KN-500 NO ASC NUMBER
SOUTH POINT MOUTH OF HERRING BAY

ACE 1369630

- Prince William Sound -

DOCUMENTS IN STREAM FILES

ASC# _____ Segment # _____

___ '89 Intertidal Assessment Survey, Sport/Com. Fish
___ '89 Shoreline Clean-Up Program (SAT)
___ '89 Anadromous Fish Stream Authorization, for instream work
___ '89 Stream Treatment Reports
___ '89 Demobilization Reports ___ Bioremediation ___ other
___ '89 RLS Sheet ___ Oil sed. sample ____ Egg sample
___ '89 Fall Walk-a-thon Survey, ADEC
___ '89 Winter Assess. Study Site ___ Winter Stream Survey Form
___ '89 Other Documents _____

_____

_____

_____

___ '90 Pre-Anadscat Survey, multi-assessment form
___ '90 Anadscat Survey
___ '90 Anadromous Fish Stream Evaluation (work order)
___ '90 Anadromous Fish Stream Addendum to work order
___ '90 Shoreline Evaluation, SAT and work order for segment
___ '90 Anadromous Fish Stream Authorization, Title 16 permit
___ '90 Stream Treatment Report
___ '90 ADEC Demobilization Report for Bio
___ '90 ADF&G Oiling Condition Survey, for ASAP use (Aug. Surv.)
___ '90 ASAP Survey ___ ASAP Rec. ____ ADEC Rec. (Fall)
___ '90 Other Documents _____

_____

_____

_____

_____

ACE 7379256
+1 F/S/LT1 FF/-/S

(version 5/02/89)

SHORELINE CLEANUP PROGRAM

DATE 6/10/89 SHORELINE SEGMENT = KN-500

LOCATION: (see enclosed map) Knight Island-Southwest of Herring Point

ADEC NO.______ SHORELINE ASSESSMENT DATE: 6/05/89

Recommended Cleanup Activity(ies):
- Flood/flush with warm to hot water (up to 140°F) on low angle beaches.
- Use moderate to high pressure washing on rock.
- Use other approved methods as appropriate.
- Access could pose a problem. Natural cleaning should be considered since wave exposure is high.
- ~~No cleanup on beach #7-NOAA test site.~~

Priorities Considerations: HIGH RECREATIONAL USE ?
- Class 4: Low oil.
  Class A: Resources present.

Ecological Constraints (from site survey): Avoid lower intertidal zone containing healthy fucus community. Avoid stream runout areas in beaches 3, 6, 7. Clean at high tide on ebbing tide or take appropriate measures to protect middle and lower intertidal zone.

Archeological Constraints (from site survey):
If heretofore undiscovered cultural materials are uncovered during cleanup, contact Exxon's Archeological Field Director and take actions prescribed in the Operational Guidelines for Shoreline Cleanup dated 4/21/89 as amended.

Charles E. Holmes Date: June 10, 1989
State Historic Preservation Officer *
ISCC: Sharon K. Christopherson 6-14-89
EXXON: [signature] Date: June 19-89
FOSC: [signature] Date: 6-18-89

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

ACE 7379270 -/S&L

ADEC DEMOBILIZATION REPORT
FOR INIPOL AND CUSTOMBLEN TREATMENT

To: Alaska Department of Environmental Conservation
Oil Spill Response Center
Anchorage, Alaska
Attn: John Bauer
FAX 265-4666

From: _____ (please print)

RE: SEGMENT NUMBER KN500 SUBSEGMENT NUMBER A - Stream

ADEC REP Rowann Hudnall USCG REP Dan Pearcy

EXXON REP Frank Box BOAT NAME/SQUAD NUMBER Don Bollinger Squad 3

Site #	Length (along shore m)	Area m^2	Inipol (gallons)	Custombien (lbs.)

See Daily Report / OG Report for details

Has work been completed as stated on the work order? If your answer is no please explain in detail how the work performed was different from the work order language.

yes. bioremediation reapplication. No Inipol applied due to oiling conditions + request from ADF+G Rick Gustin + Tom Crowe

Describe the amount of oil remaining (type, size of area and location).

Splash coat UITZ. Patchy OF in UITZ.

Additional Comments (keep objective)

signature Rowann T. Hudnall

Date and time of demobilization from segment 8/24/90

Shoremon\Demob.bio 55/30/90

ACE 7379259

ADEC DEMOBILIZATION REPORT FOR INIPOL AND CUSTOMBLEN TREATMENT

To: Alaska Department of Environmental Conservation
Oil Spill Response Center
Anchorage, Alaska
Attn: John Bauer
FAX 265-4666

From: _____ (please print)

RE: SEGMENT NUMBER KN500 SUBSEGMENT NUMBER B anad

ADEC REP Rowann Hudnall USCG REP Scott Rainsford

EXXON REP Al Snook BOAT NAME/SQUAD NUMBER Don Bollinger Squad 3

Site #	Length (along shore m)	Area m^2	Inipol (gallons)	Custombien (lbs.)

See Daily Report & OG report for details

Has work been completed as stated on the work order? If your answer is no please explain in detail how the work performed was different from the work order language.

yes. bio reapplication. 3rd treat. custombien only due to anad stream. dosage reduced because lower portion of site was underwater.

Describe the amount of oil remaining (type, size of area and location).

Black SOR throughout entire area. Wide band of oiling. Looks better than it did in august but it needs to be reassessed in 1991.

Additional Comments (keep objective)

Area raked to work custombien in. ADF&G Rick Austin approved treatment in conversation on 9/10.

signature Rowann T. Hudnall

Date and time of demobilization from segment 9/11/90

Shoremon\Demob.bio 55/30/90

ADEC DEMOBILIZATION REPORT
FOR PHYSICAL/MECHCANICAL TREATMENT AND CUSTOMBLEN

To: Alaska Department of Environmental Conservation
Oil Spill Response Center
Anchorage, Alaska
Attn: John Bauer
FAX 265-4666, 265-4656

RE: SEGMENT NUMBER KN-500 SUBSEGMENT NUMBER A

DEC REP Wesley Ghormley USCG REP Scott Thomas

EXXON REP Rey Sotelo BOAT NAME/SQUAD NUMBER Pacific Seahorse "A TEAM"

Has work been completed as stated on the work order? If your answer is no please explain in detail how the work performed was different from the work order language. YES

Is there additional oil remaining which can be removed with further physical/mechanical treatment? If yes what is the recommended treatment method.

- THERE was a tremendous amount of subsurface oil present that was Not discovered during Shoreline surveys. Area is 30x40m & consisted OF OR & OP Sediments. Area was manually tilled & heavy saturated sediments removed. Custom blend was applied. Reassessment in future is necessary if No improvement more manual removal recommended.
Special use Area: Heavy cover w/ spruce needles on bedrock on North side of stream use Landa unit to remove OR scrape off manually.

Describe the amount of oil remaining (type, size of area and location).

- North side of stream 30x40 m area OF OR sediments Subsurface oil was 25 cm deep but has been brought to the surface by manually tilling.
- North side of stream heavy cover on bedrocks. Oil is mixed w/spruce needles and is 1" thick in some areas.

Additional Comments (keep objective)
- No manual tilling was recommended by TAG. However a tremendous amount of subsurface oil was discovered on North side of stream scheduled for bioremediation. An agreement was reached on site to manually till area & manually pick up Heavy OR & PO. Exxon Sotelo was very cooperative in reaching an agreement with me & Rich Gustin ADF&G. Area was custom blended but needs reassessment in the future.

signature Wesley Ghormley

Date and time of demobilization from segment 7/7/90 - 1100 Hrs

Shoremon\55 5-12-90

Post-it™ brand fax transmittal memo 7671 # of pages ▸ 3

To John Bauer	From Wes Ghormley
Co. ADEC	Co. M/V Beulah Candies
Dept. Clean-up-Monitor	Phone # 011 872 130 1403

ACE 7379261 +/S

Date: 7/20 '90

ADEC DEMOBILIZATION REPORT
FOR INIPOL AND CUSTOMBLEN TREATMENT

To: Alaska Department of Environmental Conservation
Oil Spill Response Center
Anchorage, Alaska
Attn: John Bauer
FAX 265-4666

From: Chris Strand (please print)

RE: SEGMENT NUMBER KM-500 SUBSEGMENT NUMBER B

ADEC REP Chris Strand USCG REP Vince Mulligan

EXXON REP Tony Diaz BOAT NAME/SQUAD NUMBER Arctic Palmer/squad #4

Site #	Length (along shore m)	Area m²	Inipol (gallons)	Custombien (lbs.)
①	21-63	3926	310	176
②	5	80	—	3
③	46	3850	70	144
④	10	150	—	31
⑤	40	360	29	14

Has work been completed as stated on the work order? If your answer is no please explain in detail how the work performed was different from the work order language. Yes,

Areas marked on map bloed as per work order.

Describe the amount of oil remaining (type, size of area and location). Sites ①, ②, ③ were small boulder/cobble/pebble/granule/sand stretches with ▪ surface exposed coat/film/light - patchy moderate residual oiling. Sites ④ ⑤ had similar oiling among slightly larger boulders with firmer surface oil characteristics. Small asphalt chunks removed. Selected flipped rocks exposed heavier residue pockets

Additional Comments (keep objective)
Areas were Custom blended prior to widespread billing., Lower 5' buffer from water line infringed; sprayed within 2' of rising tide. Please see attached reports for incident explanation - 15' buffer from stream observed.

signature C. Kim Strand 7/20 90
Date and time of demobilization from segment 7/20 90, 2000
Shoremon\Demob.bio 55/30/90

ACE 7379262

OG *OG HEYMAN*

SEGMENT ST/ *KN-500*

SUBDIVISION *B*

DATE *7 / 20 /* 90

BIO LOCATION ~~SKETCH~~ MAP

CHECKLIST

- ___ N Arrow
- ___ Approx. Scale
- ___ Seg/Sub Bndy
- ___ 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

Oiled Vegetation

Photo location, direction and number

LEGEND

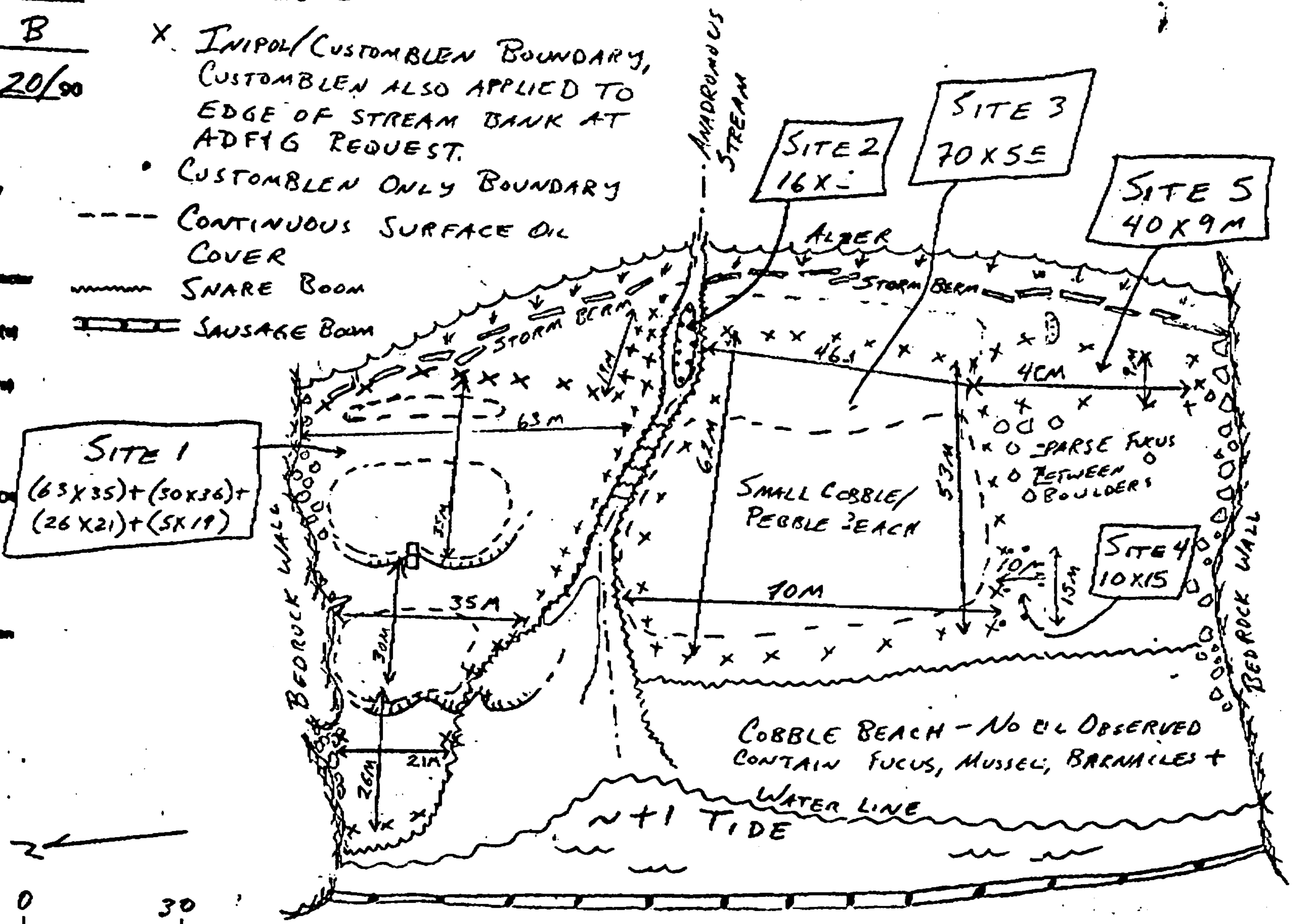
X. INIPOL/CUSTOMBLEN BOUNDARY, CUSTOMBLEN ALSO APPLIED TO EDGE OF STREAM BANK AT ADF&G REQUEST.

• CUSTOMBLEN ONLY BOUNDARY

- - - - CONTINUOUS SURFACE OIL COVER

~~~~ SNARE BOOM

▭▭▭ SAUSAGE BOOM



N

0 30 METERS (APPROXIMATE SCALE)

ACE 7379263 -15

SHORELINE OIL EVALUATION

Date: 6/5/89 Time: 19.40 HRS Observer: G. MACDONALD

Surveyed From: (Foot) (Boat) Helio/Plane Weather: (Sun/Cloud) Rain/Snow/Fog

LOCATION

LOCATION KNIGHT ISLAND. W. COAST. SEGMENT NUMBER KN-500

LENGTH OF SHORELINE SEGMENT: 2680 m

ACCESS: Foot/Vehicle/(Boat)/(Barge)/(Helio)/Float Plane

SHORELINE:

Shoreline Type: SPI/(BEA)/(COV)/(HLD)/STRT Slope: (LANG)/(HANG)/VER (beach; cliffs and headlands.)

Wave Exposure: (High)/(Med)/Low

Sediment: B 10 % / C 10 % / P ___ % / G 10 % / S 5 % / M ___ % / R 65 %

Drift Debris on Beach: (Yes)/No (Supra)/Upper/Mid/Lower Type LOGS

OIL

Degree of Oiling: Heavy/(Moderate)/(Light)/No Oil/Unobserved

Area of Beach Impact: SU / SP / (H / M) / L

Continuous: (Y)/N % of Segment 50+ Width of Band: ≤ 5 m

Sporadic: Y/N % of Segment ____

Est. Oil Thickness where > 1cm: ____ cm Est. Oil Penetration: 0-10 cm

Pooled Oil: ϕ % "Free" Oil: ϕ % (Coated): H ___ % / M 70 % / L 30 %

Fresh ϕ % Mousse ϕ % Tar Formation: 100 %

Drift Debris Oiled ? (Yes)/No (Supra)/Upper/Mid/Lower Amount: H/M/(L) (V. FRESH TAR →)

Comments:

STORMS WILL ERASE > 75% OF THIS OIL; BEACH # 7 IS NOAA TEST SITE - NO DISTURBANCE; EXPOSED ROCKS AND BENCHES MAY HINDER BARGE ACCESS; BEACHES ARE V. PERMEABLE; OIL IS V. FRESH TAR / MATURE MOUSSE; < 0.5 mm THICK & WELL ADHERED TO ROCK.

OILING BECOMES LIGHT IN SOUTHERN SEGMENT

DOCUMENTATION:

Map/Aerial photo marking segment boundaries A Hac' D

VTR: Y/(N) **Tape Number(s)** None

Photography: Y/(N) **Roll Number(s)** SMB-11

Sample Numbers Collected: None

version: 4/24/89

ECOLOGICAL EVALUATION

LOCATION: Knight Is. SITE: SW of Herring Point OBSERVER: SM Barn

LOCATION PREFIX: KN SEG. NO.: 500 LENGTH: 2680 (M)

DATE: 6/5/89 TIME (HHMM): 1940 TIDE HT.: +1 (M)

OILED ZONE: (Splash) (High) (Medium) Low

SUBSTRATUM: (Rocks) (Boulder) (Cobble) (Gravel) (Sand), Mud

LIVE BIOTA

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

Fucus is dense and continuous on rock faces and boulder areas - sparse on gravel areas

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

Dense on boulders, many patches oiled, not gaping, but byssal threads are weak

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

Dense on rocks, coated in oiled zone, most survived coating

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

Dense on several rocky areas - oiled but alive and feeding on Mytilus

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

Not oiled but some living in tidal pools that have oil sheen

OTHER OBSERVATIONS: Tidal pools among the boulders exhibit sheen Pools also contain sea anemones (Anthopleura) that were responsive. Seagrasses (Zostera) seen in subtidal. Small darting fish (Salmon smolts) in subtidal

CLEANUP PRECAUTIONS: Lower FIZ is healthy throughout segment Avoid this area and the streams at beaches 3, 6, and 7

MAMMALS: Otters ___ Harbor Seals ___ Sea Lions ___ Whales ___
Other None

BIRDS: Gulls, Eagles, Not apparently oiled

GENERAL OBSERVATIONS: This segment contains 7 cobble-gravel beaches separated by rocks & rock face. Oil is black & tarry - possibly a transitional phase from mousse to tar. Overall oiling conditions are moderate

ACE 7379267

(version of 4/29/89)

CULTURAL RESOURCE EVALUATION

Date 6-5-89 Location Knight Island - ~~east~~ westside Site _____

Location Prefix KN Segment # 500 Length 2680 m.

Survey Method:

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

Ground X (G - indicate on map)

Known cultural resources (AHRS #) _____ Data Source _____

Oil conditions/beach visibility moderate oil cover ?

Width of beach zone surveyed 10-40 m Tree fringe surveyed 10 m.

Cultural resources observed in beach zone (AHRS code) CMT (just off beach)

Cultural resources observed in tree fringe (AHRS code) CMT

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

Shore Profile Steep rock walls w/ occasional pocket beach w/ gentle grade.

Fresh Water Sources Small streams

Sea Exposure Open to the West

Access/Safety poor access

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

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

Photos: Color Roll # — Frames —

B/W Roll # WA2- Frames 18 – 22

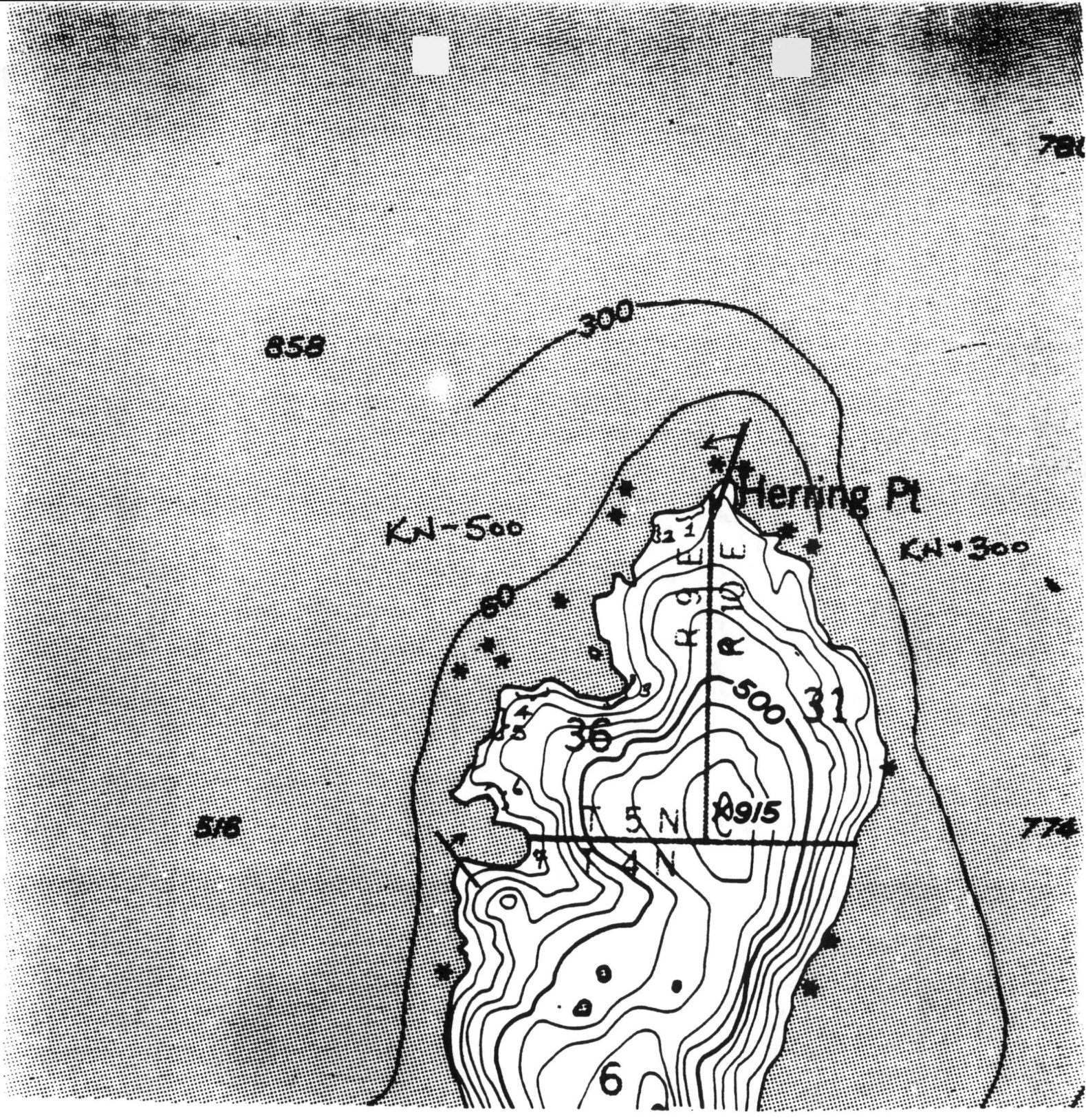
Observer(s) ANDREFSKY

Time survey started 7:50 PM Time survey ended 9:35 PM

Cultural resource considerations/restraints:

IF heretofore unidentified cultural resources are discovered during cleanup contact Exxon archeologists immediately.

ACE 7379268



SEGMENT KN-500

7 beaches;

REGION: PRINCE WILLIAM SOUND

SEGMENT: ST/KN-500

SUBDIVISIONS: A (1 OF 2)

S ELINE EVALUATION

SEGMENT ST/ KN-500 SUBDIVISION A (1 OF 2) DATE 4/7-8/90

SEGMENT ENVIRONMENTAL SENSITIVITIES AND TIME CONSTRAINTS:
1A Salmon stream mouth - fry outmigration (3/1 to 5/15)
1B Salmon stream mouth - spawning (7/10 to 8/31)
5T All bald eagle nests (3/1 to 6/1)-Active eagle nests (3/1 to 9/1)
6Y Recreation: Special use destination
See attached Ecological Constraint sheet for specific constraints and contacts.

SUBDIVISION ECOLOGICAL CONSTRAINTS:
Avoid any unnecessary disturbance or damage to unoiled biota and substrate.

ARCHAEOLOGICAL CONSTRAINTS:
If cultural resources are uncovered during shoreline treatment, stop work in the vicinity, mark the location of the find and contact a member of Exxon's Cultural Resource Program immediately (564-3657; 564-3658 or 564-3276).

SHPO SIGNATURE:_____ DATE:_____

OILING CATEGORIZATION:

Wide 55 m: Medium 210 m: Narrow 1433m: V.Light 478 m: No Oil 0 m
Subsurface Oil Observed: Yes X No____ Maximum Depth 50+ cm

RECOMMENDATIONS:

____No Treatment Recommended	____Snare/Absorbent Booms
_X_Treatment Recommended	____Oil Snares (pom poms)
_X_Manual Pickup	____Absorbents (pads,rolls,etc)
_X_Bioremediation	____Spot Washing:____Wands
_X_Tarmat: _X_Breakup	____ Beach Cleaner
_X_Removal	____Other (see comments)

COMMENTS: Recommended treatment includes 1) manual removal of tarmat, 2) manual pick up of oiled debris and logs, 3) bioremediation of areas shown on attached sketch map. Work should be conducted between 6/1 and 7/10 based on eagle nest and salmon constraints after consultation with ADF&G and USFWS regarding eagle nest.

TAG COMMENTS:_____

TAG APPROVAL DATE:_____
ADEC _____
EXXON _____ FOSC:_____ DATE:_____
NOAA _____
USCG _____

ACE 7379272

FIELD SHORELINE COMMENT SHEET

SEGMENT ST / KN 500 SUBDIVISION: A DATE 4/7-8/90

USCG
NAME W. E. White SIGNATURE William E. White

☐ NO TREATMENT RECOMMENDED ☒ TREATMENT SUGGESTED

COMMENTS

Recommended treatment includes mechnically tilling and washing or other approved method as needed to remove the suface oil, ALSO manual pickup of broken asphalt pavement.

ADEC
NAME Dianne Munson SIGNATURE Dianne Munson

☐ NO TREATMENT RECOMMENDED ☒ TREATMENT SUGGESTED

COMMENTS primarily bedrock cliff with many pebble, cobble boulder beaches. substrate of beaches was primarily granule. In all beaches but two residual subsurface oil was observed (black oil surfaced in pits interstitial water. The oil was most often buried with pebble / granule from 10-20 cm. The oil got increasingly thicker with increased depth. The subsurface oil smelled like "crude". Surface oiling consisted of coats, asphalt / pavement and tar balls. The beaches contain large amounts of potentially mobile oil if beach unbuilds. Recommended treatment includes mechanically tilling and washing or other approved method as needed to remove the sub surface oil.

LAND MANAGER
NAME David Mandrella SIGNATURE David Mandrella

☐ NO TREATMENT RECOMMENDED ☒ TREATMENT SUGGESTED

COMMENTS Impacted areas in this segment include a consistent band f broken, patchy and sporadic coats along bedrock and boulder horeline. Heavy subsurface oiling exists in majority of low angle obble and pebble beaches. Pits 4 and 5 have oil layers that have been uried by pebble and granule layers. Asphalt pavement exists ear pits 11, 15 and just north of 19. Recommended treatments include manual pickup of broken asphalt pavement and tarballs. Beach coves ith heavily affected subsurface layers may benefit by manual or nechanical disruption of sediments [illegible]

ACE 7379273

SHORELINE OILING SUMMARY

REVISION NO. [illegible]

OG Sawyer USCG White SEGMENT ST/ KN500
BIO Benson LAND REP Mandrella (FS) SUBDIVISION A (1of2)
EXXON Katsimpalis ADEC Munson TIME 16:00 to 09:30
TEAM NO.: 8 TIDE LEVEL: See #6 Comments DATE Apr. 7&8 /90
EST. SUBDIVISION LENGTH: 2409 m ☑ Sun ☐ Clouds ☐ Fog ☐ Rain ☐ Snow
UPLANDS DESCRIPTION: ☐ Grass ☑ Forest ☑ Rock snow
SURVEYED FROM: ☑ Foot ☑ Boat ☐ Helo WORKING DIRECTION: N to S
SURFACE SEDIMENTS: R 60 % B 10 % C 20 % P 10 % G 0 % S 0 % M 0 % V 0 %
SLOPE: Lang 30 % Hang 10 % Vert 60 % WAVE EXPOSURE: ☐ Low ☐ Med ☑ High
OIL CATEGORY LENGTH: W 50 m M 189 m N 1565 m VL 605 m NO 0 m

SURFACE OIL

CHARACTER	DISTRIBUTION				OIL / FILM COLOR					IMPACTED ZONES			
	/C	/B	/P	/S	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	SU	UI	MI	U
ASPHALT PAVEMENT		/		/	/			/			/		
POOLED													
COVER													
COAT		/	/	/		/		/			/	/	
STAIN													
MOUSSE													
PATTIES													
TARBALLS				/		/					/		
FILM				/				/			/	/	
NO OIL										/			/

PAVEMENT: H F (S) 30 sq. m by 10 cm
PATTIES / TARBALLS 1 BAGS
NEAR SHORE SHEEN? NO SR RW SL TL

OILED DEBRIS	AMOUNT SM	MD	LG
Logs		/	
Vegetation			
Trash			
Debris			

DEBRIS COLLECTED ☑ YES ☐ NO
TYPE rope
#BAGS 1

Photographs:
Roll No. ST-8-2
Frames 25-34

SUBSURFACE OIL

PIT NO.	PIT DEPTH (cm)	SUBSURFACE OIL CHARACTER					OILED INTERVAL (cm-cm)	BELOW		OIL / FILM COLOR					PIT ZONE				ANA	SUBSURFACE SEDIMENTS
		OP	OR	OL	OF	NO		UO	UG	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	SU	UI	MI	U		
1	20		/		✓		10 - 20	/		✓							/		N	B, C, G
2	30					/	- - -		/								/		N	P, G
3	20				/		- - -		/								/		N	C, P, G
4	35		/				20 - 35	/		/							/		N	P, G
5	40		/				15 - 40	/		/							/		N	P, G
6	35					/	- - -		/								/		N	P, G, B

COMMENTS ST/KN-500A: Pits 4+5 have oil layers that have been buried by "sheets" of pebbles and granules.
- This (Sub-) segment was examined from 16:00 to 19:30 on Apr. 7 and from 08:30 to 10:30, Apr. 8. The tide levels +5.5 to +0.5 of +0.1 to +6.0, respectively.

ACE 7379274

Page 1 of ____ REVIEWED JW DATE 4/11/90

SHORELI[N] OILING SUMMARY (PAGE 2 of 7) REVISION 03/22/90

SEGMENT ST/ KN500 SUBDIVISION A

SUBSURFACE OIL (CONTINUED)

PIT NO.	PIT DEPTH (cm)	SUBSURFACE OIL CHARACTER					OILED INTERVAL (cm-cm)	BELOW		OIL / FILM COLOR						PIT ZONE				ANA	SUBSURFACE SEDIMENTS
		OP	OR	OL	OF	NO		UO	UC							SU	UI	MI	LI		
7	35		✓				10 - 35	✓		✓							✓			N	P, C, G
8	60					✓	– · –		✓								✓			N	P, B
9	35				✓		– · –		✓	✓							✓			N	P, wt
10	50		✓		✓		10 - 50	✓		✓								✓		N	C, P, G
11	50		✓				0 - 10		✓	✓							✓			N	P
12	50		✓				15 - 30		✓	✓								✓		Y	C, P, G, wt
13	30					✓	– · –		✓								✓			N	P, G, wt
14	25					✓	– · –		✓										✓	N	P, C
15	35		✓		✓		0 - 35	✓		✓							✓			N	P, G, wt
16	30					✓	– · –		✓								✓			N	P, G
17	20					✓	– · –		✓									✓		N	C, P, G
18	30					✓	– · –		✓								✓			N	P, G
19	60		✓		✓		10 - 50		✓	✓	✓							✓		N	P, G, wt
20	55		✓		✓		10 - 25		✓		✓							✓		N	P, G

COMMENTS ST/KN-500A: Pit 12 had a peat layer buried by about 40cm of pebbles and granules. The base of the peat layer extends below the bottom of the pit (50+cm). H_2S smell was noted.

– Pits 15 and 16 were dug on either side of a small anadromous (?) stream. A clean shovel was used to disrupted the stream bed and no sheens were observed.

– Pit 20 had a peat layer about 15cm thick and buried to a depth of 35cm. Its possible that the layer was a log.

ACE 7379275

REVIEWED JW DATE 4/11/90

SHORELINE ECOLOGICAL SUMMARY

REVISION: 03/22/90

Segment ST / KN500 Subdivision A (1 of 2) Date (mo / day / yr) 4/7 - 4/8/90

4/7: 1610-1945

Time (24 hr) 0835-0930 Biologist John Benson

(A) Substrate type and % of segments:
(1) Bedrock 60 (2) Boulder 10 (3) Cobble 20 (4) Pebble 10 (5) Sand Ø (6) Silt Ø

(B) Overall % cover of biota (% of segment): Dense 30 Moderate 50 Low 20

(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-8-2
Frames 25-32: 4/7
33-34: 4/8

BARNACLES

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

MYTILUS

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

GASTROPODS

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

Wildlife Observations/ General Comments:
cormorants
dead sea otter (unoiled)

Ecological Considerations:
Sensitivities: 5T-2 (eagle nests)
6Y (special use)
1B (salmon stream)

High gastropod densities were observed primarily in the tidepools which are abundant in this subdivision. Mytilus and Fucus together form a complete cover of the mid-tide level bedrock substra in many areas.

ACE 7379277

OG Sawyer

SEGMENT ST/KN500

SUBDIVISION A

DATE Apr. 18 90

CHECKLIST

- ___ N Arrow
- ___ Approx. Scale
- ___ Seg/Sub Body
- ___ 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

Oiled Vegetation

1 ●→ Photo location, direction, and number

SKETCH MAP

large protective crack with ~2m wide band of fresh CT/S

Remove Solvent Rags Saturated

ST-8-2-26

ST-8-2-27+28

Bio Here

Knight Island

Low angle cobble and pebble beach w/ ~1m wide band of CT/S

FL/S

ST-8-2-30

~9X6m AP/S/B

TB/S and FL/S

Breakup Tarmat

Breakup + Remove Tarmat

AP/S/B ~15m²

stream

Oiled logs - medium amount

ST-8-2-32

Low angle boulder and pebble beach

Low angle cobble beach with CT/S

CT/S

ST-8-2-29

ST-8-2-31

Bio Here Rake Area

CT/S Otter remains

Otter or Seal remains

Low angle Cobble beach with CT/S in upper intertidal

Remove Oil/Vegetation

Oiled Vegetation

Southern Margin of ST/KN500A

Breakup Tarmat

AP/S/S ~15m²

CT/P

CT/S

TB/S

CT/B

Low angle Pebble and Granule beach with FL/S

ST-8-2-33

ST/KN500B

ST-8-2-34

CT/B

Knight Island Passage

Bedrock Cliff

0 100 200 300m

ACE 7379276

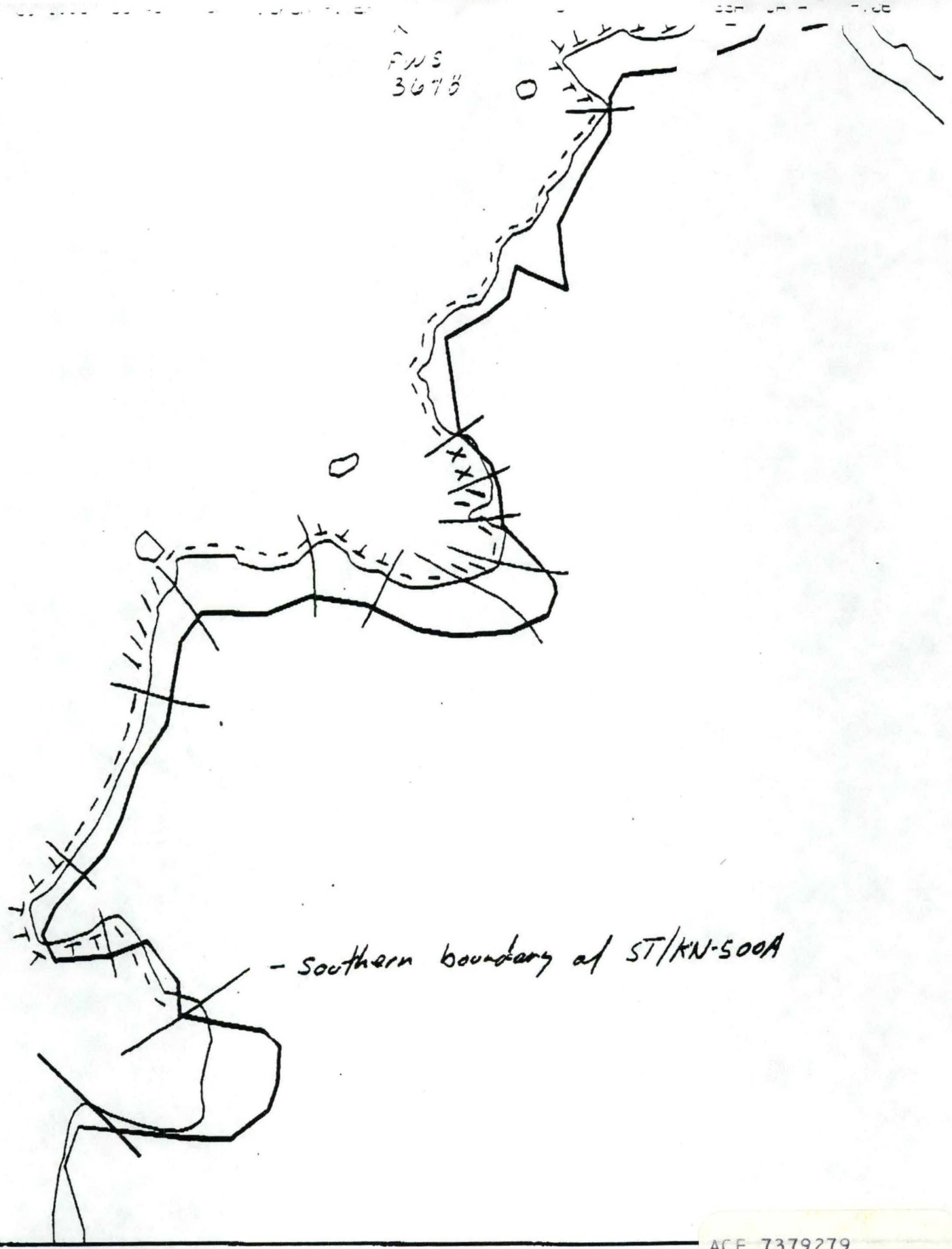
Oil Character Length (m): AP 20 PO — CV — CT 1750 ST — MS — PT — TB 10 FL 300 NO —

REVISION: 03/24/98

PWS, SEWARD A HOMER ECOLOGICAL CONS AINTS

1A	**Salmon stream mouth - fry outmigration (3/1 to 5/15)**	
1B	**Salmon stream mouth - spawning (7/10 to 8/31)**	
	No disturbance of stream bed or banks unless authorized by ADF&G. No beach flushing into stream drainage. No bioremediation or other chemical application within 100m of stream. Contact ADF&G Habitat Division prior to treatment for permits.	
1C	**Salmon fry nursery area (4/31 to 7/31)**	
1D	**Esther Hatchery release (4/15 to 6/1)**	
1E	**Main Bay Hatchery release (4/20 to 5/10)**	
1F	**Sawmill Bay Hatchery release (4/15 to 6/1)**	
1G	**Cannery Creek Hatchery release (4/21 to 6/1)**	
1H	**Remote release site**	
1I	**Gill net area (6/7 to 8/31)**	
1J	**Purse seine area (7/20 to 9/30)**	
1K	**Purse seine hook-off (7/20 to 9/30)**	
1L	**Set net sites (6/11 to 7/25)**	
	For Codes 1C through 1L contact ADF&G for specific dates, locations and constraints.	
2M	**Herring spawning (4/1 to 6/15)**	
	Restrict boat traffic to essential minimum. Avoid damage to unoiled intertidal and subtidal algae and seagrass. Contact ADF&G for specific dates and locations.	
3N, 3P	**Harbor seal and sea lion pupping (5/15 to 7/1)**	
3O, 3Q	**Harbor seal and sea lion molting (8/15 to 9/15)**	
	Restrict boat and air traffic to essential minimum. No personnel within 400m. Aircraft to maintain 800m horizontal and 300m vertical distance from haulouts.	
5R	**Seabird colony (5/1 to 9/1)**	
	Restrict air traffic to essential minimum. No personnel within 800m. Aircraft to maintain 800m horizontal, 300m vertical distance. Contact ADF&G and USFWS prior to treatment.	
5S	**Shorebird/waterfowl concentration (4/1 to 5/15)**	
	Restrict all activity to essential minimum, especially air traffic.	
5T	**All Bald Eagle nests (3/1 to 6/1)**	
	Active Bald Eagle nests (3/1 to 9/1)	
	Restrict air traffic to essential minimum. No personnel within 400m 3/1 to 6/1. Air approach and takeoff from and to seaward only; maintain 800m horizontal, 300m vertical distance from nests. Contact USFWS prior to treatment for confirmation of dates.	
6U	**Recreation:**	**Tent sites (6/1 to 9/15)**
6V		**Anchorages (6/1 to 9/15)**
6W		**Forest Service cabins (6/1 to 9/15)**
6X		**Lodge (6/1 to 9/15)**
6Y		**Special use destination**
7Z	**Subsistence area:**	**Salmon harvesting (5/1 to 9/30)**
7HH		**Finfish harvesting**
7II		**Deer harvesting (8/15 to 2/28)**
7JJ		**Invertebrate harvesting**
	For Codes 7Z through 7JJ contact ADF&G and Chenega Corporation for specific dates, locations, and constraints.	

ACE 7379278



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

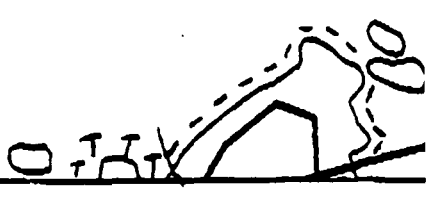
KN-500A

ADEC Segment Length: 2554m

0 100 200 300
METERS

ACE 7379279

Map Key: PWS-367a
Name: Sawyer
Date: Apr. 8, 1990
Data Entered:



↓ 367A

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

KN-500

ADEC Segment Length: 2554m

0 100 200 300

Map Key: PWS-367b
Name: Sawyer
Date: Apr. 8, 1990
Date Entered:

ACE 7379260 -/S

Processed 4/19

RECEIVED
APR 17 1990
DEPT. OF
ENVIRONMENTAL CONSERVATION

REGION: PRINCE WILLIAM SOUND

SEGMENT: ST/KN-500

SUBDIVISIONS: B (2 OF 2)

gravel wash
till
remove all logs

Lance, Mark & Morrison visited this location on April 12th and we concurred in need for thorough gravel washing operation. Should be tilled and thoroughly dredged and washed.

S RELINE EVALUATION

SEGMENT ST/ KN-500 SUBDIVISION B (2 OF 2) DATE 4/8/90

SEGMENT ENVIRONMENTAL SENSITIVITIES AND TIME CONSTRAINTS:
1A Salmon stream mouth - fry outmigration (3/1 to 5/15)
1B Salmon stream mouth - spawning (7/10 to 8/31)
5T All bald eagle nests (3/1 to 6/1)-Active eagle nests (3/1 to 9/1)
6Y Recreation: Special use destination
See attached Ecological Constraint sheet for specific constraints and contacts.

SUBDIVISION ECOLOGICAL CONSTRAINTS:
Avoid any unnecessary disturbance or damage to unoiled biota and substrate.

ARCHAEOLOGICAL CONSTRAINTS:
If cultural resources are uncovered during shoreline treatment, stop work in the vicinity, mark the location of the find and contact a member of Exxon's Cultural Resource Program immediately (564-3657; 564-3658 or 564-3276).

SHPO SIGNATURE:_____ DATE:_____

OILING CATEGORIZATION:

Wide 306 m: Medium 72 m: Narrow 0 m: V.Light 0 m: No Oil 0 m
Subsurface Oil Observed: Yes X No____ Maximum Depth 25+ cm

RECOMMENDATIONS:

____No Treatment Recommended	____Snare/Absorbent Booms
_X_Treatment Recommended	____Oil Snares (pom poms)
_X_Manual Pickup	____Absorbents (pads,rolls,etc)
_X_Bioremediation	____Spot Washing:____Wands
_X_Tarmat: _X_Breakup	____ Beach Cleaner
_X_Removal	____Other (see comments)

COMMENTS: Recommended manual pick up of tarmats, oiled debris, trash and oiled logs (>10% coverage). Bioremediation of areas indicated on sketch map. Treatment should be conducted after 5/15 due to fry out-migration and USFWS must be contacted prior to treatment due to eagle nesting constraints in area.

TAG COMMENTS:_____

TAG APPROVAL DATE:_____
ADEC _____
EXXON _____ FOSC:_____ DATE:_____
NOAA _____
USCG _____

ACE 7379282

FIELD SH(LINE COMMENT SHEET

SEGMENT ST / KN-500 SUBDIVISION: B DATE 4-8-90

USCG

NAME W.E. WHITE SIGNATURE [signature]

☐ NO TREATMENT RECOMMENDED ☒ TREATMENT SUGGESTED

COMMENTS

Treatment suggested: Removal of oiled Log's - debris/Trash - dredge and wash also manual removal of oil - tilling and flushing of heavily impacted area.

ADEC

NAME Dianne Munson SIGNATURE [signature]

☐ NO TREATMENT RECOMMENDED ☒ TREATMENT SUGGESTED

COMMENTS Primarily sand, pebble, cobble beach. The beaches surface (500 sq. meters) is continuous asphalt/pavement. The subsurface has continuous residual oil. Oiling occurs on both sides of the anadromous stream. A clean shovel was used to dig into the stream, oil sheen was observed. An oiled log is in the stream. Debris and trash observed. An observation noted on the included map suggests that sediments are being deposited from low i.t.z. uppwards and burying the asphalt/pavement. Strongly suggest further treatment. Further T.A.G. evaluation suggested. Recommended treatment includes remov of oiled log, remove debris/trash, till and wash or dredge and wash.

LAND MANAGER

NAME David Mandrella SIGNATURE [signature]

☐ NO TREATMENT RECOMMENDED ☒ TREATMENT SUGGESTED

COMMENTS

An anadromous stream flows through the central portion of this subdivision. Extremely large areas of asphalt pavement exists in mid, upper, and lower intertidal zones. Subsurface oil exists up to depths of 25 cm. Residual oil exists in pits excavated adjacent to stream and digging within stream bed created a sheen. Treatments recommended include manual and/or mechanical tilling and flushing of heavily impacted areas along with placement of sansorb boom to intercept sheens. Ecologically important area warrants further monitoring

REVISION NO. 08/01/89

ACE 7379283

SHOI..INE OILING SUMMARY

REVISION NO. 03/22/90

OG Sawyer USCG White SEGMENT ST/ KN500
BIO Benson LAND REP Mandrella (FS) SUBDIVISION B (2072)
EXXON Katsimpalis ADEC Munson TIME 08:00 to 10:30
TEAM NO.: 8 TIDE LEVEL: +1.0 to +6.0 DATE Apr 18 /90
EST. SUBDIVISION LENGTH: 300 m ☑ Sun ☐ Clouds ☐ Fog ☐ Rain ☐ Snow
UPLANDS DESCRIPTION: ☐ Grass ☑ Forest ☐ Rock SNOW
SURVEYED FROM: ☑ Foot ☐ Boat ☐ Helo WORKING DIRECTION: E to W
SURFACE SEDIMENTS: R 30 % B 20 % C 20 % P 30 % G 0 % S 0 % M 0 % V 0 %
SLOPE : Lang 70 % Hang 0 % Vert 30 % WAVE EXPOSURE: ☑ Low ☐ Med ☐ High
OIL CATEGORY LENGTH: W 200 m M 100 m N 0 m VL 0 m NO 0 m

SURFACE OIL

CHARACTER	DISTRIBUTION /C	/S	/P	/R	OIL / FILM COLOR SHN/BR	DBL/RW	DY/SL	DBR/TL	LBR	IMPACTED ZONES SU	UI	MI	LI
ASPHALT PAVEMENT	/			/	/	/					/	/	/
POOLED													
COVER	/		/			/					/		
COAT			/	/		/					/	/	
STAIN													
MOUSSE													
PATTIES													
TARBALLS													
FILM			/	/		✓					/	/	/
NO OIL										/			

PAVEMENT: H F S 500 sq. m by 15 cm
PATTIES / TARBALLS 0 BAGS
NEAR SHORE SHEEN? NO BR (RW) SL TL

OILED DEBRIS	AMOUNT SM	MD	LG
Logs		/	
Vegetation		/	
Trash	/		
Debris			

DEBRIS COLLECTED ☑ YES ☐ NO
TYPE rope
#BAGS 1

Photographs:
Roll No. ST-8-2
Frames 35-36

SUBSURFACE OIL

PIT NO.	PIT DEPTH (cm)	SUBSURFACE OIL CHARACTER OP	OR	OL	OF	NO	OILED INTERVAL (CM-CM)	BELOW UO	UC	OIL / FILM COLOR SHN/BR	DBL/RW	DY/SL	DBR/TL	LBR	PIT ZONE SU	UI	MI	LI	ANA	SUBSURFACE SEDIMENTS
* 1	25		/		✓		0-25	/		✓							/		N	P, G, S, wt
2	20		/		✓		0-20	/		✓						/			N	C, P, G, wt
3	25		/		✓		0-15		/	/		✓				/			N	C, P, G, wt
* 4	30		/		✓		0-15		/	/		✓				/			N	P, G
5	35		/		✓		0-10		/	/						/			N	C, P, G
6	25		/		✓		0-5		/	/	✓					/			N	C, P, G, S, wt

COMMENTS
* oiled interval <5cm does not constitute subsurface oil inpits* 1 & 4

ACE 7379284

REVIEWED JW DATE 4/11/90

OG Sawyer

SEGMENT ST/ KN-500

SUBDIVISION B

DATE Apr 18 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

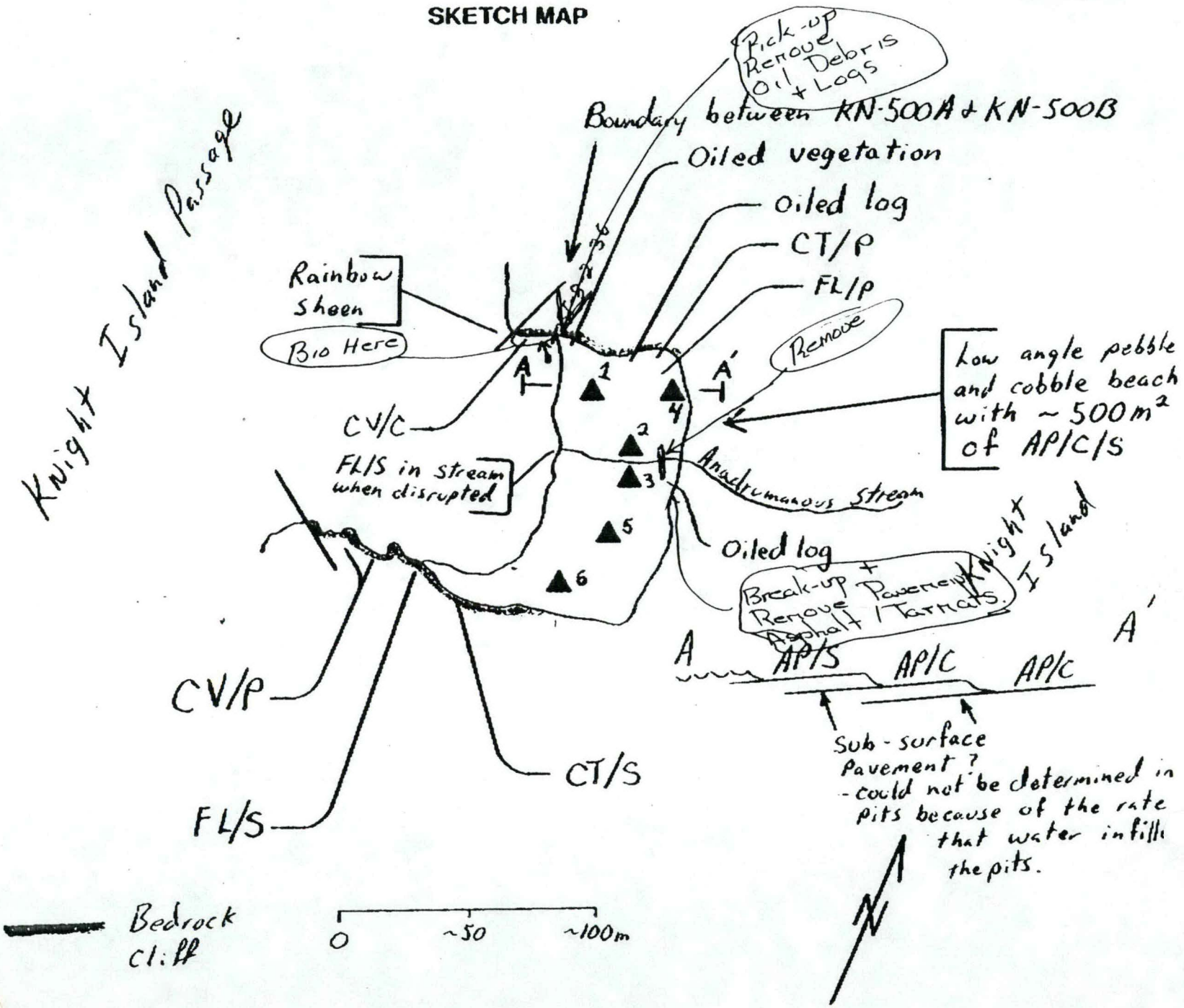
CT/P Patchy Distribution

CT/S Splashed Distribution

Oiled Vegetation

1 ●→ Photo location, direction, and number

SKETCH MAP



ACE 7379285

Oil Character Length (m): AP 100 PO ○ CV 30 CT 80 ST ○ MS ○ PT ○ TB ○ FL 60 NO ○

REVISION: 03/04/90

SHORELI ECOLOGICAL SUMMARY

REVISION: 02/28/90

Segment ST / KN500 Subdivision B (2 of 2) Date (mo / day / yr) 4/8/90

Time (24 hr) 0930-1045 Biologist John Benson

(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 50 Low 30

(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-8-2
Frames 35-36

BARNACLES LOW INTERTIDAL COULD NOT BE OBSERVED

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	X	2	2	
3	3	3	3	3	3	3	X	3	X	3	3	NOT PRESENT
4	4	4	4	4	4	4	X	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	2	2	2	X	2	X	2	2	
3	3	3	3	X	3	3	3	3	3	3	3	NOT PRESENT
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	

GASTROPODS

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

Wildlife Observations/ General Comments:
harbor seal (Phoca vitulina)
bald eagle (adult - Haliaeetus leucocephalus)
LOW INTERTIDAL COULD NOT BE OBSERVED

Ecological Considerations:
Sensitivities: 5T-2 (eagle nests)
6Y (special use)
1B (salmon stream)

Any potential plan for oil removal/treatment in this subdivision should consider the effects of the treatment on the mussels in the cobble-pebble beach and on the gastropods in the cobble-boulder beds. The species diversity here was moderate (perhaps due to the paucity of tidepools), but the abundance of molluscs is high (in the mid-tide level)

[redacted] - fry outmigration (5/1 to 6/15)
[redacted] - spawning (7/15 to 8/31)
No disturbance of stream bed or banks unless authorized by ADF&G. No beach flushing into stream drainage. No bioremediation or other chemical application within 100m of stream. Contact ADF&G Habitat Division prior to treatment for permits.

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

1D Esther Hatchery release (4/15 to 6/1)

1E Main Bay Hatchery release (4/20 to 5/10)

1F Sawmill Bay Hatchery release (4/15 to 6/1)

1G Cannery Creek Hatchery release (4/21 to 6/1)

1H Remote release site

1I Gill net area (6/7 to 8/31)

1J Purse seine area (7/20 to 9/30)

1K Purse seine hook-off (7/20 to 9/30)

1L Set net sites (6/11 to 7/25)
For Codes 1C through 1L contact ADF&G for specific dates, locations and constraints.

2M Herring spawning (4/1 to 6/15)
Restrict boat traffic to essential minimum. Avoid damage to unoiled intertidal and subtidal algae and seagrass. Contact ADF&G for specific dates and locations.

3N, 3P Harbor seal and sea lion pupping (5/15 to 7/1)
3O, 3Q Harbor seal and sea lion molting (8/15 to 9/15)
Restrict boat and air traffic to essential minimum. No personnel within 400m. Aircraft to maintain 800m horizontal and 300m vertical distance from haulouts.

5R Seabird colony (5/1 to 9/1)
Restrict air traffic to essential minimum. No personnel within 800m. Aircraft to maintain 800m horizontal, 300m vertical distance. Contact ADF&G and USFWS prior to treatment.

5S Shorebird/waterfowl concentration (4/1 to 5/15)
Restrict all activity to essential minimum, especially air traffic.

5T All Bald Eagle nests (3/1 to 6/1)
Active Bald Eagle nests (3/1 to 9/1)
Restrict air traffic to essential minimum. No personnel within 400m 3/1 to 6/1. Air approach and takeoff from and to seaward only; maintain 800m horizontal, 300m vertical distance from nests. Contact USFWS prior to treatment for confirmation of dates.

6U Recreation: Tent sites (6/1 to 9/15)

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

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

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

6Y Special use destination

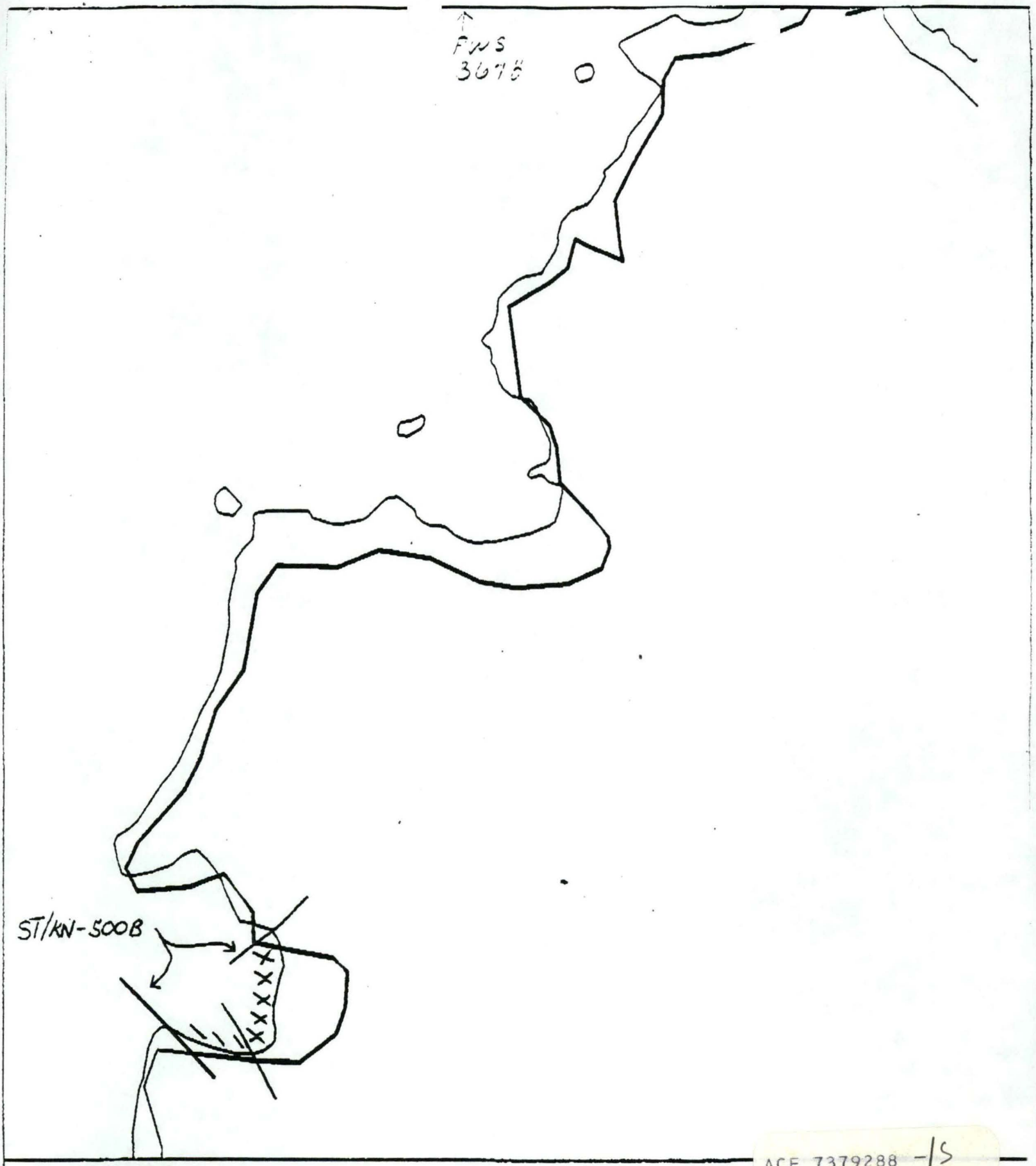
7Z Subsistence area: Salmon harvesting (5/1 to 9/30)

7HH Finfish harvesting

7II Deer harvesting (8/15 to 2/28)

7JJ Invertebrate harvesting
For Codes 7Z through 7JJ contact ADF&G and Chenega Corporation for specific dates, locations, and constraints.

ACE 7379287



ACE 7379288 -15

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

KN-500B

ADEC Segment Length: 2554m

0 100 200 300
METERS

Map Key: PWS-367a
Name: Sawyer
Date: Apr. 8, 1990
Data Entered:

AJW

Pre-ANADSCAT-90

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: 4-12-90

4 START TIME: 1225

5 STOP TIME: 1235

6 SEGMENT #: KN500SB

7 STATION #:

8 K-UNIT:

9 STAT AREA:

10 LAT:

11 LONG:

12 SOURCE: (Map) Loran

13 LOCATION: KNIGHT IS.

14 DESCRIPTION: OUTSIDE COAST PEN. HERRING BAY

15 HIGH TIDE TIMES: /

16 HIGH TIDE HTS: /

17 LOW TIDE TIMES: /

18 LOW TIDE HTS: /

19 TIDE HT AT SURVEY:

Ebb Slack Flood Slack

20 USCG QUAD:

21 TEAM RECORDER: R. Gustin

22 OBSERVERS: 1 pilot

23 AGENCY: ADFG HAB

24 PHOTOS TAKEN: Y (N)

Roll #: Frame:

25 VIDEO TAKEN: Y (N) TAPE#:

Start: End:

26 SAMPLES TAKEN? Y (N) Number

Oil

Sediment

Biological

Water

EXTENT OF OIL

	SHORELINE L	W	M²	%	STREAM L	W	M²	%
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) AJW

37 CATALOG #: 226-10-16996 AJW

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: Everywhere

43 ANADROMOUS FISH PRESENT? Y N

44 ANADROMOUS FISH OBSERVATION

Species	Aerial	Ground

COMMENTS: A disaster -

Thick oil everywhere.

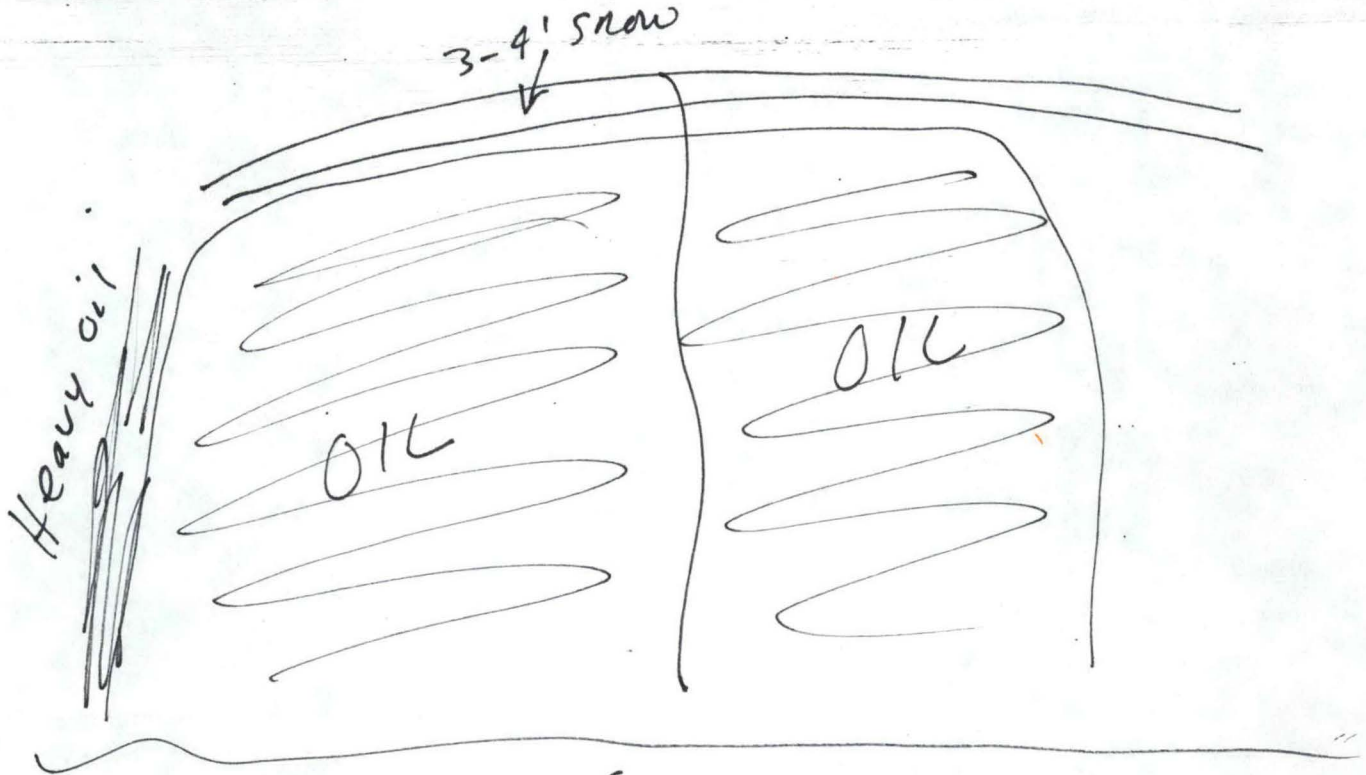
(Dredge)

ACE 7379289 +/S

45 PHOTOLOG

FRAME(S)	DESCRIPTION

46 OIL DISTRIBUTION DIAGRAM



4-12-90

KN500S
226-10-16996 AJW

Sample taken
Photo frame # and
shot direction.

ACE 7379290 -15

ADF&G WINTER STREAM SURVEY FORM

Shoreline Segment No: KN 500 Stream Catalog No: NOT CATALOGED
Geographic Location: SOUTHERN POINT OF MOUTH OF HERRING BAY
Date: 1-4-90 Start Time: 1145 End Time: 1229
Observers: TOM CROWE, VINCE MATHEWS DNR
Low Tide: (time and height) 1243 PM
High Tide: 703 PM

SHORELINE DIMENSIONS AT STREAM SITE

Intertidal Zone: 85 METERS
Area to Right of Stream: 40 METERS
Area to Left of Stream: 70 METERS
Wave Exposure: HIGH ____ MEDIUM X LOW ____

SHORELINE TYPE

Steep Bedrock ____ Low Angle Bedrock ____ Gravel (0.1 to 2 inch dia) X Cobble (2 to 10 inch) ____ Boulder (>10 inches) ____
Other ____

STREAM CHARACTERISTICS

Length through Intertidal Zone: 1000 METERS
Average Width: 1 METER
Channel/Bed Configuration:
Single Channel X Multiple Channels ____ Number ____
Note: (see diagram attached)

BIOLOGICAL OBSERVATIONS

6 DEER SPOTTED ON THIS BEACH WITH MANY TRACKS.

ACE 7379291 +/S

CHARACTERISTICS OF OIL DEPOSITS

DEPOSIT A
Distance from Stream [illegible]
Surface Area _____
Thickness 6" TO [illegible]
Penetration Depth 6" TO 24"
Tar X Asphalt _____
Mousse _____ Stain _____
% Coverage of Deposit [illegible]
Tidal Zone [illegible]
Comments: [illegible]
INTERTIDAL ZONE

DEPOSIT B SNOW
Distance from Stream _____
Surface Area _____
Thickness _____
Penetration Depth _____
Tar _____ Asphalt _____
Mousse _____ Stain _____
% Coverage of Deposit _____
Tidal Zone _____
Comments: SNOW COVERED
UNABLE TO DETERMINE [illegible]

DEPOSIT C
Distance from Stream _____
Surface Area _____
Thickness _____
Penetration Depth _____
Tar _____ Asphalt _____
Mousse _____ Stain _____
% Coverage of Deposit _____
Tidal Zone _____
Comments: _____

DEPOSIT D
Distance from Stream _____
Surface Area _____
Thickness _____
Penetration Depth _____
Tar _____ Asphalt _____
Mousse _____ Stain _____
% Coverage of Deposit _____
Tidal Zone _____
Comments: _____

DEPOSIT E
Distance from Stream _____
Surface Area _____
Thickness _____
Penetration Depth _____
Tar _____ Asphalt _____
Mousse _____ Stain _____
% Coverage of Deposit _____
Tidal Zone _____
Comments: _____

DEPOSIT F
Distance from Stream _____
Surface Area _____
Thickness _____
Penetration Depth _____
Tar _____ Asphalt _____
Mousse _____ Stain _____
% Coverage of Deposit _____
Tidal Zone _____
Comments: _____

PHOTOGRAPHIC EVIDENCE

VIDEO
Cassette No. [illegible]
Photographer [illegible]
Beginning Footage 0
Ending Footage 280

35 MM
Roll Number _____
Photographer _____
Frame Numbers _____

Polaroid
Number of Prints _____
Photographer _____

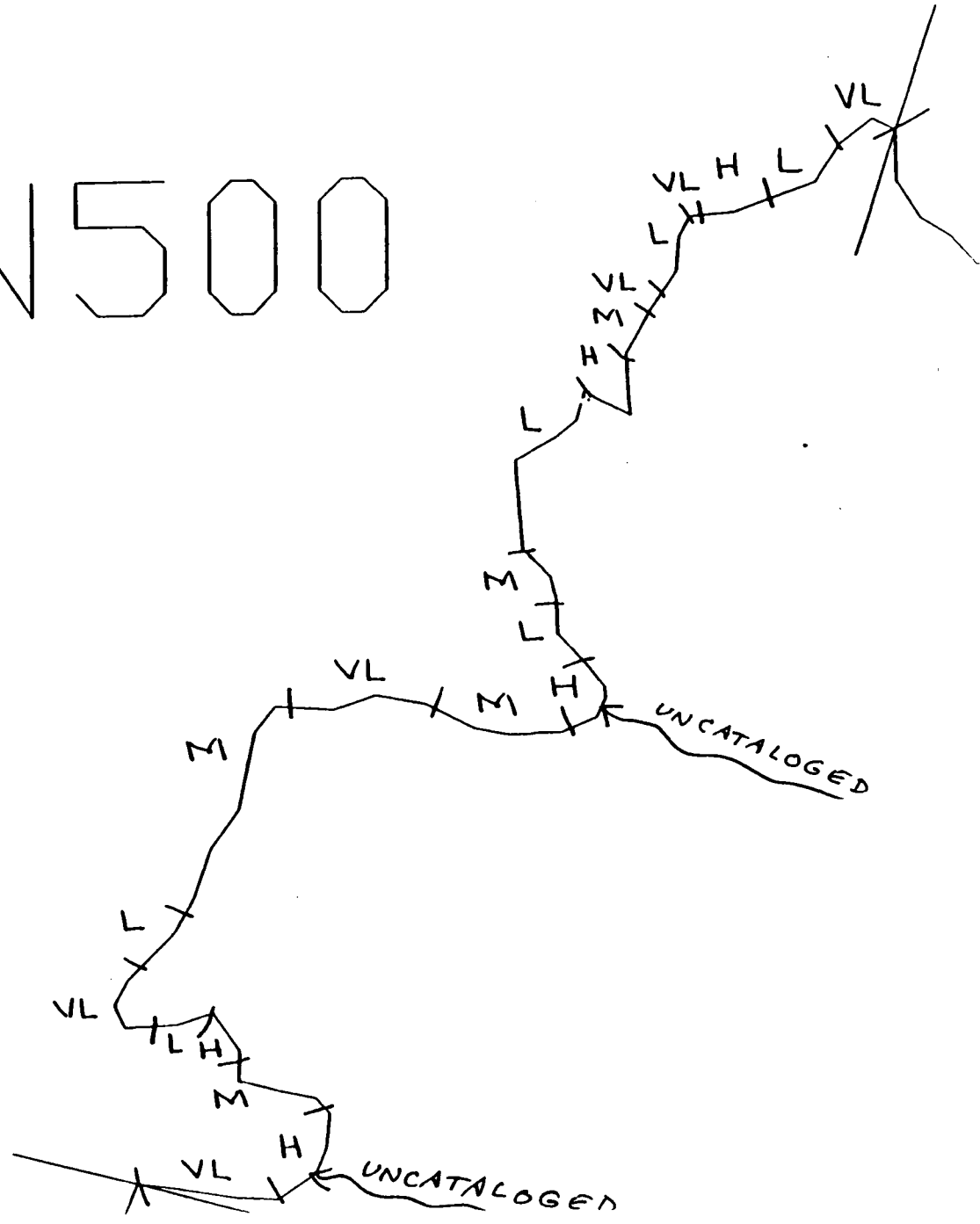
KN500

OILING
H = Heavy M = Moderate L = Light VL = Very Light N = None NS = Not Surveyed
Distance In Meters

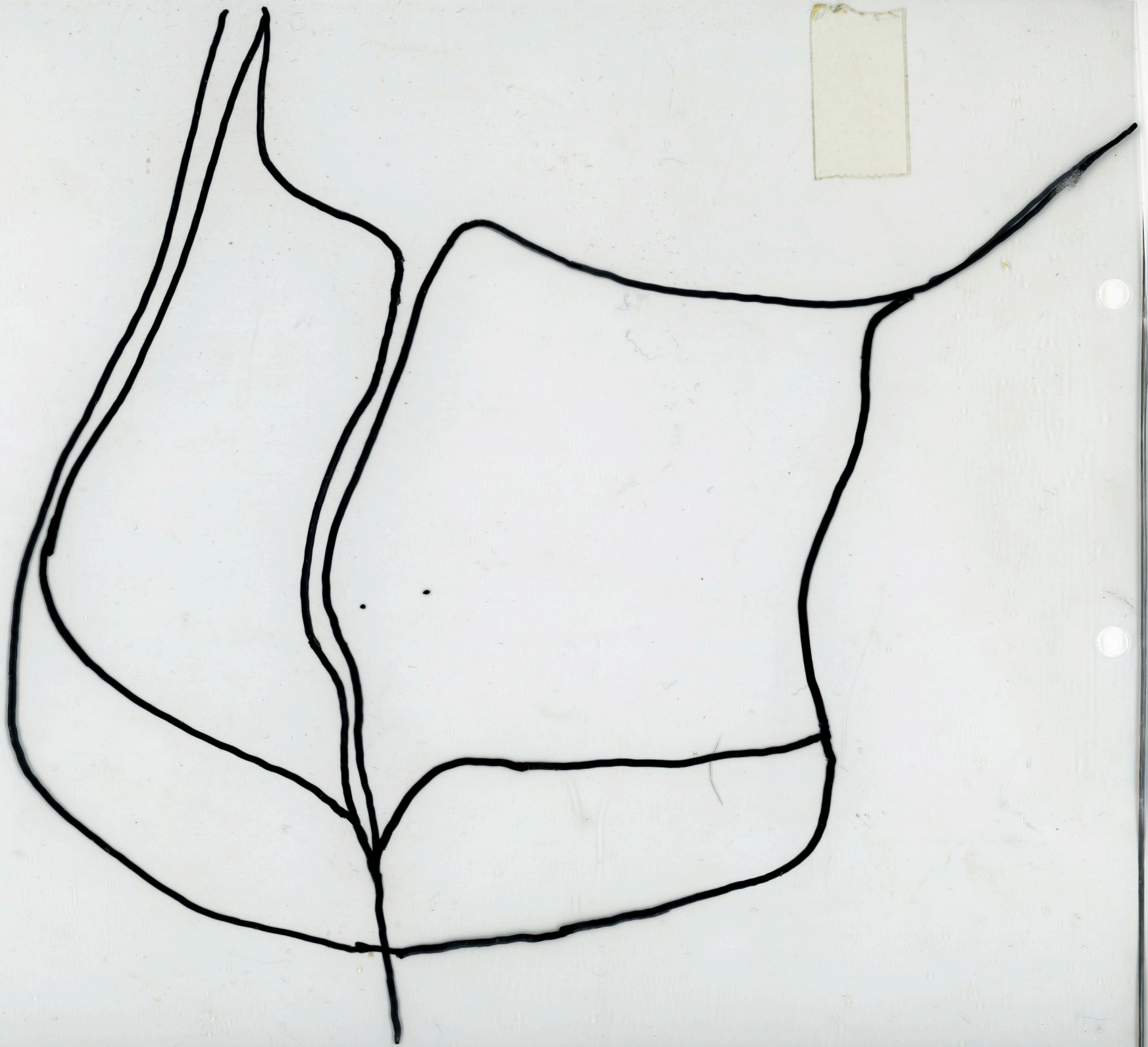
N

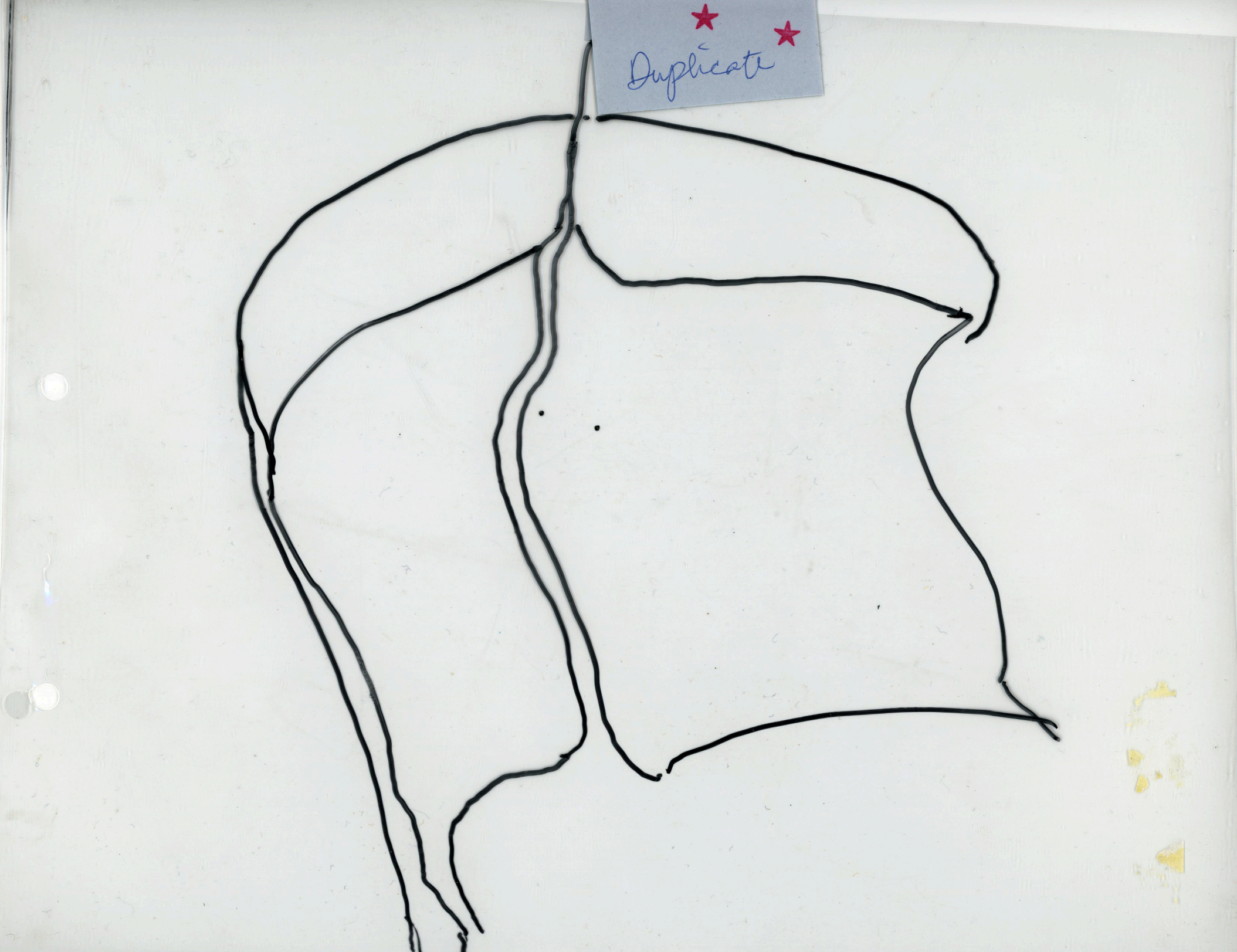
ADEC Sep/Oct 1989 Survey

0 meters 500



ACE 7379293




Duplicate

THE FOLLOWING ACE NUMBER(S) HAVE BEEN DESTROYED.

7379294 **THROUGH** ←

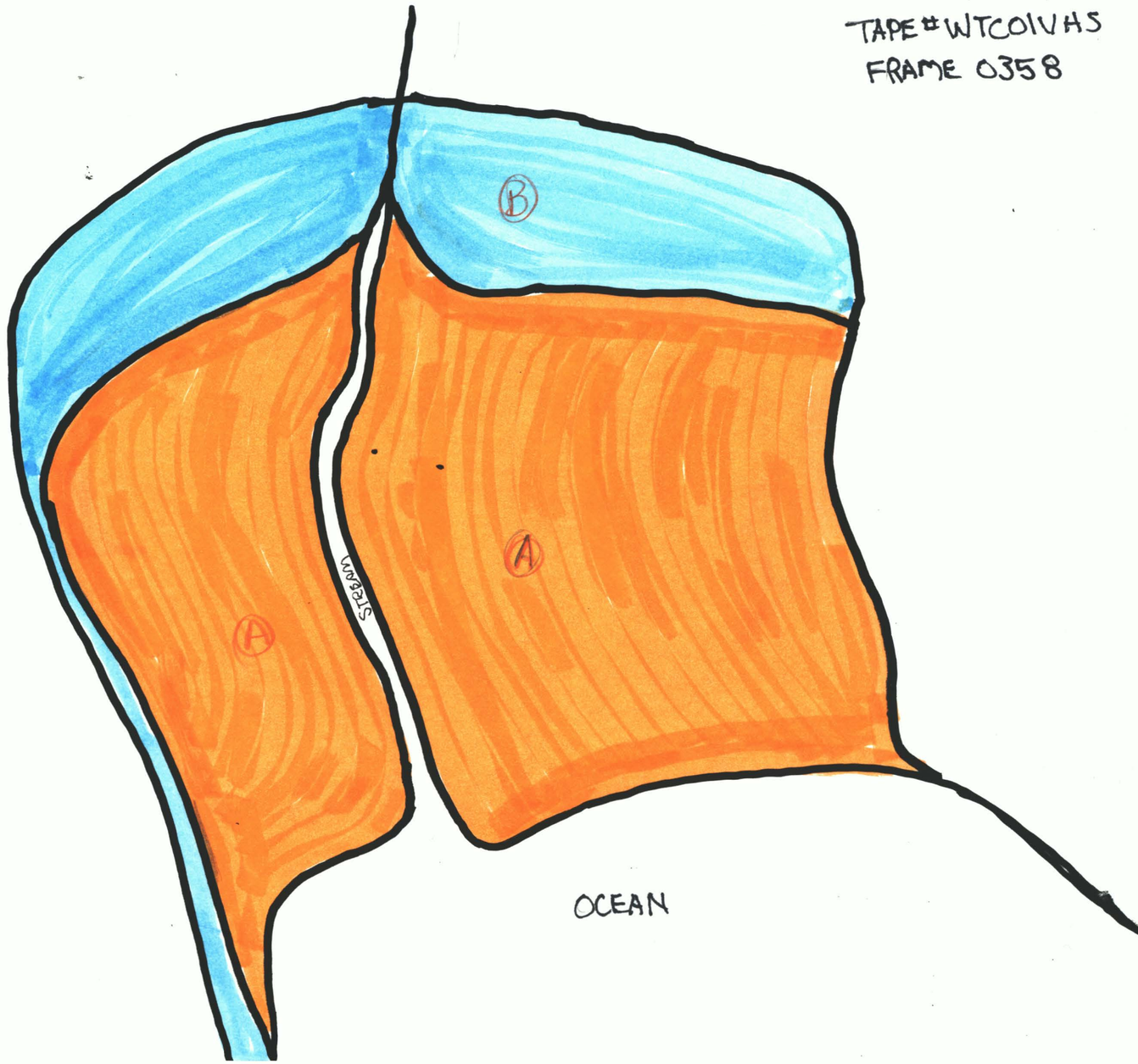
ACE 7379295

TAPE # WTC01VHS
FRAME 0358

→ HEAVY

→ SNOW

HERRING BAY
KN-500
NO ASC #
1-4-90



SCALE