

OIL SPILL PUBLIC INFO. CENTER



3 6653 00006405 9

EVOS
GC
1552
.P75
S42
1991
v.15

[Shoreline evaluations, 1991].

Kodiak K0634 SL 015 to K0908 CD 003

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REGION: KODIAK

SEGMENT: ST/K06-34-SL-015

SUBDIVISIONS: A (1 OF 1)

SHORELINE EVALUATION

SEGMENT ST/ K06-34-SL-15 SUBDIVISION A (1 OF 1) DATE 4/4/90

SEGMENT ENVIRONMENTAL SENSITIVITIES AND TIME CONSTRAINTS:

Salmon stream mouth no. ASC#256-40, #10010

Salmon stream outmigration (1A) - 3/1 to 5/15 and spawning (1B) - 7/10 to 8/31. No disturbance of stream bed or banks unless authorized by ADF&G. Contact ADF&G Habitat Division prior to treatment for permits. Sensitive estuary (8AA).

SUBDIVISION ECOLOGICAL CONSTRAINTS:

Avoid disturbance/damage to unoiled substrate and biota.

ARCHAEOLOGICAL CONSTRAINTS:

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

SHPO SIGNATURE: _____ DATE: _____

OILING CATEGORIZATION:

Wide 0 m: Medium 0 m: Narrow 0 m: V.Light 25 m: No Oil 1276 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: Manual pick up of mousse and oil spill related debris. Work before 7/10.

TAG COMMENTS:

TAG APPROVAL DATE: _____

ADEC _____
EXXON _____
NOAA _____
USCG _____

FOSC: _____ DATE: _____

FIELD SHORELINE COMMENT SHEET

SEGMENT ST / K6-34-SL-15 SUBDIVISION: K6-34-SL-15A DATE 4/4/90

CG

NAME D.D. Haven Jr., GM3, USCGR SIGNATURE [Signature]

☐ NO TREATMENT RECOMMENDED ☒ TREATMENT SUGGESTED
COMMENTS

This area is ~~a~~ very lightly impacted according to OG. I was inspecting a separate area at the time. Normally, I would not recommend clean up for this degree of impact, but there is leftover clean up debris in nearby segments and while there are workers in the area, they may as well pick-up any removable oil/mousse.

ADEC

NAME Francine J. Bennis SIGNATURE [Signature]

☐ NO TREATMENT RECOMMENDED ☒ TREATMENT SUGGESTED
COMMENTS

Treatment for other segments in Sturgeon Lagoon is recommended. It'd be a good idea for the clean-up crew to attend to this area to manually collect any retrievable oil.
SSAT Field maps should accompany clean-up crews.

LAND MANAGER

NAME JOAN P. HARDISTER SIGNATURE [Signature]

☐ NO TREATMENT RECOMMENDED ☒ TREATMENT SUGGESTED USFWS
COMMENTS

Impact by oil is light. inadvertent cleanup by crews in adjacent areas is warranted.

John Merrick

Concur with above

John Merrick Koniag, Inc.

SHORELINE OILING SUMMARY

REVISION NO. 03/22/90

OG Acton USCG Haven SEGMENT ST/ K 6-34-SL-15
 BIO Davis LAND REP USFWS Hardister SUBDIVISION K6-34-SL-15A
 EXXON Avery ADEC Bennis TIME 2:30 to 3:15
 TEAM NO.: 20 TIDE LEVEL: +6 to +4.5 DATE 4 / 4 / 90
 ST. SUBDIVISION LENGTH: 1330 m ☐ Sun ☐ Clouds ☐ Fog ☐ Rain ☒ Snow
 UPLANDS DESCRIPTION: ☒ Grass ☐ Forest ☐ Rock
 SURVEYED FROM: ☒ Foot ☐ Boat ☐ Helo WORKING DIRECTION: S to N
 SURFACE SEDIMENTS: R 0 % B 0 % C 25 % P 25 % G 15 % S 30 % M 25 % V 0 %
 SLOPE: Long 100 % Hang 0 % Vert 0 % WAVE EXPOSURE: ☒ Low ☐ Med ☐ High
 OIL CATEGORY LENGTH: W 0 m M 0 m N 0 m VL 30 m NO 1300 m

SURFACE OIL

CHARACTER	DISTRIBUTION				OIL / FILM COLOR						IMPACTED ZONES			
	C	B	P	S	SW	BR	BL	GR	TR	LR	SU	U	M	U
ASPHALT PAVEMENT														
POOLED														
COVER														
COAT				✓		✓							✓	
STAIN														
MOUSSE			✓					✓					✓	
PATTIES														
TARBALLS														
FILM														
NO OIL											✓	✓		✓

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 10/10#BAGS 0

Photographs:

Roll No. 20-3Frames 7-10

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	OP	NO		VO	UC	SW	BR	BL	GR	TR	LR	SU	U	M	U		
1	40					✓	-										✓				MGP
2	40					✓	-											✓			MGP
3	30					✓	-											✓			MGP
4	30					✓	-												✓		MGP
5	30					✓	-												✓		MGP
							-														

COMMENTS 3m x 30m band of MGP and CT/S₀ on and around surface cobbles/patbles.
No subsurface or other oil was observed. Walked entire segment

↓
 Band in in upper MITZ.

OG Acta

SKEETCH MAP

Approx Scale
1cm = 100m
N↑

SEGMENT ST/ KL-34-2-15

SUBDIVISION KL-34-2-15

DATE 1 / 1 / 90

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

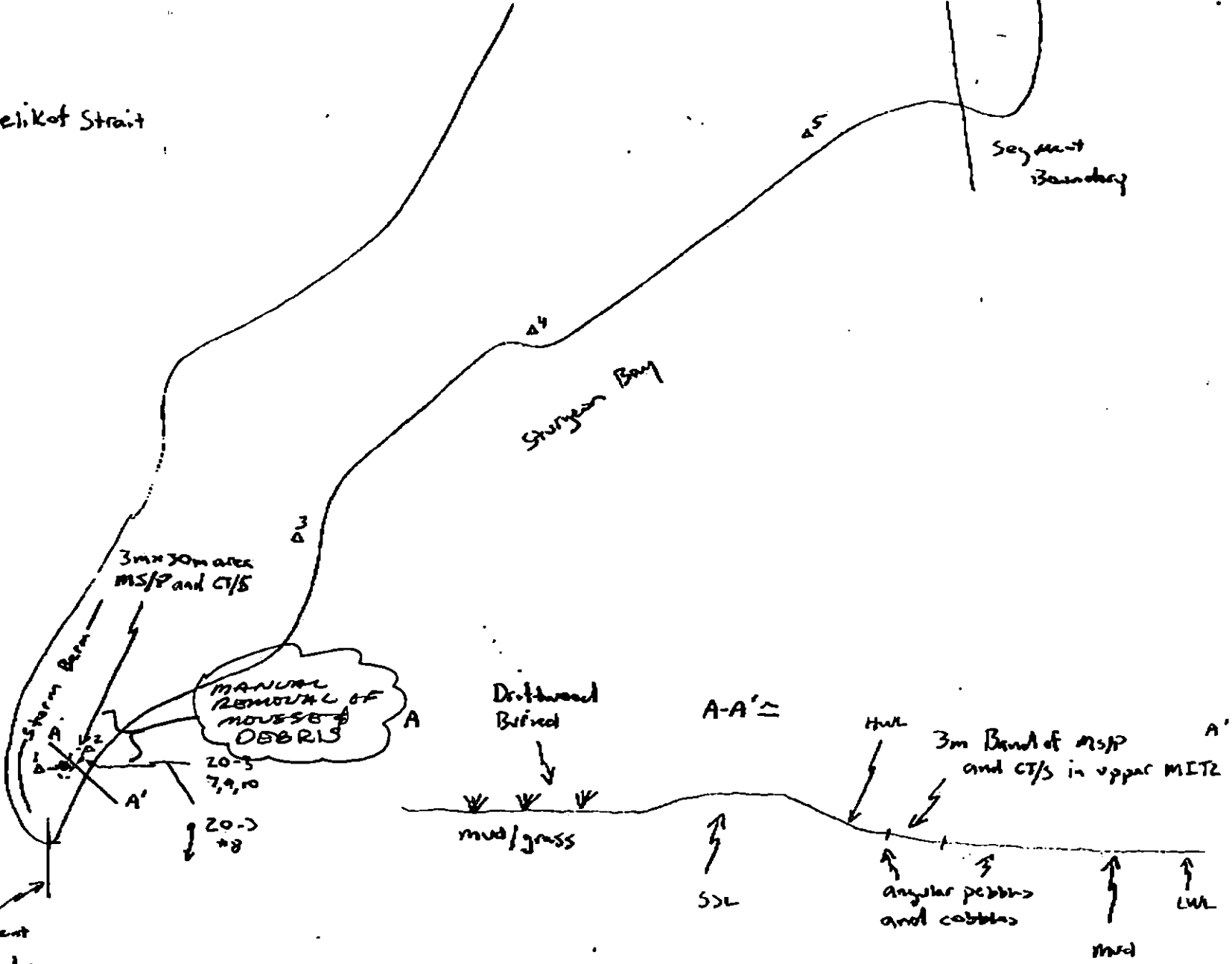
- LEGEND
- 1 Δ
Pc - No Subsurface Oil
 - 2 Δ⁺
Pt - Subsurface Oil
 - CT/C
Continuous Distribution
 - CT/B
Broken Distribution
 - CT/P
Patchy Distribution
 - CT/S
Splattered Distribution
 - Dried Vegetation
 - 1 →
Photo location, direction, and number

Shelikof Strait

Sturgeon Bay

Segment Boundary

Segment Boundary



Character Length (m): AP ☐ PO ☐ CV ☐ CT 30 ☐ ST ☐ MS 30 ☐ PT ☐ TB ☐ FL ☐ NO 1300

SHORELINE ECOLOGICAL SUMMARY

REVISION: 03/22/90

Segment ST / K06-34 Subdivision SL-15A Date (mo / day / yr) 4-4-90

Time (24 hr) 14:30 Biologist H. Davis

(A) Substrate type and % of segments:
(1) Bedrock (2) Boulder (3) Cobble 25 (4) Pebble 50 (5) Sand 10 (6) Silt 25

(B) Overall % cover of biota (% of segment): Dense Moderate 50% Low 50% (25%)

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

Photographs:
Roll No. ST-20-3

Frames 7-12

BARNACLES

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

NOT PRESENT
1, 5, 6

MYTILUS

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

NOT PRESENT
1, 5, 6

GASTROPODS

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

NOT PRESENT
1, 5, 6

FUCUS

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

NOT PRESENT
1, 2, 5, 6

Wildlife Observations/ General Comments: On the center of the channel zostra beds were visible. Mallards (5-6), Pintails (20-30) and glaucous winged gulls were feeding in the area. At the western end of section SL-15 the barnacle population is sparse but continuous. As the number of colonies and patches decreases to the east so does the numbers of barnacles. Fucus appears sporadically as moderate to sparse patches. Gastropods were sparse. Evident both adults and juveniles were observed in the area.

Ecological Considerations: (A, B, 8A) The estuary and river areas are food sources for many species of birds, mammals and fish. It is a spawning area for Pink, Chum, Coho, Steelhead and Rainbow.

K6-34-SL-15A

Segment
Boundary

SL-

SL-3

Segment
Boundary

XXXX Wide

●● Medium

SL-15

--- Narrow

ADEC Segment Length: 1331m

TTTT Very Light

0000 No Oil



K6-34-SL-15A

Map Key: GOA-188

Name: Acton

Date: 4-4-90

Data Entered:

SHORELINE EVALUATION

SEGMENT ST/ K06-34-SL-15 SUBDIVISION A (1 OF 1) DATE 4/4/90

SEGMENT ENVIRONMENTAL SENSITIVITIES AND TIME CONSTRAINTS:

Salmon stream mouth no. ASC#256-40, #10010
Salmon stream outmigration (1A) - 3/1 to 5/15 and spawning (1B) - 7/10 to 8/31. No disturbance of stream bed or banks unless authorized by ADF&G. Contact ADF&G Habitat Division prior to treatment for permits. Sensitive estuary (8AA).

SUBDIVISION ECOLOGICAL CONSTRAINTS:

Avoid disturbance/damage to unoiled substrate and biota.

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) *per* or 229-1508 (24 hrs.)).

SHPO SIGNATURE: *Rachel Jean Dore* DATE: 6/20/90

OILING CATEGORIZATION:

Wide 0 m: Medium 0 m: Narrow 0 m: V.Light 25 m: No Oil 1276 m
Subsurface Oil Observed: Yes No X Maximum Depth

RECOMMENDATIONS:

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

COMMENTS: Manual pick up of mousse and oil spill related debris. Work before 7/10.

TAG COMMENTS:

TAG APPROVAL DATE: 4/16/90
ADEC *M. Hansen*
EXXON *Harold Ten*
NOAA *Burl Wescott*
USCG *G.A. Feltner*

FOSC: *h L* DATE: 6-27-90

Acton

SKETCH MAP

Approx Scale
1cm = 100m
N↑

MENT ST/ KL-34-2-15

DIVISION KL-34-2-15

E 1 90

ACKLIST

Arrow
approx. Scale
leg/Sub Bndry
N Dist.
Veg
length
Cover
substrate Character
st. HMA/LVL
SL
rofile Location(s)
rofile(s)
Location(s)
note Location(s)

SEND

△
to Subsurface Oil

2 △
subsurface Oil

CT/C
ious Distribution

CT/B
n Distribution

CT/P
Distribution

CT/S
ed Distribution

Vegetation

→
location, direction,
under

Shelikof Strait

Sturgeon Bay

Segment
Boundary

Segment
Boundary

3m x 30m area
MS/P and CT/S

MANUAL
REMOVAL OF
MOVES &
DEBRIS

Driftwood
Bifurc

A-A' =

3m Band of MS/P
and CT/S in upper MITZ

mud/grass

angular pebbles
and cobbles

mud

LWL

tractor Length (m): AP ☐ PO ☐ CV ☐ CT 30 ☐ ST ☐ MS 30 ☐ PT ☐ TB ☐ FL ☐ NO 1300

REVISION: 02/24/00

K6-34-SL-15A

Segment
Boundary

SL-

SL-3

Segment
Boundary

XXXX Wide

// Medium

--- Narrow

TTTT Very Light

OOOO No Oil

SL-15

ADEC Segment Length: 1331m



K6-34-SL-15A

Map Key: GOA-188

Name: ArdenDate: 4-4-90

Data Entered:

ADDENDUM: SUBDIVISION CONSTRAINTS

SEGMENT K06-34-SL-15 SUBDIVISION A (1 of 1)

WORK WINDOW

Manual Pickup

WORK PRIOR TO 7/10

ARCHAEOLOGICAL STANDARD CONSTRAINT

If cultural resources are uncovered, PHONE 564-3274.

APPLICABLE ECOLOGICAL TIME CONSTRAINTS

1A,1B Salmon Stream

ADF&G catalogued anadromous stream (256-40-10010) is in Subdivision A. Closed to manual pickup after 7/10.

OTHER ECOLOGICAL CONSIDERATIONS

Avoid any unnecessary disturbance or damage to unrolled biota and substrate. Sensitive Estuary.

FOSC

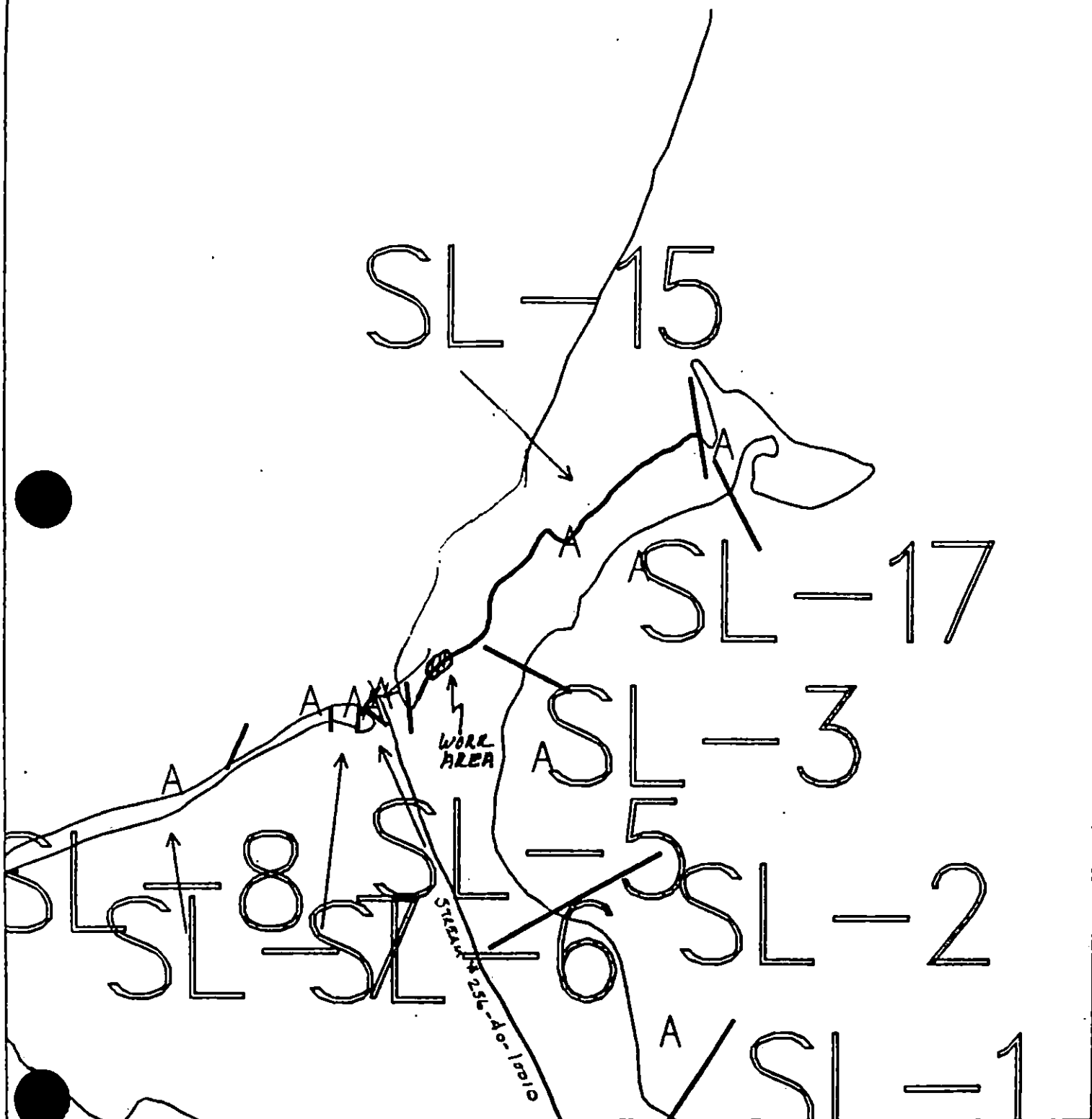
Date

Prepared by

Date

6/5/90

6-28-90



Exxon Company, USA

ECOLOGY MAP
 SEGMENT K6-34 SL-15
 SUBDIVISION A (1 of 1)

- ★ Seabird Colony
- ▲ Active Eagle Nest
- △

SHORELINE EVALUATION

MENT ST/ K06-34-SL-15 SUBDIVISION A (1 OF 1) DATE 4/4/90

SEGMENT ENVIRONMENTAL SENSITIVITIES AND TIME CONSTRAINTS:

Salmon stream mouth no. ASC#256-40, #10010

Salmon stream outmigration (1A) - 3/1 to 5/15 and spawning (1B) - 7/10 to 8/31. No disturbance of stream bed or banks unless authorized by ADF&G. Contact ADF&G Habitat Division prior to treatment for permits. Sensitive estuary (8AA).

SUBDIVISION ECOLOGICAL CONSTRAINTS:

Avoid disturbance/damage to unoiled substrate and biota.

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) *pm* or 229-1508 (24 hrs.)).

PO SIGNATURE: Rachel Dean Dorn DATE: 6/20/90

OILING CATEGORIZATION:

Wide 0 m: Medium 0 m: Narrow 0 m: V.Light 25 m: No Oil 1276 m
Subsurface Oil Observed: Yes No X Maximum Depth

RECOMMENDATIONS:

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

COMMENTS: Manual pick up of mousse and oil spill related debris. Work before 7/10.

TAG COMMENTS:

TAG APPROVAL DATE: 4/16/90

ADEC [Signature]

EXXON [Signature]

NOAA [Signature]

USCG [Signature]

FOSC: [Signature]

DATE: 6-27-90

SHORELINE EVALUATION

SEGMENT ST/ K06-34-SL-016 SUBDIVISION A (1 OF 1) DATE 4/4/90

SEGMENT ENVIRONMENTAL SENSITIVITIES AND TIME CONSTRAINTS:

Salmon stream mouth no. ASC #256-40, #10010

1A Salmon stream mouth - fry outmigration (4/15 to 7/31)

1B Salmon stream mouth - spawning (7/15 to 9/10; PEAK 8/15)

SUBDIVISION ECOLOGICAL CONSTRAINTS:

Avoid disturbance/damage to unoiled biota and substrate. See attached Ecological Constraint Sheet.

ARCHAEOLOGICAL CONSTRAINTS:

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

SHPO SIGNATURE: *Charles E. Adams* DATE: 4/17/90

OILING CATEGORIZATION:

Wide 0 m: Medium 0 m: Narrow 0 m: V. Light 0 m: No Oil 1921 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> <u> </u> Beach Cleaner
<u> </u> <u> </u> Removal	<u> </u> Other (see comments)

COMMENTS:

TAG COMMENTS:

TAG APPROVAL DATE: 4/16/90

ADEC *[Signature]*

EXXON *ANDY TATE*

NOAA *Bull Wescott*

USCG *G.A. REITER*

FOSC: *[Signature]*

DATE: 4-20-90

K6-34-SL-16A

SL-16

Segment
Boundary

SL-17

XXXX Wide

/●/ Medium

---- Narrow

TTTT Very Light

0000 No Oil

SL-16

ADEC Segment Length: 2011m



K6-34-SL-16A
Map Key: GOA-189

Name: Acton

Date: 4-4-90

Data Entered:

REGION: KODIAK

SEGMENT: ST/K06-34-SL-016

SUBDIVISIONS: A (1 OF 1)

SHORELINE EVALUATION

SEGMENT ST/ K06-34-SL-016 SUBDIVISION A (1 OF 1) DATE 4/4/90

SEGMENT ENVIRONMENTAL SENSITIVITIES AND TIME CONSTRAINTS:

Salmon stream mouth no. ASC #256-40, #10010

1A Salmon stream mouth - fry outmigration (4/15 to 7/31)

1B Salmon stream mouth - spawning (7/15 to 9/10; PEAK 8/15)

SUBDIVISION ECOLOGICAL CONSTRAINTS:

Avoid disturbance/damage to unoiled biota and substrate. See attached Ecological Constraint Sheet.

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 1921 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 / K6-34-SL-16 SUBDIVISION: K6-34-SL-16 A DATE 4/4/90

CG

NAME D.D. Haven Jr. GM3 USC&R SIGNATURE [Signature]

☒ NO TREATMENT RECOMMENDED
COMMENTS

☐ TREATMENT SUGGESTED

No oil sighted.

ADEC

NAME Francine J. Bennis SIGNATURE [Signature]

☒ NO TREATMENT RECOMMENDED
COMMENTS

☐ TREATMENT SUGGESTED

Walked entire segment. NO OIL OBSERVED.

LAND MANAGER

NAME John P. HEDISTER SIGNATURE [Signature]

☐ NO TREATMENT RECOMMENDED
COMMENTS

☐ TREATMENT SUGGESTED

No oil observed

John Merrick

No oil - no clean up

John Merrick Konig, Inc

SHORELINE OILING SUMMARY

REVISION NO. 012270

OG Acton USCG Haven SEGMENT ST/ K6-34-SL-16
 BIO Davis LAND REP USGS Hardisty SUBDIVISION K6-34-SL-KA
 EXXON Ajex ADEC Dennis TIME 3:15 to 4:00
 TEAM NO.: 20 TIDE LEVEL: +4.5 to +3.5 DATE 4/4 /90
 EST. SUBDIVISION LENGTH: 2011 m ☐ Sun ☐ Clouds ☐ Fog ☐ Rain ☒ Snow
 UPLANDS DESCRIPTION: ☒ Grass ☐ Forest ☐ Rock
 SURVEYED FROM: ☒ Foot ☐ Boat ☐ Helo WORKING DIRECTION: N to S
 SURFACE SEDIMENTS: R 0 % B 0 % C 0 % P 15 % G 15 % S 20 % M 50 % V 0 %
 SLOPE: Long 100 % Hang 0 % Vert 0 % WAVE EXPOSURE: ☒ Low ☐ Med ☐ High
 OIL CATEGORY LENGTH: W 0 m M 0 m N 0 m VL 0 m NO 2011 m

SURFACE OIL

CHARACTER	DISTRIBUTION				OIL / FILM COLOR						IMPACTED ZONES			
	C	R	P	S	SL	BR	OR	SL	BR	TL	SU	U	M	U
ASPHALT														
PAVEMENT														
POOLED														
COVER														
COAT														
STAIN														
MOUSSE														
PATTIES														
TARBALLS														
FILM														
NO OIL											✓	✓	✓	✓

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. 0Frames 0

SUBSURFACE OIL

PIT NO.	PIT DEPTH (cm)	SUBSURFACE OIL CHARACTER					OILED INTERVAL (CM-CM)	BELOW		OIL / FILM COLOR						PIT ZONE				A N A	SUBSURFACE SEDIMENTS
		OP	OR	OL	OF	NO		UO	UC	SL	BR	OR	SL	BR	TL	SU	U	M	U		
1	30					✓	-											✓			MSG
2	30					✓	-										✓				MSG
3	30					✓	-											✓			MSGP
4	30					✓	-										✓				MSG
5	30					✓	-											✓			MSGP
6	30					✓	-										✓				MSG

COMMENTS No oil observed in this segment, which is comprised of an estuarine marsh with many small arms/tributaries. Walked entire segment.

OG Acton

SEGMENT S-34-SL-16

SUBDIVISION K-34-SL-10A

DATE 4/4/90

SKETCH MAP

Typical Profile w/in segment

CHECKLIST

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

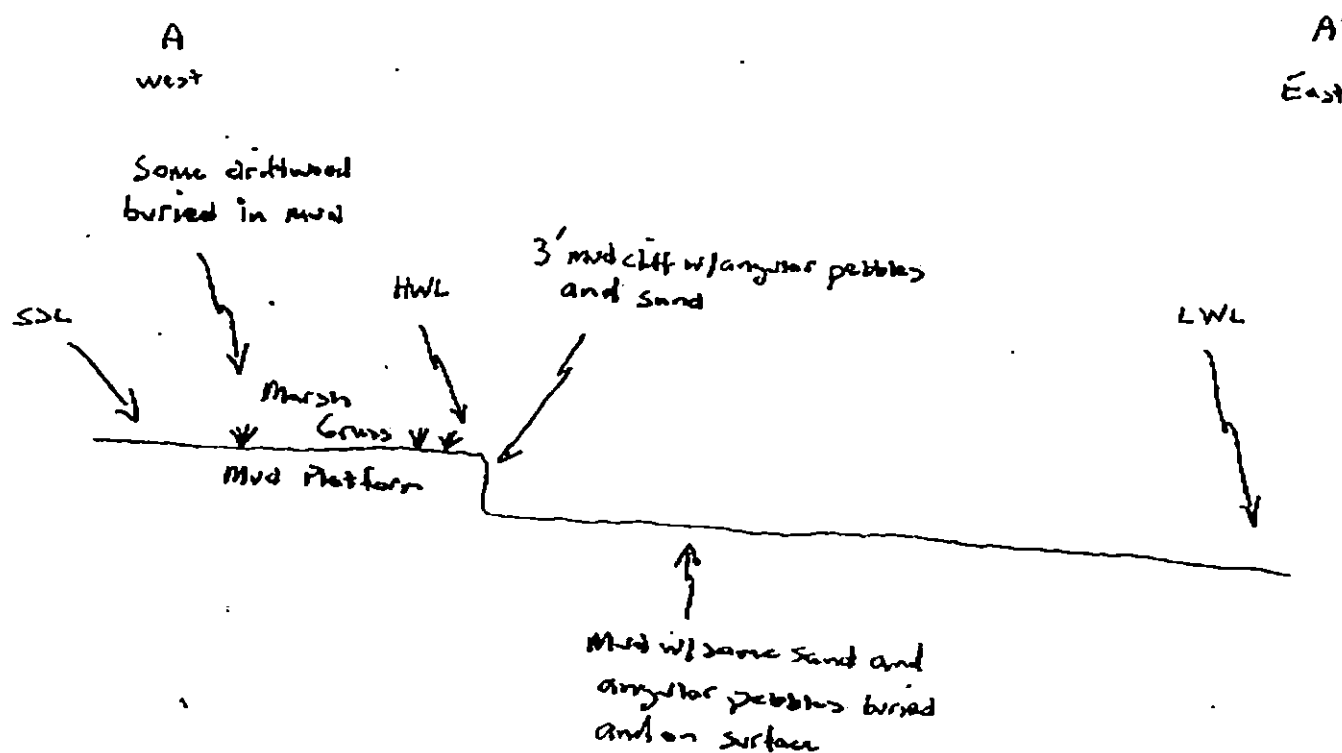
Splashed Distribution

Oiled Vegetation

1 $\leftrightarrow$

Photo location, direction,
and number

A-A' $\approx$ 20 m



Oil Character Length (m): AP 0 PO 0 CV 0 CT 0 ST 0 MS 0 PT 0 TB 0 FL 0 NO 200

REVISION: 000000

OG Act

SEARCH MAP

SEGMENT SL-34-SL-70

SUBDIVISION K6-34-SL-70A

DATE 4 / 4 90

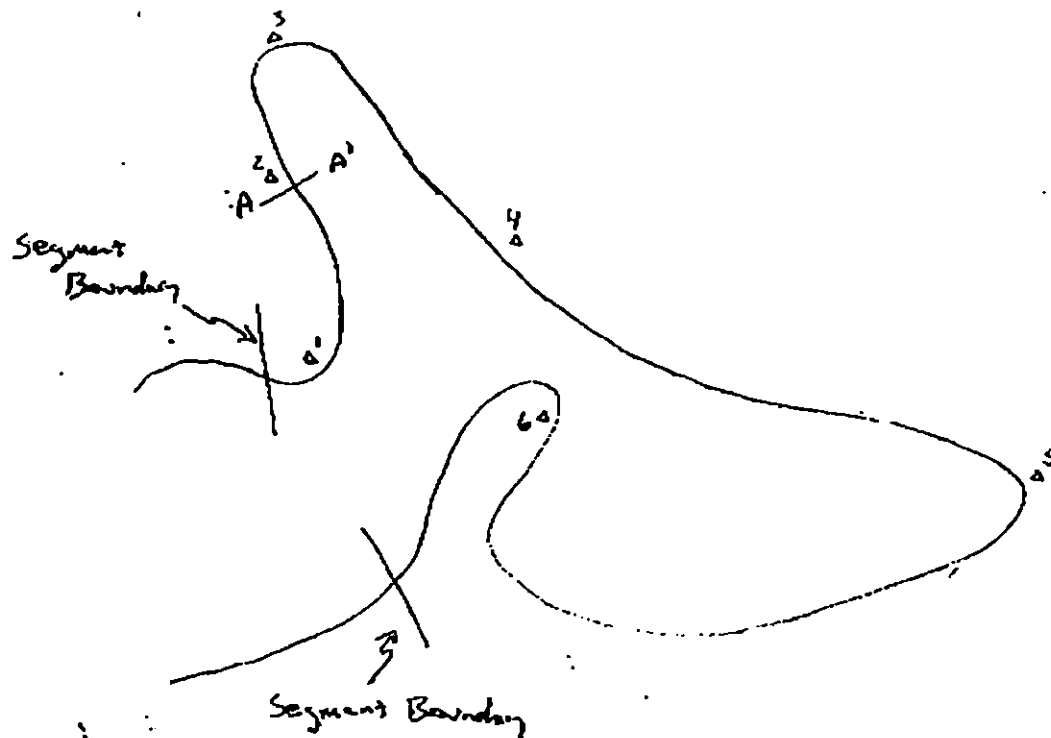
Approx Scale
1cm = 100m
N ↑

CHECKLIST

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

LEGEND

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



Oil Character Length (m): AP PO CV CT ST MS PT TB FL NO 2011

REVISION: 02/24/90

SHORELINE ECOLOGICAL SUMMARY

REVISION: 05/22/90

Segment ST/K06-34 Subdivision SL-16A Date (mo/day/yr) 4-4-90Time (24 hr) 14:30 Biologist H. Davis

- (A) Substrate type and % of segments:
 (1) Bedrock (2) Boulder (3) Cobble 5 (4) Pebble 25 (5) Sand 20 (6) Silt 50
- (B) Overall % cover of biota (% of segment): Dense Moderate Low 100% (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. Frames

BARNACLES

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

MYTILUS

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

GASTROPODS

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

FUCUS

Dense			Moderate			Sparse			Rare			NOT PRESENT 1, 2, 5, 6
1U	1M	1L	1U	1M	1L	1U	1M	1L	1U	1M	1L	
2	2	2	2	2	2	2	2	2	2	2	2	
3	3	3	3	3	3	3	3	3	X	X	X	
4	4	4	4	4	4	4	4	4	X	X	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: This area is an estuarine marsh (20-40) on tides, (30-40) Glaucous winged gulls, (20) mallards, (4) adult eagles, (2) juvenile eagles, and 3-4 Harlequin ducks. Deer tracks, River Otter tracks, and fox tracks were seen on the shore line. One Red Fox observed. Barnacles, Mytilus, gastropods and Fucus were found sporadically on cobbles. Diatom mats and filamentous algae covered the bottom of rivulets and small arms of the intertidal area.

Ecological Considerations: (1A, 1B, 1AA) The estuary and river areas are used by birds, and several species of trout and salmon. Pink Chum, Coho, Steelhead and Rainbow all spawn in the Sturgeon river.

KODIAK ECOLOGICAL CONSTRAINTS

SL-016-A

- 1A Salmon stream mouth - fry outmigration (4/15 to 7/31)
1B Salmon stream mouth - spawning (7/15 to 9/10; PEAK 8/15)
No disturbance of stream bed or banks unless authorized by ADF&G. No beach flushing into stream drainage. No bioremediation or other chemical application within 100m of stream. Contact ADF&G Habitat Division prior to treatment for permits.
- 1C Salmon fry nursery area (4/31 to 7/31)
- 1D Kotai Bay Hatchery release
Pink salmon - late May, early June; Chum salmon - June; Sockeye salmon - early July.
- 1H Remote release site
- 1I Gill net area
- 1J Purse seine area
Mainland, West side Kodiak, Shuyak & Moser/Olga Bay - 6/9 to 10/1.
East side Kodiak, East side Afognak - 7/4 to 10/1.
- 1K Purse seine hook-off
- 1L Set net sites
USFWS setnet uplands permit 5/15 to 9/15.

For Codes 1C through 1L contact ADF&G for specific dates, locations and constraints.
- 2M Herring spawning (4/15 to 6/30)
Restrict boat traffic to essential minimum. Avoid damage to uncoiled intertidal and subtidal algae and seagrass. Contact ADF&G for specific dates and locations.
- 3N, 3P Harbor seal and sea lion pupping (5/10 to 6/30)
Restrict boat and air traffic to essential minimum. No personnel within 400m. Aircraft to maintain 800m horizontal and 300m vertical distance from haulouts.
- 3O, 3Q Harbor seal and sea lion molting (8/15 to 9/15)
Restrict boat and air traffic to essential minimum. No personnel within 400m. Aircraft to maintain 800m horizontal and 300m vertical distance from haulouts.
- 5R Seabird colony (5/1 to 8/31)
Restrict air traffic to essential minimum. No personnel within 800m. Aircraft to maintain 800m horizontal, 300m vertical distance. Contact ADF&G and USFWS prior to treatment.
- 5S Shorebird/waterfowl concentration (4/1 to 5/15)
Restrict all activity to essential minimum, especially air traffic.
- 5T All Bald Eagle nests (3/1 to 6/1)
Active Bald Eagle nests (3/1 to 9/1)
Restrict air traffic to essential minimum. No personnel within 400m 3/1 to 6/1. Air approach and takeoff from and to seaward only; maintain 800m horizontal, 300m vertical distance from nests. Contact USFWS prior to treatment for confirmation of dates.
- 6U Recreation: Tent sites (6/1 to 9/15)
- 6V Anchorages (6/1 to 9/15)
- 6W Forest Service cabins (6/1 to 9/15)
- 6X Lodge (6/1 to 9/15)
- 6Y Special use destination
- 7Z Subsistence area: Salmon harvesting (6/1 to 9/30)
- 7HH Finfish harvesting
- 7II Deer harvesting (8/1 to 1/7)
- 7JJ Invertebrate harvesting
- 7KK Bear harvesting (4/1 to 5/15 and 10/25 to 11/30)
For Codes 7Z through 7JJ contact ADF&G and Chenega Corporation for specific dates, locations, and constraints.

K6-34-SL-16A

SL-16

Segment
Boundary

SL-17

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

SL-16

ADEC Segment Length: 2011m

0 100 200 300
 METERS



K6-34-SL-16A

Map Key: GOA-189

Name: Acton

Date: 4-4-90

Data Entered:

SHORELINE EVALUATION

SEGMENT ST/ K06-34-SL-17 SUBDIVISION A (1 OF 1) DATE 4/7/90

SEGMENT ENVIRONMENTAL SENSITIVITIES AND TIME CONSTRAINTS:

Salmon stream mouth no. ASC 256-40, #10010

1A Salmon - fry outmigration (4/15 to 7/31)

1B Salmon - spawning (7/15 to 9/10; PEAK 8/15)

SUBDIVISION ECOLOGICAL CONSTRAINTS:

Avoid disturbance/damage to unoiled biota and substrate.

ARCHAEOLOGICAL CONSTRAINTS:

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

SHPO SIGNATURE

Charles J. Dwyer

DATE:

April 14, 1990

OILING CATEGORIZATION:

Wide 0 m: Medium 0 m: Narrow 0 m: V.Light 0 m: No Oil 880 m

Subsurface Oil Observed: Yes No X Maximum Depth

RECOMMENDATIONS:

 No Treatment Recommended

X Treatment Recommended

X Manual Pickup

 Bioremediation

 Tarmat: Breakup

 Removal

 Snare/Absorbent Booms

 Oil Snares (pom poms)

 Absorbents (pads, rolls, etc)

 Spot Washing: Wands

 Beach Cleaner

 Other (see comments)

COMMENTS: Manual pick up of oil snare boom between 3/15 and 7/10.

TAG COMMENTS:

TAG APPROVAL DATE: 4/14/90

ADEC Art Weiner Det Weiner

EXXON ANDY TATE

NOAA Burt Waples

USCG G.A. REITER

FOSC:

DATE: 5-23-90

OG Acto

SEARCH MAP

SEGMENT ST/ K6-34-SL-17

SUBDIVISION K6-34-SL-17A

DATE 4 / 4 90

Approx Scale 1cm = 5m

CHECKLIST

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

LEGEND

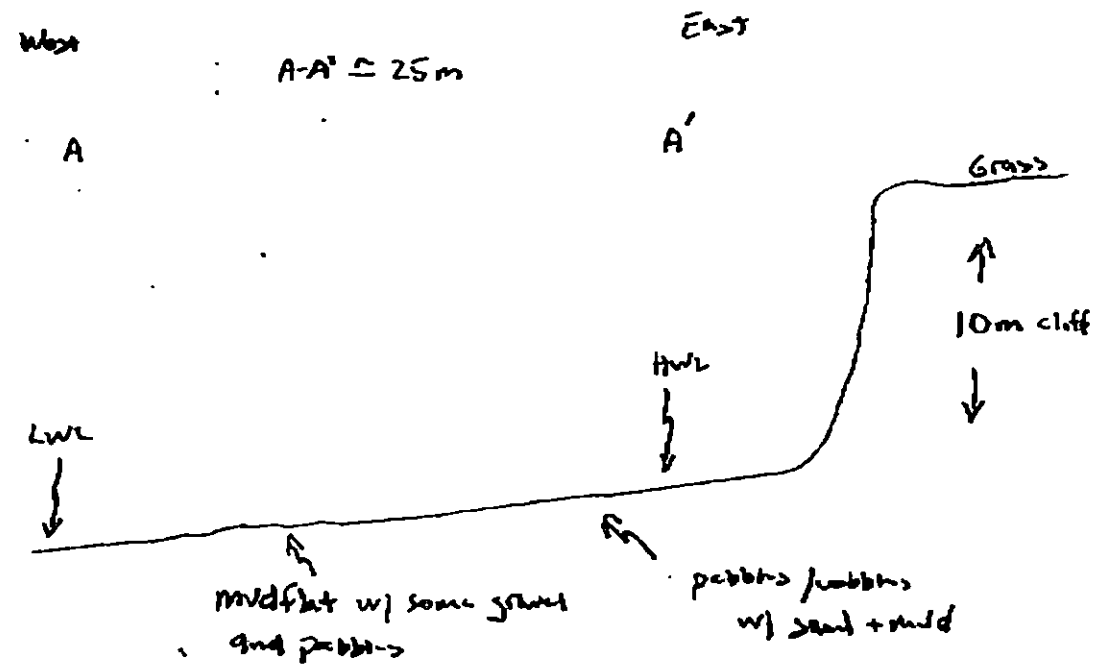
- 1 Δ
Pit - No Subsurface Oil
- 2 $\blacktriangle$
Pit - Subsurface Oil
- CT/C

Continuous Distribution
- CT/B

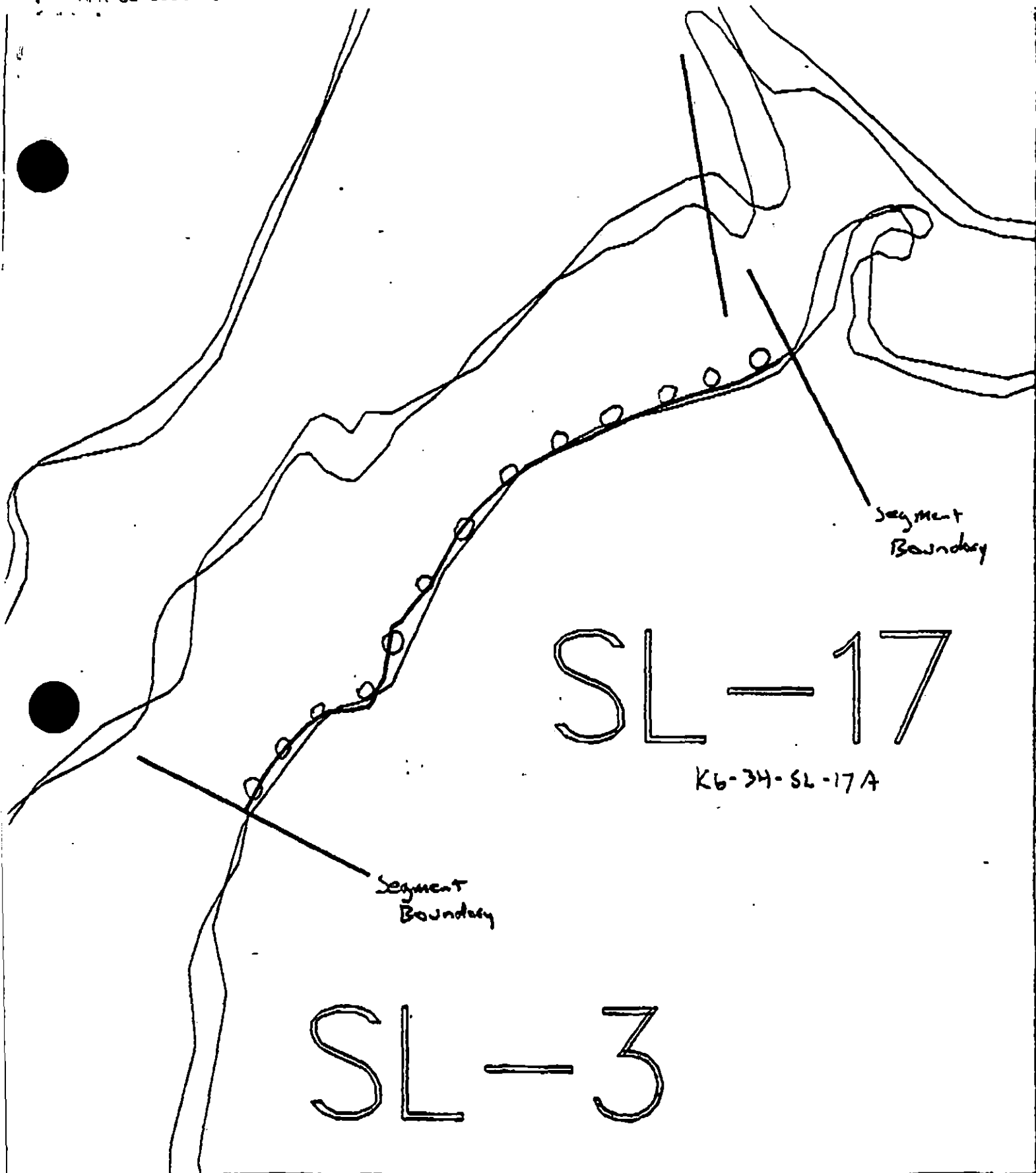
Broken Distribution
- CT/P

Patchy Distribution
- CT/S

Splashed Distribution
- ☐ Oil Vegetation
- 1 $\Rightarrow$
Photo location, direction, and number



Oil Character Length (m): AP 0 PO 0 CV 0 CT 0 ST 0 MS 0 PT 0 TB 0 FL 0 NO 876



K6-34-SL-17A

XXXX Wide

/// Medium

- - - Narrow

TTTT Very Light

0000 No Oil

SL-17

ADEC Segment Length: 878m



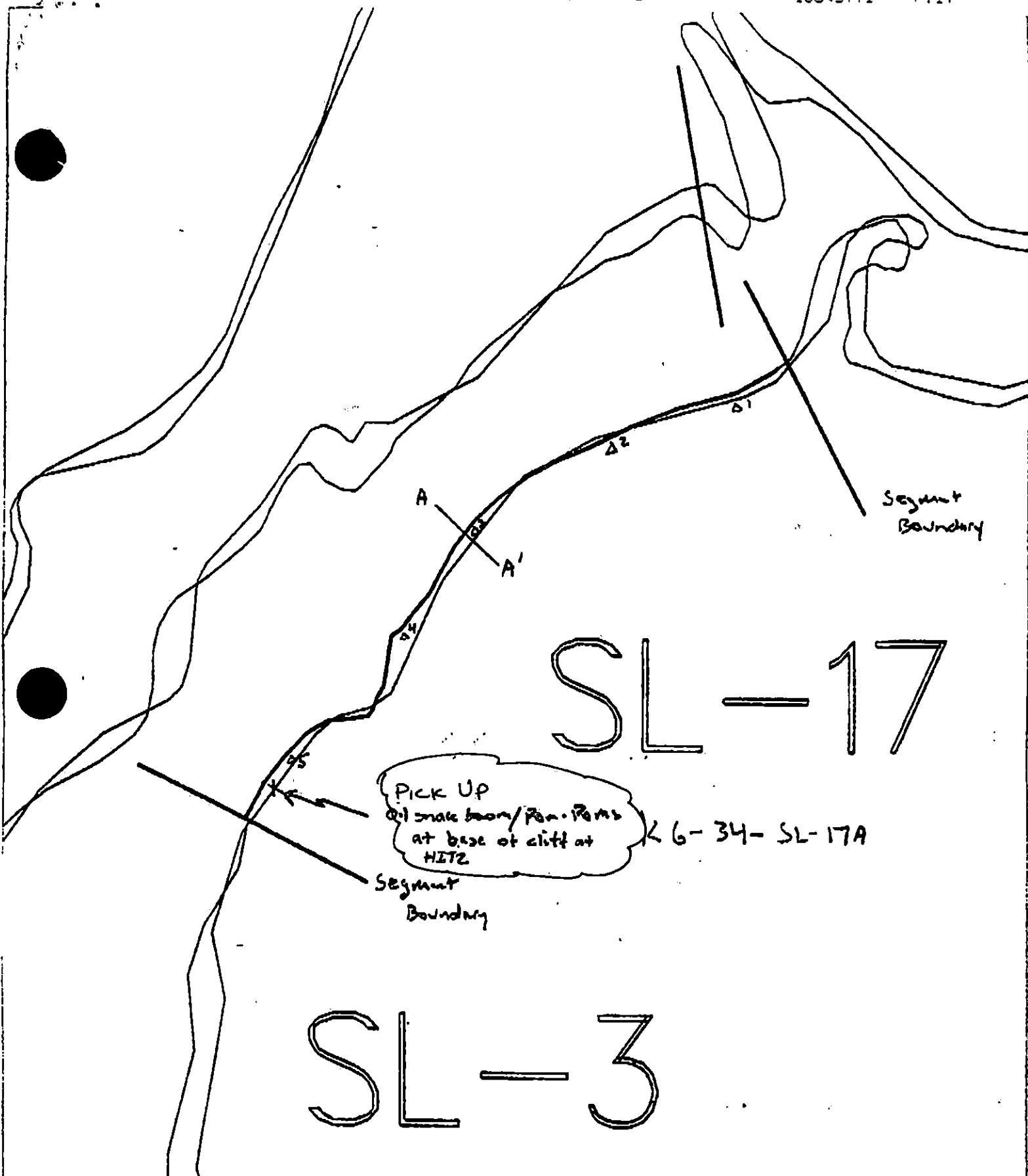
K6-34-SL-17A

Map Key: GOA-190

Name: Acton

Date: 4-4-90

Date Entered:



XXXX Wide

● // Medium

---- Narrow

TTTT Very Light

0000 No Oil

SL-17

ADEC Segment Length: 876m



KL-34-SL-17A

Map Key: GOA-190

Name: ActonDate: 4-4-90

Data Entered:

REGION: KODIAK

SEGMENT: K06-34-SL-17

SUBDIVISIONS: A (1 OF 1)

SHORELINE EVALUATION

SEGMENT ST/ K06-34-SL-17 SUBDIVISION A (1 OF 1) DATE 4/7/90

SEGMENT ENVIRONMENTAL SENSITIVITIES AND TIME CONSTRAINTS:

Salmon stream mouth no. ASC 256-40, #10010
1A Salmon - fry outmigration (4/15 to 7/31)
1B Salmon - spawning (7/15 to 9/10; PEAK 8/15)

SUBDIVISION ECOLOGICAL CONSTRAINTS:

Avoid disturbance/damage to unoiled biota and substrate.

ARCHAEOLOGICAL CONSTRAINTS:

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

SHPO SIGNATURE: _____ DATE: _____

OILING CATEGORIZATION:

Wide 0 m: Medium 0 m: Narrow 0 m: V.Light 0 m: No Oil 880 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: Manual pick up of oil snare boom between 3/15 and 7/10.

TAG COMMENTS:

TAG APPROVAL DATE: _____
ADEC _____
EXXON _____
NOAA _____

FOSC: _____ DATE: _____

FIELD SHORELINE COMMENT SHEET

SEGMENT ST/K6-34-SL-17 SUBDIVISION: K6-34-SL-17-A DATE 4/4/90

USCG

NAMED D.D. Haven Jr. GM3 USCG SIGNATURE *[Signature]*

☒ NO TREATMENT RECOMMENDED
COMMENTS

☐ TREATMENT SUGGESTED

No oil sighted.

ADEC

NAME *Francine J. Benoit* SIGNATURE *[Signature]*

☒ NO TREATMENT RECOMMENDED
COMMENTS

☐ TREATMENT SUGGESTED

No oil observed.

There is, however, a portion of oil-snare boom lying at the top of the UITE. It should be retrieved.
(See map for location)

LAND MANAGER

NAME *JOHN P. HARDISTER* SIGNATURE *[Signature]* USFWS

☒ NO TREATMENT RECOMMENDED
COMMENTS

☒ TREATMENT SUGGESTED

No oil observed - concern that oil-snare boom should be removed.

John Merrick

Concur with ADEC recommendation *John Merrick Koniag, Inc*

SHORELINE OILING SUMMARY

REVISION NO. 03-22-90

OG Acton USCG Haven SEGMENT ST/ K6-34-26-17
 BIO Davis LAND REP USEPA Hardister SUBDIVISION K6-34-26-17A (1 of 1)
 EXXON Avery ADEC Bennis TIME 4:00 to 4:30
 TAM NO.: 20 TIDE LEVEL: +3.5 to +2 DATE 4/4/90
 EST. SUBDIVISION LENGTH: 876 m ☐ Sun ☐ Clouds ☐ Fog ☐ Rain ☒ Snow
 UPLANDS DESCRIPTION: ☒ Grass ☐ Forest ☐ Rock
 SURVEYED FROM: ☒ Foot ☐ Boat ☐ Helo WORKING DIRECTION: N to S
 SURFACE SEDIMENTS: R 0 % B 0 % C 15 % P 10 % G 15 % S 20 % M 40 % V 0 %
 SLOPE: Long 100 % Hang 0 % Vert 0 % WAVE EXPOSURE: ☒ Low ☐ Med ☐ High
 OIL CATEGORY LENGTH: W 0 m M 0 m N 0 m VL 0 m NO 876 m

SURFACE OIL

CHARACTER	DISTRIBUTION				OIL / FILM COLOR								IMPACTED ZONES			
	IC	IS	IP	IR	BR	OR	OL	OF	NO	TL	LR	TR	SU	U	M	U
ASPHALT PAVEMENT																
POOLED																
COVER																
COAT																
STAIN																
MOUSSE																
PATTIES																
TARBALLS																
FILM																
NO OIL													✓	✓	✓	✓

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 Poms Poms/Bco#BAGS 6

Photographs:

Roll No. 0Frames 0

SUBSURFACE OIL

PIT NO.	PIT DEPTH (cm)	SUBSURFACE OIL CHARACTER					OILED INTERVAL (CM-CM)	BELOW		OIL / FILM COLOR								PIT ZONE				A N A	SUBSURFACE SEDIMENTS
		OP	OR	OL	OF	NO		UG	UD	BR	OR	OL	OF	NO	TL	LR	TR	SU	U	M	U		
1	30					✓	-													✓			ms G
2	30					✓	-												✓				ms G
3	30					✓	-												✓				ms G
4	30					✓	-												✓				ms G
5	30					✓	-												✓				ms G
							-																

COMMENTS No oil was observed in this section. Oil snare boom / pom-poms noted on sketch should be retrieved. Walked entire segment.

OG Acto

SCH MAP

SEGMENT ST/ K6-34-SL-17

SUBDIVISION K6-34-SL-17A

DATE 4 / 4 / 90

Approx Scale 1cm = 5m

CHECKLIST

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

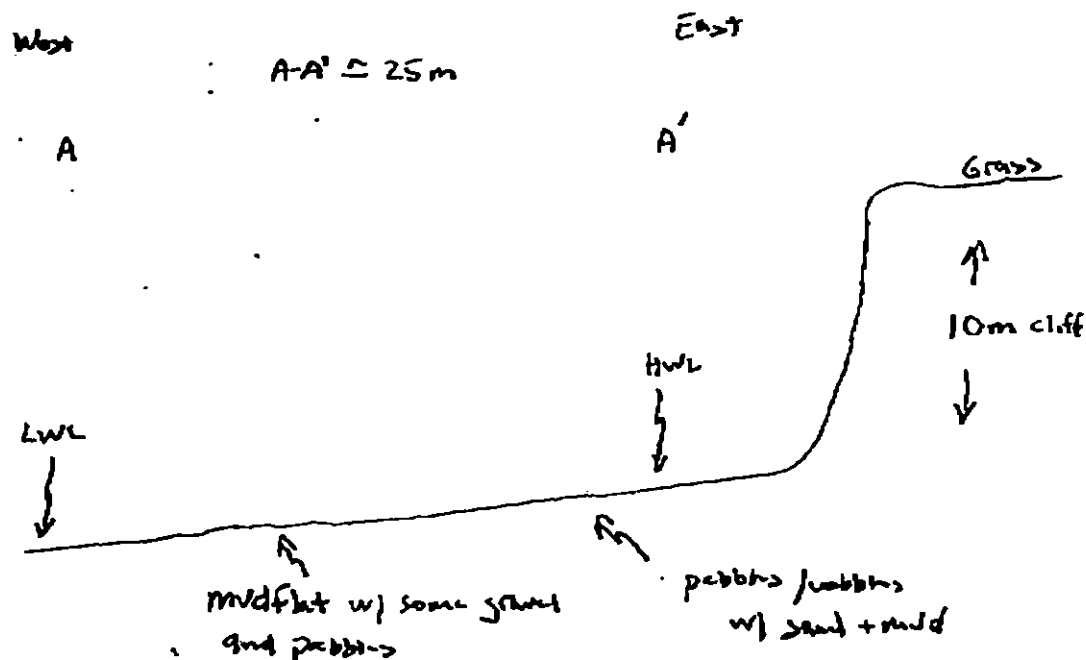
CT/S

Splashed Distribution

Oiled Vegetation

1 $\Rightarrow$

Photo location, direction,
and number



Oil Character Length (m): AP 0 PO 0 CV 0 CT 0 ST 0 MS 0 PT 0 TB 0 FL 0 NO 876

REVISION: 03/24/90

SHORELINE ECOLOGICAL SUMMARY

REVISION: 03/22/90

Segment ST / K06-34 Subdivision SL-17A Date (mo / day / yr) 4-4-90Time (24 hr) 15:30 Biologist H. Davis

(A) Substrate type and % of segments:

(1) Bedrock (2) Boulder (3) Cobble 20 (4) Pebble 20 (5) Sand 20 (6) Silt 40(B) Overall % cover of biota (% of segment): Dense Moderate 50% Low 50% 30%

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

Photographs:

Roll No. ST-20-03Frames

BARNACLES

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

GASTROPODS

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

FUCUS

Dense			Moderate			Sparse			Rare			NOT PRESENT 1, 2, 5, 6
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: Gastropods and Barnacles were the most common intertidal animals. Fucus was patchy, often individual cobbles would be covered with enough Fucus to float the cobble. A few large limpets were found each on their own cobble. Littorina were present on the under side of cobbles and crevices of Barnacles. Pintails (60-30) and mallards were feeding over the eelgrass beds. Eagles (1, juvenile) were seen in the area.

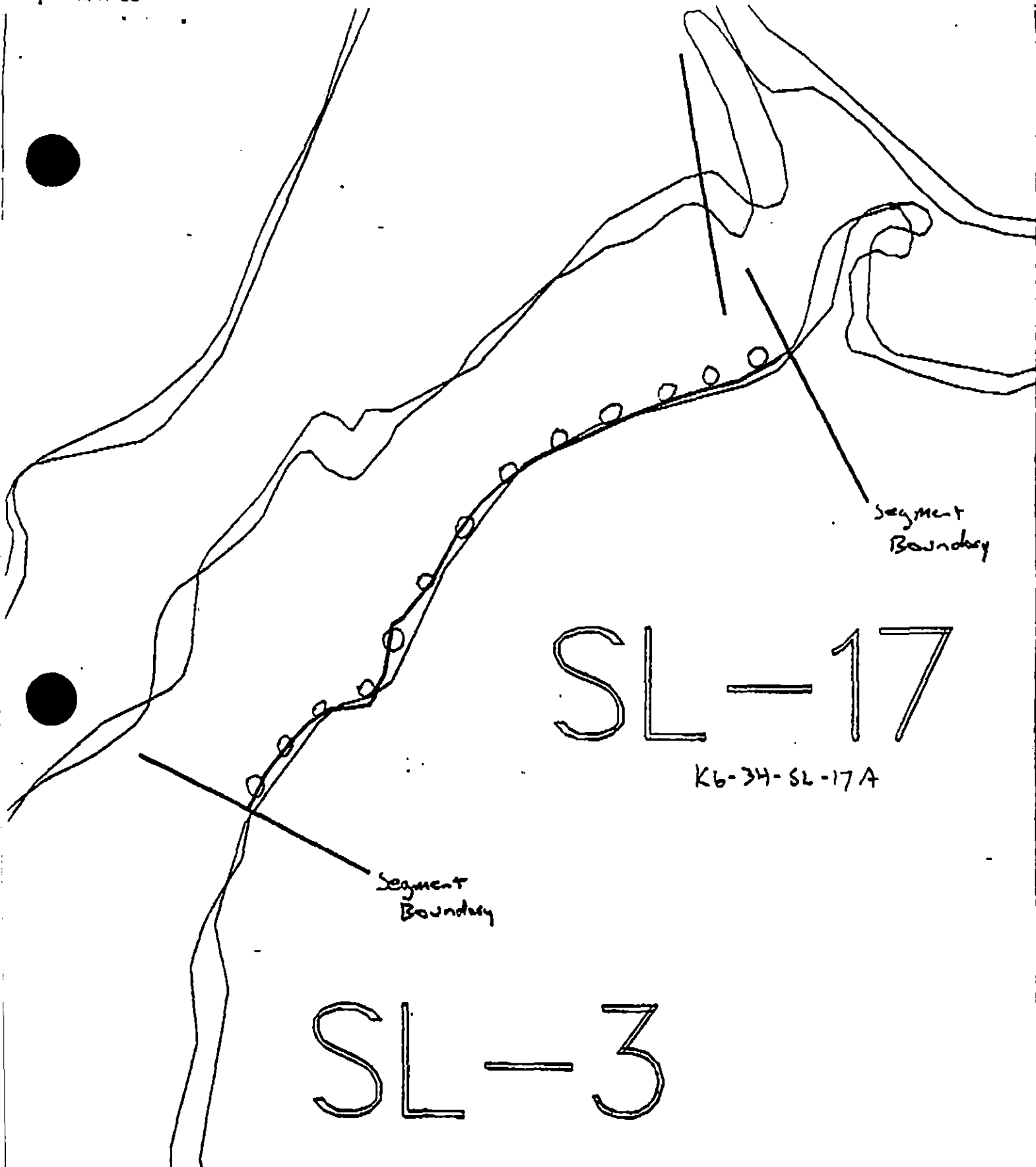
Ecological Considerations: (IA, IB, & AA) The estuary area is a major source of food for many species of birds, fish and mammals. Eelgrass beds provide food and protection for the salmon smolt.

ASC # 256-40 # 10010

KODIAK ECOLOGICAL CONSTRAINTS

SL-17-A

- 1A Salmon stream mouth - fry outmigration (4/15 to 7/31)
 1B Salmon stream mouth - spawning (7/15 to 9/10; PEAK 8/15)
 No disturbance of stream bed or banks unless authorized by ADF&G. No beach flushing into stream drainage. No bioremediation or other chemical application within 100m of stream. Contact ADF&G Habitat Division prior to treatment for permits.
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- 1D Kotol Bay Hatchery release
 Pink salmon - late May, early June; Chum salmon - June; Sockeye salmon - early July.
- 1H Remote release site
- 1I Gill net area
- 1J Purse seine area
 Mainland, West side Kodiak, Shuyak & Moser/Olga Bay - 6/9 to 10/1.
 East side Kodiak, East side Afognak - 7/4 to 10/1.
- 1K Purse seine hook-off
- 1L Set net sites
 USFWS setnet uplands permit 5/15 to 9/15.
 For Codes 1C through 1L contact ADF&G for specific dates, locations and constraints.
- 2M Herring spawning (4/15 to 6/30)
 Restrict boat traffic to essential minimum. Avoid damage to unholed intertidal and subtidal algae and seagrass. Contact ADF&G for specific dates and locations.
- 3N, 3P Harbor seal and sea lion pupping (5/10 to 6/30)
 Restrict boat and air traffic to essential minimum. No personnel within 400m. Aircraft to maintain 800m horizontal and 300m vertical distance from haulouts.
- 3O, 3Q Harbor seal and sea lion molting (8/15 to 9/15)
 Restrict boat and air traffic to essential minimum. No personnel within 400m. Aircraft to maintain 800m horizontal and 300m vertical distance from haulouts.
- 5R Seabird colony (5/1 to 8/31)
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- 5S Shorebird/waterfowl concentration (4/1 to 5/15)
 Restrict all activity to essential minimum, especially air traffic.
- 5T All Bald Eagle nests (3/1 to 6/1)
 Active Bald Eagle nests (3/1 to 9/1)
 Restrict air traffic to essential minimum. No personnel within 400m. 3/1 to 6/1. Air approach and takeoff from and to seaward only; maintain 800m horizontal, 300m vertical distance from nests. Contact USFWS prior to treatment for confirmation of dates.
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- 6V Anchorages (6/1 to 9/15)
- 6W Forest Service cabins (6/1 to 9/15)
- 6X Lodge (6/1 to 9/15)
- 6Y Special use destination
- 7Z Subsistence area: Salmon harvesting (6/1 to 9/30)
- 7HH Finfish harvesting
- 7II Deer harvesting (8/1 to 1/7)
- 7JJ Invertebrate harvesting
- 7KK Bear harvesting (4/1 to 5/15 and 10/25 to 11/30)
 For Codes 7Z through 7JJ contact ADF&G and Chenega Corporation for specific dates, locations, and constraints.



XXXX Wide

/// Medium

-- Narrow

TTTT Very Light

0000 No Oil

SL-17

ADEC Segment Length: 876m

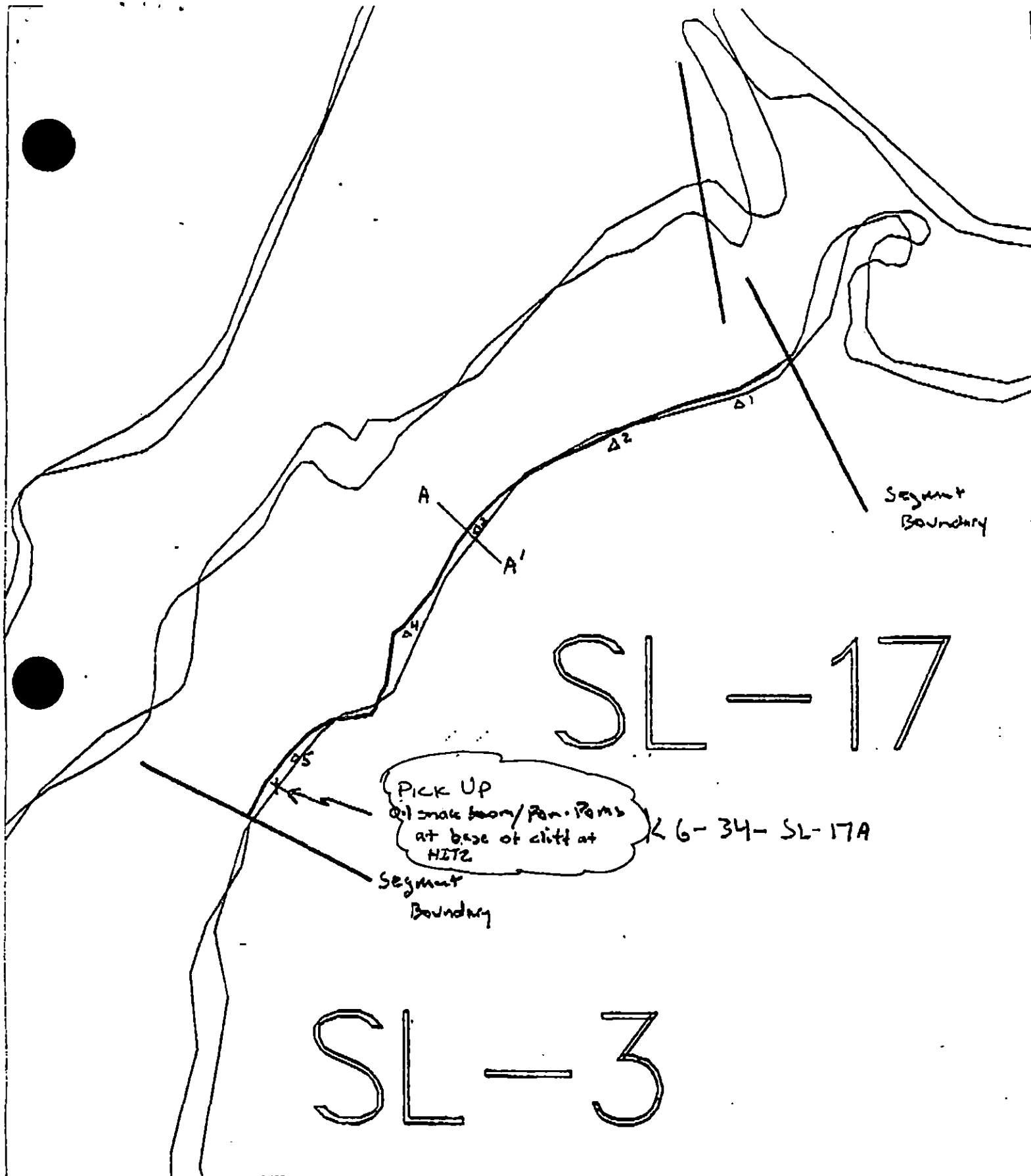


K6-34-SL-17A

Map Key: GOA-190

Name: ActionDate: 7-4-99

Data Entered:



XXXX Wide

/// Medium

--- Narrow

TTTT Very Light

0000 No Oil

SL-17

ADEC Segment Length: 876m



K6-34-SL-17A

Map Key: GOA-190

Name: Acton

Date: 4-4-90

Data Entered:

SHORELINE EVALUATION

SEGMENT ST/ K0703-LC-005 SUBDIVISION A (1 OF 1) DATE 4/4/90

SEGMENT ENVIRONMENTAL SENSITIVITIES AND TIME CONSTRAINTS:

Sensitive estuary (AA); Stream mouth - fry outmigration (1A) - 3/1 to 5/15; Stream mouth - spawning (1B) - 7/10 to 8/31.

SUBDIVISION ECOLOGICAL CONSTRAINTS: Bald eagles observed in area - but no nest sitings.

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

SHPO SIGNATURE: Charles F. Horner DATE: April 11, 1990

OILING CATEGORIZATION:

Wide 0 m: Medium 0 m: Narrow 0 m: V.Light 0 m: No Oil 7053 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	☐ <u> </u> Beach Cleaner
☐ <u> </u> Removal	☐ Other (see comments)

COMMENTS: No treatment recommended. No oil observed.

TAG COMMENTS:

TAG APPROVAL DATE: 4/11/90

ADEC JOHN BAUER John Bauer

EXXON ANDY TOM Andy Tom

NOAA Burt Wesscott Burt Wesscott

USCG G.H. REITER G.H. Reiter

FOSC:

DATE: 4-20-90

GOA
167B

K7-3-LC-5A

Segment
Boundary

LC-6

LC-5

XXXX Wide

//// Medium

---- Narrow

TTTT Very Light

0000 No Oil

ADEC Segment Length: 7036m

0 500 1000 1500

METERS

K7-3-LC-5A

Map Key: GOA-167a

Name: Acton

Date: 4-3-90

Date Entered:

K7-3-LC-5A

Segment Boundary

↓ GOA
167A

XXXX Wide

//// Medium

---- Narrow

TTTT Very Light

0000 No Oil

LC-5

ADEC Segment Length: 7036m

0 500 1000
METERS



K7-3-LC-5A

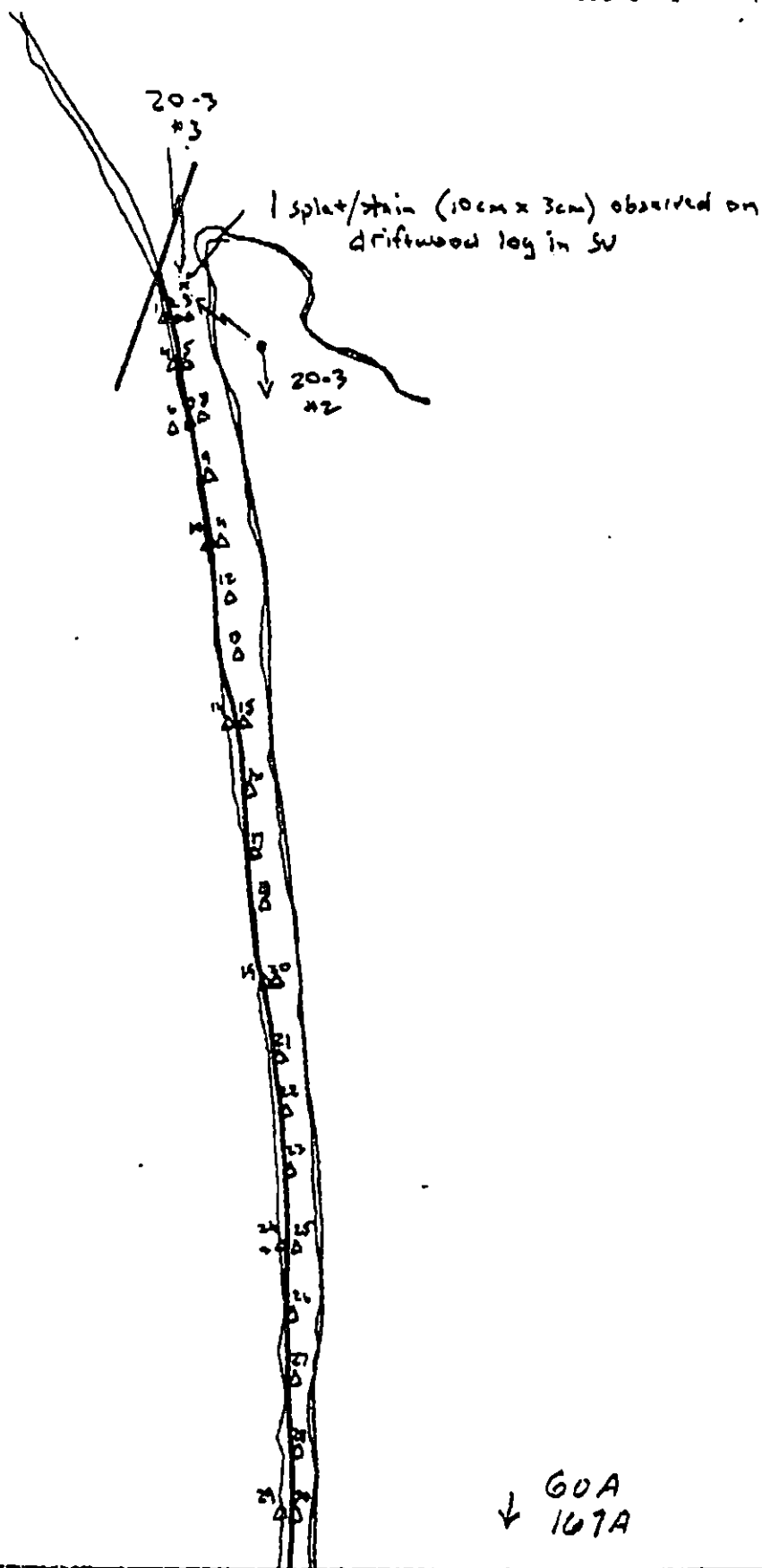
Map Key: GOA-167b

Name: Acton

Date: 4-3-90

Data Entered:

K7-3-LC-5A



XXXX Wide

//// Medium

--- Narrow

TTTT Very Light

0000 No Oil

LC-5

ADEC Segment Length: 7036m



K7-3-LC-5A

Map Key: GOA-167b

Name: Acton

Date: 4-3-90

Data Entered:

REGION: KODIAK

SEGMENT: ST/ K0703-LC-005

SUBDIVISIONS: A (1 OF 1)

SHORELINE EVALUATION

SEGMENT ST/ K0703-LC-005 SUBDIVISION A (1 OF 1) DATE 4/4/90

SEGMENT ENVIRONMENTAL SENSITIVITIES AND TIME CONSTRAINTS:

Sensitive estuary (AA); Stream mouth - fry outmigration (1A) - 3/1 to 5/15; Stream mouth - spawning (1B) - 7/10 to 8/31.

SUBDIVISION ECOLOGICAL CONSTRAINTS: Bald eagles observed in area - but no nest sitings.

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 7053 m
Subsurface Oil Observed: Yes _____ No X Maximum Depth _____

RECOMMENDATIONS:

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

COMMENTS: No treatment recommended. No oil observed.

TAG COMMENTS: _____

TAG APPROVAL DATE: _____

ADEC _____

EXXON _____

NOAA _____

USCG _____

FOSC: _____ DATE: _____

SEGMENT ST/ K07-03 LC05 SUBDIVISION: K7-3-LC-SA DATE 9-3-90

USCG

NAME E.D. Haven Jr, 6m3, USCG SIGNATURE [Signature]☒ NO TREATMENT RECOMMENDED
COMMENTS☐ TREATMENT SUGGESTED

No oil sighted

ADEC

NAME Francine J Bennis SIGNATURE [Signature]☒ NO TREATMENT RECOMMENDED
COMMENTS☐ TREATMENT SUGGESTED

No OIL OBSERVED, except for 1 splatter on a drift log
of supratidal.

LAND MANAGER

NAME JOHN P. HARDISTER SIGNATURE [Signature]☐ NO TREATMENT RECOMMENDED
COMMENTS☐ TREATMENT SUGGESTED

USFWS

No oil observed-

OG Alton USCG Haven SEGMENT ST/ K7-3-LC-3
 BIO Davis LAND REP USFWS Hardister SUBDIVISION K7-3-LC-5A
 EXXON Avery ADEC Bennis TIME 2:30 to 6:00
 TEAM NO.: 20 TIDE LEVEL: +5.5 to +1 DATE 4/3 /90
 EST. SUBDIVISION LENGTH: 7036 m 7053 ☒ Sun ☒ Clouds ☐ Fog ☐ Rain ☐ Snow
 UPLANDS DESCRIPTION: ☒ Grass ☐ Forest ☐ Rock
 SURVEYED FROM: ☒ Foot ☐ Boal ☐ Helo WORKING DIRECTION: N to S
 SURFACE SEDIMENTS: R 0 % B 0 % C 35 % P 35 % G 20 % S 10 % M 0 % V 0 %
 SLOPE: Long 100 % Hang 0 % Vert 0 % WAVE EXPOSURE: ☐ Low ☐ Med ☒ High
 OIL CATEGORY LENGTH: W 0 m M 0 m N 0 m VL 0 m NO 7036 m
7053

SURFACE OIL

CHARACTER	DISTRIBUTION				OIL / FILM COLOR								IMPACTED ZONES			
	IC	IS	IP	IS	SL	BR	TRW	GY	SL	DBR	TL	LR	SU	U	M	U
ASPHALT																
PAVEMENT																
POOLED																
COVER																
COAT																
STAIN																
MOUSSE																
PATTIES																
TARBALLS																
FILM																
NO OIL													✓	✓	✓	✓

PAVEMENT: H F S N/A sq.m by N/A cm

PATTIES / TARBALLS N/A BAGS

NEAR SHORE SHEEN? ☒ BR RW SL TL

OILED DEBRIS	AMOUNT		
	SM	MD	LG
Logs			
Vegetation			
Trash			
Debris			

DEBRIS COLLECTED
☐ YES ☒ NO

TYPE N/A

#BAGS N/A

Photographs:

Roll No. 20-3

Frames 2, 3, 6

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		UD	UC	SL BR	DL RW	GY	SL	DBR	TL	LR	SU	U	M	U				
1	30					✓	-											✓						GP
2	30					✓	-											✓						PC
3	30					✓	-									✓								SC
4	45					✓	-											✓						GP
5	35					✓	-									✓								SC
6	40					✓	-													✓				SP

COMMENTS One oil splot/stain (10cm x 3cm) observed on drift log in SU at extreme N end of segment. No other oil observed. Many pits (approx 66) up to 25-40 cm in depth were dug, with no subsurface oil observed. High energy shoreline for entire segment, w/ S end having the steepest and largest storm beach.

SEGMENT ST/K7-3-LC-5 SUBDIVISION K7-3-LC-5A

SUBSURFACE OIL (CONTINUED)

PIT NO.	PIT DEPTH (cm)	SUBSURFACE OIL CHARACTER					OILED INTERVAL (CM/CM)	BELOW		OIL / FILM COLOR								PIT ZONE				A N A	SUBSURFACE SEDIMENTS	
		OP	OR	IN	OF	NO		VO	UC	SP RT	DR RT	OW RT	SL DR	TL DR	LO RT	SU	UI	ME	UJ					
7	30					✓	.									✓								PL
8	30					✓	.									✓								SL
9	30					✓	.											✓						PL
10	30					✓	.												✓					SL
11	30					✓	.									✓								SL
12	30					✓	.										✓							PL
13	30					✓	.									✓								SL
14	30					✓	.											✓						PL
15	30					✓	.									✓								SL
16	30					✓	.									✓								SL
17	40					✓	.									✓								SL
18	40					✓	.										✓							PL
19	40					✓	.											✓						PL
20	40					✓	.									✓								SL

COMMENTS

REVIEWED BAT DATE 4 Apr 90

SUBSURFACE OIL (CONTINUED)

PIT NO.	PIT DEPTH (cm)	SUBSURFACE OIL CHARACTER					OILED INTERVAL (CM.CM)	BELOW		OIL / FILM COLOR								PIT ZONE				A N A	SUBSURFACE SEGMENTS
		OP	OR	OL	OF	NO		VO	UC	SP	BP	RP	RY	SL	LM	IL	LR	SU	UI	ML	LI		
21	40					✓	.													✓			PG
22	35					✓	.												✓				PC
23	35					✓	.											✓					SC
24	30					✓	.														✓		SG
25	30					✓	.											✓					SC
26	30					✓	.											✓					SG
27	30					✓	.												✓				PC
28	40					✓	.											✓					SC
29	30					✓	.													✓			PG
30	30					✓	.											✓					SC
31	30					✓	.												✓				PC
32	40					✓	.											✓					SC
33	30					✓	.															✓	SG
34	30					✓	.												✓				PC

COMMENTS

REVIEWED BAT DATE 4 Apr 90

SUBSURFACE OIL (CONTINUED)

PIT NO.	PIT DEPTH (cm)	SUBSURFACE OIL CHARACTER					OILED INTERVAL (m)	BELOW		OIL / FILM COLOR								PIT ZONE				A N A	SUBSURFACE SEDIMENTS
		CO	CA	OX	OF	NO		UC	UC	BR	BL	PA	GR	SL	DR	TT	LP	SU	IN	ME	U		
35	30					✓	-											✓					SC
36	30					✓	-											✓					SC
37	30					✓	-												✓				CP
38	30					✓	-											✓					SC
39	30					✓	-														✓		SG
40	40					✓	-													✓			GP
41	40					✓	-												✓				PC
42	40					✓	-											✓					SC
43	35					✓	-											✓					SC
44	35					✓	-													✓			PG
45	40					✓	-											✓					SC
46	40					✓	-												✓				PL
47	30					✓	-													✓			PG
48	30					✓	-											✓					SC

COMMENTS

REVIEWED BAT DATE 4 Apr 90

SEGMENT ST/K7-3-LC-5 SUBDIVISION K7-3-LC-5A

SUBSURFACE OIL (CONTINUED)

PIT NO.	PIT DEPTH (cm)	SUBSURFACE OIL CHARACTER					OILED INTERVAL (CM-CM)	BELOW		OIL / FILM COLOR								PIT ZONE				A N A	SUBSURFACE SEDIMENTS	
		OF	OR	OL	OF	NO		UG	UC	SN ON	BR BL	RY SL	DEP TR	LRH	SU	U	M	U						
49	40					✓	-								✓									SC
50	40					✓	-								✓									SC
51	30					✓	-											✓						PG
52	30					✓	-									✓								PL
53	40					✓	-								✓									SC
54	30					✓	-													✓				SB
55	30					✓	-											✓						PG
56	40					✓	-								✓									SL
57	40					✓	-									✓								PL
58	30					✓	-											✓						PG
59	30					✓	-								✓									SL
60	30					✓	-											✓						PG
61	35					✓	-								✓									SL
62	30					✓	-													✓				SB

COMMENTS

REVIEWED BAT DATE 4 Apr 90

✓

REVIEWED BAF DATE 4 Apr 90

OG Ad

SKETCH MAP

SEGMENT ST/ K7-3-LC-5

Scale Approx 1cm = 5m

SUBDIVISION K7-3-LC-5A

DATE 4 / 3 90

CHECKLIST

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

LEGEND

1 Δ

Pit - No Subsurface Oil

2 Δ

Pit - Subsurface Oil

CT/C

Continuous Distribution

CT/B

Broken Distribution

CT/P

Patchy Distribution

CT/S

Splashed Distribution

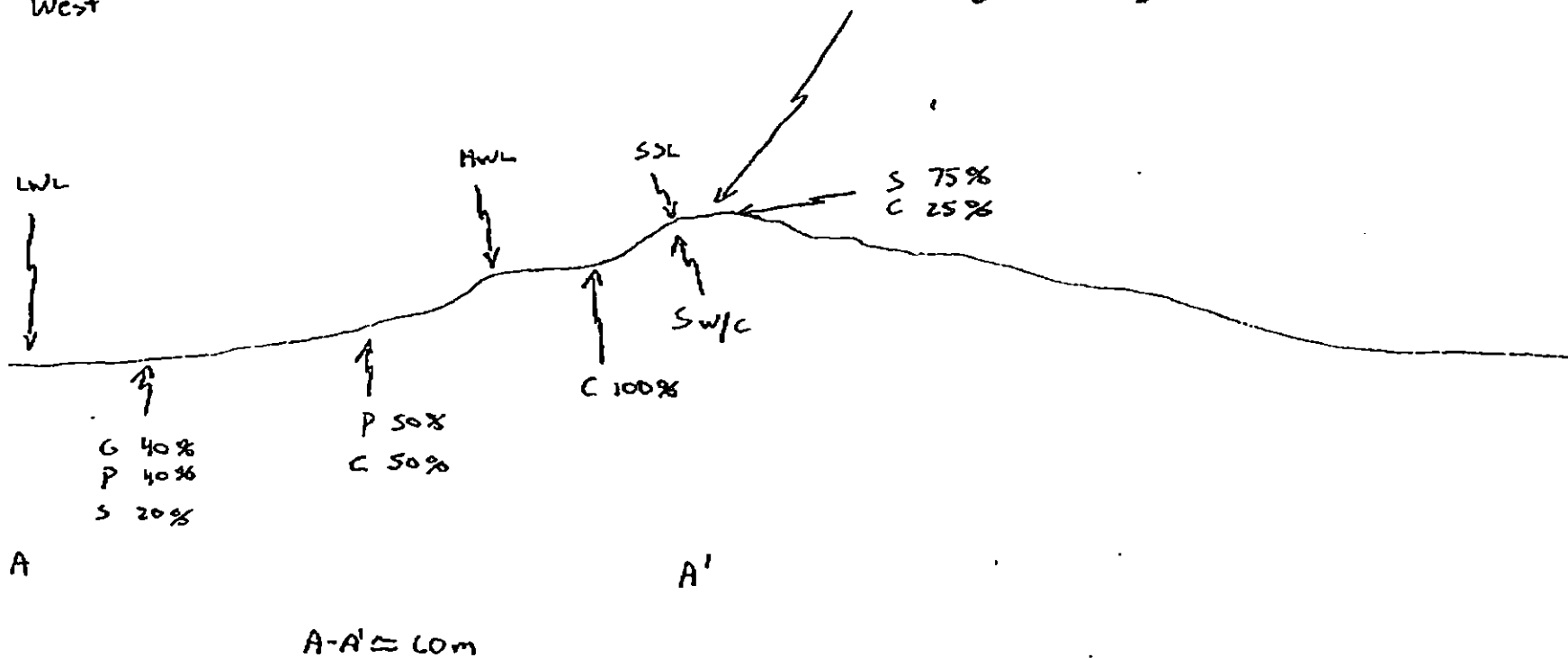
Oiled Vegetation

1 $\rightarrow$

Photo location, direction, and number

West

East



Oil Character Length (m): AP 0 PO 0 CV 0 CT 0 ST 0 MS 0 PT 0 TB 0 FL 0 NO 7036 7053

REVISION 03/24/90

Segment ST/K7-3 Subdivision LC-05A Date (mo / day / yr) 4-3-90Time (24 hr) 14:35 Biologist H. Davis

- (A) Substrate type and % of segments:
 (1) Bedrock _____ (2) Boulder _____ (3) Cobble 35 (4) Pebble 45 (5) Sand 20 (6) Silt _____
- (B) Overall % cover of biota (% of segment): Dense _____ Moderate _____ Low 100% (<1%)
- (C) Density, substrate preference (by number from A, above), & vertical zonation of major taxa: (upper-U; mid-M; low tidal-L); juveniles / adults (X), new settlement (3)

Photographs:

Roll No. ST-20-3Frames 2,3,6

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: K07-03 LC-05A is the ocean side of a cobble/pebble spit separating Ukiah Lagoon from the Pacific Ocean. It is a high energy beach with a lot of logs washed up above the high tide line by storms. Mytilus shells were found in the drift but there were no populations of barnacles, mytilus, gastropods or Fucus. No Eagle nests were seen, but several (3-4) adult eagles and 2 juvenile eagles were observed in the area. Deer tracks and scat were found on the grass bluff area above the storm berm. 2 red foxes were seen on the grass bluffs. Birds observed in the area (p0-30) Glaucous winged Gulls, Emperor geese (10), (p0-30) Steller's Eider, 50 Rock Sandpiper, Harlequin Old Squaw, (7) cormorant sp., Scoter sp., 5-6 pintail, Mallards, (6) Tundra swans. 1 sea otter was observed feeding at the southern end of LC-05A. 6-7 Humpback whales were observed off shore. 6-8 Steller's sea lions were observed near by at Sukhoi Lagoon just to the north of LC-05A.

Ecological Considerations:
 (1A, 1B, 8AA) The estuary on the back side of LC-05A is an extremely rich feeding area for many species of birds. Eagle feed and nest in the area (No nest were observed at the time). Tundra swans nest nearby at Sukhoi Lagoon. No streams in the area. Smolt - Fry could be feeding in the Estuary area (1B-01).

K7-3-LC-5A

Segment
Boundary

LC-6

LC-5

XXXX Wide

//// Medium

---- Narrow

TTTT Very Light

0000 No Oil

ADEC Segment Length: 7036m



K7-3-LC-5A

Map Key: GOA-167a

Name: Acton

Date: 4-3-90

Date Entered:

K7-3-LC-5A

Segment Boundary

↓ GOA
167A

XXXX Wide

//// Medium

---- Narrow

TTTT Very Light

0000 No Oil

LC-5

ADEC Segment Length: 7036m

0 300 600 900

METERS

K7-3-LC-5A

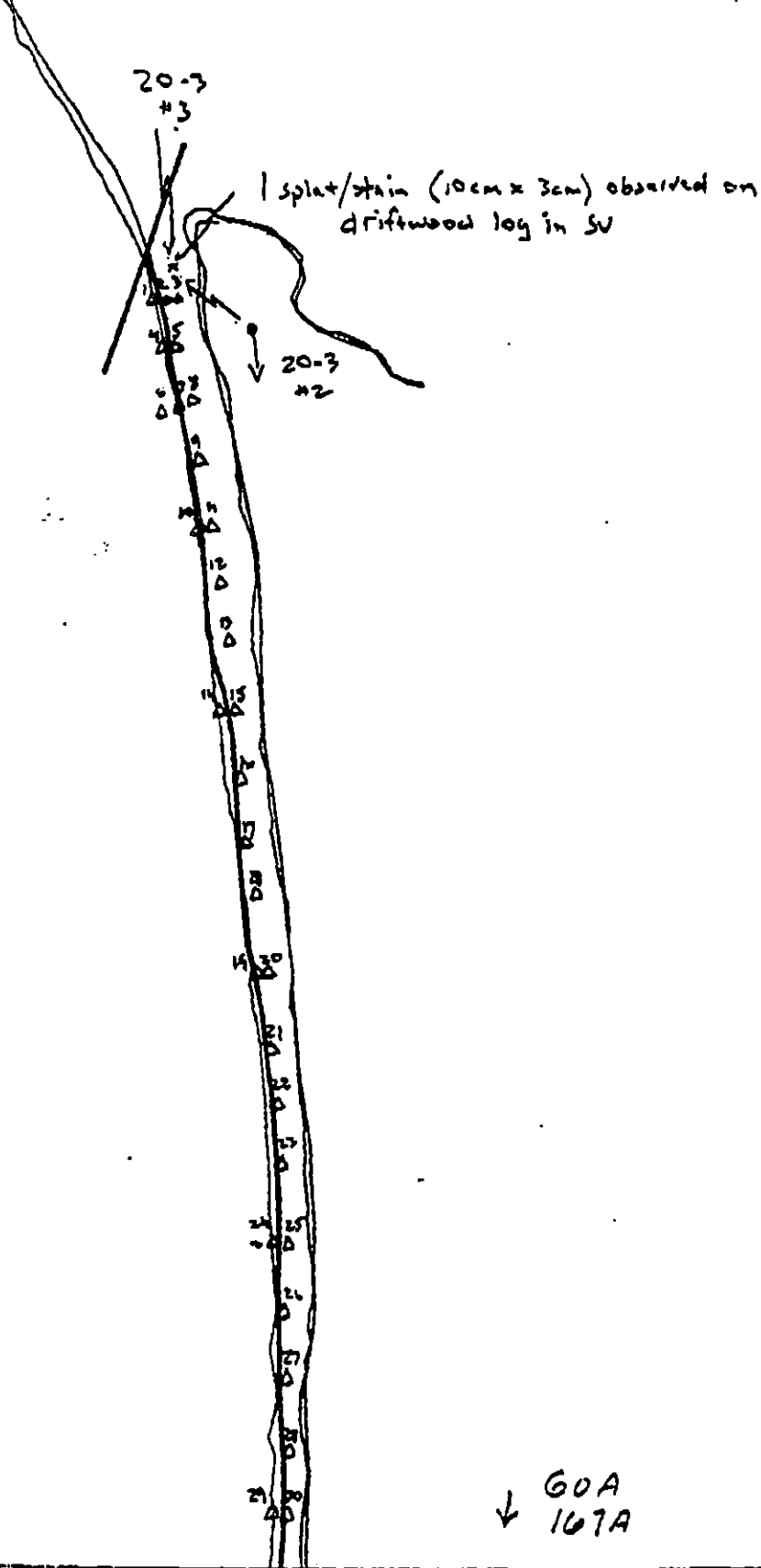
Map Key: GOA-167b

Name: Acton

Date: 4-3-90

Data Entered:

K7-3-LC-5A



XXXX Wide

//// Medium

--- Narrow

TTT Very Light

0000 No Oil

LC-5

ADEC Segment Length: 7036m



K7-3-LC-5A

Map Key: GOA-167b

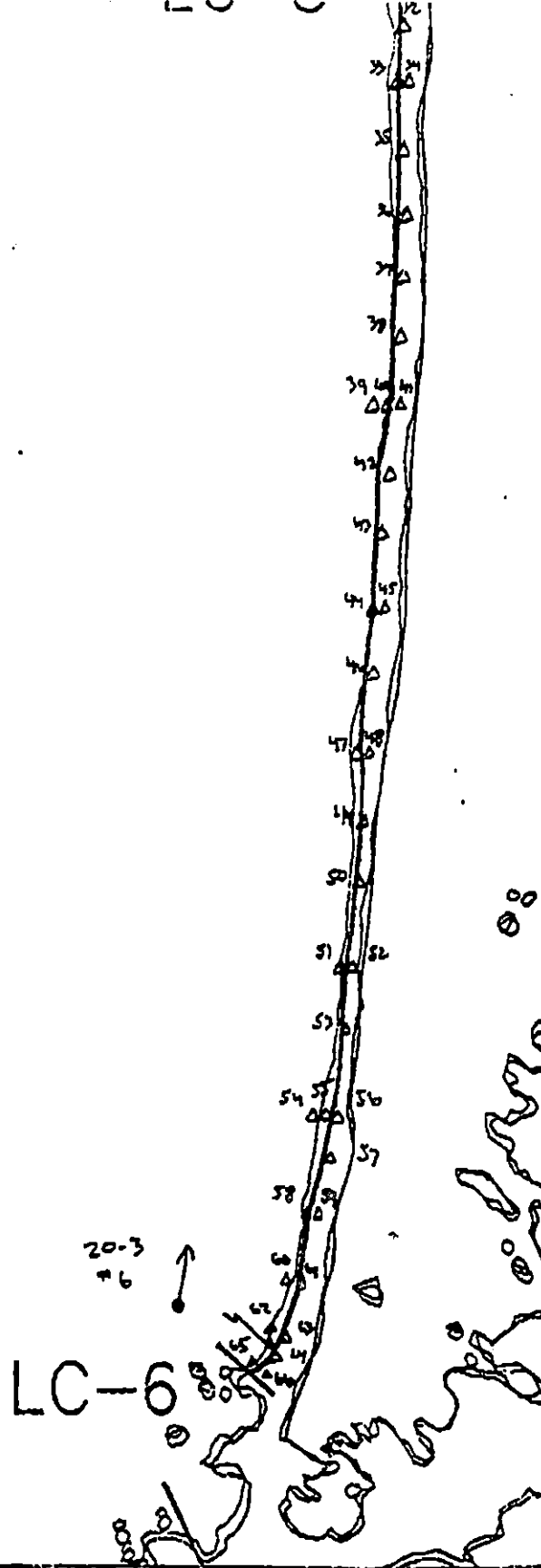
Name: Acton

Date: 4-3-90

Data Entered:

GOA
167B

K7-3-LC-5A



XXXX Wide

//// Medium

--- Narrow

TTT Very Light

0000 No Oil

LC-5

ADEC Segment Length: 7036m



K7-3-LC-5A
Map Key: GOA-167a

Name: Acton

Date: 4-3-90

Data Entered:

SHORELINE EVALUATION

SEGMENT ST/ K07-04-LB-001 SUBDIVISION A (1 OF 1) DATE 4/3/90

SEGMENT ENVIRONMENTAL SENSITIVITIES AND TIME CONSTRAINTS:

No specific constraints identified.

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: *[Signature]* DATE: 4/23/90

OILING CATEGORIZATION:

Wide 0 m: Medium 0 m: Narrow 0 m: V.Light 0 m: No Oil 8721 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: 4/21/90
ADEC ART WEINER *[Signature]*
EXXON ANDY TEN *[Signature]*
NOAA Burt Wesscott *[Signature]*
USCG KENNETH KEANE *[Signature]*

FOSC: *[Signature]* DATE: 4-27-90

OS Acton

SKETCH MAP

SEGMENT ST/ K74-LB-1

SUBDIVISION K74-LB-1A

DATE 4 / 3 90

CHECKLIST

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

Oil on Vegetation

1 $\Rightarrow$

Photo location, direction,
and number

A-A' $\leq$ 100m

Pacific
Ocean

LWL

Accumulated
Driftwood

S.C

SSL

Hut

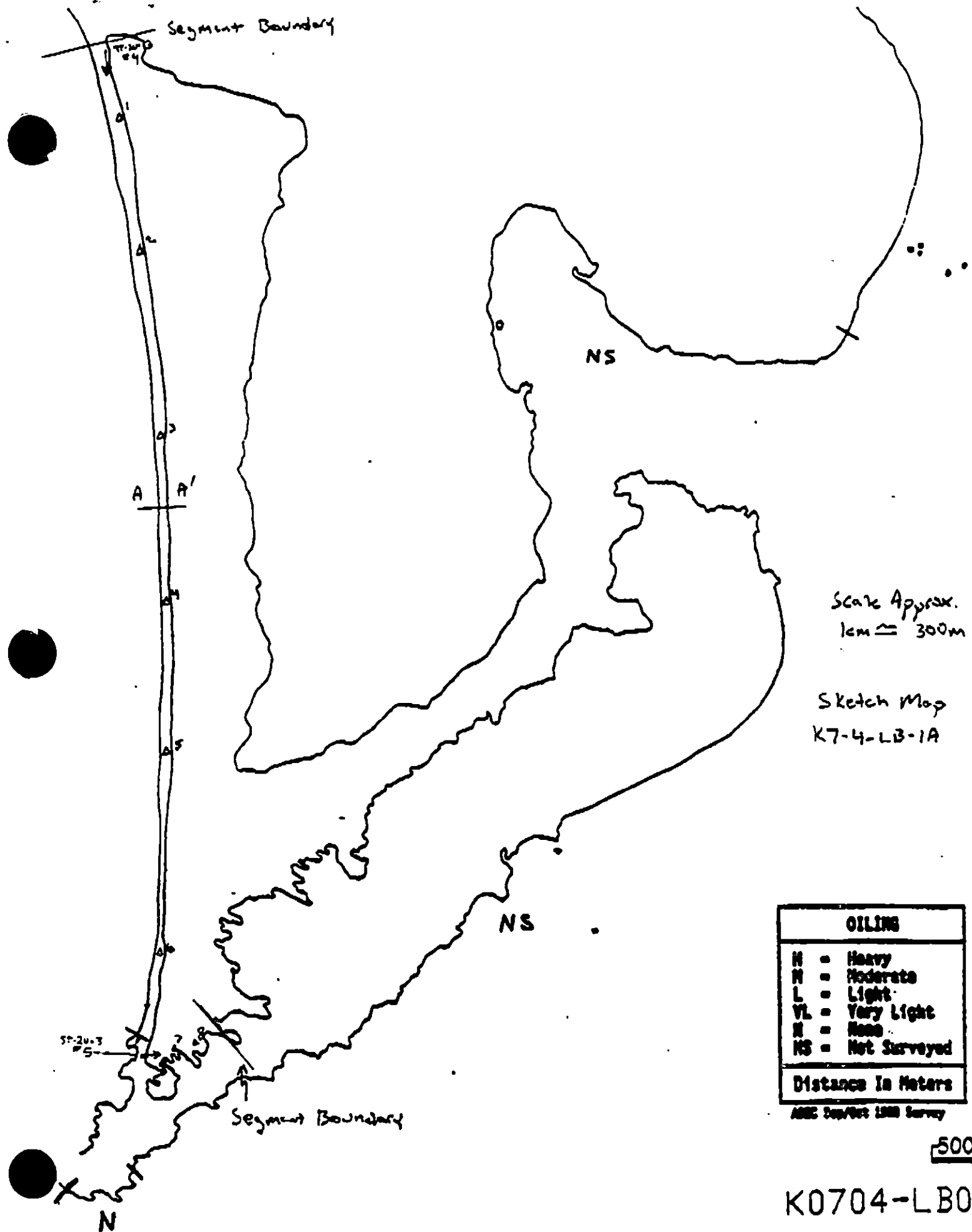
Aitutak
Lagoon

LWL

M

Oil Character Length (m): AP _____ PO _____ CV _____ CT _____ ST _____ MS _____ PT _____ TB _____ FL _____ NO 7500

REVISION: 8/24/88



K0704-LB00

G.O.A
1588 →

XXXX Wide

/// Medium

Narrow

TTTT Very Light

0000 No Oil

LB - 1

ADEC Segment Length: 46022m

METERS

K7-4-L3-1A

Map Key: GOA-158a

Name: Acton

Date: 4-3-90

Data Entered:

↑
GOA
158E

K7-4-LB-1A

LC-5

GOA 158A
↓
GOA 158D

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

LB-1

ADEC Segment Length: 46022m



K7-4-LB-1A
Map Key: GOA-158c
Name: Acron
Date: 4-3-90
Data Entered:

LC-4

K7-4-LB-1A

Subdivision Boundary

↓ GOA 158C

XXXX Wide

//// Medium

--- Narrow

TTTT Very Light

0000 No Oil

LB-1

ADEC Segment Length: 46022m



METERS

K7-4-LB-1A

Map Key: GOA-158C

Name: Acton

Date: 4-3-90

Date Entered:

REGION: KODIAK

SEGMENT: ST/K07-04-LB-001

SUBDIVISIONS: A (1 OF 1)

SHORELINE EVALUATION

SEGMENT ST/ K07-04-LB-001 SUBDIVISION A (1 OF 1) DATE 4/3/90

SEGMENT ENVIRONMENTAL SENSITIVITIES AND TIME CONSTRAINTS:

No specific constraints identified.

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 0 m: No Oil 8721 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: _____

SEGMENT ST/ K7-4-LB-1 SUBDIVISION: K7-4-LB-1A DATE 4-3-90

USCG

NAME D.D. Haven Jr, GM3,

USCGR

SIGNATURE [Signature]

☒ NO TREATMENT RECOMMENDED
COMMENTS -

☐ TREATMENT SUGGESTED

No oil sighted

ADEC

NAME Francine J. Benoit

SIGNATURE [Signature]

☒ NO TREATMENT RECOMMENDED
COMMENTS

☐ TREATMENT SUGGESTED

Walked approximately 5 miles of segment LB 001, along inside of spit along Alitak Lagoon. NO OIL OBSERVED, surface or subsurface

LAND MANAGER

NAME JOHN P. HARDISTER

SIGNATURE [Signature]

☐ NO TREATMENT RECOMMENDED
COMMENTS

☒ TREATMENT SUGGESTED

USFWS

No oil observed

SHORELINE OILING SUMMARY

REVISION NO. 03/82/88

OG Acton USCG Haven SEGMENT ST/ K7-4-LB-1
 BIO Davis LAND REP USFWS Harbor SUBDIVISION K7-4-LB-1A
 EXXON Avery ADEC Bennis TIME 14:25 to 18:15
 TEAM NO.: 20 TIDE LEVEL: -5.5 to +1 DATE 4/3/90
 EST. SUBDIVISION LENGTH: 7500 m ☒ Sun ☒ Clouds ☐ Fog ☐ Rain ☐ Snow
 UPLANDS DESCRIPTION: ☒ Grass ☐ Forest ☐ Rock
 SURVEYED FROM: ☒ Foot ☐ Boat ☐ Helo WORKING DIRECTION: N to S
 SURFACE SEDIMENTS: R 0 % B 0 % C 15 % P 20 % G 15 % S 10 % M 40 % V 0 %
 SLOPE: Long 100 % Hang 0 % Vert 0 % WAVE EXPOSURE: ☒ Low ☐ Med ☐ High
 OIL CATEGORY LENGTH: W 0 m M 0 m N 0 m VL 0 m NO 7500 m

US 39500

SURFACE OIL

CHARACTER	DISTRIBUTION				OIL / FILM COLOR								IMPACTED ZONES			
	C	B	P	S	1	2	3	4	5	6	7	8	SU	U	M	U
ASPHALT PAVEMENT																
POOLED																
COVER																
COAT																
STAIN																
MOUSSE																
PATTIES																
TARBALLS																
FILM																
NO OIL													✓	✓	✓	✓

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

PATTIES / TARBALLS 0 BAGS

NEAR SHORE SHEEN? (NO) BR RW SL TL

OILED DEBRIS	AMOUNT		
	SM	MD	LG
Logs			
Vegetation			
Trash			
Debris			

DEBRIS COLLECTED
☐ YES ☒ NO

TYPE 0

#BAGS 0

Photographs:

Roll No. 20-3

Frames 4,5

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			
1	30					✓	-											✓		SGP
2	30					✓	-											✓		MS
3	30					✓	-											✓		MS
4	30					✓	-											✓		SGP
5	20					✓	-											✓		MS
6	30					✓	-											✓		SGP

COMMENTS No oil observed in this segment. Entire subdivision was surveyed on foot

OS Acta

SEGMENT ST/ K7-4-LB-1

SUBDIVISION K7-4-LB-1A

DATE 4 / 3 90

SKETCH MAP

CHECKLIST

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

LEGEND

1 Δ

Pit - No Subsurface Oil

2 Δ

Pit - Subsurface Oil

CT/C

Continuous Distribution

CT/B

Broken Distribution

CT/P

Patchy Distribution

CT/S

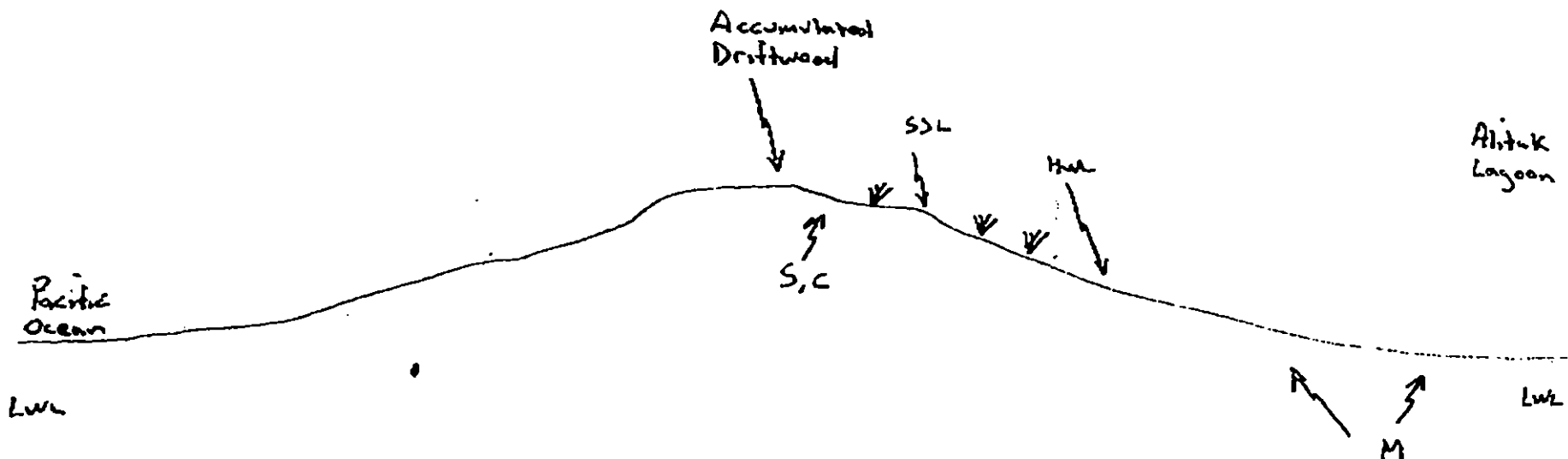
Splashed Distribution

Oiled Vegetation

1 $\Rightarrow$

Photo location, direction,
and number

A-A' $\approx$ 100m



Oil Character Length (m): AP _____ PO _____ CV _____ CT _____ ST _____ MS _____ PT _____ TB _____ FL _____ NO 7500

REVISION: 03/24/00

SHORELINE ECOLOGICAL SUMMARY

REVISION: 03-22-90

Segment ST / K07-04 Subdivision L3-01 A Date (mo / day / yr) 4-3-90

Time (24 hr) 14:35 Biologist H. Davis

- (A) Substrate type and % of segments:
 (1) Bedrock (2) Boulder 5% (3) Cobble 20% (4) Pebble 25% (5) Sand 15% (6) Silt 35%
- (B) Overall % cover of biota (% of segment): Dense 10% Moderate 60% Low 30% (40%)
- (C) Density, substrate preference (by number from A, above), & vertical zonation of major taxa: (upper-U; mid-M; low tidal-L); juveniles / adults (X), new settlement (O)

Photographs:
Roll No. ST-20-3Frames 4, 5

BARNACLES

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

NOT PRESENT:
1, 5, 6

MYTILUS

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

GASTROPODS

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

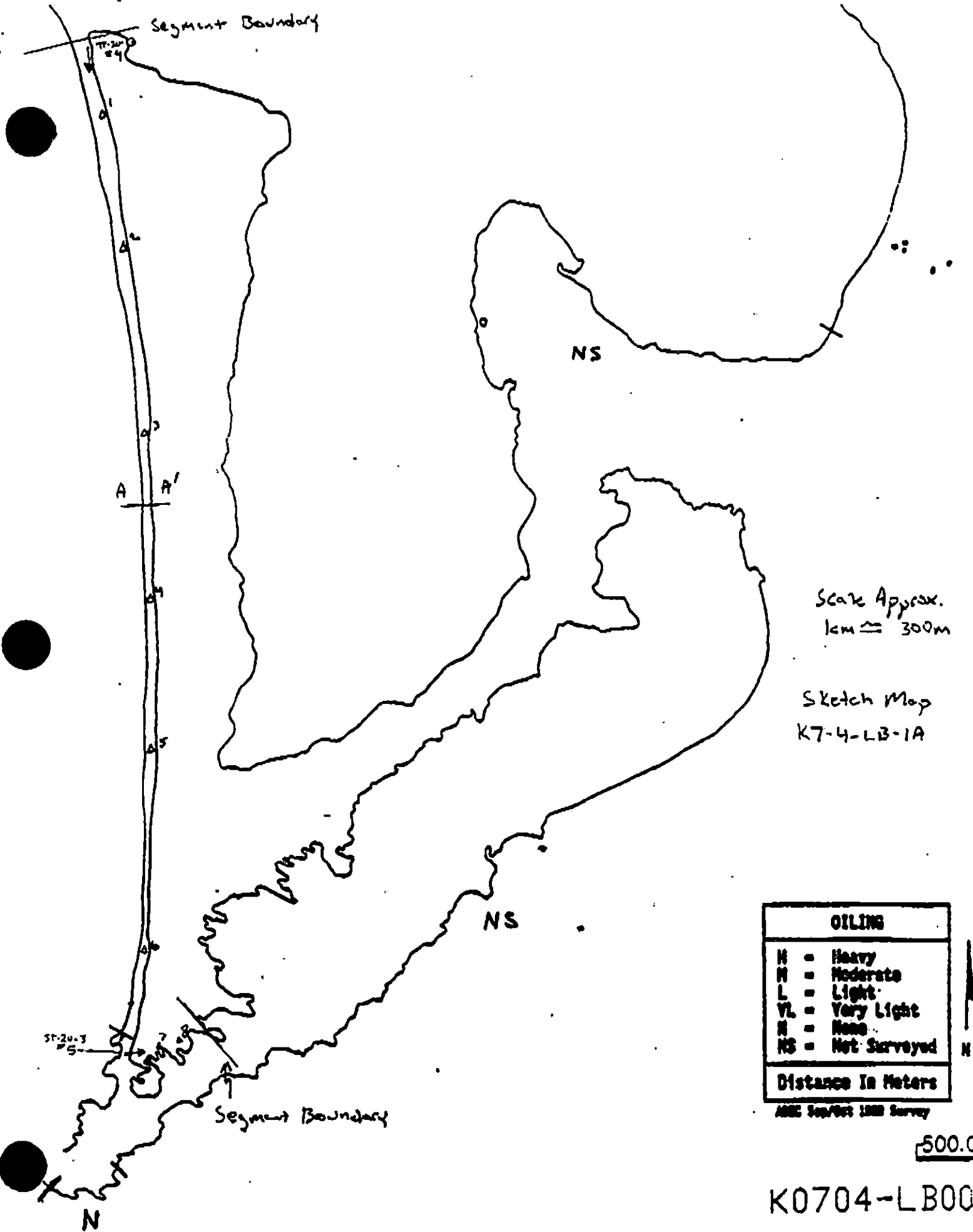
FUCUS

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	X	X	3	X	X	3	X	X	X	3	3
4	X	X	4	X	X	4	X	X	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

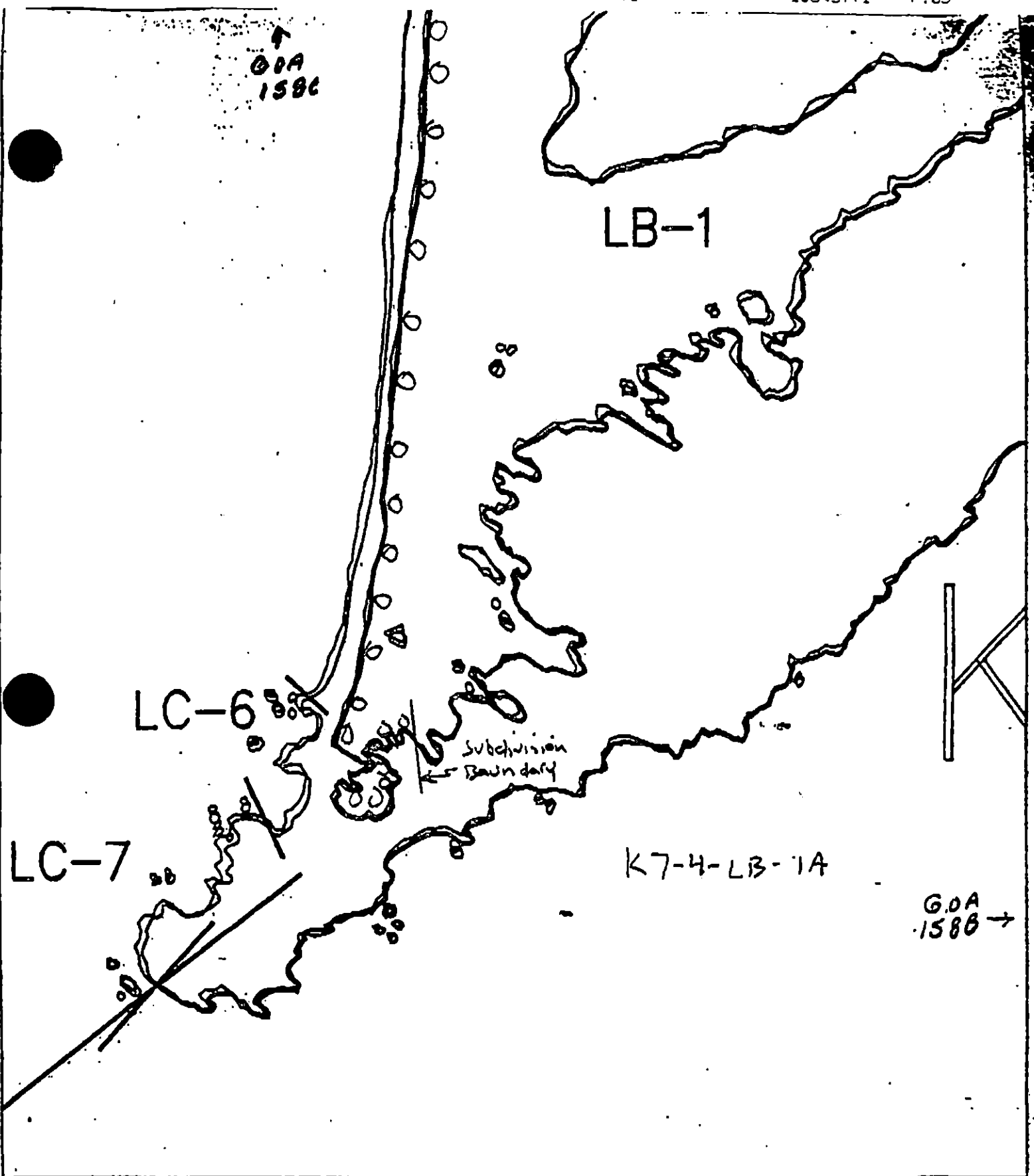
NOT PRESENT

Wildlife Observations/ General Comments: Central area of lagoon along side the barrier beach is a shallow mudflat area with *Bostera* beds. Pintails (20-30), Harlequin (2), Glaucous winged gulls (30-40) Oldf. were feeding in the area. Snow was found in scattered but dense patches in the lower intertidal. There was also dense patches of *Uredia* with scattered *Uredia* (sp?) Beds of *Mytilus* were also patchy but dense. Deer tracks and ocat was found along the shore. 3 juvenile eagles and 2 adults were seen along the barrier beach. 2 Red Foxes were seen. 1 was running across the intertidal.

Ecological Considerations: (None) This is an estuary area separated from the ocean by a Barrier beach. Used by water fowl for feeding and breeding. Eagles feed and nest in the area. Seabird and Sea Duck winter in this estuary.



K0704-LB00



XXXX Wide	LB-1	K7-4-LB-1A
/// Medium		Map Key: GOA-1586
--- Narrow	ADEC Segment Length: 46022m	Name: <u>Acton</u>
TTTT Very Light		Date: <u>4-3-90</u>
0000 No Oil		Date Entered:

↑
GOA
158E

K7-4-LB-1A

LC-5

GOA 158A GOA 158D
↓

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

LB-1

ADCC Segment Length: 46022m



K7-4-LB-1A
Map Key: GOA-158c
Name: Acton
Date: 4-3-90
Data Entered:

LC-4

K7-4-LB-1A

Subdivision Boundary

↓ GOA 158C

XXXX Wide

//// Medium

---- Narrow

TTTT Very Light

0000 No Oil

LB-1

ADEC Segment Length: 46022m



METERS

K7-4-LB-1A

Map Key: GOA-158C

Name: Acton

Date: 4-3-90

Data Entered:

REGION: KODIAK

SEGMENT: ST/K07-13-TI-001

SUBDIVISIONS: A (1 OF 1)

SHORELINE EVALUATION

SEGMENT ST/ K07-13-TI-001 SUBDIVISION A (1 OF 1) DATE 5/31/90

SEGMENT ENVIRONMENTAL SENSITIVITIES AND TIME CONSTRAINTS:

3N, 3P Harbor seal and sea lion pupping (5/10 to 7/1)
3O, 3Q Harbor seal and sea lion molting (8/15 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 0 m: No Oil 9324 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 Removal	☐ Beach Cleaner
	☐ Other (see comments)

COMMENTS: _____

TAG COMMENTS: _____

TAG APPROVAL DATE: _____

ADEC _____
EXXON _____
NOAA _____
USCG _____

FOSC: _____ DATE: _____

KODIAK ECOLOGICAL CONSTRAINTS

- 1A Salmon stream mouth - fry outmigration (4/15 to 7/31)
 1B Salmon stream mouth - spawning (7/15 to 9/10; PEAK 8/15)
 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, 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 prior to treatment for consultation and/or permit application.
 AGENCY CONTACT PERSON: ADF&G Ken Middleton 267-2299
- 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, 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 Kotol Bay Hatchery release
 Pink salmon - late May, early June; Chum salmon - June; Sockeye salmon - early July.
- 1H Remote release site
 No use of methods which might affect nearshore oil or toxicity levels, such as hot water wash or Inipol application, 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 for confirmation and authorization.
 AGENCY CONTACT PERSON: ADF&G Larry Peltz 424-3214
- 1I Gill net area
 1J Purse seine area
 Mainland, West side Kodiak, Shuyak & Moser/Olga Bay (6/9 to 10/1)
 East side Kodiak, East side Afognak (7/4 to 10/1)
- 1K Purse seine hook-off
 1L Set net sites
 Contact ADF&G for confirmation - dates and locations may vary. 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 Larry Nicholson 424-4791
- 2M Herring spawning (4/15 to 6/30)
 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 Larry Nicholson 486-4791
- 30 Harbor seal and sea lion pupping (5/10 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 disturbances to essential minimum. No personnel within 400m 3/1 to 6/1. Air approach and takeoff from and to seaward only; maintain 800m horizontal, 300m vertical distance from nests. Contact USFWS prior to treatment for confirmation of dates.
 AGENCY CONTACT PERSON: USFWS Jill Parker 786-3377
- 6U Recreation: Tent sites (6/1 to 9/15)
 6V Anchorages (6/1 to 9/15)
 6W Forest Service cabins (6/1 to 9/15)
 6X Lodge (6/1 to 9/15)
 6Y Special use destination
- 7Z Subsistence area: Salmon harvesting (6/1 to 9/30)
 Finfish harvesting
 Deer harvesting (6/1 to 1/7)
 Invertebrate harvesting
 Bear harvesting (4/1 to 5/15 and 10/25 to 11/30)
 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
- 7RK

FIELD SHORELINE COMMENT SHEET

SEGMENT ST / K-713/TE-1 SUBDIVISION: A DATE _____

NOAA

USCG

NAME Tom Cellahan SIGNATURE Tom Cellahan DATE 6/1/90

☒ NO TREATMENT RECOMMENDED

☐ TREATMENT SUGGESTED

COMMENTS

Only two very weathered tarballs observed. A sample of each was taken for fingerprinting analysis in NOAA Lab in Anchorage.

ADFG

ADEC

NAME JEFF BARNHART SIGNATURE Jeff Barnhart

☒ NO TREATMENT RECOMMENDED

☐ TREATMENT SUGGESTED

COMMENTS

Agree with land manager comments. No Treatment recommended.

LAND MANAGER

NAME Mike Gaskin/ADEC SIGNATURE Michael Gaskin

☒ NO TREATMENT RECOMMENDED

☐ TREATMENT SUGGESTED

COMMENTS

This segment is mostly within a legislatively designated critical habitat area. Mostly a high wave energy beach area which has deposited tons of beach cobble and gravel during past months. Possibly covering previously deposited oil. Only 2 tarballs and one oil patch was observed during survey. Local residents: John/Midge Spitzer turned over

SHORELINE OILING SUMMARY

REVISION NO. 2413 90

OG J. Springer USCG A. Smith SEGMENT ST/ K-713/TI-1
D. Lohse LAND REP M. Goodwin SUBDIVISION A (1 OF 1)
 ON NOAA T. Callahan ABEC Fish & Game J. Barnhart TIME 11:20 to 15:20
 TEAM NO. 19 TIDE LEVEL +5 TO +1 DATE 05/31/1990
 EST. SUBDIVISION LENGTH: 18,600 m ☐ Sun ☐ Clouds ☐ Fog ☒ Rain ☐ Snow
 UPLANDS DESCRIPTION: ☒ Grass ☐ Forest ☐ Rock Stationary dunes & back-beach lagoon.
 SURVEYED FROM: ☒ Foot ☐ Boat ☒ Helo WORKING DIRECTION: W to E
 SURFACE SEDIMENTS: R 100 % B 5 % C 5 % P 10 % G 30 % S 50 % M % V %
 SLOPE: Lang 100 % Hang % Vert % WAVE EXPOSURE: ☐ Low ☐ Med ☒ High
 OIL CATEGORY LENGTH: W m M m N m VL 0.24 m NO 18,600 m

SURFACE OIL

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

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

OILED DEBRIS	AMOUNT		
	SM	MD	LG
Logs			
Vegetation			
Trash			
Debris			

DID YOU COLLECT DEBRIS?

YES ☐ NO ☒TYPE #BAGS

Photographs:

Roll No. Frames

SUBSURFACE OIL

PIT NO.	PIT DEPTH (cm)	SUBSURFACE OIL CHARACTER					OILED INTERVAL (CM)	BELOW		OIL / FILM COLOR						PIT ZONE				A N A	SHEEN (Y/N)	▼	SURFACE - SUBSURFACE SEDIMENTS		
		OP	OR	OL	OF	NO		UO	UC	SP	BP	OP	SL	TL	LR	SU	U	M	L						
1	30					X	.		X							X									S/S<
2	50					X	.		X							X									S/S
3	55					X	.		X							X									S/S
							.																		
							.																		
							.																		

COMMENTS most of segment consists of sand spit with stationary back-beach dunes. Extreme northwest end has incompetent mudstone cliffs.

Southeast end of segment was not surveyed due to the presence of seals and bad weather.

Two tar balls found are hard and very weathered - may not be from Exxon Valdez.

OIG Springer
 SEGMENT STICK 73/II-1
 SUBDIVISION A
 DATE 05/31/90

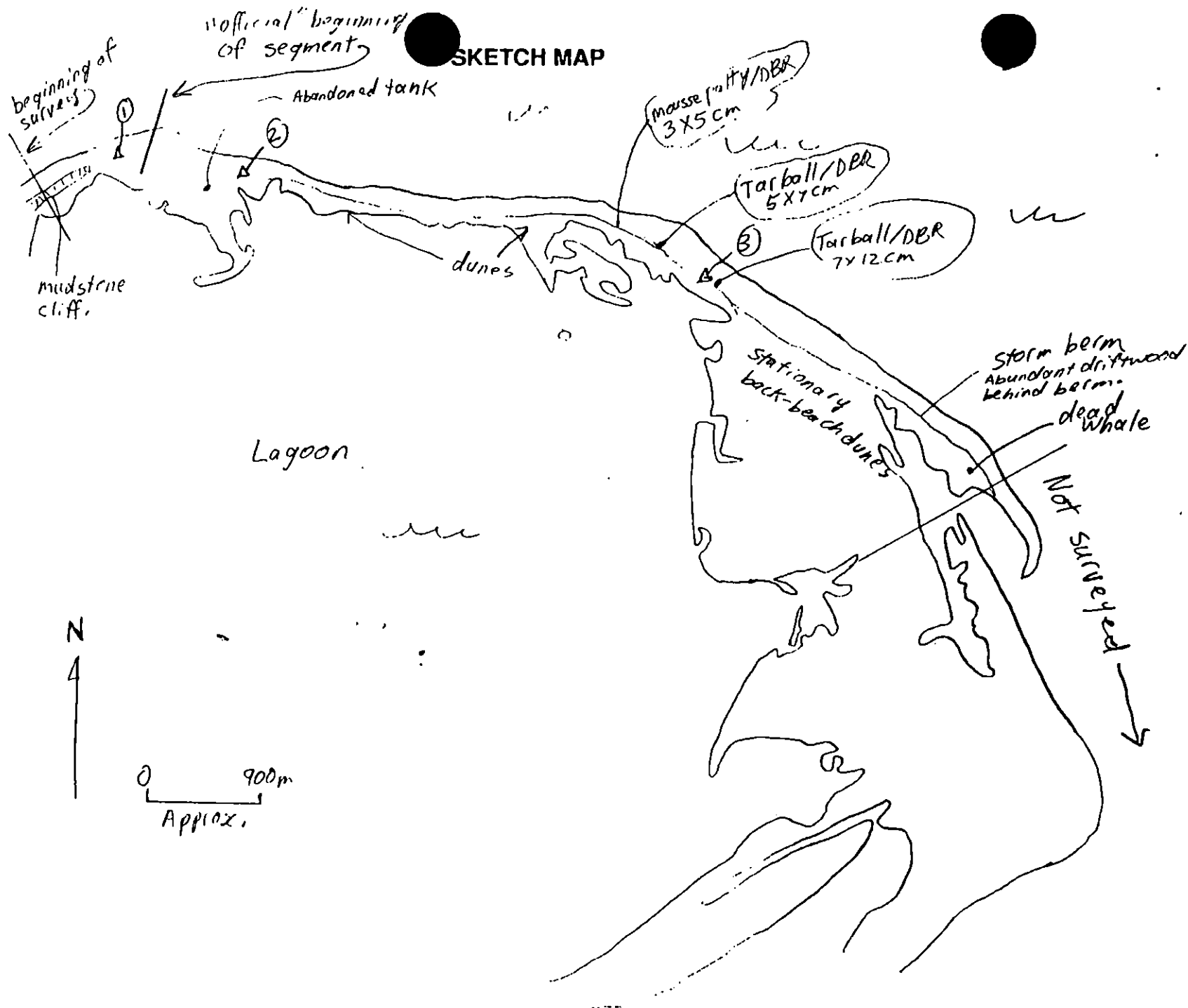
CHECKLIST

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

LEGEND

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

SKETCH MAP



Oil Character Length (m): AP 0.05 PT 0.19 FL 18,600

REVISION: 02/24/90

SHORELINE ECOLOGICAL SUMMARY

REVISION: 03-22-90

Segment ST / K7-13TI-1 Subdivision A Date (mo / day / yr) 5-31-90

Time (24 hr) 11:00 Biologist David Lohse

(A) Substrate type and % of segments:
(1) Bedrock (2) Boulder 5 (3) Cobble 5 (4) Pebble 10 (5) Sand 80 (6) Silt

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

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

Photographs:
Roll No. ST-19-100

Frames 22

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:

See page 2.

Ecological Considerations:

- 0 - At northwestern end of segment several solitary seals observed in water. Further east a pod of ~50 seals was observed. In the small lagoon in the center of the segment 2-3 pods of seals were observed hauled out on the beach.
- 5R - Gulls nesting in northwestern portion of segment. Other nesting areas may

Segment ST/K7-13/TI-1

Subdivision 4

5-31-90

Biologist: David Cohen

Wildlife Observations/General Comments

1. One immature bald eagle, ~6 terns, and innumerable gulls were spotted in area
2. One complete baken whale and the remains of 2 deer and 2 seals were found on beach
3. Intertidal region along segment was sandy beach with scattered pockets of boulders, cobbles, and pebbles. In several locations there were 2 beach berms. At one site the area between the berms was low enough to be covered with water, and the scattered cobbles and pebbles here had some Enteromorpha on them. Other than this the intertidal was devoid of organisms

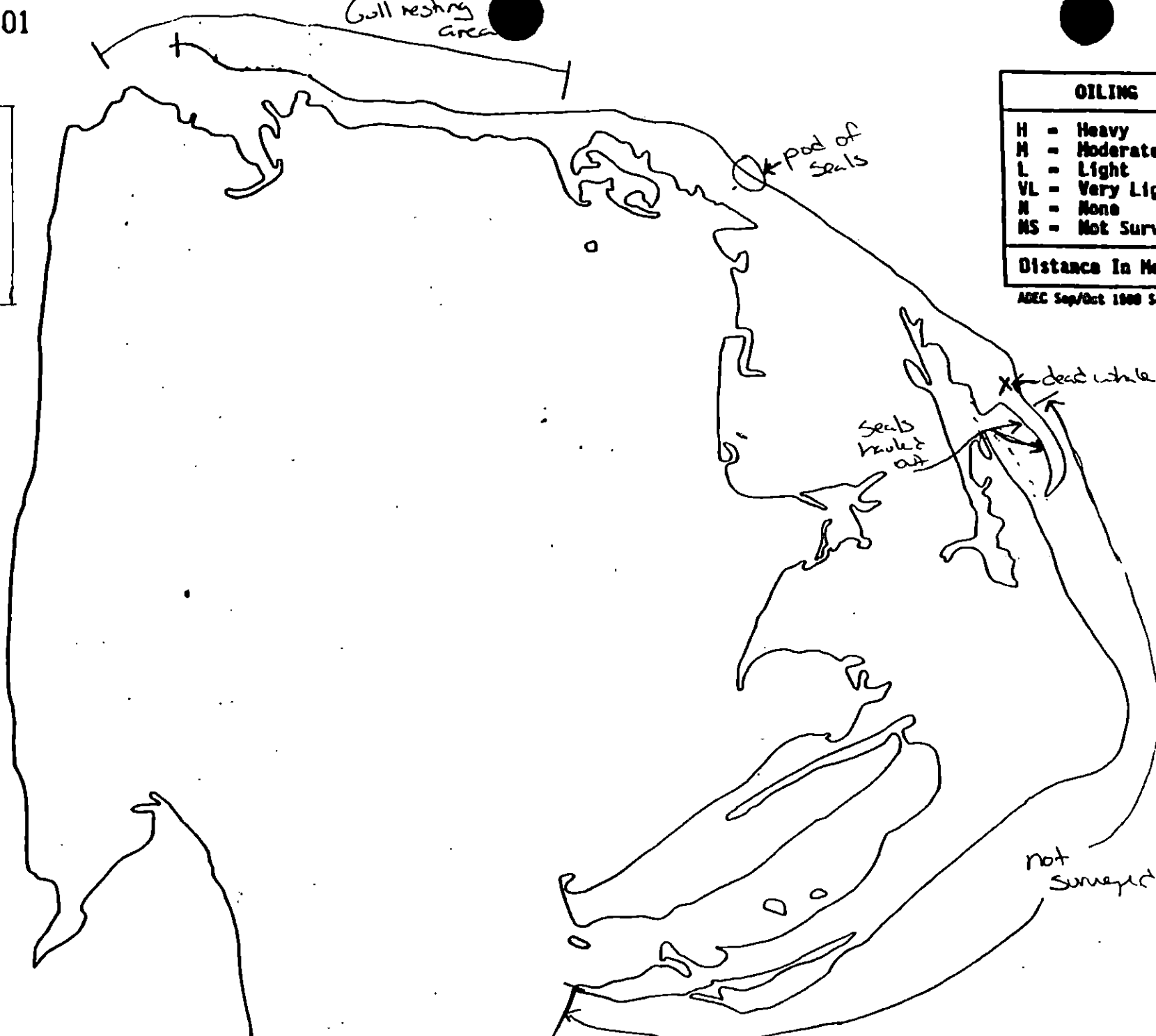
K071 I001

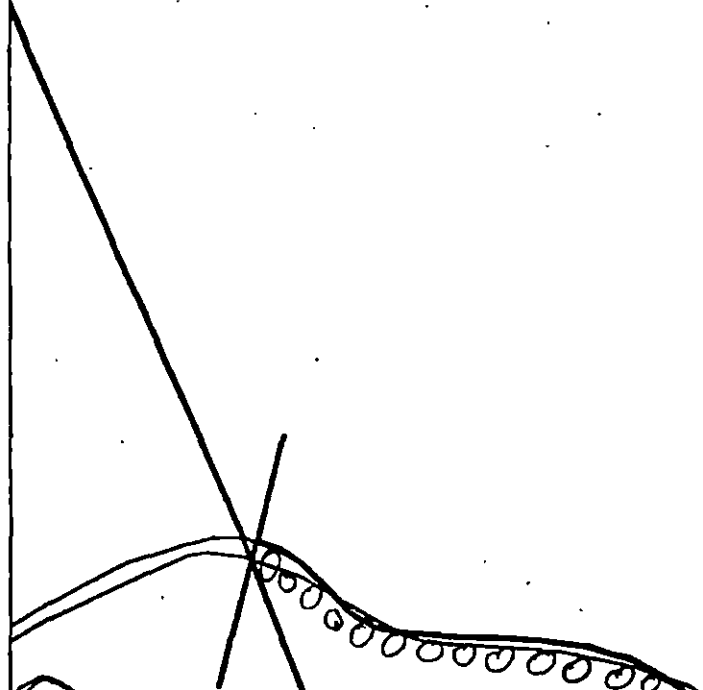
Gull resting area

ology Map
source Codes for
Entire Segment

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

ADEC Sep/Oct 1988 Survey





↓ GOA
3150

XXXX Wide

//// Medium

---- Narrow

TTTT Very Light

0000 No Oil

K0713-TI-1-A

ADEC Segment Length: 23866m



Map Key: GOA-315g

Name: James Springer

Date: 5/31/90

Data Entered:

↑ GOA
315G

GOA
315E →

XXXX Wide

//// Medium

--- Narrow

TTTT Very Light

0000 No Oil

KØ713-TI-1-A

ADEC Segment Length: 23866m

0 300 600 900
METERS

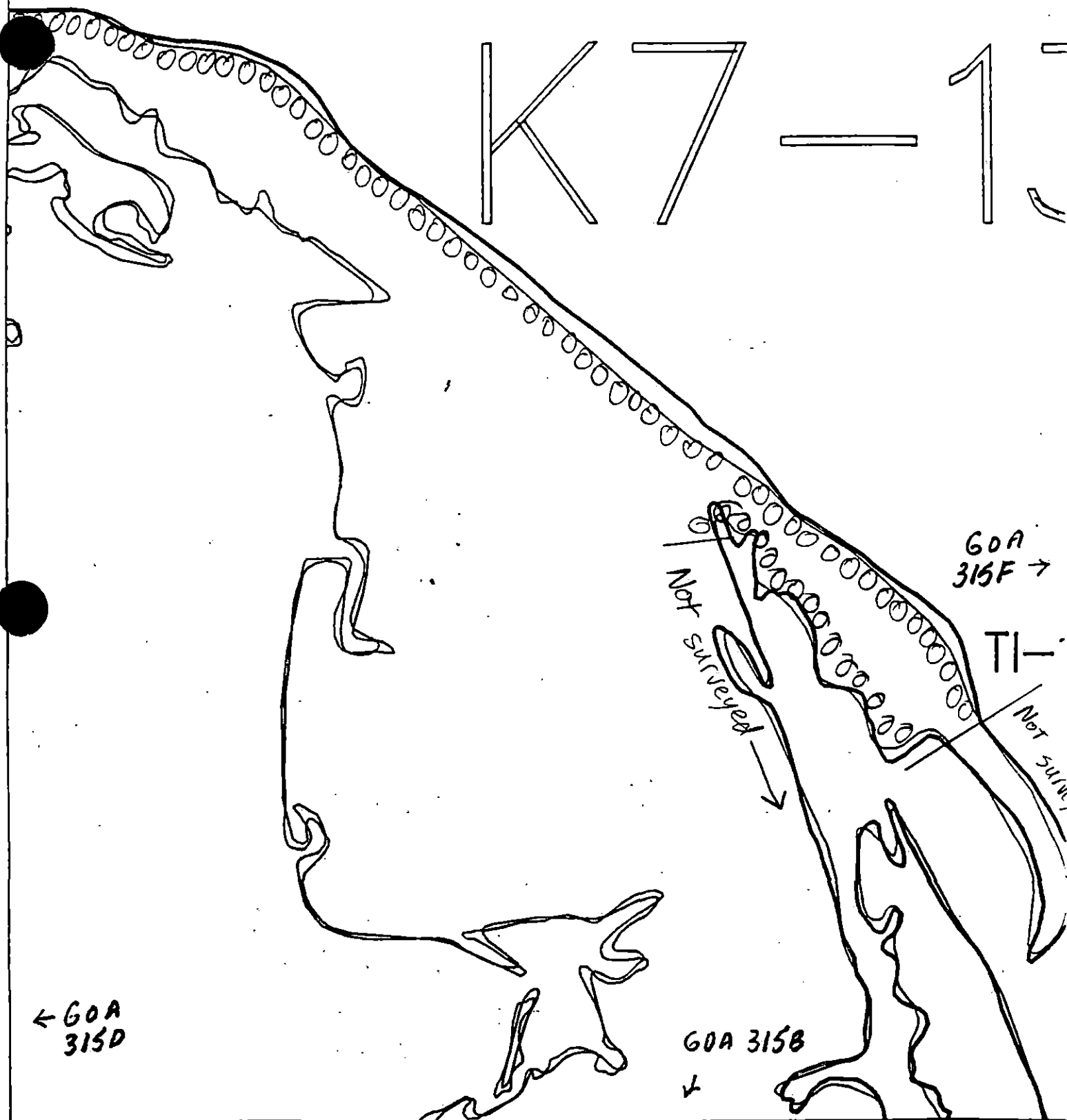
Map Key: GOA-315d

Name: James Springer

Date: 5/31/90

Data Entered:

K7-1



XXXX Wide

//// Medium

---- Narrow

TTTT Very Light

0000 No Oil

K713-TI-1-A

ADEC Segment Length: 23866m



Map Key: GOA-315a

Name: James Springer

Date: 5/31/90

Data Entered:

Not
surveyed

← GOA
315E

↓ GOA 315C

XXXX Wide

//// Medium

---- Narrow

TTTT Very Light

0000 No Oil

K0713-TI-1-A

ADEC Segment Length: 23866m

0 500 600 900
METERS

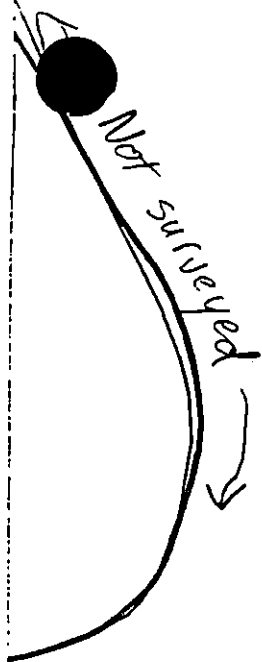
Map Key: GOA-315I

Name: James Springer

Date: 5/31/90

Data Entered:

↑
GOA 315F



← GOA
315B



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

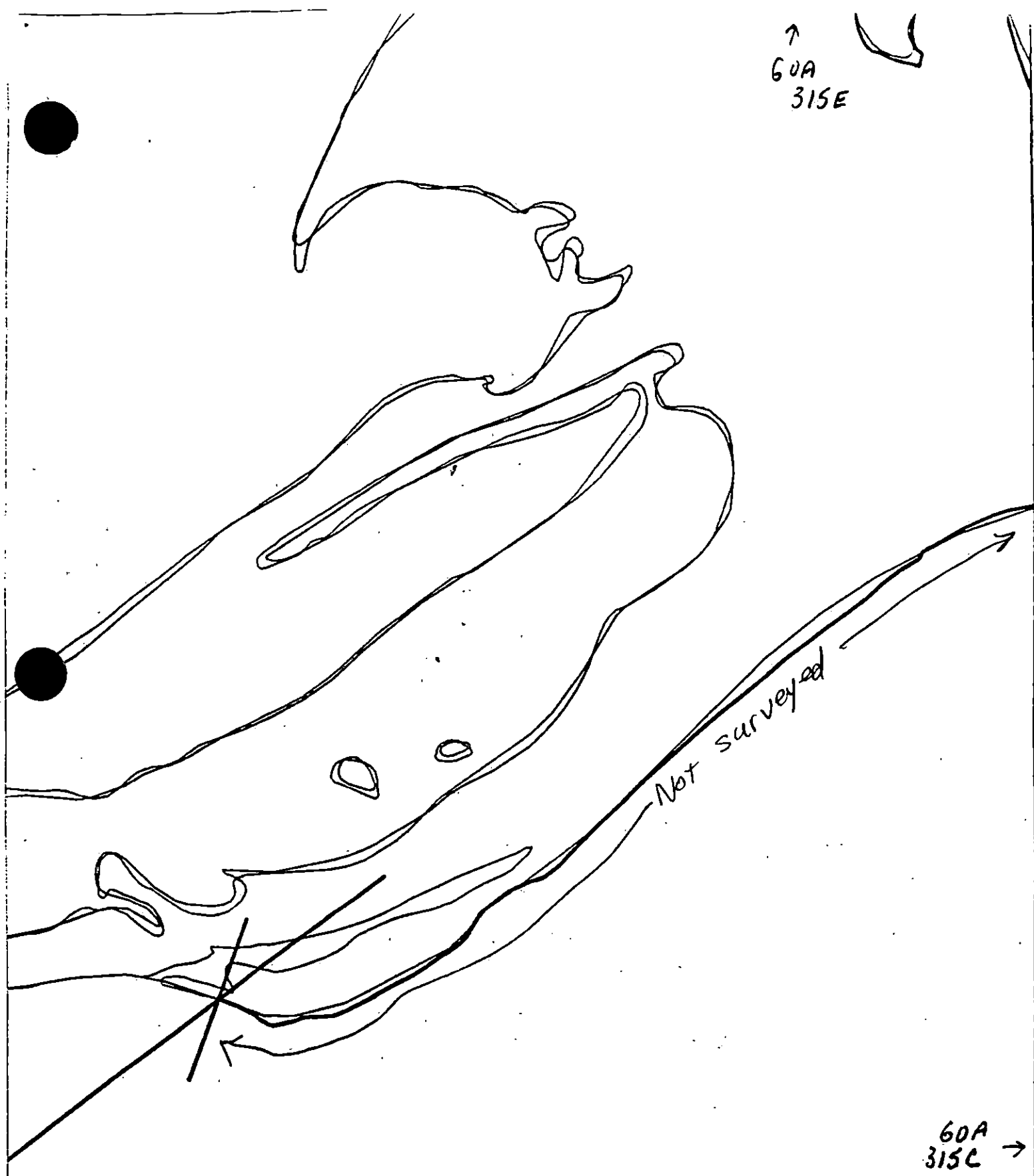
KØ713-TI-1-A

ADEC Segment Length: 23866m



Map Key: GOA-315c
Name: James Springer
Date: 5/31/90
Data Entered:

↑
60A
315E



60A
315C →

XXXX Wide

//// Medium

---- Narrow

TTTT Very Light

0000 No Oil

KØ713-TI-1-A

ADEC Segment Length: 23866m



Map Key: 60A-315b

Name: James Springer

Date: 5/31/90

Data Entered:

SHORELINE EVALUATION

SEGMENT ST/ K07-13-TI-001 SUBDIVISION A (1 OF 1) DATE 5/31/90

SEGMENT ENVIRONMENTAL SENSITIVITIES AND TIME CONSTRAINTS:

3N, 3P Harbor seal and sea lion pupping (5/10 to 7/1)
3O, 3Q Harbor seal and sea lion molting (8/15 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. Hodges DATE: June ~~17~~ 18, 1990

OILING CATEGORIZATION:

Wide_0_m: Medium_0_m: Narrow_0_m: V.Light_0_m: No Oil_9324_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: 6/16/90
ADEC Roy Morris R. Morris
EXXON Andy Ten Andy FOSC: 1 L DATE: 6-27-90
NOAA Joseph Talkott J. Talkott
USCG G.A. Reiter G.A. Reiter

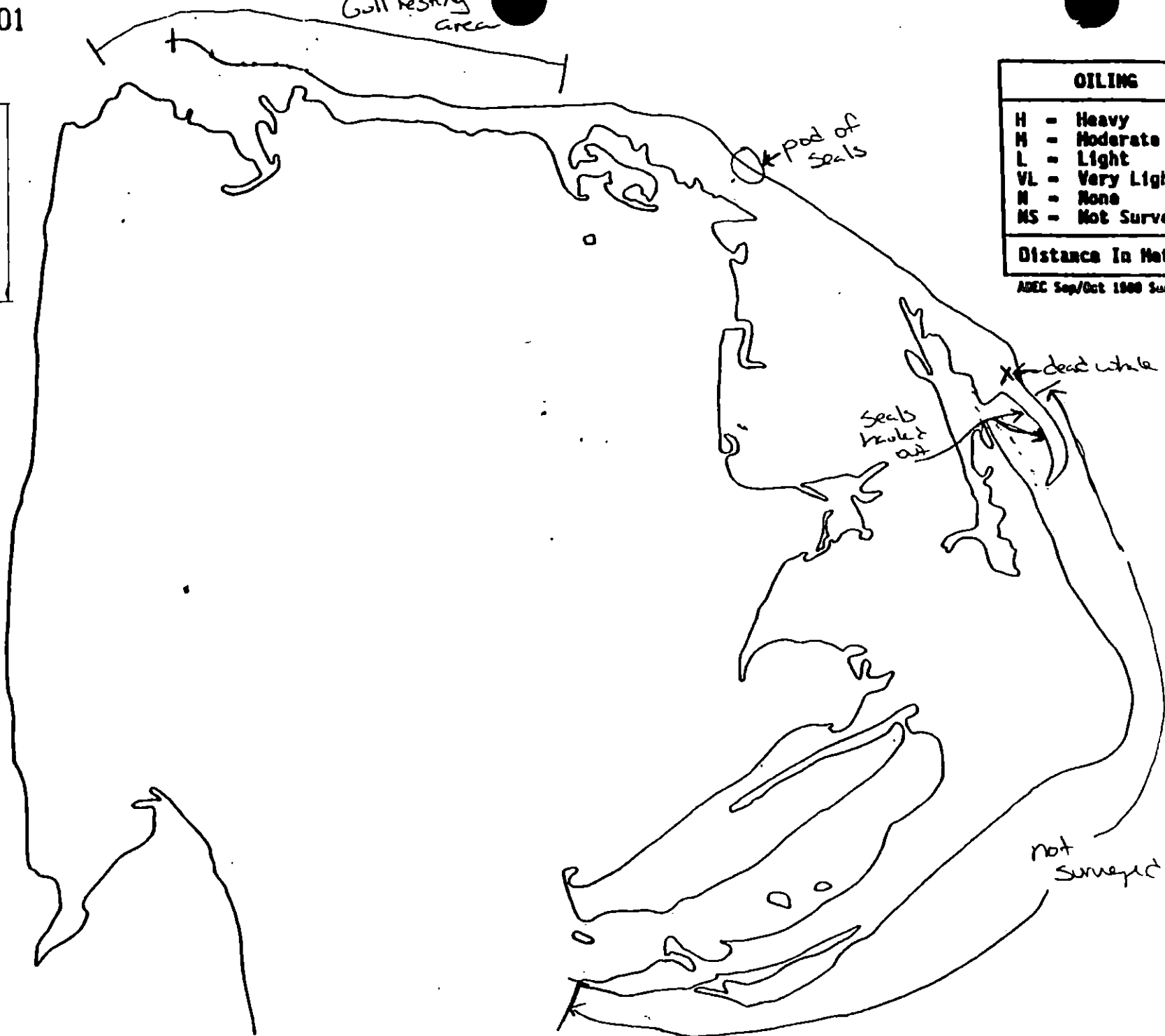
K0715-11001

Gull resting area

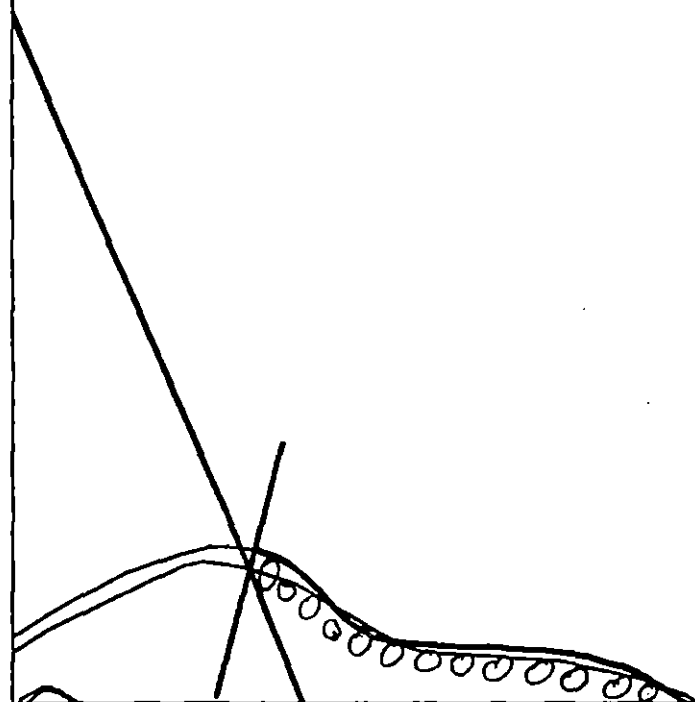
ology Map
source Codes for
Entire Segment

OILING	
H	- Heavy
M	- Moderate
L	- Light
VL	- Very Light
N	- None
MS	- Not Surveyed
Distance In Meters	

ADEC Sep/Oct 1988 Survey



1000



↓ GOA
3150

XXXX Wide

//// Medium

---- Narrow

TTTT Very Light

OOOO No Oil

K0713-TI-1-A

ADEC Segment Length: 23866m



Map Key: GOA-315g

Name: James Springer

Date: 5/31/90

Data Entered:

↑ 60A
315G

60A
315E →

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

KØ713-TI-1-A

ADEC Segment Length: 23866m

0 300 600 900

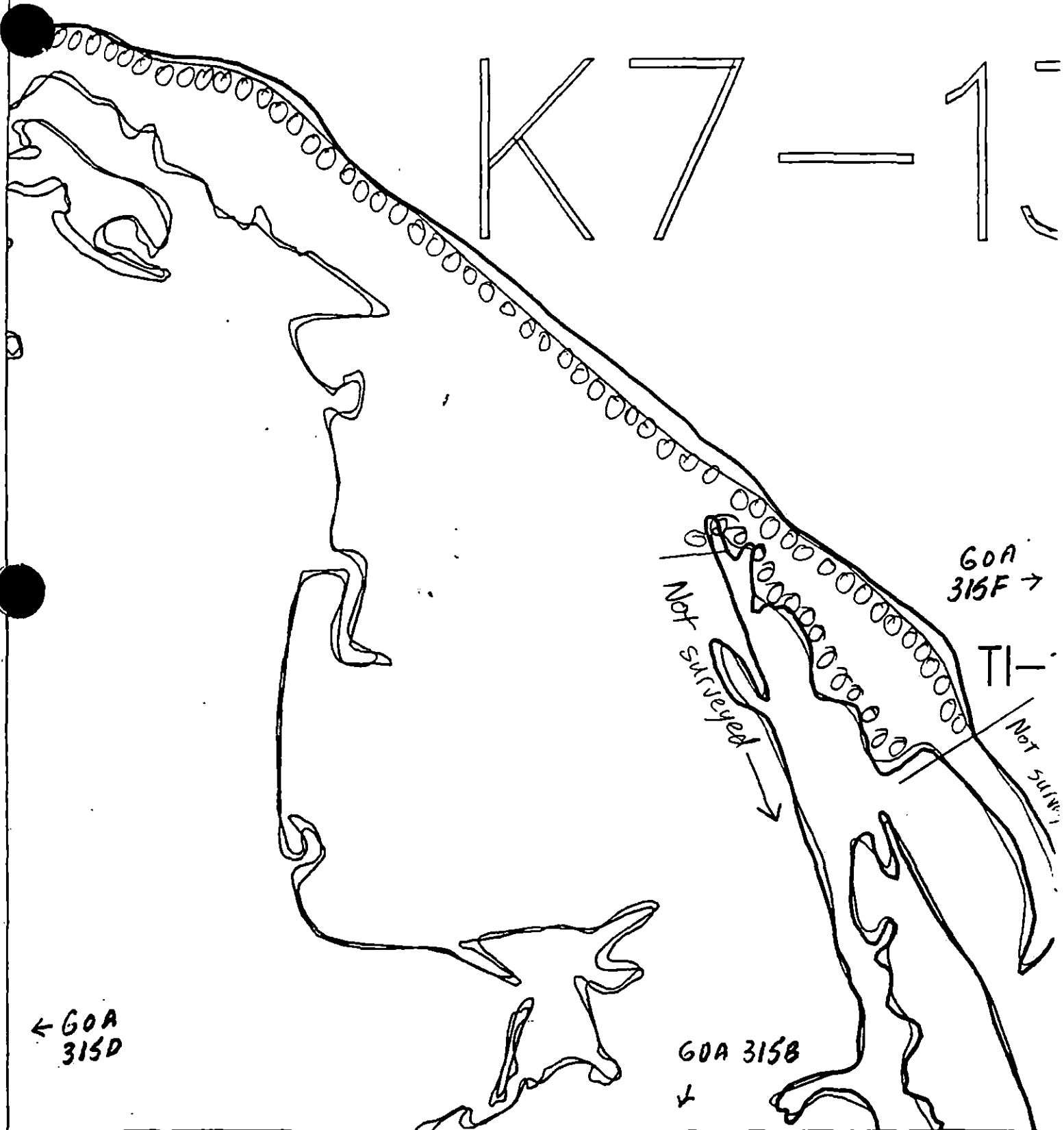
Map Key: 60A-315d

Name: James Springer

Date: 5/31/90

Data Entered:

K7-1



← GOA 315D

GOA 315B
↓

GOA 315F →

TI-
Not surveyed

Not surveyed
↓

XXXX Wide

//// Medium

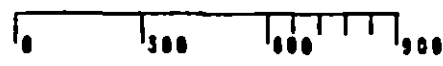
--- Narrow

TTTT Very Light

OOOO Not

K0713-TI-1-A

ADEC Segment Length: 23866m



Map Key: GOA-315e

Name: James Springer

Date: 5/31/90

Data Entered:

Not
Surveyed

← GOA
315E

↓ GOA 315C

XXXX Wide

//// Medium

--- Narrow

TTTT Very Light

OOOO N. 0:1

K0713-TI-1-A

ADEC Segment Length: 23866m

0 300 600 900

Map Key: GOA-315f

Name: James Springer

Date: 5/31/90

Data Entered:

↑
GOA 315F

Not surveyed

← GOA
315B

XXX Wide

//// Medium

--- Narrow

TTTT Very Light

K0713-TI-1-A

ADEC Segment Length: 23866m

0 500 600 900

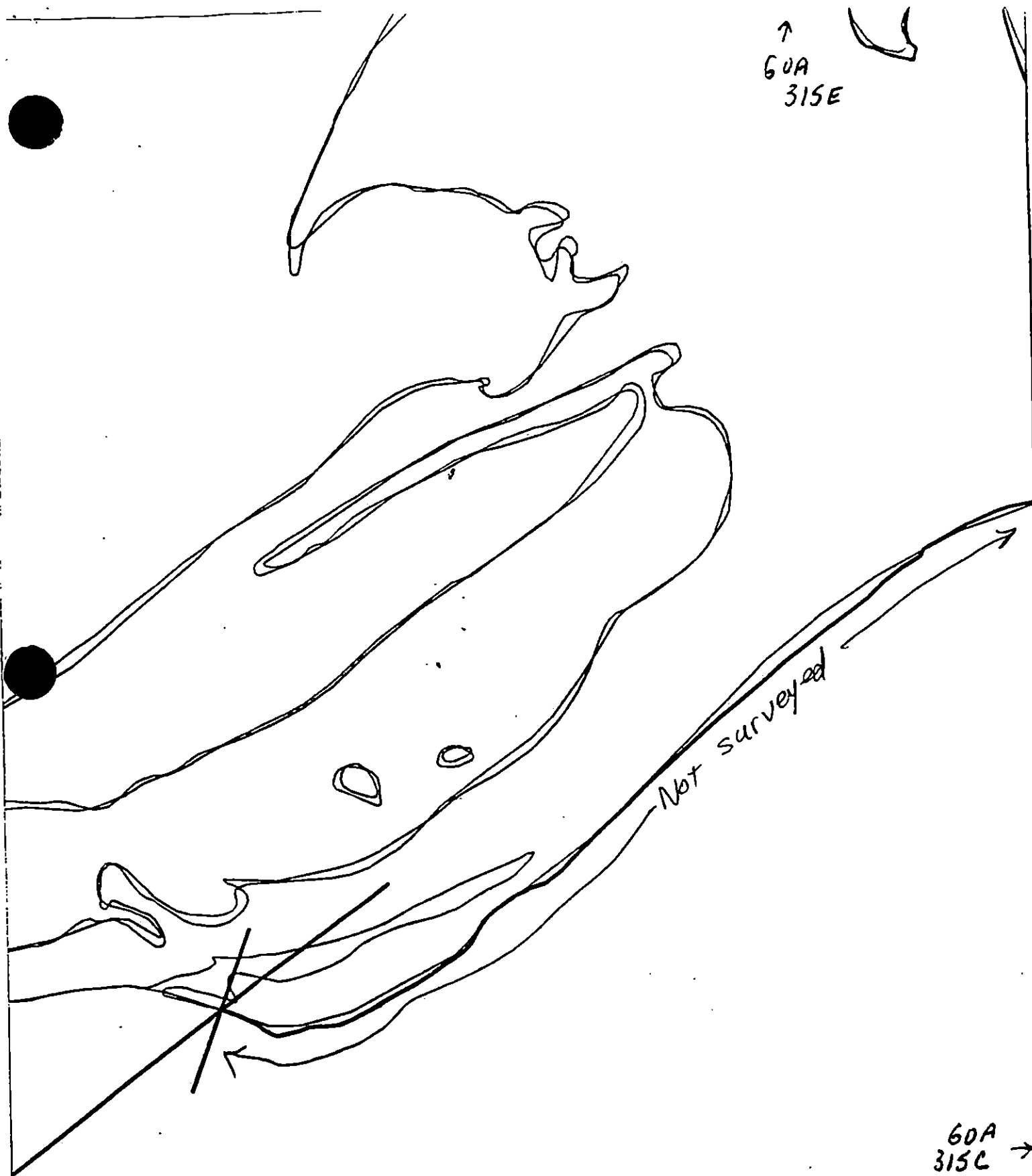
Map Key: GOA-315c

Name: James Springer

Date: 5/31/90

Name Entered:

↑
60A
315E



60A
315C →

XXXX Wide

//// Medium

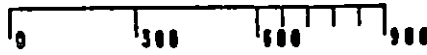
--- Narrow

TTTT Very Light

OOOO No Oil

KØ713-TI-1-A

ADEC Segment Length: 23866m



Map Key: 60A-315b

Name: James Springer

Date: 5/31/90

Data Entered:

REGION: KODIAK

SEGMENT: ST/K08-04-UB-003

SUBDIVISIONS: A (1 OF 1)

SHORELINE EVALUATION

SEGMENT ST/ K08-04-UB-03 SUBDIVISION A (1 OF 1) DATE 4/9/90

SEGMENT ENVIRONMENTAL SENSITIVITIES AND TIME CONSTRAINTS:

Harbor seal and sea lion pupping (3N, 3P) - 5/10 to 6/30 and molting (3Q, 3Q) - 8/15 to 9/15.

SUBDIVISION ECOLOGICAL CONSTRAINTS:

Avoid disturbance/damage to unopened biota and substrate. See attached Ecological Constraint Sheet.

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 15922 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: _____

SEGMENT ST / K 8-4 UB 03 SUBDIVISION: K-8-4-UB-3A DATE 4-8-90

USCG

NAME DD Haven Jr, GMB, USCGR SIGNATURE [Signature]☒ NO TREATMENT RECOMMENDED
COMMENTS☐ TREATMENT SUGGESTED

No oil sighted

ADEC

NAME FRANCINE D. BENNIS SIGNATURE [Signature]☒ NO TREATMENT RECOMMENDED
COMMENTS☐ TREATMENT SUGGESTED

Walked entire length of accessible beach in each of our 4 setdowns
in north Ugak Bay. No oil observed.

LAND MANAGER

NAME Ray Burger ADNR SIGNATURE [Signature]☒ NO TREATMENT RECOMMENDED
COMMENTS☐ TREATMENT SUGGESTED

Four pocket beaches on segment assessed - no oil
All four are high energy beaches, landable by small craft
& very campable
Deer & eagles abound.
Three-wheeler trail accesses beach #4

REVISION NO. 03-21-90

SHORELINE OILING SUMMARY

REVISION NO. 01/22/92

OG Acton USCG Hakon SEGMENT ST/ K8-4-03-3
 BIO Davis LAND REP DNR SUBDIVISION K8-4-03-3A
 EXXON Avery ADEC Bennis TIME 8:15 to 11:45
 TEAM NO.: 20 TIDE LEVEL: +0.5 to +6 DATE 4/8/90
 EST. SUBDIVISION LENGTH: 15495 m ☒ Sun ☐ Clouds ☐ Fog ☐ Rain ☐ Snow
 UPLANDS DESCRIPTION: ☒ Grass ☐ Forest ☒ Rock
 SURVEYED FROM: ☒ Foot ☐ Boat ☒ Helo WORKING DIRECTION: NW to SE
 SURFACE SEDIMENTS: R 30 % B 30 % C 10 % P 10 % G 10 % S 10 % M 0 % V 0 %
 SLOPE: Long 33 % Hang 33 % Vert 33 % WAVE EXPOSURE: ☐ Low ☐ Med ☒ High
 OIL CATEGORY LENGTH: W 0 m M 0 m N 0 m VL 0 m NO 15495 m

SURFACE OIL

CHARACTER	DISTRIBUTION				OIL / FILM COLOR								IMPACTED ZONES			
	10	15	20	25	30	35	40	45	50	55	60	65	SU	U	M	U
ASPHALT PAVEMENT																
POOLED																
COVER																
COAT																
STAIN																
MOUSSE																
PATTIES																
TARBALLS																
FILM																
NO OIL													✓	✓	✓	✓

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-20-3Frames 27-34

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	30	35	40	45	50	55	60	65	SU	U	M	U		
1	30					✓	-											✓					MSG
2	30					✓	-											✓					MSG
3	30					✓	-											✓					MSG
4	30					✓	-											✓					MSG
5	20					✓	-											✓					MSG
6	30					✓	-											✓					SG

COMMENTS Surveyed 4 sections on foot (see map). Remainder of segment was surveyed by helo at approx 30kts and 30m altitude due to steep to vertical headland and cliff and flooding tide (4000m approx). No oil was observed in areas surveyed on foot. No oil was observed in areas surveyed by helo, although the limitations of spotting oil by helo are obvious. A foot survey of these areas would be required to make a more conclusive judgement regarding the presence of oil.

SHORELINE OILING SUMMARY (PAGE 2 of 2)

REVISION 03/22/90

SEGMENT ST/ K8-4-013-3 SUBDIVISION K8-4-013-3A

SUBSURFACE OIL (CONTINUED)

PIT NO.	PIT DEPTH (cm)	SUBSURFACE OIL CHARACTER					OILED INTERVAL (CM-CM)	BELOW		OIL / FILM COLOR						PIT ZONE				A N A	SUBSURFACE SEDIMENTS		
		OP	OR	OL	OF	NO		UO	UC	SR	BR	DR	FW	GY	BL	DR	TL	LR	SU			UI	MI
7	30					✓	-											✓					SG
8	30					✓	-											✓					SG
9	30					✓	-											✓					SG
10	30					✓	-											✓					SG
11	30					✓	-											✓					SG
12	30					✓	-											✓					SG
13	30					✓	-											✓					SG
14	30					✓	-											✓					SG
15	30					✓	-											✓					SG
16	30					✓	-											✓					SG
17	30					✓	-											✓					SG
18	30					✓	-											✓					SG
19	30					✓	-											✓					SG
20	30					✓	-											✓					SG

COMMENTS

REVIEWED BAT DATE 9 Apr 90

OG Ac

SEGMENT ST/ K8-4-VB-3

SUBDIVISION K8-4-VB-3A

DATE 4 / 8 90

CHECKLIST

- ☐ N Arrow
- ☐ Approx. Scale
- ☐ Seg/Sub Endry
- ☐ Oil Dist.
- ☐ Width
- ☐ Length
- ☐ % Cover
- ☐ Substrate Character
- ☐ Est. HMLAWL
- ☐ SSI
- ☐ Profile Location(s)
- ☐ Profile(s)
- ☐ Pit Location(s)
- ☐ Photo Location(s)

LEGEND

1 Δ

Pit - No Subsurface Oil

2 Δ

Pit - Subsurface Oil

CT/C

Continuous Distribution

CT/B

Broken Distribution

CT/P

Patchy Distribution

CT/S

Splashed Distribution

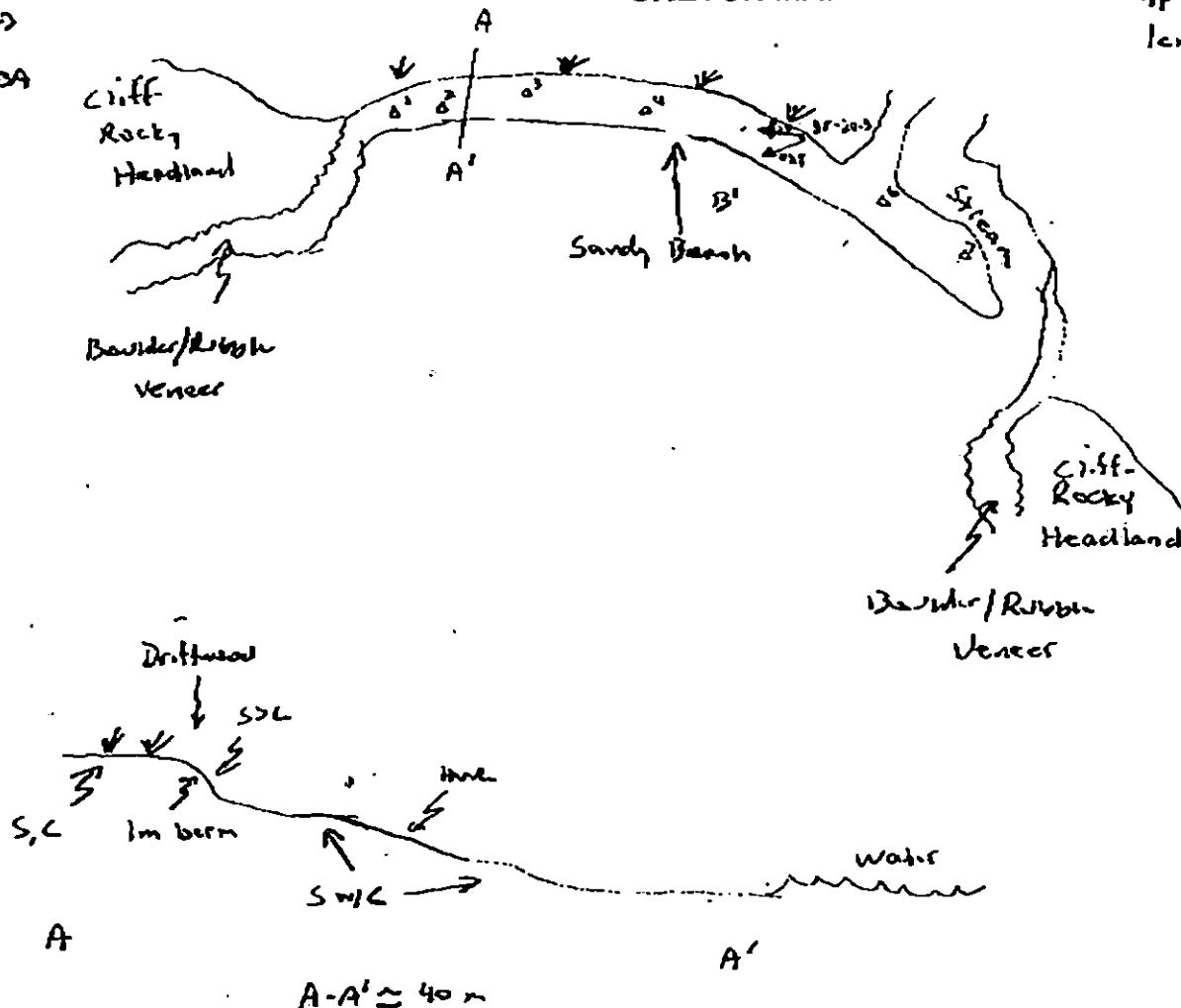
Oiled Vegetation

1 $\Rightarrow$

Photo location, direction, and number

SKETCH MAP #1

N $\uparrow$
Approx Scale
1cm $\approx$ 100m



Oil Character Length (m): AP 0 PO 0 CV 0 CT 0 ST 0 MS 0 PT 0 TB 0 FL 0 NO 2000

REVISION: 8/2/90

HPF-08-1990 20:01 FROM ENCH NODIR

10

1543771

P.08

OG A

SEGMENT ST/ K8-4-V3-3

SUBDIVISION K8-4-V3-3A

DATE 4 / 8 90

CHECKLIST

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

LEGEND

1 Δ

Pit - No Subsurface Oil

2 Δ

Pit - Subsurface Oil

CT/C

Continuous Distribution

CT/B

Broken Distribution

CT/P

Patchy Distribution

CT/S

Splashed Distribution

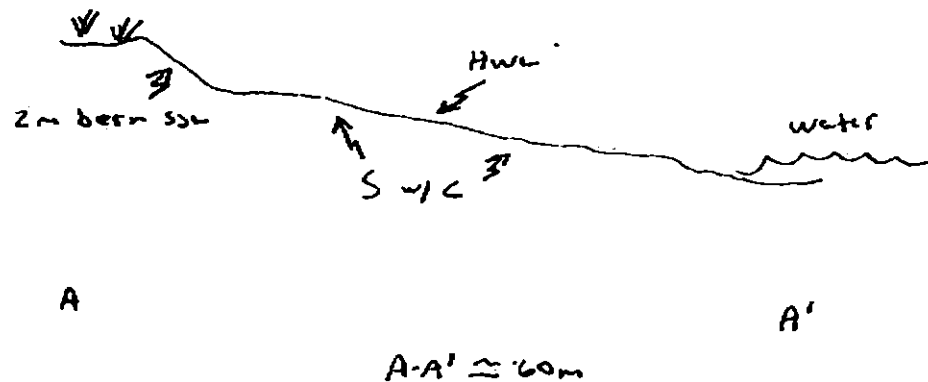
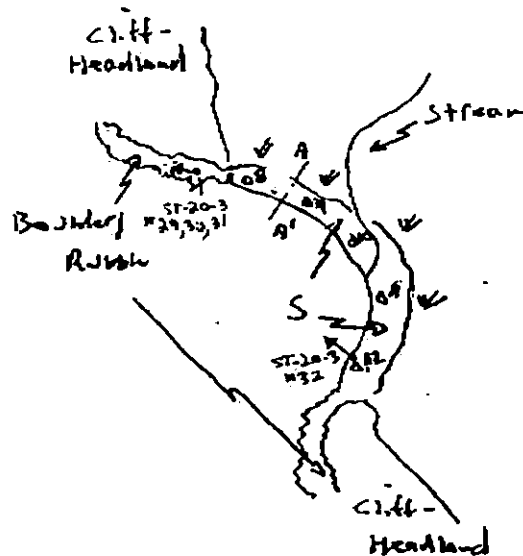
Oil on Vegetation

1 $\rightarrow$

Photo location, direction,
and number

SOURCE MAP #2

N $\uparrow$
Approx Scale
1cm $\approx$ 100m



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

REVISION: 03/24/00

DATE 4 / 8 90

CHECKLIST

- ☐ N Area
- ☐ Approx. Scale
- ☐ Seg/Sub Entry
- ☐ Oil Dist.
- ☐ Width
- ☐ Length
- ☐ % Cover
- ☐ Substrate Character
- ☐ Est. HY/LA/WL
- ☐ SSL
- ☐ Profile Location(s)
- ☐ Profile(s)
- ☐ Pix Location(s)
- ☐ Photo Location(s)

LEGEND

1 Δ

PH - No Subsurface Oil

2 ▲

Pt1 - Subsurface Oil

CT/C

Continuous Distribution

CT/8

Broken Distribution

CT/P

Patchy Distribution

CT/S

Splashed Distribution

Old Vegetation

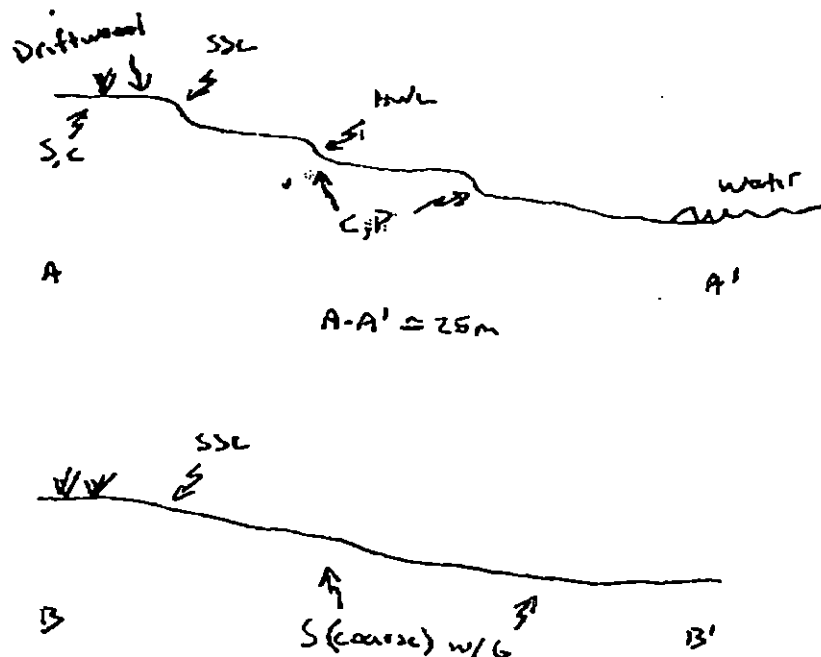
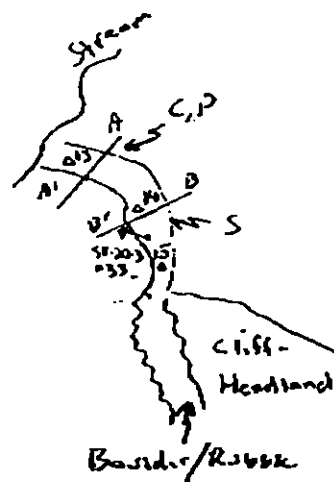
1.

Photo location, direction,
and number

SEARCH MAP ⁺ 3

NA

Approx Scale
1cm $\approx$ 100m



C, 1st Bench - West end of beach

S Beach - control + east end of beach

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

REVISION: 03/24/78

OG A

SEARCH MAP #4

N ↑
Approx. Scale
1cm = 100m

SEGMENT ST/ K8-4-10-3

SUBDIVISION K8-4-10-3A

DATE 4 / 8 / 90

CHECKLIST

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

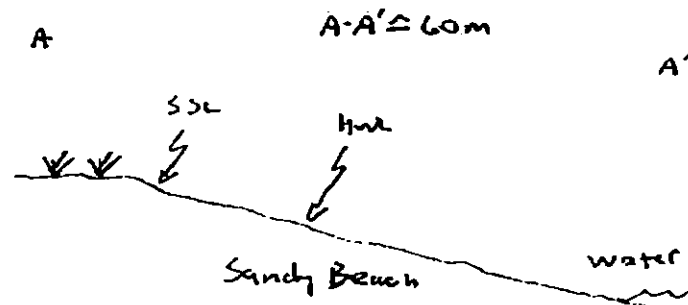
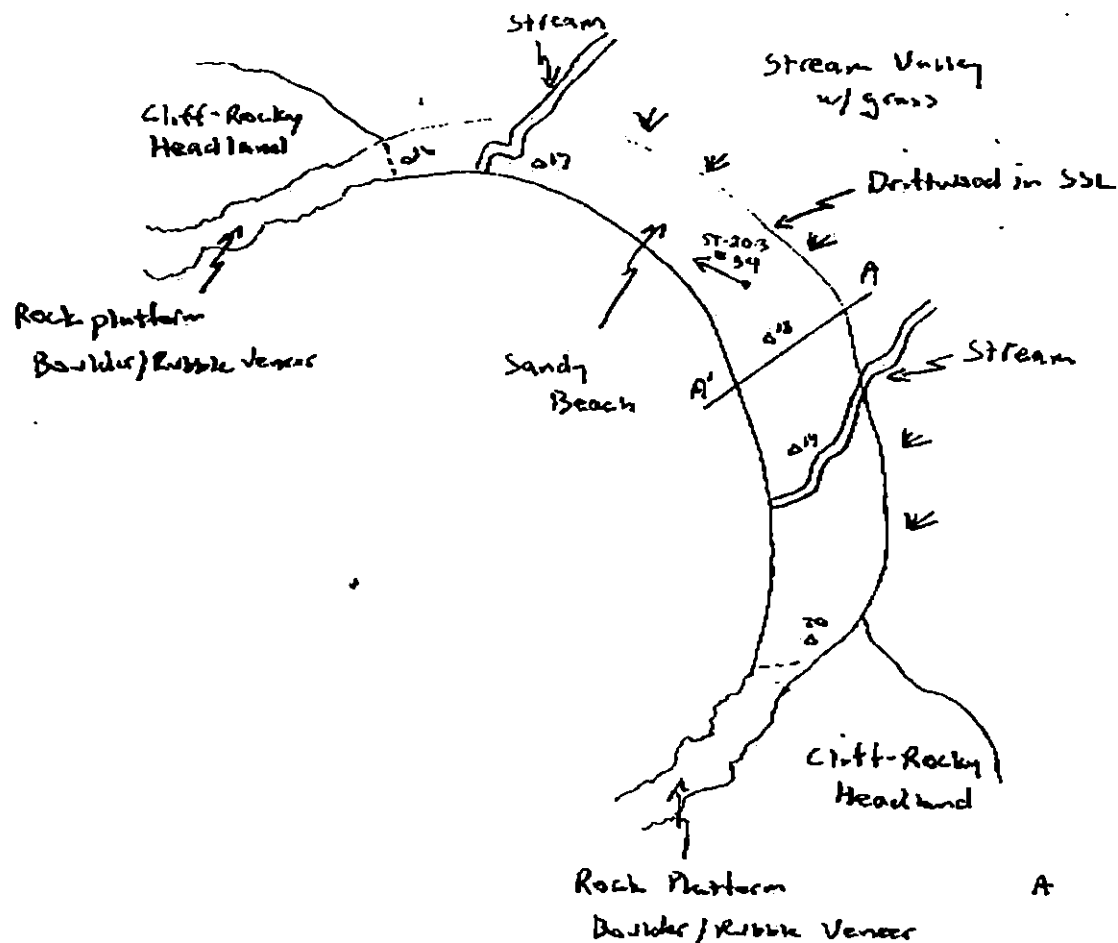
CT/S

Splashed Distribution

Oiled Vegetation

1 ➡

Photo location, direction, and number



Oil Character Length (m): AP ☐ PO ☐ CV ☐ CT ☐ ST ☐ MS ☐ PT ☐ TB ☐ FL ☐ NO 4500

REVISION: 03/20/90

SHORELINE ECOLOGICAL SUMMARY

REVISION: 03/22/90

Segment ST/K08-04 Subdivision UB-03A (Rocky Points) Date (mo/day/yr) 4-8-90Time (24 hr) 08:25 Biologist H. Davis

- (A) Substrate type and % of segments:
 (1) Bedrock 30 (2) Boulder 30 (3) Cobble 10 (4) Pebble 20 (5) Sand 10 (6) Silt -
- (B) Overall % cover of biota (% of segment): Dense 25% Moderate 25% Low 50% (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. ST-20-3Frames 27-34

BARNACLES

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

NOT PRESENT
5, 6

MYTILUS

Dense			Moderate			Sparse			Rare		
1U	1M	1L	1U	1M	1L	1U	1M	1L	1U	1M	1L
X	X	X	X	X	X	X	X	X	X	X	X
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
6

GASTROPODS

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

FUCUS

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

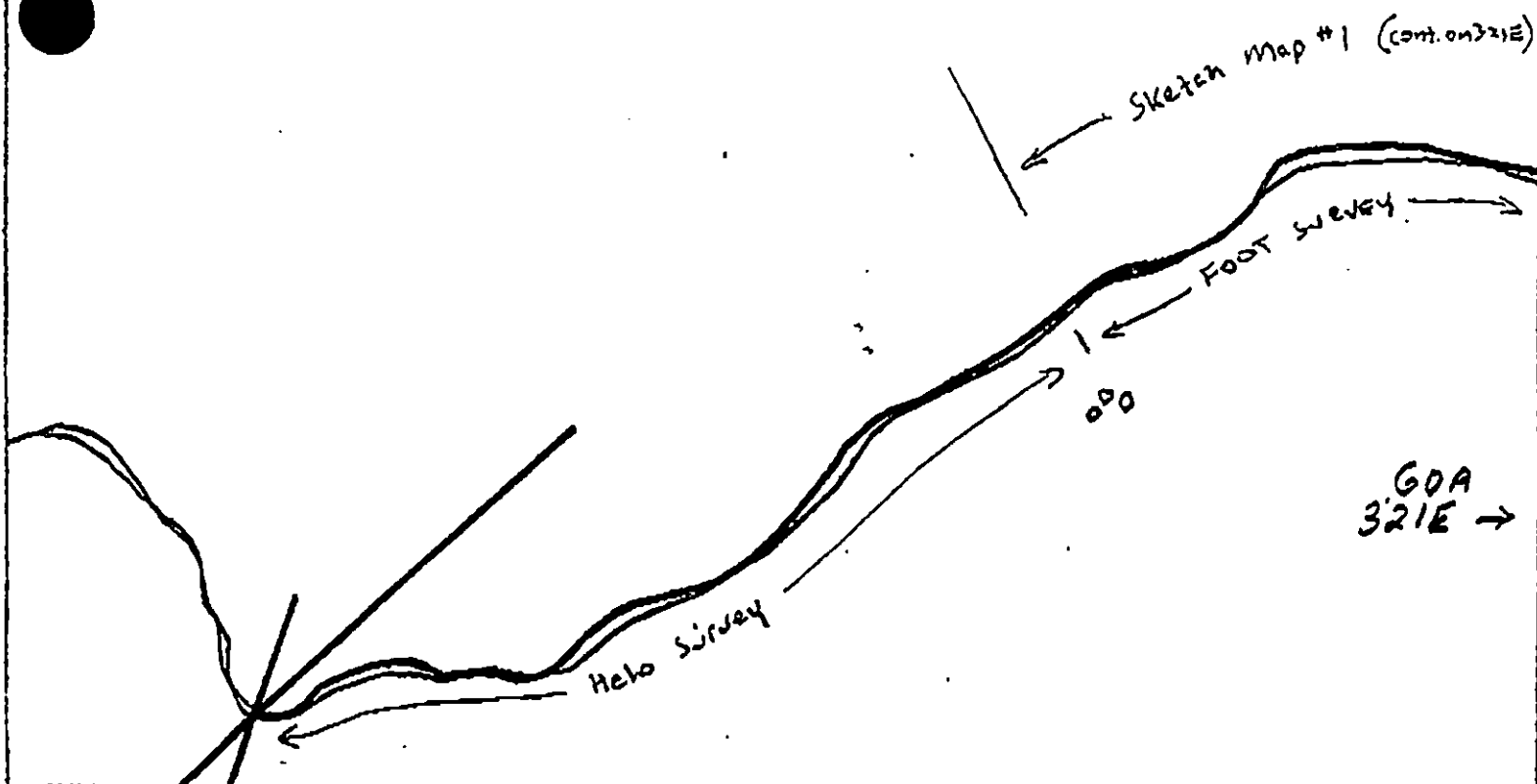
NOT PRESENT

Wildlife Observations/ General Comments: The cobble/pebble beaches have no Fucus, Mytilus, Barnacles or gastropods. Shells and Algae in the cracks include: *Tilapia patula*, *Theraps caryae*, *Saxidomus giganteus*, *Chlorocardium nuttallii*, *Laminaria dentifera*, *Perna perna*, *Nereocystis*, *Strongylocentrotus*, *Halyscion*, and *Aleria*. The rocky points varies from Fucus, gastropod, Mytilus, Barnacle populations to very rich intertidal communities. Deer, Fox and River otter tracks were found 20-30 deer were in the intertidal feeding. *Nereocystis* forests were visible from shore. Gulls, Surf Scoters, *Oxyechus*, Mallards, Ducks? and Eagles in these

Ecological Considerations: (3N, 3O) Harbor seals molt and pup in these area. Eagles (ST) are feeding and nesting on the cliffs and pinnacles. (1 meat observed to north of Shark Pt.) at least two of the four streams are anadromous.

KODIAK ECOLOGICAL CONSTRAINTS

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



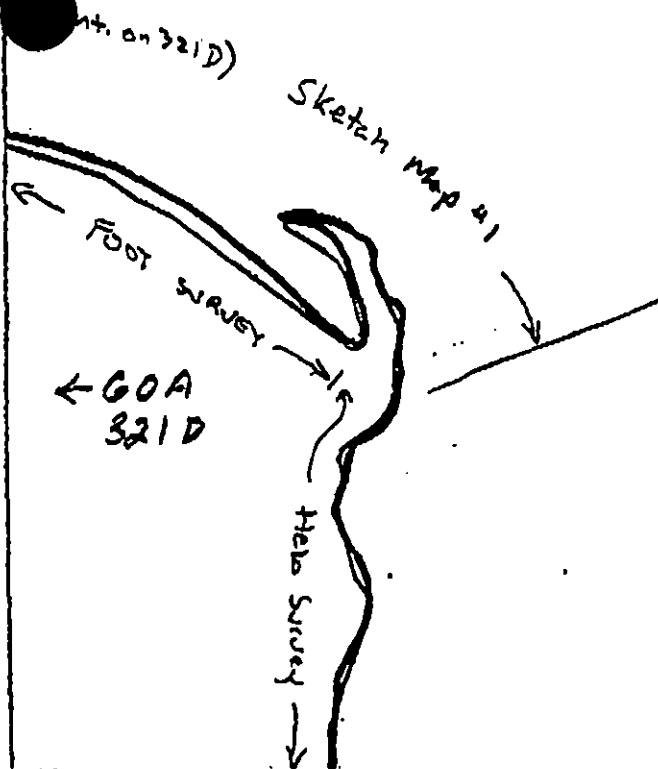
XXX Wide
 /// Medium
 --- Narrow
 TTTT Very Light
 ADEC Segment Length: 18040m

UB-3

0 300 600 900



K8-4VB-3A
 Map Key: GOA-321d
 Name: Acton
 Date: 4-8-90



GOA
↓ 321B

XXXX Wide

/// Medium

--- Narrow

TTTT Very Light

0000 No Oil

UB-3

ADEC Segment Length: 16040m



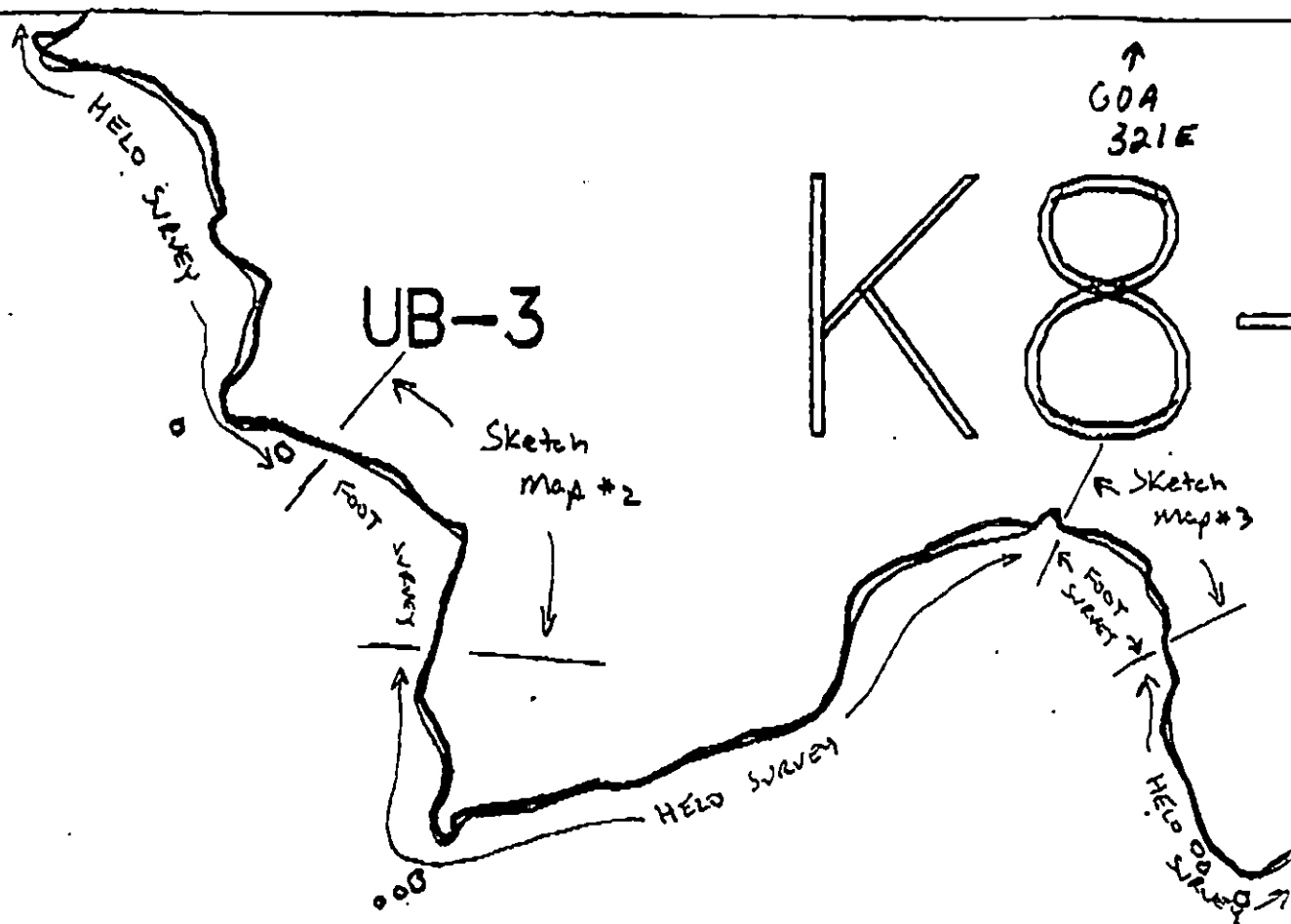
K8-4-UB-3A

Map Key: GOA-321a

Name: Acton

Date: 4-8-90

Data Entered:



XXXX Wide

/// Medium

--- Narrow

TTTT Very Light

OOOO No Oil

UB-3

ADEC Segment Length: 16040m

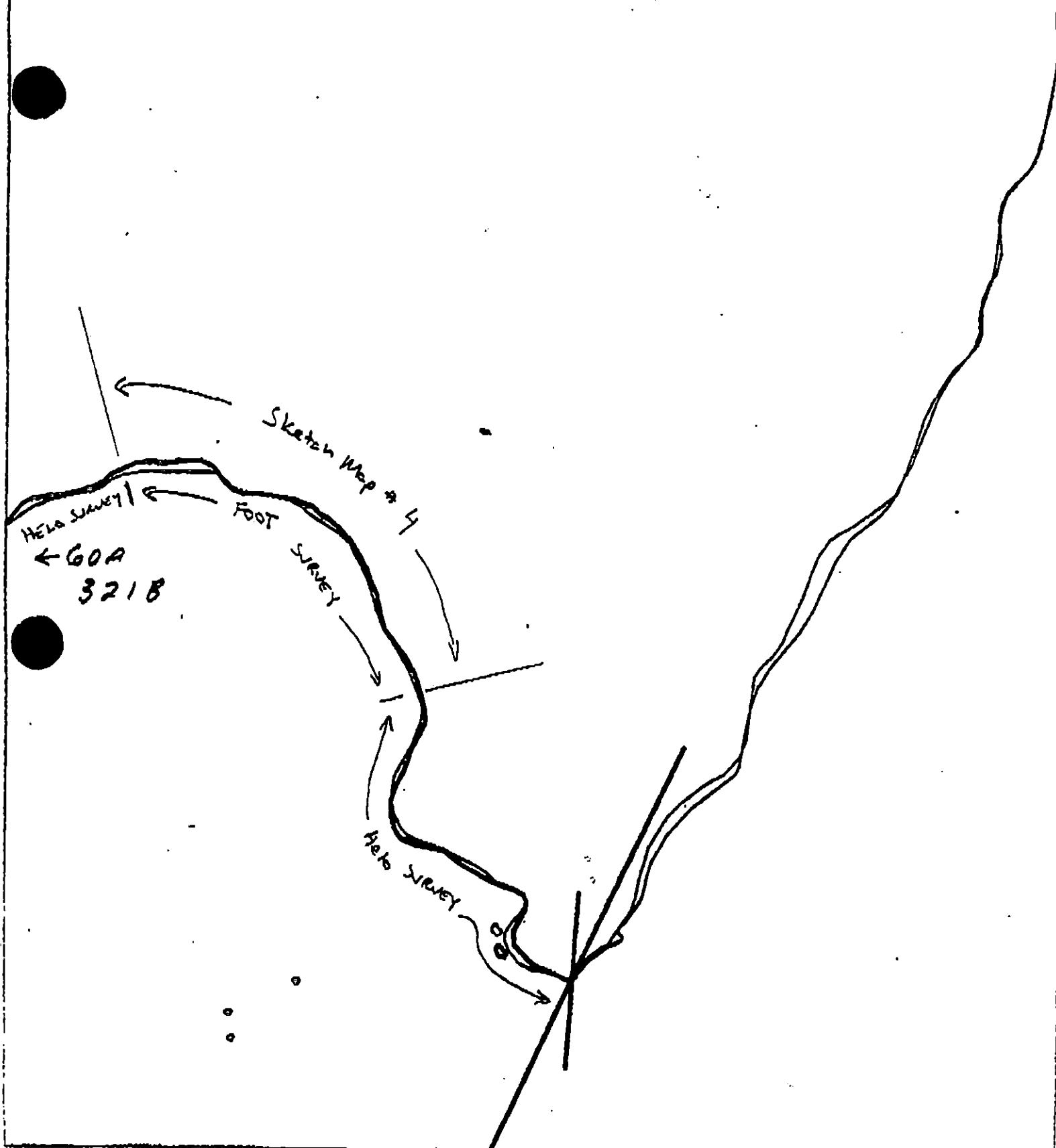


K8-4-UB-3A

Map Key: GOA-321b

Name: ActonDate: 4-8-90

Data Entered:



XXXX Wide

UB-3

/// Medium

--- Narrow ADEC Segment Length: 16040m

TTTT Very Light

0000 No Oil



METERS



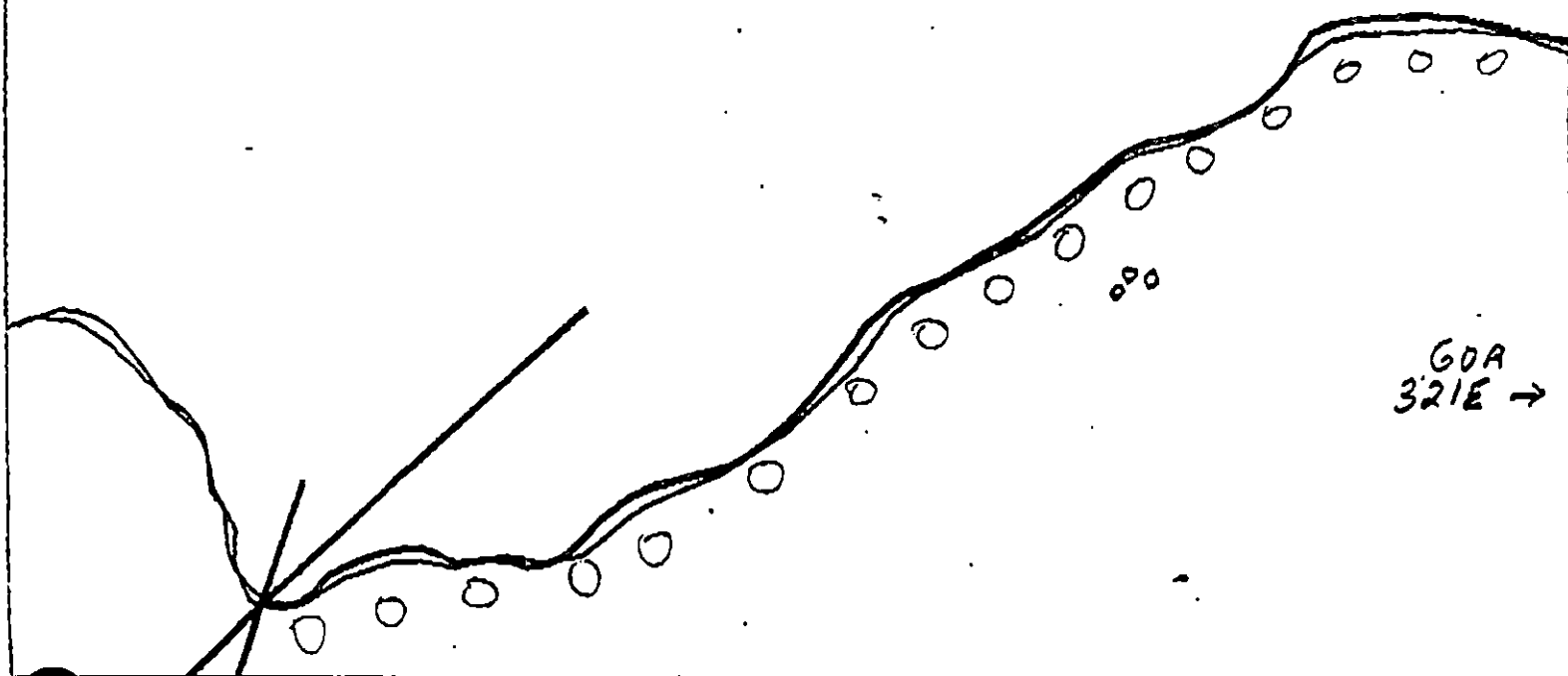
K8-4-UB-3A

Map Key: 00A-321c

Name: ActonDate: 4-8-90

Data Entered:

K8-4-UB-3A



XXX Wide

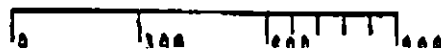
//// Medium

--- Narrow

TTTT Very Light

UB-3

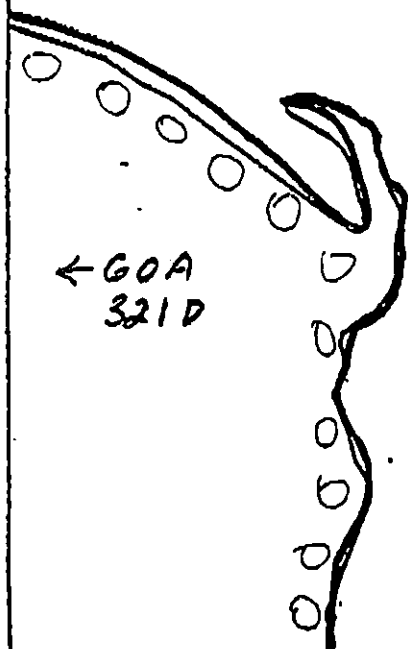
ADEC Segment Length: 16040m



K8-4-UB-3A
Map Key: GOA-321d

Name: Acton

Date: 4-8-90



K8-4- VB-3A

GOA
↓ 321B

XXXX Wide

/// Medium

--- Narrow

TTTT Very Light

0000 No Oil

UB-3

APEC Segment Length: 16040m



K8-4-VB-3A

Map Key: GOA-321e

Name: Acton

Date: 4-8-90

Data Entered:

UB-3

K8

↑
GOA
321E

K8-4-VB-3A

GOA
321C→

XXXX Wide

//// Medium

---- Narrow

TTTT Very Light

OOOO No Oil

UB-3

ADEC Segment Length: 18040m



K8-4-VB-3A

Map Key: GOA-321b

Name: Acton

Date: 4-8-90

Data Entered:

K8-4-UB-3A

← GOA
321B

UB-3

XXXX Wide

/// Medium

--- Narrow

TTTT Very Light

0000 No Oil

ADEC Segment Length: 16040m



METERS

K8-4-UB-3A

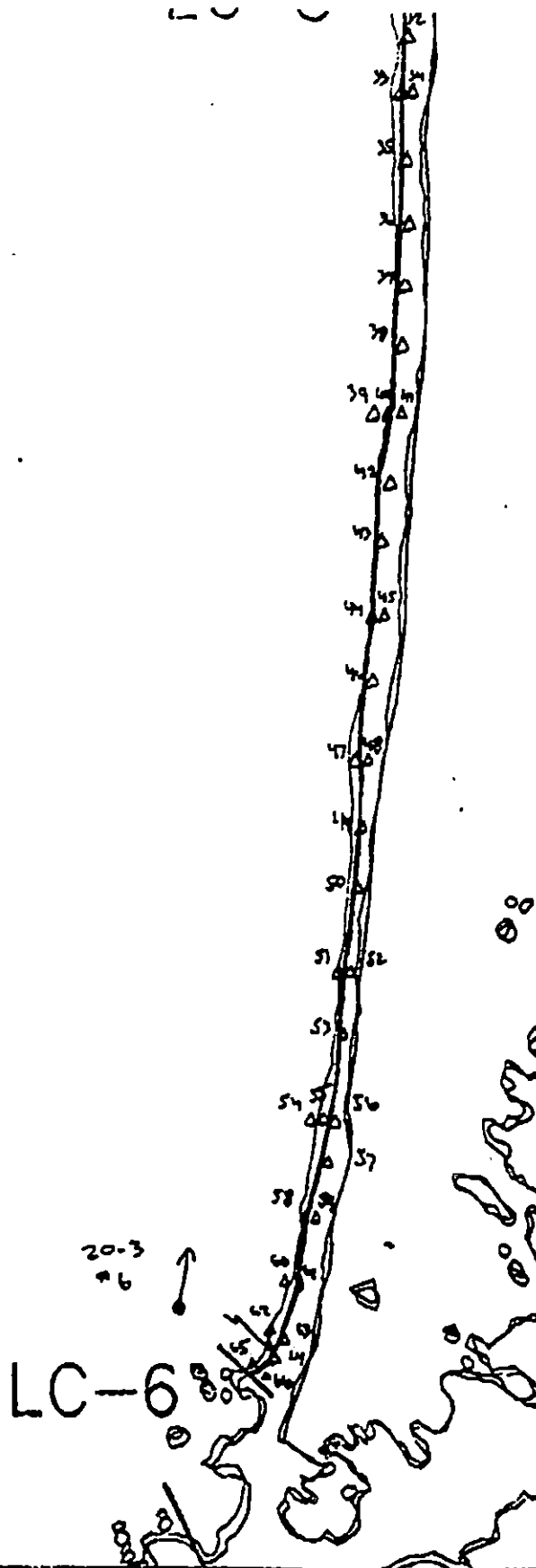
Map Key: GOA-321c

Name: ActonDate: 4-8-90

Data Entered:

GOA
167B

K7-3-LC-5A



XXXX Wide

/// Medium

--- Narrow

TTTT Very Light

0000 No Oil

LC-5

ADEC Segment Length: 7036m



K7-3-LC-5A

Map Key: GOA-1670

Name: Acton

Date: 4-3-90

Data Entered:

SHORELINE EVALUATION

SEGMENT ST/ K08-04-UB-03 SUBDIVISION A (1 OF 1) DATE 4/9/90

SEGMENT ENVIRONMENTAL SENSITIVITIES AND TIME CONSTRAINTS:

Harbor seal and sea lion pupping (3N, 3P) - 5/10 to 6/30 and molting (3O, 3Q) - 8/15 to 9/15.

SUBDIVISION ECOLOGICAL CONSTRAINTS:

Avoid disturbance/damage to unoiled biota and substrate. See attached Ecological Constraint Sheet.

ARCHAEOLOGICAL CONSTRAINTS:

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

SHPO SIGNATURE: Charles E. Hodman DATE: 4/17/90

OILING CATEGORIZATION:

Wide 0 m: Medium 0 m: Narrow 0 m: V.Light 0 m: No Oil 15922 m
Subsurface Oil Observed: Yes No X Maximum Depth

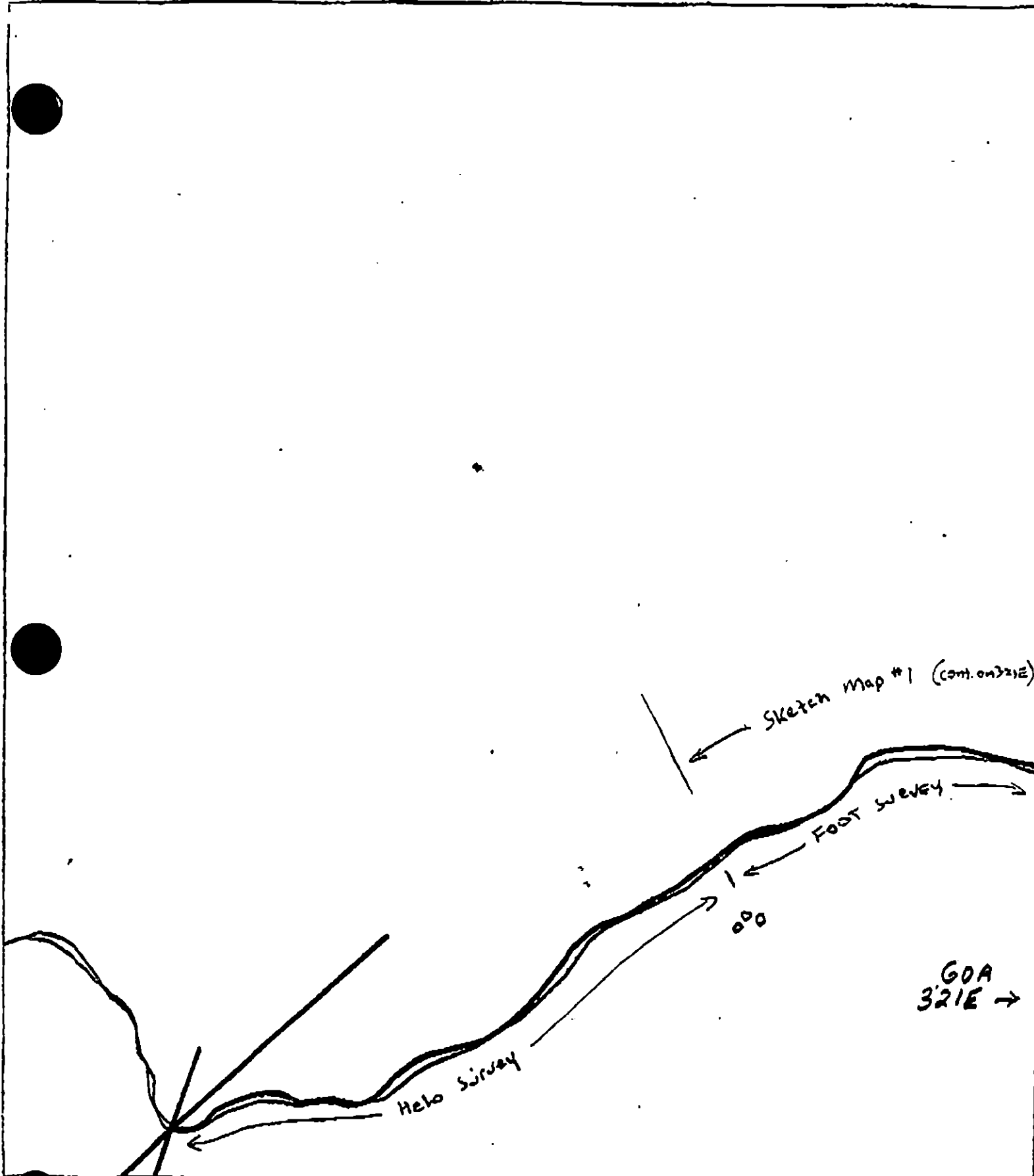
RECOMMENDATIONS:

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

COMMENTS:

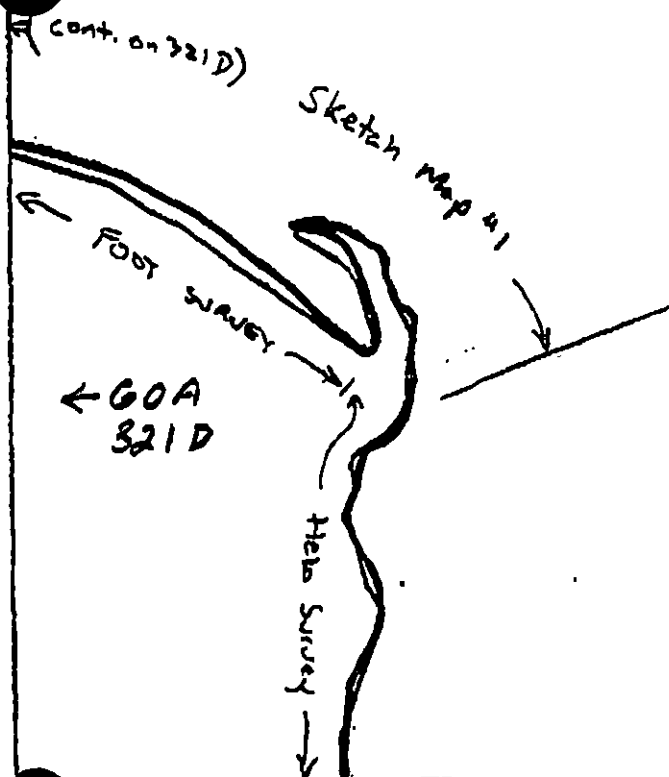
TAG COMMENTS:

TAG APPROVAL DATE: 4/16/90
ADEC AL
EXXON ANDY TGA FOSC: DATE: 4-20-90
NOAA Bruce W. Wright
USCG G.A. Reiter



XXX Wide	UB-3	ADEC Segment Length: 18040m		K8-4-VB-3A
//// Medium				Map Key: GOA-321d
--- Narrow				Name: <u>Acton</u>
TTTT Very Light				Date: <u>4-8-90</u>
OOOO No Oil				Date Collected:

Scale bar: 0 300 600 900



GOA
↓ 321B

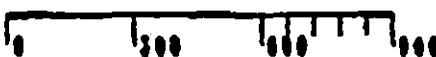
XXXX Wide
//// Medium

UB-3

--- Narrow

ADEC Segment Length: 18040m

TTTT Very Light

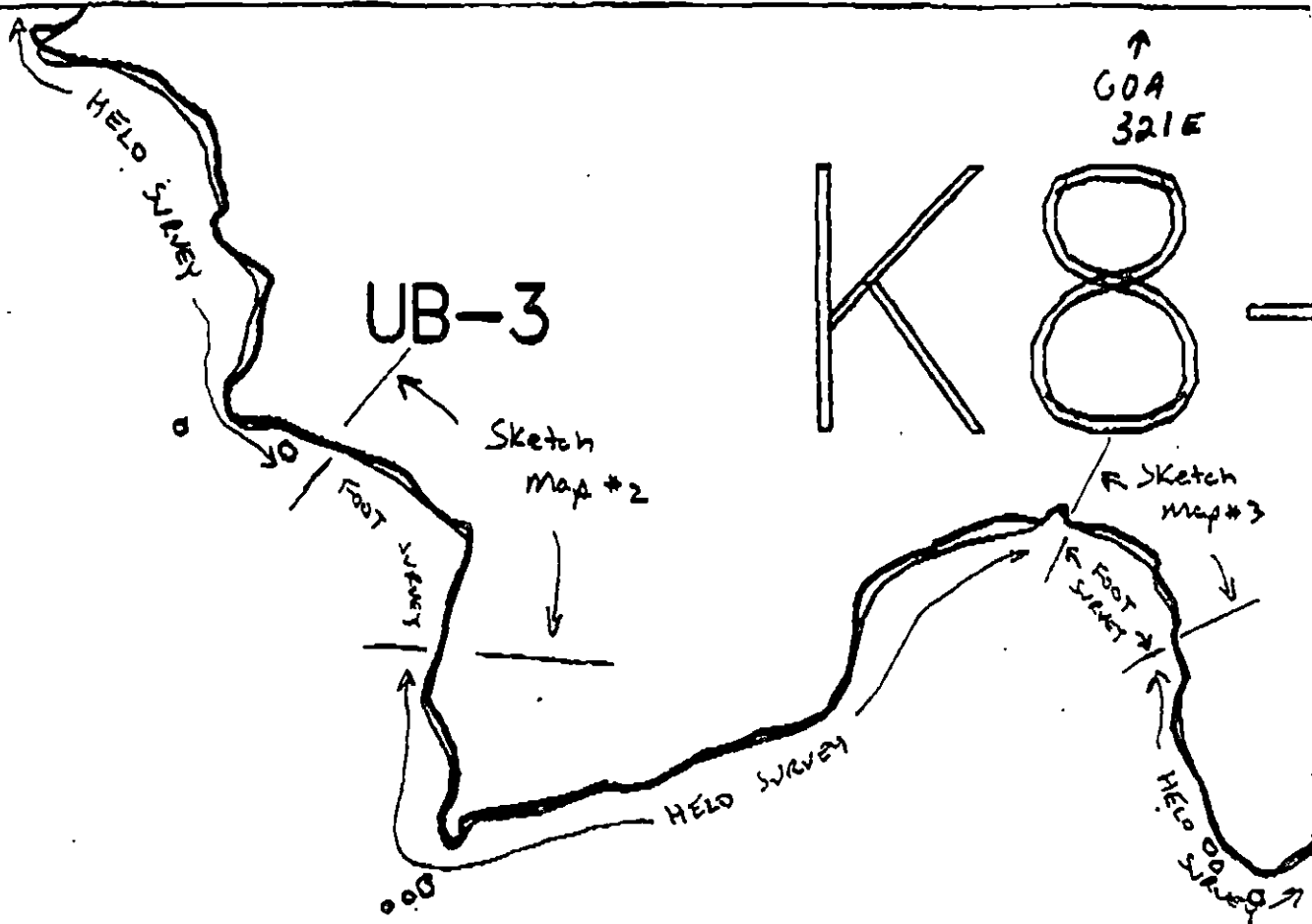


K8-4UB-3A

Map Key: GOA-3210

Name: Acta

Date: 4-8-90



XXXX Wide

//// Medium

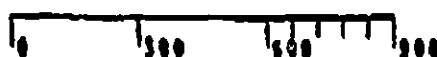
--- Narrow

TTTT Very Light

OOOO No Oil

UB-3

ADEC Segment Length: 16040m



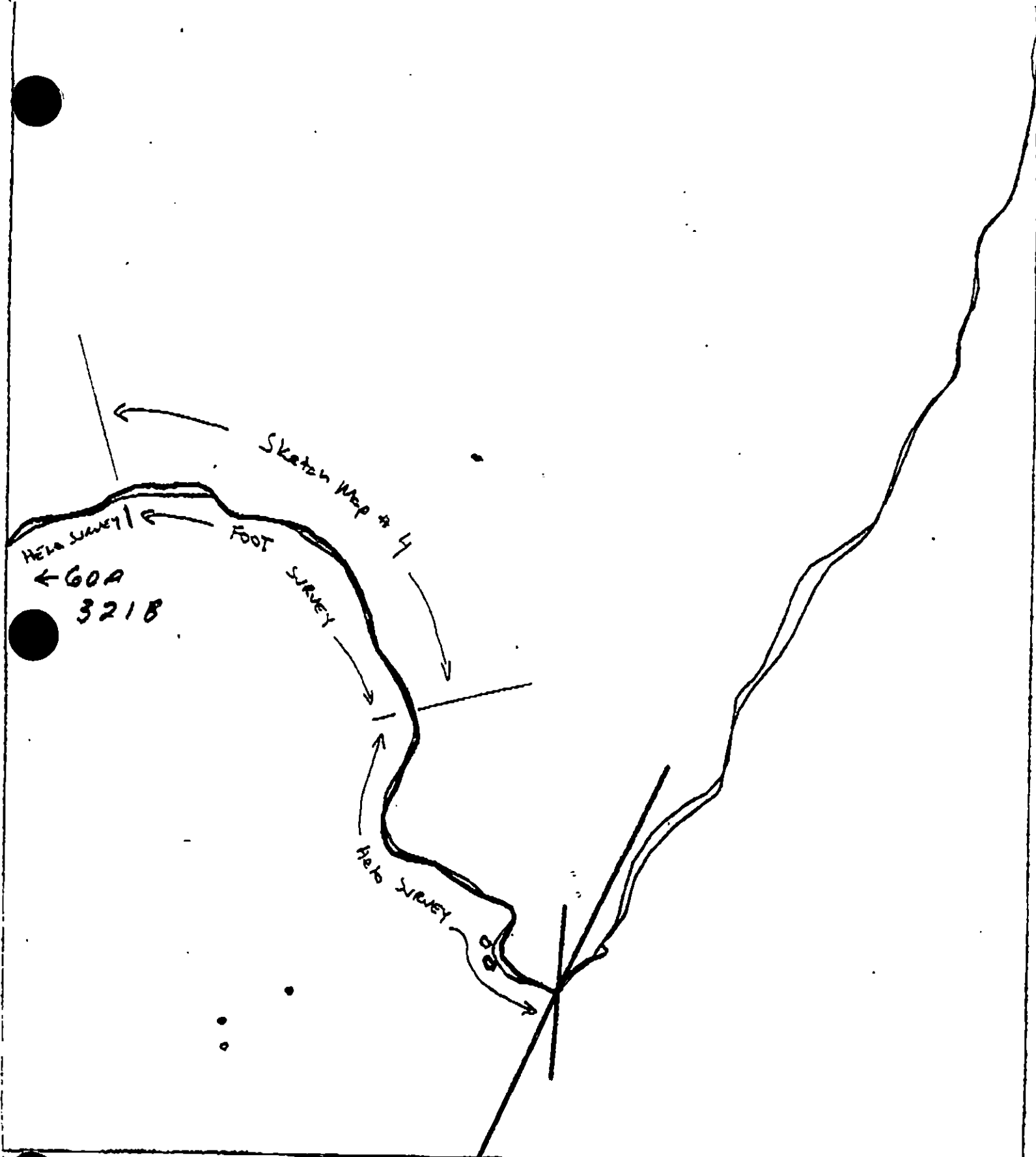
K8-4-UB-3A

Map Key: GOA-321b

Name: Acton

Date: 4-8-90

Data Entered:



UB-3

XXX Wide

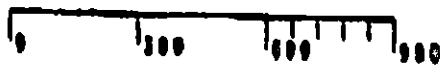
/// Medium

--- Narrow

TTTT Very Light

0000 No Oil

ADEC Segment Length: 16040m



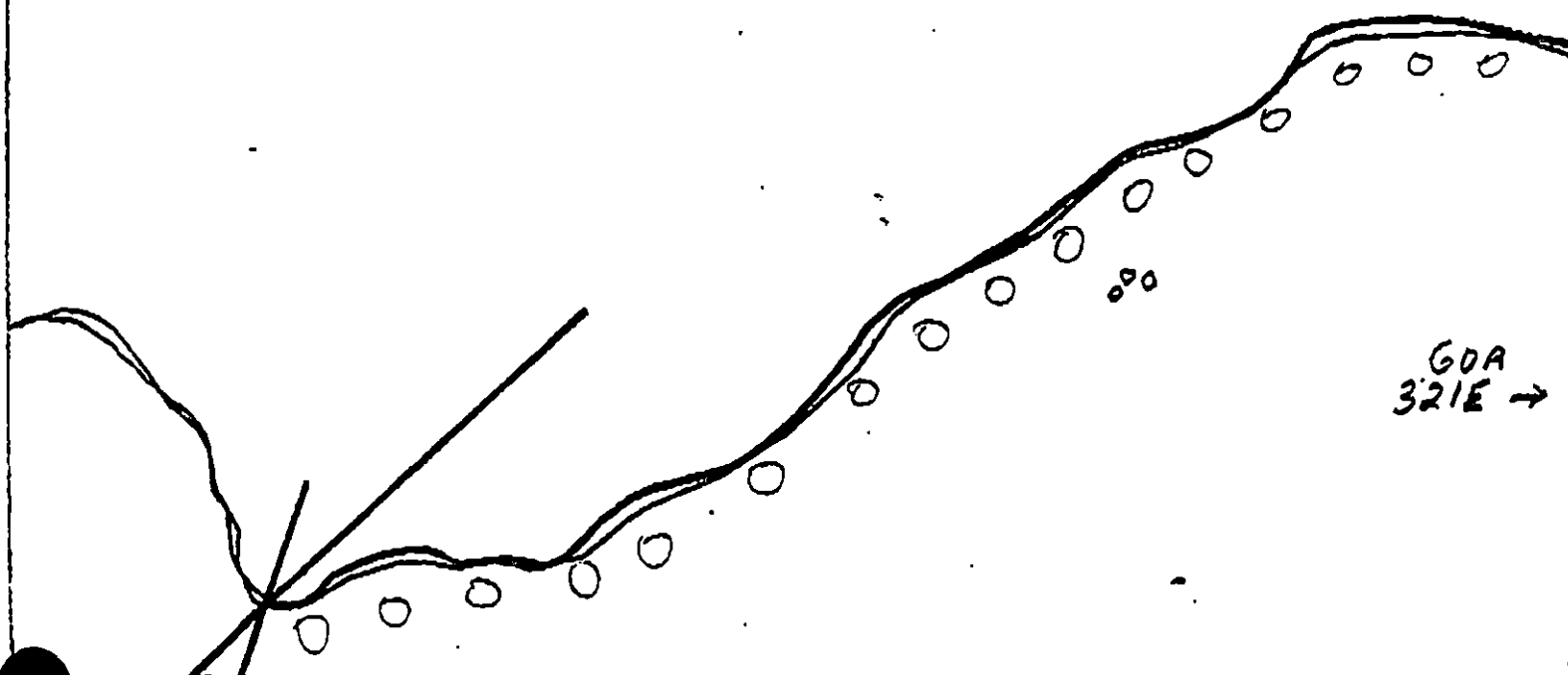
K8-4-UB-3A

Map Key: 00A-321c

Name: ActonDate: 4-8-90

Data Entered:

K8-4-UB-3A



XXXX Wide

//// Medium

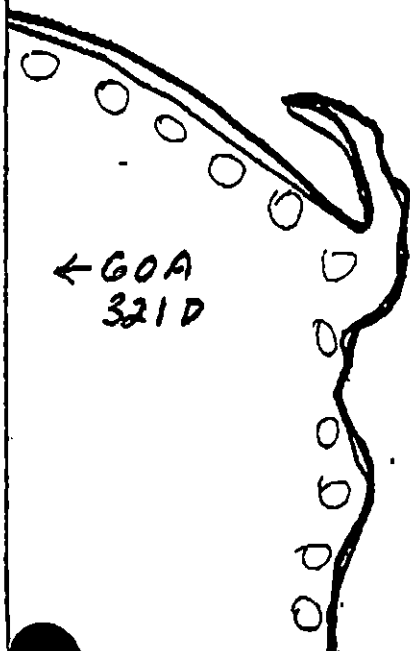
---- Narrow

TTTT Very Light

UB-3

ADEC Segment Length: 16040m

K8-4-UB-3A
Map Key: GOA-321dName: ActonDate: 4-8-90



K8-4-UB-3A

GOA
↓ 321B

XXXX Wide

//// Medium

--- Narrow

TTTT Very Light

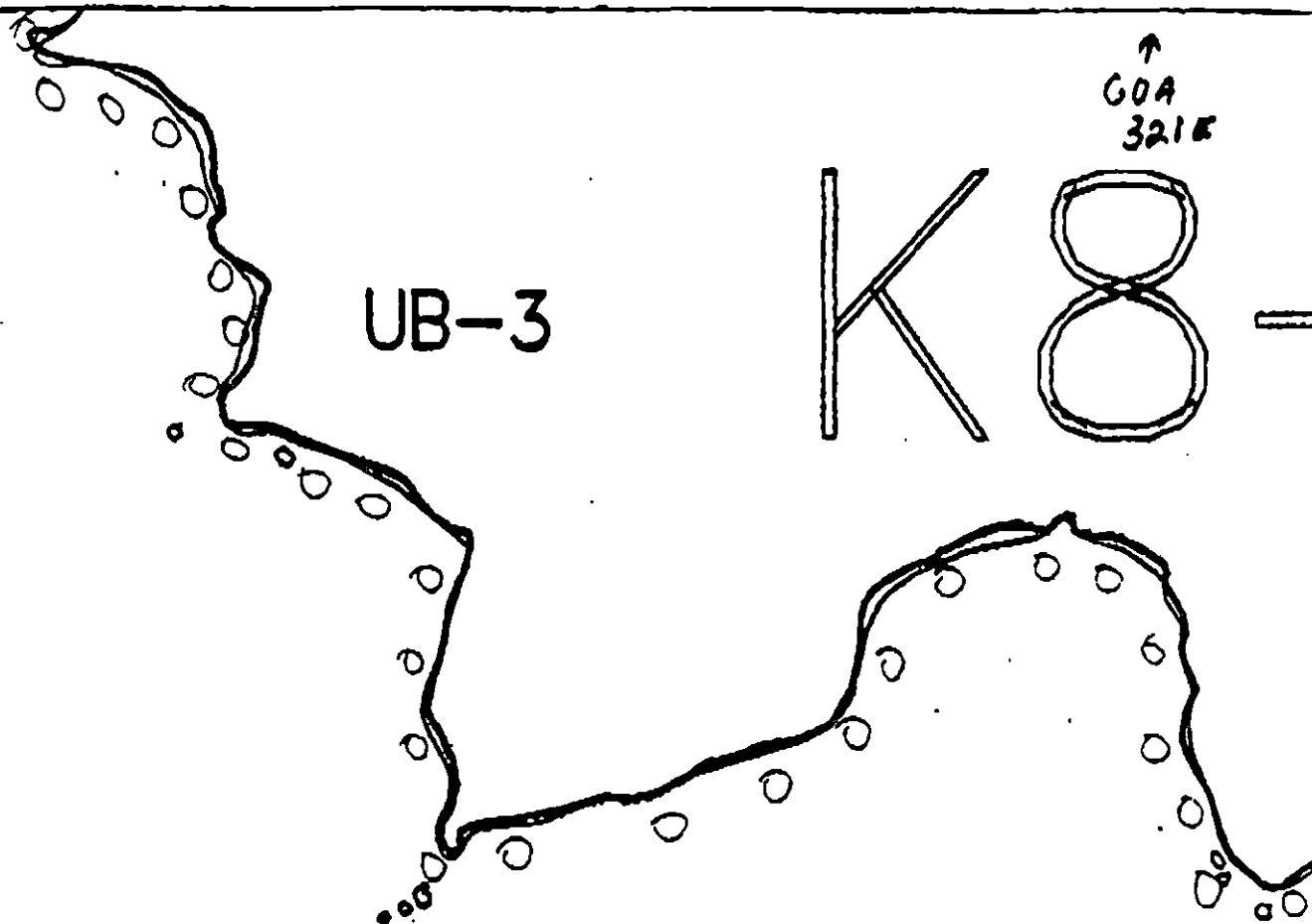
UB-3

ADEC Segment Length: 16040m

K8-4-UB-3A
Map Key: GOA-321a

Name: Acton

Date: 4-8-90



K8-4-UB-3A

GOA
321C →

XXXX Wide

//// Medium

--- Narrow

TTTT Very Light

0000 No Oil

UB-3

ADEC Segment Length: 16040m



K8-4-UB-3A
Map Key: GOA-321b

Name: Acton

Date: 4-8-90

Data Entered:

K8-4-UB-3A

←GOA

321B

XXXX Wide

//// Medium

--- Narrow

TTTT Very Light

0000 No Oil

UB-3

ADEC Segment Length: 16040m



K8-4-UB-3A

Map Key: GOA-321c

Name: Acton

Date: 4-8-90

Data Entered:

1991 MAYSAP EVALUATION

SEGMENT: KO906CP001 SUB: A REGION: KOD SURVEY DATE: 5/23/91

ENVIRONMENTAL SENSITIVITIES:

Work Window(s) OPEN

Ecological/Constraints (see page two for details) NONE

ARCHAEOLOGICAL CONSTRAINTS:

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

SHPO Signature: Timothy O'Brien Date: 6/04/91

RECOMMENDATIONS:

INITIAL

TAG

FOSC

TREATMENT REQUIRED (Y or N)

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 1991

FOSC APPROVAL DATE: 6/8/91

ADEC

FOSC

EXXON

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

USCG

NOAA

ADEC

NAME J. BARNHART, ADECSIGNATURE J. Barnhart

- ☒ NTR 1990 SSAT reported very little oil in this segment. No oil was observed during our survey.

EXXON

NAME RANDALL K. BOYERNAME R. HARRELSON, EXXONSIGNATURE Randall K Boyer

- ☒ NTR NO OIL WAS OBSERVED ON THIS SUBDIVISION. THIS HIGH ENERGY SHORELINE WITH ROUNDED BOULDERS IS SO ACTIVE THAT OILING WOULD DISSAPATE. NO FURTHER REASSESSMENT IS WARRANTED.

LANDMANAGER

NAME E. BENNISOF NPSSIGNATURE Francine J B

- ☒ NTR This segment received a "NTR" in 1990; SSAT survey 1990 indicated very little oil.

USCG/NOAA

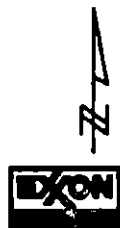
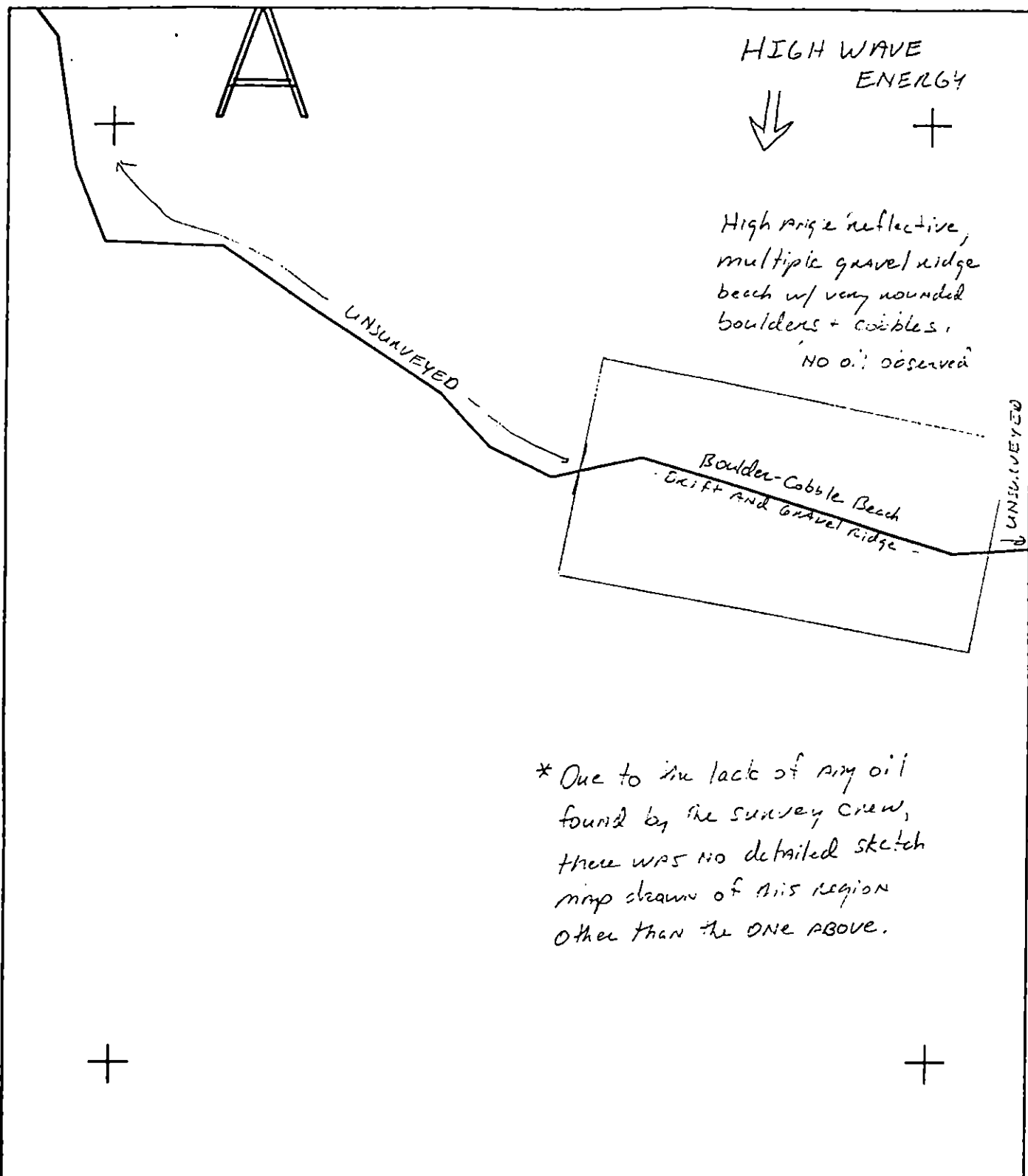
NAME CWO R. SPURR/G. SHIGENAKASIGNATURE R. Spurr / G. Shigenaka

- ☒ NTR No oil observed during NAYSAP

SURVEYED PORTION OF THE SEGMENT WAS AN EXPOSED ROUNDED COBBLE BEACH WITH EXTENSIVE DRIFT LOG PILING IN THE SUPRATIDAL. ADEC/ADFC REP REPORTED LITTLE OILING OF SIGNIFICANCE OCCURRED AT THIS SEGMENT. NO OIL RESIDUES WERE OBSERVED ALONG THE SURVEYED AREA.

PAGE 1 OF 1

Reviewed: 5/27/94
reviewed 5.27.94



K0906 CP001 A

METERS

100 200

AK State Plane Zone 4

Subdivision Field Map

Map Key: 60X0000CP001AB

Name: D. Fitzgerald

Date: 23 MAY 1991

reviewed 5.27 94

High angle (reflective)
multiple gravel ridge
beach w/ very rounded
boulders + cobbles.
(NO oil observed)

UNSURVEYED

Boulder-Cobble Beach
Onift

UNSUBS

書 1 冊 2



AK State Plans Sept. 4
9986cp001ub-

Date: 23 May 1991

MAYSAP BIOLOGICAL SUMMARY FORM

TEAM # 6 Helo

DATE May 23 1991

SEGMENT # K9N-6 CP-01

TIDAL HEIGHT(Range) 5.6-4.5 ft (15⁰⁰-15¹⁵)

SUBDIVISION A

BIOLOGIST H. Davis

SEA STATE 1-2 ft

WIND SPEED/DIRECTION 10-20 kt Breeze NE

PHOTOGRAPHS: ROLL # 6-21

FRAME # 1+2

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

This was a high energy cobble/Boulder beach in front of a drift log and cobble ridge. Ulva and laminaria made up most of the drift. amphipods were active in the moist areas of the kelp. There was almost no kelp in the area surveyed and No oil was seen.

Tufted Puffin (2) Sparrows (Song?) (2)

Oystercatcher (1) Glaucous-winged Gull (3) Kittiwake (2 Dead) Storm Petrel (1 Dead)

WILDLIFE OBSERVATIONS

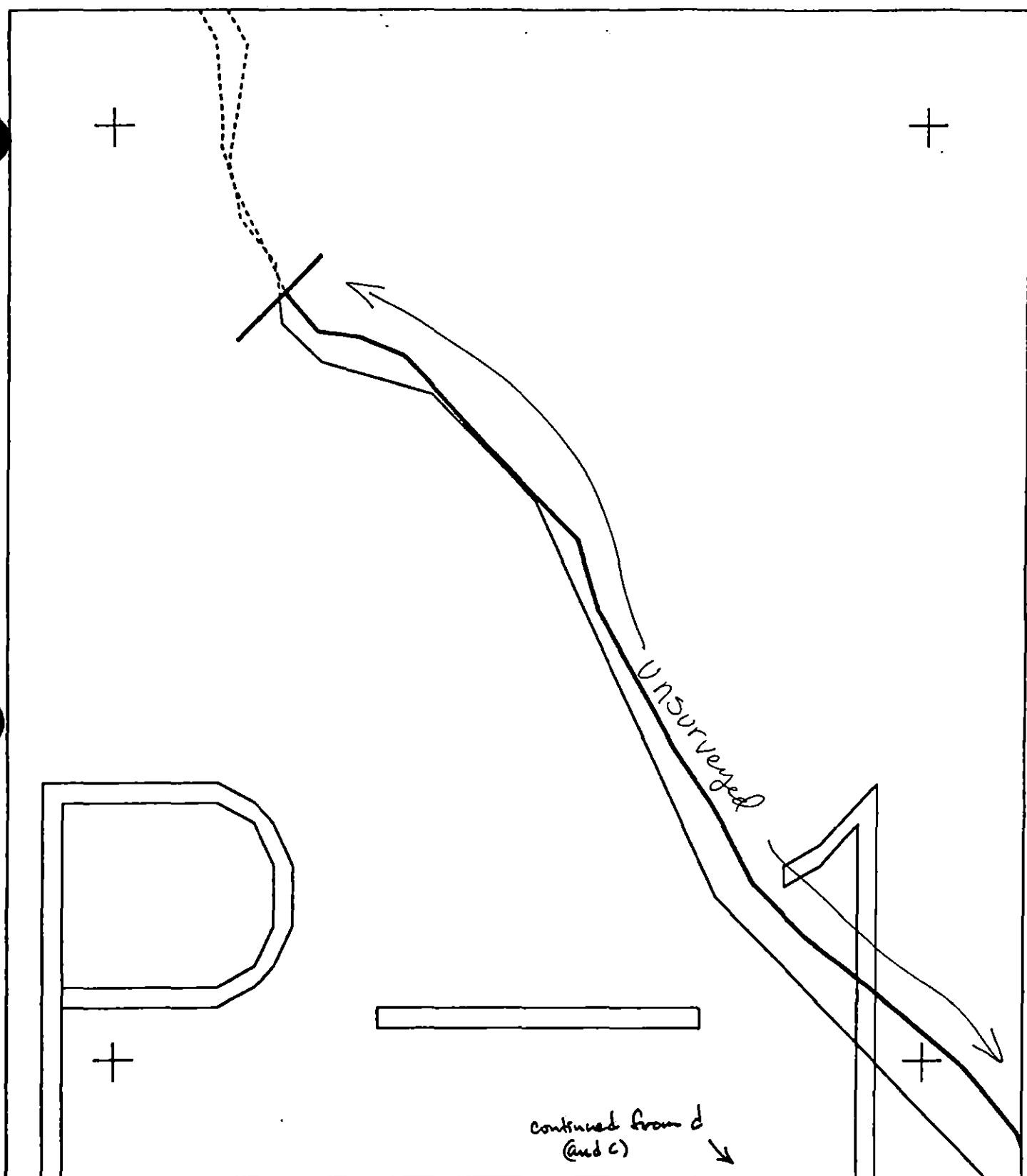
TO BE COMPLETED IN ALL SUBDIVISIONS

BIRDS	# OF SPECIES	TOTAL BIRDS	FISH OBSERVED SPECIES PRESENT
Eagles	0	-	0
Seabirds	21	32	
Waterfowl	0	-	
Gulls/Kittiwakes	2	5	
Shorebirds	1	1	
Corvids	0	-	
Other Birds <i>Sparrows</i>	1	2	

MARINE MAMMALS	# OBSERVED	LAND MAMMALS SPECIES	# OBSERVED
Sea Otters	0		
Pinnipeds (specify)			
<i>Stellar's Sea Lions</i>	+50 *		
<i>Seals (specify)</i>	0		

At top of CD-21, 3 swimming off shore.

Shoreline subdivision map showing important biological features attached..



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

K0906 CP001 A
 ADEC Subsegment Length: 4186m
 METERS

5 100 200
 AX State Plane Zone 4
 9806cp001ab- . . .



Subdivision Field Map
 Map Key: 60AX0006CP001AB
 Name: D. Fitzgerald (JY)
 Date: 23 May 91
 Date Entered:

Reviewed: MC 5/28/91
 5.27 91

UNsurveyed →
continued from d →

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

K0906 CP001 A
ADEC Subsegment Length: 4188m
METERS

AK State Plane Zone 4
g0906cp001a- . . .



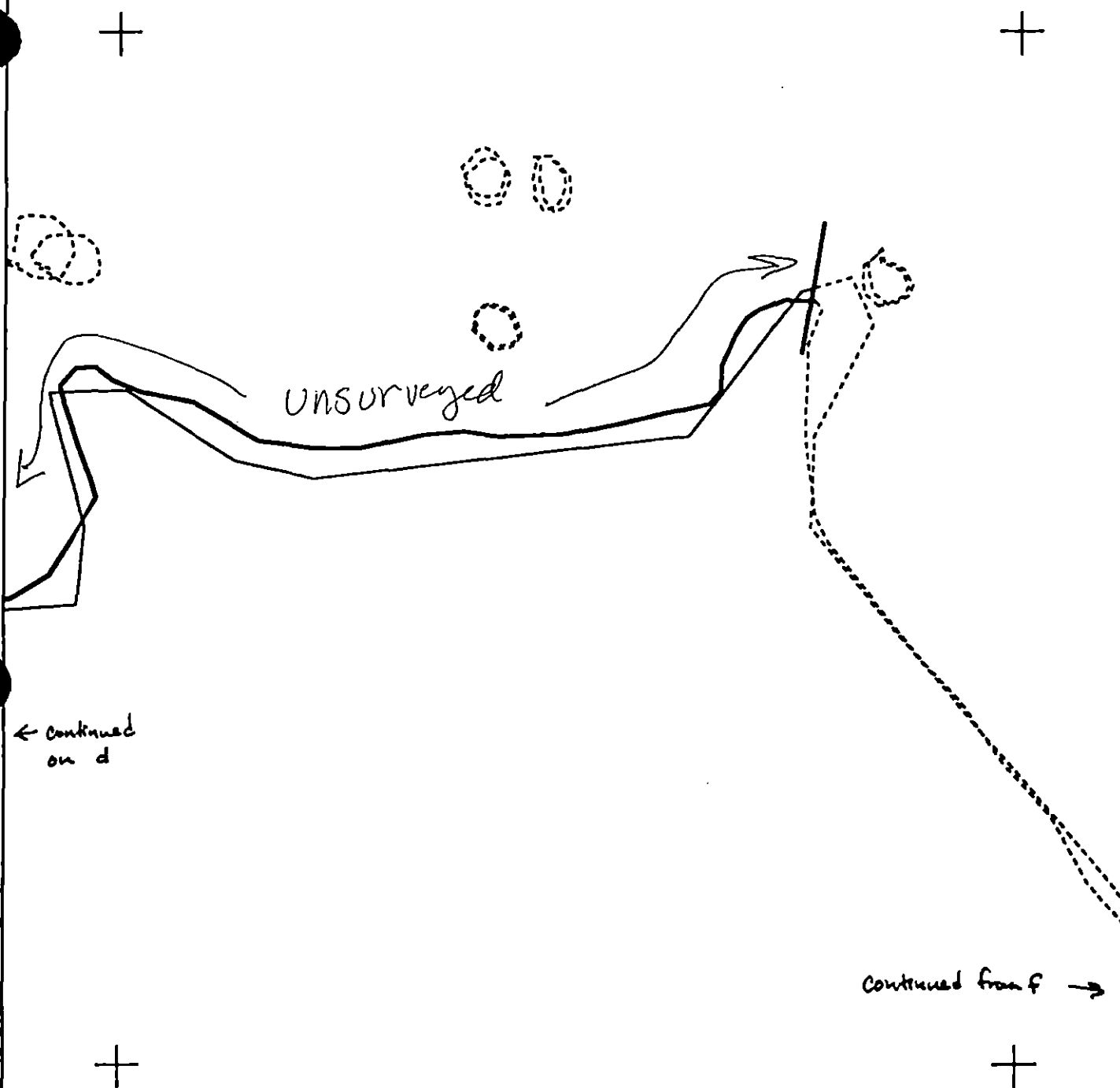
Subdivision Field Map
Map Key: 60AK0906CP001Ac
Name: Fitzgerald (JY)
Date: 23 May 91
Data Entered:

Reviewed: 5/28/91 MC
5.27 JY

A hand-drawn map of a coastline, likely a bay or inlet, enclosed in a rectangular border. The map features several key elements:

- Top Center:** The text "continued on h (and C)" is written above a small, simple sketch of a triangular structure, possibly a lighthouse or a small building.
- Top Left:** A crosshair symbol (+) is located near the top left corner.
- Top Right:** A crosshair symbol (+) is located near the top right corner.
- Bottom Left:** A crosshair symbol (+) is located near the bottom left corner.
- Bottom Right:** A crosshair symbol (+) is located near the bottom right corner.
- Coastline:** A solid line represents the coastline, starting from the top left, curving down, and then extending towards the right. A dashed line, labeled "UNSURVEYED", branches off from the solid line and extends towards the right.
- Shaded Area:** A series of small, overlapping circles or ovals are drawn along the coastline, possibly representing a reef, rocks, or a specific type of terrain.
- Labels:**
 - The word "UNSURVEYED" is written twice: once along the dashed line and once near the bottom right corner, pointing to a specific area.
 - The text "continued from e" is written at the bottom right, with an arrow pointing towards the right edge of the map.

Reviews: mc 5/27/99
reviewed 5.27.99



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

K0906 CP001 A
 ADEC Subsegment Length: 4186m
 METERS

AK State Plane Zone 4
 9906cp001a-- . . .



Subdivision Field Map
 Map Key: COAK0906CP001A
 Name: Fitzgerald
 Date: 5.23.91
 Date Entered:

Reviewed by: MC 5/28/91
 Reviewed by: 5.27.



continued on e



continued from g

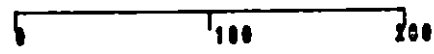


XXXX Wide
//// Medium
---- Narrow
TTTT Very Light
0000 No Oil

K0906 CP001 A

ADEC Subsegment Length: 4186m

METERS



AK State Plane Zone 4
90906ap001af- . . .



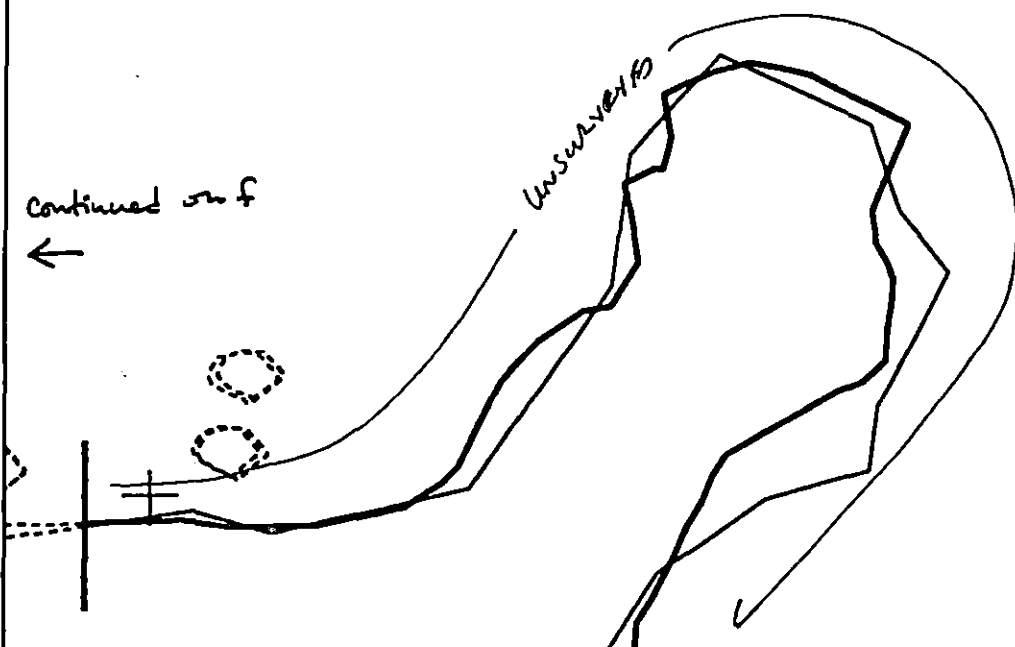
Subdivision Field Map

Map Key: 60AK0906CP001A1

Name: _____

Date: _____

Data Entered: _____



XXXX	Wide	K0906 CP001 A	Subdivision Field Map
////	Medium	ADEC Subsegment Length: 4186m	Map Key: 60AK0906CP001A
----	Narrow	METERS	Name: <u>Fitzgerald (JY)</u>
TTTT	Very Light	0 100 200	Date: <u>5.23.91</u>
0000	No Oil	AK State Plane Zone 4 GCSNAD83	Date Entered:



Revised: MC 5128/91
JY-5.27.91

↑ continued on g

UNSUBMITTIBLE

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

K0906 CP001 A
ADEC Subsegment Length: 4188m
METERS

AK State Plane Zone 4
90908ep001ab- . . .



Subdivision Field Map
Map Key: 60AK0000CP001AB
Name: Fitzgerald (JY)
Date: 5.23.91
Data Entered:

Revised: MC 5/28/91
5.27.91 94

1991 MAYSAP EVALUATION

SEGMENT: K0906CP001 SUB: A REGION: KOD SURVEY DATE: 5/23/91

ENVIRONMENTAL SENSITIVITIES:

Work Window(s) OPEN

Ecological/Constraints (see page two for details) NONE

ARCHAEOLOGICAL CONSTRAINTS:

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

SHPO Signature: _____ Date: _____

RECOMMENDATIONS:

INITIAL

TAG

FOSC

TREATMENT REQUIRED (Y or N)

N

Manual Pickup (Check as Req.)

Spot Washing

Bio-Customblen Only

Bio-Inipol/Customblen

Other

Other

COMMENTS:

INITIAL: _____

TAG: _____

FOSC: _____

TAG APPROVAL DATE: _____

FOSC APPROVAL DATE: _____

ADEC _____

FOSC _____

EXXON _____

USCG _____

NOAA _____

TEAM NO. 6-HELO SEGMENT CP-1SUBDIVISION ADATE 5/23/91

ADEC

NAME J. BARNHART, ADEC

SIGNATURE

J. Barnhart☒ NTR

1990 SSAT reported very little oil in this segment. No oil was observed during our survey.

EXXON RANDALL K. BOYERNAME R. HARRISON, EXXON

SIGNATURE

Randall K Boyer☒ NTR

NO OIL WAS OBSERVED ON THIS SUBDIVISION. THIS HIGH ENERGY SHORELINE WITH ROUNDED BOULDERS IS SO ACTIVE THAT OILING WOULD DISSIPATE. NO FURTHER REASSESSMENT IS WARRANTED.

LANDMANAGER

NAME F. BENNISOF NPS

SIGNATURE

Francine J. Bennis☒ NTR

This segment received a "NTR" in 1990; SSAT survey 1990 indicated very little oil.

USCG/NOAA

NAME CWO R. SPURR/G. SHIGENAKA

SIGNATURE

R. Spurr / Gary Shigenaka☒ NTR

No oil observed during MAYSAT

SURVEYED PORTION OF THE SEGMENT WAS AN EXPOSED ROUNDED COBBLE BEACH WITH EXTENSIVE DRIFT LOG PILING IN THE SUPRATIDAL. ADEC/ADFCG REP REPORTED LITTLE OILING OF SIGNIFICANCE OCCURRED AT THIS SEGMENT. NO OIL RESIDUES WERE OBSERVED ALONG THE SURVEYED AREA.

TEAM NO. 6-HELLO

PAGE 1 OF 1

OG D. FITZGERALD

BIO *H. DAVIS*

SEGMENT K9-6-22-1

ADEC J. BARNHART ADFG

LANDMANAGER F. BENNIS for NPS

SUBDIVISION A

EXXON R. BOYER

USCG/NOAA CWO SPURR; G. SHIGER. AKA

DATE 23 / MA, 191

TIME 15 : 00 to 15 : 15

TIDE LEVEL 5.6 ft. to 4.5 ft.

ENERGY LEVEL: ☒ H ☐ M ☐ L

SURVEYED FROM: ☒ FOOT ☐ BOAT ☐ HELO

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

TOTAL LENGTH SHORELINE SURVEYED: 300 m

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

EST. OIL CATEGORY LENGTH: W _____ m M _____ m N _____ m VL _____ m NO 300 m US 3886 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 - 21 FRAMES 1+2

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

OG COMMENTS: Highly exposed beach with several indicators explaining why no oil was observed at this site:

1. High wave ENERGY
2. Very well-rounded Boulder + cobbles
3. multiple gravel storm ridges
4. high angle reflective beach

These characteristics explain why any oil that did exist at this site was ABRASIONED by waves and gravel movement.

Reviews: 578/9/10

PHOTO SITES, CP-1A
ROLL 6-21, FRAMES 1 & 2

HIGH WAVE
ENERGY



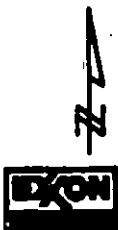
High Angle (reflective)
multiple gravel ridge
beach w/ very rounded
boulders + cobbles.
(NO oil observed)

UNSURVEYED

Boulder Cobble Beach
Drift

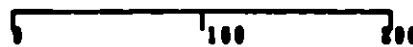
#1 #2

UNSURVEYED



K0906 CP001 A

METERS



AK State Plane Spheroid
NAD83

Subdivision Field Map

Map Key: 60A00000CP001A

Name: D. Fitzgerald

Date: 23 May 1991

MAYSAP BIOLOGICAL SUMMARY FORM

TEAM # 6 Help

DATE May 23 1991

SEGMENT # K9N-6 CP-01

TIDAL HEIGHT (Range) 56-4.5 ft (15⁰⁰-15¹⁵)

SUBDIVISION A

BIOLOGIST H. Davis

SEA STATE 1-2 ft

WIND SPEED/DIRECTION 10-20 kt Breeze NE

PHOTOGRAPHS: ROLL # G-21

FRAME # 1+2

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

This was a high energy cobble/Boulder beach in front of a drift log and cobble ridge. Ulva and Laminaria made up most of the drift. limpets were active in the moist areas of the kelp. There was almost no kelp in the area surveyed and no oil was seen.

Tufted Puffin (2) Sparrows (Song?) (2)

Oystercatcher (1) Glaucous-winged Gull (3) Kittiwake (2 Dead) Storm Petrel (1 Dead)

WILDLIFE OBSERVATIONS

TO BE COMPLETED IN ALL SUBDIVISIONS

BIRDS	# OF SPECIES	TOTAL BIRDS	FISH OBSERVED SPECIES PRESENT
Eagles	0	-	0
Seabirds	21	32	
Waterfowl	0	-	
Gulls/Kittiwakes	2	5	
Shorebirds	1	1	
Corvids	0	-	
Other Birds Sparrow	1	2	

MARINE MAMMALS

OBSERVED

LAND MAMMALS

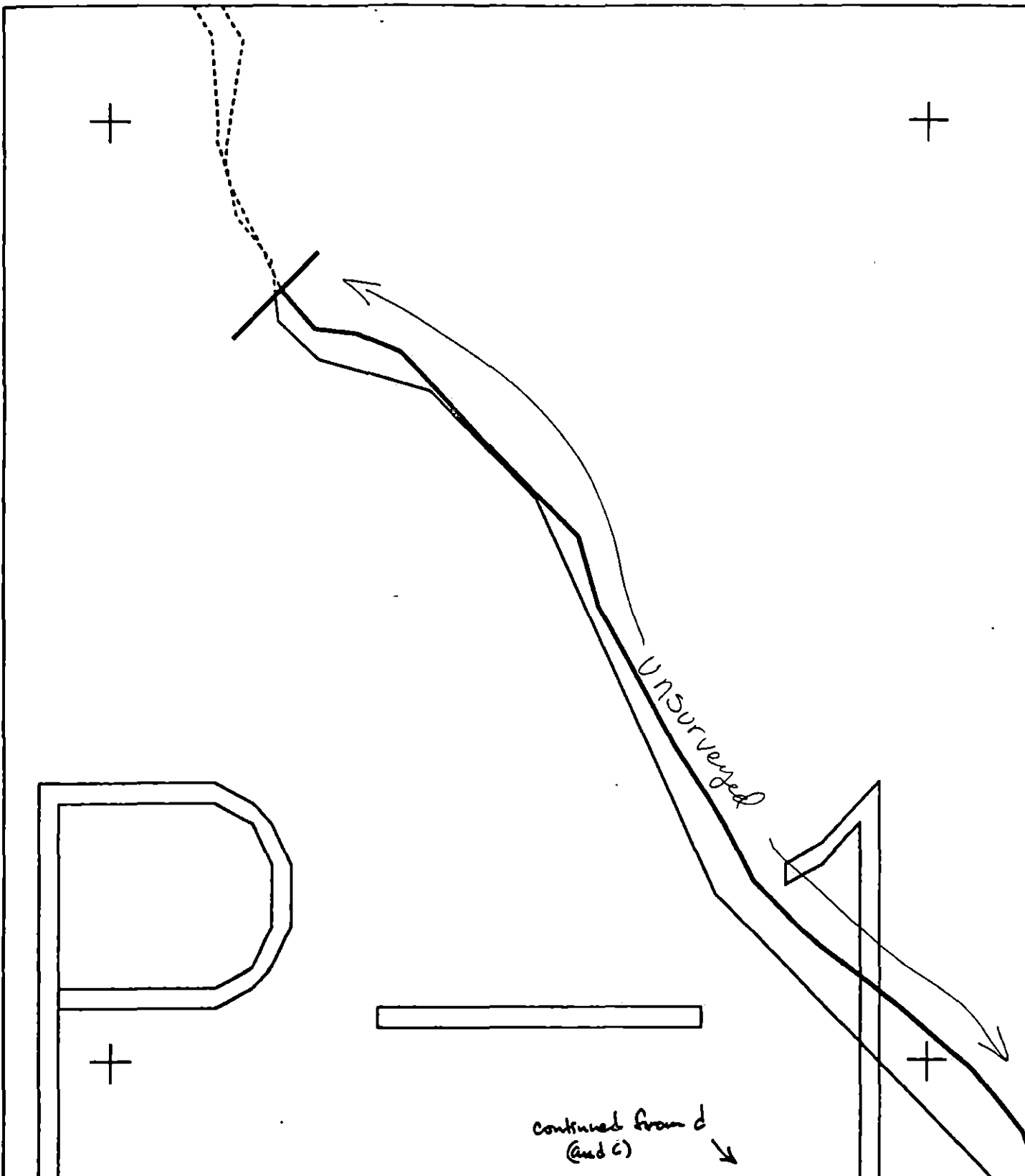
SPECIES

OBSERVED

Sea Otters	0		
Pinnipeds (specify)			
Stellar's Sea Lions	+50 *		
Whales (specify)	0		

At top of CD-21, 3 swimming off shore.
Shoreline subdivision map showing important biological features attached.

P. 11 11:21 am



continued from d
(and c)

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

K0906 CP001 A
 ADEC Subsegment Length: 4186m
 METERS

5 100 200
 AK State Plane Zone 4
 900000p001ab- . . .



Subdivision Field Map
 Map Key: 60AK0000CP001AB
 Name: D. Fitzgerald (JY)
 Date: 23 May 91
 Date Entered:

REVIEWED: MC 5/28/91
 C.27 04

UNsurveyed →
continued from d →

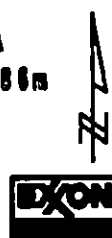
XXXX
////

TTTT
0000

Wide
Medium
Narrow
Very Light
No Oil

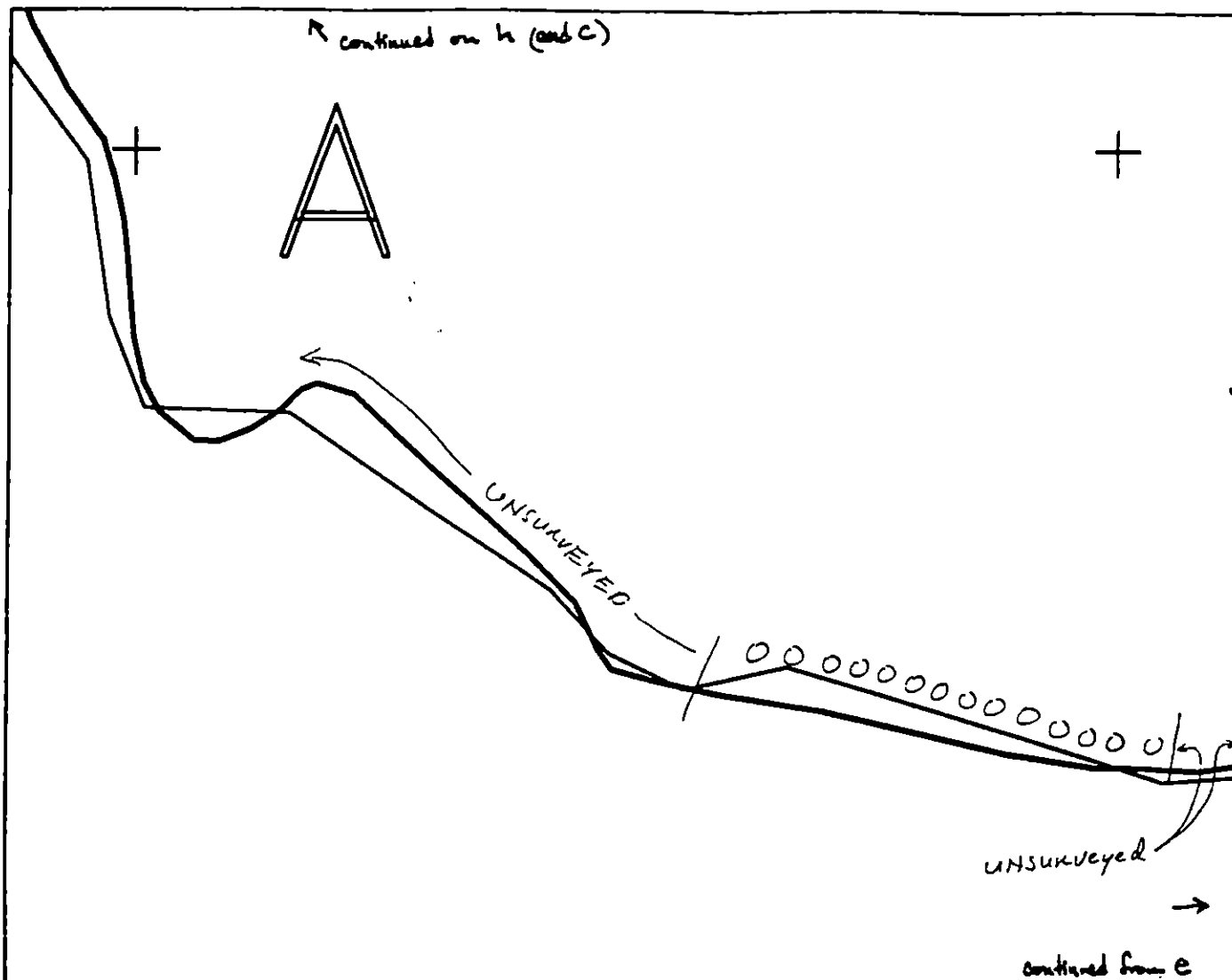
K0906 CP001 A
ADEC Subsegment Length: 4186m
METERS

5 100 200
AK State Plane Zone 4
99906cp001a- . . .



Subdivision Field Map
Map Key: 60AK0906CP001Ae
Name: Fitzgerald (JY)
Date: 23 May 91
Date Entered:

Reviewed: 5/23/91 MC
5-27 JY



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

K0906 CP001 A
 ADEC Subsegment Length: 4186m

METERS

0 100 200
 AK State Plane Zone 4
 985000001nd- . . .



Subdivision Field Map

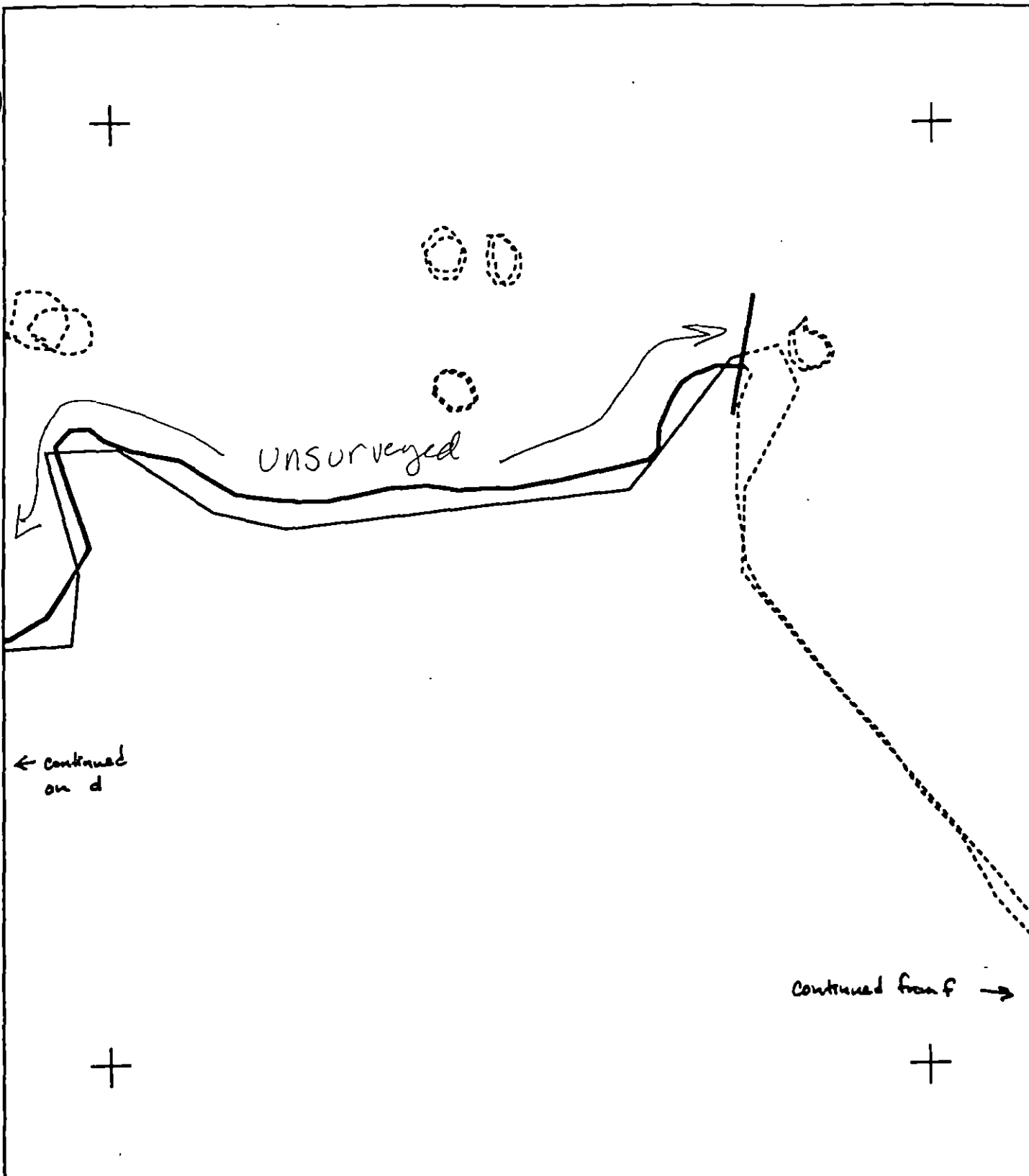
Map Key: 00AK0000CP001AD

Name: D. F. FIDELER

Date: 23 MAY 1991

Date Entered:

Reviewed: MC 5/27/91
 reviewed 5.27.91



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

K0906 CP001 A
 ADEC Subsegment Length: 4186m
 METERS

0 100 200

AK State Plane Zone 4
 90806000100- . . .



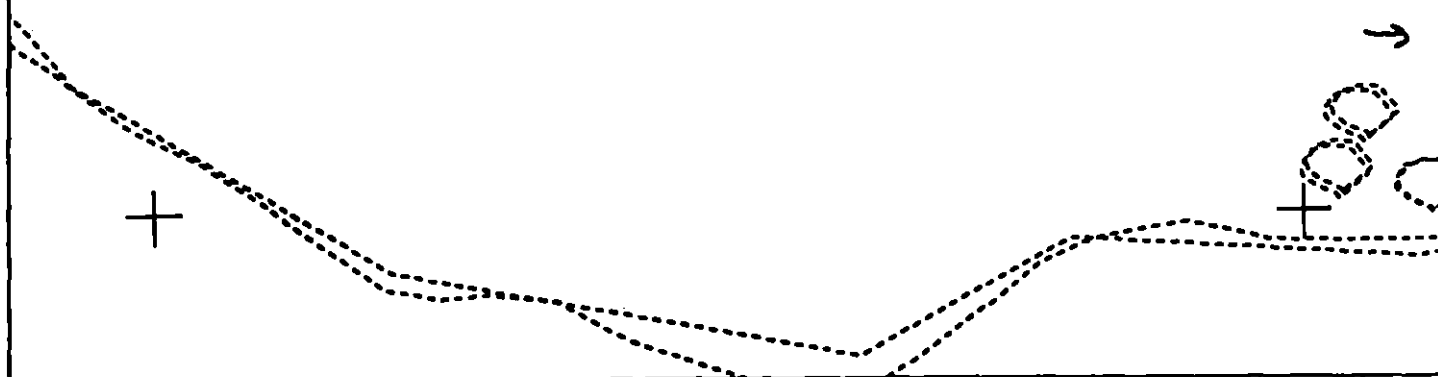
Subdivision Field Map
 Map Key: 60AX0000CP001A0
 Name: Fitzgerald
 Date: 5.23.91
 Date Entered:

Reviewed by: MC 5/28/91
 reviewed by 5.27.



continued on e
←

continued from g
→



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

K0906 CP001 A
ADEC Subsegment Length: 4188m
METERS

AK State Plane Zone 4
80506ep801at- . . .



Subdivision Field Map
Map Key: 60AK8000CP001A1
Name: _____
Date: _____
Date Entered: _____



Continued on f
←

Unsurveyed

Continued from b
↓

XXXX	Wide	K0906 CP001 A	Subdivision Field Map
////	Medium	ADEC Subsegment Length: 4188m	Map Key: 60AX0906CP001A
----	Narrow	METERS	Name: <u>Fitzgerald (JY)</u>
TTTT	Very Light	5 100 200	Date: <u>5.23.91</u>
0000	No Oil	AK State Plane Zone 4 90906cp001ag-...	Date Entered:



Revised: MC 5728/91
JY-5.27.91

↑ continued on g

unsaturated

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

K0906 CP001 A
ADEC Subsegment Length: 4186m
METERS

0 100 200
AK State Plane Zone 4
900000001ab



Subdivision Field Map
Map Key: 60AK0006CP001ab
Name: Fitzgerald (JY)
Date: 5.23.91
Data Entered:

Revised: MC 518191

SHORELINE EVALUATION

SEGMENT ST/ K09-06-CP-01 SUBDIVISION A (1 OF 1) DATE 4/26/90

SEGMENT ENVIRONMENTAL SENSITIVITIES AND TIME CONSTRAINTS:

Katmai National Park

ADF&G anadromous stream no. 248-40-10105

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

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

5R Seabird colony (5/1 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: *Charles E. Hansen* DATE: 5/14/90

OILING CATEGORIZATION:

Wide 0 m: Medium 0 m: Narrow 74 m: V.Light 223 m: No Oil 3889 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: 5/12/90
ADEC *Art Weimer*
EXXON *AMY TGAZ*
NOAA *Gary Petrac*
USCG *D.D. ROME*

FOSC: *WHL* DATE: 5-18-90

OG LINDSAY NAKASHIMA

SEGMENT 6906 - CPO01

SUBDIVISION CPO01A

DATE 4/26/90

CHECKLIST

- ☐ N Arrow
- ☐ Approx. Scale
- ☐ Seg/Sub Bndry
- ☐ Off Dist.
- ☐ Width
- ☐ Length
- ☐ % Cover
- ☐ Substrate Character
- ☐ Est. HWA/LA/VL
- ☐ SSL
- ☐ Profile Location(s)
- ☐ Profile(s)
- ☐ Pli Location(s)
- ☐ Photo Location(s)

LEGEND

1 Δ
Pli - No Subsurface Off

2 Δ
Pli - Subsurface Off

CT/C
Continuous Distribution

CT/B
Broken Distribution

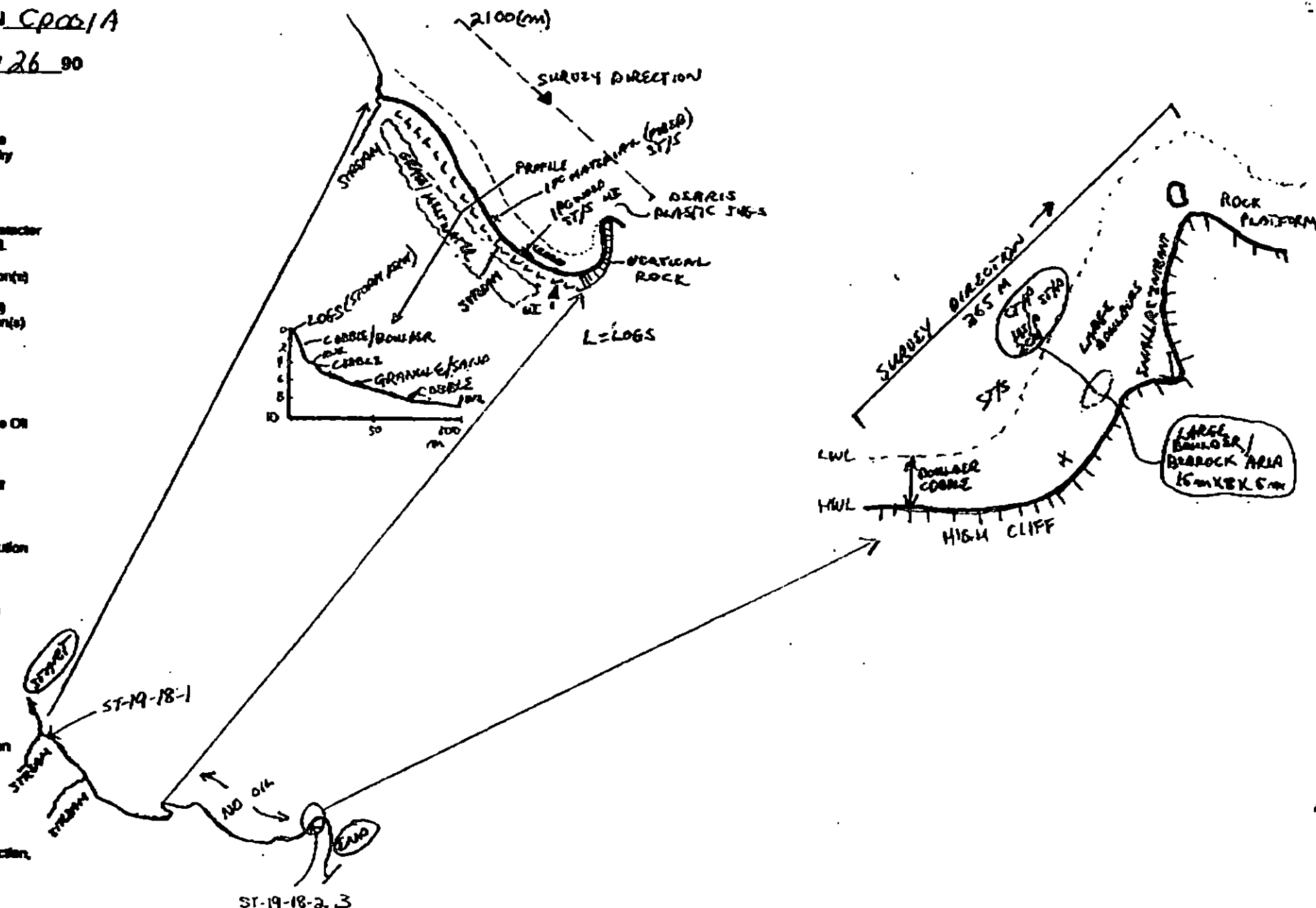
CT/P
Patchy Distribution

CT/S
Spotted Distribution

lll
Oiled Vegetation

1 ●
Photo location, direction, and number

ETCH MAP



Character Length (m): AP 0 PO 0 CV 0 CT 15 ST 240 MS 15 PT 0 TB 0 FL 15 NO 2250

REVISION 007600

ECOLOGICAL WITH

1A, 1B
5R

SUBJECT ANADROMOUS
STREAM

248-40-10105

AFOGNAK (D-5) QUADRANGLE
ALASKA

1:63 360 SERIES (TOPOGRAPHIC)

30' ILLIAMNA A-1 AND A-2

25'

1:620 000 FEET

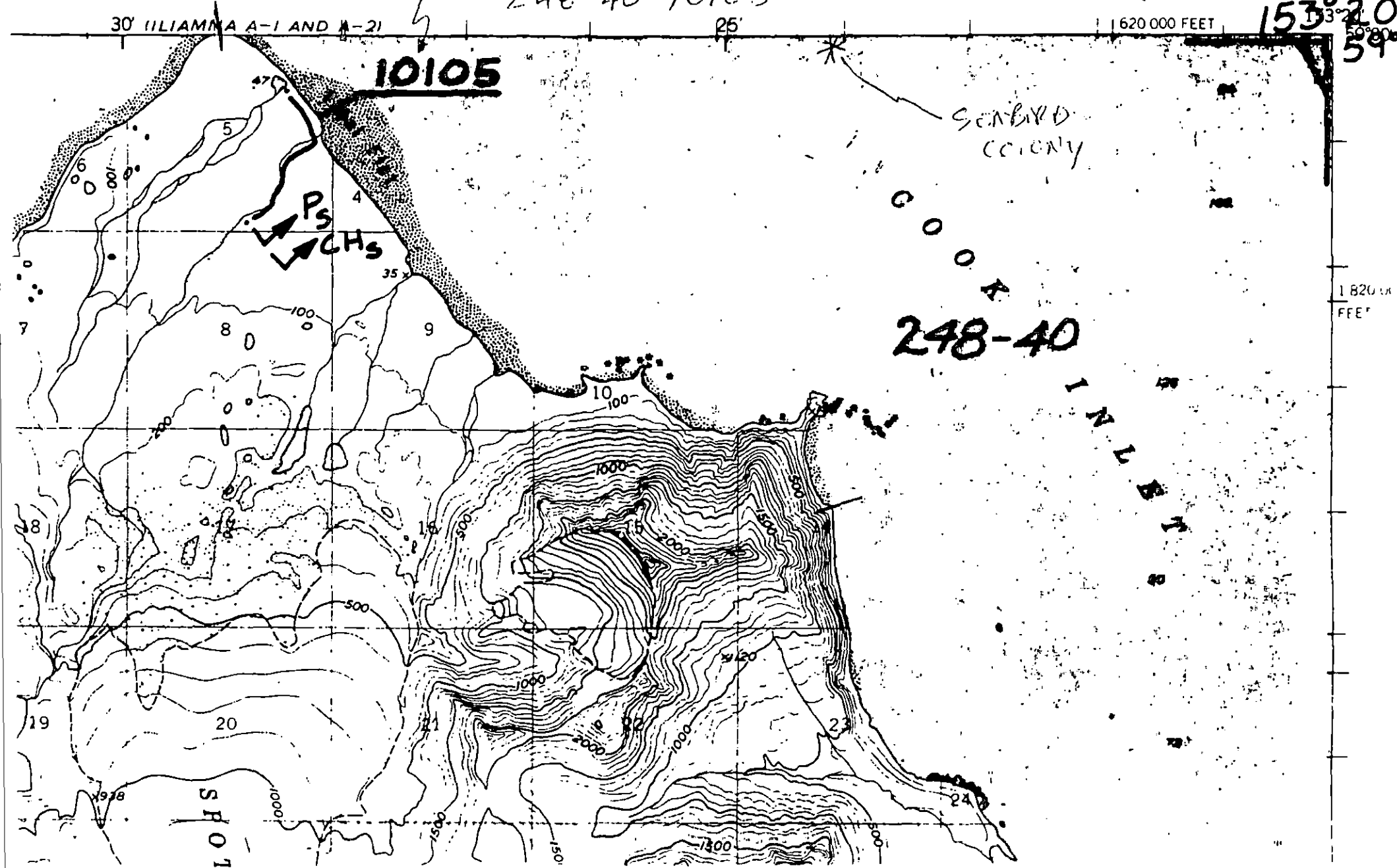
153° 20'
59'

10105

SEABIRD
COLONY

248-40

1:820 000
FEET



ECO MAP
Pg 1

No Resources

↓ GOA 62A

XXXX Wide

//// Medium

--- Narrow

TTTT Very Light

CP-1

ADEC Segment Length: 8074m

0 300 600 900

Map Key: GOA-62c

Name: _____

Date: _____

Data Entered: _____

↑
GOA
62C

K9N

ECOMAP
Pg 2

Anadromous
Stream

ADF+G 10105 ↑
(pink, chum, silver)

CP-1

K-9-6-CP-1-A

GOA
62B →

XXXX Wide

/// Medium

---- Narrow

TTTT Very Light

0000 No Oil

CP-1

ADEC Segment Length: 8074m



Map Key: GOA-62a

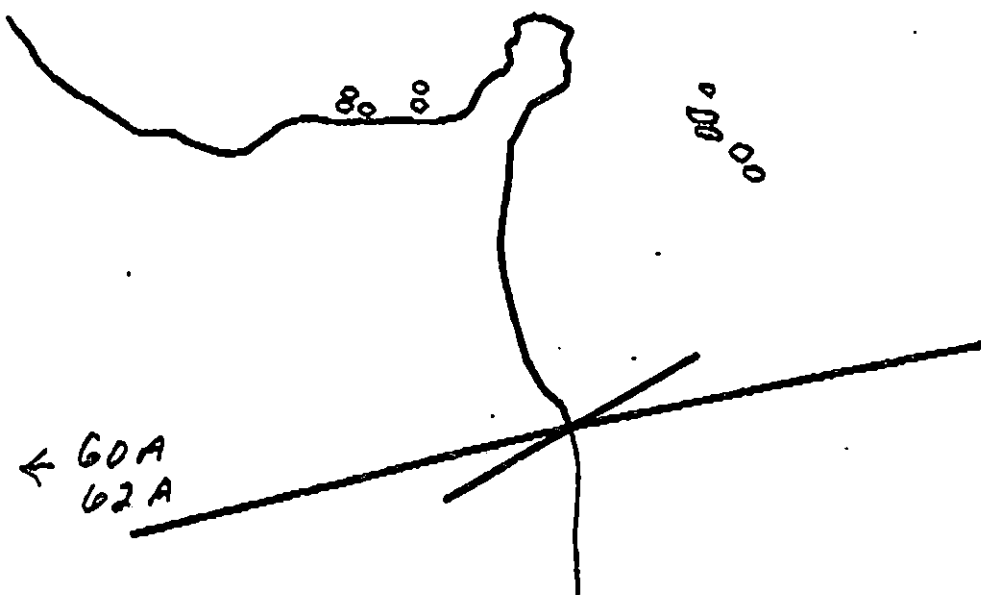
Name: _____

Date: _____

Data Entered: _____

ECO MAP
Pg 3

No Resources



XXXX Wide

// Medium

--- Narrow

TTTT Very Light

0000 No Oil

CP-1

ADEC Segment Length: 8074m



Map Key: GOA-62b

Name: _____

Date: _____

Data Entered: _____

NOT SURVEYED
REPORTED AS NOT
OILED BY ADEC

↓ GOA 62A

XXXX Wide

//// Medium

---- Narrow

TTTT Very Light

OOOO No Oil

CP-1

ADEC Segment Length: 8074m



Map Key: GOA-62c

Name: LINDSAY NAKASHIMA

Date: 4/26/90

Data Entered:

↑
GOA
62C

K9N

NOT SURVEYED
REPORTED AS NOT OILED
BY ADEC

CP-1

GOA
62B →

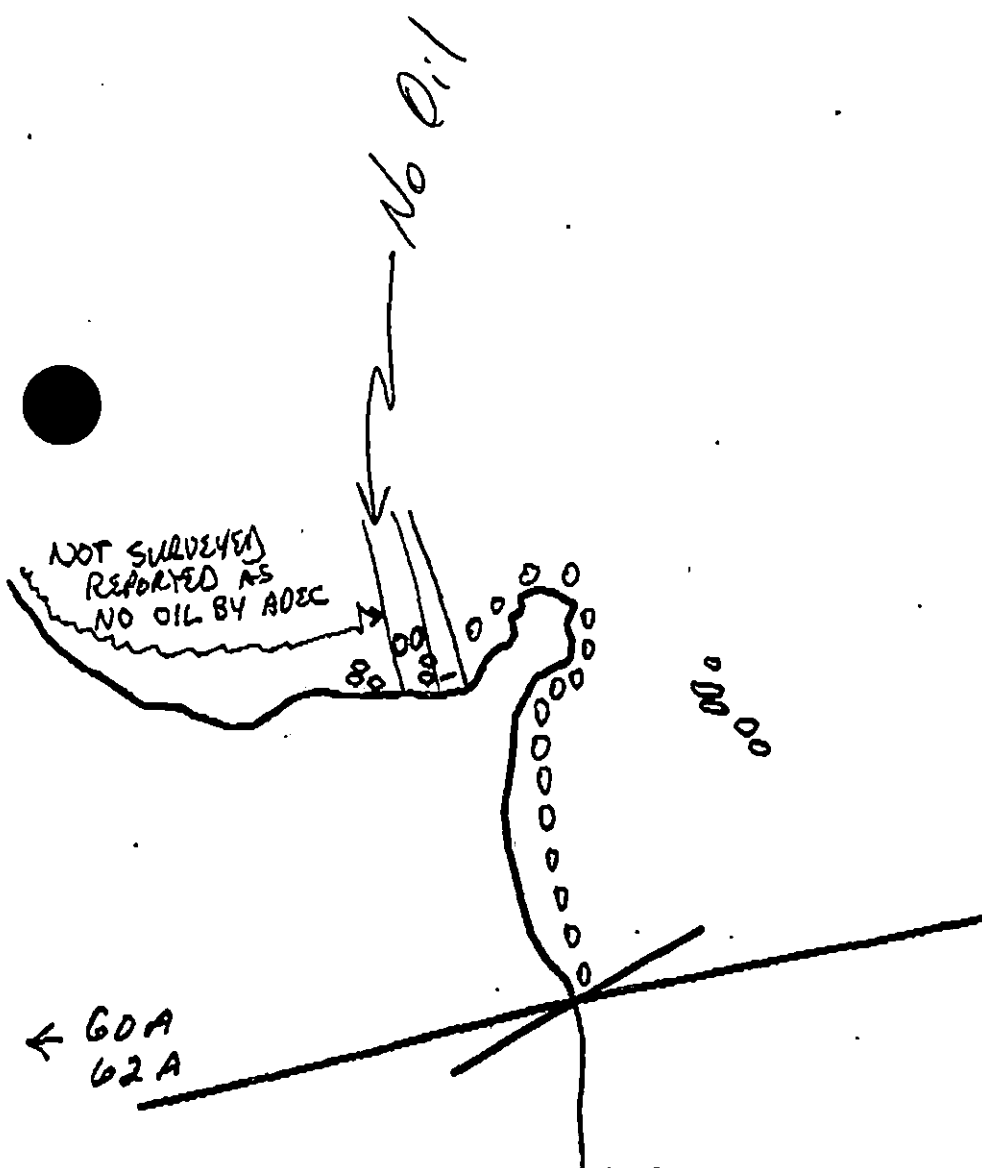
XXX Wide
/// Medium
--- Narrow
TTTT Very Light

CP-1

ADEC Segment Length: 8074m



Map Key: GOA-62a
Name: LINDSAY NAKASHIMA
Date: 4/26/90
Date Entered:



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

CP-1

ADEC Segment Length: 8074m



Map Key: GOA-82b
 Name: LINDSEY NAKASIMA
 Date: 4/26/90
 Data Entered:

REGION: KODIAK

SEGMENT: ST/K09-06-CP-01

SUBDIVISIONS: A (1 OF 1)

SHORELINE EVALUATION

SEGMENT ST/ K09-06-CP-01 SUBDIVISION A (1 OF 1) DATE 4/26/90

SEGMENT ENVIRONMENTAL SENSITIVITIES AND TIME CONSTRAINTS:

Katmai National Park

ADF&G anadromous stream no. 248-40-10105

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

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

5R Seabird colony (5/1 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 74 m: V.Light 223 m: No Oil 3889 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: _____

KODIAK ECONOMIC CONSTRAINTS

- 1A Salmon stream mouth - fry outmigration (4/15 to 7/31)
1B Salmon stream mouth - spawning (7/15 to 9/10; PEAK 8/15)
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, 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 prior to treatment for consultation and/or permit application.
AGENCY CONTACT PERSON: ADF&G Ken Middleton 267-2299
- 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, 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 Kotai Bay Hatchery release
Pink salmon - late May, early June; Chum salmon - June; Sockeye salmon - early July.
- 1H Remote release site
No use of methods which might affect nearshore oil or toxicity levels, such as hot water wash or Inipol application, 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 for confirmation and authorization.
AGENCY CONTACT PERSON: ADF&G Larry Peltz 424-3214
- 1I Gill net area
1J Purse seine area
Mainland, West side Kodiak, Shuyak & Moser/Olga Bay (6/9 to 10/1)
East side Kodiak, East side Afognak (7/4 to 10/1)
1K Purse seine hook-off
1L Set net sites
Contact ADF&G for confirmation - dates and locations may vary. 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 Larry Nicholson 424-4791
- 2M Herring spawning (4/15 to 6/30)
Contact ADF&G for confirmation - dates and locations may vary. Restrict boat traffic to essential minimum. Avoid damage to unopened intertidal and subtidal algae and seagrass. If plans for treatment include methods such as hot water wash or Inipol application which might affect nearshore oil or toxicity levels, contact ADF&G for consultation and authorization.
AGENCY CONTACT PERSON: ADF&G Larry Nicholson 486-4791
- 3N, 3P Harbor seal and sea lion pupping (5/10 to 7/1)
Harbor seal and sea lion molting (8/15 to 9/15)
Restrict boat and air traffic to essential minimum. No personnel within 400m. Aircraft to maintain 800m horizontal and 300m vertical distance from haulouts. No application of Inipol within two weeks of arrival dates (work window at these sites is limited to 7/2 to 7/31). Contact ADF&G and USFWS prior to treatment for confirmation.
AGENCY CONTACT PERSON: US National Marine Fisheries Service Steve Zimmerman 586-7235
ADF&G Don Calkins 267-2403
- 5R Seabird colony (5/1 to 9/1)
Restrict air and boat traffic to essential minimum. No personnel within 800m. Aircraft to maintain 800m horizontal, 300m vertical distance from colony. Contact USFWS prior to treatment.
AGENCY CONTACT PERSON: USFWS Jill Parker 786-3377
- 5S Shorebird/waterfowl concentration (4/1 to 5/15)
Restrict all activity to essential minimum, especially air traffic. Contact USFWS and ADF&G for confirmation.
AGENCY CONTACT PERSON: USFWS Jill Parker 786-3377
ADF&G Tom Roth 267-2206
- 5T All Bald Eagle nests (3/1 to 6/1)
Active Bald Eagle nests (3/1 to 9/1)
Restrict air traffic and all disturbance to essential minimum. No personnel within 400m 3/1 to 6/1. Air approach and takeoff from and to seaward only; maintain 800m horizontal, 300m vertical distance from nests. Contact USFWS prior to treatment for confirmation of dates.
AGENCY CONTACT PERSON: USFWS Jill Parker 786-3377
- 6U Recreation: Tent sites (8/1 to 9/15)
6V Anchorages (8/1 to 9/15)
6W Forest Service cabins (8/1 to 9/15)
6X Lodge (8/1 to 9/15)
6Y Special use destination
- 7Z Subsistence area: Salmon harvesting (8/1 to 9/30)
7HH Finfish harvesting
7I Deer harvesting (8/1 to 1/7)
7J Invertebrate harvesting
7K Bear harvesting (4/1 to 5/15 and 10/25 to 11/30)
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 / K0906 CP-001 SUBDIVISION: A DATE 4/26/90

NAAA

ISCC

NAME John Naughton SIGNATURE John J. Naughton☒ NO TREATMENT RECOMMENDED☐ TREATMENT SUGGESTED

COMMENTS

This segment consisted of very light oil. Mainly stain and coat with one area of small amount of mousse at far eastern end of segment. Recommend no treatment.

ADEC

NAME Terry Ellsworth SIGNATURE Terry Ellsworth☐ NO TREATMENT RECOMMENDED☒ TREATMENT SUGGESTED

COMMENTS

One small 15m x 8m area in the eastern portion of the segment contains patchy interstitial mousse/sediment around large boulders. Manual removal using small tools is recommended.

LAND MANAGER

NAME Carl Sebech SIGNATURE Carl Sebech☐ NO TREATMENT RECOMMENDED☐ TREATMENT SUGGESTED

COMMENTS

Oiled debris should be removed from storm berm.
The mousse at the south east end of the segment is difficult to access, mostly interstitial and under boulders. This oil can be expected to persist for a long time if not removed.

SHORELINE OILING SUMMARY

REVISION NO. 24 12-90

CG LINDSAY NAKASHIMA 4506 (NOAA) JOHN NAUGHTON SEGMENT ST/ K0906
 BIO DEB MCCORMICK LAND REP (NPS) CARL SCHUCH SUBDIVISION CAD01A LCF 1
 EXXON FRIO BYARS ADEC TERRY GILLESWORTH TIME 7:40 to 9:00
 TEAM NO. 19 TIDE LEVEL +1.3 TO -2.0 FALLING DATE 4/26/90
 EST. SUBDIVISION LENGTH: 2465 m ☒ Sun ☐ Clouds ☐ Fog ☐ Rain ☐ Snow
 UPLANDS DESCRIPTION: ☒ Grass ☐ Forest ☒ Rock GRASS TO NORTH - ROCK TO SOUTH
 SURVEYED FROM: ☒ Foot ☐ Boat ☐ Helo WORKING DIRECTION: WEST to EAST
 SURFACE SEDIMENTS: R 10 % B 50 % C 10 % P 3 % G 2 % S 25 % M 0 % V 0
 SLOPE: Long 75 % Hang 15 % Vert 10 % WAVE EXPOSURE: ☐ Low ☐ Med ☒ High
 OIL CATEGORY LENGTH: W 0 m M 0 m N 15 m VL 200 m NO 2250 m

SURFACE OIL

CHARACTER	DISTRIBUTION				OIL / FILM COLOR								IMPACTED ZONES			
	10	15	10	5	10	15	10	5	10	15	10	5	SU	U	M	L
ASPHALT PAVEMENT																
POOLED																
COVER																
COAT			X	X		X								X		
STAIN			X	X		X								X		
MOUSSE			X	X				X						X		
PATTIES																
TARBALLS																
FILM																
NO OIL													X	X	X	

PAVEMENT H F S NONE sq. m by 0PATTIES / TARBALLS NONE BAGSNEAR SHORE SHEEN? (NO) BR RW SL TL

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

DID YOU COLLECT DEBRIS?

YES ☐ NO ☒TYPE —#BAGS 0

Photographs:

Roll No. ST-19-18Frames 1-3

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)	T	SURFACE - SUBSURFACE SEDIMENTS
		OP	OR	OL	OF	NO		UO	UC	10	15	10	5	10	15	10	5	SU	U	M	L				
1	30					X	0-0											X				—	—	—	PKGS

COMMENTS - OILING MAPS INDICATE AREAS NOT SURVEYED - THE AREAS WERE NOTED AS NOT OILED BY ADEC

2100m - OIL IN THE FIRST AREA IS STAIN ON LOGS AND DEBRIS (PLASTIC JUNK/ROPE)
388 THE DISTRIBUTION IS ALONG A 200(M) SECTION OF SHORELINE AND
SKETCH SPORADICALLY DISTRIBUTED AT THE UPPER INTERTIDAL ZONE

365m - MOUSSE EXTENDS TO 2cm
588
SKETCH

REVIEWED YH DATE 4-29-90

SHORELINE ECOLOGICAL SUMMARY

REVISION: 03/22/77

Segment ST / KO906 C.P.-1 Subdivision A Date (mo / day / yr) 4-26-90Time (24 hr) 0740-0900 Biologist D. McCormick

- (A) Substrate type and % of segments:
 (1) Bedrock 10 (2) Boulder 50 (3) Cobble 10 (4) Pebble 3 (5) Sand 25 (6) Silt -
- (B) Overall % cover of biota (% of segment): Dense 0 Moderate 10 Low 90
- (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-19-18Frames 1-3

BARNACLES

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

NOT PRESENT

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	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

GASTROPODS

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

NOT PRESENT

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: Oystercatchers and gulls.

Most of segment is pebble/cobble/sand beach with only Fila green algae on LETZ boulder/cobble.
 Intertidal macrofauna confined to boulder beaches at end of segment.

Ecological Considerations: According to NOAA, seabird colonies + at least one eagle nest are included in this segment. Neither of these eco resources were seen during our survey. Also, they are not noted on any USFWS or NPS resource maps. There is one anadromous stream (pink, chums + silvers) at the north end of the segment. See ECO map.

DATE 4-26-90 TIME 0740-0900 TIDE HEIGHT -2.0' ~ +3.0'

1 = BEDROCK 2=BOULDER 3=COBBLE 5=SAND 6=SILT

FLORA:

SPECIES	UITZ	MITZ	LITZ	COMMENTS
BOSSIELLA/CORALLINA				
CALLIARTHRON/CORALLINA				
CLADOPHORA SPP				
COSTARIA SPP				
ENDOCLADIA MURICATA	1	1		Intidal pools
FILAMENTOUS GREENS			2.3	
FILAMENTOUS REDS				
OLOIOPELTIS PURCATA				
HALOSACCION GLANDIFORME				
LAMINARIA SPP				
LITHOTHAMNION				
NEREOCYSTIS SPP				
PORPHYRA SPP				
RALPHSIA/HILDENBRANDIA				
PHODOMELA LARIX				
RHOHOMENIA PALMATA				
SCYTOSIPHON SPP				
ULVA SPP				
ZOSTERA MARINA				
ENTOROMORPHA				

FAUNA:

ANTHOPLEURA SPP				
(SEMI) BALUNUS CARIOSUS		2, 3	2.3	
B. GLANDULA	2			
BRYOZOANS				
CHITONS (other than K. TUNICATA)				
CLAMS				
CRABS				
DERMASTERIAS IMBRICATA				
KATHARINA TUNICATA				
LEPTASTERIAS HEXACTIS				
LIMPETS	1, 2	2		
LITTORINA SPP	2	2, 3	2	
NUCELLA SPP				
PAGURUS SPP				
PISASTER OCHRACEUS				
POLYCHAETES				
PYCNOPODIA HELIANTHOIDES				
SEARLESIA DIRA				
SERPULIDS				
SIPHONARIA THERSITES				
TEALIA				

GEOLOGICAL MAP

1A 1B
5R

SUBJECT ANALYSES
- STREAM

248-40-10105

AFOGNAK (D-5) QUADRANGLE

ALASKA

1:63 360 SERIES (TOPOGRAPHIC)

30' ULLIAMNA A-1 AND A-2

25'

620 000 FEET

153° 20'
58'

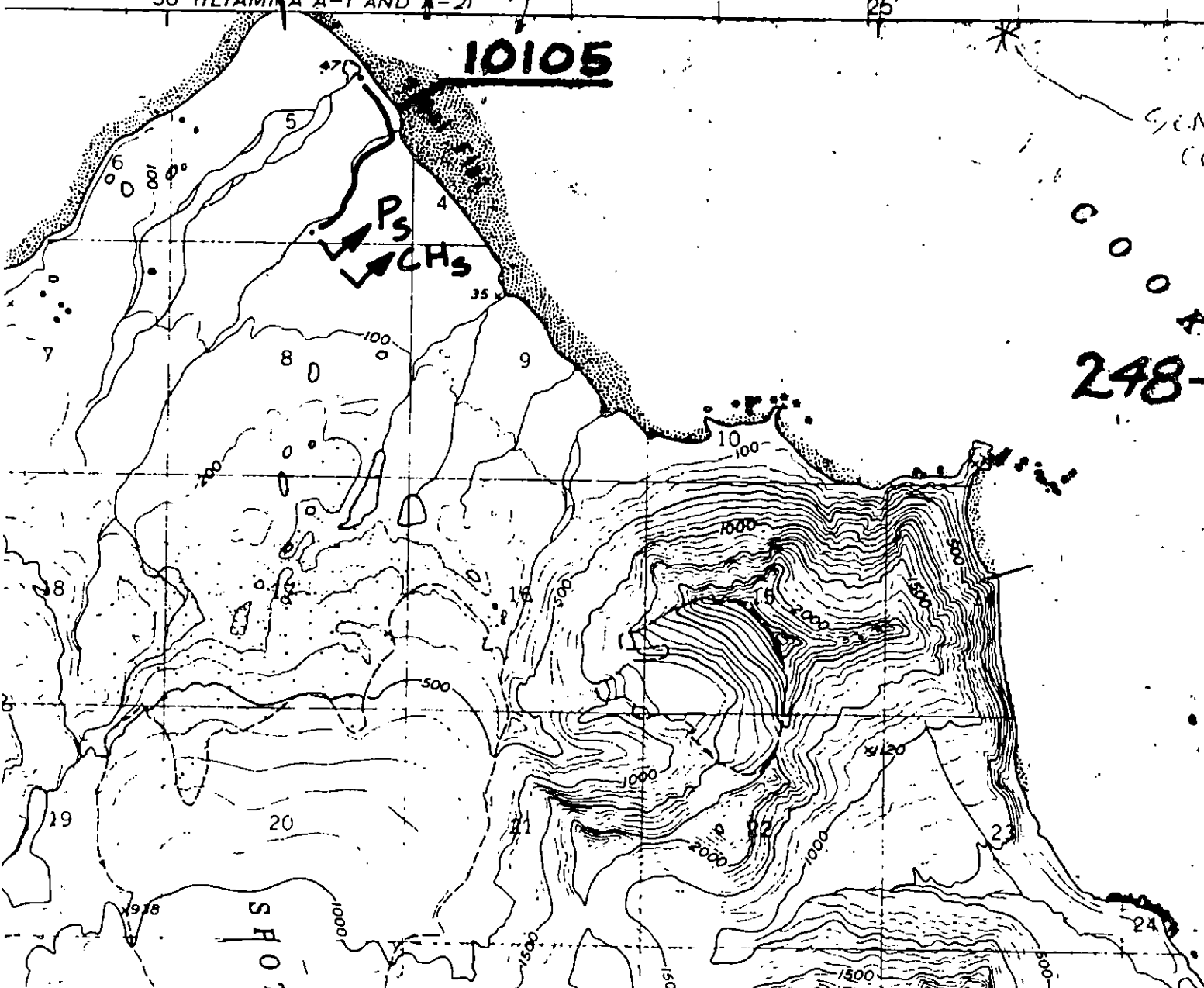
10105

SEALYD
COUNTRY

248-40

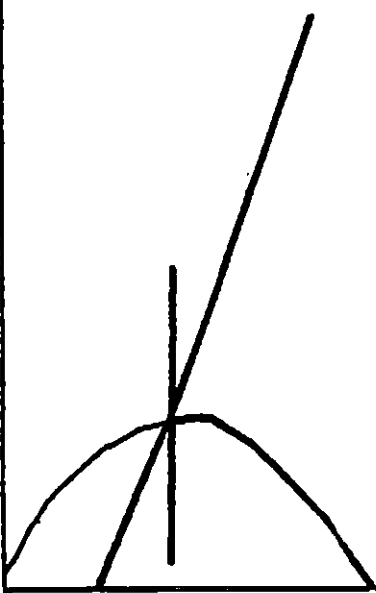
INLET

SFO1



ECO MAP
Pg 1

No Resources



↓ GOA 62A

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

CP-1

ADEC Segment Length: 8074m



Map Key: GOA-62c
Name: _____
Date: _____
Date Entered: _____

↑
GOA
62c

K9N

ECOMAP
Pg 2

Anadromous
Stream

ADF+G 10105

(pink, chum, silver)

CP-1

K-9-6-CP-1-A

GOA
62B →

XXXX Wide

//// Medium

---- Narrow

TTTT Very Light

0000 No Oil

CP-1

ADEC Segment Length: 8074m

0 300 600 900
METERS

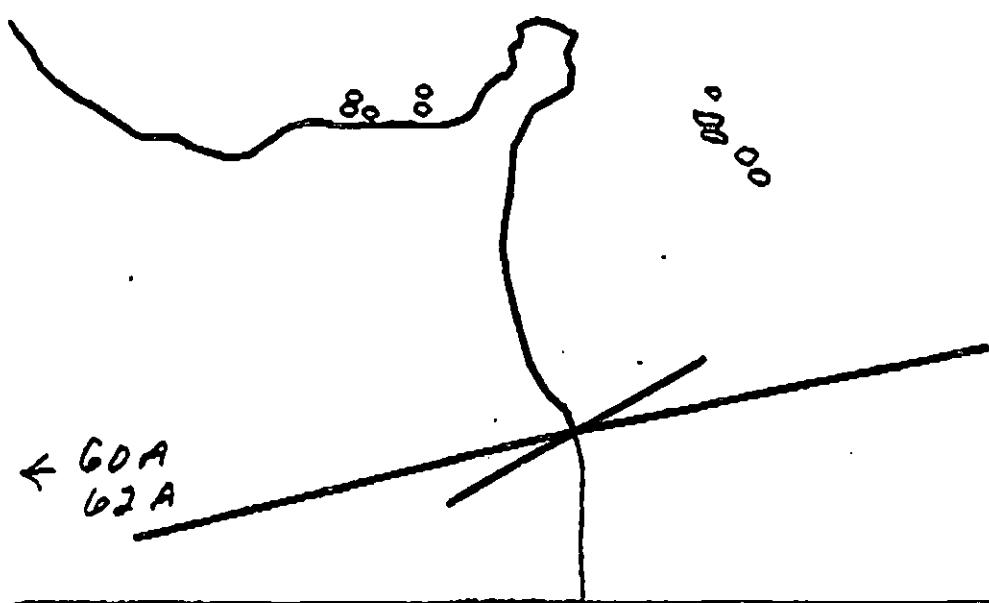
Map Key: GOA-62a

Name: _____

Date: _____

Data Entered: _____

No Resources



XXXX Wide

/// Medium

--- Narrow

TTTT Very Light

0000 No Oil

CP-1

ADEC Segment Length: 8074m

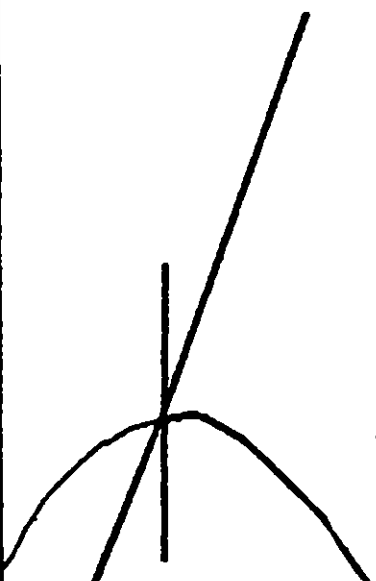


Map Key: GOA-62b

Name: _____

Date: _____

Data Entered: _____



NOT SURVEYED
REPORTED AS NOT
OILED BY ADEC

↓ GOA 62A

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

CP-1

ADEC Segment Length: 8074m



Map Key: GOA-62c
Name: LINOSAY NAKASIMAY
Date: 4/26/90
Data Entered:

↑
GOA
62C

K9N

NOT SURVEYED
REPORTED AS NOT OILED
BY ADEC

CP-1

GOA
62B →

XXXX Wide

//// Medium

---- Narrow

TTTT Very Light

OOOO No Oil

CP-1

ADEC Segment Length: 8074m

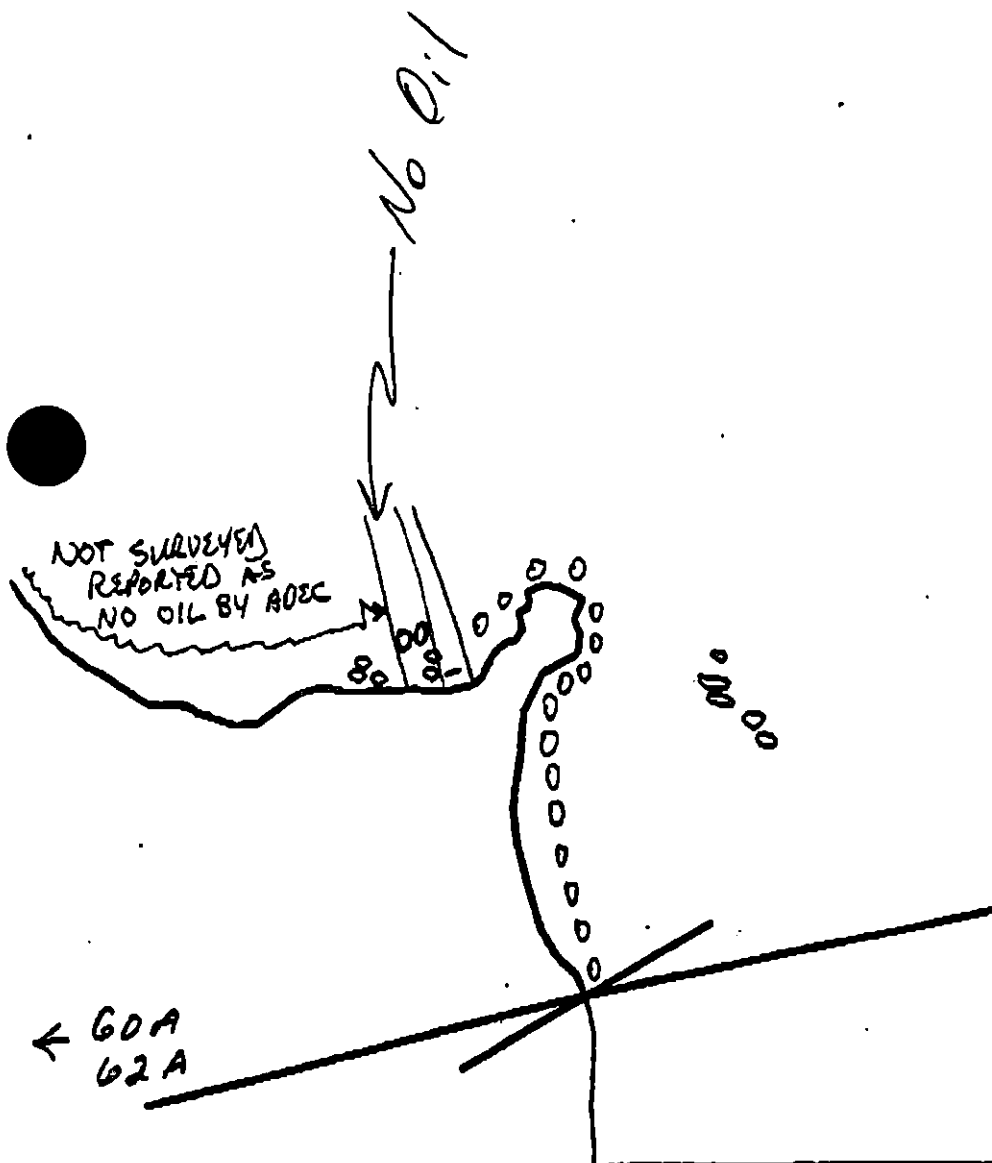


Map Key: GOA-62a

Name: LINDSAY NAKASHIMA

Date: 4/24/92

Data Entered:



XXXX Wide

CP-1

/// Medium

ADEC Segment Length: 8074m

--- Narrow

TTTT Very Light

0000 No Oil



Map Key: GOA-82b

Name: LUDWIG NAKASHIMA

Date: 4/26/90

Data Entered:

REGION: KODIAK

SEGMENT: ST/K09-06-CP-02

SUBDIVISIONS: A (1 OF 1)

SHORELINE EVALUATION

SEGMENT ST/ K09-06-CP-02 SUBDIVISION A (1 OF 1) DATE 4/26/90

SEGMENT ENVIRONMENTAL SENSITIVITIES AND TIME CONSTRAINTS:

3N,3P Harbor seal and sea lion pupping (5/15 to 7/1)
30,3Q Harbor seal and sea lion molting (8/15 to 9/15)
Katmai National Park

See attached Ecological Constraint sheet for specific constraints and contacts.

SUBDIVISION ECOLOGICAL CONSTRAINTS:

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

ARCHAEOLOGICAL CONSTRAINTS:

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

SHPO SIGNATURE: _____ DATE: _____

OILING CATEGORIZATION:

Wide 0 m: Medium 189 m: Narrow 320 m: V.Light 1918 m: No Oil 1241 m
Subsurface Oil Observed: Yes _____ No X Maximum Depth _____

RECOMMENDATIONS:

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

COMMENTS: Recommended treatment includes manual pickup of mousse, oiled debris and oiled logs as indicated on sketch map. Bioremediate area indicated on sketch map. Work should be conducted between 7/2 and 8/14 due to pinniped constraints.

TAG COMMENTS: _____

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

FOSC: _____ DATE: _____

KODIAK ECOLOGICAL CONSTRAINTS

- 1A Salmon stream mouth - fry outmigration (4/15 to 7/31)
 1B Salmon stream mouth - spawning (7/15 to 9/10; PEAK 8/15)
 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, 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 prior to treatment for consultation and/or permit application.
 AGENCY CONTACT PERSON: ADF&G Ken Middleton 267-2299
- 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, 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 Kotol Bay Hatchery release
 Pink salmon - late May, early June; Chum salmon - June; Sockeye salmon - early July.
- 1H Remote release site
 No use of methods which might affect nearshore oil or toxicity levels, such as hot water wash or Inipol application, 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 for confirmation and authorization.
 AGENCY CONTACT PERSON: ADF&G Larry Peltz 424-3214
- 1I Gill net area
 1J Purse seine area
 Mainland, West side Kodiak, Shuyak & Moser/Olga Bay (6/9 to 10/1)
 East side Kodiak, East side Afognak (7/4 to 10/1)
 1K Purse seine hook-off
 1L Set net sites
 Contact ADF&G for confirmation - dates and locations may vary. 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 Larry Nicholson 424-4791
- 2M Herring spawning (4/15 to 6/30)
 Contact ADF&G for confirmation - dates and locations may vary. Restrict boat traffic to essential minimum. Avoid damage to unopened intertidal and subtidal algae and seagrass. If plans for treatment include methods such as hot water wash or Inipol application which might affect nearshore oil or toxicity levels, contact ADF&G for consultation and authorization.
 AGENCY CONTACT PERSON: ADF&G Larry Nicholson 486-4791
- P Harbor seal and sea lion pupping (5/10 to 7/1)
 Q Harbor seal and sea lion molting (8/15 to 9/15)
 Restrict boat and air traffic to essential minimum. No personnel within 400m. Aircraft to maintain 800m horizontal and 300m vertical distance from haulouts. No application of Inipol within two weeks of arrival dates (work window at these sites is limited to 7/2 to 7/31).
 Contact ADF&G and USFWS prior to treatment for confirmation.
 AGENCY CONTACT PERSON: US National Marine Fisheries Service Steve Zimmerman 586-7235
 ADF&G Don Calkins 267-2403
- 5R Seabird colony (5/1 to 9/1)
 Restrict air and boat traffic to essential minimum. No personnel within 800m. Aircraft to maintain 800m horizontal, 300m vertical distance from colony. Contact USFWS prior to treatment.
 AGENCY CONTACT PERSON: USFWS Jill Parker 786-3377
- 5S Shorebird/waterfowl concentration (4/1 to 5/15)
 Restrict all activity to essential minimum, especially air traffic. Contact USFWS and ADF&G for confirmation.
 AGENCY CONTACT PERSON: USFWS Jill Parker 786-3377
 ADF&G Tom Roth 267-2206
- 5T All Bald Eagle nests (3/1 to 6/1)
 Active Bald Eagle nests (3/1 to 9/1)
 Restrict air traffic and all disturbance to essential minimum. No personnel within 400m 3/1 to 6/1. Air approach and takeoff from and to seaward only; maintain 800m horizontal, 300m vertical distance from nests. Contact USFWS prior to treatment for confirmation of dates.
 AGENCY CONTACT PERSON: USFWS Jill Parker 786-3377
- 6U Recreation: Tent sites (6/1 to 9/15)
 6V Anchorages (6/1 to 9/15)
 6W Forest Service cabins (6/1 to 9/15)
 6X Lodge (6/1 to 9/15)
 6Y Special use destination
- 7Z Subsistence area: Salmon harvesting (6/1 to 9/30)
 7HH Finfish harvesting
 7W Deer harvesting (8/1 to 1/7)
 7J Invertebrate harvesting
 7K Bear harvesting (4/1 to 5/15 and 10/25 to 11/30)
 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 / 19-6, C.P. 2 SUBDIVISION: A DATE 4.26.90

USCG

NAME D.D. Haven Jr., GMS, USCGR SIGNATURE [Signature]

☐ NO TREATMENT RECOMMENDED

☒ TREATMENT SUGGESTED

COMMENTS

Oiled debris present on North side of island

ADEC

NAME Francine J. Benn's SIGNATURE [Signature]

☐ NO TREATMENT RECOMMENDED

☒ TREATMENT SUGGESTED

COMMENTS

MANUAL CLEAN-UP RECOMMENDED; There are 2 main areas on Shaw Island of collectable oil;

1) A 8m x 150m band of mousse, & mousse saturated fine sediments on the North side of Shaw I., just to the east of a c/o/s beach. Clean-up crew should check drift berms for mousse patches & turballs as well.

2) A 3m x 50m band of oil similar to that described above exists on a South-west beach as well. Clean-up w/ shovels & trowels will not be difficult.

Clean-up crew should check other areas shown on SSAT field map to collect any other retrievable oil.

LAND MANAGER UP

NAME WILL TROYER SIGNATURE [Signature]

☐ NO TREATMENT RECOMMENDED

☐ TREATMENT SUGGESTED

COMMENTS

I basically agree with the ADEC representatives. The long band of mousse on the north side can easily be removed by manual labor with a shovel as much of it lies between boulders with a sand & rubble under layer. Similar conditions are found on the band of mousse on the SW side. Some could be removed in the NE corner band but much of the remaining is in between boulder and boulder and little could be removed. None of the island received treatment last year. [Signature]

SHORELINE OILING SUMMARY

REVISION NO. 06/12/90

OG Acton USCG Haven SEGMENT ST/ K9-6-C7-2
 BIO Davis LAND REP NPS Troyer, James SUBDIVISION K9-6-C7-2A (1 OF 1)
 EXXON Avery ADEC Bennis TIME 9:20 10:12:45
 TEAM NO. 20 TIDE LEVEL -3 to +5.5 DATE 4/26/90
 EST. SUBDIVISION LENGTH: 3933 m ☐ Sun ☒ Clouds ☐ Fog ☐ Rain ☐ Snow
 UPLANDS DESCRIPTION: ☒ Grass ☐ Forest ☒ Rock
 SURVEYED FROM: ☒ Foot ☐ Boat ☐ Helo WORKING DIRECTION: clockwise to from N
 SURFACE SEDIMENTS: R 40 % B 40 % C 10 % P 5 % G 5 % S 0 % M 0 % V 0 %
 SLOPE: Long 80 % Hang 10 % Vert 10 % WAVE EXPOSURE: ☐ Low ☐ Med ☒ High
 OIL CATEGORY LENGTH: W 0 m M 140 m N 200 m VL 2500 m NO 1093 m

SURFACE OIL

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

PAVEMENT H F S 0 sq. m by 0 cm

PATTIES / TARBALLS 0 BAGS

NEAR SHORE SHEEN? ☒ NO BR RW SL TL

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

Photographs:

Roll No. ST-20-7, ST-20-8

Frames 31-37, 2-9

SUBSURFACE OIL

PIT NO.	PIT DEPTH (cm)	SUBSURFACE OIL CHARACTER					OILED INTERVAL (cm)	BELOW		OIL / FILM COLOR					PIT ZONE				A N A	SHEEN (Y/N)	↓	SURFACE - SUBSURFACE SEDIMENTS
		OP	OR	OL	OF	NO		UO	UC	1	2	3	4	5	SU	U	M	N				
1	5																					G, R
2	5																					G, R
3	5																					S G, R

COMMENTS Island has extensive rock platform on all sides, with widths at low tide of up to 120 meters on the north shore. The area with the highest degree of oiling is located on the north shore in the middle of the island, just north of a small pond and just east of a sand/cobble pocket beach (one of few on the island), in the upper VTR. Pit depths were minimal due to rock/boulder composition of platform veneer. A significant percentage (> 80 %) of the very light oiling was comprised of very sporadic, occasional stain.

REVIEWED W DATE 4/27/90

OG A

SEGMENT ST/K9-6-C7-2

SUBDIVISION K9-6-C7-2A

DATE 4 / 26 90

CHECKLIST

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

LEGEND

- 1 Δ
Pit - No Subsurface Oil
- 2 Δ
Pit - Subsurface Oil
- CT/C

Continuous Distribution
- CT/B

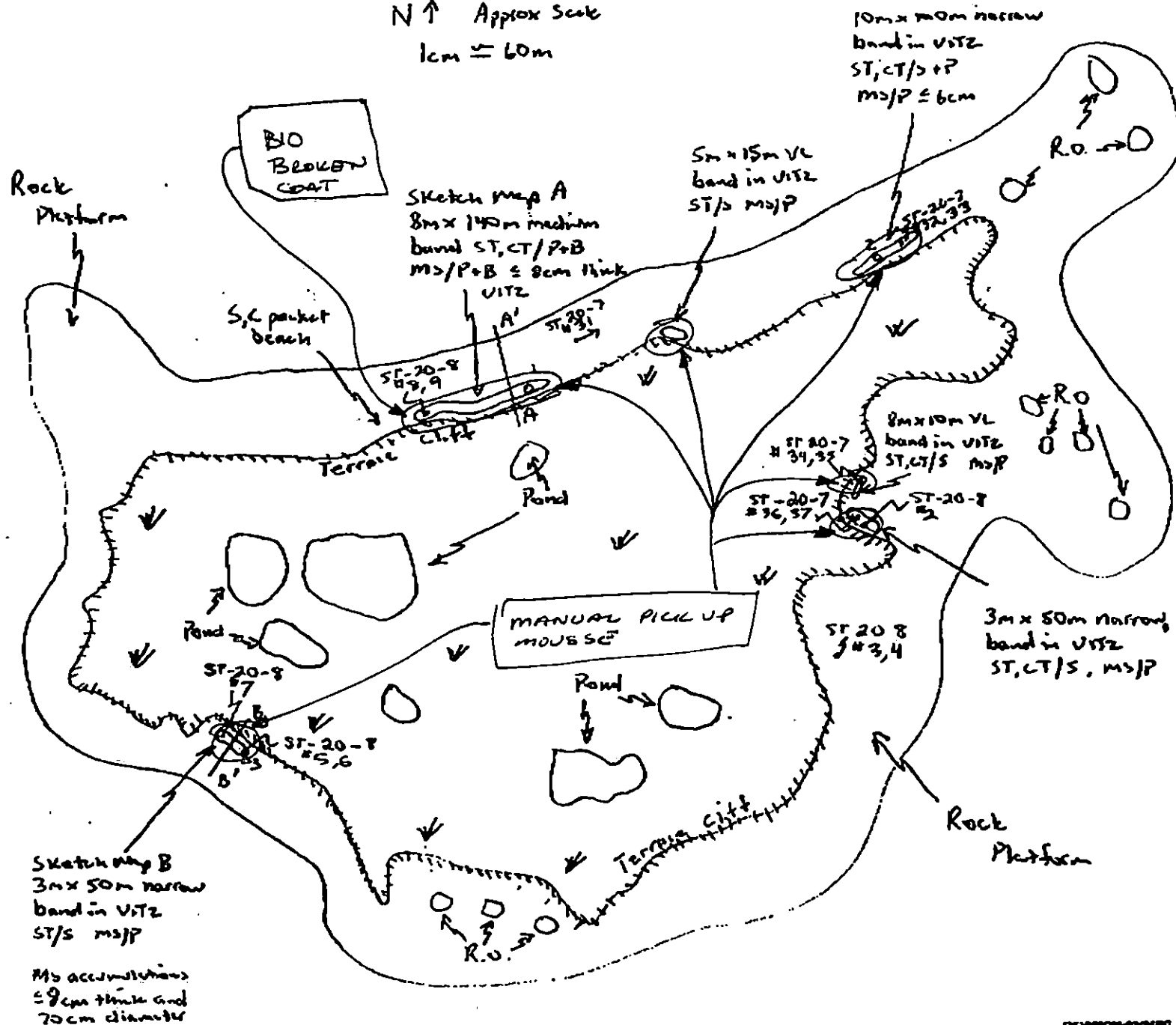
Broken Distribution
- CT/P

Patchy Distribution
- CT/S

Splashed Distribution
- Oil slick Vegetation
- 1 $\circ$
Pit location, direction, and number

SKETCH MAP

N $\uparrow$ Approx Scale
1cm $\approx$ 60m



Oil Character Length (m): AP PO CV 2840 CT 2840 ST 2840 MS 2840 PT TB FL NO 1093

REVISION: 03/24/93

OG A

SEGMENT ST/ K9-6-C2-2

SUBDIVISION K9-6-C2-2A

DATE 4/26/90

CHECKLIST

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

LEGEND

1 Δ

FTL - No Subsurface Oil

2 Δ

PL - Subsurface Oil

CT/C

Continuous Distribution

CT/B

Broken Distribution

CT/P

Patchy Distribution

CT/S

Splashed Distribution

Oiled Vegetation

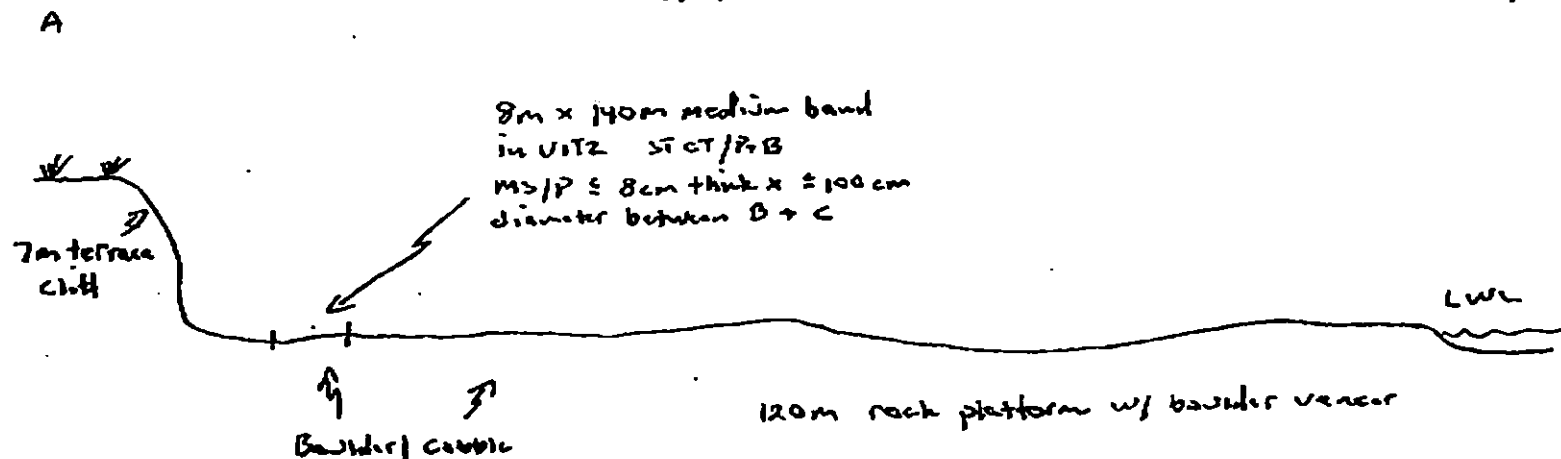
1 $\Rightarrow$

Photo location, direction, and number

SKETCH MAPS

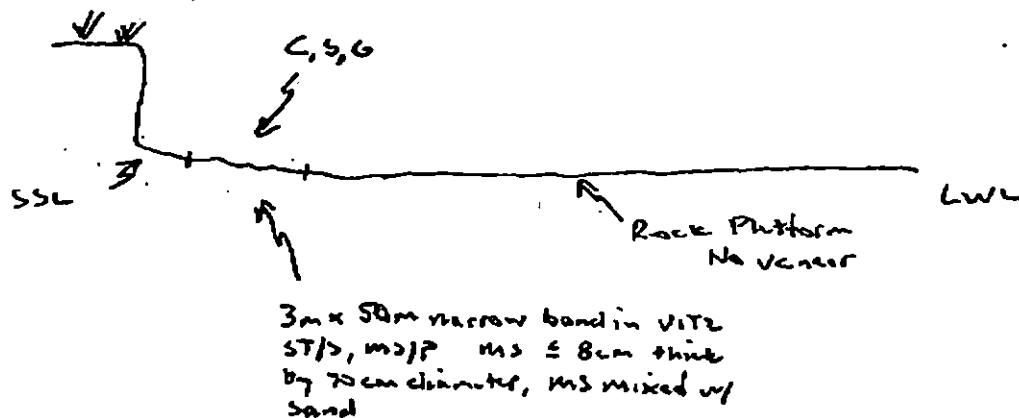
Sketch Map A

A-A' $\approx$ 120m



Sketch Map B

B-B' $\approx$ 60m



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

REVISION 02/24/90

SHORELINE ECOLOGICAL SUMMARY

REVISION 02-27-78

Segment ST / K9-6 Subdivision CP-02 Date (mo / day / yr) 4/26/90

Time (24 hr) 09:20 Biologist H. Davis

- (A) Substrate type and % of segments:
 (1) Bedrock 40 (2) Boulder 40 (3) Cobble 10 (4) Pebble 10 (5) Sand - (6) Silt -
- (B) Overall % cover of biota (% of segment): Dense 30% Moderate 30% Low 40% (40%)
- (C) Density, substrate preference (by number from A, above), & vertical zonation of major taxa: (upper-U; mid-M; low tidal-L); juveniles / adults (X), new settlement (3)

Photographs:
 Roll No. ST-20-7 ST-20-8

Frames 31-37, 1-9

BARNACLES Continuous mostly moderate.

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
 4, 5, 6

MYTILUS Small patches all the way around the island.

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
 4, 5, 6

GASTROPODS Continuous around the island. Littorina Dense, limpets sparse, Nuccella rare.

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
 4, 5, 6

FUCUS Patchy and sparse all the way around the island

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
 4, 5, 6

Wildlife Observations/ General Comments: 15-25 Sandhill cranes, 2 tundra swans, Glaucous-winged gulls, 4 pairs of oystercatchers. Sea otters feeding just off shore. A large male otter was surprised in a small pool in the upper intertidal. Spring algal growth is just beginning. Nuccella canaliculata laying eggs. Naticoidaea very common.

Ecological Considerations: Seabird colony. Harbor seals haul out and pup on the North-east tip of the island. Both the horned and tufted puffins have a rookery on the western edge of the island. The Tundra Swan and Sand hill crane nest on the bluffs and around the ponds.

DATE 4/26/90 TIME 09:20 - 13:00 TIDE HEIGHT -3 to +5.5

 1 = BEDROCK 2 = BOULDER 3 = COBBLE 5 = SAND 6 = SILT
 4 = pebble

FLORA:

SPECIES	UITZ	MITZ	LITZ	COMMENTS
BOSSIELLA/CORALLINA	1	1,2	1	
CALLIARTHRON/CORALLINA	1	1	1	
CLADOPHORA SPP	—	3	2,3	
COSTARIA SPP	—	—	—	in drift?
ENDOCLADIA MURICATA	1	1,2	—	
FILAMENTOUS GREENS	—	1,2,3	1,2,3	
FILAMENTOUS REDS	1	2,3	2,3	
OLOIOPELTIS FURCATA	1	1,2	—	
HALOSACCION GLANDIFORME	1	1,2	1	Very large (2.5m) individuals + new growth
LAMINARIA SPP	—	—	1,2	
LITHOTHAMNION	1	1	1	
NEREOCYSTIS SPP	—	—	2	Offshore + in drift also
PORPHYRA SPP	1	1,2	—	
RALPHSIA/HILDENBRANDIA	—	—	—	
RHODOMELA LARX	1	1,2	—	large shallow pools on rock shelves killed
RHODOMENTIA PALMATA	1,2	1,2	—	
SCYTOSIPHON SPP	1,2	1,2	2	
ULVA SPP	1	1	1,2	
ZOSTERA MARINA	—	—	—	
ENTEROMORPHA	1	1,2	—	Near fresh water run off

FAUNA:

ANTHOPELEURA SPP	—	1	1,2	
(SEMI) BALUNUS CARIOSUS	1,2	1,2	1,2,3	
B. GLANDULA	1,2,3	1,2,3	2	
BRYOZOANS	—	—	*	membranoptera on drift kelp.
CHITONS (other than K. TUNICATA)	—	—	1	Conicella on corallina
CLAMS	—	—	—	Shells Protolucina, Masoma, Saxidomus
CRABS	—	—	—	
DERMASTERIAS IMBRICATA	—	—	—	
KATHARINA TUNICATA	—	1,2	1,2	
LEPTASTERIAS HEXACTIS	—	—	—	
LIMPETS	1,2	1,2	1,2	
LITTORINA SPP	1,2,3	1,2,3	1,2,3	Very numerous
NUCELLA SPP	—	1,2	—	on barnacles in sheltered areas
PAGURUS SPP	1	1	1,2	
PISASTER OCHRACEUS	—	—	—	
POLYCHAETES	—	—	—	
PYCNOPODIA HELIANTHOIDES	—	—	—	
SEARLESIA DIRA	—	—	—	shells w/ hermit crabs
SERPULIDS	—	—	—	
SIPHONARIA THERSITES	—	—	—	
TEALIA	—	1,2	1	

4-26-90 K7-6 C-0

H. Davis

RECRUITMENT AND MORTALITY

1) Observations of recent settlement (S) or new growth (G):

a) Barnacles, less than 1mm (S), 1-3mm (G)

1. Vertical distribution (LTZ, MTZ, UTZ):

(S) rare in LTZ+MTZ (G) UTZ-LTZ, but mostly found in LTZ

2. Substrate (Rock, Boulder, Cobble, etc. Note if oiled/unoled):

Rock → Cobble. None in oiled areas

3. Horizontal distribution (Dense, Sparse, Patchy, Cont., etc.):

Continuous/moderate

b) Mytilus less than 2mm (S), 2-5mm (G)

1. Vertical distribution:

No (S) seen. Rare (G) in LTZ+MTZ

2. Substrate (Note if oiled/unoled):

on Rock in crevices below oiled area

3. Horizontal distribution:

Small scattered patches all the way around the island.

c) Littorina, eggs or less than 2mm dia. No eggs observed.

1. Vertical distribution:

MTZ-LTZ rare-sparse < 2mm dia.

2. Substrate (Note if oiled/unoled):

Rock-cobble. 90% of the Littorina are below the oiled area.

3. Horizontal distribution:

Continuous around the island.

d) Fucus, other algae, seagrass (Note species and what type of growth)

1. Vertical distribution:

UTZ, MTZ, LTZ

2. Substrate (Note if oiled/unoled):

Rock-cobble None oiled

3. Horizontal distribution:

Patchy around the island

e) Other (Describe)

The algae look like it is starting its spring growth.

2) Observations of mortality:

a) Barnacles (Describe as % dead individuals or scars)

1. Vertical distribution:

LTZ 60% ave 10-90% range MTZ 30% ave 10-80% range UTZ 30% ave 5%-70% range

2. Substrate (Note if oiled/unoled):

Rock-cobble. Very few (1%) in oiled zone.

3. Horizontal distribution:

continuous/patchy around the island

b) Mytilus (Describe as % Note if drilled or otherwise clearly predated)

1. Vertical distribution:

LTZ-UTZ ave 10% mortality, 0-30% range

2. Substrate (Note if oiled/unoled):

Never in an oiled area.

3. Horizontal distribution:

Rare/Patchy around the island

c) Other:

OG A Bio H. Davis

SEGMENT ST/ K9-6-CP-2

SUBDIVISION K9-6-CP-2A

DATE 4 / 26 / 90

CHECKLIST

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

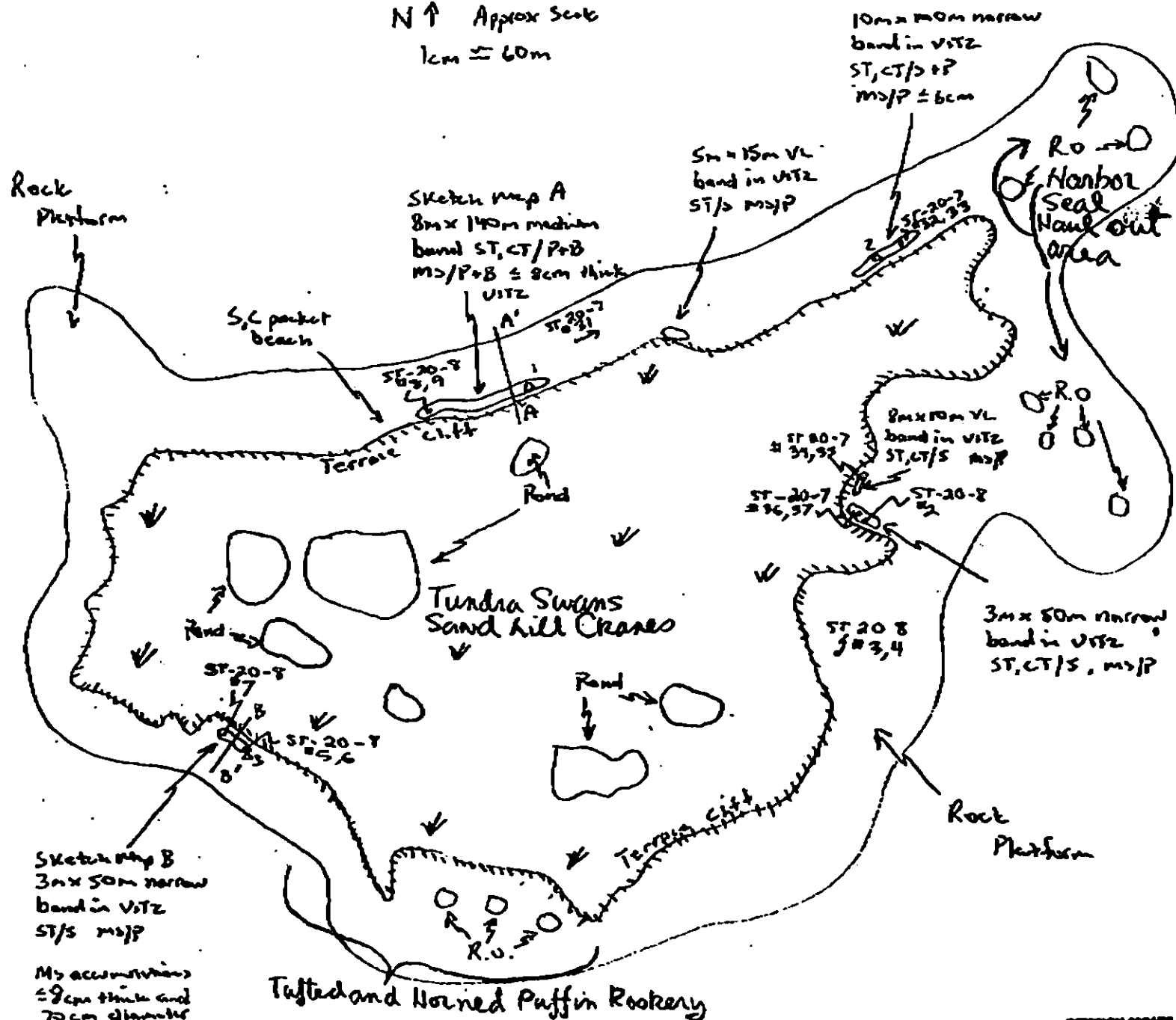
$\square$ CT/S
 Splashed Distribution

$\square$ Cited Vegetation

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

Sketch Map

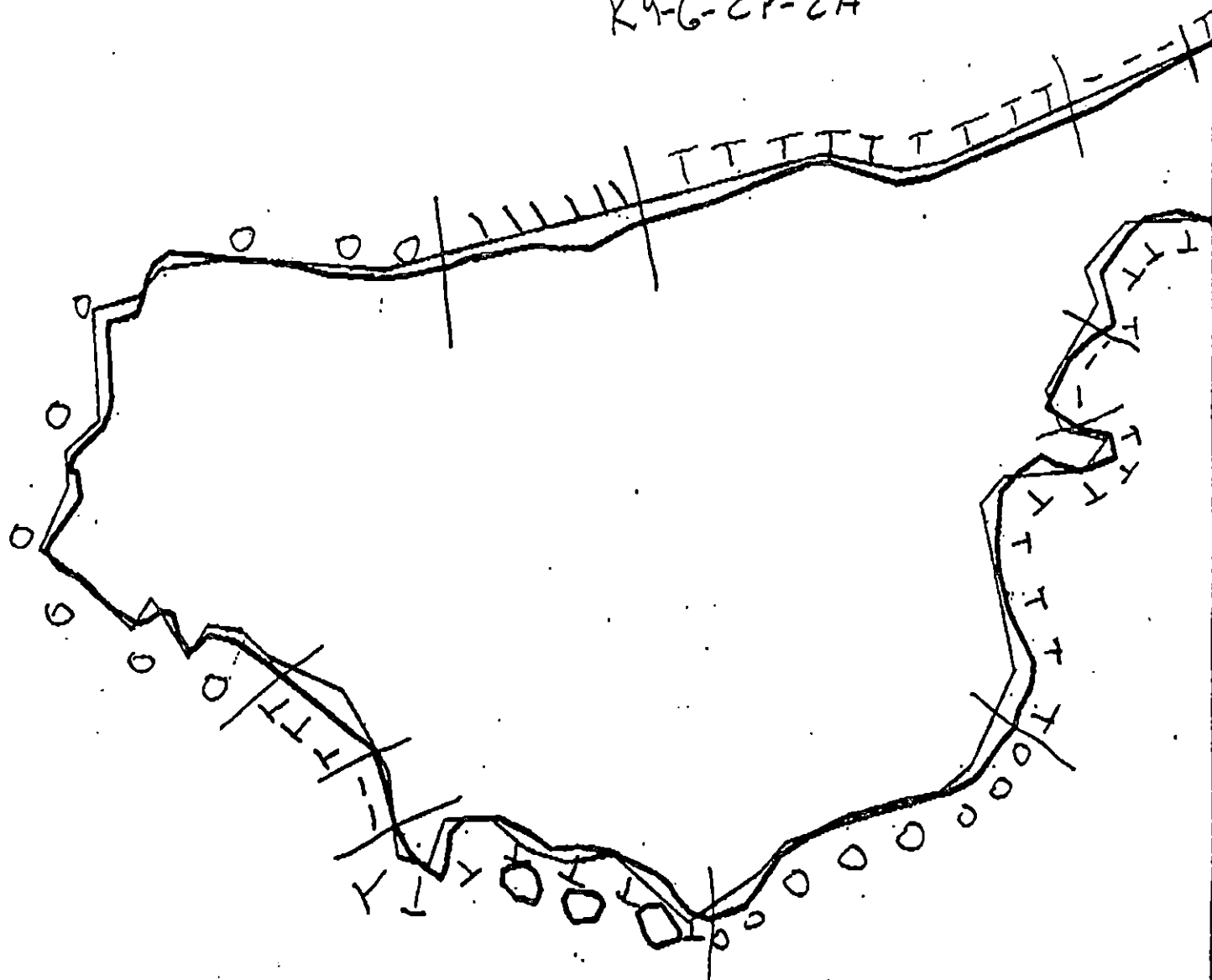
N $\uparrow$ Approx Scale
 1cm $\approx$ 60m



Oil Character Length (m): AP PO OV 2X40 CT 2X40 ST 2X40 MS 2X40 PT TB FL NO 1093

NEWBORN 2004/90

K9-6-CP-2A



XXXX Wide

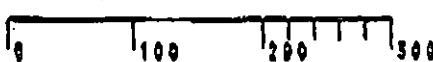
/// Medium

--- Narrow

TTTT Very Light

CP-2

Approx. Segment Length: 4449m



K9-6-CP-2A

Map Key: AKP-CP-2a

Name: Acton

Date: 4-29-90

K9-G-CP-2A

XXXX Wide

//// Medium

--- Narrow

TTTT Very Light

0000 No Oil

CP-2

Approx. Segment Length: 4449m

0 100 200 300

METERS

Map Key: K9-G-CP-2A
AKP-CP-2b

Name: Acton

Date: 4-29-90

Data Entered:

SHORELINE EVALUATION

SEGMENT ST/ K09-06-CP-02 SUBDIVISION A (1 OF 1) DATE 4/26/90

SEGMENT ENVIRONMENTAL SENSITIVITIES AND TIME CONSTRAINTS:

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

30,3Q Harbor seal and sea lion molting (8/15 to 9/15)

Katmai National Park

See attached Ecological Constraint sheet for specific constraints and contacts.

SUBDIVISION ECOLOGICAL CONSTRAINTS:

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

ARCHAEOLOGICAL CONSTRAINTS:

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

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

OILING CATEGORIZATION:

Wide 0 m: Medium 189 m: Narrow 320 m: V.Light 1918 m: No Oil 1241 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 Removal	<u> </u> Beach Cleaner
	<u> </u> Other (see comments)

COMMENTS: Recommended treatment includes manual pickup of mousse, oiled debris and oiled logs as indicated on sketch map. Bioremediate area indicated on sketch map. Work should be conducted between 7/2 and 8/14 due to pinniped constraints.

TAG COMMENTS: Monitors to assess the significance of the oiled logs.

TAG APPROVAL DATE: 5/8/90

ADEC Art Weiler Art Weiler

EXXON Andy Tera Andy Tera

NOAA Gary Petric Gary Petric

USCG G.A. Reiter G.A. Reiter

FOSC: DATE: 5-12-90

Treat before 15 May or after 15 Sep. Bioremediation is not authorized. NPS monitor to be on site.

OG A

SEGMENT ST/ K9-6-C9-2

SUBDIVISION K9-6-C9-2A

DATE 4/26/90

CHECKLIST

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

LEGEND

1 Δ

PT - No Subsurface Oil

2 Δ

PK - Subsurface Oil

CT/C

Continuous Distribution

CT/B

Broken Distribution

CT/P

Patchy Distribution

CT/S

Splashed Distribution

Cited Vegetation

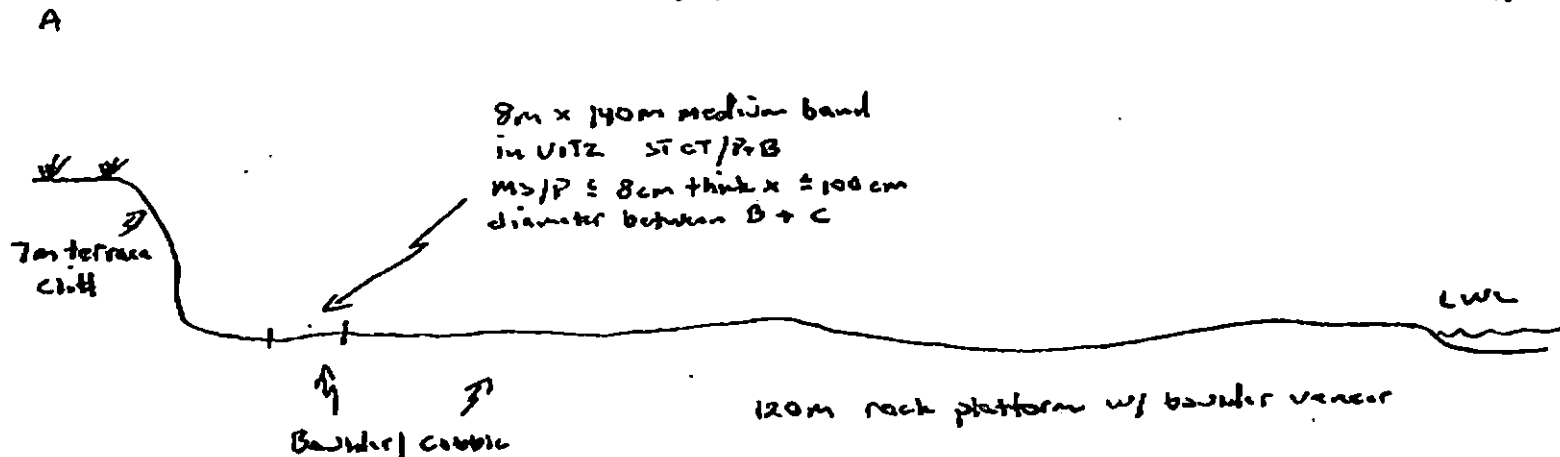
1 $\Rightarrow$

Photo location, direction, and number

SKETCH MAPS

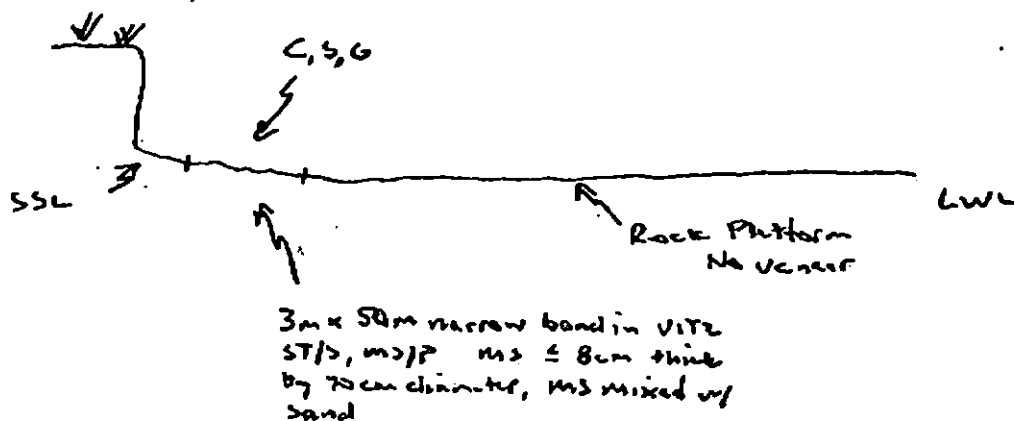
Sketch Map A

A-A' $\approx$ 120m



Sketch Map B

B-B' $\approx$ 60m



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

REVISED 02/24/90

08 Ad Bio H. Davis

SEGMENT ST/ K9-6-C9-2

SUBDIVISION K9-6-C9-2A

DATE 4 / 26 / 90

CHECKLIST

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

LEGEND

- 1 Δ
Pt - No Subsurface Oil
- 2 Δ
PR - Subsurface Oil
- CT/C

Continuous Distribution
- CT/B

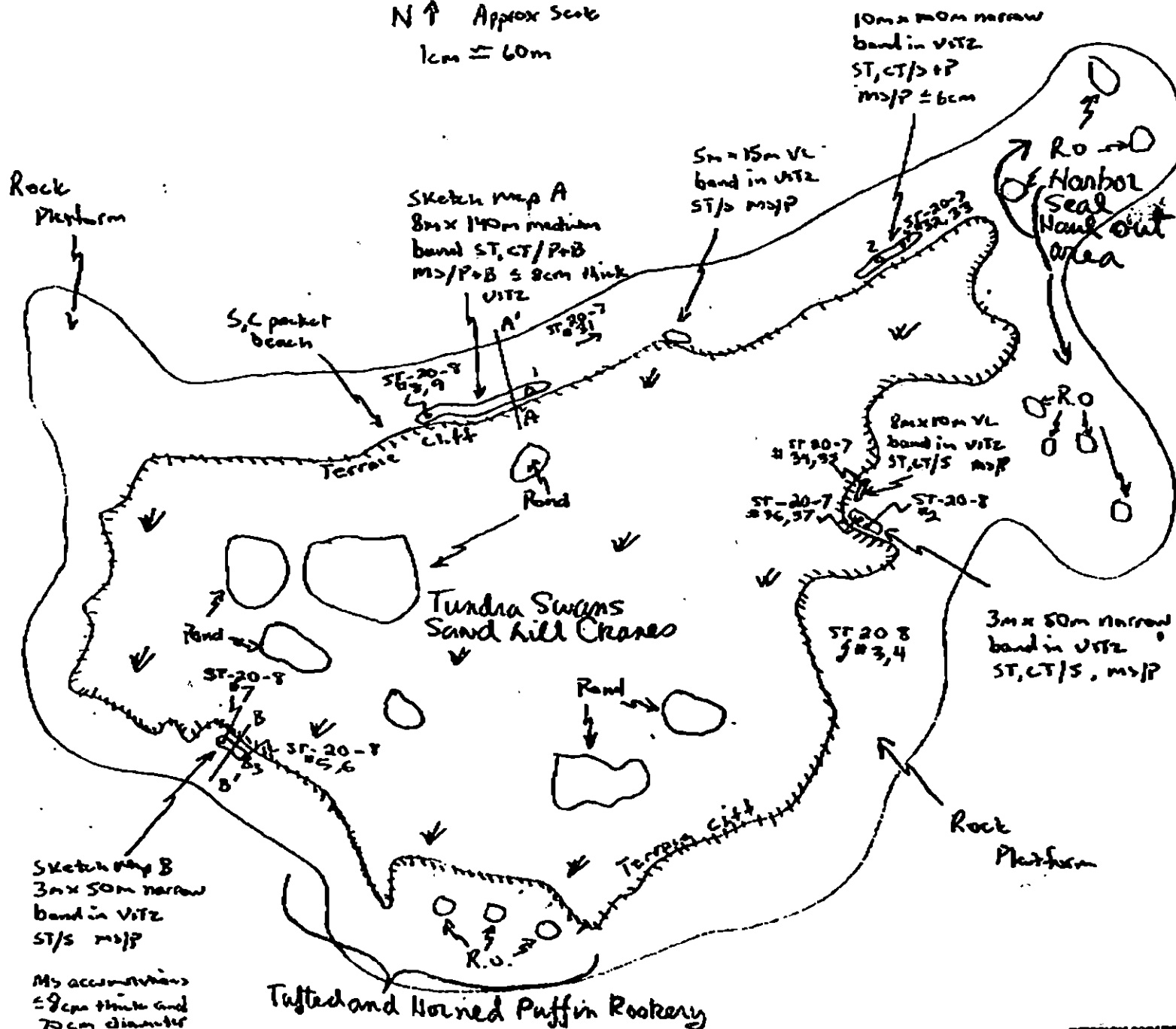
Broken Distribution
- CT/P

Patchy Distribution
- CT/S

Splashed Distribution
- ☐ Oil Vegetation
- 1 $\Rightarrow$
Photo location, direction, and number

Ecology Sketch Map

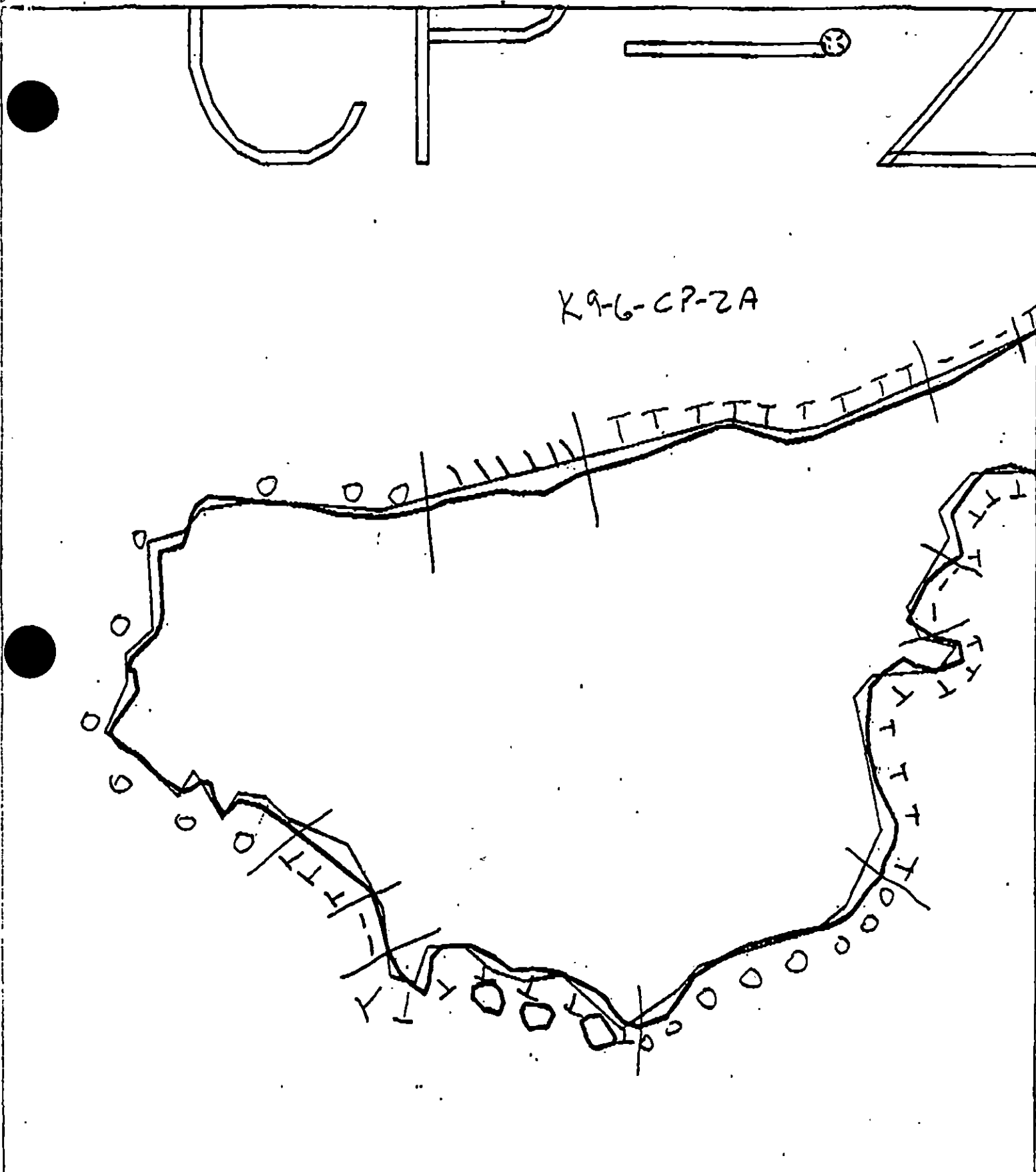
N $\uparrow$ Approx Scale
1cm $\approx$ 60m



Oil Character Length (m): AP PO CV 2x40 CT 2x40 ST 2x40 MS 2x40 PT TB FL NO 1093

REVISION: 2004/09

K9-6-CP-2A



● XXX Wide

//// Medium

--- Narrow

TTTT Very Light

CP-2

Approx. Segment Length: 4449m

K9-6-CP-2A

Map Key: AKP-CP-2c

Name: Acton

Date: 4-29-10

K9-G-CP-2A

XXXX Wide

//// Medium

--- Narrow

TTTT Very Light

0000 No Oil

CP-2

Approx. Segment Length: 4449m



METERS

K9-G-CP-2A
Map Key: AKP-CP-2b

Name: Acton

Date: 4-29-90

Data Entered:

ADDENDUM: SUBDIVISION CONSTRAINTS

SEGMENT K09-06-CP-02 SUBDIVISION A (1 of 1)

WORK WINDOW	
Manual Pickup	CLOSED

ARCHAEOLOGICAL STANDARD CONSTRAINT

If cultural resources are uncovered, PHONE 564-3274.

APPLICABLE ECOLOGICAL TIME CONSTRAINTS

3N,O,P,Q	Harbor Seal & Sea Lion Pupping and Molting	Closed to manual pickup prior to 7/1 and after 8/15.
5R	Seabird Colony	Closed to all activities; work site is less than 800m from seabird colony.

OTHER ECOLOGICAL CONSIDERATIONS

If seabird colony constraint is removed, other ecological considerations will apply.

FOSC

[Signature]

Date

6-15-90

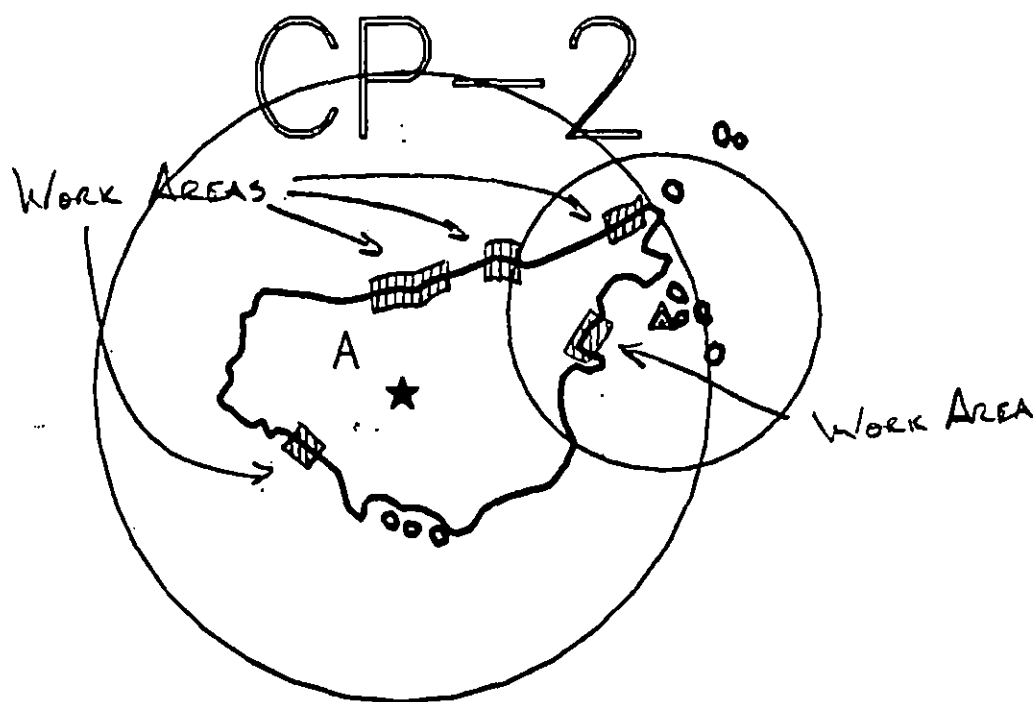
Prepared by

[Signature]

Date

6/15/90

Access denied
make Luke 6/13/90



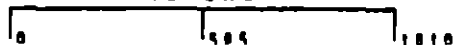
TREATMENT



Exxon Company, USA
Map Key: NGP-CP-2
June 10, 1990



ECOLOGY MAP
SEGMENT K9N-6 CP-2
SUBDIVISION --- (--- of ---)
METERS



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

1 inch = 1657 feet

SHORELINE EVALUATION

SEGMENT ST/ K09-06-CP-02 SUBDIVISION A (1 OF 1) DATE 4/26/90

SEGMENT ENVIRONMENTAL SENSITIVITIES AND TIME CONSTRAINTS:

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

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

Katmai National Park

See attached Ecological Constraint sheet for specific constraints and contacts.

SUBDIVISION ECOLOGICAL CONSTRAINTS:

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

ARCHAEOLOGICAL CONSTRAINTS:

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

SHPO SIGNATURE: J. David McWhorter

DATE: 5/2/90

OILING CATEGORIZATION:

Wide 0 m: Medium 189 m: Narrow 320 m: V.Light 1918 m: No Oil 1241 m

Subsurface Oil Observed: Yes No X Maximum Depth

RECOMMENDATIONS:

 No Treatment Recommended

X Treatment Recommended

X Manual Pickup

X Bioremediation

 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 pickup of mousse, oiled debris and oiled logs as indicated on sketch map. Bioremediate area indicated on sketch map. Work should be conducted between 7/2 and 8/14 due to pinniped constraints.

SEE CONSTRAINTS ADDENDUM dated 6/15/90

TAG COMMENTS: MONITOR TO ASSESS THE SIGNIFICANCE OF THE OILED LOGS

TAG APPROVAL DATE: 5/8/90

ADEC ART WENGER Art Wenger

EXXON AMY TAYLOR Amy Taylor

NOAA GARY STRONG Gary Strong

USCG G.A. BEITER G.A. Beiter

FOSC:

DATE: 5-12-90

Treat before 15 May or after 15 Sep. Bioremediation is not authorized. NPS monitor to be on site.

WORK PLAN ADDENDUM

Segment K-09-06-CP02

Subdivision A

Dated Aug 13 1990

MODIFICATION

1. REASON FOR MODIFICATION

REQUEST BY EXXON TO DEMOBILIZE DUE TO MINIMAL REMAINING OIL AND SAFETY CONSIDERATIONS OUTLINED IN THE ATTACHED PACKAGE

2. ADJUSTMENT TO WORK PLAN

TAG RECOMMENDS DEMOBILIZATION DUE TO THE FACTORS CONTAINED WITHIN THE ATTACHED PACKAGE OF INFORMATION

SHPO APPROVAL NEEDED YES NO X

SHPO SIGNATURE _____

TAG APPROVAL DATE Aug 13 1990

ADEC RAY MORAN'S R. Moran request 24hr comments were ADVR be cons. - good.

EXXON ANDY TEA

FOSC my L DATE 15 AUG 90

NOAA Burl Wescott Burl Wescott

USCG D.D. Rome DD Rome

Continue to work the subdivision.
Requires careful planning with regard to tides, sea & wx conditions — Safety remain paramount ~~to be~~ this being said — the site can & should be worked safely — just pick your time to complete the operations as safely & quickly as possible. my L

REVISION 1

7/24/90

ADDENDUM: SUBDIVISION CONSTRAINTS

SEGMENT K09-08-CP-02 SUBDIVISION A (1 of 1)

WORK WINDOW	
Manual Pickup	☒ OPEN (NPS & USFWS MONITORS REQUIRED) ☐ CLOSED

ARCHAEOLOGICAL STANDARD CONSTRAINT

If cultural resources are uncovered, PHONE 564-3274.

APPLICABLE ECOLOGICAL TIME CONSTRAINTS

3N,O,P,Q	Harbor Seal & Sea Lion Pupping and Molting
5R	Seabird Colony
5T	Bald Eagle Nest

Closed to manual pickup prior to 7/1 and after 8/15.

Open with limited access and NPS monitor present. Closed to all activities; work site is less than 800m from seabird colony. JPP 7/24

USFWS 6/1/90 Map indicates an active nest in SUBDIVISION A. No Constraint to Manual pickup more than 400m from active nest. USFWS monitor required for work within 400m of nest. JPP 7/24

OTHER ECOLOGICAL CONSIDERATIONS

If seabird colony constraint is removed, other ecological considerations will apply.

for work within 400m of nest.

G.A. Renteria
for FOSC
7/24

FOSC

Date

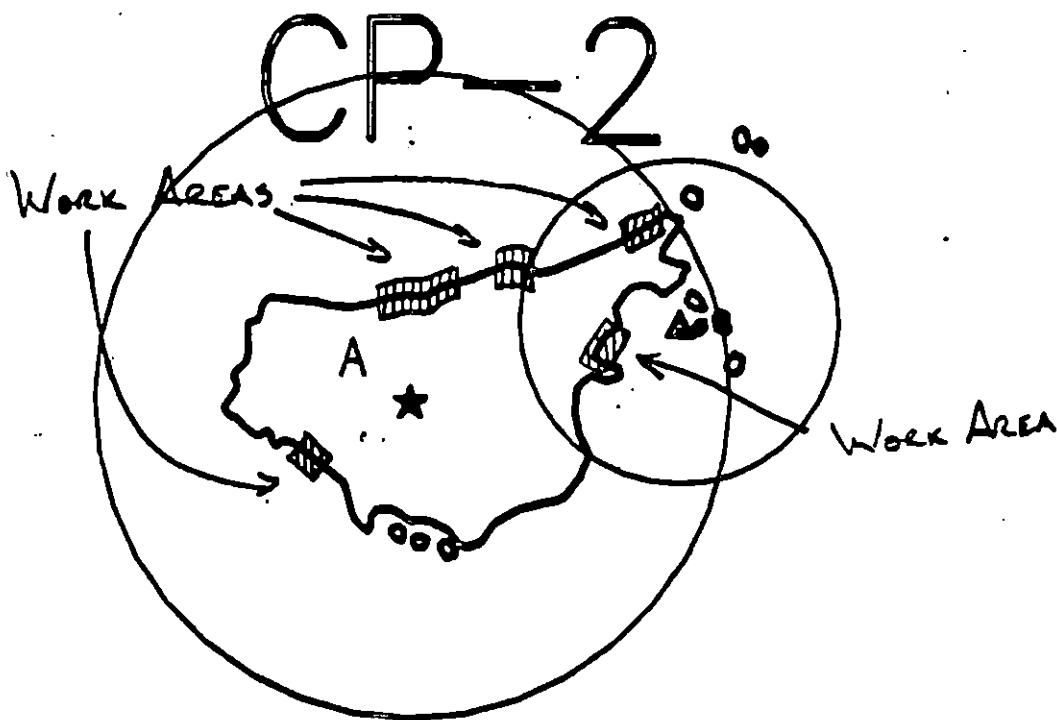
6-15-90

Prepared by

Date

6/15/90

Access denied
make Luke 6/13/90



ATTACHMENT



Exxon Company, USA



ECOLOGY MAP
SEGMENT K9N-6 CP-2
SUBDIVISION --- (--- of ---)
MAY 1990

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

SHORELINE EVALUATION

SEGMENT ST/ K09-06-CP-02 SUBDIVISION A 1 OF 1 DATE 4/26/90

SEGMENT ENVIRONMENTAL SENSITIVITIES AND TIME CONSTRAINTS:

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

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

Katmai National Park

See attached Ecological Constraint sheet for specific constraints and contacts.

SUBDIVISION ECOLOGICAL CONSTRAINTS:

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

ARCHAEOLOGICAL CONSTRAINTS:

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

SHPO SIGNATURE: J. David McManis

DATE: 5/8/90

OILING CATEGORIZATION:

Wide 0 m: Medium 189 m: Narrow 320 m: V.Light 1918 m: No Oil 1241 m
Subsurface Oil Observed: Yes No X Maximum Depth

RECOMMENDATIONS:

 No Treatment Recommended

X Treatment Recommended

X Manual Pickup

X Bioremediation

 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 pickup of mousse, oiled debris and oiled logs as indicated on sketch map. Bioremediate area indicated on sketch map. Work should be conducted between 7/2 and 8/14 due to pinned constraints.

SEE CONSTRAINTS ADDENDUM dated 6/15/90 JF

TAG COMMENTS: Monitors To Assess THE SUFFICIENCY OF THE OILED LOGS

REVISION 1 TO
SEE CONSTRAINTS ADDENDUM DATED 7/24/90 JPP

TAG APPROVAL DATE: 5/8/90

ADEC: Art Weiner

EXXON: Art Weiner

NOAA: Gary Peters

USCG: G.A. Reiter

FOSC:

DATE: 5-12-90

Treat before 15 May or after 15 Sep. Bioremediate is not authorized. NPS monitor to be on site.

SHORELINE EVALUATION

SEGMENT ST/ K09-07-CO-001 SUBDIVISION A (1 OF 1) DATE 5/5/90

SEGMENT ENVIRONMENTAL SENSITIVITIES AND TIME CONSTRAINTS:

4LL State Marine Park National Parks

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: Rachel Jean Darr DATE: 5/18/90

OILING CATEGORIZATION:

Wide 0 m: Medium 0 m: Narrow 0 m: V.Light 725 m: No Oil 8385 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 Removal	☐ Beach Cleaner
	☐ Other (see comments)

COMMENTS:

TAG COMMENTS:

TAG APPROVAL DATE: 5/17/90.

ADEC Art Weiner Art Weiner

EXXON Amy Teal Amy Teal

NOAA Gary Petruc Gary Petruc

USCG G.A. PEITER G.A. Peiter

FOSC: myl DATE: 5-23-90

OG Acton

SEGMENT ST/ K9-7-CO-1

SUBDIVISION K9-7-CO-1A

DATE 5/5 90

CHECKLIST

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

LEGEND

1 Δ

Pit - No Subsurface Oil

2 Δ

Pit - Subsurface Oil

CT/C

Continuous Distribution

CT/B

Broken Distribution

CT/P

Patchy Distribution

CT/S

Splashed Distribution

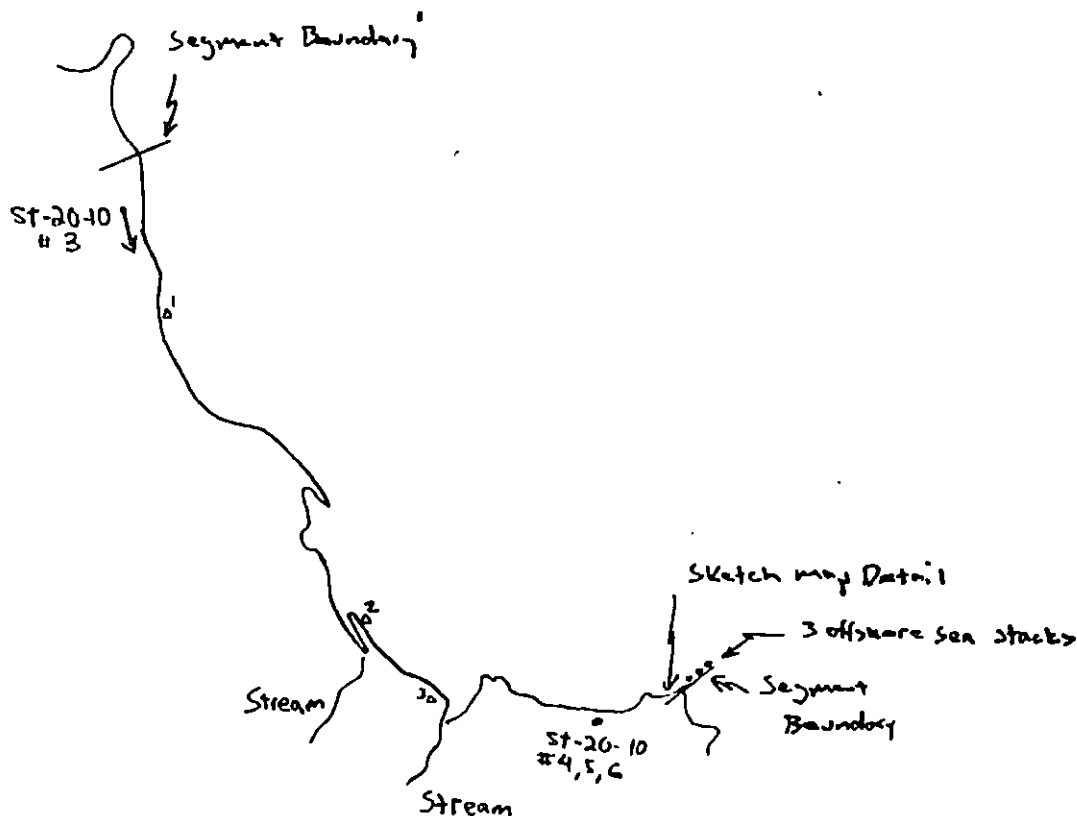
Oiled Vegetation

1 $\Rightarrow$

Photo location, direction,
and number

SKETCH MAP

N $\uparrow$ 1cm $\approx$ 600m



Oil Character Len AP 0 PO 0 CV 0 CT 0 ST 300 MS 100 TB 0 FL 0 NO 8977

REVISION: 02/24/90

OG Acton

SEGMENT ST/ K9-7-CO-1

SUBDIVISION K9-7-CO-1A

DATE 5 / 5 90

CHECKLIST

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

LEGEND

1 Δ

Pit - No Subsurface Oil

2 Δ

Pit - Subsurface Oil

CT/C

Continuous Distribution

CT/B

Broken Distribution

CT/P

Patchy Distribution

CT/S

Splashed Distribution

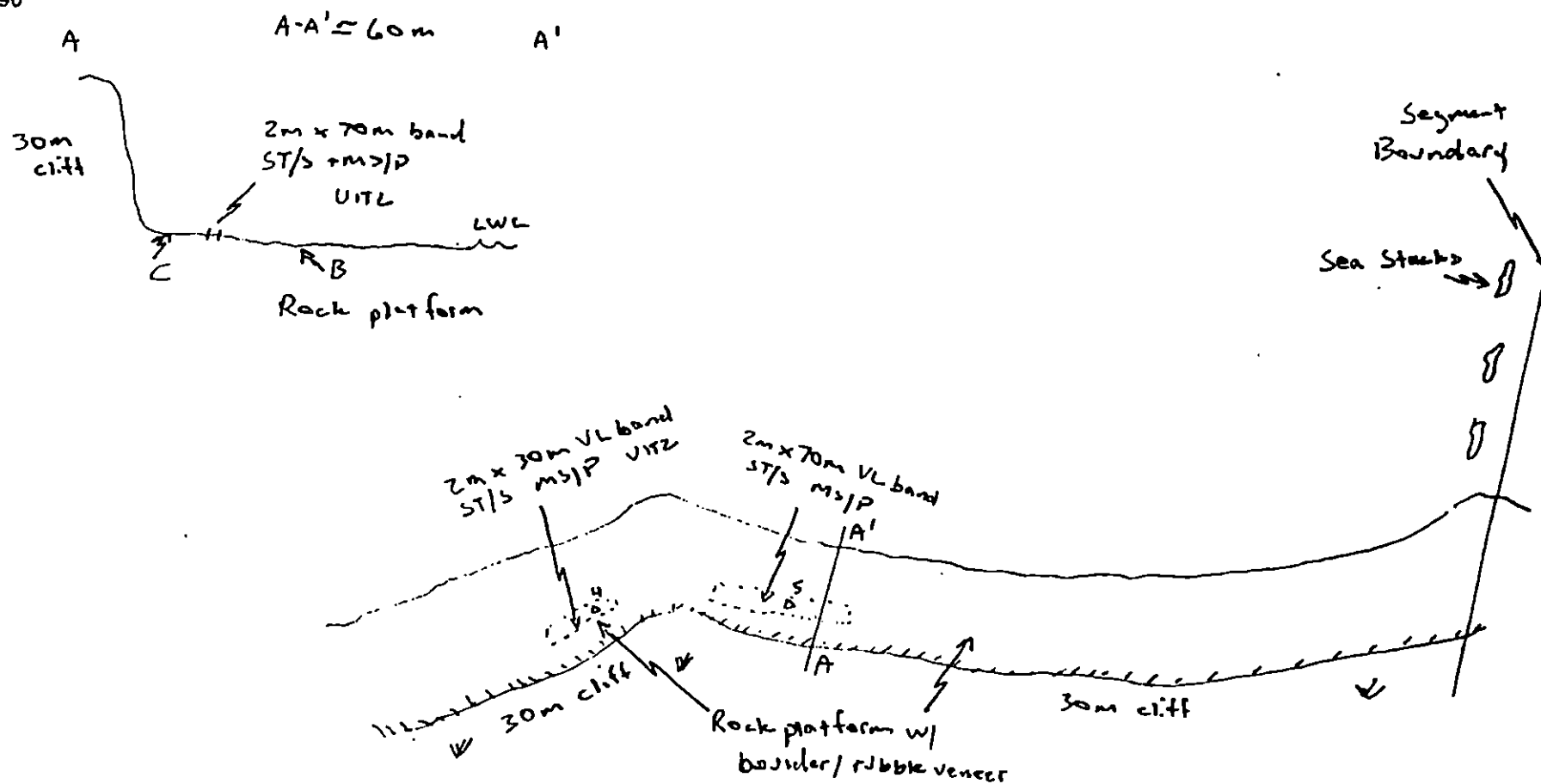
Oiled Vegetation

1 $\Rightarrow$

Photo location, direction,
and number

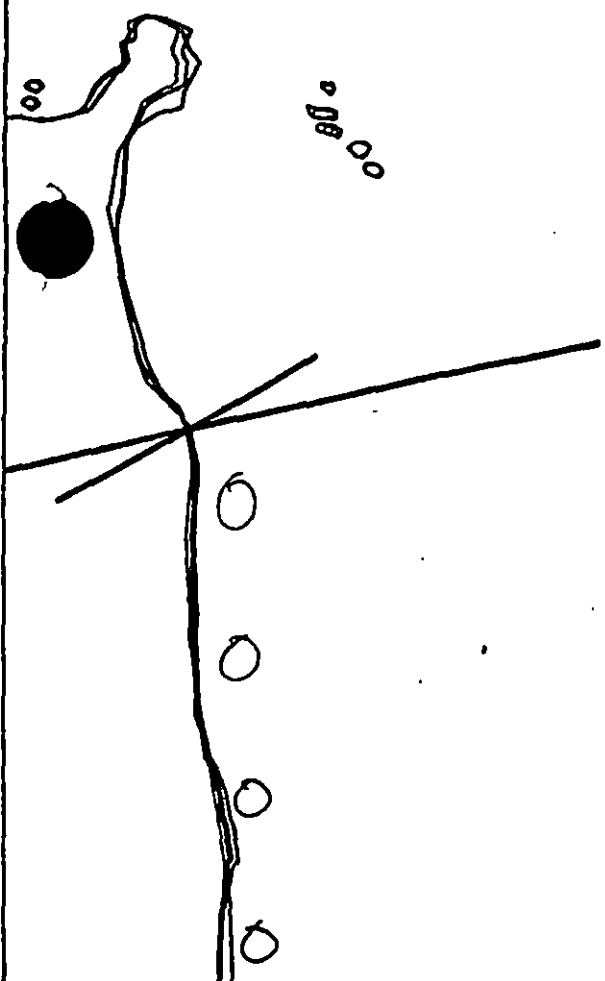
SKETCH MAP Detail

N $\uparrow$ Approx Scale 1cm = 30m



Oil Character Len: AP PO CV CT ST MS TB FL NO

ISSN: 93/24/98



K9-7- CO-1A

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

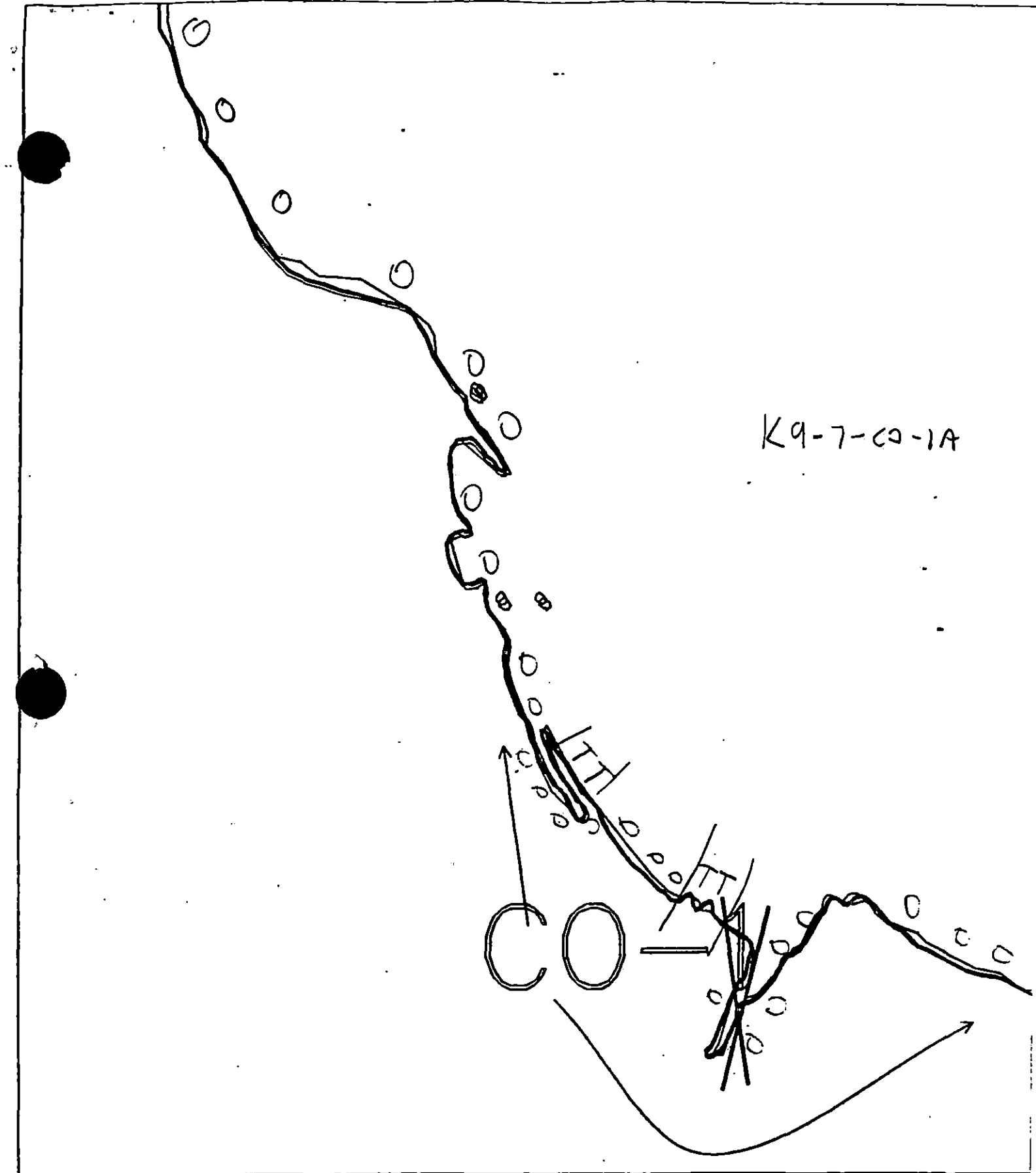
CO-1

Approx. Segment Length: 9595m



K9-7- CO-1A
Map Key: AKP-CO-1c
Name: Acton
Date: 5-5-90
Data Entered:





K9-7-CO-1A

CO

XXXX Wide

/// Medium

---- Narrow

TTTT Very Light

0000 No Oil

CO-1

Approx. Segment Length: 9595m



K9-7-CO-1A

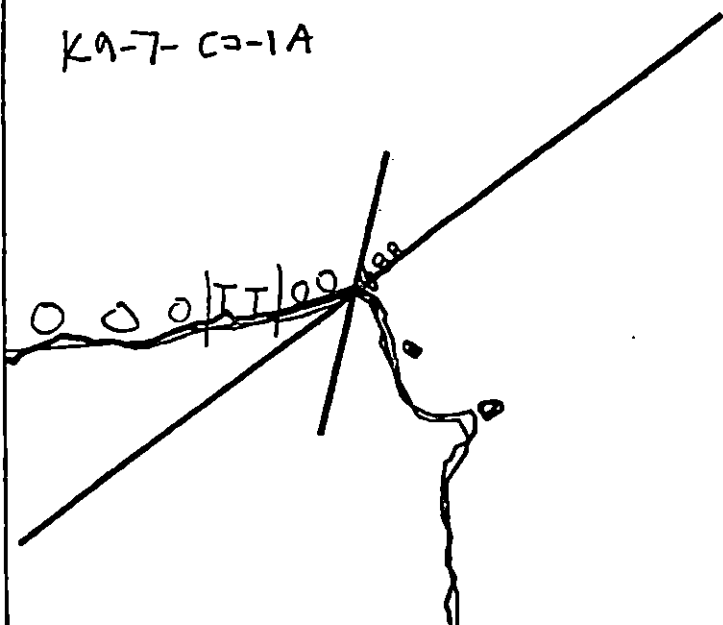
Map Key: AKP-CO-1a

Name: Acton

Date: 5-5-90

Data Entered:

K9-7-C0-1A



XXXX Wide

/// Medium

--- Narrow

TTTT Very Light

OOOO No Oil

C0-1

Approx. Segment Length: 9595m



K9-7-C0-1A

Map Key: AKP-C0-1b

Name: Acton

Date: 5-5-90

Data Entered:

REGION: KODIAK

SEGMENT: ST/K09-07-CO-001

SUBDIVISIONS: A (1 OF 1)

SHORELINE EVALUATION

SEGMENT ST/ K09-07-CO-001 SUBDIVISION A (1 OF 1) DATE 5/5/90

SEGMENT ENVIRONMENTAL SENSITIVITIES AND TIME CONSTRAINTS:

4LL State Marine Park National Parks

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 725 m: No Oil 8385 m
Subsurface Oil Observed: Yes _____ No X Maximum Depth _____

RECOMMENDATIONS:

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

COMMENTS: _____

TAG COMMENTS: _____

TAG APPROVAL DATE: _____

ADEC _____
EXXON _____
NOAA _____
USCG _____

FOSC: _____ DATE: _____

KODIAK ECOLOGICAL CONSTRAINTS

- 1A Salmon stream mouth - fry outmigration (4/15 to 7/31)
1B Salmon stream mouth - spawning (7/15 to 9/10; PEAK 8/15)
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, 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 prior to treatment for consultation and/or permit application.
AGENCY CONTACT PERSON: ADF&G Ken Middleton 267-2299
- 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, 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 Kotol Bay Hatchery release
Pink salmon - late May, early June; Chum salmon - June; Sockeye salmon - early July.
- 1H Remote release site
No use of methods which might affect nearshore oil or toxicity levels, such as hot water wash or Inipol application, 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 for confirmation and authorization.
AGENCY CONTACT PERSON: ADF&G Larry Peltz 424-3214
- 1I Gill net area
1J Purse seine area
Mainland, West side Kodiak, Shuyak & Moser/Olga Bay (6/9 to 10/1)
East side Kodiak, East side Afognak (7/4 to 10/1)
1K Purse seine hook-off
1L Set net sites
Contact ADF&G for confirmation - dates and locations may vary. 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 Larry Nicholson 424-4791
- 2M Herring spawning (4/15 to 6/30)
Contact ADF&G for confirmation - dates and locations may vary. Restrict boat traffic to essential minimum. Avoid damage to unloiled intertidal and subtidal algae and seagrass. If plans for treatment include methods such as hot water wash or Inipol application which might affect nearshore oil or toxicity levels, contact ADF&G for consultation and authorization.
AGENCY CONTACT PERSON: ADF&G Larry Nicholson 486-4791
- 3P Harbor seal and sea lion pupping (5/10 to 7/1)
Harbor seal and sea lion molting (8/15 to 9/15)
Restrict boat and air traffic to essential minimum. No personnel within 400m. Aircraft to maintain 800m horizontal and 300m vertical distance from haulouts. No application of Inipol within two weeks of arrival dates (work window at these sites is limited to 7/2 to 7/31). Contact ADF&G and USFWS prior to treatment for confirmation.
AGENCY CONTACT PERSON: US National Marine Fisheries Service Steve Zimmerman 586-7235
ADF&G Don Calkins 267-2403
- 5R Seabird colony (5/1 to 9/1)
Restrict air and boat traffic to essential minimum. No personnel within 800m. Aircraft to maintain 800m horizontal, 300m vertical distance from colony. Contact USFWS prior to treatment.
AGENCY CONTACT PERSON: USFWS Jill Parker 786-3377
- 5S Shorebird/waterfowl concentration (4/1 to 5/15)
Restrict all activity to essential minimum, especially air traffic. Contact USFWS and ADF&G for confirmation.
AGENCY CONTACT PERSON: USFWS Jill Parker 786-3377
ADF&G Tom Roth 267-2208
- 5T All Bald Eagle nests (3/1 to 6/1)
Active Bald Eagle nests (3/1 to 9/1)
Restrict air traffic and all disturbance to essential minimum. No personnel within 400m 3/1 to 6/1. Air approach and takeoff from and to seaward only; maintain 800m horizontal, 300m vertical distance from nests. Contact USFWS prior to treatment for confirmation of dates.
AGENCY CONTACT PERSON: USFWS Jill Parker 786-3377
- 6U Recreation: Tent sites (6/1 to 9/15)
6V Anchorages (6/1 to 9/15)
6W Forest Service cabins (6/1 to 9/15)
6X Lodge (6/1 to 9/15)
6Y Special use destination
- 7Z Subistence area: Salmon harvesting (6/1 to 9/30)
7HH Finfish harvesting
7II Deer harvesting (8/1 to 1/7)
7JJ Invertebrate harvesting
7KK Bear harvesting (4/1 to 5/15 and 10/25 to 11/30)
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 1 K 9-7 CO-1 SUBDIVISION: K 9-7-CO-1A DATE 5-5-90

CG

NAME D. Haven J. LMS, USCGR

SIGNATURE [Signature]

☒ NO TREATMENT RECOMMENDED
COMMENTS

☐ TREATMENT SUGGESTED

ADEC

NAME Francine J. Bennis

SIGNATURE [Signature]

☒ NO TREATMENT RECOMMENDED
COMMENTS

☐ TREATMENT SUGGESTED

Oil is present in a ~2 meter wide band spanning approximately 100 meters total. Mousse & mousse saturated fine sediments are trapped under cobbles and boulders. There is very little recoverable oil. The area is difficult to access.

LAND MANAGER NPS

NAME Will TROYER

SIGNATURE [Signature]

☐ NO TREATMENT RECOMMENDED
COMMENTS

☐ TREATMENT SUGGESTED

There is a small band of scattered mousse wedged between large boulders and bedrock and a few splatters of oil. If appear this would be very difficult to remove. This is in the eastern end of the segment and on a high energy beach and access by vessel is difficult because of the beach exposure.

SHORELINE OILING SUMMARY

REVISION NO. 04-13-90

OG Acton USCG Haven SEGMENT ST/ K9-7-20-1
 BIO Davis LAND REP NPS Trolley, Pembroke SUBDIVISION K9-7-20-1A (1 OF 1)
 EXXON - ADEC Bennis TIME 4:15 to 8:20
 TEAM NO. 20 TIDE LEVEL +5 to +3 DATE 5/5/90
 EST. SUBDIVISION LENGTH: 9277 m ☒ Sun ☐ Clouds ☐ Fog ☐ Rain ☐ Snow
 UPLANDS DESCRIPTION: ☐ Grass ☐ Forest ☒ Rock
 SURVEYED FROM: ☐ Foot ☐ Boat ☐ Helo WORKING DIRECTION: NW to SE
 SURFACE SEDIMENTS: R 20 % B 60 % C 15 % P - % G - % S 5 % M - % V - %
 SLOPE: Lang 85 % Hang 15 % Vert - % WAVE EXPOSURE: ☐ Low ☐ Med ☒ High
 OIL CATEGORY LENGTH: W - m M - m N - m VL 380 m NO 8977 m

SURFACE OIL

CHARACTER	DISTRIBUTION				OIL / FILM COLOR								IMPACTED ZONES			
	/C	/B	/P	/S	SBL BR	DBL BW	GY	SL	DBH TL	LBR	SU	U	M	U		
ASPHALT PAVEMENT																
POOLED																
COVER																
COAT																
STAIN				✓		✓						✓				
MOUSSE			✓						✓			✓				
PATTIES																
TARBALLS																
FLM																
NO OIL											✓		✓	✓		

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 -#BAGS 0

Photographs:

Roll No. ST-20-10Frames #3-6

SUBSURFACE OIL

PIT NO.	PIT DEPTH (cm)	SUBSURFACE OIL CHARACTER					OILED INTERVAL (CM)	BELOW		OIL / FILM COLOR						PIT ZONE				A N A	SHEEN (Y/N)	▼	SURFACE - SUBSURFACE SEDIMENTS			
		OP	OR	OL	OF	NO		VO	UC	SBL BR	DBL RW	GY SL	DRR TL	LBR	SU	U	M	U								
1	10					✓	-		✓								✓									BC
2	10					✓	-		✓								✓									C
3	10					✓	-		✓								✓									C
4	5					✓	-		✓								✓									BR
5	5					✓	-		✓								✓									BR
							-																			

COMMENTS Oil was observed as VL ST/S near the two streams, and as VL ST/S and MS/P near the eastern segment boundary. The oil observed in the Detail Sketch area has decreased significantly since August 1989.

REVIEWED BAT DATE 8 MAY 90

OG Act

SEGMENT ST/ K9-7-co-1

SUBDIVISION K9-7-co-1A

DATE 5/5 90

CHECKLIST

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

LEGEND

1 Δ

Pit - No Subsurface Oil

2 Δ

Pit - Subsurface Oil

CT/C

Continuous Distribution

CT/B

Broken Distribution

CT/P

Patchy Distribution

CT/S

Splashed Distribution

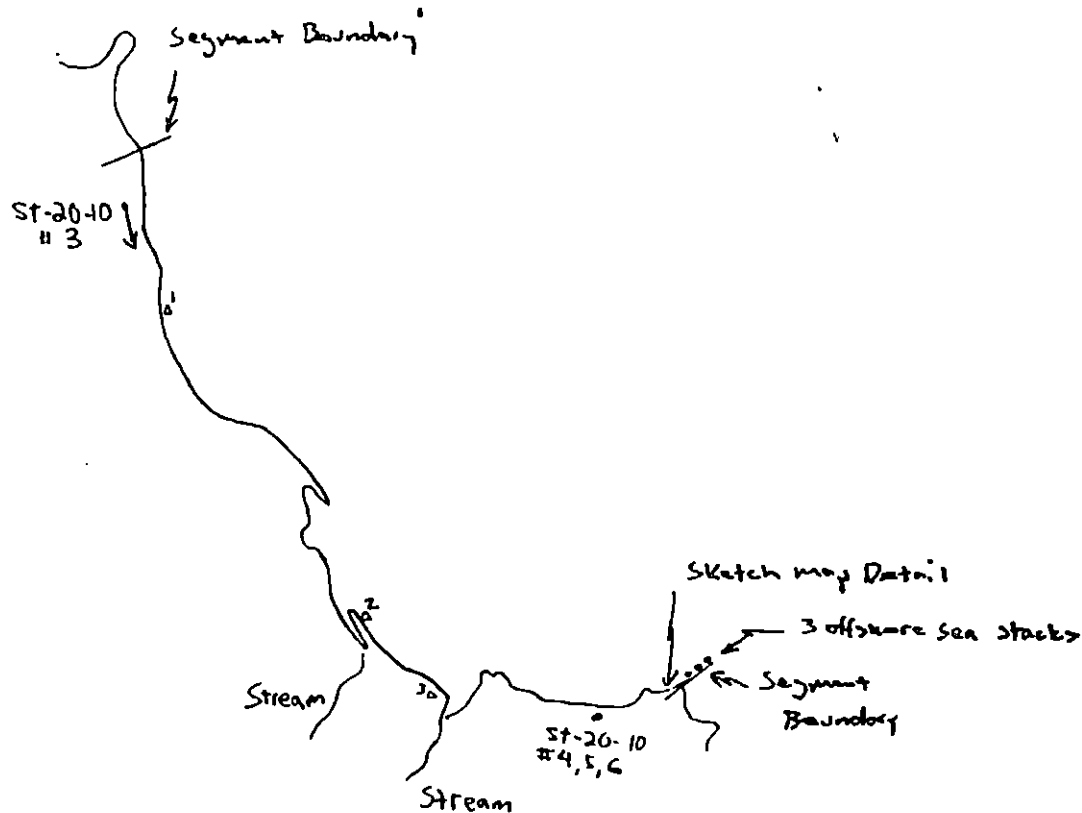
Oiled Vegetation

1 $\rightarrow$

Photo location, direction,
and number

SKETCH MAP

N $\uparrow$ 1cm = 600m



Oil Character Length (m): AP 0 PO 0 CV 0 CT 0 ST 300 MS 100 PT 0 TB 0 FL 0 NO 8977

REVISION: 03/24/90

OG Act

SEGMENT S A-7-CO-1

SUBDIVISION K9-7-CO-1A

DATE 5 / 5 90

SEARCH MAP Detail

N ↑

Approx Scale 1cm = 30m

CHECKLIST

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

LEGEND

1 Δ

Pit - No Subsurface Oil

2 Δ

Pit - Subsurface Oil

CT/C

Continuous Distribution

CT/B

Broken Distribution

CT/P

Patchy Distribution

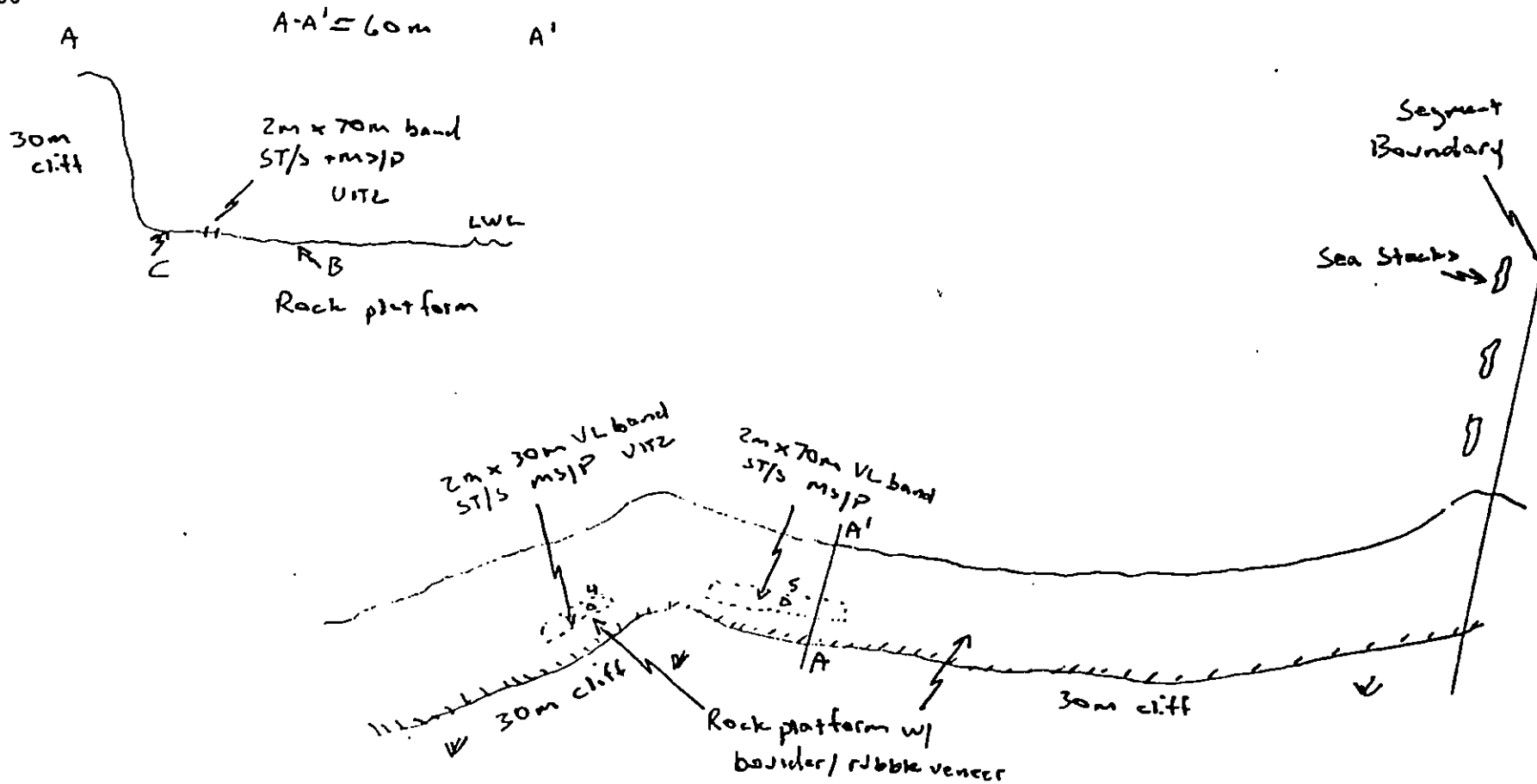
CT/S

Splashed Distribution

Oiled Vegetation

1 →

Photo location, direction,
and number



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

REVISION: 03/24/90

SHORELINE ECOLOGICAL SUMMARY

REVISION: 03/22

Segment ST/k9-7 Subdivision CO-01 "A" Date (mo / day / yr) 5/5/90

Time (24 hr) 16:15 Biologist H. Davis

(A) Substrate type and % of segments:
(1) Bedrock 20 (2) Boulder 60 (3) Cobble 15 (4) Pebble - (5) Sand 5 (6) Silt -(B) Overall % cover of biota (% of segment): Dense - Moderate 30% Low 70% (30%)

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

Photographs:
Roll No. ST-20-10Frames # 3 - 6

BARNACLES Moderate-Rare. Sporadic distribution.

Dense			Moderate			Sparse			Rare			NOT PRESENT 4, 5, 6
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 Sparse-Rare patches

Dense			Moderate			Sparse			Rare			NOT PRESENT 3, 4, 5, 6
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 Sporadic Dense-Rare Littorina Sparse Nucella Moderate limpets

Dense			Moderate			Sparse			Rare			NOT PRESENT 4, 5, 6
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 Patchy distribution

Dense			Moderate			Sparse			Rare			NOT PRESENT 3, 4, 5, 6
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: See Ecology sketch map

Ecological Considerations: No Ecological constraints listed. However there is an Eagle nest on the Third pinnacle at the southern end of the segment. The nest is in use. The stream to the north has pinkies spawning in it. Schools of fry were seen in small coves. There is also a Red-faced cormorant rookery in the segment.

Ecology Map

1/2 mile

K4-7 CU-01

H. Davis

5/5/90

Much of this segment was boulder-cobble beaches with very low level of inhabitation. On these beaches littorina, limpets, Balanus, Endocladia, Corallina, Ulva and Fucus are the most common inhabitants. Bedrock platforms in this segment quite often had cobbles being swept across them by wave action. Here there was even lower abundance. Littorina, Balanus, limpets, Mytilus, corallina, Ulva, Fucus, and Rhodomena were the most common inhabitants. The area with the most abundant biota was a low profile, boulder-bedrock beach with few cobbles. The MTZ was dominated by Balanus (and some Chthamalus), Littorina (scutulata + sitkana), Nucella (lima or emarginata?), Katharina tunicata, Pagurus sp, Amphipods, Porphyra, corallina, Cladophora, Ralfsia, Endocladia and Callianthron. MTZ has Cladophora, Ulva, Enteromorpha, Fucus, Corallina, Halosaccion, Odonthalia, Rhodomena, Zostera, Halichondria, Anthopleura artemesia, Nereidae?, Balanus, Pagurus sp, Mopalia, Tonicella, Katharina, Littorina, Nucella, Mytilus, Clinocardium (shells only), Leptasterias, and Strongylocentrotus sp (shell). LTZ Alaria, Laminaria, unknown red algae blade, Fucus, Sargassum, Halosaccion, Ptilota, Halichondria, Anthopleura artemesia, Serpulidae, Balanus, Tonicella, Littorina, Nucella, Leptasterias, Holothuroid, and Platyhelminthes. Birds: Oystercatchers, 2 adult Eagles, Surf scoters, Teal (green wing?), Mallard, Harlequin, Red-face cormorants, and Glaucous-winged gulls. Bear, wolf and fox tracks in upper intertidal.

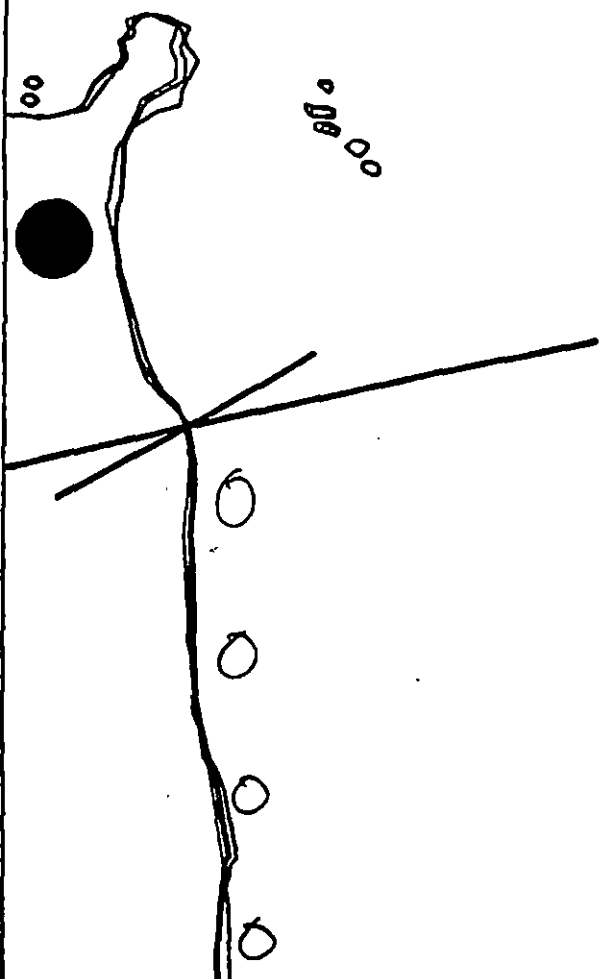
Red faced
cormorant
Rookery

Salmon Fry
Schools

Pinks

Eagle
Nest

N



K9-7-CO-1A

①

XXXX Wide

CO-1

/// Medium

---- Narrow

Approx. Segment Length: 9595m

TTTT Very Light

OOOO No Oil



METERS



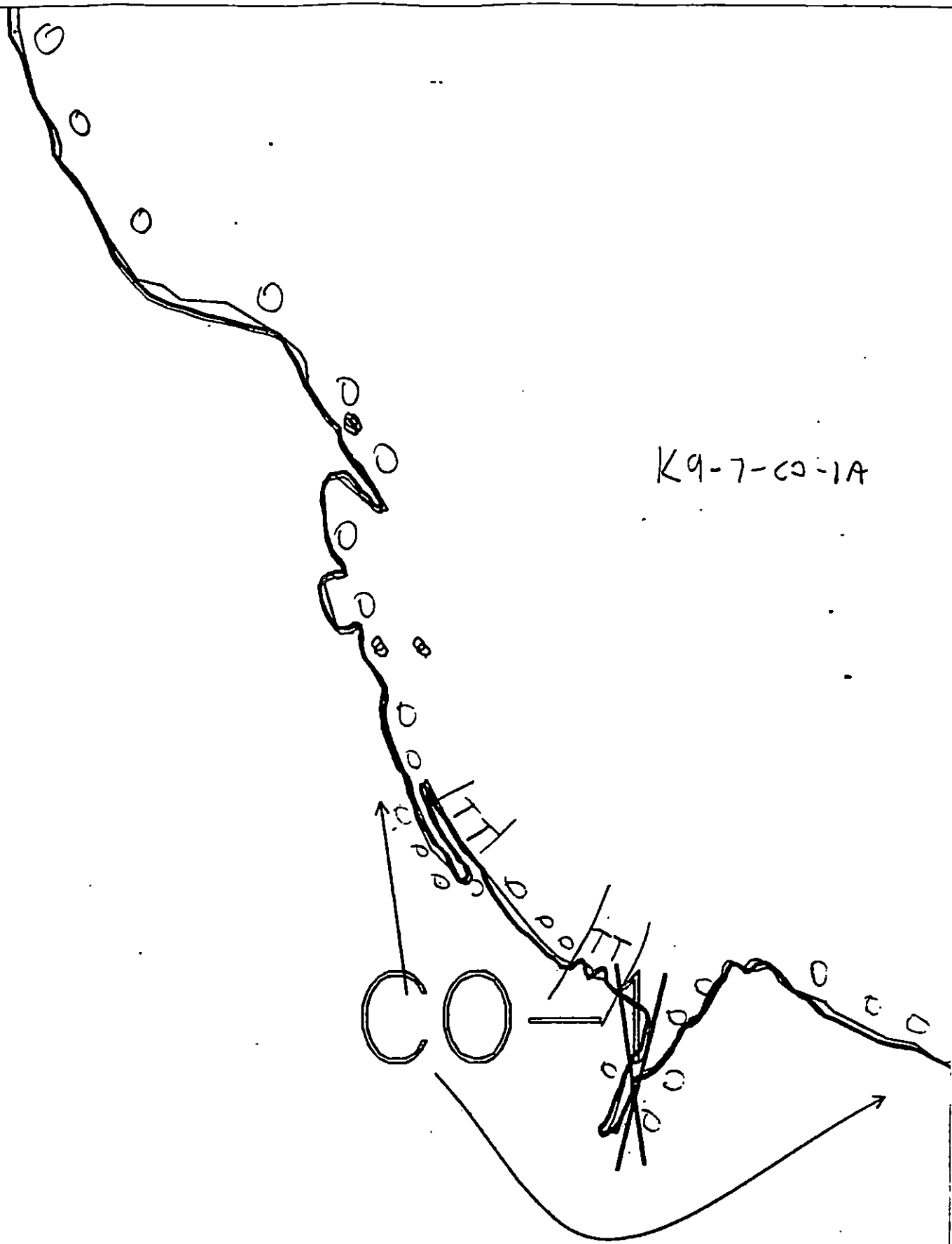
K9-7-CO-1A

Map Key: AKP-CO-1c

Name: Acton

Date: 5-5-90

Data Entered:



K9-7-co-1A

CO

XXXX Wide

/// Medium

--- Narrow

TTTT Very Light

0000 No Oil

CO-1

Approx. Segment Length: 9595m



K9-7-co-1A

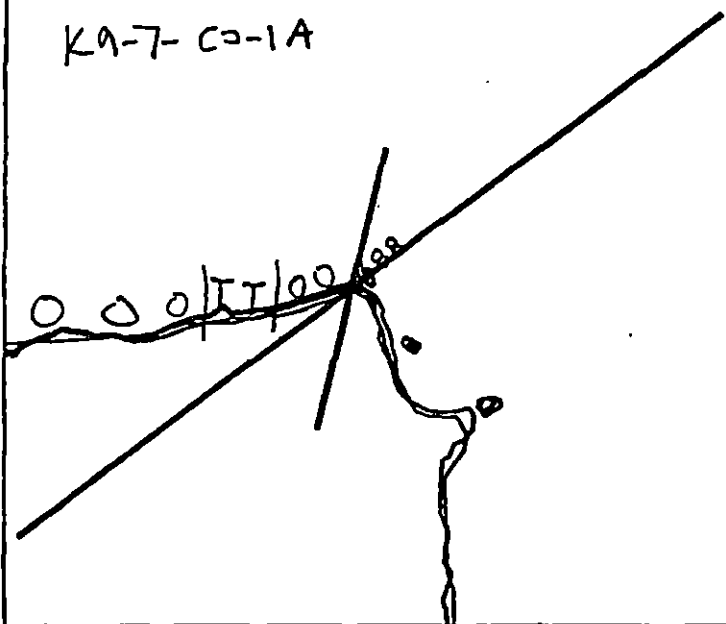
Map Key: AKP-CO-1a

Name: Acton

Date: 5-5-90

Data Entered:

K9-7-CO-1A



XXXX Wide

/// Medium

--- Narrow

TTTT Very Light

OOOO No Oil

CO-1

Approx. Segment Length: 9595m



METERS



K9-7-CO-1A

Map Key: AKP-CO-1b

Name: Acton

Date: 5-5-90

Data Entered:

SHORELINE EVALUATION

SEGMENT ST/ K09-08-CD-01 SUBDIVISION A (1 OF 1) DATE 4/27/90

SEGMENT ENVIRONMENTAL SENSITIVITIES AND TIME CONSTRAINTS:

5T All bald eagle nests (3/1 to 6/1)-Active eagle nests (3/1 to 9/1)
See attached Ecological Constraint sheet for specific constraints and contacts.

SUBDIVISION ECOLOGICAL CONSTRAINTS:

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

ARCHAEOLOGICAL CONSTRAINTS:

If cultural resources are uncovered during shoreline treatment, stop work in the vicinity, mark the location of the find and contact Exxon's Cultural Resource Program immediately (564-3274 (Anchorage) or 229-1508 (24 hrs.)).

SHPO SIGNATURE: *Shula Z. Hines* DATE: 5/14/90

OILING CATEGORIZATION:

Wide 0 m: Medium 0 m: Narrow 39 m: V.Light 372 m: No Oil 1072 m
Subsurface Oil Observed: Yes No X Maximum Depth

RECOMMENDATIONS:

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

COMMENTS: Recommended treatment is manual pickup of mousse patties.
Work should be conducted after 6/1 with USFWS approval regarding eagle nest constraint.

TAG COMMENTS:

TAG APPROVAL DATE: 5/12/90.
ADEC ART WENGER Detlefsen
EXXON ANDY TGAZ Deal
NOAA Gary Petrac Gary Petrac
USCG D.O. ROME D.W. Kane

FOSC: *WJL* DATE: 5-18-90

OG Acton

SEGMENT ST/ K9-8-CD-1

SUBDIVISION K9-8-CD-1A

DATE 4 / 27 / 90

CHECKLIST

- ☐ N Arrow
- ☐ Approx. Scale
- ☐ Seg/Sub Body
- ☐ Oil Dist.
- ☐ Width
- ☐ Length
- ☐ % Cover
- ☐ Substrate Character
- ☐ Est. FW/LA/VL
- ☐ SSL
- ☐ Profile Location(s)
- ☐ Profile(s)
- ☐ PI Location(s)
- ☐ Photo Location(s)

LEGEND

1 Δ

PI - No Surface Oil

2 Δ

PI - Subsurface Oil

CT/C

Continuous Distribution

CT/B

Broken Distribution

CT/P

Patchy Distribution

CT/S

Splashed Distribution

Oiled Vegetation

1 $\rightarrow$

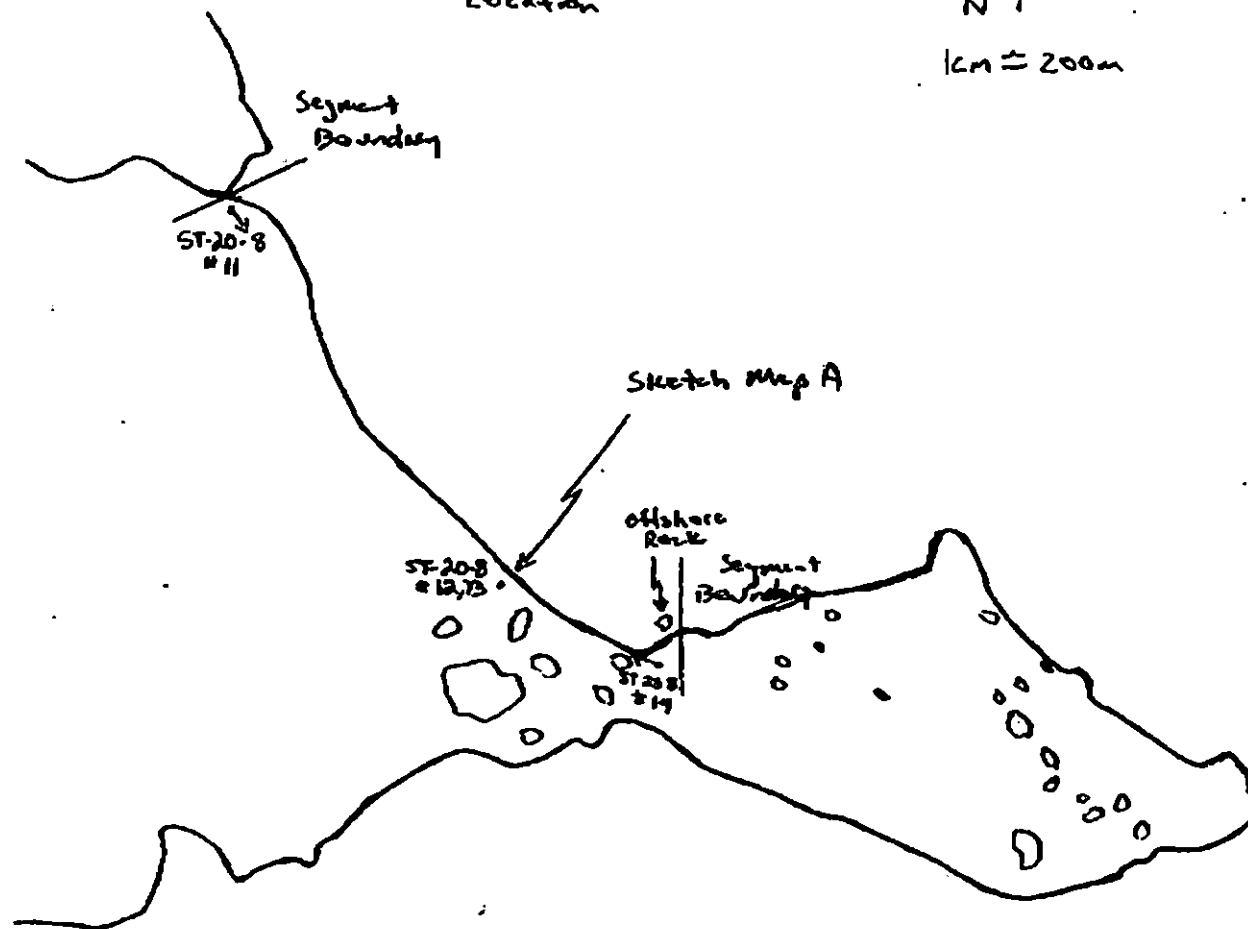
Photo location, direction,
and number

SKETCH MAP

Location

N $\uparrow$

1cm $\approx$ 200m



Oil Character () AP PO CV 50 CT 50 ST 350 MS 50 TB FL NO 1139

REVISION: 002480

OG Acton

SEGMENT ST/ K9-B-CD-1

SUBDIVISION K9-B-CD-1A

DATE 4/27/90

SKETCH MAP A

N ↑
1cm = 10m

A-A' = 80m

CHECKLIST

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

LEGEND

1 Δ

PR - No Subsurface Oil

2 Δ

PR - Subsurface Oil

CT/C

Continuous Distribution

CT/B

Broken Distribution

CT/P

Patchy Distribution

CT/S

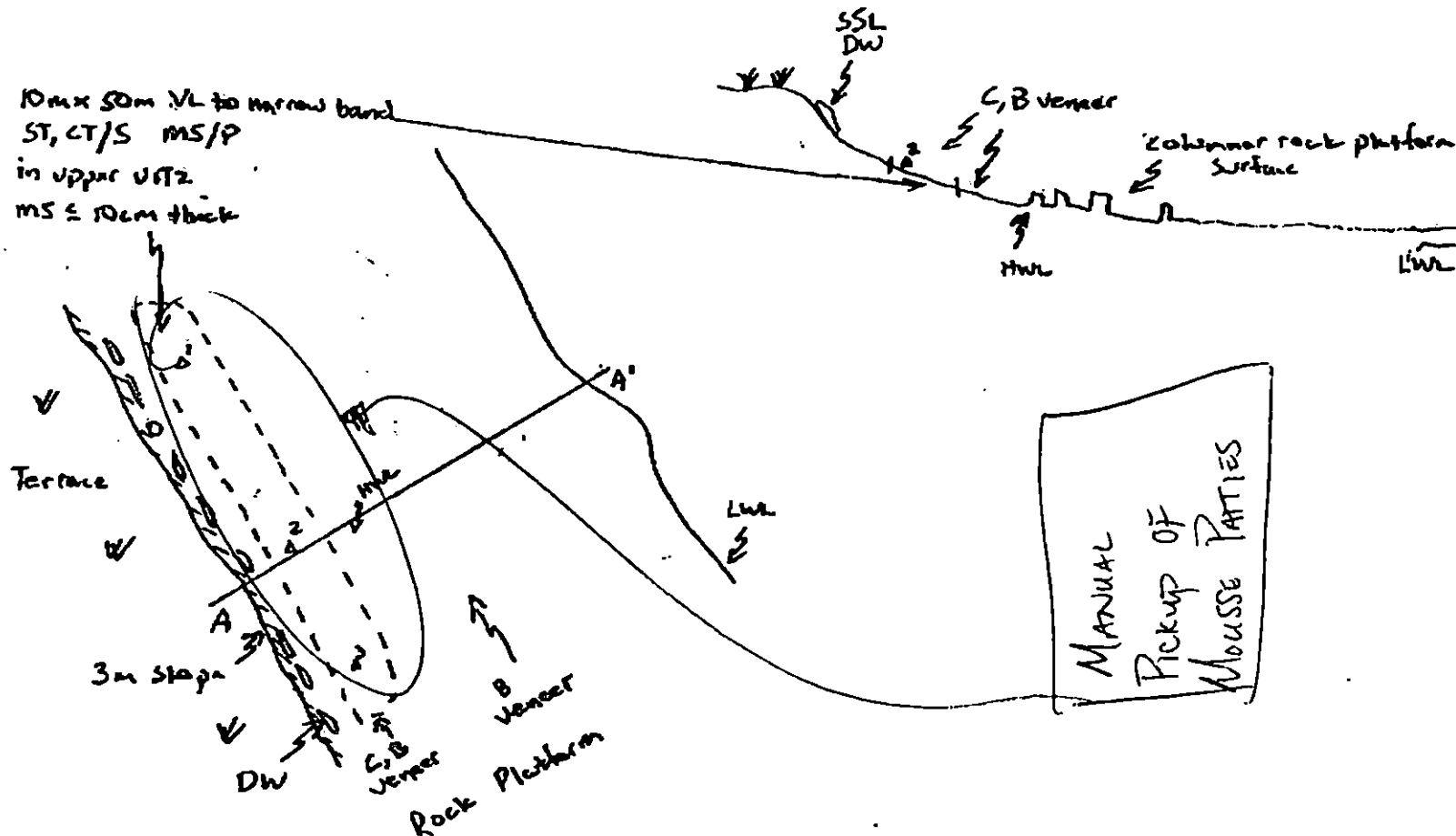
Scattered Distribution

Oil Vegetation

1 ●→

Photo location, direction,
and number

10m x 50m VL to narrow band
ST, CT/S MS/P
in upper U/T2
MS ≤ 10cm thick



Oil Character L () n): AP _____ PO _____ CV _____ CT _____ ST _____ MS _____ TB _____ FL _____ NO _____

ENCLOSURE



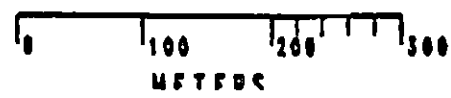
K9-8-CD-1A

D-1

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

CD-1

ADEC Segment Length: 1484m



K9-8-CD-1A

Map Key: GOA-29

Name: Acton

Date: 4-27-99

Data Entered:

ADDENDUM: SUBDIVISION CONSTRAINTS

SEGMENT K09-08-CD-01 SUBDIVISION A (1 of 1)

WORK WINDOW	
Manual Pickup	OPEN

ARCHAEOLOGICAL STANDARD CONSTRAINT

If cultural resources are uncovered, PHONE 564-3274.

APPLICABLE ECOLOGICAL TIME CONSTRAINTS

5T Bald Eagle Nest

NO CONSTRAINT. Authorized per memo dated 6/10/90 from Mary Portner/USFWS to Rex Coulter/Exxon.

OTHER ECOLOGICAL CONSIDERATIONS

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

FOSC

[Signature]

Date

6/13/90

Prepared by

Rex R. Coulter

Date

06/11/90

STREAM #
24E-40-10150

WORK
AREA

CD-1 CD-2

CD-4

TREATMENT



Exxon Company, USA
Map Key: AKP-CD-1
1:10,000



ECOLOGY MAP
SEGMENT K9N-8 CD-1
SUBDIVISION A (1 of 1)
METERS



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

1 inch = 1643 feet

SHORELINE EVALUATION

SEGMENT ST/ K09-08-CD-01 SUBDIVISION A (1 OF 1) DATE 4/27/90

SEGMENT ENVIRONMENTAL SENSITIVITIES AND TIME CONSTRAINTS:

ST 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 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: *Shirley J. Mas*

DATE: 5/14/90

OILING CATEGORIZATION:

Wide 0 m: Medium 0 m: Narrow 39 m: V. Light 372 m: No Oil 1072 m
Subsurface Oil Observed: Yes No X Maximum Depth

RECOMMENDATIONS:

 No Treatment Recommended
X Treatment Recommended
X 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: Recommended treatment is manual pickup of mousse patties.
Work should be conducted after 6/1 with USFWS approval regarding eagle nest constraint.

SEE CONSTRAINT ADDENDUM
DATED 06/11/90, REX C.

TAG COMMENTS:

TAG APPROVAL DATE: 5/12/90

ADEC *Ann Wagon*
EXXON *Ann Tarr*
NOAA *Gary Petrone*
USCG *D.D. Rome*

FOSC: *my L*

DATE: 5-15-90

REGION: KODIAK

SEGMENT: ST/K09-08-CD-01

SUBDIVISIONS: A (1 OF 1)

SHORELINE EVALUATION

SEGMENT ST/ K09-08-CD-01 SUBDIVISION A (1 OF 1) DATE 4/27/90

SEGMENT ENVIRONMENTAL SENSITIVITIES AND TIME CONSTRAINTS:

5T All bald eagle nests (3/1 to 6/1)-Active eagle nests (3/1 to 9/1)
See attached Ecological Constraint sheet for specific constraints and contacts.

SUBDIVISION ECOLOGICAL CONSTRAINTS:

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

ARCHAEOLOGICAL CONSTRAINTS:

If cultural resources are uncovered during shoreline treatment, stop work in the vicinity, mark the location of the find and contact Exxon's Cultural Resource Program immediately (564-3274 (Anchorage) or 229-1508 (24 hrs.)).

SHPO SIGNATURE: _____ DATE: _____

OILING CATEGORIZATION:

Wide 0 m: Medium 0 m: Narrow 39 m: V.Light 372 m: No Oil 1072 m
Subsurface Oil Observed: Yes _____ No X Maximum Depth _____

RECOMMENDATIONS:

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

COMMENTS: Recommended treatment is manual pickup of mousse patties.
Work should be conducted after 6/1 with USFWS approval regarding eagle
nest constraint.

TAG COMMENTS: _____

TAG APPROVAL DATE: _____

ADEC _____
EXXON _____
NOAA _____
USCG _____

FOSC: _____ DATE: _____

KODIAK ECOLOGICAL CONSTRAINTS

- 1A Salmon stream mouth - fry outmigration (4/15 to 7/31)
 1B Salmon stream mouth - spawning (7/15 to 9/10; PEAK 8/15)
 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, 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 prior to treatment for consultation and/or permit application.
 AGENCY CONTACT PERSON: ADF&G Ken Middleton 267-2299
- 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, 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 Kotol Bay Hatchery release
 Pink salmon - late May, early June; Chum salmon - June; Sockeye salmon - early July.
- 1H Remote release site
 No use of methods which might affect nearshore oil or toxicity levels, such as hot water wash or Inipol application, 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 for confirmation and authorization.
 AGENCY CONTACT PERSON: ADF&G Larry Peltz 424-3214
- 1I Gill net area
 1J Purse seine area
 Mainland, West side Kodiak, Shuyak & Moser/Olga Bay (6/9 to 10/1)
 East side Kodiak, East side Afognak (7/4 to 10/1)
 1K Purse seine hook-off
 1L Set net sites
 Contact ADF&G for confirmation - dates and locations may vary. 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 Larry Nicholson 424-4791
- 2M Herring spawning (4/15 to 6/30)
 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 Larry Nicholson 486-4791
- 2N Harbor seal and sea lion pupping (5/10 to 7/1)
 Harbor seal and sea lion molting (8/15 to 9/15)
 Restrict boat and air traffic to essential minimum. No personnel within 400m. Aircraft to maintain 800m horizontal and 300m vertical distance from haulouts. No application of Inipol within two weeks of arrival dates (work window at these sites is limited to 7/2 to 7/31). Contact ADF&G and USFWS prior to treatment for confirmation.
 AGENCY CONTACT PERSON: US National Marine Fisheries Service Steve Zimmerman 586-7235
 ADF&G Don Calkins 267-2403
- 5R Seabird colony (5/1 to 9/1)
 Restrict air and boat traffic to essential minimum. No personnel within 800m. Aircraft to maintain 800m horizontal, 300m vertical distance from colony. Contact USFWS prior to treatment.
 AGENCY CONTACT PERSON: USFWS Jill Parker 786-3377
- 5S Shorebird/waterfowl concentration (4/1 to 5/15)
 Restrict all activity to essential minimum, especially air traffic. Contact USFWS and ADF&G for confirmation.
 AGENCY CONTACT PERSON: USFWS Jill Parker 786-3377
 ADF&G Tom Roth 267-2208
- 5T All Bald Eagle nests (3/1 to 6/1)
 Active Bald Eagle nests (3/1 to 6/1)
 Restrict air traffic and all disturbance to essential minimum. No personnel within 400m 3/1 to 6/1. Air approach and takeoff from and to seaward only; maintain 800m horizontal, 300m vertical distance from nests. Contact USFWS prior to treatment for confirmation of dates.
 AGENCY CONTACT PERSON: USFWS Jill Parker 786-3377
- 6U Recreation: Tent sites (6/1 to 9/15)
 6V Anchorages (6/1 to 9/15)
 6W Forest Service cabins (6/1 to 9/15)
 6X Lodge (6/1 to 9/15)
 6Y Special use destination
- 7Z Subsistence area: Salmon harvesting (6/1 to 9/30)
 7HH Finfish harvesting
 7I Deer harvesting (8/1 to 1/7)
 Invertebrate harvesting
 Bear harvesting (4/1 to 5/15 and 10/25 to 11/30)
 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 1K9-08 CD-001 SUBDIVISION: K9-8-CD-1A DATE 4-27-90

SCG

NAME D.D. Haven Jr. GMS, USCGR SIGNATURE [Signature]

☒ NO TREATMENT RECOMMENDED

☐ TREATMENT SUGGESTED

COMMENTS

This area does have mousse present, but majority of it is deep in the crevices between boulders and would be almost impossible to recover. I have monitored this area all winter long and it has dramatically improved on its own the last two months since the ice has melted.

ADEC

NAME Francine J. Benn's SIGNATURE [Signature]

☐ NO TREATMENT RECOMMENDED

☒ TREATMENT SUGGESTED

COMMENTS

MANUAL CLEAN-UP RECOMMENDED FOR SMALL AREA OF COLLECTIBLE OIL.

If clean-up crew is in the area, then they should cruise CD-001 w/SSAT map to remove recoverable MS saturated sediments in a 10 x 50m area indicated on maps.

Cape Douglas is a HIGH ENERGY area, but mousse saturated sediments apparently are able to persist among cobble/boulders.

LAND MANAGER NPS

NAME Will TROYER SIGNATURE [Signature]

☐ NO TREATMENT RECOMMENDED

☐ TREATMENT SUGGESTED

COMMENTS

With travel and shovel some mousse can be removed. This is a high energy beach and will probably clean itself faster than most.

SHORELINE OILING SUMMARY

REVISION NO. 04-12-88

OG Acton USCG Haven SEGMENT ST/ K 9-8-62-1
 BIO Davis LAND REP NPS Tropic. Zone SUBDIVISION K 9-8-62-1A (1 OF 1)
 EXXON Arco ADEC Bennis TIME 7:45 10:40
 TEAM NO. 25 TIDE LEVEL +5 to +1.5 DATE 4/27/90
 EST. SUBDIVISION LENGTH: 149m ☒ Sun ☐ Clouds ☐ Fog ☐ Rain ☐ Snow
 UPLANDS DESCRIPTION: ☒ Grass ☐ Forest ☐ Rock
 SURVEYED FROM: ☒ Foot ☐ Boat ☐ Helo WORKING DIRECTION: N to S
 SURFACE SEDIMENTS: R 40 % B 40 % C 15 % P 1 % G 2 % S 2 % M 0 % V 0 %
 SLOPE: Long 100 % Hang - % Vert - % WAVE EXPOSURE: ☐ Low ☐ Med ☒ High
 OIL CATEGORY LENGTH: W 0 m M 0 m N 25 m VL 325 m NO 1139 m

SURFACE OIL

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

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 0#BAGS 0

Photographs:

Roll No. ST-20-8Frames 11-14

SUBSURFACE OIL

PIT NO.	PIT DEPTH (cm)	SUBSURFACE OIL CHARACTER					OILED INTERVAL (cm)	BELOW		OIL / FILM COLOR					PIT ZONE				A	N	SHEEN (Y/N)	↓	SURFACE - SUBSURFACE SEDIMENTS
		OP	OR	OL	OF	NO		UO	UC	1	2	3	4	5	SU	U	M	L					
1	5					✓	.		✓						✓								R
2	5					✓	.		✓						✓								R
3	5					✓	.		✓						✓								R
							.																
							.																
							.																

COMMENTS Shoreline is rock platform w/ B+C veneer in upper USTZ and SITZ. Columnar rock platform surface in lower USTZ and MITZ. Observed oil was above columnar structure area. 10m x 50m band VL band was observed (see maps). Other 300m of UL oiling was from area of sketch map B to S segment boundary and consists of: VL, very sporadic stain. Pit depths are minimal due to R+B.

Mousse in interstitial spaces between rocks, boulders, rubble (± 8cm thick).

REVIEWED 7WDATE 5/1/90

OG Acton

SEGMENT K9-B-C-D-1

SUBDIVISION K9-B-C-D-1A

DATE 4 / 27 90

CHECKLIST

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

Spotted Distribution

Old Vegetation

1 $\Rightarrow$

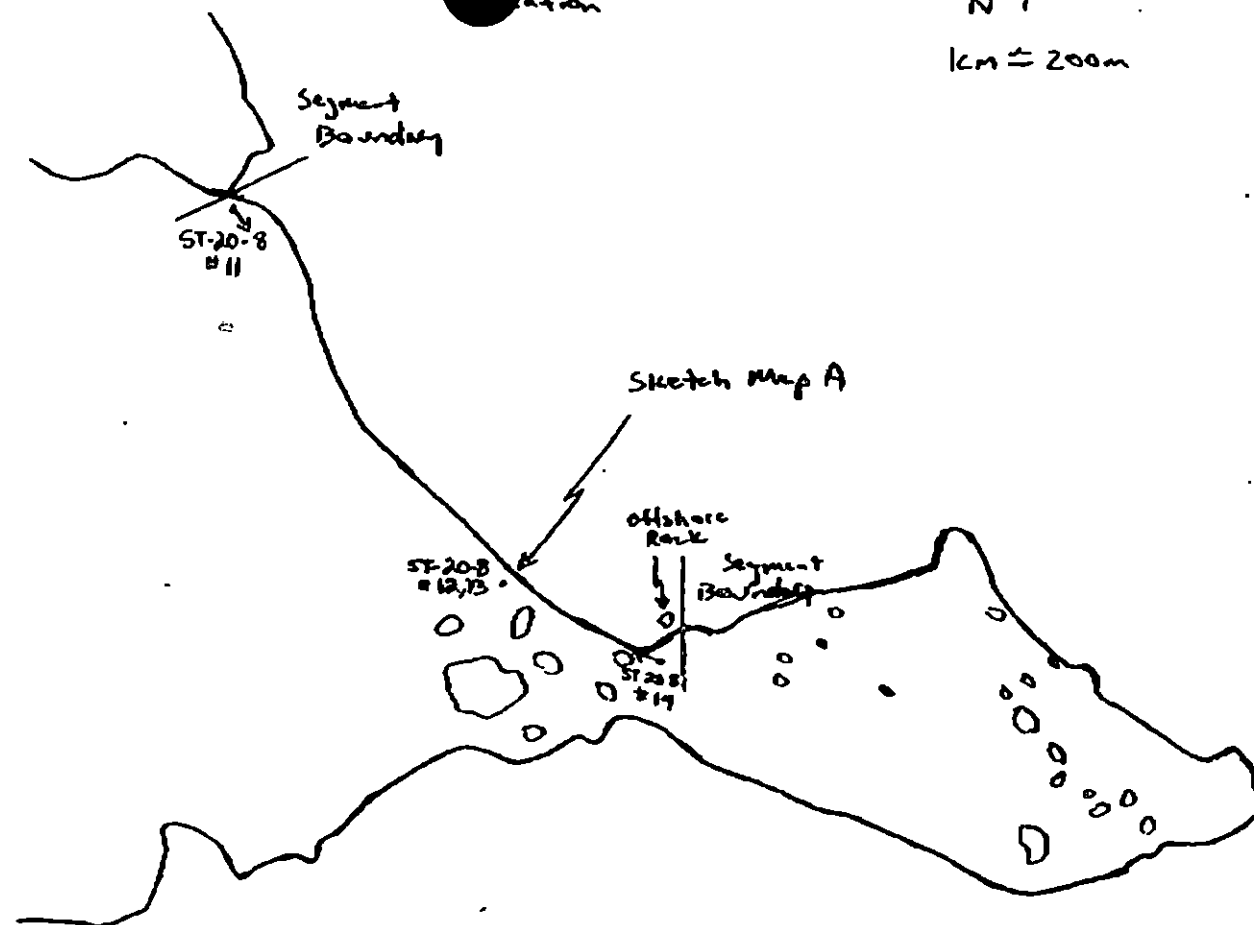
Photo location, direction,
and number

SKETCH MAP

ation

N $\uparrow$

1cm $\approx$ 200m



Oil Character Length (m): AP PO CV 50 CT 50 ST 350 MS 50 PT TB FL NO 1139

REVISION: 002000

OG Acacia

SEGMENT K9-B-CD-1

SUBDIVISION K9-B-CD-1A

DATE 4/27/90

CHECKLIST

- ☐ N Arrow
- ☐ Approx. Scale
- ☐ Seg/Sub Grid
- ☐ Oil Dist.
- ☐ Width
- ☐ Length
- ☐ % Cover
- ☐ Substrate Character
- ☐ Est. HWA/LWA
- ☐ SSL
- ☐ Profile Location(s)
- ☐ Profile(s)
- ☐ Pit Location(s)
- ☐ Photo Location(s)

LEGEND

1 Δ
Pit - No Subsurface Oil

2 Δ
Pit - Subsurface Oil

$\boxed{CT/C}$
Continuous Distribution

$\boxed{CT/B}$
Broken Distribution

$\boxed{CT/P}$
Patchy Distribution

$\boxed{CT/S}$
Splashed Distribution

Oiled Vegetation

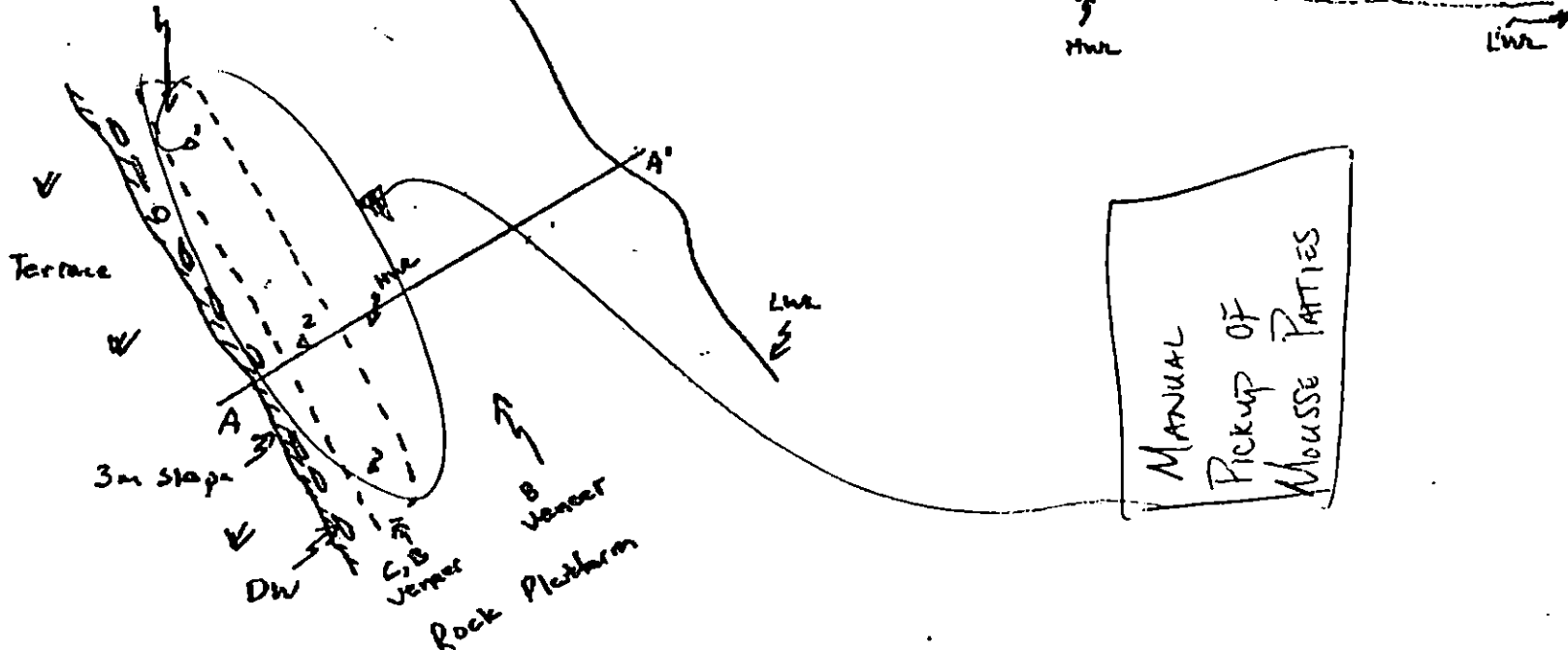
1 $\Rightarrow$
Photo location, direction,
and number

ATCH MAP A

N $\uparrow$
1cm $\approx$ 10m

A-A' $\approx$ 80m

10m x 50m N/L to narrow band
ST, CT/S MS/P
in upper USTZ
MS $\approx$ 10cm thick



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

REVISION: 0004/90

SHORELINE ECOLOGICAL SUMMARY

REVISION: 03/22/

Segment ST / K9-08 Subdivision CD-01 Date (mo / day / yr) 4/27/90

Time (24 hr) 7:45 Biologist H. Davis

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

(B) Overall % cover of biota (% of segment): Dense 10% Moderate 30% Low 60% (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. ST-20-8

Frames 11-14

BARNACLES *Barnacles* were all small and sparse - Rare

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
4,5,6

MYTILUS a few mytilus in protected crevices.

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
3,4,5,6

GASTROPODS *Littorina* very sparse, limpets sparse, *Urosalpinx* sp. rare patchy

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
3,4,5,6

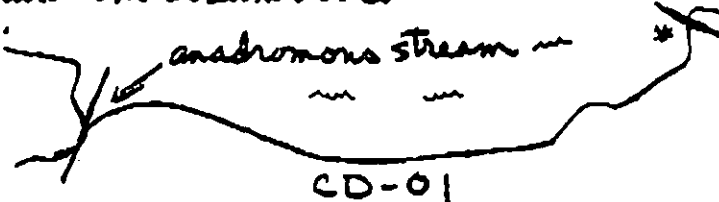
FUCUS *Agardhi* from worn bases, partly varied patchy.

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
3,4,5,6

Wildlife Observations/ General Comments: Rocky shelves with sand, gravel, and cobbles being moved across them. Buried anthropods. Worn down Fucus. Few Barnacles. Rhodomena larvae Fucus and Corallinacea are the main algae. Halimnobia panicea on rocks. Urosalpinx sp. in crevices. Small anemones sp. 1cm grey. Spirobrans. All of the distributions were patchy due to the patchiness of substrate.

Ecological Considerations: Anadromous stream at the north end of the segment. Pink salmon spawn there.



DATE 4/27/90 TIME 7:45 - 8:40 TIDE HEIGHT +5 To +1.5

1 = BEDROCK 2=BOULDER 3=COBBLE 5=SAND 6=SILT

FLORA:

SPECIES	UITZ	MITZ	LITZ	COMMENTS
BOSSIELLA/CORALLINA	1	1	1	In bedrock pools only
CALLIARTHRON/CORALLINA	1	1	1	"
CLADOPHORA SPP	—	—	—	
COSTARIA SPP	—	—	—	
ENDOCLADIA MURICATA	1	1, 2	—	
FILMAENTOUS GREENS	—	1, 2	—	
FILAMENTOUS REDS	—	1	1	
GLOIOPELTIS FURCATA	—	—	—	
HALOSACCION GLANDIFORME	1	1	1	
LAMINARIA SPP	—	—	1, 2	
LITHOTHAMNION	1	1	—	
NEREOCYSTIS SPP	—	—	—	In drift
PORPHYRA SPP	—	—	—	
RALPHSIA/HILDENBRANDIA	—	—	—	
RHODOMELA LARIX	1, 2	1	1, 2	Most abundant algae in this section
RHOZOMENIA PALMATA	—	—	1	
SCYTOSIPHON SPP	—	—	—	
ULVA SPP	1*	1*	—	On Rhodomela larix
ZOSTERA MARINA	—	—	—	
ENTEROMORPHA	—	—	—	

FAUNA:

ANTHOPLEURA SPP	—	1, 2	1	On under sides of boulders and in crevices
(SEMI) BALUNUS CARIOSUS	—	1	1	
B. GLANDULA	1, 2	1, 2	1, 2	
BRYOZOANS	—	—	—	
CHITONS (other than K. TUNICATA)	—	—	—	
CLAMS	—	—	—	
CRABS	—	—	—	
DERMASTERIAS IMBRICATA	—	—	—	
KATHARINA TUNICATA	—	—	—	
LEPTASTERIAS HEXACTIS	—	—	—	
LIMPETS	1	1, 2	1	
LITTORINA SPP	1, 2, 3	1, 2, 3	1, 2, 3	very common
NUCELLA SPP	1, 2	1, 2	1, 2, 3	
PAGURUS SPP	1, 2	1, 3	1	Mostly at bottom of pools
PISASTER OCHRACEUS	—	—	—	
POLYCHAETES	—	—	—	
PYCNOPODIA HELIANTHOIDES	—	—	—	
SEARLESIA DIRA	—	—	—	
SERPULIDS	—	—	—	
SIPHONARIA THERSITES	—	—	—	
TEALIA	—	1	—	
Cucumaria ? Holothuroid	1	—	—	gray 1 cm long seven bands of ft. at coralline base (5)
Halichondria picea	1	1	1	Very common

K9-8-CD-1A

D-1

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

CD-1

ADEC Segment Length: 1484m



K9-8-CD-1A

Map Key: 60A-29

Name: Acton

Date: 4-27-90

Data Entered:

SHORELINE EVALUATION

SEGMENT ST/ K09-08-CD-02 SUBDIVISION A (1 OF 1) DATE 4/27/90

SEGMENT ENVIRONMENTAL SENSITIVITIES AND TIME CONSTRAINTS:

5T All bald eagle nests (3/1 to 6/1)-Active eagle nests (3/1 to 9/1)
Eagle nest on NOAA list.

See attached Ecological Constraint sheet for specific constraints and contacts.

SUBDIVISION ECOLOGICAL CONSTRAINTS:

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

ARCHAEOLOGICAL CONSTRAINTS:

If cultural resources are uncovered during shoreline treatment, stop work in the vicinity, mark the location of the find and contact Exxon's Cultural Resource Program immediately (564-3274 (Anchorage) or 229-1508 (24 hrs.)).

SHPO SIGNATURE: *Paula E. Hume* DATE: 5/14/90

OILING CATEGORIZATION:

Wide 0 m: Medium 0 m: Narrow 93 m: V.Light 38 m: No Oil 694 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 Removal	<u> </u> Beach Cleaner
	<u> </u> Other (see comments)

COMMENTS: Recommended treatment includes 1) manual pickup of mousse
patties and 2) bioremediation of area shown on attached sketch map.
Work should be conducted after 6/1 with USFWS approval regarding eagle
nest.

TAG COMMENTS:

TAG APPROVAL DATE: 5/12/90
ADEC *Art Wouke* *Drt Weimin*
EXXON *Andy Etc* *Real*
NOAA *Gary Petrac* *Andy Petrac*
USCG *D.D. Rome* *DD Rome*

FOSC: *[Signature]* DATE: 5-18-90
Monitors access need for customblend
following mousse pickup.

OG. Aden-----

SEGMENT ST/K9-8-C7-2

SUBDIVISION X9-B-CP-2A

DATE 4 / 27 90

CHECKLIST

- ___ N Azom
- ___ Approx. Scale
- ___ Seg/Sub Bndry
- ___ Oil Dist.
- ___ Width
- ___ Length
- ___ % Cover
- ___ Substrate Character
- ___ Est. H₂N/L₂N/L
- ___ SSL
- ___ Profile Location(s)
- ___ Profile(s)
- ___ Pit Location(s)
- ___ Photo Location(s)

LEGEND

1 

PM - No Subsurface Oil

2 ▲

PR - Subsurface 03

CT/C

Continuous Distribution

CT/B

Broken Distribution

CT/P

Patchy Distribution

CT/9

Splashed Distribution

Cold Vegetation

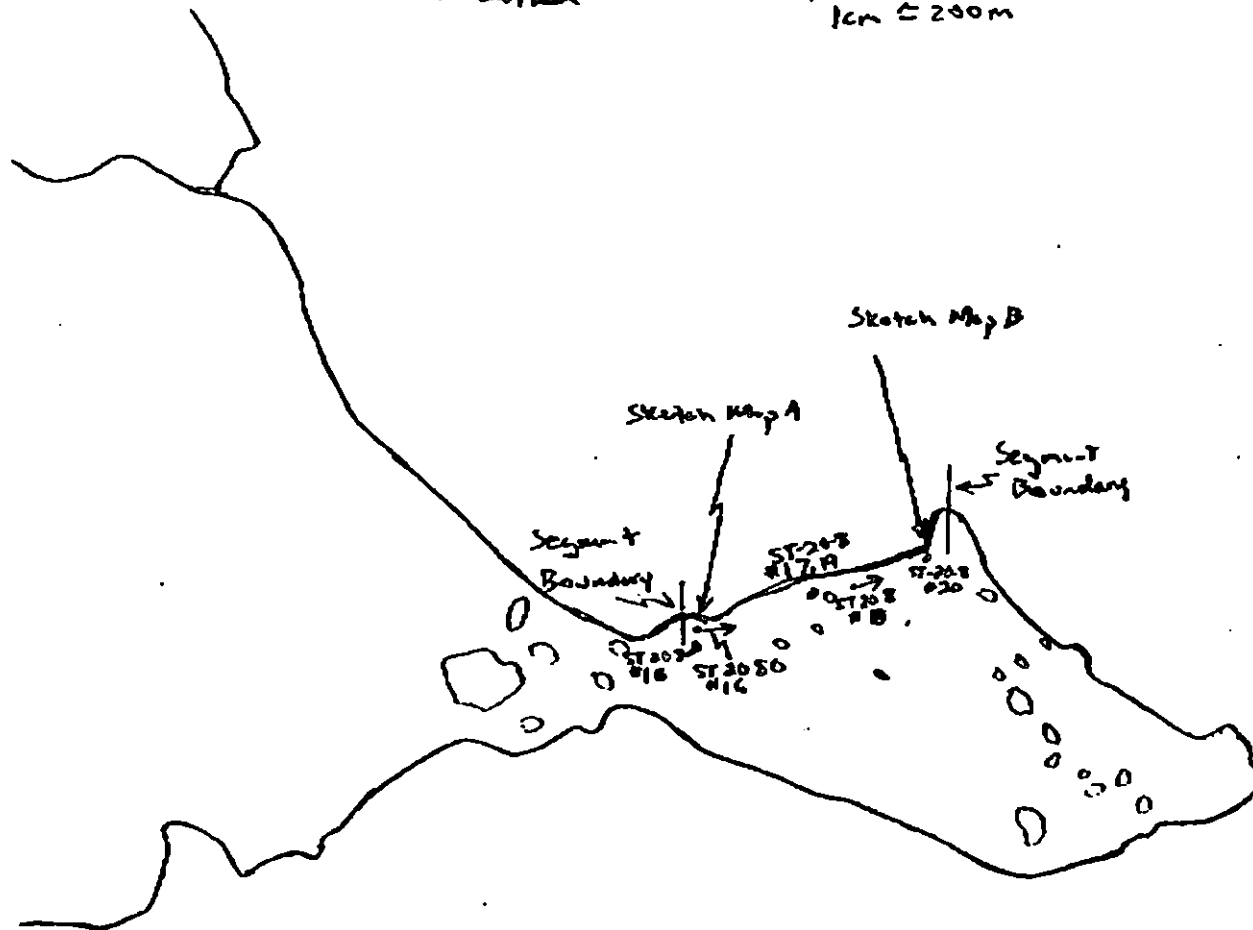
1. 2

**Photo location, direction,
and number**

SKETCH MAP

Location

N 1

$$1 \text{ cm} \approx 200 \text{ m}$$


Oil Character (m): AP _____ PO _____ CV 140 CT 220 ST 220 MS 140 _____ TB _____ FL _____ NO 594

REVISION: 3/2/90

OG Acton

SKETCH MAP A

SEGMENT ST/ K1-8 - CP-2

SUBDIVISION K9-8-CP-2A

DATE 4 / 27 90

CHECKLIST

- ☐ H Arrow
☐ Appret. Scale
☐ Seg/Sub Endry
☐ Oa Dts.
☐ Width
☐ Length
☐ % Cover
☐ Substrate Character
☐ Est. HWA/LWL
☐ SSL
☐ Profile Location(s)
☐ Profile(s)
☐ Pit Location(s)
☐ Photo Location(s)

LEGEND

1 Δ

PH - No Subsurface Oil

2 ▲

P11 - Subsurface Oil

CT/C

Continuous Distribution

CT/B

Broken Distribution

CT/P

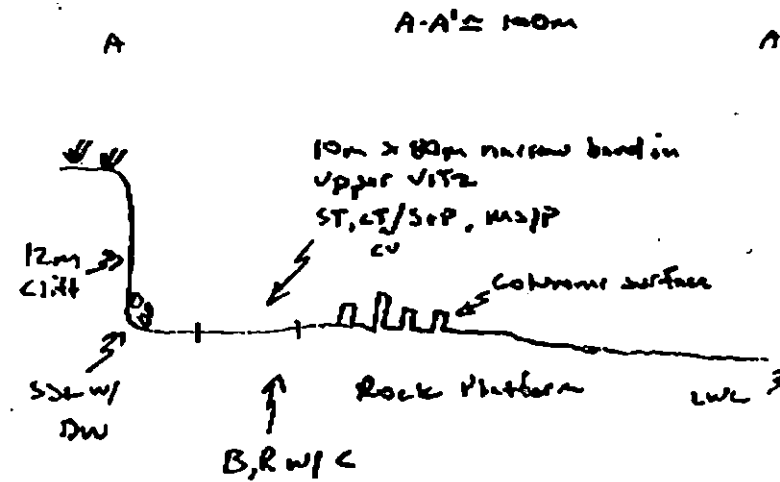
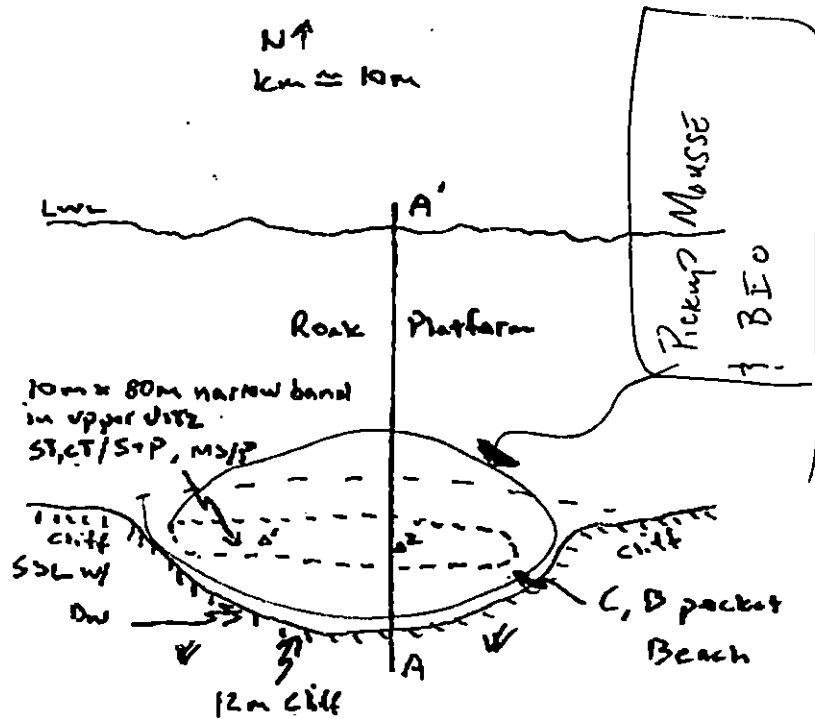
Patchy Distribution

CT/S

Splashed Distribution

Other Vegetation

1. 4

**Photo location, direction,
and number**

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

REVENUE: \$234,100

OG Acton

SKETCH MAP B

SEGMENT ST/ K9-8-CP-2

SUBDIVISION K9-8-CP-2A

DATE 4/27/90

CHECKLIST

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

LEGEND

1 Δ
Pit - No Subsurface Oil

2 Δ
Pit - Subsurface Oil

CT/C
Continuous Distribution

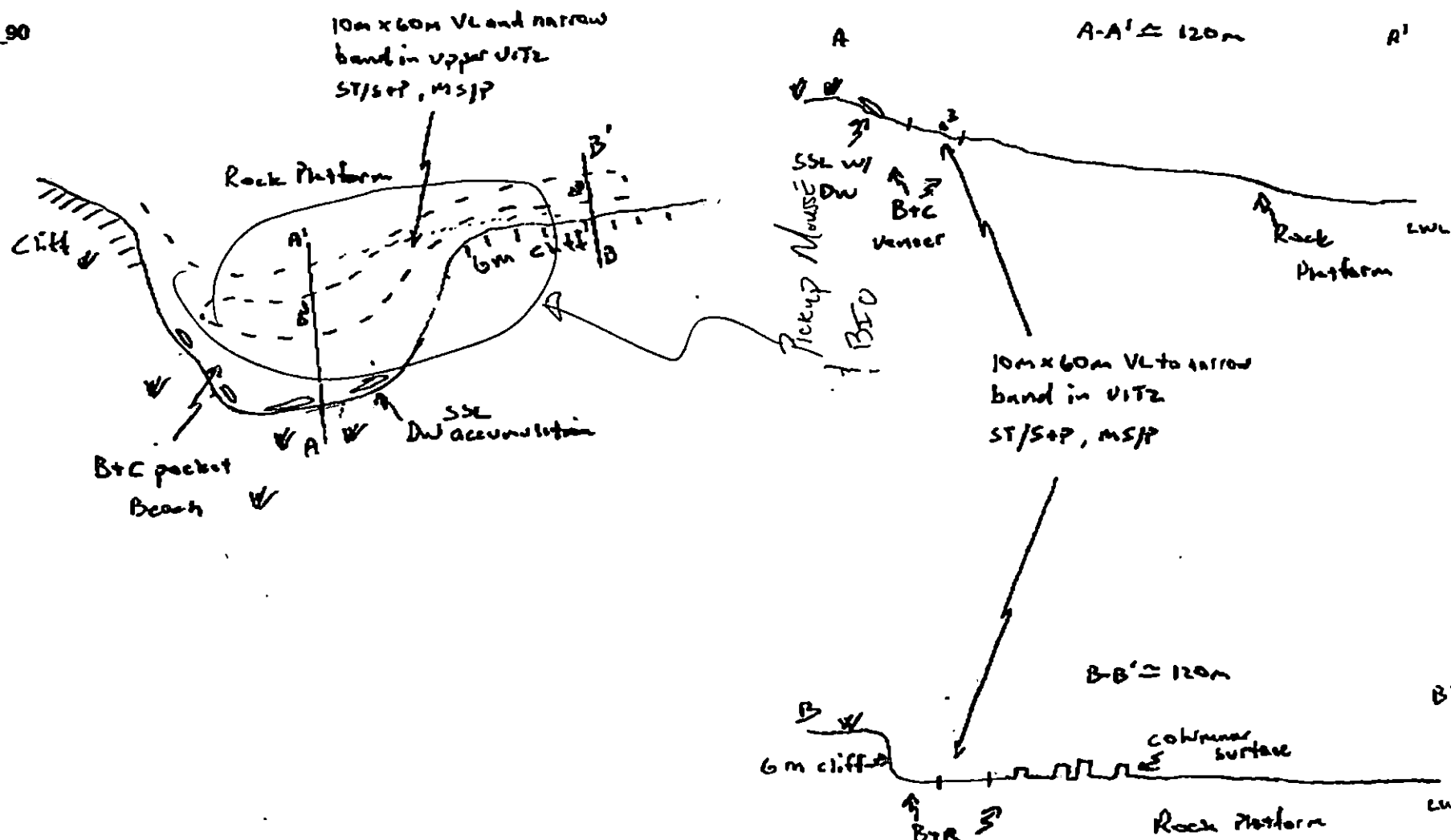
CT/B
Broken Distribution

CT/P
Patchy Distribution

CT/S
Splashed Distribution

Oil Vegetation

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



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

CD-2

K9-8-CD-2A

XXXX Wide

/// Medium

---- Narrow

TTTT Very Light

OOOO No Oil

CD-2

ADEC Segment Length: 825m



METERS

K9-8-CD-2A

Map Key: 60A-40

Name: Acton

Date: 4-27-90

Data Entered:

ADDENDUM: SUBDIVISION CONSTRAINTS

SEGMENT K09-08-CD-02 SUBDIVISION A (1 of 1)

WORK WINDOW	
Manual Pickup	OPEN

ARCHAEOLOGICAL STANDARD CONSTRAINT

If cultural resources are uncovered, PHONE 564-3274.

APPLICABLE ECOLOGICAL TIME CONSTRAINTS

5T Bald Eagle Nest No constraint to manual pickup. Authorized per memo 6/10/90 from Mary Portner/USFWS to Rex Coulter/Exxon.

OTHER ECOLOGICAL CONSIDERATIONS

Avoid any unnecessary disturbance or damage to unrolled blots and substrate.

FOSC

[Signature]

Date

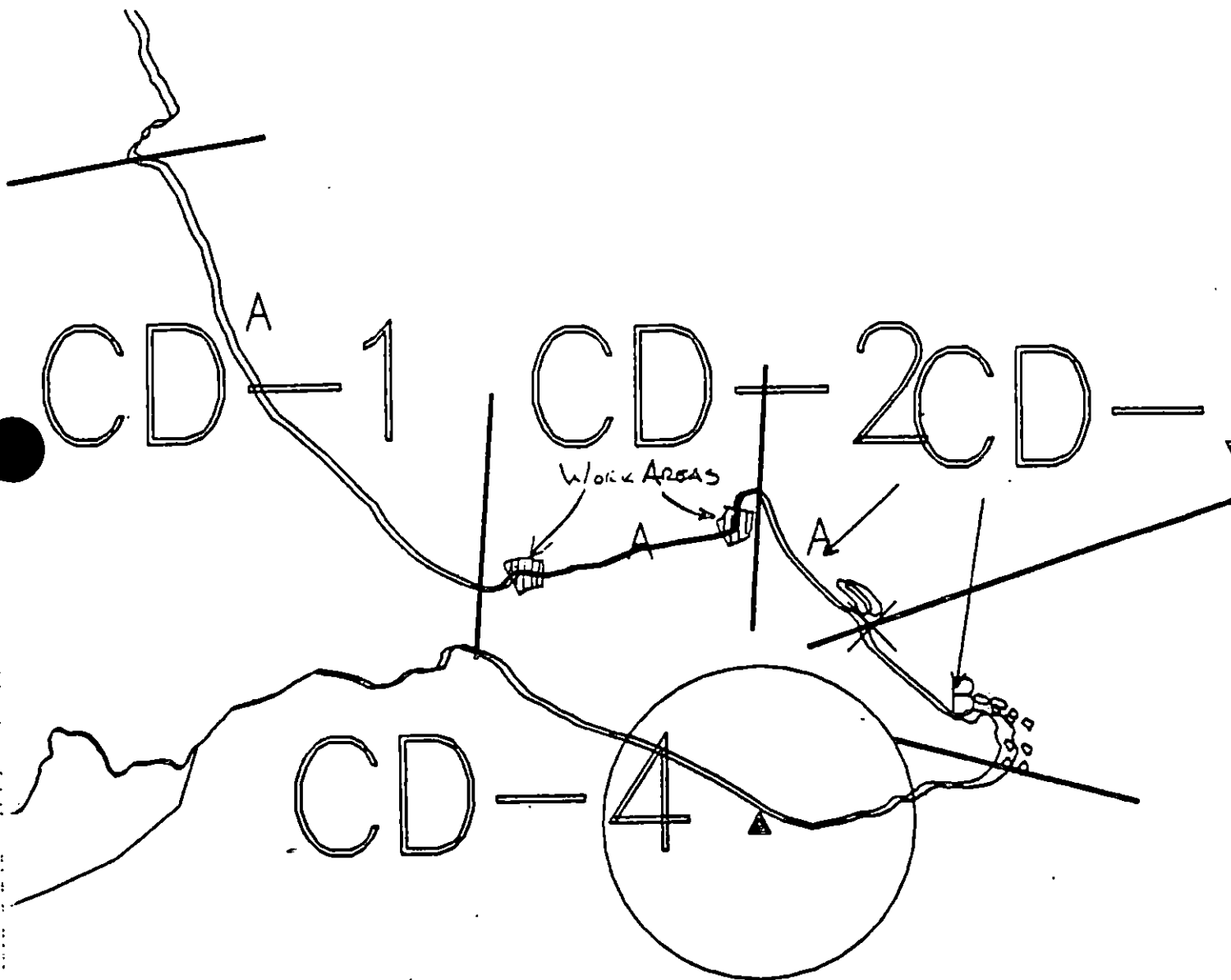
6/13/90

Prepared by

Rex D. Coulter

Date

06/11/90



TREATMENT

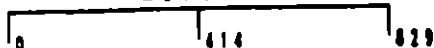


Exxon Company, USA
Map Key: MP-CD-2
Date 10.1990



ECOLOGY MAP SEGMENT K9N-8 CD-2 SUBDIVISION A (1 of 1)

METERS



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

1 inch = 1359 feet

WORK PLAN ADDENDUM

Segment K09-08-CD-002

Subdivision A

Dated 5/22/90

MODIFICATION

1. REASON FOR MODIFICATION

- FOSC Request
- Landowner comments

2. ADJUSTMENT TO WORK PLAN

- No bioremediation

SHPO APPROVAL NEEDED YES _____

SHPO SIGNATURE _____

NO X

TAG APPROVAL DATE 5/31/90

ADEC ART WELCH Art Welton

EXXON ANDERSON

NOAA JOSEPH T. BART

USCG G.A. REITER G.A. Reiter

FOSC [Signature] DATE 5/31/90

SHORELINE EVALUATION

SEGMENT ST/ K09-08-CD-02 SUBDIVISION A (1 OF 1) DATE 4/27/90

SEGMENT ENVIRONMENTAL SENSITIVITIES AND TIME CONSTRAINTS:

5T All bald eagle nests (3/1 to 6/1)-Active eagle nests (3/1 to 9/1)
Eagle nest on NOAA list.

See attached Ecological

See attached Ecological Constraint sheet for specific constraints and contacts.

SUBDIVISION ECOLOGICAL CONSTRAINTS:

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

ARCHAEOLOGICAL CONSTRAINTS:

If cultural resources are uncovered during shoreline treatment, stop work in the vicinity, mark the location of the find and contact Exxon's Cultural Resource Program immediately (564-3274 (Anchorage) or 229-1508 (24 hrs.)).

SHPO SIGNATURE:

DATE: 5/14/90

OILING CATEGORIZATION:

Wide 0 m: Medium 0 m: Narrow 93 m: V.Light 38 m: No Oil 694 m
Subsurface Oil Observed: Yes No X Maximum Depth

RECOMMENDATIONS:

☐ 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: Recommended treatment includes 1) manual pickup of mouse
patties and 2) bioremediation of area shown on attached sketch map.
Work should be conducted after 6/1 with USFWS approval regarding eagle
nest. See WORK PLAN ADDENDUM

SEE WORK PLAN ADDENDUM
DATED 5/22/90 AND CONSTRAINT
ADDENDUM DATED 06/11/90. TSC.

TAG COMMENTS:

TAG APPROVAL DATE: 5/12/90.

ADEC Asst. Warden Asst. Warden

EXXON Amoy Star

NOAA GARY PATRICK HAYES

USCG D. D. ROMER USCG

FOSC:

DATE: 5-15-90

Monitors access need for customized
P.O.s... in-use reqs.

WORK PLAN ADDENDUM

Segment K09-08-CD-002

Subdivision A

Dated 5/22/90

MODIFICATION

1. REASON FOR MODIFICATION

- FOSC Request
- Landowner comments

2. ADJUSTMENT TO WORK PLAN

- No bioremediation

SHPO APPROVAL NEEDED YES _____ SHPO SIGNATURE _____

NO X

TAG APPROVAL DATE 5/31/90

ADEC ART WEINER Art Weiner

EXXON Andrew Teal Beal

NOAA Josepa Talbott James

USCG G.A. REITER G.A. Reiter

FOSC [Signature] DATE 5/31/90

SHORELINE EVALUATION

SEGMENT ST/ K09-08-CD-02 SUBDIVISION A (1 OF 1) DATE 4/27/90

SEGMENT ENVIRONMENTAL SENSITIVITIES AND TIME CONSTRAINTS:

5T All bald eagle nests (3/1 to 6/1)-Active eagle nests (3/1 to 9/1)
Eagle nest on NOAA list.

See attached Ecological Constraint sheet for specific constraints and contacts.

SUBDIVISION ECOLOGICAL CONSTRAINTS:

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

ARCHAEOLOGICAL CONSTRAINTS:

If cultural resources are uncovered during shoreline treatment, stop work in the vicinity, mark the location of the find and contact Exxon's Cultural Resource Program immediately (564-3274 (Anchorage) or 229-1508 (24 hrs.)).

SHPO SIGNATURE: *Paula E. Hume* DATE: 5/14/90

OILING CATEGORIZATION:

Wide 0 m: Medium 0 m: Narrow 93 m: V.Light 38 m: No Oil 694 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 <i>of 5/14/90</i>	<u> </u> Spot Washing: <u> </u> Wands
<u> </u> Tarmat Removal	<u> </u> Beach Cleaner
	<u> </u> Other (see comments)

COMMENTS: Recommended treatment includes 1) manual pickup of mousse
patties and 2) bioremediation of area shown on attached sketch map.
Work should be conducted after 6/1 with USFWS approval regarding eagle
nest.

TAG COMMENTS:

TAG APPROVAL DATE: 5/12/90
ADEC *Art Wouder* *Dit Wouder*
EXXON *Andy Etz* *Peggy*
NOAA *Gary Petrac* *Andy Petrac*
USCG *D.D. Rome* *DD Rome*

FOSC: *L* DATE: 5-18-90

Monitors/access need for customblend
following mousse pickup.

OG. Adrian

SEGMENT ST-208

SUBDIVISION K9-B-CP-2A

DATE 4 / 27 90

CHECKLIST

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

Oil Vegetation

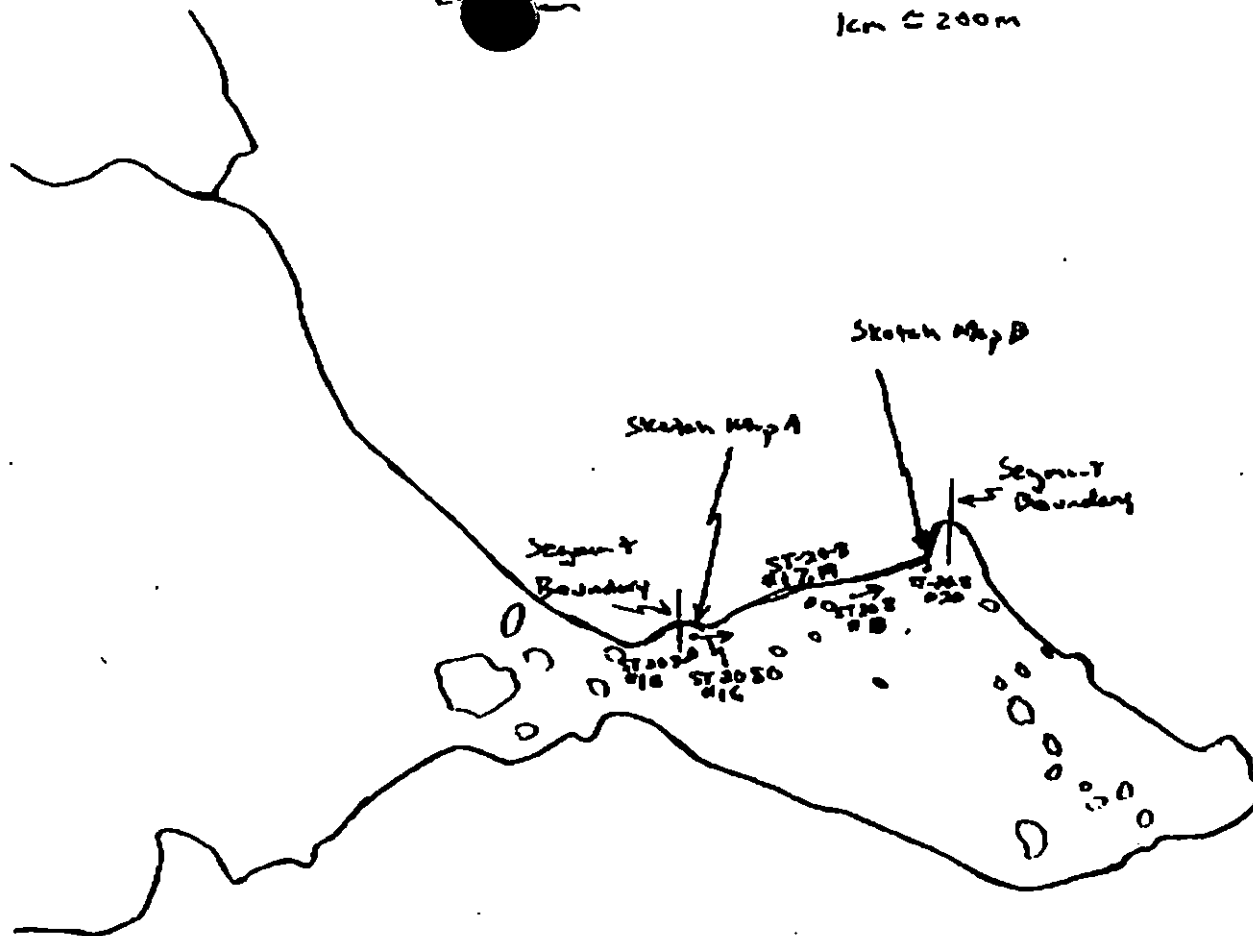
1 ●→

Photo location, direction,
and number

SKETCH MAP

N ↑

1cm = 200m



Oil Character Length (m): AP _____ PO _____ CV 140 CT 220 ST 220 MS 140 PT _____ TB _____ FL _____ NO 594

REV3001/212400

OG Act

SKETCH MAP A

SEGMENT 1-8-CP-2

SUBDIVISION K9-8-CP-2A

DATE 4 / 27 90

CHECKLIST

- ☐ M Arrow
- ☐ Approx. Scale
- ☐ Seg/Sub Entry
- ☐ Oil Dist.
- ☐ Width
- ☐ Length
- ☐ % Cover
- ☐ Substrate Character
- ☐ Est. HMLAWL
- ☐ SSL
- ☐ Profile Location(s)
- ☐ Profile(s)
- ☐ P/L Location(s)
- ☐ Photo Location(s)

LEGEND

1 Δ

Pl - No Subsurface Oil

2 Δ

Pl - Subsurface Oil

CT/C

Continuous Distribution

CT/B

Broken Distribution

CT/P

Patchy Distribution

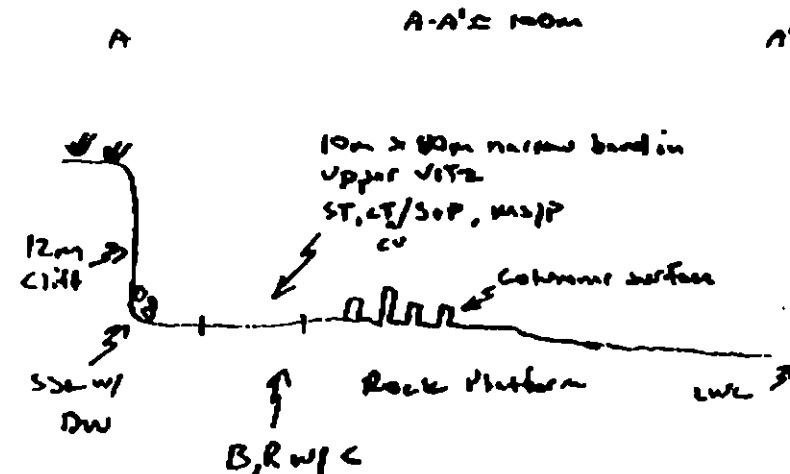
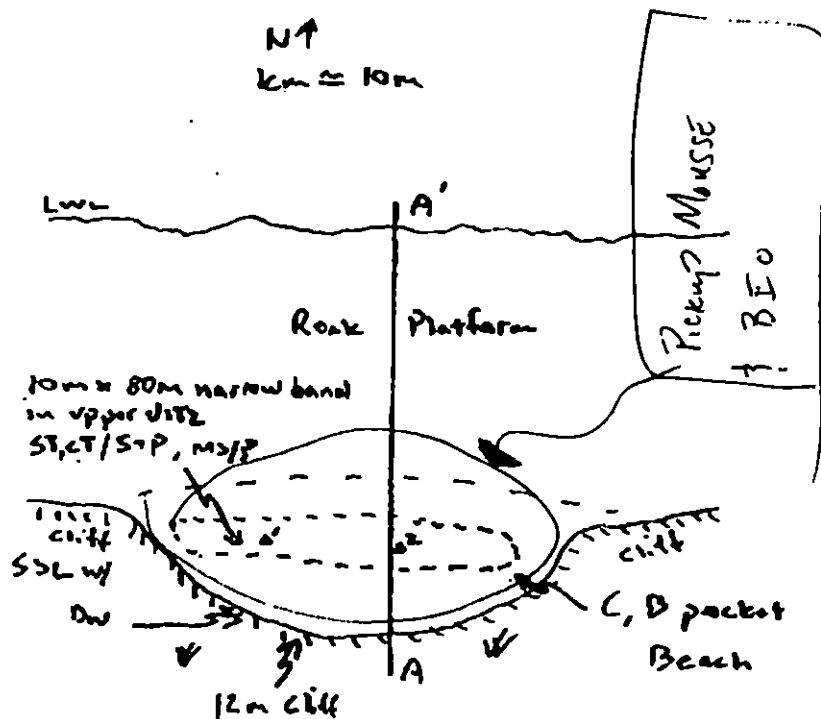
CT/S

Splashed Distribution

Oil Vegetation

1 $\Rightarrow$

Photo location, direction, and number



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

REVISED 04/90

OG Act

SEARCH MAP B

SEGMENT ST/ K9 8-C2-2

SUBDIVISION K9 8-C2-2A

DATE 4 / 27 90

CHECKLIST

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

LEGEND

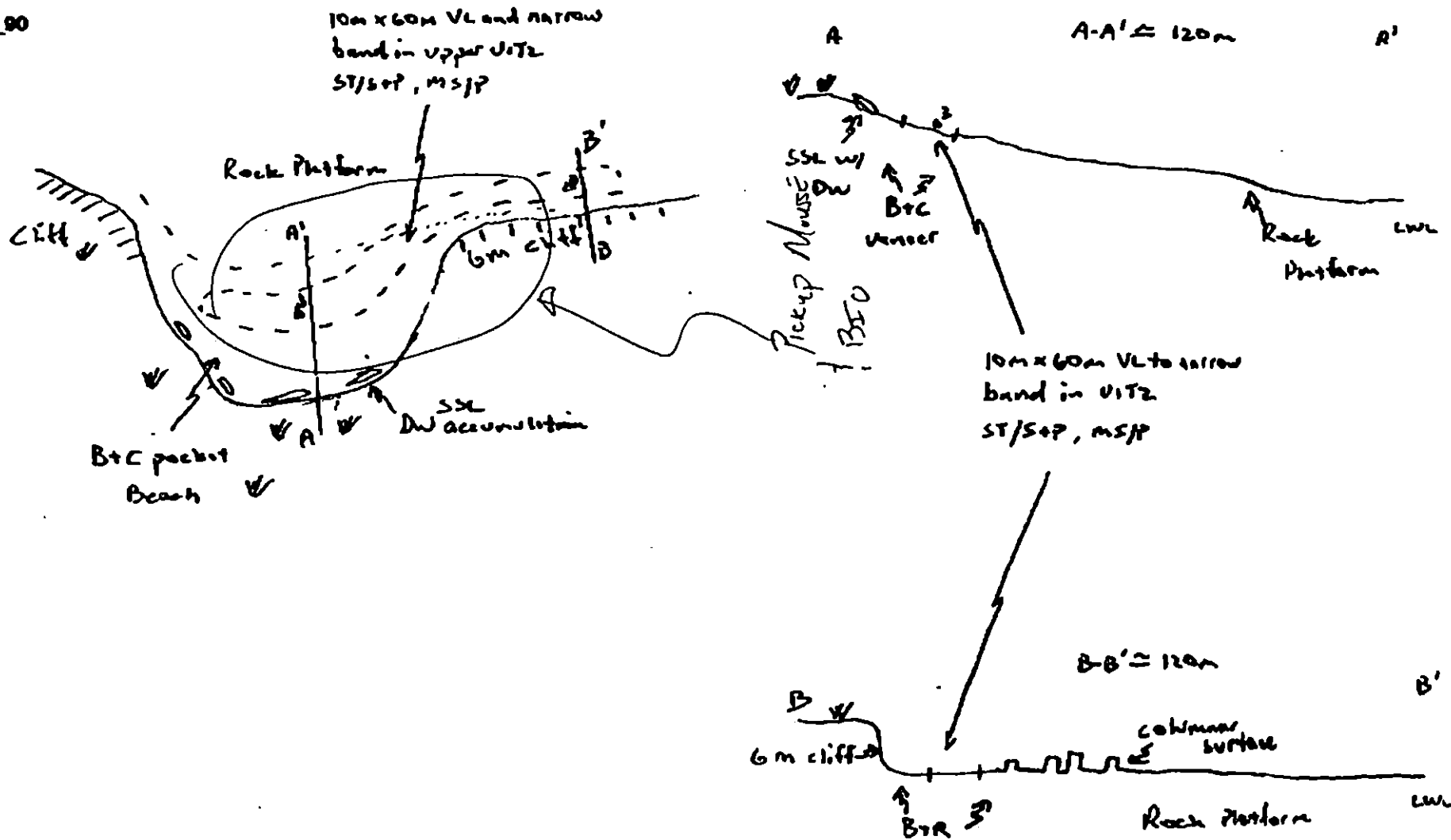
- 1 Δ
Pk - No Subsurface Oil
- 2 Δ
Pk - Subsurface Oil
- CT/C

Continuous Distribution
- CT/B

Broken Distribution
- CT/P

Patchy Distribution
- CT/S

Splashed Distribution
- Oil Vegetation
- 1 $\Rightarrow$
Photo location, direction, and number



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

REVISIONS

CD-2

K9-8-CD-2A

XXXX Wide

//// Medium

---- Narrow

TTTT Very Light

oooo No Oil

CD-2

ADEC Segment Length: 825m



K9-8-CP-2A

Map Key: 60A-40

Name: Acton

Date: 4-27-90

Date Entered:



REGION: KODIAK

SEGMENT: ST/K09-08-CD-02

SUBDIVISIONS: A (1 OF 1)

SHORELINE EVALUATION

SEGMENT ST/ K09-08-CD-02 SUBDIVISION A (1 OF 1) DATE 4/27/90

SEGMENT ENVIRONMENTAL SENSITIVITIES AND TIME CONSTRAINTS:

5T All bald eagle nests (3/1 to 6/1)-Active eagle nests (3/1 to 9/1)
Eagle nest on NOAA list.

See attached Ecological Constraint sheet for specific constraints and contacts.

SUBDIVISION ECOLOGICAL CONSTRAINTS:

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

ARCHAEOLOGICAL CONSTRAINTS:

If cultural resources are uncovered during shoreline treatment, stop work in the vicinity, mark the location of the find and contact Exxon's Cultural Resource Program immediately (564-3274 (Anchorage) or 229-1508 (24 hrs.)).

SHPO SIGNATURE: _____ DATE: _____

OILING CATEGORIZATION:

Wide 0 m: Medium 0 m: Narrow 93 m: V.Light 38 m: No Oil 694 m
Subsurface Oil Observed: Yes _____ No X Maximum Depth _____

RECOMMENDATIONS:

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

COMMENTS: Recommended treatment includes 1) manual pickup of mousse patties and 2) bioremediation of area shown on attached sketch map.
Work should be conducted after 6/1 with USFWS approval regarding eagle nest.

TAG COMMENTS: _____

TAG APPROVAL DATE: _____

ADEC _____
EXXON _____
NOAA _____
USCG _____

FOSC: _____ DATE: _____

KODIAK ECOLOGICAL CONSTRAINTS

- 1A Salmon stream mouth - fry outmigration (4/15 to 7/31)
 1B Salmon stream mouth - spawning (7/15 to 9/10; PEAK 8/15)
 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, 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 prior to treatment for consultation and/or permit application.
 AGENCY CONTACT PERSON: ADF&G Ken Middleton 267-2299
- 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, 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 Kotol Bay Hatchery release
 Pink salmon - late May, early June; Chum salmon - June; Sockeye salmon - early July.
- 1H Remote release site
 No use of methods which might affect nearshore oil or toxicity levels, such as hot water wash or Inipol application, 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 for confirmation and authorization.
 AGENCY CONTACT PERSON: ADF&G Larry Peltz 424-3214
- 1I Gill net area
 1J Purse seine area
 Mainland, West side Kodiak, Shuyak & Moser/Olga Bay (6/9 to 10/1)
 East side Kodiak, East side Afognak (7/4 to 10/1)
 1K Purse seine hook-off
 1L Set net sites
 Contact ADF&G for confirmation - dates and locations may vary. 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 Larry Nicholson 424-4791
- 2M Herring spawning (4/15 to 6/30)
 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 Larry Nicholson 486-4791
- 3P Harbor seal and sea lion pupping (5/10 to 7/1)
 3D Harbor seal and sea lion molting (8/15 to 9/15)
 Restrict boat and air traffic to essential minimum. No personnel within 400m. Aircraft to maintain 800m horizontal and 300m vertical distance from haulouts. No application of Inipol within two weeks of arrival dates (work window at these sites is limited to 7/2 to 7/31). Contact ADF&G and USFWS prior to treatment for confirmation.
 AGENCY CONTACT PERSON: US National Marine Fisheries Service Steve Zimmerman 586-7235
 ADF&G Don Calkins 267-2403
- 5R Seabird colony (5/1 to 9/1)
 Restrict air and boat traffic to essential minimum. No personnel within 800m. Aircraft to maintain 800m horizontal, 300m vertical distance from colony. Contact USFWS prior to treatment.
 AGENCY CONTACT PERSON: USFWS Jill Parker 786-3377
- 5S Shorebird/waterfowl concentration (4/1 to 5/15)
 Restrict all activity to essential minimum, especially air traffic. Contact USFWS and ADF&G for confirmation.
 AGENCY CONTACT PERSON: USFWS Jill Parker 786-3377
 ADF&G Tom Roth 267-2208
- 5T All Bald Eagle nests (3/1 to 6/1)
 Active Bald Eagle nests (3/1 to 6/1)
 Restrict air traffic and all disturbance to essential minimum. No personnel within 400m 3/1 to 6/1. Air approach and takeoff from and to seaward only; maintain 800m horizontal, 300m vertical distance from nests. Contact USFWS prior to treatment for confirmation of dates.
 AGENCY CONTACT PERSON: USFWS Jill Parker 786-3377
- 6U Recreation: Tent sites (6/1 to 9/15)
 6V Anchorages (6/1 to 9/15)
 6W Forest Service cabins (6/1 to 9/15)
 6X Lodge (6/1 to 9/15)
 6Y Special use destination
- 7Z Subsistence area: Salmon harvesting (6/1 to 9/30)
 7H Finfish harvesting
 7I Deer harvesting (8/1 to 1/7)
 7J Invertebrate harvesting
 7K Bear harvesting (4/1 to 5/15 and 10/25 to 11/30)
 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 / K9-08 CO-002 SUBDIVISION: K9-8-CD-2A DATE 4-27-90

SCG

NAME D.D. Haven Jr., TM3 USCG

SIGNATURE [Signature]

☒ NO TREATMENT RECOMMENDED

☐ TREATMENT SUGGESTED

COMMENTS

This area has a ^{very} small amount of mousse within a band mentioned in OG Report. Oil band consist of such small amounts of stain (none being recoverable) that treatment can't be recommended. I have monitored this area throughout the winter and it has dramatically improved itself.

ADEC

NAME Francine J. Bennis

SIGNATURE [Signature]

☐ NO TREATMENT RECOMMENDED

☒ TREATMENT SUGGESTED

COMMENTS

MANUAL CLEAN-UP RECOMMENDED w/ SHOVELS & TROWELS.

Segment has oiled areas at western & eastern edges, & has an area of NO OIL in between these.

Mousse saturated sediments in patchy distribution exist in oiled areas & are collectable.

Clean-up crew should have SSAT maps with them.

LAND MANAGER

NAME WILL TROYER

SIGNATURE [Signature]

☐ NO TREATMENT RECOMMENDED

☐ TREATMENT SUGGESTED

COMMENTS

Some mousse could be removed by manual means in those areas of major oil concentration. It is a high energy beach that probably will eventually clean itself.

SHORELINE OILING SUMMARY

REVISION NO. 06-13-80

OG Acton USCG Haven SEGMENT ST/ K9-8-CD-2
 BIO Dennis LAND REP NPS Travel, Texas SUBDIVISION K9-8-CD-2A (1 OF 1)
 EXXON Avery ADEC Bennis TIME 8:40 to 9:50
 TEAM NO. 20 TIDE LEVEL FLS to -2.0 DATE 4/27/90
 EST. SUBDIVISION LENGTH: 814 m ☒ Sun ☐ Clouds ☐ Fog ☐ Rain ☐ Snow
 UPLANDS DESCRIPTION: ☒ Grass ☐ Forest ☐ Rock
 SURVEYED FROM: ☒ Foot ☐ Boat ☐ Helo WORKING DIRECTION: W to E
 SURFACE SEDIMENTS: R 40 % B 40 % C 15 % P 1 % G 2 % S 2 % M 0 % V 0 %
 SLOPE: Long 100 % Hang - % Vert - % WAVE EXPOSURE: ☐ Low ☐ Med ☒ High
 OIL CATEGORY LENGTH: W 0 m M 0 m N 110 m VL 30 m NO 674 m

SURFACE OIL

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

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 0#BAGS 0

Photographs:

Roll No. ST-20-8Frames 15-20

SUBSURFACE OIL

PIT NO.	PIT DEPTH (cm)	SUBSURFACE OIL CHARACTER					OILED INTERVAL (cm)	BELOW		OIL / FILM COLOR					PIT ZONE				A N A	SHEEN (Y/N)	↓	SURFACE - SUBSURFACE SEDIMENTS
		OF	OR	OL	OF	NO		UO	UG	1	2	3	4	5	SU	U	M	U				
1	10					✓	.		✓							✓						C B
2	10					✓	.		✓							✓						C B
3	10					✓	.		✓							✓						C B
4	5					✓	.		✓							✓						B R
							.															
							.															

COMMENTS Shoreline is rock platform w/ D+c veneer. Two areas of oiling were observed (see maps). Pit depths are minimal due to R and B. Mousse was observed in interstitial spaces between rocks, boulders, cobbles (≤ 8 cm thick).

REVIEWED 7WDATE 5/1/90

OG. Action

SEGMENT 8-C2-2

SUBDIVISION K9-B-C2-2A

DATE 4 / 27 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)
- ☐ 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

Spashed Distribution

Oiled Vegetation

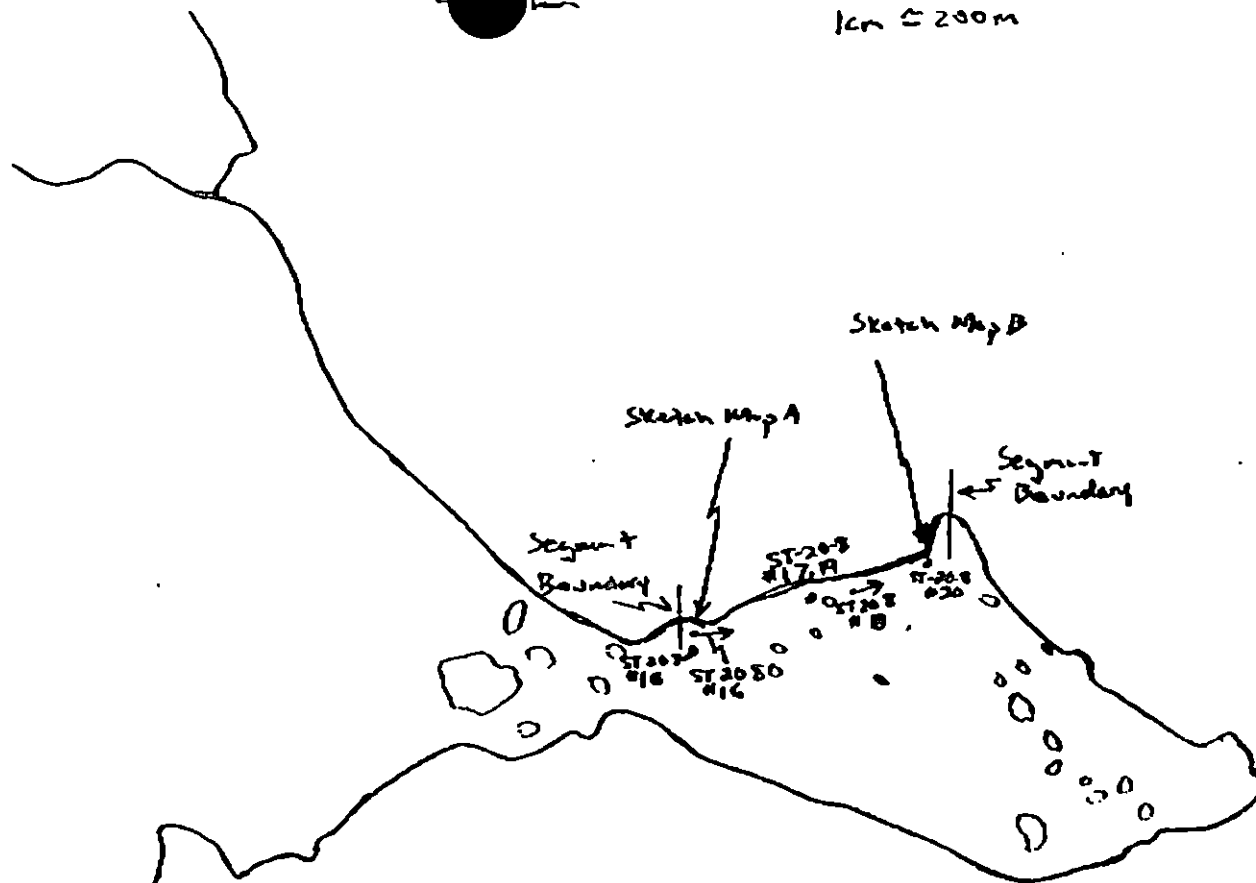
1 $\Rightarrow$

Photo location, direction,
and number

SKETCH MAP

N $\uparrow$

1cm $\approx$ 200m



Oil Character Length (m): AP _____ PO _____ CV 140 CT 220 ST 220 MS 140 PT _____ TB _____ FL _____ NO 594

REVISION: 01/24/90

SEGMENT 5-1-8 - CP-2

SUBDIVISION K9-8-CF-2A

DATE 4 / 27 90

CHECKLIST

- ☐ N Arrow
- ☐ Approx. Scale
- ☐ Seg/Sub Body
- ☐ Oil Dtsl
- ☐ Width
- ☐ Length
- ☐ % Cover
- ☐ Substrate Character
- ☐ Est. HPA/LWL
- ☐ SSL
- ☐ Profile Location(s)
- ☐ Profile(s)
- ☐ PI Location(s)
- ☐ Photo Location(s)

LEGEND

1 Δ
#1 - No Subsurface Oil

2 ▲
P1 - Subsurface Oil

CT/C
Continuous Distribution

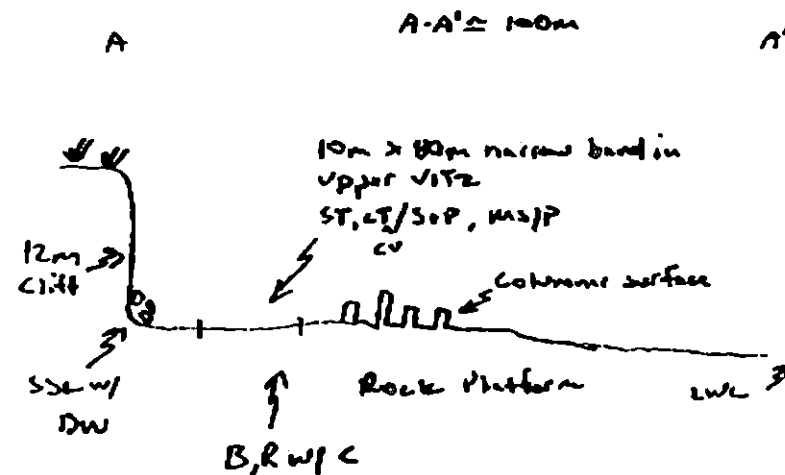
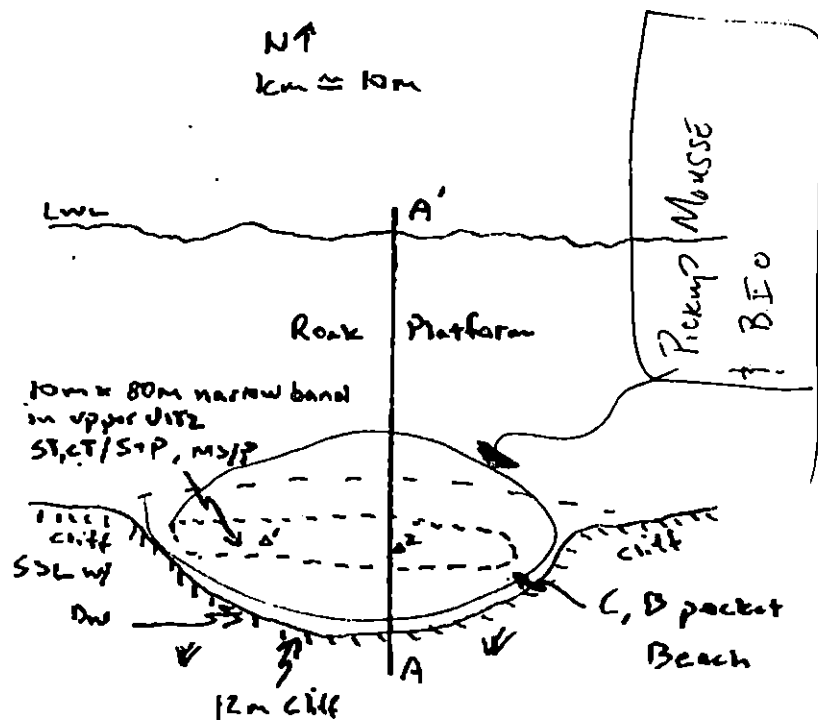
CT/B
Broken Distribution

CT/P
Partial Distribution

CT/S
Splashed Distribution

Cold Vegetation

Photo location, direction,
and number



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

References

DATE 4 / 27 90

CHECKLIST

- ___ N Answer
- ___ Approx. Scale
- ___ Seg/Sub Endry
- ___ Off Dist.
- ___ Width
- ___ Length
- ___ % Cover
- ___ Substrate Character
- ___ Est. HAILAWL
- ___ STL
- ___ Profile Location(s)
- ___ Profile(s)
- ___ Pin Location(s)
- ___ Photo Location(s)

LEGEND

1 Δ
Fit - No Subsurface Off

2 ▲
Fig - 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

10m x 60m VL and narrow
band in upper VLT
ST/STP, MSJP

Rock Phyllosum

16m 2

B+C packet
Beach

SSC
accumulation

ATCH MAP B

$$A-A' \leq 120m$$

R

A-A' $\leq 120m$

A

Pickup Mosaic

SSZ w/ DW

B+C

veneer

10m x 60m VL to arrow band in U1T2 ST/SOP, MSP

Fault

Rack Platform

LWL

10m x 60m VL to narrow
band in U1Z
ST/SP, MSP

 $B-B' \approx 120 \mu$

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

References

SHORELINE ECOLOGICAL SUMMARY

REVISION: 03/22/90

Segment ST / K9-08 Subdivision CD-02 Date (mo / day / yr) 4/27/90Time (24 hr) 8:40 Biologist N. Davis

- (A) Substrate type and % of segments:
 (1) Bedrock 40 (2) Boulder 40 (3) Cobble 10 (4) Pebble 5 (5) Sand 5 (6) Silt —
- (B) Overall % cover of biota (% of segment): Dense 10% Moderate 30% Low 60% (30%)
- (C) Density, substrate preference (by number from A, above), & vertical zonation of major taxa: (upper-U; mid-M; low tidal-L); juveniles / adults (X), new settlement (3)

Photographs: Roll No. ST-20-8Frames 15-20

BARNACLES continuous along segment. sparse to dense distribution

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

MYTILUS in crevices. sparse-rare

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
3, 4, 5, 6

GASTROPODS Littorines dense-moderate, limpets mod-sparse, Nucella sparse-rare

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

NOT PRESENT
4, 5, 6

FUCUS Patchy distribution. moderate-sparse

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

Wildlife Observations/ General Comments: Glaucous-winged gulls, Fuca, Rhodomeles, Corallina were the dominant algae with some laminaria in the low intertidal. Littorines, limpets were more common. The substrate type went from Rhyolite, and sand to cobble, and boulder. Lots of Halichondria panicea. Nucella sp. eggs (canaliculate) it looks like spring growth is just beginning. Pagurus sp. with eggs.

Ecological Considerations: There is an anadromous stream in the segment next to this one.

DATE 4/27/90 TIME 840-950

TIDE HEIGHT +1.5 To -2.0

1 = BEDROCK

2 = BOULDER

3 = COBBLE

S = SAND

6 = SILT

FLORA:

SPECIES	UITZ	MITZ	LITZ	COMMENTS
BOSSIELLA/CORALLINA	1	1	—	
CALLIARTHRON/CORALLINA	1	1	—	
CLADOPHORA SPP	—	1,2	1,2	
COSTARIA SPP	—	—	—	
ENDOCLADIA MURICATA	1,2	1,2	—	
FILAMENTOUS GREENS	—	1,2,3	1,2,3	
FILAMENTOUS REDS	—	—	1,2	
GLOIOPELTIS FURCATA	—	—	—	
HALOSACCION OLANDIFORME	—	1	1	old, large plants
LAMINARIA SPP	—	1	1,2	wide band in LTZ
LITHOTHAMNION	1	1	1	
NEREOCYSTIS SPP	—	—	—	in drift and floating off shore
PORPHYRA SPP	2,3	2	—	
RALPHSIA/HILDENBRANDIA	—	—	—	
RHODOMELA LARIX	1	1,2	—	
RHODOMENIA PALMATA	—	2	2	
SCYTOSIPHON SPP	—	—	—	
ULVA SPP	1	1	—	
ZOSTERA MARINA	—	—	—	
ENTOMORPHA	1,2	1,2	1	

FAUNA:

ANTHOPEURA SPP	—	1	—	
(SEMI) BALANUS CARIOSUS	—	1	1	
B. OLANDULA	—	1	—	
BRYOZOANS	—	—	—	
CHITONS (other than K. TUNICATA)	—	—	—	
CLAMS	—	—	—	
CRABS	—	—	—	
DERMASTIERIAS IMBRICATA	—	—	—	
KATHARINA TUNICATA	—	—	—	
LEPTASTERIAS HEXACTIS	—	—	—	
LIMPETS	1,2	1,2,3	1,2	
LITTORINA SPP	1,2,3	1,2,3	1,2,3	Dense
NUCELLA SPP	1	1,2	2	Edges of coralline on rock
PAGURUS SPP	1	1	—	
PISASTER OCHRACEUS	—	—	—	
POLYCHAETES	—	—	—	
PYCNOPODIA HELIANTHOIDES	—	—	—	
SEARLESIA DIRA	—	—	—	
SERPULIDS	—	—	—	
SIPHONARIA THESITES	—	—	—	
TEALIA	—	—	—	
Halichon dracaenoides	1,2	1,2	1,2	very abundant

CD-2

K9-8-CD-2A

XXXX Wide

//// Medium

--- Narrow

TTTT Very Light

oooo No Oil

CD-2

ADEC Segment Length: 825m

0 100 200 300

METERS

K9-8-CP-2A

Map Key: 60A-40

Name: Acton

Date: 4-27-90

Data Entered:

1991 MAYSAP EVALUATION

SEGMENT: K0908CD002 SUB: A REGION: KOD SURVEY DATE: 5/22/91

ENVIRONMENTAL SENSITIVITIES:

Work Window(s) OPEN

Ecological/Constraints (see page two for details) NONE

ARCHAEOLOGICAL CONSTRAINTS:

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

SHPO Signature: Timothy A. Smith Date: 6/07/91

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>	<u> </u>
Other <u> </u>	<u> </u>	<u> </u>	<u> </u>

COMMENTS:

INITIAL:

TAG:

FOSC:

TAG APPROVAL DATE: JUNE 6 1991

FOSC APPROVAL DATE: 6/12/91

ADEC John Bane

FOSC

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

EXXON Beal

USCG Ed Moore

NOAA John

MAYSAP FIELD SHORELINE COMMENT SHEET

TEAM NO. 6-HELO SEGMENT CD-2SUBDIVISION ADATE 5/22/91

ADEC

NAME J. BARNHART, ADECSIGNATURE Jeff Barnhart

- ☒ NTR Area A as shown on the OG sketch map is 42m long x 10m wide, containing brown, semi-fluid odoriferous oil with a thickness of 2.5-5.0 cm. A thin veneer of sand covers most of the mousse. VECO workers removed some mousse. Oil still remains on the beach. Area B contains oil in the form of wet, unweathered mousse. No oil removed by VECO workers at this site.

EXXON

NAME R. HARRELSON, EXXON

SIGNATURE _____

- ☐ NTR

See next page

LANDMANAGER

NAME E. BENNISOF NPSSIGNATURE Ernie Bennis

- ☒ NTR

Oil is concentrated in site A (OG map) in the form of mousse / I+V in cobbles / boulders, SOR, ST, CT, CV. VECO workers recovered 3 bags, approximately 60 # from this site. A thin veneer of clean sediments partially covered the observed oil. The oil present has a weathered surface layer covering sticky, gooey, "fresh" looking mousse. Other small wads of mousse (1cm. in diameter), "fresh" looking, are scattered among the boulders. Very little oil is present at site B, it is in the form of SOR, ST, CT, & trace of mousse. Splatters of ST, CT, & CV are present at an area to the west of site B, in a ~5x30m area (64% CV).

USCG/NOAA

NAME CWO R. SPURR / S. SHIGENAKASIGNATURE R. Spurr / S. Shigenaka

- ☒ NTR Most of the recoverable oil in this segment was removed by the workers during the MAYSAP survey

THE SURVEYED PORTION OF THE SEGMENT CONSISTED OF A BOULDER BEACH WITH BEDROCK CLIFFS AND/OR GRASSY FLATS FOUND ABOVE. AS HAS BEEN FAIRLY TYPICAL OF THE BOULDER BEACHES SURVEYED IN THIS AREA, THE MID- TO UPPER ITZ WERE DEPAUPERATE, ALTHOUGH LARGE LITTORINA SITKANA SNAILS WERE ABUNDANT IN THE MID- TO LOWER ITZ. THE MOST SIGNIFICANT BAND OF OILING FOUND ALONG THE AREA SURVEYED WAS A LITZ 4-14m WIDE x 45m LONG (OG ESTIMATES) SECTION WHERE SOR/MOUSSE WAS OBSERVED AMONG BOULDERS AND UNDER COBBLES. SOME SILVER SHEEN WAS ALSO SEEN IN POOLS OF WATER. THE VECO CREW WORKED THIS SITE DURING THE SURVEY, RECOVERING 3 BAGS. OVER THE REMAINDER OF THE SURVEYED AREA, SCATTERED OCCURRENCES OF COAT OR SPLATTERS WERE SEEN, BUT CONCENTRATION, OR PERCENT COVER, WAS VERY LOW.



11-44 PMJ7 TO 17135561757 P.03
MAYSAP FIELD SHORELINE COMMENT SHEET

TEAM NO. 6-HELO SEGMENT CP-2 SUBDIVISION A DATE 5/22/91

ADEC

NAME E. T. BARNHART, ADEC

SIGNATURE E. T. Barnhart

- ☒ NTR Area A as shown on the OG sketchmap is 42m long & 10m wide, containing brown, semi-fluid odoriferous oil with a thickness of 2.5-5.0 cm. A thin veneer of sand covers most of the mousse. VECO workers removed some mousse. Oil still remains on the beach. Area B contains oil in the form of wet, unweathered mousse. No oil removed by VECO workers at this site.

EXXON

NAME R. HARRISON, EXXON

SIGNATURE R. Harrison

- ☒ NTR Recoverable oil has been picked up by VECO workers. No net environmental benefit from additional work.

LANDMANAGER

NAME E. BENNIS

OF NPS

SIGNATURE E. Bennis

☒ NTR

Oil is concentrated in site A (OG map) in the form of mousse / 2+V in cobbles / boulders, sor, cr, cp, cv. VECO workers recovered 3 bags, approximately 60# from this site. A thin veneer of clean sediments partially covered the observed oil. The oil present has a weathered surface layer covering sticky, gooey, "fresh" looking mousse. Other small wads of mousse (1cm. in diameter), "fresh" looking, are scattered among the boulders. Very little oil is present at site B, it is in the form of sor, cr, cp, & trace of mousse. Splatters of sor, cr, & cv are present in an area to the west of site B, in a 5x30m area (46/970/1700).

USCG/NOAA

NAME CWO E. SPURR / E. SHIGENAKA

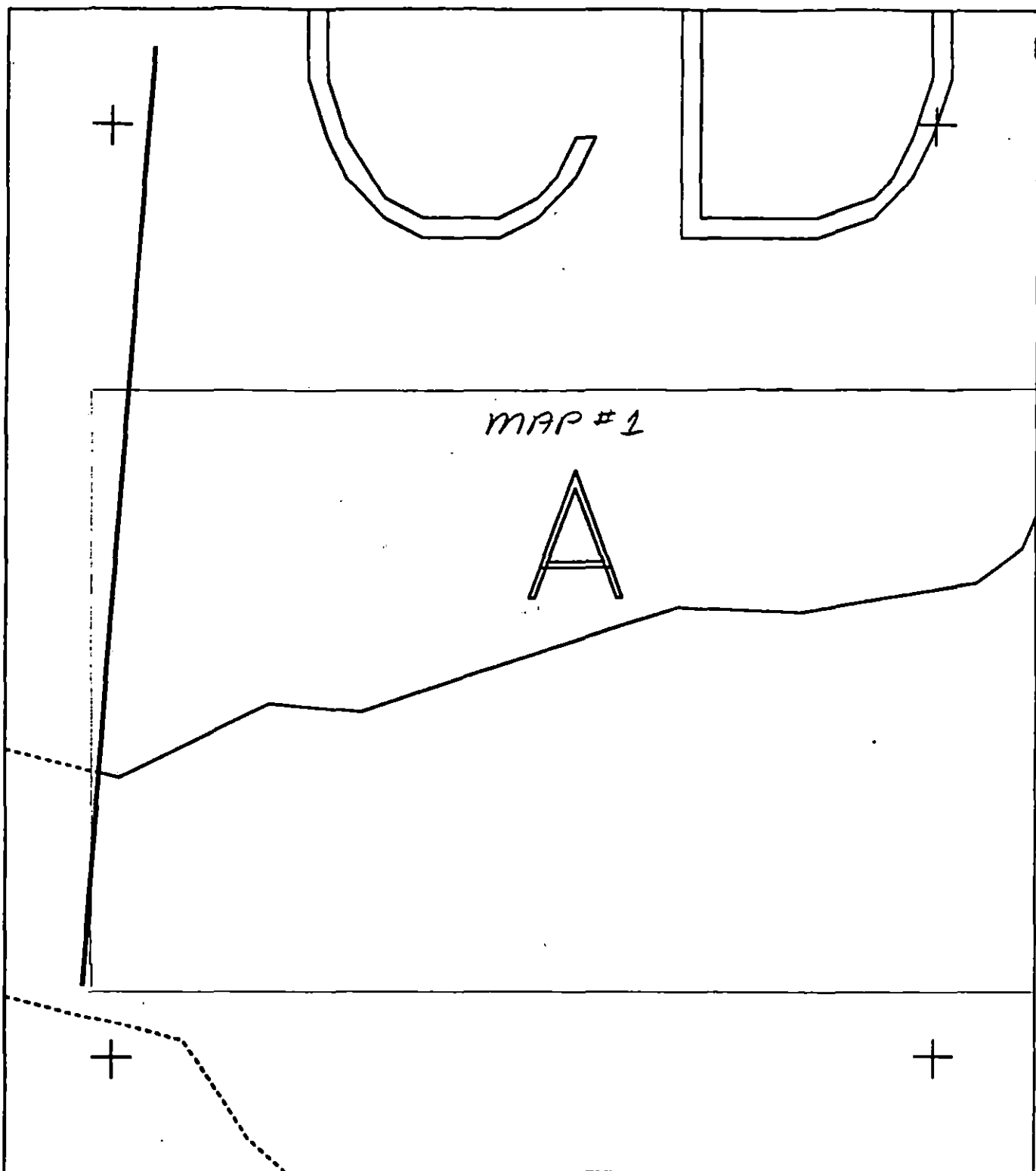
SIGNATURE E. Spurr / E. Shigenaka

- ☒ NTR Most of the recoverable oil in this segment was removed by the workers during the MAYSAP survey.

THE SURVEYED PORTION OF THE SEGMENT CONSISTED OF A BOULDER BEACH WITH SEVERAL CLIFFS AND/OR GRASSY FLATS FOUNDED ABOVE, AS HAS BEEN FAIRLY TYPICAL OF THE BOULDER BEACHES SURVEYED IN THIS AREA. THE MID- TO UPPER TIDE WERE DEPAUPERATE, ALTHOUGH LARGE LITTORINA SITICANA SNAILS WERE ABUNDANT IN THE MID- TO LOWER TIDE. THE MOST SIGNIFICANT BAND OF OILING FOUNDED ALONG THE AREA SURVEYED WAS A 10m WIDE X 45m LONG (OG ESTIMATES) SECTION WHERE SOR/LAUSSE WAS OBSERVED AMONG BOULDERS AND COBBLES. SOME SILVER SHEEN WAS ALSO SEEN IN POOLS OF WATER. THE VECO CREW WORKED THIS SITE DURING THE SURVEY, RECOVERING 3 BAGS. OVER THE REMAINDER OF THE SURVEYED AREA, SCATTERED OCCURRENCES OF COAT OR SPLATTERS WERE SEEN, BUT CONCENTRATION, OR PERCENT COVER, WAS VERY LOW.

PAGE 1 OF 1

Reviews: MC 5/29/91
reviewed 5.27.92

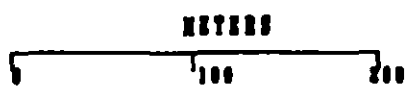


MAP #1

A



K0908 CD002 A



AS State Planning Dept. 1

Subdivision Field Map
Map Key: COX0000CD002A
Name: D. Fitzgerald
Date: 22 May 1991

Reviewed S.27 Gy

MAP #1
Continued

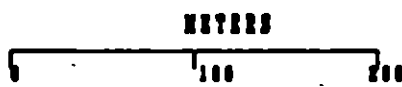
K0908 CD002 A

Subdivision Field Map

Map Key: 604X0000C0002A3

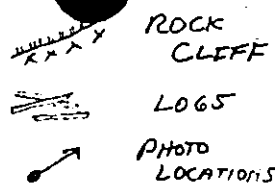
Name: D. Fitzgerald

Date: 22 May 1991



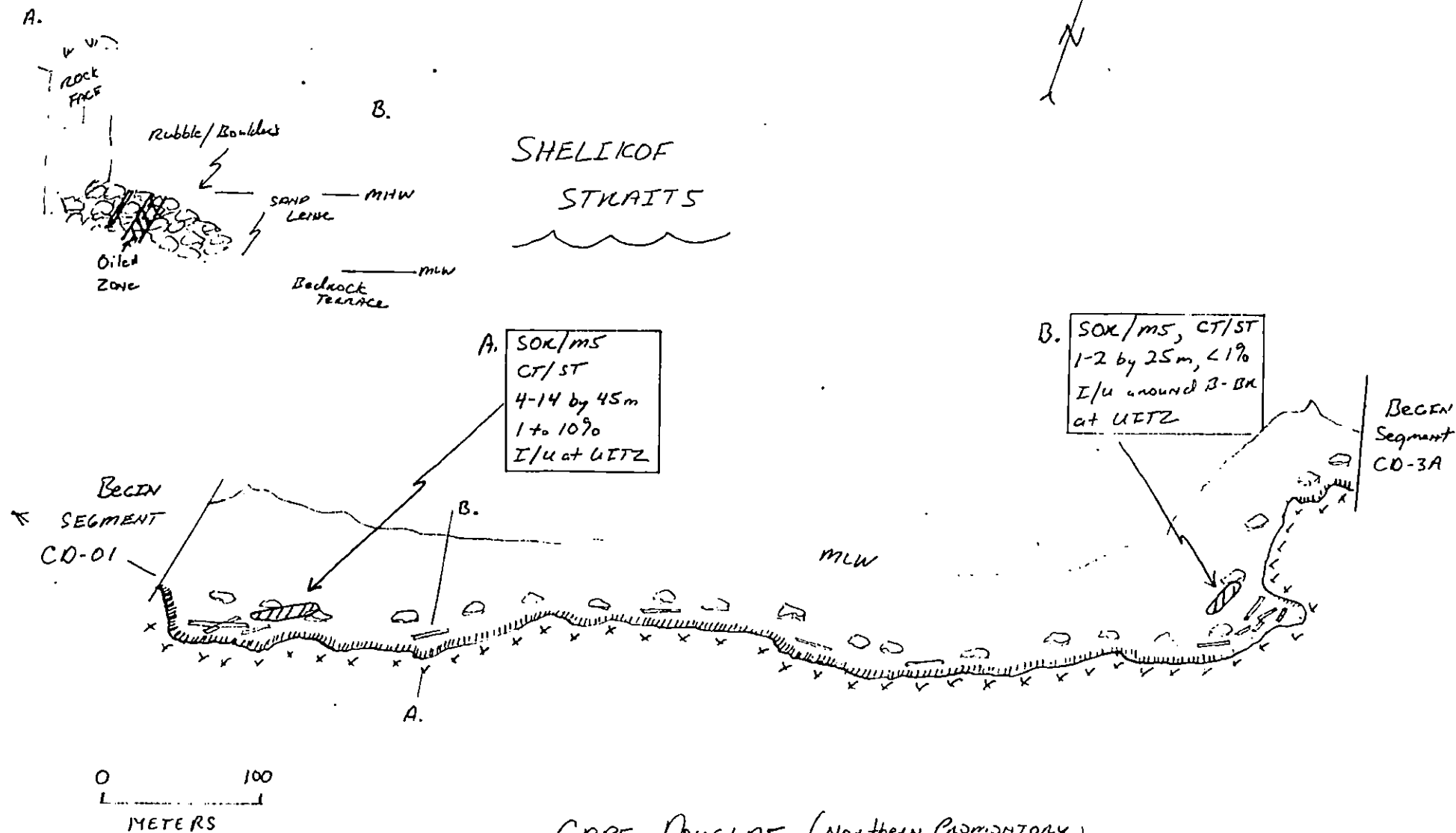
AK State Plane Zone 14
GCS: NAD83

Reviewed 5-27-94



PU. & VECO WORKERS
 COLLECTED 3 BAGS OF
 OILED SEDIMENT AT
 SITE A.

SKETCH MAP (06)
 K9N-8-CD-2A
 D. M. FITZGERALD
 22 May 1991
 1415-1515



REVIEWED: MC 5/09/91
 reviewed 5.27 94

MAYSAP BIOLOGICAL SUMMARY FORM

TEAM # G Helo

DATE May 22 1991

SEGMENT # K9N-08 CD-2

TIDAL HEIGHT (Range) 4.2 ft - 1.6 ft (14:15 15:15)

SUBDIVISION A

BIOLOGIST H. Davis

SEA STATE Calm < 1 ft

WIND SPEED/DIRECTION light breeze 5 kt NE

PHOTOGRAPHS: ROLL # G-20

FRAME # 4-6

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

Like most of CD, this segment is a bedrock platform against grass topped cliffs. Boulders, cobble and gravel cover the surface of the bedrock. Sites A+B Both sites were very similar in position, although Site A was larger. In sites A+B littorina, amphipods and endobryoids were the most common animals. Endocladia, Barnacles and limpets were also present but sparse. There was little drift mostly Alaria, Laminaria, and Fucus. Endobryoids and amphipods were active in the shell hash/gravel beneath drift. Limpets, barnacles, littorina, endocladia and Fucus become more dense below the two sites. In small pools and crevices Fucus, Alaria, Laminaria, crustacean coralline, Mytilus, Rhodomea, Ulva, Papurus, and Anthopleura artemesia occur. Above the two sites are caches of debris and logs.

The biota in this segment is fecund, healthy, and beginning spring growth. Clean up would be more disruptive than productive.

Western Sandpipers (2) Kittiwakes (4 (2 dead)) Glaucous-winged Gull (+10) Swallows (3)

WILDLIFE OBSERVATIONS

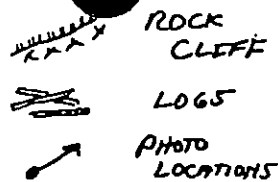
TO BE COMPLETED IN ALL SUBDIVISIONS

BIRDS	# OF SPECIES	TOTAL BIRDS	FISH OBSERVED SPECIES PRESENT
Eagles	0		
Seabirds	—		
Waterfowl	—		
Gulls/Kittiwakes	2	+ 14	
Shorebirds	1	2	
Corvids	—		
Other Birds swallows	1	3	

MARINE MAMMALS	# OBSERVED	LAND MAMMALS SPECIES	# OBSERVED
Sea Otters	0		
Pinnipeds (specify)			
Elles (specify)			

shoreline subdivision map showing important biological features attached.

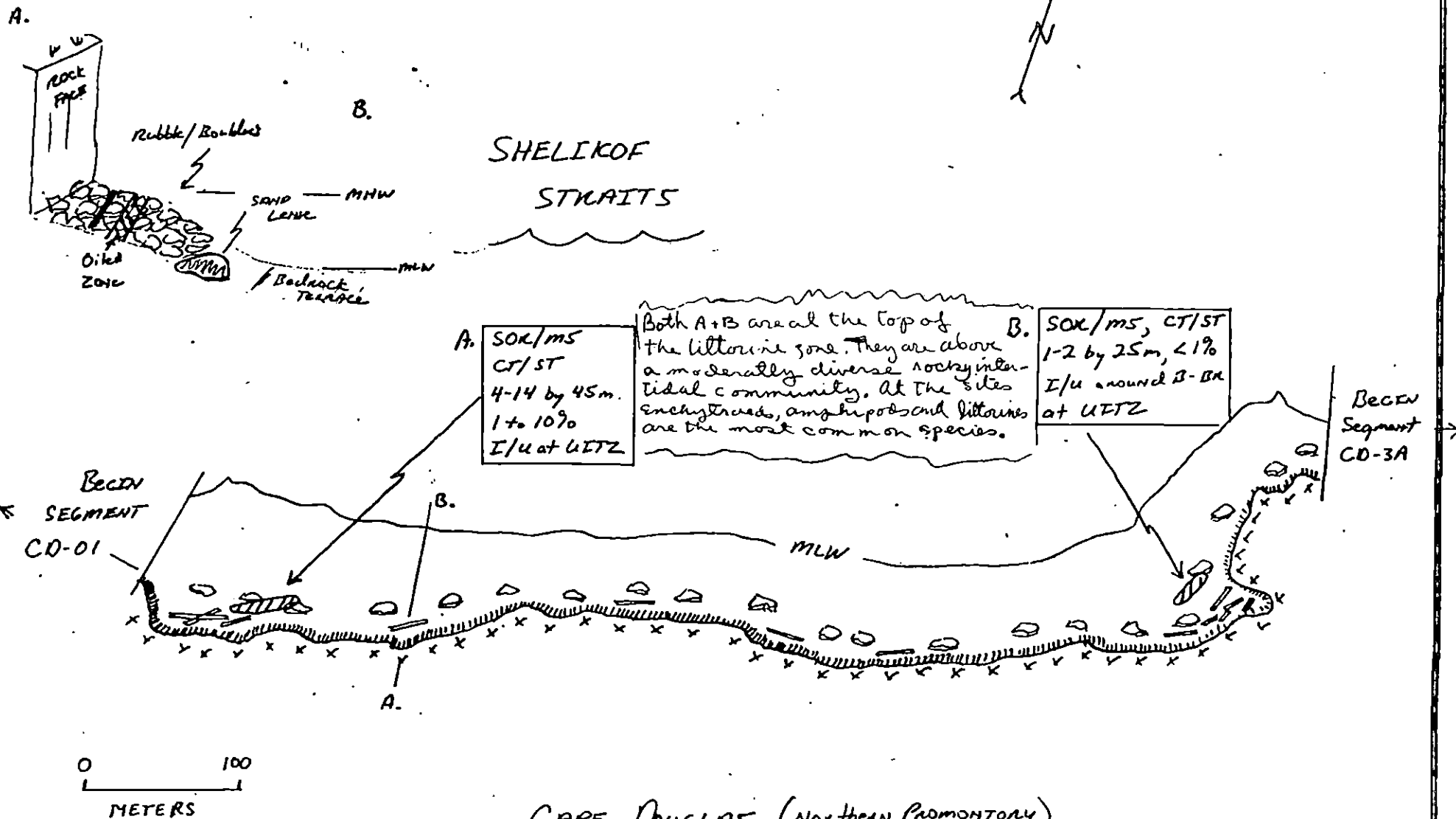
Doc. M R 5/24/91



P.U. & VECO WORKERS
COLLECTED 3 BAGS OF
OILED SEDIMENT AT
SITE A.

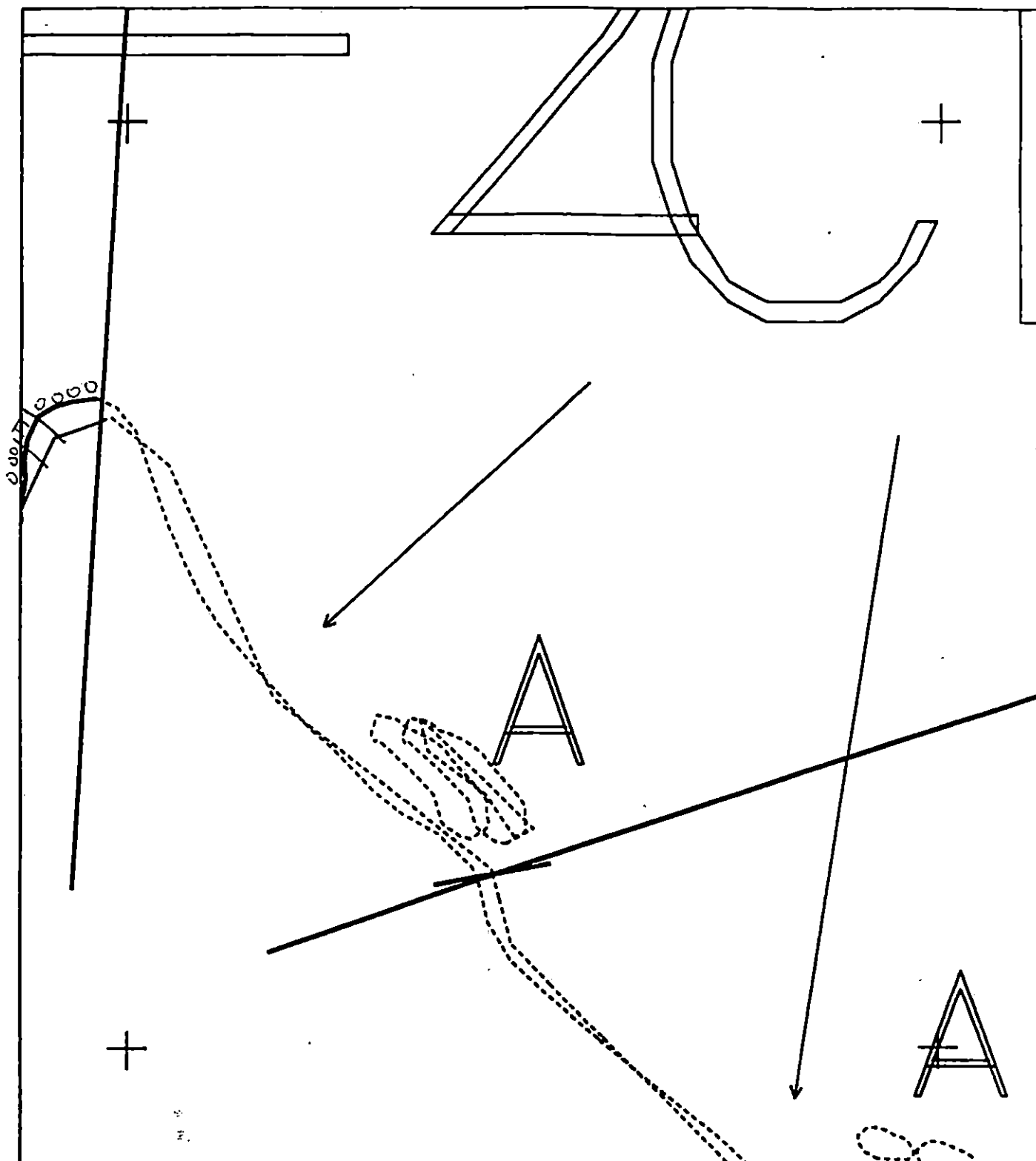
Bio Map
H. Davis

Sketch Map (06)
K9N-8-CD-2A
D. M. Fitzgerald
22 May 1991
1415-1515



CAPE DOUGLAS (NORTHERN PROMONTORY)

Reviewed 5.27 9y



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

K0908 CD002 A
 ADEC Subsegment Length: 825m.

METERS

0 100 200

AK State Plane Zone 4
 900000d002ab-1 . . .



Subdivision Field Map

Map Key: 60AK0000CD002Ab

Name: D Fitzgerald

Date: 22 May 1991

Date Entered:

Reviewed: MC 5129m
 reviewed 5.27.91

1991 MAYSAP EVALUATION

SEGMENT: K0908CD002 SUB: A REGION: KOD SURVEY DATE: 5/22/91

ENVIRONMENTAL SENSITIVITIES:

Work Window(s) OPEN

Ecological/Constraints (see page two for details) NONE

ARCHAEOLOGICAL CONSTRAINTS:

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

SHPO Signature: _____ Date: _____

RECOMMENDATIONS:

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

ADECNAME J. BARNHART, ADECSIGNATURE Jiff Barnhart

- ☒ NTR Area A as shown on the OG sketch map is 42m long x 10m wide, containing brown, semi-fluid odoriferous oil with a thickness of 2.5-5.0 cm. A thin veneer of sand covers most of the mousse. VECO workers removed some mousse, oil still remains on the beach. Area B contains oil in the form of wet, unweathered mousse. No oil removed by VECO workers at this site.

EXXONNAME R. HARRELSON, EXXON

SIGNATURE _____

- ☐ NTR

See next page

LANDMANAGERNAME E. BENNISOF NPSSIGNATURE Ernie Bennis

- ☒ NTR

Oil is concentrated in SITE A (OG map) in the form of mousse/ITV in cobbles/boulders, SOR, ST, CT, CV. VECO workers recovered 3 bags, approximately 60# for this site. A thin veneer of clean sediments partially covered the observed oil. The oil present has a weathered surface layer covering sticky, gooey, "fresh" looking mousse. Other small wads of mousse (1cm. in diameter), "fresh" looking, are scattered among the boulders. Very little oil is present at SITE B, it is in the form of SOR, ST, CT, & trace of mousse. Splatters of ST, CT, & CV are present at an area to the west of SITE B, in a 5x30m area (24/07).

USCG/NOAANAME CWO R. SPURE/B. SHIGENAKASIGNATURE R. Spure / B. Shigenaka

- ☒ NTR Most of the recoverable oil in this segment was removed by the workers during the MARSAP survey

THE SURVEYED PORTION OF THE SEGMENT CONSISTED OF A BOULDER BEACH WITH BEYOND CLIFFS AND/OR GRASSY FLATS FOUND ABOVE. AS HAS BEEN FAIRLY TYPICAL OF THE BOULDER BEACHES SURVEYED IN THIS AREA, THE MID- TO UPPER ITZ WERE DEPAUPERATE, ALTHOUGH LARGE LITTORINA SITKANA SNAILS WERE ABUNDANT IN THE MID- TO LOWER ITZ. THE MOST SIGNIFICANT BAND OF OILING FOUND ALONG THE AREA SURVEYED WAS A LITZ 4-14m WIDE x 45m LONG (OG ESTIMATES) SECTION WHERE SOR/MOUSSE WAS OBSERVED AMONG BOULDERS AND UNDER COBBLES. SOME SILVER SHEEN WAS ALSO SEEN IN POOLS OF WATER. THE VECO CREW WORKED THIS SITE DURING THE SURVEY, RECOVERING 3 BAGS. OVER THE REMAINDER OF THE SURVEYED AREA, SCATTERED OCCURRENCES OF COAT OR SPLATTERS WERE SEEN, BUT CONCENTRATION, OR PERCENT COVER, WAS VERY LOW.

TEAM NO. 6-HELLO SEGMENT CD-2 SUBDIVISION A DATE 5/22/91

ADEC

NAME J. BARNHART ADEC

SIGNATURE J. Barnhart

- ☒ NTR Area A as shown on the OG sketchmap is 42m long x 10m wide, containing brown, semi-fluid odoriferous oil with a thickness of 2.5-5.0 cm. A thin veneer of sand covers most of the mousse. Veco workers removed some mousse. Oil still remains on the beach. Area B contains oil in the form of wet, unweathered mousse. No oil removed by Veco workers at this site.

EXXON

NAME R. HAPPELSON EXXON

SIGNATURE R. Happelson

- ☒ NTR Recoverable oil has been picked up by Veco workers. No net environmental benefit from additional work.

LANDMANAGER

NAME E. BENNIS

OF NPS

SIGNATURE E. Bennis

- ☒ NTR

Oil is concentrated in site B (OG map) in the form of mousse / 2+V in cobbles / boulders, silt, etc. Veco workers recovered 3 bags, approximately 60 # for this site. A thin veneer of clean sediments partially covered the observed oil. The oil present has a weathered surface layer covering sticky, gooey, "foam" (looking more like small wads of mousse (1cm. in diameter), "foam" looking, and scattered among the boulders. Very little oil is present at site B, it is in the form of silt, etc. a mass of material. Splatters of silt, etc. are present at an area to the west of site B, in a 5x30m area (6/10).

USCG/NOAA

NAME CWO R. SPURR / S. SHIGEMAE

SIGNATURE R. Spurr / S. Shigemae

- ☒ NTR Most of the recoverable oil in this segment was removed by the workers during the ALBERT survey

THE SURVEYED PORTION OF THE SEGMENT CONSISTED OF A BOULDER BEACH WITH BEDROCK CLIFFS AND/OR GRASSY FLATS FOUND ABOVE, AS HAS BEEN FAIRLY TYPICAL OF THE BOULDER BEACHES SURVEYED IN THIS AREA. THE MID. TO UPPER TIDE WERE DEPAUPERATE, ALTHOUGH LARGE LITTORINA SITICANA SNAILS WERE ABUNDANT IN THE MID. TO LOWER TIDE. THE MOST SIGNIFICANT BAND OF OILING FOUND ALONG THE AREA SURVEYED WAS A SITE 2-14 M WIDE X 45M LONG (OG ESTIMATES) SECTION WHERE SOR/MOUSSE WAS OBSERVED AMONG BOULDERS AND UPPER COBBLES. SOME SILVER SHEEN WAS ALSO SEEN IN POOLS OF WATER. THE VECO CREW WORKED THIS SITE DURING THE SURVEY, RECOVERING 3 BAGS. ONLY THE REMAINDER OF THE SURVEYED AREA, SCATTERED OCCURRENCES OF COAT OR SPLATTERS WERE SEEN, BUT CONCENTRATION, OR PERCENT COVER, WAS VERY LOW.

Reviewed: MC 5/29/91
reviewed 5.27.94



AK State Plane Zone 9
90080000-0000

Reviewed 5.27.97

+

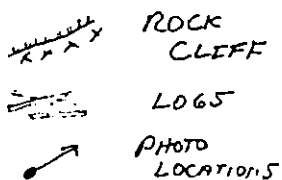


A horizontal scale bar labeled "METERS" with markings at 0, 100, and 200.

AK State Planning Zone, 4
90908cd002ub-

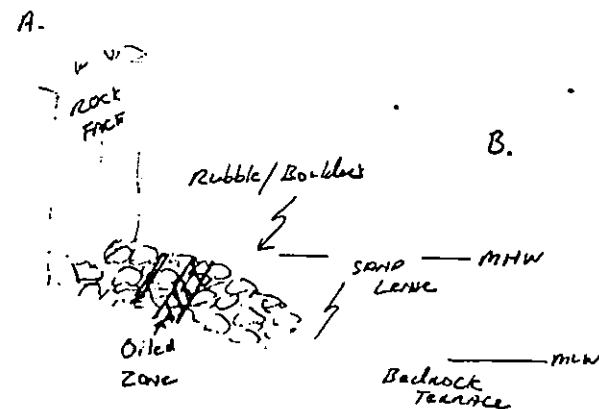
Date: 22 MAY 1991

reviewed 5.27 94



P.U. & VECO WORKERS
COLLECTED 3 BAGS OF
OILED SEDIMENT AT
SITE A.

Sketch Map (06
K9N-8-CD-2A
D. M. FitzGerald
22 May 1991
1415-1515



SHELIKOF
STRAITS

B. SOX/MS, CT/ST
1-2 by 25m, <1%
I/u around B-BK
at UETZ

BEGIN
Segment
CD-3A

BEGIN
SEGMENT
CD-01

A. SOX/MS
CT/ST
4-14 by 45m
1 to 10%
I/u at UETZ

0 100
METERS

CAPE DOUGLAS (Northern PUDJANTORY)

REVIEWED: MC 5/09/91

MAYSAP BIOLOGICAL SUMMARY FORM

TEAM # G Helo

DATE May 22 1991

SEGMENT # K9N-08 CD-2

TIDAL HEIGHT (Range) 4.2 ft - 1.6 ft (14:15 15:15)

SUBDIVISION A

BIOLOGIST H. Davis

SEA STATE Calm < 1 ft

WIND SPEED/DIRECTION Light breeze 5 kt NE

PHOTOGRAPHS: ROLL # G-20

FRAME # 4-6

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

Like most of CD this segment is a bedrock platform against glass topped cliffs. Boulders, cobble and gravel cover the surface of the bedrock. Sites A+B Both sites were very similar in position, although Site A was larger. In site A+B littorina, amphipods and anachitids were the most common animals. Endocladia, barnacles and limpets were also present but sparse. There was little drift on site. Alaria laminaria and Fucus. Encyrtids and amphipods were active in the small bush/gravel beneath drift. Limpets, barnacles, littorina, endocladia and Fucus become more dense below the two sites. In small pools and crevices Fucus, alonchalia, hairsia, crustacean coralline, Mytilus, Rhodomeles, Ulva, Papurus, and anthopleura artemisia occur. Above the two sites are caches of debris and logs.

The biota in this segment is found, healthy, and beginning spring growth. Clear up would be more disruptive than productive.

Western Sandpipers (2) Kittiwakes (4 (2 dead)) Glaucous-winged Gull (+10) Swallows (3)

WILDLIFE OBSERVATIONS

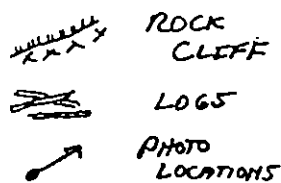
TO BE COMPLETED IN ALL SUBDIVISIONS

BIRDS	# OF SPECIES	TOTAL BIRDS	FISH OBSERVED SPECIES PRESENT
Eagles	0		
Seabirds	-		
Waterfowl	-		
Gulls/Kittiwakes	2	+ 14	
Shorebirds	1	2	
Corvids	-		
Other Birds swallows	1	3	

MARINE MAMMALS	# OBSERVED	LAND MAMMALS SPECIES	# OBSERVED
Sea Otters	0		
Pinnipeds (specify)			
Whales (specify)			

Shoreline subdivision map showing important biological features attached.

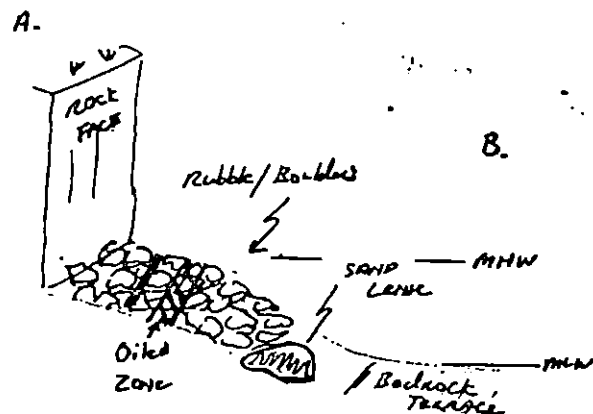
Reviewed M.B. 5/22



P.U. * VECO WORKERS
COLLECTED 3 BAGS OF
OILED SEDIMENT AT
SITE A.

Bio Map
H. Davis

Sketch Map (06
K9N-8-CD-2A
D. M. FITZGERALD
22 May 1991
1415-1515

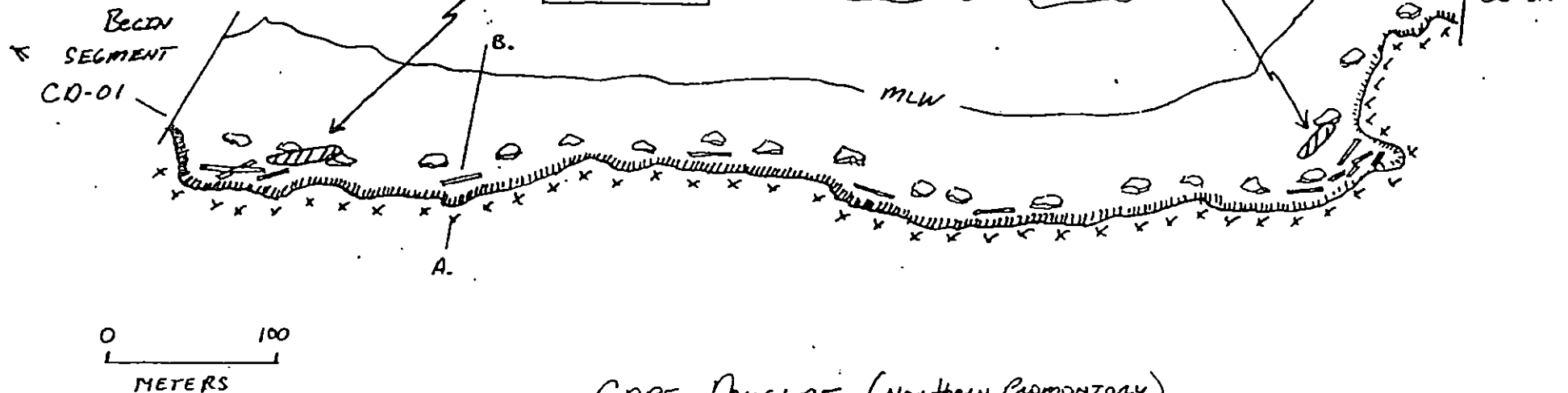


SHELIKOF
STRAITS

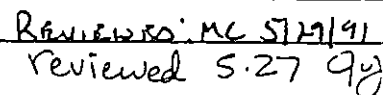
A. SOK/MS
CT/ST
4-14 by 45m.
1 to 10%
I/U at UETZ

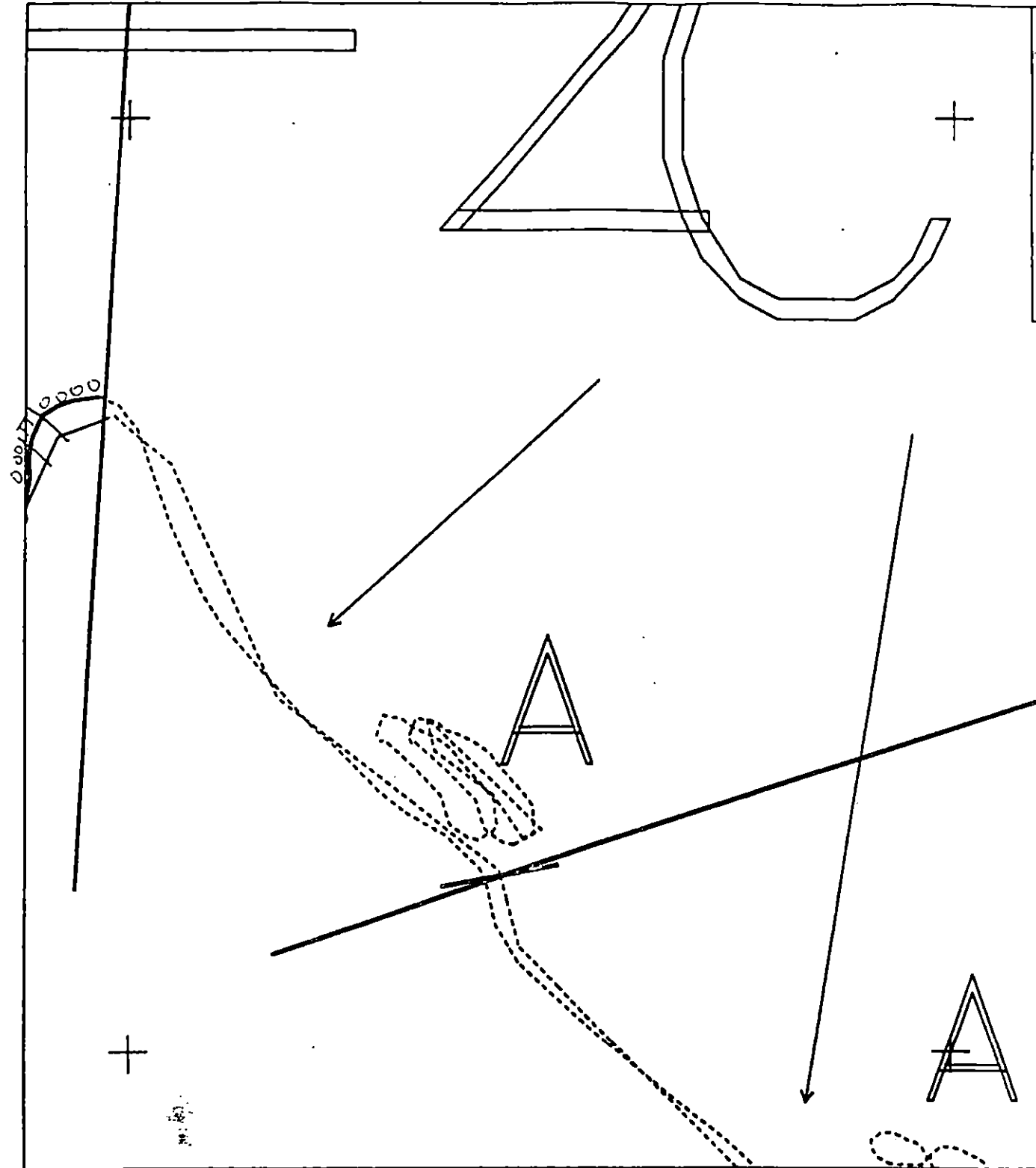
Both A+B are at the top of
the littoral zone. They are above
a moderately diverse rocky inter-
tidal community. At the sites
encrusted, amphipods and littorines
are the most common species.

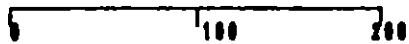
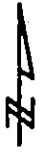
B. SOK/MS, CT/ST
1-2 by 25m, <1%
I/U around B-BX
at UETZ



CAPE DOUGLAS (NORTHERN PROMONTORY)





XXXX	Wide	K0908 CD002 A ADEC Subsegment Length: 825m. METERS  AK State Plane Zone 4 90008ed002ab-...	 Subdivision Field Map Map Key: 00AX0000CD002AB Name: <u>D Fitzgerald</u> Date: <u>22 May 1991</u> Date Entered:
////	Medium		
----	Narrow		
TTTT	Very Light		
0000	No Oil		



Reviewed: MC 5127191
 reviewed 5.27.91

1991 MAYSAP EVALUATION

SEGMENT: K0908CD003 **SUB:** A **REGION:** KOD **SURVEY DATE:** 5/22/91

ENVIRONMENTAL SENSITIVITIES:

Work Window(s) OPEN

Ecological/Constraints (see page two for details) NONE

ARCHAEOLOGICAL CONSTRAINTS:

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

SHPO Signature: _____ **Date:** _____

RECOMMENDATIONS:

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 _____

ADECNAME J. BARNHART, ADEC

SIGNATURE

Jeff Barnhart☐ NTR ☒ Treatment Recommended

K9-08 CD03 and K9-9 CD03 must be reviewed as a single entity. Segment CD03 is bisected by a Kunit boundary line. Oiled area within K9-8 CD03 is 30m x 30m, mousse oozing around boulders, pooled oil. Brown sheen in tidal pools, 5% oil coverage. Vero crew removed approx. 100 pounds of oil. K9-08 CD003 and K9-9 CD03 combined have recoverable mousse, estimated to be 50-75 bags. Recommend cleanup using Trowels to remove the heavy mousse/pooled oil from between the boulders and cobbles.

☒ TREATMENT SUGGESTED CONCUR WITH NPS, ADEC & USCG (Kodiak Island Beach) *John Jett***EXXON**NAME R. HARRELSON, EXXON

SIGNATURE

☐ NTR*See next page***LANDMANAGER**NAME E. BENNISOF NPS

SIGNATURE

Francis Bennis☐ NTR ☒ Treatment suggested

SITE A (06 map) 8-20m x 40m still contains mousse pooled (to 6cm thick observed), ST, CV, SDR. Mousse appeared to "bleed" in the sun. Deposition of clean gravels is present in the upper portion (landward) of this site, 1990's SSAT survey (April) indicated much less oil than was actually retrieved in August 1990 clean-up, executed after many days of warm temperatures. It's likely that this situation could be repeated as warm temperatures lower the oil's viscosity. Oil will continue to "bleed" throughout B/C interstices. Pending review by NPS, treatment is suggested to retrieve recoverable oil.

USCG/NOAANAME CWO R. SPURR / B. SHIGENAKA

SIGNATURE

R. Spurr / B. Shigenaka

☐ NTR Site A on 06 map still contains a substantial SDR and pooled mousse which was very evident during survey. This can be removed manually by a work crew as it is easily accessible between the large boulders

SURVEYED PORTION OF THE SEGMENT CONSISTED OF A FAIRLY LIMITED AREA EXTENDING FROM THE BORDER BETWEEN K9NBCD-3 AND K9N9CV-3 (WHOEVER DESIGNATED THESE SEGMENTS SHOULD BE MOUSSED AND FEATHERED) NORTHWEST ABOUT 25M (J. BARNHART ESTIMATE). THE AREA HAD PREVIOUSLY BEEN NOTED AS HAVING BEEN OILED AND SHOWED OBVIOUS SIGNS (STAIN/COAT ON BOULDERS) THAT MADE IT EASY TO RELOCATE. THE BEACH WAS A BOULDER BEACH WITH BEDROCK OUTCROPS. MID- TO UPPER ITZ WAS DEPAUPERATE, BUT LITTORINA SITKANA SNAILS WERE ABUNDANT BELOW. SEVERAL TIDE POOLS WERE PRESENT IN THE MITZ AND BELOW, PROVIDING SOMEWHAT RICHER HABITAT (SEE BIO REPORT) THAN OTHER BOULDER BEACHES. OILING, AS NOTED PREVIOUSLY WAS OBVIOUS. THE STAINED BOULDERS DELINEATED AN AREA OF SDR/MOUSSE, SOMETIMES PRESENT IN LARGE MATS. SOME OF THE MATERIAL WAS BEGINNING TO COPE IN THE EXTRAORDINARY SUNSHINE WE ENJOYED, AND TIDAL POOLS ADJACENT TO RESIDUES SHOWED SHEEN. HIGHEST DEGREE OF COVERAGE OCCURRED IN UITE. ALTHOUGH THIS ZONE ON AN EXPOSED BOULDER BEACH LIKE THIS HAS LITTLE FLORA AND FAUNA, THERE WAS A LARGE AMOUNT OF OIL REMAINING ON THE SHORELINE. NOTE: THIS BEACH AND THE ADJACENT SEGMENT WERE STAKED OUT IN THE SUPRATIDAL — ADEC SITE?

ADEC

NAME J. BARNHART, ADEC

SIGNATURE

J. Barnhart☒ NTR ☒ Treatment Recommended

K9-08 CD03 and K9-9 CD03 must be reviewed as a single entity. Segment CD03 is bisected by a Kunit boundary line. Oil domes within K9-8 CD03 segment, mousse oozing around boulders, pooled oil. Brown sheen in tidal pools. 5% oil coverage. Veco crew removed approx. 100 pounds of oil. K9-08 CD003 and K9-9 CD003 combined have recoverable mousse, estimated to be 50-75 bags. Recommend cleanup using Trawls to remove the heavy mousse/pooled oil from between the boulders and cobbles.

☒ TREATMENT SUGGESTED CONCUR WITH NPS, ADEC, USCG (Kure Island Beach) *ADA Jett*

EXXON

NAME R. HARRELSON, EXXON

SIGNATURE

R. Harrelson

- ☐ NTR Recovery of oiled sediments from between boulders and cobble is operationally feasible, but would be time consuming and costly. Recovery at this site is not as advanced as in other areas, but high energy wave action would continue the cleaning process if additional treatment is not required.

DMANAGER

NAME E. BENNIS

OF NPS

SIGNATURE

E. Bennis

- ☐ NTR ☒ Treatment suggested

SITE A (06 map) 1-20m x 40m still contains mousse pooled (to 6cm thick observed), ST, CT, CV, SDR. Mousse appeared to "bleed" in the sun. Deposition of clean gravels is present in the upper portion (landward) of this site. 1990's SSAT survey (April) indicated much less oil than was actually retrieved in August 1990 clean-up, executed after many days of warm temperatures. It is likely that this situation could be repeated as warm temperatures lower the oil's viscosity. Oil will continue to "bleed" throughout O/C intertidal. Pending review by NPS, treatment is suggested to retrieve recoverable oil.

USCG/NOAA

NAME CWO R. SPURR/D. SHIGENAKA

SIGNATURE

R. Spurr / D. Shigenaka

- ☐ NTR Site A on 06 map still contains a substantial SDR and pooled mousse which was very evident during survey. This can be removed manually by a work crew as it is easily accessible between the large boulders

SURVEYED PORTION OF THE SEGMENT CONSISTED OF A FAIRLY LIMITED AREA EXTENDING FROM THE BORDER BETWEEN K9NB CD-3 AND K9NC CD-3 (WHOMEVER DESIGNATED THESE SEGMENTS SHOULD BE MOUSSED AND FEATHERED) NORTHWEST ABOUT 25M (J. BARNHART ESTIMATE). THE AREA HAD PREVIOUSLY BEEN NOTED AS HAVING BEEN OILED AND SHOWED OBVIOUS SIGNS (STAIN/COAT ON BOULDERS) THAT MADE IT EASY TO RELOCATE. THE BEACH WAS A BOULDER BEACH WITH BEDROCK OUTCROPS, MID- TO UPPER TIDE WAS DEPAUPERATE, BUT LITTORALINIA SITTANA SNAILS WERE ABUNDANT BELOW. SEVERAL TIDE POOLS WERE PRESENT IN THE MITS AND PROVIDING SOMEWHAT BETTER HABITAT (SEE BIO REPORT) THAN OTHER BOULDER BEACHES. OILING, AS NOTED PREVIOUSLY, WAS OBVIOUS. THE STAINED BOULDERS DELINEATED AN AREA OF SDR/MOUSSE, SOMETIMES PRESENT IN LARGE MATS. SOME OF THE MATERIAL WAS BEGINNING TO COPE IN THE EXTRAORDINARY SUNSHINE WE ENJOYED. ADJACENT POOLS ADJACENT TO LESIONS SHOWED SHEEN, HIGHEST DEGREE OF COVERAGE OCCURRED IN ULTS. ALTHOUGH THIS ZONE ON AN EXPOSED BOULDER BEACH LIKE THIS HAS LITTLE FLORA AND FAUNA, THERE WAS A LARGE AMOUNT OF OIL REMAINING ON THE SHORELINE. NOTE: THIS BEACH AND THE ADJACENT SEGMENT WERE STAGED OUT IN THE SUPRATIDAL - ADEC SITE?

PAGE 1 OF 1

SEGMENT K9-08-CD-03

SUBDIVISION A

DATE 22 / May / 91

ENERGY LEVEL: ☒ H ☐ M ☐ LNEAR SHORE SHEEN: ☐ BR ☒ RB ☒ SL ☐ NONE

EST. OIL CATEGORY LENGTH: W — m M — m N — m VL 70 m NO 30 m US 356 m

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

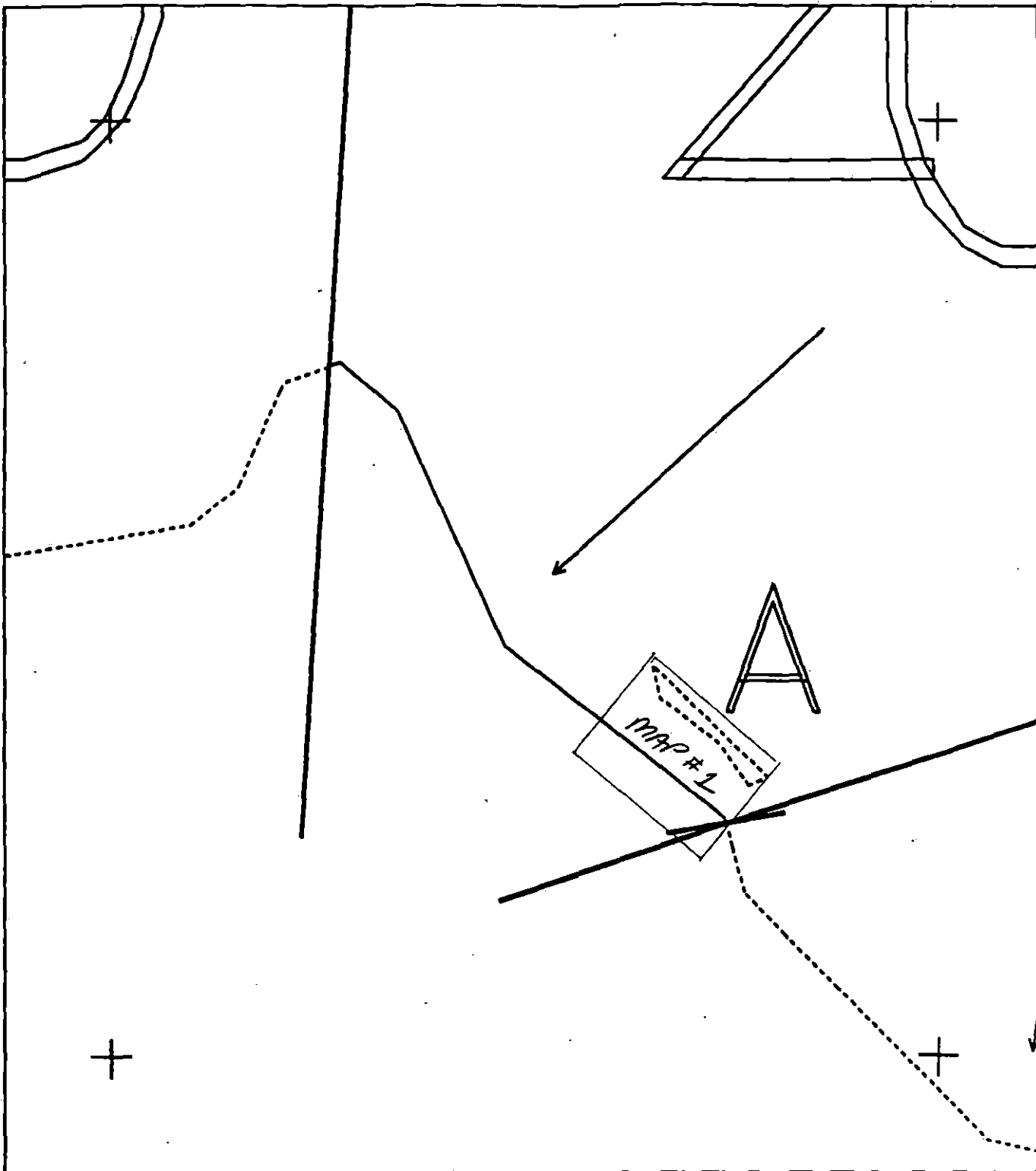
SLOPE: V = VERTICAL; H = HIGH ANGLE; M = MEDIUM ANGLE; L = LOW ANGLE

PHOTO ROLL # MAYSAP- 6 - 20 FRAMES 7+10

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

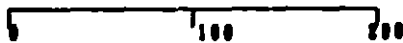
OG COMMENTS: This segment is located along the exposed Cape Douglas Promontory along the northward facing shoreline. This area is characterized by a bedrock wave-cut platform with numerous rock pinnacles and irregular exposures which partially shelter portions of the MITZ to UITZ beach. The upper beach consists of boulders and bedrock backed by a prominent boulder-driftwood ridge. The eastern end of this segment which had wide oiling conditions last year with extensive mousse is much improved. While mousse could be found in some areas of this site, adjacent regions were devoid of oil. Exposed mousse flowed in the hot sun and silver and rainbow sheens occurred in tide pools.

Reviewed: MC 5/30/94
Reviewed 5.27.94



K0908 CD003 A

METERS



AS SHOWN PLANS SHEET 4.

Subdivision Field Map

Map Key: COAK0000CD003A

Name: D. Fitzgerald

Date: 22 MAY 1991

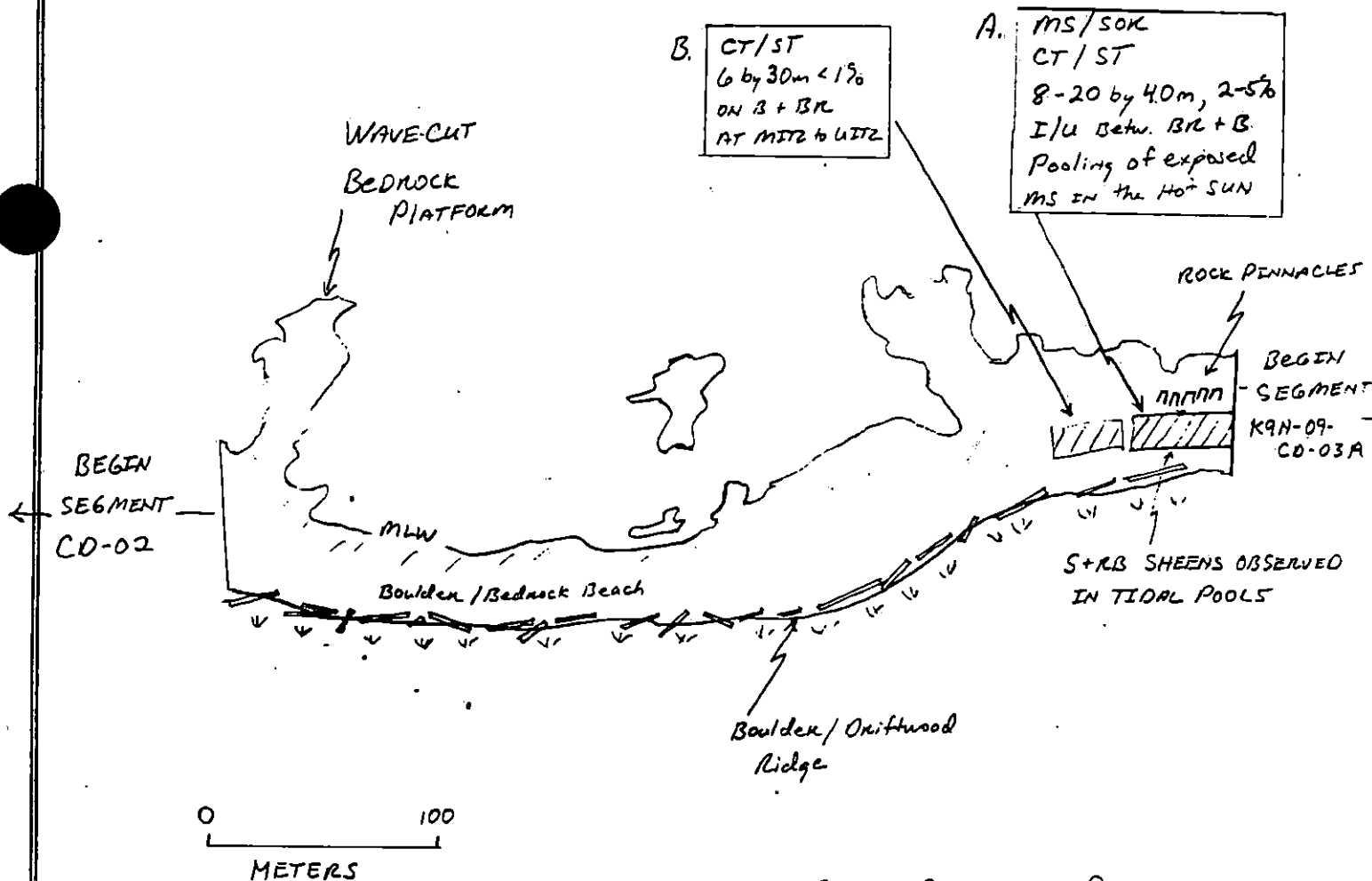
reviewed 8.27 9y

Sketch MAP (06)
 K0908-CD-3-A
 D M. Fitzgerald
 22 May 1991
 1545 - 1600

V V V GRASSY AREA
 Driftwood RIDGE
 WATER
 Bedrock Platform
 PHOTO SITES

P.U. * VEC WORKERS RETRIEVED
 4 BAGS OF MOUSSE AND
 OILED SEDIMENTS FROM
 SITE A.

SHELKOF
 STRAITS



CAPE DOUGLAS PROMONTORY

REVIEWED: MCL 5/30/91
 reviewed 5.27.92

PHOTO SITES, K9NB CD-3A
ROLL 6-20, FRAMES 7 & 10

Sketch made by
K0908-CD-3A
D M. Fitzgerald
22 May 1991
1545 - 1600

GLASSY
AREA
Driftwood
RIDGE
WATER
Bedrock
Platform
PHOTO
SITES

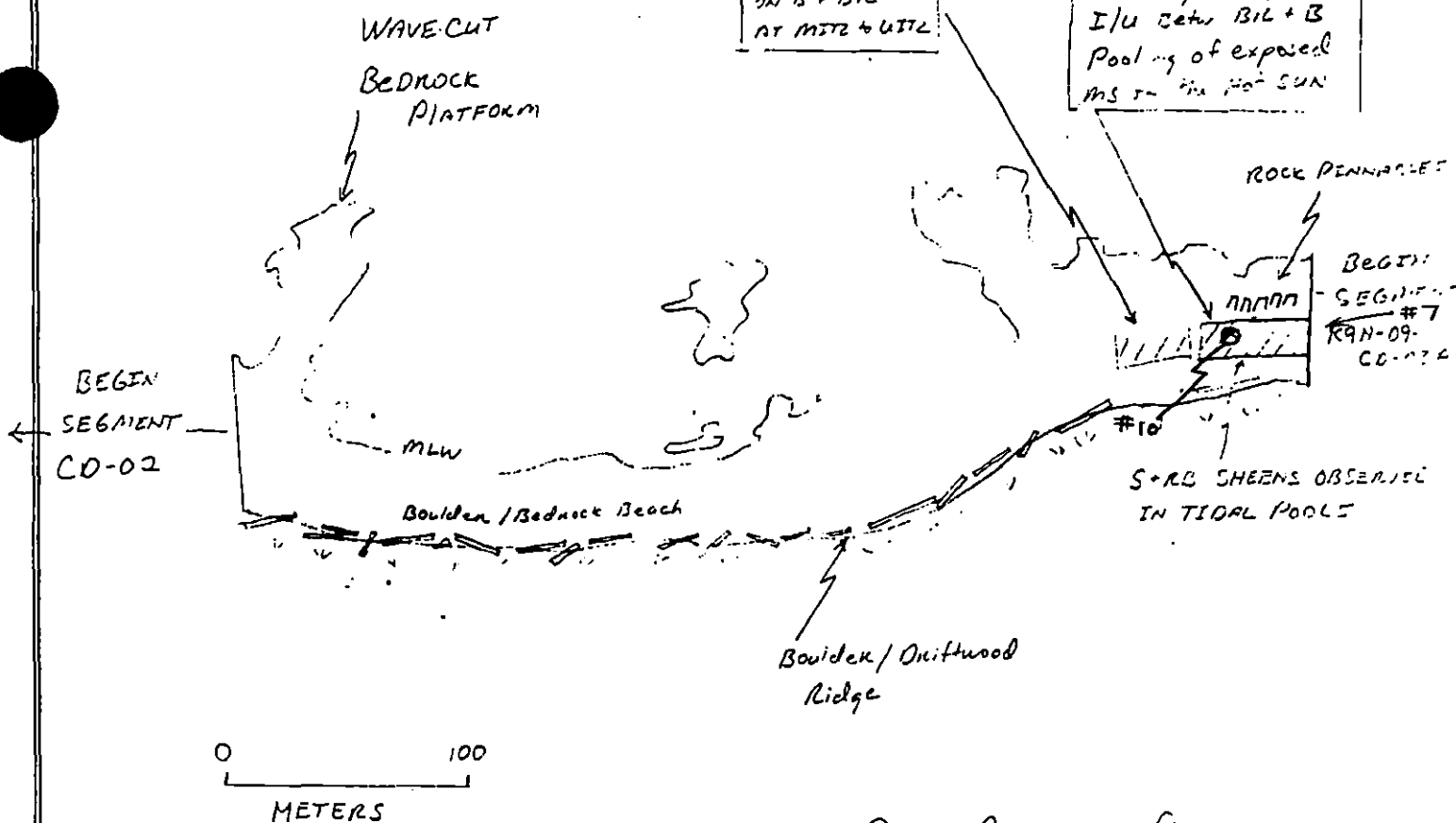


SHELIKOF
STRAITS

P.U. * VECO WORKERS RETRIEVED
4 BAGS OF Mousse AND
OILED SEDIMENTS FROM
SITE A.

B. CT/ST
6 by 30m x 150
ON B + BR
AT MITE + UTLE

A. MS/SOK
CT/ST
8-20 by 40m, 2-5%
I/U betw BR + B
Pooling of exposed
MS in the hot sun



CAPE DOUGLAS PROMONTORY

MAYSAP BIOLOGICAL SUMMARY FORM

TEAM # 6 Helo

DATE May 21 1991

SEGMENT # K9N-08 CD-03

TIDAL HEIGHT (Range) 1.5 ft (15:45-16:00)

SUBDIVISION A

BIOLOGIST H. Davis

SEA STATE Calm <1 ft

WIND SPEED/DIRECTION Light Breeze 5 kts NE

PHOTOGRAPHS: ROLL # G-20

FRAME # 7+10

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

This is one of two side by side segments with very similar biota. The segment is a boulder covered beach shore in front of a log, boulder and cobble ridge. The LITZ had a sparse covering of littorines and barnacles. Amphipods, limpets, and nemertean are found under rocks. Density of littorines, limpets, amphipods and barnacles increases lower in the intertidal where pools of water have collected. *Odonthalia*, *Halochondria*, *Pagurus* and encrusting corallines can be found. In the MITZ, *Fucus*, *Ulva*, *Alaria*, *Boswellia*, *Rhodomenia*, *Scytosiphon*, *Mucella*, *Tetractylis*, *Halochondria*, *Sculpinus*, *Priolebacks*, *Telia*, *Anthopleura*, *Leptasterias*, and *Hedophyllum* are all common. The LITZ had *Laminaria*, *saccarina*, *Alaria*, *Pradaea*, and *Hedophyllum*. *Leptasterias*, *Mucella*, *Pagurus*, *Littorina*, and *Fucus* were all fertile/egg producing.

Site A+Bore both in areas of sparse littorines, barnacles (*Balanus* and a few carians) and limpets (*A. personata* & *C. digitatus*). There was only a little drift around the site (*Fucus* & *Laminaria*). Amphipods and encyrtids were underneath moist drift.

Wandering Tattler (1) Cormorant sp (1)

OBS. SQUAW (3) Pacific Loon (2) Harlequin (5) Glaucous-wing Gulls (5) Kittiwakes (5, 2 dead)

WILDLIFE OBSERVATIONS

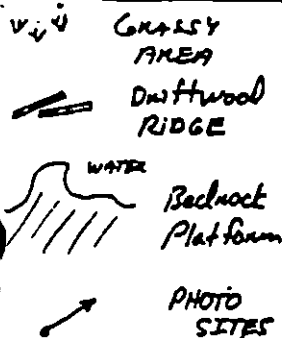
TO BE COMPLETED IN ALL SUBDIVISIONS

BIRDS	# OF SPECIES	TOTAL BIRDS	FISH OBSERVED SPECIES PRESENT
Eagles	0		Sculpins
Seabirds	1	1	Priolebacks
Waterfowl	3	10	
Gulls/Kittiwakes	2	10	
Shorebirds	1	1	
Corvids	0		
Other Birds	0		

LAND MAMMALS

MARINE MAMMALS	# OBSERVED	SPECIES	# OBSERVED
Sea Otters		Fox? Tracks	
Pinnipeds (specify)			
Harbor Seal	1		
Whales (specify)			

Shoreline subdivision map showing important biological features attached.



Bio Map
H. Davis

SKETCH MAP (06)
 K0908-CD-3-A
 D.M. FITZGERALD
 22 May 1991
 1545 - 1600



SHELIKOF STRAITS

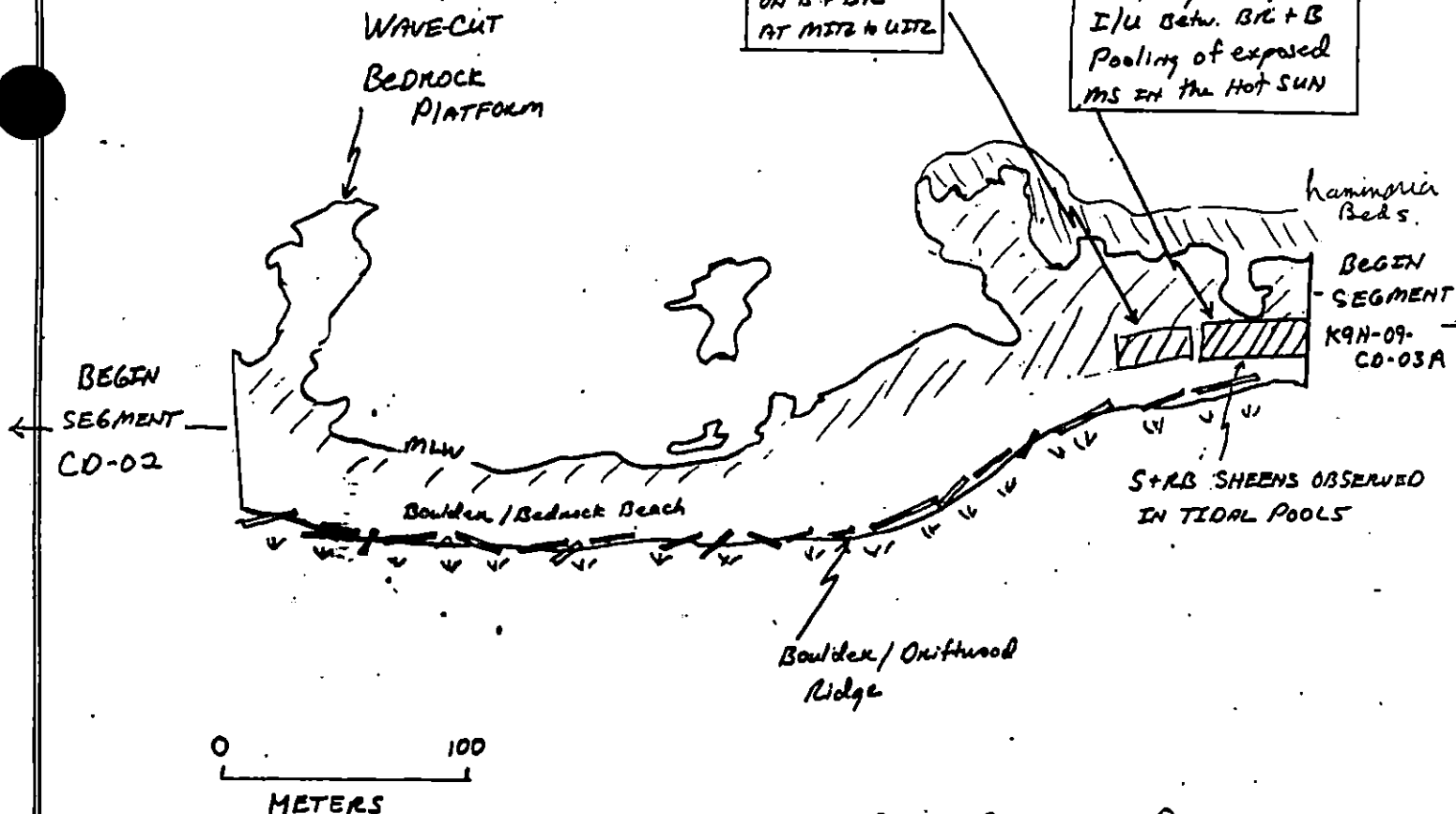
A+B

Both sites A+B were in area with very sparse biota. Littorina was the most common animal. Some barnacles, limpets, amphipods and algal drift was found in the area also. Lower down the biota became much more diverse.

P.U. * VECO WORKERS RETRIEVED
 4 BAGS OF MOUND AND
 OILSO SEDIMENTS FROM
 SITE A.

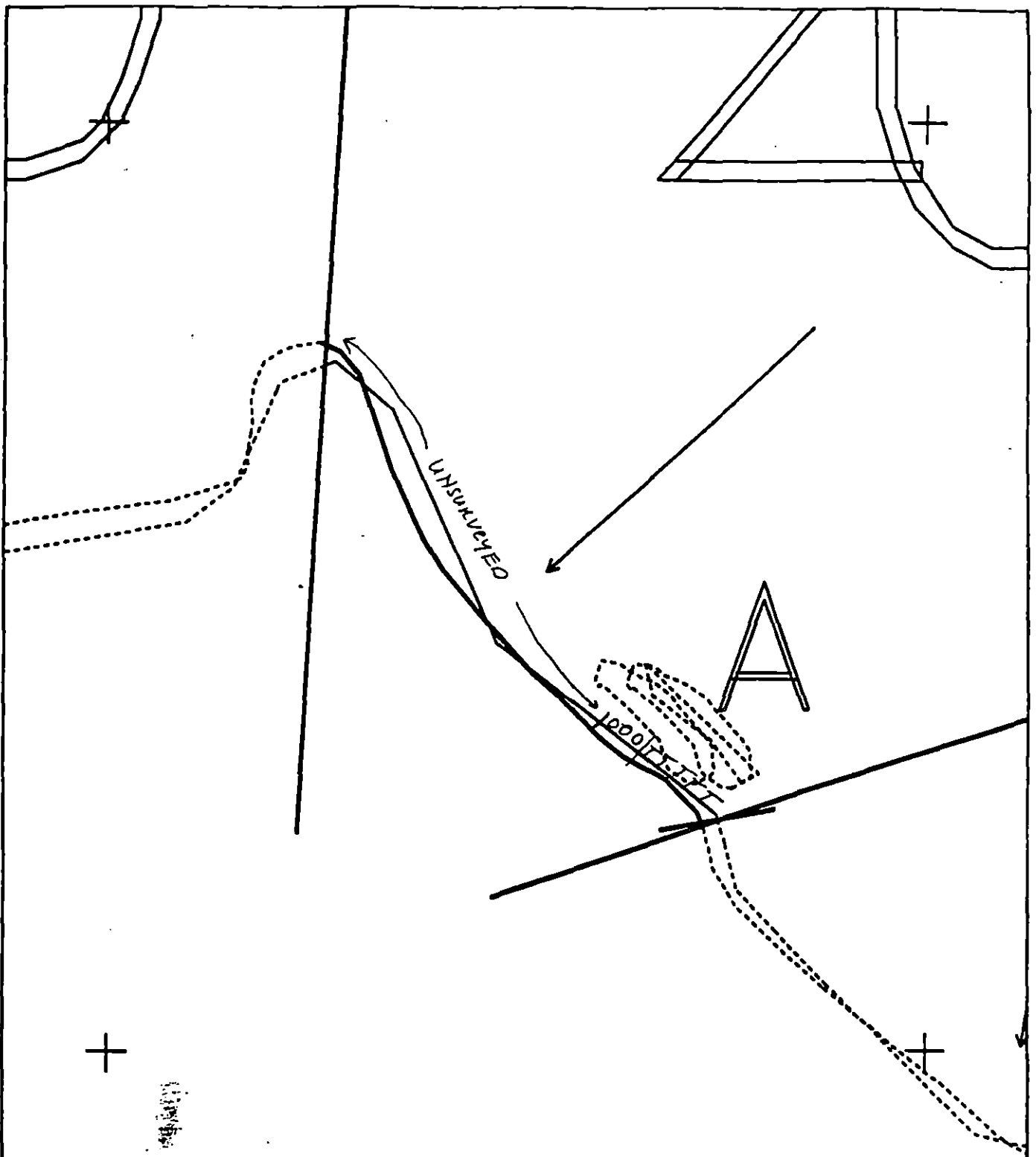
B. CT/ST
 6 by 30m < 1%
 ON B + BR
 AT MITE + UITE

A. MS/SOK
 CT/ST
 8-20 by 40m, 2-5%
 I/U betw. BR + B
 Pooling of exposed
 MS in the HOT SUN



CAPE DOUGLAS PROMONTORY

Reviewed M.B. 5/30/91



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

K0908 CD003 A
 ADEC Subsegment Length: 458m
 METERS

0 100 200
 AK State Plane Zone 4
 600004003a-1



Subdivision Field Map
 Map Key: 60AK0000CD003A
 Name: D. Fitzgerald
 Date: 22 MAY 1991
 Date Entered:

Reviewed: MC 5130/91
 reviewed 5.27.91

1991 MAYSAP EVALUATION

SEGMENT: K0908CD003 SUB: A REGION: KOD SURVEY DATE: 5/22/91ENVIRONMENTAL SENSITIVITIES:Work Window(s) OPENEcological/Constraints (see page two for details) NONEARCHAEOLOGICAL CONSTRAINTS:If treatment is planned, a cultural resource evaluation is required prior to shoreline treatment.SHPO Signature: Timothy A. Hines Date: 6/03/91RECOMMENDATIONS:

	INITIAL	TAG	FOSC
TREATMENT REQUIRED (Y or N)	<u>N</u>	<u>N</u>	<u>Y</u>
Manual Pickup (Check as Req.)	<u>_____</u>	<u>_____</u>	<u>X</u>
Spot Washing	<u>_____</u>	<u>_____</u>	<u>_____</u>
Bio-Customblen Only	<u>_____</u>	<u>_____</u>	<u>X</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: SUBSTANTIAL AMOUNT OF OIL REMAINS + IS RECOVERABLE
PRIORITY AREA OF OIL + PRESTIGE (KODMAI). AN AGENCY SURVEY
TEAM MEMBERS INDICATE OIL IS BURNING + RECOVERABLE.
CLEANUP READY ACCESSIBLE MOUSSE + CUSTOMBLN - llh

TAG APPROVAL DATE: MAY 31 1991FOSC APPROVAL DATE: 6/10/91ADEC John BauerFOSC llhEXXON RealE. E. PAGE, CDR, USCG
CHIEF OF STAFF, FOSCUSCG EDMNOAA Ray

TEAM NO. 6-HELO SEGMENT K9N8CD-3SUBDIVISION ADATE 5/22/91

ADEC

NAME J. BARNHART, ADECSIGNATURE Jeff Barnhart☐ NTR ☒ Treatment Recommended

K9-08 CD03 and K9-9 CD03 must be reviewed as a single entity. Segment CD03 is bisected by a Kunit boundary line. Oiled area within K9-8 CD03 is 30m x 32m, mousse oozing around boulders, pooled oil. Brown sheen in tidal pools. 5% oil coverage. Veco crew removed approx. 100 pounds of oil. K9-08 CD003 and K9-9 CD03 combined have recoverable mousse, estimated to be 50-75 bags. Recommend cleanup using trowels to remove the heavy mousse/pooled oil from between the boulders and cobbles.

☒ TREATMENT Suggested CONCUR WITH NPS, ADEC & USCG (Kodiak Island Borough) NOTE: JELT

EXXON

NAME R. HARRELSON, EXXON

SIGNATURE _____

☐ NTR

See next page

LANDMANAGER

NAME E. BENNISOF NPSSIGNATURE Junior Bennis☐ NTR ☒ Treatment suggested

SITE A (OG map) 8-20m x 40m still contains mousse pooled (to 6cm thick observed), ST, CV, SOR. Mousse appeared to "bleed" in the sun. Deposition of clean gravels is present in the upper portion (landward) of this site. 1990's SSAT survey (April) indicated much less oil than was actually retrieved in August 1990 clean-up, executed after many days of warm temperatures. It's likely that this situation could be repeated as warm temperatures lower the oil's viscosity. Oil will continue to "bleed" throughout O/C interstices. Pending review by NPS, treatment is suggested to retrieve recoverable oil.

USCG/NOAA

NAME CWO R. SPURR/G. SHIGENAKASIGNATURE R. Spurr / G. Shigenaka

☐ NTR Site A on OG map still contains a substantial SOR and pooled mousse which was very evident during survey. This can be removed manually by a work crew as it is easily accessible between the large boulders

SURVEYED PORTION OF THE SEGMENT CONSISTED OF A FAIRLY LIMITED AREA EXTENDING FROM THE BORDER BETWEEN K9N8CD-3 AND K9N9CD-3 (WHOEVER DESIGNATED THESE SEGMENTS SHOULD BE MOUSSED AND FEATHERED) NORTHWEST ABOUT 25m (J. BARNHART ESTIMATE). THE AREA HAD PREVIOUSLY BEEN NOTED AS HAVING BEEN OILED AND SHOWED OBVIOUS SIGNS (STAIN/COAT ON BOULVERS) THAT MADE IT EASY TO RELOCATE. THE BEACH WAS A BOULDER BEACH WITH BEDROCK OUTCROPS. MID- TO UPPER ITZ WAS DEPAUPERATE, BUT LITTORINA SITKANA SNAILS WERE ABUNDANT BELOW. SEVERAL TIDE POOLS WERE PRESENT IN THE MITZ AND BELOW, PROVIDING SOMEWHAT RICHER HABITAT (SEE BIO REPORT) THAN OTHER BOULDER BEACHES. OILING, AS NOTED PREVIOUSLY, WAS OBVIOUS. THE STAINED BOULDERS DELINEATED AN AREA OF SOR/MOUSSE, SOMETIMES PRESENT IN LARGE MATS. SOME OF THE MATERIAL WAS BEGINNING TO COKE IN THE EXTRAORDINARY SUNSHINE WE ENJOYED, AND TIDAL POOLS ADJACENT TO RESIDUES SHOWED SHEEN. HIGHEST DEGREE OF COVERAGE OCCURRED IN UITS. ALTHOUGH THIS ZONE ON AN EXPOSED BOULDER BEACH LIKE THIS HAS LITTLE FLORA AND FAUNA, THERE WAS A LARGE AMOUNT OF OIL REMAINING ON THE SHORELINE. NOTE: THIS BEACH AND THE ADJACENT SEGMENT WERE STACED OUT IN THE SUPRATIDAL — ADEC SITE?

TEAM NO. 6-HELO SEGMENT K9NB CD-3 SUBDIVISION A DATE 5/22/91

ADEC

NAME J. BARNHART, ADEC

SIGNATURE Jeff Barnhart

☒ NTR ☒ Treatment Recommended

K9-08 C003 and K9-9 C003 must be reviewed as a single entity. Segment C003 is bisected by a KUNIT boundary line. Oiled area within K9C003 is brown, mousse oozing around boulders, pooled oil. Brown sheen in tidal pools. 5% oil coverage. VECO crew removed approx. 100 pounds of oil. K9-08 C0003 and K09-9 C003 combined have recoverable mousse, estimated to be 50-75 bags. Recommend cleanup using Trowels to remove the heavy mousse / pooled oil from between the boulders and cobbles.

☒ TREATMENT SUGGESTED CONCUR WITH NPS, ADEC & USCG (Kodiak Island Beach) John Fulton

EXXON

NAME R. HARRELSON, EXXON

SIGNATURE R. Harrelson

☐ NTR Recovery of oiled sediments from between boulders and cobble is operationally feasible, but would be time consuming and costly. Recovery at this site is not as advanced as in other areas, but high energy wave action would continue the cleaning process if additional treatment is not required.

MANAGER

NAME E. BENNIS

OF NPS

SIGNATURE John Fulton

☐ NTR ☒ Treatment Suggested

SITE A (06 map) 8-20m x 40m still contains mousse pooled (to 6cm thick observed), ST, CV, SVR. Mousse appeared to "bleed" in the sun. Deposition of clean gravels is present in the upper portion (landward) of this site. 1990's SSAT survey (April) indicated much less oil than was actually retrieved in August 1990 clean-up, executed after many days of warm temperatures. It's likely that this situation could be repeated as warm temperatures lower the oil's viscosity. Oil will continue to "bleed" throughout O/C intertidal. Pending review by NPS, treatment is suggested to retrieve recoverable oil.

USCG/NOAA

NAME CWO R. SELER/B. SHIGENAKA

SIGNATURE R. Seler / B. Shigenaka

☐ NTR Site A on 06 map still contains a substantial SVR and pooled mousse which was very evident during survey. This can be removed manually by a work crew as it is easily accessible between the large boulders

SURVEYED PORTION OF THE SEGMENT CONSISTED OF A FAIRLY LIMITED AREA EXTENDING FROM THE BORDER BETWEEN K9NB CD-3 AND K9NB CV-3 (WHICHEVER DESIGNATED THESE SEGMENTS SHOULD BE MOUSSED AND FEATHERED) NORTHWEST ABOUT 25m (J. BARNHART ESTIMATE). THE AREA HAD PREVIOUSLY BEEN NOTED AS HAVING BEEN OILED AND SHOWED OBVIOUS SIGNS (STAIN/COAT ON BOULDERS) THAT MADE IT EASY TO RELOCATE. THE BEACH WAS A BOULDER BEACH WITH BEDROCK OUTCROPS. MID- TO UPPER ITZ WAS DEPAUPERATE, BUT LITTORALINIA SITICANA SNAILS WERE ABUNDANT BELOW. SEVERAL TIDE POOLS WERE PRESENT IN THE MITZ AND PROVIDING SOMEWHAT RICHER HABITAT (SEE VIDEO REPORT) THAT OTHER BOULDER BEACHES. OILING, AS NOTED PREVIOUSLY WAS OBVIOUS. THE STAINED BOULDERS DELINEATED AN AREA OF SVR/MOUSSE. SOMETIMES PRESENT IN LARGE MATS. SOME OF THE MATERIAL WAS BEGINNING TO COPE IN THE EXTRAORDINARY SUNSHINE WE ENJOYED, AND TIDAL POOLS ADJACENT TO LESIONS SHOWED SHEEN. HIGHEST DEGREE OF COVERAGE OCCURRED IN UITE. ALTHOUGH THIS ZONE ON AN EXPOSED BOULDER BEACH LIKE THIS HAS LITTLE FLORA AND FAUNA, THERE WAS A LARGE AMOUNT OF OIL REMAINING ON THE SHORELINE. NOTE: THIS BEACH AND THE ADJACENT SEGMENT WERE STAGED OUT IN THE SUPRATIDAL - APEC SITE?

(X) PAGE 1 OF 1

SEGMENT K9-08-CD-03

SUBDIVISION A

DATE 22 / MAY / 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 70 m NO 30 m US 356 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 - 20 FRAMES 7+10

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

OG COMMENTS: This segment is located along the exposed Cape Douglas Promontory along the northward facing shoreline. This area is characterized by a bedrock wave-cut platform with numerous rock pinnacles and irregular exposures which partially shelter portions of the MITZ to UITE beach. The upper beach consists of boulders and bedrock backed by a prominent boulder-driftwood ridge. The eastern end of this segment which had wide oiling conditions last year with extensive mousse is much improved. While mousse could be found in some areas of this site, adjacent regions were devoid of oil. Exposed mousse flowed in the hot sun and silver and rainbow sheens occurred in tide pools.

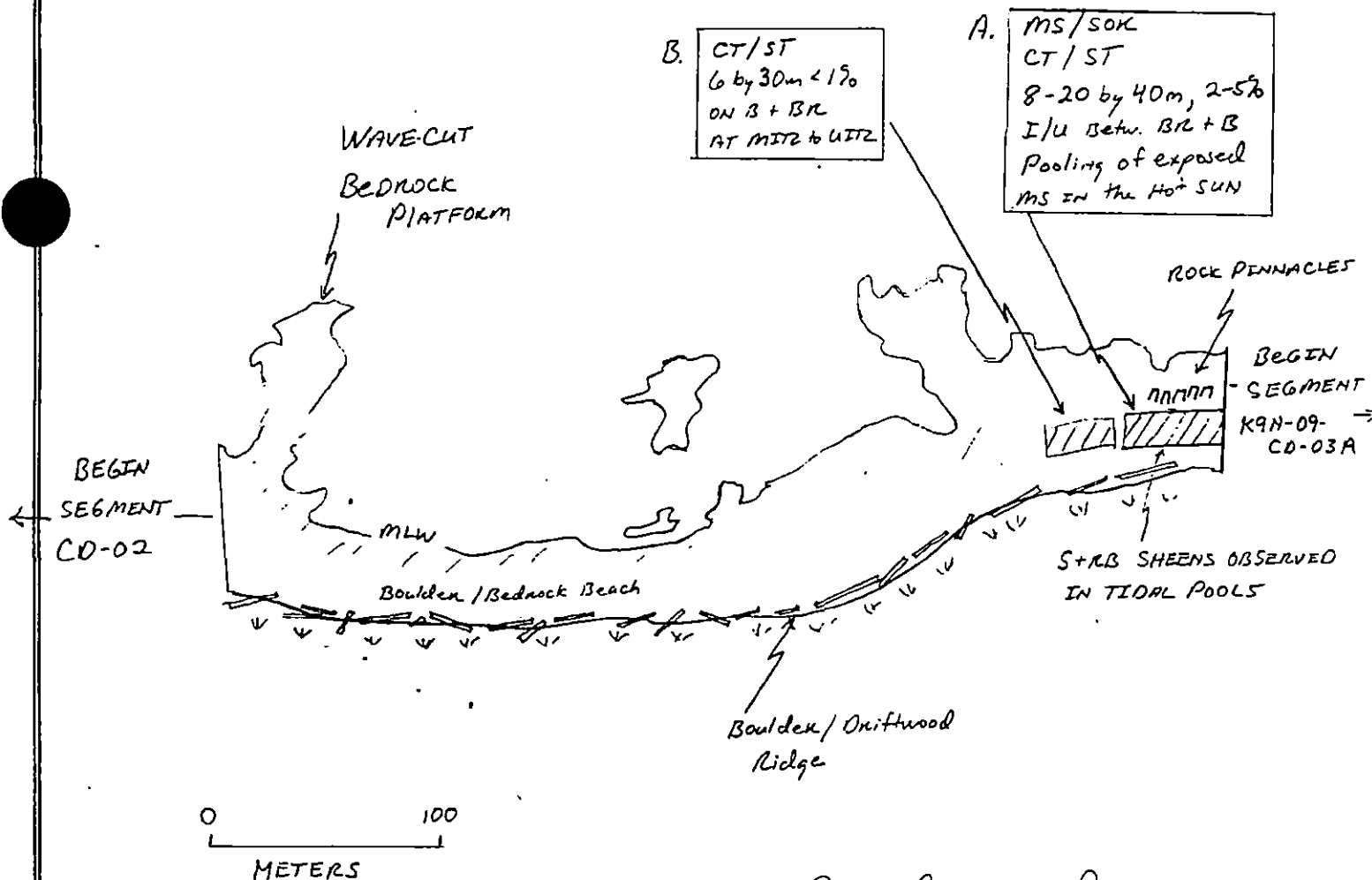
Reviews: MC 5/30/99
Reviewed 5.27.99

V.V. 4 GRASSY
 AREA
 Driftwood
 RIDGE
 WATER
 Bedrock
 Platform
 PHOTO
 SITES

Sketch MAP (OG)
 K0908-CD-3-A
 D.M. Fitzgerald
 22 May 1991
 1545 - 1600

P.U. * VECO WORKERS RETRIEVED
 4 BAGS OF MOUSSE AND
 OILED SEDIMENTS FROM
 SITE A.

SHELICKOF
 STRAITS



CAPE DOUGLAS PROMONTORY

REVIEWED: MCS/30/91
 reviewed 5.27.91

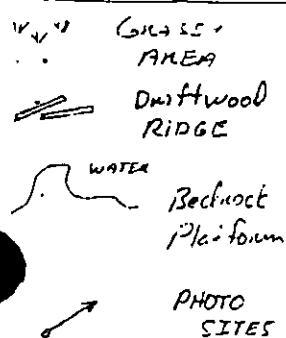
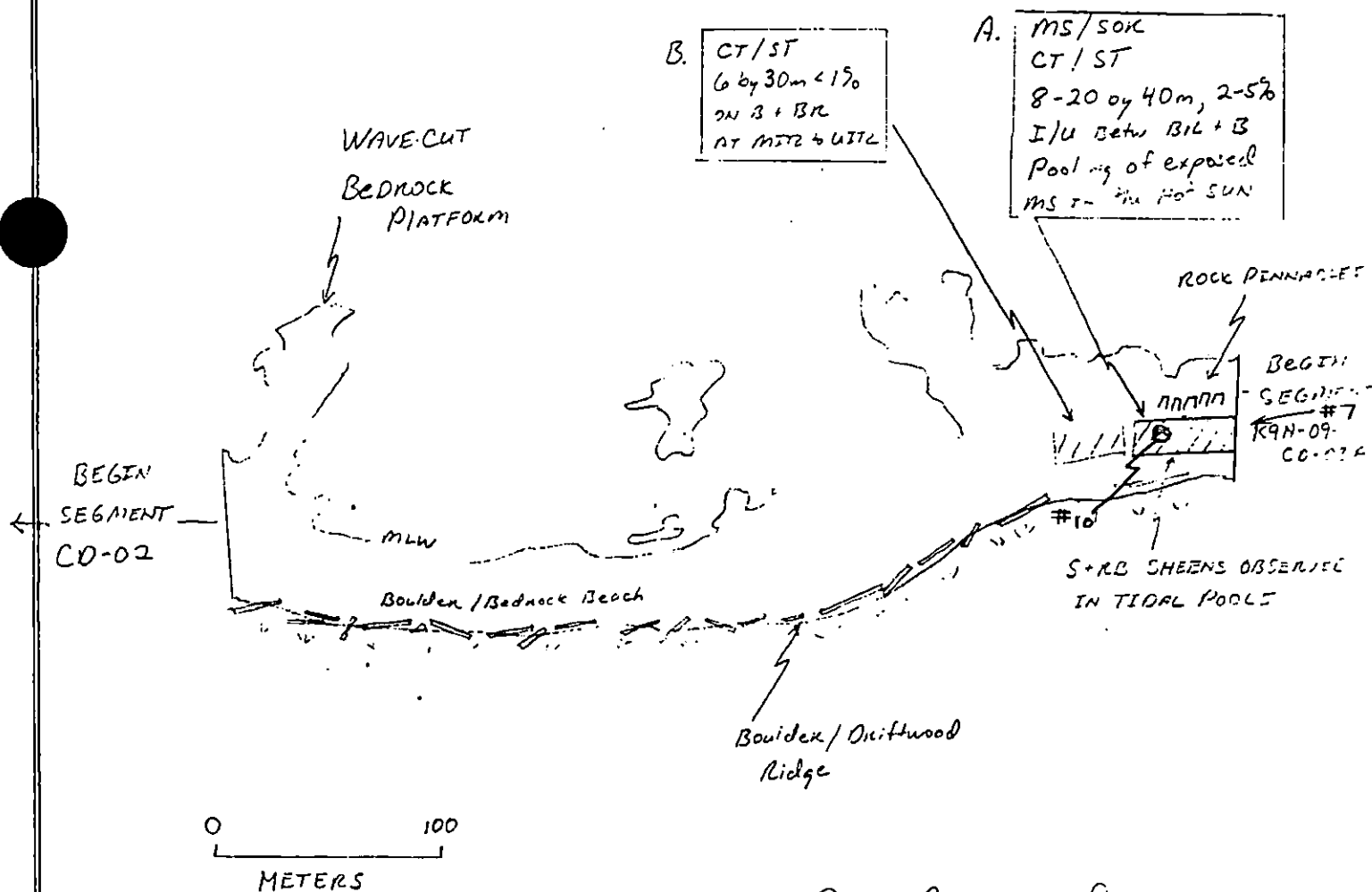


PHOTO SITES, K9NB CD-3A
ROLL 6-20, FRAMES 7 & 10

Sketch map of
 K0908-CD-3A
 D.M. Fitzgerald
 22 May 1991
 1545 - 1600

P.U.* VECO WORKERS RETRIEVED
 4 BAGS OF MOUSSE AND
 OILED SEDIMENTS FROM
 SITE A.

SHELIKOF STRAITS



CAPE DOUGLAS PROMONTORY

MAYSAP BIOLOGICAL SUMMARY FORM

TEAM # 6 Helo.

DATE May 21 1991

SEGMENT # K9N-08 CD-03

TIDAL HEIGHT (Range) 1.5 ft (15:45:16:00)

SUBDIVISION A

BIOLOGIST H. Davis

SEA STATE Calm <1 ft

WIND SPEED/DIRECTION Light Breeze 5 kts NE

PHOTOGRAPHS: ROLL # 6-20

FRAME # 7+10

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

This is one of two side by side segments with very similar biota. The segment is a boulder covered bedrock shore in front of a large boulder and cobble ridge. The UITZ had a sparse covering of littorina and barnacles. Amphipods, limpets, and nemertean are found under rocks. Density of littorines, limpets, amphipods and barnacles increases lower in the intertidal where pools of water have collected. Odonthalia, Halochondria, Pagurus and encrusting corallines can be found. In the MITZ, Fucus, Ulva, Alaria, Bossiella, Rhodomela, Scytosiphon, Muscilla, tetractilia, Halochondria, Sculpins, pibblebacks, Tella, Anthopleura, Leptasterias, and Hedophyllum are all common. The LITZ had Laminaria saccharina, Alaria, Disidea, and Hedophyllum, Leptasterias, Muscilla, Pagurus, Littorina, and Fucus were all fertile/egg producing.

Site A+Bore both in areas of sparse littorines, barnacles (Balanus and a few carians) and limpets (N. personata + C. digitalis). There was only a little drift around the site. (Fucus laminaria) Amphipods and encyrtids were underneath moist drift.

Wandering Tattler (1) Cormorant sp (1)

Oldsquaw (3) Pacific Loon (2) Harlequin (5) Glaucous-winged Gulls (5) Kittiwakes (5, 2 dead)

WILDLIFE OBSERVATIONS

TO BE COMPLETED IN ALL SUBDIVISIONS

BIRDS	# OF SPECIES	TOTAL BIRDS	FISH OBSERVED SPECIES PRESENT
Eagles	0		Sculpins
Seabirds	1	1	Pribble back
Waterfowl	3	10	
Gulls/Kittiwakes	2	10	
Shorebirds	1	1	
Corvids	0		
Other Birds	0		

MARINE MAMMALS	# OBSERVED	LAND MAMMALS SPECIES	# OBSERVED
Sea Otters		Fox? Tracks	
Pinnipeds (specify)			
Harbor Seal	1		
Seals (specify)			

Shoreline subdivision map showing important biological features attached.

Revised: MC 5/30/91

Revised: MR 5/26/91

GRASSY AREA
 Driftwood RIDGE
 WATER
 Bedrock Platform
 PHOTO SITES

Bio Map
 H. Davis

SKETCH MAP (06)
 K0908-CD-3-A
 D. M. Fitzgerald
 22 MAY 1991
 1545 - 1600

A+B

Both sites A+B were in area with very sparse biota. Littorina was the most common animal. Some barnacles, limpets, amphipods and algal drift was found in the area also. Lower down the biota became much more diverse.

P.U. * VECO WORKERS RETRIEVED
 4 BAGS OF Mousse AND
 OILED SEDIMENTS FROM
 SITE A.

SHELKOF
 STRAITS

B. CT/ST
 6 by 30m < 1%
 ON B + BR
 AT M12 & U12

A. MS/SOK
 CT/ST
 8-20 by 40m, 2-5%
 I/U betw. BR + B
 Pooling of exposed
 MS IN THE HOT SUN

WAVECUT
 BEDROCK
 PLATFORM

BEGIN
 SEGMENT
 CD-02

Littorina
 Beds.
 BEGIN
 SEGMENT
 K9N-09-
 CD-03A

S+RB SHEENS OBSERVED
 IN TIDAL POOLS

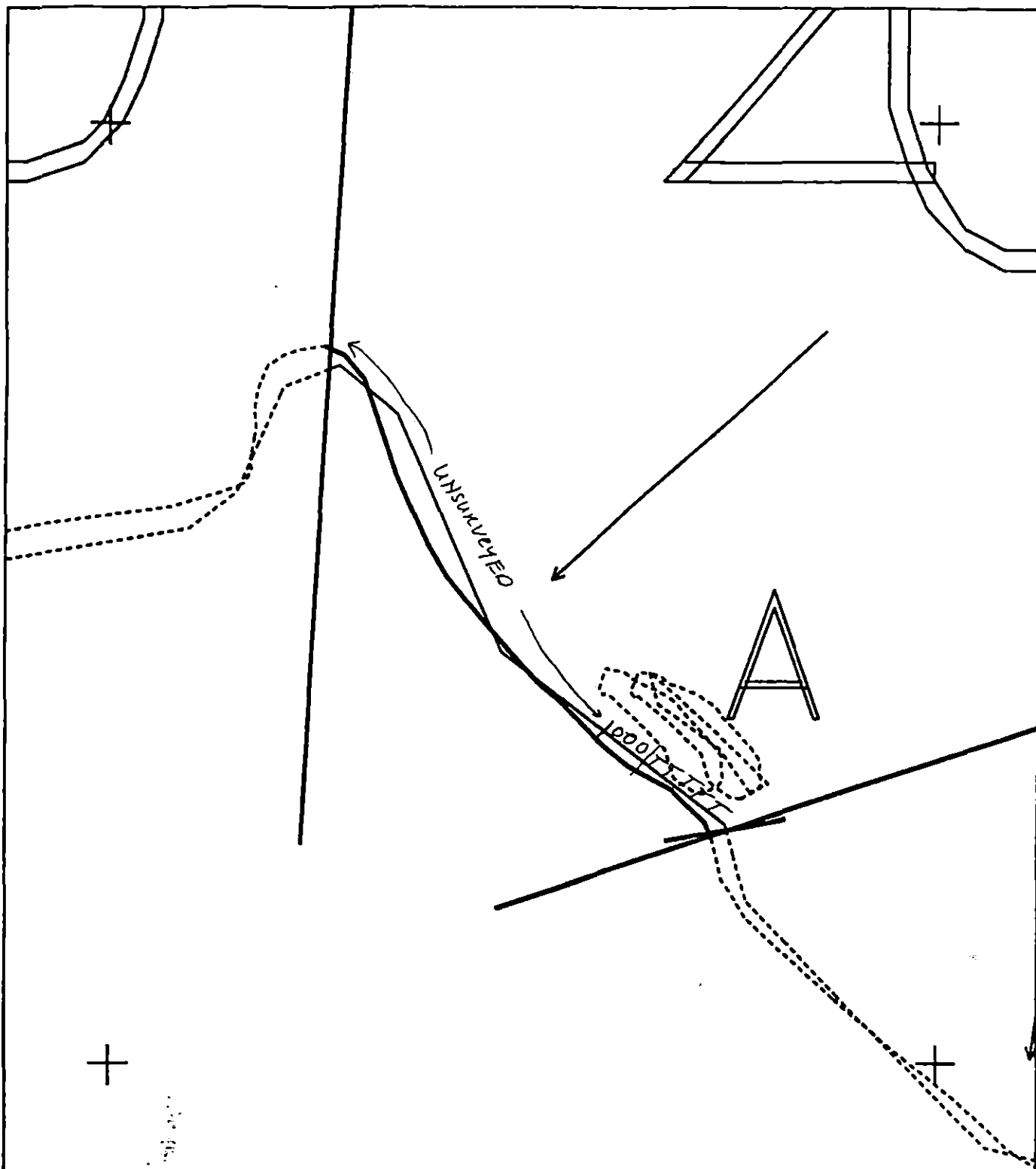
Boulder / Bedrock Beach

Boulder / Driftwood
 Ridge

0 100
 METERS

CAPE DOUGLAS PROMONTORY

Reviewed M.B. 5/30/91



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

K0908 CD003 A
 ADEC Subsegment Length: 458m
 METERS

0 100 200
 AK State Plane Zone 4
 6000d003a-1 . . .



Subdivision Field Map
 Map Key: 60AK0008CD003A
 Name: D. Fitzgerald
 Date: 22 MAY 1991
 Date Entered:

Reviewed by: MC 5130191
 reviewed 5.27.91

SHORELINE EVALUATION

SEGMENT ST/ K09-08-CD-03 SUBDIVISION A (1 OF 2) DATE 4/27/90

SEGMENT ENVIRONMENTAL SENSITIVITIES AND TIME CONSTRAINTS:

5T All bald eagle nests (3/1 to 6/1)-Active eagle nests (3/1 to 9/1)
Eagle nest on NOAA list.

See attached Ecological Constraint sheet for specific constraints and contacts.

SUBDIVISION ECOLOGICAL CONSTRAINTS:

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

ARCHAEOLOGICAL CONSTRAINTS:

If cultural resources are uncovered during shoreline treatment, stop work in the vicinity, mark the location of the find and contact Exxon's Cultural Resource Program immediately (564-3274 (Anchorage) or 229-1508 (24 hrs.)).

SHPO SIGNATURE: Charles Z. Holmes DATE: 5/14/90

OILING CATEGORIZATION:

Wide 0 m: Medium 31 m: Narrow 0 m: V.Light 425 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 Removal	<u> </u> Beach Cleaner
	<u> </u> Other (see comments)

COMMENTS: Recommended treatment includes 1) manual pickup of mousse,
2) bioremediation of areas shown on attached sketch map. Work should
be conducted after 6/1 with USFWS approval regarding eagle nest con-
straint.

TAG COMMENTS:

TAG APPROVAL DATE: 5/12/90

ADEC Art Warner
EXXON Amy Tetz
NOAA Gary Petrac
USCG D.D. Rome

FOSC: DATE: 5-18-90

Assess need for Cuaternblend following
mousse pick up. If needed, apply only
in intertidal zone.

OG Acton

SEGMENT K9-8-CD-3A

SUBDIVISION K9-8-CD-3A

DATE 4 / 27 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)
- ☐ 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 $\Rightarrow$

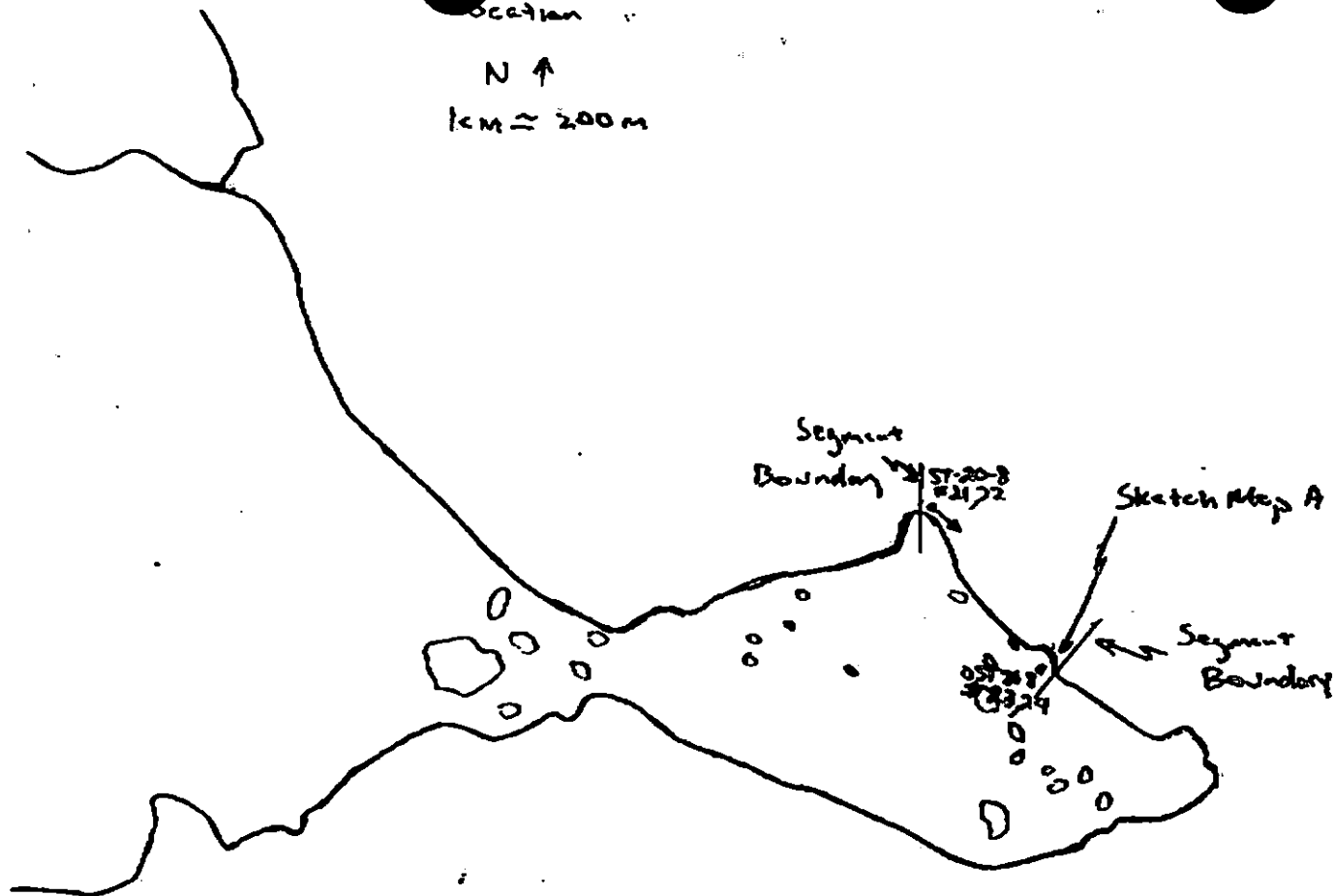
Photo location, direction,
and number

SKETCH MAP

Location

N $\uparrow$

1 cm $\approx$ 200 m



Oil Character Length (m): AP PO CV 40 CT 40 ST 450 MS 40 PT TB FL NO

REVISION: 02/00

OG A

SEGMENT ST/ K9-B-C0-3A

SUBDIVISION K9-B-C0-3A

DATE 4 / 27 90

CHECKLIST

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

LEGEND

1 Δ

Pli - No Subsurface Oil

2 Δ

Pli - Subsurface Oil

CT/C

Continuous Distribution

CT/B

Broken Distribution

CT/P

Patchy Distribution

CT/S

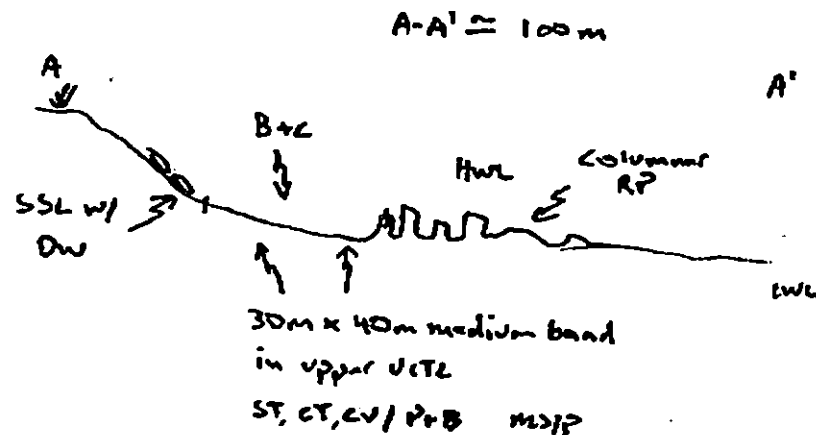
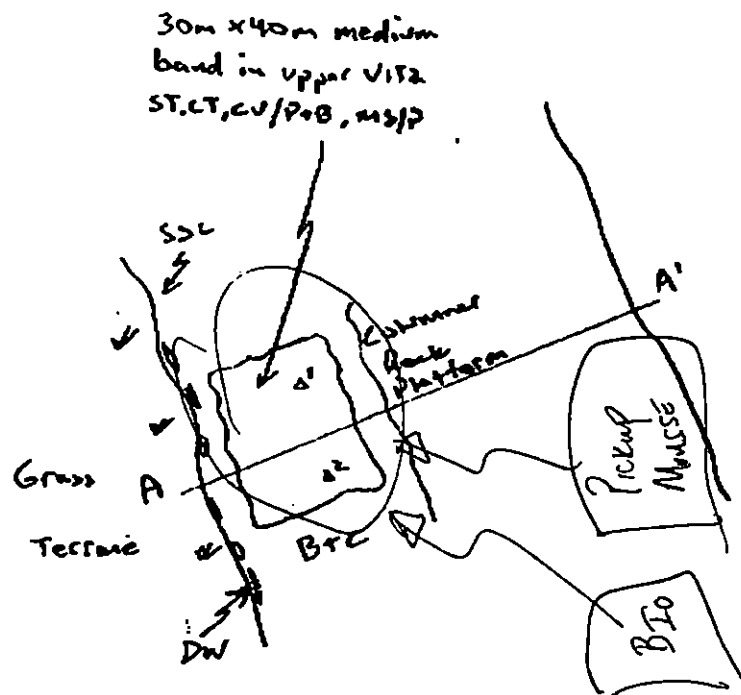
Sparsely Distributed

Other Vegetation

1 $\Rightarrow$

Photo location, direction, and number

SKETCH MAP A



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

REVISED 03/00

CD-3A

K9-8-CD-3A

SUBDIV.
A
Rep C.

XXXX Wide

//// Medium

---- Narrow

TTTT Very Light

CD-3A

ADEC Segment Length: 1090m

0 100 200 300

K9-8-CD-3A

Map Key: GOA-43

Name: Acton

Date: 4-27-90



WORK PLAN ADDENDUM

Segment K09-08-CD-003

Subdivision A

Dated 5/22/90

MODIFICATION

1. REASON FOR MODIFICATION

- FOSC Request
- Landowner comments

2. ADJUSTMENT TO WORK PLAN

- No bioremediation

SHPO APPROVAL NEEDED YES _____

SHPO SIGNATURE _____

NO X

TAG APPROVAL DATE 5/31/90

ADEC ART WEINER Art Weiner

EXXON ANDY TEAL Andy Teal

NOAA Joseph Talbott Joseph Talbott

USCG G.A. REITER G.A. Reiter

FOSC [Signature] DATE 5/31/90

SHORELINE EVALUATION

SEGMENT ST/ K09-08-CD-03 SUBDIVISION A (1 OF 2) DATE 4/27/90

SEGMENT ENVIRONMENTAL SENSITIVITIES AND TIME CONSTRAINTS:

ST All bald eagle nests (3/1 to 6/1)-Active eagle nests (3/1 to 9/1)
Eagle nest on NOAA list.
See attached Ecological Constraint sheet for specific constraints and contacts.

SUBDIVISION ECOLOGICAL CONSTRAINTS:

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

ARCHAEOLOGICAL CONSTRAINTS:

If cultural resources are uncovered during shoreline treatment, stop work in the vicinity, mark the location of the find and contact Exxon's Cultural Resource Program immediately (564-3274 (Anchorage) or 229-1508 (24 hrs.)).

SHPO SIGNATURE: Charles J. Adams DATE: 5/14/90

OILING CATEGORIZATION:

Wide 0 m: Medium 31 m: Narrow 0 m: V.Light 425 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>5/31/90</u>	<u> </u> Spot Washing: <u> </u> Wands
<u> </u> Tarmat Removal	<u> </u> Beach Cleaner
	<u> </u> Other (see comments)

COMMENTS: Recommended treatment includes 1) manual pickup of mousse,
2) bioremediation of areas shown on attached sketch map. Work should
be conducted after 6/1 with USFWS approval regarding eagle nest con-
straint.

TAG COMMENTS:

TAG APPROVAL DATE: 5/12/90

ADEC Art Wenzel
EXXON Andy Tate
NOAA Gary Petrac
USCG D.D. Rome

FOSC: DATE: 5-18-90

Access/need for Customblend following
mousse pick up. If needed, apply only
in intended zone.

OG A

SEGMENT ST/ K98 CD-3A

SUBDIVISION K98 CD-3A

DATE 4 / 27 90

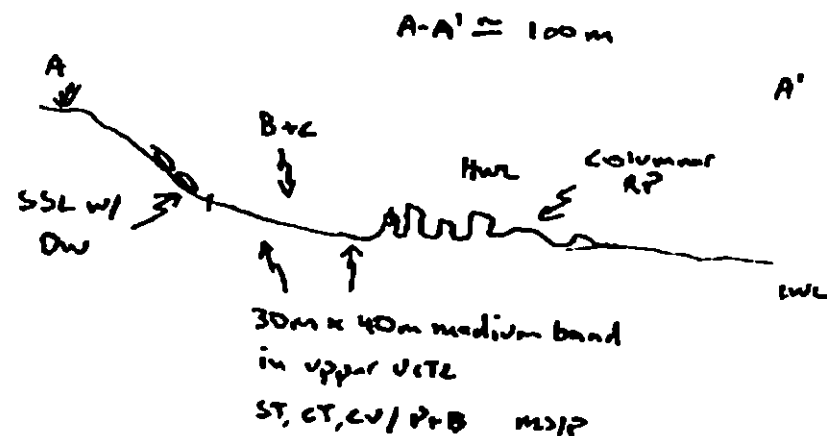
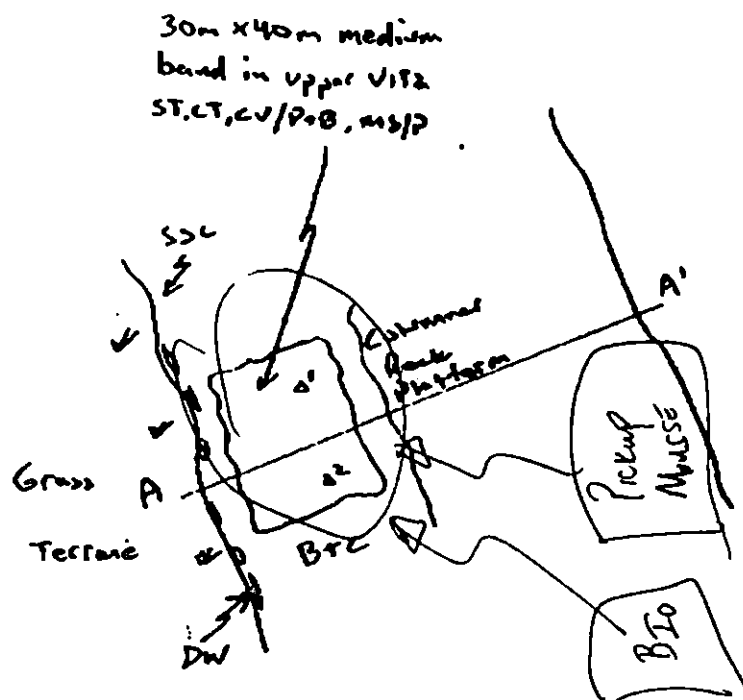
SKETCH MAP A

CHECKLIST

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

LEGEND

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



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

REVISIONS

DATE 4 / 27 90

CHECKLIST

___ N Arrow
 ___ Approx. Scale
 ___ Seg/Sub Entry
 ___ Off Dist.
 ___ Width
 ___ Length
 ___ % Cover
 ___ Substrate Character
 ___ Est. HML/LWL
 ___ SBL
 ___ Profile Location(s)
 ___ Profile(s)
 ___ Pit Location(s)
 ___ Photo Location(s)

LEGEND

Fl - No Subsurface Oil

2 ▲
Pin - Setsurface Oil

CT/C
Continuous Distribution

CT/B
Broken Distribution

CT/P

Patchy Distribution

Splashed Distribution

Oned Vegetation

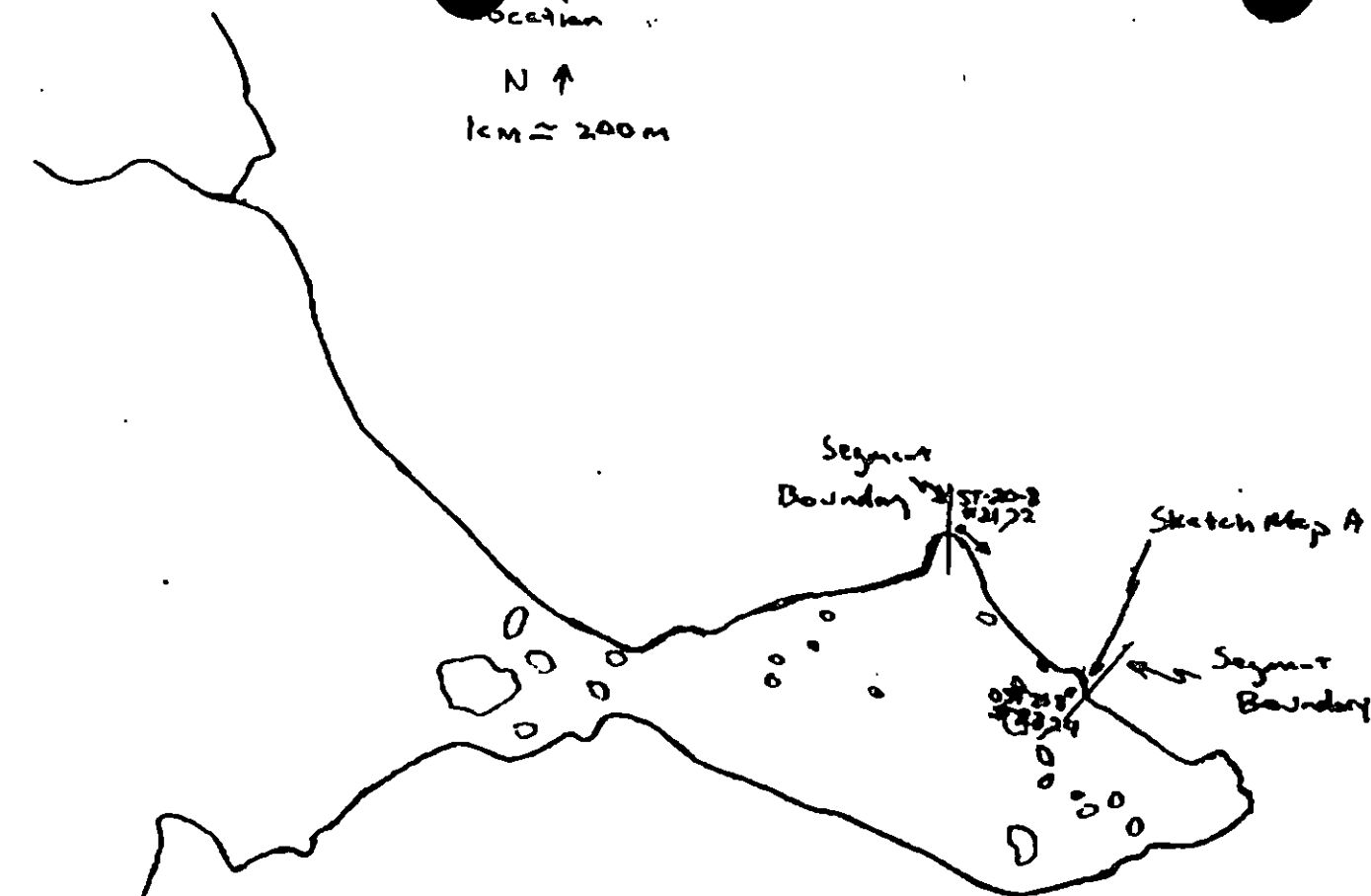
1 

Photo location, direction,
and number

KETCH-MAP

00000000

N 

$$l_{cm} \simeq 240 \text{ m}$$


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

FREE CONSULTATION

CD-3A

K9-8-CD-3A

SUBDIV.
A
REPL.

XXXX Wide

//// Medium

---- Narrow

TTTT Very Light

CD-3A

ADEC Segment Length: 1090m

0 100 200 300

K9-8-CD-3A

Map Key: GOA-43

Name: Acton

Date: 4-27-90

ADDENDUM: SUBDIVISION CONSTRAINTS

SEGMENT K09-08-CD-003 SUBDIVISION A (1 of 2)

WORK WINDOW

Manual Pickup

OPEN

ARCHAEOLOGICAL STANDARD CONSTRAINT

If cultural resources are uncovered, PHONE 564-3274.

APPLICABLE ECOLOGICAL TIME CONSTRAINTS

5T Bald Eagle Nest

NO CONSTRAINT. Authorized per memo dated 6/10/90 from Mary Portner/USFWS to Rex Coulter/Exxon.

OTHER ECOLOGICAL CONSIDERATIONS

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

FOSC

R. Coulter

Date

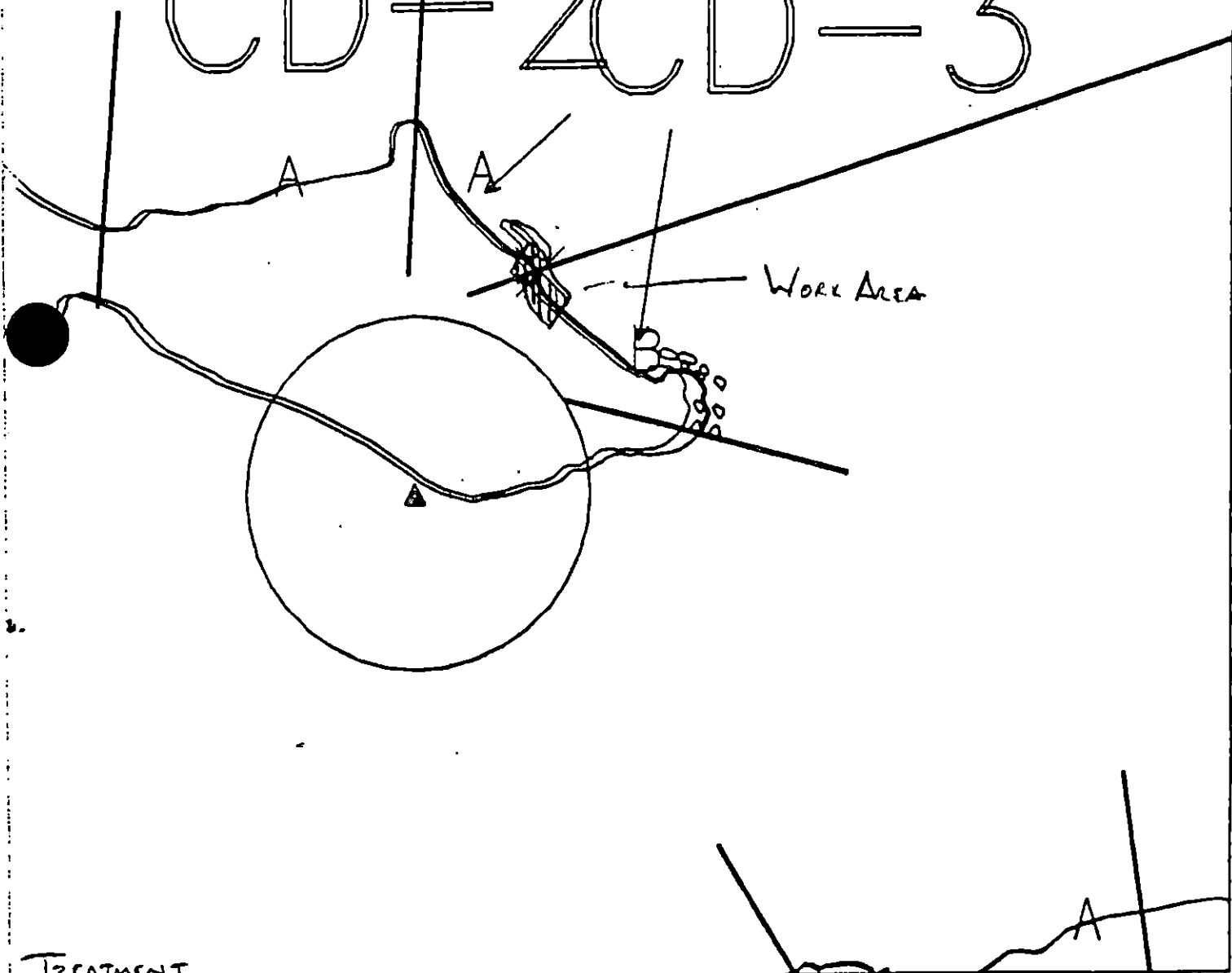
6/13/90

Prepared by

Rex R. Coulter

Date

06/11/90

$$CD + 2CD - 3$$


Exxon Company, USA
Map Key: AWP-CD-3
Dec 10, 1990



ECOLOGY MAP
SEGMENT K9N-08CD-3
SUBDIVISION A (1 of 2)

METERS



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

1 inch = 1205 feet

WORK PLAN ADDENDUM

Segment K09-08-CD-003

Subdivision A

Dated 5/22/90

MODIFICATION

1. REASON FOR MODIFICATION

- FOSC Request
- Landowner comments

2. ADJUSTMENT TO WORK PLAN

- No bioremediation

SHPO APPROVAL NEEDED YES _____

SHPO SIGNATURE _____

NO X

TAG APPROVAL DATE 5/31/90

ADEC Art Weiner Art Weiner

EXXON Amoy Tenz Amoy Tenz

NOAA Joseph Talbot Joseph Talbot

USCG G.A. Reiter G.A. Reiter

FOSC [Signature] DATE 5/31/90

SHORELINE EVALUATION

SEGMENT ST/ K09-08-CD-03 SUBDIVISION A (1 OF 2) DATE 4/27/90

SEGMENT ENVIRONMENTAL SENSITIVITIES AND TIME CONSTRAINTS:

5T All bald eagle nests (3/1 to 6/1) - Active eagle nests (3/1 to 9/1)
Eagle nest on NOAA list.

See attached Ecological Constraint sheet for specific constraints and contacts.

SUBDIVISION ECOLOGICAL CONSTRAINTS:

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

ARCHAEOLOGICAL CONSTRAINTS:

If cultural resources are uncovered during shoreline treatment, stop work in the vicinity, mark the location of the find and contact Exxon's Cultural Resource Program immediately (564-3274 (Anchorage) or 229-1508 (24 hrs.)).

SHPO SIGNATURE: Shawn J. H. Jones DATE: 5/14/90

OILING CATEGORIZATION:

Wide 0 m: Medium 31 m: Narrow 0 m: V. Light 425 m: No Oil 0 m
Subsurface Oil Observed: Yes No X Maximum Depth

RECOMMENDATIONS:

 No Treatment Recommended
X Treatment Recommended
X Manual Pickup
X Bioremediation
 Tarmat Removal

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

COMMENTS: Recommended treatment includes 1) manual pickup of mousse,
2) bioremediation of areas shown on attached sketch map. Work should
be conducted after 6/1 with USFWS approval regarding eagle nest con-
straint.

SEE WORK PLAN ADDENDUM
DATED 5/22/90 AND CONSTRAINT
ADDENDUM DATED 06/11/90
Reg C.

TAG COMMENTS:

TAG APPROVAL DATE: 5/12/90

ADEC Det. Warner
EXXON Andy Tetz
NOAA Gary Petrone
USCG D.D. Rome

FOSC: DATE: 5-18-90

Gessers/need for Customblend following
mousse pick up. If needed, apply only
in intended zone.

REGION: KODIAK

SEGMENT: ST/K09-08-CD-03

SUBDIVISIONS: A (1 OF 2)

SHORELINE EVALUATION

SEGMENT ST/ K09-08-CD-03 SUBDIVISION A (1 OF 2) DATE 4/27/90

SEGMENT ENVIRONMENTAL SENSITIVITIES AND TIME CONSTRAINTS:

5T All bald eagle nests (3/1 to 6/1)-Active eagle nests (3/1 to 9/1)
Eagle nest on NOAA list.

See attached Ecological Constraint sheet for specific constraints and contacts.

SUBDIVISION ECOLOGICAL CONSTRAINTS:

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

ARCHAEOLOGICAL CONSTRAINTS:

If cultural resources are uncovered during shoreline treatment, stop work in the vicinity, mark the location of the find and contact Exxon's Cultural Resource Program immediately (564-3274 (Anchorage) or 229-1508 (24 hrs.)).

SHPO SIGNATURE: _____ DATE: _____

OILING CATEGORIZATION:

Wide 0 m: Medium 31 m: Narrow 0 m: V.Light 425 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 Removal	☐ Beach Cleaner
	☐ Other (see comments)

COMMENTS: Recommended treatment includes 1) manual pickup of mousse,
2) bioremediation of areas shown on attached sketch map. Work should
be conducted after 6/1 with USFWS approval regarding eagle nest con-
straint.

TAG COMMENTS: _____

TAG APPROVAL DATE: _____

ADEC _____
EXXON _____
NOAA _____
USCG _____

FOSC: _____ DATE: _____

KODIAK ECOLOGICAL CONSTRAINTS

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

FIELD SHORELINE COMMENT SHEET

SEGMENT ST 1K9-08 CD003A SUBDIVISION: 1K9-8-CD-3A DATE 4-27-90

JSCG

NAME D.D. Haven Jr., GM3, USCGR SIGNATURE [Signature]

☐ NO TREATMENT RECOMMENDED

☒ TREATMENT SUGGESTED

COMMENTS

There are some patches of mousse behind bedrock platforms and are protected from wave energy. Is not weathering very fast.

ADEC

NAME Francine J. Bennis SIGNATURE [Signature]

☐ NO TREATMENT RECOMMENDED

☒ TREATMENT SUGGESTED

COMMENTS

MANUAL CLEAN-UP RECOMMENDED w/SHOVEL & TROWELS.

Patchy mousse saturated sediments among cobbles/boulders exist near NW & SE corners of segment, along with ST, CT, CV.
Cleanup crew should have SSAT maps to treat areas of indicated oil.

LAND MANAGER

NPS

NAME WILL TROYER SIGNATURE [Signature]

☐ NO TREATMENT RECOMMENDED

☐ TREATMENT SUGGESTED

COMMENTS

Some mousse could be removed with shovels & trowels.

SHORELINE OILING SUMMARY

REVISION NO. 04/13/90

OG Acton USCG Haven SEGMENT ST/ K9-8-6D-3A
 BIO Davis LAND REP NPS T-124, 3000 SUBDIVISION K9-8-6D-3A (1 OF 2)
 EXXON Avery ADEC Bennett TIME 9:50 to 10:50
 TEAM NO. 20 TIDE LEVEL -2.0 to -3.5 DATE 4/27/90
 EST. SUBDIVISION LENGTH: 450 m ☒ Sun ☐ Clouds ☐ Fog ☐ Rain ☐ Snow
 UPLANDS DESCRIPTION: ☒ Grass ☐ Forest ☐ Rock
 SURVEYED FROM: ☒ Foot ☐ Boat ☐ Helo WORKING DIRECTION: NW to SE
 SURFACE SEDIMENTS: R 40 % B 40 % C 15 % P 1 % G 2 % S 2 % M 0 % V 0 %
 SLOPE: Long 100 % Hang - % Vert - % WAVE EXPOSURE: ☐ Low ☐ Med ☒ High
 OIL CATEGORY LENGTH: W 0 m M 40 m N 0 m VL 40 m NO 0 m

SURFACE OIL

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

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 0#BAGS 0

Photographs:

Roll No. ST-20-8Frames 21-24

SUBSURFACE OIL

PIT NO.	PIT DEPTH (cm)	SUBSURFACE OIL CHARACTER					OILED INTERVAL (cm)	BELOW		OIL / FILM COLOR					PIT ZONE				A N A	SHEEN (Y/N)	↓	SURFACE - SUBSURFACE SEDIMENTS
		OP	OR	OL	OF	NO		VO	UC	1	2	3	4	5	SU	U	M	L				
1	5					✓	.		✓						✓							C B
2	5					✓	.		✓						✓							R
							.															
							.															
							.															
							.															

COMMENTS Shoreline is a wide rock platform w/ little or no veneer from the lower U1Z down and C+B veneer in the upper U1Z and S1Z. The columnar rock surface in the lower U1Z appears to dissipate enough wave energy to inhibit natural cleaning of the oiled area. Minimal pit depths due to C+B surface/subsurface.

 REVIEWED 7W DATE 5/1/90

OG Acton

SEGMENT 9-8-CD-3A

SUBDIVISION K9-8-CD-3A

DATE 4 / 27 / 90

CHECKLIST

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

LEGEND

1 Δ

Pit - No Subsurface Oil

2 Δ

Pit - Subsurface Oil

CT/C

Continuous Distribution

CT/B

Broken Distribution

CT/P

Patchy Distribution

CT/S

Splashed Distribution

Oil Vegetation

1 $\Rightarrow$

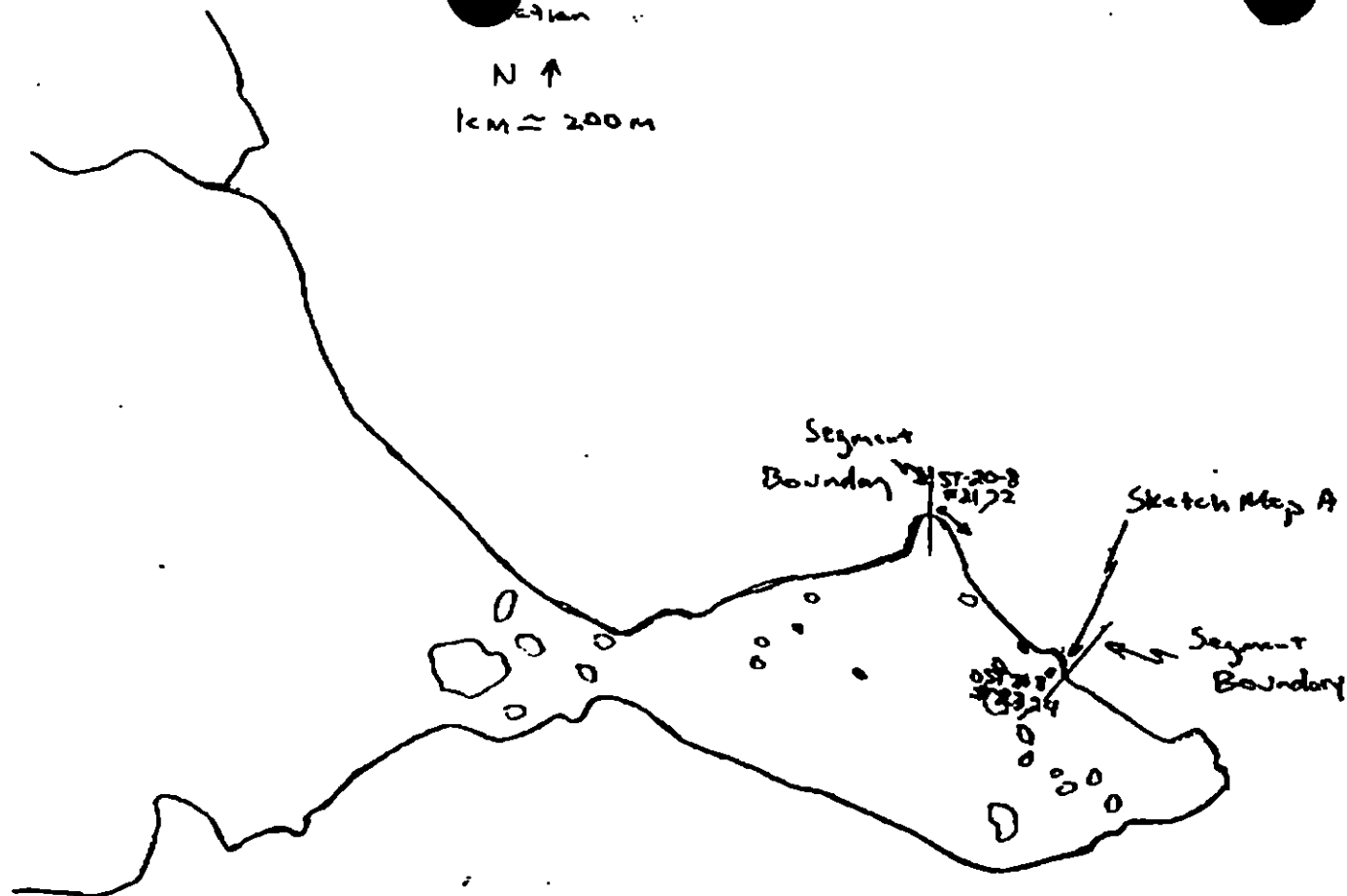
Photo location, direction,
and number

SKETCH MAP

Location

N $\uparrow$

1 cm $\approx$ 200 m



Oil Character Length (m): AP PO CV 40 CT 40 ST 450 MS 40 PT TB FL NO

REVISION: 03/20/90

OG A-1

SEGMENT K98-CD-3A

SUBDIVISION K98-CD-3A

DATE 4 / 27 90

CHECKLIST

- ☐ N Arrow
- ☐ Approx. Scale
- ☐ Seg/Sub Bdry
- ☐ Oil Dist.
- ☐ Width
- ☐ Length
- ☐ % Cover
- ☐ Substrate Character
- ☐ Est. FW/LA/WL
- ☐ SSL
- ☐ Profile Location(s)
- ☐ Photo Location(s)
- ☐ Photo Location(s)

LEGEND

1 Δ

P1 - No Subsurface Oil

2 Δ

P1 - Subsurface Oil

CT/C

Continuous Distribution

CT/B

Broken Distribution

CT/P

Patchy Distribution

CT/S

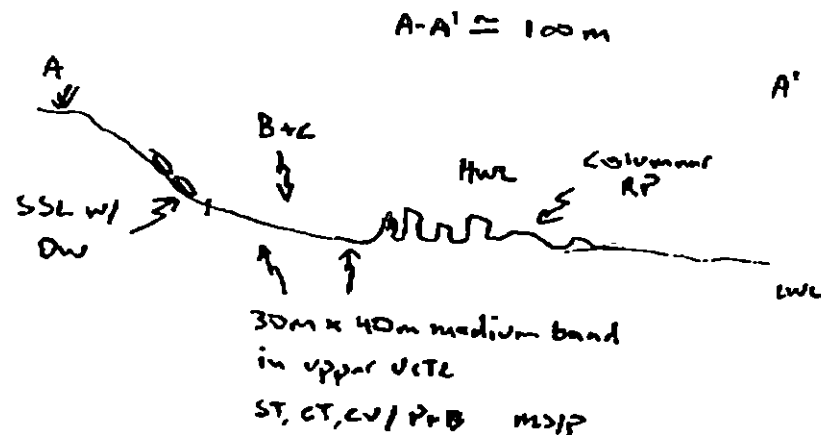
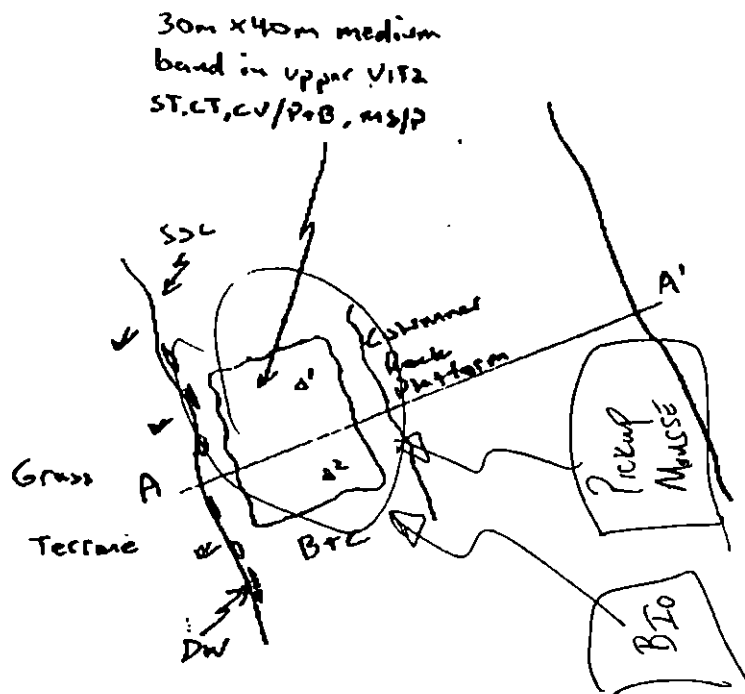
Splashed Distribution

Oil Vegetation

1 $\Rightarrow$

Photo location, direction,
and number

TCH MAP A



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

REVISION 02/90

SHORELINE ECOLOGICAL SUMMARY

REVISION: 33

Segment ST / K9-08 Subdivision CD-03A Date (mo / day / yr) 4/27/90Time (24 hr) 9:50 Biologist H. Davis(A) Substrate type and % of segments:
(1) Bedrock 40 (2) Boulder 40 (3) Cobble 15 (4) Pebble 3 (5) Sand 2 (6) Silt —(B) Overall % cover of biota (% of segment): Dense 20% Moderate 40% Low 40% (40%)

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

Photographs:
Roll No. ST-20-8Frames 21-24BARNACLES *Continuons but sparse-moderate*

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

NOT PRESE
4, 5, 6MYTILUS *Small patches between boulders*

Dense			Moderate			Sparse			Rare		
X	X	1L	X	X	1L	X	X	1L	X	X	X
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 PRESE
3, 4, 5, 6GASTROPODS *Littorina dense, limpets sparse-mod, Nucella sp. sparse-rare*

Dense			Moderate			Sparse			Rare		
X	X	X	X	X	X	X	X	1L	X	X	1L
3	3	3	3	3	3	3	3	2	3	3	2
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 PRESEN
4, 5, 6FUCUS *Patchy all through the segment*

Dense			Moderate			Sparse			Rare		
X	X	1L	X	X	1L	X	X	X	1U	1M	X
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 PRESEN
4, 5, 6

Wildlife Observations/ General Comments: large boulders, cobble and rocks interlocking. Laminaria, Gelophyllum, Rhodomela, Fucus, Corallina, Ulva, Cladophora and filamentous greens are the most prominent algae. Pagurus sp. common. Eggs of Nucella sp. (canaliculata) Cl. overlaps littorina in the upper intertidal. Grazing trails into oil stain.

Ecological Considerations: Anadromous stream in nearby segment

DATE 4/27/90 TIME 9:50 - 10:50

TIDE HEIGHT -2.0 to -3.5

1 = BEDROCK

2 = BOULDER

3 = COBBLE

5 = SAND

6 = SILT

FLORA:

SPECIES	UITZ	MITZ	LITZ	COMMENTS
BOSSIELLA/CORALLINA	1	1	1	> on bed rock, in pools
CALLIARTHRON/CORALLINA	1	1	1	
CLADOPHORA SPP	—	2	2,3	
COSTARIA SPP	—	—	—	
ENDOCLADIA MURICATA	1,2	1	—	
FILAMENTOUS GREENS	2	1,2,3	1,2,3	
FILAMENTOUS REDS	—	1,2	1,2	
GLOIOPELTIS FURCATA	—	1,2	—	
HALOSACCION GLANDIFORME	1	1,2	1	
LAMINARIA SPP	—	1	1,2	
LITHOTHAMNION	1	1	1	
NEREOCYSTIS SPP	—	—	—	In drift and off shore
PORPHYRA SPP	1,2	1,2	—	
RALPHSIA/HILDENBRANDIA	—	—	—	
RHODOMELA LARX	1	1	1,2	
RHODOMENIA PALMATA	1,2,3	1,2,3	—	
SCYTOSIPHON SPP	—	—	—	
ULVA SPP	1	1,2	1,2,3	
ZOSTERA MARINA	—	—	—	
ENTEROMORPHA	—	1,2	—	
<i>Nelophyllum</i> sp?	1	1	—	in LITZ pools

FAUNA:

ANTHOPLEURA SPP	1	1	1	
(SEMI) BALUNUS CARIOSUS	1,2,3	1,2,3	1,2,3	
B. GLANDULA	1,2,3	1,2,3	1,2,3	
BRYOZOANS	—	—	—	
CHITONS (other than K. TUNICATA)	—	1	—	mostly in
CLAMS	—	—	—	
CRABS	—	—	—	
DERMASTRIAS IMBRICATA	—	—	—	
KATHARINA TUNICATA	1	1	—	
LEPTASTERIAS HEXACTIS	1	2	—	NOT PARADISE
LIMPETS	1,2,3	1,2,3	1,2,3	
LITTORINA SPP	1,2,3	1,2,3	1,2,3	
NUCELLA SPP	1,2,3	1,2,3	1,2	canaliculate esp. cases
PAGURUS SPP	1	1,2	1	Female w/ eggs.
PISASTER OCHRACEUS	—	—	—	
POLYCHAETES	—	—	—	
PYCNOPODIA HELIANTHOIDES	—	—	—	
SEARLESIA DIRA	—	—	—	
SERPULIDS	—	—	—	
SIPHONARIA THERSITES	—	—	—	
TEALIA	—	1	—	

CD-3A

K9-8-CD-3A

SUBDIV.
A
Rep C.

XXXX Wide

//// Medium

--- Narrow

TTTT Very Light

CD-3A

ADEC Segment Length: 1090m

0 100 200 300

K9-8-CD-3A

Map Key: GOA-43

Name: Acton

Date: 4-27-90



REGION: KODIAK

SEGMENT: ST/K09-08-CD-03

SUBDIVISIONS: B (2 OF 2)

SHORELINE EVALUATION

SEGMENT ST/ K09-08-CD-03 SUBDIVISION B (2 OF 2) DATE 4/27/90

SEGMENT ENVIRONMENTAL SENSITIVITIES AND TIME CONSTRAINTS:

5T All bald eagle nests (3/1 to 6/1)-Active eagle nests (3/1 to 9/1)
See attached Ecological Constraint sheet for specific constraints and contacts.

SUBDIVISION ECOLOGICAL CONSTRAINTS:

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

ARCHAEOLOGICAL CONSTRAINTS:

If cultural resources are uncovered during shoreline treatment, stop work in the vicinity, mark the location of the find and contact Exxon's Cultural Resource Program immediately (564-3274 (Anchorage) or 229-1508 (24 hrs.)).

SHPO SIGNATURE: _____ DATE: _____

OILING CATEGORIZATION:

Wide 0 m: Medium 62 m: Narrow 534 m: V.Light 38 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 Removal	☐ Beach Cleaner
	☐ Other (see comments)

COMMENTS: Recommended treatment includes 1) manual pickup of mousse patties and 2) bioremediation of areas shown on attached sketch map.
Work should be conducted after 6/1 with USFWS approval regarding eagle nest constraint.

TAG COMMENTS: _____

TAG APPROVAL DATE: _____

ADEC _____
EXXON _____
NOAA _____
USCG _____

FOSC: _____ DATE: _____

KODIAK ECOLOGICAL CONSTRAINTS

- 1A Salmon stream mouth - fry outmigration (4/15 to 7/31)
1B Salmon stream mouth - spawning (7/15 to 9/10; PEAK 8/15)
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, 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 prior to treatment for consultation and/or permit application.
AGENCY CONTACT PERSON: ADF&G Ken Middleton 267-2299
- 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, 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 for confirmation and advice.
AGENCY CONTACT PERSON: ADF&G Larry Peltz 424-3214
- 1D Kotai Bay Hatchery release
Pink salmon - late May, early June; Chum salmon - June; Sockeye salmon - early July.
- 1H Remote release site
No use of methods which might affect nearshore oil or toxicity levels, such as hot water wash or Inipol application, 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 for confirmation and authorization.
AGENCY CONTACT PERSON: ADF&G Larry Peltz 424-3214
- 1I Gill net area
1J Purse seine area
Mainland, West side Kodiak, Shuyak & Moser/Olga Bay (6/9 to 10/1)
East side Kodiak, East side Afognak (7/4 to 10/1)
1K Purse seine hook-off
1L Set net sites
Contact ADF&G for confirmation - dates and locations may vary. 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 Larry Nicholson 424-4791
- 2M Herring spawning (4/15 to 6/30)
Contact ADF&G for confirmation - dates and locations may vary. Restrict boat traffic to essential minimum. Avoid damage to unopened intertidal and subtidal algae and seagrass. If plans for treatment include methods such as hot water wash or Inipol application which might affect nearshore oil or toxicity levels, contact ADF&G for consultation and authorization.
AGENCY CONTACT PERSON: ADF&G Larry Nicholson 486-4791
- 3P Harbor seal and sea lion pupping (5/10 to 7/1)
Q Harbor seal and sea lion molting (8/15 to 9/15)
Restrict boat and air traffic to essential minimum. No personnel within 400m. Aircraft to maintain 800m horizontal and 300m vertical distance from haulouts. No application of Inipol within two weeks of arrival dates (work window at these sites is limited to 7/2 to 7/31). Contact ADF&G and USFWS prior to treatment for confirmation.
AGENCY CONTACT PERSON: US National Marine Fisheries Service Steve Zimmerman 586-7235
ADF&G Don Calkins 267-2403
- 5R Seabird colony (5/1 to 9/1)
Restrict air and boat traffic to essential minimum. No personnel within 800m. Aircraft to maintain 800m horizontal, 300m vertical distance from colony. Contact USFWS prior to treatment.
AGENCY CONTACT PERSON: USFWS Jill Parker 786-3377
- 5S Shorebird/waterfowl concentration (4/1 to 5/15)
Restrict all activity to essential minimum, especially air traffic. Contact USFWS and ADF&G for confirmation.
AGENCY CONTACT PERSON: USFWS Jill Parker 786-3377
ADF&G Tom Roth 267-2206
- 5T All Bald Eagle nests (3/1 to 6/1)
Active Bald Eagle nests (3/1 to 9/1)
Restrict air traffic and all disturbance to essential minimum. No personnel within 400m 3/1 to 6/1. Air approach and takeoff from and to seaward only; maintain 800m horizontal, 300m vertical distance from nests. Contact USFWS prior to treatment for confirmation of dates.
AGENCY CONTACT PERSON: USFWS Jill Parker 786-3377
- 6U Recreation: Tent sites (6/1 to 9/15)
6V Anchorages (6/1 to 9/15)
6W Forest Service cabins (6/1 to 9/15)
6X Lodge (6/1 to 9/15)
6Y Special use destination
- 7Z Subsistence area: Salmon harvesting (6/1 to 9/30)
7HH Finfish harvesting
7II Deer harvesting (8/1 to 1/7)
J Invertebrate harvesting
K Beer harvesting (4/1 to 5/15 and 10/25 to 11/30)
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 / K909 CD003B SUBDIVISION: K9-9-CD-2B DATE 4-27-90

SCG
NAME D.D. Haver Jr., USCG SIGNATURE [Signature]

☐ NO TREATMENT RECOMMENDED ☒ TREATMENT SUGGESTED
COMMENTS

Small amount of recoverable oil

ADEC
NAME Francine J. Bennis SIGNATURE [Signature]

☐ NO TREATMENT RECOMMENDED ☒ TREATMENT SUGGESTED
COMMENTS

MANUAL CLEAN-UP RECOMMENDED WITH SHOVELS & TROWELS
Within this segment are several locations having collectable mouse
saturated fine sediments in the interstitial spaces of boulders/cobble.
2 main areas are:
1) 30 x 40 m area with ST, CF, CV, MS, PT.
2) 20 x 20 m area " " " "
Other collectable oil exists in places in UETE in easternmost portion of the
segment. Clean-up crew should have SSAT maps & check all areas w/indicated o

LAND MANAGER NPS
NAME Will TROYER SIGNATURE [Signature]

☐ NO TREATMENT RECOMMENDED ☐ TREATMENT SUGGESTED
COMMENTS

Some mouse can be collected with shovel and trowel
by digging between boulders in the major area
of mouse concentration. On the east end of the
segment, at the very end a few square miles of oil
in fine pebbles that could quickly be
picked up

SHORELINE OILING SUMMARY

REVISION NO. 04-12-90

OG Acton USCG Haven SEGMENT ST/ K49-CD-3D
 BIO Davis LAND REP NPS Troyer, James SUBDIVISION K49-CD-3B (1 OF 1)
 EXXON Amery ADEC Bennis TIME 8:00 to 11:45
 TEAM NO. 20 TIDE LEVEL -3.5 to -2.0 DATE 4/27/90
 EST. SUBDIVISION LENGTH: 611 m ☒ Sun ☐ Clouds ☐ Fog ☐ Rain ☐ Snow
 UPLANDS DESCRIPTION: ☒ Grass ☐ Forest ☐ Rock
 SURVEYED FROM: ☒ Foot ☐ Boat ☐ Helo WORKING DIRECTION: NW to SE
 SURFACE SEDIMENTS: R 40 % B 40 % C 10 % P 3 % G 3 % S 4 % M 0 % V 0 %
 SLOPE: Long 100 % Hang 0 % Vert 0 % WAVE EXPOSURE: ☐ Low ☐ Med ☒ High
 OIL CATEGORY LENGTH: W 0 m M 45 m N 446 m VL 100 m NO 0 m

SURFACE OIL

CHARACTER	DISTRIBUTION				OIL / FILM COLOR								IMPACTED ZONES			
	C	N	E	S	1	2	3	4	5	6	7	8	SU	U	M	U
ASPHALT PAVEMENT																
POOLED																
COVER																
COAT																
STAIN																
MOUSSE																
PATTIES																
TARBALLS																
FILM																
NO OIL																

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 0#BAGS 0

Photographs:

Roll No. ST-20-8Frames 25-30

SUBSURFACE OIL

PIT NO.	PIT DEPTH (cm)	SUBSURFACE OIL CHARACTER					OILED INTERVAL (CM)	BELOW		OIL / FILM COLOR								PIT ZONE				A N A	SHEEN (Y/N)	▼	SURFACE - SUBSURFACE SEDIMENTS
		OP	OR	OL	OF	NO		UG	UC	1	2	3	4	5	6	7	8	SU	U	M	U				
1	5																								BR
2	5																								BR

COMMENTS

REVIEWED /wDATE 5/1/90

OG Acton

SEGMENT 29-CD-3B

SUBDIVISION K9-9-CD-3B

DATE 4 / 27 90

CHECKLIST

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

LEGEND

1 ▲

PR - No Subsurface Oil

2 ▲

PI - Subsurface Oil

CT/C

Continuous Distribution

CT/B

Broken Distribution

CT/P

Patchy Distribution

CT/S

Splashed Distribution

Old Vegetation

1 ➡

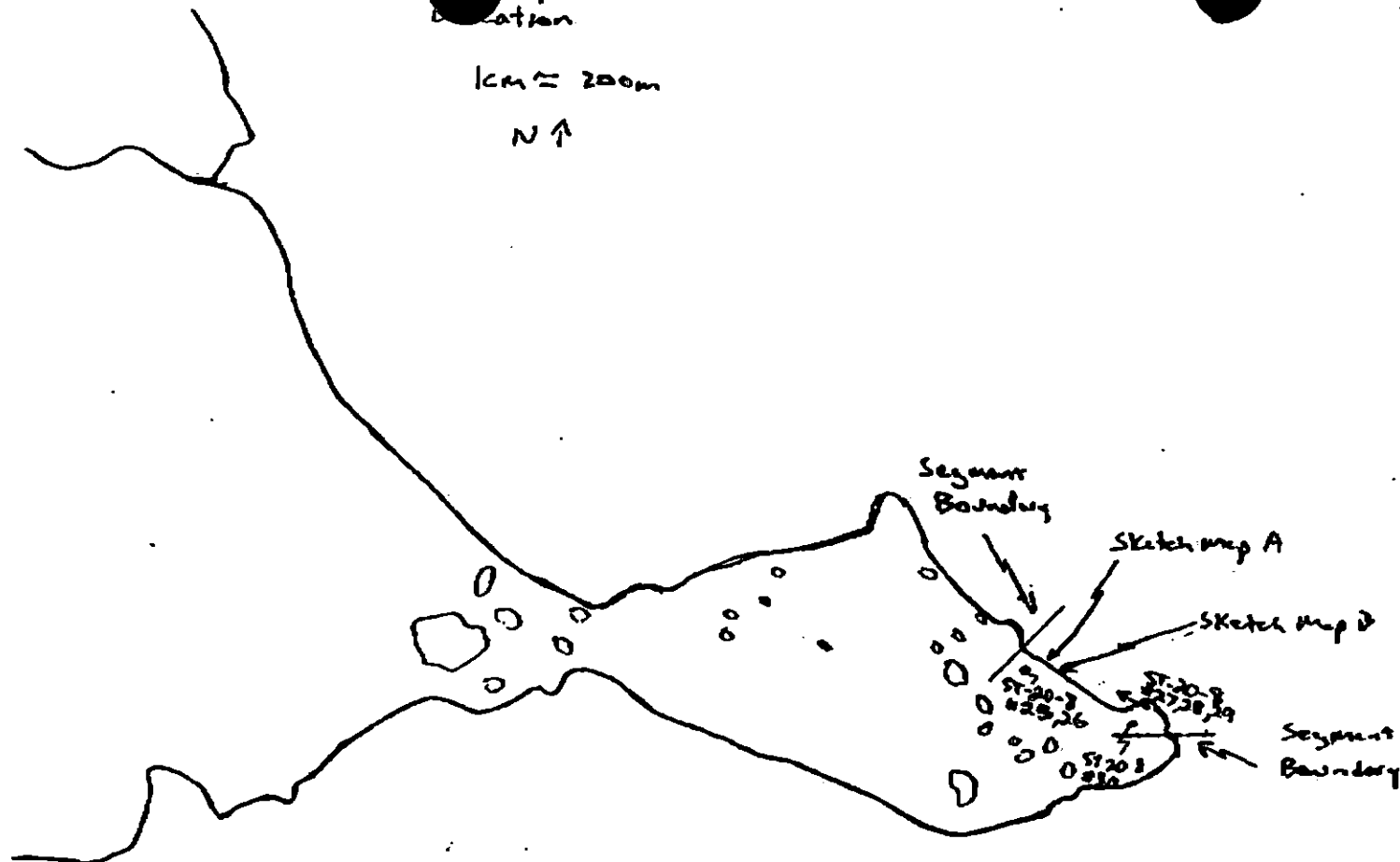
Photo location, direction,
and number

SKETCH MAP

Location

1cm = 200m

N ↑



Oil Character Length (m): AP _____ PO _____ CV 50 CT 60 ST 60 MS 50 PT _____ TB _____ FL _____ NO _____

REVISION 007000

OG A-3

SEGMENT 9-1-CD-3B

SUBDIVISION K9-9-CD-3B

DATE 4 / 27 90

CHECKLIST

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

LEGEND

1 Δ
Pi - No Subsurface Oil

2 Δ
Pi - Subsurface Oil

$\boxed{CT/C}$
Continuous Distribution

$\boxed{CT/B}$
Broken Distribution

$\boxed{CT/P}$
Patchy Distribution

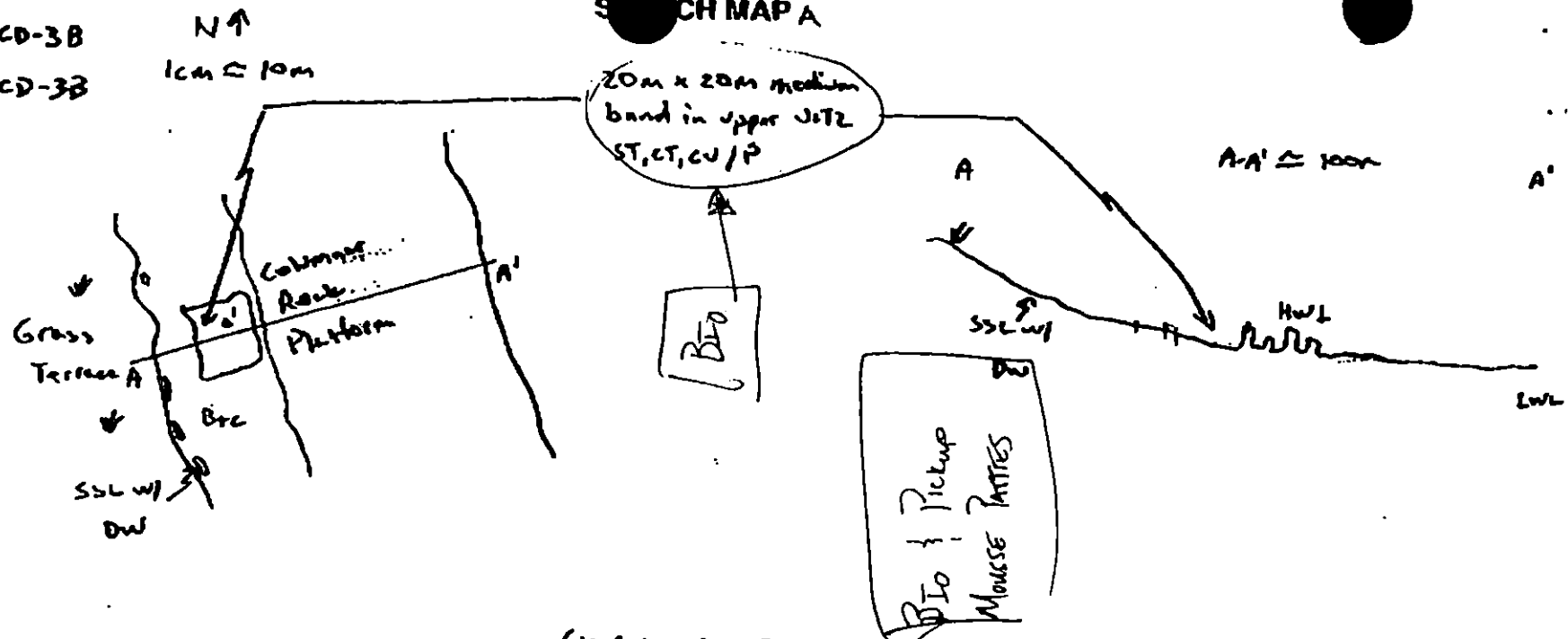
$\boxed{CT/S}$
Splashed Distribution

Oil Vegetation

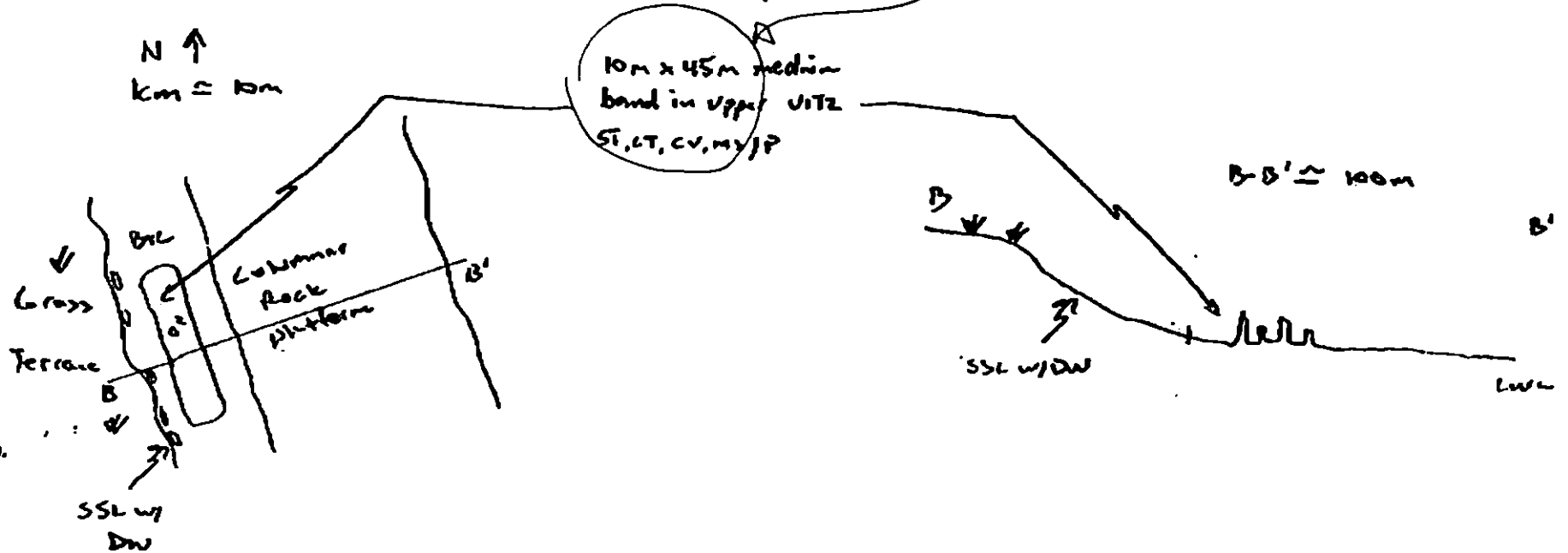
1 $\odot$
Photo location, direction, and number

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

SKETCH MAP A



Sketch Map B



SHORELINE ECOLOGICAL SUMMARY

REVISION: 03/2

Segment ST / K9-09 Subdivision CD-03B Date (mo / day / yr) 4/27/90Time (24 hr) 10:50 Biologist N. Davis

(A) Substrate type and % of segments:

(1) Bedrock 40 (2) Boulder 40 (3) Cobble 10 (4) Pebble 6 (5) Sand 4 (6) Silt -(B) Overall % cover of biota (% of segment): Dense 20% Moderate 40% Low 40% (40%)

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

Photographs:

Roll No. ST-20-8Frames 25-30

BARNACLES Continuous mostly moderate with sparse areas.

Dense			Moderate			Sparse			Rare		
1M	1L		1M	1L		1M	1L		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 PRESEN

MYTILUS small patches between cobble + boulder

Dense			Moderate			Sparse			Rare		
1M	1L		1M	1L		1M	1L		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 PRESEN

GASTROPODS Dense Littorina, Mod-Sparse limpets mostly on low areas and underside

Dense			Moderate			Sparse			Rare		
1M	1L		1M	1L		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 PRESEN

FUCUS Patchy all through the segment

Dense			Moderate			Sparse			Rare		
1M	1L		1M	1L		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 PRESEN

4,5,6

(LTZ) Wildlife Observations/ General Comments: Rock outcropping boulders and cobble substrate. Laminaria, Gelidium, Rhodophyta, Green filamentous, Cladophora, Alaria, Fucus, Rhodomela, Rhodomenia, and Gelidium (LTZ) were the most prominent algae seen. Oil overlaps limpets, Littorina and barnacles in some areas in the LTZ.

Ecological Considerations: 5 r Eagle nest. No eagles or nests were seen.

DATE 4/27/90 TIME 10:50 - 11:45 TIDE HEIGHT -3.5 to -2.0

1 = BEDROCK

2 = BOULDER

3 = COBBLE

5 = SAND

6 = SILT

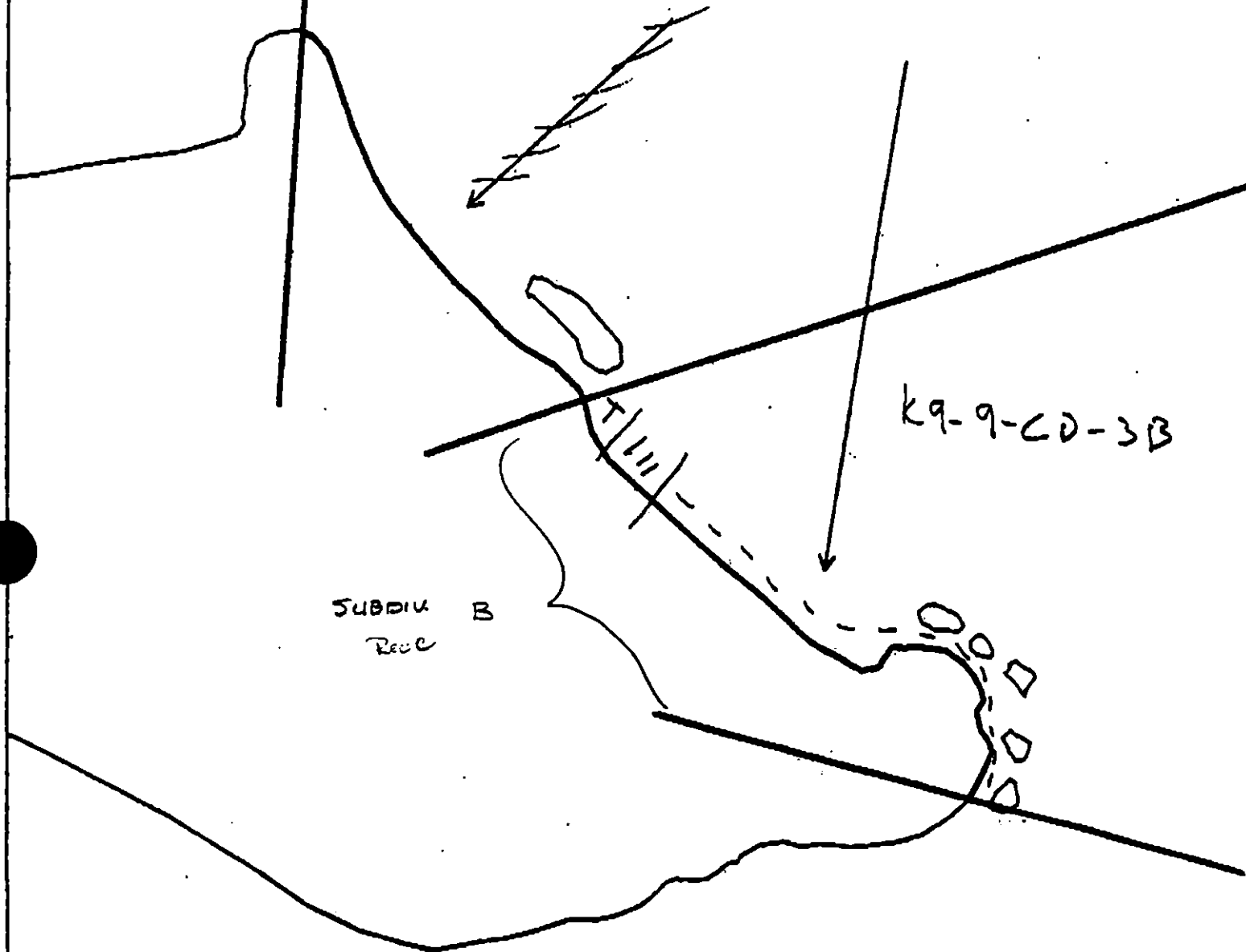
FLORA:

SPECIES	UTZ	MITZ	LITZ	COMMENTS
BOSSIELLA/CORALLINA	1	1	1	on bed rock in pools
CALLIARTHRON/CORALLINA	1	1	1	"
CLADOPHORA SPP	—	2	2,3	
COSTARIA SPP	—	—	—	
ENDOCLADIA MURICATA	1,2	1	—	
FILAMENTOUS GREENS	2	1,2,3	1,2,3	
FILAMENTOUS REDS	—	1,2	1,2	
GLOIOPELTIS FURCATA	—	1	—	
HALOSACCION GLANDIFORME	1	1	—	
LAMINARIA SPP	—	1	1,2	
LITHOTHAMNION	1	1	1	
NEREOCYSTIS SPP	—	—	—	In drift and off shore
PORPHYRA SPP	1,2	1,2	—	
RALPHSIA/HILDENBRANDIA	—	—	—	
RHODOMELA LARX	1	1	1,2	
RHODOMENIA PALMATA	1,2,3	1,2,3	—	
SCYTOSIPHON SPP	—	—	—	
ULVA SPP	1	1,2	1,2,3	
ZOSTERA MARINA	—	—	—	
ENTOMORPHA	—	1	—	

FAUNA:

ANTHOPELURA SPP	1	1	1	
(SEMI) BALUNUS CARIOSUS	1,2,3	1,2,3	1,2,3	
B. GLANDULA	1,2,3	1,2,3	1,2,3	
BRYOZOANS	—	—	—	
CHITONS (other than K. TUNICATA)	—	1	—	in pools?
CLAMS	—	—	—	
CRABS	—	—	—	
DERMASTERIAS IMBRICATA	—	—	—	
KATHARINA TUNICATA	—	1	1	
LEPTASTERIAS HEXACTIS	—	—	—	
LIMPETS	1,2,3	1,2,3	1,2,3	
LITTORINA SPP	1,2,3	1,2,3	1,2,3	
NUCELLA SPP	1,2,3	1,2,3	1,2	Egg cases of conical shape
PAGURUS SPP	1	1,2	1	
PISASTER OCHRACEUS	—	—	—	
POLYCHAETES	—	—	—	
PYCNOPODIA HELIANTHOIDES	—	—	—	
SEARLESIA DIRA	—	—	—	Pagurus using shells
SERPULIDS	—	—	—	
SIPHONARIA THERSITES	—	—	—	
TEALIA	—	—	1	

CD-3B



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

CD-3B

ADEC Segment Length: 1090m



K9-9-CD-3B
Map Key: GOA-43
Name: Acton
Date: 4-27-90
Data Entered:

WORK PLAN ADDENDUM

Segment K09-08-CD-003

Subdivision B

Dated 5/22/90

MODIFICATION

1. REASON FOR MODIFICATION

- FOSC Request
- Landowner comments

2. ADJUSTMENT TO WORK PLAN

- No bioremediation

SHPO APPROVAL NEEDED YES _____ SHPO SIGNATURE _____
NO X

TAG APPROVAL DATE 5/31/90

ADEC ART WEINER Art Weiner

EXXON AMY TEAL Real

NOAA Joseph Talbot Joe Talbot

USCG G.A. REITER G.A. Reiter

FOSC [Signature] DATE 5/31/90

SHORELINE EVALUATION

SEGMENT ST/ K09-08-CD-03 SUBDIVISION B (2 OF 2) DATE 4/27/90

SEGMENT ENVIRONMENTAL SENSITIVITIES AND TIME CONSTRAINTS:

ST 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 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: *Charles F. Johnson* DATE: 5/14/90

OILING CATEGORIZATION:

Wide 0 m: Medium 62 m: Narrow 534 m: V.Light 38 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 <i>by 5/31/90</i>	<u> </u> Spot Washing: <u> </u> Wands
<u> </u> Tarmat Removal	<u> </u> Beach Cleaner
	<u> </u> Other (see comments)

COMMENTS: Recommended treatment includes 1) manual pickup of mousse patties and 2) bioremediation of areas shown on attached sketch map.
Work should be conducted after 6/1 with USFWS approval regarding eagle nest constraint.

TAG COMMENTS: _____

TAG APPROVAL DATE: 5/12/90
ADEC *Art Wanger* *D. D. Rome*
EXXON *Andy Tate* *Steve*
NOAA *Gary Petras* *Andy Petras*
USCG *D. D. Rome* *D. D. Rome*

FOSC: *W L* DATE: 5-15-90
Bioremediation limited to areas indicated on map which are clearly in the intertidal zone.

00 Field

SEGMENT ST-9-CD-3B

SUBDIVISION ST-9-CD-3B

DATE 4 / 27 90

CHECKLIST

- ☐ N Area
- ☐ Approx. Scale
- ☐ Seg/Sub Entry
- ☐ Oil Dist.
- ☐ Width
- ☐ Length
- ☐ % Cover
- ☐ Substrate Character
- ☐ Est. HW/L WL
- ☐ SSL
- ☐ Profile Location(s)
- ☐ Profile(s)
- ☐ Pit Location(s)
- ☐ Photo Location(s)

LEGEND

1 Δ
Pt - No Subsurface Oil

2 Δ
Pt - Subsurface Oil

$\boxed{CT/C}$
Continuous Distribution

$\boxed{CT/B}$
Broken Distribution

$\boxed{CT/P}$
Patchy Distribution

$\boxed{CT/S}$
Spotted Distribution

$\rightarrow$
Oiled Vegetation

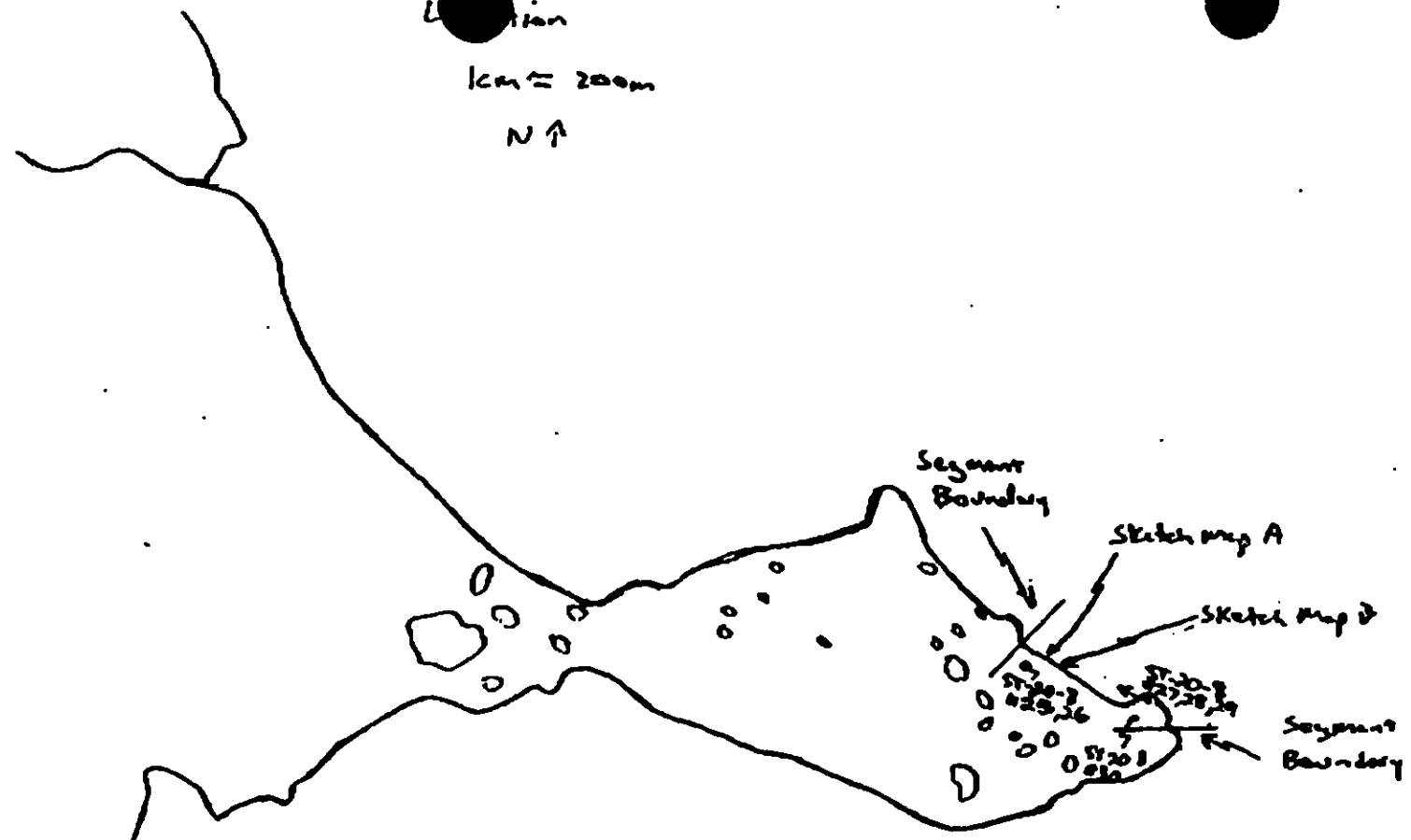
$\rightarrow$
Photo location, direction,
and number

SKETCH MAP

Location

1cm $\approx$ 200m

N $\uparrow$



Oil Character Length (m): AP _____ PO _____ CV 5/1 CT 6/1 ST 6/1 MB 5/1 FT _____ TB _____ FL _____ NO _____

REVISIONS/REVISED

OG A

SEGMENT SY-9-2-CD-3B

SUBDIVISION K9-9-CD-3B

DATE 4 / 27 90

CHECKLIST

- ☐ N Area
- ☐ Approx. Scale
- ☐ Seg/Sub Entry
- ☐ Oil Dir.
- ☐ Width
- ☐ Length
- ☐ % Cover
- ☐ Substrate Character
- ☐ Est. H/W/L/W/L
- ☐ Still
- ☐ 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

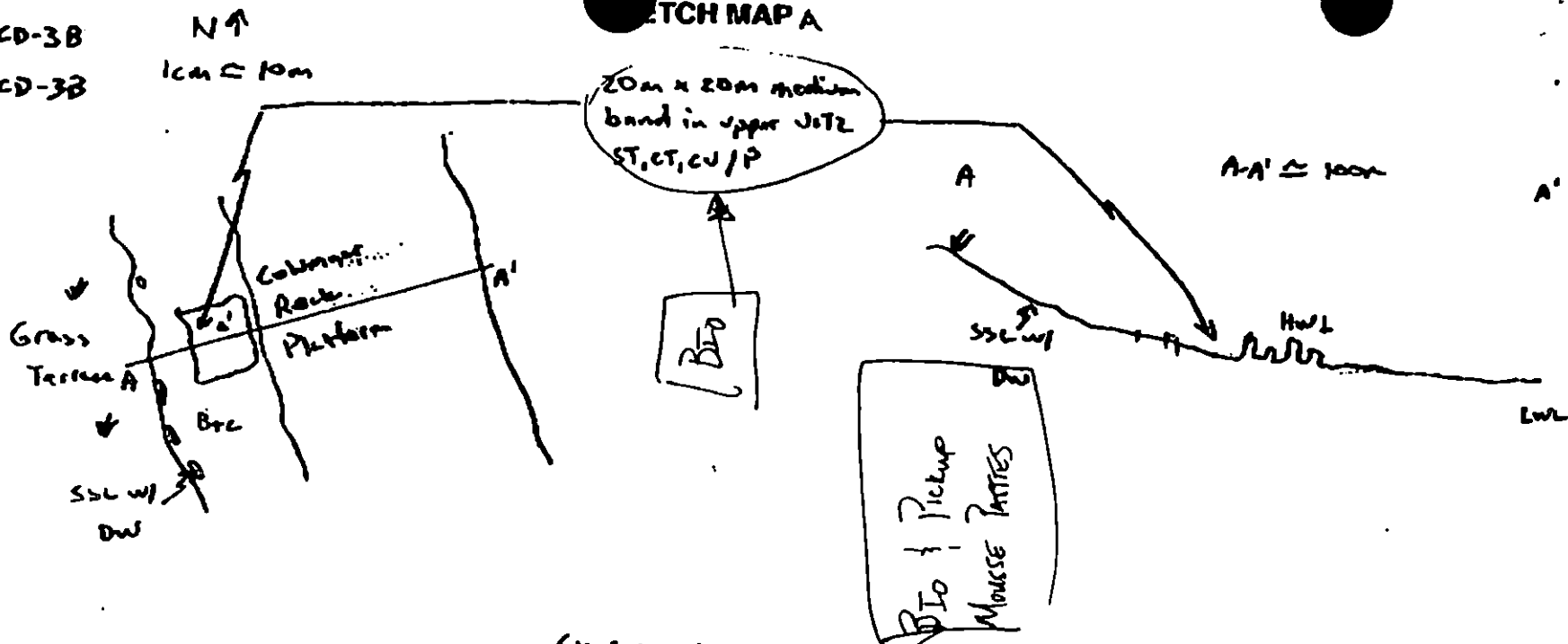
Spashed Distribution

Old Vegetation

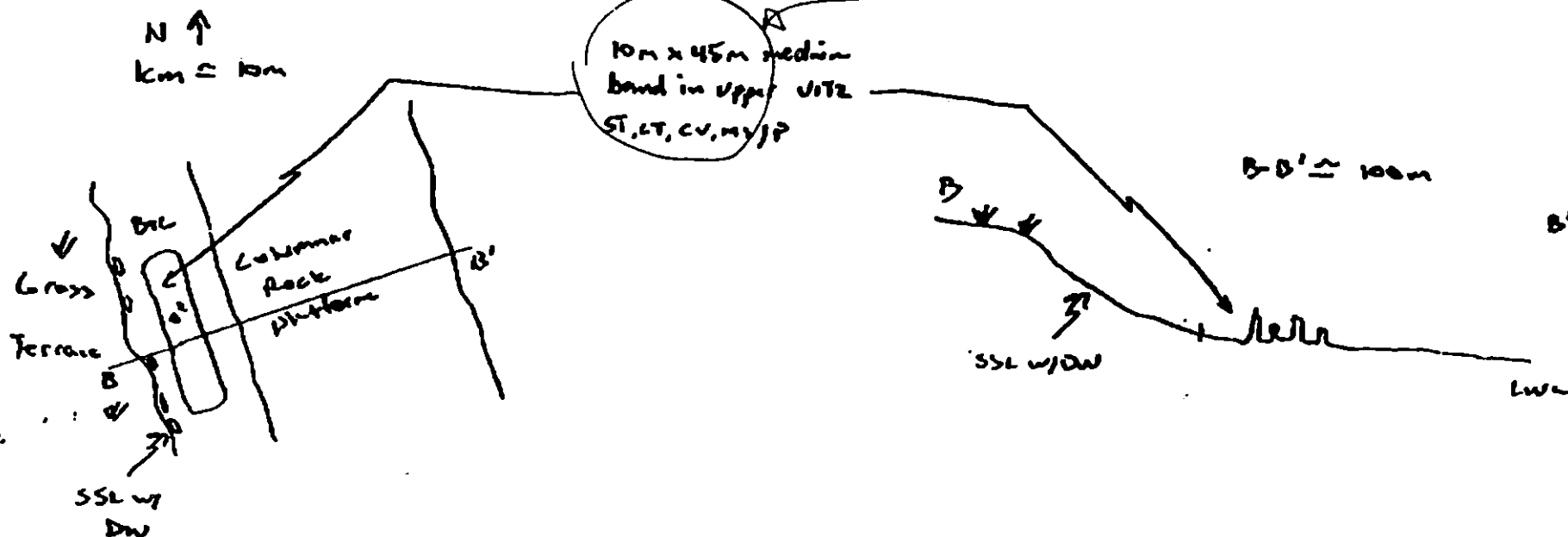
1 $\rightarrow$

Photo location, direction, and number

SKETCH MAP A



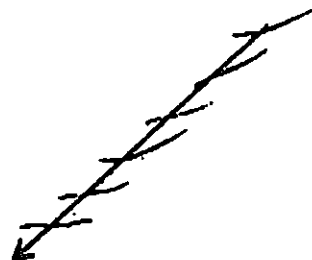
Sketch Map B



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

REVISION 000000

CD-3B



K9-9-CD-3B

SUBDIV B
Rec C

XXXX Wide

//// Medium

--- Narrow

TTTT Very Light

0000 No Oil

CD-3B

ADEC Segment Length: 1090m



K9-9-CD-3B

Map Key: 80A-43

Name: Acton

Date: 7-27-90

Date Entered:

ADDENDUM: SUBDIVISION CONSTRAINTS

SEGMENT K09-08-CD-003 SUBDIVISION B (2 of 2)

WORK WINDOW

Manual Pickup

OPEN

ARCHAEOLOGICAL STANDARD CONSTRAINT

If cultural resources are uncovered, PHONE 564-3274.

APPLICABLE ECOLOGICAL TIME CONSTRAINTS

5T Bald Eagle Nest

NO CONSTRAINT. Authorized per memo dated 6/10/90 from Mary Portner/USFWS to Rex Coulter/Exxon.

OTHER ECOLOGICAL CONSIDERATIONS

Avoid any unnecessary disturbance or damage to unopened blots and substrate.

FOSC

[Signature]

Date

6/13/90

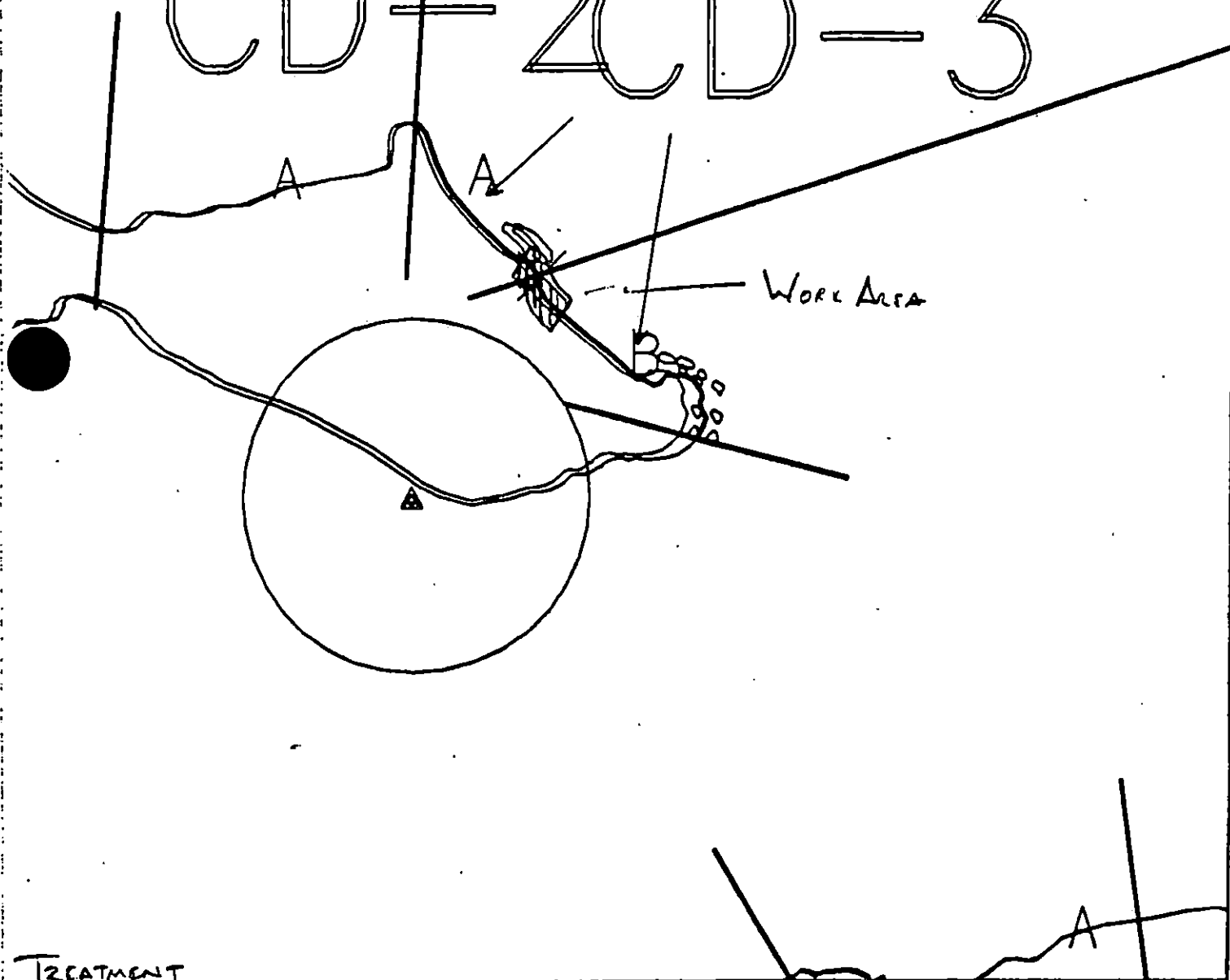
Prepared by

Rex R. Coulter

Date

06/11/90

CD-2CD-3



TREATMENT

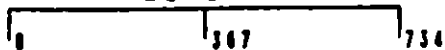


Exxon Company, USA
Map Key: MP-CD-3
June 10, 1990



ECOLOGY MAP
SEGMENT K9N-98 CD-3
SUBDIVISION B (2 of 2)

METERS



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

1 inch = 1205 feet

Dated 5/22/90

1. REASON FOR MODIFICATION

- ## 2. ADJUSTMENT TO WORK PLAN

- SHPO APPROVAL NEEDED YES _____ SHPO SIGNATURE _____
NO X

TAG APPROVAL DATE 5/31/90

ADEC ART WEINER Art Weiner

EXXON ARMY T&A Ad

NOAA Joseph Talbot

USCG G.A. REITER G.A. Reiter

FOSC *St. Joseph* DATE *5/31/90*

SHORELINE EVALUATION

SEGMENT ST/ K09-08-CD-03 SUBDIVISION B (2 OF 2) DATE 4/27/90

SEGMENT ENVIRONMENTAL SENSITIVITIES AND TIME CONSTRAINTS:

5T All bald eagle nests (3/1 to 6/1) - Active eagle nests (3/1 to 9/1)
See attached Ecological Constraint sheet for specific constraints and contacts.

SUBDIVISION ECOLOGICAL CONSTRAINTS:

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

ARCHAEOLOGICAL CONSTRAINTS:

If cultural resources are uncovered during shoreline treatment, stop work in the vicinity, mark the location of the find and contact Exxon's Cultural Resource Program immediately (564-3274 (Anchorage) or 229-1508 (24 hrs.)).

SHPO SIGNATURE: *Charles J. Johnson* DATE: 5/14/90

OILING CATEGORIZATION:

Wide 0 m: Medium 62 m: Narrow 534 m: V. Light 38 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 Removal	<u> </u> Beach Cleaner
	<u> </u> Other (see comments)

COMMENTS: Recommended treatment includes 1) manual pickup of mousse
patties and 2) bioremediation of areas shown on attached sketch map.
Work should be conducted after 6/1 with USFWS approval regarding eagle
nest constraint.

SEE WORK PLAN ADDENDUM
DATED 05/22/90 AND CONSTRAINT
ADDENDUM DATED 06/11/90. Req C

TAG COMMENTS:

TAG APPROVAL DATE: 5/12/90
ADEC *Ann Wagner*
EXXON *Ann Tamm*
NOAA *Greg Patton*
USCG *D.D. Rome*

FOSC: *W L* DATE: 5-18-90
Bioremediation limited to areas indicated on
map which are clearly in the intertidal
zone.

SHORELINE EVALUATION

SEGMENT ST/ K09-08-CD-03 SUBDIVISION B (2 OF 2) DATE 4/27/90

SEGMENT ENVIRONMENTAL SENSITIVITIES AND TIME CONSTRAINTS:

ST 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 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: Charles J. Hines DATE: 5/14/90

OILING CATEGORIZATION:

Wide 0 m: Medium 62 m: Narrow 534 m: V.Light 38 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 Removal	<u> </u> Beach Cleaner
	<u> </u> Other (see comments)

COMMENTS: Recommended treatment includes 1) manual pickup of mousse patties and 2) bioremediation of areas shown on attached sketch map.
Work should be conducted after 6/1 with USFWS approval regarding eagle nest constraint.

TAG COMMENTS:

TAG APPROVAL DATE: 5/12/90
ADEC Art Weinger Dgt Weinger
EXXON Andy Galt
NOAA Gary Petrac
USCG D. D. Rome

FOSC: DATE: 5-18-90
Bioremediation limited to areas indicated on map which are clearly in the intertidal zone.

OG Acton

SEGMENT ST/ K9-9-CD-3B

SUBDIVISION K9-9-CD-3B

DATE 4 / 27 90

CHECKLIST

☐ N Arrow
☐ Approx. Scale
☐ Segment Entry
☐ Oil Dist.
☐ Width
☐ Length
☐ % Cover
☐ Substrate Character
☐ Est. H/W/L/WL
☐ SSL
☐ Profile Location(s)
☐ Profile(s)
☐ P/L Location(s)
☐ Photo Location(s)

LEGEND

1 Δ

P2 - No Subsurface Oil

2 Δ

P1 - Subsurface Oil

CT/C

Continuous Distribution

CT/B

Broken Distribution

CT/P

Patchy Distribution

CT/S

Splashed Distribution

Oiled Vegetation

1 $\Rightarrow$

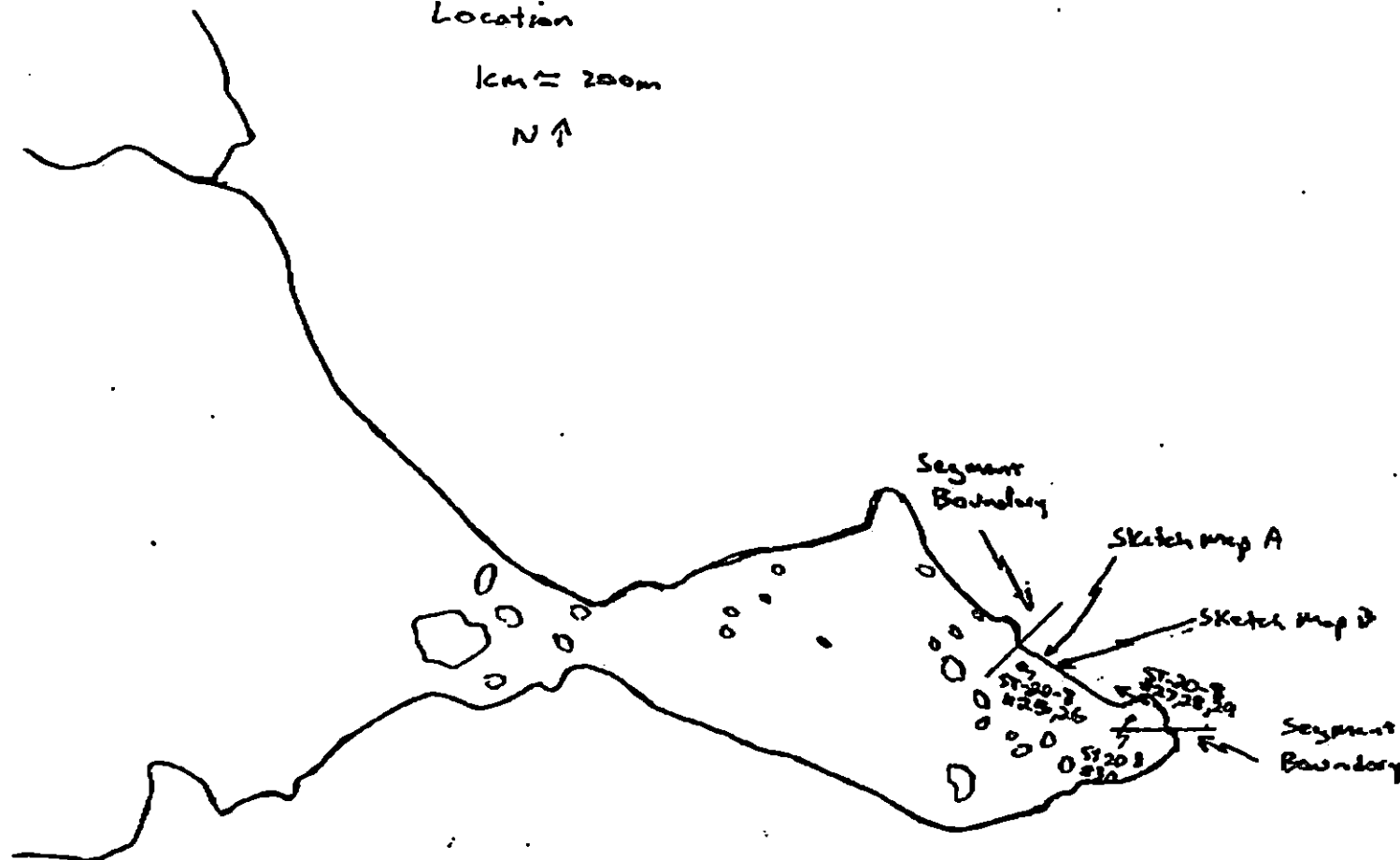
Photo location, direction,
and number

SKETCH MAP

Location

1cm $\approx$ 200m

N $\uparrow$



Oil Character Legend: AP PO CV 511 CT 611 ST 611 MS 511 TB FL NO

REVISION 02/20/90

OG Acton

SEGMENT ST/Y9-2-CD-3B

SUBDIVISION K9-9-CD-3B

DATE 4 / 27 90

CHECKLIST

☐ N Arrow
☐ Approx. Scale
☐ Seg/Sub Entry
☐ 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

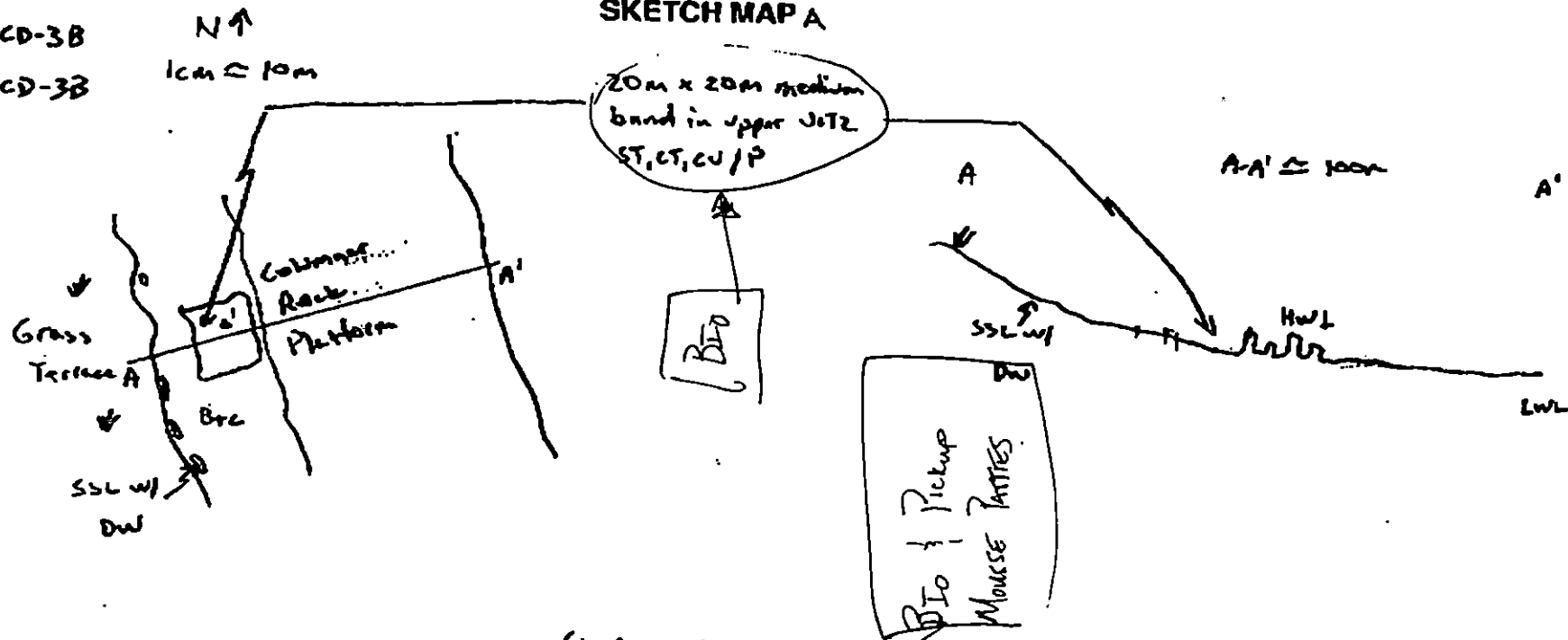
Splashed Distribution

Old Vegetation

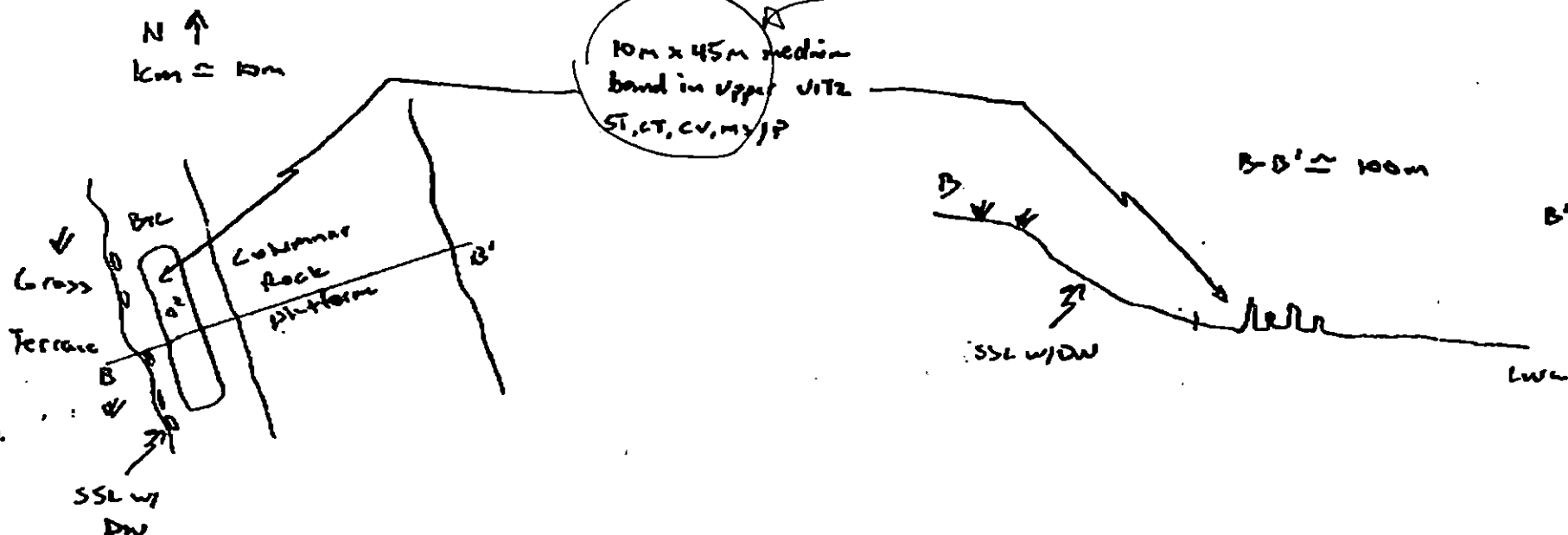
1 $\Rightarrow$

Photo location, direction,
and number

SKETCH MAP A



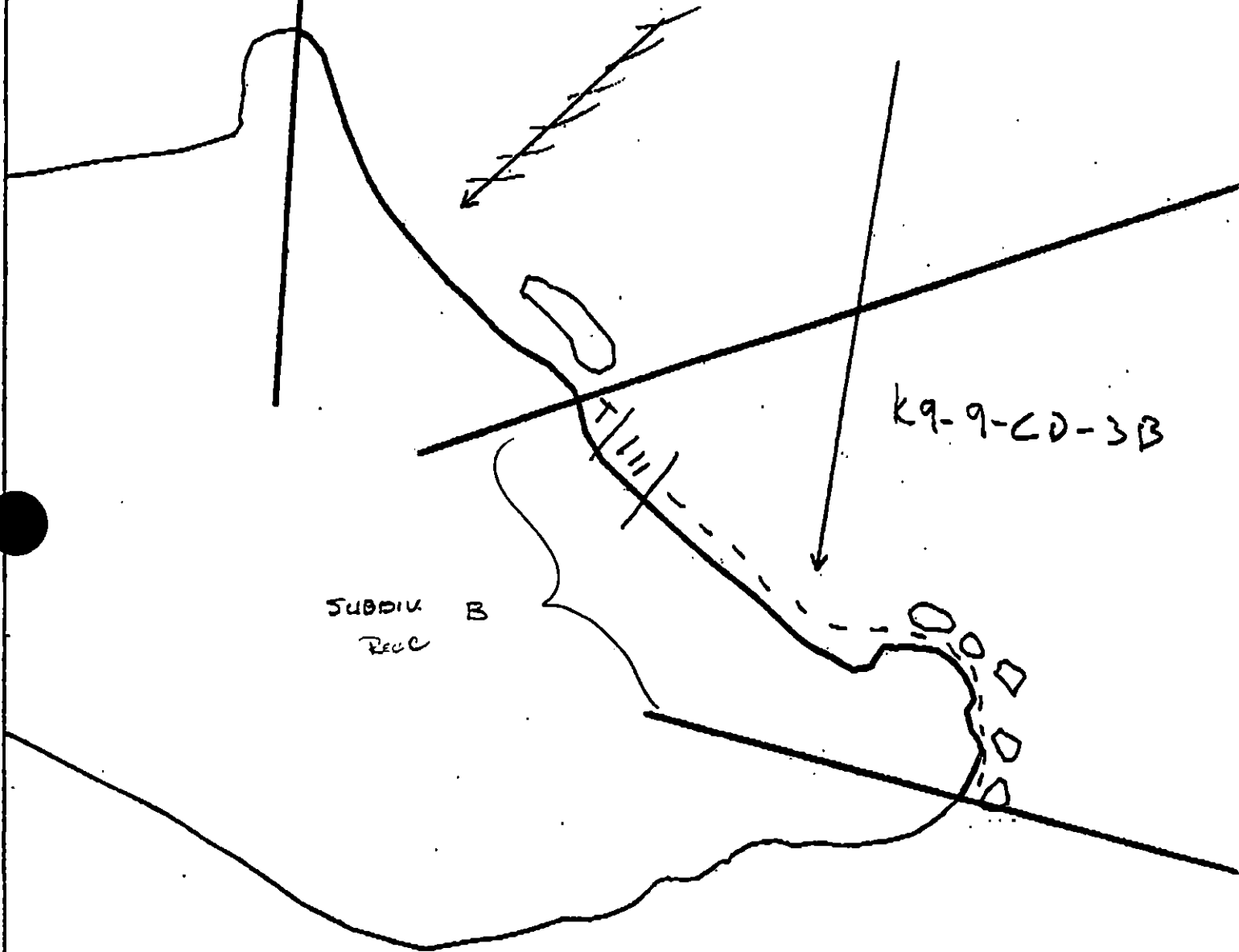
Sketch Map B



Oil Character Le AP PO CV CT ST MS TB FL NO

NOV-13-1989

CD-3B



XXXX Wide

//// Medium

--- Narrow

TTTT Very Light

OOOO No Oil

CD-3B

ADEC Segment Length: 1090m



K9-9-CD-3B
Map Key: 60A-43

Name: Acton

Date: 4-27-90

Data Entered:

1991 MAYSAP EVALUATION

SEGMENT: K0909CD003 SUB: A REGION: KOD SURVEY DATE: 5/22/91

ENVIRONMENTAL SENSITIVITIES:

Work Window(s) OPEN

Ecological/Constraints (see page two for details) NONE

ARCHAEOLOGICAL CONSTRAINTS:

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

SHPO Signature: _____ Date: _____

RECOMMENDATIONS:

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 _____

ADECNAME J. BARNHART, ADECSIGNATURE Jeff Barnhart☐ NTR ☒ Treatment Recommended

K9-08 CD03 and K9-9 CD03 must be reviewed as a single entry. Segment CD03 is bisected by a unit boundary line. The oiled area in K9-9 CD03 as a continuation of the band beginning in K9-8 CD03 is 25m long x 3m wide, mousse oozing around and between boulders, 5% oil coverage, 6cm thick. K9-8 CD03 and K9-9 CD03 combined have recoverable mousse estimated to be 50-75 bags. The second site (B on OG sketch) is 23m long x 10m wide, 5% oil coverage, mousse, pooled oil, oozing from around and between boulders. Measured thickness, surface to bottom depth. VECO crew removed approx. 50 pounds of oil. Recoverable oil exists at this site, estimated to be at least 50 bags, more if a storm moves the 30cm layer of gravel and sand out from between the boulders in the upper portion of the oiled band. The third site is basically a continuation of area B. The band is 25m long x 3m wide, very occasional, mousse 1%. Recoverable. Recommend cleanup using floats to remove the heavy mousse/pooled oil from between the boulders.

☒ TREATMENT Suggested - CONCUR WITH ADEC, USCB, ANANPS (Rooker Island Borough) NOTE: ACTION**EXXON**NAME R. HARRELSON, EXXON

SIGNATURE _____

☐ NTRSee next page**LANDMANAGER**NAME E. BENNISOF NPSSIGNATURE Francis B.☐ NTR ☒ Treatment suggested.

SITE A (OG map) continuation of SITE A, K908, has recoverable pooled mousse, "bleeding" in the sun + mousse saturated fine sediments (.5m² observed to 15cm thick). Brown/grey sheen exist in small tide pools, SDR, ST, CT, CV present. Comments from K908 CD3A apply here, as layer of clean sediments is deposited intermittently throughout delineated oiled area.

SITE B also has small amounts of recoverable mousse in 10x23m area.

Pending review by NPS, treatment is suggested to remove retrievable oil.

USCG/NOAANAME CWO R. SPURR/C. SHIGENAKASIGNATURE R. Spurr / C. Shigenaka☐ NTR This segment and K9N9CD3 should be treated at the same time as the oiled area as indicated on OG map as site A is transected by the segment boundary.

SURVEYED PORTION OF THE SEGMENT WAS A BOULDER/BEDROCK BEACH EXTENDING SOUTHEAST FROM THE BORDER BETWEEN K9N8CD-3 AND K9N9CD-3. THE PHYSICAL ENVIRONMENT WAS THE SAME AS THAT DESCRIBED FOR K9N8CD-3. OBSERVED OILING WAS VERY SIMILAR TO THAT IN THE ADJACENT SEGMENT, WHICH WAS NOT SURPRISING GIVEN IT WAS THE SAME BAND OF OIL. JEFF BARNHART ESTIMATED IT EXTENDED 30m INTO K9N9CD-3. HEAVIEST CONCENTRATIONS OCCURRED IN THE UITE AND CONSISTED OF SOR/MOUSSE, SOMETIMES HEAVY, WITH ASSOCIATED SHEEN ON TIDAL POOLS. BOULDERS SHOWED THE SAME STAIN/COAT OBSERVED IN K9N8 CD-3. ONE VECO WORKER WORKED THIS LOCATION AND REMOVED 1 BAG IN ADDITION TO 1 BAG FOUND IN THE SUPRATIDAL BY THE RPO. THE LOCATION HAD BEEN STAGED OUT IN THE SUPRATIDAL (ADEC/NPS STUDY SITE?) AS WAS THE CASE FOR K9N8 CD-3. THIS IS A HIGHLY EXPOSED BEACH WITH FEW FLORA AND FAUNA IN THE IMMEDIATE VICINITY OF THE OILED PORTION OF THE SHORELINE. HOWEVER, THERE APPEARED TO BE A RELATIVELY LARGE AMOUNT OF OIL REMAINING ON THE BEACH.

ADEC

NAME T. BARNHART, ADEC

SIGNATURE

T. Barnhart☐ NTR ☒ Treatment Recommended

K9-08 CD03 and K9-9 CD03 must be reviewed as a single entity. Segment CD03 is bisected by a K unit boundary. The oiled area in K9-9 CD03 as a continuation of the band beginning in K9-8 CD03 is 25m long x 30m wide. Mousse oozing around and between boulders, 5% oil coverage, 10cm thick. K9-8 CD03 and K9-9 CD03 combined have recoverable oil estimated to be 50-75 bags. The second site (B on OG sketch) is 23m long x 10m wide, 5% oil coverage, mousse, pooled oil oozing from around and between boulders. Measured thickness, surface to be in depth. VECO crew removed approx. pounds of oil. Recoverable oil exists at this site, estimated to be at least 50 bags, more if a storm moves the 30 cm layer of gravel and sand out from between the boulders in the upper portion of the oiled band. The third site is basically a continuation of area B. The band is 25m long x 3m wide, very occasional, mousse 1%. Recoverable. Recommend cleanup using floats to remove the heavy mousse/pooled oil from between the cobbles/boulders.

☒ TREATMENT Suggested - CONCUR WITH ADEC, USCG, ANANIS (KODIAK Island Borough), etc.

EXXON

NAME R. HARRELSON, EXXON

SIGNATURE

R. Harrelson

☐ NTR Recovery of oiled sediments from between boulders and cobbles is operationally feasible, but would be time consuming and costly. Recovery at this site is not as advanced as in other areas, but high energy wave action would continue the clearing process if additional treatment is not required.

LANDMANAGER

NAME E. BENNIS

OF NPS

SIGNATURE

E. Bennis☐ NTR ☒ Treatment suggested.

SITE A (OG map), continuation of SITE A, K908, has recoverable pooled mousse, "bleeding" in the sun + mousse. Saturated fine sediments (1.5m² observed to 15cm thick), Brown/green slimes exist in small tide pools. SDR, ST, CT, CV. presents. Comments from K908 CD3A apply here, as layer of clean sediments is deposited intermittently throughout decontaminated oiled area. SITE B also has small amounts of recoverable mousse in 10x23m area.

Pending review by NPS, treatment is suggested to remove retrievable oil.

USCG/NOAA

NAME CWO R. SPURR/S. SHIGENAKA

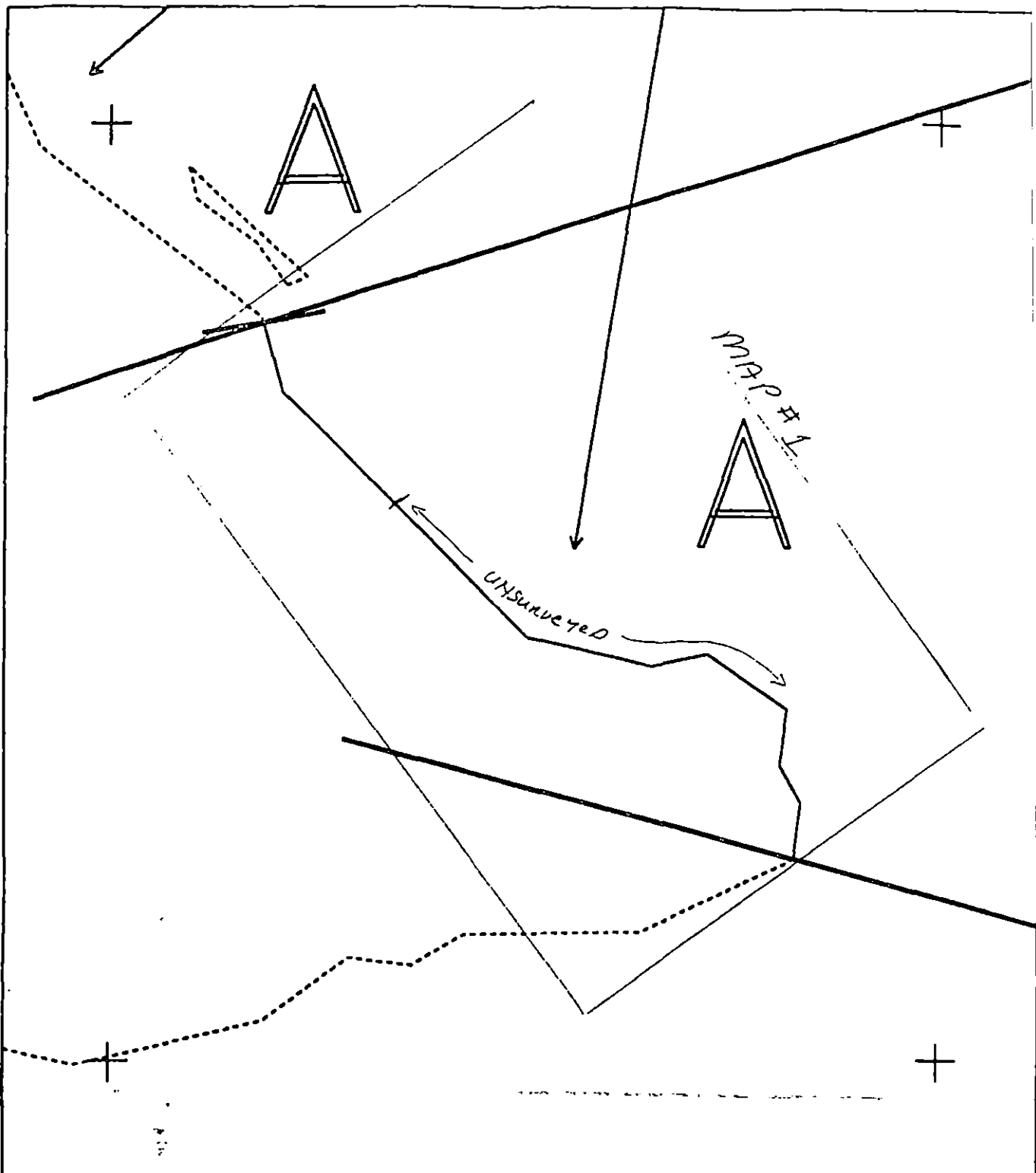
SIGNATURE

R. Spurr / S. Shigenaka

☐ NTR This segment and K9N8 CD3 should be treated at the same time as the oiled area as indicated on OG map as site A is transected by the Segment boundary.

SURVEYED PORTION OF THE SEGMENT WAS A BOULDER/BEACH BEACH EXTENDING SOUTHEAST FROM THE BORDER BETWEEN K9N8 CD-3 AND K9N9 CD-3. THE PHYSICAL ENVIRONMENT WAS THE SAME AS THAT DESCRIBED FOR K9N8 CD-3. OBSERVED OILING WAS VERY SIMILAR TO THAT IN THE ADJACENT SEGMENT, WHICH WAS NOT SURPRISING GIVEN IT WAS THE SAME BAND OF OIL. JEFF BARNHART ESTIMATED IT EXTENDED 30m INTO K9N9 CD-3. HEAVIEST CONCENTRATIONS OCCURRED IN THE UTE AND CONSISTED OF 30R/MOUSSE, SOMETIMES HEAVY, WITH ASSOCIATED SHEEN ON TIDAL POOLS. BOULDERS SHOWED THE SAME STAIN/COAT OBSERVED IN K9N8 CD-3. ONE VECO WORKER WORKED THIS LOCATION AND REMOVED 1 BAG IN ADDITION TO 1 BAG FOUND IN THE SUPERTIDAL BY THE RPO. THE LOCATION HAS BEEN STAGED OUT IN THE SUPERTIDAL (ADEC/NPS STUDY SITE?) AS WAS THE CASE FOR K9N8 CD-3. THIS IS A HIGHLY EXPOSED BEACH WITH FEW FLORA AND FAUNA IN THE IMMEDIATE VICINITY OF THE OILED PORTION OF THE SHORELINE. HOWEVER, THERE APPEARED TO BE A RELATIVELY LARGE AMOUNT OF OIL REMAINING ON THE BEACH.

REVIEWED: MC 5/30/91
reviewed S.2794



K0909 CD003 A

Subdivision Field Map

Map Key: 604X0000CD003A

Name: D. Fitzgerald

Date: 22 MAY 1991

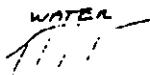


0 100 200 METERS

AK State Planning Zone 4.

reviewed 5.27 91

W V V GRASSY AREA



WAVE-CUT
PLATFORM



Piled Logs



PHOTO SITES

Sketch MAP (06

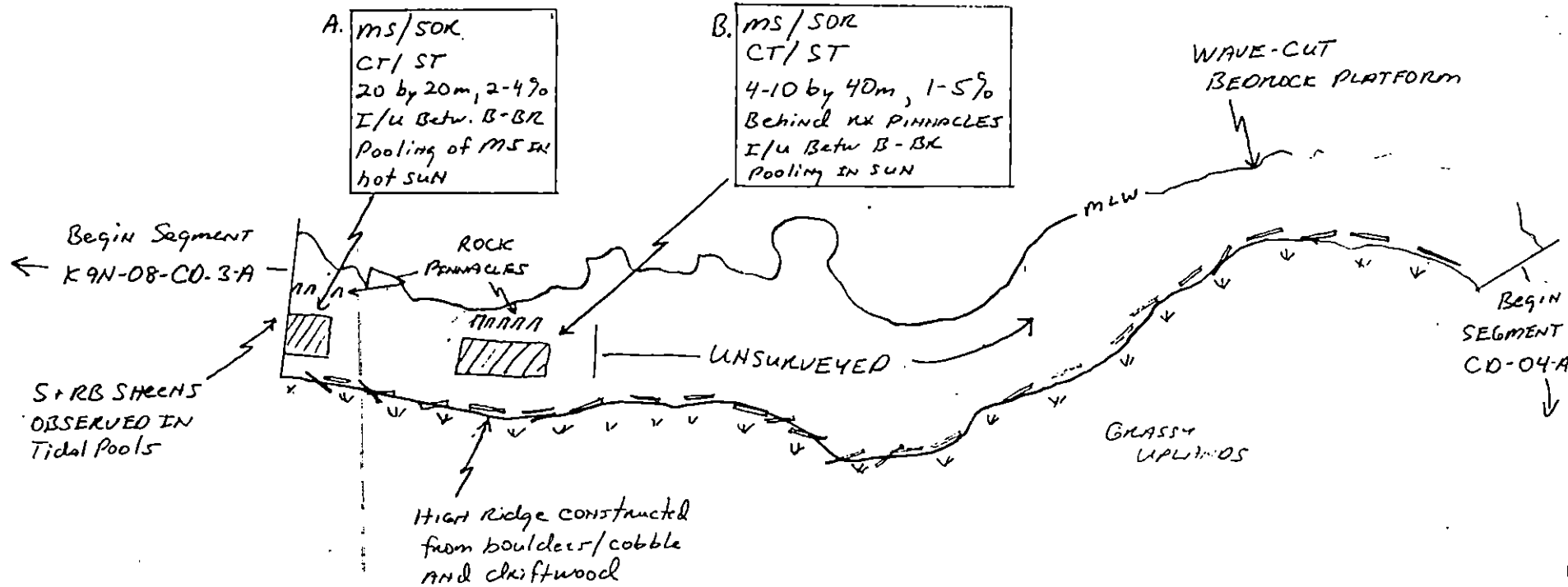
K 9N-09-CD-3-A

O M. FITZGERALD

22 MAY 1991

1600 - 1700

SHELIKOF
STRAITS



0 100
METERS

CAPE DOUGLAS PROMONTORY

W V V GRASSY HILLS

WATER — WAVE-CUT
PLATFORM

Piled Logs

PHOTO SITES

PHOTO SITES, K9N9 CD-3A
ROLL 6-20, FRAMES 8,9,11,12

Sketch MAP OF

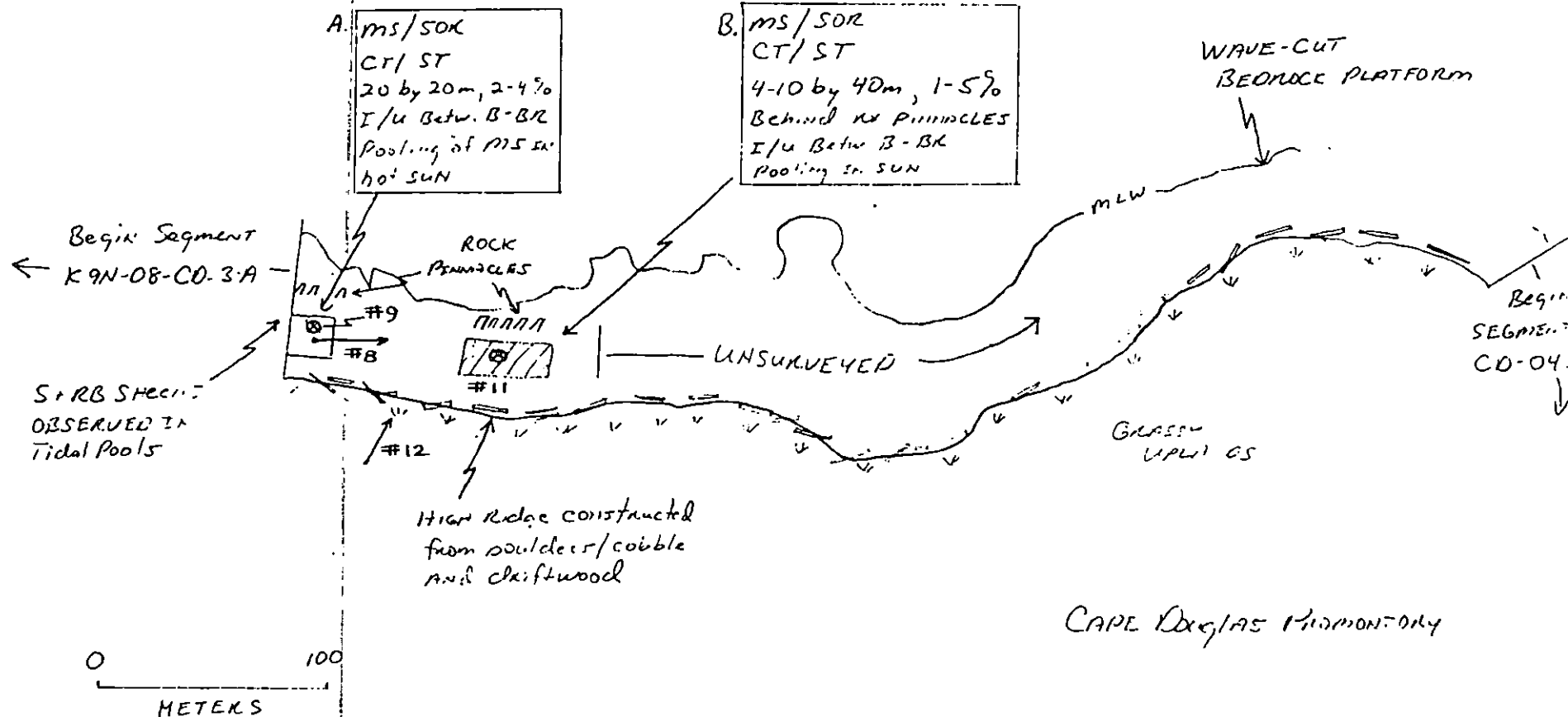
K9N-09-CD-3A

U N F. - 2660

22 MAY 1991

1600 - 1700

SHELL COVE
STRAITS



MAYSAP BIOLOGICAL SUMMARY FORM

TEAM # 6 Helo

DATE May 21 1991

SEGMENT # K9N-09 CD-03

TIDAL HEIGHT (Range) 1.5 ft - 1.5 ft (16:00-17:00)

SUBDIVISION A

BIOLOGIST H. Davis

SEA STATE Calm < 1 ft

WIND SPEED/DIRECTION Light Breeze 5 Kts NE

PHOTOGRAPHS: ROLL # 6-20

FRAME # 89, 112

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

This is one of two side by side segments with very similar biota. CD-03 is a boulder covered bedrock shore in front of a log, boulder and cobble ridge. The MITZ had a sparse covering of littorina and barnacles. Amphipods, limpets, and nemertean are found under rocks. Density of littorines, barnacles, limpets, amphipods and Mytilus increases lower in the intertidal, where tide-pools begin. Alonthealia, gloiopeltis, Halochondria, Pagurus, and encrusting corallines can be found. In the MITZ, Fucus, Ulva, Alaria, Bossiella, Corallina, Rhodomenia, Scytosiphon, Nucella, Tetraclita, Halochondria, Sculpins, pricklybacks, Felia, Anthopleura, Leptasterias and Hedophyllum are all common. In the LITZ Alaria, Laminaria saccharina, Tridacna, Hedophyllum and Ulva sp. could be seen. Leptasterias, Nucella, Pagurus, Littorina and Fucus were all fertile/egg-producing.

Sites A+B were both located in areas of sparse biota. Littorina, barnacles, and limpets (B. glandula, B. canorus, N. perona, E. digitatus) were present. Under moist algal drift amphipods and enchytraids could be found.

The MITZ has a rich rocky intertidal community and clean up in this segment would be more disruptive than productive.

Surf Scoter (5) Sandpiper sp. (2)

Oldsquaw (3) Pacific Loons (2) Harlequins (5) Glaucous-wing Gulls (5) Kittiwakes (5) dead

WILDLIFE OBSERVATIONS

TO BE COMPLETED IN ALL SUBDIVISIONS

BIRDS	# OF SPECIES	TOTAL BIRDS	FISH OBSERVED SPECIES PRESENT
Eagles	0	-	Sculpins
Seabirds	0	-	Pricklyback
Waterfowl	4	15	
Gulls/Kittiwakes	2	10	
Shorebirds	1	2	
Corvids	0	-	
Other Birds	0	-	

MARINE MAMMALS	# OBSERVED	LAND MAMMALS SPECIES	# OBSERVED
Sea Otters		Bear Tracks	
Pinnipeds (specify)		Fox? tracks	
Harbor seal	1		
Whales (specify)			

Shoreline subdivision map showing important biological features attached.

Reviewed: MC 5/30/91

Rev'd 5/30/91 DM

W V V GRASSY AREA



WAVE-CUT
PLATFORM

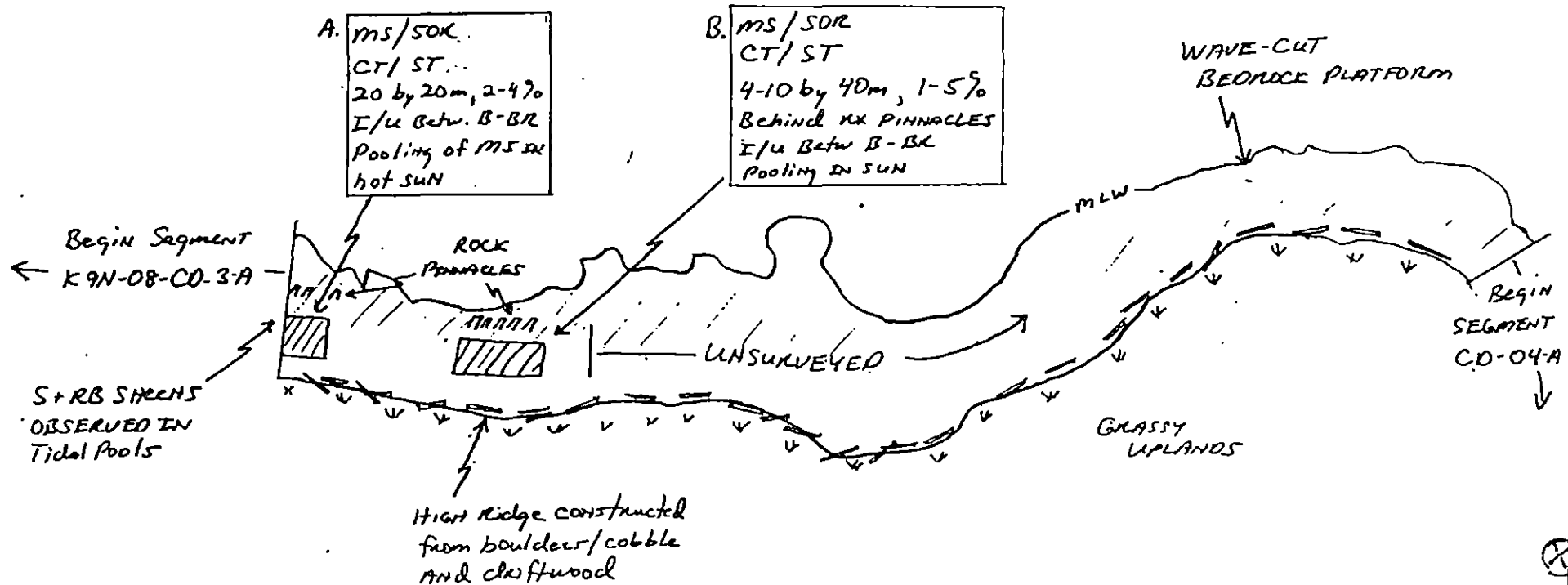
Piled Logs

PHOTO SITES

Bio Map
H. Davis

Sketch Map (06
K-9N-09-CD-3-A
O. M. FITZGERALD
22 MAY 1991
1600 - 1700

SHELIKOF
STRAITS



A+B

Both sites A+B were in depauperate areas, littorines were the most common organism followed by amphipods, barnacles and limpets. Below the rock pinnacles the biota becomes much more diverse and populous.

1991 MAYSAP EVALUATION

SEGMENT: K0909CD003 SUB: A REGION: KOD SURVEY DATE: 5/22/91ENVIRONMENTAL SENSITIVITIES:Work Window(s) OPENEcological/Constraints (see page two for details) NONEARCHAEOLOGICAL CONSTRAINTS:If treatment is planned, a cultural resource evaluation is required prior to shoreline treatment.SHPO Signature: Timothy A. Smith Date: 6/03/91RECOMMENDATIONS:

	INITIAL	TAG	FOSC
TREATMENT REQUIRED (Y or N)	<u>N</u>	<u>✓</u>	<u>Y</u>
Manual Pickup (Check as Req.)	<u> </u>	<u> </u>	<u>X</u>
Spot Washing	<u> </u>	<u> </u>	<u> </u>
Bio-Customblen Only	<u> </u>	<u> </u>	<u>X</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: CONSIDERABLE OIL REMAINING IN FORM OF OVRHEAD Mousse -
ASTORIA
AN SURVEYORS INDICATE IT IS RECOVERABLE. NATION PARK SERVICE
DESIRES REMOVAL OF MOUSSE - REMOVAL OF OIL FROM NATION PARK
+ RESERVE IS OF HIGH INTEREST/PRIORITY. REMOVE ACCESSIBLE MOUSSE

TAG APPROVAL DATE: MAY 31 1991 FOSC APPROVAL DATE: 6/9/91ADEC WhitakerFOSC E. E. PAGEEXXON RealE. E. PAGE, SDR, USCG
CHIEF OF STAFF, FOSCUSCG EdmadoNOAA Long

TEAM NO. 6-HELO SEGMENT K9N9 CD-3 SUBDIVISION A DATE 5/22/91**ADEC**NAME J. BARNHART, ADECSIGNATURE Jeff Barnhart☒ NTR ☒ Treatment Recommended

K9-08 CD03 and K9-9 CD03 must be reviewed as a single entity. Segment CD03 is bisected by a K unit boundary line. The oiled area in K9-9 CD03 as a continuation of the band beginning in K9-8 CD03 is 25m long x 30m wide mounds oozing around and between boulders, 5% oil coverage, 6cm thick. K9-8 CD03 and K9-9 CD03 combined have recoverable mousse estimated to be 50-75 bags. The second site (B on OG sketch) is 23m long x 10m wide, 5% oil coverage, mousse, pooled oil, oozing from around and between boulders. Measured thickness, surface to bottom, 15cm. VECO crew removed approx. 50 pounds of oil. Recoverable oil exists at this site, estimated to be at least 50 bags, more if a storm moves the 30 cm layer of gravel and sand out from between the boulders in the upper portion of the oiled band. The third site is basically a continuation of area B. The band is 25m long x 3m wide, very occasional, mousse 1%. Recoverable. Recommend cleanup using trawls to remove the heavy mousse/pooled oil from between the cobbles/boulders.

☒ TREATMENT Suggested - CONCUR WITH ADEC, USCG, ANANPS (Koonik Island Borough) State Health**EXXON**NAME R. HARRELSON, EXXONSIGNATURE R Harrelson

☐ NTR Recovery of oiled sediments from between boulders and cobbles is operationally feasible, but would be time consuming and costly. Recovery at this site is not as advanced as in other areas, but high energy wave action would continue the cleaning process if additional treatment is not required.

NDMANAGERNAME F. BENNIS

OF NPS

SIGNATURE F Bennis☐ NTR ☒ Treatment suggested.

SITE A (OG map), continuation of SITE A, K908, has recoverable pooled mousse, "bleeding" in the sun + mousse, saturated fine sediments (.5m² observed to 15cm thick), Brown/grey sludge exist in small tide pools, SDR, ST, CT, CV. present. Comments from K908 CD3A apply here, as layer of clean sediments is deposited intermittently throughout de-oiled area.

SITE B also has small amounts of recoverable mousse in 10x23m area.

Pending review by NPS, treatment is suggested to remove retrievable oil.

USCG/NOAANAME CWO R. SPURR/G. SHIGENAKASIGNATURE R Spurr / G Shigenaka

☐ NTR This segment and K9N8CD3 should be treated at the same time as the oiled area as indicated on OG map as site A is transected by the segment boundary.

SURVEYED PORTION OF THE SEGMENT WAS A BOULDER/BEDROCK BEACH EXTENDING SOUTHEAST FROM THE BORDER BETWEEN K9N8CD-3 AND K9N9CD-3. THE PHYSICAL ENVIRONMENT WAS THE SAME AS THAT DESCRIBED FOR K9N8CD-3. OBSERVED OILING WAS VERY SIMILAR TO THAT IN THE ADJACENT SEGMENT, WHICH WAS NOT SURPRISING GIVEN IT WAS THE SAME BAND OF OIL. JEFF BARNHART ESTIMATED IT EXTENDED 30m INTO K9N9CD-3. HEAVIEST CONCENTRATIONS OCCURRED IN THE UITS AND CONSISTED OF 30R/MOUSSE, SOMETIMES HEAVY, WITH ASSOCIATED SHEEN ON TIDAL POOLS. BOULDERS SHOWED THE SAME STAIN/COAT OBSERVED IN K9N8CD-3. ONE VECO WORKER WORKED THIS LOCATION AND REMOVED 1 BAG IN ADDITION TO 1 BAG FOUND IN THE TIDAL POOL BY THE EPO. THE LOCATION HAS BEEN STAGED OUT IN THE SUPRATIDAL (ADEC/NPS STUDY SITE) WAS THE CASE FOR K9N8CD-3, THIS IS A HIGHLY EXPOSED BEACH WITH FEW FLORA AND FAUNA IN THE IMMEDIATE VICINITY OF THE OILED PORTION OF THE SHORELINE. HOWEVER, THERE APPEARED TO BE A RELATIVELY

LARGE AMOUNT OF OIL REMAINING ON THE BEACH.

TEAM NO. 6-HELO SEGMENT K9N9 CD-3SUBDIVISION ADATE 5/22/91

ADEC

NAME J. BARNHART, ADEC

SIGNATURE

☐ NTR ☒ Treatment Recommended

K9-08 CD03 and K9-9 CD03 must be reviewed as a single entity. Segment CD03 is bisected by a unit boundary line. The oiled area in K9-9 CD03 as a continuation of the band beginning in K9-8 CD03 is 25m long x 30m wide. Mousse oozing around and between boulders, 5% oil coverage, 4cm thick. K9-8 CD03 and K9-9 CD03 combined have recoverable mousse estimated to be 50-75 bags. The second site (B on OG sketch) is 23m long x 10m wide, 5% oil coverage, mousse, pooled oil, oozing from around and between boulders. Measured thickness, surface to 6cm depth. VECO crew removed approx. 50 pounds of oil. Recoverable oil exists at this site, estimated to be at least 50 bags, more if a storm moves the 30 cm layer of gravel and sand out from between the boulders in the upper portion of the oiled band. The third site is basically a continuation of area B. The band is 25m long x 3m wide, very occasional mousse 1%. Recoverable. Recommend cleanup using shovels to remove the heavy mousse/pooled oil from between the cobbles/boulders.

☒ TREATMENT Suggested - CONCUR WITH ADEC, USCG, ANANPS (KODIAK Island Borough) *NOTE: JETTY*

EXXON

NAME R. HARRELSON, EXXON

SIGNATURE

☐ NTR

See next page

LANDMANAGER

NAME F. BENNISOF NPS

SIGNATURE

☐ NTR ☒ Treatment suggested.

SITE A (OG map) continuation of SITE A, K908, has recoverable pooled mousse, "bleeding" in the sun + mousse saturated fine sediments (.5m² observed to 15cm thick). Brown/grey sheens exist in small tide pools, SDR, ST, CT, CV present. Comments from K908 CD3A apply here, as layer of clean sediments is deposited intermittently throughout delineated oiled area. SITE B also has small amounts of recoverable mousse in 10 x 23m area.

Pending review by NPS, treatment is suggested to remove retrievable oil.

USCG/NOAA

NAME CWO R. SPURR/G. SHIGENAKA

SIGNATURE

☐ NTR This segment and K9N8CD3 should be treated at the same time as the oiled area as indicated on OG map as site A is transected by the segment boundary.

SURVEYED PORTION OF THE SEGMENT WAS A BOULDER/BEDROCK BEACH EXTENDING SOUTHEAST FROM THE BORDER BETWEEN K9N8CD-3 AND K9N9CD-3. THE PHYSICAL ENVIRONMENT WAS THE SAME AS THAT DESCRIBED FOR K9N8CD-3. OBSERVED OILING WAS VERY SIMILAR TO THAT IN THE ADJACENT SEGMENT, WHICH WAS NOT SURPRISING GIVEN IT WAS THE SAME BAND OF OIL. JEFF BARNHART ESTIMATED IT EXTENDED 30m INTO K9N9CD-3. HEAVIEST CONCENTRATIONS OCCURRED IN THE UITE AND CONSISTED OF SDR/MOUSSE, SOMETIMES HEAVY, WITH ASSOCIATED SHEEN ON TIDAL POOLS. BOULDERS SHOWED THE SAME STAIN/COAT OBSERVED IN K9N8CD-3. ONE VECO WORKER WORKED THIS LOCATION AND REMOVED 1 BAG IN ADDITION TO 1 BAG FOUND IN THE SUPRATIDAL BY THE RPO. THE LOCATION HAD BEEN STAGED OUT IN THE SUPRATIDAL (ADEC/NPS STUDY SITE 2) AS WAS THE CASE FOR K9N8CD-3. THIS IS A HIGHLY EXPOSED BEACH WITH FEW FLORA AND FAUNA IN THE IMMEDIATE VICINITY OF THE OILED PORTION OF THE SHORELINE. HOWEVER, THERE APPEARED TO BE A RELATIVELY LARGE AMOUNT OF OIL REMAINING ON THE BEACH.

ⓧ PAGE 1 OF 1

SEGMENT 1C9N-9-CD-3

SUBDIVISION A

DATE 22 May 191

ENERGY LEVEL: ☒ H ☐ M ☐ L

W m M m N m VL 60 m NO 90 m US 484 m

DISTRIBUTION: C = 91-100%; B = 61-80%; P = 11-50%; S = 1-10%; T = <1%

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

PHOTO ROLL # MAYSAP-

6 - 20

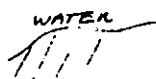
FRAMES 8,9,11,12

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

OG COMMENTS: This segment is located along the exposed Cape Douglas promontory on its northward facing shoreline. This area is characterized by a bedrock wave cut platform covered along its landward extent by boulders and some cobbles. The beach is backed by a storm ridge composed of boulders and considerable driftwood. The oiling of this region is concentrated at two sites which are protected by bedrock pinnacles. There is much less oiling at these sites than what was seen during ASAP. However, pockets of MS and SOK can be found I/U in boulder areas and exposed mousse flows in the hot sun.

REVIEWED: MC 5/30/91
reviewed S.2794

GRASSY AREA



WAVE-CUT
PLATFORM



Piled Logs



PHOTO SITES

Sketch Map (06)

K9N-09-CD-3-A

O. M. Fitzgerald

22 May 1991

1600 - 1700

SHELIKOF
STRAITS



A. MS/SOR
CT/ST
20 by 20m, 2-4%
I/u Betw. B-BR
Pooling of MS in
hot sun

B. MS/SOR
CT/ST
4-10 by 40m, 1-5%
Behind RX PINNACLES
I/u Betw B-BR
Pooling in sun

WAVE-CUT
BEDROCK PLATFORM

Begin Segment
K9N-08-CD-3-A

S+RB SHEENS
OBSERVED IN
Tidal Pools

ROCK
PINNACLES

UNSURVEYED

GRASSY
UPLANDS

Begin
SEGMENT
CD-04-A

High Ridge constructed
from boulders/cobbles
and driftwood

0 100
METERS

CAPE DOUGLAS PROMONTORY

Reviewed: MC 5/20/91
revised S. 27/91

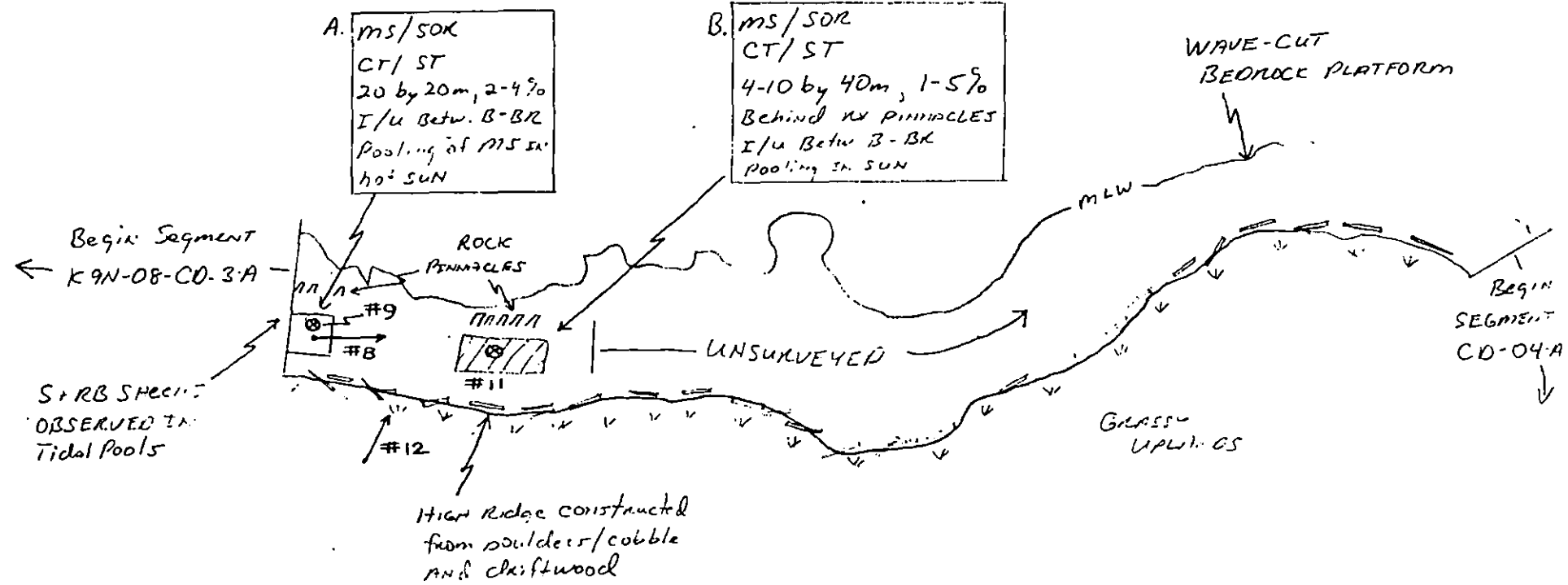
GRASSY AREA

PHOTO SITES, K9N9 CD-
ROLL 6-20, FRAMES 8, 9, 11, 12

Sketch Map 06
K9N-09-CD-3A
U. M. F. - 26 MAY 1991
1600 - 1700

WATER
WAVE-CUT
PLATFORM
Piled Logs
PHOTO SITES

SHELL COE
STRATTS



0 100
METERS

CAPE DOUGLAS MIDMONTAIN

MAYSAP BIOLOGICAL SUMMARY FORM

TEAM # 6 Helo

DATE May 21 1991

SEGMENT # K9N-09 CD-03

TIDAL HEIGHT (Range) 1.5 ft - 1.5 ft (16:00-17:00)

SUBDIVISION A

BIOLOGIST H. Davis

SEA STATE Calm < 1 ft

WIND SPEED/DIRECTION Light Breeze 5 kts NE

PHOTOGRAPHS: ROLL # 6-20

FRAME # 89, 112

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

This is one of two side by side segments with very similar biota. CD-03 is a boulder covered bedrock shore in front of a log, boulder and cobble ridge. The MITZ had a sparse covering of littorina and barnacles. Amphipods, limpets, and nemertean are found under rocks. Density of littorines, barnacles, limpets, amphipods and Mytilus increases lower in the intertidal. Where tide-pools begin Chonothalia, gloiopeltis, Nalochondria, Pagurus, and encrusting corallines can be found. In the MITZ, Fucus, Ulva, Alaria, Bossiella, Corallina, Rhodomela, Scytosiphon, Nucella, Tetraclita, Nalochondria, Sculpins, pricklebacks, Telia, Anthopleura, a, Leptasterias and Hedophyllum are all common. In the MITZ Alaria, Laminaria saccharina, Sargassum, Hedophyllum and Ulva sp. could be seen. Leptasterias, Nucella, Pagurus, Littorina and Fucus were all fertile/egg-producing.

Sites A+B were both located in areas of sparse biota. Littorina, barnacles, and limpets (B. glandula, B. carinus, N. perona (edidit)) were present. Under moist algal drift amphipods and enchytraids could be found.

The MITZ has a rich rocky intertidal community and clean up in this segment would be more disruptive than productive.

Surf Scoter (5) Sandpiper sp (2)

Oldsquaw (3) Pacific Loons (2) Harlequins (5) Glaucous-wing Gulls (5) Kittiwakes (5) dead

WILDLIFE OBSERVATIONS

TO BE COMPLETED IN ALL SUBDIVISIONS

BIRDS	# OF SPECIES	TOTAL BIRDS	FISH OBSERVED SPECIES PRESENT
Eagles	0	-	Sculpins
Seabirds	0	-	Prickleback
Waterfowl	4	15	
Gulls/Kittiwakes	2	10	
Shorebirds	1	2	
Corvids	0	-	
Other Birds	0	-	

LAND MAMMALS

MARINE MAMMALS

OBSERVED

SPECIES

OBSERVED

Sea Otters		Bear Tracks	
Pinnipeds (specify)		For? tracks	
Harbor seal	1		
ales (specify)			

Shoreline subdivision map showing important biological features attached.

Reviewed: MC 5/30/91

P. J. Clark NM

W V GRASSY AREA



WAVE-CUT
PLATFORM



Piled Logs



PHOTO SITES

Bio Map
H. Davis

Sketch MAP (06)
K-9N-09-CD-3-A
O. M. FITZGERALD
22 MAY 1991
1600 - 1700

SHELIKOF
STRAITS



A. MS/SOK.
CT/ST...
20 by 20m, 2-4%
I/u Betw. B-BR
Pooling of MS in
hot SUN

B. MS/SOK
CT/ST
4-10 by 40m, 1-5%
Behind RX PINNACLES
I/u Betw B-BR
Pooling in SUN

WAVE-CUT
BEDROCK PLATFORM

Begin Segment
← K-9N-08-CD-3-A

S+RB SHEENS
OBSERVED IN
Tidal Pools

ROCK
PINNACLES

UNSURVEYED

Begin
SEGMENT
CD-04-A

High Ridge constructed
from boulders/cobble
and driftwood

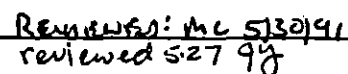
GRASSY
UPLANDS

0 100
METERS

A+B

CAPE DOUGLAS PROMONTORY

Both sites A+B were in depauperate areas. Littorines
were the most common organism followed by
amphipods, barnacles and limpets. Below the
rock pinnacles the biota becomes much more
diverse and populous.



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