

ADF&G MULTI-ASSESSMENT FORM  
1991 GENERAL ENTRY CHECKLIST



STREAM#: 2323010375  
SEGMENT: BM005

PAGE 13

DATE PRINTED: 06/21/91

LOCATION: TAROKA ARM, SOUTHWEST MOUTH, LAKE SYSTEM

SURVEY TYPE: 90 PRE SCREEN - ~~MS~~ 59

METHOD: GROUND

DATE: 04/08/90

TEAM RECORDER: HILL

START TIME: 0750

OBSERVERS: GLENN MCLANE

END TIME: 0835

OG/HAB DISCREPANCIES: -

AGENCY: FG

PHOTOS TAKEN: N

STATION: 2323010375

ROLL#: -0-

FRAME: -0-

VIDEO TAKEN: -

TAPE#: -0-

START: -0-

END: -0-

SAMPLES TAKEN: N

SAMPLE NUMBERS: -0-

-0-

-0-

-0-

-0-

-0-

OIL IN STREAM BED: N

OVERALL OIL IMPACT: N

OIL ON BEACH BY MOUTH: N

WAVE EXPOSURE: -0- *26*

SHORELINE TYPE: LOW-LYING ROCKS BEACH

SUBSTRATE TYPE: BEDROCK -0- BOULDER 40 COBBLE 60 VEGETAT -0-

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

ANADROMOUS FISH PRESENT: -

SPECIES: -0- *Sea otter*

COUNT: -0- *1*

-0-

-0-

-0-

-0-

-0-

-0-

-0-

-0-

*KE  
see from  
comments*

ADF&G MULTI-ASSESSMENT FORM  
1991 OILING ENTRY CHECKLIST



AGE 14

DATE PRINTED: 06/21/91

STREAM# : 2323010375  
SEGMENT#: BM005

SURVEY TYPE : 90 PRE SCREEN - ~~MS~~ *45* LOCATION: TAROKA ARM, SOUTHWEST MOUTH,  
DATE: 04/08/90 LAKE SYSTEM  
TIMES: 0750 - 0835 TEAM RECORDER: HILL

-- OILING EXTENT --

SITE#	SITE TYPE	DEPTH (cm)	LENGTH (m)	WIDTH (m)	AREA (m)	%	THICK (cm)	PEN (cm)	OIL TYPE CODES
1	-0-	-0-	-0-	-0-	-0-	-0-	-0-	-0-	NOT AVAIL <i>-0</i>

COMMENTS:

NO OIL OBSERVED ON BEACH OR WITHIN STREAM CHANNEL. 2 SETS OF GOAT TRACKS OBSERVED AT LAKE OUTLET. OTTER TRACKS OBSERVED. SEA OTTER OBSERVED AT STREAM OUTLET.

OIL ON STREAM BANKS: NO

ASC NUMBER: 232-30-10375 SEGMENT NUMBER: BM-5  
 LOCATION: KPOC, Two Arm Bay, Taroka Arm, Lake stream sw  
 STREAM NAME: shore.  
 DIAK K-UNIT: . LOCAL STREAM #: .  
 USGS QUADRANGLE: Seldovia C-1  
 SHORELINE TYPE: Beach, low lying rocks ALL SEGMENTS:  
 WAVE EXPOSURE: low

YR CATALOGED: 90/91

LATITUDE:  
 LONGITUDE:  
 LEGAL:

ASC NUMBER:  
 SURVEY TYPE: Pre-screening  
 METHOD: Foot  
 DATE: 7/8/90  
 START TIME: 0750  
 STOP TIME: 0835

TEAM RECORDER: Doug Hill  
 OBSERVERS: Lee Henry, Susan McHane

AGENCY (IES): ADF&G

PHOTOS TAKEN? No  
 Roll #: Frames:  
 VIDEO TAKEN? No 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: N

OIL IN STREAM CHANNEL? N

OIL ON BEACH WITHIN 50M OF STREAM MOUTH? N

SUBSTRATE

Bedrock	Granule
Boulder 40	Sand
Cobble 60	Silt
Pebble	Veget.

SPECIES					
COUNT					

COMMENTS: No oil observed on beach or within stream channel.

- 2 sets of Goat tracks observed at lake outlet
- other tracks observed +.
- see other observed at stream outlet.

\* Site 12-4 of 1989 A F H A  
 see 1990 field log for further info

ACE 10459107 #19

Pre-screening  
seaward zone

ADF&G MULTI-ASSESSMENT DATA FORM

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

2 REGION: PWS  KP, CI K, AP

METHOD: Aerial  Ground Boat

3 DATE: 9/8/90 8 HIGH TIDE TIMES: 0133 1135

21 TEAM RECORDER: Doug Hill

4 START TIME: 0750 9 HIGH TIDE HTS: 12.3 11.6

22 OBSERVERS: Susan McLane Lee Glenn

5 STOP TIME: 0835 17 LOW TIDE TIMES: 0740 1194

23 AGENCY: ADF&G

6 SEGMENT #: BM-5 18 LOW TIDE HTS: 0.3 10.6

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 C-1

Start: \_\_\_\_\_ End: \_\_\_\_\_

10 LAT: 59 35 21 11 LONG: 150 6 38

26 SAMPLES TAKEN? Y  N Number

12 SOURCE: Map Loran

Oil \_\_\_\_\_

13 LOCATION: KP, OC, Two Arm Bay, Tareka Arm

Sediment \_\_\_\_\_

14 DESCRIPTION: Lake/Stream SW portion of Bay

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 #: 232-30-10375

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

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  
Species Aerial Ground

35 SUBSTRATE TYPE: Bedrock \_\_\_\_\_ Boulder 40 Cobble 60  
Gravel \_\_\_\_\_ Sand \_\_\_\_\_ Mud/silt \_\_\_\_\_


COMMENTS: No oil observed on beach or stream channel, oil observed as AP, MS, TP, ST, CT, CV in 1989 on beach at mouth of stream & in stream channel. Oil probably still exists here.  
See 1989 AFHA for map.

FRAME(S)

DESCRIPTION

FRAME(S)	DESCRIPTION

**48 OIL DISTRIBUTION DIAGRAM**

— = Sample taken  
= Photo frame # and shot direction.

ACE 10459108-B 15

ASC NUMBER: 232-30-10375 SEGMENT NUMBER: BM-5

YR CATALOGED:

LOCATION: KPOC, Two Arm Bay, Taroka Arm, Lake/stream SW  
STREAM NAME: <sup>shore.</sup>

LATITUDE:

VIK K-UNIT: LOCAL STREAM #:

LONGITUDE:

US QUADRANGLE: Seldovia C-1

LEGAL:

SHORELINE TYPE: Beach, low lying rocks ALL SEGMENTS:

WAVE EXPOSURE: ~~Medium~~ LOW

ASC NUMBER:

TEAM RECORDER: Doug Hill

SURVEY TYPE: Pre-Screening

OBSERVERS: Lee Abenny, Susan McHane

METHOD: Foot

AGENCY(IES): ADF&G

DATE: 7/8/90

PHOTOS TAKEN?

START TIME: 0750

Roll #: Frames:

STOP TIME: 0835

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: N

OIL IN STREAM CHANNEL? N

OIL ON BEACH WITHIN 50M OF STREAM MOUTH? N

SUBSTRATE

Bedrock	Granule
Boulder 40	Sand
Cobble 60	Silt
Pebble	Veget.

SPECIES					
COUNT					

COMMENTS: No oil observed on beach or within stream channel.

- 2 sets of Goat tracks observed at lake outlet
- other tracks observed
- sea otter observed at stream outlet.

\* Site 12-4 of 1989 A F H A

\* see 1990 field log for further info

ACE 10459109 +/5

Pre-screening  
seaward zone

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: 9/8/90 HIGH TIDE TIMES: 0133 1152 21 TEAM RECORDER: Doug Hill

4 START TIME: 0750 HIGH TIDE HTS: 12.3 11.6 22 OBSERVERS: Susan Melane Lee Glenn

6 STOP TIME: 0835 LOW TIDE TIMES: 0740 1194 23 AGENCY: ADF&G

8 SEGMENT #: BM-5 LOW TIDE HTS: 0.3 1 0.6 24 PHOTOS TAKEN:   (N)

7 STATION #: \_\_\_\_\_ 10 TIDE HT AT SURVEY: \_\_\_\_\_ Roll #: \_\_\_\_\_ Frame: \_\_\_\_\_

9 K-UNIT: \_\_\_\_\_ Ebb  Slack  Flood Slack 25 VIDEO TAKEN:   (N) TAPE#: \_\_\_\_\_

11 STAT AREA: \_\_\_\_\_ 20 USCG QUAD: Seldovia C-1 Start: \_\_\_\_\_ End: \_\_\_\_\_

12 LAT: 59 35 21 LONG: 150 6 38 26 SAMPLES TAKEN?  (N) Number

12 SOURCE: Map Loran Oil \_\_\_\_\_

13 LOCATION: KP, OC, Two Arm Bay, Tareka Arm Sediment \_\_\_\_\_

14 DESCRIPTION: Lake/stream SW portion of Bay 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 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 40 Cobble 60  
Gravel \_\_\_\_\_ Sand \_\_\_\_\_ Mud/silt \_\_\_\_\_

36 CATALOGED ANAD. FISH SREAM?  (Y) N

37 CATALOG #: 232-30-10375

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)

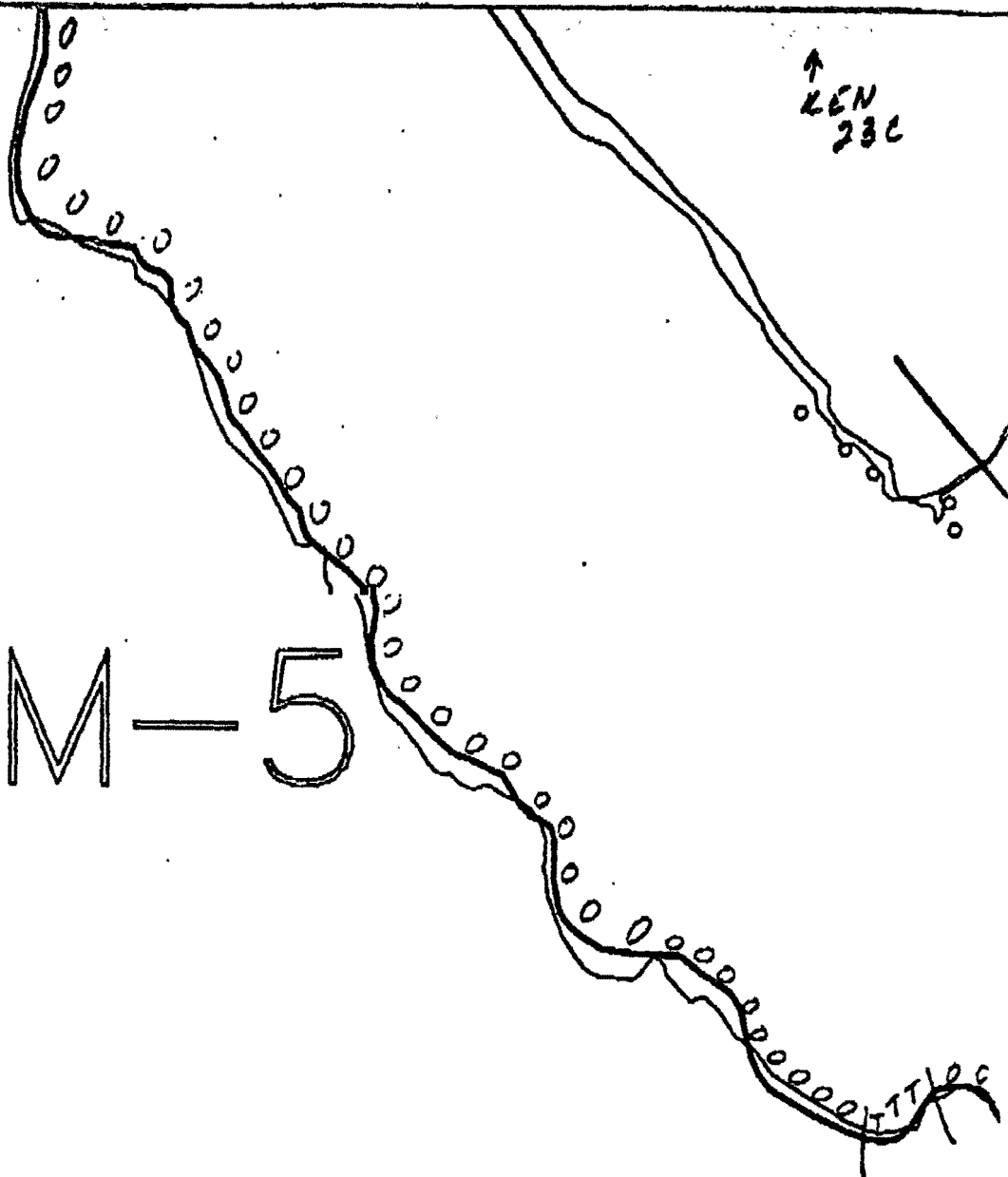
44 ANADROMOUS FISH OBSERVATION

Species	Aerial	Ground

COMMENTS: No oil observed on beach or stream channel, oil observed as AP, MS, TP, ST, CT, CV in 1989 on beach at mouth of stream & in stream channel. Oil probably still exists here.  
See 1989 AFHA for map

↑  
KEN  
23C

BM-5



KEN  
23B →

ACE 10459111  
#15

ACE 1955581  
#15

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

BM-5

ADEC Segment Length: 8829m



Map Key: KEN-23a

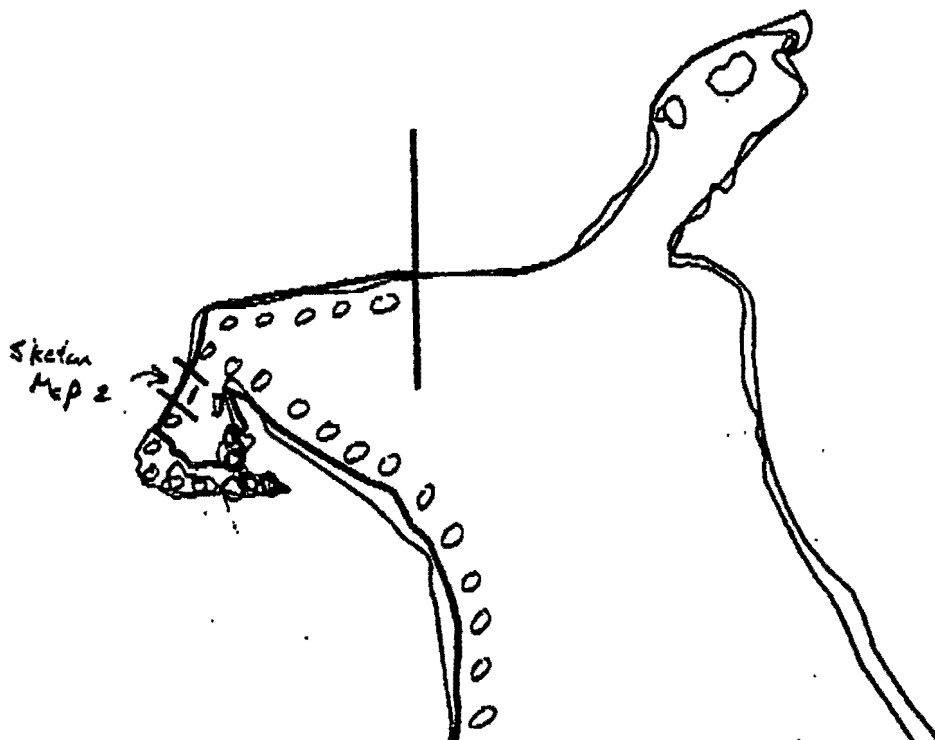
Name: Randy Liegel

Date: 4/28/90

Data Entered:

70/46





# BM-6

ACE 10459112

↓ KEN 23B

ACE 1955582

XXXX Wide  
 /// Medium  
 --- Narrow  
 TTTT Very Light  
 0000 No Oil

## BM-5

ADEC Segment Length: 8629m



Map Key: KEN-23c

Name: Ruby Seeger

Date: 4/28/90

Data Entered:

2.1/4/90

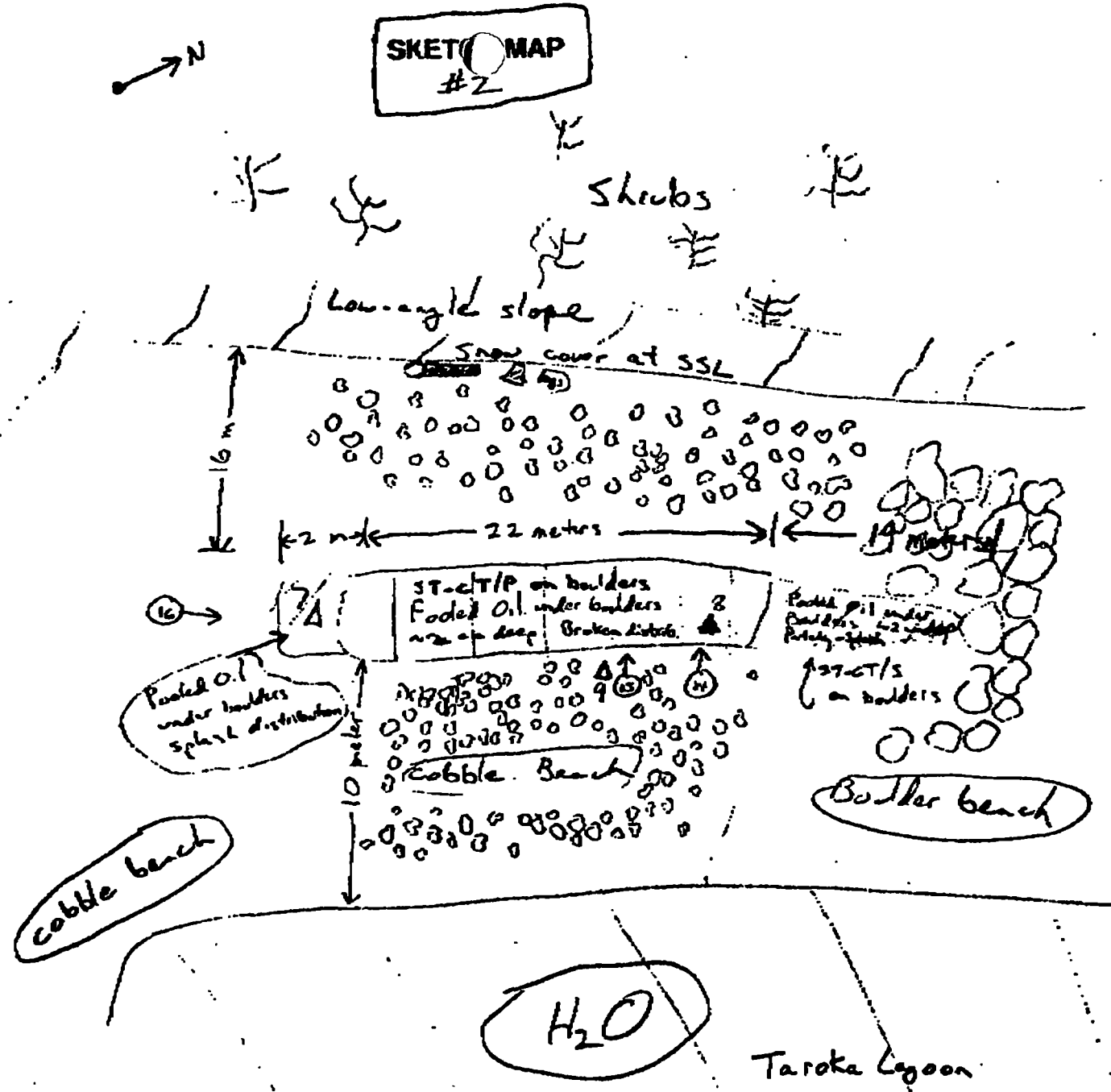
OG Randy Sigel  
 SEGMENT ST/ Brl-5  
 SUBDIVISION A  
 DATE 4/28/90

SKETCH MAP  
 #2

- CHECKLIST**
- N Arrow
  - Approx. Scale
  - Sep/Sub Bndry
  - Cl Dnt.
  - Width
  - Length
  - % Cover
  - Substrate Character
  - Est. HWA/WL
  - SSL
  - Profile Location(s)
  - Profile(s)
  - Pit Location(s)
  - Photo Location(s)

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

ACE 10459113  
 ACE 1955583



SENT BY: Xerox Telecopier 7020 : 5-1-90 : 11:34 :  
 9072247025- HOMER, ALASKA 996031#20

OG Character Length (m) AP PO CV OT ST MS PT TB FL NO

See sketch map #1

**SHORELINE OILING SUMMARY**

REVISION NO. 06/13/90

OG Randy Siegel USCG Jerry Schultz SEGMENT ST/ BM-5  
 BIO Lewis Sherman LAND REP Jerry Schultz (LAC) / SUBDIVISION A ( 1 OF 1 )  
 EXXON Leonard Herbert ADEC Mike Pibel TIME 12:00 to 13:45  
 TEAM NO. 12 TIDE LEVEL 0.35 to 4.65 DATE 4/28/90  
 EST. SUBDIVISION LENGTH: 7013 m  Sun  Clouds  Fog  Rain  Snow  
 UPLANDS DESCRIPTION:  Grass  Forest  Rock  
 SURVEYED FROM:  Foot  Boat  Helo WORKING DIRECTION: SW to NE  
 SURFACE SEDIMENTS: R 70 % B 20 % C 5 % P 3 % G 1 % S 1 % M 0 % V 0 %  
 SLOPE: Long 0 % Hang 85 % Vert 15 % WAVE EXPOSURE:  Low  Med  High  
 OIL CATEGORY LENGTH: W 0 m M 0 m N 41 m VL 30 m NO 9022 m

**SURFACE OIL**

CHARACTER	DISTRIBUTION				OIL / FILM COLOR						IMPACTED ZONES				
	C	B	P	N	BU	UC	SP	SL	OL	SL	TL	BU	U	M	U
ASPHALT PAVEMENT															
POOLED COVER	X	1	0									X	U		
COAT			X	✓	X	✓						X	✓		
STAIN			X	✓	X	✓						X	✓		
MOUSSE															
PATTIES															
TARBALLS															
FILM															
NO OIL												X		X	X

PAVEMENT H F S 0 sq. m by 0 cm

PATTIES / TARBALLS 0 BAGS

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 _____
Trash				#BAGS _____
Debris				

Photographs: None

Roll No. ST-12-7

Frames 14-16

**SUBSURFACE OIL**

PIT NO.	PIT DEPTH (cm)	SUBSURFACE OIL CHARACTER					OILED INTERVAL (cm)	BELOW		OIL / FILM COLOR						PIT ZONE				A	N	A	SHEEN (Y/N)	SURFACE - SUBSURFACE SEDIMENTS			
		OP	OR	OL	OF	NO		SO	UC	SP	SL	OL	SL	TL	BU	U	M	U									
1	12					X	0-0		X								X								-	-	P, C
2	25					X	0-0		X								X								-	-	P
3	20					X	0-0		X								X								-	-	P, G
4	35					X	0-0		X								X								-	-	P, G
5	31					X	0-0		X								X								-	-	P, G
6	33					X	0-0		X								X								-	-	B, P, G

COMMENTS: Segment consists primarily of bedrock cliff. Much of segment was surveyed by boat and no oiling observed. Taroka Lagoon in NW corner of segment had a band of oiling in OI. Broken distribution of pooled oil under cobbles/boulders for 22 meters and splashes of pooled oil for 19-21 meters.

ACE 10459114  
ACE 1955584

REVIEWED \_\_\_\_\_ DATE \_\_\_\_\_

15/46

SHORELINE OILING SUMMARY (PAGE 2)

REVISION 04/12/90

SEGMENT ST/ BK-5 SUBDIVISION A (2 OF 2)

SUBSURFACE OIL (CONTINUED)

\*

PIT NO.	PIT DEPTH (cm)	SUBSURFACE OIL CHARACTER					OILED INTERVAL (CM-FT)	BELOW		OIL / FILM COLOR							PIT ZONE				A N A	SHEEN (Y/N)	↓	SURFACE - SUBSURFACE SEDIMENTS					
		OP	OR	OL	OF	NO		UD	UC	SP	BP	BR	BY	BL	BU	U	M	U											
7	22					X	0-0		X									X										C, P	
* 8	10					X	0-0.2		X									X										C, B	
9	23					X	0-0		X									X										C, P, B	
10	30					X	0-0		X									X										P	

COMMENTS

\* Not subsurface

ACE 10459115  
ACE 1955585

REVIEWED \_\_\_\_\_ DATE \_\_\_\_\_

16/46

### FIELD SHORELINE COMMENT SHEET

SEGMENT ST / BM-5 SUBDIVISION: A DATE 4/28/90

**USCG**

NAME JERRY SCHULTZ SIGNATURE Jerry Schultz

NO TREATMENT RECOMMENDED  TREATMENT SUGGESTED

COMMENTS THE 42m BAND INDICATED ON MAP NEEDS TREATMENT. CONSIDERING THE CONSTRAINTS OF BIOREMEDIATION IN THE PARK, THE ONLY OTHER VIABLE ALTERNATIVE IS MANUAL PICKUP & REMOVAL WITH HAND WIPING THE LARGER ROCKS WHERE THE RESIDUE OIL IS MORE MOBILE.

**ADEC**

NAME Mike Ebel SIGNATURE Michael Ebel

NO TREATMENT RECOMMENDED  TREATMENT SUGGESTED

COMMENTS BM-5-A: The segment had two ~~locations~~ locations of oiling. On the SE end of this shoreline a band of splash ~~oil~~ coat was degrading into stain. all very light and being removed well by natural washing. The second area is the N shore of the lagoon found at the NW end of segment. Here a narrow band (approx 1m wide) extended 22m having pooled oil 2cm thick immediately under the surface cover. This band then changed from a broken distribution into a patchy and splashy distribution; the transition was abrupt as the band graded into splashy distribution (cont.)

**LAND MANAGER NPS**

NAME Michael Tetreau SIGNATURE Michael Tetreau

NO TREATMENT RECOMMENDED  TREATMENT SUGGESTED

COMMENTS Manual removal of the band of oiled oil in Taroa Lagoon is needed as this is a popular anchorage and a relatively high use recreation area. Removal of oiled sediment would be easy by moving the oiled material aside and clipping it with shovels.

ACE 10459116

ACE 1955586

20/46

(cont.) BM-5-A SSAT 4/28/90 Mike Ebel ADEC

and extended on another 20m, tapering in width as it went. Thus, the total band was 42m in L. If this was a section of shoreline outside of the National Park I would recommend stirring up the surface along the band with long-tined rakes and sprinkling granular fertilizer while stirring the sedo, which is the first part of treatment proposed. However, if after ~~another~~ another winter the oil was still persisting and not at least 75% degraded I would recommend manual removal of the contaminated sediments. This second step is recommended because we are dealing with park-land.

Because of recreational use I would not be opposed to immediate manual removal but feel that there is not an urgency to do so (the oil is below the layer of surface armor and will be washed away if bioenhancement does what is promised). There is not a significant risk to the limited intertidal biota found on this site to preclude granular fertilizer and it would appear to consume the least ~~amount~~ amount of resources as a method, in contrast to generating more solid waste to transport about.

\* Note sketch maps. End

Michael J. Ebel ADEC

ACE 10459117

ACE 1955587

31/46

SSAT DATA ENTRY FORMSUBSURFACE DATAPAGE 2 OF 3SEGMENT ID: Bm-5 SUBDIV: A

PIT # 1 PIT DEPTH 12 OIL CHARACTER No OIL INTVAL: FROM 0 TO 0  
 QUANT: UC OIL CLR: - FLM CLR: - ZONE: SU - UI X MI - LI -  
 SUBSURF SEDIMENT: BRK - BLD - COB X PEB X GRN - SAN - MUD - VEG -

PIT # 2 PIT DEPTH 25 OIL CHARACTER No OIL INTVAL: FROM 0 TO 0  
 QUANT: UC OIL CLR: - FLM CLR: - ZONE: SU - UI X MI - LI -  
 SUBSURF SEDIMENT: BRK - BLD - COB - PEB X GRN - SAN - MUD - VEG -

PIT # 3 PIT DEPTH 20 OIL CHARACTER No OIL INTVAL: FROM 0 TO 0  
 QUANT: UC OIL CLR: - FLM CLR: - ZONE: SU - UI X MI - LI -  
 SUBSURF SEDIMENT: BRK - BLD - COB - PEB X GRN X SAN - MUD - VEG -

PIT # 4 PIT DEPTH 35 OIL CHARACTER No OIL INTVAL: FROM 0 TO 0  
 QUANT: UC OIL CLR: - FLM CLR: - ZONE: SU - UI X MI - LI -  
 SUBSURF SEDIMENT: BRK - BLD - COB - PEB X GRN X SAN - MUD - VEG -

PIT # 5 PIT DEPTH 31 OIL CHARACTER No OIL INTVAL: FROM 0 TO 0  
 QUANT: UC OIL CLR: - FLM CLR: - ZONE: SU - UI X MI - LI -  
 SUBSURF SEDIMENT: BRK - BLD - COB - PEB X GRN X SAN - MUD - VEG -

PIT # 6 PIT DEPTH 33 OIL CHARACTER No OIL INTVAL: FROM 0 TO 0  
 QUANT: UC OIL CLR: - FLM CLR: - ZONE: SU - UI X MI - LI -  
 SUBSURF SEDIMENT: BRK - BLD X COB - PEB X GRN X SAN - MUD - VEG -

PIT # 7 PIT DEPTH 22 OIL CHARACTER No OIL INTVAL: FROM 0 TO 0  
 QUANT: UC OIL CLR: - FLM CLR: - ZONE: SU - UI X MI - LI -  
 SUBSURF SEDIMENT: BRK - BLD - COB X PEB X GRN - SAN - MUD - VEG -

PIT # 8 PIT DEPTH 10 OIL CHARACTER No OIL INTVAL: FROM 0 TO 2  
 QUANT: UC OIL CLR: LAA FLM CLR: - ZONE: SU - UI X MI - LI -  
 SUBSURF SEDIMENT: BRK - BLD X COB X PEB X GRN - SAN - MUD - VEG -

PROBLEMS: \_\_\_\_\_

ACE-10459118

ACE 1955588

23/46

SSAT DATA ENTRY FORM

SUBSURFACE DATA

SEGMENT ID: BM-5 SUBDIV: A

PIT # 9 PIT DEPTH 23 OIL CHARACTER NO OIL INTVAL: FROM 0 TO 0  
QUANT: UC OIL CLR: - FLM CLR: - ZONE: SU - UI  MI - LI -  
SUBSURF SEDIMENT: BRK - BLD  COB  PEB  GRN - SAN - MUD: - VEG -

PIT # 10 PIT DEPTH 30 OIL CHARACTER NO OIL INTVAL: FROM 0 TO 0  
QUANT: UC OIL CLR: - FLM CLR: - ZONE: SU - UI  MI - LI -  
SUBSURF SEDIMENT: BRK - BLD - COB - PEB  GRN - SAN - MUD - VEG -

PIT #      PIT DEPTH      OIL CHARACTER      OIL INTVAL: FROM      TO       
QUANT:      OIL CLR:      FLM CLR:      ZONE: SU      UI      MI      LI       
SUBSURF SEDIMENT: BRK      BLD      COB      PEB      GRN      SAN      MUD      VEG     

PIT #      PIT DEPTH      OIL CHARACTER      OIL INTVAL: FROM      TO       
QUANT:      OIL CLR:      FLM CLR:      ZONE: SU      UI      MI      LI       
SUBSURF SEDIMENT: BRK      BLD      COB      PEB      GRN      SAN      MUD      VEG     

PIT #      PIT DEPTH      OIL CHARACTER      OIL INTVAL: FROM      TO       
QUANT:      OIL CLR:      FLM CLR:      ZONE: SU      UI      MI      LI       
SUBSURF SEDIMENT: BRK      BLD      COB      PEB      GRN      SAN      MUD      VEG     

PIT #      PIT DEPTH      OIL CHARACTER      OIL INTVAL: FROM      TO       
QUANT:      OIL CLR:      FLM CLR:      ZONE: SU      UI      MI      LI       
SUBSURF SEDIMENT: BRK      BLD      COB      PEB      GRN      SAN      MUD      VEG     

PIT #      PIT DEPTH      OIL CHARACTER      OIL INTVAL: FROM      TO       
QUANT:      OIL CLR:      FLM CLR:      ZONE: SU      UI      MI      LI       
SUBSURF SEDIMENT: BRK      BLD      COB      PEB      GRN      SAN      MUD      VEG     

PIT #      PIT DEPTH      OIL CHARACTER      OIL INTVAL: FROM      TO       
QUANT:      OIL CLR:      FLM CLR:      ZONE: SU      UI      MI      LI       
SUBSURF SEDIMENT: BRK      BLD      COB      PEB      GRN      SAN      MUD      VEG     

PROBLEMS:     

ACE 10459119

ACE 1955589

24/46



SHORELINE ECOLOGICAL SUMMARY (Page 1 of 4)

NEEDLE POINT

Segment ST/ BM-5 Subdivision A Date (mo/day/yr) 4/28/90

Time (24 hr) 1205-1350 Biologist SHARMAN

(A) Substrate type and % of segments: SUBDIV  
 (1) Bedrock 70 (2) Boulder 20 (3) Cobble 5 (4) Pebble 3 (5) Sand 2 (6) Silt          + granula

(B) Overall % cover of biota (% of segment): Dense          Moderate X Low           
SUBDIV

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

Photographs: Roll No. ST-12-7

Frames 14, 15, 16

BARNACLES

Dense			Moderate			Sparse			Rare			
1U	1M	1L	1U	1M	1L	1U	1M	1L	1U	1M	1L	
2	2	2	2	2	2	X	X	2	2	2	2	NOT PRESENT
3	3	3	3	3	3	3	3	3	3	3	3	
4	4	4	4	4	4	4	4	4	4	4	4	
5	5	5	5	5	5	5	5	5	5	5	5	
6	6	6	6	6	6	6	6	6	6	6	6	
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	2	2	2	2	2	2	2	2	NOT PRESENT
3	3	3	3	3	3	3	3	3	3	3	3	
4	4	4	4	4	4	4	4	4	4	4	4	
5	5	5	5	5	5	5	5	5	5	5	5	
6	6	6	6	6	6	6	6	6	6	6	6	
6	6	6	6	6	6	6	6	6	6	6	6	

GASTROPODS (ANCELA, LITTORINA, LIMAETS)

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	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	
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	X	X	2	2	2	2	NOT PRESENT
3	3	3	3	3	3	3	3	3	3	3	3	
4	4	4	4	4	4	4	4	4	4	4	4	
5	5	5	5	5	5	5	5	5	5	5	5	
6	6	6	6	6	6	6	6	6	6	6	6	
6	6	6	6	6	6	6	6	6	6	6	6	

Wildlife Observations/ General Comments: 100 glaucous-winged gulls, 5 cormorants, 25 pigeon guillemots, 10 Barrow's goldeneyes, 2 murrelets, 150 surf scoters, 20 Harlequin ducks, 1 pair oystercatchers, 1 pair bald eagles (nest not associated with any brown nest). 1 subadult eagle, 2 sea lions, 1 mountain goat on cliffs, 1 inactive eagle nest (see map), 1 dipper in stream "A" (cont.)

Ecological Considerations:  
 We received no information regarding resource sensitivities previously identified for this segment. Note, however, the presently inactive eagle nest and the courting pair of adults (nest location unknown - probably somewhere near N. end of segment). Some information re. the 2 anadromous streams (see map, map) is gleaned from a recent draft report to the NPS by Milner: stream "A" may drywater in summer but the stream-lake system has a run (cont.)

BM-5

Shoreline Ecological Summary (cont.)  
(Page 2 of 4)Sharman  
4/28/90General Comments (cont.):

(see eco. map). The lake is still mostly ice-covered. River otter scat at lake margin. The intertidal zone here is perfectly healthy and normal. Even the area of oiling concern in Taroha Lagoon does not appear to have been significantly impacted biotically. All species appear to be recruiting normally, albeit in generally quite low numbers. As with other beaches in the Koni area, these appear to have subsided during the '64 earthquake, as evidenced by dead trees along the supratidal fringe.

Ecological Considerations (cont.):

of 100-200+ pink and sockeye spawners. Stream "B" in the lagoon apparently supports a pink run on the order of 60+, with the lagoon itself supporting several hundred probable beach spawners. Neither of these streams apparently is catalogued by ADF & G. Significantly, seine netting last July in the lagoon produced over 2,000 herring.

ACE 10459121

ACE 1955591

26/46

↑  
KEN  
23C

BM-5

Page 3 of 4  
BM-5  
Eco. Map

presently  
inactive  
sage nest

Anadromous  
stream "A"

Fake

KEN  
23B

AGE 1955592

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

BM-5

ADEC Segment Length: 8629m



Map Key: KEN-23a

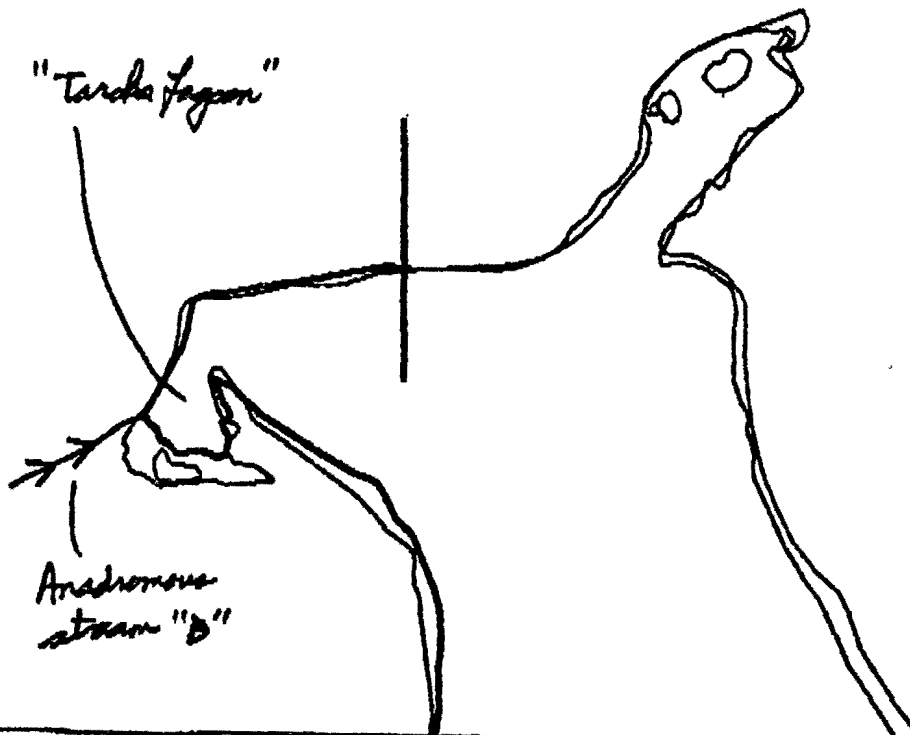
Name: ACE 10459122

Date: Data Entered: 7/7/90

Page 4 of 4

**BM-5**

Eco. Map



BM-6

↓ KEN 23B

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

BM-5

ADEC Segment Length: 8629m



ACE 1955593



Map Key: KEN-23c

Name:

Date: ACE 10459123

Date Entered:

28/146

ADF&G MULTI-ASSESSMENT FORM  
1991 GENERAL ENTRY CHECKLIST

*DDA  
10/7/91*

*OK*



STREAM#: 2323010375  
SEGMENT: BM005

DATE PRINTED: 08/19/91

PAGE 42

LOCATION: TAROKA ARM, SOUTHWEST MOUTH, LAKE SYSTEM

SURVEY TYPE: 89 AFHS METHOD: FOOT

DATE: 09/03/89

TEAM RECORDER: HILL

START TIME: *1315*  
END TIME:

*Time  
1315*

OBSERVERS: RANDALL

TIDES: *low slack*  
OG/HAB DISCREPANCIES:

AGENCY: FG

PHOTOS TAKEN: Y

STATION: 2323010375

ROLL#: 89DDH036H  
FRAME: 02-08

VIDEO TAKEN: Y TAPE#: 89RDR001H  
START: 2865 END: 2956

SAMPLES TAKEN: *N*

SAMPLE NUMBERS:

OIL IN STREAM BED: Y

OVERALL OIL IMPACT: L

OIL ON BEACH BY MOUTH: Y

WAVE EXPOSURE: LOW

SHORELINE TYPE: BEACH LAKE

SUBSTRATE TYPE: BEDROCK	BOULDER	COBBLE 50	VEGETAT
GRAVEL 20	SAND 10	MUD/SILT	GRANULE 20

ANADROMOUS FISH PRESENT: Y

SPECIES: PINK SALMON	COUNT:	800
RED SALMON		500

ADF&G MULTI-ASSESSMENT FORM  
1991 OILING ENTRY CHECKLIST

OK

PAGE 55

DATE PRINTED: 08/19/91

STREAM# : 2323010375  
SEGMENT#: BM005

SURVEY TYPE : 89 AFHS - SS  
DATE: 09/03/89  
TIMES: -

LOCATION: TAROKA ARM, SOUTHWEST MOUTH,  
LAKE SYSTEM  
TEAM RECORDER: HILL

-- OILING EXTENT --

SITE#	SITE TYPE	DEPTH (cm)	LENGTH (m)	WIDTH (m)	AREA (m)	%	THICK (cm)	PEN (cm)	OIL TYPE CODES
1									AP MS

COMMENTS:

SITE 13-6. STOPPED TO RETAKE PHOTOS BECAUSE 8/22/89 PHOTOS WERE TRASHED BY PHOTO PROCESSOR. SHEEN, OIL (AP, MS) IN CREEK. MOUSSE INT THE STREAM CHANNEL IS 1.1CM TO 1.8CM THICK. THE LAKE OUTLET STREAM RUNS ON THE SURFACE TO THE SALTWATER. ~~PREVIOUSLY~~ THE STREAM WENT SUBSURFACE PRIOR TO RUNNING INTO SALT WATER. *ON PREVIOUS SURVEY*



Site 13-6

OK

ASC NUMBER: 232-30-10375 SEGMENT NUMBER: BM-5 YR CATALOGED:

LOCATION: Taroka Arm, SW shore ~~of lake~~

LAK NAME: LOCAL STREAM #:

LAK K-UNIT: LOCAL STREAM #:

USGS QUADRANGLE: Seldovia C-1

SHORELINE TYPE: Beach/Lake

WAVE EXPOSURE: L

LATITUDE: 593521

LONGITUDE: 150.638

LEGAL: S 7S SW10

ALL SEGMENTS:

ASC NUMBER:

SURVEY TYPE: SS

METHOD: Foot

DATE: 9/13/89

START TIME: 1315

STOP TIME:

TEAM RECORDER: Doug Hill

OBSERVERS: Rick Randall

AGENCY(IES): ADF+G

PHOTOS TAKEN? y

Roll #: 89DDH-036 Frames: 2 → 8

VIDEO TAKEN? y Tape Number: 89ROR0014V

Counter Start: 2865 → 2956

DDH  
10/7/91

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							AP, MS
SITE 2							
SITE 3							
SITE 4							
SITE 5							

OVERALL OIL IMPACT: L

OIL IN STREAM CHANNEL? y

OIL ON BEACH WITHIN 50M OF STREAM MOUTH? y

SUBSTRATE

Bedrock	Granulezo
Boulder	Sand 10
Cobble 50	Silt
Pebble 20	Veget.

SPECIES	PINKS	Reds			
COUNT	800	500			

COMMENTS: STOPPED to retake photos → 8/22/89 photos were trashed by photoprocessor.

SHEEN, oil (AP, MS) in Creek. Mousse in the stream channel is ~~1.1 cm to 1.8 cm thick~~ 1.1 cm to 1.8 cm thick.

The lake outlet stream runs on the surface to the saltwater. Previously the stream went subsurface prior to running into saltwater.

Site 13-6

ASC NUMBER: 232-30-10375 SEGMENT NUMBER: BM-5 YR CATALOGED:  
 LOCATION: Taroka Arm, SW shore, ~~Wade~~  
 DAM NAME:  
 KODIAK K-UNIT: LOCAL STREAM #:  
 USGS QUADRANGLE: Seldovia C-1  
 SHORELINE TYPE: Beach/Lake ALL SEGMENTS:  
 WAVE EXPOSURE: L

LATITUDE: 59 35 21  
 LONGITUDE: 150 6 38  
 LEGAL: S 7S 5W10

ASC NUMBER:  
 SURVEY TYPE: SS  
 METHOD: ~~Foot~~  
 DATE: 9/13/89  
 START TIME:  
 STOP TIME: 1315

TEAM RECORDER: Doug Hill  
 OBSERVERS: Rick Randall  
 AGENCY(IES): ADF46  
 PHOTOS TAKEN? y  
 Roll #: 89DDH-036 Frames: 2 → 8  
 VIDEO TAKEN? y Tape Number: 89RDR0014V  
 Counter Start: 2865 → 2956

DDM  
 10/7/99

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? y

OIL ON BEACH WITHIN 50M OF STREAM MOUTH? y

SUBSTRATE

Bedrock	Granule 20
Boulder	Sand 10
Cobble 50	Silt
Pebble 20	Veget.

SPECIES	Pinks	Reds			
COUNT	800	500			

COMMENTS: STOPPED to retake photos → 8/22/89 photos were trashed by photoprocessor.  
 SHEEN, oil (AP, MS) in creek. Mousse in the stream channel is  
~~1.1 cm to 1.8 cm thick.~~ 1.1 cm to 1.8 cm thick.  
 The lake outlet stream runs on the surface to the saltwater. Previously the stream went subsurface prior to running into saltwater.



ADF&G MULTI-ASSESSMENT FORM  
1991 GENERAL ENTRY CHECKLIST



STREAM#: 2323010375  
SEGMENT: BM005

PAGE 1

DATE PRINTED: 08/23/91

LOCATION: TAROKA ARM, SOUTHWEST MOUTH, LAKE SYSTEM

SURVEY TYPE: 89 AFHS - SS

METHOD: FOOT

DATE: 08/22/89

TEAM RECORDER: HILL

START TIME: 1415

OBSERVERS: RANDALL

END TIME: 1510

TIDES: -0-

AGENCY: FG

OG/HAB DISCREPANCIES: -

PHOTOS TAKEN: Y

STATION: 2323010375

ROLL#: 89DDH027H 89DDH028H

FRAME: 24-30 01-02

VIDEO TAKEN: Y

TAPE#: 89RDR001H

START: 0399

END: 0540

SAMPLES TAKEN: Y

SAMPLE NUMBERS: 89DDH056H -0-

-0- -0-

-0- -0-

OIL IN STREAM BED: Y

OVERALL OIL IMPACT: L

OIL ON BEACH BY MOUTH: Y

WAVE EXPOSURE: LOW

SHORELINE TYPE: BEACH LAKE

SUBSTRATE TYPE: BEDROCK -0- BOULDER -0- COBBLE 50 VEGETAT -0-

GRAVEL 20 SAND 10 MUD/SILT -0- GRANULE 20

ANADROMOUS FISH PRESENT: Y

SPECIES: PINK SALMON COUNT: 40

RED SALMON 210

-0- -0-

-0- -0-

-0- -0-

END OF REPORT

*Handwritten note on a blue sticky note:*  
DDH  
10/7/91

ACE 10459091 *Handwritten initials:* H/K/S/K

ADF&G MULTI-ASSESSMENT FORM  
1991 OILING ENTRY CHECKLIST

*ok*

PAGE 1

DATE PRINTED: 08/23/91

STREAM# : 2323010375  
SEGMENT#: BMO05

SURVEY TYPE : 89 AFHS - SS                      LOCATION: TAROKA ARM, SOUTHWEST MOUTH,  
DATE: 08/22/89                                              LAKE SYSTEM  
TIMES: 1415 - 1510                                      TEAM RECORDER: HILL

-- OILING EXTENT --

SITE#	SITE TYPE	DEPTH (cm)	LENGTH (m)	WIDTH (m)	AREA (m)	%	THICK (cm)	PEN (cm)	OIL TYPE CODES
1	-0-	-0-	91	69	6279	2	3.7	5	MS OP HOR A

COMMENTS:

SITE 12-4. WITHIN THE 69M X 91M NOTED ABOVE (SITE #1) EXISTS A 4.6M X 18.3M LIGHTLY OILED AREA WITHIN THE ANADROMOUS STREAM CHANNEL. THE % OF OIL PS ~1% - MOUSSE PATTIES UP TO 10" TO 10" AND LESS THAN 3.8 THICK. SOCKEYES SPAWNING IN AND NEAR OUTLET STREAM, NW CORNER OF LAKE AND AT SW END OF LAKE. THE OUTLET STREAM FLOW GOES SUBSURFACE BEFORE REACHING THE SALT WATER - AT LOW TIDE.

END OF REPORT

ACE 10459092 -15

1989-AFHS



site 12-4

BM-5

No map - printout!

Taroka - SW

at

ASC NUMBER: 232-30-10375 SEGMENT NUMBER: ~~232-30-10375~~ YR CATALOGED:

LOCATION: Taroka Arm, SW shore

TAM NAME:

LAKE K-UNIT: LOCAL STREAM #:

US QUADRANGLE: Seldovia Cr. LATITUDE: 59 35 21

SURVEY TYPE: Beach/LAKE LONGITUDE: 150 6 38

WAVE EXPOSURE: L LEGAL: S 75 5w.10

ALL SEGMENTS:

SC NUMBER:

SURVEY TYPE: 85

METHOD: Foot

DATE: 8/22/89

START TIME: 1415

STOP TIME: 1510

TEAM RECORDER: Doug Hill

OBSERVERS: Rick Randall

AGENCY(IES): ADF&G

PHOTOS TAKEN? y

Roll #: 8900H 27H → 24030

8900H 28H → Frames: 12

VIDEO TAKEN? y Tape Number: 89-RDR-001-H-V

Counter Start: 0399 → 0540

SAMPLES TAKEN? y

SAMPLE I.D. NUMBERS: 1. 8900H 056H ROR/WH-2/24/89-1430 2.

3.

4. 5.

6.

	LENGTH m	WIDTH m	M2	%	THICK cm	PEN cm	OIL TYPE
SITE 1	91	69	6279	2	3.7	5	MS, DP, HDR, AP
SITE 2							
SITE 3							
SITE 4							
SITE 5							

OVERALL OIL IMPACT: L

OIL IN STREAM CHANNEL? y

OIL ON BEACH WITHIN 50M OF STREAM MOUTH? y

SUBSTRATE

Bedrock	Granule 20
Boulder	Sand 10
Cobble 50	Silt
Pebble 20	Veget.

SPECIES	Pinks	RED			
COUNT	40	210			

REMARKS: Within the 69m x 91m noted above (site # 1) exists a 4.6m x 18.3m area within the ANAO stream channel. The % of oil is ~ 1% --- mousse patties up to 10" x 10" and less than 3.8 thick.

Sockeyes spawning in & near outlet stream, NW corner of lake and at SW end of lake. The outlet stream flow goes subsurface before reaching the saltwater - at low tide.

232-20-10375

FISH HABITAT ASSESSMENT FORM

TAROKA ARM - SW shore - mouth

1 REGION: 2 PWS (KP, CI) (del) 3 OBSERVER(S) Doug Hill, Rick RANDAL

4 SITE NO. 12-4 5 AERIAL PHOTO NO. (3, 4, 5, 6) 6 CAT NO. NC

7 STREAM NAME 8 LAT 59° 35' 35" 9 LONG 150° 06' 70"

10 DATE 8/22/89 11 TIME 1415 12 TIDE: Low black Flood High slack Ebb

13 CATALOGED ANADROMOUS STREAM? Y 14 ANAD. FISH FOUND? Y N

15 OIL FOUND IN STREAM? Y N 16 OIL FOUND NEAR STREAM (1 MI.)? Y N

17 OIL SAMPLES TAKEN? Y N 18 ID NOS. RDR/DDH-8/22/89-1430

19 35 MM PICTURES TAKEN? Y N 20 ROLL NO(S) 89-DDH-028, 89-DDH-027, 89-DDH-036/9/89

21 EXPOSURE NO.	22 DESCRIPTION
Roll #27 24, 25	Sockeye and pink salmon - mid-creek
26, 27	Creek runs subsurface at this time - looking downstream to salt water
30	Sample RDR/DDH-8/22/89-1430
Roll #28 1	Oil found throughout boulder area in photo - beach at creek mouth
2	looking upstream from lower creek
Roll #36 2, 3	Typical oil found on this beach 1/8" to 1/4" thick
4, 5, 6	Mussel on bottom of flowing salmon stream
7, 8	Sockeye spawning at a near lake outlet

23 VIDEO FOOTAGE TAKEN? Y N 24 CASSETTE NO(S) 89-RDR-001-H-Vide

25 DESCRIPTION: Pink & Sockeye in outlet of lake stream  
Grand footage of General Area, Sample site, oil within creek  
(0399-0540) ACE 7380397

7/3/89 - Sheen, oil within creek, outlet creek continues from lake to salt water (i.e., higher water level), oil visible on tree trunks up to 3' above ground 2-3' of continuous oil. (2865-2956). ACE 10459094

**ANADROMOUS FISH OBSERVATIONS**

	PINK	CHUM	RED	KING	COHO	DOLLY
28 Aerial	40* <del>210</del> 800 <del>400-500</del>		210* 400-500			
29 Ground	40* 800		140* 300			

\* - upper estimate is 8/22/89 survey

Ground survey only encompasses mouth of lake and stream

30 COMMENTS: 9/3/89 Aerial did Not Fly to Northern and Southern end points of lake - where sockeye observed on the 8/22/89 survey  
Sockeye quite red on both surveys / mold observed on some pinks

**OIL OBSERVATIONS**

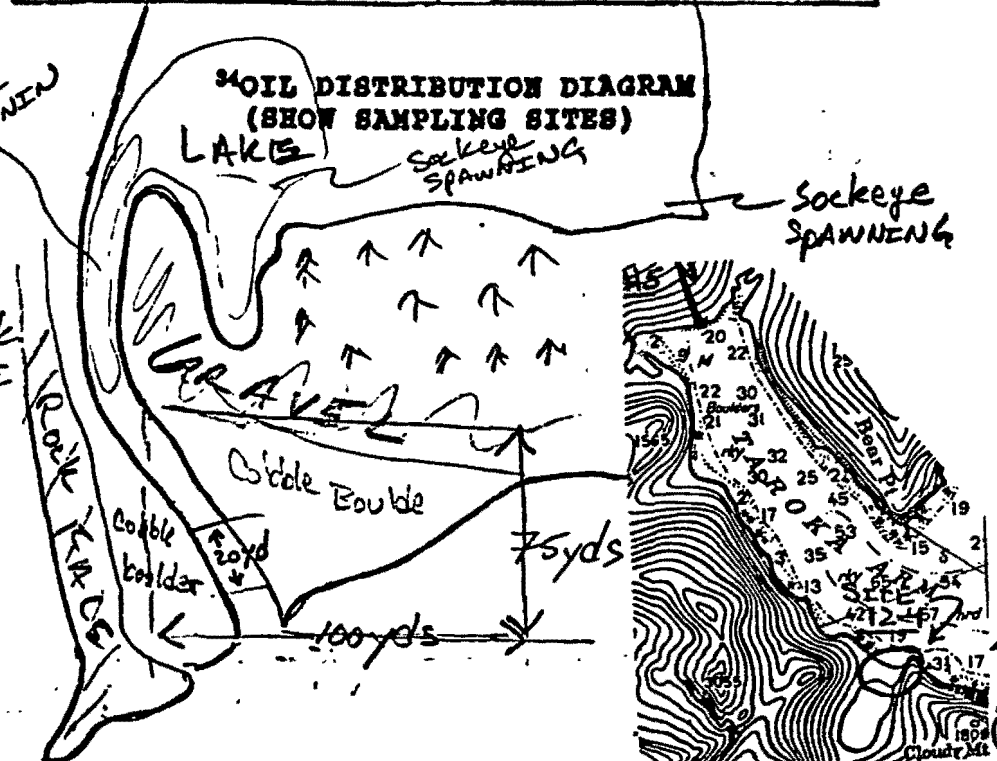
Site  
12-4

**EXTENT OF OIL:**

	WITHIN STREAM	OUTSIDE STREAM
31 SURFACE COVERAGE	Sporadic mousse puddles Syds x 20 yd Area / up to 1000'	Sporadic mousse puddles throughout the 75 x 100 yd Area depicted below
32 SURFACE THICKNESS	up to 1/2" thick	1/4" x 1/4" to 2' x 2' splashes - 1/2" thick
33 PENETRATION	Surface	1-2"

35 PREDOMINANT SUBSTRATE TYPE:

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

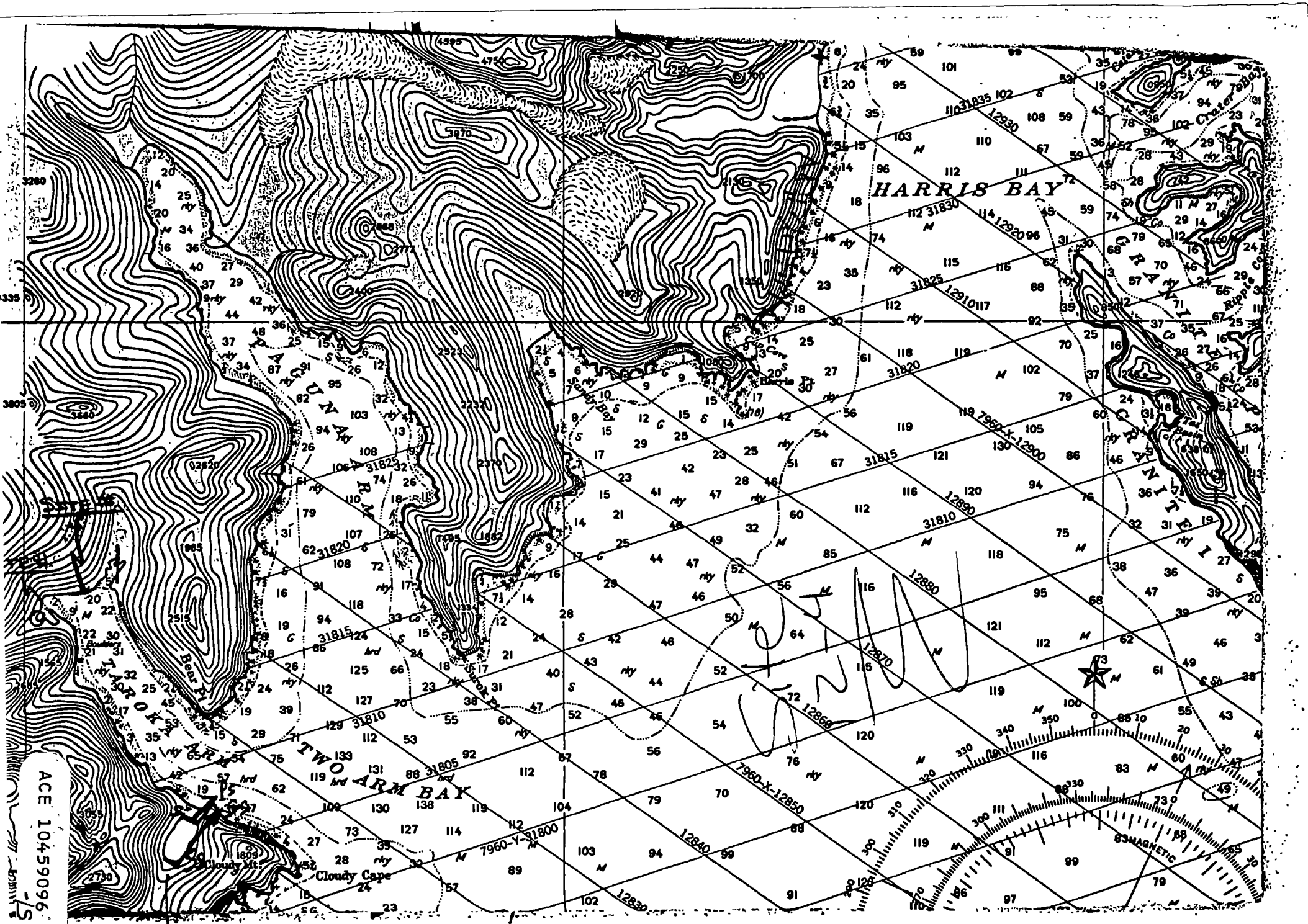


36 COMMENTS: The lower 50 yds of creek dry on 8/22/89 - subsurface flow continues flow to saltwater on 9/3/89

DEC Seward Tract on this beach (213C)

ACE 10459095

ACE 7380398



ACE 10459096

ACE 7380399

*○ SITE 12-4*

*Chart 06682*

*○*

site 12-4

1989-AFHS

BM-5

Taroka-SW

ASC NUMBER: 232-30-10375 SEGMENT NUMBER: ~~232-30-10375~~ YR CATALOGED:  
 LOCATION: Taroka Arm, SW shore  
 DAM NAME: LATITUDE: 59 35 21  
 NIAK K-UNIT: LOCAL STREAM #: LONGITUDE: 150 6 38  
 USGS QUADRANGLE: Seldovia Cr. LEGAL: S 75 5w10  
 SHORELINE TYPE: Beach/LAKE ALL SEGMENTS:  
 WAVE EXPOSURE: L

ASC NUMBER: TEAM RECORDER: Doug Hill  
 SURVEY TYPE: 85 OBSERVERS: Rick Randall  
 METHOD: Foot AGENCY(IES): ADFAG  
 DATE: 8/22/89 PHOTOS TAKEN? y  
 START TIME: 1415 Roll #: 8900H 27H → 24230  
 STOP TIME: 1510 VIDEO TAKEN? y Tape Number: 89-RDR-001-H.V  
 Counter Start: 0399 → 0540

22/8/89  
10/2/89

SAMPLES TAKEN? y  
 SAMPLE I.D. NUMBERS: 1. ROR/00H-2/22/89-1430 2.  
 4. 5. 3. 6.

	LENGTH m	WIDTH m	M2	%	THICK cm	PEN cm	OIL TYPE
SITE 1	91	69	6279	2	3.7	5	PT MS, DP, HOR, AP
SITE 2							
SITE 3							site comments
SITE 4							Sporadic throughout the 75x100 yd area (4ft x 4ft to 2' x 2' patches) to 1 1/2" thickness. Penetration 1-2"
SITE 5							Lower stream and mouth.

OVERALL OIL IMPACT: L

OIL IN STREAM CHANNEL? y

OIL ON BEACH WITHIN 50M OF STREAM MOUTH? y

SUBSTRATE

Bedrock	Granule 20
Boulder	Sand 10
Cobble 50	Silt
Pebble 20	Veget.

SPECIES	Pinks	RED			
COUNT	40	210			

COMMENTS: Within the 69m x 91m noted above (site # 1) exists a  
 4.6m x 18.3m <sup>lightly oiled</sup> area within the ANAO stream channel.  
 The % of oil is ~1% - - mousse patties up to 10" x 10"  
 and less than 3.8 <sup>cm</sup> thick.

Sockeyes spawning in + near outlet stream, NW corner of lake  
 and at SW end of lake. The outlet stream flow  
 goes subsurface before reaching the saltwater - at  
 low tide.

FISH HABITAT ASSESSMENT FORM

TAROKA ARM - SW shore - mouth

1 REGION: 2 PWS 3 KP, CI 4 OBSERVER(S) Doug Hill, Rick RANDAL

5 SITE NO. 12-4 6 AERIAL PHOTO NO. 3, 4, 5, 6 7 CAT NO. NC

8 STREAM NAME 9 LAT 59° 35' 35" 10 LONG 150° 06' 70"

11 DATE 8/22/89 12 TIME 1415 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. RDR/DDH-8/22/89-1430

20 35 mm PICTURES TAKEN? Y N 21 ROLL NO(S) 89-DDH-028, 89-DDH-027, 89-DDH-036/9/3/89

22 EXPOSURE NO.	23 DESCRIPTION
24, 25	Sockeye and pink salmon - mid-creek
26, 27	Creek runs sub-surface at this time - looking downstream to salt water
30	Sample RDR/DDH-8/22/89-1430
1	Oil found throughout boulder area in photo - beach at creek mouth
2	looking upstream from lower creek
2, 3	Typical oil found on this beach 1/8" to 1/4" thick
4, 5, 6	Mousse on bottom of flowing salmon stream
7, 8	Sockeye spawning at a near lake outlet

24 VIDEO FOOTAGE TAKEN? Y N 25 CASSETTE NO(S) 89-RDR-001-H-Vide

26 DESCRIPTION: Pinks + Sockeyes in outlet of lake stream

Grand Portage of General Area, Sample site, oil within creek

0399-0540 ACE 7380397 9/3/89 - Sheen, oil within creek, outlet creek continuous from lake to salt water (i.e., higher water level), Oil visible on tree trunks up to 3' above ground 2-3' of continuous oil. (2865-2956). ACE 10459098



**ANADROMOUS FISH OBSERVATIONS**

	PINK	CHUM	RED	KING	COHO	DOLLY
28 Aerial	40* <del>20</del> 800 <del>400-500</del>		210* 400-500			
29 Ground	40* 800		140* 300			

\* - upper estimate is 8/22/89 survey

Ground survey only encompasses mouth of lake and stream

30 COMMENTS: 9/3/89 Aerial did Not Fly to Northern and Southernmost points of lake - where sockeye observed on the 8/22/89 survey  
Sockeye quite red on both surveys / mald observed on some pinks

**OIL OBSERVATIONS**

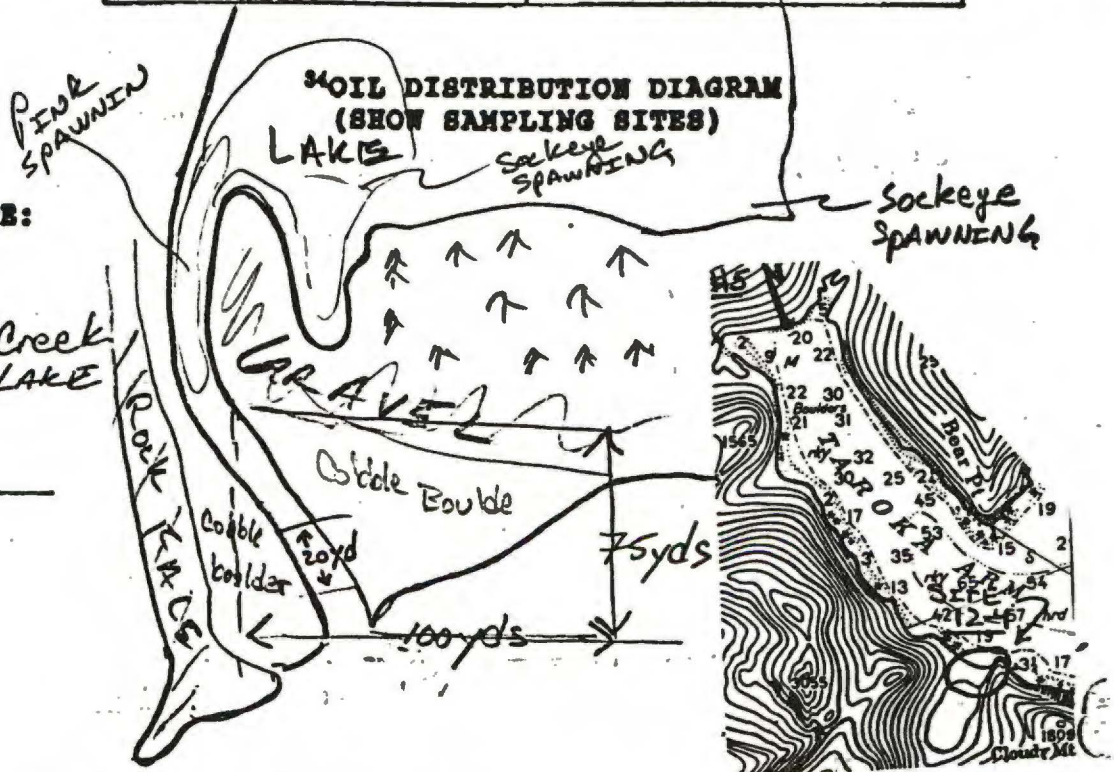
Site  
12-4

**EXTENT OF OIL:**

	WITHIN STREAM	OUTSIDE STREAM
31 SURFACE COVERAGE	Sporadic mousse puddles Syds x 20 yd Area / up to 6' x 10"	Sporadic mousse puddles throughout the 75 x 100 yd Area depicted below
32 SURFACE THICKNESS	up to 1 1/2" thick	1/4" x 1/4" to 2' x 2' patches - 1 1/2" thick
33 PENETRATION	Surface	1-2"

35 PREDOMINANT SUBSTRATE TYPE:

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

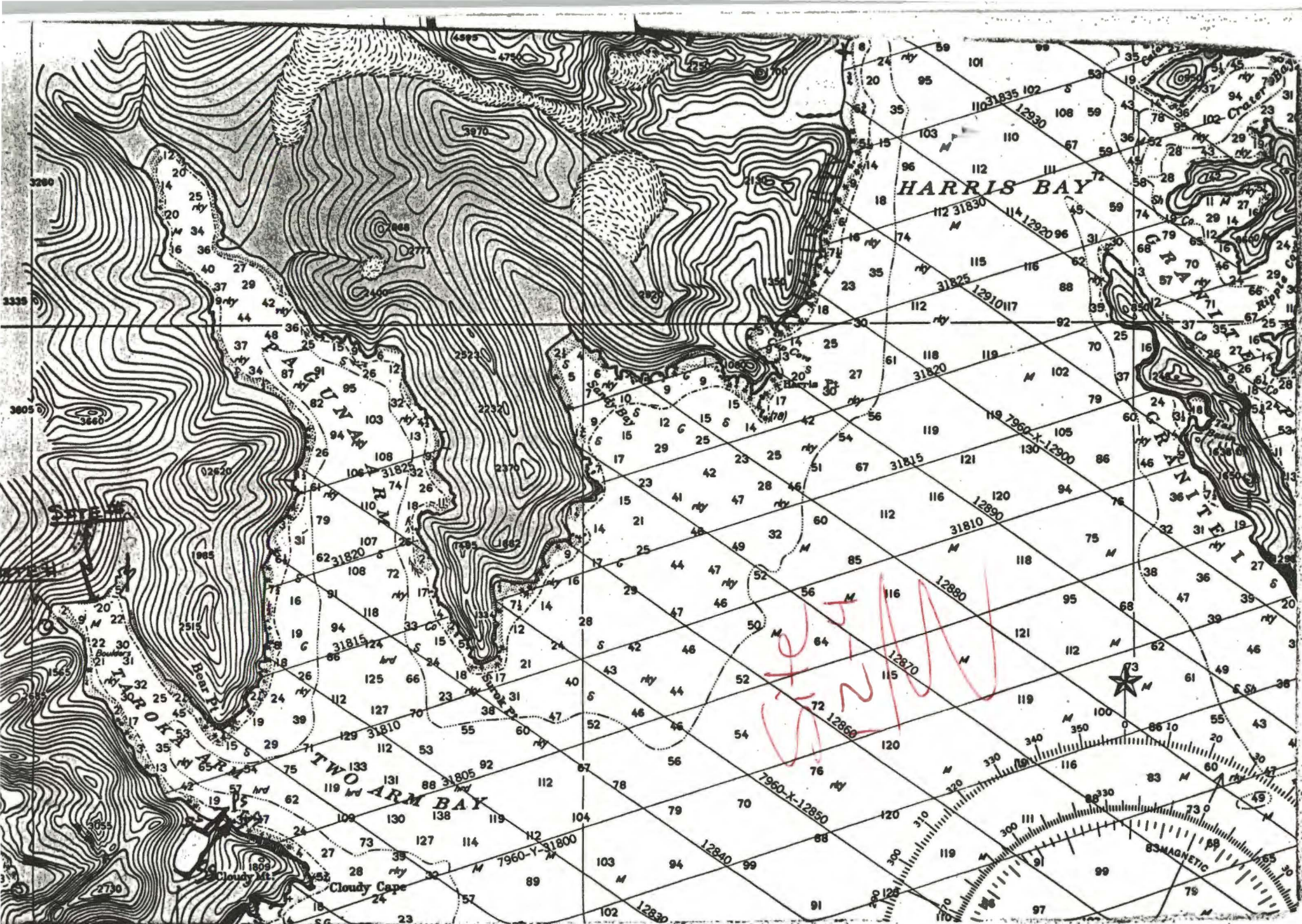


36 COMMENTS: The lower 40 yds of creek dry on 8/22/89 - subsurface Flow  
Continuous Flow to saltwater on 9/3/89

ACE 10459099

DEC Seward Travers on this beach (213C)

ACE 7380398



ACE 10459100-XS/P

ACE 7380399

SITE  
12-4

Chart 16682