

K9-35 KA-03 AFS 262-60-10040
Kashvik Creek 1990

Are 7334219/A+HF/HF

ADF&G MULTI-ASSESSMENT FORM
1991 GENERAL ENTRY CHECKLIST

STREAM#: 2626010040
SEGMENT: KA003

PAGE 76

DATE PRINTED: 07/25/91

LOCATION: KASHVIK BAY

SURVEY TYPE: 90 CLEANUP MONITORING

METHOD: GROUND

DATE: 06/27/90

TEAM RECORDER: BARNHART

START TIME: -0-

OBSERVERS: BYARS COLLETT REED HALLER
TUCKERS

END TIME: -0-

TIDES: -0-

AGENCY: FG EXX USCG DEC NPS USFWS

OG/HAB DISCREPANCIES: -

PHOTOS TAKEN: Y

STATION: 2626010040

ROLL#: 90JPB002K 004K 005K

FRAME: 10-15 18-19 01-04

VIDEO TAKEN: N

TAPE#: -0-

START: -0-

END: -0-

SAMPLES TAKEN: N

SAMPLE NUMBERS: -0-

-0-

-0-

-0-

-0-

-0-

OIL IN STREAM BED: N

OVERALL OIL IMPACT: L

OIL ON BEACH BY MOUTH: Y

WAVE EXPOSURE: -0-

SHORELINE TYPE: -0-

SUBSTRATE TYPE: BEDROCK -0- BOULDER -0- COBBLE 10 VEGETAT -0-

GRAVEL 60 SAND 30 MUD/SILT -0- GRANULE -0-

ANADROMOUS FISH PRESENT: -

SPECIES: -0-

COUNT: -0-

-0-

-0-

-0-

-0-

-0-

-0-

-0-

-0-

ADF&G MULTI-ASSESSMENT FORM
1991 OILING ENTRY CHECKLIST

PAGE 79

DATE PRINTED: 07/26/91

STREAM# : 2626010040
SEGMENT#: KA003

SURVEY TYPE : 90 CLEANUP MONITORING LOCATION: KASHVIK BAY
DATE: 06/27/90
TIMES: -0- - -0- TEAM RECORDER: BARNHART

-- OILING EXTENT --

SITE#	SITE TYPE	DEPTH (cm)	LENGTH (m)	WIDTH (m)	AREA (m)	%	THICK (cm)	PEN (cm)	OIL TYPE CODES
1	-0-	-0-	48	4	192	3	2.5	1	TP
2	-0-	-0-	102	4	408	5	2.5	1	TP
3	-0-	-0-	42	3	126	10	2.5	1	TP

COMMENTS:

2480 POUNDS OF OIL/OILED SEDIMENT REMOVED. HELO CREW WORKED 6 HOURS ON THIS AREA, FOR A TOTAL OF 36 MAN HOURS. THE SSAT SURVEY INDICATED AN AREA OF OIL 20M X 3M. UPON ARRIVAL AT THIS SITE I DISCOVERED THE OILED AREA EXTENDED 192M. EXXON AND THE COAST GUARD AGREED TO CLEAN THE ADDITIONAL AREA. THE OILED AREA WAS LOCATED ALONG THE BASE OF THE CLIFF APPROXIMATELY 50M FROM THE STREAM CHANNEL, AT LOW TIDE. AS THE AIR TEMPERATURE REACHED 70°F THE OIL BENEATH THE WEATHERED SURFACE LAYER BECAME STICKY AND SEMI-FLUID. THE OIL COLOR WAS LIGHT BROWN. A SECOND WORK AREA INDICATED ON THE WORK ORDER MAP NEAR THE BOUNDARY OF KA003 AND KA002 WAS OVERLOOKED BY EXXON, COAST GUARD AND DEC. SEGMENT KA003 WAS SIGNED OFF WITHOUT TREATING THE SECOND AREA. THIS AREA (BEACH SEGMENT) WAS SUBSEQUENTLY TREATED ON 8/13/90.



'90 Cleanup Monitoring

ASC NUMBER: SEGMENT NUMBER: YR CATALOGED:
LOCATION: LATITUDE:
STREAM NAME: LONGITUDE:
KODIAK K-UNIT: KA-03 LOCAL STREAM #: LEGAL:
USGS QUADRANGLE: WAVE EXPOSURE:
SHORELINE TYPE:

ASC NUMBER: 262-60-10040
SURVEY TYPE: CL
METHOD: F
DATE: 6-27-90
START TIME:
STOP TIME:

TEAM RECORDER: J. Barnhart
OBSERVERS: F. Byars, R. Collett, R. Reed, J. Haller
S. Tuckers
AGENCY(IES): ADFG, Exxon, USCG, ADEC, NPS, USFWS

PHOTOS TAKEN? Y
*Roll #: 90JPB004K Frames: 10-15
VIDEO TAKEN? N Tape Number:
Counter Start:

SAMPLES TAKEN? N

SAMPLE I.D. NUMBERS: 1. 2. 3.
4. 5. 6.

OILING DATA

	LENGTH	WIDTH	M2	%	THICK	FEN	OIL TYPE
SITE 1	48m	4m	192	3	2.5cm	1cm	TP
SITE 2	102m	4m	408	5	2.5cm	1cm	TP
SITE 3	42m	3m	126	10	2.5cm	1cm	TP
SITE 4							
SITE 5							

OVERALL OIL IMPACT: L

OIL IN STREAM CHANNEL? N

OIL ON BEACH WITHIN 50M OF STREAM MOUTH? X

SUBSTRATE

Bedrock Granule
Boulder Sand 30
Cobble 10 Silt
Pebble 60 Veget.

SPECIES					
COUNT					

COMMENTS: * Additional film roll numbers/frames: 90JPB004K Frames 18+19, 90JPB005K Frames 01 and 04
2480 pounds of oil/oiled sediment removed. Helo crew worked 6 hours on this area, for a total of 36 man hours.
The SSAT survey indicated an area of oil 20m x 3m. Upon arrival at this site I discovered the oiled area extended 192m. Exxon and the Coast Guard agreed to clean the additional area. The oiled area was located along the base of the cliff approximately 50m from the stream channel, at low tide. As the air temperature reached 70°F the oil beneath the weathered surface layer became sticky and semi-fluid. The oil color was light brown.

A second work area indicated on the work order map near the boundary of KA003 and KA002 was overlooked by Exxon, Coast Guard and DEC. Segment KA-003 was signed off without treating the second area. This area was subsequently treated on 8/13/90.

EVOS CLEANUP MONITORING, 1990.

REGION: Alaska Peninsula

REPRESENTATIVES

K-UNIT: K09-35

Exxon: Fred Byers

SEGMENT: KA-003

USCG: Ray Collett

LOCATION: Kashvik Bay

DEC: Randy Reed

STREAM NAME: Kashvik Creek

NPS: John Haller

ANAD. STREAM CAT. # 262-60-10040

USFWS: Sandy Tuckers

ANAD. FISH STREAM PERMIT ISSUED: 6/27/90 ADFG: Jeff Barnhart

DATE(S) WORKED: 6/27/90

OTHER:

SQUAD # 9 Hela

HOURS WORKED: 6.0

SQUAD SIZE: 6

TOTAL MAN HOURS WORKED: 36.0

NUMBER OF BAGS Collected: 62

WORK ORDER ISSUED 5-18-90

POUNDS OF OIL/OILED SEDIMENT REMOVED: 2480

TREATMENT TECHNIQUES: MANUAL REMOVAL X BIOREMEDIATION

OTHER

OIL BANDS

DEMOS DATE: 6/27/90

D 1cm L 48 W 4 m² 192 % oil cover 3

OIL SAMPLE(S) #: NONE

D 1cm L 102 W 4 m² 408 % oil cover 5

OIL TYPE: IB PT

D 1cm L 42 W 3 m² 126 % oil cover 10

SUBSTRATE TYPE: Gravel 60 Cobble 10 D L W m² % oil cover

Sand 30

L W m² % oil cover

PHOTOLOG

Roll #	FRAME #	DESCRIPTION
90JPB002K	10	Tar patties along Tidal flat, north side of stream channel.
90JPB002K	11	Tar patties along Tidal flat, north side of stream channel.
90JPB002K	12	Tar patties along Tidal flat, north side of stream channel.
90JPB002K	13	On Tidal flats looking west toward oiled area and stream.
90JPB002K	14	On Tidal flat looking north toward oiled area and work crew
90JPB002K	15	Tarballs and oiled sediments on absorbent pad. Along Tidal flat N of stream channel.
90JPB002K	16	oiled area along Tidal flat north of stream channel as delineated by row of plastic bags
90JPB004K	18	Aerial view AFS 262-60-10040 (center)
90JPB004K	19	Aerial view Kashvik creek and Tidal flat.
90JPB005K	01	Aerial view
90JPB005K	04	Aerial view AFS 262-60-10040 center, along bluff.

PROBLEMS: We attempted to access this area on 6/25/90 and 6/26/90. Due to brown bear activity on the tidal flats the National Park service RPO would not allow us to land at the work site.

A second work area indicated on the work order map near the boundary of KA003 and KA002 was overlooked by Exxon, Coast Guard and DEC. Segment KA-003 was signed off without treating the second area. This area was treated on 8/13/90.

NOTE: second area was a shoreline segment not a stream segment.

OBSERVATIONS: ^{The} SSAT survey indicated an area of oil 20m x 3m.

Upon arrival at this site I discovered the oiled area extended 192m. Exxon and ^{The} Coast Guard agreed to clean the additional area. The oiled area was located along the base of the cliff approx 50m from the stream channel, at low tide.

As the air temperature reached 70°F the oil beneath the weathered surface layer became sticky, and semi-fluid. The color was light brown.

SIGNED: Jeffery P. Barnhart

'90 Cleanup Monitoring

ASC NUMBER:	SEGMENT NUMBER:	YR CATALOGED:
LOCATION:		
STREAM NAME:		LATITUDE:
KODIAK K-UNIT: KA-03	LOCAL STREAM #:	LONGITUDE:
USGS QUADRANGLE:		LEGAL:
SHORELINE TYPE:		WAVE EXPOSURE:

ASC NUMBER: 262-60-10040
 SURVEY TYPE: CL
 METHOD: F
 DATE: 6-27-90
 START TIME:
 STOP TIME:

TEAM RECORDER: J. Barnhart
 OBSERVERS: F. Byars, R. Collett, R. Road, J. Haller
 S. Tuckers
 AGENCY (IES): ADFG, Exxon, USCG, ADEC, NPS, USFWS
 PHOTOS TAKEN? Y
 *Roll #: 90JPB008k Frames: 10-15
 VIDEO TAKEN? N Tape Number:
 Counter Start:

SAMPLES TAKEN? N

SAMPLE I.D. NUMBERS:	1.	2.	3.
	4.	5.	6.

OILING DATA

	LENGTH	WIDTH	M2	%	THICK	FEN	OIL TYPE
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SITE 3	42m	3m	126	10	2.5cm	1cm	TP
SITE 4							
SITE 5							

OVERALL OIL IMPACT: L

OIL IN STREAM CHANNEL? N

OIL ON BEACH WITHIN 50M OF STREAM MOUTH? X

SUBSTRATE

Bedrock	Granule
Boulder	Sand 30
Cobble 10	Silt
Pebble 60	Veget.

SPECIES

COUNT

COMMENTS: * Additional film roll numbers/Frames: 90JPB004k Frames 18+19, 90JPB005k Frames 02 and 04
 2480 pounds of oil/oiled sediment removed. Helocrew worked 6 hours on this area, for a total of 36 man hours.
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16.512

ACE 7334233 +S

KODIAK ECOLOGICAL CONSTRAINTS

1A
1B

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

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

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

AGENCY CONTACT PERSON: ADF&G Ken Middleton 267-2299

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

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

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

1D Kotai Bay Hatchery release

Pink salmon - late May, early June; Chum salmon - June; Sockeye salmon - early July.

1H Remote release site

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

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

1I Gill net area

1J Purse seine area

Mainland, West side Kodiak, Shuyak & Moser/Olga Bay (6/9 to 10/1)

East side Kodiak, East side Afognak (7/4 to 10/1)

1K Purse seine hook-off

1L Set net sites

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

AGENCY CONTACT PERSON: ADF&G Larry Nicholson 424-4791

2M Herring spawning (4/15 to 6/30)

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

AGENCY CONTACT PERSON: ADF&G Larry Nicholson 486-4791

3N, 3P Harbor seal and sea lion pupping (5/10 to 7/1)

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

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

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

ADF&G Don Calkins 267-2403

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

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

AGENCY CONTACT PERSON: USFWS Jill Parker 786-3377

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

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

AGENCY CONTACT PERSON: USFWS Jill Parker 786-3377

ADF&G Tom Roth 267-2208

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

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

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

AGENCY CONTACT PERSON: USFWS Jill Parker 786-3377

6U Recreation:

Tent sites (8/1 to 9/15)

6V Anchorages (8/1 to 9/15)

6W Forest Service cabins (8/1 to 9/15)

6X Lodge (8/1 to 9/15)

6Y Special use destination

7Z Subsistence area: Salmon harvesting (8/1 to 9/30)

Finfish harvesting

Deer harvesting (8/1 to 1/7)

Invertebrate harvesting

Bear harvesting (4/1 to 5/15 and 10/25 to 11/30)

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

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

ACE 7334234

7H
7I
✓ 7J
7K

FIELD SHORELINE COMMENT SHEET

SEGMENT ST / K0936-KA003 SUBDIVISION: KA003A DATE 4/29/80

NOAA
USCG
NAME

John Naughton SIGNATURE John J. Naughton

☒ NO TREATMENT RECOMMENDED

☐ TREATMENT SUGGESTED

COMMENTS

This segment at the head of Kashvik Bay had only very light oil. Patches of mousse were found in a few locations, primarily along rock outcrop adjacent to an anadromous stream. This area is a rich resource area consisting primarily of intertidal mud/sand flats, anadromous streams, eagle nesting, bear and other large land mammal habitats. Because of potential disturbance from clean up activities and small amounts of oil observed, recommended by

ADEC

NAME Terry Ellsworth

SIGNATURE Terry Ellsworth

☐ NO TREATMENT RECOMMENDED

☒ TREATMENT SUGGESTED

COMMENTS

Four areas containing recoverable mousse were found in this segment. Mousse occurs interstitially between boulders and cobbles and in crevices. One area is located along the north side of Kashvik Bay easterly from the head of the bay. The remaining areas occur along the south side of the bay. Manual removal is recommended and would be best accomplished using shovels and small garden tools. The possible presence of nesting eagles should be considered when scheduling clean up.

ACE 7334235

LAND MANAGER

NAME Carl Sabach

SIGNATURE Carl Sabach

☐ NO TREATMENT RECOMMENDED

☐ TREATMENT SUGGESTED

COMMENTS

Recoverable oil consists primarily of scattered mousse patches with entrained sediments. The larger patches could be removed with shovels or trowels. The cleanup crew should access oiled sections only and not disturb sensitive eagle and bear habitats adjacent to these sections. Helicopters should avoid flying along bluffs where eagles commonly roost. Oil along the north shore is limited to the banks of an anadromous stream.

SHORELINE OILING SUMMARY

REVISION NO 04.12.90

OG LINDSAY NARASHIMA (NOM) JOHN NAUGHTON SEGMENT ST/ K0936-KA003
 BIO JIM BARRY LAND REP CARL SCHOEN SUBDIVISION KA003A (1 OF 1)
 EXXON FRED BYARS ADEC TERRY ELLSWORTH TIME 10:15 to 12:40 PM
 TEAM NO. 19 TIDE LEVEL +1.80 TO -1.80 FT. DATE 4/29/90
 EST. SUBDIVISION LENGTH: 10388 m ☐ Sun ☒ Clouds ☐ Fog ☐ Rain ☐ Snow
 UPLANDS DESCRIPTION: ☐ Grass ☐ Forest ☒ Rock
 SURVEYED FROM: ☒ Foot ☐ Boat ☐ Helo WORKING DIRECTION: NORTH to SOUTH
 SURFACE SEDIMENTS: R 50 % B 30 % C 10 % P 5 % G 3 % S 2 % M 0 % V 0
 SLOPE: Lang 50 % Hang 30 % Vert 20 % WAVE EXPOSURE: ☐ Low ☒ Med ☒ High
 OIL CATEGORY LENGTH: W 0 m M 0 m N 0 m VL 375 m NO 10013 m

SURFACE OIL

CHARACTER	DISTRIBUTION				OIL / FILM COLOR								IMPACTED ZONES			
	C	B	P	S	SW	W	BL	BR	OR	Y	GR	LT	SW	U	M	U
ASPHALT PAVEMENT																
POOLED																
COVER																
COAT			X	X		X								X		
STAIN			X	X		X								X		
MOUSSE			X	X				X						X		
PATTIES																
TARBALLS																
FILM				X			X							X		
NO OIL													X		X	X

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

OILED DEBRIS	AMOUNT		
	SM	MD	LG
Logs			
Vegetation			
Trash			
Debris			

DID YOU COLLECT DEBRIS?

YES ☐ NO ☒TYPE →#BAGS 0

Photographs:

Roll No. _____

Frames _____

SUBSURFACE OIL

PIT NO.	PIT DEPTH (cm)	SUBSURFACE OIL CHARACTER					OILED INTERVAL (cm)	BELOW		OIL / FILM COLOR								PIT ZONE				A N A	SHEEN (Y/N)	▼	SURFACE - SUBSURFACE SEDIMENTS
		OP	OR	OL	OF	NO		UO	UC	SW	W	BL	BR	OR	Y	GR	LT	SW	U	M	U				
1	5			X			0-3	X					X					X				N	N	-	PK
2	5			X			0-1	X					X					X				N	N	-	PK/G
							.																		
							.																		
							.																		
							.																		

ACE 7334236

COMMENTS

THE NORTH SHORE IS PRIMARILY INTERTIDAL TO A HIGH CLIFF BASE, OTHER AREAS TO THE WEST ARE COMPOSED OF LOWER ROCK CLIPS OR TILL, WHICH IS ERODING AND CONTRIBUTING SEDIMENT TO THE NEARSHORE BOWE. OIL CONSISTS OF ISOLATED PATCHES ON A FEW (5 TO 6) BOULDERS IN THE CENTRAL AND EASTERN PORTION OF THE NORTH SIDE OF KASHAK BAY. THE WESTERN END HAS MOUSSE, COAT, & STAIN ON A BEDROCK OUTCROP/APRON THAT PROTECTS INTO THE BAY. MOUSSE AND STAIN PATCHES OCCUR ON THE BOULDERS TO THE WEST OF THE ROCK OUTCROP. THE SOUTHSIDE OF KASHAK BAY HAS MOUSSE/COAT/STAIN.

REVIEWED BAT DATE 3 May 90

Segment ST / Subdivision A Date (mo / day / yr) 4/29/90Time (24 hr) 1024-1345 Biologist Jim Barry

(A) Substrate type and % of segments:

(1) Bedrock 50 (2) Boulder 30 (3) Cobble 10 (4) Pebble 5 (5) Sand 3 (6) Silt 2(B) Overall % cover of biota (% of segment): Dense 10 Moderate 10 Low 80

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

Photographs:

Roll No. ST-6-7Frames 15-16

BARNACLES

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

NOT PRESENT

MYTILUS

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

NOT PRESENT

GASTROPODS

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

NOT PRESENT

FUCUS

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

NOT PRESENT

Wildlife Observations/ General Comments:

See attached

Ecological Considerations:

ANADROMOUS FISH STREAMS - 2 on segment

10040 DOLLY VARESW
CHUM SALMON (SPAWNING)
PINK SALMON (SPAWNING)

10030 DOLLY VARESW
CHUM SALMON (SPAWNING)
PINK SALMON (SPAWNING)

AGE 7334238

SEGMENT K9-35-KA003
BIOLOGIST - JIM BARRY

SUBDIVISION A

APRIL 29, 1990

Time 1025-1345

Tidal Window +1.8 => -1.8 ft.

I. GENERAL COMMENTS

- A. **Exposure** - This segment includes moderate to highly exposed headlands and low to moderately exposed sand flats and cobble shores.

B. Habitats

1. Sand Flats

Extensive intertidal sand flats are by far the dominant habitat type on this segment. Sand flats extend to as much as 1000 m or more from the upper shore. The biota occupying this habitat are patchy. Clams are moderately abundant (razor clams - *Siliqua patula*; *Macoma balthica*, *M. nasuta*, and *Tresus capax*). Polychaete worms also are dense in patches (Neridae?). Well defined patches of an unidentified infaunal worm are evident from their castings on the surface. These worms (Sipunculids?) are dense (>30/m²) in some locations and sparse in others. Few algae are present on the sand flat. Occasional boulders are covered by barnacles, a few mussels, and *Ulva lactuca* and filamentous green algae.

2. Flat Bedrock Shores

This habitat is located in a large patch (ca. 200 x 600 m) in the northern section of the segment, as well as much smaller patches along the southern end. Most of this habitat is located in the middle to low zone and is occupied by a high cover of macroalgae. Dominant species include *Ulva lactuca*, *Laminaria dentigera*, *Alaria marginata*, *Fucus distichus*, *Palmaria palmata*, *Rhodomela larix*, *Zostera marina* (a higher plant), and crustose corallinaceae. Other species include *Grateloupia* sp.,

Iridaea sp., *Membranoptera?* sp.). Occasional boulders and cobble that extend into the middle zone are covered by filamentous and bladelike green algae, and a sparse cover of mussels.

3. High Angle Bedrock and Boulder Headlands

Most of these shores have a dense cover of barnacles (*Balanus glandula*) and periwinkles (*Littorina* sp.) in the upper zone, with a moderate to sparse cover of mussels (*Mytilus edulis*) in slightly lower levels. The middle zone often has a dense to moderate cover of *Fucus distichus*, *Rhodomela larix*, and eel grass (*Zostera marina*). Lower zones are covered by *Fucus distichus*, *Laminaria dentigera*, *Odonthalia floccosa*, *Palmaria palmata*, and others. Common invertebrates include anemones (*Anthopleura artimesia*), sponges (*Halichondria* sp.), chitons, limpets, worms (polychaeta and echiura), hermit crabs, whelks, sea stars, sea cucumbers, isopods and amphipods.

4. Cobble Beaches

Cobble beaches vary considerably in terms of biotic characteristics. In upper zones, cobble beaches usually are nearly devoid of biota, especially on moderate to highly exposed beaches where scour by wave action is severe. On protected beaches, upper zones cobbles have barnacles and mussels, while lower zones are covered by the algae and invertebrates similar to those discussed above. Several intertidal fishes (pricklebacks, gunnels, sculpins) inhabit this area.

5. Cobble and Boulder Fields

This habitats also varies. Flat cobble beaches are present in some parts of the extensive sand flats. Barnacles are moderately abundant on cobble in this habitat. Filamentous green algae are sparse, as are macroalgae. Amphipods, isopods, and a few other invertebrates are present and variable in abundance.

C. Oil-Related Comments

1. Oil or Cleanup Related Mortality

None evident.

2. Ecological Sensitivities to oil or cleanup.

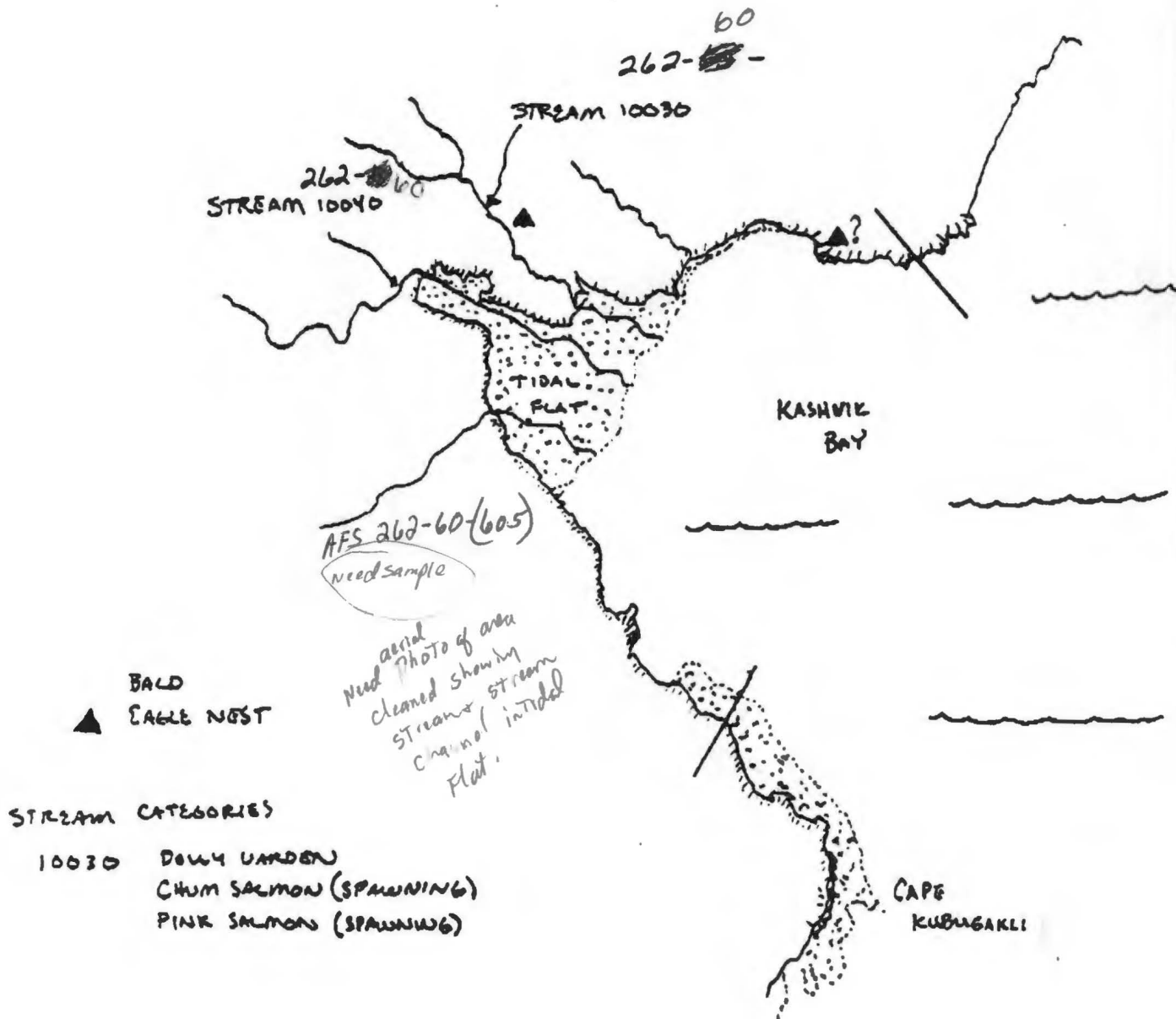
Oil cover on this segment was very light or zero and treatment will likely not be recommended for any of the segment. As such there are no ecological sensitivities that will be affected. Ecological sensitivities are:

a. Anadromous streams (see map)

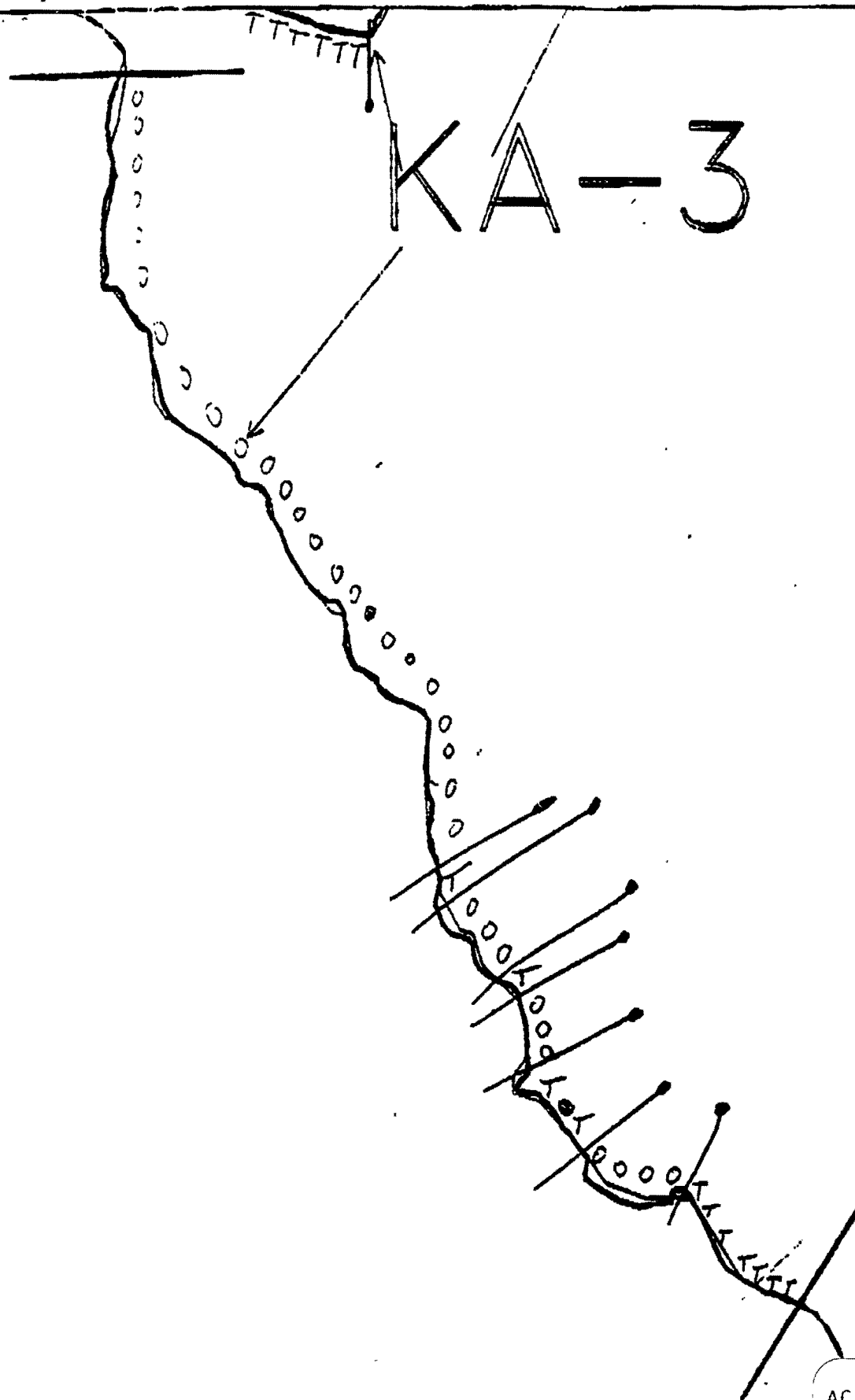
Streams number 10030 and 10040. Both are utilized by Dolly Varden, Chum Salmon (spawning), and Pink salmon (spawning).

b. Eagle Nesting sites (see map)

One (or possibly two) bald eagle nests are located in the segment.



KA-3



ACE 7334243

XXXX Wide

//// Medium

---- Narrow

TTTT Very Light

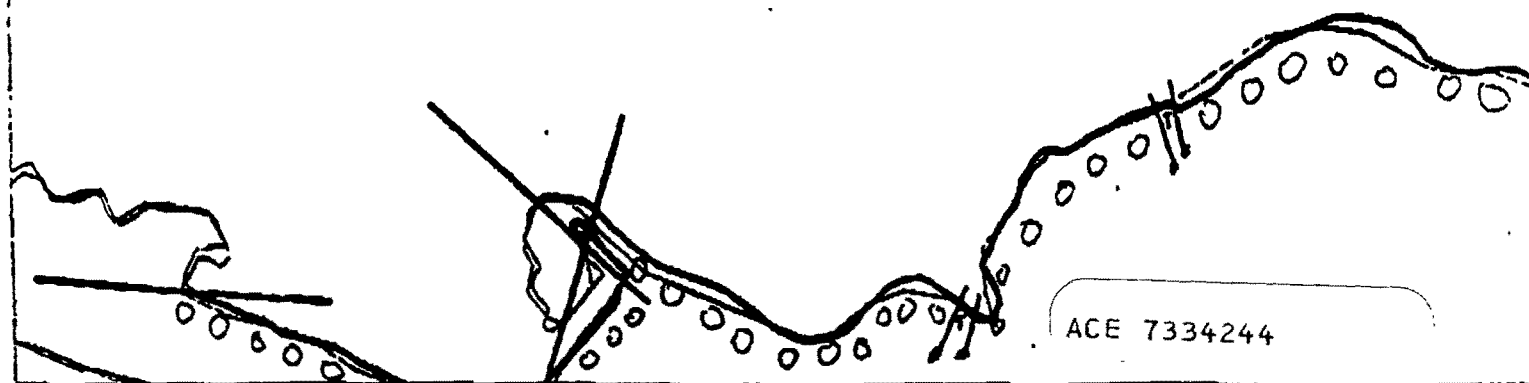
KA-3

Approx. Segment Length: 1055m

Map Key: AKP-KA-3a

Name: LINDSAY NAKASHIMA

Date: 4/29/90



ACE 7334244

XXXX Wide

//// Medium

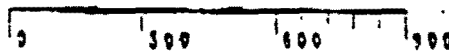
--- Narrow

TTTT Very Light

0000 No 0

KA-3

Approx. Segment Length: 1055m

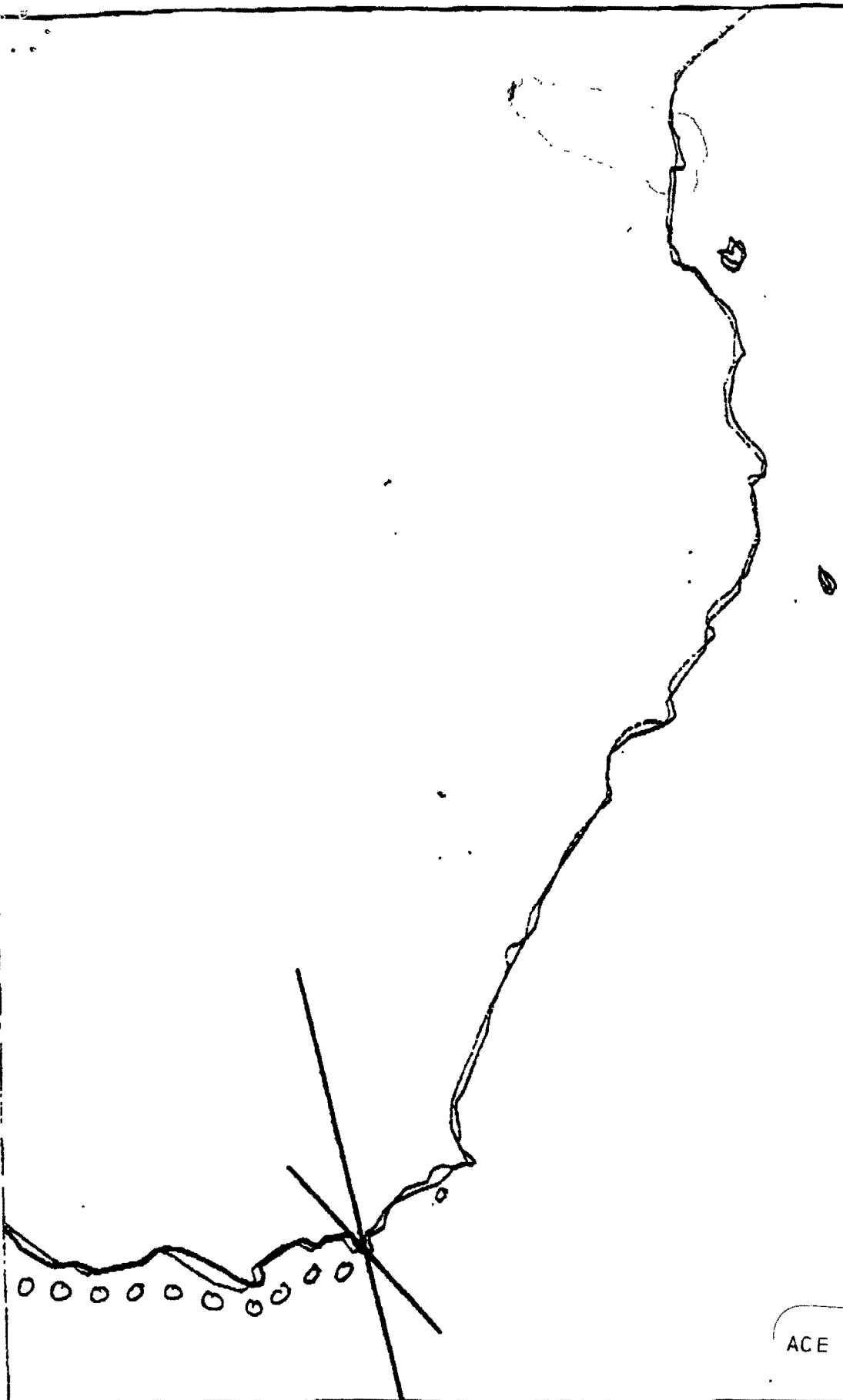


Map Key: AKP-KA-3c

Name: WINOSAY NAKASHIMA

Date: 4/29/90

Date: _____



ACE 7334245 -S

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

KA-3

Approx. Segment Length: 1055m



Map Key: AKP-KA-3d

Name: LINDSEY NAKASHIMA

Date: 4/28/90

Data Entered:

Date 6/27/90 Wednesday

Departure Time: 7:55 AM

Arrival Time: 9:05 AM Puale Bay ^{K10-7} PB019

Photo Data: None Too windy, move on to Kashuk.

Personnel: Fred Byars (Eaton) JEFF BARNHART (ADF&G)

John Haller (NPS), Randy Reed (ADEC) Ray Collett (USCG)

Sandra Tucker (USF&WS)

Oil Sample number: ~

Segment / K unit: ~

Comments: Drive To TCP 6:45 AM. Work on

Data / camera. 7:15 Load Aircraft, briefing, SW.

Sunny, CAVU. Located oil. Wind 30 mph steady,

too windy to work. Depart 9:45 AM. Will ~~go~~
go to Kashuk.

ACE 7334248 +9

Land Kashuk 10:00 AM. K09-35-KA-03

Band 48m x 6m patchy, band narrows in

The western end to 2m. Overall coverage

3% surface Tar patties / patches asphalted ^{Depth to} 1-2"

11:14 AM CG one star Admiral & crew banded to
inspect beach.

Dave Zawaski, Commander Smith, Julie Carlson (DEC)

Among persons on crew

CREW START: 10:30 AM CREW STOP: 12 noon

CREW START: 12:30 pm CREW STOP: 5:00 pm

Photos: 10, 11, 12, _____ Tar patties

Kashuk Bay 10:15 AM K09-35 KA03 North

side of Tidal Flat near stream

#13 K09-35 KA03 on Sand Flats Looking
NW Toward stream 10:45 AM

#14 Same position Looking Toward
work crew 10:45 AM KA03

#15 Photo of Tar & oiled sediments on
absorbent pads KA03

#16 photo of oiled area as delineated by the
Row of glassine bags. workers are at extreme
end of oiled area Toward stream.

ACE 7334249

upon additional investigation the band
is actually 150 yards long. Patchy.

Areas of surface oiling 1' square to 6' dia,

As the temperature increased today to near 70°F

The oil under the weathered surface turned

into a ~~sticky~~ sticky light brown fluid mousse.

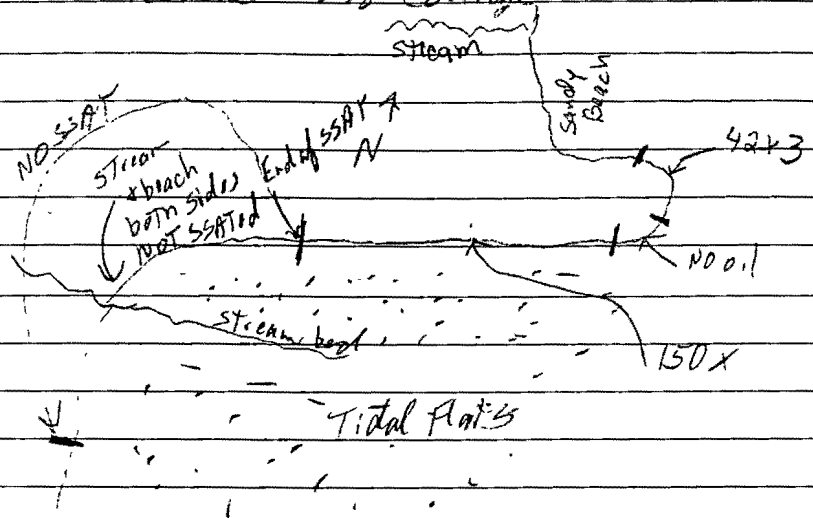
Substrate is shale / cobbles ^{40%} (thin layer) over

gravel / sand. The work order says this area

is 20m x 3m This is NOT correct, FRED

Kashvik creek con't.

Byars gave me go ahead to clean the additional area where we located oil. Found another band 42x3 patchy Tar/mousse patches around ~~the~~ + under the cobbles 10% coverage.



Sling bags to KAO2 Depart Kashvik 6:00pm

Land Kodiak Depart 6:50pm

Fred Byars (Exxon) indicated 3,000 pounds.

62 bags 40 pounds Each picked up today.

~~Exxon~~ Exxon AM eggs called just after I got in command center. will be flying to Cape

Douglas in 125 PM Twinstan 8:00 AM Departure.

Terry (DEC) Ellsworth called. Spoke to her.

Temmy Tamih said they are following schedule.

I guess I'll have to track that class on. Done at 8:00pm.

ACE 7334250 - 5

The "work area" in KA003 near the juncture with KA002 is a beach segment.
An anadromous stream is not involved with this work area. JPB

Land Kodiak 5:15pm at Airport. Copy manifests
from 511 EH. Called Middleton not home.
Done 6 pm

8/13/90

8/13 AT office 0730 Paperwork, phone calls, Middleton
ETC. Drive to ICR In Helo 8:50. Depart
Kodiak Airport
357 EH. Crew. Floyd Avery Exxon, Jerry
Elsworth (DEC), Tom McMahon (USCG), Bill Parks
(USCG). Dave Stiglmeyer WPS left 8:45 AM
on 311 EH with work crew. weather CAVU
wind 18 N. Land 10:15 AM Kashuk KA003
Crew start 10:00 AM stop 11:30 AM
24 (40 pound) bags. [move to Tan mat #1
at approx 11:40 AM. start work 12:30 pm ^{5:45pm}
Tan mat #1. N5799 H lands Kashuk
Tan mat #1 crew 1:37 pm Depart 1:45 pm
Drop off customers. Exxon Fuel person in
helo spoke to Floyd & Bill. Then departed.
[when I arrived at the ICR this AM a discussion was
just starting between Floyd & Terry as to working the
"work area" near the East Boundary of the segment. KA003
Apparently what has happened is Bill Stillings (Exxon)
has told Floyd Avery to not work that area.

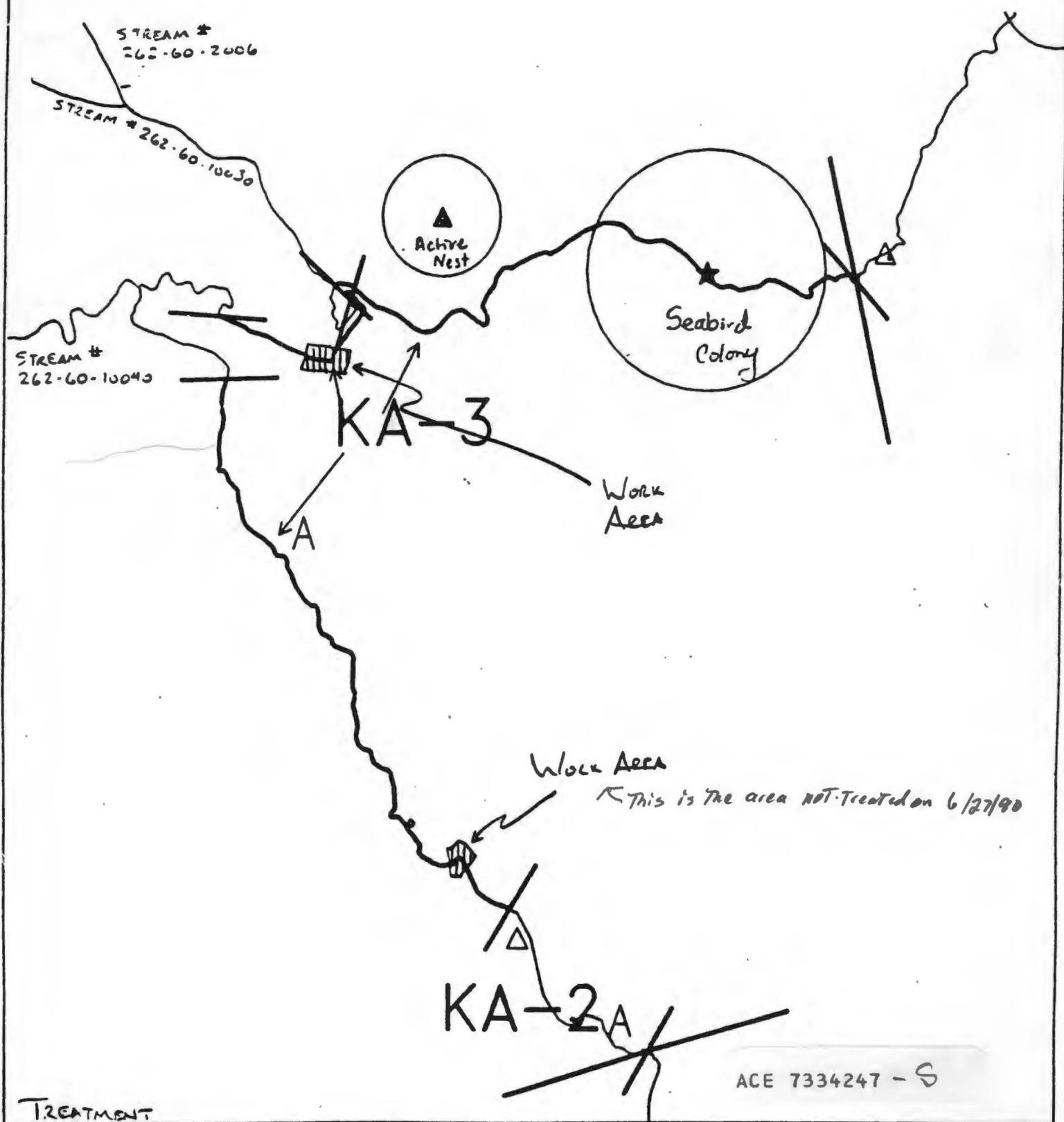
That "work area" as described in the original
work order was not treated when we cleaned
this segment (KA003). By mistake Randy Reed (DEC)
and Fred Evans (Exxon) demobilized this area
without noticing there was an additional
area to be worked. I explained this to both the
Coast Guard and Exxon, McMahon and Avery
respectively. On the beach at Tan mat #4
additional dialogue continued about this
particular situation. Floyd says "if we
don't get to it today we will be unable
to work this area." This was the directive
of Bill Stillings.

work is to commence shortly on removing the
culverts from the island Bay Drilling site
(Abandon). This is next to Jute creek. We
probably should keep an eye on what is going
on down there.

(start work area at juncture of KA2 & KA3 at
4pm. stop 5pm bags = 17
54 = 40 pound bags from Tan mat #1
Depart K9-3 KA003 5:10pm. Land Kodiak
6pm Paperwork Done 6:45pm

ACE 7334246 + 5

ACE 7334246/8



Exxon Company, USA
Map Key: AKP-KA-3

ECOLOGY MAP
SEGMENT K9S-35 KA-3
SUBDIVISION A (1 of 1)
METERS

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

K09-35-KA003

4/29/90

Schoch - Sketch A

Alaska
PeninsulaApproximately
1000 mDistance Between stream channel
in Tidal Flats area cleaned approx
50 m.many bears in area only one RPD
could NOT survey area by stream
due to this constraint.

Cottonwoods

Stream
268-60-10040Stream
268-60-10030

Alders

Water
FallsSegment
End

Kashvik Bay

Barren

Tidal
Flats

6 m Band

Water
Falls30m x 2m Patchy
ms/ct/st

Pit #1

Segment
End15m x 2m x 3cm
Patchy
ms/ct/stL - Drift Logs in Pocket Beaches
X - Occasional Spatters or patches
ms/ct/st

O - Oil Impacted Area

TTT - Cliff

ACE 7334219/B/HFF/1

State of Alaska
Department of Fish and Game
Habitat Division

Page 1 of 1

Field Inspection Report

Date 6/27/90 Time 1700

Location: (Logging unit/Road/Waterbody) Alaska Peninsula Koshvik Bay
Koshvik Creek AFS 262-60-10040 K09-35 KA-003

Operator/Contractor: Exxon (Eves)

Individuals present at time of inspection:

<u>Name</u>	<u>Representing</u>
<u>Fred Byars</u>	<u>Exxon</u>
<u>Ray Collett</u>	<u>USCG</u>
<u>Randy Reed</u>	<u>ADFC</u>
<u>Sandy Tuckers</u>	<u>USFWS</u>
<u>John Haller</u>	<u>NPS</u>

Activity/Situation Observed: oil bands totalling 192m in length were cleaned
to an acceptable level.

Pertinent Statutes/Regulations: _____

Recommended/Required Action (Specify): _____

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.

Jill P. Barnhart Fisheries Biologist
Fish and Game Representative/Title

Company Representative/Title

ACE 7334222

State of Alaska
Department of Fish and Game
Habitat Division

Page 1 of 1

Field Inspection Report

Date 6/27/90 Time 1700

Location: (Logging unit/Road/Waterbody) Alaska Peninsula, Kashvik Bay
Kashvik creek AFS 262-60-10040 K09-35 KA-003

Operator/Contractor: Exxon (Evros)

Individuals present at time of inspection:

<u>Name</u>	<u>Representing</u>
<u>Evel Byers</u>	<u>Exxon</u>
<u>Ray Collett</u>	<u>USCG</u>
<u>Randy Reed</u>	<u>ADEC</u>
<u>Sandy Tuckers</u>	<u>USFWS</u>
<u>John Haller</u>	<u>NPS</u>

Activity/Situation Observed: oil bands totalling 192 m in length were cleaned
to an acceptable level.

Pertinent Statutes/Regulations: _____

Recommended/Required Action (Specify): _____

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.

Jeffrey P. Barnhart Fisheries Biologist
Fish and Game Representative/Title

Company Representative/Title

State of Alaska
Department of Fish and Game
Habitat Division

Page 1 of 1

Field Inspection Report

Date 6/27/90 Time 1700

Location: (Logging unit/Road/Waterbody) Alaska Peninsula, Kachuk Bay
Kachuk Creek AFS 242-60-10040 K09-35 KA-003

Operator/Contractor: Exxon (Evos)

Individuals present at time of inspection:

<u>Name</u>	<u>Representing</u>
<u>Fred Byers</u>	<u>Exxon</u>
<u>Ray Collett</u>	<u>USCG</u>
<u>Benny Reed</u>	<u>ADEC</u>
<u>Sandy Tuckers</u>	<u>USFWS</u>
<u>John Haller</u>	<u>NPS</u>

Activity/Situation Observed: oil bands totalling 192 m in length were cleaned
to an acceptable level.

Pertinent Statutes/Regulations: _____

Recommended/Required Action (Specify): _____

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.

Jeffrey P. Lombard Fisheries Biologist
Fish and Game Representative/Title

Company Representative/Title

State of Alaska
Department of Fish and Game
Habitat Division

Page 1 of 1

Field Inspection Report

Date 6/27/90 Time 1700

Location: (Logging unit/Road/Waterbody) Alaska Peninsula, Kushuk Bay
Kushuk Creek AFS 362-60-10040 K09-35 KA-003

Operator/Contractor: Exxon (Exxon)

Individuals present at time of inspection:

<u>Name</u>	<u>Representing</u>
<u>Fred Byers</u>	<u>Exxon</u>
<u>Ray Collett</u>	<u>USCG</u>
<u>Randy Reed</u>	<u>ADFC</u>
<u>Sandy Tucker</u>	<u>USFWS</u>
<u>John Haller</u>	<u>MPS</u>

Activity/Situation Observed: oil bands totaling 122 m in length were cleaned
to an acceptable level.

Pertinent Statutes/Regulations: _____

Recommended/Required Action (Specify): _____

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.

Ally P. Lambert Fisheries Biologist
Fish and Game Representative/Title

Company Representative/Title

ADDENDUM: SUBDIVISION CONSTRAINTS

SEGMENT K09-35-KA-03 SUBDIVISION A (1 of 1)

WORK WINDOW

Manual Pickup

OPEN

ARCHAEOLOGICAL STANDARD CONSTRAINT

If cultural resources are uncovered, PHONE 564-3274.

APPLICABLE ECOLOGICAL TIME CONSTRAINTS

1A,1B Salmon Stream

60 81B
ADF&G catalogued anadromous streams (262-65-10030 and 262-65-10040) are more than 100m from work site. No constraint to manual pickup.

5R Seabird Colony

NO CONSTRAINT. Work site is more than 800m from seabird colony.

5T Bald Eagle Nest

NO CONSTRAINT. USFWS 4/9/90 map indicates no active nest within 400m of Subdivision A work site.

7JJ Subsistence:
Invertebrate Harvesting

No constraint to manual pickup.

OTHER ECOLOGICAL CONSIDERATIONS

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

FOSC

Date

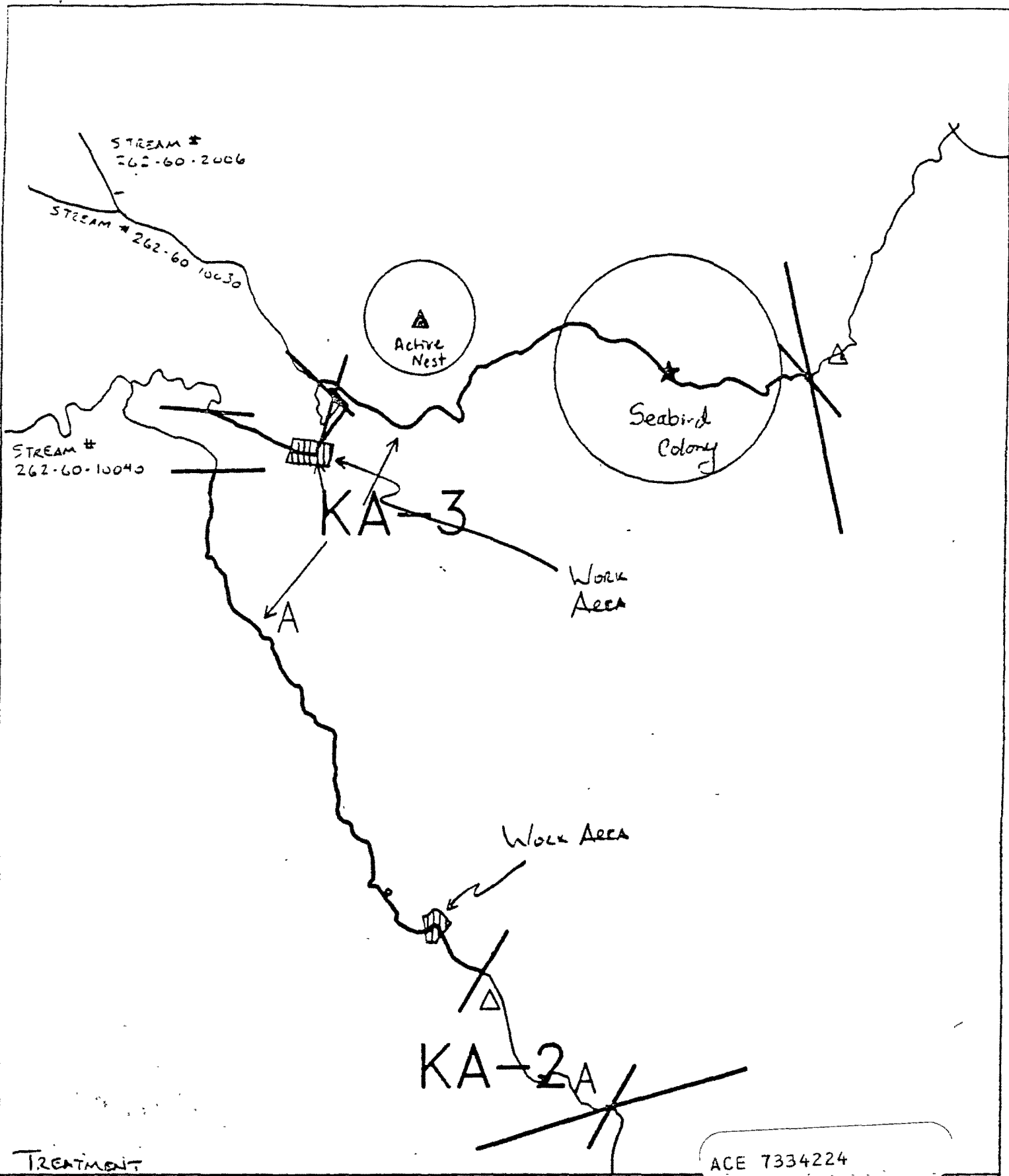
6-15-90

Prepared by

Date

6/15/90

ACE 7334223



Exxon Company, USA
Map Key: AKP-KA-3

ECOLOGY MAP
SEGMENT K9S-35 KA-3
SUBDIVISION A (1-1 of 1-1)
METERS

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

SEGMENT ST/ K09-35-KA-03 SUBDIVISION A (1 OF 1) DATE 4/29/90

See attached Ecological Constraint sheet for specific constraints and contacts.

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

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

SHPO SIGNATURE: Michael Antognoli DATE: 5/15/10

Wide 0 m: Medium 0 m: Narrow 0 m: V.Light 1560 m: No Oil 9155 m
Subsurface Oil Observed: Yes _____ No X Maximum Depth _____

Other (see comments)

COMMENTS: Recommended treatment is manual pickup of mousse from areas indicated on attached sketch map. Work should be conducted between 6/1 and 7/10 based on eagle nest and salmon constraints with approval of USFWS regarding eagle nest. Consult ADF&G for specific working times regarding invertebrate harvesting.

TAG COMMENTS:

TAG APPROVAL DATE: 5/15/90

ADEC ~~Art~~ WEINER ~~Art~~ Weiner

EXXON Amoy TGA 2nd

NOAA Brown Tailed Shearwater

USCG G.A. PETER G.A. Peter

FOSC:

DATE: 5-18-90

ACE 7334225 -S

4/29/90

Schoch - Sketch

Alaska
PeninsulaApproximately
1000 m

Barren

Cottonwoods

Stream
262-60-10040Stream
262-60-10030

Alders

Water Falls

No oil observed

Segment
Endoiled area
193m in Length
Tidal
Flats

Kashvik Bay

Not Surveyed

6 m Band

Water Falls

No oil observed

30m x 2m Patchy
ms/cf/st

L - Drift Logs in Pocket Beaches

X - Occasional Spatters or patches
ms/cf/st

O - Oil Impacted Area

TTT - Cliff

15m x 2m x 3cm
Patchy
ms/cf/stSegment
End

ACE 7334251

STATE OF ALASKA

DEPARTMENT OF FISH AND GAME

STEVE COWPER, GOVERNOR

333 RASPBERRY ROAD
ANCHORAGE, ALASKA 99518-1599
PHONE: (907) 344-0541

EXXON Valdez Oilspill Cleanup

Anadromous Fish Stream Authorization

Date 6/27/90

EXXON Authorized Representative

Fred BYARS

Shoreline Segment K09-35 KA-03

Anadromous Fish Stream Number(s) Kashvik Bay AFS 262-60-10040

Approved Cleanup Techniques manual removal of asphalted / Tar
patches and patches,

Approved Cleanup Period 6/27/90 - 7/10/90

Alaska Department of Fish and Game

ACE 7334252

Jeffrey P. Barnhart
Authorized Officer

Fred D. Byars
Permittee's Signature

EXXON FLIGHT PLAN

1. AIRCRAFT TAIL NUMBER: 509EH DATE: 6/27/90
2. AIRCRAFT COLOR: Red/White/Blue TYPE AIRCRAFT: B212
3. TOTAL NUMBER OF PEOPLE ON BOARD (INCLUDING CREW): 8
4. DEPARTURE POINT: ADQ ETD: 0730
5. ROUTE OF FLIGHT (SHOW ALL WAYPOINTS): ADQ - Pualu Bay - ADQ
6. FINAL DESTINATION: ADQ ETA: 1930
7. FUEL ON BOARD: 2 HRS + 40 MINUTES
8. ANTICIPATED DELAYS (WAYPOINT/TIME): —
9. COMPLETE MANIFEST AND ATTACH OR USE FORM BELOW: ☒ (check complete)
10. DRAW ROUTE WITH DIRECTION ARROWS AND ATTACH: ☒ (check complete)
11. EXECUTE IDEMNIFICATION AGREEMENT IF REQUIRED (reference page F-4) AND ATTACH. REQUIRED? YES ☐ NO ☒
12. FAX (266-6471) COMPLETE FLIGHT PLAN AND ATTACHMENTS TO TRANSPORTATION FOLLOWING OR CALL (266-6582). IF DELAYED MORE THAN 30 MIN., AMEND ETD....

NAME	COMPANY	WEIGHT	BAG WT	DESTINATION
Fred Byars	EXXON	est. 235	0	ADQ
Jeff Barnhart	ADF+G	↓	↓	↓
John Haller	Nat. Park S.			
Randy Reed	ADEC			
Ray Collett	USCG			
Sandra Tuckers	USF+W			

ACE 7334253

PILOTS NAMES:

McNulty / Lachmann

TOTALS

2010

0

TOTAL PASS & BAGGAGE

2010

EXXON FLIGHT PLAN

12. FAX (266-6471) COMPLETE FLIGHT PLAN AND ATTACHMENTS TO TRANSPORTATION
FOLLOWING OR CALL (266-6582). IF DELAYED MORE THAN 30 MIN., AMEND ETD...

ACE 7334254

R WALLACE
F TOOLAN

TOTALS	1785	200
TOTAL PASS & BAGGAGE	1485	

OPERATIONS DAILY REPORT **SQUAD 9 - SEATRADER/HELICOPTER**

FROM: Fred BYARS
 TO: VESSEL COMMAND NETWORK
 FAX No: (907) 266-6490

DATE OF WORK:

6/27/90WORK HOURS: START 0700 TO: 1930

WEATHER CONDITIONS:

Wind Speed (Knts) 15

Wave Height (Ft) _____

GENERAL Great

TIDES:

HIGH _____

Time _____

HIGH _____

Time _____

LOW _____

Time _____

LOW _____

Time _____

GENERAL LOCATION:

Kashvik Bay**SAFETY****INCIDENTS**

For Day

Fatality	
Lost Time	
Restricted	
Medical Treatment	
Total Recordable	

(Transmit Details Separately)

SCHEDULED WORK DAY

HOURS (ex Break) =

Vessel

Helo

Working _____
 Weather Downtime _____
 Transit Time _____
 Mechanical Downtime _____
 Other: _____

12

12

9

3

VESSEL**REPRESENTATIVES NAMES**

ADEC _____

Exxon _____

USCG _____

OOPS _____

Other _____

HELICOPTER**REPRESENTATIVES NAMES**ADEC Randy ReedExxon Fred BYARSUSCG Ray CollettOther Jeff Barnhart ADSandy Tucker USF**MANPOWER AND BILLETING STATUS (# of People)**

Berthing Vessel	PAX * Beds	Exxon Reps	OOPS	Agency Reps	Other	Beach Wkrs Wkg	Idle	Open Beds
Sea Trader	16							

Helicopter # of Workers
6

* COI Passenger Beds (Includes Service Personnel)

	Boat Crews
Berthing Vessels	
LCV/Production	
Work Boats	
TOTALS	

Helicopter Tail #'s
509 EH
511 EH
Work Areas
K1-35 KA 3

VESSEL STATUS (# of Vessels)

Vessel Type	Total Assign	In Transit	Total Working	Not Used	Mech Down	Weath Down
Berthing						
LCV/Production						
Work Boat						
TOTALS						

VESSELS ASSIGNED:

Vessel Name	Vessel Type	# People Berthed
Sea Trader	Berthing	

NEXT SQUAD MOVE: LOCATION

PB-19B K10-7DATE OF MOVE 7/28/90

DATE OF LAST CREW CHANGE

PORT FOR CREW CHANGE

SCHEDULED DATE FOR NEXT CREW CHANGE

PORT FOR CREW CHANGE

VISITORS (Name/Affiliation)

STATUS OF SUPPLIES/STORAGE CAPACITIES:

ACE 7334255

NUMBER OILED/DEAD BIRDS FOUND _____ # Alive

NUMBER OILED/DEAD MAMMALS FOUND _____ # Alive

OTHER*

* Such as discovery of dead oiled birds/mammals, Archeological Artifacts, Wildlife incidents, etc.

PHOTO LOG ADF&G

OFFICE: KODIAK
DATE PRINTED: 09/06/90

PHOTOGRAPHER: J. Barnhart

ROLL #: 90JP8005K

FRAME#	DATE	TIME	SEGMENT#	STATION#	LOCATION	REASON FOR TAKING PHOTO
01	07/18/90	1850	KA-003	2626010040	Kashvik Creek, Alaska Peninsula K09-35	Aerial view.
02	07/18/90	1850	KA-003	26260K-605	Kashvik Bay, Alaska Peninsula K09-35	Aerial view.
03	07/18/90	1850	KA-003	26260K-605	Kashvik Bay, Alaska Peninsula K09-35	Aerial view looking east.
04	07/18/90	1850	KA-003	-0-	Kashvik Bay, Alaska Peninsula K09-35	Aerial view - AFS#262-60-605 (foreground), AFS#262-60-10040 (center, along bluff).
05	08/10/90	1150	KA-003	26260K-605	Kashvik Bay, Alaska Peninsula K09-35	Removal of oil band #4 west of stream.
06	08/10/90	1150	KA-003	26260K-605	Kashvik Bay, Alaska Peninsula K09-35	Oil band #4 covered with sand. Process of removal.
07	08/10/90	1155	KA-003	26260K-605	Kashvik Bay, Alaska Peninsula K09-35	Oil band #4 covered with sand. Process of removal.
08	08/10/90	1155	KA-003	26260K-605	Kashvik Bay, Alaska Peninsula K09-35	Oil band #4. Rainbow/silver sheen in water.
09	08/10/90	1155	KA-003	26260K-605	Kashvik Bay, Alaska Peninsula K09-35	Oiled cobble removed from band #4.
10	08/10/90	1210	KA-003	26260K-605	Kashvik Bay, Alaska Peninsula K09-35	Removal of oil band #4. Brown/silver sheen. Small globules floating oil.
11	08/10/90	1212	KA-003	26260K-605	Kashvik Bay, Alaska Peninsula K09-35	Removal of oil band #4. View toward west.
12	08/13/90	1430	KA-003	26260K-605	Kashvik Bay, Alaska Peninsula K09-35	Bill Parks (Veco), Floyd Avery (Exxon), Terry Ellsworth (DEC), T. McMahon (USCG).
14	08/13/90	1520	KA-003	26260K-605	Kashvik Bay, Alaska Peninsula K09-35	Bags delineate oil band #1. View toward west.
15	08/13/90	1520	KA-003	26260K-605	Kashvik Bay, Alaska Peninsula K09-35	Oil band #1. View toward west.

PHOTO LOG ADF&G

OFFICE: KODIAK

DATE PRINTED: 09/06/90

PHOTOGRAPHER: J. Barnhart

ROLL #: 90JP8004K

FRAME#	DATE	TIME	SEGMENT#	STATION#	LOCATION	REASON FOR TAKING PHOTO
01	07/15/90	1030	AS-007	2626510040	Alinchak Bay, Alaska Peninsula K10-02	View downstream toward mouth of AFS#262-65-10040.
02	07/15/90	1100	AS-007	2626510040	Alinchak Bay, Alaska Peninsula K10-02	Aerial view of cleanup crew east of AFS#262-65-10040.
03	07/15/90	1100	AS-007	2626510040	Alinchak Bay, Alaska Peninsula K10-02	Aerial view, cleanup crew east of AFS#262-65-10040.
04	07/15/90	1105	AB-002	26265K-655	Bear Lake Creek, Alaska Peninsula K10-02	Aerial view of lower river.
05	07/15/90	1105	AB-002	26265K-655	Bear Lake Creek, Alaska Peninsula K10-02	Aerial view.
06	07/17/90	1220	AB-002	26265K-655	Bear Lake Creek, Alaska Peninsula K10-02	Sand removed by water, exposing subsurface mousse layer, lower river.
07	07/17/90	1225	AB-002	26265K-655	Bear Lake Creek, Alaska Peninsula K10-02	Sand removed by water, exposing subsurface mousse layer, lower river.
08	07/17/90	1225	AB-002	26265K-655	Bear Lake Creek, Alaska Peninsula K10-02	Exposed subsurface oil layer, lower river.
09	07/17/90	1230	AB-002	26265K-655	Bear Lake Creek, Alaska Peninsula K10-02	5cm thick mousse pattie, broken apart.
10	07/17/90	1233	AB-002	26265K-655	Bear Lake Creek, Alaska Peninsula K10-02	Mousse patties on stream bank, lower river.
11	07/17/90	1235	AB-002	26265K-655	Bear Lake Creek, Alaska Peninsula K10-02	Sand removed by water, exposing subsurface mousse layer, lower river.
12	07/17/90	1247	AB-002	26265K-655	Bear Lake Creek, Alaska Peninsula K10-02	Test pit at edge of stream, lower river. Sheening evident.
13	07/17/90	1250	AB-002	26265K-655	Bear Lake Creek, Alaska Peninsula K10-02	Surface mousse patties on stream bank, lower river.
14	07/17/90	1405	AB-002	26265K-655	Bear Lake Creek, Alaska Peninsula K10-02	Semifluid mousse patties in stream, lower river.
15	07/17/90	1410	AB-002	26265K-655	Bear Lake Creek, Alaska Peninsula K10-02	Mousse in stream bed, lower river. Sheening evident.
16	07/17/90	1412	AB-002	26265K-655	Bear Lake Creek, Alaska Peninsula K10-02	View upstream from lower river. Oiled area near shovel and stake.
17	07/17/90	1605	AB-002	26265K-655	Bear Lake Creek, Alaska Peninsula K10-02	Lower river. TAG, Agency monitors.
18	07/18/90	1700	KA-003	-0-	Kashvik Bay, Alaska Peninsula K09-35	Aerial view - AFS#262-60-10040 (center) and AFS#262-60-605 (left).

FRAME#	DATE	TIME	SEGMENT#	STATION#	LOCATION	REASON FOR TAKING PHOTO
19	07/18/90	1700	KA-003	2626010040	Kashvik Creek, Alaska Peninsula K09-35	Aerial view - Kashvik Creek and tidal flat.
20	07/18/90	1745	KA-003	26260K-605	Kashvik Bay, Alaska Peninsula K09-35	Ken Middleton measuring thickness of tarmat.
21	07/18/90	1755	KA-003	26260K-605	Kashvik Bay, Alaska Peninsula K09-35	Ken Middleton standing in tarmat.
22	07/18/90	1800	KA-003	26260K-605	Kashvik Bay, Alaska Peninsula K09-35	Tarmat adjacent to stream channel.
23	07/18/90	1810	KA-003	26260K-605	Kashvik Bay, Alaska Peninsula K09-35	Tarmat #3 west of stream. Oil under cobble.
24	07/18/90	1820	KA-003	26260K-605	Kashvik Bay, Alaska Peninsula K09-35	Tarmat #4 west of stream. Cobble removed from mat.

PHOTO LOG ADF&G

OFFICE: KODIAK
DATE PRINTED: 09/06/90

PHOTOGRAPHER: J. Barnhart

ROLL #: 90JPB002K

FRAME#	DATE	TIME	SEGMENT#	STATION#	LOCATION	REASON FOR TAKING PHOTO
01	06/24/90	1040	PB-001	2627010025	Paule Creek-Paule Bay, Alaska Peninsula K10-07	Tarballs, patties removed from subsurface on beach north of stream mouth.
02	06/24/90	1040	PB-001	2627010025	Paule Creek-Paule Bay, Alaska Peninsula K10-07	Supersack containing bags of oil, on beach north of stream mouth.
03	06/24/90	1125	PB-001	2627010025	Paule Creek-Paule Bay, Alaska Peninsula K10-07	Bags of oil. 12m x 3m excavated area on beach north of stream mouth.
04	06/24/90	1200	PB-001	2627010025	Paule Creek-Paule Bay, Alaska Peninsula K10-07	Fred Byars (Exxon), John Hardister (USF&WS), and pilots.
05	06/24/90	1425	PB-001	2627010025	Paule Creek-Paule Bay, Alaska Peninsula K10-07	Slings supersacks onto uplands. Beach north of stream mouth.
06	06/25/90	1300	KA-002	-0-	Kashvik Bay, Alaska Peninsula K09-35	Cobble turned over exposing unweathered mousse. Sheen evident in pool of water.
07	06/25/90	1320	KA-002	-0-	Kashvik Bay, Alaska Peninsula K09-35	Todd Skoglund (VECO) cleaning beach.
08	06/26/90	1030	KA-002	-0-	Kashvik Bay, Alaska Peninsula K09-35	Portion of excavation site necessary to remove subsurface mousse.
09	06/26/90	1605	KA-002	-0-	Kashvik Bay, Alaska Peninsula K09-35	Helicopter slinging supersacks of oil onto uplands.
10	06/27/90	1015	KA-003	2626010040	Kashvik Creek, Alaska Peninsula K09-35	Tar patties along tidal flat, north side of stream channel.
11	06/27/90	1015	KA-003	2626010040	Kashvik Creek, Alaska Peninsula K09-35	Tar patties along tidal flat, north side of stream channel.
12	06/27/90	1015	KA-003	2626010040	Kashvik Creek, Alaska Peninsula K09-35	Tar patties along tidal flat, north side of stream channel.
13	06/27/90	1045	KA-003	2626010040	Kashvik Creek, Alaska Peninsula K09-35	On tidal flats looking west toward oiled area and stream.
14	06/27/90	1045	KA-003	2626010040	Kashvik Creek, Alaska Peninsula K09-35	On tidal flat looking north toward oiled area and work crew.
15	06/27/90	1100	KA-003	2626010040	Kashvik Creek, Alaska Peninsula K09-35	Tarballs and oiled sediments on absorbent pad. Along tidal flat north of stream channel.
16	06/27/90	1400	KA-003	2626010040	Kashvik Creek, Alaska Peninsula K09-35	Oiled area along tidal flat north of stream channel as delineated by row of plastic bags.
17	06/28/90	1100	CD-020	2621010092	2 mi SW Cape Douglas, Alaska Peninsula K09-11	3m x 1m oiled area on stream bank, exposed after log was rolled away.
18	06/28/90	1220	CD-020	2621010092	2 mi SW Cape Douglas, Alaska Peninsula K09-11	Oiled area, north bank of stream/lagoon.
19-21	06/27/90	-0-	-0-	-0-	Glaciers	Miscellaneous photos. Not oil related.
22	06/29/90	1150	PB-016	2627010010	Helen Creek-Paule Bay, Alaska Peninsula K10-07	Oil mousse on stream bank.

4/29/90

Schoch - Sketch A

Alaska
PeninsulaApproximately
1000 m

Do not write on.

This copy

From SSAT

KA-03

Cottonwoods

Alders

Water Falls

Segment
End

Kashvik Bay

Tidal
Flats

Barren

6 m Band

Water
Falls30 m x 2 m Patchy
ms/ct/st

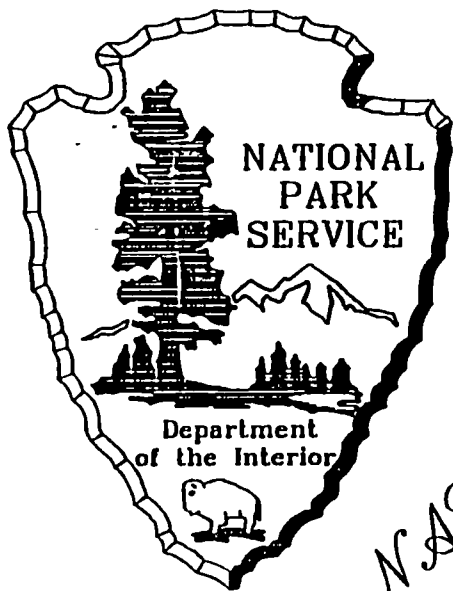
L - Drift Logs in Pocket Beaches

X - Occasional Spatters or patches
ms/ct/st

O - Oil Impacted Area

TTT - Cliff

15 m x 2 m x 3 cm
Patchy
ms/ct/stSegment
End



KATMAI NATIONAL PARK AND PRESERVE

CAPE DOUGLAS

SWIKSHAK BAY

HALLO BAY

KUKAK BAY

K09-35-KA003

KATMAI BAY

Shelikof Strait

10 5 0 10 20 30
KILOMETERS

ACE 7334226 X

**National Park Service
Shoreline Oil Assessment**

Observer:... *Schoch* Zone:... *Kodiak* Segment #: *Ko. 2-35. K.A. 00.*
Date:... *4/20/90* Place: *Kashvik Bay - Koonai*
Time:... *10.05* Tide Height: Segment Length:... *13000*
(map in heel)
Weather: cloudy sunny fog rain windy
Observations from: ground vessel helicopter
Upland Description: bedrock rubble alluvial fan grass forest
alder/willows marsh lagoon pond bluff
Upland Slope Angle: low medium , high vertical
Intertidal Slope Angle: low medium high vertical
Wave Exposure: low medium high Wave Type: swell cresting breaking
Length of Beach:meters Width:... *1000*meters
in tidal flats

Impacted Area (length)

Total length of impacted area:... *1900*meters

Wide: >6 m and >50% oil cover.... *0*meters

Moderate: 3 m to 6m and 10% to 50% oil cover..... *0*meters

Narrow: <3m and >10% oil cover.... *0*meters

Very Light: <10% oil cover regardless of width (splatters)... *1900*meters

Subsurface Oil Assessment

Pit #	Oil Type	Matrix Size	Intertidal Location	Pit	Oiled Depth Interval	Pit Depth	% Sediment Saturation
1	<i>Mousse / gel</i>	<i>B/C/S</i>	<i>UI</i>		<i>2-3 cm</i>	<i>5 cm</i>	<i>100</i>
2	<i>Mousse</i>	<i>C/P/S</i>	<i>UI</i>		<i>2-1 cm</i>	<i>5 cm</i>	<i>100</i>
3							
4							
5							
6							
7							

ACE 7334227

Supratidal

Observer:....Schach.....Segment #: KP9-35-KA003

Substrate	%	oil type	continuous	broken	patchy/numerous	spat
bedrock (vertical) 100		asphalt				
		pooled				
boulder 0		cover				
		coat				
cobble 0		stain				
		mousse				
pebble 0		patties				
		tarballs				
sand 0		sheen				
		logs				
silt/mud 0		plastic				
		dead algae				
organics 0		dead wildlife number and type				

NO OIL
OBSERVED

Upper Intertidal

Substrate	%	oil type	continuous	broken	patchy/numerous	spat
bedrock 50		asphalt				
		pooled				
boulder 30		cover				✓
		coat				✓
cobble 10		stain				✓
		mousse			✓	✓
pebble 5		patties				
		tarballs				
sand 5		sheen				
		logs				
silt/mud 0		plastic				
		dead algae				

ACE 7334228

Middle Intertidal

Observer:....*Schech*....Segment #: *K09-35-K*

Substrate	%	oil type	continuous	broken	patchy/numerous	sp.
bedrock	<i>50</i>	asphalt				
		pooled				
boulder	<i>30</i>	cover				✓
		coat				✓
cobble	<i>10</i>	stain				✓
		mousse			✓	✓
pebble	<i>5</i>	patties				
		tarballs				
sand	<i>5</i>	sheen				
		logs				
silt/mud	<i>0</i>	plastic				
		dead algae				
organics	<i>0</i>	dead wildlife number and type <i>0</i>				

Lower Intertidal

Substrate	%	oil type	continuous	broken	patchy/numerous	spa.
bedrock	<i>10</i>	asphalt				
		pooled				
boulder	<i>10</i>	cover				
		coat				
cobble	<i>5</i>	stain				
		mousse				
pebble	<i>5</i>	patties				
		tarballs				
sand	<i>20</i>	sheen				
		logs				
silt/mud	<i>50</i>	plastic				
		dead algae				

ACE 7334229

**Biological Assessment
Of Oil Impacted Area**

Observer:... *S. Schuch* ... Segment #: *K09-35-K1*

Intertidal Organism	Dense	Moderate	Sparse	Rare	Juvenile	Mortality
Barnacles						
Mussels						
Littorina						
Nucella						
Limpets						
Amphipods						
Isopods						
Echinoderms						
Fucus						
Other Algae						

See SSAT FORM 1510

Marine Mammal Observations:

Terrestrial Mammal Observations:

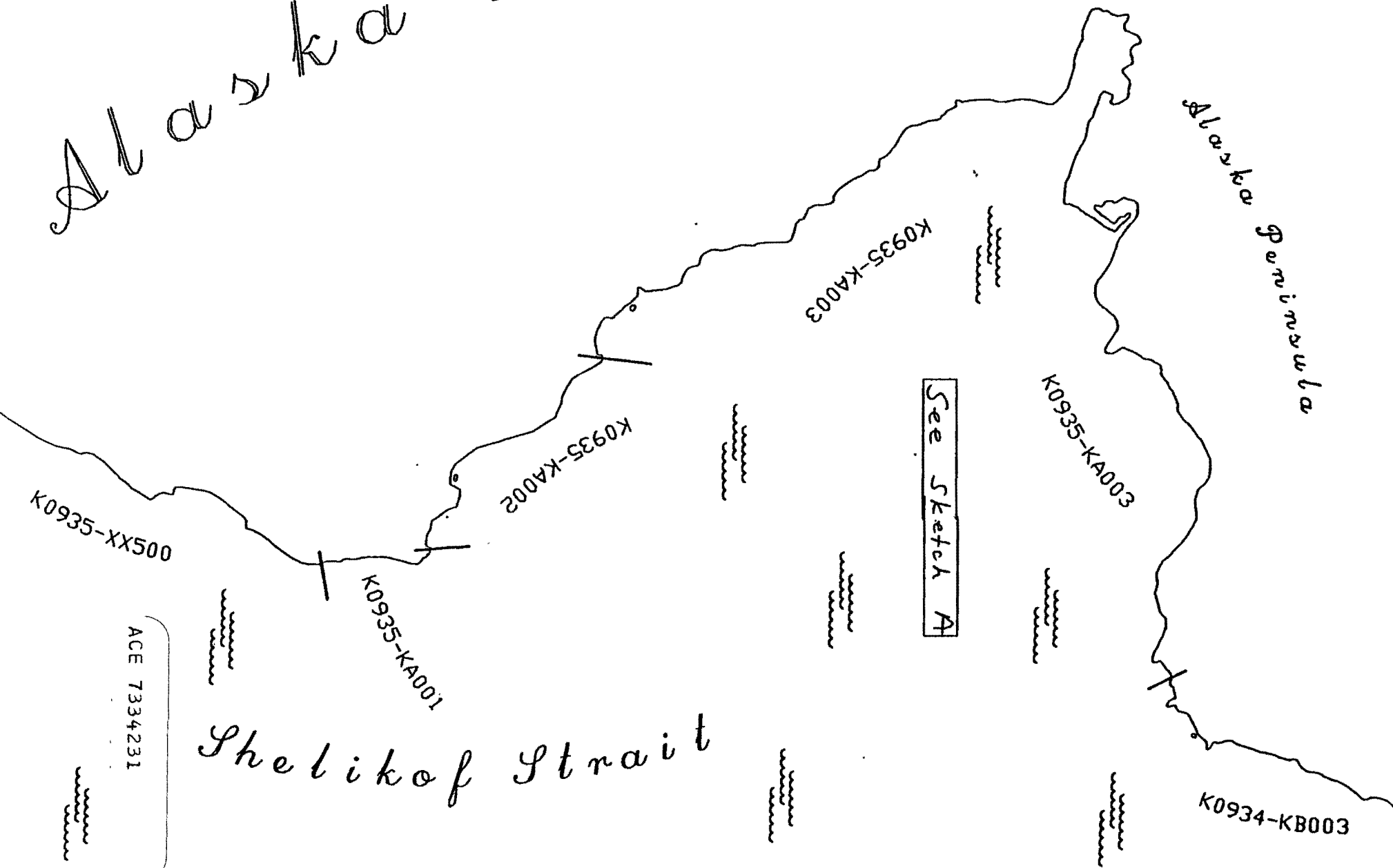
Bird Observations:

*Bald Eagles 3 juveniles
4 mature*

General Observations:

*Recoverable oil consists of several mouse
patches with entrained sediment which could
be scraped from the substrate.*

Alaska Peninsula



Shelikof Strait

ACE 7334231

K09-35-KA003

4/29/90

Schock - Sketch A

Alaska
Peninsula

Approximately
1000 m

Cottonwoods

Alders

Water
Falls

Segment
End

Kashvik Bay

Barren

Tidal
Flats

Pit #2

6 m Band

Water
Falls

30 m x 2 m Patchy
ms/Ct/St

Pit #1

Segment
End

ACE 7334232 -5

15 m x 2 m x 3 cm
Patchy
ms/Ct/St

L - Drift Logs in Pocket Beaches

X - Occasional Spatters or patches
ms/Ct/St

Oil Impacted Area

Oil

262-60-10040

ACE 7334262/A

STATE OF ALASKA

DEPARTMENT OF FISH AND GAME

STEVE COWPER, GOVERNOR

Rapifax 349-1723

333 RASPBERRY ROAD
ANCHORAGE, ALASKA 99518-1599
PHONE: (907) 344-0541

RAPIFAX TRANSMITTAL SHEET

TO: Ken Middleton
Anch. HabitatDATE: 6/21/90No. Pages: 6
(including this page)FROM: JEFF BARNHART
Kodiak Habitat

MESSAGE:

~~###~~ K10-2 The DEC bible indicates it is
segment X+500. Must have been
converted to 007.

There are two streams as I have indicated
on the sketch. The north stream is
262-65-10040. The southern stream is #656
on the Kodiak map't map. It is not in the
Atlas I have. You should be able to come up
with a number at your end.

ALASKA DEPT OF
FISH & GAME

JUN 21 1990

REGION II
HABITAT DIVISIONALASKA DEPT OF
FISH & GAME

JUN 21 1990

REGION II
HABITAT DIVISION

K-10
~~15-01~~

3

RECEIVED
JUN 18 1990

DEPT. OF
NATURAL RESOURCES
CONSERVATION

REGION: KODIAK

SEGMENT: ST ~~K10~~ 02-AS-007

SUBDIVISIONS: A (1 OF 1)

concur

Anal of near
251-65-10040 - look wrong!
262-65-10040 / what name
(Alameda Bay)

** assess mid-zone 6/19/90*
KRM

262-65-10040

Correct
gfb

Purple Chum and Dolly Varden

Bluffs

Mud Flat

Glaucous-winged
Gull Nesting Colony

Sand Flat

Bedrock, Boulders,
and Cobbles below
Rock Faces. Sand
in LFZ



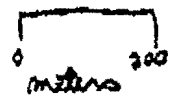
Ecology Map.

6/1/90

210-02

AS-007

H. Davis



SHORELINE EVALUATION

SEGMENT ST//K01-02-AS-002 SUBDIVISION A (1 OF 1) DATE 6/1/90

SEGMENT ENVIRONMENTAL SENSITIVITIES AND TIME CONSTRAINTS:

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

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

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

18 ~~Salmon stream south~~ - spawning (7/15 to 9/10; PEAK 8/15)

(Stream ID # (251-65-10040))

See attached ~~ecological~~ constraint sheet for specific constraints and contacts.

→ Incorrect, correct # 262-65-10040 and stream #656

SUBDIVISION ECOLOGICAL CONSTRAINTS:

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

ARCHAEOLOGICAL CONSTRAINTS:

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

SHPO SIGNATURE: _____ DATE: _____

OILING CATEGORIZATION:

Wide 0 m: Medium 0 m: Narrow 106 m: V.Light 3907m: No Oil 4019 m

Subsurface Oil Observed: Yes _____ No X Maximum Depth _____

RECOMMENDATIONS:

 No Treatment Recommended

☒ Treatment Recommended

X Manual Pickup

Bioremediation

Tarmat Removal

Snare/Absorbent Booms

Oil Snares (pom poms)

 Absorbents (pads, rolls, etc)

Spot Washing: _____ Wands _____

Beach Cleaner

Other (see comments)

COMMENTS: Recommended treatment is manual removal of mousse in areas shown on attached sketch map.

TAG COMMENTS:

TAG APPROVAL DATE: _____

ADEC

EXXON

NOAA

USCG

FOSC: DATE:

Top Character League

[illegible]

A hand-drawn geological map of a coastal area. The map features a coastline with several points of interest labeled with lines pointing to specific locations. The labels include:

- Very widely scattered splatters of storm STP/S** (top right)
- Only splatter STP/S** (middle right)
- No oil** (two locations: one near the top right, one near the center)
- Some splatter CV/S** (center)
- Widely scattered splatter on rock areas CV/S** (bottom center)
- No oil** (bottom center)
- Widely scattered splatter over CV/S** (bottom left)
- Well sorted sand beach** (top left)
- Red rock with large boulders, sandstone** (top left, below the well sorted sand beach)
- Sand beach with rubble storm berm** (bottom left)
- Sheet beach, area in UZ, NIZ, area in UZ, STP** (top center)
- and with STP in STP** (top center)
- 1000** (a line with an arrow pointing towards the top right)
- 1520** (a line with an arrow pointing towards the bottom left)

 The map is drawn with simple lines and includes some handwritten notes and numbers.

~~LA 10 - FO - CV 724 CT 1100 ST 1100 MO - PT 95 IN 39.9 FL - NO 3944~~

AS-7

	inches	x450	Normal
NO	8.25	3713	3944
VL	8.0	3600	3924
L	0.2	90	95
		7403	7863

K10-2
 NOT
 K10-3

K10-3

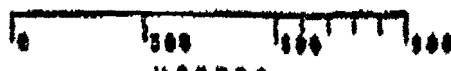
XXXX Wide K10-2 - AS-7

/// Medium

--- Narrow

TTTT Very Light

ADEC Segment Length: 8032m



Map Key: AKP-AS-7a

Name: R. Marty

Date: June 01 1995

Date Entered:

FAX TRANSMITTAL
NATIONAL PARK SERVICE
OFFICE OF OIL SPILL COORDINATION
2525 GAMBELL STREET
ANCHORAGE, ALASKA 99503
(907) 257-2526

ALASKA DEPT. C.
FISH & GAME
JUL 13 1990
REGION II
HABITAT DIVISION

TO: Ken Middleton/Dick Heusel
FROM: Dan Hanson
DATE: 7/13/90

RECIPIENT'S FAX # ~~3~~ 349-1723
SENDER'S FAX # (907) 257-2523



COMMENTS: K09-35-KA3
FYI - Katmai segment with
oil reported at the mouth of 2 salmon
streams

File Kodiak Anad. Streams
262-60-10040



NUMBER OF PAGES TO FOLLOW: 2

ACE 7334262/HF/S/H

TO: FILES

FROM: CHIEF BIOLOGIST, TROYER, NPS, HODIAT

SUBJECT: INSPECTION SEGMENT H9-35-HA3 (TASHVIT BAY)

On July 11, 1990, myself, Bill McDonald and Paul Purifoy started to walk H9-35-HA3. We did not finish it because we found so much oil the tide came in before we finished. The head of the bay contains extensive tidal flats and we decided to walk this first.

I checked this area last year and found petroleum oil in the flats then but never knew if it had been cleaned up. The SSAT team this year indicated they found no oil in this area but when I reviewed their report I noted they did not walk the last mile at the head of the bay on the south side. So we decided to walk this section first. We found four major bands of oil in this area as indicated on the attached map. Three of these were at the base of the tidal flat slope where the rock sediment meets the sand. The largest one was in the shallow flats in pebble-rock-sand. Huge sections were solid mouse sometimes 15 feet by 10 plus feet in diameter. This is one of the most extensive oiled areas I have seen, yet it will be easy to remove. The rocks are small enough so they and the mouse can be shoveled into bags. Almost every inch of this can be removed and a team could probably get all of it in a day or so. Much of the mouse is far up in the tide flats and will take a helicopter crew to remove or it will require a boat crew to walk in a long way and get picked up on high tide.

The area on the north side was treated, however we found a section about 10 M x 1 meter that was missed. This is on the edge of the salmon stream and is in the form of thick mouse patches, sometimes 18" in diameter. I marked this with a pink ribbon. It's near the cliffs. It could be picked up when the south side is treated.

Bill Troyer

SEGMENT K09-35-HA3 (HASHVIT BAY HEAD)

July 11, 1990

