

LA-023A ASC 16772
NORTH OF POWDER POINT

ACE 1369642

DOCUMENTS IN STREAM FILES

ASC# _____ Segment # _____

____ '89 Intertidal Assessment Survey, Sport/Com. Fish
____ '89 Shoreline Clean-Up Program (SAT)
____ '89 Anadromous Fish Stream Authorization, for instream work
____ '89 Stream Treatment Reports
____ '89 Demobilization Reports ____ Bioremediation ____ other
____ '89 RLS Sheet ____ Oil sed. sample ____ Egg sample
____ '89 Fall Walk-a-thon Survey, ADEC
____ '89 Winter Assess. Study Site ____ Winter Stream Survey Form
____ '89 Other Documents _____

____ '90 Pre-Anadscat Survey, multi-assessment form
____ '90 Anadscat Survey
____ '90 Anadromous Fish Stream Evaluation (work order)
____ '90 Anadromous Fish Stream Addendum to work order
____ '90 Shoreline Evaluation, SAT and work order for segment
____ '90 Anadromous Fish Stream Authorization, Title 16 permit
____ '90 Stream Treatment Report
____ '90 ADEC Demobilization Report for Bio
____ '90 ADF&G Oiling Condition Survey, for ASAP use (Aug. Survey)
____ '90 ASAP Survey ____ ASAP Rec. ____ ADEC Rec. (Form)
____ '90 Other Documents _____



Pre-A. AD SCAT-90 ^{ASW}

ADF&G MULTI-ASSESSMENT DATA FORM

1 SURVEY TYPE: BS SS DS TS AVS SCHA MMS PTA

2 REGION: PWS KP, CI K, AP

METHOD: Aerial Ground Boat

3 DATE: 4/12/90

15 HIGH TIDE TIMES: /

21 TEAM RECORDER: _____

4 START TIME: 0820

16 HIGH TIDE HTS: /

22 OBSERVERS: Tom Cruise

5 STOP TIME: 0830

17 LOW TIDE TIMES: /

23 AGENCY: ADF&G ASW

6 SEGMENT #: LAD23

18 LOW TIDE HTS: /

24 PHOTOS TAKEN: Y N

7 STATION #: _____

19 TIDE HT AT SURVEY: _____

Roll #: _____ Frame: _____

8 K-UNIT: _____

Ebb Slack Flood Slack

25 VIDEO TAKEN: Y N TAPE#: _____

9 STAT AREA: _____

20 USCG QUAD: _____

Start: _____ End: _____

10 LAT: _____

11 LONG: _____

26 SAMPLES TAKEN? Y N Number

12 SOURCE: Map Loran

13 LOCATION: LAD23

14 DESCRIPTION: _____

Oil
Sediment
Biological
Water

EXTENT OF OIL

	SHORELINE				STREAM			
	L	W	M ²	%	L	W	M ²	%
27 SURFACE COVERAGE								
28 SURFACE THICKNESS								
29 PENETRATION								

30 OVERALL OIL IMPACT: N VL L M H

31 OIL TYPE: Pooled Mousse Tar Asphalt Sticky Stain

32 OILED DEBRIS? Y N

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

34 WAVE EXPOSURE: High Moderate Low

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

36 CATALOGED ANAD. FISH SREAM? Y N

37 CATALOG #: 10772

38 STREAM NAME: _____

39 OIL IN STREAM BED? Y N

40 OIL ON STREAM BANKS? Y N

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

42 OIL WITHIN 1 MILE OF STREAM? Y N

Where: _____

43 ANADROMOUS FISH PRESENT? Y N

44 ANADROMOUS FISH OBSERVATION
Species Aerial Ground

COMMENTS: LIGHT SEEN AFTER DIGGING A PIT. STAINED LOGS
ON THE BEACH

FRAME(S)

DESCRIPTION

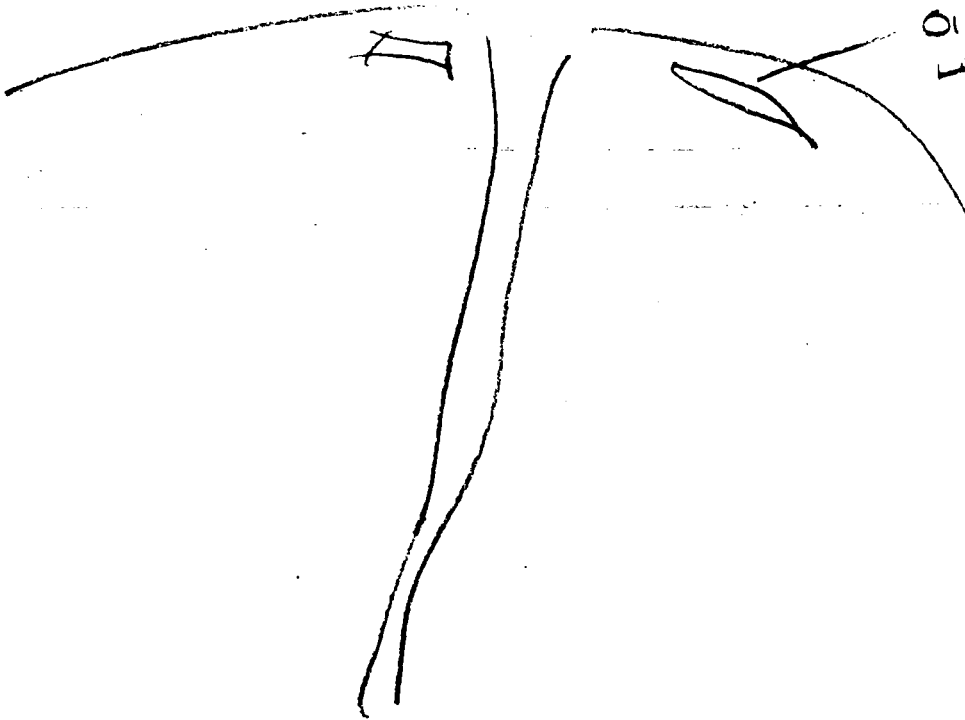
46 OIL DISTRIBUTION DIAGRAM

LA 023

226-40-16722
LW

4/12/90

TC

OIL STAINED
LOGS

= Sample taken
 = Photo frame # and
 shot direction.

ACE 7379900 -/S

ASC NUMBER:

SEGMENT NUMBER:

YR CATALOGED:

LOCATION:

STREAM NAME:

ODIAK K-UNIT:

USGS QUADRANGLE:

SHORELINE TYPE:

LOCAL STREAM #:

ALL SEGMENTS:

LATITUDE:

LONGITUDE:

LEGAL: S

ASC NUMBER:

SURVEY TYPE:

METHOD:

DATE: / /

START TIME:

STOP TIME:

WAVE EXPOS:

TEAM RECORDER:

OBSERVERS:

AGENCY(IES):

PHOTOS TAKEN?

Roll #:

Frames:

VIDEO TAKEN?

Tape Number:

Counter Start:

SAMPLES TAKEN?

SAMPLE I.D. NUMBERS: 1.

2.

3.

4.

5.

6.

	LENGTH	WIDTH	M2	%	THICK	PEN	OIL TYPE
SITE 1	10	2					ST
SITE 2							
SITE 3							
SITE 4							
SITE 5							

OVERALL OIL IMPACT:

OIL IN STREAM CHANNEL?

OIL ON BEACH WITHIN 50M OF STREAM MOUTH?

SUBSTRATE

Bedrock	Granule
Boulder	Sand
Cobble	Silt
Pebble	Veget.

SPECIES

COUNT

COMMENTS:



ANADSCAT-90

48/49

ADF&G MULTI-ASSESSMENT DATA FORM

SURVEY TYPE: BS SS DS TS AVS SCHA MMS PTA 2 REGION: PWS KP,CI K,AP

METHOD: Aerial Ground Boat

3 DATE: 4/20/90 15 HIGH TIDE TIMES: 1007 2304

4 START TIME: 1800 16 HIGH TIDE HTS: 9.0' 9.4'

5 STOP TIME: 1820 17 LOW TIDE TIMES: 0400 1634

6 SEGMENT #: LA-23 18 LOW TIDE HTS: 4.5' 1.6'

7 STATION #: N/A 19 TIDE HT AT SURVEY: 2.49'

8 K-UNIT: N/A Ebb Slack Flood Slack

9 STAT AREA: N/A 20 USCG QUAD: SEA A-3

10 LAT: 11 LONG:

12 SOURCE: Map Loran

13 LOCATION:

14 DESCRIPTION:

21 TEAM RECORDER: TOM CROWE

22 OBSERVERS: ANADSCAT #15

23 AGENCY: EXXON/ADF&G

24 PHOTOS TAKEN: Y (N)

Roll #: Frame:

25 VIDEO TAKEN: Y (N) TAPE#:

Start: End:

26 SAMPLES TAKEN? Y (N) Number

Oil

Sediment

Biological

Water

EXTENT OF OIL

	SHORELINE				STREAM			
	L	W	M ²	%	L	W	M ²	%
27 SURFACE COVERAGE	100 yds	50 yds	5000 yds	0	50	2/100	0	
28 SURFACE THICKNESS	None							
29 PENETRATION	None							
30 OVERALL OIL IMPACT:	N	<u>VL</u>	L	M	H			
31 OIL TYPE:	Pooled	Mousse	Tar	Asphalt	Sticky	<u>Stain</u>		
32 OILED DEBRIS?	<u>Y</u>	N						
33 SHORELINE TYPE:	Headland	Low-lying	Rocks	<u>Beach</u>	Cove			
		Lagoon	Marsh					
34 WAVE EXPOSURE:	High	<u>Moderate</u>	Low					
35 SUBSTRATE TYPE:	Bedrock	Boulder	Cobble					
	Gravel	<u>✓</u>	Sand	<u>✓</u>	Mud/silt			

36 CATALOGED ANAD. FISH STREAM? (Y) N

37 CATALOG #: 226-40-16772

38 STREAM NAME: N/A

39 OIL IN STREAM BED? Y (N)

40 OIL ON STREAM BANKS? Y (N)

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

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

Where:

43 ANADROMOUS FISH PRESENT? Y (N)

44 ANADROMOUS FISH OBSERVATION

Species	Aerial	Ground

COMMENTS: VERY LIGHT. ONLY SIGN OF OIL IS STAIN ON
LOGS WHERE THIS STREAM CUTS THROUGH STORM BEACH.
NO TREATMENT RECOMMENDS

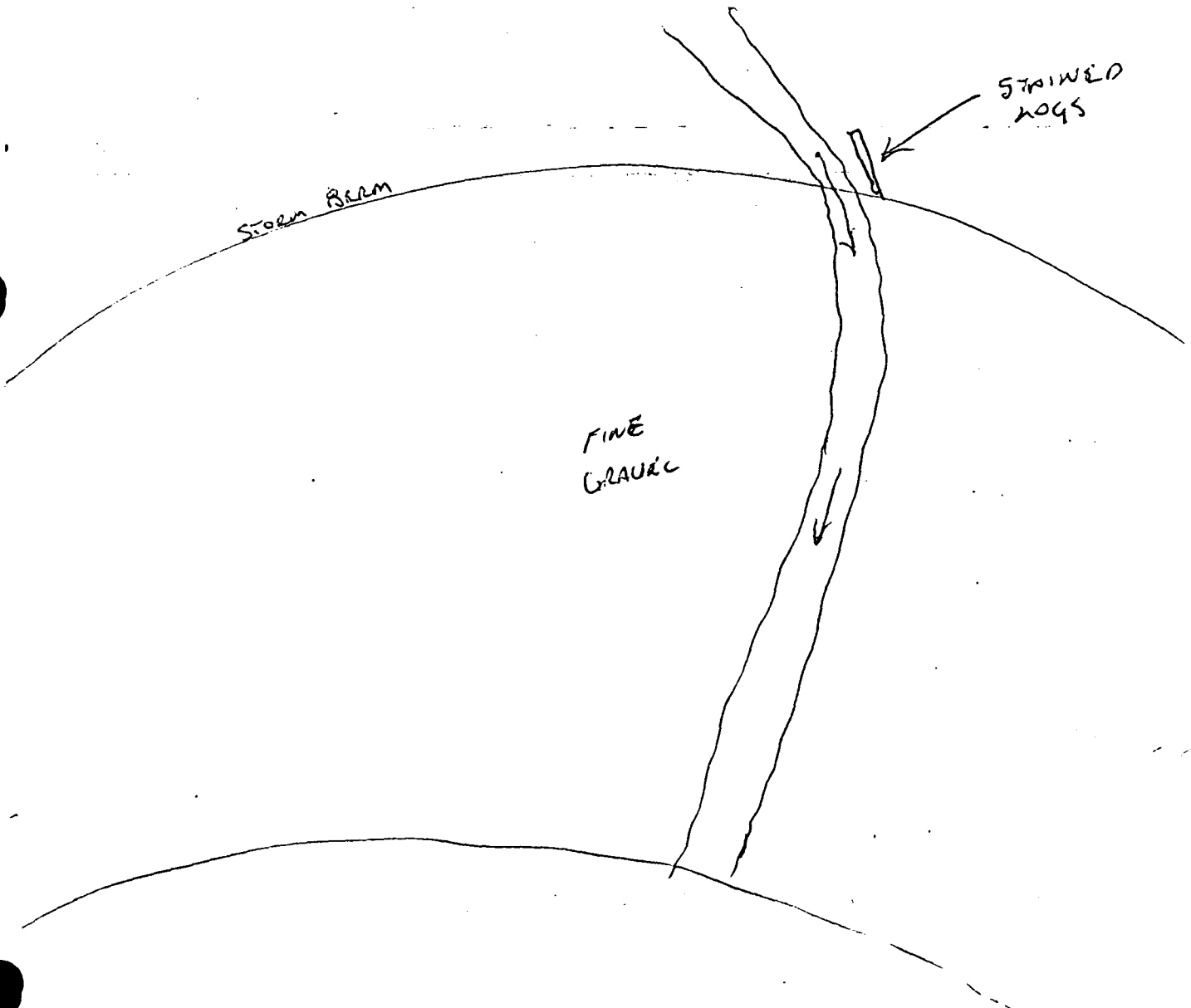
FRAME(S)

DESCRIPTION

48 OIL DISTRIBUTION DIAGRAM

ASC 226-40-16772

LA-023



Sample taken
Photo frame # and
shot direction.

ACE 7379898 -15

ASC NUMBER:

SEGMENT NUMBER:

YR CATALOGED:

LOCATION:

STREAM NAME:

LATITUDE:

ODIAK K-UNIT:

LOCAL STREAM #:

LONGITUDE:

USGS QUADRANGLE:

LEGAL: S

SHORELINE TYPE:

ALL SEGMENTS:

ASC NUMBER:

TEAM RECORDER:

SURVEY TYPE:

OBSERVERS:

METHOD:

DATE: / /

AGENCY(IES):

START TIME:

PHOTOS TAKEN?

STOP TIME:

Roll #:

Frames:

WAVE EXPOS:

VIDEO TAKEN? Tape Number:

Counter Start:

SAMPLES TAKEN?

SAMPLE I.D. NUMBERS: 1.

2.

3.

4.

5.

6.

	LENGTH	WIDTH	M2	%	THICK	PEN	OIL TYPE
SITE 1	80	35					ST
SITE 2	50	2					ST
SITE 3							
SITE 4							
SITE 5							

OVERALL OIL IMPACT:

OIL IN STREAM CHANNEL?

OIL ON BEACH WITHIN 50M OF STREAM MOUTH?

SUBSTRATE

Bedrock	Granule
Boulder	Sand
Cobble	Silt
Pebble	Veget.

SPECIES

COUNT

COMMENTS:

DATE		SURVEY	SITE	W x L (m) SITE TYPE	PERCENT OIL	THICKNESS & PENETR. (cm)	OIL TYPES, DEPTH INTERVAL(cm)	SITE SPECIFIC COMMENTS
04/20/90	OG'S ANADSCAT	0						NO OIL, NO PITS. OFN, VERY SPORADICALLY STAINED <1%.
MAD vs. OG: VL, ONLY SIGN OF OIL IS STAIN ON LOGS WHERE STREAM CUTS IN STORM BERM. COMMENTS:								

CATALOG NUMBER: 2264016772		SEGMENT#: LA023 A		LOCATION: LATOUCHE ISLAND, NORTH OF POWDER POINT		SEQ:	
DATE	SURVEY	SITE	W x L (m) SITE TYPE	PERCENT OIL	THICKNESS & PENETR. (cm)	OIL TYPES, DEPTH INTERVAL(cm)	SITE SPECIFIC COMMENTS
04/12/90	PRE-ANADSCAT	1	SURFACE			ST FI	storm berm - lightly stained logs. light sheen after digging a pit
<p>MAD vs. OG: COMMENTS: LIGHT SHEEN AFTER DIGGING A PIT. STAINED LOGS ON THE BEACH. NO OIL ON STREAM BANKS.</p>							

CATALOG NUMBER: 2264016772		SEGMENT#: LA023 A		LOCATION: LATOUCHE ISLAND, NORTH OF POWDER POINT		SEQ:	
DATE	SURVEY	SITE	W x L (m) SITE TYPE	PERCENT OIL	THICKNESS & PENETR. (cm)	OIL TYPES, DEPTH INTERVAL(cm)	SITE SPECIFIC COMMENTS
04/20/90	ANADSCAT	1	SURFACE			ST	STAIN ON LOGS WHERE STREAM CUTS THROUGH STORM BERM IS ONLY SIGN OF OIL
<p>MAD vs. OG: COMMENTS: VERY LIGHT. ONLY SIGN OF OIL IS STAIN ON LOGS WHERE THIS STREAM CUTS THROUGH STORM BERM. NO TREATMENT RECOMMENDED.</p>							

CATALOG NUMBER: 2264016772		SEGMENT#: LA023 A		LOCATION: LATOUCHE ISLAND, NORTH OF POWDER POINT		SEQ:	
DATE	SURVEY	SITE	W x L (m) SITE TYPE	PERCENT OIL	THICKNESS & PENETR. (cm)	OIL TYPES, DEPTH INTERVAL(cm)	SITE SPECIFIC COMMENTS
04/20/90	OG'S ANADSCAT	#1				ST	NO OIL , NO PITS. OFN, VERY SPORADICALLY STAINED <1%. ONLY SIGN OF OIL IS STAIN ON LOGS WHERE STREAM CUTS IN STORM BERM.
<p>MAD vs. OG: VL, ONLY SIGN OF OIL IS STAIN ON LOGS WHERE STREAM CUTS IN STORM BERM. COMMENTS: Very Light. Agree.</p>							



OFFICIAL PHOTOGRAPH ADF&G EXXON VALDEZ OIL SPILL

OFFICE: VALDEZ

DATE: 09/11/89

TIME: -0-

SEGMENT#: -0-

STATION#: -0-

LOCATION: LATOUCHE ISLAND NEAR WILSON BAY

REASON FOR TAKING PHOTO: UPPER INTERTIDAL SITE - SHOT AERIAL
PHOTOGRAPH. (147°54'30"/60°03'00"). DOCUMENTING
UNDOCUMENTED SALMON STREAM.

TAKEN BY: RICK GUSTIN

INITIALS: _____

ROLL #: 89RLG007V FRAME #: 00

EVIDENCE ID#: 10210

ACE 7379577

Final Anadromous Stream Treatment Information

Segment ID - Stream ID	NTR	Bio	Bio Start	Bio End	Man	Man Start	Man End
K0911-CD020 262-10-10080					X	6/28/90	6/28/90
K0911-CD020 262-10-10092					X	6/28/90	6/28/90
K0917-CC100 262-15-10040	X						
K0919-HB001 262-20-10040					X	6/12/90	6/14/90
K0919-HB004 262-20-10030	X						
K1002-AB002 262-65-655					X	7/7/90	7/8/90
K1007-PB001 262-70-10025					X	6/23/90	6/24/90
K1007-PB016 262-70-10010					X	7/10/90	7/10/90
K1009-DB008 262-75-10020	X						
KN0103 226-10-16922		X	7/7/90	9/1/90	X	7/7/90	7/7/90
KN0106 226-10-16890					X	6/30/90	6/30/90
KN0110 226-10-16928	X						
KN0120 226-10-16940	X						
KN0129 226-10-16975					X	5/30/90	5/30/90
KN0129 KN0129-UNCAT		X	6/19/90	6/19/90	X	5/30/90	5/30/90
KN0132 226-10-16982		X	6/19/90	9/11/90	X	5/26/90	5/29/90
KN0134 226-30-16865		X	6/23/90	6/23/90	X	6/23/90	6/23/90
KN0201 226-30-16872					X	6/1/90	6/1/90
KN0205 226-30-16860					X	6/1/90	6/3/90
KN0211 226-10-16875		X	7/1/90	7/9/90	X	7/1/90	7/9/90
KN0211 226-10-16880					X	7/1/90	7/1/90
KN0213 226-30-16853		X	7/1/90	7/6/90	X	7/1/90	7/6/90
KN0401 226-30-16820					X	6/30/90	6/30/90
KN0500 226-10-16992		X	7/5/90	9/11/90	X	7/5/90	7/7/90
KN0500 226-10-16996		X	7/7/90	9/11/90	X	7/5/90	7/7/90
KN0601 226-40-16855	X						
KN0602 226-40-16851	X						
KN0602 226-40-16853	X						
KN0701 226-30-16840		X	6/30/90	9/13/90	X	6/30/90	7/27/90
KN0704 226-30-16844	X						
LA015 226-40-16782		X	7/3/90	7/8/90	X	7/3/90	7/8/90
LA018 226-40-16780		X	7/3/90	8/26/90	X	6/15/90	7/4/90
LA021 226-40-16774		X	6/17/90	6/17/90	X	6/13/90	6/14/90
LA021 226-40-16776	X						
LA023 226-40-16772	X						
LA029 226-40-16788	X						
LA031 226-40-16785	X						
MA009 226-20-15044	X						
MN001 227-20-17570	X						
NA026 226-40-12950	X						
NK001 232-21-10230		X	7/3/90	7/4/90	X	7/3/90	7/4/90
PD002 242-42-10450					X	6/21/90	6/23/90
PD003 242-42-10460					X	6/21/90	6/23/90
TB002 232-10-10340					X	7/1/90	7/1/90
TB003 232-10-10342					X	6/20/90	7/1/90
WB001 242-32-10155					X	6/19/90	6/19/90
WB003 242-32-10160					X	6/19/90	6/19/90
WH003 226-40-16322		X	7/8/90	7/8/90	X	7/8/90	7/8/90

SUMMARY SHEET
FOR DIFFICULT-TO-COPY ITEMS

ALASKA/CIVIL EXXON

Folder ACE # 1369642

CDP BOX # 12,306

Begin ACE Number 7379877 End ACE Number _____ *Blow*

DOCUMENT TYPE:

_____ BOOK

_____ BLUEPRINT

X PHOTOS

_____ VIDEO

_____ SLIDES

_____ AUDIO CASSETTE

_____ MAP OR CHART

_____ OTHER-Identify document type

_____ COMPUTER PRINTOUT

MARGINALIA: YES ✓ NO _____

AUTHOR: Rich Austin

DATE OF PUBLICATION: 9/11/89

VERBATIM TITLE: _____

INFERRED TITLE: Official Photograph ADF&H - Exxon
Valdez Oil Spill - Office: Valdez - Time: -0-
Segmenz#: -0- Station#: -0- Roll#: 89RL4007V,
Frame#: 00 Evidence ID#: 10210
Location: Latouche Island near Wilson Bay

ADDITIONAL INFORMATION: Reason for taking photo: Upper
Intertidal Site - Short Aerial Photograph. (147° 54'
30" / 60° 03' 00"). Documenting Undocumented Salmon
Stream.

H:\ZMCL\SUMMARY.FRM
Revised 1/30/91

ACE 7379876

CATALOG NUMBER: 2264016772

STREAM NAME:

LOCATION: LATOUCHE ISLAND, NORTH OF POWDER POINT

SEGMENT NUMBER: LA023 A

SHORELINE TYPE:

DATE: 04/12/90 TIME: BEACH-0830

SITE	WIDTH (m)	LENGTH (m)	AREA (sqm)	PERCENT OIL	THICKNESS (cm)	PENETRATION (cm)	SURFACE SUBSURF	OIL TYPES	COMMENTS
1							SURFACE	ST	

COMMENTS:

LIGHT SHEEN AFTER DIGGING A PIT. STAINED LOGS ON THE BEACH.

STREAM BANKS: NO

MILE OF STREAM: YES

OIL ON
OIL WITHIN 1

CATALOG NUMBER: 2264016772

STREAM NAME:

LOCATION: LATOUCHE ISLAND, NORTH OF POWDER POINT

SEGMENT NUMBER: LA023 A

SHORELINE TYPE:

DATE: 04/20/90 TIME: BEACH-1820

SITE	WIDTH (m)	LENGTH (m)	AREA (sqm)	PERCENT OIL	THICKNESS (cm)	PENETRATION (cm)	SURFACE SUBSURF	OIL TYPES	COMMENTS
1							SURFACE	ST	

COMMENTS:

VERY LIGHT. ONLY SIGN OF OIL IS STAIN ON LOGS WHERE THIS STREAM CUTS THROUGH STORM BERM. NO TREATMENT RECOMMENDED.

OIL ON STREAM BANKS: NO

WITHIN 1 MILE OF STREAM: NO

OIL

ADEC EXXON VALDEZ POST-TREATMENT SURVEY REPORT

SEGMENT#: LA023
LOCATION: NW LATOUCHE ISLAND

DATE: 09/28/89
TIME: 19:15

Survey Type: Ground
Team: W. Ghormley, D. Hall

WEATHER AND SEA CONDITIONS

Weather: Cloudy, Rain Wind Direction: E
Sea State: Calm Knots: 0-15

Low Tide: 19:35 Feet: 0.88 High Tide: 1:07 Feet: 11.8
Low Tide: 7:16 Feet: 0.51 High Tide: 13:33 Feet: 12.1

SHORELINE DESCRIPTION

Shoretypes: B
(H=headland, LR=low-lying rock, B=beach, C=cove, L=lagoon, M=marsh)

Wave Exposure: M (H=high, M=moderate, L=low)
Shoreline Composition: C
(R=bedrock, B=boulder, C=cobble, G=gravel, S=sand, M=silt)

OIL CHARACTERISTICS

Degree of Oiling: L,M,H
(N=none, VL=very light, L=Light, M=moderate, H=heavy)
Area of Impact: H,M
(S=supratidal, H=high intertidal, M=mid tidal, L=low intertidal)

Max. Oil Thickness: 2 mm (1 = 1 mm or less, 0 = no oil)
Max. Oil Penetration: 30 cm (35 = 35 cm or greater)

Percent Segment Categorized as Oiled: 100%
Presence of Oiled Driftwood (y/n): n
Oil Types: T,A
(P=pooled, M=mousse, SY=sticky, T=tar, A=asphalt, ST=stain)
Samples: LA023-1 / LA023-2 / none / none

DAMAGED OR OILED ORGANISMS

Fucus (y/n): n Barnacles (y/n): n Mussels (y/n): n
Dead Mammals: 0 Dead Birds: 0

SOLID WASTE FOUND

Type: Cleanup debris
Bags Collected: 1

Draft

Printed: 12/12/89 11:44

ACE 7379874

Walk-a-thon

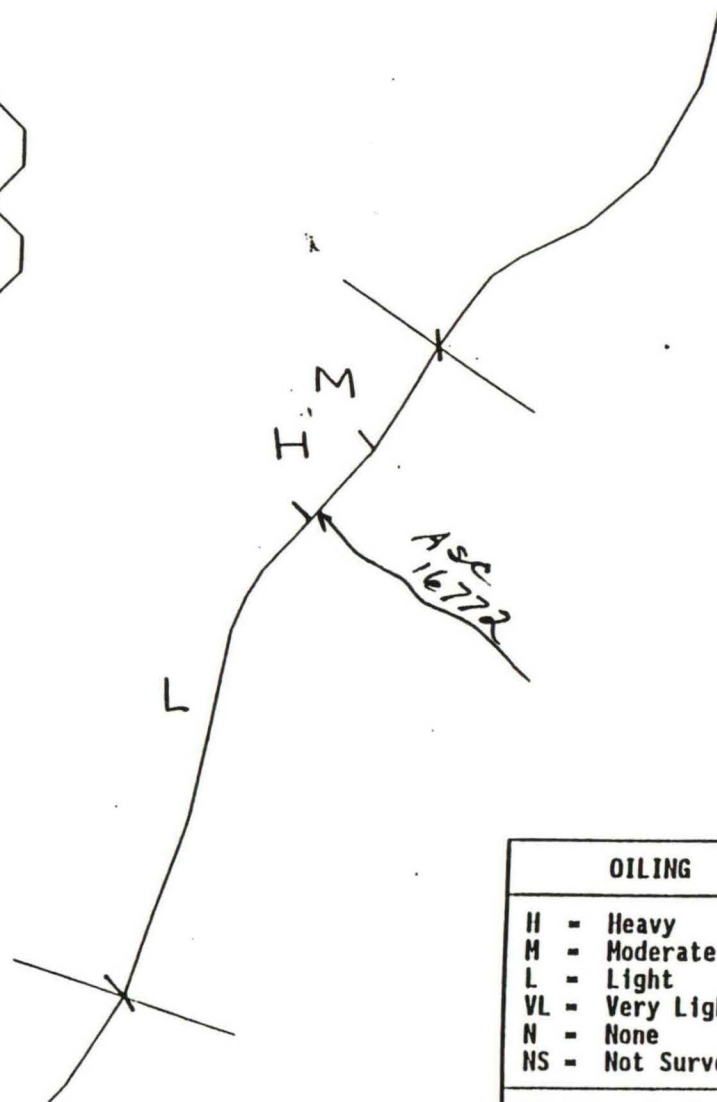
LA023

500.0

ACE 7379901

89

Walkathon



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



Pre-L-AD SCAT-90

ADF&G MULTI-ASSESSMENT DATA FORM

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

2 REGION: PWS KP, CI K, AP

METHOD: Aerial Ground Boat

3 DATE: 4/12/90

15 HIGH TIDE TIMES: /

21 TEAM RECORDER: _____

4 START TIME: 0820

16 HIGH TIDE HTS: /

22 OBSERVERS: Tom Crowe

5 STOP TIME: 0830

17 LOW TIDE TIMES: /

23 AGENCY: ADF&G

6 SEGMENT #: LAD23

18 LOW TIDE HTS: /

24 PHOTOS TAKEN: Y (N)

7 STATION #:

19 TIDE HT AT SURVEY: _____

Roll #: _____ Frame: _____

8 K-UNIT: _____

Ebb Slack Flood Slack

25 VIDEO TAKEN: Y (N) TAPE#: _____

9 STAT AREA: _____

20 USCG QUAD: _____

Start: _____ End: _____

10 LAT: _____

11 LONG: _____

26 SAMPLES TAKEN? Y (N) Number

12 SOURCE: Map Loran

13 LOCATION: LATITUDE

14 DESCRIPTION: _____

EXTENT OF OIL

SHORELINE

L W M² %

STREAM

L W M² %

27 SURFACE COVERAGE

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

28 SURFACE THICKNESS

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

29 PENETRATION

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

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

31 OIL TYPE: Pooled Mousse Tar Asphalt Sticky Stain

32 OILED DEBRIS? Y (N)

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

34 WAVE EXPOSURE: High Moderate Low

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

36 CATALOGED ANAD. FISH SREAM? (Y) N

37 CATALOG #: 16722

38 STREAM NAME: _____

39 OIL IN STREAM BED? Y N

40 OIL ON STREAM BANKS? Y N

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

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

Where: _____

43 ANADROMOUS FISH PRESENT? Y N

44 ANADROMOUS FISH OBSERVATION

Species Aerial Ground

COMMENTS: LIGHT STAIN AFTER WADING A D.I. STAINLESS LUGG

ON THE BEACH

ACE 7379899 +15

FRAME(S)

DESCRIPTION

46 OIL DISTRIBUTION DIAGRAM

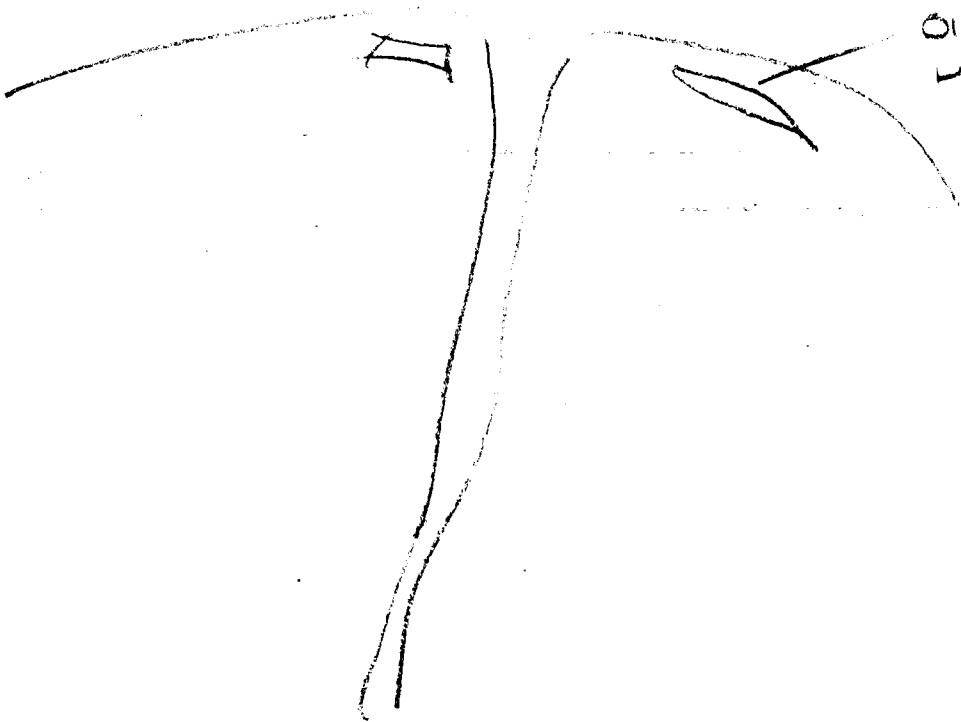
CA 023

206-40-16722
LW

4/12/90

OIL SPILLS
LW

TC



= Sample taken
= Photo frame # and
shot direction.

ACE 7379900-15

48/49

ADF&G MULTI-ASSESSMENT DATA FORM

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

2 REGION: PWS KP, CI K, AP

METHOD: Aerial Ground Boat

3 DATE: 4/20/90

15 HIGH TIDE TIMES: 1007 2304

21 TEAM RECORDER: Tom Crowe

4 START TIME: 1800

16 HIGH TIDE HTS: 9.0' 9.4'

22 OBSERVERS: ANADSCAT #15

5 STOP TIME: 1820

17 LOW TIDE TIMES: 0400 1630

23 AGENCY: REXON/ADF&G

6 SEGMENT #: LA-23

18 LOW TIDE HTS: 4.5' 1.6'

24 PHOTOS TAKEN: Y (N)

7 STATION #: N/A

19 TIDE HT AT SURVEY: 2.49'

Roll #: Frame:

8 K-UNIT: N/A

Ebb Slack Flood Slack

25 VIDEO TAKEN: Y (N) TAPE#:

9 STAT AREA: N/A

20 USCG QUAD: SNA A-3

Start: End:

10 LAT:

11 LONG:

26 SAMPLES TAKEN? Y (N) Number

12 SOURCE: Map Loran

Oil

13 LOCATION:

Sediment

14 DESCRIPTION:

Biological

Water

EXTENT OF OIL

	SHORELINE				STREAM			
	L	W	M ²	%	L	W	M ²	%
27 SURFACE COVERAGE	100	50	5000	0	50	2	100	0

36 CATALOGED ANAD. FISH SREAM? (Y) N

28 SURFACE THICKNESS

37 CATALOG #: 226-40-16772

29 PENETRATION

38 STREAM NAME: N/A

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

39 OIL IN STREAM BED? Y (N)

31 OIL TYPE: Pooled Mousse Tar Asphalt Sticky Stain

40 OIL ON STREAM BANKS? Y (N)

32 OILED DEBRIS? (Y) N

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

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

Where:

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

43 ANADROMOUS FISH PRESENT? Y (N)

34 WAVE EXPOSURE: High Moderate Low

44 ANADROMOUS FISH OBSERVATION
Species Aerial Ground

35 SUBSTRATE TYPE: Bedrock Boulder Cobble

Gravel Sand Mud/silt

COMMENTS: Very light. Only sign of oil is stain on

logs where this stream cuts through storm berm.

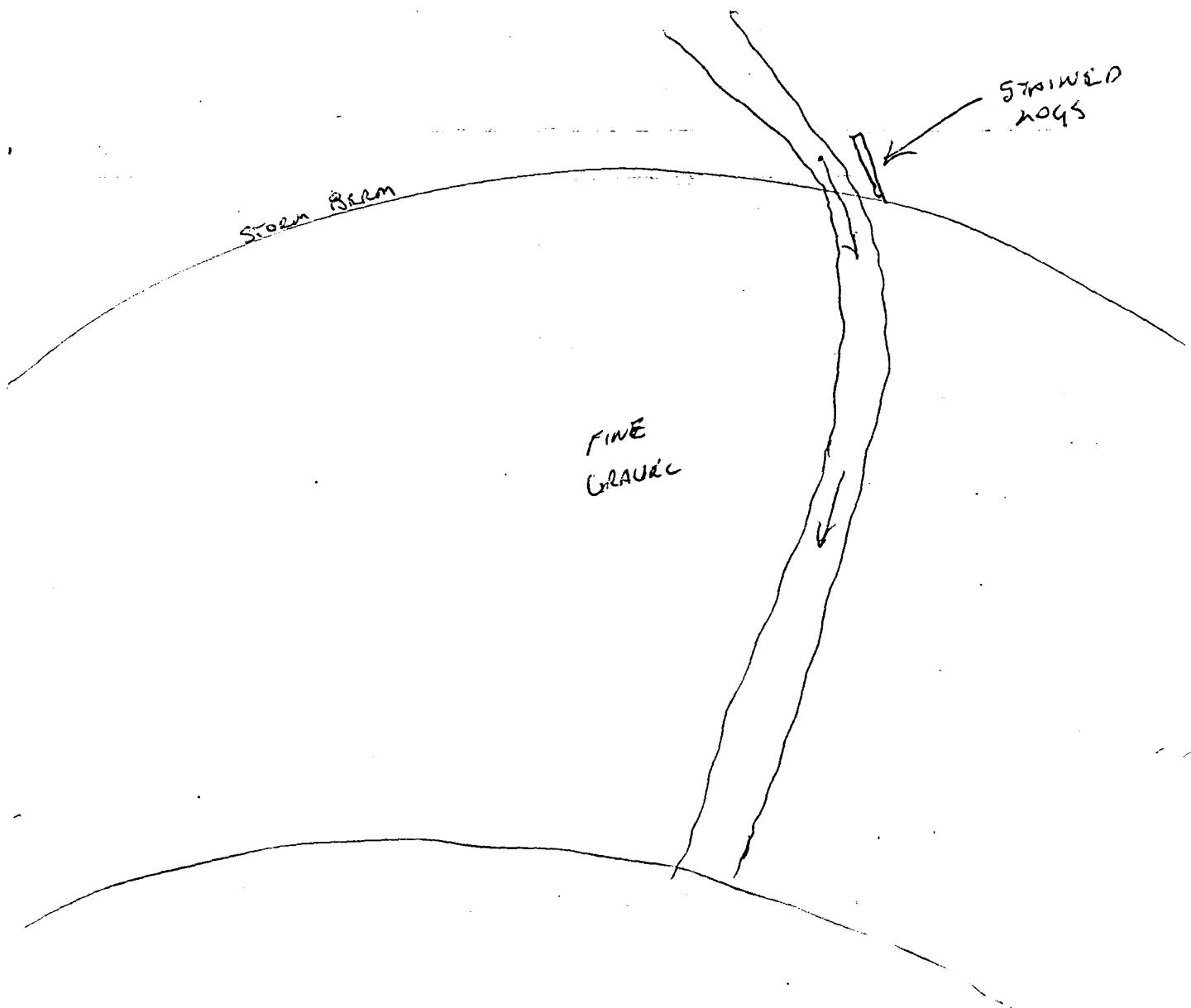
NO TREATMENT RECOMMENDED

49/49

FRAME(S)

DESCRIPTION

46 OIL DISTRIBUTION DIAGRAM

ASC 226-40-1677Z
LA-023

Sample taken
Photo frame # and
shot direction.

ACE 7379898 -15

2/49

ASC # 226-40-16774

Segment LA-021

Observations A deposit of heavy oil penetrates the substrate immediately adjacent to the upper-mid intertidal portion of the stream. This area has a surface armor of large cobble overlying small gravels. A high tide berm may be advancing over this oil deposit. Tar from this deposit is exposed in the stream channel along the southwest bank and is leaking sheen into the stream. Tarry/moussy oil penetrates the sediment approximately 4 cm at the present stream bank. Oil penetration may be deeper further from the stream.

3 Treatment Recommendations The complete layer of oiled substrate within this deposit should be manually removed, bagged, and taken from the site for safe disposal. Four-wheelers should be used to facilitate removal of material from beach. Excavation should begin on the side of the patch most distant from the stream channel. Clean material from the adjacent berm should be backfilled into the excavated area soon after oiled material is removed. In no circumstances should clean material be deposited over any remaining oiled substrate. Immediately after removal of the oiled substrate adjacent to the stream, boulders from the opposite shore (see ADF&G Multi-Assessment Data Form diagram for general location) should be placed along the bank to prevent migration of the channel into the treated area. All activities must occur between 15 May and 15 July, 1990.

ASC # 226-40-16772

Segment LA-023

Observations Only lightly stained logs in storm berm.

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

OG WILLIAM ID 10 USCG McMAHON SEGMENT ST/ LA 21
 BIO MICHAEL FAWCETT LAND REP TOM CROWE-ADFG STREAM 226-40-16722 OF
 EXXON CUS GARCIA ADFG MIKE WIEDMER Time to
 TEAM NO. 15 TIDE LEVEL +2 FT DATE 20 / APR / 90
 EST. SUBDIVISION LENGTH: 50 m ☒ Sun ☐ Clouds ☐ Fog ☐ Rain ☐ Snow
 UPLANDS DESCRIPTION: ☒ Grass ☒ Forest ☐ Rock
 SURVEYED FROM: ☒ Foot ☐ Boat ☐ Helo
 SURFACE SEDIMENTS: R % B % C 75 % P 25 % G % S % M % V
 SLOPE: Lang 90 % Hang 10 % Ven % WAVE EXPOSURE: ☒ Low ☐ Med ☐ High
 OIL CATEGORY LENGTH: W 0 m M 0 m N 0 m VL 0 m NO 50

SURFACE OIL

CHARACTER	DISTRIBUTION				OIL / FILM COLOR					IMPACTED ZONES				
	C	S	P	S	SP	OR	OL	OF	NO	SU	U	M	L	U
ASPHALT PAVEMENT														
POOLED														
COVER														
COAT														
STAIN														
MOUSSE														
PATTIES														
TARBALLS														
FILM														
NO OIL	NONE													

PAVEMENT H F S 0 sq. m by 0PATTIES / TARBALLS 0 BANEAR SHORE SHEEN? ☒ NO BR RW SL

OILED DEBRIS	AMOUNT			
	SM	MD	LG	
Logs				Did you COLL DEBRIS <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO
Vegetation				
Trash				TYPE <u> </u>
Debris				#BAGS <u> </u>

Photographs:

Roll No. Frames

SUBSURFACE OIL

PIT NO.	PIT DEPTH (cm)	SUBSURFACE OIL CHARACTER					OILED INTERVAL (CM-CL)	BELOW		OIL / FILM COLOR					PIT ZONE				A N A	SHEEN (Y/N)	!	SURFACE SUBSURFA SEDIMENT
		OP	OR	OL	OF	NO		UO	UC	SP	OR	OL	OF	NO	SU	U	M	L				

COMMENTS

REVIEWED DATE

SKETCH MAP

OG WILLIAM REID

SEGMENT ST/ LA23

STREAM 226 10-16772

DATE 20 APR 90

CHECKLIST

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

LEGEND

1 Δ
PI - No Substrate Oil

2 Δ
PI - Substrate Oil

CT/C
Continuous Distribution

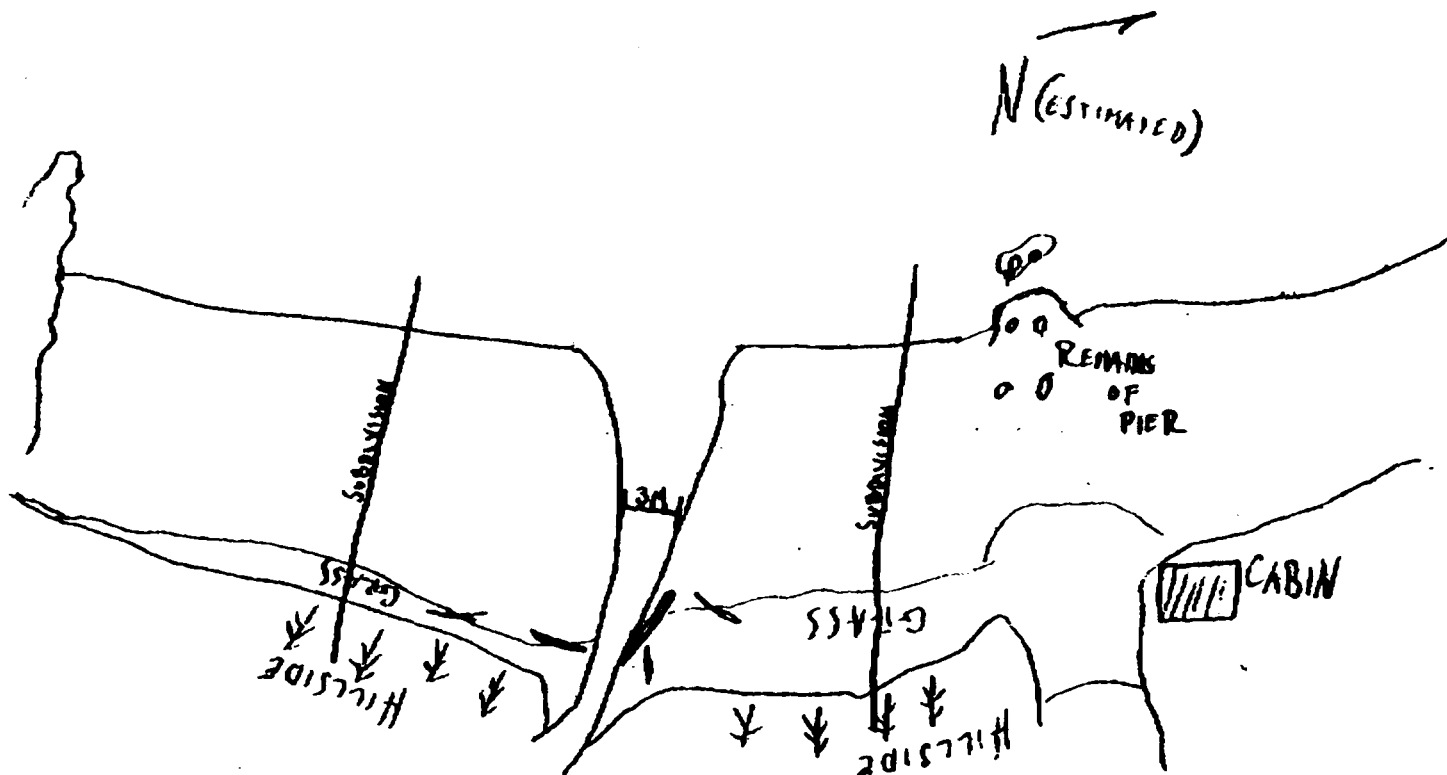
CT/B
Broken Distribution

CT/P
Patchy Distribution

CT/S
Splashed Distribution

eee
Oiled Vegetation

1 →
Photo location, direction,
and number



ACE 7379887

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

REVISIONS

P.47

EXAM UNFS

TO

EXAM UNFS CORDOVA

FROM

10:57

APR-21-1990

Ecologists' Summary
segment LA-21
Stream # 226-40-16722

4/20/90

Michael Fawcett

No oil was found at this site except
for a few light splatters on drift logs.
One mature eagle in tree. No cleanup
recommended.

~~M~~ F Fawcett

4/1/99

OPERATIONS FIELD NOTES

See Back for Instructions

SEGMENT ID ANAD ~~LA~~-23
 STREAM ID # 226-40-16772
 ANNOTATED MAP INCLUDED Y/N

DATE 4-20-90
 NAME GARCIA
 TEAM # 15

SURFACE OIL	Quantities in Meters			None	Treatment Recommendation					
	Length	Width	Area		Bioremediation		Tilling		Spot Hot Water	
					Y/N	% Treat	Y/N	% Treat	Y/N	% Treat
Wide Band	VERY SPORADICALLY			NONE						
Medium Band	STAINED. LESS THAN									
Narrow Band	10%									
Very Light										
TOTAL MANDAYS						0		0		0

SUBSURFACE OIL NONE

Other (Describe)?

TARMATS	Quantities in Meters			Treatment Rec			# of Bags	Mandays Required	
	Length	Width	Thick(cm)	None	Breakup	Remove		Breakup	Remove
Area #1	NONE								
Area #2									
Area #3									
Area #4									
Sporadic Mats									

MANUAL PICKUP	Type of Debris			In Meters		# of Bags	Pickup Y/N	Manday Estimate
	Mousse Tarballs	Oiled Veget	Cleanup Debris	Length	Width			
"Pocket" #1	NONE							
"Pocket" #2								
"Pocket" #3								
Random/Continuous								

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

Is there Other Debris on the Beach? Y/N How Many Bags? Is it mingled with the Oiled Debris Y/N

GENERAL

Snow covering 10 % of the Supratidal Zone?
 Wave Exposure H/M/L Access Limitations: NONE

Snare Boom/Pom Poms Recommended? NO

Would the production Craft have to be relocated to complete work on this subdivision? Y/N # of Times N/A

COMMENTS:

NO TREATMENT NECESSARY ON THIS STREAM.

ACE 7379890 +/S

FIELD SHORELINE COMMENT SHEET

SEGMENT ST / LAO 23 SUBDIVISION: 16772 DATE 4/20/90

USCG
NAME CWO2 McMAHON SIGNATURE [Signature]

☒ NO TREATMENT RECOMMENDED ☐ TREATMENT SUGGESTED
COMMENTS

~~ADFG~~
~~ADEG~~ MICHAEL WIEDMER
NAME AG Team member SIGNATURE [Signature]

☒ NO TREATMENT RECOMMENDED ☐ TREATMENT SUGGESTED
COMMENTS

LAND MANAGER
NAME no team member SIGNATURE _____

☐ NO TREATMENT RECOMMENDED ☐ TREATMENT SUGGESTED
COMMENTS

ANADROMOUS FISH STREAM EVALUATION

SEGMENT ST/ LA-23 A STREAM NO: 226-40-16772 DATE 4/20/90

SEGMENT ENVIRONMENTAL SENSITIVITIES AND TIME CONSTRAINTS:

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

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

SUBDIVISION ECOLOGICAL CONSTRAINTS:

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

ARCHAEOLOGICAL CONSTRAINTS:

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

SHPO SIGNATURE: J. David McArthur DATE: 5/8/90Subsurface Oil Observed: Yes No X Maximum Depth

RECOMMENDATIONS:

X No Treatment Recommended
 Treatment Recommended
 Manual Pickup
 Bioremediation
 Tarmat Removal

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

COMMENTS:

 TAG COMMENTS:

 TAG APPROVAL DATE: 5/7/90ADEC ART WILKINEXXON Andy TCHNOAA Gary PetrasUSCG G.A. BEITERFOSC: WJL DATE: 5-18-90G.A. BEITER G.A. BEITER working etc at hrs. in advance of workACE 7379881
+1581AC/RT

RECEIVED
MAY 03 1990

DEPT. OF
ENVIRONMENTAL CONSERVATION

ANADROMOUS FISH STREAM ASSESSMENT

REGION: PRINCE WILLIAM SOUND

SEGMENT: LA-23 A

STREAM NO: 226-40-16772

concur

Processed
5-7-90
mk

ACE 7379882 +/S

- 1A Salmon stream mouth - fry out on (3/1 to 5/15)
 1B Salmon stream mouth - spawn /10 to 8/31)
 No disturbance of stream bed or banks unless authorized by ADF&G. No beach flushing into stream drainage. No bioremediation or other chemical application within 100m of stream without authorization from ADF&G. No use of methods which might affect nearshore oil or toxicity levels, such as hot water wash or Inipol application, prior to at least July 1 unless authorized by ADF&G. Treatment which is not intrusive and which will not affect nearshore oil or toxicity levels, such as manual removal, can probably proceed without adherence to time constraints. In any case, contact ADF&G Habitat Division prior to treatment for consultation and/or permit application.
 AGENCY CONTACT PERSON: ADF&G John Morison 267-2324
- 1C Salmon fry nursery area (4/31 to 7/31)
 No use of methods which might affect nearshore oil or toxicity levels, such as hot water wash or Inipol application, prior to July 31 unless authorized by ADF&G. Treatment which will not affect nearshore oil or toxicity levels, such as manual or mechanical removal, can probably proceed without adherence to time constraints. Contact ADF&G prior to treatment for confirmation and advice.
 AGENCY CONTACT PERSON: ADF&G Larry Peltz 424-3214
- 1D Esther Hatchery release (4/15 to 6/15)
 1E Main Bay Hatchery release (4/20 to 6/15)
 1F Sawmill Bay Hatchery release (4/15 to 6/1)
 1G Cannery Creek Hatchery release (4/21 to 6/1)
 1H Remote release site
 No use of methods which might affect nearshore oil or toxicity levels, such as hot water wash or Inipol application, prior to at least July 1 unless authorized by ADF&G and/or PWS Aquaculture Association. Treatment which will not affect nearshore oil or toxicity levels, such as manual or mechanical removal, can probably proceed without adherence to time constraints. Contact ADF&G or PWS Aquaculture Association for confirmation and authorization.
 AGENCY CONTACT PERSON: 1E ADF&G Larry Peltz 424-3214
 1D 1F 1G PWS Aquaculture Association John McMillan or Bruce Suzumoto 424-7511
- 1I Gill net area (6/7 to 8/31)
 1J Purse seine area (7/20 to 9/30)
 1K Purse seine hook-off (7/20 to 9/30)
 1L Set net sites (6/11 to 7/25)
 Contact ADF&G for specific dates, locations and constraints. Restrict boat and air traffic to essential minimum. When set net sites are present (1L) restrict beach operations to essential minimum as authorized by ADF&G. If plans for treatment include methods such as hot water wash or Inipol application which might affect nearshore oil or toxicity levels, contact ADF&G for consultation and authorization.
 AGENCY CONTACT PERSON: ADF&G James Brady 424-3212
- 2M Herring spawning (4/1 to 6/15)
 Contact ADF&G for confirmation - dates and locations may vary. Restrict boat traffic to essential minimum. Avoid damage to uncoiled intertidal and subtidal algae and seagrass. If plans for treatment include methods such as hot water wash or Inipol application which might affect nearshore oil or toxicity levels, contact ADF&G for consultation and authorization.
 AGENCY CONTACT PERSON: ADF&G Evelyn Biggs 424-3235
- 3N, 3P Harbor seal and sea lion pupping (5/15 to 7/1)
 3O, 3Q Harbor seal and sea lion molting (8/15 to 9/15)
 Restrict boat and air traffic to essential minimum. No personnel within 400m. Aircraft to maintain 800m horizontal and 300m vertical distance from haulouts. No application of Inipol within two weeks of arrival dates (work window at these sites is limited to 7/2 to 7/31).
 Contact ADF&G and USFWS prior to treatment for confirmation.
 AGENCY CONTACT PERSON: US National Marine Fisheries Service Steve Zimmerman 586-7235
 ADF&G Don Calkins 267-2403
- 5R Seabird colony (5/1 to 9/1)
 Restrict air and boat traffic to essential minimum. No personnel within 800m. Aircraft to maintain 800m horizontal, 300m vertical distance from colony. Contact USFWS prior to treatment.
 AGENCY CONTACT PERSON: USFWS Jill Parker 786-3377
- 5S Shorebird/waterfowl concentration (4/1 to 5/15)
 Restrict all activity to essential minimum, especially air traffic. Contact USFWS and ADF&G for confirmation.
 AGENCY CONTACT PERSON: USFWS Jill Parker 786-3377
 ADF&G Tom Rothy 267-2206
- 5T All Bald Eagle nests (3/1 to 6/1)
 Active Bald Eagle nests (3/1 to 9/1)
 Restrict air traffic and all disturbance to essential minimum. No personnel within 400m 3/1 to 6/1. Air approach and takeoff from and to seaward only; maintain 800m horizontal, 300m vertical distance from nests. Contact USFWS prior to treatment for confirmation of dates.
 AGENCY CONTACT PERSON: USFWS Jill Parker 786-3377
- 6U Recreation: Tent sites (6/1 to 9/15)
 6V Anchorages (6/1 to 9/15)
 6W Forest Service cabins (6/1 to 9/15)
 6X Lodge (6/1 to 9/15)
 6Y Special use destination
- 7Z Subsistence area: Salmon harvesting (5/1 to 9/30)
 7HH Finfish harvesting
 7II Deer harvesting (8/15 to 2/28)
 7JJ Invertebrate harvesting
 Contact ADF&G and appropriate Native Corporation for specific dates, locations, and constraints. Restrict boat and air traffic and beach disturbance to essential minimum. If plans for treatment include methods such as hot water wash or application of Inipol which might affect intertidal or nearshore oil or toxicity levels, contact ADF&G and appropriate Native Corporation for authorization - see Native Corporation Contact List for each Native Corporation's contact person.
 AGENCY CONTACT PERSON: ADF&G Jim Fall 267-2359

GENERAL DATA

stream
226-40-16772
SEG ID: LA21 SUBDIV: _____ TEAM: AS-5 SURVEY DATE: 4/20/90
PAVEMENT: CHAR — AREA 0 THICKNESS 0 TARBALLS 0
OILED: LGS — VEG — TRH — DBR — WAVE EXP: LW X MD — HG —
FAX RCVD: _____ DT: _____ AGENCY DISAGREE: _____
EST SUBDIV LGTH: 50 OIL CATEGORY: W 0 M 0 N 0 VL 0 NO 50 U 0

SURFACE DATA

SURFACE SEDIMENT: BRK — BLD — COB 75 PEB 25 GRN — SAN — MUD — VEG —

CHAR #: 1 OIL CHAR: 110 OIL DIST: CONT — BRKN — PTCH — SPLH —
OIL CLR: — FILM CLR: — TIDAL ZONE: SU — UI — MI — LI —

CHAR #: _____ OIL CHAR: _____ OIL DIST: CONT _____ BRKN _____ PTCH _____ SPLH _____
OIL CLR: _____ FILM CLR: _____ TIDAL ZONE: SU _____ UI _____ MI _____ LI _____

CHAR #: _____ OIL CHAR: _____ OIL DIST: CONT _____ BRKN _____ PTCH _____ SPLH _____
OIL CLR: _____ FILM CLR: _____ TIDAL ZONE: SU _____ UI _____ MI _____ LI _____

CHAR #: _____ OIL CHAR: _____ OIL DIST: CONT _____ BRKN _____ PTCH _____ SPLH _____
OIL CLR: _____ FILM CLR: _____ TIDAL ZONE: SU _____ UI _____ MI _____ LI _____

CHAR #: _____ OIL CHAR: _____ OIL DIST: CONT _____ BRKN _____ PTCH _____ SPLH _____
OIL CLR: _____ FILM CLR: _____ TIDAL ZONE: SU _____ UI _____ MI _____ LI _____

CHAR #: _____ OIL CHAR: _____ OIL DIST: CONT _____ BRKN _____ PTCH _____ SPLH _____
OIL CLR: _____ FILM CLR: _____ TIDAL ZONE: SU _____ UI _____ MI _____ LI _____

CHAR #: _____ OIL CHAR: _____ OIL DIST: CONT _____ BRKN _____ PTCH _____ SPLH _____
OIL CLR: _____ FILM CLR: _____ TIDAL ZONE: SU _____ UI _____ MI _____ LI _____

CHAR #: _____ OIL CHAR: _____ OIL DIST: CONT _____ BRKN _____ PTCH _____ SPLH _____
OIL CLR: _____ FILM CLR: _____ TIDAL ZONE: SU _____ UI _____ MI _____ LI _____

SSAT DATA ENTRY FORM

SUBSURFACE DATA

PAGE 2 OF 2SEGMENT ID: LA 21 SUBDIV: 226-40-16772

PIT # PIT DEPTH OIL CHARACTER OIL INTVAL: FROM TO
QUANT: OIL CLR: FLM CLR: ZONE: SU UI MI LI
SUBSURF SEDIMENT: BRK BLD COB PEB GRN SAN MUD VEG

PIT # PIT DEPTH OIL CHARACTER OIL INTVAL: FROM TO
QUANT: OIL CLR: FLM CLR: ZONE: SU UI MI LI
SUBSURF SEDIMENT: BRK BLD COB PEB GRN SAN MUD VEG

PIT # PIT DEPTH OIL CHARACTER OIL INTVAL: FROM TO
QUANT: OIL CLR: FLM CLR: ZONE: SU UI MI LI
SUBSURF SEDIMENT: BRK BLD COB PEB GRN SAN MUD VEG

PIT # PIT DEPTH OIL CHARACTER OIL INTVAL: FROM TO
QUANT: OIL CLR: FLM CLR: ZONE: SU UI MI LI
SUBSURF SEDIMENT: BRK BLD COB PEB GRN SAN MUD VEG

PIT # PIT DEPTH OIL CHARACTER OIL INTVAL: FROM TO
QUANT: OIL CLR: FLM CLR: ZONE: SU UI MI LI
SUBSURF SEDIMENT: BRK BLD COB PEB GRN SAN MUD VEG

PIT # PIT DEPTH OIL CHARACTER OIL INTVAL: FROM TO
QUANT: OIL CLR: FLM CLR: ZONE: SU UI MI LI
SUBSURF SEDIMENT: BRK BLD COB PEB GRN SAN MUD VEG

PIT # PIT DEPTH OIL CHARACTER OIL INTVAL: FROM TO
QUANT: OIL CLR: FLM CLR: ZONE: SU UI MI LI
SUBSURF SEDIMENT: BRK BLD COB PEB GRN SAN MUD VEG

PIT # PIT DEPTH OIL CHARACTER OIL INTVAL: FROM TO
QUANT: OIL CLR: FLM CLR: ZONE: SU UI MI LI
SUBSURF SEDIMENT: BRK BLD COB PEB GRN SAN MUD VEG

PROBLEMS: No pits dug -

48/49

Extra
copies

ADFLG MULTI-ASSESSMENT DATA FORM

1 SURVEY TYPE: SS SS DS TS AVS SCMA MMS PTA

2 REGION: PWS KP, CI K, AP

METHOD: Aerial Ground Boat

1007 2304

3 DATE: 4/20/98

15 HIGH TIDE TIMES: 1007 2304

21 TEAM RECORDER: Tom Crowe

4 START TIME: 1800

16 HIGH TIDE HTS: 9.0' , 9.4'

22 OBSERVERS: ANADSCAT #15

5 STOP TIME: 1820

17 LOW TIDE TIMES: 0400 , 1634

23 AGENCY: REXAN/ROF+6

6 SEGMENT #: LA-23

18 LOW TIDE HTS: 4.5' , 1.6'

24 PHOTOS TAKEN: Y (A)

7 STATION #: N/A

19 TIDE HT AT SURVEY: 2.49'

Roll #: _____ Frames: _____

8 K-UNIT: N/A

Ebb Slack Flood Slack

25 VIDEO TAKEN: Y (N) TAPES: _____

9 STAT AREA: N/A

20 USCG QUAD: Saw A-3

Start: _____ End: _____

10 LAT: _____

11 LONG: _____

26 SAMPLES TAKEN: Y (N) Number

12 SOURCE: Map Loren

Oil _____

13 LOCATION: _____

Sediment _____

14 DESCRIPTION: _____

Biological _____

Water _____

EXTENT OF OIL

	SHORELINE				STREAM			
	L	N	H	S	L	N	H	S
27 SURFACE COVERAGE	100%	100%	100%	0	100%	100%	100%	0

36 CATALOGED ANAD. FISH BREAST (Y) N

37 CATALOG #: 226-40-16772

38 STREAM NAME: N/A

28 SURFACE THICKNESS: None

39 OIL IN STREAM BED? Y (N)

29 PENETRATION: None

40 OIL ON STREAM BANKS? Y (N)

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

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

31 OIL TYPE: Pealed Mousse Tar Asphalt Sticky Stain

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

32 OILED DEBRIS: (Y) N

Where: _____

33 SHORELINE TYPE: Headland Low-lying Rocks Beach Cove

43 ANADROMOUS FISH PRESENT? Y (N)

34 WAVE EXPOSURE: High Moderate Low

44 ANADROMOUS FISH OBSERVATION

35 SUBSTRATE TYPE: Bedrock Boulder Cobble

Gravel ✓ Sand ✓ Mud/silt

Species	Aerial	Ground

COMMENTS: Very light. Only sign of oil is stain on

logs where this stream cuts through storm berm.

NO TREATMENT RECOMMENDED

ACE 7379888

ASC # 226-40-16774

Segment LA-021

Observations A deposit of heavy oil penetrates the substrate immediately adjacent to the upper-mid intertidal portion of the stream. This area has a surface armor of large cobble overlying small gravels. A high tide berm may be advancing over this oil deposit. Tar from this deposit is exposed in the stream channel along the southwest bank and is leaking sheen into the stream. Tarry/moussy oil penetrates the sediment approximately 4 cm at the present stream bank. Oil penetration may be deeper further from the stream.

Treatment Recommendations The complete layer of oiled substrate within this deposit should be manually removed, bagged, and taken from the site for safe disposal. Four-wheelers should be used to facilitate removal of material from beach. Excavation should begin on the side of the patch most distant from the stream channel. Clean material from the adjacent berm should be backfilled into the excavated area soon after oiled material is removed. In no circumstances should clean material be deposited over any remaining oiled substrate. Immediately after removal of the oiled substrate adjacent to the stream, boulders from the opposite shore (see ADF&G Multi-Assessment Data Form diagram for general location) should be placed along the bank to prevent migration of the channel into the treated area. All activities must occur between 15 May and 15 July, 1990.

ASC # 226-40-16772

Segment LA-023

Observations Only lightly stained logs in storm berm.

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

OG William R USCG McMAHON SEGMENT ST/ LA 2 3
 BIO MICHAEL FAWCETT LAND REP TOM GROVE - ADEG STRIP M226-10-16772 (OF)
 EXXON Gus GARCIA ADEG MIKE WIDMER TIME 10
 TEAM NO. 15 TIDE LEVEL +2 FT DATE 20 / APR / 90
 EST. SUBDIVISION LENGTH: 50 m ☒ Sun ☐ Clouds ☐ Fog ☐ Rain ☐ Snow
 UPLANDS DESCRIPTION: ☒ Grass ☒ Forest ☐ Rock
 SURVEYED FROM: ☒ Foot ☐ Boat ☐ Helo
 SURFACE SEDIMENTS: R 0 % B 0 % C 75 % P 25 % G 0 % S 0 % M 0 % V 0
 SLOPE: Long 90 % Hang 10 % Vert 0 % WAVE EXPOSURE: ☒ Low ☐ Med ☐ High
 OIL CATEGORY LENGTH: W 0 m M 0 m N 0 m VL 0 m NO 50 m

SURFACE OIL

CHARACTER	DISTRIBUTION				OIL / FILM COLOR				IMPACTED ZONES			
	C	S	P	N	1	2	3	4	SW	M	NE	U
ASPHALT PAVEMENT												
POOLED												
COVER												
COAT												
STAIN												
MOUSSE												
PATTIES												
TARBALLS												
FILM												
NO OIL	None								X	X	X	X

PAVEMENT H F S 0 sq. m by 0PATTIES / TARBALLS 0 BAGNEAR SHORE SHEEN? ☒ NO BR RW SL TI

OILED DEBRIS	AMOUNT		
	SM	MD	LG
Logs			
Vegetation			
Trash			
Debris			

Did You COLLECT DEBRIS
☐ YES ☒ NO

TYPE _____

#BAGS _____

Photographs:

Roll No. _____

Frames _____

SUBSURFACE OIL NO PITS

PIT NO.	PIT DEPTH (cm)	SUBSURFACE OIL CHARACTER					OILED INTERVAL	BELOW		OIL / FILM COLOR				PIT ZONE				A N A	SHEEN (Y/N)	V	SURFACE SUBSURFACE SEDIMENT
		OP	OR	OL	OF	NO		NO	NO	1	2	3	4	SW	M	NE	U				

COMMENTS

REVIEWED JWDATE 4-25-90

46/49
OG WILLIAM REID

SEGMENT ST/ LA21

STREAM 226-10-16772

DATE 20 / APR 90

CHECKLIST

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

LEGEND

1 ▲

Pit - No Subsurface Oil

2 ▲

Pit - Subsurface Oil

CT/C

Continuous Distribution

CT/B

Open Distribution

CT/P

dry Distribution

CT/S

Splashed Distribution

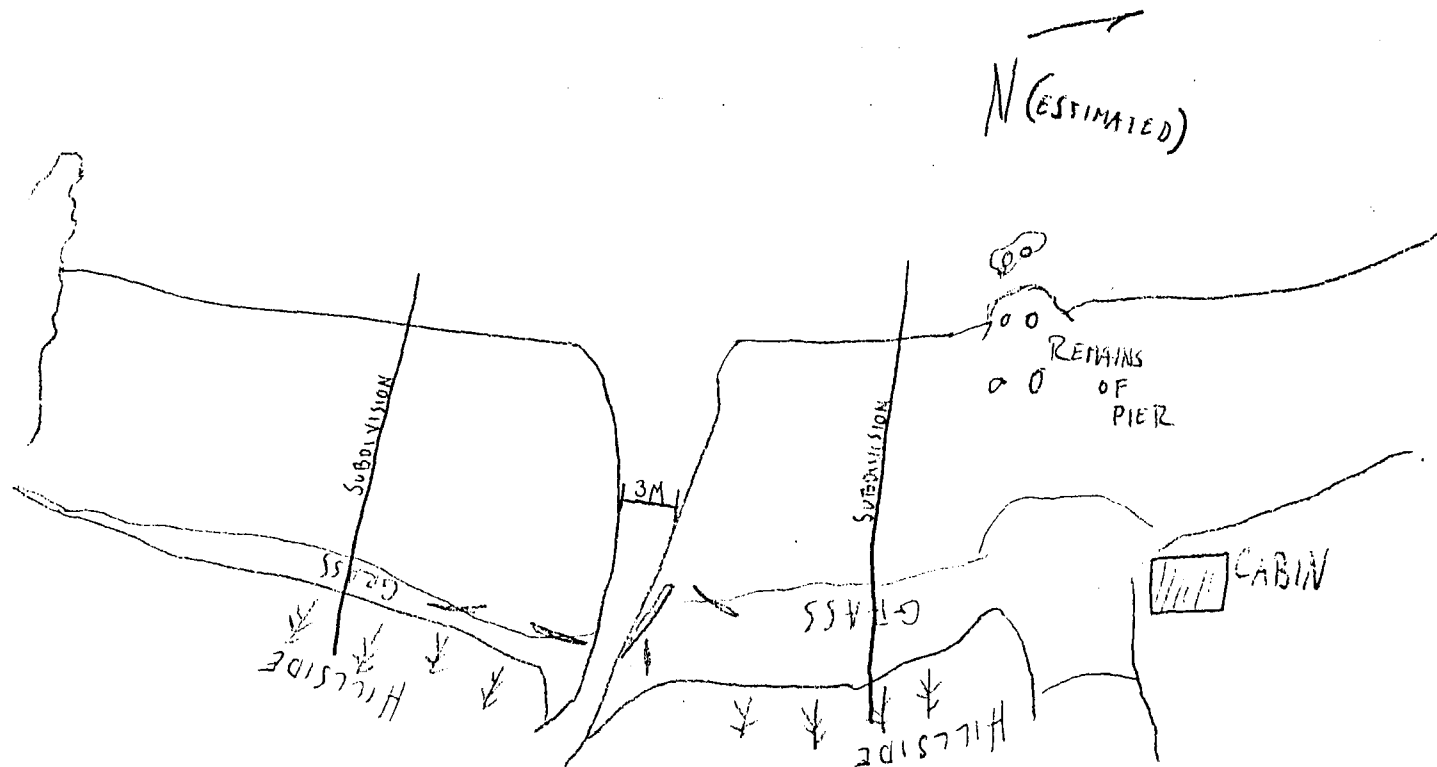
eee

Oiled Vegetation

1 ➡

Photo location, direction,
and number

SKETCH MAP



ACE 7379895

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

REVISION: 03/24/90

Ecologists' Summary
segment LA-21
Stream # 226-40-16722

4/20/90

Michael Fawcett

No oil was found at this site except
for a few light splatters on drift logs.
One mature eagle in tree. No cleanup
recommended.

M F Fawcett

ADROMOUS FISH STREAM EVALUATION

SEGMENT ST/ LA-23 A STREAM NO: 226-40-16772 DATE 4/20/90

SEGMENT ENVIRONMENTAL SENSITIVITIES AND TIME CONSTRAINTS:

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

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

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: _____

Subsurface Oil Observed: Yes _____ No X Maximum Depth _____

RECOMMENDATIONS:

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

COMMENTS: _____

TAG COMMENTS: _____

TAG APPROVAL DATE: _____

ADEC _____

EXXON _____

NOAA _____

USCG _____

FOSC: _____ DATE: _____

(version 5/02/89)

SHORELINE CLEANUP PROGRAM

DATE 6-18-89

SHORELINE SEGMENT LA-23

LOCATION: (see enclosed map) Latouche Island - Northwest End

ADEC NO. _____ SHORELINE ASSESSMENT DATE: 6-15-89

Recommended Cleanup Activity(ies):

- Manually remove contaminated drift material (fucus).
- Use manual techniques (including rakes and shovels) to remove surface oil outside buffer zones established by the archaeological monitor.

Priorities Considerations:

- Mechanical equipment limited to 6-wheel ATVs to remove bags of oiled debris.

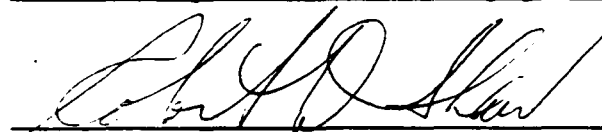
Class: 1 moderate to light oil/time sensitive

Class: A Subsistence resources present.

Ecological Constraints (from site survey):

Archeological Constraints (from site survey):

Archaeological monitor required prior to and during cleanup. Cleanup is to avoid historic archaeological material (to be flagged with an approximate 20 m buffer) in the intertidal zone, as per direction of onsite archaeological monitor. Monitor is to prepare a site map depicting location and nature of historic artifacts and features in the intertidal zone as per a Work Plan for Archaeological Monitoring jointly applicable to LA-23 and LA-24.



State Historic Preservation Officer *

Date: June 20, 1989

ISCC: _____

Date: _____

EXXON: _____

Date: _____

FOSC: _____

Date: _____

* Signature required to satisfy stipulations in Alaska DNR land use permits for tide and submerged lands .

SHORELINE OIL EVALUATIONDate: 6/15/89 Time: 08:06Observer: RICK GILLIESurveyed From: Foot/Boat/Helio/PlaneWeather: Sun/Cloud/Rain/Snow/FogLOCATIONLOCATION LATOCHE ISLAND SEGMENT NUMBER LA-23LENGTH OF SHORELINE SEGMENT: 450 mACCESS: Foot/Vehicle/Boat/Barge/Helio/Float PlaneSHORELINE:Shoreline Type: SPI/BEA/COV/HLD/STRTSlope: LANG/HANG/VERWave Exposure: High/Med/LowSediment: B 5 % / C 60 % / P 40 % / G 10 % / S % / M % / R 5 %Fucus
LOGSDrift Debris on Beach: Yes/No

Supra/Upper/Mid/Lower Type

OILDegree of Oiling: Heavy/Moderate/Light/No Oil/UnobservedArea of Beach Impact: SU / SP / H / M / LContinuous: Y/N % of Segment 80 Width of Band: 10 mSporadic: Y/N % of Segment Est. Oil Thickness where > 1cm: cm Est. Oil Penetration: 5-10 cmPooled Oil: % "Free" Oil: % Coated: H 20 % / M 60 % / L 20 %Fresh % Mousse % Tar Formation: 100 %Drift Debris Oiled? Yes/No Supra/Upper/Mid/Lower Amount: H/M/LComments:

- ① Oil band at mid to 3/4 tide (1/4 below high tide)
- ② Oiled Fucus debris

DOCUMENTATION:

Map/Aerial photo marking segment boundaries

LA-23 MAP

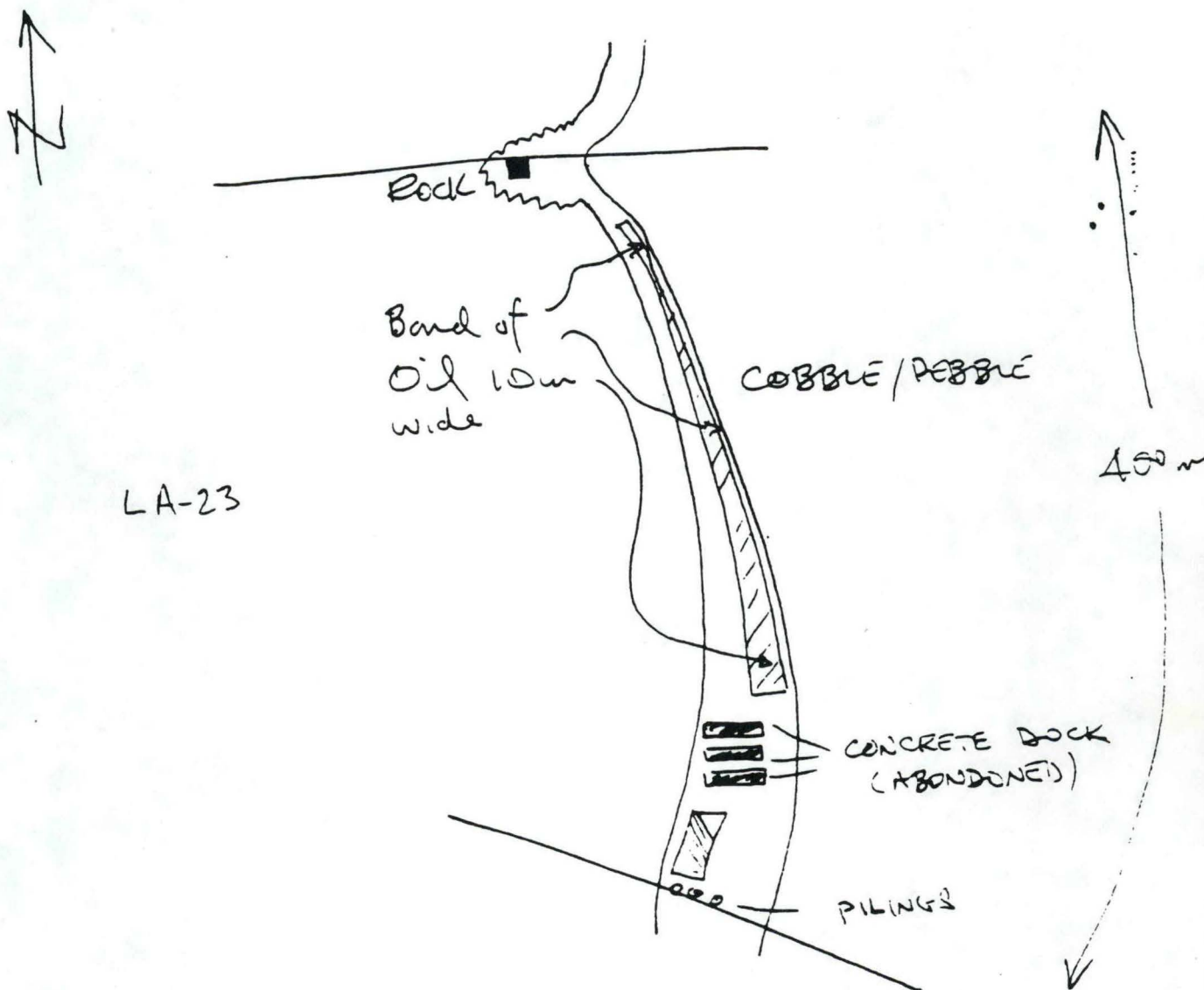
VTR: Y/N Tape Number(s) _____

Photography: Y/N Roll Number(s) _____

T4G-1

Sample Numbers Collected: _____

N/A



(version of 4/29/89)

CULTURAL RESOURCE EVALUATION

Date 6/15/89 Location Tatouche Island Site _____

Location Prefix LA Segment # LA-23 Length 450m

Survey Method:

Air _____ (A - indicate on map) Boat _____ (A - indicate on map)

Ground ✓ (G - indicate on map)

Known cultural resources (AHRS #) 026 Data Source ?

Oil conditions/beach visibility light & patchy

Width of beach zone surveyed 15 m Tree fringe surveyed 30m

Cultural resources observed in beach zone (AHRS code) 026 MNE, HTI

Cultural resources observed in tree fringe (AHRS code) 026 MNE, HTI

General observations justifying survey method and segment's site probability:

Shore Profile moderately sloped beach & uplands

Fresh Water Sources none

Sea Exposure exposed to west

Access/Safety good

Probability of undiscovered sites in beach zone (circle one) 1 2 3 4 5

Monitoring during cleanup needed yes/no Collection yes/no

Photos: Color Roll # _____ Frames _____

B/W Roll # T4-A-1 Frames 2, 7

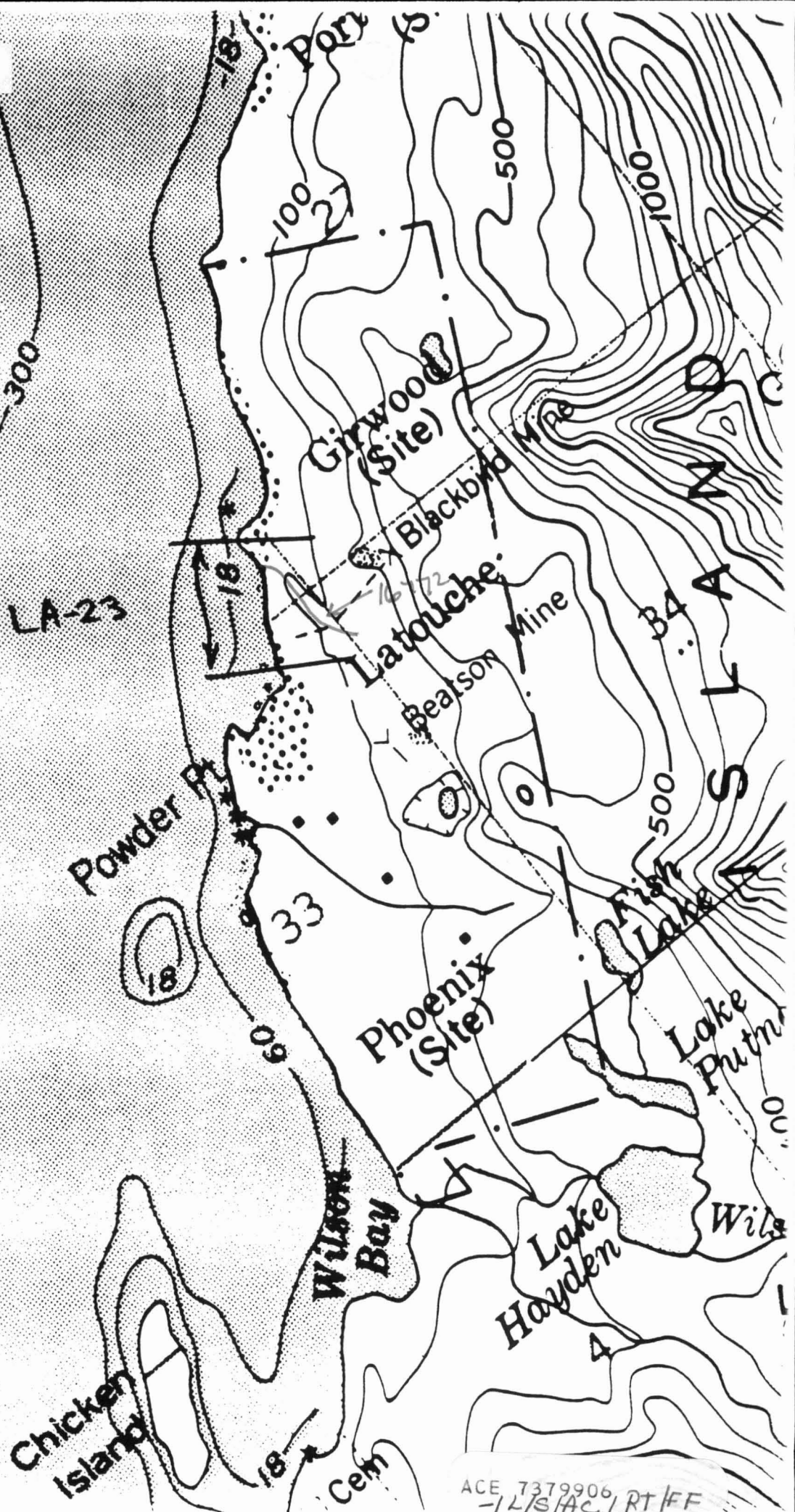
Observer(s) C. Wilson

Time survey started 0730 Time survey ended 0800
0845

Cultural resource considerations/restraints:

Cleanup activity in the segment will impact historic resources even if monitoring occurs. If possible, a representative sample of ceramic shards and other objects should be made prior to cleanup. Monitoring is essential.

PASSAGE



STREAM#: 2264016772

SEGMENT#: LA023 A

LOCATION: LATOUCHE ISLAND, NORTH OF POWDER POINT

STREAM NAME:

PURPOSE: LOOK AT AREA FOR REASSESSMENT

DATE	OBSERVER OTHER REPS	WORK ORDER DATE	DEMOBIL. DATE	SURFACE OIL SUBSURFACE OIL	TREATMENTS	AMOUNT REMOVED	REMAINING OIL
06/13/91	TOM CROWE EXX WHOOLY NAUMAN, USCG SHULTZ	05/30/91				N/A	WE WALKED TO THE AREA INDICATED ON THE OG MAP WHERE OILING WAS SHOWN TO OCCUR. AFTER DIGGING NUMEROUS PITS WE FAILED TO LOCATE ANY BURIED OIL. WE DID SEE SOME VERY SMALL AMOUNTS OF OIL OCCURRING IN INTERSTICES OF UPTURNED SHALE ROCK.

COMMENTS:

STREAM#: BEACH03

SEGMENT#: LA024 A

LOCATION: LATOUCHE ISLAND, COPPER MINE SITE

STREAM NAME: NO STREAM

PURPOSE: CARRY OUT FOSC WORK ORDER

DATE	OBSERVER OTHER REPS	WORK ORDER DATE	DEMOBIL. DATE	SURFACE OIL SUBSURFACE OIL	TREATMENTS	AMOUNT REMOVED	REMAINING OIL
06/13/91	CROWE FOR ADEC EXX NAUMAN BELLINGHAM HARRELSON, USCG SCHULTZ	06/07/91	06/13/91	TB	MANUAL REMOVAL	2 GEO BAGS	THERE WAS VERY LARGE AMOUNT OF TARBALLS COVERING A LARGE AREA MOSTLY OCCURRING AT TIDE LINES ON THE BEACH. THIS CREW SPENT 2 HOURS ON HUNT AND RETRIEVAL. THERE WERE SO MANY TARBALLS THAT IT IS POSSIBLE THAT WE MISSED SOME.

COMMENTS:

ADF&G OIL SPILL RESPONSE MONITORING

ASC# 22640 16772

Date: 6/13/91

Stream Name: _____

Observer: Tom Crowe

Segment-Sub Unit LAZSA

Location: N. NEAR FUEL SITE

Anad. Stream Permit Issued? Y ☒ N

Date: _____

Work Order Issued: ☒ Y N

Date: 5/30/91 (WT) REASSESS

Demob Date: REASSESSMENT

Oil Characteristics (circle appropriate ones)

Surface: AP, MS, TB, SOR, CV, CT, ST, FL, DB, None
Subsurface: OP, HOR, MOR, LOR, OF, TR, None

Treatment Techniques:

Manual Removal
Manual Raking
Spot Wash
Other REASSESSMENT

Bioremediation & Type
Mechanical Tilling
Header Flood (Hot/Cold)

Crew Size: 6

Lbs. or Bags of Oil/Sediment Removed N/A

Other Agency Reps, and Names: EXXON: CHRIS WHOLLY, Scott Nauman
SHULTZ (USCG)

Photos

Y ☒ N

Roll #

Frames

Video

Tape #

Start

End

N/A

Sediment/Oil Samples (Y ☒ N)

Collection Number

Purpose of Trip * LOOK AT AREA FOR REASSESSMENT

* Form designed primarily for cleanup inspection trips, but should be used for any field trips, i.e., to check on bird rookeries, seal haulouts, special habitat areas, etc.

Describe extent of remaining oil (any comments on expected completion of cleanup).

WE WALKED TO THE AREA INDICATED ON THE OG MAP WHERE OILING WAS SHOWN TO OCCUR. AFTER DIGGING NUMEROUS PITS WE FAILED TO LOCATE ANY BURIED OIL. WE DID SEE SOME VERY SMALL AMOUNTS OF OIL OCCURRING IN INTERSTICES OF UPTURNED SHALE ROCK.

Comments: (Are work order procedures being followed?, etc.)

A:OPRESP
April 2, 1991

ADF&G OIL SPILL RESPONSE MONITORING

ASC# 22640 16772

Date: 6/13/91

Stream Name: _____

Observer: Tom Crowe

Segment-Sub Unit LAZSA

Location: N. NEAR FUEL SITE

Anad. Stream Permit Issued? Y (N)

Date: _____

Work Order Issued: (Y) N

Date: 5/30/91 (WT) REASSESS

Demob Date: REASSESSMENT

Oil Characteristics (circle appropriate ones)

Surface: AP, MS, TB, SOR, CV, CT, ST, FL, DB, None
 Subsurface: OP, HOR, MOR, LOR, OF, TR, None

Treatment Techniques:

Manual Removal
 Manual Raking
 Spot Wash
 Other ✓ REASSESSMENT

Bioremediation & Type
 Mechanical Tilling
 Header Flood (Hot/Cold)

Crew Size: 6

Lbs. or Bags of Oil/Sediment Removed N/A

Other Agency Reps, and Names: EXXON: CHRIS WHOOLEY, Scott NAUMAN
SHULTZ (USCG)

Photos

Y (N)

Roll #

Frames

Video

Tape #

Start

End

N/A

Sediment/Oil Samples (Y (N))

Collection Number

Purpose of Trip * LOOK AT AREA FOR REASSESSMENT

* Form designed primarily for cleanup inspection trips, but should be used for any field trips, i.e., to check on bird rookeries, seal haulouts, special habitat areas, etc.

Describe extent of remaining oil (any comments on expected completion of cleanup).

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Comments: (Are work order procedures being followed?, etc.)

A:OPRESP
April 2, 1991

MAYSAP FIELD SHORELINE COMMENT SHEET

TEAM NO. 5 SEGMENT LA-23 SUBDIVISION A DATE 5/17/91

226-40-16772

ADEC

NAME John Hayes SIGNATURE [Signature]

☐ NTR ☒ TREATMENT RECOMMENDED

Our team observed one patch of isolated H/O R.S.S. oiling which is recommended for ^(exposure) raking + removal in area A. The rest of the oiling on this segment was light + no further treatment is recommended.

EXXON

NAME John Dean SIGNATURE [Signature]

☒ NTR OIL PRESENT APPEARS TO BE DEGRADING WELL. AMOUNT IS REALLY INSIGNIFICANT.

LANDMANAGER

NAME Private OF CVC SIGNATURE [Signature]

☐ NTR See Og + ADEC Comments + Notes

USCG/NOAA

NAME DREHER/CLINE SIGNATURE [Signature]

☒ NTR No sheening observed until agitation by shovel pick. H/O R.S.S. in pits 1 & 2 will not harden, mobilize and should be left to natural degradation.

Subsurface oiling near Site A could be manually exposed with little effort, as surface consists of pebbles and granules. No other oiling warranting further treatment was located. Due



1991 STATE WORK ORDER
EXXON VALDEZ OIL SPILL PROJECT
STATE OF ALASKA

PRINCE WILLIAM SOUND

maysap-N

2264016772

SEGMENT: LA023 SUBDIVISION: A SITE:
anadromous fish stream, shore fishery or leased economic
site, subsistence use area

RECOMMENDED TREATMENT:

In area A:

- Manually till to the depth of the oil the area around
pit 1 (HOR sediments).

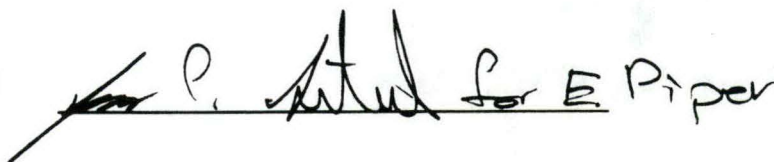
ENVIRONMENTAL SENSITIVITIES:
anadromous fish stream

WORK WINDOW: 05/29/91 - 07/10/91

CLEANUP PLAN AND COST ESTIMATE DUE:

DATE SUBMITTED: 05/29/91

STATE ON SCENE COORDINATOR:

 E. Piper

2-45-16772

ENVIRONMENTAL SENSITIVITIES:

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

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

RECOMMENDATIONS:

TAG

TREATMENT REQUIRED (Y or N)

N

N

✓

Spot Washing

Bio-Customblen Only

Bio-Inipol/Custombien

Other MANUAL PU TO OAPDX

Other *OK* *DIC*

INITIAL:

TAG:

FOSC: "HOT" IN AREA "A" IS EASILY ACCESSIBLE / TREATABLE.
OIL EVIDENTLY CAUSING OILSLEDS TO DEVELOP IN TIDE
POOLS. LOGISTICS ARE EASY IN LIGHT OF OTHER C/U OPS,
GOING ON IN THE AREA. MAINTAIN / RECOVER HOT IN AREA A.

TAG APPROVAL DATE: MAY 29 1991

FOSC APPROVAL DATE: 6/11/91

ADEC

FOSC

EXXON

USCG

NOAA

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

→ The state ^{CHIEF OF STAFF} ~~will~~ ^{FOSS} be used for further treatment

Ecological/Constraints

Page 2

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

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

1991 MAYSAP EVALUATION

SEGMENT: LA 023 SUB: A REGION: PWS SUR

ENVIRONMENTAL SENSITIVITIES:

Work Window(s) RESTRICTED 7/10 - 9/15

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

ARCHAEOLOGICAL CONSTRAINTS:

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

SHPO Signature: _____ Date: _____

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

COMMENTS:

INITIAL: fill in area of pit 1

TAG: NTP - state to reevaluate

FOSC: _____

TAG APPROVAL DATE: _____ FOSC APPROVAL DATE: _____

ADEC _____ FOSC _____

EXXON _____

USCG _____

NOAA _____

w/ anad stream
ASC 4 226-4016772

1991 MAYSAP EVALUATION

SEGMENT: LA 023 SUB: A REGION: PWS SURVEY DATE: 5/17/91

ENVIRONMENTAL SENSITIVITIES:

Work Window(s) RESTRICTED 7/10 - 9/15

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

ARCHAEOLOGICAL CONSTRAINTS:

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

SHPO Signature: _____ Date: _____

RECOMMENDATIONS:

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

COMMENTS:

INITIAL: fill in area of pit 1

TAG: NR - state to reevaluate

FOSC: _____

TAG APPROVAL DATE: _____ FOSC APPROVAL DATE: _____

ADEC _____ FOSC _____

EXXON _____

USCG _____

NOAA _____

5

PAGE 1 OF 1

DATE MAY, 17 1917

ENERGY LEVEL: ☐ H ☒ M ☐ L

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

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

EST. OIL CATEGORY LENGTH: W 1 m M 1 m N 1 m VL 20 m NO 345 m US 0 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-

5 - 19 FRAMES 1.2

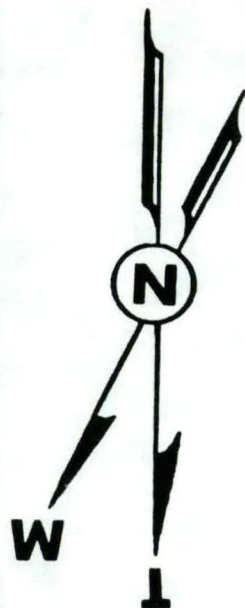
SHEEN COLOR: B = BROWN: R = RAINBOW: S = SILVER: N = NONE

OG COMMENTS: PIT ① HOR CONFINED BEHIND BEDROCK OUTCROP AT HITZ DIRECTLY ABOVE CEMENT BLOCK ON BEACH (SEVERAL PITS USED TO DEFINE EXTENT). AREA ① ON VERTICALLY BEDDED SHALE ABOVE CEMENT BLOCK AT NORTH END OF SEGMENT. VERY HARD AP AT SOUTH END OF SEGMENT APPEARS TO BE FROM AN OLD ROAD BED ERODING INTO THE LITTORAL ZONE.

Reviewed 5.20 9y
5/20/91 F.W.

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

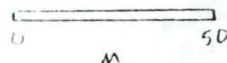
SEGMENT: LA-23 A
DATE: MAY 17 1991
AIR P.#: PIM-C 005-54



LEGEND

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

SCALE



WARNING
SOUTH AT
TOP OF MAP

+20cm THICK
PRE SPILL
AP. POSSIBLY
OLD ROAD
BED ERODING
ON TO BEACH.

CONCRETE
WHARF
BUTTRESS

SCATTERED CHUNKS
OF VERY HARD AP
ON BEACH FROM
ERODING ROAD.

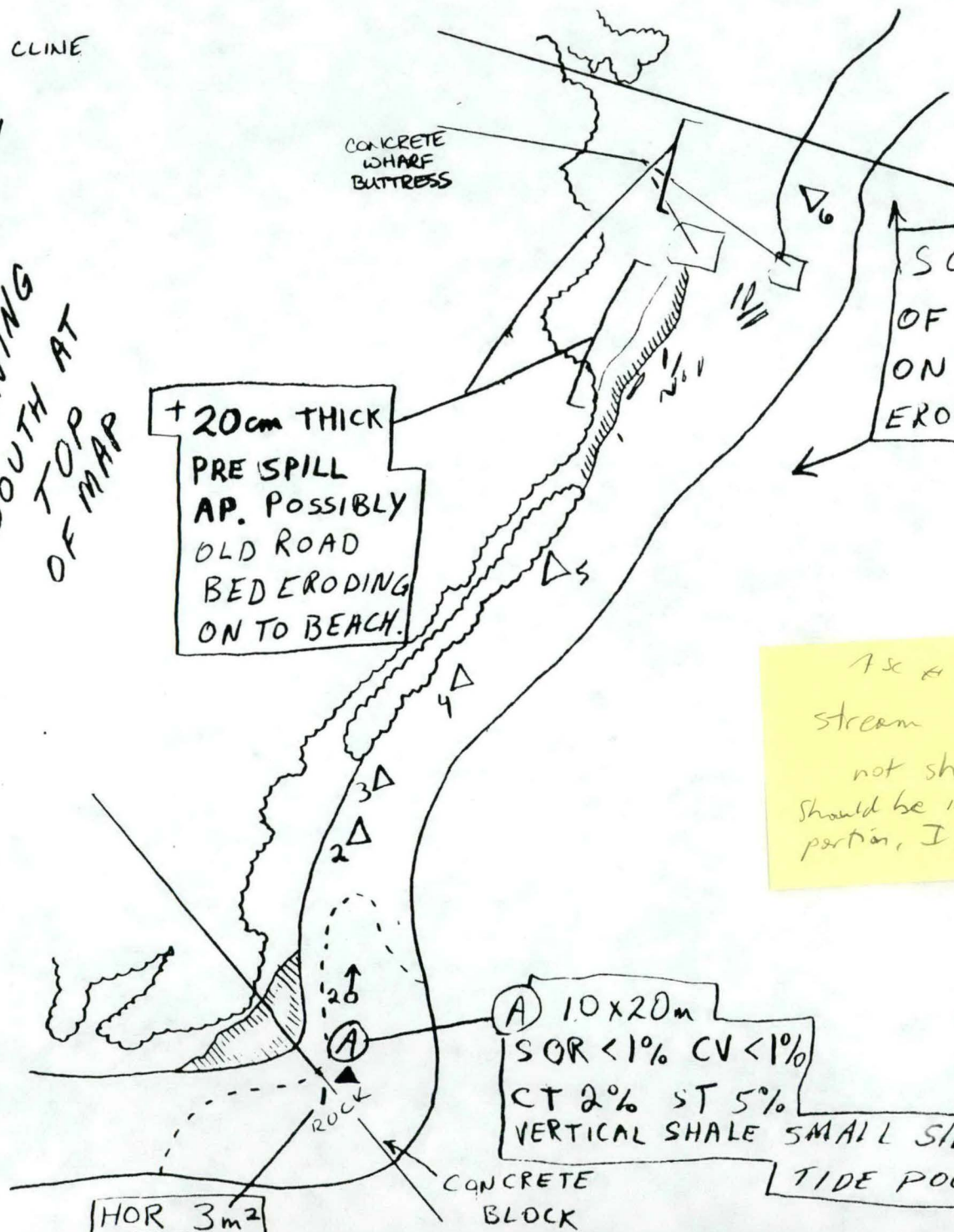
75' H 226-40-
stream 16722
not shown.
should be in southern
portion, I think

A 10x20m
SOR <1% CV <1%
CT 2% ST 5%
VERTICAL SHALE SMALL SILVER SHEEN IN

TIDE POOLS

CONCRETE
BLOCK

HOR 3m²



MAYSAP BIOLOGICAL SUMMARY FORM

pg 1 of 1

TEAM # 5

DATE 17 May 1991

SEGMENT # LA-23

TIDAL HEIGHT(Range) +5.5 \Rightarrow +4.5

SUBDIVISION A

BIOLOGIST Crank

SEA STATE 1

WIND SPEED/DIRECTION 5 knots/NW

PHOTOGRAPHS: ROLL #

FRAME #

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

Area(A) is located high in the ULTZ. Moss and black and yellow lichen cover less than one percent of the surface sediments.

The INT2 is a low bedrock outcrop with a dense Fucus bed. Barnacles are sparse to moderately concentrated; a recent spat settlement is present.

Corals are sparsely concentrated in Fucus plants and in patches of moderate density in the pools. Rare Nucella (dog whelms) are present.

Tidepools have filamentous green algae, coralline algae, Odonthalia (algae) and Syngnathus (fish). Biota cover is >80%.

Most of this subdivision is a low angle, cobble beach with low biota cover. Access to the outcrop below area A should be restricted to avoid disturbance to the healthy, lush biota.

The lower intertidal zone was not exposed during survey.

WILDLIFE OBSERVATIONS

TO BE COMPLETED IN ALL SUBDIVISIONS

BIRDS	# OF SPECIES	TOTAL BIRDS	FISH OBSERVED SPECIES PRESENT
Eagles			Tidepool sculpins
Seabirds	1	4	
Waterfowl			
Gulls/Kittiwakes			
Shorebirds	2	3	
Corvids			
Other Birds			

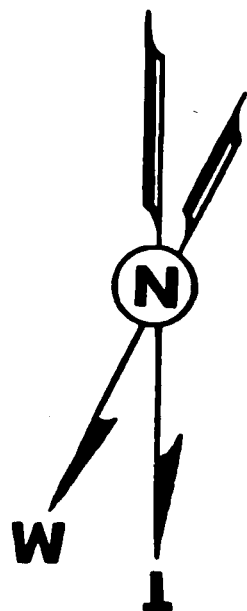
LAND MAMMALS

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

Shoreline subdivision map showing important biological features attached. F.W. 5/20/91
Reviewed M.B. 5/20/91

MAYSAP 1991
 OG SKETCH MAP 1510
 GREG CHANEY / DON CLINE / CRUICK
 TEAM 5

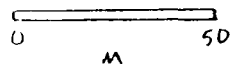
SEGMENT: LA-23A
 DATE: MAY 17 1991
 AIR P.N.: PIM-C 005-54



LEGEND

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

SCALE



WARNING
 SOUTH AT
 TOP OF MAP

+20cm THICK
 PRE SPILL
 AP. POSSIBLY
 OLD ROAD
 BED ERODING
 ON TO BEACH.

CONCRETE
 WHARF
 BUTTRESS

SCATTERED CHUNKS
 OF VERY HARD AP
 ON BEACH FROM
 ERODING ROAD.

Round coral cover
 1% to 10% in
 the LITZ & MIZ

Rock outcrop has dense
 Fucus bed. Bista cover
 1780%. Avoid trampling
 the bista on the rock.
 East corner neither side

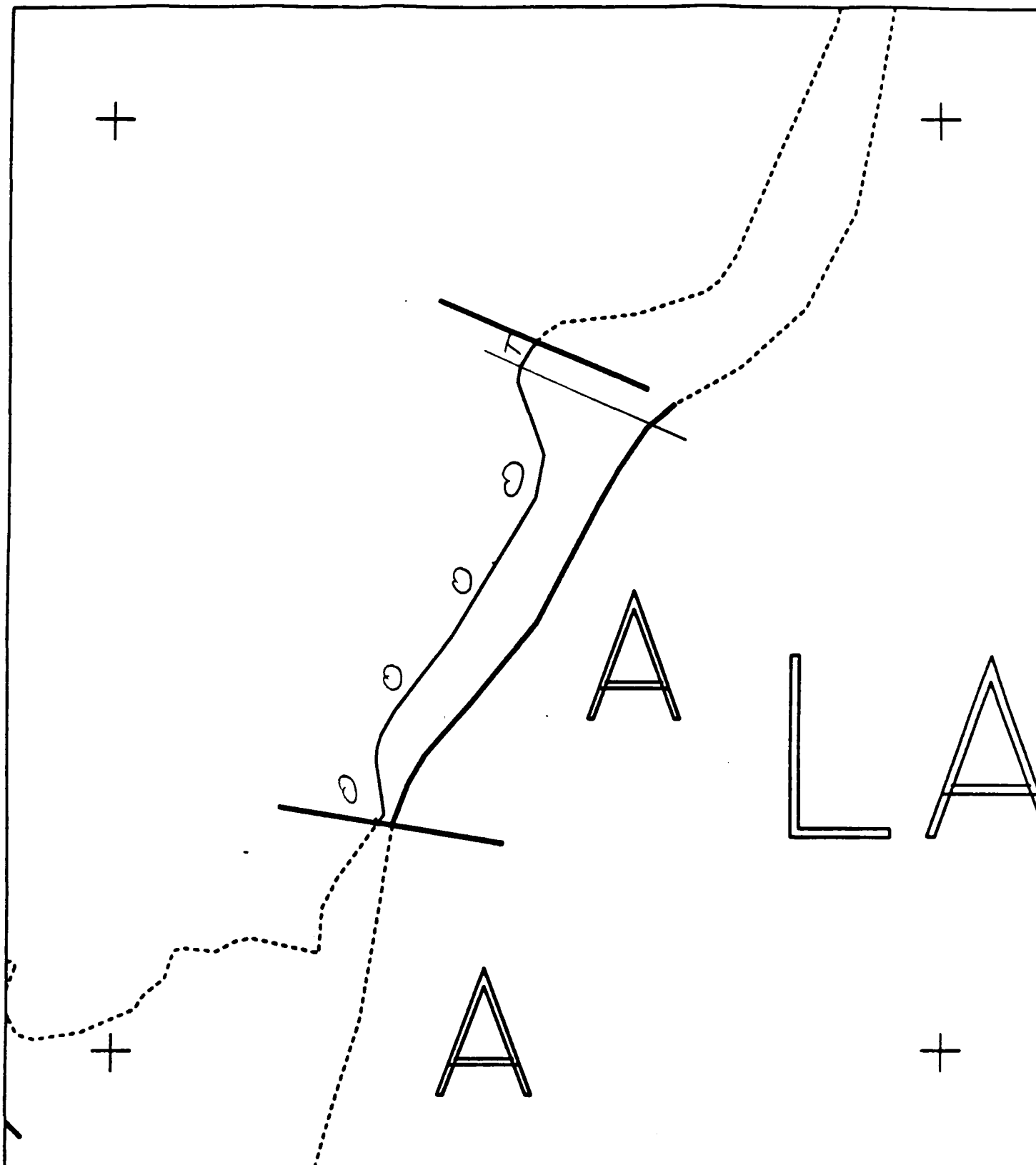
A 10x20m
 SOR <1% CV <1%
 CT 2% ST 5%
 VERTICAL SHALE SMALL SILVER SHEEN IN

TIDE POOLS

CONCRETE
 BLOCK

HOR 3m2

Reviews M/S 5/20/91
 F.W. 5/20/91

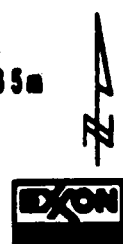


XXXX Wide
 //// Medium
 ---- Narrow
 TTTT Very Light
 0000 No Oil

LA023 A

ADEC Subsegment Length: 385m
 METERS

5 100 200
 AK State Plane Zone 4
 pl023a



Subdivision Field Map
 Map Key: PWSLA023A
 Name: CHANEY
 Date: MAY 17 1991
 Date Entered:

reviewed S.209 J
 5/20/91 F.W.D