

KN201 A ASC: 226-30-16872
KNIGHT ISLAND, WEST ARM

ACE 1369626

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 (Agass)
____ '90 ASAP Survey ____ ASAP Rec. ____ ADEC Rec ()
____ '90 Other Documents _____

ACE 7378857
+1/5/14/FF/-/S



KN201

08/18/89





OFFICIAL PHOTOGRAPH

ADEC

OFFICIAL PHOTOGRAPH ADF&G EXXON VALDEZ OIL SPILL

OFFICE: VALDEZ

DATE: 08/18/89

TIME: -0-

SEGMENT#: KN201

STATION#: 2263016870

LOCATION: WEST ARM, BAY-OF-ISLES, KNIGHT ISLAND

REASON FOR TAKING PHOTO: STREAM SEDIMENT SAMPLE SITE - LOWER
INTERTIDAL. BIG ENTRANCE BOULDERS IN BACKGROUND. (MAP
41)

TAKEN BY: RICK GUSTIN

INITIALS: _____

ROLL #: 89RLG004V FRAME #: 01

EVIDENCE ID#: 10251

Roll #: _____ Frame #: _____

ACE 7378795



OFFICIAL PHOTOGRAPH

ADEC

OFFICIAL PHOTOGRAPH ADF&G EXXON VALDEZ OIL SPILL

OFFICE: VALDEZ

DATE: 08/18/89

TIME: -0-

SEGMENT#: KN201

STATION#: 2263016870

LOCATION: WEST ARM, BAY-OF-ISLES, KNIGHT ISLAND

REASON FOR TAKING PHOTO: STREAM SEDIMENT SAMPLE SITE. GENERAL PHOTO
OF STREAM MOUTH - LOWER INTERTIDAL. PHOTO TAKEN LOOKING
TOWARD ENTRANCE BOULDERS. (MAP 41)

TAKEN BY: RICK GUSTIN

INITIALS: _____

ROLL #: 89RLG004V FRAME #: 02

EVIDENCE ID#: 10251

Roll #: _____ Frame #: _____

ACE 7378796



OFFICIAL PHOTOGRAPH

ADEC

OFFICIAL PHOTOGRAPH ADF&G EXXON VALDEZ OIL SPILL

OFFICE: VALDEZ

DATE: 08/18/89

TIME: -0-

SEGMENT#: KN201

STATION#: 2263016870

LOCATION: WEST ARM, BAY-OF-ISLES, KNIGHT ISLAND

REASON FOR TAKING PHOTO: MIDDLE INTERTIDAL SEDIMENT SAMPLING SITE.
TAKEN FROM RIGHT BANK FACING DOWNSTREAM. (MAP 41)

TAKEN BY: RICK GUSTIN

INITIALS: _____

ROLL #: 89RLG004V FRAME #: 03

EVIDENCE ID#: 10251

Roll #: _____ Frame #: _____

ACE 7378797



OFFICIAL PHOTOGRAPH

OFFICIAL PHOTOGRAPH ADF&G EXXON VALDEZ OIL SPILL

OFFICE: VALDEZ DATE: 08/18/89 TIME: -0-

SEGMENT#: KN201 STATION#: 2263016870
LOCATION: WEST ARM, BAY-OF-ISLES, KNIGHT ISLAND

REASON FOR TAKING PHOTO:UPPER INTERTIDAL SEDIMENT SAMPLE SITE. 20 METERS UP FROM MIDDLE INTERTIDAL. TAKEN FROM RIGHT BANK FACING DOWNSTREAM.

TAKEN BY: RICK GUSTIN INITIALS: _____

ROLL #: 89RLG004V FRAME #: 04 EVIDENCE ID#: 10251

Roll #: _____ Frame #: _____

ACE 7378798

OFFICIAL PHOTOGRAPH

ROLL #: _____
Frame #: _____

OFFICIAL PHOTOGRAPH ADF&G EXXON VALDEZ OIL SPILL

OFFICE: VALDEZ DATE: 08/18/89 TIME: -0-

SEGMENT#: KN201 STATION#: 2263016870
LOCATION: WEST ARM, BAY-OF-ISLES, KNIGHT ISLAND

REASON FOR TAKING PHOTO: PHOTO OF UPPER TO LOWER INTERTIDAL SAMPLING AREA.

TAKEN BY: RICK GUSTIN INITIALS: _____

ROLL #: 89RLG004V FRAME #: 05 EVIDENCE ID#: 10251

ADEC

ACE 7378799





Roll #: _____ Frame #: _____

OFFICIAL PHOTOGRAPH ADF&G EXXON VALDEZ OIL SPILL

OFFICE: VALDEZ DATE: 08/18/89 TIME: -0-

SEGMENT#: KN201 STATION#: 2263016870
LOCATION: WEST ARM, BAY-OF-ISLES, KNIGHT ISLAND

REASON FOR TAKING PHOTO: OIL SAMPLE SEDIMENT SITE WITHIN ONE MILE
OF CATALOGUED ANADROMOUS FISH STREAM. 60 METERS RIGHT
OF LOWER INTERTIDAL SITE.

TAKEN BY: RICK GUSTIN

INITIALS: _____

ROLL #: 89RLG004V FRAME #: 06

EVIDENCE ID#: 10251

ADEC

OFFICIAL PHOTOGRAPH

ACE 7378800



OFFICIAL PHOTOGRAPH

ADEC

OFFICIAL PHOTOGRAPH ADF&G EXXON VALDEZ OIL SPILL

OFFICE: VALDEZ

DATE: 08/18/89

TIME: -0-

SEGMENT#: KN201

STATION#: 2263016870

LOCATION: WEST ARM, BAY-OF-ISLES, KNIGHT ISLAND

REASON FOR TAKING PHOTO: DUPLICATE PHOTO OF OIL SEDIMENT SAMPLE
SITE. SITE AS YOU FACE DOWNSTREAM.

TAKEN BY: RICK GUSTIN

INITIALS: _____

ROLL #: 89RLG004V FRAME #: 07

EVIDENCE ID#: 10251

Roll #: _____ Frame #: _____

ACE 7378801



Roll # _____
Frame # _____

OFFICIAL PHOTOGRAPH ADF&G EXXON VALDEZ OIL SPILL

OFFICE: VALDEZ

DATE: 08/22/89

TIME: -0-

SEGMENT#: KN201

STATION#: 2263016870

LOCATION: WEST ARM, BAY-OF-ISLES, KNIGHT ISLAND

REASON FOR TAKING PHOTO: AERIAL VIEW - LOCATION OF STREAM SEDIMENT
SAMPLE SITE. (MAP 41)

TAKEN BY: RICK GUSTIN

INITIALS: _____

ROLL #: 89RLG004V FRAME #: 14

EVIDENCE ID#: 10251

ADEC

OFFICIAL PHOTOGRAPH

ACE 7378802

ADF&G MULTI-ASSESSMENT DATA FORM

1 SURVEY TYPE: BS SS DS TS AVS SCHM MMS PTA2 REGION: PWS KP, CI K, APMETHOD: Aerial Ground Boat3 DATE: 4-22-9015 HIGH TIDE TIMES: 121 TEAM RECORDER: R. Gustin4 START TIME: 181516 HIGH TIDE HTS: 122 OBSERVERS: A. Weseman5 STOP TIME: 185517 LOW TIDE TIMES: 123 AGENCY: ADFG6 SECTANT #: KN20118 LOW TIDE HTS: 124 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#: 90AWO1555

9 STAT AREA:

20 USCG QUAD:

Start: 0446 End: 0481

10 LAT:

11 LONG:

26 SAMPLES TAKEN? Y (N) Number12 SOURCE: Map Loran

Oil

13 LOCATION: Knight Is.

Sediment

14 DESCRIPTION: West Arm

Biological

Water

EXTENT OF OIL

	SHORELINE				STREAM			
	L	W	M ²	%	L	W	M ²	%
27 SURFACE COVERAGE								
28 SURFACE THICKNESS	3cm							
29 PENETRATION	3-4cm							
30 OVERALL OIL IMPACT:	N	VL	L	M	H			

36 CATALOGED ANAD. FISH SREAM? (Y) N37 CATALOG #: 226-30-16872

38 STREAM NAME:

39 OIL IN STREAM BED? Y (N)40 OIL ON STREAM BANKS? (Y) N41 OIL ON BEACH ADJACENT TO MOUTH? (Y) N
(within 50 meters)42 OIL WITHIN 1 MILE OF STREAM? (Y) N

Where:

31 OIL TYPE: Pooled Mousse Tar Asphalt Sticky Stain32 OILED DEBRIS? Y (N)33 SHORELINE TYPE: Headland Low-lying Rocks Beach Cove
Lagoon Marsh

43 ANADROMOUS FISH PRESENT? Y N

34 WAVE EXPOSURE: High Moderate Low44 ANADROMOUS FISH OBSERVATION
Species Aerial Ground35 SUBSTRATE TYPE: Bedrock Boulder 15% Cobble 20%
Gravel 65% Sand Mud/silt

COMMENTS: Primary area of oiling in upper intertidal on both
sides of stream E.W. thin broken random tar mats 2-4cm thick.
No apparent oil in stream. Lower intertidal
Small scattered mousse patty's right down to Low tide (0.3)
10 m² mousse patty's.

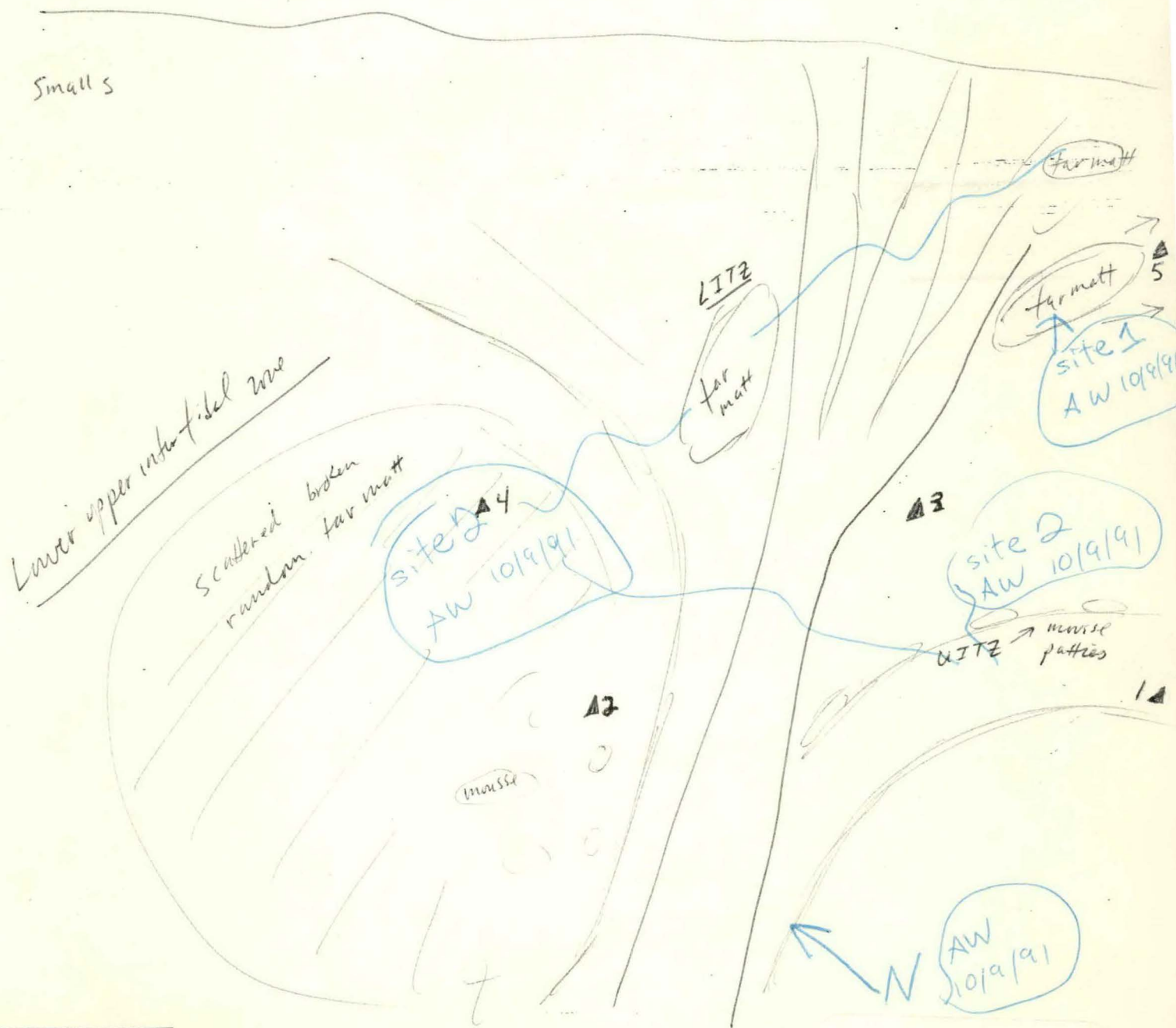
ACE 7378874 +15

226-30-16872

DESCRIPTION

Pit #1	8 cm deep	3 cm patty of oiled mussels
Pit #2	9 cm deep	no visible oil
Pit #3	16 cm deep	no visible oil
Pit #4	14 cm deep	1 cm oil depth from top - in patty
Pit #5	10 cm deep	1-2 cm depth patty

46 OIL DISTRIBUTION DIAGRAM



ACE 7378875

Recommendations

Perform work at a minimum of (0.7 tide)
Remove scattered broken far matts which cover areas
ranging from upper intertidal to lower intertidal
on both east & west sides of creek.

There are a few scattered patties west of the
creek near a smaller creek - these should be
manually removed.

The flat on the ~~west~~^{east} side of the creek - in
the upper intertidal zone has scattered bands
of matts needing removal.

Perform a survey of the entire ITZ
prior to work to get a feel for the
distribution of matts.

Remove any oiled debris found.

No bioremediation recommended.

Comments by Ken Critchlow:

Agree to suggested cleanup approach by ADFG.

KRC

OPERATIONS FIELD NOTES

See Back for Instructions

SEGMENT ID ANAD KH-201
 STREAM ID # 226-30-16872
 ANNOTATED MAP INCLUDED QIN

DATE 4-22-90
 NAME DARRYL JOE
 TEAM # 14

SURFACE OIL	Quantities in Meters			Treatment Recommendation						
				None	Bioremediation		Tilling		Spot Hot Water	
	Length	Width	Area		Y/N	% Treat	Y/N	% Treat	Y/N	% Treat
Wide Band	SEE BELOW									
Medium Band										
Narrow Band										
Very Light										
TOTAL MANDAYS										

SUBSURFACE OIL

Other (Describe)?	<u>NO SUBSURFACE OIL FOUND</u>

TARMATS	Quantities in Meters			Treatment Rec			# of Bags	Mandays Required	
	Length	Width	Thick(cm)	None	Breakup	Remove		Breakup	Remove
Area #1	<u>5</u>	<u>1</u>	<u>1</u>			☒	<u>2</u>	<u>—</u>	<u>1</u>
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	☒			<u>10</u>	<u>10</u>	<u>100</u>	<u>Y</u>	<u>5</u>
* Pocket #2								
* Pocket #3								
Random/Continuous								

OILED LOGS <u>YIN</u>	OILING <u>H/M/L</u>	QUANTITY <u>L/M/S</u>	BURN <u>YIN</u>
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Is there Other Debris on the Beach? QIN How Many Bags? 100 Is it mingled with the Oiled Debris YIN
2 -> UNOILED FOCUS

GENERAL Snow covering 0 % of the Supratidal Zone?

Wave Exposure H/M/L Access Limitations: GOOD ACCESS

Snare Boom/Pom Poms Recommended? NO

Would the production Craft have to be relocated to complete work on this subdivision? QIN, # of Times 1

COMMENTS:

ALL WORK SHOULD BE PLANNED FOR PERIOD 5-15 -> 7-10
NOTIFY ADF & E BEFORE STARTING WORK

ANADROMOUS FISH STREAM EVALUATION

SEGMENT ST/ KN-201 A STREAM NO: 226-30-16872 DATE 4/22/90

SEGMENT ENVIRONMENTAL SENSITIVITIES AND TIME CONSTRAINTS:

Three anadromous streams in KN-201: 226-30-16872, 226-30-16869, 226-30-16870.

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

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

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

See attached Ecological Constraint sheet for specific constraints and contacts.

SUBDIVISION ECOLOGICAL CONSTRAINTS:

Avoid any unnecessary disturbance or damage to uncoiled biota and substrate. No ecological constraints re: intertidal biota.

ARCHAEOLOGICAL CONSTRAINTS:

Consultation and inspection with an Exxon archaeologist is required prior to treatment. Specific on-site monitoring requirements will be determined at that time.

SHPO SIGNATURE: J. David McManus DATE: 5/9/90

Subsurface Oil Observed: Yes No X Maximum Depth

RECOMMENDATIONS:

 No Treatment Recommended

X Treatment Recommended

X Manual Pickup

 Bioremediation

X Tarmat Removal

 Snare/Absorbent Booms

 Oil Snares (pom poms)

 Absorbents (pads, rolls, etc)

 Spot Washing: Wands

 Beach Cleaner

 Other (see comments)

COMMENTS: Recommended treatment includes 1) manual pickup of mousse
and tar patties as indicated on sketch map, 2) removal of tarmat where
indicated. Work should be conducted between 5/15 and 7/10 based on
anadromous stream constraints.

TAG COMMENTS:

TAG APPROVAL DATE: 5/9/90

ADEC Art Wagner Art Wagner

EXXON Andy Tera Andy Tera

NOAA Bruce Wescott Bruce Wescott

USCG D.D. Rome D.D. Rome

FOSC: W L DATE: 5-18-90

SHORELINE OILING SUMMARY (ANAD)

REVISION NO. 04/1

OG CAL LARSON USCG DREHER, CWE SEGMENT ST/ KN 201 4/A
 BIO KEN CLITCHLOW LAND REP STREAM 226-30-16872 OF
 EXXON DARLHL YVES ADFG 226-30-16872 TIME/15:10 to 18:30
 TEAM NO. 14 TIDE LEVEL + DATE 4/22/90
 EST. SUBDIVISION LENGTH: 65 m ☒ Sun ☐ Clouds ☐ Fog ☐ Rain ☐ Snow
 UPLANDS DESCRIPTION: ☒ Grass ☒ Forest ☐ Rock
 SURVEYED FROM: ☐ Foot ☐ Boat ☐ Helo
 SURFACE SEDIMENTS: R 5 % B 5 % C 5 % P 10 % G 60 % S 20 % M 5 % V 5
 SLOPE: Long 100 % Hang 5 % Vert 5 % WAVE EXPOSURE: ☒ Low ☐ Med ☐ High
 OIL CATEGORY LENGTH: W 5 m M 5 m N 5 m VL 10 m NO 55

SURFACE OIL

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

PAVEMENT H F (S) 10 sq. m by 2PATTIES / TARBALLS 1 BAG

NEAR SHORE SHEEN? NO BR RW (S) 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	BELOW		OIL / FILM COLOR				PIT ZONE				A N A	STEEN (Y/N)	Y	SURFACE SUBSURFACE SEDIMENT
		OP	OR	OL	OF	NO		NO	NO	1	2	3	4	SU	M	ME	U				
1	8					✓	.							✓							10, 45, 75, 90
3	9					✓	.							✓							60, 70, 80, 90
2	16					✓	.							✓							10, 20, 30, 40
4	14					✓	.							✓							50, 60, 70, 80
5	10					✓	.									✓		Y			

COMMENTS

REVIEWED JWDATE 4-24-90

ACE 7378872

OG CALLARSON

SEGMENT ST/ KN201 16870

STREAM 226-30-16872 correct

DATE 4 / 22 / 90

CHECKLIST

- ☐ N Arrow
- ☐ Approx. Scale
- ☐ Seg/Sub Bndry
- ☐ Oil Dist.
- ☐ Substrate Character
- ☐ Profile Location(s)
- ☐ Profile(s)
- ☐ Pit Location(s)
- ☐ Photo Location(s)

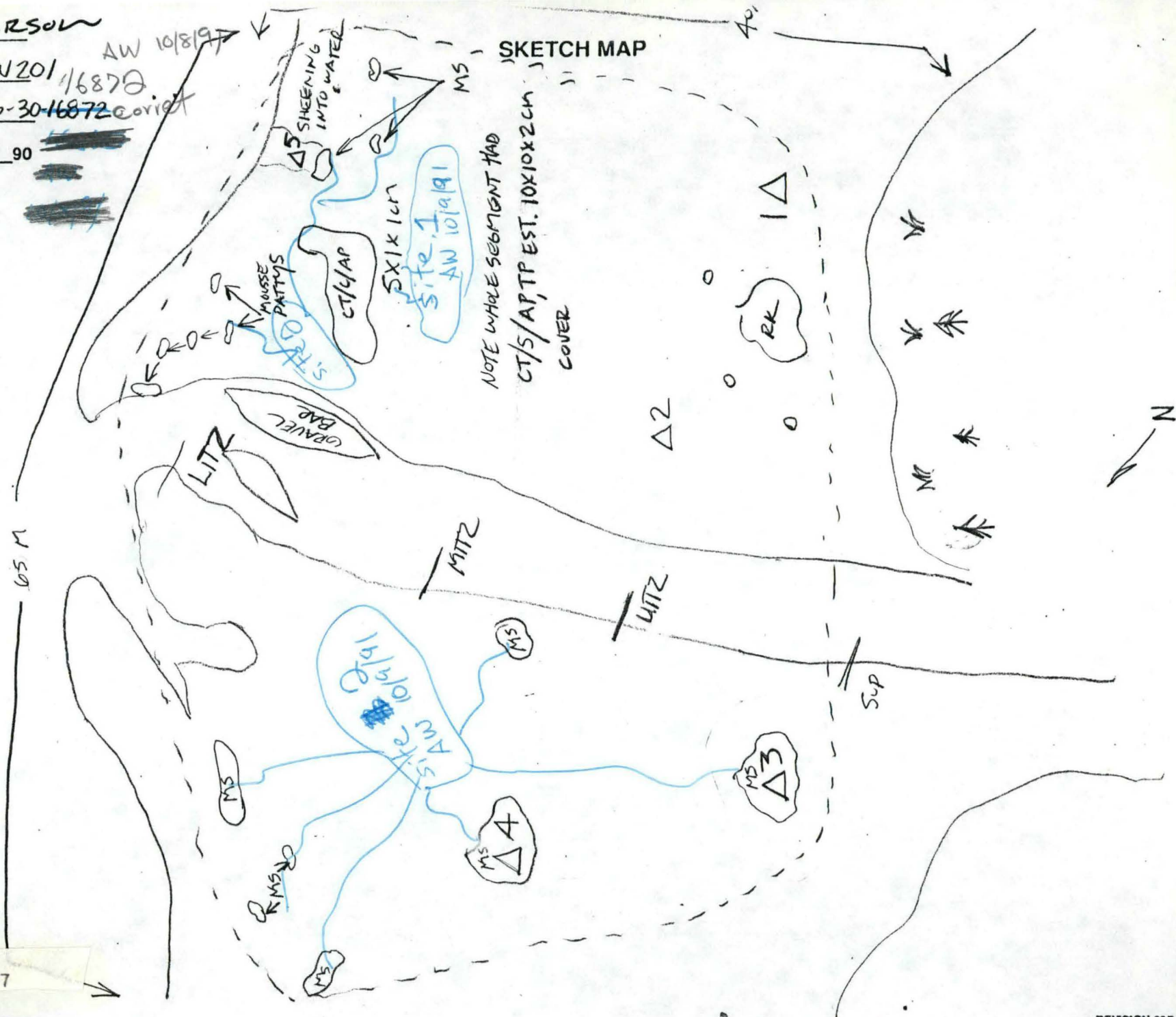
LEGEND

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

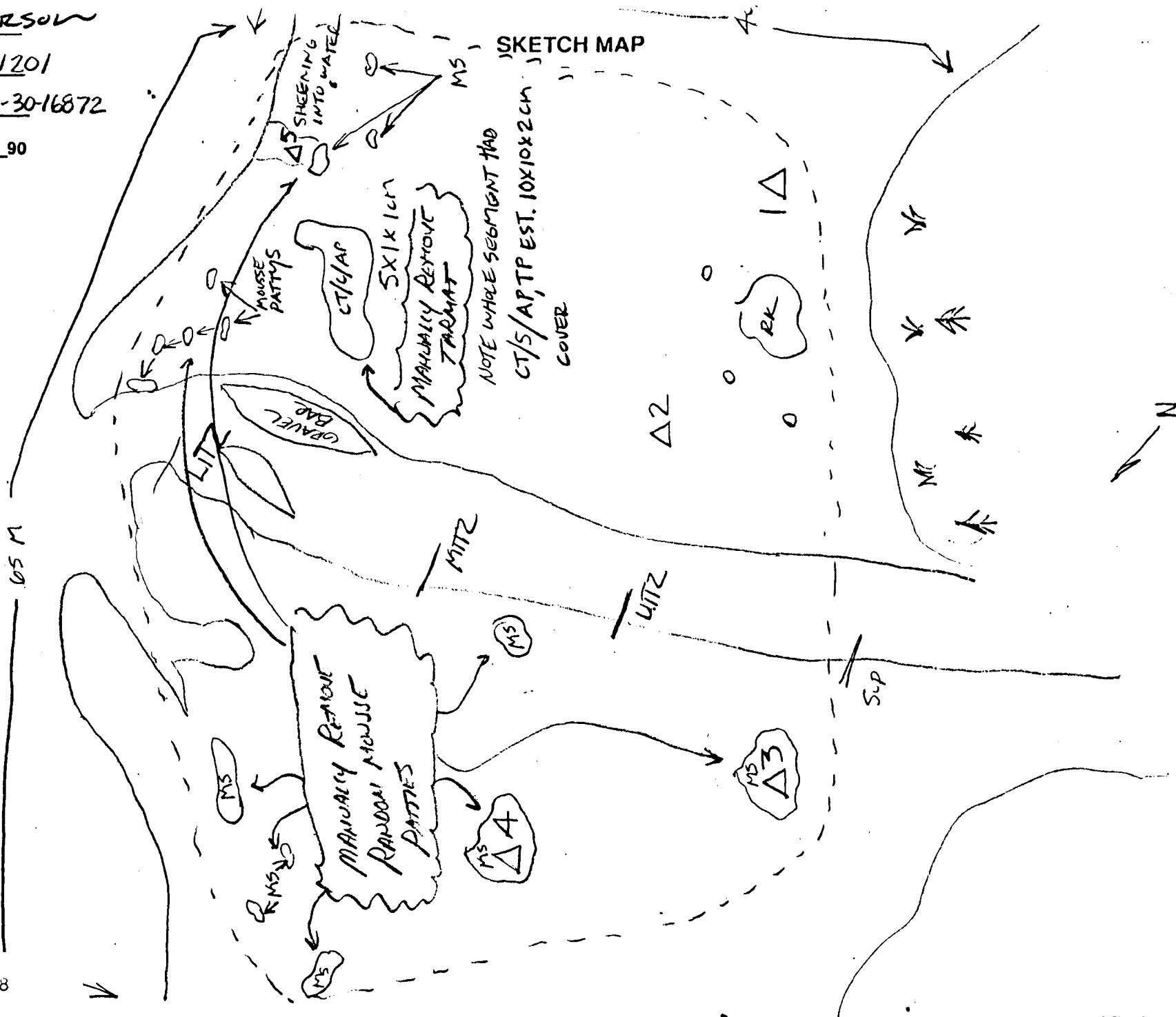
ACE 7378877

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

SKETCH MAP



REVISION: 03/24/96



FIELD SHORELINE COMMENT SHEET

SEGMENT ST 1 KN-201 SUBDIVISION: ^{ASC #} 226-30-16872 DATE 22 APR 90

USCG

NAME Kerwin L. Dreher SIGNATURE CWO K. L. Dreher

☐ NO TREATMENT RECOMMENDED
COMMENTS

☒ TREATMENT SUGGESTED

Agree.

ADEC → **ADF&G**

NAME Rick Gustin SIGNATURE Richard L. Gustin

☐ NO TREATMENT RECOMMENDED

☒ TREATMENT SUGGESTED

COMMENTS Perform work at a minimum of (0.7 tide)

Remove scattered broken tar mats which cover areas ranging from upper intertidal to lower intertidal on both east and west sides of creek.

There are a few scattered patties west of the creek near a smaller creek - these should be manually removed.

The flat on the ^{east} ~~west~~ side of the creek in the upper inter-

LAND MANAGER → **NONE**

NAME Rick Gustin SIGNATURE Richard L. Gustin

☐ NO TREATMENT RECOMMENDED
COMMENTS

☒ TREATMENT SUGGESTED

tidal zone has scattered bands of mats needing removal. Perform a survey of the entire ITZ prior to work to get a feel for the distribution of mats.

Remnant oil debris found.

ACE 7378879

ANAD
SSAT DATA ENTRY FORM

PAGE 1 OF 1

GENERAL DATA

226-30
SEG ID: KN-201 SUBDIV: 16872 TEAM: 14 SURVEY DATE: 4/22/90
PAVEMENT: CHAR S AREA 10 THICKNESS 2 TARBALLS X
OILED: LGS - VEG - TRH - DBR - WAVE EXP: LW X MD - HG -
FAX RCVD: - DT: - AGENCY DISAGREE: -
EST SUBDIV LGTH: 65 OIL CATEGORY: W - M - N - VL 10 NO 55 U -

SURFACE DATA

SURFACE SEDIMENT: BRK - BLD 5 COB 5 PEB 10 GRN 60 SAN 20 MUD - VEG -

CHAR #: 1 OIL CHAR: AP OIL DIST: CONT - BRKN - PTCH - SPLH X
OIL CLR: DBR FILM CLR: TL TIDAL ZONE: SU - UI X MI X LI X

CHAR #: 2 OIL CHAR: PT OIL DIST: CONT - BRKN - PTCH - SPLH X
OIL CLR: DBR FILM CLR: TL TIDAL ZONE: SU - UI X MI X LI X

CHAR #: 3 OIL CHAR: TB OIL DIST: CONT - BRKN - PTCH - SPLH X
OIL CLR: DBR FILM CLR: TL TIDAL ZONE: SU - UI X MI X LI X

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 -

17

ANAD
SSAT DATA ENTRY FORM

SUBSURFACE DATA

PAGE 1 OF 1

SEGMENT ID: KN-201 SUBDIV: 226-30
16872

PIT # 1 PIT DEPTH 8 OIL CHARACTER NO OIL INTVAL: FROM — TO —
QUANT: — OIL CLR: — FLM CLR: — ZONE: SU — UI X MI — LI —
SUBSURF SEDIMENT: BRK — BLD — COB — PEB X GRN X SAN X MUD — VEG —

PIT # 2 PIT DEPTH 9 OIL CHARACTER NO OIL INTVAL: FROM — TO —
QUANT: — OIL CLR: — FLM CLR: — ZONE: SU — UI X MI — LI —
SUBSURF SEDIMENT: BRK — BLD — COB — PEB X GRN X SAN X MUD — VEG —

PIT # 3 PIT DEPTH 16 OIL CHARACTER NO OIL INTVAL: FROM — TO —
QUANT: — OIL CLR: — FLM CLR: — ZONE: SU — UI X MI — LI —
SUBSURF SEDIMENT: BRK — BLD — COB — PEB — GRN X SAN X MUD — VEG —

PIT # 4 PIT DEPTH 14 OIL CHARACTER NO OIL INTVAL: FROM — TO —
QUANT: — OIL CLR: — FLM CLR: — ZONE: SU — UI X MI — LI —
SUBSURF SEDIMENT: BRK — BLD — COB — PEB — GRN X SAN X MUD — VEG —

PIT # 5 PIT DEPTH 10 OIL CHARACTER NO OIL INTVAL: FROM — TO —
QUANT: — OIL CLR: — FLM CLR: — ZONE: SU — UI — MI — LI X
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: —

— ACE 7378883 -/S

PWS, SEWARD AND HOMER ECOLOGICAL CONSTRAINTS

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

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

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

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

1C Salmon fry nursery area (4/31 to 7/31)

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

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

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

1E Main Bay Hatchery release (4/20 to 6/10)

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

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

1H Remote release site

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

ADF&G Don Calkins 267-2403

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

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

AGENCY CONTACT PERSON: USFWS Jill Parker 786-3377

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

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

AGENCY CONTACT PERSON: USFWS Jill Parker 786-3377

ADF&G Tom Roth 267-2206

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

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

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

AGENCY CONTACT PERSON: USFWS Jill Parker 786-3377

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

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

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

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

Special use destination

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

7HH Finfish harvesting

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

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

ACE 7378870

*Proceeded
5/18/90
mw*

RECEIVED
MAY 05 1990

DEPT. OF
ENVIRONMENTAL CONSERVATION

ANADROMOUS FISH STREAM ASSESSMENT

REGION: PRINCE WILLIAM SOUND

SEGMENT: KN-201 A

STREAM NO: 226-30-16872

CONCUR

2 separate streams stuck together

KN201 A in front

KN 134 in back
corrected

OK

ACE 7378868

KN201

CATALOG NUMBER: 2263016872					SEGMENT NUMBER: KN007* A				
STREAM NAME:					SHORELINE TYPE:				
LOCATION: KNIGHT ISLAND, BAY OF ISLES, WEST ARM					DATE: 04/12/90 TIME: COVE -0748				

SITE	WIDTH (m)	LENGTH (m)	AREA (sqm)	PERCENT OIL	THICKNESS (cm)	PENETRATION (cm)	SURFACE SUBSURF	OIL TYPES	COMMENTS
1					5-8cm		SURFACE	AP MS	+ east side of stream - L-LITZ
2					5-8cm		SURFACE	MS AP	+ west side of stream L-LITZ

COMMENTS:
 MOUSSE PATTIES FOUND EITHER SIDE OF STREAM, UPPER INTERTIDAL ZONE TO EDGE OF LOW TIDE STREAM CHANNEL. PATCHES OF MOUSSE OILED FINES GRAVELS. SOME OILED VEGETATION, OIL ON STREAM
 PENETRATION 2-3". (SHOVEL REMOVAL)
 BANKS: YES
 STREAM: YES, UPPER INTERTIDAL ZONE
 OIL WITHIN 1 MILE OF
 OIL IN STREAMBED: POSSIBLY

stream in KN201

CATALOG NUMBER: 2263016872					SEGMENT NUMBER: KN007* A				
STREAM NAME:					SHORELINE TYPE:				
LOCATION: KNIGHT ISLAND, BAY OF ISLES, WEST ARM					DATE: 04/22/90 TIME: COVE -1855				

SITE	WIDTH (m)	LENGTH (m)	AREA (sqm)	PERCENT OIL	THICKNESS (cm)	PENETRATION (cm)	SURFACE SUBSURF	OIL TYPES	COMMENTS
1				5-10%	1-2cm		SURFACE	AP	east side of stream - tarmat

COMMENTS:
 PRIMARY AREA OF OILING IN UPPER INTERTIDAL ON BOTH SIDES OF STREAM E & W. THIN BROKEN RANDOM TARMATS 2-4 CM THICK. NO APPARENT OIL IN STREAM. SMALL SCATTERED MOUSSE PATTIES RIGHT DOWN TO LOW TIDE (0.3), 10 M2 MOUSSE PATTIES. OIL ON STREAM
 BANKS: YES
 STREAM: YES
 OIL WITHIN 1 MILE OF

2	10	10	1-10%	2-4cm		Surface	ms/AP/PT	Both sides of stream - Broken tarmats & small scattered mousse patches u-LITZ	
---	----	----	-------	-------	--	---------	----------	---	--

ADF&G MULTI-ASSESSMENT DATA FORM

ANADSCAT -90

1 SURVEY TYPE: BS SS DS TS AVS SCHM MMS PTA2 REGION: PWS KP,CI K,APMETHOD: Aerial Ground Boat3 DATE: 4-22-9015 HIGH TIDE TIMES: 121 TEAM RECORDER: R. Gustin4 START TIME: 181516 HIGH TIDE HTS: 122 OBSERVERS: A. Weseman5 STOP TIME: 185517 LOW TIDE TIMES: 123 AGENCY: ADFG6 SEGMENT #: KN20118 LOW TIDE HTS: 124 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#: 90AJWO1SS5

9 STAT AREA:

20 USCG QUAD:

Start: 0446 End: 0451

10 LAT:

11 LONG:

26 SAMPLES TAKEN? Y N Number12 SOURCE: Map Loran

Oil

13 LOCATION: Knight Is.

Sediment

14 DESCRIPTION: West Arm

Biological

Water

EXTENT OF OIL

	SHORELINE				STREAM			
	L	W	M ²	%	L	W	M ²	%
27 SURFACE COVERAGE								
28 SURFACE THICKNESS	3cm							
29 PENETRATION	3-4cm							
30 OVERALL OIL IMPACT:	N	VL	L	<u>M</u>	H			

31 OIL TYPE: Pooled Mousse Tar Asphalt Sticky Stain32 OILED DEBRIS? Y N33 SHORELINE TYPE: Headland Low-lying Rocks Beach Cove
Lagoon Marsh34 WAVE EXPOSURE: High Moderate Low35 SUBSTRATE TYPE: Bedrock Boulder 15% Cobble 20%
Gravel 65% Sand Mud/silt36 CATALOGED ANAD. FISH SREAM? Y N37 CATALOG #: 226-30-76872

38 STREAM NAME:

39 OIL IN STREAM BED? Y N40 OIL ON STREAM BANKS? Y N41 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 N44 ANADROMOUS FISH OBSERVATION
Species Aerial Ground

COMMENTS: Priming area of oiling in upper intertidal on both
sides of stream E.W. thin broken random tar mats 2-4cm thick.
No apparent oil in stream. Lower intertidal
Small scattered mousse pattys right down to Low tide (0.3)
10 m² mousse pattys.

7278874 +15

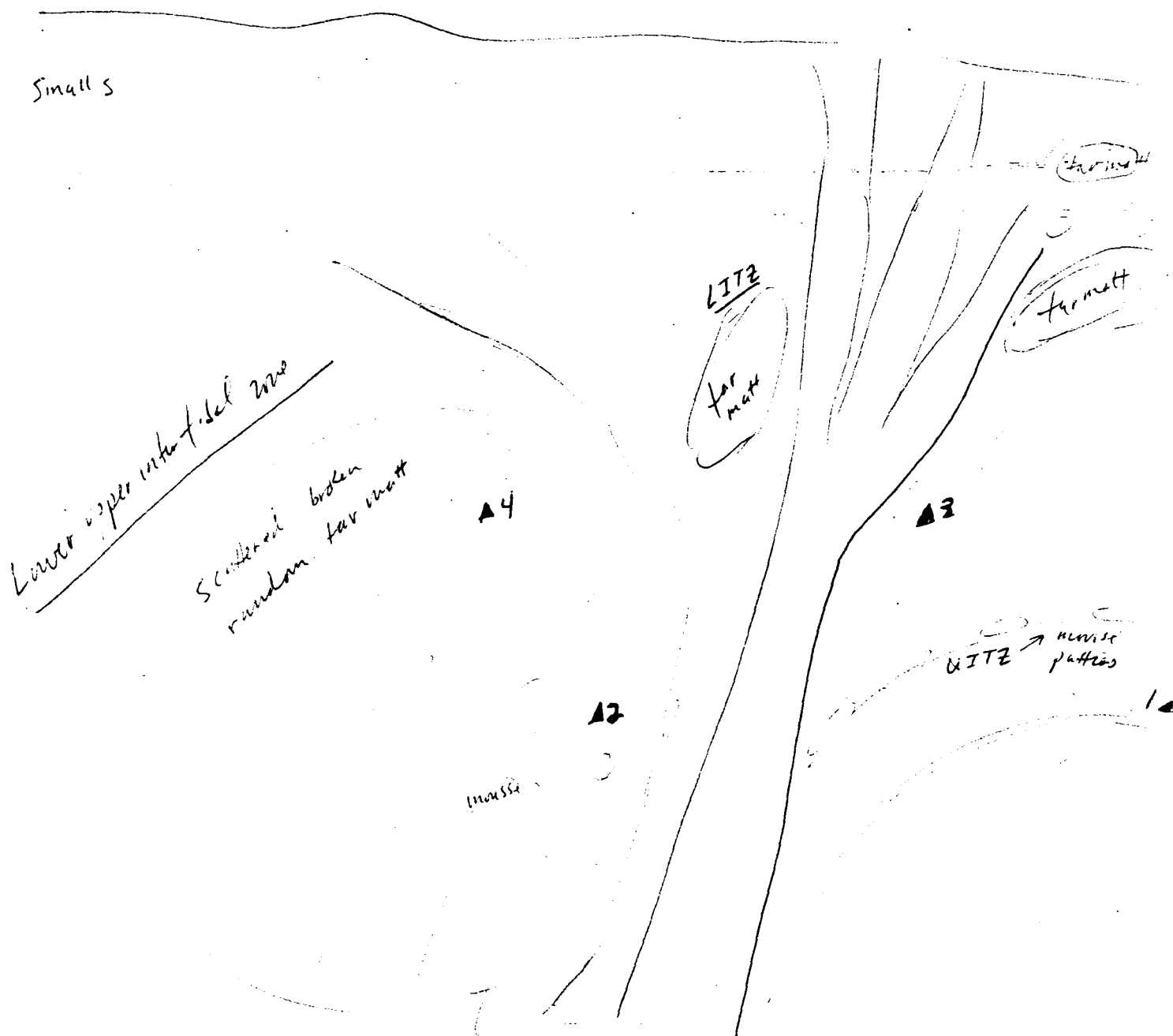
KN 201

226-30-16872

FRAME(S)

DESCRIPTION

Pit #1	8cm deep	3cm patty of oil & mousse
Pit #2	9cm deep	no visible oil
Pit #3	16cm deep	no visible oil
Pit #4	14cm deep	1cm oil depth from top in patty
Pit #5	10cm deep	1-2cm depth patty

48 OIL DISTRIBUTION DIAGRAM

ASC NUMBER:	SEGMENT NUMBER:	YR CATALOGED:
LOCATION:		
STREAM NAME:		LATITUDE:
KODIAK K-UNIT:	LOCAL STREAM #:	LONGITUDE:
USGS QUADRANGLE:		LEGAL: S
SHORELINE TYPE:	ALL SEGMENTS:	

ASC NUMBER: 226-30-16822
 SURVEY TYPE:
 METHOD:
 DATE: 4/22/90
 START TIME:
 STOP TIME:

TEAM RECORDER:
 OBSERVERS:

AGENCY(IES):

PHOTOS TAKEN?

Roll #:

Frames:

VIDEO TAKEN?

Tape Number:

Counter Start:

WAVE EXPOS:

SAMPLES TAKEN?

SAMPLE I.D. NUMBERS: 1.
 4.

2.
 5.

3.
 6.

	LENGTH	WIDTH	M2	%	THICK	PEN	OIL TYPE
SITE 1	40	10			3/4 0.75 cm	4	sp/
SITE 2							
SITE 3							
SITE 4							
SITE 5							

OVERALL OIL IMPACT:

OIL IN STREAM CHANNEL?

SUBSTRATE

Bedrock	Granule
Boulder	Sand
Cobble	Silt
Pebble	Veget.

OIL ON BEACH WITHIN 50M OF STREAM MOUTH?

SPECIES					
COUNT					

COMMENTS:

see comments.
 Should be 2-4 cm.
 KZ 5/23/91

ADF&G MULTI-ASSESSMENT DATA FORM

1 SURVEY TYPE: BS SS DS TS AVS SCHA MMHS PTA2 REGION: PWS KP,CI K,APMETHOD: Aerial Ground Boat3 DATE: 4-12-9015 HIGH TIDE TIMES: /21 TEAM RECORDER: R. Gustin4 START TIME: 074216 HIGH TIDE HTS: /22 OBSERVERS: 1 pilot5 STOP TIME: 074817 LOW TIDE TIMES: /23 AGENCY: ADFG HAB6 SEGMENT #: KN00718 LOW TIDE HTS: /24 PHOTOS TAKEN: Y (N)7 STATION #: Aw 10/9/9119 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 LoranOil /13 LOCATION: KNIGHT IS.Sediment /14 DESCRIPTION: West Arm Bay Isles.Biological /Water /

EXTENT OF OIL

	SHORELINE				STREAM			
	L	W	M ²	%	L	W	M ²	%
27 SURFACE COVERAGE								

36 CATALOGED ANAD. FISH STREAM? (Y) N37 CATALOG #: 1687238 STREAM NAME: /

28 SURFACE THICKNESS

39 OIL IN STREAM BED? Y N possibly

29 PENETRATION

40 OIL ON STREAM BANKS? (Y) N30 OVERALL OIL IMPACT: N VL L M H41 OIL ON BEACH ADJACENT TO MOUTH? (Y) N
(within 50 meters)31 OIL TYPE: Pooled Mousse Tar Asphalt Sticky Stain42 OIL WITHIN 1 MILE OF STREAM? (Y) N32 OILED DEBRIS? (Y) NWhere: upper intertidal zone33 SHORELINE TYPE: Headland Low-lying Rocks Beach Cove
Lagoon Marsh

43 ANADROMOUS FISH PRESENT? Y N

34 WAVE EXPOSURE: High Moderate Low44 ANADROMOUS FISH OBSERVATION
Species Aerial Ground35 SUBSTRATE TYPE: Bedrock / Boulder / Cobble /
Gravel / Sand / Mud/silt /

Species	Aerial	Ground

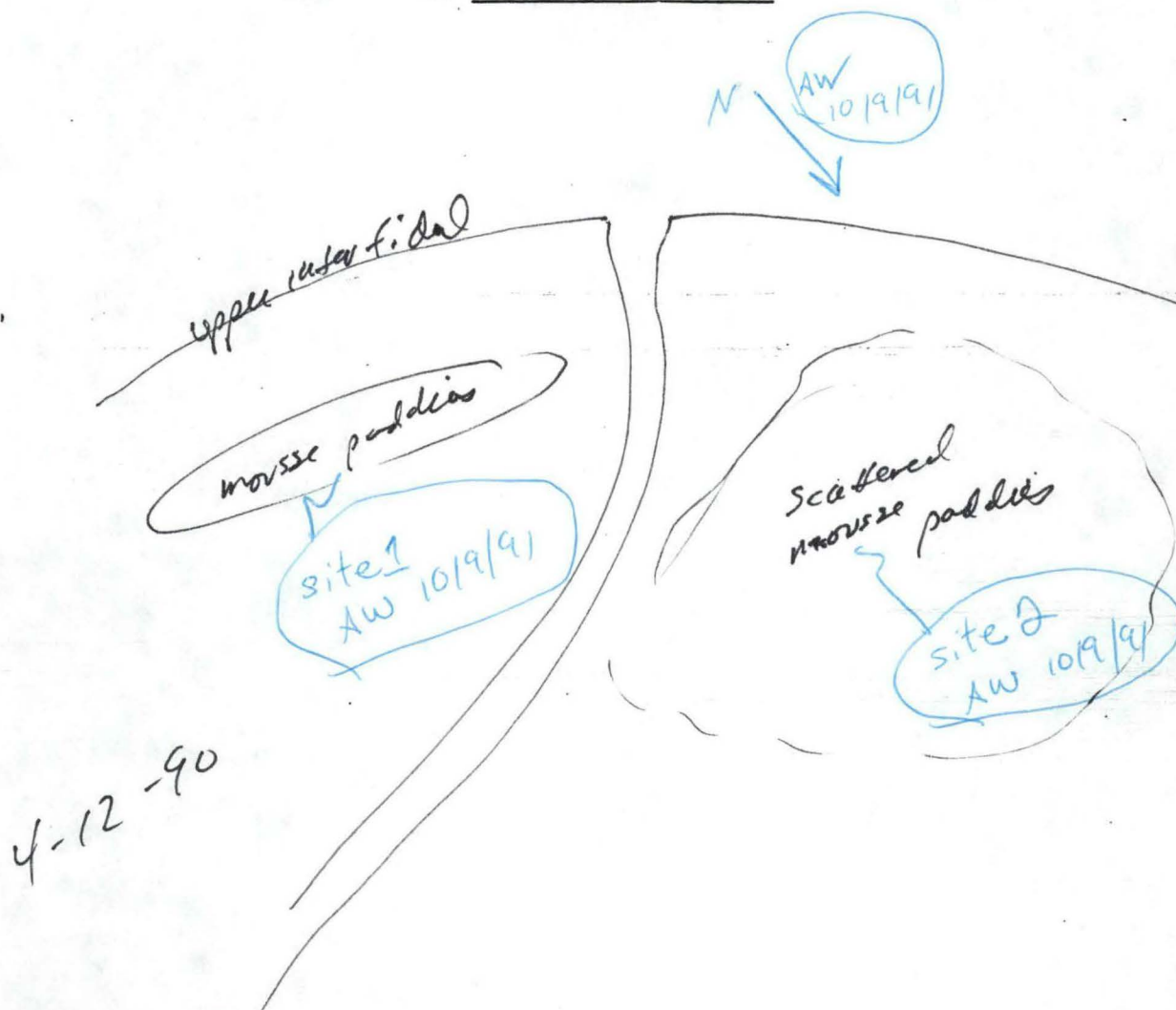
COMMENTS: mousse paddies found either side stream upper-intertidal zone to edge of low tide stream channel.
patches of mousse oiled fines gravels
some oiled vegetation
penetration - 2-3" (shovel removal)

ACE 7378276 +/AC/RT
+/S/AC/RT

FRAME(S)

DESCRIPTION

46 OIL DISTRIBUTION DIAGRAM



KN007
226-30-16872 AJW

= Sample taken
= Photo frame # and
shot direction.

ACE 7378277 -/S

ASAP Follow-Up Recommendations
TAG Recommendations - August 13, 1990

SEGMENT			
CH-09	H	Site 1	Manual pickup of tarmats, rake and bioremediate* H.P.
		Site 2	Manual pickup of tarmats, rake and bioremediate* H.P.
EL-57	H		NTR
EL-58	A		Manual till - mop up mobile oil with snare and bioremediate - low priority
EL-58	C		Storm berm relocation (mechanical if necessary)
EL-58	C		NTR - Reassessment in '91
EL-58	D		Customblen application and reassessment in '91
ER-07	A	Site 1	NTR
		Site 2	Manual pickup of tarmat and bioremediation (low priority)
EV-05	A		Limited manual pickup followed by bioremediation - Customblen (low priority)
EV-05	H		Manual pickup of mousse/AP followed by bioremediation. Manual till in heaviest areas if necessary (H.P.)
EV-12	A		Access and remove heaviest concentration of AP/OP/HOR manual removal followed by bioremediate
EV-15	A		Manual removal of MS/AP/OP/HOR where accessible - bioremediate (H.P.)
EV-26	A		Manual removal of AP and bioremediate (M.P.)
EV-37	A		Manual pickup of OP/HOR sediments (relocate armor to access)
EV-39	A		Bioremediate
FL-01	A		NTR - work done
GR-301	B	Site 1	Manual pickup of mousse (H.P.)
		Site 2	NTR
		Site 3	NTR
GR-301	H	New Site	Manual pickup of mousse (H.P.)
KN-07	A		Manual pickup of AP/OP/mousse and bioremediate (H.P.) both areas
KN-08	A		Manual pickup followed by bioremediation (L.P.)
KN-201	A		Manual removal of AP followed by bioremediation (M.P.)
KN-211	H	Site 1	Manual pickup of oiled debris at stream mouth next to small pool, use chain saw as necessary to access.
		Site 2	NTR
		Site 3	NTR
		Site 4	NTR
KN-400	A	Site 1	Manual removal of accessible AP followed by rake and bioremediation (L.P.)
		Site 3	NTR
KN-404	A		Bioremediate and assessment in '91
KN-405	A		Further TAG evaluation - bioremediate and assessment in '91
NK-02	A		Manual pickup AP/mousse - bioremediation (M.P.)
PD-04	A		Manual pickup of mousse patties and bioremediation, Inipol and Customblen (M.P.)
PN-01	A		Manual pickup of AP and bioremediation (L.P.)

ANADROMOUS STREAM CONSTRAINT

TAG
EXXON
ADEC
USCG
NOAA

Andy Tetz
Michael R. K. [unclear]
[unclear]
[unclear]

DATED

Aug 15 1990

FOSC

DATED

ACE 7378858

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

Page of

Date 5-19-90 Time 1335

ASC # 226-30-168 72

Stream on south side as well as 16872 on north.

Operator/Contractor: SXXON/VECO

Name

Representing

Ken Keane USCG

R. Custer ADP

Peter Rubenstein NOAA / EPA

Activity/Situation Observed: observed treated area + m.s. seed
oil patches / observed snags cat stream +
see if work was done - Needs more work

(Tune 1 st. work was completed satisfactorily.)

Pertinent Statutes/Regulations: AK. Title 16

Recommended/Required Action (Specify): both stream need

Manual removal of tar mats + patches
filling

By (date) _____ (if applicable)

Please note: This is not a final inspection report. It is intended to provide the operator/contractor with a notice of problems or concerns which require immediate attention. If necessary, a final inspection report will be issued at a subsequent date.

Rick Gusten ADFG Tech 3

Fish and Game Representative/Title

Company Representative/Title

ADEC BIOREMEDIATION DAILY REPORT

1810
\$DATE: 9.6.90ADEC Monitor: Jeff Givalias

TIDES: TIME: HEIGHT:
 Low 8:46 -0.9
 High 2:41 13.4
 Low 21:09 -0.8
 High 15:04 14.0

WEATHER: Cloudy Rain Fog Sun
 TEMP: 60 SEA COND: Calm
 WIND DIR: N-NE-E-SE-S-SW-W-NW LT VARIOUS
 WIND SPEED 0-15 16-30 30+

USCG John DowdExxon Chris KatsimakisOOPS DAVE BellowOther ADFIG: Rick GustinOGS DALE PARENT

Segment Sub No. Inipol Custom
 sites (gal) (lbs.)

Comments

- NO OG REPORTS AS NO
 OG. USING OG TECH ONLY.

KN-07	A	1	11	5.5	- ASAP work order
		2	12	6	- AREA BORDERS "SET ASIDE SITE"
KN-09	A	1	-	-	- BIO FOLLOWING ASAP MANUAL WORK
		2	-	14	REMAINING oil IS RESIDUAL O/R
		3	8	4	OIL ON SHARP incline boulder
		4	31	15	beach, western exposure
KN-24	A	1	-	15	- BIO RETREAT
		2	-	51	- Inipol last applied 8-19-90.
		3	-	62	- State willing to wait 30 day
		4	-	31	period for next Inipol application,
		5	-	4	but Exxon unwilling.
		6	-	31	- Area would benefit from Inipol
KN-26	A	1	23	11	more so than Customblend
		2	16	7	BIO RETREAT
KN-201	A	1	-	10	DEFINITE SUBSTRATE OIL. Area high
		2	-	-	energy beach, with OIL AT SITE.
		3	-	4	should benefit from winter storms
					BIO FOLLOWING manual TREATMENT (ASAP)
					- RESIDUAL OIL SEDIMENTS, amongst boulders
					IN UTR. Inipol would benefit, but
					large numbers of salmon spawning
					in bay.

\\shorelin\rowann\biorept 8/7/90

ACE 7378862
+AC/RT

ADEC DEMOBILIZATION REPORT
FOR PHYSICAL/MECHANICAL TREATMENT AND CUSTOMER

To: Alaska Department of Environmental Conservation
Oil Spill Response Center
Anchorage, Alaska

Attn: John Bauer
FAX 265-4666, 265-4656

RE: SEGMENT NUMBER KN 201

SUBSEGMENT NUMBER A

DEC REP Marianne Profita

USCG REP David Sylvester

EXXON REP Tom Czarnecki

BOAT NAME/SQUAD NUMBER HU ENSCO Atlas

Has work been completed as stated on the work order? Squad #8
If your answer is no please explain in detail how the work performed was different from the work order language.

Yes.

Is there additional oil remaining which can be removed with further physical/mechanical treatment? If yes what is the recommended treatment method.

No. AP areas down to clean sediments.

Describe the amount of oil remaining (type, size of area and location).

Sporadic or - stain on boulders

Additional Comments (keep objective)

signature Marianne Profita

Date and time of demobilization from segment 8/27/90 1900

Shoremon\55 5-12-90

A.S.A.P.

KN 201
Site 1

August 9, 1990

ADEC recommends the following treatment:

- 1) Manually remove all mousse, asphalt pavement, and OP and OR subsurface oil.
- 2) Manually till all treatment areas containing any residual oil.
- 3) Bioremediate all treatment areas and all areas containing residual oil using Inipol and Customblen.

ACE 7378864

Rick Gustin
FWT3
June 1, 1990
Corinthian PWS

KN201 \ASC#226-30-16872
Bay Isles Knight Is.

Work began June 1 with Rod Reynolds' crew doing their usual competent job. The upper ITZ had been worked during the early morning while the tide was full. Later at 1450 they returned and finished picking up the tar patties in the LITZ&MidITZ while I assisted. The area was cleaned up and the crew moved out at 1600. Surface patties were removed and tilled leaving the stream looking good. Approximately 1 super sack of oiled gravel was removed from the stream site.

ACE 7378865

Page of

Date 5-19-90 Time 1335

Form 11-88 (1-82)

Page of

Date 5-19-90 Time 1335

Location: (Logging unit/Road/Waterbody) KN 201 West Pine Bay 756
ASC # 226-30-16572 DO in
Stream on south side as well as 16572 on north

Representing

R. Custer ADEG

Peter Rubenstein NCAA / CPA

Activity/Situation Observed: Observed treated area + missed
0.1 patches / observed snagscat stream +
see if work was done - Needs more work
(This 1st. work was completed satisfactorily.)

Pertinent Statutes/Regulations: AK. Title 16

Recommended/Required Action (Specify): both stream need

Manual removal of tar warts + patches
filling

Please note: This is not a final inspection report. It is intended to provide the operator/contractor with a notice of problems or concerns which require immediate attention. If necessary, a final inspection report will be issued at a subsequent date.

Rocky Mtn. ADEB Tall 3

Company Representative/Title

Map from SSAT 90

KN-07

ANADROMOUS STREAM
226-30-16872

Stream #1

Salmon Regulatory
Fishing Sign

Area of mod → dense
mussels in tide-inlet
cobble.

ECOLOGY MAP (1 OF 1)

RESOURCE COBES FOR ENTIRE
SEGMENT:

1A

1B

226-30-16872

226-30-16870

226-30-16869

6V

ANADROMOUS STREAM
226-30-16870

ANADROMOUS STREAM

226-30-16870

KN-200

XXXX Wide

//// Medium

--- Narrow

TTTT Very Light

0000 No Oil

KN-201

ADEC Segment Length: 1007m

0 100 200 300
METERS

ACE 7223335

Map Key: PWS-402

Name: _____

Date: _____

Data Entered: _____

map from SSAT 90

SKETCH MAP

0 100 200 300

AP/P
- 3M WIDE BAND

Stream
226-30 16870

AP/P

- 3m wide Band
- 10m², 3cm Thick

- ☒ N Antenn
- ☒ Approx. Scale
- ☒ Seg/Sub Body
- ☒ Od Dist.
- ☒ Width
- ☒ Length
- ☒ % Cover
- ☒ Substrate Character
- ☒ Est. HWA/WL
- ☒ SSL
- ☒ Profile Location(s)
- ☒ Profile(s)
- ☒ PH Location(s)
- ☒ Photo Location(s)

AP/S, CT/S, TB/S,

WITZ
COBBLE/BOMBER

MANUALLY REMOVED
TARMATS

WEST ARM

X CT/P, AP/S.
- 6 x 20m
- WITZ
- BEDROCK

AP/S, TB/S, FL/S
- 20m
- WITZ
- COBBLE

BIOREMEDIATE ENTIRE
SUBDIVISION AFTER MANUAL
WORK — APPLY BIO UP TO
STREAM BANK WITH ADFEG
APPROVAL

MANUALLY REMOVE DIED VEGETATION
AND TAR MAT

AP/B
- 2-3m X 10m
- KITZ

AP/S EXTENDS TO PUTZ
AND DILED VEGETATION

Large Stream,
300 m to Lake

226-30-16869
Stream

Oil Character Length (m) AP 60 PO 0 CV 0 CT 600 ST 0 MS 0 PT 100 TB 100 FL 20 NO 127

REVISION: 03/24/08

ACE 7223334



20

OFFICIAL PHOTOGRAPH ADF&G EXXON VALDEZ OIL SPILL

OFFICE: VALDEZ

DATE: 09/10/89

TIME: -0-

SEGMENT#: ~~KN 7~~ *KN 201*

STATION#: -0-

LOCATION: KNIGHT ISLAND, BAY OF ISLES

ASC# 1226-20-16872
REASON FOR TAKING PHOTO: WEST ARM. MOUTH OF UNCATALOGUED SALMON
STREAM.

TAKEN BY: DULCE V. BEN

INITIALS: _____

ROLL #: 89DB002V

FRAME #: 20

EVIDENCE ID#: _

Ecology Map

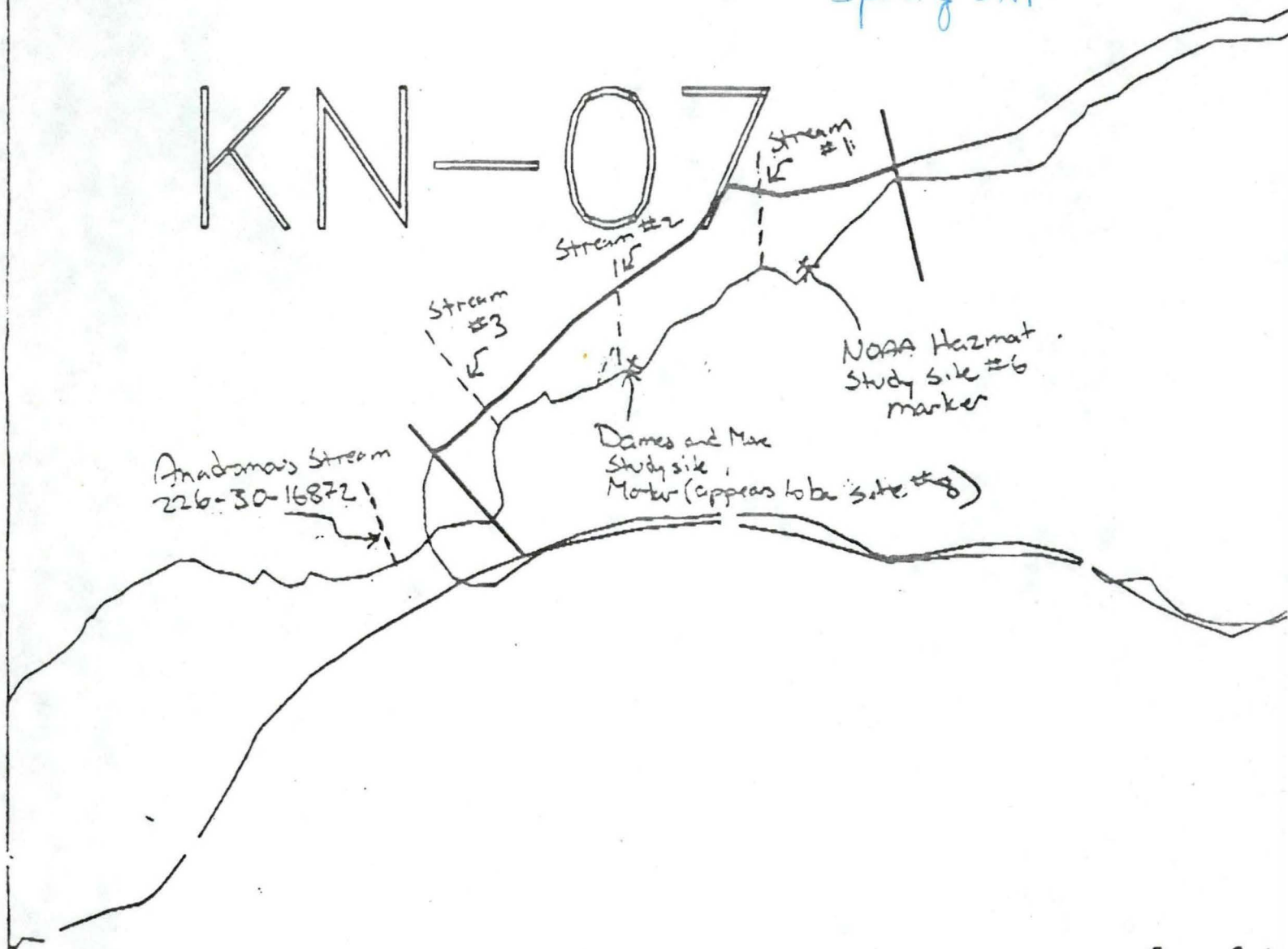
source codes for entire segment
A,B - Stream 226-30-16872 within
100m of segment boundary in
segment KN201

KN-20

2M
6Y

Map from 1990
Spring SLP

KN-07



XXXX Wide

//// Medium

--- Narrow

TTTT Very Light

KN-7

Total Segment Length: 532



Map Key: PWS-411

Name: _____

Date: _____

ACE 7222433

ANADJ OUS FISH STREAM EVALUATIC

EX-19

SEGMENT ST/ KN-201 A STREAM NO: 226-30-16872 DATE 4/22/90

SEGMENT ENVIRONMENTAL SENSITIVITIES AND TIME CONSTRAINTS:

Three anadromous streams in KN-201: 226-30-16872, 226-30-16869, 226-30-16870.

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

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

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

See attached Ecological Constraint sheet for specific constraints and contacts.

SUBDIVISION ECOLOGICAL CONSTRAINTS:

Avoid any unnecessary disturbance or damage to unoiiled biota and substrate. No ecological constraints re: itnertidal biota.

ARCHAEOLOGICAL CONSTRAINTS:

Consultation and inspection with an Exxon archaeologist is required prior to treatment. Specific on-site monitoring requirements will be determined at that time.

SHPO SIGNATURE: _____ DATE: _____

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: _____ Wands
<u> X </u> Tarmat Removal	<u> </u> Beach Cleaner
	<u> </u> Other (see comments)

COMMENTS: Recommended treatment includes 1) manual pickup of mousse and tar patties as indicated on sketch map, 2) removal of tarmat where indicated. Work should be conducted between 5/15 and 7/10 based on anadromous stream constraints.

TAG COMMENTS: _____

TAG APPROVAL DATE: _____

ADEC _____

EXXON _____

NOAA _____

USCG _____

FOSC: _____ DATE: _____

OG CAL LARSON C DREHER, CWE SECTION 11 KN 201 18
 BIO KEN CRITCHLOW N EP 226-30-16872 (OF)
 EXXON DARRELL YOE ADFG 21K KUSTIN-AIMEE WESEMAN TIME/B : 10 to 18 : 50
 TEAM NO. 14 TIDE LEVEL +1 DATE 4 / 22 / 90
 EST. SUBDIVISION LENGTH: 65 m ☒ Sun ☐ Clouds ☐ Fog ☐ Rain ☐ Snow
 UPLANDS DESCRIPTION: ☒ Grass ☒ Forest ☐ Rock
 SURVEYED FROM: ☐ Foot ☐ Boat ☐ Helo
 SURFACE SEDIMENTS: R % B 5 % C 5 % P 10 % G 60 % S 20 % M % V %
 SLOPE: Lang 100 % Hang % Vert % WAVE EXPOSURE: ☒ Low ☐ Med ☐ High
 OIL CATEGORY LENGTH: W m M m N m VL 10 m NO 55 m

SURFACE OIL

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

PAVEMENT H F (S) 10 sq. m by .2 cm

PATTIES / TARBALLS BAGS

NEAR SHORE SHEEN? NO BR RW (S) 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-CL)	BELOW		OIL / FILM COLOR								PIT ZONE				A N A	SHEEN (Y/N)	⚠	SURFACE - SUBSURFACE SEDIMENTS	
		OP	OR	OL	OF	NO		UO	UC	SBL BR	DBL FR	FW FW	GY GY	SL SL	DBL TL	LR LR	SU	U	M	L						
1	8					✓	.									✓										PB, GR, SD / PB, GR, SL
3	9					✓	.									✓										GR, SD / GR, SD
2	16					✓	.									✓										PB, GR, SD / PB, GR, SL
4	14					✓	.									✓										SD, GR / SD, GR
5	10					✓	.											✓				Y				
							.																			

COMMENTS

REVIEWED DATE

FIELD SHORELINE COMMENT SHEET

39/43

SEGMENT ST / KN-201 SUBDIVISION: ^{ASC # 16870} 226-30-16872 DATE 22 APR 90

USCG

NAME Kerwin L. Draher SIGNATURE K. L. Draher

☐ NO TREATMENT RECOMMENDED
COMMENTS

☒ TREATMENT SUGGESTED

Agree.

ADEC → **ADFG**

NAME Rick Gustin SIGNATURE Richard Gustin

☐ NO TREATMENT RECOMMENDED
COMMENTS

☒ TREATMENT SUGGESTED

Perform work at a minimum of (0.7 tide)

Remove scattered broken tar mats which cover areas ranging from upper intertidal to lower intertidal on both east and west sides of creek.

There are a few scattered patties west of the creek near a smaller creek - these should be manually removed.

The flat on the ^{east} ~~west~~ side of the creek in the upper inter-

LAND MANAGER → **None**

NAME Rick Gustin SIGNATURE Richard Gustin

☐ NO TREATMENT RECOMMENDED
COMMENTS

☒ TREATMENT SUGGESTED

tidal zone has scattered bands of mats needing removal. Perform a survey of the entire ITZ prior to work to get a feel for the distribution of mats.

Remove any oiled debris found.

No bioremediation recommended.

ACE 7378871

SEGMENT ST/ KN201

STREAM 226-30-16872

DATE 7 122 90

CHECKLIST

- N Arrow
 Approx. Scale
 Seg/Sab Body
 Off Dist.
 Width
 Length
 % Cover
 Substrate Character
 Est. HW/LA/VA
 SBL
 Profile Location(s)
 Profile(s)
 PH Location(s)
 Photo Location(s)

LEGEND

! Δ

PH - No Subsurface Oil

24

PH - Subsurface Oil . . .**CTAC**

Continuous Distribution

CT/0

Broken Distribution

CT/P

Patchy Distribution

CT/S

Splashed Distribution

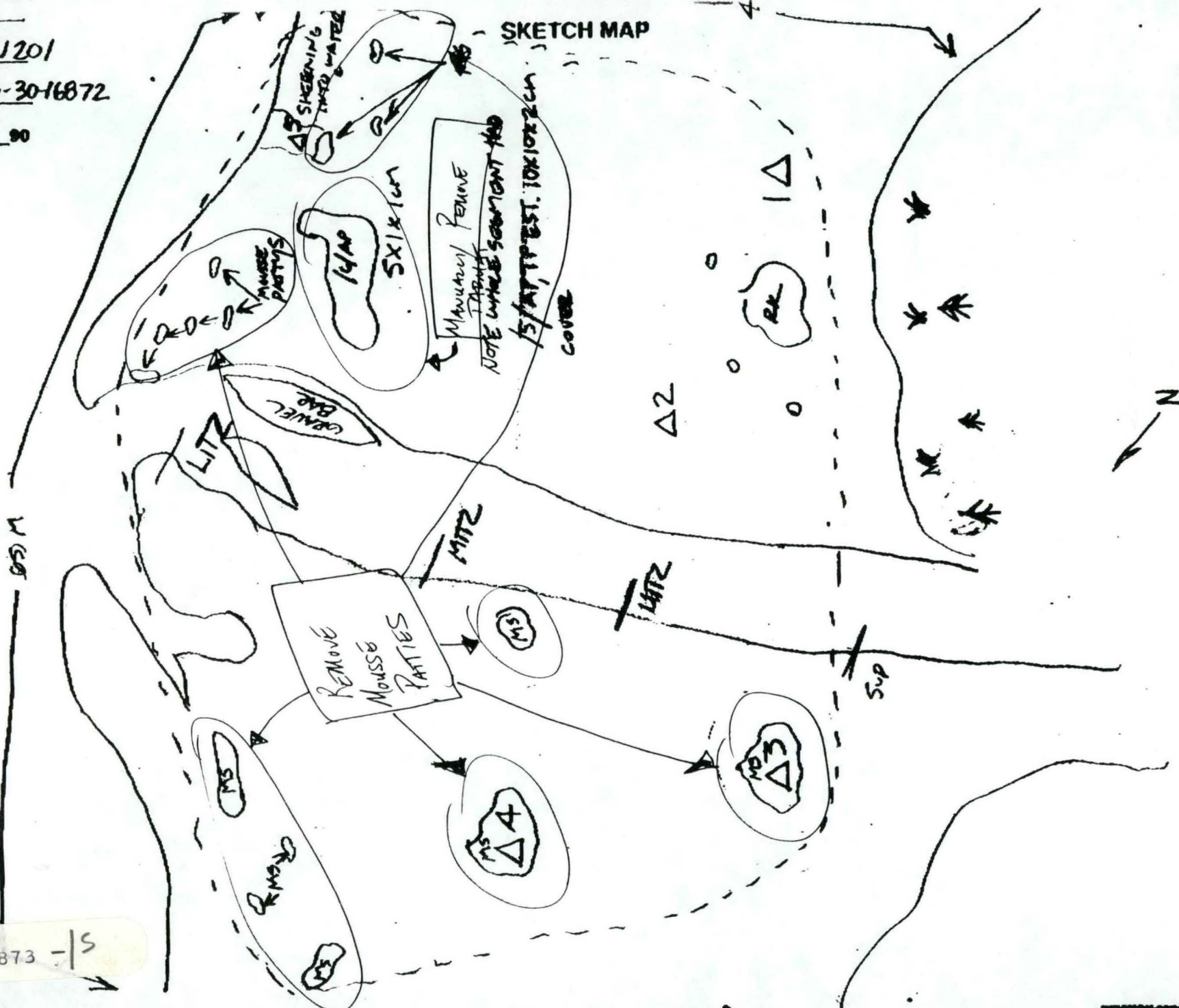
Old Vegetation

! ➡
Photo location, direction,
and number

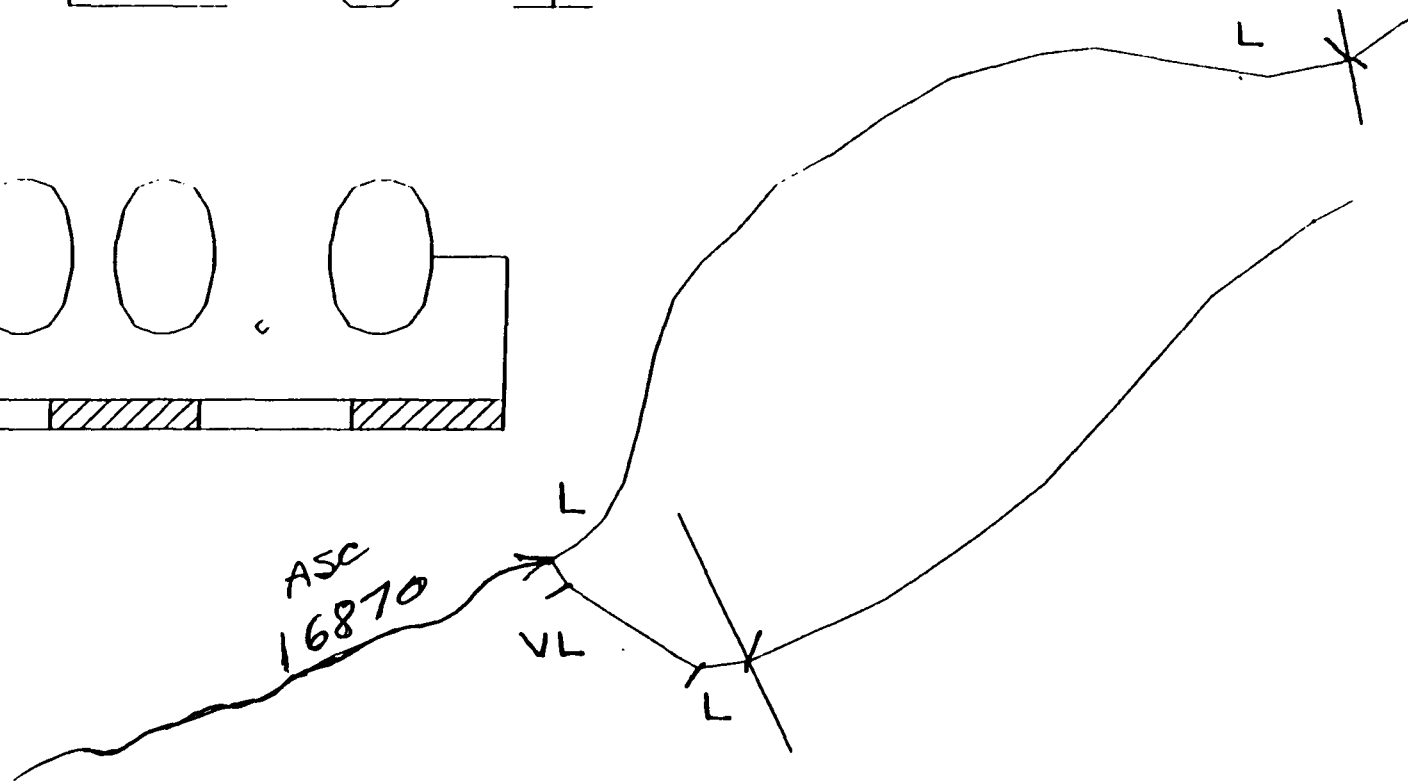
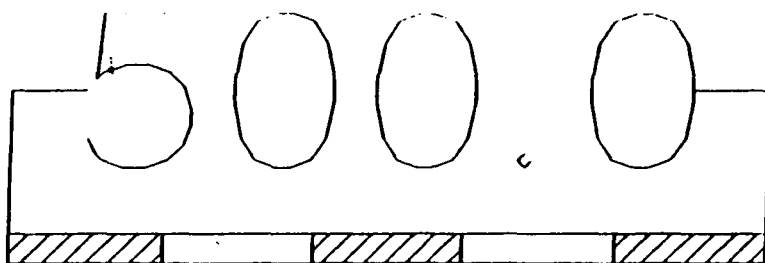
ACE 7378873

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

REVISION: 02/24/00



KN201



ASC
16870

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

ADFIG Sport on survey - Spring '87

ASSESSMENT OF INTERTIDAL SPAWNING AREAS AFFECTED
BY THE PRINCE WILLIAM SOUND OIL SPILL

NAME: Knight J Bay of Islands (W arm)

USGS MAP: Sound B-3

MAP #:

DATE: 4-26-89

TIME OF SURVEY: 1255

LOW TIDE .4 TIME 1139

COLLECTORS: DR, sm

ASC# 226-30-16870

NO OIL
SHEEN
MOUSSE
BLACK OIL

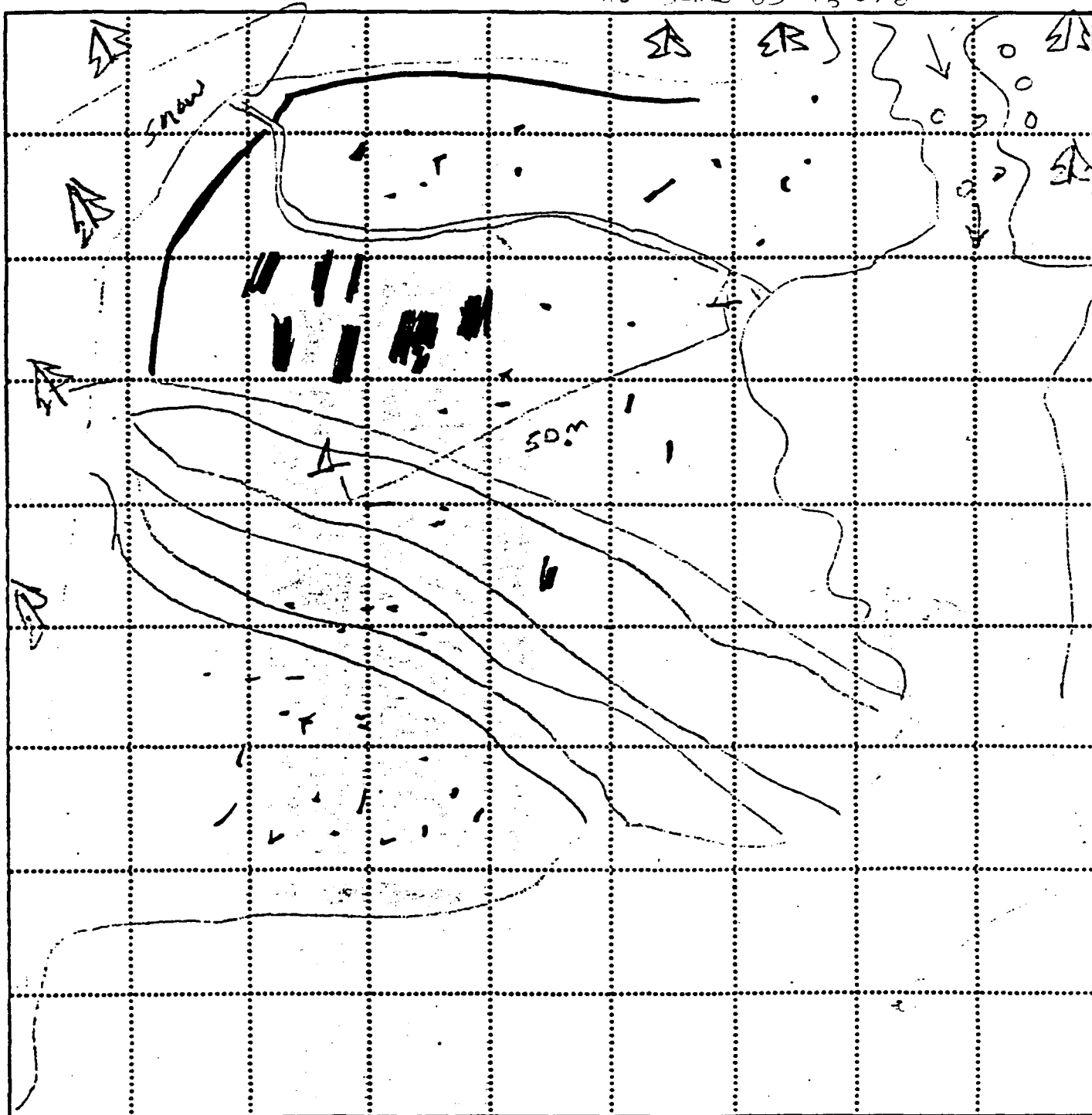
OIL TYPES PRESENT (1 2 3 4)

PHOTO #: 20741, 20742, 20743

STREAM CATALOG #: 16870

SCALE: ONE GRID EQUALS 1000 FT. KN29

not same as 16870



COLOR CODE: 1) NO OIL - BLANK 2) SHEEN - GREEN 3) MOUSSE - BROWN 4) BLACK OIL - BLACK

COMMENTS:

band of oily veg. 1-5 ft wide

patches several ft wide and 100 ft long scattered throughout area

ACE 7378885

7/4/AC/RT/FF