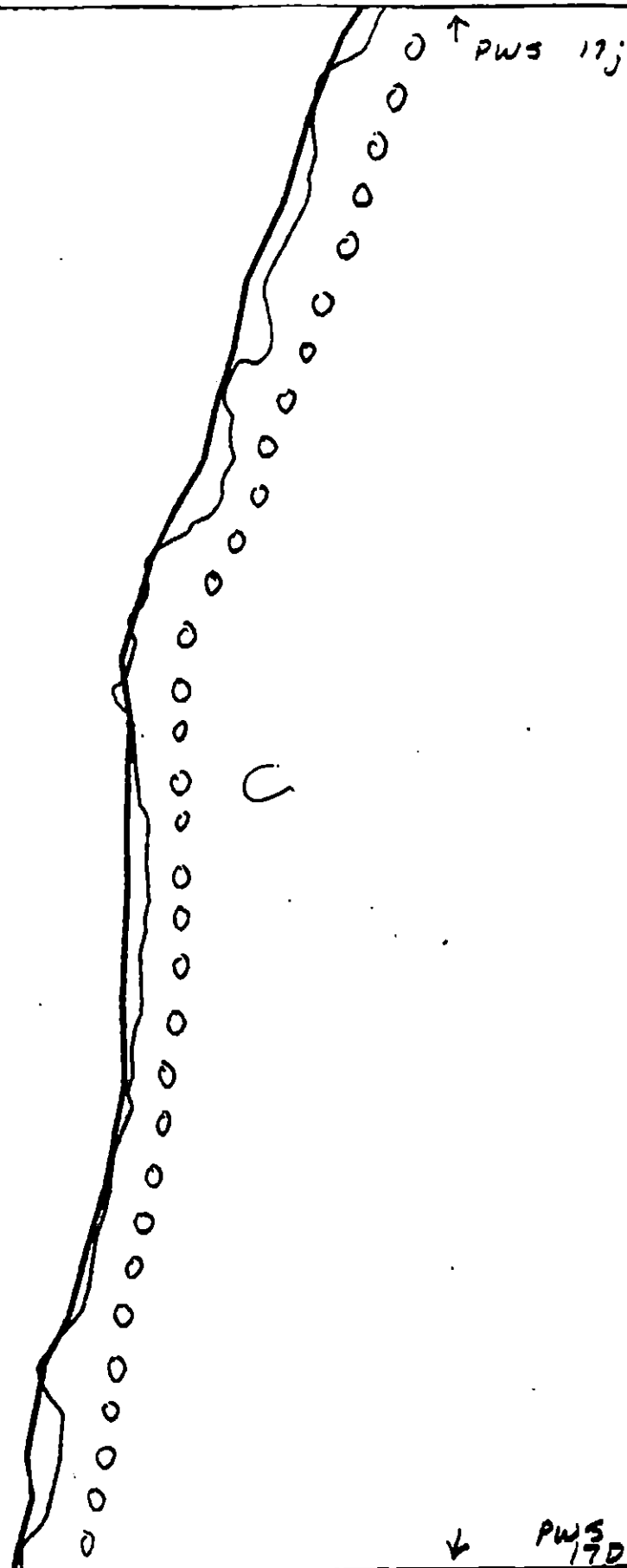
Map Key: PWS-17j

Name: Mike Fogel

Date: 4/24/90

0 100 200 300

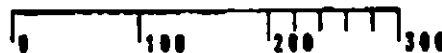




XXXX Wide  
 /// Medium  
 --- Narrow  
 TTTT Very Light  
 ^ ^ ^ ^ " ^ . .

BA-6C

ADEC Segment Length: 16653m

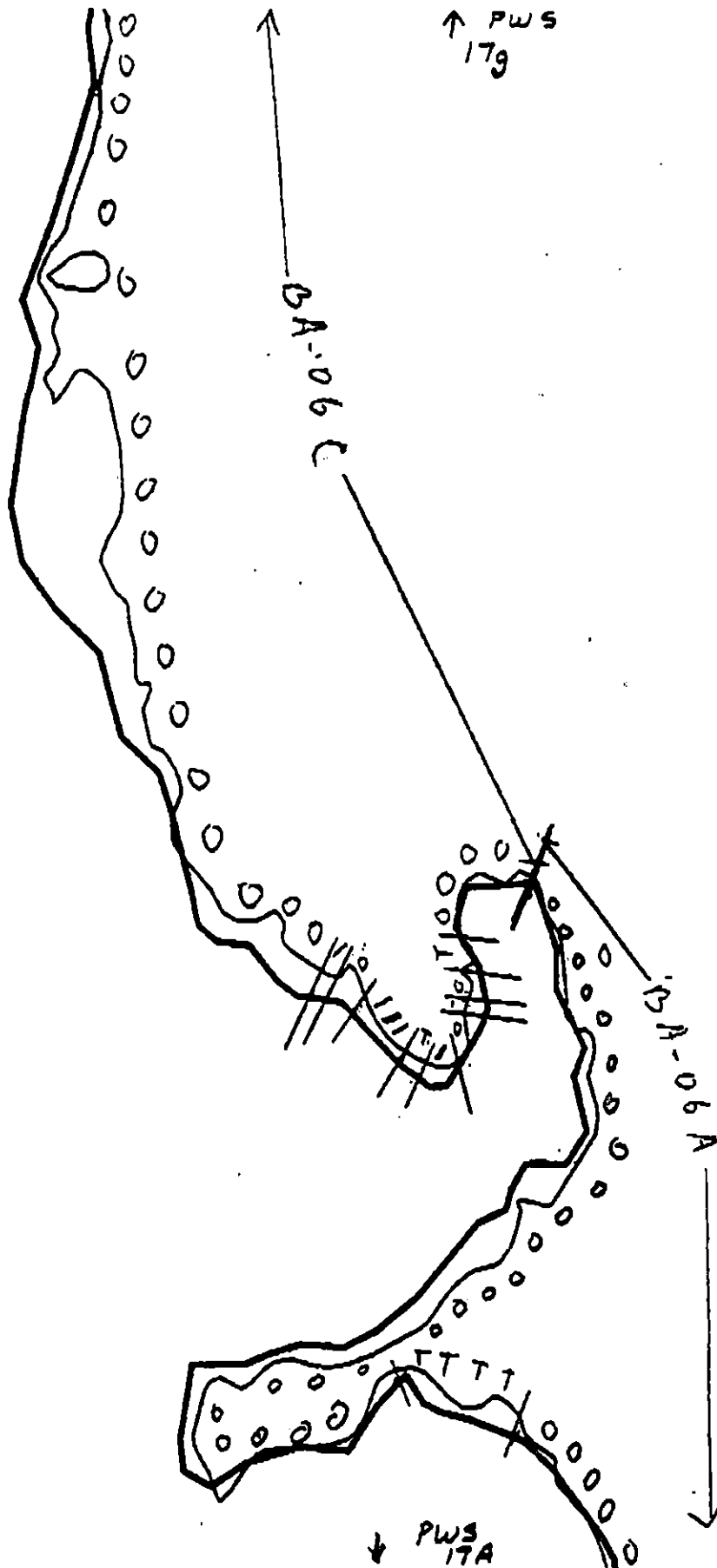


Map Key: PWS-17g

Name: Mike Foget

Date: 4/24/90

Data Entered:



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

BA-6

ADEC Segment Length: 16653m



Map Key: PWS-17d

Name: Mike Fager

Date: 4/24/90

Data Entered:

↑ PWS  
17d

BA-06A

PWS  
17i

XXXX Wide  
 //// Medium  
 --- Narrow  
 TTTT Very Light  
 ^ ^ ^ ^ " ^ . .

BA-6A

ADEC Segment Length: 10653m

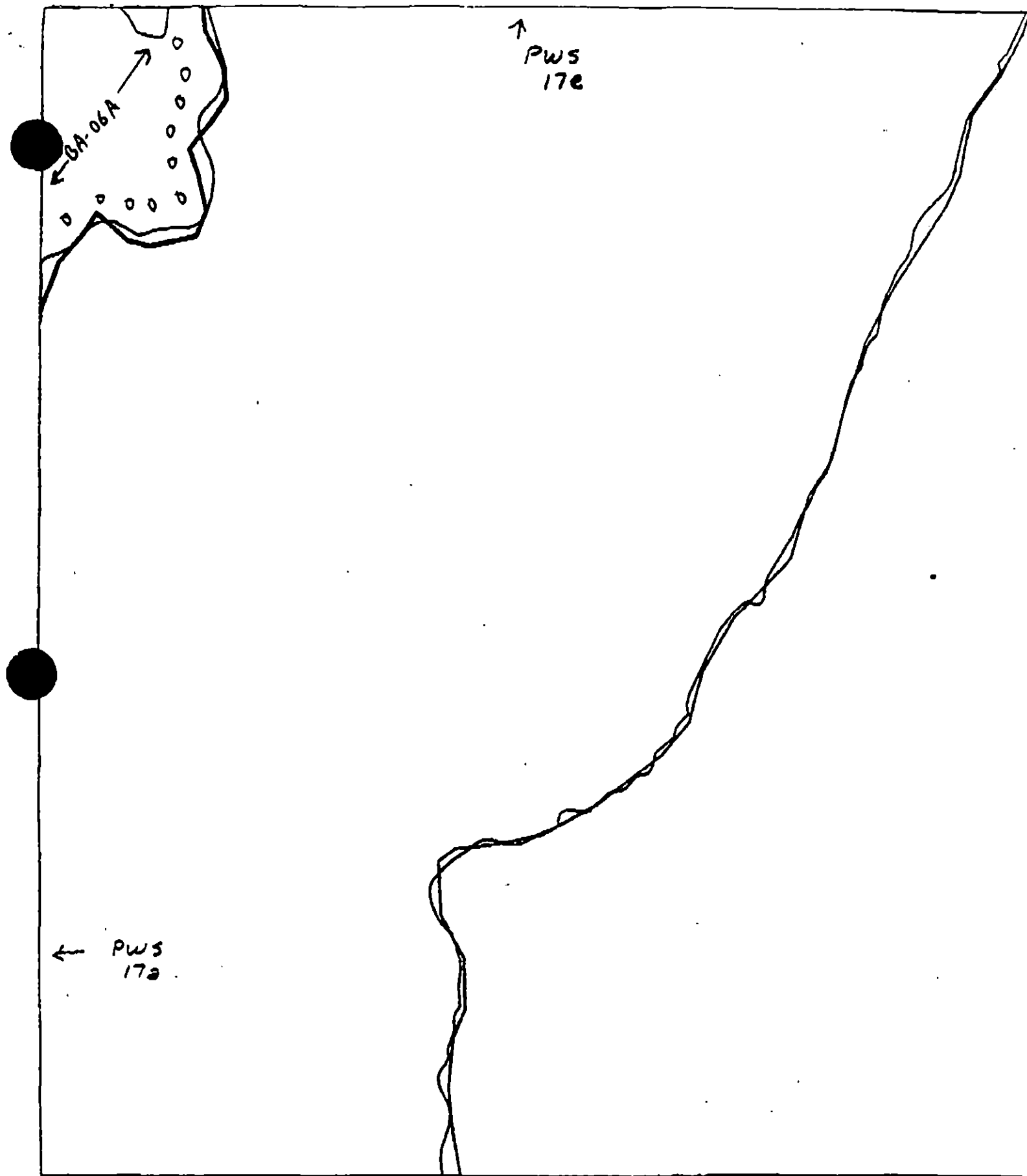
0 100 200 300

Map Key: PWS-17a

Name: Mike Foget

Date: 4/24/90

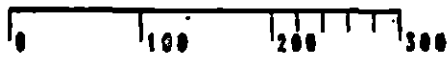
Date Entered:



XXXX Wide  
//// Medium  
--- Narrow  
TTTT Very Light  
OOOO M. Oil

BA-64

ADEC Segment Length: 16653m

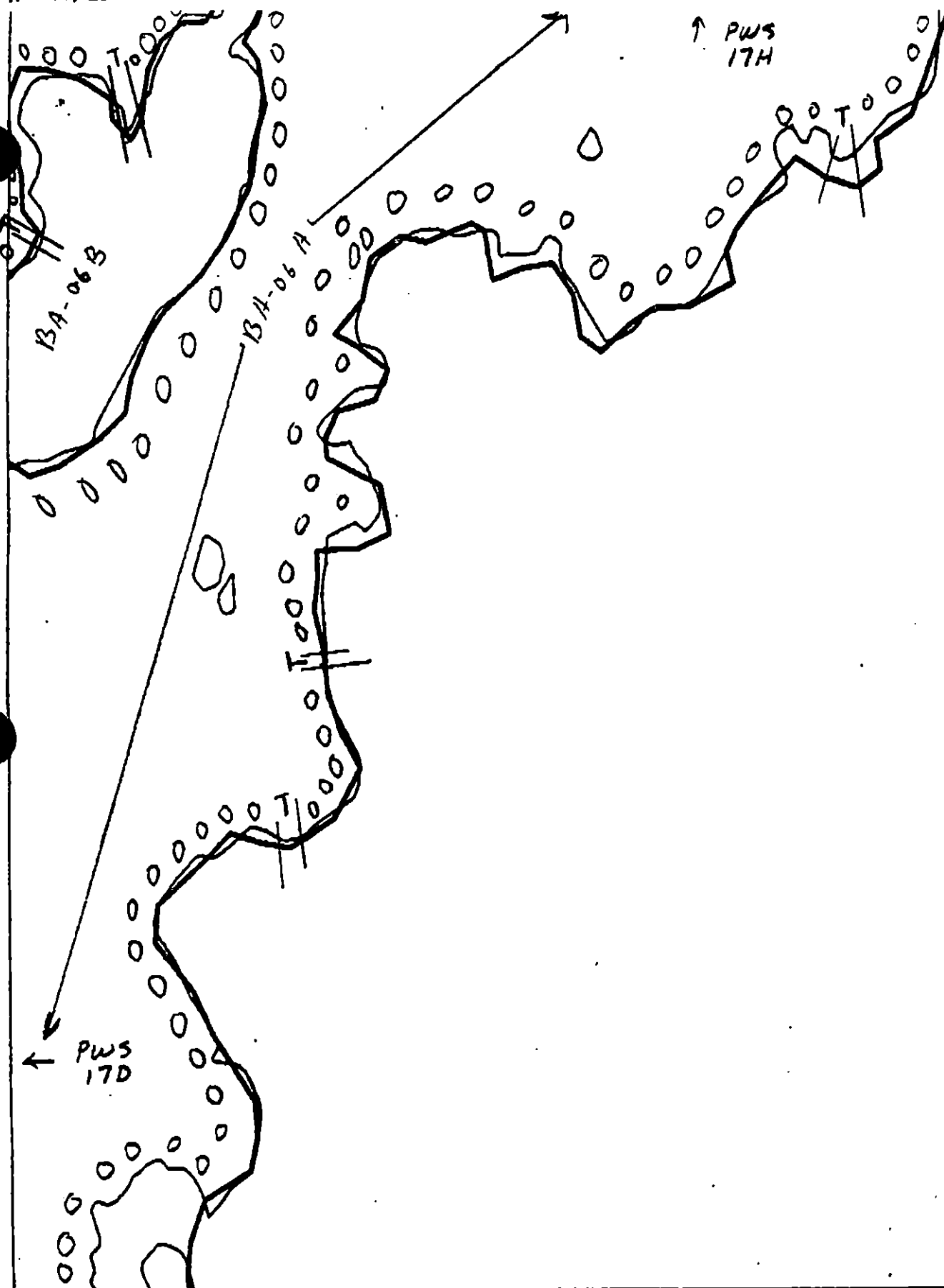


Map Key: PWS-17b

Name: Mike Foye

Date: 4/24/00

Data Entered:



↑ PWS  
17H

← PWS  
17D

XXXX Wide  
 /// Medium  
 --- Narrow

ADEC Segment Length: 16653m

TTTT Very Light  
 OOOO NA O I



Map Key: PWS-17e

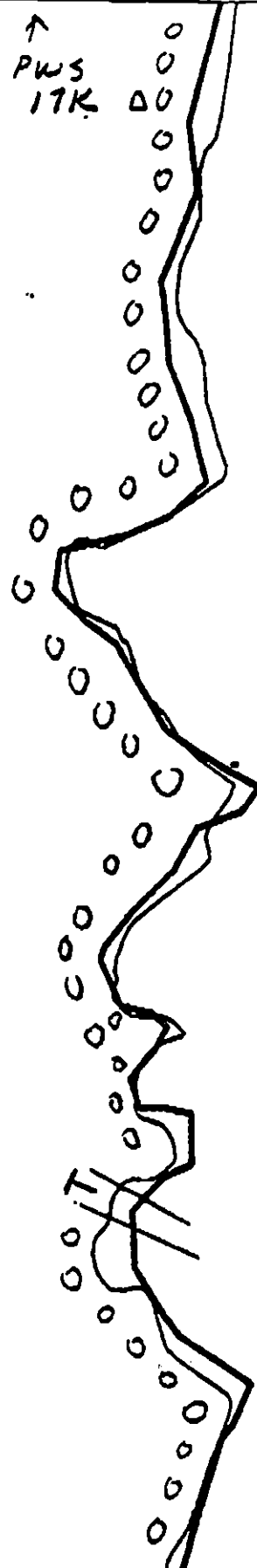
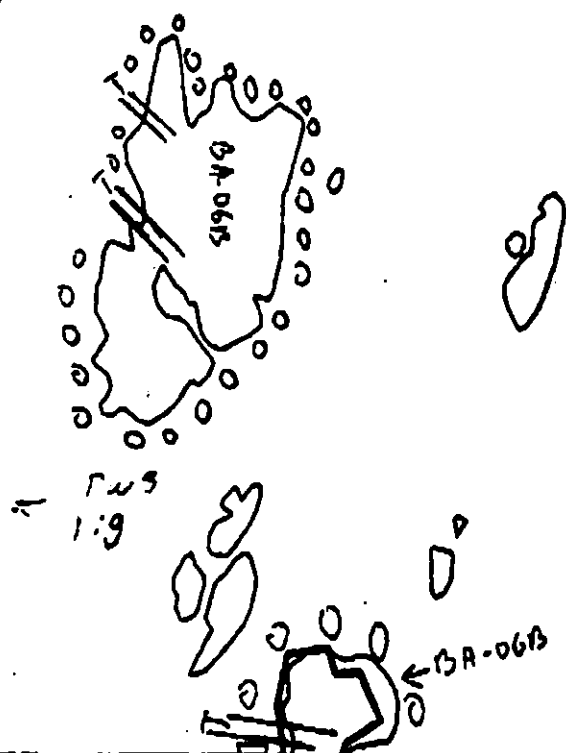
Name: Mike Foye

Date: 4/24/90

Data Entered:

A-06

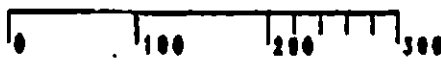
BA-06A



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

BA-6A

ADEC Segment Length: 16653m

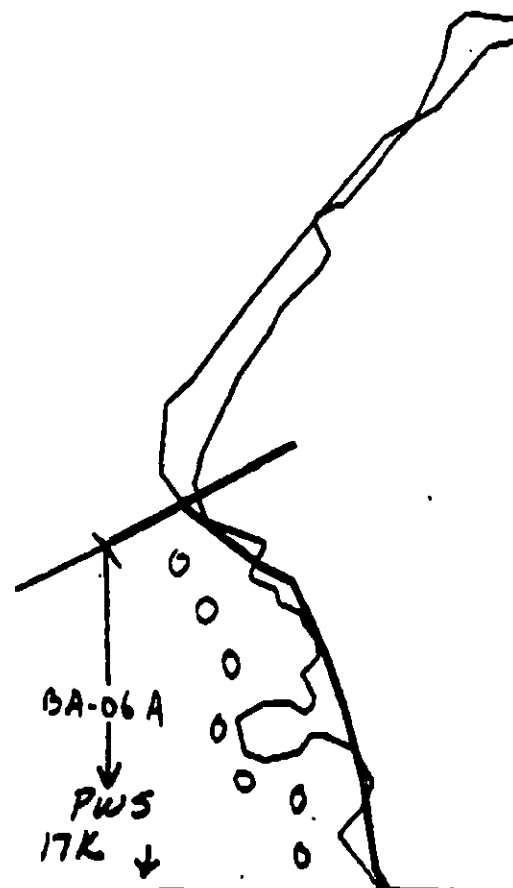


Map Key: PWS-17h

Name: Mike Foye

Date: 4/24/90

Date Entered:



XXXX Wide

//// Medium

--- Narrow

TTTT Very Light

BA-6A

ADEC Segment Length: 10053m

Map Key: PWS-17a

Name: Mike Foyer

4/24/90

BA-6A

PWS 171 →

↓ PWS 174

XXXX Wide

//// Medium

--- Narrow

TTTT Very Light

OOOO

BA-6A

ADEC Segment Length: 16653m

0 100 200 300

Map Key: PWS-17k

Name: Mike Fogar

Date: 4/24/90

## 1991 MAYSAP EVALUATION

SEGMENT: BA 006 SUB: C REGION: PWS SURVEY DATE: 5/21/91ENVIRONMENTAL SENSITIVITIES:Work Window(s) RESTRICTED 3/1 - 9/15Ecological/Constraints (see page two for details) Eagle nest, Fish harvest area, Anadromous streamARCHAEOLOGICAL CONSTRAINTS:

If cultural resources are uncovered during shoreline treatment, stop work in the vicinity, mark the location of the find, and contact Exxon's Cultural Resource Program immediately: 564-3276; 564-3657; (Anchorage) or 229-1514 (24 hrs.). *Timothy A. Smith for SHPO 6/07/91*

RECOMMENDATIONS:

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

COMMENTS:

INITIAL: Manual pickup of asphalt at location I. Apply Inipol and Customblen after asphalt removal. Avoid intercobble mussel bed downshore of location I.

TAG: ADD AREAS D + E FOR MIN P/N OF EASILY ACCESSIBLE AP / HSUR FOLLOWED BY CUSTOMBLEN + OR INIPOL

FOSC:   

TAG APPROVAL DATE: JUNE 6 1991 FOSC APPROVAL DATE: 6/10/91

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

EXXON Boal CHIEF OF STAFF, FOSC

USCG Edmundo

NOAA PTK

**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.

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

# MAYSAP FIELD SHORELINE COMMENT SHEET

TEAM NO. 5 SEGMENT BA 006 SUBDIVISION C DATE 5/21/91

## ADEC

NAME John Hoyer SIGNATURE [Signature]

☐ NTR

Recommend manual Removal of AP + Tar mats in UITZ of Areas D, E + I. Area I is highest priority as numerous tar mats were observed in the UITZ one very large one in pit #3 area.

## EXXON

NAME John Dean SIGNATURE [Signature]

☐ NTR

Time Did Not Allow Survey Crew to collect all RECOVERABLE OIL IN AREA I. IF CLEAN UP IS APPROVED, CREW SHOULD RECHECK AREAS C & E AS WELL. THIS AREA IS GOOD CANDIDATE FOR BIO REMEDIATION BUT TECHNIQUE IS NOT APPROVED BY LEAD MANAGER.

## LANDMANAGER

NAME Steve WARD OF CVC / FS SIGNATURE [Signature]

☐ NTR

Lots of manual to do in this area. (C-E-I) oil in grassy area can be raked and a lot of oil removed easily. Former Work site that was never completed.

NO-BIO.

## USCG/NOAA

NAME DREHER / CLINE SIGNATURE [Signature]

☐ NTR

In area I of this segment I observed several large tar mats that had been covered by fucus and pebbles. Recommend manual removal. Easy skiff access. Approximately 6 man hours.

Significant oiling occurs throughout the site - sketch maps and oiling summary adequately describes the site. Oiling conditions are variable here, & treatment is necessary. DWC

5

## MAYSAP SHORELINE OILING SUMMARY

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

TEAM NO. \_\_\_\_\_

OG CHANEY

BIO CRANK

SEGMENT BA 6

ADEC HAYES

LANDMANAGER WARD for CUC

SUBDIVISION C

EXXON DEAN

USCG/NOAA DREHER/CLINE

DATE May 21 1991

TIME 11:23 to 13:55

TIDE LEVEL 5 ft. to 1 ft.

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

TOTAL LENGTH SHORELINE SURVEYED: 550 m

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

TIDAL POOL SHEEN

EST. OIL CATEGORY LENGTH: W - m M 25 m N 38 m VL 332 m NO 155 m US 2711 m

| L<br>O<br>C | SURFACE OIL CHARACTER |    |    |     |    |    |    |    |    |    | SURFACE<br>SEDIMENT<br>TYPE | SHORE<br>SLOPE<br>VHML | AREA       |             | ZONE |    |    |    | NOTES                |
|-------------|-----------------------|----|----|-----|----|----|----|----|----|----|-----------------------------|------------------------|------------|-------------|------|----|----|----|----------------------|
|             | AP                    | MS | TB | SOR | CV | CT | ST | FL | DB | NO |                             |                        | WIDTH<br>m | LENGTH<br>m | S    | UI | MI | LI |                      |
| A           |                       | T  |    |     | S  | P  |    |    |    |    | R                           | M                      | 2          | 4           |      | ✓  |    |    |                      |
| B           |                       |    |    | S   | T  | T  |    |    |    |    | RB                          | M                      | 3          | 8           |      | ✓  |    |    |                      |
| C           |                       |    |    |     | S  | P  |    |    |    |    | R                           | H                      | 3          | 3           |      | ✓  |    |    |                      |
| D           | P                     |    |    | P   | S  |    |    |    |    |    | BP                          | L                      | 2.5        | 7           | ✓    |    |    |    | 4m Deep              |
| E           | T                     |    |    | T   | T  | T  |    |    |    |    | BCPG                        | M                      | 10         | 25          | ✓    | ✓  |    |    | SCATTERED PATCHES    |
| F           | S                     |    |    |     | T  | T  |    |    |    |    | BP                          | M                      | 2          | 4           |      | ✓  |    |    | SCATTERED PATCHES    |
| G           |                       |    |    | T   | S  | S  |    |    |    |    | BR                          | H                      | 3          | 4           | ✓    | ✓  |    |    | FISSURE              |
| H           |                       |    |    |     | T  | T  |    |    |    |    | BR                          | HV                     | 3          | 60          |      | ✓  |    |    | SPLATS ON BOULDERS   |
| I           | P                     |    |    | S   |    |    |    |    |    |    | PB                          | M                      | 4          | 25          |      | ✓  |    |    | SEE COMMENTS         |
| J           |                       |    |    |     | T  | T  |    |    |    |    | B                           | M                      | 10         | 105         |      | ✓  |    |    | SPLATS ON BOULDERS   |
| K           | T                     |    |    |     | T  | T  |    |    |    |    | BCP                         | M                      | 7          | 40          |      | ✓  |    |    | BOULDERS PEBBLES     |
| L           | T                     |    |    | T   | T  | T  |    |    |    |    | RBCP                        | LM                     | 6          | 110         |      | ✓  |    |    |                      |
| M           | P                     | S  |    | S   | S  | S  |    |    |    |    | R                           | L                      | 1          | 30          |      | ✓  |    |    | LOCALIZED POCKETS MS |

DISTRIBUTION: C=91-100%; B=51-60%; P=11-50%; S=1-10%; T=&lt;1%

SLOPE: V=VERTICAL; H=HIGH ANGLE; M=MEDIUM ANGLE; L=LOW ANGLE PHOTO ROLL # MAYSAP- 5 - 20 FRAMES 14-21

| PIT<br>NO. | PIT<br>DEPTH<br>(cm) | SUBSURFACE<br>OIL CHARACTER |     |     |     |    |    |    | OILED<br>ZONE<br>cm-cm | CLEAN<br>BELOW<br>Y/N | H2O<br>LEVEL<br>(cm) | SHEEN<br>COLOR<br>BR & N | PIT<br>ZONE |    |    |    | SURFACE-<br>SUBSURFACE<br>SEDIMENTS | NOTES |
|------------|----------------------|-----------------------------|-----|-----|-----|----|----|----|------------------------|-----------------------|----------------------|--------------------------|-------------|----|----|----|-------------------------------------|-------|
|            |                      | OP                          | HOR | MOR | LOR | OF | TR | NO |                        |                       |                      |                          | S           | UI | MI | LI |                                     |       |
| 1          | 20                   |                             |     |     |     |    |    | ✓  | -                      |                       | -                    | -                        | ✓           |    |    |    | P-PR                                |       |
| 2          | 25                   | ✓                           |     |     |     |    |    |    | 0-8                    | Y                     | -                    | -                        | ✓           |    |    |    | PG-PG                               |       |
| 3          | 25                   | ✓                           |     |     |     |    |    |    | 0-8                    | Y                     | -                    | -                        | ✓           |    |    |    | PG-PG                               |       |
| 4          | 20                   |                             |     |     |     |    |    | ✓  | -                      |                       | -                    | -                        | ✓           |    |    |    | PG-PG                               |       |
| 5          | 15                   |                             |     |     |     |    |    | ✓  | -                      |                       | -                    | -                        | ✓           |    |    |    | PG-PG                               |       |
| 6          | 15                   |                             |     |     |     |    |    | ✓  | -                      |                       | 10                   | N                        | ✓           |    |    |    | PG-PG                               |       |
| 7          | 20                   |                             |     |     |     |    |    | ✓  | -                      |                       | -                    | -                        | ✓           |    |    |    | P-PG                                |       |

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

## OG COMMENTS:

THIS SUBDIVISION WAS SURVEYED IN 2 LOCATIONS. THE MOST SIGNIFICANT OIL WAS OBSERVED AT LOCATION (I) WHICH IS DESCRIBED ON THE NEXT PAGE BUT AREA (K) WAS COVERED BY A BROAD BAND OF SEAWEED DRIFT. WE MOVED THE DRIFT ASIDE IN MANY PLACES BUT IF A CREW WAS IN THE AREA WHEN THE SEAWEED WAS GONE, ANOTHER LOOK WOULD BE HELPFUL.

CONT. ON NEXT PAGE

REVISED: 5/24/91 DESIGNED: E.W. 5/24/91

SEGMENT BA-6

SUBDIVISION C

DATE MAY, 21 191

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

WAVE SHADOW BOULDER

SEVERAL BAGS OF OILED

SEDIMENT WERE REMOVED FROM THIS SITE DURING THE SURVEY. WHEN WE FIRST ARRIVED THERE WERE SEVERAL EXAMPLES OF AP PATCHES PARTIALLY BURIED AS DRAWN ABOVE. MOST OF THESE WERE RECOVERED WITH SOR/m REMAINING. IN THE VICINITY OF PITS 2 to 7 A DISTINCT PATCH OF AP WAS DEFINED  $4 \times 7m$ . THIS PATCH TURNED VERY SOFT IN THE DIRECT SUN AND COULD BE CLASSIFIED AS SOR/H. IT WAS NOT RECOVERED.

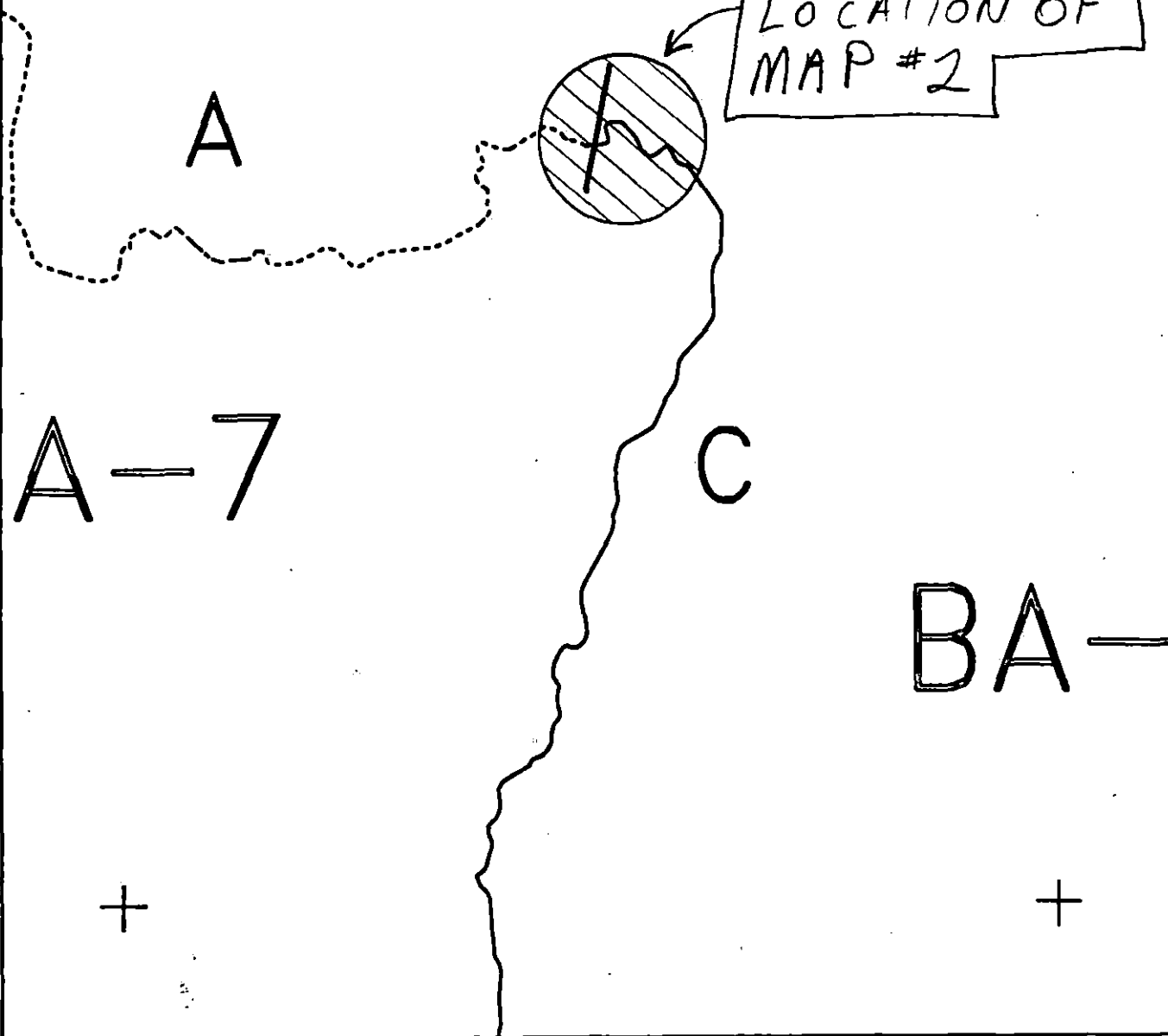
(L<sub>2</sub>) PHOTO #20 LOCALIZED POCKETS MS IN VERTICAL BEDDING PLANES UP TO 3cm DEEP. AP to SOR/H DEPENDING ON SUN IN THE VICINITY

REVIEWED: F.W. 5/26/91

REVIEWED: MC 5/26/91

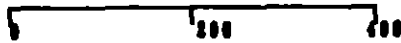
MAP 1 of 4

ORIENTATION MAP



BA006 C

METERS



AK State Plane Zone 4  
NAD83

Subdivision Field Map

Map Key: PVSBA006C

Name: CHANEY

Date: MAY 22 1991

REVIEWED: MC 5/24/91

REVIEWED: F.W. 5/26/91

MAP 2 of 4

MAY SAP 1991  
OG SKETCH MAP  
GREG CHANEY  
TEAM 5

SEGMENT BA-6C  
MAY 21 1991  
NO AIR PHOTO  
PROVIDED

(A) 2x4m MSTRACE  
CV 10% CT 15%

(C) 3x3m  
CV 10% CT 20%

LOW ROUNDED  
BEDROCK

(B) 3x8m SOR 5%  
CV <1%, CT <1%

(D) 2.5x7m AP 30%  
SOR 30% CT 10%

(E) 10x25m  
AP <1% SOR <1%  
CV <1% CT <1%

NO  
SURVEY

30 METERS

BAINBRIDGE ISLAND

Revised: 6/11/91  
REVISED: R.W. SHAW

MAP 3 of 4

+

ORIENTATION  
MAP

LOCATION OF  
MAP #4

B

A

BA006 C

Subdivision Field Map

Map Key: PVSDA006C

Name: CHANEY

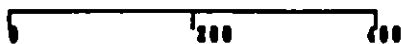
Date: MAY 22 1991

Reviewed: MC 5/26/91

REVIEWED: F.W. 5/26/91



METERS



AK State Plane Zone 4  
photostatic

TEAM 5  
 SEGMENT: BA006 C  
 DATE: MAY 21 1991  
 AIR P.#: NONE

PATCHES  
 SCATTERED

F 2x4m AP 3%  
 CT < 1%

G 3x4m OR < 1%  
 CV 10% CT 5%

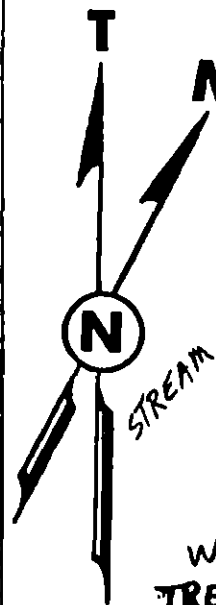
H 3x60m CV < 1%  
 CT < 1%

I 4x25m  
 20% SOFT AP  
 5% SOR/M  
 SEE COMMENTS

SEVERAL BAGS  
 RECOVERED

L1 6x110m AP < 1%, T < 1%,  
 SOR < 1%, CV < 1%, CT < 1%

L2 1x20m AP 15%, MS 1%, SOR 10%  
 CV 10% CT 10% DISCONT. BAND  
 INSIDE L1



WHITE DRIFT  
 TREE WITH  
 BRANCHES

LEGEND.

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

J 10x105m  
 CV < 1%  
 CT < 1%  
 SPLATTERS  
 ON BOULDERS

SCALE

APPROXIMATELY  
 40 METERS

K 7x40m AP < 1%  
 CV < 1% CT < 1%  
 AP MOSTLY ON WEST  
 SIDE OF AREA K

NO FIELD DATA  
 ASSUME:  
 4x4M OP

L1

L2

20

AP

BROAD BAND  
 DRIFTED SEAWEEED

REVISED: F.W. 5/24/91  
 Revised: M. 5/24/91

## MAYSAP BIOLOGICAL SUMMARY FORM

TEAM # 5

DATE 21 May 1991

pg 1 of 3

SEGMENT # BA-6

TIDAL HEIGHT (Range) +5 → +1

SUBDIVISION A

BIOLOGIST Crank

SEA STATE 0

WIND SPEED/DIRECTION no wind

PHOTOGRAPHS: ROLL #

FRAME #

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

(A) Area is located high in the UITZ. White and black lichen, moss and rare concentrations of *Littorina* in small tidepools are present in the site. Biota cover is ~20%. A silver oil sheen was present on the tidepools within the site.

(B,C) Areas are located low in the UITZ. Barely concentrated barnacles, dry patches of *Fucus* sporlings; and clusters of moderately concentrated limpets cover 1% of the surface sediments. Directly below the site there is a 5m band dense *Fucus* on peat. Conceptacles are maturing and sporlings are present. Sparse concentrations of barnacles, *Littorina* and limpets are also present. Biota cover is ~80%. Located low in the MITZ there is a moderate to densely concentrated intertidal mussel bed.

(D) Area is located in the SUPRA and includes the driftline. Rye grass is sprouting through the AP covering <1% of the apron. There are also exposed dead rye grass roots in the AP. Surrounding the AP and in the general vicinity rye grass covers ~30% of the surface.

(E) Area is in the SUPRA and UITZ. The SUPRA has ~30% rye grass cover. The UITZ has ~20% biota cover including: sparse concentrations of barnacles, *Fucus*, *Littorina* and limpets and a rare concentration of juvenile mussels. The *Fucus* sporlings are dry. Approx. the 5' tide level there is a moderately concentrated intertidal mussel bed with sparse barnacles sparse *Fucus* and rare *Gloiopectis* (aba). A manual crew (no machines!) could access the site using

## WILDLIFE OBSERVATIONS

## TO BE COMPLETED IN ALL SUBDIVISIONS

a single path through the lower zones to minimize damage to the mussel bed. The mussel bed should not be disturbed except for access path.

## FISH OBSERVED

| BIRDS            | # OF SPECIES | TOTAL BIRDS | SPECIES PRESENT |
|------------------|--------------|-------------|-----------------|
| Eagles           | 1            | 1           | Pink Salmon fry |
| Seabirds         | 1            | 20          |                 |
| Waterfowl        | 1            | 1           |                 |
| Gulls/kittiwakes | 3            | 19          |                 |
| Shorebirds       | 1            | 2           |                 |
| Corvids          | 1            |             |                 |
| Other Birds      | 1            | 1           |                 |

## LAND MAMMALS

## MARINE MAMMALS

## # OBSERVED

## SPECIES

## # OBSERVED

|                     |               |      |   |
|---------------------|---------------|------|---|
| Sea Otters          | 2             | Deer | 1 |
| Pinnipeds (specify) | 1 Sealion     |      |   |
|                     | 1 Harbor Seal |      |   |
| Whales (specify)    |               |      |   |
|                     |               |      |   |

Shoreline subdivision map showing important biological features attached.

REVIEWED: MC 5/16/91

Team # 5  
Segment # BA-6  
Subdivision A  
Sea State 0

Date 21 May 1991 pg 2 of 3  
Tidal Height +5 → +1  
Biologist Crank  
Wind Speed / Direction no wind

## Comments (cont.)

- (F) Area is a 2x4m patch in the UITZ, 1m west of cliff wall and 8m east of a babbling brook. Within the site, healthy Fucus with sporelings and a rare concentration of healthy barnacles cover 10% of the surface sediments. Directly below the site, a 8x4m patch of Fucus and barnacles covers 30% of the sediments. In the low MITZ and LITZ barnacles are dominant. West of the stream bank barnacles cover 60% of the surface area.
- (G) Area is located in the SUPRA and UITZ on a small pocket of bedrock and boulders. In the SUPRA, moss is present. In the UITZ there are rare concentrations of barnacles and Fucus sporelings. Low in the site there are sparse patches of limpets. Filamentous green algae is present on the bedrock sides. One meter below the site there is a dense 4m wide Fucus band. Below the Fucus, barnacles are dominant, moderately concentrated to the LITZ.
- (H) Area is located in the UITZ on boulders and bedrock. Rare concentrations of barnacles, Fucus sporelings and limpets are present. Biota cover is <1%. In the MITZ the same organisms cover 50% of the surface sediments.
- (I) Area is located in the UITZ. No intertidal biota was found within the site. Ten meters below, barnacles have a moderate concentration and Littorina and limpets are sparse. At approx. the +5' tide level there are moderate, intercobble mussels, dense Littorina and sparse juvenile Scartesia (whelk). Biota cover is ~70%. On a rock outcrop, there is a moderate concentration of Fucus (with maturing conceptacles and sporelings) and barnacles (various ages). Biota cover is ~70%. In the LITZ, clam shells are also present.

Reviews: 5/14/91 MC

Team # 5  
Segment # BA-6  
Subdivision A  
Sea State 0

Date 21 May 1991 pg 3 of 3  
Tidal Height  $45 \rightarrow +1$   
Biologist Crank  
Wind Speed / Direction no wind

### Comments (cont.)

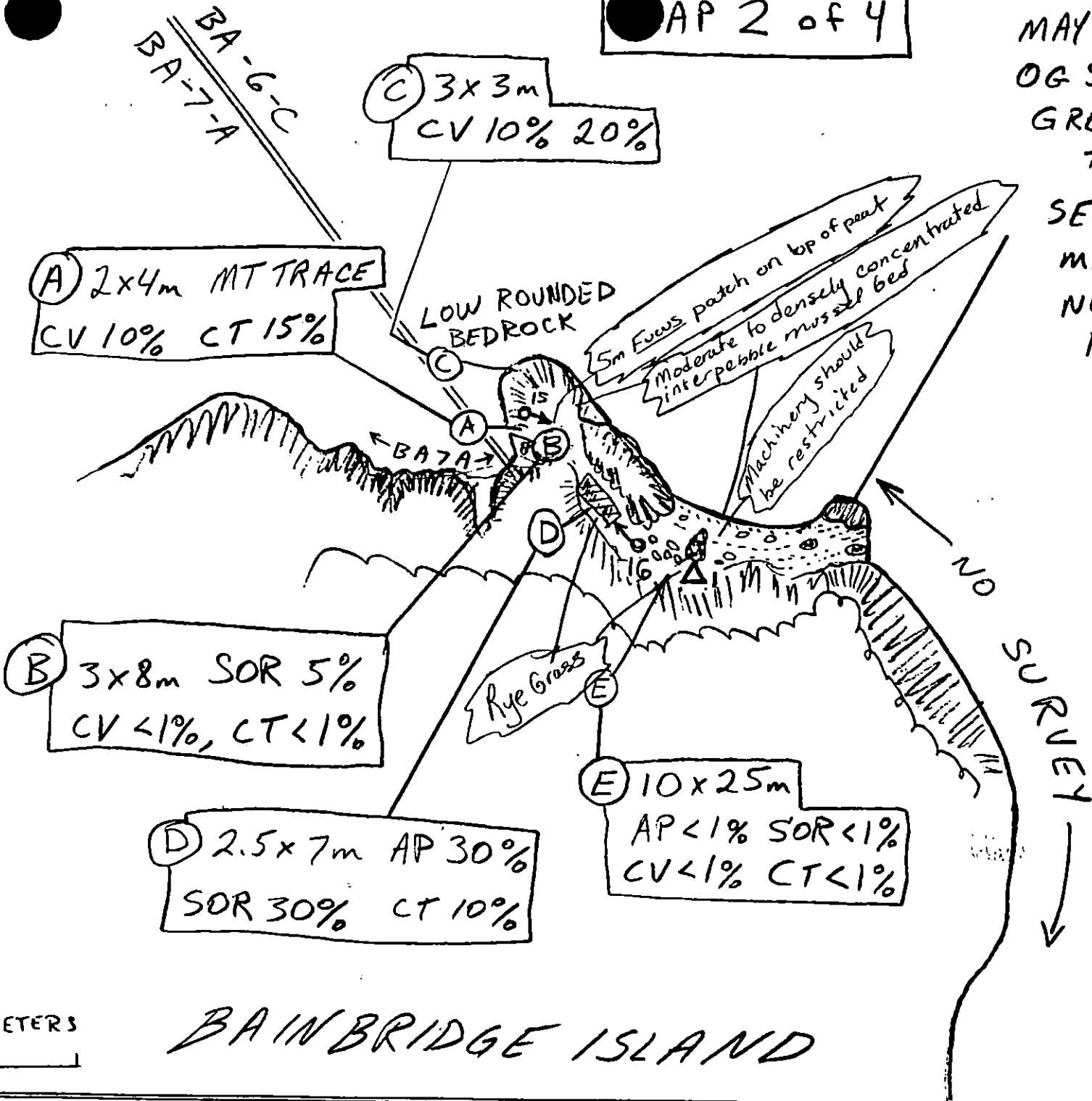
(J) Area is located high in the UITZ. Black lichen, moss and ryegrass are present within the site. Biota cover is  $<1\%$ . Directly below the site Fucus and barnacles have a sparse concentration. In the MITZ, there are sparse concentrations of Fucus with sporelings, mussels, barnacles with spat, Scytosiphon and Enteromorpha (algae). Littorina and limpets are moderate and polychaete worms are rare. Biota cover is  $\sim 30\%$ .

(K) Area is located under drift Fucus. There is no intertidal biota present within the site. Biota below the site is similar to (J).

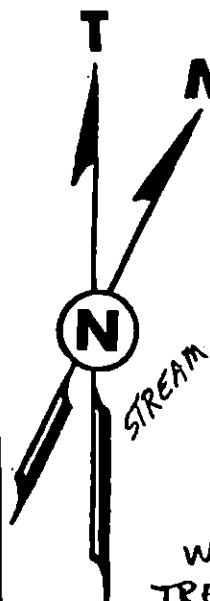
(L<sub>1</sub> & L<sub>2</sub>) Areas are located in the SUPRA and UITZ. L<sub>2</sub> is the vertical bed planes within the L<sub>1</sub> cover. In the SUPRA, ryegrass and moss is present. In the UITZ Fucus, barnacles, Littorina and limpets cover  $210\%$  of the surface sediments. In the middle of the core, L<sub>2</sub> has a dense Fucus sporeling cover  $1 \times 3$  m. Below the site there is a discontinuous, dense cover of Fucus and gastropods. Barnacles and mussels have a continuous, sparse to moderate concentration. Biota cover is  $\sim 70\%$ . Above the sites, grass tips have been grazed.

MAYSAP 19  
OG SKETCH MAP BIO  
GREG CHANEY CRANK  
TEAM 5

SEGMENT BA-6C  
MAY 21 1991  
NO AIR PHOTO  
PROVIDED



MAY 1991  
 OG SKETCH MAP / Bio  
 GREG CHANEY / Crank  
 TEAM 5  
 SEGMENT: BA006 c  
 DATE: MAY 21 1991  
 AIR P.#: NONE



WHITE DRIFT  
 TREE WITH  
 BRANCHES

#### LEGEND

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

SCALE

(F)

(F)

(G)

(H)

(I)

(J)

(K)

(L)

(M)

(N)

(O)

(P)

(Q)

(R)

BAINBRIDGE  
 ISLAND

Barnacles cover 60% of  
 the sediments  
 28x4m Fucus Patch

Dense Fucus

Intercobble Mussel  
 bed beginning ~15'

Dense concentration  
 of Fucus sporlings

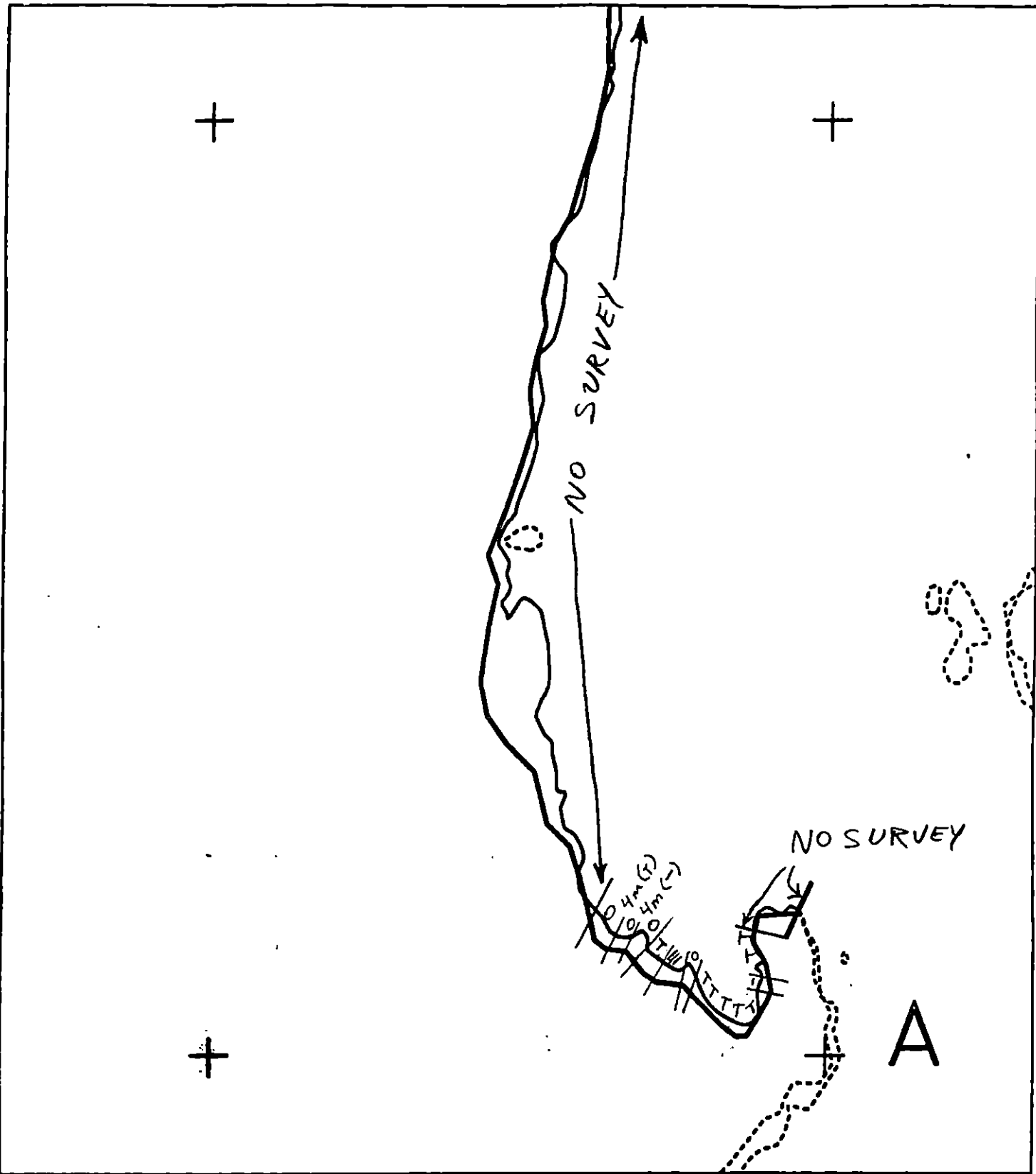
Biota cover  
 in MITZ ~ 70%

TREES

TREES

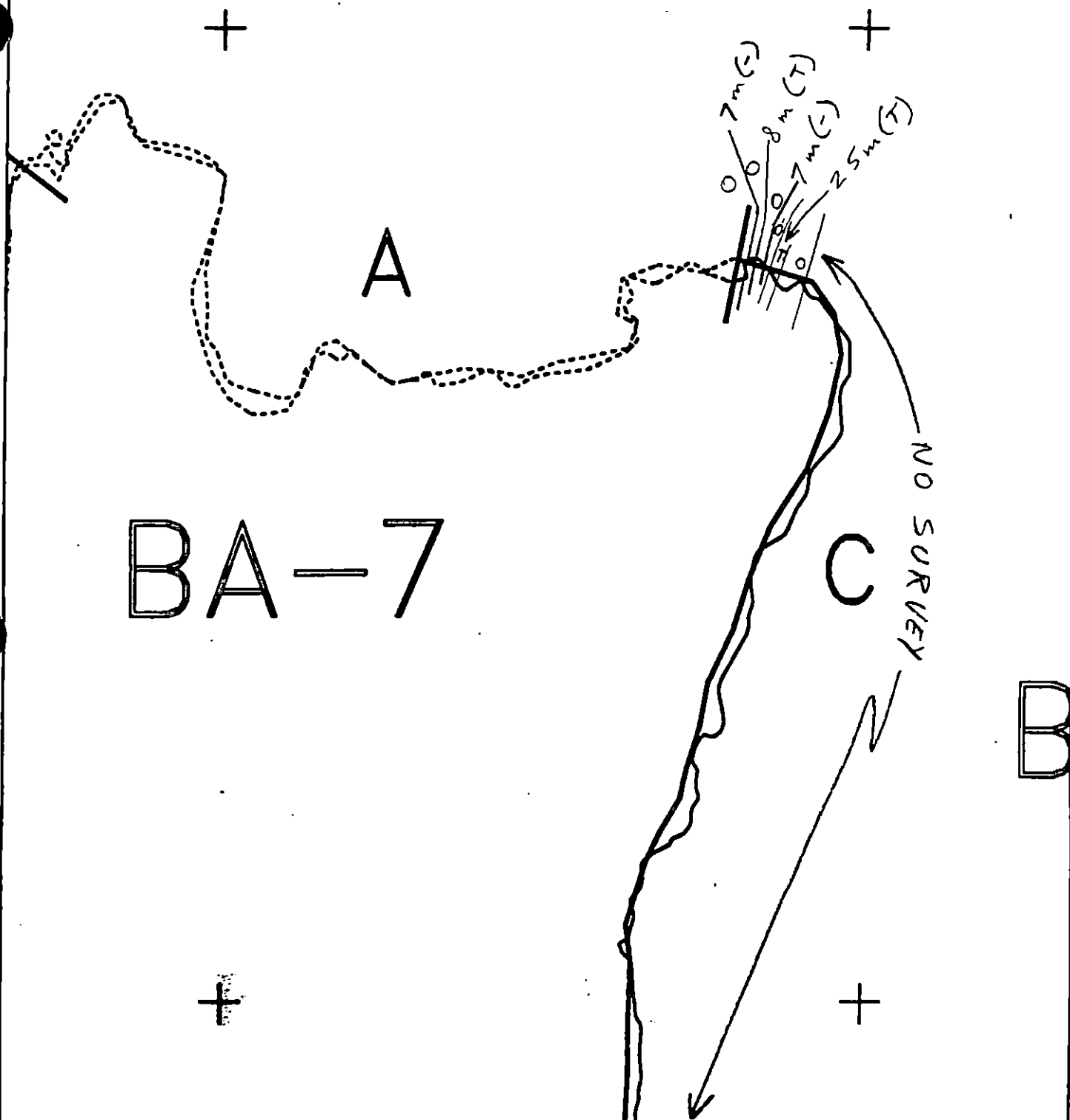
BROAD BAND  
 DRIFTED SEAWEED

Sparingly concentrated  
 biota cover ~ 38%



|      |            |                                                                                                    |      |                          |
|------|------------|----------------------------------------------------------------------------------------------------|------|--------------------------|
| XXXX | Wide       | <b>BA006 C</b><br>ADEC Subsegment Length: 3261m<br>METERS<br><br>AK State Plane Zone 4<br>pbs006ca | <br> | Subdivision Field Map    |
| //// | Medium     |                                                                                                    |      | Map Key: PWSBA006Ca      |
| ---- | Narrow     |                                                                                                    |      | Name: <u>CHANEY</u>      |
| TTTT | Very Light |                                                                                                    |      | Date: <u>MAY 21 1991</u> |
| 0000 | No Oil     |                                                                                                    |      | Date Entered:            |

REVIEWED: F.W. 5/26/91  
 REVIEWED: MC 5/26/91



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

BA006 C  
 ADEC Subsegment Length: 3201m  
 METERS  
 0 200 400  
 AK State Plane Zone 4  
 pba006cb

Subdivision Field Map  
 Map Key: PWSBA006Cb  
 Name: CHANEY  
 Date: MAY 21 1991  
 Date Entered:



REVIEWED: F.W. 5/26/91  
 REWISAPD: MC 5/26/91

## 1991 MAYSAP EVALUATION

SEGMENT: BA 006 SUB: C REGION: PWS SURVEY DATE: 5/21/91ENVIRONMENTAL SENSITIVITIES:Work Window(s) RESTRICTED 3/1 - 9/15Ecological/Constraints (see page two for details) Eagle nest,  
Fish harvest area, Anadromous streamARCHAEOLOGICAL 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)

Y

Manual Pickup (Check as Req.)

X

Spot Washing

Bio-Customblen Only

Bio-Inipol/Customblen

Other

Other

XCOMMENTS:INITIAL: Manual pickup of asphalt at location I. Apply Inipol  
and Customblen after asphalt removal. Avoid intercobble mussel  
bed downshore of location I.

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.

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

**ADEC**

NAME John Hays SIGNATURE [Signature]

☐ NTR

Recommend manual Removal of AP + Tar mats in UITE of Areas D, E + I. Area I is highest priority as numerous tar mats were observed in the UITE one very large one in pit #2 + 3 area.

**EXXON**

NAME John Dean SIGNATURE [Signature]

☐ NTR

Time Did Not Allow Survey Crew to collect all RECOVERABLE OIL IN AREA I. IF CLEAN UP IS APPROVED, CREW SHOULD RECHECK AREAS C + E AS WELL. THIS AREA IS GOOD CANDIDATE FOR BIO REMEDIATION BUT TECHNIQUE IS NOT APPROVED BY LAND MANAGER.

**LANDMANAGER**

NAME Steve Ward OF CVC / FS SIGNATURE [Signature]

☐ NTR

Lots of manual to do in this area. (C-E-I) oil in grassy area can be raked and a lot of oil removed easily. Former Work site that was never completed.  
NO-BIO.

**USCG/NOAA**

NAME DREHER / CLINE SIGNATURE CWO K. L. Dreher

☐ NTR

In area I of this segment I observed several large tar mats that had been covered by fucus and pebbles. Recommend manual removal. Easy skiff access. Approximately 6 manhours.

Significant oiling occurs throughout the site - sketch maps and oiling summary adequately describes the site. Oiling conditions are variable here, + treatment is necessary. DUC

TEAM NO.                      BIO CRANK SEGMENT BA 6  
 OG CHANEY LANDMANAGER WARD for CUC SUBDIVISION C  
 ADEC HAYES USCG/NOAA DREHER/CLINE DATE May 21 191  
 EXXON DEAN

TIME 11:23 to 13:55 TIDE LEVEL 5 ft. to 1 ft. ENERGY LEVEL: ☐ H ☒ M ☐ L  
 SURVEYED FROM: ☒ FOOT ☐ BOAT ☐ HELO WEATHER: ☐ SUN ☒ CLOUDS ☐ FOG ☐ RAIN ☐ SNOW  
 TOTAL LENGTH SHORELINE SURVEYED: 550 m NEAR SHORE SHEEN: ☐ BR ☐ RB ☐ SL ☐ NONE  
 EST. OIL CATEGORY LENGTH: W - m M 25 m N 38 m VL 332 m NO 155 m US 2711 m

| L<br>O<br>C | SURFACE OIL CHARACTER |    |    |     |    |    |    |    |    |    | SURFACE<br>SEDIMENT<br>TYPE | SHORE<br>SLOPE<br>VHML | AREA       |             | ZONE |    |    |    | NOTES                |
|-------------|-----------------------|----|----|-----|----|----|----|----|----|----|-----------------------------|------------------------|------------|-------------|------|----|----|----|----------------------|
|             | AP                    | MS | TB | SOR | CV | CT | ST | FL | DB | NO |                             |                        | WIDTH<br>m | LENGTH<br>m | S    | UI | MI | LI |                      |
| A           |                       |    |    |     | S  | P  |    |    |    |    | R                           | M                      | 2          | 4           |      | ✓  |    |    |                      |
| B           |                       |    |    |     | S  | T  | T  |    |    |    | RB                          | M                      | 3          | 8           |      | ✓  |    |    |                      |
| C           |                       |    |    |     | S  | P  |    |    |    |    | R                           | H                      | 3          | 3           |      | ✓  |    |    |                      |
| D           |                       |    |    |     | P  | S  |    |    |    |    | BP                          | L                      | 2.5        | 7           |      | ✓  |    |    | 4cm Deep             |
| E           |                       |    |    |     | T  | T  | T  |    |    |    | BCPG                        | M                      | 10         | 25          |      | ✓  | ✓  |    | SCATTERED PATCHES    |
| F           |                       |    |    |     | T  | T  | T  |    |    |    | BP                          | M                      | 2          | 4           |      | ✓  |    |    | SCATTERED PATCHES    |
| G           |                       |    |    |     | T  | S  | S  |    |    |    | BR                          | H                      | 3          | 4           |      | ✓  | ✓  |    | FISSURE              |
| H           |                       |    |    |     | T  | T  |    |    |    |    | BR                          | HV                     | 3          | 60          |      | ✓  |    |    | SPLATS ON BOULDERS   |
| I           |                       |    |    |     | S  |    |    |    |    |    | PB                          | M                      | 4          | 25          |      | ✓  |    |    | SEE COMMENTS         |
| J           |                       |    |    |     | T  | T  |    |    |    |    | B                           | M                      | 10         | 105         |      | ✓  |    |    | SPLATS ON BOULDERS   |
| K           |                       |    |    |     | T  | T  |    |    |    |    | BCP                         | M                      | 7          | 40          |      | ✓  |    |    | BOULDERS PEBBLES     |
| L1          |                       |    |    |     | T  | T  | T  |    |    |    | RBCP                        | LM                     | 6          | 110         |      | ✓  |    |    |                      |
| L2          |                       |    |    |     | S  | S  | S  |    |    |    | R                           | L                      | 1          | 30          |      | ✓  |    |    | LOCALIZED POCKETS M. |

DISTRIBUTION: C = 81-100%; 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 - 20 FRAMES 14 -

| PIT<br>NO. | PIT<br>DEPTH<br>(cm) | SUBSURFACE<br>OIL CHARACTER |     |     |     |    |    |    |       | OILED<br>ZONE | CLEAN<br>BELOW | H2O<br>LEVEL | SHEEN<br>COLOR | PIT<br>ZONE |    |    |    | SURFACE-<br>SUBSURFACE<br>SEDIMENTS | NOTES |
|------------|----------------------|-----------------------------|-----|-----|-----|----|----|----|-------|---------------|----------------|--------------|----------------|-------------|----|----|----|-------------------------------------|-------|
|            |                      | OP                          | HOR | MOR | LOR | OF | TR | NO | cm-cm | Y/N           | (cm)           | BR           | R              | S           | UI | MI | LI |                                     |       |
| 1          | 20                   |                             |     |     |     |    |    | ✓  | -     |               | -              | -            |                | ✓           |    |    |    | P-PR                                |       |
| 2          | 25                   | ✓                           |     |     |     |    |    |    | O-8   | Y             | -              | -            |                | ✓           |    |    |    | PG-PG                               |       |
| 3          | 25                   | ✓                           |     |     |     |    |    |    | O-8   | Y             | -              | -            |                | ✓           |    |    |    | PG-PG                               |       |
| 4          | 20                   |                             |     |     |     |    |    | ✓  | -     |               | -              | -            |                | ✓           |    |    |    | PG-PG                               |       |
| 5          | 15                   |                             |     |     |     |    |    | ✓  | -     |               | -              | -            |                | ✓           |    |    |    | PG-PG                               |       |
| 6          | 15                   |                             |     |     |     |    |    | ✓  | -     |               | 10             | N            |                | ✓           |    |    |    | PG-PG                               |       |
| 7          | 20                   |                             |     |     |     |    |    | ✓  | -     |               | -              | -            |                | ✓           |    |    |    | P-PG                                |       |

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

OG COMMENTS: THIS SUBDIVISION WAS SURVEYED IN 2 LOCATIONS. THE MOST SIGNIFICANT OIL WAS OBSERVED AT LOCATION (I) WHICH IS DESCRIBED ON THE NEXT PAGE BUT AREA (K) WAS COVERED BY A BROAD BAND OF SEAWEED DRIFT. WE MOVED THE DRIFT ASIDE IN MANY PLACES BUT IF A CREW WAS IN THE AREA WHEN THE SEAWEED WAS GONE, ANOTHER LOOK WOULD BE HELPFUL.

CONT. ON NEXT PAG.  
 RAISED: MC 6/24/91 REVISED: F.W. 5/26/91

[illegible]

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

OG COMMENTS: AREA (I) | SIDE VIEW

SEVERAL BAGS OF OILED

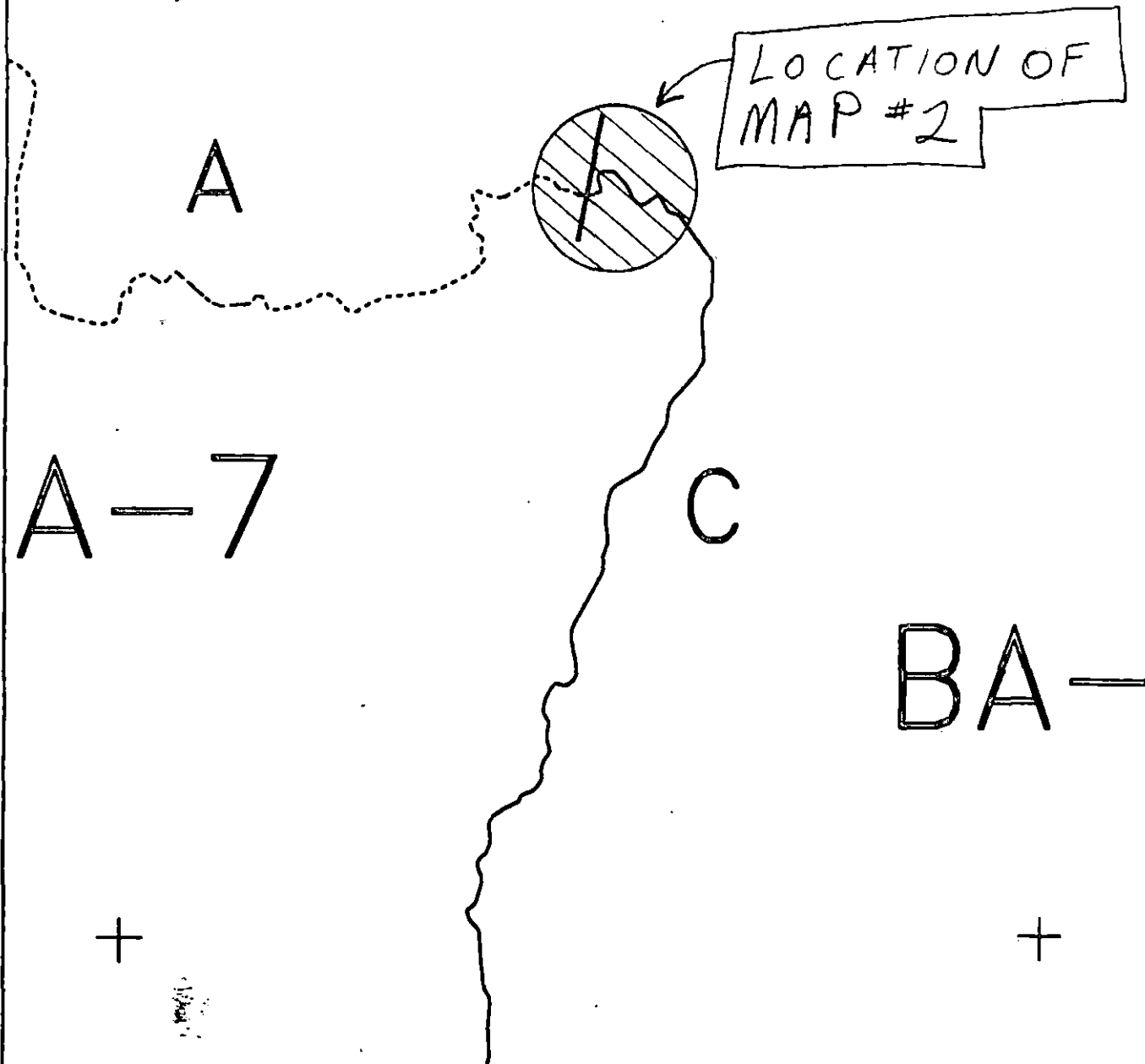
SEDIMENT WERE REMOVED FROM THIS SITE DURING THE SURVEY. WHEN WE FIRST ARRIVED THERE WERE SEVERAL EXAMPLES OF AP PATCHES PARTIALLY BURIED AS DRAWN ABOVE. MOST OF THESE WERE RECOVERED WITH SOR/m REMAINING. IN THE VICINITY OF PITS 2 to 7 A DISTINCT PATCH OF AP WAS DEFINED 4x7m. THIS PATCH TURNED VERY SOFT IN THE DIRECT SUN AND COULD BE CLASSIFIED AS SOR/H. IT WAS NOT RECOVERED.

(L<sub>2</sub>) PHOTO #20 LOCALIZED POCKETS MS IN VERTICAL BEDDING PLANE. UP TO 3cm DEEP. AP to SOR/H DEPENDING ON SUN IN THE VICINITY.

REVIEWED: F.W. 5/26/1  
REVIEWED: MC 5/26/9,

MAP 1 of 4

ORIENTATION MAP



BA006 C

METERS



AK State Plane Zone 4  
14800000

Subdivision Field Map

Map Key: PVSBA006C

Name: CHANEY

Date: MAY 22 1991

REVIEWED: MC 5/26/91

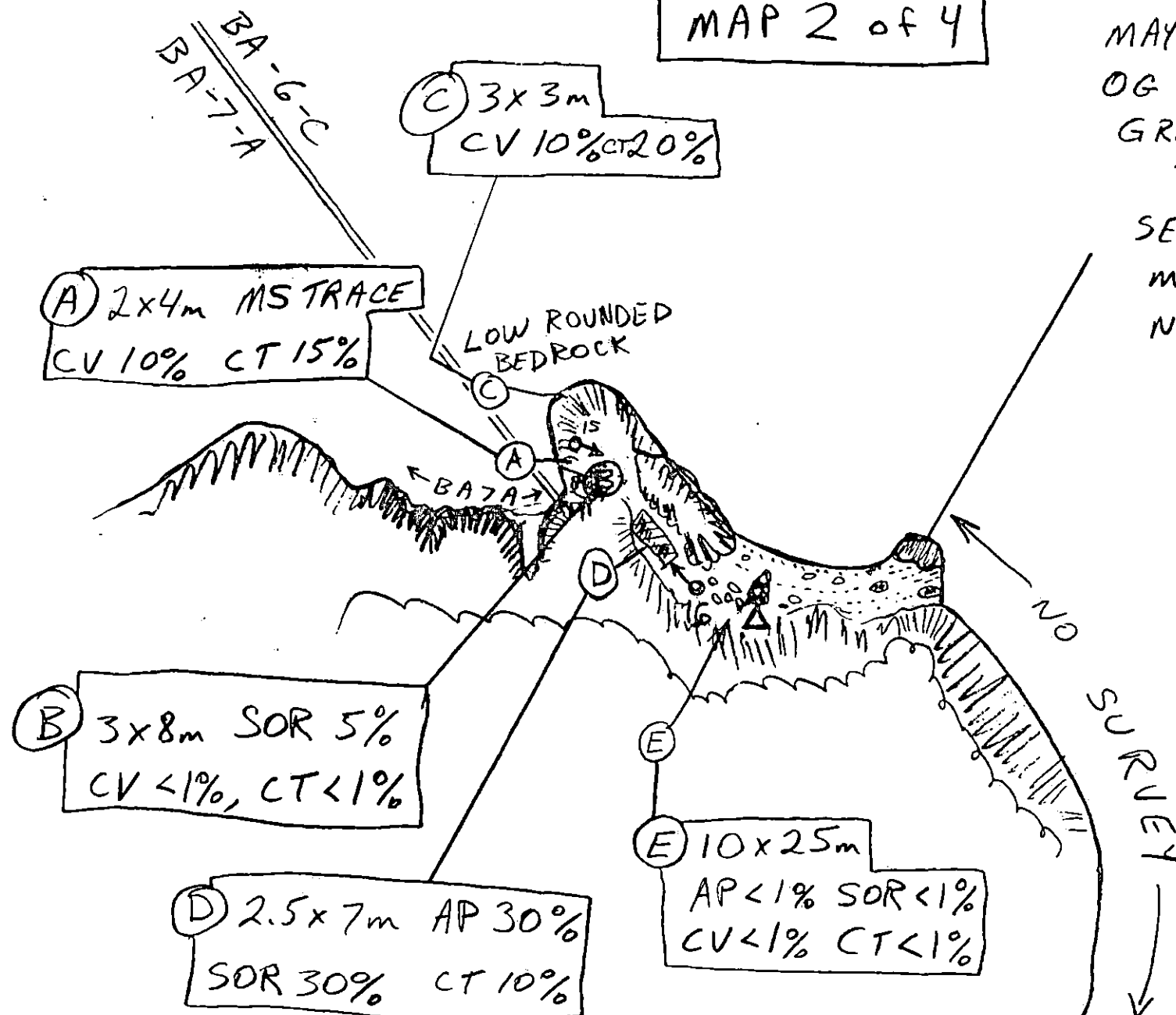
REVIEWED: F.W. 5/26/91

MAP 1 of 4

MAP 2 of 4

MAY/SAP 1991  
OG SKETCH MAP  
GREG CHANEY  
TEAM 5

SEGMENT BA-6C  
MAY 21 1991  
NO AIR PHOTO  
PROVIDED



BAINBRIDGE ISLAND

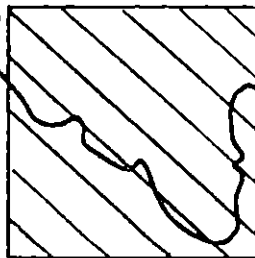
Revised: 11/5/91  
REVISED: F.W. 5/24/94

MAP 3 of 4

+

ORIENTATION  
MAP

LOCATION OF  
MAP #4



B

A



BA006 C

METERS



AK State Plane Zone 4  
psu00000

Subdivision Field Map

Map Key: PVSBA000C

Name: CHANEY

Date: MAY 22 1991

REVIEWED: MC 5/24/91

REVIEWED: F.W. 5/26/91

AYSAP 1991  
UG SKETCH MAP  
GREG CHANEY

MAP 4 of 4

TEAM 5  
SEGMENT: BA006 C  
DATE: MAY 21 1991  
AIR P.#: NONE

PATCHES  
SCATTERED

F 2x4m AP 3%  
CT < 1%

G 3x4m SOR < 1%  
CV 10% CT 5%

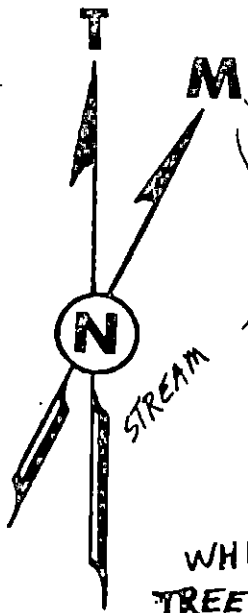
H 3x60m CV < 1%  
CT < 1%

I 4x25m  
20% SOFT AP  
5% SOR/M  
SEE COMMENTS

SEVERAL BAGS  
RECOVERED

L<sub>1</sub> 6x110m AP < 1%, TB < 1%,  
SOR < 1%, CV < 1%, CT < 1%

L<sub>2</sub> 1x20m AP 15%, MS 1%, SOR 10%  
CV 10% CT 10% DISCONT. BAND  
INSIDE L<sub>1</sub>



WHITE DRIFT  
TREE WITH  
BRANCHES

LEGEND

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

J 10x105m  
CV < 1%  
CT < 1%  
SPLATTERS  
ON BOULDERS

NO FIELD DATA  
ASSUME:  
4m x 4m OP

L<sub>1</sub>

L<sub>2</sub>

20

K

K 7x40m AP < 1%  
CV < 1% CT < 1%  
AP MOSTLY ON WEST  
SIDE OF AREA K

SCALE

APPROXIMATELY

40 METERS

BROAD BAND  
DRIFTED SEAWEED

REVISED: F.W. 5/24/91  
Assumed: Mc 5/24/91

TEAM # 5

DATE 21 May 1991

SEGMENT # BA-16

TIDAL HEIGHT (Range) +5 → +1

SUBDIVISION A

BIOLOGIST Crank

SEA STATE 0

WIND SPEED/DIRECTION no wind

PHOTOGRAPHS: ROLL #

FRAME #

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

(A) Area is located high in the VITZ. White and black lichens, moss and rare concentrations of *Littorina* in small tidepools are present in the site. Biota cover is ~20%. A Silver oil sheen was present on the tidepools within the site.

(B,C) Areas are located low in the VITZ. Rarely concentrations of *Fucus* *spargangia*; and clusters of *monostichus* concentrated 1 meter cover 1% of the surface. Sediments. Directly below the site there is a 5m band dense *Fucus* on peat. *Concepracies* are maturing and *spargangia* are present. *Concepracies* concentrations of barnacles, *Littorina* and *Littorina* are also present. Biota cover is ~80%. Located low in the MITZ there is a moderate to densely concentrated intertidal mussel bed.

(D) Area is located in the SUPRA and includes the driftline. Rye grass is sprouting through the AP covering <1% of the supralitt. There are also exposed dead rye grass roots in the AP. Surrounding the AP and in the general vicinity rye grass covers ~30% of the surface.

(E) Area is in the SUPRA and VITZ. The SUPRA has ~30% rye grass cover. The VITZ has ~20% biota cover including: sparse concentrations of barnacles, *Fucus*, *Littorina* and limpets and a rare concentration of juvenile mussels. The *Fucus* *spargangia* are dry. Approx. the 5' tide level there is a moderately concentrated intertidal mussel bed with sparse barnacles sparse *Fucus* and rare *Gloiopeletis* (aka). A manual crew (no machines!) could access the site using

WILDLIFE OBSERVATIONS a single path through the lower zones to minimize damage to the mussel bed. The mussel bed should not be disturbed except for access path.

## TO BE COMPLETED IN ALL SUBDIVISIONS

## FISH OBSERVED

| BIRDS            | # OF SPECIES | TOTAL BIRDS | SPECIES PRESENT |
|------------------|--------------|-------------|-----------------|
| Eagles           | 1            | 1           | Pink Salmon fry |
| Seabirds         | 1            | 20          |                 |
| Waterfowl        | 1            | 1           |                 |
| Gulls/kittiwakes | 3            | 19          |                 |
| Shorebirds       | 1            | 2           |                 |
| Corvids          | 1            |             |                 |
| Other Birds      | 1            | 1           |                 |

## LAND MAMMALS

## MARINE MAMMALS

## # OBSERVED

## SPECIES

## # OBSERVED

|                     |               |      |   |
|---------------------|---------------|------|---|
| Sea Otters          | 2             | Deer | 1 |
| Pinnipeds (specify) | 1 Sealion     |      |   |
| Whales (specify)    | 1 Harbor Seal |      |   |
|                     |               |      |   |
|                     |               |      |   |

Shoreline subdivision map showing important biological features attached.

Reviewed: MC 5/16/91  
Brend 5/16/91

Team # 5  
Segment # BA-6  
Subdivision A  
Sea State 0

Date 21 May 1991 pg 20  
Tidal Height +5 → +1  
Biologist Crank  
Wind Speed / Direction no wind

### Comments (cont.)

- (F) Area is a 2x4m patch in the UITZ, 1 m west of cliff wall and 8m east of a babbling brook. Within the site, healthy Fucus with sporelings and a rare concentration of healthy barnacles cover 10% of the surface sediments. Directly below the site, a 8x4m patch of Fucus and barnacles covers 30% of the sediments. In the low MITZ and LITZ barnacles are dominant. West of the stream bank barnacles cover 20% of the surface area.
- (G) Area is located in the SUPRA and UITZ on a small pocket of bedrock and boulders. In the SUPRA, moss is present. In the UITZ there are rare concentrations of barnacles and Fucus sporelings. Low in the site there are sparse patches of limpets. Filamentous green algae is present on the bedrock sides. One meter below the site there is a dense 4m wide Fucus band. Below the Fucus, barnacles are dominant, moderately concentrated to the LITZ.
- (H) Area is located in the UITZ on boulders and bedrock. Rare concentrations of barnacles, Fucus sporelings and limpets are present. Biota cover is <1%. In the MITZ the same organisms cover 50% of the surface sediments.
- (I) Area is located in the UITZ. No intertidal biota was found within the site. Ten meters below, barnacles have a moderate concentration and Littorina and limpets are sparse. At approx. the +5' tide level there are moderate, intercobble mussels, dense Littorina and sparse juvenile Saxileasia (whelk). Biota cover is ~70%. On a rock outcrop, there is a moderate concentration of Fucus (with maturing conceptacles and sporelings) and barnacles (various ages). Biota cover is ~70%. In the LITZ, clam shells are also present.

REVIEWED: 5/14/91 MC

Team # 5  
Segment # BA-6  
Subdivision A  
Sea State 0

Date 21 May 1991 pg 3  
Tidal Height  $+5 \rightarrow +1$   
Biologist Crank  
Wind Speed / Direction no wind

### Comments (cont.)

(J) Area is located high in the UITZ. Black lichen, moss and ryegrass are present within the site. Biota cover is  $< 1\%$ . Directly below the site Fucus and barnacles have a sparse concentration. In the MITZ, there are sparse concentrations of Fucus with sporelings, mussels, barnacles with spat, Scytosiphon and Enteromorpha (algae). Littorina and limpets are moderate and polychaete worms are rare. Biota cover is  $\sim 30\%$ .

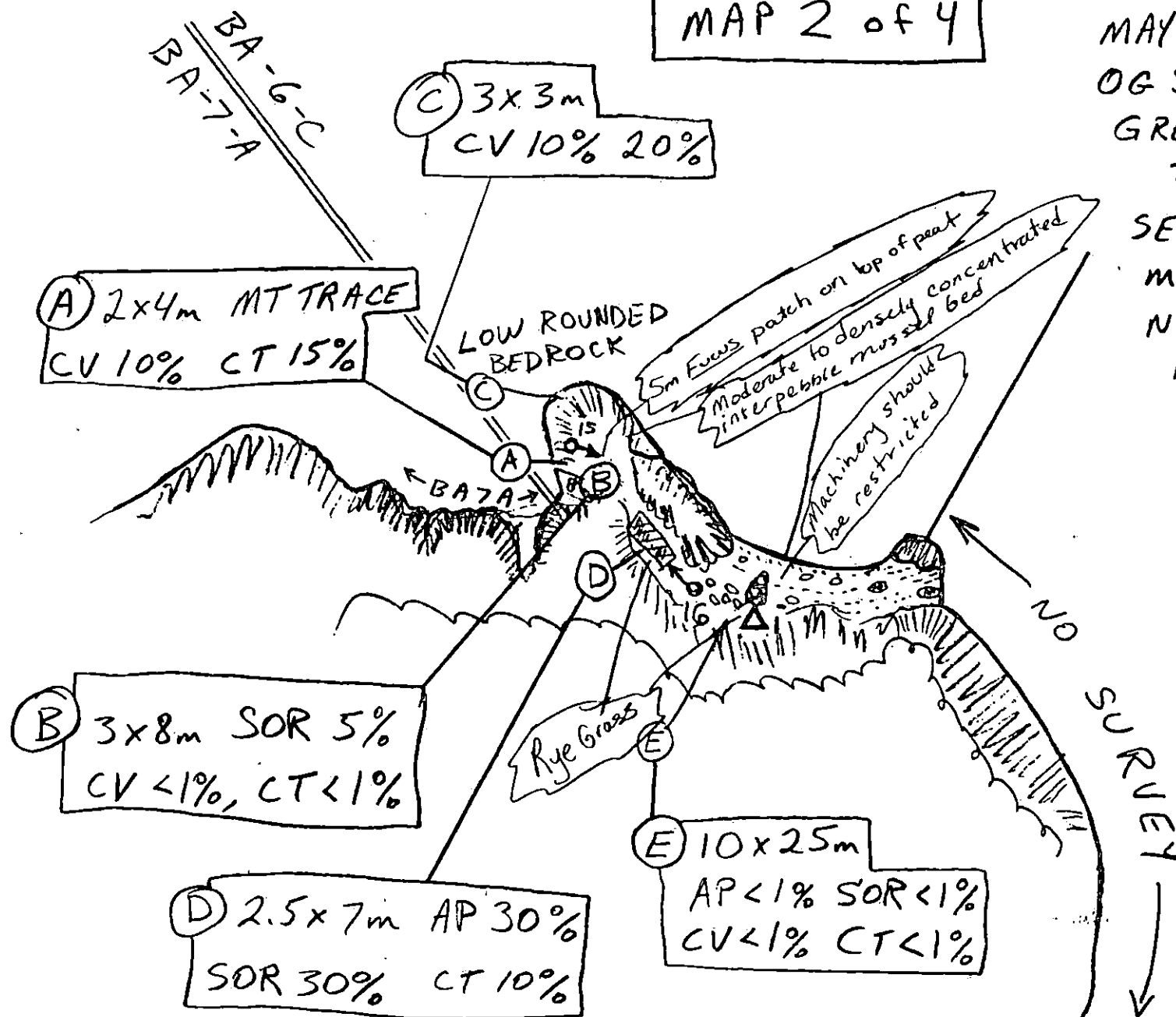
(K) Area is located under drift Fucus. There is no intertidal drift present within the site, Biota below the site is similar to (J).

(L<sub>1</sub> & L<sub>2</sub>) Areas are located in the SUPRA and UITZ. L<sub>2</sub> is the vertical bed planes with the L<sub>1</sub> cover. In the SUPRA, ryegrass and moss is present. In the UITZ Fucus, barnacles, Littorina and limpets cover  $< 10\%$  of the surface sediment. In the middle of the cove, L<sub>2</sub> has a dense Fucus sporeling cover.  $1 \times 3$  Below the site there is a discontinuous, dense cover of Fucus and gastropods. Barnacles and mussels have a continuous, sparse to moderate concentration. Biota cover is  $\sim 70\%$ . Above the sites, grass tips have been grazed.

MAP 2 of 4

MAY SAP 1991  
OG SKETCH MAP  
GREG CHANEY / CRAN  
TEAM 5

SEGMENT BA-60  
MAY 21 1991  
NO AIR PHOTO  
PROVIDED



MAYSAP 1991

OG SKETCH MAP

GREG CHANEY

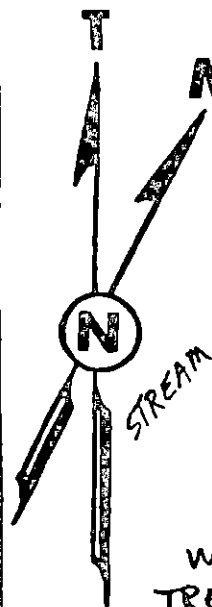
TEAM 5

SEGMENT: BA006 C

DATE: MAY 21 1991

AIR P.#: NONE

Bio Crank



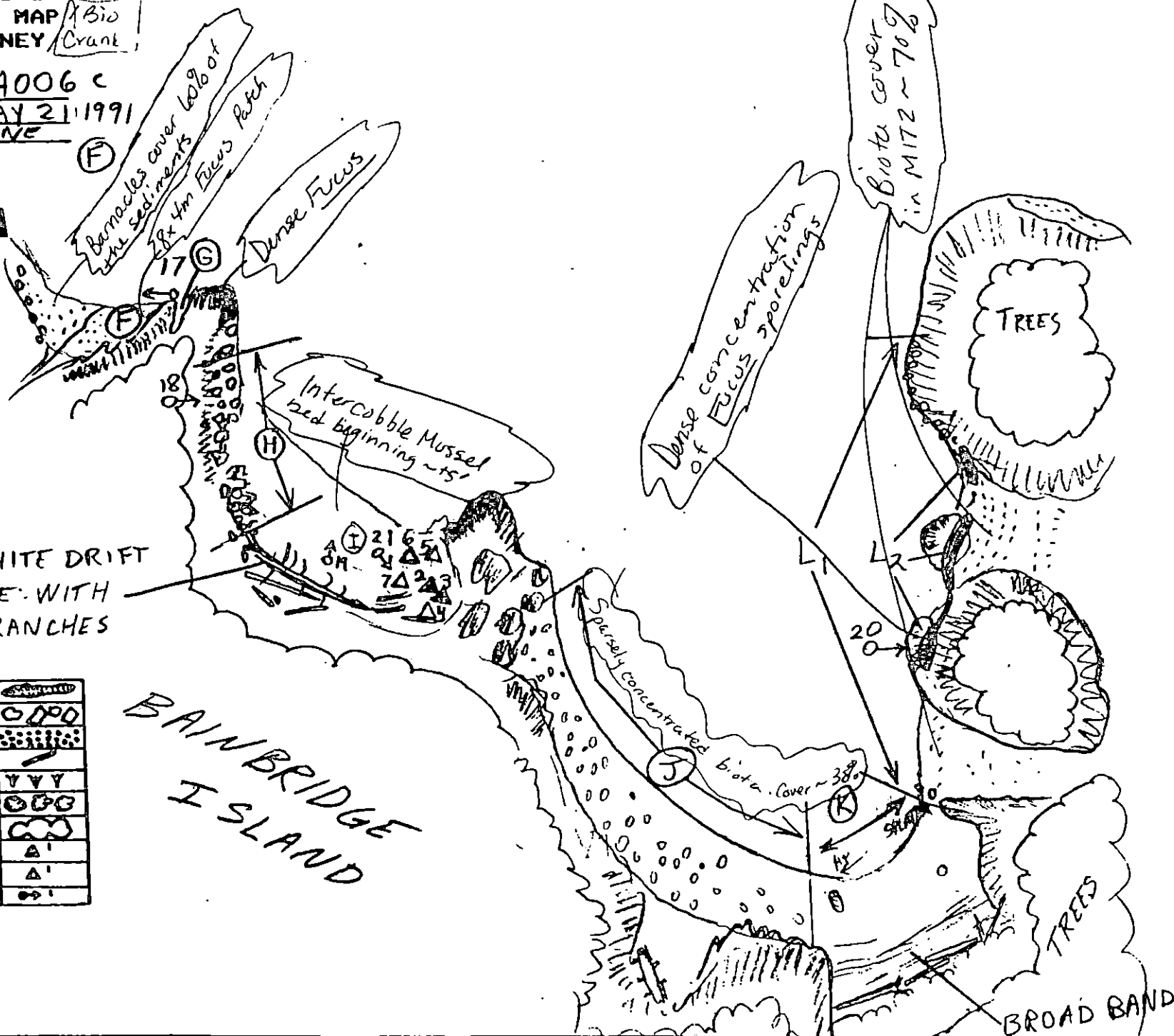
WHITE DRIFT  
TREE WITH  
BRANCHES

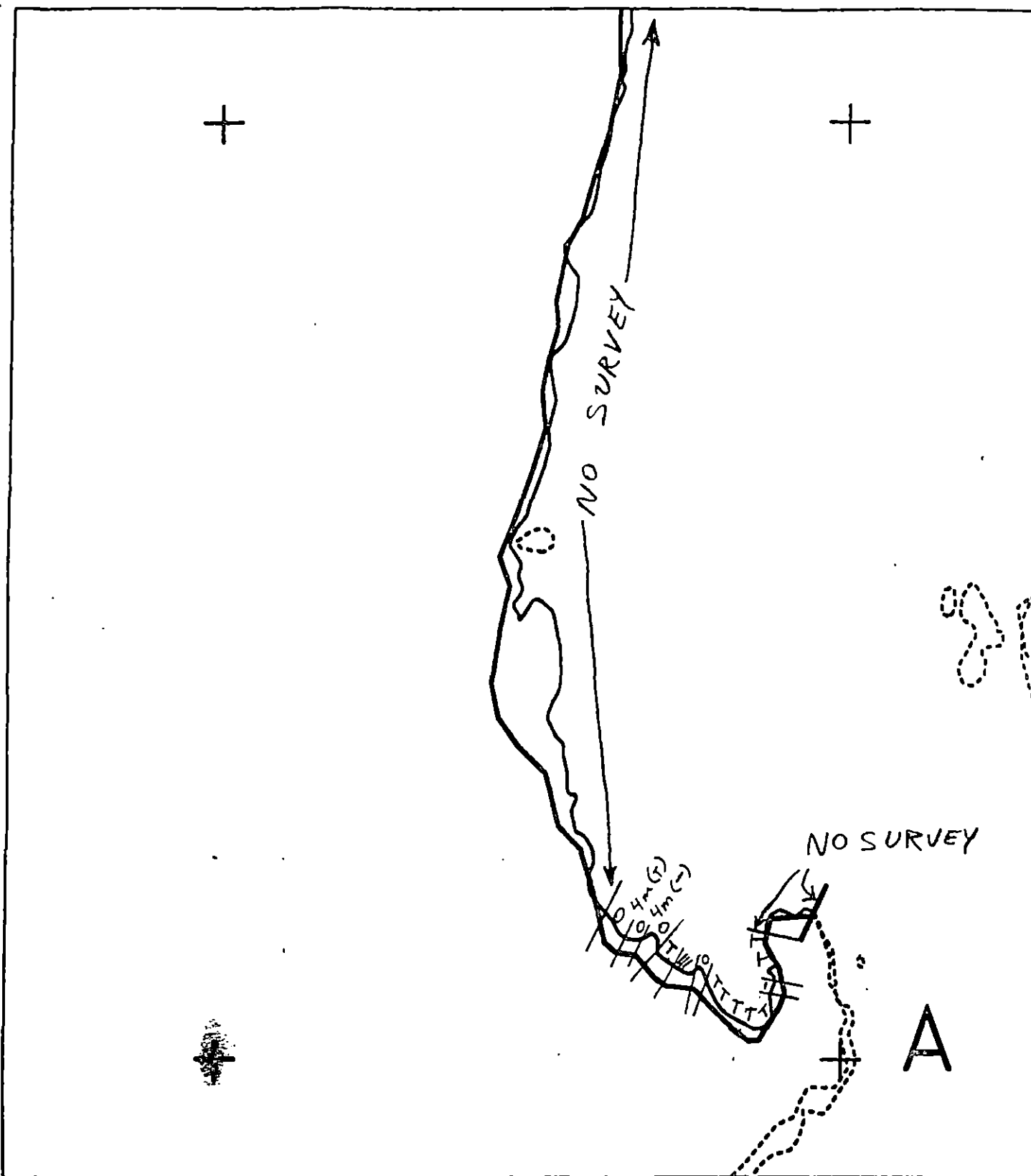
LEGEND

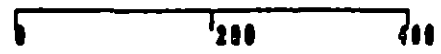
|            |  |
|------------|--|
| BEDROCK    |  |
| BOULDERS   |  |
| FINE BED.  |  |
| DRIFT LOG  |  |
| GRASS      |  |
| BRUSH      |  |
| FOREST     |  |
| OILED PIT  |  |
| NO OIL PIT |  |
| PHOTO      |  |

SCALE

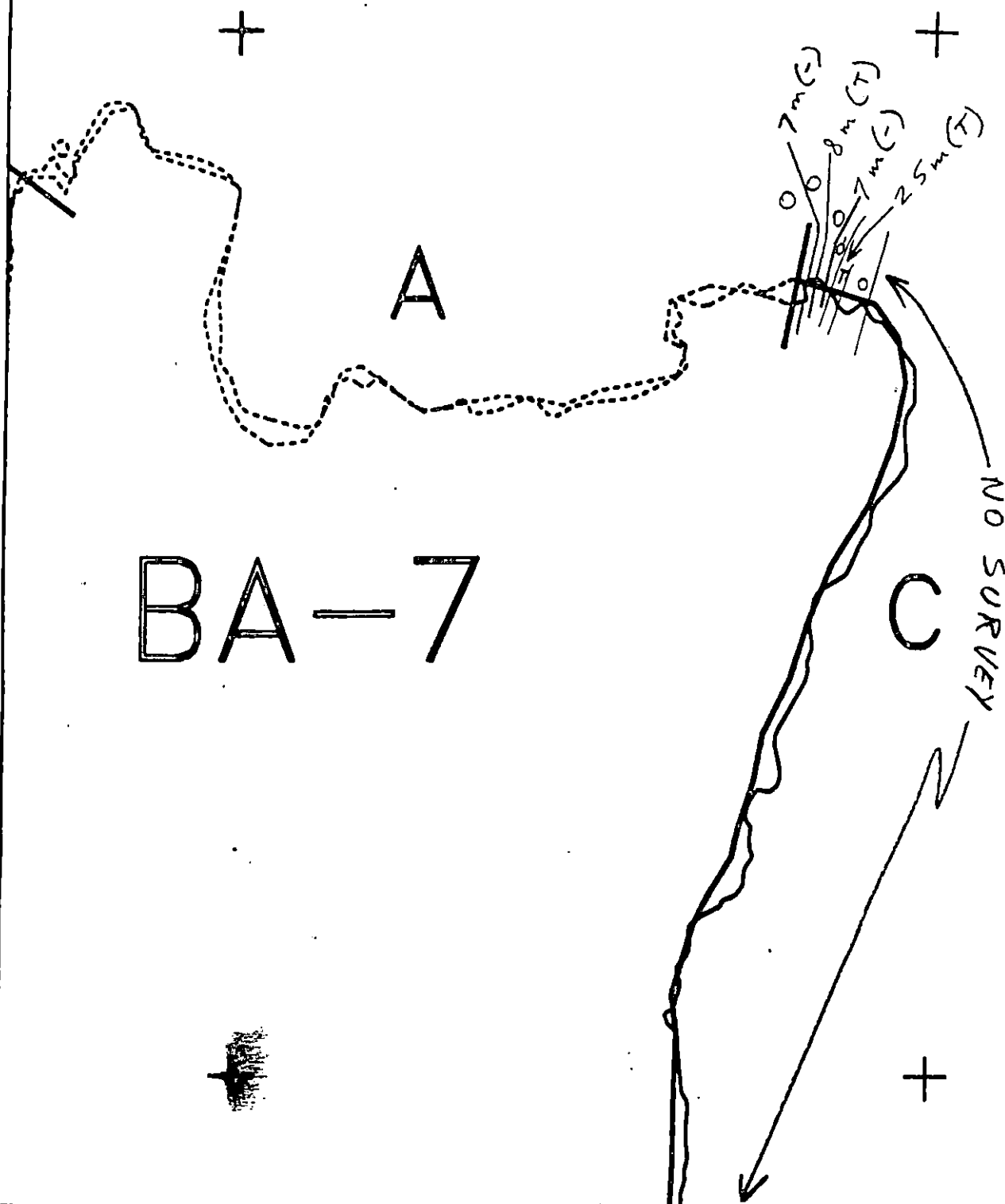
BAINBRIDGE  
ISLAND





|      |            |                                                                                                                                                                                        |                                                                                                                                                                                |                          |
|------|------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------|
| XXXX | Wide       | <b>BA006 C</b><br>ADEC Subsegment Length: 3281m<br>METERS<br><br>AK State Plane Zone 4<br>pb000600 | <br> | Subdivision Field Map    |
| //// | Medium     |                                                                                                                                                                                        |                                                                                                                                                                                | Map Key: PWSBA0006C      |
| ---- | Narrow     |                                                                                                                                                                                        |                                                                                                                                                                                | Name: <u>CHANEY</u>      |
| TTTT | Very Light |                                                                                                                                                                                        |                                                                                                                                                                                | Date: <u>MAY 21 1991</u> |
| 0000 | No Oil     |                                                                                                                                                                                        |                                                                                                                                                                                | Date Entered:            |

REVIEWED: F.W. 5/26/91  
 REVIEWED: MC 5/24/91



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

**BA006 C**  
 ADEC Subsegment Length: 3261m  
 METERS  
 0 200 400  
 AK State Plane Zone 4  
 ph0002eb



Subdivision Field Map  
 Map Key: PWSBA0006C  
 Name: CHANEY  
 Date: MAY 21 1991  
 Date Entered:

REVIEWED: F.W. 5/26/91  
 REVISOR: MC 5/26/91

ASAP

SEGMENT AS / BA-6 SUBDIVISION: C SITE: 1 DATE 8/4/90

## USCG

NAME MTC Michael D. Brown SIGNATURE Michael D. Brown☐ YES  
REASON:☒ NO

PRIORITY SITE FOR REASSESSMENT IN 1991

## ADEC

NAME John Hayer SIGNATURE John Hayer☒ YES  
REASON:☐ NO

PRIORITY SITE FOR REASSESSMENT IN 1991

Work Plan Modification written for North Beach.  
The rest of the site has additional SOR + MS.

## LAND MANAGER

NAME DOUGLAS GIBSON SIGNATURE Douglas Gibson☐ YES  
REASON:☒ NO

PRIORITY SITE FOR REASSESSMENT IN 1991

~~REG~~ <sup>REG</sup> CONDITIONAL PROVIDED ASAP WORK ORDER  
REQUEST FOR 1990 IS ~~REG~~ <sup>REG</sup> COMPLETED.

## EXXON

NAME Martinez N.W. SIGNATURE Nicholas G. Martinez☐ YES  
REASON:☒ NO

PRIORITY SITE FOR REASSESSMENT IN 1991

Minimum S.O.R. Nature should take care  
of what little is left.

SEGMENT AS/ BA-6 SUBDIVISION: C SITE: 2 DATE 8/4/90USCGNAME MTC Michael D. Brown SIGNATURE Michael D. BrownREASON: ☐ YES ☒ NO PRIORITY SITE FOR REASSESSMENT IN 1991ADECNAME John Hoyer SIGNATURE John HoyerREASON: ☒ YES ☐ NO PRIORITY SITE FOR REASSESSMENT IN 1991

MS SOR in UITS, screen was observed in  
tide pools. Most of the SOR was in areas where  
manual work was done at May Farm AP.

LAND MANAGERNAME DOUGLAS GIBSON SIGNATURE Douglas GibsonREASON: ☐ YES ☒ NO PRIORITY SITE FOR REASSESSMENT IN 1991EXXONNAME Martinez Ned SIGNATURE Ned MartinezREASON: ☐ YES ☒ NO PRIORITY SITE FOR REASSESSMENT IN 1991

No significant oiling in area

SEGMENT BA-6

SUBDIVISION C - SITE #1

DATE 8/4/90

# SKETCH MAP SITE #1

## 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 ▲

Pit - No Subsurface Oil

2 ▲

Pit - Subsurface Oil

CT/C

Continuous Distribution

CT/B

Broken Distribution

CT/P

Patchy Distribution

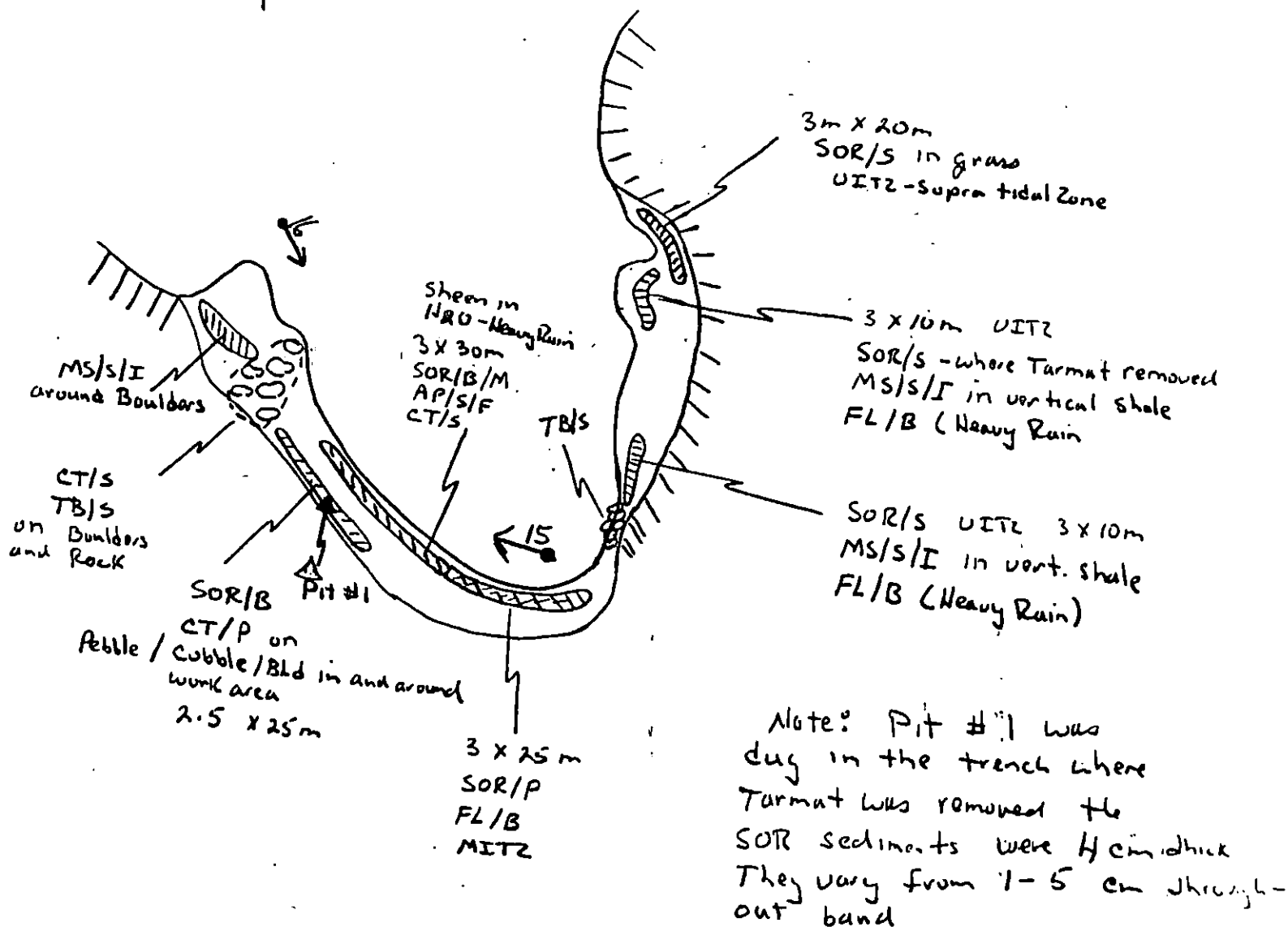
CT/S

Splashed Distribution

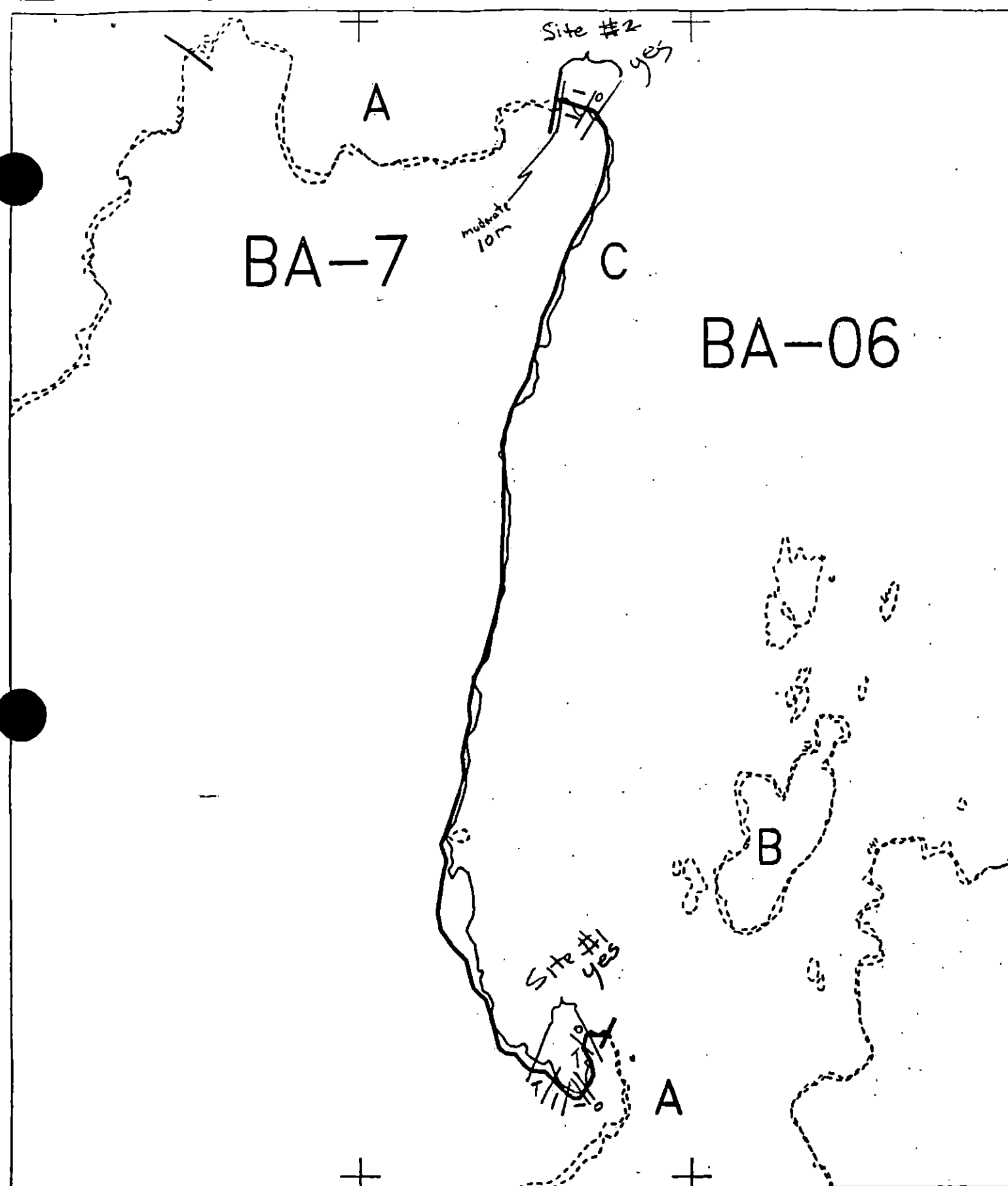
Oil Vegetation

1 ●→

Photo location, direction,  
and number



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



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

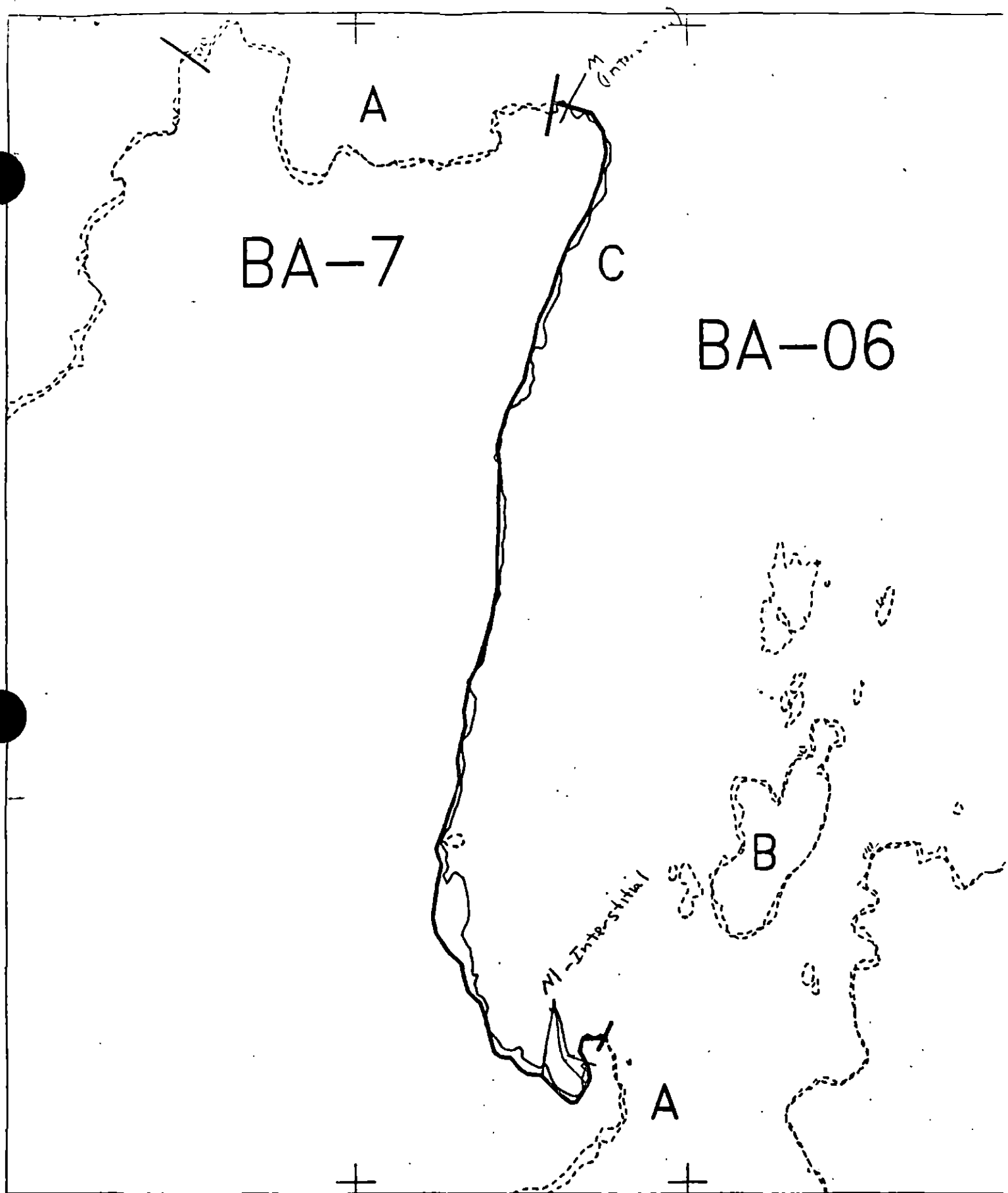
BA-6 C  
 ADEC Subsegment Length: 3261m  
 METERS

0 340 680

AK State Plane Zone 4 1:13706  
 pbe-6c



Subdivision Field Map  
 Map Key: PWSBA-6C  
 Name: Reimer  
 Date: 8/4/90  
 Date Entered:



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

BA-6 C  
 ADEC Subsegment Length: 3261m  
 METERS

0 340 600

AK State Plane Zone 4  
 pba-6c



Subdivision Field Map  
 Map Key: PWSBA-6C  
 Name: Reimer  
 Date: 8/4/90  
 Data Entered:

**ARLIS**  
**Alaska Resources**  
**Library & Information Services**  
**Anchorage, AK**