[Shoreline evaluations, 1991].

Kodiak K1007 PB 016 to K1009 DB 003

SHORELINE EVALUATION

SEGMENT ST/K10-7-PB-016 SUBDIVISION A (1 OF 1) DATE 5/2/90

SEGMENT ENVIRONMENTAL SENSITIVITIES AND TIME CONSTRAINTS:
1A Salmon stream mouth - fry outmigration (4/1 to 7/31)
1B Salmon stream mouth - spawning (7/15 to 9/10; PEAK 8/15)
4QQ State Marine Park National Wildlife Refuge
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 treatment is planned, **a cultural resource evaluation is required prior to shoreline treatment.**

SHPO SIGNATURE: Rachel Jean Orr DATE: 5/18/90

OILING CATEGORIZATION:

Wide 0 m: Medium 0 m: Narrow 0 m: V.Light 30 m: No Oil 1148 m
Subsurface Oil Observed: Yes____ No X Maximum Depth_____

RECOMMENDATIONS:

X No Treatment Recommended	_____Snare/Absorbent Booms
_____Treatment Recommended	_____Oil Snares (pom poms)
_____Manual Pickup	_____Absorbents (pads,rolls,etc)
_____Bioremediation	_____Spot Washing:_____Wands
_____Tarmat Removal	_____Beach Cleaner
	_____Other (see comments)

COMMENTS: _____

TAG COMMENTS: _____

TAG APPROVAL DATE: 5/17/90
ADEC Art Weiner Art Weiner
EXXON Andy Teal _____ FOSC: _____ DATE: 5-24-90
NOAA Gary Petrae Gary Petrae
USCG G.A. Reiter G.A. Reiter

Monitor assess this subdivision in Conjunction with work conducted in Area.

OG Alaska

SEGMENT ST/ K10-7-PD-16

SUBDIVISION K10-7- PD-16A

DATE 5 / 2 90

SKETCH MAP

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

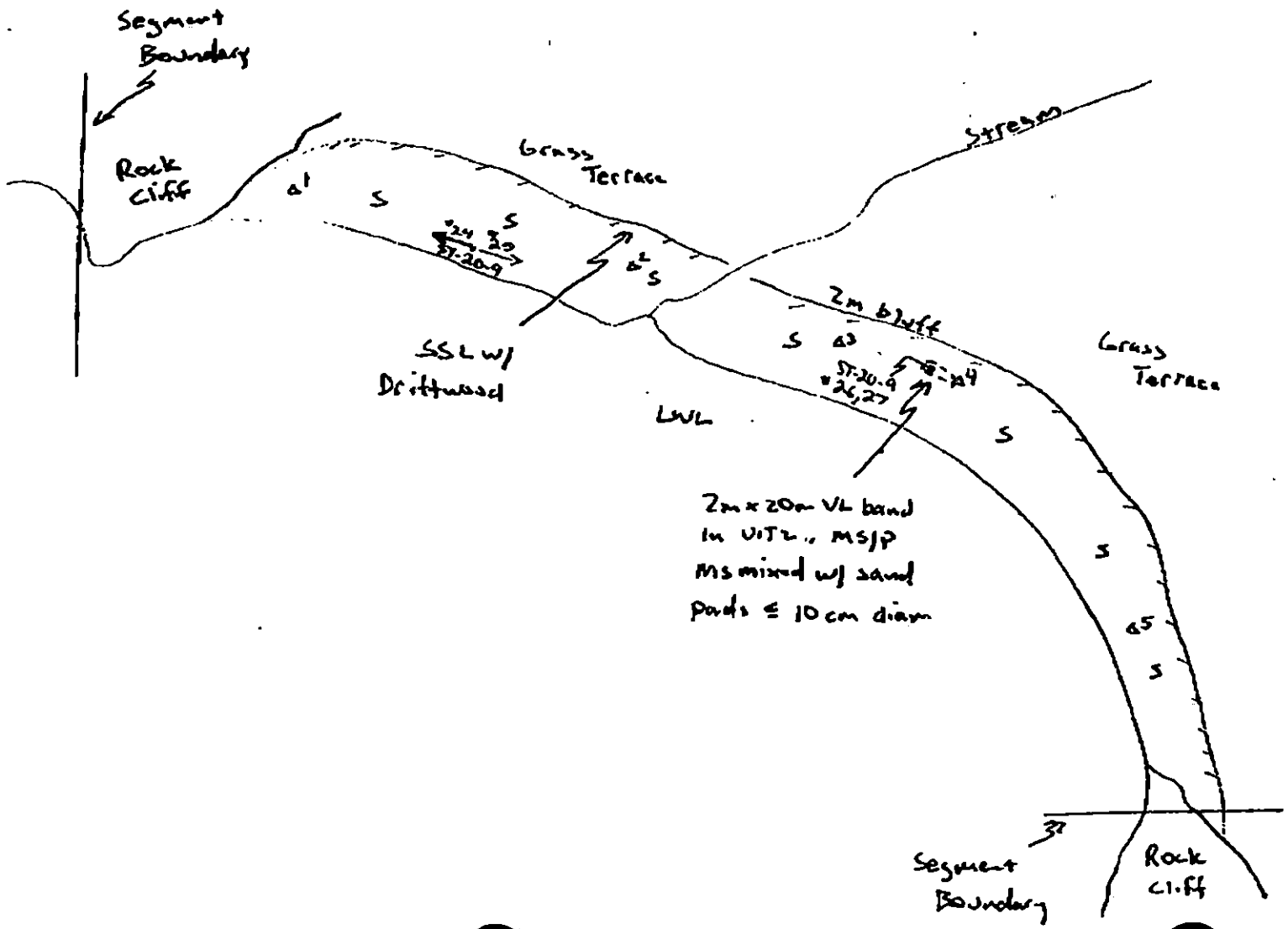
CT/S

Splashed Distribution

Oiled Vegetation

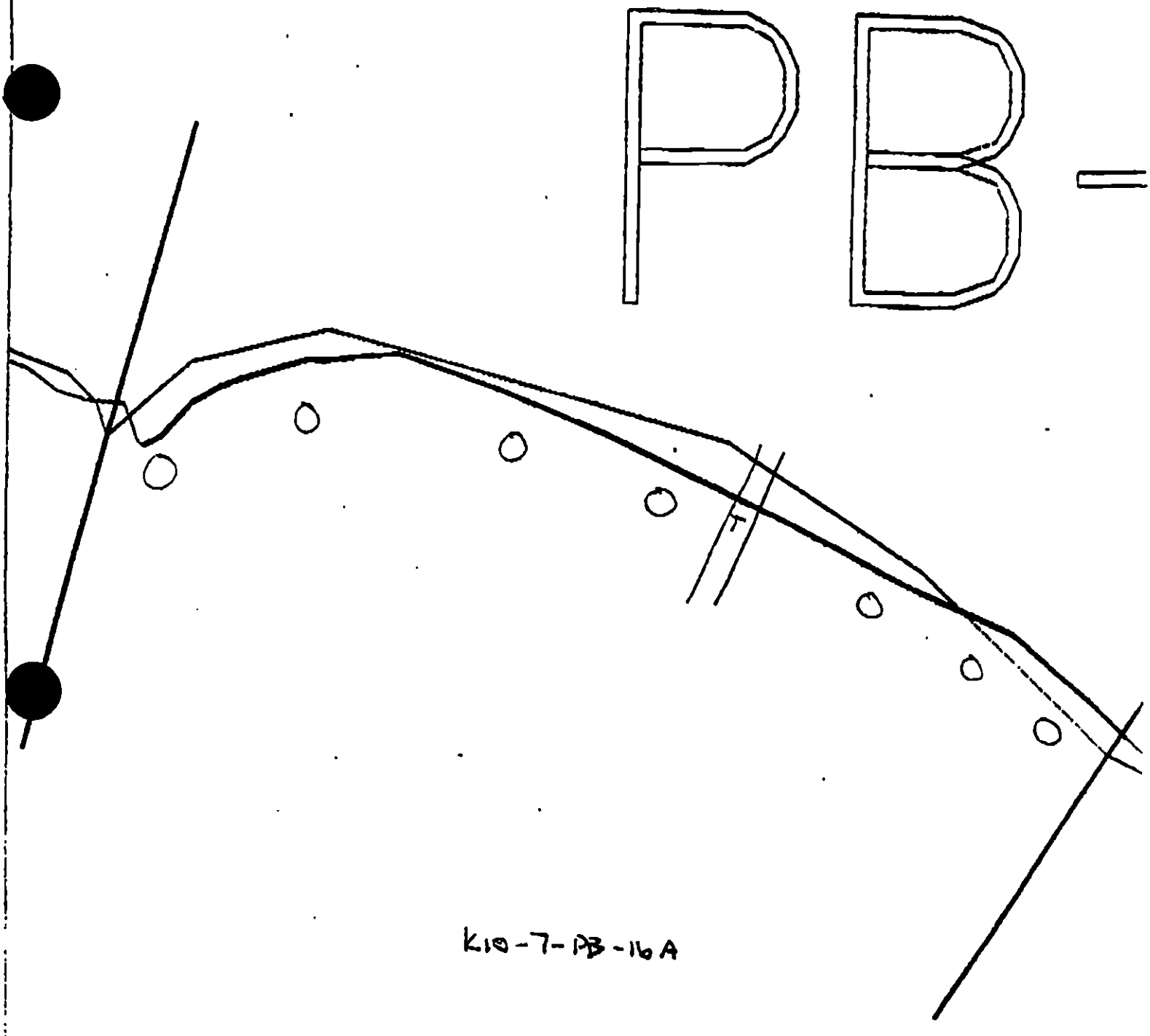
1 ⟶

Photo location, direction, and number



Oil Character (Width (m)): AP 0 PO 0 CV 0 CT 0 ST 0 MS 20 0 TB 0 FL 0 NO [illegible] 21.3

PB-



K10-7-PB-16A

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

PB-16

Approx. Segment Length: 1206m

0 100 200 300
METERS

K10-7-PB-16A
Map Key: AKP-PB-16a
Name: Aston
Date: 5-4-90
Date Entered:

REGION: KODIAK

SEGMENT: ST/K10-7-PB-016

SUBDIVISIONS: A (1 OF 1)

SHORELINE EVALUATION

SEGMENT ST/K10-7-PB-016 SUBDIVISION A (1 OF 1) DATE 5/2/90

SEGMENT ENVIRONMENTAL SENSITIVITIES AND TIME CONSTRAINTS:
1A Salmon stream mouth - fry outmigration (4/1 to 7/31)
1B Salmon stream mouth - spawning (7/15 to 9/10; PEAK 8/15)
4QQ State Marine Park National Wildlife Refuge
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 treatment is planned, **a cultural resource evaluation is required prior to shoreline treatment.**

SHPO SIGNATURE:_____ DATE:_____

OILING CATEGORIZATION:

Wide 0 m: Medium 0 m: Narrow 0 m: V.Light 30 m: No Oil 1148 m
Subsurface Oil Observed: Yes____ No X Maximum Depth_____

RECOMMENDATIONS:

X No Treatment Recommended	_____Snare/Absorbent Booms
_____Treatment Recommended	_____Oil Snares (pom poms)
_____Manual Pickup	_____Absorbents (pads,rolls,etc)
_____Bioremediation	_____Spot Washing:_____Wands
_____Tarmat Removal	_____Beach Cleaner
	_____Other (see comments)

COMMENTS: _____

TAG COMMENTS:_____

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

KODIAK ECOLOGICAL CONSTRAINTS

1A **Salmon stream mouth - fry outmigration (4/15 to 7/31)**
1B **Salmon stream mouth - spawning (7/15 to 9/10; PEAK 8/15)**
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 without authorization from ADF&G. No use of methods which might affect nearshore oil or toxicity levels, such as hot water wash or Inipol application, unless authorized by ADF&G. Treatment which is not intrusive and which will not affect nearshore oil or toxicity levels, such as manual removal, can probably proceed without adherence to time constraints. In any case, contact ADF&G prior to treatment for consultation and/or permit application.
AGENCY CONTACT PERSON: ADF&G Ken Middleton 267-2299

1C **Salmon fry nursery area (4/31 to 7/31)**
No use of methods which might affect nearshore oil or toxicity levels, such as hot water wash or Inipol application, unless authorized by ADF&G. Treatment which will not affect nearshore oil or toxicity levels, such as manual or mechanical removal, can probably proceed without adherence to time constraints. Contact ADF&G prior to treatment for confirmation and advice.
AGENCY CONTACT PERSON: ADF&G Larry Peltz 424-3214

1D **Kotoi Bay Hatchery release**
Pink salmon - late May, early June; Chum salmon - June; Sockeye salmon - early July.

1H **Remote release site**
No use of methods which might affect nearshore oil or toxicity levels, such as hot water wash or Inipol application, unless authorized by ADF&G. Treatment which will not affect nearshore oil or toxicity levels, such as manual or mechanical removal, can probably proceed without adherence to time constraints. Contact ADF&G for confirmation and authorization.
AGENCY CONTACT PERSON: ADF&G Larry Peltz 424-3214

1I **Gill net area**
1J **Purse seine area**
Mainland, West side Kodiak, Shuyak & Moser/Olga Bay (6/9 to 10/1)
East side Kodiak, East side Afognak (7/4 to 10/1)
1K **Purse seine hook-off**
1L **Set net sites**
Contact ADF&G for confirmation - dates and locations may vary. Restrict boat and air traffic to essential minimum. When set net sites are present (1L) restrict beach operations to essential minimum as authorized by ADF&G. If plans for treatment include methods such as hot water wash or Inipol application which might affect nearshore oil or toxicity levels, contact ADF&G for consultation and authorization.
AGENCY CONTACT PERSON: ADF&G Larry Nicholson 424-4791

2M **Herring spawning (4/15 to 6/30)**
Contact ADF&G for confirmation - dates and locations may vary. Restrict boat traffic to essential minimum. Avoid damage to unoiled intertidal and subtidal algae and seagrass. If plans for treatment include methods such as hot water wash or Inipol application which might affect nearshore oil or toxicity levels, contact ADF&G for consultation and authorization.
AGENCY CONTACT PERSON: ADF&G Larry Nicholson 486-4791

[redacted] **Harbor seal and sea lion pupping (5/10 to 7/1)**
[redacted] **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. No application of Inipol within two weeks of arrival dates (work window at these sites is limited to 7/2 to 7/31). Contact ADF&G and USFWS prior to treatment for confirmation.
AGENCY CONTACT PERSON: US National Marine Fisheries Service Steve Zimmerman 586-7235
ADF&G Don Calkins 267-2403

5R **Seabird colony (5/1 to 9/1)**
Restrict air and boat traffic to essential minimum. No personnel within 800m. Aircraft to maintain 800m horizontal, 300m vertical distance from colony. Contact USFWS prior to treatment.
AGENCY CONTACT PERSON: USFWS Jill Parker 786-3377

5S **Shorebird/waterfowl concentration (4/1 to 5/15)**
Restrict all activity to essential minimum, especially air traffic. Contact USFWS and ADF&G for confirmation.
AGENCY CONTACT PERSON: USFWS Jill Parker 786-3377
ADF&G Tom Rothy 267-2206

5T **All Bald Eagle nests (3/1 to 6/1)**
Active Bald Eagle nests (3/1 to 9/1)
Restrict air traffic and all disturbance 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.
AGENCY CONTACT PERSON: USFWS Jill Parker 786-3377

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 (6/1 to 9/30)**
7H **Finfish harvesting**
[redacted] **Deer harvesting (8/1 to 1/7)**
[redacted] **Invertebrate harvesting**
[redacted] **Bear harvesting (4/1 to 5/15 and 10/25 to 11/30)**
Contact ADF&G and appropriate Native Corporation for specific dates, locations, and constraints. Restrict boat and air traffic and beach disturbance to essential minimum. If plans for treatment include methods such as hot water wash or application of Inipol which might affect intertidal or nearshore oil or toxicity levels, contact ADF&G and appropriate Native Corporation for authorization - see Native Corporation Contact List for each Native Corporation's contact person.
AGENCY CONTACT PERSON: ADF&G Jim Fall 267-2359

FIELD SHORELINE COMMENT SHEET

SEGMENT ST / K10-7 PB-16 SUBDIVISION: K10-7-P13-16A DATE 5-2-90

CG
NAME D.D. Haven Jr, LCDR, USCGR SIGNATURE D.D. Haven Jr

☒ NO TREATMENT RECOMMENDED ☐ TREATMENT SUGGESTED
COMMENTS

ADEC
NAME Francine J. Bennis SIGNATURE Francine J Bennis

☐ NO TREATMENT RECOMMENDED ☑ ~~TREATMENT~~ SPOT CHECK SUGGESTED
COMMENTS

Observed 15-20 mousse patties in UITE on sandy beach. Collected most of them. Due to the changeable nature of this beach, it's possible more patties are present but not visible. I recommend a 'spot check' by any clean-up crew in Puale Bay area, particularly in a 300 meter stretch east of Helen Creek (anadromous).

LAND MANAGER
NAME ~~JOHN P. HARRISON~~ SIGNATURE John P. Harrison USFWS

~~☐ NO TREATMENT RECOMMENDED ☐ TREATMENT SUGGESTED~~
COMMENTS

Did not observe this beach due to assignment at same time on other segments. However, I do concur with the ADEC representative. This beach should be observed again to further determine nature of further contamination.

REVISION NO. 03/21/90

OG [redacted]

SEGMENT ST/ K10-7-PD-16

SUBDIVISION K10-7- PD-16A

DATE 5 / 2 90

SKETCH MAP

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

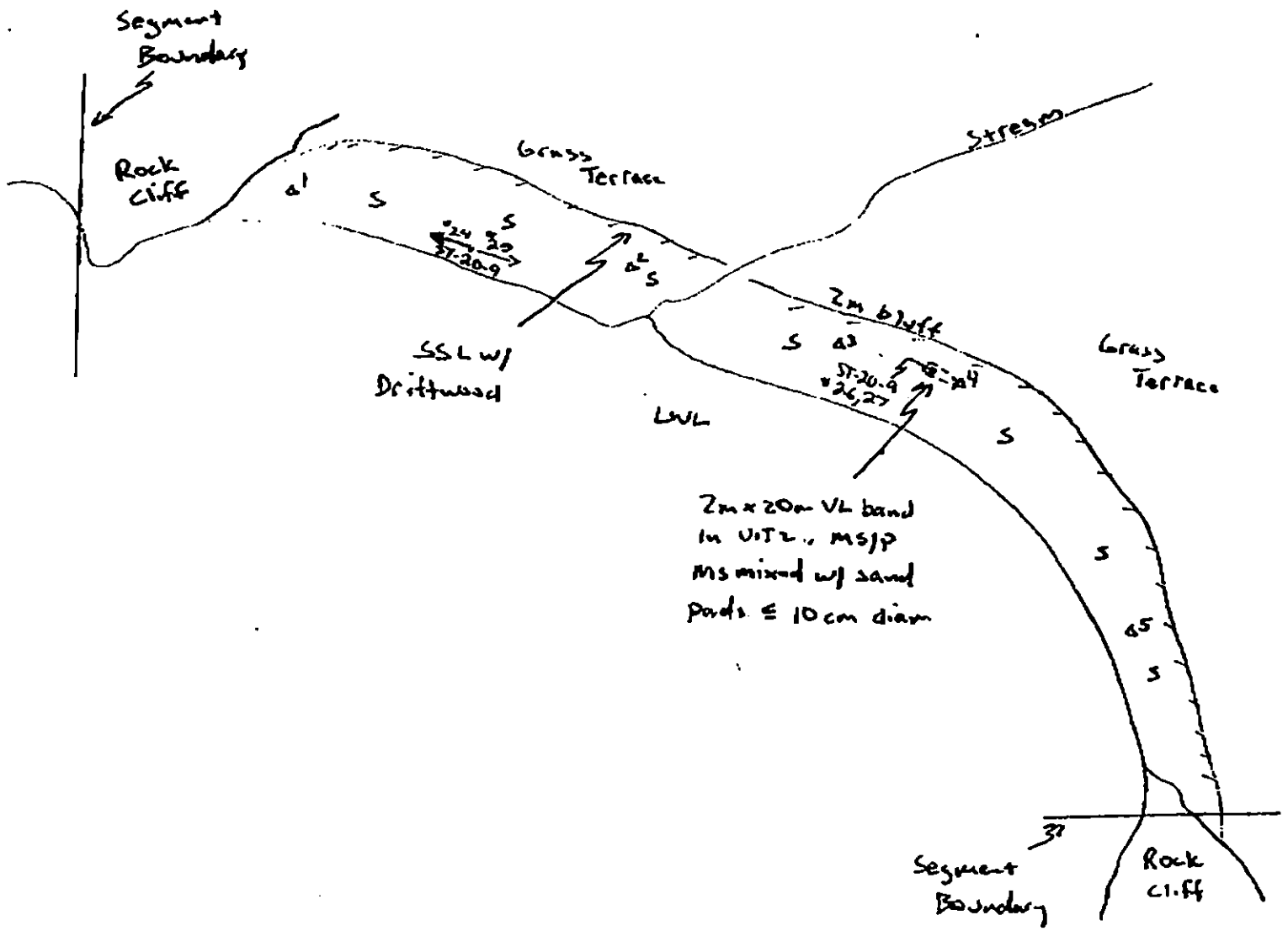
CT/B
Broken Distribution

CT/P
Patchy Distribution

CT/S
Splashed Distribution

Oiled Vegetation

1 ⇔
Photo location, direction, and number



Oil Character Length (m): AP 0 PO 0 CV 0 CT 0 ST 0 MS 20 PT 0 TB 0 FL 0 NO [redacted] | 21.3

REVISION

SHORELINE OILING SUMMARY

REVISION NO. 04/13/90

OG Acton USCG Haven SEGMENT ST/ KIG-7-PB-1L
BIO Davis LAND REP NPS Trooper (for views) SUBDIVISION KIG-7-PB-16A (1 OF 1)
EXXON Avery ADEC Bennis TIME 2 :45 to 3 :45
TEAM NO. 20 TIDE LEVEL +2 to +1 DATE 5 / 2 / 90
EST. SUBDIVISION LENGTH: ~~1000~~ m 1233 ☐ Sun ☐ Clouds ☐ Fog ☒ Rain ☐ Snow
UPLANDS DESCRIPTION: ☒ Grass ☐ Forest ☒ Rock
SURVEYED FROM: ☒ Foot ☐ Boat ☐ Helo WORKING DIRECTION: W to E
SURFACE SEDIMENTS: R - % B - % C 5 % P 5 % G 5 % S 85 % M - % V - %
SLOPE : Lang 90 % Hang - % Vert 10 % WAVE EXPOSURE: ☐ Low ☒ Med ☐ High
OIL CATEGORY LENGTH: W - m M - m N - m VL 20 m NO ~~430~~ 1213 m

SURFACE OIL

CHARACTER	DISTRIBUTION				OIL / FILM COLOR					IMPACTED ZONES			
	C	B	P	R	BRN/BLK	RW	SL	TL	SHN	SU	UI	MI	LI
ASPHALT PAVEMENT													
POOLED													
COVER													
COAT													
STAIN													
MOUSSE			✓				✓				✓		
PATTIES													
TARBALLS													
FILM													
NO OIL										✓		✓	✓

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 SM	MD	LG
Logs			
Vegetation			
Trash			
Debris			

DID YOU COLLECT DEBRIS?
YES ☒ NO ☐
TYPE mousse pads
#BAGS 1

Photographs:
Roll No. ST-20-9
Frames 24 - 27

SUBSURFACE OIL

PIT NO.	PIT DEPTH (cm)	SUBSURFACE OIL CHARACTER					OILED INTERVAL (cm-cm)	BELOW		OIL / FILM COLOR					PIT ZONE				ANA	SHEEN (Y/N)	▼	SURFACE-SUBSURFACE SEDIMENTS
		OP	OR	OL	OP	MO		UO	UC	BRN/BLK	RW	SL	TL	SHN	SU	UI	MI	LI				
1	20			.		✓	-		✓							✓						S,R
2	40					✓	-		✓							✓					✓	S
3	40					✓	-		✓							✓					✓	S
4	60					✓	-		✓							✓					✓	S
5	40					✓	-		✓							✓					✓	S
							-															

COMMENTS Segment is a sandy beach. VL mousse/sand pads were observed. Some of these pads were collected.

REVIEWED BAT DATE 5MAY90

SHORELINE ECOLOGICAL SUMMARY

REVISION: 03/22

Segment ST / K10-7 Subdivision PB-16 Date (mo / day / yr) 5/2/90

Time (24 hr) 14:45 Biologist H. Davis

(A) Substrate type and % of segments:
(1) Bedrock — (2) Boulder 5 (3) Cobble 5 (4) Pebble 5 (5) Sand 85 (6) Silt —

(B) Overall % cover of biota (% of segment): Dense — Moderate — Low 100% (1%)

(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-20-9
Frames 24 - 27

BARNACLES a few dense patches at the western end of the segment 2x4 meter max

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
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

NOT PRESENT 3,4,5,6

MYTILUS None seen

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
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

NOT PRESENT 1,2,3,4,5,6

GASTROPODS No littorines in the area. A few (2-4) limpets. A few Nucella.

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
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

NOT PRESENT 3,4,5,6

FUCUS Seen in the wrack, none found growing on the segment.

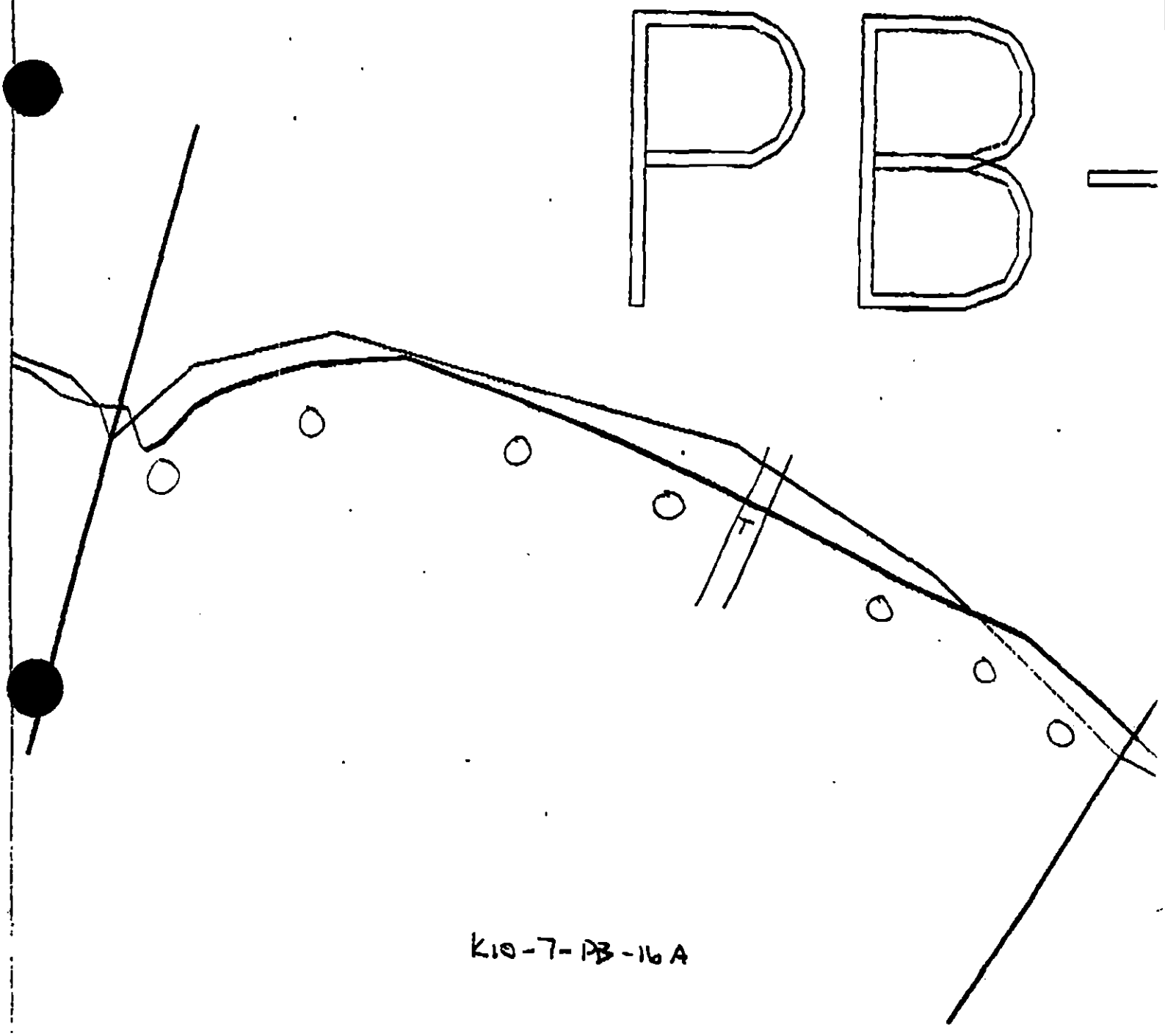
Dense			Moderate			Sparse			Rare		
1U	1M	1L	1U	1M	1L	1U	1M	1L	1U	1M	1L
2	2	2	2	2	2	2	2	2	2	2	2
3	3	3	3	3	3	3	3	3	3	3	3
4	4	4	4	4	4	4	4	4	4	4	4
5	5	5	5	5	5	5	5	5	5	5	5
6	6	6	6	6	6	6	6	6	6	6	6

NOT PRESENT 1,2,3,4,5,6

Wildlife Observations/ General Comments: This segment was a wide sand beach with an anadromous stream mouth along it. At the eastern end of the segment there was a very large (1/2 m deep x 40 x 10 meter) kelp wrack made mostly of Laminaria, Fucus, Nereocystis, Desmarestia, Ulva and Phaeophytes. Bird tracks leading to the wrack and along the beach were numerous. River otter scat was also seen. Cormorants (2) sea ducks, and Glaucous-winged Gulls.

Ecological Considerations:
1A1B. Stream mouth outmigration and spawning of Pink salmon.

at the western end of the segment there was an area of boulders below the cliff face with some fauna & flora. Porphyra grew on the boulders, some Nolocaemea (Scutum ? persona) were on the boulders along with a few Nucella. Balanus glandula (Balanoidea?) was present in small scattered patches. No live mytilus found but beach shells included Clinocardium nuttalli, Protothaca staminea, Saxidomus giganteus and a few Tresus capax. Kelp wrack included Laminaria dentigera Fucus, Alaria, Nereocystis



K10-7-PB-16A

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

PB-16

Approx. Segment Length: 1206m

0 100 200 500
METERS

K10-7-PB-16A
Map Key: AKP-PB-16a
Name: Acton
Date: 5-4-90
Date Entered:

SHORELINE EVALUATION

SEGMENT ST/K1007-PB016 SUBDIVISION A DATE 2 MAY 90

SEGMENT ENVIRONMENTAL SENSITIVITIES AND TIME CONSTRAINTS:

1A, 1B
4DQ

SUBDIVISION ECOLOGICAL CONSTRAINTS: Avoid disturbance/damage to unoiled substrate and biota.

ARCHAEOLOGICAL CONSTRAINTS: If treatment is planned, a cultural resource evaluation is required prior to shoreline treatment.

SHPO SIGNATURE:_____ DATE:_____

OILING CATEGORISATION:
Wide 0 m: Medium 0 m: Narrow 0 m: V.Light 30 m: No Oil 148 m
Subsurface Oil Observed: Yes____ No X Maximum Depth_____

RECOMMENDATIONS:

X No Treatment Recommended	____Snare/Absorbent Booms
____Treatment Recommended	____Oil Snares (pom poms)
____Manual Pickup	____Absorbents (pads,rolls,etc)
____Bioremediation	____Spot Washing:____Wands
____Tarmat: ____Breakup	____ Beach Cleaner
____Removal	____Other (see comments)

Comments: NO TREATMENT RECOMMENDED. MOUSSE WAS COLLECTED WHILE SHORELINE WAS ASSESSED. (5/11/90 RKB)

TAG COMMENTS:_____

TAG APPROVAL DATE:_____
ADEC _____
EXXON Scott A. Neuman 5/11/90 FOSC:_____ DATE:_____
NOAA _____
USCG _____

1991 MAYSAP EVALUATION

SEGMENT: K1007PB016 SUB: A REGION: KOD SURVEY DATE: 5/19/91

ENVIRONMENTAL SENSITIVITIES:
Work Window(s) OPEN 5/1 - 7/10; RESTRICTED 7/10 - 9/15

Ecological/Constraints (see page two for details) Anadromous stream

ARCHAEOLOGICAL CONSTRAINTS:
If treatment is planned, a cultural resource evaluation is required prior to shoreline treatment.

SHPO Signature: Timothy O Smith Date: 6/03/91

RECOMMENDATIONS:	INITIAL	TAG	FOSC
TREATMENT REQUIRED (Y or N)	N	N	N
Manual Pickup (Check as Req.)			
Spot Washing			
Bio-Customblen Only			
Bio-Inipol/Customblen			
Other			
Other			

COMMENTS:
INITIAL:

TAG:

FOSC:

TAG APPROVAL DATE: MAY 31 1991 FOSC APPROVAL DATE: 6/5/91

ADEC

EXXON

USCG

NOAA

FOSC

E. E. PAGE, CDR, USCG
CHIEF OF STAFF, FOSC

ECOLOGICAL CONSTRAINTS
1991 FIELD ACTIVITIES

Anadromous Stream: Unlimited treatment up to stream bank between May 15 and July 10. ADF&G approval required for work after July 10. Fish Habitat Permit required for instream work. ADF&G approval required for bioremediation within 100 meters of anadromous stream after July 10.

TEAM NO. 6-Helo SEGMENT PB-16 SUBDIVISION A DATE 19 / May / 91

ADEC
NAME J. BARNHART of ADFG SIGNATURE Jeff Barnhart

☒ NTR ☐ Treatment Suggested

A few widely scattered SOR-TB's were located and removed along the beach north of the stream Helen Creek 062-70-10010. The oiled area along the stream that was cleaned in 1990 exhibited ~2-5 SOR-MS around and under cobble, in an area approx 12m x 5m. This was picked up by the Veco crew. The second area occurs at the confluence of the tributary stream and Helen creek. The approx. size is 10m long x 1m wide, SOR-MS. This was not detected in 1990 because it was covered with sand. The Veco crew removed as much oil as possible.

EXXON
NAME R. HARRELSON SIGNATURE RC Harrelson

☑ NTR All readily accessible oiled material has been removed from this area. No further treatment is required.

LANDMANAGER
NAME J. HANDISTER OF USFWS SIGNATURE John P. Handister

☑ NTR Concur with ADEC representative. The area along the anadromous stream that I observed in 1990 had been cleaned and the residual SOR-MS were removed during the current survey by the VECO crew. No further cleanup is recommended.

USCG/NOAA
NAME CWO SPUHL / G SHIGEHARA SIGNATURE R.P. Spuhl / Gary Shigehara

☒ NTR SOR-TB's were removed by Veco workers during survey

SURVEYED PORTION OF THE SEGMENT CONSISTED OF A WIDE SAND BEACH BORDERED TO THE EAST BY ROCKY CLIFFS AND TO THE WEST BY AN ANADROMOUS STREAM. TO THE NORTH, ABOVE THE SUPRATIDAL MARGIN OF THE BEACH, WAS AN AREA OF SALT GRASS. DRIFTWOOD LOGS WERE ABUNDANT IN THE SUPRATIDAL ZONE THE SAND BEACH APPEARED TO BE ACTIVELY SHIFTING, AND MATS OF BEACHED SEAWEED MATERIAL WERE BURIED IN THE UPPER MITZ. ALTHOUGH SOME SOR WAS FOUND ALONG THE BEACH PROPER, MOST OF THE OILING OBSERVED OCCURRED ALONG THE BANKS OF THE STREAM TO THE WEST. MOUSSE WAS FOUND IN AND UNDER COBBLE SUBSTRATE IN THE EASTERN SHORE. SOME RESIDUE WAS ALSO FOUND IN THE SUPRATIDAL IN THE SALT GRASS. ON THE WEST SIDE OF THE STREAM, AN APPROXIMATELY 2 x 4 M BAND WHERE SOR/TAR MATS WERE FOUND IN SANDY SUBSTRATE WAS DOCUMENTED. IN THE SUPRA WEST OF THE STREAM, STAIN WAS FOUND ON DRIFTWOOD LOGS. THE MOST SUBSTANTIAL OF THE RESIDUES FOUND WERE RECOVERED BY THE VECO CREW.

MAYSAP SHORELINE OILING SUMMARY

TEAM NO. 6-Helo

SEGMENT KIO-7-PB-16

OG D. FitzGerald BIO H. Davis

SUBDIVISION A

ADEC J. Barnhart LANDMANAGER J. Hardistem for USFWS

DATE 19 / MAY / 91

EXXON R. Hamelson USCG/NOAA CWO Spurr / G. Shigenaka

TIME 10:00 to 11:00 TIDE LEVEL 4.7 ft. to 2.2 ft. ENERGY LEVEL: ☐ H ☑ M ☐ L

SURVEYED FROM: ☒ FOOT ☐ BOAT ☐ HELO WEATHER: ☒ SUN ☒ CLOUDS ☐ FOG ☐ RAIN ☐ SNOW

TOTAL LENGTH SHORELINE SURVEYED: 500 m NEAR SHORE SHEEN: ☐ BR ☐ RB ☐ SL ☒ NONE

EST. OIL CATEGORY LENGTH: W 0 m M 0 m N 0 m VL 135 m NO 365 m US 0 m

LOC	SURFACE OIL CHARACTER										SURFACE SEDIMENT	SHORE SLOPE	AREA		ZONE				NOTES
	AP	MS	TB	SOR	CV	CT	ST	FL	DB	NO	TYPE	V H M L	WIDTH m	LENGTH m	S	UI	MI	LI	
A							T				L	L	20	10	X				Stain on Logs
B			T	T		T					S	L	6	25	X	X			I/u around B+C edge of Creek
C			T	T							S	L	2	7	X				Juncture of two creeks
D			T								S	L	10	100	X	X			Berm Area

DISTRIBUTION: C = 91-100%; B = 51-90%; P = 11-50%; S = 1-10%; T = <1%

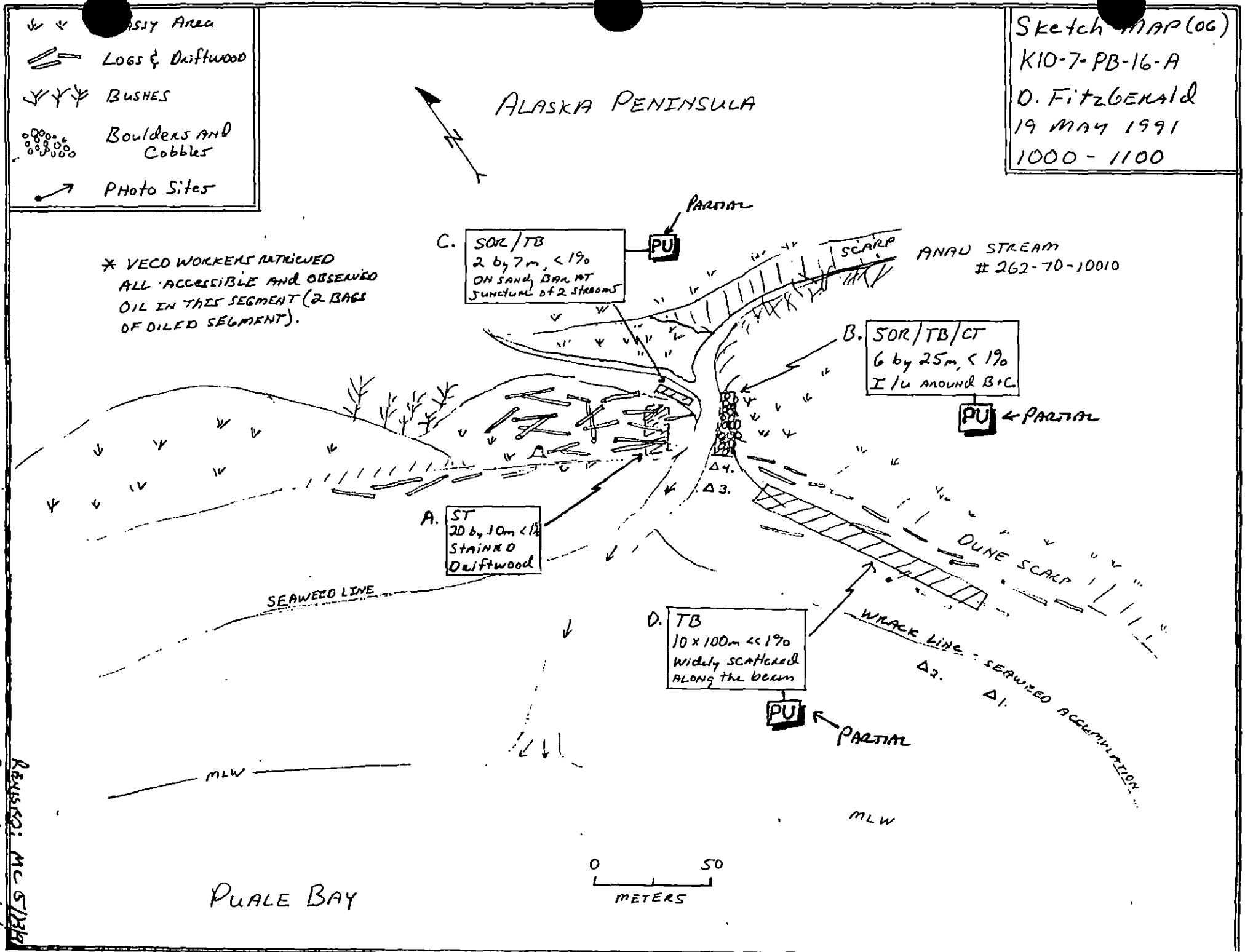
SLOPE: V = VERTICAL; H = HIGH ANGLE; M = MEDIUM ANGLE; L = LOW ANGLE PHOTO ROLL # MAYSAP- 6 - 17 FRAMES 1-6

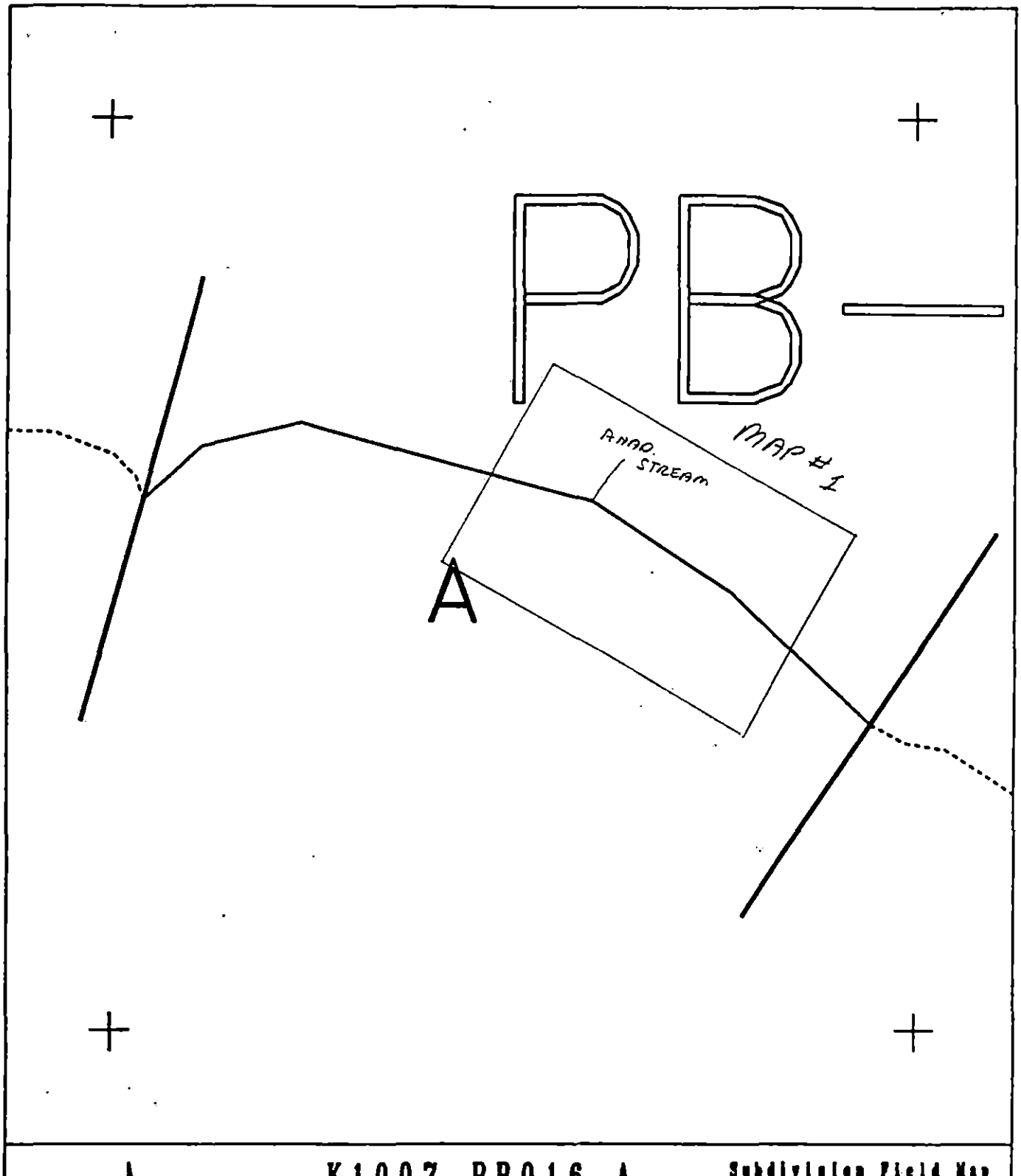
PIT NO.	PIT DEPTH (cm)	SUBSURFACE OIL CHARACTER							OILED ZONE cm-cm	CLEAN BELOW Y/N	H2O LEVEL (cm)	SHEEN COLOR B R S N	PIT ZONE				SURFACE-SUBSURFACE SEDIMENTS	NOTES
		OP	HOR	MOR	LOR	OF	TR	NO					S	UI	MI	LI		
1	25							X	-		15				X		Sand	Beachface
2	25							X	-		15				X		Sand	"
3	20							X	-		15			X			Sand	Side of Creek Chan.
4	20							X	-		15			X			Sand	Side of Creek Chan.
									-									
									-									
									-									
									-									
									-									

SHEEN COLOR: B = BROWN; R = RAINBOW; S = SILVER; N = NONE

OG COMMENTS: This segment is a sandy pocket beach between two rock headlands with an Anad. Stream # 262-70-10010 on the eastside of Puale Bay. The oiling of this segment consists of 1) tarballs scattered along 100m length of beach on the southeast side of the creek, 2) a region of SOR/TB/CT around and under Boulders & Cobbles along the Anad. stream bank, 3) SOR/TB on a point bar at the juncture of two creeks, and some stained logs. The VECO workers removed all observed and accessible oil amounting to 1½ bags.

REVIEWED: MC 5/23/91
REVIEWED: F.W. 5/28/91


Grassy Area
Logs & Driftwood
Bushes
Boulders and Cobbles
Photo Sites
Sketch MAP (OG)
K10-7-PB-16-A
D. Fitzgerald
19 May 1991
1000 - 1100
ALASKA PENINSULA
* VECO WORKERS RETRIEVED ALL ACCESSIBLE AND OBSERVED OIL IN THIS SEGMENT (2 BAGS OF OILED SEGMENT).
C. SOR/TB
2 by 7m, < 1%
ON sandy BAR AT Junction of 2 streams
PU
PARTIAL
SCARP
ANAU STREAM
262-70-10010
B. SOR/TB/CT
6 by 25m, < 1%
I/u around B+C.
PU
PARTIAL
Δ4.
Δ3.
A. ST
20 by 10m < 1%
Stained
Driftwood
SEAWEED LINE
DUNE SCARP
D. TB
10 x 100m << 1%
Widely scattered
along the beach
PU
PARTIAL
WRACK LINE - SEAWEED ACCUMULATION
Δ2.
Δ1.
MLW
MLW
0
50
METERS
PUALE BAY
RENEWED: K.W. STARK



K1007 PB016 A

Subdivision Field Map

Map Key: COAK1007PB016A

METERS

0 200 400

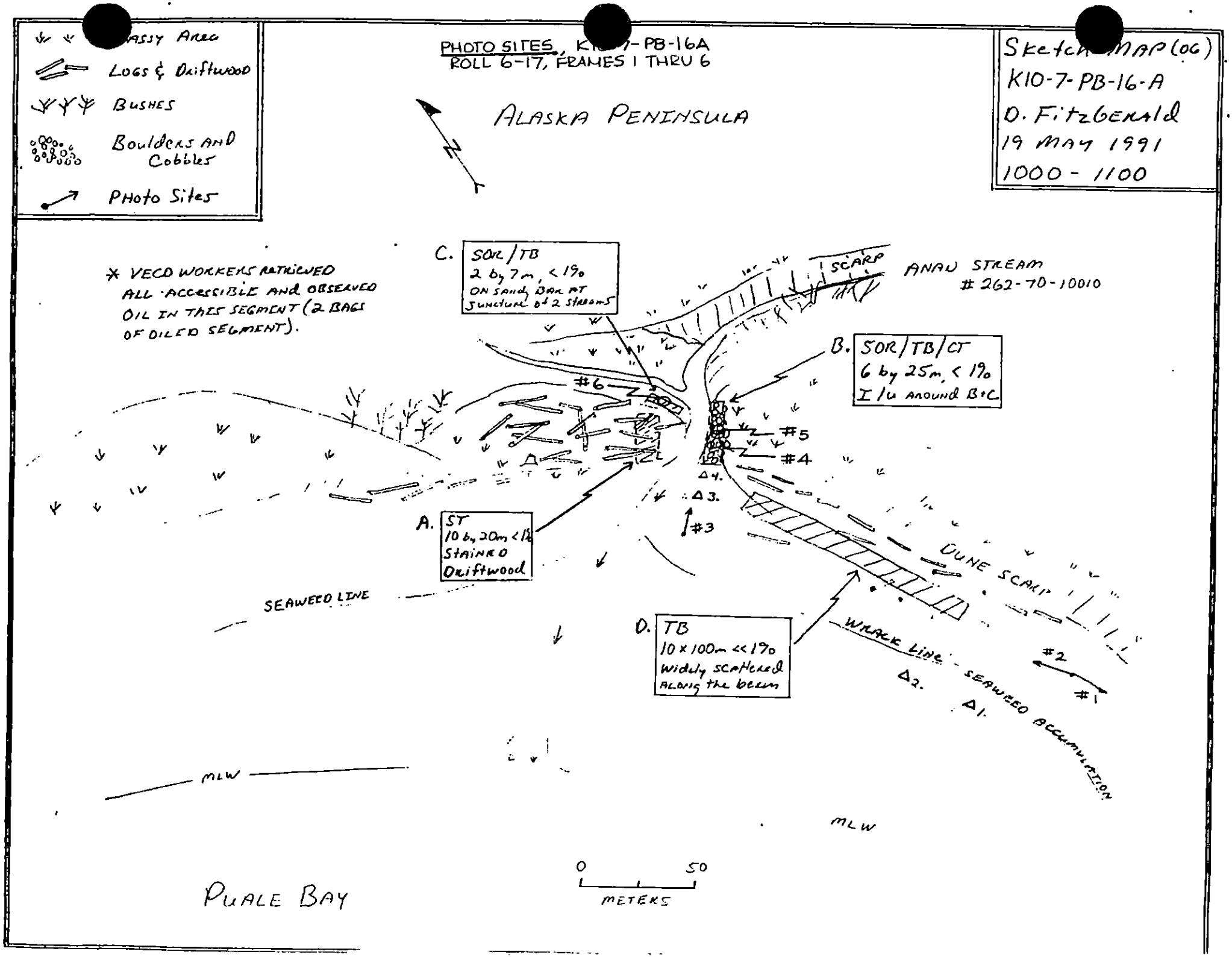
AK State Plane Zone 4.

g1007pb016a

Name: O. FitzGerald

Date: 19 MAY 1991

REVIEWED: F.W. 5/23/91


Grassy Area
Logs & Driftwood
Bushes
Boulders and Cobbles
Photo Sites
PHOTO SITES, K10-7-PB-16A
ROLL 6-17, FRAMES 1 THRU 6
Sketch MAP (OG)
K10-7-PB-16-A
D. Fitzgerald
19 MAY 1991
1000 - 1100
ALASKA PENINSULA
N
* VECO WORKERS RETRIEVED ALL ACCESSIBLE AND OBSERVED OIL IN THIS SEGMENT (2 BAGS OF OILED SEGMENT).
C. SOR/TB
2 by 7m, < 1%
ON SAND BAR AT JUNCTURE of 2 STREAMS
SCARP
ANAN STREAM
262-70-10010
B. SOR/TB/CT
6 by 25m, < 1%
1/u AROUND B+C
#6
#5
#4
Δ4.
Δ3.
#3
A. ST
10 by 20m < 1%
STAINED
Driftwood
SEAWEED LINE
D. TB
10 x 100m << 1%
Widely scattered
ALONG the beach
DUNE SCARP
WRACK LINE - SEAWEED ACCUMULATION
#2
#1
Δ2.
Δ1.
MLW
MLW
0
50
METERS
PUALE BAY

MAYSAP BIOLOGICAL SUMMARY FORM

TEAM # 6 Helo	**DATE** May 19 1991
SEGMENT # PB-16	**TIDAL HEIGHT(Range)** 4.7ft - 2.2ft. (10⁰¹ - 11⁰⁰)
SUBDIVISION A	**BIOLOGIST** H. Davis
SEA STATE 2ft	**WIND SPEED/DIRECTION** 10-20 KT NW
PHOTOGRAPHS: ROLL # 6-17	**FRAME #** 1-6

COMMENTS/OBSERVATIONS (to be completed in oiled subdivisions only):

This segment of Prudhoe Bay was a sandy beach with rocky cliffs at each end. There is an anadromous stream (#262-70-10010) near the center of the segment. On the western cliffs there was an eagle on a nest. Two adult eagles were soaring over the eastern end. The eagle on the nest stayed there during the surveys.

A,C. This area in the SITZ is a debris-swath with no live biota. Above and to the east it is bounded by the anadromous stream. There is a thick (2-4 ft) kelp wrack below site A. Amphipods, enchytraeus (annelids) and kelp flies were making use of the wrack. Sparrows were on the kelp feeding. Willows, Dunegrass (Elymus?) are the dominate vegetation on the slopes above the beach.

B. This site had a few barnicles attached to the rocks. Above the area is a field of Dune grass (ammophila/Elymus?) Below this area is the stream. Pinks run up this stream.

D. This area was between the kelp wrack line and the logs piled against the Dune scarp. The kelp wrack is mostly Nereocystis, Laminaria, Fucus, Alaria and agarum. Common shells on the beach were saxidomus, siliqua and mytilus.

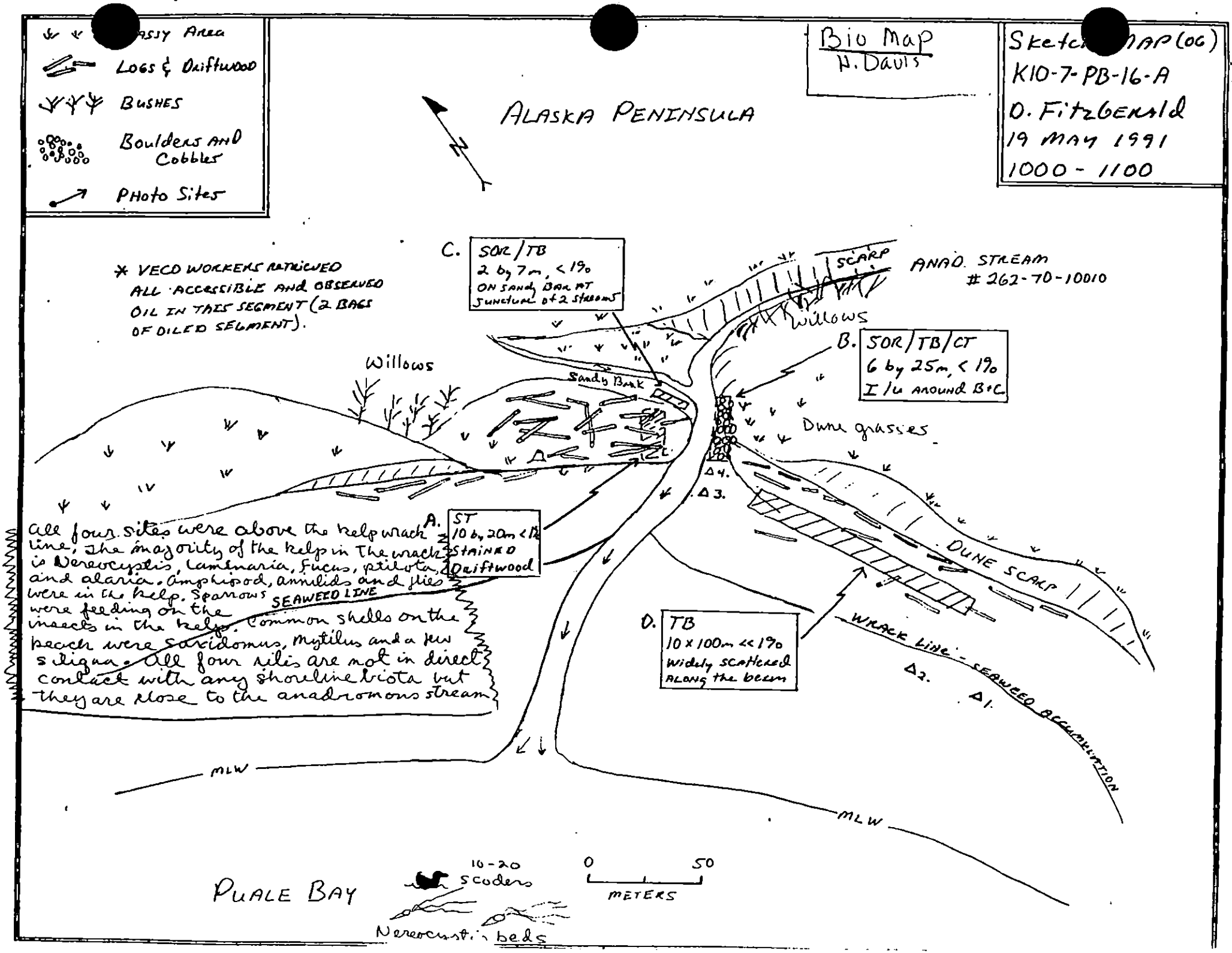
Scoter sp (10-20) Pipit (1) Cormorant (1)
Eagles (3) Kittiwakes (≤10) Glaucono-winged Gull (5) Plover (2) Sparrows (Savannah) (3)

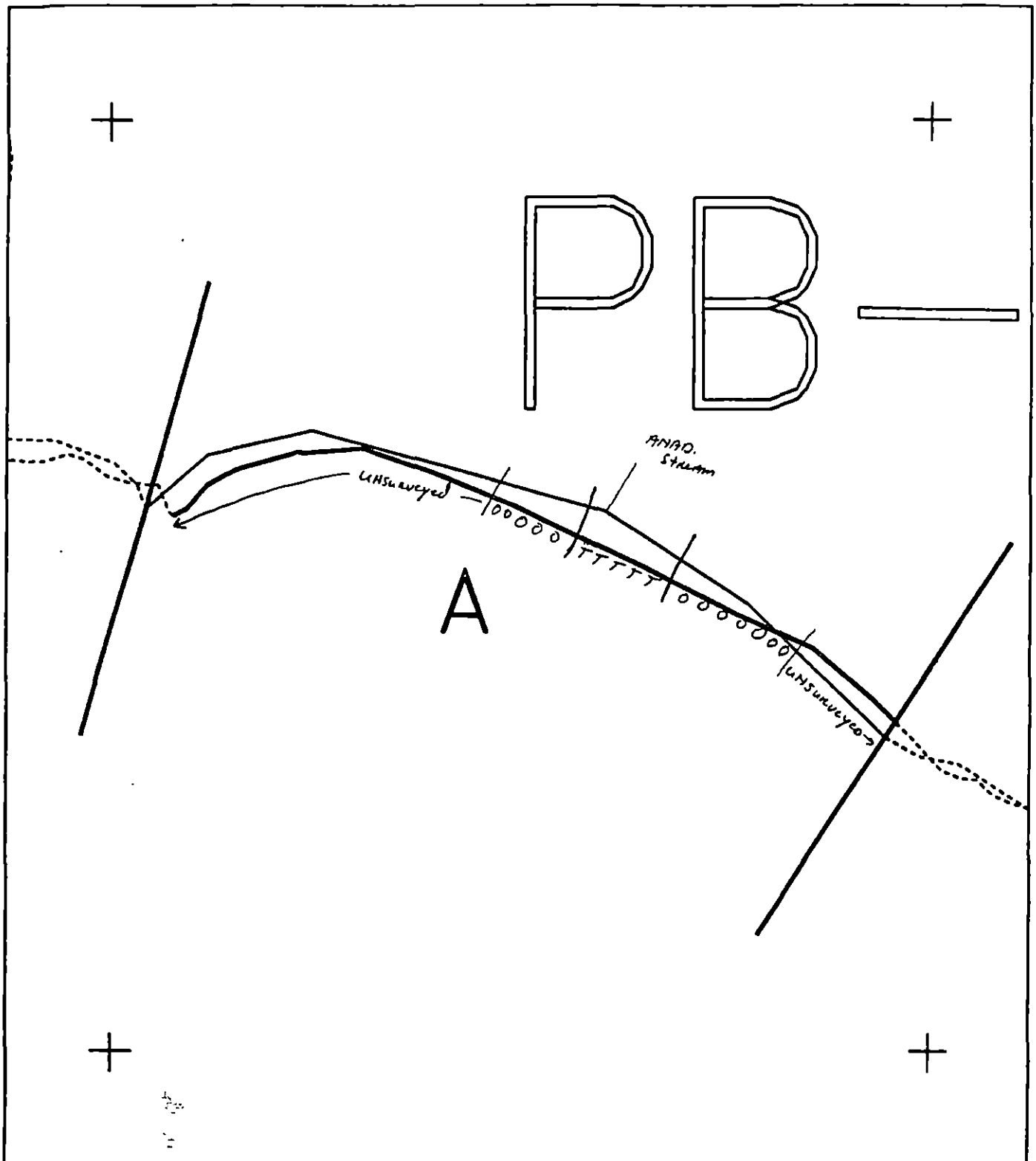
WILDLIFE OBSERVATIONS
TO BE COMPLETED IN ALL SUBDIVISIONS

BIRDS	# OF SPECIES	TOTAL BIRDS	FISH OBSERVED SPECIES PRESENT
Eagles	1	(1 on nest 2 soaring) (3)	∅
Seabirds	1	1	
Waterfowl	1	10-20	
Gulls/kittiwakes	3	17	
Shorebirds	1	1	
Corvids	∅		
Other Birds sparrows	1	3	

MARINE MAMMALS	# OBSERVED	LAND MAMMALS SPECIES	# OBSERVED
Sea Otters	∅	Caribou	3 (on uplands)
Pinnipeds (specify)	∅		
Whales (specify)	∅		

Shoreline subdivision map showing important biological features attached.


Grassy Area
Logs & Driftwood
Bushes
Boulders and Cobbles
Photo Sites
Bio Map
N. Davis
Sketch Map (OC)
K10-7-PB-16-A
O. Fitzgerald
19 May 1991
1000 - 1100
ALASKA PENINSULA
* VECO WORKERS RATRIEVED ALL ACCESSIBLE AND OBSERVED OIL IN THIS SEGMENT (2 BAGS OF OILED SEGMENT).
C. SOR/TB
2 by 7m, < 1%
ON sandy BAR AT JUNCTURE of 2 STREAMS
SCARP
ANAD. STREAM
262-70-10010
Willows
B. SOR/TB/CT
6 by 25m, < 1%
I/u AROUND B+C
Willows
Sandy Bank
Dune grasses
Δ4.
Δ3.
A. ST
10 by 20m < 1%
STAINED
Driftwood
SEAWEED LINE
DUNE SCARP
All four sites were above the kelp wrack line, the majority of the kelp in the wrack is Nereocystis, Laminaria, Fucus, ptilota, and alaria. Amphipod, annelids and flies were in the kelp. Sparrows were feeding on the insects in the kelp. Common shells on the beach were Saxidomus, Mytilus and a few S. alaska. All four sites are not in direct contact with any shoreline biota but they are close to the anadromous stream.
D. TB
10 x 100m << 1%
Widely SCATTERED ALONG the beach
WRACK LINE - SEAWEED ACCUMULATION
Δ2.
Δ1.
MLW
MLW
PUALE BAY
10-20 scoders
Nereocystis beds
0
50
METERS



XXXX	Wide	K1007 PB016 A
////	Medium	ADEC Subsegment Length: 1178m
----	Narrow	METERS
TTTT	Very Light	0 200 400
0000	No Oil	AK State Plane Zone 4
		g1007pb016a-. . . .

Subdivision Field Map

Map Key: GOAK1007PB016A

Name: D. FitzGerald

Date: 19 MAY 1991

Date Entered:

REVIEWED: MC 5/25/91
REVIEWED: F.W. 5/23/91

1991 MAYSAP EVALUATION

SEGMENT: K1007PB016 **SUB:** A **REGION:** KOD **SURVEY DATE:** 5/19/91

ENVIRONMENTAL SENSITIVITIES:
Work Window(s) OPEN 5/1 - 7/10; RESTRICTED 7/10 - 9/15

Ecological/Constraints (see page two for details) Anadromous stream

ARCHAEOLOGICAL CONSTRAINTS:
If treatment is planned, a cultural resource evaluation is required prior to shoreline treatment.

SHPO Signature:_____ Date:_____

RECOMMENDATIONS:	INITIAL	TAG	FOSC
TREATMENT REQUIRED (Y or N)	N		
Manual Pickup (Check as Req.)			
Spot Washing			
Bio-Customblen Only			
Bio-Inipol/Customblen			
Other_____			
Other_____			

COMMENTS:
INITIAL:

TAG:

FOSC:

TAG APPROVAL DATE:_____ **FOSC APPROVAL DATE:**_____

ADEC_____ FOSC _____

EXXON_____

USCG_____

NOAA_____

ECOLOGICAL CONSTRAINTS
1991 FIELD ACTIVITIES

Anadromous Stream: Unlimited treatment up to stream bank between May 15 and July 10. ADF&G approval required for work after July 10. Fish Habitat Permit required for instream work. ADF&G approval required for bioremediation within 100 meters of anadromous stream after July 10.

TEAM NO. 6-Helo SEGMENT PB-16 SUBDIVISION A DATE 19 / May / 91

ADEC
NAME J. BARNHART of ADFG SIGNATURE Jeff Barnhart

☒ NTR ☐ Treatment Suggested

A few widely scattered SOR-TB's were located and removed along the beach north of the stream Helen Creek 262-70-10010. The oiled area along the stream that was cleaned in 1990 exhibited ~~<~~ SOR-ms around and under cobble, in an area approx 12m x 5m. This was picked up by the Veco crew. The second area occurs at the confluence of the Tributary stream and Helen creek. The approx. size is 10m long x 1m wide, SOR-ms. This was not detected in 1990 because it was covered with sand. The Veco crew removed as much as possible.

EXXON
NAME R. HARRELSON SIGNATURE RC Harrelson

☑ NTR All readily accessible oiled material has been removed from this area. No further treatment is required.

LANDMANAGER
NAME J. HARDISTER OF USFWS SIGNATURE John P. Hardister

☑ NTR Comm with ADEC representative. The area along the anadromous stream that I observed in 1990 had been cleaned and the residual SOR-MS was removed during the current survey by the VECO crew. No further cleanup is recommended.

USCG/NOAA
NAME CWO SPURR / G. SHIGENAKA SIGNATURE R.P. Spurr / Gary Shigenaka

☒ NTR SOR-TB's were removed by Veco workers during survey

SURVEYED PORTION OF THE SEGMENT CONSISTED OF A WIDE SAND BEACH BORDERED TO THE EAST BY ROCKY CLIFFS AND TO THE WEST BY AN ANADROMOUS STREAM. TO THE NORTH, ABOVE THE SUPRATIDAL PORTION OF THE BEACH, WAS AN AREA OF SALT GRASS. DRIFTWOOD LOGS WERE ABUNDANT IN THE SUPRATIDAL ZONE. THE SAND BEACH APPEARED TO BE ACTIVELY SHIFTING, AND MATS OF BEACHED SEAWEED MATERIAL WERE BURIED IN THE UPPER MITZ. ALTHOUGH SOME SOR WAS FOUND ALONG THE BEACH PROPER, MOST OF THE OILING OBSERVED OCCURRED ALONG THE BANKS OF THE STREAM TO THE WEST. MOUSSE WAS FOUND IN AND UNDER COBBLE ~~SLOPE~~ AT ON THE EASTERN SHORE. SOME RESIDUE WAS ALSO FOUND IN THE SUPRATIDAL IN THE SALT GRASS. ON THE WEST SIDE OF THE STREAM, AN APPROXIMATELY 2 x 4 M BAND WHERE SOR/TAR MATS WERE FOUND IN SANDY SUBSTRATE WAS DOCUMENTED. IN THE SUPRATIDAL WEST OF THE STREAM, STAIN WAS FOUND ON DRIFTWOOD LOGS. THE MOST SUBSTANTIAL OF THE RESIDUES FOUND WERE RECOVERED BY THE VECO CREW.

MAYSAP SHORELINE OILING SUMMARY

TEAM NO. 6-Helo

SEGMENT K10-7-PB-16

OG O. FITZGERALD BIO H. DAVIS

SUBDIVISION A

ADEC J. BARNHART LANDMANAGER J. HARDISTEK for USFWS

DATE 19 / MAY / 91

EXXON R. HAMILTON USCG/NOAA CWO SPURR / G. SHIGENAKA

TIME 10 : 00 to 11 : 00 TIDE LEVEL 4.7 ft. to 2.2 ft. ENERGY LEVEL: ☐ H ☑ M ☐ L

SURVEYED FROM: ☒ FOOT ☐ BOAT ☐ HELO WEATHER: ☒ SUN ☒ CLOUDS ☐ FOG ☐ RAIN ☐ SNOW

TOTAL LENGTH SHORELINE SURVEYED: 500 m NEAR SHORE SHEEN: ☐ BR ☐ RB ☐ SL ☒ NONE

EST. OIL CATEGORY LENGTH: W 0 m M 0 m N 0 m VL 135 m NO 365 m US 0 m

LOC	SURFACE OIL CHARACTER										SURFACE SEDIMENT	SHORE SLOPE	AREA		ZONE				NOTES
	AP	MS	TB	SOR	CV	CT	ST	FL	DB	NO	TYPE	V H M L	WIDTH m	LENGTH m	S	UI	MI	LI	
A							T				L	L	20	10	X				STAIN ON LOGS
B			T	T		T					S	L	6	25	X	X			I/u AROUND B+C edge of creek
C			T	T							S	L	2	7	X				JUNCTURE of two creeks
D			T								S	L	10	100	X	X			BERM AREA

DISTRIBUTION: C = 91-100%; B = 51-90%; P = 11-50%; S = 1-10%; T = <1%

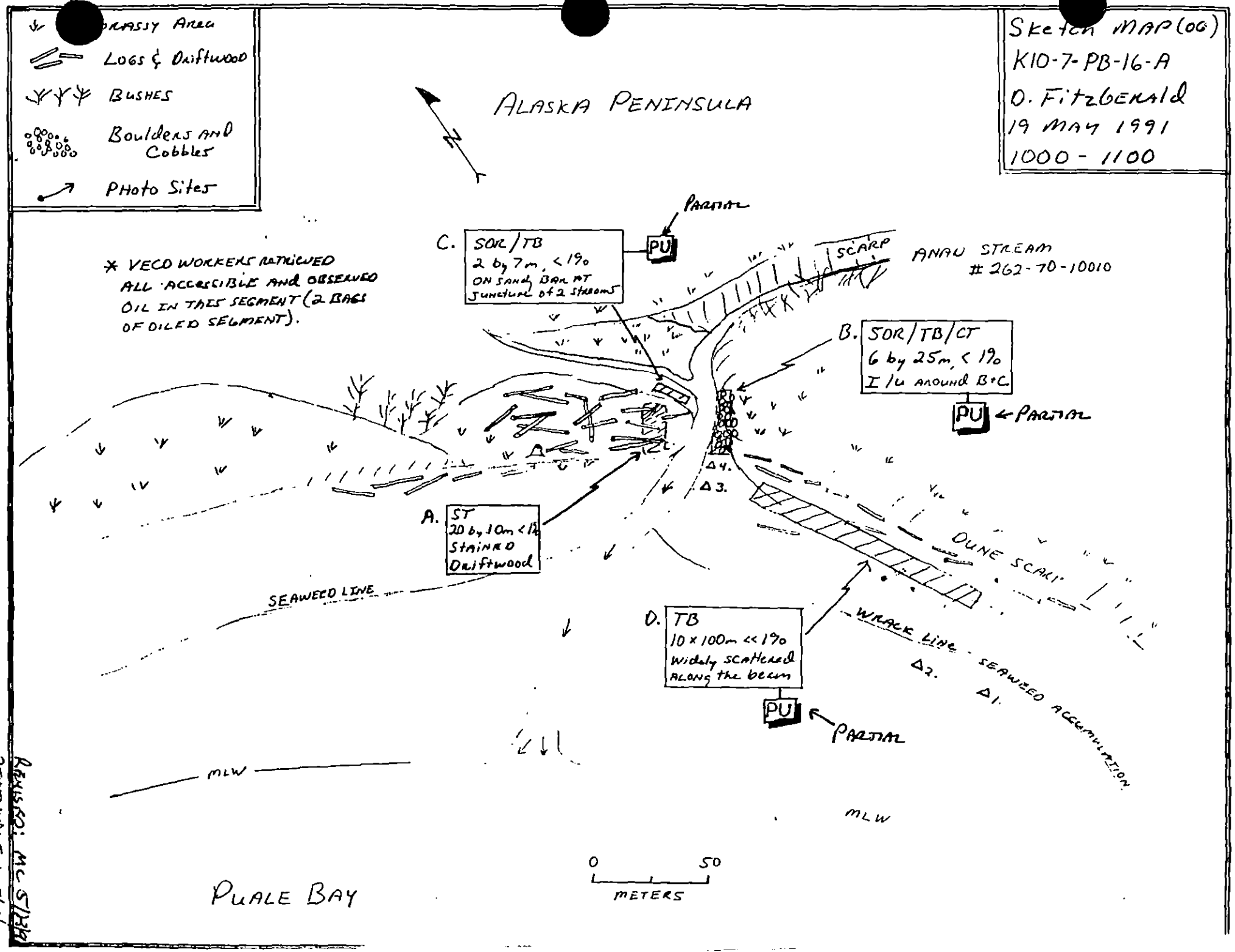
SLOPE: V = VERTICAL; H = HIGH ANGLE; M = MEDIUM ANGLE; L = LOW ANGLE PHOTO ROLL # MAYSAP- 6 - 17 FRAMES 1-6

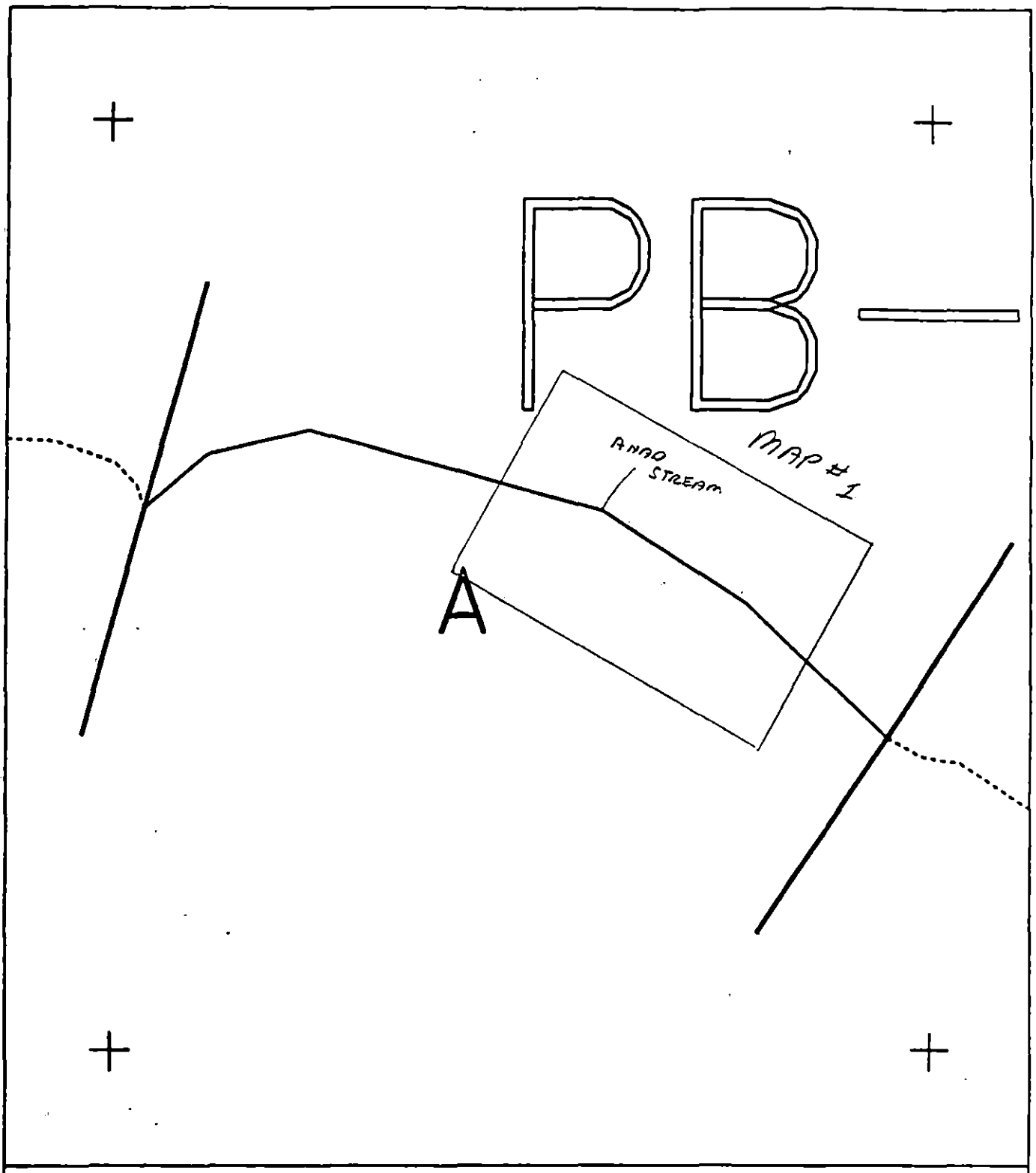
PIT NO.	PIT DEPTH (cm)	SUBSURFACE OIL CHARACTER							OILED ZONE cm-cm	CLEAN BELOW Y/N	H2O LEVEL (cm)	SHEEN COLOR	PIT ZONE				SURFACE-SUBSURFACE SEDIMENTS	NOTES
		OP	HOR	MOR	LOR	OF	TR	NO				B R S N	S	UI	MI	LI		
1	25							X	-		15				X		SAND	BEACHFACE
2	25							X	-		15				X		SAND	"
3	20							X	-		15			X			SAND	SIDE of CREEK CHAN
4	20							X	-		15			X			SAND	SIDE of CREEK CHAN
									-									
									-									
									-									
									-									
									-									

SHEEN COLOR: B = BROWN; R = RAINBOW; S = SILVER; N = NONE

OG COMMENTS: This segment is a sandy pocket beach between two rock headlands with an Anad. Stream # 262-70-10010 on the eastside of Purple Bay. The oiling of this segment consists of 1) tarballs scattered along 100m length of beach on the southeast side of the creek, 2) a region of SOR/TB/CT around and under Boulders & Cobbles along the ANAD. STREAM BANK, 3) SOR/TB on a point bar at the juncture of two creeks, and some stained Logs. The VECO Workers removed all observed and accessible oil amounting to 1½ bags.

REVIEWED: MC 5/23/91
REVIEWED: F.W. 5/24/91


Grassy Area
Logs & Driftwood
Bushes
Boulders and Cobbles
Photo Sites
Sketch MAP (OG)
K10-7-PB-16-A
D. Fitzgerald
19 MAY 1991
1000 - 1100
ALASKA PENINSULA
* VECO WORKERS REMOVED ALL ACCESSIBLE AND OBSERVED OIL IN THIS SEGMENT (2 BAGS OF OILED SEGMENT).
C. SOR/TB
2 by 7m, <1%
ON SAND BAR AT JUNCTURE of 2 STREAMS
PARTIAL
PU
SCARP
ANAU STREAM
262-70-10010
B. SOR/TB/CT
6 by 25m, <1%
1/u AROUND B+C
PU
PARTIAL
Δ4.
Δ3.
A. ST
20 by 10m <1%
STAINED
Driftwood
SEAWEED LINE
DUNE SCARP
D. TB
10 x 100m <<1%
Widely SCATTERED ALONG the beach
WRACK LINE - SEAWEED ACCUMULATION
Δ2.
Δ1.
PU
PARTIAL
MLW
MLW
0
50
METERS
PUALE BAY
REVISED: MC 5/13/91
REVIEWED: F.W. 5/23/91



K1007 PB016 A

METERS

0 100 200

AK State Plane Zone 4

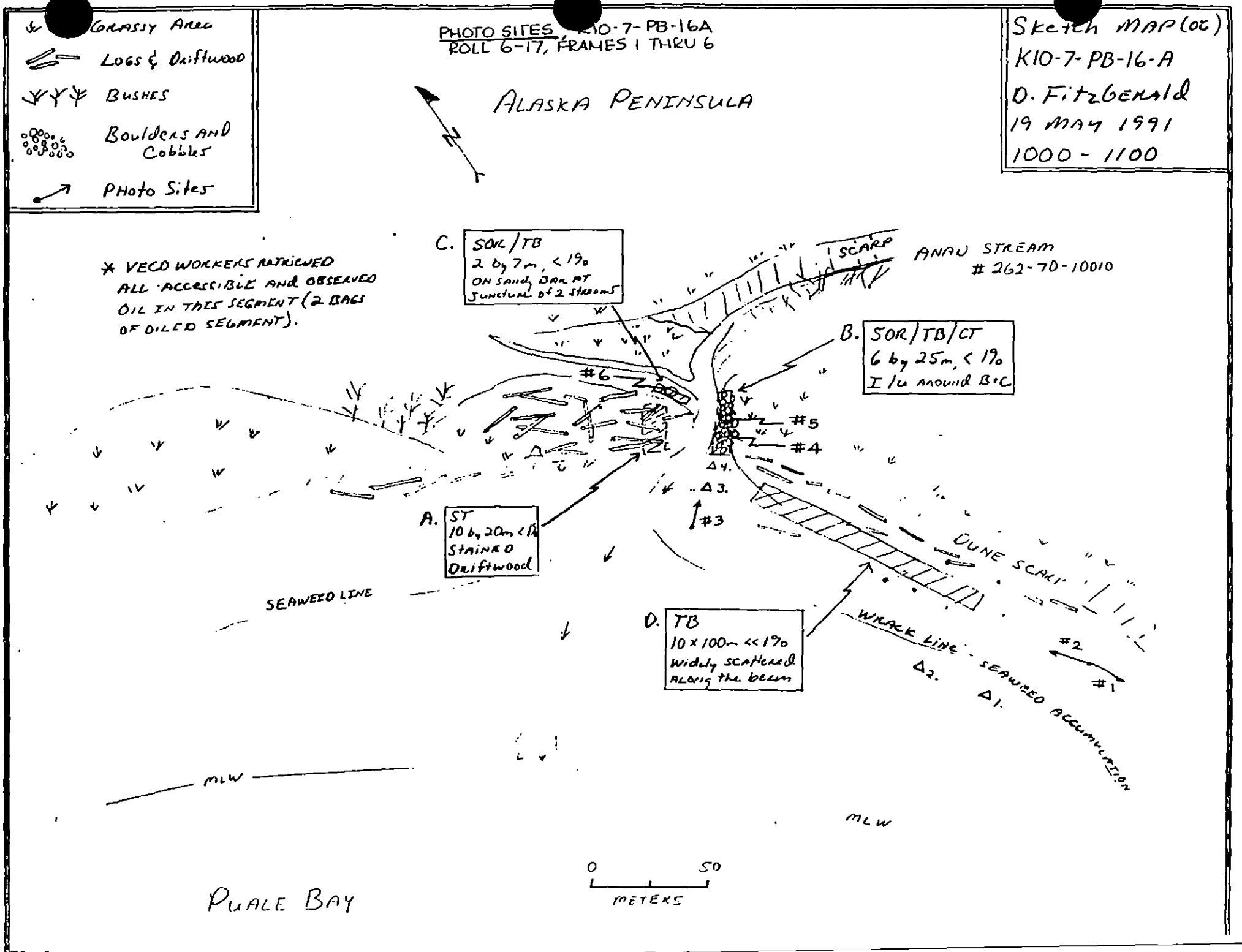
Subdivision Field Map

Map Key: K1007PB016A

Name: O.F. FitzGerald

Date: 19 MAY 1991

REVIEWED: F.W. 5/23/91


Grassy Area
Logs & Driftwood
Bushes
Boulders and Cobbles
Photo Sites
PHOTO SITES K10-7-PB-16A
ROLL 6-17, FRAMES 1 THRU 6
Sketch MAP (OC)
K10-7-PB-16-A
D. FitzGerald
19 MAY 1991
1000 - 1100
ALASKA PENINSULA
N
* VECO WORKERS RETRIEVED ALL ACCESSIBLE AND OBSERVED OIL IN THIS SEGMENT (2 BAGS OF OILED SEGMENT).
C. SOR/TB
2 by 7m, < 1%
ON SANDY BAR AT JUNCTURE of 2 STREAMS
SCARP
ANAU STREAM
262-70-10010
B. SOR/TB/CT
6 by 25m, < 1%
I/u AROUND B+C
#6
#5
#4
Δ4.
Δ3.
#3
A. ST
10 by 20m < 1%
STAINED
Driftwood
SEAWEED LINE
D. TB
10 x 100m << 1%
Widely scattered
along the beach
DUNE SCARP
WRACK LINE - SEAWEED ACCUMULATION
#2
#1
Δ2.
Δ1.
MLW
MLW
0
50
METERS
PUALE BAY

MAYSAP BIOLOGICAL SUMMARY FORM

TEAM # 6 Helo	DATE May 19 1991
SEGMENT # PB-16	TIDAL HEIGHT (Range) 4.7ft - 2.2ft. (10^{00} - 11^{00})
SUBDIVISION A	BIOLOGIST H. Davis
SEA STATE 2ft	WIND SPEED/DIRECTION 10-20 KT NW
PHOTOGRAPHS: ROLL # 6-17	FRAME # 1-6

COMMENTS/OBSERVATIONS (to be completed in oiled subdivisions only):

The segment of Prair Bay was a sandy beach with rocky cliffs at each end. There is an anadromous stream (#262-70-10010) near the center of the segment. On the western cliffs there was an eagle on a nest. Two adult eagles were soaring over the eastern end. The eagle on the nest stayed there during the surveys.

A, C. This area in the SIT 2 is a debris swath with no live biota. Above and to the east it is bounded by the anadromous stream. There is a thick (2-4 ft) kelp wrack below site A. Amphipods, enchytraeus (annelids) and kelp flies were making use of the wrack. Sparrows were on the kelp feeding. Willows, Dunegrass (Elymus?) are the dominate vegetation on the slopes above the beach.

B. This site had a few barnicles attached to the rocks. Above the area is a field of Dune grass (ammophila/Elymus?) Below this area is the stream. Pinks run up this stream.

D. This area was between the kelp wrack line and the logs piled against the Dune scarp. The kelp wrack is mostly Nereocystis, Laminaria, Fucus, Alaria and agarum. Common shells on the beach were saxidomus, siliqua and mytilus.

Scoter sp (10-20) Pipit (1) Cormorant (1)
Eagles (3) Kittiwake (≈10) Glaucous-winged Gull (5) Mew (2) Sparrows (Savannah) (3)

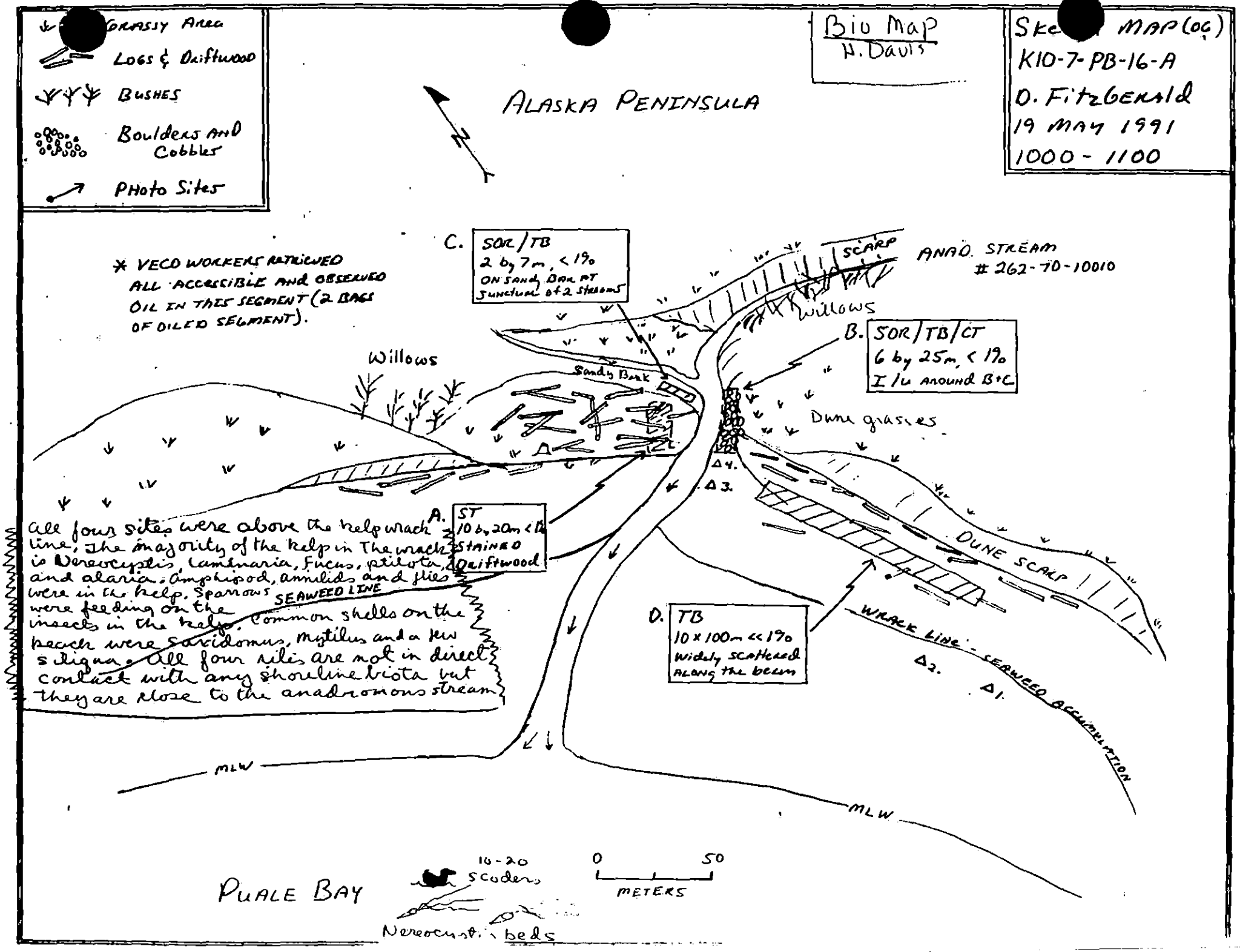
WILDLIFE OBSERVATIONS
TO BE COMPLETED IN ALL SUBDIVISIONS

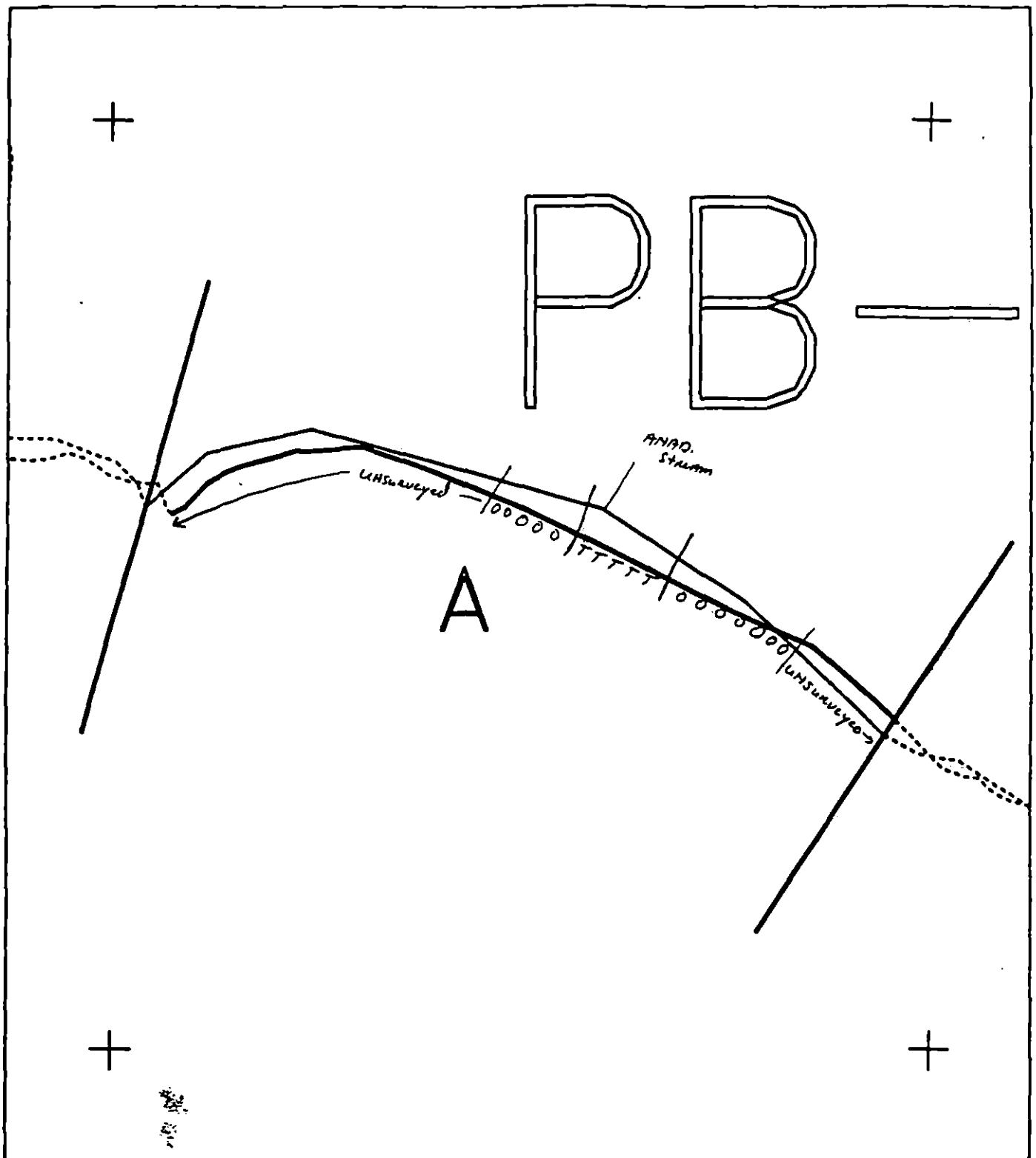
BIRDS	# OF SPECIES	TOTAL BIRDS	FISH OBSERVED SPECIES PRESENT
Eagles	1	(1 on nest) (2 soaring) (3)	∅
Seabirds	1	1	
Waterfowl	1	10-20	
Gulls/Kittiwakes	3	17	
Shorebirds	1	1	
Corvids	∅		
Other Birds sparrow	1	3	

MARINE MAMMALS	# OBSERVED	LAND MAMMALS SPECIES	# OBSERVED
Sea Otters	∅	Caribou	3 (on uplands)
Pinnipeds (specify)	∅		
Cetaceles (specify)	∅		

Shoreline subdivision map showing important biological features attached.

Rec'd 5/23/91


Grassy Area
Logs & Driftwood
Bushes
Boulders and Cobbles
Photo Sites
Bio Map
N. Davis
Sketch MAP (OC)
K10-7-PB-16-A
D. FitzGerald
19 MAY 1991
1000 - 1100
ALASKA PENINSULA
* VECO WORKERS REPORTED ALL ACCESSIBLE AND OBSERVED OIL IN THIS SEGMENT (2 BAGS OF OILED SEGMENT).
C. SOR/TB 2 by 7m, < 1% ON SAND BAR AT JUNCTION of 2 STREAMS
SCARP
ANAD. STREAM # 262-70-10010
Willows
B. SOR/TB/CT 6 by 25m, < 1% I/u AROUND B+C
Willows
Sandy Bank
Dune grasses
Δ4.
Δ3.
A. ST 10 b, 20m < 1% STAINED Driftwood
All four sites were above the kelp wrack line. The majority of the kelp in the wrack is Nereocystis, Laminaria, Fucus, Ptilota, and alaria. Amphipod, annulids and flies were in the kelp. Sparrows were feeding on the insects in the kelp. Common shells on the beach were Saxidomus, Mytilus and a few S. signa. All four sites are not in direct contact with any shoreline biota but they are close to the anadromous stream.
SEAWEED LINE
DUNE SCARP
D. TB 10 x 100m << 1% Widely scattered along the beach
WRACK LINE - SEAWEED ACCUMULATION
Δ2.
Δ1.
MLW
MLW
PUALE BAY
10-20 scoters
Nereocyst. beds
0
50
METERS



XXXX	Wide	K1007 PB016 A
////	Medium	ADEC Subsegment Length: 1170m
----	Narrow	METERS
TTTT	Very Light	0 200 400
0000	No Oil	AK State Plane Zone 4 g1007pb016a-' ... .

EXXON

Subdivision Field Map
Map Key: 00AK1007PB016A
Name: D. FitzGerald
Date: 19 MAY 1991
Date Entered:

REVIEWED: MC 5/23/91
REVIEWED: F.W. 5/23/91

ANADROMOUS FISH STREAM EVALUATION

SEGMENT ST/K10-07-PB-016 STREAM NO: 262-70-10010 DATE 5/2/90

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)
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 treatment is planned, **a cultural resource evaluation is required prior to shoreline treatment.**

SHPO SIGNATURE: Rachel Jean Orr DATE: 5/22/90

Subsurface Oil Observed: Yes_____ No X Maximum Depth_____

RECOMMENDATIONS:

X No Treatment Recommended	_____Snare/Absorbent Booms
_____Treatment Recommended	_____Oil Snares (pom poms)
_____Manual Pickup	_____Absorbents (pads,rolls,etc)
_____Bioremediation	_____Spot Washing:_____Wands
_____Tarmat Removal	_____Beach Cleaner
	_____Other (see comments)

COMMENTS: _____

TAG COMMENTS: _____

TAG APPROVAL DATE: 5/18/90
ADEC Art Weiner Art Weiner
EXXON Andy Tear
NOAA Gary Petrae Gary Petrae
USCG G.A. Reiter G.A. Reiter

FOSC: _____ DATE: MAY 27 1990

OG William Reid

15/38 SEGMENT ST/ PBD16

STREAM 262-70-10010

DATE 7 / [illegible] 90

SKETCH MAP

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

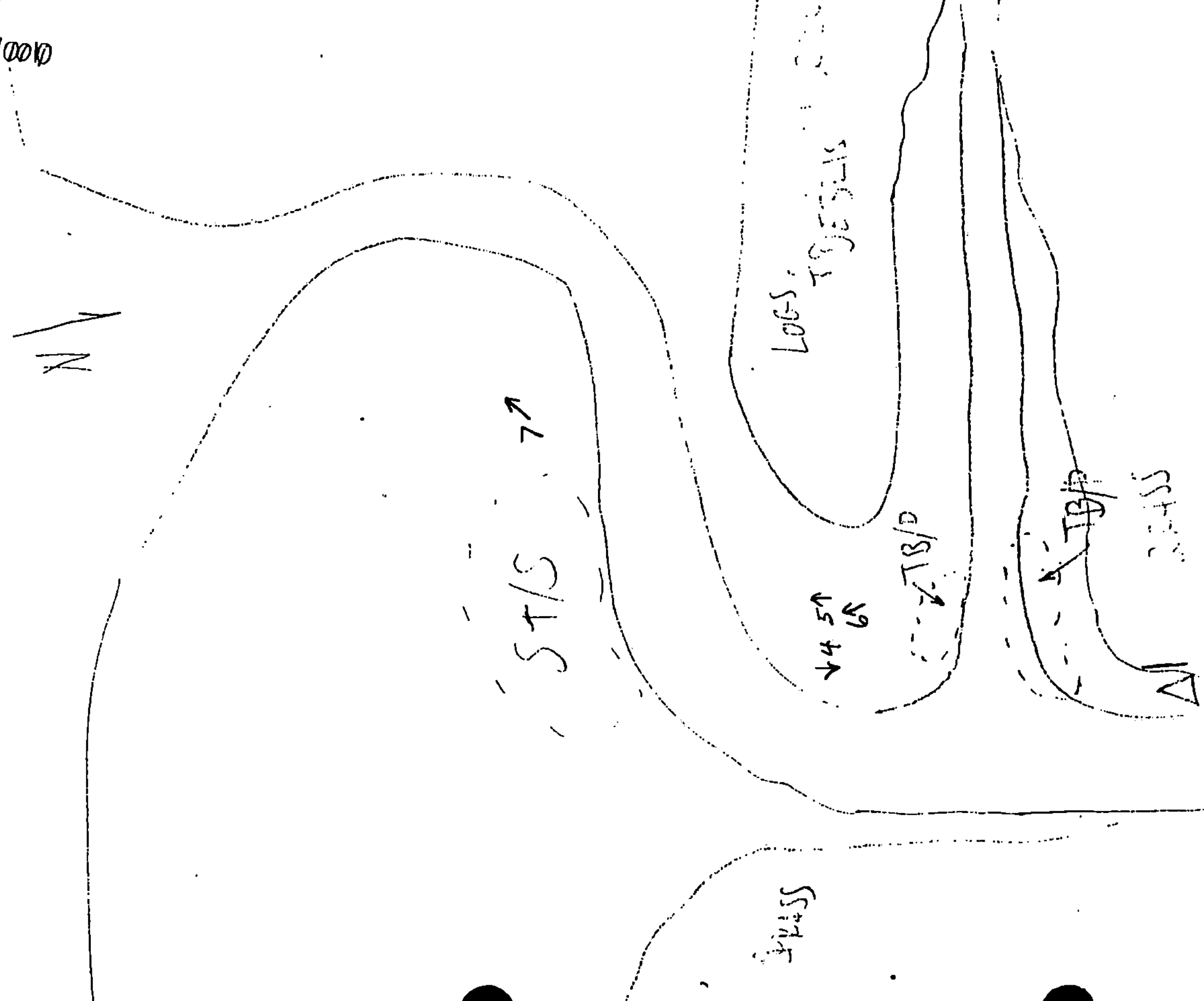
CT/B Broken Distribution

CT/P Patchy Distribution

CT/S Splashed Distribution

eee Oiled Vegetation

1 ●➤ Photo location, direction, and number



Oil Character Le[illegible]): AP_____ PO_____ CV_____ CT_____ ST_____ MS_____ _____ TB_____ FL_____ NO_____

REVISION:03/24/90

ANADROMOUS FISH STREAM EVALUATION ADDENDUM

CONSTRAINTS FOR STREAM NO. 262-70-10010

SEGMENT K10-07-PB-16 SUBDIVISION A

WORK WINDOW	
Manual Pickup	CLOSED

ARCHAEOLOGICAL STANDARD CONSTRAINT

If cultural resources are uncovered, PHONE 564-3274.

APPLICABLE ECOLOGICAL TIME CONSTRAINTS

1A,1B	Salmon Stream	ADF&G catalogued anadromous stream (262-70-10010 is in Subdivision A. No constraint to manual pickup.
5T	Bald Eagle Nest	USFWS 6/1/90 map indicates an active nest in Subdivision A. Closed to manual pickup within 400m of active nest. No constraint to manual pickup more than 400m from active nest.

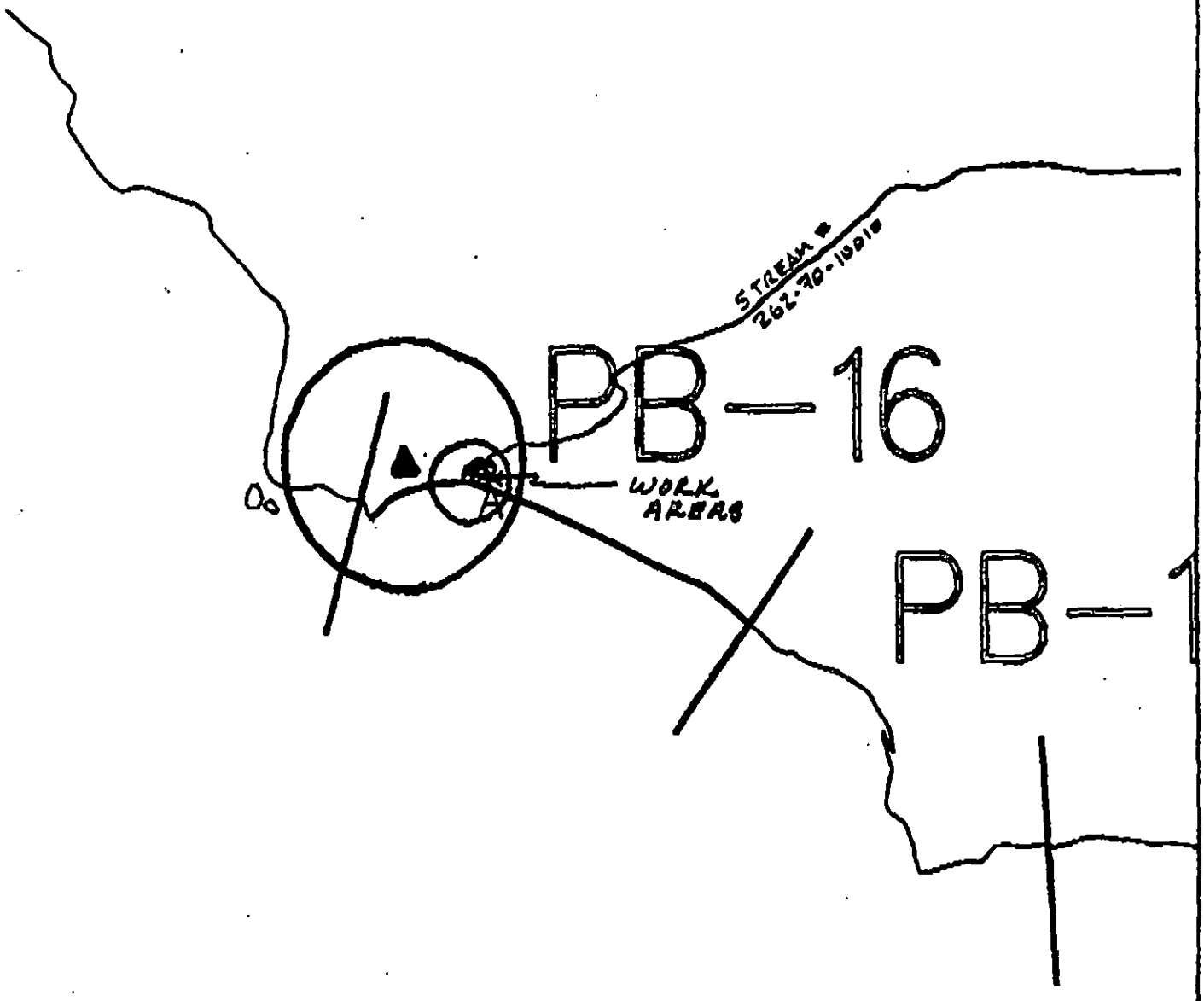
OTHER ECOLOGICAL CONSIDERATIONS

If eagle nest constraint is removed, other ecological considerations will apply.

SEE SUBDIVISION CONSTRAINT ADDENDUM K10-07-PB-16A FOR ADDITIONAL CONSTRAINT INFORMATION.

FOSC _____ Date 7-10-90

Prepared by _____ Date 7-10-90



EXXON

ECOLOGY MAP

SEGMENT K10-7 PB-16

SUBDIVISION A

★ Seabird Colony

▲ Active Eagle Nest

ANADROMOUS FISH STREAM EVALUATION

SEGMENT ST/K10-07-PB-016 STREAM NO: 262-70-10010 DATE 5/2/90

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)
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 treatment is planned, a cultural resource evaluation is required prior to shoreline treatment.

SHPO SIGNATURE: Judith Gordon Dew DATE: 5/22/90

Subsurface Oil Observed: Yes____ No__X__ Maximum Depth____

RECOMMENDATIONS:

__X__No Treatment Recommended
____Treatment Recommended
____Manual Pickup
____Bioremediation
____Tarmat Removal
____Snare/Absorbent Booms
____Oil Snares (pom poms)
____Absorbents (pads,rolls,etc)
____Spot Washing:____Wands
____Beach Cleaner
____Other (see comments)

COMMENTS: SEE ATTACHED WORK PLAN ADDENDUM DATED 7/9/90 AND CONSTRAINT ADDENDUM DATED 7/10/90. RexC.

TAG COMMENTS:

TAG APPROVAL DATE: 5/18/90
ADEC Art Weiner
EXXON Andy Ten
NOAA Gary Petrae
USCG
FOSC DATE: MAY 27 1990

WORK PLAN ADDENDUM

K10-7

Segment PB-16 Subdivision _____ Dated 7/9/90

ANAD. STREAM # 262-70-10010 (HELEN CREEK)

MODIFICATION

1. REASON FOR MODIFICATION

ANAD SCAT RECOMMENDED NO TREATMENT. REASSESSMENT ON 29 JUNE 90 LOCATED A LAYER OF MOUSSE.

2. ADJUSTMENT TO WORK PLAN

WORK PLAN SHOULD BE CHANGED FROM "NO TREATMENT RECOMMENDED" TO "MANUAL PICKUP" AS INDICATED ON THE ATTACHED SKETCH MAP.

ARCHAEOLOGICAL CONSTRAINT: If cultural resources are uncovered during shoreline treatment, stop work in the vicinity, mark the location of the find and contact Exxon's Cultural Resource Program immediately (564-3274 (Anchorage) or 229-1508 (24 hrs.)).

SHPO APPROVAL NEEDED YES X SHPO SIGNATURE Rachel Mason Date 7/11/90

NO _____

TAG APPROVAL DATE 7/9/90

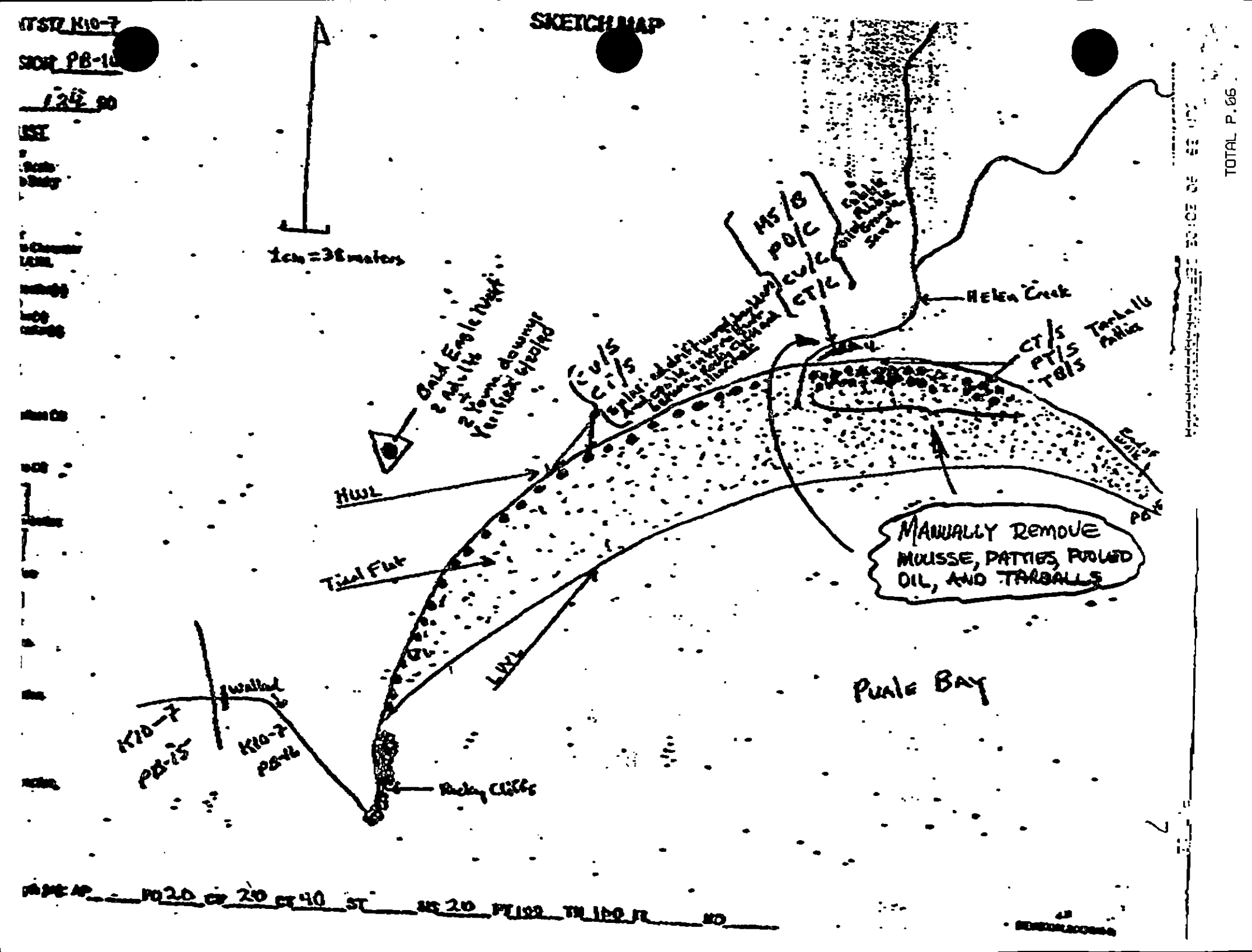
ADEC for Maureen Reidhead

EXXON Hmoy Tem

FOSC _____ DATE 7-10-90

NOAA Burl Wescott

USCG G.A. Reiter


SKETCH MAP
1cm = 38 meters
Bald Eagle Nest
2 Adults
2 Young downy Yellow Headed
HWL
Tidal Flat
LWL
Swallow
K10-7 PS-15
K10-7 PS-16
Rocky Cliffs
HS/B
PD/C
CW/C
CT/C
Helen Creek
CT/S
PT/S
TB/S
Tanaiu Point
Puale Bay
MANUALLY REMOVE MOUSSE, PATTIES, POOLED OIL, AND TARBALLS

ANADROMOUS FISH STREAM EVALUATION

SEGMENT ST/K09-12-XK500 STREAM NO: 262-10-10040 DATE 6/1/90

SEGMENT ENVIRONMENTAL SENSITIVITIES AND TIME CONSTRAINTS:

1A Salmon stream mouth - fry outmigration (4/15 to 7/31)
1B Salmon stream mouth - spawning (7/15 to 9/10; PEAK 8/15)
5S Shorebird/waterfowl concentration (4/25 to 5/15)
See attached Ecological Constraint sheet for specific constraints and contracts.

SUBDIVISION ECOLOGICAL CONSTRAINTS:
See above.

ARCHAEOLOGICAL CONSTRAINT: Consultation and inspection with an **Exxon archaeologist is required prior to treatment.** Specific on-site monitoring requirements will be determined at that time.
>>> PHONE 564-3274 (Anchorage) OR 229-1508 (24 hrs.) <<<

SHPO SIGNATURE: Charles E. Holmes DATE: June 29, 1990

Subsurface Oil Observed: Yes____ No X Maximum Depth_____

RECOMMENDATIONS:

_____No Treatment Recommended	_____Snare/Absorbent Booms
X Treatment Recommended	_____Oil Snares (pom poms)
X Manual Pickup	_____Absorbents (pads,rolls,etc)
_____Bioremediation	_____Spot Washing:_____Wands
_____Tarmat Removal	_____Beach Cleaner
	_____Other (see comments)

COMMENTS: Recommended treatment is manual removal of mousse, patties and oiled debris as shown on attached sketch map.

TAG COMMENTS: SURVEY AREA NOT PREVIOUSLY SURVEYED.

TAG APPROVAL DATE: 6/18/90.
ADEC Pam Monroe R. Monroe
EXXON Andy Teal
NOAA Joseph Talbott JC Bragg
USCG G.A. REITER G.A. Reiter FOSC: D. Jarvis DATE: 6/30/90

See ATTACHED CONSTRAINTS
G.A. Reiter

ANADROMOUS FISH STREAM ASSESSMENT

REGION: KODIAK

SEGMENT: K10-07-PB-016

SUBDIVISION: A

STREAM NO: 262-70-10010

ANADROMOUS FISH STREAM EVALUATION

SEGMENT ST/K10-07-PB-016 STREAM NO: 262-70-10010 DATE 5/2/90

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)
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 treatment is planned, **a cultural resource evaluation is required prior to shoreline treatment.**

SHPO SIGNATURE:_____ DATE:_____

Subsurface Oil Observed: Yes_____ No X Maximum Depth_____

RECOMMENDATIONS:

X No Treatment Recommended	_____Snare/Absorbent Booms
_____Treatment Recommended	_____Oil Snares (pom poms)
_____Manual Pickup	_____Absorbents (pads,rolls,etc)
_____Bioremediation	_____Spot Washing:_____Wands
_____Tarmat Removal	_____Beach Cleaner
	_____Other (see comments)

COMMENTS: _____

TAG COMMENTS:_____

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

KODIAK ECOLOGICAL CONSTRAINTS

1A **Salmon stream mouth - fry outmigration (4/15 to 7/31)**
1B **Salmon stream mouth - spawning (7/15 to 9/10; PEAK 8/15)**
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 without authorization from ADF&G. No use of methods which might affect nearshore oil or toxicity levels, such as hot water wash or Inipol application, unless authorized by ADF&G. Treatment which is not intrusive and which will not affect nearshore oil or toxicity levels, such as manual removal, can probably proceed without adherence to time constraints. In any case, contact ADF&G prior to treatment for consultation and/or permit application.
AGENCY CONTACT PERSON: ADF&G Ken Middleton 267-2299

1C **Salmon fry nursery area (4/31 to 7/31)**
No use of methods which might affect nearshore oil or toxicity levels, such as hot water wash or Inipol application, unless authorized by ADF&G. Treatment which will not affect nearshore oil or toxicity levels, such as manual or mechanical removal, can probably proceed without adherence to time constraints. Contact ADF&G prior to treatment for confirmation and advice.
AGENCY CONTACT PERSON: ADF&G Larry Peltz 424-3214

1D **Kotoi Bay Hatchery release**
Pink salmon - late May, early June; Chum salmon - June; Sockeye salmon - early July.
1H **Remote release site**
No use of methods which might affect nearshore oil or toxicity levels, such as hot water wash or Inipol application, unless authorized by ADF&G. Treatment which will not affect nearshore oil or toxicity levels, such as manual or mechanical removal, can probably proceed without adherence to time constraints. Contact ADF&G for confirmation and authorization.
AGENCY CONTACT PERSON: ADF&G Larry Peltz 424-3214

1I **Gill net area**
1J **Purse seine area**
Mainland, West side Kodiak, Shuyak & Moser/Olga Bay (6/9 to 10/1)
East side Kodiak, East side Afognak (7/4 to 10/1)
1K **Purse seine hook-off**
1L **Set net sites**
Contact ADF&G for confirmation - dates and locations may vary. Restrict boat and air traffic to essential minimum. When set net sites are present (1L) restrict beach operations to essential minimum as authorized by ADF&G. If plans for treatment include methods such as hot water wash or Inipol application which might affect nearshore oil or toxicity levels, contact ADF&G for consultation and authorization.
AGENCY CONTACT PERSON: ADF&G Larry Nicholson 424-4791

2M **Herring spawning (4/15 to 6/30)**
Contact ADF&G for confirmation - dates and locations may vary. Restrict boat traffic to essential minimum. Avoid damage to unoiled intertidal and subtidal algae and seagrass. If plans for treatment include methods such as hot water wash or Inipol application which might affect nearshore oil or toxicity levels, contact ADF&G for consultation and authorization.
AGENCY CONTACT PERSON: ADF&G Larry Nicholson 486-4791

Harbor seal and sea lion pupping (5/10 to 7/1)
30, 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. No application of Inipol within two weeks of arrival dates (work window at these sites is limited to 7/2 to 7/31). Contact ADF&G and USFWS prior to treatment for confirmation.
AGENCY CONTACT PERSON: US National Marine Fisheries Service Steve Zimmerman 586-7235
ADF&G Don Calkins 267-2403

5R **Seabird colony (5/1 to 9/1)**
Restrict air and boat traffic to essential minimum. No personnel within 800m. Aircraft to maintain 800m horizontal, 300m vertical distance from colony. Contact USFWS prior to treatment.
AGENCY CONTACT PERSON: USFWS Jill Parker 786-3377

5S **Shorebird/waterfowl concentration (4/1 to 5/15)**
Restrict all activity to essential minimum, especially air traffic. Contact USFWS and ADF&G for confirmation.
AGENCY CONTACT PERSON: USFWS Jill Parker 786-3377
ADF&G Tom Rothy 267-2206

5T **All Bald Eagle nests (3/1 to 6/1)**
Active Bald Eagle nests (3/1 to 9/1)
Restrict air traffic and all disturbance 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.
AGENCY CONTACT PERSON: USFWS Jill Parker 786-3377

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 (6/1 to 9/30)**
Finfish harvesting
Deer harvesting (8/1 to 1/7)
Invertebrate harvesting
7KK **Bear harvesting (4/1 to 5/15 and 10/25 to 11/30)**
Contact ADF&G and appropriate Native Corporation for specific dates, locations, and constraints. Restrict boat and air traffic and beach disturbance to essential minimum. If plans for treatment include methods such as hot water wash or application of Inipol which might affect intertidal or nearshore oil or toxicity levels, contact ADF&G and appropriate Native Corporation for authorization - see Native Corporation Contact List for each Native Corporation's contact person.
AGENCY CONTACT PERSON: ADF&G Jim Fall 267-2359

11/53 #2

FIELD SHORELINE COMMENT SHEET

RB ~~AK~~ 6 PB-16

SEGMENT ST / ~~[illegible]~~ SUBDIVISION: _____ DATE _____

USCG
NAME CWO MCMAHON SIGNATURE _____

☒ NO TREATMENT RECOMMENDED ☐ TREATMENT SUGGESTED
COMMENTS

ADF&G
~~ADEC~~
NAME JEFFREY BARNHART SIGNATURE Jeffrey Barnhart

☒ NO TREATMENT RECOMMENDED ☐ TREATMENT SUGGESTED
COMMENTS Very little oil located in this anadromous fish stream. The four T/B's located do not justify a cleanup.

LAND MANAGER
NAME _____ SIGNATURE _____

☐ NO TREATMENT RECOMMENDED ☐ TREATMENT SUGGESTED
COMMENTS

SHORELINE OILING SUMMARY (ANAD.) 14/38 REVISION NO.:

OG William Reid USCG McMahon SEGMENT ST/ PB016
BIO Michael Fawcett LAND REP _____ STREAM 262-70-10001 OF
EXXON Gus Garcia ADFG ~~Mike Wiedmer~~ Jeff Bernhart TIME 13:05 to :
TEAM NO. 15 TIDE LEVEL 4 FT DATE 2 / MAY / 90
EST. SUBDIVISION LENGTH: 80 m ☐ Sun ☐ Clouds ☐ Fog ☒ Rain ☐ Snow
UPLANDS DESCRIPTION: ☒ Grass ☐ Forest ☐ Rock _____
SURVEYED FROM: ☒ Foot ☐ Boat ☐ Helo
SURFACE SEDIMENTS: R ___ % B ___ % C 10 % P ___ % G 20 % S 70 % M ___ % V ___
SLOPE : Lang 100 % Hang ___ % Vert ___ % WAVE EXPOSURE: ☒ Low ☐ Med ☒ Hig
OIL CATEGORY LENGTH: W 0 m M 0 m N 20 m VL 20 m NO 40

SURFACE OIL

CHARACTER	DISTRIBUTION				OIL / FILM COLOR					IMPACTED ZONES			
	/C	/B	/P	/S	SHN/BR	DRK/RW	GY/SL	MED/TL	LGT/	SU	UI	MI	LI
ASPHALT PAVEMENT													
POOLED													
COVER													
COAT													
STAIN				X			X				X		
MOUSSE													
PATTIES													
TARBALLS			X					X			X		
FILM													
NO OIL										X		X	X

PAVEMENT H F S 0 sq. m by 6
PATTIES / TARBALLS 0 B
NEAR SHORE SHEEN? (NO) BR RW SL

OILED DEBRIS	AMOUNT SM	MD	LG
Logs			
Vegetation			
Trash			
Debris			

Did You Col DEBRIS ☐ YES ☐ NO
TYPE G
#BAGS 0

Photographs:
Roll No. AS-15-8
Frames 4-7

SUBSURFACE OIL

PIT NO.	PIT DEPTH (cm)	SUBSURFACE OIL CHARACTER					OILED INTERVAL (CM-CM)	BELOW		OIL / FILM COLOR					PIT ZONE				ANA	SHEEN (Y/N)	▼	SURFA SUBSUR SEDIME
		OP	OR	OL	OF	NO		UO	UC	SHN/BR	DRK/RW	GY/SL	MED/TL	LGT/	SU	UI	MI	LI				
1	40					X	-									X				N	35	S/C
2	35					X	-									X				N	30	S/S
							-															
							-															
							-															
							-															

COMMENTS ▸

REVIEWED JW DATE 5/8/90

OG WILLIAM REID

SEGMENT ST/ PB016

STREAM 262-70-10010

DATE 7/15/90

15/38

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

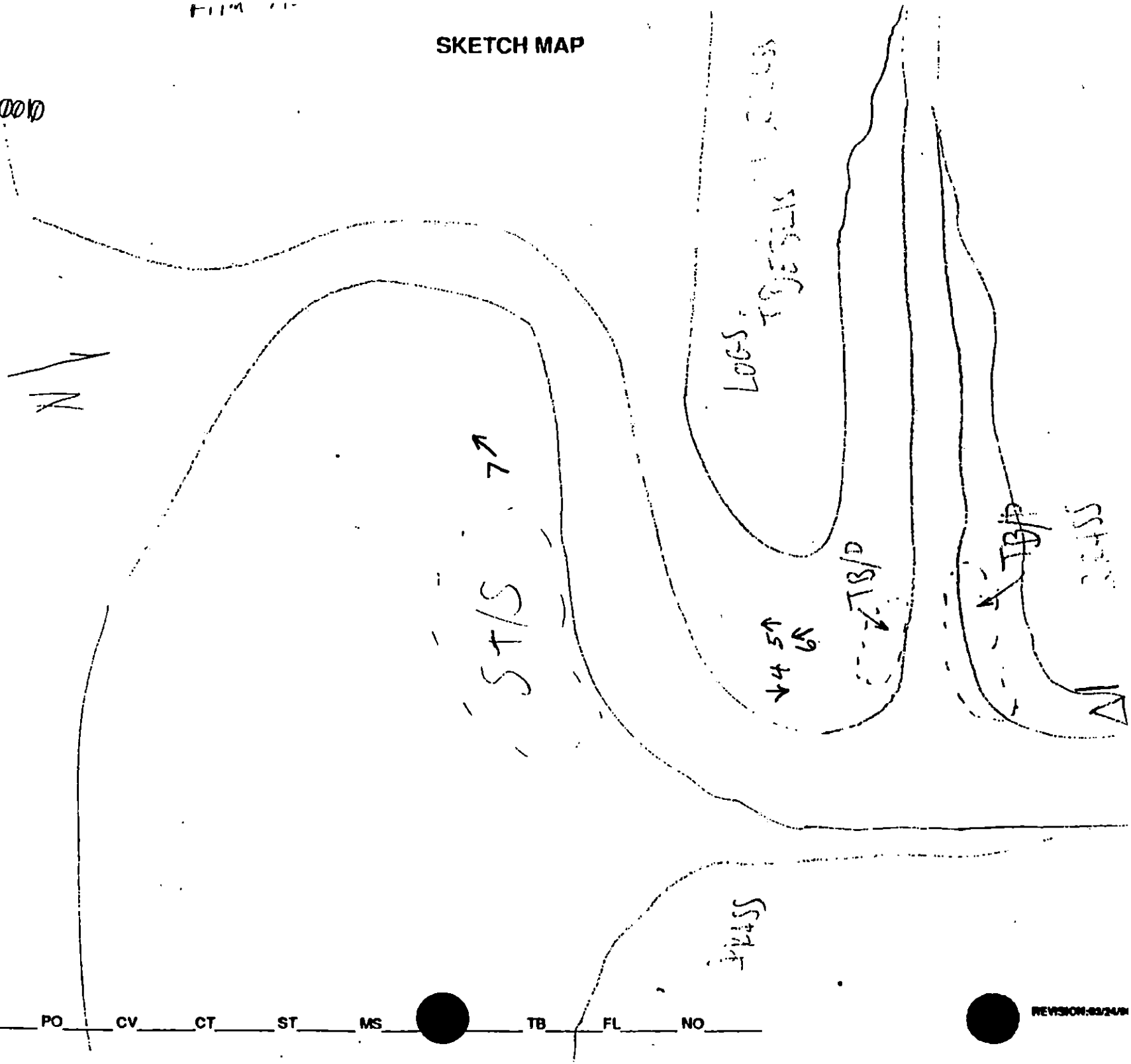
CT/P
Patchy Distribution

CT/S
Splashed Distribution

lll
Oiled Vegetation

1 ●→
Photo location, direction, and number

SKETCH MAP



Oil Character (%): AP_____ PO_____ CV_____ CT_____ ST_____ MS_____ TB_____ FL_____ NO_____

REVISION: 03/24/91

12/38

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: 5/3/96 16 HIGH TIDE TIMES: 8:52pm / 10:16pm 21 TEAM RECORDER: JEFFREY BARNHART

4 START TIME: 1:15 pm 16 HIGH TIDE HTS: 14.1 / 14.8 22 OBSERVERS: Cris Garcia, William Reid, John McMahon, Mike Fowle

5 STOP TIME: 1:35 pm 17 LOW TIDE TIMES: 3:11 PM / 3:50pm 23 AGENCY: ADF&G/EVOS/USCG/MMC/MMS

6 SEGMENT #: OBC16 18 LOW TIDE HTS: 5.4 / 1.9 24 PHOTOS TAKEN: Y (N)

7 STATION #: 262-70-10010 19 TIDE HT AT SURVEY: _____ Roll #: _____ Frame: _____

8 K-UNIT: K10-07 (Ebb) Slack Flood Slack 25 VIDEO TAKEN: Y (N) TAPE#: _____

9 STAT AREA: 262-70 20 USCG QUAD: Karluk D-5 Start: _____ End: _____

10 LAT: 57° 45' 20" N 11 LONG: 155° 29' 9" W 26 SAMPLES TAKEN? Y (N) Number

12 SOURCE: Map Loran (Anadcat) Oil _____

13 LOCATION: Helen Creek, Pugle Bay Sediment _____

14 DESCRIPTION: S 33S 38W 22 Biological _____

Water _____

EXTENT OF OIL

	SHORELINE L	W	M²	%	STREAM L	W	M²	%
27 SURFACE COVERAGE								
28 SURFACE THICKNESS								
29 PENETRATION	0							

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 Beach) Moderate (Low Stream)

35 SUBSTRATE TYPE: Bedrock _____ Boulder _____ Cobble _____ Gravel 20 Sand 80 Mud/silt _____

36 CATALOGED ANAD. FISH STREAM? (Y) N

37 CATALOG #: 262-70-10010

38 STREAM NAME: Helen 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: _____

43 ANADROMOUS FISH PRESENT? Y (N)

44 ANADROMOUS FISH OBSERVATION

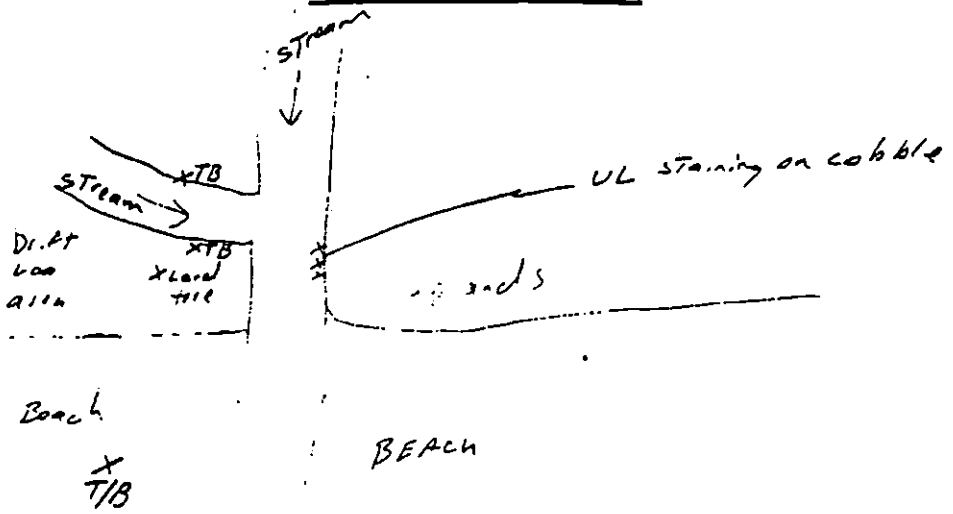
Species	Aerial	Ground

COMMENTS: Found only 4 T/B's. No change in amount.

I agree with recommendation of Exxon

FRAME(S)	DESCRIPTION

48 OIL DISTRIBUTION DIAGRAM



· Sample taken
Photo frame # and

SHORELINE EVALUATION

SEGMENT ST/ K10-07-PB-019 SUBDIVISION A (1 OF 2) DATE 5/2/90

SEGMENT ENVIRONMENTAL SENSITIVITIES AND TIME CONSTRAINTS:
4QQ State Marine Park Natinal Wildlife Refuge

Sensitivity code and general time constraints. See attached Ecological sheet for specific constraints and contacts.

SUBDIVISION ECOLOGICAL CONSTRAINTS:

Avoid any unnecessary disturbance or damage to unoiled biota and substrate. (See above)

ARCHAEOLOGICAL CONSTRAINTS:

If treatment is planned, **a cultural resource evaluation is required prior to shoreline treatment.**

SHPO SIGNATURE: Rachel Jean Orr DATE: 5/22/90

OILING CATEGORIZATION:

Wide 0 m: Medium 0 m: Narrow 0 m: V.Light 29 m: No Oil 223 m
Subsurface Oil Observed: Yes____ No X Maximum Depth_____

RECOMMENDATIONS:

X No Treatment Recommended	_____Snare/Absorbent Booms
_____Treatment Recommended	_____Oil Snares (pom poms)
_____Manual Pickup	_____Absorbents (pads,rolls,etc)
_____Bioremediation	_____Spot Washing:_____Wands
_____Tarmat Removal	_____Beach Cleaner
	_____Other (see comments)

COMMENTS: _____

TAG COMMENTS: _____

TAG APPROVAL DATE: 5/21/90.
ADEC Art Weiner Art Weiner
EXXON Amy Tech
NOAA Joseph Talbott
USCG G.A. Beiter G.A. Beiter
FOSC: _____ DATE: MAY 27 1990

OG [redacted]an

SEGMENT ST/ Kto-7-PB-19A

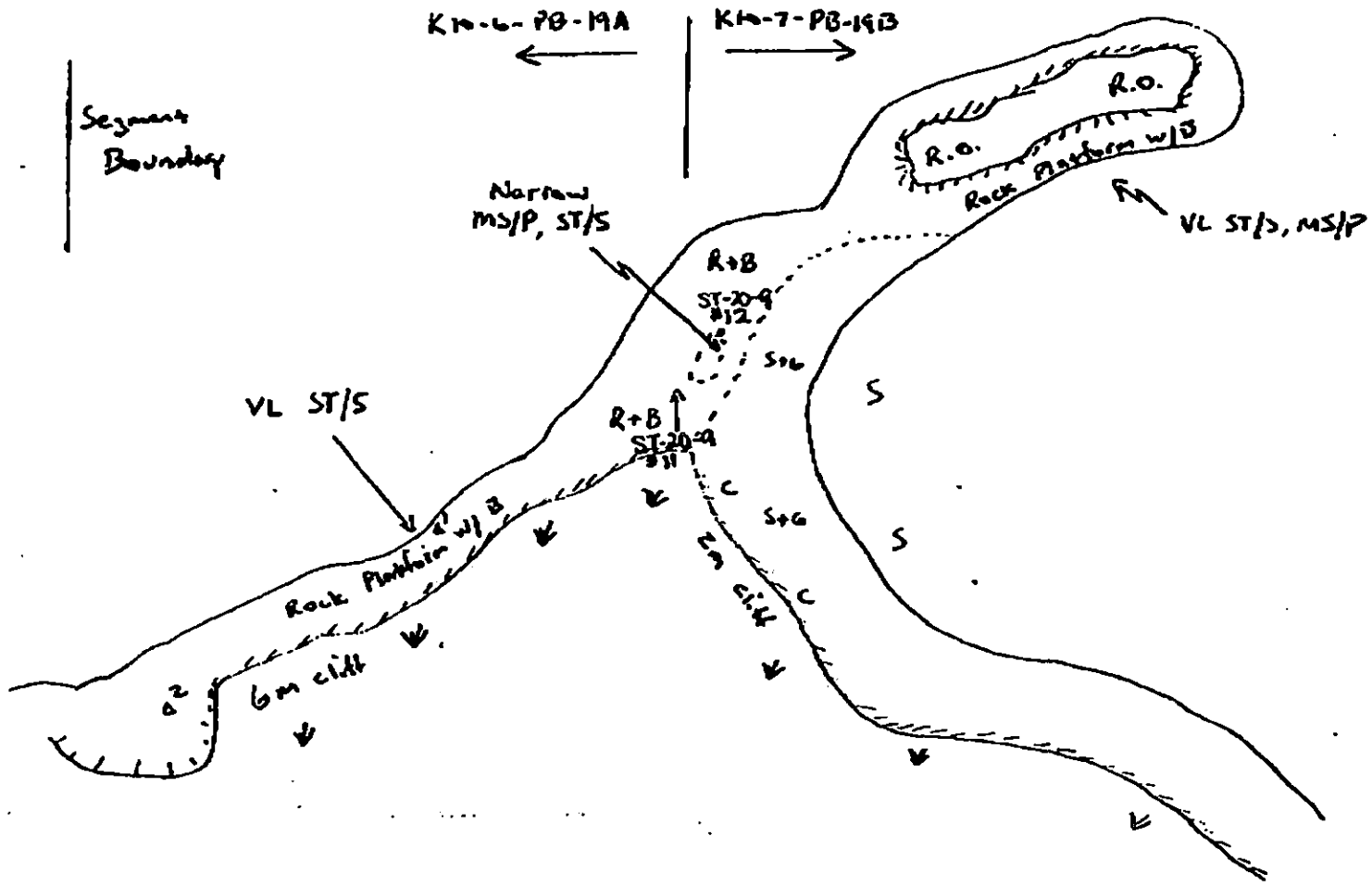
SUBDIVISION Kto-7-PB-19A

DATE 5 / 2 90

SKETCH MAP

N ↑

Approx Scale
1cm ≈ 30m



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

Oil Character Length (m): AP 0 PO 0 CV 0 CT 0 ST 10 MS 0 PT 0 TB 0 FL 0 NO 220

REVISION 01/24/90

OG [redacted]

SEGMENT ST/ Kq-7 - P3- 19A

SUBDIVISION Kq.7 - P3 - 19A

DATE 5 / 2 90

SKETCH MAP

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

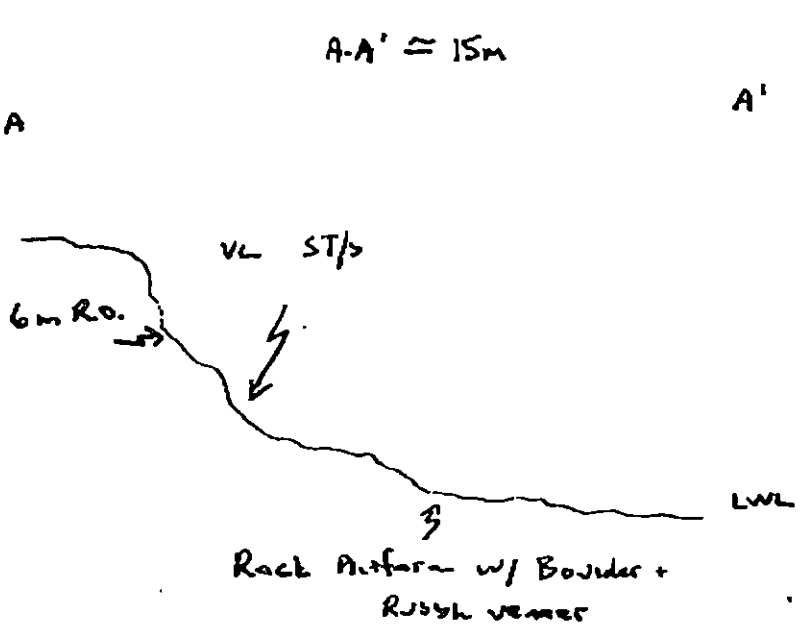
CT/B
Broken Distribution

CT/P
Patchy Distribution

CT/S
Splashed Distribution

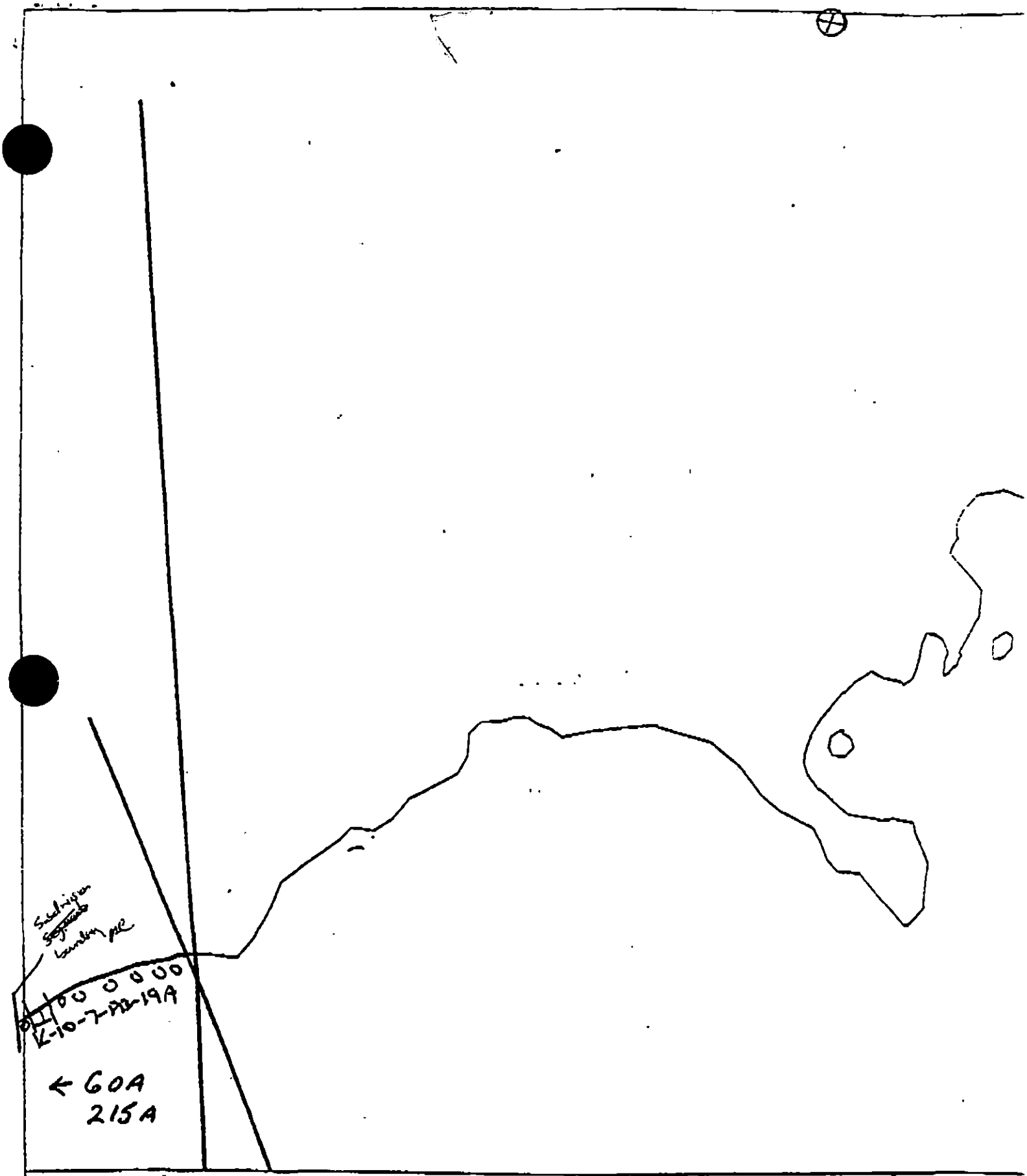
Oiled Vegetation

1 ⇨
Photo location, direction, and number



Oil Character Length (m): AP_____ PO_____ CV_____ CT_____ ST 10 MS_____ PT_____ TB_____ FL_____ NO 220

REVISION: 03/24/99



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

PB-19A

ADEC Segment Length: 3295m

0 100 200 300

K10-7-PB-19A
Map Key: GOA-215b
Name: Acton
Date: 5-2-90
Data Entered:

REGION: KODIAK

SEGMENT: ST/K10-7-PB-019

SUBDIVISIONS: A (1 OF 2)

SHORELINE EVALUATION

SEGMENT ST/ K10-07-PB-019 SUBDIVISION A (1 OF 2) DATE 5/2/90

SEGMENT ENVIRONMENTAL SENSITIVITIES AND TIME CONSTRAINTS:
4QQ State Marine Park Natinal Wildlife Refuge

Sensitivity code and general time constraints. See attached Ecological sheet for specific constraints and contacts.

SUBDIVISION ECOLOGICAL CONSTRAINTS:

Avoid any unnecessary disturbance or damage to unoiled biota and substrate. (See above)

ARCHAEOLOGICAL CONSTRAINTS:

If treatment is planned, **a cultural resource evaluation is required prior to shoreline treatment.**

SHPO SIGNATURE:_____ DATE:_____

OILING CATEGORIZATION:

Wide 0 m: Medium 0 m: Narrow 0 m: V.Light 29 m: No Oil 223 m
Subsurface Oil Observed: Yes____ No X__ Maximum Depth_____

RECOMMENDATIONS:

X No Treatment Recommended	_____Snare/Absorbent Booms
_____Treatment Recommended	_____Oil Snares (pom poms)
_____Manual Pickup	_____Absorbents (pads,rolls,etc)
_____Bioremediation	_____Spot Washing:_____Wands
_____Tarmat Removal	_____Beach Cleaner
	_____Other (see comments)

COMMENTS: _____

TAG COMMENTS:_____

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

KODIAK ECOLOGICAL CONSTRAINTS

1A Salmon stream mouth - fry outmigration (4/15 to 7/31)
1B Salmon stream mouth - spawning (7/15 to 9/10; PEAK 8/15)
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 without authorization from ADF&G. No use of methods which might affect nearshore oil or toxicity levels, such as hot water wash or Inipol application, unless authorized by ADF&G. Treatment which is not intrusive and which will not affect nearshore oil or toxicity levels, such as manual removal, can probably proceed without adherence to time constraints. In any case, contact ADF&G prior to treatment for consultation and/or permit application.
AGENCY CONTACT PERSON: ADF&G Ken Middleton 267-2299

1C Salmon fry nursery area (4/31 to 7/31)
No use of methods which might affect nearshore oil or toxicity levels, such as hot water wash or Inipol application, unless authorized by ADF&G. Treatment which will not affect nearshore oil or toxicity levels, such as manual or mechanical removal, can probably proceed without adherence to time constraints. Contact ADF&G prior to treatment for confirmation and advice.
AGENCY CONTACT PERSON: ADF&G Larry Peltz 424-3214

1D Kotoi Bay Hatchery release
Pink salmon - late May, early June; Chum salmon - June; Sockeye salmon - early July.
1H Remote release site
No use of methods which might affect nearshore oil or toxicity levels, such as hot water wash or Inipol application, unless authorized by ADF&G. Treatment which will not affect nearshore oil or toxicity levels, such as manual or mechanical removal, can probably proceed without adherence to time constraints. Contact ADF&G for confirmation and authorization.
AGENCY CONTACT PERSON: ADF&G Larry Peltz 424-3214

1I Gill net area
1J Purse seine area
Mainland, West side Kodiak, Shuyak & Moser/Olga Bay (6/9 to 10/1)
East side Kodiak, East side Afognak (7/4 to 10/1)
1K Purse seine hook-off
1L Set net sites
Contact ADF&G for confirmation - dates and locations may vary. Restrict boat and air traffic to essential minimum. When set net sites are present (1L) restrict beach operations to essential minimum as authorized by ADF&G. If plans for treatment include methods such as hot water wash or Inipol application which might affect nearshore oil or toxicity levels, contact ADF&G for consultation and authorization.
AGENCY CONTACT PERSON: ADF&G Larry Nicholson 424-4791

2M Herring spawning (4/15 to 6/30)
Contact ADF&G for confirmation - dates and locations may vary. Restrict boat traffic to essential minimum. Avoid damage to unoiled intertidal and subtidal algae and seagrass. If plans for treatment include methods such as hot water wash or Inipol application which might affect nearshore oil or toxicity levels, contact ADF&G for consultation and authorization.
AGENCY CONTACT PERSON: ADF&G Larry Nicholson 486-4791

Harbor seal and sea lion pupping (5/10 to 7/1)
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. No application of Inipol within two weeks of arrival dates (work window at these sites is limited to 7/2 to 7/31). Contact ADF&G and USFWS prior to treatment for confirmation.
AGENCY CONTACT PERSON: US National Marine Fisheries Service Steve Zimmerman 586-7235
ADF&G Don Calkins 267-2403

5R Seabird colony (5/1 to 9/1)
Restrict air and boat traffic to essential minimum. No personnel within 800m. Aircraft to maintain 800m horizontal, 300m vertical distance from colony. Contact USFWS prior to treatment.
AGENCY CONTACT PERSON: USFWS Jill Parker 786-3377

5S Shorebird/waterfowl concentration (4/1 to 5/15)
Restrict all activity to essential minimum, especially air traffic. Contact USFWS and ADF&G for confirmation.
AGENCY CONTACT PERSON: USFWS Jill Parker 786-3377
ADF&G Tom Rothy 267-2206

5T All Bald Eagle nests (3/1 to 6/1)
Active Bald Eagle nests (3/1 to 9/1)
Restrict air traffic and all disturbance 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.
AGENCY CONTACT PERSON: USFWS Jill Parker 786-3377

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 (6/1 to 9/30)
7H Finfish harvesting
Deer harvesting (8/1 to 1/7)
Invertebrate harvesting
Bear harvesting (4/1 to 5/15 and 10/25 to 11/30)
Contact ADF&G and appropriate Native Corporation for specific dates, locations, and constraints. Restrict boat and air traffic and beach disturbance to essential minimum. If plans for treatment include methods such as hot water wash or application of Inipol which might affect intertidal or nearshore oil or toxicity levels, contact ADF&G and appropriate Native Corporation for authorization - see Native Corporation Contact List for each Native Corporation's contact person.
AGENCY CONTACT PERSON: ADF&G Jim Fall 267-2359

FIELD SHORELINE COMMENT SHEET

SEGMENT ST / K10-6 PB 124 SUBDIVISION: KN-7-PB-15A DATE 5.2.91
7

USCG
NAME D.D. Haven Jr. (OM3) USCG SIGNATURE

☒ NO TREATMENT RECOMMENDED ☐ TREATMENT SUGGESTED
COMMENTS

ADEC
NAME Francine J. Bennis SIGNATURE

☒ NO TREATMENT RECOMMENDED ☐ TREATMENT SUGGESTED
COMMENTS

Only splatters observed.

LAND MANAGER
NAME JOHN HARDISTER SIGNATURE
USFWS

~~☐ NO TREATMENT RECOMMENDED~~ ~~☒ TREATMENT SUGGESTED~~
COMMENTS

Did not observe this segment directly. Concur with ADEC representative.

SHORELINE OILING SUMMARY

REVISION NO. 04/13/90

OG Acton USCG Haven SEGMENT ST/ K10-7-19A
BIO Davis LAND REP NPS Troyer (for USFW) SUBDIVISION K10-6-19A (1 OF 3)
EXXON Avery ADEC Bennis TIME 1615 to 1645
TEAM NO. 20 TIDE LEVEL +6 to +5 DATE 5/2/90
EST. SUBDIVISION LENGTH: 230 m ☐ Sun ☐ Clouds ☐ Fog ☒ Rain ☐ Snow
UPLANDS DESCRIPTION: ☐ Grass ☐ Forest ☒ Rock
SURVEYED FROM: ☒ Foot ☐ Boat ☐ Helo WORKING DIRECTION: W to E
SURFACE SEDIMENTS: R 60 % B 35 % C 2 % P 1 % G 1 % S 1 % M - % V - %
SLOPE : Lang 20 % Hang 40 % Vert 40 % WAVE EXPOSURE: ☐ Low ☐ Med ☒ High
OIL CATEGORY LENGTH: W - m M - m N - m VL 10 m NO 220 m

SURFACE OIL

CHARACTER	DISTRIBUTION				OIL / FILM COLOR					IMPACTED ZONES			
	RC	RB	P	RS						SU	UI	MI	LI
ASPHALT PAVEMENT													
POOLED													
COVER													
COAT													
STAIN				✓		✓					✓		
MOUSSE													
PATTIES													
TARBALLS													
FILM													
NO OIL										✓		✓	✓

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 SM	MD	LG
Logs			
Vegetation			
Trash			
Debris			

DID YOU COLLECT DEBRIS?
YES ☐ NO ☒
TYPE -
#BAGS 0

Photographs:
Roll No. ST-20-9
Frames 11, 12

SUBSURFACE OIL

PIT NO.	PIT DEPTH (cm)	SUBSURFACE OIL CHARACTER					OILED INTERVAL (cm)	BELOW		OIL / FILM COLOR					PIT ZONE				ANA	SHEEN (Y/N)	▼	SURFACE - SUBSURFACE SEDIMENTS
		OP	OR	OL	OF	NO		UO	UC						SU	UI	MI	LI				
1	10					✓	-		✓							✓						R, B, G
2	5					✓	-		✓						✓							R, B, G
							-															
							-															
							-															
							-															

COMMENTS Several very light stain (ST/S) were observed in one area of the upper UITZ. This subdivision is very high wave exposure and comprised primarily of rock platform with boulder/rubble veneer.

REVIEWED BAT DATE 8 MAY 90

OG [redacted]

SEGMENT ST/ K to 7-PB-19A

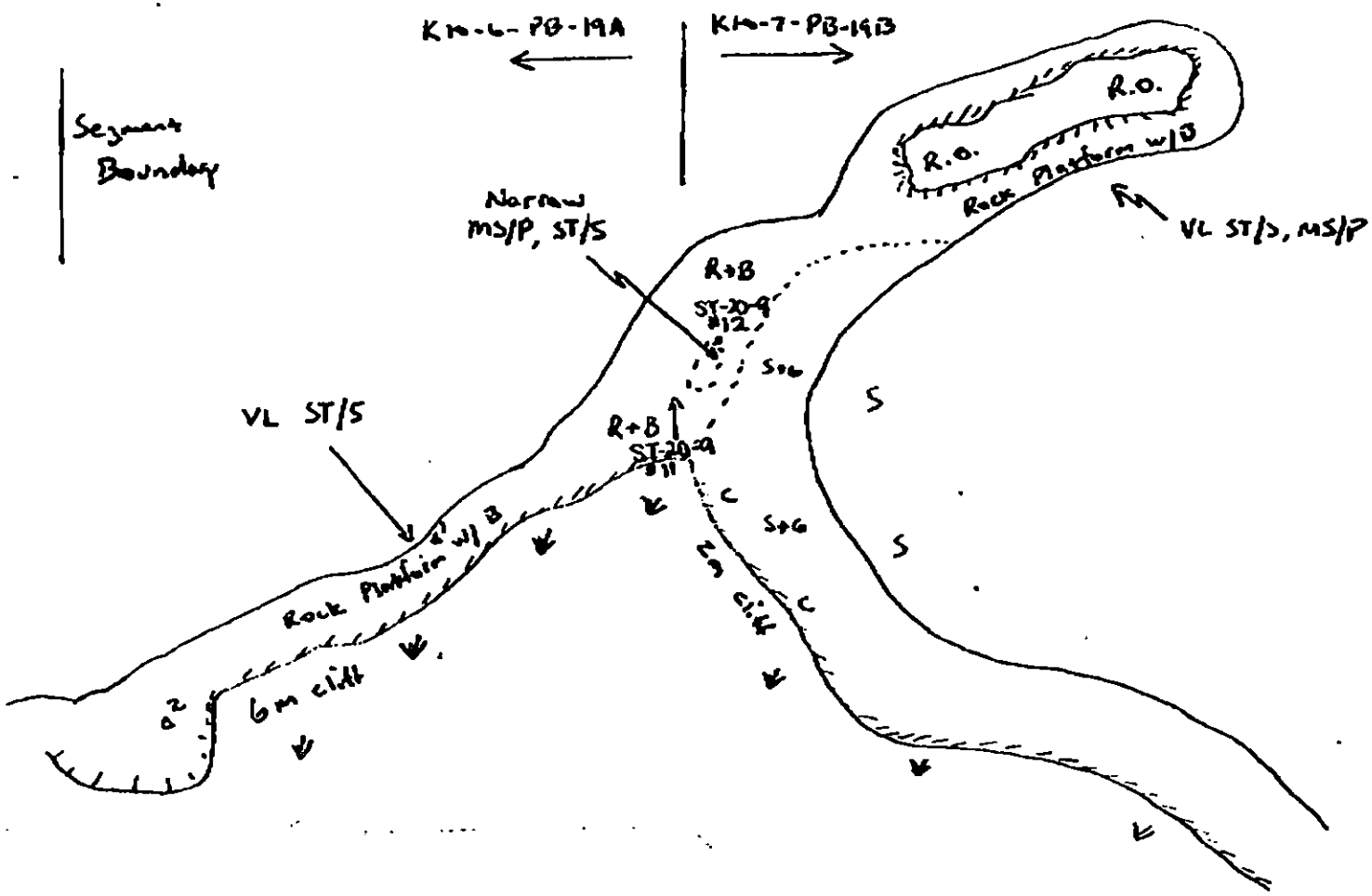
SUBDIVISION Kto-7-PB-19A

DATE 5 / 2 90

SKETCH MAP

N ↑

Approx Scale
1cm ≈ 30m



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

Oil Character Length (m): AP 0 PO 0 CV 0 CT 0 ST 10 MS 0 PT 0 TB 0 FL 0 NO 220

REVISION 5/24/90

OG [redacted]

SEGMENT ST/ K9-7 - P3- 19A

SUBDIVISION K9-7 - P3 - 19A

DATE 5 / 2 90

SKETCH MAP

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

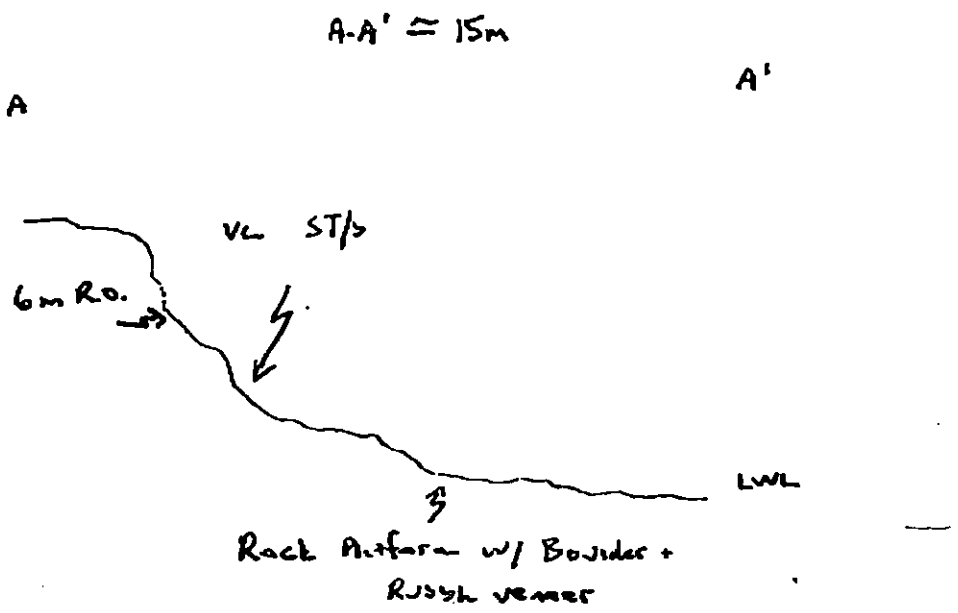
CT/B
Broken Distribution

CT/P
Patchy Distribution

CT/S
Splashed Distribution

Oiled Vegetation

1 ⟶
Photo location, direction, and number



Oil Character Length (m): AP_____ PO_____ CV_____ CT_____ ST 10 MS_____ PT_____ TB_____ FL_____ NO 220

REVISION 03/24/98

SHORELINE ECOLOGICAL SUMMARY

REVISION: 03/22/

Segment ST / K10-7 Subdivision PB-19A Date (mo / day / yr.) 5/2/90

Time (24 hr) 12:30 Biologist N. Davis

(A) Substrate type and % of segments:
(1) Bedrock 60 (2) Boulder 35 (3) Cobble 2 (4) Pebble 2 (5) Sand 1 (6) Silt —

(B) Overall % cover of biota (% of segment): Dense 20% Moderate 30% Low 50% (40%)

(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-20-9
Frames 11,12,

BARNACLES Continuous along segment. Some sparse - some dense. Mostly Moderate.

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~~	
3	3	3	3	3	3	3	3	3	3	3	3	NOT PRESEN
4	4	4	4	4	4	4	4	4	4	4	4	3,4,5,6
5	5	5	5	5	5	5	5	5	5	5	5	
6	6	6	6	6	6	6	6	6	6	6	8	

MYTILUS Small patches of small mytilus most were < 5cm in length.

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	
3	3	3	3	3	3	3	3	3	3	3	3	NOT PRESEN
4	4	4	4	4	4	4	4	4	4	4	4	3,4,5,6
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 Continuous but variable in densities. littorina moderate; Limpets sparse, Nucella Sparse - Rare.

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	
3	3	3	3	3	3	~~3~~	~~3~~	~~3~~	3	3	3	NOT PRESEN
4	4	4	4	4	4	4	4	4	4	4	4	4,5,6
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 Continuous with variable densities. Alot of new growth

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	
3	~~3~~	3	3	~~3~~	3	3	3	3	3	3	3	NOT PRESEN
4	4	4	4	4	4	4	4	4	4	4	4	4,5,6
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: The lower intertidal was dominated by Iammaria dentigera Alaria, Dredea - Unknown Gigartinales blade, Rhodomenia, and corallina. Anthopleura artemisia Mopalia sp. Katharina tunicata, unknown holothuroids, and Pagurus sp. The MTZ was dominated by lithothamnion, corallina, Rhodomenia, Odonthalia, ulva, Fucus, Notoacmea, anthopleura artemisia; telia crassicornis, pagurus, spirorbis, Unknown Rhynchocel Balanus cariosus and glandula; littorina sitkana and scutilata, Nucella. The NTZ was dominated by Fucus, Rhodomela lycopodioides, Odonthalia floccosa, Ulva, Bossiella and corallina, Balanus glandula, littorina, Nucella, Notoacmea and Pagurus. Birds seen in the area Harlequin, Mergansers, Cormorants, Glaucous-winged Gulls, Tundra Swans, 2 adult Eagles and merganasers. Mammals using the area Caribou, Foxes (they have an active den on bird) Sea Otters, Wolves and Bears.

Ecological Considerations: NONE. Eagles may be nesting in the area. Beach used by Foxes Sea Otters offshore.

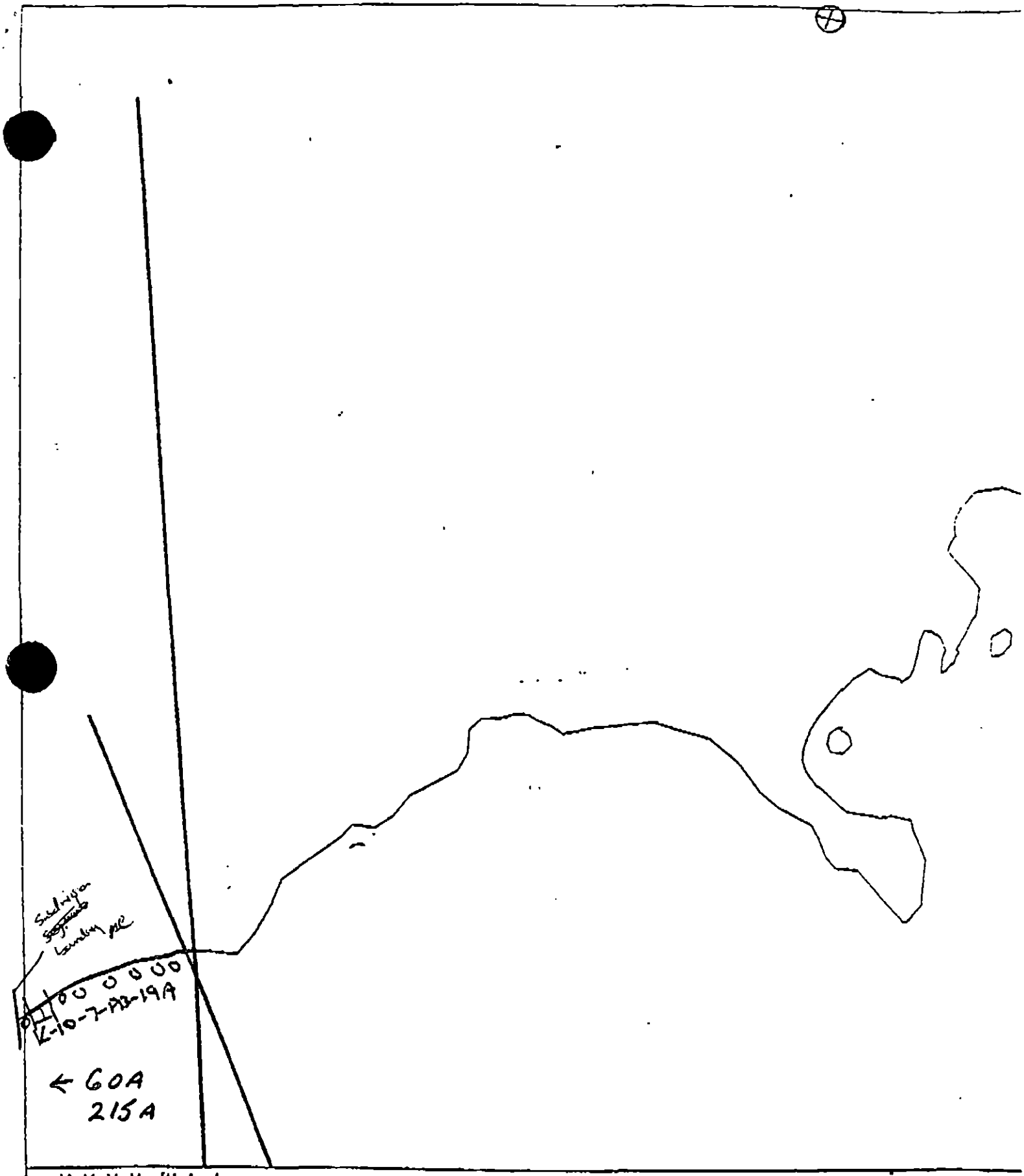
Control No.
(Office Use Only)

PHOTOGRAPHY LOG

ROLL NO. ST-20-9 FROM 4/29 TO
TEAM NO. 20 PWS / KENAI / KODIAK / AK. PENINSULA

FRAME NUMBER	PHOTOGRAPHER	DATE	SITE	LOCATION CODE	COMMENTS
11	N. Davis	4/29/90	KO-7-PB-19		View across segment from LIT2 to LIT2 looking South
12	↓	↓			mouth of Bluin

PHOTOLOG.WK1 03/26/90 BAT



XXXX Wide
//// Medium
---- Narrow
TTTT Very Light

PB-19A

ADEC Segment Length: 3295m

0 100 200 300

K10-7-PB-19A
Map Key: 60A-215b
Name: Acton
Date: 5-2-90

SHORELINE EVALUATION

SEGMENT ST/ K10-7-PB-019 SUBDIVISION B (2 OF 2) DATE 5/2/90

SEGMENT ENVIRONMENTAL SENSITIVITIES AND TIME CONSTRAINTS:
4QQ State Marine Park National Wildlife Refuge

SUBDIVISION ECOLOGICAL CONSTRAINTS:

Avoid any unnecessary disturbance or damage to unoiled biota and substrate.

ARCHAEOLOGICAL CONSTRAINTS:

Consultation and inspection with an Exxon archaeologist is required prior to treatment. Specific on-site monitoring requirements will be determined at that time.**>>>PHONE 564-3274 (Anchorage) OR 229-1508 (24 hrs.)<<<**

SHPO SIGNATURE: Rachel Joan Orr DATE: 5/22/90

OILING CATEGORIZATION:

Wide 0 m: Medium 0 m: Narrow 0 m: V.Light 201 m: No Oil 2843 m
Subsurface Oil Observed: Yes ____ No X Maximum Depth ____

RECOMMENDATIONS:

____No Treatment Recommended	____Snare/Absorbent Booms
__X__Treatment Recommended	____Oil Snares (pom poms)
__X__Manual Pickup	____Absorbents (pads,rolls,etc)
____Bioremediation	____Spot Washing:____Wands
____Tarmat Removal	____Beach Cleaner
	____Other (see comments)

COMMENTS: Recommend manual pick up of mousse accumulations in the UITZ as indicated on the attached sketch map. No specific environmental time constraints identified.

TAG COMMENTS: ____

TAG APPROVAL DATE: 5/21/90.
ADEC Art Weiner Art Weiner
EXXON Andy Tosh Andy Tosh FOSC [signature] DATE: MAY 27 1990
NOAA Joseph Talbott Joseph Talbott
USCG G.A. REITER G.A. Reiter

OG Acton

SEGMENT Kio- - PB-19B A

SUBDIVISION Kio- - PB-19B A

DATE 5 / 2 90

SKETCH MAP

N

Approx Scale
1cm = 30m

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

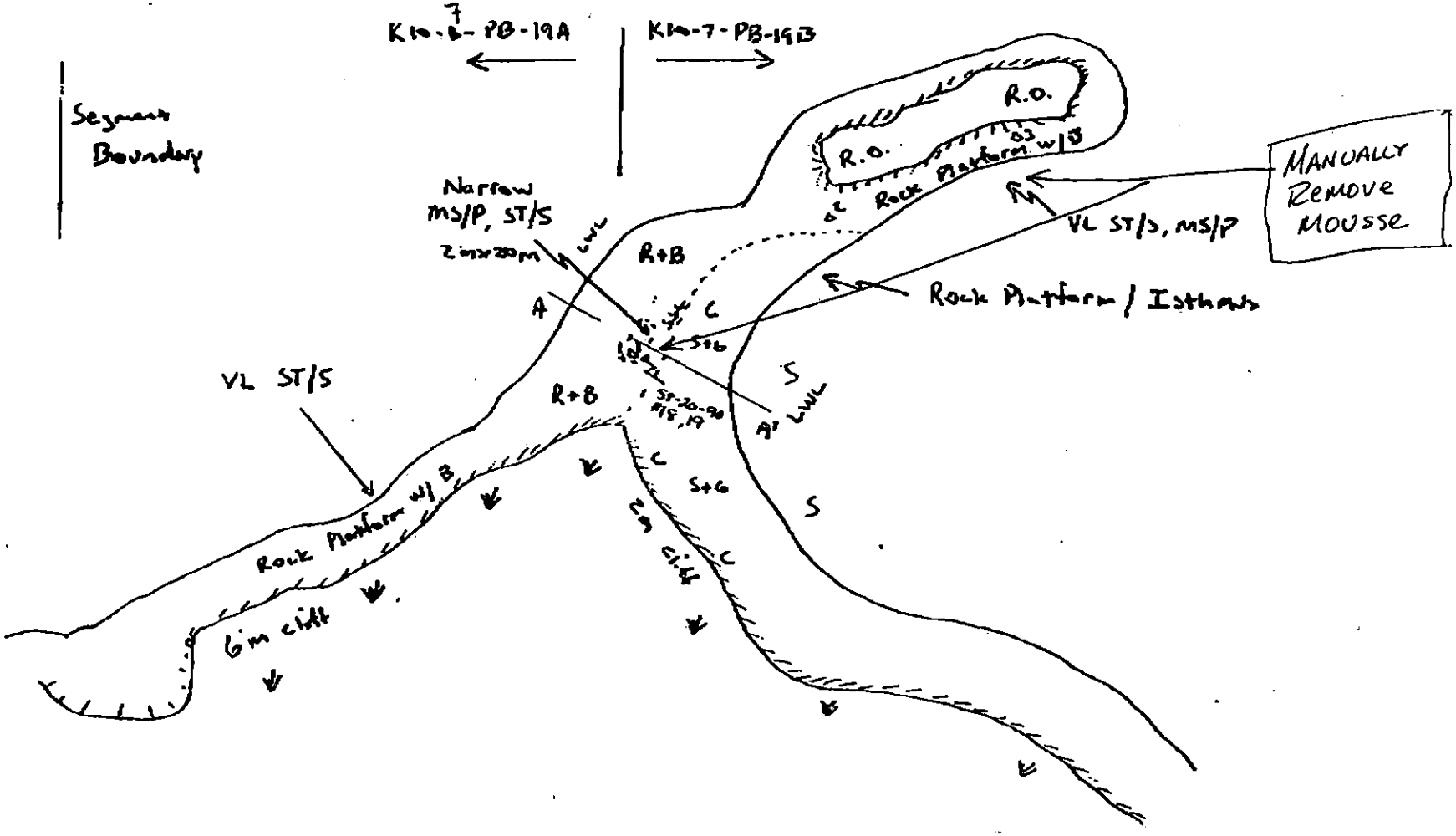
CT/B
Broken Distribution

CT/P
Patchy Distribution

CT/S
Splashed Distribution

Oiled Vegetation

1 ⇔
Photo location, direction, and number



Oil Character Length (m): AP 0 PO 0 CV 0 CT 0 ST 220 MS 270 PT 0 TB 0 FL 0 NO 4172

REVISION: 03/21/90

OG A[redacted]n

SEGMENT SI/ K10-7-PB-19B&E

SUBDIVISION K10-7-PB-19B&E

DATE 5/2/90

SKETCH MAP

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

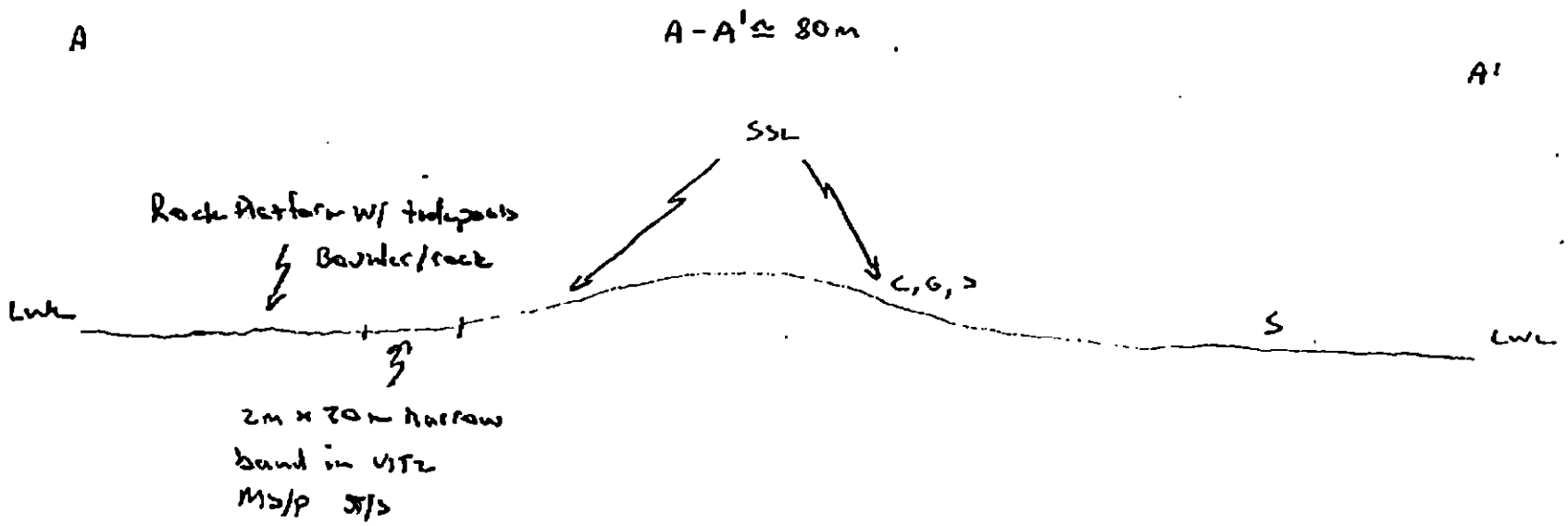
CT/B
Broken Distribution

CT/P
Patchy Distribution

CT/S
Splashed Distribution

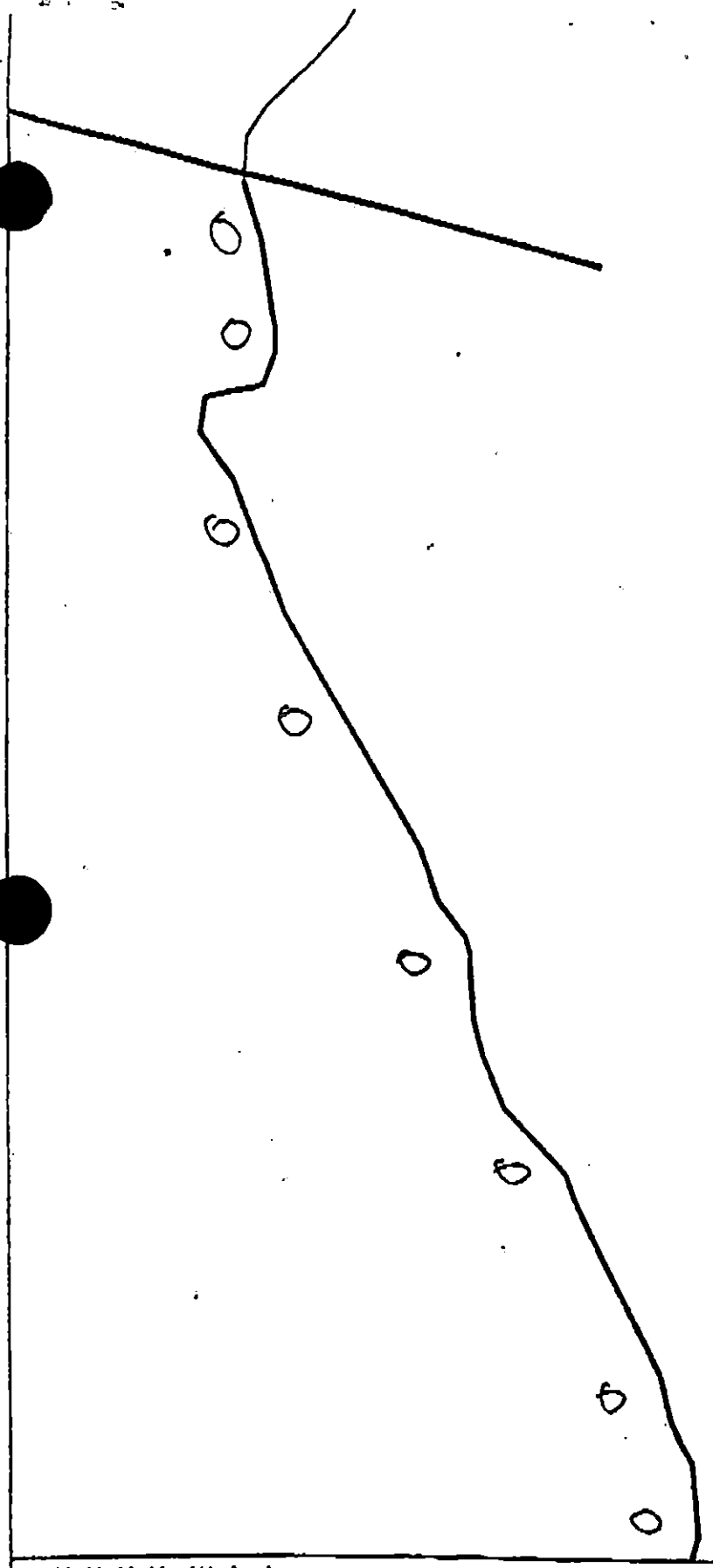
Oiled Vegetation

1 ◆▸
Photo location, direction, and number



Oil Character Length (m): AP_____ PO_____ CV_____ CT_____ ST_____ MS_____ PT_____ TB_____ FL_____ NO_____

REVISION:03/94/99



K10-7-PB-19B

GOA
↓215A

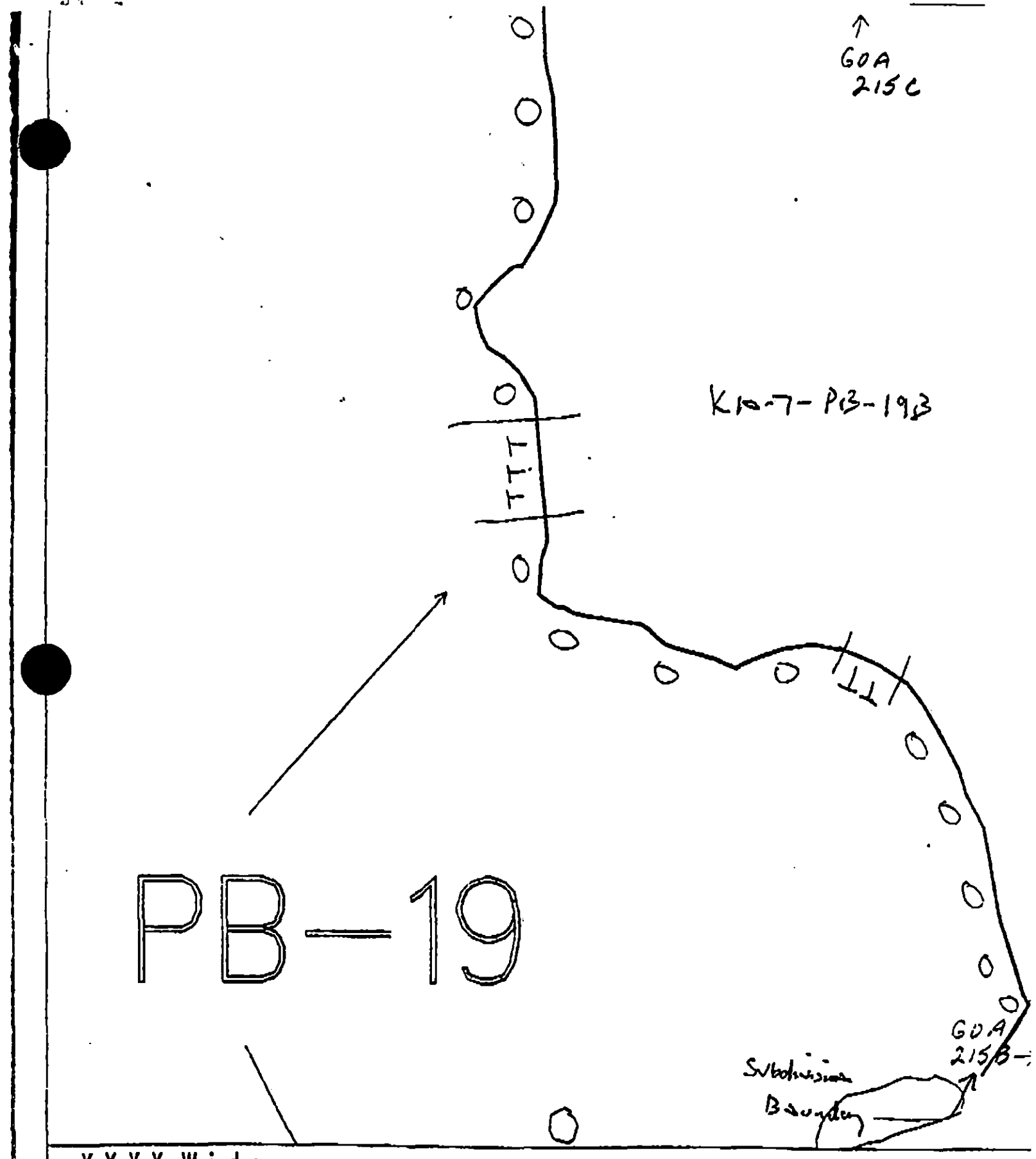
XXXX Wide
//// Medium
---- Narrow
TTTT Very Light
0000 No Oil

PB-19

ADEC Segment Length: 3295m

0 100 200 300
METERS

K10-7-PB-19B
Map Key: GOA-215c
Name: Acton
Date: 5-2-90
Data Entered:



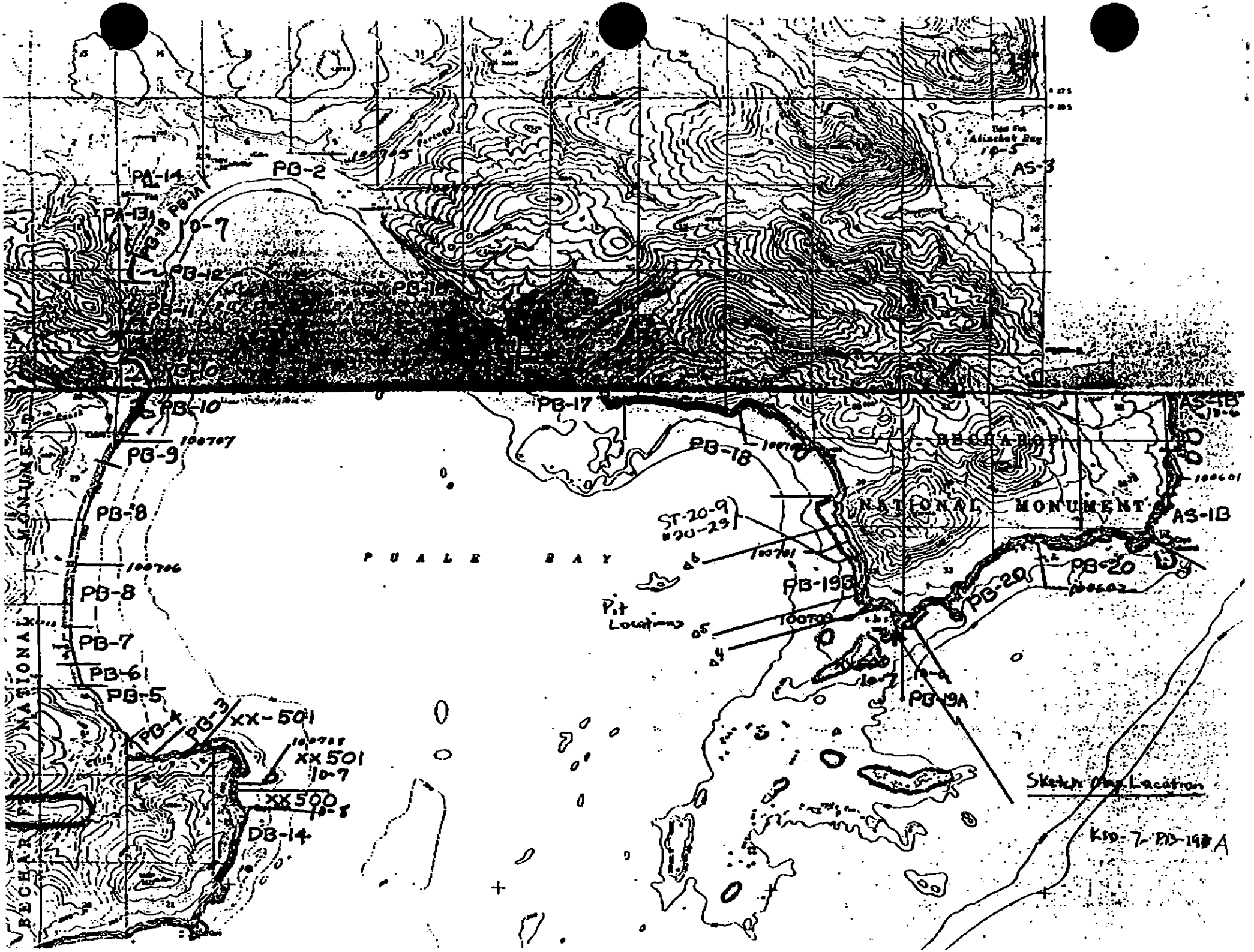
XXXX Wide
//// Medium
---- Narrow
TTTT Very Light
0000 Oil

P.B-19

ADEC Segment Length: 3295m

0 100 200 300
METERS

K10-7-PB-193
Map Key: GOA-215a
Name: Acton
Date: 5-2-90
Date Entered:


PB-2
PB-14
PB-13
PB-12
PB-11
PB-10
PB-9
PB-8
PB-8
PB-7
PB-6
PB-5
PB-4
PB-3
PB-17
PB-18
PB-19B
PB-20
PB-20
PB-19A
AS-3
AS-1B
AS-1B
NATIONAL MONUMENT
NATIONAL MONUMENT
PUALE BAY
ST-20-9
#20-29
Pit Locations
XX-501
XX501
10-7
XX500
DB-14
Sketch Map Location
Ksp-7-PB-19B A

ADDENDUM: SUBDIVISION CONSTRAINTS

SEGMENT K10-7-PB-019 SUBDIVISION B (2 of 2)

WORK WINDOW	
Manual Pickup	OPEN

ARCHAEOLOGICAL STANDARD CONSTRAINT

If cultural resources are uncovered, PHONE 564-3274.

APPLICABLE ECOLOGICAL TIME CONSTRAINTS

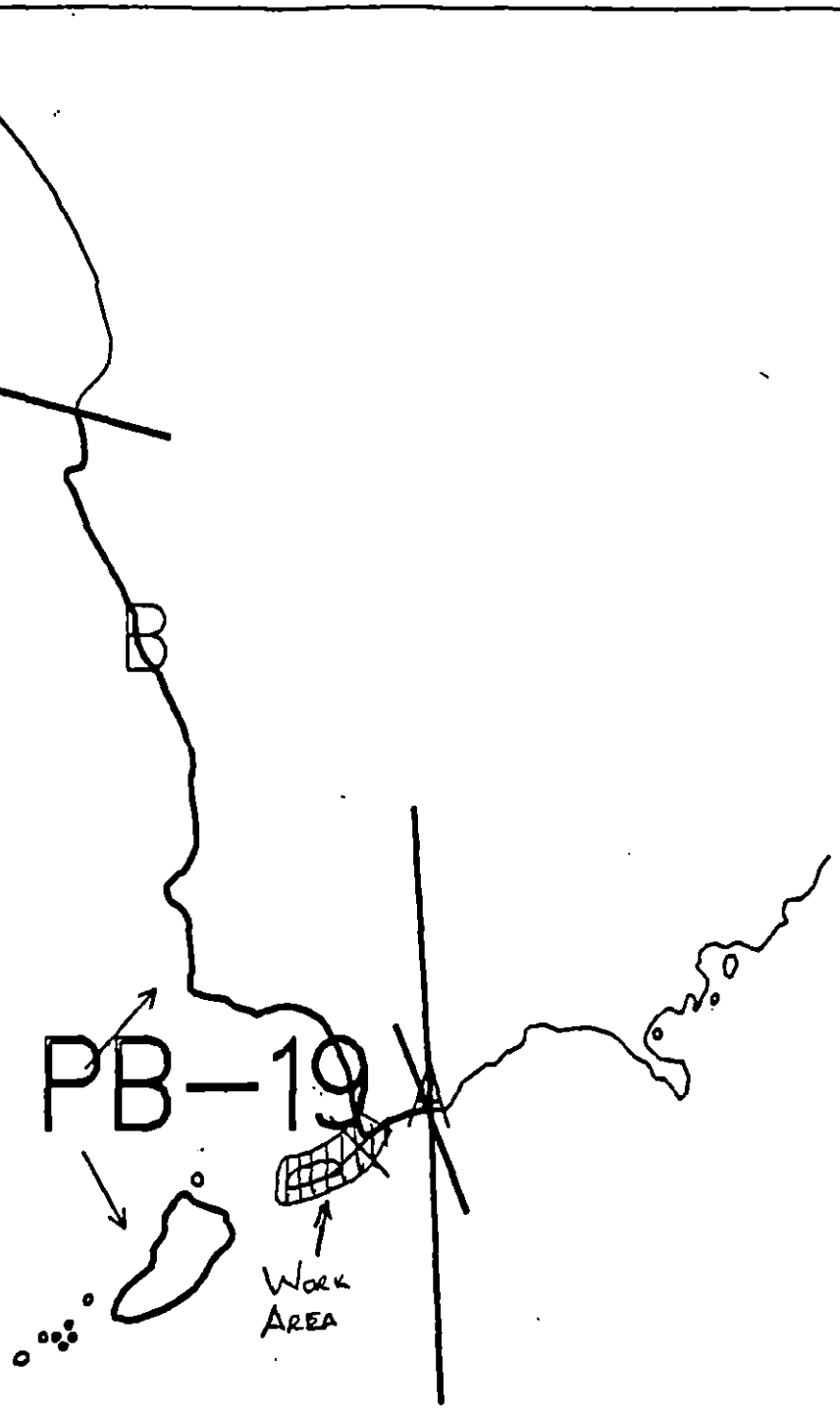
No constraint to manual pickup.

OTHER ECOLOGICAL CONSIDERATIONS

Avoid any unnecessary disturbance or damage to unoiled biota and substrate.

FOSC _____ Date 6/15/90

Prepared by Reg R. Coulter Date 06-14-90



EXXON

Exxon Company, USA

Map Key: AKP-PB-19

ECOLOGY MAP

SEGMENT K10-7 PB-19

SUBDIVISION B (2 of 2)

METERS

★ Seabird Colony

▲ Active Eagle Nest

△ Inactive Eagle Nest

SHORELINE EVALUATION

SEGMENT ST/ K10-7-PB-019 SUBDIVISION B (2 OF 2) DATE 5/2/90

SEGMENT ENVIRONMENTAL SENSITIVITIES AND TIME CONSTRAINTS:
4QQ State Marine Park National Wildlife Refuge

SUBDIVISION ECOLOGICAL CONSTRAINTS:

Avoid any unnecessary disturbance or damage to unoiled biota and substrate.

ARCHAEOLOGICAL CONSTRAINTS:

Consultation and inspection with an Exxon archaeologist is required prior to treatment. Specific on-site monitoring requirements will be determined at that time.**>>>PHONE 564-3274 (Anchorage) OR 229-1508 (24 hrs.)<<<**

SHPO SIGNATURE: Rachel Jean Orr DATE: 5/22/90

OILING CATEGORIZATION:

Wide 0 m: Medium 0 m: Narrow 0 m: V.Light 201 m: No Oil 2843 m
Subsurface Oil Observed: Yes____ No X Maximum Depth_____

RECOMMENDATIONS:

_____No Treatment Recommended	_____Snare/Absorbent Booms
__X__Treatment Recommended	_____Oil Snares (pom poms)
__X__Manual Pickup	_____Absorbents (pads,rolls,etc)
_____Bioremediation	_____Spot Washing:_____Wands
_____Tarmat Removal	_____Beach Cleaner
	_____Other (see comments)

COMMENTS: Recommend manual pick up of mousse accumulations in the UITZ as indicated on the attached sketch map. No specific environmental time constraints identified.
REFER TO CONSTRAINT ADDENDUM dated 6/14/90

TAG COMMENTS:

TAG APPROVAL DATE: 5/21/90.
ADEC ART WERNER
EXXON ANDY TOTH
NOAA JOSEPH ELBERT
USCG G.A. REITER

FOSC: _____ DATE: MAY 27 1990

REGION: KODIAK

SEGMENT: ST/K10-7-PB-019

SUBDIVISIONS: B (2 OF 2)

SHORELINE EVALUATION

SEGMENT ST/ K10-7-PB-019 SUBDIVISION B (2 OF 2) DATE 5/2/90

SEGMENT ENVIRONMENTAL SENSITIVITIES AND TIME CONSTRAINTS:
4QQ State Marine Park National Wildlife Refuge

SUBDIVISION ECOLOGICAL CONSTRAINTS:

Avoid any unnecessary disturbance or damage to unoiled biota and substrate.

ARCHAEOLOGICAL CONSTRAINTS:

Consultation and inspection with an Exxon archaeologist is required prior to treatment. Specific on-site monitoring requirements will be determined at that time.**>>>PHONE 564-3274 (Anchorage) OR 229-1508 (24 hrs.)<<<**

SHPO SIGNATURE:_____ DATE:_____

OILING CATEGORIZATION:

Wide 0 m: Medium 0 m: Narrow 0 m: V.Light 201 m: No Oil 2843 m
Subsurface Oil Observed: Yes____ No X Maximum Depth_____

RECOMMENDATIONS:

_____No Treatment Recommended	_____Snare/Absorbent Booms
__X__Treatment Recommended	_____Oil Snares (pom poms)
__X__Manual Pickup	_____Absorbents (pads,rolls,etc)
_____Bioremediation	_____Spot Washing:_____Wands
_____Tarmat Removal	_____Beach Cleaner
	_____Other (see comments)

COMMENTS: Recommend manual pick up of mousse accumulations in the UITZ as indicated on the attached sketch map. No specific environmental time constraints identified.

TAG COMMENTS:_____

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

KODIAK ECOLOGICAL CONSTRAINTS

1A Salmon stream mouth - fry outmigration (4/15 to 7/31)
1B Salmon stream mouth - spawning (7/15 to 9/10; PEAK 8/15)
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 without authorization from ADF&G. No use of methods which might affect nearshore oil or toxicity levels, such as hot water wash or Inipol application, unless authorized by ADF&G. Treatment which is not intrusive and which will not affect nearshore oil or toxicity levels, such as manual removal, can probably proceed without adherence to time constraints. In any case, contact ADF&G prior to treatment for consultation and/or permit application.
AGENCY CONTACT PERSON: ADF&G Ken Middleton 267-2299

1C Salmon fry nursery area (4/31 to 7/31)
No use of methods which might affect nearshore oil or toxicity levels, such as hot water wash or Inipol application, unless authorized by ADF&G. Treatment which will not affect nearshore oil or toxicity levels, such as manual or mechanical removal, can probably proceed without adherence to time constraints. Contact ADF&G prior to treatment for confirmation and advice.
AGENCY CONTACT PERSON: ADF&G Larry Peltz 424-3214

1D Kodol Bay Hatchery release
Pink salmon - late May, early June; Chum salmon - June; Sockeye salmon - early July.
1H Remote release site
No use of methods which might affect nearshore oil or toxicity levels, such as hot water wash or Inipol application, unless authorized by ADF&G. Treatment which will not affect nearshore oil or toxicity levels, such as manual or mechanical removal, can probably proceed without adherence to time constraints. Contact ADF&G for confirmation and authorization.
AGENCY CONTACT PERSON: ADF&G Larry Peltz 424-3214

1I Gill net area
1J Purse seine area
Mainland, West side Kodiak, Shuyak & Moser/Olga Bay (6/9 to 10/1)
East side Kodiak, East side Afognak (7/4 to 10/1)
1K Purse seine hook-off
1L Set net sites
Contact ADF&G for confirmation - dates and locations may vary. Restrict boat and air traffic to essential minimum. When set net sites are present (1L) restrict beach operations to essential minimum as authorized by ADF&G. If plans for treatment include methods such as hot water wash or Inipol application which might affect nearshore oil or toxicity levels, contact ADF&G for consultation and authorization.
AGENCY CONTACT PERSON: ADF&G Larry Nicholson 424-4791

2M Herring spawning (4/15 to 6/30)
Contact ADF&G for confirmation - dates and locations may vary. Restrict boat traffic to essential minimum. Avoid damage to unoiled intertidal and subtidal algae and seagrass. If plans for treatment include methods such as hot water wash or Inipol application which might affect nearshore oil or toxicity levels, contact ADF&G for consultation and authorization.
AGENCY CONTACT PERSON: ADF&G Larry Nicholson 486-4791

Harbor seal and sea lion pupping (5/10 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. No application of Inipol within two weeks of arrival dates (work window at these sites is limited to 7/2 to 7/31). Contact ADF&G and USFWS prior to treatment for confirmation.
AGENCY CONTACT PERSON: US National Marine Fisheries Service Steve Zimmerman 586-7235
ADF&G Don Calkins 267-2403

5R Seabird colony (5/1 to 9/1)
Restrict air and boat traffic to essential minimum. No personnel within 800m. Aircraft to maintain 800m horizontal, 300m vertical distance from colony. Contact USFWS prior to treatment.
AGENCY CONTACT PERSON: USFWS Jill Parker 786-3377

5S Shorebird/waterfowl concentration (4/1 to 5/15)
Restrict all activity to essential minimum, especially air traffic. Contact USFWS and ADF&G for confirmation.
AGENCY CONTACT PERSON: USFWS Jill Parker 786-3377
ADF&G Tom Rothy 267-2206

5T All Bald Eagle nests (3/1 to 6/1)
Active Bald Eagle nests (3/1 to 9/1)
Restrict air traffic and all disturbance 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.
AGENCY CONTACT PERSON: USFWS Jill Parker 786-3377

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 (8/1 to 9/30)
Finfish harvesting
Deer harvesting (8/1 to 1/7)
Invertebrate harvesting
7KK Bear harvesting (4/1 to 5/15 and 10/25 to 11/30)
Contact ADF&G and appropriate Native Corporation for specific dates, locations, and constraints. Restrict boat and air traffic and beach disturbance to essential minimum. If plans for treatment include methods such as hot water wash or application of Inipol which might affect intertidal or nearshore oil or toxicity levels, contact ADF&G and appropriate Native Corporation for authorization - see Native Corporation Contact List for each Native Corporation's contact person.
AGENCY CONTACT PERSON: ADF&G Jim Fall 267-2359

FIELD SHORELINE COMMENT SHEET

SEGMENT ST/K10-7 PG.19A SUBDIVISION: K10-7-23-19B DATE 5-2-90

USCG
NAME D.D. Haven Jr. LCDR USCGR SIGNATURE

☐ NO TREATMENT RECOMMENDED ☒ TREATMENT SUGGESTED
COMMENTS

Mousse is not weathering rapidly, But it should be low priority due to very small quantity.

ADEC
NAME Francine J. Bennis SIGNATURE

☐ NO TREATMENT RECOMMENDED ☒ TREATMENT SUGGESTED
COMMENTS

Observed 2 areas of mousse saturated fine sediments among cobble/boulders, easily accessible, collectable by shovel from

1. 3m x 20m band

2. 3m x 4m band just to the south of band described above.

Mousse is also present in cracks/crevices of boulder/bedrock in this area, but generally too difficult to extract.

LAND MANAGER
NAME JOHN HARDISTER SIGNATURE John P. Hardister USFWS

~~☐ NO TREATMENT RECOMMENDED~~ ~~☒ TREATMENT SUGGESTED~~
COMMENTS

Was not present on this segment due to assignments on other segments. Agree with ADEC observations and recommendations.

SHORELINE OILING SUMMARY

REVISION NO 04/12/90

OG Acton USCG Haven SEGMENT ST/ K10-7-PO-1913
BIO Davis LAND REP NPS Traylor (Tarvisius) SUBDIVISION K10-7-PO-1913 (1 OF 1)
EXXON Avery ADEC Bennis TIME 12:45 to 2:30
TEAM NO. 20 TIDE LEVEL +4.5 to +2.0 DATE 5 / 2 / 90
EST. SUBDIVISION LENGTH: 4392 m ☐ Sun ☐ Clouds ☐ Fog ☒ Rain ☐ Snow
UPLANDS DESCRIPTION: ☐ Grass ☐ Forest ☒ Rock
SURVEYED FROM: ☒ Foot ☐ Boat ☐ Helo WORKING DIRECTION: SE to NW
SURFACE SEDIMENTS: R 40 % B 30 % C 20 % P 10 % G - % S - % M - % V - %
SLOPE : Lang 80 % Hang 20 % Vert - % WAVE EXPOSURE: ☐ Low ☐ Med ☒ High
OIL CATEGORY LENGTH: W - m M - m N 0 m VL 200 m NO 4192 m

SURFACE OIL

CHARACTER	DISTRIBUTION				OIL / FILM COLOR					IMPACTED ZONES			
	RC	RB	RP	RS						SU	UI	MI	LI
ASPHALT PAVEMENT													
POOLED													
COVER													
COAT													
STAIN				✓		✓					✓		
MOUSSE			✓					✓	✓		✓		
PATTIES													
TARBALLS													
FILM													
NO OIL										✓		✓	✓

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 SM	MD	LG
Logs			
Vegetation			
Trash			
Debris			

DID YOU COLLECT DEBRIS?

YES ☐ NO ☒

TYPE -

#BAGS 0

Photographs:

Roll No. ST-20-9

Frames 18-23

SUBSURFACE OIL

PIT NO.	PIT DEPTH (cm)	SUBSURFACE OIL CHARACTER					OILED INTERVAL (CM)	BELOW		OIL / FILM COLOR						PIT ZONE				ANA	SHEEN (Y/N)	▼	SURFACE · SUBSURFACE SEDIMENTS
		OP	OR	OL	OF	NO		UO	UC							SU	UI	MI	LI				
1	10					✓	-		✓								✓						<P>
2	5					✓	-		✓								✓						RB
3	5					✓	-		✓								✓						RB
4	5					✓	-		✓								✓						RB
5	5					✓	-		✓								✓						RB
6	10					✓	-		✓								✓						<R

COMMENTS A small (2m × 20m) of narrow oiling was observed in between boulders at the extreme SE end of the segment, on the SE side of the isthmus which connects the mainland w/ an offshore rock outcrop. Oiling here was stain and mousse in between boulders. Other oil observed was very light stain or mousse at very widely spaced / sporadic intervals. This segment is primarily rock platform composed of exposed shale/slate beds folded at an approximate 45 degree angle.

REVIEWED BAT DATE 8MAY90

OG Acton

SEGMENT K10- -PB-19B A

SUBDIVISION K10- -PB-19B A

DATE 5 / 2 90

SKETCH MAP

N

Approx Scale
1cm ≈ 30m

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

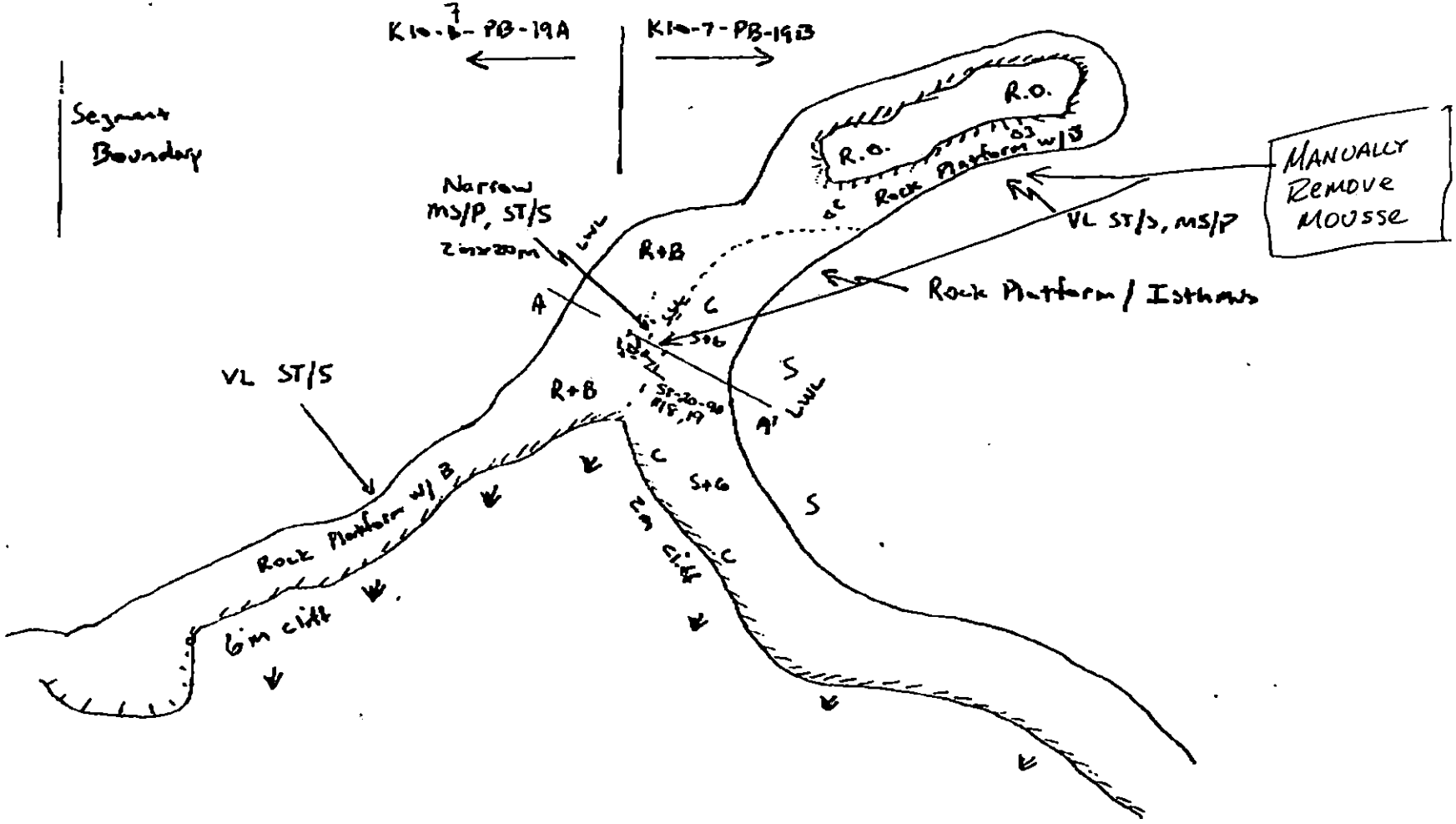
CT/B Broken Distribution

CT/P Patchy Distribution

CT/S Splashed Distribution

Oiled Vegetation

1 ⇔ Photo location, direction, and number



Oil Character Length (m): AP 0 PO 0 CV 0 CT 0 ST 220 MS 270 PT 0 TB 0 FL 0 NO 4172

REVISION:03/24/90

OG A

SEGMENT K10-7-P13-19 B A

SUBDIVISION K10-7-P13-19 B A

DATE 5/2/90

SKETCH MAP

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

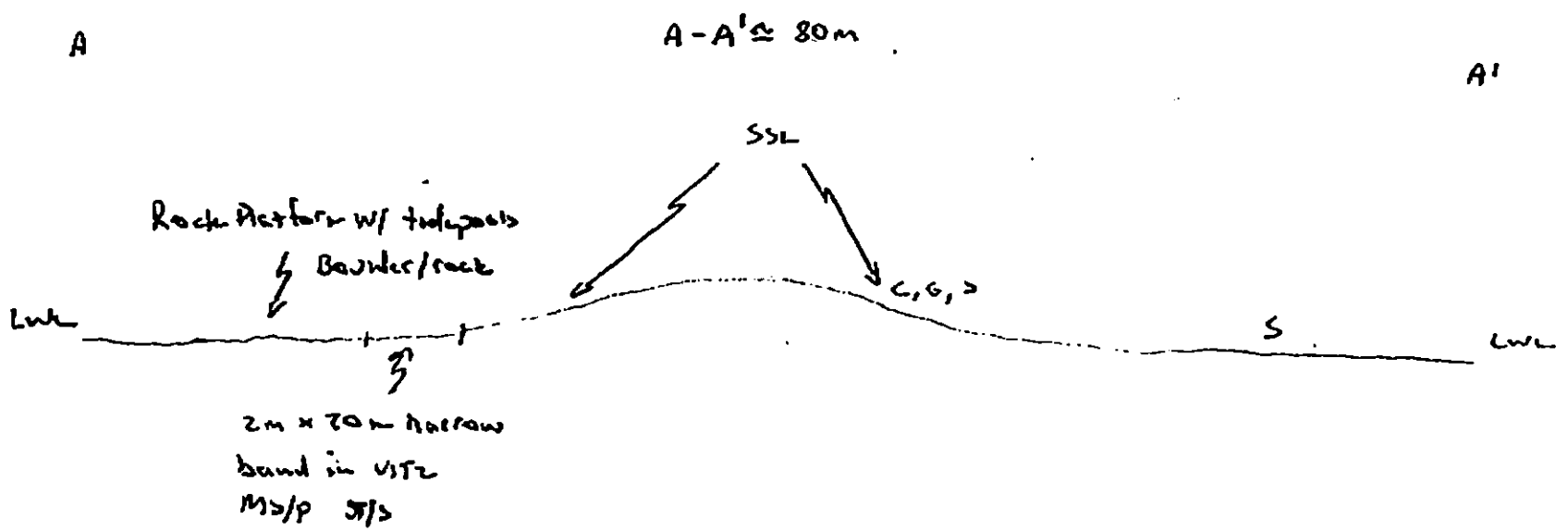
CT/B
Broken Distribution

CT/P
Patchy Distribution

CT/S
Splashed Distribution

Oiled Vegetation

1 ◆
Photo location, direction, and number



Oil Character Length (m): AP_____ PO_____ CV_____ CT_____ ST_____ MS_____ PT_____ TB_____ FL_____ NO_____

REVISION 03/24/90

SHORELINE ECOLOGICAL SUMMARY

REVISION: 03/22

Segment ST / KIO-7 Subdivision PB-19 & B Date (mo / day / yr) 5/2/90

Time (24 hr) 13:00 Biologist N. Davis

(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 10% Moderate 40% Low 50% (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-20-9
Frames # 18 - 23

BARNACLES Continuous along the segment except where interrupted by small sand beaches

Dense			Moderate			Sparse			Rare			
~~1U~~	1M	1L	~~1U~~	1M	1L	~~1U~~	~~1M~~	1L	1U	1M	1L	NOT PRESENT
~~2~~	2	2	2	2	2	~~2~~	~~2~~	2	2	2	2	
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	

MYTILUS No dense patches, small numbers in crevices. Very patchy. Most smaller than 4cm.

Dense			Moderate			Sparse			Rare			
1U	1M	1L	1U	1M	1L	~~1U~~	~~1M~~	~~1L~~	~~1U~~	(1M)	~~1L~~	NOT PRESENT
2	2	2	2	2	2	2	~~2~~	~~2~~	~~2~~	2	~~2~~	3, 4, 5, 6
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	

GASTROPODS Variable but continuous. Dense to rare areas along segment

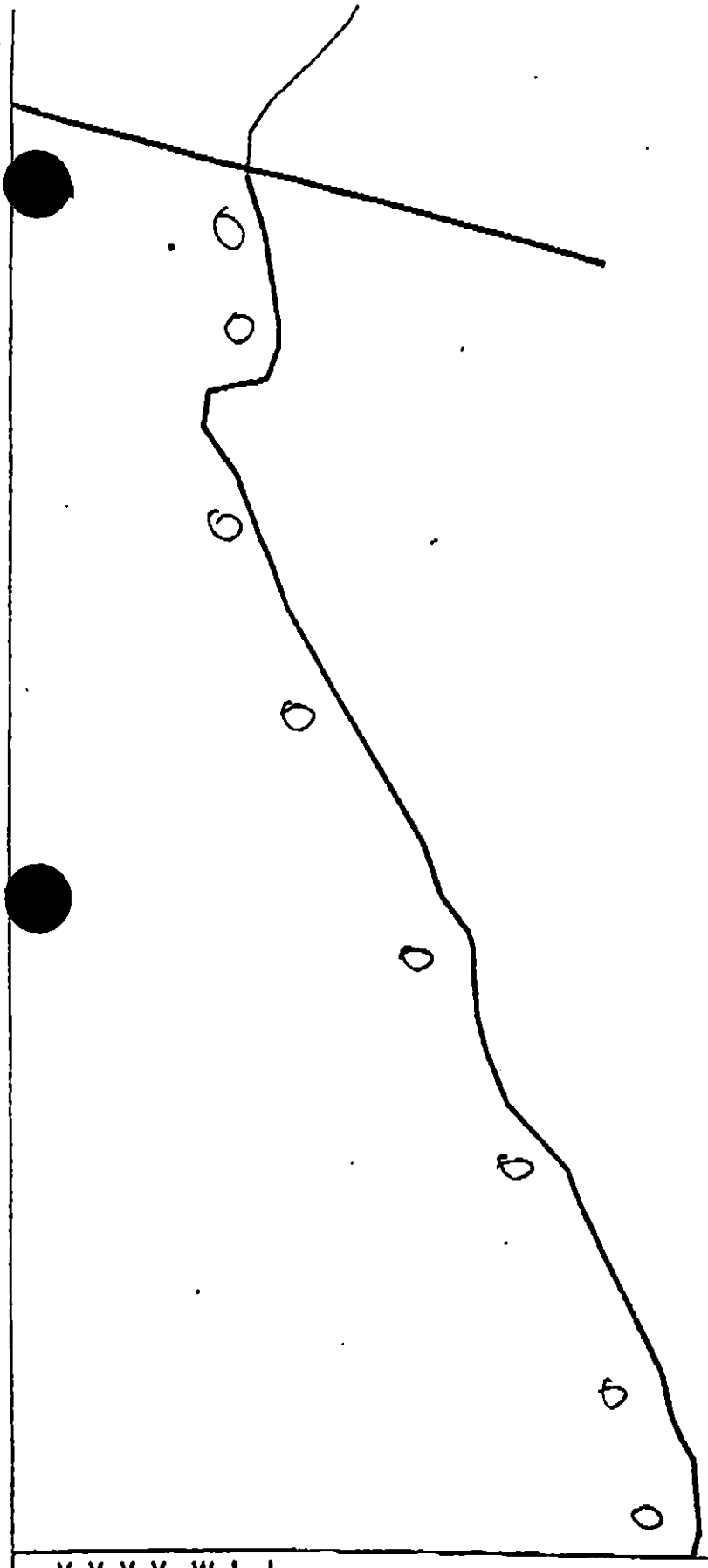
Dense			Moderate			Sparse			Rare			
~~1U~~	~~1M~~	~~1L~~	~~1U~~	~~1M~~	~~1L~~	~~1U~~	~~1M~~	~~1L~~	~~1U~~	~~1M~~	1L	NOT PRESENT
~~2~~	~~2~~	~~2~~	2	~~2~~	2	~~2~~	~~2~~	~~2~~	2	~~2~~	~~2~~	4, 5, 6
3	3	3	3	3	3	~~3~~	~~3~~	~~3~~	~~3~~	~~3~~	~~3~~	
4	4	4	4	4	4	4	4	4	4	4	4	
5	5	5	5	5	5	5	5	5	5	5	5	
6	6	6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

FUCUS Continuous with a variable density. Alot of new growth.

Dense			Moderate			Sparse			Rare			
~~1U~~	~~1M~~	1L	~~1U~~	~~1M~~	~~1L~~	(1U)	(1M)	(1L)	~~1U~~	1M	~~1L~~	NOT PRESENT
2	~~2~~	2	2	2	~~2~~	2	~~2~~	2	~~2~~	2	2	3, 4, 5, 6
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	

Wildlife Observations/ General Comments: This segment is mostly shale/mudstone shelves tilted at an angle. MTZ Dense littorine Fucus, Rhodomela, Odonthalia, Porphyra, Sona Nuella, limpets, Platythelomenther sp, littorina eggs, amphipods, MTZ was mostly Rhodomela, Odontholia, Corallina, Zostera marina in pools, Anthopleura artemisia, Katherina tunicata, Tonicella, and Pagurus sp. The LTZ was covered with sand in many areas. but had Laminaria, Zostera, Alaria, Rhodomenia Dredia, Birds seen merganser, Harlequin, surf scoter, Cormorants, Glaucon-winged gulls, Snow Bunting, wandering Tattler. 2 adult Eagles and Tundra swans. Sea Otters, Bear, Foxes, wolves and Caribou tracks were found along this segment.

Ecological Considerations: None listed but Eagles may be nesting on the point. Nearby segment have anadromous stream



K10-7-PB-19B

GOA
↓215A

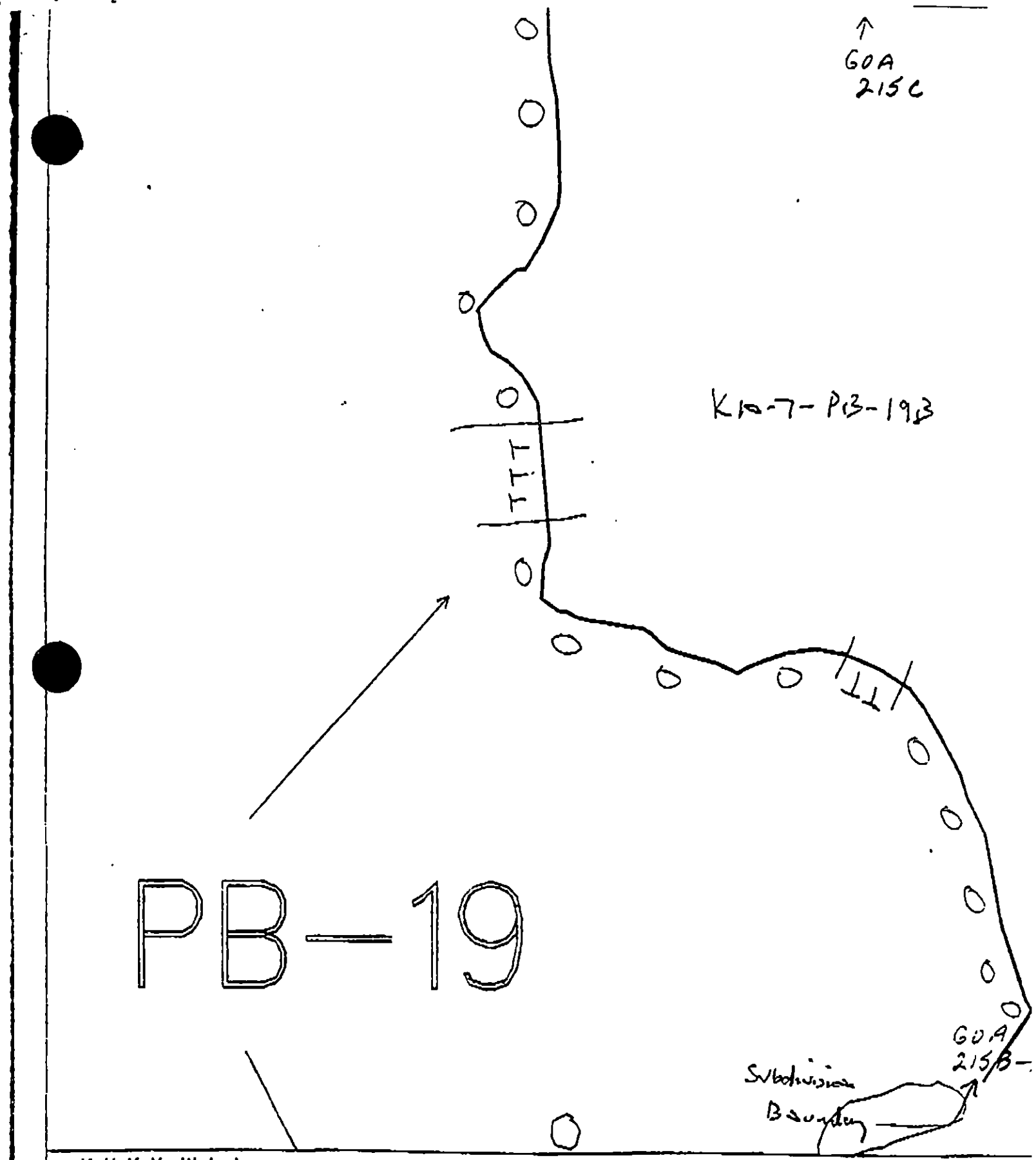
XXXX Wide
/// Medium
---- Narrow
TTTT Very Light
0000 No Oil

PB-19

ADEC Segment Length: 3295m

0 100 200 300
METERS

K10-7-PB-19B
Map Key: GOA-215c
Name: Acton
Date: 5-2-90
Data Entered:



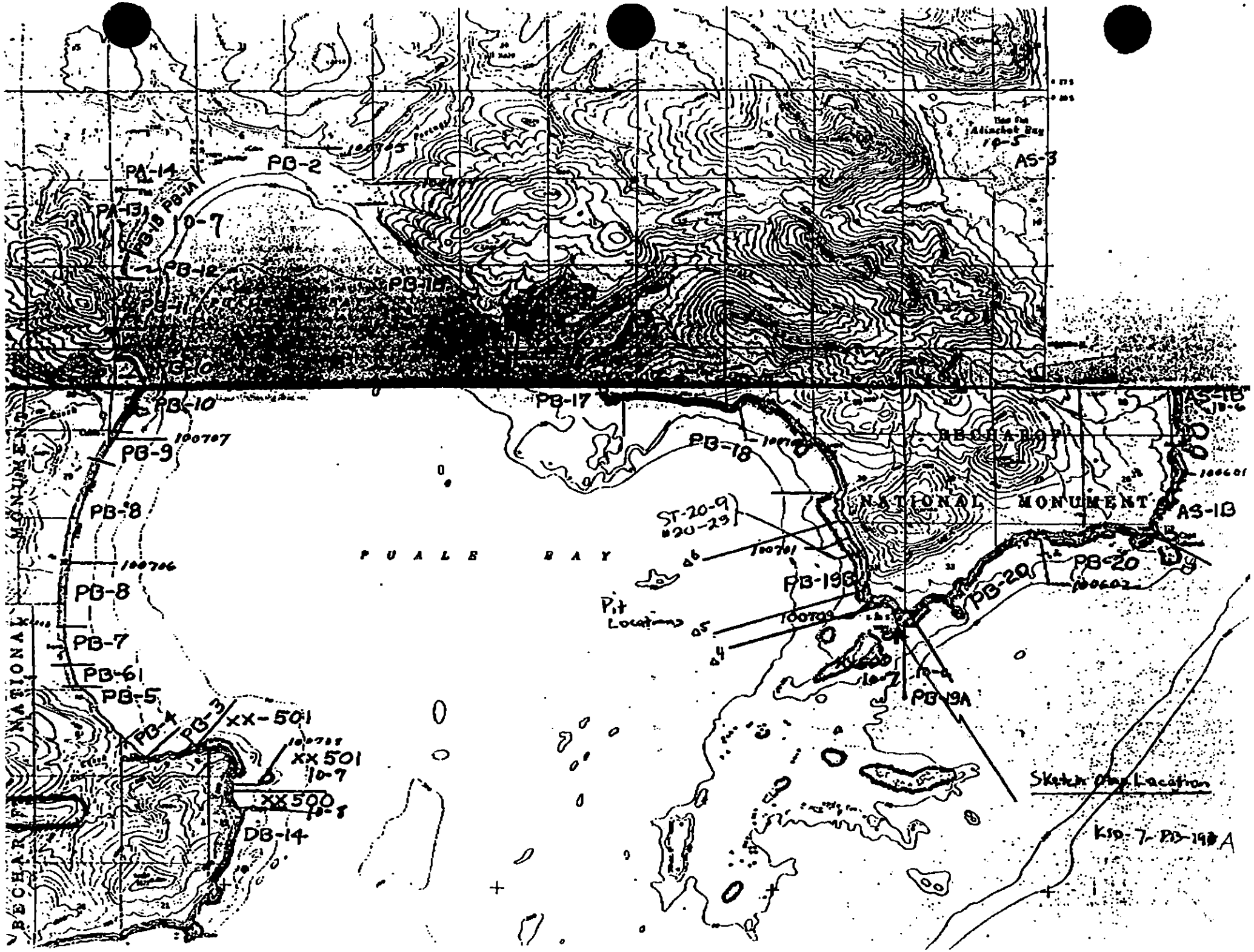
XXXX Wide
//// Medium
---- Narrow
TTTT Very Light
0000 NR Oil

P.B-19

ADEC Segment Length: 3295m

0 100 200 300

K10-7-PB-19B
Map Key: GOA-215a
Name: Acton
Date: 5-2-90
Date Entered:


PB-14
PB-13
PB-15
PB-1A
PB-2
PB-7
PB-12
PB-11
PB-1B
PB-10
PB-9
PB-8
PB-8
PB-7
PB-6
PB-5
PB-4
PB-3
XX-501
XX501
10-7
XX500
10-8
DB-14
PB-17
PB-18
PB-19B
PB-19A
PB-20
PB-20
AS-3
AS-1B
AS-1B
NATIONAL MONUMENT
NATIONAL MONUMENT
PUALE BAY
ST-20-9
#20-23
Pit Locations
05
04
Sketch of Location
Ksp-7-PB-19BA

1991 MAYSAP EVALUATION

SEGMENT: K1007PB019 **SUB:** B **REGION:** KOD **SURVEY DATE:** 5/27/91

ENVIRONMENTAL SENSITIVITIES:
Work Window(s) OPEN

Ecological/Constraints (see page two for details) NONE

ARCHAEOLOGICAL CONSTRAINTS:
If treatment is planned, a cultural resource evaluation is required prior to shoreline treatment.

SHPO Signature: _____ Date: _____

RECOMMENDATIONS:	**INITIAL**	**TAG**	**FOSC**
TREATMENT REQUIRED (Y or N)	N		
Manual Pickup (Check as Req.)			
Spot Washing			
Bio-Customblen Only			
Bio-Inipol/Customblen			
Other _____			
Other _____			

COMMENTS:
INITIAL:

TAG:

FOSC:

TAG APPROVAL DATE: _____ **FOSC APPROVAL DATE:** _____

ADEC _____ FOSC _____

EXXON _____

USCG _____

NOAA _____

MAYSAP FIELD SHORELINE COMMENT SHEET

TEAM NO. 6-HELO SEGMENT PR-19 SUBDIVISION B DATE 5/27/91

ADEC
NAME J. BARNHART, ADEC SIGNATURE Jeff Barnhart

☒ NTR A trace amount of MS was located at the 1990 cleanup site. Showing evident in Tidal pools. Veco personnel removed approx 2 pounds. Trace oil remains at this site.

EXXON
NAME R. COULTER, EXXON SIGNATURE Rew R. Coulter

☑ NTR VERY SPORADIC LIGHT AREAS OF SOR WAS FOUND. A MINIMAL AMOUNT OF TOUCHUP WORK WAS DONE BY THE VECO CREW. NO SIGNIFICANT OILING REMAINS.

LANDMANAGER
NAME J. HARDISTER OF USF&WS SIGNATURE John P. Hardister

☑ NTR The SOR that remains on this segment is insufficient to warrant further treatment.

USCG/NOAA
NAME CWO R. SPURR/E. SHIGENAKA SIGNATURE R. P. Spurr / Gary Shigenaka

☒ NTR All significant MS/SOR was removed by the Veco workers during the survey

THE SURVEYED PORTION OF THE SEGMENT WAS A SMALL ISTHMUS EXTENDING FROM THE SOUTHEASTERN SHORE OF QUALS BAY OUT TO THE SOUTHWEST. A BEDROCK/COBBLE/BOULDER SADDLE CONNECTED A LARGE BEDROCK OUTCROP WITH THE MAIN SHORELINE; THE HIGHEST PORTION OF THE SADDLE (UPPER UITE) WAS COMPRISED OF SMALLER SUBSTRATE (PEBBLES). SOR AND MOUSSE WERE FOUND IN BOULDER/COBBLES AT THE BASE OF THE LARGE BEDROCK OUTCROP. THE UNDERSIDE OF COBBLES IN THIS AREA, OLIGOCHAETES AND PLATYHELMINTHS WERE FOUND IN ASSOCIATION WITH THE MOUSSE. THE VECO CREW REMOVED OR BROKE UP LARGER AGGREGATIONS OF RESIDUE DISCOVERED. NO OTHER OILING OF SIGNIFICANCE WAS OBSERVED IN THE SURVEYED SECTION.

MAYSAP SHORELINE OILING SUMMARY

TEAM NO. 6-Helo

SEGMENT K10-07-PB-19

OG D. FitzGerald BIO H Davis

SUBDIVISION B

ADEC J. Barnhart AOFC LANDMANAGER J. Hallister for USFWS

DATE 27 / May / 91

EXXON R. Coulter USCG/NOAA CWO Spurgil / G. Shigenaka

TIME 11 : 05 to 11 : 30 TIDE LEVEL 2.4 ft. to 3.0 ft. ENERGY LEVEL: ☐ H ☑ M ☐ L

SURVEYED FROM: ☒ FOOT ☐ BOAT ☐ HELO WEATHER: ☑ SUN ☐ CLOUDS ☐ FOG ☐ RAIN ☐ SNOW

TOTAL LENGTH SHORELINE SURVEYED: 150 m NEAR SHORE SHEEN: ☐ BR ☐ RB ☐ SL ☒ NONE

EST. OIL CATEGORY LENGTH: W — m M — m N — m VL 38 m NO 112 m US 3337 m

LOC	SURFACE OIL CHARACTER										SURFACE SEDIMENT	SHORE SLOPE	AREA		ZONE				NOTES
	AP	MS	TB	SOR	CV	CT	ST	FL	DB	NO	TYPE	V H M L	WIDTH m	LENGTH m	S	UI	MI	LI	
A		T		T							B-BK-C	M	4	10		X			I/u around boulders
B1		T		T							B-BK-C	M	2	8		X			" " "
2		T		T		T					B-BK-C	M	2	20		X			" " "

DISTRIBUTION: C = 91–100%; B = 51–90%; P = 11–50%; S = 1–10%; T = <1%

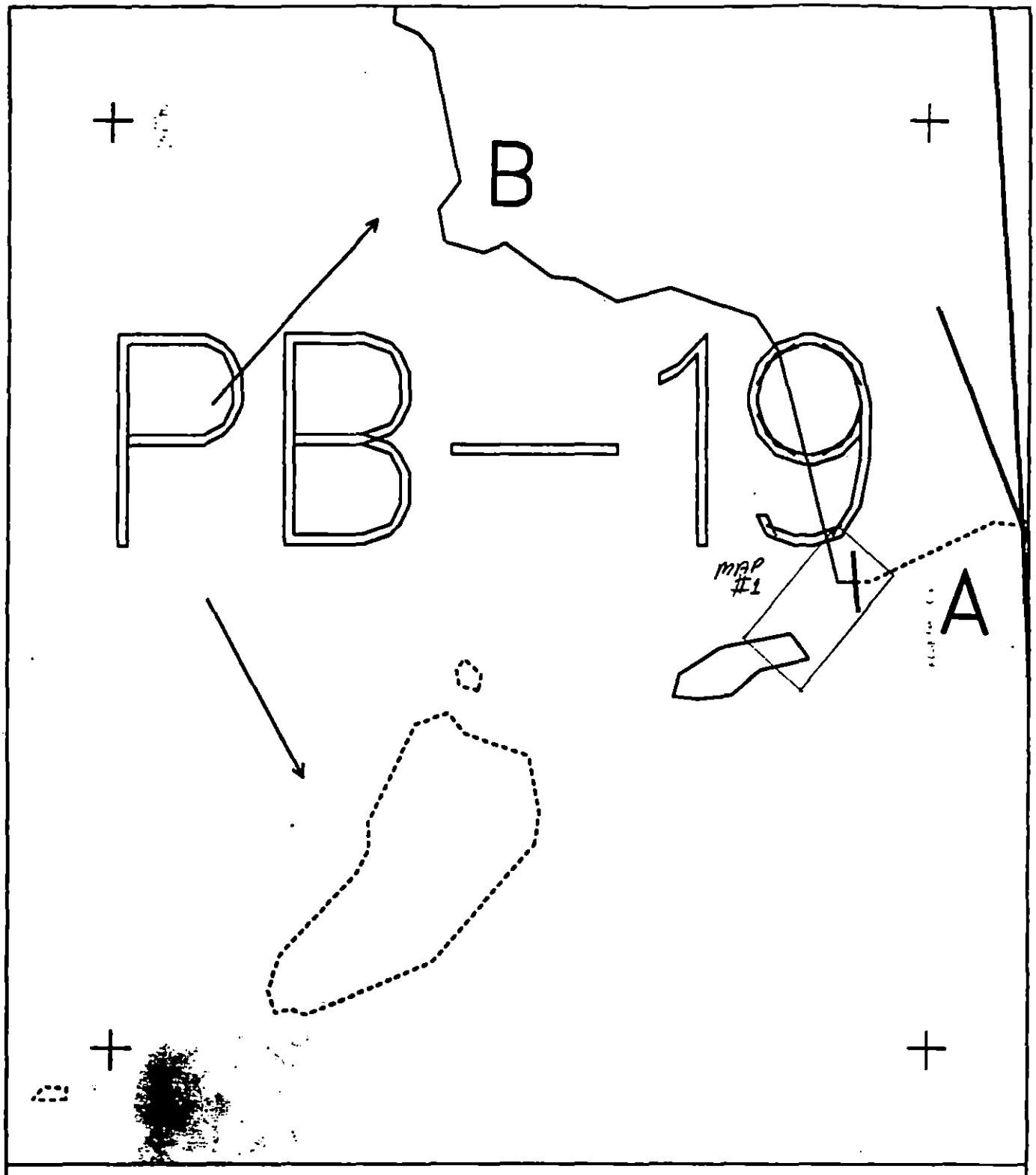
SLOPE: V = VERTICAL; H = HIGH ANGLE; M = MEDIUM ANGLE; L = LOW ANGLE PHOTO ROLL # MAYSAP- 6 - 23 FRAMES 12-14

PIT NO.	PIT DEPTH (cm)	SUBSURFACE OIL CHARACTER							OILED ZONE cm-cm	CLEAN BELOW Y/N	H2O LEVEL (cm)	SHEEN COLOR B R S N	PIT ZONE				SURFACE-SUBSURFACE SEDIMENTS	NOTES
		OP	HOR	MOR	LOR	OF	TR	NO					S	UI	MI	LI		
									-									
									-									
									-									
									-									
									-									
									-									
									-									
									-									
									-									

SHEEN COLOR: B = BROWN; R = RAINBOW; S = SILVER; N = NONE

OG COMMENTS: This segment is located at the Northeast mouth to Quale Bay. The site that was surveyed within the segment is positioned between the mainland and an offshore island. This area consists of angular to rounded boulders and cobbles lying on top of an irregular bedrock platform. The oiling occurs in two general areas: 1) Adjacent to the island and, 2) in a zone near the mainland. The oiled sediments are very sporadic and consist of mostly SOR and some very small areas of mousse.

Reviewed: MC 5/31/91
revised 5/31/91 KG



K1007 PB019 B

Subdivision Field Map

Map Key: [illegible]

Name: D. FitzGerald

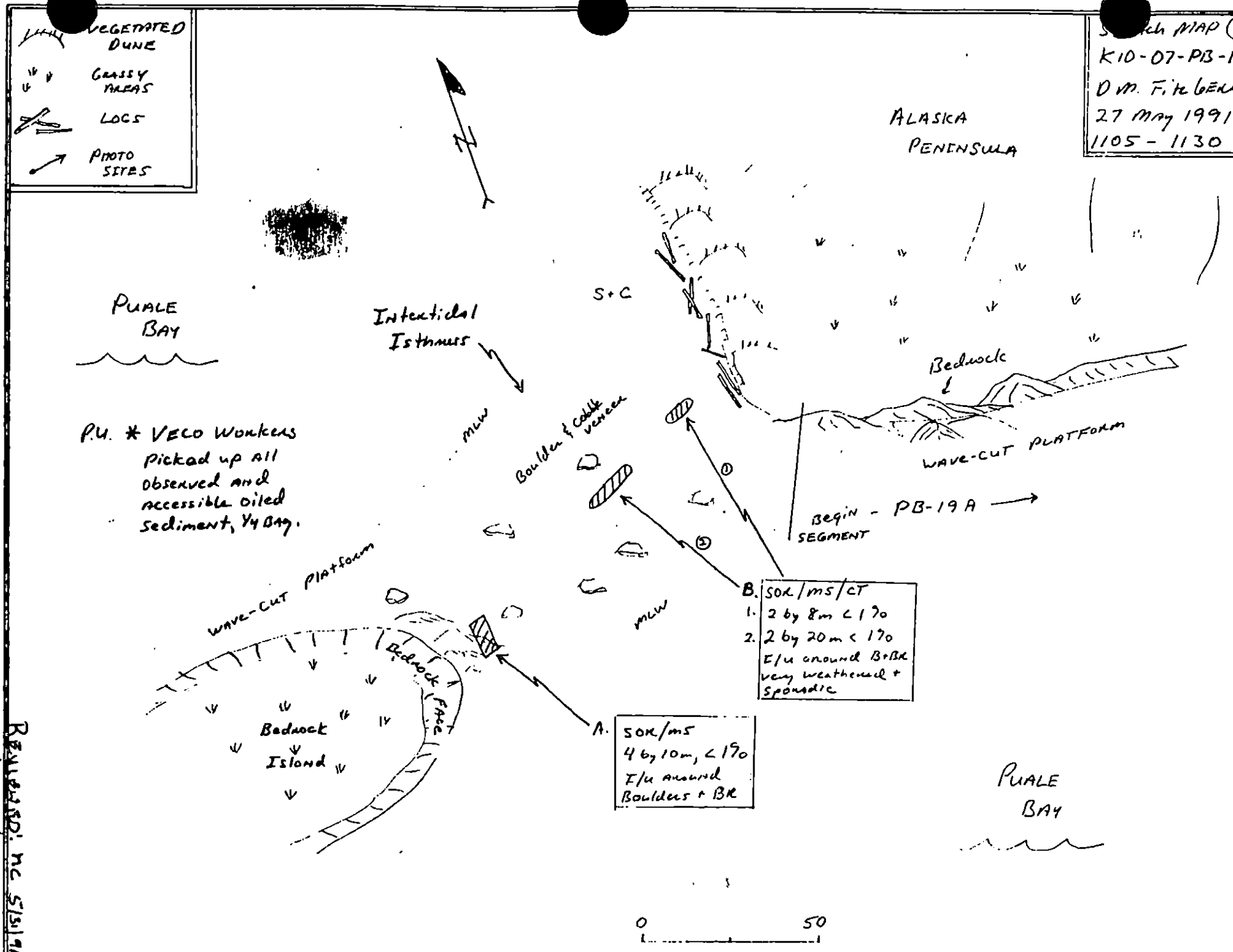
Date: 27 May 1991

METERS

0 300 600

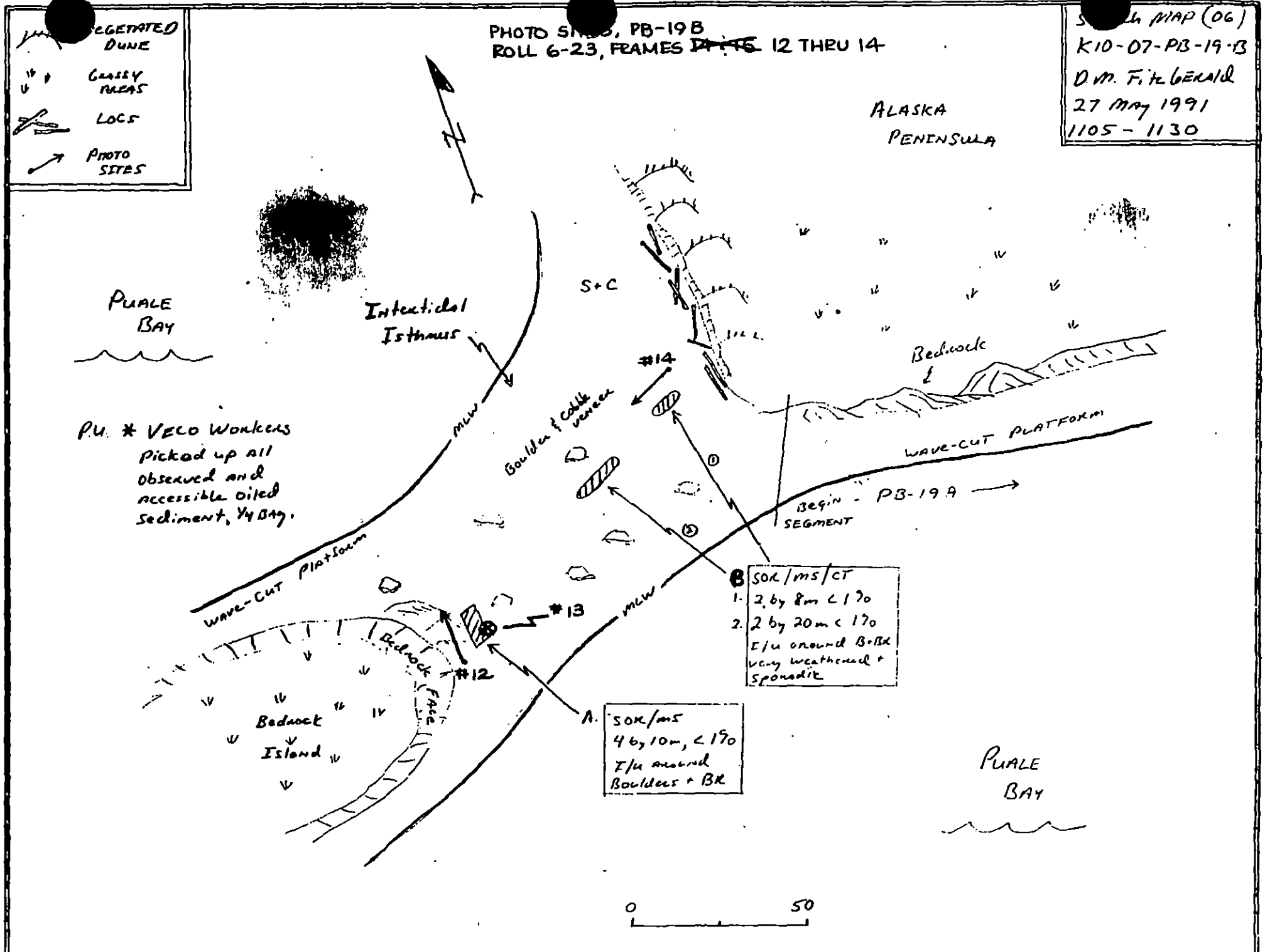
AE State Plane Zone 5

DIXON



Sketch MAP (06)
K10-07-PB-19-B
D.M. FitzGerald
27 May 1991
1105 - 1130

REVIEWED: MC 5/31/91
reviewed 5/31/91 KG


VEGETATED DUNE
GRASSY AREAS
LOGS
PHOTO SITES
PHOTO SITES, PB-19B
ROLL 6-23, FRAMES ~~14-15~~ 12 THRU 14
SEARCH MAP (06)
K10-07-PB-19-B
D.M. FITZGERALD
27 MAY 1991
1105 - 1130
ALASKA PENINSULA
PUALE BAY
INTERTIDAL ISTHMUS
S+C
BEDROCK
#14
BOULDER & COBBLE VENEER
WAVE-CUT PLATFORM
BEGIN - PB-19A
SEGMENT
MLW
P.U. * VECO WORKERS PICKED UP ALL OBSERVED AND ACCESSIBLE OILED SEDIMENT, PUALE BAY.
WAVE-CUT PLATFORM
#13
BEDROCK FACE
#12
BEDROCK ISLAND
B
SOR/MS/CT
1. 2 by 8m < 1%
2. 2 by 20m < 1%
I/u around B-BR
very weathered + spongelit
A.
SOR/MS
4 by 10m, < 1%
I/u around Boulders + BR
PUALE BAY
0
50

MAYSAP BIOLOGICAL SUMMARY FORM

TEAM # 6 Helo — DATE May 27 1991

SEGMENT # K10-07 PB-19 — TIDAL HEIGHT (Range) 2.4-3.0ft (11:00-11:30)

SUBDIVISION B — BIOLOGIST H. Davis

SEA STATE 2ft [illegible] ocean side calm on bay side — WIND SPEED/DIRECTION 5-16 kts NE

PHOTOGRAPHS: ROLL # 6-23 — FRAME # 12-14

COMMENTS/OBSERVATIONS (to be completed in oiled subdivisions only):

The area surveyed was the isthmus on the south-eastern end of the segment. The area examined was at the top of the littorine/barnacle/limpet zone. Annelids (enchytraids) amphipods, and flat worms were on the underside of rocks in the area. As you moved toward the bottom of the MITZ the density of barnacles, limpets, and littorines increased. Fucus covered the MITZ and was patchy.

Site A had many enchytraids in the SOR/MS area. Littorines were in moderate numbers. Barnacles limpets and amphipods were sparse. The thick tidal wrack contained Laminaria, Alaria, and Fucus. Enchytraids and amphipods were active in the wrack. Site B had very sparse littorines, barnacles and limpets. However the oligochaetes (enchytraids) were very dense under the rocks and in the oiled sediment. The biota on the slope below site B (1:2) was sparse.

Considering the exposure and substrate this area had a healthy biota. In 1990 Forks had dens up above this site.

Eagle(1) Puffin?(1)
Harlequin(3) surf scoter(5) Cormorants(2) Glaucous-winged Gull(5+)

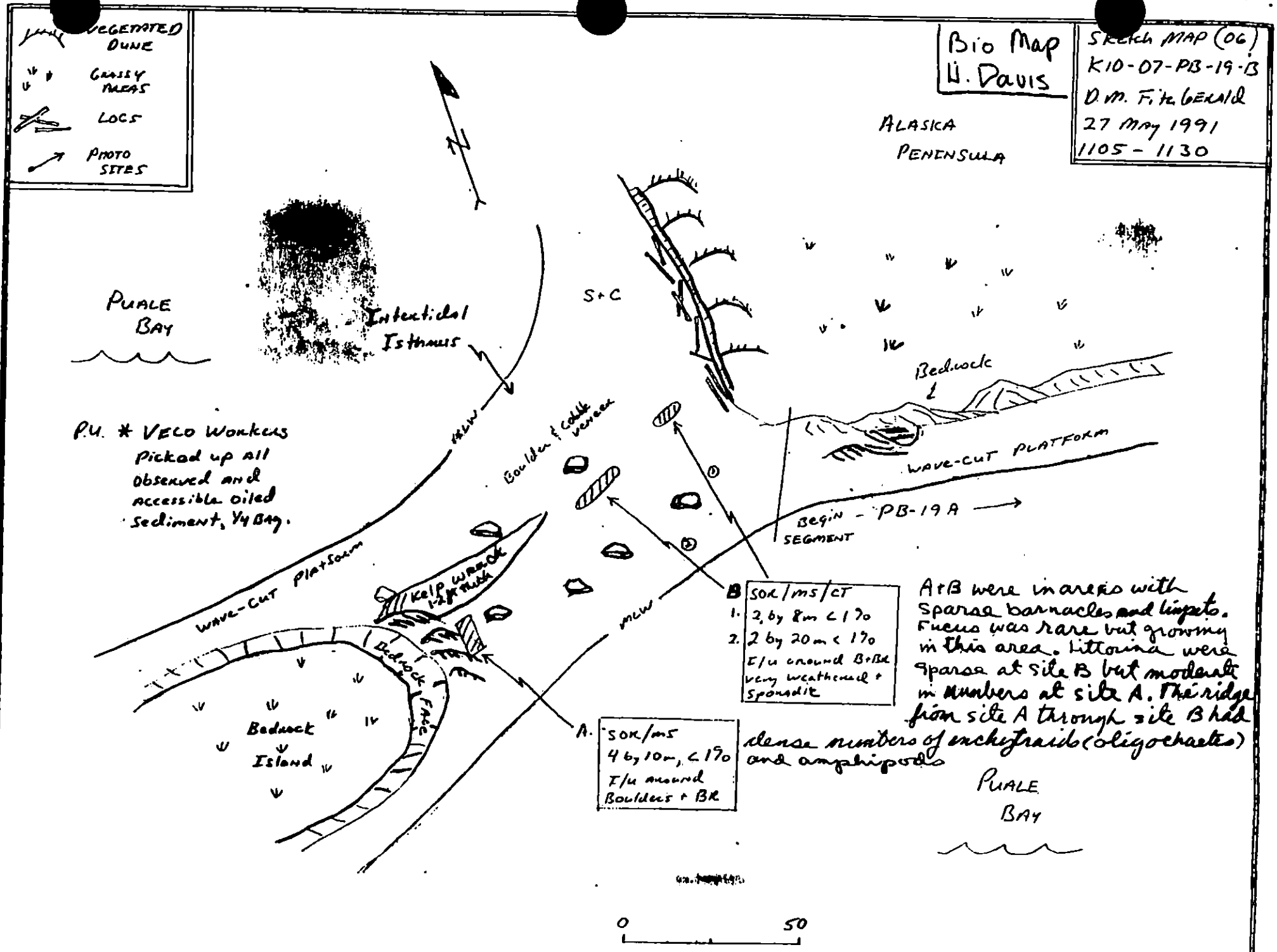
WILDLIFE OBSERVATIONS
TO BE COMPLETED IN ALL SUBDIVISIONS

BIRDS	# OF SPECIES	TOTAL BIRDS	FISH OBSERVED SPECIES PRESENT
Eagles	1	1	Sculpins
Seabirds	2?	3	
Waterfowl	2	8	
Gulls/Kittiwakes	1	+5	
Shorebirds	0		
Corvids	0		
Other Birds	0		

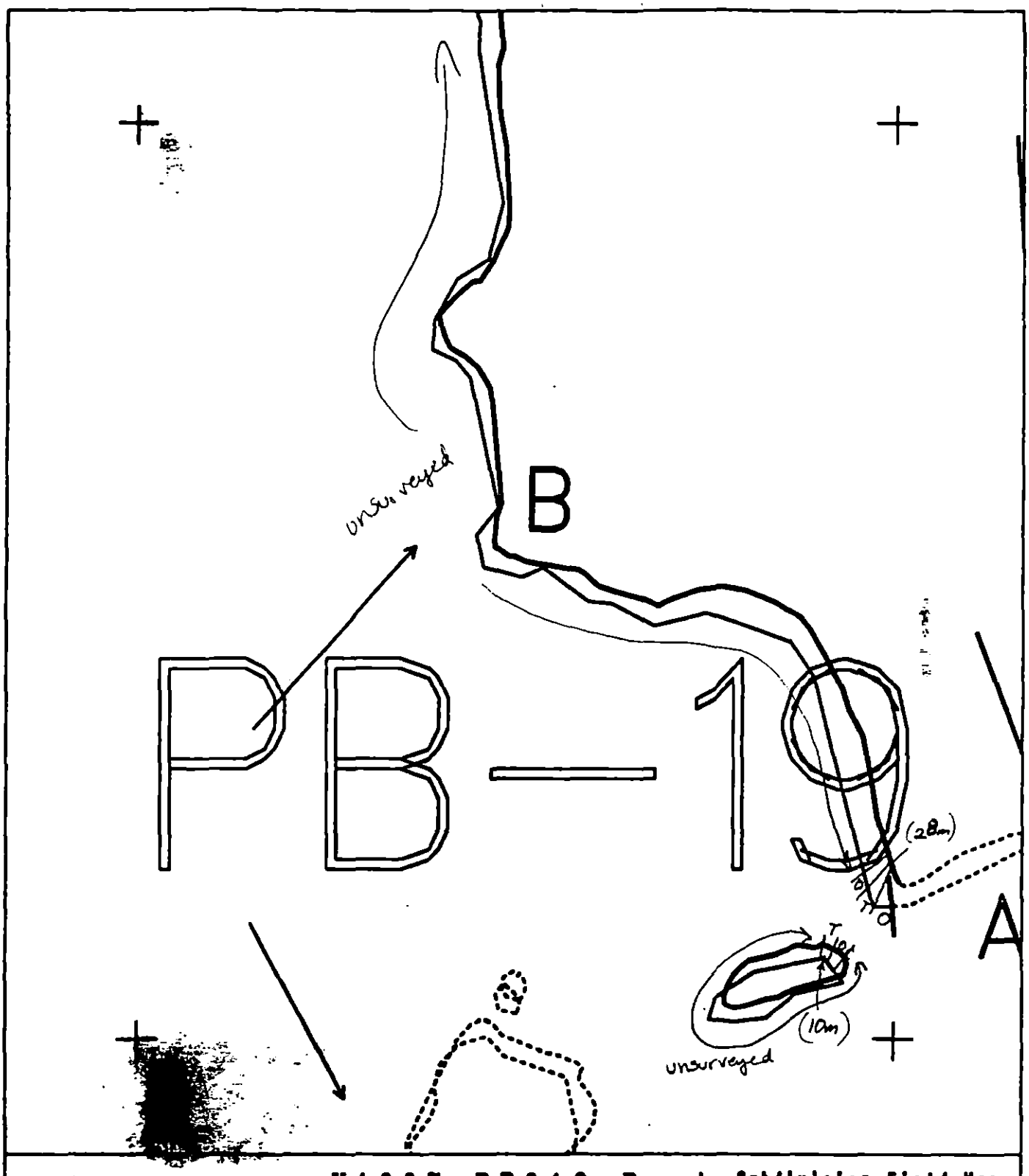
MARINE MAMMALS	# OBSERVED	LAND MAMMALS SPECIES	# OBSERVED
Sea otters	0	Fox Tracks	
Pinnipeds (specify)		Caribou	5 in up Lnks.
Harbor Seal	1		
Whales (specify)	0		

Shoreline subdivision map showing important biological features attached.

Reviewed MB 5/21/91

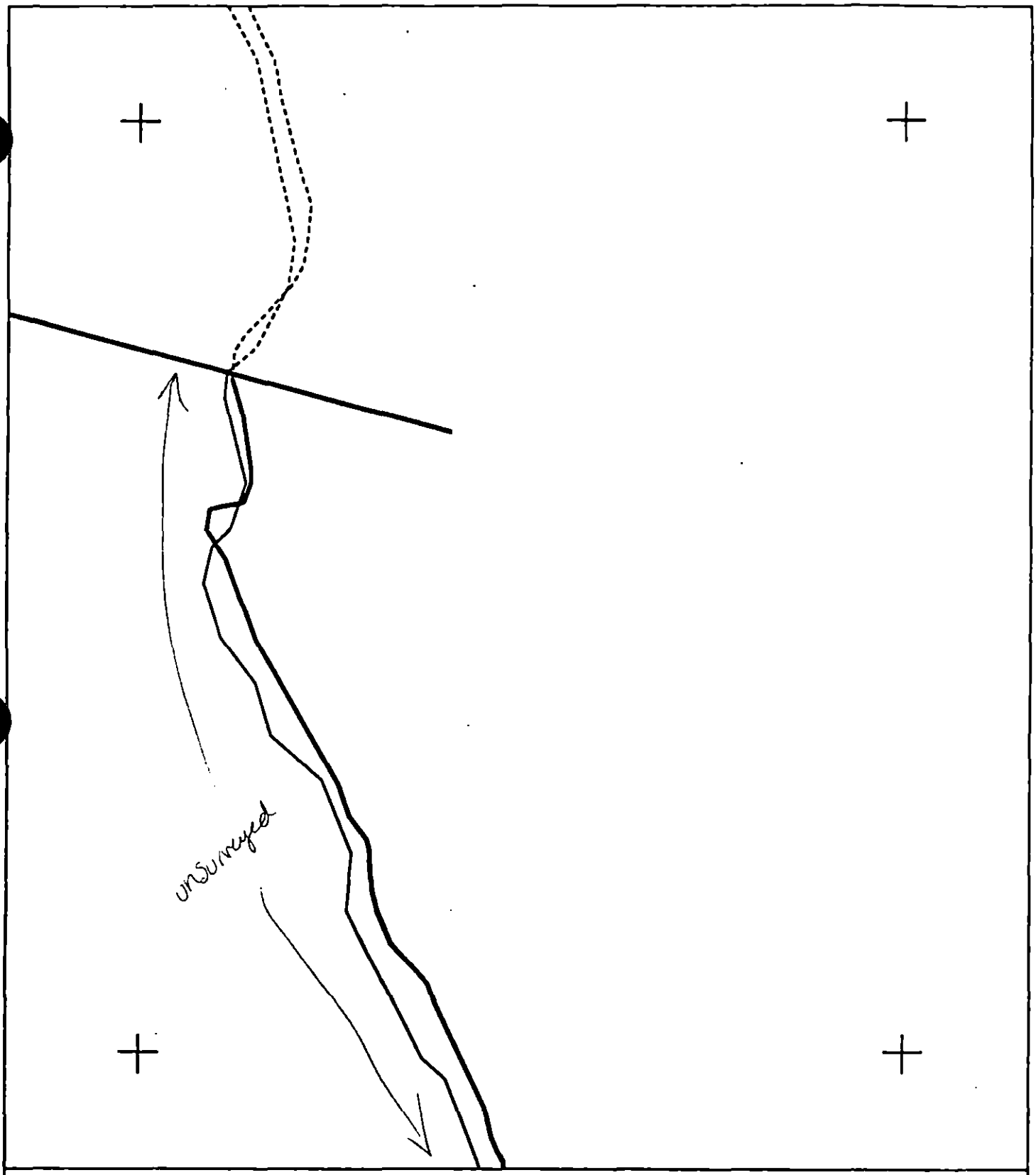


Reviewed MB 5/31/



XXXX	Wide	K1007 PB019 B	Subdivision Field Map
////	Medium	ADEC Subsegment Length: 3487m	Map Key: 00AK1007PB019B0
----	Narrow	METERS	Name: D. FitzGerald
TTTT	Very Light	0 200 400	Date: 27 MAY 1991
0000	No Oil	AK State Plane Zone 4 gl007pb019b-. . . .	Date Entered:

REVIEWED: 5/31/91 MC
revised 5/31/91 KG



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

K1007 PB019 B

ADEC Subsegment Length: 3487m

METERS

0 200 400

AK State Plane Zone 4

g1007pb019bb-' .. .

N

EXXON

Subdivision Field Map

Map Key: GOAK1007PB019BB

Name: D. FitzGerald

Date: 27 May 1991

Data Entered:

revised 5/31/91 KG

REVIEWED: 5/31/91 mc

1991 MAYSAP EVALUATION

SEGMENT: K1007PB019 **SUB:** B **REGION:** KOD **SURVEY DATE:** 5/27/91

ENVIRONMENTAL SENSITIVITIES:
Work Window(s) OPEN

Ecological/Constraints (see page two for details) NONE

ARCHAEOLOGICAL CONSTRAINTS:
If treatment is planned, a cultural resource evaluation is required prior to shoreline treatment.

SHPO Signature: Timothy A. Smith Date: 6/07/91

RECOMMENDATIONS:	**INITIAL**	**TAG**	**FOSC**
TREATMENT REQUIRED (Y or N)	N	N	N
Manual Pickup (Check as Req.)			
Spot Washing			
Bio-Custombien Only			
Bio-Inipol/Custombien			
Other			
Other			

COMMENTS:
INITIAL:

TAG:

FOSC:

TAG APPROVAL DATE: JUNE 7 1991 **FOSC APPROVAL DATE:** 6/12/91

ADEC

EXXON

USCG

NOAA

FOSC

E. E. PAGE, CDR, USCG
CHIEF OF STAFF, FOSC

MAYSAP FIELD SHORELINE COMMENT SHEET

TEAM NO. 6-HELO SEGMENT PB-19 SUBDIVISION B DATE 5/27/91

ADEC
NAME J. BARNHART, ADEC&G SIGNATURE Jeff Barnhart

☒ NTR A trace amount of MS was located at the 1990 cleanup site. Showing evidant in Tidal pools. Veco personnel removed approx 2 pounds. Trace oil remains at this site.

EXXON
NAME R. COULTER, EXXON SIGNATURE Rew R. Coulter

☑ NTR VERY SPORADIC LIGHT AREAS OF SOR WAS FOUND. A MINIMAL AMOUNT OF TOUCH-UP WORK WAS DONE BY THE VECO CREW. NO SIGNIFICANT OILING REMAINS.

LANDMANAGER
NAME J. HARDISTER OF USF&WS SIGNATURE John P. Hardister

☑ NTR The SOR that remains on this segment is insufficient to warrant further treatment.

USCG/NOAA
NAME CWO R. SPURR/S. SHIGENAKA SIGNATURE R. P. Spurr / Guy Shigenaka

☒ NTR All significant AP/SOR was removed by the Veco workers during the survey

THE SURVEYED PORTION OF THE SEGMENT WAS A SMALL ISTHMUS EXTENDING FROM THE SOUTHEASTERN SHORE OF [illegible] BAY OUT TO THE SOUTHWEST. A BEDROCK/COBBLE/BOULDER SADDLE CONNECTED A LARGE BEDROCK OUTCROP WITH [illegible]MAIN SHORELINE; THE HIGHEST PORTION OF THE SADDLE (UPPER SITE) WAS COMPRISED OF SMALLER SUBSTRATE [illegible] (PEBBLES). SOR AND MOUSSE WERE FOUND IN BOULDER/COBBLES AT THE BASE OF THE LARGE BEDROCK OUTCROP. ON THE UNDERSIDE OF COBBLES IN THIS AREA, OLIGOCHAETES AND PLATYHELMINTHS WERE FOUND IN ASSOCIATION WITH THE MOUSSE. THE VECO CREW REMOVED OR BROKE UP LARGER AGGREGATIONS OF RESIDUE DISCOVERED. NO OTHER OILING OF SIGNIFICANCE WAS OBSERVED IN THE SURVEYED SECTION.

MAYSAP SHORELINE OILING SUMMARY

TEAM NO. 6-Helo

SEGMENT K10-07-PB-19

OG D. Fitzgerald BIO H. Davis

SUBDIVISION B

ADEC J. Barnhart AOFC LANDMANAGER J. Handisten for USFWS

DATE 27/MAY/91

EXXON R. Coulter USCG/NOAA CWO Spurgl / G. Shigenaka

TIME 11:05 to 11:30 TIDE LEVEL 2.4 ft. to 3.0 ft. ENERGY LEVEL: ☐ H ☑ M ☐ L

SURVEYED FROM: ☒ FOOT ☐ BOAT ☐ HELO WEATHER: ☑ SUN ☐ CLOUDS ☐ FOG ☐ RAIN ☐ SNOW

TOTAL LENGTH SHORELINE SURVEYED: 150 m NEAR SHORE SHEEN: ☐ BR ☐ RB ☐ SL ☒ NONE

EST: OIL CATEGORY LENGTH: W — m M — m N — m VL 38 m NO 112 m US 3337 m

LOC	SURFACE OIL CHARACTER										SURFACE SEDIMENT TYPE	SHORE SLOPE	AREA		ZONE				NOTES
	AP	MS	TB	SOR	CV	CT	ST	FL	DB	NO		V H M L	WIDTH m	LENGTH m	S	UI	MI	LI	
A		T		T							B-BK-C	M	4	10		X			I/u around boulders
B1.		T		T							B-BK-C	M	2	8		X			" " "
2.		T		T		T					B-BK-C	M	2	20		X			" " "

DISTRIBUTION: C = 91-100%; B = 51-90%; P = 11-50%; S = 1-10%; T = <1%

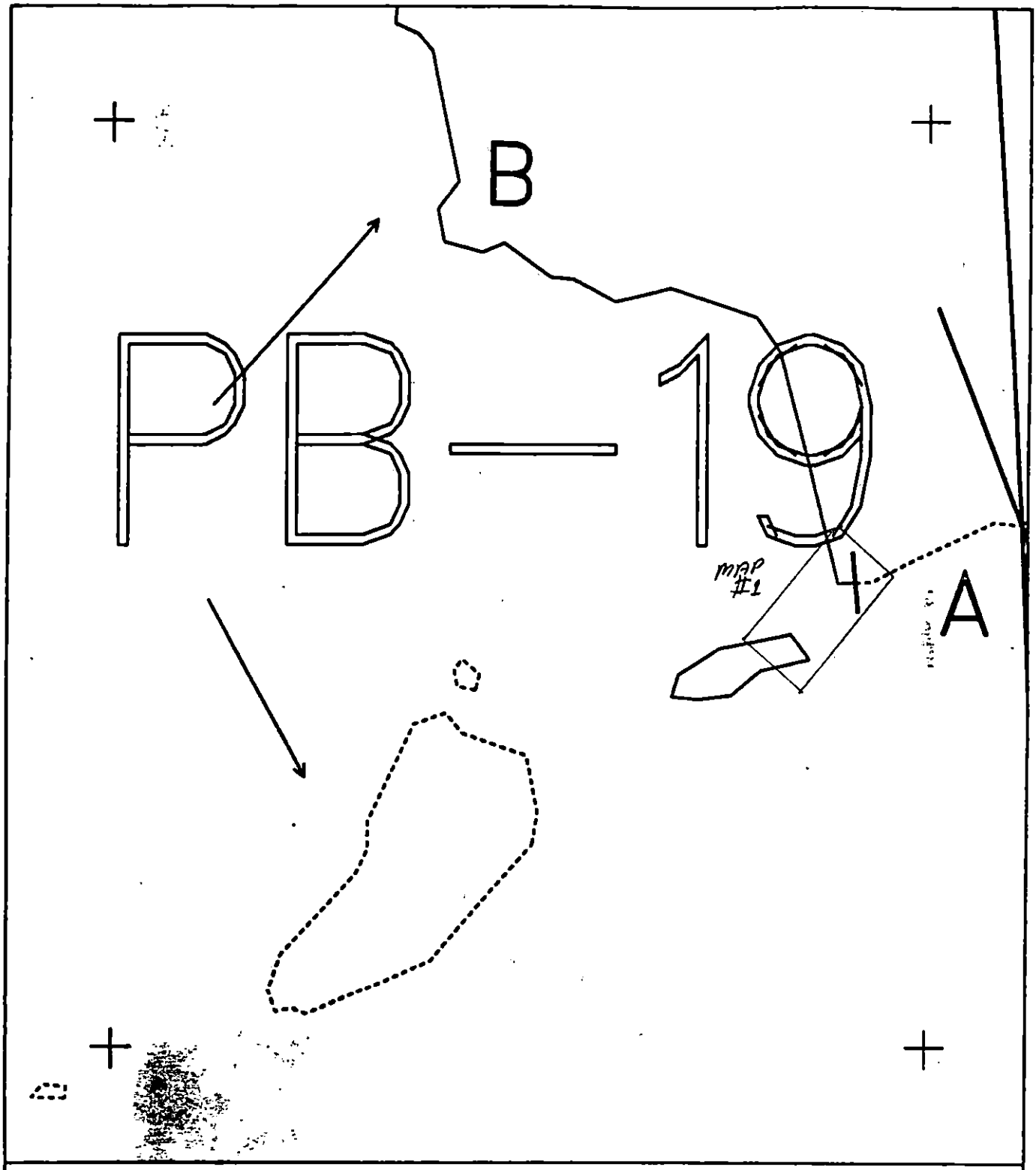
SLOPE: V = VERTICAL; H = HIGH ANGLE; M = MEDIUM ANGLE; L = LOW ANGLE PHOTO ROLL # MAYSAP- 6 - 23 FRAMES 12-14

PIT NO.	PIT DEPTH (cm)	SUBSURFACE OIL CHARACTER							OILED ZONE cm-cm	CLEAN BELOW Y/N	H2O LEVEL (cm)	SHEEN COLOR B R S N	PIT ZONE				SURFACE-SUBSURFACE SEDIMENTS	NOTES
		OP	HOR	MOR	LOR	OF	TR	NO					S	UI	MI	LI		
									-									
									-									
									-									
									-									
									-									
									-									
									-									
									-									
									-									

SHEEN COLOR: B = BROWN; R = RAINBOW; S = SILVER; N = NONE

OG COMMENTS: This segment is located at the Northeast mouth to Quale Bay. The site that was surveyed within the segment is positioned between the mainland and an offshore island. This area consists of angular to rounded boulders and cobbles lying on top of an irregular bedrock platform. The oiling occurs in two general areas: 1) adjacent to the island and, 2) in a zone near the mainland. The oiled sediments are very sporadic and consist of mostly SOR and some very small areas of mousse.

REVIEWED: MC 5/31/91
revised 5/31/91 KG



K1007 PB019 B

METERS

0 200 400

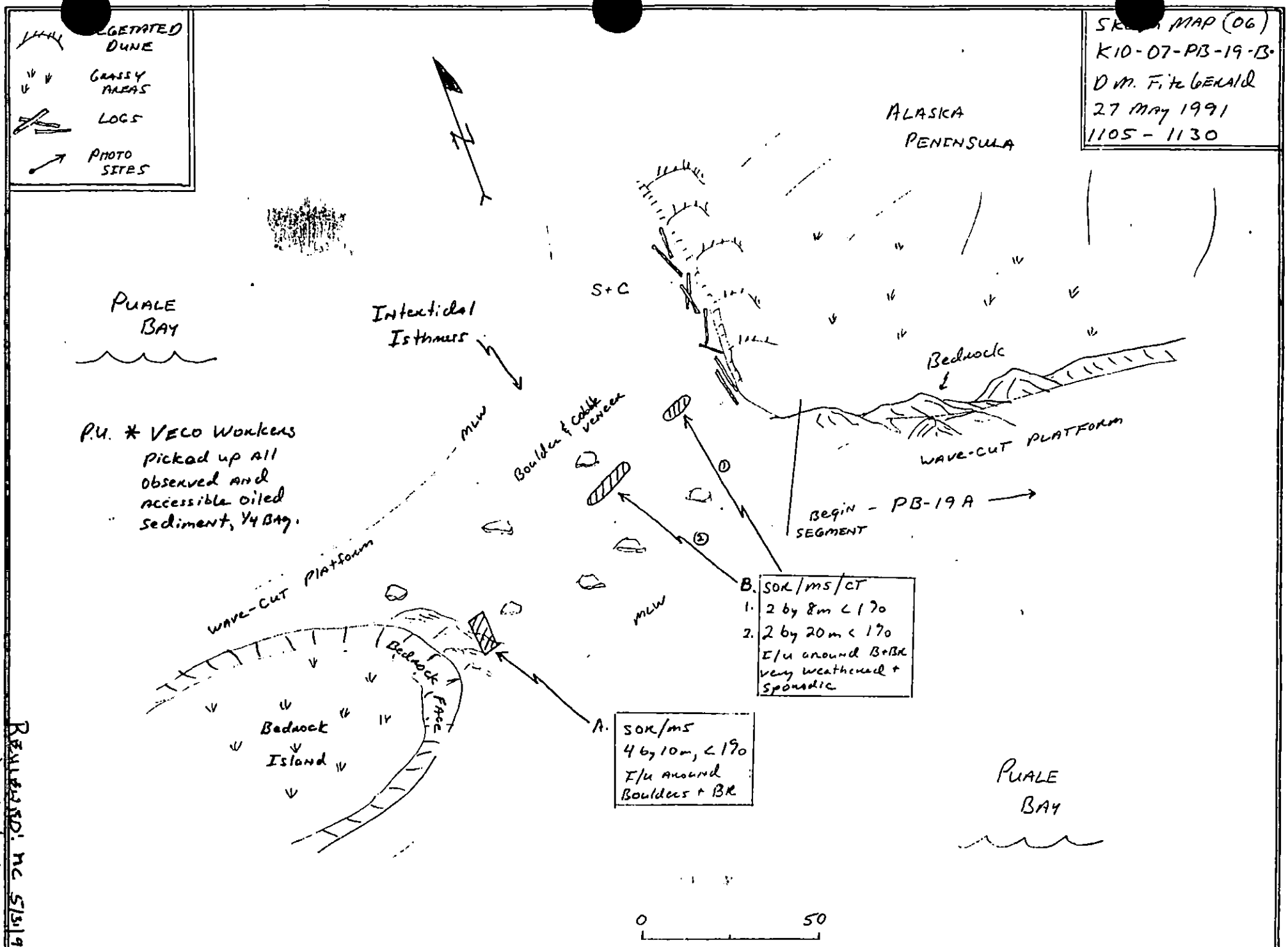
AE Static Plane Tape, 4.

Subdivision Field Map

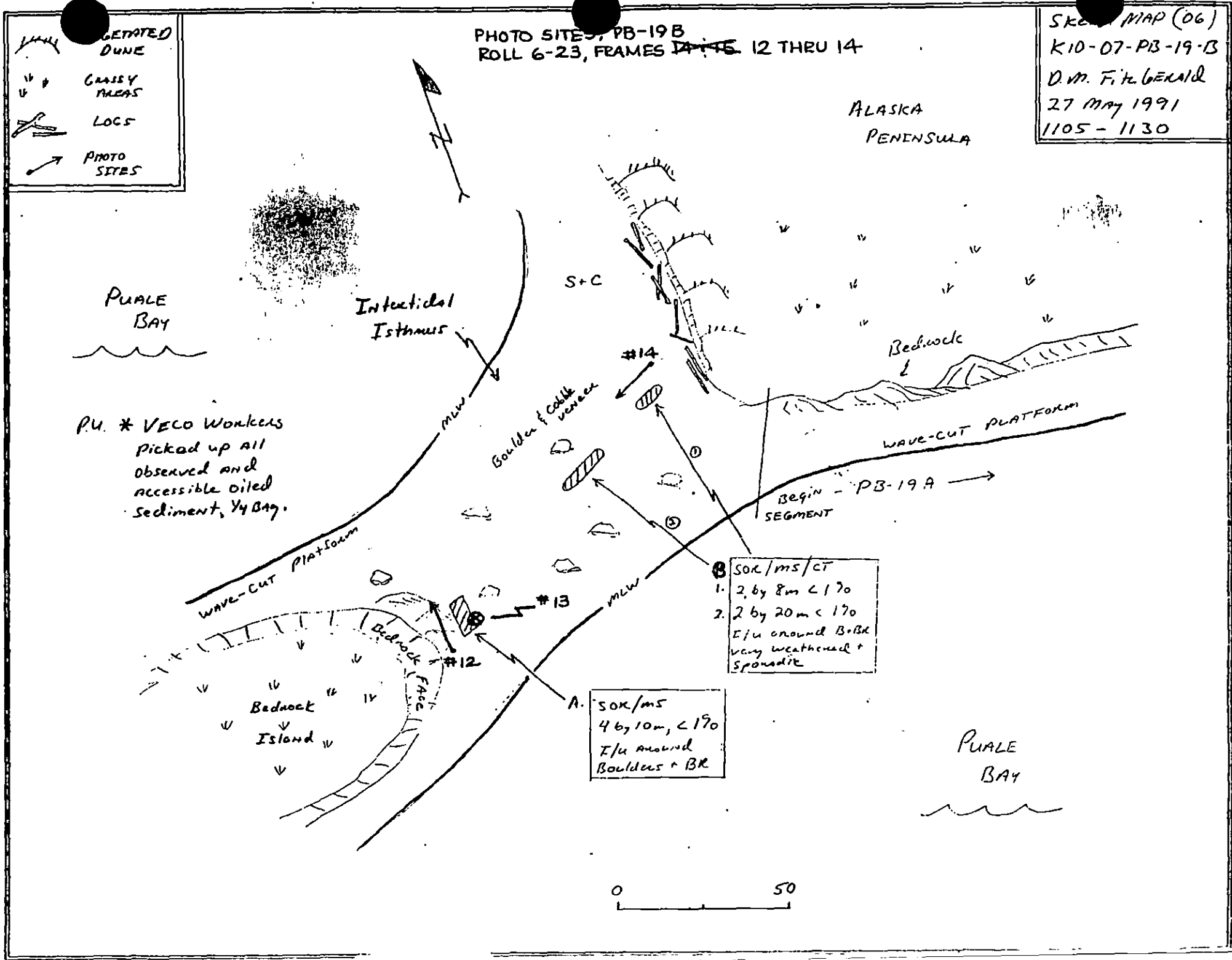
Map Key: CHAK1007PB019B

Name: D. FitzGerald

Date: 27 May 1991



RELEASED: MC 5/31/91
reviewed 5/31/91 KG


VEGETATED DUNE
GRASSY AREAS
LOGS
PHOTO SITES
PHOTO SITES, PB-19B
ROLL 6-23, FRAMES ~~14-15~~ 12 THRU 14
SKETCH MAP (06)
K10-07-PB-19-B
D.M. FITZGERALD
27 MAY 1991
1105 - 1130
ALASKA PENINSULA
N
PUALE BAY
INTERTIDAL ISTHMUS
S+C
#14
BEDROCK
BOULDER & COBBLE VENEER
MLW
P.U. * VECO WORKERS PICKED UP ALL OBSERVED AND ACCESSIBLE OILED SEDIMENT, 4 BAG.
WAVE-CUT PLATFORM
BEGIN - PB-19A
SEGMENT
B
SOR/MS/CT
1. 2 by 8m < 1%
2. 2 by 20m < 1%
I/u around BoBk very weathered + sporadic
#13
#12
BEDROCK FACE
BEDROCK ISLAND
A.
SOR/MS
4 by 10m, < 1%
I/u around Boulders + BR
PUALE BAY
0
50

MAYSAP BIOLOGICAL SUMMARY FORM

TEAM # 6 Helo **DATE** May 27 1991

SEGMENT # K10-07 PB-19 **TIDAL HEIGHT (Range)** 2.4-3.0 ft (11:00 - 11:30)

SUBDIVISION B **BIOLOGIST** H. Davis

SEA STATE 2 ft ocean side calm on bay side **WIND SPEED/DIRECTION** 5-16 kts NE

PHOTOGRAPHS: ROLL # 6-23 **FRAME #** 12-14

COMMENTS/OBSERVATIONS (to be completed in oiled subdivisions only):

The area surveyed was the isthmus on the south-eastern end of the segment. The area examined was at the top of the littorine/barnacle/limpet zone. Annelids (enchytraids) amphipods, and flat worms were on the underside of rocks in the area. As you moved toward the bottom of the UITZ the density of barnacles, limpets, and littorines increased. Fucus covered the MITZ and was patchy

Site A had many enchytraids in the SOR/ms area. Littorines were in moderate numbers. Barnacles limpets and amphipods were sparse. The thick tidal wrack contained Laminaria, Alaria and Fucus. Enchytraids and amphipods were active in the wrack. Site B had very sparse littorines, barnacles and limpets. However the oligochaetes (enchytraids) were very dense under the rocks and in the oiled sediment. The biota on the slope below site B (1:2) was sparse.

Considering the exposure and substrate this area had a healthy biota. In 1990 Foxes had dens up above this site.

Eagle (1) Puffin ? (1)
Harlequin (3) surf scoter (5) Cormorants (2) Glaucous-winged Gull (5+)

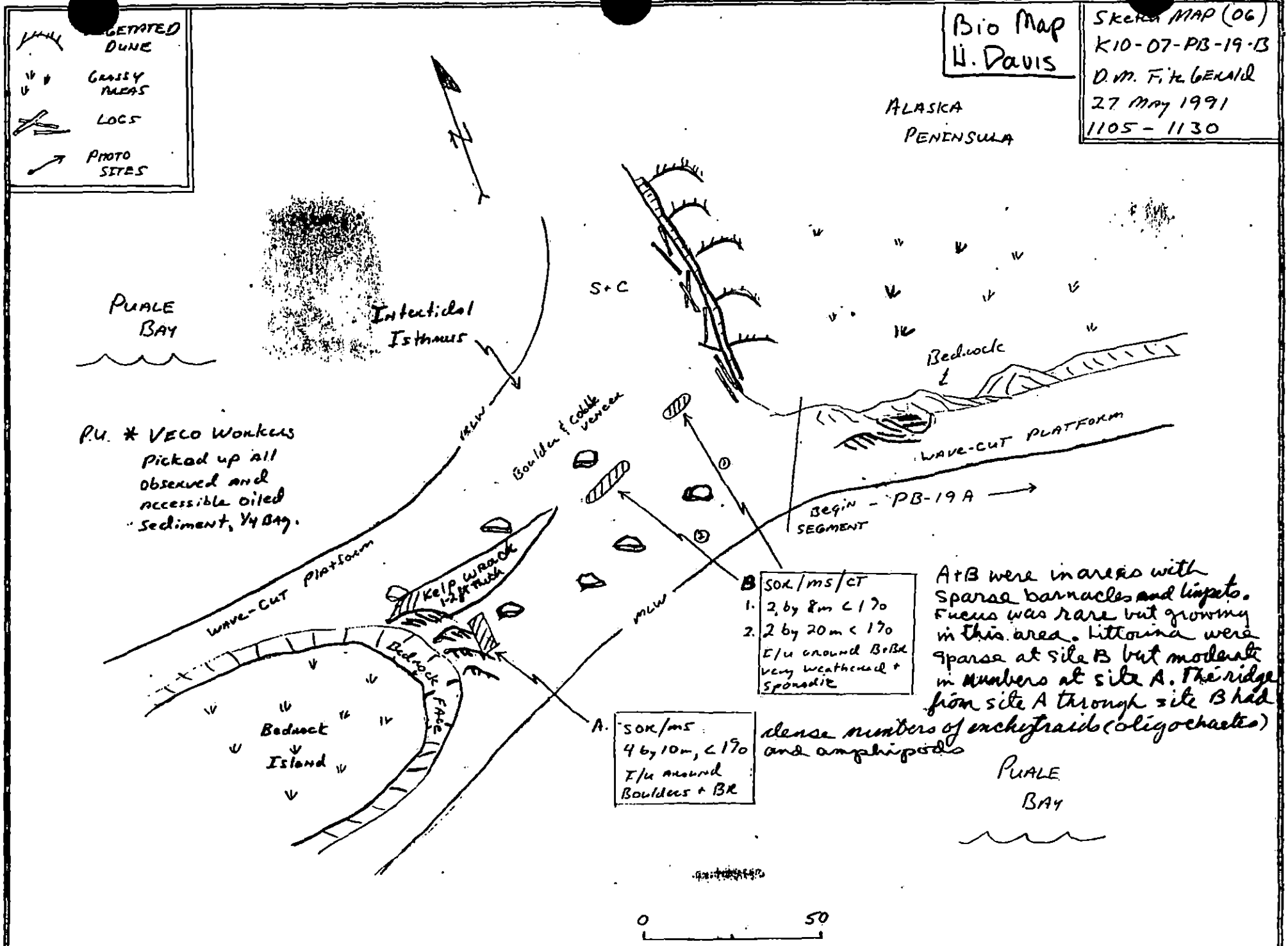
WILDLIFE OBSERVATIONS
TO BE COMPLETED IN ALL SUBDIVISIONS

BIRDS	# OF SPECIES	TOTAL BIRDS	FISH OBSERVED SPECIES PRESENT
Eagles	1	1	Sculpins
Seabirds	3?	3	
Waterfowl	2	8	
Gulls/Kittiwakes	1	+5	
Shorebirds	Ø		
Corvids	Ø		
Other Birds	Ø		

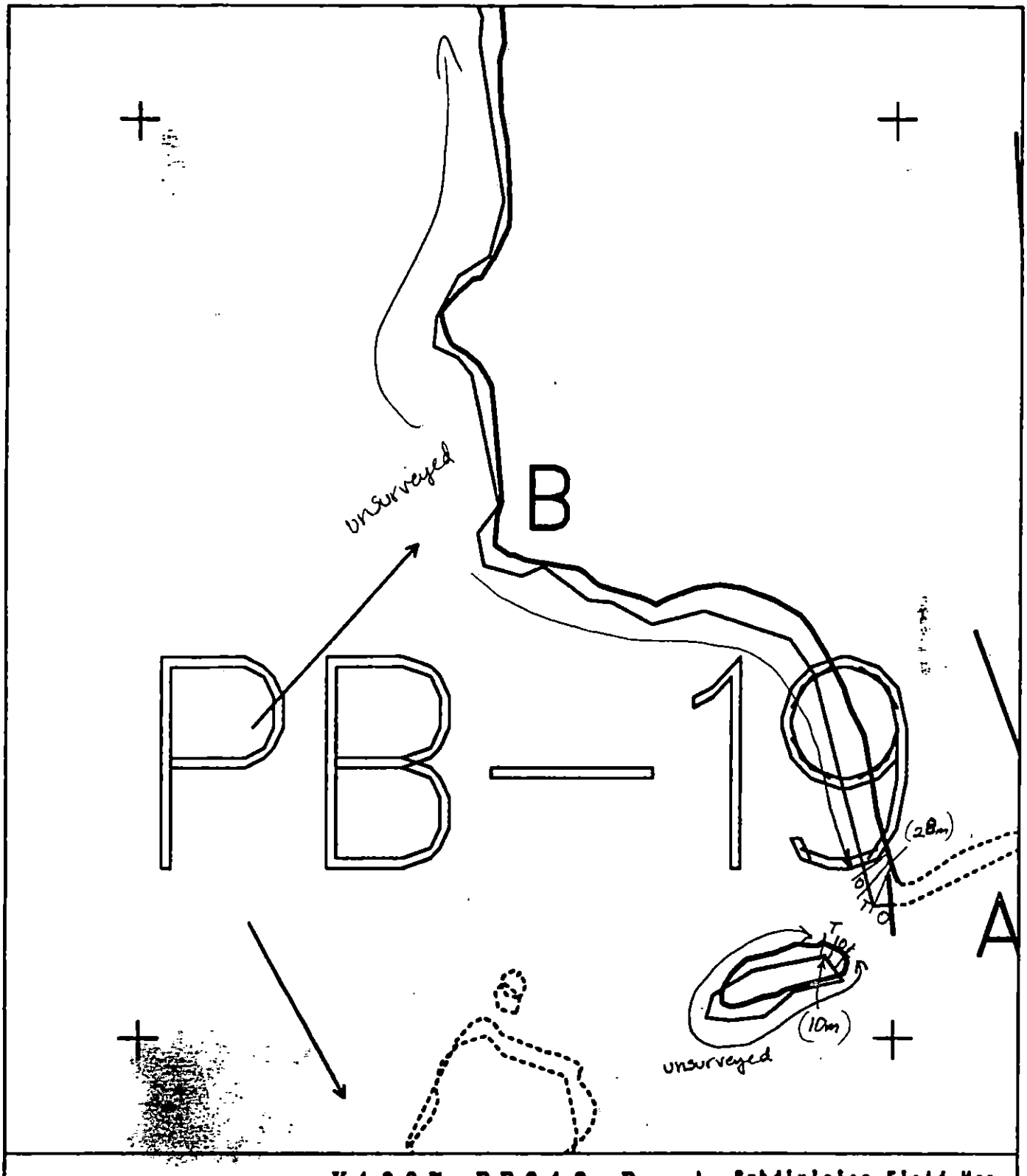
MARINE MAMMALS	# OBSERVED	LAND MAMMALS SPECIES	# OBSERVED
Sea Otters	Ø	Fox Tracks	
Pinnipeds (specify)		Caribou	5 in upland.
Harbor Seal	1		
Whales (specify)	Ø		

Shoreline subdivision map showing important biological features attached.

Reviewed MJB 5/21/91



Reviewed MB 5/31/



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

K1007 PB019 B

ADEC Subsegment Length: 3487m

METERS

0 200 400

AK State Plane Zone 4

g1007pb019b-. . . .

Subdivision Field Map

Map Key: 90AK1007PB019B

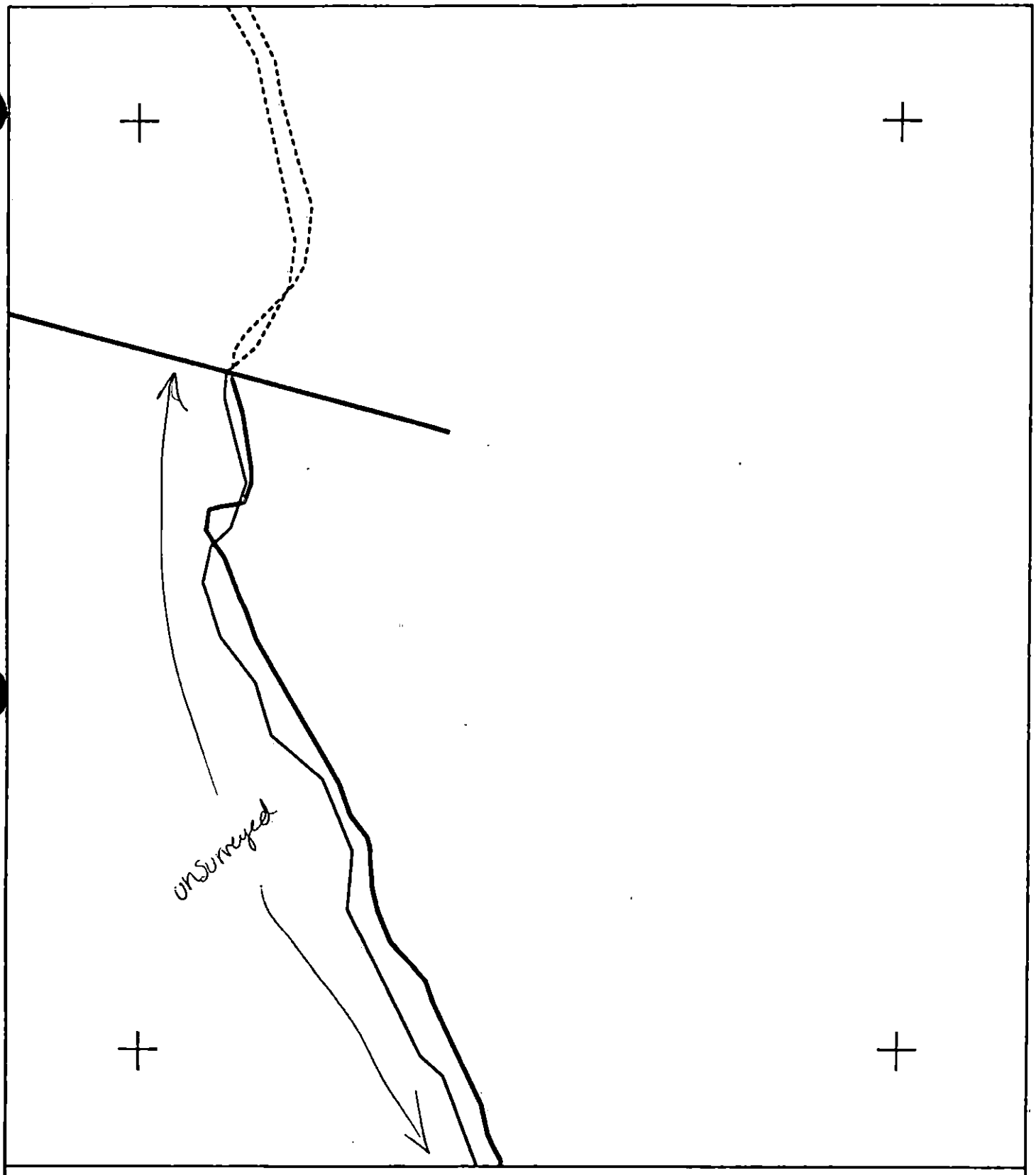
Name: D. Fitzgerald

Date: 27 May 1991

Date Entered:

REVIEWED: 5/31/91 MC

revised 5/31/91 KG



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

K1007 PB019 B

ADEC Subsegment Length: 3487m

METERS

0 200 400

AK State Plane Zone 4
g1007pb019b-. .. .

EXXON

Subdivision Field Map

Map Key: GOAK1007PB019B

Name: D. FitzGerald

Date: 27 May 1991

Date Entered:

revised 5/31/91 KG

REVIEWED: 5/31/91 MC

1991 MAYSAP EVALUATION

SEGMENT: K1007PB019 SUB: B REGION: KOD SURVEY DATE: 5/27/91

ENVIRONMENTAL SENSITIVITIES:
Work Window(s) OPEN

Ecological/Constraints (see page two for details) NONE

ARCHAEOLOGICAL CONSTRAINTS:
If treatment is planned, a cultural resource evaluation is required prior to shoreline treatment.

SHPO Signature: _____ Date: _____

RECOMMENDATIONS:	INITIAL	TAG	FOSC
TREATMENT REQUIRED (Y or N)	N		
Manual Pickup (Check as Req.)			
Spot Washing			
Bio-Customblen Only			
Bio-Inipol/Customblen			
Other _____			
Other _____			

COMMENTS:
INITIAL: _____

TAG: _____

FOSC: _____

TAG APPROVAL DATE: _____ FOSC APPROVAL DATE: _____

ADEC _____ FOSC _____

EXXON _____

USCG _____

NOAA _____

MAYSAP FIELD SHORELINE COMMENT SHEET

TEAM NO. 6-HELO SEGMENT PB-19 SUBDIVISION B DATE 5/27/91

ADEC
NAME J. BARNHART ADF&G SIGNATURE Jeff Barnhart

☒ NTR A trace amount of MS was located at the 1990 cleanup site. Staining evident in Tidal pools. Veco personnel removed approx 2 pounds. Trace oil remains at this site.

EXXON
NAME R. COULTER, EXXON SIGNATURE Rew R. Coulter

☑ NTR VERY SPORADIC LIGHT AREAS OF SOR WAS FOUND. A MINIMAL AMOUNT OF TOUCHUP WORK WAS DONE BY THE VECO CREW. NO SIGNIFICANT OILING REMAINS.

LANDMANAGER
NAME J. HARDISTER OF USF&WS SIGNATURE John P. Hardister

☑ NTR The SOR that remains on this segment is insufficient to warrant further treatment.

USCG/NOAA
NAME CWO R. SPURR/G. SHIGENAKA SIGNATURE R. P. Spurr / Gary Shigenaka

☒ NTR All significant MS/SOR was removed by the Veco workforce during the survey

THE SURVEYED PORTION OF THE SEGMENT WAS A SMALL ISTHMUS EXTENDING FROM THE SOUTHEASTERN SHORE OF [illegible] BAY OUT TO THE SOUTHWEST. A BEDROCK/COBBLE/BOULDER SADDLE CONNECTED A LARGE BEDROCK OUTCROP WITH MAIN SHORELINE; THE HIGHEST PORTION OF THE SADDLE (UPPER UITZ) WAS COMPRISED OF SMALLER SUBSTRATE [illegible] (PEBBLES). SOR AND MOUSSE WERE FOUND IN BOULDER/COBBLES AT THE BASE OF THE LARGE BEDROCK OUTCROP. ON THE UNDERSIDE OF COBBLES IN THIS AREA, OLIGOCHAETES AND PLATYHELMINTHS WERE FOUND IN ASSOCIATION WITH THE MOUSSE. THE VECO CREW REMOVED OR BROKE UP LARGER AGGREGATIONS OF RESIDUE DISCOVERED. NO OTHER OILING OF SIGNIFICANCE WAS OBSERVED IN THE SURVEYED SECTION.

MAYSAP SHORELINE OILING SUMMARY

TEAM NO. 6-Helo

SEGMENT K10-07-PB-19

OG D FitzGerald BIO H Davis

SUBDIVISION B

ADEC J. Barnhart ADFG LANDMANAGER J. Hallister for USFWS

DATE 27 / MAY / 91

EXXON R. Coulter USCG/NOAA CWO Spurkil / G. Shigenaka

TIME 11 : 05 to 11 : 30 TIDE LEVEL 2.4 ft. to 3.0 ft. ENERGY LEVEL: ☐ H ☑ M ☐ L

SURVEYED FROM: ☒ FOOT ☐ BOAT ☐ HELO WEATHER: ☒ SUN ☐ CLOUDS ☐ FOG ☐ RAIN ☐ SNOW

TOTAL LENGTH SHORELINE SURVEYED: 150 m NEAR SHORE SHEEN: ☐ BR ☐ RB ☐ SL ☒ NONE

EST. OIL CATEGORY LENGTH: W — m M — m N — m VL 38 m NO 112 m US 3337 m

LOC	SURFACE OIL CHARACTER										SURFACE SEDIMENT	SHORE SLOPE	AREA		ZONE				NOTES
	AP	MS	TB	SOR	CV	CT	ST	FL	DB	NO	TYPE	V H M L	WIDTH m	LENGTH m	S	UI	MI	LI	
A		T		T							B-BK-C	m	4	10		X			I/u around boulders
B1.		T		T							B-BK-C	m	2	8		X			" " "
2.		T		T		T					B-BK-C	m	2	20		X			" " "

DISTRIBUTION: C = 91-100%; B = 51-90%; P = 11-50%; S = 1-10%; T = <1%

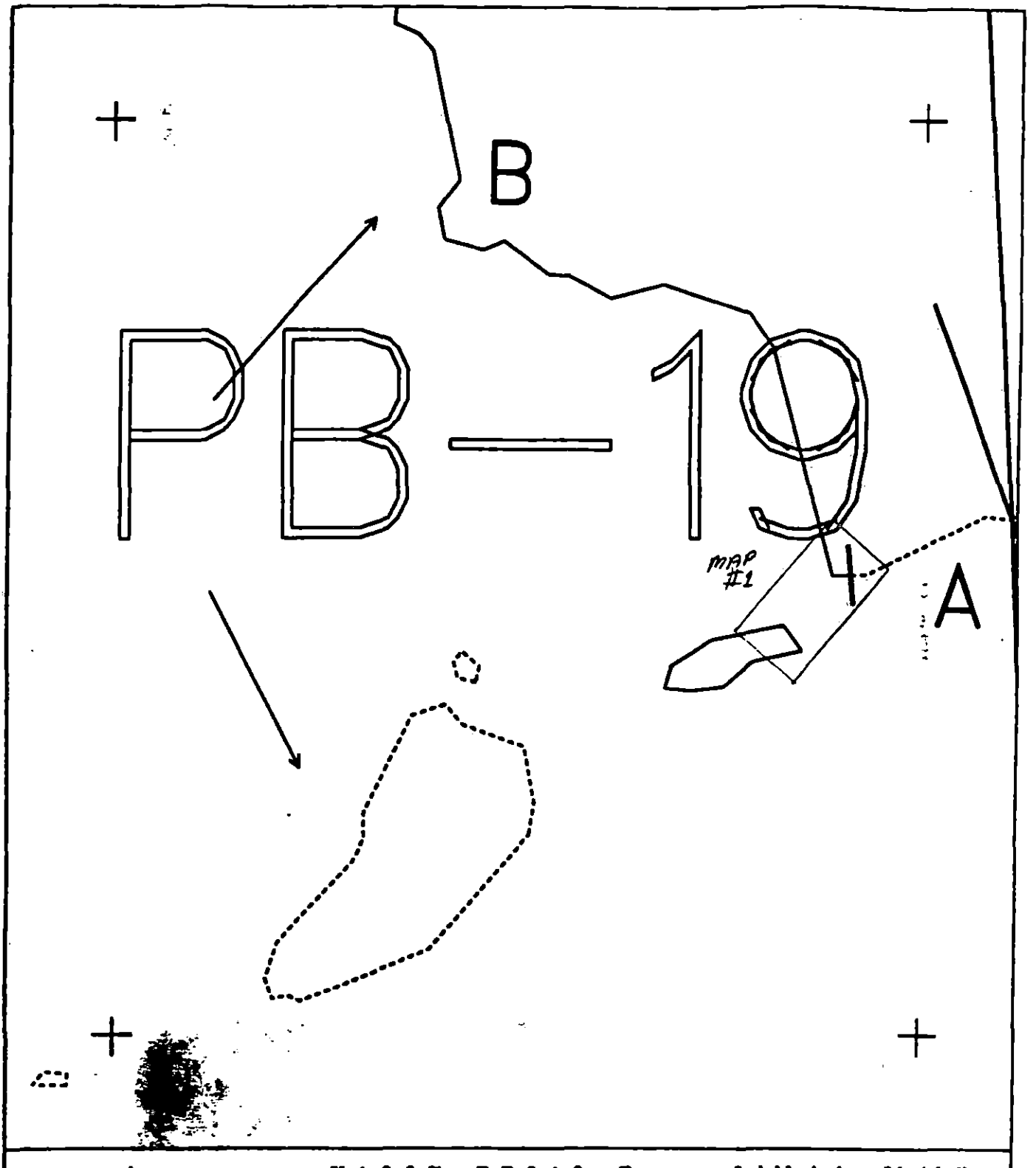
SLOPE: V = VERTICAL; H = HIGH ANGLE; M = MEDIUM ANGLE; L = LOW ANGLE PHOTO ROLL # MAYSAP- 6 - 23 FRAMES 12-14

PIT NO.	PIT DEPTH (cm)	SUBSURFACE OIL CHARACTER							OILED ZONE cm-cm	CLEAN BELOW Y/N	H2O LEVEL (cm)	SHEEN COLOR B R S N	PIT ZONE				SURFACE-SUBSURFACE SEDIMENTS	NOTES
		OP	HOR	MOR	LOR	OF	TR	NO					S	UI	MI	LI		
									-									
									-									
									-									
									-									
									-									
									-									
									-									
									-									
									-									

SHEEN COLOR: B = BROWN; R = RAINBOW; S = SILVER; N = NONE

OG COMMENTS: This segment is located at the northeast mouth to Puale Bay. The site that was surveyed within the segment is positioned between the mainland and an offshore island. This area consists of angular to rounded boulders and cobbles lying on top of an irregular bedrock platform. The oiling occurs in two general areas: 1) Adjacent to the island and; 2) in a zone near the mainland. The oiled sediments are very sporadic and consist of mostly SOR and some very small areas of mousse.

Reviewed: MC 5/31/91
revised 5/31/91 KG



K1007 PB019 B

METERS

0 200 400

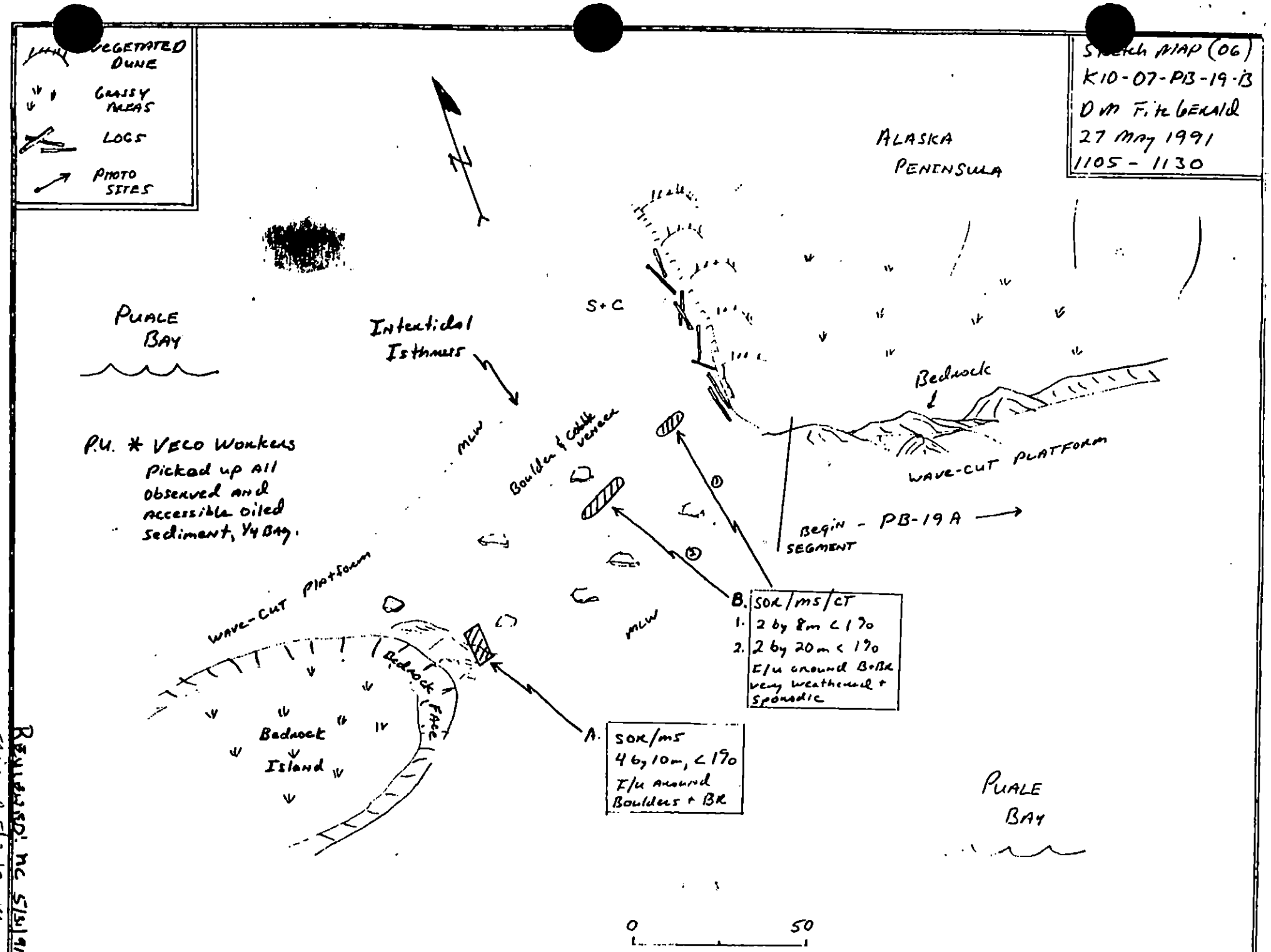
AK State Plane Zone 4

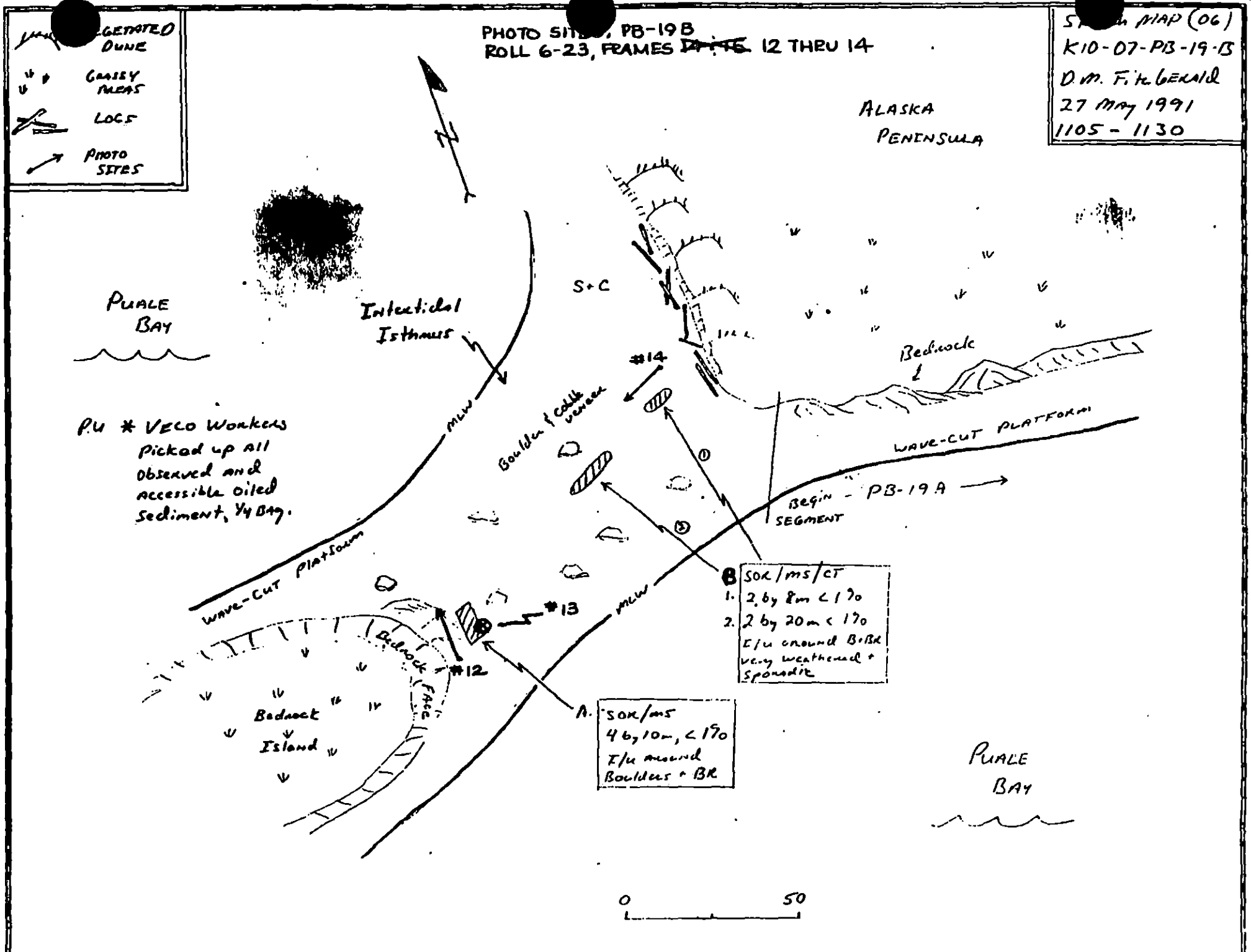
Subdivision Field Map

Map Key: K1007PB019B

Name: D. FitzGerald

Date: 27 May 1991


VEGETATED DUNE
GRASSY AREAS
LOGS
PHOTO SITES
SKETCH MAP (06)
K10-07-PB-19-B
D M FITZGERALD
27 MAY 1991
1105 - 1130
ALASKA PENINSULA
PUALE BAY
INTERTIDAL ISTHMUS
S+C
MLW
BOULDER & COBBLE VENEER
BEDROCK
WAVE-CUT PLATFORM
BEGIN - PB-19A
SEGMENT
P.U. * VECO WORKERS PICKED UP ALL OBSERVED AND ACCESSIBLE OILED SEDIMENT, VY BAY.
WAVE-CUT PLATFORM
BEDROCK FACE
BEDROCK ISLAND
B. SOR/MS/CT
1. 2 by 8m < 1%
2. 2 by 20m < 1%
F/u around BoBk very weathered + sporadic
A. SOR/MS
4 by 10m, < 1%
F/u around Boulders + BR
PUALE BAY
0
50
REVIEWED: MC 5/31/91
reviewed 5/31/91 KG


VEGETATED DUNE
GRASSY AREAS
LOGS
PHOTO SITES
PHOTO SITES, PB-19B
ROLL 6-23, FRAMES ~~14 THRU 16~~ 12 THRU 14
SHEET MAP (06)
K10-07-PB-19-B
D.M. FITZGERALD
27 MAY 1991
1105 - 1130
ALASKA PENINSULA
PUALE BAY
Intertidal Isthmus
MLLW
S+C
Bedrock
#14
Boulder & cobble veneer
WAVE-CUT PLATFORM
BEGIN - PB-19A
SEGMENT
PU * VECO Workers picked up all observed and accessible oiled sediment, Y4 Bay.
WAVE-CUT PLATFORM
MLLW
#13
#12
Bedrock Face
Bedrock Island
B
SOR/MS/CT
1. 2 by 8m < 1%
2. 2 by 20m < 1%
I/u around B-BR very weathered + sporadic
A.
SOR/MS
4 by 10m, < 1%
I/u around Boulders + BR
PUALE BAY
0
50

MAYSAP BIOLOGICAL SUMMARY FORM

TEAM # 6 Helo **DATE** May 27 1991

SEGMENT # K10-07 PB-19 **TIDAL HEIGHT (Range)** 2.4-3.0ft (11:00-11:30)

SUBDIVISION B **BIOLOGIST** H. Davis

SEA STATE 2ft [redacted] open side calm in bay **WIND SPEED/DIRECTION** 5-16 kts NE

PHOTOGRAPHS: ROLL # 6-23 **FRAME #** 12-14

COMMENTS/OBSERVATIONS (to be completed in oiled subdivisions only):

The area surveyed was the isthmus on the south-eastern end of the segment. The area examined was at the top of the littorine/barnacle/limpet zone. Annelids (enchytraids) amphipods, and flatworms were on the underside of rocks in the area. As you moved toward the bottom of the MITZ the density of barnacles, limpets, and littorines increased. Fucus covered the MITZ and was patchy.

Site A had many enchytraids in the sediments area. Littorines were in moderate numbers. Barnacles limpets and amphipods were sparse. The thick tidal wrack contained laminaria, Alaria and Fucus. Enchytraids and amphipods were active in the wrack. Site B had very sparse littorines, barnacles and limpets. However the oligochaetes (enchytraids) were very dense under the rocks and in the oiled sediment. The biota on the slope below site B (1/2) was sparse.

Considering the exposure and substrate this area had a healthy biota. In 1990 Foxes had dens up above this site.

Eagle (1) Puffin ? (1)
Harlequin (3) surf scoter (5) Cormorants (2) Glaucous-winged Gull (5+)

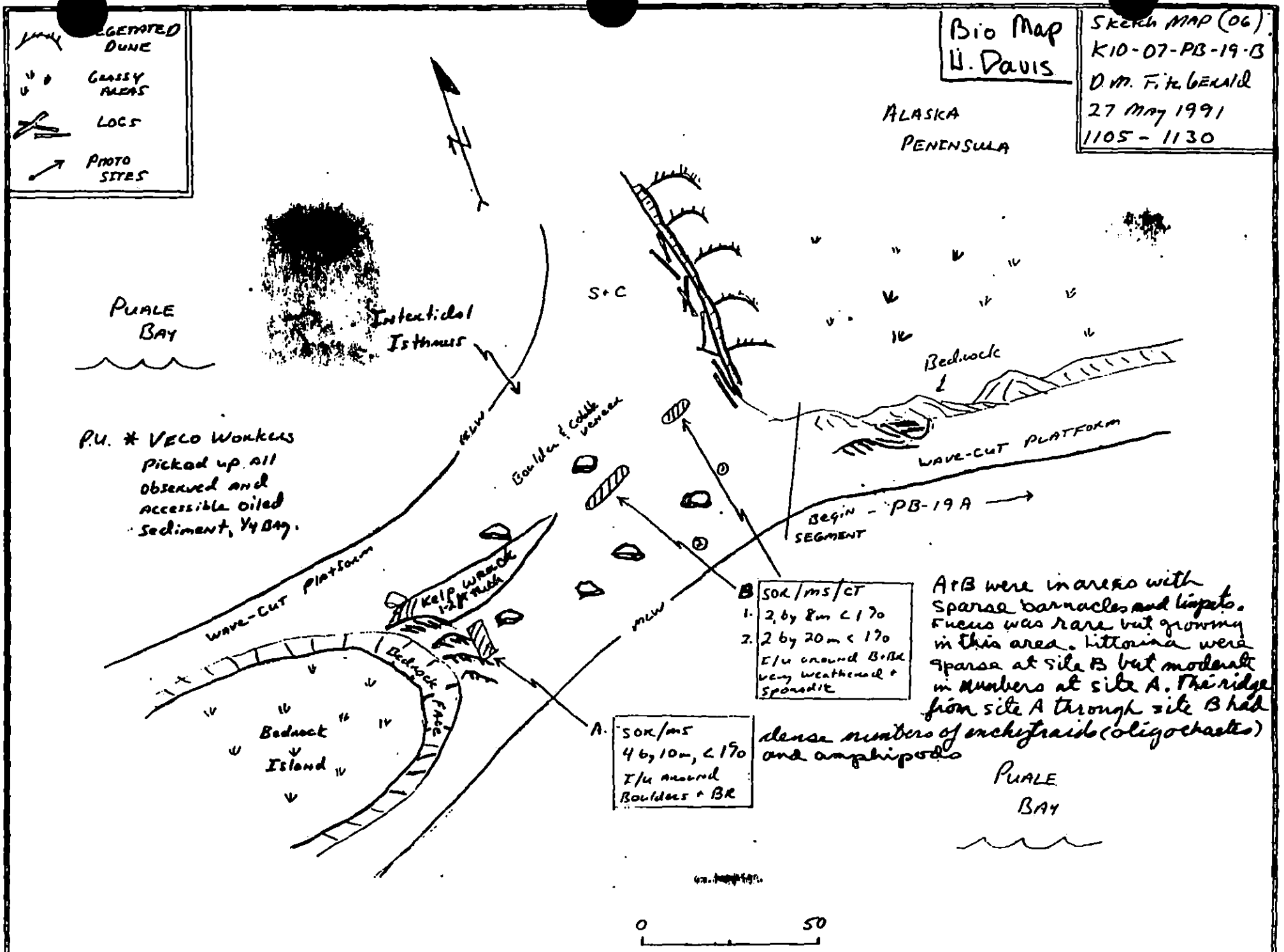
WILDLIFE OBSERVATIONS
TO BE COMPLETED IN ALL SUBDIVISIONS

BIRDS	# OF SPECIES	TOTAL BIRDS	FISH OBSERVED SPECIES PRESENT
Eagles	1	1	Sculpins
Seabirds	2 ?	3	
Waterfowl	2	8	
Gulls/Kittiwakes	1	+5	
Shorebirds	Ø		
Corvids	Ø		
Other Birds	Ø		

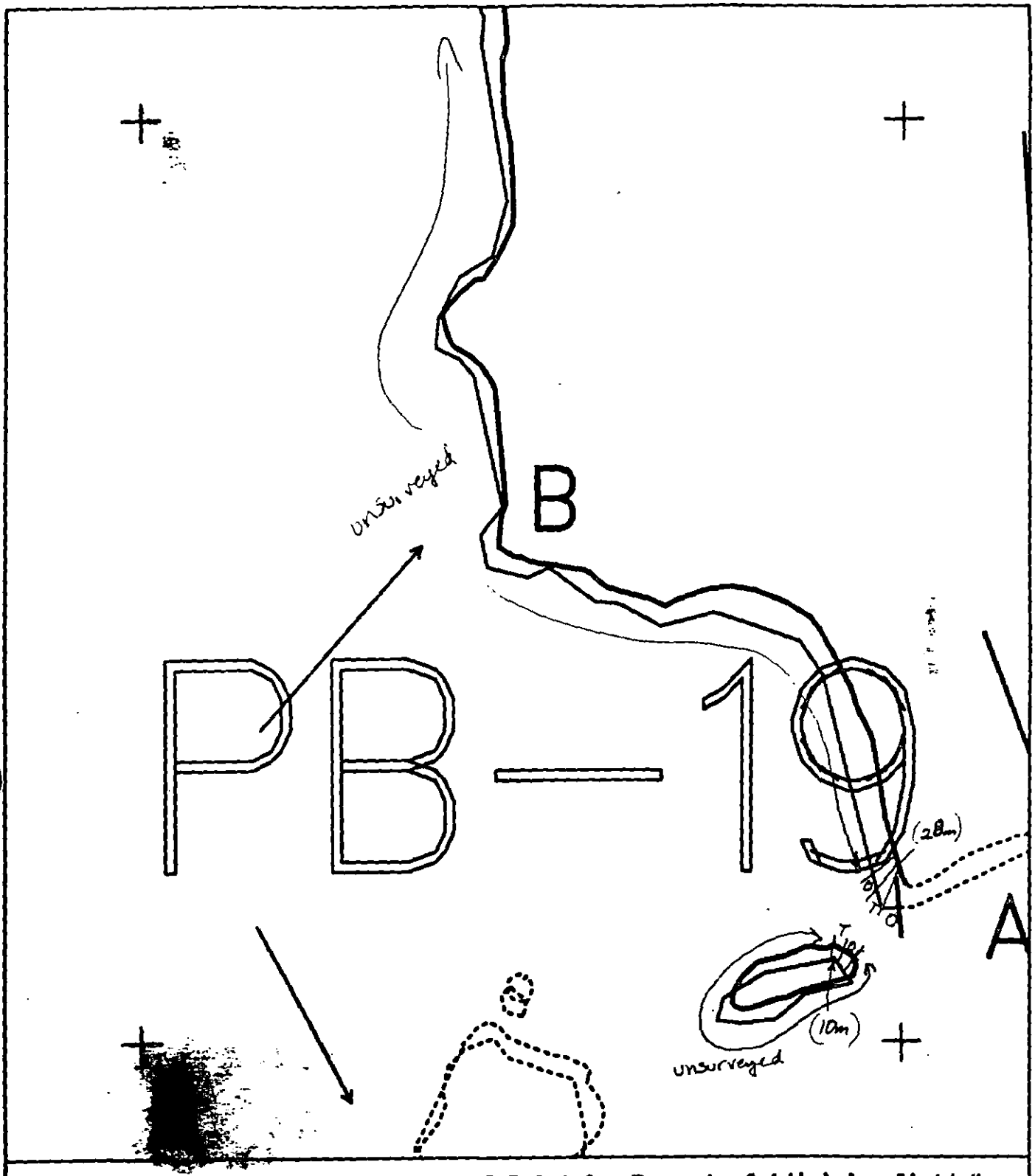
MARINE MAMMALS	# OBSERVED	LAND MAMMALS SPECIES	# OBSERVED
Sea Otters	Ø	Fox Tracks	
Pinnipeds (specify)		Caribou	5 in upland.
Harbor Seal	1		
Whales (specify)	Ø		

Shoreline subdivision map showing important biological features attached.

Reviewed MB 5/31/91



Reviewed MB 5/31



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

K1007 PB019 B

ABEC Subsegment Length: 3487m

METERS

0 200 400

AK State Plane Zone 4

Subdivision Field Map

Map Key: [illegible]

Name: D. Fitzgerald

Date: 27 MAY 1991

Date Entered:

REVIEWED: 5/31/91 MC

revised 5/31/91 KG

1991 MAYSAP EVALUATION

SEGMENT: K1009DB001 **SUB:** M **REGION:** KOD **SURVEY DATE:** 5/28/91

ENVIRONMENTAL SENSITIVITIES:
Work Window(s) OPEN

Ecological/Constraints (see page two for details) NONE

ARCHAEOLOGICAL CONSTRAINTS:
If treatment is planned, a cultural resource evaluation is required prior to shoreline treatment.

SHPO Signature: _____ Date: _____

RECOMMENDATIONS:	**INITIAL**	**TAG**	**FOSC**
TREATMENT REQUIRED (Y or N)	N		
Manual Pickup (Check as Req.)			
Spot Washing			
Bio-Customblen Only			
Bio-Inipol/Customblen			
Other _____			
Other _____			

COMMENTS:
INITIAL:

TAG:

FOSC:

TAG APPROVAL DATE: _____ **FOSC APPROVAL DATE:** _____

ADEC _____ FOSC _____

EXXON _____

USCG _____

NOAA _____

TEAM NO. 6-HELO SEGMENT DB-1 SUBDIVISION A DATE 5/28/91

ADEC
NAME J. BARNHART ADEC&G SIGNATURE Jeff Barnhart

☑ NTR No oil observed.

EXXON
NAME R. COULTER, EXXON SIGNATURE R. R. Coulter

☑ NTR NO OIL FOUND.

LANDMANAGER
NAME J. HARDISTER OF USF&WS SIGNATURE John P. Hardister

☑ NTR No recoverable oil found.

USCG/NOAA
NAME CWO R. SPUHR/E. SHIGENAKA SIGNATURE R. Spuhr / Gary Shigenaka

☒ NTR No recoverable oil located

THE SURVEYED PORTION OF THE SEGMENT WAS A CONTINUATION OF THE SHORELINE AROUND A WIDE SANDY TIDAL FLAT/STREAM DELTA FROM DB-2. THE PHYSICAL SETTING DIFFERED SOMEWHAT IN THAT THE FLAT SHOWED DISTINCT RIPPLES, LARGE BOULDERS LITTERED THE UPPER BOUNDARIES OF THE SAND FLAT, AND PARTICULARLY ALONG THE SOUTHEASTERN PART OF THE SEGMENT, IMPRESSIVE HIGH CRUMBLY BEDROCK CLIFFS ROSE FROM THE SUPRATIDAL. TALUS SLOPES ASSOCIATED WITH THE CLIFFS REACHED THE SUPRATIDAL. BEYOND WEATHERED COAT SEEN ON BOULDERS IN THE UPPER INTER, NO OTHER OIL RESIDUES WERE SEEN ALONG THE SEGMENT.

MAY 91 FIELD SHORELINE COMMENT SHEET

TEAM NO. 6-HELO SEGMENT DB-1 SUBDIVISION A DATE 5 / 28 / 91

ADEC
NAME J. BARNHART, ADF&G SIGNATURE Jeff Barnhart

☒ NTR No oil observed.

EXXON
NAME R. COULTER, EXXON SIGNATURE

☐ NTR

LANDMANAGER
NAME J. HARDISTER OF USF&WS SIGNATURE John P. Hardister

☑ NTR No recoverable oil found.

USCG/NOAA
NAME CWO R. SPURR/G. SHIGENAKA SIGNATURE R. D. Spurr / Gary Shigenaka

☒ NTR No recoverable oil located

THE SURVEYED PORTION OF THE SEGMENT WAS A CONTINUATION OF THE SHORELINE AROUND A WIDE SANDY TIDAL FLAT/STREAM DELTA FROM DB-2. THE PHYSICAL SETTING DIFFERED SOMEWHAT IN THAT THE FLAT SHOWED DISTINCT RIPPLES, LARGE BOULDERS LITTERED THE UPPER BOUNDARIES OF THE SAND FLAT, AND PARTICULARLY ALONG THE SOUTH-EASTERN PART OF THE SEGMENT, IMPRESSIVE HIGH CRUMBLY BEDROCK CLIFFS ROSE FROM THE SUPRATIDAL. TALUS SLIDES ASSOCIATED WITH THE CLIFFS REACHED THE SUPRATIDAL. BEYOND WEATHERED COAT SEEN ON BOULDERS IN THE UPPER DITE, NO OTHER OIL RESIDUES WERE SEEN ALONG THE SEGMENT.

MAYSAP SHORELINE OILING SUMMARY

TEAM NO. 6 Helo

SEGMENT K10-09 DB-01

OG D FitzGerald BIO H. Davis

SUBDIVISION M

ADEC J Baenhart / ADFG LANDMANAGER J Nardisten for USFWS

DATE 28 / May / 91

EXXON R Coulter USCG/NOAA CWO Spurr / G. Shigenaka

TIME 10 : 20 to 10 : 45 TIDE LEVEL 1.1 ft. to 0 ft. ENERGY LEVEL: ☐ H ☒ M ☐ L

SURVEYED FROM: ☒ FOOT ☐ BOAT ☐ HELO WEATHER: ☐ SUN ☒ CLOUDS ☐ FOG ☐ RAIN ☐ SNOW

TOTAL LENGTH SHORELINE SURVEYED: 1149 m NEAR SHORE SHEEN: ☐ BR ☒ RB ☐ SL ☐ NONE

EST. OIL CATEGORY LENGTH: W — m M — m N — m VL 6 m NO 1143 m US — m

LOC	SURFACE OIL CHARACTER										SURFACE SEDIMENT TYPE	SHORE SLOPE	AREA		ZONE				NOTES
	AP	MS	TB	SOR	CV	CT	ST	FL	DB	NO		V H M L	WIDTH m	LENGTH m	S	UI	MI	LI	
A			T										1	4	X				Next to marsh Most Oil
B						T			.				1	2		X			On Boulders

DISTRIBUTION: C = 91-100%; B = 51-90%; P = 11-50%; S = 1-10%; T = <1%

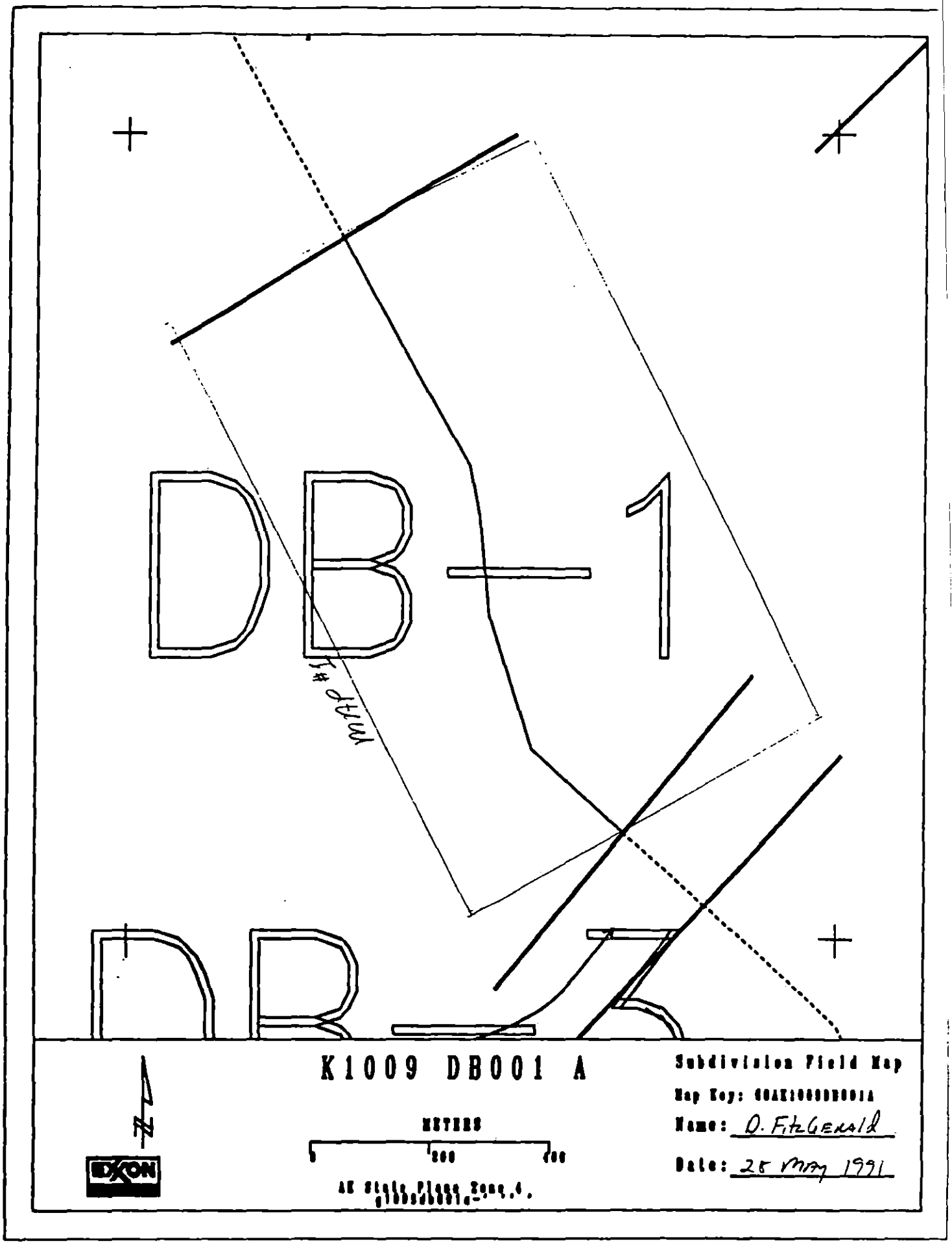
SLOPE: V = VERTICAL; H = HIGH ANGLE; M = MEDIUM ANGLE; L = LOW ANGLE PHOTO ROLL # MAYSAP- 6 - 24 FRAMES ____

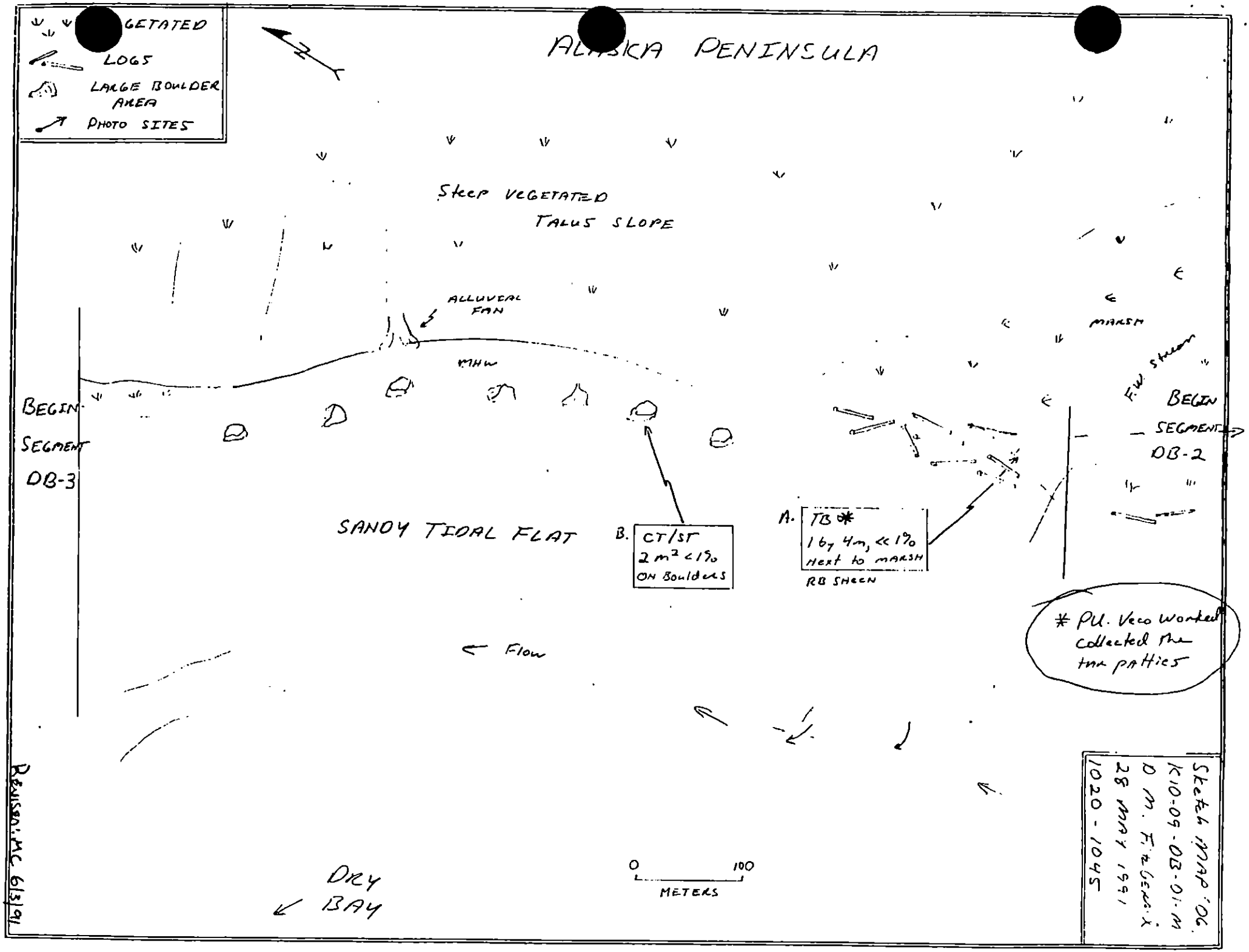
PIT NO.	PIT DEPTH (cm)	SUBSURFACE OIL CHARACTER							OILED ZONE cm-cm	CLEAN BELOW Y/N	H2O LEVEL (cm)	SHEEN COLOR B R S N	PIT ZONE				SURFACE-SUBSURFACE SEDIMENTS	NOTES
		OP	HOR	MOR	LOR	OF	TR	NO					S	UI	MI	LI		
									-									
									-									
									-									
									-									
									-									
									-									
									-									
									-									
									-									

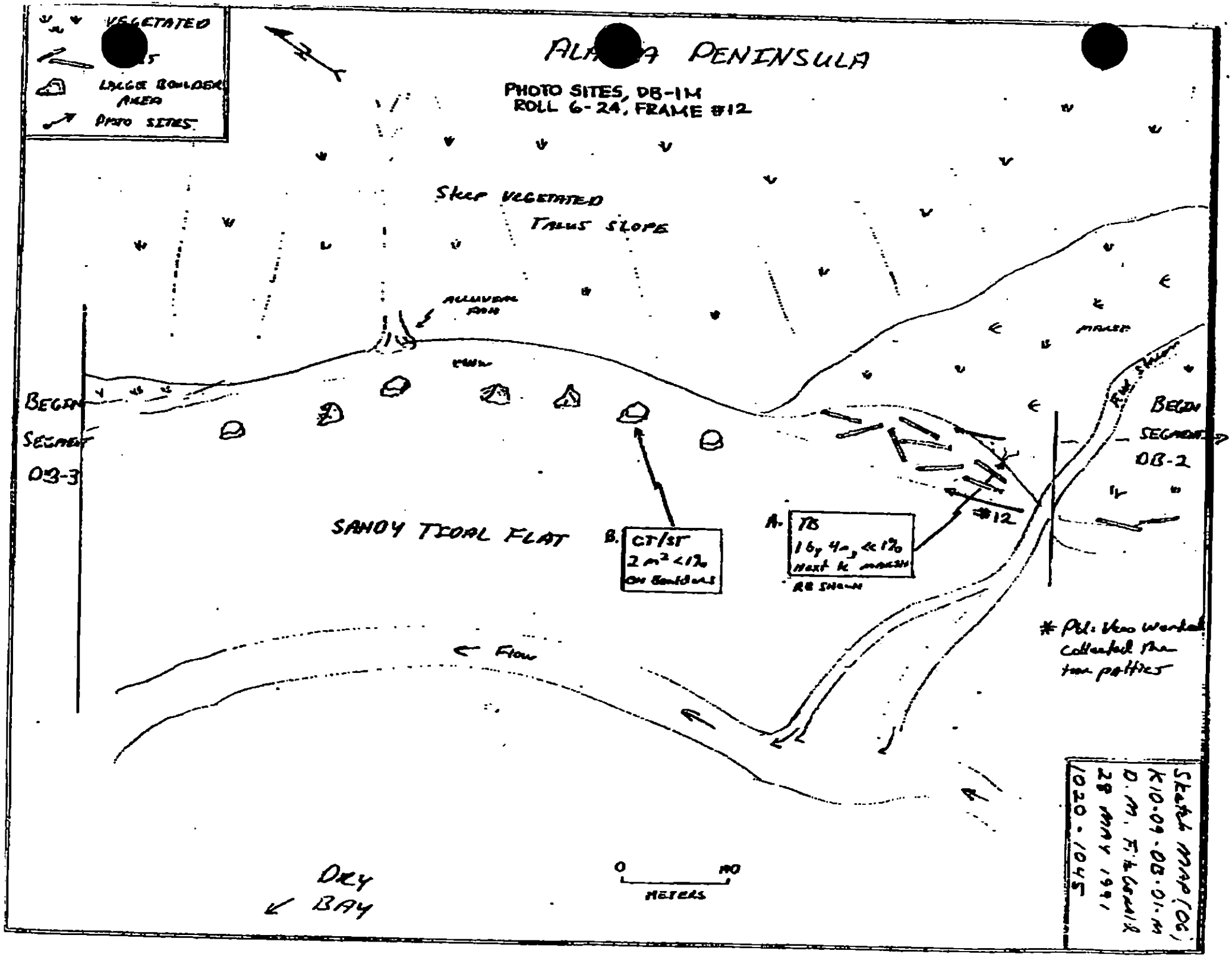
SHEEN COLOR: B = BROWN; R = RAINBOW; S = SILVER; N = NONE

OG COMMENTS: This segment is located along the west central coast of Day Bay. The shoreline is backed by a steep vegetated talus slope and fronted by a tidal flat and tidal channel. Large boulders which have rolled down the slope and onto the beach are scattered along much the upper shore. Oiling of this shoreline is very minimal consisting of 1. tar patties in a small area adjacent to the marsh and 2. very weathered coat of some boulders. VECO workers collected the tar patties

REVIEWED: MC 6/5/91


DB-1
DB-2
K1009 DB001 A
Subdivision Field Map
Map Key: 60AK10000001A
Name: O. FitzGerald
Date: 28 May 1991
METERS
0
200
400
EXXON


ALASKA PENINSULA
VEGETATED
LOGS
LARGE BOULDER AREA
PHOTO SITES
Steep VEGETATED
TALUS SLOPE
ALLUVIAL FAN
MHW
MARSH
F.W. SHEEN
BEGIN SEGMENT OB-3
BEGIN SEGMENT OB-2
SANDY TIDAL FLAT
B. CT/ST
2 m² <1%
ON Boulders
A. TB *
1 by 4m, <<1%
Next to MARSH
RB SHEEN
* PU. Veco Worker collected the two patties
Flow
DRY BAY
0 100
METERS
Sketch MAP '06
K10-09-OB-01.M
D. M. Fitzgerald
28 MAY 1991
1020 - 1045
Revised MC 6/3/91


VEGETATED
LARGE BOULDER AREA
PHOTO SITES
ALASKA PENINSULA
PHOTO SITES, DB-1M
ROLL 6-24, FRAME #12
STEEP VEGETATED TALUS SLOPE
ALLUVIAL FAN
FLOW
BEGIN SEGMENT DB-3
SANDY TIDAL FLAT
B. CT/ST
2 m² <1%
ON BOULDERS
A. TB
16y 4m, <1%
NEXT H. MARSH
RB SHOWN
#12
BEGIN SEGMENT DB-2
FLOW
* Phil: Vera worked collected the two pottles
FLOW
DRY BAY
0
100
METERS
SKETCH MAP (OG)
K10-09-DB-01-M
D. M. FITZGERALD
28 MAY 1991
1020-1045

MAYSAP BIOLOGICAL SUMMARY FORM

TEAM # 6 Helo | DATE May 28 1991

SEGMENT # K10-09 DB-01 | TIDAL HEIGHT (Range) Lift to Off (10:20-10 45)

SUBDIVISION M | BIOLOGIST N. Davis

SEA STATE Tide Out in Bay (2-3 ft on coast) | WIND SPEED/DIRECTION 5-10 kts SE-E

PHOTOGRAPHS: ROLL # 6-24 | FRAME #

COMMENTS/OBSERVATIONS (to be completed in oiled subdivisions only):

Site A had TB's next to a marshy area, Spartina sp. and other marsh plants were growing in the area. Pintails were actively feeding in the marsh. Around the TB there was very little biota. A diatom mat was growing on the surface of the sediment. Drift logs, small bits of kelp wrack (Fucus, Ulva, laminaria) and shells (Macoma sp.) were located around site A.

Site B had Fucus, filamentous green algae, and barnacles on the rocks at the MHW. Between boulders and cobbles were diatom mats growing on the sand and mud. A few limpets were present but littorines were rare. Up the Talus slope from Site B was the burrow of a Red Fox. The NOAA rep. found part of a bear's jaw about 200 meters from Site B.

sparrows (5)
semi palmated plover (3) Pintail (3) Dead Kittiwakes (3) Glaucous-winged Gull (5)
Rock Sandpipers (3) "Peeps" (little brown shorebirds to far away to ID) (4) Raven (1)

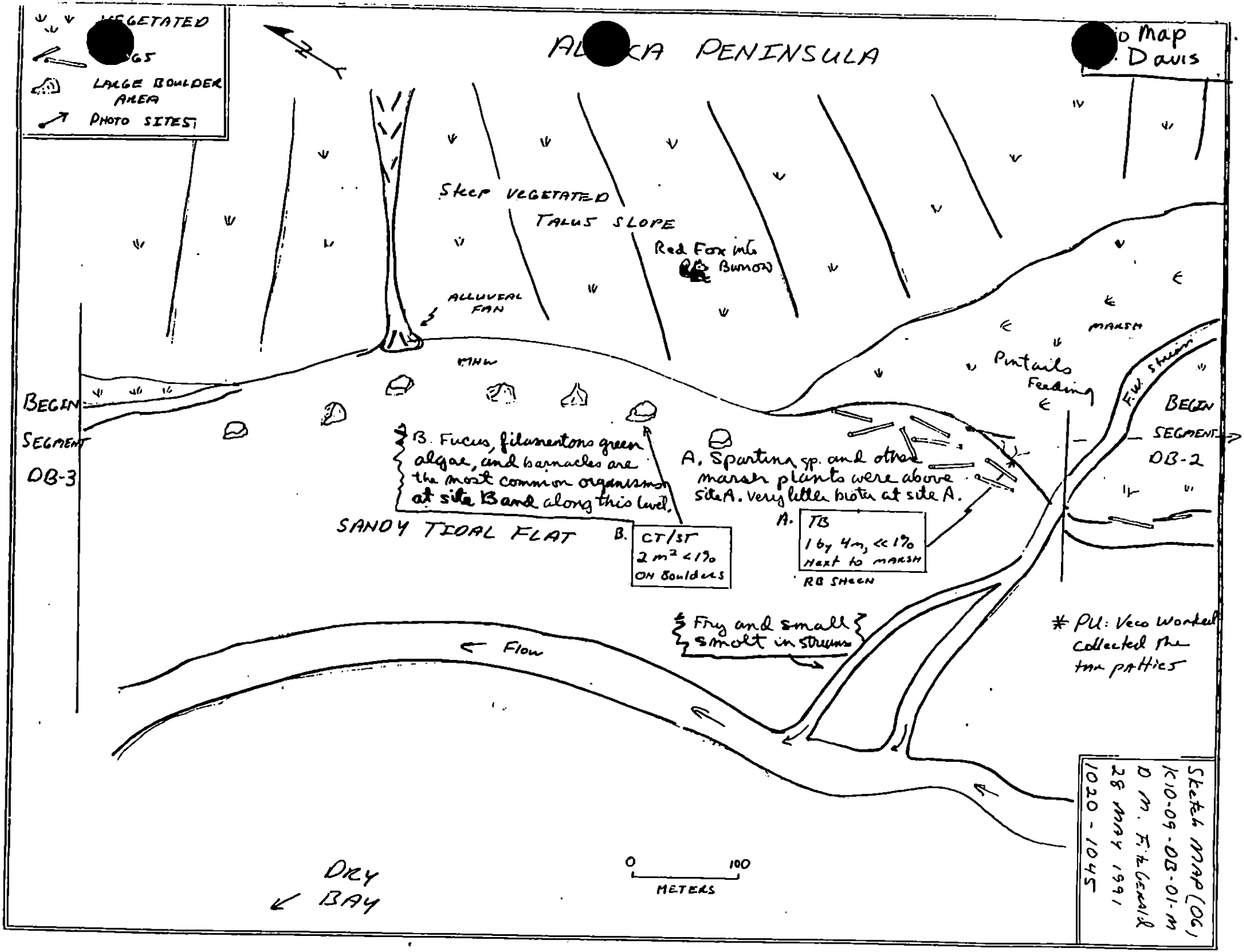
WILDLIFE OBSERVATIONS
TO BE COMPLETED IN ALL SUBDIVISIONS

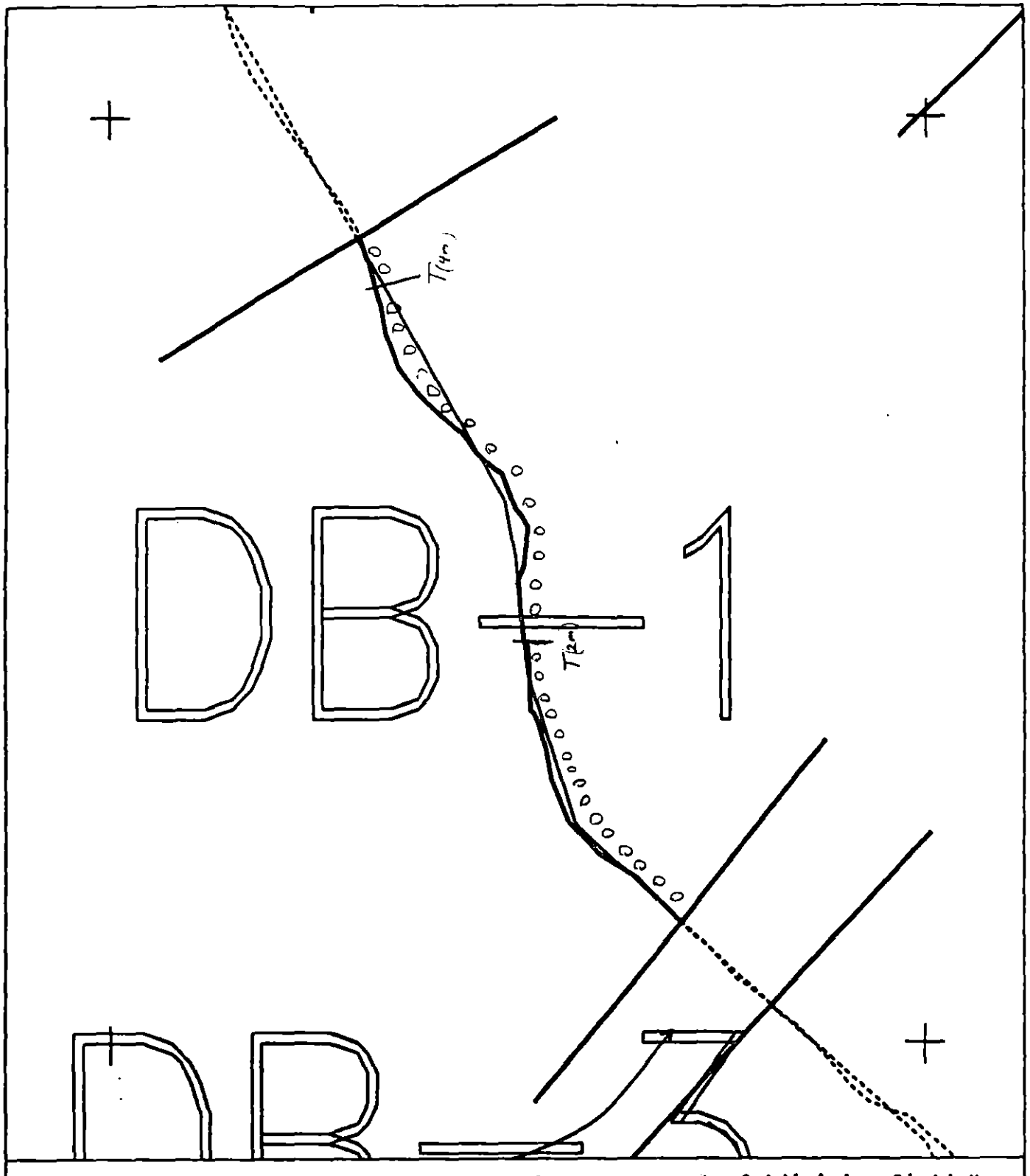
BIRDS	# OF SPECIES	TOTAL BIRDS	FISH OBSERVED SPECIES PRESENT
Eagles			Fry + Smolt in Streams
Seabirds			
Waterfowl	1	3	
Gulls/Kittiwakes	2	5+ 3 dead Kittiwakes	
Shorebirds	3	10	
Corvids	1	1	
Other Birds sparrows	1-2	5	

MARINE MAMMALS	# OBSERVED	LAND MAMMALS SPECIES	# OBSERVED
Sea Otters		Red Fox	1 On slope
Pinnipeds (specify)		Caribou Tracks	
les (specify)			

Shoreline subdivision map showing important biological features attached.

Posted 6/12/91 T.M.


VEGETATED
LARGE BOULDER AREA
PHOTO SITES
ALASKA PENINSULA
Map
Davis
Steep VEGETATED TALUS SLOPE
Red Fox in Burrow
ALLUVIAL FAN
MHW
MARSH
Pintails Feeding
Fw stream
BEGIN SEGMENT OB-3
BEGIN SEGMENT OB-2
B. Fucus, filamentous green algae, and barnacles are the most common organisms at site B and along this level.
A. Spartina sp. and other marsh plants were above site A. Very little biota at site A.
SANDY TIDAL FLAT
B. CT/ST 2 m² <1% ON Boulders
A. TB 1 by 4m, <<1% Next to MARSH RB SHEEN
Fry and small smolt in streams
Flow
* PU: Veco Worker collected the two patties
DRY BAY
0 100 METERS
Sketch MAP (OG) K10-09-OB-01-M D M. FitzGerald 28 MAY 1991 1020-1045



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

K1009 DB001 A

ADEC Subsegment Length: 1149m

METERS

0 200 400

AK State Plane Zone 4

Subdivision Field Map

Map Key: 6OAK1000000001A

Name: Duncan FitzGerald

Date: 28 MAY 1991

Date Entered:

REMARKS: MC 6/3/91

1991 MAYSAP EVALUATION

SEGMENT: K1009DB001 SUB: M REGION: KOD SURVEY DATE: 5/28/91

ENVIRONMENTAL SENSITIVITIES:
Work Window(s) OPEN

Ecological/Constraints (see page two for details) NONE

ARCHAEOLOGICAL CONSTRAINTS:
If treatment is planned, a cultural resource evaluation is required prior to shoreline treatment.

SHPO Signature: Timothy C. Smith Date: 6/07/91

RECOMMENDATIONS:	INITIAL	TAG	FOSC
TREATMENT REQUIRED (Y or N)	N	N	N
Manual Pickup (Check as Req.)			
Spot Washing			
Bio-Customblen Only			
Bio-Inipol/Customblen			
Other			
Other			

COMMENTS:
INITIAL:

TAG:

FOSC:

TAG APPROVAL DATE: June 7 1991 FOSC APPROVAL DATE: 6/12/91

ADEC John Bauer FOSC

EXXON Beal

USCG E B Page

NOAA J T Turner

E. E. PAGE, CDR, USCG
CHIEF OF STAFF, FOSC

TEAM NO. 6-HELO SEGMENT DB-1 SUBDIVISION A DATE 5/28/91

ADEC
NAME J. BARNHART ADF&G SIGNATURE Jeff Barnhart

☐ NTR No oil observed.

EXXON
NAME R. COULTER, EXXON SIGNATURE Rex R. Coulter

☑ NTR NO OIL FOUND.

LANDMANAGER
NAME J. HARRISTER OF USF&WS SIGNATURE John P. Harrister

☑ NTR No recoverable oil found.

USCG/NOAA
NAME CWO R. SPURR/G. SHIGENAKA SIGNATURE R R Spurr / Gary Shigenaka

☒ NTR No recoverable oil located

THE SURVEYED PORTION OF THE SEGMENT WAS A CONTINUATION OF THE SHORELINE AROUND A WIDE SANDY TIDAL FLAT/STREAM DELTA FROM DB-2. THE PHYSICAL SETTING DIFFERED SOMEWHAT IN THAT THE FLAT SHOWED DISTINCT RIPPLES, LARGE BOULDERS LITTERED THE UPPER BOUNDARIES OF THE SAND FLAT, AND PARTICULARLY ALONG THE SOUTHEASTERN PART OF THE SEGMENT, IMPRESSIVE HIGH CRUMBLY BEDROCK CLIFFS ROSE FROM THE SUPRATIDAL. TALUS SLOPES ASSOCIATED WITH THE CLIFFS REACHED THE SUPRATIDAL. BEYOND WEATHERED COAT SEEN ON BOULDERS IN THE UPPER ½, NO OTHER OIL RESIDUES WERE SEEN ALONG THE SEGMENT.

MAYSAP FIELD SHORELINE COMMENT SHEET

TEAM NO. 6-HELO SEGMENT DB-1 SUBDIVISION A DATE 5 / 28 / 91

ADEC

NAME J. BARNHART, ADF&G SIGNATURE Jeff Barnhart

☒ NTR No oil observed.

EXXON

NAME R. COULTER, EXXON SIGNATURE

☐ NTR

LANDMANAGER

NAME J. HARDISTER OF USF & WS SIGNATURE John P. Hardister

☒ NTR No recoverable oil found.

USCG/NOAA

NAME CWO R. SPURR/G. SHIGENAKA SIGNATURE R. Spurr / Gary Shigenaka

☒ NTR No recoverable oil located

THE SURVEYED PORTION OF THE SEGMENT WAS A CONTINUATION OF THE SHORELINE AROUND A WIDE SANDY TIDAL FLAT/STREAM DELTA FROM DB-2. THE PHYSICAL SETTING DIFFERED SOMEWHAT IN THAT THE FLAT SHOWED DISTINCT RIPPLES, LARGE BOULDERS LITTERED THE UPPER BOUNDARIES OF THE SAND FLAT, AND PARTICULARLY ALONG THE SOUTH-EASTERN PART OF THE SEGMENT, IMPRESSIVE HIGH CRUMBLY BEDROCK CLIFFS ROSE FROM THE SUPRATIDAL. TALUS SLIDES ASSOCIATED WITH THE CLIFFS REACHED THE SUPRATIDAL. BEYOND WEATHERED COAT SEEN ON BOULDERS IN THE UPPER UITZ, NO OTHER OIL RESIDUES WERE SEEN ALONG THE SEGMENT.

MAYSAP SHORELINE OILING SUMMARY

TEAM NO. 6 Helo

SEGMENT K10-09 DB-01

OG D FitzGerald BIO H. Davis

SUBDIVISION M

ADEC J Barnhart /ADFG LANDMANAGER J Hardister for USFWS

DATE 28 / May / 91

EXXON R Coulter USCG/NOAA CWO Spurr/G. Shigenaka

TIME 10 : 20 to 10 : 45 TIDE LEVEL 1.1 ft. to 0 ft. ENERGY LEVEL: ☐ H ☒ M ☐ L

SURVEYED FROM: ☒ FOOT ☐ BOAT ☐ HELO WEATHER: ☐ SUN ☒ CLOUDS ☐ FOG ☐ RAIN ☐ SNOW

TOTAL LENGTH SHORELINE SURVEYED: 1149 m NEAR SHORE SHEEN: ☐ BR ☒ RB ☐ SL ☐ NONE

EST. OIL CATEGORY LENGTH: W — m M — m N — m VL 6 m NO 1143 m US — m

LOC	SURFACE OIL CHARACTER										SURFACE SEDIMENT	SHORE SLOPE	AREA		ZONE				NOTES
	AP	MS	TB	SOR	CV	CT	ST	FL	DB	NO	TYPE	V H M L	WIDTH m	LENGTH m	S	UI	MI	LI	
A			T										1	4	X				Next to marsh Most P/U
B						T			•				1	2		X			ON Boulders

DISTRIBUTION: C = 91-100%; B = 51-90%; P = 11-50%; S = 1-10%; T = <1%

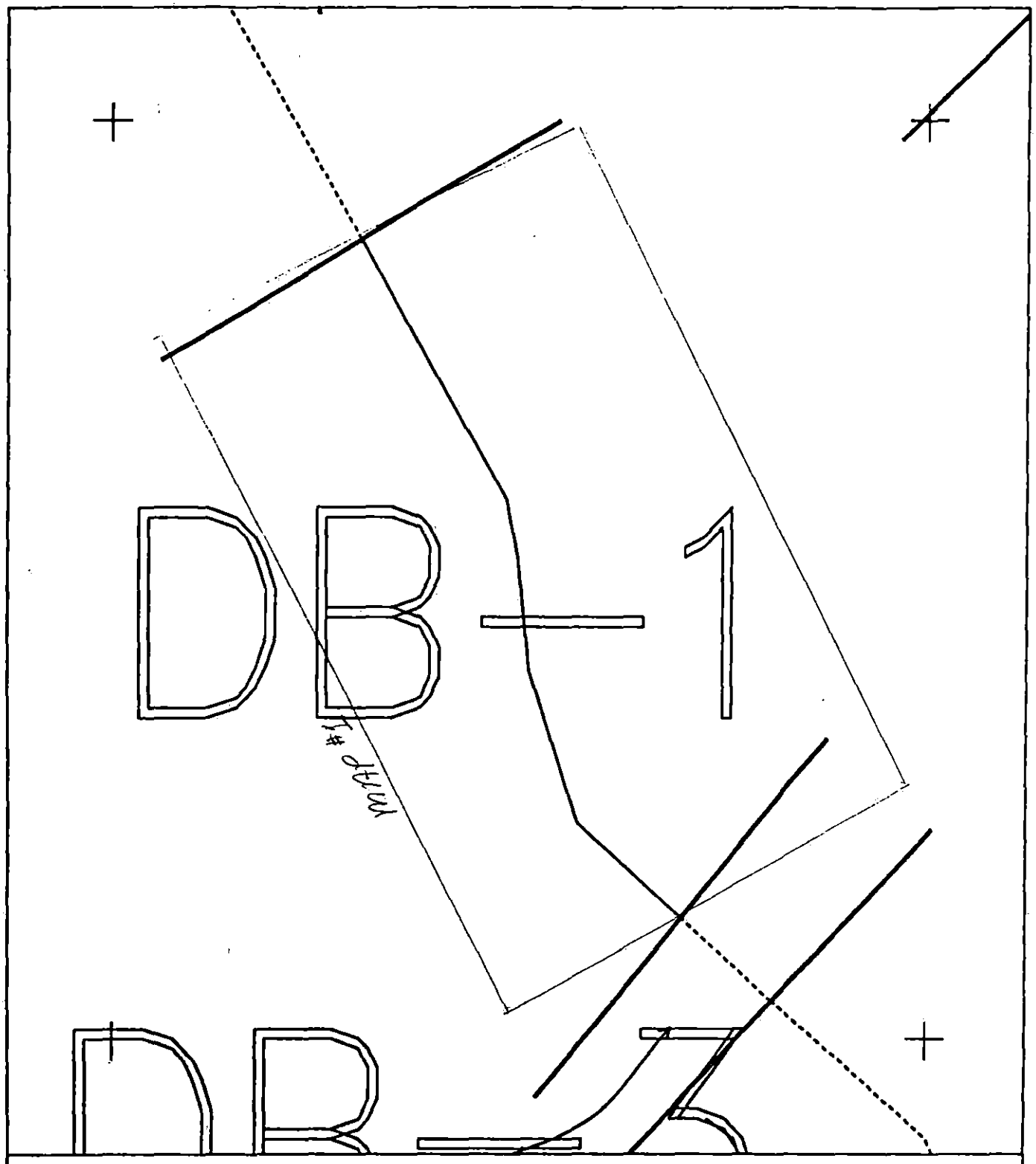
SLOPE: V = VERTICAL; H = HIGH ANGLE; M = MEDIUM ANGLE; L = LOW ANGLE PHOTO ROLL # MAYSAP- 6 - 24 FRAMES ____

PIT NO.	PIT DEPTH (cm)	SUBSURFACE OIL CHARACTER							OILED ZONE	CLEAN BELOW	H2O LEVEL	SHEEN COLOR	PIT ZONE				SURFACE-SUBSURFACE SEDIMENTS	NOTES
		OP	HOR	MOR	LOR	OF	TR	NO	cm-cm	Y/N	(cm)	B R S N	S	UI	MI	LI		
									-									
									-									
									-									
									-									
									-									
									-									
									-									
									-									
									-									

SHEEN COLOR: B = BROWN; R = RAINBOW; S = SILVER; N = NONE

OG COMMENTS: This segment is located along the west central coast of Dry Bay. The shoreline is backed by a steep vegetated talus slope and fronted by a tidal flat and tidal channel. Large boulders which have rolled down the slope and onto the beach are scattered along much the upper shore. Oiling of this shoreline is very minimal consisting of 1. tar patties in a small area adjacent to the marsh and 2. very weathered coat of some boulders. VECO workers collected the tar patties

REVIEWED: MC 6/5/91



K1009 DB001 A

Subdivision Field Map

Map Key: COAK1009DB001A

Name: D. FitzGerald

Date: 28 May 1991

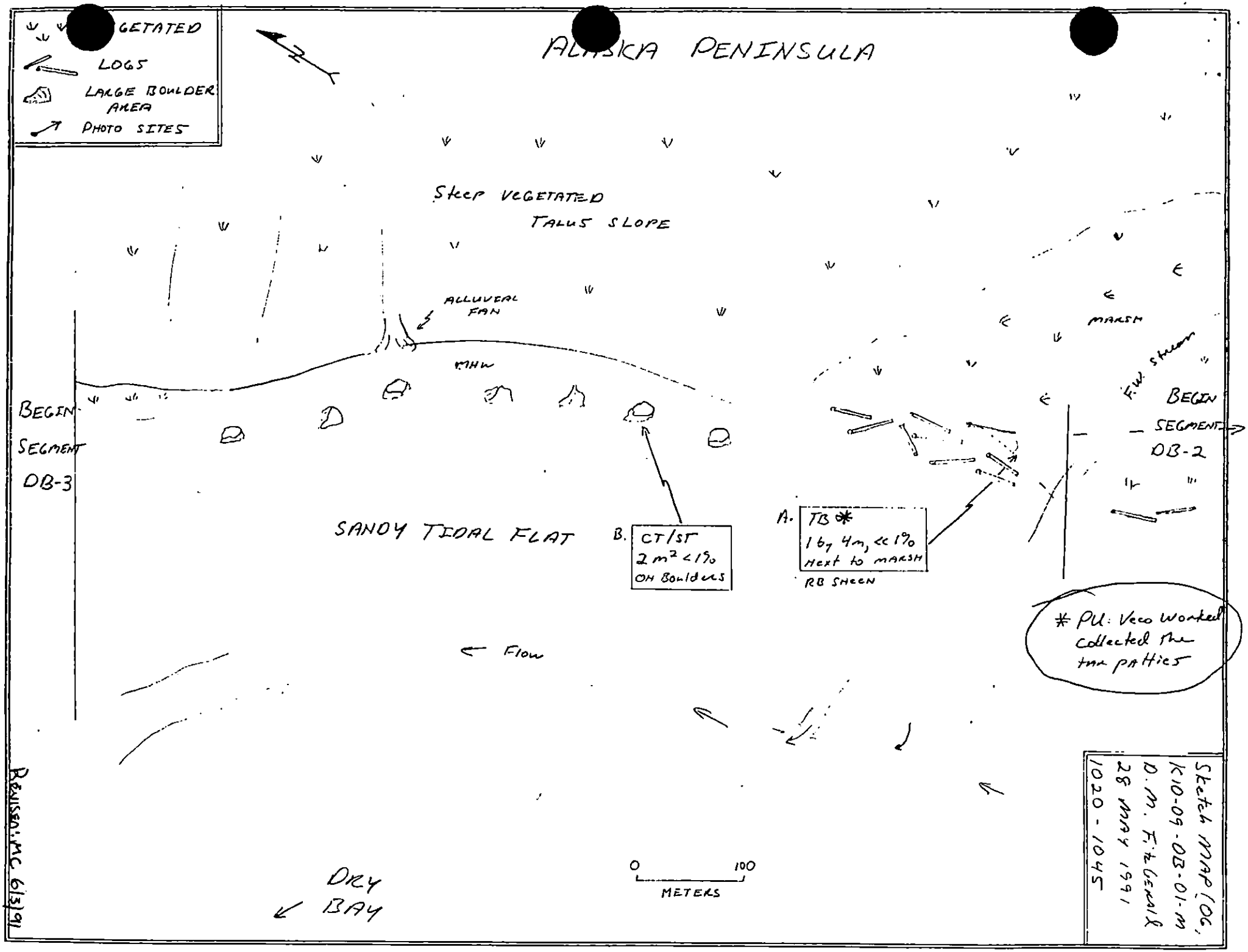
N

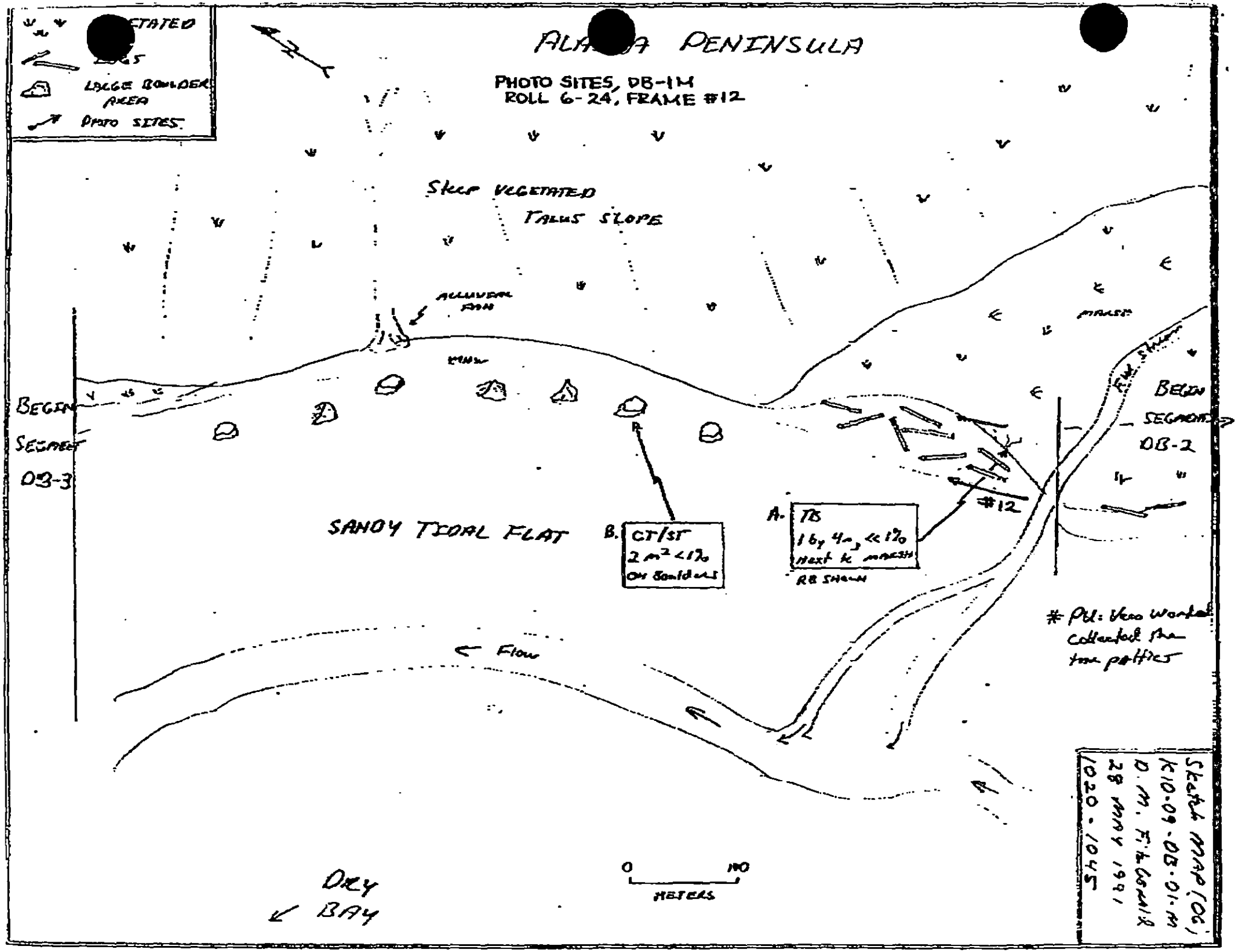
METERS

0 200 400

AK State Plane Zone 4.

EXXON


ALASKA PENINSULA
GETATED
LOGS
LARGE BOULDER AREA
PHOTO SITES
Steep VEGETATED
TALUS SLOPE
ALLUVIAL FAN
MHW
MARSH
Fw stream
BEGIN SEGMENT OB-2
BEGIN SEGMENT OB-3
SANDY TIDAL FLAT
B. CT/ST
2 m² <1%
ON Boulders
A. TB *
1 by 4m, << 1%
next to MARSH
RB SHEEN
* PU: Veco Worked collected the tar patties
Flow
Dry
BAY
0
100
METERS
Revised: MC 6/3/91
Sketch MAP/LOG,
K10-09-OB-01-M
D. M. FitzGerald
28 MAY 1991
1020 - 1045


ETATED
LARGE BOULDER AREA
PHOTO SITES
ALASKA PENINSULA
PHOTO SITES, DB-1M
ROLL 6-24, FRAME #12
Steep VEGETATED
TALUS SLOPE
ALLUVIAL FAN
MARSH
BEGIN SEGMENT DB-3
BEGIN SEGMENT DB-2
SANDY TIDAL FLAT
A. TB
1 by 4m, <1%
next to marsh
RB shown
B. CT/ST
2 m² <1%
on boulders
#12
Flow
0
100
METERS
DRY
BAY
Pit: Veg worked collected from pottics
Sketch Map (OG)
K10-09-DB-01-M
D. M. Fitzgerald
28 May 1991
1020-1045

MAYSAP BIOLOGICAL SUMMARY FORM

TEAM # 6 Helo — DATE May 28 1991

SEGMENT # K10-09 DB-01 — TIDAL HEIGHT (Range) 1.1 ft to Off (10:20-10:45)

SUBDIVISION M — BIOLOGIST N. Davis

SEA STATE Tide Out in Bay (2-3 ft on coast) — WIND SPEED/DIRECTION 5-10 kts SE-E

PHOTOGRAPHS: ROLL # 6-24 — FRAME #

COMMENTS/OBSERVATIONS (to be completed in oiled subdivisions only):

Site A had TB's next to a marshy area. Spartina sp. and other marsh plants were growing in the area. Pintails were actively feeding in the marsh. Around the TB there was very little biota. A diatom mat was growing on the surface of the sediment. Drift logs, small bits of kelp wrack (Fucus, Ulva, laminarin) and shells (Mytilus sp.) were located around site A.

Site B had Fucus, filamentous green algae, and barnacles on the rocks at the MHW. Between boulders and cobbles were diatom mats growing on the sand and mud. A few limpets were present but littorines were rare. Up the Talus slope from site B was the burrow of a Red Fox. The NOAA rep. found part of a bear's jaw about 200 meters from Site B.

sparrows (5)
semi palmated plover (3) Pintail (3) Dead kittiwakes (3) Glaucous-winged Gull (5)
Rock Sandpipers (3) "Peeps" (little brown shorebirds to far away to ID) (4) Raven (1)

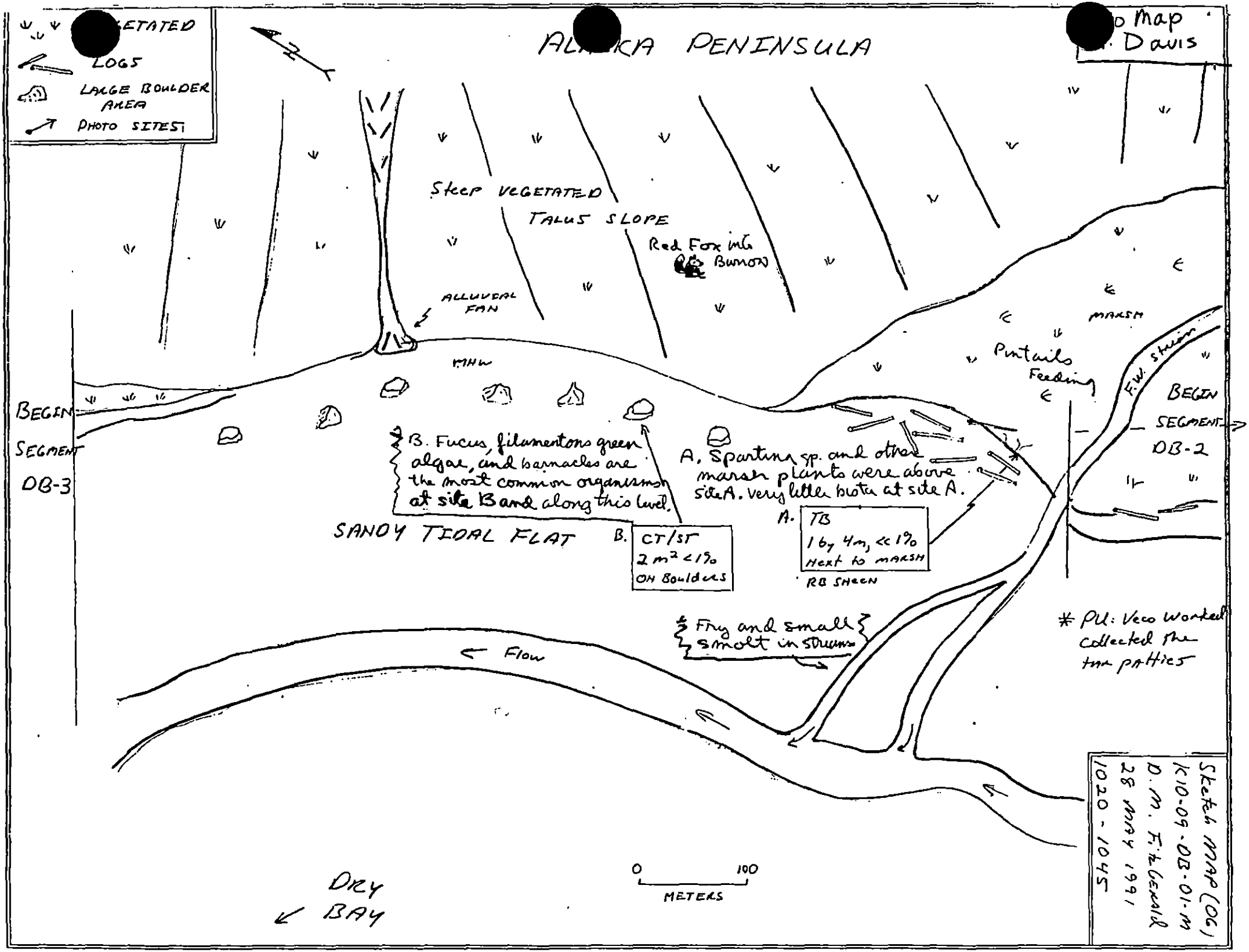
WILDLIFE OBSERVATIONS
TO BE COMPLETED IN ALL SUBDIVISIONS

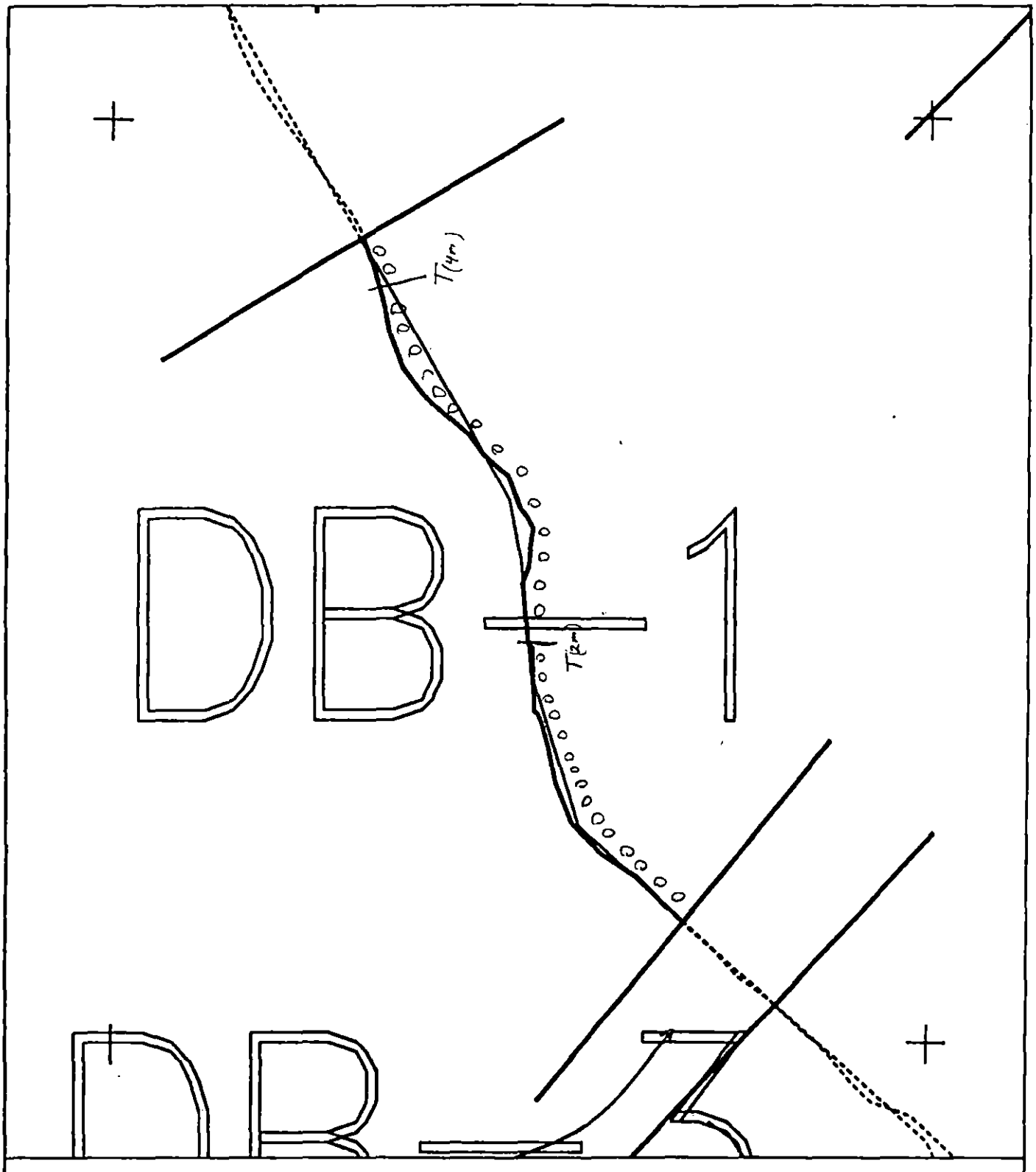
BIRDS	# OF SPECIES	TOTAL BIRDS	FISH OBSERVED SPECIES PRESENT
Eagles			Fry + Smolt in Streams
Seabirds			
Waterfowl	1	3	
Gulls/Kittiwakes	2	5 (+ 3 dead Kittiwakes)	
Shorebirds	3	10	
Corvids	1	1	
Other Birds sparrows	1-2	5	

MARINE MAMMALS	# OBSERVED	LAND MAMMALS SPECIES	# OBSERVED
Sea Otters		Red Fox	1 On slope
Pinnipeds (specify)		Caribou Tracks	
Whales (specify)			

Shoreline subdivision map showing important biological features attached.

Pencil 6/2/91 DM


ETATED
LOGS
LARGE BOULDER AREA
PHOTO SITES
ALASKA PENINSULA
Map
Davis
Steep VEGETATED TALUS SLOPE
Red Fox in Burrow
ALLUVIAL FAN
MHW
MARSH
Pintails Feeding
F.W. stream
BEGIN SEGMENT OB-2
BEGIN SEGMENT OB-3
B. Fucus, filamentous green algae, and barnacles are the most common organisms at site B and along this level.
SANDY TIDAL FLAT
B. CT/ST 2 m² <1% ON Boulders
A, Spartina sp. and other marsh plants were above site A. Very little biota at site A.
A. TB 1 by 4m, <<1% Next to MARSH
RB SHEEN
Fry and small smolt in streams
Flow
* PH: Veco Worker collected the two patties
0 100 METERS
DRY BAY
Sketch MAP (OC) K10-09-OB-01-M D. M. FitzGerald 28 MAY 1991 1020-1045



XXXX	Wide	K1009 DB001 A	Subdivision Field Map
////	Medium	ADEC Subsegment Length: 1148m	Map Key: 6OAK1000DB001A
----	Narrow	METERS	Name: Duncan Fitzgerald
TTTT	Very Light	0 200 400	Date: 28 MAY 1991
0000	No Oil	AK State Plane Zone 4 gl009db001a-1.wor	Date Entered:

EXXON

Reviewed: MC 6/3/91

ANADROMOUS FISH STREAM EVALUATION

SEGMENT ST/K10-09-DB-08 STREAM NO: 262-75-10020 DATE 5/2/90

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)
See attached Ecological Constraint sheet for specific constraints and contacts.

SUBDIVISION ECOLOGICAL CONSTRAINTS:

Avoid any unnecessary disturbance of damage to unoiled biota and substrate.

ARCHAEOLOGICAL CONSTRAINTS:

If treatment is planned, a cultural resource evaluation is required prior to shoreline treatment.

SHPO SIGNATURE: Rachel Jean Orr DATE: 5/22/90

Subsurface Oil Observed: Yes_____ No X Maximum Depth_____

RECOMMENDATIONS:

X No Treatment Recommended	_____Snare/Absorbent Booms
_____Treatment Recommended	_____Oil Snares (pom poms)
_____Manual Pickup	_____Absorbents (pads,rolls,etc)
_____Bioremediation	_____Spot Washing:_____Wands
_____Tarmat Removal	_____Beach Cleaner
	_____Other (see comments)

COMMENTS: _____

TAG COMMENTS: _____

TAG APPROVAL DATE: 5/18/90.
ADEC Art Weiner Art Weiner
EXXON Kirk Ott Kirk Ott
NOAA Gary Petrae Gary Petrae
USCG G.A. REITER G.A. Reiter

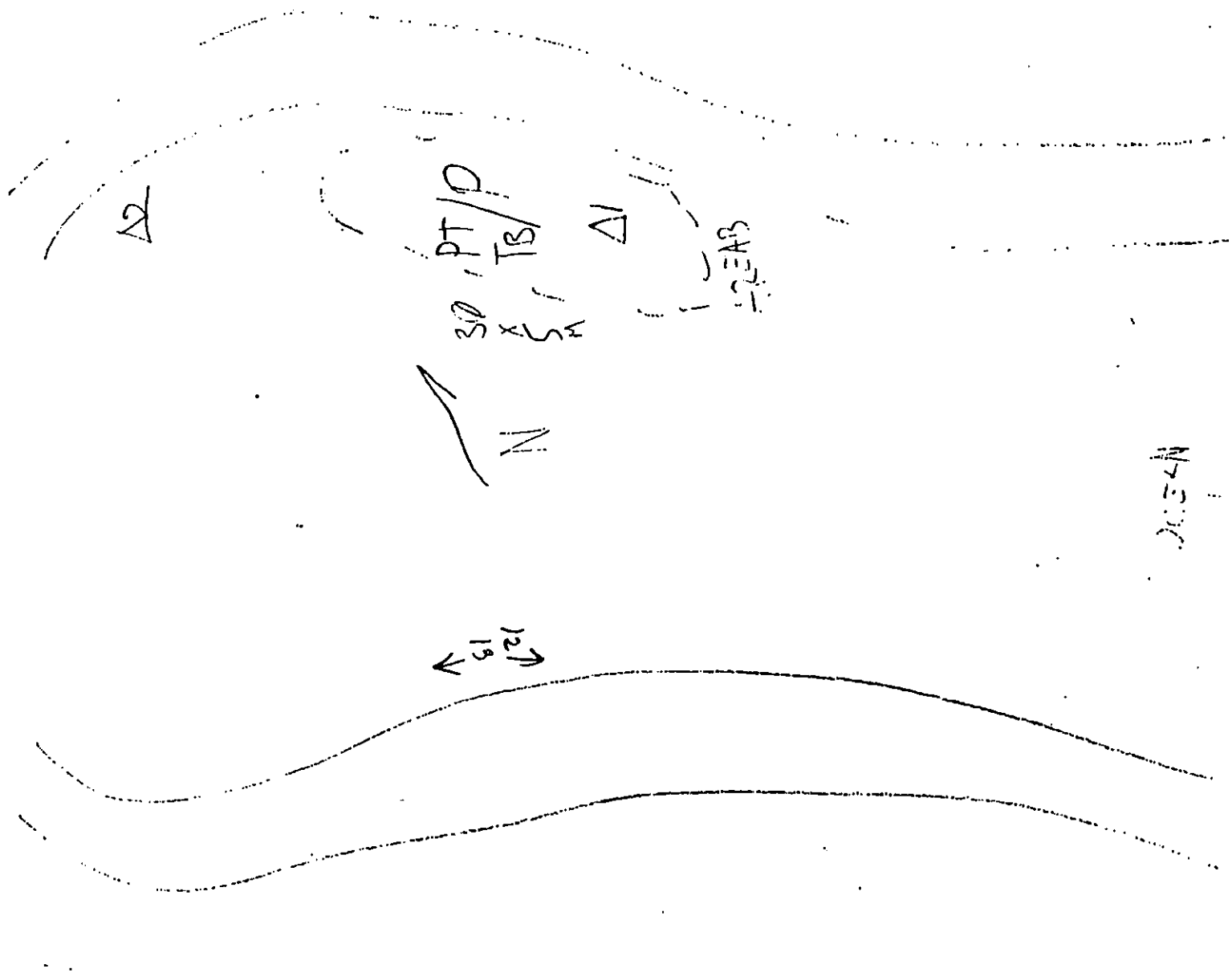
FOSC: [signature] DATE: MAY 27 1990

ST/ UB G.08

STREAM 26.75-1-22.20

DATE 2 / MAY 90

SKETCH MAP



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

lll
Oiled Vegetation

1 ➡
Photo location, direction, and number

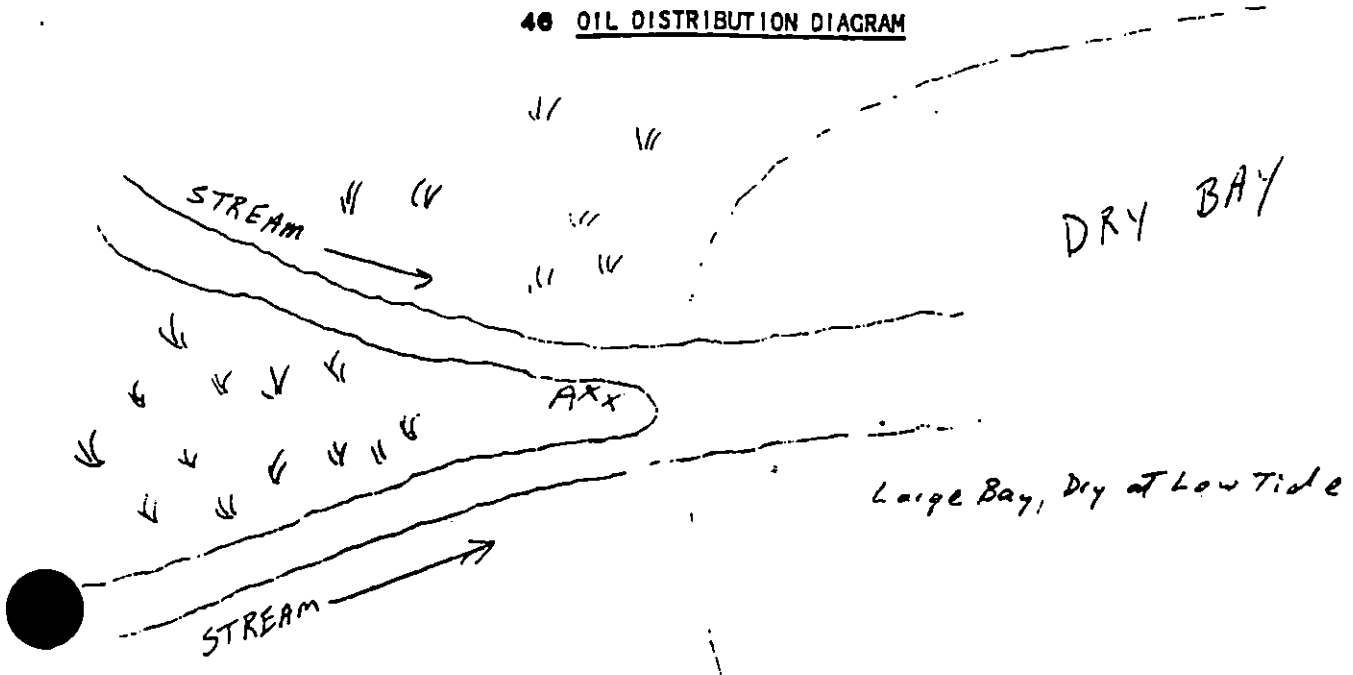
Oil Character Length (m): AP_____ PO_____ CV_____ CT_____ ST_____ MS_____ PT_____ TB_____ FL_____ NO_____

REVISION:03/24/89

4/33

FRAME(S)	DESCRIPTION

46 OIL DISTRIBUTION DIAGRAM



Area A 30x20m area
~5% coverage T/B T/P

· Sample taken
= Photo frame # and shot direction.

ANADROMOUS FISH STREAM ASSESSMENT

REGION: KODIAK

SEGMENT: K10-09-DB-008

SUBDIVISION: A

STREAM NO: 262-75-10020

ANADROMOUS FISH STREAM EVALUATION

SEGMENT ST/K10-09-DB-08 STREAM NO: 262-75-10020 DATE 5/2/90

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)
See attached Ecological Constraint sheet for specific constraints and contacts.

SUBDIVISION ECOLOGICAL CONSTRAINTS:

Avoid any unnecessary disturbance of damage to unoiled biota and substrate.

ARCHAEOLOGICAL CONSTRAINTS:

If treatment is planned, a cultural resource evaluation is required prior to shoreline treatment.

SHPO SIGNATURE:_____ DATE:_____

Subsurface Oil Observed: Yes_____ No__X__ Maximum Depth_____

RECOMMENDATIONS:

__X__No Treatment Recommended
_____Treatment Recommended
_____Manual Pickup
_____Bioremediation
_____Tarmat Removal
_____Snare/Absorbent Booms
_____Oil Snares (pom poms)
_____Absorbents (pads,rolls,etc)
_____Spot Washing:_____Wands
_____Beach Cleaner
_____Other (see comments)

COMMENTS: _____

TAG COMMENTS:_____

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

KODIAK ECOLOGICAL CONSTRAINTS

1A **Salmon stream mouth - fry outmigration (4/15 to 7/31)**
1B **Salmon stream mouth - spawning (7/15 to 9/10; PEAK 8/15)**
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 without authorization from ADF&G. No use of methods which might affect nearshore oil or toxicity levels, such as hot water wash or Inipol application, unless authorized by ADF&G. Treatment which is not intrusive and which will not affect nearshore oil or toxicity levels, such as manual removal, can probably proceed without adherence to time constraints. In any case, contact ADF&G prior to treatment for consultation and/or permit application.
AGENCY CONTACT PERSON: ADF&G Ken Middleton 267-2299

1C **Salmon fry nursery area (4/31 to 7/31)**
No use of methods which might affect nearshore oil or toxicity levels, such as hot water wash or Inipol application, unless authorized by ADF&G. Treatment which will not affect nearshore oil or toxicity levels, such as manual or mechanical removal, can probably proceed without adherence to time constraints. Contact ADF&G prior to treatment for confirmation and advice.
AGENCY CONTACT PERSON: ADF&G Larry Peltz 424-3214

1D **Kotoi Bay Hatchery release**
Pink salmon - late May, early June; Chum salmon - June; Sockeye salmon - early July.
1H **Remote release site**
No use of methods which might affect nearshore oil or toxicity levels, such as hot water wash or Inipol application, unless authorized by ADF&G. Treatment which will not affect nearshore oil or toxicity levels, such as manual or mechanical removal, can probably proceed without adherence to time constraints. Contact ADF&G for confirmation and authorization.
AGENCY CONTACT PERSON: ADF&G Larry Peltz 424-3214

1I **Gill net area**
1J **Purse seine area**
Mainland, West side Kodiak, Shuyak & Moser/Olga Bay (6/9 to 10/1)
East side Kodiak, East side Afognak (7/4 to 10/1)
1K **Purse seine hook-off**
1L **Set net sites**
Contact ADF&G for confirmation - dates and locations may vary. Restrict boat and air traffic to essential minimum. When set net sites are present (1L) restrict beach operations to essential minimum as authorized by ADF&G. If plans for treatment include methods such as hot water wash or Inipol application which might affect nearshore oil or toxicity levels, contact ADF&G for consultation and authorization.
AGENCY CONTACT PERSON: ADF&G Larry Nicholson 424-4791

2M **Herring spawning (4/15 to 6/30)**
Contact ADF&G for confirmation - dates and locations may vary. Restrict boat traffic to essential minimum. Avoid damage to unoiled intertidal and subtidal algae and seagrass. If plans for treatment include methods such as hot water wash or Inipol application which might affect nearshore oil or toxicity levels, contact ADF&G for consultation and authorization.
AGENCY CONTACT PERSON: ADF&G Larry Nicholson 486-4791

Harbor seal and sea lion pupping (5/10 to 7/1)
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. No application of Inipol within two weeks of arrival dates (work window at these sites is limited to 7/2 to 7/31). Contact ADF&G and USFWS prior to treatment for confirmation.
AGENCY CONTACT PERSON: US National Marine Fisheries Service Steve Zimmerman 586-7235
ADF&G Don Calkins 267-2403

5R **Seabird colony (5/1 to 9/1)**
Restrict air and boat traffic to essential minimum. No personnel within 800m. Aircraft to maintain 800m horizontal, 300m vertical distance from colony. Contact USFWS prior to treatment.
AGENCY CONTACT PERSON: USFWS Jill Parker 786-3377

5S **Shorebird/waterfowl concentration (4/1 to 5/15)**
Restrict all activity to essential minimum, especially air traffic. Contact USFWS and ADF&G for confirmation.
AGENCY CONTACT PERSON: USFWS Jill Parker 786-3377
ADF&G Tom Rothy 267-2206

5T **All Bald Eagle nests (3/1 to 6/1)**
Active Bald Eagle nests (3/1 to 9/1)
Restrict air traffic and all disturbance 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.
AGENCY CONTACT PERSON: USFWS Jill Parker 786-3377

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 (6/1 to 9/30)**
7HH **Finfish harvesting**
Deer harvesting (8/1 to 1/7)
Invertebrate harvesting
Bear harvesting (4/1 to 5/15 and 10/25 to 11/30)
Contact ADF&G and appropriate Native Corporation for specific dates, locations, and constraints. Restrict boat and air traffic and beach disturbance to essential minimum. If plans for treatment include methods such as hot water wash or application of Inipol which might affect intertidal or nearshore oil or toxicity levels, contact ADF&G and appropriate Native Corporation for authorization - see Native Corporation Contact List for each Native Corporation's contact person.
AGENCY CONTACT PERSON: ADF&G Jim Fall 267-2359

4/38 #4

FIELD SHORELINE COMMENT SHEET

SEGMENT ST / DB008 SUBDIVISION: DATE 5/2/90

USCG
NAME CWO MCMAHON SIGNATURE

☒ NO TREATMENT RECOMMENDED ☐ TREATMENT SUGGESTED
COMMENTS

ADF&G
~~ADEC~~
NAME JEFFREY BARNHART SIGNATURE Jeffrey Barnhart

☐ NO TREATMENT RECOMMENDED ☒ TREATMENT SUGGESTED
COMMENTS

VL T/P T/B. If a cleanup crew was working in a nearby area I would suggest that the T/P T/B be manually picked up and removed.

LAND MANAGER
NAME SIGNATURE

☐ NO TREATMENT RECOMMENDED ☐ TREATMENT SUGGESTED
COMMENTS

SHORELINE OILING SUMMARY (ANAD.) 5/38 REVISION NO

OG: William Reid USCG: McMahon SEGMENT ST/ DB 008
BIO: Michael Fawcett LAND REP: STREAM 262-75-40001 OF
EXXON: Gus Garcia ADFG: Mike Wiedmer Vern Bennett TIME: 15:20 to :
TEAM NO. 15 TIDE LEVEL: 1.5 ft DATE: 1 May /90
EST. SUBDIVISION LENGTH: 400 m ☐ Sun ☐ Clouds ☐ Fog ☒ Rain ☐ Snow
UPLANDS DESCRIPTION: ☒ Grass ☐ Forest ☐ Rock
SURVEYED FROM: ☒ Foot ☐ Boat ☐ Helo
SURFACE SEDIMENTS: R ___ % B ___ % C ___ % P 10 % G 30 % S ___ % M ___ % V
SLOPE: Lang 100 % Hang ___ % Vert ___ % WAVE EXPOSURE: ☒ Low ☐ Med ☐ Hig
OIL CATEGORY LENGTH: W 0 m M 0 m N 30 m VL 0 m NO 370

SURFACE OIL

CHARACTER	DISTRIBUTION /C	/B	/P	/S	OIL / FILM COLOR SHN	BR	DRK	RW	GY	SL	DRK/TN	LBR	IMPACTED ZONES SU	UI	MI	LI
ASPHALT PAVEMENT																
POOLED																
COVER																
COAT																
STAIN																
MOUSSE																
PATTIES			X							X				X		
TARBALLS			X							X				X		
FILM																
NO OIL													X		X	X

PAVEMENT H F S 0 sq. m by 0
PATTIES / TARBALLS 6 B
NEAR SHORE SHEEN? (NO) BR RW SL

OILED DEBRIS	AMOUNT SM	MD	LG
Logs			
Vegetation			
Trash			
Debris			

Did you Col
DEBRIS
☐ YES ☐ NO
TYPE 0
#BAGS 0

Photographs:
Roll No. AS-15-8
Frames 12-13

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	DRK	RW	GY	SL	DRK/TN	LBR	PIT ZONE SU	UI	MI	LI	ANA	SHEEN (Y/N)		SURFA SUBSUR SEDIME
1	50					X	-											X				N		SC
2	40					X	-											X				N		G/
							-																	
							-																	
							-																	
							-																	

COMMENTS

REVIEWED JW DATE 5/8/90

ST/ UB 0.0/6

STREAM 202-75-1.0020

DATE 2 / MAY 90

SKETCH MAP

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

lll
Oiled Vegetation

1 ➔
Photo location, direction, and number

Oil Character Lengths (m): AP_____ PO_____ CV_____ CT_____ ST_____ MS_____ FT_____ TB_____ FL_____ NO_____

REVISION: 03/24/88

ADF&G MULTI-ASSESSMENT DATA FORM

1 SURVEY TYPE: BS (SS) OS TS AVS SCHA KMHS PTA 2 REGION: PWS KP,CI K (AP)

METHOD: Aerial (Ground) Boat

3 DATE: 5/2/96
4 START TIME: 1620
5 STOP TIME: 1655
6 SEGMENT #: DBCCB
7 STATION #:
8 K-UNIT: K1009
9 STAT AREA:
10 LAT: 57° 38' 31"
11 LONG: 155° 46' 18"
12 SOURCE: Map Loran (Handcat)
13 LOCATION: Dry Bay, Alaska Peninsula
14 DESCRIPTION: S 29S 40W 29

15 HIGH TIDE TIMES: 8:52pm / 10:16pm
16 HIGH TIDE HTS: 14.1 / 14.8
17 LOW TIDE TIMES: 3:11pm / 3:50pm
18 LOW TIDE HTS: 5.4 / 1.9
19 TIDE HT AT SURVEY:
Ebb Slack Flood (Slack)
20 USCG QUAD: Kaluk C-6

21 TEAM RECORDER: JEFFREY BARNHART
22 OBSERVERS: Gus Coccia, William Reid, John McMahon, M. LaFa
23 AGENCY: [illegible]
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	30	3	90	<5				
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 5 Sand 9.5 Mud/silt

36 CATALOGED ANAD. FISH STREAM? (Y) N
37 CATALOG #: 262-75-10020
38 STREAM NAME: Dry Bay 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:
43 ANADROMOUS FISH PRESENT? Y (N)

44 ANADROMOUS FISH OBSERVATION

Species	Aerial	Ground

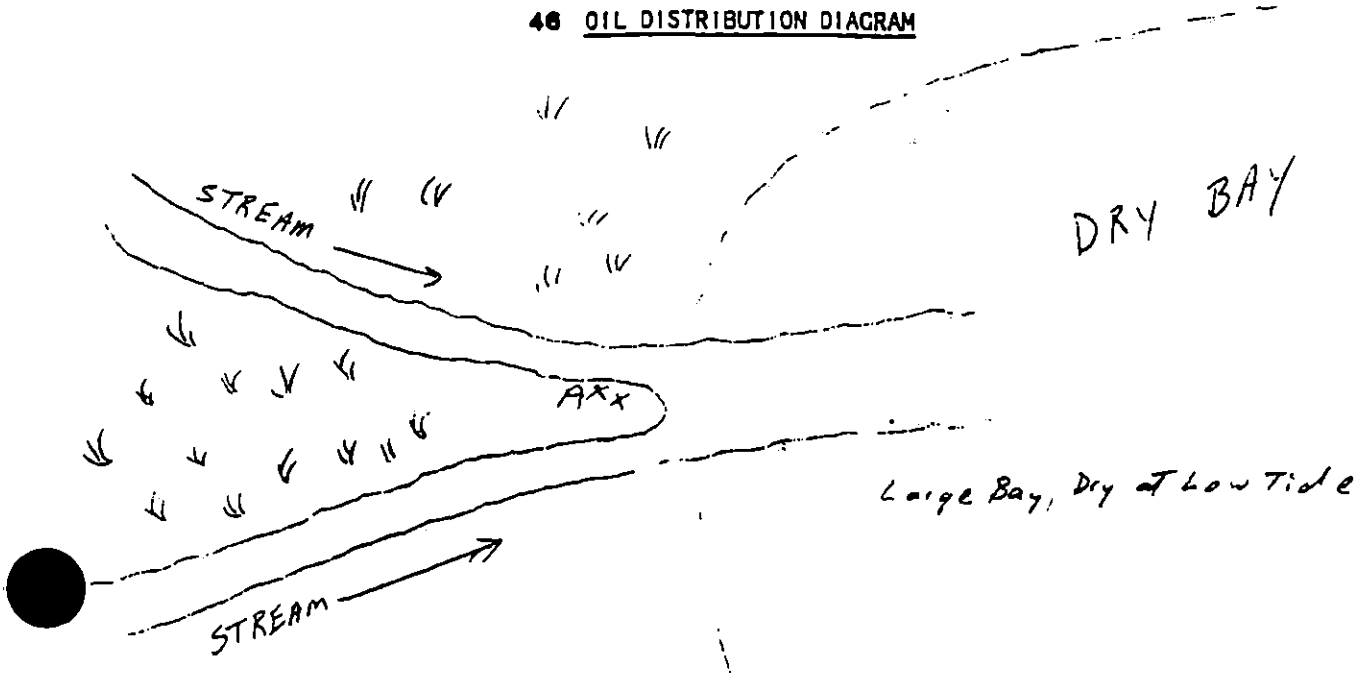
COMMENTS: Area A (see sketch map) was [illegible] found oil. It was VL tar patties and [illegible]. The cleanup crew was working in area, also I would suspect that the oil is manually picking up. Off Record

[illegible]

4/38

FRAME(S) DESCRIPTION

4B OIL DISTRIBUTION DIAGRAM



Area A 20x20m area
< 5% coverage T/B T/P

Sample taken
= Photo frame # and shot direction.

1991 MAYSAP EVALUATION

SEGMENT: K1009DB002 SUB: M REGION: KOD SURVEY DATE: 5/28/91

ENVIRONMENTAL SENSITIVITIES:
Work Window(s) OPEN 5/1 - 7/10; RESTRICTED 7/10 - 9/15

Ecological/Constraints (see page two for details) Anadromous stream

ARCHAEOLOGICAL CONSTRAINTS:
If treatment is planned, a cultural resource evaluation is required prior to shoreline treatment.

SHPO Signature: Timothy C. Smith Date: 6/07/91

RECOMMENDATIONS:	INITIAL	TAG	FOSC
TREATMENT REQUIRED (Y or N)	N	N	N
Manual Pickup (Check as Req.)			
Spot Washing			
Bio-Customblen Only			
Bio-Inipol/Customblen			
Other			
Other			

COMMENTS:
INITIAL:

TAG:

FOSC:

TAG APPROVAL DATE: JUNE 7 1991 FOSC APPROVAL DATE: 6/17/91

ADEC

EXXON

USCG

NOAA

FOSC

E. E. PAGE, CDR, USCG
~~CHIEF OF STAFF~~, FOSC

ECOLOGICAL CONSTRAINTS
1991 FIELD ACTIVITIES

Anadromous Stream: Unlimited treatment up to stream bank between May 15 and July 10. ADF&G approval required for work after July 10. Fish Habitat Permit required for instream work. ADF&G approval required for bioremediation within 100 meters of anadromous stream after July 10.

MAYSAP FIELD SHORELINE COMMENT SHEET

TEAM NO. 6-HELO SEGMENT DB-2 SUBDIVISION A DATE 5/28/91

ADEC

NAME J. BARNHART, ADEC&G SIGNATURE Jeff Barnhart

☒ NTR oil in the form of AP, TB & LTO extended from the log line into the tidal flat a distance of 30-35m. Basically oil was located along most of the segment which contains Rex creek, anadromous stream # 262-70-10030. Most oil located was removed or broken apart. Approx 45 pounds of oil was removed. Small oil sheens were observed in the sand adjacent to the oil.

EXXON

NAME R. COULTER, EXXON SIGNATURE Rex R. Coulter

☑ NTR ALL RECOVERABLE AP/TB/SOR WAS REMOVED DURING THE SURVEY. NO ADDITIONAL ATTENTION NEEDED.

LANDMANAGER

NAME J. HARDISTER OF USF&WS SIGNATURE John P. Hardister

☑ NTR Very little SOR remained on this segment following the survey. No further treatment recommended.

USCG/NOAA

NAME CWO R. SPURR/S. SHIGENAKA SIGNATURE R Spurr / Dan Shigenaka

☒ NTR SOR/AP found in this segment was removed by EV crew workers during survey.

SURVEYED PORTION OF THE SEGMENT CONSISTED OF THE SHORELINE AROUND THE PERIMETER OF A VERY BROAD SEMI-ENCLOSED TIDAL SAND FLAT, AND THE FLAT ITSELF EXTENDING OUT ABOUT 40M FROM THE SHORELINE (THE LOW LEVEL AND FIRM SUBSTRATE OF THE FLAT ENABLED EASY ACCESS FOR SURVEY). DRIFT LOGS AND OTHER DEBRIS LINED THE SUPRATIDAL AROUND THE FLAT. NUMEROUS SMALL STREAMS EMPTIED OUTO THE FLAT. A RELATIVELY LARGE NUMBER OF DEAD SEABIRDS WERE FOUND ALONG THE SHORELINE (SEE BIO REPORT). WEATHERED SOR WAS FOUND SPORADICALLY ALONG MUCH OF THE SHORELINE AND OCCASIONALLY ON THE SAND FLAT. THESE MATERIALS WERE EITHER RECOVERED OR BROKEN UP BY THE SURVEY TEAM. ASPHALT WAS ALSO FOUND ON THE BANK OF THE SHORELINE AND WAS PARTIALLY REMOVED. A SMALL CREEK TO THE SOUTHEAST OF THE ASPHALT CONTAINED A FEW SOR PATTIES IN ITS BED AND ALONG ITS BANKS. IT APPEARED THAT LITTLE RECOVERABLE OIL REMAINED IN THE SURVEYED AREA FOLLOWING THE ASSESSMENT AND ASSOCIATED PICKUP ACTIVITIES.

MAYSAP FIELD SHORELINE COMMENT SHEET

TEAM NO. 6-HELO SEGMENT DB-2 SUBDIVISION A DATE 5/28/91

ADEC

NAME J. BARNHART, ADF&G SIGNATURE Jeff Barnhart

☒ NTR Oil in the form of AP, TB < 1cm extended from the log line into the tidal flat a distance of 30-35m. Basically oil was located along most of the segment which contains Rex creek, anadromous stream #262-70-10030. Most oil located was removed or broken apart. Approx 45 pounds of oil was removed. Small oil sheens were observed in the sand adjacent to the oil.

EXXON

NAME R. COULTER, EXXON SIGNATURE

☐ NTR

LANDMANAGER

NAME J. HARDISTER OF USF&WS SIGNATURE John P. Hardister

☑ NTR Very little SOR remained on the segment following the survey. No further treatment recommended.

USCG/NOAA

NAME CWO R. SPURR/G. SHIGENAKA SIGNATURE R. Spurr / Gary Shigenaka

☒ NTR SOR/AP found in this segment was removed by F/V Vecco workers during survey.

SURVEYED PORTION OF THE SEGMENT CONSISTED OF THE SHORELINE AROUND THE PERIMETER OF A VERY BROAD SEMI-ENCLOSED TIDAL SAND FLAT, AND THE FLAT ITSELF EXTENDING OUT ABOUT 40m FROM THE SHORELINE (THE TIDE LEVEL AND FIRM SUBSTRATE OF THE FLAT ENABLED EASY ACCESS FOR SURVEY). DRIFT LOGS AND OTHER DEBRIS LITTERED THE SUPRATIDAL AROUND THE FLAT. NUMEROUS SMALL STREAMS EMPTIED OUTO THE FLAT. A RELATIVELY LARGE NUMBER OF DEAD SEABIRDS WERE FOUND ALONG THE SHORELINE (SEE BIO REPORT). WEATHERED SOR WAS FOUND SPORADICALLY ALONG MUCH OF THE SHORELINE AND OCCASIONALLY ON THE SAND FLAT. THESE MATERIALS WERE EITHER RECOVERED OR BROKEN UP BY THE SURVEY TEAM. ASPHALT WAS ALSO FOUND ON THE BANK OF THE SHORELINE AND WAS PARTIALLY REMOVED. A SMALL CREEK TO THE SOUTHEAST OF THE ASPHALT CONTAINED A FEW SOR PATTIES IN ITS BED AND ALONG ITS BANKS. IT APPEARED THAT LITTLE RECOVERABLE OIL REMAINED IN THE SURVEYED AREA FOLLOWING THE ASSESSMENT AND ASSOCIATED PICKUP ACTIVITIES.

MAYSAP SHORELINE OILING SUMMARY

TEAM NO. G-Helo

SEGMENT K10-09 DB-02

OG D. FitzGerald BIO N. Davis

SUBDIVISION M

ADEC J Barnhart / ADFG LANDMANAGER J Hardisten for USFWS

DATE 28 / May / 91

EXXON R. Coulter USCG/NOAA CWO Speer / G Shigenaka

TIME 9 : 40 to 10 : 20 TIDE LEVEL -1.4 ft. to 1.1 ft. ENERGY LEVEL: ☐ H ☐ M ☒ L

SURVEYED FROM: ☒ FOOT ☐ BOAT ☐ HELO WEATHER: ☒ SUN ☒ CLOUDS ☐ FOG ☒ RAIN ☐ SNOW

TOTAL LENGTH SHORELINE SURVEYED: 825 m NEAR SHORE SHEEN: ☐ BR ☒ RB ☐ SL ☐ NONE

EST. OIL CATEGORY LENGTH: W — m M — m N — m VL 825 m NO — m US — m

LOC	SURFACE OIL CHARACTER										SURFACE SEDIMENT	SHORE SLOPE	AREA		ZONE				NOTES
	AP	MS	TB	SOR	CV	CT	ST	FL	DB	NO	TYPE	V H M L	WIDTH m	LENGTH m	S	UI	MI	LI	
A		T	T								S, Gravel	L	20	825	X	X	X		Mostly Inbay. Tar patties

DISTRIBUTION: C = 81–100%; B = 51–80%; P = 11–50%; S = 1–10%; T = <1%

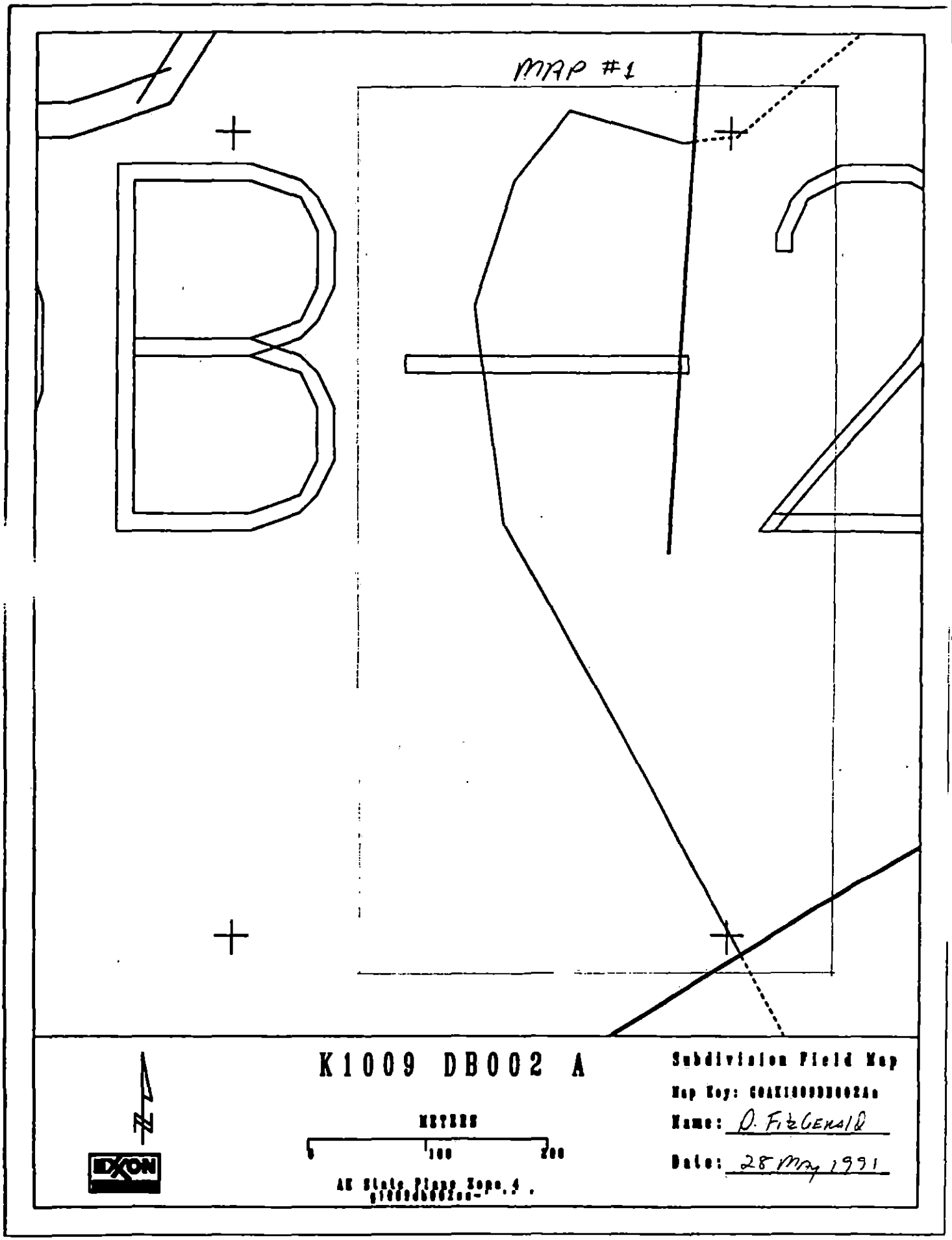
SLOPE: V = VERTICAL; H = HIGH ANGLE; M = MEDIUM ANGLE; L = LOW ANGLE PHOTO ROLL # MAYSAP- 6 - 24 FRAMES 7-

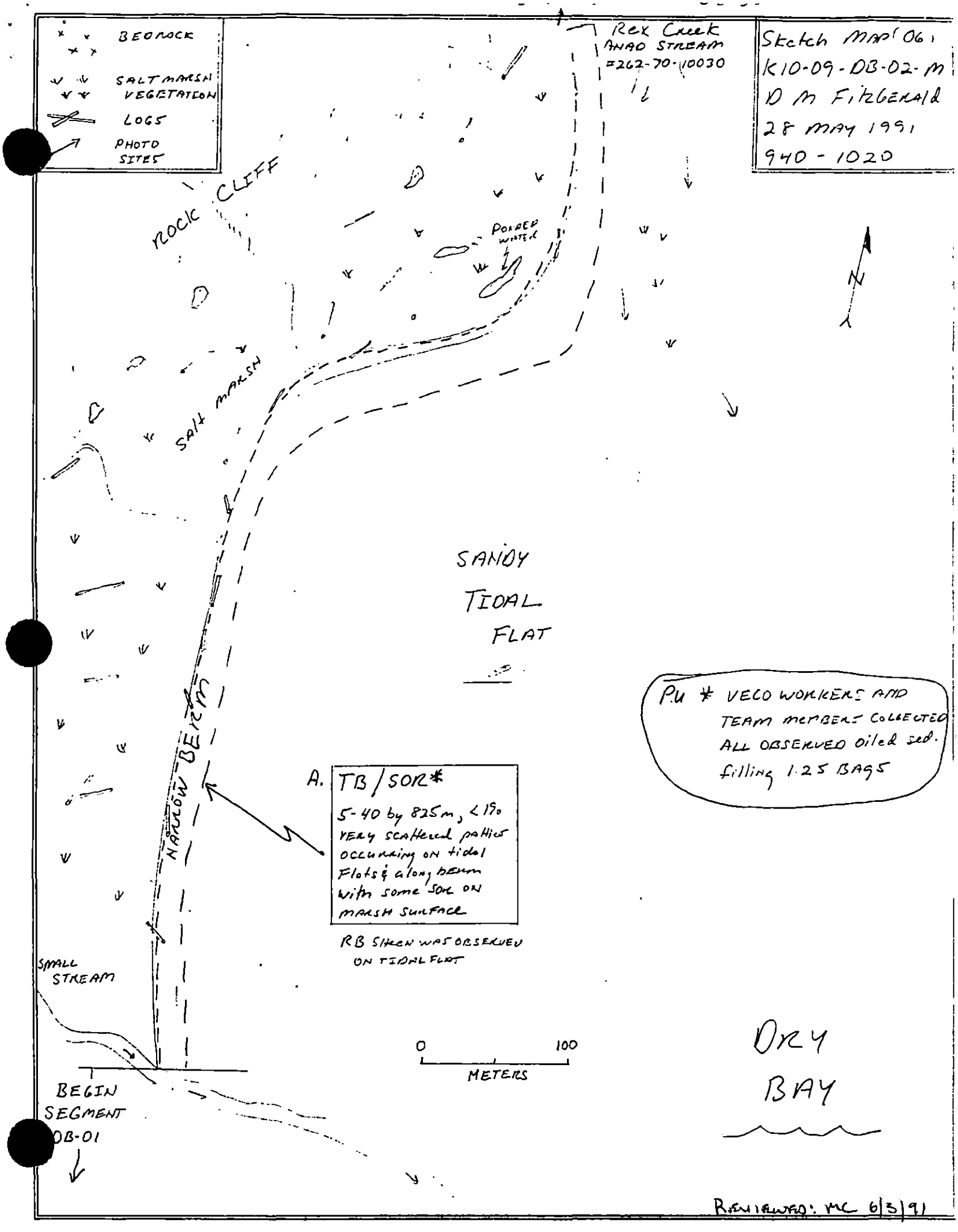
PIT NO.	PIT DEPTH (cm)	SUBSURFACE OIL CHARACTER							OILED ZONE cm-cm	CLEAN BELOW Y/N	H2O LEVEL (cm)	SHEEN COLOR B R S N	PIT ZONE				SURFACE-SUBSURFACE SEDIMENTS	NOTES
		OP	HOR	MOR	LOR	OF	TR	NO					S	UI	MI	LI		
									-									
									-									
									-									
									-									
									-									
									-									
									-									
									-									
									-									
									-									

SHEEN COLOR: B = BROWN; R = RAINBOW; S = SILVER; N = NONE

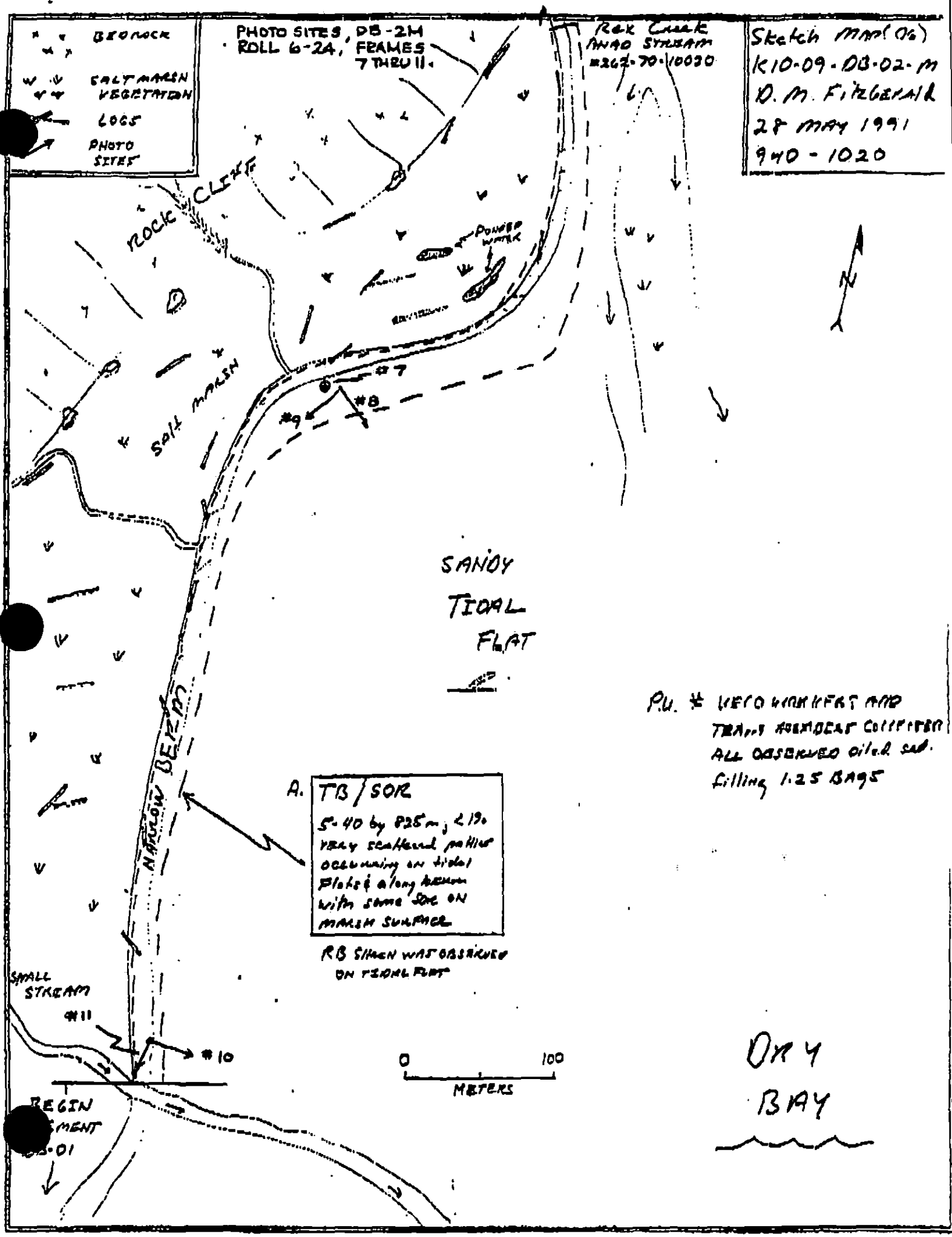
OG COMMENTS: This segment is located along the northwest side of Dry Bay where "Rex" Creek meets an expansive sandy tidal flat region. This shoreline is bordered by a wide marsh system which is littered with substantial driftwood and incised by several small freshwater streams. The entire shoreline contained infrequent tar patties on the tidal flats & along the berm with some SOR on the marsh surface. VECO workers and Survey TEAM collected all observed oiled sediments, amounting to 1 1/4 BAGS.

REVIEWED: MC 6/3/91


MAP #1
K1009 DB002 A
METERS
100
200
AK State Plane Zone 4
Subdivision Field Map
Map Key: K1009DB002A
Name: D. FitzGerald
Date: 28 May 1991



REVIEWED: MC 6/3/91


BEDROCK
SALT MARSH VEGETATION
LOGS
PHOTO SITES
PHOTO SITES, DB-2M
ROLL 6-24, FRAMES
7 THRU 11.
Rock Creek
AN40 STREAM
#262-70-10020
Sketch Map (Ok)
K10-09-03-02-M
D. M. Fitzgerald
28 MAY 1991
940 - 1020
ROCK CLIFF
POWER WALK
SALT MARSH
#7
#8
#9
SANDY
TIDAL
FLAT
NARROW BERM
A. TB / SOR
5'-40 by 825 m; 2.19
very scattered patches
occurring on tidal
flats along berm
with some SOR ON
MARSH SURFACE
RB SHEEN WAS OBSERVED
ON TIDAL FLAT
P.U. ± VERY HIGH WATER MARK
TRACE AMOUNTS OF TAR
ALL OBSERVED OILED SAND
FILLING 1.25 BAGS
SMALL
STREAM
#11
#10
0
100
METERS
BEGIN
SEGMENT
OAK
BAY

MAYSAP BIOLOGICAL SUMMARY FORM

TEAM # 6 Nelo — DATE May 28 1991

SEGMENT # K10-09 DB-02 — TIDAL HEIGHT (Range) -1.4 ft to 1.1 ft (09:40 - 10:20)

SUBDIVISION m — BIOLOGIST N. Davis

SEA STATE Tide out in Bay (2-3 ft on coast) — WIND SPEED/DIRECTION 5-10 KE SE

PHOTOGRAPHS: ROLL # 6 - 24 — FRAME # 7-

COMMENTS/OBSERVATIONS (to be completed in oiled subdivisions only):

The surveyed portion of DB-02 was the shoreline around an extensive tide flat and about 30-40 meter out onto the tide flat from the shore. This area has numerous small streams that feed out onto the flat as well as an andromous stream # 262-70-10030 (Rex Creek). Small smolt and fry were seen in several of the streams. Water fowl were feeding in some of the marshy areas. There was a bed of macoma (sp?) out on the mud flat below site A. Most of the patties in site A were picked up.

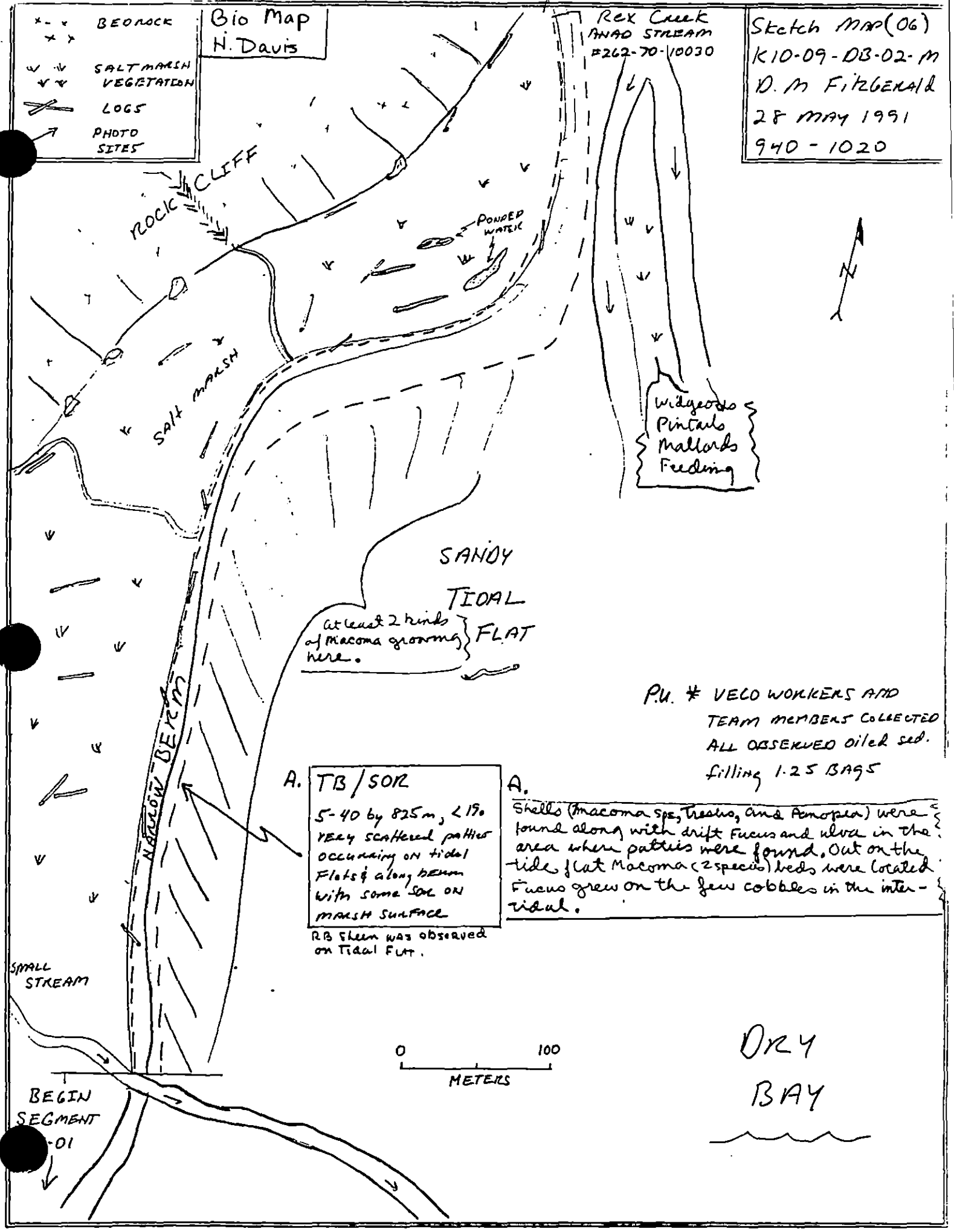
Sparrow Fox Golden Crowned (4)
1 dead Red necked Grebe 1 dead Sooty Shearwater Pintails (10) Widgeon (6) Mallards (3)
Semipalmated plovers (3) Glaucous winged Gulls (10) 7 Dead Kittiwakes Raven (1)

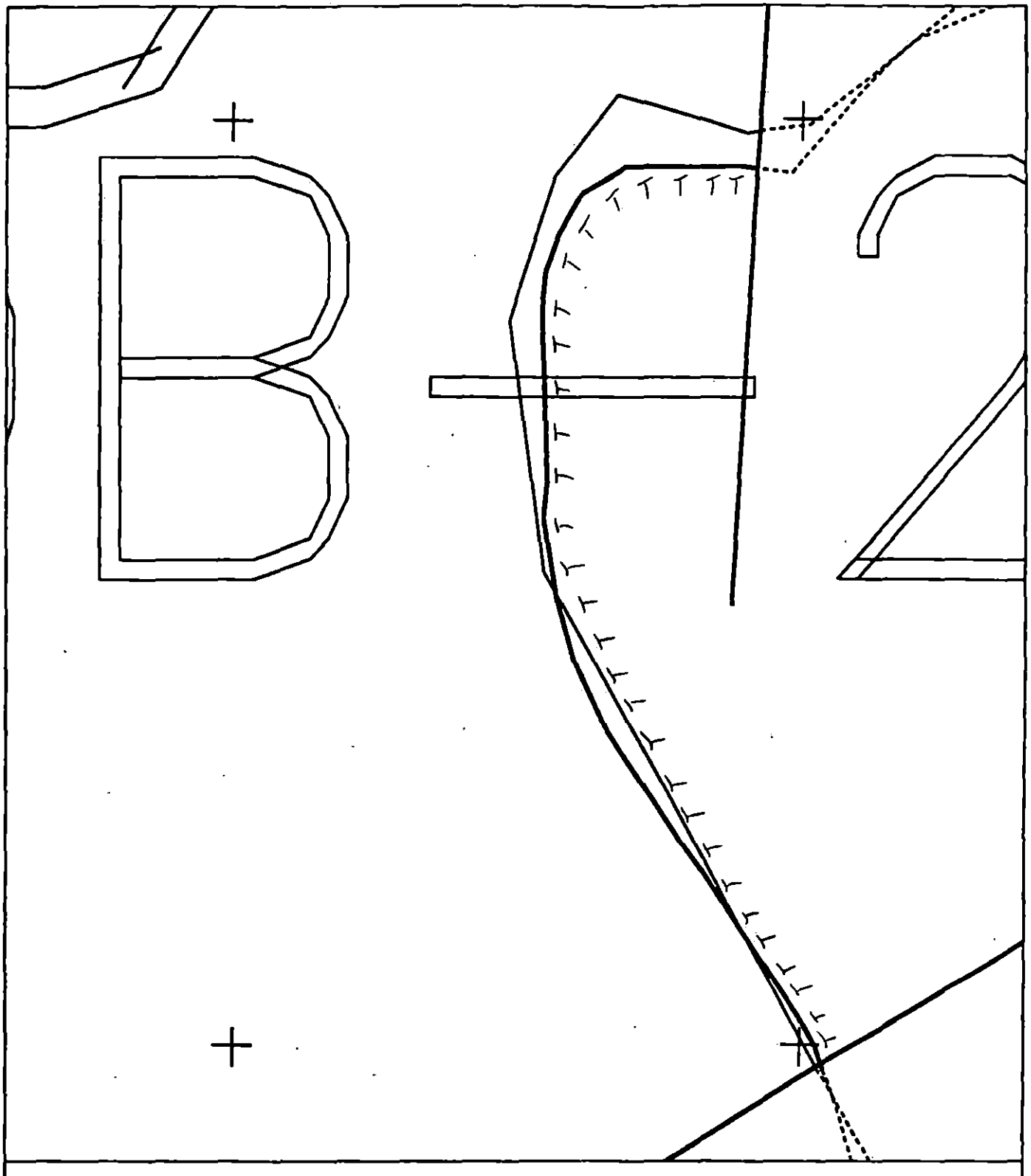
WILDLIFE OBSERVATIONS
TO BE COMPLETED IN ALL SUBDIVISIONS

BIRDS	# OF SPECIES	TOTAL BIRDS	FISH OBSERVED SPECIES PRESENT
Eagles	Ø		Fry and Smolt in the
Seabirds	(2)	(2 dead)	streams.
Waterfowl	3	19	
Gulls/Kittiwakes	2 1	10 (+7 dead kittiwakes)	
Shorebirds	1	3	
Corvids	1	1	
Other Birds sparrows	2	4	

MARINE MAMMALS	# OBSERVED	LAND MAMMALS SPECIES	# OBSERVED
Sea Otters		Caribou tracks	
Pinnipeds (specify)			
ales (specify)			

Shoreline subdivision map showing important biological features attached.


BEDROCK
SALT MARSH VEGETATION
LOGS
PHOTO SITES
Bio Map
N. Davis
Rex Creek
ANAD STREAM
#262-70-10030
Sketch Map (06)
K10-09-03-02-M
D. M Fitzgerald
28 MAY 1991
940 - 1020
ROCK CLIFF
PONDED WATER
SALT MARSH
Widgeon
Pintails
Mallards
Feeding
SANDY TIDAL FLAT
at least 2 kinds of Macoma growing here.
NARROW BERM
P.U. * VECO WORKERS AND TEAM MEMBERS COLLECTED ALL OBSERVED oiled sed. filling 1-25 BAGS
A.
TB / SOR
5-40 by 825 m, < 1%
very scattered patches occurring on tidal Flats & along berm with some SOR ON MARSH SURFACE
RB sheen was observed on Tidal Flat.
A.
Shells (Macoma spp, Tresus, and Axinopsis) were found along with drift Fucus and ulva in the area where patches were found. Out on the tide flat Macoma (2 species) beds were located. Fucus grew on the few cobbles in the intertidal.
SMALL STREAM
0
100
METERS
BEGIN SEGMENT -01
DRY BAY



XXXX	Wide	K1009 DB002 A	Subdivision Field Map
////	Medium	ADEC Subsegment Length: 825m	Map Key: 60AK1009DB002Ae
----	Narrow	METERS	Name: D. FitzGERALD
TTTT	Very Light	0 100 200	Date: 28 MAY 1991
0000	No Oil	AK State Plane Zone 4	Date Entered:

EXXON

REVIEWED: 6/3/91 MC

1991 MAYSAP EVALUATION

SEGMENT: K1009DB011 SUB: M REGION: KOD SURVEY DATE: 5/28/91

ENVIRONMENTAL SENSITIVITIES:
Work Window(s) RESTRICTED 3/1 - 9/1

Ecological/Constraints (see page two for details) Eagle nest

ARCHAEOLOGICAL CONSTRAINTS:
If treatment is planned, a cultural resource evaluation is required prior to shoreline treatment.

SHPO Signature: _____ Date: _____

RECOMMENDATIONS:	INITIAL	TAG	FOSC
TREATMENT REQUIRED (Y or N)	N		
Manual Pickup (Check as Req.)			
Spot Washing			
Bio-Customblen Only			
Bio-Inipol/Customblen			
Other			
Other			

COMMENTS:
INITIAL:

TAG:

FOSC:

TAG APPROVAL DATE: _____ FOSC APPROVAL DATE: _____

ADEC _____ FOSC _____

EXXON _____

USCG _____

NOAA _____

ECOLOGICAL CONSTRAINTS
1991 FIELD ACTIVITIES

Eagle Nest: Access restricted from 3/1 to 9/1. USF&WS authorization required. Maintain 1000' vertical and 1/4 mile horizontal buffer.

MAYSAP FIELD SHORELINE COMMENT SHEET

TEAM NO. 6-HELO SEGMENT DB-11 SUBDIVISION A DATE 5 / 28 / 91

ADEC
NAME J. BARNHART ADEC SIGNATURE Jeff Barnhart

☒ NTR Surveyed approx 200 m of this segment. Located one log with ST, CT. Removed 2 pom pom's. No other oil located.

EXXON
NAME R. COULTER EXXON SIGNATURE Rex D. Coulter

☑ NTR COMMENTS BY ADEC AND NOAA DESCRIBE THE FINDINGS OF THIS SURVEY.

LANDMANAGER
NAME J. HARDISTER OF USF&WS SIGNATURE John P. Hardister

☑ NTR No recoverable oil observed.

USCG/NOAA
NAME CWO R. SEUER/G SHIGENAKA SIGNATURE R. Seuer / Gary Shigenaka

☒ NTR No recoverable oil found

SURVEYED PORTION OF THE SEGMENT CONSISTED OF ROUGHLY THE EASTERN HALF OF A SAND BEACH OCCURRING BETWEEN BEDROCK CLIFFS IN DRY BAY. DRIFT LOGS LITTERED THE SUPRATIDAL ABOVE THE BEACH. BEAR TRACKS WERE SEEN IN THE [illegible] OF THE UNIT. LITTLE OIL WAS REPORTED HERE, AND ACCORDINGLY, LITTLE WAS OBSERVED. THE ONLY EVIDENCE OF OIL SEEN WAS STAIN ON A DRIFTWOOD LOG. TWO PIECES OF POM POM WERE FOUND, HOWEVER, AND [illegible]ERED.

MAYSAP FIELD SHORELINE COMMENT SHEET

TEAM NO. 6-HELO SEGMENT DR-11 SUBDIVISION A DATE 5 / 28 / 91

ADEC
NAME J. BARNHART, ADF&G SIGNATURE Jeff Barnhart

☒ NTR Surveyed approx 200 m of this segment. Located one log with ST, CT. Removed 2 pom pom's. No other oil located.

EXXON
NAME R. COULTER, EXXON SIGNATURE

☐ NTR

LANDMANAGER
NAME J. HARDISTER OF USF&WS SIGNATURE John P. Hardister

☑ NTR No recoverable oil observed.

USCG/NOAA
NAME CWO R. SPURR/G. SHIGENAKA SIGNATURE R. Spurr / Gary Shigenaka

☒ NTR No recoverable oil found

SURVEYED PORTION OF THE SEGMENT CONSISTED OF ROUGHLY THE EASTERN HALF OF A SAND BEACH OCCURRING BETWEEN BEDROCK CLIFFS IN DRY BAY. DRIFT LOGS LITTERED THE SUPRATIDAL ABOVE THE BEACH. BEAR TRACKS WERE SEEN IN THE SAND OF THE UITZ. LITTLE OIL WAS REPORTED HERE, AND ACCORDINGLY, LITTLE WAS OBSERVED. THE ONLY EVIDENCE OF OILING SEEN WAS STAIN ON A DRIFTWOOD LOG. TWO PIECES OF POM POM WERE FOUND, HOWEVER, AND RECOVERED.

MAYSAP SHORELINE OILING SUMMARY

TEAM NO. 6-Helo

SEGMENT 610-09 DB-11

OG D FitzGerald BIO H. Davis

SUBDIVISION M

ADEC J Barnhart/ADFG LANDMANAGER J Hardisten for USFWS

DATE 28 / May / 91

EXXON R Coulter USCG/NOAA CWO Spurr/G Shigenaka

TIME 11 : 10 to 11 : 35 TIDE LEVEL .8 ft. to 1.5 ft. ENERGY LEVEL: ☐ H ☒ M ☐ L

SURVEYED FROM: ☑ FOOT ☐ BOAT ☐ HELO WEATHER: ☐ SUN ☑ CLOUDS ☐ FOG ☐ RAIN ☐ SNOW

TOTAL LENGTH SHORELINE SURVEYED: 300 m NEAR SHORE SHEEN: ☐ BR ☐ RB ☐ SL ☑ NONE

EST. OIL CATEGORY LENGTH: W ~ m M ~ m N ~ m VL 1 m NO 299 m US 577 m

LOC	SURFACE OIL CHARACTER										SURFACE SEDIMENT	SHORE SLOPE	AREA		ZONE				NOTES
	AP	MS	TB	SOR	CV	CT	ST	FL	DB	NO	TYPE	V H M L	WIDTH m	LENGTH m	S	UI	MI	LI	
1						T	T				Log	L	.1	.1	X				COAT ON A single log
									•										

DISTRIBUTION: C = 91–100%; B = 51–90%; P = 11–50%; S = 1–10%; T = <1%

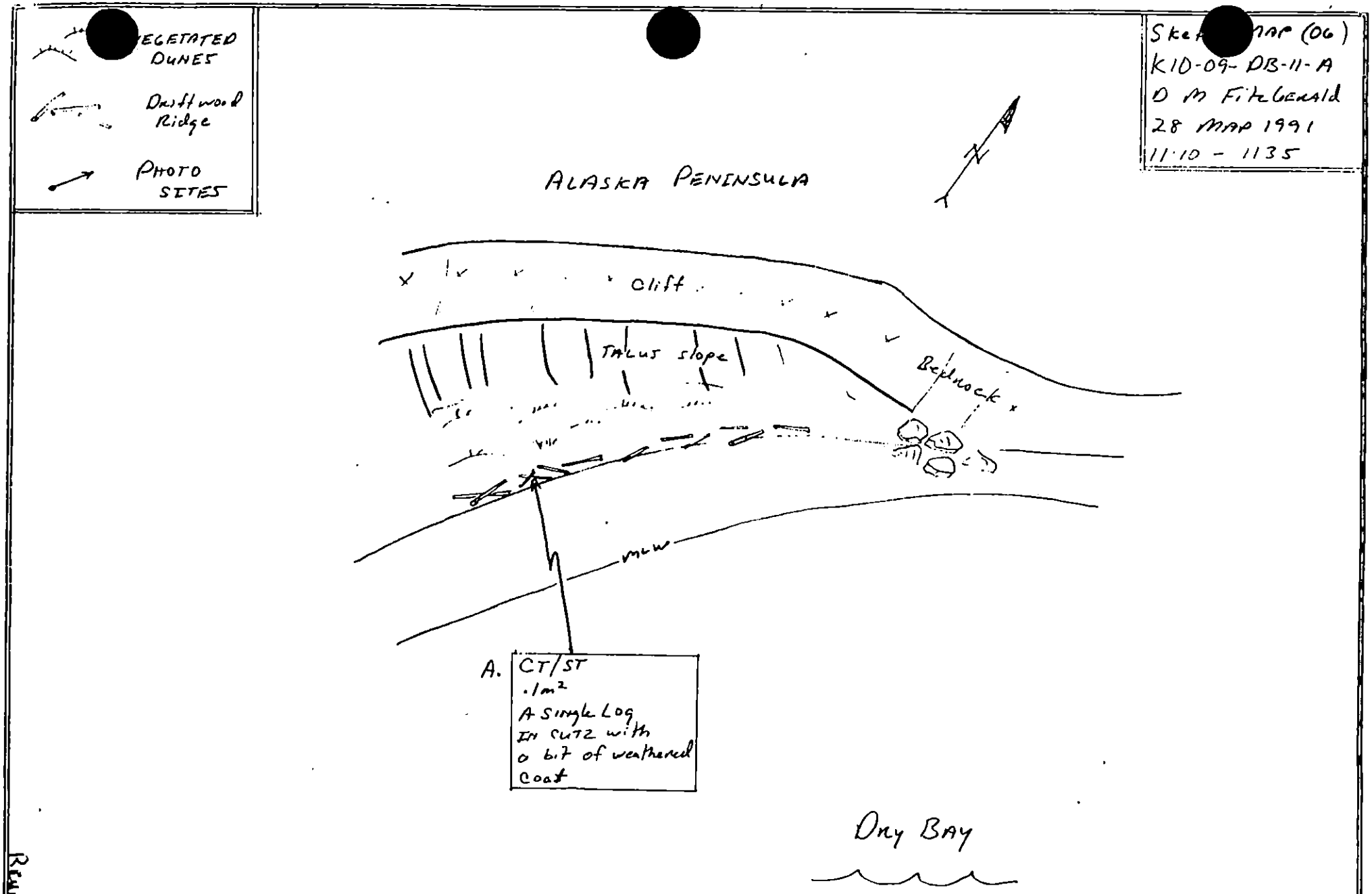
SLOPE: V = VERTICAL; H = HIGH ANGLE; M = MEDIUM ANGLE; L = LOW ANGLE PHOTO ROLL # MAYSAP- 6 - 24 FRAMES 13+14

PIT NO.	PIT DEPTH (cm)	SUBSURFACE OIL CHARACTER							OILED ZONE	CLEAN BELOW	H2O LEVEL	SHEEN COLOR	PIT ZONE				SURFACE-SUBSURFACE SEDIMENTS	NOTES
		OP	HOR	MOR	LOR	OF	TR	NO	cm-cm	Y/N	(cm)	B R S N	S	UI	MI	LI		
									-									
									-									
									-									
									-									
									-									
									-									
									-									
									-									
									-									

SHEEN COLOR: B = BROWN; R = RAINBOW; S = SILVER; N = NONE

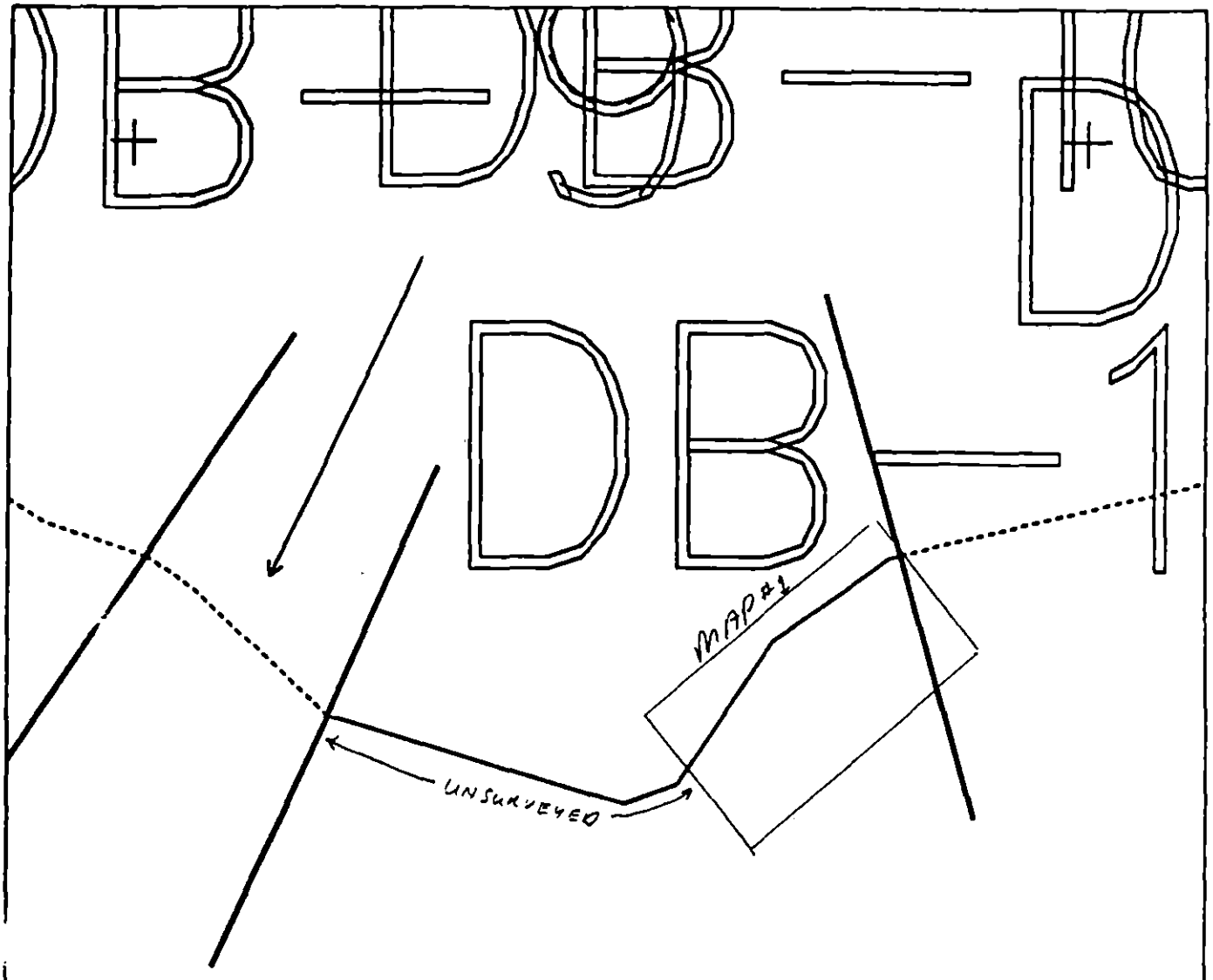
OG COMMENTS: This segment is located along the northern, outer shoreline of Ory Bay. The eastern third of the segment was surveyed and this region consists of a sandy beach backed by an extensive log drift ridge, sand dunes followed by a talus slope and rock cliff complex. The only oil found by the survey team along this segment was a CT/ST on a log in the supratidal zone. Two non-oiled pom poms were recovered from the beach.

REVIEWED: MC 6/3/91



Sketch Map (06)
K10-09-DB-11-A
D M FitzGerald
28 MAR 1991
11:10 - 1135

RELEASED: MC 6/3/19



K1009 DB011 A

Subdivision Field Map

Map Key: COAXXXXXXXXXA

Name: D. FitzGerald

Date: 28 May 1991

METERS

0 200 400

EXXON

MAYSAP BIOLOGICAL SUMMARY FORM

TEAM # G Helo | DATE May 28 1991

SEGMENT # K10-09 DB-11 | TIDAL HEIGHT(Range), 8ft-1.5ft (11^{10} - 11^{30})

SUBDIVISION M | BIOLOGIST H. Davis

SEA STATE 2-3 ft choppy | WIND SPEED/DIRECTION 10-15kts Breeze NE

PHOTOGRAPHS: ROLL # 6-24 | FRAME # 13+14

COMMENTS/OBSERVATIONS (to be completed in oiled subdivisions only):

This section of the segment is a sand beach that fronts a bedrock cliff at its eastern end. The biota observed in this area was limited to shoreplants and drift. Sea purslane and dune grass (Honkenya peploides and Elymus mollis?) was coming up around the drift logs in the intertidal. Siliqua, Teresus, Saxidomus, Cancer spp. and Tellinessus shells were found at the high tide line. Fucus, laminaria and Nereocystus were the most common drift algae on the beach. At the eastern end of the beach where the bedrock cliffs back the beach a ground squirrel had a burrow in the supratidal. The squirrel was feeding on drift algae. The pom poms found in the drift were unoiled.

Raven (1) Glaucous winged Gull (5) Kittiwake (2+1 Dead) Tufted Puffins (2) sparrows (3)

WILDLIFE OBSERVATIONS

TO BE COMPLETED IN ALL SUBDIVISIONS

BIRDS	# OF SPECIES	TOTAL BIRDS	FISH OBSERVED SPECIES PRESENT
Eagles	Ø		Ø
Seabirds	1	2	
Waterfowl	Ø		
Gulls/kittiwakes	2	7(+1 dead Kittiwake)	
Shorebirds	Ø		
Corvids	1	1	
Other Birds Sparrows	1	(3)	

MARINE MAMMALS	# OBSERVED	LAND MAMMALS SPECIES	# OBSERVED
Sea Otters	Ø	Red Fox	1 Incidental Tracks on beach
Pinnipeds(specify)	Ø	Bear Tracks	
		Caribou tracks	
ales(specify)	Ø	Ground Squirrel	1 Red burrow in supratidal

Shoreline subdivision map showing important biological features attached.

VEGETATED DUNES

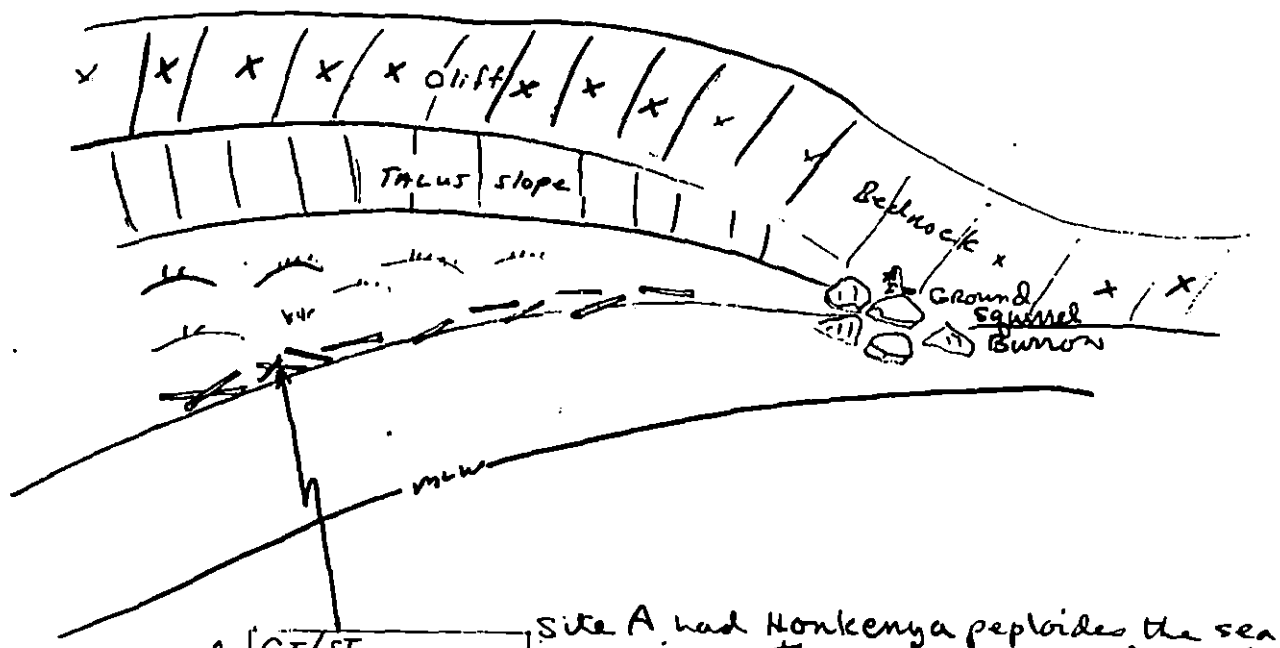
Driftwood Ridge

PHOTO SITES

Bio Map
H. Davis

Sk[redacted] MAP (06)
K10-09-DB-11-A
D M. FitzGerald
28 MAP 1991
11:10 - 1135

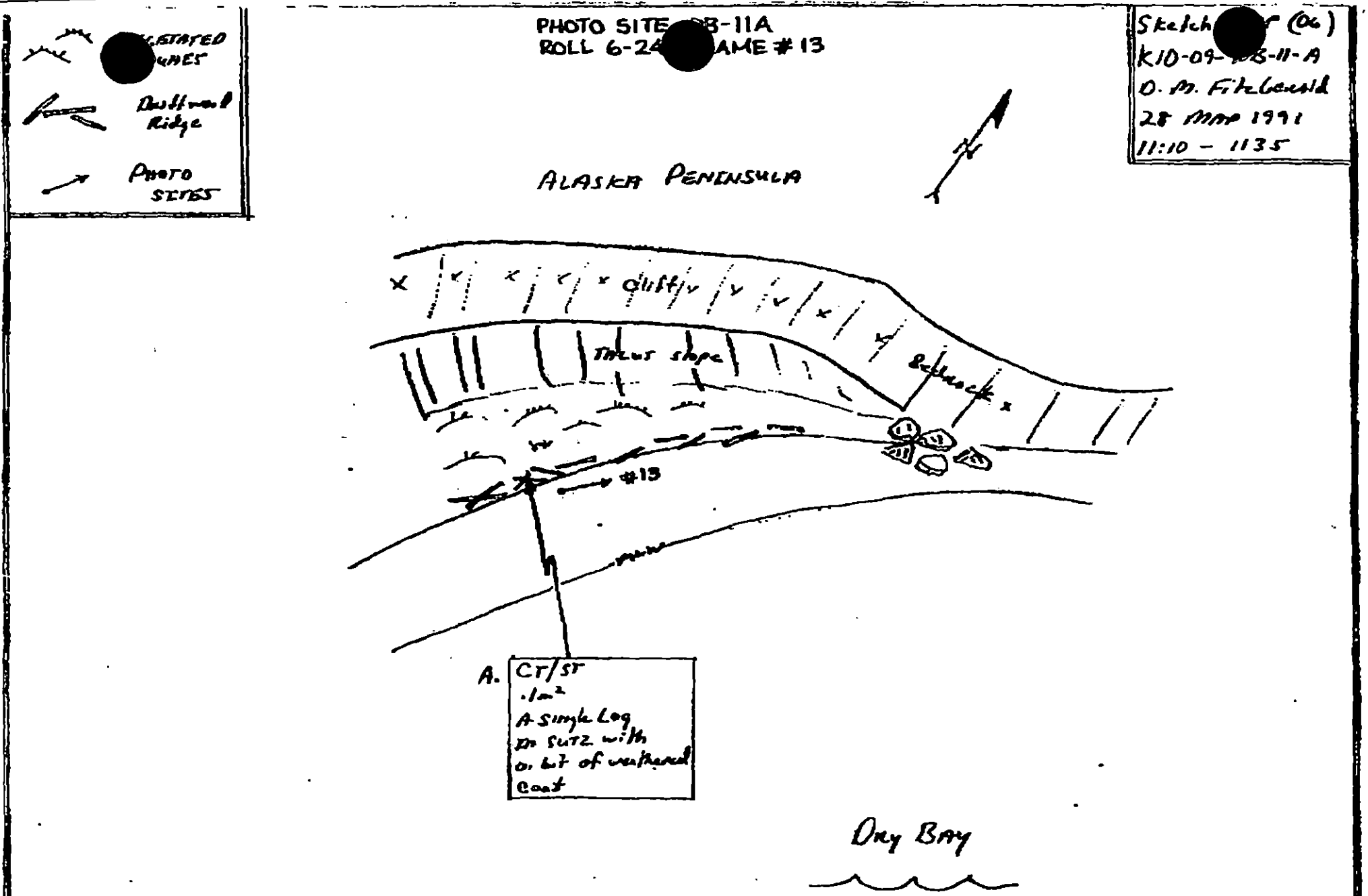
ALASKA PENINSULA

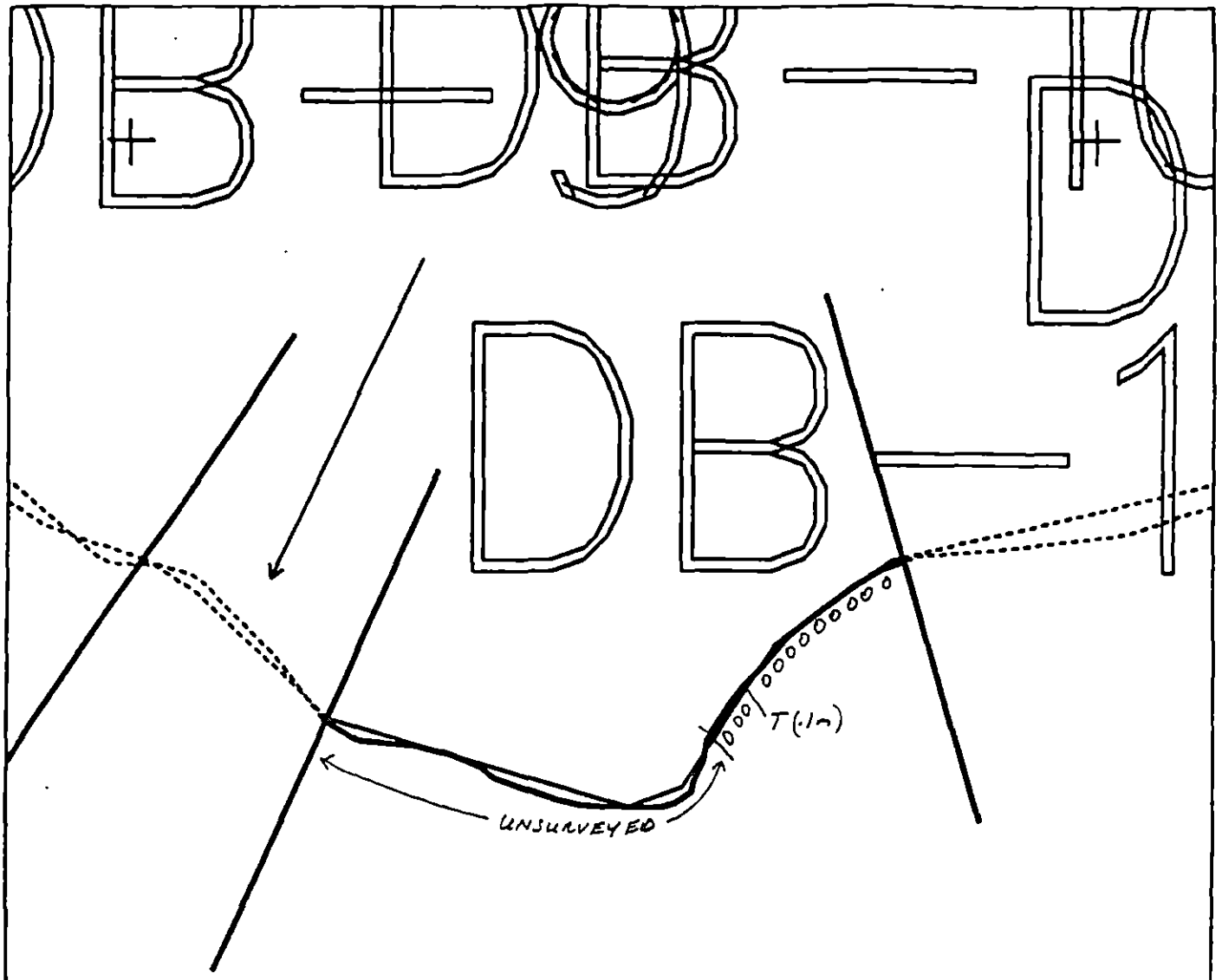


A. CT/ST
.1m²
A single Log
In cutz with
a bit of weathered
coat

Site A had Honkenya peploides the sea purslane growing up through the sand. Only logs, shells, and drift algae were located in this zone

ORY BAY


[redacted] Ridge
Photo sites
PHOTO SITE [redacted]B-11A
ROLL 6-24 [redacted] AME # 13
Sketch [redacted] (OC)
K10-09-[redacted]8-11-A
D. M. Fitzgerald
28 May 1991
11:10 - 1135
ALASKA PENINSULA
cliff
talus slope
#13
A. CT/ST
.1m²
A single Log
in SUTZ with
a bit of weathered
coat
ORY BAY



XXXX	Wide	K1009 DB011 A	Subdivision Field Map
////	Medium	ADEC Subsegment Length: 877m	Map Key: 80AK1009DB011A
----	Narrow	METERS	Name: D. Fitzgerald
TTTT	Very Light	0 200 400	Date: 28 May 1991
0000	No Oil	AK State Plane Zone 4	Date Entered:

REVIEWED: MC 6/3/91

1991 MAYSAP EVALUATION

SEGMENT: K1009DBQ11 **SUB:** M **REGION:** KOD **SURVEY DATE:** 5/28/91

ENVIRONMENTAL SENSITIVITIES:
Work Window(s) RESTRICTED 3/1 - 9/1

Ecological/Constraints (see page two for details) Eagle nest

ARCHAEOLOGICAL CONSTRAINTS:
If treatment is planned, a cultural resource evaluation is required prior to shoreline treatment.

SHPO Signature: Timothy A Smith Date: 6/07/91

RECOMMENDATIONS:	**INITIAL**	**TAG**	**FOSC**
TREATMENT REQUIRED (Y or N)	N	N	N
Manual Pickup (Check as Req.)			
Spot Washing			
Bio-Customblen Only			
Bio-Inipol/Customblen			
Other			
Other			

COMMENTS:
INITIAL:

TAG:

FOSC:

TAG APPROVAL DATE: JUNE 7 1991 **FOSC APPROVAL DATE:** 6/12/91

ADEC

EXXON

USCG

NOAA

FOSC

E. E. PAGE, CDR, USCG
CHIEF OF STAFF, FOSC

ECOLOGICAL CONSTRAINTS
1991 FIELD ACTIVITIES

Eagle Nest: Access restricted from 3/1 to 9/1. USF&WS authorization required. Maintain 1000' vertical and 1/4 mile horizontal buffer.

MAYSAP FIELD SHORELINE COMMENT SHEET

TEAM NO. 6-HELO SEGMENT DB-11 SUBDIVISION A DATE 5 / 28 / 91

ADEC
NAME J. BARNHART ADF&G SIGNATURE Jeff Barnhart

☒ NTR Surveyed approx 200 m of this segment. Located one log with ST, CT. Removed 2 pom pom's. No other oil located.

EXXON
NAME R. COULTER, EXXON SIGNATURE Rex R. Coulter

☑ NTR COMMENTS BY ADEC AND NOAA DESCRIBE THE FINDINGS OF THIS SURVEY.

LANDMANAGER
NAME J. HARDISTER OF USF&WS SIGNATURE John P. Hardister

☑ NTR no recoverable oil observed.

USCG/NOAA
NAME CWO R. SPUER/E. SHIGENAKA SIGNATURE R. Spuer / Gary Shigenaka GS

☒ NTR No recoverable oil found

SURVEYED PORTION OF THE SEGMENT CONSISTED OF ROUGHLY THE EASTERN HALF OF A SAND BEACH OCCURRING BETWEEN BEDROCK CLIFFS IN DRY BAY. DRIFT LOGS LITTERED THE SUPRATIDAL ABOVE THE BEACH. BEAR TRACKS WERE SEEN IN THE SAND OF THE UITZ. LITTLE OIL WAS REPORTED HERE, AND ACCORDINGLY, LITTLE WAS OBSERVED. THE ONLY EVIDENCE OF OIL SEEN WAS STAIN ON A DRIFTWOOD LOG. TWO PIECES OF POM POM WERE FOUND, HOWEVER, AND RETRIEVED.

MAYSAP FIELD SHORELINE COMMENT SHEET

TEAM NO. 6-HELO SEGMENT DB-11 SUBDIVISION A DATE 5 / 28 / 91

ADEC
NAME J. BARNHART, ADF&G SIGNATURE Jeff Barnhart

☒ NTR Surveyed approx 200 m of this segment. Located one log with ST, CT. Removed 2 pom pom's. No other oil located.

EXXON
NAME R. COULTER, EXXON SIGNATURE

☐ NTR

LANDMANAGER
NAME J. HABDISTER OF USF&WS SIGNATURE John P. Hardister

☑ NTR No recoverable oil observed.

USCG/NOAA
NAME CWO R. SPURR/G. SHIGENAKA SIGNATURE R Spurr / Gary Shigenaka

☒ NTR No recoverable oil found

SURVEYED PORTION OF THE SEGMENT CONSISTED OF ROUGHLY THE EASTERN HALF OF A SAND BEACH OCCURRING BETWEEN BEDROCK CLIFFS IN DRY BAY. DRIFT LOGS LITTERED THE SUPRATIDAL ABOVE THE BEACH. BEAR TRACKS WERE SEEN IN THE SAND OF THE UITZ. LITTLE OIL WAS REPORTED HERE, AND ACCORDINGLY, LITTLE WAS OBSERVED. THE ONLY EVIDENCE OF OILING SEEN WAS STAIN ON A DRIFTWOOD LOG. TWO PIECES OF POM POM WERE FOUND, HOWEVER, AND RECOVERED.

MAYSAP SHORELINE OILING SUMMARY

TEAM NO. 6-Helo

SEGMENT 610-09 DB-11

OG D FitzGerald BIO H. Davis

SUBDIVISION M

ADEC J Barnhart/ADFG LANDMANAGER J Hardisten for USFWS

DATE 28 / May / 91

EXXON R Coulter USCG/NOAA CWO Spurr/G Shigenaka

TIME 11 : 10 to 11 : 35 TIDE LEVEL .8 ft. to 1.5 ft. ENERGY LEVEL: ☐ H ☒ M ☐ L

SURVEYED FROM: ☑ FOOT ☐ BOAT ☐ HELO WEATHER: ☐ SUN ☑ CLOUDS ☐ FOG ☐ RAIN ☐ SNOW

TOTAL LENGTH SHORELINE SURVEYED: 300 m NEAR SHORE SHEEN: ☐ BR ☐ RB ☐ SL ☑ NONE

EST. OIL CATEGORY LENGTH: W ~ m M ~ m N ~ m VL 1 m NO 299 m US 577 m

LOC	SURFACE OIL CHARACTER										SURFACE SEDIMENT	SHORE SLOPE	AREA WIDTH	AREA LENGTH	ZONE				NOTES
	AP	MS	TB	SOR	CV	CT	ST	FL	DB	NO	TYPE	V H M L	m	m	S	UI	MI	LI	
1						T	T				Log	L	.1	.1	X				COAT ON a single log
									•										

DISTRIBUTION: C = 91–100%; B = 51–90%; P = 11–50%; S = 1–10%; T = <1%

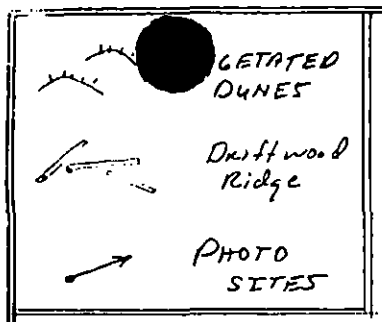
SLOPE: V = VERTICAL; H = HIGH ANGLE; M = MEDIUM ANGLE; L = LOW ANGLE PHOTO ROLL # MAYSAP- 6 - 24 FRAMES 13+14

PIT NO.	PIT DEPTH (cm)	SUBSURFACE OIL CHARACTER							OILED ZONE cm-cm	CLEAN BELOW Y/N	H2O LEVEL (cm)	SHEEN COLOR	PIT ZONE				SURFACE-SUBSURFACE SEDIMENTS	NOTES
		OP	HOR	MOR	LOR	OF	TR	NO				B R S N	S	UI	MI	LI		
									-									
									-									
									-									
									-									
									-									
									-									
									-									
									-									
									-									

SHEEN COLOR: B = BROWN; R = RAINBOW; S = SILVER; N = NONE

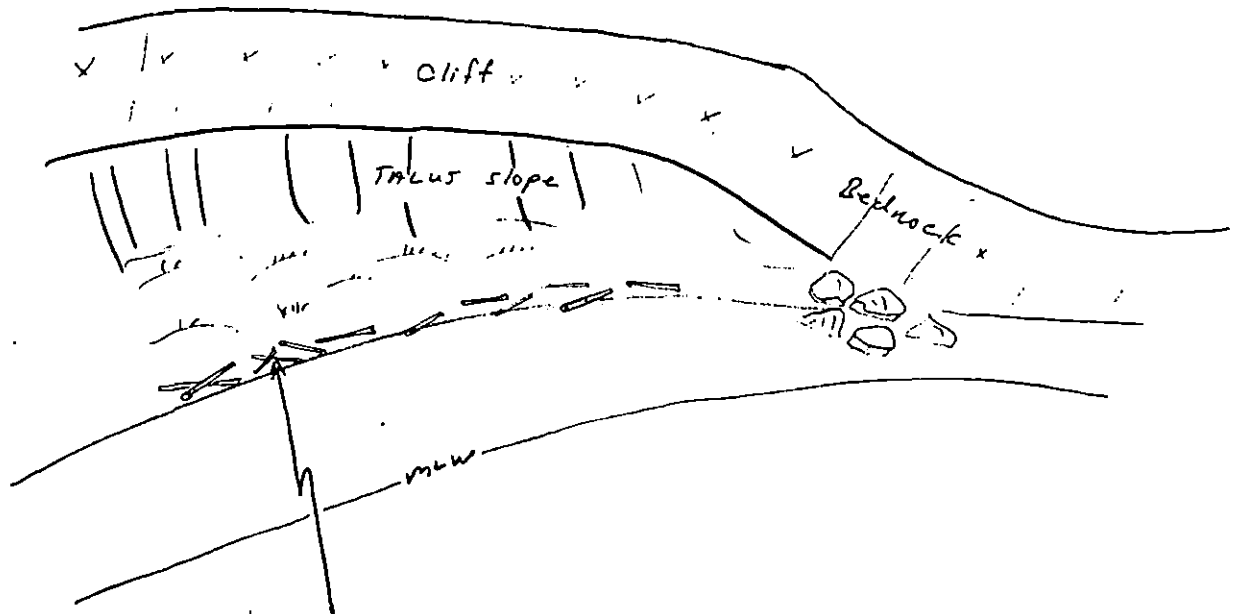
OG COMMENTS: This segment is located along the northern, outer shoreline of Ory Bay. The eastern third of the segment was surveyed and this region consists of a sandy beach backed by an extensive log drift ridge, sand dunes followed by a talus slope and rock cliff complex. The only oil found by the survey team along this segment was a CT/ST on a log in the supratidal zone. Two non-oiled pompoms were recovered from the beach.

REVIEWED: MC 6/3/91



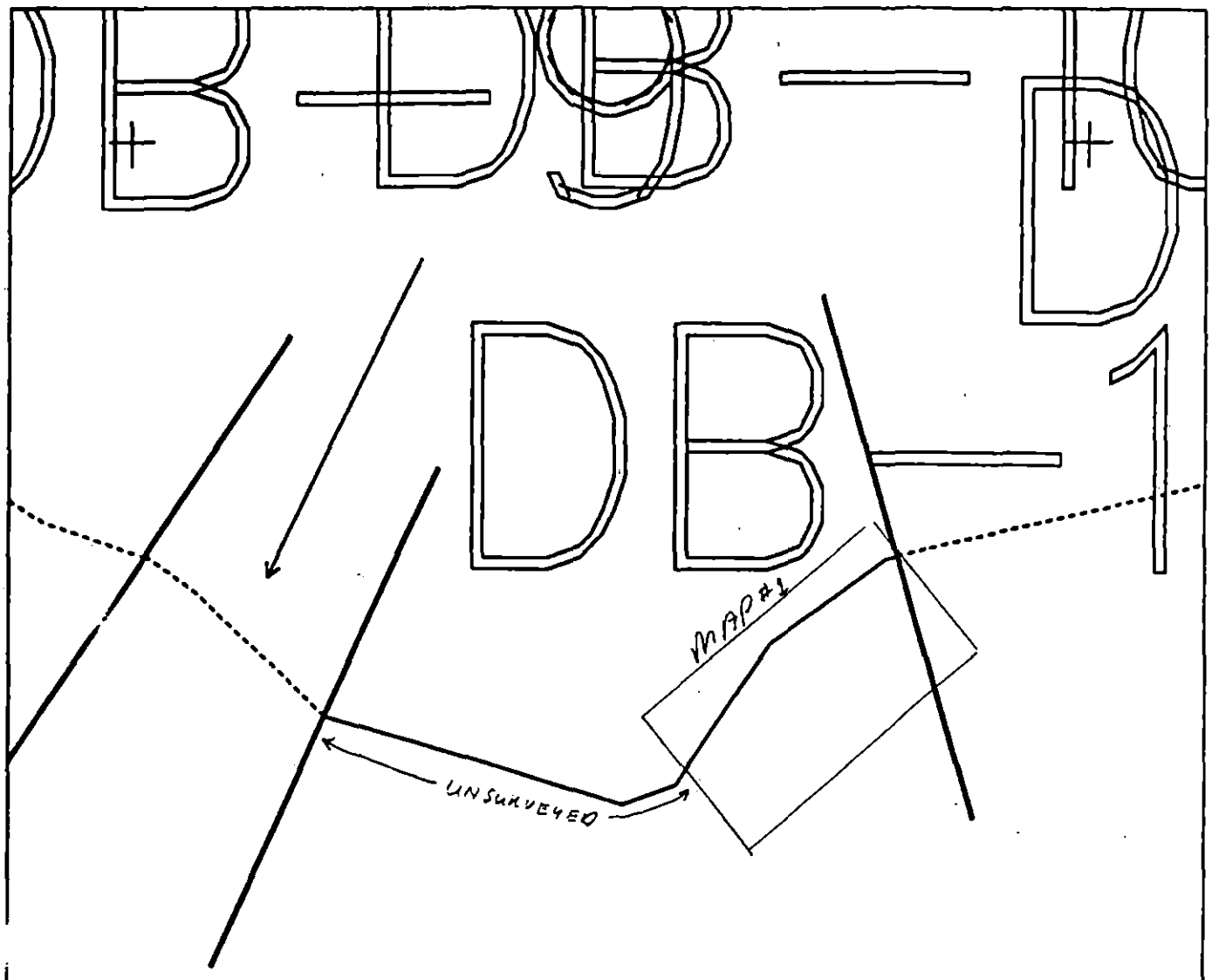
Sketch Map (06)
K10-09-DB-11-A
D. M. FitzGerald
28 MAR 1991
11:10 - 1135

ALASKA PENINSULA



A. CT/ST
.1m²
A Single Log
In cutz with
a bit of weathered
coat

ORCA BAY



K1009 DB011 A

METERS

0 500 1000

AK State Plane Zone 4

EXXON

Subdivision Field Map

Map Key: COAK1009DB011A

Name: D. Fitzgerald

Date: 28 May 1991

MAYSAP BIOLOGICAL SUMMARY FORM

TEAM # G Helo	**DATE** May 28 1991
SEGMENT # K10-89 DB-11	**TIDAL HEIGHT(Range)** .8ft-1.5ft (11:10 - 11:30)
SUBDIVISION M	**BIOLOGIST** H. Davis
SEA STATE 2-3 ft choppy	**WIND SPEED/DIRECTION** 10-15 kts Breeze NE
PHOTOGRAPHS: ROLL # 6-24	**FRAME #** 13+14

COMMENTS/OBSERVATIONS (to be completed in oiled subdivisions only):

This section of the segment is a sand beach that fronts a bedrock cliff at its eastern end. The biota observed in this area was limited to shore plants and drift. Sea purslane and dune grass (Honkenya peploides and Elymus mollis?) was coming up around the drift logs in the intertidal. Siliqua, Teressus, Saxidomus, Cancer spp. and Tellinessus shells were found at the high tide line. Fucus, laminaria and Nereocystus were the most common drift algae on the beach. At the eastern end of the beach where the bedrock cliffs back the beach a ground squirrel had a burrow in the supratidal. The squirrel was feeding on drift algae. The pom poms found in the drift were unoiled.

Raven (1) Glaucous winged Gull (5) Kittiwake (2+1 Dead) Tufted Puffins (2) sparrows (3)

WILDLIFE OBSERVATIONS
TO BE COMPLETED IN ALL SUBDIVISIONS

BIRDS	# OF SPECIES	TOTAL BIRDS	FISH OBSERVED SPECIES PRESENT
Eagles	Ø		Ø
Seabirds	1	2	
Waterfowl	Ø		
Gulls/kittiwakes	2	7 (+1 dead Kittiwake)	
Shorebirds	Ø		
Corvids	1	1	
Other Birds Sparrows	1	(3)	

MARINE MAMMALS	# OBSERVED	LAND MAMMALS SPECIES	# OBSERVED
Sea Otters	Ø	Red Fox	1 Imprints Trackson beach
Pinnipeds (specify)	Ø	Bear Tracks	
		Caribou tracks	
Whales (specify)	Ø	Ground Squirrel	1 Med burrow in supratidal

Shoreline subdivision map showing important biological features attached.

Bio Map
H. Davis

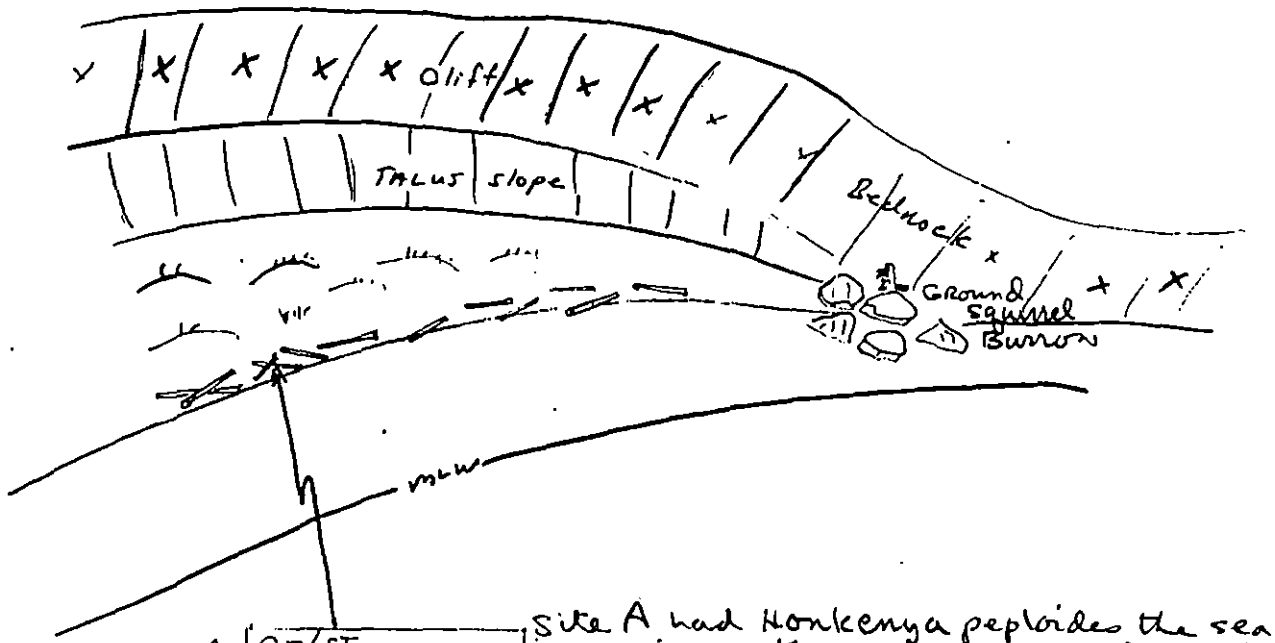
Sketch Map (06)
K10-0[redacted]DB-11-A
D. M. FitzGerald
28 MAP 1991
11:10 - 1135

[redacted]ETATED DUNES

Driftwood Ridge

PHOTO SITES

ALASKA PENINSULA



A. CT/ST
.1m²
A single Log
in cutz with
a bit of weathered
coat

Site A had Honkenya peploides the sea purslane growing up through the sand. Only logs, shells, and drift algae were located in this zone

ORV BAY

[redacted] STATED LINES

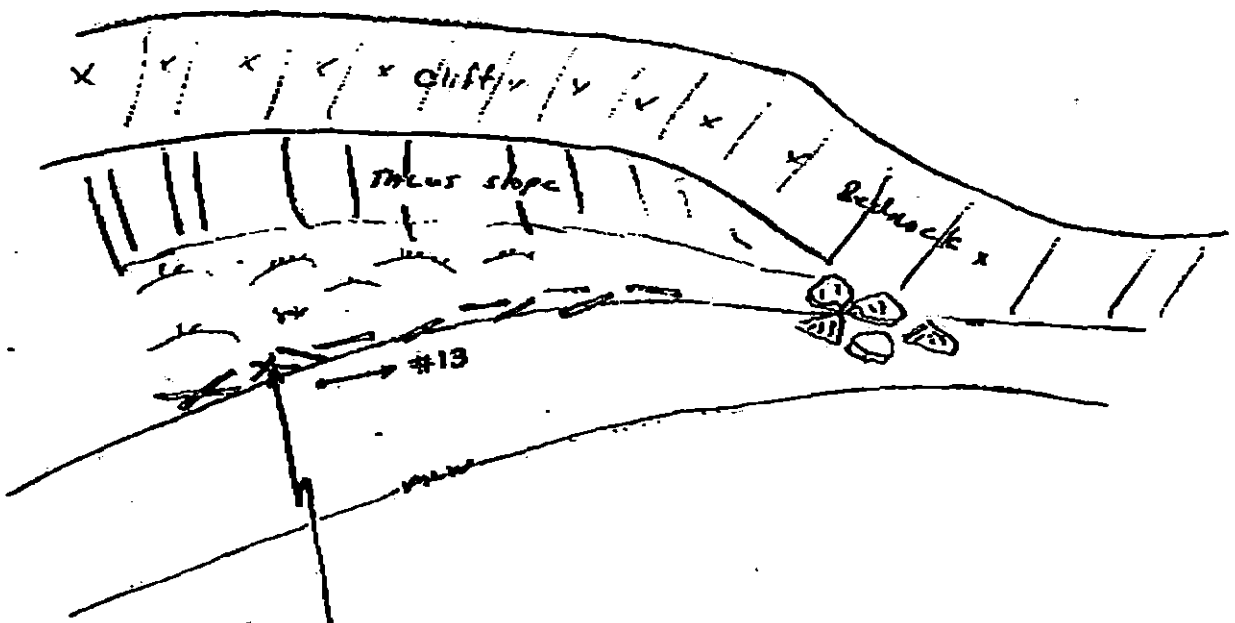
Backbone Ridge

PHOTO SITES

PHOTO SITE, [redacted] 11A
ROLL 6-24, [redacted] ME # 13

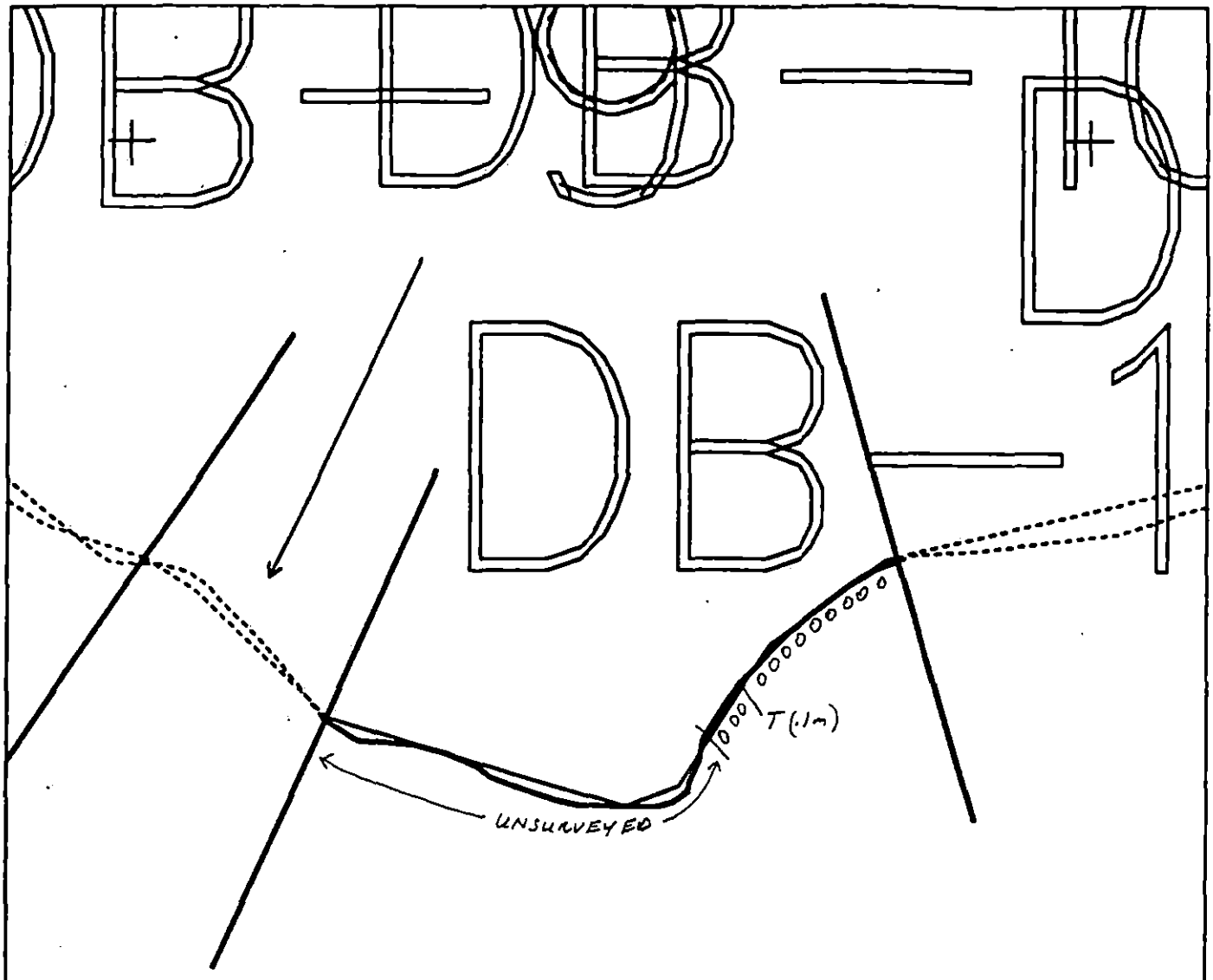
Sketch [redacted] (DG)
K10-09- [redacted] 11-A
D. M. FitzGerald
28 MAR 1991
11:10 – 1135

ALASKA PENINSULA



A. CT/ST
.1m²
A single Log
in SUTZ with
a bit of weathered
coat

ORY BAY



XXXX	Wide	K1009 DB011 A
////	Medium	ADEC Subsegment Length: 877m
----	Narrow	METERS
TTTT	Very Light	0 200 400
0000	No Oil	AK State Plane Zone 4

Subdivision Field Map
Map Key: 60AK1009DB011A
Name: D. Fitzgerald
Date: 28 May 1991
Date Entered:

REVIEWED: MC 6/3/91

REGION: KODIAK

SEGMENT: ST/K11-01-IL-001

SUBDIVISIONS: A (1 OF 2)

SHORELINE EVALUATION

SEGMENT ST/ K11-01-IL-001 SUBDIVISION A (1 OF 2) DATE 5/15/90

SEGMENT ENVIRONMENTAL SENSITIVITIES AND TIME CONSTRAINTS:
1A Salmon stream mouth - fry outmigration (4/15 to 7/31)
1B Salmon stream mouth - spawing (7/15 to 9/10; PEAK 8/15)
(262-80-10010, 262-80-10012)
4QQ State Marine Park National Wildlife Refuge
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 treatment is planned, **a cultural resource evaluation is required prior** to shoreline treatment.

SHPO SIGNATURE:_____ DATE:_____

OILING CATEGORIZATION:

Wide 0 m: Medium 0 m: Narrow 0 m: V.Light 713 m: No Oil 1630 m
Subsurface Oil Observed: Yes____ No X Maximum Depth_____

RECOMMENDATIONS:

X No Treatment Recommended	_____Snare/Absorbent Booms
_____Treatment Recommended	_____Oil Snares (pom poms)
_____Manual Pickup	_____Absorbents (pads,rolls,etc)
_____Bioremediation	_____Spot Washing:_____Wands
_____Tarmat Removal	_____Beach Cleaner
	_____Other (see comments)

COMMENTS: _____

TAG COMMENTS:_____

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

SHORELINE OILING SUMMARY

REVISION NO 04-12-90

OG Greg Chaney USCG Ken Trabue SEGMENT ST/ KII-1-IL-1
BIO Heather Davis LAND REP Otto Harris USFW SUBDIVISION A (1 OF)
EXXON — ADEC Fran Dennis TIME 10:40 to 13:00
TEAM NO. 20 TIDE LEVEL 3.0 to 0.5 ft. DATE May 15 / 90
EST. SUBDIVISION LENGTH: 2240 m ☐ Sun ☒ Clouds ☐ Fog ☒ Rain ☐ Snow
UPLANDS DESCRIPTION: ☒ Grass ☐ Forest ☐ Rock alders
SURVEYED FROM: ☒ Foot ☐ Boat ☐ Helo WORKING DIRECTION: South to North
SURFACE SEDIMENTS: R 40 % B 30 % C 5 % P 0 % G 0 % S 25 % M 0 % V 0 %
SLOPE : Lang 45 % Hang 5 % Vert 50 % WAVE EXPOSURE: ☐ Low ☐ Med ☒ High
OIL CATEGORY LENGTH: W 0 m M 0 m N 0 m VL 785 m NO 1455 m

SURFACE OIL

CHARACTER	DISTRIBUTION /C	/B	/P	/A	OIL / FILM COLOR					IMPACTED ZONES SU	UI	MI	LI
ASPHALT PAVEMENT													
POOLED				X				X			X		
COVER				X		X				X	X		
COAT				X		X				X	X		
STAIN				X			X			X	X		
MOUSSE													
PATTIES													
TARBALLS				X				X			X		
FILM													
NO OIL												X	X

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

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

DID YOU COLLECT DEBRIS?
YES ☒ · NO ☐
TYPE mousse balls
#BAGS 1

Photographs:
Roll No. ST 20 11
Frames 9

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					PIT ZONE SU	UI	MI	LI	ANA	SHEEN (Y/N)	▼	SURFACE - SUBSURFACE SEDIMENTS
1	35					X	-									X				N	30	Sand
							-															
							-															
							-															
							-															
							-															

COMMENTS

See attached.

REVIEWED BAT DATE 18 May 90

COMMENTS
SEGMENT STK11-01-IL1-A

May 15 1990

Greg Chaney

The survey of segment STK11-01-IL1-A was conducted in wind blown rain under low overcast skies. These conditions made locating oil more difficult than usual. This subdivision encompasses the south western edge of the Island Bay on the Alaska Peninsula. The coast is composed primarily of steep bedrock cliffs and sand beaches. Boulders were often observed near the base of cliffs. Along this subdivision, splattered stain on bedrock and boulders was commonly observed. It appeared have been a remnant of splattered coats and covers which were abraded by abundant sand and high energy waves from the Gulf of Alaska. In addition to the dispersed stain, more concentrated oiling was discovered around the location of pit #1. Along a section of beach roughly 30 meters long, mousse was retained in cracks of large boulders. The surface of these boulders were also splattered with cover, coat and stain. This section of beach was particularly unusual because the oiled boulders were randomly coated with loose sand up to 5 cm. deep. It was not possible to see mousse retained by boulders until sand was scrapped away from the rock surfaces. Additionally, the area appeared to have been at the bottom of an active snow avalanche chute and snow still remained in the shape of an inverted cone above the oiled beach. Our DEC representative stated that the area had been snow covered through much of the winter and spring. This may help to explain why so little weathering had taken place in this location relative to other portions of adjacent beach. Although mousse was found over 2 centimeters deep, and splattered mousse/tar cover was present on boulders, surficial coverage was less than 10%. This seemed due to the sand coating which undoubtedly covered much of the oil present. Much of the tar and mousse had incorporated a significant amount of sand into the oil matrix. This made detection of exposed oil even more difficult than usual. Just northeast of this oiled area, 6 very sandy mousse balls were collected. These were recovered from the last high tide line. These mousse balls may have been recently eroded from the adjacent oiled section just described. More sandy splattered coats and covers were located near the stream at the end of the subdivision but these did not cover more than 10% of the beach in any area. Sheen was not observed in the water along the segment, however sheen was "bleeding" off of mousse in the heavy rain. Another unusual observation was that brown bears had been digging in the sand around areas of oil concentration.

OG [redacted] Chaney

SEGMENT ST/ K11-1-IL-1

SUBDIVISION A

DATE May 15 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

ALASKA PENINSULA

SPLATTERED STAIN, COAT AND COVER ON LARGE BOULDERS. SPORADIC MOUSSE IN CRACKS COVERED WITH SAND. MOUSSE POOLED TO 2 CENTIMETERS. (SEE COMMENTS)

STREAM

SPLATTER STAIN & COAT

SPLATTER STAIN, COAT & COVER

SAND LWL

6 RECENTLY LANDED MOUSSE & SAND BALLS COLLECTED

1

OIL COVER ON PLASTIC TRASH CAN

STAIN ON DRIFT WOOD

RECENTLY LANDED. MOUSSE BALL (TARBALL) COLLECTED

SAND LWL

9

RANDOM SPLATTER STAIN & COAT

ISLAND BAY

IL-1-A

0 100 200 300

METERS

SPECIAL SYMBOL

◇ DRIPS OF TAR AND STAIN

Oil Character Length (m): AP 0 PO 10 CV 50 CT 100 ST 750 MS 20 PT 0 TB 0 FL 0 NO 1455

REVISION:

MAY-17-1990 12:38 FROM EXXON KODIAK TO 15643771 P.05

SHORELINE ECOLOGICAL SUMMARY

REVISION: 03/22/90

Segment ST / KII - 01 Subdivision IL-01A Date (mo / day / yr) 5/15/90

Time (24 hr) 10:30 Biologist H. Davis

(A) Substrate type and % of segments:
(1) Bedrock 40 (2) Boulder 30 (3) Cobble 5 (4) Pebble — (5) Sand 25 (6) Silt —

(B) Overall % cover of biota (% of segment): Dense — Moderate 20 Low 80% (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-20-11
Frames 9

BARNACLES Intermittent. Dense - Sparse mareas with substrates Barnacles can attach to.

Dense			Moderate			Sparse			Rare			
X U	1M	1L	X U	X M	1L				1U	1M	1L	
X	X	2	X	X	X				2	2	2	
3	3	3	3	3	3	X	X	3	3	3	3	NOT PRESENT
4	4	4	4	4	4	4	4	4	4	4	4	4,5,6
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 Rare. a few in crevices on boulders.

Dense			Moderate			Sparse			Rare			
1U	1M	1L	1U	1M	1L	X U	1M	1L	1U	X M	1L	
2	2	2	2	2	2	2	X	2	X	X	2	
3	3	3	3	3	3	3	3	3	3	3	3	NOT PRESENT
4	4	4	4	4	4	4	4	4	4	4	4	3,4,5,6
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 Littorina Dense - Sparse, Nucella Rare, limpets sparse.

Dense			Moderate			Sparse			Rare			
X U	X M	1L	X U	X M	1L	X U	X M	X	1U	1M	X	
X	X	2	X	3	2	X	X	X	2	2	X	
3	3	3	3	3	3	X	X	X	X	X	X	NOT PRESENT
4	4	4	4	4	4	4	4	4	4	4	4	4,5,6
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 Intermittent on boulder tops. Dense in small patches.

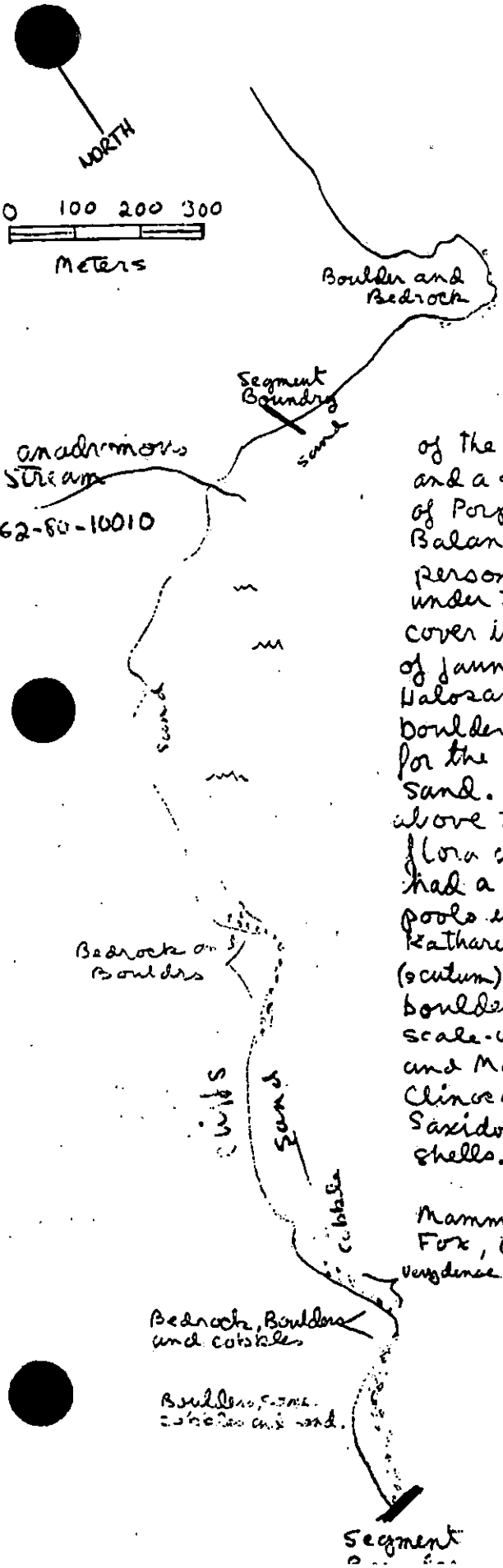
Dense			Moderate			Sparse			Rare			
1U	1M	1L	1U	1M	1L	X U	X M	1L	1U	1M	1L	
X	X	2	X	X	X	X	X	X	2	2	2	
3	3	3	3	3	3	X	X	X	3	3	3	NOT PRESENT
4	4	4	4	4	4	4	4	4	4	4	4	4,5,6
5	5	5	5	5	5	5	5	5	5	5	5	
6	6	6	6	6	6	6	6	6	6	6	6	

Wildlife Observations/ General Comments: See attached page.

Ecological Considerations: No Ecological constraints on list. There are two streams that are anadromous. Stream # 262-80-10012 has Pink Salmon and Dolly Varden spawning in it. Stream # 262-80-10010 in IL-01B has Pinks and Chum salmon spawning in it. No Eagle nests or Seabird colonies were observed although there is one of each on Jute Island (IL-2)

KII-01 IL-01A
5/15/90
N. Davis

Ecology Station Map



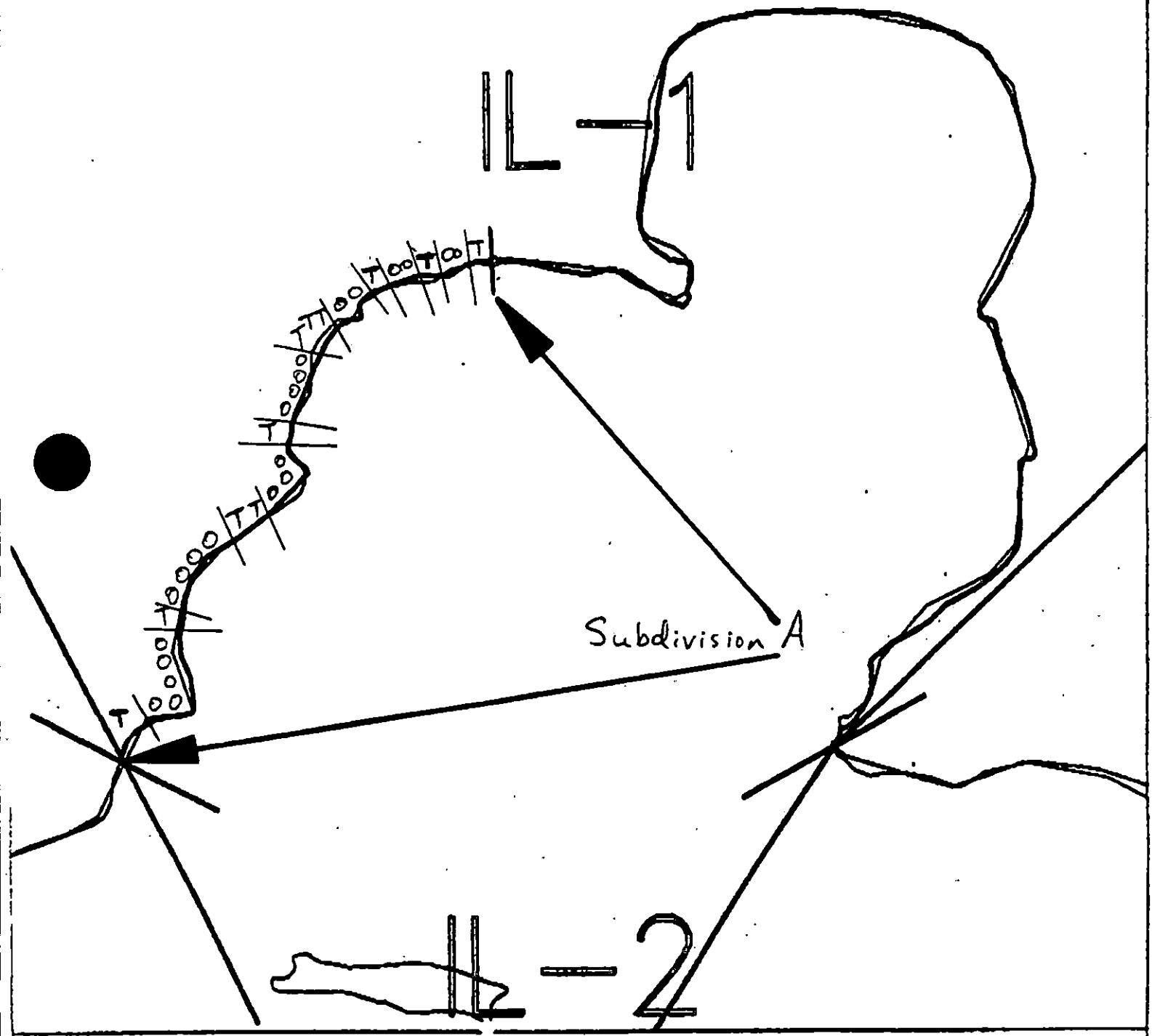
This subdivision had a mixture of sand beaches cobble beaches and bedrock/boulder points. The rock/boulder and cobble areas had a narrow band of organisms. The lower intertidal area changed rapidly to sand and the upper intertidal area was against the cliffs. The sandy beaches had no visible organisms, although shells indicated that in the shallow subtidal areas there were bivalves.

On the boulder field at the south-west end of the subdivision there was a moderate algae cover and a sparse fauna. The MTZ had a distinct zone of Porphyra, Green filamentous algae (Chaetomorales), and Balanus glandula. Littorina sitkana and Notoacmea persona were scattered sparsely among the barnacles and under the algae. Below this area the amount of algal cover increases although there is no increase in the amount of fauna. Rhodomenia, Ulva, Fucus, Scytosiphon, and Halosaccion were the most common algae on the boulders. Under the boulders were some amphipods but for the most part the boulder bases were covered with sand. At each of the three Bedrock/Boulder points above the boulder/cobble field the amount of flora and fauna increased. The upper tide zone had a few Mytilus in crevices and more Fucus. Tide pools in the MTZ had corallina, Odonthalia, Rhodomela Katharina, Anthopleura (artenisica and xanthogrammica), Notoacmea (scutum), Nucella, and Halochondria. Under cobbles and boulders were Leptasterias (with eggs), Idotea, amphipods, and scale-worms. Fucus, Alaria, Pleurophycus, Nereocystis, and Macrocystis were found a drift on the sand beaches. Clinocardium, Siliqua, Macoma (with drill holes), and Saxidomus were all present on the sand beaches as shells.

The anadromous stream had no fish visible. Mammals in the area: Bear (Mother and at least one cub) Fox, and River Otter (tracks).

The birds in the area were: Glaucous-winged gulls, Harlan's Hawk (Red Tailed), Surf Scoters, Horned Puffins, and Thrush.

K11-1



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

IL-1

ADEC Segment Length: 7700m

0 500 600 900

Map Key: AKP-IL-1
Name: Greg Chaney
Date: May 15 1990
Data Entered:

KODIAK ECOLOGICAL CONSTRAINTS

1A Salmon stream mouth - fry outmigration (4/15 to 7/31)
1B Salmon stream mouth - spawning (7/15 to 9/10; PEAK 8/15)
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 without authorization from ADF&G. No use of methods which might affect nearshore oil or toxicity levels, such as hot water wash or Inipol application, unless authorized by ADF&G. Treatment which is not intrusive and which will not affect nearshore oil or toxicity levels, such as manual removal, can probably proceed without adherence to time constraints. In any case, contact ADF&G prior to treatment for consultation and/or permit application.
AGENCY CONTACT PERSON: ADF&G Ken Middleton 267-2299

1C Salmon fry nursery area (4/31 to 7/31)
No use of methods which might affect nearshore oil or toxicity levels, such as hot water wash or Inipol application, unless authorized by ADF&G. Treatment which will not affect nearshore oil or toxicity levels, such as manual or mechanical removal, can probably proceed without adherence to time constraints. Contact ADF&G prior to treatment for confirmation and advice.
AGENCY CONTACT PERSON: ADF&G Larry Peltz 424-3214

1D Kotol Bay Hatchery release
Pink salmon - late May, early June; Chum salmon - June; Sockeye salmon - early July.
1H Remote release site
No use of methods which might affect nearshore oil or toxicity levels, such as hot water wash or Inipol application, unless authorized by ADF&G. Treatment which will not affect nearshore oil or toxicity levels, such as manual or mechanical removal, can probably proceed without adherence to time constraints. Contact ADF&G for confirmation and authorization.
AGENCY CONTACT PERSON: ADF&G Larry Peltz 424-3214

1I Gill net area
1J Purse seine area
Mainland, West side Kodiak, Shuyak & Moser/Olga Bay (6/9 to 10/1)
East side Kodiak, East side Afognak (7/4 to 10/1)
1K Purse seine hook-off
1L Set net sites
Contact ADF&G for confirmation - dates and locations may vary. Restrict boat and air traffic to essential minimum. When set net sites are present (1L) restrict beach operations to essential minimum as authorized by ADF&G. If plans for treatment include methods such as hot water wash or Inipol application which might affect nearshore oil or toxicity levels, contact ADF&G for consultation and authorization.
AGENCY CONTACT PERSON: ADF&G Larry Nicholson 424-4791

2M Herring spawning (4/15 to 6/30)
Contact ADF&G for confirmation - dates and locations may vary. Restrict boat traffic to essential minimum. Avoid damage to unoiled intertidal and subtidal algae and seagrass. If plans for treatment include methods such as hot water wash or Inipol application which might affect nearshore oil or toxicity levels, contact ADF&G for consultation and authorization.
AGENCY CONTACT PERSON: ADF&G Larry Nicholson 486-4791

3P Harbor seal and sea lion pupping (5/10 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. No application of Inipol within two weeks of arrival dates (work window at these sites is limited to 7/2 to 7/31). Contact ADF&G and USFWS prior to treatment for confirmation.
AGENCY CONTACT PERSON: US National Marine Fisheries Service Steve Zimmerman 586-7235
ADF&G Don Calkins 267-2403

5R Seabird colony (5/1 to 9/1)
Restrict air and boat traffic to essential minimum. No personnel within 800m. Aircraft to maintain 800m horizontal, 300m vertical distance from colony. Contact USFWS prior to treatment.
AGENCY CONTACT PERSON: USFWS Jill Parker 786-3377

5S Shorebird/waterfowl concentration (4/1 to 5/15)
Restrict all activity to essential minimum, especially air traffic. Contact USFWS and ADF&G for confirmation.
AGENCY CONTACT PERSON: USFWS Jill Parker 786-3377
ADF&G Tom Rothy 267-2208

5T All Bald Eagle nests (3/1 to 8/1)
Active Bald Eagle nests (3/1 to 9/1)
Restrict air traffic and all disturbance 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.
AGENCY CONTACT PERSON: USFWS Jill Parker 786-3377

6U Recreation: Tent sites (8/1 to 9/15)
6V Anchorages (8/1 to 9/15)
6W Forest Service cabins (8/1 to 9/15)
6X Lodge (8/1 to 9/15)
6Y Special use destination

7Z Subsistence area: Salmon harvesting (8/1 to 9/30)
7H Finfish harvesting
7I Deer harvesting (8/1 to 1/7)
7JJ Invertebrate harvesting
7KK Bear harvesting (4/1 to 5/15 and 10/25 to 11/30)
Contact ADF&G and appropriate Native Corporation for specific dates, locations, and constraints. Restrict boat and air traffic and beach disturbance to essential minimum. If plans for treatment include methods such as hot water wash or application of Inipol which might affect intertidal or nearshore oil or toxicity levels, contact ADF&G and appropriate Native Corporation for authorization - see Native Corporation Contact List for each Native Corporation's contact person.
AGENCY CONTACT PERSON: ADF&G Jim Fall 267-2359

FIELD SHORELINE COMMENT SHEET

SEGMENT ST / K16-01-IL-1 SUBDIVISION: A DATE 5/15/90

USCG
NAME Kenneth M. Treabue SIGNATURE K Treabue

☒ NO TREATMENT RECOMMENDED ☐ TREATMENT SUGGESTED
COMMENTS

Concur with OC Comments. Not enough recoverable oil to recommend work order.

ADEC
NAME Francine T. Bennis SIGNATURE Francine T. Bennis

☐ NO TREATMENT RECOMMENDED ☒ SPOT CHECK SUGGESTED
COMMENTS

Oil occurs in areas of this segment in the form of ST, CT, mousse caught in rock cracks/crevices, & mousse patties. Interestingly, the patties observed were located in a recent high tide line. We collected them.
Due to weather conditions, exact extent of oil present was difficult to observe. We did not complete assessment of the entire segment. Given the circumstances that patties present in a recent high tide line, I recommend a spot check of area later in the summer to see if any more oil is revealed.

LAND MANAGER
NAME Clo FLORSCHUTZ-FWS SIGNATURE Clo Florschutz

☐ ~~NO TREATMENT RECOMMENDED~~ ☐ ~~TREATMENT SUGGESTED~~
COMMENTS

Agree on recheck of area as ADEC recommends - see attachment #2

Attachment 2
U.S. Fish and Wildlife Service Shoreline Cleanup Disclaimer

This comment sheet is based on current observations and is solely for the purpose of planning and scheduling of 1990 response treatment actions. It in no way implies that the State or Federal government will not in the future determine that further restoration or other treatment, or compensation is warranted regarding this area, or that the area is considered by the Federal or State government to be adequately "clean" or "restored" for the purpose of any claim which the State or Federal government has brought or may bring against Exxon, Incorporated or any other potentially responsible party.

SHORELINE EVALUATION

SEGMENT ST/ K11-01-IL-001 SUBDIVISION A (1 OF 2) DATE 5/15/90

SEGMENT ENVIRONMENTAL SENSITIVITIES AND TIME CONSTRAINTS:
1A Salmon stream mouth - fry outmigration (4/15 to 7/31)
1B Salmon stream mouth - spawing (7/15 to 9/10; PEAK 8/15)
(262-80-10010, 262-80-10012)
4QQ State Marine Park National Wildlife Refuge
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 treatment is planned, **a cultural resource evaluation is required prior** to shoreline treatment.

SHPO SIGNATURE: Marlene E. Holmes DATE: June 19, 1990

OILING CATEGORIZATION:

Wide 0 m: Medium 0 m: Narrow 0 m: V.Light 713 m: No Oil 1630 m
Subsurface Oil Observed: Yes____ No X Maximum Depth_____

RECOMMENDATIONS:

X No Treatment Recommended	_____Snare/Absorbent Booms
_____Treatment Recommended	_____Oil Snares (pom poms)
_____Manual Pickup	_____Absorbents (pads,rolls,etc)
_____Bioremediation	_____Spot Washing:_____Wands
_____Tarmat Removal	_____Beach Cleaner
	_____Other (see comments)

COMMENTS: _____

TAG COMMENTS: _____

TAG APPROVAL DATE: 6/16/90 ADVR Flag as ~~Self~~ Priority for Fall survey, if reassessment desired.
ADEC Ray Morris
EXXON Amy Teal FOSC: D Jacobsen DATE: 7/5/90
NOAA Jason C Tuckett
USCG C.A. Freitel

OG Greg Chaney

SEG/SUBSEG STI K11-1-FL-1

SUBDIVISION A

DATE May 15 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

Photo location, direction, and number

SKETCH MAP

SPEC SYMBOL

◇ DRIPS OF TAR AND STAIN

ALASKA PENINSULA

SPLATTERED STAIN, COAT AND COVER ON LARGE BOULDERS. SPORADIC MOUSSE IN CRACKS COVERED WITH SAND. MOUSSE POOLED TO 2 CENTIMETERS. (SEE COMMENTS)

STREAM

SPLATTER STAIN & COAT

SPLATTER STAIN, COAT & COVER

SAND LWL

6 RECENTLY LANDED MOUSSE & SAND BALLS COLLECTED

1

OIL COVER ON PLASTIC TRASH CAN STAIN ON DRIFT WOOD

RECENTLY LANDED. MOUSSE BALL (TARBALL) COLLECTED

SAND LWL

9

RANDOM SPLATTER STAIN & COAT

ISLAND BAY

IL-1-A

0 100 200 300

METERS

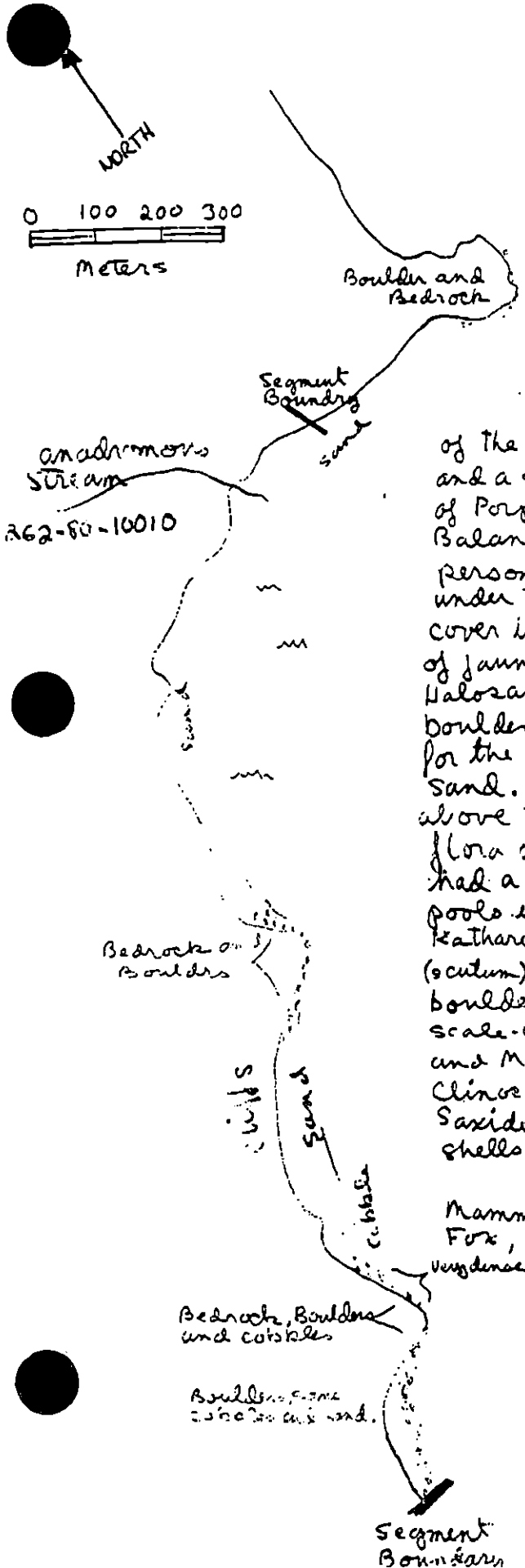
N

Oil Character Length (m): AP 0 PO 10 CV 50 CT 100 ST 750 MS 20 PT 0 TB 0 FL 0 NO 1455

MAY-17-1990 12:38 FROM EXXON KODIAK TO 15643771 P.05

K11-01 IL-01A
5/15/90
H Davis

Ecology Stretch Map



This subdivision had a mixture of sand beaches cobble beaches and bedrock/boulder points. The rock/boulder and cobble areas had a narrow band of organisms. The lower intertidal area changed rapidly to sand and the upper intertidal area was against the cliffs. The sandy beaches had no visible organisms, although shells indicated that in the shallow subtidal areas there were bivalves.

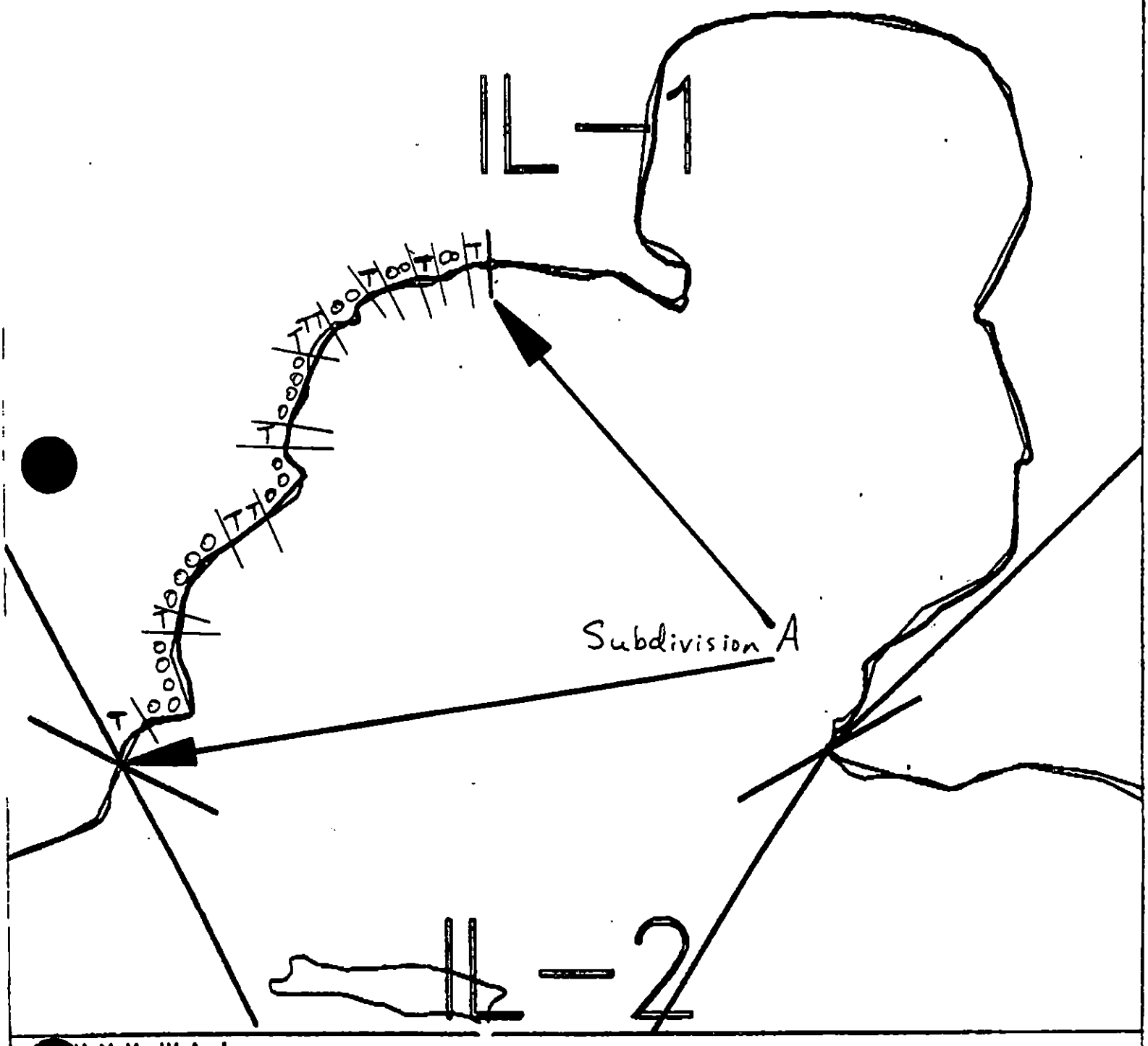
On the boulder field at the south-west end of the subdivision there was a moderate algae cover and a sparse fauna. The MTZ had a distinct zone of Porphyra, Green filamentous algae (Chaetomorpha), and Balanus glandula. Littorina sitkana and Notoacmea persona were scattered sparsely among the barnacles and under the algae. Below this area the amount of algal cover increases although there is no increase in the amount of fauna. Rhodomenia, Ulva, Fucus, Scytosiphon, and Halosaccion were the most common algae on the boulders. Under the boulders were some amphipods but for the most part the boulder bases were covered with sand. At each of the three Bedrock/Boulder points above the boulder/cobble field the amount of flora and fauna increased. The upper tide zone had a few Mytilus in crevices and more Fucus. Tide pools in the MTZ had corallina, Odonthalia, Rhodomela, Katharina, Anthopleura (artemisia and xanthogrammica), Notoacmea (scutum), Nucella, and Haliochondria. Under cobbles and boulders were heptasterius (with eggs), Idotea, Amphipods, and scale-worms. Fucus, Alaria, Pleurophycus, Nereocystis, and Macrocystis were found a drift on the sand beaches. Clinocardium, Siliqua, Macoma (with drill holes), and Saxidomus were all present on the sand beaches as shells.

The anadromous stream had no fish visible. Mammals in the area: Bear (Mother and at least one cub) Fox, and River Otter (tracks).

Littorina sitkana

The birds in the area were: Glaucous-winged gulls, Harlan's Hawk (Red Tailed), Surf Scoters, Horned Puffins, and Thrush.

K11-1



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

IL-1

ADEC Segment Length: 7700m

0 500 1000

Map Key: AKP-IL-1
Name: Greg Chaney
Date: May 15 1990
Data Entered:

REGION: KODIAK

SEGMENT: ST/K11-01-IL-001

SUBDIVISIONS: B (2 OF 2)

SHORELINE EVALUATION

SEGMENT ST/ K11-01-IL-001 SUBDIVISION B (2 OF 2) DATE 6/1/90

SEGMENT ENVIRONMENTAL SENSITIVITIES AND TIME CONSTRAINTS:
1A Salmon stream mouth - fry outmigration (4/15 to 7/31)
1B Salmon stream mouth - spawing (7/15 to 9/10; PEAK 8/15)
(262-80-10010, 262-80-10012)
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 treatment is planned, **a cultural resource evaluation is required prior** to shoreline treatment.

SHPO SIGNATURE:_____ DATE:_____

OILING CATEGORIZATION:

Wide 0 m: Medium 0 m: Narrow 0 m: V.Light 2006m: No Oil 1504 m
Subsurface Oil Observed: Yes____ No X Maximum Depth_____

RECOMMENDATIONS:

X No Treatment Recommended	_____Snare/Absorbent Booms
_____Treatment Recommended	_____Oil Snares (pom poms)
_____Manual Pickup	_____Absorbents (pads,rolls,etc)
_____Bioremediation	_____Spot Washing:_____Wands
_____Tarmat Removal	_____Beach Cleaner
	_____Other (see comments)

COMMENTS: _____

TAG COMMENTS:_____

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

KODIAK ECOLOGICAL CONSTRAINTS

1A Salmon stream mouth - fry outmigration (4/15 to 7/31)
1B Salmon stream mouth - spawning (7/15 to 9/10; PEAK 8/15)
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 without authorization from ADF&G. No use of methods which might affect nearshore oil or toxicity levels, such as hot water wash or Inipol application, unless authorized by ADF&G. Treatment which is not intrusive and which will not affect nearshore oil or toxicity levels, such as manual removal, can probably proceed without adherence to time constraints. In any case, contact ADF&G prior to treatment for consultation and/or permit application.
AGENCY CONTACT PERSON: ADF&G Ken Middleton 267-2299

1C Salmon fry nursery area (4/31 to 7/31)
No use of methods which might affect nearshore oil or toxicity levels, such as hot water wash or Inipol application, unless authorized by ADF&G. Treatment which will not affect nearshore oil or toxicity levels, such as manual or mechanical removal, can probably proceed without adherence to time constraints. Contact ADF&G prior to treatment for confirmation and advice.
AGENCY CONTACT PERSON: ADF&G Larry Peltz 424-3214

1D Kotol Bay Hatchery release
Pink salmon - late May, early June; Chum salmon - June; Sockeye salmon - early July.
1H Remote release site
No use of methods which might affect nearshore oil or toxicity levels, such as hot water wash or Inipol application, unless authorized by ADF&G. Treatment which will not affect nearshore oil or toxicity levels, such as manual or mechanical removal, can probably proceed without adherence to time constraints. Contact ADF&G for confirmation and authorization.
AGENCY CONTACT PERSON: ADF&G Larry Peltz 424-3214

1I Gill net area
1J Purse seine area
Mainland, West side Kodiak, Shuyak & Moser/Olga Bay (6/9 to 10/1)
East side Kodiak, East side Afognak (7/4 to 10/1)
1K Purse seine hook-off
1L Set net sites
Contact ADF&G for confirmation - dates and locations may vary. Restrict boat and air traffic to essential minimum. When set net sites are present (1L) restrict beach operations to essential minimum as authorized by ADF&G. If plans for treatment include methods such as hot water wash or Inipol application which might affect nearshore oil or toxicity levels, contact ADF&G for consultation and authorization.
AGENCY CONTACT PERSON: ADF&G Larry Nicholson 424-4791

2M Herring spawning (4/15 to 6/30)
Contact ADF&G for confirmation - dates and locations may vary. Restrict boat traffic to essential minimum. Avoid damage to unciled intertidal and subtidal algae and seagrass. If plans for treatment include methods such as hot water wash or Inipol application which might affect nearshore oil or toxicity levels, contact ADF&G for consultation and authorization.
AGENCY CONTACT PERSON: ADF&G Larry Nicholson 486-4791

Harbor seal and sea lion pupping (5/10 to 7/1)
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. No application of Inipol within two weeks of arrival dates (work window at these sites is limited to 7/2 to 7/31) Contact ADF&G and USFWS prior to treatment for confirmation.
AGENCY CONTACT PERSON: US National Marine Fisheries Service Steve Zimmerman 586-7235
ADF&G Don Calkins 267-2403

5R Seabird colony (5/1 to 9/1)
Restrict air and boat traffic to essential minimum. No personnel within 800m. Aircraft to maintain 800m horizontal, 300m vertical distance from colony. Contact USFWS prior to treatment.
AGENCY CONTACT PERSON: USFWS Jill Parker 786-3377

5S Shorebird/waterfowl concentration (4/1 to 5/15)
Restrict all activity to essential minimum, especially air traffic. Contact USFWS and ADF&G for confirmation.
AGENCY CONTACT PERSON: USFWS Jill Parker 786-3377
ADF&G Tom Rothy 267-2206

5T All Bald Eagle nests (3/1 to 6/1)
Active Bald Eagle nests (3/1 to 9/1)
Restrict air traffic and all disturbance 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.
AGENCY CONTACT PERSON: USFWS Jill Parker 786-3377

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 (6/1 to 9/30)
Finfish harvesting
Deer harvesting (8/1 to 1/7)
Invertebrate harvesting
Bear harvesting (4/1 to 5/15 and 10/25 to 11/30)
Contact ADF&G and appropriate Native Corporation for specific dates, locations, and constraints. Restrict boat and air traffic and beach disturbance to essential minimum. If plans for treatment include methods such as hot water wash or application of Inipol which might affect intertidal or nearshore oil or toxicity levels, contact ADF&G and appropriate Native Corporation for authorization - see Native Corporation Contact List for each Native Corporation's contact person.
AGENCY CONTACT PERSON: ADF&G Jim Fall 267-2359

FIELD SHORELINE COMMENT SHEET

SEGMENT ST / K 1101 (FL-1) SUBDIVISION: B DATE 6/1/90

USCG
NAME Michael B. Millner SIGNATURE Michael B Millner DC1

☒ NO TREATMENT RECOMMENDED ☐ TREATMENT SUGGESTED
COMMENTS

NTR. There is virtually Nothing To Recover

ADEC
NAME Francis J Beaty SIGNATURE Francis J Beaty

☒ NO TREATMENT RECOMMENDED ☐ TREATMENT SUGGESTED
COMMENTS

Observed Mousse patties + balls.

Collected them.

Occasional splatter is present otherwise

LAND MANAGER
NAME OTTO FLORSCHUTZ SIGNATURE Otto Florschutz FWS

☐ ~~NO TREATMENT RECOMMENDED~~ ☒ ~~TREATMENT SUGGESTED~~
~~COMMENTS~~

Agree with the above - Nothing recoverable - see attached #2

REVISION NO. 03/21/90

Attachment 2
U.S. Fish and Wildlife Service Shoreline Cleanup Disclaimer

This comment sheet is based on current observations and is solely for the purpose of planning and scheduling of 1990 response treatment actions. It in no way implies that the State or Federal government will not in the future determine that further restoration or other treatment, or compensation is warranted regarding this area, or that the area is considered by the Federal or State government to be adequately 'clean' or 'restored' for the purpose of any claim which the State or Federal government has brought or may bring against Exxon, Incorporated or any other potentially responsible party.

SHORELINE OILING SUMMARY

REVISION NO 3/22/90

OG R. Narty USCG B. Milliner SEGMENT ST/ K1101 (IL-1)
BIO H. Davis LAND REP O. Florschutz SUBDIVISION B
EXXON — ADEC F. Bennis TIME 12:30 to 14:30
TEAM NO.: 20 TIDE LEVEL: +1.93m to +1.03m DATE June / 01 / 90
EST. SUBDIVISION LENGTH: 3218 m ☒ Sun ☒ Clouds ☐ Fog ☐ Rain ☐ Snow
UPLANDS DESCRIPTION: ☒ Grass ☐ Forest ☐ Rock
SURVEYED FROM: ☒ Foot ☐ Boat ☐ Helo WORKING DIRECTION: W to E
SURFACE SEDIMENTS: R 10 % B 20 % C 10 % P 5 % G 5 % S 50 % M — % V — %
SLOPE : Lang 100 % Hang — % Vert — % WAVE EXPOSURE: ☒ Low ☐ Med ☐ High
OIL CATEGORY LENGTH: W — m M — m N — m VL 1800 m NO 1418 m

SURFACE OIL

CHARACTER	DISTRIBUTION				OIL / FILM COLOR					IMPACTED ZONES			
	/C	/B	/P	/S	SHEEN (BR)	THICK (RW)	DK (SL)	MED (TL)	LT (LAM)	SU	UI	MI	LI
ASPHALT PAVEMENT													
POOLED													
COVER				X		X				X	X		
COAT				X		X					X		
STAIN													
MOUSSE													
PATTIES				X					X	X	X		
TARBALLS				X					X		X	X	X
FILM													
NO OIL													

PAVEMENT: H F S None sq. m by ____ cm

PATTIES / TARBALLS 2 BAGS

NEAR SHORE SHEEN? (NO) BR RW SL TL

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

DEBRIS COLLECTED ☐ YES ☒ NO

TYPE ____

#BAGS ____

Photographs:

Roll No. ____

Frames ____

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 SHEEN (BR)	THICK (RW)	DK (SL)	MED (TL)	LT (LAM)	PIT ZONE SU	UI	MI	LI	ANA	SUBSURFACE SEDIMENTS
							-													
							-													
							-													
							-													
							-													
							-													

COMMENTS Oiling is very minor. There are scattered mousse balls and patties and minor splatter. Beach is predominantly sand.

REVIEWED BAT DATE 6/11/90

R. Marty

IENT ST/ Knot I L-1

IVISION B

1 / June 90

CKLIST

Arrow
prox. Scale
g/Sub Bndry
Dist.
dth
ngth
Cover
brasive Character
HW/LW
d
site Location(s)
ffile(s)
Location(s)
ore Location(s)

END

Subsurface Oil

2

bsurface Oil

T/C
ous Distribution

T/D
Distribution

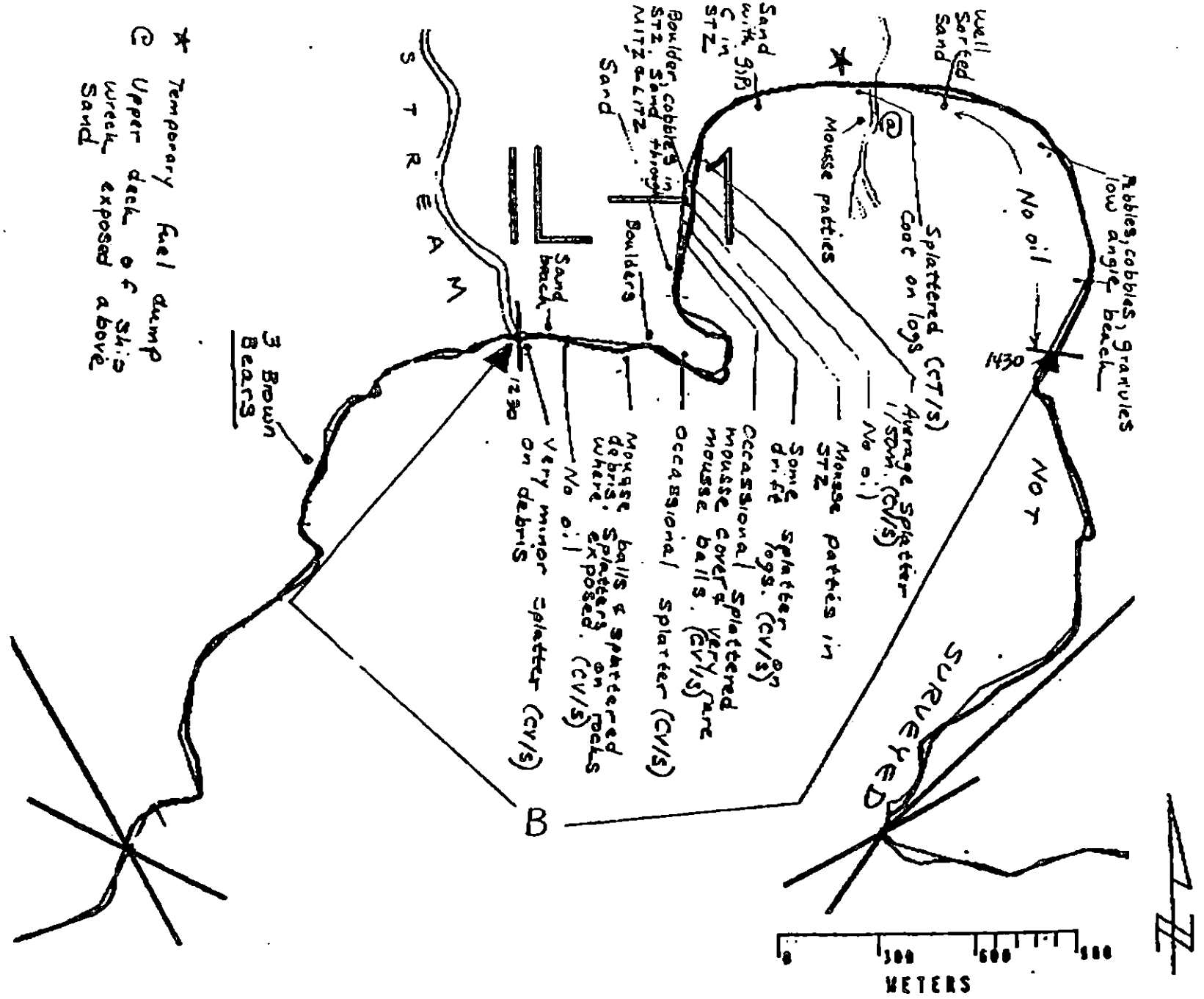
T/P
Distribution

T/S
d Distribution

R.
egetation

ocation, direction,
mber

SKETCH MAP



acter Length (m): AP — PO — CV 1800 CT 10m CT — — PT 900 MB TAT 900 FL — NO 1418

REVISION 93/24/00

SHORELINE ECOLOGICAL SUMMARY

REVISION 03/22/90

Segment ST / K11-01 Subdivision IL-001 B Date (mo / day / yr) 6/1/90

Time (24 hr) 12:40 Biologist N. Davis

(A) Substrate type and % of segments:
(1) Bedrock 10 (2) Boulder 20 (3) Cobble 10 (4) Pebble 10 (5) Sand 50 (6) Silt —

(B) Overall % cover of biota (% of segment): Dense 10% Moderate 10% Low 80% (35%)

(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-20-14
Frames #1

BARNACLES Sparse - Moderate on available Rock surfaces.

Dense			Moderate			Sparse			Rare		
1U	1M	1L							1U	1M	1L
2	2	2			2				2	2	2
3	3	3	3	3	3				3	3	
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

NOT PRESENT 5, 6

MYTILUS very few patches on Boulders.

Dense			Moderate			Sparse			Rare		
1U	1M	1L	1U	1M	1L	1U	1M	1L	1U	1M	1L
2	2	2		2	2			2			2
3	3	3	3	3	3	3	3	3	3	3	3
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

NOT PRESENT 1, 3, 5, 6

GASTROPODS Littorina - Dense - Sparse, Limpets Mod-Sparse, Nucella Rare

Dense			Moderate			Sparse			Rare		
	1M	1L							1U	1M	
		2									
		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
6	6	6	6	6	6	6	6	6	6	6	6

NOT PRESENT 4, 6

FUCUS Moderate - Sparse patches.

Dense			Moderate			Sparse			Rare		
1U	1M	1L	1U	1M	1L			1L	1U	1M	1L
2	2	2							2	2	2
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

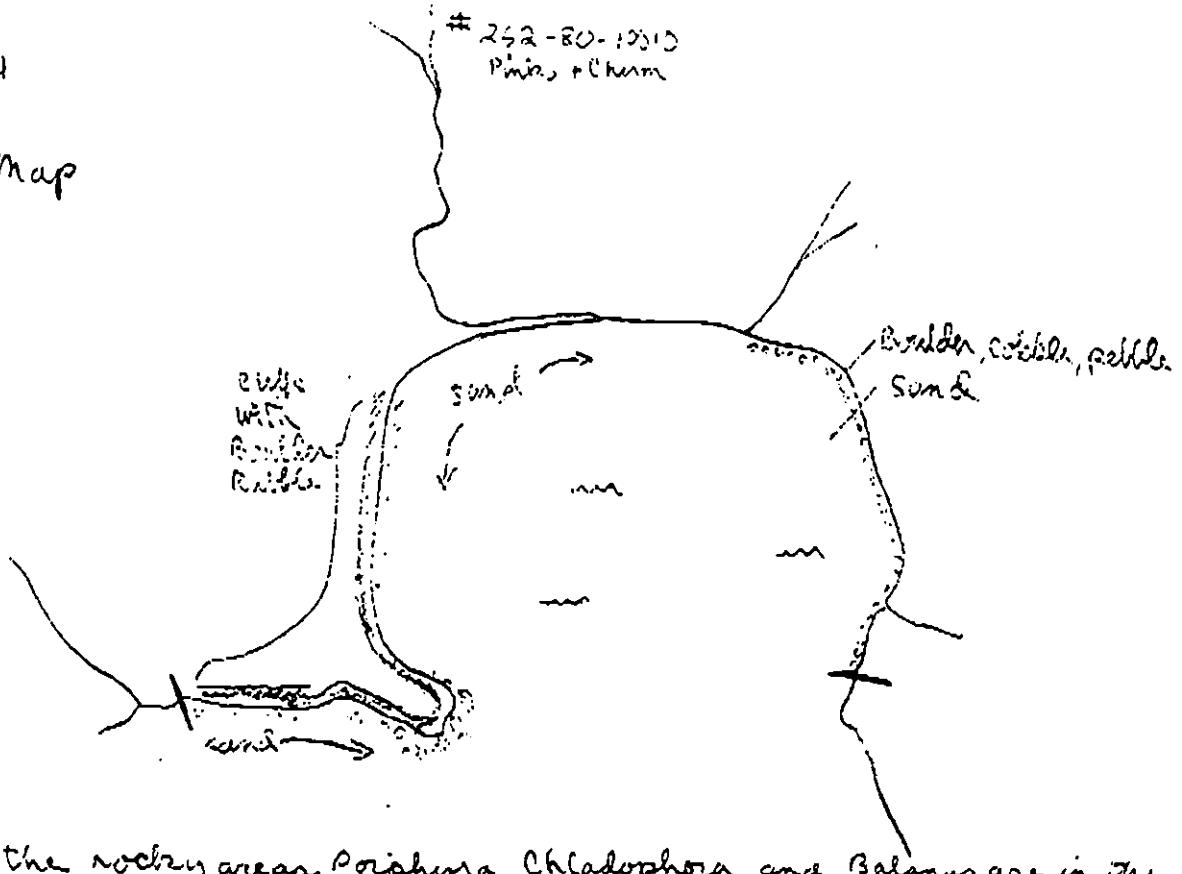
NOT PRESENT 4, 5, 6

Wildlife Observations/ General Comments: Birds seen in the area: Glaucous-winged gulls, Surf Scoters, Horned Puffins, Swallows, Surfbirds, and a Semi-palmated plovers. Mammals: Fox tracks, Bear tracks, and 1 Female 2 cubs were seen foraging in IL-001A.
See Ecology map.

Ecological Considerations: No Ecological Constraints listed. One anadromous stream in IL-001B #262-30-10010 has Pinks and Chum Salmon spawning in it. No Eagles were seen in the area.

½ mile

Ecology Map
IR11-01
IL-001B
6/1/90
N. Davis



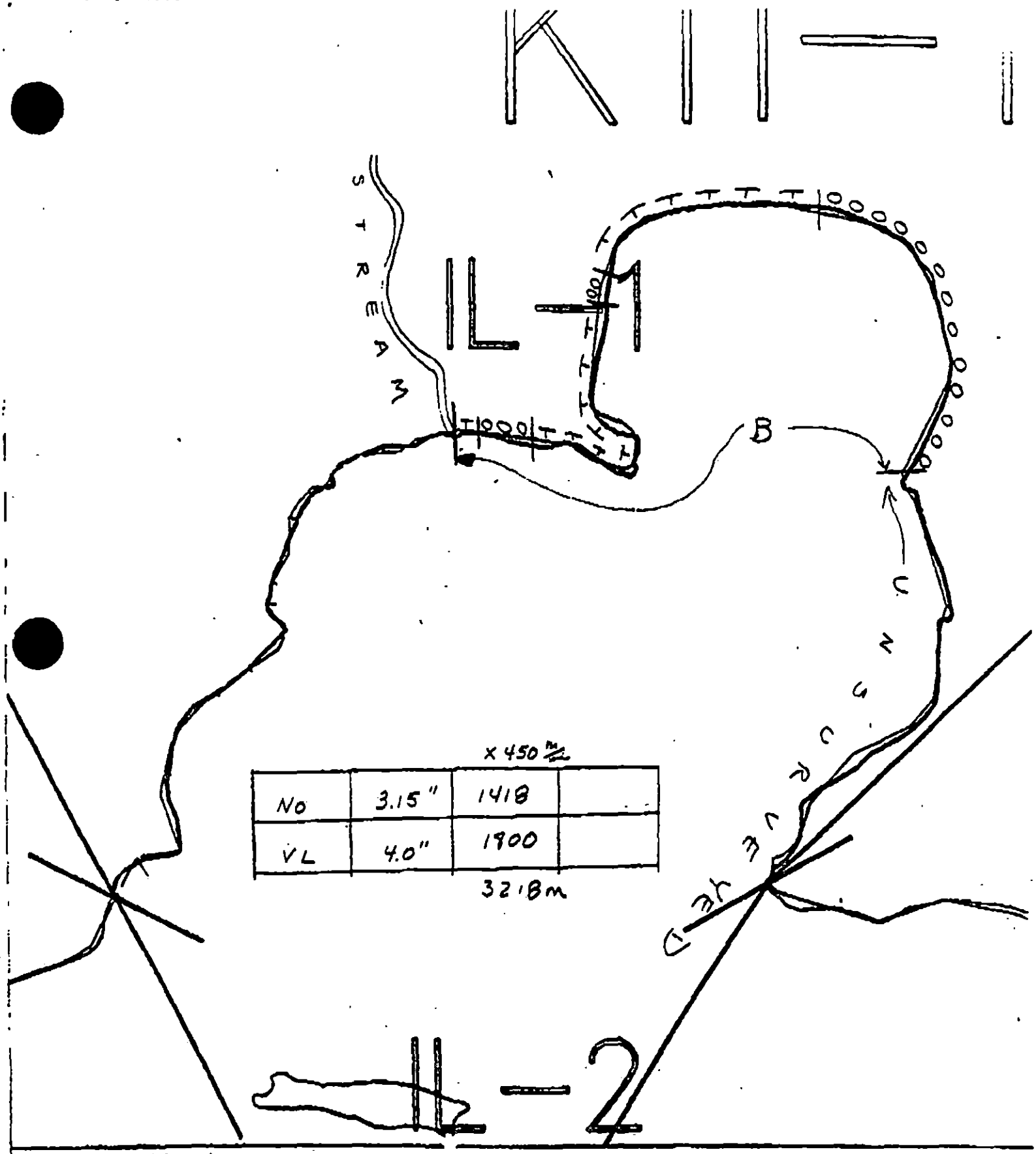
In the rocky areas Porphyra, Chladophora, and Balanus are in the highest areas below this Littorina, Notoacmea, Collisella, became more common, Fucus, Scytosiphon, Ulva and Halosaccion were the most common algae on the boulders. Under the boulders Leptasterias, amphipods, Littorina eggs, and Idotea. In the LTZ Alaria, Rhodomenia, Ulva, and Iridaea were common. On the sandy flats shells of Clinocardium, Siliqua, Saridomus, Mya, and Macoma. Some of these shells had drilled holes in them. Eutorina had been washed in and stranded in the sand flats.

Control No.
(Office Use Only)

PHOTOGRAPHY LOG

ROLL NO. ST-20-14 FROM 6/1/90 TO _____
TEAM NO. 20 PWS / KENAI / KODIAK / AK. PENINSULA

FRAME NUMBER	PHOTOGRAPHER	DATE	SITE ID	LOCATION/COMMENTS	TIME
1	H. Davis	6/1/90	KIP01 IL-001	Sandy/oil mixture. UTZ	1[illegible]
2	↓	↓	KI0-02 AS 007	Mousse and coat UTZ	6[illegible]
3			↓	" " UTZ	6[illegible]
4				mousse "balls" 1-2 inch diam. 2-3 cm thick	6[illegible]
5	↓	↓	KI0-01 AS-008	mousse patties, coat and cover UTZ	6[illegible]



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

K1101 IL-1

ADEC Segment Length: 7700m

0 500 1000 1500 2000

K1101
Map Key: AKP-IL-1
Name: R. Marty
Date: 1 June 1990
Date Entered:

SHORELINE EVALUATION

SEGMENT ST/ K11-01-IL-001 SUBDIVISION B (2 OF 2) DATE 6/1/90

SEGMENT ENVIRONMENTAL SENSITIVITIES AND TIME CONSTRAINTS:
1A Salmon stream mouth - fry outmigration (4/15 to 7/31)
1B Salmon stream mouth - spawing (7/15 to 9/10; PEAK 8/15)
(262-80-10010, 262-80-10012)
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 treatment is planned, **a cultural resource evaluation is required prior** to shoreline treatment.

SHPO SIGNATURE: Charles E Holmes DATE: June 19, 1990

OILING CATEGORIZATION:

Wide 0 m: Medium 0 m: Narrow 0 m: V.Light 2006m: No Oil 1504 m
Subsurface Oil Observed: Yes____ No X Maximum Depth_____

RECOMMENDATIONS:

X No Treatment Recommended	____Snare/Absorbent Booms
____Treatment Recommended	____Oil Snares (pom poms)
____Manual Pickup	____Absorbents (pads,rolls,etc)
____Bioremediation	____Spot Washing:____Wands
____Tarmat Removal	____Beach Cleaner
	____Other (see comments)

COMMENTS: _____

TAG COMMENTS: _____

TAG APPROVAL DATE: 6/16/90
ADEC Ray Morris R. Morris
EXXON Andy Tosh
FOSC _____ DATE: 7/5/90
NOAA Joseph C Talbott
USCG G.A. Reiter G.A. Reiter

; R. Marty

GMENT ST/ Knot I L-1

BDIVISION B

TE 1 / June 00

HECKLIST

- 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)

GEND

1 △ No Subsurface Oil

2 ▲ Subsurface Oil

CT/C
rhodus Distribution

CT/B
on Distribution

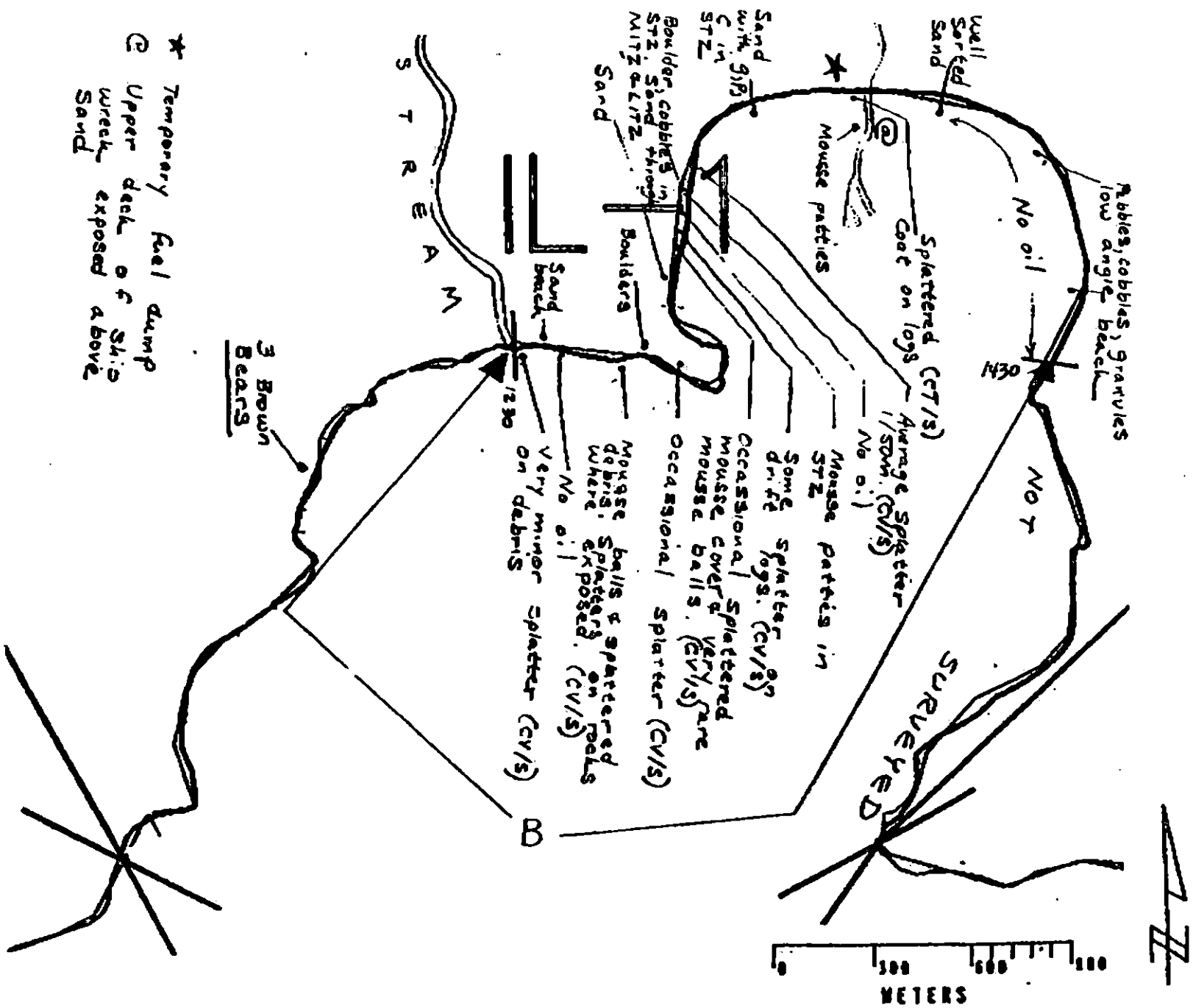
CT/P
ay Distribution

CT/S
shed Distribution

ee.
d Vegetation

o location, direction, number

SKETCH MAP

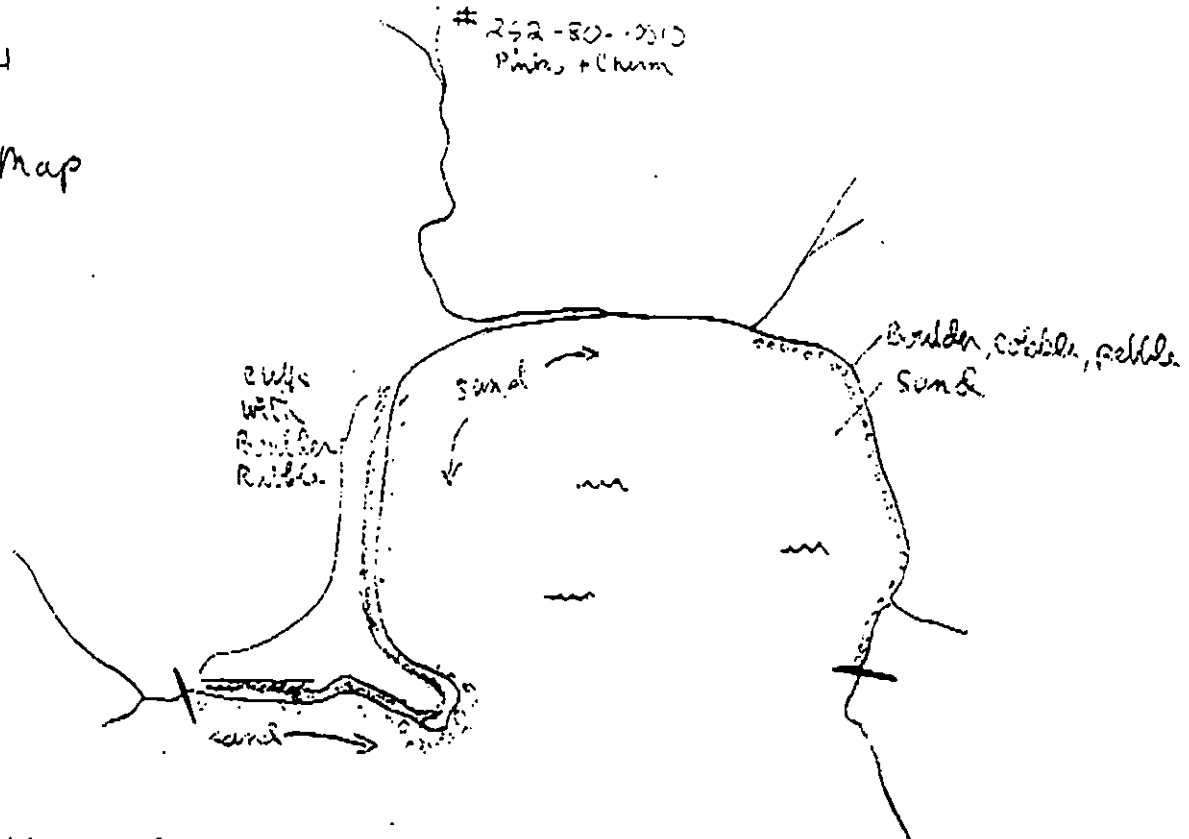


haracter Length (m): AP — PO — CV/S CV 1800 CT 10m — PT 900 MB IR 900 FL — NO 1418

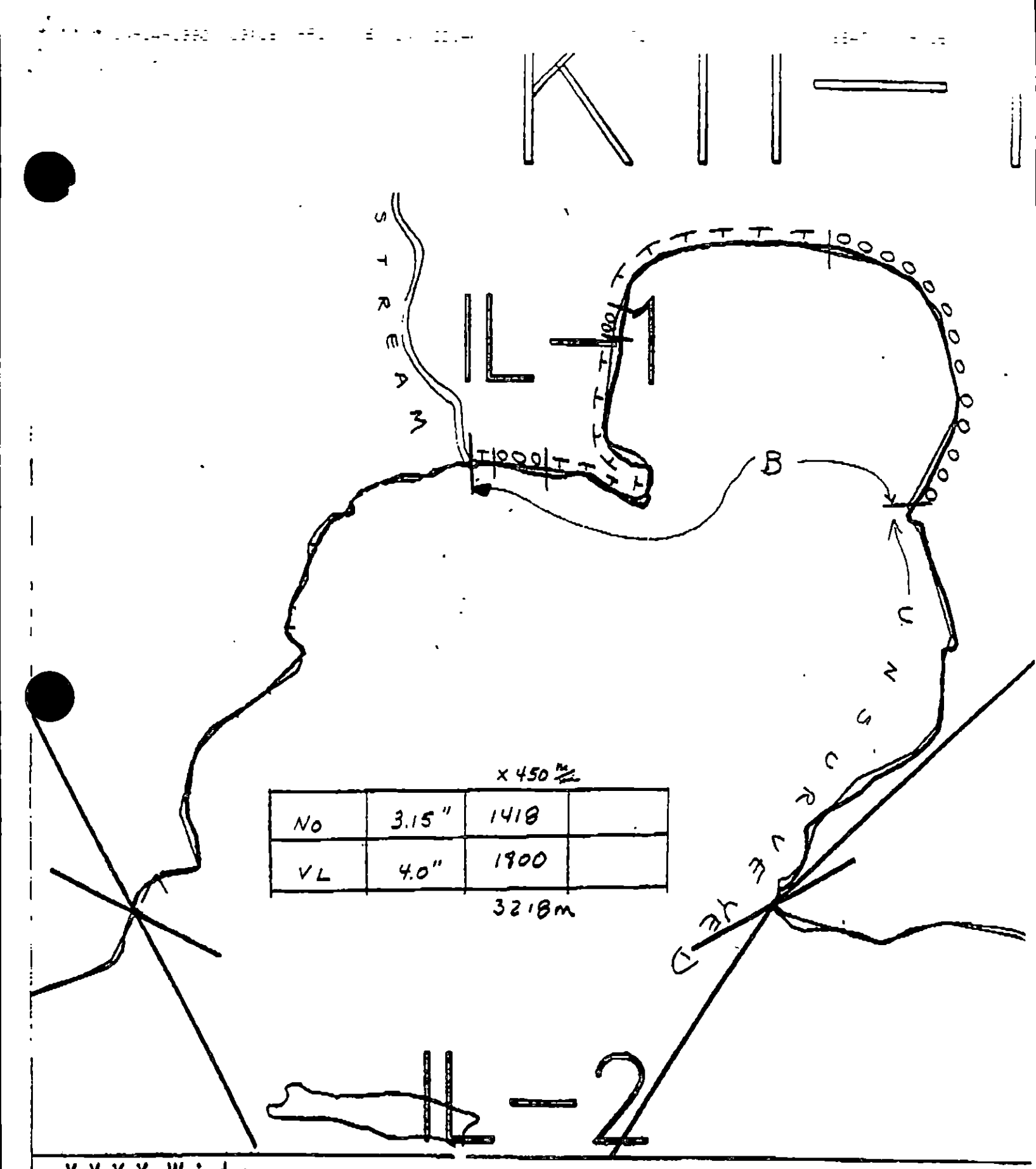
REVISION 03/24/00

½ mile

Ecology Map
IR11-01
IL-001B
6/1/90
N. Davis



In the rocky areas Porphyra, Chladophora, and Balanus are in the highest areas below this Littorina, Notoacmea, Collisella, became more common. Fucus, Scytosiphon, Ulva and Halosaccion were the most common algae on the boulders. Under the boulders Leptasterias, amphipods, Littorina eggs, and Idotea. In the LTZ Alaria, Rhodomenia, Ulva, and Iridaea were common. On the sandy flats shells of Clinocardium, Siliqua, Saxidomus, Mya, and Macoma. Some of these shells had drilled holes in them. Entomma had been washed in and stranded in the sand flats.



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

K1101 IL-1

ADEC Segment Length: 7700m

0 500 1000 1500
METERS

K1101
Map Key: AKP-IL-1
Name: R. Marty
Date: 1 June 1990
Data Entered:

1991 MAYSAP EVALUATION

SEGMENT: K1009DB002 SUB: M REGION: KOD SURVEY DATE: 5/28/91

ENVIRONMENTAL SENSITIVITIES:
Work Window(s) OPEN 5/1 - 7/10; RESTRICTED 7/10 - 9/15

Ecological/Constraints (see page two for details) Anadromous stream

ARCHAEOLOGICAL CONSTRAINTS:
If treatment is planned, a cultural resource evaluation is required prior to shoreline treatment.

SHPO Signature: _____ Date: _____

RECOMMENDATIONS:	INITIAL	TAG	FOSC
TREATMENT REQUIRED (Y or N)	N		
Manual Pickup (Check as Req.)			
Spot Washing			
Bio-Customblen Only			
Bio-Inipol/Customblen			
Other _____			
Other _____			

COMMENTS:
INITIAL: _____

TAG: _____

FOSC: _____

TAG APPROVAL DATE: _____ **FOSC APPROVAL DATE:** _____

ADEC _____ FOSC _____

EXXON _____

USCG _____

NOAA _____

ECOLOGICAL CONSTRAINTS
1991 FIELD ACTIVITIES

Anadromous Stream: Unlimited treatment up to stream bank between May 15 and July 10. ADF&G approval required for work after July 10. Fish Habitat Permit required for instream work. ADF&G approval required for bioremediation within 100 meters of anadromous stream after July 10.

MAJOR FIELD SHORELINE COMMENT SHEET

TEAM NO. 6-HELO SEGMENT DB-2 SUBDIVISION A DATE 5/28/91

ADEC
NAME J. BARNHART, ADEC&G SIGNATURE Jeff Barnhart

☒ NTR Oil in the form of AP, TB < 10% extended from the log line into the tidal flat a distance of 30-35m. Basically oil was located along most of the segment which contains Rex creek, anadromous stream # 262-70-10030. Most oil located was removed or broken apart. Approx 45 pounds of oil was removed. Small oil sheens were observed in the sand adjacent to the oil.

EXXON
NAME R. COULTER, EXXON SIGNATURE Ray R. Coulter

☑ NTR ALL RECOVERABLE AP/TB/SOR WAS REMOVED DURING THE SURVEY. NO ADDITIONAL ATTENTION NEEDED.

LANDMANAGER
NAME J. HARDISTER OF USF&WS SIGNATURE John P. Hardister

☑ NTR Very little SOR remained on this segment following the survey. No further treatment recommended.

USCG/NOAA
NAME CMD R. SPUHR/G. SHIGENAKA SIGNATURE R Spuhr / Gary Shigenaka

☒ NTR SOR/AP found in this segment was removed by TV crew workers during survey.

SURVEYED PORTION OF THE SEGMENT CONSISTED OF THE SHORELINE AROUND THE PERIMETER OF A VERY BROAD SEMI-ENCLOSED TIDAL SAND FLAT, AND THE FLAT ITSELF EXTENDING OUT ABOUT 40m FROM THE SHORELINE (THE TIDE LEVEL AND FIRM SUBSTRATE OF THE FLAT ENABLED EASY ACCESS FOR SURVEY). DRIFT LOGS AND OTHER DEBRIS LINED THE SUPRATIDAL AROUND THE FLAT. NUMEROUS SMALL STREAMS EMPTIED OUTO THE FLAT. A RELATIVELY NUMBER OF DEAD SEABIRDS WERE FOUND ALONG THE SHORELINE (SEE BIO REPORT). WEATHERED SOR WAS FOUND ALONG MUCH OF THE SHORELINE AND OCCASIONALLY ON THE SAND FLAT. THESE MATERIALS WERE EITHER SCOOPED OR BROKEN UP BY THE SURVEY TEAM. ASPHALT WAS ALSO FOUND ON THE BANK OF THE SHORELINE AND WAS PARTIALLY REMOVED. A SMALL CREEK TO THE SOUTHEAST OF THE ASPHALT CONTAINED A FEW SOR PATTIES IN ITS BED AND ALONG ITS BANKS. IT APPEARED THAT LITTLE RECOVERABLE OIL REMAINED IN THE SURVEYED AREA FOLLOWING THE ASSESSMENT AND ASSOCIATED PICKUP ACTIVITIES.

MATSAP FIELD SHORELINE COMMENT SHEET

TEAM NO. 6-HELO SEGMENT DB-2 SUBDIVISION A DATE 5 / 28 / 91

ADEC

NAME J. BARNHART, ADF&G SIGNATURE Jeff Barnhart

☒ NTR Oil in the form of AP, TB & 10% extended from the log line into the tidal flat a distance of 30-35m. Basically oil was located along most of the segment which contains Rex Creek, anadromous stream #256-70-10030. Most oil located was removed or broken apart. Approx 45 pounds of oil was removed. Small oil sheens were observed in the sand adjacent to the oil.

EXXON

NAME R. COULTER, EXXON SIGNATURE

☐ NTR

LANDMANAGER

NAME J. HARDISTER OF USF&WS SIGNATURE John P. Hardister

☑ NTR Very little SOR remained on the segment following the survey. No further treatment recommended.

USCG/NOAA

NAME CWO R. SPURR/G. SHIGENAKA SIGNATURE R. Spurr / Gary Shigenaka

☒ NTR SOR/tP found in this segment was removed by F/V Vera workers during survey.

SURVEYED PORTION OF THE SEGMENT CONSISTED OF THE SHORELINE AROUND THE PERIMETER OF A VERY BROAD SEMI-ENCLOSED TIDAL SAND FLAT, AND THE FLAT ITSELF EXTENDING OUT ABOUT 40M FROM THE SHORELINE (THE TIDE LEVEL AND FIRM SUBSTRATE OF THE FLAT ENABLED EASY ACCESS FOR SURVEY). DRIFT LOGS AND OTHER DEBRIS LITTERED THE SUPRATIDAL AROUND THE FLAT. NUMEROUS SMALL STREAMS EMPTIED OUTO THE FLAT. A RELATIVELY LARGE NUMBER OF DEAD SEABIRDS WERE FOUND ALONG THE SHORELINE (SEE BIO REPORT). WEATHERED SOR WAS FOUND SPORADICALLY ALONG MUCH OF THE SHORELINE AND OCCASIONALLY ON THE SAND FLAT. THESE MATERIALS WERE EITHER RECOVERED OR BROKEN UP BY THE SURVEY TEAM. ASPHALT WAS ALSO FOUND ON THE BANK OF THE SHORELINE AND WAS PARTIALLY REMOVED. A SMALL CREEK TO THE SOUTHEAST OF THE ASPHALT CONTAINED A FEW SOR PATTIES IN ITS BED AND ALONG ITS BANCS. IT APPEARED THAT LITTLE RECOVERABLE OIL REMAINED IN THE SURVEYED AREA FOLLOWING THE ASSESSMENT AND ASSOCIATED PICKUP ACTIVITIES.

MAYSAP SHORELINE OILING SUMMARY

TEAM NO. 6-Helo

SEGMENT K10-09 DB-02

OG D. FitzGerald BIO H. Davis

SUBDIVISION M

ADEC J Barnhart / ADFG LANDMANAGER J Hardister for USFWS

DATE 28 / May / 91

EXXON R. Coulter USCG/NOAA CWO Spurr / G Shigenaka

TIME 9 : 40 to 10 : 20 TIDE LEVEL -1.4 ft. to 1.1 ft. ENERGY LEVEL: ☐ H ☐ M ☒ L

SURVEYED FROM: ☒ FOOT ☐ BOAT ☐ HELO WEATHER: ☒ SUN ☒ CLOUDS ☐ FOG ☒ RAIN ☐ SNOW

TOTAL LENGTH SHORELINE SURVEYED: 825 m NEAR SHORE SHEEN: ☐ BR ☒ RB ☐ SL ☐ NONE

EST. OIL CATEGORY LENGTH: W — m M — m N — m VL 825 m NO — m US — m

LOC	SURFACE OIL CHARACTER										SURFACE SEDIMENT	SHORE SLOPE	AREA		ZONE				NOTES
	AP	MS	TB	SOR	CV	CT	ST	FL	DB	NO	TYPE	V H M L	WIDTH m	LENGTH m	S	UI	MI	LI	
A		T	T								S. Grant	L	20	825	X	X	X		mostly Inbeg. Tar patties

DISTRIBUTION: C = 91-100%; B = 51-90%; P = 11-50%; S = 1-10%; T = <1%

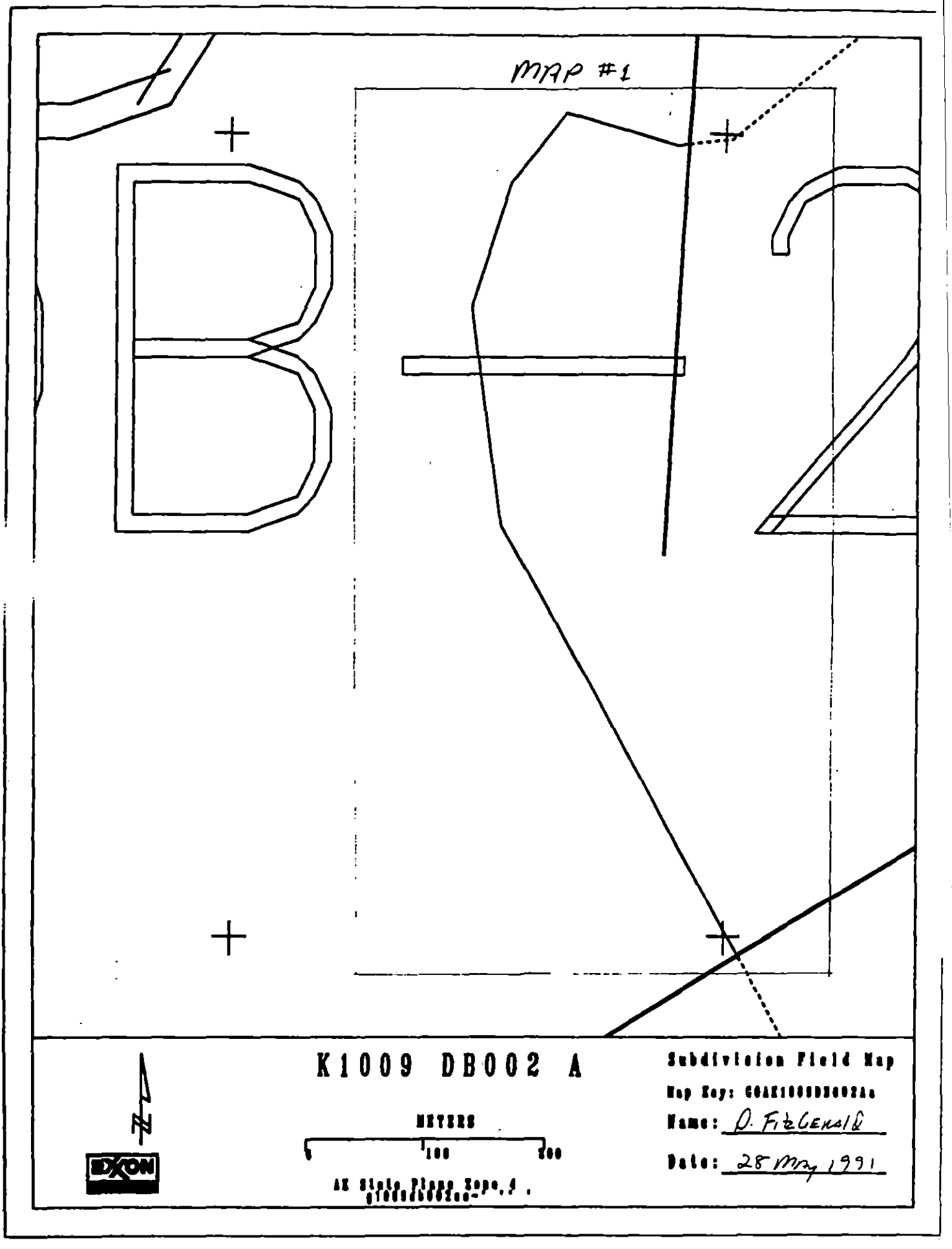
SLOPE: V = VERTICAL; H = HIGH ANGLE; M = MEDIUM ANGLE; L = LOW ANGLE PHOTO ROLL # MAYSAP- 6 - 24 FRAMES 7-

PIT NO.	PIT DEPTH (cm)	SUBSURFACE OIL CHARACTER							OILED ZONE	CLEAN BELOW	H2O LEVEL	SHEEN COLOR	PIT ZONE				SURFACE-SUBSURFACE SEDIMENTS	NOTES
		OP	HOR	MOR	LOR	OF	TR	NO	cm-cm	Y/N	(cm)	B R S N	S	UI	MI	LI		
									-									
									-									
									-									
									-									
									-									
									-									
									-									
									-									
									-									

SHEEN COLOR: B = BROWN; R = RAINBOW; S = SILVER; N = NONE

OG COMMENTS: This segment is located along the northwest side of Day Bay where "Rex" Creek meets an expansive sandy tidal flat region. This shoreline is bordered by a wide marsh system which is littered with substantial driftwood and incised by several small freshwater streams. The entire shoreline contained infrequent tar patties on the tidal flats & along the berm with some SOR on the marsh surface. VECO workers and Survey TEAM collected all observed oiled sediments, amounting to 1¼ BAGS.

REVIEWED: MC 6/3/91



K1009 DB002 A

Subdivision Field Map

Map Key: [illegible]

Name: D. FitzGerald

Date: 28 May 1991

N

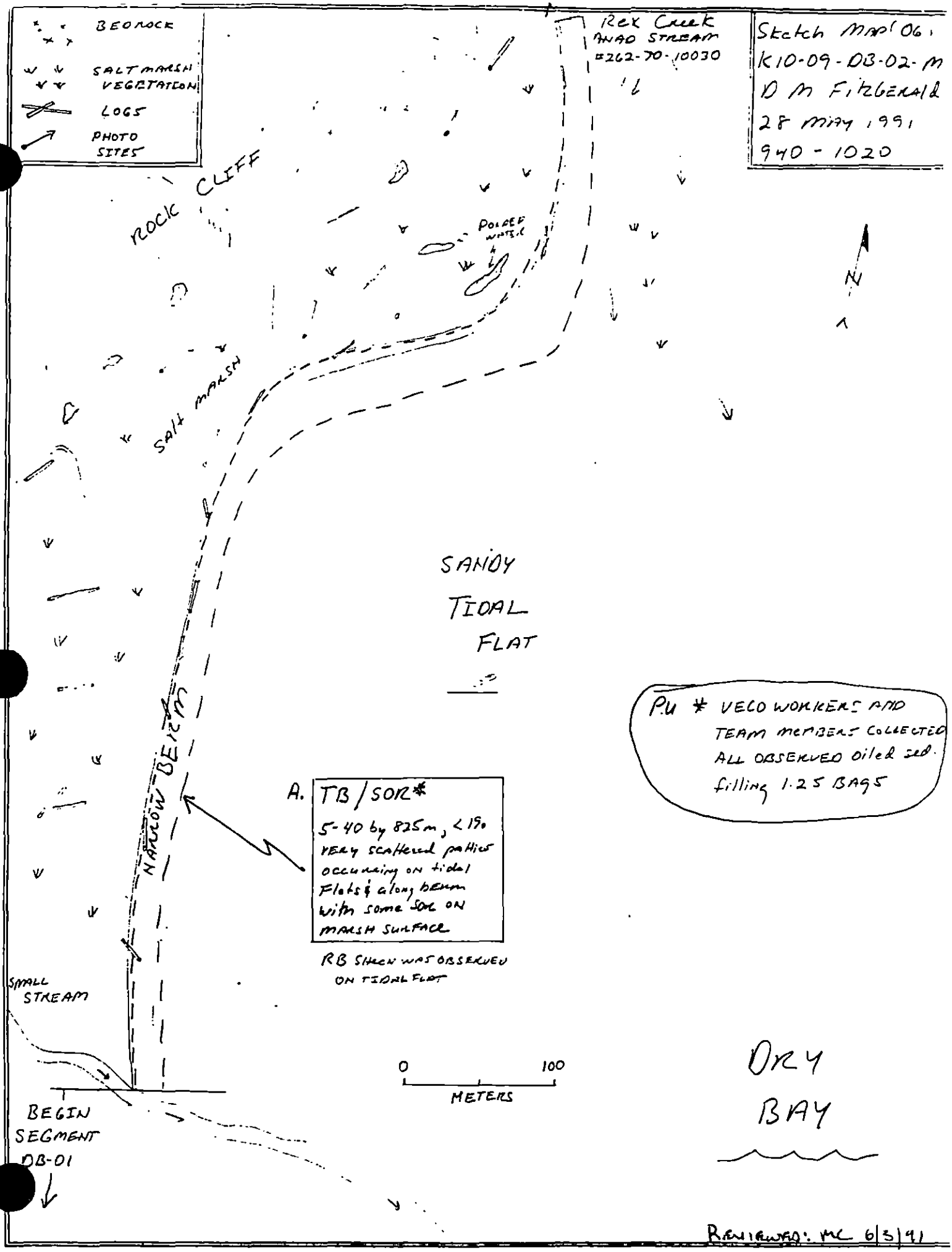
EXXON

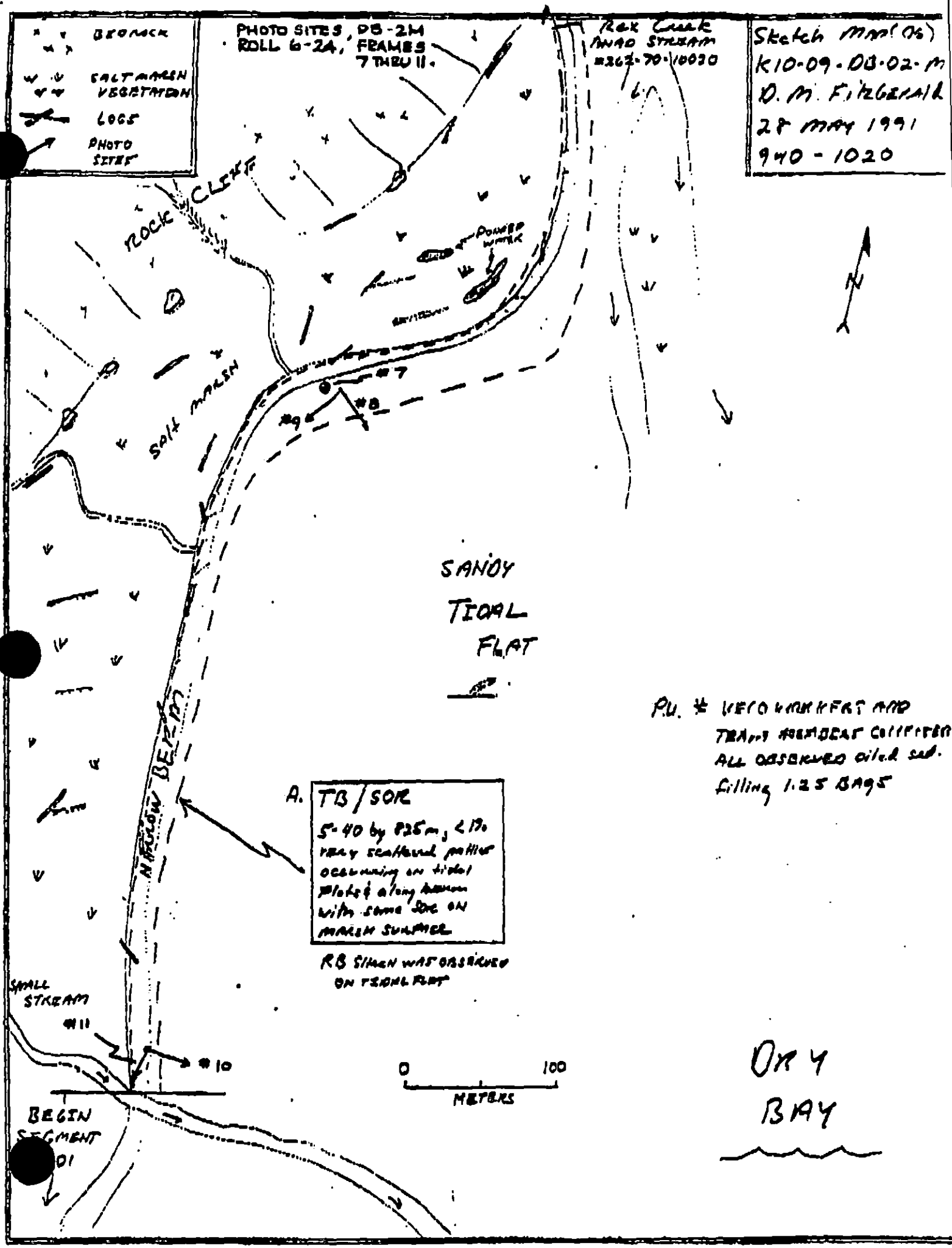
METERS

100

200

AK State Plane Zone 4


BEDROCK
SALT MARSH VEGETATION
LOGS
PHOTO SITES
Sketch Map 06
K10-09-DB-02-M
D M FITZGERALD
28 MAY 1991
940 - 1020
Rex Creek
ANAD STREAM
#262-70-10030
ROCK CLIFF
POLAR WATER
N
SALT MARSH
SANDY TIDAL FLAT
NARROW BERM
A. TB/SOR*
5-40 by 825m, <1%
VERY SCATTERED PATCHES
OCCURRING ON TIDAL
FLATS & ALONG BERM
WITH SOME SOR ON
MARSH SURFACE
RB SHEEN WAS OBSERVED
ON TIDAL FLAT
Pu * VECO WORKERS AND
TEAM MEMBERS COLLECTED
ALL OBSERVED OILED SED.
filling 1.25 BAGS
SMALL STREAM
0
100
METERS
BEGIN SEGMENT DB-01
ORY BAY
REVIEWED: MC 6/3/91


BEDROCK
SALT MARSH VEGETATION
LOGS
PHOTO SITES
PHOTO SITES, DB-2M ROLL 6-24, FRAMES 7 THRU 11.
Rock Creek NW40 STREAM #262-70-10020
Sketch map (OS) K10-09-03-02-m D. M. Fitzgerald 28 May 1991 940 - 1020
ROCK CLIFF
POWER WIRE
SALT MARSH
#7
#8
#9
SANDY TIDAL FLAT
P.U. * VERY LOW ENERGY AND TRANS. MEDIUM COARSE CONTAINED ALL OBSERVED oiled sed. filling 1.25 BAGS
NARROW BERM
A. TB/SOR
5'-40 by 825m, 2 1/2 very scattered patches occurring on tidal flats along shore with some SOR ON MARSH SURFACE
RB SHEEN WAS OBSERVED ON TIDAL FLAT
SMALL STREAM
#11
#10
0
100
METERS
BEGIN SEGMENT 01
OAK BAY

MAYSAP BIOLOGICAL SUMMARY FORM

TEAM # 6 Nelo — DATE May 28 1991

SEGMENT # K10-09 DB-02 — TIDAL HEIGHT (Range) -1.4 ft to 1.1 ft (09:40 - 10:00)

SUBDIVISION m — BIOLOGIST N. Davis

SEA STATE Tidepontin Bay (2-3 ft on coast) — WIND SPEED/DIRECTION 5-10 kts SE

PHOTOGRAPHS: ROLL # 6 - 24 — FRAME # 7-

COMMENTS/OBSERVATIONS (to be completed in oiled subdivisions only):

The surveyed portion of DB-02 was the shoreline around an estuarine tide flat and about 30-40 meters out onto the tide flat from the shore. This area has numerous small streams that feed out onto the flat as well as anadromous stream # 262-70-10030 (Rex Creek). Small smolt and fry were seen in several of the streams. Water fowl were feeding in some of the marshy areas. There was a bed of Macoma (spp?) out on the mud flat below site A. Most of the patties in site A were picked up.

Sparrows Fox Golden Crowned (4)
1 dead Red necked Grebe 1 dead Sooty Shearwater Pintails (10) Widgeon (6) Mallards (3)
Semipalmated plovers (3) Glaucous winged Gulls (10) 7 Dead Kittiwakes Raven (1)

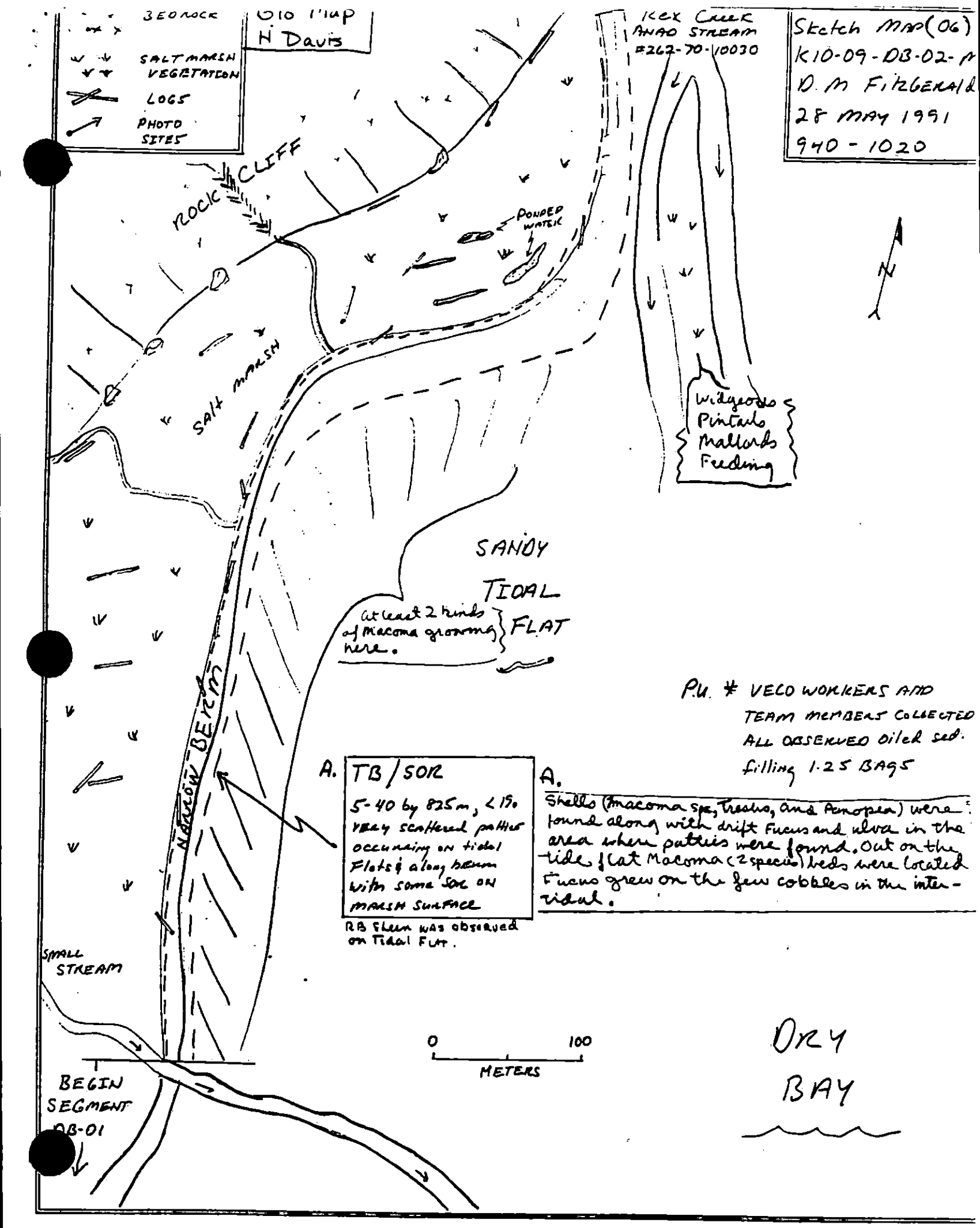
WILDLIFE OBSERVATIONS
TO BE COMPLETED IN ALL SUBDIVISIONS

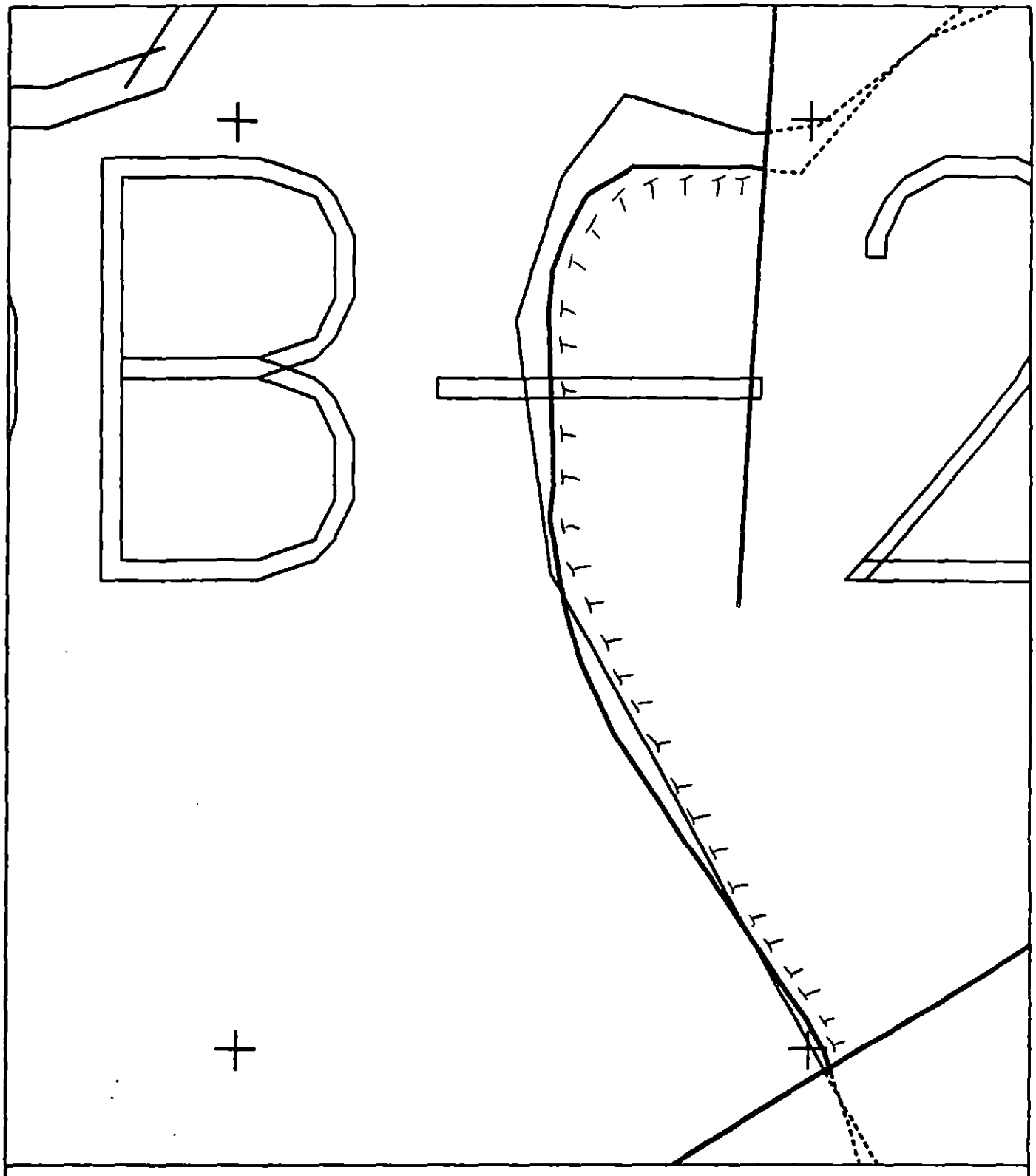
BIRDS	# OF SPECIES	TOTAL BIRDS	FISH OBSERVED SPECIES PRESENT
Eagles	Ø		Fry and Smolt in the
Seabirds	(2)	(2 dead)	streams.
Waterfowl	3	19	
Gulls/Kittiwakes	2	10 (+7 dead kittiwakes)	
Shorebirds	1	3	
Corvids	1	1	
Other Birds sparrows	2	4	

MARINE MAMMALS	# OBSERVED	LAND MAMMALS SPECIES	# OBSERVED
Sea Otters		Caribou tracks	
Pinnipeds (specify)			
ales (specify)			

Shoreline subdivision map showing important biological features attached.

Coastal plain NP


BEDROCK
SALT MARSH VEGETATION
LOGS
PHOTO SITES
OIL MAP
N Davis
ROCK CLIFF
PONDED WATER
SALT MARSH
NARROW BERM
SMALL STREAM
BEGIN SEGMENT OB-01
KEX CREEK AND STREAM #262-70-10030
Widgeon
Pintails
Mallards
Feeding
SANDY TIDAL FLAT
At least 2 kinds of Macoma growing here.
A.
TB/SOR
5-40 by 825m, < 1%
very scattered patches occurring on tidal flats & along berm with some SOR ON MARSH SURFACE
RB sheen was observed on Tidal Flat.
A.
Shells (Macoma sp, Tresus, and Panopea) were found along with drift Fucus and ulva in the area where patties were found. Out on the tide flat Macoma (2 species) beds were located Fucus grew on the few cobbles in the intertidal.
P.U. # VECO WORKERS AND TEAM MEMBERS COLLECTED ALL OBSERVED oiled sed. filling 1-25 BAGS
0
100
METERS
DRY BAY
Sketch MAP (06)
K10-09-OB-02-M
D. M FITZGERALD
28 MAY 1991
940 - 1020



XXXX	Wide	K1009 DB002 A	Subdivision Field Map
////	Medium	ADEC Subsegment Length: 825m	Map Key: 60AK1009DB002Ac
----	Narrow	METERS	Name: D. FitzGerald
TTTT	Very Light	0 100 200	Date: 28 May 1991
0000	No Oil	AK State Plane Zone 4	Date Entered:

EXXON

Reviewed: 6/3/91 MC

REGION: KODIAK

SEGMENT: ST/K11-02-IL-003

SUBDIVISION: A (1 of 1)

SHORELINE EVALUATION

SEGMENT ST/ K11-02-IL-003 SUBDIVISION A (1 OF 1) DATE 5/22/90

SEGMENT ENVIRONMENTAL SENSITIVITIES AND TIME CONSTRAINTS:

1A Salmon stream mouth - fry outmigration (4/15 to 7/31)
1B Salmon stream mouth - spawing (7/15 to 9/10; PEAK 8/15)
Bio States no anadromous streams
9LM Land Mannals - Tracks observed during survey
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 treatment is planned, a cultural resource evaluation is required prior to shoreline treatment.

SHPO SIGNATURE:_____ DATE:_____

OILING CATEGORIZATION:

Wide 0 m: Medium 0 m: Narrow 0 m: V.Light 69 m: No Oil 7539 m
Subsurface Oil Observed: Yes____ No X Maximum Depth_____

RECOMMENDATIONS:

X No Treatment Recommended	_____Snare/Absorbent Booms
____Treatment Recommended	_____Oil Snares (pom poms)
_____Manual Pickup	_____Absorbents (pads,rolls,etc)
_____Bioremediation	_____Spot Washing:_____Wands
_____Tarmat Removal	_____Beach Cleaner
	_____Other (see comments)

COMMENTS: _____

TAG COMMENTS:_____

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

KODIAK ECOLOGICAL CONSTRAINTS

1A Salmon stream mouth - fry outmigration (4/15 to 7/31)
1B Salmon stream mouth - spawning (7/15 to 9/10; PEAK 8/15)
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 without authorization from ADF&G. No use of methods which might affect nearshore oil or toxicity levels, such as hot water wash or Inipol application, unless authorized by ADF&G. Treatment which is not intrusive and which will not affect nearshore oil or toxicity levels, such as manual removal, can probably proceed without adherence to time constraints. In any case, contact ADF&G prior to treatment for consultation and/or permit application.
AGENCY CONTACT PERSON: ADF&G Ken Middleton 267-2299

1C Salmon fry nursery area (4/31 to 7/31)
No use of methods which might affect nearshore oil or toxicity levels, such as hot water wash or Inipol application, unless authorized by ADF&G. Treatment which will not affect nearshore oil or toxicity levels, such as manual or mechanical removal, can probably proceed without adherence to time constraints. Contact ADF&G prior to treatment for confirmation and advice.
AGENCY CONTACT PERSON: ADF&G Larry Peltz 424-3214

1D Kotoi Bay Hatchery release
Pink salmon - late May, early June; Chum salmon - June; Sockeye salmon - early July.
1H Remote release site
No use of methods which might affect nearshore oil or toxicity levels, such as hot water wash or Inipol application, unless authorized by ADF&G. Treatment which will not affect nearshore oil or toxicity levels, such as manual or mechanical removal, can probably proceed without adherence to time constraints. Contact ADF&G for confirmation and authorization.
AGENCY CONTACT PERSON: ADF&G Larry Peltz 424-3214

1I Gill net area
1J Purse seine area
Mainland, West side Kodiak, Shuyak & Moser/Olga Bay (6/9 to 10/1)
East side Kodiak, East side Afognak (7/4 to 10/1)
1K Purse seine hook-off
1L Set net sites
Contact ADF&G for confirmation - dates and locations may vary. Restrict boat and air traffic to essential minimum. When set net sites are present (1L) restrict beach operations to essential minimum as authorized by ADF&G. If plans for treatment include methods such as hot water wash or Inipol application which might affect nearshore oil or toxicity levels, contact ADF&G for consultation and authorization.
AGENCY CONTACT PERSON: ADF&G Larry Nicholson 424-4791

2M Herring spawning (4/15 to 6/30)
Contact ADF&G for confirmation - dates and locations may vary. Restrict boat traffic to essential minimum. Avoid damage to unoiled intertidal and subtidal algae and seagrass. If plans for treatment include methods such as hot water wash or Inipol application which might affect nearshore oil or toxicity levels, contact ADF&G for consultation and authorization.
AGENCY CONTACT PERSON: ADF&G Larry Nicholson 486-4791

3[illegible] Harbor seal and sea lion pupping (5/10 to 7/1)
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. No application of Inipol within two weeks of arrival dates (work window at these sites is limited to 7/2 to 7/31). Contact ADF&G and USFWS prior to treatment for confirmation.
AGENCY CONTACT PERSON: US National Marine Fisheries Service Steve Zimmerman 586-7235
ADF&G Don Calkins 267-2403

5R Seabird colony (5/1 to 9/1)
Restrict air and boat traffic to essential minimum. No personnel within 800m. Aircraft to maintain 800m horizontal, 300m vertical distance from colony. Contact USFWS prior to treatment.
AGENCY CONTACT PERSON: USFWS Jill Parker 786-3377

5S Shorebird/waterfowl concentration (4/1 to 5/15)
Restrict all activity to essential minimum, especially air traffic. Contact USFWS and ADF&G for confirmation.
AGENCY CONTACT PERSON: USFWS Jill Parker 786-3377
ADF&G Tom Rothy 267-2206

5T All Bald Eagle nests (3/1 to 6/1)
Active Bald Eagle nests (3/1 to 9/1)
Restrict air traffic and all disturbance 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.
AGENCY CONTACT PERSON: USFWS Jill Parker 786-3377

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 (6/1 to 9/30)
[illegible] Finfish harvesting
Deer harvesting (8/1 to 1/7)
[illegible] Invertebrate harvesting
7KK Bear harvesting (4/1 to 5/15 and 10/25 to 11/30)
Contact ADF&G and appropriate Native Corporation for specific dates, locations, and constraints. Restrict boat and air traffic and beach disturbance to essential minimum. If plans for treatment include methods such as hot water wash or application of Inipol which might affect intertidal or nearshore oil or toxicity levels, contact ADF&G and appropriate Native Corporation for authorization - see Native Corporation Contact List for each Native Corporation's contact person.
AGENCY CONTACT PERSON: ADF&G Jim Fall 267-2359

FIELD SHORELINE COMMENT SHEET

SEGMENT ST / K11-01 . TL:3 SUBDIVISION: _____ DATE 5-22-90

USCG
NAME STAN L. SHIELDS SIGNATURE Stan L. Shields

☒ NO TREATMENT RECOMMENDED ☐ TREATMENT SUGGESTED
COMMENTS

ONLY LIGHT STAINING IN A FEW AREAS OF THE SEGMENT WERE OBSERVED.

ADEC
NAME Francine J. Bennis SIGNATURE Francine J. Bennis

☒ NO TREATMENT RECOMMENDED ☐ TREATMENT SUGGESTED
COMMENTS

Only sporadic stains and splatters observed.

LAND MANAGER
NAME OTTO FLORSCHUTZ SIGNATURE Otto Florschutz

☐ ~~NO TREATMENT RECOMMENDED~~ ☐ ~~TREATMENT SUGGESTED~~
~~COMMENTS~~

Am in agreement with above ADEC recommendations - see Attachment No. 2

Attachment 2
U.S. Fish and Wildlife Service Shoreline Cleanup Disclaimer

This comment sheet is based on current observations and is solely for the purpose of planning and scheduling of 1990 response treatment actions. It in no way implies that the State or Federal government will not in the future determine that further restoration or other treatment, or compensation is warranted regarding this area, or that the area is considered by the Federal or State government to be adequately 'clean' or 'restored' for the purpose of any claim which the State or Federal government has brought or may bring against Exxon, Incorporated or any other potentially responsible party.

SHORELINE OILING SUMMARY

REVISION NO. 04/13/90

OG Mike Foget USCG Stan Shields SEGMENT ST/ K1102 - IL003
BI [redacted] Heather Davis LAND REP #0 FLORSCHUTZ SUBDIVISION A (1 OF 1)
E[redacted] — ADEC Fran Bennis TIME 6:30 to 10:30
TEAM NO. 20 TIDE LEVEL +1.0 - +3.5 DATE 5 / 22 / 90
EST. SUBDIVISION LENGTH: 7500 m ☐ Sun ☒ Clouds ☐ Fog ☒ Rain ☐ Snow
UPLANDS DESCRIPTION: ☒ Grass ☐ Forest ☒ Rock Backshore consists mostly of steep vert rock w/ some grass backing
SURVEYED FROM: ☒ Foot ☐ Boat ☐ Helo WORKING DIRECTION: S to N
SURFACE SEDIMENTS: R 20 % B 50 % C 20 % P 5 % G 0 % S 5 % M 0 % V 0 %
SLOPE : Lang 70 % Hang 30 % Vert 0 % WAVE EXPOSURE: ☐ Low ☐ Med ☒ High
OIL CATEGORY LENGTH: W 0 m M 0 m N 0 m VL 60 m NO 7440 m

SURFACE OIL

CHARACTER	DISTRIBUTION				OIL / FILM COLOR					IMPACTED ZONES			
	/C	/B	/P	/S	BRN/BLK	ORG/RED	OLV/GRN	YEL/TAN	SHN	SU	UI	MI	LI
ASPHALT PAVEMENT													
POOLED													
COVER													
COAT													
STAIN				X		X				X	X		
MOUSSE													
[redacted]ES													
[redacted]BALLS													
FILM													
NO OIL												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 SM	MD	LG
Logs			
Vegetation			
Trash			
Debris			

DID YOU COLLECT DEBRIS?
YES ☐ NO ☒
TYPE 0
#BAGS 0

Photographs:
Roll No. —
Frames —

SUBSURFACE OIL

PIT NO.	PIT DEPTH (cm)	SUBSURFACE OIL CHARACTER					OILED INTERVAL (CM)		BELOW		OIL / FILM COLOR					PIT ZONE				ANA	SHEEN (Y/N)	▼	SURFACE - SUBSURFACE SEDIMENTS
		OP	OR	OL	OF	NO			UO	UC	BRN/BLK	ORG/RED	OLV/GRN	YEL/TAN	SHN	SU	UI	MI	LI				
1	30					X	-										X			—	—	—	P, G, S, P
2	30					X	-									X				—	—	—	C, G, S, C
3	40					X	-										X			—	—	—	S, C
4	50					X	-										X			—	—	—	S, C
5	30					X	-									X				—	N	20	S, C
6	30					X	-										X			—	—	—	C, P

COMMENTS Shore zone consists of Rocky headlands w/ Low [redacted]ngle Boulder Beaches and Rock benches. Their are also a few sand Beaches, With the exception of some staining (see map) no oil was observed for most of the segment.

PAT [illegible]

OG Mike Foget

SEGMENT ST/ [redacted]02 - IL003

SUBDIVISION A

DATE 5 / 22 80

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

SL[redacted]CH MAP

Legend

IIIII – Steep back shore

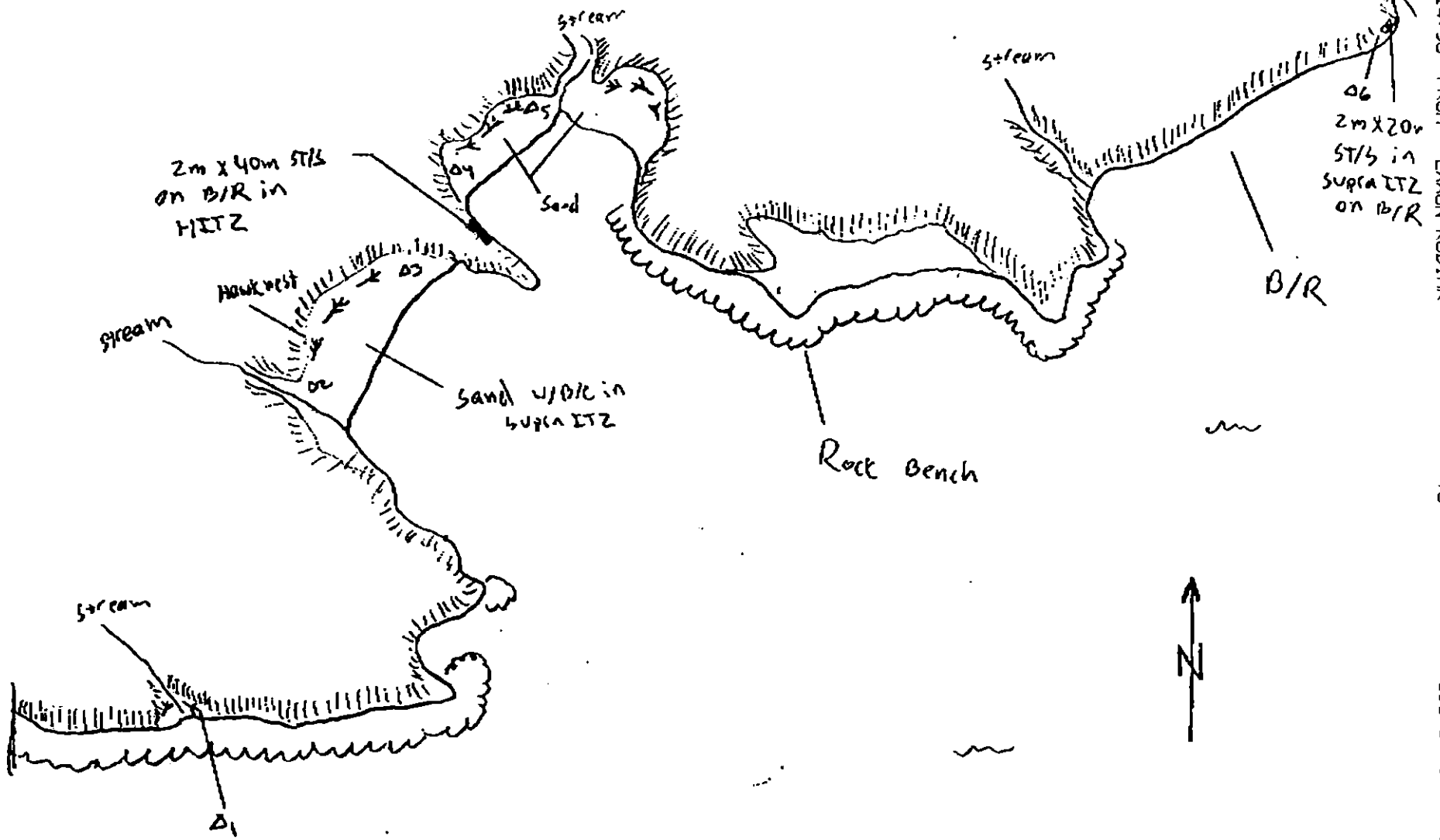
rrrrr – Low angle bedrock

~ – stream

– drift logs, debris

Scale

500m



Character Length (m): AP 0 PO 0 CV 0 CT 0 ST 60 MS 0 PT 0 TB 0 FL 0 NO 7440

REVISION: 03/24/80

MAY-23-1990 14:58 FROM EXXON KODIAK TO 15643771 P.03

SHORELINE ECOLOGICAL SUMMARY

REVISION: 03/23/90

Segment ST / KII 02 Subdivision IL-003 Date (mo / day / yr) 5/22/90

Time (24 hr) 18:15 Biologist N. Davis

(A) Substrate type and % of segments:
(1) Bedrock 20 (2) Boulder 50 (3) Cobble 20 (4) Pebble 5 (5) Sand 5 (6) Silt —

(B) Overall % cover of biota (% of segment): Dense 30% Moderate 40% Low 30% (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. —
Frames —

BARNACLES Continuous along most of the segment (none on sandy flats)

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

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	X	X	
3	3	3	3	3	3	3	3	3	3	3	3	NOT PRESENT
4	4	4	4	4	4	4	4	4	4	4	4	3, 4, 5, 6
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 Continuous along segment Littorina Dense/Mod. Limpets Mod/Sparse Nucella Sparse

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

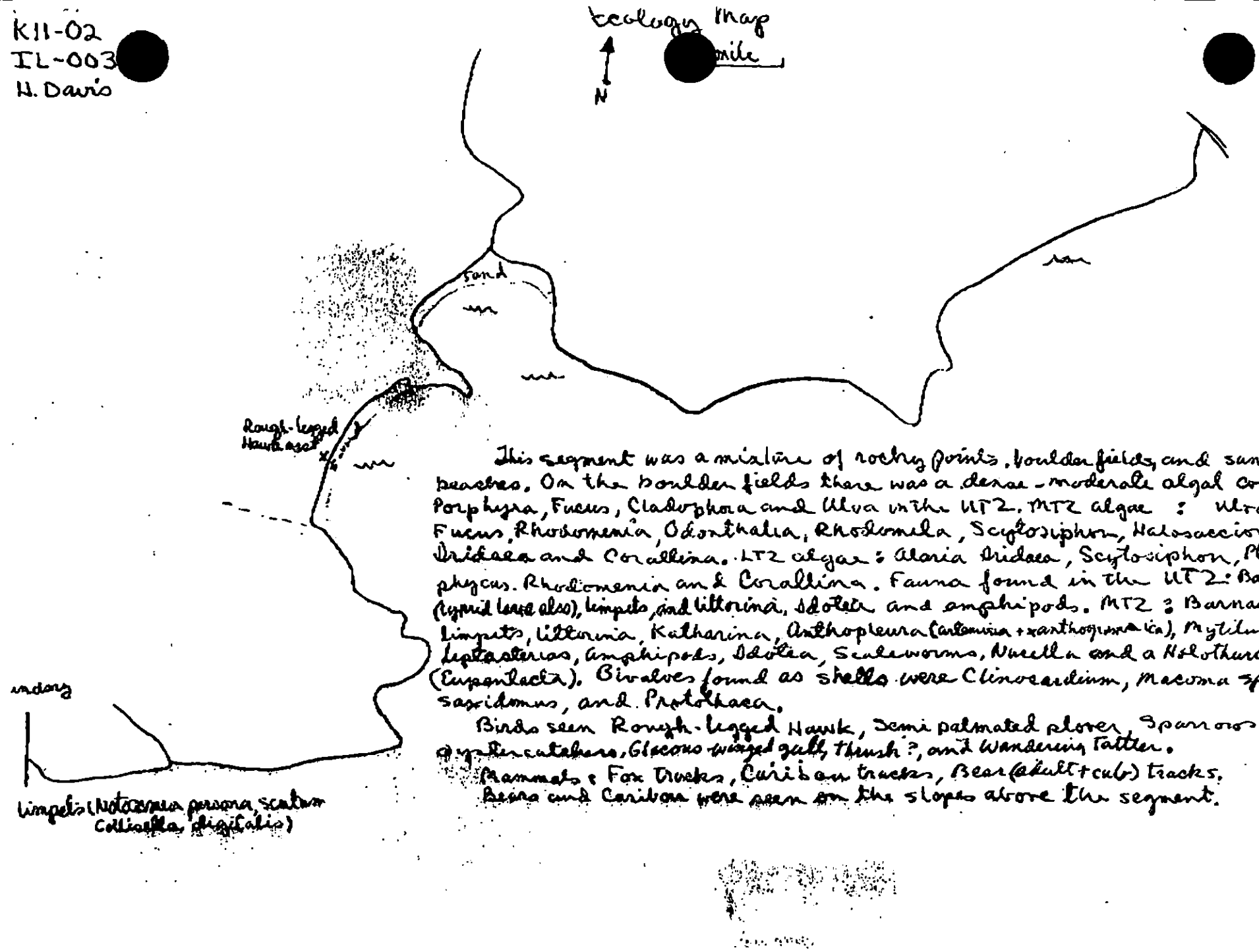
FUCUS Moderate patches along segment.

Dense			Moderate			Sparse			Rare			
1U	1M	1L	1U	1M	1L	1U	1M	1L	1U	1M	1L	
2	2	2	X	X	2	2	X	X	X	2	2	
3	3	3	3	3	3	3	3	3	3	X	X	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: See Eco Map,

Ecological Considerations: Not on Ecological constraints list. No Anadromous streams listed on Fish and Game maps. None of the streams showed evidence of being anadromous. The next segment up IL-1 did have Anadromous streams. There were no Bird colonies observed on the segment. Caribou tracks were found in the UT2. A Rough-legged hawk had a nest & was up one of the cliffs. She appeared to be brooding.

K11-02
IL-003
N. Davis



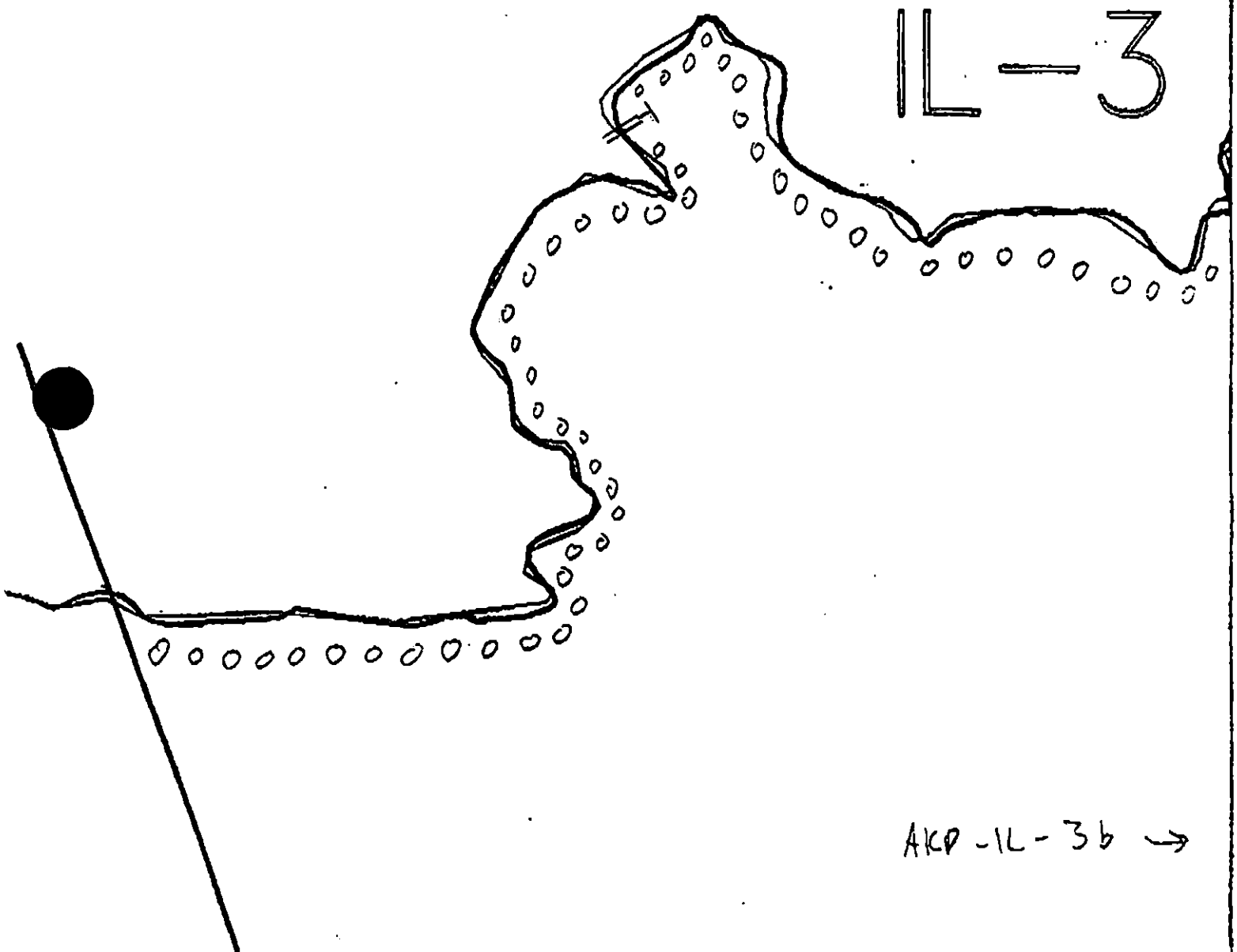
This segment was a mixture of rocky points, boulder fields, and sand beaches. On the boulder fields there was a dense - moderate algal cover. Porphyra, Fucus, Cladophora and Ulva in the UT2. MT2 algae : Ulva, Fucus, Rhodomenia, Odonthalia, Rhodomela, Scytosiphon, Halosaccion, Iridaea and Corallina. LT2 algae : Alaria Iridaea, Scytosiphon, Pleurophycus. Rhodomenia and Corallina. Fauna found in the UT2: Barnacles, (typid larva also), limpets, and littorina, Idotea and amphipods. MT2 : Barnacles, Limpets, littorina, Katharina, Anthopleura (artemisia + xanthogrammica), Mytilus, Leptasterias, amphipods, Idotea, Scaleworms, Nuella and a Holothuroidea. (Cucumaria). Bivalves found as shells were Clinocardium, Macoma sp., Saxidomus, and Protothaca.

Birds seen Rough-legged Hawk, Semi palmated plover, Sparrows, Oystercatchers, Glaucous winged gull, Thrush ?, and Wandering Tattler.

Mammals : Fox Tracks, Caribou tracks, Bear (adult + cub) tracks. Bears and Caribou were seen on the slopes above the segment.

K11-2

IL-3



AKP-IL-3b →

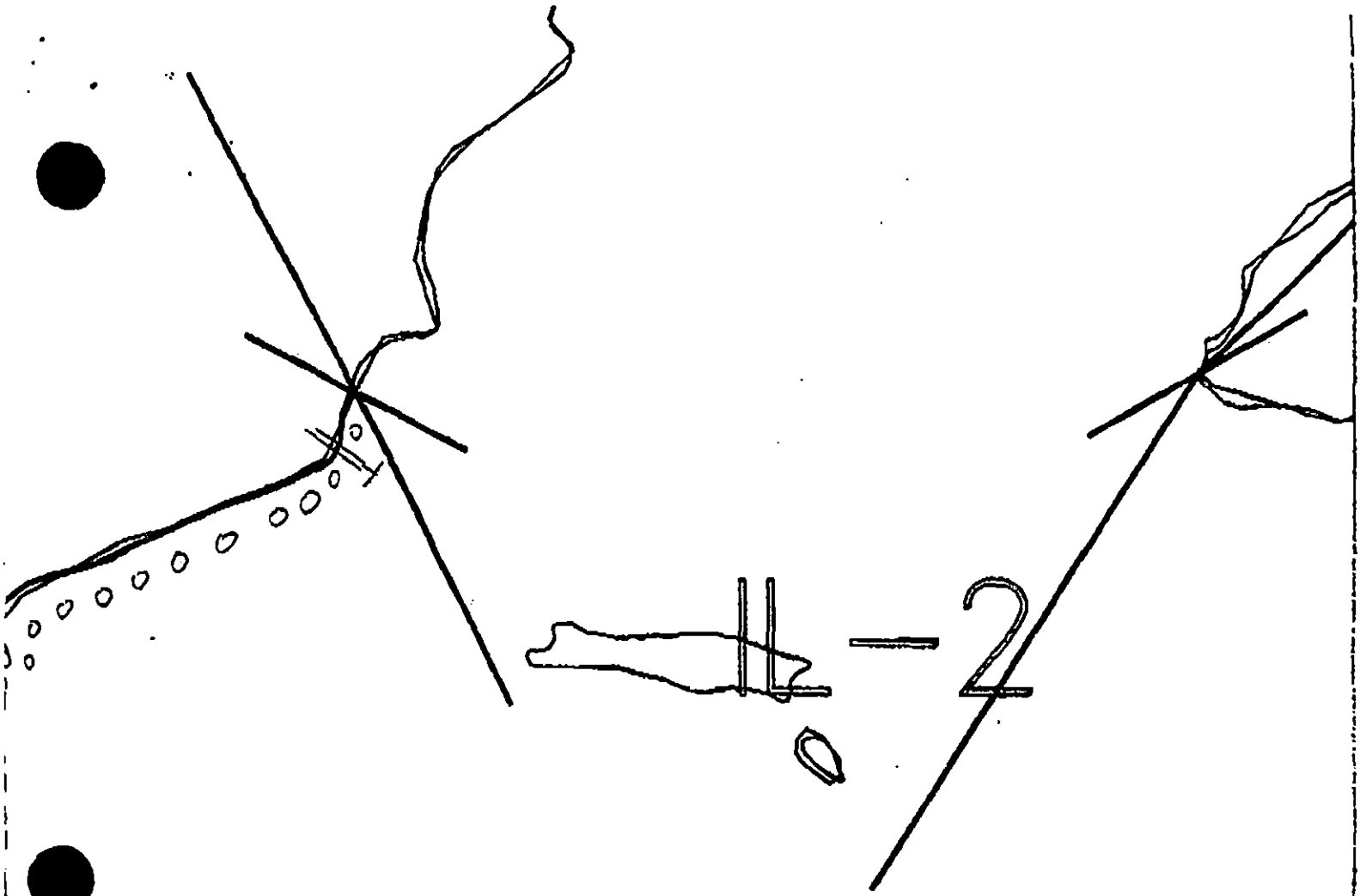
XXXX Wide
// Medium
---- Narrow
TTTT Very Light
0000 No Oil

K11Ø2-IL-3A

ADEC Segment Length: 7608m

0 500 1000 1500
METERS

Map Key: AKP-IL-3a
Name: Mike Foget
Date: 5/21/90
Data Entered:



← AKP-IL-3a

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

KII02-IL-3-A

ADEC Segment Length: 7608m

0 300 600 900
METERS

Map Key: AKP-IL-3b
Name: Mike Foget
Date: 5/21/90
Data Entered:

SHORELINE EVALUATION

SEGMENT ST/ K11-02-IL-003 SUBDIVISION A (1 OF 1) DATE 5/22/90

SEGMENT ENVIRONMENTAL SENSITIVITIES AND TIME CONSTRAINTS:

1A Salmon stream mouth - fry outmigration (4/15 to 7/31)
1B Salmon stream mouth - spawing (7/15 to 9/10; PEAK 8/15)
Bio States no anadromous streams
9LM Land Mannals - Tracks observed during survey
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 treatment is planned, a cultural resource evaluation is required prior to shoreline treatment.

SHPO SIGNATURE: Rachel Jean Orr DATE: 6/1/90

OILING CATEGORIZATION:

Wide 0 m: Medium 0 m: Narrow 0 m: V.Light 69 m: No Oil 7539 m
Subsurface Oil Observed: Yes____ No X Maximum Depth_____

RECOMMENDATIONS:

X No Treatment Recommended	_____Snare/Absorbent Booms
_____Treatment Recommended	_____Oil Snares (pom poms)
_____Manual Pickup	_____Absorbents (pads,rolls,etc)
_____Bioremediation	_____Spot Washing:_____Wands
_____Tarmat Removal	_____Beach Cleaner
	_____Other (see comments)

COMMENTS: _____

TAG COMMENTS: _____

TAG APPROVAL DATE: 5/31/90
ADEC Art Weiner Art Weiner
EXXON Amy Teas
NOAA Joseph Talbott
USCG G.A. Reiter G.A. Reiter

FOSC: _____ DATE: 6-8-90

Mike Foget

ENT ST/ K110 IL003

VISION A

5 / 22 90

KLIST

row
rat. Scale
/Sub Entry
Xst.
h
gth
over
trate Character
H/M/L/VL

ie Location(s)
le(s)
ocation(s)
o Location(s)

ND

Subsurface Oil

urface Oil

/C
il Distribution

/B
tribution

/P
tribution

/S
Distribution

e

ation

ation, direction,
er

Legend

IIII – Steep back shore

rrrrr – Low angle Bedrock

~ – stream

⊀ – drift Logs, debris

SKETCH MAP

Scale

500m

stream

2m X 40m ST/S on B/R in HITZ

04

Sand

05

stream

Hawknest

03

stream

02

Sand w/DIC in supra ITZ

Rock Bench

stream

01

stream

06

2m X 20m ST/S in supra ITZ on B/R

B/R

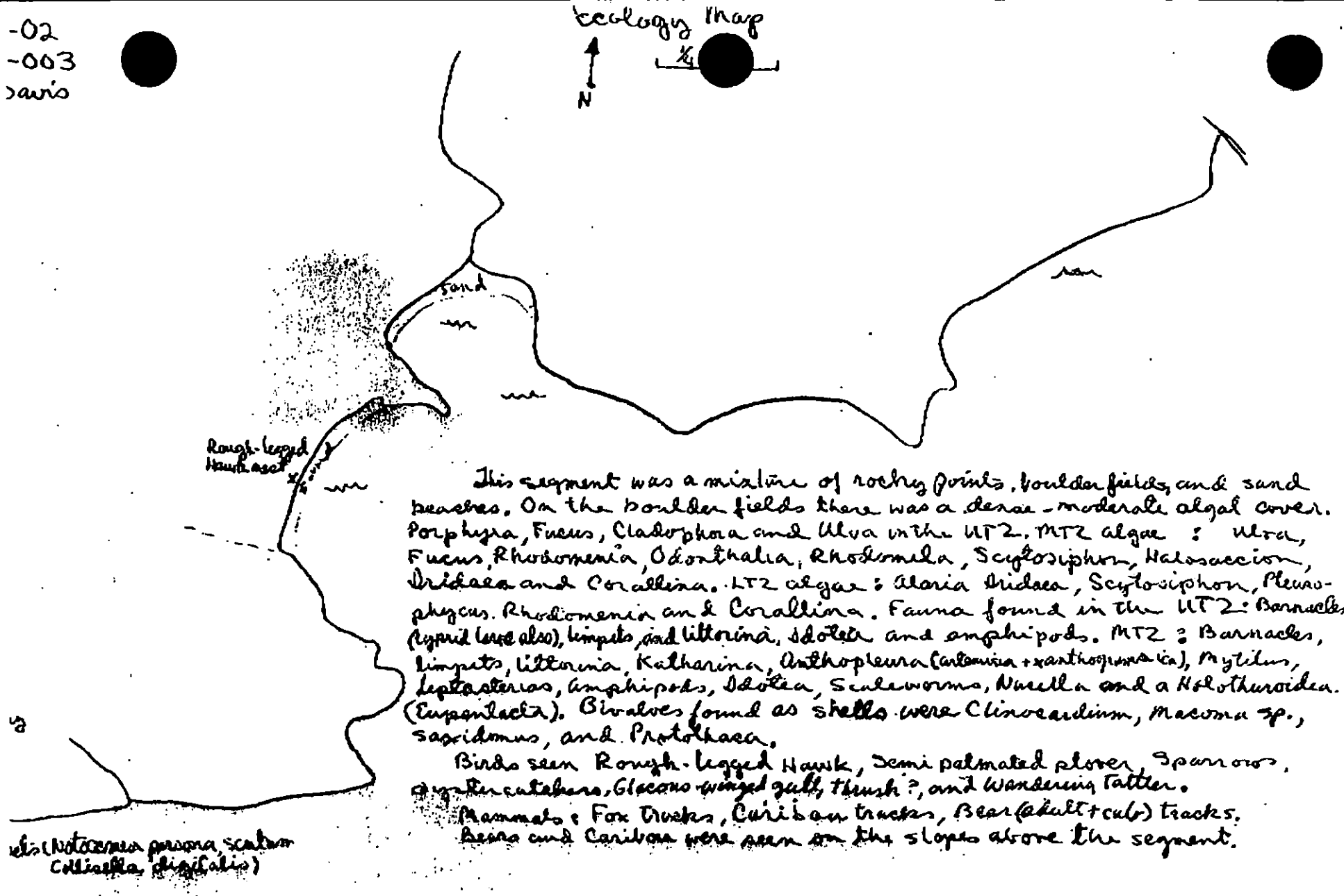
N

MAY-23-1990 14:58 FROM EAGON KODIAK TO 15043777... P.03

ter Length (m): AP 0 PO 0 CV 0 CT 0 ST 60 MS 0 PT 0 TB 0 FL 0 NO 7440

REVISION:01/2/90

-02
-003
Davis



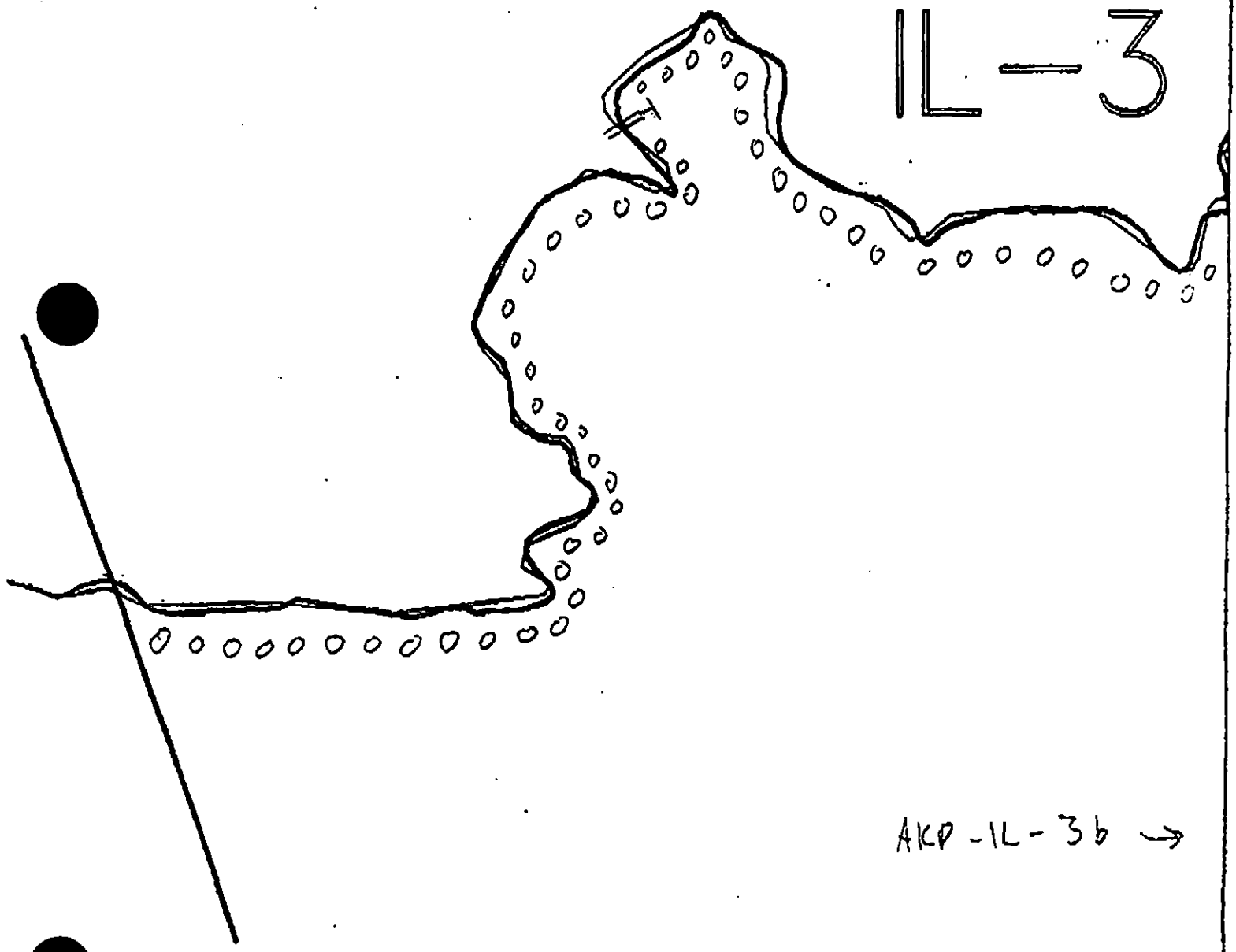
This segment was a mixture of rocky points, boulder fields, and sand beaches. On the boulder fields there was a dense - moderate algal cover. Porphyra, Fucus, Cladophora and Ulva in the UT2. MT2 algae : Ulva, Fucus, Rhodomenia, Odonthalia, Rhodomela, Scytosiphon, Halosaccion, Iridaea and Corallina. LT2 algae : Alaria Iridaea, Scytosiphon, Pleurophycus. Rhodomenia and Corallina. Fauna found in the UT2: Barnacles, (Cyprid larvae also), limpets, and littorina, Idotea and amphipods. MT2 : Barnacles, limpets, littorina, Katharina, Anthopleura (artemisia + xanthogrammica), Mytilus, Leptasterias, Amphipods, Idotea, Scaleworms, Nucella and a Holothuroidea. (Cucumaria). Bivalves found as shells were Clinocardium, Macoma sp., Saxidomus, and Protothaca.

Birds seen Rough-legged Hawk, Semi palmated plover, Sparrows, Oystercatchers, Glaucous-winged gull, Thrush ?, and Wandering Tattler.

Mammals : Fox tracks, Caribou tracks, Bear (adult + cub) tracks. Bears and Caribou were seen on the slopes above the segment.

K11-2

IL-3



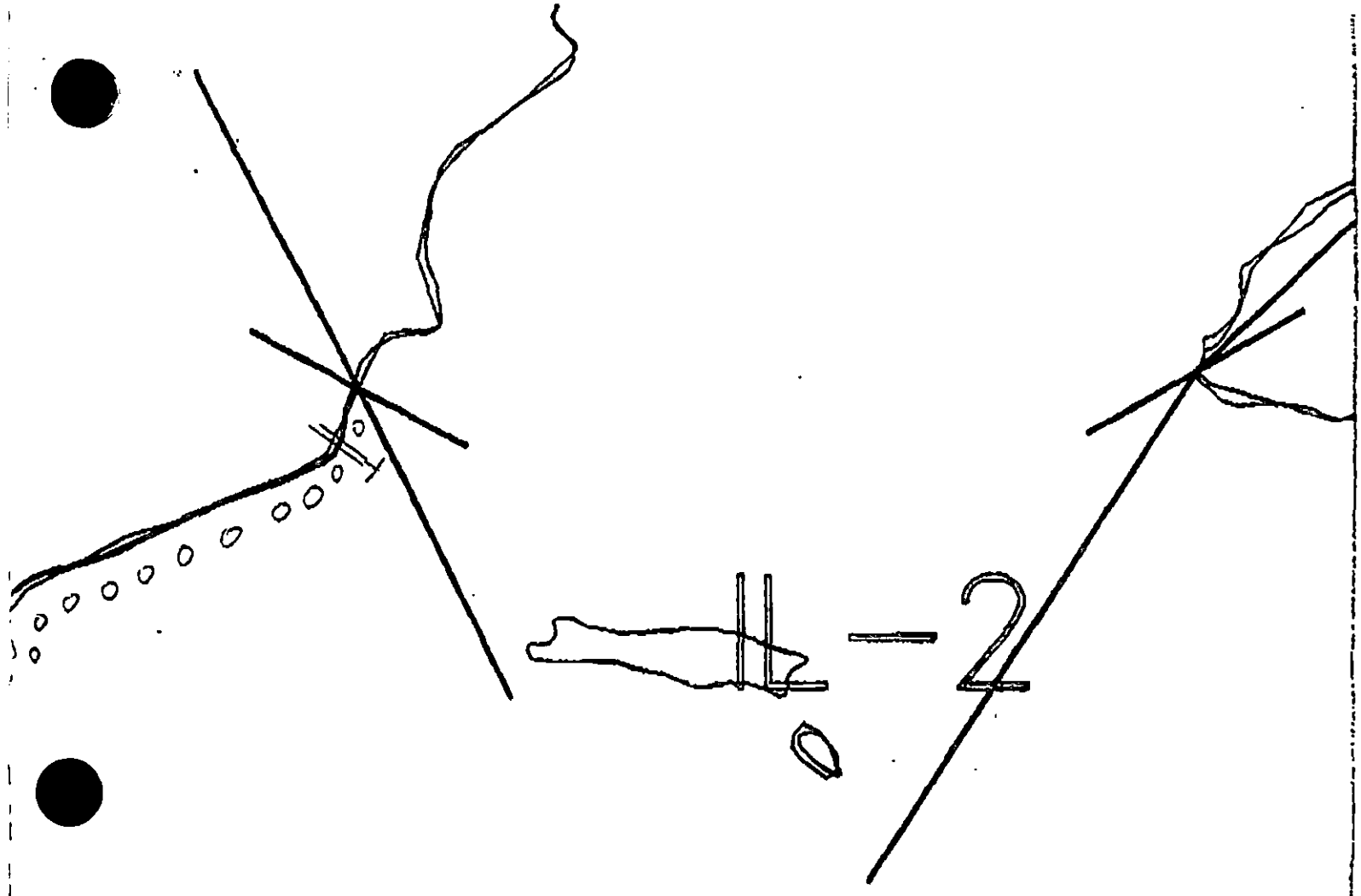
AKP-IL-3b →

XXXX Wide
//// Medium
---- Narrow

K11Ø2-IL-3A

ADEC Segment Length: 7608m

Map Key: AKP-IL-3a
Name: Mike Foglt
Date: 5/21/90



← AKP - IL-3a

XXXX Wide
//// Medium
---- Narrow
TTTT Very Light

KII02 - IL-3 - A

ADEC Segment Length: 7608m

Map Key: AKP-IL-3b
Name: Mike Foget
Date: 5/21/90

1991 MAYSAP EVALUATION

SEGMENT: K1009DB003 SUB: M REGION: KOD SURVEY DATE: 5/28/91

ENVIRONMENTAL SENSITIVITIES:
Work Window(s) OPEN

Ecological/Constraints (see page two for details) NONE

ARCHAEOLOGICAL CONSTRAINTS:
If treatment is planned, a cultural resource evaluation is required prior to shoreline treatment.

SHPO Signature: Timothy A. Smith Date: 6/07/91

RECOMMENDATIONS:	INITIAL	TAG	FOSC
TREATMENT REQUIRED (Y or N)	N	N	N
Manual Pickup (Check as Req.)			
Spot Washing			
Bio-Customblen Only			
Bio-Inipol/Customblen			
Other			
Other			

COMMENTS:
INITIAL:

TAG:

FOSC:

TAG APPROVAL DATE: JUNE 7 1991 FOSC APPROVAL DATE: 6/12/91

ADEC

EXXON

USCG

NOAA

FOSC
E. E. PAGE, CDR, USCG
CHIEF OF STAFF, FOSC

TEAM NO. 6-HELO SEGMENT DB-3 SUBDIVISION A DATE 5 / 28 / 91

ADEC
NAME J. BARNHART ADEC&G SIGNATURE Jeff Barnhart

☐ NTR No oil observed

EXXON
NAME R. COULTER EXXON SIGNATURE Rex R. Coulter

☑ NTR NO OIL FOUND.

[redacted]DMANAGER
[redacted]E J. HARDISTER OF USF&WS SIGNATURE John P. Hardister

☐ NTR No oil observed.

USCG/NOAA
NAME CWO R. SPURR/G. SHIGENAKA SIGNATURE R Spurr / Glenn Shigenaka

☒ NTR No oil observed during survey

SURVEYED PORTION OF THIS SHORT SEGMENT CONSISTED OF ESSENTIALLY THE SAME PHYSICAL CHARACTERISTICS AS THE ADJOINING DB-1: SANDY TIDAL FLAT WITH BOULDERS ALONG ITS UPPER MARGIN AND THE SUPRATIDAL BUTTING UP AGAINST HIGH CLIFFS. ROUGHLY HALF OF THE SEGMENT WAS SURVEYED, BUT NO OIL WAS OBSERVED.

[redacted]

TEAM NO. 6-HELO SEGMENT DB-3 SUBDIVISION A DATE 5 / 28 / 91

ADEC
NAME J. BARNHART, ADF&G SIGNATURE Jeff Barnhart

☒ NTR No oil observed

EXXON
NAME R. COULTER, EXXON SIGNATURE

☐ NTR

LANDMANAGER
NAME J. HARDISTER OF USF&WS SIGNATURE John P. Hardister

☒ NTR No oil observed.

USCG/NOAA
NAME CWO R. SPURR/G. SHIGENAKA SIGNATURE R Spurr / Gary Shigenaka

☒ NTR No oil observed during survey

SURVEYED PORTION OF THIS SHORT SEGMENT CONSISTED OF ESSENTIALLY THE SAME PHYSICAL CHARACTERISTICS AS THE ADJOINING DB-1: SANDY TIDAL FLAT WITH BOULDERS ALONG ITS UPPER MARGIN AND THE SUPRATIDAL BUTTING UP AGAINST HIGH CLIFFS. ROUGHLY HALF OF THE SEGMENT WAS SURVEYED, BUT NO OIL WAS OBSERVED.

MAYSAP SHORELINE OILING SUMMARY

TEAM NO. 6 Helo

SEGMENT K10-09 DB-03

OG D FitzGerald BIO N. Davis

SUBDIVISION M

ADEC J. Barnhart / ADFG LANDMANAGER J Hardister for USFWS

DATE 28 / May / 91

EXXON R Coulter USCG/NOAA CWO Spurr / G Shigenaka

TIME 10 : 45 to 10 : 55 TIDE LEVEL 0 ft. to .1 ft. ENERGY LEVEL: ☐ H ☑ M ☐ L

SURVEYED FROM: ☒ FOOT ☐ BOAT ☐ HELO WEATHER: ☐ SUN ☑ CLOUDS ☐ FOG ☐ RAIN ☐ SNOW

TOTAL LENGTH SHORELINE SURVEYED: 175 m NEAR SHORE SHEEN: ☐ BR ☐ RB ☐ SL ☒ NONE

EST. OIL CATEGORY LENGTH: W — m M — m N — m VL — m NO 175 m US — m

LOC	SURFACE OIL CHARACTER										SURFACE SEDIMENT TYPE	SHORE SLOPE	AREA		ZONE				NOTES
	AP	MS	TB	SOR	CV	CT	ST	FL	DB	NO		V H M L	WIDTH m	LENGTH m	S	UI	MI	LI	
A										X									NO OIL SEEN
									•										

DISTRIBUTION: C = 91-100%; B = 51-90%; P = 11-50%; S = 1-10%; T = <1%

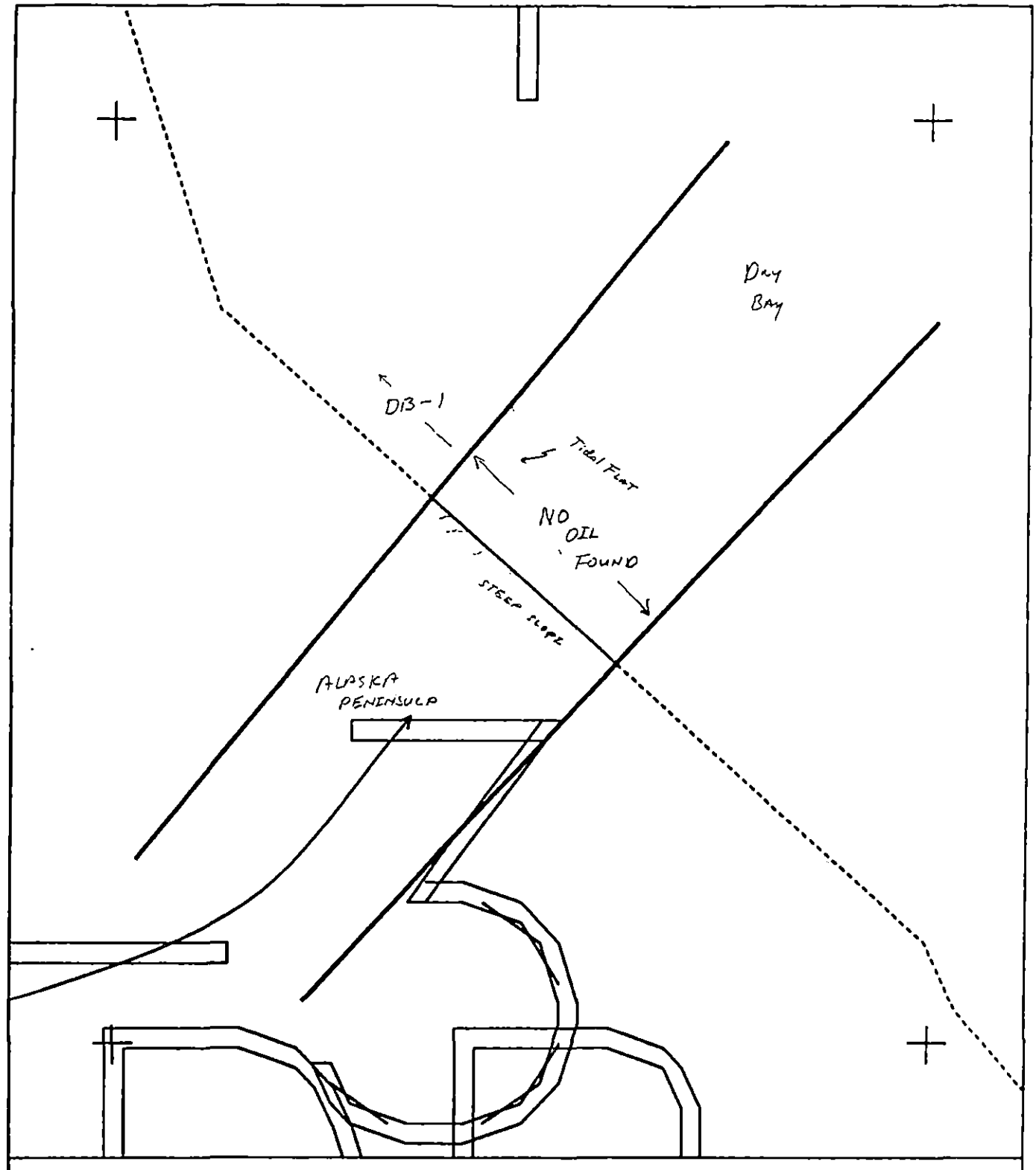
SLOPE: V = VERTICAL; H = HIGH ANGLE; M = MEDIUM ANGLE; L = LOW ANGLE PHOTO ROLL # MAYSAP- 6 - 24 FRAMES ____

PIT NO.	PIT DEPTH (cm)	SUBSURFACE OIL CHARACTER							OILED ZONE cm-cm	CLEAN BELOW Y/N	H2O LEVEL (cm)	SHEEN COLOR B R S N	PIT ZONE				SURFACE-SUBSURFACE SEDIMENTS	NOTES
		OP	HOR	MOR	LOR	OF	TR	NO					S	UI	MI	LI		
									-									
									-									
									-									
									-									
									-									
									-									
									-									
									-									
									-									

SHEEN COLOR: B = BROWN; R = RAINBOW; S = SILVER; N = NONE

OG COMMENTS: This segment is located along the west central side of Ong Bay. No oil could be found by the survey team along this shoreline. This area is moderately exposed to wave energy and therefore, the oiling reported on 8 May 1990 consisting of CT/co/ST, was likely abraded and dispersed by storm waves.

REVISED: MC 6/3/91



K1009 DB003 A

Subdivision Field Map

Map Key: [illegible]

Name: D.M FitzGerald

Date: 28 MAY 1991

METERS

100 200

AK State Plane Zone 4

EXXON

REVIEWED: MC 6/3/91

MAYSAP BIOLOGICAL SUMMARY FORM

TEAM # 6 Helo | DATE May 28 1991

SEGMENT # K10-09 DB-03 | TIDAL HEIGHT (Range) 0-.1 ft (1045 - 1055)

SUBDIVISION m | BIOLOGIST H. Davis

SEA STATE Tide out in bay (2-3 ft on coast) | WIND SPEED/DIRECTION 5 kts E

PHOTOGRAPHS: ROLL # 6-24 | FRAME #

COMMENTS/OBSERVATIONS (to be completed in oiled subdivisions only):

No oil was observed in this segment. The site is a sandy tidal flat with boulder/cobble substrate in the UIT2 and supratidal backed by high bedrock cliffs. Fucus and filamentous green algae grew on the rocks in the UIT2. Barnacles and limpets were very sparse in this area.

Rock Sandpipers (2) Kittiwake, 1 dead

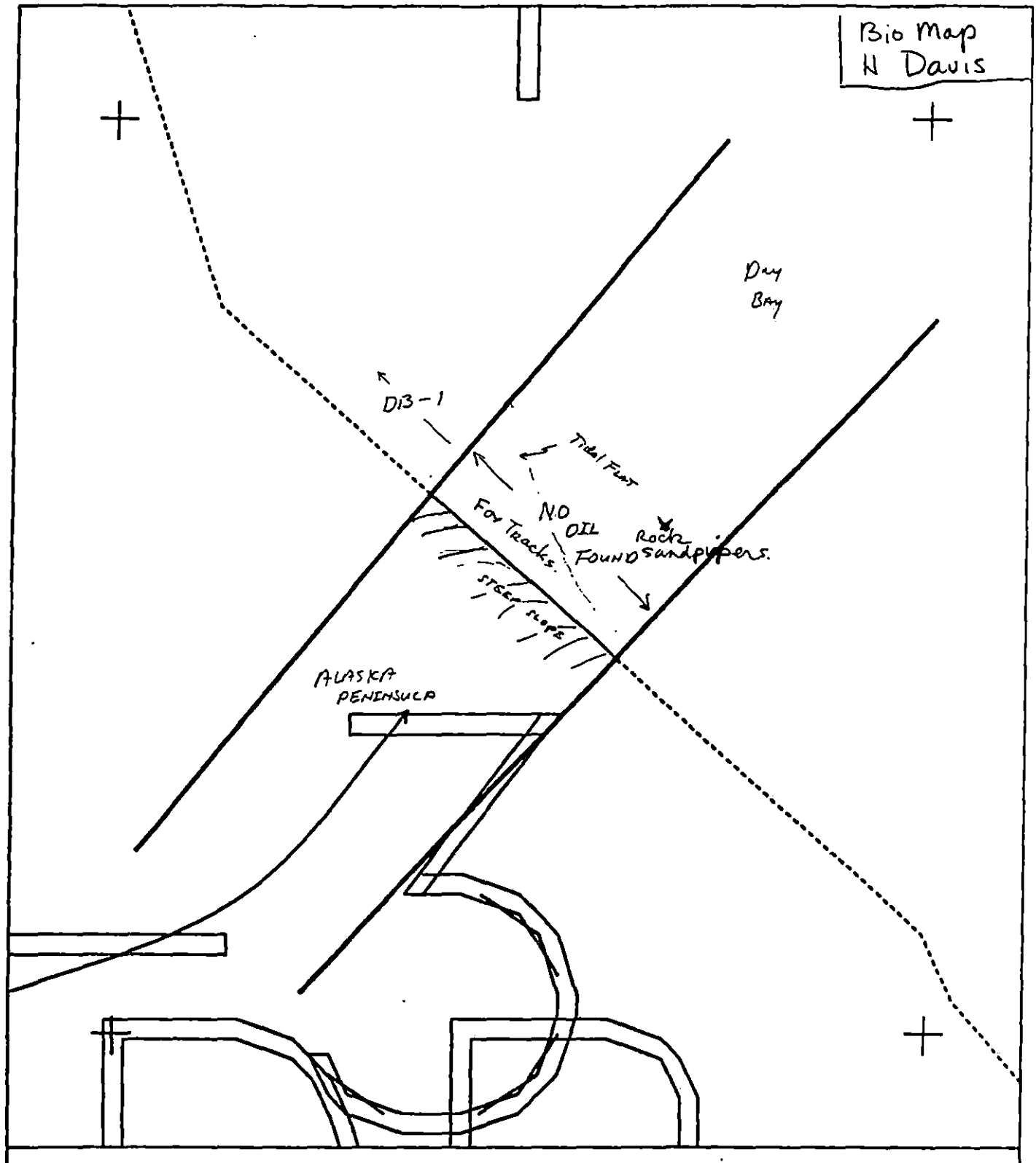
WILDLIFE OBSERVATIONS

TO BE COMPLETED IN ALL SUBDIVISIONS

BIRDS	# OF SPECIES	TOTAL BIRDS	FISH OBSERVED SPECIES PRESENT
Eagles	Ø		Ø
Seabirds	Ø		
Waterfowl	Ø		
Gulls/Kittiwakes	(1)	(1)	
Shorebirds	1	2	
Corvids	Ø		
Other Birds	Ø		

MARINE MAMMALS	# OBSERVED	LAND MAMMALS SPECIES	# OBSERVED
Sea Otters	Ø	Fox tracks	
Pinnipeds (specify)	Ø		
Cetaceans (specify)	Ø		

Shoreline subdivision map showing important biological features attached.



K1009 DB003 A

Subdivision Field Map

Map Key: COAK1000000003A

Name: D.M. FitzGerald

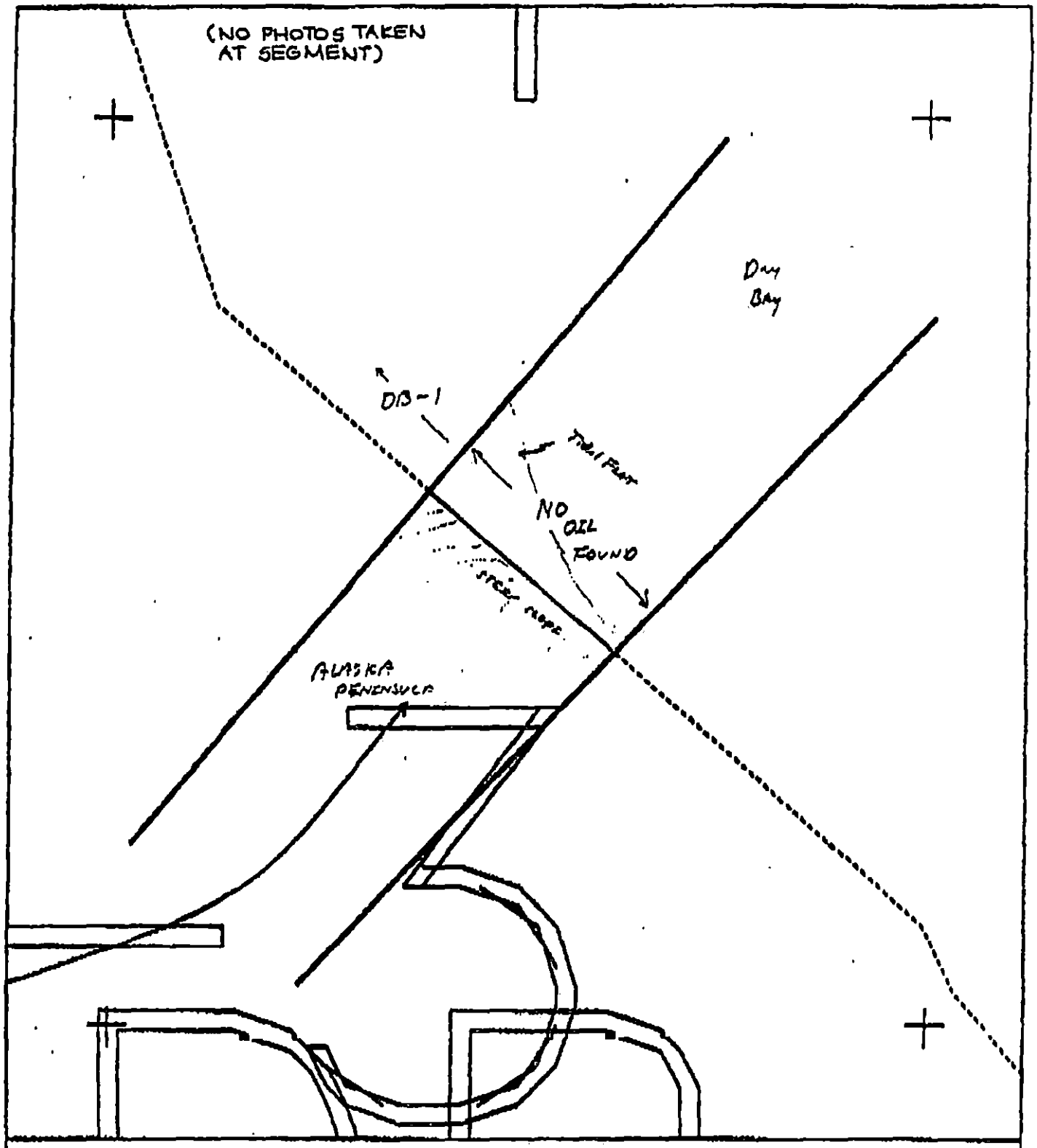
Date: 28 MAY 1991

METERS

0 100 200

AK State Plane Zone 4.

EXXON



K1009 DB003 A

Subdivision Field Map

Map Key: [illegible]

Name: D. M. FitzGerald

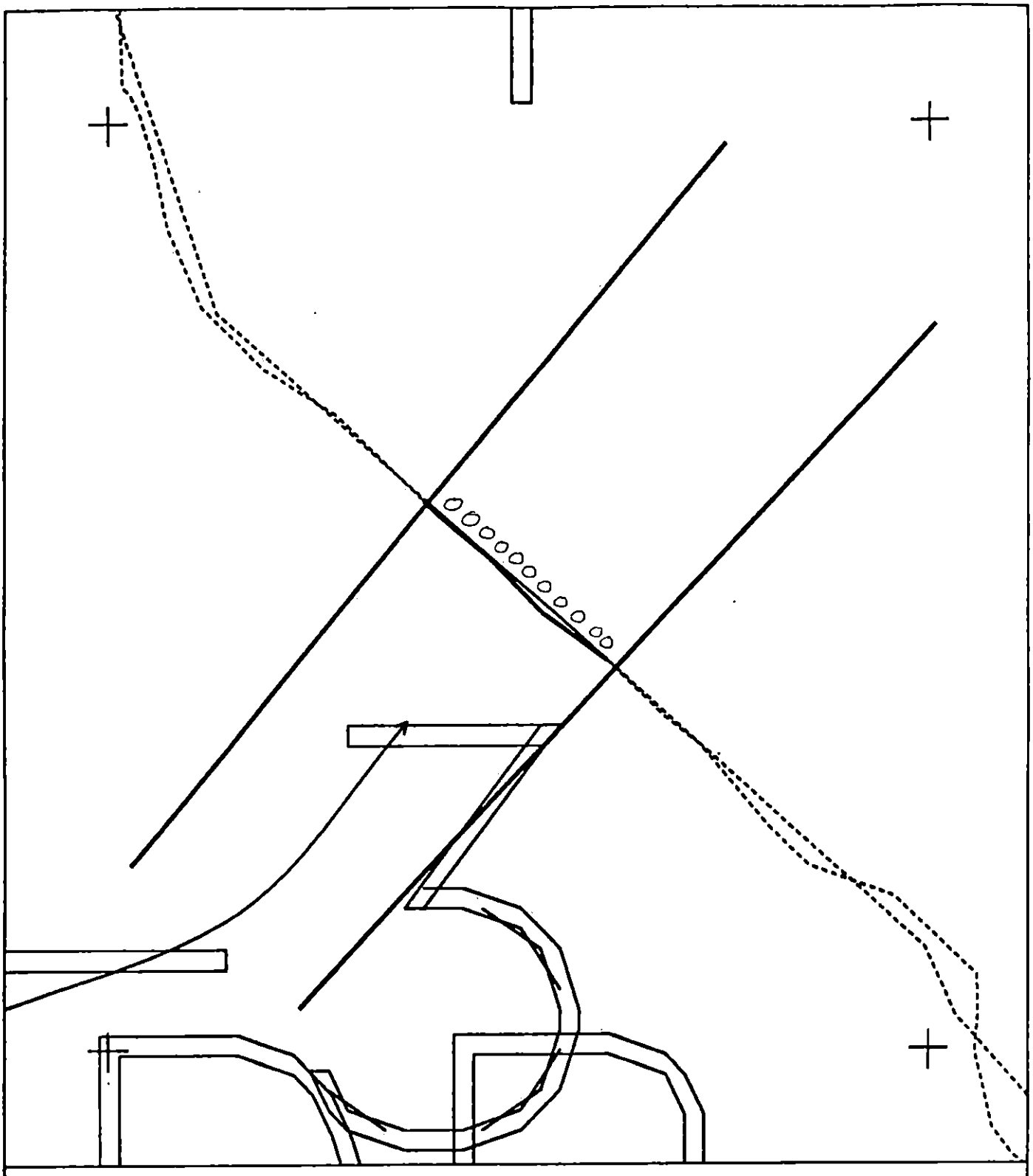
Date: 28 MAY 1991

METERS

0 100 200

EXXON

AT Alaska Clean Seas



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

K1009 DB003 A

ADEC Subsegment Length: 175m

METERS

100 200

AK State Plane Zone 4

N

EXXON

Subdivision Field Map

Map Key: 60AK1009DB003A

Name: D. M. FitzGerald

Date: 28 MAY 1991

Date Entered:

REVIEWED: MC 6/3/91

1991 MAYSAP EVALUATION

SEGMENT: K1009DB003 **SUB:** M **REGION:** KOD **SURVEY DATE:** 5/28/91

ENVIRONMENTAL SENSITIVITIES:
Work Window(s) OPEN

Ecological/Constraints (see page two for details) NONE

ARCHAEOLOGICAL CONSTRAINTS:
If treatment is planned, a cultural resource evaluation is required prior to shoreline treatment.

SHPO Signature:_____ Date:_____

RECOMMENDATIONS:	**INITIAL**	**TAG**	**FOSC**
TREATMENT REQUIRED (Y or N)	N		
Manual Pickup (Check as Req.)			
Spot Washing			
Bio-Customblen Only			
Bio-Inipol/Customblen			
Other_____			
Other_____			

COMMENTS:
INITIAL:

TAG:

FOSC:

TAG APPROVAL DATE:_____ **FOSC APPROVAL DATE:**_____

ADEC_____ FOSC _____

EXXON_____

USCG_____

NOAA_____

TEAM NO. 6-HELO SEGMENT DB-3 SUBDIVISION A DATE 5 / 28 / 91

ADEC
NAME J. BARNHART ADEC&G SIGNATURE Jeff Barnhart

☒ NTR No oil observed

EXXON
NAME R. COULTER, EXXON SIGNATURE Rex R. Coulter

☑ NTR NO OIL FOUND.

DMANAGER
ME J. HARDISTER OF USF&WS SIGNATURE John P. Hardister

☑ NTR No oil observed.

USCG/NOAA
NAME CWO R. SPUER/B. SHIGENAKA SIGNATURE R Spuer / Dan Shigenaka

☒ NTR No oil observed during survey

SURVEYED PORTION OF THIS SHORT SEGMENT CONSISTED OF ESSENTIALLY THE SAME PHYSICAL CHARACTERISTICS AS THE ADJOINING DB-1: SANDY TIDAL FLAT WITH BOULDERS ALONG ITS UPPER MARGIN AND THE SUPRATIDAL BUTTING UP AGAINST HIGH CLIFFS. ROUGHLY HALF OF THE SEGMENT WAS SURVEYED, BUT NO OIL WAS OBSERVED.

MATSAP FIELD SHORELINE COMMENT SHEET

TEAM NO. 6-HELO SEGMENT DB-3 SUBDIVISION A DATE 5 / 28 / 91

ADEC
NAME J. BARNHART, ADF&G SIGNATURE Jeff Barnhart

☒ NTR No oil observed

EXXON
NAME R. COULTER, EXXON SIGNATURE

☐ NTR

LANDMANAGER
NAME J. HARDISTER OF USF&WS SIGNATURE John P. Hardister

☒ NTR No oil observed.

USCG/NOAA
NAME CWO R. SPURR/G. SHIGENAKA SIGNATURE R Spurr / Gary Shigenaka

☒ NTR No oil observed during survey

SURVEYED PORTION OF THIS SHORT SEGMENT CONSISTED OF ESSENTIALLY THE SAME PHYSICAL CHARACTERISTICS AS THE ADJOINING DB-1: SANDY TIDAL FLAT WITH BOULDERS ALONG ITS UPPER MARGIN AND THE SUPRATIDAL BUTTING UP AGAINST HIGH CLIFFS. ROUGHLY HALF OF THE SEGMENT WAS SURVEYED, BUT NO OIL WAS OBSERVED.

MAYSAP SHORELINE OILING SUMMARY

TEAM NO. 6 Helo

OG D FitzGerald BIO N. Davis

SEGMENT K10-09 DB-03

ADEC J. Barnhart / ADFG LANDMANAGER J Hardister for USFWS

SUBDIVISION M

EXXON R Coulter USCG/NOAA CWO Spurr / G Shigenaka

DATE 28 / May / 91

TIME 10 : 45 to 10 : 55 TIDE LEVEL 0 ft. to .1 ft. ENERGY LEVEL: ☐ H ☑ M ☐ L

SURVEYED FROM: ☒ FOOT ☐ BOAT ☐ HELO WEATHER: ☐ SUN ☑ CLOUDS ☐ FOG ☐ RAIN ☐ SNOW

TOTAL LENGTH SHORELINE SURVEYED: 175 m NEAR SHORE SHEEN: ☐ BR ☐ RB ☐ SL ☒ NONE

EST. OIL CATEGORY LENGTH: W — m M — m N — m VL — m NO 175 m US — m

LOC	SURFACE OIL CHARACTER										SURFACE SEDIMENT	SHORE SLOPE	AREA		ZONE				NOTES
	AP	MS	TB	SOR	CV	CT	ST	FL	DB	NO	TYPE	V H M L	WIDTH m	LENGTH m	S	UI	MI	LI	
A										X									NO OIL SEEN

DISTRIBUTION: C = 91–100%; B = 51–90%; P = 11–50%; S = 1–10%; T = <1%

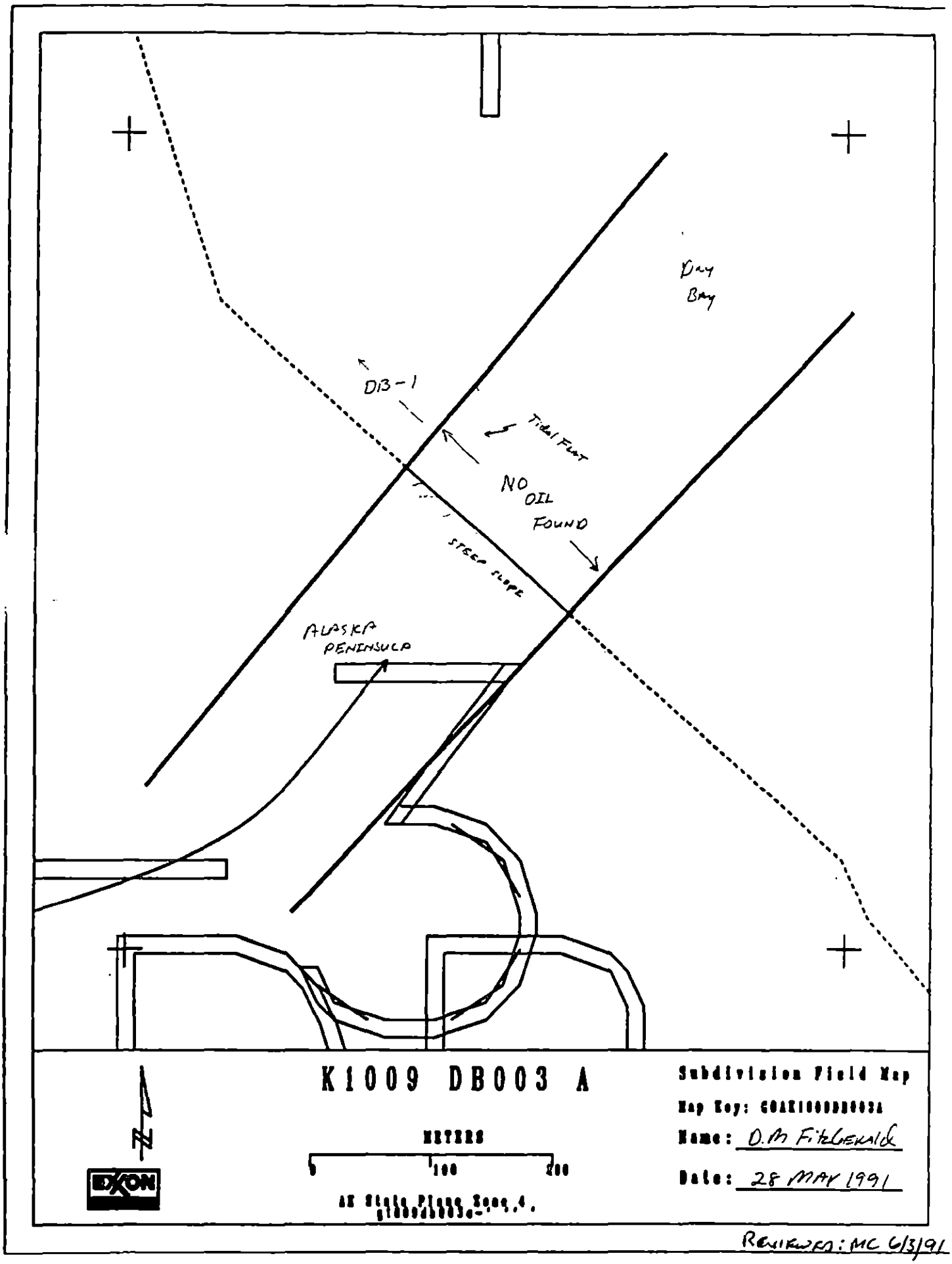
SLOPE: V = VERTICAL; H = HIGH ANGLE; M = MEDIUM ANGLE; L = LOW ANGLE PHOTO ROLL # MAYSAP- 6 - 24 FRAMES —

PIT NO.	PIT DEPTH (cm)	SUBSURFACE OIL CHARACTER							OILED ZONE cm-cm	CLEAN BELOW Y/N	H2O LEVEL (cm)	SHEEN COLOR B R S N	PIT ZONE				SURFACE-SUBSURFACE SEDIMENTS	NOTES
		OP	HOR	MOR	LOR	OF	TR	NO					S	UI	MI	LI		
									-									
									-									
									-									
									-									
									-									
									-									
									-									
									-									
									-									

SHEEN COLOR: B = BROWN; R = RAINBOW; S = SILVER; N = NONE

OG COMMENTS: This segment is located along the west central side of Day Bay. No oil could be found by the survey team along this shoreline. This area is moderately exposed to wave energy and therefore, the oiling reported on 8 May 1990 consisting of CT/CO/ST, was likely abraded and dispersed by storm waves.

REVISED: MC 6/3/91



K1009 DB003 A

Subdivision Field Map

Map Key: [illegible]

Name: D.M Fitzgerald

Date: 28 MAY 1991

METERS

0 100 200

EXXON

RENUMBER: MC 6/3/91

MAYSAP BIOLOGICAL SUMMARY FORM

TEAM # 6 Helo | DATE May 28 1991

SEGMENT # K10-09 DB-03 | TIDAL HEIGHT (Range) 0-.1 ft (1045 - 1055)

SUBDIVISION m | BIOLOGIST N. Davis

SEA STATE Tide out in bay (2-3 ft on coast) | WIND SPEED/DIRECTION 5 kts E

PHOTOGRAPHS: ROLL # 6-24 | FRAME #

COMMENTS/OBSERVATIONS (to be completed in oiled subdivisions only):

No oil was observed in this segment. The site is a sandy tidal flat with boulder/cobble rubble in the UIT2 and supratidal backed by high bedrock cliffs. Fucus and filamentous green algae grew on the rocks in the UIT2. Barnacles and limpets were very sparse in this area.

Rock Sandpipers (2) Kittiwake 1 dead

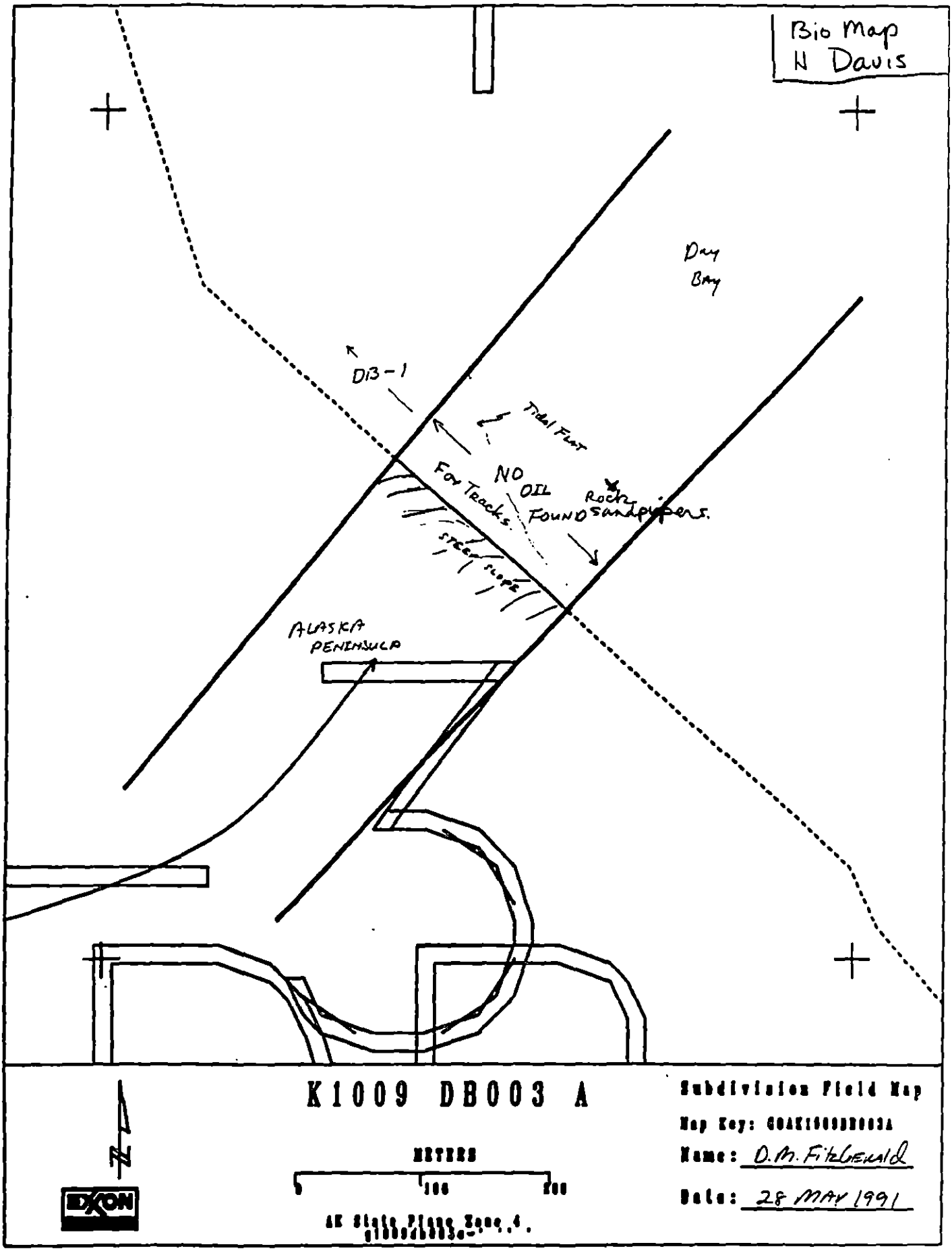
WILDLIFE OBSERVATIONS
TO BE COMPLETED IN ALL SUBDIVISIONS

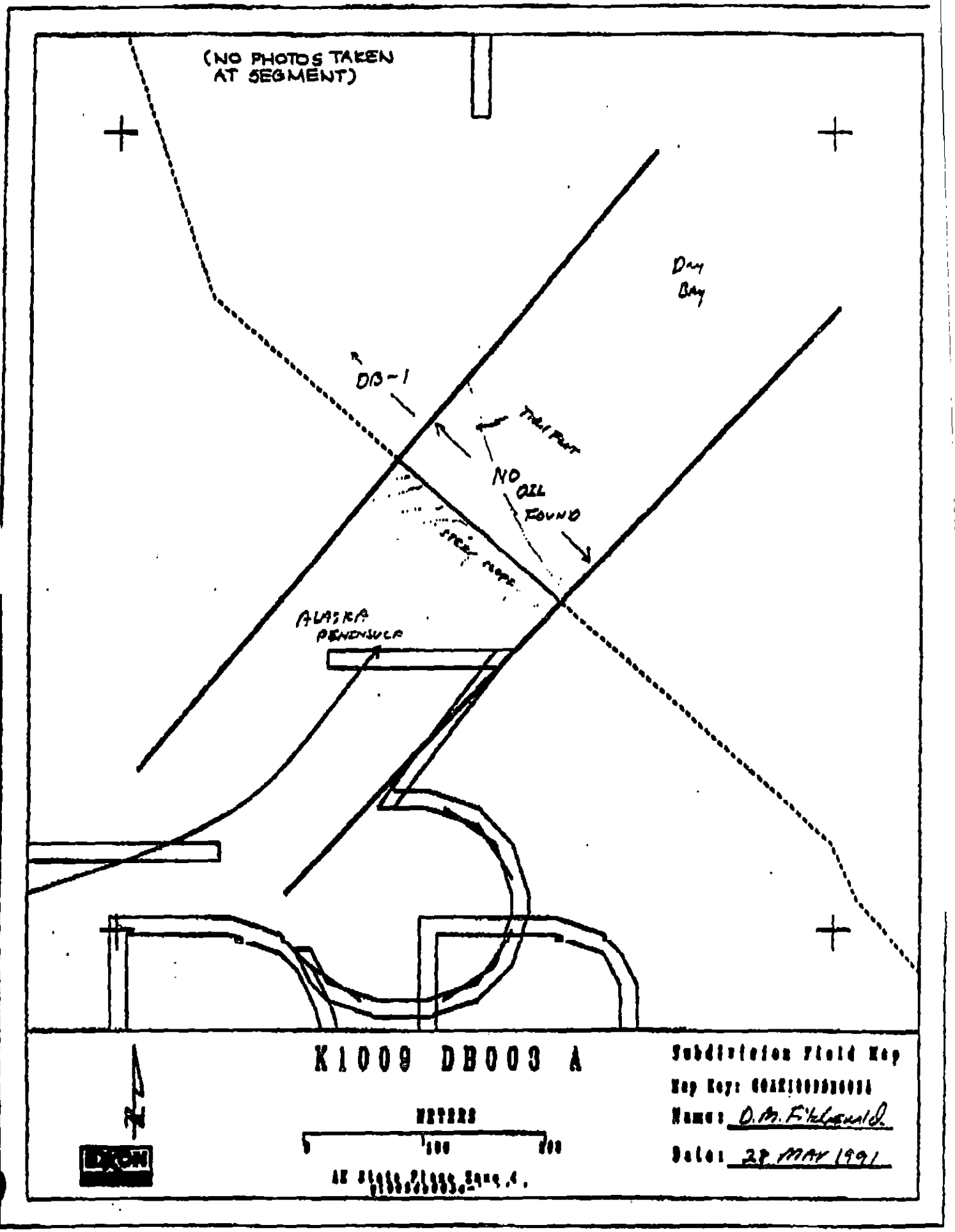
BIRDS	# OF SPECIES	TOTAL BIRDS	FISH OBSERVED SPECIES PRESENT
Eagles	Ø		Ø
Seabirds	Ø		
Waterfowl	Ø		
Gulls/Kittiwakes	(1)	(1)	
Shorebirds	1	2	
Corvids	Ø		
Other Birds	Ø		

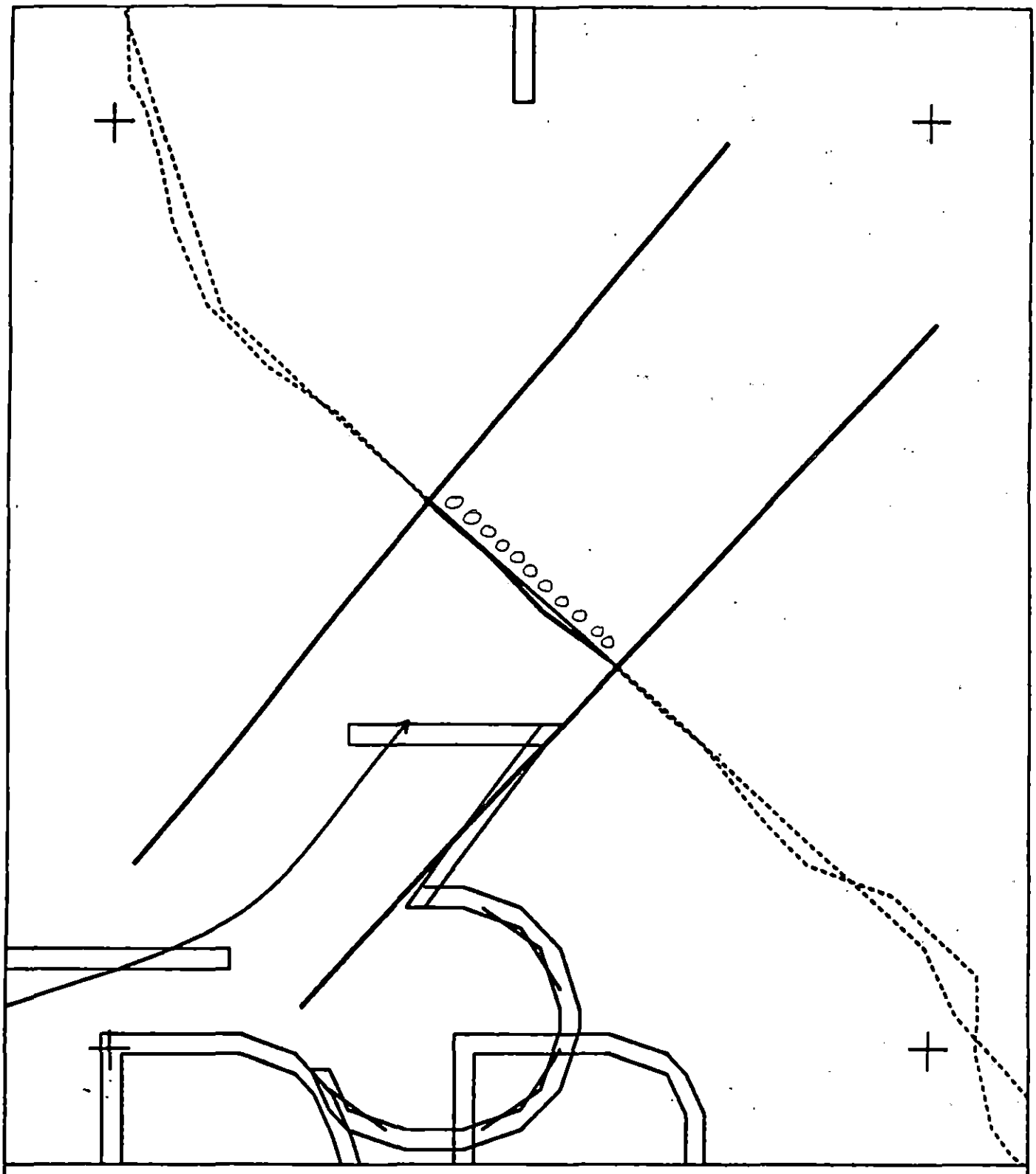
MARINE MAMMALS	# OBSERVED	LAND MAMMALS SPECIES	# OBSERVED
Sea Otters	Ø	Fox Tracks	
Pinnipeds (specify)	Ø		
Whales (specify)	Ø		

Shoreline subdivision map showing important biological features attached.

Printed with SAS


Bio Map
N Davis
Dry Bay
DB3-1
Tidal Flat
NO OIL FOUND
For Tracks
Rocky
Sandpipers.
steep slope
ALASKA PENINSULA
K1009 DB003 A
Subdivision Field Map
Map Key:
Name: D.M. FitzGerald
Date: 28 MAY 1991
METERS
100
200
EXXON


(NO PHOTOS TAKEN AT SEGMENT)
Dry Bay
DB-1
TAR PIT
NO OIL FOUND
STEEL ROPE
ALASKA PENINSULA
K1009 DB003 A
Subdivision Field Map
Name: D.M. Fitzgerald
Date: 28 MAY 1991
EXXON



XXXX	Wide	K1009 DB003 A
////	Medium	ADEC Subsegment Length: 175m
----	Narrow	METERS
TTTT	Very Light	0 100 200
0000	No Oil	AK State Plane Zone 4

EXXON

Subdivision Field Map

Map Key: 00AK1000000003A

Name: D. M. FitzGerald

Date: 28 May 1991

Date Entered:

Reviewed: MC 6/3/91