

(version 5/02/89)

SHORELINE CLEANUP PROGRAM

DATE 5/26/89

SHORELINE SEGMENT SC-1

LOCATION: (see enclosed map) South of STEEP CAPE, near entrance
to Raspberry Strait

ADEC NO. _____ SHORELINE ASSESSMENT DATE: 5/19/89

Recommended Cleanup Activity(ies):

- Remove oiled coated seaweed drift in the high intertidal zone.
- Check to make sure that the clean seaweed does not cover any contaminated seaweed drift.

Priorities Considerations:

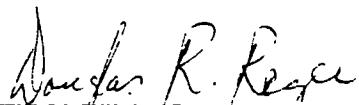
See Above.

Ecological Constraints (from site survey):

Avoid areas of healthy fucus in lower intertidal zone.

Archeological Constraints (from site survey):

No access above the active beach. Site should be monitored during cleanup. The restraints for type A cleanup should be applied to this segment. If heretofore undiscovered cultural materials are uncovered during cleanup, contact Exxon's Archeological Field Director and take actions prescribed in the Operational Guidelines for Shoreline Cleanup dated 4/21/89 as amended.



State Historic Preservation Officer *

Date: 5/29/89

EXXON: _____

Date: _____

FOSC: _____

Date: _____

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

ACE 6725829 845

SHORELINE OIL EVALUATIONDate: 19 May 1989 Time: 1050 HRSObserver: BRYAN TRIMMSurveyed From: Foot/Boat/Helio/PlaneWeather: SUN/Cloud/Rain/Snow/Fog**LOCATION**LOCATION 1 MILE (1750m) S. OF STEEP CAPE ON
AFOGNAK Is (ENTRANCE TO RASPBERRY STR).SEGMENT NUMBER SC-1LENGTH OF SHORELINE SEGMENT: 1500 mACCESS: Foot/Vehicle/Boat/Barge/Helio/Float Plane**SHORELINE:**Shoreline Type: SPI/SEA/COV/HLD/STRTSlope: LANG/HANG/VERWave Exposure: High/Med/LowSediment: B 25% / C 25% / P 25% / G 25% / S —% / M —% / R —%Drift Debris on Beach: Yes/No Supra/Upper/Mid/Lower Type LOGS/SEAWeed**OIL**Degree of Oiling: Heavy/Moderate/Light/No Oil/UnobservedArea of Beach Impact: SU / SP / H / M / LContinuous: Y/N % of Segment 25 Width of Band: 1/2 mSporadic: Y/N % of Segment 35Est. Oil Thickness where > 1cm: — cm Est. Oil Penetration: 5 cmPooled Oil: —% "Free" Oil: —% Coated: H —% / M —% / L 100%Fresh —% Mousse 98% Tar Formation: 2%Drift Debris Oiled? Yes/No Supra/Upper/Mid/Lower Amount: H/M/L**Comments:**

LIGHT CHOCOLATE MOUSSE COATING OF BOULDER/Cobble BEACH. NO CLEANUP RECOMMENDED (TOO THIN A
SEEMS TO BE 2ND OR 3RD OILING.
COATING). REMOVE THE 1/2 m BAND OF OILED SEAWeed DRIFT AT THE TOP OF THE HIGH INTERTIDAL ZONE.
NOTE: MAKE SURE WORK CREWS CHECK & MAKE SURE CLEAN SEAWeed DRIFT DOES NOT OVERLAY ANY OILED
SEAWeed DRIFT.

ECOLOGICAL EVALUATION

LOCATION: Afograk Is SITE: S. of Star Cape OBSERVER: SM Bam
 LOCATION PREFIX: SC SEG. NO.: 1 LENGTH: 1500 (M)
 DATE: 5/19/89 TIME (HHMM): 1050 TIDE HT.: + 2 (M)
 OILED ZONE: Splash High Medium Low
 SUBSTRATUM: Rocks Boulder Cobble Gravel Sand Mud

LIVE BIOTA

Fucus (algae): Patchy (Y)/N Contin. Y/N Dense (Y)/N Sparse Y/N None Y/N

Dense in lower ITZ Some coated at beginning of seg.

Mytilus (Mussels): Patchy (Y)/N Contin. Y/N Dense (Y)/N Sparse Y/N None Y/N

Same as above

Balanus (Barnacles): Patchy (Y)/N Contin. Y/N Dense (Y)/N Sparse Y/N None Y/N

Dense spot in lower ITZ

Littorina

Patchy Y/N Contin. Y/N Dense Y/N Sparse (Y)/N None Y/N

Healthy

Limpets: Patchy Y/N Contin. Y/N Dense Y/N Sparse (Y)/N None Y/N

Healthy, Thais also

OTHER OBSERVATIONS: Amphipods alive in debris, Debris very dense in areas, lightly oiled

CLEANUP PRECAUTIONS: Avoid healthy Fucus community in lower ITZ and on boulders

MAMMALS: Otters Harbor Seals Sea Lions Whales
 Other Deep tracks

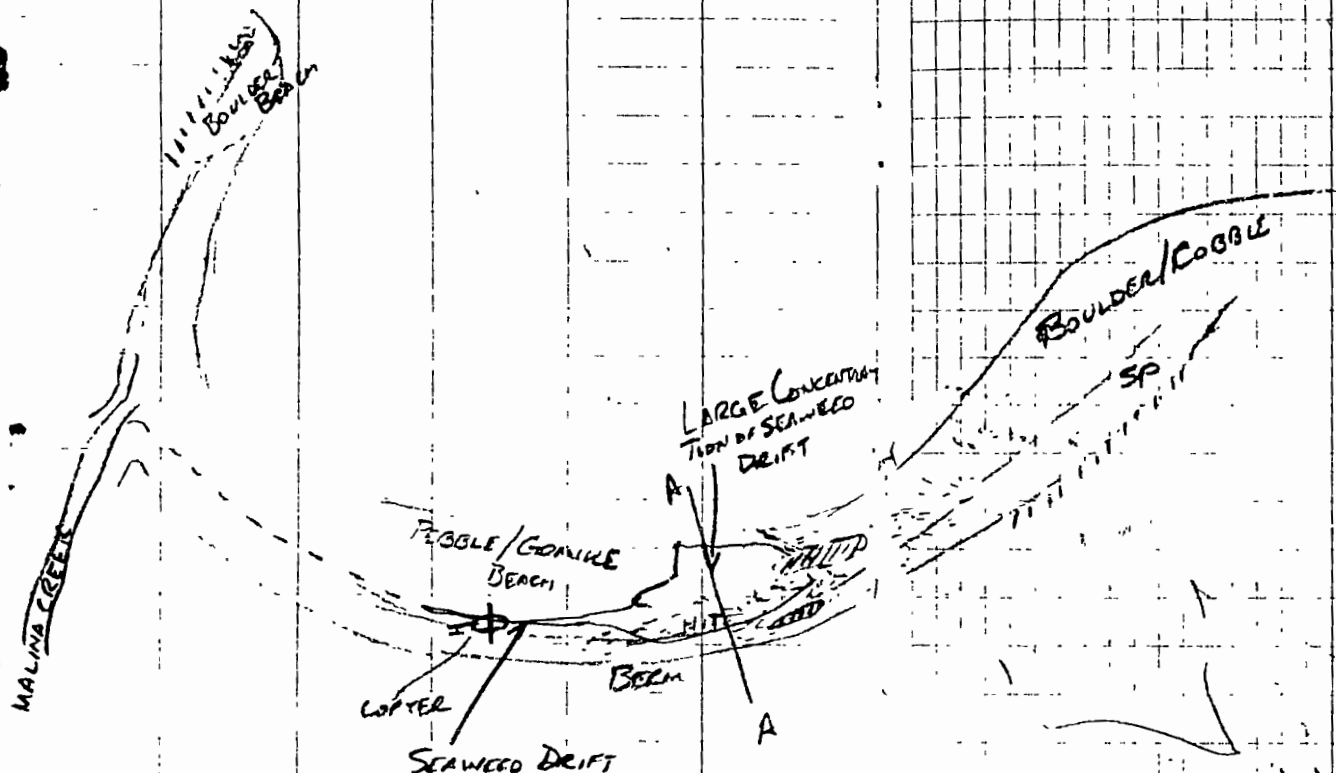
BIRDS: None seen

GENERAL OBSERVATIONS: Over all light oiling of beach

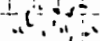
DOCUMENTATION:Map/Aerial photo marking segment boundaries A HatchedVTR: Y/N Tape Number(s) NonePhotography: (Y)/N Roll Number(s) SMB-8Sample Numbers Collected: None

ACE 6725832

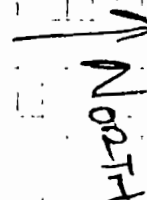
PLANE VIEW SC-1



LIGHT COATED
MOUSSE



SPLATTERED OIL
LIGHT MOD.



ACE 6725833

(version of 4/29/89)

CULTURAL RESOURCE EVALUATION

Date 5-19-89 Location AFOGNAK Site South of Steep Cape

Location Prefix SC Segment # 1 Length 1500m

Survey Method:

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

Ground ✓ (G - indicate on map)

Known cultural resources (AHRS #) NONE Data Source AHRS files

Oil conditions/beach visibility light band of oiled debris

Width of beach zone surveyed 5 m Tree fringe surveyed up to 10m

Cultural resources observed in beach zone (AHRS code) NONE

Cultural resources observed in tree fringe (AHRS code) HP

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

Shore Profile rolling up as rising above a sand, cobble and Boulder Beach. Crescent Beach curves roughly north to south

Fresh Water Sources one small stream

Sea Exposure somewhat protected from northerly winds.

Access/Safety Easily Accessible by Boat or Helicopter

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

Monitoring during cleanup needed (yes/no) Collection yes/no

Photos: Color Roll # may 4 Frames 1-11

B/W Roll # may 3 Frames 8-22

Observer(s) Mike YARBOROUGH

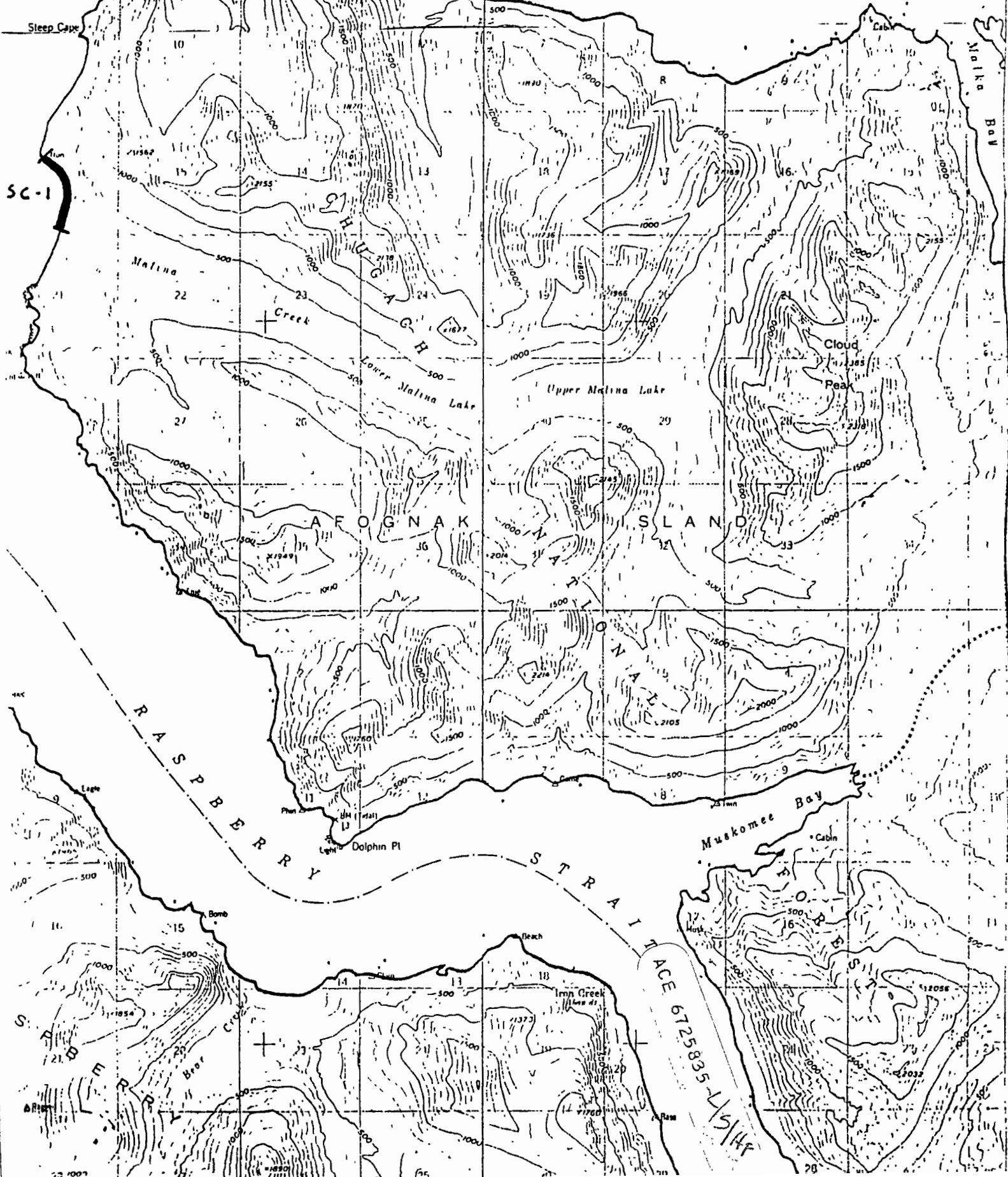
Time survey started 10 45 AM Time survey ended 12 00 PM

Cultural resource considerations/restraints:

NO ACCESS ABOVE THE ACTIVE BEACH. SITE SHOULD BE MONITORED DURING CLEANUP. THE RESTRAINTS FOR TYPE A CLEANUP SHOULD BE APPLIED TO THIS SEGMENT.

ACE 6725834

SC-1 Steep Cape Afgnake Is.



6725835-15/14f

AFS 251-10-10050
MALINA CREEK, AFOGNAK
SITE A4-5

ACE 1369717



251-10-105



89 Stream Survey

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

ASC NUMBER: 251-10-10050
 SURVEY TYPE: SS
 METHOD: F
 DATE: 9/2/89
 START TIME: 1640
 STOP TIME: 1735

TEAM RECORDER: Roger Dunbar
 OBSERVERS: J. Barnhart, R. Talvi

AGENCY(IES): ADF&G

PHOTOS TAKEN? Y
 Roll #: 89-RGT-001-K Frames: 22, 23
 VIDEO TAKEN? Y Tape Number: H5008
 Counter Start: 1489

89JPB/8K

SAMPLES TAKEN? Y

SAMPLE I.D. NUMBERS: 1. A4-5-1
 4.

2. A4-5-2
 5.

3.
 6.

OILING DATA

	LENGTH	WIDTH	M2	%	THICK	FEN	OIL TYPE
SITE 1	100 m +	3 m	300	50	Ø	20 cm	ms
SITE 2	100 m +	7 m	700	10	Ø	20 cm	ms
SITE 3							
SITE 4							
SITE 5							

OVERALL OIL IMPACT: M

OIL IN STREAM CHANNEL? N

OIL ON BEACH WITHIN 50M OF STREAM MOUTH? Y

SUBSTRATE	
Bedrock	Granule
Boulder	Sand X
Cobble	Silt
Pebble X	Veget.

SPECIES	PS	RS			
COUNT	1000	1			

COMMENTS: site A4-5. Malina Creek, Atognak Island. Located and removed a dead oiled bird from the beach. Oil splattered on driftwood from the river mouth south along the beach for a distance of 200m at which point the survey ended. At a point approximately 100m south of the stream the oil impact became very evident. The oil band was 10m wide beginning at the high tide line and continuing down the beach face. The band extended a distance of 100 yds where the survey ended. The band probably continued down the beach to the end of the survey area. The oil was mixed with gravel to a depth of 8 inches. The lower 3m of the band had 50% oil coverage. The upper 7m had 10% oil coverage.

FISH HABITAT ASSESSMENT FORM

Malina Creek

Randy Talvi
Jeff Barnhart
Roger DanbarREGION: PWS KP, CI ☒ AP OBSERVER(S)SITE NO. A4-5 AERIAL PHOTO NO. KT-10 CAT NO. AFS 251-10-10050STREAM NAME Malina Creek LAT 58° 10' .24" N LONG 153° 12' .36" WDATE 9/2/89 TIME 1630 TIDE: Low slack Flood High slack EbbCATALOGED ANADROMOUS STREAM? ☒ N ANAD. FISH FOUND? ☒ NOIL FOUND IN STREAM? See notes Y N OIL FOUND NEAR STREAM (1 MI.)? ☒ NOIL SAMPLES TAKEN? ☒ N ID NOS. A4-5-1 & A4-5-235 mm PICTURES TAKEN? Y N ROLL NO(S). 195A

EXPOSURE NO. DESCRIPTION

22 Dug up saturated gravel23 " " " "VIDEO FOOTAGE TAKEN? ☒ N CASSETTE NO(S). H5008DESCRIPTION: 1489-1642 Malina River oil splattered
Drift & rocks, oil saturation of gravel, Dead oiled
bird

ACE 6725862

ANADROMOUS FISH OBSERVATIONS
PINK CHUM RED KING COHO DOLLY

	PINK	CHUM	RED	KING	COHO	DOLLY
Aerial						
Ground			1			

COMMENTS: Poor Visability could not get count
but there was at least a thousand from ocean
to high tide mark. Pinks

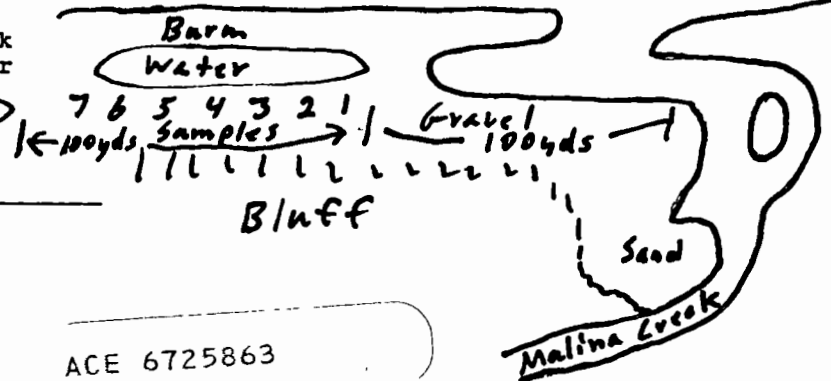
OIL OBSERVATIONS

EXTENT OF OIL:

	WITHIN STREAM	OUTSIDE STREAM
SURFACE COVERAGE	—	<u>See notes</u>
SURFACE THICKNESS	—	
PENETRATION	—	

OIL DISTRIBUTION DIAGRAM
(SHOW SAMPLING SITES)Shelikof StraitPREDOMINANT
SUBSTRATE TYPE:

1. Bedrock
2. Boulder
3. Cobble
4. Gravel
5. Sand
6. Mud
7. Other

COMMENTS: oil splattered on driftwood whole Length
of survey $\approx$ 200 yds. About 100 yds from creek oil
impact became moderate-heavy 10m band up to 15"
areas of oiled gravel $\approx$ 8" penetration. Oil probably continues
past survey.

89 Stream Survey

ASC NUMBER: LOCATION: STREAM NAME: KODIAK K-UNIT: USGS QUADRANGLE: SHORELINE TYPE: *Beach*

SEGMENT NUMBER: LOCAL STREAM #: YR CATALOGED: LATITUDE: LONGITUDE: LEGAL: WAVE EXPOSURE: *H*

ASC NUMBER: *251-10-10050*
 SURVEY TYPE: *SS*
 METHOD: *F*
 DATE: *9/2/89*
 START TIME: *1640*
 STOP TIME: *1735*

TEAM RECORDER: *Roger Dunbar*
 OBSERVERS: *J. Barnhart, R. Telvi*

AGENCY(IES): *ADFG*

PHOTOS TAKEN? *Y*
 Roll #: *89-RGT-001-K* Frames: *22, 23*
 VIDEO TAKEN? *Y* Tape Number: *H5008*
 Counter Start: *1489*

SAMPLES TAKEN? *Y*
 SAMPLE I.D. NUMBERS: *1. A4-5-1*
4.

2. A4-5-2
3.
5.
6.

OILING DATA

	LENGTH	WIDTH	M2	%	THICK	FEN	OIL TYPE
SITE 1	<i>100 m +</i>	<i>3 m</i>	<i>300</i>	<i>50</i>	<i>Ø</i>	<i>20 cm</i>	<i>ms</i>
SITE 2	<i>100 m +</i>	<i>7 m</i>	<i>700</i>	<i>10</i>	<i>Ø</i>	<i>20 cm</i>	<i>ms</i>
SITE 3							
SITE 4							
SITE 5							

OVERALL OIL IMPACT: *M*

OIL IN STREAM CHANNEL? *N*
 SUBSTRATE

Bedrock Granule
 Boulder Sand *x*
 Cobble Silt
 Pebbles Veget.

OIL ON BEACH WITHIN 50M OF STREAM MOUTH? *Y*

SPECIES	<i>PS</i>	<i>RS</i>			
COUNT	<i>1000</i>	<i>1</i>			

COMMENTS: site A4-5. Malina Creek, Atognak Island. Located and removed a dead oiled bird from the beach. Oil splattered on driftwood from the river mouth south along the beach for a distance of 200m at which point the survey ended. At a point approximately 100m south of the stream the oil impact became very evident. The oil band was 10m wide beginning at the high tide line and continuing down the beach face. The band extended a distance of 100 yds where the survey ended. The band probably continued down the beach past the end of the survey area. The oil was mixed with gravel to a depth of 8 inches. The lower 3m of the band had 50% oil coverage. The upper 7m had 10% oil coverage.

AFOGNAK IS. - MALINA CREEK

FISH HABITAT ASSESSMENT FORM

Randy Talvi
Jeff Barnhart
Roger Dunbar

REGION: PWS KP, CI ☒ AP

OBSERVER(S) Roger Dunbar

SITE NO. A4-5 AERIAL PHOTO NO. KT-10 CAT NO. AFS 251-10-10050

STREAM NAME Malina Creek LAT 58° 10' 24" N LONG 153° 12' 36" W

DATE 9/2/89 TIME 1630 TIDE: Low slack Flood High slack Ebb

CATALOGED ANADROMOUS STREAM? ☒ N ANAD. FISH FOUND? ☒ N

See notes
OIL FOUND IN STREAM? Y N OIL FOUND NEAR STREAM (1 MI.)? ☒ N

OIL SAMPLES TAKEN? ☒ N ID NOS. A4-5-1 & A4-5-2

35 mm PICTURES TAKEN? Y N

Converted To 89-RGT-001-K
ROLL NO(S). 195A 81B

EXPOSURE NO.

DESCRIPTION

<u>22</u>	<u>Dug up saturated gravel</u>
<u>23</u>	<u>" " " "</u>

VIDEO FOOTAGE TAKEN? ☒ N

CASSETTE NO(S). H5008

DESCRIPTION: 1489-1642 Malina ^{Creek} River oil splattered
Drift & rocks; oil saturation of gravel, Dead oiled
bird

ANADROMOUS FISH OBSERVATIONS

PINK CHUM RED KING COHO DOLLY

Aerial								
Ground			1					

COMMENTS: Poor Visability could not get count
but there was at least a thousand from ocean
to high tide mark. *Pinks*

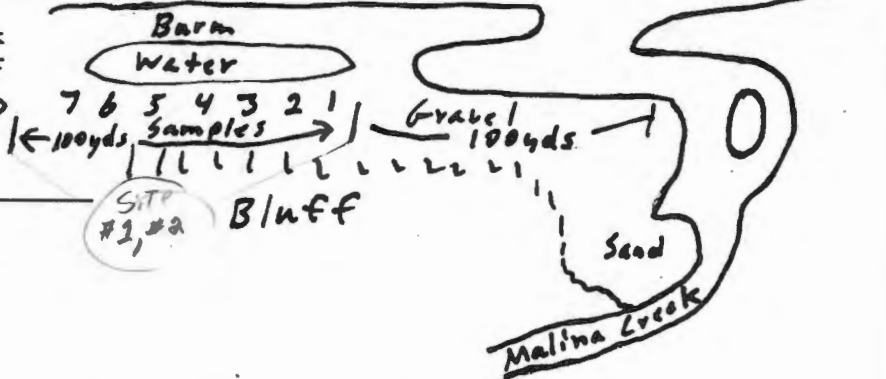
OIL OBSERVATIONS

EXTENT OF OIL:

	WITHIN STREAM	OUTSIDE STREAM
SURFACE COVERAGE	—	See notes
SURFACE THICKNESS	—	
PENETRATION	—	

OIL DISTRIBUTION DIAGRAM
(SHOW SAMPLING SITES)PREDOMINANT
SUBSTRATE TYPE:

1. Bedrock
2. Boulder
3. Cobble
4. Gravel
5. Sand
6. Mud
7. Other



COMMENTS: oil splattered on driftwood whole length
of survey $\approx$ 200yds. About 100yds from creek oil
impact became moderate-heavy 10m band up to 15"
areas of oiled gravel $\approx$ 8" penetration. Oil probably continued
past survey.

A4-5

"*Rite in the Rain*"
ALL-WEATHER WRITING PAPER ®



ALL-WEATHER

LEVEL

Notebook No. 311-M

Alaska Dept of Fish + Game Habitat
Kodiak, Alaska 486-5033

Kodiak Archipelago Anadromous
Fish Habitat Assessment

Anadromous Fish Habitat
Assessment
Exxon Valdez Oil Spill

Date: 9/2/89

Site Number: A4-5

Location of sampling point:

Latitude - $58^{\circ}10'24''N$

Longitude - $153^{\circ}12'36''W$

Other comments: ~~at~~ off pilots map

Distances paced

Malina Creek 251-10-10050

Type of sample: Oil or Sediment
(circle one)

How many samples taken? 2

2

Volume of samples taken:

250 ml.

Date and Time of collection:

9/2/89 1715

List of sample identification numbers:

A4-5-1

A4-5-2

3

Description of sampling point and sampling methodology:

~ 100-200 yds from Malina Cr.

See Fish hab. ass. form, 7 sites used methodology as specified in Draft Plan of Anadromous Hab. Ass. Plan on Pg 9.

4

References (Maps, photographs, video)
 Roll # converted to 89-RGT-001-K
 - 35mm 195A-22+23
 - Video 1489-1642
 - Aerial photo KI-10 9PB

Field Observations: found dead
 Bird, Oil splattered driftwood
 was frequent all along survey.
 About 100 yds from creek SW
 impact became moderate to heavy.
 10m Band starting at high tide Line.
 up to 8" penetration, Oil mixed with
 gravel $\approx$ 1' apart in lower part
 of band. Lower 3m $\approx$ 50% coverage
 upper 7m 10% coverage. Oiled
 spots ranged up to 15" diameter.

5

Roger Dumber
 9/2/89

References (Maps, photographs, video)

- 35mm 195A-22 + 23
- Video 1489-1642

Field Observations: found dead Bird, Oil splattered driftwood was frequent all along survey.

About 100 yds from creek SW impact became moderate to heavy.

10m Band starting at high tide Line, up to 8" penetration. Oil mixed with gravel $\approx$ 1' apart in lower part of band. Lower 3m $\approx$ 50% coverage. upper 7m 10% coverage. Oiled spots ranged up to 15" diameter.

Roger Dunbar

9/2/89

Malina creek cont

ACE 6725864

ACE 6725865

26

Uncataloged AFS East shore Tonki Bay, Head of Bay.
Stream runs Eastward.

Aerial add 500 more. above where
H.T. upstream Roger stopped counting
upper reaches delineated via aerial surv.

58° 13' 42" N Lat
153° 07' 30" W Long

East side Tonki Bay 1 mile from head of
uncataloged Stream Bay.

166 Live 50 live $\pm 50 = 200$ live.
50 Dead 75 Dead 125 dead

Delphin Bay 1:00 pm PS. present in uncataloged
AFS Stream on Eastern shore. PS in lagoon
approx 200 + 100 carcasses is approx 50-75 PS in
Lower Reach of Stream, 58° 20' 30" N Lat 153° 26' 54" W Long.

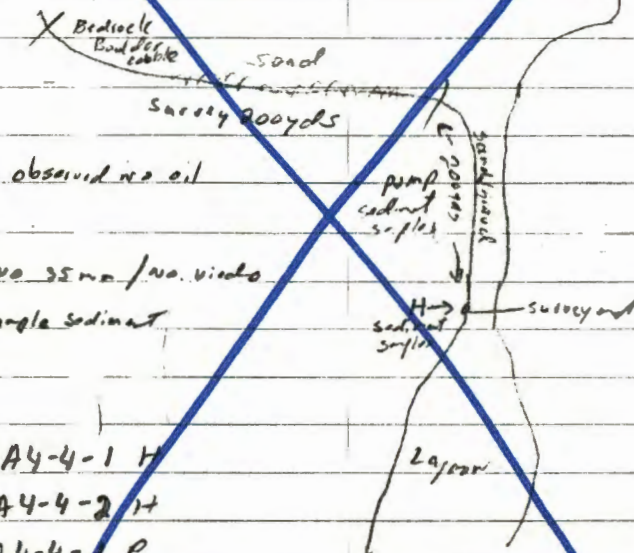
Tried to stop at Pauls Bay could not land. Too
much grass on beach.

1335 stop MacDonalds Lagoon Izhut Bay
2:35 pm depart MacDonalds Lagoon Izhut Bay
no birds at this stop Stream # 252-30-10080
Lat 58° 08' 48"
Long 153° 19' 00"

Site #
A 4-4

AFS 252-31-10/10 25

2:45 pm Stop Stezen Bay Kodiak mport Stream # 319
Depart Duck Bay 4 pm ocean



observed no oil

no signs/no birds

sample sediment

A4-4-1 H

A4-4-2 H

A4-4-1 P

A4-4-2 P

A4-4-1 mp

A4-4-2 mp

Lat 58° 07' 54"

Long 152° 24' 36"

Site A4-5 midline creek at Shilkey Straights

Lat 58° 10' 24" stopped 4:35 Departed 5:35 pm

Long 153° 12' 36" start survey 4:40

sample time 5:15 pm

land Kodiak ✓

pickup dead oil eat bird

Arrive 6:00 pm

AFS 251-10-10050

JFB

ACE 6725866

ACE 6725867

4:33 pm Malina River, Afognak Is. (12)
Malina River, Afognak Is.

Site # A4-5

Video Footage: 1489 - 1682 & 4144

Of Malina River, oil splattered
driftwood, oil splattered rocks, oil
saturation of gravel, dead oiled bird
HS008 Cassette #

9/2/89 R.T.

ACE 6725868

9/3/89 A5-1 (13)
2 mile from Kulink Cape
Pilot - Dave
Craft # - 403 EH

Walked from Bridge piling downstream
to where old bridge is on bank.
One small pine size clump of mouse
mixed with pine needles was found.
no other signs of oil contamination
were noticed along survey route

~~Lat 152° 48' 10"~~
Long 152° 48' 10" W *Pilot's Chart
~~Lat 58° 4' 30" N~~

Mouse pith was on a piece
of bedrock 3 yds from high tide line.

Afognak Is, Afognak Bay
AFS 252-34-10020

Went in place on stream
fish count =

No video
No

ACE 6725869

A4-5

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ALL-WEATHER

LEVEL

Notebook No. 311-M

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TACOMA, WA 98421-3696 USA

Alaska Dept of Fish + Game Habitat
Kodiak, Alaska 486-5033

Kodiak Archipelago Anadromous
Fish Habitat Assessment

ACE 6725870

Anadromous Fish Habitat
Assessment
Exxon Valdez Oil Spill

Date: 9/2/89

Site Number: A4-5

Location of sampling point:

Latitude - 58° 10' 24" N

Longitude - 153° 12' 36" W

Other comment: off pilots map

Distances paced

Malina Creek 251-10-10050

Type of sample: (0:1) or Sediment
(circle one)

How many samples taken? 2

ACE 6725871

~~A4-3 1335~~

~~Macdonald Lagoon~~

~~A4-4 1445~~

~~Duck Bay~~

A4-5 1630

Malina River

ACE 6725872

next page

1715 sample time

3m 50%
7m 10%

Oil mixed in gravel & organics

Pinks & / sockeye

Extreme high

Gravel

Sand

Grass

oil splattered
Drift (frequent)

alot of oil is
buried

Dead Bird

ACE 6725873-1L/FF

34

10m Band starting at high tide line
8" penetration
MoA → heavy
up to 15" ~~Penetration~~ areas
saturated

oiled Drift
20yds
80yds

W. for samples

Barren

33