

AFS 259-25-10060
CHINIAR LAGOON, KODIAK ISLAND
SITE K 10-1

259-25-256

ACE 1853440 + F/HP

1300 m
x 1.25 miles } VL
 } WIDELY
 } MOSSY
275 m
x .25 miles } MATTED

≤ 3" PENET. IN
" " OUT



89 Stream Survey

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

SEGMENT NUMBER: LOCAL STREAM #:

YR CATALOGED: LATITUDE: LONGITUDE: LEGAL: WAVE EXPOSURE: Low

ASC NUMBER: 259-25-10060
 SURVEY TYPE: SS
 METHOD: F
 DATE: 9/10/89
 START TIME: 1145
 STOP TIME: N/A

TEAM RECORDER: JEFFREY P. BARNHART
 OBSERVERS: R. Dunbar

AGENCY(IES): ADFG

PHOTOS TAKEN? Y
 Roll #: 89-KRM-001K Frames: 19-23
 VIDEO TAKEN? N Tape Number:
 Counter Start:

SAMPLES TAKEN? Y
 SAMPLE I.D. NUMBERS: 1. K10-1-1
 4.

2. K10-1-2 3.
 5. 6.

OILING DATA

	LENGTH	WIDTH	M2	%	THICK	FEN	OIL TYPE
SITE 1	<u>880 m</u>	<u>2 m</u>	<u>1760</u>	<u>1</u>	<u>1.27cm</u>	<u>2.54cm</u>	<u>MS</u>
SITE 2	<u>2200 m</u>	<u>2 m</u>	<u>4400</u>	<u>1</u>	<u>1.27cm</u>	<u>7 cm</u>	<u>MS</u>
SITE 3							
SITE 4							
SITE 5							

OVERALL OIL IMPACT: VL

OIL IN STREAM CHANNEL? Y
 SUBSTRATE

OIL ON BEACH WITHIN 50M OF STREAM MOUTH? Y

Bedrock Granule
 Boulder Sand ☒
 Cobble ☒ Silt
 Pebble ☒ Veget.

SPECIES	<u>PS</u>				
COUNT	<u>6</u>				

COMMENTS: Found what appeared to be a dead chum salmon in the lagoon. Observed three pair of pink salmon spawning in the outlet of the lagoon.

Site K10-1. Chiniak Lagoon, Kodiak Island.

Survey site #2: The lagoon appeared to have been cleaned of most oil prior to our survey.

Survey Site #1: All Terrain vehicles had been driven over the oil band making it difficult to locate the oil in the sand substrate.



89 Stream Survey

ASC NUMBER:	SEGMENT NUMBER:	YR CATALOGED:
LOCATION:		
STREAM NAME:		LATITUDE:
KODIAK K-UNIT:	LOCAL STREAM #:	LONGITUDE:
USGS QUADRANGLE:		LEGAL:
SHORELINE TYPE: <i>Lagoon</i>		WAVE EXPOSURE: <i>Low</i>

ASC NUMBER: *259-25-10060*
 SURVEY TYPE: *SS*
 METHOD: *F*
 DATE: *9/10/89*
 START TIME: *1145*
 STOP TIME: *N/A*

TEAM RECORDER: *JEFFREY P. BARNHART*
 OBSERVERS: *R. Dunbar*

AGENCY(IES): *ADFG*

PHOTOS TAKEN? *Y*
 Roll #: *89-KRM-001K* Frames: *19-23*
 VIDEO TAKEN? *N* Tape Number:
 Counter Start:

SAMPLES TAKEN? *Y*

SAMPLE I.D. NUMBERS: 1. *K10-1-1*
 4.

2. *K10-1-2* 3.
 5. 6.

OILING DATA

	LENGTH	WIDTH	M2	%	THICK	FEN	OIL TYPE
SITE 1	<i>880 m</i>	<i>2 m</i>	<i>1760</i>	<i>1</i>	<i>1.27cm</i>	<i>2.54cm</i>	<i>MS</i>
SITE 2	<i>2200 m</i>	<i>2 m</i>	<i>4400</i>	<i>1</i>	<i>1.27cm</i>	<i>7 cm</i>	<i>MS</i>
SITE 3							
SITE 4							
SITE 5							

OVERALL OIL IMPACT: *VL*

OIL IN STREAM CHANNEL? *Y*
 SUBSTRATE

Bedrock	Granule
Boulder	Sand ☒
Cobble ☒	Silt
Pebble ☒	Veget.

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

SPECIES	<i>PS</i>				
COUNT	<i>6</i>				

COMMENTS: *Found what appeared to be a dead chum salmon in the lagoon. Observed three pair of pink salmon spawning in the outlet of the lagoon.*

Site K10-1, Chiniak Lagoon, Kodiak Island.

Survey Site #2: The lagoon appeared to have been cleaned of most oil prior to our survey.
Survey Site #1: All Terrain vehicles had been driven over the oil band making it difficult to locate the oil in the sand substrate.

Chiniak Lagoon, Kodiak

FISH HABITAT ASSESSMENT FORM

REGION: PWS KP, CI (K), AP OBSERVER(S) JEFF BARNHART
ROGER DUNBAR

SITE NO. K-10-1 AERIAL PHOTO NO. — CAT NO. 259-25-10060

STREAM NAME Chiniak Lagoon LAT 57° 37' 40" LONG 152° 9' 50" W

DATE 09/11/89 TIME 11:45 TIDE: Low slack Flood High slack Ebb

CATALOGED ANADROMOUS STREAM? (Y) N ANAD. FISH FOUND? (Y) N

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

OIL SAMPLES TAKEN? (Y) N ID NOS. K10-1-1 K10-1-2

35 mm PICTURES TAKEN? (Y) N

changed to 89-KRM-001-K 9PB

ROLL NO(S). 106

EXPOSURE NO.

DESCRIPTION

18 19 9PB	mousse mixed w/ spruce needles. Ocean side of spit
19 20 9PB	mousse patch inside lagoon
20 21 9PB	Looking From lagoon toward ocean. Outlet of lagoon
21 22 9PB	Mousse patch inside lagoon
22 23 9PB	mousse dug out of gravel well inside lagoon

VIDEO FOOTAGE TAKEN? Y (N) CASSETTE NO(S). —

DESCRIPTION: —

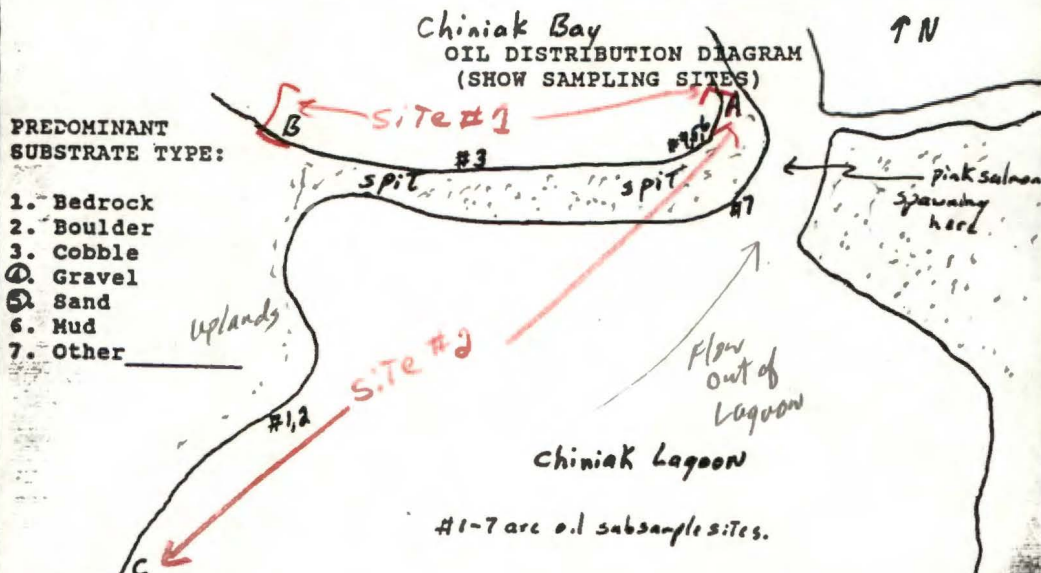
ANADROMOUS FISH OBSERVATIONS								
	PINK	CHUM	RED	KING	COHO	DOLLY		
Aerial								
Ground	yes							

COMMENTS: Found what appeared to be a dead chum salmon in the lagoon. Observed three pairs of pink salmon spawning in outlet of lagoon. For complete count contact ADF&G commercial fish Division Kodiak Alaska 486-4791.

OIL OBSERVATIONS

EXTENT OF OIL:

	WITHIN STREAM	OUTSIDE STREAM
SURFACE COVERAGE	< 1%	< 1%
SURFACE THICKNESS	1/2" to 1"	1/2" to 1"
PENETRATION	up to 3"	up to 1"



COMMENTS: Survey pt A-B approx 1/2 mile. VL mensur. parties 5-7 yards below extreme high tide line. Survey pt A-C approx 1 1/4 mile. VL mensur. parties. Additional comments in log book. All distances approx. by following shore of lagoon.

site K10-1

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



ALL-WEATHER

LEVEL

Notebook No. 311-M

Alaska Dept of Fish and Game, Habitat
Kodiak, Alaska phone 486-4791
Kodiak Archipelago Anadromous
Fish Habitat Assessment

1
Anadromous Fish Habitat Assessment

Exxon Valdez oil spill

Date: 09/10/89

Site Number K10-1

Location of Sampling point:

Latitude: $57^{\circ} 37' 40''$ N

Longitude: $153^{\circ} 9' 50''$ W

Other comments:

Type of sample: oil

2

How many samples Taken?

Two (2) samples Taken

Volume of samples Taken!

Approx 200 ml each.

Date and Time of collection:

09/10/89 1145 - 1230 hours

List of sample identification numbers:

K10-1-1 K10-1-2

3

Description of sampling point and sampling methodology.

Subsample 1 and 2 were Taken approx $\frac{3}{4}$ mile from lagoon mouth, on west shore of lagoon. Oil was located approximately 5 yards from extreme Tide line. Patties 3-5 inches dia. Penetration 3".

Subsample #3 Taken approx 600 yds west of lagoon mouth on ocean side of spit, 5 yds from extreme Tide line.

Subsamples #4, 5 & 6. Taken approx 90 yards west of lagoon mouth on ocean side of spit, 7 yards from extreme Tide line.

Subsample #7. Inside mouth of lagoon. Six (6) yards from water's edge, 18 yards from extreme Tide line.

Methodology: Sampling protocol as described in The Draft Plan, Transboundary Fish Habitat Assessment Plan, page 9 was followed.

4

References (maps, charts, photo, video)

- Kodiak Area Salmon District Map
- 35 mm still photos Roll # ~~A06~~
exposures 18, 19, 20, 21, & 22

Roll # changed To 89-KRM-001-K gfb

Field Observations:

West side of lagoon and lagoon entrance.
Mousse patties VL ranging in size from
1"-6" dia at normal high tide line.
Penetration 1" to 3". IT appeared as if
the beach areas inside the lagoon had been
Bleached at some time. Observed several piles
of pink salmon on redds in channel between
lagoon and ocean. Widely scattered blue
mussels near mouth of lagoon. Found what
appeared to be a chum salmon, dead in the
lagoon. The mousse near the entrance of
the lagoon (mouth) was located in the area
of the lagoon, normally covered by the high

5

Tide. Found a live crab approx 3" in size
within two feet of a mousse patty.
Crab spp. unidentified. Found mousse
patties as far as 1 1/2 mile (approx) into
lagoon from lagoon mouth. Distance
estimated by following shoreline.

Ocean side of spit from lagoon mouth
west approx 1/2 mile. Mousse patties
mixed with bird feathers, spruce needles
and sand. Coverage was VL. Found
some oiled drift wood. Most of the
oil was located approx 5-7 yards from
extreme tide line. All terrain vehicles
(3 or 4 wheelers) had been driven over this
level of the beach making it difficult
to locate oil in the sand beach.

Jeff Bamber 09/10/89

ANADROMOUS FISH OBSERVATIONS

	PINK	CHUM	RED	KING	COHO	DOLLY		
Aerial								
Ground	yes							

COMMENTS: Found what appeared to be a dead chum salmon in the lagoon. Observed three pairs of pink salmon spawning in outlet of lagoon. For complete contact ADF&G commercial fish Division Kodiak Alaska 486-4791.

OIL OBSERVATIONS

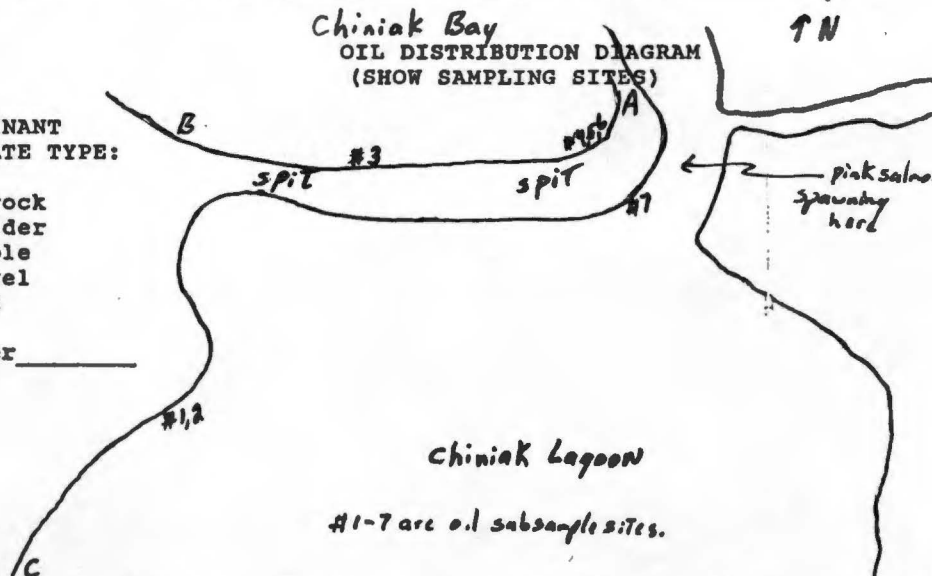
EXTENT OF OIL:

	WITHIN STREAM	OUTSIDE STREAM
SURFACE COVERAGE	< 1%	< 1%
SURFACE THICKNESS	1/2" to 1"	1/2" to 1"
PENETRATION	up to 3"	up to 1"

PREDOMINANT SUBSTRATE TYPE:

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

Chiniak Bay OIL DISTRIBUTION DIAGRAM (SHOW SAMPLING SITES)



COMMENTS: Survey pt A-B approx 1/2 mile. Vh mussel patches 5-7 yards below extreme high tide line. Survey pt A-C approx 1 1/4 mile. Vh mussel patches. Additional comments in log book. All distances approx. by following shore of lagoon.

ACE 1853441 +1FF

Chiniak Lagoon, Kodiak Island FISH HABITAT ASSESSMENT FORM

REGION: PWS KP, CI (K), AP OBSERVER(S) JEFF BARNHART
ROGER DUNBAR

SITE NO. K-10-1 AERIAL PHOTO NO. — CAT NO. 259-25-10060

STREAM NAME Chiniak Lagoon LAT 57° 37' 40" LONG 152° 9' 50" W

DATE 09/10/89 TIME 11:45 TIDE: Low slack Flood High slack Ebb

CATALOGED ANADROMOUS STREAM? (Y) N ANAD. FISH FOUND? (Y) N

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

OIL SAMPLES TAKEN? (Y) N ID NOS. K10-1-1 K10-1-2

35 mm PICTURES TAKEN? (Y) N ROLL NO(S). A06

EXPOSURE NO. DESCRIPTION

- | | |
|----|--|
| 18 | mussel mixed w/ spruce needles. Ocean side of spit |
| 19 | mussel patch inside lagoon |
| 20 | Looking From lagoon toward ocean. Outlet of lagoon |
| 21 | mussel patch inside lagoon |
| 22 | mussel dump out of gravel wall inside lagoon |

VIDEO FOOTAGE TAKEN? Y (N) CASSETTE NO(S). —

DESCRIPTION: —

ACE 1853442

How many samples Taken?
Two (2) samples Taken

Volume of samples Taken:
Approx 200 ml each.

Date and Time of collection:

09/10/89 1145 - 1230 hours

List of sample identification numbers:

K10-1-1 K10-1-2

ACE 1853443

Description of sampling point and sampling methodology.

Subsample 1 and 2 were Taken approx $\frac{1}{4}$ mile from lagoon mouth, on west shore of lagoon. Oil was located approximately 5 yards from extreme Tide line. Patties 3-5 inches dia. Penetration 3".

Subsample #3 Taken approx 600 yds west of lagoon mouth on ocean side of spit, 5 yds from extreme Tide line.

subsamples #4, 5 & 6. Taken approx 90 yards west of lagoon mouth on ocean side of spit, 7 yards from extreme Tide line.

subsample #7. Inside mouth of lagoon. Six (6) yards from water's edge, 18 yards from extreme Tide line.

Methodology: Sampling protocol as described in The Draft Plan, Arcticomous Fish Habitat Assessment Plan, page 9 was followed

ACE 1853444

References (maps, charts, photo, video)
- Kodiak Area Salmon District Map
- 35 mm. still photos Roll # A06
exposures 18, 19, 20, 21, & 22.

Field Observations:

West side of lagoon and lagoon entrance. Mousse patties VL ranging in size from 1-6" dia at normal high Tide line. Penetration 1" to 3". IT appeared as if the beach areas inside the lagoon had been Bleached at some time. Observed several pairs of pink salmon on redds in channel between lagoon and ocean. Widely scattered blue mussels near mouth of lagoon. Found what appeared to be a chum salmon, dead in the lagoon. The mousse near the entrance of the lagoon (mouth) was located in the area of the lagoon, normally covered by the high

Tide. Found a live crab approx 3" in size within two feet of a mousse patty. Crab spp. unidentified. Found mousse patties as far as $1\frac{1}{4}$ mile (approx) into lagoon from lagoon mouth. Distance estimated by following shoreline.

Ocean side of spit from lagoon mouth west approx $\frac{1}{2}$ mile. Mousse patties mixed with bird feathers, spruce needles and sand. Coverage was VL. Found some piled drift wood. Most of the oil was located approx 5-7 yards from extreme Tide line. All Terrain vehicles (3 or 4 wheelers) had been driven over this level of the beach making it difficult to locate oil in the sand beach.

Jeff Barnhart 09/10/89

Chiniak Lagoon

ACE 1853445

ACE 1853446

Site K10-1

"Write in the Rain"
ALL-WEATHER WRITING PAPER



ALL-WEATHER

LEVEL

Notebook No. 311-M

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Alaska Dept of Fish and Game, Habitat
Kodiak, Alaska phone 486-4791

Kodiak Archipelago Anadromous
Fish Habitat Assessment

ACE 1853447

Anadromous Fish Habitat Assessment

Exxon Valdez oil spill

Date: 09/10/89

Site Number K10-1

Location of Sampling point:

Latitude: 57° 37' 40" N

Longitude: 152° 9' 50" W

Other comments:

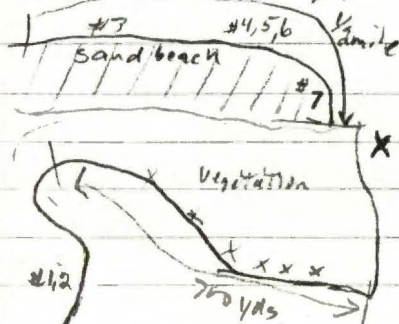
Type of sample: oil

ACE 1853448

9/6 wait Friesch Alaska Helicopters N5013G
 Depart Airport 10:00 AM Depart Bear Cove 12:10 PM
 Land Tonki 12:40 Arrive Kodiak Airport
 Ken Middleton / myself. J.P.B.

9/10/89

K-10-1 Chinik Lagoon



Sub #1 5 yards from
 extreme Tide Line 11:40 AM

Mousse in gravel, 3" dia

Sub #2 5 yds from

extreme Tide line

mousse/feathers

5" dia pos. 3"

#3 5 yds from

extreme Tide

Line, 2" dia

mousse/feathers

sand

#4 subsample mousse/spruce needles

100 yds W of lagoon mouth 7 yds
 from extreme Tide line.

#5 3 feet from #4. mousse/feathers 1 1/2" dia

#6 same location mousse/sand

#7 mouth of lagoon mousse/sand.

6 yds from water edge
 X = 1" mousse patten 18 yds from extreme Tide line.

(black banks are flat (little slope) at this point

12 noon. observed 2 pr pink salmon spawning

in Lagoon at this point. Also observed small
 # of blue mussels & one unidentified crab eggs.

VL scattered mousse patties along outside
 beach. Most patties 1-2" dia in sand beach
 small amt of oiled sticks

inside Lagoon small mousse patties 1-6" dia
 at high Tide line, VL. x + denote oil location

Middle Bay - Two bags approx 15 pounds
 of mousse/col grass sitting along side
 of the road. Also Large bag of
 pom-poms same spot.

J.P.B.