

KCI BEACH DATA INVENTORY - DATE AND LOCATION ENTRY 01/31/92

ATE: 01/31/92 11:33:47

(sorted by location and date)

page 1

survdate	location	segment	streams nearby
07/10/89	AMAKDEDORI BEACH		
06/12/89	AUGUSTINE ISLAND		
06/12/89	AUGUSTINE ISLAND, EAST SIDE		
07/11/89	AUGUSTINE ISLAND, EAST SIDE		
06/12/89	AUGUSTINE ISLAND, NORTH POINT		
06/12/89	AUGUSTINE ISLAND, NORTH SHORE		
06/12/89	AUGUSTINE ISLAND, SOUTH SHORE		
06/12/89	AUGUSTINE ISLAND, SOUTHEAST SHORE		
06/28/90	BADGER COVE		
06/15/90	BADGER COVE AND SHIPWRECK POINT, BETWEEN	CB001	
06/18/90	BADGER COVE AND SHIPWRECK POINT, BETWEEN	CB001	
05/09/91	BARREN ISLANDS, USHAGAT ISLAND	US010	
05/06/91	BARREN ISLANDS, USHAGAT NORTH SHORE	US001 A	
05/06/91	BARREN ISLANDS, USHAGAT, NORTH SHORE	US002 A	
05/06/91	BARREN ISLANDS, USHAGAT, NORTH SHORE	US005 A	
05/06/91	BARREN ISLANDS, USHAGAT, NORTH SHORE	US005 B	
05/07/91	BARREN ISLANDS, USHAGAT, NORTH SHORE	US002 A	
05/08/91	BARREN ISLANDS, USHAGAT, NORTH SHORE	US007 A	
05/08/91	BARREN ISLANDS, USHAGAT, NORTH SHORE	US008 A	
05/08/91	BARREN ISLANDS, USHAGAT, NORTH SHORE	US009 A	
05/11/91	BARREN ISLANDS, USHAGAT, NORTH SIDE	US011 A	
05/11/91	BARREN ISLANDS, USHAGAT, SOUTH SHORE	US012	
05/07/91	BARREN ISLANDS, WEST AMATULI ISLAND	WA001 A	
04/21/89	CAPE DOUGLAS		
08/13/89	CAPE DOUGLAS, SOUTH	CD019, 016	2621010100
08/13/89	CAPE DOUGLAS, SOUTH, INISKIN BAY,	CD016, 019	2621010100
04/21/89	CAPE DOUGLAS, SUKHOI BAY		
07/11/89	CHINITNA BAY, SOUTH SHORE		
05/17/90	CHUGACH BAY, HEAD, WEST AND NORTH SHORE		
05/31/90	CHUGACH BAY, NORTH AND WEST SHORES, 1/4 M OFF CRK	CB003 A	2422010190
04/24/90	CHUGACH BAY, NORTH BEACH	CB003 B	
04/26/90	CHUGACH BAY, NORTH BEACH		

ACE 9960944 + F/S



survdate	location	segment	streams nearby
04/27/90	CHUGACH BAY, NORTH BEACH	CB003 B	
05/31/90	CHUGACH BAY, NORTH SHORE, HEAD OF BAY	CB003 A	
05/29/90	CHUGACH BAY, NORTH, WEST AND SOUTH SHORES		
04/07/90	CHUGACH ISLANDS, EAST CHUGACH ISLAND		
06/15/90	CHUGACH ISLANDS, EAST CHUGACH ISLAND	C1001	
07/03/90	CHUGACH ISLANDS, EAST CHUGACH ISLAND		
06/15/90	CHUGACH PASSAGE, ANDERSEN BEACH	KC901	2421010200
06/18/90	CHUGACH PASSAGE, ANDERSEN BEACH, 200 M WEST OF STR		2421010200
06/13/89	COCK INLET, WEST SIDE, DRY BAY, HEAD		
05/05/89	COOK INLET, ANCHOR POINT		
05/04/89	COOK INLET, ANCHOR RIVER		2441010010
05/09/89	COOK INLET, ANCHOR RIVER		2441010010
05/09/89	COOK INLET, DEEP CREEK		2442010100
07/04/89	COOK INLET, DEEP CREEK		
07/12/89	COOK INLET, EAST SIDE, CLAM GULCH		
05/10/90	COOK INLET, EAST SIDE, DEEP CREEK - STARISKI		
07/09/89	COOK INLET, EAST SIDE, KASILOF RIVER - 10 MI SOUTH		
07/27/89	COOK INLET, EAST SIDE, KENAI - KASILOF RIVER		KANAI, KASILOF, NINI
05/11/90	COOK INLET, EAST SIDE, NINILCHIK R. - 11 MI SOUTH		
05/10/89	COOK INLET, HOMER SPIT		
07/20/89	COOK INLET, KALGIN ISLAND		
05/09/89	COOK INLET, NINILCHIK RIVER		2442010090
05/23/89	COOK INLET, NINILCHIK RIVER		2442010090
07/24/89	COOK INLET, STARISKI CREEK		2441010050
07/27/89	COOK INLET, WEST SIDE, INISKIN BAY, EAST OF		
07/11/89	COTTONWOOD BAY, SOUTH SIDE ENTRANCE		
07/01/90	ELIZABETH ISLAND LAKE OFFICE REPORT		
07/11/89	INISKIN BAY, INSIDE, NORTH SHORE		
07/11/98	INISKIN BAY, NORTH SHORE		
07/20/89	KACHEMAK BAY, ANCHOR RIVER, 5 MILES SOUTH OF		
07/18/89	KACHEMAK BAY, ELDRED PASSAGE		
07/19/89	KACHEMAK BAY, ELDRED PASSAGE, MCKEON SPIT		
07/11/89	KACHEMAK BAY, GLACIER SPIT		
07/09/89	KACHEMAK BAY, HESKETH ISLAND		

survdate	location	segment	streams nearby
07/17/89	KACHEMAK BAY, HOMER SPIT		
07/22/89	KACHEMAK BAY, RUSSIAN VILLAGE, 1 MILE SOUTH OF		
08/13/89	KAMISHAK BAY SEAL HAULOUT		
06/16/89	KAMISHAK BAY, AMAKDEDULIA COVE		
07/10/89	KAMISHAK BAY, AMAKDEDULIA COVE		
07/10/89	KAMISHAK BAY, BRUIN BAY, MOUTH		
06/22/89	KAMISHAK BAY, CHENIK CREEK, 1/2 MILE SE OF		2433010200
06/29/89	KAMISHAK BAY, CHENIK HEAD		
04/21/89	KAMISHAK BAY, DOUGLAS REEF		
06/16/89	KAMISHAK BAY, HORSESHOE COVE		
07/11/89	KAMISHAK BAY, KIRSHNER LAKE OUTLET		
08/13/89	KAMISHAK BAY, MC NEIL LAGOON		2432010050 2432010035,10050
06/16/89	KAMISHAK BAY, MCNEILL COVE		
06/16/89	KAMISHAK BAY, MCNEILL COVE HEAD		
06/16/89	KAMISHAK BAY, MCNEILL COVE, NORTH HEAD		
06/16/89	KAMISHAK BAY, MCNEILL RIVER HEAD		
08/13/89	KAMISHAK BAY, SHAW ISLAND HAULOUT		
06/13/89	KAMISHAK BAY, URSUS COVE		
07/10/89	KAMISHAK BAY, URSUS COVE, MOUTH		
07/11/89	KAMISHAK BAY, URSUS HEAD		
04/18/90	KOYUKTOLIK BAY (DOGFISH BAY), NORTH	KC904	2414010320,10325
08/05/89	KOYUKTOLIK BAY, NORTH SHORE OF NARROWS		
04/18/90	KOYUKTOLIK BAY, SPIT BY DOGFISH NARROWS		2414010320
06/16/89	MCNEILL RIVER GAME SANCTUARY		
08/04/89	NUKA BAY, SURPRISE BAY, NEAR ARIADNE ISLAND		
07/11/90	NUKA ISLAND, NORTHEAST COVE		
07/10/90	NUKA PASSAGE, YALIK GLACIER BEACH	YG002	
07/26/89	NUKA PASSAGE, YALIK GLACIER, 1.3 M W OF DIVISION I	YG003	2321010250
04/14/90	NUKA PASSAGE, YALIK GLACIER, 1.3 M W OF DIVISION I	YG003	2321010250
04/11/90	ONE HAUL BAY, 1/4 NW OF LAGOON		
07/24/89	ONE HAUL BAY, EAST		2423110080,10090
04/11/90	ONE HAUL BAY, EAST		
04/11/90	ONE HAUL BAY, EAST SIDE		
07/24/89	ONE HAUL BAY, NORTHWEST		2423110100

survdate	location	segment	streams nearby
04/17/90	ONE HAUL BAY, NORTHWEST		2423110100
04/17/90	ONE HAUL BAY, W/I 1 MILE OF STREAM		2423110100
05/07/91	PERL ISLAND	PE001	
05/07/91	PERL ISLAND, SE GULF OF ALASKA	PE001	
04/12/90	PERL ISLAND, SEA LION HAULOUT		
05/07/91	PERL ISLAND, SEA LION HAULOUT	PE001	
06/01/90	PETROF POINT	PP001	
04/18/90	PORT CHATHAM, CHATHAM SPIT		2421010220,230,240,2
08/05/89	PORT CHATHAM, CLAM COVE, NORTHWEST		
08/05/89	PORT CHATHAM, PORTLOCK CANNERY SITE		
08/04/89	PORT DICK AERIAL FISH SURVEY		2424310400,410,420,3
07/06/90	PORT DICK, MARS COVE	PD004	
06/20/90	PORT DICK, PIKE POINT		
05/09/90	PORT DICK, WEST ARM	PD001,004	
05/24/90	PORT DICK, WEST ARM, AND ISLAND CREEK BAY		2424210430
06/28/90	PORT DICK, WEST ARM, HEAD	PD001	
05/09/90	PORT DICK, WEST ARM, NORTH AND SOUTH SHORES	PD001,4	
05/13/90	PORT DICK, WEST ARM, NORTH AND SOUTH SHORES	WB003 A	2423210160
05/21/90	PORT DICK, WEST ARM, SOUTH SHORE		
05/19/90	PORT DICK, WEST ARM, SOUTH SHORE - PIKE POINT	PD004, 10	
05/24/90	PORT DICK, WEST ARM, VARIOUS SEGMENTS		
05/25/90	PORT DICK, WEST ARM, VARIOUS SEGMENTS		
06/15/90	ROCKY POINT	RB001,BC02	
05/23/89	STARISKI CREEK		2441010050
05/23/90	STARISKI CREEK		2441010050
09/03/89	TAROKA ARM, NORTHWEST HEAD	BM006 A	2323010340,10350
09/03/89	TAROKA ARM, NORTHWEST TIP	BM005 A	2323010340,10350
04/25/90	TONSINA BAY, GRIMM BEACH	TB004	
06/20/90	TONSINA BAY, GRIMM BEACH	TB004	
06/20/91	TONSINA BAY, GRIMM BEACH	TB004	
04/25/90	TONSINA BAY, LONG ISLAND COVE	TB005	
07/10/90	TONSINA BAY, OTTER BEACH AND TIDE FLATS	TB003	
05/06/91	USHAGAT ISLAND, NORTH SHORE, EAST 1/2 OF ISLAND	USSA	
05/06/91	USHAGAT ISLAND, NORTH SHORE, EAST 1/2 OF ISLAND	USSB	

ACE 9960947

survdate	location	segment	streams nearby
05/06/91	USHAGAT ISLAND, NORTH SHORE, EAST END	US1A	
05/06/91	USHAGAT ISLAND, NORTH SHORE, EAST END OF ISLAND	US2A	
05/08/91	USHAGAT ISLAND, NORTH SHORE, WESTERN 2 OF ISLAND	US7A	
05/08/91	USHAGAT ISLAND, NORTH SHORE, WESTERN 2 OF ISLAND	US8A	
05/08/91	USHAGAT ISLAND, NORTH SHORE, WESTERN 2 OF ISLAND	US9A	
05/11/91	USHAGAT ISLAND, NORTH SIDE	US11A	
05/11/91	USHAGAT ISLAND, SOUTH SIDE	US12	
05/07/91	WEST AMATULI ISLAND, BEACH WEST OF AMATULI COVE	WA1A	
05/07/91	WEST AMATULI ISLAND, NORTHWEST BAY/COVE OF ISLAND	WA2A	
06/27/90	WINDY BAY, ENTIRE SEGMENT	WB003	2423210160,10170,101
07/11/90	WINDY BAY, GRUNGY COVE	RB005	
05/21/90	WINDY BAY, NORTH SHORE	WB002 E	
05/23/90	WINDY BAY, NORTH SHORE		
05/31/90	WINDY BAY, NORTH SHORE	WB002	
07/11/90	WINDY BAY, NORTHEASTMOST COVE		
05/21/90	WINDY BAY, OYSTERCATCHER ISLAND	WB009	
05/03/90	YALIK GLACIER BEACH TARMAT	YG002	
07/10/90	YALIK GLACIER BEACH TARMAT		2321010250

ACE 9960948-15

From:

Doug Hill  
Oilspill Response Center  
509 Sterling Hwy.  
Homer, AK 99603

(I)

12/30/89

Greetings,

Enclosed are the  
revised habitat assessment  
forms.

Each form has an  
attached ~~map~~ map marked  
with the approximate upstream  
extent that fish were observed.

NOTE:

\* 7/26/89 - "YALIK Pt Creek" was site ~~3~~ 4-3

"Yalik Pt Creek" is now site (4-4)

\* 9/3/89 - Puget BAY was site 13-10; is

now ~~3~~ SITE (13-11A)

\* Time Change on SITE 14-1

\* Flood STAGE designated on all  
forms enclosed

ACE 9960949 +S/R

II

Get a hold of me if  
you have any questions.

Thanks very much for  
your help. Sorry I couldn't  
get this stuff in sooner.

Oh! Check the "CHANGE TO"  
portion of the  
Nomination forms  
enclosed.

TAKE CARE,

Doug

Raughn D Hill

ACE 9960950

4,4,6,7

FISH HABITAT ASSESSMENT FORM

West of the base of Step Mountain, Kamishak Bay

1 REGION: 2 PWS 3 KP, CI 4 K, AP 5 OBSERVER(S) Lee Glenn Rick Randall

6 SITE NO. 16-3 7 AERIAL PHOTO NO. 5, 6 8 CAT NO. NC

9 STREAM NAME 10 LAT 59.25.80 11 LONG 153.46.30

12 DATE 9/16/89 13 TIME 1600 14 TIDE: Low slack Flood High slack Ebb

15 CATALOGED ANADROMOUS STREAM? Y N 16 ANAD. FISH FOUND? Y N

17 OIL FOUND IN STREAM? Y N 18 OIL FOUND NEAR STREAM (1 MI.)? Y N

19 OIL SAMPLES TAKEN? Y N 20 ID NOS. RDR-9/16/89-1458

21 35 mm PICTURES TAKEN? Y N 22 ROLL NO(S) RDR-17

23 EXPOSURE NO.	24 DESCRIPTION
5	Aerial of beach, mouth of stream and stream
6	same

25 VIDEO FOOTAGE TAKEN? Y N 26 CASSETTE NO(S) 89-LPG-014-11

27 DESCRIPTION: Aerial footage of stream and beach at mouth of stream. Ground footage of stream mouth, beach and pink salmon carcasses



**ANADROMOUS FISH OBSERVATIONS**

	PINK	CHUM	RED	KING	COHO	DOLLY		
28 Aerial	8							
29 Ground	5							

30 **COMMENTS:** Pink Salmon Carcasses found along stream bank, and in stream at least 75 yds. upstream from mouth. found 8 carcasses & numerous bear track along stream bank.

**OIL OBSERVATIONS**

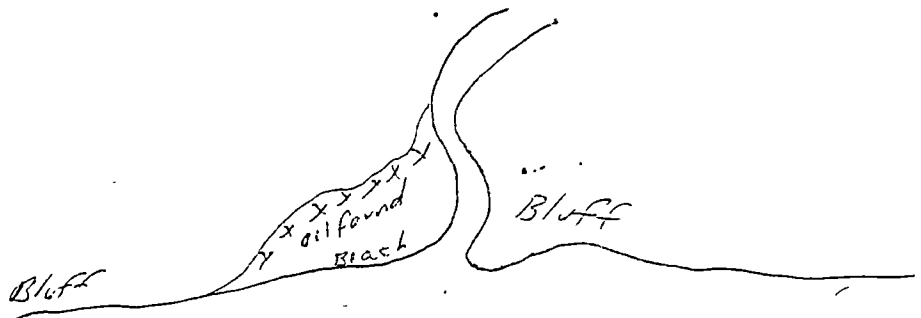
**EXTENT OF OIL:**

	WITHIN STREAM	OUTSIDE STREAM
31 SURFACE COVERAGE	/	Found mounds in small amounts at the higher tide lines splattered on Rocks & logs
32 SURFACE THICKNESS		up to 1/8" thick
33 PENETRATION		mainly surface

**34 OIL DISTRIBUTION DIAGRAM (SHOW SAMPLING SITES)**

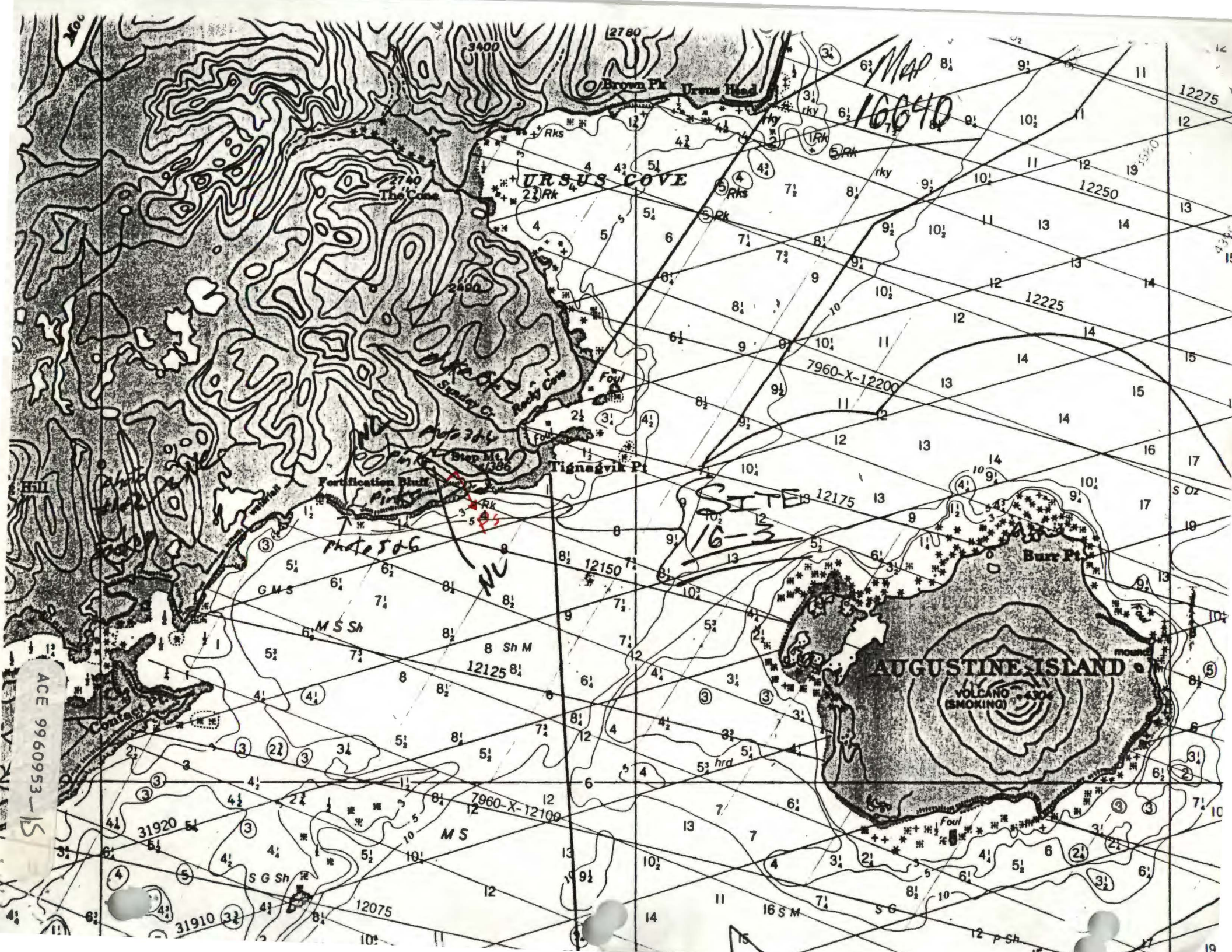
**35 PREDOMINANT SUBSTRATE TYPE:**

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



**36 COMMENTS:**





ACE 9960953-15

Map  
16640

SITE  
16-3

photo 5-6

photo 3-4

AUGUSTINE ISLAND

VOLCANO  
(SMOKING)

URSUS COVE

Tignavik Pt

Burr Pt

Brown Pk

The Cone

Fortification Bluff

Sunder Cr

Hill

31920

31910

12075

7960-X-12100

7960-X-12200

12275

12250

12225

12175

12150

12125

14

16 S M

12 P Sh

19



No stream

1 mi N. Clam Gulch

ASC NUMBER: \_\_\_\_\_ SEGMENT NUMBER: \_\_\_\_\_ YR CATALOGED: \_\_\_\_\_  
 LOCATION: Cook Inlet, East Side, Clam Gulch State Res Area, 1 mi North  
 Critical HABITAT Area  
 DAM NAME: \_\_\_\_\_ LATITUDE: 60° 15' 12"  
 ADIAK K-UNIT: \_\_\_\_\_ LOCAL STREAM #: \_\_\_\_\_ LONGITUDE: 151° 23' 24"  
 QUADRANGLE: Kenai A-4 LEGAL: \_\_\_\_\_  
 STREAMLINE TYPE: BS ALL SEGMENTS: \_\_\_\_\_  
 WAVE EXPOSURE: High

ASC NUMBER: \_\_\_\_\_ TEAM RECORDER: Rick Randall  
 SURVEY TYPE: BS OBSERVERS: ~~CRANDALL~~  
 METHOD: ATV AGENCY (IES): ADF&G  
 DATE: 7/12/89 PHOTOS TAKEN? N  
 START TIME: 1130 Roll #: \_\_\_\_\_ Frames: \_\_\_\_\_  
 STOP TIME: \_\_\_\_\_ VIDEO TAKEN? N Tape Number: \_\_\_\_\_  
 Counter Start: \_\_\_\_\_

SAMPLES TAKEN?  
 SAMPLE I.D. NUMBERS: 1. RRCI-9 2. 3.  
 4. 5. 6.

	LENGTH m	WIDTH m	H2	t	THICK cm	PEN cm	OIL TYPE
SITE 1							
SITE 2							
SITE 3							
SITE 4							
SITE 5							

VERALL OIL IMPACT: VL

OIL IN STREAM CHANNEL? \_\_\_\_\_ OIL ON BEACH WITHIN 50M OF STREAM MOUTH? \_\_\_\_\_

SUBSTRATE		SPECIES				
Bedrock	Granule	—				
Boulder	Sand					
Cobble	Silt					
Pebble	Veget.					
		COUNT				
		—				

COMMENTS: CLAM GULCH STATE CRITICAL HABITAT AREA  
 Tarball 4" diameter and 3/8" thick



ISLAND Creek

ASC NUMBER: 242-42-10440 SEGMENT NUMBER: PD-00 YR CATALOGED:  
 LOCATION: Port Dick  
 DAM NAME:  
 KUMIAK K-UNIT: LOCAL STREAM #:  
 QUADRANGLE: Seldovia B-4  
 SHORELINE TYPE: BEACH ALL SEGMENTS:  
 WAVE EXPOSURE: Low  
 LATITUDE: 59 17 32  
 LONGITUDE: 151 8 40  
 LEGAL: S 10S 11W21

ASC NUMBER:  
 SURVEY TYPE: SS  
 METHOD: Foot  
 DATE: ~~6/1/89~~ 7/10/89  
 START TIME: 2  
 STOP TIME: 2  
 TEAM RECORDER: Greg Demers  
 OBSERVERS:  
 AGENCY(IES): ADFG  
 PHOTOS TAKEN?   
 Roll #: Frames:  
 VIDEO TAKEN?  Tape Number:  
 Counter Start:

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

ISLAND Creek	LENGTH m	WIDTH m	M2	%	THICK cm	PEN cm	OIL TYPE
SITE 1	100	10		V	<Z	-	T.B N/A
SITE 2	40	10		Z	<Z		T.B, LG N/A
SITE 3							
SITE 4							
SITE 5							

OVERALL OIL IMPACT: L  
 OIL IN STREAM CHANNEL?   
 OIL ON BEACH WITHIN 50M OF STREAM MOUTH?

SUBSTRATE

Bedrock	Granule
Boulder	Sand
Cobble	Silt 60
Pebble 40	Veget.

SPECIES	Ø				
COUNT	Ø				

COMMENTS: pls put into oilcomm:  
 Cannot locate original notes (KS 11/14/91).

Comments:

ACE 9960955

Note: Since I could only locate the Commfish report + maps, this observation was put into log files.  
 KS 11/14/91.





# Staniski Creek

ASC NUMBER: 244-10-10050      SEGMENT NUMBER:      YR CATALOGED:  
 LOCATION: Cook Inlet  
 DAM NAME: Staniski Crk.  
 TANK K-UNIT:      LOCAL STREAM #:      LATITUDE: 59 52 53  
 USGS QUADRANGLE: ~~Kenai A-5~~      Seldovia D-5      LONGITUDE: 151 47 46  
 SHORELINE TYPE: Beach      ALL SEGMENTS:      LEGAL: S 35.15W 35  
 WAVE EXPOSURE: High

ASC NUMBER:      TEAM RECORDER: —  
 SURVEY TYPE: — CommFISH      OBSERVERS: AL DAVIS  
 METHOD: —  
 DATE: 7/24/89      AGENCY(IES): ADF+G  
 START TIME: —  
 STOP TIME: —  
 PHOTOS TAKEN? —  
     Roll #:      Frames:  
 VIDEO TAKEN? — Tape Number:  
     Counter Start:

SAMPLES TAKEN? —  
 SAMPLE I.D. NUMBERS: 1.      2.      3.  
                                          4.      5.      6.

	LENGTH m	WIDTH m	M2	%	THICK cm	PEN cm	OIL TYPE
SITE 1							LIGHT OIL
SITE 2							
SITE 3							
SITE 4							
SITE 5							

OVERALL OIL IMPACT: VL  
 OIL IN STREAM CHANNEL?       OIL ON BEACH WITHIN 50M OF STREAM MOUTH?

SUBSTRATE

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

SPECIES					
COUNT					

COMMENTS: Light oil observed at Staniski Creek on approx. this date.

note - deleted from MAD + moved into LOGINDEX as no original notes available. 8/11/11.

See "East Side Cook Inlet" Report by Norma Dodiak (ADF+G)



# Anchor River

ASC NUMBER: 244-10-10010      SEGMENT NUMBER:             YR CATALOGED:         
 LOCATION: Cook Inlet  
 DAM NAME: Anchor River  
 TANK UNIT:             LOCAL STREAM #:         
 US QUADRANGLE: Seldovia D-5      ALL SEGMENTS:         
 SHORELINE TYPE: Beach  
 WAVE EXPOSURE: High      LEGAL: S 55 15 W 4

SC NUMBER:             TEAM RECORDER: AL DAVIS (ADFG)      OBSERVERS: John Halvorsen (ADFG)  
 SURVEY TYPE: BS             AGENCY(IES):         
 METHOD: FOOT  
 DATE: 5/5/89      PHOTOS TAKEN? ?      Roll #: ?      Frames: ?  
 START TIME:      VIDEO TAKEN? ?      Tape Number: ?  
 TOP TIME:      Counter Start: ?

SAMPLES TAKEN?      SAMPLE I.D. NUMBERS: 1.      2.      3.      4.      5.      6.      Type: bilcomm

	LENGTH m	WIDTH m	H2	%	THICK cm	PEN cm	OIL TYPE
SITE 1	-	-	-	-	-	-	on beach at mouth of river.
SITE 2							light oil - occasional patches, splashes.
SITE 3							
SITE 4							
SITE 5							

OVERALL OIL IMPACT: L  
 OIL IN STREAM CHANNEL? N      OIL ON BEACH WITHIN 50M OF STREAM MOUTH? Y  
 SUBSTRATE:

Bedrock	Granule <u>35</u>	SPECIES	<u>→</u>				
Boulder	Sand <u>30</u>	COUNT					
Cobble	Silt						
Pebble <u>35</u>	Veget.						

COMMENTS: Oil picked up at Anchor Pt. Beach. Light oil - occasional patches/splashes.  
 Oil found one mile south of river and on beach at mouth of River.

LOG INDEX

ACE 9960958

See "East Side Cook Inlet Report" by Norma Dudiak (ADFG)



Chenik Crk

ASC NUMBER: 243-30-10200 SEGMENT NUMBER: YR CATALOGED:  
 LOCATION: Kamishak Bay  
 DAM NAME: Chenik Crk  
 LOCAL STREAM #: ALL SEGMENTS:  
 QUADRANGLE: Iliamna A-4  
 SHORELINE TYPE: Beach  
 WAVE EXPOSURE: High  
 LATITUDE: 59 13 3  
 LONGITUDE: 154 8 30  
 LEGAL: S 11S 29W15

SC NUMBER: TEAM RECORDER: AL DAVIS  
 SURVEY TYPE: BS/SS OBSERVERS:  
 METHOD: FOOT  
 DATE: 6/29/89 AGENCY(IES): ADF46  
 START TIME: 1200 PHOTOS TAKEN? N  
 STOP TIME: VIDEO TAKEN? N Tape Number:  
 Counter Start:

SAMPLES TAKEN? N  
 SAMPLE I.D. NUMBERS: 1. 2. 3.  
 4. 5. 6.

	LENGTH m	WIDTH m	H2	t	THICK cm	PEN cm	OIL TYPE
SITE 1	402	—	—	—	—	—	MS
SITE 2							
SITE 3							
SITE 4							
SITE 5							

OVERALL OIL IMPACT: VL  
 OIL IN STREAM CHANNEL? N  
 SUBSTRATE  
 OIL ON BEACH WITHIN 50M OF STREAM MOUTH? —

Bedrock	Granule
Boulder	Sand
Cobble	Silt
Pebble	Veget.

SPECIES	/				
COUNT	/				

REMARKS: Surveyed south beach on south side of Chenik Crk.  
 - Oil observed at ≈ 19' tide line. Oil apparently came in on the 6/28/89.  
 - Unknown how near the oil was to stream, though it was within 1 mile of the stream.  
 Contact Al Davis for further info.

LOGINDEX



Chenik Head

ASC NUMBER: \_\_\_\_\_ SEGMENT NUMBER: \_\_\_\_\_ YR CATALOGED: \_\_\_\_\_  
 LOCATION: Kamishak Bay, Chenik Head  
 DAM NAME: \_\_\_\_\_ LATITUDE: \_\_\_\_\_  
 ADIAK K-UNIT: \_\_\_\_\_ LOCAL STREAM # \_\_\_\_\_ LONGITUDE: \_\_\_\_\_  
 US QUADRANGLE: Iliamna A-4 LEGAL: \_\_\_\_\_  
 SHORELINE TYPE: Beach ALL SEGMENTS:   
 WAVE EXPOSURE: High

ASC NUMBER: \_\_\_\_\_ TEAM RECORDER: AL DAVIS  
 SURVEY TYPE: BS OBSERVERS: Rance Morrison  
 METHOD: FOOT  
 DATE: 6/29/89 AGENCY(IES): ADFG  
 START TIME: 1300 PHOTOS TAKEN?   
 STOP TIME: \_\_\_\_\_ Roll #: \_\_\_\_\_ Frame #: \_\_\_\_\_  
 VIDEO TAKEN?  Tape Number: \_\_\_\_\_  
 Counter start: \_\_\_\_\_  
 SAMPLES TAKEN?   
 SAMPLE I.D. NUMBERS: 1. \_\_\_\_\_ 2. \_\_\_\_\_ 3. \_\_\_\_\_  
 4. \_\_\_\_\_ 5. \_\_\_\_\_ 6. \_\_\_\_\_

	LENGTH m	WIDTH m	H2	t	THICK cm	PEN cm	OIL TYPE
SITE 1	805	—	—	—	—	—	MS
SITE 2							
SITE 3							
SITE 4							
SITE 5							

OVERALL OIL IMPACT: VL  
 OIL IN STREAM CHANNEL? \_\_\_\_\_ OIL ON BEACH WITHIN 50M OF STREAM MOUTH? \_\_\_\_\_

SUBSTRATE

Bedrock	Granule
Boulder	Sand
Cobble	Silt
Pebble	Veget.

SPECIES				
COUNT				

REMARKS: SEE AL DAVIS Map for more exact location.  
 Surveyed "one car beach" and 2 beaches  
 South.

LOG INDEX



Chenik HEAD-N

ASC NUMBER: 243-30-10200 SEGMENT NUMBER: \_\_\_\_\_ YR CATALOGED: \_\_\_\_\_  
 LOCATION: Kamishak Bay, Pocket beach just south Chenik Crk  
 DAM NAME: \_\_\_\_\_ 1/2 m. SE Chenik Crk  
 NADIAK K-UNIT: \_\_\_\_\_ LOCAL STREAM #: \_\_\_\_\_  
 USGS QUADRANGLE: Iliamna A-4 LATITUDE: \_\_\_\_\_  
 SHORELINE TYPE: Beach LONGITUDE: \_\_\_\_\_  
 TIDE EXPOSURE: High ALL SEGMENTS: \_\_\_\_\_ LEGAL: \_\_\_\_\_

ASC NUMBER: \_\_\_\_\_ TEAM RECORDER: AL DAVIS  
 SURVEY TYPE: BS OBSERVERS: Lance Morrison  
 METHOD: FOOT AGENCY(IES): ADF&G  
 DATE: 6/22/89 PHOTOS TAKEN?   
 START TIME: 1400 Roll #: \_\_\_\_\_ Frames: \_\_\_\_\_  
 STOP TIME: \_\_\_\_\_ VIDEO TAKEN?  Tape Number: \_\_\_\_\_  
 Counter Start: \_\_\_\_\_  
 SAMPLES TAKEN?   
 SAMPLE I.D. NUMBERS: 1. \_\_\_\_\_ 2. \_\_\_\_\_ 3. \_\_\_\_\_  
 4. \_\_\_\_\_ 5. \_\_\_\_\_ 6. \_\_\_\_\_

	LENGTH m	WIDTH m	H2	t	THICK cm	PEN cm	OIL TYPE
SITE 1	91	—	—	—	—	—	TB
SITE 2							
SITE 3							
SITE 4							
SITE 5							

OVERALL OIL IMPACT:    
 OIL IN STREAM CHANNEL? \_\_\_\_\_ OIL ON BEACH WITHIN 50M OF STREAM MOUTH? \_\_\_\_\_  
 SUBSTRATE  
 Bedrock  Granule   
 Boulder  Sand   
 Cobble  Silt   
 Pebble  Veget.   
 SPECIES \_\_\_\_\_  
 COUNT \_\_\_\_\_

REMARKS: Oil observed on pocket beach 1/2 mile south-east of Chenik Crk. LAT & LONG reflect oil observ. site not stream mouth.  
 - Beach had been cleaned - some new tarballs on beach.

LOG INDEX



Chenik Crk.

ASC NUMBER: 243-30-1020 SEGMENT NUMBER: —  
LOCATION: Kamishak Bay  
STREAM NAME: Chenik Crk.  
LOCAL STREAM #: —  
QUADRANGLE: Iliamna A-4  
SHORELINE TYPE: Beach  
WAVE EXPOSURE: High

YR CATALOGED: —  
LATITUDE: 59 13 3  
LONGITUDE: 154 8 30  
LEGAL: S 11S 29W15

SC NUMBER: —  
SURVEY TYPE: BS/SS  
METHOD: FOOT  
DATE: 6/22/89  
START TIME: 1400  
STOP TIME: —

TEAM RECORDER: AL Davis  
OBSERVERS: Rance Morrison  
AGENCY(IES): ADF+G  
PHOTOS TAKEN?   
Roll #: — Frames: —  
VIDEO TAKEN?  Tape Number: —  
Counter Start: —

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

	LENGTH m	WIDTH m	H2	↓	THICK cm	PEN cm	OIL TYPE
SITE 1							
SITE 2							
SITE 3							
SITE 4							
SITE 5							

OVERALL OIL IMPACT: VL

OIL IN STREAM CHANNEL?

OIL ON BEACH WITHIN 50M OF STREAM MOUTH? —

SUBSTRATE

Bedrock	Granule
Boulder	Sand
Cobble	Silt
Pebble	Veget.

SPECIES	—				
COUNT					

COMMENTS: Surveyed from north end of Amakdedori Beach to Chenik on foot. The lgth above refers to area in vicinity of stream. Unknown how close oil was to crk - oil was within one mile of stream. Scattered tarballs observed - less oil observed than ~~on~~ 6/8/89 survey. Contact AL Davis for verification of whether photos exist etc.

ACE 9960962 +15

LOGINDEX.



Chenik Crk

ASC NUMBER: 243-30-10200 SEGMENT NUMBER: — YR CATALOGED: —  
 LOCATION: Kamishak Bay  
 STREAM NAME: Chenik Crk  
 LOCAL STREAM #: —  
 QUADRANGLE: Iliamna A-4  
 SHORELINE TYPE: Beach  
 WAVE EXPOSURE: High  
 ALL SEGMENTS: —

LATITUDE: 59 13 3  
 LONGITUDE: 154 8 30  
 LEGAL: S 11S 29W15

SC NUMBER: —  
 SURVEY TYPE: BS/SS  
 METHOD: FOOT  
 DATE: 6 / 22 / 89  
 START TIME: 0600  
 STOP TIME: 1300

TEAM RECORDER: AL DAVIS  
 OBSERVERS: Lance Morrison  
 AGENCY(IES): ADF&G  
 PHOTOS TAKEN?   
 Roll #: — Frames: —  
 VIDEO TAKEN?  Tape Number: —  
 Counter Start: —

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

	LENGTH m	WIDTH m	H2	?	THICK cm	PEN cm	OIL TYPE
SITE 1	5634	—	—	—	—	—	TB
SITE 2							
SITE 3							
SITE 4							
SITE 5							

OVERALL OIL IMPACT:

OIL IN STREAM CHANNEL?  OIL ON BEACH WITHIN 50M OF STREAM MOUTH?

SUBSTRATE

Bedrock	Granule
Boulder	Sand
Cobble	Silt
Pebble	Veget.

SPECIES

—					
COUNT					

REMARKS: Surveyed from north end of Amakdedori beach to Chenik on foot.  
 - Observed scattered tarballs - less oil observed than 6/8/89 survey.  
 - Unknown how near to the stream the oil was - though it was within a mile of the stream.  
 - Contact Al Davis for further information.

LOGINDEX (Dup)

ACE 9960963 -15



Chenik Crk

ASC NUMBER: 243-30-10200 SEGMENT NUMBER:  
LOCATION: Kamishak Bay  
STREAM NAME: Chenik Crk  
LOCAL STREAM #:  
QUADRANGLE: Iliamna A-4  
SHORELINE TYPE: Beach  
WAVE EXPOSURE: High

YR CATALOGED:  
LATITUDE: 59 13 3  
LONGITUDE: 154 8 30  
LEGAL: S 115 29W15

ASC NUMBER:  
SURVEY TYPE: BS/SS  
METHOD: FOOT  
DATE: 6/8/89  
START TIME: 1200  
STOP TIME: 1800

TEAM RECORDER: AL Davis  
OBSERVERS: Rance Morrison  
AGENCY(IES): ADF4G  
PHOTOS TAKEN?   
Roll #: Frames:  
VIDEO TAKEN?  Tape Number:  
Counter Start:

SAMPLES TAKEN?

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

	LENGTH m	WIDTH m	M2	%	THICK cm	PEN cm	OIL TYPE
SITE 1	365+	—	—	—	—	—	TB, MS
SITE 2							
SITE 3							
SITE 4							
SITE 5							

OVERALL OIL IMPACT: L

OIL IN STREAM CHANNEL?

OIL ON BEACH WITHIN 50M OF STREAM MOUTH?

SUBSTRATE

Bedrock	Granule
Boulder	Sand
Cobble	Silt
Pebble	Veget.

SPECIES	—				
COUNT					

COMMENTS: Surveyed from north end of Amakdedoni beach to Chenik on foot. Chenik Lagoon most heavily oiled area between Amakdedoni Beach and Chenik Lagoon - tarballs observed every 6" or less. Oil located primarily at the 19-20' ~~high~~ tide ~~max~~ level (tarballs and mousse on rocks).  
 Contact ~~Al Davis/Rance Morrison~~ ~~survey~~ survey crew for further info. whether or not photos or video were taken.

LOG INDEX



# PAINT RIVER

ASC NUMBER: 243-20-10020	SEGMENT NUMBER: —	YR CATALOGED:
LOCATION: Kamishak Bay		
DAM NAME: Paint River		
USDA QUADRANGLE: Iliamna A-4	LOCAL STREAM #:	LATITUDE: 59 9 27
SHORELINE TYPE: Beach		LONGITUDE: 154 14 28
WAVE EXPOSURE: High	ALL SEGMENTS:	LEGAL: S 12S 29W 7

SURVEY TYPE: BS/SS METHOD: FOOT DATE: 6/16/89 START TIME: 1330 STOP TIME: —	TEAM RECORDER: AL DAVIS OBSERVERS: Rance Morrison AGENCY(IES): ADF&G PHOTOS TAKEN? <input checked="" type="checkbox"/> Roll #: _____ Frames: _____ VIDEO TAKEN? <input checked="" type="checkbox"/> Tape Number: _____ Counter Start: _____
SAMPLES TAKEN? <input checked="" type="checkbox"/>	
SAMPLE I.D. NUMBERS: 1. _____ 2. _____ 3. _____ 4. _____ 5. _____ 6. _____	

SITE	LENGTH m	WIDTH m	H2	t	THICK cm	PEN cm	OIL TYPE
SITE 1	805	—	—	—	—	—	TB
SITE 2							
SITE 3							
SITE 4							
SITE 5							

OVERALL OIL IMPACT: VL

OIL IN STREAM CHANNEL?  SUBSTRATE

Bedrock Boulder Cobble Pebble	Granule Sand silt Veget.
----------------------------------------	-----------------------------------

OIL ON BEACH WITHIN 50M OF STREAM MOUTH? —

SPECIES	COUNT				
—					

REMARKS: Site # 2 on AL DAVIS'S MAP  
 Unknown how close oil was to stream - though it was found within one mile of stream.  
 Contact Al Davis for photo verification

LOG INDEX



BEACH

Amakdedori Crk.

ASC NUMBER: 243-40-1000 SEGMENT NUMBER: — YR CATALOGED: —  
 LOCATION: Kamishak Bay  
 STREAM NAME: Amakdedori Creek LOCAL STREAM #: —  
 QUADRANGLE: Iliamna B-4  
 SHORELINE TYPE: BEACH ALL SEGMENTS: —  
 WAVE EXPOSURE: High

LATITUDE: 59 16 39  
 LONGITUDE: 154 7 37  
 LEGAL: S 105.29W26

SURVEY TYPE: BS/SS  
 METHOD: FOOT  
 DATE: 6/8/89  
 START TIME: 1200 ok 2  
 STOP TIME: 1800 ok 1

TEAM RECORDER: AL DAVIS  
 OBSERVERS: Rance Morrison  
 AGENCY(IES): ADF&G

PHOTOS TAKEN? N  
 Roll #: — Frames: —  
 VIDEO TAKEN? N Tape Number: —  
 Counter Start: —

SAMPLES TAKEN? N  
 SAMPLE I.D. NUMBERS: 1. — 2. — 3. —  
 4. — 5. — 6. —

	LENGTH m	WIDTH m	M2	%	THICK cm	PEN cm	OIL TYPE
SITE 1	1610+	—	—	—	—	—	MS, TB
SITE 2							
SITE 3							
SITE 4							
SITE 5							

OVERALL OIL IMPACT: L  
 OIL IN STREAM CHANNEL? N  
 OIL ON BEACH WITHIN 50M OF STREAM MOUTH? Y

SUBSTRATE

Bedrock	Granule
Boulder	Sand
Cobble	Silt
Pebble	Veget.

SPECIES	/				
COUNT					

REMARKS: Surveyed from north end of Amakdedori Beach to Chenik on foot. In places tarballs observed every 6" or less. Oil located primarily at the 19-20' tide level (tarballs & MS on rocks).  
 Contact Al Davis to verify whether or not photos exist.  
 Contact survey crew for further info

ACE 9960966

→ LOG INDEX + Beach



ASC NUMBER: 243-10010 SEGMENT NUMBER:          YR CATALOGED:           
 LOCATION: Kamishak Bay  
 DAM NAME: Amakdedoni Crk.  
 LOCAL STREAM #:           
 QUADRANGLE: Iliamna B-4  
 SHORELINE TYPE: Beach   
 WAVE EXPOSURE: High  
 LATITUDE: 59 16 39  
 LONGITUDE: 154 7 37  
 LEGAL: S 10S 29W 26  
 ALL SEGMENTS:         

SC NUMBER:          TEAM RECORDER: AL DAVIS  
 SURVEY TYPE:          OBSERVERS: Rance Morrison  
 METHOD: BS/SS  
 DATE: 6/22/89  
 AGENCY(IES): ADFG  
 START TIME: 0600  
 TOP TIME: 1300  
 PHOTOS TAKEN?       
 Roll #:          Frames:           
 VIDEO TAKEN?      Tape Number:           
 Counter start:         

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

	LENGTH m	WIDTH m	M2	%	THICK cm	PEN cm	OIL TYPE
SITE 1	56.34	—	—	—	—	—	TB
SITE 2							
SITE 3							
SITE 4							
SITE 5							

OVERALL OIL IMPACT:       
 OIL IN STREAM CHANNEL?      OIL ON BEACH WITHIN 50M OF STREAM MOUTH?     

SUBSTRATE

Bedrock	Granule
Boulder	Sand
Cobble	Silt
Pebble	Veget.

SPECIES					
COUNT					

REMARKS: Surveyed from north end of Amakdedoni beach to check on foot. Observed scattered tarballs - less oil observed than 6/8/89 survey. Contact Al Davis for photo verification, i.e. whether or not photos exist. Unknown how close oil was to stream - oil was within 1 mile of stream.

in log index.



No stream

Homer Spit

ASC NUMBER: \_\_\_\_\_ SEGMENT NUMBER: \_\_\_\_\_ YR CATALOGED: \_\_\_\_\_  
 LOCATION: Kachemak Bay, Homer Spit, ~~SW~~ ~~SE~~ Side  
 DAM NAME: \_\_\_\_\_ LATITUDE: 59° 37' 18"  
 KACHEMAK K-UNIT: \_\_\_\_\_ LOCAL STREAM #: \_\_\_\_\_ LONGITUDE: 151° 27' 30"  
 USGS QUADRANGLE: Seldovia C-4 LEGAL: \_\_\_\_\_  
 SHORELINE TYPE: BEACH ALL SEGMENTS: \_\_\_\_\_  
 WAVE EXPOSURE: High

ASC NUMBER: \_\_\_\_\_  
 SURVEY TYPE: BS  
 METHOD: FOOT  
 DATE: 7/17/89  
 START TIME: 1300  
 STOP TIME: \_\_\_\_\_

TEAM RECORDER: Rick Randall  
 OBSERVERS: \_\_\_\_\_  
 AGENCY(IES): ADF&G  
 PHOTOS TAKEN?   
 Roll #: RDR-6 Frames: 10  
 VIDEO TAKEN?  Tape Number: \_\_\_\_\_  
 Counter Start: \_\_\_\_\_

SAMPLES TAKEN? yes  
 SAMPLE I.D. NUMBERS: 1. RRKB-13 2. RRKB-14 3. \_\_\_\_\_  
 4. \_\_\_\_\_ 5. \_\_\_\_\_ 6. \_\_\_\_\_

	LENGTH m	WIDTH m	H2	t	THICK cm	PEN cm	OIL TYPE
SITE 1							
SITE 2							
SITE 3							
SITE 4							
SITE 5							

VERALL OIL IMPACT: VL

IL IN STREAM CHANNEL? \_\_\_\_\_  
 SUBSTRATE

Bedrock	Granule 33
Boulder	Sand
Cobble 33	Silt
Pebble 33	Veget. <input checked="" type="checkbox"/>

OIL ON BEACH WITHIN 50M OF STREAM MOUTH? \_\_\_\_\_

SPECIES	—				
COUNT	—				

REMARKS:   
 Sample # RRKB-13: Found on west side of spit - at the 1/2 way point of the spit. 2" diameter by 1/4" thick. Found in most recent tide line. 59° 37' 18", 151° 27' 30"  
 Sample # RRKB-14: Found on west side of spit NW of sample 13. 2" diameter x 1/4" thick. Found in most recent tide line. 59° 37' 30", 151° 27' 30"



# \*Kachemak Bay Critical Habitat Area

ASC NUMBER: _____	SEGMENT NUMBER: _____	YR CATALOGED: _____	
LOCATION: <u>Kachemak Bay, <del>Older Passage Area</del> Elder Passage Area</u>			
TEAM NAME: _____	LOCAL STREAM #: _____	LATITUDE: <u>See comments</u>	LONGITUDE: " " " "
USGS QUADRANGLE: <u>Seldovia C-4</u>		LEGAL: _____	
SUBSTRATE TYPE: <u>BEACH (low lying rocks)</u>	ALL SEGMENTS: _____		
WAVE EXPOSURE: <u>Moderate</u>			

SC NUMBER: \_\_\_\_\_  
 SURVEY TYPE: BS  
 METHOD: Skiff/Boat  
 DATE: 7/18/89  
 START TIME: 1030  
 STOP TIME: 1400

TEAM RECORDER: Rick Randall  
 OBSERVERS: \_\_\_\_\_  
 AGENCY (IES): ADFG  
 PHOTOS TAKEN? yes  
 Roll #: RDR-6      Frames: 11 → 14  
 VIDEO TAKEN? \_\_\_\_\_      Tape Number: \_\_\_\_\_  
 Counter Start: \_\_\_\_\_

SAMPLES TAKEN? \_\_\_\_\_  
 SAMPLE I.D. NUMBERS:
 

1. <u>RRKB-15</u>	2. <u>RRKB-16</u>	3. <u>RRKB-17</u>
4. <u>RRKB-18</u>	5. <u>RRKB-19</u>	6. <u>RRKB-20</u>

SITE	LENGTH m	WIDTH m	H2	t	THICK cm	PEN cm	OIL TYPE
SITE 1	—	—	—	—	—	—	—
SITE 2							
SITE 3							
SITE 4							
SITE 5							

**OVERALL OIL IMPACT: VL**

OIL IN STREAM CHANNEL? \_\_\_\_\_

SUBSTRATE	
Bedrock	Granule
Boulder	Sand
Cobble	Silt
Pebble	Veget.

OIL ON BEACH WITHIN 50M OF STREAM MOUTH? \_\_\_\_\_

SPECIES	<u>Sea Otter</u>		
COUNT	<u>1</u>		

- Skiffed from Homer Boat Hbr. to Eldredge Passage Area.
- COMMENTS: Sample # RRKB-15: Taken from Yukon Island outside beach between Yukon & Hesketh Island. One tarball 1" x 1/4" thick, One tarball 2 1/2" diameter x 1/4" thick.
- KACHEMAK BAY CRITICAL HABITAT AREA      59° 31' 12", 151° 30' 30"
- RRKB-16: Taken from Hesketh Island, largest beach. Found on spruce bow 1/2" long. Dead Sea Otter found - no apparent oil on fur.      59° 30' 30", 151° 30' 18"
- RRKB-17: Taken from Hesketh Island, <sup>next beach</sup> west of sample 16 beach. Tarball 1" x 1/2" long x 1/8".      59° 30' 30", 151° 30' 42"      ACE 9960969
- RRKB-18: Taken from Hesketh Island - west side. One tarball 1" x 1/2" x 1/8". Found at most recent tide line.      59° 30' 30", 151° 31' 18"
- RRKB-19: Taken from Eldred Passage - Rock Quarry - 2nd beach to west. Oil adhered to drift weed: 1 1/2" x 1/2".      59° 29' 48", 151° 28' 00"
- RRKB-20: Taken from Eldred Passage - Beach at entrance of Sadie Cove. Oil adhered to feathers - 2" x 1".      59° 31' 42", 151° 27' 18"



ASC NUMBER: LOCATION: Kachemak Bay, Kachemak Bay Critical Habitat Area  
 SAM NAME: McKeon Spit to Aurora Lagoon  
 LOCAL STREAM #1: ALL SEGMENTS:  
 YR CATALOGED:  
 LATITUDE:  
 LONGITUDE:  
 LEGAL:

SC NUMBER:  
 SURVEY TYPE:  
 METHOD:  
 DATE: 7/19/89  
 START TIME: 0748  
 TOP TIME: 1555  
 TEAM RECORDER: Rock Randall  
 OBSERVERS: Doug Hill  
 AGENCY(IES): ADFG  
 PHOTOS TAKEN? Yes  
 Roll #: ROR-6 → Frames: 15-20  
 VIDEO TAKEN? No Tape Number: 6-14  
 Counter Start:

SAMPLES TAKEN? Yes  
 SAMPLE I.D. NUMBERS:  
 1. DDH-7/19/89-A  
 2. DDH-7/19/89-B  
 3. 89ROR-21  
 4. 89ROR-22  
 5. 89ROR-23  
 6. KB-AurSpit-DDH-7/19/89

	LENGTH m	WIDTH m	112	1	THICK cm	PEN cm	OIL TYPE
SITE 1	<u>4024</u>	<u>1</u>	<u>—</u>	<u>1</u>	<u>—</u>	<u>—</u>	<u>T.B, MS, ST</u>
SITE 2							
SITE 3							
SITE 4							
SITE 5							

VERALL OIL IMPACT: VL

OIL IN STREAM CHANNEL? —

SUBSTRATE	
Bedrock	Granule
Boulder	Sand
Cobble	Silt
Pebble	Veget.

OIL ON BEACH WITHIN 50M OF STREAM MOUTH? —

SPECIES	BALD EAGLE	Common LOON	Black Legged Kittiwake	Glaucous winged GULLS	new BULLY BEAR
COUNT	<u>1</u>	<u>2</u>	<u>8</u>	<u>3</u>	<u>5</u>

REMARKS:  
 - Ground surveyed approximately 1/4 mile of McKeon Spit. No oil observed.  
 - Ground surveyed from Rusty's Lagoon to tip of Glacier Spit  
 - Dime to quarter sized tarballs, mousse and numerous oil stains found easily ~~found~~ along length of ~~beach~~ Glacier Spit beach - Oil sign quite common.  
~~Observed oil sheen just east of the beach~~  
 - All samples recorded in the sample box with the exception of #6 were taken on the Glacier Spit beach.  
 - Aurora Spit: took sample ~~near~~ Found 4 tarballs near mouth of Portlock Creek we observed hundreds of crab molts  
 - Observed oil sheen just east little Tutka (Bilge Pumping?)

ACE 9960970







ASC NUMBER: \_\_\_\_\_ SEGMENT NUMBER: \_\_\_\_\_ YR CATALOGED: \_\_\_\_\_  
 LOCATION: *Kachemak Bay Critical Has. Area*  
 DAM NAME: \_\_\_\_\_ LATITUDE: \_\_\_\_\_  
 KUCHIAK K-UNIT: \_\_\_\_\_ LOCAL STREAM #: \_\_\_\_\_ LONGITUDE: \_\_\_\_\_  
 US QUADRANGLE: *Seldovia D-3* LEGAL: \_\_\_\_\_  
 SHORELINE TYPE: *BEACH* ALL SEGMENTS: \_\_\_\_\_  
 WAVE EXPOSURE: *High*

SC NUMBER: \_\_\_\_\_ TEAM RECORDER: *Rick Randall*  
 SURVEY TYPE: *B2* OBSERVERS: \_\_\_\_\_  
 METHOD: *Foot* AGENCY(IES): *AOFG*  
 DATE: *7/22/89* PHOTOS TAKEN? *N* *10/4/91*  
 START TIME: ? Roll #: \_\_\_\_\_ Frames: \_\_\_\_\_  
 TOP TIME: ? VIDEO TAKEN? *N* Tape Number: \_\_\_\_\_  
 Counter Start: \_\_\_\_\_  
 SAMPLES TAKEN? *N*  
 SAMPLE I.D. NUMBERS: 1. \_\_\_\_\_ 2. \_\_\_\_\_ 3. \_\_\_\_\_  
 4. \_\_\_\_\_ 5. \_\_\_\_\_ 6. \_\_\_\_\_

	LENGTH m	WIDTH m	H2	t	THICK cm	PEN cm	OIL TYPE
SITE 1							
SITE 2							
SITE 3							
SITE 4							
SITE 5							

VERALL OIL IMPACT: *N*  
 OIL IN STREAM CHANNEL? \_\_\_\_\_ OIL ON BEACH WITHIN 50M OF STREAM MOUTH? \_\_\_\_\_  
 SUBSTRATE  

Bedrock	Granule
Boulder	Sand
Cobble	Silt
Pebble	Veget.

SPECIES	_____				
COUNT	_____				

COMMENTS: *Ground surveyed 1610 meters of beach  $\approx$  1 mile South of Kachemak Silo (Russian Village) - Northshore Head of Bay.*

(1<sup>st</sup> confirmation of oiled beach in Cook Inlet) **ANCHOR RIVER**

ASC NUMBER: 244-10-10060      SEGMENT NUMBER: ~~7~~      YR CATALOGED:   
 LOCATION: Cook Inlet      STREAM NAME: Anchor River      LATITUDE: 59 46.29  
 KODIAK K-UNIT:      LOCAL STREAM #:      LONGITUDE: 151 51 13  
 US QUADRANGLE: Seldovia D-5      LEGAL: SSS 15W 4  
 SHORELINE TYPE: BEACH      ALL SEGMENTS:   
 WAVE EXPOSURE: High

SC NUMBER:      TEAM RECORDER: AL DAVIS  
 SURVEY TYPE: BS      OBSERVERS:   
 METHOD: FOOT      AGENCY(IES): ADF&G  
 DATE: 5/4/89      PHOTOS TAKEN? N  
 START TIME:      Roll #:      Frames:   
 TOP TIME:      VIDEO TAKEN? N      Tape Number:   
                                          Counter Start:

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

	LENGTH m	WIDTH m	H2	†	THICK cm	PEN cm	OIL TYPE
SITE 1							*
SITE 2							
SITE 3							
SITE 4							
SITE 5							

OVERALL OIL IMPACT: VL  
 OIL IN STREAM CHANNEL? N      OIL ON BEACH WITHIN 50M OF STREAM MOUTH? Y  
 SUBSTRATE

Bedrock	Granula <del>45</del> 35	SPECIES				
Boulder	Sand <del>30</del>					
Cobble	Silt					
Pebble <del>35</del>	Veget.					
		COUNT				

REMARKS: Light oiling (splashes + patches) on beach and at river mouth.

ACE 9960973

See "East Side Cook Inlet Report" by Nonna Dudlak (ADF&G)



Not A Stream / <sup>last confirmation</sup> of oil beach in Cook Inlet ~~Cook Inlet~~ **Anchor Point**

ASC NUMBER: \_\_\_\_\_ SEGMENT NUMBER: \_\_\_\_\_ YR CATALOGED: \_\_\_\_\_  
 LOCATION: Cook Inlet, Anchor Point LATITUDE: \_\_\_\_\_  
 TANK NAME: \_\_\_\_\_ LONGITUDE: \_\_\_\_\_  
 TANK K-UNIT: \_\_\_\_\_ LOCAL STREAM #: \_\_\_\_\_ LEGAL: \_\_\_\_\_  
 USGS QUADRANGLE: Seldovia D-5 ALL SEGMENTS: \_\_\_\_\_  
 SHORELINE TYPE: Beach  
 WAVE EXPOSURE: High

ASC NUMBER: \_\_\_\_\_ TEAM RECORDER: \_\_\_\_\_  
 SURVEY TYPE: BS OBSERVERS: AL DAVIS John Halvorse  
 METHOD: FOOT AGENCY(IES): ADFG, ADEL  
 DATE: 5/5/89 PHOTOS TAKEN? \_\_\_\_\_  
 START TIME: \_\_\_\_\_ Roll #: \_\_\_\_\_ Frames: \_\_\_\_\_  
 STOP TIME: \_\_\_\_\_ VIDEO TAKEN? \_\_\_\_\_ Tape Number: \_\_\_\_\_  
 Counter Start: \_\_\_\_\_

SAMPLES TAKEN? \_\_\_\_\_  
 SAMPLE I.D. NUMBERS: 1. \_\_\_\_\_ 2. \_\_\_\_\_ 3. \_\_\_\_\_  
 4. \_\_\_\_\_ 5. \_\_\_\_\_ 6. \_\_\_\_\_

	LENGTH m	WIDTH m	M2	%	THICK cm	PEN cm	OIL TYPE
SITE 1							
SITE 2							
SITE 3							
SITE 4							
SITE 5							

OVERALL OIL IMPACT: L  
 OIL IN STREAM CHANNEL? \_\_\_\_\_ OIL ON BEACH WITHIN 50M OF STREAM MOUTH? \_\_\_\_\_

SUBSTRATE

Bedrock	Granule	10
Boulder	Sand	30
Cobble	Silt	
Pebble	Veget.	

SPECIES				
COUNT				

COMMENTS: ~~Anchor Pt. Received light oiling, occasional patches and splotches, on the beach by Anchor~~  
 Oil picked up from beach at Anchor Point  
 see "East Side Cook Inlet" Report by Norma Ordick (ADFG).

1st Confirmation of Oil on Homer Spit Homer Spit

ASC NUMBER:	SEGMENT NUMBER:	YR CATALOGED:
LOCATION: Cook Inlet, Homer Spit		
TAM NAME:	LOCAL STREAM #:	LATITUDE:
MARK K-UNIT:		LONGITUDE:
US QUADRANGLE:	ALL SEGMENTS:	LEGAL:
SHORELINE TYPE: Beach		
WAVE EXPOSURE: High		

ASC NUMBER:	TEAM RECORDER: John Halvorsen
SURVEY TYPE:	OBSERVERS: John Halbo
METHOD:	AGENCY(IES): ADEC
DATE: 5/10/89	PHOTOS TAKEN? <input type="checkbox"/>
START TIME:	Roll #: _____ Frames: _____
STOP TIME:	VIDEO TAKEN? <input type="checkbox"/> Tape Number: _____
	Counter Start: _____

SAMPLES TAKEN?

SAMPLE I.D. NUMBERS: 1. \_\_\_\_\_ 2. \_\_\_\_\_ 3. \_\_\_\_\_

4. \_\_\_\_\_ 5. \_\_\_\_\_ 6. \_\_\_\_\_

	LENGTH m	WIDTH m	M2	%	THICK cm	PEN cm	OIL TYPE
SITE 1							
SITE 2							
SITE 3							
SITE 4							
SITE 5							

OVERALL OIL IMPACT:

OIL IN STREAM CHANNEL?  OIL ON BEACH WITHIN 50M OF STREAM MOUTH?

SUBSTRATE

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

SPECIES	—				
COUNT					

COMMENTS: Two local citizen brought oil samples from the Homer spit to the Oil Response office.

See "East Side Cook Inlet" Report by Nonna Dudiak (AO#46).







ASC NUMBER:                      SEGMENT NUMBER:                      YR CATALOGED:                       
 LOCATION: Cook Inlet East Side, 1 mi either side kenai, kasilof and Ninilchik Rivers  
 CAN NAME: Kenai, kasilof, Ninilchik LATITUDE:                       
 LOCAL STREAM #:                      LONGITUDE:                       
 QUADRANGLE:                      LEGAL:                       
 SHORELINE TYPE: Beach ALL SEGMENTS:                       
 WAVE EXPOSURE: High

SC NUMBER:                      TEAM RECORDER: Rick Randall  
 SURVEY TYPE: BS OBSERVERS:                       
 METHOD: ATV AGENCY(IES): ADFG  
 DATE: 7/27/89 PHOTOS TAKEN? N  
 START TIME: ? Roll #:                      Frames:                       
 TOP TIME: ? VIDEO TAKEN?                      Tape Number:                       
 Counter Start:                     

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

	LENGTH m	WIDTH m	H2	t	THICK cm	PEN cm	OIL TYPE
SITE 1	<u>                    </u>	<u>                    </u>	<u>                    </u>	<u>                    </u>	<u>                    </u>	<u>                    </u>	<u>                    </u>
SITE 2	<u>                    </u>	<u>                    </u>	<u>                    </u>	<u>                    </u>	<u>                    </u>	<u>                    </u>	<u>                    </u>
SITE 3	<u>                    </u>	<u>                    </u>	<u>                    </u>	<u>                    </u>	<u>                    </u>	<u>                    </u>	<u>                    </u>
SITE 4	<u>                    </u>	<u>                    </u>	<u>                    </u>	<u>                    </u>	<u>                    </u>	<u>                    </u>	<u>                    </u>
SITE 5	<u>                    </u>	<u>                    </u>	<u>                    </u>	<u>                    </u>	<u>                    </u>	<u>                    </u>	<u>                    </u>

OVERALL OIL IMPACT: NONE

OIL IN STREAM CHANNEL?                     

OIL ON BEACH WITHIN 50M OF STREAM MOUTH?                     

SUBSTRATE

Bedrock	Granule
Boulder	Sand
Cobble	Silt
Pebble	Veget.

SPECIES	<u>                    </u>	SEAL	<u>                    </u>	<u>                    </u>	<u>                    </u>
COUNT	<u>                    </u>	1	<u>                    </u>	<u>                    </u>	<u>                    </u>

REMARKS: Ground surveyed one mile on either side of the Kenai, Kasilof and Ninilchik Rivers. Surveyed recent and old tide lines. Survey lasted approx. 6.5 hrs.  
Observed one dead juvenile seal, 1/4 mile N. Kasilof River

Ninilchik River - Kenai A-5, 244-20-10090 60° 3' 27" 151° 39' 37" S1S14W27

Kasilof River - Kenai B-4, 244-30-10050 60° 23' 14" 151° 17' 52" 41S42W36

Kenai River - Kenai C-4, 244-30-10010 60° 32' 55" 151° 15' 43" S55N11W6



Augustine Island - E

ASC NUMBER: \_\_\_\_\_ SEGMENT NUMBER: \_\_\_\_\_ YR CATALOGED: \_\_\_\_\_  
 LOCATION: Kamishak Bay, Augustine Island, East Side  
 DAM NAME: \_\_\_\_\_ LATITUDE: \_\_\_\_\_  
 K-UNIT: \_\_\_\_\_ LOCAL STREAM #: \_\_\_\_\_ LONGITUDE: \_\_\_\_\_  
 US QUADRANGLE: Iliamna B-2 LEGAL: \_\_\_\_\_  
 SHORELINE TYPE: BEACH ALL SEGMENTS: \_\_\_\_\_  
 WAVE EXPOSURE: High

SC NUMBER: \_\_\_\_\_ TEAM RECORDER: AL Davis  
 SURVEY TYPE: BS OBSERVERS: Rance Morrison  
 METHOD: FOOT  
 DATE: 7/11/89 AGENCY(IES): ADF46  
 START TIME: 1830 PHOTOS TAKEN? N  
 TOP TIME: \_\_\_\_\_ Roll #: \_\_\_\_\_ Frames: \_\_\_\_\_  
 VIDEO TAKEN? N Tape Number: \_\_\_\_\_  
 Counter Start: \_\_\_\_\_

SAMPLES TAKEN? N  
 SAMPLE I.D. NUMBERS: 1. \_\_\_\_\_ 2. \_\_\_\_\_ 3. \_\_\_\_\_  
 4. \_\_\_\_\_ 5. \_\_\_\_\_ 6. \_\_\_\_\_

	LENGTH m	WIDTH m	H2	?	THICK cm	PEN cm	OIL TYPE
SITE 1	805	—	—	—	—	—	TB
SITE 2							
SITE 3							
SITE 4							
SITE 5							

VERALL OIL IMPACT: VL

IL IN STREAM CHANNEL? \_\_\_\_\_ OIL ON BEACH WITHIN 50M OF STREAM MOUTH? \_\_\_\_\_  
 SUBSTRATE

Bedrock	Granule
Boulder	Sand
Cobble	Silt
Pebble	Veget.

SPECIES	—				
COUNT	—				

MENTS: TB found at 19' plus level - mostly older Tarballs



Augustine Island - South

ASC NUMBER: \_\_\_\_\_ SEGMENT NUMBER: \_\_\_\_\_ YR CATALOGED: \_\_\_\_\_  
 LOCATION: Augustine Island, South Shore  
 VABM NAME: \_\_\_\_\_ LATITUDE: \_\_\_\_\_  
 NAVIAC K-UNIT: \_\_\_\_\_ LOCAL STREAM #: \_\_\_\_\_ LONGITUDE: \_\_\_\_\_  
 USCG QUADRANGLE: Iliamna B-2 LEGAL: \_\_\_\_\_  
 SHORELINE TYPE: Beach ALL SEGMENTS: \_\_\_\_\_  
 WAVE EXPOSURE: High

SC NUMBER: \_\_\_\_\_ TEAM RECORDER: AL DAVIS  
 SURVEY TYPE: B3 OBSERVERS: RICK RANDALL  
 METHOD: FOOT AGENCY(IES): ADFG  
 DATE: 6/12/89 PHOTOS TAKEN? \_\_\_\_\_  
 START TIME: 1200 Roll #: \_\_\_\_\_ Frames: \_\_\_\_\_  
 STOP TIME: \_\_\_\_\_ VIDEO TAKEN? \_\_\_\_\_ Tape Number: \_\_\_\_\_  
 Counter Start: \_\_\_\_\_

SAMPLES TAKEN? \_\_\_\_\_  
 SAMPLE I.D. NUMBERS: 1. \_\_\_\_\_ 2. \_\_\_\_\_ 3. \_\_\_\_\_  
 4. \_\_\_\_\_ 5. \_\_\_\_\_ 6. \_\_\_\_\_

	LENGTH m	WIDTH m	H2	%	THICK cm	PEN cm	OIL TYPE
SITE 1	<u>4289</u>	<u>—</u>	<u>—</u>	<u>—</u>	<u>—</u>	<u>—</u>	<u>NONE</u>
SITE 2							
SITE 3							
SITE 4							
SITE 5							

OVERALL OIL IMPACT: NONE

OIL IN STREAM CHANNEL? \_\_\_\_\_ OIL ON BEACH WITHIN 50M OF STREAM MOUTH? \_\_\_\_\_  
 SUBSTRATE

Bedrock	Granule
Boulder	Sand
Cobble	Silt
Pebble	Veget.

SPECIES	<u>—</u>				
COUNT	<u>—</u>				

COMMENTS: Site # 1 on AL Davis's MAP  
Survey ran from VABM "South Augustine" to the  
east for 3 miles (4289 meters)  
Contact Survey crew for further info



Augustine Is. SE

ASC NUMBER: \_\_\_\_\_ SEGMENT NUMBER: \_\_\_\_\_ YR CATALOGED: \_\_\_\_\_  
 LOCATION: Augustine Island, SE shore, Section 6  
 CAN NAME: \_\_\_\_\_ LATITUDE: \_\_\_\_\_  
 KUKIAK K-UNIT: \_\_\_\_\_ LOCAL STREAM # \_\_\_\_\_ LONGITUDE: \_\_\_\_\_  
 USCG QUADRANGLE: Iliamna B-2 LEGAL: \_\_\_\_\_  
 SHORELINE TYPE: Beach ALL SEGMENTS: \_\_\_\_\_  
 WAVE EXPOSURE: High

ASC NUMBER: \_\_\_\_\_ TEAM RECORDER: AL DAVIS  
 SURVEY TYPE: BS OBSERVERS: Rick Randall  
 METHOD: FOOT  
 DATE: 6/12/89 AGENCY(IES): ADF46  
 START TIME: 1330 PHOTOS TAKEN? \_\_\_\_\_  
 STOP TIME: \_\_\_\_\_ Roll #: \_\_\_\_\_ Frames: \_\_\_\_\_  
 VIDEO TAKEN? \_\_\_\_\_ Tape Number: \_\_\_\_\_  
 Counter Start: \_\_\_\_\_

SAMPLES TAKEN? \_\_\_\_\_  
 SAMPLE I.D. NUMBERS: 1. \_\_\_\_\_ 2. \_\_\_\_\_ 3. \_\_\_\_\_  
 4. \_\_\_\_\_ 5. \_\_\_\_\_ 6. \_\_\_\_\_

	LENGTH m	WIDTH m	H2	%	THICK cm	PEN cm	OIL TYPE
SITE 1	✓	✓	✓	✓	✓	✓	None
SITE 2							
SITE 3							
SITE 4							
SITE 5							

OVERALL OIL IMPACT: None

OIL IN STREAM CHANNEL? \_\_\_\_\_ OIL ON BEACH WITHIN 50M OF STREAM MOUTH? \_\_\_\_\_  
 SUBSTRATE

Bedrock	Granule
Boulder	Sand
Cobble	Silt
Pebble	Veget.

SPECIES	✓				
COUNT	✓				

REMARKS: Site # 2 on AL DAVIS'S MAP  
 Surveyed 402 meters of beach.  
 Contact Survey crew for further info.



No stream

# Augustine Island (sec. 29)

ASC NUMBER: \_\_\_\_\_ SEGMENT NUMBER: \_\_\_\_\_ YR CATALOGED: \_\_\_\_\_  
 LOCATION: Augustine Island, Eastside - ENE VABM mound  
 DAM NAME: \_\_\_\_\_ LOCAL STREAM #: \_\_\_\_\_  
 QUADRANGLE: Iliamna B-2  
 SHORELINE TYPE: Beach ALL SEGMENTS: \_\_\_\_\_  
 WAVE EXPOSURE: High

LATITUDE: 59 22 30  
 LONGITUDE: 153 20 04  
 LEGAL: \_\_\_\_\_

SC NUMBER: \_\_\_\_\_ TEAM RECORDER: AL DAVIS  
 SURVEY TYPE: BS OBSERVERS: Rance Morrison  
 METHOD: FOOT  
 DATE: 6/12/89 AGENCY(IES): ADF&G  
 START TIME: 1400  
 STOP TIME: \_\_\_\_\_

PHOTOS TAKEN?  Roll #: \_\_\_\_\_ Frames: \_\_\_\_\_  
 VIDEO TAKEN?  Tape Number: \_\_\_\_\_  
 Counter Start: \_\_\_\_\_

SAMPLES TAKEN?   
 SAMPLE I.D. NUMBERS: 1. \_\_\_\_\_ 2. \_\_\_\_\_ 3. \_\_\_\_\_  
 4. \_\_\_\_\_ 5. \_\_\_\_\_ 6. \_\_\_\_\_

	LENGTH m	WIDTH m	M2	%	THICK cm	PEN cm	OIL TYPE
SITE 1	402	—	—	—	—	—	MS
SITE 2							
SITE 3							
SITE 4							
SITE 5							

OVERALL OIL IMPACT:   
 OIL IN STREAM CHANNEL? \_\_\_\_\_ OIL ON BEACH WITHIN 50M OF STREAM MOUTH? \_\_\_\_\_

SUBSTRATE

Bedrock	Granule
Boulder	Sand
Cobble	Silt
Pebble	Veget.

SPECIES					
COUNT					

REMARKS: Site # 3 on AL DAVIS' MAP.  
 Contact ~~ADP~~ for further info.  
 Survey crew  
 SEC. 29



~~Stream~~ No stream

NE Augustine Island (Sec. 18, 20)

ASC NUMBER: \_\_\_\_\_ SEGMENT NUMBER: \_\_\_\_\_ YR CATALOGED: \_\_\_\_\_  
 LOCATION: Augustine Island  
 TANK NAME: \_\_\_\_\_  
 LOCAL STREAM #: \_\_\_\_\_  
 QUADRANGLE: Ithamma B-2  
 SHORELINE TYPE: Beach  
 WAVE EXPOSURE: High  
 LATITUDE: 59 22 18  
 LONGITUDE: 153 22 24  
 LEGAL: \_\_\_\_\_  
 ALL SEGMENTS: \_\_\_\_\_

SC NUMBER: \_\_\_\_\_ TEAM RECORDER: AL Davis  
 SURVEY TYPE: \_\_\_\_\_ OBSERVERS: Rance Morrison  
 METHOD: BS  
 DATE: 6/12/89  
 START TIME: 1430  
 TOP TIME: \_\_\_\_\_  
 AGENCY(IES): ADF+G  
 PHOTOS TAKEN?   
 Roll #: \_\_\_\_\_ Frames: \_\_\_\_\_  
 VIDEO TAKEN?  Tape Number: \_\_\_\_\_  
 Counter Start: \_\_\_\_\_  
 SAMPLES TAKEN?   
 SAMPLE I.D. NUMBERS: 1. \_\_\_\_\_ 2. \_\_\_\_\_ 3. \_\_\_\_\_  
 4. \_\_\_\_\_ 5. \_\_\_\_\_ 6. \_\_\_\_\_

	LENGTH m	WIDTH m	M2	%	THICK cm	PEN cm	OIL TYPE
SITE 1	3622	—	—	—	—	—	MS
SITE 2							
SITE 3							
SITE 4							
SITE 5							

OVERALL OIL IMPACT: VL

OIL IN STREAM CHANNEL? \_\_\_\_\_  
SUBSTRATE

OIL ON BEACH WITHIN 50M OF STREAM MOUTH? \_\_\_\_\_

Bedrock	Granule
Boulder	Sand
Cobble	Silt
Pebble	Veget.

SPECIES	—				
COUNT					

REMARKS: Site # 4 on AL Davis's map  
 Sec. 18, 20  
 Mousse on North end of beach (1 per 1' for 50 yds)  
 " " South end of beach (1 per 3' for 25 yds)  
 Contact Survey crew for further info



# Augustine Island

ASC NUMBER: \_\_\_\_\_ SEGMENT NUMBER: \_\_\_\_\_ YR CATALOGED: \_\_\_\_\_  
 LOCATION: Augustine Island, North point, 1/2 S VABM BURN  
 DAM NAME: \_\_\_\_\_  
 KULIAK K-UNIT: \_\_\_\_\_ LOCAL STREAM #1: \_\_\_\_\_  
 USGS QUADRANGLE: Iliamna B-2  
 SHORELINE TYPE: BS ALL SEGMENTS: \_\_\_\_\_  
 WAVE EXPOSURE: Low

SC NUMBER: \_\_\_\_\_ TEAM RECORDER: AL Davis  
 SURVEY TYPE: BS OBSERVERS: Rick Randall  
 METHOD: Foot  
 DATE: 6/12/89 AGENCY(IES): ADFG  
 START TIME: 1500  
 STOP TIME: \_\_\_\_\_  
 PHOTOS TAKEN? \_\_\_\_\_  
 Roll #: \_\_\_\_\_ Frames: \_\_\_\_\_  
 VIDEO TAKEN?  Tape Number: \_\_\_\_\_  
 Counter Start: \_\_\_\_\_  
 SAMPLES TAKEN?   
 SAMPLE I.D. NUMBERS: 1. \_\_\_\_\_ 2. \_\_\_\_\_ 3. \_\_\_\_\_  
 4. \_\_\_\_\_ 5. \_\_\_\_\_ 6. \_\_\_\_\_

	LENGTH m	WIDTH m	D12	%	THICK cm	PEN cm	OIL TYPE
SITE 1	—	—	—	—	—	—	—
SITE 2							
SITE 3							
SITE 4							
SITE 5							

OVERALL OIL IMPACT: NONE

OIL IN STREAM CHANNEL?   
 SUBSTRATE  

Bedrock	Granule
Boulder	Sand
Cobble	Silt
Pebble	Veget.

OIL ON BEACH WITHIN 50M OF STREAM MOUTH?

SPECIES	—				
COUNT					

COMMENTS: Site # 5 on AL Davis's Map  
Surveyed 402 meters of beach  
Contact survey crew for further info



Not A stream.

NW Augustine Island (sec 15+16)

ASC NUMBER: \_\_\_\_\_ SEGMENT NUMBER: \_\_\_\_\_ YR CATALOGED: \_\_\_\_\_  
 LOCATION: Augustine Island, North West Shore  
 DAM NAME: \_\_\_\_\_ LOCAL STREAM #: \_\_\_\_\_  
 QUADRANGLE: Iliamna B-2  
 SHORELINE TYPE: Beach ALL SEGMENTS: \_\_\_\_\_  
 WAVE EXPOSURE: High  
 LATITUDE: 59 23 24  
 LONGITUDE: 153 28 48  
 LEGAL: \_\_\_\_\_

SC NUMBER: \_\_\_\_\_ TEAM RECORDER: AL DAVIS  
 SURVEY TYPE: BS OBSERVERS: Rance Morrison  
 METHOD: Foot AGENCY (IES): ADFUG  
 DATE: 6/12/89  
 START TIME: 1530 PHOTOS TAKEN? N  
 TOP TIME: \_\_\_\_\_ Roll #: \_\_\_\_\_ Frames: \_\_\_\_\_  
 VIDEO TAKEN? N Tape Number: \_\_\_\_\_  
 Counter Start: \_\_\_\_\_  
 SAMPLES TAKEN? N  
 SAMPLE I.D. NUMBERS: 1. \_\_\_\_\_ 2. \_\_\_\_\_ 3. \_\_\_\_\_  
 4. \_\_\_\_\_ 5. \_\_\_\_\_ 6. \_\_\_\_\_

	LENGTH m	WIDTH m	H2	t	THICK cm	PEN cm	OIL TYPE
SITE 1	32.20	—	—	—	—	—	<del>3220</del> MS
SITE 2							
SITE 3							
SITE 4							
SITE 5							

OVERALL OIL IMPACT: VL  
 OIL IN STREAM CHANNEL? \_\_\_\_\_ OIL ON BEACH WITHIN 50M OF STREAM MOUTH? \_\_\_\_\_  
 SUBSTRATE  
 Bedrock / Granule  
 Boulder / Sand  
 Cobble / Silt  
 Pebble / Veget.  
 SPECIES  
 COUNT

REMARKS:  
 - Site #6 on AL Davis's map  
 - Sections 15 & 16  
 - 4 - pieces 8" absorbent boom (soaked) on beach  
 - Contact ~~AD Davis~~ for further info  
 Survey Crew



Mouth Ursus Cove

ASC NUMBER: \_\_\_\_\_ SEGMENT NUMBER: \_\_\_\_\_ YR CATALOGED: \_\_\_\_\_  
 LOCATION: Kamishak Bay, Mouth Ursus Cove  
 TAM NAME: \_\_\_\_\_ LATITUDE: ?  
 KAMISAK K-UNIT: \_\_\_\_\_ LOCAL STREAM #: \_\_\_\_\_ LONGITUDE: ?  
 USGS QUADRANGLE: \_\_\_\_\_ LEGAL: \_\_\_\_\_  
 SHORELINE TYPE: BEACH ALL SEGMENTS: \_\_\_\_\_  
 WAVE EXPOSURE: High

SC NUMBER: \_\_\_\_\_ TEAM RECORDER: Al Davis  
 SURVEY TYPE: BS OBSERVERS: Rance Morrison  
 METHOD: FOOT  
 DATE: 6/13/89 AGENCY(IES): ADF&G  
 START TIME: 1430 PHOTOS TAKEN? \_\_\_\_\_  
 TOP TIME: \_\_\_\_\_ Roll #: \_\_\_\_\_ Frames: \_\_\_\_\_  
 VIDEO TAKEN? \_\_\_\_\_ Tape Number: \_\_\_\_\_  
 Counter Start: \_\_\_\_\_

SAMPLES TAKEN? \_\_\_\_\_  
 SAMPLE I.D. NUMBERS: 1. \_\_\_\_\_ 2. \_\_\_\_\_ 3. \_\_\_\_\_  
 4. \_\_\_\_\_ 5. \_\_\_\_\_ 6. \_\_\_\_\_

	LENGTH m	WIDTH m	H2	%	THICK cm	PEN cm	OIL TYPE
SITE 1	805	—	—	—	—	—	MS
SITE 2							
SITE 3							
SITE 4							
SITE 5							

OVERALL OIL IMPACT: VL

OIL IN STREAM CHANNEL? N

OIL ON BEACH WITHIN 50M OF STREAM MOUTH? N

SUBSTRATE

Bedrock	Granule
Boulder	Sand
Cobble	Silt
Pebble	Veget.

SPECIES	—				
COUNT					

REMARKS:  
 CONTACT ~~AL~~ AL Davis for verification of existence or non-existence of photos.  
 Unable to ascertain the exact location of area surveyed from crews field notes. Contact field crew for further info



Dry Bay

ASC NUMBER: \_\_\_\_\_ SEGMENT NUMBER: \_\_\_\_\_ YR CATALOGED: \_\_\_\_\_  
 LOCATION: West Side Cook Inlet, Dry Bay, Head  
 DAM NAME: \_\_\_\_\_ LOCAL STREAM #: \_\_\_\_\_  
 QUADRANGLE: Iliamna c-1  
 SHORELINE TYPE: BEACH  
 TIDE EXPOSURE: High

ASC NUMBER: \_\_\_\_\_ TEAM RECORDER: AL DAVIS  
 SURVEY TYPE: BS OBSERVERS: Rance Morrison  
 METHOD: FOOT  
 DATE: 6/3/89 AGENCY(IES): ADF&G  
 START TIME: 1530 PHOTOS TAKEN? N  
 STOP TIME: \_\_\_\_\_ Roll #: \_\_\_\_\_ Frames:  
 VIDEO TAKEN? N Tape Number:  
 Counter Start:

SAMPLES TAKEN? N  
 SAMPLE I.D. NUMBERS: 1. 2. 3.  
 4. 5. 6.

	LENGTH m	WIDTH m	M2	%	THICK cm	PEN cm	OIL TYPE
SITE 1	—	—	—	—	—	—	—
SITE 2							
SITE 3							
SITE 4							
SITE 5							

OVERALL OIL IMPACT: None

OIL IN STREAM CHANNEL? \_\_\_\_\_ OIL ON BEACH WITHIN 50M OF STREAM MOUTH? \_\_\_\_\_

SUBSTRATE

Bedrock	Granule
Boulder	Sand
Cobble	Silt
Pebble	Veget.

SPECIES	—				
COUNT	—				

REMARKS: ~~Surveyed~~ Surveyed 805 meters of shoreline  
 - Unable to Ascertain exact location of survey from field crew notes. Contact field crew for further info.  
 - ASC Stream # 248-30-10010 (Bowser Creek) is at head of bay.



No stream

HEAD-Amakdedulia Cove

ASC NUMBER: \_\_\_\_\_ SEGMENT NUMBER: \_\_\_\_\_ YR CATALOGED: \_\_\_\_\_  
 LOCATION: Kamishak Bay, Amakdedulia Cove  
 DAM NAME: \_\_\_\_\_ LATITUDE: \_\_\_\_\_  
 KAMSHAK K-UNIT: \_\_\_\_\_ LOCAL STREAM #: \_\_\_\_\_ LONGITUDE: \_\_\_\_\_  
 US QUADRANGLE: Iliamna A-4 LEGAL: \_\_\_\_\_  
 SHORELINE TYPE: Beach ALL SEGMENTS: \_\_\_\_\_  
 WAVE EXPOSURE: High

SC NUMBER: \_\_\_\_\_ TEAM RECORDER: AL Davis  
 SURVEY TYPE: BS/SS OBSERVERS: Rance Morrison  
 METHOD: FOOT AGENCY (IES): ADF46  
 DATE: 6/16/89 PHOTOS TAKEN?   
 START TIME: 1230 Roll #: \_\_\_\_\_ Frames: \_\_\_\_\_  
 TOP TIME: \_\_\_\_\_ VIDEO TAKEN?  Tape Number: \_\_\_\_\_  
 Counter start: \_\_\_\_\_  
 SAMPLES TAKEN?   
 SAMPLE I.D. NUMBERS: 1. \_\_\_\_\_ 2. \_\_\_\_\_ 3. \_\_\_\_\_  
 4. \_\_\_\_\_ 5. \_\_\_\_\_ 6. \_\_\_\_\_

	LENGTH m	WIDTH m	M2	%	THICK cm	PEN cm	OIL TYPE
SITE 1	40.2	—	—	—	—	—	TB
SITE 2							
SITE 3							
SITE 4							
SITE 5							

OVERALL OIL IMPACT:  L

OIL IN STREAM CHANNEL?  SUBSTRATE

OIL ON BEACH WITHIN 50M OF STREAM MOUTH?

Bedrock	Granule
Boulder	Sand
Cobble	Silt
Pebble	Veget.

SPECIES	←				
COUNT	←				

REMARKS:  
 Site # 1 on AL Davis's map  
 Oil at 20' and 16' tide levels  
 Contact survey crew for further info.  
 Contact survey crew for verification of exact survey location (i.e., LAT & Long)



No stream ~~McNeil N Cove~~ McNeil N Cove

ASC NUMBER: \_\_\_\_\_ SEGMENT NUMBER: \_\_\_\_\_ YR CATALOGED: \_\_\_\_\_  
 LOCATION: Kamishak Bay, McNeil Cove  
 STREAM NAME: \_\_\_\_\_ LATITUDE: \_\_\_\_\_  
 HULLAK K-UNIT: \_\_\_\_\_ LOCAL STREAM #: \_\_\_\_\_ LONGITUDE: \_\_\_\_\_  
 US QUADRANGLE: Iliamna A-4 LEGAL: \_\_\_\_\_  
 SHORELINE TYPE: Beach ALL SEGMENTS: \_\_\_\_\_  
 WAVE EXPOSURE: High

SC NUMBER: \_\_\_\_\_ TEAM RECORDER: AL Davis  
 SURVEY TYPE: DS OBSERVERS: Lance Morrison  
 METHOD: Foot AGENCY(IES): ADFG  
 DATE: 6/16/89 PHOTOS TAKEN? N  
 START TIME: 1400 Roll #: \_\_\_\_\_ Frames: \_\_\_\_\_  
 TOP TIME: \_\_\_\_\_ VIDEO TAKEN? N Tape Number: \_\_\_\_\_  
 Counter Start: \_\_\_\_\_

SAMPLES TAKEN? N  
 SAMPLE I.D. NUMBERS: 1. \_\_\_\_\_ 2. \_\_\_\_\_ 3. \_\_\_\_\_  
 4. \_\_\_\_\_ 5. \_\_\_\_\_ 6. \_\_\_\_\_

	LENGTH m	WIDTH m	M2	%	THICK cm	PEN cm	OIL TYPE
SITE 1	402	—	—	—	—	—	TB
SITE 2							
SITE 3							
SITE 4							
SITE 5							

OVERALL OIL IMPACT: VL  
 OIL IN STREAM CHANNEL? \_\_\_\_\_ OIL ON BEACH WITHIN 50M OF STREAM MOUTH? \_\_\_\_\_

SUBSTRATE

Bedrock	Granula
Boulder	Sand
Cobble	Silt
Pebble	Veget.

SPECIES					
COUNT					

Comments: ~~McNeil~~ McNeil River and Mikfik Crk Drain into McNeil Cove - both are Anadromous streams. ~~Both streams~~ ~~the McNeil River~~ lies within the McNeil River State Game Sanctuary (this is primarily a brown bear sanctuary) - the area covered by this survey lies just outside of the McNeil River Sanctuary.  
~~Contact Survey crew for location~~  
 - Contact Survey crew for exact location verification



ANAD.

STATE Game Sanctuary / McNeil Cove

ASC NUMBER: \_\_\_\_\_ SEGMENT NUMBER: \_\_\_\_\_ YR CATALOGED: \_\_\_\_\_  
 LOCATION: Kamishak Bay, McNeil Cove, Kamishak (site)  
 DAM NAME: \_\_\_\_\_ LATITUDE: \_\_\_\_\_  
 TRAP K-UNIT: \_\_\_\_\_ LOCAL STREAM #: \_\_\_\_\_ LONGITUDE: \_\_\_\_\_  
 US QUADRANGLE: Iliamna A-4 LEGAL: \_\_\_\_\_  
 SHORELINE TYPE: Beach ALL SEGMENTS: \_\_\_\_\_  
 WAVE EXPOSURE: High

SC NUMBER: \_\_\_\_\_ TEAM RECORDER: Al Davis  
 SURVEY TYPE: BS OBSERVERS: Rance Morrison  
 METHOD: FOOT AGENCY(IES): ADFG  
 DATE: 6/16/89 PHOTOS TAKEN? N  
 START TIME: 1420 Roll #: \_\_\_\_\_ Frames: \_\_\_\_\_  
 STOP TIME: \_\_\_\_\_ VIDEO TAKEN? N Tape Number: \_\_\_\_\_  
 Counter Start: \_\_\_\_\_  
 SAMPLES TAKEN? N  
 SAMPLE I.D. NUMBERS: 1. \_\_\_\_\_ 2. \_\_\_\_\_ 3. \_\_\_\_\_  
 4. \_\_\_\_\_ 5. \_\_\_\_\_ 6. \_\_\_\_\_

	LENGTH m	WIDTH m	H2	1	THICK cm	PEN cm	OIL TYPE
SITE 1	91	—	—	—	—	—	TB
SITE 2							
SITE 3							
SITE 4							
SITE 5							

OVERALL OIL IMPACT: YL  
 OIL IN STREAM CHANNEL? \_\_\_\_\_ OIL ON BEACH WITHIN 50M OF STREAM MOUTH? \_\_\_\_\_  
 SUBSTRATE  

Bedrock	Granule
Boulder	Sand
Cobble	Silt
Pebble	Veget.

SPECIES	—				
COUNT	—				

REMARKS: Site # 4 on Al Davis's Map  
 Tar balls up to 2' across - NO small splashes observed.  
 The area covered on this survey lies within the McNeil River State Game Sanctuary, which is primarily a brown bear sanctuary. McNeil River and Mielik Creek which are both anadromous streams drain into the McNeil Lagoon which drains into McNeil Cove (both lie with the sanctuary). The observed oil lies within one mile of the McNeil anadromous McNeil Lagoon outlet.  
 The McNeil Bear Camp (ADFG) which is for research & tourism is situated on the shore of the lagoon.  
 - Contact Survey crew for exact location verification

ACE 9960989



ANAD. / State Game Sanctuary / McNeil Cove Head

ASC NUMBER: \_\_\_\_\_ SEGMENT NUMBER: \_\_\_\_\_ YR CATALOGED: \_\_\_\_\_  
 LOCATION: Kamishak Bay, McNeil Cove Head  
 DAM NAME: \_\_\_\_\_ LATITUDE: \_\_\_\_\_  
 KULAK K-UNIT: \_\_\_\_\_ LOCAL STREAM #: \_\_\_\_\_ LONGITUDE: \_\_\_\_\_  
 US QUADRANGLE: Iliamna A-4 LEGAL: \_\_\_\_\_  
 SHORELINE TYPE: BS ALL SEGMENTS: \_\_\_\_\_  
 WAVE EXPOSURE: High

SC NUMBER: \_\_\_\_\_ TEAM RECORDER: AL Davis  
 SURVEY TYPE: BS OBSERVERS: Rance Morrison  
 METHOD: FOOT AGENCY(IES): ADFG  
 DATE: 6/16/89 PHOTOS TAKEN?   
 START TIME: 1430 Roll #: \_\_\_\_\_ Frames: \_\_\_\_\_  
 TOP TIME: \_\_\_\_\_ VIDEO TAKEN?  Tape Number: \_\_\_\_\_  
 Counter Start: \_\_\_\_\_  
 SAMPLES TAKEN?   
 SAMPLE I.D. NUMBERS: 1. \_\_\_\_\_ 2. \_\_\_\_\_ 3. \_\_\_\_\_  
 4. \_\_\_\_\_ 5. \_\_\_\_\_ 6. \_\_\_\_\_

	LENGTH m	WIDTH m	M2	%	THICK cm	PEN cm	OIL TYPE
SITE 1	91	—	—	—	—	—	TR
SITE 2							
SITE 3							
SITE 4							
SITE 5							

OVERALL OIL IMPACT: VL

OIL IN STREAM CHANNEL?

OIL ON BEACH WITHIN 50M OF STREAM MOUTH?

SUBSTRATE

Bedrock	Granule
Boulder	Sand
Cobble	Silt
Pebble	Veget.

SPECIES					
COUNT	—				

REMARKS: Site # 5 on AL Davis's Map.  
 The area covered on this survey lies within the McNeil River State Game Sanctuary which is primarily a brown bear sanctuary. McNeil River and Mikelik Creek which are both anadromous streams drain into the McNeil Lagoon which drains into McNeil Cove (both lie within the Sanctuary). The observed oil lies within one mile of the McNeil anadromous McNeil Lagoon outlet. ACE 9960990  
 The McNeil Bear Camp (ADFG) which is for research & tourism is situated on the shore of the lagoon.



No stream Border of State Game Sanctuary / McNeil Cove N-HEAD

ASC NUMBER: \_\_\_\_\_ SEGMENT NUMBER: \_\_\_\_\_ YR CATALOGED: \_\_\_\_\_  
 LOCATION: Kamichak Bay, McNeil Cove, N-Head  
 TAM NAME: \_\_\_\_\_ LOCAL STREAM #: \_\_\_\_\_ LATITUDE: \_\_\_\_\_  
 MIKLIK K-UNIT: \_\_\_\_\_ LONGITUDE: \_\_\_\_\_  
 US QUADRANGLE: \_\_\_\_\_ LEGAL: \_\_\_\_\_  
 SHORELINE TYPE: \_\_\_\_\_ ALL SEGMENTS: \_\_\_\_\_  
 WAVE EXPOSURE: \_\_\_\_\_

SC NUMBER: \_\_\_\_\_ TEAM RECORDER: AL DAVIS  
 SURVEY TYPE: BS OBSERVERS: Rance Morrison  
 METHOD: FOOT AGENCY(IES): ADFG  
 DATE: 6/16/89 PHOTOS TAKEN? N  
 START TIME: 1500 Roll #: \_\_\_\_\_ Frames: \_\_\_\_\_  
 TOP TIME: \_\_\_\_\_ VIDEO TAKEN? N Tape Number: \_\_\_\_\_  
 Counter Start: \_\_\_\_\_

SAMPLES TAKEN? \_\_\_\_\_  
 SAMPLE I.D. NUMBERS: 1. \_\_\_\_\_ 2. \_\_\_\_\_ 3. \_\_\_\_\_  
 4. \_\_\_\_\_ 5. \_\_\_\_\_ 6. \_\_\_\_\_

	LENGTH m	WIDTH m	H2	↓	THICK cm	PEN cm	OIL TYPE
SITE 1	91	—	—	—	—	—	TB
SITE 2							
SITE 3							
SITE 4							
SITE 5							

OVERALL OIL IMPACT: VL  
 OIL IN STREAM CHANNEL? \_\_\_\_\_  
 OIL ON BEACH WITHIN 50M OF STREAM MOUTH? \_\_\_\_\_

SUBSTRATE

Bedrock	Granule
Boulder	Sand
Cobble	Silt
Pebble	Veget.

SPECIES					
COUNT					

COMMENTS: Site # 6 on AL Davis's Map  
 The area covered on this survey lies on the North border of McNeil River State Game Sanctuary which is primarily a brown bear sanctuary. McNeil R. + Miklik Ck. are both anad. streams that drain into the McNeil lagoon which drains into McNeil Cove. The McNeil Brown bear camp (ADFG) which is for research + tourism is situated on the shore of the lagoon.



McNeil River State Game Sanctuary - ~~McNeil Head~~ McNeil Head

ASC NUMBER: \_\_\_\_\_ SEGMENT NUMBER: \_\_\_\_\_ YR CATALOGED: \_\_\_\_\_  
 LOCATION: ~~McNeil Head~~ Kamishak Bay, ~~McNeil Head~~ McNeil Head  
 CAN NAME: ~~\_\_\_\_\_~~  
 LOCAL STREAM #: \_\_\_\_\_  
 QUADRANGLE: ~~\_\_\_\_\_~~ Iliamna A-4  
 SHORELINE TYPE: Beach  
 WAVE EXPOSURE: High  
 LATITUDE: \_\_\_\_\_  
 LONGITUDE: \_\_\_\_\_  
 LEGAL: \_\_\_\_\_  
 ALL SEGMENTS: \_\_\_\_\_

SC NUMBER: \_\_\_\_\_  
 SURVEY TYPE: BS  
 METHOD: FOOT  
 DATE: 6/16/89  
 START TIME: 1530  
 STOP TIME: \_\_\_\_\_

TEAM RECORDER: AL DAVIS  
 OBSERVERS: Lance Morrison  
 AGENCY(IES): ADFG  
 PHOTOS TAKEN?   
 Roll #: \_\_\_\_\_ Frames: \_\_\_\_\_  
 VIDEO TAKEN?  Tape Number: \_\_\_\_\_  
 Counter Start: \_\_\_\_\_

SAMPLES TAKEN? \_\_\_\_\_  
 SAMPLE I.D. NUMBERS: 1. \_\_\_\_\_ 2. \_\_\_\_\_ 3. \_\_\_\_\_  
 4. \_\_\_\_\_ 5. \_\_\_\_\_ 6. \_\_\_\_\_

	LENGTH m	WIDTH m	H2	t	THICK cm	PER cm	OIL TYPE
SITE 1	—	—	—	—	—	—	—
SITE 2							
SITE 3							
SITE 4							
SITE 5							

OVERALL OIL IMPACT: None

OIL IN STREAM CHANNEL? \_\_\_\_\_  
 SUBSTRATE

OIL ON BEACH WITHIN 50M OF STREAM MOUTH? \_\_\_\_\_

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

SPECIES				
COUNT	—			

REMARKS: Site 7 on AL Davis's MAP  
 Surveyed 274 meters of beach.  
 Exact location of survey can not be ascertained  
 See survey crew field notes.  
 Contact field crew for further info.



No stream / STATE Game Sanctuary / S. McNeil Head

SC NUMBER: \_\_\_\_\_ SEGMENT NUMBER: \_\_\_\_\_ YR CATALOGED: \_\_\_\_\_  
 LOCATION: Kamishak Bay LOCAL STREAM #: \_\_\_\_\_ LATITUDE: \_\_\_\_\_  
 CAN NAME: \_\_\_\_\_ LONGITUDE: \_\_\_\_\_  
 VIAK K-UNIT: \_\_\_\_\_ LOCAL STREAM #: \_\_\_\_\_ LEGAL: \_\_\_\_\_  
 SC QUADRANGLE: Iliamna A-4 ALL SEGMENTS: \_\_\_\_\_  
 HORIZONTAL LINE TYPE: Beach  
 AVE EXPOSURE: High

SC NUMBER: \_\_\_\_\_ TEAM RECORDER: AL Davis  
 SURVEY TYPE: BS OBSERVERS: Rance Morrison  
 METHOD: FOOT AGENCY(IES): ADFG  
 DATE: 6/16/89 PHOTOS TAKEN? N  
 START TIME: 1530 Roll #: \_\_\_\_\_ Frames: \_\_\_\_\_  
 STOP TIME: \_\_\_\_\_ VIDEO TAKEN? N Tape Number: \_\_\_\_\_  
 Counter Start: \_\_\_\_\_  
 SAMPLES TAKEN? N  
 SAMPLE I.D. NUMBERS: 1. \_\_\_\_\_ 2. \_\_\_\_\_ 3. \_\_\_\_\_  
 4. \_\_\_\_\_ 5. \_\_\_\_\_ 6. \_\_\_\_\_

	LENGTH m	WIDTH m	H2	t	THICK cm	PEN cm	OIL TYPE
SITE 1	402	—	—	—	—	—	TR
SITE 2							
SITE 3							
SITE 4							
SITE 5							

OVERALL OIL IMPACT: VL  
 OIL IN STREAM CHANNEL? \_\_\_\_\_ OIL ON BEACH WITHIN 50M OF STREAM MOUTH? \_\_\_\_\_  
 SUBSTRATE  

Bedrock	Granule
Boulder	Sand
Cobble	Silt
Pebble	Veget.

SPECIES	—				
COUNT					

MENTS: Site # 8 on AL Davis's Map.  
 The area surveyed lies within the McNeil River STATE GAME Sanctuary (primarily a brown bear sanctuary)



NO Stream / STATE Game Sanctuary / Horseshoe Cove Head

SC NUMBER: \_\_\_\_\_ SEGMENT NUMBER: 1 YR CATALOGED: \_\_\_\_\_  
 LOCATION: Rainishak Bay Horseshoe Cove  
 CAN NAME: \_\_\_\_\_ LOCAL STREAM #: \_\_\_\_\_ LATITUDE: \_\_\_\_\_  
 UJIAK K-UNIT: \_\_\_\_\_ LONGITUDE: \_\_\_\_\_  
 QUADRANGLE: Iliamna A-4 LEGAL: \_\_\_\_\_  
 BOUNDARY TYPE: Beach ALL SEGMENTS: \_\_\_\_\_  
 AVERAGE EXPOSURE: High

SC NUMBER: \_\_\_\_\_ TEAM RECORDER: AL DAVIS  
 SURVEY TYPE: BS OBSERVERS: Rance Morrison  
 METHOD: FOOT  
 DATE: 6/16/89 AGENCY(IES): ACE-GS  
 START TIME: 1540 PHOTOS TAKEN? N  
 STOP TIME: \_\_\_\_\_ Roll #: \_\_\_\_\_ Frames: \_\_\_\_\_  
 VIDEO TAKEN? N Tape Number: \_\_\_\_\_  
 Counter Start: \_\_\_\_\_  
 SAMPLES TAKEN? N  
 SAMPLE I.D. NUMBERS: 1. \_\_\_\_\_ 2. \_\_\_\_\_ 3. \_\_\_\_\_  
 4. \_\_\_\_\_ 5. \_\_\_\_\_ 6. \_\_\_\_\_

	LENGTH m	WIDTH m	H2	t	THICK cm	PEIL cm	OIL TYPE
SITE 1	<u>16.0</u>	<u>—</u>	<u>—</u>	<u>—</u>	<u>—</u>	<u>—</u>	<u>TB</u>
SITE 2							
SITE 3							
SITE 4							
SITE 5							

OVERALL OIL IMPACT: L  
 OIL IN STREAM CHANNEL? \_\_\_\_\_ OIL ON BEACH WITHIN 50M OF STREAM MOUTH? \_\_\_\_\_  
 SUBSTRATE

Bedrock	Granule
Boulder	Sand
Cobble	Silt
Pebble	Veget.

SPECIES	<u>—</u>			
COUNT	<u>—</u>			

REMARKS: Site # 9 on Al Davis's Map  
The area surveyed lies within the McNeil River State Game Sanctuary (primarily a brown bear sanctuary)



No stream

Kasilof River to 10 mi South

SC NUMBER: \_\_\_\_\_ SEGMENT NUMBER: \_\_\_\_\_ YR CATALOGED: \_\_\_\_\_  
 LOCATION: East Side Cook Inlet, Kasilof River to Point 10 mi South  
 CLAM NAME: Clam GULCH Critical Habitat AREA LATITUDE: SEE Comments  
 ADIAK K-UNIT: \_\_\_\_\_ LOCAL STREAM #: \_\_\_\_\_ LONGITUDE: "  
 QUADRANGLE: Kenai B-4, A-4 LEGAL: \_\_\_\_\_  
 BOUNDARY TYPE: Beach ALL SEGMENTS: \_\_\_\_\_  
 TIDE EXPOSURE: High

SC NUMBER: \_\_\_\_\_ TEAM RECORDER: Rick Randall  
 SURVEY TYPE: BS OBSERVERS: James Nelson (Anchor Pt. Resident)  
 METHOD: ATV AGENCY (IES): ADF&G  
 DATE: 7/9/89 PHOTOS TAKEN?   
 START TIME: 1300 Roll #: \_\_\_\_\_ Frames: \_\_\_\_\_  
 STOP TIME: 1730 VIDEO TAKEN?  Tape Number: \_\_\_\_\_  
 Counter Start: \_\_\_\_\_  
 SAMPLES TAKEN?  YES  
 SAMPLE I.D. NUMBERS: 1. RRCI-7 2. RRCI-8 3. \_\_\_\_\_  
 4. \_\_\_\_\_ 5. \_\_\_\_\_ 6. \_\_\_\_\_

	LENGTH m	WIDTH m	H2	%	THICK cm	PEN cm	OIL TYPE
SITE 1							
SITE 2							
SITE 3							
SITE 4							
SITE 5							

OVERALL OIL IMPACT: VL  
 OIL IN STREAM CHANNEL? \_\_\_\_\_ OIL ON BEACH WITHIN 50M OF STREAM MOUTH? \_\_\_\_\_  
 SUBSTRATE  
 Bedrock \_\_\_\_\_ Granule \_\_\_\_\_  
 Boulder \_\_\_\_\_ Sand \_\_\_\_\_  
 Cobble \_\_\_\_\_ Silt \_\_\_\_\_  
 Pebble \_\_\_\_\_ Veget. \_\_\_\_\_

SPECIES				
COUNT				

CLAM GULCH STATE CRITICAL HABITAT AREA

— Surveyed from Kasilof River to a point approx. 10 miles south.

— Sample # RRCI-7: Sample found at most recent high tide line/spruce bow with 1/2 diameter tarball. Taken near set-netter's cabin with Cooper written on it. Taken 2 miles south of Kasilof River. 60° 22' 03", 157° 22' 00"

— Sample # RRCI-8: Sample found at most recent high tide line, 1" diameter tarball. Taken on beach at 3.2 mile Coho Loop Beach access. 60° 17' 30", 157° 23' 00"

— 3 ~~other~~ other areas found with oil stained rocks at high tide line.

— Met Clete Benson and Richard Hatch (EMCO cleanup crew members) stated that they'd each found approx. 1/2 gal. of oiled debris, 10%-20% oil. Oil found was tarball consisted of tarballs attached to debris and oozing into beach.



# Hesketh Island

ASC NUMBER: \_\_\_\_\_ SEGMENT NUMBER: \_\_\_\_\_ YR CATALOGED: \_\_\_\_\_  
 LOCATION: Kachemak Bay, Hesketh Island  
 DAM NAME: \_\_\_\_\_ LOCAL STREAM #: \_\_\_\_\_  
 U.S. QUADRANGLE: Selkovia C-4  
 SHORELINE TYPE: Beach ALL SEGMENTS: \_\_\_\_\_  
 WAVE EXPOSURE: Moderate

SC NUMBER: \_\_\_\_\_ TEAM RECORDER: AL DAVIS  
 SURVEY TYPE: BS OBSERVERS: \_\_\_\_\_  
 METHOD: FOOT  
 DATE: 7/9/89 AGENCY(IES): ADF&G  
 START TIME: 1630 PHOTOS TAKEN? N  
 STOP TIME: \_\_\_\_\_ Roll #: \_\_\_\_\_ Frames: \_\_\_\_\_  
 VIDEO TAKEN? N Tape Number: \_\_\_\_\_  
 Counter Start: \_\_\_\_\_  
 SAMPLES TAKEN? Yes  
 SAMPLE I.D. NUMBERS: 1. AD7889-01 2. AD7889-02 3. AD7889-03  
 4. \_\_\_\_\_ 5. \_\_\_\_\_ 6. \_\_\_\_\_

SITE	LENGTH m	WIDTH m	H2	T	THICK cm	PEN cm	OIL TYPE
SITE 1	<u>805</u>	—	—	—	—	—	<u>MS</u>
SITE 2							
SITE 3							
SITE 4							
SITE 5							

OVERALL OIL IMPACT: ✓

OIL IN STREAM CHANNEL? \_\_\_\_\_ OIL ON BEACH WITHIN 50M OF STREAM MOUTH? \_\_\_\_\_

SUBSTRATE

Bedrock	Granule
Boulder	Sand
Cobble	Silt
Pebble	Veget.

SPECIES	COUNT	COUNT	COUNT	COUNT
—	—	—	—	—

COMMENTS: NE portion of Hesketh Island  
Within Kachemak Bay Critical Habitat Area



Amakdedulia Cove

SC NUMBER: \_\_\_\_\_ SEGMENT NUMBER: \_\_\_\_\_ YR CATALOGED: \_\_\_\_\_  
 LOCATION: Kaimichak Bay, Amakdedulia Cove  
 DAM NAME: \_\_\_\_\_ LOCAL STREAM #: \_\_\_\_\_  
 UVIK K-UNIT: \_\_\_\_\_ LOCAL STREAM #: \_\_\_\_\_  
 USGS QUADRANGLE: Iliamna A-4  
 SHORELINE TYPE: Beach ALL SEGMENTS: \_\_\_\_\_  
 WAVE EXPOSURE: High

SC NUMBER: \_\_\_\_\_ TEAM RECORDER: AL DAVIS  
 SURVEY TYPE: BS OBSERVERS: Rick Randall  
 METHOD: FOOT  
 DATE: 7/10/89 AGENCY(IES): ADP/6  
 START TIME: 1300 PHOTOS TAKEN? \_\_\_\_\_  
 STOP TIME: \_\_\_\_\_ Roll #: RDR-5 Frames: 1,3,14  
 VIDEO TAKEN? N Tape Number: \_\_\_\_\_  
 Counter Start: \_\_\_\_\_

SAMPLES TAKEN?  
 SAMPLE I.D. NUMBERS: 1. AD 71089 07 2. AD 7108908 3. AD 7108909  
 4. \_\_\_\_\_ 5. \_\_\_\_\_ 6. \_\_\_\_\_

	LENGTH m	WIDTH m	H2	%	THICK cm	PEN cm	OIL TYPE
SITE 1	<u>36.6</u>	<u>—</u>	<u>—</u>	<u>—</u>	<u>—</u>	<u>—</u>	<u>TB</u>
SITE 2							
SITE 3							
SITE 4							
SITE 5							

OVERALL OIL IMPACT: VL

OIL IN STREAM CHANNEL? \_\_\_\_\_ OIL ON BEACH WITHIN 50M OF STREAM MOUTH? \_\_\_\_\_

SUBSTRATE

Bedrock	Granule
Boulder	Sand
Cobble	Silt
Pebble	Veget

SPECIES	<u>—</u>				
COUNT	<u>—</u>				

REMARKS: Samples taken from middle of beach  
Oil easily found on higher tide levels - no oil found on  
most recent tide



Amakdedori Beach

ASC NUMBER: LOCATION: TAM NAME: NADIAK K-UNIT: USGS QUADRANGLE: SHORELINE TYPE: <u>Beach</u> TIDE EXPOSURE: <u>High</u>	SEGMENT NUMBER: <u>    </u>  LOCAL STREAM #: <u>    </u>  ALL SEGMENTS: <u>    </u>	YR CATALOGED: <u>    </u>  LATITUDE: <u>    </u> LONGITUDE: <u>    </u> LEGAL: <u>    </u>
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ASC NUMBER: SURVEY TYPE: <u>BS</u> METHOD: <u>FOOT</u> DATE: <u>7/10/89</u> START TIME: <u>1330</u> STOP TIME: <u>    </u>	TEAM RECORDER: <u>AL Davis</u> OBSERVERS: <u>Rick Randall</u>  AGENCY(IES): <u>ADFG</u>  PHOTOS TAKEN? Roll #: <u>    </u> Frames: <u>    </u> VIDEO TAKEN? <u>N</u> Tape Number: <u>    </u> Counter Start: <u>    </u>
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SAMPLES TAKEN?     

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

	LENGTH m	WIDTH m	H2	t	THICK cm	PEN cm	OIL TYPE
SITE 1	<u>1207</u>	<u>    </u>	<u>    </u>	<u>    </u>	<u>    </u>	<u>    </u>	<u>TB</u>
SITE 2							
SITE 3							
SITE 4							
SITE 5							

OVERALL OIL IMPACT: VL

OIL IN STREAM CHANNEL?      OIL ON BEACH WITHIN 50M OF STREAM MOUTH?     

SUBSTRATE

Bedrock	Granule
Boulder	Sand
Cobble	Silt
Pebble	Veget.

SPECIES	<u>    </u>				
COUNT	<u>    </u>				

REMARKS: Amakdedori Creek runs through this beach. However from the data collected it is impossible to know how close the oil was to the stream (contact. AL Davis or Rick Randall for more info). Oil present at higher tide levels - No oil at most recent tide lines.



Brvin Bay-South Mouth

ASC NUMBER: \_\_\_\_\_ SEGMENT NUMBER: \_\_\_\_\_ YR CATALOGED: \_\_\_\_\_  
 LOCATION: Kamichak Bay, Mouth Brvin Bay LATITUDE: \_\_\_\_\_  
 DAM NAME: \_\_\_\_\_ LONGITUDE: \_\_\_\_\_  
 ADIAK K-UNIT: \_\_\_\_\_ LOCAL STREAM #: \_\_\_\_\_ LEGAL: \_\_\_\_\_  
 QUADRANGLE: Iliamna B-3 ALL SEGMENTS: \_\_\_\_\_  
 SHORELINE TYPE: Beach  
 WAVE EXPOSURE: High

SURVEY TYPE: BS  
 METHOD: Foot  
 DATE: 7/10/89  
 START TIME: 1420  
 STOP TIME: \_\_\_\_\_

TEAM RECORDER: AL Davis  
 OBSERVERS: Rick Randall  
 AGENCY(IES): ADFG

PHOTOS TAKEN? \_\_\_\_\_  
 Roll #: \_\_\_\_\_ Frames: \_\_\_\_\_  
 VIDEO TAKEN? N Tape Number: \_\_\_\_\_  
 Counter Start: \_\_\_\_\_

SAMPLES TAKEN? N  
 SAMPLE I.D. NUMBERS: 1. \_\_\_\_\_ 2. \_\_\_\_\_ 3. \_\_\_\_\_  
 4. \_\_\_\_\_ 5. \_\_\_\_\_ 6. \_\_\_\_\_

	LENGTH m	WIDTH m	H2	4	THICK cm	PEN cm	OIL TYPE
SITE 1	<u>805</u>	<u>—</u>	<u>—</u>	<u>—</u>	<u>—</u>	<u>—</u>	<u>TB</u>
SITE 2							
SITE 3							
SITE 4							
SITE 5							

OVERALL OIL IMPACT: YL

OIL IN STREAM CHANNEL? \_\_\_\_\_  
 SUBSTRATE

OIL ON BEACH WITHIN 50M OF STREAM MOUTH? \_\_\_\_\_

Bedrock	Granule
Boulder	Sand
Cobble	Silt
Pebble	Veget.

SPECIES	<u>—</u>				
COUNT	<u>—</u>				

COMMENTS: the exact location of this survey cannot be ascertained from field crew notes. Contact AL Davis &/or Rick Randall for further info.  
Oil observed on 5<sup>th</sup> previous <sup>high</sup> tide line



Ursus Cove - North Beach

ASC NUMBER: \_\_\_\_\_ SEGMENT NUMBER: \_\_\_\_\_ YR CATALOGED: \_\_\_\_\_  
 LOCATION: Kamishak Bay, Ursus Cove North, ~~North~~ Beach  
 CAN NAME: \_\_\_\_\_ LOCAL STREAM #: \_\_\_\_\_ LATITUDE: \_\_\_\_\_  
 ADIAK K-UNIT: \_\_\_\_\_ LOCAL STREAM #: \_\_\_\_\_ LONGITUDE: \_\_\_\_\_  
 USGS QUADRANGLE: Iliamna C-3 LEGAL: \_\_\_\_\_  
 SHORELINE TYPE: Beach ALL SEGMENTS: \_\_\_\_\_  
 WAVE EXPOSURE: High

ASC NUMBER: \_\_\_\_\_ TEAM RECORDER: AL DAVIS  
 SURVEY TYPE: BS OBSERVERS: Rick Randall  
 METHOD: FOOT  
 DATE: 7/10/89 AGENCY(IES): 2 ADFG  
 START TIME: 1600 PHOTOS TAKEN? N  
 STOP TIME: \_\_\_\_\_ Roll #: \_\_\_\_\_ Frames: \_\_\_\_\_  
 VIDEO TAKEN? N Tape Number: \_\_\_\_\_  
 Counter Start: \_\_\_\_\_  
 SAMPLES TAKEN? \_\_\_\_\_  
 SAMPLE I.D. NUMBERS: 1. 2. 3.  
 4. 5. 6.

	LENGTH m	WIDTH m	H2	t	THICK cm	PEN cm	OIL TYPE
SITE 1	_____						
SITE 2							
SITE 3							
SITE 4							
SITE 5							

OVERALL OIL IMPACT: NONE

OIL IN STREAM CHANNEL? \_\_\_\_\_ OIL ON BEACH WITHIN 50M OF STREAM MOUTH? \_\_\_\_\_

SUBSTRATE

Bedrock	Granule
Boulder	Sand
Cobble	Silt
Pebble	Veget.

SPECIES	_____				
COUNT	_____				

REMARKS: Exact location of this survey can not be ascertained from field crew notes. Contact crew members for further info.



Ursus Cove - South Beach

ASC NUMBER: \_\_\_\_\_ SEGMENT NUMBER: \_\_\_\_\_ YR CATALOGED: \_\_\_\_\_  
 LOCATION: Kamishak Bay, Ursus Cove Mouth, ~~North~~ South Beach  
 DAM NAME: \_\_\_\_\_ LOCAL STREAM #: \_\_\_\_\_ LATITUDE: \_\_\_\_\_  
 ADIAK K-UNIT: \_\_\_\_\_ LONGITUDE: \_\_\_\_\_  
 USGS QUADRANGLE: Iliamna A-3 LEGAL: \_\_\_\_\_  
 SHORELINE TYPE: BEACH ALL SEGMENTS: \_\_\_\_\_  
 TIDE EXPOSURE: High

ASC NUMBER: \_\_\_\_\_ TEAM RECORDER: AL DAVIS  
 SURVEY TYPE: BS OBSERVERS: Rick Randall  
 METHOD: FOOT  
 DATE: 7/10/89 AGENCY(IES): ADFG  
 START TIME: 1645 PHOTOS TAKEN? \_\_\_\_\_  
 STOP TIME: \_\_\_\_\_ Roll #: \_\_\_\_\_ Frames: \_\_\_\_\_  
 VIDEO TAKEN?  Tape Number: \_\_\_\_\_  
 Counter Start: \_\_\_\_\_  
 SAMPLES TAKEN?   
 SAMPLE I.D. NUMBERS: 1. \_\_\_\_\_ 2. \_\_\_\_\_ 3. \_\_\_\_\_  
 4. \_\_\_\_\_ 5. \_\_\_\_\_ 6. \_\_\_\_\_

	LENGTH m	WIDTH m	H2	%	THICK cm	PEN cm	OIL TYPE
SITE 1							
SITE 2							
SITE 3							
SITE 4							
SITE 5							

OVERALL OIL IMPACT: VL  
 OIL IN STREAM CHANNEL?  OIL ON BEACH WITHIN 50M OF STREAM MOUTH?   
 SUBSTRATE  

Bedrock	Granule
Boulder	Sand
Cobble	Silt
Pebble	Veget.

SPECIES				
COUNT				

REMARKS: The exact location of this survey ~~is unknown~~ can not be ascertained from field crew notes.  
 - Contact field crew for further info.  
 - Oil found at 18' tide level.  
 - Oil spot every 1 ft.



ASC NUMBER: \_\_\_\_\_ SEGMENT NUMBER: \_\_\_\_\_ YR CATALOGED: \_\_\_\_\_  
 LOCATION: Kachemak Bay, Glacier Spit  
 DAM NAME: \_\_\_\_\_  
 KACHEMAK K-UNIT: \_\_\_\_\_ LOCAL STREAM #: \_\_\_\_\_  
 USGS QUADRANGLE: Seldovia C-4  
 SHORELINE TYPE: BEACH ALL SEGMENTS: \_\_\_\_\_  
 WAVE EXPOSURE: High LATITUDE: 59° 38' 48"  
 LONGITUDE: 151° 12' 12"  
 LEGAL: \_\_\_\_\_

ASC NUMBER: \_\_\_\_\_ TEAM RECORDER: AL Davis  
 SURVEY TYPE: BS OBSERVERS: Rick Randall  
 METHOD: Foot Rance Morrison  
 DATE: 7/11/89 AGENCY(IES): ADF&G  
 START TIME: 1000 PHOTOS TAKEN? ✓ Roll #: \_\_\_\_\_ Frames: \_\_\_\_\_  
 STOP TIME: 1100 VIDEO TAKEN? ✓ Tape Number: \_\_\_\_\_  
 Counter Start: \_\_\_\_\_

SAMPLES TAKEN? ✓  
 SAMPLE I.D. NUMBERS: 1. \_\_\_\_\_ 2. \_\_\_\_\_ 3. \_\_\_\_\_  
 4. \_\_\_\_\_ 5. \_\_\_\_\_ 6. \_\_\_\_\_

	LENGTH m	WIDTH m	H2	%	THICK cm	PEN cm	OIL TYPE
SITE 1	<u>✓</u>	<u>✓</u>	<u>—</u>	<u>—</u>	<u>—</u>	<u>—</u>	<u>—</u>
SITE 2							
SITE 3							
SITE 4							
SITE 5							

OVERALL OIL IMPACT: ✓  
 OIL IN STREAM CHANNEL? \_\_\_\_\_ SUBSTRATE \_\_\_\_\_  
 OIL ON BEACH WITHIN 50M OF STREAM MOUTH? \_\_\_\_\_

Bedrock \_\_\_\_\_ Granule ✓  
 Boulder \_\_\_\_\_ Sand ✓  
 Cobble ✓ Silt \_\_\_\_\_  
 Pebble ✓ Veget. \_\_\_\_\_

SPECIES					
COUNT	<u>—</u>				

REMARKS:  
 - 1610 meters surveyed on foot.  
 - ADF&G received a report of <sup>oil</sup>oiled net ~~found~~  
 in the Glacier Spit area.



BEACH S. Chinitwa

ASC NUMBER: \_\_\_\_\_ SEGMENT NUMBER: \_\_\_\_\_ YR CATALOGED: \_\_\_\_\_  
 LOCATION: Chinitwa Bay, South Shore  
 DAM NAME: \_\_\_\_\_ LOCAL STREAM #: \_\_\_\_\_ LATITUDE: \_\_\_\_\_  
 QUADRANGLE: Sellovia D-8, Iliamna D-1 LONGITUDE: \_\_\_\_\_  
 SHORELINE TYPE: BEACH ALL SEGMENTS: \_\_\_\_\_ LEGAL: \_\_\_\_\_  
 WAVE EXPOSURE: \_\_\_\_\_

ASC NUMBER: \_\_\_\_\_ TEAM RECORDER: AL Davis  
 SURVEY TYPE: BS OBSERVERS: Rance Morrison  
 METHOD: Foot  
 DATE: 7/11/89 AGENCY(IES): ADF&G  
 START TIME: 1300 PHOTOS TAKEN? N  
 STOP TIME: \_\_\_\_\_ Roll #: \_\_\_\_\_ Frames: \_\_\_\_\_  
 VIDEO TAKEN? N Tape Number: \_\_\_\_\_  
 Counter Start: \_\_\_\_\_

SAMPLES TAKEN? N  
 SAMPLE I.D. NUMBERS: 1. \_\_\_\_\_ 2. \_\_\_\_\_ 3. \_\_\_\_\_  
 4. \_\_\_\_\_ 5. \_\_\_\_\_ 6. \_\_\_\_\_

	LENGTH m	WIDTH m	M2	%	THICK cm	PEN cm	OIL TYPE
SITE 1	—	—	—	—	—	—	—
SITE 2							
SITE 3							
SITE 4							
SITE 5							

OVERALL OIL IMPACT: NONE

OIL IN STREAM CHANNEL? \_\_\_\_\_ OIL ON BEACH WITHIN 50M OF STREAM MOUTH? \_\_\_\_\_

SUBSTRATE

Bedrock	Granule
Boulder	Sand
Cobble	Silt
Pebble	Veget.

SPECIES	—				
COUNT	—				

REMARKS: Ground surveyed: 274 meters of shoreline



Iniskin Bay - North

ASC NUMBER: \_\_\_\_\_ SEGMENT NUMBER: \_\_\_\_\_ YR CATALOGED: \_\_\_\_\_  
 LOCATION: Iniskin Bay, North shore  
 DAM NAME: \_\_\_\_\_ LATITUDE: \_\_\_\_\_  
 BREAK K-UNIT: \_\_\_\_\_ LOCAL STREAM #: \_\_\_\_\_ LONGITUDE: \_\_\_\_\_  
 QUADRANGLE: Iliamna C-2 LEGAL: \_\_\_\_\_  
 SHORELINE TYPE: BEACH ALL SEGMENTS: \_\_\_\_\_  
 WAVE EXPOSURE: \_\_\_\_\_

ASC NUMBER: \_\_\_\_\_ TEAM RECORDER: AL DAVIS  
 SURVEY TYPE: BS OBSERVERS: Rance Morrison  
 METHOD: FOOT  
 DATE: 7/11/89 AGENCY(IES): ADF&G  
 START TIME: 1320 PHOTOS TAKEN? N  
 STOP TIME: \_\_\_\_\_ Roll #: \_\_\_\_\_ Frames: \_\_\_\_\_  
 VIDEO TAKEN? N Tape Number: \_\_\_\_\_  
 Counter Start: \_\_\_\_\_

SAMPLES TAKEN? N  
 SAMPLE I.D. NUMBERS: 1. \_\_\_\_\_ 2. \_\_\_\_\_ 3. \_\_\_\_\_  
 4. \_\_\_\_\_ 5. \_\_\_\_\_ 6. \_\_\_\_\_

	LENGTH m	WIDTH m	H2	↓	THICK cm	PEN cm	OIL TYPE
SITE 1	—	—	—	—	—	—	—
SITE 2							
SITE 3							
SITE 4							
SITE 5							

OVERALL OIL IMPACT: N  
 OIL IN STREAM CHANNEL? \_\_\_\_\_  
 OIL ON BEACH WITHIN 50M OF STREAM MOUTH? \_\_\_\_\_

SUBSTRATE

Bedrock	Granule
Boulder	Sand
Cobble	Silt
Pebble	Veget.

SPECIES	—				
COUNT	—				

REMARKS:  
 - Ground surveyed 805 meters of shoreline  
 - Sandy beach



Iniskin Bay - Inside

ASC NUMBER: \_\_\_\_\_ SEGMENT NUMBER: \_\_\_\_\_ YR CATALOGED: \_\_\_\_\_  
 LOCATION: Iniskin Bay, Inside, North Shore  
 DAM NAME: \_\_\_\_\_ LATITUDE: \_\_\_\_\_  
 LOCAL STREAM #: \_\_\_\_\_ LONGITUDE: \_\_\_\_\_  
 QUADRANGLE: Iliamna C-2 LEGAL: \_\_\_\_\_  
 SHORELINE TYPE: BEACH ALL SEGMENTS: \_\_\_\_\_  
 WAVE EXPOSURE: \_\_\_\_\_

ASC NUMBER: \_\_\_\_\_ TEAM RECORDER: AL DAVIS  
 SURVEY TYPE: BS OBSERVERS: Rance Morrison  
 METHOD: FOOT  
 DATE: 7/11/89  
 START TIME: 1345  
 STOP TIME: \_\_\_\_\_  
 AGENCY(IES): ADF46  
 PHOTOS TAKEN? N  
 Roll #: \_\_\_\_\_ Frames: \_\_\_\_\_  
 VIDEO TAKEN? N Tape Number: \_\_\_\_\_  
 Counter Start: \_\_\_\_\_

SAMPLES TAKEN? N  
 SAMPLE I.D. NUMBERS: 1. 2. 3.  
 4. 5. 6.

	LENGTH m	WIDTH m	M2	%	THICK cm	PEN cm	OIL TYPE
SITE 1	/	/	/	/	/	/	/
SITE 2							
SITE 3							
SITE 4							
SITE 5							

VERALL OIL IMPACT: None

OIL IN STREAM CHANNEL? \_\_\_\_\_ OIL ON BEACH WITHIN 50M OF STREAM MOUTH? \_\_\_\_\_

SUBSTRATE

Bedrock	Granule
Boulder	Sand
Cobble	Silt
Pebble	Veget.

SPECIES	/				
COUNT	/				

REMARKS: Ground Survey 274 meters of shoreline



COTTONWOOD BAY - South

ASC NUMBER: \_\_\_\_\_ SEGMENT NUMBER: \_\_\_\_\_ YR CATALOGED: \_\_\_\_\_  
 LOCATION: Cottonwood Bay, South Side entrance  
 DAM NAME: \_\_\_\_\_ LATITUDE: \_\_\_\_\_  
 BREAK K-UNIT: \_\_\_\_\_ LOCAL STREAM #: \_\_\_\_\_ LONGITUDE: \_\_\_\_\_  
 USGS QUADRANGLE: Iliamna G-2 LEGAL: \_\_\_\_\_  
 SHORELINE TYPE: BEACH ALL SEGMENTS: \_\_\_\_\_  
 WAVE EXPOSURE: \_\_\_\_\_

ASC NUMBER: \_\_\_\_\_  
 SURVEY TYPE: BS  
 METHOD: FOOT  
 DATE: 7/11/89  
 START TIME: 1400  
 STOP TIME: \_\_\_\_\_

TEAM RECORDER: AL DAVIS  
 OBSERVERS: Rance Morrison

AGENCY(IES): ADF&G

PHOTOS TAKEN? N  
 Roll #: \_\_\_\_\_ Frames: \_\_\_\_\_  
 VIDEO TAKEN? N Tape Number: \_\_\_\_\_  
 Counter Start: \_\_\_\_\_

SAMPLES TAKEN? N

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

	LENGTH m	WIDTH m	H2	%	THICK cm	PEN cm	OIL TYPE
SITE 1	—	—	—	—	—	—	—
SITE 2							
SITE 3							
SITE 4							
SITE 5							

VERALL OIL IMPACT: None

OIL IN STREAM CHANNEL? \_\_\_\_\_  
 SUBSTRATE

OIL ON BEACH WITHIN 50M OF STREAM MOUTH? \_\_\_\_\_

Bedrock	Granule
Boulder	Sand
Cobble	Silt
Pebble	Veget.

SPECIES	—				
COUNT	—				

REMARKS: Ground surveyed 366 meters of shoreline.



Ursus Head - North side

ASC NUMBER: \_\_\_\_\_ SEGMENT NUMBER: \_\_\_\_\_ YR CATALOGED: \_\_\_\_\_  
 LOCATION: Kamishak Bay, Ursus Head  
 DAM NAME: \_\_\_\_\_ LATITUDE: \_\_\_\_\_  
 K-UNIT: \_\_\_\_\_ LOCAL STREAM #: \_\_\_\_\_ LONGITUDE: \_\_\_\_\_  
 QUADRANGLE: Iliamna C-2 LEGAL: \_\_\_\_\_  
 SHORELINE TYPE: BEACH ALL SEGMENTS: \_\_\_\_\_  
 WAVE EXPOSURE: High

ASC NUMBER: \_\_\_\_\_ TEAM RECORDER: AL DAVES  
 SURVEY TYPE: BS OBSERVERS: Rance Morrison  
 METHOD: FOOT  
 DATE: 7/11/89 AGENCY(IES): ADFG  
 START TIME: 1445 PHOTOS TAKEN?   
 STOP TIME: \_\_\_\_\_ Roll #: \_\_\_\_\_ Frames: \_\_\_\_\_  
 VIDEO TAKEN?  Tape Number: \_\_\_\_\_  
 Counter Start: \_\_\_\_\_

SAMPLES TAKEN?   
 SAMPLE I.D. NUMBERS: 1. \_\_\_\_\_ 2. \_\_\_\_\_ 3. \_\_\_\_\_  
 4. \_\_\_\_\_ 5. \_\_\_\_\_ 6. \_\_\_\_\_

	LENGTH m	WIDTH m	H2	δ	THICK cm	PEN cm	OIL TYPE
SITE 1	—	—	—	—	—	—	—
SITE 2							
SITE 3							
SITE 4							
SITE 5							

VERALL OIL IMPACT: NONE

OIL IN STREAM CHANNEL? \_\_\_\_\_ OIL ON BEACH WITHIN 50M OF STREAM MOUTH? \_\_\_\_\_

SUBSTRATE

Bedrock	Granule
Boulder	Sand
Cobble	Silt
Pebble	Veget.

SPECIES	—				
COUNT	—				

REMARKS: ~~3220~~  
 Ground surveyed 3220 meters of shoreline on the North side of Ursus Head



Kirschner Lake Outlet

ASC NUMBER: \_\_\_\_\_ SEGMENT NUMBER: \_\_\_\_\_ YR CATALOGED: \_\_\_\_\_  
 LOCATION: Kamishak Bay, Kirschner Lake outlet  
 LAK NAME: Kirschner Lake  
 LAK K-UNIT: \_\_\_\_\_ LOCAL STREAM #: \_\_\_\_\_  
 QUADRANGLE: Iliamna B-3  
 SHORELINE TYPE: Beach  
 WAVE EXPOSURE: High

SC NUMBER: \_\_\_\_\_ TEAM RECORDER: AL DAVIS  
 SURVEY TYPE: BS OBSERVERS: Rance Morrison  
 METHOD: FOOT  
 DATE: 7/11/89 AGENCY(IES): ADF&G  
 START TIME: 1600 PHOTOS TAKEN?   
 TOP TIME: \_\_\_\_\_ Roll #: \_\_\_\_\_ Frames: \_\_\_\_\_  
 VIDEO TAKEN?  Tape Number: \_\_\_\_\_  
 Counter Start: \_\_\_\_\_  
 SAMPLES TAKEN?   
 SAMPLE I.D. NUMBERS: 1. \_\_\_\_\_ 2. \_\_\_\_\_ 3. \_\_\_\_\_  
 4. \_\_\_\_\_ 5. \_\_\_\_\_ 6. \_\_\_\_\_

	LENGTH m	WIDTH m	H2	t	THICK cm	PEN cm	OIL TYPE
SITE 1	120.7	—	—	—	—	—	TB
SITE 2							
SITE 3							
SITE 4							
SITE 5							

VERALL OIL IMPACT: VL

OIL IN STREAM CHANNEL? \_\_\_\_\_ OIL ON BEACH WITHIN 50M OF STREAM MOUTH? \_\_\_\_\_

SUBSTRATE		SPECIES	COUNT
Bedrock	Granule		
Boulder	Sand		
Cobble	Silt		
Pebble	Veget.		

REMARKS:  
~~\_\_\_\_\_~~  
 - Sockeye fry are planted in Kirschner Lake by ADF&G  
 - Survey conducted and oil found on south side of creek.  
 - TB found at 1.9' tide level



1989-AFHIS

Site 4-1

YALIK Glacier

ASC NUMBER: 232-10-10250

SEGMENT NUMBER: YG-2

YR CATALOGED:

LOCATION: Nuka Passage, YALIK Glacier Beach

REAM NAME: YALIK west creek to Yalik River

DIAMETER K-UNIT:

LOCAL STREAM #:

LATITUDE: 59 25 25

LONGITUDE: 150 43 50

LEGAL: S 9S 9W 1

USGS QUADRANGLE: Seldovia B-2

SHORELINE TYPE: Beach, Tide Flat

ALL SEGMENTS:

WAVE EXPOSURE: M

ASC NUMBER:

SURVEY TYPE: BS

METHOD: Ground

DATE: 7/26/89

START TIME: 1255

STOP TIME: 1348

TEAM RECORDER: Doug Hill

OBSERVERS: Rick Randall

AGENCY(IES): ADF+G

PHOTOS TAKEN?

Roll #: 81DDH11H

Frames: 6, 7, 8, 9, 10, 11, 12

VIDEO TAKEN?

Tape Number: 18-26

Counter Start:

SAMPLES TAKEN?

SAMPLE I.D. NUMBERS: 1. DDH/RDR-7/26/89-1255 2.  
4. 5. 6.

	LENGTH m	WIDTH m	M2	%	THICK cm	PEN cm	OIL TYPE
SITE 1	366	9-15	—	215	—	—	Sporadic Tar TB, TP, ST, CT, CV
SITE 2	73	—	—	—	<20	<7.5	TAR, MS, ST
SITE 3	64	27	—	—	<20	<7.5	TAR, MS, ST
SITE 4	46	—	—	—	<20	<7.5	TAR, MS, ST
SITE 5	46	27	—	—	<20	<7.5	TAR, MS, ST

OVERALL OIL IMPACT: W/H 9 220 5.0 Tar MS, ST

OIL IN STREAM CHANNEL? N

OIL ON BEACH WITHIN 50M OF STREAM MOUTH? NO

SUBSTRATE

Bedrock	Granule
Boulder	Sand
Cobble 60	Silt 20
Pebble 20	Veget.

SPECIES	Pink	Chum			
COUNT	2	1			

ACE 9961009

- COMMENTS: Approx. 1/2 mile of oiled surface
- Blackened cobble and patches of oil frequently found subsurface
  - Frequently found clean surface with subsurface MS
  - very dense hard packed cobble + gravel
  - HAWK Pickup + Bioremediation occurred on this beach
  - Salmon were observed in clearwater stream on west side of valley.
  - Aerial surveyed 21.5 miles of east side Yalik Glacier stream (silt obscured observation)
  - Observed clearwater channels on east side of glacial stream (1-1.5 miles above mouth - No fish observed.

11/13/91 = Beach Survey. Did not survey with 80 yds of either stream. (Ks)



YA

FISH HABITAT ASSESSMENT FORM

YALIK Glacier

2 miles off

1 REGION: 2 PWS 3 KP, CI 4 ~~YALIK~~ 5 OBSERVER(S) Doug Hill, Rick Randall

6 SITE NO. 4-1 7 AERIAL PHOTO NO. 10, 11, 12 8 CAT NO. ALL  
*Roll # 011*

9 STREAM NAME \_\_\_\_\_ 10 LAT 59° 25' 25" 11 LONG 150° 43' 50"  
*Roll # 026*

12 DATE 7/26/89 13 TIME 1255 14 TIDE: Low slack Flood High slack  EBB

15 CATALOGED ANADROMOUS STREAM? Y  N 16 ANAD. FISH FOUND?  N

17 OIL FOUND IN STREAM? Y  N 18 OIL FOUND NEAR STREAM (1 MI.)?  N

19 OIL SAMPLES TAKEN?  N 20 ID NOS. DDH/RDR-7/26/89-1255

21 35 mm PICTURES TAKEN? Y N 22 ROLL NO(S) 89-DDH-011  
89-DDH-026

23 EXPOSURE NO.	24 DESCRIPTION
<i>Roll # 011</i> 6, 7	Sample # DDH/RDR-7/26/89-1255. Thick mousse found below oil blackened cobble-up to 1" thick
8, 9	" " " " " " Location ID photo
<i>Roll # 026</i> 19, 20	Tool used to scanify YALIK Glacier beach
21, 24, 25	Inipulx Granular Fertilizer on YALIK Glacier Beach
23	Typical <sup>state</sup> oil on beach at time of Bioremediation
18, 19	Bioremed => Inipul area
22	Crew spot applied BTO to areas outside main oiled area

25 VIDEO FOOTAGE TAKEN? Y  N 26 CASSETTE NO(S) \_\_\_\_\_

27 DESCRIPTION: \_\_\_\_\_

ACE 9961010

ACE 7380230



**ANADROMOUS FISH OBSERVATIONS**

	PINK	CHUM	RED	KING	COHO	DOLLY		
28 Aerial	2	1						
29 Ground								

30 COMMENTS: SALMON observed in Clearwater Stream on west side of valley  
Aerial surveyed  $\approx$  1/2 miles of East side YALUK Glacier stream - Silt observed observation.  
Observed Clearwater channels on East side of glacial stream (1-1/2 miles above mouth) No fish observed

Site 4-1

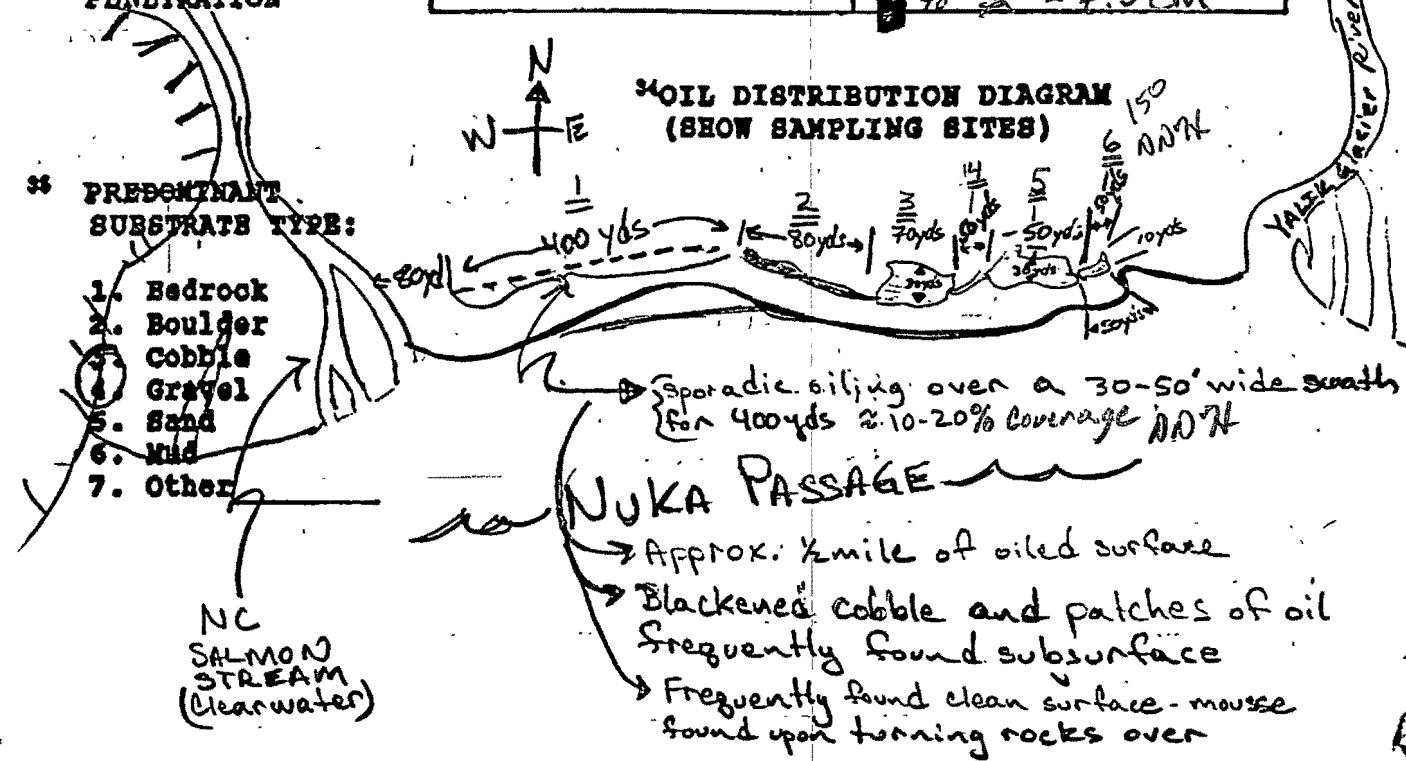
**OIL OBSERVATIONS**

**EXTENT OF OIL:**

	WITHIN STREAM	OUTSIDE STREAM
31 SURFACE COVERAGE	None	Approx. 1/2 mile L. seal
32 SURFACE THICKNESS	Observed	up to 3/4" $\approx$ 2.0 cm D/NH
33 PENETRATION		To 2" $\approx$ 7.5 cm D/NH

34 **PREDOMINANT SUBSTRATE TYPE:**

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



35 COMMENTS: Very dense hard packed cobble & gravel. Cleanup activities occurred on the beach (hand pickup and bioremediation) ACE 9961011





SELDONIA

Division I

NUKA ISLAND

Side 4-1

YALIK GALACTER BEACH

WESTERN-MOST GLACKS

P A

U K A

ACE 9961012

ACE 7380232



State of Alaska  
 Department of Fish and Game  
 Nomination for Waters  
 Important to Anadromous Fish

Year of Revision

Anadromous Water Catalog Volume Southcentral Region

USGS Quad Seldovia B-2

Name of Waterway None Known (Yalik Glacier West creek-for purposes Here)

Anadromous Water Catalog Number of Waterway NC

4-1

Change to \_\_\_\_\_ Atlas  
 \_\_\_\_\_ Catalog  
 \_\_\_\_\_ Both

Addition X

Deletion \_\_\_\_\_

Correction \_\_\_\_\_

Name addition:

USGS name None

Local name None Known

For Office Use

Nomination # _____	
Regional Supervisor _____	Date _____
Drafted _____	Date _____

Species	Date(s) Observed	Spawning	Rearing	Migration
Pink Salmon	7/26/89	X		
Chum Salmon	7/26/89	X		

Comments: Provide any clarifying information, including number of fish observed, location of fish survey data, etc.

2 Pinks and 1 chum observed 1 mile above saltwater

1-1/2 miles of stream surveyed-lower 1-1/2 miles.

Original data on file with state EXXON Valdez Oil Spill Lawyers

Attach a copy of a map showing location of mouth and upper points of each species, specific stream reaches identified for spawning or rearing, locations of barriers, such as falls. Attach a copy of the fish survey data, if available.

Name of Observer (please print) Douglas D. Hill

Date: <sup>DDH</sup> 12/13/89 Signature: Douglas D Hill

Address: Oil Spill Response Center, 509 Sterling Hwy.

Homer, AK. 99603 235-5322

Signature of Area Biologist: \_\_\_\_\_

ACE 9961013

ACE 7380229



ADW  
10/29/91

ASC NUMBER: 242-31-10080 SEGMENT NUMBER: None YR CATALOGED:  
 LOCATION: One Haul Bay - Eastern Stream  
 REAM NAME:  
 KODIAK K-UNIT: LOCAL STREAM #:  
 USGS QUADRANGLE: Seldovia A-4  
 SHORELINE TYPE: BEACH ALL SEGMENTS:  
 WAVE EXPOSURE: M/H  
 LATITUDE: 59 13 15  
 LONGITUDE: 151 12 5  
 LEGAL: S 113 11 W 18

ASC NUMBER:  
 SURVEY TYPE: BS  
 METHOD: Ground  
 DATE: 7/24/89  
 START TIME: 1210  
 STOP TIME: 1530  
 TEAM RECORDER: Doug Hill  
 OBSERVERS: Lee Allen  
 AGENCY (IES): ADFUG  
 PHOTOS TAKEN? Roll #: 89 DDH 08 Frames: 25-36  
 VIDEO TAKEN? 89 DDH 09 Tape Number: 1411  
 Counter Start:

SAMPLES TAKEN?  
 SAMPLE I.D. NUMBERS: 1. one Haul Bay #3  
 2. 1. LPA/DDH-7/24/89-1330  
 3.  
 4.  
 5.  
 6.

	LENGTH m	WIDTH m	M2	%	THICK cm	PEN cm	OIL TYPE
SITE 1	1.5	1	1.5	85	<30	<30	MS
SITE 2	274	2	548	<1	—	—	TARBALLS
SITE 3							
SITE 4							
SITE 5							

OVERALL OIL IMPACT: VL

OIL IN STREAM CHANNEL? N

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

OIL ON BEACH WITHIN 50M OF STREAM MOUTH? NO

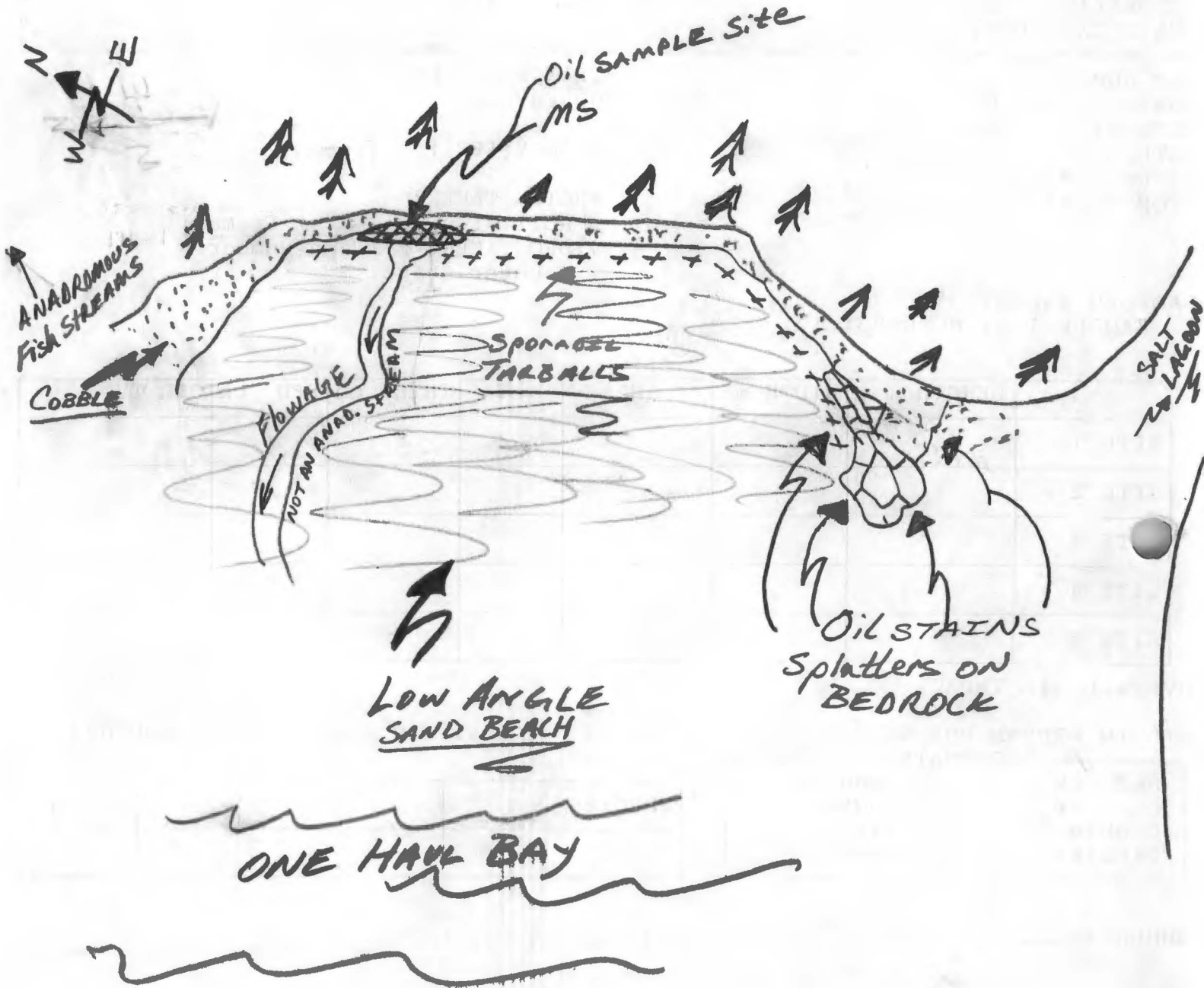
7/24/89

SPECIES				
PINKS				
COUNT	300			

COMMENTS: Oiling: line of sporadic tarballs ranging in size from 1/4" x 1/4" to 1" x 1" present along beach.  
 - Sporadic stain and oil splatters on bedrock at south end of beach - Numerous splatters/drips - Very obvious  
 - This oil sample site is within one mile of two ANADROMOUS streams (ASC # 243-31-10080 & 10090). The site is nearest to stream 10080.

MAP OVER

# ONE HAUL BAY



The An



FISH HABITAT ASSESSMENT FORM

One Haul Bay - Easternmost flowage - Approx 1/2 mile SE of cataloged stream # 10090. One mile northwest of brackish lagoon. 2/3 mile NW of oil sample site # 2-2

1 REGION: 2 PWS KP, CI 4 K, AP 5 OBSERVER(S) Dray, Hill, Lee Glenn

6 SITE NO. 2-2 7 AERIAL PHOTO NO. 25/1,11 8 CAT NO. NE

9 STREAM NAME \_\_\_\_\_ 10 LAT 59° 13' 15" 11 LONG 151° 12' 5"

12 DATE 7/24/89 13 TIME 1300 14 TIDE Low black Flood High slack Ebb

15 CATALOGED ANADROMOUS STREAM? Y  N 16 ANAD. FISH FOUND?  N

17 OIL FOUND IN STREAM? Y  N 18 OIL FOUND NEAR STREAM (1 MI.)?  N

19 OIL SAMPLES TAKEN?  N 20 ID NOS. One Haul Bay #3 - LP6/DDH-7/24/89-1300 <sup>DDH</sup>

21 35 mm PICTURES TAKEN?  N 22 ROLL NO(S) 89-DDH-008  
89-DDH-009

23 EXPOSURE NO.	24 DESCRIPTION
<u>25</u>	<u>Aerial stream # 10080 (stream was NC in 1981)</u>
<u>26, 27</u>	<u>Sample # One Haul Bay - LP6/DDH-7/24/89-1300</u>
<u>28</u>	<u>" " " " " " " " - Location ID</u>
<u>29, 30, 31, 32</u>	<u>" " " " " " " "</u>
<u>33, 35, 36</u>	<u>Oil splatters on rock</u>
<u>1</u>	<u>Aerial</u>
<u>11</u>	<u>"</u>
<u>28</u>	<u>Below cataloged stream - Easternmost Creek / Flowage Pond One Haul Bay, NW of lagoon, SW of stream # 10090</u>

25 VIDEO FOOTAGE TAKEN? Y  N 26 CASSETTE NO(S) \_\_\_\_\_

27 DESCRIPTION: \_\_\_\_\_

Roll # 008

Roll # 009

Roll # 008



**ANADROMOUS FISH OBSERVATIONS**

	PINK	CHUM	RED	KING	COHO	DOLLY		
28 Aerial	300							
29 Ground								

30 COMMENTS: 90% of fish observed at intertidal area  
Fish observed on 8/21/89 - Aerial survey

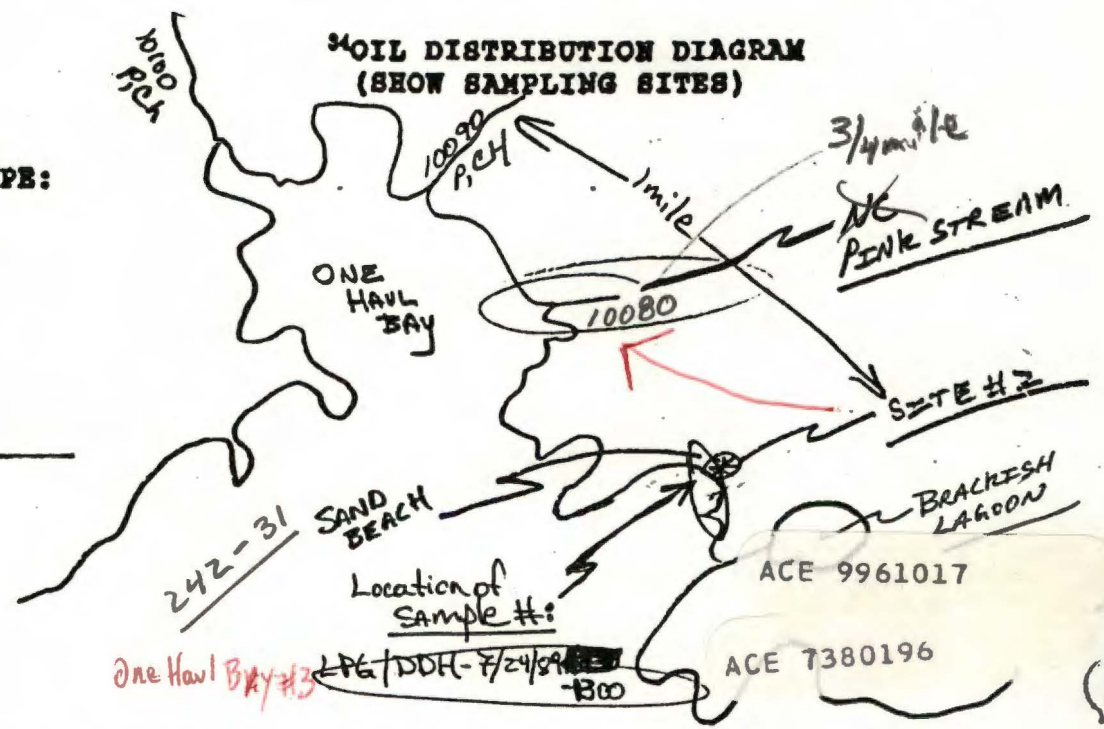
**OIL OBSERVATIONS**

*Site 2*

	EXTENT OF OIL:
	WITHIN STREAM <i>on surface</i> OUTSIDE STREAM
31 SURFACE COVERAGE	300 yards of sporadic tar balls (1" x 1/2" to 1" x 1/2")
32 SURFACE THICKNESS	3' x 1/2" patch of nearly pure mousse or oil saturated sand, located at creek that flows here
33 PENETRATION	8" to 1" (Buried by sand)

35 PREDOMINANT SUBSTRATE TYPE:

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



36 COMMENTS: Oil located primarily at Cobble-sand BEACH interface - where subsurface fluvial  
breaks breaks out of Cobble into beach. The more SAND & Cobble we turned over  
the more mousse we found. We only dig in one AREA



ONE HAUL BAY-East Creek  
ASC# 242-31-10080

Site 2-2

This stream  
was not  
cataloged  
in 1989

ONE HAUL BAY  
ASC# 242-31-10090

Oil Sample Site  
Sample #: LP6/DDH-7/24/89-1330

ACE 9961018

ACE 7380197



No stream

CAPE Douglas - Commfish Kodiak

ASC NUMBER: \_\_\_\_\_ SEGMENT NUMBER: \_\_\_\_\_ YR CATALOGED: \_\_\_\_\_  
 LOCATION: CAPE Douglas  
 TANK NAME: \_\_\_\_\_ LOCAL STREAM #: \_\_\_\_\_  
 TANK K-UNIT: \_\_\_\_\_ LOCAL STREAM #: \_\_\_\_\_  
 QUADRANGLE: AFOGNAK D-4, D-5  
 SHORELINE TYPE: BEACH, Low Lying Rocks ALL SEGMENTS: \_\_\_\_\_  
 WAVE EXPOSURE: High

ASC NUMBER: \_\_\_\_\_ TEAM RECORDER: B. Barrett  
 SURVEY TYPE: BS OBSERVERS: K. Brennan  
 METHOD: FOOT D. Kaplan  
 DATE: 4/21/89 AGENCY(IES): ADF&G/Commfish/Kodiak  
 START TIME: 1545 PHOTOS TAKEN? ?  
 TOP TIME: \_\_\_\_\_ Roll #: ? Frames: ?  
 VIDEO TAKEN? ? Tape Number: ?  
 Counter Start: \_\_\_\_\_

SAMPLES TAKEN? ?  
 SAMPLE I.D. NUMBERS: 1. \_\_\_\_\_ 2. \_\_\_\_\_ 3. \_\_\_\_\_  
 4. \_\_\_\_\_ 5. \_\_\_\_\_ 6. \_\_\_\_\_

	LENGTH m	WIDTH m	H2	%	THICK cm	PEN cm	OIL TYPE
SITE 1	—	—	—	—	—	—	—
SITE 2							
SITE 3							
SITE 4							
SITE 5							

OVERALL OIL IMPACT:

OIL IN STREAM CHANNEL?

OIL ON BEACH WITHIN 50M OF STREAM MOUTH?

SUBSTRATE

Bedrock	Granule
Boulder	Sand
Cobble	Silt
Pebble	Veget.

SPECIES				
COUNT	SEALS	4		

REMARKS:  
 - Mousse at high tide line.  
 - 1-1.5 gallons of oil per 50 yds  
 - Unable to ascertain exact location from crews field notes - Contact ADF&G, Commercial Fisheries in Kodiak for more detailed info  
 - USFWS report of 5/9/89 stated that 70 sea lions were counted at Cape Douglas



No stream

Douglas Reef - Commfish Kodiak

ASC NUMBER: \_\_\_\_\_ SEGMENT NUMBER: \_\_\_\_\_ YR CATALOGED: \_\_\_\_\_  
 LOCATION: Kamishak Bay, Douglas Reef  
 ISLAND NAME: \_\_\_\_\_ LOCAL STREAM #/ : \_\_\_\_\_  
 QUADRANGLE: \_\_\_\_\_  
 SHORELINE TYPE: Beach/Lying Rocks ALL SEGMENTS: \_\_\_\_\_  
 WAVE EXPOSURE: High

SC NUMBER: \_\_\_\_\_ TEAM RECORDER: \_\_\_\_\_  
 SURVEY TYPE: BS OBSERVERS: B. Barnett  
 METHOD: FOOT K. Brennan  
 DATE: 4/21/89 AGENCY(IES): D. Kaplan  
 START TIME: 1525 → ADF&G/Kodiak-Commfish  
 STOP TIME: \_\_\_\_\_ PHOTOS TAKEN? ?  
 Roll #: \_\_\_\_\_ Frames: \_\_\_\_\_  
 VIDEO TAKEN? ? Tape Number: \_\_\_\_\_  
 Counter Start: \_\_\_\_\_

SAMPLES TAKEN? - ?  
 SAMPLE I.D. NUMBERS: 1. \_\_\_\_\_ 2. \_\_\_\_\_ 3. \_\_\_\_\_  
 4. \_\_\_\_\_ 5. \_\_\_\_\_ 6. \_\_\_\_\_

	LENGTH m	WIDTH m	H2	δ	THICK cm	PEN cm	OIL TYPE
SITE 1	—	—	—	—	—	—	—
SITE 2							
SITE 3							
SITE 4							
SITE 5							

VERALL OIL IMPACT: M  
 OIL IN STREAM CHANNEL? \_\_\_\_\_  
 SUBSTRATE

OIL ON BEACH WITHIN 50M OF STREAM MOUTH? \_\_\_\_\_

Bedrock	Granule
Boulder	Sand
Cobble	Silt
Pebble	Veget.

SPECIES	SEALS	Oyster-catchers	Auklets	BALD EAGLES	...
COUNT	200	50	500	2	

COMMENTS: Moderate concentrations of mousse on north side of reef; All tide pools on north side had 5-10% volm. mousse. 35-50 gallons of mousse on rocks and pools on north side of island, South end of Island not heavily impacted.

LAT & Long reflect general area.  
 Bald eagles were observed with nest.  
 Kodiak ADF&G-Commfish may have more info concerning Kamishak Bay.



No stream

Sukoi Bay - Commfish Kodiak

ASC NUMBER: \_\_\_\_\_ SEGMENT NUMBER: \_\_\_\_\_ YR CATALOGED: \_\_\_\_\_  
 LOCATION: CAPE Douglas, Sukoi BAY  
 DAM NAME: \_\_\_\_\_  
 LOCAL STREAM #: \_\_\_\_\_  
 QUADRANGLE: AFOGNAR D-4, D-5  
 SHORELINE TYPE: BEACH, Low lying Ropes  
 WAVE EXPOSURE: High  
 LATITUDE: \_\_\_\_\_  
 LONGITUDE: \_\_\_\_\_  
 LEGAL: \_\_\_\_\_  
 ALL SEGMENTS: \_\_\_\_\_

ASC NUMBER: \_\_\_\_\_ TEAM RECORDER: \_\_\_\_\_  
 SURVEY TYPE: ~~Boat~~ BS  
 METHOD: ~~Boat~~ Aerial  
 DATE: 4/21/89  
 START TIME: \_\_\_\_\_  
 STOP TIME: \_\_\_\_\_  
 OBSERVERS: K. Brennan  
 B. Barrett  
 D. Kaplan  
 AGENCY (IES): ADF+G/Commfish/Kodiak  
 PHOTOS TAKEN? ?  
 Roll #: \_\_\_\_\_ Frames: \_\_\_\_\_  
 VIDEO TAKEN? ? Tape Number: \_\_\_\_\_  
 Counter Start: \_\_\_\_\_

SAMPLES TAKEN? ?  
 SAMPLE I.D. NUMBERS: 1. \_\_\_\_\_ 2. \_\_\_\_\_ 3. \_\_\_\_\_  
 4. \_\_\_\_\_ 5. \_\_\_\_\_ 6. \_\_\_\_\_

	LENGTH m	WIDTH m	H2	%	THICK cm	PEN cm	OIL TYPE
SITE 1							
SITE 2							
SITE 3							
SITE 4							
SITE 5							

OVERALL OIL IMPACT: \_\_\_\_\_  
 OIL IN STREAM CHANNEL? \_\_\_\_\_  
 OIL ON BEACH WITHIN 50M OF STREAM MOUTH? \_\_\_\_\_

SUBSTRATE

Bedrock	Granule
Boulder	Sand
Cobble	Silt
Pebble	Veget.

SPECIES	SEA OTTER				
COUNT	2				

REMARKS:  
 - Aerial survey of 1/2 the intertidal area of Bay with Helo 10' off Deck, no oil obvious.  
 - Contact Kodiak ADF+G Commfish office for further info  
 - USFWS report of 5/9/89 stated that 70 sea lions were counted at Cape Douglas.



FISH HABITAT ASSESSMENT FORM

CAPE Puget - Lake to NW of Cape (see map)

*Has never been catalogued to my knowledge D.D.R.*

1 REGION: 2 PWS 3 KP, CI 4 K, AP 5 OBSERVER(S) Doug Hill, Rick Randall  
Lee Galeon

6 SITE NO. \_\_\_\_\_ 7 AERIAL PHOTO NO. \_\_\_\_\_ 8 CAT NO. 110901 *Lake has no # - 2004 4/12/91*

9 STREAM NAME \_\_\_\_\_ 10 LAT \_\_\_\_\_ 11 LONG \_\_\_\_\_

12 DATE 9/3/89 13 TIME 1915 14 TIDE: Low slack Flood High slack Ebb

15 CATALOGED ANADROMOUS STREAM? Y N 16 ANAD. FISH FOUND? Y N

17 OIL FOUND IN STREAM? Y N 18 OIL FOUND NEAR STREAM (1 MI.)? Y N

19 OIL SAMPLES TAKEN? Y N 20 ID NOS. \_\_\_\_\_

21 35 mm PICTURES TAKEN? Y N 22 ROLL NO(S). \_\_\_\_\_

23 EXPOSURE NO.	24 DESCRIPTION
_____	<u>Aerial Survey: No Visible Inlet</u>
_____	<u>or Outlet to saltwater-</u>
_____	<u>mighty stout sand bar/beach</u>
_____	<u>vegetation on beach.</u>
_____	_____
_____	_____
_____	_____

25 VIDEO FOOTAGE TAKEN? Y N 26 CASSETTE NO(S). \_\_\_\_\_

27 DESCRIPTION: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_



**ANADROMOUS FISH OBSERVATIONS**

**PINK CHUM RED KING COHO DOLLY**

28	Aerial							
29	Ground							

30 COMMENTS: \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

**OIL OBSERVATIONS**

**EXTENT OF OIL:**

	WITHIN STREAM	OUTSIDE STREAM
31 SURFACE COVERAGE		
32 SURFACE THICKNESS		
33 PENETRATION		

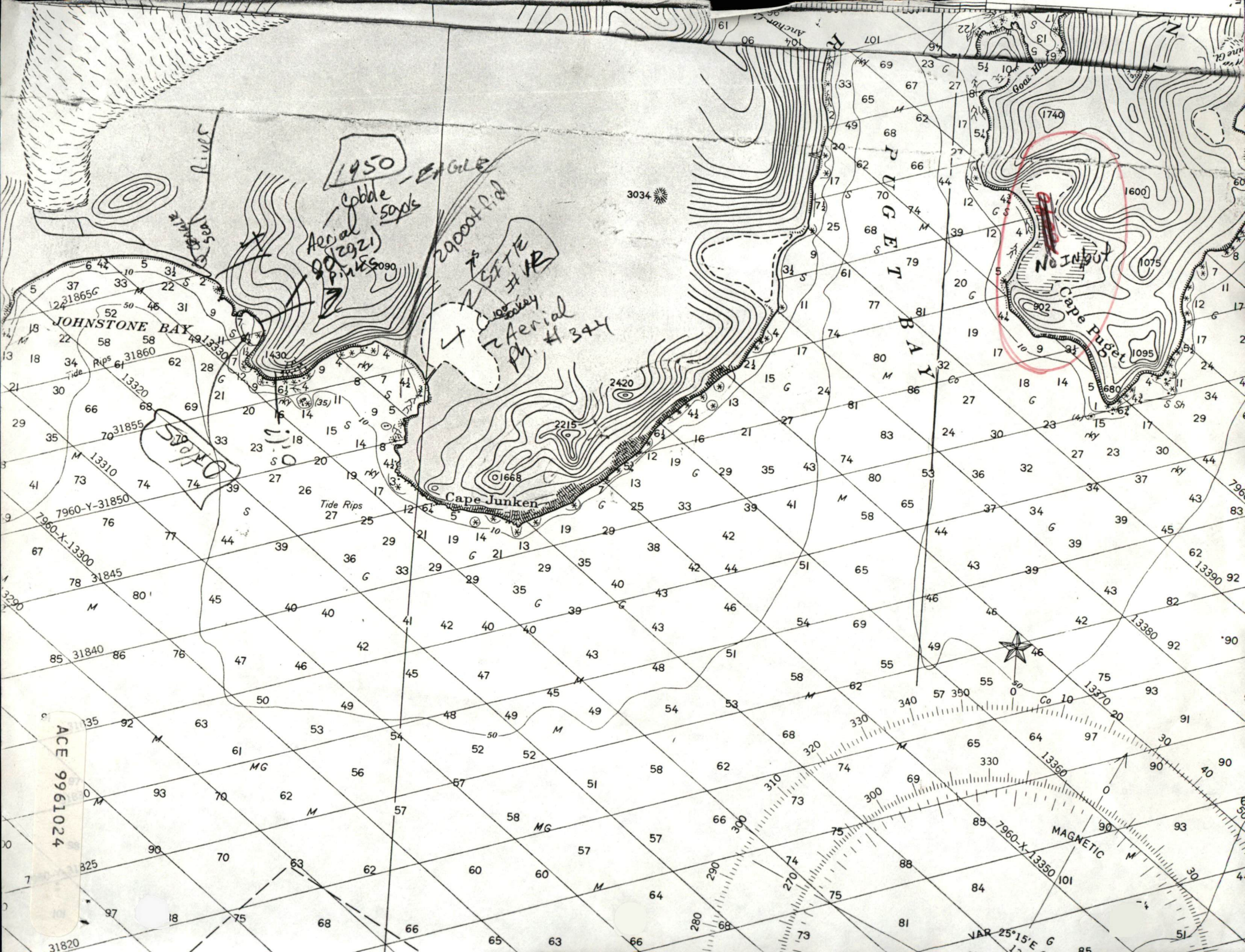
**34 OIL DISTRIBUTION DIAGRAM  
 (SHOW SAMPLING SITES)**

35 **PREDOMINANT  
 SUBSTRATE TYPE:**

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

36 COMMENTS: \_\_\_\_\_





1950

EAGLE

Cobble sands

Aerial 902921

20000 ft

SITE # 12

Aerial Ph. # 344

NO INPUT

ACE 9961024

MAGNETIC  
25°15' E G



OK DDT  
4/12/19

FISH HABITAT ASSESSMENT FORM

CAPE Junken - Lake Approx. 4 miles NE of Cape

<sup>1</sup>REGION: <sup>2</sup>PWS <sup>3</sup>KP, CI <sup>4</sup>K, AP <sup>5</sup>OBSERVER(S) Doug Hill, Rick RANDALL  
Leed Glenn

<sup>6</sup>SITE NO. \_\_\_\_\_ <sup>7</sup>AERIAL PHOTO NO. \_\_\_\_\_ <sup>8</sup>CAT NO. 16510

<sup>9</sup>STREAM NAME 9/3/89 <sup>10</sup>LAT \_\_\_\_\_ <sup>11</sup>LONG \_\_\_\_\_

<sup>12</sup>DATE 9/3/89 <sup>13</sup>TIME 1915 <sup>14</sup>TIDE: Low slack Flood High slack  Ebb

<sup>15</sup>CATALOGED ANADROMOUS STREAM?  Y  N <sup>16</sup>ANAD. FISH FOUND? Y  N

<sup>17</sup>OIL FOUND IN STREAM? Y  N <sup>18</sup>OIL FOUND NEAR STREAM (1 MI.)? Y  N

<sup>19</sup>OIL SAMPLES TAKEN? Y  N <sup>20</sup>ID NOS. \_\_\_\_\_

<sup>21</sup>35 mm PICTURES TAKEN? Y  N <sup>22</sup>ROLL NO(S). \_\_\_\_\_

<sup>23</sup> EXPOSURE NO.	<sup>24</sup> DESCRIPTION
_____	Aerial Survey: No visible Tulet, outlet
_____	to saltwater - stovt
_____	Sand bar/beach - Vegetation
_____	on beach.
_____	
_____	
_____	
_____	

<sup>25</sup>VIDEO FOOTAGE TAKEN? Y  N <sup>26</sup>CASSETTE NO(S). \_\_\_\_\_

<sup>27</sup>DESCRIPTION: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_



**ANADROMOUS FISH OBSERVATIONS**

**PINK CHUM RED KING COHO DOLLY**

28	<b>Aerial</b>							
29	<b>Ground</b>							

30 **COMMENTS:** \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

**OIL OBSERVATIONS**

**EXTENT OF OIL:**

	<b>WITHIN STREAM</b>	<b>OUTSIDE STREAM</b>
31 <b>SURFACE COVERAGE</b>		
32 <b>SURFACE THICKNESS</b>		
33 <b>PENETRATION</b>		

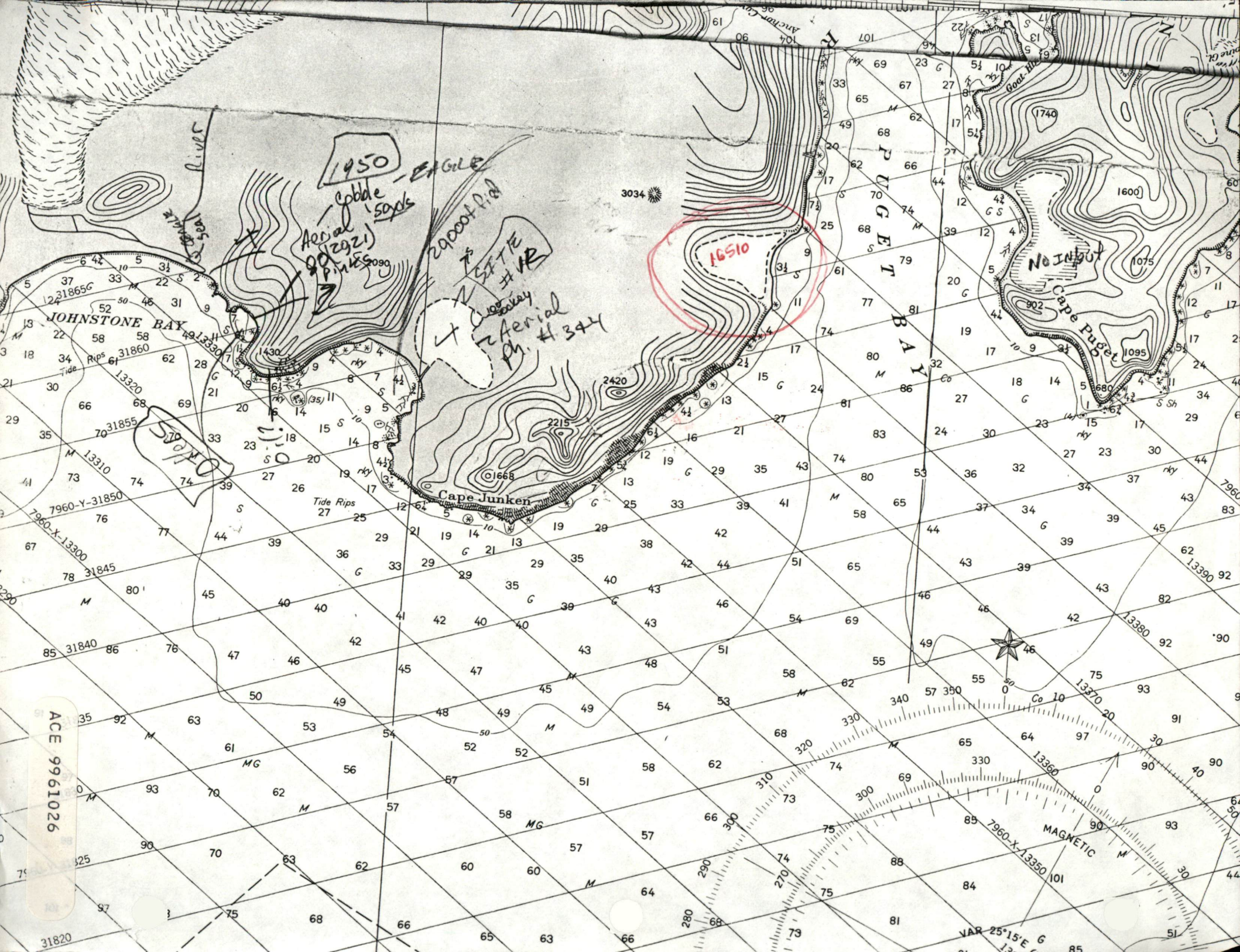
**34 OIL DISTRIBUTION DIAGRAM  
 (SHOW SAMPLING SITES)**

35 **PREDOMINANT  
 SUBSTRATE TYPE:**

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

36 **COMMENTS:** \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_





1950  
Cobble Sands

Aerial  
Photos

29000 ft. Al

SITE # 12

Aerial  
Ph. # 344

16510

ACE 9961026



MAGNETIC

VAR 25°15'E G











FISH HABITAT ASSESSMENT FORM

Port Chatham → Cannery Site sample  
 1 REGION: PWS KP, CI 2 OBSERVER(S) Don Hill Lee Glenn  
Jack Lentfer  
242-10  
 6 SITE NO. 7-1 7 AERIAL PHOTO NO. 26,27 8 CAT NO. 10220

9 STREAM NAME \_\_\_\_\_ 10 LAT 59.12.51 11 LONG 151.44.30

12 DATE 8/5/89 13 TIME 1200 14 TIDE: Low slack Flood High slack Ebb

15 CATALOGED ANADROMOUS STREAM?  N 16 ANAD. FISH FOUND? Y  N

17 OIL FOUND IN STREAM? Y  N 18 OIL FOUND NEAR STREAM (1 MI.)? Y  N

19 OIL SAMPLES TAKEN?  N 20 ID NOS. 89 DDH 007 DDH-8/5/89-1200

21 35 mm PICTURES TAKEN?  N 22 ROLL NO(S) 89-DDH-007  
89-DDH-014

23 EXPOSURE NO.	24 DESCRIPTION
<u>10 (014)</u>	<u>Oil sample toward seysds to west/left of this photo</u>

25 VIDEO FOOTAGE TAKEN? Y  N 26 CASSETTE NO(S) \_\_\_\_\_

27 DESCRIPTION: \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

ACE 9961029

ACE 7380164



**ANADROMOUS FISH OBSERVATIONS**

	PINK	CHUM	RED	KING	CORO	DOLLY		
28 Aerial				②				
29 Ground				①				

30 COMMENTS: \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

**OIL OBSERVATIONS**

*Site 13*

**EXTENT OF OIL:**

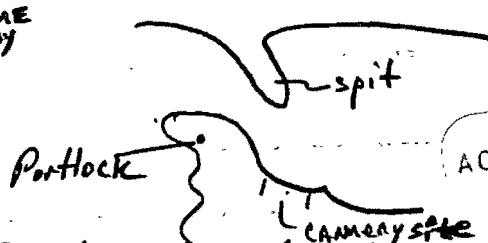
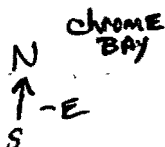
	WITHIN STREAM	OUTSIDE STREAM
31 SURFACE COVERAGE		<i>Oiled Plastic bottle</i>
32 SURFACE THICKNESS		<i>CAP - 1/8" thick oil on</i>
33 PENETRATION		<i>it</i>

**34 OIL DISTRIBUTION DIAGRAM  
(SHOW SAMPLING SITES)**

**35 PREDOMINANT  
SUBSTRATE TYPE:**

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

*Sample found on beach just below cannery site (old boilers etc). South shore of Pt. Chatham EAST of Portlock.*



ACE 9961030

ACE 7380165

36 COMMENTS: *Jack Lentler has found oil on this beach (drift line) - previously, Jack Represent Chugach Native Assoc.*



NOT A STREAM

FISH HABITAT ASSESSMENT FORM



*Nuka Bay, West Arm, Surprise Bay  
(Small Bight 1 mile NE Ariadne IsL)*

1 REGION: 2 PWS 3 KP, CI 4 K, AP 5 OBSERVER(S) Doug Hill, Rick Randall

6 SITE NO. 6-4 7 AERIAL PHOTO NO. \_\_\_\_\_ 8 CAT NO. \_\_\_\_\_

9 STREAM NAME \_\_\_\_\_ 10 LAT \_\_\_\_\_ 11 LONG \_\_\_\_\_

12 DATE 8/4/89 13 TIME 1200 noon 14 TIDE: Low slack Flood High slack Ebb

15 CATALOGED ANADROMOUS STREAM? Y N 16 ANAD. FISH FOUND? Y N

17 OIL FOUND IN STREAM? Y N 18 OIL FOUND NEAR STREAM (1 MI.)? Y N

19 OIL SAMPLES TAKEN? Y N 20 ID NOS. \_\_\_\_\_

21 35 mm PICTURES TAKEN? Y N 22 ROLL NO(S). \_\_\_\_\_

23 EXPOSURE NO. 24 DESCRIPTION

23 EXPOSURE NO.	24 DESCRIPTION

*Beach Survey*

OVER →

25 VIDEO FOOTAGE TAKEN? Y N 26 CASSETTE NO(S). \_\_\_\_\_

27 DESCRIPTION: \_\_\_\_\_

ACE 9961031

ACE 7380290

NOT A STREAM

FISH HABITAT ASSESSMENT FORM



*Nika Bay, WEST ARM, Surprise Bay  
(Small Bight 1 mile NE Ariadne ISL)*

1 REGION: 2 PWS 3 KP, CI 4 K, AP 5 OBSERVER(S) Doug Hill, Rick Randall

6 SITE NO. 6-4 7 AERIAL PHOTO NO. \_\_\_\_\_ 8 CAT NO. \_\_\_\_\_

9 STREAM NAME \_\_\_\_\_ 10 LAT \_\_\_\_\_ 11 LONG \_\_\_\_\_

12 DATE 8/4/89 13 TIME 1200 noon 14 TIDE: Low slack Flood High slack Ebb

15 CATALOGED ANADROMOUS STREAM? Y N 16 ANAD. FISH FOUND? Y N

17 OIL FOUND IN STREAM? Y N 18 OIL FOUND NEAR STREAM (1 MI.)? Y N

19 OIL SAMPLES TAKEN? Y N 20 ID NOS. \_\_\_\_\_

21 35 mm PICTURES TAKEN? Y N 22 ROLL NO(S). \_\_\_\_\_

23 EXPOSURE NO. 24 DESCRIPTION

23 EXPOSURE NO.	24 DESCRIPTION

OVER →

25 VIDEO FOOTAGE TAKEN? Y N 26 CASSETTE NO(S). \_\_\_\_\_

27 DESCRIPTION: \_\_\_\_\_

ACE 9961031

ACE 7380290



**ANADROMOUS FISH OBSERVATIONS**

PINK CHUM RED KING COHO DOLLY

28	Aerial							
29	Ground							

30 COMMENTS: Tempera observed off beach (pinks?)

*Site  
6/12*

**OIL OBSERVATIONS**

EXTENT OF OIL:

	WITHIN STREAM	OUTSIDE STREAM
31 SURFACE COVERAGE	/	/
32 SURFACE THICKNESS	/	/
33 PENETRATION	/	/

**34 OIL DISTRIBUTION DIAGRAM  
(SHOW SAMPLING SITES)**

35 **PREDOMINANT  
SUBSTRATE TYPE:**

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

*Foot surveyed: 200 yds. of beach - MERLE Potter (ADEK) informed us of oil in this area - apparently we were on the wrong beach.*

*No Oil Observed*

ACE 9961032

36 COMMENTS:

ACE 7380291





1989-AFHS

Site 7-3

Koyuktalik (Dogfish) Bay

Oil Sample Site

ASC NUMBER: \_\_\_\_\_ SEGMENT NUMBER: \_\_\_\_\_  
 LOCATION: Koyuktalik (Dogfish) Bay; North shore of narrows  
 TEAM NAME: \_\_\_\_\_  
 KODIAK K-UNIT: \_\_\_\_\_ LOCAL STREAM #: \_\_\_\_\_  
 USGS QUADRANGLE: Seldovia A-5  
 SHORELINE TYPE: Beach  
 WAVE EXPOSURE: Low

YR CATALOGED: \_\_\_\_\_  
 LATITUDE: \_\_\_\_\_  
 LONGITUDE: \_\_\_\_\_  
 LEGAL: \_\_\_\_\_

ALL SEGMENTS:

ASC NUMBER: \_\_\_\_\_  
 SURVEY TYPE: BS  
 METHOD: Ground  
 DATE: 8/5/89  
 START TIME: 1320  
 STOP TIME: 1415

Beach  
Survey

TEAM RECORDER: Doug Hill (ADFG)  
 OBSERVERS: Lee Glenn (ADFG)  
 Jack Ladner (CAC)

AGENCY (IES):

PHOTOS TAKEN? \_\_\_\_\_  
 Roll #: 8908H07H  
 VIDEO TAKEN?  Tape Number: 15, 16, 17  
 Counter Start: \_\_\_\_\_

SAMPLES TAKEN?

SAMPLE I.D. NUMBERS: 1. JPA/DH/JL-8/5/89-1330 2. 3.  
 4. 5. 6.

	LENGTH m	WIDTH m	M2	%	THICK cm	PEN cm	OIL TYPE
SITE 1	≈ 15	.25	3.75	≈ 1	.5	—	TB, CV
SITE 2							
SITE 3							
SITE 4							
SITE 5							

OVERALL OIL IMPACT: VL

OIL IN STREAM CHANNEL? None Observed

SUBSTRATE	
Bedrock	Granulex
Boulder	Sand
Cobbles	Silt
Pebbles	Veget.

OIL ON BEACH WITHIN 50M OF STREAM MOUTH? None Observed

7/21/89

SPECIES	Count			
Chum	15			
COUNT	15			

Stream 241-40-10320

COMMENTS: Oil found at east end of narrows - North shore - Approx. 3/4 mile from Anadromous fish stream # 241-40-10320 + 10325. Anadromous stream # 241-40-10300 is present at the head (east end) of Dogfish Bay.

- Oil found was very minimal + sporadic. Spots of 3mm thick were found for ≈ 15m. These spots ranged in size from 1.5mm x 1.5m to 2.5 x 7.5mm. They were found at a rate of 1 per 6 feet.

- VECO crews were present in Koyuktalik Bay early in the season.



FISH HABITAT ASSESSMENT FORM

Dupe

Dogfish (Koyuktoik) Bay - oil sample site

1 REGION: 2 PWS KP, CI 3 X, AP 4 OBSERVER(S) Doug Hill, Lee Glenn  
Jack Lentfer

6 SITE NO. 7-3 7 AERIAL PHOTO NO. 8 CAT NO. 241-40-10320

9 STREAM NAME <sup>Northernmost</sup> Dogfish 10 LAT 59.14.48. 11 LONG 151.52.20.

12 DATE 8-5/89 13 TIME 1330 14 TIDE: Low slack Flood High slack Ebb

15 CATALOGED ANADROMOUS STREAM?  N 16 ANAD. FISH FOUND?  N

17 OIL FOUND IN STREAM?  N 18 OIL FOUND NEAR STREAM (1 MI.)?  N

19 OIL SAMPLES TAKEN?  N 20 ID NOS. Dogfish Bay - LP6/DOH/JL - 8/5/89 - 1330

21 35 MM PICTURES TAKEN?  N 22 ROLL NO(S) 890DH070H  
~~890DH071H~~

23 EXPOSURE NO. 24 DESCRIPTION 890DH07H

32 - Aerial - mouth & intertidal - looking upstream

15, 16 - Sample # Dogfish Bay - LP6/DOH/JL - 8/5/89 - 1330

17 - Lee Glenn / ADPEG's Jack Lentfer (CNA) at location where oil found / looking towards head of bay.

25 VIDEO FOOTAGE TAKEN?  N 26 CASSETTE NO(S) \_\_\_\_\_

27 DESCRIPTION: \_\_\_\_\_

ACE 9961035

ACE 7380302



ANADROMOUS FISH OBSERVATIONS

	PINK	CHUM	RED	KING	COHO	DOLLY		
28 Aerial		15						
29 Ground		Ø						

30 COMMENTS: 7/21/89 ⇒ Foot surveyed approx. 1/2 mile on ground - (both shores of stream and high tide line of mud flats). No carcasses observed

OIL OBSERVATIONS

EXTENT OF OIL:

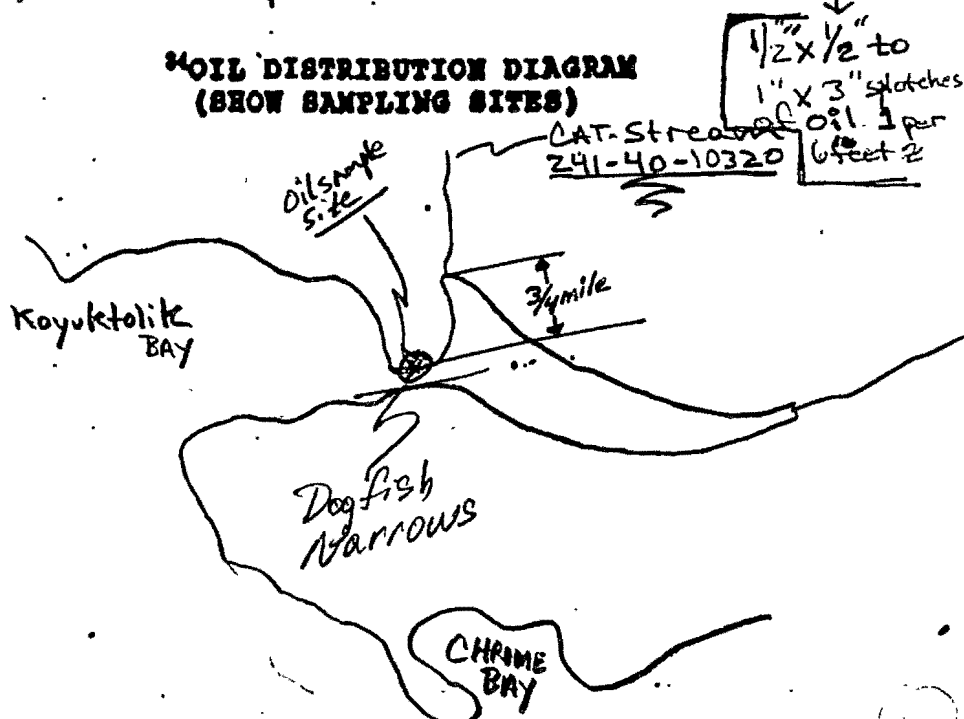
	WITHIN STREAM	OUTSIDE STREAM
31 SURFACE COVERAGE	/	Very minimal - highly sporadic splashes of oil for 50 feet along high tide line
32 SURFACE THICKNESS		~ 3 mm
33 PENETRATION		Surface

Site A / Site X

OIL DISTRIBUTION DIAGRAM (SHOW SAMPLING SITES)

34 PREDOMINANT SUBSTRATE TYPE:

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



35 COMMENTS: "Very" light oiling observed

ACE 7380303

YECO crews were present early in season

→ MAY-JUNE

ACE 9961036

SELDOVIA (A-6) QUADRANGLE  
ALASKA  
1:63,360 SERIES (TOPOGRAPHIC)

880,000 FEET (ZONE 5) R 16 W

BAY

KOYUKTOPIK

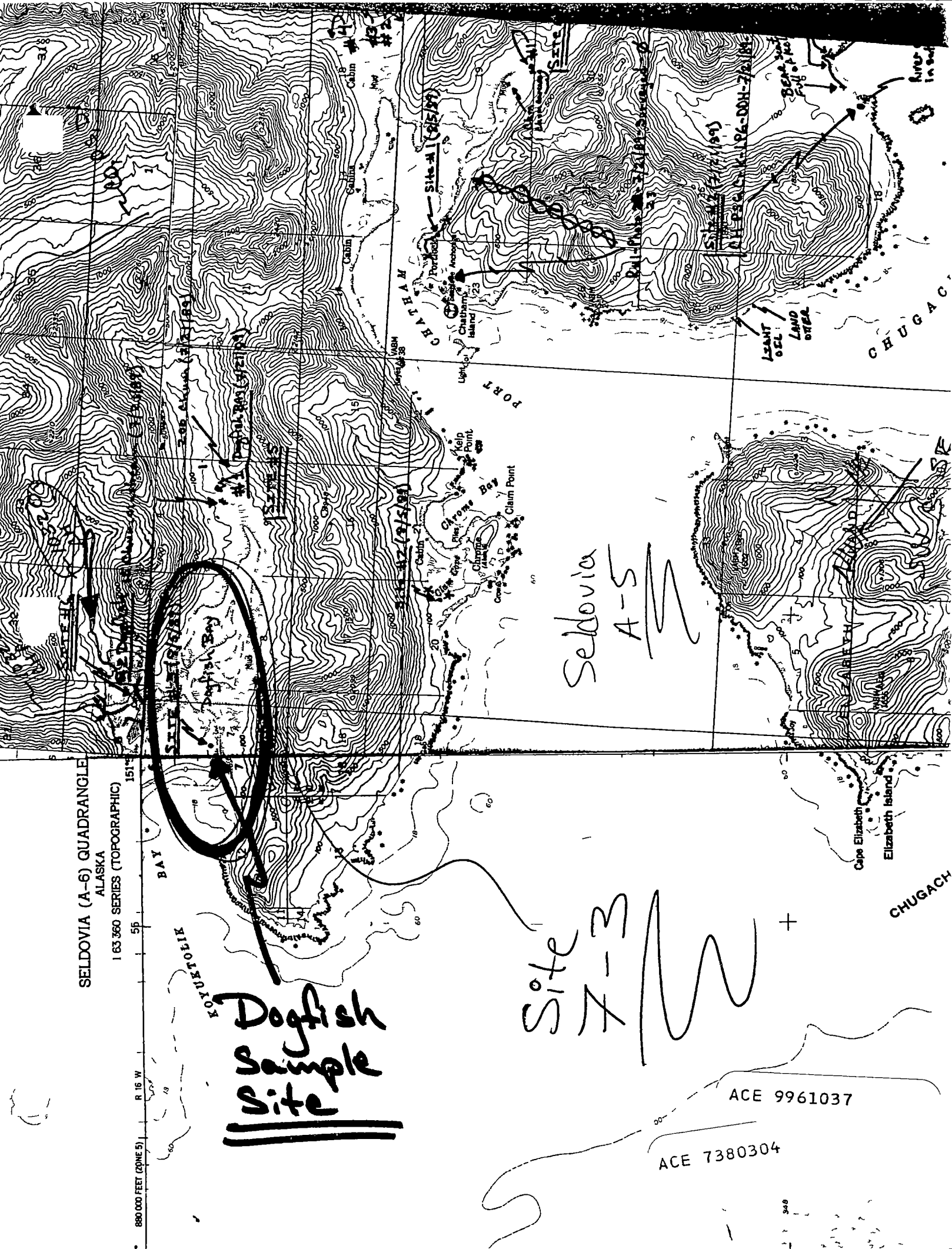
**Doyle's  
Sample  
Site**

Site  
7-3

Seldovia  
A-5

ACE 9961037

ACE 7380304





1989-AFHS

Site 7-2

Chrome Bay - Oil Sample Site

ASC NUMBER: \_\_\_\_\_ SEGMENT NUMBER: CS-01 YR CATALOGED: \_\_\_\_\_  
 LOCATION: Port Chatham, Chrome Bay, Clam Cove, NW  
 TEAM NAME: \_\_\_\_\_ LATITUDE: 59° 12' 48"  
 KODIAK K-UNIT: \_\_\_\_\_ LOCAL STREAM #: \_\_\_\_\_ LONGITUDE: 151° 49' 54"  
 USGS QUADRANGLE: Seldovia A-5 LEGAL: \_\_\_\_\_  
 SHORELINE TYPE: Beach ALL SEGMENTS: \_\_\_\_\_  
 WAVE EXPOSURE: L

ASC NUMBER: \_\_\_\_\_ TEAM RECORDER: Doug Hill (ADF+G)  
 SURVEY TYPE: BS OBSERVERS: Lee Doug (ADF+G)  
 METHOD: Ground Jack Leutter (CAC)  
 DATE: 8/5/89 AGENCY(IES): \_\_\_\_\_  
 START TIME: 1250 PHOTOS TAKEN? \_\_\_\_\_  
 STOP TIME: 1315 Roll #: 8100H14H Frames: 11, 12, 13, 14  
 VIDEO TAKEN?  Tape Number: \_\_\_\_\_  
 Counter Start: \_\_\_\_\_

SAMPLES TAKEN?  
 SAMPLE I.D. NUMBERS: 1. LP6/004-8/5/89-1300 2. 3.  
 4. 5. 6.

	WIDTH m	M2	%	THICK cm	PEN cm	OIL TYPE
	.5	45.5	?	< 2.5	< 5	MS, TB
SITE 5						

Beach Survey

OVERALL OIL IMPACT: L  
 OIL IN STREAM CHANNEL? None Observed  
 OIL ON BEACH WITHIN 50M OF STREAM MOUTH? No

SUBSTRATE

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

SPECIES					
COUNT					

COMMENTS: Sporadic patches of oil found at high tide line - oil 1-2" depth along length of beach (~100 yds) - 4" x 10" patties common. Gravel saturated with oil 1" to 2" penetration. often found clean surface with oil subsurface.  
 Chrome Bay is in Port Chatham. Four Anadromous fish streams are present in Port Chatham --- 242-10-10220, 10230, 10240, 10250.

ACE 9961038

1989-AFHS

Site 7-2

Chrome Bay - Oil sample site

ASC NUMBER: \_\_\_\_\_ SEGMENT NUMBER: CS-01 YR CATALOGED: \_\_\_\_\_  
 LOCATION: Port Chatham, Chrome Bay, Clam Cove, NW  
 TEAM NAME: \_\_\_\_\_ LATITUDE: 59° 12' 48"  
 KODIAK K-UNIT: \_\_\_\_\_ LOCAL STREAM #: \_\_\_\_\_ LONGITUDE: 151° 49' 54"  
 USGS QUADRANGLE: Seldovia A-5 LEGAL: \_\_\_\_\_  
 SHORELINE TYPE: Beach ALL SEGMENTS: \_\_\_\_\_  
 WAVE EXPOSURE: L

ASC NUMBER: \_\_\_\_\_ TEAM RECORDER: Doug Hill (ADF+G)  
 SURVEY TYPE: BS OBSERVERS: Lee Doug (ADF+G)  
 METHOD: Ground Jack Lentfer (CAC)  
 DATE: 8/5/89 AGENCY(IES): \_\_\_\_\_  
 START TIME: 1250 PHOTOS TAKEN? \_\_\_\_\_  
 STOP TIME: 1315 Roll #: 89DDH14H Frames: 11, 12, 13, 14  
 VIDEO TAKEN?  Tape Number: \_\_\_\_\_  
 Counter Start: \_\_\_\_\_

SAMPLES TAKEN?  
 SAMPLE I.D. NUMBERS: 1. LP6/DDH-8/5/89-1200 2. \_\_\_\_\_ 3. \_\_\_\_\_  
 4. \_\_\_\_\_ 5. \_\_\_\_\_ 6. \_\_\_\_\_

	LENGTH m	WIDTH m	M2	%	THICK cm	PEN cm	OIL TYPE
SITE 1	91 ⊕	.5	45.5	?	< 2.5	< 5	MS, TB
SITE 2							
SITE 3							
SITE 4							
SITE 5							

OVERALL OIL IMPACT: L  
 OIL IN STREAM CHANNEL? *None observed* OIL ON BEACH WITHIN 50M OF STREAM MOUTH? *No*

SUBSTRATE

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

SPECIES					
COUNT					

COMMENTS: Sporadic patches of oil found at high tide line - Oil 1-2" depth along length of beach (±100 yds) - 4" x 10" patties common. Gravel saturated with oil 1" to 2" penetration. often found clean surface with oil subsurface.  
 Chrome Bay is on Port Chatham. Four Anadromous fish streams are present in Port Chatham --- 242-10-10220, 10230, 10240, 10250.



FISH HABITAT ASSESSMENT FORM

Chrome Bay → see site 1-3 & 1-4 ⇒ No stream

(However, if anadromous streams exist in Pt. Chatham Chrome Bay is at mouth of Pt. Chatham)

1 REGION: 2 PWS 3 KP, CI 4 K, AP 5 OBSERVER(S) Doug Hill, Lee Glenn Jack Lentfer

6 SITE NO. 7-2 7 AERIAL PHOTO NO.            8 CAT NO. No stream

9 STREAM NAME            10 LAT 59° 12' <sup>48</sup> 00" 11 LONG 151° 49' <sup>54</sup> 00"

12 DATE 8/5/89 13 TIME 1300 14 TIDE: Low slack Flood High slack Ebb

15 CATALOGED ANADROMOUS STREAM? Y 16 ANAD. FISH FOUND? Y

17 OIL FOUND IN STREAM? Y 18 OIL FOUND NEAR STREAM (1 MI.)? Y

19 OIL SAMPLES TAKEN? Y 20 ID NOS Chrome Bay-LPG/DDH-8/5/89-1300

21 35 MM PICTURES TAKEN? Y 22 ROLL NO(S) 89DDH14H

23 EXPOSURE NO.	24 DESCRIPTION
<u>11, 12</u>	<u>(Typical sea current from locally made log boom in vicinity of oil sample)</u>
<u>13, 14</u>	<u>Oil sample found at Chrome Bay</u>

25 VIDEO FOOTAGE TAKEN? Y 26 CASSETTE NO(S)           

27 DESCRIPTION:             
            
            
          

ACE 9961039

ACE 7380299

**ANADROMOUS FISH OBSERVATIONS**

	PINK	CHUM	RED	KING	COHO	DOLLY		
28 Aerial								
29 Ground								

30 **COMMENTS:** Fish observed Approximately 2.5 to 3.5  
to EAST in Pt. Chatham streams (Anadromous streams)

*ten sites*

**OIL OBSERVATIONS**

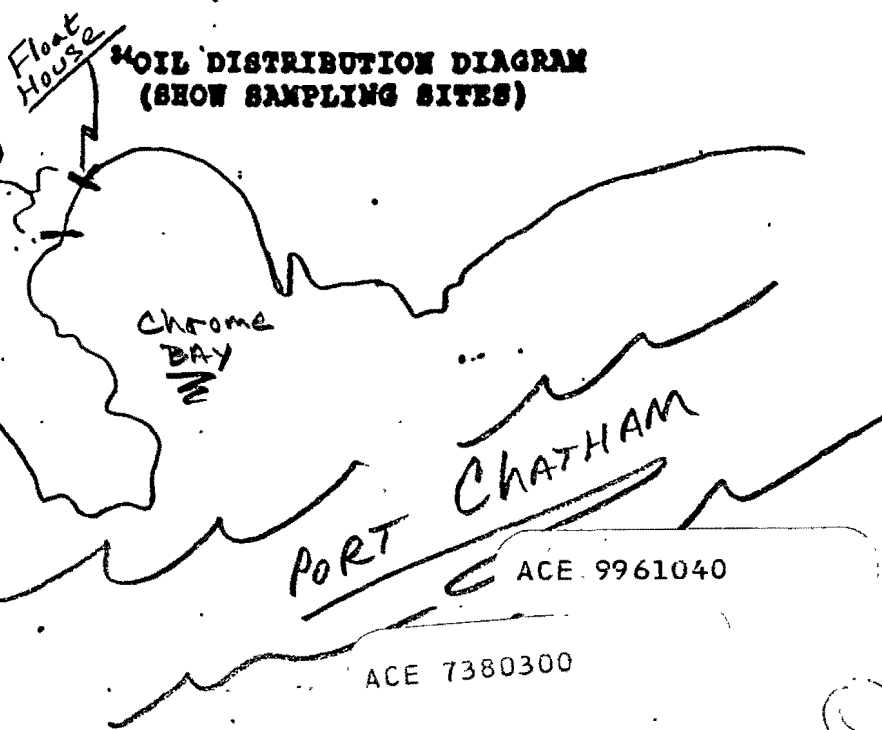
**EXTENT OF OIL:**

	WITHIN STREAM	OUTSIDE STREAM
31 SURFACE COVERAGE	/	Sporadic areas of gravel sand saturated with oil ≈ 100 yds x 1' wide
32 SURFACE THICKNESS		up to 3/4"
33 PENETRATION		≈ 1"-2"

34 **PREDOMINANT SUBSTRATE TYPE:**

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

Foot survey Oil sample  
 ≈ 100 yds  
 Hi-tide line



ACE 9961040  
 ACE 7380300

35 **COMMENTS:** Sporadic oil found at high tide line ⇒ Oil 1" to 2" depth along  
length of beach (≈ 100 yds) - 4" x 10" patches common. Gravel saturated with  
oil 1" to 2" penetration





ADF&G MULTI-ASSESSMENT DATA FORM

1 SURVEY TYPE:  SS DS TS AVS SCHA M4HS PTA 2 REGION: PWS  KP, CI K, AP

METHOD: Aerial  Ground Boat

3 DATE: 5/23/90 18 HIGH TIDE TIMES: 0051 1135B 21 TEAM RECORDER: Doan Hill (ADF&G)  
Tam Schroeder (EXXON)

4 START TIME: 0810 19 HIGH TIDE HTS: 14.3 11.2 22 OBSERVERS: Wes Bucher (ADF&G)  
Rance Morrison (ADF&G)

5 STOP TIME: 1500 17 LOW TIDE TIMES: 0729 11924 23 AGENCY: Rance Morrison (ADF&G)

6 SEGMENT #: WB-2 18 LOW TIDE HTS: -2.9 12.0 24 PHOTOS TAKEN:  N  
9000H11H 00,000  
 Roll #: 9000H10H Frame: 22-23

7 STATION #: \_\_\_\_\_ 19 TIDE HT AT SURVEY: \_\_\_\_\_ 25 VIDEO TAKEN: Y  TAPE#: \_\_\_\_\_

8 K-UNIT: \_\_\_\_\_ Ebb Slack Flood Slack Starts: \_\_\_\_\_ End: \_\_\_\_\_

9 STAT AREA: \_\_\_\_\_ 20 USCG QUAD: Soldovia A-5

10 LAT: \_\_\_\_\_ 11 LONG: \_\_\_\_\_ 26 SAMPLES TAKEN: Y  Number

12 SOURCE: Map Loran 011 \_\_\_\_\_

13 LOCATION: Windy Bay, North Shore Sediment \_\_\_\_\_

14 DESCRIPTION: \_\_\_\_\_ Biological \_\_\_\_\_

Water \_\_\_\_\_

EXTENT OF OIL

	SHORELINE				STREAM			
	L	W	M <sup>2</sup>	%	L	W	M <sup>2</sup>	%
27 SURFACE COVERAGE								
28 SURFACE THICKNESS								
29 PENETRATION								
30 OVERALL OIL IMPACT:	N	VL	L	M	<input checked="" type="radio"/> H			

31 OIL TYPE: Poiled Mousse Tar Asphalt Sticky Stain  
MS, TP, AP, HDR-LOR, SOR, ST

32 OILED DEBRIS?  N

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

34 WAVE EXPOSURE: High  Moderate Low

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

36 CATALOGED ANAD. FISH STREAM: Y N

37 CATALOG #: \_\_\_\_\_

38 STREAM NAME: \_\_\_\_\_

39 OIL IN STREAM BED? Y N

40 OIL ON STREAM BANKS? Y N

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

42 OIL WITHIN 1 MILE OF STREAM? Y N  
 Where: \_\_\_\_\_

43 ANADROMOUS FISH PRESENT? Y N

44 ANADROMOUS FISH OBSERVATION

Species	Aerial	Ground

ACE 9961042

COMMENTS: Day spent with Wes Bucher (ADF&G - Lower Cook Inlet Commercial Fisheries  
Dept. Mgmt. Biologist), Rance Morrison (Assistant Area Mgmt Biologist) and  
Tam Schroeder (Exxon Fisheries consultant). We surveyed all of WB-02, starting  
from the west ~~side of the bay~~ and ending at WB-01. Wes + Rance needed  
to see these beaches so they could make a decision ~~regarding~~ regarding a  
potential Commercial Salmon fishery in Windy Bay.



FRAME(S)	DESCRIPTION
22, 23	Manual pickup - removing pooled oil from among boulders/cobbles → TAR & AP Crew at WB-2B

## 48 OIL DISTRIBUTION DIAGRAM

We soiled at the beaches in terms of the potential for sheering, refloating oil, potential for a salmon net to be dragged across an oiled substrate, etc.

WB-2E has a number of large boulder and cobble patches on it. Beneath the boulder & cobble lies pools<sup>ed</sup> mousse with little visible sediment mixed in. Numerous pockets containing up to a quart of oil can be found easily by turning boulders. Pockets of mousse can also be found in cracks and crevasses in the bedrock. ~~Pockets of oil can be found beneath the cobbles.~~ Tan patties can be found along nearly the entire stretch of WB-02 - as well as pockets of mousse.

The bathtub ring of oil is still present along nearly the entire length of WB-02. This ring is on the rock face that is found in about 70% of WB-02.

-met Russel Kinobe ~~man~~ (ADEL) and work crew. manually removing oil from "Net Beach" (beach in WB-02E). The crew has picked up 2 more super sacks from this beach since my last visit here on 5/21. The ENSCO Atlas crew is working this beach

Cherry  
(see photocopied notes)

= Sample taken  
= Photo frame # and  
shot direction.

ACE 9961043



## Comments cont'd

~~Particular concern~~

We stated particular concern about the oil on WB-2B. This is a beach where the oil could be dragged up by a seine net.

The fishery would occur ~~near~~ in vicinity of the most heavily oiled portions of Windy Bay.

This survey team recommends more pickup in subdivisions WB-2A, B, C, D + E.

We wanted to survey WB-03 but USFWS Eagle constraints restricted us from even walking the beach.

Also, this survey team agrees the WB-09 needs cleaning.



5/23/90

Tom ~~from~~ ~~points~~ ~~a~~ ~~hand~~  
winter <sup>are</sup> ~~trawls~~ ~~being~~ ~~used~~  
to pick up oil. Crew using  
buckets to transport oil sediments  
& mousee to Super sack which  
is then loaded by crane onto  
LCM.

- Wes Bucher has not been on  
an oiled beach as of yet - he  
is the new air fisheries  
Mgmt. Biol (just arrived this  
Spring).

Tom Schroeder is the "Ex" - Lower  
Cook Inlet ADFG Mgmt  
Biol. - he now works for Exxon  
Exxon does not want to see this  
fishery closed - hence I presume  
that if WES writes a memo stating  
that a fishery is at stake -  
we may be able to get some  
good ~~attention~~ cleanup on these  
Windy Bay Beaches.

WB-003 & WB-002 can  
still use some cleanup.  
As there is oil on these  
beach which may stay

5/23/90

have the potential to refloat or  
run when the temperatures of  
summer rise & the sun bakes  
the beaches.

Wes was particularly concerned about  
the easily removable oil on WB-002  
& Subdivision B. Tom Schroeder says  
that this is a beach where some-  
one should possibly make a net  
and the lead could drag the bottom  
and scrape up oil - the oil is  
far enough down in the intertidal  
zone where the oil is accessible  
to seine net. The fishery, when  
it occurs, will most probably  
exist right up to the ADFG  
Regulatory marker (According  
to Tom Schroeder). Hence the  
fishery would exist in close  
vicinity to the most heavily oiled  
portions of this narrow bay.  
Additionally, the head of this  
bay WB-003 continues to  
hold a significant volume of oil  
oil exists which could potentially

5/23/90

reflect on cause sheering  
The beaches in question are  
Main beach, Point Beach, Tom  
Tom beach and Adams  
Beach. Essentially all the  
Shoreline from ~~#~~ Windy Right  
Creek to Center Creek

However, Due to An ~~Eagle~~  
Eagle's nest on the Point of  
WB-003 just above ~~Point~~  
~~Point~~ Point Beach. USFWS  
has put a halt to any kind of  
Activity within a 1/4 mile of the  
nest. Hence - all of the oiled  
beaches in WB-003 are completely  
off limits to any type of Cleanup  
activity.

Additionally, at this time we  
can not even walk the beach  
to survey it. I tried to get  
clearance to land outside of  
the one-quarter mile buffer  
and walk the shoreline. Thus  
far USFWS (Mary Partner has  
said NO - No activity at  
all. Currently there is

5/23/90

heavy logging activity occurring  
on ~~Chugach~~ Native Assoc. land  
in Windy / North West shores - (chainsaw,  
trucks, JCMs, Planes, helos, blasting  
etc). Logging within 1 mile of nest.

79,85 - Comm. Fisheries - in windy

- I have been trying to get a hold  
of someone in USFWS so we can at  
least take the Comish folks on the  
WB-3 beaches - so far have not  
been able to talk to Mary Partner  
(Anchorage, who did the Eagle survey)  
Although, Mary did call me today  
while I was out in Windy.

Susan Machanic talked to Mary -  
Mary said "no we can not walk on  
those beaches." etc

- Tom Schroeder - says Exxon has  
gotten clearance to conduct foot  
surveys in the Sound. He will  
try to see about getting clearance  
for us to survey WB-03.

- Jerry Nugent, USFWS - Homer Rep  
said on phone today he can not  
help us - though he does think it  
silly. but we cant walk



5/23/90 or do manual pickup  
on these beaches.

Spoke w/ Mark Kwada on phone  
today. He says it would be best for  
us to give Tom Schroeder his  
concerns about oiled beaches to  
Tom Schroeder - i.e. tell Tom the  
beaches he feels could use cleaning  
~~to protect~~ beaches with the potential  
to affect Comm. fisheries.

→ We asked me to make a list  
of oiled beaches of which it  
would be a value to clean. He  
will pass this on to Tom.

I believe Tom will willingly  
pass these concerns in whole or  
to his superiors.

Tom, on his own, turned over cobbles  
& boulders stating to us that  
beneath the boulders & cobbles is  
where the reef flat <sup>& shearable</sup> & ruinable  
mussel exists. Tom stated that  
he felt the potential does exist  
in Windy for nets to be oiled.  
As I think there is a good  
chance for shutting down the

5/23/90

Windy Bay Seine Fishery

~~the majority of the oil exists in~~  
a zone where it will be inaccessible  
to seine nets as long as it remains  
on the beach. The ~~oil~~ majority of  
the ~~oil~~ oils is present at  
the upper intertidal zone - on  
rocky bedrock platforms covered  
with sediments, cobbles & boulders.

→ We - says he will not sign  
anything offered by Exxon at this  
time. As I have told him the  
potential for mobile oil when the  
potential warmer, sunny days  
come along, the fishery will not  
occur, if it does until ~~some~~

some time around the 26<sup>th</sup> of July.

This is primarily a pink fishery.  
He says it would obviously be crazy at  
this time to sign anything off  
Future surveys prior to the fishery  
are necessary.

Tom did not press us with  
an Anti-Nonclosure comments.

5/23/90 → Even w/ the toxicity problem  
Tom feels Bio-remed is worth a  
try if it could possibly alleviate  
having problems in the fishery in June  
to come. I told him they haven't  
given the alternatives a good look -  
A fair test.

Mark Kuvvada - Says Exxon is trying  
to get out of having human manure  
on bio-remediated beaches. Says they've  
put balloons etc. (looks like used car  
lots) to keep animals. The SOCA FOC  
Conditions stated that a monitor will  
be present for 24 hrs after Tripol.  
Application

• We flew to WB-009 (Oyster catcher  
Is.) We definitely feel this  
should be cleaned, as do the rest  
of us - Schroeder included.



OILED AREAS WHICH THREATEN THE SALMON FISHERY

Windy Bay

On May 31, Lee Glenn and Doug Hill, ADF&G; Russell Kunibe, ADEC; and Pat Norman, land manager - Port Graham Village Association walked oiled beach segments on the north side of Windy Bay. Several beach segments had been signed off by Exxon and Coast Guard. Mousse was observed bleeding from sediments and beneath boulders and some was re-floating on the incoming tide. These demobilized beaches were unacceptable to the land manager and will reduce the probability of a fishery unless cleaned to a higher standard. Work crews, however, are doing a good job considering the limited technology and work order calling for only manual pickup. Apparently work orders for the demobilized segments will have to be re-issued.

On May 23 and 24, Doug Hill, ADF&G; Wes Bucher, ADF&G, Commercial Fish Management Biologist and Tom Schroeder, Exxon Fishery Consultant surveyed Windy Bay. All were in general agreement on the degree of oiling and problems it presents to having a fishery this year. The season usually starts about July 10th. (See Tom Schroeder's letter of May 23 and 24 for his comments.) They observed a lot of soft mousse, sheens in the tide pools, sections of oiled shoreline that may foul fishing gear and in general agreed that opening Windy Bay is totally contingent upon getting these beaches clean. I will keep you informed on the progress of clean up.

Port Dick

Work has not begun in Port Dick. On May 24 and 25, Doug Hill, Wes Bucher and Tom Schroeder surveyed the oiled shoreline. Areas of concern include the tar mat and buried lens of oil at PD-1 near Slide Creek, the oiled cobble-boulder beach at Mars Cove and Pike Point and beaches within PD-4. See maps by Doug Hill showing areas of primary concern to the fishery and Tom Schroeder letter of May 24 and 25. The fishing season in Port Dick starts around the end of the month (June 25). Clean up should start in Port Dick immediately to clean these beaches prior to opening the fishery.

Sincerely,

*Leland Glenn*  
 Leland Glenn Habitat Division  
 Habitat Biologist

cc: Jim Butler, Kenai Peninsula Borough  
 Wes Bucher, ADF&G, Homer  
 Paul Ruesch, ADF&G, Soldotna  
 Tom Schroeder, Fisheries Consultant to Exxon  
 Pat Norman, Chugach Native Inc.

FILE: \WP50\NORMA\SURVEY90.604

ACE 9961049

RELATES TO MAY 31 MAO FROM

RELATES TO MAY 23 & 24 MAO FROM



Commercial Fisheries Survey - 5/23/90

Foot Survey

Doug Hill (ADF+G - Habitat)

WES Bucher (ADF+G - Comm. fish)

Tom Schroeder (Exxon - Fisheries Rep)

WB-09 - Oystercatcher Island - Pickup Pavement, mousse patches and saturated sediment. Concentrate on cobble/boulder beach on west side of island

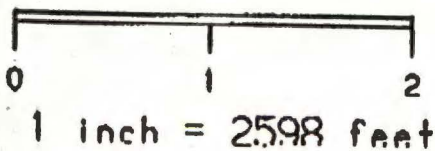
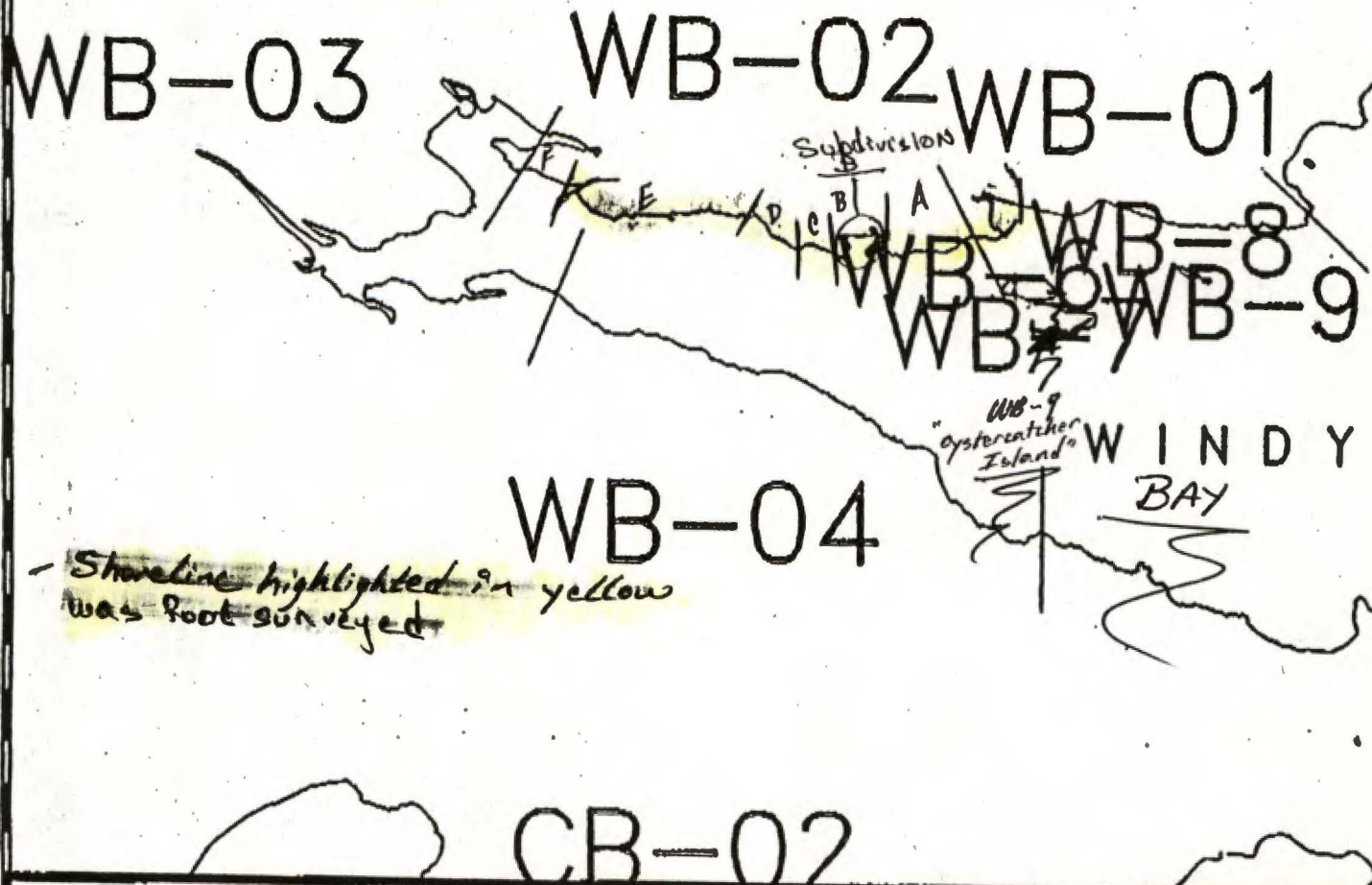
WB-02 - Subdivision B ⇒ Pickup <sup>Asphalt</sup> Mousse patches/saturated sediment (Potential Purse seine site).

Subdivision A - pickup, mousse patches/saturated sediment

Subdivision C - pickup mousse patches/saturated sediment/Asphalt patches

Subdivision D - pickup mousse patches/pavement/saturated sediment

Subdivision E - pickup mousse patches/pavement/saturated sediment



EXXON COMPANY, USA

ACE 9961050

May 21, 1990

Aml used:

/chugach1/morris/super2/ups.aml



NOT A STREAM

ADF&G MULTI-ASSESSMENT DATA FORM

MAYSAP BARREN ISLANDS Ushagat Island

- 1) SURVEY TYPE: BS SS
- 2) REGION: PWS KP, CI K, AP
- 3) METHOD: Aerial Ground Boat
- 4) DATE: 5/6/91
- 5) START TIME: 1220
- 6) STOP TIME: 1415
- 7) SEGMENT #: US-1A
- 8) K-UNIT: \_\_\_\_\_
- 9) LAT: \_\_\_\_\_
- 10) LONG: \_\_\_\_\_
- 11) ASC #: \_\_\_\_\_
- 12) STREAM NAME: Basten Islands, Ushagat Island
- 13) LOCATION: North Shore - East End of Island
- 14) WAVE EXPOSURE: High Moderate Low
- 15) SHORELINE TYPE: Headland Low-lying Rocks Beach Cove Lagoon Marsh
- 16) HIGH TIDE TIME: 0736/0919
- 17) HIGH TIDE HTS: 13.2/13.0
- 18) LOW TIDE TIMES: 1353/1322
- 19) LOW TIDE HTS: 7.1 to 3.0
- 20) TIDE HT AT SURVEY: 6' to 3'
- 21) USCG QUAD: Atogak D-1
- 22) TEAM RECORDER: Steve Ferguson (see note)
- 23) OBSERVERS: Don Hill (ADF&G)
- 24) AGENCY: \_\_\_\_\_
- 25) PHOTOS TAKEN: Y N  
See photolog-over →  
ROLL #: \_\_\_\_\_ FRAMES: \_\_\_\_\_
- 26) VIDEO TAKEN: Y N  
TAPE # \_\_\_\_\_  
START: \_\_\_\_\_ STOP: \_\_\_\_\_
- 27) SAMPLES TAKEN? Y N  
SAMPLE I.D. \_\_\_\_\_

28) EXTENT OF OIL

	LENGTH m	WIDTH m	M2	%	THICK cm	PEN cm	OIL TYPE
SITE 1	30	1	30	<1	<2.5	—	MS, CT, ST
SITE 2	2	1	2	10	<2.5	—	SOR, MS
SITE 3	100	2	200	<1	—	—	CT, ST
SITE 4	3	2	6	20	—	—	CT, ST
SITE 5	30	1	30	1%	<1	—	MS, CT, ST

- 29) OVERALL OIL IMPACT:
  - H = >6m band with ≥50% oil coverage
  - M = >6m band with ≤50% oil coverage or ≥3m to ≤6m with ≥10% oil coverage
  - U = <3m band with >10% oil coverage
  - VL = ≤10% oil coverage regardless of band width
  - N = No oil observed
- 30) OIL IN STREAMBED: Y N N/A
- 31) OIL ON BEACH ADJACENT TO MOUTH: Y N N/A
- 32) SUBSTRATE TYPE (PERCENT):  
Bedrock 95% Boulder 5% Gravel 10% Sand \_\_\_\_\_ Cobble 10% Mud/silt \_\_\_\_\_
- 33) ANADROMOUS FISH PRESENT: Y N
- 34) WILDLIFE OBSERVATION  
Species \_\_\_\_\_ Number \_\_\_\_\_  
Bald Eagle Immature (1)  
See Bio Comments from MAYSAP

35) COMMENTS: The mousse present is found primarily in the cracks of the bedrock. A few patches of MS with sediment were observed beneath & between cobbles & boulders at & near site 2. Site #2 is in vicinity of ADEC & ADF&G transects. This area has cleaned very well since 1989 - In 1989 a significant amount of oil was present on this rocky platform. There is potential for the east end subsurface oil to still be present.

36) PHOTOLOG

FRAME(S)

DESCRIPTION

see photolocation map from MAYSAT  
Rebecca Hoff of NOAA took photos  
Roll # 6-08  
Frame #s 2-6

MAP

see OG map.

I concur with OG map & comments  
with the exception of site #5 which I added  
to MAYSAT map on 5/20/91.  
Nangle & Hill

ACE 9961052

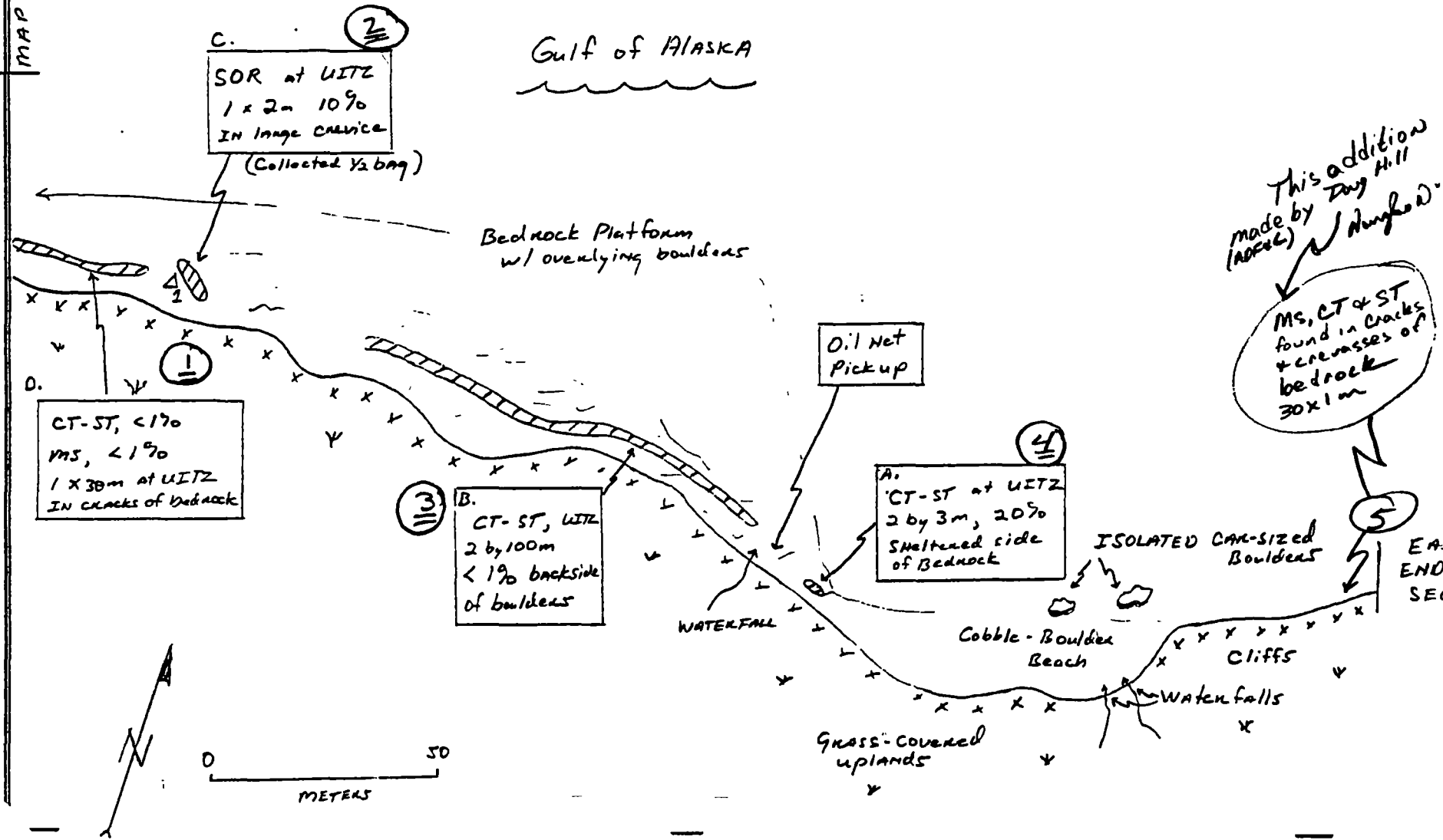


xx - Bedrock  
 yyy - Grassly  
 <img alt="arrow symbol"/> - LOGS  
 ↑ - PHOTOS

SKETCH M1  
 US-1A  
 (MAP 1 of 2)  
 DUNCAN M. FITZ  
 6 MAY 1999  
 1220 - 1415

MAP # 2  
 MAP # 1

Gulf of ALASKA



C. 2  
 SOR at UETZ  
 1 x 2m 10%  
 IN large crevice  
 (Collected 1/2 bag)

D. 1  
 CT-ST, <1%  
 MS, <1%  
 1 x 30m at UETZ  
 IN cracks of bedrock

3 B.  
 CT-ST, UETZ  
 2 by 100m  
 <1% backside  
 of boulders

Oil Net Pickup

4 A.  
 CT-ST at UETZ  
 2 by 3m, 20%  
 Sheltered side  
 of bedrock

This addition  
 made by Doug Hill  
 (AOC&C) 5  
 MS, CT & ST  
 found in cracks  
 & crevasses of  
 bedrock  
 30x1m

ISOLATED CAR-SIZED Boulders

WATERFALL

Cobble-Boulder Beach

Cliffs

Grass-covered uplands

Waterfalls

EAS  
END  
SEG

0 50  
METERS

ACE: 9961053

- 1) SURVEY TYPE: BS SS
- 2) REGION: PWS KP, CI K, AP
- 3) METHOD: Aerial Ground Boat
- 4) DATE: 5/11/91 16) HIGH TIDE TIME: 0036/1319
- 5) START TIME: 0640 17) HIGH TIDE HTS: 17.1/16.0
- 6) STOP TIME: 0720 18) LOW TIDE TIMES: 0706/0709
- 7) SEGMENT #: US-11A 19) LOW TIDE HTS: .3/2.7
- 8) K-UNIT: \_\_\_\_\_ 20) TIDE HT AT SURVEY: 0'
- 9) LAT: \_\_\_\_\_ Ebb Slack Flood Slack
- 10) LONG: \_\_\_\_\_ 21) USCG QUAD: APogak-D-1
- 11) ASC #: NA
- 12) STREAM NAME: NA
- 13) LOCATION: Barren Islands, Ushagat Island, North Side
- 14) WAVE EXPOSURE: High Moderate Low
- 15) SHORELINE TYPE: Headland Low-lying Rocks Beach  
Cove Lagoon Marsh

- 22) TEAM RECORDER: Duncan Fitzgerald (OG), Doug Hill (ADF&G)  
Heather Davis (BIO), Bob Jensen (USCG)
- 23) OBSERVERS: Mike Blenden (USEWS), Rex Coulter (Exxon), Gary Shiginaka (NOA)
- 24) AGENCY: \_\_\_\_\_
- 25) PHOTOS TAKEN: Y (N)  
ROLL #: \_\_\_\_\_ FRAMES: \_\_\_\_\_
- 26) VIDEO TAKEN: Y (N)  
TAPE # \_\_\_\_\_  
START: \_\_\_\_\_ STOP: \_\_\_\_\_
- 27) SAMPLES TAKEN? Y (N)  
SAMPLE I.D. \_\_\_\_\_

28) EXTENT OF OIL

	LENGTH m	WIDTH m	M2	%	THICK cm	PEN cm	OIL TYPE
SITE 1							
SITE 2							
SITE 3							
SITE 4							
SITE 5							

- 29) OVERALL OIL IMPACT: H = >6m band with ≥50% oil coverage  
M = >6m band with ≤50% oil coverage or ≥3m to ≤6m with ≥10% oil coverage  
L = <3m band with >10% oil coverage  
VL = ≤10% oil coverage regardless of band width  
(N) = No oil observed
- 33) ANADROMOUS FISH PRESENT: Y N N/A

- 30) OIL IN STREAMBED: Y N NA
- 31) OIL ON BEACH ADJACENT TO MOUTH: Y N NA
- 32) SUBSTRATE TYPE (PERCENT):  
Bedrock \_\_\_\_\_ Boulder \_\_\_\_\_ Gravel 80% Sand 20% Cobble \_\_\_\_\_ Mud/Silt \_\_\_\_\_
- 34) WILDLIFE OBSERVATION (N)  
Species \_\_\_\_\_ Number \_\_\_\_\_

35) COMMENTS: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_



36) PHOTOLOG

FRAME(S)

DESCRIPTION

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Δ = Sample Taken  
2/ = Photo Frame # and  
Shot Direction

ACE 9961055

Not A stream

ADF&G MULTI-ASSESSMENT DATA FORM

MAYSAP - Barren Island  
USHAGAT Island - 9A

- 1) SURVEY TYPE:  SS
- 2) REGION: PWS  RP, CI K, AP
- 3) METHOD: Aerial  Ground Boat
- 4) DATE: 5/8/91 16) HIGH TIDE TIME: 1013/2311 22) TEAM RECORDER: Steve Ferguson (ADFC)
- 5) START TIME: 1505 17) HIGH TIDE HTS: 12.5/14.4 23) OBSERVERS: Douy Hill (ADFC)
- 6) STOP TIME: 1600 18) LOW TIDE TIMES: 0428/1637 24) AGENCY: \_\_\_\_\_
- 7) SEGMENT #: US-9A 19) LOW TIDE HTS: 6.1/4.2 25) PHOTOS TAKEN:  N  
See photolog - over 2 →  
ROLL #: \_\_\_\_\_ FRAMES: \_\_\_\_\_
- 8) K-UNIT: \_\_\_\_\_ 20) TIDE HT AT SURVEY: 8' to 7'6"
- 9) LAT: \_\_\_\_\_ Ebb Slack Flood Slack 26) VIDEO TAKEN: Y  N
- 10) LONG: \_\_\_\_\_ 21) USCG QUAD: Afognak D-1 TAPE # \_\_\_\_\_
- 11) ASC #: \_\_\_\_\_ START: \_\_\_\_\_ STOP: \_\_\_\_\_
- 12) STREAM NAME: Barren Islands, Ushagat Island 27) SAMPLES TAKEN? Y  N
- 13) LOCATION: North shore, Western 1/2 Island SAMPLE I.D. \_\_\_\_\_
- 14) WAVE EXPOSURE:  High Moderate Low
- 15) SHORELINE TYPE: Headland Low-lying Rocks  Beach  
Cove Lagoon Marsh

28) EXTENT OF OIL

	LENGTH m	WIDTH m	M2	%	THICK cm	PEN cm	OIL TYPE
SITE 1	40	10	400	11	<3.0		CT/ST
SITE 2	10	2	40	11	<3.0		MS
SITE 3	30	2	60	15%	-	-	CT/ST
SITE 4							
SITE 5							

- 29) OVERALL OIL IMPACT: 33) ANADROMOUS FISH PRESENT: Y N N/A
- H = >6m band with ≥50% oil coverage
- M = >6m band with ≤50% oil coverage or ≥3m to <6m with ≥10% oil coverage
- L = <3m band with >10% oil coverage
- VL = ≤10% oil coverage regardless of band width
- N = No oil observed
- 34) WILDLIFE OBSERVATION
- Species \_\_\_\_\_ Number \_\_\_\_\_
- SEE MAYSAP Bio
- Comments

- 30) OIL IN STREAMBED: Y N N/A
- 31) OIL ON BEACH ADJACENT TO MOUTH: Y N N/A
- 32) SUBSTRATE TYPE (PERCENT):
- Bedrock 50% Boulder 50% Gravel \_\_\_\_\_ Sand \_\_\_\_\_ Cobble \_\_\_\_\_ Mud/Silt \_\_\_\_\_

35) COMMENTS: SEE OG & Shoreline Comment sheet of MASAP  
CT/ST/MS in cracks of bedrock and on boulders.





NOT A stream

MAYSAP - barren islands  
Ushagat Island - BA

- 1) SURVEY TYPE:  BS SS
- 2) REGION: PWS  P, CI K, AP
- 3) METHOD: Aerial  Ground Boat
- 4) DATE: 5/9/91 16) HIGH TIDE TIME: 10:3/2311
- 5) START TIME: 1400 17) HIGH TIDE HTS: 12.5/14.4
- 6) STOP TIME: 1505 18) LOW TIDE TIMES: 0428/1637
- 7) SEGMENT #: VS-BA 19) LOW TIDE HTS: 6.1/4.2
- 8) K-UNIT: \_\_\_\_\_ 20) TIDE HT AT SURVEY: 8' to 7.6"
- 9) LAT: \_\_\_\_\_  Slack Flood Slack
- 10) LONG: \_\_\_\_\_ 21) USCG QUAD: Afognak 0-1
- 11) ASC #: \_\_\_\_\_
- 12) ~~STREAM NAME:~~ Barren Islands - VSHAG
- 13) LOCATION: North Shore - West 1/2 Island
- 14) WAVE EXPOSURE: High Moderate Low
- 15) SHORELINE TYPE: Headland Low-lying Rocks  Beach  
Cove Lagoon Marsh

- 22) TEAM RECORDER: Steve Ferguson (ADEG)
- 23) OBSERVERS: Doug Hill (ADF&G)
- 24) AGENCY: \_\_\_\_\_
- 25) PHOTOS TAKEN:  N  
See photo log - over →  
ROLL #: \_\_\_\_\_ FRAMES: \_\_\_\_\_
- 26) VIDEO TAKEN: Y   
TAPE # \_\_\_\_\_  
START: \_\_\_\_\_ STOP: \_\_\_\_\_
- 27) SAMPLES TAKEN? Y   
SAMPLE I.D. \_\_\_\_\_

28) EXTENT OF OIL

	LENGTH m	WIDTH m	M2	%	THICK cm	PEN cm	OIL TYPE
SITE 1	25	2	50	<1%	2.5		TB, ST, CT
SITE 2	30	2-4		<1			ST, CT (oo logs)
SITE 3							
SITE 4							
SITE 5							

- 29) OVERALL OIL IMPACT: H = >6m band with ≥50% oil coverage  
M = >6m band with ≤ 50% oil coverage or ≥3m to ≤6m with ≥10% oil coverage  
L = <3m band with >10% oil coverage  
 VI = ≤10% oil coverage regardless of band width  
N = No oil observed
- 33) ANADROMOUS FISH PRESENT: Y N N/A

- 30) OIL IN STREAMBED: Y N
- 31) OIL ON BEACH ADJACENT TO MOUTH: Y N N/A
- 32) SUBSTRATE TYPE (PERCENT):  
Bedrock \_\_\_\_\_ Boulder \_\_\_\_\_ Gravel 40% Sand \_\_\_\_\_ Cobble 60% Mud/Silt \_\_\_\_\_

- 34) WILDLIFE OBSERVATION  
Species \_\_\_\_\_ Number \_\_\_\_\_  
SEE MAYSAP BIO  
Comments

35) COMMENTS: The 2x 150m <sup>subsurface</sup> band of SOB observed on past surveys was not observed on MAYSAP. It would be good to look at this area in July to explore for the previously identified subsurface band of oil - hard to believe that it's gone.



FRAME(S)

DESCRIPTION

See MAYSAP photo location map  
 Rebecca Hoff (NDAP) took photos  
 Roll # 6-09  
 Frame # 5-B

MAP

See MAYSAP OG MAP

I concur w/map

Douglas D Hill

ACE 9961059

▲  
2/

■

Sample Taken  
 Photo Frame # and  
 Shot Direction

Not A stream

- 1) SURVEY TYPE:  SS
- 2) REGION: PWS  KP,CS K,AP
- 3) METHOD: Aerial  Ground Boat
- 4) DATE: 5/6/91
- 5) START TIME: 1605
- 6) STOP TIME: 1700
- 7) SEGMENT #: US-SB
- 8) K-UNIT: \_\_\_\_\_
- 9) LAT: \_\_\_\_\_
- 10) LONG: \_\_\_\_\_
- 11) ASC #: \_\_\_\_\_
- 12) STREAM NAME: Barren Islands, Ushagat Island
- 13) LOCATION: North shore, East 1/2 of Island
- 14) WAVE EXPOSURE:  High Moderate Low
- 15) SHORELINE TYPE: Headland Low-lying Rocks  Beach  
Cove Lagoon Marsh
- 16) HIGH TIDE TIME: 0736/1919
- 17) HIGH TIDE HTS: 13.2/13.0
- 18) LOW TIDE TIMES: 1353/14.22
- 19) LOW TIDE HTS: 7.1/3.6
- 20) TIDE HT AT SURVEY: 4'2" to 4'6"
- 21) USCG QUAD: Alognek D-1
- 22) TEAM RECORDER: <sup>Duncan Fitzgerald (OC)</sup> Steve Ferguson (ADFC)
- 23) OBSERVERS: Doug Hill (ADF&G)
- 24) AGENCY: \_\_\_\_\_
- 25) PHOTOS TAKEN:  Y  N  
See photo log - over →  
ROLL #: \_\_\_\_\_ FRAMES: \_\_\_\_\_
- 26) VIDEO TAKEN:  Y  N  
TAPE # \_\_\_\_\_  
START: \_\_\_\_\_ STOP: \_\_\_\_\_
- 27) SAMPLES TAKEN?  Y  N  
SAMPLE I.D. \_\_\_\_\_

28) EXTENT OF OIL

	LENGTH m	WIDTH m	M2	%	THICK cm	PEN cm	OIL TYPE
SITE 1							
SITE 2	No oil observed.						
SITE 3							
SITE 4							
SITE 5							

- 29) OVERALL OIL IMPACT:
  - H = >6m band with ≥50% oil coverage
  - M = >6m band with ≤50% oil coverage or ≥3m to ≤6m with ≥10% oil coverage
  - L = <3m band with >10% oil coverage
  - VL = ≤10% oil coverage regardless of band width
  - = No oil observed
- 30) OIL IN STREAMBED:  Y  N
- 31) OIL ON BEACH ADJACENT TO MOUTH:  Y  N <sup>N/A</sup>  N/A
- 32) SUBSTRATE TYPE (PERCENT):
  - Bedrock \_\_\_\_\_ Boulder \_\_\_\_\_ Gravel 40% Sand \_\_\_\_\_ Cobble 60% Mud/Silt \_\_\_\_\_
- 33) ANADROMOUS FISH PRESENT:  Y  N  N/A
- 34) WILDLIFE OBSERVATION
  - Species \_\_\_\_\_ Number \_\_\_\_\_
  - SEE MAYSAP BIO
  - Comments \_\_\_\_\_

35) COMMENTS: Subsurface oil removal occurred here in 1990 -  
 No oil observed on 1991 MAYSAP. MAYSAP 1991:  
 Numerous pits dug. Potential for subsurface to still be present exists.



36) PHOTOLOG

FRAME(S)

DESCRIPTION

See MAYSAP Photo location MAP- Rebecca Hoff (NOAA)  
took photos.  
Roll # - 6-08  
Frame # -> R-10

ACE 9961061

• Sample Taken  
• Photo Frame # and  
Shot Direction

NOT A stream

- 1) SURVEY TYPE:  HP  SS
- 2) REGION: PWS  KP, CI  K, AP
- 3) METHOD: Aerial  Ground  Boat
- 4) DATE: 5/8/91 16) HIGH TIDE TIME: 1013/2311
- 5) START TIME: 1315 17) HIGH TIDE HTS: 12.5/14.4
- 6) STOP TIME: 1345 18) LOW TIDE TIMES: 0428/1637
- 7) SEGMENT #: US-7A 19) LOW TIDE HTS: 6.1/4.2
- 8) K-UNIT: \_\_\_\_\_ 20) TIDE HT AT SURVEY: 8' to 7.6
- 9) LAT: \_\_\_\_\_  Ebb  Slack  Flood  Slack
- 10) LONG: \_\_\_\_\_ 21) USCG QUAD: Afognak D-1
- 11) ASC #: \_\_\_\_\_
- 12) ~~STREAM NAME:~~ Barren Islands-Ushagat Island
- 13) LOCATION: North Shore, Western 1/2 Island
- 14) WAVE EXPOSURE:  High  Moderate  Low
- 15) SHORELINE TYPE:  Headland  Low-lying Rocks  Beach

- 22) TEAM RECORDER: Duncan Fitzgerald (ADEC)
- 23) OBSERVERS: Doug Hill (ADF&G)
- 24) AGENCY: \_\_\_\_\_
- 25) PHOTOS TAKEN:  Y  N  
See photolog-over →  
ROLL #: \_\_\_\_\_ FRAMES: \_\_\_\_\_
- 26) VIDEO TAKEN: \_\_\_\_\_  
TAPE # \_\_\_\_\_  
START: \_\_\_\_\_ STOP: \_\_\_\_\_
- 27) SAMPLES TAKEN?  Y  N  
SAMPLE I.D. \_\_\_\_\_

28) EXTENT OF OIL

	LENGTH m	WIDTH m	M2	%	THICK cm	PEN cm	OIL TYPE
SITE 1	20	3	60	<1%	<1	-	MS/SOR/CT/ST
SITE 2	10	1	10	<1	-	-	CT/ST
SITE 3							
SITE 4							
SITE 5							

- 29) OVERALL OIL IMPACT:
  - H = >6m band with ≥50% oil coverage
  - M = >6m band with ≤50% oil coverage or ≥3m to ≤6m with ≥10% oil coverage
  - L = <3m band with >10% oil coverage
  - VI = ≤10% oil coverage regardless of band width
  - N = No oil observed
- 30) OIL IN STREAMBED:  Y  N N/A
- 31) OIL ON BEACH ADJACENT TO MOUTH:  Y  N N/A
- 32) SUBSTRATE TYPE (PERCENT):  
Bedrock \_\_\_\_\_ Boulder 20% Gravel 40% Sand \_\_\_\_\_ Cobble 40% Mud/Silt \_\_\_\_\_
- 33) ANADROMOUS FISH PRESENT:  Y  N N/A
- 34) WILDLIFE OBSERVATION  
Species \_\_\_\_\_ Number \_\_\_\_\_  
SEE MAYSAN BIO  
Comments \_\_\_\_\_

35) COMMENTS: MS/SOR was found in cracks of bedrock.

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36) PHOTOLOG

FRAME(S)

DESCRIPTION

see MAYSAP photolocation May - Rebecca Hoff (NOAA)  
took photo

Roll #: 6-09

Frame #: 1-4

MAP

SEE MAYSAP OR MAP  
I connect w/map

Douglas D'Neil

ACE 9961063

Sample Taken  
Photo Frame # and  
Shot Direction

A:EDDATFO  
April 3, 1991

NOT A Stream

MAYSAP - BARREN ISLANDS  
USNAGAT Island - SA

- 1) SURVEY TYPE:  BS SS
- 2) REGION: PWS  KP, CI K, AP
- 3) METHOD: Aerial  Ground Boat
- 4) DATE: 5/6/91 16) HIGH TIDE TIME: 0736/1919 22) TEAM RECORDER: Duncan Fitzgerald (OG)  
Steve Ferguson (ADFC)
- 5) START TIME: 1535 17) HIGH TIDE HTS: 13.2/13.0 23) OBSERVERS: Doug Hill (ADF&G)
- 6) STOP TIME: 1600 18) LOW TIDE TIMES: 1353/1422 24) AGENCY: \_\_\_\_\_
- 7) SEGMENT #: US-SA 19) LOW TIDE HTS: 7.1/3.6 25) PHOTOS TAKEN: Y  N
- 8) K-UNIT: \_\_\_\_\_ 20) TIDE HT AT SURVEY: 4'2 to 4'6" ROLL #: \_\_\_\_\_ FRAMES: \_\_\_\_\_
- 9) LAT: \_\_\_\_\_ Ebb Slack  Flood Slack 26) VIDEO TAKEN: Y  N
- 10) LONG: \_\_\_\_\_ 21) USCG QUAD: Afonak D-1 TAPE # \_\_\_\_\_
- 11) ASC #: \_\_\_\_\_ START: \_\_\_\_\_ STOP: \_\_\_\_\_
- 12) STREAM NAME: Barren Islands, Usnagat Island 27) SAMPLES TAKEN? Y  N
- 13) LOCATION: North Shore, East 1/2 of Island SAMPLE I.D. \_\_\_\_\_
- 14) WAVE EXPOSURE:  High Moderate Low
- 15) SHORELINE TYPE:  Headland  Low-lying Rocks  Beach  
Cove  Lagoon Marsh

28) EXTENT OF OIL

	LENGTH m	WIDTH m	M2	%	THICK cm	PEN cm	OIL TYPE
SITE 1							
SITE 2	No oil observed						
SITE 3							
SITE 4							
SITE 5							

- 29) OVERALL OIL IMPACT:
  - H = >6m band with ≥50% oil coverage
  - M = >6m band with ≤50% oil coverage or ≥3m to ≤6m with ≥10% oil coverage
  - L = <3m band with >10% oil coverage
  - VL = ≤10% oil coverage regardless of band width
  - N = No oil observed
- 30) OIL IN STREAMBED: Y  N N/A
- 31) OIL ON BEACH ADJACENT TO MOUTH: Y  N N/A
- 32) SUBSTRATE TYPE (PERCENT):
  - Bedrock \_\_\_\_\_ Boulder \_\_\_\_\_ Gravel 40% Sand \_\_\_\_\_ Cobble 60% Mud/Silt \_\_\_\_\_
- 33) ANADROMOUS FISH PRESENT: Y  N N/A
- 34) WILDLIFE OBSERVATION
  - Species \_\_\_\_\_ Number \_\_\_\_\_
  - See MAYSAP BTO
  - Comments

35) COMMENTS: No oil observed.  
Numerous waterfowl in lake  
Work occurred on this high energy beach in 1990  
Pits dug - no oil observed





-- NOT A stream

- 1) SURVEY TYPE:  BS SS
- 2) REGION: PWS  KP, CI R, AP
- 3) METHOD: Aerial  Ground Boat
- 4) DATE: 5/6/91 16) HIGH TIDE TIME: 0736/0919 22) TEAM RECORDER: Steve Ferguson (AD&C)
- 5) START TIME: 1430 17) HIGH TIDE HTS: 13.2/13.0 23) OBSERVERS: Douy Hill (ADF&G)
- 6) STOP TIME: 1515 18) LOW TIDE TIMES: 1353/1422 24) AGENCY: \_\_\_\_\_
- 7) SEGMENT #: US-2A 19) LOW TIDE HTS: 7.1/3.6 25) PHOTOS TAKEN:  Y  N
- 8) K-UNIT: \_\_\_\_\_ 20) TIDE HT AT SURVEY: 3' to 4' 2 ROLL #: see photolog "over" FRAMES: \_\_\_\_\_
- 9) LAT: \_\_\_\_\_  EDD Slack Flood Slack 26) VIDEO TAKEN:  Y  N
- 10) LONG: \_\_\_\_\_ 21) USCG QUAD: Afognak D-1 TAPE # \_\_\_\_\_
- 11) ASC #: \_\_\_\_\_ START: \_\_\_\_\_ STOP: \_\_\_\_\_
- 12) STREAM NAME: BARREN Islands, Ushagat Island 27) SAMPLES TAKEN?  Y  N
- 13) LOCATION: North Shore, East end of Island SAMPLE I.D. \_\_\_\_\_
- 14) WAVE EXPOSURE:  HIGH Moderate Low
- 15) SHORELINE TYPE: Headland  Low-lying Rocks  Beach

Cove Lagoon Marsh

28) EXTENT OF OIL

	LENGTH m	WIDTH m	M2	%	THICK cm	PEN cm	OIL TYPE
SITE 1	<u>Minor found on logs</u>						<u>CT/ST</u>
SITE 2							
SITE 3							
SITE 4							
SITE 5							

- 29) OVERALL OIL IMPACT:
  - H = >6m band with ≥50% oil coverage
  - M = >6m band with ≤50% oil coverage or ≥3m to ≤6m with ≥10% oil coverage
  - L = <3m band with >10% oil coverage
  - VL = ≤10% oil coverage regardless of band width
  - = No oil observed
- 30) OIL IN STREAMBED:  Y  N N/A
- 31) OIL ON BEACH ADJACENT TO MOUTH:  Y  N N/A
- 32) SUBSTRATE TYPE (PERCENT):
  - Bedrock 10% Boulder 5% Gravel 40% Sand \_\_\_\_\_ Cobble 40% Mud/Silt \_\_\_\_\_
- 33) ANADROMOUS FISH PRESENT:  Y  N N/A
- 34) WILDLIFE OBSERVATION
  - Species \_\_\_\_\_ Number \_\_\_\_\_
  - SEE MAYSAP BIO
  - Comments

35) COMMENTS: Numerous pits were dug on the east end of this segment (cobble area) to explore for buried oil identified on previous surveys - No oil observed CT & ST observed on drift wood. The team decided it unnecessary to survey the west end of the segment



36) PHOTOLOG

FRAME(S)

DESCRIPTION

See photo location MAP from MAYSAP  
Rebecca Hoff (NOAA) took photos  
Roll # 6-08  
Frame # 1-7

MAP

See MAYSAP map - I concur  
with OG map + comments

Douglas D'Kill

ACE 9961067

- 1) SURVEY TYPE: BS SS k 2) REGION: PWS KP, CI K, AP  
 3) METHOD: Aerial Ground Boat  
 4) DATE: 5/7/91 16) HIGH TIDE TIME: 0842/2220 22) TEAM RECORDER: Duncan Fitzgerald/06, Steve Ferguson/ADEI  
 5) START TIME: 1405 17) HIGH TIDE HTS: 12.5/13.4 23) OBSERVERS: Pony Hill  
 6) STOP TIME: 1510 18) LOW TIDE TIMES: 0310/1530 24) AGENCY: \_\_\_\_\_  
 7) SEGMENT #: WA-2A 19) LOW TIDE HTS: 7.0/4.1 25) PHOTOS TAKEN: SEE photos on opposite side of page  
 8) K-UNIT: \_\_\_\_\_ 20) TIDE HT AT SURVEY: 6'to 4'2" ROLL #: \_\_\_\_\_ FRAMES: \_\_\_\_\_  
 9) LAT: \_\_\_\_\_ Ebb Slack Flood Slack 26) VIDEO TAKEN: Y (N)  
 10) LONG: \_\_\_\_\_ 21) USCG QUAD: Atogak D-1 TAPE # \_\_\_\_\_  
 11) ASC #: \_\_\_\_\_ START: \_\_\_\_\_ STOP: \_\_\_\_\_  
 12) ~~STREET NAME~~ BARREN Islands, West Amatule Island 27) SAMPLES TAKEN? Y (N)  
 13) LOCATION: Northwest Bay/ Cove of Island SAMPLE I.D. \_\_\_\_\_  
 14) WAVE EXPOSURE: High Moderate Low  
 15) SHORELINE TYPE: Headland Low-lying Rocks Beach  
Cove Lagoon Marsh

28) EXTENT OF OIL

	LENGTH m	WIDTH m	M2	%	THICK cm	PEN cm	OIL TYPE
SITE 1	35	2	70	<1%	—	—	MS/SOR
SITE 2	30	2 to 5			5	Found at depth of 20-70cm	MS
SITE 3	—	—	.5	<1%	<1.5	—	SOR
SITE 4	—	—	.25	<1%	<1	—	MS
SITE 5							

- 29) OVERALL OIL IMPACT:  
 H = >6m band with ≥50% oil coverage  
 M = >6m band with ≤50% oil coverage or ≥3m to ≤6m with ≥10% oil coverage  
(L) = <3m band with >10% oil coverage  
 VL = ≤10% oil coverage regardless of band width  
 N = No oil observed

- 33) ANADROMOUS FISH PRESENT Y N N/A  
 34) WILDLIFE OBSERVATION  
 Species Fox Sparrow Number (1)

- 30) OIL IN STREAMBED: Y N  
 31) OIL ON BEACH ADJACENT TO MOUTH: Y N N/A  
 32) SUBSTRATE TYPE (PERCENT):  
 Bedrock \_\_\_\_\_ Boulder \_\_\_\_\_ Gravel 40% Sand 20% Cobble 40% Mud/Silt \_\_\_\_\_

35) COMMENTS: Most of the oil was observed at the north end of the segment. The oil exist primarily as a 2-5m x 30m subsurface layer of mousse. The layer is 2-5cm thick and buried by 20 to 70cm of Granule/sand. MS/SOR was found interstitially in/on bedrock & boulders. Oil exists at the SWTZ + UETZ.



36) PHOTOLOG

FRAME(S)

DESCRIPTION

See MAYSAP photolocation Map, Rebecca Hoff of NOAA  
took the photos. Roll # 6-08, Frames 15-18.

MAP

SEE MAYSAP OG map ~ the map concurs with  
the ADEL Rep. + my observations.

Not A Stream

- 1) SURVEY TYPE:  BS SS
- 2) REGION: PWS  KP, CI K, AP
- 3) METHOD: Aerial  Ground Boat
- 4) DATE: 5/7/91
- 16) HIGH TIDE TIME: 0842/2220
- 22) TEAM RECORDER: <sup>Duncan Fitzgerald (06)</sup> Steve Ferguson (ADFC)
- 5) START TIME: 1300
- 17) HIGH TIDE HTS: 12.5/13.4
- 23) OBSERVERS: Doug Hill (ADF&G)
- 6) STOP TIME: 1345
- 18) LOW TIDE TIMES: 0310/1530
- 24) AGENCY: \_\_\_\_\_
- 7) SEGMENT #: W/A-1A
- 19) LOW TIDE HTS: 7.0/4.1
- 25) PHOTOS TAKEN:  Y  N  
See Photolog on Back
- 8) K-UNIT: \_\_\_\_\_
- 20) TIDE HT AT SURVEY: 6' to 4' 2"
- ROLL #: \_\_\_\_\_ FRAMES: \_\_\_\_\_
- 9) LAT: \_\_\_\_\_
- Eb Slack Flood Slack
- 26) VIDEO TAKEN:  Y  N
- 10) LONG: \_\_\_\_\_
- 21) USCG QUAD: AFDGNAK D-1
- TAPE # \_\_\_\_\_
- 11) ASC #: \_\_\_\_\_
- START: \_\_\_\_\_ STOP: \_\_\_\_\_
- 12) ~~SEPARATION~~: Barren Islands, West Amatuli Island
- 27) SAMPLES TAKEN?  Y  N
- 13) LOCATION: SE portion of Island, Cobble/gravel beach directly west of Amatuli cove
- SAMPLE I.D. \_\_\_\_\_
- 14) WAVE EXPOSURE:  High Moderate Low
- 15) SHORELINE TYPE: Headland Low-lying Rocks  Beach  
Cove Lagoon Marsh

28) EXTENT OF OIL

	LENGTH m	WIDTH m	M2	%	THICK cm	PEN cm	OIL TYPE
SITE 1							
SITE 2							
SITE 3	No oil observed						
SITE 4							
SITE 5							

- 29) OVERALL OIL IMPACT:
  - H = >6m band with ≥50% oil coverage
  - M = >6m band with ≤ 50% oil coverage or ≥3m to ≤6m with ≥10% oil coverage
  - L = <3m band with >10% oil coverage
  - VL = ≤10% oil coverage regardless of band width
  - No oil observed
- 30) OIL IN STREAMBED:  Y  N N/A
- 31) OIL ON BEACH ADJACENT TO MOUTH:  Y  N N/A
- 32) SUBSTRATE TYPE (PERCENT):  
Bedrock 20% Boulder \_\_\_\_\_ Gravel 40% Sand \_\_\_\_\_ Cobble 40% Mud/Silt \_\_\_\_\_
- 33) ANADROMOUS FISH PRESENT:  Y  N N/A
- 34) WILDLIFE OBSERVATION
 

Species	Number
Bald Eagles	2A, 1I
Systercatchers	(1)
Hermit Thrush	(1)

35) COMMENTS: A lot of drift was observed on West portion of this beach - Numerous buoys. No oil was observed.



36) PHOTOLOG

FRAME(S)

DESCRIPTION

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- See Photo Location Map of MAYSAP Survey  
Rebecca Hoff of NOAA took photos  
Roll 6-08, Frames # 12-14

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ACE 9961071

▲  
2/      ■      Sample Taken  
         ■      Photo Frame # and  
              Shot Direction

MAYSAP - Barren Island  
Ushagat Isl

- 1) SURVEY TYPE: BB SS  
 2) REGION: PWS KP, CI K, AP  
 3) METHOD: Aerial Ground Boat  
 4) DATE: 5/11/91 16) HIGH TIDE TIME: 0036/1319  
 5) START TIME: 0750 17) HIGH TIDE HTS: 17.1'/16.0'  
 6) STOP TIME: 0820 18) LOW TIDE TIMES: 0706/0709  
 7) SEGMENT #: US-12 19) LOW TIDE HTS: .3'/2.7'  
 8) K-UNIT: \_\_\_\_\_ 20) TIDE HT AT SURVEY: .8' to 1.0'  
 9) LAT: \_\_\_\_\_ Ebb Slack Flood Slack 26) VIDEO TAKEN: Y (N)  
 10) LONG: \_\_\_\_\_ 21) USCG QUAD: Afognak D-1 ROLL #: \_\_\_\_\_ FRAMES: \_\_\_\_\_  
 11) ASC #: \_\_\_\_\_ NA START: \_\_\_\_\_ STOP: \_\_\_\_\_  
 12) STREAM NAME: \_\_\_\_\_ NA 27) SAMPLES TAKEN? Y (N)  
 13) LOCATION: Barren Islands, Ushagat Island, South Side SAMPLE I.D. \_\_\_\_\_  
 14) WAVE EXPOSURE: High Moderate Low  
 15) SHORELINE TYPE: Headland Low-lying Rocks Beach  
 Cove Lagoon Marsh

28) EXTENT OF OIL

	LENGTH m	WIDTH m	HT	%	THICK cm	PEN cm	OIL TYPE
SITE 1			<u>25cm<sup>2</sup></u>				<u>ST on log</u>
SITE 2							
SITE 3							
SITE 4							
SITE 5							

- 29) OVERALL OIL IMPACT: H = >6m band with ≥50% oil coverage  
 M = >6m band with < 50% oil coverage or ≥3m to <6m with ≥10% oil coverage  
 L = <3m band with >10% oil coverage  
VL = <10% oil coverage regardless of band width  
N = No oil observed  
 33) ANADROMOUS FISH PRESENT: Y N  
 34) WILDLIFE OBSERVATION  
 Species \_\_\_\_\_ Number \_\_\_\_\_  
See MAYSAP BIO  
 Comments \_\_\_\_\_

- 30) OIL IN STREAMBED: Y N NA  
 31) OIL ON BEACH ADJACENT TO MOUTH: Y N NA  
 32) SUBSTRATE TYPE (PERCENT):  
 Bedrock \_\_\_\_\_ Boulder \_\_\_\_\_ Gravel 80% Sand 20% Cobble \_\_\_\_\_ Mud/Silt \_\_\_\_\_

35) COMMENTS: STAIN on log at SUTZ





ADF&G MULTI-ASSESSMENT DATA FORM

- 1) SURVEY TYPE: **BS** SS MAYSAP 2) REGION: PWS **KP, CI** K, AP
- 3) METHOD: Aerial **Ground** Boat Seldovia Boole  
*correction*
- 4) DATE: 5-7-91 16) HIGH TIDE TIME: \_\_\_\_\_ 22) TEAM RECORDER: L. Glenn
- 5) START TIME: 15:20 17) HIGH TIDE HTS: \_\_\_\_\_ 23) OBSERVERS: D. Hill
- 6) STOP TIME: 17:15 18) LOW TIDE TIMES: 3:34 3:09 24) AGENCY: AD.F&G
- 7) SEGMENT #: PE-001 19) LOW TIDE HTS: \_\_\_\_\_ 25) PHOTOS TAKEN:  Y  N  
P 91 DDH 001 H
- 8) K-UNIT: \_\_\_\_\_ 20) TIDE HT AT SURVEY: Low ROLL #: \_\_\_\_\_ FRAMES: \_\_\_\_\_
- 9) LAT: 59 06 0 Ebb **Slack** Flood Slack 26) VIDEO TAKEN:  Y  N
- 10) LONG: 151 40 0 21) USCG QUAD: \_\_\_\_\_ TAPE # V-91-LPG-031-H
- 11) ASC #: None START: \_\_\_\_\_ STOP: 0506
- 12) STREAM NAME: None 27) SAMPLES TAKEN?  Y  N
- 13) LOCATION: Peril Island - S.E. Gulf of Alaska SAMPLE I.D. \_\_\_\_\_
- 14) WAVE EXPOSURE: **High** Moderate Low \_\_\_\_\_
- 15) SHORELINE TYPE: **Headland** Low-lying Rocks Beach \_\_\_\_\_  
Cove Lagoon Marsh \_\_\_\_\_

28) EXTENT OF OIL

	LENGTH m	WIDTH m	M2	%	THICK cm	PEN cm	OIL TYPE
SITE 1							
SITE 2							
SITE 3							
SITE 4							
SITE 5							

- 29) OVERALL OIL IMPACT: 33) ANADROMOUS FISH PRESENT:  Y  N
- H = >6m band with ≥50% oil coverage
- M = >6m band with ≤ 50% oil coverage or ≥3m to ≤6m with ≥10% oil coverage
- L = <3m band with >10% oil coverage
- VL = ≤10% oil coverage regardless of band width
- N = No oil observed
- 34) WILDLIFE OBSERVATION
- Species \_\_\_\_\_ Number \_\_\_\_\_
- About 30 Steller Sea
- Lions hauled out -

- 30) OIL IN STREAMBED:  Y  N N/A
- 31) OIL ON BEACH ADJACENT TO MOUTH:  Y  N N/A
- 32) SUBSTRATE TYPE (PERCENT):
- Bedrock \_\_\_\_\_ Boulder 10 Gravel 35 Sand 20 Cobble 35 Mud/Silt \_\_\_\_\_

35) COMMENTS: See sketch map prepared by the O.G. - Mr Dunkin.  
Ran about 6 or 8 sections off the haulout and the remainder  
settled back to normal during the 1.5 hr survey.  
See my comments on the MAYSAP report - attached.  
This beach needs to be cleaned.





BEACH SURVEY

ANDERSEN BEACH

ADF&G MULTI-ASSESSMENT DATA FORM

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

2 REGION: PWS  KP, CI  K, AP

METHOD: Aerial  Ground  Boat

3 DATE: 6/15/90 18 HIGH TIDE TIMES: 0646 12004 21 TEAM RECORDER: Doug Hill

4 START TIME: 1250 19 HIGH TIDE HTS: 9.7 10.6 22 OBSERVERS: Lee Glenn

5 STOP TIME: 1330 17 LOW TIDE TIMES: 0055 11311 23 AGENCY: ADF&G

6 SEGMENT #: 18 LOW TIDE HTS: 3.4 10.7 24 PHOTOS TAKEN:  N

7 STATION #: 19 TIDE HT AT SURVEY: Roll #: 700HISH Frame: 376

8 K-UNIT: UNIT #10  Slack  Flood  Slack

9 STAT AREA: KC-901 20 USCG QUAD: Seldovia A-5

10 LAT: 59 9 54 11 LONG: 151 41 43

12 SOURCE: Map Loran

13 LOCATION: Chugach Passage, Stream/valley, just north

DESCRIPTION: Perl Island, Andersen Beach

Streams.

MAD + OIL

Site # JTS TP AP ST OR  
ACE 9961075

EXTENT OF OIL

	SHORELINE				STREAM			
	L	W	M <sup>2</sup>	%	L	W	M <sup>2</sup>	%
27 SURFACE COVERAGE								
28 SURFACE THICKNESS								
29 PENETRATION								
30 OVERALL OIL IMPACT:	N	VL	L	<input checked="" type="radio"/> M	H			
31 OIL TYPE:	Pooled	<input checked="" type="radio"/> House	<input checked="" type="radio"/> Tar	<input checked="" type="radio"/> Asphalt	<input checked="" type="radio"/> Sticky	<input checked="" type="radio"/> Slush		
32 OILED DEBRIS?	Y	<input checked="" type="radio"/> M <sup>s</sup>	<input checked="" type="radio"/> TP	<input checked="" type="radio"/> AP	<input checked="" type="radio"/> SI	<input checked="" type="radio"/> WP		
33 SHORELINE TYPE:	Headland	<input checked="" type="radio"/> Low-lying Rocks	<input checked="" type="radio"/> Beach		Cove			
		Lagoon	Marsh					
34 WAVE EXPOSURE:	<input checked="" type="radio"/> High	Moderate	Low					
35 SUBSTRATE TYPE:	Bedrock	Boulder	Cobble					
	Gravel	15	Sand	8.5	Mud/silt			

36 CATALOGED ANAD. FISH SREAM?  N

37 CATALOG #: 242-10-10200

38 STREAM NAME: Andersen Beach

39 OIL IN STREAM BED? Y  N

40 OIL ON STREAM BANKS? Y  N

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

42 OIL WITHIN 1 MILE OF STREAM?  Y  N  
~ 200m  
Where: Point to west of stream

43 ANADROMOUS FISH PRESENT? Y ? N

44 ANADROMOUS FISH OBSERVATION

Species	Aerial	Ground

COMMENTS: Needs to have oil removed/A sufficient quantity of oil exists to warrant the presence of a cleanup crew. This has been reported to ADEC.



BEACH SURVEY

ANDERSEN BEACH

ADF&G MULTI-ASSESSMENT DATA FORM

1 SURVEY TYPE:  SS  DS  TS  AVS  SCHA  MMS  PTA

2 REGION: PWS  KP, CI  K, AP

METHOD: Aerial  Ground  Boat

3 DATE: 6/15/90

18 HIGH TIDE TIMES: 0646 12004

21 TEAM RECORDER: Doug Hill

4 START TIME: 1250

19 HIGH TIDE HTS: 9.7 10.6

22 OBSERVERS: Lee Glenin

5 STOP TIME: 1330

17 LOW TIDE TIMES: 0055 11311

23 AGENCY: ADF&G

6 SEGMENT #:

16 LOW TIDE HTS: 3.4 10.7

24 PHOTOS TAKEN:  N

7 STATION #:

19 TIDE HT AT SURVEY:

Roll #: 900HISH Frame: 326

8 K-UNIT: Unit #10

Slack  Flood  Slack

25 VIDEO TAKEN: Y  TAPE#:

KL-901

9 STAT AREA:

20 USCG QUAD: Seldovia A-5

Starts: \_\_\_\_\_ Ends: \_\_\_\_\_

10 LAT: 59 9 54

11 LONG: 151 41 43

26 SAMPLES TAKEN? Y  Number

12 SOURCE: Map  Loran

Oil \_\_\_\_\_

13 LOCATION: Chugach Passage, stream/valley just north of

Sediment \_\_\_\_\_

DESCRIPTION: Perl Island, Andersen Beach

Biological \_\_\_\_\_

EXTENT OF OIL

Water \_\_\_\_\_

	SHORELINE				STREAM			
	L	W	M <sup>2</sup>	%	L	W	M <sup>2</sup>	%
27 SURFACE COVERAGE								
28 SURFACE THICKNESS								
29 PENETRATION								

36 CATALOGED ANAD. FISH SREAM?  N

37 CATALOG #: 242-10-10200

38 STREAM NAME: Andersen Beach

39 OIL IN STREAM BED? Y

40 OIL ON STREAM BANKS? Y

30 OVERALL OIL IMPACT: N VL L  H

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

31 OIL TYPE: Pooled   House  Tar  Asphalt  Sticky  Slush

42 OIL WITHIN 1 MILE OF STREAM?  N

32 OILED DEBRIS? Y  MS TP AP SJ WP

Where: Point to west of stream

33 SHORELINE TYPE: Headland   Low-lying Rocks  Beach  Cove

43 ANADROMOUS FISH PRESENT? Y ? N

34 WAVE EXPOSURE:  High  Moderate  Low

44 ANADROMOUS FISH OBSERVATION

35 SUBSTRATE TYPE: Bedrock \_\_\_\_\_ Boulder \_\_\_\_\_ Cobble \_\_\_\_\_

Gravel 15 Sand 8.5 Mud/silt \_\_\_\_\_

Species Aerial Ground

Species	Aerial	Ground

COMMENTS: Needs to have oil removed/A sufficient quantity of oil exists to warrant the presence of a cleanup crew. This has been reported to ADEC.

FRAME(S)	DESCRIPTION
3, 4	<i>Tannat - puddling like mouse with</i>
5	<i>Heavy coat of black oil on rocks, pooled mouse &amp; Littorina trivellia</i>
6	<i>One of the patches of heavily oil</i>

48 OIL DISTRIBUTION DIAGRAM

= Sample taken  
 = Photo frame # and  
 shot direction.

ACE 9961077







Not A stream

Chugach Bay Photo-  
Transect  
Site

ADF&G MULTI-ASSESSMENT DATA FORM

1 SURVEY TYPE:  SS  DS  TS  AVS  SCHA  MMS  PTA

2 REGION: PWS  KP, CI  K, AP

METHOD: Aerial  Ground  Boat

3 DATE: 4/26/90

4 START TIME: 0735

5 STOP TIME: 0804

6 SEGMENT #: CB-3B <sup>CB003 B</sup>

7 STATION #: \_\_\_\_\_

8 K-UNIT: \_\_\_\_\_

9 STAT AREA: \_\_\_\_\_

10 LAT: \_\_\_\_\_

11 LONG: \_\_\_\_\_

12 SOURCE: Map  Loran

13 LOCATION: Chugach Bay, North Shore, "NORTH BEACH"

14 DESCRIPTION: \_\_\_\_\_

15 HIGH TIDE TIMES: 0238 / 1545

16 HIGH TIDE HTS: -3.7 / 1.5

17 LOW TIDE TIMES: 0915 / 1215

18 LOW TIDE HTS: 15.2 / 12.2

19 TIDE HT AT SURVEY: \_\_\_\_\_

20 USCG QUAD: Seldovia A-5

21 TEAM RECORDER: Doug Hill / Susan McLane

22 OBSERVERS: Lee Ghan

23 AGENCY: ADF&G

24 PHOTOS TAKEN:  Y  N

25 VIDEO TAKEN: Y  N  TAPE#: \_\_\_\_\_

26 SAMPLES TAKEN? Y  N  Number

Oil: \_\_\_\_\_

Sediment: \_\_\_\_\_

Biological: \_\_\_\_\_

Water: \_\_\_\_\_

EXTENT OF OIL

	SHORELINE				STREAM			
	L	W	M <sup>2</sup>	%	L	W	M <sup>2</sup>	%
27 SURFACE COVERAGE								
28 SURFACE THICKNESS								
29 PENETRATION								
30 OVERALL OIL IMPACT:	N	VL	L	<input checked="" type="radio"/> H				
31 OIL TYPE:	<input checked="" type="radio"/> Pooled	<input checked="" type="radio"/> Mousse	<input checked="" type="radio"/> Tar	Asphalt	<input checked="" type="radio"/> Sticky	<input checked="" type="radio"/> Stain		
32 OILED DEBRIS?	Y	N	<del>MS TP ST</del>		<input checked="" type="radio"/> SOR	<input checked="" type="radio"/> OP		
33 SHORELINE TYPE:	Headland	Low-lying	Rocks	<input checked="" type="radio"/> Beach	Cove			
		Lagoon	Marsh					
34 WAVE EXPOSURE:	<input checked="" type="radio"/> High	<input checked="" type="radio"/> Moderate	Low					
35 SUBSTRATE TYPE:	Bedrock	Boulder	<input checked="" type="checkbox"/>	Cobble	<input checked="" type="checkbox"/>			
	Gravel	<input checked="" type="checkbox"/>	Sand	<input checked="" type="checkbox"/>	Mud/silt	<input checked="" type="checkbox"/>		

36 CATALOGED ANAD. FISH STREAM? Y  N

37 CATALOG #: ~~BEACH CB003~~

38 STREAM NAME: \_\_\_\_\_

39 OIL IN STREAM BED? Y  N  NA

40 OIL ON STREAM BANKS? Y  N  NA

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

42 OIL WITHIN 1 MILE OF STREAM? Y  N  NA

Where: \_\_\_\_\_

43 ANADROMOUS FISH PRESENT? Y  N  NA

44 ANADROMOUS FISH OBSERVATION

Species	Aerial	Ground

ACE 9961080

COMMENTS: Photo transect site.  
This beach is within one mile of an anadromous fish stream. The "Solvent" under the guise of Fertilizer (Enipal) was applied in August of 1989. 40 to 50 pound rocks have migrated on the East end of the transect. Photo from Dec. 10<sup>th</sup> 1989 shows rocks at the "0" meter point further apart. Upper end of transect => 2-3" tar mats (Brown shiny surface on interstitial oil). Numerous pockets of mousse beneath rocks at lower end of transect - pure flowing mousse beneath rocks.



No stream

Douglas Reef - Commfish Kodiak

ASC NUMBER: \_\_\_\_\_ SEGMENT NUMBER: \_\_\_\_\_ YR CATALOGED: \_\_\_\_\_  
 LOCATION: Kamishak Bay, Douglas Reef  
 ISLAND NAME: \_\_\_\_\_ LOCAL STREAM: / \_\_\_\_\_  
 KODIAK K-UNIT: \_\_\_\_\_  
 USGS QUADRANGLE: \_\_\_\_\_  
 SHORELINE TYPE: Beachy low lying rocks ALL SEGMENTS: \_\_\_\_\_  
 WAVE EXPOSURE: High

ASC NUMBER: \_\_\_\_\_  
 SURVEY TYPE: BS  
 METHOD: FOOT  
 DATE: 4/21/89  
 START TIME: 1525  
 STOP TIME: \_\_\_\_\_

Beach  
 yellow stickers  
 are notes to  
 myself.

TEAM RECORDER: \_\_\_\_\_  
 OBSERVERS: B. Barnett  
 K. Brennan  
 D. Kaplan  
 AGENCY(IES): ADF&G/Kodiak-Commfish  
 PHOTOS TAKEN? ?  
 Roll #: \_\_\_\_\_ Frames: \_\_\_\_\_  
 VIDEO TAKEN? ? Tape Number: \_\_\_\_\_  
 Counter Start: \_\_\_\_\_  
 2. \_\_\_\_\_ 3. \_\_\_\_\_  
 5. \_\_\_\_\_ 6. \_\_\_\_\_

SAMPLES TAKEN? ?  
 SAMPLE I.D. NUMBER: \_\_\_\_\_

	LENGTH	DEPTH	THICK cm	PEN cm	OIL TYPE
SITE 1	←	ACE 9961081	—	—	MS
SITE 2					
SITE 3					
SITE 4					
SITE 5					

OVERALL OIL IMPACT: M

OIL IN STREAM CHANNEL? \_\_\_\_\_  
SUBSTRATE

Bedrock	Granule
Boulder	Sand
Cobble	Silt
Pebble	Veget.

OIL ON BEACH WITHIN 50M OF STREAM MOUTH? \_\_\_\_\_

SPECIES	SEALS	Oyster-catchers	Auklets	BALD EAGLES	...
COUNT	200	50	500	2	

REMARKS: Moderate concentrations of mousse on north side of reef; All tide pools on north side had 5-10% volm. mousse. 35-50 gallons of mousse on rocks and pools on north side of island, South end of Island not heavily impacted.

LAT & Long reflect general area.  
 Bald eagles were observed with nest.  
 Kodiak ADF&G-Commfish may have more info concerning Kamishak Bay.

ACE 9961082



No stream

Douglas Reef - Commfish Kodiak

ASC NUMBER: \_\_\_\_\_ SEGMENT NUMBER: \_\_\_\_\_ YR CATALOGED: \_\_\_\_\_  
 LOCATION: Kamishak Bay, Douglas Reef  
 ISLAND NAME: \_\_\_\_\_ LOCAL STREAM: /  
 KODIAK K-UNIT: \_\_\_\_\_  
 USGS QUADRANGLE: \_\_\_\_\_  
 SHORELINE TYPE: Beachy low Lying Rocks ALL SEGMENTS: \_\_\_\_\_  
 WAVE EXPOSURE: High

ASC NUMBER: \_\_\_\_\_  
 SURVEY TYPE: BS  
 METHOD: FOOT  
 DATE: 4/21/89  
 START TIME: 1525  
 STOP TIME: \_\_\_\_\_

TEAM RECORDER: \_\_\_\_\_  
 OBSERVERS: B. Barnett  
 K. Brennan  
 D. Kaplan  
 AGENCY(IES): ADF&G/Kodiak-Commfish  
 PHOTOS TAKEN? ?  
 Roll #: \_\_\_\_\_ Frames: \_\_\_\_\_  
 VIDEO TAKEN? ? Tape Number: \_\_\_\_\_  
 Counter Start: \_\_\_\_\_

SAMPLES TAKEN? ?

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

	LENGTH m	WIDTH m	H2	t	THICK cm	PEN cm	OIL TYPE
SITE 1	—	—	—	—	—	—	MS
SITE 2							
SITE 3							
SITE 4							
SITE 5							

VERALL OIL IMPACT: M

OIL IN STREAM CHANNEL? \_\_\_\_\_

OIL ON BEACH WITHIN 50M OF STREAM MOUTH? \_\_\_\_\_

SUBSTRATE

Bedrock	Granule
Boulder	Sand
Cobble	Silt
Pebble	Veget.

SPECIES	SEALS	Oyster-catchers	Auklets	BALD EAGLES	...
COUNT	200	50	500	2	

REMARKS: Moderate concentrations of mousse on north side of reef; All tide pools on north side had 5-10% volm. mousse. 35-50 gallons of mousse on rocks and pools on north side of island, South end of Island not heavily impacted.

LAT & Long reflect general area.  
 Bald eagles were observed with nest.

Kodiak ADF&G-Commfish may have more info concerning Kamishak Bay.



No stream

CAPE Douglas - Commercial Kodiak

ASC NUMBER: \_\_\_\_\_ SEGMENT NUMBER: \_\_\_\_\_ YR CATALOGED: \_\_\_\_\_  
 LOCATION: CAPE Douglas  
 LOCAL STREAM #: \_\_\_\_\_  
 USGS QUADRANGLE: AFOUNAK D-4, D-5  
 SHORELINE TYPE: BEACH, Low Lying Rocks  
 WAVE EXPOSURE: High  
 LATITUDE: ?  
 LONGITUDE: ?  
 LEGAL: \_\_\_\_\_

SC NUMBER: \_\_\_\_\_ TEAM RECORDER: B. Barrett  
 SURVEY TYPE: BS OBSERVERS: K. Brennan  
 METHOD: FOOT DATE: 4/21/89  
 START TIME: 1545 AGENCY (IES): ADF&G / Commercial / Kodiak  
 TOP TIME: \_\_\_\_\_ PHOTOS TAKEN? ?  
 Roll #: ? Frames: ?  
 VIDEO TAKEN? ? Tape Number: ?  
 Counter Start: \_\_\_\_\_

SAMPLES TAKEN? ?  
 SAMPLE I.D. NUMBERS: 1. \_\_\_\_\_ 2. \_\_\_\_\_ 3. \_\_\_\_\_  
 4. \_\_\_\_\_ 5. \_\_\_\_\_ 6. \_\_\_\_\_

	LENGTH m	WIDTH m	H2	t	THICK cm	PEN cm	OIL TYPE
SITE 1	—	—	—	—	—	—	MS
SITE 2							
SITE 3							
SITE 4							
SITE 5							

VERALL OIL IMPACT: ←

OIL IN STREAM CHANNEL? — OIL ON BEACH WITHIN 50M OF STREAM MOUTH? —

SUBSTRATE

Bedrock	Granule
Boulder	Sand
Cobble	Silt
Pebble	Veget.

SPECIES	SEALS				
COUNT	4				

REMARKS: Mousse at high tide line.  
 - 1-1.5 gallons of oil per 50 yds  
 - Unable to ascertain exact location from crews field notes - Contact ADF&G, Commercial fisheries in Kodiak for more detailed info  
 - USFWS report of 5/9/89 stated that 70 sea lions were counted at Cape Douglas

ACE 9961083



NO oar stream

# Augustine Island - South

SC NUMBER: \_\_\_\_\_ SEGMENT NUMBER: \_\_\_\_\_ YR CATALOGED: \_\_\_\_\_  
 LOCATION: Augustine Island, South Shore  
 CAN NAME: \_\_\_\_\_ LATITUDE: \_\_\_\_\_  
 JULIAK K-UNIT: \_\_\_\_\_ LOCAL STREAM #: \_\_\_\_\_ LONGITUDE: \_\_\_\_\_  
 SGS QUADRANGLE: Iliamna B-2 LEGAL: \_\_\_\_\_  
 SHORELINE TYPE: Beach ALL SEGMENTS: \_\_\_\_\_  
 AVE EXPOSURE: High

DDNL-10/9/91

SC NUMBER: \_\_\_\_\_  
 SURVEY TYPE: BS  
 METHOD: FOOT  
 DATE: 6/12/89  
 START TIME: 1200  
 STOP TIME: \_\_\_\_\_

TEAM RECORDER: AL DAVIS  
 OBSERVERS: RICK RANDALL  
 AGENCY(IES): ADFG  
 PHOTOS TAKEN? \_\_\_\_\_  
 Roll #: \_\_\_\_\_ Frames: \_\_\_\_\_  
 VIDEO TAKEN? \_\_\_\_\_ Tape Number: \_\_\_\_\_  
 Counter Start: \_\_\_\_\_

SAMPLES TAKEN?  
 SAMPLE I.D. NUMBERS: 1. \_\_\_\_\_ 2. \_\_\_\_\_ 3. \_\_\_\_\_  
 4. \_\_\_\_\_ 5. \_\_\_\_\_ 6. \_\_\_\_\_

	LENGTH m	WIDTH m	H2	t	THICK cm	PEI cm	OIL TYPE
SITE 1	<del>4289</del>	—	—	—	—	—	None
SITE 2							
SITE 3							
SITE 4							
SITE 5							

OVERALL OIL IMPACT: NONE

OIL IN STREAM CHANNEL? \_\_\_\_\_

OIL ON BEACH WITHIN 50M OF STREAM MOUTH? \_\_\_\_\_

SUBSTRATE

Bedrock	Granule
Boulder	Sand
Cobble	Silt
Pebble	Veget.

SPECIES	—				
COUNT	—				

REMARKS: Site # 1 on Al Davis' MAP - Homer Files  
 Survey ran from VABM "South Augustine" to the east for 3 miles (4289 meters)  
 Contact survey crew for further info



NO stream

Augustine Is - SE

SC NUMBER: \_\_\_\_\_ SEGMENT NUMBER: \_\_\_\_\_ YR CATALOGED: \_\_\_\_\_  
 LOCATION: Augustine Island, SE shore, Section 6  
 SAN NAME: \_\_\_\_\_ LATITUDE: \_\_\_\_\_  
 BOAT K-UNIT: \_\_\_\_\_ LOCAL STREAM #: \_\_\_\_\_ LONGITUDE: \_\_\_\_\_  
 USGS QUADRANGLE: Iliamna B-2 LEGAL: \_\_\_\_\_  
 SHORELINE TYPE: Beach ALL SEGMENTS: \_\_\_\_\_  
 WAVE EXPOSURE: High

SC NUMBER: \_\_\_\_\_  
 SURVEY TYPE: BS  
 METHOD: Foot  
 DATE: 6/12/89  
 START TIME: 1330  
 STOP TIME: \_\_\_\_\_

TEAM RECORDER: AL DAVIS  
 OBSERVERS: Rick Randall 2094-10/9/91  
 AGENCY(IES): ADF46  
 PHOTOS TAKEN? \_\_\_\_\_  
 Roll #: \_\_\_\_\_ Frames: \_\_\_\_\_  
 VIDEO TAKEN? \_\_\_\_\_ Tape Number: \_\_\_\_\_  
 Counter start: \_\_\_\_\_

SAMPLES TAKEN? \_\_\_\_\_  
 SAMPLE I.D. NUMBERS: 1. \_\_\_\_\_ 2. \_\_\_\_\_ 3. \_\_\_\_\_  
 4. \_\_\_\_\_ 5. \_\_\_\_\_ 6. \_\_\_\_\_

	LENGTH m	WIDTH m	H2	1	THICK cm	PEN cm	OIL TYPE
SITE 1 <del>1</del> 2	/	/	/	/	/	/	None
SITE 2							
SITE 3							
SITE 4							
SITE 5							

OVERALL OIL IMPACT: None

OIL IN STREAM CHANNEL? \_\_\_\_\_

OIL ON BEACH WITHIN 50M OF STREAM MOUTH? \_\_\_\_\_

SUBSTRATE

Bedrock	Granule
Boulder	Sand
Cobble	Silt
Pebble	Veget.

SPECIES	/				
COUNT	/				

Site # 2 on AL DAVIS'S MAP - Homer Files  
 COMMENTS: Surveyed 402 meters of beach  
 Contact Survey crew for further info



No stream

# Augustine Island (sec. 29)

SC NUMBER: _____	SEGMENT NUMBER: _____	YR CATALOGED: _____
LOCATION: Augustine Island, Eastside - ENE VABM mound	LOCAL STREAM #: _____	LATITUDE: 57 22 30
DAM NAME: _____	ALL SEGMENTS: _____	LONGITUDE: 153 20 04
UAIK K-UNIT: _____		LEGAL: _____
SGS QUADRANGLE: Iliamna B-2		
SHORELINE TYPE: Beach		
AVERAGE EXPOSURE: High		

ADP-10/9/91

SC NUMBER: \_\_\_\_\_  
 SURVEY TYPE: BS  
 METHOD: FOOT  
 DATE: 6/12/89  
 START TIME: 1400  
 STOP TIME: \_\_\_\_\_

TEAM RECORDER: AL DAVIS  
 OBSERVERS: Rance Morrison

AGENCY(IES): ADF46

PHOTOS TAKEN?   
 Roll #: \_\_\_\_\_ Frames: \_\_\_\_\_  
 VIDEO TAKEN?  Tape Number: \_\_\_\_\_  
 Counter start: \_\_\_\_\_

SAMPLES TAKEN?

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

	LENGTH m	WIDTH m	H2	↓	THICK cm	PHI cm	OIL TYPE
SITE 1/3	402"	—	—	—	—	—	MS
SITE 2							
SITE 3							
SITE 4							
SITE 5							

OVERALL OIL IMPACT: VL

OIL IN STREAM CHANNEL? \_\_\_\_\_

OIL ON BEACH WITHIN 50M OF STREAM MOUTH? \_\_\_\_\_

SUBSTRATE

Bedrock	Granule
Boulder	Sand
Cobble	Silt
Pebble	Veget.

SPECIES					
COUNT					

REMARKS: Site # 3 on AL DAVIS' MAP - Homer Files  
 Contact ~~ADP~~ for further info  
 Survey crew  
 SEC. 29



~~NO~~ No stream NE Augustine Island (SEC. 18, 20)

SC NUMBER: \_\_\_\_\_ SEGMENT NUMBER: \_\_\_\_\_ YR CATALOGED: \_\_\_\_\_  
 LOCATION: Augustine Island  
 COMMON NAME: \_\_\_\_\_  
 ADIAC K-UNIT: \_\_\_\_\_ LOCAL STREAM #: \_\_\_\_\_  
 U.S. QUADRANGLE: Hammond B-2  
 SHORELINE TYPE: Beach LEGAL: \_\_\_\_\_  
 AVERAGE EXPOSURE: High ALL SEGMENTS: \_\_\_\_\_  
ADP 10/9/91

SC NUMBER: \_\_\_\_\_ TEAM RECORDER: AL Davis  
 SURVEY TYPE: \_\_\_\_\_ OBSERVERS: Rance Morrison  
 METHOD: BS  
 DATE: 6/12/89 AGENCY(IES): ADF+G  
 START TIME: 4:30 PHOTOS TAKEN?   
 END TIME: \_\_\_\_\_ Roll #: \_\_\_\_\_ Frames: \_\_\_\_\_  
 VIDEO TAKEN?  Tape Number: \_\_\_\_\_  
 Counter Start: \_\_\_\_\_  
 SAMPLES TAKEN?   
 SAMPLE I.D. NUMBERS: 1. \_\_\_\_\_ 2. \_\_\_\_\_ 3. \_\_\_\_\_  
 4. \_\_\_\_\_ 5. \_\_\_\_\_ 6. \_\_\_\_\_

	LENGTH m	WIDTH m	H2	t	THICK cm	PEN cm	OIL TYPE
SITE # 4	3622"	—	—	—	—	—	MS
SITE 2							
SITE 3							
SITE 4							
SITE 5							

OVERALL OIL IMPACT:    
 OIL IN STREAM CHANNEL? \_\_\_\_\_ OIL ON BEACH WITHIN 50M OF STREAM MOUTH? \_\_\_\_\_  
 SUBSTRATE:

Bedrock	Granule
Boulder	Sand
Cobble	Silt
Pebble	Veget.

SPECIES	—				
COUNT					

COMMENTS: Site # 4 on AL Davis's map - Homer Files  
 Sec. 18, 20  
 Mousse on North end of beach (1 per 1' for 50 yds)  
 " " South end of beach (1 per 3' for 25 yds)  
~~Contact Survey crew for further info~~



NO Stream

Augustine Isl - N

SC NUMBER: \_\_\_\_\_ SEGMENT NUMBER: \_\_\_\_\_ YR CATALOGED: \_\_\_\_\_  
 LOCATION: Augustine Island, North point, 1/2 S VABM Burr  
 SAM NAME: \_\_\_\_\_ LOCAL STREAM #1: \_\_\_\_\_  
 AVIAK K-UNIT: \_\_\_\_\_ LOCAL STREAM #1: \_\_\_\_\_  
 SGS QUADRANGLE: Iliamna B-2  
 SHORELINE TYPE: BS  
 WAVE EXPOSURE: Low  
 ALL SEGMENTS: \_\_\_\_\_

LATITUDE: 59 24.48  
 LONGITUDE: 153 24 24  
 LEGAL: \_\_\_\_\_

DDP 10/9/91

C NUMBER: \_\_\_\_\_  
 SURVEY TYPE: BS  
 METHOD: Foot  
 DATE: 6/12/89  
 START TIME: 1500  
 STOP TIME: \_\_\_\_\_

TEAM RECORDER: Al Davis  
 OBSERVERS: Rick Randall

AGENCY(IES): ADFG

PHOTOS TAKEN?   
 Roll #: \_\_\_\_\_ Frames: \_\_\_\_\_  
 VIDEO TAKEN?  Tape Number: \_\_\_\_\_  
 Counter Start: \_\_\_\_\_

SAMPLES TAKEN?   
 SAMPLE I.D. NUMBER: 1. \_\_\_\_\_  
 2. \_\_\_\_\_  
 3. \_\_\_\_\_  
 4. \_\_\_\_\_  
 5. \_\_\_\_\_  
 6. \_\_\_\_\_

	LENGTH m	WIDTH m	H2	t	THICK cm	PHI cm	OIL TYPE
SITE 1/5	—	—	—	—	—	—	None
SITE 2							
SITE 3							
SITE 4							
SITE 5							

OVERALL OIL IMPACT: None

OIL IN STREAM CHANNEL? \_\_\_\_\_  
 SUBSTRATE

Bedrock	Granule
Boulder	Sand
Cobble	Slit
Pebble	Veget.

OIL ON BEACH WITHIN 50M OF STREAM MOUTH? \_\_\_\_\_

SPECIES					
COUNT					

REMARKS: Site # 5 on Al Davis's map  
 Surveyed 402 meters of beach  
 Contact survey crew for further info



Not A stream

NW Augustine Island (sec 15+16)

SC NUMBER: _____	SEGMENT NUMBER: _____	YR CATALOGED: _____
LOCATION: Augustine Island, North West Shore	LOCAL STREAM #1: _____	LATITUDE: 59 23 24
WATER NAME: _____	ALL SEGMENTS: _____	LONGITUDE: 153 28 48
WIAK K-UNIT: _____		LEGAL: _____
SGS QUADRANGLE: Iliamna B-2		
SHORELINE TYPE: Beach		
WAVE EXPOSURE: High		

ADP - 10/9/91

SC NUMBER: _____	TEAM RECORDER: AL DAVIS
SURVEY TYPE: BS	OBSERVERS: Rance Morrison
METHOD: Foot	AGENCY(IES): ADFGL
DATE: 6/12/89	PHOTOS TAKEN? N
START TIME: 1530	Roll #: _____
STOP TIME: _____	Frames: _____
	VIDEO TAKEN? N
	Tape Number: _____
	Counter Start: _____

SAMPLES TAKEN? N

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

	LENGTH m	WIDTH m	H2	%	THICK cm	PEL cm	OIL TYPE
SITE #6	3220	—	—	—	—	—	3220 MS
SITE 2							
SITE 3							
SITE 4							
SITE 5							

OVERALL OIL IMPACT: VL

OIL IN STREAM CHANNEL? \_\_\_\_\_

OIL ON BEACH WITHIN 50M OF STREAM MOUTH? \_\_\_\_\_

SUBSTRATE		SPECIES				
Bedrock	Granula	/				
Boulder	Sand	/				
Cobble	Slit	/				
Pebble	Veget.	/				
		COUNT				
		/				

REMARKS: Site #6 on AL Davis's map + Homer Files

Sections 15 & 16

4 - pieces 8" absorbent boom (fouled) on beach

Contact ~~AD Davis~~ for further info

Survey crew



No stream

Mouth Ursus Cove

SC NUMBER: LOCATION: Kamishak Bay, Mouth Ursus Cove  
 SEGMENT NUMBER: LOCAL STREAM #: ALL SEGMENTS:  
 YR CATALOGED: LATITUDE: LONGITUDE: LEGAL: DATE - 10/9/91

C NUMBER: SURVEY TYPE: BS  
 METHOD: FOOT  
 DATE: 6/13/89  
 START TIME: 1430  
 STOP TIME:  
 TEAM RECORDER: AL Davis  
 OBSERVERS: Rance Morrison  
 AGENCY(IES): ADF46  
 PHOTOS TAKEN?   
 Roll #: Frames:  
 VIDEO TAKEN?  Tape Number: Counter start:  
 SAMPLES TAKEN?   
 SAMPLE I.D. NUMBERS: 1. 2. 3. 4. 5. 6.

	LENGTH m	WIDTH m	H2	t	THICK cm	PEN cm	OIL TYPE
SITE 1	805	—	—	—	—	—	MS
SITE 2							
SITE 3							
SITE 4							
SITE 5							

OVERALL OIL IMPACT: VVL VL  
 OIL IN STREAM CHANNEL? N OIL ON BEACH WITHIN 50M OF STREAM MOUTH? N  
 SUBSTRATE  
 Bedrock / Granule  
 Boulder / Sand  
 Cobble / silt  
 Pebble / Veget. /

SPECIES					
COUNT					

REMARKS: CONTACT ~~AL~~ AL Davis for verification of existence or non-existence of photos.  
 Unable to ascertain the exact location of area surveyed



stream?

Dry Bay

SC NUMBER: \_\_\_\_\_ SEGMENT NUMBER: \_\_\_\_\_ IR CATALOGED: \_\_\_\_\_  
 LOCATION: West Side Cook Inlet, Dry Bay, Head  
 SAM NAME: \_\_\_\_\_ LATITUDE: \_\_\_\_\_  
 ULIAK K-UNIT: \_\_\_\_\_ LOCAL STREAM #: \_\_\_\_\_ LONGITUDE: \_\_\_\_\_  
 U.S. GCS QUADRANGLE: Iliamna C-1 LEGAL: \_\_\_\_\_  
 SHORELINE TYPE: BEACH ALL SEGMENTS: \_\_\_\_\_  
 TIDE EXPOSURE: High DATE: 10/9/91

SC NUMBER: \_\_\_\_\_ TEAM RECORDER: AL DAVIS  
 SURVEY TYPE: BS OBSERVERS: Rance Morrison  
 METHOD: FOOT AGENCY(IES): ADF&G  
 DATE: 6/13/89 PHOTOS TAKEN? N  
 START TIME: 1530 Roll #: \_\_\_\_\_ Frames: \_\_\_\_\_  
 STOP TIME: \_\_\_\_\_ VIDEO TAKEN? N Tape Number: \_\_\_\_\_  
 Counter Start: \_\_\_\_\_  
 SAMPLES TAKEN? N  
 SAMPLE I.D. NUMBERS: 1. \_\_\_\_\_ 2. \_\_\_\_\_ 3. \_\_\_\_\_  
 4. \_\_\_\_\_ 5. \_\_\_\_\_ 6. \_\_\_\_\_

	LENGTH m	WIDTH m	HT	W	THICK cm	PEN cm	OIL TYPE
SITE 1	—	—	—	—	—	—	None
SITE 2							
SITE 3							
SITE 4							
SITE 5							

OVERALL OIL IMPACT: None  
 OIL IN STREAM CHANNEL? \_\_\_\_\_ OIL ON BEACH WITHIN 50M OF STREAM MOUTH? \_\_\_\_\_  
 SUBSTRATE  
 Bedrock Granule  
 Boulder Sand  
 Cobble Silt  
 Pebble Veget.

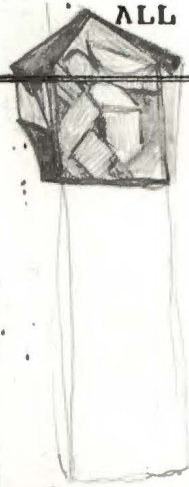
SPECIES				
COUNT	—			

COMMENTS: ~~Surveyed~~ Surveyed 805 meters of shoreline  
 - Unable to Ascertain exact location of survey  
 from field crew notes. Contact field crew  
 for further info.  
 ASC Stream # 248-30-10010 (Bowser Creek) is at  
 head of bay.



No stream ~~HEAD - Amakdedulia Cove~~ HEAD - Amakdedulia Cove

SC NUMBER: \_\_\_\_\_ SEGMENT NUMBER: \_\_\_\_\_ YR CATALOGED: \_\_\_\_\_  
 LOCATION: Kamishak Bay, Amakdedulia Cove  
 DAM NAME: \_\_\_\_\_ LATITUDE: \_\_\_\_\_  
 ULIAK K-UNIT: \_\_\_\_\_ LOCAL STREAM #: \_\_\_\_\_ LONGITUDE: \_\_\_\_\_  
 SGS QUADRANGLE: Iliamna A-4 LEGAL: \_\_\_\_\_  
 SHORELINE TYPE: Beach  
 TIDE EXPOSURE: High



SC NUMBER: \_\_\_\_\_  
 SURVEY TYPE: BS/SS  
 METHOD: FOOT  
 DATE: 6/16/89  
 START TIME: 1230  
 STOP TIME: \_\_\_\_\_

TEAM RECORDER: AL Davis  
 OBSERVERS: Rance Morrison

AGENCY(IES): ADF & G

PHOTOS TAKEN?   
 Roll #: \_\_\_\_\_ Frames: \_\_\_\_\_  
 VIDEO TAKEN?  Tape Number: \_\_\_\_\_  
 Counter Start: \_\_\_\_\_

SAMPLES TAKEN?

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

	LENGTH m	WIDTH m	H2	↓	THICK cm	PEN cm	OIL TYPE
SITE 1	40.2	—	—	—	—	—	TB
SITE 2							
SITE 3							
SITE 4							
SITE 5							

OVERALL OIL IMPACT:  L

OIL IN STREAM CHANNEL? \_\_\_\_\_

OIL ON BEACH WITHIN 50M OF STREAM MOUTH? \_\_\_\_\_

SUBSTRATE

Bedrock	Granule
Boulder	Sand
Cobble	Silt
Pebble	Veget.

SPECIES	—				
COUNT	—				

REMARKS: Site # 1 on AL Davis's map - Homer Files  
 Oil at 20' and 16' tide levels  
~~Contact survey areas for further info.~~



No stream

NEAR STATE GAME SANCTUARY  
McNeil N Cove

SC NUMBER: _____	SEGMENT NUMBER: _____	YR CATALOGED: _____
LOCATION: Kamishak Bay, McNeil Cove		
SAM NAME: _____		LATITUDE: _____
VIKAK K-UNIT: _____	LOCAL STREAM #: _____	LONGITUDE: _____
SGS QUADRANGLE: Iliamna, A-4		LEGAL: _____
SHORELINE TYPE: Beach	ALL SEGMENTS: _____	
WAVE EXPOSURE: High		

C NUMBER: _____	TEAM RECORDER: AL Davis
SURVEY TYPE: BS	OBSERVERS: Lance Morrison
METHOD: Foot	AGENCY(IES): ADFG
DATE: 6/16/89	PHOTOS TAKEN? <input checked="" type="checkbox"/>
START TIME: 1400	Roll #: _____
STOP TIME: _____	Frames: _____
	VIDEO TAKEN? <input checked="" type="checkbox"/>
	Tape Number: _____
	Counter Start: _____

SAMPLES TAKEN?

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

	LENGTH m	WIDTH m	H <sub>2</sub>	?	THICK cm	PEN cm	OIL TYPE
SITE 1 <b>T3</b>	402	—	—	—	—	—	TB
SITE 2							
SITE 3							
SITE 4							
SITE 5							

OVERALL OIL IMPACT: VL

OIL IN STREAM CHANNEL? \_\_\_\_\_

OIL ON BEACH WITHIN 50M OF STREAM MOUTH? \_\_\_\_\_

SUBSTRATE	
Bedrock	Granule
Boulder	Sand
Cobble	Silt
Pebble	Veget.

SPECIES					
COUNT					

Site # 3 on AL Davis's map - HOMER Files

MENTS: ~~McNeil~~ McNeil River and Mikfik Crk Drain into McNeil Cove - both are Anadromous streams.

~~Both streams~~ ~~the McNeil River~~ lies within the McNeil River State Game Sanctuary (this is primarily a brown bear sanctuary)

- the area covered by this survey lies just outside of the McNeil River Sanctuary.

- ~~Contact Survey crew for POC~~



ANAD.

# STATE Game Sanctuary / McNeil Cove

ASC NUMBER: \_\_\_\_\_ SEGMENT NUMBER: \_\_\_\_\_ YR CATALOGED: \_\_\_\_\_  
 LOCATION: Kamishak Bay, McNeil Cove, Kamishak (site)  
 DAM NAME: \_\_\_\_\_ LATITUDE: \_\_\_\_\_  
 ILLIAMNA K-UNIT: \_\_\_\_\_ LOCAL STREAM #: \_\_\_\_\_ LONGITUDE: \_\_\_\_\_  
 USGS QUADRANGLE: Illiamna A-4 LEGAL: \_\_\_\_\_  
 SHORELINE TYPE: Beach ALL SEGMENTS: \_\_\_\_\_  
 WAVE EXPOSURE: High

DATE 10/9/91

ASC NUMBER: \_\_\_\_\_  
 SURVEY TYPE: BS  
 METHOD: FOOT  
 DATE: 6/16/89  
 START TIME: 1420  
 STOP TIME: \_\_\_\_\_

TEAM RECORDER: Al Davis  
 OBSERVERS: Rance Morrison  
 AGENCY(IES): ADFG  
 PHOTOS TAKEN? N  
 Roll #: \_\_\_\_\_ Frames: \_\_\_\_\_  
 VIDEO TAKEN? N Tape Number: \_\_\_\_\_  
 Counter Start: \_\_\_\_\_

SAMPLES TAKEN? N

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

	LENGTH m	WIDTH m	H2	t	THICK cm	PEN cm	OIL TYPE
SITE # 4	91	—	—	—	—	—	TB
SITE 2							
SITE 3							
SITE 4							
SITE 5							

OVERALL OIL IMPACT: YL

OIL IN STREAM CHANNEL? \_\_\_\_\_

OIL ON BEACH WITHIN 50M OF STREAM MOUTH? \_\_\_\_\_

SUBSTRATE

Bedrock	Granule
Boulder	Sand
Cobble	Silt
Pebble	Veget.

SPECIES				
COUNT	—			

REMARKS: Site # 4 on Al Davis's Map - HOMER Files  
 Tarballs up to 2' across - NO small splashes observed.  
 The area covered on this survey lies within the McNeil River State Game Sanctuary, which is primarily a brown bear sanctuary. McNeil River and Mizek Creek which are both anadromous streams drain into the McNeil Lagoon which drains into McNeil Cove (both lie within the Sanctuary). The observed oil lies within one mile of the McNeil anadromous McNeil Lagoon outlet. The McNeil Bear Camp (ADFG) which is for research & tourism is situated on the shore of the lagoon.

ACE 9961094



ANAD. / State Game Sanctuary / McNeil Cove Head

SC NUMBER: \_\_\_\_\_ SEGMENT NUMBER: \_\_\_\_\_ YR CATALOGED: \_\_\_\_\_

LOCATION: Kumichak Bay, McNeil Cove Head

LOCAL STREAM #: \_\_\_\_\_

LATITUDE: \_\_\_\_\_

LONGITUDE: \_\_\_\_\_

LEGAL: \_\_\_\_\_

ALL SEGMENTS: \_\_\_\_\_

DATE: 6/16/89

TIME: 1430

MAP: 10/9/91

SC NUMBER: \_\_\_\_\_

SURVEY TYPE: BS

METHOD: FOOT

DATE: 6/16/89

START TIME: 1430

STOP TIME: \_\_\_\_\_

TEAM RECORDER: AL Davis

OBSERVERS: Lance Morrison

AGENCY(IES): ADFG

PHOTOS TAKEN?

Roll #: \_\_\_\_\_

VIDEO TAKEN?

Tape Number: \_\_\_\_\_

Counter Start: \_\_\_\_\_

SAMPLES TAKEN?

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

	LENGTH m	WIDTH m	H2	t	THICK cm	PEN cm	OIL TYPE
SITE 1	91	—	—	—	—	—	TB
SITE 2							
SITE 3							
SITE 4							
SITE 5							

OVERALL OIL IMPACT:

OIL IN STREAM CHANNEL?

OIL ON BEACH WITHIN 50M OF STREAM MOUTH?

SUBSTRATE

Bedrock	Granule
Boulder	Sand
Cobble	Slit
Pebble	Veget.

SPECIES	<input checked="" type="checkbox"/>				
COUNT	<input checked="" type="checkbox"/>				

MENTS: Site #5 on AL Davis's Map. - Homer Kiks

The area covered on this survey lies within the McNeil River State Game Sanctuary, which is primarily a bear sanctuary. McNeil River and Miklik Creek, which are both anadromous streams drain into the McNeil Lagoon which drains into McNeil Cove (both lie with the sanctuary). The observed oil lies within one mile of the anadromous McNeil Lagoon outlet. The McNeil Bear Camp (ADFG) which is for research & tourism is situated on the shore of the lagoon.



No stream Border of State Game Sanctuary / McNeil Cove N-HEAD

SC NUMBER: \_\_\_\_\_ SEGMENT NUMBER: \_\_\_\_\_ YR CATALOGED: \_\_\_\_\_  
 LOCATION: Kamichak Bay, McNeil Cove, N-Head  
 LOCAL STREAM #1: \_\_\_\_\_  
 ALL SEGMENTS: \_\_\_\_\_  
 LATITUDE: \_\_\_\_\_  
 LONGITUDE: \_\_\_\_\_  
 LEGAL: \_\_\_\_\_  
 DATE: 10/10/89

SURVEY TYPE: BS  
 METHOD: FOOT  
 DATE: 6/16/89  
 START TIME: 1500  
 STOP TIME: \_\_\_\_\_  
 TEAM RECORDER: AL DAVIS  
 OBSERVERS: Rance Morrison  
 AGENCY(IES): ADFG  
 PHOTOS TAKEN? N  
 Roll #: \_\_\_\_\_ Frame #: \_\_\_\_\_  
 VIDEO TAKEN? N Tape Number: \_\_\_\_\_  
 Counter Start: \_\_\_\_\_

SAMPLES TAKEN? \_\_\_\_\_  
 SAMPLE I.D. NUMBERS: 1. \_\_\_\_\_ 2. \_\_\_\_\_ 3. \_\_\_\_\_  
 4. \_\_\_\_\_ 5. \_\_\_\_\_ 6. \_\_\_\_\_

	LENGTH m	WIDTH m	H2	t	THICK cm	PEN cm	OIL TYPE
SITE # 6	91	—	—	—	—	—	7B
SITE 2							
SITE 3							
SITE 4							
SITE 5							

OVERALL OIL IMPACT: VL

OIL IN STREAM CHANNEL? \_\_\_\_\_  
 OIL ON BEACH WITHIN 50M OF STREAM MOUTH? \_\_\_\_\_  
 SUBSTRATE: Bedrock / Granule, Boulder / Sand, Cobble / silt, Pebble / Veget.

SPECIES				
COUNT				

COMMENTS: Site # 6 on AL Davis's Map - Home's files  
 The area covered on this survey lies on the North border of McNeil River State Game Sanctuary which is primarily a brown bear sanctuary. McNeil R. + Mikfik Ck. are both anad. streams that drain into the McNeil lagoon which drains into McNeil Cove. The McNeil Brown bear camp (ADFG) which is for research + tourism is situated on the shore of the lagoon.



SC NUMBER: \_\_\_\_\_ SEGMENT NUMBER: \_\_\_\_\_ VII CATALOGUE: \_\_\_\_\_  
 LOCATION: ~~McNeil Head~~ Kamishak Bay, ~~McNeil Head~~ **McNeil Head**  
 IAN NAME: \_\_\_\_\_ LOCAL STREAM #: \_\_\_\_\_ LATITUDE: \_\_\_\_\_  
 UVIAK K-UNIT: \_\_\_\_\_ LONGITUDE: \_\_\_\_\_  
 USGS QUADRANGLE: **Flamingo A-4** LEGAL: \_\_\_\_\_  
 SHORELINE TYPE: **Beach** ALL SEGMENTS: \_\_\_\_\_  
 WAVE EXPOSURE: **High** *DDA 10/9/91*

SC NUMBER: \_\_\_\_\_ TEAM RECORDER: **AL DAVIS**  
 SURVEY TYPE: **BS** OBSERVERS: **Raine Morrison**  
 METHOD: **Foot** AGENCY(IES): **ADFAG**  
 DATE: **6/16/89** PHOTOS TAKEN?   
 START TIME: **1530** Roll #: \_\_\_\_\_ Frames: \_\_\_\_\_  
 STOP TIME: \_\_\_\_\_ VIDEO TAKEN?  Tape Number: \_\_\_\_\_  
 Counter Start: \_\_\_\_\_

SAMPLES TAKEN? \_\_\_\_\_  
 SAMPLE I.D. NUMBERS: 1. \_\_\_\_\_ 2. \_\_\_\_\_ 3. \_\_\_\_\_  
 4. \_\_\_\_\_ 5. \_\_\_\_\_

	LENGTH m	WIDTH m	H2	δ	THICK cm	PEL cm	OIL TYPE
SITE <del>4</del> <b>7</b>	—	—	—	—	—	—	<b>None</b>
SITE 2							
SITE 3							
SITE 4							
SITE 5							

OVERALL OIL IMPACT: **None**  
 OIL IN STREAM CHANNEL? \_\_\_\_\_ OIL ON BEACH WITHIN 50M OF STREAM MOUTH? \_\_\_\_\_

SUBSTRATE

Bedrock	Granule
Boulder	Sand
Cobble	Silt
Pebble	Veget.

SPECIES				
COUNT	—			

COMMENTS: **Site 7 on AL Davis's MAP - Homer Files**  
**Surveyed 274 meters of beach**  
**Exact location of survey can not be ascertained**  
**see survey crew field notes**  
~~Contact field crew for further info~~







NO Stream / STATE Game Sanctuary / Horseshoe Cove Head

SC NUMBER: \_\_\_\_\_ SEGMENT NUMBER: 1 YEAR CATALOGED: \_\_\_\_\_  
 LOCATION: Rainishak Bay, Horseshoe Cove  
 CAN NAME: \_\_\_\_\_ LOCAL STREAM #: \_\_\_\_\_  
 WIAK K-UNIT: \_\_\_\_\_ LOCAL STREAM #: \_\_\_\_\_  
 SGS QUADRANGLE: Iliamna A-4 LATITUDE: \_\_\_\_\_  
 LONGITUDE: \_\_\_\_\_  
 SHORELINE TYPE: Beach LEGAL: \_\_\_\_\_  
 AVE EXPOSURE: High ALL SEGMENTS: \_\_\_\_\_  
10/9/91

C NUMBER: \_\_\_\_\_ TEAM RECORDER: AL DAVIS  
 SURVEY TYPE: B3 OBSERVERS: Rance Morrison  
 METHOD: FOOT AGENCY(IES): ADFC  
 DATE: 6/16/89 PHOTOS TAKEN? N  
 START TIME: 1540 Roll #: \_\_\_\_\_ Framed: \_\_\_\_\_  
 STOP TIME: \_\_\_\_\_ VIDEO TAKEN? N Tape Number: \_\_\_\_\_  
 Counter Start: \_\_\_\_\_  
 SAMPLES TAKEN? N  
 SAMPLE I.D. NUMBERS: 1. \_\_\_\_\_ 2. \_\_\_\_\_ 3. \_\_\_\_\_  
 4. \_\_\_\_\_ 5. \_\_\_\_\_

	LENGTH m	WIDTH m	H2	T	THICK cm	DIR cm	OIL TYPE
SITE <u>1</u> <u>9</u>	<u>16.0</u>	<u>—</u>	<u>—</u>	<u>—</u>	<u>—</u>	<u>—</u>	<u>TB</u>
SITE 2							
SITE 3							
SITE 4							
SITE 5							

OVERALL OIL IMPACT: L  
 OIL IN STREAM CHANNEL? \_\_\_\_\_ OIL ON BEACH WITHIN 50M OF STREAM MOUTH? \_\_\_\_\_  
 SUBSTRATE:

Bedrock	Granule
Boulder	Sand
Cobble	Silt
Pebble	Veget.

SPECIES	—				
COUNT	—				

COMMENTS: Site 1, 9 on Al Davis's Map - Homer Files  
 The area surveyed lies within the McNeil River  
 State Game Sanctuary (primarily a brown  
 bear sanctuary)







No Stream

Cherik Head

SC NUMBER: \_\_\_\_\_ SEGMENT NUMBER: \_\_\_\_\_ YEAR CATALOGED: \_\_\_\_\_  
 LOCATION: Kamishak Bay, Cherik Head  
 IAN NAME: \_\_\_\_\_ LOCAL STREAM # \_\_\_\_\_  
 UJIAK K-UNIT: \_\_\_\_\_  
 SGS QUADRANGLE: Iliamna A-4  
 SHORELINE TYPE: Beach  
 AVE EXPOSURE: High  
 ALL SEGMENTS:  *NOA 10/9/91*

SC NUMBER: \_\_\_\_\_ TEAM RECORDER: AL DAVIS  
 SURVEY TYPE: BS OBSERVERS: Rance Morrison  
 METHOD: FOOT  
 DATE: 6/29/89  
 START TIME: 1300  
 STOP TIME: \_\_\_\_\_  
 AGENCY(IES): ADPLG  
 PHOTOS TAKEN?  Roll #: \_\_\_\_\_  
 VIDEO TAKEN?  Tape Number: \_\_\_\_\_  
 Counter Start: \_\_\_\_\_  
 SAMPLES TAKEN?   
 SAMPLE I.D. NUMBERS: 1. \_\_\_\_\_ 2. \_\_\_\_\_ 3. \_\_\_\_\_  
 4. \_\_\_\_\_ 5. \_\_\_\_\_ 6. \_\_\_\_\_

	LENGTH m	WIDTH m	H2	1	THICK cm	POH cm	OIL TYPE
SITE 1	805	—	—	—	—	—	MS
SITE 2							
SITE 3							
SITE 4							
SITE 5							

OVERALL OIL IMPACT: VL  
 OIL IN STREAM CHANNEL? \_\_\_\_\_  
 SUBSTRATE: Bedrock, Boulder, Cobble, Pebble, Granule, Sand, Silt, Veget.   
 OIL ON BEACH WITHIN 50M OF STREAM MOUTH? \_\_\_\_\_  

SPECIES				
COUNT				

COMMENTS: SEE AL DAVIS Map for more exact location.  
 Surveyed "one car beach" and 2 beaches  
 South  
 See AL Davis's Map Homer Files







No stream

Amakdedulia Cove

SC NUMBER: \_\_\_\_\_ SEGMENT NUMBER: \_\_\_\_\_ YR CATALOGED: \_\_\_\_\_  
 LOCATION: Kamishak Bay, Amakdedulia Cove  
 SAM NAME: \_\_\_\_\_ LOCAL STREAM #: A-4  
 UVIK K-UNIT: \_\_\_\_\_ ALL SEGMENTS: \_\_\_\_\_  
 SGS QUADRANGLE: Iliamna LEGAL: DDA 10/9/91  
 SHORELINE TYPE: Beach  
 TIDE EXPOSURE: High

SC NUMBER: \_\_\_\_\_ TEAM RECORDER: AL Davis  
 SURVEY TYPE: BS OBSERVERS: Rick Randall  
 METHOD: FOOT  
 DATE: 7/10/89 AGENCY (IES): AORAG  
 START TIME: 1300 PHOTOS TAKEN? RORGS  
 STOP TIME: \_\_\_\_\_ Roll #: ROR-5 Frames: 13,14  
 VIDEO TAKEN? N Tape Number: \_\_\_\_\_  
 Counter Start: \_\_\_\_\_

SAMPLES TAKEN?  
 SAMPLE I.D. NUMBER: 1. AD 71089 07 2. AD 7108908 3. AD 7108909  
 5. 6.

	LENGTH m	WIDTH m	112	1	THICK cm	PER cm	OIL TYPE
SITE 1	366	—	—	—	—	—	TB
SITE 2							
SITE 3							
SITE 4							
SITE 5							

OVERALL OIL IMPACT: VL

OIL IN STREAM CHANNEL? \_\_\_\_\_ OIL ON BEACH WITHIN 50M OF STREAM MOUTH? \_\_\_\_\_

SUBSTRATE

Bedrock	Granule
Boulder	Sand
Cobble	Silt
Pebble	Veget.

SPECIES	/				
COUNT	/				

REMARKS: Samples taken from middle of beach  
 Oil easily found on higher tide levels - no oil found on most recent tide.  
 See Al Davis's Map - Homer Files







No stream

Brvin Bay - South Mouth

SC NUMBER: \_\_\_\_\_ SEGMENT NUMBER: \_\_\_\_\_ YR CATALOGED: \_\_\_\_\_  
 LOCATION: Kamichak Bay, Mouth Brvin Bay  
 SAM NAME: \_\_\_\_\_ LOCAL STREAM #: \_\_\_\_\_  
 JULIAK K-UNIT: \_\_\_\_\_  
 SGS QUADRANGLE: Iliamna, B-3  
 SHORELINE TYPE: Beach  
 AVE EXPOSURE: High  
 ALL SEGMENTS: \_\_\_\_\_  
 DATE: 10/9/91

C NUMBER: \_\_\_\_\_ TEAM RECORDER: AL Davis  
 SURVEY TYPE: BS OBSERVERS: Rick Randall  
 METHOD: FOOT  
 DATE: 7/10/89  
 START TIME: 1420  
 STOP TIME: \_\_\_\_\_  
 AGENCY(IES): ADFG  
 PHOTOS TAKEN? \_\_\_\_\_  
 Roll #: \_\_\_\_\_ Frames: \_\_\_\_\_  
 VIDEO TAKEN? N Tape Number: \_\_\_\_\_  
 Counter Start: \_\_\_\_\_  
 SAMPLES TAKEN? N  
 SAMPLE I.D. NUMBERS: 1. \_\_\_\_\_ 2. \_\_\_\_\_ 3. \_\_\_\_\_  
 4. \_\_\_\_\_ 5. \_\_\_\_\_

	LENGTH m	WIDTH m	112	1	THICK cm	PERL cm	OIL TYPE
SITE 1	805	—	—	—	—	—	TB
SITE 2							
SITE 3							
SITE 4							
SITE 5							

OVERALL OIL IMPACT: VL  
 OIL IN STREAM CHANNEL? \_\_\_\_\_  
 SUBSTRATE:  
 Bedrock \_\_\_\_\_ Granule \_\_\_\_\_  
 Boulder \_\_\_\_\_ Sand \_\_\_\_\_  
 Cobble \_\_\_\_\_ Gilt \_\_\_\_\_  
 Pebble \_\_\_\_\_ Vegat. \_\_\_\_\_  
 OIL ON BEACH WITHIN 50M OF STREAM MOUTH? \_\_\_\_\_  
 SPECIES: \_\_\_\_\_  
 COUNT: \_\_\_\_\_

REMARKS: ~~The exact location of this SURVEY NO. is not known. Field crew cannot be ascertained from notes. Contact AL Davis &/or Rick Randall for further info.~~  
 Oil observed on 5th previous <sup>high</sup> tide line  
 See AL Davis Map - Homer Files



*No stream*      *Ursus Cave - North Beach*

SC NUMBER: \_\_\_\_\_ SEGMENT NUMBER: \_\_\_\_\_ YR CATALOGED: \_\_\_\_\_  
 LOCATION: *Kamishak Bay, Ursus Cave Mouth, North Beach*  
 SAM NAME: \_\_\_\_\_ LATITUDE: \_\_\_\_\_  
 UVIAK K-UNIT: \_\_\_\_\_ LOCAL STREAM #: \_\_\_\_\_ LONGITUDE: \_\_\_\_\_  
 SGS QUADRANGLE: *Iliamna C-3* LEGAL: \_\_\_\_\_  
 SHORELINE TYPE: *Beach* ALL SEGMENTS: \_\_\_\_\_  
 AVE EXPOSURE: *High* *ADK 10/9/89*

C NUMBER: \_\_\_\_\_ TEAM RECORDER: *AL DAVIS*  
 SURVEY TYPE: *BS* OBSERVERS: *Rick Randall*  
 METHOD: *FOOT* AGENCY(IES): *ADFG*  
 DATE: *7/10/89* PHOTOS TAKEN? \_\_\_\_\_  
 START TIME: *1600* Roll #: \_\_\_\_\_ Frames: \_\_\_\_\_  
 STOP TIME: \_\_\_\_\_ VIDEO TAKEN? \_\_\_\_\_ Tape Number: \_\_\_\_\_  
 Counter Start: \_\_\_\_\_

SAMPLES TAKEN? \_\_\_\_\_  
 SAMPLE I.D. NUMBERS: 1. \_\_\_\_\_ 2. \_\_\_\_\_ 3. \_\_\_\_\_  
 4. \_\_\_\_\_ 5. \_\_\_\_\_ 6. \_\_\_\_\_

	LENGTH m	WIDTH m	H2	%	THICK cm	PER cm	OIL TYPE
SITE 1	<i>—</i>						<i>None</i>
SITE 2							
SITE 3							
SITE 4							
SITE 5							

OVERALL OIL IMPACT: *NONE*

OIL IN STREAM CHANNEL? \_\_\_\_\_

OIL ON BEACH WITHIN 50M OF STREAM MOUTH? \_\_\_\_\_

SUBSTRATE

Bedrock	<i>Granule</i>
Boulder	<i>Sand</i>
Cobble	<i>Slit</i>
Pebble	<i>Veget.</i>

SPECIES				
COUNT	<i>—</i>			

COMMENTS: *Exact location of this survey can not be ascertained from field crew notes. Contact crew members for further info.*

*See Al Davis Map - Homer Files*



No stream

Ursus Cove - South Beach

SC NUMBER: \_\_\_\_\_ SEGMENT NUMBER: \_\_\_\_\_ YEAR CATALOGED: \_\_\_\_\_  
 LOCATION: Kamishak Bay, Ursus Cove Mouth, ~~South Beach~~ South Beach  
 SAM NAME: \_\_\_\_\_ LOCAL STREAM #: \_\_\_\_\_ LATITUDE: \_\_\_\_\_  
 UIAK K-UNIT: \_\_\_\_\_ LONGITUDE: \_\_\_\_\_  
 SGS QUADRANGLE: Iliamna 0-3 LEGAL: \_\_\_\_\_  
 SHORELINE TYPE: BEACH ALL SEGMENTS: \_\_\_\_\_  
 TIDE EXPOSURE: High

10/9/91

SC NUMBER: \_\_\_\_\_ TEAM RECORDER: AL Davis  
 SURVEY TYPE: BS OBSERVERS: Rick Randall  
 METHOD: FOOT AGENCY(IES): ADF46  
 DATE: 7/10/89 PHOTOS TAKEN? \_\_\_\_\_  
 START TIME: 1645 Roll #: \_\_\_\_\_ Frames: \_\_\_\_\_  
 STOP TIME: \_\_\_\_\_ VIDEO TAKEN?  Tape Number: \_\_\_\_\_  
 Counter Start: \_\_\_\_\_  
 SAMPLES TAKEN?  SAMPLE I.D. NUMBERS: 1. \_\_\_\_\_ 2. \_\_\_\_\_ 3. \_\_\_\_\_  
 4. \_\_\_\_\_ 5. \_\_\_\_\_ 6. \_\_\_\_\_

	LENGTH m	WIDTH m	112	1	THICK cm	PER cm	OIL TYPE
SITE 1							ST
SITE 2							
SITE 3							
SITE 4							
SITE 5							

OVERALL OIL IMPACT: YL  
 OIL IN STREAM CHANNEL? \_\_\_\_\_  
 SUBSTRATE: Bedrock, Boulder, Cobble, Pebble  
 Granule, Sand, silt, Veget.

OIL ON BEACH WITHIN 50M OF STREAM MOUTH? \_\_\_\_\_

SPECIES				
COUNT				

COMMENTS: ~~The exact location of this survey is unknown.~~ can not be  
 ascertained from field crew notes.  
 - Contact field crew for further info.  
 - Oil found at 18' tide level.  
 - Oil spot every 1 ft.  
 See AL Davis Map - Homer Files



No stream

SC NUMBER: \_\_\_\_\_ SEGMENT NUMBER: 1 YR CATALOGED: \_\_\_\_\_  
 LOCATION: Kachemak Bay, Glacier Spit Kachemak State - Kach. Bay State Park  
Critical Habitat Area LATITUDE: 44 59° 38' 48"  
 STREAM NAME: \_\_\_\_\_ LOCAL STREAM #: \_\_\_\_\_ LONGITUDE: 151° 12' 12"  
 UIAK K-UNIT: \_\_\_\_\_ LEGAL: \_\_\_\_\_  
 SGS QUADRANGLE: Seldovia C-4 ALL SEGMENTS: \_\_\_\_\_  
 SHORELINE TYPE: BEACH  
 AVE EXPOSURE: High

SC NUMBER: \_\_\_\_\_ TEAM RECORDER: AL Davis  
 SURVEY TYPE: BS OBSERVERS: Rick Randall  
Rance Morrison  
 METHOD: Foot AGENCY(IES): ADFG  
 DATE: 7/11/89 PHOTOS TAKEN? ✓  
 START TIME: 1000 Roll #: \_\_\_\_\_ Frames: \_\_\_\_\_  
 STOP TIME: 1100 VIDEO TAKEN? ✓ Tape Number: \_\_\_\_\_  
 Counter Start: \_\_\_\_\_  
 SAMPLES TAKEN? ✓  
 SAMPLE I.D. NUMBERS: 1. \_\_\_\_\_ 2. \_\_\_\_\_ 3. \_\_\_\_\_  
 4. \_\_\_\_\_ 5. \_\_\_\_\_ 6. \_\_\_\_\_

	LENGTH m	WIDTH m	112	1	THICK cm	PEN cm	OIL TYPE
SITE 1	✓	✓	—	—	—	—	<u>None</u>
SITE 2							
SITE 3							
SITE 4							
SITE 5							

OVERALL OIL IMPACT: ✓  
 OIL IN STREAM CHANNEL? \_\_\_\_\_ OIL ON BEACH WITHIN 50M OF STREAM MOUTH? \_\_\_\_\_  
 SUBSTRATE  
 Bedrock \_\_\_\_\_ Granule ✓  
 Boulder \_\_\_\_\_ Sand ✓  
 Cobble ✓ Silt \_\_\_\_\_  
 Pebble ✓ Veget. \_\_\_\_\_

SPECIES					
	—				
COUNT	—				

COMMENTS:  
 - 1610 meters surveyed on foot.  
 - ADFG received a report of <sup>oil</sup>oiled net ~~found~~  
 in the Glacier Spit area.  
 See Al Davis Map-Homer Files



No stream

BEACH S. Chinitwa

SC NUMBER: \_\_\_\_\_ SEGMENT NUMBER: \_\_\_\_\_ YR CATALOGED: \_\_\_\_\_  
 LOCATION: Chinitwa Bay, South shore  
 SAM NAME: \_\_\_\_\_ LATITUDE: \_\_\_\_\_  
 UIAK K-UNIT: \_\_\_\_\_ LOCAL STREAM #: \_\_\_\_\_ LONGITUDE: \_\_\_\_\_  
 SGS QUADRANGLE: Seldovia D-8, Iliamna D-1 LEGAL: \_\_\_\_\_  
 SHORELINE TYPE: BEACH ALL SEGMENTS: \_\_\_\_\_  
 TIDE EXPOSURE: \_\_\_\_\_ DATE: 10/9/91

SC NUMBER: \_\_\_\_\_  
 SURVEY TYPE: BS  
 METHOD: Foot  
 DATE: 7/11/89  
 START TIME: 1300  
 STOP TIME: \_\_\_\_\_

TEAM RECORDER: AL DAVIS  
 OBSERVERS: Rance Morrison  
 AGENCY(IES): ADFVG

PHOTOS TAKEN? N  
 Roll #: \_\_\_\_\_ Frames: \_\_\_\_\_  
 VIDEO TAKEN? N Tape Number: \_\_\_\_\_  
 Counter Start: \_\_\_\_\_

SAMPLES TAKEN? N

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

	LENGTH m	WIDTH m	H2	t	THICK cm	PEN cm	OIL TYPE
SITE 1	/	/	/	/	/	/	None
SITE 2							
SITE 3							
SITE 4							
SITE 5							

OVERALL OIL IMPACT: NONE

OIL IN STREAM CHANNEL? \_\_\_\_\_

OIL ON BEACH WITHIN 50M OF STREAM MOUTH? \_\_\_\_\_

SUBSTRATE

Bedrock	Granule
Boulder	Sand
Cobble	Silt
Pebble	Veget.

SPECIES	/				
COUNT	/				

COMMENTS: Ground surveyed: 274 meters of shoreline  
 See Al Davis Map - Homer Files



Stream?

Iniskin Bay - North

SC NUMBER: \_\_\_\_\_ SEGMENT NUMBER: \_\_\_\_\_ YR CATALOGED: \_\_\_\_\_  
 LOCATION: Iniskin Bay, North shore  
 SAM NAME: \_\_\_\_\_ LATITUDE: \_\_\_\_\_  
 ULIAK K-UNIT: \_\_\_\_\_ LOCAL STREAM #: \_\_\_\_\_ LONGITUDE: \_\_\_\_\_  
 SGS QUADRANGLE: Iliamna C-2 LEGAL: \_\_\_\_\_  
 SHORELINE TYPE: BEACH ALL SEGMENTS: \_\_\_\_\_  
 AVE EXPOSURE: \_\_\_\_\_

DDP 10/9/91

C NUMBER: \_\_\_\_\_  
 SURVEY TYPE: BS  
 METHOD: FOOT  
 DATE: 7/11/89  
 START TIME: 1320  
 STOP TIME: \_\_\_\_\_

TEAM RECORDER: AL DAVIS  
 OBSERVERS: Rance Morrison

AGENCY(IES): ADFG

PHOTOS TAKEN? N  
 Roll #: \_\_\_\_\_ Frames: \_\_\_\_\_  
 VIDEO TAKEN? N Tape Number: \_\_\_\_\_  
 Counter Start: \_\_\_\_\_

SAMPLES TAKEN? N

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

	LENGTH m	WIDTH m	H2	z	THICK cm	PEN cm	OIL TYPE
SITE 1	—	—	—	—	—	—	None
SITE 2							
SITE 3							
SITE 4							
SITE 5							

OVERALL OIL IMPACT: N

OIL IN STREAM CHANNEL? \_\_\_\_\_  
 SUBSTRATE

OIL ON BEACH WITHIN 50M OF STREAM MOUTH? \_\_\_\_\_

Bedrock	Granule
Boulder	Sand
Cobble	Silt
Pebble	Veget.

SPECIES	—				
COUNT	—				

REMARKS:  
 - Ground surveyed 805 meters of shoreline.  
 - Sandy beach

See AL Davis Map - Homer Files



Iniskin Bay - Inside

SC NUMBER: \_\_\_\_\_ SEGMENT NUMBER: \_\_\_\_\_ YR CATALOGED: \_\_\_\_\_  
 LOCATION: Iniskin Bay, Inside, North Shore  
 DAM NAME: \_\_\_\_\_ LATITUDE: \_\_\_\_\_  
 UJIAK K-UNIT: \_\_\_\_\_ LOCAL STREAM #: \_\_\_\_\_ LONGITUDE: \_\_\_\_\_  
 USGS QUADRANGLE: Iliamna C-2 LEGAL: \_\_\_\_\_  
 SHORELINE TYPE: BEACH ALL SEGMENTS: \_\_\_\_\_  
 WAVE EXPOSURE: \_\_\_\_\_

ADP 10/9/91

SC NUMBER: \_\_\_\_\_  
 SURVEY TYPE: BS  
 METHOD: FOOT  
 DATE: 7/11/89  
 START TIME: 1345  
 STOP TIME: \_\_\_\_\_

TEAM RECORDER: AL DAVIS  
 OBSERVERS: Rance Morrison  
 AGENCY(IES): ADF&G  
 PHOTOS TAKEN? N  
 Roll #: \_\_\_\_\_ Frames: \_\_\_\_\_  
 VIDEO TAKEN? N Tape Number: \_\_\_\_\_  
 Counter Start: \_\_\_\_\_

SAMPLES TAKEN? N

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

	LENGTH m	WIDTH m	H2	δ	THICK cm	PEN cm	OIL TYPE
SITE 1	/	/	/	/	/	/	None
SITE 2							
SITE 3							
SITE 4							
SITE 5							

OVERALL OIL IMPACT: None

OIL IN STREAM CHANNEL? \_\_\_\_\_

OIL ON BEACH WITHIN 50M OF STREAM MOUTH? \_\_\_\_\_

SUBSTRATE

Bedrock	Granule
Boulder	Sand
Cobble	Silt
Pebble	Veget.

SPECIES	/				
COUNT	/				

REMARKS: Ground Survey: 274 meters of shoreline

AL Davis Map - Homer Files



COTTONWOOD BAY - South

SC NUMBER: \_\_\_\_\_ SEGMENT NUMBER: \_\_\_\_\_ YR CATALOGED: \_\_\_\_\_  
 LOCATION: Cottonwood Bay, South Side entrance  
 DAM NAME: \_\_\_\_\_ LATITUDE: \_\_\_\_\_  
 ADIAK K-UNIT: \_\_\_\_\_ LOCAL STREAM #: \_\_\_\_\_ LONGITUDE: \_\_\_\_\_  
 USGS QUADRANGLE: Iliamna C-2 LEGAL: \_\_\_\_\_  
 SHORELINE TYPE: BEACH ALL SEGMENTS: \_\_\_\_\_  
 TIDE EXPOSURE: \_\_\_\_\_

10/9/91

SC NUMBER: \_\_\_\_\_  
 SURVEY TYPE: BS  
 METHOD: FOOT  
 DATE: 7/11/89  
 START TIME: 1400  
 STOP TIME: \_\_\_\_\_

TEAM RECORDER: AL DAVIS  
 OBSERVERS: Rance Morrison

AGENCY(IES): ADF46

PHOTOS TAKEN? N  
 Roll #: \_\_\_\_\_ Frames: \_\_\_\_\_  
 VIDEO TAKEN? N Tape Number: \_\_\_\_\_  
 Counter Start: \_\_\_\_\_

SAMPLES TAKEN? N

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

	LENGTH m	WIDTH m	H2	%	THICK cm	PEN cm	OIL TYPE
SITE 1	—	—	—	—	—	—	None
SITE 2							
SITE 3							
SITE 4							
SITE 5							

OVERALL OIL IMPACT: None

OIL IN STREAM CHANNEL? \_\_\_\_\_

OIL ON BEACH WITHIN 50M OF STREAM MOUTH? \_\_\_\_\_

SUBSTRATE

Bedrock	Granule
Boulder	Sand
Cobble	Silt
Pebble	Veget.

SPECIES	—				
COUNT	—				

REMARKS: Ground surveyed 366 meters of shoreline.

Al Davis Map - Homer Files



No stream

Ursus Head - North side

SC NUMBER: \_\_\_\_\_ SEGMENT NUMBER: \_\_\_\_\_ YR CATALOGED: \_\_\_\_\_  
 LOCATION: Kamishak Bay, Ursus Head  
 DAM NAME: \_\_\_\_\_ LATITUDE: \_\_\_\_\_  
 UJIAK K-UNIT: \_\_\_\_\_ LOCAL STREAM #: \_\_\_\_\_ LONGITUDE: \_\_\_\_\_  
 SGS QUADRANGLE: Iliamna C-2 LEGAL: \_\_\_\_\_  
 SHORELINE TYPE: BEACH ALL SEGMENTS: \_\_\_\_\_  
 AVE EXPOSURE: High DDH 10/9/91

C NUMBER: \_\_\_\_\_ TEAM RECORDER: AL DAVIS  
 SURVEY TYPE: BS OBSERVERS: Rance Morrison  
 METHOD: FOOT  
 DATE: 7/11/89 AGENCY(IES): ADFG  
 START TIME: 1445 PHOTOS TAKEN?   
 STOP TIME: \_\_\_\_\_ Roll #: \_\_\_\_\_ Frames: \_\_\_\_\_  
 VIDEO TAKEN?  Tape Number: \_\_\_\_\_  
 Counter Start: \_\_\_\_\_  
 SAMPLES TAKEN?   
 SAMPLE I.D. NUMBERS: 1. \_\_\_\_\_ 2. \_\_\_\_\_ 3. \_\_\_\_\_  
 4. \_\_\_\_\_ 5. \_\_\_\_\_ 6. \_\_\_\_\_

	LENGTH m	WIDTH m	H2	t	THICK cm	PEN cm	OIL TYPE
SITE 1	—	—	—	—	—	—	None
SITE 2							
SITE 3							
SITE 4							
SITE 5							

OVERALL OIL IMPACT: NONE

OIL IN STREAM CHANNEL? \_\_\_\_\_ OIL ON BEACH WITHIN 50M OF STREAM MOUTH? \_\_\_\_\_

SUBSTRATE

Bedrock	Granule
Boulder	Sand
Cobble	Silt
Pebble	Veget.

SPECIES	—				
COUNT	—				

REMARKS: ~~3000~~  
 Ground surveyed 3220 meters of shoreline on the North side of Ursus Head  
 See AL Davis Map - Homer Files



No stream

Augustine Island - E

SC NUMBER: \_\_\_\_\_ SEGMENT NUMBER: \_\_\_\_\_ YR CATALOGED: \_\_\_\_\_  
 LOCATION: Kamishak Bay, Augustine Island, East Side  
 SAM NAME: \_\_\_\_\_ LATITUDE: \_\_\_\_\_  
 UJIAK K-UNIT: \_\_\_\_\_ LOCAL STREAM #: \_\_\_\_\_ LONGITUDE: \_\_\_\_\_  
 SGS QUADRANGLE: Iliamna B-2 LEGAL: \_\_\_\_\_  
 SHORELINE TYPE: BEACH ALL SEGMENTS: \_\_\_\_\_  
 AVE EXPOSURE: High DDA 10/9/91

SC NUMBER: \_\_\_\_\_ TEAM RECORDER: AL Davis  
 SURVEY TYPE: BS OBSERVERS: Rance Morrison  
 METHOD: FOOT  
 DATE: 7/11/89 AGENCY(IES): ADF4G  
 START TIME: 1830 PHOTOS TAKEN? N  
 STOP TIME: \_\_\_\_\_ Roll #: \_\_\_\_\_ Frames: \_\_\_\_\_  
 VIDEO TAKEN? N Tape Number: \_\_\_\_\_  
 Counter Start: \_\_\_\_\_  
 SAMPLES TAKEN? N  
 SAMPLE I.D. NUMBERS: 1. \_\_\_\_\_ 2. \_\_\_\_\_ 3. \_\_\_\_\_  
 4. \_\_\_\_\_ 5. \_\_\_\_\_ 6. \_\_\_\_\_

	LENGTH m	WIDTH m	H2	t	THICK cm	PEN cm	OIL TYPE
SITE 1	805	—	—	—	—	—	TB
SITE 2							
SITE 3							
SITE 4							
SITE 5							

OVERALL OIL IMPACT: VL

OIL IN STREAM CHANNEL? \_\_\_\_\_ OIL ON BEACH WITHIN 50M OF STREAM MOUTH? \_\_\_\_\_  
 SUBSTRATE

Bedrock	Granula
Boulder	Sand
Cobble	Silt
Pebble	Veget.

SPECIES	—				
COUNT	—				

REMARKS: TB found at 19' plus level - mostly  
 older Tarballs  
 - See AL Davis Map Homer Files



No Stream

1 mi N. Clam Gulch

SC NUMBER: \_\_\_\_\_ SEGMENT NUMBER: \_\_\_\_\_ YR CATALOGED: \_\_\_\_\_  
 LOCATION: Cook Inlet, East Side, Clam Gulch State Rec Area, 1 mi North  
 STREAM NAME: CLAM GULCH STATE CRITICAL HABITAT AREA LATITUDE: 60° 15' 12"  
 ADRIAN K-UNIT: \_\_\_\_\_ LOCAL STREAM #: \_\_\_\_\_ LONGITUDE: 151° 23' 24"  
 USGS QUADRANGLE: Kenai A-4 LEGAL: \_\_\_\_\_  
 SHORELINE TYPE: BS ALL SEGMENTS: \_\_\_\_\_  
 TIDE EXPOSURE: High DOR 10/9/91

SC NUMBER: \_\_\_\_\_ TEAM RECORDER: Rick Randall  
 SURVEY TYPE: BS OBSERVERS: ~~CRANDALL~~  
 METHOD: ATV AGENCY(IES): ADFG  
 DATE: 7/12/89 PHOTOS TAKEN? N  
 START TIME: 1130 Roll #: \_\_\_\_\_ Frames:  
 STOP TIME: \_\_\_\_\_ VIDEO TAKEN? N Tape Number:  
 Counter Start: \_\_\_\_\_

SAMPLES TAKEN?  
 SAMPLE I.D. NUMBERS: 1. RRCI-9 2. \_\_\_\_\_ 3. \_\_\_\_\_  
 4. \_\_\_\_\_ 5. \_\_\_\_\_ 6. \_\_\_\_\_

	LENGTH m	WIDTH m	112	1	THICK cm	PEN cm	OIL TYPE
SITE 1	.10	.10					TB
SITE 2							
SITE 3							
SITE 4							
SITE 5							

OVERALL OIL IMPACT: VL  
 OIL IN STREAM CHANNEL? \_\_\_\_\_ OIL ON BEACH WITHIN 50M OF STREAM MOUTH? \_\_\_\_\_

SUBSTRATE

Bedrock	Granule
Boulder	Sand
Cobble	Silt
Pebble	Veget.

SPECIES	—				
COUNT	—				

REMARKS: CLAM GULCH STATE Critical Habitat Area  
 Tarball 4" diameter and 3/8 thick

*[Handwritten signature]*



# \*Kachemak Bay Critical Habitat Area

SC NUMBER: \_\_\_\_\_ SEGMENT NUMBER: \_\_\_\_\_ YR CATALOGED: \_\_\_\_\_  
 LOCATION: Kachemak Bay, ~~Oldred Passage Area~~ **Eldred Passage Area**  
 COMMON NAME: **Eldred Passage Area** LATITUDE: See comments  
 WIAK K-UNIT: \_\_\_\_\_ LOCAL STREAM #: \_\_\_\_\_ LONGITUDE: " " " "  
 SGS QUADRANGLE: Seldivia C-4 LEGAL: \_\_\_\_\_  
 SHORELINE TYPE: BEACH, low lying rocks ALL SEGMENTS: \_\_\_\_\_  
 AVE EXPOSURE: Moderate DDH 10/9/91

SC NUMBER: \_\_\_\_\_  
 SURVEY TYPE: **BS**  
 METHOD: Skiff/Boat  
 DATE: 7/18/89  
 START TIME: 1030  
 STOP TIME: 1400

TEAM RECORDER: Rick Randall  
 OBSERVERS: \_\_\_\_\_  
 AGENCY(IES): ADF&G  
 PHOTOS TAKEN? ~~NO~~ **Yes**  
 Roll #: RDR-6 Frames: 11 → 14  
 VIDEO TAKEN? \_\_\_\_\_ Tape Number: \_\_\_\_\_  
 Counter Start: \_\_\_\_\_

SAMPLES TAKEN? **89AL014H**  
 SAMPLE I.D. NUMBER: 1. RRKB-15  
 2. RRKB-18  
**89AL015H**

**89AL016H**  
 2. RRKB-16  
 5. RRKB-19  
**89AL015H**  
 3. RRKB-17  
 6. RRKB-20  
*center of it.*

SITE	LENGTH m	WIDTH m	H2	%	THICK cm	PEN cm	OIL TYPE
SITE 1	—	—	—	—	—	—	—
SITE 2							
SITE 3							
SITE 4							
SITE 5							

## OVERALL OIL IMPACT: VL

OIL IN STREAM CHANNEL? \_\_\_\_\_  
 SUBSTRATE:  
 Bedrock  Granule   
 Boulder  Sand   
 Cobble  Silt   
 Pebble  Veget.

OIL ON BEACH WITHIN 50M OF STREAM MOUTH? \_\_\_\_\_  

SPECIES	<del>AAA</del>	Sea Otter			
COUNT	—	1			

- Skiffed from Homer Boat Hbr. to Eldred Passage Area.
- RRKB-15**: Taken from Yukon Island outside beach between Yukon & Hesketh Island. One tarball 1" x 1/4" thick, One tarball 2 1/2" diameter x 1/4" thick.  
**KACHEMAK BAY CRITICAL HABITAT AREA** 59° 31' 12", 151° 30' 30"
- RRKB-16**: Taken from Hesketh Island, largest beach. Found on spruce bow 1/2" long. Dead Sea Otter found - no apparent oil on fur.  
59° 30' 30", 151° 30' 18"
- RRKB-17**: Taken from Hesketh Island, <sup>next beach</sup> west of sample 16 beach. Tarball: 1" x 1/2" long x 1/8". 59° 30' 30", 151° 30' 42" ACE 9961116
- RRKB-18**: Taken from Hesketh Island - west side. One tarball: 1" x 1/2" x 1/8". Found at most recent tide line. 59° 30' 30", 151° 31' 18"
- RRKB-19**: Taken from Eldred Passage - Rock Quarry - 2nd beach to west. Oil adhered to drift weed: 1 1/2" x 1/2". 59° 29' 48", 151° 28' 00"
- RRKB-20**: Taken from Eldred Passage - Beach at entrance of Sadie Cove. Oil adhered to feathers - 2" x 1". 59° 31' 42", 151° 27' 18"

Over 7% Oil samples



SC NUMBER: LOCATION: Kachemak Bay, Kachemak Bay Critical Habitat Area  
 MCKEAN SPIT to AURORA LAGOON  
 SAM NAME: LOCAL STREAM #1  
 YR CATALOGED: DDH-7/19/89  
 LATITUDE: LONGITUDE: LEGAL: ALL SEGMENTS:

C NUMBER: SURVEY TYPE: BS  
 METHOD: Foot  
 DATE: 7/19/89  
 START TIME: 0748  
 STOP TIME: 1555  
 TEAM RECORDER: Rick Randall  
 OBSERVERS: Doug Hill  
 AGENCY(IES): ADFG  
 PHOTOS TAKEN? yes  
 Roll # 89ROR-6 Frames 15-20  
 VIDEO TAKEN? no Tape Number 6-14  
 Counter Start:

SAMPLES TAKEN? yes  
 SAMPLE I.D. NUMBERS: DDH-7/19/89-A  
1. 89ROR-22  
2. DDH-7/19/89-B  
3. 89ROR-21  
5. 89ROR-23 KB-AurSpit-DDH-7/19/89  
89ROR-24 89DOH03H

SITE	LENGTH m	WIDTH m	112	1	THICK cm	PEN cm	OIL TYPE
SITE 1	4024	1	—	1	—	—	TB, MS, ST
SITE 2							
SITE 3							
SITE 4							
SITE 5							

pls put the 7th sample into comment.

OVERALL OIL IMPACT: ✓  
 OIL IN STREAM CHANNEL? SUBSTRATE  
 Bedrock / Granule  
 Boulder / Sand  
 Cobble / Silt  
 Pebble / Veget.

IN BOB OF STREAM MOUTH? —  
 Common Loon 2, Black Legged Kittiwake 8, Glaucous winged GULLS 3, mew Gulls 5, BLACK BEAR 1

COMMENTS: Ground surveyed approximately 1/2 mile of Mckean Spit. No oil observed.  
 - Ground surveyed from Rusty's Lagoon to tip of Glacier Spit  
 - Dime to quarter sized tarballs, mouse and numerous oil stains found easily ~~found~~ along length of ~~beach~~ Glacier Spit beach - Oil sign quite common.  
~~Outscraped ~~with the soap~~~~  
 - All samples recorded in the sample box with the exception of #6 were taken on the Glacier Spit beach.  
 - Aurora Spit: took sample. Near mouth of Portlock Creek we observed hundreds of Crab molts  
 - Observed oil sheen just east little Tutka (Bilge Pumping?)



SC NUMBER: LOCATION: Kachemak Bay, Kachemak Bay Critical Habitat Area  
 LOCAL STREAM: Mckean Spit to Aurora Lagoon  
 YR CATALOGED: 1991  
 LATITUDE: LONGITUDE: LEGAL: NO  
 ALL SEGMENTS:

TEAM RECORDER: Rock Randall  
 OBSERVERS: Doug Hill  
 AGENCY(IES): ADFG  
 PHOTOS TAKEN? yes  
 Roll # 89ROR-6 Frames 15-20  
 VIDEO TAKEN? no Tape Number 6-14  
 Counter Start:

SAMPLES TAKEN? yes  
 SAMPLE I.D. NUMBERS: 1. DDH-7/19/89-A  
2. DDH-7/19/89-B  
3. 89ROR-21  
4. 89ROR-22  
5. 89ROR-23

SITE	LENGTH m	WIDTH m	H2	?	THICK cm	PEN cm	OIL TYPE
SITE 1	4024	1	—	1	—	—	TB, MS, ST
SITE 2							
SITE 3							
SITE 4							
SITE 5							

OVERALL OIL IMPACT: VL  
 OIL IN STREAM CHANNEL? NO  
 OIL ON BEACH WITHIN 50M OF STREAM MOUTH? NO

SUBSTRATE	
Bedrock	Granule
Boulder	Sand
Cobble	Silt
Pebble	Veget.

SPECIES	BALD EAGLE	COMMON LOON	BLACK LEGGED KITTIWAKE	GLAUCOUS WINGED GULLS	MOURN DOVE	BLACK BEAR
COUNT	1	2	8	3	5	1

COMMENTS: Ground surveyed approximately 1/2 mile of Mckean Spit. No oil observed.  
 - Ground surveyed from Rusty's Lagoon to tip of Glacier Spit  
 - Dime to quarter sized tarballs, mousse and numerous oil stains found easily ~~found~~ along length of Glacier Spit beach. Oil sign quite common.  
 - All samples recorded in the sample box with the exception of #6 were taken on the Glacier Spit beach.  
 - Aurora Spit: took sample. Near mouth of Portlock Creek we observed hundreds of crab molts.  
 - Observed oil sheen just east little Tutka (Bilge Pumping?)



No stream

Homer Spit

SC NUMBER: \_\_\_\_\_ SEGMENT NUMBER: \_\_\_\_\_ YR CATALOGED: \_\_\_\_\_  
 LOCATION: Kaikemak Bay, Homer Spit, ~~SW~~ ~~SE~~ Side  
 SAM NAME: \_\_\_\_\_ LOCAL STREAM #1: \_\_\_\_\_  
 IAK K-UNIT: \_\_\_\_\_ LOCAL STREAM #2: \_\_\_\_\_  
 SGS QUADRANGLE: Seldovia C-4  
 SHORELINE TYPE: BEACH  
 TIDE EXPOSURE: High

*DDW 10/9/91*

SC NUMBER: \_\_\_\_\_ TEAM RECORDER: Rick Randall  
 SURVEY TYPE: BS OBSERVERS: \_\_\_\_\_  
 METHOD: FOOT  
 DATE: 7/17/89 AGENCY(IES): ADF&G  
 START TIME: 1300 PHOTOS TAKEN?   
 STOP TIME: \_\_\_\_\_ Roll #: RDR-6 Frames: 10  
 VIDEO TAKEN?  Tape Number: \_\_\_\_\_  
 Counter Start: \_\_\_\_\_  
 SAMPLES TAKEN? *yes* SAMPLE I.D. NUMBER: 1. *RRKB-13* 2. *RRKB-14* 3. \_\_\_\_\_ 4. \_\_\_\_\_ 5. \_\_\_\_\_ 6. \_\_\_\_\_

	LENGTH m	WIDTH m	H2	%	THICK cm	PEN cm	OIL TYPE
SITE 1							
SITE 2							
SITE 3							
SITE 4							
SITE 5							

OVERALL OIL IMPACT: VL  
 OIL IN STREAM CHANNEL? \_\_\_\_\_ OIL ON BEACH WITHIN 50M OF STREAM MOUTH? \_\_\_\_\_

SUBSTRATE

Bedrock	Granule 33
Boulder	Sand
Cobble 33	Slit
Pebble 33	Veget. <input checked="" type="checkbox"/>

SPECIES					
COUNT					

COMMENTS: *Sample # RRKB-13: Found on west side of spit - at the 1/2 way point of the spit. 2" diameter by 1/4" thick. Found in most recent tide line. 59°37'18", 151°27'30"*  
*Sample # RRKB-14: Found on west side of spit NW of sample 13. 2" diameter x 1/4" thick. Found at most recent tide line. 59°37'30", 151°27'30"*



# Kalgin Island

SC NUMBER: ~~00620~~ SEGMENT NUMBER: \_\_\_\_\_ YR CATALOGED: \_\_\_\_\_  
 LOCATION: Cook Inlet, Kalgin Island Critical Habitat Area  
 SAM NAME: ~~South Anchorage Pt~~ LOCAL STREAM: \_\_\_\_\_  
 VIAC K-UNIT: \_\_\_\_\_ LATITUDE: Check Sample Log  
 LONGITUDE: " " "  
 LEGAL: \_\_\_\_\_  
 SGS QUADRANGLE: Kenai B-6  
 SHORELINE TYPE: Beach  
 WAVE EXPOSURE: High  
 ALL SEGMENTS: \_\_\_\_\_

*DDH 10/9/9*

C NUMBER: \_\_\_\_\_  
 SURVEY TYPE: **BS**  
 METHOD: Foot  
 DATE: 7/20/89  
 START TIME: ~~0950~~  
 STOP TIME: ~~1243~~  
 TEAM RECORDER: Rick Randall  
 OBSERVERS: Al Davis  
 AGENCY(IES): ADF&G  
 PHOTOS TAKEN? \_\_\_\_\_  
 Roll 1: **RDR-7** Frames: 1-8  
 VIDEO TAKEN? **N** Tape Number: \_\_\_\_\_  
 Counter Start: \_\_\_\_\_  
 SAMPLES TAKEN? *Yes*  
 SAMPLE I.D. NUMBERS: 1. <sup>*As is*</sup> **89RDR-25** 2. <sup>*As is*</sup> **89RDR-26** 3. \_\_\_\_\_  
 4. **89RDR-24H** 5. **89RDR-25H** 6. \_\_\_\_\_

SITE	LENGTH m	WIDTH m	H2	T	THICK cm	PEN cm	OIL TYPE
SITE 1	/	/	/	/	/	/	<b>TB-V</b>
SITE 2							
SITE 3							
SITE 4							
SITE 5							

OVERALL OIL IMPACT: **YL**  
 OIL IN STREAM CHANNEL? \_\_\_\_\_  
 OIL ON BEACH WITHIN 50M OF STREAM MOUTH? \_\_\_\_\_  
 SUBSTRATE:

Bedrock /	Granule /
Boulder /	Sand /
Cobble /	Slit /
Pebble /	Veget. /

SPECIES	/	/	/	/	/
COUNT	/	/	/	/	/

Ground surveyed beaches within the Kalgin Island Critical Habitat Area with use of Helicopter.  
**1108** - Found tarball 3.5" x 1/4" - Eastside approx. 3/4 mile from point on beach just south of river. Found at recent high tide line.  
**1128** - Found oil on spruce bow 2 1/2" x 1". 100 yds south of 1108 sample. *OK* Found at most recent tide line.  
~~(330) ... you like ... 5 miles South of Anchorage River ...  
 ... tide line from previous ...  
 ... oil on rocks ... found surface ...~~



Kach. Bay Crit. HAB Area

SC NUMBER: \_\_\_\_\_ SEGMENT NUMBER: \_\_\_\_\_ YR CATALOGED: \_\_\_\_\_  
 LOCATION: Kach. Bay Critical Habitat Area - Sm. South Anchos River  
 LAKE NAME: \_\_\_\_\_ LATITUDE: 59° 41' 30"  
 LOCAL STREAM #: \_\_\_\_\_ LONGITUDE: 151° 45' 30"  
 LEGAL: \_\_\_\_\_  
 ALL SEGMENTS: ADP 10/9/91

SC NUMBER: \_\_\_\_\_ SURVEY TYPE: BS  
 METHOD: FOOT  
 DATE: 7/20/89  
 START TIME: 1400 1330  
 STOP TIME: \_\_\_\_\_  
 TEAM RECORDER: Rick Randall  
 OBSERVERS: AL DAVES  
 AGENCY(IES): ADF&G  
 PHOTOS TAKEN? Yes  
 Roll # RDR-7 Frames: 12-18  
 VIDEO TAKEN? N Tape Number: \_\_\_\_\_  
 Counter Start: \_\_\_\_\_

SAMPLES TAKEN? Yes  
 SAMPLE I.D. NUMBER: 1. 89RDR27 2. \_\_\_\_\_ 3. \_\_\_\_\_  
 4. 89RDR26H 5. \_\_\_\_\_ 6. \_\_\_\_\_

	LENGTH m	WIDTH m	H2	t	THICK cm	PEN cm	OIL TYPE
SITE 1	—	—	—	—	—	—	<u>ST OIL</u>
SITE 2							
SITE 3							
SITE 4							
SITE 5							

VERALL OIL IMPACT: L  
 OIL IN STREAM CHANNEL? \_\_\_\_\_ OIL ON BEACH WITHIN 50M OF STREAM MOUTH? \_\_\_\_\_

SUBSTRATE

Bedrock	Granule
Boulder	Sand
Cobble	Silt
Pebble	Veget.

SPECIES	—				
COUNT	—				

REMARKS: Oil easily found at hi tide line ~~at~~ Presumably at the previous months high tide lines. Splatters of oil on rocks. Oil found surface and subsurface at 20-23' tide line.



SC NUMBER: \_\_\_\_\_ SEGMENT NUMBER: \_\_\_\_\_ YR CATALOGED: \_\_\_\_\_  
 LOCATION: Kachemak Bay Critical Hab. Area  
 TANK NAME: \_\_\_\_\_ LOCAL STREAM #: \_\_\_\_\_ LATITUDE: \_\_\_\_\_  
 ADIAK K-UNIT: \_\_\_\_\_ LONGITUDE: \_\_\_\_\_  
 SGS QUADRANGLE: Seldovia D-33 LEGAL: \_\_\_\_\_  
 SHORELINE TYPE: BEACH ALL SEGMENTS: \_\_\_\_\_  
 WAVE EXPOSURE: High

*DDG 10/9/89*

SC NUMBER: \_\_\_\_\_  
 SURVEY TYPE: BS  
 METHOD: Foot  
 DATE: 7/22/89  
 START TIME: ?  
 STOP TIME: ?  
 SAMPLES TAKEN? N  
 SAMPLE I.D. NUMBERS: 1. \_\_\_\_\_ 2. \_\_\_\_\_ 3. \_\_\_\_\_  
 4. \_\_\_\_\_ 5. \_\_\_\_\_ 6. \_\_\_\_\_

TEAM RECORDER: Rick Randall  
 OBSERVERS: \_\_\_\_\_  
 AGENCY(IES): ADF&G  
 PHOTOS TAKEN? N  
 Roll #: \_\_\_\_\_ Frames: \_\_\_\_\_  
 VIDEO TAKEN? N Tape Number: \_\_\_\_\_  
 Counter Start: \_\_\_\_\_

	LENGTH m	WIDTH m	H2	T	THICK cm	PEN cm	OIL TYPE
SITE 1							None
SITE 2							
SITE 3							
SITE 4							
SITE 5							

OVERALL OIL IMPACT: N

OIL IN STREAM CHANNEL? \_\_\_\_\_  
 SUBSTRATE

Bedrock	Granule
Boulder	Sand
Cobble	Silt
Pebble	Veget.

OIL ON BEACH WITHIN 50M OF STREAM MOUTH? \_\_\_\_\_

SPECIES	_____	_____	_____	_____	_____
COUNT	_____	_____	_____	_____	_____

COMMENTS: Ground surveyed 1610 meters of beach  $\approx$  1 mile  
 South of Kachemak Silo (Russian Village) - North shore  
 Head of Bay.



ASC NUMBER: \_\_\_\_\_ SEGMENT NUMBER: \_\_\_\_\_ YR CATALOGED: \_\_\_\_\_  
 LOCATION: Cook Inlet East Side, 1 mi either side Kenai, Kasilof and Ninilchik Rivers  
 STREAM NAME: Kenai, Kasilof, Ninilchik LATITUDE: \_\_\_\_\_  
 HUBIAK K-UNIT: \_\_\_\_\_ LOCAL STREAM #: \_\_\_\_\_ LONGITUDE: \_\_\_\_\_  
 USGS QUADRANGLE: \_\_\_\_\_ LEGAL: \_\_\_\_\_  
 SHORELINE TYPE: Beach ALL SEGMENTS: \_\_\_\_\_  
 WAVE EXPOSURE: High *ADFG 10/9/89*

SC NUMBER: \_\_\_\_\_ TEAM RECORDER: Rick Randall  
 SURVEY TYPE: BS OBSERVERS: \_\_\_\_\_  
 METHOD: ATV AGENCY(IES): ADF+G  
 DATE: 7/27/89 PHOTOS TAKEN?   
 START TIME: ? Roll #: \_\_\_\_\_ Frames: \_\_\_\_\_  
 TOP TIME: ? VIDEO TAKEN? \_\_\_\_\_ Tape Number: \_\_\_\_\_  
 Counter Start: \_\_\_\_\_

SAMPLES TAKEN? \_\_\_\_\_  
 SAMPLE I.D. NUMBERS: 1. \_\_\_\_\_ 2. \_\_\_\_\_ 3. \_\_\_\_\_  
 4. \_\_\_\_\_ 5. \_\_\_\_\_ 6. \_\_\_\_\_

	LENGTH m	WIDTH m	112	1	THICK cm	PEN cm	OIL TYPE	
SITE 1	✓		PLEASE NOTE ON Computer (MAD Forms) Any oil between Cape Kasilof and Happy Valley was in Glam Gulch State Critical Habitat Area Includes: Deep Crk Ninilchik River					
SITE 2								
SITE 3								
SITE 4								
SITE 5								

OVERALL OIL IMPACT: NONE  
 OIL IN STREAM CHANNEL? \_\_\_\_\_ IN 50M OF STREAM MOUTH? \_\_\_\_\_  
 SUBSTRATE

Bedrock	Granule	ACE 9961123	SEAL		
Boulder	Sand				
Cobble	Silt				
Pebble	Veget.				

REMARKS: Ground surveyed one mile on either side of the Kenai, Kasilof and Ninilchik Rivers. Surveyed recent and old, tide lines. Survey lasted approx. 6.5 hrs.  
 - observed one dead juvenile seal, 1/4 mile N. Kasilof River

Ninilchik River - Kenai A-5, 244-20-10090 (60° 3' 27" 151° 39' 37" S1514W27)

Kasilof River - Kenai B-4, 244-30-10050 (60° 23' 14" 151° 17' 52" 4842W36)

Kenai River - Kenai C-4, 244-30-10010 (60° 32' 55" 151° 15' 43" S 5 N 11 W 6)

*Don't need last (ins).*



ASC NUMBER: \_\_\_\_\_ SEGMENT NUMBER: \_\_\_\_\_ YR CATALOGED: \_\_\_\_\_  
 LOCATION: Cook Inlet East Side, 1 mi either side Kenai, Kasilot and Ninilchik Rivers  
 STREAM NAME: Kenai, Kasilot, Ninilchik LATITUDE: \_\_\_\_\_  
 AQUIFAC K-UNIT: \_\_\_\_\_ LOCAL STREAM #: \_\_\_\_\_ LONGITUDE: \_\_\_\_\_  
 USGS QUADRANGLE: \_\_\_\_\_ LEGAL: \_\_\_\_\_  
 SHORELINE TYPE: Beach ALL SEGMENTS: \_\_\_\_\_  
 WAVE EXPOSURE: High *ADFG 10/9/89*

ASC NUMBER: \_\_\_\_\_ TEAM RECORDER: Rick Randall  
 SURVEY TYPE: BS OBSERVERS: \_\_\_\_\_  
 METHOD: ATV AGENCY(IES): ADF+G  
 DATE: 7/27/89 PHOTOS TAKEN?   
 START TIME: ? Roll #: \_\_\_\_\_ Frames: \_\_\_\_\_  
 TOP TIME: ? VIDEO TAKEN? \_\_\_\_\_ Tape Number: \_\_\_\_\_  
 Counter Start: \_\_\_\_\_

SAMPLES TAKEN? \_\_\_\_\_  
 SAMPLE I.D. NUMBERS: 1. \_\_\_\_\_ 2. \_\_\_\_\_ 3. \_\_\_\_\_  
 4. \_\_\_\_\_ 5. \_\_\_\_\_ 6. \_\_\_\_\_

	LENGTH m	WIDTH m	H2	t	THICK cm	PEN cm	OIL TYPE
SITE 1	✓						
SITE 2							
SITE 3							
SITE 4							
SITE 5							

VERALL OIL IMPACT: NONE

OIL IN STREAM CHANNEL? \_\_\_\_\_ OIL ON BEACH WITHIN 50M OF STREAM MOUTH? \_\_\_\_\_  
 SUBSTRATE

Bedrock	Granule
Boulder	Sand
Cobble	Silt
Pebble	Veget.

SPECIES	✓	SEAL			
COUNT	✓	1			

REMARKS: Ground surveyed one mile on either side of the Kenai, Kasilot and Ninilchik Rivers. Surveyed recent and old, tide lines. Survey lasted approx. 6.5 hrs.  
 - Observed one dead juvenile Seal, 1/4 mile N. Kasilot River

Ninilchik River - Kenai A-5, 244-20-10090 (60° 3' 27" S 151° 39' 37" W) 41842W27

Kasilot River - Kenai B-4, 244-30-10050 (60° 23' 14" S 151° 17' 52" W) 41842W36

Kenai River - Kenai C-4, 244-30-10010 (60° 32' 55" S 151° 15' 43" W) 41842W36

*Don't need last coords.* ACE 9961124 S 5 N 11 W 6



No stream

# Sukoi Bay - Commfish Kodiak

ASC NUMBER: \_\_\_\_\_ SEGMENT NUMBER: \_\_\_\_\_ YR CATALOGED: \_\_\_\_\_  
 LOCATION: Cape Douglas, Sukoi Bay  
 IAN NAME: \_\_\_\_\_ LOCAL STREAM #: \_\_\_\_\_  
 NAVIAC K-UNIT: \_\_\_\_\_  
 USGS QUADRANGLE: AF06NAR D-4, D-5  
 SHORELINE TYPE: BEACH, Low lying Rocks ALL SEGMENTS: \_\_\_\_\_  
 WAVE EXPOSURE: High

2007  
10/19/99

ASC NUMBER: \_\_\_\_\_ TEAM RECORDER: \_\_\_\_\_  
 SURVEY TYPE: PS OBSERVERS: K. Brennan  
 METHOD: Foot Aerial B. Barrett  
 DATE: 4/21/89 AGENCY(IES): ADF&G/Commfish/Kodiak  
 START TIME: \_\_\_\_\_ PHOTOS TAKEN? \_\_\_\_\_  
 STOP TIME: \_\_\_\_\_ Roll #: \_\_\_\_\_ Frames: \_\_\_\_\_  
 VIDEO TAKEN? \_\_\_\_\_ Tape Number: \_\_\_\_\_  
 Counter Start: \_\_\_\_\_

SAMPLES TAKEN? \_\_\_\_\_  
 SAMPLE I.D. NUMBERS: 1. \_\_\_\_\_ 2. \_\_\_\_\_ 3. \_\_\_\_\_  
 4. \_\_\_\_\_ 5. \_\_\_\_\_ 6. \_\_\_\_\_

	LENGTH m	WIDTH m	H2	%	THICK cm	PEN cm	OIL TYPE
SITE 1							
SITE 2							
SITE 3							
SITE 4							
SITE 5							

OVERALL OIL IMPACT: \_\_\_\_\_  
 OIL IN STREAM CHANNEL? \_\_\_\_\_  
 OIL ON BEACH WITHIN 50M OF STREAM MOUTH? \_\_\_\_\_

SUBSTRATE

Bedrock	Granule
Boulder	Sand
Cobble	Silt
Pebble	Veget.

SPECIES	SEA OTTER				
COUNT	2				

REMARKS: Aerial survey of 1/2 the intertidal area of Bay with Helo 10' off deck, no oil obvious.  
 Contact Kodiak ADF&G Commfish office for further info.  
 USFWS report of 5/9/89 stated that 70 sea lions were counted at Cape Douglas.



Windy Bay-WB-2  
Treatment/Post-treatment  
Survey

Not A Stream  
ADF&G MULTI-ASSESSMENT DATA FORM

1 SURVEY TYPE:  SS DS TS AVS SCHA MHHS PTA 2 REGION: PWS  K,AP

METHOD: Aerial Ground Boat

3 DATE: 5/31/90 18 HIGH TIDE TIMES: 0802 10911 21 TEAM RECORDER: Lee Glenn, Doug Hill (ADF&G)

4 START TIME: 1200 19 HIGH TIDE HTS: 9.7 110.8 22 OBSERVERS: Pat Abraham (CNA)  
Russel Kinobe (ADEC)

5 STOP TIME: 1730 17 LOW TIDE TIMES: 0148 10207 23 AGENCY: Russel Kinobe (ADEC)

6 SEGMENT #: WB-02 18 LOW TIDE HTS: 3.6 11.3 24 PHOTOS TAKEN:  N  
900H12H 01→13  
Roll #: 900DH13H Frame: 01→07

7 STATION #: \_\_\_\_\_ 19 TIDE HT AT SURVEY: \_\_\_\_\_ 25 VIDEO TAKEN:  N TAPE#: 90LPG023H  
Start: 3658 End: 4362

8 K-UNIT: \_\_\_\_\_ Ebb Slack Flood Slack 26 SAMPLES TAKEN? Y  Number  
Oil \_\_\_\_\_  
Sediment \_\_\_\_\_  
Biological \_\_\_\_\_  
Water \_\_\_\_\_

9 STAT AREA: \_\_\_\_\_ 20 USCG QUAD: Seldovia-A-5

10 LAT: \_\_\_\_\_ 11 LONG: \_\_\_\_\_

12 SOURCE: Map Loran

13 LOCATION: Windy Bay, North Shore

14 DESCRIPTION: \_\_\_\_\_

EXTENT OF OIL

	SHORELINE				STREAM			
	L	W	M <sup>2</sup>	%	L	W	M <sup>2</sup>	%
27 SURFACE COVERAGE								
28 SURFACE THICKNESS								
29 PENETRATION								
30 OVERALL OIL IMPACT:	N	VL	L	M	<input checked="" type="radio"/>			

31 OIL TYPE: Pooled Mousse Tar Asphalt Sticky Seafn  
She  $\phi$  MS, TP, AP, HDR-LOR, OP, SOL

32 OILED DEBRIS?  N

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

34 WAVE EXPOSURE: High Moderate Low

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

36 CATALOGED ANAD. FISH STREAM? Y N

37 CATALOG #:

38 STREAM NAME:

39 OIL IN STREAM BED? Y N

40 OIL ON STREAM BANKS? Y N

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

42 OIL WITHIN 1 MILE OF STREAM? Y N

Where:

43 ANADROMOUS FISH PRESENT? Y N

44 ANADROMOUS FISH OBSERVATION

Species	Aerial	Ground

COMMENTS: See Attached Trip report - yellow lined text



48 PHOTOLOG

FRAME(S)	DESCRIPTION
01, 02	Post-treatment Survey of WR-2E (NE BEACH) / Pooled Mousse
3, 4, 5	Onboard EX-50 Atlas
6, 7, 8, 10	Pooled mousse (6 => w/water) (7 => karnack) (8) (10)
9	Tide Pool w/ sheen & mousse on surface, Pooled Mousse
11, 12, 13	Mousse reflecting as tide rises, Pooled mousse

48 OIL DISTRIBUTION DIAGRAM

= Sample taken  
 = Photo frame # and  
 shot direction.

ACE 9961127

**MEMORANDUM**

**STATE OF ALASKA**

To: Lee Glenn  
Habitat Biologist III  
Oil Response Center  
Homer

From: Doug Hill  
FT III  
Oil Response Center  
Homer

SUBJECT: Trip Report---Cleanup monitoring Windy Bay 002 and Chugach Bay 003-B---Russel Kinube(ADEC), Pat Norman (CNA), Lee Glenn and Doug (ADF&G). Perl and Elizabeth Island Sea Lion Haulout Overflight.

Trip Date: May 31,1990  
Crew: Lee Glenn,Doug Hill (ADF&G), Pat Norman (CNA), Russel Kinube (ADEC).  
Vehicle: Kenai Helicopter 44TV---Lynn Beckhorn-Pilot  
Start: 1120 hrs.  
Stop: 2030 hrs.

Cordova Tide Table Correction  
High Tide Times: 0802/0911  
High Tide HTS: 09.7/10.8  
Low Tide Times: 0148/0207  
Low Tide HTS: 03.6/01.3

Map-USCG Quad: Seldovia A-5 and B-4

1120 hrs.-Depart ERA Helos Homer  
Flew to Port Graham to Pick up Pat Norman (Chugach Native Association). Chugach Native Assoc. owns the land surrounding Windy Bay and Chugach Bay.

1142 hrs.-Port Graham---Pick up Pat Norman

1200 hrs.-Arrive Windy Bay---Put down at log transfer site-WB-02E.  
Cleanup crew has put in a lot of effort here, moving boulders and cobble to get at the pooled oil and oil saturated sediment. Perhaps 70 to 80% of visible oil remaining after the winter storms has been removed by the cleanup crews. However, on this warm sunny day shining dark brown mousse is clearly visible and flowing in some locations. Further work is needed to prevent this oil from refloating. At the present time this oil is easily located and could easily be picked up. So why not take advantage of the situation and pick it up. A crew could easily mop this oil up in a day. All participants of this flight agreed that this oil should be picked up. As it is a threat to the commercial fishery. Pat Norman is a commercial salmon fisherman-holding a Lower Cook Inlet district seine permit. Pat has seined in Windy Bay.



Pat stated that this area is not clean enough. We moved on to a beach approximately 80 yds. to the east of the log transfer site. This was a boulder, gravel, cobble beach. We were met by Steve Ferguson (ADEC), John Dean (EXXON), and Darin Smith (Obrien Oil Spill Pollution Services). Recoverable mousse and saturated sediment still remains on a portion of this beach. Darin Smith (COOPS) said that they had signed off on this beach last night but they had not looked at this portion of the beach. According to the USCG (Jack Reed) once a beach is signed off no one can go back to work that beach without a new SSAT survey and the paperwork must go through the TAG process. Additionally the USCG tells us that the land manager is the only one that can sign off on a beach--in this case it would be Pat Norman (CNA). So a sign off team would consist of EXXON, USCG, and the land manager. However, the coast guard decided that they could not wait for the land manager so they signed it off without the presence of the land manager (P. Norman). Jack Reed and Chris Vandepelt (USCG) passed this information on to us. The current admiral said that we do not have time to wait for the land manager if they are not able to be present when we want them there. Further the USCG feels if effort is going to be put into these beaches in the time frame that EXXON has set up we have to sign these beaches off as fast possible. Well lets see some more effort out here then. Two crews of ten in the entire Homer zone is not much of a good faith effort. Actually observations show us that perhaps only eight of these ten in fact do any real work. So, increase in numbers of workers is necessary as well as a prolonged time frame. The big rush by the USCG to help EXXON stay on its prescribed budget is ~~is~~ already upon us. The first Ensco Atlas crew that arrived had the hurry mode instilled in them upon arrival to the first Homer Zone beach (Nuka 01) <sup>Job</sup> This was in late April. What's the hurry? A decent <sup>Job</sup> could be done if they just take their time and finish a beach before they leave it.

1345 hrs-John Dean had us on board the Ensco Atlas for lunch.

~~REDACTED~~ Discussed concerns about small work crew sizes and the brevity of EXXONS schedule for cleanup this summer as well as possibly getting a crew to do further work on WB-02C.

1500 hrs-Skiffed to WB-2E (Net Beach). Observed small pockets of pooled mousse bleeding. Observed mousse from one <4" thick pool of mousse refloating as the tide rose and submerged it. Portions of the mousse were breaking free from the main body. In terms a commercial fishery this is exactly what we don't want. The land manager (Pat Norman) <sup>Job</sup> Was very concerned about this. Further pickup is required on this beach.

1615 hrs-Skiffed to segment WB-2B. The cleanup crew was on site and picking up tar patties, tar mats and oil saturated



sediment. The workers would locate a patch of oil and follow the seam as far as it would take them. Crew members stated that what would start out as a surface pickup often took them a few inches subsurface (i.e., the visible oiled material extended below the surface of the beach and the workers followed it until it ran out). This particular beach was an expressed cleanup concern of Tom Schroeder (EXXON Fisheries Consultant). A high potential for oiling nets exists here. Fish tend to school up in these embayments. Hence it would be a logical place to make a set since the slope of the beach is low and fish tend to school up in these embayments.

SEAMS  
WENT  
Subsurface  
SEAMS  
WENT  
Subsurface

1740 hrs.-Flew to Chugach Bay. Cleanup crew of nine working CB-3B. Here we were met by Jim Davis (USCG), Mike Revis (VECO), James Byers (OOPS), and Clara Crosby (ADEC). The crew was picking up the large tar mat, tar patties, and alot of heavily oiled sediment from around and beneath cobbles and boulders. The tarmat extended beneath gravel berm at the top of the beach. Russel Kinube said that this oil beneath the berm was not reported on the SSAT survey. Jim Davis (USCG monitor) said Admiral Ciangalini told him once a beach is signed off no one will return to that beach. Jim stated that this statement has caused him to be cautious about signing off until the beach is thoroughly cleaned.

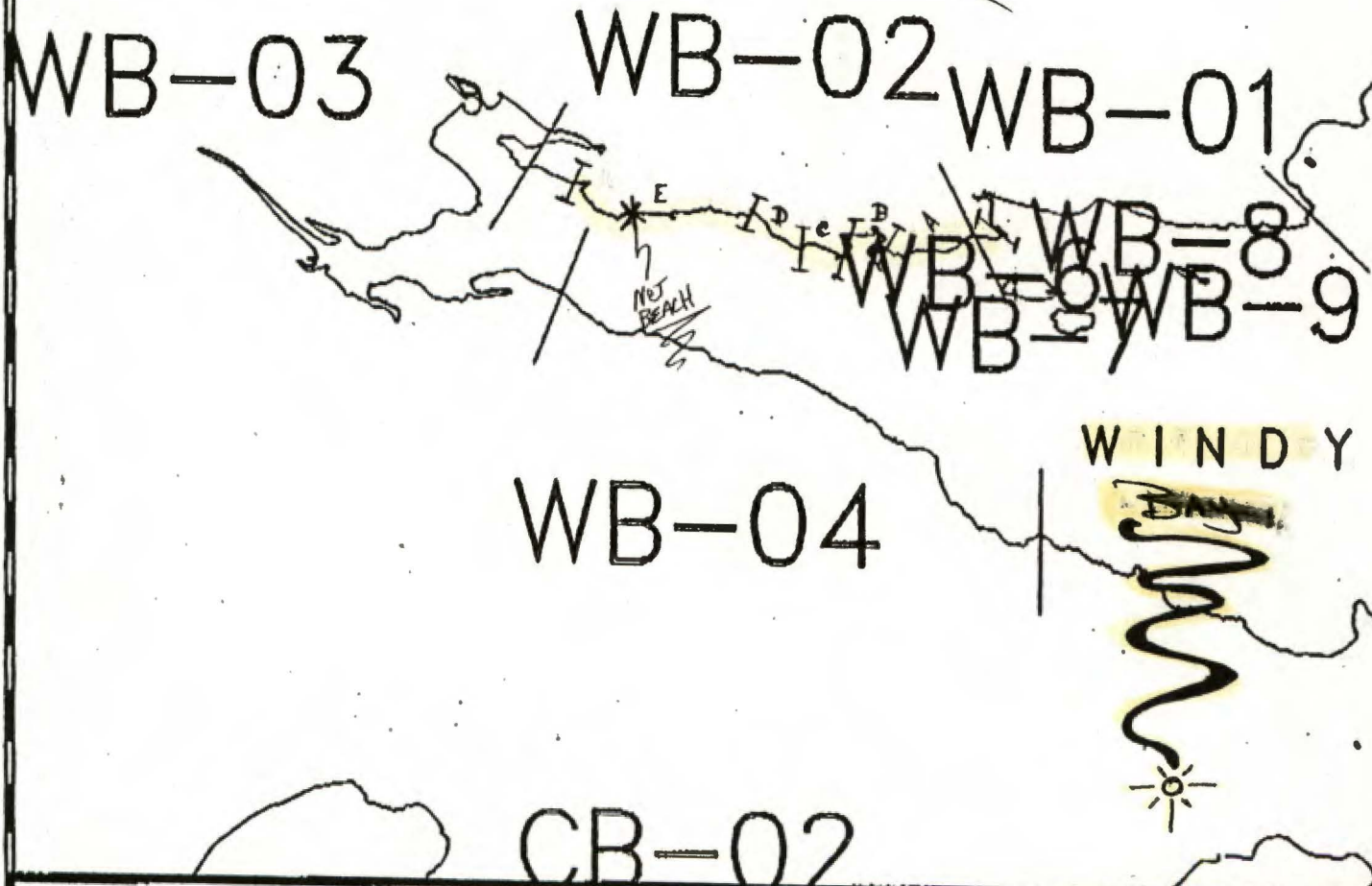
1935 hrs.-Depart Chugach Bay. Overflight of Perl and Elizabeth Island sea lion haulouts. Observed approximately 40 individuals on Perl and approximately 75 individuals on Elizabeth.

1953 hrs.-Land Port Graham and drop off Pat Norman.

2010 hrs.-Land ERA Helos Homer.



WINDY  
BAY



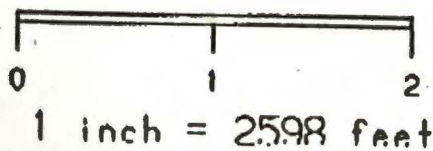
ACE 9961131

EXXON COMPANY, USA

May 21, 1990

Aml used:

/chugacht/morris/super2/ups.aml



ADF&G MULTI-ASSESSMENT DATA FORM

1 SURVEY TYPE:  SS DS TS AVS SCHA MMS PTA 2 REGION: PWS  (KP,C1) K,AP  
 METHOD: Aerial  Ground Boat  
 3 DATE: 5/25/90 16 HIGH TIDE TIMES: 0214 11541 21 TEAM RECORDER: Wes Bucher (AOF+G)  
 4 START TIME: 0810 18 HIGH TIDE HTS: 15.2 111.7 22 OBSERVERS: Tom Schroeder (EXXON) Doug Hill (AOF+G)  
 5 STOP TIME: 1130 17 LOW TIDE TIMES: 0902 12059 23 AGENCY: \_\_\_\_\_  
 6 SEGMENT #: WB 04, 05, WB 03 19 LOW TIDE HTS: -3.9 1 2.4 24 PHOTOS TAKEN: Y:   
 7 STATION #: LEAVE SCGS BLANK 20 TIDE HT AT SURVEY: \_\_\_\_\_ Roll #: \_\_\_\_\_ Frame: \_\_\_\_\_  
 8 K-UNIT: \_\_\_\_\_ Ebb Slack Flood Slack 25 VIDEO TAKEN: Y  TAPE#: \_\_\_\_\_  
 9 STAT AREA: \_\_\_\_\_ 20 USCG QUAD: Seldovia A-5, B-4 Start: \_\_\_\_\_ End: \_\_\_\_\_  
 10 LAT: \_\_\_\_\_ 11 LONG: \_\_\_\_\_ 20 SAMPLES TAKEN? Y  Number \_\_\_\_\_

12 SOURCE: Map Loran OIL \_\_\_\_\_  
 13 LOCATION: West Arm Port Dick, Windy Bay, Various Beach Segments Sediment \_\_\_\_\_  
 14 DESCRIPTION: \_\_\_\_\_ Biological \_\_\_\_\_  
 Water \_\_\_\_\_

Comments:  
 Enter all below + attached print

	EXTENT				
	L	W	M <sup>2</sup>	S	
27 SURFACE COVERAGE					
28 SURFACE THICKNESS					
29 PENETRATION					
30 OVERALL OIL IMPACT:	N	VL	L	M	H
31 OIL TYPE:	Pooled	Mousse	Tar	Aspha	
32 OILED DEBRIS?	Y	N			

CATALOGED ANAD. FISH SREAM? Y N  
 CATALOG #:  
 STREAM NAME:  
 DIL IN STREAM BED? Y N  
 DIL ON STREAM BANKS? Y N  
 DIL ON BEACH ADJACENT TO MOUTH? Y N  
 (within 50 meters)  
 DIL WITHIN 1 MILE OF STREAM? Y N  
 Where: \_\_\_\_\_

33 SHORELINE TYPE: Headland Low-lying Rocks Beach Cove  
 Lagoon Marsh  
 34 WAVE EXPOSURE: High Moderate Low  
 35 SUBSTRATE TYPE: Bedrock \_\_\_\_\_ Boulder \_\_\_\_\_ Cobble \_\_\_\_\_  
 Gravel \_\_\_\_\_ Sand \_\_\_\_\_ Mud/silt \_\_\_\_\_

43 ANADROMOUS FISH PRESENT? Y N

44 ANADROMOUS FISH OBSERVATION

Species	Aerial	Ground

COMMENTS: SEE ATTACHED FIELD NOTES + AIR RECORD

Surveyed portions of <sup>five</sup> ~~two~~ segments with Wes Bucher (AOF+G) & Tom Schroeder with consideration for the 1990 Commercial Salmon season. ACE 9961133  
 PD-05: Oil sheen on tide pool at east end of embayment - No Mousse or tar observed (surveyed center of segment - 22600' straight line <sup>to EAST</sup> from west end of segment)  
 WB-04: No oil observed - surveyed west 1/2 mile of segment. AP patches 1x40m (?% coverage) + 3x 50m (1% coverage?) observed along with



ADF&G MULTI-ASSESSMENT DATA FORM

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

METHOD: Aerial  Ground Boat

3 DATE: 5/25/90 16 HIGH TIDE TIMES: 0214 11541 21 TEAM RECORDER: Wes Bucher (AOF&G)

4 START TIME: 0810 16 HIGH TIDE HTS: 15.2 11.7 22 OBSERVERS: Tom Schroeder (EXKOD)

5 STOP TIME: 1130 17 LOW TIDE TIMES: 0902 12059 23 AGENCY: Doy Hill (AOF&G)

6 SEGMENT #: WB 04, 05, WB 03 18 LOW TIDE HTS: -3.9 1 2.4 24 PHOTOS TAKEN: Y

7 STATION #: LEAVE SCGS BLANK 19 TIDE HT AT SURVEY: \_\_\_\_\_ Roll #: \_\_\_\_\_ Frame: \_\_\_\_\_

8 K-UNIT: \_\_\_\_\_ Ebb Slack Flood Slack 25 VIDEO TAKEN: Y  TAPE#: \_\_\_\_\_

9 STAT AREA: \_\_\_\_\_ 20 USCG QUAD: Seldovia A-5, B-4 Start: \_\_\_\_\_ End: \_\_\_\_\_

10 LAT: \_\_\_\_\_ 11 LONG: \_\_\_\_\_ 26 SAMPLES TAKEN? Y  Number \_\_\_\_\_

12 SOURCE: Map Loran PORT DICK, WEST ARM, WINDY BAY. WB 003-005, WB 001, 005, 010. Oil \_\_\_\_\_

13 LOCATION: West Arm Port Dick, Windy Bay, Various Beach Segments Sediment \_\_\_\_\_

14 DESCRIPTION: \_\_\_\_\_ Biological \_\_\_\_\_

Water \_\_\_\_\_

EXTENT OF OIL

	SHORELINE				STREAM			
	L	W	M <sup>2</sup>	%	L	W	M <sup>2</sup>	%
27 SURFACE COVERAGE								
28 SURFACE THICKNESS								
29 PENETRATION								

30 OVERALL OIL IMPACT: N VL L M H

31 OIL TYPE: Pooled Mousse Tar Asphalt Sticky Stain

32 OILED DEBRIS? Y N

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

34 WAVE EXPOSURE: High Moderate Low

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

36 CATALOGED ANAD. FISH SREAM? Y N

37 CATALOG #:

38 STREAM NAME:

39 OIL IN STREAM BED? Y N

40 OIL ON STREAM BANKS? Y N

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

42 OIL WITHIN 1 MILE OF STREAM? Y N  
Where: \_\_\_\_\_

43 ANADROMOUS FISH PRESENT? Y N

44 ANADROMOUS FISH OBSERVATION

Species	Aerial	Ground

COMMENTS: SEE ATTACHED FIELD NOTES & AIR RECORD

Surveyed portions of <sup>five</sup> segments with Wes Bucher (AOF&G) & Tom Schroeder with consideration for the 1990 Commercial Salmon season. ACE 9961133

PD-05: Oil seen on tide pool at east end of embayment - No Mousse or tar observed (surveyed center of segment - 2 2600' straight line <sup>to EAST</sup> from west end of segment)

WB-04: No oil observed - surveyed west 1/2 mile of segment. AP patches 1x40m (?% coverage) & 3x50m (1% coverage?) observed along with



South Shore of Creek-Bend at Mouth---This portion of beach looks great relative to what it looked like prior to the Yukon River crew's efforts. The crew moved alot of the cobble over and large boulders to get at the underlying and surrounding. At this time little sheen was observed on the portions of beach where water is running and/or pooled. The crew has obviously removed a substantial portion of the oil(sheen and film) saturated sediment. Unlike the 1990 Nuka-1 cleanup where the beach presented a greater threat to wildlife after cleanup than it did prior to cleanup. Mousse and sheen ran down the beach at Nuka-1 after the crew left the area. It will be interesting to see what happens to both of these area on a warm sunny day.

South Shore---Bend at Mouth to Grass Flats. Crew throughly scoured the rock wall area for oil. Lee and I observed only oil stain on rocks. The oil in the grass flats was picked up primarily by ADF&G, ADEC, and ADNR staff on 5/19/89. This section looks good. I do not doubt however, that oil still remains scattered throughout the area-on the gravel bars and beneath the vegetation.

North Bank---Primary cleanup occurred from the bend below the falls to a point approximately 200 yds. downstream (the downstream end of the rocky outcropping). The crew has done an excellent job of cleaning this section of the streambank. Considerably more oil existed here than we or the SSAT team had previously observed. Oil was picked up from the water bank interface to a line approximately 10' above the stream bed. The crew removed vegetation (stems and roots) to get at the oil present. Tar patties were found to be much larger at the base of the vegetation than anticipated. Numerous areas denuded of vegetation now exist due to the cleanup effort. These areas exist primarily upstream of the rocky outcropping.

The crew also moved cobble and large boulders to get at the oil present around the rock bases and in the fractures. Picks were used to bust rock in order to get at the oil pooled in the fractures. It was a good feeling to recognize that the EXXON crew took the initiative to "seek and find oil". Aubrey Brown (1989 EXXON Homer Zone work supervisor) told the beach work supervisors that their job was not to "seek and find" oil. He told them if they find it pick it up, but do not seek to find oil.

CB-03B---We walked to CB-03B. A substantial amount of oil remains in the form of tar patties, tarmats and saturated sediment. We found oil buried beneath 1" of sand/gravel. Numerous splashes of oil are still very visible on the rock face about the waterfall. We dug about 12 holes in the vicinity of the waterfall. We were unable to find the lens of oil Russel Kinube (ADEC) told us we would find.

1604 hrs.-Depart Chugach Bay.

1610 hrs.-Arrive Windy Bay. Landed at small creek immediately to west of Net Beach (WB-02). Helo dropped us off and moved

ACE 9961134/B



## Comments cont'd

scattered coat & TAR Patties.

WB-03 <sup>On</sup> East 1/4 mile of segment we observed scattered patties and 3x50 patch of AP (0% coverage ?).

~~PD-10: Pike Point - Some buried MS observed in mussel bed.~~

PD-10: Pike Point - "Mussel Bed" - Some partially buried mousse  
"East facing Beach" - heavily oiled area, mobile mousse present on surface & subsurface.  
We would like to see this stuff picked up.

PD-05+01: Tent-Town Point - west end PD-05, east end PD-01. we observed two light lines of tar patties along length of alluvial fan and a few 1'x2' patties on north end of fan.

Field Notes - Dog Hill / 1990

5/25/90

0746 - Depart ERA HELO<sup>3</sup> Homer on  
Kawai HELO<sup>4</sup> 44TV (LYNN Beckhorn)  
WES Bucher (AOF4G)  
Tom Schroeder (EXXON)  
Dog Hill (AOF4G)

0810 ⇒ ARR. WB-~~005~~ STOP #1

F/V Enso Atlas in Windy Bay and  
LCM Constructor.

- oil seen on tide pool outcast  
end of embayments. No mousse  
or tar observed.

0830 Depart Stop #1

0832 - STOP #2 - East end of  
WB-004 - Boundary  
No oil observed

0902 - stop #2 Depart WB-04

0906 - STOP #3 ARR.

0940 - West end 1/4 to 1/2 mile end of  
of WB-004  
No oil observed

→ Creek to EAST of Windy  
left is Pink Sparrow. A Reg  
According to T. Schroeder

5/25/90

0945 - STOP #4 Pike Point

Mussel bed - Port Dick  
Little oil observed - Some  
buried mousse observed.  
Some mousse amongst mussels  
(tan patches). Looking better  
than previous visit.

1011 - Depart #4

1012 - ARR STOP #5

Pike Pt. East facing beach  
heavily oiled - Mobile mousse  
still exists on surface &  
subsurface. We would like to  
see this stuff picked up

1018 - Depart #5

1022 - ARR TENT TOWN Pt STOP #6

- 2 lines of tan patches along  
length of Alluvial fan and  
a few large xixi patches on North  
end of fan (for 20 yds north  
of fan) could easily be picked  
up. Lg. Bear plug found on  
beach

1055 - Depart #6

1102 - ARR PORT Dick CABEN



Field Notes - Bay Hill / 1990

5/25/90 Walked 1/4 mile to  
pt. from Cabin - South → RD-004  
Showed Wes & Tom the line  
of Tar patches. Estimate at  
Point covered with 1/2"-1" layer  
of oil - Algae growing on oil.  
1130 - Depart Point Dick Cabin.  
1155 - Home - ERA HEROS

5/29/90

Lee Glenn Day (WILL (ADEFNG))

Lyann Beckhorn Pilot

Kenan Halo 44TV

We flew to Chugach Bay and walked  
from CB-0021 to Beach B  
(South Cove) <sup>DOH</sup> CB-4, CB-33  
had been worked recently a little  
but a large quantity of oil still  
remains. Boulders & Cobble have been  
removed up to along the ADEFNG photo  
transect line. Even where boulders &  
Cobble have been moved up to 3" thick  
patties of tar remaining. One only  
has to glance to note the significant  
quantity of oil remaining.  
Jerry Nugent (USFWS) told us the

crew is having a safety meeting on  
board the M/V Yukon River. Jerry also  
said the crew plans to work here today &  
then move on to the Barren Islands.  
The crew did a fine job of cleaning  
up the 2 pocket beaches in WB-04  
(Between the creek mouth and South Cove)  
South Cove looks much better than it did last  
fall - however the beach (rocky platform)  
is still saturated with oil. It looks like  
someone poured fuel oil on it - little surface  
mud or tar patties visible on surface -  
the sediments were all oil  
and the surface is definitely oil stained  
what a mess

We made an overflight of the Pearl Island  
and Eliz. Island - Sea Lion habitat.  
We observed 8 Sea Lion on Pearl Island  
approx. 45-50 Sea Lion on Eliz. None of  
the Pearl Sea Lion were resting on the oiled  
beach.

We first surveyed the anachronous fish stream  
at Eliz. Island. ~~we~~ we did not walk  
to the lab - we did not need to, as we  
found about 3 five gallon bucket loads  
of oil in the stream. 10 yds above  
the 90° bend we found 1 of these



OILED AREAS WHICH THREATEN THE SALMON FISHERY

Windy Bay

On May 31, Lee Glenn and Doug Hill, ADF&G; Russell Kunibe, ADEC; and Pat Norman, land manager - Port Graham Village Association walked oiled beach segments on the north side of Windy Bay. Several beach segments had been signed off by Exxon and Coast Guard. Mousse was observed bleeding from sediments and beneath boulders and some was re-floating on the incoming tide. These demobilized beaches were unacceptable to the land manager and will reduce the probability of a fishery unless cleaned to a higher standard. Work crews, however, are doing a good job considering the limited technology and work order calling for only manual pickup. Apparently work orders for the demobilized segments will have to be re-issued.

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Port Dick

Work has not begun in Port Dick. On May 24 and 25, Doug Hill, Wes Bucher and Tom Schroeder surveyed the oiled shoreline. Areas of concern include the tar mat and buried lens of oil at PD-1 near Slide Creek, the oiled cobble-boulder beach at Mars Cove and Pike Point and beaches within PD-4. See maps by Doug Hill showing areas of primary concern to the fishery and Tom Schroeder letter of May 24 and 25. The fishing season in Port Dick starts around the end of the month (June 25). Clean up should start in Port Dick immediately to clean these beaches prior to opening the fishery.

Sincerely,

*Leland Glenn*  
 Leland Glenn Habitat Division  
 Habitat Biologist

cc: Jim Butler, Kenai Peninsula Borough  
 Wes Bucher, ADF&G, Homer  
 Paul Ruesch, ADF&G, Soldotna  
 Tom Schroeder, Fisheries Consultant to Exxon  
 Pat Norman, Chugach Native Inc.

FILE: \WP50\NORMA\SURVEY90.604

1 PLATES TO MAH  
 23 & 24 MAH Form  
 MAO Form  
 31 MAY 31



# Commercial Fisheries Survey - 5/25/90

## Foot Survey

Doug Hill (ADFG - Habitat)

WES Bucher (ADFG - Commfish)

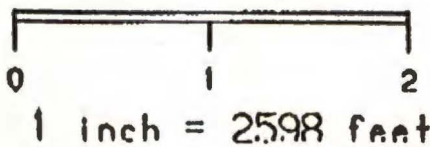
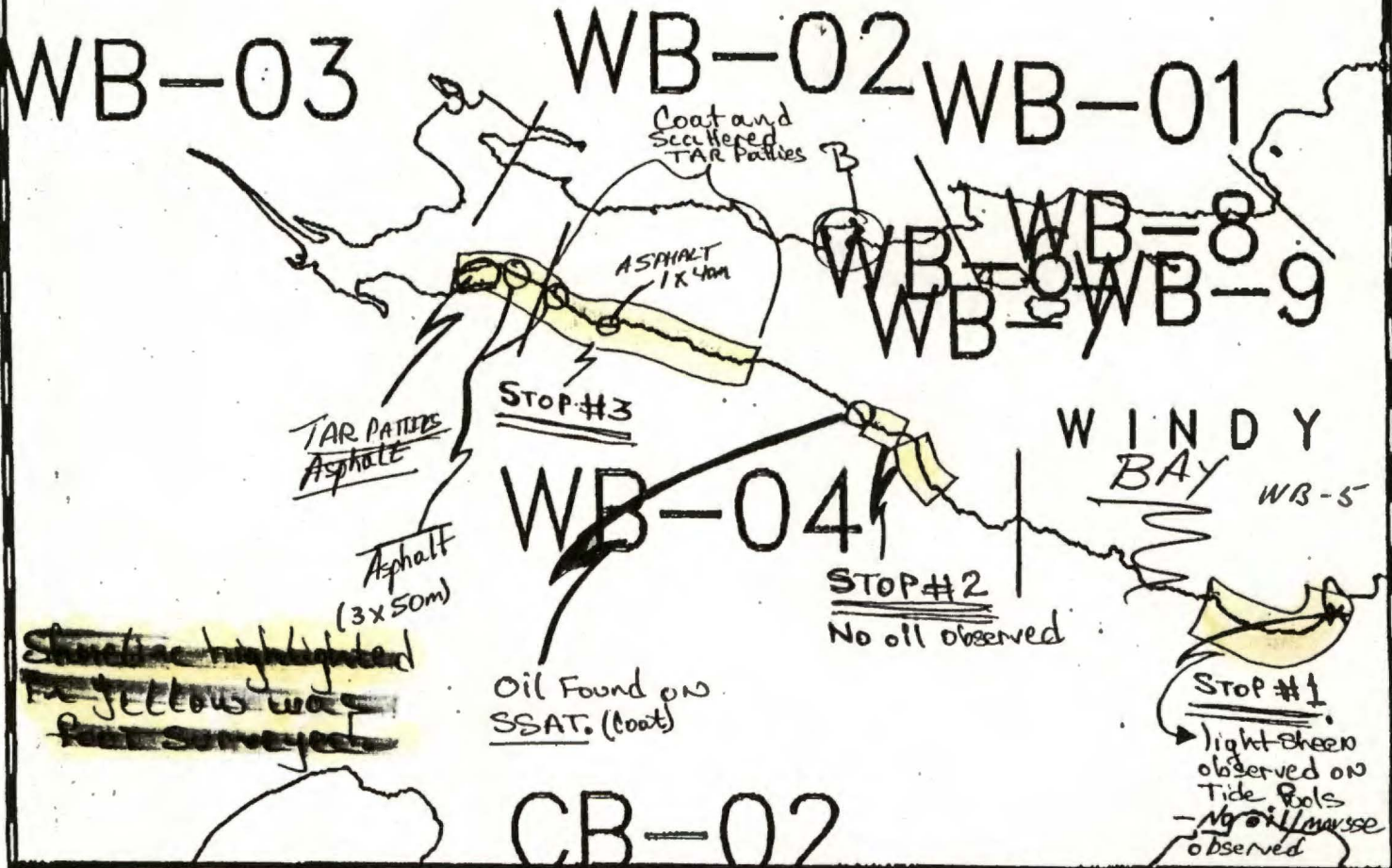
Tom Schroeder (EXXON - Fisheries Rep.)

WB-05 - stop #1 - No removeable oil observed

WB-04 - stop #2 - No removeable oil observed

WB-04 - stop #3 - Pickup tar patties, Asphalt, mousse patches/saturated sediment

WB-03 - stop #3 - Subdivision E - Pickup Tar patties/Asphalt/saturated sediment from spit and amongst boulder at East end



EXXON COMPANY, USA

ACE 9961138

May 21, 1990

Aml used:

/chugachi/morris/super2/ops.aml



Commercial Fisheries Survey - 5/25/90

Foot Survey

Doug Hill - (ADF&G - Habitat)

Wes Bucher - (ADF&G - Commfish)

Tom Schroeder (Exxon - Fisheries Rep.)

0-06

PD-07

PD-8

ISLAND CREEK

PD-9

S T A R M

MARS COVE

Phillipino Cove

PD-10

STOP #5

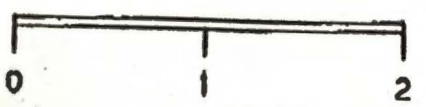
PD-10 - STOP #4 - Mousse patches in Mossel BED.

PD-10 - STOP #5 - PICKUP - Mousse patches, fragments, pooled mousse deposits beneath rocks.

STOP #4

PORT DICK

RIKE POINT



1 inch = 3183 feet

EXXON COMPANY, USA

ACE 9961139

May 21, 1990

AmI used!

/chugach1/morris/super2/ops.eml



# TATE WILDERNE

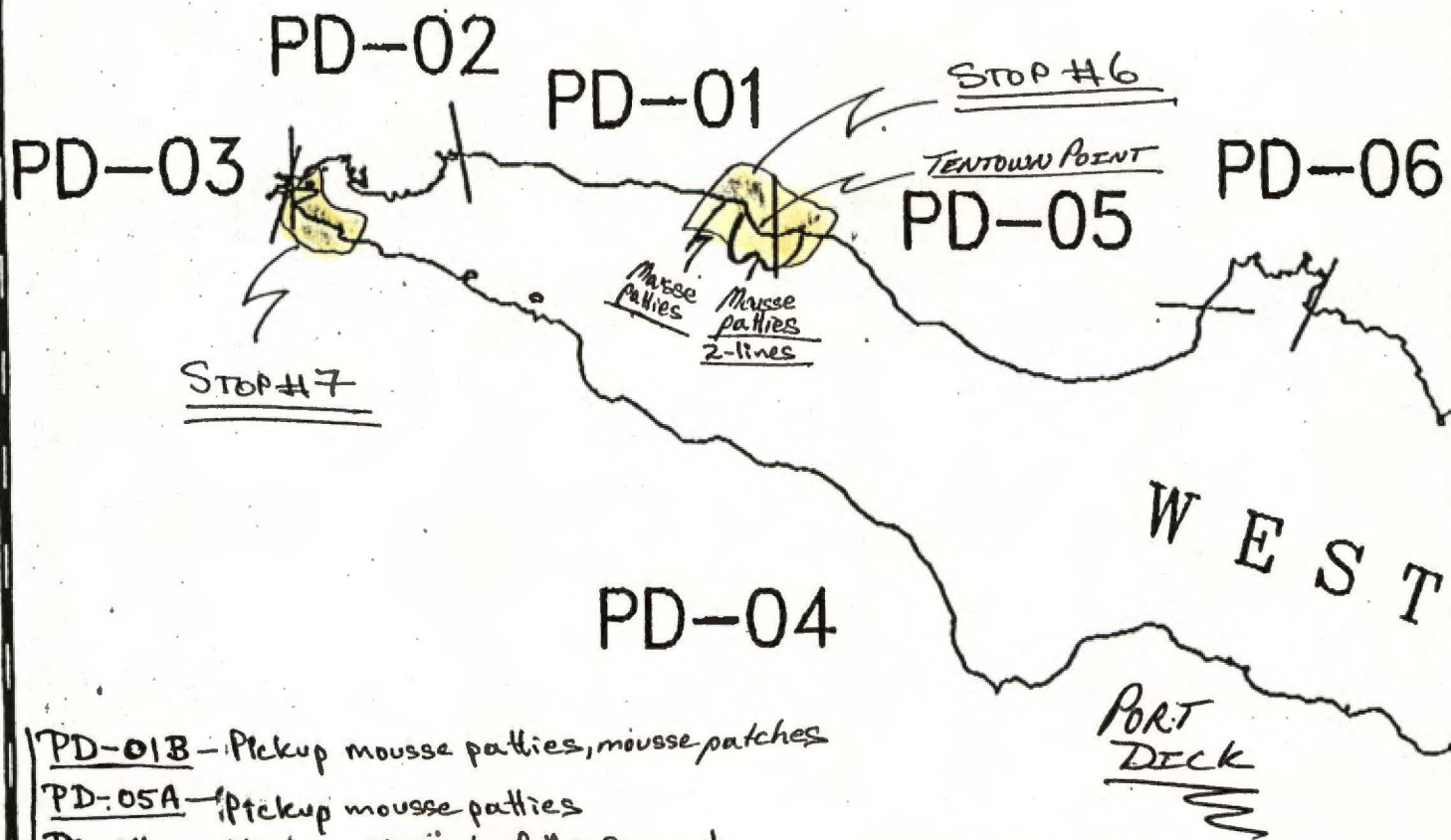
Commercial Fisheries Survey - 5/25/90

Foot Survey

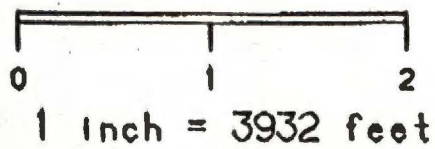
Doug Hill - (ADF+G - Habitat)

WES Bucher - (ADF+G - Commfish)

Tom Schroeder (EXXON - Fisheries Rep.)



- PD-01B - Pickup mousse patties, mousse patches
- PD-05A - Pickup mousse patties
- PD-04 - Western 2/350yds of this Segment  
This portion of the Segment WAS missed by SSAT crew  
Not Included on SSAT MAP of PD-04.  
Pickup tar patties, mousse patches, saturated sediment.



EXXON COMPANY, USA

ACE 9961140

May 21, 1990

Aml used:

/chugachl/morris/super2/ops.aml



ADF&G MULTI-ASSESSMENT DATA FORM

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

METHOD: Aerial Ground Boat

3 DATE: 5/24/90 16 HIGH TIDE TIMES: 0128 1145 21 TEAM RECORDER: Wes Bucher (ADF&G)

4 START TIME: 0822 18 HIGH TIDE HTS: 14.9 11.6 22 OBSERVERS: Tom Schroeder (Exxon) Dony Hill (ADF&G)

6 STOP TIME: 1131 17 LOW TIDE TIMES: 0815 1205 23 AGENCY: \_\_\_\_\_

6 SEGMENT #: PD-01,04,10 18 LOW TIDE HTS: -3.7 1 2.2 24 PHOTOS TAKEN: Y

7 STATION #: 3 forms 19 TIDE HT AT SURVEY: \_\_\_\_\_ Roll #: \_\_\_\_\_ Frame: \_\_\_\_\_

8 K-UNIT: leave seg blank. Ebb Slack Flood Slack 25 VIDEO TAKEN: Y  TAPE#: \_\_\_\_\_

9 STAT AREA: \_\_\_\_\_ 20 USCG QUAD: Seldovia-B-3, B-4 Starts: \_\_\_\_\_ Ends: \_\_\_\_\_

10 LAT: \_\_\_\_\_ 11 LONG: \_\_\_\_\_ 26 SAMPLES TAKEN? Y  Number

12 SOURCE: Map Loran

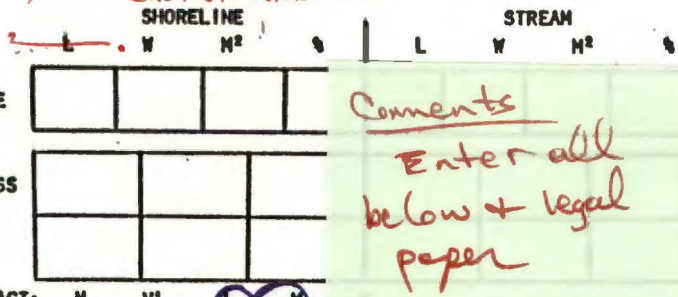
13 LOCATION: KP, CI, West Arm Port Dick, various beach PD004, 001, 010.

DESCRIPTION: Segment (includes survey of portion of Island Creek Bay/Cove + ASC # 242-42-10430) top of comments.

Oil \_\_\_\_\_  
Sediment \_\_\_\_\_  
Biological \_\_\_\_\_  
Water \_\_\_\_\_

PD-004  
PD-010  
PD-010

PORT DICK, WEST ARM, HAS ONE EXTENT OF OIL EAST OF MAIN COVE



27 SURFACE COVERAGE

28 SURFACE THICKNESS

29 PENETRATION

30 OVERALL OIL IMPACT: N VL ∞ H

31 OIL TYPE: Pooled Mousse Tar A MS, TP, AP, HOI

32 OILED DEBRIS? Y N

33 SHORELINE TYPE: Headland Low-lying R Lagoon

34 WAVE EXPOSURE: High Moderate

35 SUBSTRATE TYPE: Bedrock \_\_\_\_\_ Boulder \_\_\_\_\_ Gravel \_\_\_\_\_ Sand \_\_\_\_\_ Mud/silt \_\_\_\_\_

Comments  
Enter all below + legal paper

Nancy, as this is part of the beach database, 1 form is enough.

ACE 9961141

36 CATALOGED ANAD. FISH SREAN? Y N

37 CATALOG #:

38 STREAM NAME:

39 OIL IN STREAM BED? Y N

40 OIL ON STREAM BANKS? Y N

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

42 OIL WITHIN 1 MILE OF STREAM? Y N Where: \_\_\_\_\_

43 ANADROMOUS FISH PRESENT? Y N

44 ANADROMOUS FISH OBSERVATION

Species	Aerial	Ground

ACE 9961142

Comments for all

COMMENTS: ~~see attached field notes~~

Surveyed portions of 3 segments with Wes Bucher (ADF&G), Tom Schroeder (Exxon) monitoring with consideration of the 1990 Commercial salmon season. Oil found along <sup>entire</sup> 1/4 mile stretch of beach from USGS marker "LERES" to the east. Patches of pooled mousse (< 6" diameter) are numerous. Numerous patches of saturated sediment common at base of rock face

Comments Cont'd →



ADF&G MULTI-ASSESSMENT DATA FORM

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

2 REGION: PWS KP, CI K, AP

METHOD: Aerial Ground Boat

3 DATE: 5/24/90

16 HIGH TIDE TIMES: 0128 11451

21 TEAM RECORDER: Wes Bucher (ADF&G)

4 START TIME: 0822

18 HIGH TIDE HTS: 14.9 11.6

22 OBSERVERS: Tom Schroeder (Exxon)

6 STOP TIME: 1131

17 LOW TIDE TIMES: 0815 1205

23 AGENCY: Douy Hill (ADF&G)

6 SEGMENT #: PD-0104, 10

18 LOW TIDE HTS: -3.7 1 2.2

24 PHOTOS TAKEN: Y (2)

7 STATION #: 3 forms

19 TIDE HT AT SURVEY: \_\_\_\_\_

Roll #: \_\_\_\_\_ Frames: \_\_\_\_\_

8 K-UNIT: leave seg blank

Ebb Slack Flood Slack

25 VIDEO TAKEN: Y (1) TAPE#: \_\_\_\_\_

9 STAT AREA: \_\_\_\_\_

20 USCG QUAD: Soldovia-B-3, B-4

Start: \_\_\_\_\_ End: \_\_\_\_\_

10 LAT: \_\_\_\_\_

11 LONG: \_\_\_\_\_

26 SAMPLES TAKEN? Y (1) Number \_\_\_\_\_

12 SOURCE: Map Loran

Oil \_\_\_\_\_

13 LOCATION: KP, OC, West Arm Port Dick, Various beach

Sediment \_\_\_\_\_

DESCRIPTION: Segment (Includes survey of portion of Island Creek Bay/Cove + ASC # 242-42-10430)

Biological \_\_\_\_\_

PORT DICK, WEST ARM, ITALS ONE EXTENT OF OIL

Water \_\_\_\_\_

PD-004  
PD-010  
PD-011

EAST OF ITAL COVE

	SHORELINE				STREAM			
	L	W	M <sup>2</sup>	%	L	W	M <sup>2</sup>	%
27 SURFACE COVERAGE								
28 SURFACE THICKNESS								
29 PENETRATION								

36 CATALOGED ANAD. FISH SREAM? Y N

37 CATALOG #: \_\_\_\_\_

38 STREAM NAME: \_\_\_\_\_

39 OIL IN STREAM BED? Y N

40 OIL ON STREAM BANKS? Y N

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

42 OIL WITHIN 1 MILE OF STREAM? Y N

Where: \_\_\_\_\_

30 OVERALL OIL IMPACT: N VL L M H

43 ANADROMOUS FISH PRESENT? Y N

31 OIL TYPE: Pooled Mousse Tar Asphalt Sticky Stain

44 ANADROMOUS FISH OBSERVATION

32 OILED DEBRIS? Y N

MS, TP, AP, HOR-LOR, SOR

Species Aerial Ground

33 SHORELINE TYPE: Headland Low-lying Rocks Beach Cove

Lagoon Marsh


34 WAVE EXPOSURE: High Moderate Low

ACE 9961142

35 SUBSTRATE TYPE: Bedrock \_\_\_\_\_ Boulder \_\_\_\_\_ Cobble \_\_\_\_\_

Gravel \_\_\_\_\_ Sand \_\_\_\_\_ Mud/silt \_\_\_\_\_

COMMENTS: ~~See Attached Field Notes~~

Comments for all

Surveyed portions of 3 segments with Wes Bucher (ADF&G), Tom Schroeder (Exxon) monitoring with consideration of the 1990 Commercial salmon season. Oil found along <sup>extending</sup> 1/4 mile stretch of beach from USGS marker "LERES" to the east. Patches of pooled mousse (< 6" diameter) are numerous. Numerous patches of saturated sediment common at base of rock face

Comments Cont'd ->



10:00  
8:00

~~for all 3 forms~~

Comments

and at upper level of focus zone. Majority of oil here is inaccessible at this time to seine nets. ~~Revised~~ Pickup of AP +MS recommended by the 3 of us.

- Mid-section of PD-04: NE facing gradually sloping Arc shaped beach - a likely spot for a seine set. Mousse patties found on this beach. Cleanup will be recommended.
- PD-~~04~~<sup>04</sup> (MARS Cove): Wes is definitely in favor of having <sup>cleanup</sup> more work at Mars Cove.
- PD-01: Walked to ~~large~~ tar mat to give Wes an ~~idea~~<sup>idea</sup> of what type of oil exists above the <sup>HOPE</sup> regulatory marker (tar mats + mousse beneath gravel + 4" thick  $\approx$  25' x 50' tar mat).

00

00



5/24/90

0806 → Depart EPA Helos on beach

helo 447N (Lynn Beckhorn, pilot)

Wes Buchner (ADF - Cook Inlet - Cook Inlet Comm. Fish Bio)

Tom Schroeder (Exxon Fisheries Rep - EX)

Doug Hill (ADF - Green Mgmt Bio - lower)

Cook Inlet

Traces/Conduct

H1

H2

Time 0120 1453 0815 2011

Feet 14.9' 11.6' 3.7' 2.2'

STOP #1

0822 HAAR PD-004 at CERES

E. US Geolog. Survey Benchmark

Soil found along entire  $\approx 1/4$

mile of beach survey

→ Point of land with seastack and stream/waterfalls coming off hillside (see map w/ field report)

oil found on ~~the~~ seastack point all the way around

- oil found all the way around this seastack point of land with mussel covered isthmus

Small patches of pooled mussels

→ < than 6" diameter numerous. Numerous - patches of saturated



5/24/90

sediment  
- oil ~~found~~ quite common at base of rock face and at upper level of Pucus Zone. Found amongst boulders and cobble as mouse and mixed with sediment (sediment patches). This • Majority of oil is inaccessible to seine nets if it remains ~~in~~ <sup>(oil)</sup> in place. Not enough oil to cause significant shear.

A creek drops down the outside of this STOP (CERES USGS Benchmark - found on point of land). The lake where this creek originates has been stocked with Sockeye smolt 1990 will be the 1<sup>st</sup> year of Adult return. Currently, the regulatory (ADF&G Commission) marker is just to the west of this creek.

Schroeder will make a recommend. to have some of this oil picked up.

5/24/90

0901 → Depart STOP #1

0908 → Arrv. STOP #2

NE facing gradually sloping Arc-~~shaped~~ shaped beach - A beach where pinks may school up and a seiner ~~to~~ could potentially drag its leadline (According to Tom Schroeder).

We found ~~to~~ mouse patches on this beach ~~to~~ (14" x 14")

Very light oiling. Though Schroeder will recommend this for manual pickup as threat to fishery.

0941 Depart STOP #2

0949 Arrv. STOP #3

NE Facing Gradually sloping gravel/cobble/boulder beach  
No oil found

~~1008~~

1008 - Depart #3

1010 - Arrv. Mara Cove



5/7

10) - NE portion of head of Cove  
~~the~~ soft Gelatinous mounds  
found in NE corner - head of  
Cove - had to dig through drift  
(weedless kelp) to get at oil. oil  
also covered with gravel.

Stopped first give us idea of  
what's here (Surveyed head of Cove only)

1018 - Depart MAP 5

Arrv STOP #4 NE portion of  
Island Creek Bay - No  
oil observed - 1/4 mile survey

1043 - Depart Stop #5

1046 - Arrv Stop #6

Island Creek NW portion  
of Bay. No oil observed  
1/4 mile survey

1106 - Depart STOP #6

1109 - Arrv. PD-001 - land on berrys  
at East Mouth of ~~Island~~ Park  
~~Flats~~ or walked to  
large Tar mat of PD-001  
(DEC transect site).

To give us a view of  
what ~~is~~ type of oil exists

5/24/90

there. This oil is obviously inside  
the ATF+6 Regulatory matter.  
1131 - Depart

viewed tar mats and mounds  
beneath gravel - Landans  
~~more~~ sample sites as well  
on the 14" thick Tarmat (25'  
x 50')<sub>2</sub>.

1131 - Depart PD-001

1143 - overflight of Windy Bay to  
see if any sheering is occurring  
at this higher tide level. Tide not  
high enough yet to submerge the  
areas of beach being worked by  
the cleanup crews. <sup>disturbed</sup>

~~to~~ no sheers.

ADOC - conducting transect at Black Lagoon  
Alaska Helo - on beach at 1989 - Fuel  
depot site

2 vessels in Windy LCM & Berthing  
vessels

1200hrs - Homer



OILED AREAS WHICH THREATEN THE SALMON FISHERY

Windy Bay

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Sincerely,

*Leland Glenn*  
 Leland Glenn Habitat Division  
 Habitat Biologist

cc: Jim Butler, Kenai Peninsula Borough  
 Wes Bucher, ADF&G, Homer  
 Paul Ruesch, ADF&G, Soldotna  
 Tom Schroeder, Fisheries Consultant to Exxon  
 Pat Norman, Chugach Native Inc.

FILE: \WP50\NORMA\SURVEY90.604

Relates to MAY 31  
MAO Form

Relates to MAY 23 & 24  
MAO Form

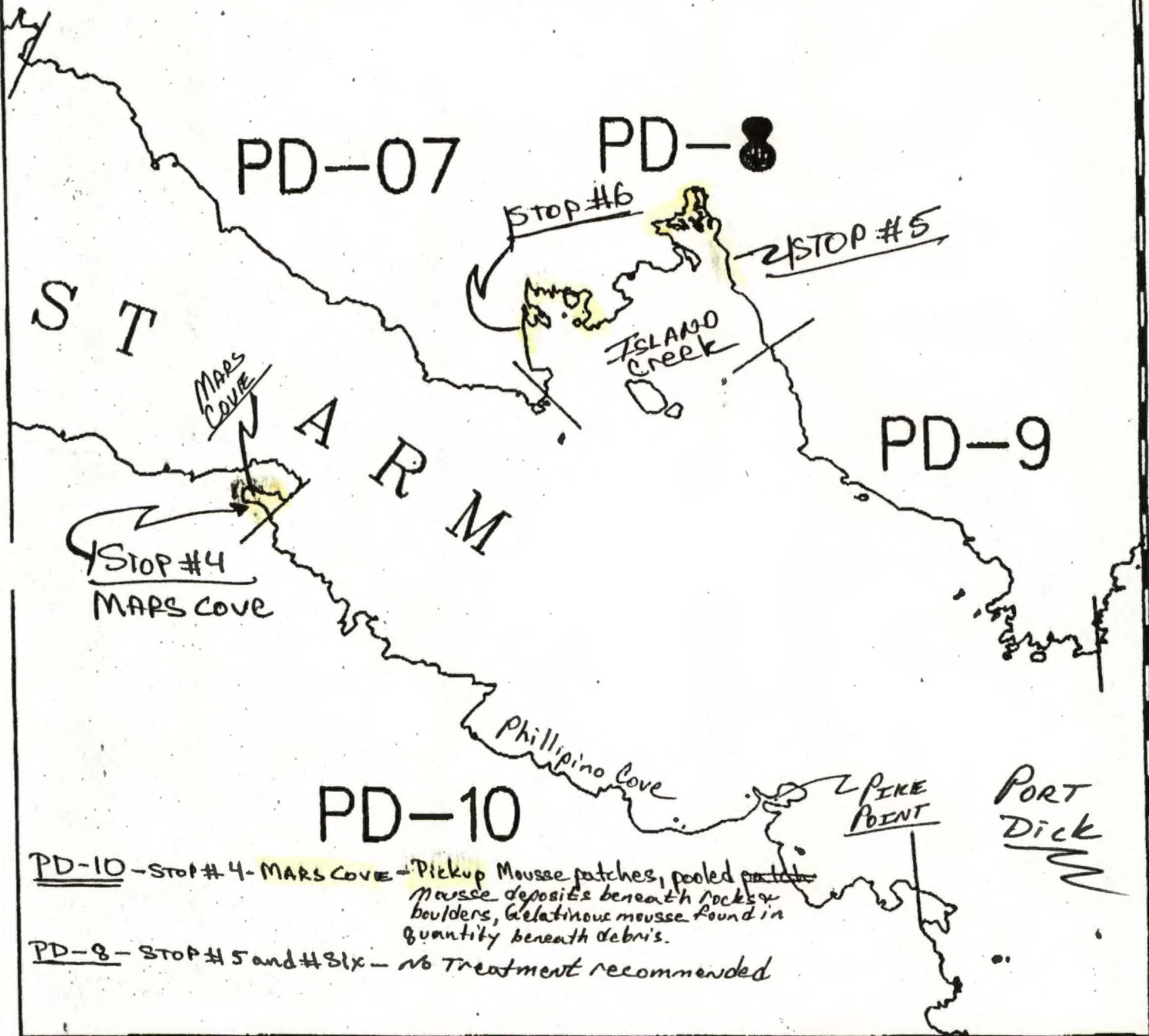


Commercial Fisheries Survey - 5/24/90

FOOT SURVEY

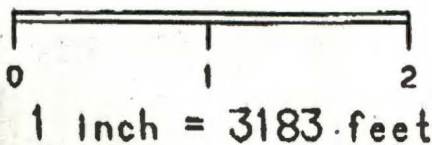
-06

Doug Hill (ADFLG - Habitat)  
Wes Bucher (ADFLG - Commfish)  
Tom Schroeder (Exxon - Fisheries Rep)



PD-10 - STOP # 4 - MARS COVE - Pickup Mousse patches, pooled patches  
Mousse deposits beneath rocky boulders, Gelatinous mousse found in quantity beneath debris.

PD-8 - STOP # 5 and # 6 - No Treatment recommended



EXXON COMPANY, USA

ACE 9961148

May 21, 1990

Aml used!

/chugachi/morris/super2/ops.aml

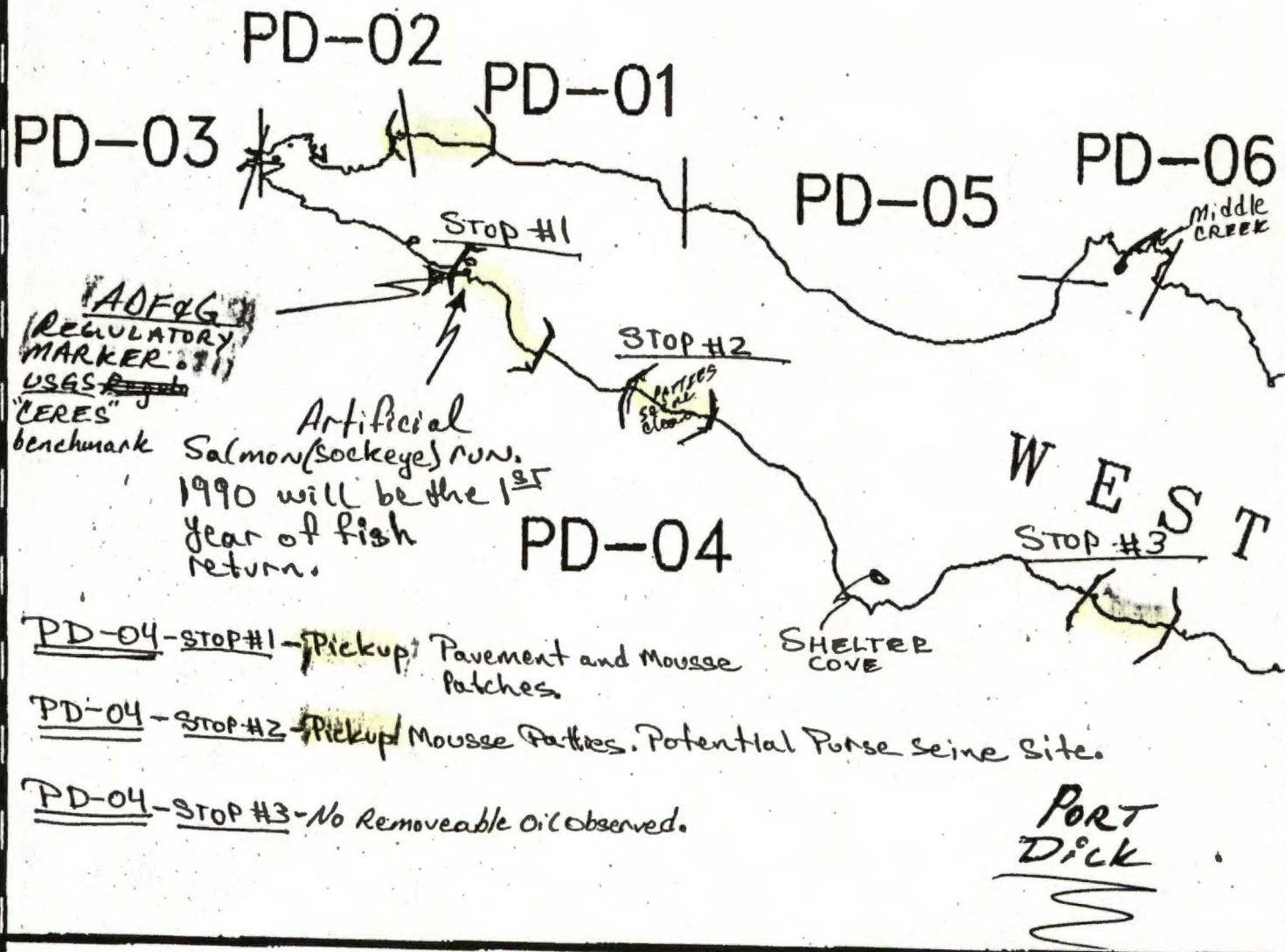


# TATE WILDERNE

Commercial Fisheries Survey - 5/24/90

## Foot Survey

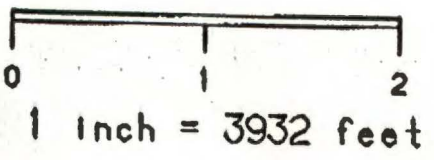
Doug Hill (ADFG - Habitat)  
Wes Bucher (ADFG - Commfish)  
Tom Schroeder (Exxon - Fisheries Rep)



PD-04-STOP#1 - Pickup! Pavement and Mousse patches.

PD-04-STOP#2 - Pickup! Mousse Patches. Potential Purse Seine Site.

PD-04-STOP#3 - No Removeable Oil Observed.



EXXON COMPANY, USA

ACE 9961149

May 21, 1990

Aml used:

/chugach1/morris/super2/ops.aml



Port Dick - PD-04  
 Prelim. Fisheries Survey

ADF&G MULTI-ASSESSMENT DATA FORM

1 SURVEY TYPE:  SS  DS  TS  AVS  SCHA  MMS  PTA

2 REGION: PWS  KP, CI  K, AP

METHOD: Aerial   Ground  Boat

3 DATE: 5/21/90

4 START TIME: 1710

5 STOP TIME: 1736

6 SEGMENT #: PD-04

7 STATION #: \_\_\_\_\_

8 K-UNIT: \_\_\_\_\_

9 STAT AREA: \_\_\_\_\_

10 LAT: \_\_\_\_\_

11 LONG: \_\_\_\_\_

12 SOURCE: Map  Loran

13 LOCATION: West Arm Port Dick - South shore - ADF&G Cabin

14 DESCRIPTION: to seastack  $\approx$  1/4 mile to east.

16 HIGH TIDE TIMES: 1202 12359

17 LOW TIDE TIMES: 0550 1756

18 HIGH TIDE HTS: 10.2 113.4

19 LOW TIDE HTS: 0.0 11.9

20 TIDE HT AT SURVEY: \_\_\_\_\_

21 TEAM RECORDER: Doug Hill

22 OBSERVERS: Lee Glenn

23 AGENCY: ADF&G

24 PHOTOS TAKEN: Y  N

25 VIDEO TAKEN: Y  N

26 SAMPLES TAKEN? Y  N  Number \_\_\_\_\_

Oil \_\_\_\_\_

Sediment \_\_\_\_\_

Biological \_\_\_\_\_

Water \_\_\_\_\_

EXTENT OF OIL

	SHORELINE			STREAM		
	L	W	M <sup>2</sup>	L	W	M <sup>2</sup>
27 SURFACE COVERAGE						
28 SURFACE THICKNESS						
29 PENETRATION						
30 OVERALL OIL IMPACT:	N	VL	<input checked="" type="radio"/>			
31 OIL TYPE:	Pooled	Mousse	<input checked="" type="radio"/>			
32 OILED DEBRIS?	Y	<input checked="" type="radio"/>				
33 SHORELINE TYPE:	Headland	<input checked="" type="radio"/> Low-1				
34 WAVE EXPOSURE:	High	<input checked="" type="radio"/> Moderate				
35 SUBSTRATE TYPE:	Bedrock	<input checked="" type="radio"/>				
	Gravel	<input checked="" type="radio"/>		Sand	<input type="radio"/>	
				Mud/silt	<input checked="" type="radio"/>	

Comments: Enter highlighted + typed + print.

ACE 9961150

36 CATALOGED ANAD. FISH SREAH? Y  N

37 CATALOG #:

38 STREAM NAME:

39 OIL IN STREAM BED? Y  N

40 OIL ON STREAM BANKS? Y  N

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

42 OIL WITHIN 1 MILE OF STREAM? Y  N

Where: \_\_\_\_\_

43 ANADROMOUS FISH PRESENT? Y  N

44 ANADROMOUS FISH OBSERVATION

Species	Aerial	Ground

COMMENTS: Conducted a brief preliminary survey considering what implications observed oil might have for a potential 1990 Port Dick Commercial Fishery.

1710-Arrive Port Dick---PD-04. Walked PD-04 to the seastack approximately 1/4 mile from the ADF&G cabin. We observed numerous tar patties and small tarmats. All of which could easily be picked up in about a half a day. About 2 weeks ago the crew was here and did not have work orders to pick up the tar patties. However, since they were here they decided to pick some of the oil up. To their dismay the USCG monitor told them they would have to cease until they recieved a workorder. How foolish, Even the Exxon Supervisor wanted to pick the stuff up.



Port Dick - PD-04  
 Prelim. Fisheries Survey

ADF&G MULTI-ASSESSMENT DATA FORM

1 SURVEY TYPE:  SS  DS  TS  AVS  SCHA  MHIS  PTA

2 REGION: PWS  KP, CI  K, AP

METHOD: Aerial  Ground  Boat

3 DATE: 5/21/90

4 START TIME: 1710

5 STOP TIME: 1736

6 SEGMENT #: PD-04

7 STATION #:

8 K-UNIT:

9 STAT AREA:

10 LAT:

11 LONG:

12 SOURCE: Map  Loran

13 LOCATION: West Arm Port Dick - South shore - ADF&G Cabin

14 DESCRIPTION: to seastack  $\approx$  1/4 mile to east.

16 HIGH TIDE TIMES: 1202 12359

17 LOW TIDE TIMES: 1550 1756

18 HIGH TIDE HTS: 10.2 113.4

19 LOW TIDE HTS: 0.0 11.9

20 USCG QUAD: Seldovia B-4

21 TEAM RECORDER: Doug Hill

22 OBSERVERS: Lee Glenn

23 AGENCY: ADF&G

24 PHOTOS TAKEN: Y

25 VIDEO TAKEN: Y  TAPE#: \_\_\_\_\_

26 SAMPLES TAKEN? Y  Number \_\_\_\_\_

Oil: \_\_\_\_\_

Sediment: \_\_\_\_\_

Biological: \_\_\_\_\_

Water: \_\_\_\_\_

EXTENT OF OIL

	SHORELINE				STREAM			
	L	W	M <sup>2</sup>	%	L	W	M <sup>2</sup>	%
27 SURFACE COVERAGE								
28 SURFACE THICKNESS								
29 PENETRATION								
30 OVERALL OIL IMPACT:	N	VL	<input checked="" type="radio"/> L	M	H			
31 OIL TYPE:	Pooled	Mousse	<input checked="" type="radio"/> Tar	<input checked="" type="radio"/> Asphalt	<input checked="" type="radio"/> Sticky	<input checked="" type="radio"/> Slain		
32 OILED DEBRIS?	Y	<input checked="" type="radio"/>	TP	AP	ST			
33 SHORELINE TYPE:	Headland	<input checked="" type="radio"/> Low-lying Rocks	<input checked="" type="radio"/> Beach	Cove				
		Lagoon	Marsh					
34 WAVE EXPOSURE:	High	<input checked="" type="radio"/> Moderate	<input checked="" type="radio"/> Low					
35 SUBSTRATE TYPE:	Bedrock <input checked="" type="checkbox"/>	Boulder <input checked="" type="checkbox"/>	Cobble <input checked="" type="checkbox"/>					
	Gravel <input checked="" type="checkbox"/>	Sand <input checked="" type="checkbox"/>	Mud/silt <input checked="" type="checkbox"/>					

36 CATALOGED ANAD. FISH SREAH? Y  N

37 CATALOG #:

38 STREAM NAME:

39 OIL IN STREAM BED? Y  N

40 OIL ON STREAM BANKS? Y  N

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

42 OIL WITHIN 1 MILE OF STREAM? Y  N

Where: \_\_\_\_\_

43 ANADROMOUS FISH PRESENT? Y  N

44 ANADROMOUS FISH OBSERVATION

Species	Aerial	Ground

COMMENTS: Conducted a brief preliminary survey considering what implications observed oil might have for a potential 1990 Port Dick Commercial Fishery.

ACE 9961151

1710-Arrive Port Dick---PD-04. Walked PD-04 to the seastack approximately 1/4 mile from the ADF&G cabin. We observed numerous tar patties and small tarmats. All of which could easily be picked up in about a half a day. About 2 weeks ago the crew was here and did not have work orders to pick up the tar patties. However, since they were here they decided to pick some of the oil up. To their dismay the USCG monitor told them they would have to cease until they recieved a workorder. How foolish, Even the Exxon Supervisor wanted to pick the stuff up.



prelim. Fisheries survey

1 SURVEY TYPE:  SS  DS  TS  AVS  SCHA  MMS  PTA

2 REGION: PWS  KP, CI  K, AP

METHOD: Aerial  Ground  Boat

3 DATE: 5/21/90 16 HIGH TIDE TIMES: 1202 12359 21 TEAM RECORDER: Doug Hill

4 START TIME: 1650 18 HIGH TIDE HTS: 10.2 11.4 22 OBSERVERS: Lee Glenn

5 STOP TIME: 1705 17 LOW TIDE TIMES: 0550 1756 23 AGENCY: ADF+G

6 SEGMENT #: WB-09 19 LOW TIDE HTS: 0.0 1.9 24 PHOTOS TAKEN: Y:

7 STATION #: \_\_\_\_\_ 18 TIDE HT AT SURVEY: \_\_\_\_\_ Roll #: \_\_\_\_\_ Frames: \_\_\_\_\_

8 K-UNIT: \_\_\_\_\_  Ebb  Slack  Flood  Slack 25 VIDEO TAKEN: Y  TAPE#: \_\_\_\_\_

9 STAT AREA: \_\_\_\_\_ 20 USCG QUAD: Seldovia A-5 Starts: \_\_\_\_\_ Ends: \_\_\_\_\_

10 LAT: \_\_\_\_\_ 11 LONG: \_\_\_\_\_ 26 SAMPLES TAKEN Y  Number

12 SOURCE: Map  Loran

13 LOCATION: Windy Bay, Oystercatcher Island

14 DESCRIPTION: West Beach of Eastern Island

Oil \_\_\_\_\_

Sediment \_\_\_\_\_

Biological \_\_\_\_\_

Water \_\_\_\_\_

EXTENT OF OIL

	SHORELINE				STREAM			
	L	W	M <sup>2</sup>	V	L	W	M <sup>2</sup>	V
27 SURFACE COVERAGE								
28 SURFACE THICKNESS								
29 PENETRATION								
30 OVERALL OIL IMPACT:	N	VL	L					

31 OIL TYPE: Pooled House TR  
MS TR AP PH

32 OILED DEBRIS?

33 SHORELINE TYPE: Headland  Low  Lagoon

34 WAVE EXPOSURE: High  Moderate

35 SUBSTRATE TYPE: Bedrock  Gravel  Sand  Mud/silt

Comments:  
Enter highlighted  
& typed portions.

ACE 9961152

36 CATALOGED ANAD. FISH-SPEAK? Y N

37 CATALOG #:

38 STREAM NAME:

39 OIL IN STREAM BED? Y N

40 OIL ON STREAM BANKS? Y N

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

42 OIL WITHIN 1 MILE OF STREAM? Y N

Where? \_\_\_\_\_

43 ANADROMOUS FISH PRESENT? Y N

44 ANADROMOUS FISH OBSERVATION

Species	Aerial	Ground

COMMENTS: Conducted a brief preliminary survey considering what implications observed oil might have for a potential

1990 Windy Bay Commercial Salmon Fishery ACE 9961153  
1650-Arrive WB-09 (Oystercatcher Island).

Surveyed heavily oiled west facing beach. This beach receives little storm energy. Hence, there is no noticeable change in degree of oiling since last fall. Oil is readily visible in the form of tarmats, tar patties, and heavily saturated sediment. Observed tar patches up to 4" thick. The majority of this beach is oiled with heavily oil saturated sediment. The oystercatchers are present as usual.



1 SURVEY TYPE:  SS  DS  TS  AVS  SCHA  MHHS  PTA

2 REGION: PWS  KP, CI  K, AP

METHOD: Aerial   Ground  Boat

3 DATE: 5/21/90 16 HIGH TIDE TIMES: 1202 12359 21 TEAM RECORDER: Doug Hill

4 START TIME: 1650 18 HIGH TIDE HTS: 10.2 11.4 22 OBSERVERS: Lee Glenn

6 STOP TIME: 1705 17 LOW TIDE TIMES: 0550 1756 23 AGENCY: ADF+G

8 SEGMENT #: WB09 19 LOW TIDE HTS: 0.0 1.1-9 24 PHOTOS TAKEN: Y  N

7 STATION #: \_\_\_\_\_ 10 TIDE HT AT SURVEY: \_\_\_\_\_ Roll #: \_\_\_\_\_ Frame: \_\_\_\_\_

8 K-UNIT: \_\_\_\_\_  Ebb  Slack  Flood  Slack 25 VIDEO TAKEN: Y  N TAPE#: \_\_\_\_\_

9 STAT AREA: \_\_\_\_\_ 20 USCG QUAD: Seldovia A-5 Starts: \_\_\_\_\_ Ends: \_\_\_\_\_

10 LAT: \_\_\_\_\_ 11 LONG: \_\_\_\_\_ 26 SAMPLES TAKEN? Y  N Number

12 SOURCE: Map  Lorain  \_\_\_\_\_

13 LOCATION: Windy Bay, Oystercatcher Island

14 DESCRIPTION: West Beach of Eastern Island

Oil \_\_\_\_\_

Sediment \_\_\_\_\_

Biological \_\_\_\_\_

Water \_\_\_\_\_

EXTENT OF OIL

	SHORELINE				STREAM			
	L	W	M <sup>2</sup>	%	L	W	M <sup>2</sup>	%
27 SURFACE COVERAGE								
28 SURFACE THICKNESS								
29 PENETRATION								
30 OVERALL OIL IMPACT:	N	VL	L	<input checked="" type="radio"/> H	H			

31 OIL TYPE:  Pooled  House  Tar  Asphalt  Sticky  Seafn

32 OILED DEBRIS?  MS, TRAP, OP, HOR, LOR, BOR

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

34 WAVE EXPOSURE: High  Moderate   Low

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

36 CATALOGED ANAD. FISH STREAM? Y  N

37 CATALOG #:

38 STREAM NAME:

39 OIL IN STREAM BED? Y  N

40 OIL ON STREAM BANKS? Y  N

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

42 OIL WITHIN 1 MILE OF STREAM? Y  N

43 ANADROMOUS FISH PRESENT? Y  N

44 ANADROMOUS FISH OBSERVATION

Species	Aerial	Ground

COMMENTS: Conducted a brief preliminary survey considering what implications observed oil might have for a potential

1990 Windy Bay Commercial Salmon Fishery ACE 9961153  
1650-Arrive WB-09 (Oystercatcher Island).

Surveyed heavily oiled west facing beach. This beach receives little storm energy. Hence there is no noticeable change in degree of oiling since last fall. Oil is readily visible in the form of tarmats, tar patties, and heavily saturated sediment. Observed tar patches up to 4" thick. The majority of this beach is oiled with heavily oil saturated sediment.

The oystercatchers are present as usual.



NOT A STREAM

WINDY BAY => NET BEACH

ADF&G MULTI-ASSESSMENT DATA FORM

1 SURVEY TYPE: BS SS DS TS AVS SCIA MMS PTA 2 REGION: PWS (KP, CI) K, AP

METHOD: Aerial Ground Boat

3 DATE: 5/21/90 18 HIGH TIDE TIMES: 1202 12359 21 TEAM RECORDER: Doug Hill

4 START TIME: 1610 19 HIGH TIDE HTS: 10.2 13.4 22 OBSERVERS: Lee Glenn

5 STOP TIME: 1645 17 LOW TIDE TIMES: 0550 11756 23 AGENCY: ADF&G

6 SEGMENT #: WB-2E 18 LOW TIDE HTS: 0.0 1.9 24 PHOTOS TAKEN: Y: 0

7 STATION #: \_\_\_\_\_ 19 TIDE HT AT SURVEY: \_\_\_\_\_ Roll #: \_\_\_\_\_ Frame: \_\_\_\_\_

8 K-UNIT: \_\_\_\_\_ (Ebb) Slack Flood Slack 25 VIDEO TAKEN: Y (M) TAPE#: \_\_\_\_\_

9 STAT AREA: \_\_\_\_\_ 20 USCG QUAD: Seldovia A-5 Starts: \_\_\_\_\_ Ends: \_\_\_\_\_

10 LAT: \_\_\_\_\_ 11 LONG: \_\_\_\_\_ 26 SAMPLES TAKEN? Y (M) Number

12 SOURCE: Map Loran OIL \_\_\_\_\_

13 LOCATION: Windy Bay North Shore Sediment \_\_\_\_\_

14 DESCRIPTION: \_\_\_\_\_ Biological \_\_\_\_\_

Water \_\_\_\_\_

EXTENT OF OIL

	SHORELINE				STREAM			
	L	W	M <sup>2</sup>	S	L	W	M <sup>2</sup>	S
27 SURFACE COVERAGE								
28 SURFACE THICKNESS								
29 PENETRATION	^							
30 OVERALL OIL IMPACT:	N	VL	L					
31 OIL TYPE: Pooled		<u>House</u>	<u>Tar</u>					
32 OILED DEBRIS?	<u>(M)</u>	<u>MS, TP</u>						
33 SHORELINE TYPE:	Headland	<u>(Low)</u>						
		Lagoon						
34 WAVE EXPOSURE:	High	<u>(Moderate)</u>						
35 SUBSTRATE TYPE:	Bedrock	<u>(check)</u>						
	Gravel							
		Sand						

Comments  
Easter highlighted  
& yellow legal  
paper

ACE 9961154

36 CATALOGED ANAD. FISH SREAN? Y N

37 CATALOG #:

38 STREAM NAME: NET BEACH

39 OIL IN STREAM BED? Y N

40 OIL ON STREAM BANKS? Y N

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

42 OIL WITHIN 1 MILE OF STREAM? Y N

Where: \_\_\_\_\_

43 ANADROMOUS FISH PRESENT? Y N

44 ANADROMOUS FISH OBSERVATION

Species	Aerial	Ground

COMMENTS: \_\_\_\_\_

ACE 9961155

Conducted brief preliminary survey considering what implications  
observed oil might have for a potential 1990 commercial salmon  
fishery (Continued => see attached field report WB-2E section  
see attached map of WB-2E location

corrected



NOT A STREAM

WINDY BAY => NET DEALT

ADF&G MULTI-ASSESSMENT DATA FORM

1 SURVEY TYPE: BS SS DS TS AVS SCHA M4HS PTA 2 REGION: PWS (KP, CI) K, AP

METHOD: Aerial Ground Boat

3 DATE: 5/21/90 18 HIGH TIDE TIMES: 1202 12359 21 TEAM RECORDER: Doug Hill

4 START TIME: 1610 19 HIGH TIDE HTS: 10.2 113.4 22 OBSERVERS: Lee Glenn

5 STOP TIME: 1645 17 LOW TIDE TIMES: 0550 11756 23 AGENCY: ADF&G

6 SEGMENT #: WB-2E 18 LOW TIDE HTS: 0.0 11.9 24 PHOTOS TAKEN: Y: 0

7 STATION #: \_\_\_\_\_ 19 TIDE HT AT SURVEY: \_\_\_\_\_ Roll #: \_\_\_\_\_ Frame: \_\_\_\_\_

8 K-UNIT: \_\_\_\_\_ (Ebb) Slack Flood Slack 25 VIDEO TAKEN: Y (N) TAPE#: \_\_\_\_\_

9 STAT AREA: \_\_\_\_\_ 20 USCG QUAD: Seldovia A-5 Start: \_\_\_\_\_ End: \_\_\_\_\_

10 LAT: \_\_\_\_\_ 11 LONG: \_\_\_\_\_ 26 SAMPLES TAKEN? Y (N) Number

12 SOURCE: Map Loran Oil \_\_\_\_\_

13 LOCATION: Windy Bay North Shore Sediment \_\_\_\_\_

14 DESCRIPTION: \_\_\_\_\_ Biological \_\_\_\_\_

Water \_\_\_\_\_

EXTENT OF OIL

	SHORELINE				STREAM			
	L	W	M <sup>2</sup>	%	L	W	M <sup>2</sup>	%
27 SURFACE COVERAGE								
28 SURFACE THICKNESS								
29 PENETRATION								

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

31 OIL TYPE: Pooled (House) (Tar) (Asphalt) (SEIck) (Stain)

32 OILED DEBRIS? (N) MS, TP, AP, ST, HOR, OP, MOR

36 CATALOGED ANAD. FISH STREAM? Y N

37 CATALOG #: \_\_\_\_\_

38 STREAM INLET NET BEACH

39 OIL IN STREAM BED? Y N

40 OIL ON STREAM BANKS? Y N

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

42 OIL WITHIN 1 MILE OF STREAM? Y N

Where: \_\_\_\_\_

33 SHORELINE TYPE: Headland (Low-Tying Rocks) Beach Cove

Lagoon Marsh

34 WAVE EXPOSURE: High (Moderate) Low

35 SUBSTRATE TYPE: Bedrock (✓) Boulder (✓) Cobble (✓)

Gravel (✓) Sand (✓) Mud/silt (✓)

43 ANADROMOUS FISH PRESENT? Y N

44 ANADROMOUS FISH OBSERVATION

Species	Aerial	Ground

COMMENTS: Attached field report

ACE 9961155

Conducted brief preliminary survey considering what implications  
observed oil might have for a potential 1990 commercial salmon  
fishery. (Continued => see attached field report WB-2E section  
see attached map of WB-2E location

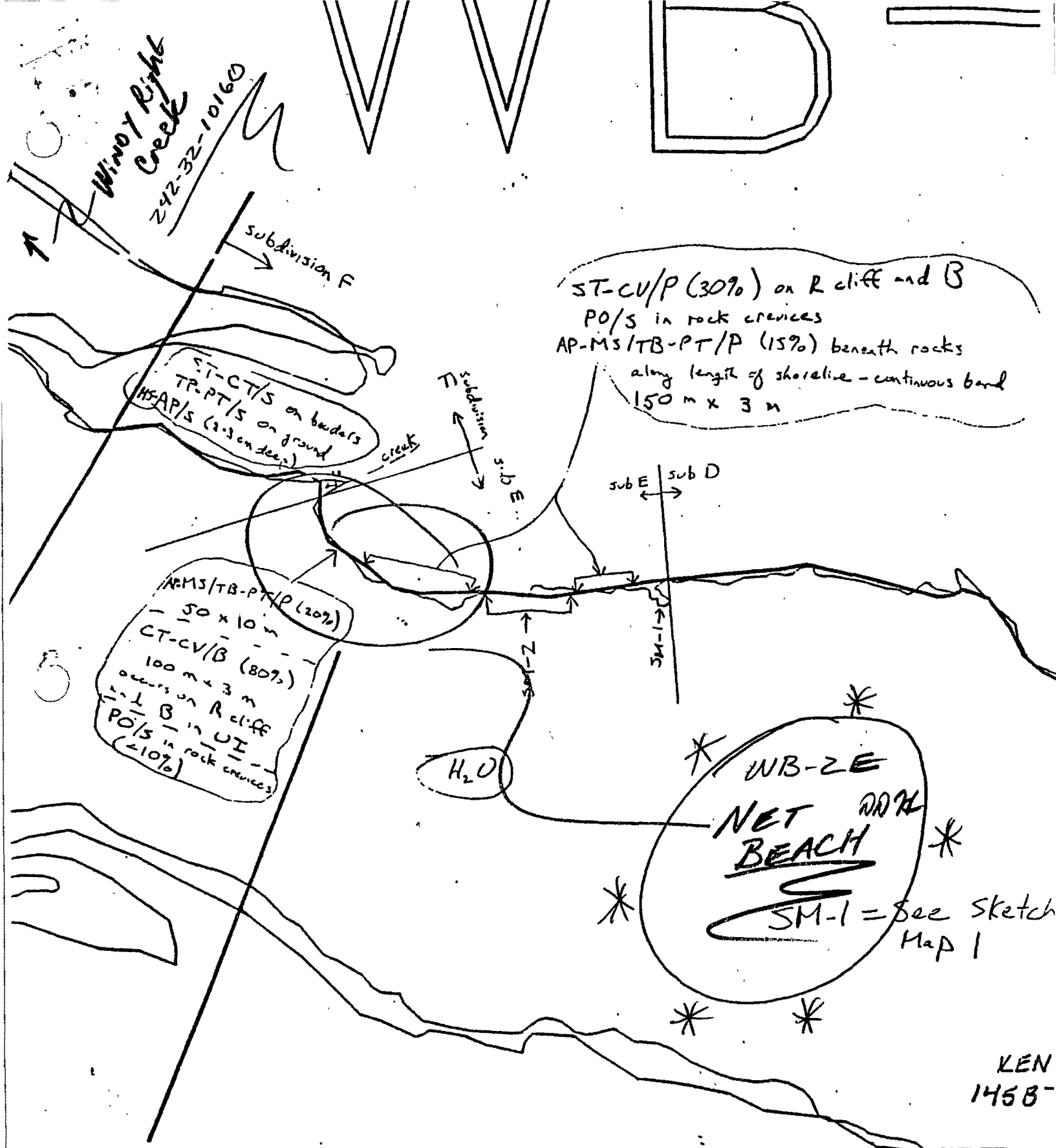
Carroll



## Comments

Crew has recently worked this beach - the crew moved a large volume of material. All remaining sediment wrecks of oil (OP, HOB, MOB) and pockets of pooled mousse remain. Observed a patch of mousse 2' x 2' + 3" thick. A bit of oil mobilization is occurring here on this cool day. More work is necessary here.





KEN  
145B-

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

**WB-2**

ADEC Segment Length: 2232m



ACE 9961157

Map Key: KEN-145a

Name: Andy Siegel

Date: 4/4/70

Data Entered:



**BEACH**

C NUMBER: \_\_\_\_\_ SEGMENT NUMBER: NK-02 YR CATALOGED: \_\_\_\_\_  
 LOCATION: NE Cove, Noka Island  
 IAN NAME: \_\_\_\_\_ LOCAL STREAM #: \_\_\_\_\_ LATITUDE: \_\_\_\_\_  
 LIAK K-UNIT: \_\_\_\_\_ LONGITUDE: \_\_\_\_\_  
 PGS QUADRANGLE: Seldovia B-2 LEGAL: \_\_\_\_\_  
 SHORELINE TYPE: Beach/Cove ALL SEGMENTS: \_\_\_\_\_  
 WAVE EXPOSURE: Moderate

E NUMBER: \_\_\_\_\_ TEAM RECORDER: Hill  
 SURVEY TYPE: BS OBSERVERS: GLENN  
 METHOD: FOOT  
 DATE: 7/11/90 AGENCY(IES): ADF&G  
 START TIME: 1121 PHOTOS TAKEN? Y  
 END TIME: 1318 Roll #: 900DH20H Frames: 1-7  
 VIDEO TAKEN? Y Tape Number: 90LP6025H  
 Counter start: 5467 → 5521  
 SAMPLES TAKEN? N  
 SAMPLE I.D. NUMBERS: 1. 2. 3. 4. 5. 6.

	LENGTH m	WIDTH m	112	1	THICK cm	PERI cm	OIL TYPE
SITE 1							<u>ST, CT, GV MS, HOR-LOR</u>
SITE 2							
SITE 3							
SITE 4							
SITE 5							

OVERALL OIL IMPACT: 2  
 OIL IN STREAM CHANNEL? N/A OIL ON BEACH WITHIN 50M OF STREAM MOUTH? N/A  
 SUBSTRATE  
 Bedrock 30 Granule  
 Boulder 10 Sand  
 Cobble 30 Silt  
 Pebble 30 Veget.

SPECIES					
<u>NONE</u>					
COUNT					

Some  
 COMMENTS: Pooled mousse & heavily oiled sediment observed. Some pooled mousse observed below cobbles & boulders that would be better off left alone, i.e., Not enough oil to warrant disrupting the present order of the beach.



BEACH.

Both stream and non-stream  
Entire segment survey

WB-03 entire segment

ADF&G MULTI-ASSESSMENT DATA FORM

1 SURVEY TYPE: B3 SS DS TS AVS SCHM MMS PTA

2 REGION: PWS REP K,AP

METHOD: Aerial Ground Boat

3 DATE: 6/27/90

16 HIGH TIDE TIMES: 1523 1505

21 TEAM RECORDER: Doug Hill

4 START TIME: \_\_\_\_\_

18 HIGH TIDE HTS: 14.1 11.9

22 OBSERVERS: \_\_\_\_\_

6 STOP TIME: \_\_\_\_\_

17 LOW TIDE TIMES: 1022 12230

23 AGENCY: ADF&G

8 SEGMENT #: WB-03

18 LOW TIDE HTS: -2.8 2.4

24 PHOTOS TAKEN: Y 1

7 STATION #: \_\_\_\_\_

19 TIDE HT AT SURVEY: \_\_\_\_\_

Roll #: \_\_\_\_\_ Frames: \_\_\_\_\_

8 K-UNIT: \_\_\_\_\_

Ebb Slack Flood Slack

25 VIDEO TAKEN: Y TAPE#: \_\_\_\_\_

9 STAT AREA: \_\_\_\_\_

20 USCG QUAD: Seldonia-A-5

Start: \_\_\_\_\_ End: \_\_\_\_\_

10 LAT: \_\_\_\_\_

11 LONG: \_\_\_\_\_

26 SAMPLES TAKEN? Y Number \_\_\_\_\_

12 SOURCE: Map Loran

13 LOCATION: Windy Bay, Head of Bay streams 292-32-

14 DESCRIPTION: 1060, 70, 80.

EXTENT OF OIL

	SHORELINE				STREAM			
	L	W	M <sup>2</sup>	%	L	W	M <sup>2</sup>	%
27 SURFACE COVERAGE								
28 SURFACE THICKNESS								
29 PENETRATION								

30 OVERALL OIL IMPACT: N VL L B H

31 OIL TYPE: Pooled House Tap Asphalt Sticky Stain

32 OILED DEBRIS? Y N site: MS TB AP ST

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

34 WAVE EXPOSURE: High Moderate Low

35 SUBSTRATE TYPE: Bedrock Gravel Boulder 10% Cobble 20%

Gravel 60% Sand 10% Mud/silt \_\_\_\_\_

36 CATALOGED ANAD. FISH SREAM? Y N

37 CATALOG # 242-32 10160 10170 10180  
Windy Right  
Windy Center  
Windy Left

38 STREAM NAME: \_\_\_\_\_

39 OIL IN STREAM BED? Y N Windy Right

40 OIL ON STREAM BANKS? Y N Windy Right

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

42 OIL WITHIN 1 MILE OF STREAM? Y N All 3 Stream

Where: WB-03, 02, 04

43 ANADROMOUS FISH PRESENT? Y ? N

44 ANADROMOUS FISH OBSERVATION

Species	Aerial	Ground

ACE 9961159

COMMENTS: Surveyed beach from Windy Right Creek to the southern border of WB-03. I observed signs of current oil pick up from main beach to woman's beach (WB-03B to WB-03D). But observed no work going on - only observed moved rocks, pumps, trowels, shovels & sacks. Cairns (piled rocks) were present identifying oil deposits. Rocks have been moved to get at over



FRAME(S)

DESCRIPTION

46 OIL DISTRIBUTION DIAGRAM

oiled sediment below. I walked around the mouths of the 3 streams to get to <sup>WB-03D</sup> where the crew was sitting. Jerry Nugent (USFWS) was present + observing the eagle nest which is in the center of WB-03, Jerry was watching the nest <sup>and me</sup> as I walked the shoreline around the base of the eagle nest tree. Jerry informed me that he had quickly pulled the crew off the beach because the eagles were chortling + flying "nervously". Also, the crew found a dead eagle nestling on the rocks (found on the bedrock shoreline at the mouth of Windy Right (Just south of main beach) below the Eagle nest.

Jerry Nugent ~~said~~ said he would allow the crew to go back to the beach at high tide to get the sacks + tools strewn from WB-03B to WB-03D.

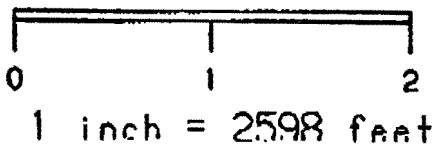
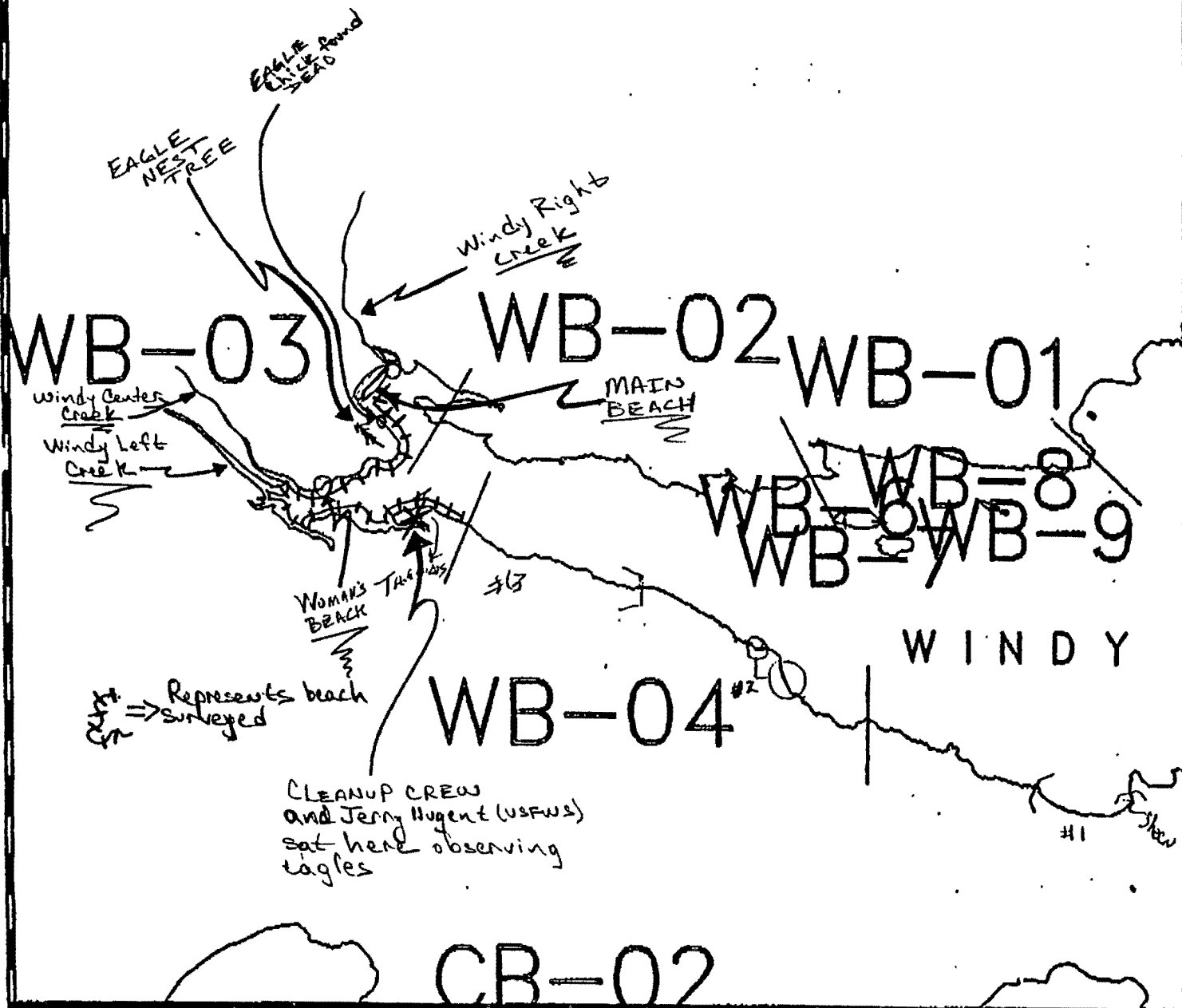
George Stiles (Exxon work supervisor) says the crew will move to ~~Port Dick~~ Port Dick until the eagle problem is averted. Port Dick needs to be picked up ~~up~~ prior to the commercial fishery anyway.

Jerry says the ~~WB~~ TB-03 eagle nest appeared inactive so he left Tonsina Bay + allowed the crews to work the area. However, the crew has reported that they've seen the eagles hauling sticks etc (frequently).

= Sample taken  
 = Photo frame # and shot direction.

ACE 9961160





EXXON COMPANY, USA

ACE 9961161

May 21, 1990

Aml used:

/chugach1/morris/super2/ous.aml



No stream

Kasilof River to 10 mi South

SC NUMBER: \_\_\_\_\_ SEGMENT NUMBER: \_\_\_\_\_ YR CATALOGED: \_\_\_\_\_  
 LOCATION: East Side Cook Inlet, Kasilof River to Point 10 mi South  
 DAM NAME: Clam Gulch STATE: Critical Habitat Area LATITUDE: SEE Comments  
 WIAK K-UNIT: \_\_\_\_\_ LOCAL STREAM #: \_\_\_\_\_ LONGITUDE: \_\_\_\_\_  
 FGS QUADRANGLE: Kenai B-4, A-4 LEGAL: \_\_\_\_\_  
 BORELINE TYPE: Beach ALL SEGMENTS: \_\_\_\_\_  
 AVE EXPOSURE: High

10/9/91

SURVEY TYPE: BS  
 METHOD: ATV  
 DATE: 7/9/89  
 START TIME: 1300  
 STOP TIME: 1730

TEAM RECORDER: Rick Randall  
 OBSERVERS: James Nelson (Anchor Pt. Resident)

AGENCY(IES): ADF&G

PHOTOS TAKEN?   
 Roll #: \_\_\_\_\_ Frames: \_\_\_\_\_  
 VIDEO TAKEN?  Tape Number: \_\_\_\_\_  
 Counter start: \_\_\_\_\_

SAMPLES TAKEN? Yes  
 SAMPLE I.D. NUMBERS:

- 1. RRCI-7
- 2. RRCI-8
- 3. \_\_\_\_\_
- 4. **9111017H**
- 5. **9111006H**
- 6. \_\_\_\_\_

	LENGTH m	WIDTH m	H2	T	THICK cm	PEN cm	OIL TYPE
SITE 1							
SITE 2							
SITE 3							
SITE 4							
SITE 5							

OVERALL OIL IMPACT: VL

OIL IN STREAM CHANNEL? \_\_\_\_\_

OIL ON BEACH WITHIN 50M OF STREAM MOUTH? \_\_\_\_\_

SUBSTRATE

Bedrock	Granule
Boulder	Sand
Cobble	Silt
Pebble	Veget.

Within 1 mile. => Yes

SPECIES	—				
COUNT	—				

— Surveyed from Kasilof River to a point approx. 10 miles south.

COMMENTS: Sample # RRCI-7: Sample found at most recent high tide line/spruce  
 bow with 1/2 diameter tarball. Taken near Seb-netter's  
 Cabin with Cooper written on it. Taken 2 miles  
 South of Kasilof River. 60° 22' 03", 157° 22' 00"

Sample # RRCI-8: Sample found at most recent high tide line/  
 1" diameter tarball. Taken on beach at  
 3.2 mile Coho Loop Beach access. 60° 17' 30", 157° 23' 09"

— 3 ~~more~~ other areas found with oil stained rocks at high tide line.

— Met Cleve Benson and Richard Hatch (EMCO cleanup crew members)  
 stated that they'd each found approx. 1/2 gal. of oiled debris.  
 10% - 20% oil. Oil found was tarball consisted of tarballs  
 attached to debris and oozing into beach.

CLAM GULCH STATE CRITICAL HABITAT AREA



ADF&G MULTI-ASSESSMENT DATA FORM

1 SURVEY TYPE:  SS  DS  TS  AVS  SCH  MHS  PTA 027 2 REGION: PWS  KP,C  K,AP

METHOD: Aerial  Ground  Boat

3 DATE: 5/10/90 18 HIGH TIDE TIMES: 0212 1 15 24 21 TEAM RECORDER: Rick Conover (ADNR)

4 START TIME: 0745 19 HIGH TIDE HTS: 12.8 1 10.5 22 OBSERVERS: Doug Hill (ADF&G)

5 STOP TIME: 1100 17 LOW TIDE TIMES: 0823 1 20 14 23 AGENCY: \_\_\_\_\_

6 SEGMENT #: \_\_\_\_\_ 16 LOW TIDE HTS: -1.3 1 2.7 24 PHOTOS TAKEN: Y:  Roll #: \_\_\_\_\_ Frame: \_\_\_\_\_

7 STATION #: \_\_\_\_\_ 19 TIDE HT AT SURVEY: \_\_\_\_\_ 25 VIDEO TAKEN: Y  TAPE#: \_\_\_\_\_

8 K-UNIT: \_\_\_\_\_  Ebb  Slack  Flood  Slack 26 USCG QUAD: Siddonia D-5, Kenai A-44 A-5 Start: \_\_\_\_\_ End: \_\_\_\_\_

9 STAT AREA: \_\_\_\_\_ 20 LAT: \_\_\_\_\_ 11 LONG: \_\_\_\_\_ 28 SAMPLES TAKEN? Y  Number \_\_\_\_\_

12 SOURCE: Map  Loran  Cook Inlet, East Side, 011 \_\_\_\_\_

13 LOCATION: Deep Creek to Stariski Creek Sediment \_\_\_\_\_

14 DESCRIPTION: \_\_\_\_\_ Biological \_\_\_\_\_

Water \_\_\_\_\_

EXTENT OF OIL

	SHORELINE				STREAM			
	L	W	M <sup>2</sup>	%	L	W	M <sup>2</sup>	%
27 SURFACE COVERAGE								
28 SURFACE THICKNESS								
29 PENETRATION								
30 OVERALL OIL IMPACT: <input checked="" type="radio"/> VL <input type="radio"/> L <input type="radio"/> M <input type="radio"/> H								
31 OIL TYPE: Pooled <input type="radio"/> Mousse <input type="radio"/> Tar <input type="radio"/> Asphalt <input type="radio"/> <b>NONE</b> <input type="radio"/> Sticky <input type="radio"/> Stain								
32 OILED DEBRIS? Y <input checked="" type="radio"/>								
33 SHORELINE TYPE: Headland <input type="radio"/> Low-lying Rocks <input type="radio"/> Beach <input checked="" type="radio"/> Cove <input type="radio"/> Lagoon <input type="radio"/> Marsh								
34 WAVE EXPOSURE: <input checked="" type="radio"/> High <input type="radio"/> Moderate <input type="radio"/> Low								
35 SUBSTRATE TYPE: Bedrock _____ Boulder _____ Cobble <input checked="" type="checkbox"/>								
Gravel <input checked="" type="checkbox"/> Sand <input checked="" type="checkbox"/> Mud/silt <input checked="" type="checkbox"/>								

36 CATALOGED ANAD. FISH-STREAM?  Y  N

37 CATALOG #: 244-10-10100  A

244-10-10050  B

Deep Creek  A

38 STREAM NAME: Stariski Creek  B

39 OIL IN STREAM BED? Y  N

40 OIL ON STREAM BANKS? Y  N

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

42 OIL WITHIN 1 MILE OF STREAM? Y  N

Where: \_\_\_\_\_

43 ANADROMOUS FISH PRESENT? Y  N

44 ANADROMOUS FISH OBSERVATION

Species	Aerial	Ground

COMMENTS: This survey took in 2 anadromous streams:  
Deep Creek ASC# 244-10-10100  
Stariski Creek ASC# 244-10-10050  
No oil observed along this approximately  
10 miles stretch of beach.



**MEMORANDUM**

**STATE OF ALASKA**

Date: 5/10/90  
 To: Lee Glenn  
 Habitat Biologist III  
 Oil Response Center  
 Homer  
 From: Doug Hill  
 FT III  
 Oil Response Center  
 Homer

**SUBJECT: Trip Report Deep Creek to Stariski Creek**

Trip Date: May 10, 1990  
 Crew: Doug Hill (ADF&G) and Rick Conover (ADNR)  
 Vehicle: ATV-one three wheeler and one four wheeler  
 Start: 0745 hrs.  
 Stop: 1100 hrs.

**Deep Creek Tide Table**

High Tide Times:	<del>1546</del> / <del>1650</del>	0212 / 1524
High Tide HTS:	<del>19.9</del> / <del>18.1</del>	12.8 / 10.5
Low Tide Times:	<del>1034</del> / <del>1057</del>	0823 / 2014
Low Tide HTS:	<del>-1.6</del> / <del>2.7</del>	-1.3 / 2.7

Map-USCG Quad: Seldovia D-5 & Kenai A-5

Rick Conover and I travelled to Deep Creek State Recreation Area via the Sterling Hwy. Once at the recreation area we unloaded the ATVs and began our slow southward journey to the mouth of Stariski Creek---Norma Dudiak's survey of 5/9/90 began at Whiskey Gulch and terminated at Stariski Creek. We surveyed what little drift line existed. The drift line was nearly non-existent in some areas and very minimal over the majority of the beach surveyed. We also surveyed the storm drift lines where present. Portions of the beach were buried by recent sloughing of the bluff.

NO OIL WAS OBSERVED ALONG THIS APPROXIMATELY 10 MILE LONG STRETCH OF BEACH.

We observed approximately 50 bald eagles approximately 1/4 mile south of Stariski Creek. We observed about 80 to 100 bald eagles on over the entire distance covered.



# YALIK Glacier Beach TARMAT

## ADF&G MULTI-ASSESSMENT DATA FORM

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

METHOD: Aerial  Ground Boat

3 DATE: 5/3/90      16 HIGH TIDE TIMES: 0952 1225      21 TEAM RECORDER: Doug Hill (ADF&G)

4 START TIME: 1409      18 HIGH TIDE HTS: 9.9 110.9      22 OBSERVERS: Jeff Johnson  
Roger MacCoy (NOR)

6 STOP TIME: 1433      17 LOW TIDE TIMES: 0337 1602      23 AGENCY: \_\_\_\_\_

8 SEGMENT #: YG-02      18 LOW TIDE HTS: 4.2 11.9      24 PHOTOS TAKEN:  N

7 STATION #: \_\_\_\_\_      19 TIDE HT AT SURVEY: \_\_\_\_\_      Roll #: DDOHA09H Frames: 18, 19, 20

8 K-UNIT: \_\_\_\_\_      Ebb Slack Flood Slack      25 VIDEO TAKEN: Y  TAPE#: \_\_\_\_\_

9 STAT AREA: \_\_\_\_\_      20 USCG QUAD: Seldovia B-2      Starts: \_\_\_\_\_ Ends: \_\_\_\_\_

10 LAT: \_\_\_\_\_      11 LONG: \_\_\_\_\_      26 SAMPLES TAKEN: Y  Number

12 SOURCE: Map Loran      011 \_\_\_\_\_

13 LOCATION: KP, DC, Nuka Passage, Yalik Glacier Beach      Sediment \_\_\_\_\_

14 DESCRIPTION: large intertidal cobble flats      Biological \_\_\_\_\_

Water \_\_\_\_\_

### EXTENT OF OIL

	SHORELINE				STREAM			
	L	W	M <sup>2</sup>	%	L	W	M <sup>2</sup>	%
27 SURFACE COVERAGE								
28 SURFACE THICKNESS								
29 PENETRATION								
30 OVERALL OIL IMPACT:	N	VL	L	M	<input checked="" type="radio"/>			
31 OIL TYPE:	Pooled	<input checked="" type="radio"/> House	<input checked="" type="radio"/> Tar	<input checked="" type="radio"/> Asphalt	Sticky	Stain		
32 OILED DEBRIS?	Y	N	<u>MS TP AP SOR</u>					
33 SHORELINE TYPE:	Headland	Low-lying Rocks	<input checked="" type="radio"/> Beach	Cove				
		Lagoon	Marsh					
34 WAVE EXPOSURE:	High	<input checked="" type="radio"/> Moderate	Low					
35 SUBSTRATE TYPE:	Bedrock	Boulder	Cobble	<u>60</u>				
	Gravel	<u>20</u>	Sand	Mud/silt	<u>20</u>			

36 CATALOGED ANAD. FISH SREAM?  N

37 CATALOG #: 232-10-10250

38 STREAM NAME: \_\_\_\_\_

39 OIL IN STREAM BED? Y  N

40 OIL ON STREAM BANKS? Y  N

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

42 OIL WITHIN 1 MILE OF STREAM?  N

Where: YALIK Glacier Tarmat to the east

43 ANADROMOUS FISH PRESENT? Y ? N

44 ANADROMOUS FISH OBSERVATION

Species	Aerial	Ground

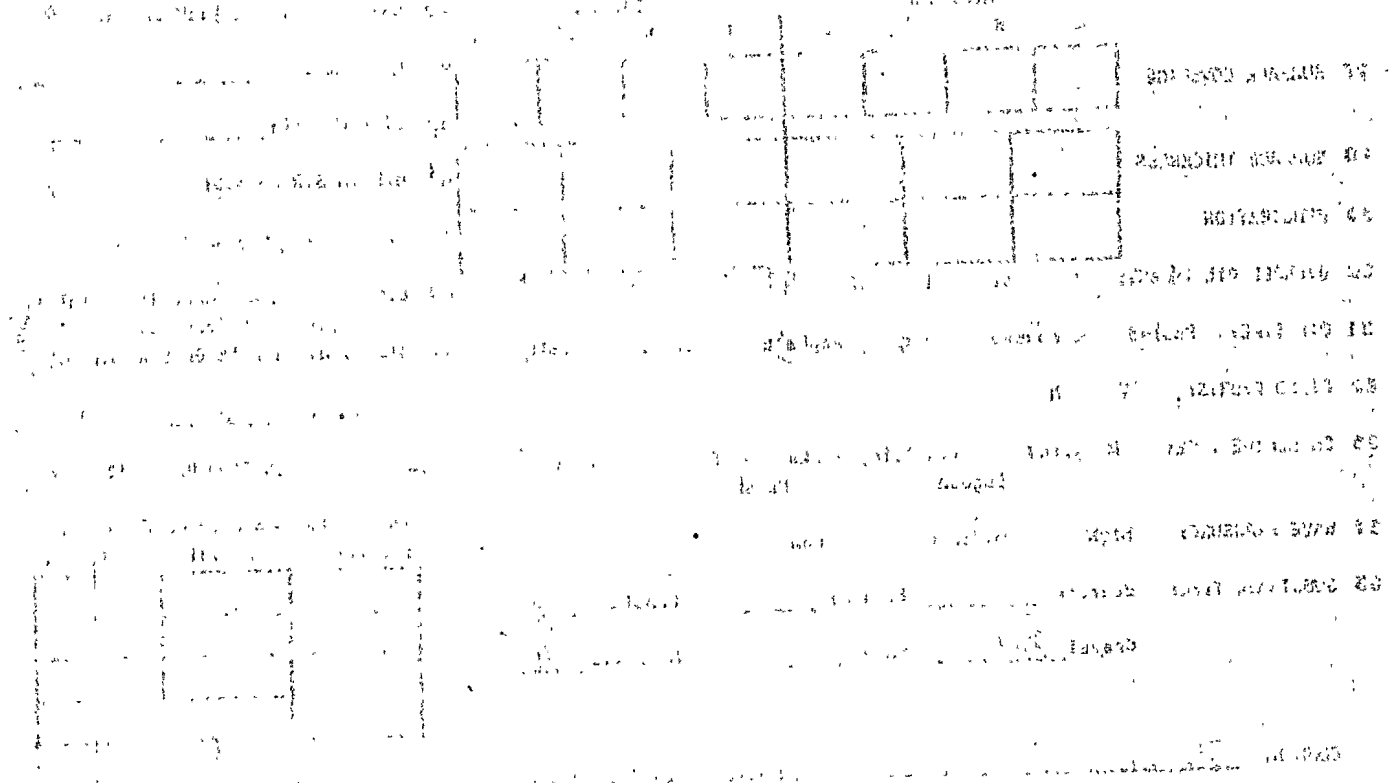
COMMENTS: Tarmat more visible from the air today than it has been on previous flights. Algal growth on tarpalies - little to no growth where oil is not present (this algal growth on oil has been observed on the south shore of Chugach Bay Creek also - an area which was not bioremediated - to our knowledge). Algal growing on hard outer crust of oil.

Mallards, Shovelers & sea otters observed



FRAME(S)	DESCRIPTION <i>Algal</i>
18 & 19	<i>Algal Growth on tar patties // Lesser growth at oil-less areas (perhaps the growth is due to the Tripal &amp;/or granular fertilizer applications).</i>
20	<i>NOAA ocean current tracking transmitter-buoy. Roger MacLampkin &amp; Jeff Johnson (ASPL) in photo</i>

**46 OIL DISTRIBUTION DIAGRAM**



= Sample taken  
 = Photo frame # and shot direction.

ACE 9961166



Need 2 FORMS!

BEACH TRANSECT

NOT A STREAM BUT THE Area is within 1/4 mile from spawning channels

PD-01 → AUEC  
Transect BEACH Profile

ADF&G MULTI-ASSESSMENT DATA FORM

PD-04 → Pike Point

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

2 REGION: PWS  KP, CI  K, AP

METHOD: Aerial  Ground  Boat

3 DATE: 5/9/90

16 HIGH TIDE TIMES: 0142 11449

21 TEAM RECORDER: Claire Crosby (ADEC)

4 START TIME: 0710 0900

16 HIGH TIDE HTS: 12.7 110.5

22 OBSERVERS: Lee Glenn Doug Hill (ADEC)

6 STOP TIME: 0857 0943

17 LOW TIDE TIMES: 0823 12016

23 AGENCY: \_\_\_\_\_

6 SEGMENT #: PD-01 PD-04

18 LOW TIDE HTS: -1.2 1 2.7

24 PHOTOS TAKEN: Y  N

7 STATION #: \_\_\_\_\_

19 TIDE HT AT SURVEY: \_\_\_\_\_

Roll #: \_\_\_\_\_ Frames: \_\_\_\_\_

8 K-UNIT: \_\_\_\_\_

Ebb Slack  Flood Slack

26 VIDEO TAKEN: Y  N TAPE#: \_\_\_\_\_

9 STAT AREA: \_\_\_\_\_

20 USCG QUAD: Seldovia B-4

Start: \_\_\_\_\_ End: \_\_\_\_\_

10 LAT: \_\_\_\_\_

11 LONG: \_\_\_\_\_

26 SAMPLES TAKEN Y  N Number

12 SOURCE: Map Loran

OIL \_\_\_\_\_

13 LOCATION: KP, DC, West Arm Port Dick, North shore, beach (PD-01)

Sediment \_\_\_\_\_

14 DESCRIPTION: West Arm Port Dick, South shore, Pike Point (PD-04)

Biological \_\_\_\_\_

EXTENT OF OIL

Water \_\_\_\_\_

	SHORELINE				STREAM			
	L	W	M <sup>2</sup>	%	L	W	M <sup>2</sup>	%
27 SURFACE COVERAGE								
28 SURFACE THICKNESS								
29 PENETRATION								

36 CATALOG # AND. FISH-SCREEN? Y N

37 CATALOG #: BEACH # PD001  
BEACH # PD004

38 STREAM NAME: \_\_\_\_\_

39 OIL IN STREAM BED? Y N

40 OIL ON STREAM BANKS? Y N

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

42 OIL WITHIN 1 MILE OF STREAM? Y N

30 OVERALL OIL IMPACT: N VL L  H H

31 OIL TYPE: Pooled  House  Tar  Asphalt  Sticky  Seath

32 OILED DEBRIS? Y  N <sup>NS TP AP ST OP (OO1)</sup>

33 SHORELINE TYPE: Headland  Low-lying Rocks  Beach  Cove <sup>TP AP ST (OO4)</sup>  
Lagoon Marsh

Where: \_\_\_\_\_

43 ANADROMOUS FISH PRESENT? Y N

34 WAVE EXPOSURE: High  Moderate  Low

44 ANADROMOUS FISH OBSERVATION

36 SUBSTRATE TYPE: Bedrock \_\_\_\_\_ Boulder \_\_\_\_\_ Cobble 70

Gravel 15 Sand 15 Mud/silt \_\_\_\_\_

Species Aerial Ground


ACE 9961167

COMMENTS: PD-01 Lee Glenn & I (Doug Hill) aided Claire Crosby in conducting a beach profile transect (ADEC). See ADEC for transect info. Thick tar mat & mousse beneath & between boulders & cobbles (SEE OTHER SIDE OF THIS PAGE)

PD-04 (Pike Point) ⇒ Observed bare patches in mussel bed where mussels were removed with oil last fall (1989). Numerous mussels are still surrounded by oil. The boulder/cobble pocket beach on the west side of the Isthmus still holds heavy mousse beneath & between cobbles & boulders. Satisfactory cleanup will require moving boulders & cobble to get oil which pools up beneath over

PD004



FRAME(S)

DESCRIPTION

## 48 OIL DISTRIBUTION DIAGRAM

PD001 1 The moderate to heavy oil on the west end of PD-01 is of concern in part due to its proximity to Slide Creek and Port Dick Creek (ANAO streams). Salmon utilize all the waterways of the slide creek tide flats. In 1989 SE often moved tarballs onto the shorelines of PD-2 (slide creek) + PD-3 (Port Dick Creek)

This

PD004 2 Numerous dead limits are observed on this beach - presumably smothered by oil.

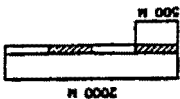
Both PD001 and PD004 With the initiation of the 1990 commercial salmon season both of these beaches may be of concern in terms of potential for oiling fishing gear and the harvest. PD-01 is between the commercial fisheries regulatory marker and Port Dick/slide creek. Hence fishing can not occur off this beach. The cobble boulder beach on the west side of Pike Point is too small a pocket to allow a "set" to be made. However, oil can still be released from these beaches. Additionally, because cleanup procedures cause loosening of the oil + sheen, cleanup should occur well in advance of the fishing season to minimize the risk of free floating oil.

*we can only enter one segment / frame. It's not clear from the comments which belongs to what segment. It's check carefully.*

= Sample taken  
= Photo frame # and  
shot direction.

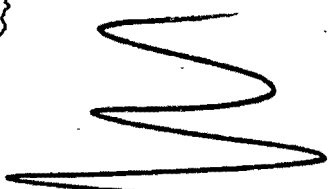
ACE 9961168





Port  
Dick

Pike Point  
Mussel bed (or lid) East side  
of Ischnus.  
- Boulder/cobble heavily  
oiled site.



DH001

GP1002  
GP1001

GP1003

PD012B

PD012A

PD010

PD010

PD011B

PD009

PD008C

PD008B

PD007B

PD008A

PD007A

PD004

PD005

PD001

PD006

PD002

PD003B

PD003A

PD011A

Port Dick  
Creek

TARMAT  
ADEL BEACH Profile  
ADEL Transsect site

Slide Creek

ACE 9961169

PHOTO TRANSECT

WB-03B PHOTOTRANSECT  
Windy Bay - MAIN BEACH

ADF&G MULTI-ASSESSMENT DATA FORM

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

2 REGION: PWS  KP, CI K, AP

METHOD: Aerial  Ground Boat

3 DATE: 5/13/90 18 HIGH TIDE TIMES: 0348 1715 21 TEAM RECORDER: Doug Hill

4 START TIME: 1000 19 HIGH TIDE HTS: 12.4 9.7 22 OBSERVERS: Lee Gleason

5 STOP TIME: 1240 17 LOW TIDE TIMES: 1043 12235 23 AGENCY: ADF&G

6 SEGMENT #: WB-3B A 18 LOW TIDE HTS: -0.4 4.4 24 PHOTOS TAKEN:  N

7 STATION #: 19 TIDE HT AT SURVEY: Roll #: 9000H08H Frame: 1-11

1657

8 K-UNIT: Ebb Slack Flood Slack 25 VIDEO TAKEN:  N TAPE#: 90LPG023H

9 STAT AREA: 20 USCG QUAD: Seldovia A-5 Start: 0431-3H End: 1650

10 LAT: 59 14 7 V 11 LONG: 151 33 34 V 26 SAMPLES TAKEN Y  Number

12 SOURCE: Map Loran 011

13 LOCATION: KP, OC, Windy Bay, Windy Right Creek Sediment

14 DESCRIPTION: Cobble beach on south side of Windy Right Creek's mouth. Biological

EXTENT OF OIL

	SHORELINE				STREAM			
	L	W	M <sup>2</sup>	S	L	W	M <sup>2</sup>	S
27 SURFACE COVERAGE								
28 SURFACE THICKNESS								
29 PENETRATION								

30 OVERALL OIL IMPACT: N VL  L M H

31 OIL TYPE: Pooled Mousse  Tar  Asphalt  Sticky  Stain

32 OILED DEBRIS?  N

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

34 WAVE EXPOSURE: High Moderate  Low

35 SUBSTRATE TYPE: Bedrock Boulder Cobble 50  
Gravel 20 Sand 0 Mud/silt 30

36 CATALOGED ANAD. FISH SREAM?  N

37 CATALOG #: 242-32-10160 ✓

38 STREAM NAME: Windy Right Crk

39 OIL IN STREAM BED? Y  N

40 OIL ON STREAM BANKS?  N

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

42 OIL WITHIN 1 MILE OF STREAM?  N

Where: WB-02, WB-03 ABC

43 ANADROMOUS FISH PRESENT? Y ? N

44 ANADROMOUS FISH OBSERVATION  
Species Aerial Ground

Species	Aerial	Ground

This phototransect was along "Main Beach" which is immediately to the south of Windy Right Creek's mouth.

COMMENTS: RAN Phototransect - Able to find transect markers with a bit of searching. A # of rocks (cobbles & boulders) have been significantly rearranged since the transect was ran last fall. A closer look at this beach reveals numerous tar patches and AP beneath & between the cobbles & boulders. Oil saturated sediment (LOP-HOR) found within substrate also. Reviewing the photos & memories of 1989 the amount of oil over



FRAME(S)	DESCRIPTION
1-11	Photo sites $\rightarrow$ 0, 1, 5, 5, 15, 15, 25, 45, 55 + 60 meter Plot (1/2 meter squared plots)

48 OIL DISTRIBUTION DIAGRAM

present has apparently decreased.

Boulders & cobbles were moved, against the wishes of Exxon & the intellect of NOAA, in 1989 to effectively get at the oil that had seeped beneath & between. Rock piles were created. NOAA reps said moving these rocks was bad medicine & would disrupt the geomorphology of the beach & surrounding. In spite of this "wisdom" the beach has been sorted out nicely over the winter.

The amount of wave energy that reaches this seemingly protected beach is surprising. I guess this must be "Windy" Bay.



Sample taken  
Photo frame # and  
shot direction.

ACE 9961171



2 ENTITIES

SHEEN SURVEY

Comments

Overtflight of South Shore of Port Dick  
Looking to see if any sheen present coming of PD-04 & PD-10

ADF&G MULTI-ASSESSMENT DATA FORM

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

2 REGION: PWS  KP,C  K,AP

METHOD:  Aerial  Ground  Boat

3 DATE: 5/19/90

4 START TIME: 0943

6 STOP TIME: 0953

6 SEGMENT #: PD-04 + 10

7 STATION #:

8 K-UNIT:

9 STAT AREA:

10 LAT:

12 SOURCE:  Map  Loran

13 LOCATION: Port Dick, West Arm, South shore

14 DESCRIPTION: Head of West Arm to Pike Point

16 HIGH TIDE TIMES: 0957 11024

16 HIGH TIDE HTS: 9.3 11.3

17 LOW TIDE TIMES: 0341 11552

18 LOW TIDE HTS: 3.2 1.8

19 TIDE HT AT SURVEY:

20 USCG QUAD: Seldovia B-3 & B-4

21 TEAM RECORDER: Doug Hill (ADF&G)

22 OBSERVERS: Leigh Carlson (AONR) Lee Glenn (ADF&G)

23 AGENCY:

24 PHOTOS TAKEN: Y  N

Roll #: \_\_\_\_\_ Frame: \_\_\_\_\_

25 VIDEO TAKEN: Y  N TAPE#: \_\_\_\_\_

Start: \_\_\_\_\_ End: \_\_\_\_\_

26 SAMPLES TAKEN? Y  N Number \_\_\_\_\_

which? ↑  
ALL of the south shore between PD Creek & Pike Point

EXTENT OF OIL

	SHORELINE				STREAM			
	L	W	M <sup>2</sup>	%	L	W	M <sup>2</sup>	%
27 SURFACE COVERAGE								
28 SURFACE THICKNESS								
29 PENETRATION								
30 OVERALL OIL IMPACT:	N	VL	L	M	H			
31 OIL TYPE:	Pooled	Mousse	Ter	Asphalt	Sticky	Stain		
32 OILED DEBRIS?	Y	N						
33 SHORELINE TYPE:	Headland	Low-lying Rocks	Beach	Cove				
		Lagoon	Marsh					
34 WAVE EXPOSURE:	High	Moderate	Low					
35 SUBSTRATE TYPE:	Bedrock	Boulder	Cobble					
	Gravel	Sand	Mud/silt					

36 CATALOGED ANAD. FISH SKELET? Y  N

37 CATALOG #:

38 STREAM NAME:

39 OIL IN STREAM BED? Y  N

40 OIL ON STREAM BANKS? Y  N

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

42 OIL WITHIN 1 MILE OF STREAM? Y  N

Where: \_\_\_\_\_

43 ANADROMOUS FISH PRESENT? Y  N

44 ANADROMOUS FISH-OBSERVATION

Species	Aerial	Ground

for both:  
COMMENTS: In anticipation of the 1990 Commercial Salmon season we conducted a brief overflight, during near high tide of the south shore of Port Dick to see if any oil sheen is leaching from oiled beaches. We surveyed from Port Dick Creek to Pike Point. No sheen was observed.



Not A Stream  
ADF&G MULTI-ASSESSMENT DATA FORM

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

METHOD: Aerial Ground Boat

3 DATE: 5/29/90 15 HIGH TIDE TIMES: 05421 1915 21 TEAM RECORDER: Doug Hill

4 START TIME: \_\_\_\_\_ 16 HIGH TIDE HTS: 12.21 10.8 22 OBSERVERS: Lee Glenn

5 STOP TIME: \_\_\_\_\_ 17 LOW TIDE TIMES: ... 11221 23 AGENCY: ADF&G

6 SEGMENT #: CB-3B 18 LOW TIDE HTS: ... 1-0.8 24 PHOTOS TAKEN: Y (N)

7 STATION #: subsec B 19 TIDE HT AT SURVEY: 2.1 Roll #: \_\_\_\_\_ Frame: \_\_\_\_\_

8 K-UNIT: \_\_\_\_\_ Ebb Slack Flood Slack 25 VIDEO TAKEN: Y (N) TAPE#: \_\_\_\_\_

9 STAT AREA: \_\_\_\_\_ 20 USCG QUAD: Seldovia A-5 Start: \_\_\_\_\_ End: \_\_\_\_\_

10 LAT: \_\_\_\_\_ 11 LONG: \_\_\_\_\_ 26 SAMPLES TAKEN? Y (N) Number

12 SOURCE: Map Loran 011 \_\_\_\_\_

13 LOCATION: Chugach Bay, North shore, West shore Sediment \_\_\_\_\_

14 DESCRIPTION: South shore Biological \_\_\_\_\_

Water \_\_\_\_\_

EXTENT OF OIL

	SHORELINE				STREAM			
	L	W	M <sup>2</sup>	V	L	W	M <sup>2</sup>	V
27 SURFACE COVERAGE								
28 SURFACE THICKNESS								
29 PENETRATION								
30 OVERALL OIL IMPACT:	N	VL	L	M	H			
31 OIL TYPE:	<u>Roiled</u>	<u>House</u>	<u>Tar</u>	Asphalt	<u>Sticky</u>	<u>SEATN</u>		
32 OILED DEBRIS?	Y	N	<u>MS</u>	<u>TR</u>	<u>ST</u>	<u>OB</u>		
33 SHORELINE TYPE:	Headland	Low-lying Rocks	<u>Beach</u>	Cove				
		Lagoon	Marsh					
34 WAVE EXPOSURE:	High	<u>Moderate</u>	Low					
35 SUBSTRATE TYPE:	Bedrock	Boulder	<u>✓</u>	Cobble	<u>✓</u>			
	Gravel	<u>✓</u>	Sand	Mud/silt	<u>✓</u>			

36 CATALOGED ANAD. FISH SREAM? (N) with 1/2 mile

37 CATALOG #: BEACH & BOULDS

38 STREAM NAME: \_\_\_\_\_

39 OIL IN STREAM BED? Y N N/A

40 OIL ON STREAM BANKS? Y N

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

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

Where: \_\_\_\_\_

43 ANADROMOUS FISH PRESENT? Y N

44 ANADROMOUS FISH OBSERVATION

Species	Aerial	Ground

This survey encompassed a beach which is just North (within 1/4 mile) of the Chugach Bay Anad. stream (242-20-10190)

COMMENTS: CB-3B had been worked a little recently. But a large quantity of oil still remains on subdiv. B. Boulders & cobbles have been moved along the ADF&G transect line to get at the oil interstitially beneath. Even where rocks have been moved up to 3" thick tar patties remain. Just a glance reveals the significant quantity of oil remaining.

The crew is currently having a safety meeting (during low water?) and plans to work on 3B today and then move to the Barrens tomorrow.

FRAME(S)	DESCRIPTION

46 OIL DISTRIBUTION DIAGRAM

Comments cont'd:

The crew cleaned the pocket beaches between the mouth of Chugach Bay Creek and the Cove (pocket beach) on the south shore of Chugach (CB-04). These beaches were cleaned well. The oiled beach at south cove (CB-04) looks much better than it did last year, however the rocky platform is still saturated with oil. It looks like some poured motor oil all over the beach - not much surface mounds or tar patties visible on surface. Yet the sediments wreak of oil and the surface is definitely oil stained. What a mess!

= Sample taken  
 = Photo frame # and shot direction.



ACE 9961175

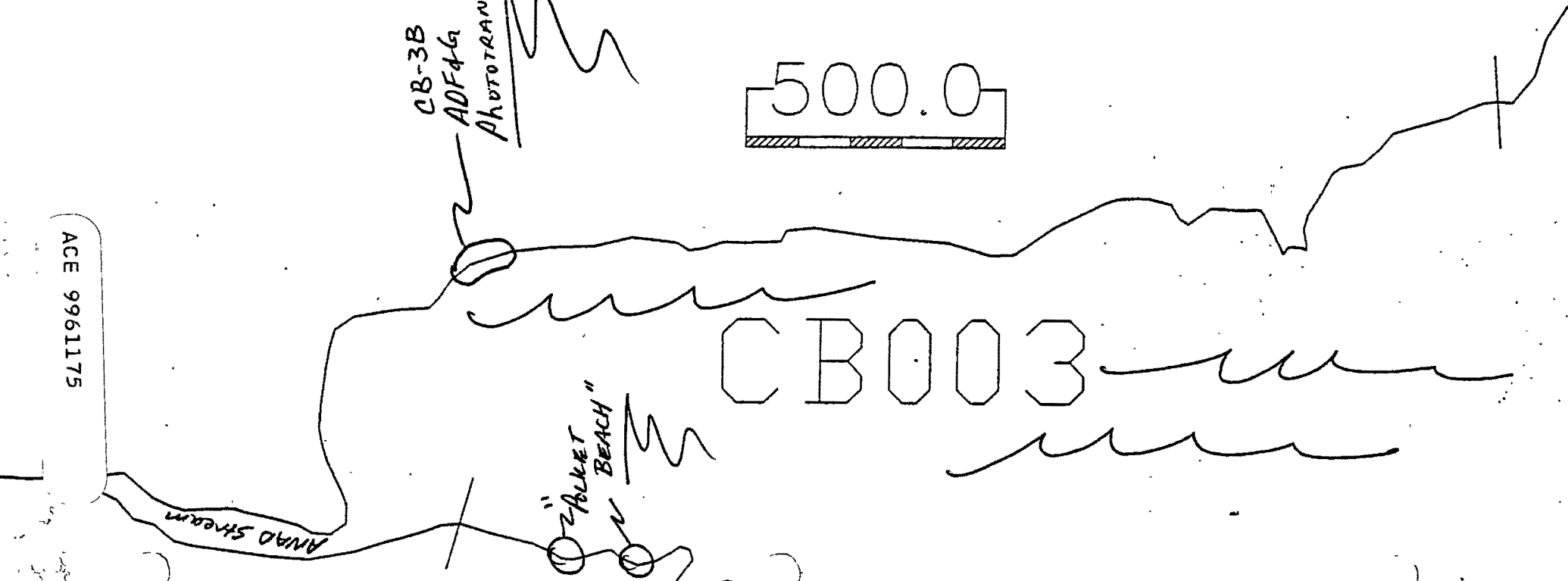
ANAD STREAM

CB-3B  
ADF46  
PHOTOTRANSECT

500.0

CB003

"POCKET BEACH"



Chugach Bay  
Cleanup Monitoring

ADF&G MULTI-ASSESSMENT DATA FORM

1 SURVEY TYPE: BS SS DS TS AVS SCHA M4HS PTA      2 REGION: PWS KP, CI K, AP

METHOD: Aerial Ground Boat

3 DATE: 5/31/90      16 HIGH TIDE TIMES: 0802 / 0911      21 TEAM RECORDER: Lee Glenn, Doug Hick (AOF-G)

4 START TIME: 1740      18 HIGH TIDE HTS: 9.7 / 10.8      22 OBSERVERS: PAT Norman (CNA)  
Russel Kinobe (ADEC)

6 STOP TIME: 1930      17 LOW TIDE TIMES: 0148 / 0207      23 AGENCY: \_\_\_\_\_

8 SEGMENT #: CB-3A      18 LOW TIDE HTS: 3.6 / 1.3      24 PHOTOS TAKEN:  N  
90D0H14H      1-3

7 STATION #: Subsg A      19 TIDE HT AT SURVEY: \_\_\_\_\_      25 VIDEO TAKEN: Y N TAPE#: 90LP6023H  
90D0H13H      Frame: 8-12

8 K-UNIT: \_\_\_\_\_      Ebb      Slack      Flood      Slack      26 SAMPLES TAKEN: Y  Number

9 STAT AREA: \_\_\_\_\_      20 USCG QUAD: Seldovia A-5      Start: 9363      End: 4570

10 LAT: \_\_\_\_\_      11 LONG: \_\_\_\_\_

12 SOURCE: Map      Loran

13 LOCATION: Chugach Bay, North-shore, head of Bay  
CHUGACH BAY CREEK

14 DESCRIPTION: 1/4 mile from ~~21220-1090~~

Oil \_\_\_\_\_

Sediment \_\_\_\_\_

Biological \_\_\_\_\_

Water \_\_\_\_\_

EXTENT OF OIL

	SHORELINE				STREAM			
	L	W	M <sup>2</sup>	%	L	W	M <sup>2</sup>	%
27 SURFACE COVERAGE								
28 SURFACE THICKNESS								
29 PENETRATION								
30 OVERALL OIL IMPACT:	N	VL	L	<input checked="" type="checkbox"/> H				
31 OIL TYPE:	<u>Pooled</u>	Mousse	Tar	Asphalt	Sticky	Stain		
32 OILED DEBRIS?	<input checked="" type="checkbox"/> Y	N						
33 SHORELINE TYPE:	Headland	Low-lying Rocks	<u>Beach</u>	Cove				
		Lagoon	Marsh					
34 WAVE EXPOSURE:	High	<u>Moderate</u>	Low					
35 SUBSTRATE TYPE:	Bedrock	<input checked="" type="checkbox"/>	Boulder	<input checked="" type="checkbox"/>	Cobble	<input checked="" type="checkbox"/>		
	Gravel	<input checked="" type="checkbox"/>	Sand	<input checked="" type="checkbox"/>	Mud/silt	<input checked="" type="checkbox"/>		

36 CATALOGED ANAD. FISH STREAM? Y N

37 CATALOG #: BEACH EB 003

38 STREAM NAME: 242 2010190

39 OIL IN STREAM BED? Y N

40 OIL ON STREAM BANKS? Y N

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

42 OIL WITHIN 1 MILE OF STREAM? Y N

Where: \_\_\_\_\_

43 ANADROMOUS FISH PRESENT? Y N

44 ANADROMOUS FISH OBSERVATION

Species	Aerial	Ground

COMMENTS: See attached trip report - yellow lined  
portion of text.

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sediment. The workers would located a patch of oil and follow the seam as far as it would take them. Crew members stated that what would start out as a surface pickup often took them a few inches subsurface (i.e., the visible oiled material extended below the surface of the beach and the workers followed it until it ran out). This particular beach was an expressed cleanup concern of Tom Schroeder (EXXON Fisheries Consultant). A high potential for oiling nets exists here. Fish tend to school up in these embayments. Hence it would be a logical place to make a set since the slope of the beach is low and fish tend to school up in these embayments.

~~1740 hrs.~~ - ~~Flew to Chugach Bay.~~ Cleanup crew of nine working CB-3B. Here we were met by Jim Davis (USCG), Mike Revis (VECO), James Byers (OOPS), and Clara Crosby (ADEC). The crew was picking up the large tar mat, tar patties, and alot of heavily oiled sediment from around and beneath cobbles and boulders. The tarmat extended beneath gravel berm at the top of the beach. Russel Kinube said that this oil beneath the berm was not reported on the SSAT survey. Jim Davis (USCG monitor) said Admiral Ciangalini told him once a beach is signed off no one will return to that beach. Jim stated that this statement has caused him to be cautious about signing off until the beach is thoroughly cleaned.

~~An Anaxoromous Fish stream is w/in 1/4 mile of this beach~~  
1935 hrs. - Depart Chugach Bay. Overflight of Perl and Elizabeth Island sea lion haulouts. Observed approximately 40 individuals on Perl and approximately 75 individuals on Elizabeth.

1953 hrs. - Land Port Graham and drop off Pat Norman.

2010 hrs. - Land ERA Helos Homer.

✓ ~~Chugach Bay Creek~~  
~~ASC # 242-20-10190~~

WB-04  
WB-04

WIND

WB-04

Cleanup monitoring  
Survey location

CB-02

CB-03

CHUGACH BAY

CB-04

S S A G E



1 inch = 3791 feet

EXXON COMPANY, USA

ACE 9961178

May 21, 1990

Aml used:

/chugach1/morris/super2/ops.aml



OILING SURVEY

ADF&G MULTI-ASSESSMENT DATA FORM

NOT A STREAM

BADGER POINT  
Shipwreck Beach CB-01

1 SURVEY TYPE:  SS  DS  TS  AVS  SCHA  MMS  PTA

2 REGION: PWS  KP, CI K, AP

METHOD: Aerial  Ground  Boat

3 DATE: 6/15/90 16 HIGH TIDE TIMES: 1039 12234 21 TEAM RECORDER: Doug Hill

4 START TIME: 1339 16 HIGH TIDE HTS: 8.8 112.8 22 OBSERVERS: Lee GLENN

5 STOP TIME: 1437 17 LOW TIDE TIMES: 0420 11602 23 AGENCY: ADF&G

6 SEGMENT #: CB-01 18 LOW TIDE HTS: 1.0 3.0 24 PHOTOS TAKEN:  Y  N

7 STATION #: \_\_\_\_\_ 19 TIDE HT AT SURVEY: \_\_\_\_\_ Roll #: 1200H Frame: 7-11

8 K-UNIT: \_\_\_\_\_ Ebb Slack Flood Slack 25 VIDEO TAKEN: Y  TAPE#: \_\_\_\_\_

9 STAT AREA: \_\_\_\_\_ 20 USCG QUAD: Selbovia A-4 Start: \_\_\_\_\_ End: \_\_\_\_\_

10 LAT: \_\_\_\_\_ 11 LONG: \_\_\_\_\_ 26 SAMPLES TAKEN? Y  Number \_\_\_\_\_

12 SOURCE: Map Loran WINDY BAY, BADGER COVE, HEADLAND BETWEEN OIL \_\_\_\_\_  
(SHIPWRECK POINT)

13 LOCATION: Headland of low lying rock between BADGER Cove & Windy Bay (between Chugach & Windy) Shipwreck Sediment \_\_\_\_\_

14 DESCRIPTION: Shipwreck Point Biological \_\_\_\_\_

EXTENT OF OIL

	SHORELINE				STREAM			
	L	W	M <sup>2</sup>	%	L	W	M <sup>2</sup>	%
27 SURFACE COVERAGE								
28 SURFACE THICKNESS								
29 PENETRATION								

30 OVERALL OIL IMPACT: N VL L  H H

31 OIL TYPE:  Pooled  House  Tar  Asphalt  Sticky  Seatin  
MS TP AP ST SON

32 OILED DEBRIS?  Y  N

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

34 WAVE EXPOSURE:  High Moderate Low

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

36 CATALOGED ANAD. FISH STREAM? Y  N

37 CATALOG #: BEACH (CB-01)

38 STREAM NAME: \_\_\_\_\_

39 OIL IN STREAM BED? Y  N  N/A

40 OIL ON STREAM BANKS? Y  N

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

42 OIL WITHIN 1 MILE OF STREAM? Y  N

Where: \_\_\_\_\_

43 ANADROMOUS FISH PRESENT? Y  N

44 ANADROMOUS FISH OBSERVATION

Species	Aerial	Ground

COMMENTS: Enough oil (Tar, AP and a few pockets of pooled residue) exists to warrant an oil pickup + removal crew. Oil found from point on west to the shipwreck. This area was SSATED no work has come out yet for this beach. This brief survey was reported to ADEC.

46 PHOTOLOG

FRAME(S)	DESCRIPTION
7,8	Oil Sheen on tide pool surface
9	Littorina, Near heaviest oil concentration
10	Heavily Oil Saturated Sediment in vicinity of tide pools

46 OIL DISTRIBUTION DIAGRAM

= Sample taken  
= Photo frame # and  
shot direction.

ACE 9961180



~~SAME BEACH -- as previous Shipwreck Beach~~

NOT A SALMON STREAM  
GILING SURVEY  
ADF&G MULTI-ASSESSMENT DATA FORM

CB-01 / BADGER POINT  
Shipwreck BEACH

1 SURVEY TYPE:  SS  DS  TS  AVS  SCHA  MHS  PTA

2 REGION: PWS  KP, CI  K, AP

METHOD: Aerial  Ground  Boat

3 DATE: 6/10/91 16 HIGH TIDE TIMES: 1039 12234 21 TEAM RECORDER: Doug Hill  
Clara Crosby, Steve Ferguson (AOEC)

4 START TIME: 1339 18 HIGH TIDE HTS: 8.8, 12.8 22 OBSERVERS: Bud Stanley (NOAA)

5 STOP TIME: 1416 17 LOW TIDE TIMES: 0420 11602 23 AGENCY:

6 SEGMENT #: CB-01 18 LOW TIDE HTS: 1.0 13.0 24 PHOTOS TAKEN: Y

7 STATION #: 19 TIDE HT AT SURVEY: Roll #: Frame:

8 K-UNIT:  Ebb  Slack  Flood  Slack 25 VIDEO TAKEN: Y  TAPE#: Start: End:

9 STAT AREA: 20 USCG QUAD: Selkovia A-4 26 SAMPLES TAKEN: Y  Number

10 LAT: 11 LONG: 27 OIL

12 SOURCE: Map Loran WINDY BAY, BADGER COVE, HEADLAND BETWEEN (SHIPWRECK POINT)

13 LOCATION: HEADLAND of low-lying Rock Between Badger Cove & WINDY BAY (between Chyachv windy) Shipwreck

14 DESCRIPTION: 28 Sediment

29 Biological

30 Water

EXTENT OF OIL

	SHORELINE				STREAM			
	L	W	M <sup>2</sup>	%	L	W	M <sup>2</sup>	%
27 SURFACE COVERAGE								
28 SURFACE THICKNESS								
29 PENETRATION								
30 OVERALL OIL IMPACT:	N	VL	L	<input checked="" type="radio"/> H	H			
31 OIL TYPE:	<input checked="" type="radio"/> Pooled	<input type="radio"/> House	<input type="radio"/> Tar	<input type="radio"/> Asphalt	<input type="radio"/> Sticky	<input type="radio"/> Stain		
32 OILED DEBRIS?	<input checked="" type="radio"/> Y	<input type="radio"/> N						
33 SHORELINE TYPE:	<input checked="" type="radio"/> Headland	<input type="radio"/> Low-lying Rocks	<input type="radio"/> Beach	<input type="radio"/> Cove				
		<input type="radio"/> Lagoon	<input type="radio"/> Marsh					
34 WAVE EXPOSURE:	High	Moderate	Low					
35 SUBSTRATE TYPE:	Bedrock <input checked="" type="checkbox"/>	Boulder <input checked="" type="checkbox"/>	Cobble <input checked="" type="checkbox"/>					
	Gravel <input checked="" type="checkbox"/>	Sand <input checked="" type="checkbox"/>	Mud/silt					

36 CATALOGED ANAD. FISH STREAM? Y N

37 CATALOG #: ~~BEACH BOUND~~

38 STREAM NAME:

39 OIL IN STREAM BED? Y N

40 OIL ON STREAM BANKS? Y N

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

42 OIL WITHIN 1 MILE OF STREAM? Y N

Where:

43 ANADROMOUS FISH PRESENT? Y N

44 ANADROMOUS FISH OBSERVATION

Species	Aerial	Ground

ACE 9961181

COMMENTS: Surveyed this beach primarily to show Bud Stanley of NOAA the readily removable tar mats. 5 x 11 meters tar mat exists on the west portion of the point. Tar patches are scattered east to the shipwreck "Kathy Joann" (24% over a 60 x 5 m area). Bud Stanley was neutral as to whether or not the oil should be picked up. He was not concerned one way or the other. Bud feels the oil is not a threat in terms of re-planting. The oil mat is protected behind a 5' high bedrock over.



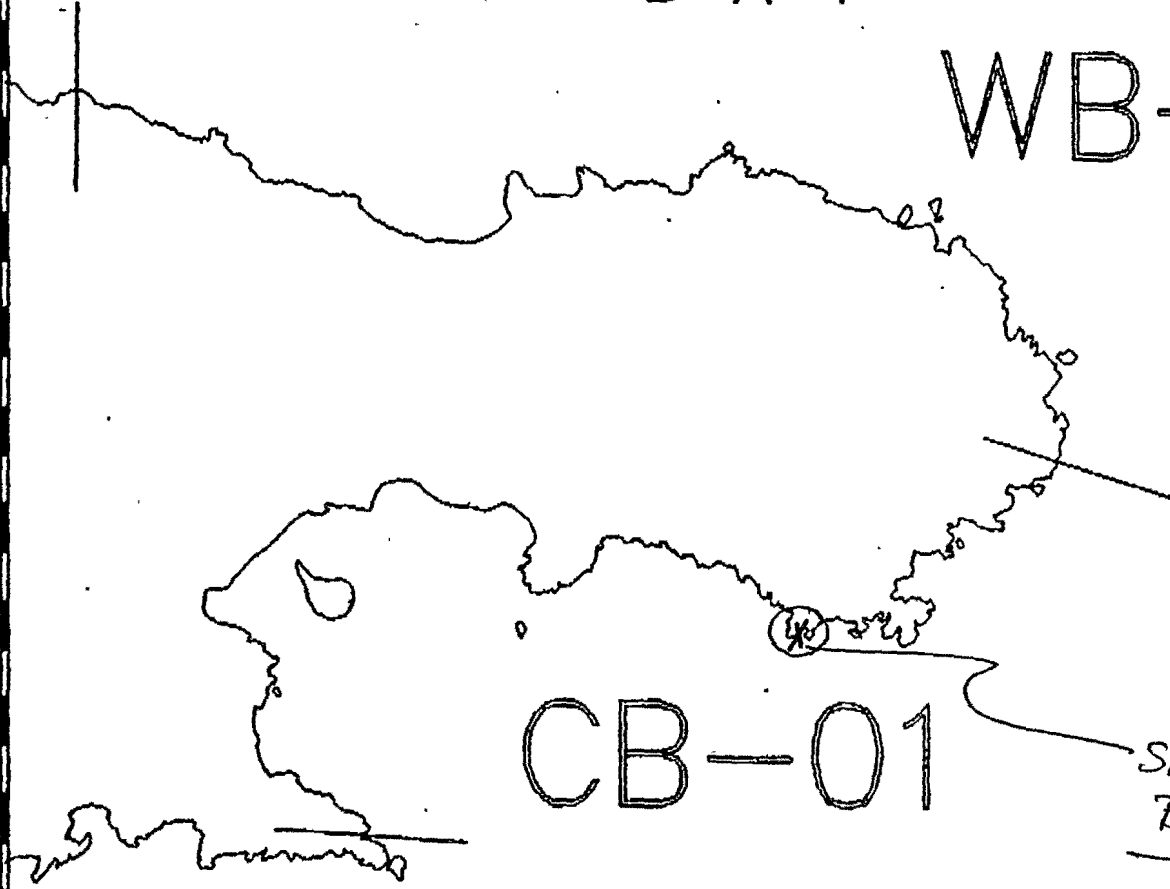


B-9 WB-9

W-14 Q

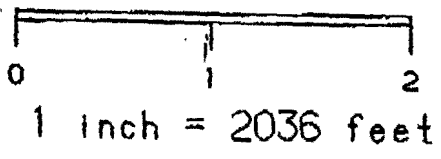
WINDY BAY

WB-05



CB-01

6/18/90  
Shipwreck  
BEACH



EXXON COMPANY, USA

ACE 9961183

May 21, 1990

Aml used:

/chugach1/morris/super2/ops.aml

NOT A STREAM

ANDERSEN BEACH  
Point ~~2.5~~ <sup>3.2</sup> miles to west of  
ANAD. Stream #

OILING SURVEY

ADF&G MULTI-ASSESSMENT DATA FORM

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

METHOD: Aerial  (Ground) Boat

3 DATE: 6/18/90 16 HIGH TIDE TIMES: 1039 12234 21 TEAM RECORDER: Jay Hill (ADFG)  
Bud Stanley (NOMA)

4 START TIME: 1441 18 HIGH TIDE HTS: 8.8 12.8 22 OBSERVERS: Clara Krashy & Steve Ferguson  
(ADFG)

6 STOP TIME: 1519 17 LOW TIDE TIMES: 0420 11602 23 AGENCY: \_\_\_\_\_

6 SEGMENT #: None 18 LOW TIDE HTS: 1.0 13.0 24 PHOTOS TAKEN: Y

7 STATION #: \_\_\_\_\_ 19 TIDE HT AT SURVEY: \_\_\_\_\_ Roll #: \_\_\_\_\_ Frame: \_\_\_\_\_

8 K-UNIT: Unit 10 Ebb Slack Flood Slack 25 VIDEO TAKEN: Y  TAPE#: \_\_\_\_\_

9 STAT AREA: 242-10 20 USCG QUAD: Seldovia A-5 Start: \_\_\_\_\_ End: \_\_\_\_\_

10 LAT: 59 9 54 11 LONG: 151 41 43 26 SAMPLES TAKEN? Y  Number

12 SOURCE: Map Loran ANDERSEN BEACH, 200 m WEST OF Oil \_\_\_\_\_

13 LOCATION: ~~Church Passage, Stream Valley just North of~~ 242 1010200 Sediment \_\_\_\_\_  
~~Port Island, Andersen Beach~~ Biological \_\_\_\_\_

EXTENT OF OIL

	SHORELINE				STREAM			
	L	W	M <sup>2</sup>	%	L	W	M <sup>2</sup>	%
27 SURFACE COVERAGE								
28 SURFACE THICKNESS								
29 PENETRATION								
30 OVERALL OIL IMPACT:	N	VL	<u>(L)</u>	<u>(H)</u>	H			
31 OIL TYPE:	Pooled	<u>Mousse</u>	<u>Tar</u>	<u>Asphalt</u>	<u>Sticky</u>	<u>Slurry</u>		
32 OILED DEBRIS?	Y	<input checked="" type="radio"/>	<u>MS TP AP SWR ST</u>					
33 SHORELINE TYPE:	Headland	<u>Low-lying Rocks</u>	<u>Beach</u>	Cove	Lagoon	Marsh		
34 WAVE EXPOSURE:	<u>High</u>	Moderate	Low					
35 SUBSTRATE TYPE:	Bedrock	Boulder	Cobble		Gravel	<u>15</u>	Sand	<u>85</u>
							Mud/silt	

36 CATALOGED ANAD. FISH STREAM?  Y  N

37 CATALOG #: 242-10-10200 BEACH KE901

38 STREAM NAME: Andersen Beach

39 OIL IN STREAM BED? Y  N/A

40 OIL ON STREAM BANKS? Y

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

42 OIL WITHIN 1 MILE OF STREAM?  Y  N  
Where: Point to West stream mouth

43 ANADROMOUS FISH PRESENT? Y  N

44 ANADROMOUS FISH OBSERVATION

Species	Aerial	Ground

COMMENTS: Oiled Area (Area of heaviest oiling) is approximately 5 x 100 meter. ~~propagated~~ Bud Stanley is the only person present who feels this oil poses no re-oiling threat. A few areas of pooled mousse still exist. Oil is beneath & between boulders/cobble/pea gravel. The oil <sup>is present</sup> flows in the ~~under~~ <sup>under</sup> the influence of the sun, sediment is heavily entrained with oil.



Not A stream

PORT DICK TIDE GAGE  
Cleanup monitoring

ADF&G MULTI-ASSESSMENT DATA FORM

1 SURVEY TYPE: BS SS DS TS AVS SCHA MHHS PTA  
 2 REGION: PWS KP-Cl K,AP  
 METHOD: Aerial Ground Boat  
 3 DATE: 6/20/90 18 HIGH TIDE TIMES: 1252 1117<sup>am</sup> 21 TEAM RECORDER: Doug Hill  
 4 START TIME: 1548 19 HIGH TIDE HTS: 9.9 114.2 22 OBSERVERS: Lee Glenn  
 5 STOP TIME: 1725 17 LOW TIDE TIMES: 0625 11811 23 AGENCY: ADF&G  
 6 SECTENT #: PD-10A 18 LOW TIDE HTS: -1.7 13.3 24 PHOTOS TAKEN: 1 N  
 7 STATION #: Subsea A 19 TIDE HT AT SURVEY: \_\_\_\_\_ Roll #: 900DH16H Frame: 23, 24  
 8 K-UNIT: \_\_\_\_\_ ED Slack Flood Slack 25 VIDEOS TAKEN: 0 N TAPE#: 90LPG23H  
 9 STAT AREA: \_\_\_\_\_ 20 USCG QUAD: Selobvia B-3 Start: 4859 End: 5509  
 10 LAT: \_\_\_\_\_ 11 LONG: \_\_\_\_\_ 26 SAMPLES TAKEN? Y 0 Number

12 SOURCE: Map Lorán PORT DICK, WEST ARM, SOUTH SHORE,  
 13 LOCATION: West Arm Port Dick, South shore PIKE POINT  
 14 DESCRIPTION: \_\_\_\_\_

Oil \_\_\_\_\_  
 Sediment \_\_\_\_\_  
 Biological \_\_\_\_\_  
 Water \_\_\_\_\_

EXTENT OF OIL

	SHORELINE				STREAM			
	L	W	N <sup>2</sup>	S	L	W	N <sup>2</sup>	S
27 SURFACE COVERAGE								
28 SURFACE THICKNESS								
29 PENETRATION								

30 CATALOGED ANAD. FISH SREAM? Y N  
 37 CATALOG #: BEACH 22014  
 38 STREAM NAME: \_\_\_\_\_  
 39 OIL IN STREAM BED? Y N N/A  
 40 OIL ON STREAM BANKS? Y N  
 41 OIL ON BEACH ADJACENT TO MOUTH? Y N  
 (within 50 meters)  
 42 OIL WITHIN 1 MILE OF STREAM? Y N  
 Where: \_\_\_\_\_

30 OVERALL OIL IMPACT: N VL L M H  
 31 OIL TYPE: Pooled Mousse Tar Asphalt Sticky Stain  
 32 OILED DEBRIS? 0 N MS TP AP SOA ST  
 33 SHORELINE TYPE: Headland Low-lying Rocks Beach Cove  
 Lagoon Marsh  
 34 WAVE EXPOSURE: High Moderate Low  
 35 SUBSTRATE TYPE: Bedrock ✓ Boulder ✓ Cobble ✓  
 Gravel ✓ Sand ✓ Mud/silt ✓

43 ANADROMOUS FISH PRESENT? Y N  
 44 ANADROMOUS FISH OBSERVATION  
 Species Aerial Ground  


 ACE 9961185

COMMENTS: M/V Yukon River Anchored off middle Crk. 1.0m skiff & two skiffs at Akas Pointe John Friske (ADFC) skiff went to the East facing beach at Pikes Point. We are met by Jeff Sullard (USCG) (USCG), Tim Turner (EXXON) and crew of 6 on beach. Manual removal of oil (removing mousse & heavily oiled sediment). Crew started at 1712 w/ tide & working down the beach with the outgoing tide. Where's the rest of the crew? over →





0-06

PD-07

PD-8

S T

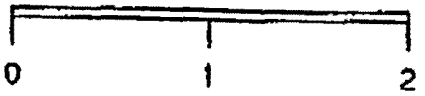
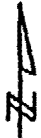
A R M

PD-9

MUSSEL BED

PD-10

MANUAL CLEANUP AREA



1 inch = 3183 feet

EXXON COMPANY, USA

ACE 9961187

May 21, 1990

Aml used:

/chugach1/morris/super2/ops.aml

Not A Stream - Post-Cleanup monitoring  
ADF&G MULTI-ASSESSMENT DATA FORM

1 SURVEY TYPE:  SS  DS  TS  AVS  SCHA  MMS  PTA

2 REGION: PWS  KP, CI  K, AP

METHOD: Aerial  Ground  Boat

3 DATE: 6/20/91 15 HIGH TIDE TIMES: 1252<sup>am</sup> 1117<sup>am</sup> 21 TEAM RECORDER: Doug Hill

4 START TIME: 1736 16 HIGH TIDE HTS: 9.9 114.2 22 OBSERVERS: Lee Glenn

5 STOP TIME: 1945 17 LOW TIDE TIMES: 0625 1811 23 AGENCY: ADF&G

6 SEGMENT #: TB-04 18 LOW TIDE HTS: 7.7 13.3 24 PHOTOS TAKEN:  Y  N

7 STATION #: \_\_\_\_\_ 19 TIDE HT AT SURVEY: \_\_\_\_\_ Roll #: 900HB16H Frame: 12-19, 25, 29

8 K-UNIT: \_\_\_\_\_ Ebb Slack Flood Slack 25 VIDEO TAKEN:  Y  N TAPE#: 90LP6023H

9 STAT AREA: \_\_\_\_\_ 20 USCG QUAD: Soldonia B-3 Start: 5510 End: 5751

10 LAT: \_\_\_\_\_ 11 LONG: \_\_\_\_\_ 26 SAMPLES TAKEN: Y  Number

12 SOURCE: Map Loran

13 LOCATION: TONSINA BAY, GRIMM BEACH

14 DESCRIPTION: \_\_\_\_\_

EXTENT OF OIL

	SHORELINE				STREAM					
	L	W	M <sup>2</sup>	%	L	W	M <sup>2</sup>	%		
27 SURFACE COVERAGE										
28 SURFACE THICKNESS										
29 PENETRATION										
30 OVERALL OIL IMPACT:	N	VL	<u>L</u>	<u>H</u>	N	VL		H		
31 OIL TYPE:	Pooled	<u>Housse</u>	<u>TAR</u>	<u>Asphalt</u>	<u>Sticky</u>	<u>Stain</u>				
32 OILED DEBRIS?	<input checked="" type="radio"/> Y <input type="radio"/> N	<u>MS</u>	<u>TP</u>	<u>AP</u>	<u>SUN</u>	<u>ST</u>				
33 SHORELINE TYPE:	Headland	Low-lying Rocks	<u>Beach</u>	Cove	Lagoon	Marsh				
34 WAVE EXPOSURE:	High	Moderate	<u>Low</u>							
35 SUBSTRATE TYPE:	Bedrock	Boulder	<input checked="" type="checkbox"/>	Cobble	<input checked="" type="checkbox"/>	Gravel	<input checked="" type="checkbox"/>	Sand	Mud/silt	<input checked="" type="checkbox"/>

36 CATALOGED ANAD. FISH STREAM? Y  N

37 CATALOG #: BEACH TB 04

38 STREAM NAME: \_\_\_\_\_

39 OIL IN STREAM BED? Y  N  N/A

40 OIL ON STREAM BANKS? Y  N  N/A

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

42 OIL WITHIN 1 MILE OF STREAM? Y  N  N/A

Where: \_\_\_\_\_

43 ANADROMOUS FISH PRESENT? Y  N

44 ANADROMOUS FISH OBSERVATION

Species	Aerial	Ground

ACE 9961188

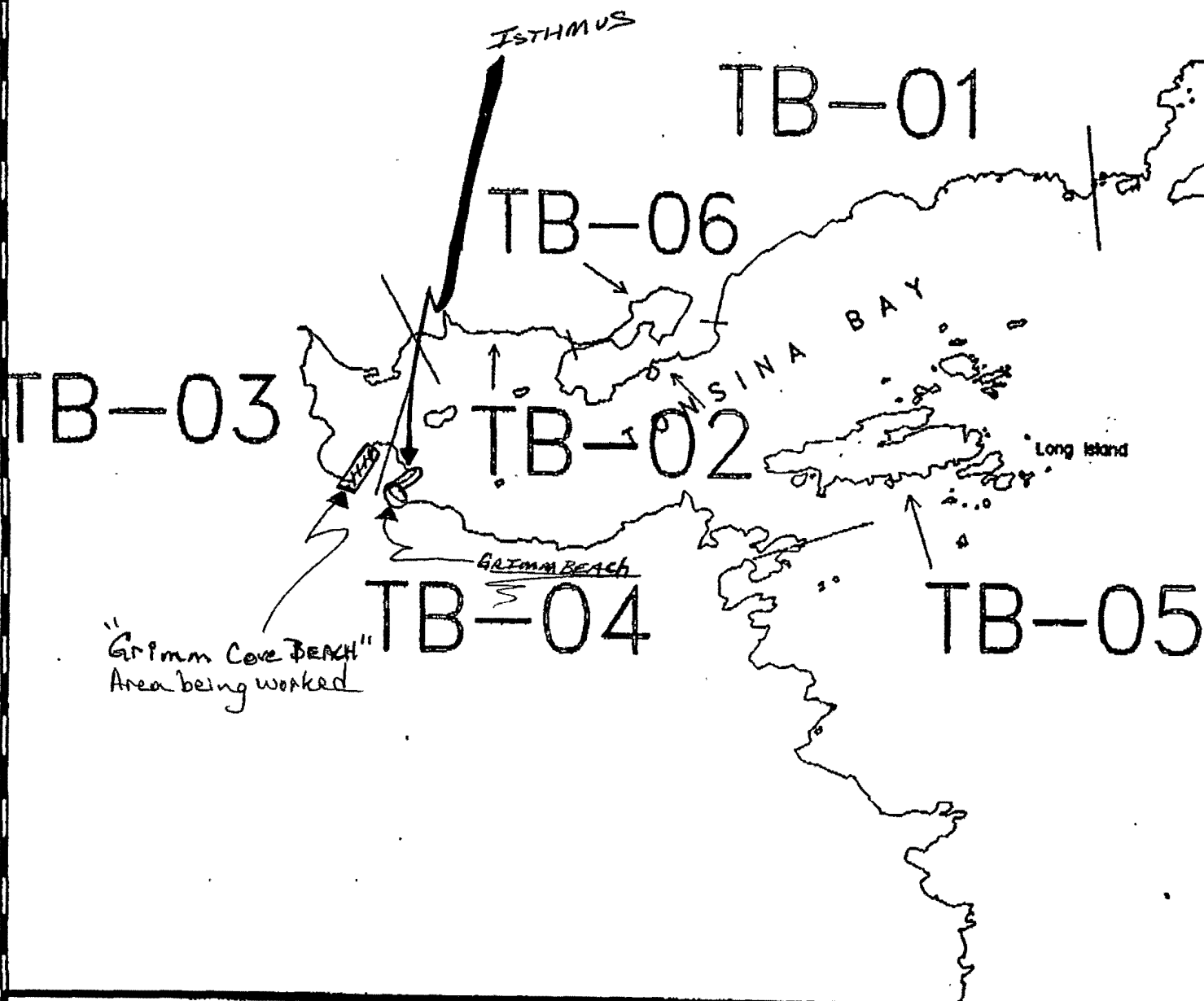
COMMENTS: This beach has recently been cleaned & is within 1/2 mile of two anadromous streams. The odor of oil is strong/thick. Plenty of work still needs to be done here prior to Demobilization and or Bioremediation. I add Bioremediation the prior sentence because the work staff is being "pushed" this year & its hard to tell the difference between the two sometimes! A ample amount of recoverable oil saturated sediment and tar patties over



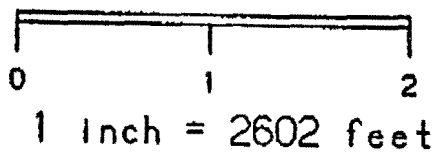
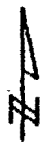


6/20/90

1736hr → 1945hrs



"Grimm Cove BEACH" Area being worked



EXXON COMPANY, USA

ACE 9961190

May 21, 1990

Aml used:

/chugachl/morris/super2/ops.aml



- PD-01 (NOT A Salmon Stream)

Cleanup Monitoring

- W/in 1/4 mile of Anadromous Stream (242-42-10450)  
- W/in 1 mile of Stream 242-42-10460

Not A Stream  
ADF&G MULTI-ASSESSMENT DATA FORM

1 SURVEY TYPE:  BS SS DS TS AVS SCHA MMS PTA 2 REGION: PWS  PD-01 K, AP

METHOD: Aerial  Ground Boat

3 DATE: 6/28/90 18 HIGH TIDE TIMES: 0616 1119 21 TEAM RECORDER: Doug Hill (AOF&G)

4 START TIME: 1112 19 HIGH TIDE HTS: 10.6 11.3 22 OBSERVERS: Lee Wynn (AOF&G)  
John Fenske (AOEC)

6 STOP TIME: 1406 17 LOW TIDE TIMES: ----- 1243 23 AGENCY: \_\_\_\_\_

8 SEGMENT #: PD-01 18 LOW TIDE HTS: ----- 11.5 24 PHOTOS TAKEN:  N

7 STATION #: \_\_\_\_\_ 19 TIDE HT AT SURVEY: \_\_\_\_\_ Roll #: \_\_\_\_\_ Frame: \_\_\_\_\_

8 K-UNIT: \_\_\_\_\_ Ebb Slack Flood Slack 25 VIDEO TAKEN:  N TAPE: 90LW024H

9 STAT AREA: \_\_\_\_\_ 20 USCG QUAD: Seldovia B-4 Start: 0632

10 LAT: \_\_\_\_\_ 11 LONG: \_\_\_\_\_ 26 SAMPLES TAKEN: Y (

12 SOURCE: Map  Lorán

13 LOCATION: Port Dick, West Arm, Head of West Arm

14 DESCRIPTION: \_\_\_\_\_

Nancy -  
pls watch out -  
need 2nd med-  
form for 7/6/90  
(see comments)

EXTENT OF OIL

	SHORELINE				STREAM			
	L	W	M <sup>2</sup>	%	L	W	M <sup>2</sup>	%
27 SURFACE COVERAGE								
28 SURFACE THICKNESS								
29 PENETRATION								
30 OVERALL OIL IMPACT:	N	VL	L	<u>M</u>	H			
31 OIL TYPE:	<u>Pooled</u>	<u>Mousse</u>	<u>Tar</u>	<u>Asphalt</u>	<u>Sticky</u>	<u>Stain</u>		
32 OILED DEBRIS?	Y	<u>N</u>	<u>SOR MS TB AP ST</u>					
33 SHORELINE TYPE:	Headland	Low-lying	Rocks	<u>Beach</u>	Cove			
		Lagoon	Marsh					
34 WAVE EXPOSURE:	High	<u>Moderate</u>	Low					
35 SUBSTRATE TYPE:	Bedrock	Boulder	Cobble	<u>5%</u>				
	Gravel	<u>70%</u>	Sand	<u>10%</u>	Mud/silt	<u>15%</u>		

36 CATALOGED ANAD. FISH SREANT? Y N

37 CATALOG #: SEARCH ID 001

38 STREAM NAME: \_\_\_\_\_

39 OIL IN STREAM BED? Y N NA

40 OIL ON STREAM BANKS? Y N

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

42 OIL WITHIN 1 MILE OF STREAM? Y N

Where: \_\_\_\_\_

43 ANADROMOUS FISH PRESENT? Y N

44 ANADROMOUS FISH OBSERVATION

Species	Aerial	Ground

ACE 9961191 1A

COMMENTS Crew of 11 working the PD-01 Tarnat - pooled mousse is being found frequently below the surface cobble & gravel (mobile chocolate brown mousse). Often the surface is clean (free of oil). However, below a 1-3" layer of readily removable low viscosity mousse is found. Once this layer of oil is located it can be followed by removing the overlying cobble & gravel. The tarnat contains less oil than was previously (over)



- PD-01 (NOT A Salmon Stream)

Cleanup Monitoring

- W/in 1/4 mile of Anadromous Stream (242-42-10450)  
- W/in 1 mile of Stream 242-42-10460

Not A Stream  
ADF&G MULTI-ASSESSMENT DATA FORM

1 SURVEY TYPE:  BS SS DS TS AVS SCHA MHHS PTA 2 REGION: PWS  K, AP

METHOD: Aerial  Ground Boat

3 DATE: 6/28/90 15 HIGH TIDE TIMES: 0616 11919 21 TEAM RECORDER: Doug Hill (AOF&G)

4 START TIME: 1112 16 HIGH TIDE HTS: 10.6 11.3 22 OBSERVERS: Lee Ginn (AOF&G)  
John Fenske (AOEC)

5 STOP TIME: 1406 17 LOW TIDE TIMES: ----- 12433 23 AGENCY: \_\_\_\_\_

6 SEGMENT #: PD-01 18 LOW TIDE HTS: ----- 11.5 24 PHOTOS TAKEN:  N

7 STATION #: \_\_\_\_\_ 19 TIDE HT AT SURVEY: \_\_\_\_\_ Roll #: \_\_\_\_\_ Frame: \_\_\_\_\_

8 K-UNIT: \_\_\_\_\_ Ebb Slack Flood Slack 25 VIDEO TAKEN:  N TAPE#: 90L6024H

9 STAT AREA: \_\_\_\_\_ 20 USCG QUAD: Seldovia B-4 Start: 0632 End: 1005

10 LAT: \_\_\_\_\_ 11 LONG: \_\_\_\_\_ 26 SAMPLES TAKEN? Y  N Number

12 SOURCE: Map  Loran

13 LOCATION: Port Dick, West Arm, Head of West Arm

14 DESCRIPTION: \_\_\_\_\_

EXTENT OF OIL

	SHORELINE				STREAM			
	L	W	M <sup>2</sup>	%	L	W	M <sup>2</sup>	%
27 SURFACE COVERAGE								
28 SURFACE THICKNESS								
29 PENETRATION								

30 OVERALL OIL IMPACT: N VL L  H H 36 CATALOGED ANAD. FISH SREANT? Y N

31 OIL TYPE:  Pooled  Mousse  Tar  Asphalt  Sticky  Stain 37 CATALOG #: SEARCH PD 01

32 OILED DEBRIS? Y  N SOR MS TB AP ST 38 STREAM NAME: \_\_\_\_\_

33 SHORELINE TYPE: Headland Low-lying Rocks  Beach Cove  
Lagoon Marsh 39 OIL IN STREAM BED? Y N

34 WAVE EXPOSURE: High  Moderate Low 40 OIL ON STREAM BANKS? Y N

35 SUBSTRATE TYPE: Bedrock \_\_\_\_\_ Boulder \_\_\_\_\_ Cobble 5%  
Gravel 70% Sand 10% Mud/silt 15% 41 OIL ON BEACH ADJACENT TO MOUTH? Y N  
(within 50 meters)

44 ANADROMOUS FISH OBSERVATION

Species	Aerial	Ground

ACE 9961191 1A

COMMENTS: Crew of 11 working the PD-01 Tarnat - pooled mousse is being found frequently below the surface cobble & gravel (mobile chocolate brown mousse). Often the surface is clean (free of oil). However, below a 1-3" layer of readily removable, low viscosity mousse is found. Once this layer of oil is located it can be followed by removing the overlying cobble & gravel. The tarnat contains less oil than was previously (over)



= Sample taken  
= Photo frame # and  
= shot direction.

Comments cont'd

Thought - this is not to say that a small amount exists. George Stiles (EXXON supervisor) and Bill (VECO supervisor) met us as we arrived. George stated that the work ought to be completed here in 1.5 to 2.5 hrs. We figured if an acceptable job was to be done the crew would have to spend at least another day. Lee spent a considerable amount of time digging throughout the area (in worked + unworked areas). Once again the crew is not doing a systematic job of working/cleaning the beach - individuals are scattered here + there at random, removing <sup>clean</sup> overburden + in a number of cases piling it onto piled areas that and onto areas that have not been looked at yet.

Lee stressed to Bill + George the importance of getting this area cleared (with regards the commercial salmon fishery). As with other EXXON supervisors George seems to be rushed to get another segment marked a "complete". Quantity is definitely stressed over Quality.

At the end of our visit George agreed to go over the beach systematically from one end to the other until the beach "meets" state standards. Lee stated that the state wants PD-01 clean before the crew moves to Mars Cove

make up MAD for 7/6/90 BS CLEANUP MONITORING

7/6/90 - oil still remains in large enough quantity at PD-01 to be removed. This oil is an ADF&G concern for many reasons but in particular it is within 1/4 mile of a number of salmon spawning channels at the Slide Creek tide flats

48 OIL DISTRIBUTION DIAGRAM


DESCRIPTION

FRAME(S)

ACE 9961911B

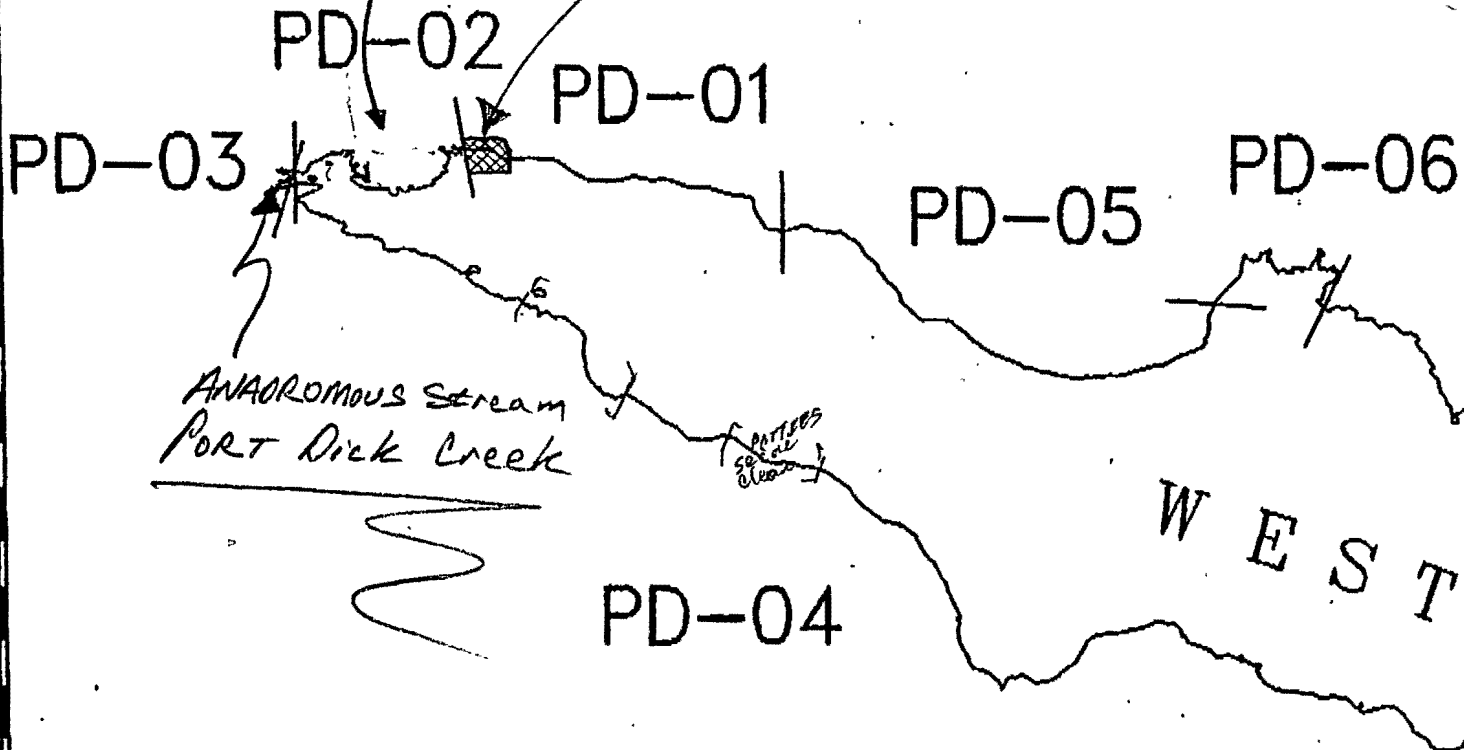
48 PHOTOLOC

# GATE WILDERNESS

6/28/90

ANAOROMOUS Stream  
Slide Creek

AREA BEING WORKED  
AREA SURVEYED ON THIS TRIP



0 1 2  
1 inch = 3932 feet

EXXON COMPANY, USA

ACE 9961192

May 21, 1990

Aml used:

/chugach1/morris/super2/ops.aml



BADGER COVE

NOT A STREAM

ADF&G MULTI-ASSESSMENT DATA FORM

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

METHOD: Aerial Ground Boat

3 DATE: 6/28/90 18 HIGH TIDE TIMES: 0616 11919 21 TEAM RECORDER: Doug Hill

4 START TIME: 1112 19 HIGH TIDE HTS: 10.6 11.3 22 OBSERVERS: Lee Glass

6 STOP TIME: 1406 17 LOW TIDE TIMES: --- 12433 23 AGENCY: ADF&G

8 SEGMENT #: CB-101 16 LOW TIDE HTS: --- 11.5 24 PHOTOS TAKEN: Y  N

7 STATION #: \_\_\_\_\_ 19 TIDE HT AT SURVEY: \_\_\_\_\_ Roll #: \_\_\_\_\_ Frame: \_\_\_\_\_

8 K-UNIT: \_\_\_\_\_ Ebb Slack Flood Slack 25 VIDEO TAKEN: Y  TAPE#: \_\_\_\_\_

9 STAT AREA: \_\_\_\_\_ 20 USCG QUAD: Seldovia A-4 Start: \_\_\_\_\_ End: \_\_\_\_\_

10 LAT: \_\_\_\_\_ 11 LONG: \_\_\_\_\_ 26 SAMPLES TAKEN? Y  N Number

12 SOURCE: Map BADGER COVE, Loran BETWEEN WINDY BAY & CHUGACH BAY, 011 \_\_\_\_\_

13 LOCATION: Cove Between Windy & Chugach Bays Sediment \_\_\_\_\_

14 DESCRIPTION: Sandy Beach with seashell in center of Cove Biological \_\_\_\_\_

EXTENT OF OIL

	SHORELINE				STREAM			
	L	W	M <sup>2</sup>	%	L	W	M <sup>2</sup>	%
27 SURFACE COVERAGE								
28 SURFACE THICKNESS								
29 PENETRATION								

30 OVERALL OIL IMPACT: N  L M H 38 CATALOGED ANAD. FISH STREAM? Y N

31 OIL TYPE: Pooled House Tar Asphalt Sticky Stain 37 CATALOG #: BEACH CB 001

32 OILED DEBRIS:  N 39 OIL IN STREAM BED? Y N

33 SHORELINE TYPE: Headland Low-lying Rocks Beach Cove 40 OIL ON STREAM BANKS? Y N

34 WAVE EXPOSURE: High Moderate Low 41 OIL ON BEACH ADJACENT TO MOUTH? Y N (within 50 meters)

35 SUBSTRATE TYPE: Bedrock \_\_\_\_\_ Boulder \_\_\_\_\_ Cobble \_\_\_\_\_ 42 OIL WITHIN 1 MILE OF STREAM? Y N

Gravel 10% Sand 90% Mud/silt \_\_\_\_\_

44 ANADROMOUS FISH OBSERVATION

Species	Aerial	Ground

ACE 9961193

COMMENTS: Surveyed the center beach (head of Cove between Windy & Chugach Bays) for subsurface oil. Oil was found 10" below the surface of the beach (3/4-1" thick/sporadic blobs of mucus. The extent of this oil is unknown. Sheen was observed coming out of black sand on previous trips

B-WB-9

V0149

WINDY BAY

00

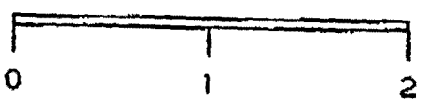
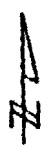
WB-05

CENTER BEACH



BADGER COVE

CB-01



1 inch = 2036 feet

EXXON COMPANY, USA

ACE 9961194

May 21, 1990

Aml used:

/chugach1/morris/super2/ops.aml



Not A Stream

Chugach ~~Island~~ ISLAND

Σ 10/20

PHOTO TRANSECT

ADF&G MULTI-ASSESSMENT DATA FORM

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

2 REGION: PWS KP, CI K, AP

METHOD: Aerial Ground Boat

3 DATE: 7/3/90 18 HIGH TIDE TIMES: 1200 1221

21 TEAM RECORDER: Doug Hill

4 START TIME: 1430 19 HIGH TIDE HTS: 8.0 11.2

22 OBSERVERS: Lee Grewo

5 STOP TIME: 1710 17 LOW TIDE TIMES: 0450 1550

23 AGENCY: ADF&G

6 SEGMENT #: CI-4 18 LOW TIDE HTS: 2.0 4.5

24 PHOTOS TAKEN: 0 N

7 STATION #: \_\_\_\_\_ 19 TIDE HT AT SURVEY: \_\_\_\_\_

Roll #: 9000H12H Frame: 1-17

8 K-UNIT: \_\_\_\_\_ Ebb Slack Flood Slack

25 VIDEO TAKEN: 0 N TAPE#: 9016025H

9 STAT AREA: \_\_\_\_\_ 20 USCG QUAD: Seldovia A-4

Start: 0797 End: 1349

10 LAT: \_\_\_\_\_ 11 LONG: \_\_\_\_\_

26 SAMPLES TAKEN Y 0 Number

12 SOURCE: Map Loran

Oil \_\_\_\_\_

13 LOCATION: Chugach Islands, East Chugach Island

Sediment \_\_\_\_\_

14 DESCRIPTION: Low Angle east facing cobble beach

Biological \_\_\_\_\_

Water \_\_\_\_\_

EXTENT OF OIL

	SHORELINE				STREAM			
	L	W	M <sup>2</sup>	%	L	W	M <sup>2</sup>	%
27 SURFACE COVERAGE								
28 SURFACE THICKNESS								
29 PENETRATION								

36 CATALOGED ANAD. FISH STREAM? Y N

37 CATALOG #: BEACH EB 001

38 STREAM NAME: \_\_\_\_\_

39 OIL IN STREAM BED? Y N N/A

40 OIL ON STREAM BANKS? Y N

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

42 OIL WITHIN 1 MILE OF STREAM? Y N

Where: \_\_\_\_\_

43 ANADROMOUS FISH PRESENT? Y N

44 ANADROMOUS FISH OBSERVATION

Species	Aerial	Ground

ACE 9981195

30 OVERALL OIL IMPACT: N VL L M H

31 OIL TYPE: Pooled House Tar Asphalt Sticky Slush

32 OILED DEBRIS? Y N

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

34 WAVE EXPOSURE: High Moderate Low

35 SUBSTRATE TYPE: Bedrock ✓ Boulder ✓ Cobble ✓

Gravel ✓ Sand \_\_\_\_\_ Mud/silt \_\_\_\_\_

COMMENTS: Rain ADF&G 100 meter phototranssect. This beach was bio-remediated in 1989. I don't know why it was in-poled because it did not meet the criteria for in-pole application of the time it was sprayed (as occurred in more than one instance). The oil a Chugach Island was too thick at the time in-pole was applied to meet specifications for application. ~~bio-remediated~~ remediated over →

FRAME(S)	DESCRIPTION
1 → 15, 17 16	0, 10, 20, 30, 40, 50, 60, 70, 80, 90, 99.6, 1.75 meter plot (1/2 meters) pooled mousse beneath cobble (where cobbles once lay)

## 48 OIL DISTRIBUTION DIAGRAM

Comments cont'd

At this time the beach looks similar to 1989. However, the surfaces of the larger rocks have been polished. Though they are still stained a bit. A lot of oil remains here. There are a few places where a portion of the oil mats has been busted loose ~~(lifted and removed)~~ (lifted and removed). The largest of these missing portions of the oil mat was approximately 3' diameter. The oil's outer surface is now dark and crusted. Rocks are well cemented together in place by the mat of oil. Inpol certainly did not do any favors for this beach.

6 oyster catchers were observed together

- ▣ Sample taken
- ▣ Photo frame # and shot direction.

ACE 9961196



Not A Stream

ADF&G MULTI-ASSESSMENT DATA FORM

MARS Cove Cleanup  
Monitoring  
Groucho Beach  
Community concern

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

2 REGION: PWS (K,CI) K,AP

METHOD: Aerial (Ground) Boat

3 DATE: 7/6/90 15 HIGH TIDE TIMES: 0045 1 1428

21 TEAM RECORDER: Don Hill (ADF&G)  
Lee Glinn

4 START TIME: 0720 16 HIGH TIDE HTS: 12.2 19.6

22 OBSERVERS: Russell Kinke (AOEL)

5 STOP TIME: ? 17 LOW TIDE TIMES: 0747 1 1932

23 AGENCY: \_\_\_\_\_

6 SEGMENT #: PD-04 18 LOW TIDE HTS: -0.6 1 4.2

24 PHOTOS TAKEN: 0 N

7 STATION #: \_\_\_\_\_ 19 TIDE HT AT SURVEY: \_\_\_\_\_

Roll #: 9000H17H Frame: 29, 30, 31

8 K-UNIT: \_\_\_\_\_ Ebb Slack Flood Slack

25 VIDEO TAKEN: 0 N TAPE#: 90

9 STAT AREA: \_\_\_\_\_ 20 USCG QUAD: Seldoula B-4

Start: 1646 End: 2265

10 LAT: \_\_\_\_\_ 11 LONG: \_\_\_\_\_

26 SAMPLES TAKEN Y N Number

12 SOURCE: Map Loran

13 LOCATION: West Arm Port Dick, South Shore MARS COVE

Oil \_\_\_\_\_  
Sediment \_\_\_\_\_  
Biological \_\_\_\_\_  
Water \_\_\_\_\_

14 DESCRIPTION: East facing opening cove

EXTENT OF OIL

	SHORELINE				STREAM			
	L	W	N <sup>2</sup>	S	L	W	N <sup>2</sup>	S
27 SURFACE COVERAGE								
28 SURFACE THICKNESS								
29 PENETRATION								

36 CATALOGED ANAD. FISH-STREAM? Y N

37 CATALOG #: 3000H17H PD-04

38 STREAM NAME: \_\_\_\_\_

39 OIL IN STREAM BED? Y N

40 OIL ON STREAM BANKS? Y N

41 OIL ON BEACH ADJACENT TO MOUTH? Y N

(within 50 meters)

42 OIL WITHIN 1 MILE OF STREAM? Y N

Where: \_\_\_\_\_

43 ANADROMOUS FISH PRESENT? Y N

44 ANADROMOUS FISH OBSERVATION

Species	Aerial	Ground

ACE 9961197

30 OVERALL OIL IMPACT: N VL L M H

31 OIL TYPE: Pooled Mousse Tar Asphalt Sticky SEATH

32 OILED DEBRIS? Y N MS TP AP ST OP

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

34 WAVE EXPOSURE: High Moderate Low

35 SUBSTRATE TYPE: Bedrock \_\_\_\_\_ Boulder 5 Cobble 70

Gravel 5 Sand 5 Mud/silt 5

COMMENTS: Crew of 10 working North shore of Cove (George Stiles)  
is the Exxon Supervisor. Crew is manually removing mousse & heavily  
oiled sediment. Four sorbent booms are strung out along beach. Crew has  
done a nice job on the SW segment of this beach. However, 1-2"  
thick mousse was not hard to find. The crew has worked this beach for  
the past 5 days. The crew is getting tired of being on this beach  
(over ->)

Comments cont'd →

This type of attitude seems to be rampant this year --- ~~even~~ even the hired workers want to hurry off and be somewhere else before the job at hand is complete. The twist this year is that we hear the crews complaining about being in the same place for too long --- they seem to get bored and verbally express their discontent, or well.

Nearly all the cobble has been moved on the SW portion of this beach to get at the pooled mussels & oiled sediment --- this portion of the beach is now of a yellow/tan color "dry" of oil\* for the time being. When the tide is too high to work this portion of the beach the crew moves to the SE portion which is at a higher elevation.

Spoke with uscg monitor Jeff Fullard  
Concerning Elizabeth Island activities

See 7/6/90 Elizabeth Island MAD form ---

"Summary of recent Activities"

- = Sample taken
- = Photo frame # and shot direction.

ACE 9961198



Crongy Cove

# Not A Stream

ADF&G MULTI-ASSESSMENT DATA FORM

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

METHOD: Aerial Ground Boat

3 DATE: 7/11/90 16 HIGH TIDE TIMES: 0405 11713 21 TEAM RECORDER: Doug Hill

4 START TIME: 1348 18 HIGH TIDE HTS: 12.5 11.2 22 OBSERVERS: Lee Glenn

5 STOP TIME: 1430 17 LOW TIDE TIMES: 1040 11054 23 AGENCY: \_\_\_\_\_

6 SEGMENT #: ~~005~~ RB-05 19 LOW TIDE HTS: -1.4 12.3 24 PHOTOS TAKEN: Y N

7 STATION #: \_\_\_\_\_ 10 TIDE HT AT SURVEY: \_\_\_\_\_ Roll #: \_\_\_\_\_ Frame: \_\_\_\_\_

8 K-UNIT: \_\_\_\_\_ Ebb Slack Flood Slack 25 VIDEO TAKEN: Y N TAPE#: \_\_\_\_\_

9 STAT AREA: \_\_\_\_\_ 20 USCG QUAD: \_\_\_\_\_ Starts: \_\_\_\_\_ Ends: \_\_\_\_\_

10 LAT: \_\_\_\_\_ 11 LONG: \_\_\_\_\_ 26 SAMPLES TAKEN: Y N Number

12 SOURCE: Map Loran Oil \_\_\_\_\_

13 LOCATION: Windy Bay, NE most Cove, CRONGY COVE Sediment \_\_\_\_\_

14 DESCRIPTION: \_\_\_\_\_ Biological \_\_\_\_\_

Water \_\_\_\_\_

### EXTENT OF OIL

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

31 OIL TYPE: Pooled Mousse Tar Asphalt Sticky Stain  
AP ST SOP

32 OILED DEBRIS: Y N

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

34 WAVE EXPOSURE: High Moderate Low

35 SUBSTRATE TYPE: Bedrock 10 Boulder \_\_\_\_\_ Cobble 15  
Gravel 70 Sand 14 Mud/silt \_\_\_\_\_

36 CATALOGED ANAD. FISH STREAM? Y N

37 CATALOG #: BEACH RB-005

38 STREAM NAME: \_\_\_\_\_

39 OIL IN STREAM BED? Y N

40 OIL ON STREAM BANKS? Y N

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

42 OIL WITHIN 1 MILE OF STREAM? Y N  
Where: \_\_\_\_\_

43 ANADROMOUS FISH PRESENT? Y N

44 ANADROMOUS FISH OBSERVATION

Species	Aerial	Ground

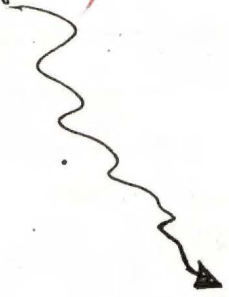
ACE 9961199

COMMENTS: Sheen observed along SE end of beach - sheen on surface of incoming tide. Numerous (Anthopleura) Anemones along entire shore. Tried to find crab molts but tide was too high. Numerous crab molts were found here ~~in~~ in 1989. Normae Jane are not seeing crabs in the invertebrate transects. Found herring juveniles getting trapped in pools as tide receded. Numerous dead barnacles on rocks that were

= Sample taken  
= Photo frame # and  
shot direction.

heavily oiled in 1989. ~~These~~ These rocks were also steam cleaned (primarily vertical and near vertical rock faces) Observed barnacle spat in areas bare of other barnacles (where adults were last year).

(I'm falling asleep!)



48 OIL DISTRIBUTION DIAGRAM

Horizontal lines for data entry in the OIL DISTRIBUTION DIAGRAM section.

Horizontal lines for data entry on the right side of the page.

DESCRIPTION

FRAME(S)



RB-04

RB-05

GRUNNY COVE

Surveyed  
This portion  
of beach

ROCK

WINDY BAY

9

BAY

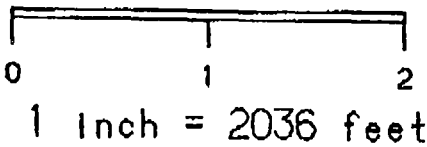
EXXON COMPANY, USA

ACE 9961201

May 21, 1990

Aml used:

/chugach1/morris/super2/ops.aml



Cook Inlet-East Side Survey  
Zuwheel survey

ADF&G MULTI-ASSESSMENT DATA FORM

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

METHOD: Aerial  Ground Boat

3 DATE: 5/11/90 16 HIGH TIDE TIMES: 0244 1558 21 TEAM RECORDER: \_\_\_\_\_

4 START TIME: 1715 18 HIGH TIDE HTS: 12.8 10.4 22 OBSERVERS: Clara Crosby (AORC) Doug Hill (ADF&G)

6 STOP TIME: 1303 17 LOW TIDE TIMES: 0929 12122 23 AGENCY: \_\_\_\_\_

8 SEGMENT #: \_\_\_\_\_ 18 LOW TIDE HTS: -1.2 1 3.6 24 PHOTOS TAKEN: Y  Roll #: \_\_\_\_\_ Frames: \_\_\_\_\_

7 STATION #: \_\_\_\_\_ 19 TIDE HT AT SURVEY: \_\_\_\_\_ 26 VIDEO TAKEN: Y  TAPE#: \_\_\_\_\_

8 K-UNIT: \_\_\_\_\_ Ebb Slack Flood Slack 28 USCG QUAD: Seldovia D-5, Kenai A4-A-5 Starts: \_\_\_\_\_ Ends: \_\_\_\_\_

9 STAT AREA: \_\_\_\_\_ 20 SAMPLES TAKEN? Y  Number

10 LAT: \_\_\_\_\_ 11 LONG: \_\_\_\_\_

12 SOURCE: Map Loran Cook Inlet, East site 36 OIL \_\_\_\_\_

13 LOCATION: ~~Beach~~ Ninilchik River to a point 11.0 miles north 37 Sediment \_\_\_\_\_

14 DESCRIPTION: \_\_\_\_\_ 38 Biological \_\_\_\_\_

39 Water \_\_\_\_\_

EXTENT OF OIL

	SHORELINE				STREAM			
	L	W	M <sup>2</sup>	%	L	W	M <sup>2</sup>	%
27 SURFACE COVERAGE								
28 SURFACE THICKNESS								
29 PENETRATION								

30 OVERALL OIL IMPACT:  VL L M H

31 OIL TYPE: Pooled Mousse Tar Asphalt Sticky Stain

32 OILED DEBRIS? Y

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

34 WAVE EXPOSURE:  High Moderate Low

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

36 CATALOGED ANAD. FISH STREAM?  N

37 CATALOG #: 244-10-10090

38 STREAM NAME: Ninilchik River

39 OIL IN STREAM BED? Y

40 OIL ON STREAM BANKS? Y

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

42 OIL WITHIN 1 MILE OF STREAM? Y

Where: \_\_\_\_\_

43 ANADROMOUS FISH PRESENT? Y  N

44 ANADROMOUS FISH OBSERVATION

Species	Aerial	Ground

COMMENTS: Fhte  
(Enter highlighted part only)

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11111

MEMORANDUM

STATE OF ALASKA

Date: 5/11/90  
To: Lee Glenn  
Habitat Biologist III  
Oil Response Center  
Homer  
From: Doug Hill  
FT III  
Oil Response Center  
Homer

---

SUBJECT: Trip Report/Ninilichik River To A Point 11.0 Miles North

Trip Date: May 11, 1990  
Crew: Doug Hill (ADF&G) and Clara Crosby (ADEC)  
Vehicle: ATV-one three wheeler and one four wheeler  
Start: 0715 hrs.  
Stop: 1303 hrs.

Deep Creek Tide Table

High Tide Times:	<del>1618</del> / <del>1726</del>	0244 / 1558
High Tide HTS:	<del>19.8</del> / <del>17.8</del>	12.8 / 10.4
Low Tide Times:	<del>1106</del> / <del>1112</del>	0929 / 2122
Low Tide HTS:	<del>1.1</del> / <del>4.8</del>	1.2 / 3.6

Map-USCG Quad: Seldovia D-5, Kenai A-4 & Kenai A-5

Clara Crosby and I drove to an access road (gravel Pit) which is one mile north of Ninilchik "North Bar" on the Sterling Hwy. We commenced our ATV survey at 0715 hrs. We travelled south to the Ninilchik River. We arrived at the Ninilchik River at 0900 hrs. WE OBSERVED NO OIL ON THIS 3.5 MILE STRETCH OF BEACH.

At 0930 hrs. we were back at our starting point (gravel pit road) and continued north for approximately 7.5 miles. We turned around and headed back to the trucks at 1220 hrs. At 1303 hrs. we arrived back at the gravel pit road.

**NO OIL WAS OBSERVED ON THIS 7.5 MILE STRETCH OF BEACH.**

The drift lines were very light to non-existent. We had no trouble getting a good look at the majority of potential oil locations. However, a substantial amount of bluff slough has recently covered a number of areas on the upper portions of the beach---primarily at the base of the bluff. There is the possibility that oil have been concealed by the silt and clay.

1430 hrs.---Arrive at DOT shop to refuel and wash the ATVs.

1515 hrs.---Depart DOT to return the three-wheeler to its owner Jim Nelson (North Fork Rd.). Clara returns to Oil Response Center in Homer-with other vehicle.

ACE 9961203



Not A Stream

ADFG MULTI-ASSESSMENT DATA FORM

1 SURVEY TYPE: BS SS DS TS AVS SCHA M4HS PTA 2 REGION: PWS KP, CI K, AP

METHOD: Aerial Ground Boat

3 DATE: 7/10/90 18 HIGH TIDE TIMES: 0330 0405 11641 21 TEAM RECORDER: Doug Hill

4 START TIME: 1145 19 HIGH TIDE HTS: 12.8 11.0 22 OBSERVERS: Lee Glenn

5 STOP TIME: 1430 17 LOW TIDE TIMES: 1007 12211 23 AGENCY: ANF&S

6 SEGMENT #: YG-2 18 LOW TIDE HTS: -1.7 12.7 24 PHOTOS TAKEN: Y N

7 STATION #: \_\_\_\_\_ 19 TIDE HT AT SURVEY: \_\_\_\_\_ Roll #: 900H19H Frame: 10-25

8 K-UNIT: \_\_\_\_\_ Ebb Slack Flood Slack 25 VIDEO TAKEN: Y N TAPE#: 90L6025H

9 STAT AREA: \_\_\_\_\_ 20 USCG QUAD: Seldovia B-3 Starts: 3997 Ends: 4569

10 LAT: 59 25 25 11 LONG: 150 43 50 26 SAMPLES TAKEN? Y N Number

12 SOURCE: Map Loran 011 \_\_\_\_\_

13 LOCATION: Nuka Passage, North Shore, North Nuka Island Sediment \_\_\_\_\_

14 DESCRIPTION: Low angle Yalik Glacier Beach Biological \_\_\_\_\_

EXTENT OF OIL

	SHORELINE				STREAM			
	L	W	M <sup>2</sup>	%	L	W	M <sup>2</sup>	%
27 SURFACE COVERAGE								
28 SURFACE THICKNESS								
29 PENETRATION								

30 OVERALL OIL IMPACT: N VL L M H

31 OIL TYPE: Pooled House Tar Asphalt Sticky Stain

32 OILED DEBRIS? Y N

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

34 WAVE EXPOSURE: High Moderate Low

35 SUBSTRATE TYPE: Bedrock \_\_\_\_\_ Boulder \_\_\_\_\_ Cobble 60  
Gravel 20 Sand \_\_\_\_\_ Mud/silt 20

LEAVE IN WATER 10/19/91

36 CATALOGED ANAD. FISH STREAM? Y N

37 CATALOG #: 232-10-10250

38 STREAM NAME: Yalik Glacier West Creek

39 OIL IN STREAM BED? Y N

40 OIL ON STREAM BANKS? Y N

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

42 OIL WITHIN 1 MILE OF STREAM? Y N

Where: 3/4 mile NE of ANAD fish stream

43 ANADROMOUS FISH PRESENT? Y ? N

44 ANADROMOUS FISH OBSERVATION

Species	Aerial	Ground

ACE 9961204

COMMENTS: Met John Czannecki (EXXON) & Chuck Reed (ADFC) on beach. 2 Bobcats front end loaders were in use removing tar mats. One crew member was guiding the Bobcat operator as to the placement of the bucket (depth, angle, etc). The person guiding the bucket also shoveled oil missed by the bucket into the path of the bucket. A pile of oiled sediment was present -> this pile was created by the Bobcat and was approx 8" tall by 20' long (over)



and 15' wide. A portion of the crew pick up the rocks that overly the oil and tossed them out the oiled zone → unoled and oil stained rocks. John Czarnecki (EXXON) said the crew will be off the beach tomorrow ~ I doubt it. The pile of oiled sediment will be loaded into the "Super Sacks"

-Tough to find an efficient way to remove overburden to get at the tar mat below ~ A lot of unoled material is going to be transported to Oregon. Additionally, although its great to have the Yalik tar mat removed I feel the "saturated sediment" at TB-3 (ANAD. stream and tide flats) is more of a problem due to the greater biological activity at TB-03. The <sup>Cobble/boulder</sup> Yalik Glacier beach is a virtual desert relative to the TB-03 Tide flats. So why is it okay to remove the much greater volume of sediment at Yalik Glacier (the oil at Yalik Glacier cover <sup>very</sup> small % of the beach relative to the oil at TB-03) as opposed to the smaller volume of oil at TB-03. The oil at TB-03 is not a tar mat - we are locked into terminology. Terminology begins to run the operation and not the thought of the moment. Yalik Glacier made a good show --- I guess the surface is more important than the contents. ~~?!?. Hollywood is back~~

48 OIL DISTRIBUTION DIAGRAM

	am	pm	
7/11/90	0905	1713	Photos
Hi tide times	12.5	11.2	
Lo " "	2040	1854	
Lo " heights	-1.4	2.3	
4cm on			

DESCRIPTION

FRAME(S)

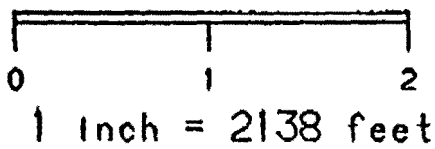
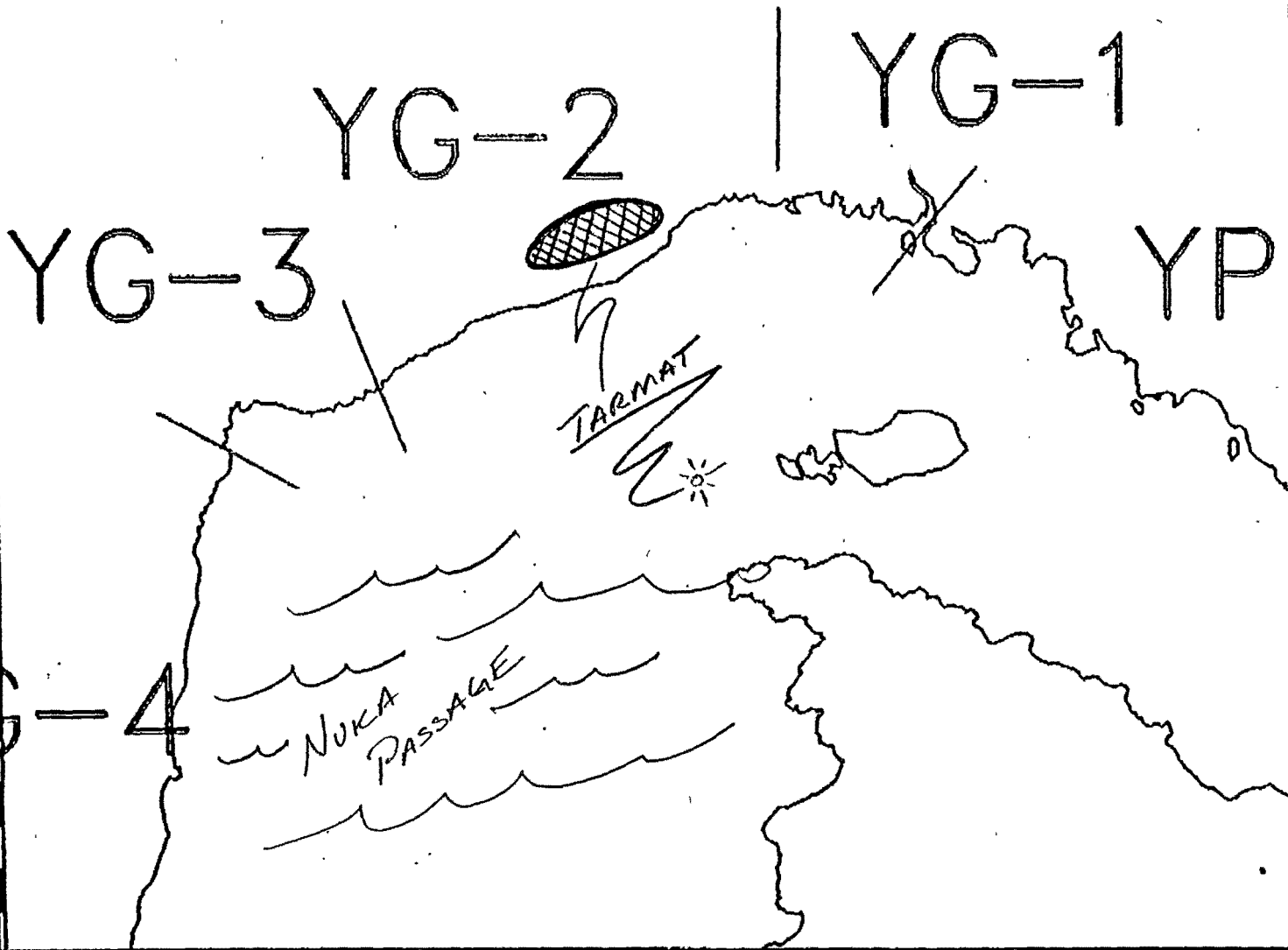
~~PHOTOLOG~~ PHOTOLOG

FRAME(S)

Description

- 10 - - - - - Aerial - vessel present during tar mat removal
- 11 - - - - - Oiled sediment will remain mechanical excavation complete
- 12 - - - - - oiled sediment that will be picked up by mechanical excavation
- 13 - - - - - overview of mechanical tar mat removal operation
- 14
- 15 - - - - - Bobcat dumping load of oiled sediment.  
16 Pile of sediment will later be loaded on LCM
- 17 - - - - - Rippers that were not used to till beach prior to excavation
- 19 - - - - - Bobcat scooping up tar mat - crew member guides bucket  
20 depth angle etc  
21
- 22 - - - - - Bobcat scooping up tar mat - crew member in foreground  
23 removing overburden so bobcat can get to oiled surface below.
- 24 - - - - - Aerial of mechanical ~~tar mats~~ tar mat ~~removal~~ removal  
25





EXXON COMPANY, USA

ACE 9961207

May 21, 1990

Aml used:

/chugechl/morris/super2/ops.aml

TOWNSIA BAY  
OTTER BEACH

Not A Stream  
ADF&G MULTI-ASSESSMENT DATA FORM

1 SURVEY TYPE:  SS  DS  TS  AVS  SCHA  M4HS  PTA 2 REGION: PWS  KP, CI K, AP

METHOD: Aerial  Ground  Boat

3 DATE: 7/10/90 16 HIGH TIDE TIMES: 0905 11641 21 TEAM RECORDER: Doug Hill

4 START TIME: 1106 18 HIGH TIDE HTS: 12.8 111.0 22 OBSERVERS: Lee Glenn

5 STOP TIME: 1335 17 LOW TIDE TIMES: 1007 12211 23 AGENCY: ADF&G

TB 903

6 SEGMENT #: ~~TB-03~~ TB-02 19 LOW TIDE HTS: -1.7 12.7 24 PHOTOS TAKEN:  N

7 STATION #: \_\_\_\_\_ 10 TIDE HT AT SURVEY: \_\_\_\_\_ Roll #: 9000H1911 Frame: 7-29

8 K-UNIT: \_\_\_\_\_ Ebb Slack Flood Slack 25 VIDEO TAKEN:  N TAPE#: 90LPG025H

9 STAT AREA: \_\_\_\_\_ 20 USCG QUAD: \_\_\_\_\_ Start: 3913 End: 3996

10 LAT: \_\_\_\_\_ 11 LONG: \_\_\_\_\_ 26 SAMPLES TAKEN? Y  N Number

12 SOURCE: Map Loran HEAD, OTTER BEACH <sup>AM</sup> TIDE FLATS Oil \_\_\_\_\_

13 LOCATION: TOWNSIA BAY, North Shore, point at mouth Isthmus Sediment \_\_\_\_\_

14 ~~DESCRIPTION~~ of Tide Flats are at head of bay Biological \_\_\_\_\_

EXTENT OF OIL

	SHORELINE				STREAM			
	L	W	M <sup>2</sup>	S	L	W	M <sup>2</sup>	S
27 SURFACE COVERAGE	3	3.7	11.1	100				
28 SURFACE THICKNESS		5.0 mm						
29 PENETRATION		2.0 mm						

30 OVERALL OIL IMPACT: N VL  M H

31 OIL TYPE: Pooled  ~~House~~  Tar  Asphalt  Sticky  Stain

32 OILED DEBRIS? Y  N MS TB AP STS SOR

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

34 WAVE EXPOSURE: High  Moderate  Low

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

36 CATALOGED ANAD. FISH STREAM? Y N

37 CATALOG #: BEACH TB 3002

38 STREAM NAME: \_\_\_\_\_

39 OIL IN STREAM BED? Y N N/A

40 OIL ON STREAM BANKS? Y N

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

42 OIL WITHIN 1 MILE OF STREAM? Y N  
Where: \_\_\_\_\_

43 ANADROMOUS FISH PRESENT? Y N

44 ANADROMOUS FISH OBSERVATION  
Species \_\_\_\_\_ Aerial \_\_\_\_\_ Ground \_\_\_\_\_


ACE 9961208

COMMENTS: Observed saturated sediment to 3" depth. Oil is in the gravel portion of the beach - there is little invertebrate life so why not just dig the oil out. This is the beach that the USCG (Jerry Schultz) "told" ADEC & EXXON to just mix the tar with the gravel and custoblent - The USCG monitor said the crew had been on the beach long enough over



= Sample taken  
= Photo frame # and  
shot direction.

Comments cont'd

Custom blen was applied to a 10'x12' (3m x 3.7m) ~~mat~~ tarmat which was 1 to 1 3/4" thick (the crusty portion). Tarmats are generally picked up with little argument. And, the location and conditions of this tarmat would pose ~~little~~ no problem in terms of damage ~~caused~~ caused by removing this mat.

Often it is hard to distinguish between the USCG + EXXON

48 OIL DISTRIBUTION DIAGRAM


DESCRIPTION

FRAME(S)

ACE 9961209

48 PHOTOLOG

TB-01

TB-06

OTTER BEACH

CATALOGED ANAD STREAM

NON-CATALOGED ANAD STREAM

TB-03

TB-02

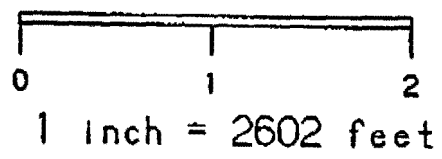
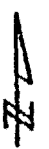
SINAI BAY

Long Island

TIDE FLATS

TB-04

TB-05



EXXON COMPANY, USA

ACE 9961210

May 21, 1990

Aml used:

/chugachi/morris/super2/ops.aml



NOT A Stream  
ADF&G MULTI-ASSESSMENT DATA FORM

1 SURVEY TYPE:  SS  DS  TS  AVS  SCHA  MMS  PTA

2 REGION: PWS  KP, CI  K, AP

METHOD: Aerial  Ground  Boat

3 DATE: 4/27/90

4 START TIME: 1132

5 STOP TIME: ?

6 SEGMENT #: CB-3B

7 STATION #: 5

8 K-UNIT: OK

9 STAT AREA: \_\_\_\_\_

10 LAT: \_\_\_\_\_

12 SOURCE: Map  Loran

13 LOCATION: Chugach Bay, North Shore, "North Beach"

14 DESCRIPTION: ADF&G PHOTOTRANSECT LOCATION

15 HIGH TIDE TIMES: 0238 11545

16 HIGH TIDE HTS: -3.7 11.5

17 LOW TIDE TIMES: 0915 12115

18 LOW TIDE HTS: 15.2 112.2

19 TIDE HT AT SURVEY: \_\_\_\_\_

20 USCG QUAD: Seldovia A-5

21 TEAM RECORDER: Davy Hill

22 OBSERVERS: Lee Glenn, Susan Milane

23 AGENCY: ADF&G

24 PHOTOS TAKEN:  Y  N

Roll #: 9000H02BH Frame: 26 → 35

25 VIDEO TAKEN:  Y  N TAPE#: 90LPL022H

Start: 4388 End: 4774

26 SAMPLES TAKEN Y N Number

Oil \_\_\_\_\_

Sediment \_\_\_\_\_

Biological \_\_\_\_\_

Water \_\_\_\_\_

EXTENT OF OIL

	SHORELINE				STREAM			
	L	W	M <sup>2</sup>	%	L	W	M <sup>2</sup>	%
27 SURFACE COVERAGE								
28 SURFACE THICKNESS								
29 PENETRATION								
30 OVERALL OIL IMPACT:	N	VL	L	<input checked="" type="radio"/> H <input type="radio"/> H				
31 OIL TYPE:	<input checked="" type="radio"/> Pooled	<input checked="" type="radio"/> Mousse	<input type="radio"/> Tar	<input type="radio"/> Asphalt	<input type="radio"/> Sticky	<input type="radio"/> Stain		
32 OILED DEBRIS:	Y	N						
33 SHORELINE TYPE:	Headland	Low-lying Rocks	<input checked="" type="radio"/> Beach	Cove				
		Lagoon	Marsh					
34 WAVE EXPOSURE:	High	<input checked="" type="radio"/> Moderate	Low					
35 SUBSTRATE TYPE:	Bedrock	Boulder	<input checked="" type="checkbox"/>	Cobble	<input checked="" type="checkbox"/>			
	Gravel	Sand	<input checked="" type="checkbox"/>	Mud/silt	<input checked="" type="checkbox"/>			

36 CATALOGED ANAD. FISH STREAM: Y N

37 CATALOG #: BEACH CB003B

38 STREAM NAME: \_\_\_\_\_

39 OIL IN STREAM BED? Y N

40 OIL ON STREAM BANKS? Y N

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

42 OIL WITHIN 1 MILE OF STREAM? Y N

Where: \_\_\_\_\_

43 ANADROMOUS FISH PRESENT? Y N

44 ANADROMOUS FISH OBSERVATION

Species	Aerial	Ground

Photo transect site

COMMENTS: Collected ~ 1/2 quart of Mousse (very little sediment). The mousse was black-choco brown & very low viscosity - flowing profusely on this warm sunny day. Found numerous pools of Mousse in cavities below cobbles/boulders.

For details on phototransect see phototransect forms & photos.

CHUGACH BAY  
Creek

"CB-3B"  
ADF46  
PHOTOTRANSECT

CB003

500.0



NOT A STREAM

TONSINA BAY - Grimm Beach

ADF&G MULTI-ASSESSMENT DATA FORM

1 SURVEY TYPE:  SS DS TS AVS SCHA MMS PTA  
BIOP ⇒ INVERTED RATE TRAVERSE  
METHOD: Aerial  (Ground) Boat

2 REGION: PWS <  KP, CI > K, AP

3 DATE: 4/25/90 15 HIGH TIDE TIMES: 0158 1 1457 21 TEAM RECORDER: Doug Hill  
4 START TIME: 0945 16 HIGH TIDE HTS: 14.7 1 12.4 22 OBSERVERS: Norma Dudrak  
5 STOP TIME: 1100 17 LOW TIDE TIMES: 0830 1 0832 23 AGENCY: ADF&G  
6 SEGMENT #: TB-4 18 LOW TIDE HTS: -3.3 1 0.9 24 PHOTOS TAKEN:  N  
7 STATION #: \_\_\_\_\_ 19 TIDE HT AT SURVEY: \_\_\_\_\_ Roll #: 9000H07H Frame: 21 → 24

8 K-UNIT: \_\_\_\_\_ Ebb Slack  (Flood) Slack 25 VIDEO TAKEN: Y  TAPE#: \_\_\_\_\_  
9 STAT AREA: \_\_\_\_\_ 20 USCG QUAD: Seldovia B-3 Starts: \_\_\_\_\_ End: \_\_\_\_\_

10 LAT: \_\_\_\_\_ 11 LONG: \_\_\_\_\_ 26 SAMPLES TAKEN? Y  N  Number

12 SOURCE: Map Loran 011 \_\_\_\_\_  
13 LOCATION: KP, OC, TONSINA BAY, Grimm Beach Sediment \_\_\_\_\_  
14 DESCRIPTION: WEST Slope of BAY, South pocket beach Biological \_\_\_\_\_  
Water \_\_\_\_\_

EXTENT OF OIL

	SHORELINE				STREAM			
	L	W	M <sup>2</sup>	%	L	W	M <sup>2</sup>	%
27 SURFACE COVERAGE								
28 SURFACE THICKNESS								
29 PENETRATION								
30 OVERALL OIL IMPACT:	N	VL	<input checked="" type="checkbox"/> M	H				

36 CATALOGED ANAD. FISH STREAM? Y N

37 CATALOG #: N/A

38 STREAM NAME: \_\_\_\_\_

39 OIL IN STREAM BED? Y N

40 OIL ON STREAM BANKS? Y N

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

42 OIL WITHIN 1 MILE OF STREAM? Y N

Where: \_\_\_\_\_

43 ANADROMOUS FISH PRESENT? Y N

44 ANADROMOUS FISH OBSERVATION  
Species Aerial Ground


ACE 9961213

31 OIL TYPE: Pooled  Mouse  Tar  Asphalt  Sticky  Stain

32 OILED DEBRIS?  N MS TP AP ST

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

34 WAVE EXPOSURE: High Moderate  Low

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

M x 3.28 = Feet

COMMENTS: Beach Very Green - Perhaps due to Bioremediation/Not sure if its greener than norm.  
Though this type of Algal growth does occur naturally on Oil saturated sediment on Tethus  
(North shore of Tigt); Oil saturated sediment, AP, CT, CV, ST, Oiled sparse over the on length  
of North shore, heaviest oil on NW Corner near dirt bank; tar balls, mouse, oil saturated  
sediment on flats at MITZ & LITZ; Oiled logs/debris in SUTZ  
More work could easily be done here. Oil sheen at NW Corner of beach



OVERFLIGHT  
EAGLE SURVEY

Not A Stream

CI-1  
EAST Chugach Isl

ADF&G MULTI-ASSESSMENT DATA FORM

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

METHOD: Aerial Ground Boat

3 DATE: 6/15/90 15 HIGH TIDE TIMES: 064617004 21 TEAM RECORDER: Doug Hill

4 START TIME: 1257 16 HIGH TIDE HTS: 9.71 10.6 22 OBSERVERS: Lee Glenn

5 STOP TIME: \_\_\_\_\_ 17 LOW TIDE TIMES: 005.511311 23 AGENCY: ADF&G

6 SEGMENT #: CI-I <sup>CS 101</sup> 18 LOW TIDE HTS: 3.4 10.7 24 PHOTOS TAKEN: Y (N)

7 STATION #: \_\_\_\_\_ 19 TIDE HT AT SURVEY: \_\_\_\_\_ Roll #: \_\_\_\_\_ Frames: \_\_\_\_\_

8 K-UNIT: \_\_\_\_\_ ~~Slack~~ Slack Slack 25 VIDEO TAKEN: Y (N) TAPE#: \_\_\_\_\_

9 STAT AREA: \_\_\_\_\_ 20 USCG QUAD: Seldovia A-4 Start: \_\_\_\_\_ End: \_\_\_\_\_

10 LAT: \_\_\_\_\_ 11 LONG: \_\_\_\_\_ 26 SAMPLES TAKEN? Y (N) Number

12 SOURCE: Map Loran OIL \_\_\_\_\_

13 LOCATION: East Chugach Island Sediment \_\_\_\_\_

14 DESCRIPTION: East side of Island, low energy boulder/cobble beach. Biological \_\_\_\_\_

Water \_\_\_\_\_

EXTENT OF OIL

	SHORELINE				STREAM			
	L	W	M <sup>2</sup>	S	L	W	M <sup>2</sup>	S
27 SURFACE COVERAGE								
28 SURFACE THICKNESS								
29 PENETRATION								
30 OVERALL OIL IMPACT:	N	VL	L	<u>(H)</u>				
31 OIL TYPE:	Pooled	Mousse	Tar	Asphalt	Sticky	Stain		
32 OILED DEBRIS?	Y	N						
33 SHORELINE TYPE:	Headland	<u>Low-lying Rocks</u>	<u>Beach</u>	Cove				
		Lagoon	Marsh					
34 WAVE EXPOSURE:	<u>High</u>	<u>Moderate</u>	Low					
35 SUBSTRATE TYPE:	Bedrock	<u>✓</u>	Boulder	<u>✓</u>	Cobble	<u>✓</u>		
	Gravel	<u>✓</u>	Sand	<u>✓</u>	Mud/silt			

36 CATALOGED ANAD. FISH STREAM? Y (N)

37 CATALOG #1: ~~BEACH~~

38 STREAM NAME: \_\_\_\_\_

39 OIL IN STREAM BED? Y N

40 OIL ON STREAM BANKS? Y N

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

42 OIL WITHIN 1 MILE OF STREAM? Y N

Where: \_\_\_\_\_

43 ANADROMOUS FISH PRESENT? Y N

44 ANADROMOUS FISH OBSERVATION Species Aerial Ground


NOT AN OILING SURVEY.

COMMENTS: Overflight of Chugach Island to observe eagle nest. Observed Active eagle nest situated directly above the moderate to heavily oiled beach segment CI-I. This beach was trampled but it looks, visually, just like it did last fall. We did not land due to nest. Hummm?? This nest has not been addressed in USFWS paperwork.



1989-AFHS

Site 7-2

not a stream

Chrome Bay - Oil Sample Site

ASC NUMBER: \_\_\_\_\_ SEGMENT NUMBER: CS-01 YR CATALOGED: \_\_\_\_\_  
 LOCATION: Port Chatham, Chrome Bay, Clam Cove, NW  
 SAM NAME: \_\_\_\_\_ LATITUDE: 59° 12' 48"  
 NODIAK K-UNIT: \_\_\_\_\_ LOCAL STREAM #: \_\_\_\_\_ LONGITUDE: 151° 49' 54"  
 USGS QUADRANGLE: Seldovia A-5 LEGAL: \_\_\_\_\_  
 SHORELINE TYPE: Beach ALL SEGMENTS: \_\_\_\_\_  
 WAVE EXPOSURE: L

ASC NUMBER: \_\_\_\_\_ TEAM RECORDER: Doug Hill (ADF&G)  
 SURVEY TYPE: BS OBSERVERS: Lee Doug (ADF&G)  
 METHOD: Ground Jack Lentfer (CAC)  
 DATE: 8/5/89 AGENCY(IES): \_\_\_\_\_  
 START TIME: 1250 PHOTOS TAKEN? \_\_\_\_\_  
 STOP TIME: 1315 Roll #: 8100H14H Frames: 11, 12, 13, 14  
 VIDEO TAKEN?  Tape Number: \_\_\_\_\_  
 Counter Start: \_\_\_\_\_

SAMPLES TAKEN?  
 SAMPLE I.D. NUMBERS: 1. LP6/DOH-8/5/89-1300 2. \_\_\_\_\_ 3. \_\_\_\_\_  
 4. \_\_\_\_\_ 5. \_\_\_\_\_ 6. \_\_\_\_\_

	LENGTH m	WIDTH m	M2	%	THICK cm	PEN cm	OIL TYPE
SITE 1	91 ⊕	.5	45.5	?	< 2.5	< 5	MS, TB
SITE 2							
SITE 3							
SITE 4							
SITE 5							

OVERALL OIL IMPACT: L  
 OIL IN STREAM CHANNEL? *None observed* OIL ON BEACH WITHIN 50M OF STREAM MOUTH? *No*  
 SUBSTRATE

Bedrock	Granule <input checked="" type="checkbox"/>
Boulder	Sand
Cobble <input checked="" type="checkbox"/>	Silt
Pebble <input checked="" type="checkbox"/>	Veget.

SPECIES					
COUNT					

COMMENTS: Sporadic patches of oil found at high tide line - oil 1-2" depth along length of beach (2100 yds) - 4" x 10" patties common. Gravel saturated with oil 1" to 2" penetration. often found clean surface with oil subsurface.  
 Chrome Bay is in Port Chatham. Four Anadromous fish streams are present in Port Chatham --- 242-10-10220, 10230, 10240, 10250.

FISH HABITAT ASSESSMENT FORM

Chrome Bay → sec site 1-3 + 1-4 ⇒ NO stream

(However, 4 anadromous streams exist in Pt. Chatham Chrome Bay is at mouth of Pt. Chatham)

1 REGION: 2 PWS 3 KP, CI 4 K, AP 5 OBSERVER(S) Doug Hill, Lee Glenn Jack Lentfer

6 SITE NO. 7-2 7 AERIAL PHOTO NO. / 8 CAT NO. No stream

9 STREAM NAME \_\_\_\_\_ 10 LAT 59° 12' <sup>48</sup> 20 11 LONG 151° 49' <sup>54</sup> 20

12 DATE 8/5/89 13 TIME 1300 14 TIDE: Low slack Flood High slack Ebb

15 CATALOGED ANADROMOUS STREAM? Y  N 16 ANAD. FISH FOUND? Y  N

17 OIL FOUND IN STREAM? Y  N 18 OIL FOUND NEAR STREAM (1 MI.)? Y  N

19 OIL SAMPLES TAKEN? Y  N 20 ID NOS. Chrome Bay-LPG/DDH-8/5/89-1300

21 35 MM PICTURES TAKEN? Y  N 22 ROLL NO(S). 89DDH14H

23 EXPOSURE NO.	24 DESCRIPTION
<u>11, 12</u>	<u>Traces of oil from locally made log boom in vicinity of oil sample</u>
<u>13, 14</u>	<u>Flood House in view</u>
	<u>Oil sample found at Chrome Bay</u>

25 VIDEO FOOTAGE TAKEN? Y  N 26 CASSETTE NO(S). \_\_\_\_\_

27 DESCRIPTION: \_\_\_\_\_

ACE 9961216

ACE 7380299



ANADROMOUS FISH OBSERVATIONS

	PINK	CHUM	RED	KING	COHO	DOLLY		
28 Aerial								
29 Ground								

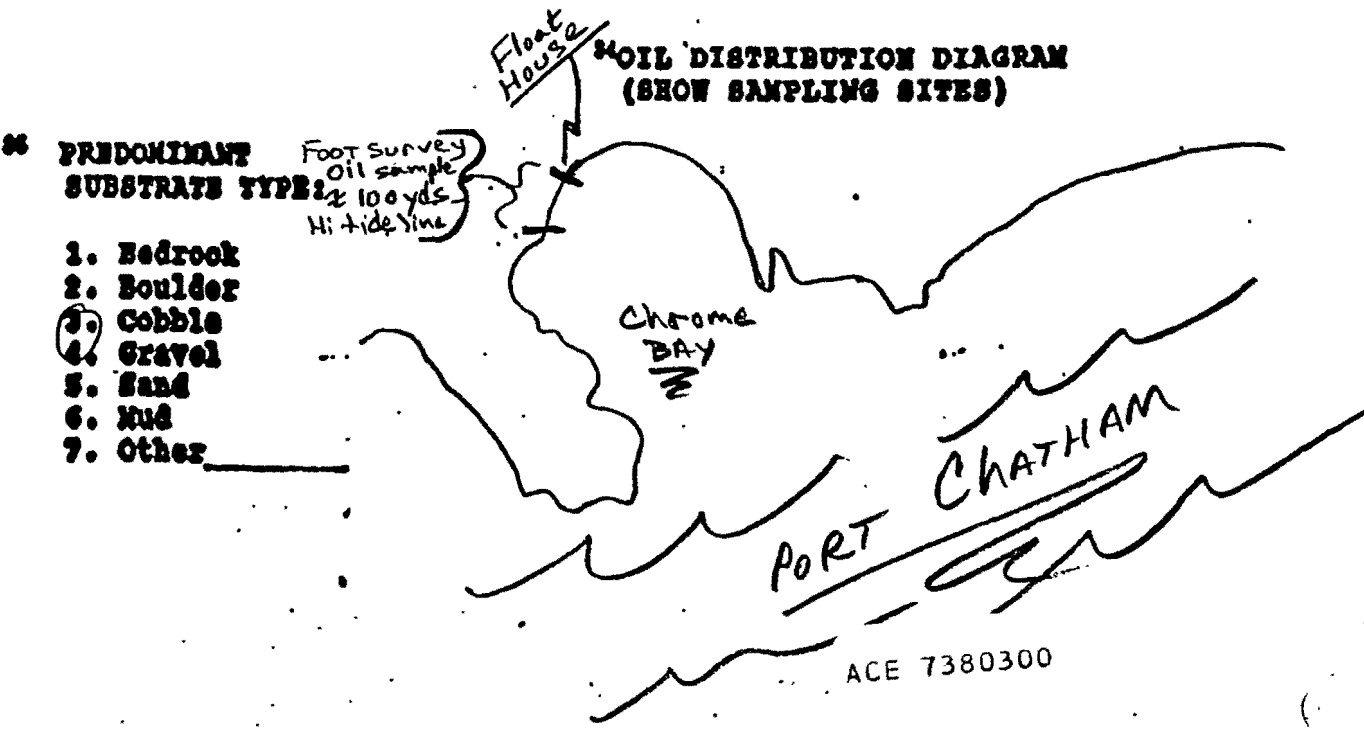
30 COMMENTS: Fish observed Approximately 2.5 to 3.5  
to EAST in Pt Chatham streams/Anadromous streams

*ten sites*

OIL OBSERVATIONS

EXTENT OF OIL:

	WITHIN STREAM	OUTSIDE STREAM
31 SURFACE COVERAGE		sporadic areas of gravel sand saturated with oil $\approx$ 100 yds x 1' wide
32 SURFACE THICKNESS		up to 3/4"
33 PENETRATION		$\approx$ 1" - 2"



- 35 PREDOMINANT SUBSTRATE TYPE:
1. Bedrock
  2. Boulder
  3. Cobble
  4. Gravel
  5. Sand
  6. Mud
  7. Other \_\_\_\_\_

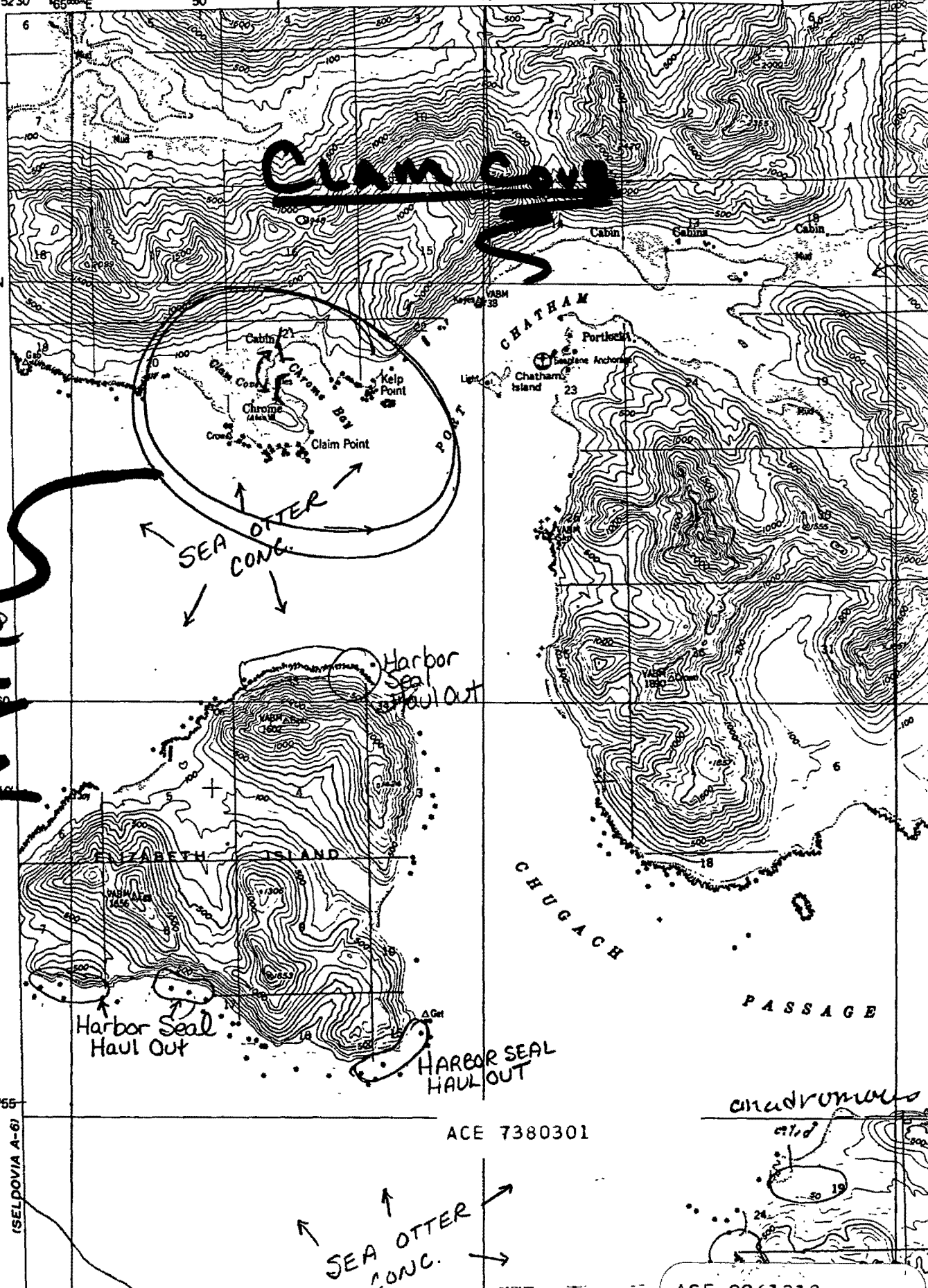
36 COMMENTS: Sporadic oil found at high tide line  $\Rightarrow$  Oil 1" to 2" depth along  
length of beach ( $\approx$  100 yds) - 4" x 10" patches common. Gravel saturated with  
oil 1" to 2" penetration

For chart high

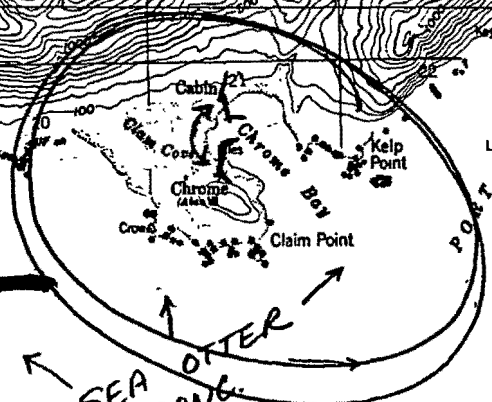
UNITED STATES  
DEPARTMENT OF THE INTERIOR  
GEOLOGICAL SURVEY

151°52'30" 65°00'00" E 50' 70' 45' (SELDOVIA 1)

Seldovia  
A-5



**CLAM CON**



site  
7-2

Harbor Seal Haul Out  
Elizabeth Island  
Harbor Seal Haul Out  
HARBOR SEAL HAULOUT

ACE 7380301

SEA OTTER CONC.

anadromous

ACE 9961218



1989 - AFHS

Site 7-3

not a stream

Koyuktolik (Dogfish) Bay

Oil Sample Site

ASC NUMBER: \_\_\_\_\_ SEGMENT NUMBER: \_\_\_\_\_ YR CATALOGED: \_\_\_\_\_  
 LOCATION: Koyuktolik (Dogfish) Bay; North shore of narrows  
 DAM NAME: \_\_\_\_\_ LOCAL STREAM #: \_\_\_\_\_ LATITUDE: \_\_\_\_\_  
 KODIAK K-UNIT: \_\_\_\_\_ LONGITUDE: \_\_\_\_\_  
 USGS QUADRANGLE: Seldovia A-5 LEGAL: \_\_\_\_\_  
 SHORELINE TYPE: Beach ALL SEGMENTS: \_\_\_\_\_  
 WAVE EXPOSURE: Low

ASC NUMBER: \_\_\_\_\_ TEAM RECORDER: Doug Hill (ADFG)  
 SURVEY TYPE: BS OBSERVERS: Lee Glenn (ADFG)  
 METHOD: Ground Jack Laffer (CAC)  
 DATE: 8/5/89 AGENCY(IES): \_\_\_\_\_  
 START TIME: 1320 PHOTOS TAKEN? \_\_\_\_\_  
 STOP TIME: 1415 Roll #: 89DDH07H Frames: 32  
 VIDEO TAKEN?  Tape Number: 15, 16, 17  
 Counter Start: \_\_\_\_\_

SAMPLES TAKEN?  
 SAMPLE I.D. NUMBERS: 1. JPA/DDH/JL-8/5/89-1330 2. 3.  
 4. 5. 6.

	LENGTH m	WIDTH m	M2	%	THICK cm	PEN cm	OIL TYPE
SITE 1	≈ 15	.25	3.75	< 1	.5	—	TB, CV
SITE 2							
SITE 3							
SITE 4							
SITE 5							

OVERALL OIL IMPACT: VL

OIL IN STREAM CHANNEL? None Observed

SUBSTRATE	
Bedrock	Granulex
Boulder	Sand
Cobbles	Silt
Pebbles	Veget.

OIL ON BEACH WITHIN 50M OF STREAM MOUTH? None Observed

7/21/89

SPECIES	Count				
Chum	15				

Stream 241-40-10320

COMMENTS: Oil found at east end of narrows - North shore - Approx. 3/4 mile from Anadromous fish stream # 241-40-10320 + 10325. Anadromous Stream # 241-40-10300 is present at the head (east end) of Dogfish Bay.

- Oil found was very minimal + sporadic. Spatches ≈ 3mm thick were found for ≈ 15m. These splatches ranged in size from 1.5m x 1.5m to 2.5 x 7.5m. They were found at a rate of 2 per 6 feet.
- VECO crews were present in Koyuktolik Bay early in the season.

FISH HABITAT ASSESSMENT FORM

Dupa

Dogfish (Koyuktoik) Bay - oil sample site

1 REGION: 2 PWS KP, CI 3 K, AP 4 OBSERVER(S) Don Hill, Lee Glenn Jack Lentfer

5 SITE NO. 7-3 6 AERIAL PHOTO NO. 7 CAT NO. 241-40-10320

8 STREAM NAME <sup>Northernmost</sup> Dogfish 9 LAT 59.14.48. 10 LONG 151.52.20.

11 DATE 8-5/89 12 TIME 1330 13 TIDE: Low slack Flood High slack Ebb

14 CATALOGED ANADROMOUS STREAM?  Y  N 15 ANAD. FISH FOUND?  Y  N

16 OIL FOUND IN STREAM?  Y  N 17 OIL FOUND NEAR STREAM (1 MI.)?  Y  N

18 OIL SAMPLES TAKEN?  Y  N 19 ID NOS. Dogfish Bay - LP6/D0H/JL - 8/5/89 - 1330

20 35 MM PICTURES TAKEN?  Y  N 21 ROLL NO(S) 89D0H070H

22 EXPOSURE NO. 23 DESCRIPTION 89D0H070H

<u>32</u>	<u>Inter-tidal - looking upstream</u>
<u>15, 16</u>	<u>Sample # Dogfish Bay - LP6/D0H/JL - 8/5/89 - 1330</u>
<u>17</u>	<u>Lee Glenn / Jack Lentfer (DNA) location where oil found / looking towards head of bay</u>

24 VIDEO FOOTAGE TAKEN?  Y  N 25 CASSETTE NO(S) \_\_\_\_\_

26 DESCRIPTION: \_\_\_\_\_  
\_\_\_\_\_



ANADROMOUS FISH OBSERVATIONS

	PINK	CHUM	RED	KING	COHO	DOLLY		
28 Aerial		15						
29 Ground		0						

30 COMMENTS: 7/21/89 => Foot surveyed approx. 1/2 mile on ground - (both shores of stream and high tide line of mud flats). No carcasses observed

OIL OBSERVATIONS

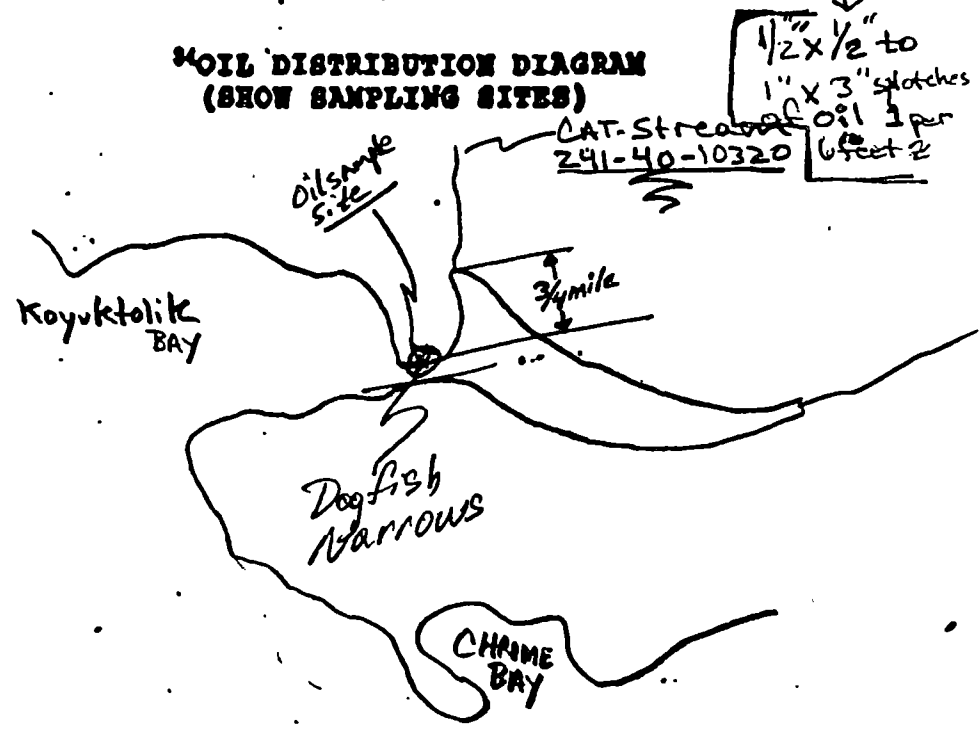
EXTENT OF OIL:

	WITHIN STREAM	OUTSIDE STREAM
31 SURFACE COVERAGE	/	Very minimal - highly sporadic splashes of oil for 50 feet along high tide line
32 SURFACE THICKNESS		~ 3 mm
33 PENETRATION		Surface

OIL DISTRIBUTION DIAGRAM (SHOW SAMPLING SITES)

34 PREDOMINANT SUBSTRATE TYPE:

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



35 COMMENTS: "Very" light oiling observed

ACE 7380303

Yeco crews were present early in season

→ MAY-JUNE

ACE 9961221

*SITING*





NOT A STREAM/SEAL HAUL OUT

ASC NUMBER: \_\_\_\_\_ SEGMENT NUMBER: ? YR CATALOGED: \_\_\_\_\_  
 LOCATION: Kamishak Bay LATITUDE: 59° 06' 00"  
 DAM NAME: \_\_\_\_\_ LONGITUDE: 153° 23' 02"  
 TANK K-UNIT: \_\_\_\_\_ LOCAL STREAM #: \_\_\_\_\_ LEGAL: \_\_\_\_\_  
 USGS QUADRANGLE: Iliamna A1-2  
 SHORELINE TYPE: Rocky Platform, Beach ALL SEGMENTS:  
 WAVE EXPOSURE: High

ASC NUMBER: \_\_\_\_\_ TEAM RECORDER: Doug Hill  
 SURVEY TYPE: BS OBSERVERS: Lee Glens  
 METHOD: FOOT AGENCY(IES): ADF46  
 DATE: 8/13/89 PHOTOS TAKEN? \_\_\_\_\_  
 START TIME: 1615 Roll #: 890DH20H Frames: 21, 22, 23  
 TOP TIME: 1640 VIDEO TAKEN? \_\_\_\_\_ Tape Number: 89LP6014H  
 Counter Start: 1712 → 1770

SAMPLES TAKEN? 89DDH049H  
 SAMPLE I.D. NUMBERS: 1. ~~89LP6014H~~ 1615 2. 3.  
 4. 5. 6.

	LENGTH m	WIDTH m	M2	t	THICK cm	PEN cm	OIL TYPE
SITE 1	9.1	9.1	82.8	50	9.0	10.2	MS, OP, HOR
SITE 2	37	9.1	336.7	35	2.5	10.2	MS, OP, HOR, MOR ST
SITE 3							
SITE 4							
SITE 5							

OVERALL OIL IMPACT: N  
 OIL IN STREAM CHANNEL? NA  
 OIL ON BEACH WITHIN 50M OF STREAM MOUTH? NA

SUBSTRATE

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

SPECIES	Eagles	Seals			
COUNT	2	5			

COMMENTS: Flowing fluid mousse found on southwest shore of Island.  
 (Right at South Tip of Island)  
 No mention made of this at this time by anyone involved in EVOS  
 5 seals on SE shore of Island  
 2 Eagles " " " " " "

NOT A STREAM

1989-AFHS

Site 7-1

Port Chatham → Cannery

ASC NUMBER: See Comments	SEGMENT NUMBER: CS-902	YR CATALOGED: <u>Site Sample</u>
LOCATION: Port Chatham, Old Portlock Cannery Site		
NAME: _____	LOCAL STREAM #:	LATITUDE: 59 12 51
WAVE EXPOSURE: L/M	ALL SEGMENTS:	LONGITUDE: 151 44 30
QUADRANGLE: Seldovia A-5		LEGAL:
SHORELINE TYPE: Beach		

ASC NUMBER:	TEAM RECORDER: Doug Hill (ADF&G)
SURVEY TYPE: BS	OBSERVERS: Lee Glenn (ADF&G)
METHOD: Ground	AGENCY(IES): Jack Lentfer (Chugach Alaska Corp)
DATE: 8/5/89	PHOTOS TAKEN?
START TIME: 1158	Roll #: 89DDH14H Frames: 10
STOP TIME: 1245	VIDEO TAKEN? <input checked="" type="checkbox"/> Tape Number:
	Counter Start:

SAMPLES TAKEN?  
 SAMPLE I.D. NUMBERS: 1. LPG/DDH-8/5/89-1200 2. 3.  
 4. 5. 6.

	LENGTH m	WIDTH m	M2	%	THICK cm	PEN cm	OIL TYPE
SITE 1							SE - Φ -
SITE 2							
SITE 3							
SITE 4							
SITE 5							

OVERALL OIL IMPACT:  V  L

OIL IN STREAM CHANNEL?  OIL ON BEACH WITHIN 50M OF STREAM MOUTH?

SUBSTRATE	
Bedrock	Granule <input checked="" type="checkbox"/>
Boulder	Sand
Cobble <input checked="" type="checkbox"/>	Silt
Pebble <input checked="" type="checkbox"/>	Veget.

SPECIES					
COUNT					

COMMENTS: Oil sample found on beach just below old cannery site (old boilers etc) (South Shore Pt. Chatham, just east of Portlock).  
 - Oiling consist of just a splattering of oil.  
 - Jack Lentfer (CAC) has found oil on this beach on previous trips.  
 - VECO crews monitored Port Chatham - info concerning this effort has been inaccessible.  
 - Four Anadromous fish streams are present in Port Chatham -  
 242-10-10220, 10230, 10240, 10250. - Please run one copy each.



FISH HABITAT ASSESSMENT FORM

Port Chatham → Cannery Site sample  
1 REGION: DWS RP, CI 26 10 OBSERVER(S) Don Hill, Lee Glenn  
Jack Lentfer

2 SITE NO. 7-1 3 AERIAL PHOTO NO. 26, 27 8 CAT NO. 10220  
242-10

9 STREAM NAME \_\_\_\_\_ 10 LAT 59.12.51 11 LONG 151.44.30  
52

12 DATE 8/5/89 13 TIME 1200 14 TIDE: Low slack Flood High slack Ebb

15 CATALOGED ANADROMOUS STREAM?  N 16 ANAD. FISH FOUND? Y  N

17 OIL FOUND IN STREAM? Y  N 18 OIL FOUND NEAR STREAM (1 MI.)? Y  N

19 OIL SAMPLES TAKEN?  N 20 ID NOS. 89 DDH 007 DDH-8/5/89-1200

21 35 mm PICTURES TAKEN?  N 22 ROLL NO(S). 89-DDH-007  
89-DDH-014

23 EXPOSURE NO.	24 DESCRIPTION
<u>10 (014)</u>	<u>oil sample found on rocks to west of pier</u>

25 VIDEO FOOTAGE TAKEN? Y  N 26 CASSETTE NO(S). \_\_\_\_\_

27 DESCRIPTION: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

ACE 9961225

ACE 7380164

ANADROMOUS FISH OBSERVATIONS

PINK CHUM RED KING COHO DOLLY

28	Aerial				②				
29	Ground				①				

30 COMMENTS: \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

OIL OBSERVATIONS

EXTENT OF OIL:

WITHIN STREAM                      OUTSIDE STREAM

- 31 SURFACE COVERAGE  
 32 SURFACE THICKNESS  
 33 PENETRATION

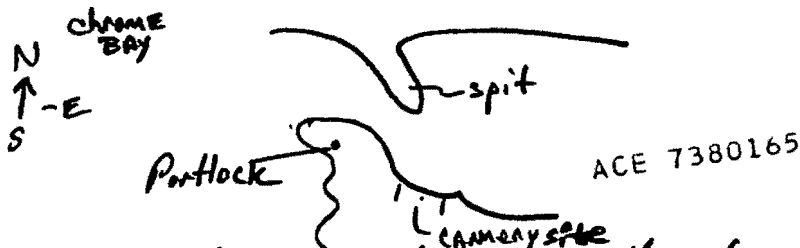
	Diked Plastic bottle
	CAP - 1/2" thick oil on it

34 OIL DISTRIBUTION DIAGRAM  
 (SHOW SAMPLING SITES)

35 PREDOMINANT  
 SUBSTRATE TYPE:

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

Sample found on beach just below cannery site (old boilers etc). South shore of Pt. Chatham EAST of Portlock.



36 COMMENTS: Jack Lentfer has found oil on this beach (drift line) - previously, Jack Represent Chugach Native Assoc.





Not A stream TONSINA Bay - Grimm beach

ASC NUMBER: \_\_\_\_\_ SEGMENT NUMBER: TB-04 YR CATALOGED: \_\_\_\_\_  
 LOCATION: TONSINA BAY LATITUDE: 59 18 18  
 STREAM NAME: \_\_\_\_\_ LONGITUDE: 150 56 54  
 KODIAK K-UNIT: \_\_\_\_\_ LOCAL STREAM #: \_\_\_\_\_ LEGAL: \_\_\_\_\_  
 USGS QUADRANGLE: Seldovia B-3 ALL SEGMENTS: \_\_\_\_\_  
 SHORELINE TYPE: Beach WAVE EXPOSURE: LOW NOVA 10/9/91

ASC NUMBER: \_\_\_\_\_ TEAM RECORDER: Hill  
 SURVEY TYPE: BS OBSERVERS: Dodiak  
 METHOD: FOOT AGENCY(IES): ADFC  
 DATE: 4 12 51 90 PHOTOS TAKEN? Y  
 START TIME: 0945 Roll #: 9000H07H Frames: 21-24  
 STOP TIME: 1100 VIDEO TAKEN? N Tape Number: \_\_\_\_\_  
 Counter Start: \_\_\_\_\_

SAMPLES TAKEN? N  
 SAMPLE I.D. NUMBERS: 1. \_\_\_\_\_ 2. \_\_\_\_\_ 3. \_\_\_\_\_  
 4. \_\_\_\_\_ 5. \_\_\_\_\_ 6. \_\_\_\_\_

	LENGTH m	WIDTH m	M2	%	THICK cm	PEN cm	OIL TYPE
SITE 1	18	<1.5	27	60	1.25/7.5	—	AP, MS, OR (OP)
SITE 2	46	<1.5	69	20	1.25/7.5	—	AP, MS, OR, PV, CT, ST
SITE 3	92	—	—	41	<2.5	—	TB, OR
SITE 4	ISTHMUS - Oiled Area not measured						
SITE 5							

OVERALL OIL IMPACT: M  
 OIL IN STREAM CHANNEL? \_\_\_\_\_ OIL ON BEACH WITHIN 50M OF STREAM MOUTH? \_\_\_\_\_

SUBSTRATE

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

SPECIES					
	<u>NONE</u>				
COUNT					

COMMENTS:

COMMENT ARE ON ATTACHED PAGE



NOT A STREAM - TONSINA BAY - Grimm Beach

ADF&G MULTI-ASSESSMENT DATA FORM

1 SURVEY TYPE:  SS DS TS AVS SCHA MMS PTA  
~~BSF~~ → INVERTED RATE TRANSCE

2 REGION: PWS  KP, CI K, AP

METHOD: Aerial  Ground Boat

3 DATE: 4/25/90 15 HIGH TIDE TIMES: 0150 1 1457 21 TEAM RECORDER: Doug Hill

4 START TIME: 0945 16 HIGH TIDE HTS: 14.7 112.4 22 OBSERVERS: Norma Dudrak

5 STOP TIME: 1100 17 LOW TIDE TIMES: 0830 10832 23 AGENCY: ADF&G

6 SEGMENT #: TB-4 18 LOW TIDE HTS: -3.3 10.9 24 PHOTOS TAKEN:  N

7 STATION #: \_\_\_\_\_ 19 TIDE HT AT SURVEY: \_\_\_\_\_ Roll #: 9000H07H Frame: 21 → 24

8 K-UNIT: \_\_\_\_\_ Ebb Slack  Flood Slack 25 VIDEO TAKEN: Y  TAPE#: \_\_\_\_\_

9 STAT AREA: \_\_\_\_\_ 20 USCG QUAD: Seldovia B-3 Start: \_\_\_\_\_ End: \_\_\_\_\_

10 LAT: \_\_\_\_\_ 11 LONG: \_\_\_\_\_ 26 SAMPLES TAKEN? Y N Number

12 SOURCE: Map Loran Oil \_\_\_\_\_

13 LOCATION: KP, OC, TONSINA BAY, Grimm Beach Sediment \_\_\_\_\_

14 DESCRIPTION: West shore of BAY, South pocket beach Biological \_\_\_\_\_

Water \_\_\_\_\_

EXTENT OF OIL

	SHORELINE				STREAM			
	L	W	M <sup>2</sup>	S	L	W	M <sup>2</sup>	S
27 SURFACE COVERAGE								
28 SURFACE THICKNESS								
29 PENETRATION								

30 OVERALL OIL IMPACT: N VL  M H

31 OIL TYPE: Pooled  Mousse  Tar  Asphalt  Sticky  Stain

32 OILED DEBRIS?  Y N

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

34 WAVE EXPOSURE: High Moderate  Low

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

36 CATALOGED ANAD. FISH SREAN? Y N

37 CATALOG #:

38 STREAM NAME:

39 OIL IN STREAM BED? Y N

40 OIL ON STREAM BANKS? Y N

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

42 OIL WITHIN 1 MILE OF STREAM? Y N  
 Where: \_\_\_\_\_

43 ANADROMOUS FISH PRESENT? Y N

44 ANADROMOUS FISH OBSERVATION

Species	Aerial	Ground

ACE 9961229

$M \times 3.28 = \text{feet}$

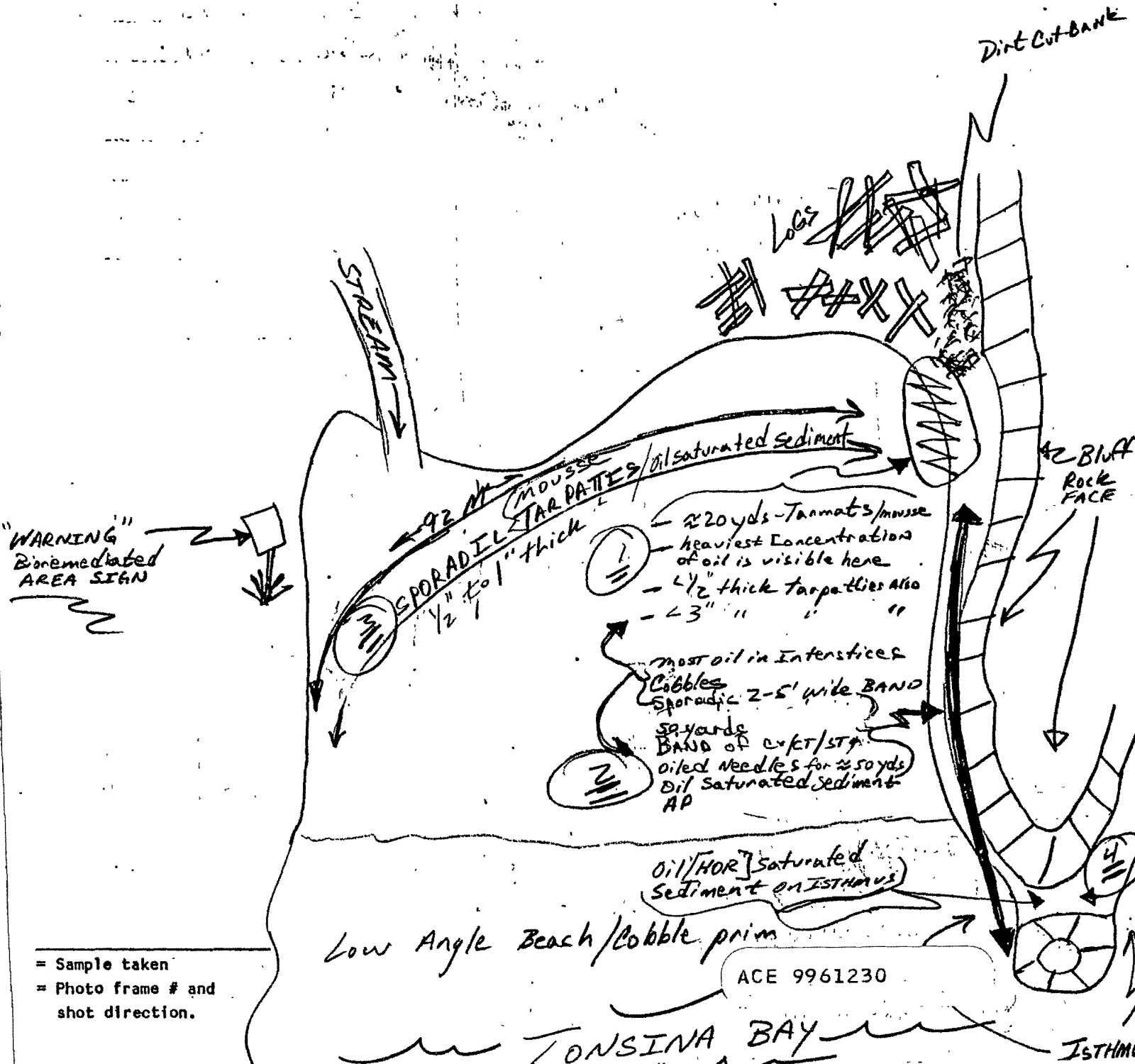
COMMENTS: Beach Very Green - Perhaps due to Bioremediation/NOT sure if its greener than normal.  
Though this type of Algal growth does occur naturally on Oil saturated sediment on Tethmos  
(North shore of Tigt); Oil saturated sediment, Al, CT, CV, ST, Oiled spruce over the on length  
of North shore, heaviest oil on NW Corner near dirt bank; tarballs, Mousse, oil saturated  
Sediment on flats at MITZ & LITZ; Oiled logs/debris in SUTZ  
More work could easily be done here. Oil seen at NW Corner of beach

FRAME(S)

DESCRIPTION

21	Barnacles smothered w/oil (dead). Oil encrusted needles
22	Oil encrusted needles - Barnacles dead/smothered in Oil
23	Typical oil found on NW corner of beach - bench below dirt bank
24	Algal growth on barnacles - upper portion of bioremediated Area

46 OIL DISTRIBUTION DIAGRAM



= Sample taken  
 = Photo frame # and shot direction.



TONSINA BAY - Long Island Cove

ASC NUMBER: -NA- SEGMENT NUMBER: TB-5 YR CATALOGED:  
 LOCATION: TONSINA BAY - Long Island Cove  
 STREAM NAME: LATITUDE: 59 18 27  
 KODIAK K-UNIT: LOCAL STREAM #: LONGITUDE: 150 53 47  
 USGS QUADRANGLE: Seldovia B-3 LEGAL:  
 SHORELINE TYPE: Seach Cove ALL SEGMENTS:  
 WAVE EXPOSURE: Low

DDH 10/9/91

ASC NUMBER: -NA-  
 SURVEY TYPE: BS  
 METHOD: Foot  
 DATE: 4/25/90  
 START TIME: 0750  
 STOP TIME: 0940

TEAM RECORDER: Doug Hill  
 OBSERVERS: Norma Dudia  
 AGENCY (IES): ADF + G  
 PHOTOS TAKEN? Y  
 Roll #: 9000H07H Frames: 13-20  
 VIDEO TAKEN? N Tape Number:  
 Counter Start:

SAMPLES TAKEN? Y  
 SAMPLE I.D. NUMBERS: 1. 9000H074H 2. 3.  
 4. 5. 6.

	LENGTH m	WIDTH m	M2	%	THICK cm	PEN cm	OIL TYPE
SITE 1							
SITE 2							
SITE 3							
SITE 4							
SITE 5							

OVERALL OIL IMPACT: L

OIL IN STREAM CHANNEL? N/A

OIL ON BEACH WITHIN 50M OF STREAM MOUTH? N/A

SUBSTRATE

Bedrock <input checked="" type="checkbox"/>	Granule <input checked="" type="checkbox"/>
Boulder <input checked="" type="checkbox"/>	Sand <input checked="" type="checkbox"/>
Cobble <input checked="" type="checkbox"/>	Silt <input checked="" type="checkbox"/>
Pebble <input checked="" type="checkbox"/>	Veget. <input type="checkbox"/>

SPECIES	<u>NONE</u>				
COUNT					

COMMENTS: SEE 1990 field log for further info

NOT A STREAM

TONSINA BAY - Long Island Cove

ADF&G MULTI-ASSESSMENT DATA FORM

1 SURVEY TYPE:  SS  DS  TS  AVS  SCHA  MMS  PTA

2 REGION: PWS  R,CI  K,AP

METHOD: Aerial  Ground  Boat

3 DATE: 4/25/90

15 HIGH TIDE TIMES: 0158 11457

21 TEAM RECORDER: Doug Hill

4 START TIME: 0800

16 HIGH TIDE HTS: 14.7 112.4

22 OBSERVERS: Norma Dudak

6 STOP TIME: 0940

17 LOW TIDE TIMES: 0830 10832

23 AGENCY: ADF+G

8 SEGMENT #: TB-05

18 LOW TIDE HTS: -3.3 10.9

24 PHOTOS TAKEN: 0 N

7 STATION #:

19 TIDE HT AT SURVEY:

Roll #: 100H07H Frame: 13-20

9 K-UNIT:

Ebb  Slack  Flood

25 VIDEO TAKEN:  Y  N TAPE#:

10 STAT AREA: 232-10

20 USCG QUAD: Seldovia B-3

Start: End:

10 LAT:

11 LONG:

26 SAMPLES TAKEN?  Y  N Number

12 SOURCE: Map Loran

NOH/NO-4/25/90-0826

13 LOCATION: KP, OC, TONSINA BAY, Long Island

14 DESCRIPTION: Cove on East side of Island

Sediment

Biological

Water

EXTENT OF OIL

	SHORELINE				STREAM			
	L	W	M <sup>2</sup>	%	L	W	M <sup>2</sup>	%
27 SURFACE COVERAGE								
28 SURFACE THICKNESS								
29 PENETRATION								

35 CATALOGED ANAD. FISH SREAM?  Y  N

37 CATALOG #:

38 STREAM NAME:

30 OVERALL OIL IMPACT:  N  VL  L  M  H

39 OIL IN STREAM BED?  Y  N

40 OIL ON STREAM BANKS?  Y  N

31 OIL TYPE: Pooled  POOL  TAP  ASPHALT  STICKY  SLUSH

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

42 OIL WITHIN 1 MILE OF STREAM?  Y  N

32 OILED DEBRIS?  Y  N

Where:

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

43 ANADROMOUS FISH PRESENT?  Y  N

34 WAVE EXPOSURE: High  Moderate  Low

44 ANADROMOUS FISH OBSERVATION  
Species Aerial Ground

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


No dimensions were taken - Only general observations

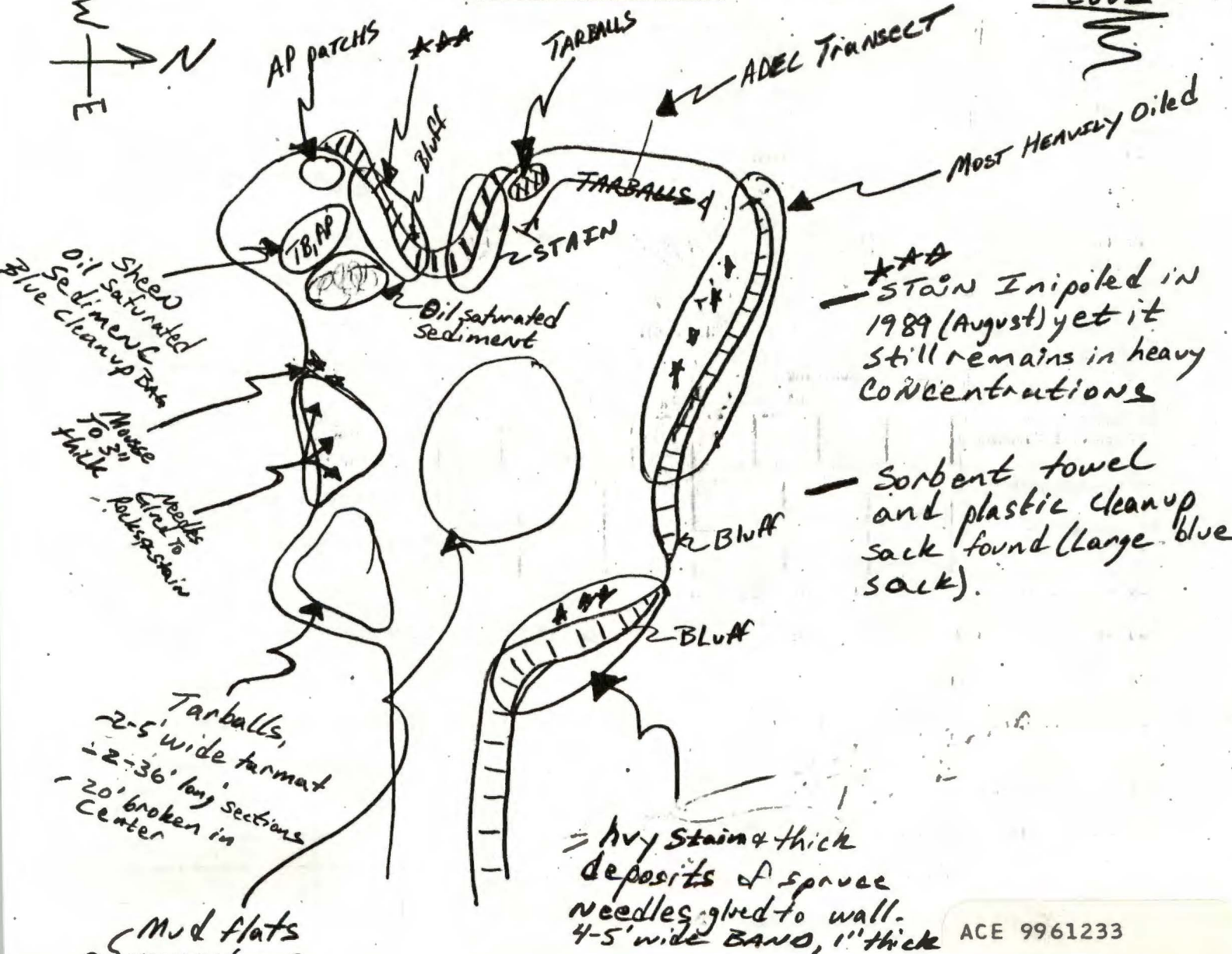
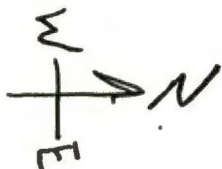
COMMENTS: Oil sheen present in lower intertidal (Mud/silt). North shore - heavy stain and thick deposits (up to 2") of oil encrusted spruce needles. NW Bight => Tarballs, stain, CT, CV on Rock face. SW Bight => ST, CT, CV on Rocks + Rock face, AP patches, sheen. Oil saturated sediment, Tarballs. South shore => MS to 3" thick, Tarmat (2-5' wide, 2-36' long sections), tarballs, needles glued by oil to rocks, stain. Norma has some USCG notes that state that only one bight is over



FRAME(S)	DESCRIPTION
14	Soft pliable choco brown MS w/in thin band crust of oil
15	Blue sheen on surface - subsurface oiling to 3" (MS + oil saturated sediment)
16	Spruce needles plastered to rock face - NW corner of Lagoon
17	Norma Dudiak picking up oiled Sorbent towel
18	8' wide band of spruce needles cemented to rock face by oil
19	Closeup of oil encrusted needles - 1/2" to 2" thick on rock face
20	Aerial of Long Island Cove.

48 OIL DISTRIBUTION DIAGRAM

TONSINA BAY - LONG ISLAND COVE



ACE 9961233

Comments Cont'd: Long Island Cove was

Inipoled in 1989. This info is erroneous, Inipol was applied to the entire cove west of the Narrows that lead into the cove.

AST, CT, CV inipoled in 1989 and yet no noticeable change in the degree of oiling is evident. Definitely enough oil to warrant cleanup in cove.

= Sample taken  
= Photo frame # and shot direction.



ASC NUMBER: *NONE* SEGMENT NUMBER: *PE-1* YR CATALOGED:  
 LOCATION: *Outer Coast Kenai Peninsula, Pearl Island*  
 STREAM NAME: *SEA LION HAULOUT* LATITUDE: *59 06 48*  
 KODIAK K-UNIT: LOCAL STREAM #: LONGITUDE: *151 39 36*  
 USGS QUADRANGLE: *Seldovia A-5* LEGAL:  
 SHORELINE TYPE: *Headland* ALL SEGMENTS:  
 WAVE EXPOSURE: *High* *10/9/91 - 2001*

ASC NUMBER: *NONE*  
 SURVEY TYPE: *90 Pre SSAT/SH BS*  
 METHOD: *Foot*  
 DATE: *4/12/90*  
 START TIME: *0950*  
 STOP TIME: *1221*

TEAM RECORDER: *Lee Glenn*  
 OBSERVERS: *Norma Dudzak*

AGENCY(IES): *ADF+G*

PHOTOS TAKEN? *Yes*  
 Roll #: *90NWD350H* Frames: *1,2,3,4,5*  
 VIDEO TAKEN? *]* Tape Number: *90-LPG-022H*  
 Counter Start: *1846 → 3040*

SAMPLES TAKEN? *Y*

SAMPLE I.D. NUMBERS: 1. *LPG 412 PI1030* 2. 3.  
 4. 5. 6.

	LENGTH m	WIDTH m	M2	%	THICK cm	PEN cm	OIL TYPE
SITE 1	<sup>500'</sup> <i>152m</i>	<i>67m</i>	<i>?</i>	<i>10-50%</i>	<i>7.5cm</i>	<i>10cm</i>	<i>PD, MS, ST</i>
SITE 2	<i>67m</i>	<i>?</i>					<i>ST, OR</i>
SITE 3							
SITE 4							
SITE 5							

OVERALL OIL IMPACT: *M*

OIL IN STREAM CHANNEL? *NA*

● OIL ON BEACH WITHIN 50M OF STREAM MOUTH? *NA*

SUBSTRATE

Bedrock <i>40%</i>	Granule
Boulder <i>45%</i>	Sand
Cobble <i>10%</i>	Silt
Pebble <i>5%</i>	Veget.

SPECIES					
COUNT					

COMMENTS: *see attached 90 MAD - apply to this form (i.e., comments from comments section + from diagram section)*



ADF&G MULTI-ASSESSMENT DATA FORM

1 SURVEY TYPE:  BS SS DS TS AVS SCHA M&S PTA 2 REGION: PWS  KP, CI K, AP

METHOD: Aerial  Ground Boat CORDOVA CORRECTED  
BOOK TIDE

3 DATE: Apr. 12, 1990 15 HIGH TIDE TIMES: 1549 / 1607 21 TEAM RECORDER: LEE GLENN

4 START TIME: 0950 16 HIGH TIDE HTS: 10.9' / 10.12' 22 OBSERVERS: NORMA DUDIAK

5 STOP TIME: 1221 17 LOW TIDE TIMES: 1009 / 0949 23 AGENCY: ADF&G

6 SEGMENT #: PE-1 OR PI-1 18 LOW TIDE HTS: -0.8' / -0.8 24 PHOTOS TAKEN:  Y  N  
901WD First  
 Roll #: 350H Frame: FEW

7 STATION #: NA 19 TIDE HT AT SURVEY: -0.8 increasing 25 VIDEO TAKEN:  Y  N  
 TAPE#: A

8 K-UNIT: NA  Ebb  Slack  Flood  Slack

9 STAT AREA: NA 20 USCG QUAD: \_\_\_\_\_ Start: \_\_\_\_\_ End: \_\_\_\_\_

10 LAT: 59°06'48" 11 LONG: 151°39'36" 26 SAMPLES TAKEN?  Y  N Number + DUPE.

12 SOURCE: Map Loran 011 LPG412 PI 1030

13 LOCATION: PERL ISLAND, GULF OF ALASKA OFF THE Sediment \_\_\_\_\_

14 DESCRIPTION: SW TIP OF KENAI PENINSULA Biological \_\_\_\_\_  
Stellar Sea Lion Haulout Water \_\_\_\_\_  
EXTENT OF OIL

	SHORELINE				STREAM			
	458m	183m	M <sup>2</sup>	%	L	W	M <sup>2</sup>	%
27 SURFACE COVERAGE	500'	200'	83812	10-50%				
28 SURFACE THICKNESS	7.5cm			25%				
29 PENETRATION	10cm			25%				

30 OVERALL OIL IMPACT: N VL L  H H

31 OIL TYPE:  Pooled  Mousse Tar Asphalt  Sticky  Stain

32 OILED DEBRIS? Y  N

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

34 WAVE EXPOSURE:  High Moderate Low

35 SUBSTRATE TYPE: Bedrock 40% Boulder 45% Cobble 10%  
 Gravel 5% Sand 0 Mud/silt 0

36 CATALOGED ANAD. FISH SREAM? Y  N

37 CATALOG #: \_\_\_\_\_

38 STREAM NAME: \_\_\_\_\_

39 OIL IN STREAM BED? Y N

40 OIL ON STREAM BANKS? Y N

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

42 OIL WITHIN 1 MILE OF STREAM? Y N  
 Where: \_\_\_\_\_

43 ANADROMOUS FISH PRESENT? Y N

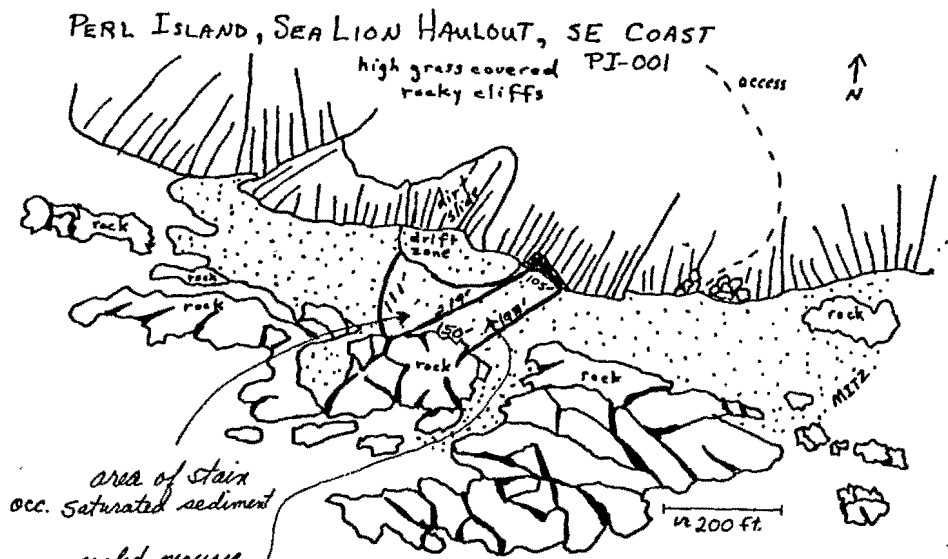
44 ANADROMOUS FISH OBSERVATION  
 Species Aerial Ground


ACE 9961235

COMMENTS: Extensive video shot and copy forwarded to Don Caulkins, ADF&G Game Div. Stellar sea lion haulout, approx 82 seen here in 1989, so far only 50 seen in 1990. Oystercatchers, gulls, cormorants seen here. Stellar sea lions are now on the threatened list. ADF&G will require strict guidelines if area is to be cleaned.

FRAME(S) ?	DESCRIPTION
1	Lee Glenn taking sample LPG 412 PJ1030
2	" " digging saturated sediment
3	Wet mousse; stick running in heat
4	Sea lions
5	Aerial of Pearl haulout

46 OIL DISTRIBUTION DIAGRAM



area of stain  
occ. saturated sediment  
pooled mousse  
in rocks  
asphalted-look

Survey for oiling condition  
April 12, 1990  
Lee Glenn  
Norma Dudich

Oil not affected by winter storms  
except to darken a surface  
oil film, under film remains  
wet yellow-brown sticky mousse.  
Saturated sediments to 2.5 inches.

Sea lions haulout directly onto the oiled area. About 82  
Stellar sea lions seen here in 1989. About 50 have  
been observed so far in 1990.

Lee Glenn  
A.O.C. & G.  
Hawaii Oil Response Center  
235-5322

= Sample taken  
= Photo frame # and  
shot direction.

ACE 9961236

ACE 1941083



ASC NUMBER: ~~0~~ SEGMENT NUMBER: ~~0~~ YR CATALOGED:  
 LOCATION: ~~OKP~~, *One Half Bay*  $\approx$  1/4 mile NW of Salt Lagoon  
 STREAM NAME: *ON EAST side of Bay.* LATITUDE: 59° 12' 40"  
 KODIAK K-UNIT: LOCAL STREAM #: LONGITUDE: 151° 11' 40"  
 USGS QUADRANGLE: *Seldovia A-4* LEGAL:  
 SHORELINE TYPE: *Beach* ALL SEGMENTS:  
 WAVE EXPOSURE: *High* *DATE 10/9/91*

ASC NUMBER: ~~0~~ TEAM RECORDER: *Doug Hill*  
 SURVEY TYPE: *Pre-screening IS* OBSERVERS: *Susan McLane*  
 METHOD: *Foot* AGENCY(IES): *ADF&G*  
 DATE: *4/11/90* PHOTOS TAKEN?   
 START TIME: *1042* Roll #: Frames:  
 STOP TIME: *1055* VIDEO TAKEN?  Tape Number:  
 Counter Start:

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

	LENGTH m	WIDTH m	M2	%	THICK cm	PEN cm	OIL TYPE
SITE 1	<i>366m</i>	<i>1m</i>		<i>3</i>	<i>&lt;1mm</i>	<i>—</i>	<i>ST, CT</i>
SITE 2							
SITE 3							
SITE 4							
SITE 5							

OVERALL OIL IMPACT: *NONE*  
 OIL IN STREAM CHANNEL? *N/A* OIL ON BEACH WITHIN 50M OF STREAM MOUTH? *N/A*

SUBSTRATE

Bedrock	Granule
Boulder	Sand
Cobble	Silt
Pebble	Veget.

SPECIES	<i>NONE</i>				
COUNT					

*Transfer MAO Comments*  
 COMMENTS: *Surveyed sandy beach of east shore of bay (1/4 mile NW of Salt Lagoon) --- we surveyed this beach only because oil was found here in 1989. This beach is within one mile of anadromous stream 242-31-10080.*  
*A mink track's on beach*

# GROUP B

## ADF&G MULTI-ASSESSMENT DATA FORM

PRE-SCREENING

1 SURVEY TYPE: BS  DS TS AVS SCHA MHS PTA 2 REGION: PWS  K, AP

METHOD: Aerial  Ground Boat Cordova

3 DATE: 4-11-90 16 HIGH TIDE TIMES: 1450 21 TEAM RECORDER: Doug Hill

4 START TIME: 1042 16 HIGH TIDE HTS: 13.0 22 OBSERVERS: Susan Melone

6 STOP TIME: 1055 17 LOW TIDE TIMES: 0917 23 AGENCY: ADF&G

6 SEGMENT #: None designated 18 LOW TIDE HTS: -1.0 24 PHOTOS TAKEN: Y  N

7 STATION #: \_\_\_\_\_ 19 TIDE HT AT SURVEY: LOW Roll #: \_\_\_\_\_ Frames: \_\_\_\_\_

8 K-UNIT: \_\_\_\_\_ Ebb Slack  Flood Stack 25 VIDEO TAKEN: Y N TAPE#: \_\_\_\_\_

9 STAT AREA: 242-31 20 USCG QUAD: Seldovia A-4 Start: \_\_\_\_\_ End: \_\_\_\_\_

10 LAT: 59° 12' 79" 11 LONG: 151° 11' 40" 26 SAMPLES TAKEN Y N Number

12 SOURCE:  Map Loran Oil \_\_\_\_\_

13 LOCATION: AFS - Uncataloged - 2 mi NE of lagoon on East side of bay Sediment \_\_\_\_\_

14 DESCRIPTION: Low Grade Sandy Beach to SE of Anadromous Fish Stream 242-31-10090. Biological \_\_\_\_\_

EXTENT OF OIL Water \_\_\_\_\_

27 SURFACE COVERAGE

	SHORELINE				STREAM			
	L	W	M <sup>2</sup>	%	L	W	M <sup>2</sup>	%
27 SURFACE COVERAGE								
28 SURFACE THICKNESS								
29 PENETRATION								

30 OVERALL OIL IMPACT: N VL L M H

31 OIL TYPE: Pooled Mousse Tar Asphalt  Sticky  Sticky

32 OILED DEBRIS?  N

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

34 WAVE EXPOSURE:  High Moderate Low

35 SUBSTRATE TYPE: Bedrock \_\_\_\_\_ Boulder 2.5% Cobble 2.5% Gravel \_\_\_\_\_ Sand 95% Mud/silt \_\_\_\_\_

36 CATALOGED ANAD. FISH STREAM? Y  N

37 CATALOG #: NONE

38 STREAM NAME: DAVE HALL BAY EAST

39 OIL IN STREAM BED? Y  N

40 OIL ON STREAM BANKS?  Y N

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

42 OIL WITHIN 1 MILE OF STREAM?  Y N

Where: \_\_\_\_\_

43 ANADROMOUS FISH PRESENT? Y  N

44 ANADROMOUS FISH OBSERVATION

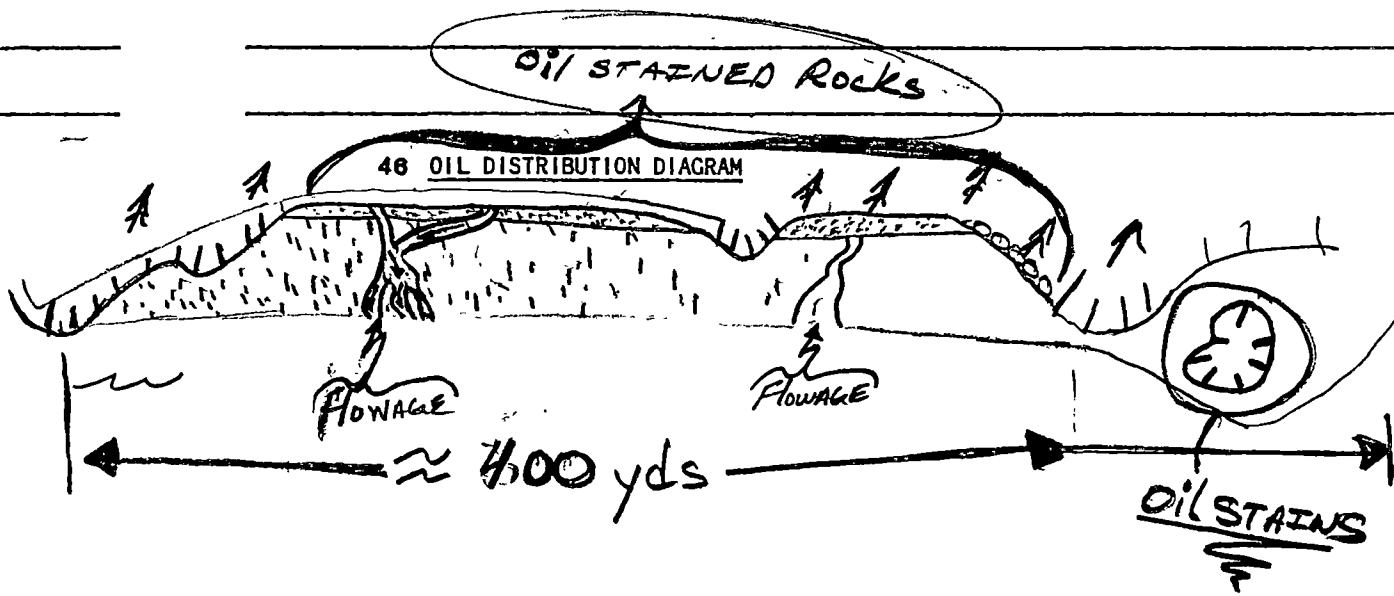
Species	Aerial	Ground

COMMENTS: ~ 400 Yds. of stained rocks - Occasional patch (<3") of saturated  
Bediment - Oil stained rocks readily visible (drip marks)  
Oil stained rocks beated along beach - vegetation interface (beach berm).  
Eastern Beach



FRAME(S)

DESCRIPTION



= Sample taken

= Photo, frame # and shot direction.

ANADSCAT - not recommended

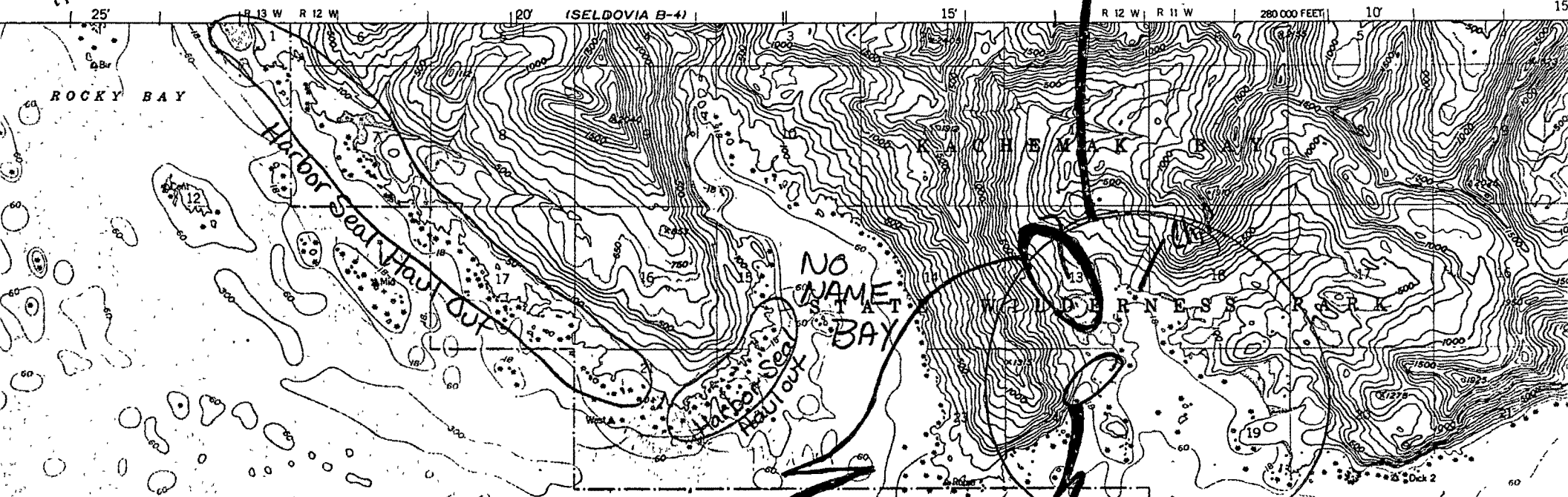
ACE 9961239

ACE 1955683

#242-31-10100

WEST BEACH  
"ONE HAUL BAY"  
4/17/90

SELDOVIA (A-4) QUADRANGLE  
ALASKA  
1:63 360 SERIES (TOPOGRAPHIC)



ACE 1955687

ACE 9961240

Sea Otter  
concentration

APCS# 242-31-10100

WEST  
BEACH  
Survey

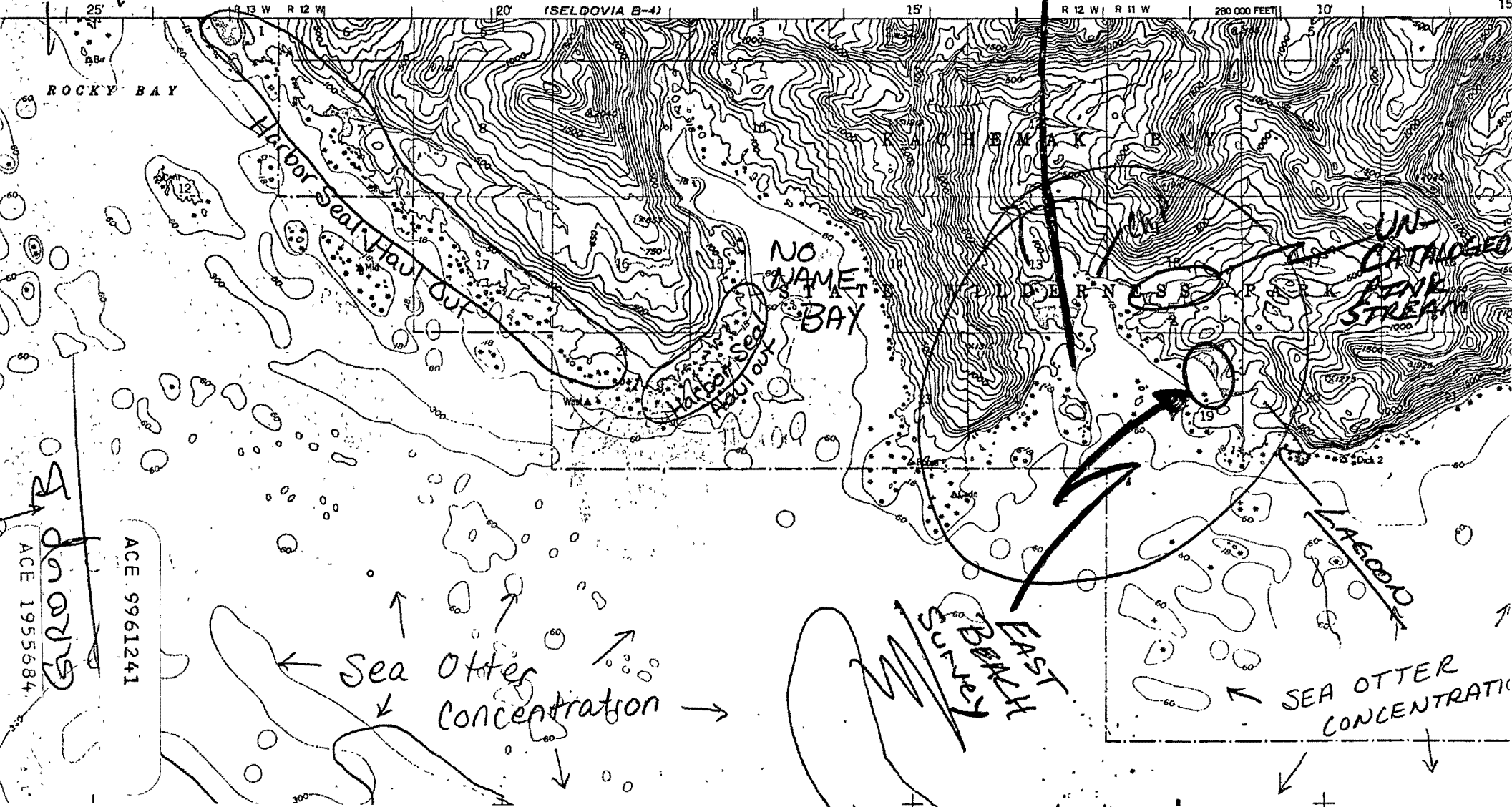
SEA OTTER  
CONCENTRATION



Uncataloged  
AFS

EAST BEACH  
"ONE HAUL BAY"  
4/11/90

SELDOVIA (A-4) QUADRANGLE  
ALASKA  
1:63 360 SERIES (TOPOGRAPHIC)



Donors  
ACE 1955684  
ACE 9961241

Sea Otter  
concentration

EAST BEACH  
SURVEY

SEA OTTER  
CONCENTRATION

NOT A STREAM

FISH HABITAT ASSESSMENT FORM



Nuka Bay, WEST ARM, Surprise Bay  
(small Bight 1 mile NE Artadne Isl)

1 REGION: 2 PWS 3 KP, CI 4 K, AP 5 OBSERVER(S) Doug Hill, Rick Randall

6 SITE NO. 6-4 7 AERIAL PHOTO NO. \_\_\_\_\_ 8 CAT NO. \_\_\_\_\_

9 STREAM NAME \_\_\_\_\_ 10 LAT \_\_\_\_\_ 11 LONG \_\_\_\_\_

12 DATE 8/4/89 13 TIME 1200 noon 14 TIDE: Low slack Flood High slack Ebb

BS

15 CATALOGED ANADROMOUS STREAM? Y N 16 ANAD. FISH FOUND? Y N

17 OIL FOUND IN STREAM? Y N 18 OIL FOUND NEAR STREAM (1 MI.)? Y N

19 OIL SAMPLES TAKEN? Y N 20 ID NOS. \_\_\_\_\_

21 35 mm PICTURES TAKEN? Y N 22 ROLL NO(S). \_\_\_\_\_

23 EXPOSURE NO. \_\_\_\_\_ 24 DESCRIPTION

pls squeeze into MAD, BAD.  
Method: Ground  
Site of none  
segment: -B-  
ACE 9961242

← OVER →

25 VIDEO FOOTAGE TAKEN? Y N 26 CASSETTE NO(S). \_\_\_\_\_

27 DESCRIPTION: \_\_\_\_\_

ACE 9961243

ACE 7380290



**ANADROMOUS FISH OBSERVATIONS**

PINK CHUM RED KING COHO DOLLY

28	Aerial							
29	Ground							

30 COMMENTS: Tempers observed off beach (pinks?)

**OIL OBSERVATIONS**

**EXTENT OF OIL:**

WITHIN STREAM      OUTSIDE STREAM

- 31 SURFACE COVERAGE
- 32 SURFACE THICKNESS
- 33 PENETRATION


**34 OIL DISTRIBUTION DIAGRAM  
(SHOW SAMPLING SITES)**

**35 PREDOMINANT  
SUBSTRATE TYPE:**

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

Foot surveyed: 200 yds. of beach - MERLE Potter (ADEC) informed us of oil in this area - apparently we were on the wrong beach.

No Oil Observed

36 COMMENTS: \_\_\_\_\_

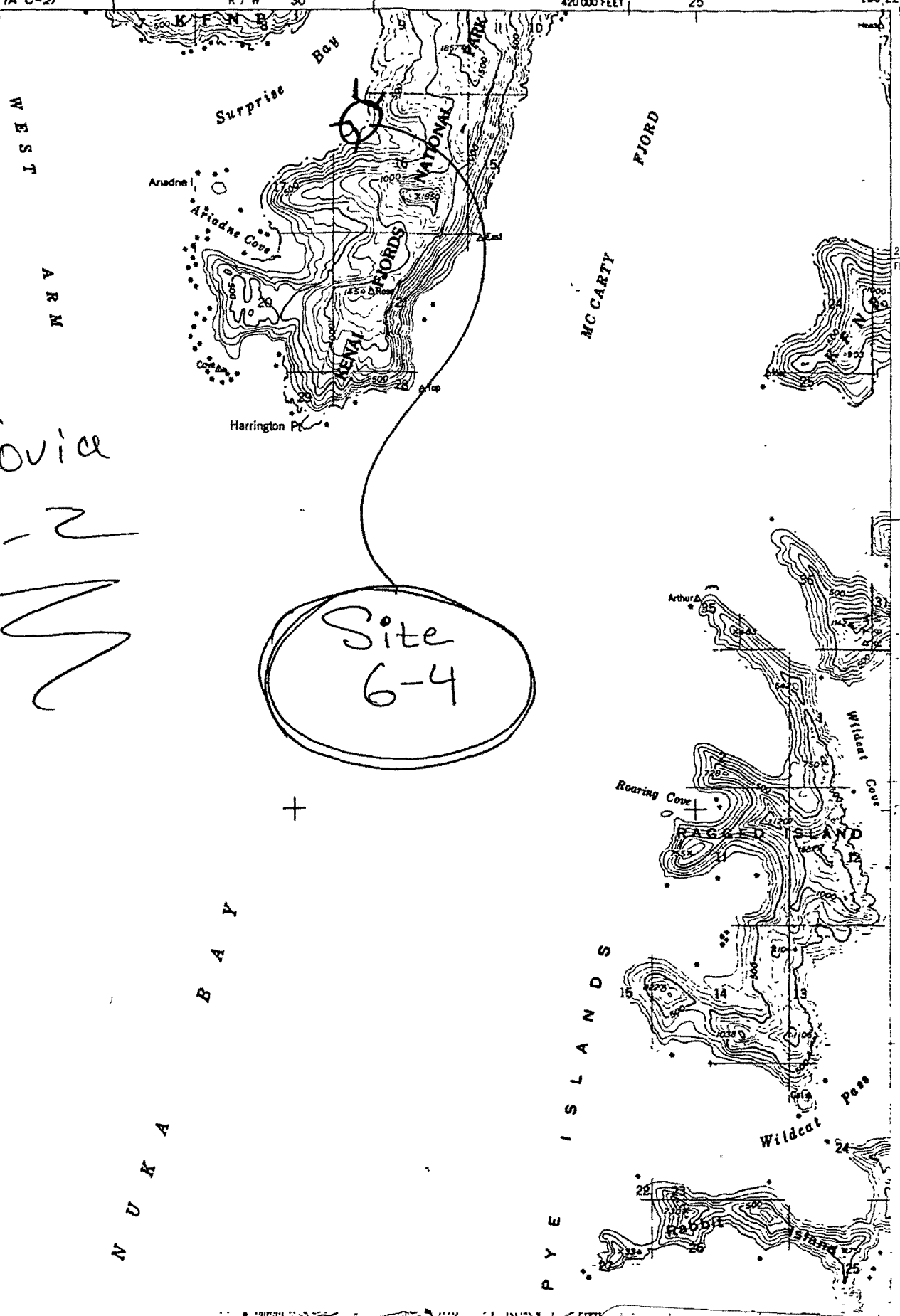
ACE 9961244

ACE 7380291

*Site 6/12*

Seldovia  
B-2

Site  
6-4



N U K A  
B A Y

P Y E  
I S L A N D S

ACE 9961245

ACE 7380292



Aerial Fish Survey

Stream # 242-43

10400 EAST  
10410 TAYLOR BAR  
10420 WEST  
10390 Sunday Hbr  
10380 Takoma Cove  
*Comments*

FISH HABITAT ASSESSMENT FORM

Port Dick Taylor Bay, Sunday Harbor

1 REGION: 2 PWS 3 KP, CI 4 K, AP 5 OBSERVER(S) Doug Hill, Rick Randall

6 SITE NO. 6-3A 7 AERIAL PHOTO NO. 8 CAT NO.

9 STREAM NAME 10 LAT 11 LONG

12 DATE 8/4/89 13 TIME 1435 14 TIDE: Low slack Flood High slack Ebb

15 CATALOGED ANADROMOUS STREAM?  N 16 ANAD. FISH FOUND?  N

17 OIL FOUND IN STREAM?  Y 18 OIL FOUND NEAR STREAM (1 MI.)?  Y

19 OIL SAMPLES TAKEN?  Y 20 ID NOS.

Aerial Fish Survey ONLY

21 35 MM PICTURES TAKEN?  Y 22 ROLL NO(S).

23 EXPOSURE NO. 24 DESCRIPTION

Aerial Fish Survey ONLY

LOVER →

25 VIDEO FOOTAGE TAKEN?  Y N 26 CASSETTE NO(S).

27 DESCRIPTION:

AS

ANADROMOUS FISH OBSERVATIONS

	PINK	CHUM	RED	KING	COHO	DOLLY			
18	10420 → 200	20	AD. 11/11/11 10/2/11/11						
	10410 → 0								
	10400 → 600								
	Aerial								
	10390 → 80 (Aerial)								
19	Ground	∅							

20 COMMENTS: Aerial Survey Only

---



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OIL OBSERVATIONS

EXTENT OF OIL:

	WITHIN STREAM	OUTSIDE STREAM
31 SURFACE COVERAGE		
32 SURFACE THICKNESS		
33 PENETRATION		

34 OIL DISTRIBUTION DIAGRAM (SHOW SAMPLING SITES)

- 35 PREDOMINANT SUBSTRATE TYPE:
1. Bedrock
  2. Boulder
  3. Cobble
  4. Gravel
  5. Sand
  6. Mud
  7. Other \_\_\_\_\_

36 COMMENTS: \_\_\_\_\_

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ACE 9961247

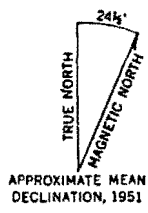


SELDOVIA  
B-3  
ple



(SELDOVIA A-4)

Mapped, edited, and published by the Geological Survey  
Control by NOS/NOAA  
Topography by photogrammetric methods from aerial photographs  
taken 1951 Map not field checked  
Selected hydrographic data compiled from USC&GS Charts  
8530 (1951) and 8531 (1951) This information is not intended  
for navigational purposes  
Universal Transverse Mercator projection, 1927 North American datum  
10,000-foot grid based on Alaska coordinate system, zone 4  
1000 metre Universal Transverse Mercator grid ticks,  
zone 5, shown in blue  
Land lines represent unsurveyed and unmarked locations  
predetermined by the Bureau of Land Management  
Folio S-16, Seward Meridian



CONTOUR  
DOTTED LINES R  
NATIONAL GEODS  
DEPTH CURVES IN FEET  
SHORELINE SHOWN REPRESENTS  
THE AVERAGE RANGE

FOR SALE BY U.S.  
FAIRBANKS, ALASKA 99701, DENVER,  
A FOLDER DESCRIBING TOPOGRAPHY

ACE 9961248

ACE 7380298

SITE 5-6

Surveyed this beach as an indicator beach.

Beach Survey

NOT A SALMON STREAM

FISH HABITAT ASSESSMENT FORM

Cook Inlet - West Side => South Facing Beach immediately EAST of mouth of Iniskin Bay.

REGION: PWS KP, CI K, AP OBSERVER(S) Doug Hilly Lee Glenn

SITE NO. 5-6 AERIAL PHOTO NO. CAT NO.

STREAM NAME LAT LONG

DATE 7/27/89 TIME 1650 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. Observed

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

EXPOSURE NO. DESCRIPTION

Foot Surveyed Approximately

1/2 to 1 mile of Beach

VIDEO FOOTAGE TAKEN? Y N CASSETTE NO(S)

DESCRIPTION:

ACE 9961249 +15

ACE 7380270

BS



**ANADROMOUS FISH OBSERVATIONS**

	PINK	CHUM	RED	KING	COHO	DOLLY		
28 Aerial								
29 Ground								

30 COMMENTS: \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

**OIL OBSERVATIONS**

**EXTENT OF OIL:**

WITHIN STREAM                      OUTSIDE STREAM

31 SURFACE COVERAGE  
 32 SURFACE THICKNESS  
 33 PENETRATION

WITHIN STREAM	OUTSIDE STREAM

**34 OIL DISTRIBUTION DIAGRAM  
 (SHOW SAMPLING SITES)**

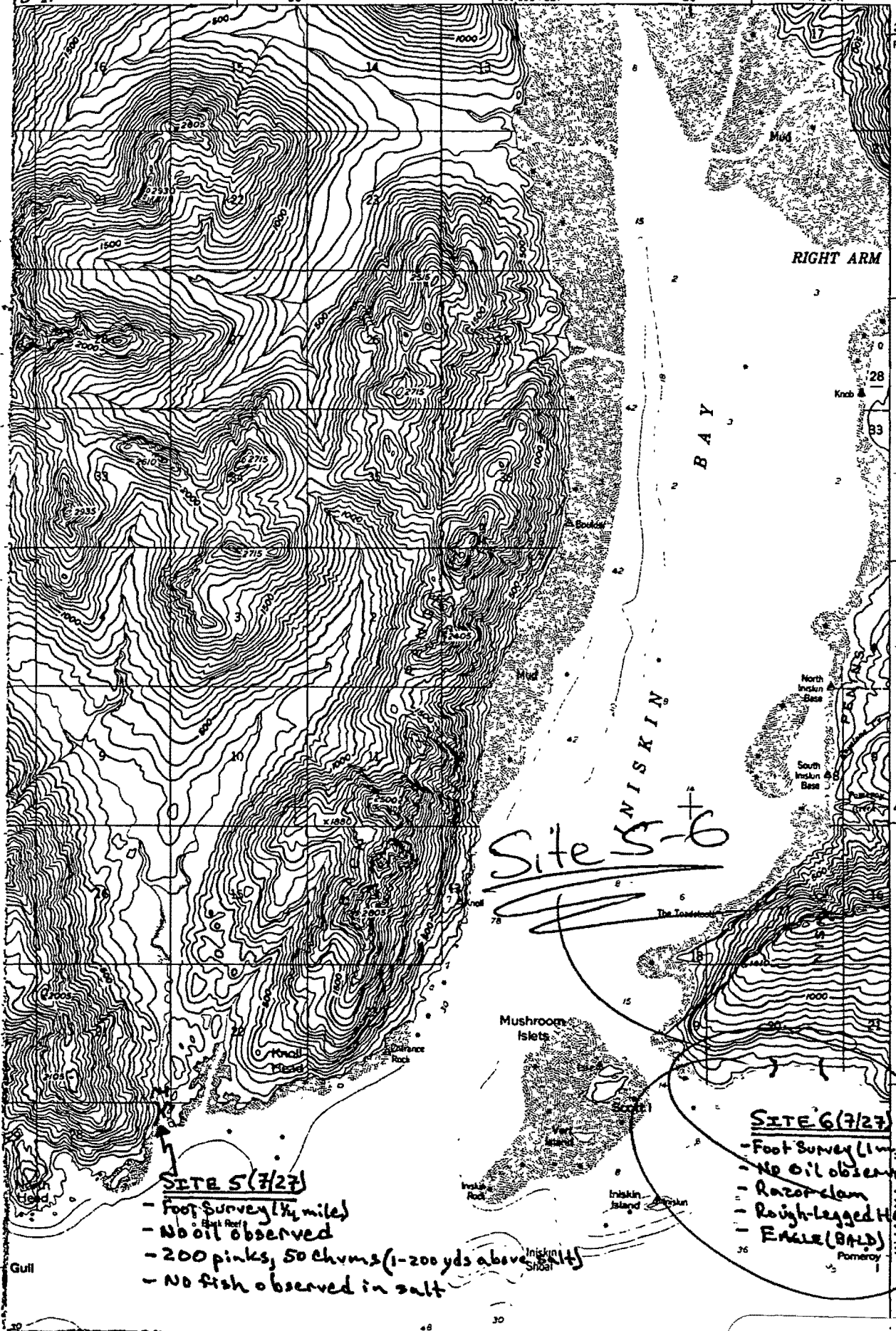
35 **PREDOMINANT  
 SUBSTRATE TYPE:**

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

*Site 5*

*BEACH  
 Spot Check  
 No Stream*

36 COMMENTS: \_\_\_\_\_ ACE 7380271



*Handwritten:* E. Gramm  
C-2

*Handwritten:* Site 5-6

**SITE 5 (7/27)**

- Foot Survey (1/4 mile)
- No oil observed
- 200 pinks, 50 chums (1-200 yds above salt)
- No fish observed in salt

**SITE 6 (7/27)**

- Foot Survey (1/4 mile) BEACH
- No oil observed
- Razor clam
- Rough-legged Hawk
- EAGLE (BALD)

ACE 9961251 -15

ACE 7380272



NOT A STREAMFUNCTION.  
TWO BEACHES: CD019, CD016, both w/ 1 mile of 26210000.

ASC NUMBER: 262-10-10100 SEGMENT NUMBER: CD-019 YR CATALOGED:  
 LOCATION: Cape Douglas, South Base CD-16  
 TEAM NAME:  
 KODIAK K-UNIT: LOCAL STREAM #:  
 USGS QUADRANGLE: AFDGNAK D-5  
 SHORELINE TYPE: Beach ALL SEGMENTS:  
 WAVE EXPOSURE: High LATITUDE:  
 LONGITUDE:  
 LEGAL:

ASC NUMBER:  
 SURVEY TYPE: WAB  
 METHOD: FOOT  
 DATE: 8/13/89  
 START TIME: 1400  
 STOP TIME: 1450  
 TEAM RECORDER: Doug Hill  
 OBSERVERS: Lee Adams  
 AGENCY(IES): ADF+G  
 PHOTOS TAKEN? y  
 Roll #: 8900H19H → Frames: 21, 22, 23, 24  
 8900H20H → 1-5  
 VIDEO TAKEN? Tape Number:  
 Counter Start:

SAMPLES TAKEN? N  
 SAMPLE I.D. NUMBERS: 1. 2. 3.  
 4. 5. 6.

	LENGTH m	WIDTH m	M2	%	THICK cm	PEN cm	OIL TYPE
SITE 1	91	6	546	10	2.5	8	MS, OP, ST, CT, CV
SITE 2	274	8	2192	95	2.5	—	MS, CT, CV, ST
SITE 3							
SITE 4							
SITE 5							

OVERALL OIL IMPACT: L

OIL IN STREAM CHANNEL? N

OIL ON BEACH WITHIN 50M OF STREAM MOUTH? N

SUBSTRATE

Bedrock	Granule
Boulder	Sand
Cobble	Silt
Pebble	Veget.

SPECIES	Tundra SWANS	Brown Bear			
COUNT	2	1			

COMMENTS: Site I ⇒ within 1 mile <sup>west</sup> of Anadromous stream, sporadic splashes of oil 1/4" x 1/4" to 5" x 8". Crusty outer layer with light brown mousse beneath.  
CD-19  
 Site II ⇒ ~~sporadic~~ within one mile <sup>east</sup> of Anadromous stream.  
CD-16 Sporadic patches of pooled mousse (.5 cm to 2.5 cm). Found at MITZ to VITZ. Boulders/cobbles thoroughly painted with oil.  
 Heavily oiled pom pom found at site # II.  
 Band of oil engulfs fresh water runoff - Flow did NOT allow retention of oil.  
 Site # 1 is 70% cobble and 30% pebble.  
 Site # 2 is 40% bedrock, 30% boulder, 30% cobble

FISH HABITAT ASSESSMENT FORM

Kamishak Bay - BASE of CAPE Douglas (South base)

1 REGION: 2 PWS KP, CT 4 K, AP 6 OBSERVER(S) Doug Hill, Lee Glenn

8 SITE NO. 10-2 9 AERIAL PHOTO NO. \_\_\_\_\_ 10 CAT NO. 262-10-10100

11 STREAM NAME \_\_\_\_\_ 12 LAT \_\_\_\_\_ 13 LONG \_\_\_\_\_

14 DATE 8/13/89 15 TIME 1440 16 TIDE: Low slack Flood High slack NDB

17 CATALOGED ANADROMOUS STREAM? N 18 ANAD. FISH FOUND? Y

19 OIL FOUND IN STREAM? Y 20 OIL FOUND NEAR STREAM (1 MI.)? N

21 OIL SAMPLES TAKEN? Y 22 ID NOS. \_\_\_\_\_

23 35 MM PICTURES TAKEN? N 24 ROLL NO(S) 89DDH19H

25 EXPOSURE NO. 26 DESCRIPTION

W/in 1 mile to south of CAT. stream

W/in 1 mile to east of CAT. stream

- 21, 22 W/in 1 mile of stream / typical oil found in vicinity of shipwreck
- 23 mousse floating on tidepool surface
- 24 heavily oiled porous pum.
- 1, 2, 3 oiled / thoroughly boulders
- 4 Aerial of oiled boulders in photos 1, 2, 3.
- 5 Aerial of oil south shore Cape Douglas

27 VIDEO FOOTAGE TAKEN? Y 28 CASSETTE NO(S) \_\_\_\_\_

29 DESCRIPTION: \_\_\_\_\_

ACE 9961253

ACE 7380338



ANADROMOUS FISH OBSERVATIONS

	PINK	CHUM	RED	KING	COHO	DOLLY		
28 Aerial								
29 Ground								

30 COMMENTS: Stream too silty to observe fish  
However, 1 Brown Bear near mouth of stream.

2 Swans at mouth of stream

OIL OBSERVATIONS

SITE  
10-2

EXTENT OF OIL:

	WITHIN STREAM	OUTSIDE STREAM
31 SURFACE COVERAGE		
32 SURFACE THICKNESS	SEE MAP Following	
33 PENETRATION		

34 OIL DISTRIBUTION DIAGRAM  
(SHOW SAMPLING SITES)

35 PREDOMINANT  
SUBSTRATE TYPE:

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

SEE MAP  
FOLLOWING  
&  
PHOTOS

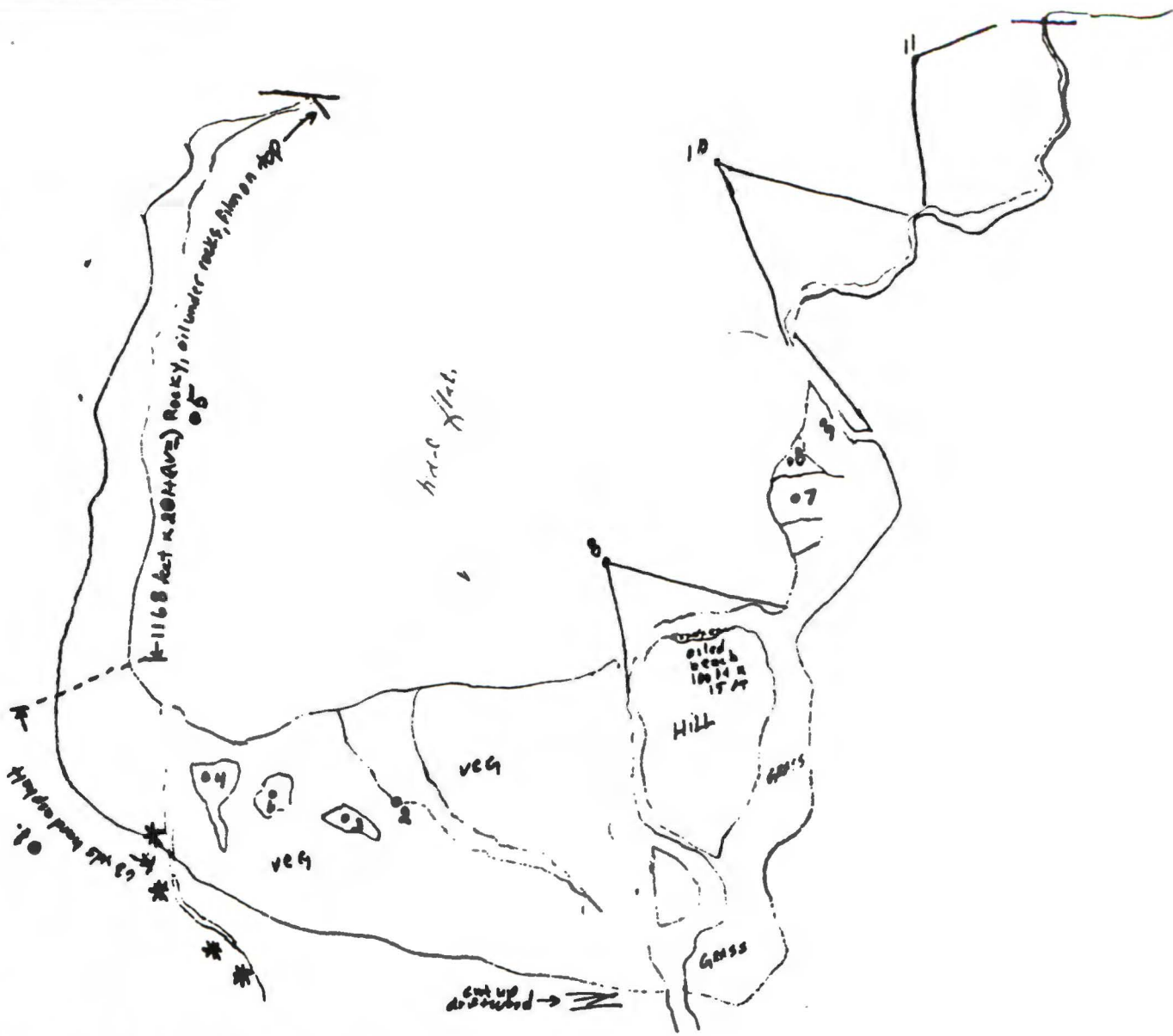
36 COMMENTS: \_\_\_\_\_

ACE 7380339

ACE 9961254







\* oiled cut up driftwood piles 6ft high x 12ft wide

OILED AREAS

1. 63 yards x 25ft asphalt (cobble)
2. 200ft x 3ft asphalt + subsurface oil (Tide Flat)
3. 30ft x 12ft asphalt + subsurface oil (Tide Flat)
4. 23 yds x 7yds asphalt w/oil (Tide Flat)
5. 1168 feet tar, oiled undersides of rocks (variable width 12-20 feet) (Rocky)
6. 30 x 30 feet asphalt (Tide Flat)
7. 20 yds x 15 yds (Tide Flat)
8. 123 yds x 4 yds (except 100ft x 30ft, cobble beach) Rocky (oiled large size rocks)
9. 18 yds x 2 yds, asphalt w/oil (Tide Flat)
10. 308 feet Rock coastline of oiled rocks (oil up rocks approx 4-6 feet)
11. 490 feet Rock coastline of oiled rocks esp. in small ones (oil up rocks approx 4-6 feet)

**TB-3 HIGH TIDE = 7/27/89**

Notes: Areas # 5, 2, 3, 4, 6, 7, 8, 9, 10, + 11 could all use some additional cleaning. significant oil on rocks in Area 8, and on rocks on 10 + 11

SHAW ISLAND

Not A STREAM/seal HAUL OUT

ASC NUMBER: \_\_\_\_\_ SEGMENT NUMBER: ? YR CATALOGED: \_\_\_\_\_  
 LOCATION: Kamishak Bay  
 DAM NAME: \_\_\_\_\_  
 KUNIT: \_\_\_\_\_ LOCAL STREAM #: \_\_\_\_\_  
 QUADRANGLE: Iliamna A1-Z  
 SHORELINE TYPE: Rocky Platform, Beach ALL SEGMENTS: \_\_\_\_\_  
 WAVE EXPOSURE: High

ASC NUMBER: \_\_\_\_\_  
 SURVEY TYPE: BS  
 METHOD: FOOT  
 DATE: 8 / 13 / 89  
 START TIME: 1615  
 STOP TIME: 1640

TEAM RECORDER: Doug Hill  
 OBSERVERS: Lee Glendon  
 AGENCY (IES): ADF46  
 PHOTOS TAKEN? \_\_\_\_\_  
 Roll #: 8900H20H Frames: 2, 2, 2, 3  
 VIDEO TAKEN? \_\_\_\_\_ Tape Number: 89LP6014H  
 Counter Start: 1712 → 1770

SAMPLES TAKEN?  
 SAMPLE I.D. NUMBERS: 1. 00H/LPG-8/13/89-1615 2. \_\_\_\_\_  
 4. \_\_\_\_\_ 5. \_\_\_\_\_  
 6. \_\_\_\_\_

	LENGTH m	WIDTH m	M2	%	THICK cm	PEN cm	OIL TYPE
SITE 1	9.1	9.1	82.8	50	9.0	10.2	MS, OP, HOR
SITE 2	37	9.1	336.7	35	2.5	10.2	MS, OP, HOR, MOR ST
SITE 3							
SITE 4							
SITE 5							

OVERALL OIL IMPACT: N

OIL IN STREAM CHANNEL? NA  
 SUBSTRATE

OIL ON BEACH WITHIN 50M OF STREAM MOUTH? NA

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

SPECIES					
COUNT					

COMMENTS: Flowing Fluid mousse found on southwest shore of Island (right at South Tip of Island)  
 No mention made of this at this time by anyone involved in EVOS

from log book: 5 seals on SE shore of Islands  
 2 Eagles " " " "

30" x 150' patch of oil ACE 9961257  
 30' x 30' (50%) patch among boulders/wash  
 Where chocolate brown mousse found from 1" to 3/4" thick amongst/between rocks, 120' oil saturated sand & gravel (penetration to 4")



1989 AFHS

Site 12-3

TAROKA - NE HEAD

ASC NUMBER: 232-90-10340	SEGMENT NUMBER:	YR CATALOGED:
LOCATION:		
TEAM NAME:		LATITUDE: 59 <del>00</del> 37.44
NAIAC K-UNIT:	LOCAL STREAM #:	LONGITUDE: 150 08 07
USGS QUADRANGLE: Seldovia C-1		LEGAL: S 65 SW 28
SHORELINE TYPE:	ALL SEGMENTS:	
WAVE EXPOSURE:		

ASC NUMBER:	TEAM RECORDER: Doug Hill
SURVEY TYPE: 98	OBSERVERS: Rick Randall
METHOD: Foot	AGENCY(IES): ADF&G
DATE: 8 / 22 / 89	PHOTOS TAKEN?
START TIME: 1400	Roll #: Frames: 2074 / 10/27/89
STOP TIME: 1410	VIDEO TAKEN? Tape Number:
	Counter Start:

SAMPLES TAKEN? *N*

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

	LENGTH m	WIDTH m	M2	%	THICK cm	PEN cm	OIL TYPE
SITE 1							
SITE 2							
SITE 3							
SITE 4							
SITE 5							

OVERALL OIL IMPACT: *N*

OIL IN STREAM CHANNEL? *N*

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

SUBSTRATE

Bedrock	Granuley
Boulder	Sand
Cobble	Silt
Pebble	Veget.

SPECIES	<del>600</del>	Pinks			
COUNT		600			

Foot surveyed the ~~Delta~~ Delta Area at mouth of stream.

COMMENTS: - Oil samples were taken within one mile <sup>to west</sup> of this stream on 9/3/89. ~~The oil was observed for 200 yds plus near the center of the head of Taroka Arm. Sporadic oil splatters~~

(See 9/3/89 survey). Pinks spawning in approx. 25 yds of intertidal creek area. An impassable waterfall is present at upper portion of this area --- Approx. 40 yds of creek present below falls at time of this survey.

FISH HABITAT ASSESSMENT FORM

TAROKA ARM - ~~NE~~ NE HEAD of BAY - Northern Bight

1 REGION: 2 PWS KP, CI 3 OBSERVER(S) Doug Hill, Lee Glenn

6 SITE NO. 12-3 7 AERIAL PHOTO NO. 19, 20, 21, 22, 23 8 CAT NO. NC

9 STREAM NAME \_\_\_\_\_ 10 LAT 59° 37' <sup>44</sup> 11 LONG 150° 08' <sup>7</sup>

12 DATE 8/22/89 13 TIME 1400 14 TIDE: Low slack Flood High slack Ebb

15 CATALOGED ANADROMOUS STREAM? Y  N 16 ANAD. FISH FOUND?  N

17 OIL FOUND IN STREAM? Y  N 18 OIL FOUND NEAR STREAM (1 MI.)?  N

19 OIL SAMPLES TAKEN?  N 20 ID NOS. ROR/DDH-9/3/89-123B

21 35 mm PICTURES TAKEN?  N 22 ROLL NO(S) 89-DDH-027

23 EXPOSURE NO.	24 DESCRIPTION
	No oil observed on 8/22/89
	- However oil samples were take within
	one mile on 9/3/89 (sample site 4 on 9/3/89 -
	As shown on map on opposite side of page)

25 VIDEO FOOTAGE TAKEN?  N 26 CASSETTE NO(S) 89-ROR-001-H-Videc

27 DESCRIPTION: Vide of sample site - within 1 mile of stream site  
No. 12-3 (sample site to SW of 12-3) ACE 9961259

sample taken on 9/3/89



ANADROMOUS FISH OBSERVATIONS

PINK CHUM RED KING COHO DOLLY

28	Aerial	600						
29	Ground	600						

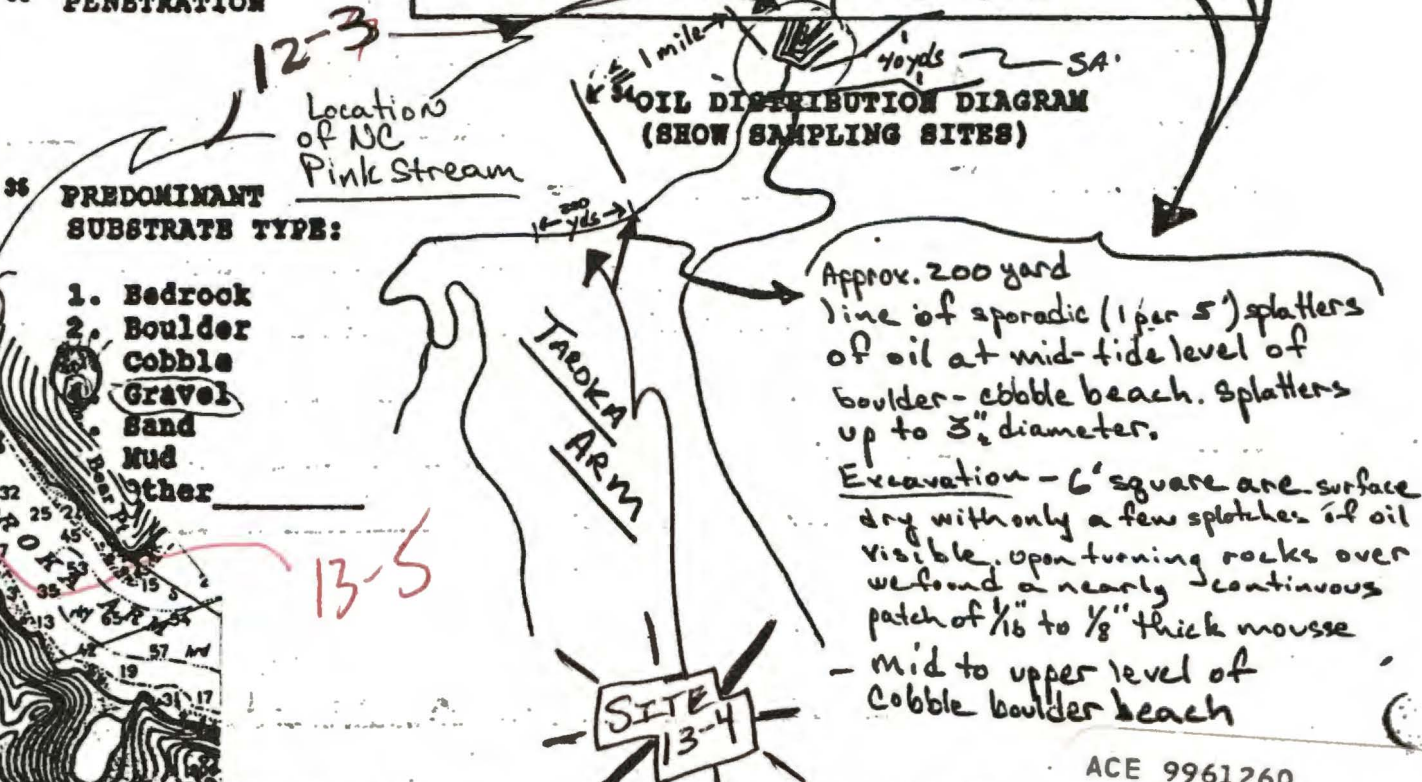
30 COMMENTS: 25 yard stretch of Intertidal spawninge Approximately 40 yards above saltwater is an impassable waterfall

OIL OBSERVATIONS

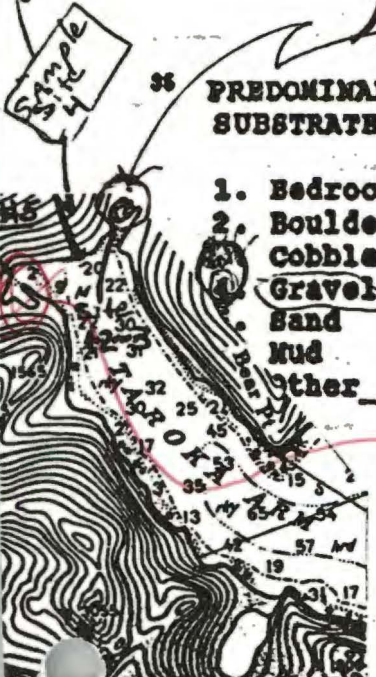
Site 12-3

EXTENT OF OIL:

	WITHIN STREAM	OUTSIDE STREAM
31 SURFACE COVERAGE	None	
32 SURFACE THICKNESS	Observed	1 to 3mm
33 PENETRATION		To 8"-10"



4th Sample Site ON 199



30 COMMENTS: Oil Found Approx 1/2 mile to SW of Stream

ACE 9961260

ACE 7380395











FISH HABITAT ASSESSMENT FORM

Kamishak Bay - BASE of CAPE Douglas (south base)

'REGION: 'PWS 'KP, CI 'K, AP 'OBSERVER(S) Doug Hill, Lee Gleason

'SITE NO. 10-2 'AERIAL PHOTO NO. 'CAT NO. 262-10-10100

'STREAM NAME 'LAT 'LONG

'DATE 8/13/89 'TIME 1440 'TIDE: Low slack Flood High slack (HDD)

'CATALOGED ANADROMOUS STREAM? (2) N 'ANAD. FISH FOUND? Y (2)

'OIL FOUND IN STREAM? Y (2) 'OIL FOUND NEAR STREAM (1 MI.)? (2) N

'OIL SAMPLES TAKEN? Y (2) 'ID NOS.

'35 mm PICTURES TAKEN? (2) N 'ROLL NO(S) 89DDH19H 89DDH20H

'EXPOSURE NO. 'DESCRIPTION

w/in 1 mile to south of CAT. stream

w/in 1 mile to east of CAT. stream

21, 22	w/in 1 mile of stream / typical oil found in vicinity of shipwreck
23	mousse floating on tidepool surface
24	heavily oiled porous pum.
1, 2, 3	oiled / thoroughly boulders
4	Aerial of oiled boulders in photos 1, 2, 3
5	Aerial of oil south shore Cape Douglas

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

'DESCRIPTION: ACE 9961263



ANADROMOUS FISH OBSERVATIONS

PINK CHUM RED KING COHO DOLLY

28	Aerial							
29	Ground							

30 COMMENTS: Stream too silty to observe fish. However, 1 Brown Bear near mouth of stream.

2 Swans at mouth of stream

OIL OBSERVATIONS

SITE 10-2

EXTENT OF OIL:

	WITHIN STREAM	OUTSIDE STREAM
31 SURFACE COVERAGE		
32 SURFACE THICKNESS	SEE MAP	
33 PENETRATION	Following	

34 OIL DISTRIBUTION DIAGRAM (SHOW SAMPLING SITES)

35 PREDOMINANT SUBSTRATE TYPE:

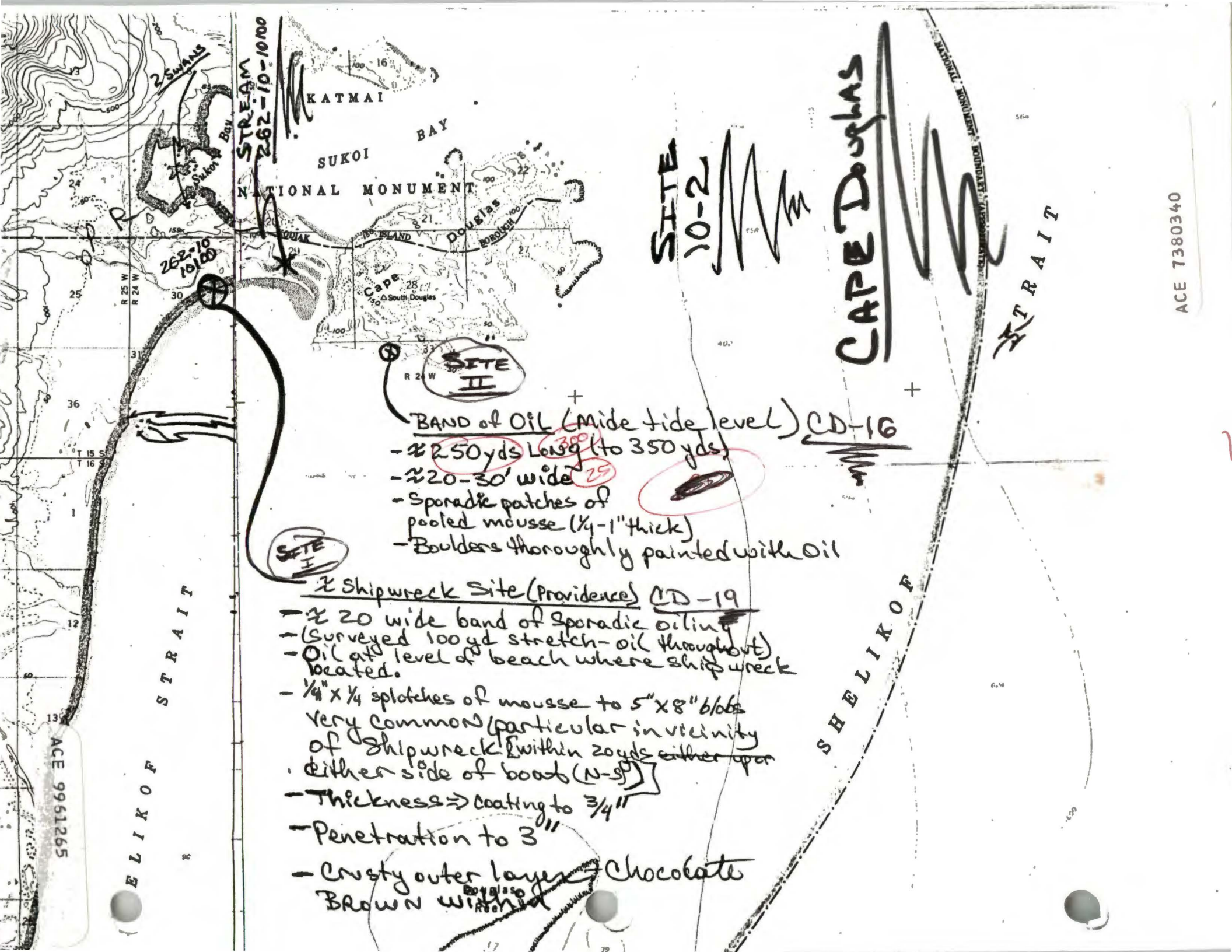
- 1. Bedrock
- 2. Boulder
- 3. Cobble
- 4. Gravel
- 5. Sand
- 6. Mud
- 7. Other \_\_\_\_\_

SEE MAP FOLLOWING & PHOTOS

ACE 9961264

36 COMMENTS:

ACE 7380339



262-10-1000  
STREAM

KATMAI

SUKOI

BAY

NATIONAL MONUMENT

DOUGLAS

Cape

SITE II

BAND of OIL (Mid tide level) CD-16

- $\approx$  250 yds Long (to 350 yds)
- $\approx$  20-30' wide
- Sporadic patches of pooled mousse (1/4-1" thick)
- Boulders thoroughly painted with oil

SITE I

Shipwreck Site (Providence) CD-19

- $\approx$  20 wide band of sporadic oiling
- (Surveyed 100 yd stretch - oil throughout)
- Oil at level of beach where shipwreck beached.
- 1/4" x 1/4" splotches of mousse to 5" x 8" blobs very common (particular in vicinity of shipwreck [within 20 yds either side of boat (N-S)])
- Thickness  $\Rightarrow$  coating to 3/4"
- Penetration to 3"
- Crusty outer layer Chocolate Brown within

CAPE Douglas

STRAIT

SHELIKOF

ACE 9961265

ACE 7380340



Site 1

ASC NUMBER: SEGMENT NUMBER: Unit 11 YR CATALOGED:  
 LOCATION: Outer Coast, Kenai Peninsula, Dogfish Bay #10320 #10325  
 STREAM NAME: - /  
 KODIAK K-UNIT: LOCAL STREAM #: LATITUDE: 59 15 0; 59 15 0  
 U QUADRANGLE: Seldovia B-5 LONGITUDE: 151 51 32; 151 51 30  
 SHORELINE TYPE: BEACH, Cove. ALL SEGMENTS: LEGAL:  
 WAVE EXPOSURE: M

ASC NUMBER: 241-40-10320 ~~10320~~  
 SURVEY TYPE: 90 Pre-screening  
 METHOD: Ground/foot  
 DATE: 4/18/90  
 START TIME: 1540  
 STOP TIME: 1640  
 TEAM RECORDER: Doug Hill  
 OBSERVERS: Susan McLane (F&G)  
 Jackie Botkin (USCG)  
 AGENCY (IES): AOF&H, USCG  
 PHOTOS TAKEN?  
 Roll #: 90 00H07H Frames: 9, 10, 11, 12  
 VIDEO TAKEN?  Tape Number:  
 Counter Start:

SAMPLES TAKEN?  
 SAMPLE I.D. NUMBERS: 1. Dogfish DOH-4/18/1600 2.  
 3.  
 4. 5.  
 6.

	LENGTH m	WIDTH m	M2	%	THICK cm	PEN cm	OIL TYPE
SITE 1	15"	12"			1"		PT
SITE 2	4"	4"			1"		PT
SITE 3							
SITE 4							
SITE 5							

OVERALL OIL IMPACT:  L

OIL IN STREAM CHANNEL?

OIL ON BEACH WITHIN 50M OF STREAM MOUTH?

SUBSTRATE

Bedrock	Granule
Boulder	Sand 20%
Cobble 20%	Silt
Pebble 60%	Veget.

SPECIES					
COUNT					

COMMENTS: Transfer Comments from "90" MAO form to this Comments section.

Not Included on A, B, or C group list

Pre-screening

ADF&G MULTI-ASSESSMENT DATA FORM

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

METHOD: Aerial Ground Boat Seldovia Tides

3 DATE: 4-18-90 15 HIGH TIDE TIMES: 0820 1 21 TEAM RECORDER: Doug Hill

4 START TIME: 1540 16 HIGH TIDE HTS: 13.1 1 22 OBSERVERS: Susan McLane

5 STOP TIME: 1640 17 LOW TIDE TIMES: 1457 1 23 AGENCY: ADF&G

6 SEGMENT #: Unit 10 18 LOW TIDE HTS: 3.9 1 24 PHOTOS TAKEN: Y N  
Jackie Botkin USCG

7 STATION #: \_\_\_\_\_ 19 TIDE HT AT SURVEY: \_\_\_\_\_ Roll #: \_\_\_\_\_ Frames: \_\_\_\_\_

8 K-UNIT: \_\_\_\_\_ Ebb Slack Flood Slack 25 VIDEO TAKEN: Y N TAPE#: \_\_\_\_\_

9 STAT AREA: 241-40 20 USCG QUAD: Seldovia A-5 Starts: \_\_\_\_\_ Ends: \_\_\_\_\_

10 LAT: 59° 14' 2 11 LONG: 151° 52.9 26 SAMPLES TAKEN? Y N Number  
Dogfish-DDH-4/18/90-1600  
011 ~~90-DDH-1600~~

12 SOURCE: Map Loran

13 LOCATION: Koyuktoilik AES 241-40-10320-E, 10325

14 DESCRIPTION: East side-lower Cook Inlet (Dogfish Bay)  
Surveyed Dogfish Narrows + outer spit BEACH  
EXTENT OF OIL

Sediment \_\_\_\_\_  
Biological \_\_\_\_\_  
Water \_\_\_\_\_

	SHORELINE				STREAM			
	L	W	M <sup>2</sup>	S	L	W	M <sup>2</sup>	S
27 SURFACE COVERAGE								
28 SURFACE THICKNESS								
29 PENETRATION								

30 OVERALL OIL IMPACT: N VL L M H

31 OIL TYPE: Pooled Mousse Tar Asphalt Sticky Stain

32 OILED DEBRIS? Y N

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

34 WAVE EXPOSURE: High Moderate Low

35 SUBSTRATE TYPE: Bedrock \_\_\_\_\_ Boulder \_\_\_\_\_ Cobble 20%  
Gravel 60% Sand 20% Mud/silt \_\_\_\_\_

36 CATALOGED ANAD. FISH SREAM? Y N

37 CATALOG # 241-40-10320  
241-40-10325

38 STREAM NAME: \_\_\_\_\_

39 OIL IN STREAM BED? Y N Did Not Survey

40 OIL ON STREAM BANKS? Y N

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

42 OIL WITHIN 1 MILE OF STREAM? Y N  
Where: Dogfish Narrows

43 ANADROMOUS FISH PRESENT? Y N

44 ANADROMOUS FISH OBSERVATION  
Species Aerial Ground


ACE 9961267

COMMENTS: Surveyed the outer beach-narrows-chase this spot presuming it may be an indicator as to what may have moved into head of bays this past winter.  
Observed one crusty surfaced mouse patty (12"x15"x1") and one 4"x4"x1" asphalt patty - South shore of Narrows.  
Surveyed Approx 1/2 mile of the outer beach on the north shore also.  
We will do a more comprehensive survey at a later date.

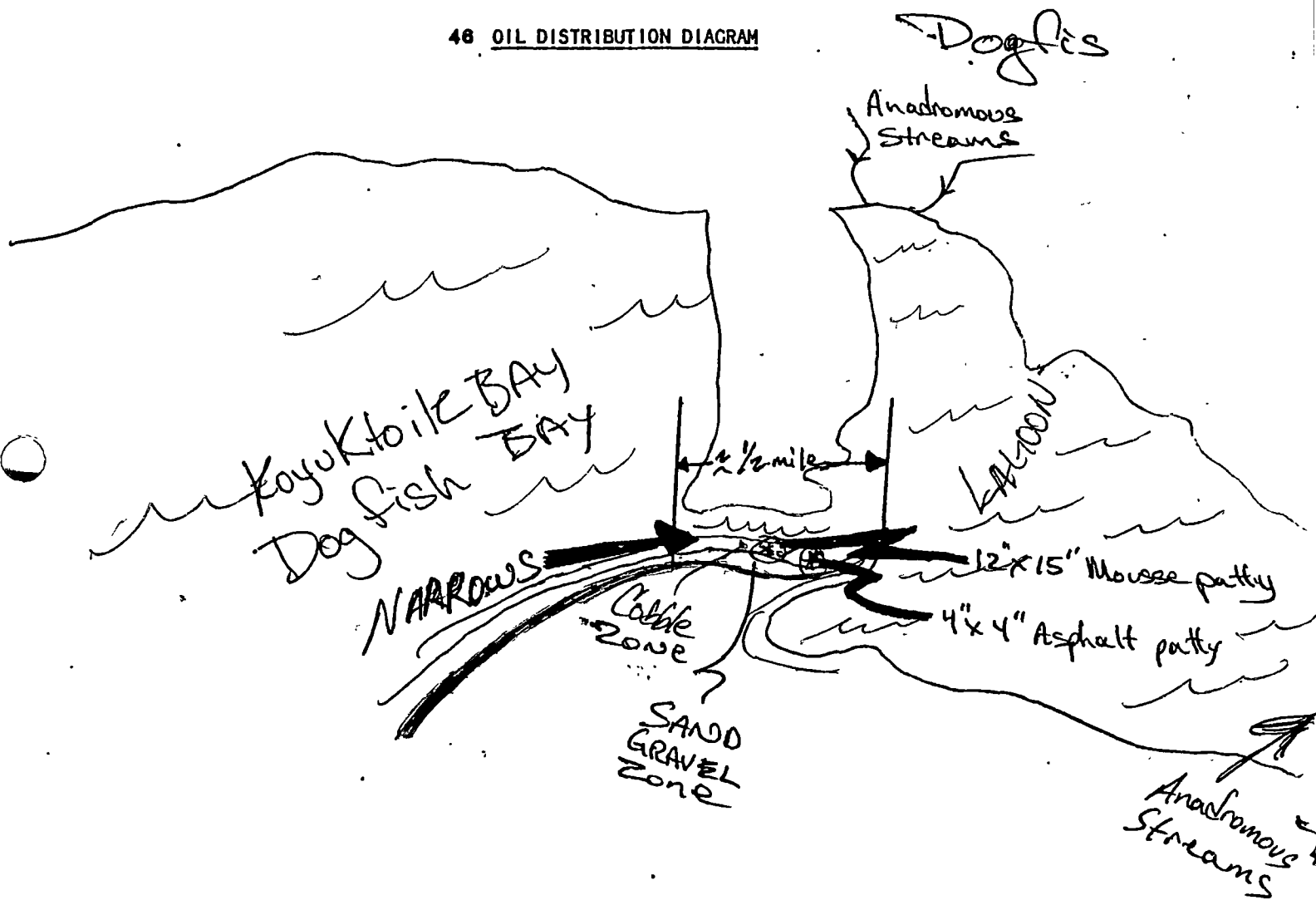
ACE 1955692



FRAME(S)

DESCRIPTION

48 OIL DISTRIBUTION DIAGRAM



~~No Anadscat Recommended~~

- = Sample taken
- = Photo frame # and shot direction.

ACE 9961268

ACE 1955693

Not Included on A, B, or C group list

Fixed Auck. 4/20/9

Pre-screening

ADF&G MULTI-ASSESSMENT DATA FORM

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

METHOD: Aerial Ground Boat Seldovia Tides

3 DATE: 4-18-90 16 HIGH TIDE TIMES: 0820 1 21 TEAM RECORDER: Doug Hill

4 START TIME: 1540 18 HIGH TIDE HTS: 13.1 1 22 OBSERVERS: Susan McLane

5 STOP TIME: 1640 17 LOW TIDE TIMES: 1457 1 23 AGENCY: ADF&G

6 SEGMENT #: Unit 10 18 LOW TIDE HTS: 3.9 1 24 PHOTOS TAKEN: Y N  
Sackie Botkin USCG

7 STATION #: \_\_\_\_\_ 19 TIDE HT AT SURVEY: \_\_\_\_\_ Roll #: \_\_\_\_\_ Frame: \_\_\_\_\_

8 K-UNIT: \_\_\_\_\_ Ebb Slack Flood Slack 25 VIDEO TAKEN: Y N TAPE#: \_\_\_\_\_

9 STAT AREA: 241-40 20 USCG QUAD: Seldovia A-5 Start: \_\_\_\_\_ End: \_\_\_\_\_

10 LAT: 59° 14' 2 11 LONG: 151° 52.9 26 SAMPLES TAKEN? Y N Number  
2011 90 DPH-1600 4/18/90-1600

12 SOURCE: Map Loran Sediment \_\_\_\_\_

13 LOCATION: Koyuktoalik AFS 241-40-10320 E 10325 Biological \_\_\_\_\_

14 DESCRIPTION: East side - lower Cook Inlet (Dogfish Bay) Water \_\_\_\_\_  
Surveyed → Dogfish Narrows + outer spit BEACH  
EXTENT OF OIL

	SHORELINE				STREAM			
	L	W	M <sup>2</sup>	%	L	W	M <sup>2</sup>	%
27 SURFACE COVERAGE								
28 SURFACE THICKNESS								
29 PENETRATION								

30 OVERALL OIL IMPACT: N VL L M H

31 OIL TYPE: Pooled Mousse Tar Asphalt Sticky Stain

32 OILED DEBRIS? Y N

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

34 WAVE EXPOSURE: High Moderate Low

35 SUBSTRATE TYPE: Bedrock \_\_\_\_\_ Boulder \_\_\_\_\_ Cobble 20%  
Gravel 60% Sand 20% Mud/silt \_\_\_\_\_

36 CATALOGED ANAD. FISH SREAM? Y N

37 CATALOG # 241-40-10320  
241-40-10325

38 STREAM NAME: \_\_\_\_\_

39 OIL IN STREAM BED? Y N *Did Not Survey*

40 OIL ON STREAM BANKS? Y N

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

42 OIL WITHIN 1 MILE OF STREAM? Y N

Where: Dogfish Narrows

43 ANADROMOUS FISH PRESENT? Y N

44 ANADROMOUS FISH OBSERVATION

Species	Aerial	Ground

ACE 9961269

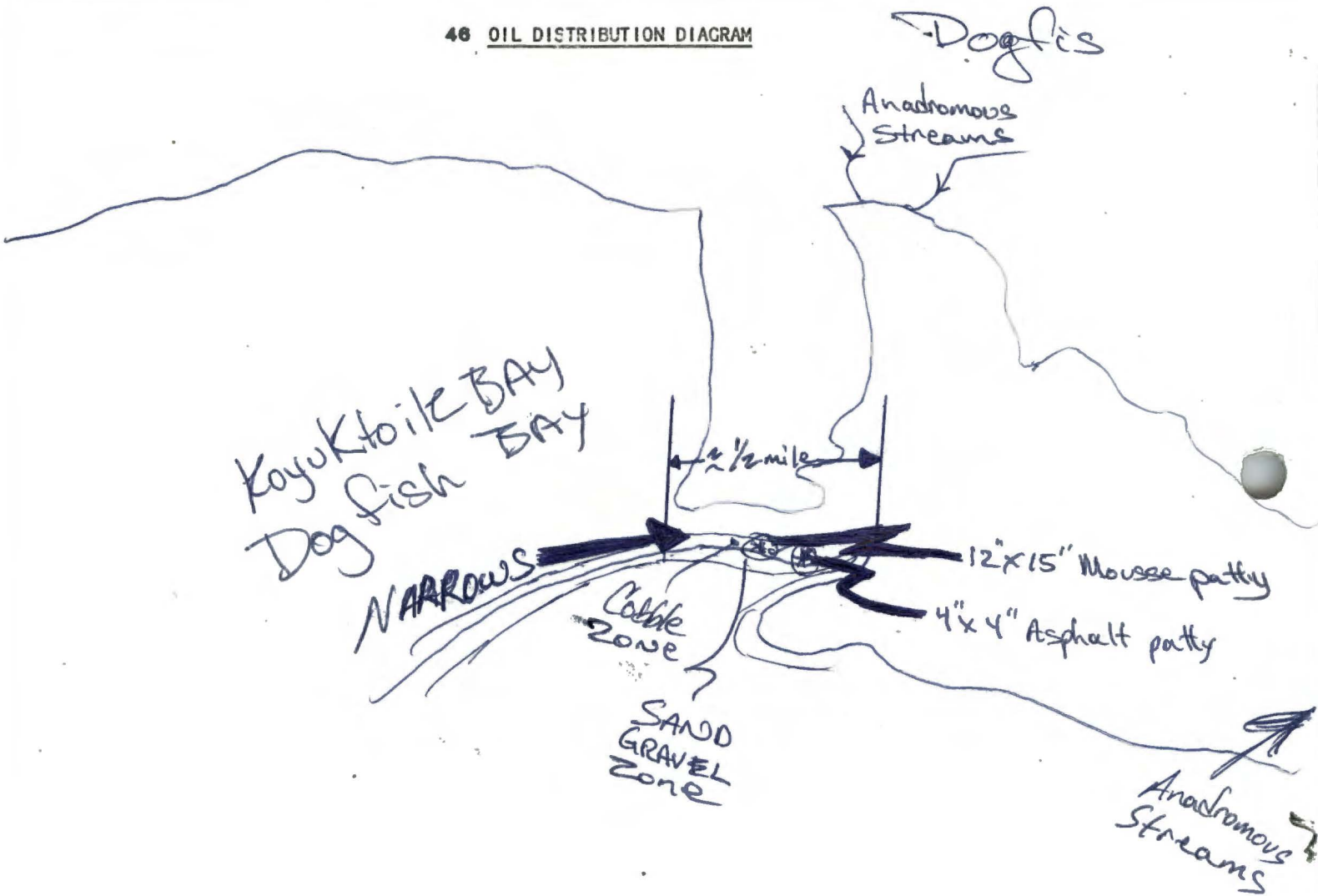
COMMENTS: Surveyed the outer beach - chose this spot presuming it may be an indicator as to what may have moved into head of bays this past winter.  
Observed one crusty surfaced mouse patty (12"x15"x1") and one 4"x4"x1" asphalt patty - South shore of Narrows. ACE 1941073  
Surveyed Approx 1/2 mile of the outer beach on the North shore Also. We will do a more comprehensive survey at a later date



FRAME(S)

DESCRIPTION

46 OIL DISTRIBUTION DIAGRAM



*\* No Anadscat Recommended*

- = Sample taken
- = Photo frame # and shot direction.

ACE 9961270

ACE 1941074

Site

ASC NUMBER: SEGMENT NUMBER: Unit 11 YR CATALOGED:  
 LOCATION: Outer Coast, Kenai Peninsula, Dogfish Bay #10320 #10325  
 STREAM NAME: -/ LATITUDE: 59 15 0; 59 15 0  
 DIAK K-UNIT: LOCAL STREAM #: LONGITUDE: 151 51 32; 151 51 40  
 USGS QUADRANGLE: Seldovia B-5 LEGAL:  
 SHORELINE TYPE: BEACH, Cove ALL SEGMENTS:  
 WAVE EXPOSURE: M

ASC NUMBER: 241-40-~~10320~~ 10325  
 SURVEY TYPE: 90 Pre-screening  
 METHOD: Ground/Poot  
 DATE: 4/18/90  
 START TIME: 1540  
 STOP TIME: 1640

TEAM RECORDER: Doug Hill  
 OBSERVERS: Susan McLane (F&G)  
 Jackie Botkin (USCG)  
 AGENCY (IES): AOF&G, USCG

PHOTOS TAKEN?  
 Roll #: 90 00407H Frames: 9, 10, 11, 12  
 VIDEO TAKEN? N Tape Number:  
 Counter Start:

SAMPLES TAKEN?  
 SAMPLE I.D. NUMBERS: 1. Dogfish DGH-4/18/-1600 2. 3.  
 4. 5. 6.

	LENGTH m	WIDTH m	M2	%	THICK cm	PEN cm	OIL TYPE
SITE 1	15"	12"			1"		PT
SITE 2	4"	4"			1"		PT
SITE 3							
SITE 4							
SITE 5							

OVERALL OIL IMPACT: VL

OIL IN STREAM CHANNEL? OIL ON BEACH WITHIN 50M OF STREAM MOUTH?

SUBSTRATE

Bedrock	Granule
Boulder	Sand 20%
Cobble 20%	Silt
Pebble 60%	Veget.

SPECIES					
COUNT					

COMMENTS: Transfer comments from "90" M A O form to this comments section.

*Nancy*  
 MAKE TWO  
 Separate entries,  
 one for each stream  
 10320 & 10325



Not Included on A, B, or C group list

Pre-screening

ADF&G MULTI-ASSESSMENT DATA FORM

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

METHOD: Aerial Ground Boat Seldovia Tides

3 DATE: 4-18-90 18 HIGH TIDE TIMES: 0820 21 TEAM RECORDER: Doug Hill

4 START TIME: 1540 19 HIGH TIDE HTS: 13.11 22 OBSERVERS: Susan McLane

5 STOP TIME: 1640 17 LOW TIDE TIMES: 1457 23 AGENCY: ADF&G

6 SEGMENT #: Unit 10 18 LOW TIDE HTS: 3.9 24 PHOTOS TAKEN: Y N  
S Jackie Botkin USCG

7 STATION #: \_\_\_\_\_ 19 TIDE HT AT SURVEY: \_\_\_\_\_ Roll #: \_\_\_\_\_ Frames: \_\_\_\_\_

8 K-UNIT: \_\_\_\_\_ Ebb Slack Flood Slack 25 VIDEO TAKEN: Y N TAPE#: \_\_\_\_\_

9 STAT AREA: 241-40 20 USCG QUAD: Seldovia A-5 Starts: \_\_\_\_\_ Ends: \_\_\_\_\_

10 LAT: 59° 14' 2 11 LONG: 151° 52.9 26 SAMPLES TAKEN? Y N Number  
Dogfish-DDH-4/18/90-1600

12 SOURCE: Map Loran Oil DDH-1600

13 LOCATION: Koyuktoik AES 241-40-10320 & 10325 Sediment \_\_\_\_\_

14 DESCRIPTION: East side - lower Cook Inlet (Dogfish Bay) Biological \_\_\_\_\_  
Surveged => Dogfish Narrows + outer spit BEACH Water \_\_\_\_\_

	SHORELINE				STREAM			
	L	W	H <sup>2</sup>	S	L	W	H <sup>2</sup>	S
27 SURFACE COVERAGE								
28 SURFACE THICKNESS								
29 PENETRATION								

36 CATALOGED ANAD. FISH SREAM? Y N

37 CATALOG # 241-40-10320  
241-40-10325

38 STREAM NAME: \_\_\_\_\_

39 OIL IN STREAM BED? Y N Did Not Survey

40 OIL ON STREAM BANKS? Y N

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

42 OIL WITHIN 1 MILE OF STREAM? Y N

30 OVERALL OIL IMPACT: N VL L M H

31 OIL TYPE: Pooled Mousse Tar Asphalt Sticky Stain

32 OILED DEBRIS? Y N

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

34 WAVE EXPOSURE: High Moderate Low

35 SUBSTRATE TYPE: Bedrock \_\_\_\_\_ Boulder \_\_\_\_\_ Cobble 20%  
Gravel 60% Sand 20% Mud/silt \_\_\_\_\_

Where: Dogfish Narrows

43 ANADROMOUS FISH PRESENT? Y N

44 ANADROMOUS FISH OBSERVATION

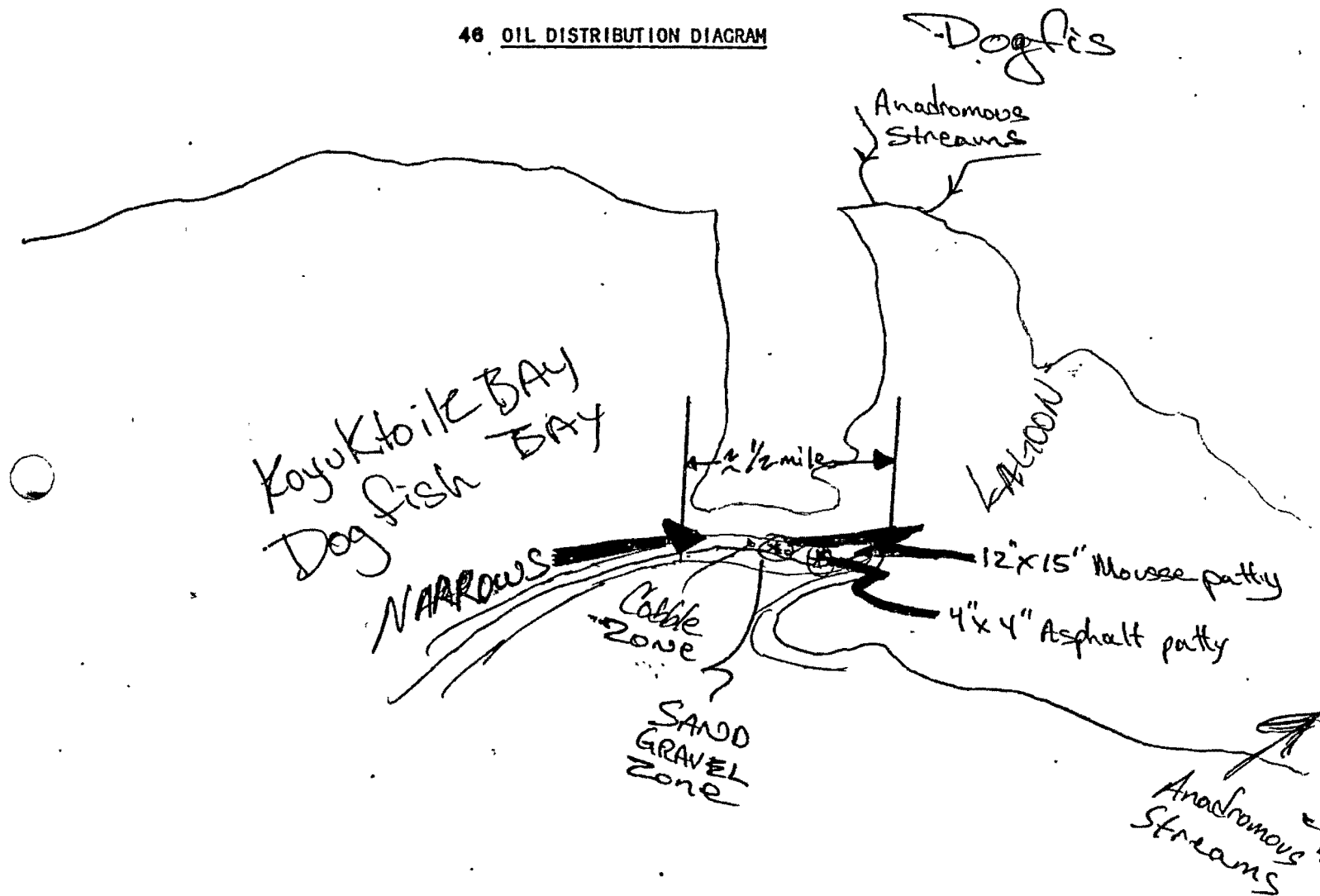
Species	Aerial	Ground

COMMENTS: Surveged the outer beach-narrows - chose this spot presuming it may be an indicator as to what may have moved into head of bays this past winter.  
Observed one crusty surfaced mouse patty (12"x15"x1") and one 4"x4"x1" asphalt patty - South shore of Narrows.  
Surveged Approx 1/2 mile of the outer beach on the North shore also  
We will do a more comprehensive survey at a later date

FRAME(S)

DESCRIPTION

46 OIL DISTRIBUTION DIAGRAM



~~No Anadscat Recommended~~

- ☐ Sample taken
- ☐ Photo frame # and shot direction.



# ANDERSEN BEACH

## ADF&G MULTI-ASSESSMENT DATA FORM

1 SURVEY TYPE:  SS  DS  TS  AVS  SCHA  MMHS  PTA

2 REGION: PWS  KP,CT  K,AP

METHOD: Aerial  Ground  Boat

3 DATE: 6/15/90 16 HIGH TIDE TIMES: 0646 12004 21 TEAM RECORDER: Doug Hill

4 START TIME: 1250 18 HIGH TIDE HTS: 9.7 110.6 22 OBSERVERS: Lee GLENN

6 STOP TIME: 1330 17 LOW TIDE TIMES: 0055 11311 23 AGENCY: ADF&G

6 SEGMENT #: \_\_\_\_\_ 18 LOW TIDE HTS: 3.4 10.7 24 PHOTOS TAKEN:  Y  N

7 STATION #: \_\_\_\_\_ 19 TIDE HT AT SURVEY: \_\_\_\_\_ Roll #: 700DHSH Frame: 376

8 K-UNIT: UNIT #10  Slack  Flood  Slack 25 VIDEO TAKEN: Y  N TAPE#: \_\_\_\_\_

9 STAT AREA: \_\_\_\_\_ 20 USCG QUAD: Seldovia A-5 Start: \_\_\_\_\_ End: \_\_\_\_\_

10 LAT: 59 9 54 11 LONG: 151 41 43 26 SAMPLES TAKEN? Y  N Number

12 SOURCE: Map  Loran

13 LOCATION: Chugach Passage, stream/valley just north of

DESCRIPTION: Perl Island, Andersen Beach

### EXTENT OF OIL

	SHORELINE				STREAM			
	L	W	M <sup>2</sup>	%	L	W	M <sup>2</sup>	%
27 SURFACE COVERAGE								
28 SURFACE THICKNESS								
29 PENETRATION								

30 OVERALL OIL IMPACT: N VL L  H H

31 OIL TYPE: Pooled  House  Tar  Asphalt  Sticky  Sludge

32 OILED DEBRIS? Y  N

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

34 WAVE EXPOSURE:  High  Moderate  Low

35 SUBSTRATE TYPE: Bedrock \_\_\_\_\_ Boulder \_\_\_\_\_ Cobble \_\_\_\_\_  
Gravel 15 Sand 8.5 Mud/silt \_\_\_\_\_

36 CATALOGED ANAD. FISH SREAM?  Y  N

37 CATALOG #: 242-10-10200

38 STREAM NAME: Andersen Beach

39 OIL IN STREAM BED? Y  N

40 OIL ON STREAM BANKS? Y  N

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

42 OIL WITHIN 1 MILE OF STREAM?  Y  N

Where: Point to west of stream

43 ANADROMOUS FISH PRESENT? Y  N

44 ANADROMOUS FISH OBSERVATION

Species	Aerial	Ground

COMMENTS: Needs to have oil removed/A sufficient quantity of oil exists to warrant the presence of a cleanup crew. This has been reported to ADEC.

FRAME(S)	DESCRIPTION
3, 4	Tar mat - bubbling like mouse within
5	Heavy coat of black oil on rocks, pooled mouse & Littorina trancellis
6	One of the patches of heavily oil

46 OIL DISTRIBUTION DIAGRAM

= Sample taken  
 = Photo frame # and shot direction.

ACE 9961273



Site

ASC NUMBER: <i>←</i>	SEGMENT NUMBER:	YR CATALOGED:
LOCATION: <i>Outer Coast, Keweenaw Peninsula, Port Chatham Spit</i>		
STREAM NAME:		LATITUDE: <i>59 13 2</i>
MODIAK K-UNIT:	LOCAL STREAM #:	LONGITUDE: <i>151 44 6</i>
US QUADRANGLE: <i>Seldovia A-5</i>		LEGAL:
SHORELINE TYPE: <i>Beach</i>	ALL SEGMENTS:	
WAVE EXPOSURE: <i>Moderate</i>		

ASC NUMBER:  
 SURVEY TYPE: *90" Pre-screening*  
 METHOD: *Foot*  
 DATE: *4/18/90*  
 START TIME: *1437*  
 STOP TIME: *1533*

TEAM RECORDER: *Doug Hill*  
 OBSERVERS: *Susan McLane*  
*Jacki Botkin*  
 AGENCY(IES): *ADFG, USCG*  
 PHOTOS TAKEN? *Yes*  
 Roll #: *90 DDH 074* Frames: *1, 2, 3, 4, 5, 6, 7, 8*  
 VIDEO TAKEN? *N* Tape Number:  
 Counter Start:

SAMPLES TAKEN? *yes (Blue Sorbent boom material)*  
 SAMPLE I.D. NUMBERS: *1. DDH-4/18/90-1530* 2.  
 4. 5. 3. 6.

	LENGTH m	WIDTH m	M2	%	THICK cm	PEN cm	OIL TYPE
SITE 1							
SITE 2							
SITE 3							
SITE 4							
SITE 5							

OVERALL OIL IMPACT: *None observed*

OIL IN STREAM CHANNEL?

OIL ON BEACH WITHIN 50M OF STREAM MOUTH?

SUBSTRATE

Bedrock	Granule
Boulder	Sand 20
Cobble	Silt
Pebble 80	Veget.

SPECIES					
COUNT					

COMMENTS: *(Transfer 90 MAD form to this section)*

*Stream in Port Chatham are*

*242-10 - 10220*  
*10230*  
*10240*  
*10250*

Not included in A, B, or C group list

Pre-Screening

ADF&G MULTI-ASSESSMENT DATA FORM

1 SURVEY TYPE: BS  SS DS TS AVS SCHA MMHS PTA 2 REGION: PWS  KP, CI K, AP  
 METHOD: Aerial   Ground Boat Seldovia  
 3 DATE: 4-18-90 16 HIGH TIDE TIMES: 0830  
 4 START TIME: 1437 16 HIGH TIDE HTS: 13.1  
 5 STOP TIME: 1533 17 LOW TIDE TIMES: 1457  
 6 SEGMENT #: Unit 11 18 LOW TIDE HTS: 3.9  
 7 STATION #: 19 TIDE HT AT SURVEY: low  
 8 K-UNIT: Ebb  Slack Flood Slack 25 VIDEO TAKEN: Y  N TAPE#:   
 9 STAT AREA: 242-10 20 USCG QUAD: Seldovia A-5 Start: End:   
 10 LAT: 59° 13' 2 11 LONG: 151° 44.6 26 SAMPLES TAKEN?  Y  N Number  
 Debris Blue boom material  
 DDH-4/18/90 1530

12 SOURCE: Map Loran  
 13 LOCATION: Port Chatham  
 14 DESCRIPTION: Port Chatham Spit

EXTENT OF OIL

	SHORELINE				STREAM			
	L	W	H <sup>2</sup>	%	L	W	H <sup>2</sup>	%
27 SURFACE COVERAGE								
28 SURFACE THICKNESS								
29 PENETRATION								
30 OVERALL OIL IMPACT:	N	VL	L	M	H			
31 OIL TYPE:	Pooled	Mousse	Tar	Asphalt	Sticky	Stain		
32 OILED DEBRIS?	<input checked="" type="radio"/> Y <input type="radio"/> N							
33 SHORELINE TYPE:	Headland	Low-lying Rocks	<input checked="" type="radio"/> Beach	Cove				
		Lagoon	Marsh					
34 WAVE EXPOSURE:	High	<input checked="" type="radio"/> Moderate	Low					
35 SUBSTRATE TYPE:	Bedrock	Boulder	Cobble					
	Gravel 80%	Sand 20%	Mud/silt					

36 CATALOGED ANAD. FISH STREAM?  Y  N  
 Several within area  
 37 CATALOG #:   
 38 STREAM NAME:   
 39 OIL IN STREAM BED? Y  N  Y  
 40 OIL ON STREAM BANKS? Y  N  Y  
 41 OIL ON BEACH ADJACENT TO MOUTH? Y  N  Y  
 (within 50 meters)  
 42 OIL WITHIN 1 MILE OF STREAM? Y  N  Y

Where:   
 43 ANADROMOUS FISH PRESENT? Y  N  Y

44 ANADROMOUS FISH OBSERVATION

Species	Aerial	Ground
ACE 9961275		
ACE 1955690		

COMMENTS: Pt Chatham Spit was surveyed by 3 observers. This is a collection beach and there are several anadromous fish streams which feed into Port Chatham. No oil was observed. However much cleanup debris was found. Absorbent boom material (blue strips) were all along the beach. One 12' x 20' piece of sea curtain (type 2) and a 12' long 2" x 4" boom piece were also found. Blue sorbent material found every 10-15' in upper drift line of spit.

non observed

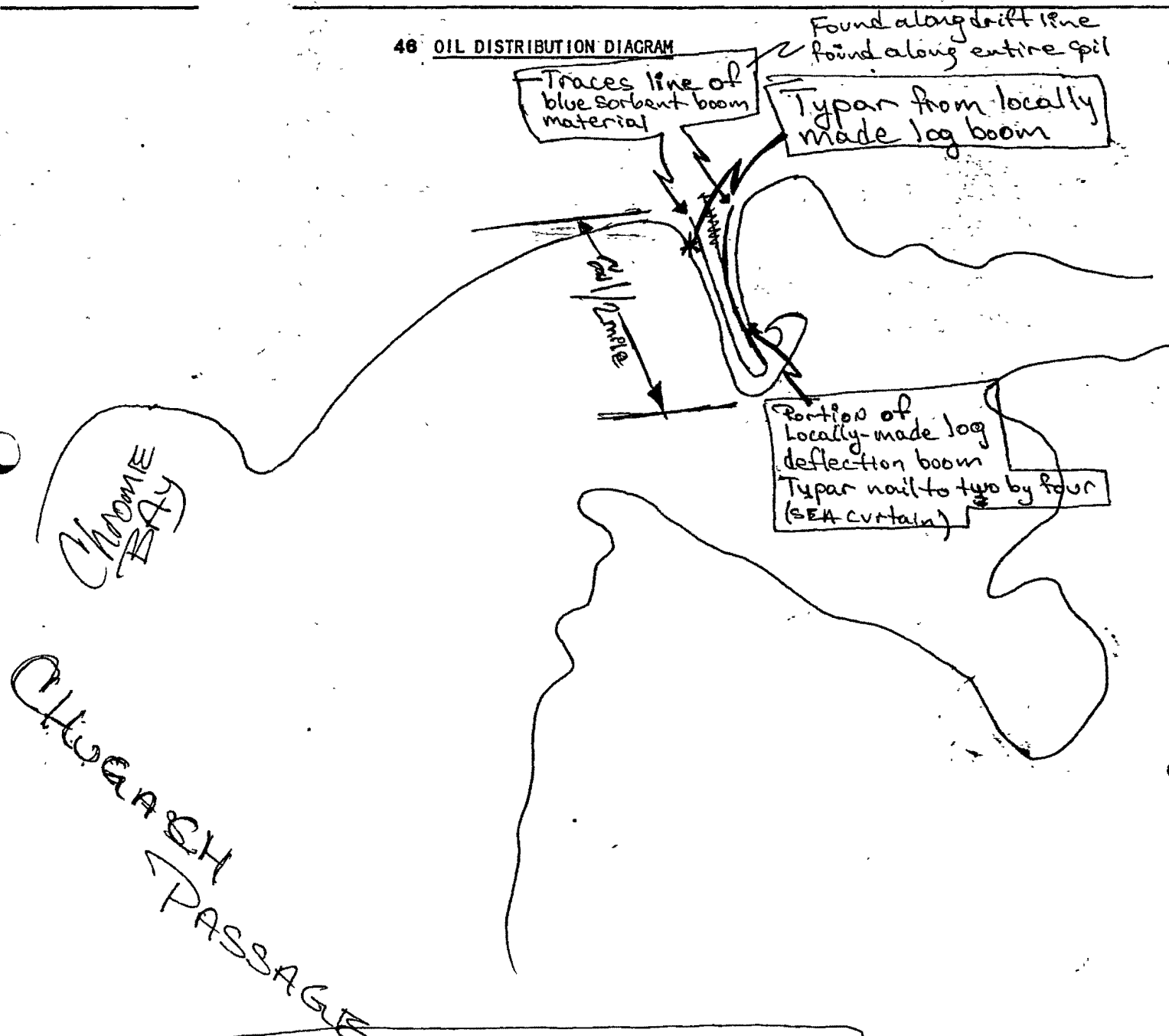
SEE MAP



FRAME(S)

DESCRIPTION

48 OIL DISTRIBUTION DIAGRAM



ANADSCAT NOT RECOMMENDED

= Sample taken  
 = Photo frame # and shot direction.

However, cleanup crew should be sent to pick up boom debris.

ACE 9961276

ACE 1955691

Not Included in A, B, or C group list

Faxed Anch. 4/20/90  
Pre-Screening

ADF&G MULTI-ASSESSMENT DATA FORM

1 SURVEY TYPE: BS SS DS TS AVS SCHA MMHS PTA 2 REGION: PWS KP, CI K, AP  
 METHOD: Aerial Ground Boat Seldovia  
 3 DATE: 4-18-90 15 HIGH TIDE TIMES: 0820 21 TEAM RECORDER: Doug Hill  
 4 START TIME: 1437 16 HIGH TIDE HTS: 13.1 22 OBSERVERS: Susan Melore  
 5 STOP TIME: 1533 17 LOW TIDE TIMES: 1457 23 AGENCY: ADF&G  
 6 SEGMENT #: Unit 11 18 LOW TIDE HTS: 3.9 24 PHOTOS TAKEN: Y N  
 7 STATION #: \_\_\_\_\_ 19 TIDE HT AT SURVEY: LOW Roll #: \_\_\_\_\_ Frame: \_\_\_\_\_  
 8 K-UNIT: \_\_\_\_\_ Ebb Slack Flood Slack 25 VIDEO TAKEN: Y N TAPE#: \_\_\_\_\_  
 9 STAT AREA: 242-10 20 USCG QUAD: Seldovia A-5 Start: \_\_\_\_\_ Ends: \_\_\_\_\_  
 10 LAT: 59° 13' 2 11 LONG: 151° 44.6 26 SAMPLES TAKEN? Y N Number  
 12 SOURCE: Map Lorán Debris Blue boom material  
Dis- DDH-4/18/90 1530

13 LOCATION: Port Chatham Sediment \_\_\_\_\_  
 14 DESCRIPTION: Port Chatham Spit Biological \_\_\_\_\_  
 Water \_\_\_\_\_

EXTENT OF OIL

	SHORELINE				STREAM			
	L	W	M <sup>2</sup>	%	L	W	M <sup>2</sup>	%
27 SURFACE COVERAGE								
28 SURFACE THICKNESS								
29 PENETRATION								

30 OVERALL OIL IMPACT: N VL L M H 36 CATALOGED ANAD. FISH STREAM? Y N  
Several within area  
 37 CATALOG #: \_\_\_\_\_  
 38 STREAM NAME: \_\_\_\_\_  
 39 OIL IN STREAM BED? Y N non observed  
 40 OIL ON STREAM BANKS? Y N  
 41 OIL ON BEACH ADJACENT TO MOUTH? Y N (within 50 meters)  
 42 OIL WITHIN 1 MILE OF STREAM? Y N  
 Where: \_\_\_\_\_  
 43 ANADROMOUS FISH PRESENT? Y N  
 44 ANADROMOUS FISH OBSERVATION  
 Species \_\_\_\_\_ Aerial \_\_\_\_\_ Ground \_\_\_\_\_  
 ACE 9961277  
 ACE 1941076

COMMENTS: Pt Chatham Spit was surveyed by 3 observers. This is a collection beach and there are several anadromous fish streams which feed into Port Chatham. No oil was observed. However much cleanup debris was found - Absorbent boom material (blue strips) were all along the beach. One 12' x 20' piece of sea curtain (typer) and a 12' long 2" x 4" boom piece were also found.

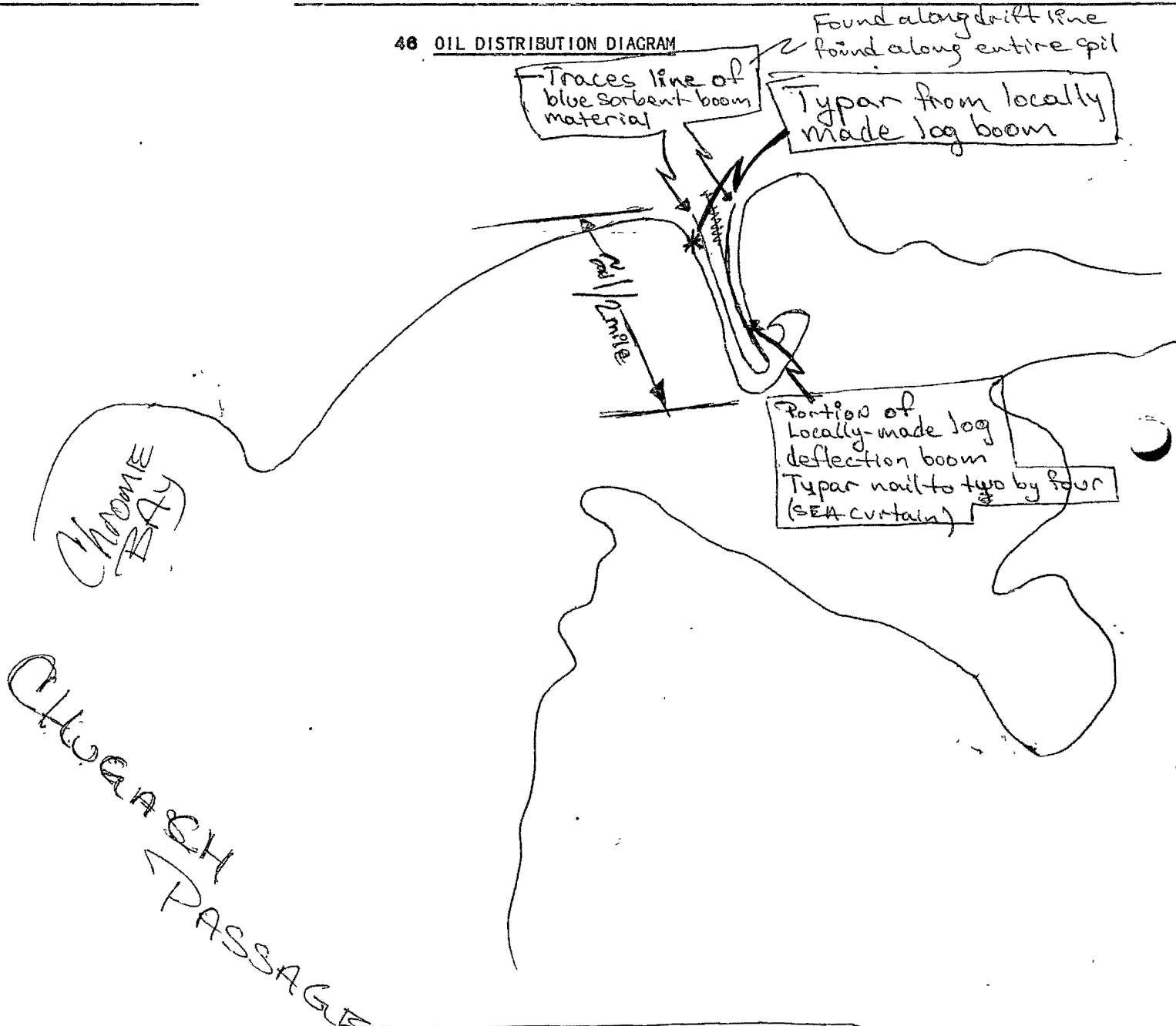
SEE MAP



FRAME(S)

DESCRIPTION

46 OIL DISTRIBUTION DIAGRAM



★ - ANADSCAT NOT RECOMMENDED

= Sample taken  
= Photo frame # and shot direction.

However, cleanup crew should be sent to pick up boom debris.

ACE 9961278

ACE 1941077

ASC NUMBER: 242-31-10100 SEGMENT NUMBER: 0

YR CATALOGED:

LOCATION: OckP, One Haul Bay

STREAM NAME:

LATITUDE: 59 12 5

DIAK K-UNIT: .

LOCAL STREAM #:

LONGITUDE: 151 13 0

USGS QUADRANGLE: Seldovia A-4

SHORELINE TYPE: Beach

ALL SEGMENTS:

LEGAL:

WAVE EXPOSURE: High

ASC NUMBER: 242-31-10100

TEAM RECORDER: Doug Hill

SURVEY TYPE: Pre-screening

OBSERVERS: Susan McLane

METHOD: Foot

AGENCY (IES): ADF+G

DATE: 4 / 17 / 90

PHOTOS TAKEN? N

START TIME: 1626

Roll #: Frames:

STOP TIME: 1648

VIDEO TAKEN? N Tape Number:

Counter Start:

SAMPLES TAKEN? N

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

	LENGTH m	WIDTH m	M2	%	THICK cm	PEN cm	OIL TYPE
SITE 1							
SITE 2							
SITE 3							
SITE 4							
SITE 5							

OVERALL OIL IMPACT: None

OIL IN STREAM CHANNEL? N

OIL ON BEACH WITHIN 50M OF STREAM MOUTH? N

SUBSTRATE

Bedrock	Granule
Boulder	Sand
Cobble	Silt
Pebble	Veget.

SPECIES	None				
COUNT					

COMMENTS: In 1989 oil was found on this beach, which is within 1 mile of the above mentioned Anacropinus stream. It was checked in 1990 as an indicator.

see attached MAO form for further comment

BC.



# Prescreening Survey

Group B

## ADF&G MULTI-ASSESSMENT DATA FORM

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

METHOD: Aerial  Ground  Boat

3 DATE: 4/17/90 15 HIGH TIDE TIMES: 1 21 TEAM RECORDER: Doug Hill

4 START TIME: 1626 16 HIGH TIDE HTS: 1 22 OBSERVERS: Susan McLean

5 STOP TIME: 1648 17 LOW TIDE TIMES: 1327 23 AGENCY: ADF&G

6 SEGMENT #: none designated 18 LOW TIDE HTS: 2.0 24 PHOTOS TAKEN:  Y  N

7 STATION #: \_\_\_\_\_ 19 TIDE HT AT SURVEY: \_\_\_\_\_ Roll #: \_\_\_\_\_ Frame: \_\_\_\_\_

8 K-UNIT: \_\_\_\_\_ Ebb Slack Flood Slack 25 VIDEO TAKEN:  Y  N TAPE#: \_\_\_\_\_

9 STAT AREA: 242-31 20 USCG QUAD: \_\_\_\_\_ Start: \_\_\_\_\_ End: \_\_\_\_\_

10 LAT: 59° 12' 5 11 LONG: 151° 13' 0 26 SAMPLES TAKEN  Y  N Number

12 SOURCE: Map Loran Oil \_\_\_\_\_

13 LOCATION: AFS #242-31-10100 One Haul Bay Sediment \_\_\_\_\_

14 DESCRIPTION: Outer beaches SW portion of bay w/in 1 mi of stream Biological \_\_\_\_\_

EXTENT OF OIL

Water \_\_\_\_\_

	SHORELINE				STREAM			
	L	W	M <sup>2</sup>	ε	L	W	M <sup>2</sup>	ε
27 SURFACE COVERAGE								
28 SURFACE THICKNESS								
29 PENETRATION								

30 OVERALL OIL IMPACT: N VL L M H

31 OIL TYPE: Pooled Mousse Tar Asphalt Sticky Stain

32 OILED DEBRIS?  Y  N

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

34 WAVE EXPOSURE: High Moderate Low

35 SUBSTRATE TYPE: Bedrock \_\_\_\_\_ Boulder \_\_\_\_\_ Cobble 70%  
Gravel \_\_\_\_\_ Sand 30% Mud/silt \_\_\_\_\_

36 CATALOGED ANAD. FISH STREAM?  Y  N

37 CATALOG #: 242-31-10100

38 STREAM NAME: West Beach - One Haul Bay  
(no name designated)

39 OIL IN STREAM BED?  Y  N

40 OIL ON STREAM BANKS?  Y  N *None observed*

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

42 OIL WITHIN 1 MILE OF STREAM?  Y  N

Where: \_\_\_\_\_

43 ANADROMOUS FISH PRESENT?  Y  N

44 ANADROMOUS FISH OBSERVATION

Species	Aerial	Ground

ACE 9961280

COMMENTS: Map of one Haul Bay connected with this form.  
Surveyed ~ 300 yds of beach - NO oil observed.  
Light oiling found here in 1989.  
Beach surveyed as an indicator beach as to what  
might have washed into One Haul Bay. This beach  
is a collection beach - lots of drift/debris (w/in one  
mile of Anadromous Fish stream).

Group B

Prescreening Survey  
Faxed Anch  
4/20/90

ADF&G MULTI-ASSESSMENT DATA FORM

1 SURVEY TYPE: BS  DS TS AVS SCHA MMHS PTA

2 REGION: PWS  KP, CI K, AP

METHOD: Aerial  Ground Boat

3 DATE: 4/17/90

15 HIGH TIDE TIMES: \_\_\_\_\_

21 TEAM RECORDER: Doug Hill

4 START TIME: 1626

16 HIGH TIDE HTS: \_\_\_\_\_

22 OBSERVERS: Susan McLane

5 STOP TIME: 1648

17 LOW TIDE TIMES: 1327

23 AGENCY: ADF&G

6 SEGMENT #: None designated

18 LOW TIDE HTS: 2.0

24 PHOTOS TAKEN: Y  N

7 STATION #: \_\_\_\_\_

19 TIDE HT AT SURVEY: \_\_\_\_\_

Roll #: \_\_\_\_\_ Frame: \_\_\_\_\_

8 K-UNIT: \_\_\_\_\_

Ebb Slack  Flood Slack

25 VIDEO TAKEN: Y  N TAPE#: \_\_\_\_\_

9 STAT AREA: 242-31

20 USCG QUAD: \_\_\_\_\_

Start: \_\_\_\_\_ End: \_\_\_\_\_

10 LAT: 59° 12' 5"

11 LONG: 151° 13' 0"

26 SAMPLES TAKEN? Y  N Number

12 SOURCE: Map Loran

Oil \_\_\_\_\_

13 LOCATION: AFS # 242-31-10100 One Haul Bay

Sediment \_\_\_\_\_

14 DESCRIPTION: Outer beaches SW portion of bay, w/in 1 mi of stream  
EXTENT OF OIL

Biological \_\_\_\_\_  
Water \_\_\_\_\_

	SHORELINE				STREAM			
	L	W	M <sup>2</sup>	%	L	W	M <sup>2</sup>	%
27 SURFACE COVERAGE								
28 SURFACE THICKNESS								
29 PENETRATION								

38 CATALOGED ANAD. FISH STREAM? Y  N

37 CATALOG #: 242-31-10100

38 STREAM NAME: West Beach - One Haul Bay  
(no name designated)

39 OIL IN STREAM BED? Y  N

40 OIL ON STREAM BANKS? Y  N

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

42 OIL WITHIN 1 MILE OF STREAM? Y  N

Where: \_\_\_\_\_

30 OVERALL OIL IMPACT: N VL L M H

31 OIL TYPE: Pooled Mousse Tar Asphalt Sticky Stain

32 OILED DEBRIS? Y  N

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

43 ANADROMOUS FISH PRESENT? Y  N

34 WAVE EXPOSURE:  High Moderate Low

44 ANADROMOUS FISH OBSERVATION  
Species Aerial Ground

35 SUBSTRATE TYPE: Bedrock \_\_\_\_\_ Boulder \_\_\_\_\_ Cobble 70%  
Gravel \_\_\_\_\_ Sand 30% Mud/silt \_\_\_\_\_


ACE 9961281

COMMENTS: Map of one Haul Bay connected with this form.  
Surveyed ~ 300 yds of beach - NO oil observed.  
Light oiling found here in 1989.  
Beach surveyed as an indicator beach as to what might have washed into One Haul Bay. This beach is a collection beach - lots of drift/debris (w/in one mile of Anadromous fish stream).

ACE 1941310

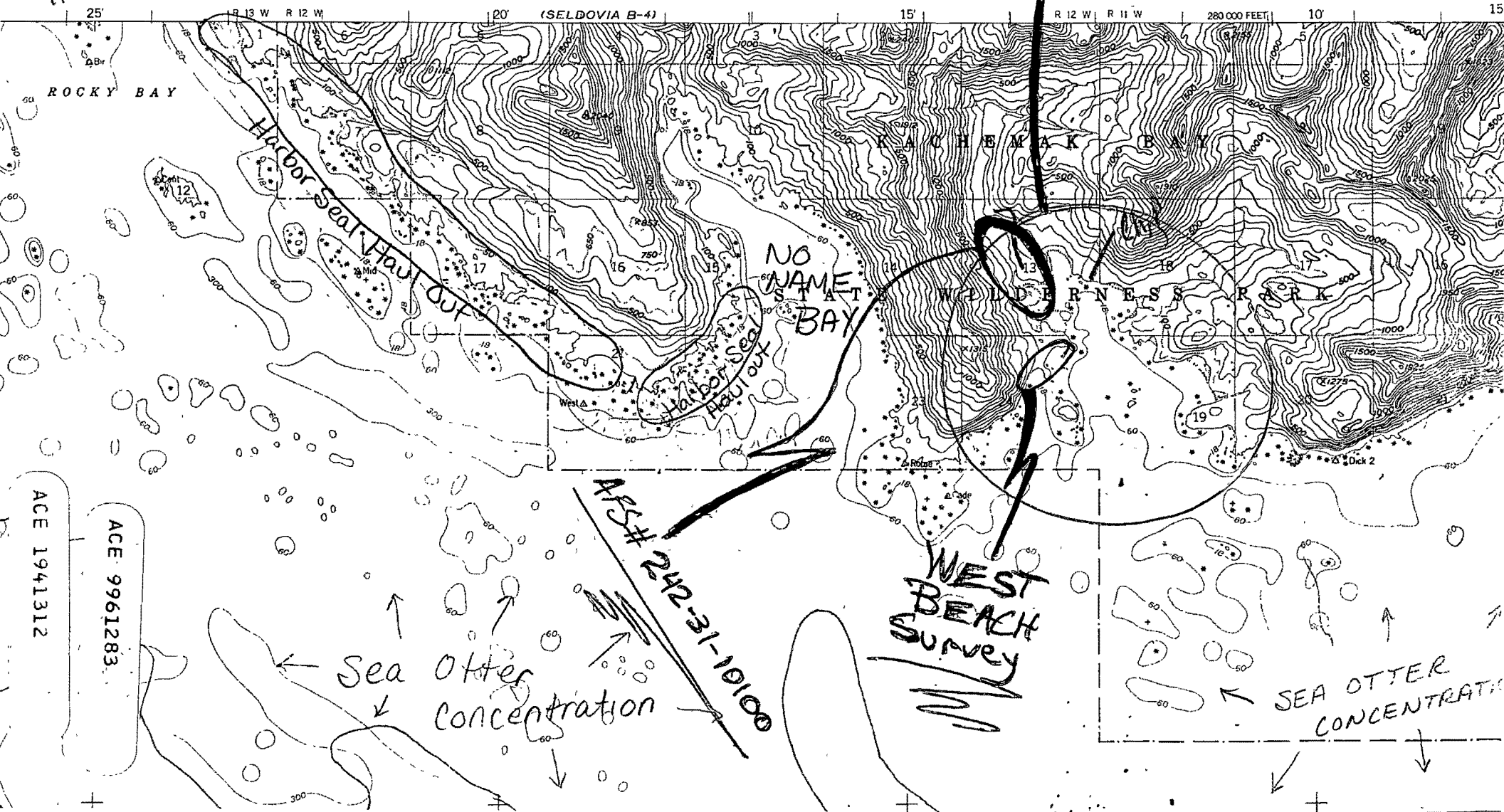




#242-31-242#

WEST BEACH  
ONE HAUL BAG  
9/17/90

SELDOVIA (A-4) QUADRANGLE  
ALASKA  
1 63 360 SERIES (TOPOGRAPHIC)



ACE 1941312

ACE 9961283

ARCS# 242-31-10100

Sea Otter  
concentration

WEST  
BEACH  
Survey

SEA OTTER  
CONCENTRATION





ASC NUMBER: ~~0~~ SEGMENT NUMBER: ~~0~~  
 LOCATION: *oak, One Half Bay, 1/4 mile NW of Salt Lagoon*  
 STREAM NAME: *ON EAST side of Bay.*  
 DIAK K-UNIT: . LOCAL STREAM #:   
 USGS QUADRANGLE: *Seldovia A-4*  
 SHORELINE TYPE: *Beach* ALL SEGMENTS:   
 WAVE EXPOSURE: *High*

YR CATALOGED:   
 LATITUDE: *59° 12' 40"*  
 LONGITUDE: *151° 11' 40"*  
 LEGAL:

ASC NUMBER: ~~0~~  
 SURVEY TYPE: *Pre-screening*  
 METHOD: *Foot*  
 DATE: *4/11/90*  
 START TIME: *1042*  
 STOP TIME: *1055*

TEAM RECORDER: *Doug Hill*  
 OBSERVERS: *Susan McLane*

AGENCY (IES): *ADF&G*

PHOTOS TAKEN?   
 Roll #: Frames:  
 VIDEO TAKEN?  Tape Number:  
 Counter Start:

SAMPLES TAKEN?

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

	LENGTH m	WIDTH m	M2	%	THICK cm	PEN cm	OIL TYPE
SITE 1	<i>366 m</i>	<i>1 m</i>		<i>3</i>	<i>&lt; 1 mm</i>	<i>—</i>	<i>ST, CT</i>
SITE 2							
SITE 3							
SITE 4							
SITE 5							

OVERALL OIL IMPACT:

OIL IN STREAM CHANNEL?

OIL ON BEACH WITHIN 50M OF STREAM MOUTH?

SUBSTRATE

Bedrock	Granule
Boulder	Sand
Cobble	Silt
Pebble	Veget.

SPECIES					
COUNT					

*Transfer MAO comments*  
 COMMENTS: *Surveyed sandy beach of east shore of bay (1/4 mile NW of Salt Lagoon) --- we surveyed this beach only because oil was found here in 1989. This beach is within one mile of anadromous stream 242-31-10080.*  
*finger tracks on beach*

*OK*  
 \* site 2-2-09-1989 AFHS  
 \* see 1190 field log for further info

ACE 9961285



Group B

ADF&G MULTI-ASSESSMENT DATA FORM

PRE-SCREENING

1 SURVEY TYPE: BS  DS TS AVS SCHA MMHS PTA 2 REGION: PWS  K,AP

METHOD: Aerial  Ground Boat Cordova

3 DATE: 4-11-90 15 HIGH TIDE TIMES: 14501 21 TEAM RECORDER: Doug Hill

4 START TIME: 1042 16 HIGH TIDE HTS: 13.01 22 OBSERVERS: Susan McLane

5 STOP TIME: 1055 17 LOW TIDE TIMES: 0917 1 23 AGENCY: ADF&G

6 SEGMENT # None designated 18 LOW TIDE HTS: -1.01 24 PHOTOS TAKEN: Y  N

7 STATION #: 19 TIDE HT AT SURVEY: low Roll #: \_\_\_\_\_ Frames: \_\_\_\_\_

8 K-UNIT: Ebb Slack  Flood Slack 25 VIDEO TAKEN: Y N TAPE#: \_\_\_\_\_

9 STAT AREA: 242-31 20 USCG QUAD: Seldovia A-4 Start: \_\_\_\_\_ Ends: \_\_\_\_\_

10 LAT: 59° 12' 79" 11 LONG: 151° 11' 40" 26 SAMPLES TAKEN? Y N Number

12 SOURCE:  Map Lorax Oil \_\_\_\_\_

13 LOCATION: AFS - Uncataloged - 1 mi N/E of lagoon on East side of bay Sediment \_\_\_\_\_

14 DESCRIPTION: Low Grade Sandy Beach to SE of Anadromous fish stream 242-31-10090. Biological \_\_\_\_\_

EXTENT OF OIL

Water \_\_\_\_\_

	SHORELINE				STREAM			
	L	W	M <sup>2</sup>	N	L	W	M <sup>2</sup>	N
27 SURFACE COVERAGE								
28 SURFACE THICKNESS								
29 PENETRATION								
30 OVERALL OIL IMPACT:	N	VL	L	M	H			

31 OIL TYPE: Pooled Mousse Tar Asphalt  Sticky  Slab

32 OILED DEBRIS?  N

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

34 WAVE EXPOSURE:  High Moderate Low

35 SUBSTRATE TYPE: Bedrock \_\_\_\_\_ Boulder 2.5% Cobble 2.5% Gravel \_\_\_\_\_ Sand 95% Mud/silt \_\_\_\_\_

36 CATALOGED ANAD. FISH SREANT? Y  N

37 CATALOG #: NONE

38 STREAM NAME: ONE HADL BAY - EAST

39 OIL IN STREAM BED? Y  N

40 OIL ON STREAM BANKS?  N

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

42 OIL WITHIN 1 MILE OF STREAM?  N

Where: \_\_\_\_\_

43 ANADROMOUS FISH PRESENT? Y  N

44 ANADROMOUS FISH OBSERVATION

Species	Aerial	Ground

COMMENTS: ~ 400 yds. of stained rocks - Occasional patch (< 3") of saturated  
Bediment - Oil stained rocks readily visible (drip marks)  
Oil stained rocks beated along beach - vegetation interface (beach berm).  
Western Beach

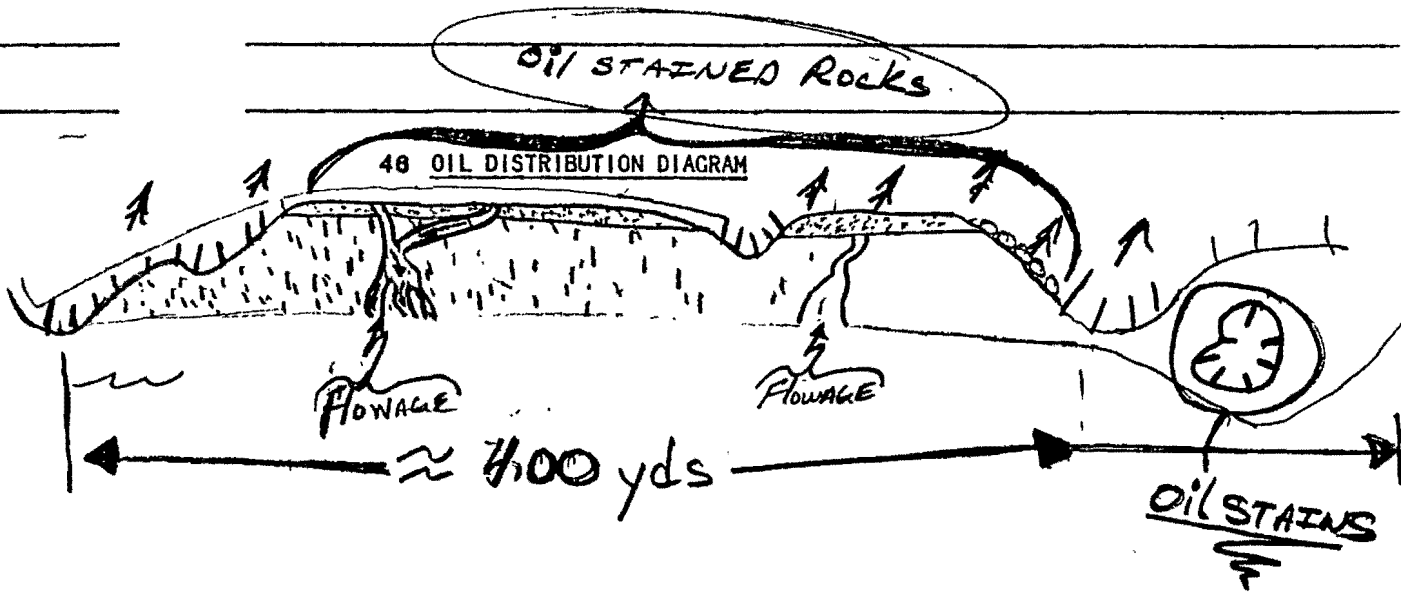
EASTERN BEACH

ACE 9961286

ACE 1955682

FRAME(S)

DESCRIPTION



15

- Sample taken
- Photo, frame # and shot direction.

ANADSCAT - not recommended

ACE 9961287

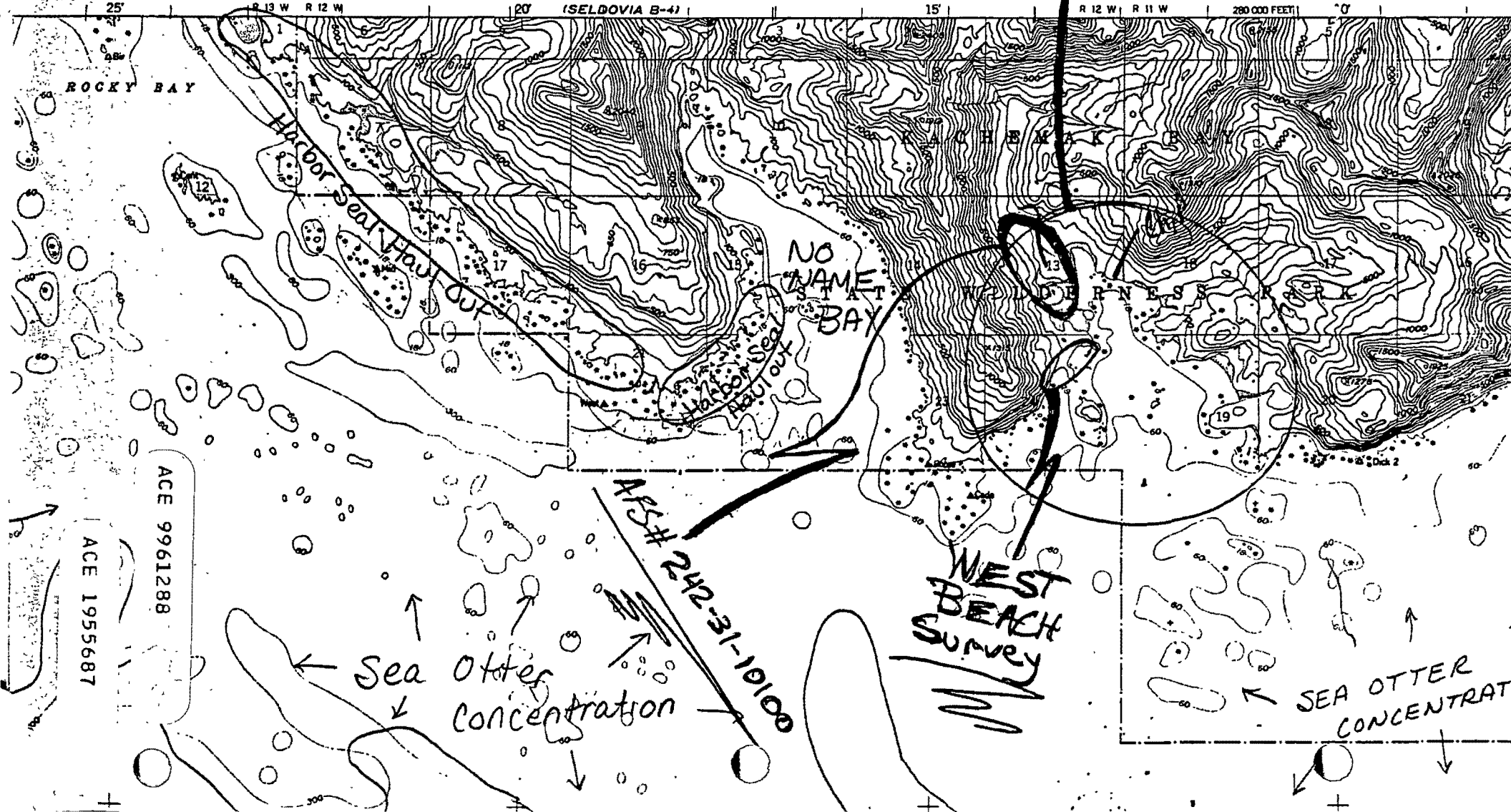
ACE 1955683



#242-31-10100

WEST BEACH  
"ONE HAUL BAY"  
4/17/90

SELDOVIA (A-4) QUADRANG  
ALASKA  
1:63 360 SERIES (TOPOGRAPHIC)



ACE 9961288

ACE 1955687

ARPS# 242-31-10100

Sea Otter  
Concentration

WEST  
BEACH  
Survey

SEA OTTER  
CONCENTRAT

EAST BEACH

"ONE HAUL BAY"

4/11/90

SELDOVIA (A-4) QUADRANT  
ALASKA  
1:63 360 SERIES (TOPOGRAPHIC)

Uncataloged  
AFS

(SELDOVIA B-4)

280 000 FEET

ROCKY BAY

Huqooq Sea Trout Out

NO NAME BAY

UNCATALOGED  
PINK  
STREAM

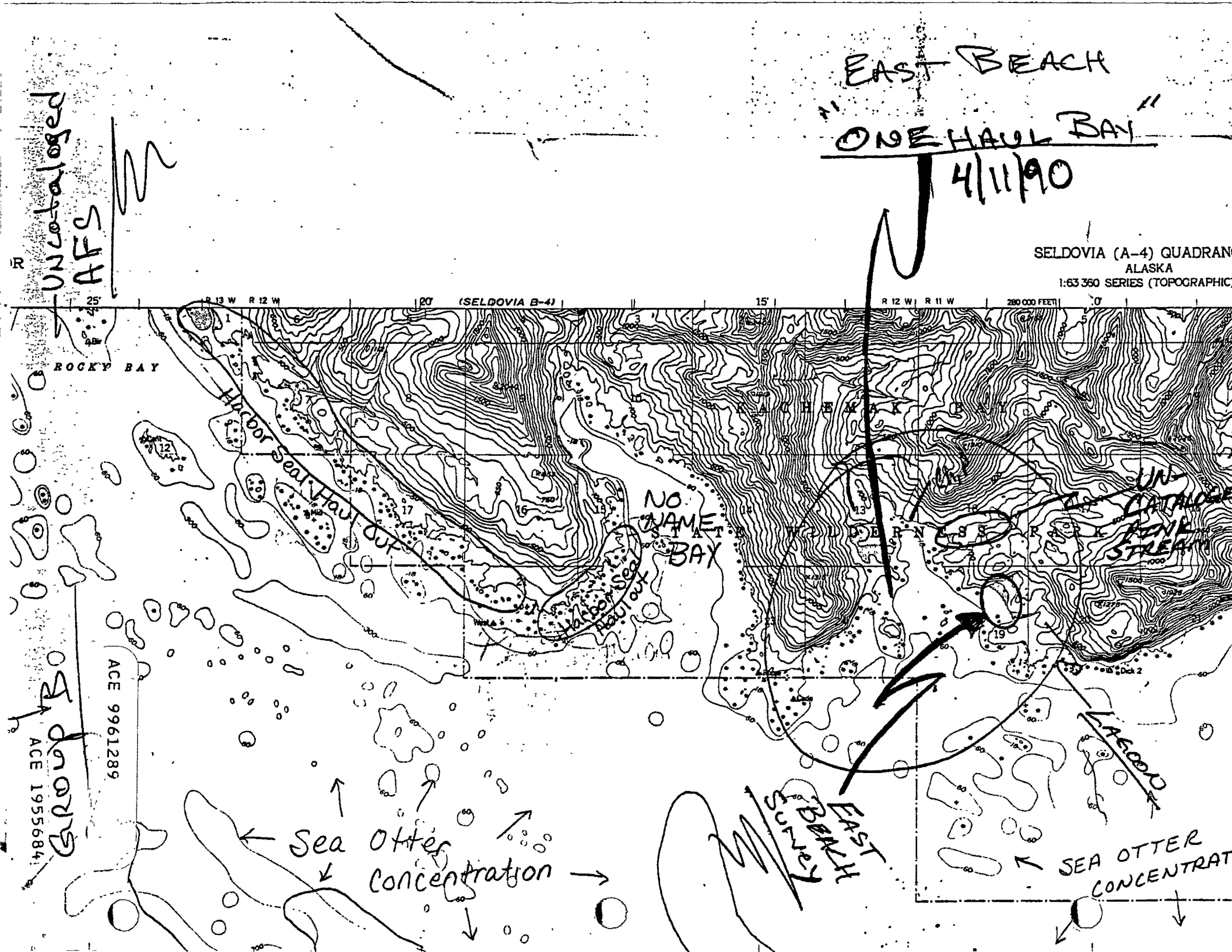
ACE 9961289

ACE 1955684

Sea Otter  
concentration

SEA OTTER  
CONCENTRAT

EAST  
BEACH  
SURVEY





Group B

Faxed Anch.  
4/20/90

PRE-SCREENING

ADF&G MULTI-ASSESSMENT DATA FORM

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

METHOD: Aerial  Ground  Boat Cordova

3 DATE: 4-11-90 15 HIGH TIDE TIMES: 14501 21 TEAM RECORDER: Doug Hill

4 START TIME: 1042 16 HIGH TIDE HTS: 13.01 22 OBSERVERS: Susan McLane

5 STOP TIME: 1055 17 LOW TIDE TIMES: 0917 1 23 AGENCY: ADF&G

6 SEGMENT #: None designated 18 LOW TIDE HTS: -1.01 24 PHOTOS TAKEN: Y  N

7 STATION #: \_\_\_\_\_ 19 TIDE HT AT SURVEY: low Roll #: \_\_\_\_\_ Frame: \_\_\_\_\_

8 K-UNIT: \_\_\_\_\_ Ebb Slack Flood Slack 25 VIDEO TAKEN: Y N TAPE#: \_\_\_\_\_

9 STAT AREA: 242-31 20 USCG QUAD: Seldovia A-4 Start: \_\_\_\_\_ End: \_\_\_\_\_

10 LAT: 59° 12' 79" 11 LONG: 151° 11' 40" 26 SAMPLES TAKEN? Y: N Number

12 SOURCE:  Map Loran Oil \_\_\_\_\_

13 LOCATION: AFS - Uncataloged - 1 mi NE of lagoon on East side of bay Sediment \_\_\_\_\_

14 DESCRIPTION: Low Grade Sandy Beach to SE of Anadromous fish stream 242-31-10090. Biological \_\_\_\_\_

EXTENT OF OIL

Water \_\_\_\_\_

27 SURFACE COVERAGE

	SHORELINE				STREAM			
	L	W	M <sup>2</sup>	%	L	W	M <sup>2</sup>	%
27 SURFACE COVERAGE								
28 SURFACE THICKNESS								
29 PENETRATION								

30 OVERALL OIL IMPACT: N VL L M H

31 OIL TYPE: Pooled Mousse Tar Asphalt Sticky Stain

32 OILED DEBRIS?  Y N

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

34 WAVE EXPOSURE: High Moderate Low

35 SUBSTRATE TYPE: Bedrock \_\_\_\_\_ Boulder 2.5% Cobble 2.5%  
Gravel \_\_\_\_\_ Sand 95% Mud/silt \_\_\_\_\_

36 CATALOGED ANAD. FISH STREAM? Y  N

37 CATALOG #: NONE

38 STREAM NAME: ONE HADL BAY EAST

39 OIL IN STREAM BED? Y  N

40 OIL ON STREAM BANKS?  Y N

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

42 OIL WITHIN 1 MILE OF STREAM?  Y N

Where: \_\_\_\_\_

43 ANADROMOUS FISH PRESENT? Y  N

44 ANADROMOUS FISH OBSERVATION

Species	Aerial	Ground

COMMENTS: ~ 400 Yds. of stained rocks - Occasional patch (<3") of saturated sediment - Oil stained rocks readily visible (drip marks)  
Oil stained rocks located along beach-vegetation interface (beach berm).  
~~Western Beach~~

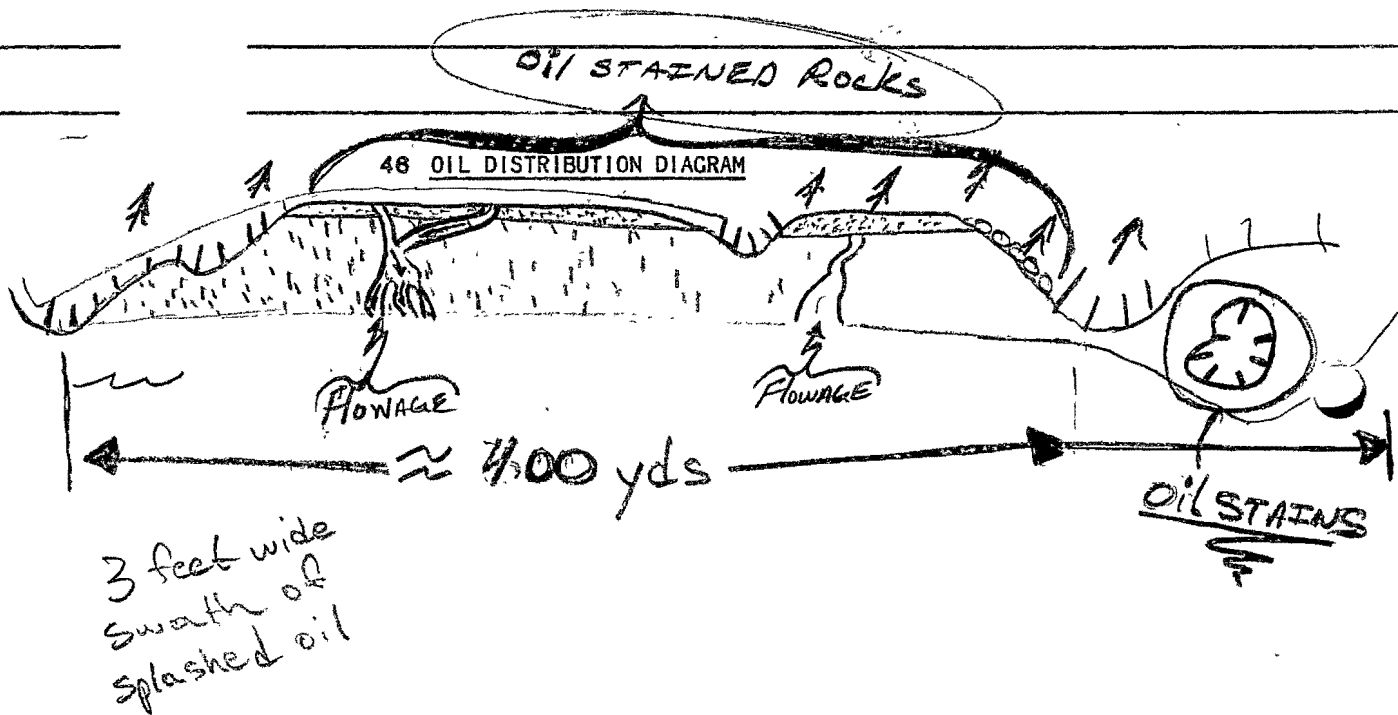
EASTERN BEACH

ACE 9961290

ACE 1941307

FRAME(S)

DESCRIPTION



15

= Sample taken

= Photo frame # and shot direction.

ACE 9961291

ANADSCAT - not recommended

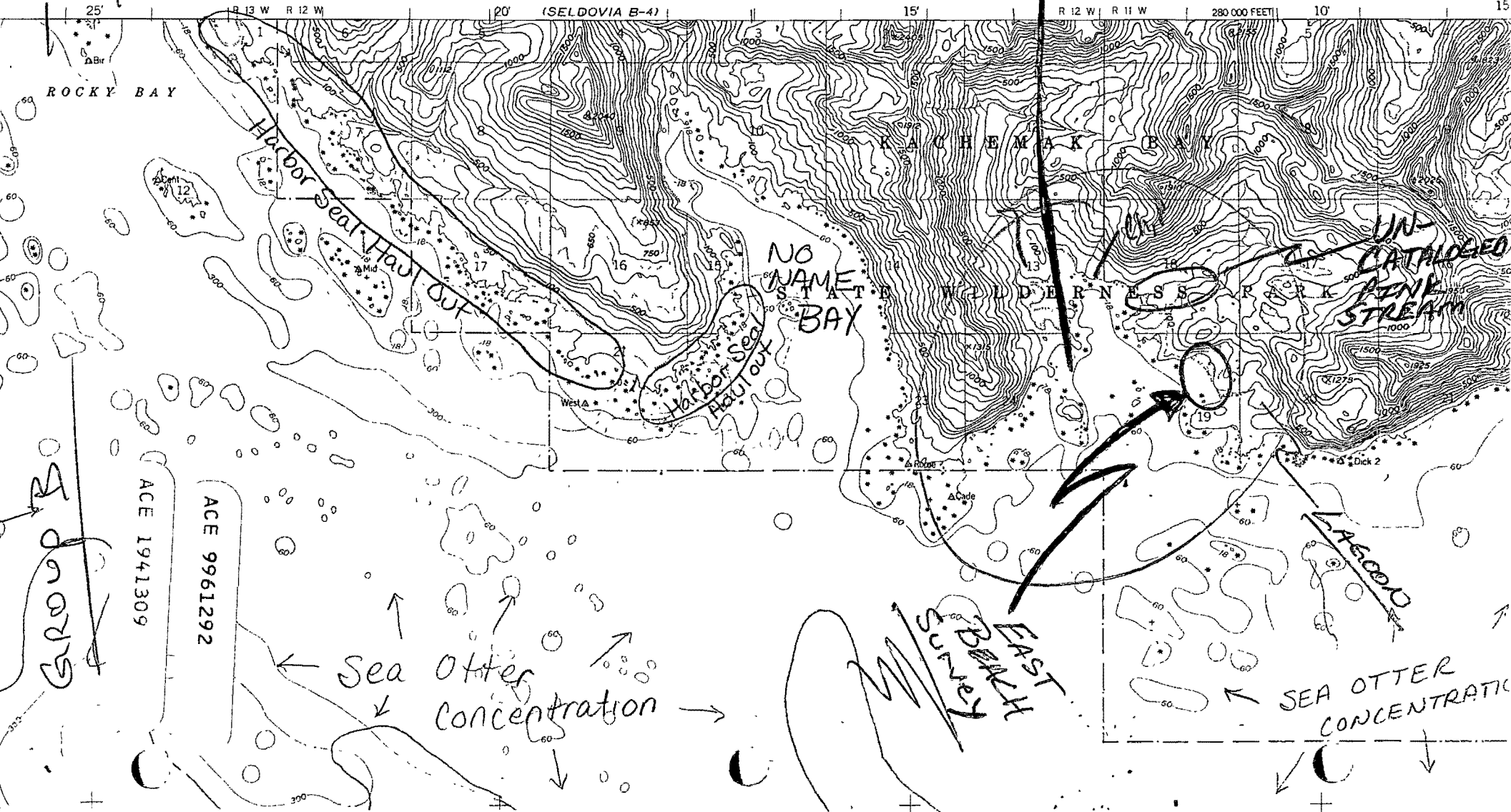
ACE 1941308



EAST BEACH  
"ONE HAUL BAY"  
4/11/90

SELDOVIA (A-4) QUADRANGLE  
ALASKA  
1 63 360 SERIES (TOPOGRAPHIC)

Uncataloged  
AFS



GROUP B  
ACE 1941309  
ACE 9961292

Sea Otter  
concentration

EAST BEACH  
BAY SURVEY

SEA OTTER  
CONCENTRATION

UN-CATALOGED  
PINK  
STREAM

Harbor Seal  
HAUL OUT

NO NAME  
BAY

ROCKY BAY

Harbor Seal  
HAUL OUT

CHEMOK  
FAY

WILDERNESS

ASCOG

Dick 2

Acade

West A

Mid

12

15

10'

R 11 W

R 12 W

15'

(SELDOVIA B-4)

20'

R 12 W

R 13 W

25'

ASC NUMBER: *NONE* SEGMENT NUMBER: *PE-1* YR CATALOGED:  
 LOCATION: *Outer Coast near Aninawa, Pearl Island*  
 STREAM NAME: *SEA LION HAULOUT* LATITUDE: *59 05 48*  
 DIAK K-UNIT: LOCAL STREAM #: LONGITUDE: *151 39 30*  
 USGS QUADRANGLE: *Seldovia A-5* LEGAL:  
 SHORELINE TYPE: *Headland* ALL SEGMENTS:  
 WAVE EXPOSURE: *High*

ASC NUMBER: *NONE*  
 SURVEY TYPE: *90 Pre SSAT/SH*  
 METHOD: *Foot*  
 DATE: *4/12/90*  
 START TIME: *0950*  
 STOP TIME: *1221*

TEAM RECORDER: *Lee Glenn*  
 OBSERVERS: *Norma Dudrak*  
 AGENCY (IES): *ADF+G*  
 PHOTOS TAKEN? *Yes*  
 Roll #: *90NWD350H* Frames: *1,2,3,4,5*  
 VIDEO TAKEN? *Y* Tape Number: *N690-LP6-022H*  
 Counter Start:

SAMPLES TAKEN? *Y*  
 SAMPLE I.D. NUMBERS: 1. *LP6 412 PI1030* 2. 3.  
 4. 5. 6.

	LENGTH m	WIDTH m	M2	%	THICK cm	PEN cm	OIL TYPE
SITE 1	<i>152 m</i> <sup>500'</sup>	<i>67 m</i>		<i>10-50%</i>	<i>7.5 cm</i>	<i>10 cm</i>	<i>PD, MS, ST</i>
SITE 2	<i>67 m</i>						<i>ST, OR</i>
SITE 3							
SITE 4							
SITE 5							

OVERALL OIL IMPACT: *M*

OIL IN STREAM CHANNEL?  
 SUBSTRATE

● OIL ON BEACH WITHIN 50M OF STREAM MOUTH?

Bedrock <i>40%</i>	Granule
Boulder <i>45%</i>	Sand
Cobble <i>10%</i>	Silt
Pebble <i>5%</i>	Veget.

SPECIES					
COUNT					

COMMENTS: *see attached 90 MAD - apply to this form (i.e., comments from comments section + from diagram section)*



ADF&G MULTI-ASSESSMENT DATA FORM

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

METHOD: Aerial  Ground  Boat CORDOVA BOOK CORRECTED TIDE

3 DATE: Apr. 12, 1990 15 HIGH TIDE TIMES: 1549 / 1607 21 TEAM RECORDER: LEE GLENN

4 START TIME: 0950 16 HIGH TIDE HTS: 10.9' / 10.12' 22 OBSERVERS: NORMA DUDIAK

5 STOP TIME: 1221 17 LOW TIDE TIMES: 1009 / 0949 23 AGENCY: ADF&G

6 SEGMENT #: PE-1 OR PI-1 18 LOW TIDE HTS: -0.8' / -0.8 24 PHOTOS TAKEN:  Y  N

7 STATION #: NA 19 TIDE HT AT SURVEY: -0.8 increasing Roll #: 350H First Frame: FEW

8 K-UNIT: NA  Ebb  Slack  Flood  Slack 25 VIDEO TAKEN:  Y  N TAPE#: NA

9 STAT AREA: NA 20 USCG QUAD: \_\_\_\_\_ Starts: \_\_\_\_\_ Ends: \_\_\_\_\_

10 LAT: 59° 06' 48" 05 11 LONG: 151° 39' 36" 30 26 SAMPLES TAKEN?  Y  N Number + DUPE.

12 SOURCE: Map  Loran  011 LPG412 PI 1030

13 LOCATION: PERL ISLAND, GULF OF ALASKA OFF THE Sediment \_\_\_\_\_

14 DESCRIPTION: SW TIP OF KENAI PENINSULA Biological \_\_\_\_\_

Stellar SEA LION HAULOUT  
EXTENT OF OIL

15 SURFACE COVERAGE: 

SURFACE COVERAGE	SHORELINE				STREAM			
	450m	183m	M <sup>2</sup>	%	L	W	M <sup>2</sup>	%
500'	200'	83812	10-	50%				

 36 CATALOGED ANAD. FISH SREAM?  Y  N

16 SURFACE THICKNESS: 

7.5cm		25%					
-------	--	-----	--	--	--	--	--

 37 CATALOG #: \_\_\_\_\_

17 PENETRATION: 

10cm		25%					
------	--	-----	--	--	--	--	--

 38 STREAM NAME: \_\_\_\_\_

18 OVERALL OIL IMPACT: N  VL  L  H  H 39 OIL IN STREAM BED?  Y  N

19 OIL TYPE:  Pooled  Mousse  Tar  Asphalt  Sticky  Stain 40 OIL ON STREAM BANKS?  Y  N

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

21 SHORELINE TYPE:  Headland  Low-lying Rocks  Beach  Cove 42 OIL WITHIN 1 MILE OF STREAM?  Y  N

22 WAVE EXPOSURE:  High  Moderate  Low 43 ANADROMOUS FISH PRESENT?  Y  N

23 SUBSTRATE TYPE: Bedrock 40% Boulder 45% Cobble 10% 44 ANADROMOUS FISH OBSERVATION

Gravel 5% Sand 0 Mud/silt 0

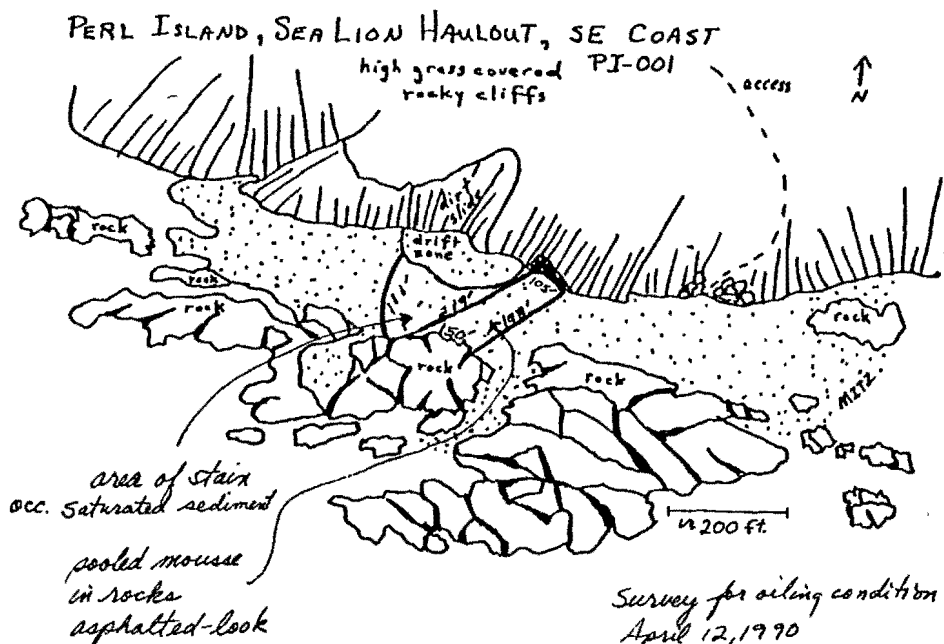
Species	Aerial	Ground

ACE 9961294

COMMENTS: Extensive video shot and copy forwarded to Don Caulkins, ADF&G Game Div. Stellar sea lion haulout, approx 82 seen here in 1989, so far only 50 seen in 1990. Oystercatchers, gulls, cormorant seen here. Stellar sea lions are now on the threatened list. ADF&G will require strict guidelines if area is to be cleaned.

FRAME(S) ?	90NWD350H	DESCRIPTION
1		Lee Glenn taking sample LP6 412 PI1030
2		" " digging saturated sediment
3		Wet mousse, sticky running in heat
4		Sea lions
5		Aerial of Perl haulout

48 OIL DISTRIBUTION DIAGRAM



Oil not affected by winter storms except to darken a surface oil film, under film remains wet yellow-brown sticky mousse. Saturated sediments to 2.5 inches.

Survey for oiling condition  
 April 12, 1990  
 Lee Glenn  
 Norma Audish

Sea lions haulout directly onto the oiled area. About 82 Stellar sea lions seen here in 1989. About 50 have been observed so far in 1990.

Lee Glenn  
 A.O.C. & C.  
 Marine Oil Response Center  
 235-5322

- = Sample taken
- = Photo frame # and shot direction.

ACE 9961295

ACE 1941083



ADF&G MULTI-ASSESSMENT DATA FORM

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

METHOD: Aerial  Ground Boat

3 DATE: Apr. 12, 1990 15 HIGH TIDE TIMES: 1549, 1607 21 TEAM RECORDER: LEE GLENN

4 START TIME: 0950 16 HIGH TIDE HTS: 10.9' / 10.12' 22 OBSERVERS: NORMA DUDIAK

5 STOP TIME: 1221 17 LOW TIDE TIMES: 1009 / 0949 23 AGENCY: ADF&G

6 SEGMENT #: PI-1 18 LOW TIDE HTS: -0.8' / -0.8 24 PHOTOS TAKEN:  Y  N

7 STATION #: NA 19 TIDE HT AT SURVEY: -0.8 increasing Roll #: 350H Frame: FIRST FEW

8 K-UNIT: NA  Ebb  Slack  Flood  Slack 25 VIDEO TAKEN:  Y  N TAPE#: NO90-LPG-022H

9 STAT AREA: NA 20 USCG QUAD: \_\_\_\_\_ Starts: \_\_\_\_\_ Ends: \_\_\_\_\_

10 LAT: 59°06'48" 11 LONG: 151°39'36" 26 SAMPLES TAKEN?  Y  N Number + DUPE.

12 SOURCE: Map Lorán

13 LOCATION: PERL ISLAND, GULF OF ALASKA OFF THE

14 DESCRIPTION: SW TIP OF KENAI PENINSULA  
STELLAR SEA LION HAULOUT  
EXTENT OF OIL

011 LPG412 PI 1030

Sediment \_\_\_\_\_

Biological \_\_\_\_\_

Water \_\_\_\_\_

27 SURFACE COVERAGE	SHORELINE				STREAM			
	458m	183m	M <sup>2</sup>	%	L	W	M <sup>2</sup>	%
500'	200'	83812	10-	50%				
28 SURFACE THICKNESS	7.5cm		25%					
29 PENETRATION	10cm		25%					

30 OVERALL OIL IMPACT: N VL L  H H

31 OIL TYPE:  Pooled  Mousse Tar Asphalt  Sticky  Stain

32 OILED DEBRIS? Y  N

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

34 WAVE EXPOSURE:  High Moderate Low

35 SUBSTRATE TYPE: Bedrock 40% Boulder 45% Cobble 10%  
Gravel 5% Sand 0 Mud/silt 0

36 CATALOGED ANAD. FISH STREAM? Y  N

37 CATALOG #:

38 STREAM NAME:

39 OIL IN STREAM BED? Y N

40 OIL ON STREAM BANKS? Y N

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

42 OIL WITHIN 1 MILE OF STREAM? Y N

Where: \_\_\_\_\_

43 ANADROMOUS FISH PRESENT? Y N

44 ANADROMOUS FISH OBSERVATION

Species	Aerial	Ground

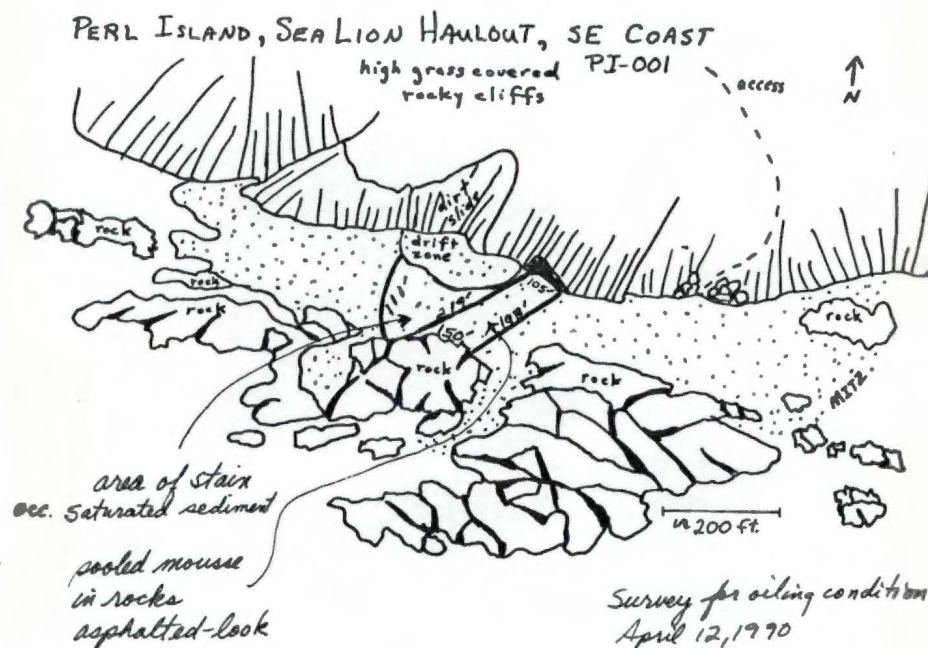
ACE 9961296

COMMENTS: Extensive video shot and copy forwarded to Don Caulkins, ADF&G Game Div. Stellar sea lion haulout, approx 82 seen here in 1989, so far only 50 seen in 1990. Oystercatchers, gulls, cormorants seen here. Stellar sea lions are now on the threatened list. ADF&G will require strict guidelines if area is to be cleaned.



FRAME(S) ?	90NWD350H	DESCRIPTION
1		Lee Glenn taking sample LPG 412 PI 7030
2		" " digging saturated sediment
3		Wet mousse, sticky running in heat
4		Sea lions
5		Aerial of Perl haulout

## 48 OIL DISTRIBUTION DIAGRAM



Oil not affected by winter storms except to darken a surface oil film, under film remains wet yellow-brown sticky mousse. Saturated sediments to 2.5 inches.

Sea lions haulout directly onto the oiled area. About 82 Stellar sea lions seen here in 1989. About 50 have been observed so far in 1990.

Lee Glenn  
A.O.C. & G.  
Hawaii Oil Response Center  
235-5322

ACE 9961297 / A

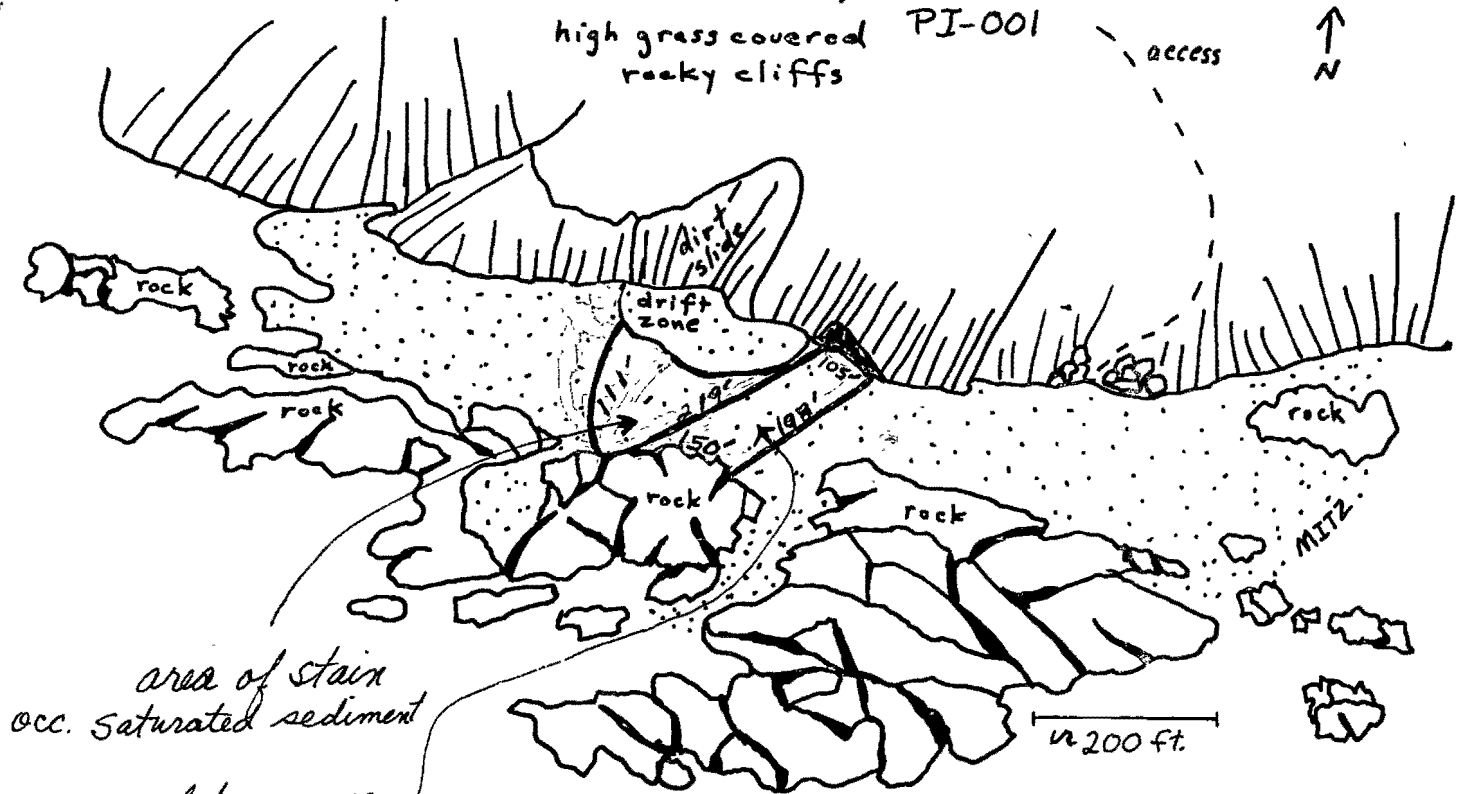
= Sample taken  
= Photo frame # and shot direction.

ACE 1941083



PERL ISLAND, SEA LION HAULOUT, SE COAST

high grass covered rocky cliffs



area of stain  
occ. saturated sediment

pooled mousse  
in rocks  
asphalted-look

Oil not effected by winter storms  
except to darken a surface  
oil film, under film remains  
wet yellow-brown sticky mousse.  
Saturated sediments to 2.5 inches.

Survey for oiling condition  
April 12, 1990  
Lee Glenn  
Norma Rudiak

Sea lions haulout directly onto the oiled area. About 82  
Stellar sea lions seen here in 1989. About 50 have  
been observed so far in 1990.

ACE 9961297/B

Lee Glenn  
A.O.C.S.G.  
Hemer Oil Response Center  
235-5322

ACE 1941084

NOT A Stream

TONGINA BAY - Grimm Beach

ASC NUMBER: SEGMENT NUMBER: TB-04 YR CATALOGED:  
 LOCATION: Tongina Bay  
 STREAM NAME: DIAK K-UNIT: LOCAL STREAM #: LATITUDE:  
 USGS QUADRANGLE: Seidowia B-3 LONGITUDE:  
 SHORELINE TYPE: Beach LEGAL:  
 WAVE EXPOSURE: Low ALL SEGMENTS:

ASC NUMBER:  
 SURVEY TYPE: BS  
 METHOD: FOOT  
 DATE: 4/25/1  
 START TIME: 0945  
 STOP TIME: 1100

TEAM RECORDER: Hill  
 OBSERVERS: Didiak  
 AGENCY (IES): AOF 267

PHOTOS TAKEN? 8  
 Roll #: 9000H07H Frames: 21-24  
 VIDEO TAKEN? N Tape Number:  
 Counter Start:

SAMPLES TAKEN?

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

	LENGTH m	WIDTH m	M2	%	THICK cm	PEN cm	OIL TYPE
SITE 1	18	<1.5	27	60	1.25/7.5	—	AP, MS, OR (OP)
SITE 2	46	<1.5	69	20	1.25/7.5	—	AP, MS, OR, PV, CT, S
SITE 3	92	—	—	41	<2.5	—	TB, OR
SITE 4	ISTHMUS - Oiled Area not measured						
SITE 5							

OVERALL OIL IMPACT: M

OIL IN STREAM CHANNEL? —  
 SUBSTRATE

OIL ON BEACH WITHIN 50M OF STREAM MOUTH? —

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

SPECIES	NONE				
COUNT					

COMMENTS:



NOT A STREAM

Tonsina Bay - Grimm Beach

ADF&G MULTI-ASSESSMENT DATA FORM

1 SURVEY TYPE: BS SS DS TS AVS SCHA MMS PTA  
 2 REGION: PWS KP, CI K, AP  
 METHOD: Aerial Ground Boat  
 3 DATE: 4/25/90 15 HIGH TIDE TIMES: 0158 1 1457 21 TEAM RECORDER: Doug Hill  
 4 START TIME: 0945 16 HIGH TIDE HTS: 14.7 112.4 22 OBSERVERS: Norma Dudrak  
 5 STOP TIME: 1100 17 LOW TIDE TIMES: 0830 1 0832 23 AGENCY: ADF&G  
 6 SEGMENT #: TB-4 18 LOW TIDE HTS: -3.3 1 0.9 24 PHOTOS TAKEN: N  
 7 STATION #: \_\_\_\_\_ 19 TIDE HT AT SURVEY: \_\_\_\_\_ Roll #: 9000007H Frame: 21 → 24  
 8 K-UNIT: \_\_\_\_\_ Ebb Slack Flood Slack 25 VIDEO TAKEN: Y N TAPE#: \_\_\_\_\_  
 9 STAT AREA: \_\_\_\_\_ 20 USCG QUAD: Seldovia B-3 Start: \_\_\_\_\_ End: \_\_\_\_\_  
 10 LAT: \_\_\_\_\_ 11 LONG: \_\_\_\_\_ 26 SAMPLES TAKEN? Y N Number  
 12 SOURCE: Map Loran Oil \_\_\_\_\_  
 13 LOCATION: KP, AK, Tonsina Bay, Grimm Beach Sediment \_\_\_\_\_  
 14 DESCRIPTION: West shore of Bay, South pocket beach Biological \_\_\_\_\_  
 Water \_\_\_\_\_

EXTENT OF OIL

	SHORELINE				STREAM				36 CATALOGED ANAD. FISH SREAM? Y N
	L	W	M <sup>2</sup>	%	L	W	M <sup>2</sup>	%	
27 SURFACE COVERAGE									37 CATALOG #:
28 SURFACE THICKNESS									38 STREAM NAME:
29 PENETRATION									39 OIL IN STREAM BED? Y N
30 OVERALL OIL IMPACT: N VL <u>L</u> M H									40 OIL ON STREAM BANKS? Y N
31 OIL TYPE: Pooled <u>Mousse</u> <u>Tar</u> <u>Asphalt</u> <u>Sticky</u> <u>Stain</u>									41 OIL ON BEACH ADJACENT TO MOUTH? Y N (within 50 meters)
32 OILED DEBRIS? <u>Y</u> N									42 OIL WITHIN 1 MILE OF STREAM? Y N Where: _____
33 SHORELINE TYPE: Headland <u>Low-lying Rocks</u> <u>Beach</u> Cove Lagoon Marsh									43 ANADROMOUS FISH PRESENT? Y N
34 WAVE EXPOSURE: High Moderate <u>Low</u>									44 ANADROMOUS FISH OBSERVATION
35 SUBSTRATE TYPE: Bedrock <u>✓</u> Boulder <u>✓</u> Cobble <u>✓</u> Gravel <u>✓</u> Sand _____ Mud/silt <u>✓</u>									Species Aerial Ground

M x 3.28 = Feet


ACE 9961299

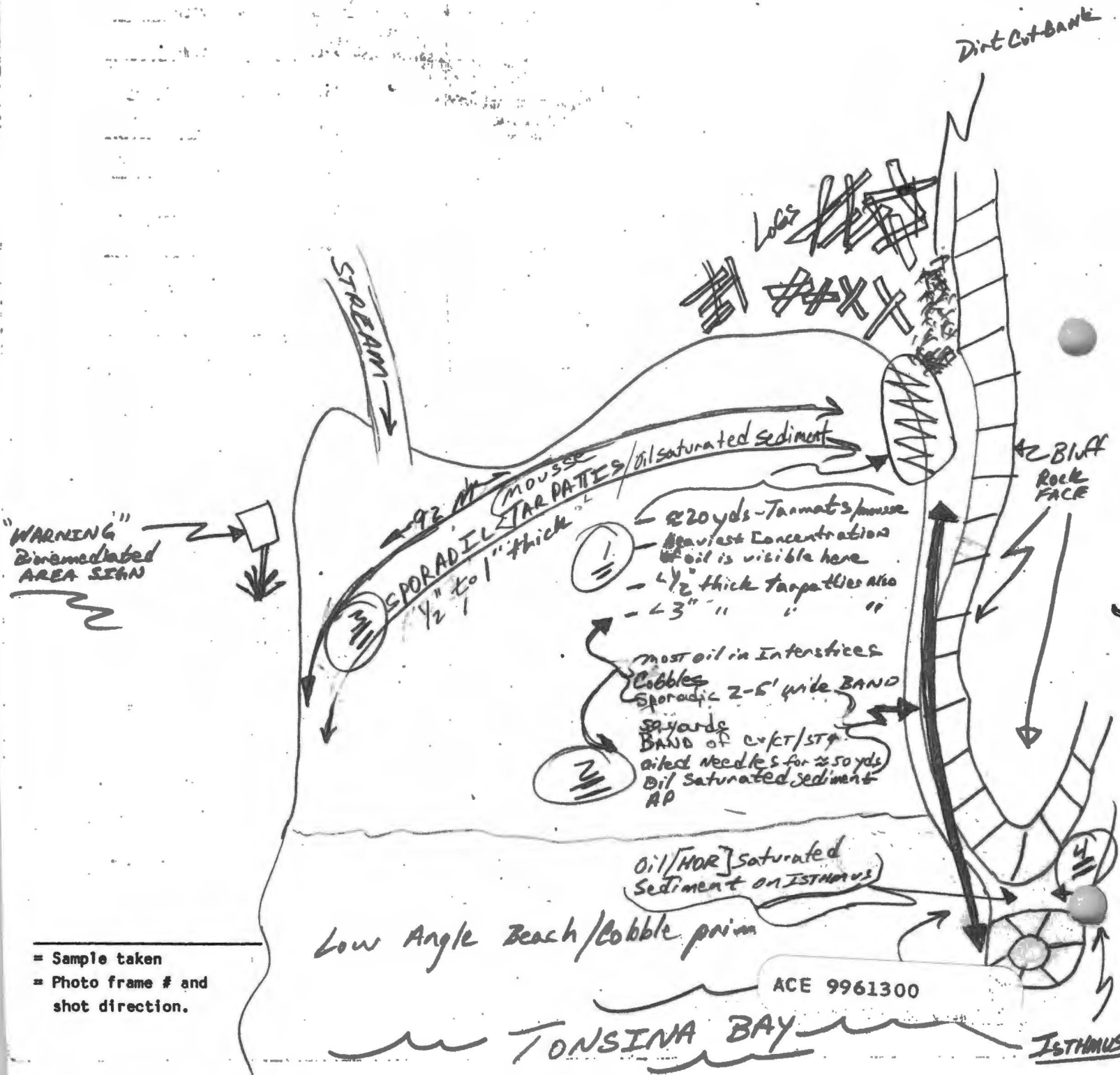
COMMENTS: Beach Very Green - Perhaps due to Bioremediation/NOT sure if its greener than normal.  
Though this type of Algal growth does occur naturally on Oil saturated sediment on Tatham  
(North shore of Tigt); Oil saturated sediment, AK, CI, CV, ST, oiled-spine evergreen on length  
of North shore, lowest oil on NW Corner near dirt bank; tar balls, Mousse, oil saturated  
Sediment on flats at MITZ & LITZ; Oiled logs/debris in SUTZ  
More work could easily be done here. Oil sheen at NW Corner of beach

FRAME(S)

DESCRIPTION

21	Barnacles smothered w/oil (dead). Oil encrusted needles
22	Oil encrusted needles - Barnacles dead/smothered in Oil
23	Typical oil found on NW corner of beach - bench below dirt bank
24	Algal growth on barnacles - upper portion of bioremediated Area

46 OIL DISTRIBUTION DIAGRAM



= Sample taken  
= Photo frame # and  
shot direction.



ADF&G MULTI-ASSESSMENT DATA FORM

~~Not a stream~~  
*NOT A stream*

*Chugach Bay Photo-  
 Transect  
 Site*

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

METHOD: Aerial  Ground Boat

3 DATE: 4/26/90 16 HIGH TIDE TIMES: 0238 1 1545 21 TEAM RECORDER: Dorothy Hill, Susan McNamee

4 START TIME: 0735 19 HIGH TIDE HTS: -3.7 1 1.5 22 OBSERVERS: Lee Graham

5 STOP TIME: 0804 17 LOW TIDE TIMES: 0915 1215 23 AGENCY: ADF&G

6 SEGMENT #: CB-3B 18 LOW TIDE HTS: 15.2 1 2.2 24 PHOTOS TAKEN:  Y  N

7 STATION #: \_\_\_\_\_ 19 TIDE HT AT SURVEY: \_\_\_\_\_ Roll #: \_\_\_\_\_ Frame: \_\_\_\_\_

8 K-UNIT: \_\_\_\_\_  Ebb Slack Flood Slack 25 VIDEO TAKEN: Y  N TAPE#: \_\_\_\_\_

9 STAT AREA: \_\_\_\_\_ 20 USCG QUAD: Seldovia A-5 Start: \_\_\_\_\_ End: \_\_\_\_\_

10 LAT: \_\_\_\_\_ 11 LONG: \_\_\_\_\_ 26 SAMPLES TAKEN? Y  N Number

12 SOURCE: Map Loran 011 \_\_\_\_\_

13 LOCATION: Chugach Bay, North Shore, "NORTH BEACH" Sediment \_\_\_\_\_

14 DESCRIPTION: \_\_\_\_\_ Biological \_\_\_\_\_

Water \_\_\_\_\_

EXTENT OF OIL

	SHORELINE				STREAM			
	L	W	M <sup>2</sup>	%	L	W	M <sup>2</sup>	%
27 SURFACE COVERAGE								
28 SURFACE THICKNESS								
29 PENETRATION								
30 OVERALL OIL IMPACT:	N	VL	L	<input checked="" type="radio"/> H <input type="radio"/> N				

31 OIL TYPE:  Pooled  Mousse  Tar Asphalt  Sticky  Stain

32 OILED DEBRIS? Y N

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

34 WAVE EXPOSURE:  High  Moderate Low

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

36 CATALOGED ANAD. FISH STREAM? Y  N

37 CATALOG #: \_\_\_\_\_

38 STREAM NAME: \_\_\_\_\_

39 OIL IN STREAM BED? Y N

40 OIL ON STREAM BANKS? Y N

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

42 OIL WITHIN 1 MILE OF STREAM? Y N  
 Where: \_\_\_\_\_

43 ANADROMOUS FISH PRESENT? Y N

44 ANADROMOUS FISH OBSERVATION

Species	Aerial	Ground

ACE 9961301

COMMENTS: This beach is within one mile of an anadromous fish stream. The "Solvent" under the guise of Fertilizer (Enipal) was applied in August of 1989. 40 to 50 pound rocks have migrated on the East end of the transect. Photo from Dec. 10<sup>th</sup> 1989 shows rocks at the 0" meter point further a part. Upper end of transect => 2-3" tar mats (Brown shiny surface on interstitial fill. Numerous packets of mousse beneath rocks at lower end of transect - pure flowing mousse beneath rocks.

FRAME(S)

DESCRIPTION

FRAME(S)	DESCRIPTION

**48 OIL DISTRIBUTION DIAGRAM**

—  
= Sample taken  
= Photo frame # and  
shot direction.



NOT A Stream No stream  
ADF&G MULTI-ASSESSMENT DATA FORM

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

METHOD: Aerial  Ground Boat

3 DATE: 4/27/90 15 HIGH TIDE TIMES: 0238 11545 21 TEAM RECORDER: Dawn Hill

4 START TIME: 1132 16 HIGH TIDE HTS: -3.7 1.5 22 OBSERVERS: Lee Glenn, Susan McLane

5 STOP TIME: ? 17 LOW TIDE TIMES: 0915 12115 23 AGENCY: ADF&G

6 SEGMENT #: CB-3B 18 LOW TIDE HTS: 15.2 112.2 24 PHOTOS TAKEN:  N

7 STATION #: 19 TIDE HT AT SURVEY: Roll #: 9000HDBH Frame: 26 → 35

8 K-UNIT: Ebb Slack Flood Slack 25 VIDEO TAKEN:  N TAPE#: 90LP6, 022 H

9 STAT AREA: 20 USCG QUAD: Seldovia A-5 Start: 4380 End: 4774

10 LAT: 11 LONG: 26 SAMPLES TAKEN? Y N Number

12 SOURCE: Map Loran 011

13 LOCATION: Chugach Bay, North Shore, "North Beach"

14 DESCRIPTION: ADF&G PHOTOTRANSECT Location Sediment

Biological

Water

EXTENT OF OIL

	SHORELINE				STREAM			
	L	W	H <sup>2</sup>	%	L	W	H <sup>2</sup>	%
27 SURFACE COVERAGE								
28 SURFACE THICKNESS								
29 PENETRATION								
30 OVERALL OIL IMPACT:	N	VL	L	<input checked="" type="radio"/> H				
31 OIL TYPE:	<input checked="" type="radio"/> Pooled	<input checked="" type="radio"/> Mousse	Tar	Asphalt	<input checked="" type="radio"/> Sticky	<input checked="" type="radio"/> Stain		
32 OILED DEBRIS?	Y	N						
33 SHORELINE TYPE:	Headland	Low-lying Rocks	Lagoon	Marsh	<input checked="" type="radio"/> Beach	Cove		
34 WAVE EXPOSURE:	High	<input checked="" type="radio"/> Moderate	Low					
35 SUBSTRATE TYPE:	Bedrock	Boulder	Gravel	Sand	Cobble	Mud/silt		

36 CATALOGED ANAD. FISH STREAM? Y N

37 CATALOG #:

38 STREAM NAME:

39 OIL IN STREAM BED? Y N

40 OIL ON STREAM BANKS? Y N

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

42 OIL WITHIN 1 MILE OF STREAM? Y N

Where:

43 ANADROMOUS FISH PRESENT? Y N

44 ANADROMOUS FISH OBSERVATION

Species	Aerial	Ground

COMMENTS: Collected ~ 1/2 quart of Mousse (very little sediment). The mousse was black choco brown & very low viscosity - flowing profusely on this warm sunny day. Found numerous pools of mousse in cavities below cobbles/boulders.

For details on phototranssect see phototranssect forms & photos.

FRAME(S)	DESCRIPTION

46 OIL DISTRIBUTION DIAGRAM

— = Sample taken  
= Photo frame # and  
shot direction.



Chugach Bay  
Creek

"CB-3B"  
ADF&G  
PHOTOTRANSECT

CB003

500.0

Not A stream - But the Area is within 1/4 mile from spawning channels

PD-01 → ADEC  
Transect BEACH PROFILE

PD-04 → Pike Point

ADF&G MULTI-ASSESSMENT DATA FORM

1 SURVEY TYPE:  BS SS DS TS AVS SCHA MHHS PTA 2 REGION: PWS  K, CT K, AP

METHOD: Aerial  Ground Boat

3 DATE: 5/9/90 16 HIGH TIDE TIMES: 0142 11449 21 TEAM RECORDER: Claire Crosby (ADEC)

4 START TIME: 0710 | 0900 18 HIGH TIDE HTS: 12.7 110.5 22 OBSERVERS: Lee Glenn Doug Hill (ADEC)

5 STOP TIME: 0857 | 0943 17 LOW TIDE TIMES: 0823 12016 23 AGENCY: \_\_\_\_\_

6 SEGMENT #: PD-01 | PD-04 19 LOW TIDE HTS: -1.2 1 2.7 24 PHOTOS TAKEN: Y N

7 STATION #: \_\_\_\_\_ 10 TIDE HT AT SURVEY: \_\_\_\_\_ Roll #: \_\_\_\_\_ Frame: \_\_\_\_\_

8 K-UNIT: \_\_\_\_\_ Ebb Slack  Flood Slack 26 VIDEO TAKEN: Y N TAPE#: \_\_\_\_\_

9 STAT AREA: \_\_\_\_\_ 20 USCG QUAD: Seldovia B-4 Start: \_\_\_\_\_ End: \_\_\_\_\_

10 LAT: \_\_\_\_\_ 11 LONG: \_\_\_\_\_ 28 SAMPLES TAKEN? Y N Number

12 SOURCE: Map Loran 011 \_\_\_\_\_

13 LOCATION: KP, DC, West Arm Port Dick, North shore, beach (PD-01) Sediment \_\_\_\_\_

14 ~~West Arm Port Dick, South Shore, Pike Point (PD-04)~~ Biological \_\_\_\_\_

EXTENT OF OIL

	SHORELINE				STREAM				36 CATALOGUED ANAD. FISH-STREAM? Y N
	L	W	M <sup>2</sup>	%	L	W	M <sup>2</sup>	%	
27 SURFACE COVERAGE									37 CATALOG #:
28 SURFACE THICKNESS									38 STREAM NAME:
29 PENETRATION									39 OIL IN STREAM BED? Y N
30 OVERALL OIL IMPACT: N VL L <input checked="" type="radio"/> H H									40 OIL ON STREAM BANKS? Y N
31 OIL TYPE: Pooled <input checked="" type="radio"/> Mousse <input checked="" type="radio"/> Tar <input checked="" type="radio"/> Asphalt <input checked="" type="radio"/> Sticky <input checked="" type="radio"/> Stain									41 OIL ON BEACH ADJACENT TO MOUTH? Y N (within 50 meters)
32 OILED DEBRIS? Y <input checked="" type="radio"/> N									42 OIL WITHIN 1 MILE OF STREAM? Y N
33 SHORELINE TYPE: Headland Low-lying Rocks <input checked="" type="radio"/> Beach Cove Lagoon Marsh									Where: _____
34 WAVE EXPOSURE: High <input checked="" type="radio"/> Moderate <input checked="" type="radio"/> Low									43 ANADROMOUS FISH PRESENT? Y N
35 SUBSTRATE TYPE: Bedrock _____ Boulder _____ Cobble 70 Gravel 15 Sand 15 Mud/silt _____									44 ANADROMOUS FISH OBSERVATION

Species	Aerial	Ground

ACE 9961304

PD-01 COMMENTS: Lee Glenn & I (Doug Hill) aided Claire Crosby in conducting a beach profile transect (ADEC). See ADEC for transect info. Thick tar mat & mousse beneath & between boulders & cobbles (see other side of this) → 1

PD-04 (Pike Point) ⇒ Observed bare patches in mussel bed where mussels were removed with oil last fall. Numerous mussels are still surrounded by oil. The boulder/cobble pocket beach on the west side of the Isthmus still holds heavy mousse beneath & between cobbles & boulders. Satisfactory cleanup will require moving boulders & cobbles to get oil which pools up beneath over → 2



FRAME(S)

DESCRIPTION

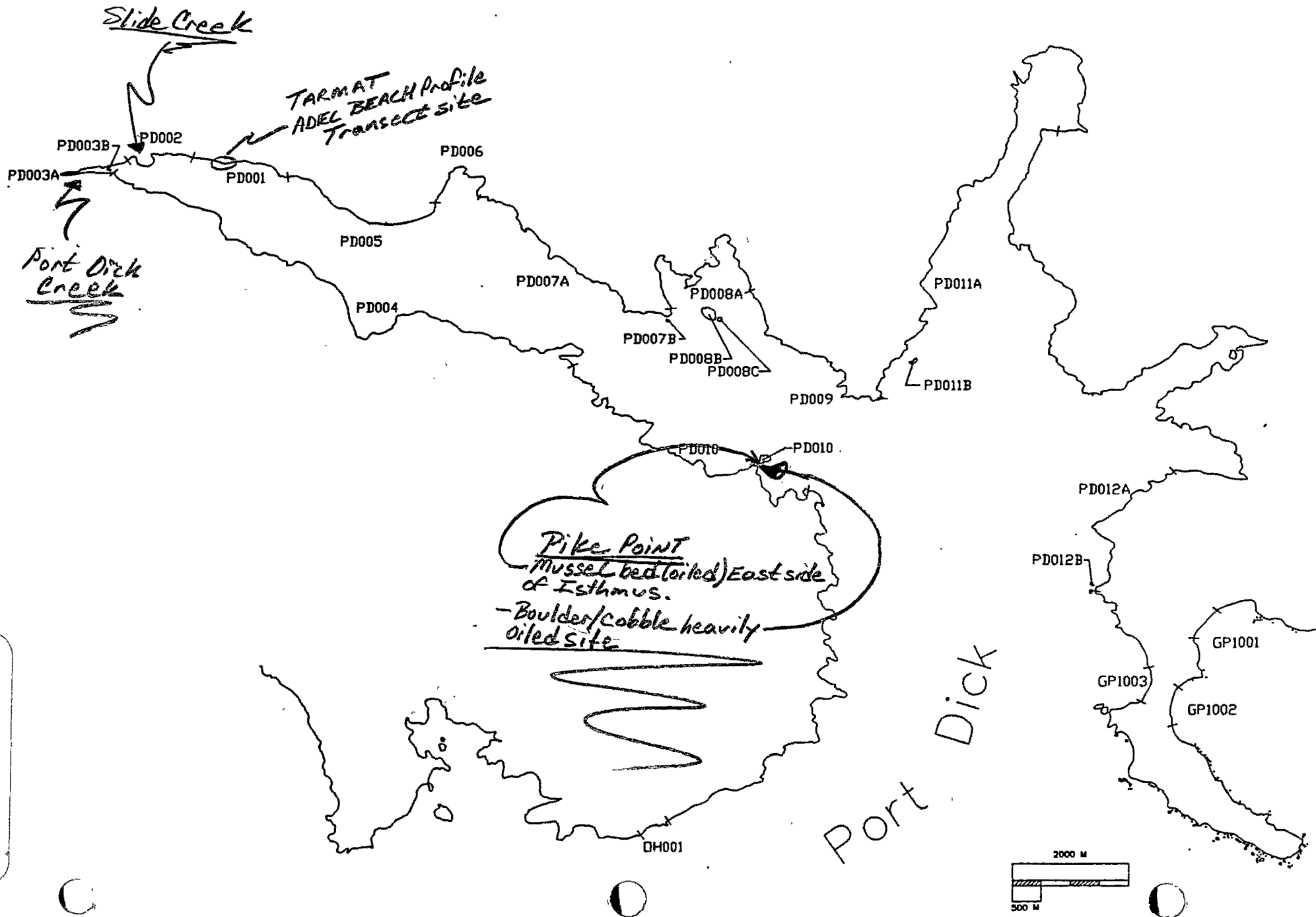
48 OIL DISTRIBUTION DIAGRAM

- 1 The moderate to heavy oil on the west end of PD-01 is of concern in part due to its proximity to Slide Creek and Port Dick Creek (ANAO streams). Salmon utilize all the waterways of the slide creek tide flats. In 1989 SE often moved tarballs onto the shorelines of PD-2 (slide creek) + PD-3 (Port Dick Creek) <sup>this</sup>
- 2 Numerous dead limits are observed on this beach - presumably smothered by oil.

With the initiation of the 1990 commercial salmon season both of these beaches may be of concern in terms of potential for oiling fishing gear and the harvest. PD-01 is between the commercial fisheries regulatory marker and Port Dick/slide creek. Hence fishing can not occur off this beach. The cobble boulder beach on the west side of Pike Point is too small a pocket to allow a "set" to be made. However, oil can still be released from these beaches. Additionally, because cleanup procedures cause loosening of the oil + sheen, cleanup should occur well in advance of the fishing season to minimize the risk of free floating oil.

= Sample taken  
 = Photo frame # and  
 shot direction.

ACE 9961305



ACE 9961306



Cook Inlet - East Side Bivweeler Survey

ADF&G MULTI-ASSESSMENT DATA FORM

1 SURVEY TYPE:  SS  DS  TS  AVS  SCHA  MMS  PTA 0 2 4 2 REGION: PWS  KP, CI K, AP

METHOD: Aerial  Ground  Boat 0 2 4

3 DATE: 5/10/90 16 HIGH TIDE TIMES: 0212 1 15 24 21 TEAM RECORDER: \_\_\_\_\_

4 START TIME: 0745 18 HIGH TIDE HTS: 12.8 1 10.5 22 OBSERVERS: Rick Conover (ADNR) Dave Hill (ADF&G)

6 STOP TIME: 1100 17 LOW TIDE TIMES: 0823 12014 23 AGENCY: \_\_\_\_\_

8 SEGMENT #: \_\_\_\_\_ 18 LOW TIDE HTS: -1.3 1 27 24 PHOTOS TAKEN: Y  N

7 STATION #: \_\_\_\_\_ 19 TIDE HT AT SURVEY: \_\_\_\_\_ Roll #: \_\_\_\_\_ Frame: \_\_\_\_\_

8 K-UNIT: \_\_\_\_\_  Ebb  Slack  Flood  Slack 25 VIDEO TAKEN: Y  N TAPE#: \_\_\_\_\_

9 STAT AREA: \_\_\_\_\_ 20 USCG QUAD: Seldovia D-5, Kenai A-4 & A-5 Start: \_\_\_\_\_ End: \_\_\_\_\_

10 LAT: \_\_\_\_\_ 11 LONG: \_\_\_\_\_ 26 SAMPLES TAKEN? Y  N Number

12 SOURCE: Map Loran OIL \_\_\_\_\_

13 LOCATION: Deep Creek to Stariski Creek Sediment \_\_\_\_\_

14 DESCRIPTION: \_\_\_\_\_ Biological \_\_\_\_\_

EXTENT OF OIL

	SHORELINE				STREAM			
	L	W	M <sup>2</sup>	%	L	W	M <sup>2</sup>	%
27 SURFACE COVERAGE								
28 SURFACE THICKNESS								
29 PENETRATION								

30 OVERALL OIL IMPACT:  VL  L  M  H

31 OIL TYPE: Pooled  Mousse  Tar  Asphalt  Sticky  Stain

32 OILED DEBRIS? Y  N

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

34 WAVE EXPOSURE:  High  Moderate  Low

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

36 CATALOGED ANAD FISH-SREAM?  Y  N  
244-10-10100  A

37 CATALOG #: 244-10-10050  B  
Deep Creek  A

38 STREAM NAME: Stariski Creek  B

39 OIL IN STREAM BED? Y  N

40 OIL ON STREAM BANKS? Y  N

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

42 OIL WITHIN 1 MILE OF STREAM? Y  N  
Where: \_\_\_\_\_

43 ANADROMOUS FISH PRESENT? Y  N

44 ANADROMOUS FISH OBSERVATION

Species	Aerial	Ground

COMMENTS: This survey took in 2 anadromous streams:  
Deep Creek ASC # 244-10-10100  
Stariski Creek ASC # 244-10-10050

FRAME(S)	DESCRIPTION

46 OIL DISTRIBUTION DIAGRAM

Sample taken  
Photo frame # and  
shot direction



MEMORANDUM

STATE OF ALASKA

Date 5/10/90  
 To Lee Glenn  
 Habitat Biologist III  
 Oil Response Center  
 Homer  
 From Doug Hill  
 FT III  
 Oil Response Center  
 Homer

SUBJECT Trip Report Deep Creek to Stariski Creek

Trip Date May 10, 1990  
 Crew Doug Hill (ADF&G) and Rick Conover (ADNR)  
 Vehicle ATV-one three wheeler and one four wheeler  
 Start 0745 hrs  
 Stop 1100 hrs

Deep Creek Tide Table

High Tide Times	<del>1546</del> / <del>1650</del>	0212 / 1524
High Tide HTS	<del>199</del> / <del>181</del>	12.8 / 10.5
Low Tide Times	<del>1034</del> / <del>1057</del>	0823 / 2014
Low Tide HTS	<del>1.6</del> / <del>3.7</del>	-1.3 / 2.7

Map-USCG Quad Seldovia D-5 & Kenai A-5

Rick Conover and I travelled to Deep Creek State Recreation Area via the Sterling Hwy. Once at the recreation area we unloaded the ATVs and began our slow southward journey to the mouth of Stariski Creek---Norma Dudiak's survey of 5/9/90 began at Whiskey Gulch and terminated at Stariski Creek.

We surveyed what little drift line existed. The drift line was nearly non-existent in some areas and very minimal over the majority of the beach surveyed. We also surveyed the storm drift lines where present. Portions of the beach were buried by recent sloughing of the bluff.

NO OIL WAS OBSERVED ALONG THIS APPROXIMATELY 10 MILE LONG STRETCH OF BEACH

We observed approximately 50 bald eagles approximately 1/4 mile south of Stariski Creek. We observed about 80 to 100 bald eagles on over the entire distance covered.

ADF&G MULTI-ASSESSMENT DATA FORM

1 SURVEY TYPE: BS SS DS TS AVS SCHA MHHS PTA 2 REGION: PWS KP, CI K, AP  
 METHOD: Aerial Ground Boat  
 3 DATE: 5/11/90 16 HIGH TIDE TIMES: 0241/558 21 TEAM RECORDER:  
 4 START TIME: 1715 18 HIGH TIDE HTS: 12.81 10.4 22 OBSERVERS: Clara Crosby (AOEC) Dave Hill (ADF&G)  
 6 STOP TIME: 1303 17 LOW TIDE TIMES: 0929 12122 23 AGENCY:  
 6 SEGMENT #: 18 LOW TIDE HTS: -1.2 1.36 24 PHOTOS TAKEN: Y (N)  
 7 STATION #: 19 TIDE HT AT SURVEY: Roll #: Frame:  
 8 K-UNIT: Ebb Slack Flood Slack 25 VIDEO TAKEN: Y (N) TAPE#:   
 9 STAT AREA: 20 USCG QUAD: Seldovia D-5, Kenai A49A-5 Starts: Ends:  
 10 LAT: 11 LONG: 26 SAMPLES TAKEN? Y (N) Number

12 SOURCE: Map Loran 011  
 13 LOCATION: Beach: Nimitzchik River to a point 110 miles north Sediment  
 14 DESCRIPTION: Biological  
 Water

EXTENT OF OIL

	SHORELINE				STREAM			
	L	W	M <sup>2</sup>	%	L	W	M <sup>2</sup>	%
27 SURFACE COVERAGE								
28 SURFACE THICKNESS								
29 PENETRATION								
30 OVERALL OIL IMPACT: <u>(N)</u> VL L M H								
31 OIL TYPE: Pooled Mousse Tar Asphalt Sticky Stain								
32 OILED DEBRIS? Y <u>(N)</u>								
33 SHORELINE TYPE: Headland Low-lying Rocks <u>(Beach)</u> Cove Lagoon Marsh								
34 WAVE EXPOSURE: <u>(High)</u> Moderate Low								
35 SUBSTRATE TYPE: Bedrock Boulder Cobble <u>✓</u> Gravel <u>✓</u> Sand <u>✓</u> Mud/silt <u>✓</u>								

36 CATALOGED ANAD. FISH STREAM? (N)  
 37 CATALOG #: 244-10-10090  
 38 STREAM NAME: Nimitzchik River  
 39 OIL IN STREAM-BED? Y (N)  
 40 OIL ON STREAM BANKS? Y (N)  
 41 OIL ON BEACH ADJACENT TO MOUTH? Y (N)  
 (within 50 meters)  
 42 OIL WITHIN 1 MILE OF STREAM? Y (N)  
 Where: \_\_\_\_\_  
 43 ANADROMOUS FISH PRESENT? Y ? N  
 44 ANADROMOUS FISH OBSERVATION  
 Species Aerial Ground


COMMENTS: This



FRAME(S)	DESCRIPTION

46 OIL DISTRIBUTION DIAGRAM

Sample taken  
Photo frame # and  
shot direction

11111

MEMORANDUM

STATE OF ALASKA

Date 5/20/90  
To. Lee Glenn  
Habitat Biologist III  
Oil Response Center  
Homer  
From Doug Hill  
FT III  
Oil Response Center  
Homer

---

SUBJECT Trip Report/Ninilichik River To A Point 11 0 Miles North

Trip Date May 11, 1990  
Crew Doug Hill (ADF&G) and Clara Crosby (ADEC)  
Vehicle ATV-one three wheeler and one four wheeler  
Start 0715 hrs  
Stop 1303 hrs

Deep Creek Tide Table

High Tide Times	<del>1618</del> / <del>1726</del>	0244 / 1558
High Tide HTS	<del>198</del> / <del>178</del>	128 / 104
Low Tide Times	<del>1106</del> / <del>1112</del>	0929 / 2122
Low Tide HTS	<del>11</del> / <del>18</del>	1.2 / 3.6

Map-USCG Quad Seldovia D-5, Kenai A-4 & Kenai A-5

Clara Crosby and I drove to an access road (gravel Pit) which is one mile north of Ninilichik "North Bar" on the Sterling Hwy. We commenced our ATV survey at 0715 hrs. We travelled south to the Ninilichik River. We arrived at the Ninilichik River at 0900 hrs. WE OBSERVED NO OIL ON THIS 3 5 MILE STRETCH OF BEACH.

At 0930 hrs we were back at our starting point (gravel pit road) and continued north for approximately 7 5 miles. We turned around and headed back to the trucks at 1220 hrs. At 1303 hrs we arrived back at the gravel pit road.

NO OIL WAS OBSERVED ON THIS 7 5 MILE STRETCH OF BEACH.

The drift lines were very light to non-existent. We had no trouble getting a good look at the majority of potential oil locations. However, a substantial amount of bluff slough has recently covered a number of areas on the upper portions of the beach---primarily at the base of the bluff. There is the possibility that oil have been concealed by the silt and clay.

1430 hrs ---Arrive at DOT shop to refuel and wash the ATVs.

1515 hrs ---Depart DOT to return the three-wheeler to its owner Jim Nelson (North Fork Rd). Clara returns to Oil Response Center in Homer-with other vehicle.

ACE 9961310



NOT A  
Stream Survey - Chugach Bay  
PEAGLE Nest Confirm  
Flight

ADF&G MULTI-ASSESSMENT DATA FORM

1 SURVEY TYPE:  BS SS DS TS AVS SCHA MHHS PTA 2 REGION: PWS  (KP,C) K,AP

METHOD: Aerial  Ground Boat

3 DATE: 5/17/90 16 HIGH TIDE TIMES: 07, 1 21 TEAM RECORDER: DOUG HILL (ADF&G)

4 START TIME: 1000 18 HIGH TIDE HTS: 1 22 OBSERVERS: Leigh Carlson (ADNR)  
Lee GARN (ADF&G)

6 STOP TIME: 1130 17 LOW TIDE TIMES: 1 23 AGENCY: \_\_\_\_\_

6 SEGMENT #: CB-3A 18 LOW TIDE HTS: 1 24 PHOTOS TAKEN: Y

7 STATION #: \_\_\_\_\_ 19 TIDE HT AT SURVEY: \_\_\_\_\_ Roll #: \_\_\_\_\_ Frame: \_\_\_\_\_

8 K-UNIT: \_\_\_\_\_ Ebb Slack Flood Slack 25 VIDEO TAKEN: Y  TAPE#: \_\_\_\_\_

9 STAT AREA: \_\_\_\_\_ 20 USCG QUAD: Seldovia A-5 Starts: \_\_\_\_\_ End: \_\_\_\_\_

10 LAT: 59 11 6 11 LONG: 151 37 47 26 SAMPLES TAKEN? Y  Number

12 SOURCE: Map Loren 011 \_\_\_\_\_

13 LOCATION: KP, DC, Chugach Bay, Head of Bay Sediment \_\_\_\_\_

14 DESCRIPTION: West and North shore Biological \_\_\_\_\_

Water \_\_\_\_\_

EXTENT OF OIL

	SHORELINE				STREAM			
	L	M	M <sup>2</sup>	%	L	M	M <sup>2</sup>	%
27 SURFACE COVERAGE								
28 SURFACE THICKNESS								
29 PENETRATION								
30 OVERALL OIL IMPACT:	N	VL	L	M	H			
31 OIL TYPE:	Pooled	Mousse	Tar	Asphalt	Sticky	Stain		
32 OILED DEBRIS?	Y	N						
33 SHORELINE TYPE:	Headland	Low-lying Rocks	Beach	Cove				
		Lagoon	Marsh					
34 WAVE EXPOSURE:	High	Moderate	Low					
35 SUBSTRATE TYPE:	Bedrock	Boulder	Cobble					
	Gravel	Sand	Mud/silt					

36 CATALOGED ANAD FISH STREAM? Y N

37 CATALOG #:

38 STREAM NAME: AK

39 OIL IN STREAM BED? Y N

40 OIL ON STREAM BANKS? Y N

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

42 OIL WITHIN 1 MILE OF STREAM? Y N

Where: AK

43 ANADROMOUS FISH PRESENT? Y N

44 ANADROMOUS FISH OBSERVATION

Species	Aerial	Ground

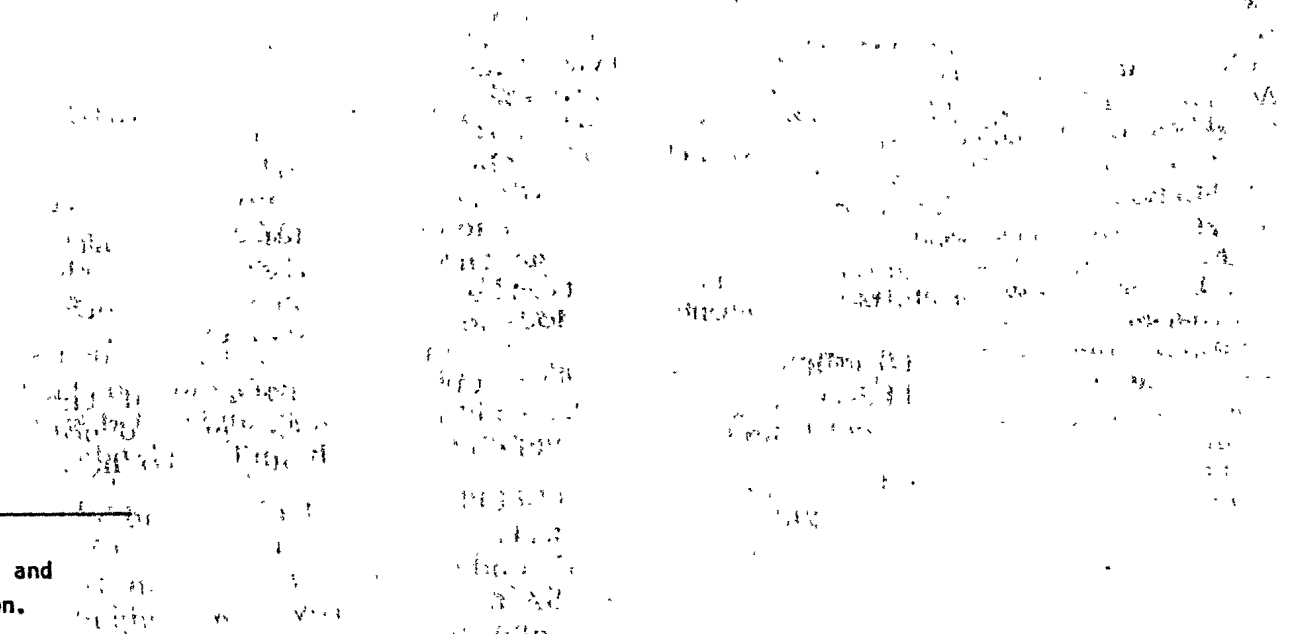
COMMENTS: see printed report

FRAME(S)

DESCRIPTION

FRAME(S)	DESCRIPTION

**46 OIL DISTRIBUTION DIAGRAM**



= Sample taken  
= Photo frame # and  
shot direction.



**MEMORANDUM**

**STATE OF ALASKA**

To: Lee Glenn  
Habitat Biologist III  
Oil Response Center  
Homer

From: Doug Hill  
FT III  
Oil Response Center  
Homer

SUBJECT: Trip Report---Chugach Bay Eagle Nest, Windy Bay Leigh Carlson (ADNR).

Trip Date: May 17, 1990  
Crew: Lee Glenn, Doug Hill (ADF&G) and Leigh Carlson (ADNR)  
Vehicle: Kenai Helicopter 678KA---Ken Deyer-Pilot  
Start: 1000 hrs.  
Stop: 1130 hrs.

Cordova Tide Table Correction  
High Tide Times: 0711 / 2059  
High Tide HTS: 9.6 / 9.6  
Low Tide Times: 0114 / 1352  
Low Tide HTS: 4.86 / 1.3

Map-USCG Quad: Seldovia A-5

Depart ERA Helicopters at 1000hrs. Leigh Carlson (ADNR) is hitching a ride with us to the F/V Ensco Atlas which is in Windy Bay. Leigh will be monitoring the EXXON cleaning operation for a few days. *Homer Zone*

Lee and I are flying to Chugach Bay to confirm or hopefully dispell the rumor that there is an eagles nest in close proximity to CB-003 subdivisions B and C. Tom Tomvlin (Current EXXON supervisor on board the F/V Yukon River) has been given orders from EXXON Anchorage to keep the cleanup crew off CB-003 subdivisions A and B because the workorder states that there is a "possible" eagles nest in the area. Additionally the workorder states that ADF&G and USFS should be contacted prior to working for confirmation. The entire section of the workorder concerning eagles is erroneous. Eagles are under the jurisdiction of the USFWS and not the ADF&G. With regards to the USFS I presume someone left out the W in USFWS. No one has documented an eagles nest in the area to date.

Nonetheless we flew to Chugach Bay to determine the distance of the nest (if it ~~from~~ really exists) from the oiled beaches. We did not believe that an eagle nest was near enough beaches B and C to halt cleanup activities.

We landed at the mouth of Chugach Bay Creek and contacted the F/V Yukon River via marine VHF. We spoke with Tom Tomvlin and Clara Crosby (ADEC) concerning the "possible" eagles nest stated in the workorder. Tom Tomvlin said that on 5/16 he recieved a message from Bill Stillings (EXXON Operations) saying to hold off work on

ACE 9961312

CB-003(B and C) until EXXON receives a confirmation as to whether or not there is a bald eagle nest in close proximity to these beaches. These are the beaches that EXXON had planned to work on 5/16.

Due to decreasing visibility the pilot told us we would have to head back to town. I was the only person to disembark the aircraft, I got a VHF radio out of the storage compartment.

Leaving Chugach Bay we took a low sweep over the beach to see if we could locate the mysterious eagles nest---we were at or near treetop level. We did not circle or hover. We observed no eagles or nest.

Arrived Windy Bay---spoke with the Ensco Atlas. The skipper told us he could not pick up Leigh Carlson because it was too rough to skiff to the beach

1130 hrs.---arrived Homer ERA Helos.

ACE 9961313



MEMORANDUM

STATE OF ALASKA

To: Lee Glenn  
Habitat Biologist III  
Oil Response Center  
Homer  
From: Doug Hill  
FT III  
Oil Response Center  
Homer

*- Relates to 5/17/90 flight to head of Chugach Bay.*

SUBJECT: Trip Report---Chugach Bay Eagle Nest, Windy Bay Leigh Carlson (ADNR). Further info regarding this issue.

Trip Date: May 17, 1990

Crew: Lee Glenn, Doug Hill (ADF&G) and Leigh Carlson (ADNR)  
Vehicle: Kenai Helicopter 678KA---Ken Deyer-Pilot  
Start: 1000 hrs.  
Stop: 1130 hrs.

Cordova Tide Table Correction

High Tide Times: 0711 / 2059  
High Tide HTS: 9.6 / 9.6  
Low Tide Times: 0114 / 1352  
Low Tide HTS: 4.86 / 1.3

Map-USCG Quad: Seldovia A-5

Date--5/18/90--0800 hrs. Homer Oil Response Office.

Recieved a message that the F/V Yukon River filed a formal complaint to EXXON Airops stating that helicopter 678KA buzzed an eagle nest on 5/17/90. This would be the ADF&G flight to dispell or confirm the existence of an eagle nest in vicinity of CB-003 beaches B and C. How can the existence of a nest be confirmed if it is not looked for. As stated in the previous memo regarding this eagle nest issue, we took a low sweep at treetop level in an attempt to find the said eagle nest. Poor weather prevented a thorough survey as we were forced make our way to Homer.

Jerry Nugent (USFWS) called this morning saying that he had been given the authority to go out and document the existence or non-existence the myysterious Chugach Bay eagle nest. Additionally Jerry will survey all the known nests and determine whether oilspill cleanup activities will pose a threat. Jerry has the authority to say yes go ahead and work or do not work in a particular area. Later this same day we recieved a call stating that Jerry has been pulled from this project and Mary Portner will conducting the eagle survey. Mary will begin her survey on 5/19/90.

- Overflight of South Shore Port Dick  
 - Looking to see if any sheen present (coming of PD-04 & PD-10)

ADF&G MULTI-ASSESSMENT DATA FORM

1 SURVEY TYPE:  BS SS DS TS AVS SCHA MHHS PTA      2 REGION: PWS  KP,C      K,AP

METHOD: Aerial  Ground Boat

3 DATE: 5/19/90      16 HIGH TIDE TIMES: 0957 11024      21 TEAM RECORDER: Doris Hill (ADENR)  
Leigh Carlson (AONR)

4 START TIME: 0943      18 HIGH TIDE HTS: 9.3 11.3      22 OBSERVERS: Lee Glenn (ADENR)

6 STOP TIME: 0953      17 LOW TIDE TIMES: 0341 11552      23 AGENCY: \_\_\_\_\_

6 SEGMENT #: PD-04+10      19 LOW TIDE HTS: 3.2 1 1.8      24 PHOTOS TAKEN: Y:  N

7 STATION #: \_\_\_\_\_      19 TIDE HT AT SURVEY: \_\_\_\_\_      Roll #: \_\_\_\_\_ Frames: \_\_\_\_\_

8 K-UNIT: \_\_\_\_\_      Ebb Slack Flood Slack      25 VIDEO TAKEN: Y  N TAPE#: \_\_\_\_\_

9 STAT AREA: \_\_\_\_\_      20 USCG QUAD: Seldovia B-3 & B-4      Start: \_\_\_\_\_ End: \_\_\_\_\_

10 LAT: \_\_\_\_\_      11 LONG: \_\_\_\_\_      26 SAMPLES TAKEN? Y  N Number

12 SOURCE: Map Loran      Oil \_\_\_\_\_

13 LOCATION: Port Dick, West Arm, South shore      Sediment \_\_\_\_\_

14 DESCRIPTION: Head of West Arm to Pike Point      Biological \_\_\_\_\_

Water \_\_\_\_\_

EXTENT OF OIL

	SHORELINE				STREAM				
	L	W	M <sup>2</sup>	%	L	W	M <sup>2</sup>	%	
27 SURFACE COVERAGE									37 CATALOG #:
28 SURFACE THICKNESS									38 STREAM NAME:
29 PENETRATION									39 OIL IN STREAM-BED? Y N
30 OVERALL OIL IMPACT: N VL L N H									40 OIL ON STREAM BANKS? Y N
31 OIL TYPE: Pooled Mousse Tar Asphalt Sticky Stain									41 OIL ON BEACH ADJACENT TO MOUTH? Y N (within 50 meters)
32 OILED DEBRIS? Y N									42 OIL WITHIN 1 MILE OF STREAM? Y N
33 SHORELINE TYPE: Headland Low-lying Rocks Beach Cove Lagoon Marsh									Where: _____
34 WAVE EXPOSURE: High Moderate Low									43 ANADROMOUS FISH PRESENT? Y N
35 SUBSTRATE TYPE: Bedrock _____ Boulder _____ Cobble _____ Gravel _____ Sand _____ Mud/silt _____									44 ANADROMOUS FISH-OBSERVATION Species Aerial Ground

COMMENTS: In anticipation of the 1990 Commercial Salmon season we conducted a brief overflight, during near high tide, of the south shore of Port Dick to see if any oil sheen is reaching from oiled beaches. We surveyed from Port Dick Brook to Pike Point. No sheen was observed.





# Commercial Fisheries Survey

## ADF&G MULTI-ASSESSMENT DATA FORM

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

METHOD: Aerial  Ground Boat

3 DATE: 5/23/90      15 HIGH TIDE TIMES: 0051 1135B      21 TEAM RECORDER: Doon Hill (ADF&G)  
Tam Schroeder (EXCOR)

4 START TIME: 0810      16 HIGH TIDE HTS: 14.3 11.2      22 OBSERVERS: Wes Bucher (ADF&G)  
Rance Morrison (ADF&G)

5 STOP TIME: 1500      17 LOW TIDE TIMES: 0729 1124      23 AGENCY: Rance Morrison (ADF&G)

6 SEGMENT #: WB-2      18 LOW TIDE HTS: -2.9 12.0      24 PHOTOS TAKEN:  Y  N  
 Roll #: 9000H11H      Frames: 00,000  
9000H10H      Frames: 22-23

7 STATION #: \_\_\_\_\_      19 TIDE HT AT SURVEY: \_\_\_\_\_      25 VIDEO TAKEN: Y   TAPE#: \_\_\_\_\_

8 K-UNIT: \_\_\_\_\_      Ebb      Slack      Flood      Slack      Start: \_\_\_\_\_      End: \_\_\_\_\_

9 STAT AREA: \_\_\_\_\_      20 USCG QUAD: Seldovia A-5

10 LAT: \_\_\_\_\_      11 LONG: \_\_\_\_\_      26 SAMPLES TAKEN? Y   Number

12 SOURCE: Map      Loran      011 \_\_\_\_\_

13 LOCATION: Windy Bay, North Shore      Sediment \_\_\_\_\_

14 DESCRIPTION: \_\_\_\_\_      Biological \_\_\_\_\_

Water \_\_\_\_\_

### EXTENT OF OIL

	SHORELINE				STREAM			
	L	W	M <sup>2</sup>	%	L	W	M <sup>2</sup>	%
27 SURFACE COVERAGE								
28 SURFACE THICKNESS								
29 PENETRATION								
30 OVERALL OIL IMPACT:	N	VL	L	M	<input checked="" type="radio"/> H			

31 OIL TYPE: Pothead      Mousse      Tar      Asphalt      Sticky      Stain

32 OILED DEBRIS?  Y  N

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

34 WAVE EXPOSURE: High      Moderate      Low

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

36 CATALOGED ANAD. FISH-SWAMP? Y  N

37 CATALOG #: \_\_\_\_\_

38 STREAM NAME: \_\_\_\_\_

39 OIL IN STREAM BED? Y  N

40 OIL ON STREAM BANKS? Y  N

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

42 OIL WITHIN 1 MILE OF STREAM? Y N

Where: \_\_\_\_\_

43 ANADROMOUS FISH PRESENT? Y  N

44 ANADROMOUS FISH OBSERVATION

Species	Aerial	Ground

ACE 9961316

COMMENTS: Day spent with Wes Bucher (ADF&G - Lower Cook Inlet Commercial Fisheries  
Manag. Biologist), Rance Morrison (Assistant Area Manag. Biologist) and  
Tam Schroeder (EXCOR Fisheries consultant). We surveyed all of WB-02, starting  
from the west ~~side of the bay~~ and ending at WB-01. Wes + Rance needed  
to see these beaches so they could make decisions regarding a  
potential Commercial Salmon fishery in Windy Bay.



FRAME(S)	DESCRIPTION
22, 23	Manual pickup - removing pooled oil from among boulders/cobbles → TAR & AP (Crew at WB-2B)

## 48 OIL DISTRIBUTION DIAGRAM

We looked at the beaches in terms of the potential for shearing, refloating oil, potential for a salmon net to be dragged across an oiled substrate, etc.

WB-2E has a number of large boulder and cobble patches on it. Beneath the boulder & cobble lies pooled mousse with little visible sediment mixed in. Numerous pockets containing up to a quart of oil can be found easily by turning boulders. Pockets of mousse can also be found in cracks and crevasses in the bedrock. ~~Pockets of mousse can also be found beneath the cobbles.~~ Tar patties can be found along nearly the entire stretch of WB-02 - as well as pockets of mousse.

The bathtub ring of oil is still present along nearly the entire length of WB-02. This ring is on the rock face that is found in about 70% of WB-02. Met. Russel Kinobe ~~works~~ (ACE) and work crew manually removing oil from "Net Beach" (beach in WB-02E). The crew has picked up 2 more super sacks from this beach since my last visit here on 5/21. The ENSCO Atlas crew is working this beach

Cont'd →  
(See photocopied notes)

= Sample taken  
= Photo frame # and  
shot direction.

ACE 9961317

5/23/90

~~Tom says some~~ ~~head~~  
morton trowels <sup>are</sup> being used  
to pick up oil. Crew using  
buckets to transport oil sediments  
& mousee to Super sack which  
is then loaded by crane onto  
LCM.

- Wes Bucher has not been on  
an oiled beach as of yet - he  
is the new air fisheries  
Mgmt. Biol (just arrived this  
Spring).

Tom Schroeder is the "Ex"-Lower  
Cook Inlet ADFG Mgmt  
Biol. - he now works for Exxon  
Exxon does not want to see this  
fishery closed - hence I presume  
that if WES writes a memo stating  
that a fishery is at stake -  
we may be able to get some  
good ~~attention~~ cleanup on these  
Windy Bay Beaches

WB-002 & WB-002 can  
still use some cleanup.

As there is oil on these  
beach & which may stay

5/23/90

have the potential to refloat or  
run when the temperatures of  
summer rise & the sun bakes  
the beaches.

Wes was particularly concerned about  
the easily removable oil on WB-002  
& Subdivision B. Tom Schroeder says  
that this is a beach where some-  
one should possibly make a net  
and the lead could drag the bottom  
and scrape up oil - the oil is  
far enough down in the intertidal  
zone where the oil is accessible  
to seine net. The fishery when  
it occurs, will most probably  
exist right up to the ADFG  
Regulatory marker (According  
to Tom Schroeder). Hence the  
fishery would exist in close  
vicinity to the most heavily oiled  
portions of this narrow bay.  
Additionally, the head of this  
bay WB-002 continues to  
hold a significant volm. of oil.  
Oil Oists which could potentially



5/23/90

reflect on cause screening.  
The beaches in question are  
Main beach, Point Beach, Tom  
Tom beach and ~~Clompas~~  
Beach. Essentially all the  
Shoreline from ~~#~~ Windy Right  
Creek to Center Creek

However, Due to An ~~Eagle~~  
eagle's nest on the Point of  
WB-003 just above ~~Tom Tom~~  
Point Beach. USFWS  
has put a halt to any kind of  
Activity within a 1/4 mile of the  
nest hence - all of the oiled  
beaches in WB-003 are currently  
off limits to any type of Cleanup  
activity.

Additionally, at this time we  
can not even walk the beach  
to survey it. I tried to get  
clearance to land outside of  
the one-quarter mile buffer  
and walk the shoreline - thus  
far USFWS (Mary Partner has  
said NO - No activity at  
all. Currently there is

5/23/90

heavy logging activity occurring  
on Chugach Native Assoc. land  
in Windy / North West shores - Chainsaw,  
trucks, OLMS, Planes, helos, blasting  
etc). Logging within 1 mile of nest.

79, 85 - Comm. Fisheries in windy

I have been trying to get a hold  
of someone in USFWS so we can at  
least take the Comolish folks on the  
WB-3 beaches - so far have not  
been able to talk to Mary Partner  
(Anchorage, who did the eagle surveys)  
Although, Mary did call me today  
while I was out in Windy.  
Susan Machan talked to Mary -  
Mary said "no we can not walk on  
those beaches." etc

Tom Schroeder - says Exxon has  
gotten clearance to conduct foot  
surveys in the Sound. He will  
try to see about getting clearance  
for us to survey WB-03.

Jerry Nugent (USFWS - Homer Rep)  
called on phone today he can not  
help us - though he does think it  
silly that we can't walk

5/23/90 or do manual pickups  
on these beaches.

Spoke w/ Mark Kwada on phone  
today. He says it would be best for  
Wes to give Tom Schroeder his  
concerns about oiled beaches to  
Tom Schroeder - i.e., tell Tom the  
beaches he feels could use cleaning,  
~~to pickup~~ beaches with the potential  
to affect Comm. fisheries.

→ We asked me to make a list  
of oiled beaches of which it  
would be a value to clean. He  
will pass this on to Tom.

I believe Tom will willingly  
pass these concerns in whole or  
to his superiors.

Tom, on his own, turned over cobbles  
& boulders stating to Wes that  
beneath the boulders & cobbles is  
where the refloatable <sup>& shearable</sup> & runnable  
mousse exists. Tom stated that  
he felt the potential does exist  
in Windy for nets to be oiled.  
But that there is a good  
chance for shutting down the

5/23/90

Windy Bay Seine Fishery

~~the~~ majority of the oil exists in  
a zone where it will be inaccessible  
to seine nets as long as it remains  
on the beach. The ~~oil~~ majority of  
the ~~oil~~ oil is present at  
the upper intertidal zone - on  
rocky bedrock platforms covered  
with sediments, cobbles & boulders.

Wes - says he will not sign  
anything offered by Exxon at this  
time. As I have told him the  
potential for mobile oil when the  
potential warms, sunny days  
come along. The fishery will not  
occur, if it does until ~~some~~  
sometime around the 26<sup>th</sup> of July.  
This is primarily a pink fishery.  
He says it would obviously be crazy at  
this time to sign anything off  
Future surveys prior to the fishery  
are necessary.  
Tom did not press Wes with  
any Anti-Non-Closure Comments.



5/23/90

→ Even w/ the toxicity problem  
Tom feels Bio-remed is worth a  
try if it could possibly alleviate  
having problems in the fishery in June  
to come. It told him they haven't  
given the alternatives a good look -  
A fair test.

Mark Kuruvada - Says Exxon is trying  
to get out of having human monitors  
on bio-remediated beaches. Says they've  
put balloons etc traps like used car  
lots to haze animals. The SOCAFOC  
conditions stated that a monitor will  
be present for 24 hrs after Tripol  
Application

• We flew to WB-009 (overcatcher  
island). We definitely feel this  
should be cleaned, as do the rest  
of us - Schroeder included.

OILED AREAS WHICH THREATEN THE SALMON FISHERY

**Windy Bay**

On May 31, Lee Glenn and Doug Hill, ADF&G; Russell Kunibe, ADEC; and Pat Norman, land manager - Port Graham Village Association walked oiled beach segments on the north side of Windy Bay. Several beach segments had been signed off by Exxon and Coast Guard. Mousse was observed bleeding from sediments and beneath boulders and some was re-floating on the incoming tide. These demobilized beaches were unacceptable to the land manager and will reduce the probability of a fishery unless cleaned to a higher standard. Work crews, however, are doing a good job considering the limited technology and work order calling for only manual pickup. Apparently work orders for the demobilized segments will have to be re-issued.

On May 23 and 24, Doug Hill, ADF&G; Wes Bucher, ADF&G, Commercial Fish Management Biologist and Tom Schroeder, Exxon Fishery Consultant surveyed Windy Bay. All were in general agreement on the degree of oiling and problems it presents to having a fishery this year. The season usually starts about July 10th. (See Tom Schroeder's letter of May 23 and 24 for his comments.) They observed a lot of soft mousse, sheens in the tide pools, sections of oiled shoreline that may foul fishing gear and in general agreed that opening Windy Bay is totally contingent upon getting these beaches clean. I will keep you informed on the progress of clean up.

**Port Dick**

Work has not begun in Port Dick. On May 24 and 25, Doug Hill, Wes Bucher and Tom Schroeder surveyed the oiled shoreline. Areas of concern include the tar mat and buried lens of oil at PD-1 near Slide Creek, the oiled cobble-boulder beach at Mars Cove and Pike Point and beaches within PD-4. See maps by Doug Hill showing areas of primary concern to the fishery and Tom Schroeder letter of May 24 and 25. The fishing season in Port Dick starts around the end of the month (June 25). Clean up should start in Port Dick immediately to clean these beaches prior to opening the fishery.

Sincerely,

*Leland Glenn*  
 Leland Glenn Habitat Division  
 Habitat Biologist

cc: Jim Butler, Kenai Peninsula Borough  
 Wes Bucher, ADF&G, Homer  
 Paul Ruesch, ADF&G, Soldotna  
 Tom Schroeder, Fisheries Consultant to Exxon  
 Pat Norman, Chugach Native Inc.

FILE: \WP50\NORMA\SURVEY90.604

Relates to MAY 31 MAO Form

Relates to MAY 23 & 24 MAO Form



Commercial Fisheries Survey - 5/23/90

Foot Survey

Doug Hill (ADF+G-Habitat)

WES Bucher (ADF+G-Commfish)

Tom Schroeder (Exxon-fisheries Rep)

WB-09 - Oystercatcher Island - Pickup Pavement, mousse patches and saturated sediment. Concentrate on Cobble/boulder beach on west side of island

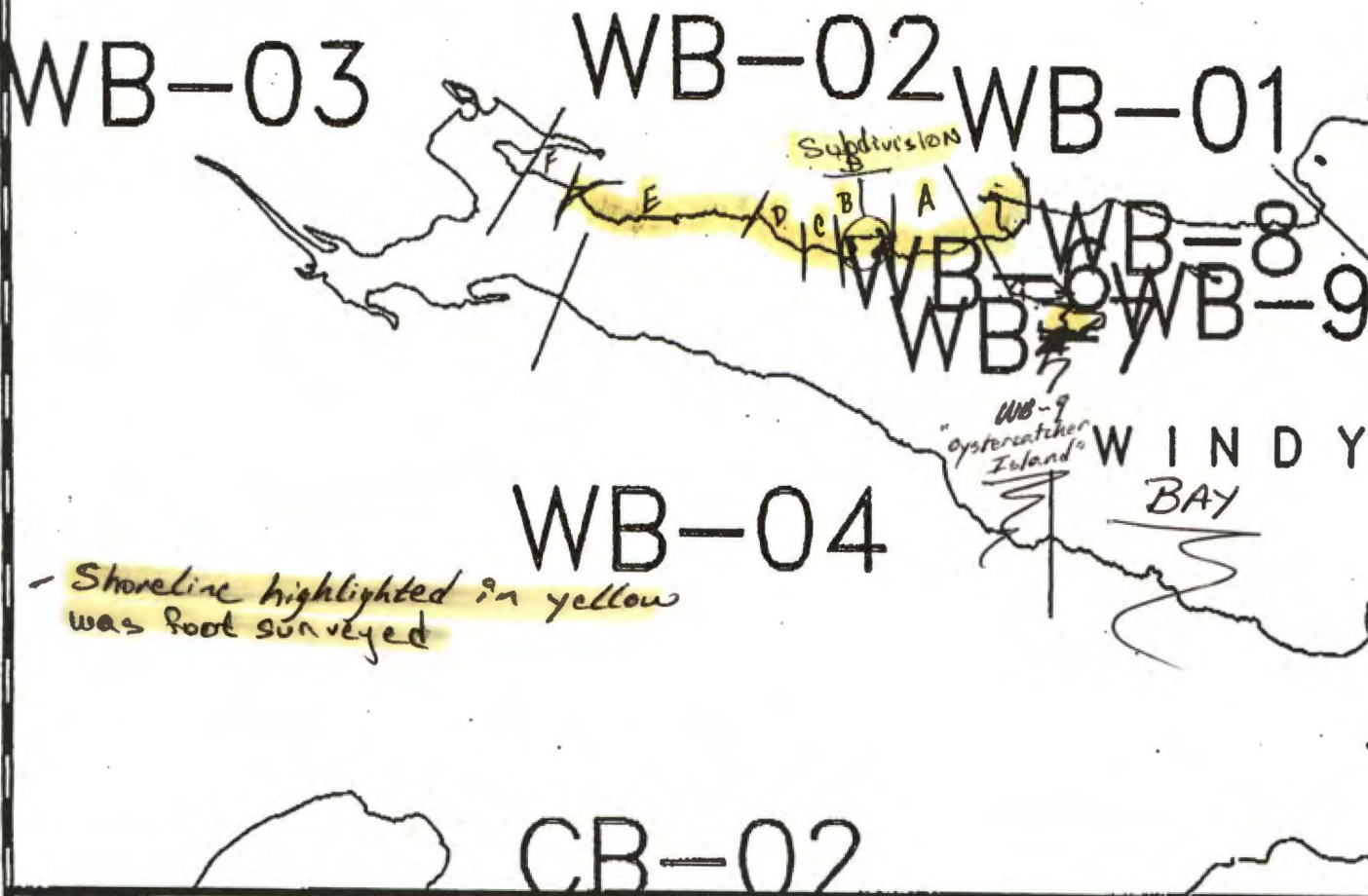
WB-02 - Subdivision B ⇒ Pickup <sup>Asphalt</sup> Mousse patches/saturated sediment (Potential Purse seine site).

Subdivision A - pickup mousse patches/saturated sediment

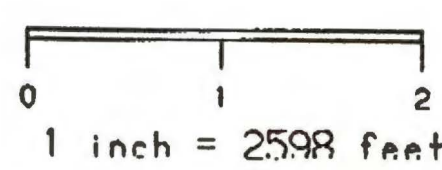
Subdivision C - pickup mousse patches/saturated sediment/Asphalt patches

Subdivision D - pickup mousse patches/pavement/saturated sediment

Subdivision E - pickup mousse patches/pavement/saturated sediment



- Shoreline highlighted in yellow was foot surveyed



EXXON COMPANY, USA

ACE 9961323

May 21, 1990

AmI used:

/chugachi/morris/super2/ops.amI

ADF&G MULTI-ASSESSMENT DATA FORM

1 SURVEY TYPE: BS SS DS TS AVS SCHA MMS PTA 2 REGION: PWS KP, CI K, AP  
 METHOD: Aerial Ground Boat  
 3 DATE: 5/24/90 15 HIGH TIDE TIMES: 0128 1145 21 TEAM RECORDER: Wes Bucher (ADF&G)  
 4 START TIME: 0822 16 HIGH TIDE HTS: 14.9 11.6 22 OBSERVERS: Tom Schroeder (EXXON)  
Doug Hill (ADF&G)  
 5 STOP TIME: 1131 17 LOW TIDE TIMES: 0815 1205 23 AGENCY: \_\_\_\_\_  
 6 SEGMENT #: PD-01,04,10 18 LOW TIDE HTS: -3.7 1 2.2 24 PHOTOS TAKEN: Y   
 7 STATION #: \_\_\_\_\_ 19 TIDE HT AT SURVEY: \_\_\_\_\_ Roll #: \_\_\_\_\_ Frame: \_\_\_\_\_  
 8 K-UNIT: \_\_\_\_\_ Ebb Slack Flood Slack 25 VIDEO TAKEN: Y  TAPE#: \_\_\_\_\_  
 9 STAT AREA: \_\_\_\_\_ 20 USCG QUAD: Soldovia-B-3, B-4 Start: \_\_\_\_\_ End: \_\_\_\_\_  
 10 LAT: \_\_\_\_\_ 11 LONG: \_\_\_\_\_ 26 SAMPLES TAKEN? Y  Number

12 SOURCE: Map Loran  
 13 LOCATION: KP, CI, West Arm Port Dick, Various beach  
 14 DESCRIPTION: Segment (includes survey of portion of Island Creek Bay/Cove ASC # 242-42-10430)  
 27 OIL \_\_\_\_\_  
 Sediment \_\_\_\_\_  
 Biological \_\_\_\_\_  
 Water \_\_\_\_\_

EXTENT OF OIL

	SHORELINE				STREAM				
	L	W	M <sup>2</sup>	%	L	W	M <sup>2</sup>	%	
27 SURFACE COVERAGE									36 CATALOGED ANAD. FISH SREAM? Y N
28 SURFACE THICKNESS									37 CATALOG #:
29 PENETRATION									38 STREAM NAME:
30 OVERALL OIL IMPACT: N VL L M H									39 OIL IN STREAM BED? Y N
31 OIL TYPE: Pooled Mousse Tar Asphalt Sticky Stain									40 OIL ON STREAM BANKS? Y N
32 OILED DEBRIS? Y N									41 OIL ON BEACH ADJACENT TO MOUTH? Y N (within 50 meters)
33 SHORELINE TYPE: Headland Low-lying Rocks Beach Cove Lagoon Marsh									42 OIL WITHIN 1 MILE OF STREAM? Y N
34 WAVE EXPOSURE: High Moderate Low									Where: _____
35 SUBSTRATE TYPE: Bedrock _____ Boulder _____ Cobble _____ Gravel _____ Sand _____ Mud/silt _____									43 ANADROMOUS FISH PRESENT? Y N
									44 ANADROMOUS FISH OBSERVATION
									Species Aerial Ground

COMMENTS: see attached field notes



FRAME(S)	DESCRIPTION

46 OIL DISTRIBUTION DIAGRAM

— = Sample taken  
= Photo frame # and  
shot direction.

5/24/90

0806 → Depart ERA Helos on Kenai  
helo 44TV (Lynn Beckhorn, pilot  
Wes Bucher (ADFC Lower Cook Inlet Comm-  
Fish Bio)

Tom Schroeder Exxon Fisheries Rep - Ex  
Doug Hill ADFC Area Mgmt Bio - Lower  
Cook Inlet

Tr. dec / Cordova

	Hi	Lo
Time	0120 1453	0815 1011
Foot	14.9' 11.6'	3.7' 7.2'

~~STOP !!~~

0822 Arrive PD-004 at "CERES"

E US Geology Survey Benchmark

Oil found along entire  $\approx 1/4$   
mile of beach survey

→ Point of land with sea stack and  
stream/waterfalls coming off  
hillside (see map w/ field report)

oil found on ~~the~~ sea stack found  
all the way around

- oil found all the way around this  
sea stack (point of land with  
mussel covered isthmus)

Small patch of pooled mussels  
→ < than 6" diameter numerous  
Numerous - particles of saturated



5/24/90

sediment

- Oil ~~found~~ quite common at base of rock face and at upper level of Fucus Zone. Found amongst boulders and cobble as mousse and mixed with sediment (sediment patches).

This • Majority of oil is inaccessible to seine nets if it <sup>(oil)</sup> remains ~~in~~ in place. Not enough oil to cause significant sheen.

A creek drops down the mt side at this STOP (CERES 0888 Benchmark - found on point of land). The lake where this creek originates has been stocked with Sockeye smolt. 1990 will be the 1<sup>st</sup> year of Adult return. ~~A~~ Currently the regulatory (ADF&G Commission) marker is just to the west of this creek.

Schroeder will make a recommend. to have some of this oil picked up.

ACE 9961326

5/24/90

0901

⇒ Depart STOP #1

0908 ⇒ Arrv. STOP #2

NE facing gradually sloping Arc-~~Point~~ shaped beach - A beach where pinks may school up and a seiner ~~is~~ could potentially drag its leadline (according to Tom Schroeder).

We found ~~the~~ mousse patches on this beach ~~is~~ (14" x 14")

Very light oiling. Though Schroeder will recommend this for manual pickup as threat to fishery.

0941 Depart STOP #2

0949 - Arrv. STOP #3

NE Facing Gradually sloping gravel/cobble/boulder beach  
No oil found

~~1008~~

1008 - Depart #3

1010 - Arrv. Mars Cove



5/23

10) - NE portion of head of Cove  
~~the~~ soft Gelatinous mouse  
found in NE corner - head of  
Cove - had to dig through drift  
(weedless kelp) to get at oil. oil  
also covered with gravel.

Stopped just give us idea of  
what's here (Surveyed head of Cove only)

1018 - Depart MALS

Arriv STOP #4 NE portion of  
Island Creek Bay - No  
oil observed - 1/4 mile survey

1043 - Depart Stop #5

1046 - Arriv Stop #6  
Island Creek NW portion  
of Bay. No oil observed  
1/4 mile survey

1106 - Depart STOP #6

1109 - Arriv. PD-001 - land on berm  
at East Mouth of Island Crk  
~~the~~ Flats & walked to  
large Tar mat of PD-001  
(DEC transect site).  
To give us a view of  
what ~~the~~ type of oil exists

5/24/90

there. This oil is obviously inside  
the ATF & G Regulatory marker.  
1131 - Depart

Viewed tar mats and mussel  
beneath gravel - Kandana  
~~more~~ sample sites. As well  
as the 24" thick Tarmat (25'  
x 50') etc.

1131 - Depart PD-001

1143 - overflight of Windy Bay to  
see if any sheering is occurring  
at this higher tide level. Tide not  
high enough yet to submerge the  
areas of beach being worked by  
the cleanup crews. <sup>disturbed</sup>

~~to~~ no sheer.

ADEC - conducting transect at Back Lagoon  
Alaska Helo - on beach at 1989 - Fuel  
depot site

2 vessels in Windy (LCM & Berthing  
vessel)

1200 hrs - Homer



OILED AREAS WHICH THREATEN THE SALMON FISHERY

Windy Bay

Relates to MAY 31  
MAO Form

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Relates to MAY  
23 & 24 MAO Form

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Sincerely,

Leland Glenn Habitat Division  
Habitat Biologist

- cc: Jim Butler, Kenai Peninsula Borough
- Wes Bucher, ADF&G, Homer
- Paul Ruesch, ADF&G, Soldotna
- Tom Schroeder, Fisheries Consultant to Exxon
- Pat Norman, Chugach Native Inc.

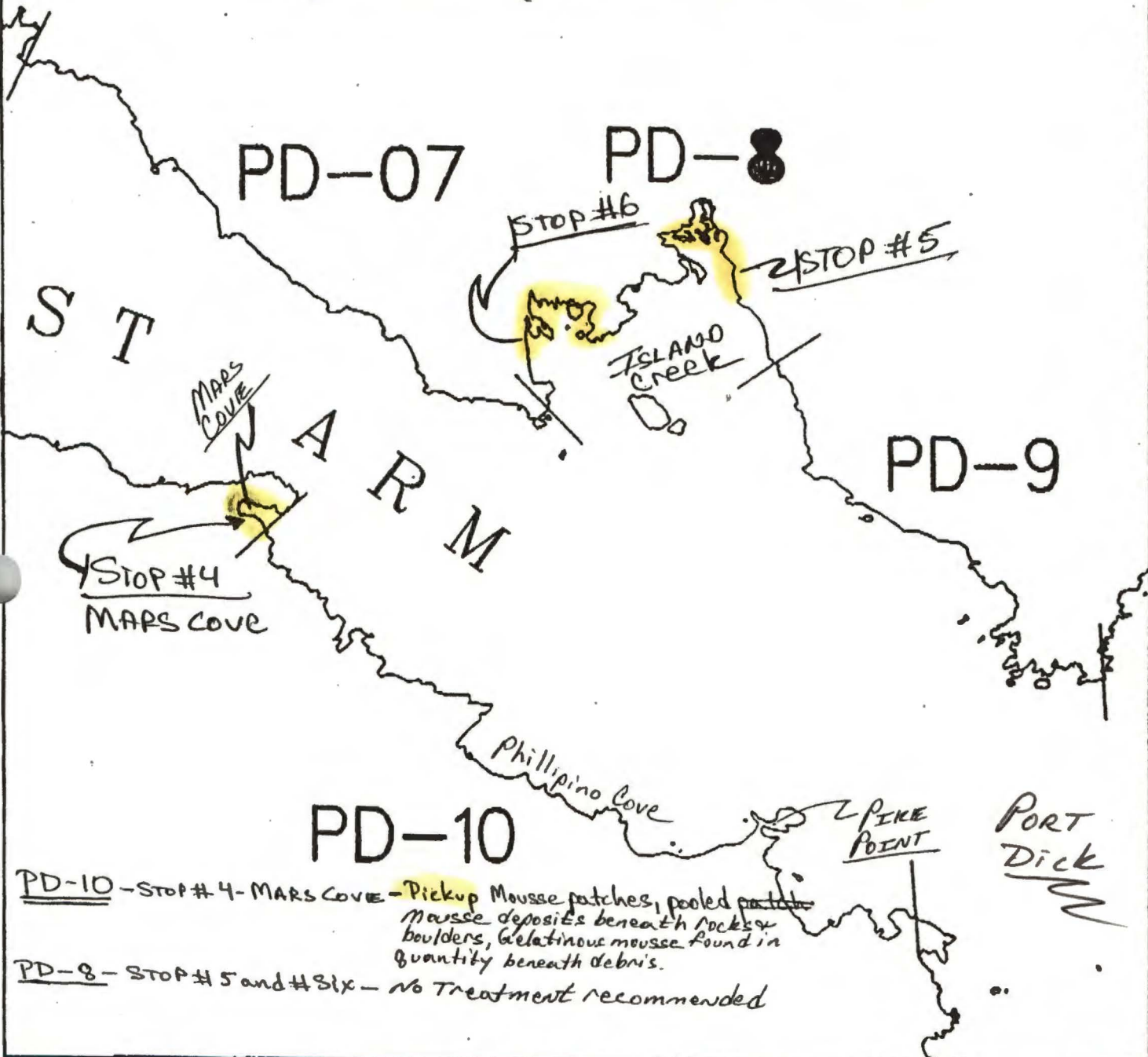
FILE: \WP50\NORMA\SURVEY90.604

Commercial Fisheries Survey - 5/24/90

FOOT SURVEY

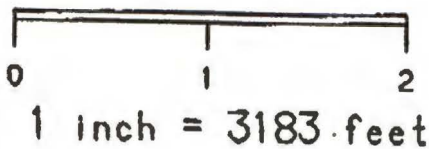
-06

Doug Hill (ADFG - Habitat)  
Wes Bucher (ADFG - Commfish)  
Tom Schroeder (Exxon - Fisheries Rep)



PD-10 - STOP #4 - MARS COVE - Pickup Mousse patches, pooled patches  
Mousse deposits beneath rocks & boulders, Gelatinous mousse found in quantity beneath debris.

PD-8 - STOP #5 and #Six - No Treatment recommended



EXXON COMPANY, USA

ACE 9961329

May 21, 1990

Aml used:

/chugachi/morris/super2/ops.aml

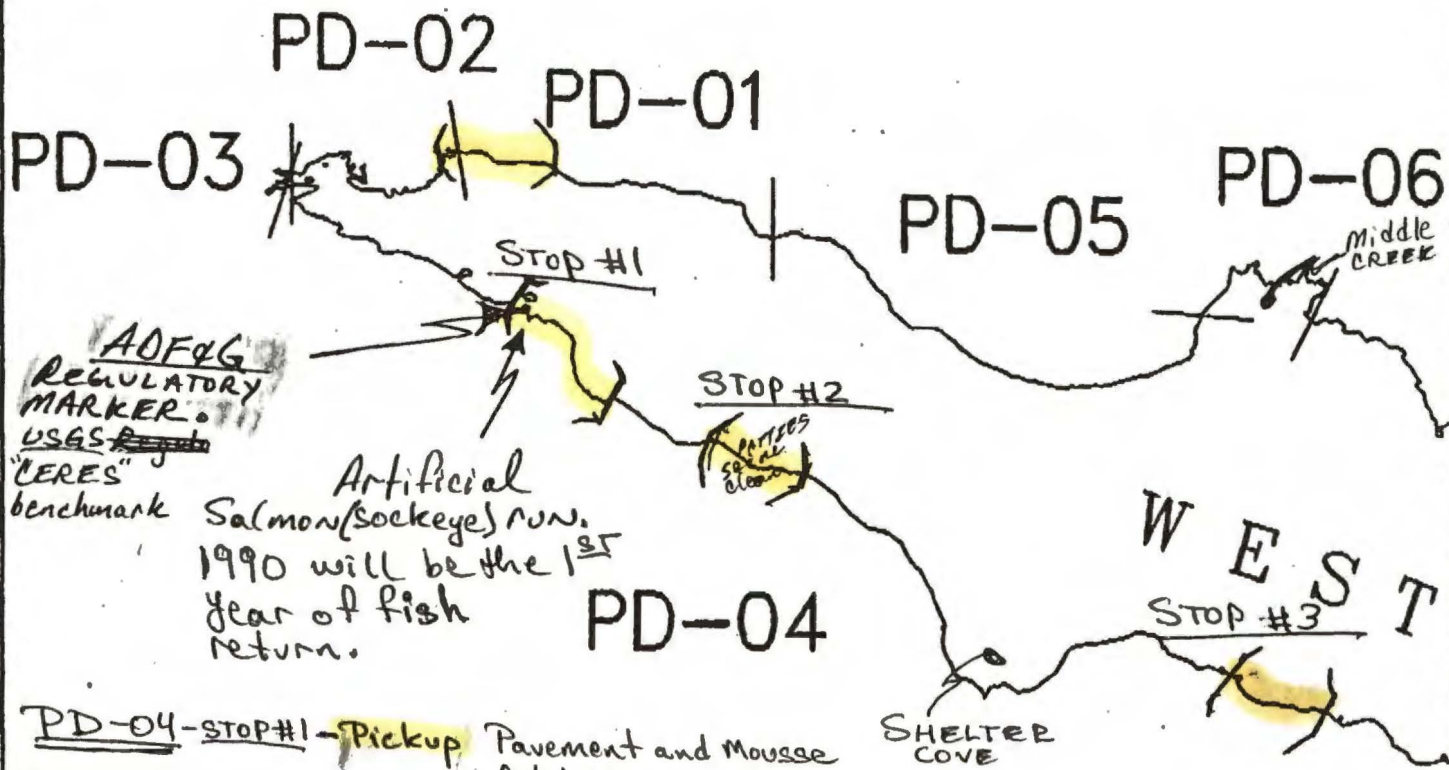


# LATE WILDERNE

Commercial Fisheries Survey - 5/24/90

## Foot Survey

Doug Hill (ADFG - Habitat)  
Wes Bucher (ADFG - Commfish)  
Tom Schroeder (Exxon - Fisheries Rep)



ADFG REGULATORY MARKER  
USGS "ERES" benchmark

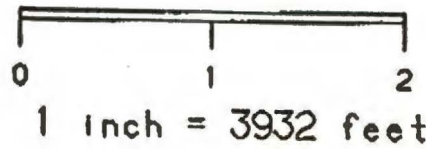
Artificial Salmon (sockeye) run. 1990 will be the 1st year of fish return.

PD-04-STOP#1 - Pickup Pavement and Mousse patches

PD-04-STOP#2 - Pickup Mousse Patches. Potential Porse seine site.

PD-04-STOP#3 - No Removeable Oil Observed.

PORT DICK



EXXON COMPANY, USA

ACE 9961330

May 21, 1990

Aml used:

/chugach1/morris/super2/ops.aml

ADF&G MULTI-ASSESSMENT DATA FORM

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

METHOD: Aerial  Ground Boat

3 DATE: 5/25/90 15 HIGH TIDE TIMES: 0214 11541 21 TEAM RECORDER: \_\_\_\_\_  
 4 START TIME: 0810 16 HIGH TIDE HTS: 15.2 11.7 22 OBSERVERS: Wes Bucher (ADF&G)  
Tom Schneider (EXXON)  
Doug Hill (ADF&G)  
 5 STOP TIME: 1130 17 LOW TIDE TIMES: 0902 12059 23 AGENCY: \_\_\_\_\_  
 6 SEGMENT #: WB 04, 05  
PD-10, PD-01, 05 18 LOW TIDE HTS: -3.9 1 2.4 24 PHOTOS TAKEN: Y    
 7 STATION #: \_\_\_\_\_ 19 TIDE HT AT SURVEY: \_\_\_\_\_ Roll #: \_\_\_\_\_ Frame: \_\_\_\_\_  
 8 K-UNIT: \_\_\_\_\_ Ebb Slack Flood Slack 25 VIDEO TAKEN: Y  TAPE#: \_\_\_\_\_  
 9 STAT AREA: \_\_\_\_\_ 20 USCG QUAD: Seldovia A-5, B-4 Start: \_\_\_\_\_ Ends: \_\_\_\_\_  
 10 LAT: \_\_\_\_\_ 11 LONG: \_\_\_\_\_ 26 SAMPLES TAKEN? Y  Number  
 12 SOURCE: Map Loran Oil \_\_\_\_\_  
 13 LOCATION: West Arm Port Dick, Windy Bay, Various Beach Segments Sediment \_\_\_\_\_  
 14 DESCRIPTION: \_\_\_\_\_ Biological \_\_\_\_\_  
 Water \_\_\_\_\_

EXTENT OF OIL

	SHORELINE				STREAM				
	L	W	M <sup>2</sup>	%	L	W	M <sup>2</sup>	%	
27 SURFACE COVERAGE									36 CATALOGED ANAD. FISH SREAM? Y N
28 SURFACE THICKNESS									37 CATALOG #:
29 PENETRATION									38 STREAM NAME:
30 OVERALL OIL IMPACT: N VL L M H									39 OIL IN STREAM BED? Y N
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32 OILED DEBRIS? Y N									41 OIL ON BEACH ADJACENT TO MOUTH? Y (within 50 meters)
33 SHORELINE TYPE: Headland Low-lying Rocks Beach Cove Lagoon Marsh									42 OIL WITHIN 1 MILE OF STREAM? Y N
34 WAVE EXPOSURE: High Moderate Low									Where: _____
35 SUBSTRATE TYPE: Bedrock Boulder Cobble Gravel Sand Mud/silt									43 ANADROMOUS FISH PRESENT? Y N
									44 ANADROMOUS FISH OBSERVATION
									Species Aerial Ground

COMMENTS: SEE Attached Field Notes & office memo

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_



FRAME(S)	DESCRIPTION

46 OIL DISTRIBUTION DIAGRAM

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= Sample taken  
= Photo frame # and  
shot direction.

Field Notes - Dog Hill / 1990

5/25/90

0746 - Depart ERA HELO<sup>S</sup> Homer on  
Kawai HELO 44TV (LYNN Beckhoorn)  
WES Bucher (ADFG)  
Tom Schroeder (EXXON)  
Dog Hill (ADFG)

0810 ⇒ ARR. WB-~~005~~ STOP #1  
S

F/V Enso Atlas in Windy Bay and  
LCM Constructor.

- oil sheen on tide pool at east  
end of embayment. No mousse  
or tar observed.

0830 Depart Stop #1

0832 - STOP #2 - East end of  
WB-004 - Boundary  
No oil observed

0902 - stop #2 Depart WB-04

0906 - STOP #3 ARR.

0940 - West end 1/4 to 1/2 mile end  
of WB-004  
No oil observed

→ Creek to EAST of Windy  
left is Pink Sparrow. A Reg  
According to T. Schroeder

5/25/90

0945 - STOP #4 Pike Point  
Mussel bed - Port Dick  
Little oil observed - some  
buried mousse observed.  
Some mousse amongst mussels  
(tar pattern). Looking better  
than previous visit.

1011 - Depart #4

1012 - ARR STOP #5

Pike Pt. East facing beach  
heavily oiled - mobile mousse  
still exists on surface &  
subsurface. We would like to  
see this stuff picked up

1018 - Depart #5

1022 - ARR TENT TOWN Pt. STOP #6

- 2 lines of tar pattern along  
length of Alluvial fan and  
a few large xixi pattern on North  
end of fan (for 20 yds north  
of fan) could easily be picked  
up. Lg. Bear plug found on  
beach

1055 - Depart #6

1102 - ARR PORT DICK CABEN



Field Notes - Bay Hill / 1990

5/25/90 Walked 1/4 mile to  
pt. from Cabin - South → PD-004  
Showered Wes & Tom - the line  
of Tar patches. Is there at  
Point covered with 1/2" - 1" layer  
of oil - Algae growing on oil.  
1130 - Depart Port Dick Cabin.  
1155 - Homer - ERA HELOS

5/29/90

Lee Stem, Doug Hill (ADFG)

Lynn Beckhorn Pilot

Kenan Helo - 44TV

We flew to Chugach Bay and walked  
from CB-0020 to Beach B

(South Cove) <sup>DOB</sup> CB-4, CB-33

had been worked recently a little

but a large quantity of oil still  
remains. Boulders & Cobble have been  
removed up to along the ADFG photo  
transect line. Even where boulders &  
Cobble have been moved up to 3" thick  
patches of tar remaining. One only  
has to glance to note the significant  
quantity of oil remaining.

Jerry Nugent (USFWS) told us the

Crew is having a safety meeting on  
board the M/V Yukon River. Jerry also  
said the crew plans to work here today &  
then move on to the Barren Islands.  
The crew did a fine job of cleaning  
up the 2 pocket beaches in WB-04  
(Between the creek mouth and South Cove)  
South Cove looks much better than it did last  
fall - however the beach (rocky platform)  
is still saturated with oil. It looks like  
someone poured fuel oil on it - little surface  
mousse or tar patches visible on surface -  
the sediments were all oil  
and the surface is definitely oil stained  
what a mess

We made an overflight of the Per Island  
and Eliz. Island - Sea Lion harbor.  
We observed 8 Sea Lion on Per Island  
approx. 45-50 Sea Lion on Eliz. Most of  
the per Sea Lion were resting on the oil  
beach.

We first surveyed the anachronous fish stream  
at Eliz. Island. We did not walk  
to the lake - we did not need to, as we  
found about 3 five gallon bucket loads  
of oil in the stream. 10 yds above  
the 90° bend we found 2 of these



OILED AREAS WHICH THREATEN THE SALMON FISHERY

**Windy Bay**

On May 31, Lee Glenn and Doug Hill, ADF&G; Russell Kunibe, ADEC; and Pat Norman, land manager - Port Graham Village Association walked oiled beach segments on the north side of Windy Bay. Several beach segments had been signed off by Exxon and Coast Guard. Mousse was observed bleeding from sediments and beneath boulders and some was re-floating on the incoming tide. These demobilized beaches were unacceptable to the land manager and will reduce the probability of a fishery unless cleaned to a higher standard. Work crews, however, are doing a good job considering the limited technology and work order calling for only manual pickup. Apparently work orders for the demobilized segments will have to be re-issued.

On May 23 and 24, Doug Hill, ADF&G; Wes Bucher, ADF&G, Commercial Fish Management Biologist and Tom Schroeder, Exxon Fishery Consultant surveyed Windy Bay. All were in general agreement on the degree of oiling and problems it presents to having a fishery this year. The season usually starts about July 10th. (See Tom Schroeder's letter of May 23 and 24 for his comments.) They observed a lot of soft mousse, sheens in the tide pools, sections of oiled shoreline that may foul fishing gear and in general agreed that opening Windy Bay is totally contingent upon getting these beaches clean. I will keep you informed on the progress of clean up.

**Port Dick**

Work has not begun in Port Dick. On May 24 and 25, Doug Hill, Wes Bucher and Tom Schroeder surveyed the oiled shoreline. Areas of concern include the tar mat and buried lens of oil at PD-1 near Slide Creek, the oiled cobble-boulder beach at Mars Cove and Pike Point and beaches within PD-4. See maps by Doug Hill showing areas of primary concern to the fishery and Tom Schroeder letter of May 24 and 25. The fishing season in Port Dick starts around the end of the month (June 25). Clean up should start in Port Dick immediately to clean these beaches prior to opening the fishery.

Sincerely,

*Leland Glenn*  
 Leland Glenn Habitat Division  
 Habitat Biologist

cc: Jim Butler, Kenai Peninsula Borough  
 Wes Bucher, ADF&G, Homer  
 Paul Ruesch, ADF&G, Soldotna  
 Tom Schroeder, Fisheries Consultant to Exxon  
 Pat Norman, Chugach Native Inc.

FILE: \WP50\NORMA\SURVEY90.604

relates to MAY 31 MAO Form

relates to MAY 23 & 24 MAO Form



# Commercial Fisheries Survey - 5/25/90

## Foot Survey

Doug Hill (ADF&G - Habitat)

WES Bucher (ADF&G - Commfish)

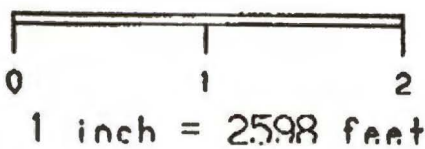
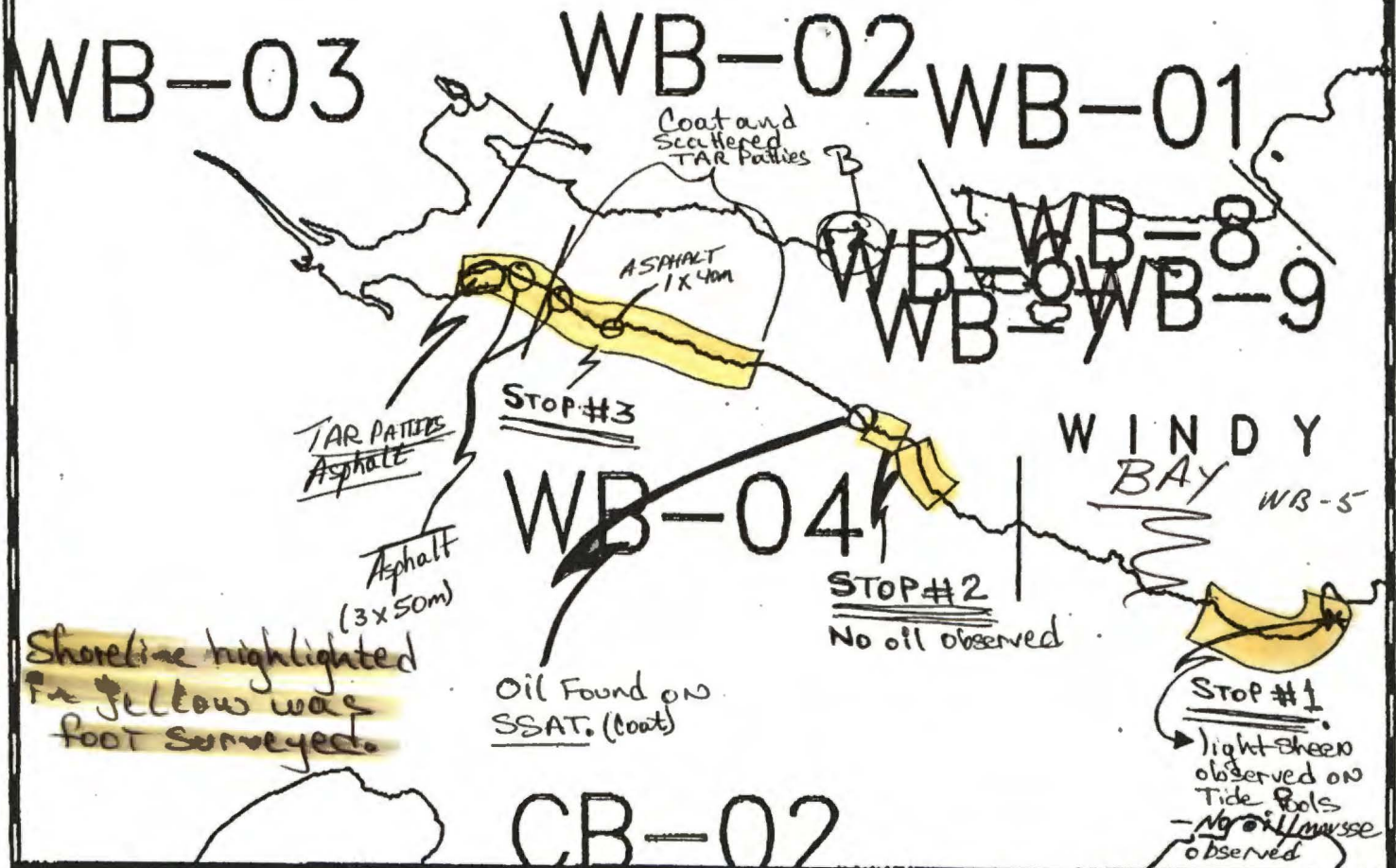
Tom Schroeder (EXXON - Fisheries Rep.)

WB-05 - stop #1 - No removable oil observed

WB-04 - stop #2 - No removable oil observed

WB-04 - stop #3 - Pickup tar patties, Asphalt, mousse patches/saturated sediment

WB-03 - stop #3 - Subdivision E - Pickup Tar patties/Asphalt/saturated sediment from spit and amongst boulder at East end



EXXON COMPANY, USA

ACE 9961335

May 21, 1990

Aml used:

/chugacht/morris/super2/ops.aml

Commercial Fisheries Survey - 5/25/90

Foot Survey.

Doug Hill - (ADF&G - Habitat)

Wes Bucher - (ADF&G - commfish)

Tom Schroeder (EXXON - Fisheries Rep.)

0-06

PD-07

PD-8

S T

ISLAND CREEK

A R M

PD-9

MARS COVE

Phillipino Cove

PD-10

STOP #5

PORT DICK

PD-10 - STOP #4 - Mousse patches in Mossel BED.

PD-10 - STOP #5 - PICKUP - Mousse patches, fragments, pooled mousse deposits beneath rocks.

STOP #4

RIKE POINT



1 inch = 3183 feet

EXXON COMPANY, USA

ACE 9961336

May 21, 1990

AmI used!

/chugach1/morris/super2/ops.amI



# TATE WILDERNE

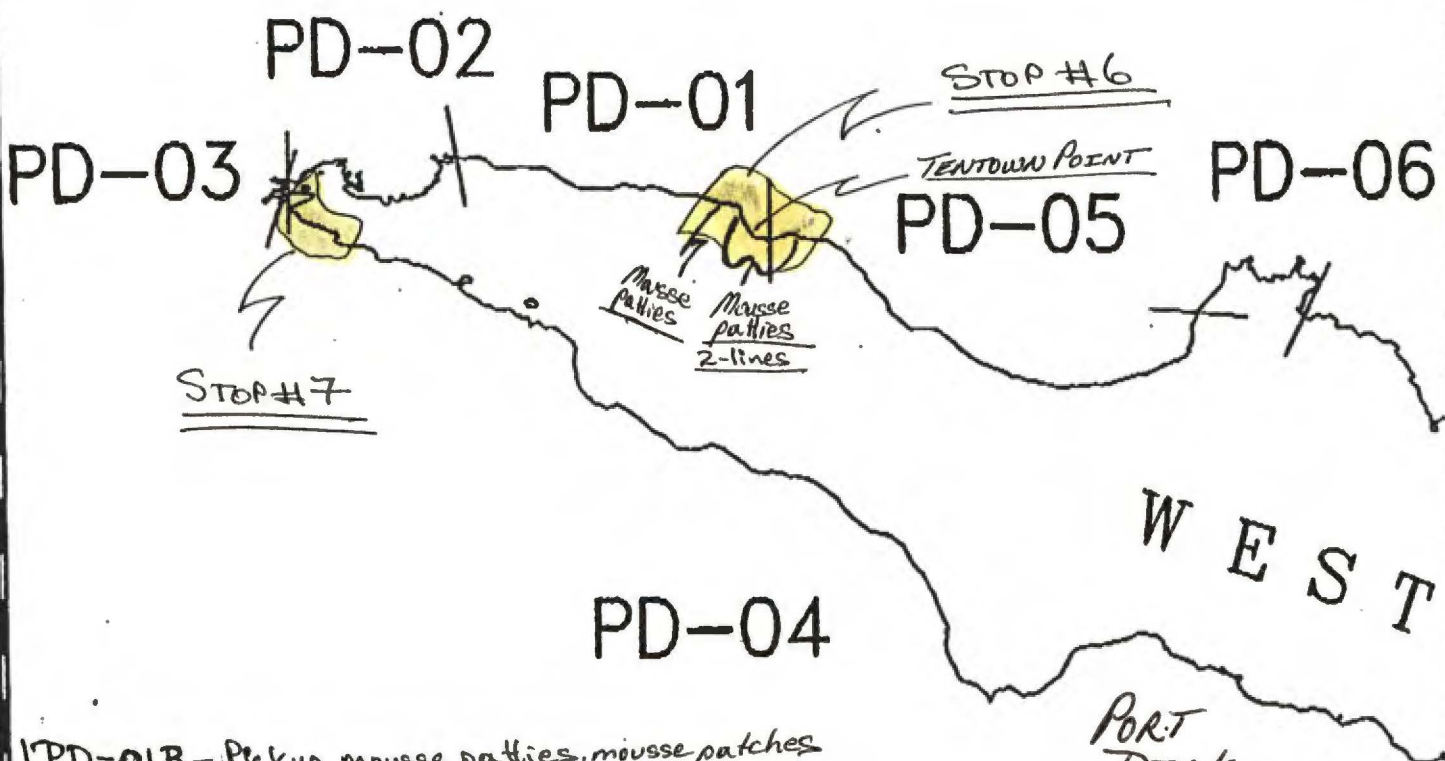
Commercial Fisheries Survey - 5/25/90

Foot Survey

Doug Hill - (ADF+G - Habitat)

WES Bucher - (ADF+G - Commfish)

Tom Schroeder (EXXON - Fisheries Rep.)

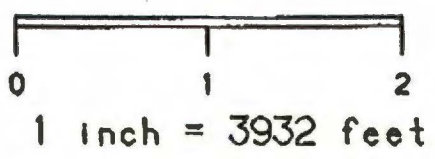


PD-01B - Pickup mousse patties, mousse patches

PD-05A - Pickup mousse patties

PD-04 - Western  $\approx$  350 yds of this Segment  
This portion of the Segment was missed by SSAT crew  
Not Included on SSAT MAP of PD-04.

Pickup tar patties, mousse patches, saturated sediment.



EXXON COMPANY, USA

ACE 996133Z

May 21, 1990

Aml used

/chugach1/morris/super2/ops.aml

Chugach Bay - ADF&G Airphoto transect area; CB-00 3C to CB-4 (South Cove)

Not A Stream  
ADF&G MULTI-ASSESSMENT DATA FORM

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

2 REGION: PWS  KP,C1  K,AP

METHOD: Aerial  Ground  Boat

3 DATE: 5/29/90 15 HIGH TIDE TIMES: 0542 1915 21 TEAM RECORDER: Doug Hill

4 START TIME: \_\_\_\_\_ 16 HIGH TIDE HTS: 12.2 10.8 22 OBSERVERS: Lee Glenn

6 STOP TIME: \_\_\_\_\_ 17 LOW TIDE TIMES: 1122 23 AGENCY: ADF&G

6 SEGMENT #: CB-3B 18 LOW TIDE HTS: 1-0.8 24 PHOTOS TAKEN: Y  N

7 STATION #: \_\_\_\_\_ 19 TIDE HT AT SURVEY: So Roll #: \_\_\_\_\_ Frame: \_\_\_\_\_

8 K-UNIT: \_\_\_\_\_ Ebb Slack Flood Slack 25 VIDEO TAKEN: Y  N TAPE#: \_\_\_\_\_

9 STAT AREA: \_\_\_\_\_ 20 USCG QUAD: Seldovia A-5 Starts: \_\_\_\_\_ Ends: \_\_\_\_\_

10 LAT: \_\_\_\_\_ 11 LONG: \_\_\_\_\_ 28 SAMPLES TAKEN? Y  N Number

12 SOURCE: Map Loran Oil \_\_\_\_\_

13 LOCATION: Chugach Bay, North shore, West shore Sediment \_\_\_\_\_

14 DESCRIPTION: South shore Biological \_\_\_\_\_

Water \_\_\_\_\_

EXTENT OF OIL

	SHORELINE				STREAM				36 CATALOGED ANAD. FISH SREAM? Y N
	L	W	M <sup>2</sup>	%	L	W	M <sup>2</sup>	%	
27 SURFACE COVERAGE									37 CATALOG #:
28 SURFACE THICKNESS									38 STREAM NAME:
29 PENETRATION									39 OIL IN STREAM BED? Y N
30 OVERALL OIL IMPACT: N VL L M H									40 OIL ON STREAM BANKS? Y N
31 OIL TYPE: <input checked="" type="radio"/> Rotted <input checked="" type="radio"/> House <input checked="" type="radio"/> Tar Asphalt <input checked="" type="radio"/> Sticky <input checked="" type="radio"/> Stain									41 OIL ON BEACH ADJACENT TO MOUTH? Y N (within 50 meters)
32 OILED DEBRIS? Y N									42 OIL WITHIN 1 MILE OF STREAM? Y N
33 SHORELINE TYPE: Headland Low-lying Rocks <input checked="" type="radio"/> Beach Cove Lagoon Marsh									Where: _____
34 WAVE EXPOSURE: High <input checked="" type="radio"/> Moderate Low									43 ANADROMOUS FISH PRESENT? Y N
35 SUBSTRATE TYPE: Bedrock _____ Boulder <input checked="" type="checkbox"/> Cobble <input checked="" type="checkbox"/> Gravel <input checked="" type="checkbox"/> Sand _____ Mud/silt <input checked="" type="checkbox"/>									44 ANADROMOUS FISH OBSERVATION

Species	Aerial	Ground

COMMENTS: This survey encompassed a beach which is just north (within 1/4 mile) of the Chugach Bay mad. stream 242-20-10190. CB-3B had been worked a little recently. But a large quantity of oil still remains on subdiv. B. Boulders & cobbles have been moved along the ADF&G transect line to get at the oil interstitially beneath. Even where rocks have been moved up to 3' thick tar patties remain. Just a glance reveals the significant quantity of oil remaining. ACE 9961338

The crew is currently having a safety meeting (during low water?) and plans to work on 3B today and then move to the barriers tomorrow.



FRAME(S)

DESCRIPTION

48 ~~PHOTOLOG~~ OIL DISTRIBUTION DIAGRAMComments cont'd:

The crew cleaned the pocket beaches between the mouth of Chugach Bay Creek and the Cove (pocket beach) on the south shore of Chugach (CB-04). These beaches were cleaned well. The oiled beach at south cove (CB-04) looks much better than it did last year, however the rocky platform is still saturated with oil. It looks like some poured motor oil all over the beach. Not much surface mousse or tan patches visible on surface. Yet the sediments wreak of oil and the surface is definitely oil stained. What a mess!

= Sample taken  
 = Photo frame # and  
 shot direction.

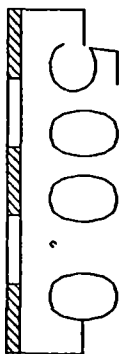
ACE 9961339

ANAD STATION

CB-3B  
ADF&G  
PHOTOTRANSECT

"BUCKET  
BEACH"

CB003





Windy Bay-WB-2  
Treatment/Post-treatment  
SURVEY

Not A Stream  
ADF&G MULTI-ASSESSMENT DATA FORM

1 SURVEY TYPE:  BS SS DS TS AVS SCHA MMHS PTA, 2 REGION: PWS  K, AP

METHOD: Aerial Ground Boat

3 DATE: 5/31/90 15 HIGH TIDE TIMES: 0802 10911 21 TEAM RECORDER: ~~---~~

4 START TIME: 1200 16 HIGH TIDE HTS: 9.7 110.8 22 OBSERVERS: Lee Glenn, Doug Hill (ADEC)

6 STOP TIME: 1730 17 LOW TIDE TIMES: 0148 10207 23 AGENCY: Russel Kinube (ADEC)

8 SEGMENT #: WB-02 18 LOW TIDE HTS: 3.6 11.3 24 PHOTOS TAKEN:  N  
900DH12H 01-13  
Roll #: 900DH13H Frame: 01-07

7 STATION #: \_\_\_\_\_ 19 TIDE HT AT SURVEY: \_\_\_\_\_

8 K-UNIT: \_\_\_\_\_ Ebb Slack Flood Slack 25 VIDEO TAKEN:  N TAPE#: 90LPG023H  
Start: 3658 End: 4362

9 STAT AREA: \_\_\_\_\_ 20 USCG QUAD: Seldovia A-5

10 LAT: \_\_\_\_\_ 11 LONG: \_\_\_\_\_ 26 SAMPLES TAKEN? Y  N Number

12 SOURCE: Map Loran

13 LOCATION: Windy Bay, North Shore

14 DESCRIPTION: \_\_\_\_\_

Oil \_\_\_\_\_  
Sediment \_\_\_\_\_  
Biological \_\_\_\_\_  
Water \_\_\_\_\_

EXTENT OF OIL

	SHORELINE				STREAM			
	L	W	M <sup>2</sup>	%	L	W	M <sup>2</sup>	%
27 SURFACE COVERAGE								
28 SURFACE THICKNESS								
29 PENETRATION								
30 OVERALL OIL IMPACT:	N	VL	L	M	<input checked="" type="radio"/>			
31 OIL TYPE:	<u>foiled</u>	<u>Mousse</u>	<u>Tar</u>	<u>Asphalt</u>	<u>Sticky</u>	<u>Stain</u>		
32 OILED DEBRIS?	<input checked="" type="radio"/> Y	<input type="radio"/> N						
33 SHORELINE TYPE:	Headland	Low-lying Lagoon	Rocks	<u>Beach</u>	Marsh	Cove		
34 WAVE EXPOSURE:	High	<u>Moderate</u>		Low				
35 SUBSTRATE TYPE:	Bedrock <input checked="" type="checkbox"/>	Boulder <input checked="" type="checkbox"/>	Cobble <input checked="" type="checkbox"/>	Gravel <input checked="" type="checkbox"/>	Sand <input checked="" type="checkbox"/>	Mud/silt <input checked="" type="checkbox"/>		

36 CATALOGED ANAD. FISH STREAM? Y  N

37 CATALOG #:

38 STREAM NAME:

39 OIL IN STREAM BED? Y  N

40 OIL ON STREAM BANKS? Y  N

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

42 OIL WITHIN 1 MILE OF STREAM? Y  N   
Where: \_\_\_\_\_

43 ANADROMOUS FISH PRESENT? Y  N

44 ANADROMOUS FISH OBSERVATION

Species	Aerial	Ground

COMMENTS: See Attached Trip report - Yellow lined text

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FRAME(S)	DESCRIPTION
01, 02	Posttreatment Survey of WR-2E (NEAR BEACH) / Pooled Mousse
3, 4, 5	onboard Exxon Atlas
6, 7, 8, 10	Pooled mousse. (6 => w/urn) (7 => barnacle) (8) (10)
9	Tide Pool up/shore & mousse on surface. Pooled Mousse
11, 12, 13	Mousse refloating as tide rises, pooled mousse

46 OIL DISTRIBUTION DIAGRAM

= Sample taken  
 = Photo frame # and shot direction.

ACE 9961341



MEMORANDUM

STATE OF ALASKA

To: Lee Glenn  
Habitat Biologist III  
Oil Response Center  
Homer

From: Doug Hill  
FT III  
Oil Response Center  
Homer

---

SUBJECT: Trip Report---Cleanup monitoring Windy Bay 002 and Chugach Bay 003-B---Russel Kinube(ADEC), Pat Norman (CNA), Lee Glenn and Doug (ADF&G). Perl and Elizabeth Island Sea Lion Haulout Overflight.

Trip Date: May 31, 1990  
Crew: Lee Glenn, Doug Hill (ADF&G), Pat Norman (CNA), Russel Kinube (ADEC).  
Vehicle: Kenai Helicopter 44TV---Lynn Beckhorn-Pilot  
Start: 1120 hrs.  
Stop: 2030 hrs.

Cordova Tide Table Correction  
High Tide Times: 0802/0911  
High Tide HTS: 09.7/10.8  
Low Tide Times: 0148/0207  
Low Tide HTS: 03.6/01.3

Map-USCG Quad: Seldovia A-5 and B-4

1120 hrs.-Depart ERA Helos Homer  
Flew to Port Graham to pick up Pat Norman (Chugach Native Association). Chugach Native Assoc. owns the land surrounding Windy Bay and Chugach Bay.

1142 hrs.-Port Graham---Pick up Pat Norman

1200 hrs.-Arrive Windy Bay---Put down at log transfer site-WB-02E. Cleanup crew has put in a lot of effort here, moving boulders and cobble to get at the pooled oil and oil saturated sediment. Perhaps 70 to 80% of visible oil remaining after the winter storms has been removed by the cleanup crews. However, on this warm sunny day shining dark brown mousse is clearly visible and flowing in some locations. Further work is needed to prevent this oil from refloating. At the present time this oil is easily located and could easily be picked up. So why not take advantage of the situation and pick it up. A crew could easily mop this oil up in a day. All participants of this flight agreed that this oil should be picked up. As it is a threat to the commercial fishery. Pat Norman is a commercial salmon fisherman-holding a Lower Cook Inlet district seine permit. Pat has seined in Windy Bay.

ACE 9961342

Pat stated that this area is not clean enough. We moved on to a beach approximately 80 yds. to the east of the log transfer site. This was a boulder, gravel, cobble beach. We were met by Steve Ferguson (ADEC), John Dean (EXXON), and Darin Smith (Obrien Oil Spill Pollution Services). Recoverable mousse and saturated sediment still remained on a portion of this beach. Darin Smith said that they had signed off on this beach last night but they had not looked at this portion of the beach. According to the USCG (Jack Reed) once a beach is signed off no one can go back to work that beach without a new SSAT survey and the paperwork must go through the TAG process. Additionally the USCG tells us that the land manager is the only one that can sign off on a beach--in this case it would be Pat Norman (CNA). So a sign off team would consist of EXXON, USCG, and the land manager. However, the coast guard decided that they could not wait for the land manager so they signed it off without the presence of the land manager (P. Norman). Jack Reed and Chris Vandepelt (USCG) passed this information on to us. The current admiral said that we do not have time to wait for the land manager if they are not able to be present when we want them there. Further the USCG feels if effort is going to be put into these beaches in the time frame that EXXON has set up we have to sign these beaches off as fast possible. Well lets see some more effort out here then. Two crews of ten in the entire Homer zone is not much of a good faith effort. Actually observations show us that perhaps only eight of these ten in fact do any real work. So, increase in numbers of workers is necessary as well as a prolonged time frame. The big rush by the USCG to help EXXON stay on its prescribed budget is at already upon us. The first Ensco Atlas crew that arrived had the hurry mode instilled in them upon arrival to the first Homer Zone beach (Nuka 01). This was in late April. What's the hurry? A decent could be done if they just take their time and finish a beach before they leave it.

1345 hrs--John Dean had us on board the Ensco Atlas for lunch.

~~REDACTED~~ Discussed concerns about small work crew sizes and the brevity of EXXONS schedule for cleanup this summer as well as possibly getting a crew to do further work on WB-02C.

1500 hrs--Skiffed to WB-2E (Net Beach). Observed small pockets of pooled mousse bleeding. Observed mousse from one <4" thick pool of mousse refloating as the tide rose and submerged it. Portions of the mousse were breaking free from the main body. In terms a commercial fishery this is exactly what we don't want. The land manager (Pat Norman) was very concerned about this. Further pickup is required on this beach.

1615 hrs--Skiffed to segment WB-2B. The cleanup crew was on site and picking up tar patties, tar mats and oil saturated



sediment. The workers would located a patch of oil and follow the seam as far as it would take them. Crew members stated that what would start out as a surface pickup often took them a few inches subsurface (i.e., the visible oiled material extended below the surface of the beach and the workers followed it until it ran out). This particular beach was an expressed cleanup concern of Tom Schroeder (EXXON Fisheries Consultant). A high potential for oiling nets exists here. Fish tend to school up in these embayments. Hence it would be a logical place to make a set since the slope of the beach is low and fish tend to school up in these embayments.

*Seams went subsurface*

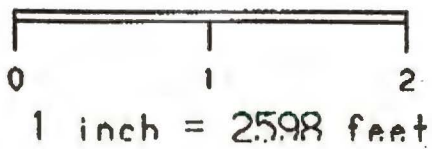
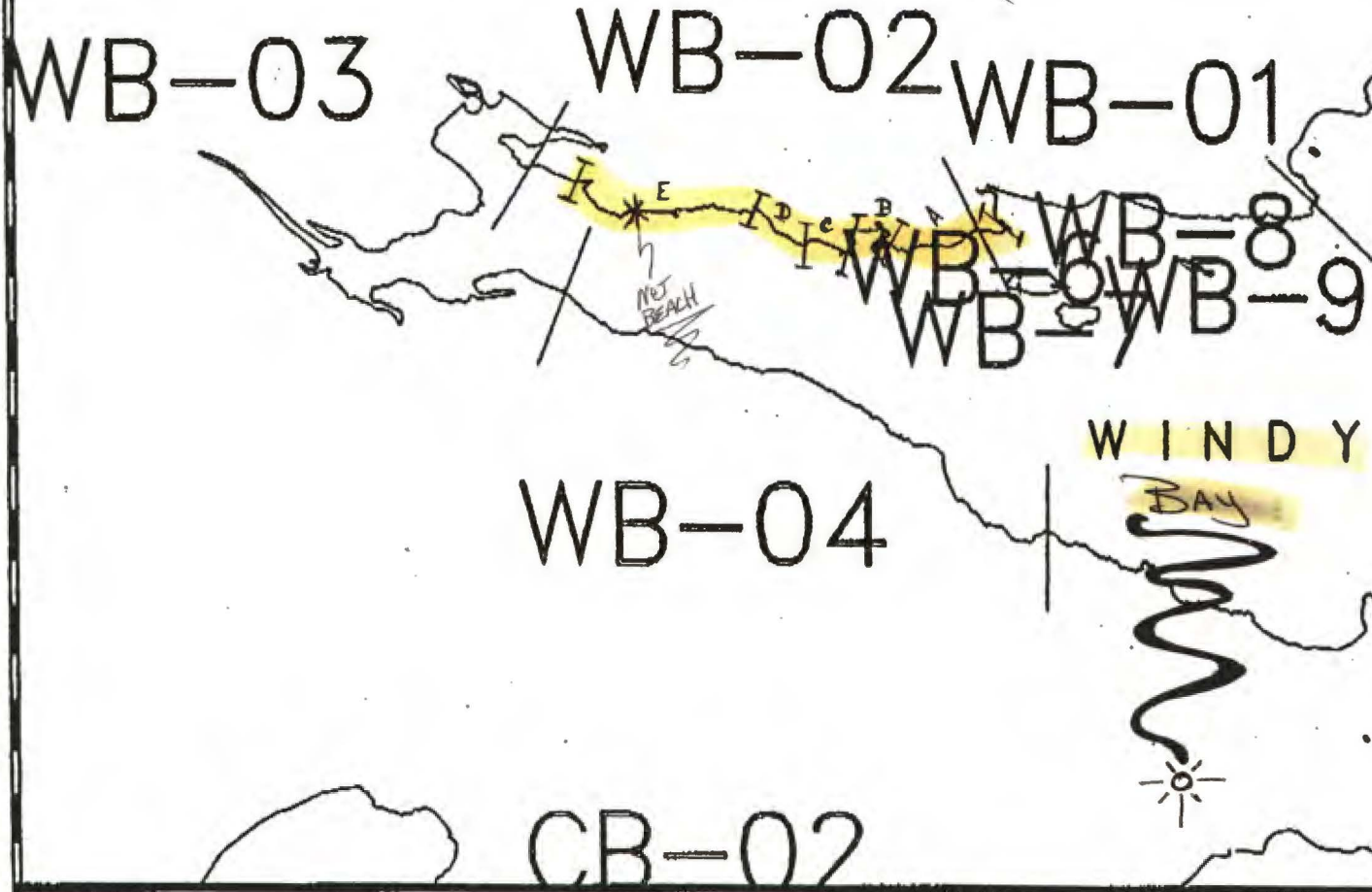
1740 hrs.-Flew to Chugach Bay. Cleanup crew of nine working CB-3B. Here we were met by Jim Davis (USCG), Mike Revis (VECO), James Byers (OOPS), and Clara Crosby (ADEC). The crew was picking up the large tar mat, tar patties, and alot of heavily oiled sediment from around and beneath cobbles and boulders. The tarmat extended beneath gravel berm at the top of the beach. Russel Kinube said that this oil beneath the berm was not reported on the SSAT survey. Jim Davis (USCG monitor) said Admiral Ciangalini told him once a beach is signed off no one will return to that beach. Jim stated that this statement has caused him to be cautious about signing off until the beach is thoroughly cleaned.

1935 hrs.-Depart Chugach Bay. Overflight of Perl and Elizabeth Island sea lion haulouts. Observed approximately 40 individuals on Perl and approximately 75 individuals on Elizabeth.

1953 hrs.-Land Port Graham and drop off Pat Norman.

2010 hrs.-Land ERA Helos Homer.

WINDY  
BAY



EXXON COMPANY, USA

ACE 9961345

May 21, 1990

Aml used:

/chugach1/morris/super2/ups.aml



~~Chugach Bay~~ Chugach Bay  
Cleanup Monitoring

ADF&G MULTI-ASSESSMENT DATA FORM

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

2 REGION: PWS KP,CI K,AP

METHOD: Aerial Ground Boat

3 DATE: 5/3/90

15 HIGH TIDE TIMES: 0802 / 0911

21 TEAM RECORDER: Lee Gilman, Doug Hill (ADF&G)

4 START TIME: 1740

16 HIGH TIDE HTS: 9.7 / 10.8

22 OBSERVERS: PT Norman (CNA)

5 STOP TIME: 1930

17 LOW TIDE TIMES: 0148 / 0207

23 AGENCY: Russel Kinobe (ADEC)

6 SEGMENT #: CB-3A

18 LOW TIDE HTS: 3.6 / 1.3

24 PHOTOS TAKEN: 1 N  
900DH14H 1-3  
Roll #: 900DH13H Frame: 8-12

7 STATION #:

19 TIDE HT AT SURVEY:

25 VIDEO TAKEN: Y N TAPE#: 90LP6023H

8 K-UNIT:

Ebb Slack Flood Slack

Start: 9363 End: 4570

9 STAT AREA:

20 USCG QUAD: Seldovia A-5

10 LAT:

11 LONG:

26 SAMPLES TAKEN? Y (N) Number

12 SOURCE: Map Loran

Oil

13 LOCATION: Chugach Bay, North Shore, head of Bay

Sediment

14 DESCRIPTION:

Biological

Water

EXTENT OF OIL

	SHORELINE				STREAM			
	L	W	M <sup>2</sup>	%	L	W	M <sup>2</sup>	%
27 SURFACE COVERAGE								
28 SURFACE THICKNESS								
29 PENETRATION								
30 OVERALL OIL IMPACT:	N	VL	L	<u>(N)</u>	H			

36 CATALOGED ANAD. FISH SREAH? Y N

37 CATALOG #:

38 STREAM NAME:

39 OIL IN STREAM BED? Y N

40 OIL ON STREAM BANKS? Y N

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

42 OIL WITHIN 1 MILE OF STREAM? Y N

Where:

31 OIL TYPE: Pooled Mousse Tar Asphalt Sticky Stain

32 OILED DEBRIS? (N) N

43 ANADROMOUS FISH PRESENT? Y N

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

44 ANADROMOUS FISH OBSERVATION

34 WAVE EXPOSURE: High Moderate Low

Species Aerial Ground

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


COMMENTS: See attached trip report - 4/1/90 lined portion of text.

FRAME(S)	DESCRIPTION

46 OIL DISTRIBUTION DIAGRAM

\_\_\_\_\_  
= Sample taken  
= Photo frame # and  
shot direction.

9



sediment. The workers would located a patch of oil and follow the seam as far as it would take them. Crew members stated that what would start out as a surface pickup often took them a few inches subsurface (i.e., the visible oiled material extended below the surface of the beach and the workers followed it until it ran out). This particular beach was an expressed cleanup concern of Tom Schroeder (EXXON Fisheries Consultant). A high potential for oiling nets exists here. Fish tend to school up in these embayments. Hence it would be a logical place to make a set since the slope of the beach is low and fish tend to school up in these embayments.

1740 hrs.-Flew to Chugach Bay. Cleanup crew of nine working CB-3B. Here we were met by Jim Davis (USCG), Mike Revis (VECO), James Byers (OOPS), and Clara Crosby (ADEC). The crew was picking up the large tar mat, tar patties, and alot of heavily oiled sediment from around and beneath cobbles and boulders. The tarmat extended beneath gravel berm at the top of the beach. Russel Kinube said that this oil beneath the berm was not reported on the SSAT survey. Jim Davis (USCG monitor) said Admiral Ciangalini told him once a beach is signed off no one will return to that beach. Jim stated that this statement has caused him to be cautious about signing off until the beach is thoroughly cleaned.

*An ANAOROMOUS Fish stream is w/in 1/4 mile of this beach*  
1935 hrs.-Depart Chugach Bay. Overflight of Perl and Elizabeth Island sea lion haulouts. Observed approximately 40 individuals on Perl and approximately 75 individuals on Elizabeth.

1953 hrs.-Land Port Graham and drop off Pat Norman.

2010 hrs.-Land ERA Helos Homer.

↓ *Chugach Bay Creek*  
*ASC# 242-20-10190*

WB-04  
WB-04  
WB-04

WIND

WB-04

Cleanup monitoring  
Survey Location

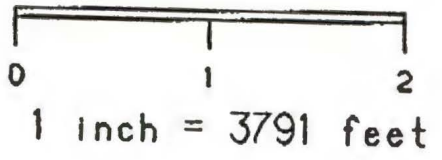
CB-02

CB-03

CHUGACH BAY

CB-04

S S A G E



EXXON COMPANY, USA

ACE 9961348

May 21, 1990

Aml used:

/chugach1/morris/super2/ops.aml



NOT AN ANAD. Stream  
ADF&G MULTI-ASSESSMENT DATA FORM

Petrof Point - A drainage is in this segment but it is not an ANADROMOUS stream - there is oil in the stream

DOA  
12/2/91

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

METHOD: Aerial  Ground Boat

3 DATE: 6/1/90 15 HIGH TIDE TIMES: 0916 12157 21 TEAM RECORDER: Doug Hill

4 START TIME: 1432 16 HIGH TIDE HTS: 9.0 11.0 22 OBSERVERS: Lee Glean

5 STOP TIME: 1600 17 LOW TIDE TIMES: 0303 1403 23 AGENCY: ADF&G

6 SEGMENT #: PP-1 18 LOW TIDE HTS: 3.3 1 2.2 24 PHOTOS TAKEN:  Y  N

7 STATION #: \_\_\_\_\_ 19 TIDE HT AT SURVEY: \_\_\_\_\_ Roll #: 900414H Frame: 4-10

8 K-UNIT: \_\_\_\_\_ Ebb Slack  Flood Slack 25 VIDEO TAKEN: Y  N TAPE#: \_\_\_\_\_

9 STAT AREA: \_\_\_\_\_ 20 USCG QUAD: Seldovia B-3 Start: \_\_\_\_\_ End: \_\_\_\_\_

10 LAT: \_\_\_\_\_ 11 LONG: \_\_\_\_\_ 26 SAMPLES TAKEN? Y  N Number

12 SOURCE: Map Loran Petrof Point 011 \_\_\_\_\_

13 LOCATION: Neka Passage, West Shore, Petrof Point to Little Cove Sediment \_\_\_\_\_

14 DESCRIPTION: \_\_\_\_\_ Biological \_\_\_\_\_

EXTENT OF OIL

	SHORELINE				STREAM			
	L	W	M <sup>2</sup>	%	L	W	M <sup>2</sup>	%
27 SURFACE COVERAGE								
28 SURFACE THICKNESS								
29 PENETRATION								
30 OVERALL OIL IMPACT:	N	VL	<input checked="" type="radio"/> L <input checked="" type="radio"/> H	H				

31 OIL TYPE: Pooled  Mousse  Tar Asphalt Sticky Stain

32 OILED DEBRIS?  Y  N

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

34 WAVE EXPOSURE: High  Moderate Low

35 SUBSTRATE TYPE: Bedrock \_\_\_\_\_ Boulder \_\_\_\_\_ Cobble \_\_\_\_\_  
Gravel 20 Sand 60 Mud/silt 20

36 CATALOGED ANAD. FISH STREAM?  N

37 CATALOG #: Not An ANAD Stream

38 STREAM NAME: But it is a drainage

39 OIL IN STREAM BED?  Y  N

40 OIL ON STREAM BANKS?  Y  N

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

42 OIL WITHIN 1 MILE OF STREAM?  Y  N  
Where: In Beach Adjacent Stream

43 ANADROMOUS FISH PRESENT? Y  N

44 ANADROMOUS FISH OBSERVATION

Species	Aerial	Ground

COMMENTS: Observed approximately 40 gallons of brown mousse in stream bed on North end of beach. Mousse covered with sand. Observed balls of sand saturated with oil approximately 300 yds of beach (8 meters x 274 meters) from VITZ to LITZ. Balls of sand/oil were in water and rolling up on beach in surf -- they were being covered & removed by wave action ~ 100<sup>segs</sup> of oil balls

FRAME(S)	DESCRIPTION
4,5	<i>Mousse buried in sand in dry Creek bed - mousse, covering shortly after surface <sup>being uncovered</sup></i>
6	<i>Dry creek bed where mousse found</i>
7, 8, 9, 10	<i>Balls of oil saturated sand litter the beach at outlet of dry creek.</i>

46 OIL DISTRIBUTION DIAGRAM

= Sample taken  
= Photo frame # and  
shot direction.

ACE 9961350



Not A stream

Eagle overflight  
CI-1  
EAST Chugach Isl

ADF&G MULTI-ASSESSMENT DATA FORM

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

2 REGION: PWS KP, CI K, AP

METHOD: Aerial Ground Boat

3 DATE: 6/15/90

15 HIGH TIDE TIMES: 0646 1700 4

21 TEAM RECORDER: Doug Hill

4 START TIME: 1247

16 HIGH TIDE HTS: 9.71 10.6

22 OBSERVERS: Lee Glenn

6 STOP TIME: \_\_\_\_\_

17 LOW TIDE TIMES: 0055 11311

23 AGENCY: ADF&G

6 SEGMENT #: CI-I

18 LOW TIDE HTS: 3.4 10.7

24 PHOTOS TAKEN: Y: (N)

7 STATION #: \_\_\_\_\_

19 TIDE HT AT SURVEY: \_\_\_\_\_

Roll #: \_\_\_\_\_ Frames: \_\_\_\_\_

8 K-UNIT: \_\_\_\_\_

~~Slack~~ Slack Slack

25 VIDEO TAKEN: Y (N) TAPE#: \_\_\_\_\_

9 STAT AREA: \_\_\_\_\_

20 USCG QUAD: Seldovia A-4

Starts: \_\_\_\_\_ Ends: \_\_\_\_\_

10 LAT: \_\_\_\_\_

11 LONG: \_\_\_\_\_

26 SAMPLES TAKEN Y (N) Number

12 SOURCE: Map Loran

Oil \_\_\_\_\_

13 LOCATION: East Chugach Island

Sediment \_\_\_\_\_

14 DESCRIPTION: East side of island, low energy boulder/cobble beach.

Biological \_\_\_\_\_

Water \_\_\_\_\_

EXTENT OF OIL

	SHORELINE				STREAM			
	L	W	M <sup>2</sup>	%	L	W	M <sup>2</sup>	%
27 SURFACE COVERAGE								
28 SURFACE THICKNESS								
29 PENETRATION								

36 CATALOGED ANAD. FISH STREAM? Y (N)

37 CATALOG #:

38 STREAM NAME:

39 OIL IN STREAM BED? Y N

40 OIL ON STREAM BANKS? Y N

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

42 OIL WITHIN 1 MILE OF STREAM? Y N

Where: \_\_\_\_\_

43 ANADROMOUS FISH PRESENT? Y N

44 ANADROMOUS FISH OBSERVATION  
Species Aerial Ground

Species	Aerial	Ground

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

31 OIL TYPE: Pooled Mousse Tar Asphalt Sticky Stain

32 OILED DEBRIS? Y N

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

34 WAVE EXPOSURE: Moderate High Low

35 SUBSTRATE TYPE: Bedrock ✓ Boulder ✓ Cobble ✓

Gravel ✓ Sand ✓ Mud/silt

COMMENTS: Overflight of Chugach Island to observe eagle nest. Observed Active eagle nest situated directly above the moderate to heavily oiled beach segment CI-I. This beach was tripoled but it looks, visually, just like it did last fall. We did not land due to nest. Hummm?? This nest has not been addressed in USFWS paperwork.

45 PHOTOLOG

FRAME(S)	DESCRIPTION

46 OIL DISTRIBUTION DIAGRAM

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= Sample taken  
= Photo frame # and  
shot direction.



NOT A STREAM

BADGER POINT  
Shipwreck BEACH CB-01

ADF&G MULTI-ASSESSMENT DATA FORM

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

2 REGION: PWS (K,CI) K,AP

METHOD: Aerial Ground Boat

3 DATE: 6/15/90

15 HIGH TIDE TIMES: 1039 12234

21 TEAM RECORDER: Doug Hill

4 START TIME: 1339

16 HIGH TIDE HTS: 8.8 112.8

22 OBSERVERS: Lee Glenn

5 STOP TIME: 1437

17 LOW TIDE TIMES: 0420 11602

23 AGENCY: ADF&G

6 SEGMENT #: CB-01

18 LOW TIDE HTS: 1.0 3.0

24 PHOTOS TAKEN: (Y) N

7 STATION #:

19 TIDE HT AT SURVEY:

Roll #: 9200H Frames: 7 → 11

8 K-UNIT:

Ebb Slack Flood Slack

25 VIDEO TAKEN: Y (N) TAPE#:

9 STAT AREA:

20 USCG QUAD: Selkovic A-4

Start: End:

10 LAT:

11 LONG:

26 SAMPLES TAKEN? Y (N) Number

12 SOURCE: Map Loran

Oil

13 LOCATION: Headland of low lying rock between Badger Cove & Windy Bay (between Chugach & Windy) Shipwreck

Sediment

14 DESCRIPTION: Shipwreck Point

Biological

Water

EXTENT OF OIL

	SHORELINE				STREAM			
	L	W	M <sup>2</sup>	%	L	W	M <sup>2</sup>	%
27 SURFACE COVERAGE								

36 CATALOGED ANAD. FISH STREAM? Y N

28 SURFACE THICKNESS								
29 PENETRATION								

37 CATALOG #:

38 STREAM NAME:

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

39 OIL IN STREAM BED? Y N

31 OIL TYPE: Pooled House Tar Asphalt Sticky Stain

40 OIL ON STREAM BANKS? Y N

32 OILED DEBRIS? (Y) N

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

42 OIL WITHIN 1 MILE OF STREAM? Y N

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

Where:

43 ANADROMOUS FISH PRESENT? Y N

34 WAVE EXPOSURE: High Moderate Low

44 ANADROMOUS FISH OBSERVATION  
Species Aerial Ground

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


COMMENTS: Enough oil (Tar, AP and a few pockets of pooled residue) exists to warrant an oil pickup & removal crew. Oil found from point on west to the shipwreck. This area was SSATED. No work has come out yet for this beach. This brief survey was reported to ADF&G.

45 PHOTOLOG

FRAME(S)	DESCRIPTION
7, 8	Oil Sheen on tide pool surface
9	Littorina, Near heaviest oil concentration
10	Heavily Oil Saturated Sediment in vicinity of tide pools

46 OIL DISTRIBUTION DIAGRAM

— = Sample taken  
= Photo frame # and shot direction.

ACE 9961353



Not A Stream

RB-1/BC-02

EAGLE  
overflight

ADF&G MULTI-ASSESSMENT DATA FORM

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

METHOD: Aerial  Ground  Boat

3 DATE: 6/15/90 15 HIGH TIDE TIMES: 1039 12234 21 TEAM RECORDER: Davy Hill

4 START TIME: 1442 16 HIGH TIDE HTS: 8.8 12.8 22 OBSERVERS: Lee Glenn

5 STOP TIME: 1446 17 LOW TIDE TIMES: 0420 1602 23 AGENCY: ADF46

6 SEGMENT #: RB-1/BC-02 18 LOW TIDE HTS: 1.0 3.0 24 PHOTOS TAKEN: Y

7 STATION #: \_\_\_\_\_ 19 TIDE HT AT SURVEY: \_\_\_\_\_ Roll #: \_\_\_\_\_ Frames: \_\_\_\_\_

8 K-UNIT: \_\_\_\_\_ Ebb Slack Flood Slack 25 VIDEO TAKEN: Y  TAPE#: \_\_\_\_\_

9 STAT AREA: \_\_\_\_\_ 20 USCG QUAD: Selkonia A-4 Start: \_\_\_\_\_ End: \_\_\_\_\_

10 LAT: \_\_\_\_\_ 11 LONG: \_\_\_\_\_ 26 SAMPLES TAKEN? Y  Number

12 SOURCE: Map Loran OIL \_\_\_\_\_

13 LOCATION: Rocky Point, Point between Boat Lagoon & Rocky Bay Sediment \_\_\_\_\_

14 DESCRIPTION: Flat boulder/pebble beach on west side of Point Biological \_\_\_\_\_

EXTENT OF OIL

Water \_\_\_\_\_

	SHORELINE				STREAM				36 CATALOGED ANAD. FISH-SREAM? Y N
	L	W	M <sup>2</sup>	%	L	W	M <sup>2</sup>	%	
27 SURFACE COVERAGE									37 CATALOG #:
28 SURFACE THICKNESS									38 STREAM NAME:
29 PENETRATION									39 OIL IN STREAM BED? Y N

30 OVERALL OIL IMPACT: N VL L M H 41 OIL ON BEACH ADJACENT TO MOUTH? Y N (within 50 meters)

31 OIL TYPE: Pooled Mousse Tar Asphalt Sticky Stain 42 OIL WITHIN 1 MILE OF STREAM? Y N

32 OILED DEBRIS? Y N Where: \_\_\_\_\_

33 SHORELINE TYPE:  Headland  Low-lying Rocks  Beach  Cove  Lagoon  Marsh 43 ANADROMOUS FISH PRESENT? Y N

34 WAVE EXPOSURE:  High  Moderate  Low 44 ANADROMOUS FISH OBSERVATION

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

Species	Aerial	Ground

COMMENTS: Overflight of RB-1/BC-02. No eagles observed on nest above heavily oiled boulder/pebble beach (RB-1). Eagle nest is on shoreline in tree on shoreline adjacent oiled beach. Did observe 2 eagle roosting on point at BC-02 (2 Adults).





NOT A SALMON  
STREAM

CB-01 / BADGER POINT  
SHIPWRECK BEACH

ADF&G MULTI-ASSESSMENT DATA FORM

1 SURVEY TYPE:  SS  DS  TS  AVS  SCHA  MMHS  PTA

2 REGION: PWS  KP, CI  K, AP

METHOD: Aerial  Ground  Boat

3 DATE: 6/18/90

15 HIGH TIDE TIMES: 1039 12234

21 TEAM RECORDER: Dave Hill  
*Clara Crosby, Steve Ferguson (AD&G)*

4 START TIME: 1339

16 HIGH TIDE HTS: 8.8 12.8

22 OBSERVERS: Bud Stanley (NOAA)

5 STOP TIME: 1416

17 LOW TIDE TIMES: 0420 11602

23 AGENCY: \_\_\_\_\_

6 SEGMENT #: CB-01

18 LOW TIDE HTS: 1.0 13.0

24 PHOTOS TAKEN: Y  N

7 STATION #: \_\_\_\_\_

19 TIDE HT AT SURVEY: \_\_\_\_\_

Roll #: \_\_\_\_\_ Frame: \_\_\_\_\_

8 K-UNIT: \_\_\_\_\_

Ebb  Slack  Flood  Slack

25 VIDEO TAKEN: Y  N  TAPE#: \_\_\_\_\_

9 STAT AREA: \_\_\_\_\_

20 USCG QUAD: Seldovia A-4

Start: \_\_\_\_\_ End: \_\_\_\_\_

10 LAT: \_\_\_\_\_

11 LONG: \_\_\_\_\_

26 SAMPLES TAKEN? Y  N  Number

12 SOURCE: Map  Loran

Oil \_\_\_\_\_

13 LOCATION: HEADLAND of low-lying Rock Between Badger Cove & WINDY BAY (between Chiyachiv winds) shipwreck

Sediment \_\_\_\_\_

14 DESCRIPTION: \_\_\_\_\_

Biological \_\_\_\_\_

Water \_\_\_\_\_

EXTENT OF OIL

	SHORELINE				STREAM			
	L	W	M <sup>2</sup>	%	L	W	M <sup>2</sup>	%
27 SURFACE COVERAGE								

36 CATALOGED ANAD. FISH STREAM? Y  N

28 SURFACE THICKNESS								
29 PENETRATION								

37 CATALOG #:

38 STREAM NAME:

30 OVERALL OIL IMPACT: N  VL  L  H

39 OIL IN STREAM BED? Y  N

31 OIL TYPE:  Pooled  Mousse  Tar  Asphalt  Sticky  Stain

40 OIL ON STREAM-BANKS? Y  N

32 OILED DEBRIS? Y  N

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

42 OIL WITHIN 1 MILE OF STREAM? Y  N

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

Where: \_\_\_\_\_

43 ANADROMOUS FISH PRESENT? Y  N

34 WAVE EXPOSURE: High  Moderate  Low

44 ANADROMOUS FISH OBSERVATION  
Species Aerial  Ground

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


ACE 9961355

COMMENTS: Surveyed this beach primarily to show Bud Stanley of NOAA the readily removable tar mats. 5 x 11 meter tar mat exists on the west portion of the point. Tar patches are scattered east to the shipwreck "Kathy Joann" (2% over a 60 x 5m area) Bud Stanley was central as to whether or not the oil should be picked up. He was not concerned one way or the other. Bud. Feels the oil is not a threat in terms of re-planting. The oil mat is protected behind a 5' high bedrock OVER

FRAME(S)	DESCRIPTION

46 OIL DISTRIBUTION DIAGRAM

shelf. There are portions of this mat that have been lifted and transported out...to the rest of the universe. Chare Crosby, Steve Ferguson <sup>(AOEC)</sup> & I all agree that this oil should be picked up. why not? A few small pockets of pooled mousse up to 3" thick are present below rocks.

— Sample taken  
 # Photo frame # and  
 shot direction.

ACE 9961356



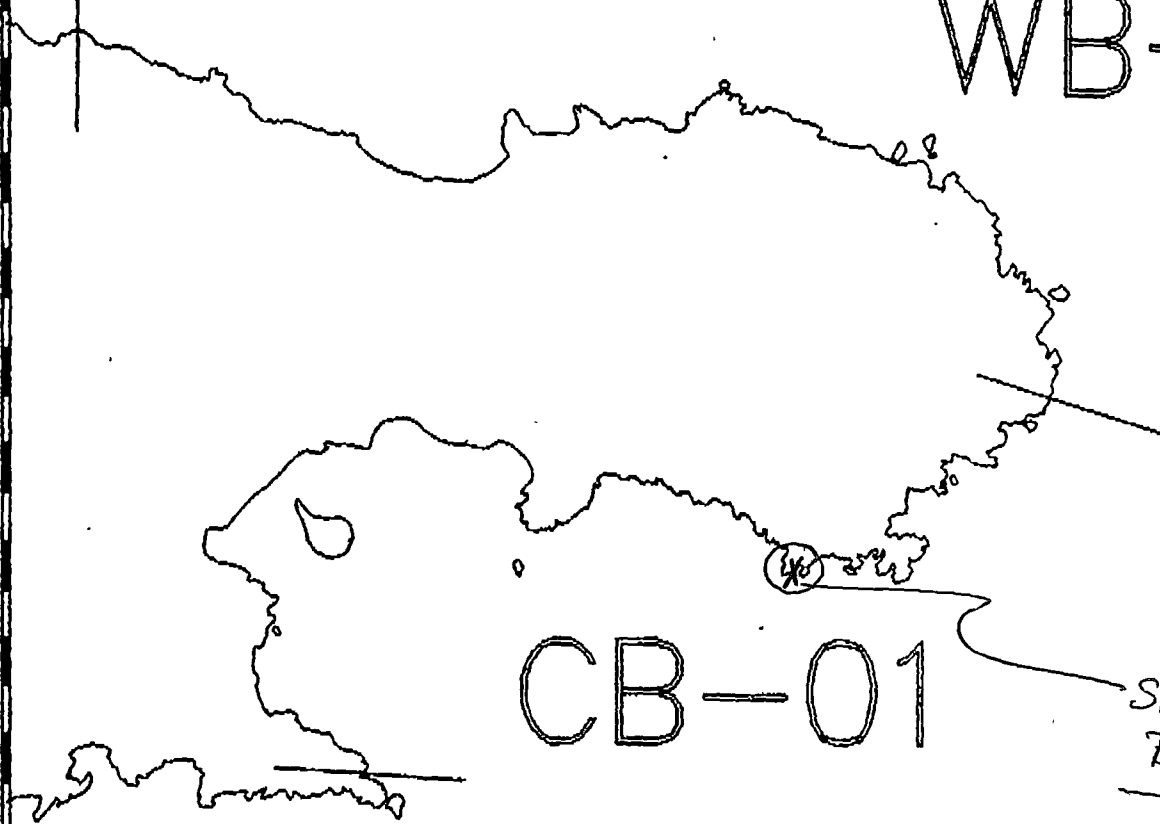
B-WB-9

WV 14 9

WINDY BAY

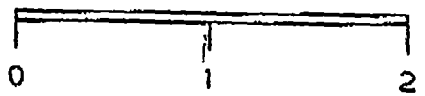
98

WB-05



CB-01

6/18/90  
Shipwreck  
BEACH



1 inch = 2036 feet

EXXON COMPANY, USA

ACE 9961357

May 21, 1990

Aml used:

/chugach1/morris/super2/ops.aml

NOT A STREAM

ANDERSEN BEACH

Point 1/2 mile to west of ANAO. Stream #

ADF&G MULTI-ASSESSMENT DATA FORM

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

2 REGION: PWS KP,CI K,AP

METHOD: Aerial (Ground) Boat

3 DATE: 6/18/90

15 HIGH TIDE TIMES: 1039 12234

21 TEAM RECORDER: Dan Hill (ADFG) Bud Stanley (NOAA)

4 START TIME: 1441

16 HIGH TIDE HTS: 8.8 12.8

22 OBSERVERS: Clara Krasny & Steve Ferguson (ADFG)

5 STOP TIME: 1519

17 LOW TIDE TIMES: 0420 11602

23 AGENCY: \_\_\_\_\_

6 SEGMENT #: None

18 LOW TIDE HTS: 1.0 13.0

24 PHOTOS TAKEN: Y (N)

7 STATION #: \_\_\_\_\_

19 TIDE HT AT SURVEY: \_\_\_\_\_

Roll #: \_\_\_\_\_ Frames: \_\_\_\_\_

8 K-UNIT: Unit 10

Ebb Slack Flood Slack

25 VIDEO TAKEN: Y (N) TAPE#: \_\_\_\_\_

9 STAT AREA: 242-10

20 USCG QUAD: Seldovia A-5

Start: \_\_\_\_\_ End: \_\_\_\_\_

10 LAT: 59 9 54

11 LONG: 151 41 43

26 SAMPLES TAKEN? Y (N) Number

12 SOURCE: Map Loran

Oil \_\_\_\_\_

13 LOCATION: Chugach Passage, Stream/Valley Just North of Pearl Island, Andersen Beach

Sediment \_\_\_\_\_

Biological \_\_\_\_\_

Water \_\_\_\_\_

EXTENT OF OIL

	SHORELINE				STREAM			
	L	W	M <sup>2</sup>	%	L	W	M <sup>2</sup>	%
27 SURFACE COVERAGE								
28 SURFACE THICKNESS								
29 PENETRATION								

36 CATALOGED ANAD. FISH STREAM? (Y) N

37 CATALOG #: 242-10-10200

38 STREAM NAME: Andersen Beach

39 OIL IN STREAM BED? Y (N)

40 OIL ON STREAM BANKS? Y (N)

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

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

Where: Point to West stream mouth

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

31 OIL TYPE: Pooled (Mousse) (Tar) (Asphalt) (Sticky) (Sludge)

32 OILED DEBRIS? Y (N)

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

43 ANADROMOUS FISH PRESENT? Y N

34 WAVE EXPOSURE: (High) Moderate Low

44 ANADROMOUS FISH OBSERVATION

35 SUBSTRATE TYPE: Bedrock \_\_\_\_\_ Boulder \_\_\_\_\_ Cobble \_\_\_\_\_ Gravel 15 Sand 85 Mud/silt \_\_\_\_\_

Species	Aerial	Ground

COMMENTS: Oiled Area (Area of heaviest oiling) is approximately 5 x 100 meter. Bud Stanley is the only person present who feels this oil poses no re-oiling threat. A few areas of pooled mousse still exist. Oil is beneath & between boulders/cobble/pea gravel. The oil flows in the under the influence of the sun, sediment is heavily entrained with oil.



FRAME(S)	DESCRIPTION

48 OIL DISTRIBUTION DIAGRAM

— = Sample taken  
= Photo frame # and  
shot direction.

Not A stream

Port Dick Pike Pt.  
Cleanup monitoring

ADF&G MULTI-ASSESSMENT DATA FORM

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

2 REGION: PWS KP, CI K, AP

METHOD: Aerial Ground Boat

3 DATE: 6/20/90

15 HIGH TIDE TIMES: 125<sup>PM</sup> 1117<sup>AM</sup>

21 TEAM RECORDER: Doeg Hill

4 START TIME: 1548

16 HIGH TIDE HTS: 9.9 114.2

22 OBSERVERS: Lee Glenn

6 STOP TIME: 1725

17 LOW TIDE TIMES: 0625 1811

23 AGENCY: ADF&G

8 SEGMENT #: AD-10A

18 LOW TIDE HTS: -1.7 13.3

24 PHOTOS TAKEN: 1 N  
9000H16H 23, 2-1

7 STATION #:

19 TIDE HT AT SURVEY:

Roll #: 900DH17H Frames: 2-11

9 K-UNIT:

EBD Slack Flood Slack

25 VIDEO TAKEN: 1 N TAPE#: 90LPG23H

9 STAT AREA:

20 USCG QUAD: Selobvia B-3

Start: 4859 End: 5509

10 LAT:

11 LONG:

26 SAMPLES TAKEN? Y 1 Number

12 SOURCE: Map Loran

13 LOCATION: West Arm Port Dick, South shore

14 DESCRIPTION:

Oil  
Sediment  
Biological  
Water

EXTENT OF OIL

	SHORELINE				STREAM			
	L	W	M <sup>2</sup>	%	L	W	M <sup>2</sup>	%
27 SURFACE COVERAGE								
28 SURFACE THICKNESS								
29 PENETRATION								

36 CATALOGED ANAD. FISH SREAM? Y N

37 CATALOG #:

38 STREAM NAME:

39 OIL IN STREAM BED? Y N

40 OIL ON STREAM BANKS? Y N

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

42 OIL WITHIN 1 MILE OF STREAM? Y N

30 OVERALL OIL IMPACT: N VL L M H

31 OIL TYPE: Pooled Mousse Tar Asphalt Sticky Stain

32 OILED DEBRIS? 1 N

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

Where:

43 ANADROMOUS FISH PRESENT? Y N

34 WAVE EXPOSURE: High Moderate Low

44 ANADROMOUS FISH OBSERVATION  
Species Aerial Ground

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


ACE 9961359

COMMENTS: M/V Yukon River Anchored off middle Crk. 1 cm skitab & two skiffs at Pikes Point. John Friske (ADFC) skiff up to the East facing beach at Pikes Point. We are met by Jeff Sullard (ADFC) (USCG), Tim Turner (EXXON) and crew of 6 on beach. Manual removal of oil (removing mousse & heavily oiled sediment). Crew started at WITZ w/ tide <sup>is</sup> marking down the beach with the outgoing tide. Where's the rest of the crew? over →





0-06

PD-07

PD-8

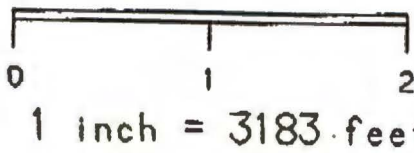
S T  
A R M

PD-9

PD-10

MUSSEL  
BED

MANUAL CLEANUP  
AREA



EXXON COMPANY, USA

ACE 9961361

May 21, 1990

Aml used:

/chugachi/morris/super2/ops.aml



Not A Stream Post-Cleanup monitoring

ADF&G MULTI-ASSESSMENT DATA FORM

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

METHOD: Aerial  Ground Boat

3 DATE: 6/20/90 15 HIGH TIDE TIMES: 1252 PM 1117 AM 21 TEAM RECORDER: Dody Hill

4 START TIME: 1736 16 HIGH TIDE HTS: 9.9 114.2 22 OBSERVERS: Lee Glenn

5 STOP TIME: 1945 17 LOW TIDE TIMES: 0625 11811 23 AGENCY: ADF&G

6 SEGMENT #: TB-04 18 LOW TIDE HTS: -1.7 13.3 24 PHOTOS TAKEN:  N

7 STATION #: \_\_\_\_\_ 19 TIDE HT AT SURVEY: \_\_\_\_\_ Roll # 9000HB16H Frame: 72-219, 25, 2A

8 K-UNIT: \_\_\_\_\_ Ebb Slack Flood Slack 25 VIDEO TAKEN:  N TAPE #: 90LPG023H

9 STAT AREA: \_\_\_\_\_ 20 USCG QUAD: Seldovia B-3 Start: 5510 End: 5751

10 LAT: \_\_\_\_\_ 11 LONG: \_\_\_\_\_ 26 SAMPLES TAKEN? Y  Number

12 SOURCE: Map Loran 011 \_\_\_\_\_

13 LOCATION: \_\_\_\_\_ Sediment \_\_\_\_\_

14 DESCRIPTION: \_\_\_\_\_ Biological \_\_\_\_\_

Water \_\_\_\_\_

EXTENT OF OIL

	SHORELINE				STREAM			
	L	W	M <sup>2</sup>	%	L	W	M <sup>2</sup>	%
27 SURFACE COVERAGE								
28 SURFACE THICKNESS								
29 PENETRATION								
30 OVERALL OIL IMPACT:	N	VL	<u>L</u>	<u>M</u>	H			
31 OIL TYPE:	Pooled	<u>Mousse</u>	<u>Tar</u>	<u>Asphalt</u>	<u>Sticky</u>	<u>Stain</u>		
32 OILED DEBRIS?	<input checked="" type="radio"/> Y	<input type="radio"/> N						
33 SHORELINE TYPE:	Headland	Low-lying Rocks	<u>Beach</u>	Cove				
		Lagoon	Marsh					
34 WAVE EXPOSURE:	High	Moderate	<u>Low</u>					
35 SUBSTRATE TYPE:	Bedrock	Boulder	<input checked="" type="checkbox"/>	Cobble	<input checked="" type="checkbox"/>			
	Gravel	<input checked="" type="checkbox"/>	Sand	<input checked="" type="checkbox"/>	Mud/silt	<input checked="" type="checkbox"/>		

36 CATALOGED ANAD. FISH STREAM? Y  N

37 CATALOG #: \_\_\_\_\_

38 STREAM NAME: \_\_\_\_\_

39 OIL IN STREAM BED? Y  N

40 OIL ON STREAM BANKS? Y  N

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

42 OIL WITHIN 1 MILE OF STREAM? Y  N

Where: \_\_\_\_\_

43 ANADROMOUS FISH PRESENT? Y  N

44 ANADROMOUS FISH OBSERVATION

Species	Aerial	Ground

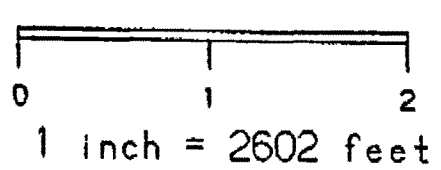
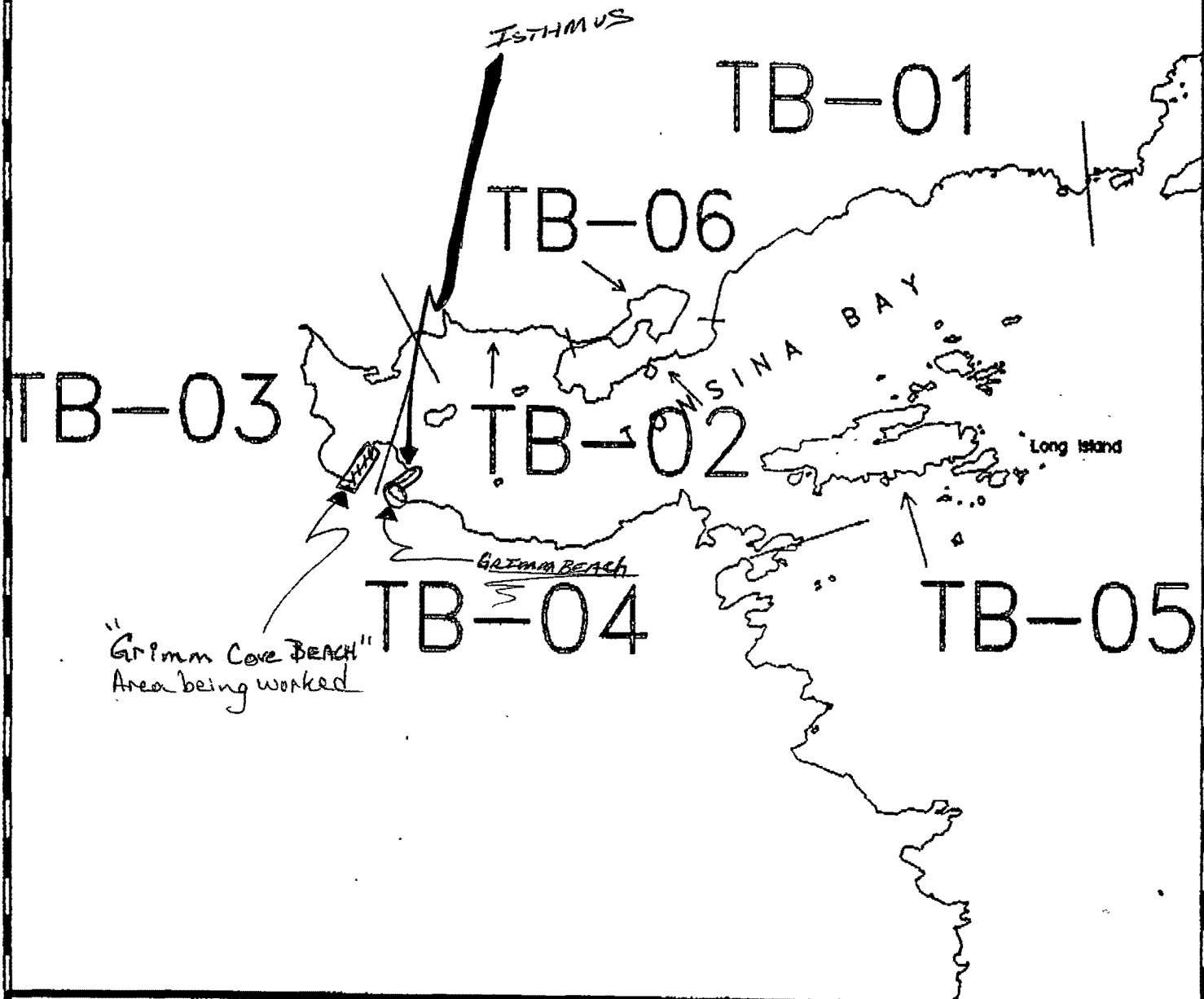
ACE 9961362

COMMENTS: This beach has recently been cleaned & is within 1/2 mile of two anadromous streams. The name of oil is strong/thick. Plenty of work still needs to be done here prior to Demobilization and on Bioremediation. I add Bioremediation the prior sentence because the vile stuff is being "pushed" this year & its hard to tell the difference between the two sometimes! A ample amount of recoverable oil saturated sediment and tar patties over





6/20/90  
1736hr → 1945hrs



EXXON COMPANY, USA

ACE 9961364

May 21, 1990

Aml used:

/chugach1/morris/super2/ops.aml

- PD-01 (NOT A salmon stream)  
Cleanup Monitoring

Not A Stream  
ADF&G MULTI-ASSESSMENT DATA FORM

- W/in 1/4 mile of Anadromous Stream (242-42-10450)  
- W/in mile of Stream 242-42-10460

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

2 REGION: PWS  KP01 K,AP

METHOD: Aerial  Ground  Boat

3 DATE: 6/28/90 15 HIGH TIDE TIMES: 0616 11919 21 TEAM RECORDER: Doug Hill (ADF&G)

4 START TIME: 1112 16 HIGH TIDE HTS: 10.6 11.3 22 OBSERVERS: Lee Brown (ADF&G)  
John Fenske (ADEL)

5 STOP TIME: 1406 17 LOW TIDE TIMES: ----- 12433 23 AGENCY: \_\_\_\_\_

6 SEGMENT #: PD-01 18 LOW TIDE HTS: ----- 11.5 24 PHOTOS TAKEN:  Y  N

7 STATION #: \_\_\_\_\_ 19 TIDE HT AT SURVEY: \_\_\_\_\_ Roll #: \_\_\_\_\_ Frame: \_\_\_\_\_

8 K-UNIT: \_\_\_\_\_ Ebb Slack Flood Slack 25 VIDEO TAKEN:  Y  N TAPE #: 90LA024H

9 STAT AREA: \_\_\_\_\_ 20 USCG QUAD: Seldovia B-4 Start: 0632 End: 1005

10 LAT: \_\_\_\_\_ 11 LONG: \_\_\_\_\_ 26 SAMPLES TAKEN? Y  N Number

12 SOURCE: Map Loran 011 \_\_\_\_\_

13 LOCATION: Port Dick, West Arm, Head of West Arm Sediment \_\_\_\_\_

14 DESCRIPTION: \_\_\_\_\_ Biological \_\_\_\_\_

Water \_\_\_\_\_

EXTENT OF OIL

	SHORELINE				STREAM			
	L	W	M <sup>2</sup>	%	L	W	M <sup>2</sup>	%
27 SURFACE COVERAGE								
28 SURFACE THICKNESS								
29 PENETRATION								

30 OVERALL OIL IMPACT: N VL L  M H

31 OIL TYPE:  Pooled  Mousse  Tar  Asphalt  Sticky  Stain

32 OILED DEBRIS? Y  N

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

34 WAVE EXPOSURE: High  Moderate Low

35 SUBSTRATE TYPE: Bedrock \_\_\_\_\_ Boulder \_\_\_\_\_ Cobble 5%  
Gravel 70% Sand 10% Mud/silt 15%

36 CATALOGED ANAD. FISH STREAM? Y N

37 CATALOG #: \_\_\_\_\_

38 STREAM NAME: \_\_\_\_\_

39 OIL IN STREAM BED? Y N

40 OIL ON STREAM BANKS? Y N

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

42 OIL WITHIN 1 MILE OF STREAM? Y N  
Where: \_\_\_\_\_

43 ANADROMOUS FISH PRESENT? Y N

44 ANADROMOUS FISH OBSERVATION  
Species Aerial Ground


ACE 9961365

COMMENTS: Crew of 11 working the PD-01 Tarnat - pooled mousse is being found frequently below the surface cobble & gravel (mobile chocolate brown mousse). Often the surface is clean (free of oil). However, below a 1-3" layer of readily removable low viscosity mousse is found. Once this layer of oil is located it can be followed by removing the overlying cobble & gravel. The tarnat contains less oil than was previously (over)



Sample taken =  
Photo frame # and  
shot direction.

Comments cont'd

thought - this is not to say that a small amount exists. George Stiles (EXXON supervisor) and Bill (NECO supervisor) met us as we arrived. George stated that the work ought to be completed here in 1.5 to 2.5 hrs. We figured if an acceptable job was to be done the crew would have to spend at least another day - Lee spent a considerable amount of time digging throughout the area (in worked & unworked areas). Once again the crew is not doing a systematic job of working/covering the beach - individuals are scattered here & there at random, removing <sup>clean</sup> overburden & in a number of cases piling it onto piled areas that and onto areas that have not been looked at yet.

Lee stressed to Bill & George the importance of getting this area cleared (with regards the commercial salmon fishery). As with other EXXON supervisors George seems to be rushed to get another segment marked a "complete". Quantity is definitely stressed over Quality.

At the end of our visit George agreed to go over the beach systematically from one end to the other until the beach "meets" state standards. Lee stated that the state wants PD-01 clean before the crew moves to Mars Cove

7/6/91 - oil still remains in large enough quantity at PD-01 to be removed. This oil is an ADF&G concern for many reasons but in particular it is within 1/4 mile of a number of salmon spawning channels at the Slide Creek tide flats.

48 OIL DISTRIBUTION DIAGRAM

Blank lined area for notes or diagrams.

DESCRIPTION

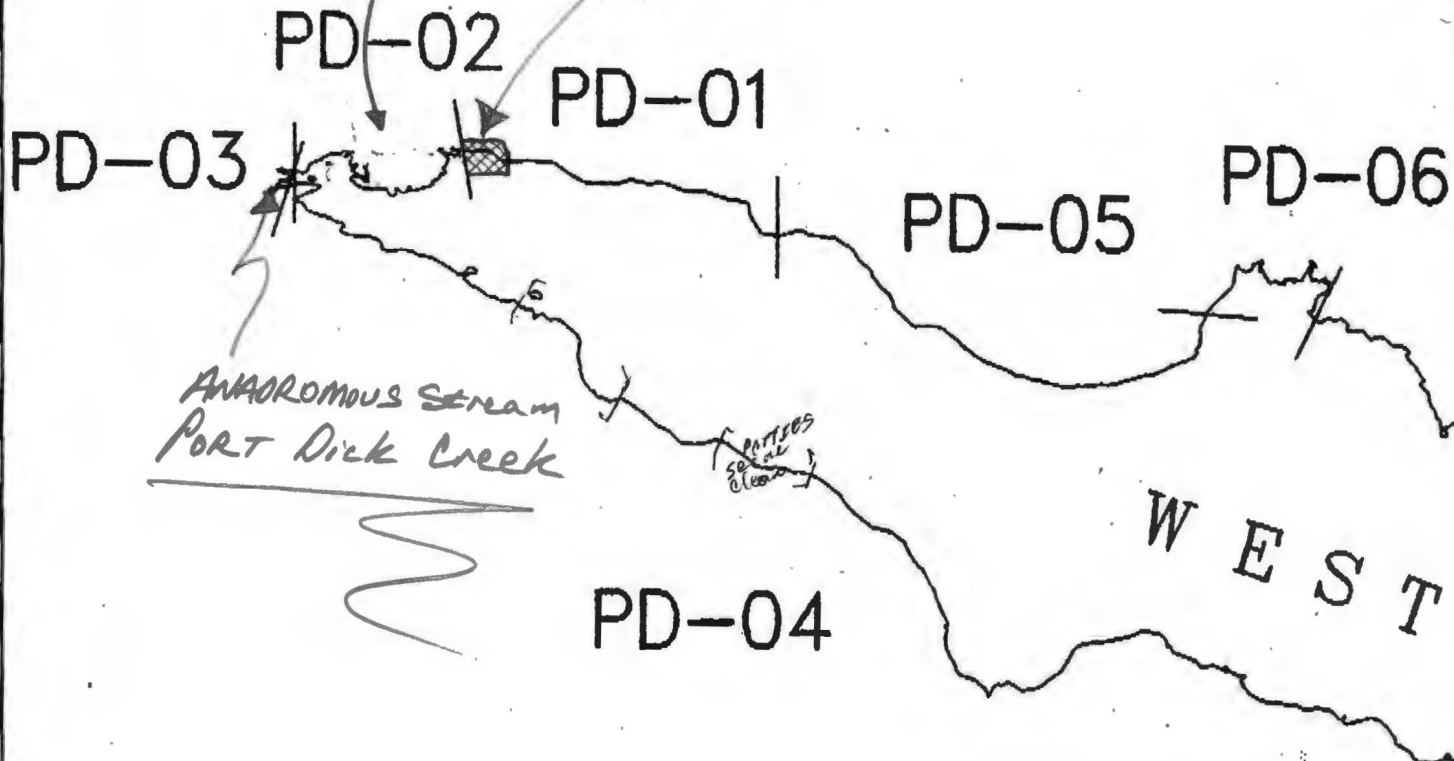
FRAME(S)

# GATE WILDERNESS

6/28/90

ANAOROMOUS Stream  
Slide Creek

AREA BEING WORKED  
AREA SURVEYED ON THIS TRIP



0 1 2  
1 inch = 3932 feet

EXXON COMPANY, USA

ACE 9961367

May 21, 1990

Aml used:

/chugechl/morris/super2/ops-aml



Not A Stream

ADF&G MULTI-ASSESSMENT DATA FORM

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

METHOD: Aerial Ground Boat

3 DATE: 6/28/90 15 HIGH TIDE TIMES: 0616 11919 21 TEAM RECORDER: Doug Hill

4 START TIME: 1112 16 HIGH TIDE HTS: 10.6 11.3 22 OBSERVERS: Lee-Glenn

5 STOP TIME: 1406 17 LOW TIDE TIMES: --- 12433 23 AGENCY: ADF&G

6 SEGMENT #: CB-01 18 LOW TIDE HTS: --- 11.5 24 PHOTOS TAKEN: Y  N

7 STATION #: \_\_\_\_\_ 19 TIDE HT AT SURVEY: \_\_\_\_\_ Roll #: \_\_\_\_\_ Frames: \_\_\_\_\_

8 K-UNIT: \_\_\_\_\_ Ebb Slack Flood Slack 25 VIDEO TAKEN: Y  TAPE#: \_\_\_\_\_

9 STAT AREA: \_\_\_\_\_ 20 USCG QUAD: Seldovia A-4 Start: \_\_\_\_\_ End: \_\_\_\_\_

10 LAT: \_\_\_\_\_ 11 LONG: \_\_\_\_\_ 26 SAMPLES TAKEN? Y  N Number

12 SOURCE: Map Loran 011

13 LOCATION: Cove Between Windy & Church Bays Sediment \_\_\_\_\_

14 DESCRIPTION: Sandy Beach with seaback in center of Cove Biological \_\_\_\_\_

Water \_\_\_\_\_

EXTENT OF OIL

	SHORELINE				STREAM			
	L	W	M <sup>2</sup>	%	L	W	M <sup>2</sup>	%
27 SURFACE COVERAGE								
28 SURFACE THICKNESS								
29 PENETRATION								
30 OVERALL OIL IMPACT:	N	<u>VL</u>	L	M	H			
31 OIL TYPE:	Pooled	<u>Mousse</u>	Tar	Asphalt	Sticky	Stain		
32 OILED DEBRIS?	<input checked="" type="checkbox"/> Y	N						
33 SHORELINE TYPE:	Headland	Low-lying Rocks	<u>Beach</u>	Cove				
		Lagoon	Marsh					
34 WAVE EXPOSURE:	<u>High</u>	Moderate	Low					
35 SUBSTRATE TYPE:	Bedrock	Boulder	Cobble					
	Gravel	<u>10%</u>	Sand	<u>90%</u>	Mud/silt			

36 CATALOGED ANAD. FISH STREAM? Y N

37 CATALOG #: \_\_\_\_\_

38 STREAM NAME: \_\_\_\_\_

39 OIL IN STREAM BED? Y N

40 OIL ON STREAM BANKS? Y N

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

42 OIL WITHIN 1 MILE OF STREAM? Y N  
Where: \_\_\_\_\_

43 ANADROMOUS FISH PRESENT? Y N

44 ANADROMOUS FISH OBSERVATION  
Species Aerial Ground




ACE-9961368

COMMENTS: Surveyed the center beach (head of Cove between Windy & Church Bays) for subsurface oil. Oil was found 10" below the surface of the beach (3/4-1" thick/sporadic blobs of mousse. The extent of this oil is unknown. Sheen was observed coming out of blank sand on previous trips

FRAME(S)

DESCRIPTION

48 OIL DISTRIBUTION DIAGRAM

 = Sample taken  
 = Photo frame # and  
spot direction.



BOWB-9

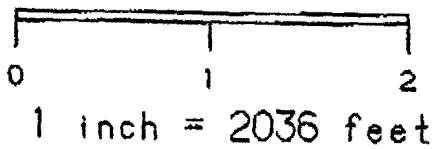
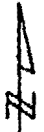
WINDY BAY

WB-05

CENTER BEACH

BADGER  
COVE

CB-01



EXXON COMPANY, USA

ACE 9961369

May 21, 1990

Aml used:

/chugach1/morris/super2/ops.aml

ADF&G MULTI-ASSESSMENT DATA FORM



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

METHOD: Aerial      Ground      Boat

3 DATE: 7/1/90      15 HIGH TIDE TIMES: 1      21 TEAM RECORDER: Doug Hill

4 START TIME: \_\_\_\_\_      16 HIGH TIDE HTS: 1      22 OBSERVERS: \_\_\_\_\_

5 STOP TIME: \_\_\_\_\_      17 LOW TIDE TIMES: 1      23 AGENCY: ADF&G

6 SEGMENT #: ET-1      18 LOW TIDE HTS: 1      24 PHOTOS TAKEN: Y N

7 STATION #: \_\_\_\_\_      19 TIDE HT AT SURVEY: \_\_\_\_\_      Roll #: \_\_\_\_\_      Frames: \_\_\_\_\_

8 K-UNIT: \_\_\_\_\_      Ebb      Slack      Flood      Slack      25 VIDEO TAKEN: Y N      TAPE#: \_\_\_\_\_

9 STAT AREA: \_\_\_\_\_      20 USCG QUAD: Sel'dovia A-4      Start: \_\_\_\_\_      End: \_\_\_\_\_

10 LAT: 59 9 15      11 LONG: 151 48 1      26 SAMPLES TAKEN? Y N      Number

12 SOURCE: Map      Loran      Oil \_\_\_\_\_

13 LOCATION: Chignik Islands, Elizabeth Island      Sediment \_\_\_\_\_

14 DESCRIPTION: Lagoon-lake-sandy beach east side island      Biological \_\_\_\_\_

Water \_\_\_\_\_

EXTENT OF OIL

	SHORELINE				STREAM			
	L	W	M <sup>2</sup>	%	L	W	M <sup>2</sup>	%
27 SURFACE COVERAGE								
28 SURFACE THICKNESS								
29 PENETRATION								

30 OVERALL OIL IMPACT: N VL L M H

31 OIL TYPE: Pooled      Mousse      Tar      Asphalt      Sticky      Stain

32 OILED DEBRIS? Y N

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

34 WAVE EXPOSURE: High      Moderate      Low

35 SUBSTRATE TYPE: Bedrock      Boulder      Cobble

36 CATALOGED ANAD. FISH STREAM?  Y N

37 CATALOG #: 242-10-10270

38 STREAM NAME: Eliz. Isl. Creek

39 OIL IN STREAM BED?  Y N

40 OIL ON STREAM BANKS?  Y N

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

42 OIL WITHIN 1 MILE OF STREAM?  Y N  
Where: Both Adjacent Stream Mouths

43 ANADROMOUS FISH PRESENT? Y ? N

44 ANADROMOUS FISH OBSERVATION

Species	Aerial	Ground

COMMENTS: A crew of four plus one ADEC representative from the M/V Yukon River worked the anadromous fish stream at Elizabeth Island. Jeff Fullard, USCG, and Charles Reed, ADEC, monitored the effort. The weather was rough so women were not taken to the beach and one outboard motor was damaged in the surf. Neither the stream, the lake nor the sandy beach on the north side of the stream were cleaned. ADF&G was given such short notice that no representatives were present during this operation. (Susan McLane, ADF&G-Homer Office Memo; Charles Reed, ADEC-Daily Assessment Form; ADF&G Homer-Office Log; Lee Glenn & Doug Hill, ADF&G).



FRAME(S)	DESCRIPTION

48 OIL DISTRIBUTION DIAGRAM

---

= Sample taken  
= Photo frame # and  
shot direction.

Not A Stream

Chugach ~~Islands~~ ISLANDS  
PHOTO TRANSECT

ADF&G MULTI-ASSESSMENT DATA FORM

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

METHOD: Aerial Ground Boat

3 DATE: 7/3/90 15 HIGH TIDE TIMES: 1200 122-11 21 TEAM RECORDER: Doug Hill

4 START TIME: 1430 16 HIGH TIDE HTS: 8.0 11.2 22 OBSERVERS: Lee Grewo

5 STOP TIME: 1710 17 LOW TIDE TIMES: 0450 11550 23 AGENCY: ADF&G

6 SEGMENT #: CI-4 18 LOW TIDE HTS: 2.0 14.5 24 PHOTOS TAKEN: 0 N  
Roll #: 9000H12H Frame: 1-17

7 STATION #: \_\_\_\_\_ 19 TIDE HT AT SURVEY: \_\_\_\_\_

8 K-UNIT: \_\_\_\_\_ Ebb Slack Flood Slack 25 VIDEO TAKEN: Y N TAPE#: 90LPG025H

9 STAT AREA: \_\_\_\_\_ 20 USCG QUAD: Seldovia A-4 Start: 0797 End: 1349

10 LAT: 59 9 15 11 LONG: 151 48 1 26 SAMPLES TAKEN? Y N Number

12 SOURCE: Map Loran 011 \_\_\_\_\_

13 LOCATION: Chugach Islands, East Chugach Island Sediment \_\_\_\_\_

14 DESCRIPTION: Low Angle east facing cobble beach Biological \_\_\_\_\_

Water \_\_\_\_\_

EXTENT OF OIL

	SHORELINE				STREAM			
	L	W	M <sup>2</sup>	%	L	W	M <sup>2</sup>	%
27 SURFACE COVERAGE								
28 SURFACE THICKNESS								
29 PENETRATION								
30 OVERALL OIL IMPACT:	N	VL	L	M	<u>H</u>			
31 OIL TYPE:	<u>Pooled</u>	<u>Mousse</u>	<u>Tar</u>	<u>Asphalt</u>	<u>Sticky</u>	<u>Stain</u>		
32 OILED DEBRIS?	Y	<u>N</u>						
33 SHORELINE TYPE:	Headland	<u>Low-lying Rocks</u>	<u>Beach</u>	Cove				
		Lagoon	Marsh					
34 WAVE EXPOSURE:	<u>High</u>	Moderate	Low					
35 SUBSTRATE TYPE:	Bedrock	<u>✓</u>	Boulder	<u>✓</u>	Cobble	<u>✓</u>		
	Gravel	<u>✓</u>	Sand		Mud/silt			

36 CATALOGED ANAD. FISH STREAM? Y N

37 CATALOG #: \_\_\_\_\_

38 STREAM NAME: \_\_\_\_\_

39 OIL IN STREAM BED? Y N

40 OIL ON STREAM BANKS? Y N

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

42 OIL WITHIN 1 MILE OF STREAM? Y N  
Where: \_\_\_\_\_

43 ANADROMOUS FISH PRESENT? Y N

44 ANADROMOUS FISH OBSERVATION

Species	Aerial	Ground

ACE 9961371

COMMENTS: Rain ADF&G 100 meter phototranssect. This beach was bio-remediated in 1989. I don't know why it was in-poled because it did not meet the criteria for in-pole application at the time it was sprayed (as occurred in more than one instance). The oil a Chugach Island was too thick at the time in-pole was applied to meet specifications for application. ~~person who~~ ~~personally~~ ~~initiated~~ over →



FRAME(S)	DESCRIPTION
1 → 15, 17 16	0, 10, 20, 30, 40, 50, 60, 70, 80, 90, 99.6, 1.75 meter plot (1/2 meters) pooled mousse beneath cobble (where cobbles once lay)

46 OIL DISTRIBUTION DIAGRAMComments Cont'd

At this time the beach looks similar to 1989. However, the surfaces of the larger rocks have been polished. Though they are still stained a bit. A lot of oil remains here. There are a few places where a portion of the oil mats has been busted loose ~~(at 100 and 1000)~~ (lifted and removed). The largest of these missing portions of the oil mat was approximately 3' diameter. The oil's outer surface is now dark and crusted. Rocks are well cemented ~~together~~ in place by the mat of oil. Tripoli certainly did not do any favors for this beach.

6 oyster catchers were observed together

= Sample taken  
= Photo frame # and  
shot direction.

ACE 9961372

MARS Cove Cleanup  
Monitoring -  
Groucho Beach  
Commtish concern

NOT A Stream

ADF&G MULTI-ASSESSMENT DATA FORM

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

METHOD: Aerial Ground Boat

3 DATE: 7/6/90 15 HIGH TIDE TIMES: 0045, 1928 21 TEAM RECORDER: Donny Hill (ADF&G)

4 START TIME: 0720 16 HIGH TIDE HTS: 12.2, 19.6 22 OBSERVERS: Russel Kinobe (AOEC)

5 STOP TIME: ? 17 LOW TIDE TIMES: 0747, 1932 23 AGENCY: \_\_\_\_\_

6 SEGMENT #: PD-04 18 LOW TIDE HTS: -0.6, 4.2 24 PHOTOS TAKEN: 0 N

7 STATION #: \_\_\_\_\_ 19 TIDE HT AT SURVEY: \_\_\_\_\_ Roll #: 900DH17H Frame: 29, 30, 31

8 K-UNIT: \_\_\_\_\_ Ebb Slack Flood Slack 25 VIDEO TAKEN: Y N TAPE#: 90

9 STAT AREA: \_\_\_\_\_ 20 USCG QUAD: Seldovia B-4 Start: 1646 End: 2265

10 LAT: \_\_\_\_\_ 11 LONG: \_\_\_\_\_ 26 SAMPLES TAKEN? Y N Number

12 SOURCE: Map Loran 011 \_\_\_\_\_

13 LOCATION: West Arm Port Dick, South Shore Sediment \_\_\_\_\_

14 DESCRIPTION: East facing opening cove Biological \_\_\_\_\_

Water \_\_\_\_\_

EXTENT OF OIL

	SHORELINE				STREAM				36 CATALOGED ANAD. FISH-STREAM? Y N
	L	W	M <sup>2</sup>	%	L	W	M <sup>2</sup>	%	
27 SURFACE COVERAGE									37 CATALOG #:
28 SURFACE THICKNESS									38 STREAM NAME:
29 PENETRATION									39 OIL IN STREAM BED? Y N
30 OVERALL OIL IMPACT: N VL L M <u>H</u>									40 OIL ON STREAM BANKS? Y N
31 OIL TYPE: <u>Pooled</u> <u>Mousse</u> <u>Tar</u> <u>Asphalt</u> <u>Sticky</u> <u>Sealant</u>									41 OIL ON BEACH ADJACENT TO MOUTH? Y N (within 50 meters)
32 OILED DEBRIS? <u>Y</u> N									42 OIL WITHIN 1 MILE OF STREAM? Y N
33 SHORELINE TYPE: Headland Low-lying Rocks <u>Beach</u> <u>Cove</u> Lagoon Marsh									Where: _____
34 WAVE EXPOSURE: High Moderate <u>Low</u>									43 ANADROMOUS FISH PRESENT? Y N
35 SUBSTRATE TYPE: Bedrock _____ Boulder <u>5</u> Cobble <u>70</u> Gravel <u>5</u> Sand <u>5</u> Mud/silt <u>5</u>									44 ANADROMOUS FISH OBSERVATION

Species	Aerial	Ground

ACE 9961373

COMMENTS: Crew of 10 working North shore of Cove (George Stiles) is the Exxon Supervisor. Crew is manually removing mousse & heavily oiled sediment. Four sorbent booms are strung out along beach. Crew has done a nice job on the SW segment of this beach. However, 1-2" thick mousse was not hard to find. The crew has worked this beach for the past 5 days. The crew is getting tired of being on this beach



FRAME(S)	DESCRIPTION

Comments cont'd →

46 OIL DISTRIBUTION DIAGRAM

This type of attitude seems to be rampant this year --- ~~even~~ the hired workers want to hurry off and be somewhere else before the job at hand is complete. The twist this year is that we hear the crews complaining about being in the same place for too long --- they seem to get bored and verbally express their discontent, oh well.

Nearly all the cobble has been moved on the SW portion of this beach to get at the pooled muck & oiled sediment --- this portion of the beach is now of a yellow/tan color/dry of oil\* for the time being. When the tide is too high to work this portion of the beach the crew moves to the SE portion which is at a higher elevation.

Spoke with uscg monitor Jeff Pollard  
 Concerning Elizabeth Island activities  
 See 7/6/90 Elizabeth Island MAD form ---  
 "Summary of recent Activities".

= Sample taken  
 = Photo frame # and  
 shot direction.

ACE 9961374

TOWNSINA BAY  
OTEP BEAC

Not A Stream  
ADF&G MULTI-ASSESSMENT DATA FORM

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

METHOD: Aerial  Ground  Boat

3 DATE: 7/10/90 15 HIGH TIDE TIMES: 0905 11691 21 TEAM RECORDER: Doug Hill

4 START TIME: 1106 16 HIGH TIDE HTS: 12.8 116.0 22 OBSERVERS: Lee Glenn

5 STOP TIME: 1335 17 LOW TIDE TIMES: 1007 12211 23 AGENCY: ADF&G

6 SEGMENT #: ~~FB-03~~ TB-02 18 LOW TIDE HTS: -1.7 12.7 24 PHOTOS TAKEN:  Y  N

7 STATION #: \_\_\_\_\_ 19 TIDE HT AT SURVEY: \_\_\_\_\_ Roll #: 900041911 Frame: 7-9

8 K-UNIT: \_\_\_\_\_ Ebb Slack Flood Slack 25 VIDEO TAKEN:  Y  N TAPE #: 90LP6025H

9 STAT AREA: \_\_\_\_\_ 20 USCG QUAD: Selkovic B-3 Start: 3913 End: 3996

10 LAT: \_\_\_\_\_ 11 LONG: \_\_\_\_\_ 26 SAMPLES TAKEN? Y  N Number

12 SOURCE: Map  Lorán

13 LOCATION: Townsina Bay, North Shore, <sup>Isthmus</sup> just at mouth

14 DESCRIPTION: of tide flats are at head of bay

Oil \_\_\_\_\_  
Sediment \_\_\_\_\_  
Biological \_\_\_\_\_  
Water \_\_\_\_\_

EXTENT OF OIL

	SHORELINE				STREAM			
	L	W	M <sup>2</sup>	%	L	W	M <sup>2</sup>	%
27 SURFACE COVERAGE	3	3.7	11.1	100				
28 SURFACE THICKNESS		5.0mm						
29 PENETRATION		2.0mm						

30 OVERALL OIL IMPACT: N VL  L  M  H

31 OIL TYPE: Pooled  House  Tar  Asphalt  Sticky  Stain

32 OILED DEBRIS? Y  N

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

34 WAVE EXPOSURE: High  Moderate  Low

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

36 CATALOGED ANAD. FISH-STREAM? Y  N

37 CATALOG #: \_\_\_\_\_

38 STREAM NAME: \_\_\_\_\_

39 OIL IN STREAM BED? Y  N

40 OIL ON STREAM BANKS? Y  N

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

42 OIL WITHIN 1 MILE OF STREAM? Y  N  Where: \_\_\_\_\_

43 ANADROMOUS FISH PRESENT? Y  N

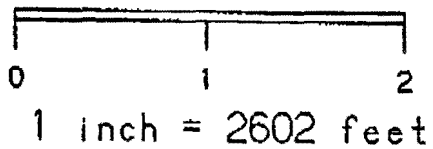
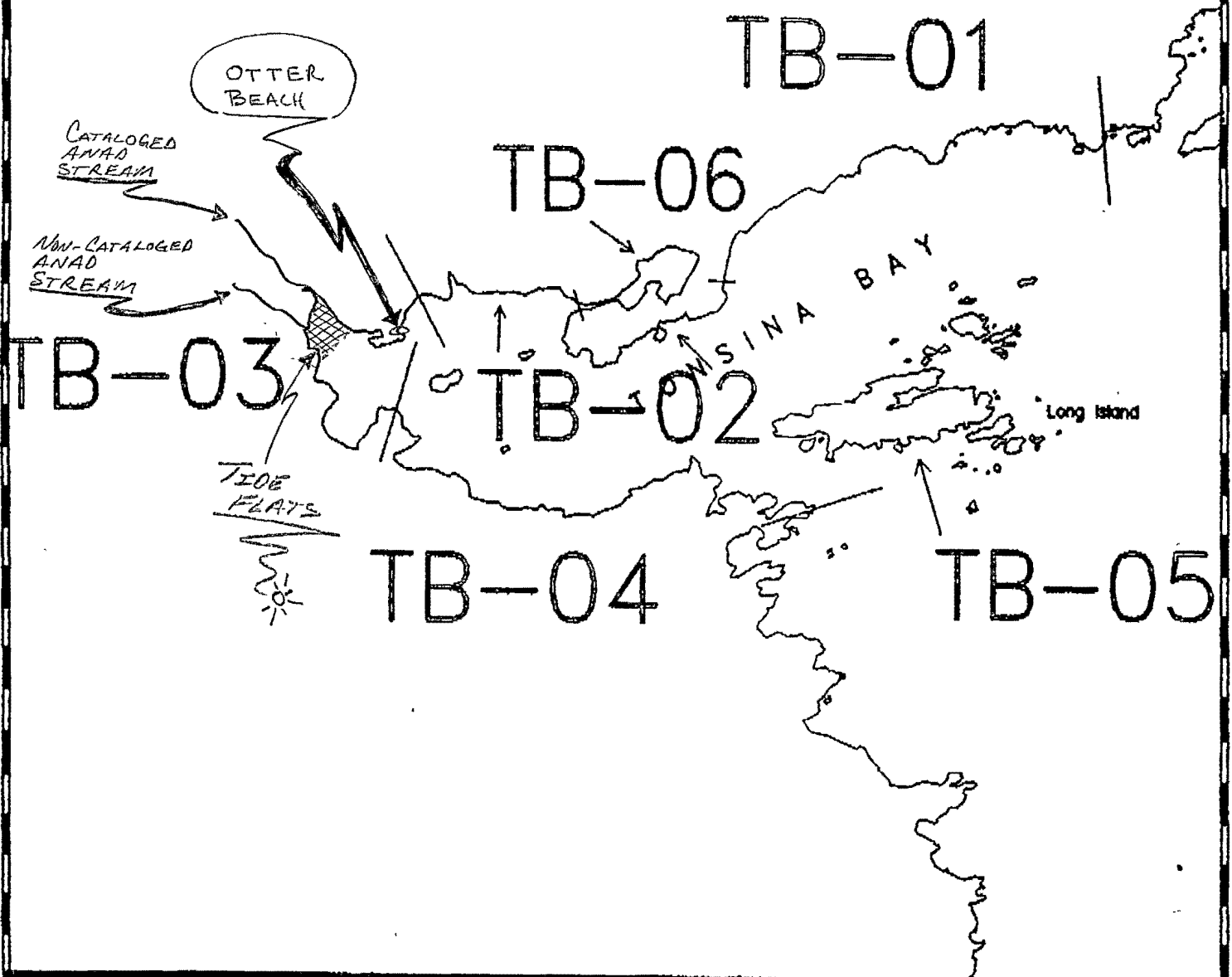
44 ANADROMOUS FISH OBSERVATION  
Species \_\_\_\_\_ Aerial  Ground


ACE 9961375

COMMENTS: Observed saturated sediment to 3" depth. Oil is in the gravel portion of the beach - there is little invertebrate life so why not just dig the oil out? This is the beach that the USCG (Terry Schultz) told ADEC & EXXON to just mix the tar mat with the gravel and custoblent - The USCG monitor said the crew had been on the beach long enough over







EXXON COMPANY, USA

ACE 9961377

May 21, 1990

Aml used:

/chugach1/morris/super2/ops.aml



# BEACH

SC NUMBER:	SEGMENT NUMBER: <i>NK-02</i>	YR CATALOGED:	
LOCATION: <i>N.E. Cove, Noka Island</i>		LATITUDE:	
ISLAND NAME:	LOCAL STREAM #:	LONGITUDE:	
QUADRANGLE: <i>Seldovia B-2</i>	ALL SEGMENTS:	LEGAL:	
LINE TYPE: <i>Beach/Cove</i>			
WAVE EXPOSURE: <i>Moderate</i>			

SC NUMBER:  
 SURVEY TYPE: *BS*  
 METHOD: *Foot*  
 DATE: *7/11/90*  
 START TIME: *1121*  
 STOP TIME: *1318*

TEAM RECORDER: *Hill*  
 OBSERVERS: *Glenn*  
 AGENCY(IES): *ADF&G*

PHOTOS TAKEN? *Y*  
 Roll #: *900DH20H* Frames: *1-7*  
 VIDEO TAKEN? *Y* Tape Number: *90LP6025H*  
 Counter start: *5467 → 5521*

SAMPLES TAKEN? *N*

SAMPLE I.D. NUMBERS:

1.	2.	3.	4.
4.	5.	6.	

	LENGTH m	WIDTH m	H2	%	THICK cm	PEN cm	OIL TYPE
SITE 1							<i>ST, LT, CV MS, HOR → LOR</i>
SITE 2							
SITE 3							
SITE 4							
SITE 5							

OVERALL OIL IMPACT: *✓*

OIL IN STREAM CHANNEL? *N/A*

OIL ON BEACH WITHIN 50M OF STREAM MOUTH? *N/A*

SUBSTRATE

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

SPECIES	COUNT				
<i>NONE</i>					

COMMENTS: *Some*  
*Pooled mounds & heavily oiled sediment observed.*  
*Some pooled mounds observed below cobbles & boulders*  
*that would be better off left alone, i.e., Not*  
*enough oil to warrant disrupting the present*  
*order of the beach.*

Crongy Cove

# Not A Stream

ADF&G MULTI-ASSESSMENT DATA FORM

1 SURVEY TYPE: (BS) SS DS TS AVS SCHA MHHS PTA 2 REGION: PWS (KP, CI) K, AP

METHOD: Aerial (Ground) Boat

3 DATE: 7/11/90 15 HIGH TIDE TIMES: 0405 11713 21 TEAM RECORDER: Doug Hill

4 START TIME: 1348 16 HIGH TIDE HTS: 12.5 11.2 22 OBSERVERS: Lee Glenn

5 STOP TIME: 1430 17 LOW TIDE TIMES: 1040 11054 23 AGENCY: \_\_\_\_\_

6 SEGMENT #: ~~005~~ RB-05 18 LOW TIDE HTS: -1.4 12.3 24 PHOTOS TAKEN: Y N

7 STATION #: \_\_\_\_\_ 19 TIDE HT AT SURVEY: \_\_\_\_\_ Roll #: \_\_\_\_\_ Frame: \_\_\_\_\_

8 K-UNIT: \_\_\_\_\_ Ebb Slack Flood Slack 25 VIDEO TAKEN: Y N TAPE#: \_\_\_\_\_

9 STAT AREA: \_\_\_\_\_ 20 USCG QUAD: \_\_\_\_\_ Start: \_\_\_\_\_ End: \_\_\_\_\_

10 LAT: \_\_\_\_\_ 11 LONG: \_\_\_\_\_ 26 SAMPLES TAKEN? Y N Number

12 SOURCE: Map Loran Oil \_\_\_\_\_

13 LOCATION: Windy Bay, NE most cove Sediment \_\_\_\_\_

14 DESCRIPTION: \_\_\_\_\_ Biological \_\_\_\_\_

Water \_\_\_\_\_

### EXTENT OF OIL

	SHORELINE				STREAM			
	L	W	H <sup>2</sup>	%	L	W	H <sup>2</sup>	%
27 SURFACE COVERAGE								
28 SURFACE THICKNESS								
29 PENETRATION								

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

31 OIL TYPE: Pooled Mousse Tar (Asphalt) (Sticky) (Stain)

32 OILED DEBRIS? (Y) N

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

34 WAVE EXPOSURE: High Moderate (Low)

35 SUBSTRATE TYPE: Bedrock 1% Boulder \_\_\_\_\_ Cobble 15  
Gravel 70 Sand 14 Mud/silt \_\_\_\_\_

36 CATALOGED ANAD. FISH-STREAM? Y N

37 CATALOG #: \_\_\_\_\_

38 STREAM NAME: \_\_\_\_\_

39 OIL IN STREAM BED? Y N

40 OIL ON STREAM BANKS? Y N

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

42 OIL WITHIN 1 MILE OF STREAM? Y N  
Where: \_\_\_\_\_

43 ANADROMOUS FISH PRESENT? Y N

44 ANADROMOUS FISH OBSERVATION

Species	Aerial	Ground

FACE 9961379

COMMENTS: Sheen observed along SE end of beach <sup>sheen on surface</sup> ~~zone on surface~~ of incoming tide. Numerous (Anthopleura) Anemones <sup>along entire shore</sup> along entire shore.

Tried to find crab molts but tide was too high. Numerous crab molts

were found here ~~in~~ in 1989. Nominae Tame are not really crabs on

the invertebrate transects. Found herring juveniles getting trapped

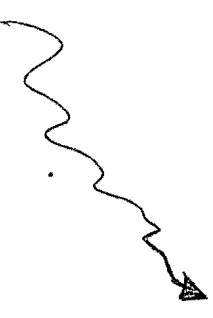
in pools as tide receded. Numerous dead barnacles on rocks that were



shot direction.  
= Photo frame # and  
= sample taken

heavily oiled in 1989. ~~These~~ These rocks were also  
steam cleaned (primarily vertical and near vertical rock faces)  
Observed barnacle spot in areas bare of other barnacles (where  
adults were last year).

I'm falling asleep!



48 OIL DISTRIBUTION DIAGRAM

Horizontal lines for data entry, organized into two columns.

DESCRIPTION

FRAME(S)

ACE 9961380

48 PHOTOLOG

RB-04

RB-05

GRUNGY COVE

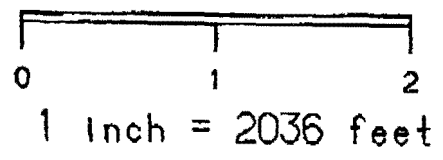
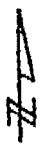
Surveyed  
This portion  
of beach

ROCK

WINDY BAY

9

Y BAY



EXXON COMPANY, USA

ACE 9961381

May 21, 1990

Aml used:

/chugach1/morris/super2/ops.aml





NOT A STREAM

TONGINA BAY - Long Island Cove

ADF&G MULTI-ASSESSMENT DATA FORM

1 SURVEY TYPE:  SS  DS  TS  AVS  SCHA  MMS  PTA

2 REGION: PWS  KP, CI  K, AP

METHOD: Aerial  Ground  Boat

3 DATE: 4/25/90 16 HIGH TIDE TIMES: 0158 11457 21 TEAM RECORDER: Doug Hill

4 START TIME: 0800 18 HIGH TIDE HTS: 14.7 112.4 22 OBSERVERS: Norma Dudak

5 STOP TIME: 0940 17 LOW TIDE TIMES: 0830 0832 23 AGENCY: ADF&G

6 SEGMENT #: TB- 18 LOW TIDE HTS: -3.3 10.9 24 PHOTOS TAKEN: 0 N

7 STATION #: \_\_\_\_\_ 19 TIDE HT AT SURVEY: \_\_\_\_\_ Roll #: 900H07H Frame: 13-20

8 K-UNIT: \_\_\_\_\_  Ebb  Slack  Flood  Slack 25 VIDEO TAKEN:  Y  N TAPE#: \_\_\_\_\_

9 STAT AREA: 232-10 20 USCG QUAD: Seldovia B-3 Start: \_\_\_\_\_ End: \_\_\_\_\_

10 LAT: \_\_\_\_\_ 11 LONG: \_\_\_\_\_ 28 SAMPLES TAKEN?  Y  N Number

12 SOURCE: Map  Loran  DOH/NO-4/25/90-0826

13 LOCATION: KP, CI, TONGINA BAY, Long Island Sediment \_\_\_\_\_

14 DESCRIPTION: Cove on East side of Island Biological \_\_\_\_\_

EXTENT OF OIL

	SHORELINE				STREAM			
	L	W	M <sup>2</sup>	%	L	W	M <sup>2</sup>	%
27 SURFACE COVERAGE								
28 SURFACE THICKNESS								
29 PENETRATION								

36 CATALOGED ANAD. FISH SREAM?  Y  N

37 CATALOG #: \_\_\_\_\_

38 STREAM NAME: \_\_\_\_\_

39 OIL IN STREAM BED?  Y  N

40 OIL ON STREAM BANKS?  Y  N

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

42 OIL WITHIN 1 MILE OF STREAM?  Y  N

Where: \_\_\_\_\_

30 OVERALL OIL IMPACT:  N  VL  L  H  H

31 OIL TYPE: Pooled    Asphalt  Sticky  Stain

32 OILED DEBRIS?  Y  N

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

43 ANADROMOUS FISH PRESENT?  Y  N

34 WAVE EXPOSURE: High  Moderate  Low

44 ANADROMOUS FISH OBSERVATION Species Aerial Ground

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


ACE 9961383

no dimensions were taken - Only general observations  
COMMENTS: Oil seen present in lower intertidal (mud/silt). North shore - heavy stain and thick deposits (up to 2") of oil encrusted spruce needles. NW Bight => Tarballs, stain, CT, CV on Rock face - SW Bight => ST, CT, CV on Rocks & Rock face, AP patches, stain, Oil saturated sediment, Tarballs. South shore => MS to 3" thick, Tarball (2-5' wide, 2-36' long sections), tarballs, needles glued by oil to rocks, stain. Norma has some USCG notes that state that only one bight in over



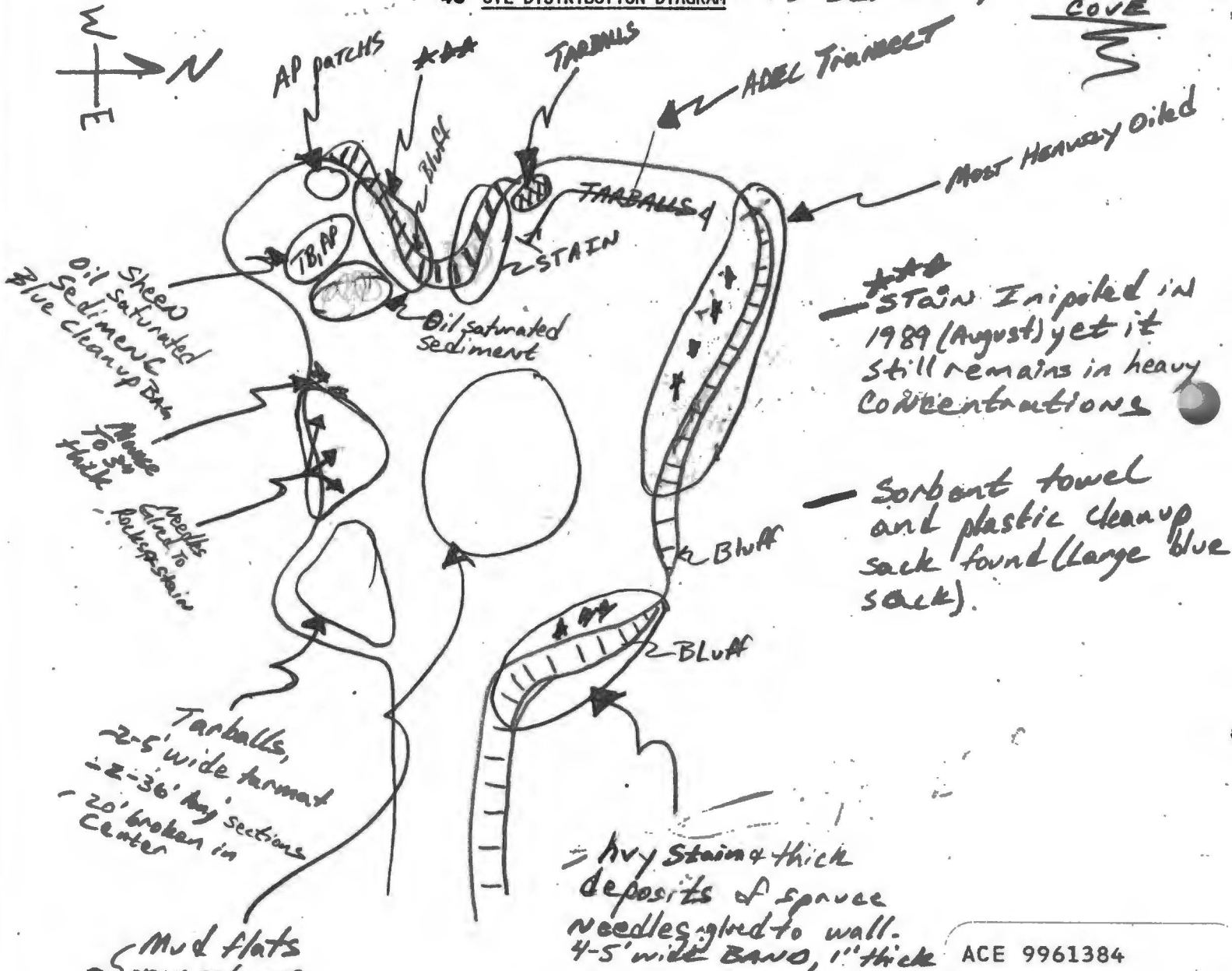
FRAME(S)

DESCRIPTION

14	Soft pliable Choco brown MS w/in thin band crust of oil
15	Blue sheen on surface - subsurface oiling to 3" (MS + oil saturated sediment)
16	Spruce needles plastered to rock face - NW corner of Lagoon
17	Norma Dudiak picking up oiled Sorbent towel
18	8' wide band of spruce needles cemented to rock face by oil
19	Closeup of oil encrusted needles - 1/2" to 2" thick on rock face
20	Aerial of Long Island Cove.

48 OIL DISTRIBUTION DIAGRAM

TONSINA BAY - LONG ISLAND COVE



Comments Cont'd: Long Island Cove was

Inipoled in 1989. This info is erroneous, Inipol was applied to the entire cove west of the narrow throat lead into the cove.

AST, AT, CV inipoled in 1989 and yet no noticeable change in the degree of oiling is evident. Definitely enough oil to warrant cleanup in cove.

- = Sample taken
- = Photo frame # and shot direction.

Beach Survey. Ks 11/25/91 (transfer from stream)

ASC NUMBER: 232-10-10250 SEGMENT NUMBER: YG-2 YR CATALOGED:  
 LOCATION: KPOC - Yalik Glacier - Western-most stream  
 STREAM NAME: -  
 DIAK K-UNIT: LOCAL STREAM #:  
 USGS QUADRANGLE: Seldovia B-2  
 SHORELINE TYPE: Beach ALL SEGMENTS:  
 WAVE EXPOSURE: Moderate

LATITUDE: 59 25 25  
 LONGITUDE: 158 43 50  
 LEGAL:

ASC NUMBER:  
 SURVEY TYPE: Pre-screening  
 METHOD: Foot  
 DATE: 4 / 14 / 90  
 START TIME: 1100  
 STOP TIME: 1145

TEAM RECORDER: Doug Hill  
 OBSERVERS: Susan McLane, Jack Reid  
 AGENCY(IES): ADF&G, USCG

PHOTOS TAKEN? Yes  
 Roll #: 9000H004 Frames: 9 → 24  
 VIDEO TAKEN? NO Tape Number:  
 Counter Start:

SAMPLES TAKEN?

SAMPLE I.D. NUMBERS: 1. DOH/sm-4/14/90-1120 2. 3.  
 4. 5. 6.

	LENGTH m	WIDTH m	M2	%	THICK cm	PEN cm	OIL TYPE
SITE 1	400m	30m		60%	< 20cm	< 20cm	AP, PT
SITE 2	250m	3m		30%	< 10cm	< 20cm	AP, PT
SITE 3							
SITE 4							
SITE 5							

OVERALL OIL IMPACT: H

OIL IN STREAM CHANNEL? NO

OIL ON BEACH WITHIN 50M OF STREAM MOUTH? NO

SUBSTRATE

Bedrock  
 Boulder  
 Cobble 60  
 Pebble 20  
 Granule  
 Sand  
 Silt 20  
 Veget.

SPECIES					
COUNT					

COMMENTS: SEE attached MAD Form (Comments and diagram section)

OK



GROUP A

ADF&G MULTI-ASSESSMENT DATA FORM

Prescreening

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

METHOD: Aerial (Ground) Boat

3 DATE: 4-14-90      15 HIGH TIDE TIMES: 17061      21 TEAM RECORDER: Doug Hill

4 START TIME: 1100      16 HIGH TIDE HTS: 9.61      22 OBSERVERS: S. Melone J. Reid (USA)

5 STOP TIME: 1145      17 LOW TIDE TIMES: 10531      23 AGENCY: ADFG

6 SEGMENT #: YF YG-1(2?)      18 LOW TIDE HTS: 0.21      24 PHOTOS TAKEN: (Y) N  
90DDH1004      Frames: 17, 19, 19, 20, 21, 22, 2  
 Roll #: \_\_\_\_\_      24

7 STATION #: 232-10 D04      19 TIDE HT AT SURVEY: LOW      25 VIDEO TAKEN: Y (M) TAPE#: \_\_\_\_\_

8 K-UNIT: \_\_\_\_\_      Ebb (Slack) Flood Slack      Starts: \_\_\_\_\_      Ends: \_\_\_\_\_

9 STAT AREA: 232-10      20 USCG QUAD: SE Louia B-2

10 LAT: N 59° 25.5'      11 LONG: W 150° 42.2'      26 SAMPLES TAKEN? (Y) N      Number \_\_\_\_\_

12 SOURCE: Map      Loran      (OIL) Yalik Glacier - DOH/Sm E 4/14/90-1120

13 LOCATION: North Shore Nuka Passage - 1 mile N Nuka Island      Sediment \_\_\_\_\_

14 DESCRIPTION: Yalik Glacier Beach      Biological \_\_\_\_\_

EXTENT OF OIL

	SHORELINE				STREAM			
	L	W	M <sup>2</sup>	%	L	W	M <sup>2</sup>	%
27 SURFACE COVERAGE								
28 SURFACE THICKNESS								
29 PENETRATION								
30 OVERALL OIL IMPACT:	N	VL	L	M	H			
31 OIL TYPE:	Pooled	Mousse	<u>Tar</u>	<u>Asphalt</u>	Sticky	Stain		
32 OILED DEBRIS?	Y	N						
33 SHORELINE TYPE:	Headland	Low-lying Rocks	<u>Beach</u>	Cove				
		Lagoon	Marsh					
34 WAVE EXPOSURE:	High	<u>Moderate</u>	Low					
35 SUBSTRATE TYPE:	Bedrock	Boulder	Cobble	<u>60%</u>				
	Gravel	<u>20%</u>	Sand	<u>10</u>	Mud/silt	<u>20%</u>		

36 CATALOGED ANAD. FISH SREAM? (Y) N

37 CATALOG #: Non-cataloged

38 STREAM NAME: "Yalik Glacier - west Creek"  
Western-most Abwage

39 OIL IN STREAM BED? Y (N) NONE observed

40 OIL ON STREAM BANKS? Y (N)

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

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

Whore: 3/4 mile NE of Anadromous fish stream

43 ANADROMOUS FISH PRESENT? Y N

44 ANADROMOUS FISH OBSERVATION

Species	Aerial	Ground

ACE 9961386

READILY visible on Ground

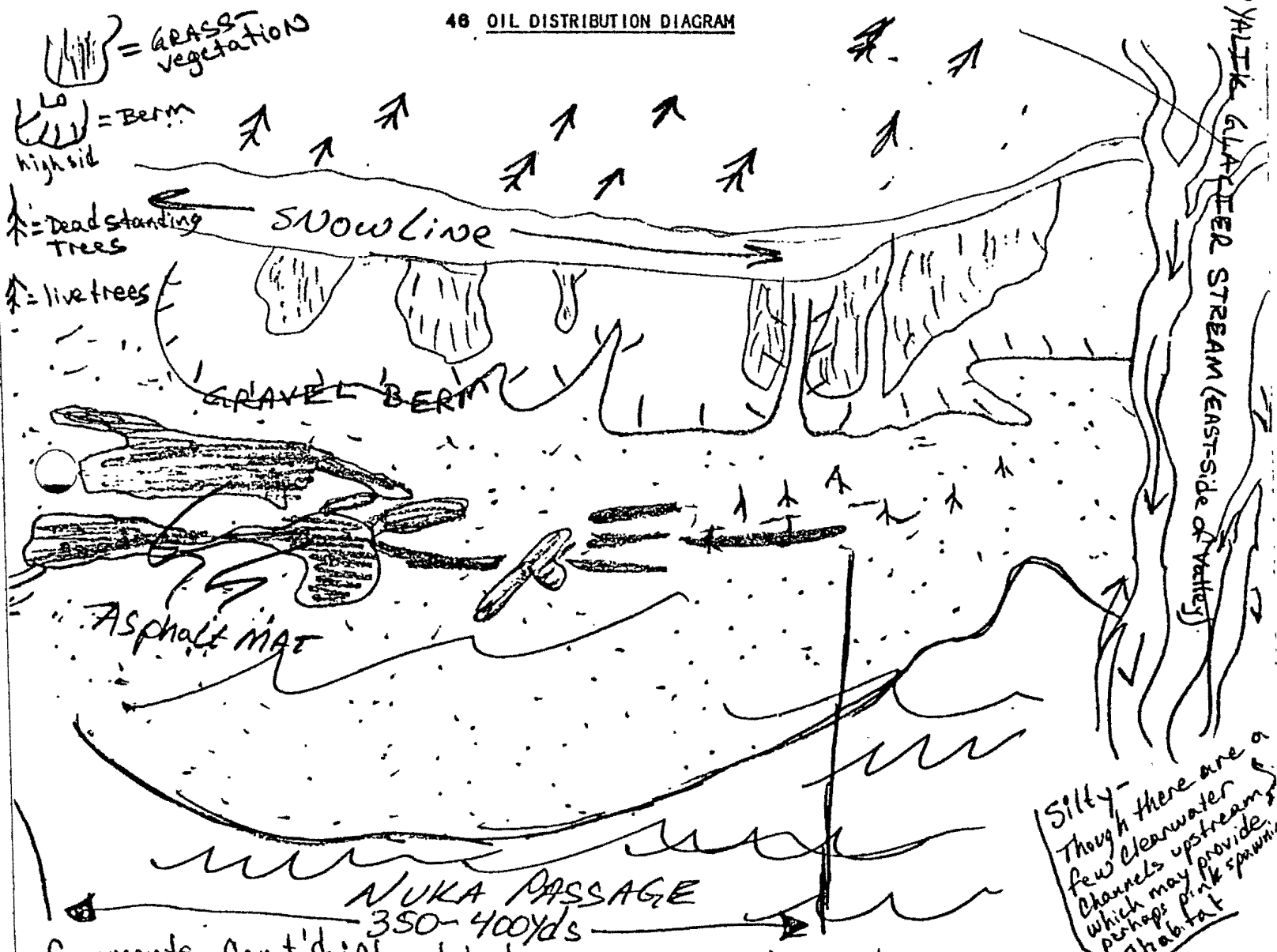
Dimension will obviously be revised on outscat

COMMENTS: Surveyed Tar/mat/Asphalt Area only. Asphalting Area difficult, at first to detect from air (unlike 1989). Observed very hard mat of Asphalt of approximately the same proportions as 1990/very Rough estimate => Approx. 400 yds long x 10 to 30 yds wide, and narrower in some areas.) Thickness of mat ranged from 1/2" to 1/4" thick. Upon breaking thru the "hard" outer surface we found friable and shiny oil saturated sediment (dark brown to black. Gravel Cobble cemented in place by asphalt. Portion becoming shiny and of lower viscosity. Numerous portions of the mat have been lifted/displaced to parts unknown (Abrupt shelf-like edges. over

WHACTION

FRAME(S)	DESCRIPTION
10, 11, 21, 22, 23, 24	- Aerial of YALIK Glacier beach - MAT most visible in photos 23 & 24
12	- Jack Reid (USCG) standing on asphalt mat (thin portion)
13	- Portion of mat where surface cobble & gravel has been torn loose / smoother surface than thicker portion of the mat
14	- 24" asphalt / saturated sediment mat
15, 16, 17, 18	Asphalt MAT / Jack Reid (USCG) photos (15) Susan Milane photos (15, 16, 17, 18)
19	Depicts friable nature of mat once "busted up" - Brown Mousse.
20	Depicts - portions of mat where waves have removed segments

48 OIL DISTRIBUTION DIAGRAM



Comments cont'd: Chocolate brown mousse observed occasionally. Portions with thinner areas - where waves have removed surface cobble & gravel from oil surface - leaving the beach with a smoother more sorted look.

Silty - Though there are a few clearwater channels upstream which may provide perhaps pink spawning habitat

DDH  
 MAT could be scooped up  
 = Sample taken  
 = Photo frame # and shot direction.

ANADSCAT Recommended



# GROUP A

Faxed Anchorage  
4/17/90  
Prescreening

## ADF&G MULTI-ASSESSMENT DATA FORM

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

2 REGION: PWS  KP,CI  K,AP

METHOD: Aerial  Ground  Boat

3 DATE: 4-14-90 15 HIGH TIDE TIMES: 17061 21 TEAM RECORDER: Doug Hill

4 START TIME: 1100 16 HIGH TIDE HTS: 9.61 22 OBSERVERS: S. Melone, J. Reid (USCG)

5 STOP TIME: 1145 17 LOW TIDE TIMES: 10531 23 AGENCY: ADF&G

6 SEGMENT #: YK YG-1(2?) 18 LOW TIDE HTS: 0.21 24 PHOTOS TAKEN:  Y  N  
9000H004 9,10,11,12,13,14,15,16

7 STATION #: 232-10 DDH 19 TIDE HT AT SURVEY: LOW Roll #: \_\_\_\_\_ Frame: 17,18,19,20,21,22,23  
24

8 K-UNIT: \_\_\_\_\_ Ebb  Slack  Flood  Slack 25 VIDEO TAKEN: Y  N TAPE#: \_\_\_\_\_

9 STAT AREA: 232-10 20 USCG QUAD: SE Lovia B-2 Start: \_\_\_\_\_ End: \_\_\_\_\_

10 LAT: N 59° 25.5 11 LONG: W 150° 42.2 26 SAMPLES TAKEN?  Y  N Number \_\_\_\_\_

12 SOURCE: Map  Loran  011 Yalik Glacier DDH/sm 4/14/90-1120

13 LOCATION: North Shore Nuka Passage - 1 mile N Nuka Island Sediment \_\_\_\_\_

14 DESCRIPTION: Yalik Glacier Beach Biological \_\_\_\_\_

Water \_\_\_\_\_

### EXTENT OF OIL

	SHORELINE				STREAM			
	L	W	M <sup>2</sup>	%	L	W	M <sup>2</sup>	%
27 SURFACE COVERAGE								
28 SURFACE THICKNESS								
29 PENETRATION								

36 CATALOGED ANAD. FISH STREAM?  Y  N  
232-10-10250

37 CATALOG #: Non-cataloged

38 STREAM NAME: "Yalik Glacier - west Creek"  
Western-most flowage

39 OIL IN STREAM BED? Y  N  NONE observed

40 OIL ON STREAM BANKS? Y  N

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

42 OIL WITHIN 1 MILE OF STREAM?  Y  N

30 OVERALL OIL IMPACT: N  VL  L  M  H

31 OIL TYPE: Pooled  Mousse  Tar  Asphalt  Sticky  Stain

32 OILED DEBRIS? Y  N

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

34 WAVE EXPOSURE: High  Moderate  Low

35 SUBSTRATE TYPE: Bedrock  Boulder  Cobble 60%  
Gravel 20% Sand  Mud/silt 20%

Where: 3/4 mile NE of Anadromous fish stream

43 ANADROMOUS FISH PRESENT? Y  N

44 ANADROMOUS FISH OBSERVATION

Species	Aerial	Ground
ACE 9961388		

READILY visible on ground

Dimension obviously used on anadromous

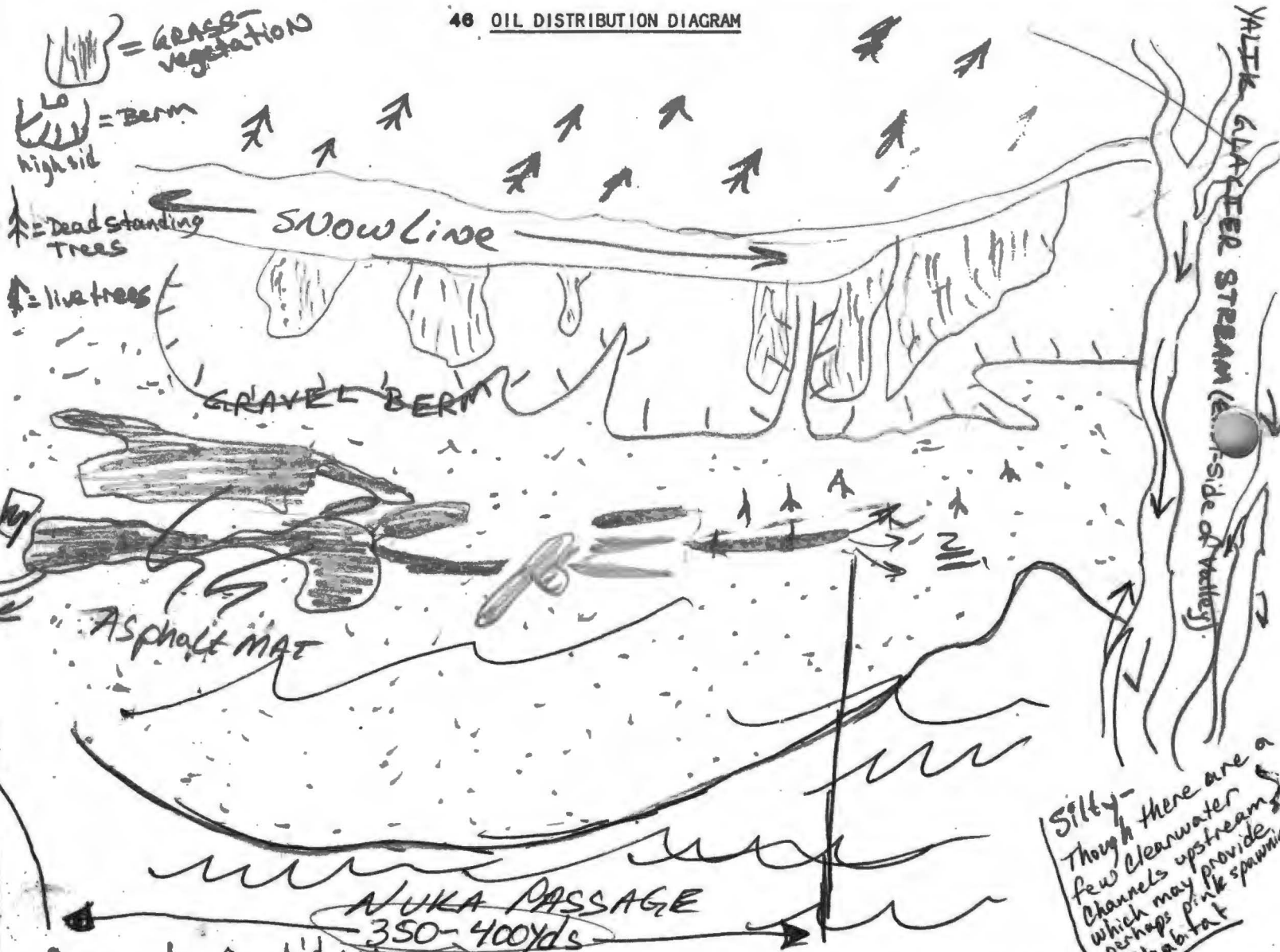
COMMENTS: Surveyed Tar/mat/Asphalt Area only. Asphalting Area difficult, at first to detect from air (unlike 1989). Observed very hard mat of Asphalt of approximately the same proportions as 1989 (very rough estimate => Approx. 400 yds long x 10 to 30 yds wide, and narrower in some areas.).

Thickest of mat ranged from 1/2" to 5" thick. Upon breaking thru the "hard" outer surface we found friable and shiny oil saturated sediment (dark brown to black. Gravel Cobble cemented in place by asphalt. Portion becoming shiny and of lower viscosity. Numerous portions of the mat have been lifted/displaced to parts unknown (Abrupt shelf-like edges. over

ACE 1955485

FRAME(S)	DESCRIPTION
10, 11, 21, 22, 23, 24	- Aerial of YALIK GLACIER beach - MAT Most visible in photos 23 & 24
12	- JACK Reid (USCG) standing on Asphalt mat (thin portion)
13	- Portion of mat where surface cobble & gravel has been torn loose / smoother surface than thicker portion of the mat
14	24" asphalt / saturated sediment mat
15, 16, 17, 18	Asphalt MAT / JACK Reid (USCG) photos (15) Susan Milne photos (15, 16, 17, 18)
19	Depicts friable nature of mat once "busted up" - Brown Mousse.
20	Depicts - portions of mat where waves have removed segments

46 OIL DISTRIBUTION DIAGRAM



Silty -  
Though there are a few clearwater channels upstream which may provide perhaps pink spawning habitat

Comments Cont'd: Chocolate brown mousse observed occasionally. Portions of thinner areas - where waves have removed surface cobble & gravel from oil surface - leaving the beach with a smoother more sorted look.

DDH  
~~Aluminum~~ MAT could be scooped up

- Sample taken.
- Photo frame # and shot direction.

ACE 9961389

ACE 1955486

ANADSCAT Recommended



# SHORELINE OILING SUMMARY

PHASE 4  
REVISION NO. 04/13/90

OG N. BIGGAR USCG (NOAA) MILES HAYES SEGMENT ST/ Y2-002  
 BIO D. RAIDER LAND REP SHERI METH-YANTONEY SUBDIVISION A (1 OF 1)  
 EXXON J. DEAN ADEC RUSSELL KUNIGE TIME 8:00 10/5:30  
 TEAM NO. 17 TIDE LEVEL +3 to -3 to +7 DATE 4/28/90  
 EST. SUBDIVISION LENGTH: 1841 m  Sun  Clouds  Fog  Rain  Snow  
 UPLANDS DESCRIPTION:  Grass  Forest  Rock  
 SURVEYED FROM:  Foot  Boat  Helo WORKING DIRECTION: middle to East/West  
 SURFACE SEDIMENTS: R 0 % B 5 % C 3 % P 30 % G 30 % S 0 % M 0 % V 0 %  
 SLOPE: Lang 100 % Hang 0 % Vert 0 % WAVE EXPOSURE:  Low  Med  High  
 OIL CATEGORY LENGTH: W 150 m M 450 m N - m VL 491 m NO 750 m

## SURFACE OIL

CHARACTER	DISTRIBUTION				OIL / FILM COLOR						IMPACTED ZONES				
	/C	/B	/P	/S	SBL/BR	DBL/RW	GY/SL	DR/TL	LR/LR	SU	UI	M	U		
ASPHALT PAVEMENT	A	B	C	D	all							all	X		
POOLED															
COVER															
COAT				G	all							all			
STAIN															
MOUSSE															
PATTIES			Y	X	Y/X							X			
TARBALLS															
FILM															
NO OIL										X	X	X			

PAVEMENT H F 3800 sq. m by 7 cm  
 PATTIES / TARBALLS 20,000 BAGS  
 (That's all)  
 NEAR SHORE SHEEN? NO BR RW SL TL

OILED DEBRIS	AMOUNT			DID YOU COLLECT DEBRIS?
	SM	MD	LG	
Logs				YES <input type="checkbox"/> NO <input checked="" type="checkbox"/>
Vegetation				TYPE <u>..</u>
Trash				#BAGS <u>..</u>
Debris				

Photographs:  
 Roll No. 5  
 Frames 2 to 5

## SUBSURFACE OIL

PIT NO.	PIT DEPTH (cm)	SUBSURFACE OIL CHARACTER					OILED INTERVAL (CM INTERVAL)	BELOW		OIL / FILM COLOR						PIT ZONE				A N A	SHEEN (Y/N)	SURFACE-SUBSURFACE SEDIMENTS
		OP	OR	OL	OF	NO		UO	UC	SBL/BR	DBL/RW	GY/SL	DR/TL	LR/LR	SU	UI	M	U				
1	18	X					0.4	X					X		X					N		P.C, g.s
2	20	X					0.7	X					X		X					N		" "
3	65					X	-	X							X					N		S, P, g
4	20				X		-	X						X						N		P, g
							-															
							-															

ACE 9961390

### COMMENTS

The heaviest impacted area of this segment is covered by an asphaltic pavement - The largest area of pavement is about 35m (cross) wide and 150m long. The remainder of continuous pavement is 1 to 3m wide (the "sidewalk"). The area of broken asphalt extends another 175m to the E, and to 400m to the west. Random chunks of asphalt and smaller patches can be found up to 1/2 the distance between the tidal and storm terraces, therefore the sketch maps show a "general limit" of these occurrences. The asphalt is 5 to 10 cm thick. In the center of sketch map 3.

REVIEWED \_\_\_\_\_ DATE \_\_\_\_\_  
 ACE 1955487  
 FLS





OG N. BIGGAR

SEGMENT ST/ 002

SUBDIVISION A

DATE 7/20/90

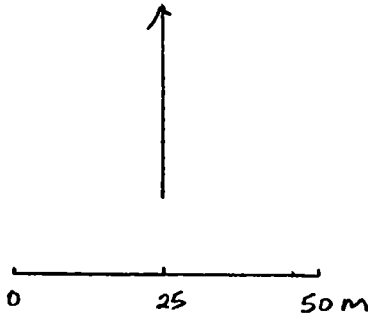
# SKETCH MAP MAP 1

## CHECKLIST

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

## LEGEND

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



ACE 9961392

$\approx$  250 m to  
End of segment creek

one PT/s  
seen @  
100 m  
from creek

SSL  
HWL

STORM  
BERM

Downed tree  
with  
net

AP/B  
4m x 1m

AP/S/P  
10m x 2m

AP/P  
10 x 2m

PT/s:  
1m<sup>2</sup>

general  
limits of  
PT/s, AP/s

general limits  
of PT/s or AP/s

overlap with  
Map 2

barricade  
berm  
LWL

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





OG N. BIGGAR

SEGMENT ST/ 0602

SUBDIVISION A

DATE 4 128 90

**CHECKLIST**

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

**LEGEND**

- 1 ▲ Pit - No Subsurface Oil
- 2 ▲ Pit - Subsurface Oil
- CT/C Continuous Distribution
- CT/B Broken Distribution
- CT/P Patchy Distribution
- CT/S Splashed Distribution
- Oil Vegetation
- 1 → Photo location, direction, and number

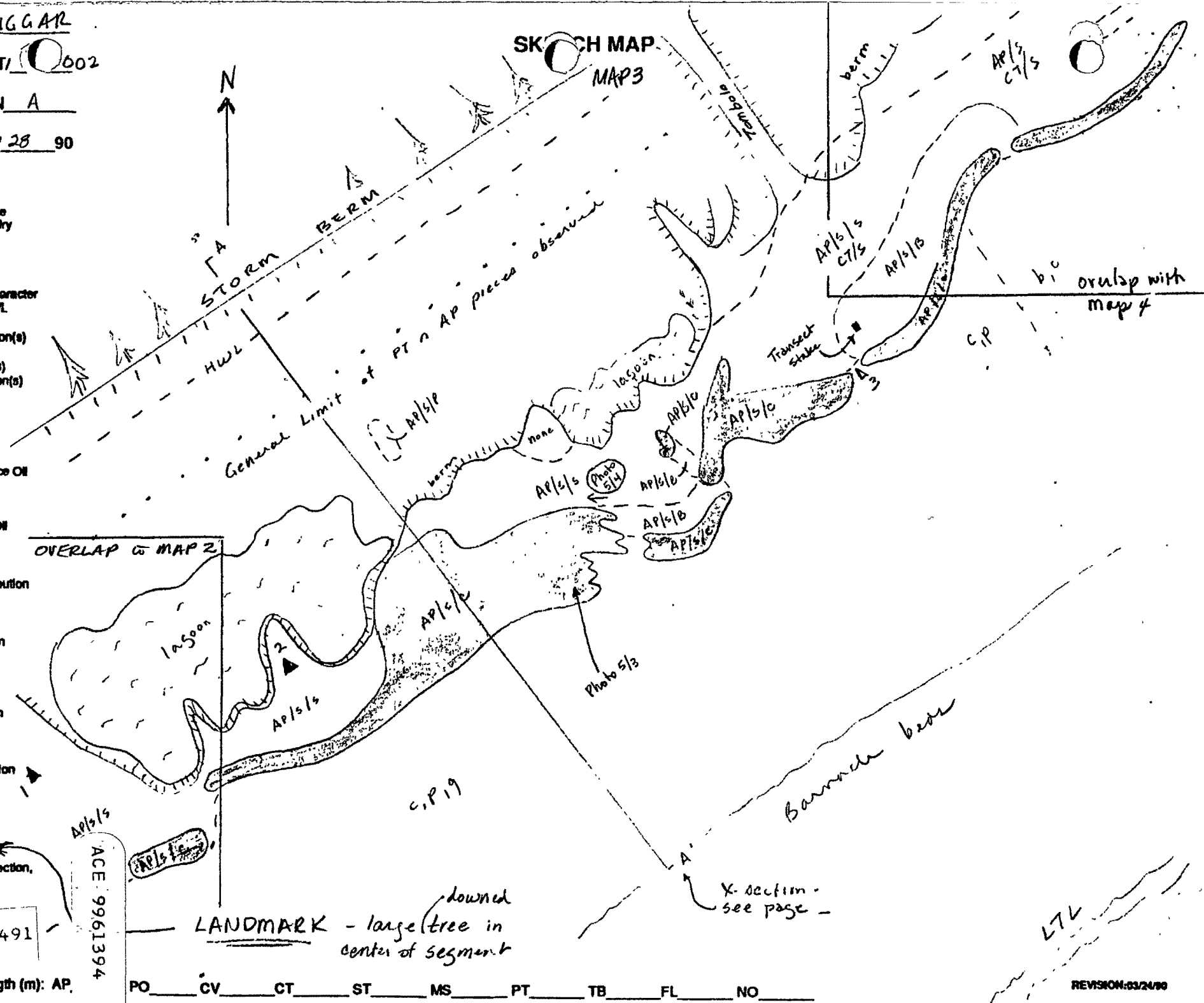
ACE 1955491

Oil Character Length (m): AP

ACE 9961394

PO CV CT ST MS PT TB FL NO

**SKETCH MAP MAP 3**



OG N. BIGGAR

SEGMENT ST/ 002

SUBDIVISION A

DATE 4/28/90

# SKETCH MAP MAP 4

20	50
10	25
150	1175

52  
4

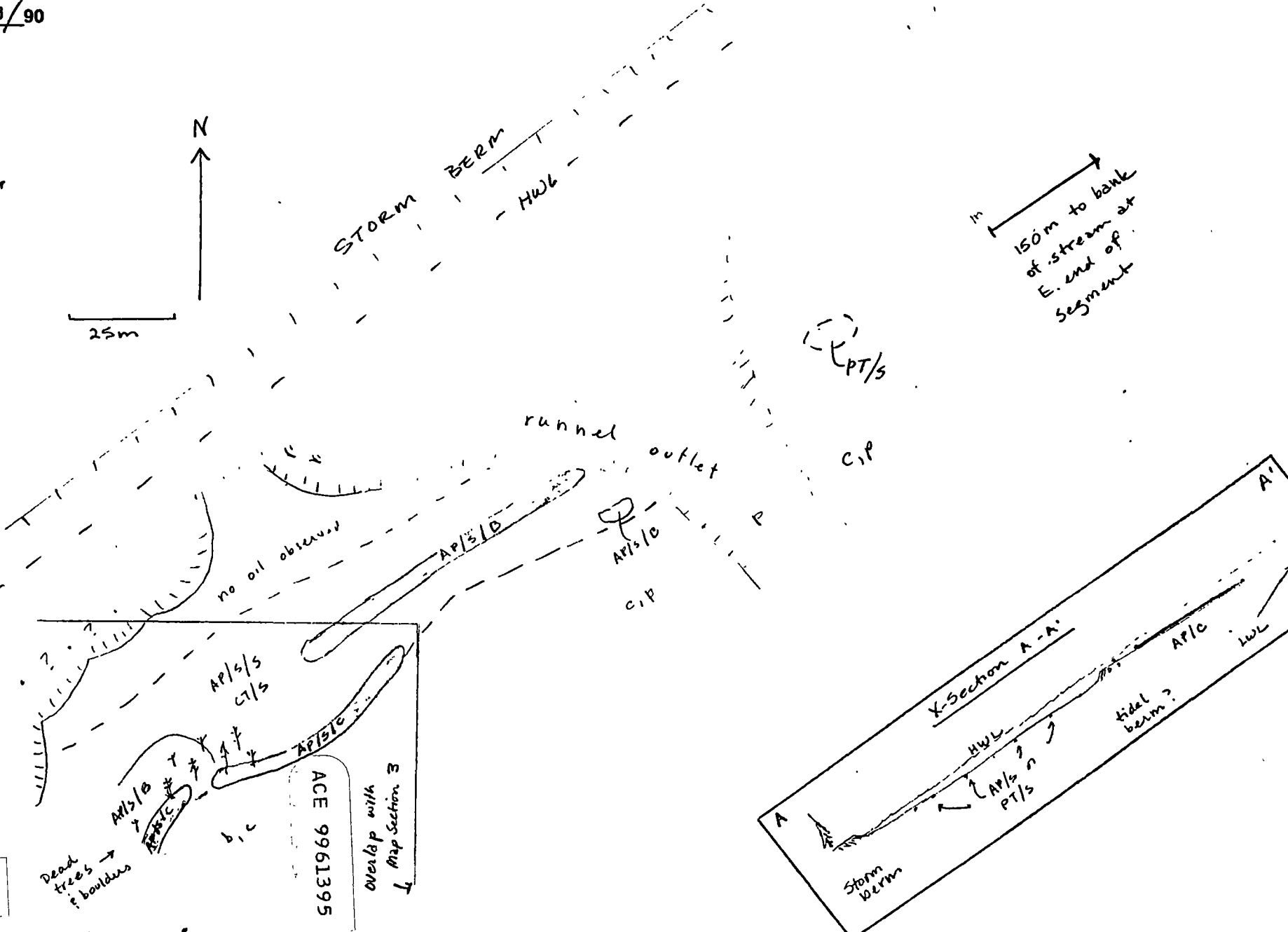
## CHECKLIST

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

## LEGEND

- 1 ▲  
Pit - No Subsurface Oil
- 2 ▲  
Pit - Subsurface Oil
- CT/C  
Continuous Distribution
- CT/B  
Broken Distribution
- CT/P  
Patchy Distribution
- CT/S  
Splashed Distribution
- eee  
Oiled Vegetation
- 1 →  
Photo location, direction, and number

25m



150m to bank  
of stream at  
E. end of  
segment

ACE 1955492

Oil Character Length (m): AP 575 PO - CV - CT - ST - MS - PT 516 TB - FL - NO 750



# SHORELINE ECOLOGICAL SUMMARY

REVISION: 03/22/90

Segment ST1 YG 002 Subdivision A Date (mo / day / yr) 4/28/90

Time (24 hr) 8:00 Biologist DANIEL RAIDER

(A) Substrate type and % of segments:  
 (1) Bedrock \_\_\_\_\_ (2) Boulder \_\_\_\_\_ (3) Cobble \_\_\_\_\_ (4) Pebble \_\_\_\_\_ (5) Sand \_\_\_\_\_ (6) Silt \_\_\_\_\_

(B) Overall % cover of biota (% of segment): Dense 20 Moderate 10 Low 70

(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 (O)

↳ to none  
 Photographs: \_\_\_\_\_  
 Roll No. 5  
 Frames 1-5

**BARNACLES**

Dense			Moderate			Sparse			Rare			
1U	1M	1L	1U	1M	1L	1U	1M	1L	1U	1M	1L	
2	2	2	2	X	2	2	2	2	2	2	2	NOT PRESENT
3	3	3	3	X	3	3	3	3	3	3	3	
4	4	4	4	X	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	

**MYTILUS**

Dense			Moderate			Sparse			Rare			
1U	1M	1L	1U	1M	1L	1U	1M	1L	1U	1M	1L	
2	2	2	2	X	2	2	2	2	2	X	2	NOT PRESENT
3	3	3	3	X	3	3	3	3	3	X	3	
4	4	4	4	X	4	4	4	4	4	X	4	
5	5	5	5	X	5	5	5	5	5	X	5	
6	6	6	6	6	6	6	6	6	6	6	6	

**GASTROPODS**

Dense			Moderate			Sparse			Rare			
1U	1M	1L	1U	1M	1L	1U	1M	1L	1U	1M	1L	
2	2	2	2	2	2	2	X	2	2	2	2	NOT PRESENT
3	3	3	3	3	3	3	X	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	

**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	NOT PRESENT
3	3	3	3	3	3	3	3	3	3	3	X	
4	4	4	4	4	4	4	4	4	4	4	X	
5	5	5	5	5	5	5	5	5	5	5	5	
6	6	6	6	6	6	6	6	6	6	6	6	

**Wildlife Observations/ General Comments:**

- Harbor Seal - 1
- Dense *Mytilus edulis* bed and dense LTZ with algae
- Profuse shore birds in list to be sent at a later date

**Ecological Considerations:**

GG

ACE 9961396

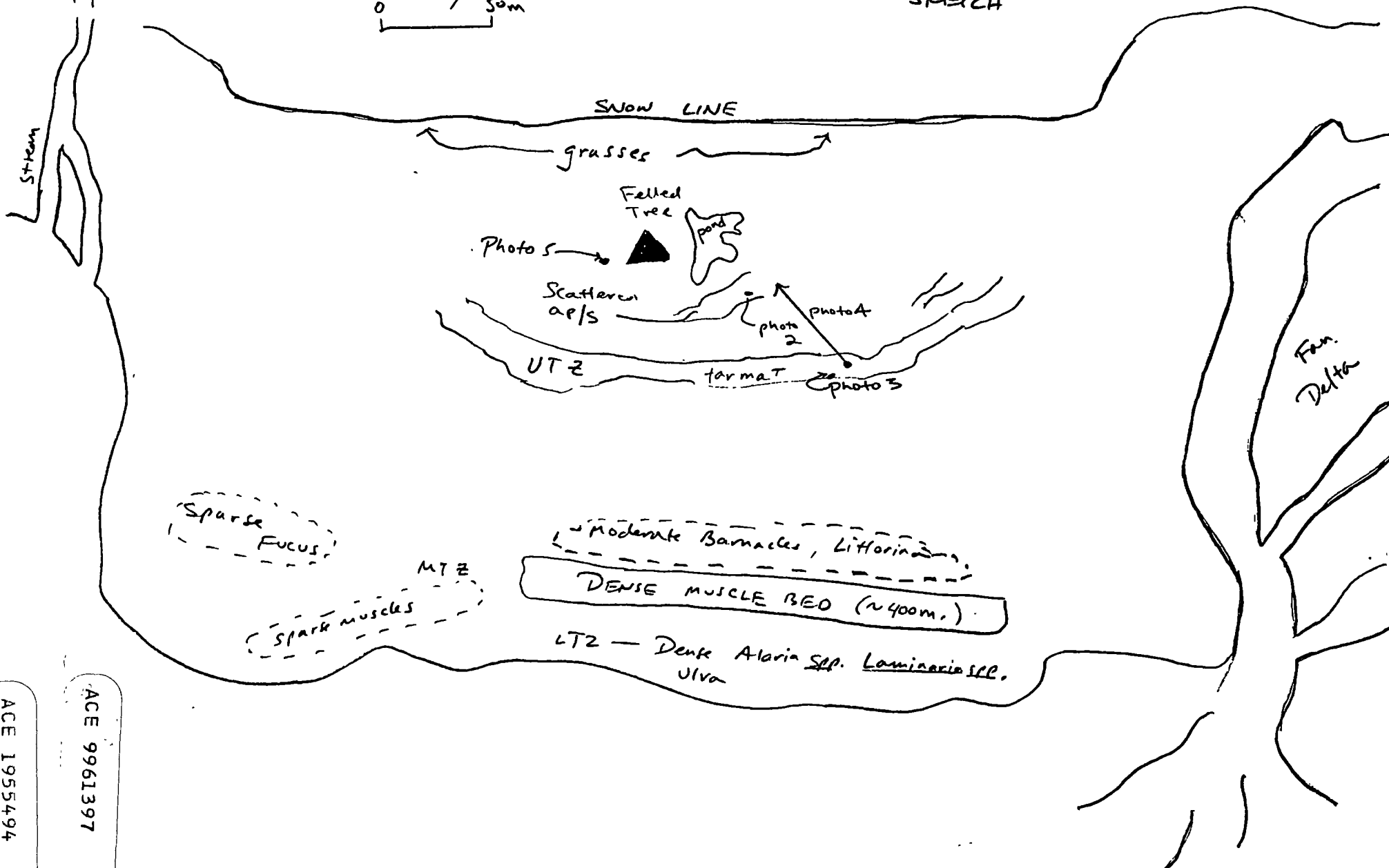
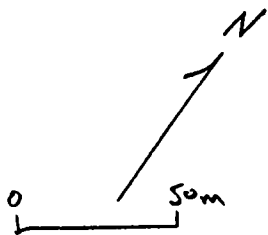
ACE 1955493

YG 002 A

TEAM 17 28 APRIL 1990

DANIEL RAIDER  
BIO SKETCH

helo  
X



ACE 1955494

ACE 9961397



BIO COMMENTS Y9001A

This segment does not receive large waves or heavy currents and does not have a well sorted substrate.

The biota is restricted to a thin band in the MTZ and LZ and consists primarily of an extensive mussel bed (ranging in width from 44 meters to 7.5 meters and 400 meters long), a moderate population of barnacles above the mussel bed and sparse fucus in the mid and upper Intertidal Zones; in the lower Intertidal Zone the biota consists primarily of Algae (Laminaria spp., Alaria spp., Ulva spp., Desmarestia intermedia, filamentous greens and Gigartina spp.)

Much of the segment is simply exposed cobble and pebbles without biota. There is however an area between the pond and the snow line (see map) which consists of considerable beach ryegrass and other grasses.

Although the MTZ is composed of a large Mytilus edulis bed (the largest I have recorded) it is present only on the Eastern half of the segment.

Mytilus continues to be present on the Western side, it is not nearly as profuse as on the Eastern. For this reason I consider its population density to be moderate over the entire segment, when, in fact, it is quite dense and extensive throughout one half of the segment.

ACE 9961398

ACE 1955495

SEGMENT: ST/ Y6 002 SUBDIVISION A LENGTH \_\_\_\_\_ BIOLOGIST DANIEL PAUER

DATE 4/28/90 TIME 8:00 TIDE HEIGHT \_\_\_\_\_

1 = BEDROCK. 2=BOULDER 3=COBBLE 5=SAND 6=SILT

SPECIES	UITZ	MITZ	LITZ	COMMENTS
BOSSIELLA/CORALLINA				
CALLIARTHRON/CORALLINA				
CLADOPHORA SPP				
COSTARIA SPP			3,5	
ENDOCLADIA MURICATA				
FILMAENTOUS GREENS		2,3	3,5	
FILAMENTOUS REDS				
GLOIOPELTIS FURCATA				
HALOSACCION GLANDIFORME				
LAMINARIA SPP			3,5	
LITHOTHAMNION				
NEREOCYSTIS SPP			3,5	
PORPHYRA SPP				
RALPHSIA/HILDENBRANDIA				
PHODOMELA LARIX		2,3		
RHOHOMENIA PALMATA				
SCYTOSIPHON SPP				
ULVA SPP		2,3	3,5	
ZOSTERA MARINA				
ENTOROMORPHA				
<i>Alaria marginata</i>			3,5	
ANTHOPLEURA SPP				
(SEMI) BALUNUS CARIOSUS		3		
B. GLANDULA		3		
BRYOZOANS				
CHITONS (other than K. TUNICATA)				
CLAMS				
CRABS				
DERMASTERIAS IMBRICATA				
KATHARINA TUNICATA				
LEPTASTERIAS HEXACTIS				
LIMPETS				
LITTORINA SPP		3,5		
NUCELLA SPP				
PAGURUS SPP				
PISASTER OCHRACEUS				
POLYCHAETES				
PYCNOPODIA HELIANTHOIDES				
SEARLESIA DIRA				
SERPULIDS				
SIPHONARIA THERSITES				
TEALIA				

FLORA:

FAUNA:

ACE 9961399

ACE 1955496



## RECRUITMENT AND MORTALITY YG 001 A

### Mytilus

- The large bed of mytilus appears to be comprised primarily of adult muscles and partial juveniles. There are no signs of new settlement or recruits of outstanding quality. New settlement and new recruits is found only rarely in this dense band.
- There are no strong indications of mortality in the mFZ, although a great abundance of opened shells are present. There are no mytilus in the area of the tar mats/ pavements.

### Barnacles

- No spat sighted
- Mortality of 20-50%, especially on cobbles; not oiled; many had already broken off and only the white calcareous sign from the shell remained.

### Gastropods

- Sparse amount of new *Littorina sitkana* over the entire segment, although group along side of the mytilus beds in moderate density on the western half of the segment
- No outstanding indications of mortality

Fucus - No outstanding indications of mortality or new growth in the segment. Primarily adults present

ACE 9961400

ACE 1955497

MOH- 28 April 1990

Birds seen at Y6-2

<u>name</u>	<u>#</u>	<u>Comments</u>
1. Mufflehead -	6	
2. Merganser (sp.) -	6±	- Common on Red-Belated
3. Glaucous-Winged Gull -	27	
4. Northern Pintail -	14	
5. Canada Goose -	7	- First seen on this trip
6. Mew Gull -	30±	
7. Greater Scaup -	20	
8. Horned Grebe -	20±	
9. Harlequin Duck -	6	
10. Ancient Murrelet -	1	
11. Mallard -	24	
12. Sandpiper (sp.) -	4	
13. Bonaparte's Gull -	11	
14. Barrow's Goldeneye -	8	
15. Northwestern Crow -	4	
16. Winter Wren -	6±	- ... sound only

NOTE:

Had seen: Harbor seal - 1

Ring Otter - 1

Sea Otter - 1

ACE 9961401

ACE 1955498



FIELD SHORELINE COMMENT SHEET

SEGMENT ST / YG-002 SUBDIVISION: A DATE 4/29/90

**USCG**

NAME \_\_\_\_\_ SIGNATURE \_\_\_\_\_

NO TREATMENT RECOMMENDED

TREATMENT SUGGESTED

COMMENTS

**ADEC**

NAME \_\_\_\_\_ SIGNATURE \_\_\_\_\_

NO TREATMENT RECOMMENDED

TREATMENT SUGGESTED

COMMENTS

**LAND MANAGER**

NAME SHARIE Methven-TONEY SIGNATURE Sharie Methven-Toney

NO TREATMENT RECOMMENDED

TREATMENT SUGGESTED

COMMENTS

Yalik Beach Segment YG-002 is within Kachemak Bay State Wilderness Park. The area ~~is~~ <sup>has</sup> high wilderness values and wildlife values. The area is heavily used by commercial fisherman and pleasure boaters. We recommend manual cleanup of the asphalt oil and mousse patties in this segment. The Cercla Study Site Sign will need to be removed when the project is completed. The Exxon ASI stakes will need removed when the project is completed.

ACE 9961402

REVISION NO. 03/21/90

ACE 1955499

# FIELD SHORELINE COMMENT SHEET

3

COMMENT ST/ YG-2 SUBDIVISION: \_\_\_\_\_ DATE 29 April 1990

~~USEG~~ NOAA  
NAME Miles O. Hayes SIGNATURE [Signature]

NO TREATMENT RECOMMENDED  TREATMENT SUGGESTED

COMMENTS  
The asphalt pavement over 800m long was the largest accumulation that our team saw. Clean-up is necessary by one of three methods:  
1) Break up into smaller particles and allow wave reworking.  
2) Manual removal.  
3) Apply a new method of "rock washing"; whereby cleaned sediment is returned to the beach.  
I favor number 3, pending outcome of ongoing net environment benefit analysis being undertaken by NOAA, ADEC & EXXON.

ADEC  
NAME \_\_\_\_\_ SIGNATURE \_\_\_\_\_

TREATMENT RECOMMENDED  TREATMENT SUGGESTED  
COMMENTS

LAND MANAGER  
NAME \_\_\_\_\_ SIGNATURE \_\_\_\_\_

NO TREATMENT RECOMMENDED  TREATMENT SUGGESTED  
COMMENTS

ACE 9961403

ACE 1955500



FIELD SHORELINE COMMENT SHEET

SEGMENT ST 1 Y6-002 SUBDIVISION: A DATE 4/28/90

USCG  
NAME \_\_\_\_\_ SIGNATURE \_\_\_\_\_

NO TREATMENT RECOMMENDED       TREATMENT SUGGESTED  
COMMENTS

ADEC  
NAME Russell Kumbie SIGNATURE Russell Kumbie

NO TREATMENT RECOMMENDED       TREATMENT SUGGESTED  
COMMENTS

*The oiling in this segment was measured out and the sketch maps are accurate and clear. The beach <sup>has</sup> low wave exposure and the cobbles and pebbles show only small evidence of movement.*  
*Recommended treatment: Manual pick up and removal of the asphalt mats. - at 1/2 ft<sup>3</sup> per bag & this will create approximately 20,000 bags of waste. If a rock marker is going to be used this year. This may be a site to consider for its use.*

LAND MANAGER  
NAME \_\_\_\_\_ SIGNATURE \_\_\_\_\_

NO TREATMENT RECOMMENDED       TREATMENT SUGGESTED  
COMMENTS

ACE 9961404

ACE 1955501  
B

YALIK Glacier Beach  
TARMAT

ADF&G MULTI-ASSESSMENT DATA FORM

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

METHOD: Aerial  Ground Boat

3 DATE: 5/3/90 16 HIGH TIDE TIMES: 0952 1225 21 TEAM RECORDER: David Hill (ADF&G)

4 START TIME: 1409 18 HIGH TIDE HTS: 9.9 110.9 22 OBSERVERS: Jeff Johnson  
Rod A Mac Campbell (ADNR)

5 STOP TIME: 1433 17 LOW TIDE TIMES: 0337 11602 23 AGENCY: \_\_\_\_\_

6 SEGMENT #: Y6-02 18 LOW TIDE HTS: 4.2 11.9 24 PHOTOS TAKEN:  N

7 STATION #: \_\_\_\_\_ 19 TIDE HT AT SURVEY: \_\_\_\_\_ Roll #: 9000H409H Frame: 18, 19, 20

8 K-UNIT: \_\_\_\_\_ Ebb Slack Flood Slack 25 VIDEO TAKEN: Y  TAPE#: \_\_\_\_\_

9 STAT AREA: \_\_\_\_\_ 20 USCG QUAD: Seldovia B-2 Start: \_\_\_\_\_ End: \_\_\_\_\_

10 LAT: \_\_\_\_\_ 11 LONG: \_\_\_\_\_ 26 SAMPLES TAKEN? Y  Number

12 SOURCE: Map Loran 011 \_\_\_\_\_

13 LOCATION: KP, CI, Alaska Passage, Yalik Glacier Beach Sediment \_\_\_\_\_

14 DESCRIPTION: large intertidal cobble flats Biological \_\_\_\_\_

Water \_\_\_\_\_

EXTENT OF OIL

	SHORELINE				STREAM			
	L	W	M <sup>2</sup>	%	L	W	M <sup>2</sup>	%
27 SURFACE COVERAGE								
28 SURFACE THICKNESS								
29 PENETRATION								
30 OVERALL OIL IMPACT:	N	VL	L	M	<input checked="" type="radio"/>			
31 OIL TYPE:	Pooled	<input checked="" type="radio"/> Mousse	<input checked="" type="radio"/> Tar	<input checked="" type="radio"/> Asphalt	Sticky	Stain		
32 OILED DEBRIS?	Y	N						
33 SHORELINE TYPE:	Headland	Low-lying Rocks	<input checked="" type="radio"/> Beach	Cove				
		Lagoon	Marsh					
34 WAVE EXPOSURE:	High	<input checked="" type="radio"/> Moderate	Low					
35 SUBSTRATE TYPE:	Bedrock _____	Boulder _____	Cobble <u>60</u>					
	Gravel <u>20</u>	Sand _____	Mud/silt <u>20</u>					

36 CATALOGED ANAD. FISH SREAM?  N

37 CATALOG #: 232-10-10250

38 STREAM NAME: \_\_\_\_\_

39 OIL IN STREAM BED? Y  N

40 OIL ON STREAM BANKS? Y  N

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

42 OIL WITHIN 1 MILE OF STREAM?  N

43 ANADROMOUS FISH PRESENT? Y ? N

44 ANADROMOUS FISH OBSERVATION

Species	Aerial	Ground

Where: Yalik Glacier Tarmat to the east

COMMENTS: Tarmat more visible from the air today than it has been on previous flights. Algal growth on tarpatics - little to no growth where oil is not present (this algal growth on oil has been observed on other south shore of Chugach Bay Creek also - An area which was not Bioremediated - to our knowledge). Algae growing on hard substr must not oil.

Mollusks, Shore Hares & sea otters observed.



46 PHOTOLOG

FRAME(S)	DESCRIPTION
18 & 19	Algal growth on tar patties // Lesser growth at oil-less areas (perhaps the growth is due to the initial &/or granular fertilizer applications.)
20	NOAA ocean current tracking transmitter-buoy. Roger Moulampell & Jeff Johnson (ASPL) in photo

46 OIL DISTRIBUTION DIAGRAM

= Sample taken  
= Photo frame # and shot direction.

ACE 9961406

### ADEC DAILY SHORELINE ASSESSMENT

LOCATION: Yalik Glacier SEG YG2 SUBSEG A

MONITOR(S): E.P. EGAN

DATE: 7/5/1990

TIME: BEGIN 1215 END 1830

TIDES:	TIME:	HEIGHT:
	LOW <u>0650</u>	<u>0.0</u>
	HIGH <del>1221</del>	<del>7.0</del>
	LOW <u>1821</u>	<u>4.6</u>
	HIGH <u>1329</u>	<u>9.0</u>

WEATHER: CLOUDY RAIN FOG SUN  
 TEMP: 50 SEA COND: calm  
 WIND DIR: N-NE-E-SE-S-SW-W-NW *Variable*  
 WIND SPEED (KNOTS): 0-15 16-30 30+

ENVIRONMENTAL CONSTRAINTS: (SEAL HAULOUTS, EAGLE NESTS, MUSSEL BEDS, ETC.) NONE

WAVE EXPOSURE: LOW MED HIGH  
ACROSS SHORE ZONE: SU UITZ MITZ LITZ

SURFACE SEDIMENTS: R0 & B10 & C75 & P10 & G5 & S0 &  
SUBSURFACE SEDIMENTS: R & B & C & P & G & S &

#### OIL CHARACTERISTICS

SURFACE: POOLED - MOUSSE - TARBALL - COVER - COAT - STAIN (Pavement)  
SUBSURFACE: OP - OR - OF

#### TREATMENT TECHNIQUES

<del>MANUAL RAKING/TILLING</del>	HEADER FLOOD (HOT/COLD)
MANUAL REMOVAL: <u>PO</u> <u>NS</u> <u>AP</u> <u>TB</u>	BIOREMEDIATION
SPOT WASHING	<u>MECHANICAL</u> <u>Bobcat front loader</u>
OTHER	

EQUIPMENT USED: Shovels, Buckets, 2 Bobcats  
 NAMES OF REPS & OTHER AGENCIES: EXXON Jon Szarnecki  
USCB Richard Vandervelt OTHER: Darin Smith CCRS  
 WORKERS ON SITE: ORTS OTHER: Vera Ron Roland

#### WASTE HANDLING/DISPOSAL

ITEMS USED TO ABSORB/CONTAIN OIL  
 # OF BAGS COLLECTED: 12 Super Sacks  
 OILED DEBRIS \_\_\_\_\_ OIL & SEDIMENTS 12 OILED VEG. \_\_\_\_\_  
 OILED LOGS PRESENT: Y (N) # OF LOGS REMOVED \_\_\_\_\_

ACE 9961407-4/S

4/20/90

ACE 1955502



Yalik Glacier Page 2 YG2A E.P. Egan 7/5/1990

PHOTO/VIDEO DOCUMENTATION

PHOTOGRAPHS: ROLL # \_\_\_\_\_ FRAME(S): \_\_\_\_\_ REASON: \_\_\_\_\_

VIDEO: TAPE # \_\_\_\_\_ REASON: \_\_\_\_\_

COMMENTS

PROBLEMS: ENFORCEMENT ACTIVITIES, UPLAND CONT., ETC.  
(PLEASE NOTE IF PROBLEM WAS DISCUSSED WITH PROPER AUTHORITY,  
AND SUBSEQUENT RESPONSE.)

None

OBSERVATIONS: TREATMENT EFFICIENCY, POSSIBLE IMPROVEMENTS, ETC.

Clean-up of tar Mats is effective to an extent, but heavily oiled sediments are often left behind when the mechanical process is finished. I would like to see the oiling removed down to the unoiled sediments. This crew is being pressed to clean-up this segment in 5 days. It is a severely matted area which could use a careful clean-up effort. Super sack amount is somewhat ~~inaccurate~~ inaccurate. The bags are not being filled to their usual 2800 lb capacity.

SIGNATURE E.P. Egan ACE 9961408 - [S]

ACE 1955503



ADF&G MULTI-ASSESSMENT DATA FORM

1 SURVEY TYPE: BS SS DS TS AVS SCHA MMHS PTA 2 REGION: PWS KP, CI K, AP  
 METHOD: Aerial Ground Boat  
 3 DATE: 7/10/90 15 HIGH TIDE TIMES: 0330 0405 12641 21 TEAM RECORDER: Doug Hill  
 4 START TIME: 1145 16 HIGH TIDE HTS: 12.8 11.0 22 OBSERVERS: Lee Glenn  
 5 STOP TIME: 1430 17 LOW TIDE TIMES: 1007 12211 23 AGENCY: ADF&G  
 6 SEGMENT #: YG-2 18 LOW TIDE HTS: -1.7 12.7 24 PHOTOS TAKEN: (Y) N  
 7 STATION #: \_\_\_\_\_ 19 TIDE HT AT SURVEY: \_\_\_\_\_ Roll #: 90DDH19H Frame: 10 → 25  
 8 K-UNIT: \_\_\_\_\_ Ebb Slack Flood Slack 25 VIDEO TAKEN: (Y) N TAPE#: 90LP6025H  
 9 STAT AREA: \_\_\_\_\_ 20 USCG QUAD: Seldovia B-3 Start: 3997 End: 4569  
 10 LAT: 59 25 25 11 LONG: 150 43 50 26 SAMPLES TAKEN? Y N Number  
 12 SOURCE: Map Loran Oil \_\_\_\_\_  
 13 LOCATION: Nuka Passage, North Shore, 7 North Nuka Island Sediment \_\_\_\_\_  
 14 DESCRIPTION: Low angle Yalik Glacier Beach Biological \_\_\_\_\_  
 Water \_\_\_\_\_

EXTENT OF OIL

	SHORELINE				STREAM			
	L	W	M <sup>2</sup>	%	L	W	M <sup>2</sup>	%
27 SURFACE COVERAGE								
28 SURFACE THICKNESS								
29 PENETRATION								
30 OVERALL OIL IMPACT:	N	VL	L	<u>(H)</u>				
31 OIL TYPE:	Pooled	<u>Mousse</u>	<u>Tar</u>	<u>Asphalt</u>	<u>Sticky</u>	<u>Stain</u>		
32 OILED DEBRIS?	Y	<u>(N)</u>						
33 SHORELINE TYPE:	Headland	Low-lying Rocks	<u>Beach</u>	Cove				
		Lagoon	Marsh					
34 WAVE EXPOSURE:	<u>High</u>	<u>Moderate</u>	Low					
35 SUBSTRATE TYPE:	Bedrock	Boulder	Cobble	<u>60</u>				
	Gravel	<u>20</u>	Sand	Mud/silt	<u>20</u>			

36 CATALOGED ANAD. FISH STREAM? (Y) N  
 37 CATALOG #: 232-10-10250  
 38 STREAM NAME: Yalik Glacier West Creek  
 39 OIL IN STREAM BED? Y (N)  
 40 OIL ON STREAM BANKS? Y (N)  
 41 OIL ON BEACH ADJACENT TO MOUTH? (Y) N  
 (within 50 meters)  
 42 OIL WITHIN 1 MILE OF STREAM? (Y) N  
 Where: 3/4 mile NE of Anad. fish stream

43 ANADROMOUS FISH PRESENT? Y ? N

44 ANADROMOUS FISH OBSERVATION

Species	Aerial	Ground

ACE 9961409

COMMENTS: Met John Czarnicki (EXXON) & Alvin Reed (AD&G) on beach. 2 Bobcats front end loaders were in use removing tar mats. One crew member was guiding the Bobcat operator as to the placement of the bucket (depth, angle, etc). The person guiding the bucket also shoveled oil missed by the bucket into the path of the bucket. A pile of oiled sediment was present → this pile was created by the Bobcat and was ± 8' tall by 20' long (over)



and 15' wide. A portion of the crew is pick up the rocks that overly the oil and tossed them out the oiled zone  $\rightarrow$  unoled and oil stained rocks. John Czarniecki (Exxon) said the crew will be off the beach tomorrow I doubt it. The pile of oiled sediment will be loaded into the "super sacks"

- Tough to find an efficient way to remove overburden to get at the tar mat below  $\rightarrow$  A lot of unoled material is going to be transported to Oregon. Additionally, although its great to have the Yalik tar mat removed I feel the "saturated sediment" at TB-3 (ANAD. stream and tide flats) is more of a problem due to the greater biological activity at TB-03. The <sup>Cobble/boulder</sup> Yalik Glacier beach is a virtual desert relative to the TB-03 Tide flats. So why is it okay to remove the much greater volume of sediment at Yalik Glacier (the oil at Yalik Glacier cover <sup>very</sup> a small % of the beach relative to the oil at TB-03) as opposed to the smaller volume of oil at TB-03. The oil at TB-03 is not a tar mat - we are locked into terminology. Terminology begins to run the operation and not the thought of the moment. Yalik Glacier made a good show --- I guess the surface is more important than the contents. ?!?. Hollywood ~~is back~~ is back

48 OIL DISTRIBUTION DIAGRAM

	am	pm	
7/27/90	0905	1713	Photos
hi tide time	12.5	11.2	
hi tide height	10.40	10.54	
Lo tide height	-1.4	2.3	
4cm on			

DESCRIPTION

FRAME(S)

~~PHOTOLOG~~ PHOTOLOG

FRAME(S)

Description

- 10 ----- Aerial - vessel present during tar mat removal
- 11 ----- Oiled sediment will remain mechanical excavation complete
- 12 ----- Oiled sediment that will be picked up by mechanical excavation
- 13 ----- overview of mechanical tar mat removal operation
- 14 -----
- 15 ----- Bobcat dumping load of oiled sediment
- 16 ----- ~~pile~~ pile of sediment will later be loaded on LCM
- 17 ----- Rippers that were not used to till beach prior to excavation
- 19 ----- Bobcat scooping up tar mat - crewmember guides bucket
- 20 ----- depth angle etc
- 21 -----
- 22 ----- Bobcat scooping up tar mat - crewmember in foreground
- 23 ----- removing overburden so bobcat can get to oiled surface below.
- 24 ----- Aerial of mechanical ~~removal~~ tar mat ~~removal~~ removal
- 25 -----





## Kachemak Green Movement

106 W. Bunnell Ave.  
Suite C

Homer, AK 99603  
(907) 235-7601

### Bioregional Caucus Announcement

The Green Party of Alaska is selecting two delegates to the Interim Statewide Council from the Kachemak Bioregion, which includes the Kenai Peninsula and Kodiak.

The caucus will be held Thursday, May 16, 1991 at the Senior Center on Svedland Avenue. The general Green Party meeting starts at 6 pm, the Delegate election will be at 7 pm, and a potluck at 8 pm. Voter registration will be available and all are welcome to attend. (Bring a friend!)

We are looking for people who are interested in the Interim Delegate position. The following is a description of the responsibilities:

There will be 2 delegates from each of the six state bioregions. If you are interested in forming a bioregion in your area, please contact the Homer office. The Interim Statewide Council will elect officers, coordinate and manage party activities until the next Green Party convention scheduled for mid-September 1991. The State Council shall meet at least twice each year at the call of the Chairperson or upon petition of at least half of the committee members. Meetings by teleconference are as valid as a face to face meeting.

The Interim State Committee is also charged with forming standing committees in the following areas:

- Central Coordinating Office
- Newsletter
- Education and Outreach
- Candidate Recruitment
- Convention
- Membership and Communication
- Fundraising
- Voter Registration
- Platform
- Legislative Tracking

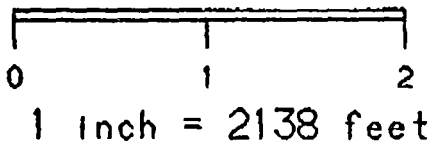
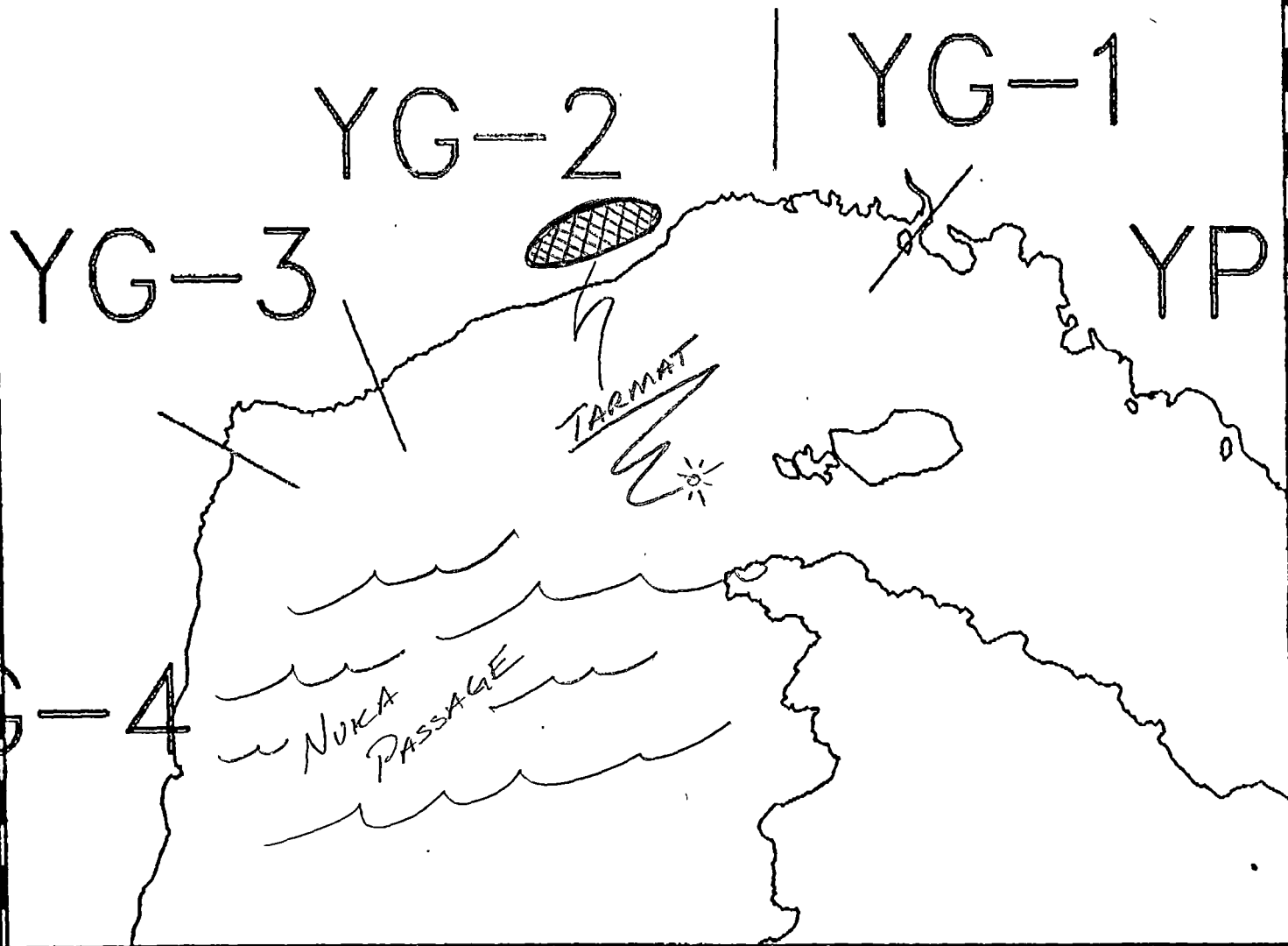
If you are interested in being a delegate, please contact us as soon as possible. We can answer any questions you might have.

For more information contact:

The Green Party of Alaska  
106 W. Bunnell Ave. Suite C  
Homer, AK 99603  
(907) 235-7601

We are looking forward to meeting other Greens in the area and everyone who is interested. We have a great deal of information to share with you regarding our bioregional environment and economy and hope to hear your opinions and ideas!





EXXON COMPANY, USA

ACE 9961412

May 21, 1990

Aml used:

/chugach1/morris/super2/ops.aml



WB-03 entire segment

Both stream and non-stream  
Entire Segment Survey  
ADF&G MULTI-ASSESSMENT DATA FORM

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

METHOD: Aerial  Ground  Boat

3 DATE: 6/27/90      15 HIGH TIDE TIMES: 0523 1150S      21 TEAM RECORDER: Doug Hill

4 START TIME: \_\_\_\_\_      16 HIGH TIDE HTS: 14.1 11.9      22 OBSERVERS: \_\_\_\_\_

5 STOP TIME: \_\_\_\_\_      17 LOW TIDE TIMES: 1022 12230      23 AGENCY: ADF&G

6 SEGMENT #: WB-03      18 LOW TIDE HTS: -2.8 1 2.4      24 PHOTOS TAKEN: Y  N

7 STATION #: \_\_\_\_\_      19 TIDE HT AT SURVEY: \_\_\_\_\_      Roll #: \_\_\_\_\_ Frame: \_\_\_\_\_

8 K-UNIT: \_\_\_\_\_      Ebb      Slack      Flood      Slack      25 VIDEO TAKEN: Y  N TAPE#: \_\_\_\_\_

9 STAT AREA: \_\_\_\_\_      20 USCG QUAD: Soldovia-A-5      Start: \_\_\_\_\_ End: \_\_\_\_\_

10 LAT: \_\_\_\_\_      11 LONG: \_\_\_\_\_      26 SAMPLES TAKEN? Y  N Number

12 SOURCE: Map  Loran

13 LOCATION: Windy Bay, Head of Bay

14 DESCRIPTION: \_\_\_\_\_

Oil \_\_\_\_\_

Sediment \_\_\_\_\_

Biological \_\_\_\_\_

Water \_\_\_\_\_

EXTENT OF OIL

	SHORELINE				STREAM			
	L	W	M <sup>2</sup>	%	L	W	M <sup>2</sup>	%
27 SURFACE COVERAGE								
28 SURFACE THICKNESS								
29 PENETRATION								
30 OVERALL OIL IMPACT:	N	VL	L	<input checked="" type="checkbox"/> B	H			
31 OIL TYPE:	Pooled	<input checked="" type="checkbox"/> House	<input checked="" type="checkbox"/> Tar	<input checked="" type="checkbox"/> Asphalt	<input checked="" type="checkbox"/> Sticky	<input checked="" type="checkbox"/> Stain		
32 OILED DEBRIS?	<input checked="" type="checkbox"/> Y	N						
33 SHORELINE TYPE:	Headland	Low-lying Rocks	<input checked="" type="checkbox"/> Beach	Cove				
		Lagoon	Marsh					
34 WAVE EXPOSURE:	High	<input checked="" type="checkbox"/> Moderate	Low					
35 SUBSTRATE TYPE:	Bedrock	Boulder	<u>10%</u>	Cobble	<u>20%</u>			
	Gravel	<u>60%</u>	Sand	<u>10%</u>	Mud/silt			

36 CATALOGED ANAD. FISH STREAM?  Y  N

37 CATALOG # 242-32 <sup>10160 Windy Right</sup> <sup>10170 Windy Center</sup> <sup>10180 Windy Left</sup>

38 STREAM NAME: \_\_\_\_\_

39 OIL IN STREAM BED?  Y  N windy Right

40 OIL ON STREAM BANKS?  Y  N windy Right

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

42 OIL WITHIN 1 MILE OF STREAM?  Y  N All 3 Stream

Where: WB-03, 02, 04

43 ANADROMOUS FISH PRESENT? Y ? N

44 ANADROMOUS FISH OBSERVATION

Species	Aerial	Ground

ACE: 9961413

COMMENTS: Surveyed beach from Windy Right Creek to the southern border of WB-03. I observed signs of current oil pick up from main beach to woman's beach (WB-03B to WB-03D). But observed no work going on - only observed moved rocks, pumps, trowels, shovels & sacks. Cairns (piled rocks) were present identifying oil deposits. Rocks have been moved to get at over

FRAME(S)

DESCRIPTION


46 OIL DISTRIBUTION DIAGRAM

oiled sediment below. I walked around the mouths of the 3 streams to get to <sup>WB-03D</sup> where the crew was sitting. Jerry Nugent (USFWS) was present + observing the eagle nest which is in the center of WB-03. Jerry was watching the nest <sup>and me</sup> as I walked the shoreline around the base of the eagle nest tree. Jerry informed me that he had quickly pulled the crew off the beach because the eagles were chortling + flying "nervously". Also, the crew found a dead eagle nestling on the rocks (found on the bedrock shoreline at the mouth of Windy Right (just south of main beach) below the Eagle nest.

Jerry Nugent ~~said~~ said he would allow the crew to go back to the beach at high tide to get the sacks + tools strewn from WB-03B to WB-03D.

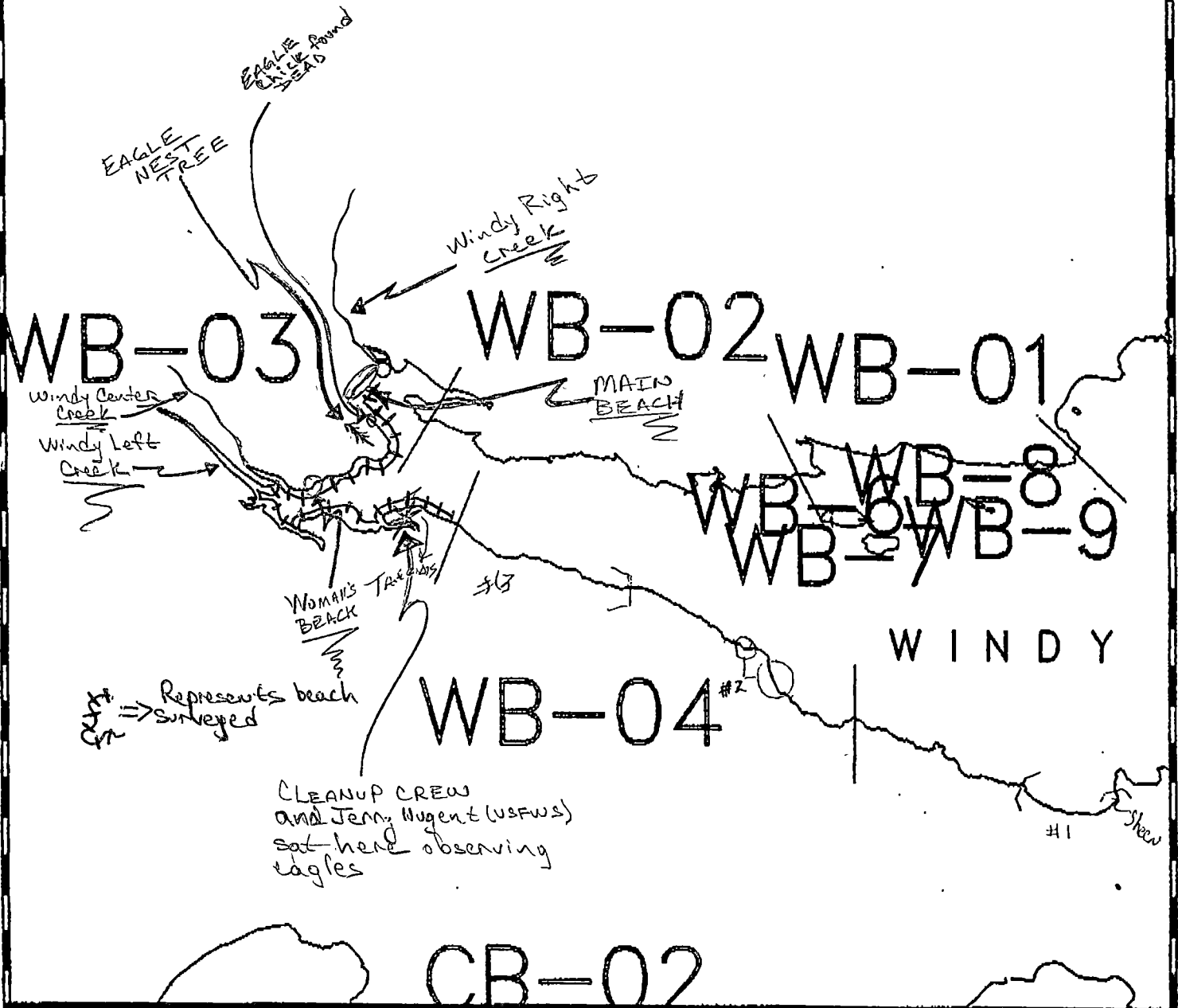
George Stiles (EXXON work supervisor) says the crew will move to ~~Port Dick~~ Port Dick until the eagle problem is averted. Port Dick needs to be picked up ~~up~~ prior to the commercial fishery anyway.

Jerry says the ~~WB-03~~ TB-03 eagle nest appeared inactive so he left Tonsina Bay + allowed the crews to work the area. However, the crew has reported that they've seen the eagles hauling sticks etc (frequently).

= Sample taken  
= Photo frame # and  
shot direction.

ACE 9961414





0 1 2  
1 inch = 2598 feet

EXXON COMPANY, USA

ACE 9961415

May 21, 1990

Ami used:

/chugacht/morris/super2/ops.aml

12/18/91

Basic GIS capability setup and approximate prices  
(prices in brackets indicate catalog prices. Local dealers may charge far more)

PC:	386/33 mhz	Everex 486/25 8-350 \$6850	( 650)
	64K cache		
	7 MB RAM	386/33 8-650 \$6007 - need coprocessor	( 420)
	400 MB hard drive		(1250)
	1.2 MB 5.25 drive		( 80)
	1.4 MB 3.5 drive		( 80)
	Keyboard 101 enhanced		( 50)
	2 serial, 1 parallel port		( 20)
	DOS 5.0		( 80)
	Math co-processor INTEL 387/33		( 200)
			-----
			\$ (2830)
		local vendor: assume	\$ 6000
Monitor	Super VGA 14", 1024x768	1 MB card	( 410)
		local vendor: assume	\$ 700
Tape drive	Mountain Filesafe 1200 1.3 GB		~ 4500 *
Mouse	ETI technologies, VGA-wonder PLUS card		89
Digipad	Summasketch II 12x12 pad		241
Output	HP Paintjet 3630A 8.5x11 (\$ 890) or HP Paintjet SL 11x17 (\$ 1070)		1100 max
Software	Geo/SQL		8000
	Autocad		4000 **
Miscellaneous Floppies, tapes			200

\* DNR and DEC mentioned \$1600 for this drive. Local vendors price this at \$ 4500 to 6000. We can get a 300 MB capacity drive for \$ 1600, however, the tapes cannot be read by the Filesafe 1200 drive. Nadeem at DEC is checking into his records to verify price and vendor.

\*\* Can we use Habitat's Autocad?

Maximum expenditure:	24,830
Minimum expenditure:	20,620

Frank needs to get out bids.

*Given to Frank for price check 12/19 AM*

*10(x)15*

ACE 9961416



Bruce Roberts:

Digital Equipment Corp. Inc

PC: 386 / 33 mhz  
 64 K cache  
 7 MB Ram  
 400 meg HD  
 1.2 MB 5.25 floppy drive  
 1.4 MB 3.5  
 Keyboard (opt enhanced)  
 2 serial, 1 parallel port  
 Dos 4.01 5.0  
 Math coprocessor level 387/33

Plamus:

650.-  
 -  
 420.-  
 1250.-  
 80.-  
 80.-  
 50.-  
 20.-  
 800.-  
 200.-  
 2810.-

EXTERNAL 200 meg.  
 INTERNAL: 300 meg → ~1000.-  
 150 meg - 250 meg.  
 500 meg  
 3000.-

GSA - pricing

Plamus: w. controller 5995.- retail.

Monitor Super VGA 14"  
 1024 x 768 1 MB card

Tape drive 150 meg  
 10000 bpi  
 1600 bpi  
 6250 bpi

internal 3690  
 DEC  
 DNR  
 Mini  
 Mountain  
 "FILESAFE 1200"  
 \$4020  
 1.3 gig tape capacity  
 2.0  
 < \$1000

Mouse Mouse + Digipad - LOGITECH \$200?

ETI technologies, runs into VGA  
 VGAWonder 3plus - 89\$ → 241\$

Software Geo/SQL  
 AutoCad

Summagraphics  
 Summa sketch II 8000.-  
 4 button pen stylus / 12x12 Fibersonor 4000.-  
 244.9

Output "HP Paintjet" (3630A) (887.-) (was 1200 \$ in CA) 1069.-

Da Vinci "low end" 2500  
 Tektronix Phaser II SX 10000

ACE 9961417

Ruff estimate: \$22000 complete w-station

ACT-OF-STATE vendors: no go. need to start with established bidders in

GISPR.XLS

HARDWARE	PRICE	SOFTWARE	PRICE
CPU 486/33	\$15,000.00	GEO/SQL	\$8,000.00
CPU 486/25	\$14,000.00	AUTOCAD	\$2,000.00
CPU 386/33	\$10,000.00	NETRBASE	\$800.00
DIGITIZER	\$2,000.00		
PLOTTER	\$20,000.00		

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TOTAL	\$61,000.00	\$10,800.00
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ALL TOTAL	\$81,700.00
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