



EVOS
GC
1552
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S42
1989
v.5

[Shoreline evaluations, 1989].

Volume 5

Flemming Island, Bainbridge Island, Gage Island, Whale Bay

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LIST OF KEY CODES USED ON SHORELINE CLEANUP EVALUATION FORMS

pg-3

ISLANDS (Locations)

Naked Is.	NA
Peak Is.	PE
Stoney Is.	ST
Eleanor Is.	EL
Ingot Is.	IN
Block Is.	BL
Entrance Is.	EN
Sphinx Is.	SP
Disk Is.	DI
Knight Is.	KN
Smith Is.	SM
Seal Is.	SE
Applegate Is.	AP
Green Is.	GR
L. Green Is.	LG
Agnes (Bass) Is.	AB
L. Smith Is.	LS
Gore Point	GP
Montague Is.	MN
Aguliak Is.	AG
Squirrel Is.	SL
New Year Is.	NY
Murray Is.	MU
Squire Is.	SQ
Crafton Is.	CR
Pt. Nowell	PN
Junction Is.	JU
Chenega Is.	CH
Pleiades Is.	PL
Bainbridge Is.	BA
Flemming Is.	FL
Evans Is.	EV
Elrington Is.	ER
Latouche Is.	LA
Danger Is.	DA

* GEOLOGIC SEDIMENT TYPE

Boulder (>256mm)	B
Cobble (64-256)	C
Pebble (4-64)	P
Granule (2-4)	G
Sand (0.06-2)	S
Mud (less 0.06)	M
Rock	R

** DEGREE OF OILING

Heavy	HV
Moderate	MD
Light	LT
No Oil	NO
Unobserved	UN

AREA OF BEACH IMPACT

Supratidal (+SHWL)	SU
HWL to SHWL	SP
Upper 1/3 ITZ	H
Middle 1/3 ITZ	M
Lower 1/3 ITZ	L

ADEC IMPACT SURVEY

Heavy	HVY
Moderate	MOD
Light	LT
No Oil	NO
Unobserved	UNOBS

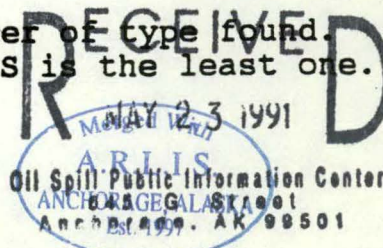
SHORELINE TYPE

Beach	BEA
Cove	COV
High Angle	HANG
Low Angle	LANG
Vertical	VER
Headland	HLD
Spit	SPI

Comments:

* Multiple entry is acceptable, use decreasing order of type found.
(ie. C/G/S where C is most predominant type and S is the least one.)

** Heavy (>6m wide and/or >1.0 cm thick)
Moderate (3-6m wide and/or 0.2-1.0 cm thick)
Light (0.1 -3m wide and/or <0.2 cm thick)
No Oil (free of visible oil)



BEACH LEVEL

SUPRATIDAL (+SHWL)	SU
HWL to SHWL	SP
UPPER 1/3 ITZ	H
MIDDLE 1/3 ITZ	M
LOWER 1/3 ITZ	L

SEDIMENT TYPE

BOULDER (> 256 mm)	B
COBBLE (64 - 256)	C
PEBBLE (4 - 64)	P
GRANULE (2 - 4)	G
SAND (0.06- 2)	S
MUD (< 0.06)	M
ROCK	R

Can use multiple entries e.g. C/G/S; in which case the first letter is the predominant sediment type and the following are in decreasing order

KEY

LOCATION PREFIX

NAKED IS	NA
PEAK IS	PE
STOREY IS	ST
ELEANOR IS	EL
INGOT IS	IN
BLOCK IS	BL
ENTRANCE IS	EN
SPHINX IS	SP
DISK IS	DI
KNIGHT IS	KN
SMITH IS	SM
SEAL IS	SE
APPELGATE IS	AP
GREEN IS	GR

LOCATION SUFFIX

A unique number which identifies the distinct segment described in this report.

C:\WP\DATA\SHOREVAL.1

(version 5/04/89)

SHORELINE PRE-CLEANUP ASSESSMENT BLOCK REPORT

Location (see enclosed map): Flemming Island West Block

Includes Shoreline Segments: FL-1, FL-2, FL-3

Submitted : [Signature] Date: 7/17/89
(for Exxon)

ISCC Approval: Sharon K. Christopher Date: 7/21/89

FOSC Approval: CE Robbins Date: 7/21/89

The cleanup procedures identified in the Shoreline Cleanup Program are recommended. Modifications to these systems can be made in the field. Exxon and other field personnel are encouraged to suggest innovations and productivity enhancements to the OSC's on-scene representative. The OSC's representative has the authority to approve on-site modifications. The Field Resource Team should be consulted if these actions do not fit within the Ecological Constraints of the Shoreline Cleanup Program. Requirements for safety and the protection of cultural material must be observed.

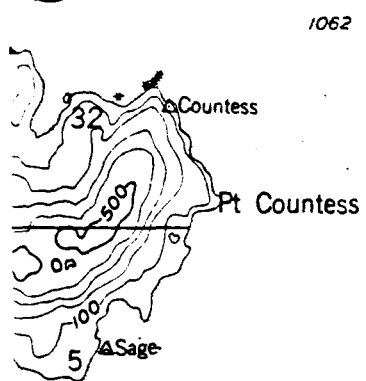
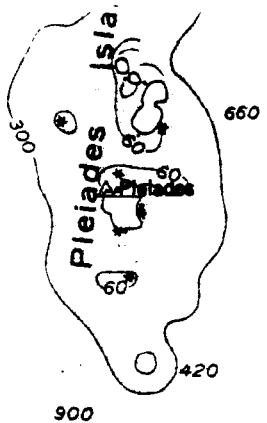
Distribution:

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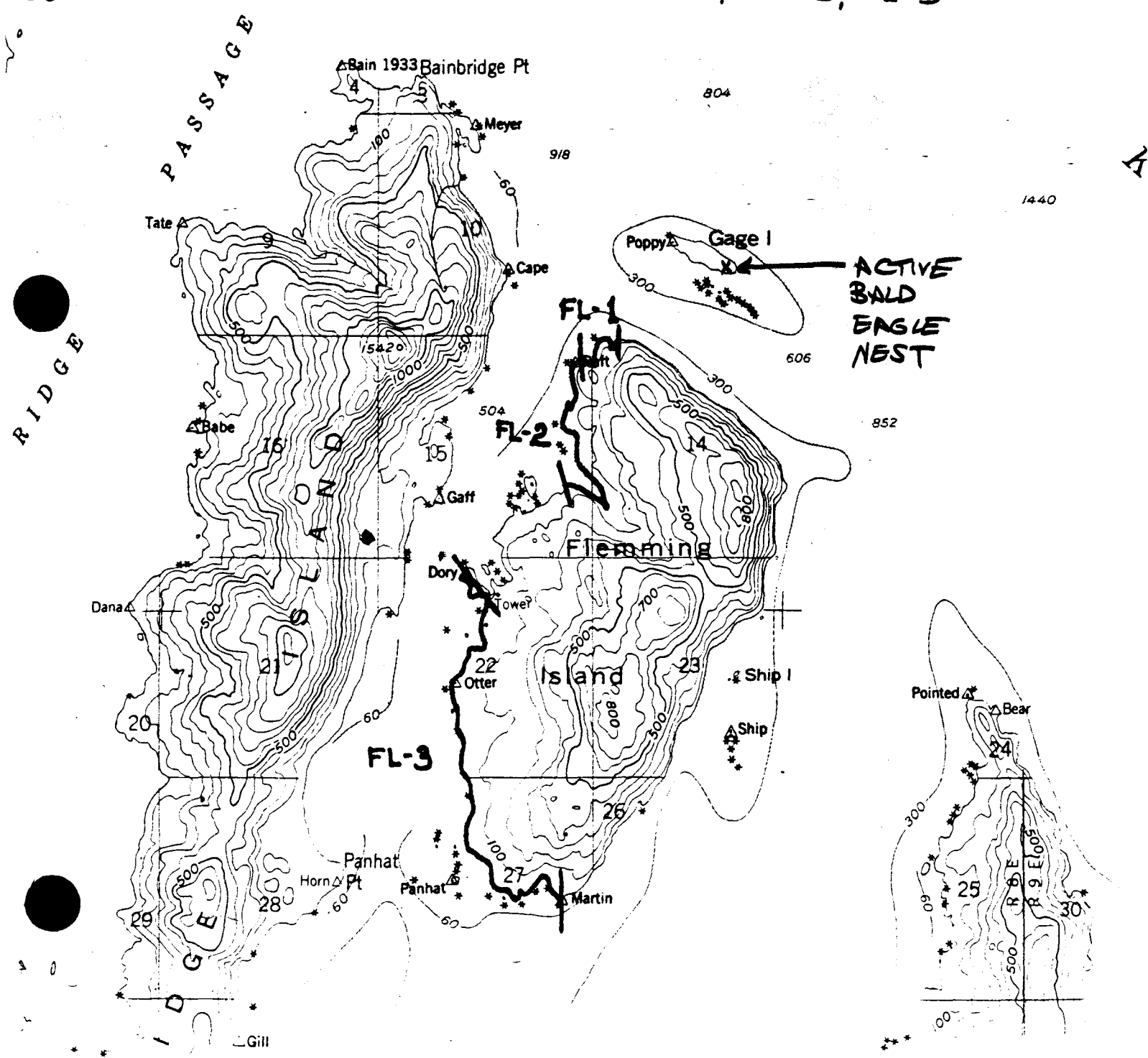
ACA
7/21

7/20/89
USFWS



FLEMMING ISLAND WEST BLOCK

FL-1, FL-2, FL-3



(version 6/14/89)

SHORELINE CLEANUP PROGRAM

DATE 7/16/89

SHORELINE SEGMENT FL-1

LOCATION: (see enclosed map) Northwest tip of Flemming Island

ADEC NO. _____ SHORELINE ASSESSMENT DATE: 7/12/89

Recommended Cleanup Activity(ies):

- Manually remove contaminated drift material (fucus), and other debris.
- Flood/flush with warm to hot water (up to 140 F) on low angle pocket beaches.
- Use moderate to high pressure warm to hot water washing on rock and oiled logs.
- Use other approved methods as appropriate.

Priorities Considerations:

Class 2-4: heavy to light oil

Class A: resources present

Small size of pocket beaches could limit use of flood/flush technique.

Ecological Constraints (from site survey): Work at mid tide + or take appropriate measures to protect lower intertidal zone. Avoid disturbing healthy fucus, plants are refuge area for smaller invertebrates. If cleanup occurs, use warm water - not hot - to reduce thermal damage to fucus plants. Restrict number of crew members to reduce trampling of intertidal zone. Minimize recontamination of lower intertidal zone.

Archeological Constraints (from site survey):

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

[Signature]
State Historic Preservation Officer *

Date: 7/17/89

ISCC: Sharon K. Christopher

Date: 7/21/89

EXXON: [Signature]

Date: 8/27/89

FOSC: [Signature]

Date: 7/21/89

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

SHORELINE OIL EVALUATION

Date: 7/12/89 Time: 12:55-14:00

Observer: KAROLINE DEBUSSCHE

Surveyed From: Foot/Boat/Helio/Plane

Weather: Sun/Cloud/Rain/Snow/Fog

LOCATION

LOCATION NE TIP OF FLEMING ISLAND SEGMENT NUMBER FL-1

LENGTH OF SHORELINE SEGMENT: 375 m

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

SHORELINE:

Shoreline Type: SPI/BEA/COV/HLD/STRT

Slope: LANG/HANG/VER

Wave Exposure: High/Med/Low

Sediment: B 20% / C 15% / P 5% / G 25% / S 10% / M 0% / R 25%

Drift Debris on Beach: Yes/No Supra/Upper/Mid/Lower Type WOOD/ALGAE
TRANSIT

OIL

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

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

Continuous: (Y)/N % of Segment 40 Width of Band: .2-8 m

Sporadic: (Y)/N % of Segment 60

Est. Oil Thickness where > 1cm: - cm Est. Oil Penetration: 5 cm

Pooled Oil: <1 % "Free" Oil: 24 % Coated: H 35% / M 15% / L 25%

Fresh 60 % Mousse 1 % Tar Formation: 39 %

Drift Debris Oiled? Yes/No Supra/Upper/Mid/Lower Amount: H/M/L

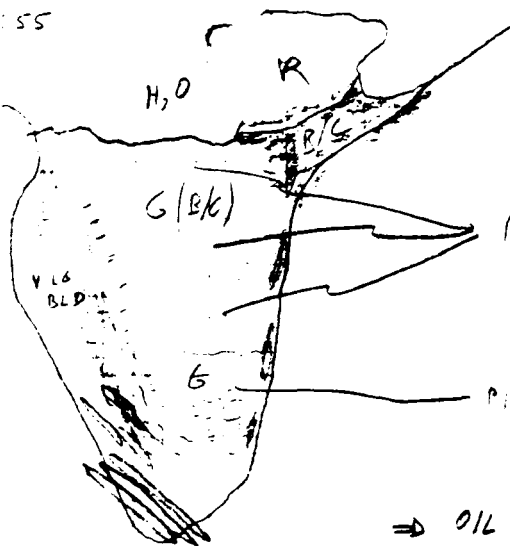
Comments:

SEGMENT CONSISTS OF ROCK OUTCROPS AND 2 HEAVILY OILED
POCKET BEACHES. ACCESS IS POSSIBLE ON BEACHES - PROBABLY
NOT FOR HEAVY EQUIPMENT - BEACH AREA IS SMALL.

7/12/89

FL-1 12:55

LOCATION ①



DIFT:

WOOD / ALGAE / TRASH IN M/H/SV
→ OILED

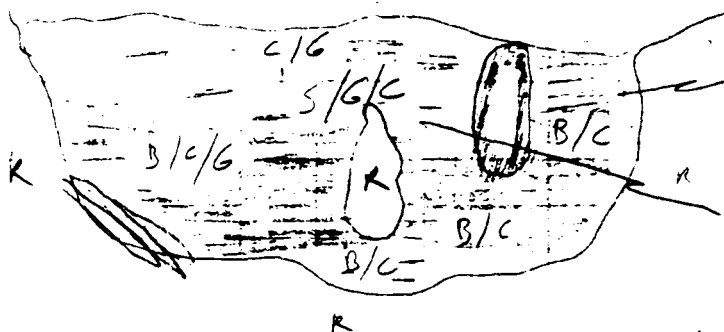
PIT: OIL / SURFACE IS OILED

PIT 25 CM OIL IN 30 CM PIT (G)

⇒ OIL IN M/H/SV & SPLASH IN SP
OILED FOCUS ON B IN MIDDTIDE

R SKIFF OUTCROP: THIN LINE OF OIL

LOCATION ②



SOME POOLED

PIT 5 CM S/G
5 CM OILED G FOCUS

OIL IN M/H/SV
OILED FOCUS IN M

FRESH / FUEL

ROL #3 P① 13:35 VIEW OF LOG ② (G)

P② 13:35 " " " (W)

END: 14:00

ECOLOGICAL EVALUATION

LOCATION: Prince William Sound SITE: NW tip of Flemming Island OBSERVER: S. L. Dearn

LOCATION PREFIX: _____ SEG. NO.: FL-1 LENGTH: 375 (M)

DATE: 07/12/89 TIME (HHMM): 12:55/1400 TIDE HT.: 5.0 - 4. ft (M)

OILED ZONE: Splash High Medium Low (Low water: 4.3 ft @ 14:14)

SUBSTRATUM: Rocks Boulder Cobble Gravel Sand Mud

LIVE BIOTA

Fucus (algae): Patchy (Y/N) Contin. (Y/N) Dense (Y/N) Sparse (Y/N) None Y/N
Upper 0.5-1.0 m of Fucus moderately to heavily oiled. Enteromorpha mats
Fucus in dense, continuous band on vertical rock outcroppings; Fucus patchy (in clumps) on cobbles/boulders

Mytilus (Mussels): Patchy (Y/N) Contin. Y/N Dense (Y/N) Sparse (Y/N) None Y/N
No dense beds of any great size. Primarily clusters along cracks in rocks + at bases of cobbles + boulders

Balanus (Barnacles): Patchy (Y/N) Contin. (Y/N) Dense (Y/N) Sparse (Y/N) None Y/N
Dense covering occurred on larger cobbles on beach + on vertical wall of rocky outcroppings.

Littorina

Patchy (Y/N) Contin. Y/N Dense (Y/N) Sparse (Y/N) None Y/N
Cluskered + sparsely scattered, primarily beneath Fucus blades + around holdfasts. *Ocenebra* + *Nucella* present

Limpets: Patchy (Y/N) Contin. Y/N Dense (Y/N) Sparse (Y/N) None Y/N
Primarily *Notamacmaea scutum* (now *Lottia* sp.) (recently settled)
Size range of limpets ranged from very small ~ 4.5 mm to 2.5 cm. Found predominantly under Fucus blades

OTHER OBSERVATIONS: Lichen zone very thick + dark - appears very similar to oil but is not (usually misleading)

1 *Pisaster* + 1 *Anthopleura* observed. 1 partially articulated deer skeleton found (bones were very clean)
Mid-lower intertidal has few clumps of algae (*Fucus*, *Scytosiphon*, *Gelidium*-like).

CLEANUP PRECAUTIONS: Minimize as much as possible disturbance to healthy Fucus + invertebrates found associated w/ Fucus plants (ie, under blades + around holdfasts)

MAMMALS: Otters _____ Harbor Seals _____ Sea Lions _____ Whales _____
Other _____

BIRDS: 1 Pigeon Guillemot, Several Glaucous-winged gulls + black legged Kittiwakes

GENERAL OBSERVATIONS: Oiling has affected upper 1m of Fucus. Invertebrates beneath oiled Fucus blades still present + apparently alive. Mid-lower intertidal relatively devoid of algae + invertebrates. Ecological diversity here is low, possibly due to tumbling effects of round cobbles + boulders during storms + high wave activity

(version of 4/29/89)

CULTURAL RESOURCE EVALUATION

Date 7-12-89 Location SEW-A-3 N.W. Coast Fleming Is. Site

Location Prefix FL Segment # 1 Length 375 m.

Survey Method:

Air (A - indicate on map) Boat X (80°) (A - indicate on map)

Ground X (20°) (G - indicate on map)

Known cultural resources (AHRS #) NONE Data Source —

Oil conditions/beach visibility MODERATE-HEAVY / FAIR

Width of beach zone surveyed 30 m Tree fringe surveyed 0

Cultural resources observed in beach zone (AHRS code) NONE

Cultural resources observed in tree fringe (AHRS code) NONE

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

Shore Profile POCKET BEACH CONSISTING OF -- MOSTLY MIXED GRAVEL SAND / BOULDERS & BORDERED BY STEEP ROCKY CLIFFS

Fresh Water Sources 1 SMALL H2O SEEP

Sea Exposure OPEN TO PRINCE OF WALES PASSAGE

Access/Safety REASONABLY ACCESSIBLE

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

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

Photos: Color Roll # Frames

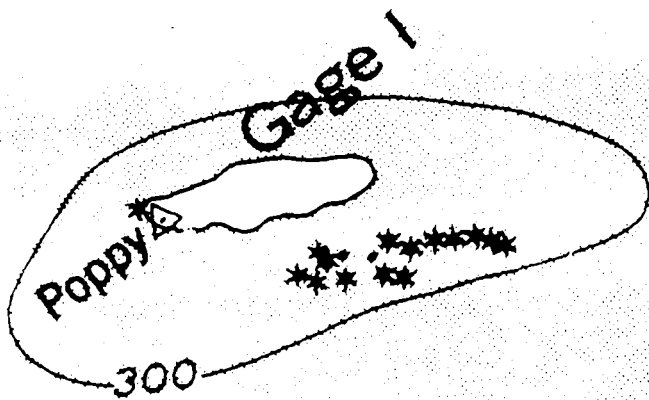
B/W Roll # 3 FRAME # 1 Frames # 1-2

Observer(s) ROBERT MACK & PAUL BUCK

Time survey started 1250 Hrs Time survey ended 1340 HRS

Cultural resource considerations/restraints:

STANDARD CONSTRAINTS



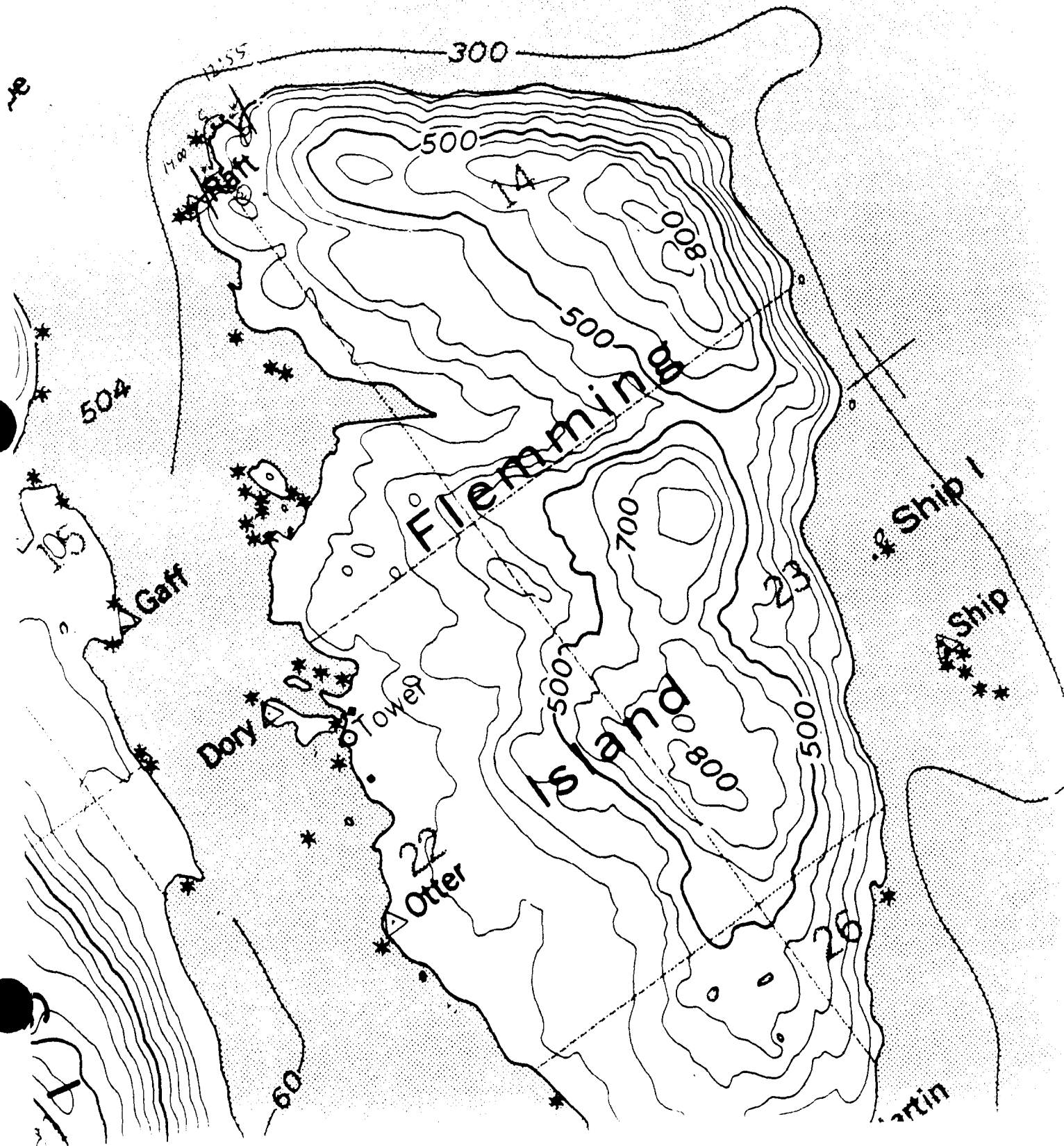
SEGMENT FL-1

JULY 12 1989

12:55 - 14:00

KAROLINE DEBUSSCHERE

852



(version 6/14/89)

SHORELINE CLEANUP PROGRAM

DATE 7/16/89

SHORELINE SEGMENT FL-2

LOCATION: (see enclosed map) Northwest Flemming Island

ADEC NO. _____ SHORELINE ASSESSMENT DATE: 7/12/89

Recommended Cleanup Activity(ies):

- Manually remove contaminated drift material (fucus).
- Use moderate to high pressure warm to hot water washing on rock and oiled logs.
- Because the contaminated beach sediments are fine grained, diskings or relocating them into the lower intertidal zone would accelerate cleaning. This is an exposed beach in which the sediments would be reworked and redistributed back up the intertidal zone. IF DISKING TECHNOLOGY IS TO BE USED, ADVISE RAT
- Use other approved methods as appropriate. 48 HOURS BEFORE HAND (IF POSSIBLE).

Priorities Considerations:

Class 2-4: heavy to light oil

Class A: resources present

Ecological Constraints (from site survey): Work at mid tide + or take appropriate measures to protect lower intertidal zone. Three potential anadromous fish streams located at sites 1 and 2. ~~Confirm with ADF&G and notify ADF&G and RAT within 48 hours prior to beginning any cleanup.~~ Avoid disturbing healthy fucus to ensure sufficient numbers of plants for reseeding. Minimize boat traffic to avoid disturbing the subtidal eelgrass.

Archeological Constraints (from site survey):

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

[Signature]
State Historic Preservation Officer *

Date: July 17, 1989

ISCC: Shawn K. Christopher

Date: 7/21/89

EXXON: [Signature]

Date: 8907-21

FOSC: [Signature]

Date: 7/21/89

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

SHORELINE OIL EVALUATION

Date: 7/12/89 Time: 14:00 - 15:15

Observer: KAROLINE DEBUSSCHE

Surveyed From: Foot/Boat/Helio/Plane

Weather: Sun/Cloud/Rain/Snow/Fog

LOCATION

LOCATION NE FLEMING ISLAND

SEGMENT NUMBER FL-2

LENGTH OF SHORELINE SEGMENT: 1970 m

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

SHORELINE:

Shoreline Type: SPI/BEA/COV/HLD/STRT

Slope: LANG/HANG/VER

Wave Exposure: High/Med/Low

Sediment: B 10 % / C 10 % / P 25 % / G 10 % / S 5 % / M 0 % / R 40 %

Drift Debris on Beach: Yes/No Supra/Upper/Mid/Lower Type WOOD/ALGAE

OIL

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

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

Continuous: Y/N % of Segment 60 Width of Band: .2 - 6 m

Sporadic: Y/N % of Segment 40

Est. Oil Thickness where > 1cm: — cm Est. Oil Penetration: ≤ 20 cm

Pooled Oil: 0 % "Free" Oil: 0 % Coated: H 10 % / M 40 % / L 50 %

Fresh 4 % Mousse 1 % Tar Formation: 95 %

Drift Debris Oiled ? Yes/No Supra/Upper/Mid/Lower Amount: H/M/L

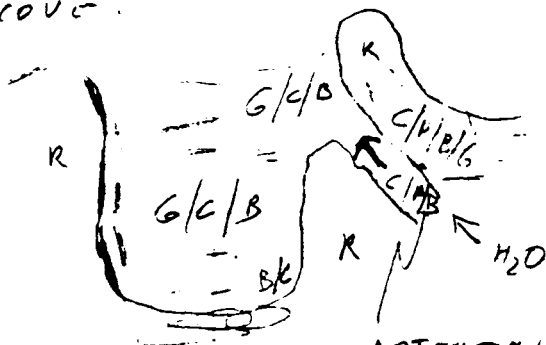
Comments:

MOST OF SEGMENT IS ROCK OUTCROP WITH 2 SMALL POCKET BEACHES
AND ONE LARGER BEACH AREA IN LOCATION (2). OIL IS FOUND SPORADIC
AT SURFACE IN BEACHES BUT CONTINUOUS IN SUBSURFACE AS LIGHT TAR
COATING (5-20 CM). BEACHES ARE ACCESSIBLE BUT 2 BEACHES AT
LOCATION (1) ARE PROBABLY TOO SMALL FOR TO ALLOW FOR
LARGE EQUIPMENT

FL-2 14:00 7/12/89

* SKIFF OUTCROP, SOME B & SPORADIC OIL - THIN LINE TO THICK COATING
* LOCATION ①

2 LITTLE POCKET BEACHES W OUTCROP/CLIFF IN BETWEEN
→ NE-POV



⇒ SPORADIC OIL (TR) ON SURFACE - LIGHT
SOME HEAVIER PATCHES
PITS → OIL IN SAND ± 10 CM (LIGHT TR) (CONF)
SPORADIC OIL ON R (OILED FOCUS)

POTENTIAL RHADROMOUS STAGN

7/12/89

FL-2 CONT

→ SW-COVE SAME MORPHOLOGY AS NO

LITTLE MORE OIL ON B & FUCUS → SOME MOUSSE

WOOD IN M/SP, ALGAE IN M/H

PIT IN H-TIDE: 10 CM IN G: OIL (TRK)

M - " 5 CM IN G " "

OIL (TRK) ON R & V LG BLD AT HIGH TIDE - OFF SHORE

P(3) 14:22: VIEW OF SW-COVE

* SKIPPED OUTCROP & SOME B, LITTLE CREVICES & B-BEACHS (TOO SMALL FOR EQUIPMENT)

→ I CONT BAND OF OIL; SPORADIC 3 DISTINCTIVE OIL BANDS

* LOCATION (2)

- LARGE BAY / BEACH AREA W SAME GENERAL MORPHOLOGY AS (1)

- 2 CREEKS: ONE POTENTIAL ANADROMOUS

- DEBRIS ALONG IN M/T/SP; WOOD IN M/H/SP

OIL I CONT BAND OF TRK ON TIDE → LIGHT TRK, SPORADIC HEAVY PATCHES
SPLASH IN SP
SPORADIC OIL IN M

DITS: M & H → OIL 5-20 CM DEEP

P(4) 15:03 VIEW OF LOC (2)

* SKIPPED OUTCROP / CLIFF OIL RING

END 15:15

FL-3 15:15 7/12/89

→ LAND IN FIRST BEACH; H₂O IS TO M/H-LINE

OIL IS DEEP-PENETRATION & EXTENDS TO MID-TIDE AS FAR AS VISIBLE

→ H₂O TOO HIGH TO WORK IN!

ECOLOGICAL EVALUATION

LOCATION: Prince William Sound SITE: NW tip of Fleming Island OBSERVER: S.L. Dearn

LOCATION PREFIX: _____ SEG. NO.: FL-2 LENGTH: 1970 (M)

DATE: 07/12/89 TIME (HHMM): 1400-1510 TIDE HT.: 5.0 - 4.5 ft (M)

OILED ZONE: Splash High Medium Low

(Low Water:
4.3 ft @ 14:14)

SUBSTRATUM: Rocks Boulder Cobble Gravel Sand Mud

LIVE BIOTA

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

Upper 1m of Fucus oiled (light to heavy oiling)

Enteromorpha mats

Fucus - dense + continuous on vertical rock outcroppings; patchy + sparse on cobbles + boulders.

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

Some larger individuals gaping (~ < 5%)

In clusters at bases of smaller boulders on beach + cracks of vertical rock outcroppings.

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

Dense on larger boulders + larger cobbles. Scattered on cobbles across beach

Littorina

Patchy Y/N Contin. Y/N Dense Y/N Sparse Y/N None Y/N

Nucella present

Clustered under Fucus blades + in cracks + crevices of boulders. Often associated in high numbers with Enteromorpha mats.

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

Primarily Notoacmaea suturem. Generally found taking refuge under Fucus blades.

OTHER OBSERVATIONS: 3 potential anadromous fish streams located (see map). Shallow subtidal eelgrass beds at Location (2). Oiled drift Fucus in wrack line. Juvenile fish (rockfish type) seen at water's edge at Location (1). Eelgrass, Halosaccion, Enteromorpha, Fucus in drift.

CLEANUP PRECAUTIONS: Disturbance of possible anadromous fish streams should be avoided.

(ADF+G maps not presently available to me. Please confirm w/ ADF+G.)

Care should also be taken to avoid recolonization of shallow subtidal eelgrass beds. If bioremediation occurs, tidal flushing of area should decrease problems associated w/ water quality. Increased nutrients may affect algal growth + eelgrass growth thereby.

MAMMALS: Otters _____ Harbor Seals 1 on nearshore rocks Sea Lions _____ Whales _____

Other _____

BIRDS: 1 Bald Eagle (not on beach, flew by over water), several Black-legged Kittiwakes, several crows

GENERAL OBSERVATIONS: Streams, although not running very much, are potential salmon spawning areas, particularly for pink salmon. Mid-high Intertidal region has relatively low diversity + abundance of organisms, possibly due primarily to cobble/boulder substratum. Shallow subtidal Zostera (eelgrass) beds appear relatively dense. These should be considered ecologically important habitats.

(version of 4/29/89)

CULTURAL RESOURCE EVALUATION

SEWARD (A-3) BOAT

Date 7/12/89 Location NW 1/4 PART OF FLEMING I. Site

Location Prefix FL- Segment # 2 Length 1970 m

Survey Method:

Air (A - indicate on map) Boat ✓(80%) (A - indicate on map)

Ground ✓(20%) (G - indicate on map)

Known cultural resources (AHRS #) NONE Data Source AHRS FILES

Oil conditions/beach visibility LIGHT TO MODERATE OILING, FAIR BEACH VISIBILITY

Width of beach zone surveyed 20 M m Tree fringe surveyed 0-5 m

Cultural resources observed in beach zone (AHRS code) NONE

Cultural resources observed in tree fringe (AHRS code) NONE

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

Shore Profile ROCKY HEADLANDS WITH SMALL ROCKY BEACHES, NARROW LAGOON W/SPRUE

Fresh Water Sources SMALL STREAMS

Sea Exposure OPEN TO PRINCE OF WALES PASSAGE

Access/Safety GOOD BOAT ACCESS, ALSO SKIFFS, LCV'S

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

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

Photos: Color Roll # Frames

B/W Roll # REBTMY 10 Frames 13, 14

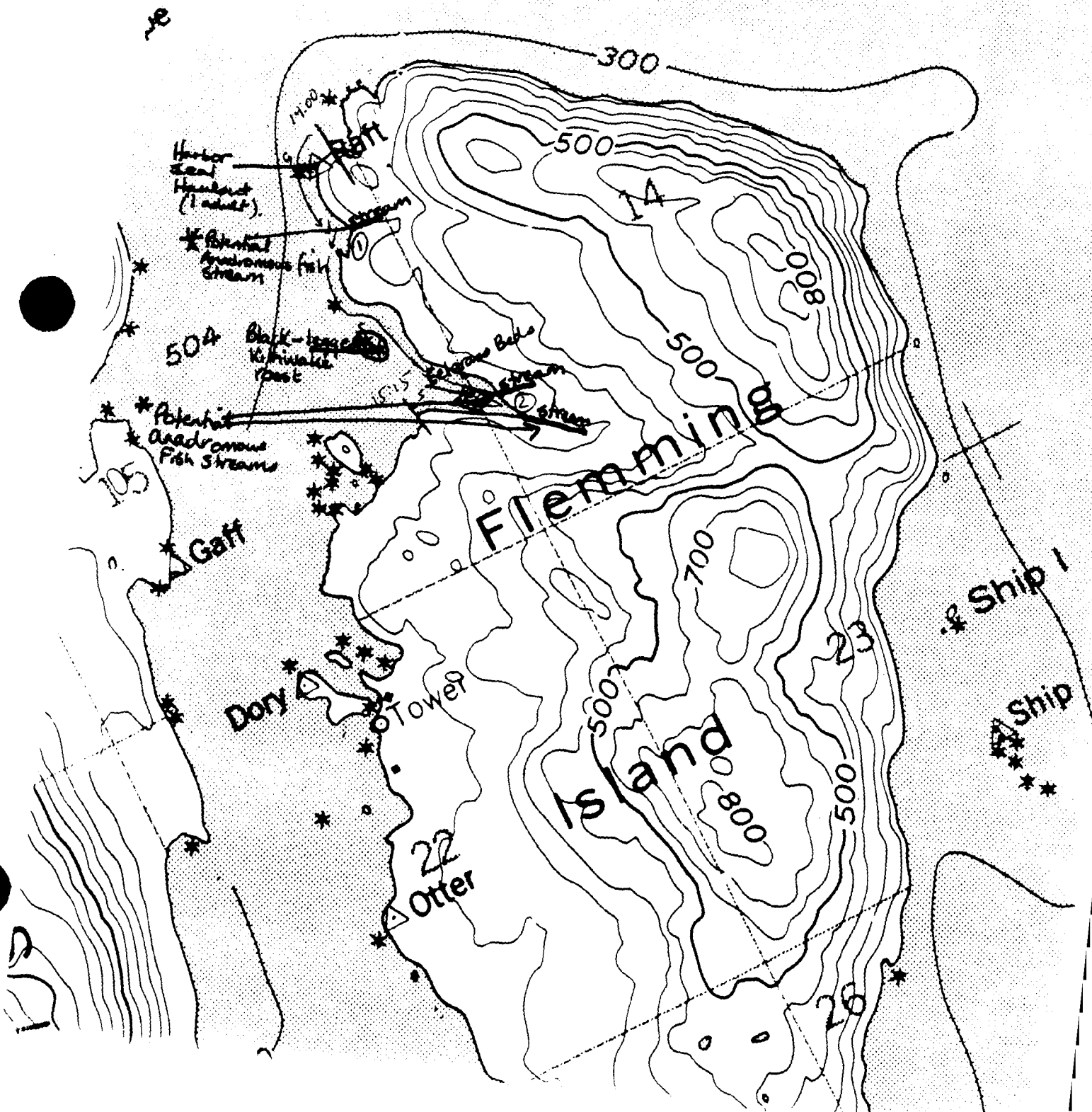
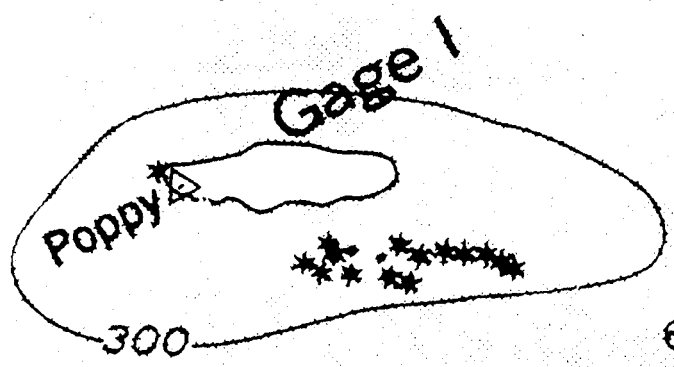
Observer(s) P. BUCK, R. MACK

Time survey started 1348 Time survey ended 1503

Cultural resource considerations/restraints:

"STANDARD CONSTRAINTS"

SEGMENT FL-2
JULY 12, 1989
14:00 - 15:15
KIRKOLICH DEBUSSCHE



(version 5/02/89)

SHORELINE CLEANUP PROGRAM

DATE 7/16/89

SHORELINE SEGMENT FL-3

LOCATION: (see enclosed map) Southwest shore of Flemming Island,
Prince William Sound

ADEC NO. _____ SHORELINE ASSESSMENT DATE: 7/12/89

Recommended Cleanup Activity(ies):

- No cleanup recommended at this time (subject to FOSC reassessment at a later date).
- Light sporadic oil in supra and upper intertidal zone is being removed by the moderate wave energy along this segment.

Priorities Considerations:

Class 4: light oil

Class B: resources absent

Ecological Constraints (from site survey):

None

Archeological Constraints (from site survey):

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



State Historic Preservation Officer *

Date: July 17, 1989

ISCC: Sharon K. Christopher

Date: 7/21/89

EXXON: L. M. M. M.

Date: 89-07-21

FOSC: C. S. D. D.

Date: 7/21/89

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

SHORELINE OIL EVALUATIONDate: 12 July 88 Time: 1259-1435Observer: MannSurveyed From: Foot/Boat/Helio/PlaneWeather: Sun/Cloud/Rain/Snow/Fog**LOCATION**LOCATION SW shore of Flemming Isl. SEGMENT NUMBER FL-3LENGTH OF SHORELINE SEGMENT: 3.2 kmACCESS: Foot/Vehicle/Boat/Barge/Helio/Float Plane**SHORELINE:**Shoreline Type: SPI/BEA/COV/HLD/STRTSlope: LANG/HANG/VERWave Exposure: High/Med/LowSediment: B 20% / C 10% / P 10% / G 1% / S 1% / M 0% / R 60%Drift Debris on Beach: Yes/No Supra/Upper/Mid/Lower Type seaweed**OIL**Degree of Oiling: Heavy/Moderate/Light/No Oil/UnobservedArea of Beach Impact: SU / (SP) / (H) / M / LContinuous: (Y)/N % of Segment 20 Width of Band: 10-20 cmSporadic: (Y)/N % of Segment 80Est. Oil Thickness where > 1cm: NA cm Est. Oil Penetration: NA cmPooled Oil: 0% "Free" Oil: 0% Coated: H 0% / M 20% / L 80%Fresh 0% Mousse 0% Tar Formation: 100%Drift Debris Oiled? (Yes)/No (Supra/Upper)/Mid/Lower Amount: H/M/(L)**Comments:**

Shorelines in this segment consists of low cliffs dividing slightly recessed pocket beaches. Oil contamination is sporadic and light, consisting of stretches of several 10's of meters of tar bands on rock faces and weathered tar lightly coating stones on beaches.

ECOLOGICAL EVALUATION

LOCATION: FLEMMING ISLAND SITE: SW Shore (PWS) OBSERVER: MEYER

LOCATION PREFIX: FL SEG. NO.: 3 LENGTH: 3.2 KM (M)

DATE: 07/12/89 TIME (HHMM): 1300 TIDE HT.: +4.3 to +5 FT (M)

OILED ZONE: Splash High Medium Low

SUBSTRATUM: Rocks Boulder cobble Gravel sand Mud

LIVE BIOTA

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

Fucus patchy/dense along headrock, absent generally from cobble beaches - unoiled.

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

Small beds throughout segment on boulders/rock and occasionally in gravel of beach.

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

Occasionally in oiled band.

Littorina

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

Littorines vary from sparse to fairly abundant under fucus, tiny littorines common on some cobble beaches. Nuclea generally sparse + patchy in segment; one group clustered in oiled barnacles.

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

Fairly common under fucus.

OTHER OBSERVATIONS: No oil in areas of several dry creek beds in segment. No sea stars observed, although tide was +4 FT during most of survey.

CLEANUP PRECAUTIONS: NONE. NO CLEANUP IS RECOMMENDED DUE TO LIGHT

CONTAMINATION AND WELL-ADVANCED, NATURAL CLEANING BY WAVE REGIME.

MAMMALS: Otters 2+pup Harbor Seals _____ Sea Lions _____ Whales _____
Other Deer tracks on beach; bear scat in adjacent upland.

BIRDS: 2 Bald Eagles (see Map); Common Mergansers - 7 plus 9 young; Harlequin Ducks - 15;
Black Oystercatchers - 4; Two Black-legged Kittiwakes roosting rocks: 89 and 70 (total 159 Kittiwakes);

GENERAL OBSERVATIONS: Glaucous-winged Gulls - 2; Crow - 2; Cormorants - 1

Generally the intertidal and subtidal was not high in diversity and productivity.

(version of 4/29/89)

CULTURAL RESOURCE EVALUATION

Date 12 July 1989 Location FLEMMING ISLAND Site _____

Location Prefix FL Segment # FL-3 Length 3.2 km

Survey Method:

Air ✓ (A - indicate on map) Boat ✓ (A - indicate on map)

Ground ✓ (G - indicate on map)

Known cultural resources (AHRS #) NONE Data Source —

Oil conditions/beach visibility LIGHT OIL

Width of beach zone surveyed 0-100 m Tree fringe surveyed Up to 10m

Cultural resources observed in beach zone (AHRS code) NONE

Cultural resources observed in tree fringe (AHRS code) NONE

General observations justifying survey method and segment's site probability:
GRAVEL, COBBLE BEACHES - EXPOSED ROCK FACES WITH Boulders - SLATE

Shore Profile OUTCROPPINGS; SPRUCE, ALDER, FERNS, BLUEBERRY, MOSS.

Fresh Water Sources NONE NOTED

Sea Exposure EXPOSED ON S END OF FLEMMING ISLAND

Access/Safety NONE

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

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

Photos: Color Roll # NONE Frames —

B/W Roll # NONE Frames —

Observer(s) Ty L. DILLIPLANE

Time survey started 1259 HRS Time survey ended 1435 HRS

Cultural resource considerations/restraints:

IF HERETOFORE UNDISCOVERED CULTURAL RESOURCES ARE FOUND DURING ANY CLEAN-UP ACTIVITIES, PLEASE CONTACT THE EXXON ARCHAEOLOGICAL DIRECTOR, DR. C. MOBLEY, IMMEDIATELY.

Poppy

606

852

300

300

Location of
Segment
FL-3

500

14

008

500

00

504

Fleming

700

Ship 1

Ship 2

Gaff

Dory

Owl

Otter

Island

800

23

500

26

*

Martin

2 Bald Eagle

FL-3

100

27

500

cliffs



boulder/cobble/
pebble pocket
beaches

TREATMENT MANUAL 6/15/89

SEG FL-1 INSPECTION # 1DATE 7/28/89SEGMENT
INSPECTION RECORD

Shoreline Treatment Process(es) Completed for this Segment

☐

Hot water wash

☐

Mechanical

☐

Warm water wash

☐

Non-mechanical

☒

Water deluge

☐

Other

Exxon

Treatment as indicated above has been completed. Request demobilization from this segment.

Comments Treatment of Segment FL-1 is complete.Ready for demob and deployment to new segment

Signature

Richard C. HarrebinDate: 7/28/89 Time: 18:12

Printed Name

Richard C. Harrebin

Existing Shoreline Condition As Visually Determined by USCG

Surface Oil

Percent

Degree of Oiling

0

Heavy

0

Medium

0

Light

10

Very Light

90

None

100 %

Subsurface Oil

☐

Yes

☒

No

Comments

Reassessment

☒

Yes - necessary

☐

No - not necessary unless re-oiled

ADEC rep

Comments

No inspector provided

Signature

Date: 1/1 Time:

Printed Name

FOSC rep

Comments

Demobilization approved/disapprovedNo Gross Contamination

Signature

Arthur J. SmithDate: 7/28/89 Time: 1832

Printed Name

Arthur J. Smith LTJG

SEG FL-2 INSPECTION # 1
DATE 7/28/89SEGMENT
INSPECTION RECORD

Shoreline Treatment Process(es) Completed for this Segment

☒ Hot water wash	☐ Mechanical
☐ Warm water wash	☐ Non-mechanical
☐ Water deluge	☐ Other

Exxon

Treatment as indicated above has been completed. Request demobilization from this segment.

Comments Treatment of Segment FL-2 is complete.
Ready for demob and deployment to new segment.
 Signature Rich E. Harrebin Date: 7/28/89 Time: 18:12
 Printed Name Richard E. Harrebin

Existing Shoreline Condition As Visually Determined by USCG

Surface Oil		
Percent	Degree of Oiling	
<u>0</u>	Heavy	
<u>5</u>	Medium	
<u>15</u>	Light	
<u>0</u>	Very Light	
<u>80</u>	None	
100 %		

Subsurface Oil

☐ Yes ☒ No

Comments _____

Reassessment

☒ Yes - necessary ☐ No - not necessary unless re-illedADEC rep Comments NO inspector provided

Signature _____

Date: / / Time: _____

Printed Name _____

FOSC rep

Demobilization approved/disapproved
Comments NO GROSS CONTAMINATIONSignature Orth A. SmithDate: 7/28/89 Time: 1829

SEG FL-3 INSPECTION # 1
DATE 7/28/89

SEGMENT
INSPECTION RECORD

Shoreline Treatment Process(es) Completed for this Segment

☐

Hot water wash

☐

Warm water wash

☐

Water deluge

☐

Mechanical

☐

Non-mechanical

☒

Other No work required

Exxon

Treatment as indicated above has been completed. Request demobilization from this segment.

Comments Treatment of Segment FL-3 is completed.
Ready for demob and deployment to new segment.
Signature Richard C. Harrebin Date: 7/28/89 Time: 18:13
Printed Name Richard C. Harrebin

Existing Shoreline Condition As Visually Determined by USCG

Surface Oil

Percent Degree of Oiling

0
0
0
5
9.5

Heavy

Medium

Light

Very Light

None

100 %

Subsurface Oil

☐

Yes

☒

No

Comments

Reassessment

☒

Yes - necessary

☐

No - not necessary unless re-oiled

ADEC rep Comments NO inspector provided

Signature

Date: / / Time:

Printed Name

FOSC rep

Demobilization Approved/disapproved

Comments NO Gross Contamination

Signature

Date: 7/28/89 Time: 18:33

Printed Name

Arthur J. Smith LTJG

COPY: EXXON ADEC FOSC ISCC

(version 5/04/89)

SHORELINE PRE-CLEANUP ASSESSMENT BLOCK REPORT

Location (see enclosed map): Flemming Island Block

Includes Shoreline Segments: FL-4, FL-5

Submitted : W. E. Washburn Date: 7-20-89
(for Exxon)

Recommendation
ISCC Approval: Sharon K. Christopherson Date: 7-28-89

FOSC Approval: A. C. Allegrando, by dir. Date: 7/28/89

The cleanup procedures identified in the Shoreline Cleanup Program are recommended. Modifications to these systems can be made in the field. Exxon and other field personnel are encouraged to suggest innovations and productivity enhancements to the OSC's on-scene representative. The OSC's representative has the authority to approve on-site modifications. The Field Resource Team should be consulted if these actions do not fit within the Ecological Constraints of the Shoreline Cleanup Program. Requirements for safety and the protection of cultural material must be observed.

Distribution:

Exxon Shoreline Coordinator
Exxon Shoreline Supervisor
Exxon SCAT file

FOSC
CDFU
NOAA
EPA
USDA (FS)
USFW
A.DEC
A.FG
A.DNR
CAC
PWSCA
USFS
SHPO

******* SCOT NOTE *******

**THERE ARE ITEMS OF GREAT CONCERN IN THIS APPROVAL BLOCK
THAT AFFECT THE DEPLOYMENT OF CREWS AND EQUIPMENT.**

READ THIS FIRST

**NOTE THAT THE UPLANDS IN SHORELINE SEGMENTS CONTAINED IN
THE FLEMMING ISLAND BLOCK ARE OWNED BY THE CHENEGA
VILLAGE CORPORATION. PERMIT NO ACCESS TO UPLANDS AT ANY
TIME.**

FLEMMING ISLAND BLOCK FL-4, FL-5



1314

PASSAGE

Bain 1933 Bainbridge Pt

804

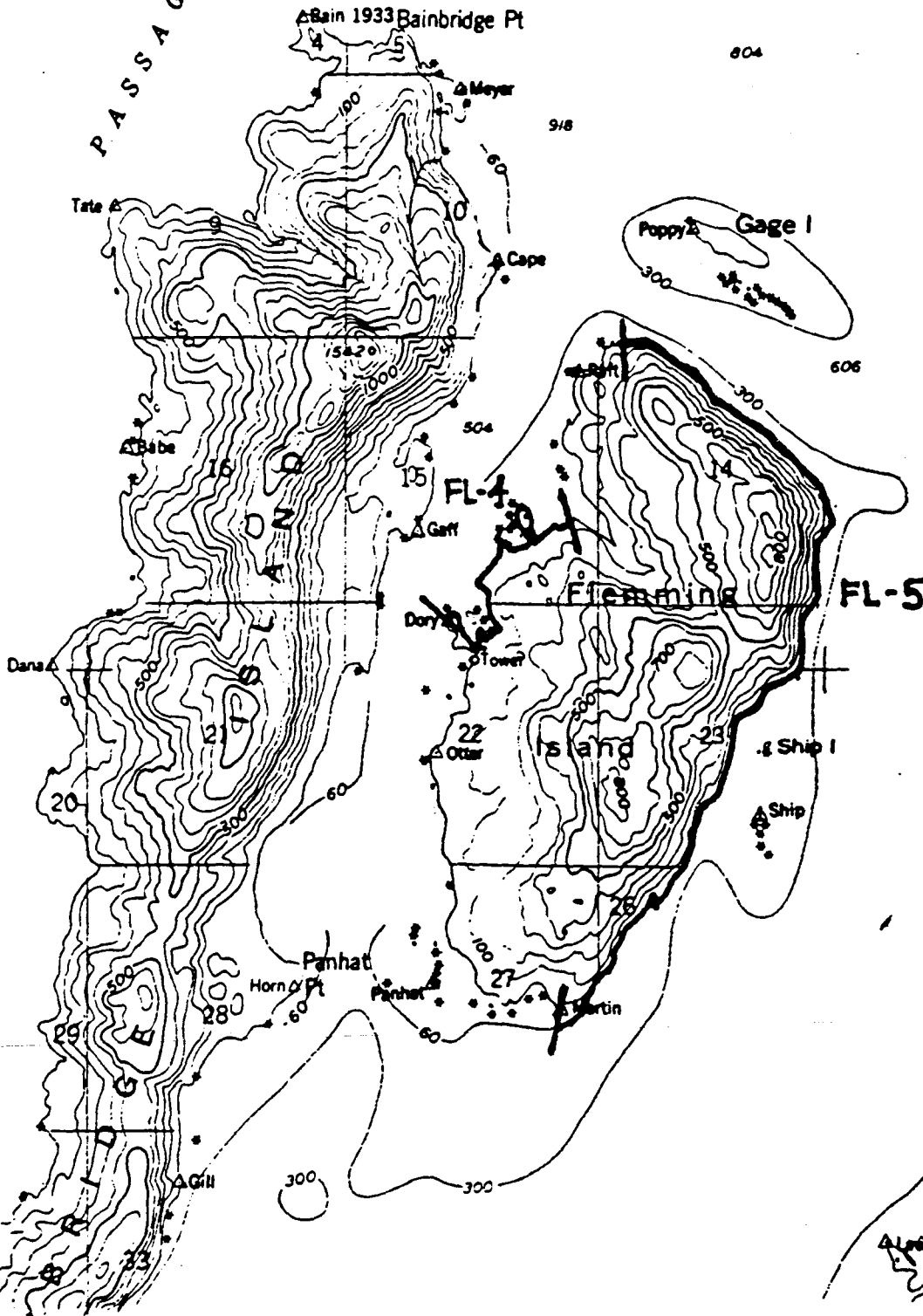
918

1440

Tate A

Poppy Gage I

CGE



852

Pointed Bear

240

(version 6/14/89)

SHORELINE CLEANUP PROGRAM

DATE 7/20/89

SHORELINE SEGMENT FL-4

LOCATION: (see enclosed map) Northwest Coast of Flemming Island,
Southwest Prince William Sound

ADEC NO. _____ SHORELINE ASSESSMENT DATE: 7/15/89

Recommended Cleanup Activity(ies):

- SC 7/24/89
Manually →
6 8907-28
- Manually remove contaminated drift material (fucus), harvest contaminated fucus.
 - Breakup and remove asphalt pavement.
 - Flood/flush with warm to hot water (up to 140 F) on low angle beaches.
 - Use moderate to high pressure warm to hot water washing on rock and boulder/cobble beaches.
 - Use other approved methods as appropriate.

Priorities Considerations:

Class 2-3: heavy to moderate oil

Class B: resources absent

Ecological Constraints (from site survey): Work at mid tide + or take appropriate measures to protect lower intertidal zone.

Archeological Constraints (from site survey):

SC 7/24/89
6 8907-28

No cleanup crew access to UPPER 203. [REDACTED]. If heretofore undiscovered cultural materials are uncovered during cleanup, contact Exxon's Archeological Field Director and take actions prescribed in the Operational Guidelines for Shoreline Cleanup dated 4/21/89 as amended.

Douglas Reger
State Historic Preservation Officer *

Date: 7/25/89

ISCC: Sharon K. Christopher

Date: 7/28/89

EXXON: [Signature]

Date: 8907-28

FOSC: W.C. Alejandro, by [Signature]

Date: 7/28/89

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

SHORELINE OIL EVALUATIONDate: 15 July 89 Time: 0515-0900Observer: MannSurveyed From: Foot/Boat/Helio/PlaneWeather: Sun/Cloud/Rain/Snow/FogLOCATIONLOCATION NW side of Flemming Isl., PWS SEGMENT NUMBER FL-4LENGTH OF SHORELINE SEGMENT: 5.5 k mACCESS: Foot/Vehicle/Boat/Barge?/Helio/Float PlaneSHORELINE:Shoreline Type: SPI/BEA/COV/HLD/STRTSlope: LANG/HANG/VERWave Exposure: High/Med/LowSediment: B 20% / C 30% / P <1% / G <1% / S 0% / M 0% / R 50%Drift Debris on Beach: Yes/No Supra/Upper/Mid/Lower Type logs, seaweedOILDegree of Oiling: Heavy/Moderate/Light/No Oil/UnobservedArea of Beach Impact: SU / SP / H / M / LContinuous: Y/N % of Segment 80% Width of Band: 1-10 mSporadic: Y/N % of Segment 20%Est. Oil Thickness where > 1cm: 2 cm Est. Oil Penetration: 2-25 cmPooled Oil: <1% "Free" Oil: 0% Coated: H 40% / M 20% / L 40%Fresh 0% Mousse 5% Tar Formation: 95%Drift Debris Oiled? Yes/No Supra/Upper/Mid/Lower Amount: H/M/L

Comments:

This segment contains a variety of different shoreline geomorphologies which vary greatly in exposure. As a consequence, oil contamination has a complicated geography. In general, shorelines facing the north or northwest are moderately to heavily contaminated by fresh tar/weathered mousse. Equipment access will be difficult in some rocky coves.

A 100m x 50m oil slick was seen off of Site A at high tide on July 14, 89 suggesting that resuspension of oil is still occurring in this area.

DOCUMENTATION:

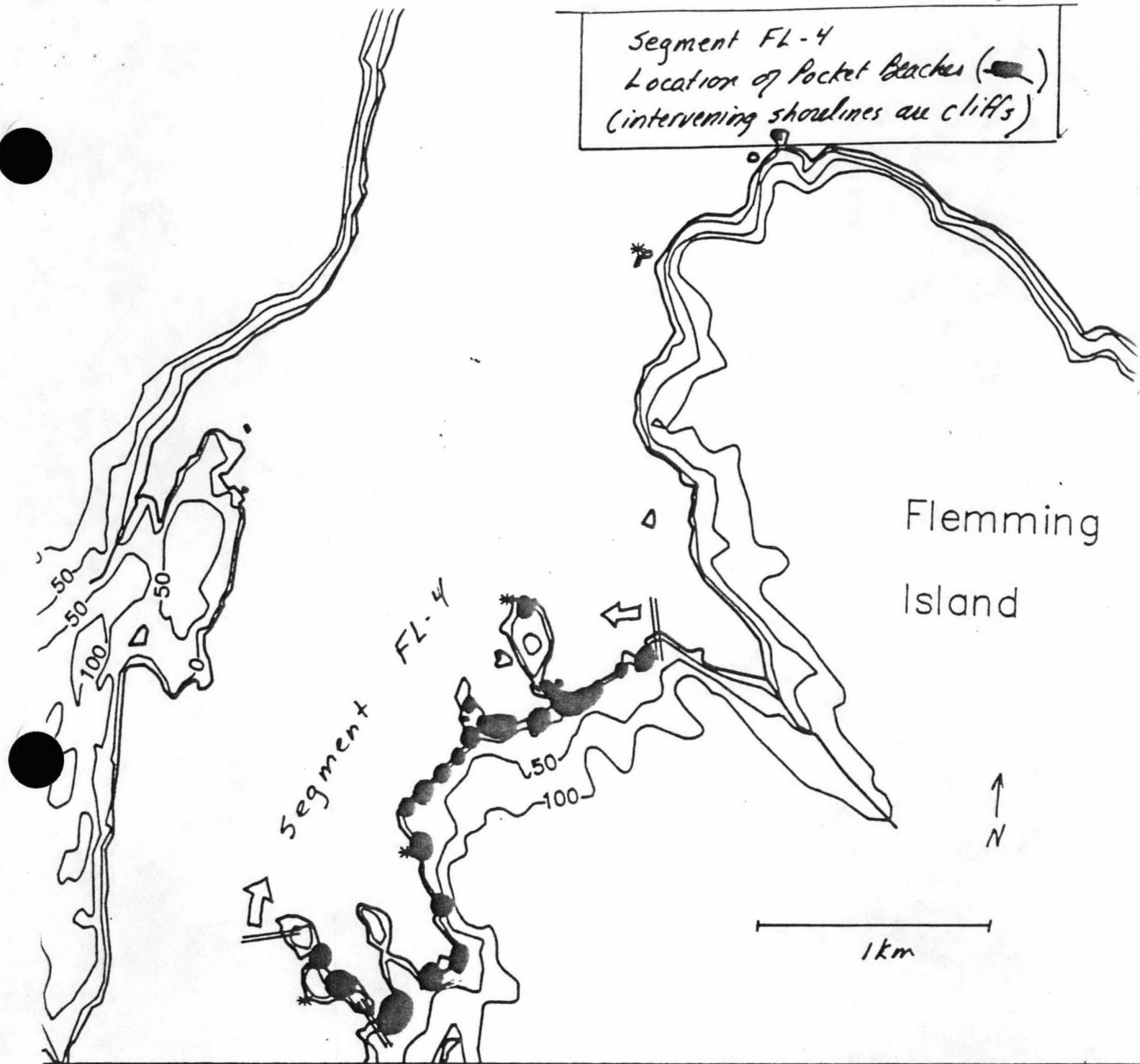
Map/Aerial photo marking segment boundaries _____

VTR: Y/N Tape Number(s) _____

Photography: ☒ Y Roll Number(s) 1-5 _____

Sample Numbers Collected: _____

Segment FL-4
 Location of Pocket Beaches (●)
 (intervening shorelines are cliffs)



AERIAL TOPOGRAPHY

PRINCE WILLIAM SOUND

FROM NASA 1:60,000 PHOTOGRAPH

MAPPED FOR EXXON CO. USA

MAPPED BY AEROMAP U.S., ALASKA

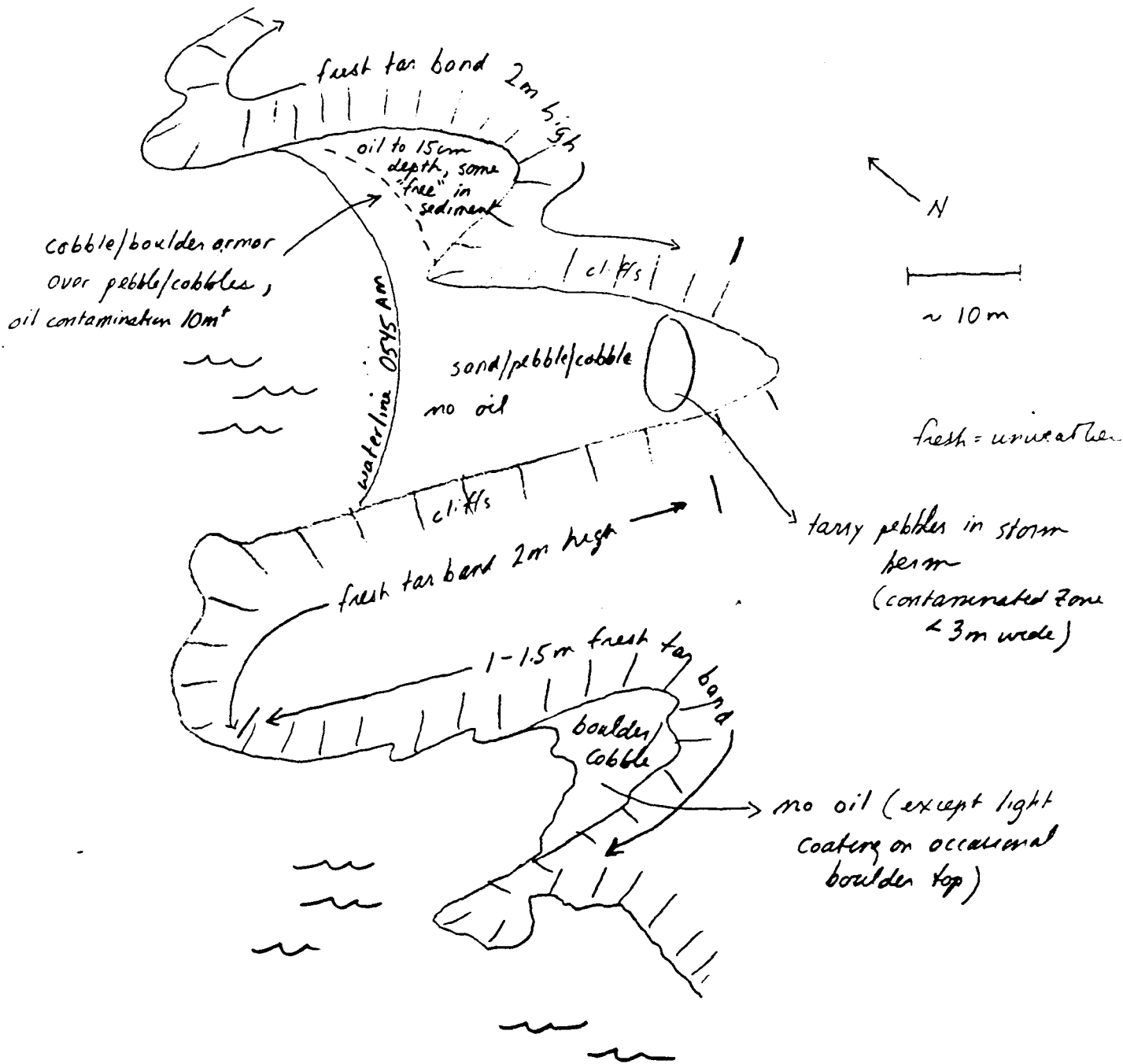
1	2	3
4	5	6
7	8	9

SEWARD

3000'

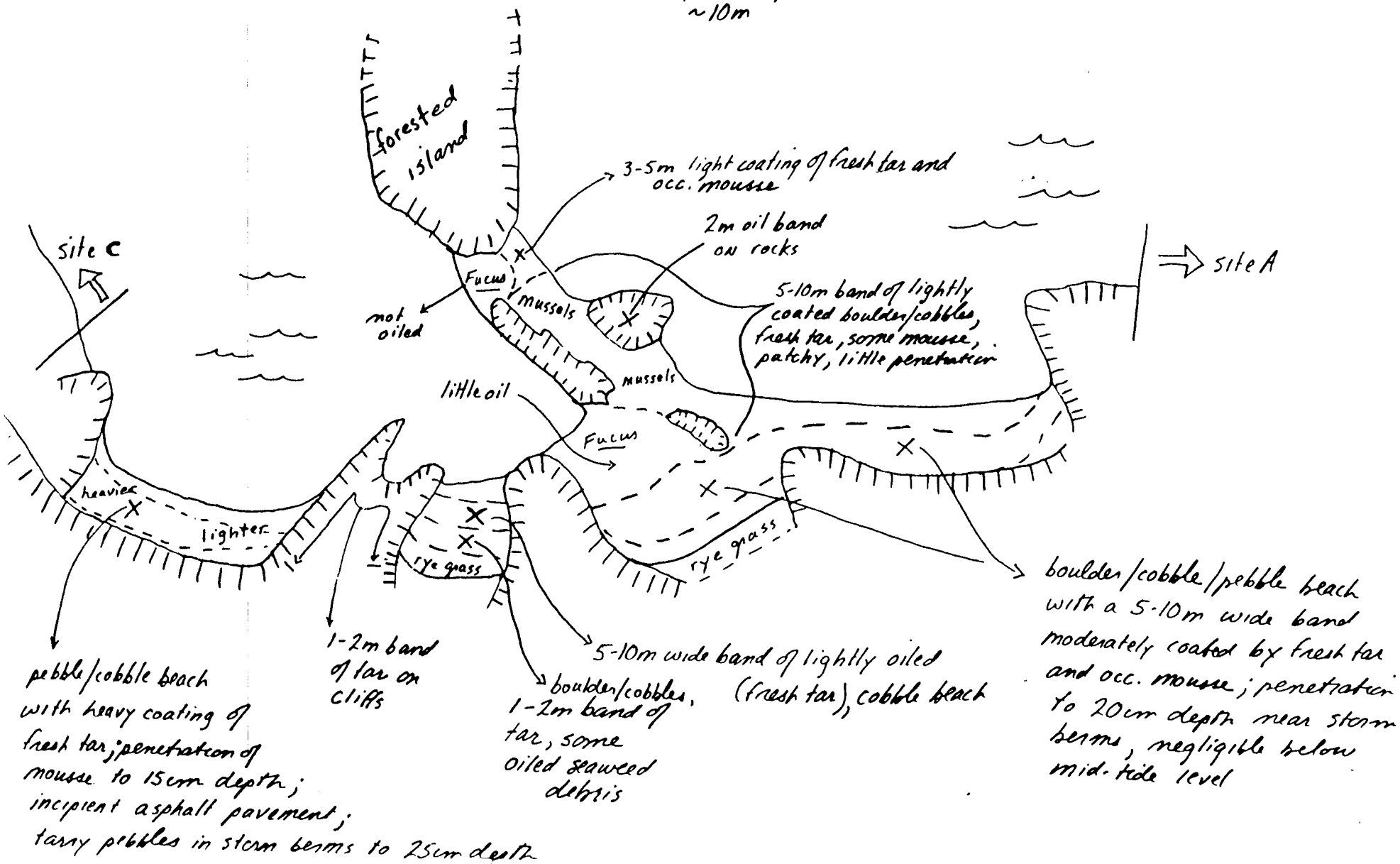
1 MILE

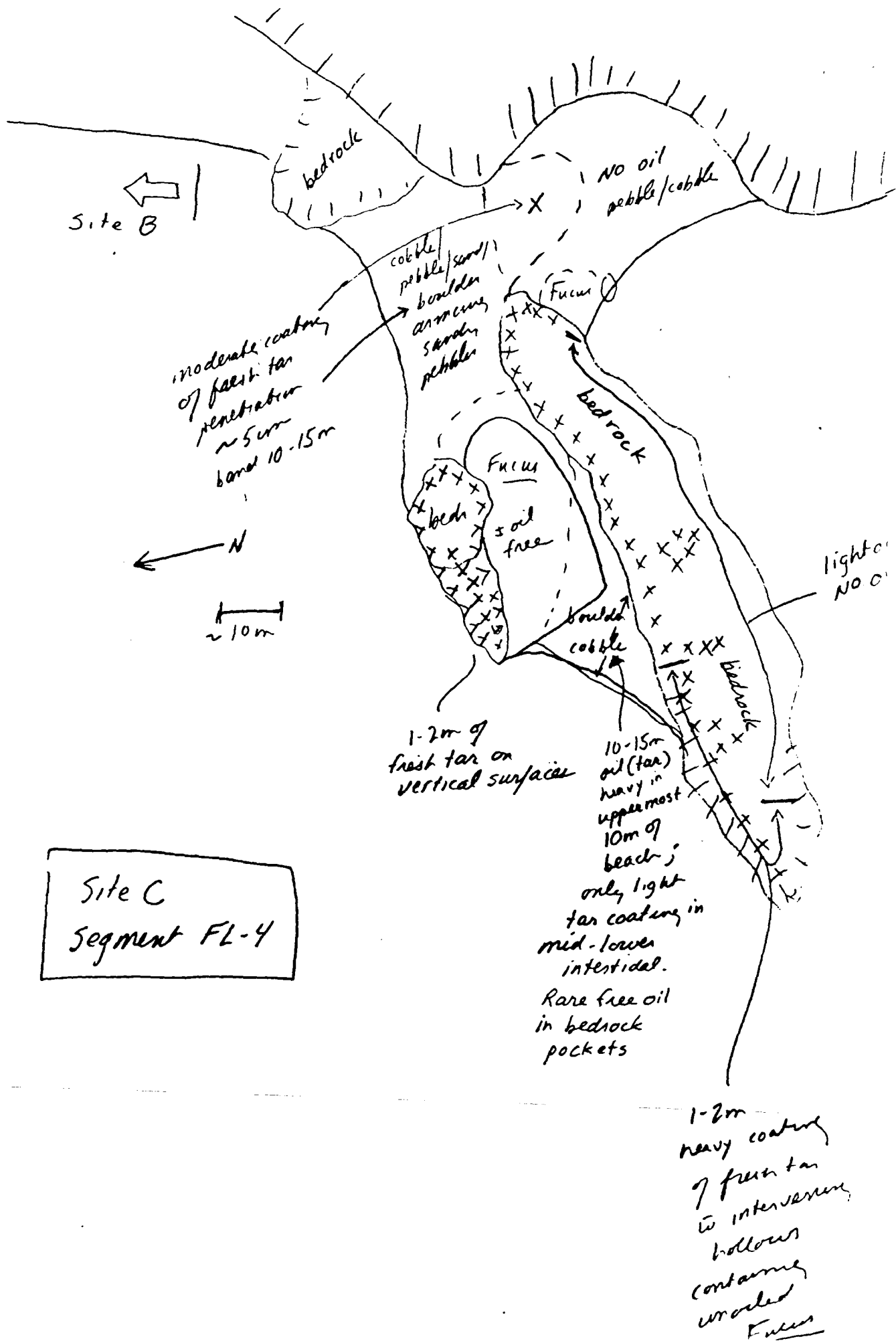
Site A, Segment FL-4

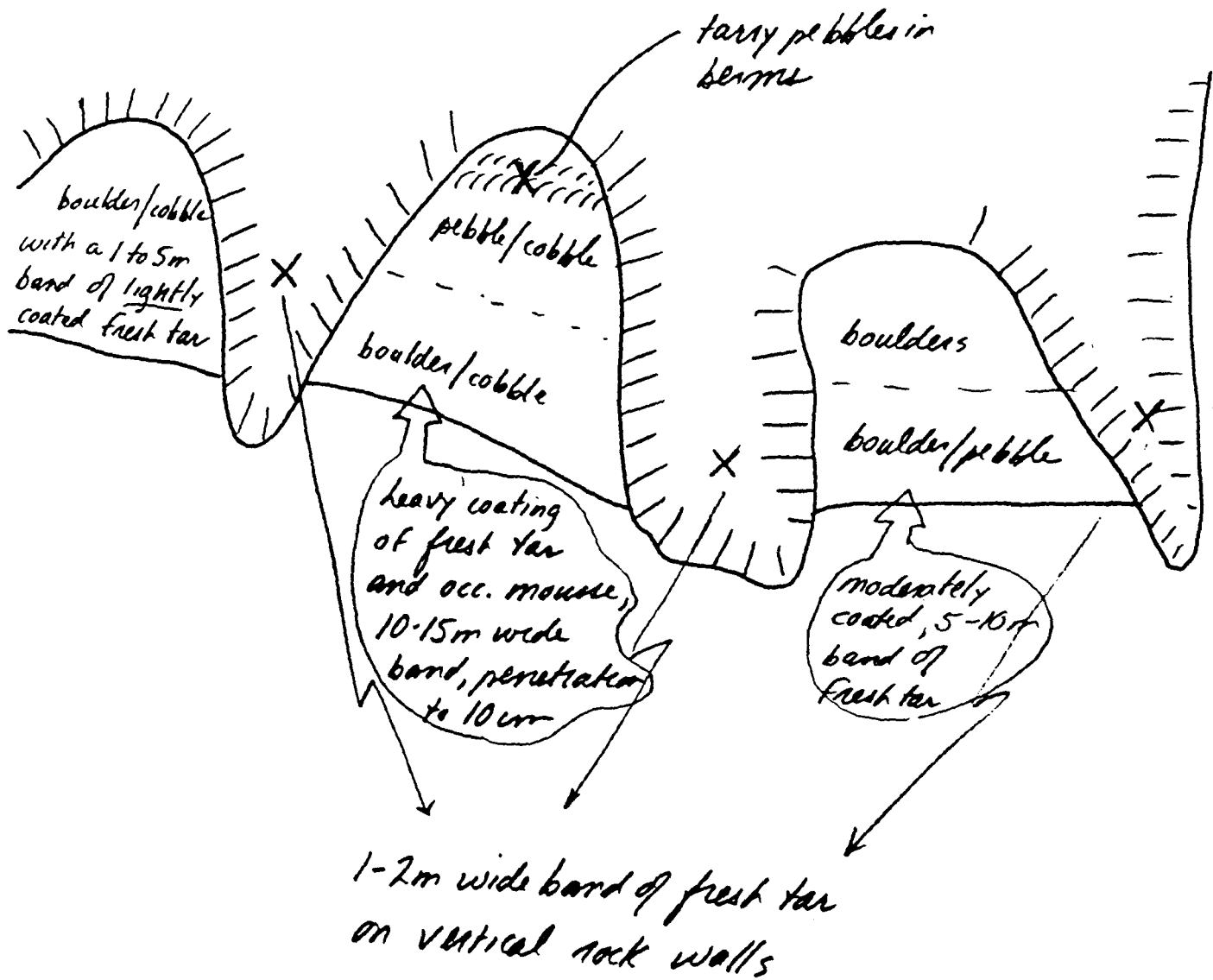


Site B, Segment FL-4
Plan View

~10m

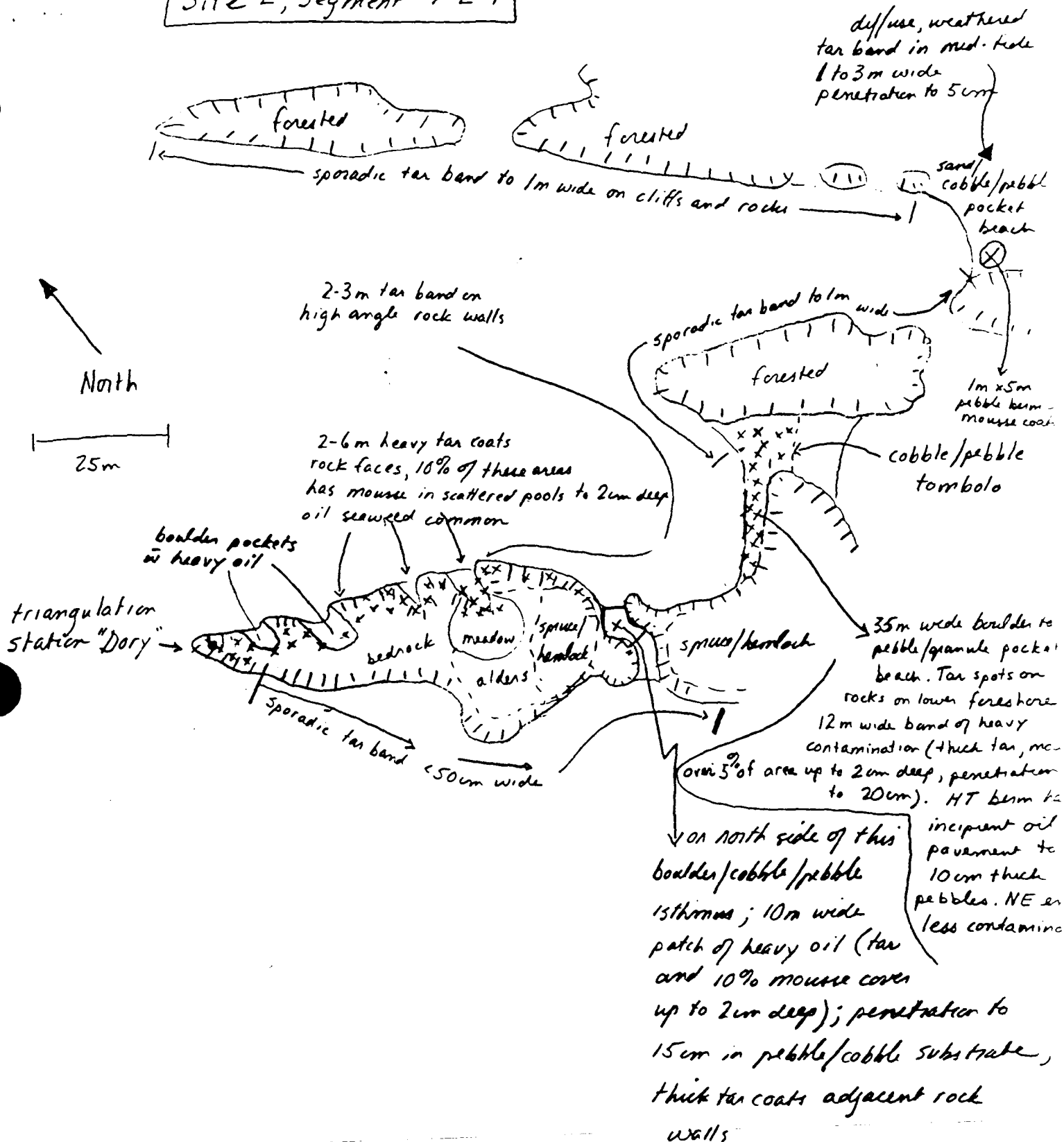




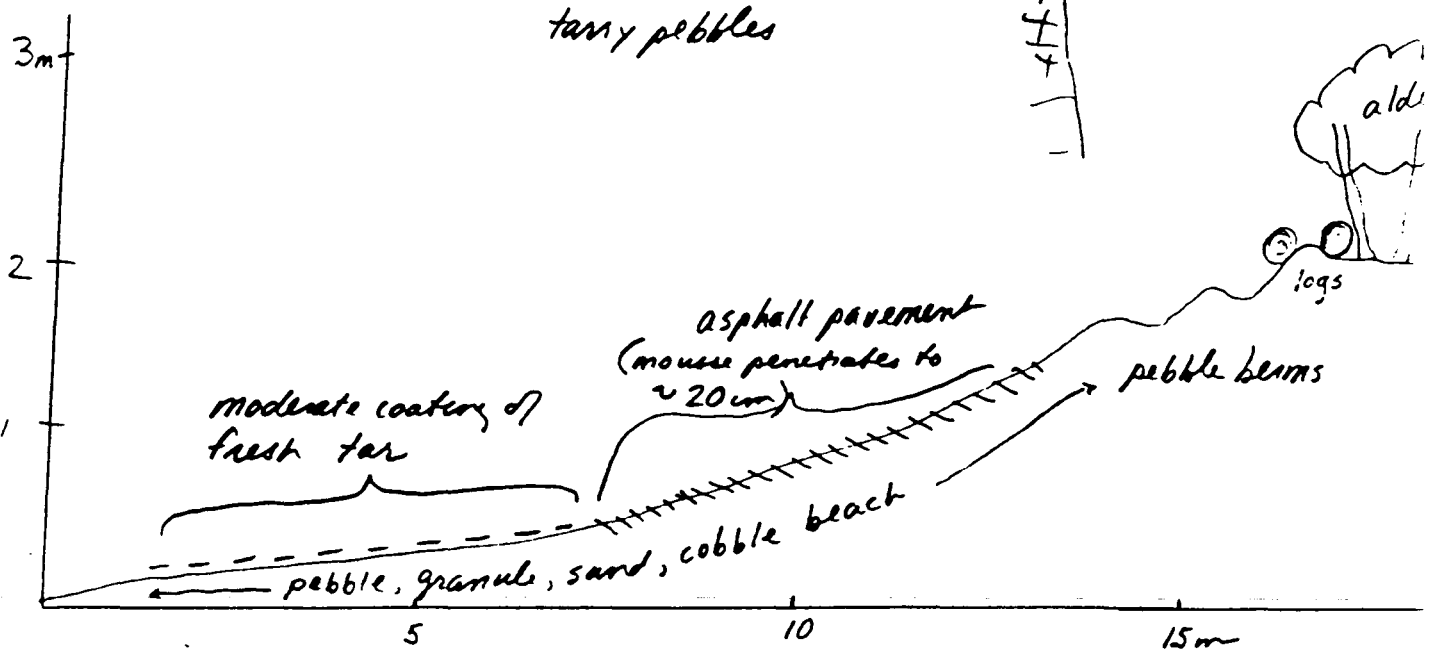
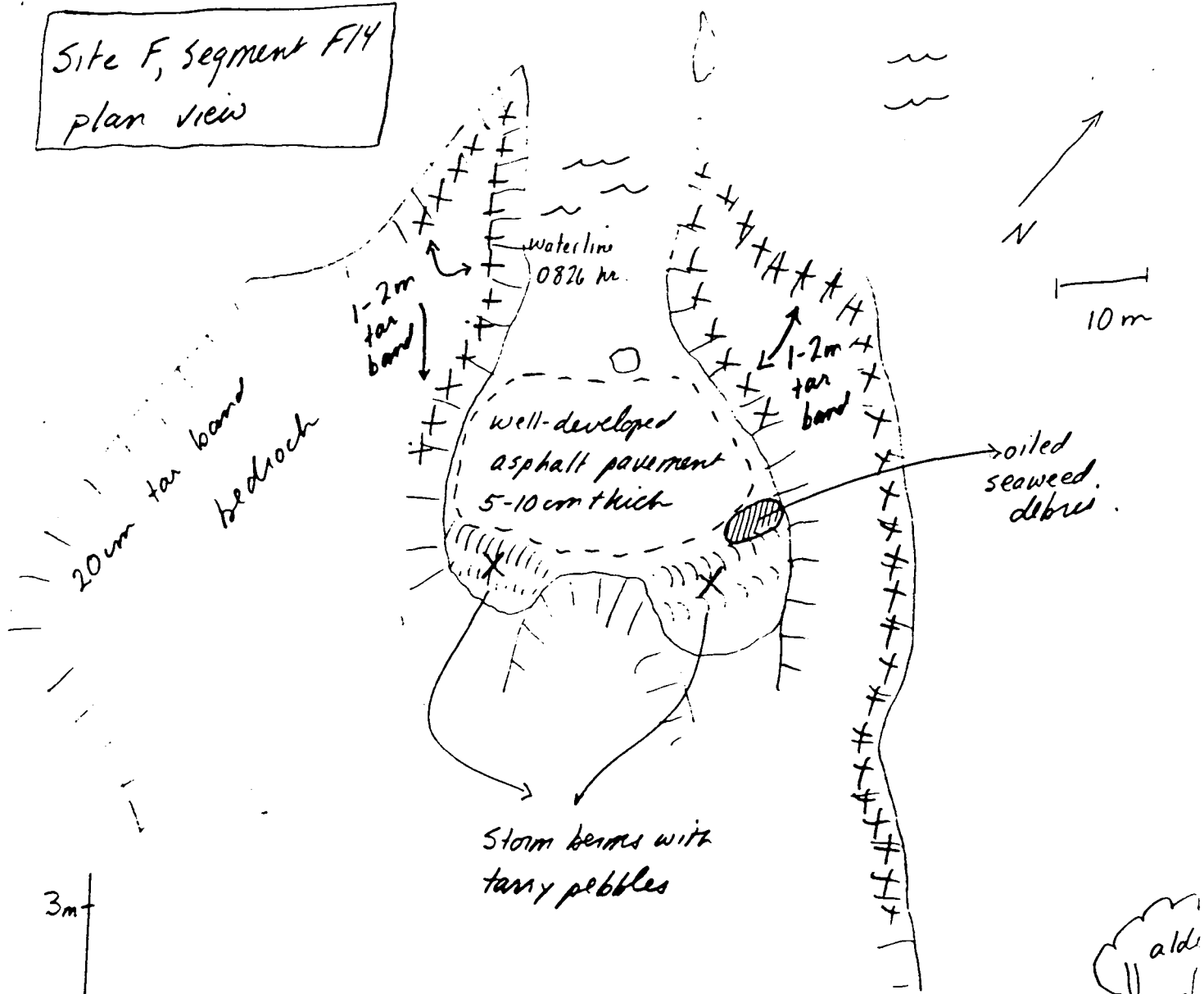


Site d, Segment
FL-4
plan view

Site E, Segment FL-4



Site F, segment F14
plan view



x-section of Site F

ECOLOGICAL EVALUATION

LOCATION: FLEMMING ISLAND SITE: NW Side; PWS OBSERVER: MEYER
 LOCATION PREFIX: FL SEG. NO.: 4 LENGTH: 5.5 KM (M)
 DATE: 07/15/89 TIME (HHMM): 0520 TIDE HT.: +0.6 to +3.0 FT (M)
 OILED ZONE: Splash High Medium Low
 SUBSTRATUM: Rocks Boulder Cobble Gravel Sand Mud

LIVE BIOTA

Fucus (algae): Patchy Y/N Contin. Y/N Dense Y/N Sparse Y/N None Y/N
Small
Patches of heavily mounded Fucus throughout oiled zones of segment. Several dense beds of uncoiled Fucus on boulder/cot
pebble beaches (at Sites B & C). However, Fucus generally patchy/sparse on cobble beaches and continuous/dense on rock faces and outcrop.
Mytilus (Mussels): Patchy Y/N Contin. Y/N Dense Y/N Sparse Y/N None Y/N
Small
Mytilus beds in flat cobble/gravel beach, on lower edges of boulders, on rock. Heavy Mytilus patchy in Fucus
Balanus (Barnacles): Patchy Y/N Contin. Y/N Dense Y/N Sparse Y/N None Y/N
Dense on rock faces and large boulders, scattered on cobbles across beach.

Littorina

Patchy Y/N Contin. Y/N Dense Y/N Sparse Y/N None Y/N
Primarily under Fucus; also present, oiled, and alive in oiled fucus. Nucella patchy in distribution, some Littorina
Limpets: Patchy Y/N Contin. Y/N Dense Y/N Sparse Y/N None Y/N
Limpets common under Fucus and in tide pools (primarily Notoacmea).

OTHER OBSERVATIONS: Pycnogonids common; one Eurytemora, a few Dermasterias. Hermit crabs
abundant but patchy in distribution, primarily under lower fucus. Oil throughout grassy area (Site B).
Eelgrass common in shallow subtidal. Oil sheen on water off oiled beaches.

CLEANUP PRECAUTIONS: Heavily oiled Fucus could be a source of recontamination; there
is abundant adjacent Fucus and removal of oiled Fucus is encouraged.

MAMMALS: Otters 1 Harbor Seals 1 Sea Lions 3 Whales _____
 Other Deer tracks on beach.
Oystercatcher - 1; 1 empty Oystercatcher Nest (Site F).

BIRDS: ~35 Black-legged Kittiwakes offshore; Ravens - 2; Steller Jay - 1; Heard: 1 Eagle, Crows.

GENERAL OBSERVATIONS: Ecological diversity and abundance of biota is generally low in this segment.
the area is a low energy system and natural recovery may be slow. However,
there is little 'free' oil on these beaches/rocky shorelines, and cleanup efforts will
likely yield little recoverable oil.

(version of 4/29/89)

CULTURAL RESOURCE EVALUATION

Date 7/15/89 Location Fleming Island Site

Location Prefix FL Segment # FL-4 Length 5.5 Kpm
~~5.4 km~~

Survey Method:

Air (A - indicate on map) Boat ✓ (A - indicate on map)

Ground ✓ (G - indicate on map)

Known cultural resources (AHRS #) None Data Source None

Oil conditions/beach visibility none to moderate / good to fair

Width of beach zone surveyed 0-15m Tree fringe surveyed 10-15

Cultural resources observed in beach zone (AHRS code) None

Cultural resources observed in tree fringe (AHRS code) CBN, CMT

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

Shore Profile Beaches 1, 2 and 3 good, gravel and moderate dunes

Fresh Water Sources one small stream on beach 1

Sea Exposure protected to east

Access/Safety Beaches 1, 2 & 3 good - the rest poor

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

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

Photos: Color Roll # Frames

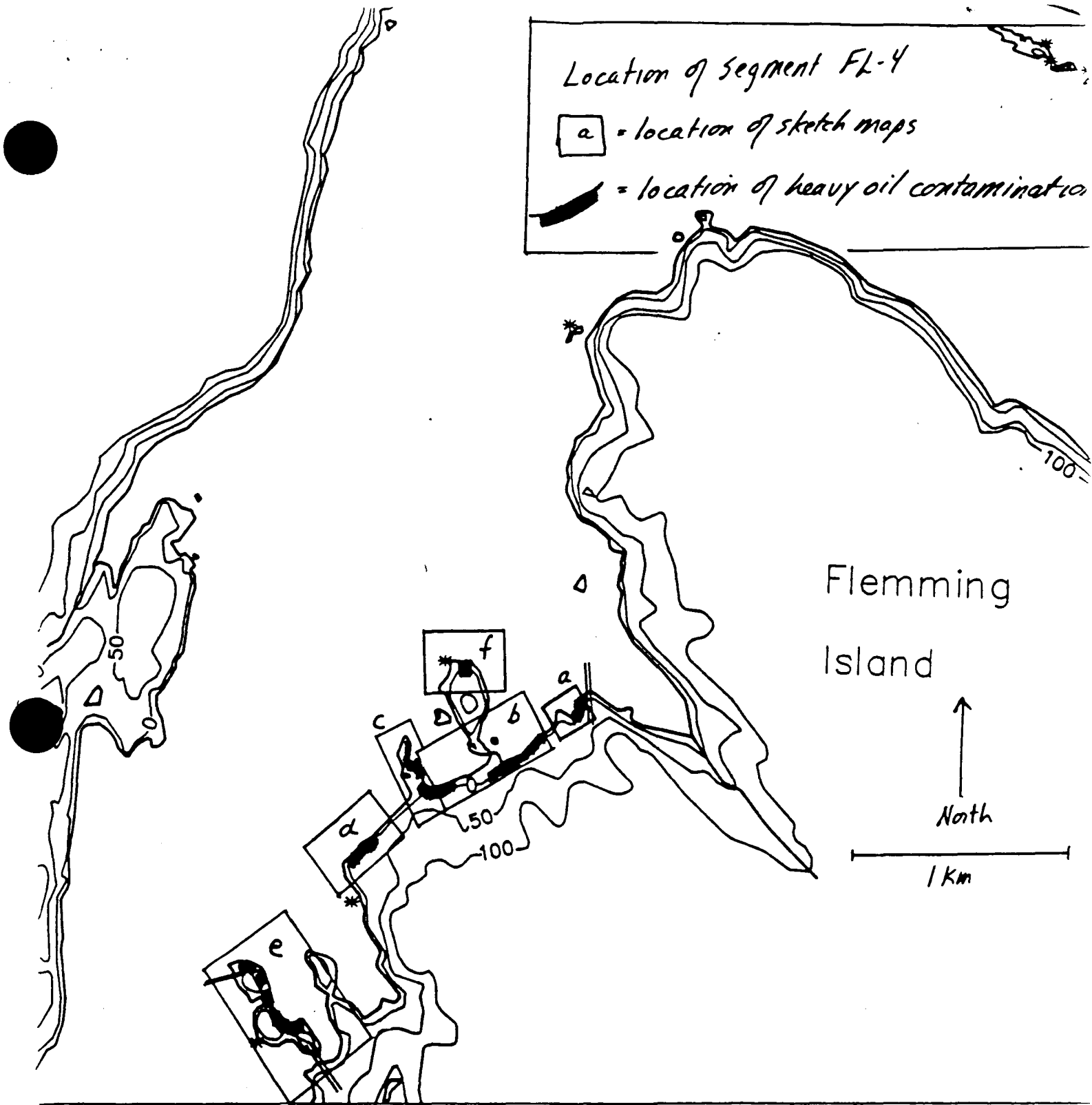
B/W Roll # Frames

Observer(s) C. When

Time survey started 0515 Time survey ended 0930

Cultural resource considerations/restraints:

standard restraints. Both the CBN and the CMT location are far enough from the beach that restricting access to the uplands should adequately protect them



1	2	3
4	5	6
7	8	9

AERIAL TOPOGRAPHIC
PRINCE WILLIAM SC

FROM NASA 1:60,000 PHOTOGRAPH

MAPPED FOR EXXON CO. USA,

3000'

(version 6/14/89)

SHORELINE CLEANUP PROGRAM

DATE 7/20/89

SHORELINE SEGMENT F1-5

LOCATION: (see enclosed map) Eastern Shore of Flemming Island,
Prince William Sound

ADEC NO. _____ SHORELINE ASSESSMENT DATE: 7/16/89

Recommended Cleanup Activity(ies):

No cleanup recommended at this time (subject to FOSC reassessment at a later date) due to very light oil and high wave exposure.

Priorities Considerations:

Class 4-5: light to no oil

Class B: resources absent

Ecological Constraints (from site survey):

No ecological constraints.

Archeological Constraints (from site survey):

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

Wong Lee Kye
State Historic Preservation Officer *

Date: 7/27/89

ISCC: Sharon K. Christopher

Date: 7/28/89

EXXON: [Signature]

Date: 8907-28

FOSC: A.C. Alejandro, by dir.

Date: 7-28-89

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

SHORELINE OIL EVALUATIONDate: 16 July 89 Time: 0537-0755Observer: MannSurveyed From: Foot/Boat/Helio/PlaneWeather: Sun Cloud/Rain/Snow/
againLOCATIONLOCATION east side of Flemming Island SEGMENT NUMBER FL-5LENGTH OF SHORELINE SEGMENT: 5.4 kmACCESS: Foot/Vehicle/Boat/Barge/Helio/Float PlaneSHORELINE:Shoreline Type: SPI/BEA/COV/HLD/STRTSlope: LANG/HANG/VERWave Exposure: High/Med/LowSediment: B 15 % / C 10 % / P 5 % / G 0 % / S 0 % / M 0 % / R 70 %Drift Debris on Beach: Yes/No Supra/Upper/Mid/Lower Type logs, sea-weedOILDegree of Oiling: Heavy/Moderate/Light/No Oil/UnobservedArea of Beach Impact: SU / SP / H / M / LContinuous: Y/N % of Segment 40 Width of Band: 0.05 - 1Sporadic: Y/N % of Segment 60Est. Oil Thickness where > 1cm: NA cm Est. Oil Penetration: NA cmPooled Oil: 0 % "Free" Oil: 0 % Coated: H <1 % / M 30 % / L 70 %Fresh 0 % Mousse 0 % Tar Formation: 100 %Drift Debris Oiled ? Yes/No Supra/Upper/Mid/Lower Amount: H/M/LComments:

This segment consists of cliffs, boulder-skirted cliffs, and small pocket beaches all experiencing moderately high wave energy. Oil contamination increases to south but is relatively minor throughout. Natural cleaning is in progress as evidenced by tar flaking off of exposed rock surfaces.

FL-5

DOCUMENTATION:

Map/Aerial photo marking segment boundaries _____

VTR: Y/N ☒ Tape Number(s) _____

Photography: Y/N _____ Roll Number(s) _____

Sample Numbers Collected: _____

ECOLOGICAL EVALUATION

LOCATION: FLEMING ISLAND SITE: East side OBSERVER: MEYER
 LOCATION PREFIX: FL SEG. NO.: FL-5 LENGTH: 5.4 KM (M)
 DATE: 07/16/89 TIME (HHMM): 0537 TIDE HT.: -0.3 to 4 FT (M)
 OILED ZONE: Splash High Medium Low
 SUBSTRATUM: Rocks Boulder cobble Gravel Sand Mud

LIVE BIOTA

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

Generally absent/sparse on cobble/pebble beaches, continuous and dense along rock face outcrops and shaded edges of beaches.

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

Small patches of mussels on lower edges of boulders, occasionally in gravel; denser by fresh water str.

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

Fairly continuous on headrock/rock face, patchy along boulders on cobble/boulder beaches.

Littorina

Patchy Y/N Contin. Y/N Dense Y/N Sparse Y/N None Y/N

Tiny Littorina infima beach on beach cobbles, in barnacles on boulders; adult Littorina less common but dens. in Fucus when present (often in Fucus beds in shade); Nucella abundant in patches, equally in oiled and un-oiled

Limpets: Patchy Y/N Contin. Y/N Dense Y/N Sparse Y/N None Y/N *barnacles, in mussel beds*

Small limpets in Fucus and on cobble with spattering of barnacles; not very abundant.

OTHER OBSERVATIONS: *Sea Stars amazingly diverse and abundant: Pisaster, Dermasterias, Pycnopoda (15% dom. in subtidal green algae - at one beach); Eusasterias common; Leptasterias, Orthasterias, Henricia, Lethasterias or Bryozoans covering algae and even Fucus. Small stream present in segment does not appear to be anadromous stream (also not on ADFG maps) and is oil-free. Eelgrass present in small beds in some coves.*

CLEANUP PRECAUTIONS: NONE.

MAMMALS: ^{Sea} Otters 1 Harbor Seals 4 Sea Lions 1 Whales
 Other DEER on cobble beach - 1.

BIRDS: Arctic Terns - 2; Eagles - 1 plus 1 pair (see map); Black-legged Kittiwakes - 7; Murrelets - 4; Crows -

GENERAL OBSERVATIONS: Island has heavy band of kerosene but no oil.

(version of 4/29/89)

CULTURAL RESOURCE EVALUATION

Date 7/16/89 Location Fleming Island Site _____

Location Prefix FL Segment # FL-5 Length 5.4 Km

Survey Method:

Air _____ (A - indicate on map) Boat ✓ THE REST (A - indicate on map)

Ground ✓ 6 beaches (G - indicate on map)

Known cultural resources (AHRS #) None Data Source None

Oil conditions/beach visibility none to light

Width of beach zone surveyed 5-15 m Tree fringe surveyed 10m

Cultural resources observed in beach zone (AHRS code) None

Cultural resources observed in tree fringe (AHRS code) None

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

Shore Profile beaches are moderately sloped and gravel or cobble

surfaced. The remainder is steep with few coral boulder fields

Fresh Water Sources two small streams with one on beach

four being the largest

Sea Exposure protected to the east

Access/Safety good on beaches - poor elsewhere.

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

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

Photos: Color Roll # _____ Frames _____

B/W Roll # _____ Frames _____

Observer(s) C. Wilson

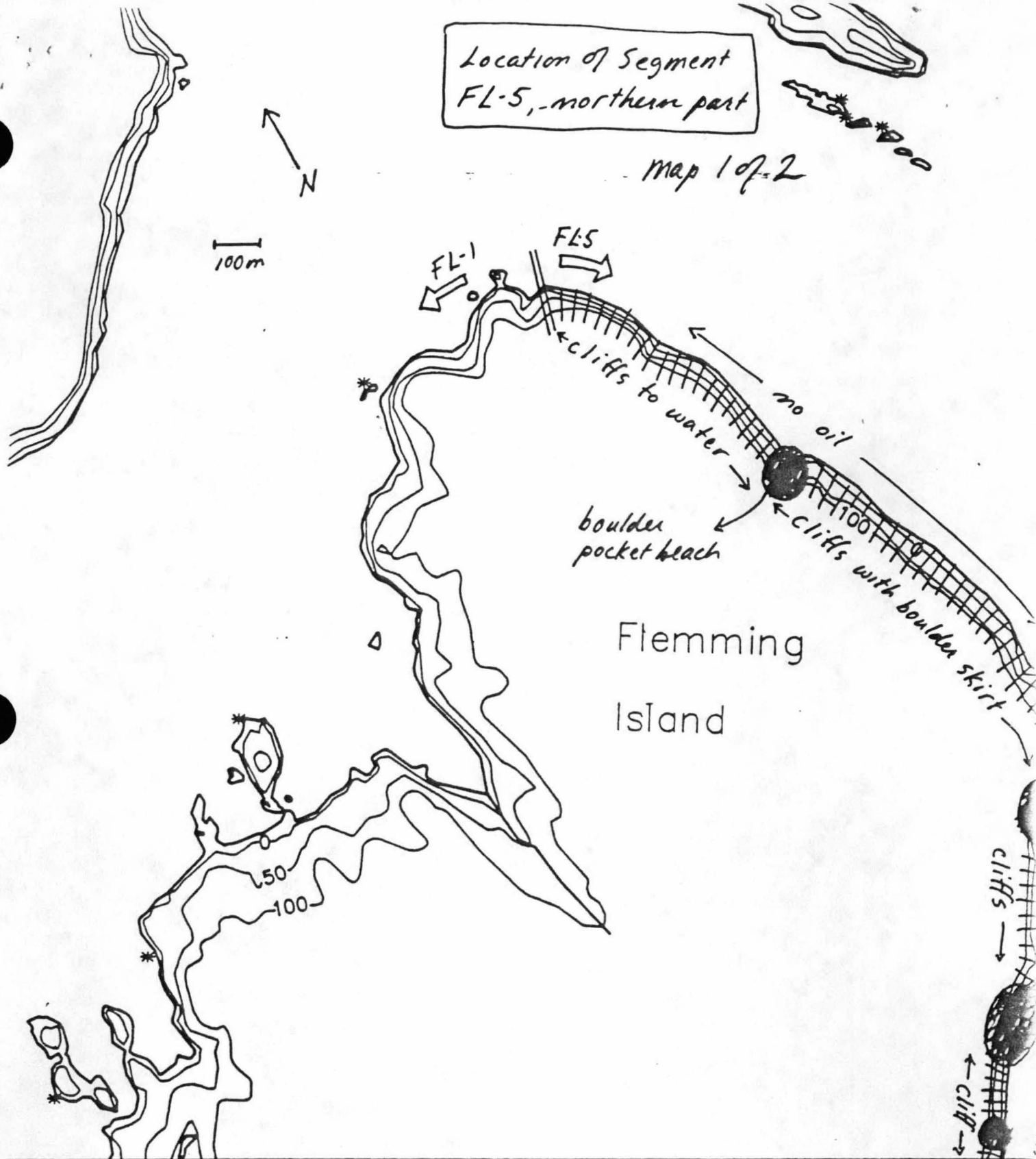
Time survey started 0600 Time survey ended 0800

Cultural resource considerations/restraints:

standard

Location of Segment
FL-5, -northern part

map 1 of 2



AERIAL TOPOGRAPHIC MAP OF

PRINCE WILLIAM SOUND AREA

FROM NASA 1:60,000 PHOTOGRAPHY OF 1981

1	2	3
4	5	6

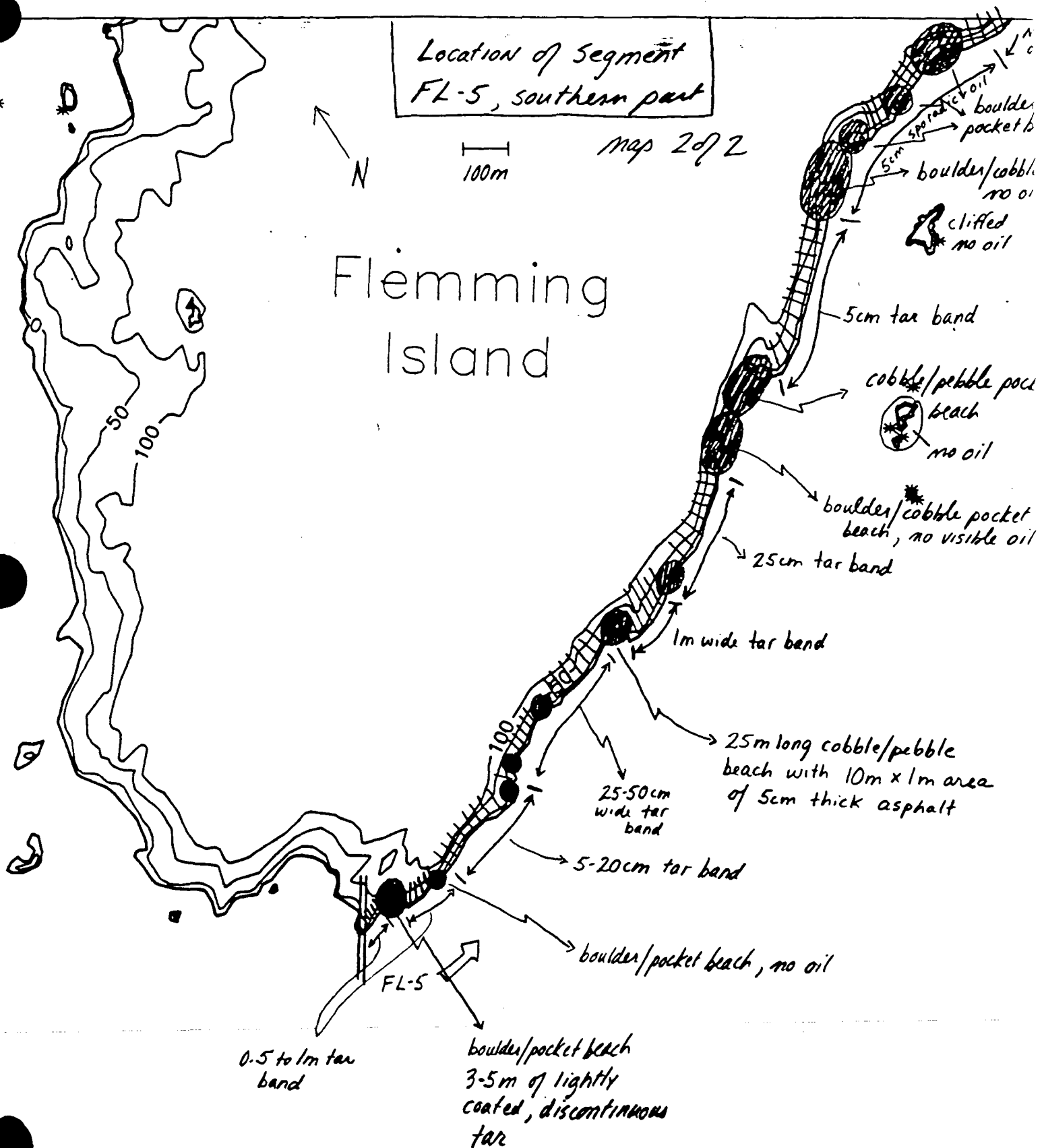
Location of Segment
FL-5, southern part

map 2 of 2



100m

Flemming Island



SEG FL-4 INSPECTION # 1

SEGMENT

DATE 8/10/89

INSPECTION RECORD

Shoreline Treatment Process(es) Completed for this Segment



Hot water wash



Mechanical



Warm water wash

Non-mechanical Red-Pans/Sorbents

Water deluge

Other Debris Removal

Exxon

Treatment as indicated above has been completed. Request demobilization from this segment.

Comments

Signature

C. F. DugginsDate: 8/10/89 Time: 1600

Printed Name

C. F. Duggins

Existing Shoreline Condition As Visually Determined by USCG

Surface Oil

Subsurface Oil

Percent Degree of Oiling



Yes



No

0

Heavy

2

Medium

2

Light

3

Very Light

93

None

100 %

Comments Small amount medium oil in hard to reach places. Very light coating in small cove

Reassessment



Yes - necessary



No - not necessary unless re-oiled

ADEC rep

Comments Cover w/ 76 and demob approval. Treatment has stabilized. No gross contamination observed. Reassesment necessary

Signature

Denny R. TimmonsDate: 8/10/89 Time: 1950

Printed Name

Denny R. Timmons, Ensign, ADEC

FOSC rep

Demobilization approved disapproved

Comments

Crew did great job in heavy hit area

Signature

Paul B. GauseDate: 8/10/89 Time: 1950

Printed Name

Paul B. Gause, LT

TREATMENT MANUAL 6-15A

SEG FL05 INSPECTION # 1DATE 8-13-89

SEGMENT

INSPECTION RECORD

Shoreline Treatment Process(es) Completed for this Segment

☐

Hot water wash

☐

Mechanical

☐

Warm water wash

☐

Non-mechanical

☐

Water deluge

☒Other Debris Removed

Exxon

Treatment as indicated above has been completed. Request demobilization from this segment.

Comments

Signature

C. F. DugginsDate: 8/13/89 Time: 1700

Printed Name

C. F. Duggins

Existing Shoreline Condition As Visually Determined by USCG

Surface Oil

Subsurface Oil

Percent

Degree of Oiling

☒

Yes

☐

No

Heavy

Medium

Light

Very Light

None

100 %

Comments Very minor in water
spots - not deep penetration

Reassessment

☒

Yes - necessary

☐

No - not necessary unless re-oiled

ADEC rep

Comments very little or no oil on segment
after one visual inspection

Signature

Peter FrantzDate: 8/13/89 Time: 1710

Printed Name

PETER FRANTZ

FOSC rep

Demobilization approved/disapprovedComments significantly oil observed around of this band
along water side line along portions of segment

Signature

Thomas D. JacksonDate: 8/13/89 Time: 1712

Printed Name

Thomas D. Jackson USCG

(version 5/04/89)

SHORELINE PRE-CLEANUP ASSESSMENT BLOCK REPORT

Location (see enclosed map): Bainbridge Island East Block

Includes Shoreline Segments: BA-1, BA-2, BA-3

Submitted :

(for Exxon)

Date: 7/21/89

Recommendation
ISCC Approval:

Shawn K. Christopher

Date: 7/29/89

FOSC Approval:

A. C. Alejandro, by des.

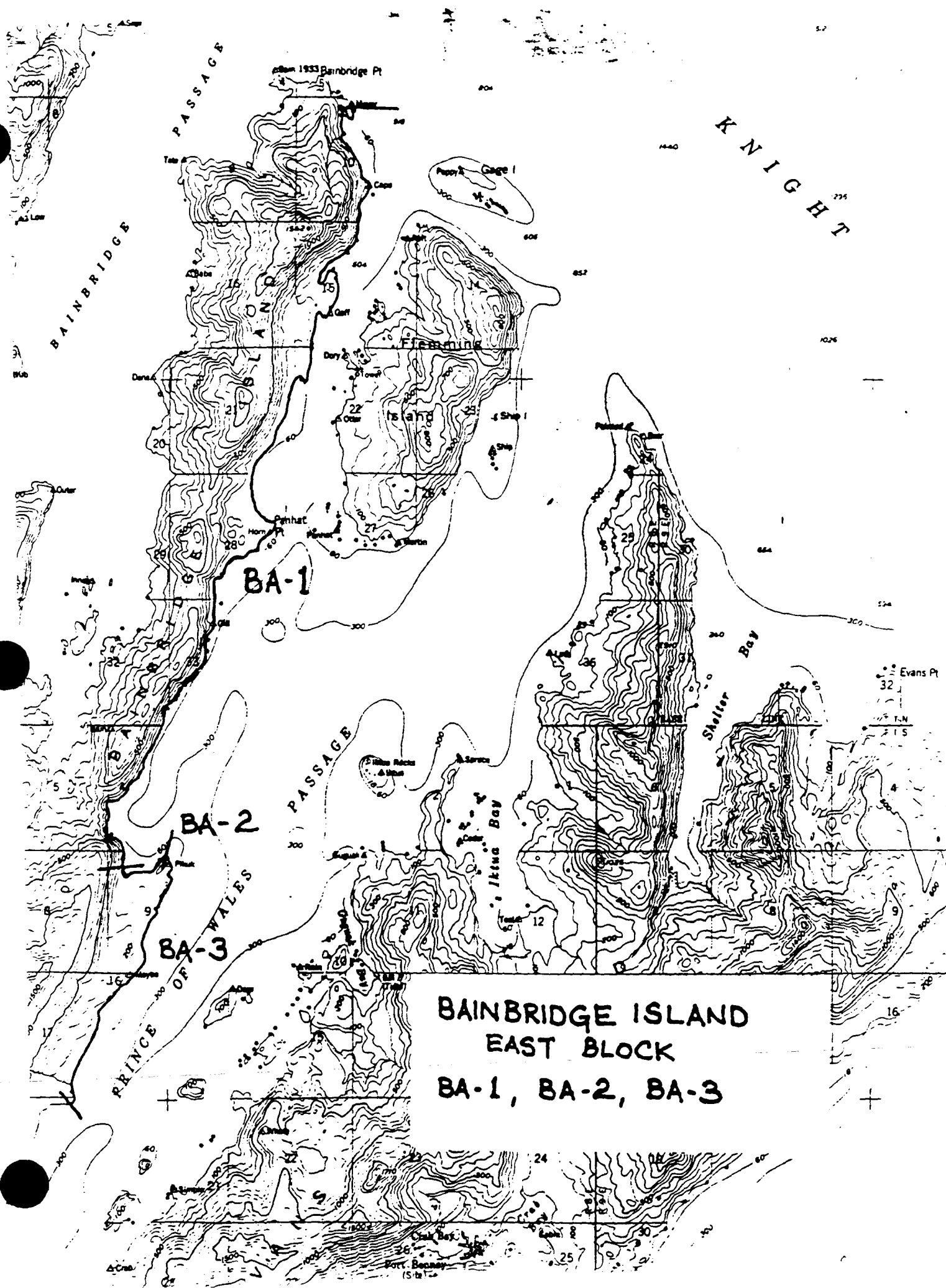
Date: 7/28/89

The cleanup procedures identified in the Shoreline Cleanup Program are recommended. Modifications to these systems can be made in the field. Exxon and other field personnel are encouraged to suggest innovations and productivity enhancements to the OSC's on-scene representative. The OSC's representative has the authority to approve on-site modifications. The Field Resource Team should be consulted if these actions do not fit within the Ecological Constraints of the Shoreline Cleanup Program. Requirements for safety and the protection of cultural material must be observed.

Distribution:

Exxon Shoreline Coordinator
Exxon Shoreline Supervisor
Exxon SCAT file

FOSC
CDFU
NOAA
EPA
USDA (FS)
USFW
A. DEC
A. FG
A. DNR
CAC
PWSCA
USFS
SHPO



BAINBRIDGE ISLAND
EAST BLOCK
BA-1, BA-2, BA-3

(version 5/02/89)

SHORELINE CLEANUP PROGRAM

DATE 7/20/89

SHORELINE SEGMENT BA-1

LOCATION: (see enclosed map) Northeast Shoreline of Bainbridge Island, Prince William Sound - Triangulation Station Meyer to Pikuk

ADEC NO. _____ SHORELINE ASSESSMENT DATE: 7/16/89

Recommended Cleanup Activity(ies):

- Manually remove contaminated drift material (fucus) and patches of mousse.
- ~~Because the contaminated berm sediments on site A are fine grained, diskings or relocating them into the middle intertidal zone, would accelerate natural cleaning. This is an exposed beach in which the sediments would be reworked and redistributed back up the intertidal zone. DO NOT RECOMMEN~~
- Use other approved methods as appropriate. ~~DISKING ON THIS SITE.~~

Priorities Considerations:

Class 4: light oil

Class A: resources present

Ecological Constraints (from site survey):

No ecological constraints.

Archeological Constraints (from site survey):

Archaeological monitor needed onsite during cleanup of Panhat Point ~~_____~~ If heretofore undiscovered cultural materials are uncovered during cleanup, contact Exxon's Archeological Field Director and take actions prescribed in the Operational Guidelines for Shoreline Cleanup dated 4/21/89 as amended.

Douglas Reger

State Historic Preservation Officer *

Date: 7/25/89

ISCC: *Sharon K. Christopher*

Date: 7/28/89

EXXON: *[Signature]*

Date: 89-07-28

FOSC: *A.C. Alejandro, by dir.*

Date: 7/28/89

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

SC 7/28/89
CO 89-07-28

SC 7/28/89
CO 89-07-28

SHORELINE OIL EVALUATION

Date: 16+17 July ⁸⁹ Time: 16 July = 0830 - 1023 hr
17 July = 0528 - 1045 hr Observer: Mann
 Surveyed From: Foot/Boat/Helio/Plane Weather: Sun Cloud/Rain/Snow/I

LOCATION

LOCATION NE shoreline of Bainbridge Island SEGMENT NUMBER BA-1

LENGTH OF SHORELINE SEGMENT: 12.8 km (8 miles)

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

SHORELINE:

Shoreline Type: SPI BEA COV HLD STRT

Slope: LANG HANG VER

Wave Exposure: High Med Low

Sediment: B 70 % / C 10 % / P 10 % / G 0 % / S 0 % / M 1 % / R 10 %

Drift Debris on Beach: Yes / No Supra Upper Mid Lower Type logs and seaweed

OIL

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

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

Continuous: Y / N % of Segment 15 Width of Band: 0.25 - 1.5

Sporadic: Y / N % of Segment 85

Est. Oil Thickness where > 1cm: NA cm Est. Oil Penetration: NA cm

Pooled Oil: 0 % "Free" Oil: 0 % Coated: H 1 % / M 5 % / L 94 %

Fresh 0 % Mousse 0 % Tar Formation: 100 %

Drift Debris Oiled? Yes / No Supra Upper Mid Lower Amount: H/M/L L

Comments:

This is a rocky, high-angle shoreline composed of boulder-skirted cliffs with occasional coves and pocket beaches. Oil contamination is rare beyond the widespread occurrence of weathered tar bands.

BA-1

DOCUMENTATION:

Map/Aerial photo marking segment boundaries _____

VTR: Y/N Tape Number(s) _____

Photography: Y/N Roll Number(s) _____

Sample Numbers Collected: _____

Bain 1933 Bainbridge Pt

SEGMENT BA-1
MAP #1 of 4

Poppy 300

Meyer

rare mousse patches

No Oil

20cm tar band

Cape

cliffs with
boulder skirts
5-20cm
discontinuous
tar

No oil

5-50cm
tar band
(discontinuous)

15m stretch
of tar with
oiled Fucus

0.5-1m
tar band

No oil

Dory
cliffs in back
still heavy
band 0.5-2m

1m wide
heavily oiled
in Fucus

to Map
#2

Key



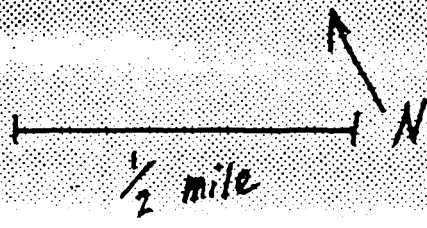
boulder/pebble beach



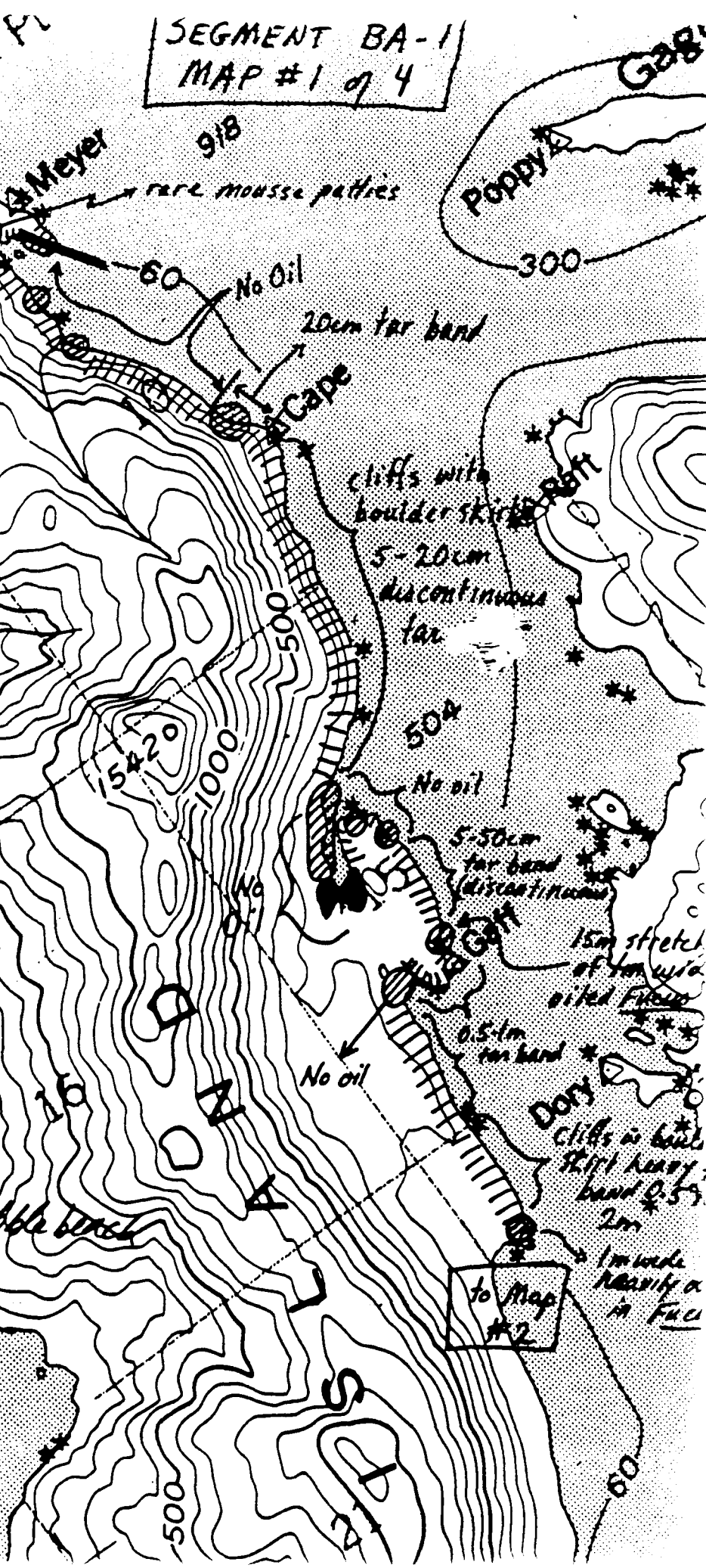
pebble/mud beach

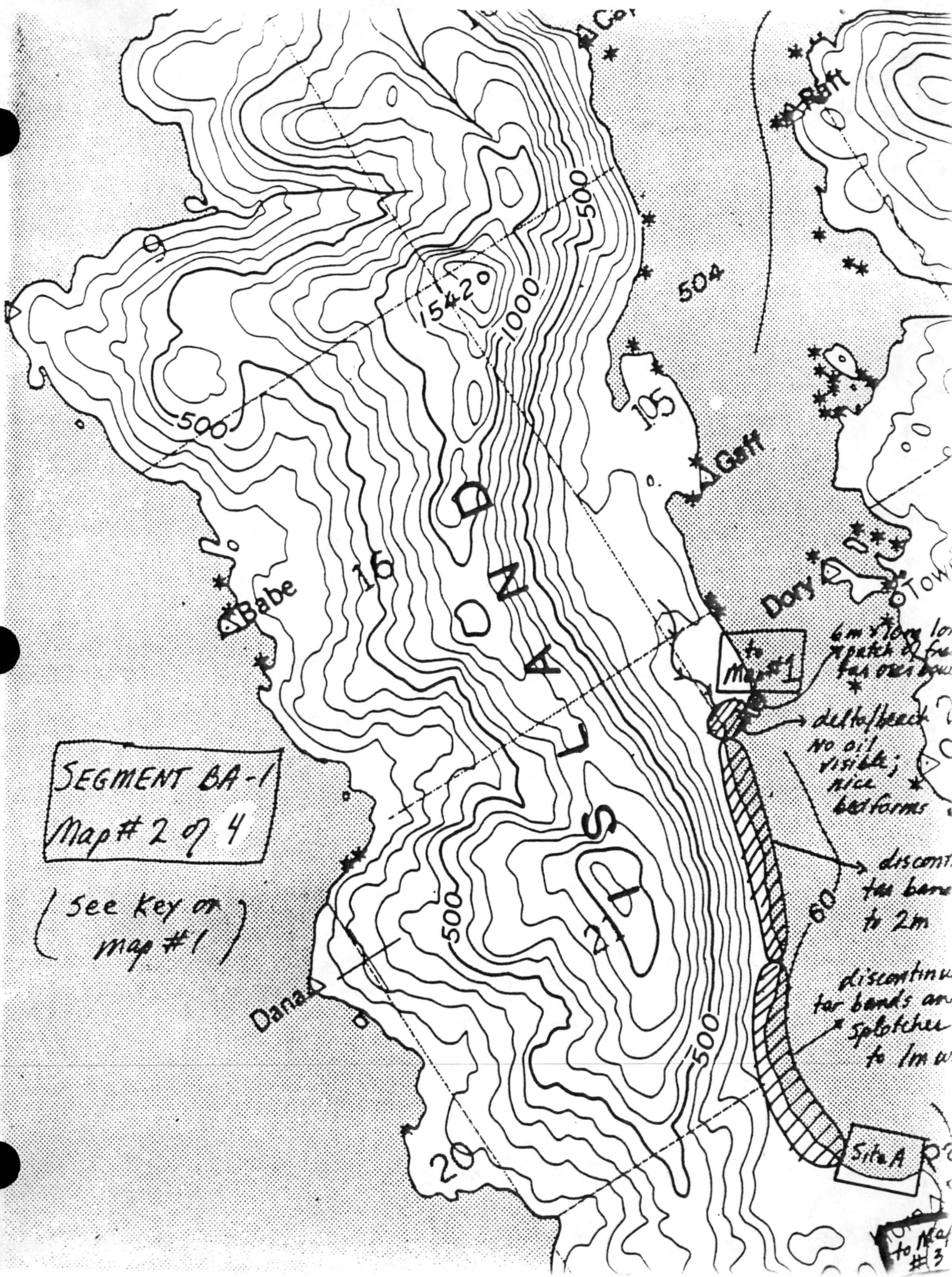


cliffs



V B R I D G E





SEGMENT BA-1
Map # 2 of 4

(See Key on
Map #1)

6m x 10m lot
patch of fur
for over 100
delta/branch
no oil
visible;
nice
bar forms

discont.
tar bands
to 2m

discontin.
tar bands and
splashes
to 1m w.

Sita A

to Map
#3

SEGMENT
BA-1
MAP # 3 of 4

(see Key on
Map #1)

Dana

Site A

to Map #2
Horn

25
furl

No oil

5-20m tan

No oil

50cm-l
tan over
50m

Gill coar

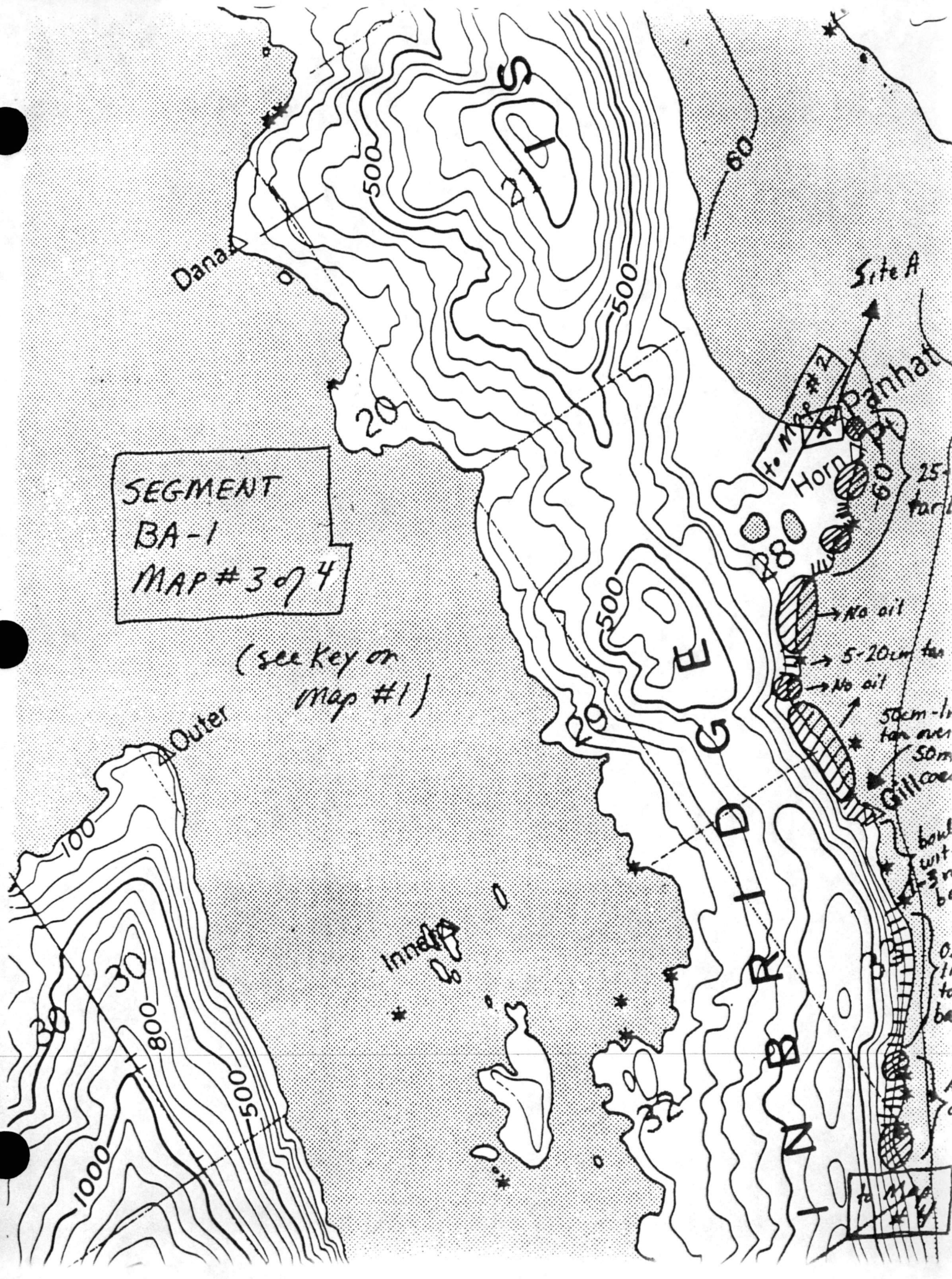
bowl
with
3 in
be

0.1
ta
ba

to Map #4

Inneta

E
G
D
R
B
I
N



Segment
BA-1
Map 4 of 4

(see Key on
map #1)

To Map
#3

Bar

R
B
N
A
B

No oil

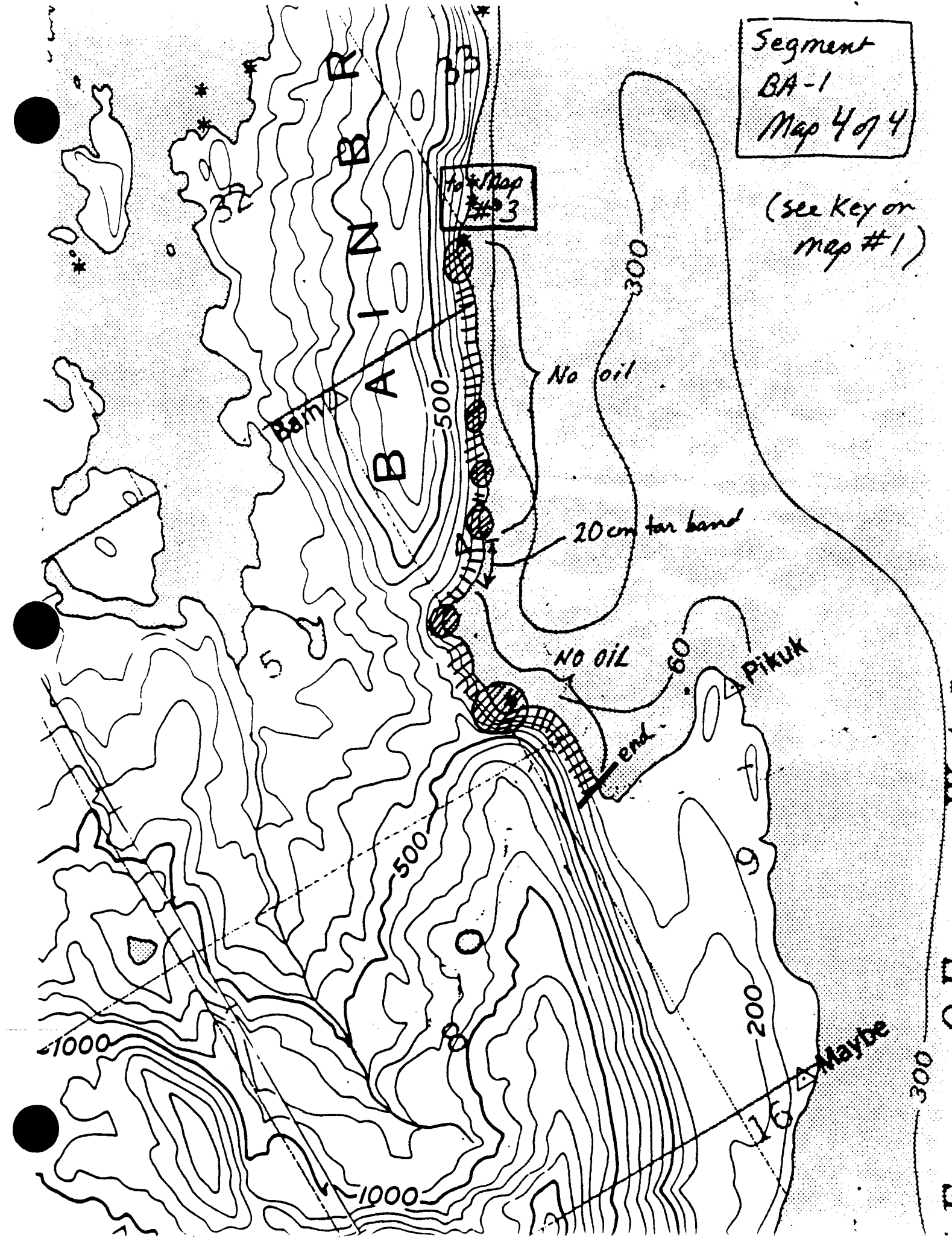
20 cm tar band

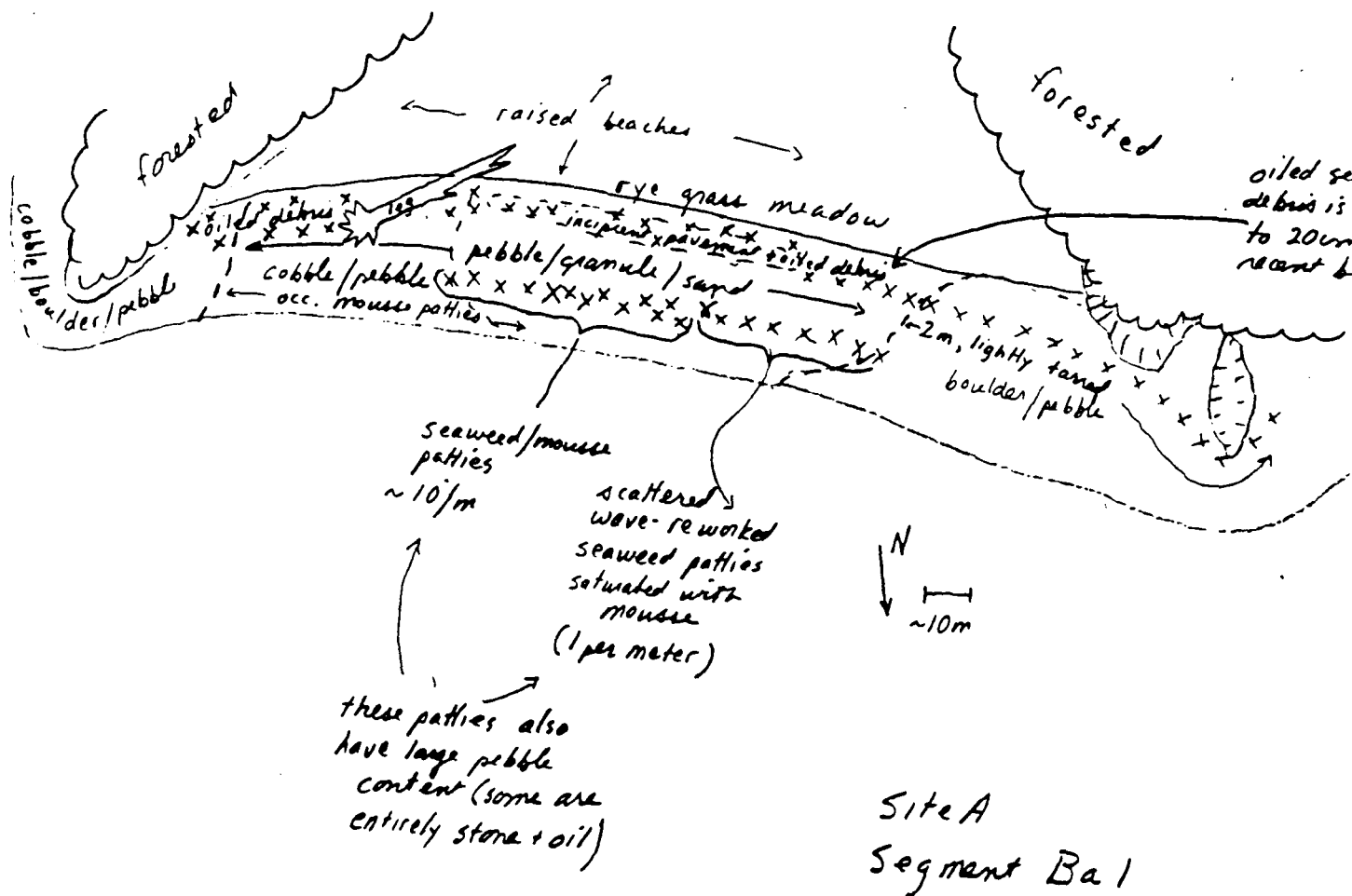
NO OIL

end

Pikuk

16 Maybe





penetration : to 20cm in storm berms

SEGMENT BA-1

Site 1 : Panhat Point

ECOLOGICAL EVALUATION

LOCATION: BAINBRIDGE ISLAND SITE: NE Shoreline (PWS) OBSERVER: MEYER

LOCATION PREFIX: BA SEG. NO.: 1 LENGTH: 12.8 KM (M)
07 / 16 / 89 0530-1023

DATE: 07 / 17 / 89 TIME (HHMM): 0528-1045 TIDE HT.: -1.2 FT to +4 FT (M)

OILED ZONE: Splash High Medium Low

SUBSTRATUM: Rocks Boulder cobble Gravel Sand Mud

LIVE BIOTA

Fucus (algae): Patchy Y/N Contin. Y/N Dense Y/N Sparse Y/N None Y/N
Site A -> some oiled fucus; occasional top 1 m oiled when fucus in oiled zone of segment
Patchy band along coast, rock faces, sparse along cobbles/pebble beaches, occasional beds.

Mytilus (Mussels): Patchy Y/N Contin. Y/N Dense Y/N Sparse Y/N None Y
usually not common, but patches at fresh water and occasional boulders, rock outcrops

Balanus (Barnacles): Patchy Y/N Contin. Y/N Dense Y/N Sparse Y/N None Y
Scattered throughout MTL/MLZ on larger cobbles and along rock face

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

Adult Littorina often in MLZ Fucus, tiny littorina on cobbles of beach. Usually patchy on Boulder and near shorelines, maybe

Limpets: Patchy Y/N Contin. Y/N Dense Y/N Sparse Y/N None Y/N
Under fucus; occasional patches of small (2cm) on cobbles

OTHER OBSERVATIONS: Pycnogonids common and abundant - hundreds on some eelgrass/algae cores; also

Pisaster, Eurytemora, Orthosternus; Leptasterias under rocks. Eelgrass fairly common in cores
throughout segment; a few fine Cockles and lots of shells: Cockles, Holes, Scallops, Clams, especially in

CLEANUP PRECAUTIONS: (initial) mudflats; Several small streams with no oil in segment, none are
shown as anachronisms by NOAA maps. also many crab carcasses and some live crab seen.
small

CLEANUP PRECAUTIONS: NONE

MAMMALS: Otters 1 Harbor Seals 1 Sea Lions 1 Whales _____
 Other Bea Seal in uplands

BIRDS: 3 Eagles (1 plus 1 pair); about 20 Black-legged Kittiwakes; 9 Glaucous-winged Gulls; 14 Murrelets;
3 Common Mergansers

GENERAL OBSERVATIONS: Area suggested for manual cleanup (site A) has little mid-tidal
biota; Pycnogonids are fairly abundant in green algae/eelgrass of the low and sub-tidal
(with a few Demasternus present too).

(version of 4/29/89)

CULTURAL RESOURCE EVALUATION

Date 7/17/89 Location Bambridge Island Site

Location Prefix BA Segment # BA-1 Length 12.8 Km

Survey Method:

Air (A - indicate on map) Boat ✓ (A - indicate on map)

Ground ✓ (G - indicate on map)

Known cultural resources (AHRS #) 076 Data Source Dr. Jagers

Oil conditions/beach visibility none to light

Width of beach zone surveyed 5-30m Tree fringe surveyed 10m

Cultural resources observed in beach zone (AHRS code) None

Cultural resources observed in tree fringe (AHRS code) FCR, MDN, CMT, #7

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

Shore Profile Beaches are flat to moderately sloped while the rest is steep wall from boulder fields

Fresh Water Sources streams on some beaches

Sea Exposure protected to east, north & south depending on the beach

Access/Safety good on beaches

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

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

Photos: Color Roll # Frames

B/W Roll # CW10 Frames 1-21

Observer(s) C. Wilson

Time survey started 0830 7/16 Time survey ended 1030 7/17

Cultural resource considerations/restraints:

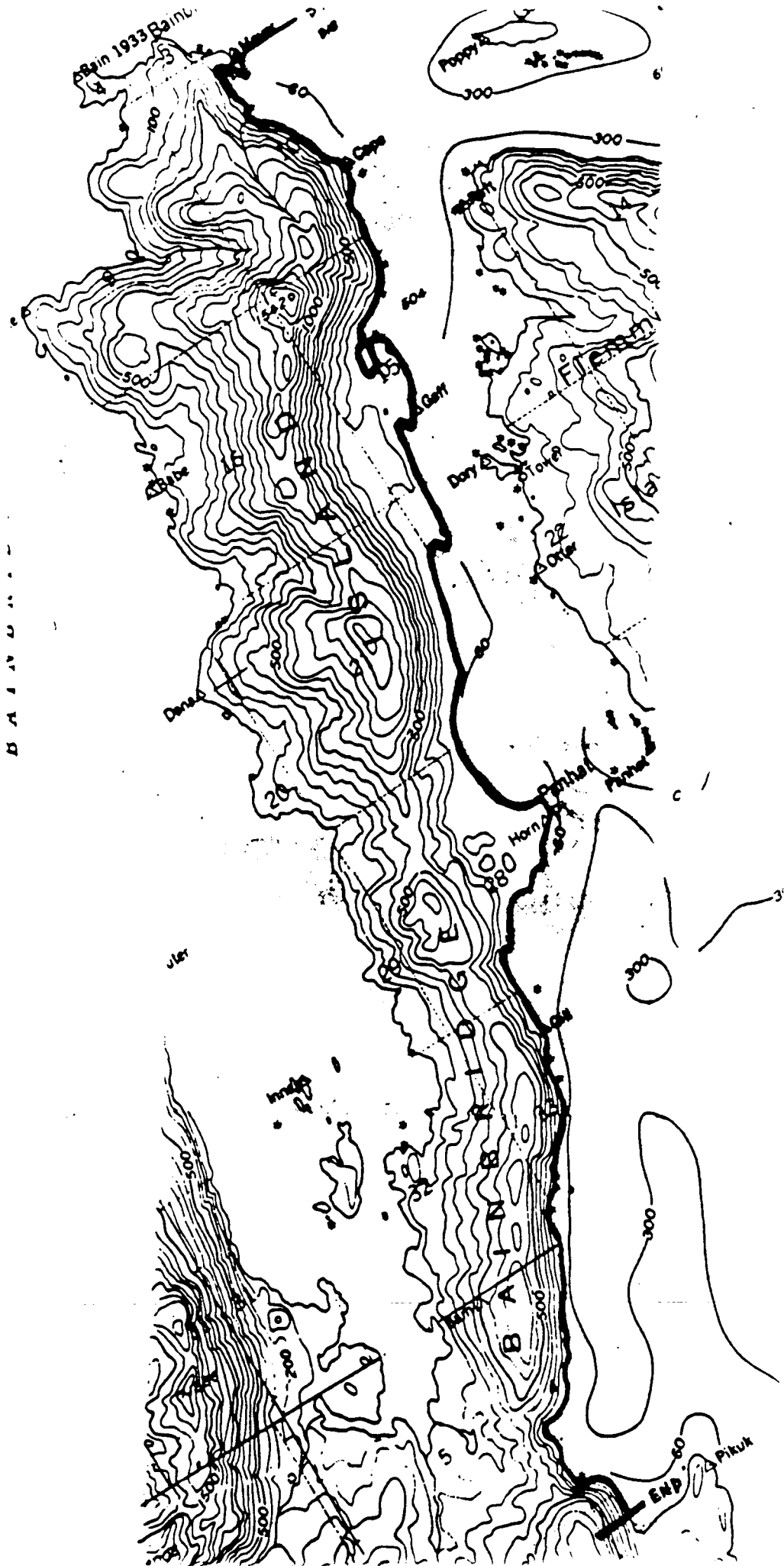
a monitor should be present during cleanup of the beach associated with AHRS #076. See map 3 in the cultural resource supporting documentation for this location. Standard restrictions elsewhere.

July 17, 1989

PWS

SEGMENT BA-1

NE Shoreline of
Bainbridge Island



(version 5/02/89)

SHORELINE CLEANUP PROGRAM

DATE 7/20/89

SHORELINE SEGMENT BA-2

LOCATION: (see enclosed map) Northeast side of Bainbridge Island,
Prince William Sound, beach west of USGS triangulation station
Pikuk

ADEC NO. _____ SHORELINE ASSESSMENT DATE: 7/17/89

Recommended Cleanup Activity(ies):

- Manually remove contaminated drift material (fucus), pooled oil and patches of mousse.
- ~~Because the contaminated berm sediments are fine grained, diskings or relocating them into the middle intertidal zone would accelerate natural cleaning. This is an exposed beach in which the sediments would be reworked and redistributed back up the intertidal zone. Do not disturb any sediments near the fish stream. DO NOT RECOMMEND ON THIS SEGMENT.~~
- Use other approved methods as appropriate. ^{DISKING}

Priorities Considerations:

Class 3: moderate oil

Class A: resources present

Ecological Constraints (from site survey):

Work at mid tide + or take appropriate measures to protect lower intertidal zone. Anadromous fish stream (No. 16570 is located within this segment (Anadromous Water Catalog, 2/84). Notify ADF&G and RAT 48 hours prior to beginning any cleanup in this area.

Archeological Constraints (from site survey):

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

Wangas Reger
State Historic Preservation Officer *

Date: 7/24/89

ISCC: Sharon K. Christopherson

Date: 7/28/89

EXXON: [Signature]

Date: 8-7-89

FOSC: A.C. Clelland, by dnr.

Date: 7/28/89

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

SC 7/28/89
6 890728

SC 7/28/89
6 890728

******* SCOT NOTE *******

**THERE ARE ITEMS OF GREAT CONCERN IN THIS APPROVAL BLOCK
THAT AFFECT THE DEPLOYMENT OF CREWS AND EQUIPMENT.**

READ THIS FIRST

**NOTE THAT THE UPLANDS IN SHORELINE SEGMENTS CONTAINED IN
THE BAINBRIDGE ISLAND EAST BLOCK HAVE BEEN SELECTED FOR
TRANSFER TO THE CHENEGA VILLAGE CORPORATION. PERMIT NO
ACCESS TO UPLANDS AT ANY TIME.**

SHORELINE OIL EVALUATIONDate: 17 July Time: 1045-1210 hrObserver: MANN

Surveyed From: Foot/Boat/Helio/Plane

Weather: (Sun) Cloud/Rain/Snow/F
hot weather**LOCATION**LOCATION NE side Bainbridge IslandSEGMENT NUMBER BA-2LENGTH OF SHORELINE SEGMENT: 700 m (0.4 mile)ACCESS: Foot/Vehicle/Boat/Barge/Helio/Float Plane**SHORELINE:**Shoreline Type: SPI/BEA/COV/HLD/STRTSlope: (LANG)/HANG/VERWave Exposure: (High/Med)/LowSediment: B 5 % / C 50 % / P 25 % / G 10 % / S 10 % / M 0 % / R 1 %Drift Debris on Beach: (Yes)/No(Supra/Upper/Mid/Lower) Type logs and
esp. seaweed**OIL**Degree of Oiling: Heavy/Moderate/Light/No Oil/UnobservedArea of Beach Impact: SU / SP / H / M / LContinuous: (Y)/N % of Segment 70 Width of Band: 5-10 mSporadic: (Y)/N % of Segment 30Est. Oil Thickness where > 1cm: NA cm Est. Oil Penetration: to 30 cmPooled Oil: 0 % "Free" Oil: 0 % Coated: H 20 % / M 40 % / L 40 %Fresh 0 % Mousse 20 % Tar Formation: 80 %Drift Debris Oiled? (Yes)/No (Supra/Upper/Mid/Lower) Amount: (H)/M/L/**Comments:**

This north-facing pocket beach trapped a large quantity of oil in seaweed debris. Fresh, tar also coats parts of this shoreline's surface. Vertical penetration is slight due to the presence of finer particle sizes at depth except in the case of pebble berms where freshly tanned pebbles and some mousse is buried below 20cm depth.

This is a geomorphologically active site relative to much of the rest of interior PW Sound so that oil, if not removed, will become buried in accumulating sediment.

BA-2

DOCUMENTATION:

Map/Aerial photo marking segment boundaries _____

VTR: Y/N Tape Number(s) _____

Photography: Y/N Roll Number(s) _____

Sample Numbers Collected: _____

Plan View of Segment BA-2
("Pikuk Point")

Note: map foreshortened towards the east

$\approx 20m$

N

especially heavy coat of
fresh tar (w some moss,
mixed w seaweed debris and pebbles
incipient asphalt; penetration to 30cm
in some bays

lightly coated, weathered.
tar; occ. penetration
to 5cm in berms

KEY

bands
of light to moderate (occ. heavy)
coating of fresh tar; penetration
to 10 cm; somewhat weathered
at surface

oiled plastic
sheet

bedrock
outcrop

forest

eye
glass

Sand
flat

blue
bathtub

ye g

grass

forested

diffuse tar splattering
on stones

A hand-drawn sketch showing a wavy line representing a waterline. To the left of the line is a rectangular area with diagonal hatching. To the right of the line, the text "waterline at 11 Am 17 July 89" is written along the curve. Below the line, the word "permit" is written, followed by several horizontal lines.

sandy pebbles
w shell debris

cobbles / boulders

forested

stream

beach ridge

beach ridge

ECOLOGICAL EVALUATION

LOCATION: BAMBRIDGE ISLAND SITE: NE side, PWS OBSERVER: MEYER

LOCATION PREFIX: BA SEG. NO.: 2 LENGTH: 700 (M)

DATE: 07 / 17 / 89 TIME (HHMM): 1045 TIDE HT.: + 4 FT (M)

OILED ZONE: Splash High Medium Low

SUBSTRATUM: Rock Boulder Cobble Gravel Sand Mud

LIVE BIOTA

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

Fucus sparse and patchy, not in oiled zone.

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

Some patchy beds of mussels, mostly simply scattered in substrate. Not oiled.

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

Scattered throughout pebble/cobble beach - not oiled.

Littorina

Patchy Y/N Contin. Y/N Dense Y/N Sparse Y/N None Y/N

Some adults in Fucus; many Littorina abundant on lower cobble beach.

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

Few limpets seen.

OTHER OBSERVATIONS: Eelgrass bed in subtidal of segment (see Map). Pink Salmon Spawning Stream (ADFG site # 16570).

CLEANUP PRECAUTIONS: Notify ADFG and RAT 48 hours prior to beginning cleanup in this segment (Pink Salmon Stream present).

MAMMALS: Otters Harbor Seals Sea Lions Whales
Other Beaver Scat in uplands.

BIRDS: Glaucous-winged Gull - 1; Mew Gull - 1; Black-legged Kittiwake - 5

GENERAL OBSERVATIONS: Algae/seaweed not abundant; primarily pebble/cobble beach with scattered barnacles and patchy sparse Fucus.

(version of 4/29/89)

CULTURAL RESOURCE EVALUATION

Date 7/17/89 Location Banbridge Island Site

Location Prefix BA Segment # BA-2 Length 700m

Survey Method:

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

Ground ✓ (G - indicate on map)

Known cultural resources (AHRS #) None Data Source None

Oil conditions/beach visibility light to moderate

Width of beach zone surveyed 10-30m Tree fringe surveyed 10m

Cultural resources observed in beach zone (AHRS code) None

Cultural resources observed in tree fringe (AHRS code) CMT

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

Shore Profile flat, broad beach

Fresh Water Sources stream

Sea Exposure protected to north

Access/Safety good

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

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

Photos: Color Roll # Frames

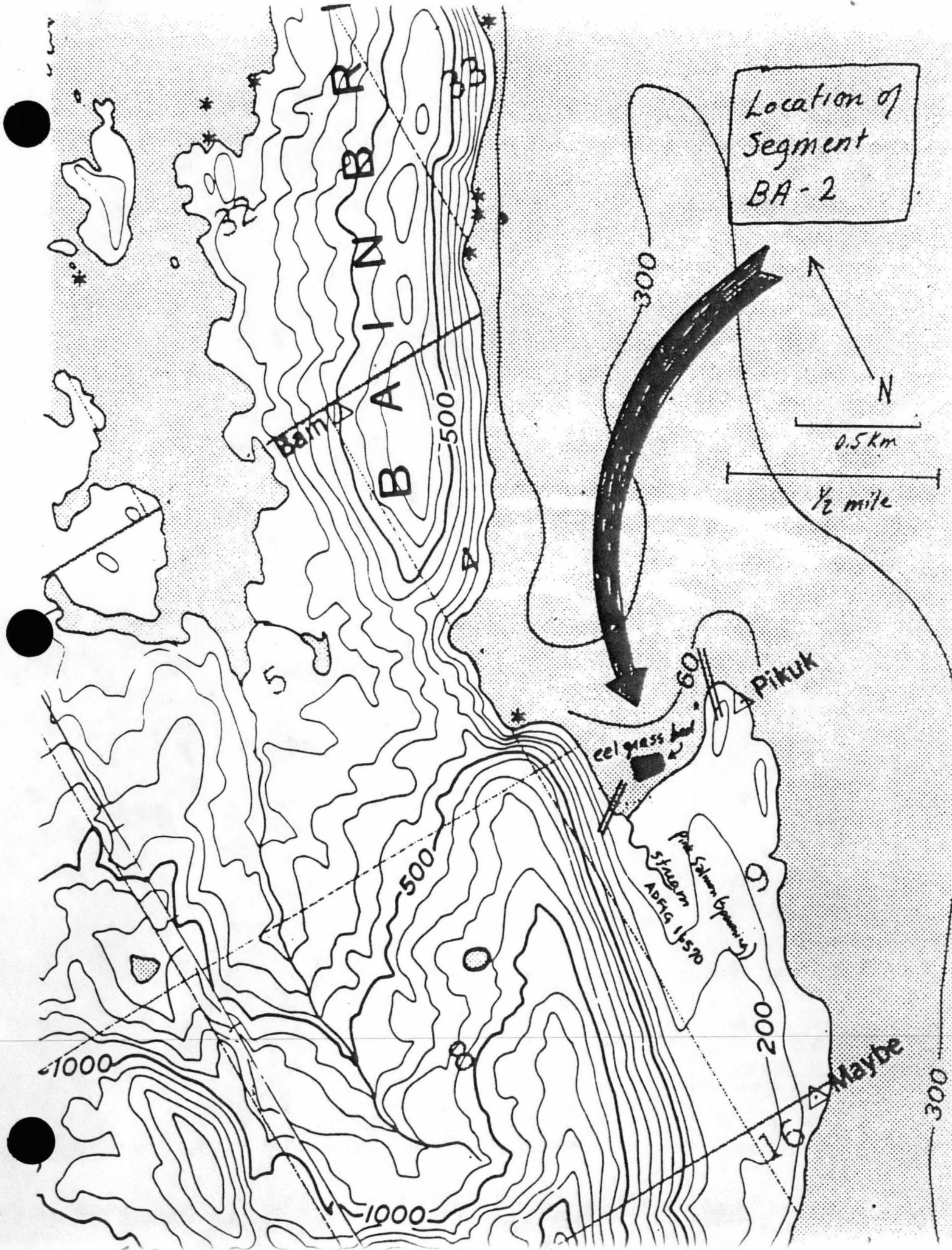
B/W Roll # Frames

Observer(s) C. Wilson

Time survey started 1000 Time survey ended 1430

Cultural resource considerations/restraints:

standard



(version 5/02/89)

SHORELINE CLEANUP PROGRAM

DATE 7/20/89

SHORELINE SEGMENT BA-3

LOCATION: (see enclosed map) Northeast shore of Bainbridge
Island and Prince of Wales Passage

ADEC NO. _____ SHORELINE ASSESSMENT DATE: 7/18/89

Recommended Cleanup Activity(ies):

- No cleanup recommended at this time (subject to FOSC reassessment at a later date) due to very light oil and variable wave energy.

Priorities Considerations:

Class 4-5: light to no oil

Class B: resources absent

Ecological Constraints (from site survey):

No ecological constraints.

Archeological Constraints (from site survey):

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

Wangas Reger
State Historic Preservation Officer *

Date: 7-24-89

ISCC: Shawn K. Christopher

Date: 7/28/89

EXXON: [Signature]

Date: 8/07-28

FOSC: A.C. Alejandro, bry dir.

Date: 7/28/89

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

SHORELINE OIL EVALUATION

Date: 18 July⁸⁹ Time: 0512 - 0702 hr Observer: Mann
 Surveyed From: Foot/Boat/Helio/Plane Weather: Sun/Cloud/Rain/Snow/

LOCATION

LOCATION east shore of Bainbridge Island SEGMENT NUMBER BA-3

LENGTH OF SHORELINE SEGMENT: 4.3 K (2.7 miles)

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

SHORELINE:

Shoreline Type: SPI/BEA/COV/HLD/STRT

Slope: LANG/HANG/VER

Wave Exposure: High/Med/Low

Sediment: B20% / C20% / P20% / G5% / S5% / M4% / R30%

Drift Debris on Beach: Yes/No Supra/Upper/Mid/Lower Type logs + seaweeds

OIL

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

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

Continuous: Y/N % of Segment 20 Width of Band: 0.01 - 3

Sporadic: Y/N % of Segment 80

Est. Oil Thickness where > 1cm: NA cm Est. Oil Penetration: <5 cm

Pooled Oil: 0 % "Free" Oil: 0 % Coated: H<1% / M20% / L80%

Fresh 0 % Mousse 0 % Tar Formation: 100 %

Drift Debris Oiled? Yes/No Supra/Upper/Mid/Lower Amount: H/M/L/
 very low

Comments:

This shoreline consists of interspersed low cliffs and pocket beaches. Wave energy decreases to south. This segment's southern boundary was set when the shoreline undergoes a major switch to finer (sandier, more pebbly) sediment types.

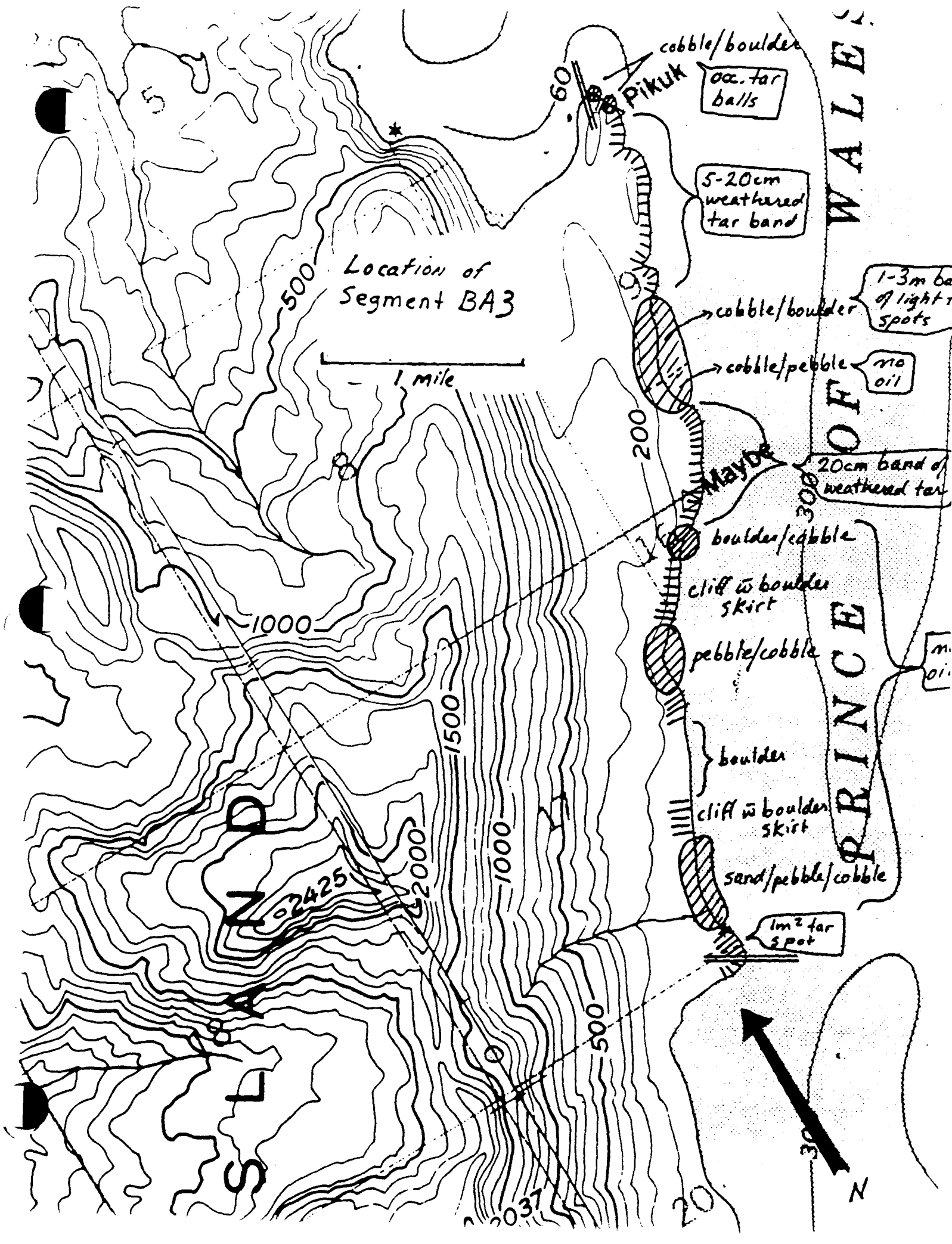
DOCUMENTATION:

Map/Aerial photo marking segment boundaries _____

VTR: Y/N Tape Number(s) _____

Photography: Y/N Roll Number(s) _____

Sample Numbers Collected: _____



ECOLOGICAL EVALUATION

LOCATION: BAINBRIDGE IS. SITE: East Shore, PWS OBSERVER: MEYER

LOCATION PREFIX: BA SEG. NO.: 3 LENGTH: 4.3 KM (M)

DATE: 07/18/89 TIME (HHMM): 0510 TIDE HT.: -1.0 to +5.0 FT (M)

OILED ZONE: Splash High Medium Low

SUBSTRATUM: Rocks Boulder cobble gravel sand and

LIVE BIOTA

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

Fairly continuous and dense along headrock, vertical rock, boulder beaches; absent or sparse, patchy on pebbly/cobble beach.

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

Patchy, often absent; small beds on headrock, in gravel by fresh H₂O runoff, @ base of Boulder adult & young occasionally under fucus.

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

Fairly continuous zone but sparse and density varies; dense spot on some beaches

Littorina

Patchy Y/N Contin. Y/N Dense Y/N Sparse Y/N None Y/N

Adults and young in Fucus; Young also abundant on cobble beach and in kumale; Nuclea common and abundant here + there, settling in barnacles esp. where fucus is absent.

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

Common in lower intertidal and tide pools, less common elsewhere.

OTHER OBSERVATIONS: Many sea star species: Pycnopodia, Dermasterias, Euryaster, Hemiacia

Low/Sub tidal invertebrates include: Onchidella borealis abundant on Halosaccion; Bryozoa, Kalkem fuscata, Amphiporus, and Tubulanus polymorphus, Tealin and Anthopleura, Nuclea eggs, and Purple Urchin.

CLEANUP PRECAUTIONS: (NO CLEANUP RECOMMENDED)

NONE

MAMMALS: Sea Otters 3+1 young Harbor Seals heard Sea Lions 5 Whales Other 2 River Otters; Harbor Seal Haulboat (with seals) across Prince of Wales Passage (the group)

BIRDS: 1 Eagle; 80 Harlequin Ducks; Arctic Terns - 2; Black-legged Kittiwakes - 7; Glaucous-winged Gulls - 5; Murrelet sp. - 1; Common Merganser - 22 young of the year; Crows - 3; Gray Jay on log deck.

GENERAL OBSERVATIONS:

Patchy light oil band is already quite weathered; occasional tar spots; much of segment is free of all oil contamination and very little biota was impacted.

(version of 4/29/89)

CULTURAL RESOURCE EVALUATION

Date 7/18/89 Location Bainbridge Island Site

Location Prefix BA Segment # BA-3 Length 4.3K

Survey Method:

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

Ground ✓ (G - indicate on map)

Known cultural resources (AHRS #) None Data Source None

Oil conditions/beach visibility None to light

Width of beach zone surveyed 5-15 m Tree fringe surveyed 10m

Cultural resources observed in beach zone (AHRS code) None

Cultural resources observed in tree fringe (AHRS code) None

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

Shore Profile Beaches are moderately sloped and gravel/cobble covered. The rest is well forested

Fresh Water Sources several very small streams

Sea Exposure protected to the east

Access/Safety beaches - good

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

Monitoring during cleanup needed yes no Collection yes no

Photos: Color Roll # Frames

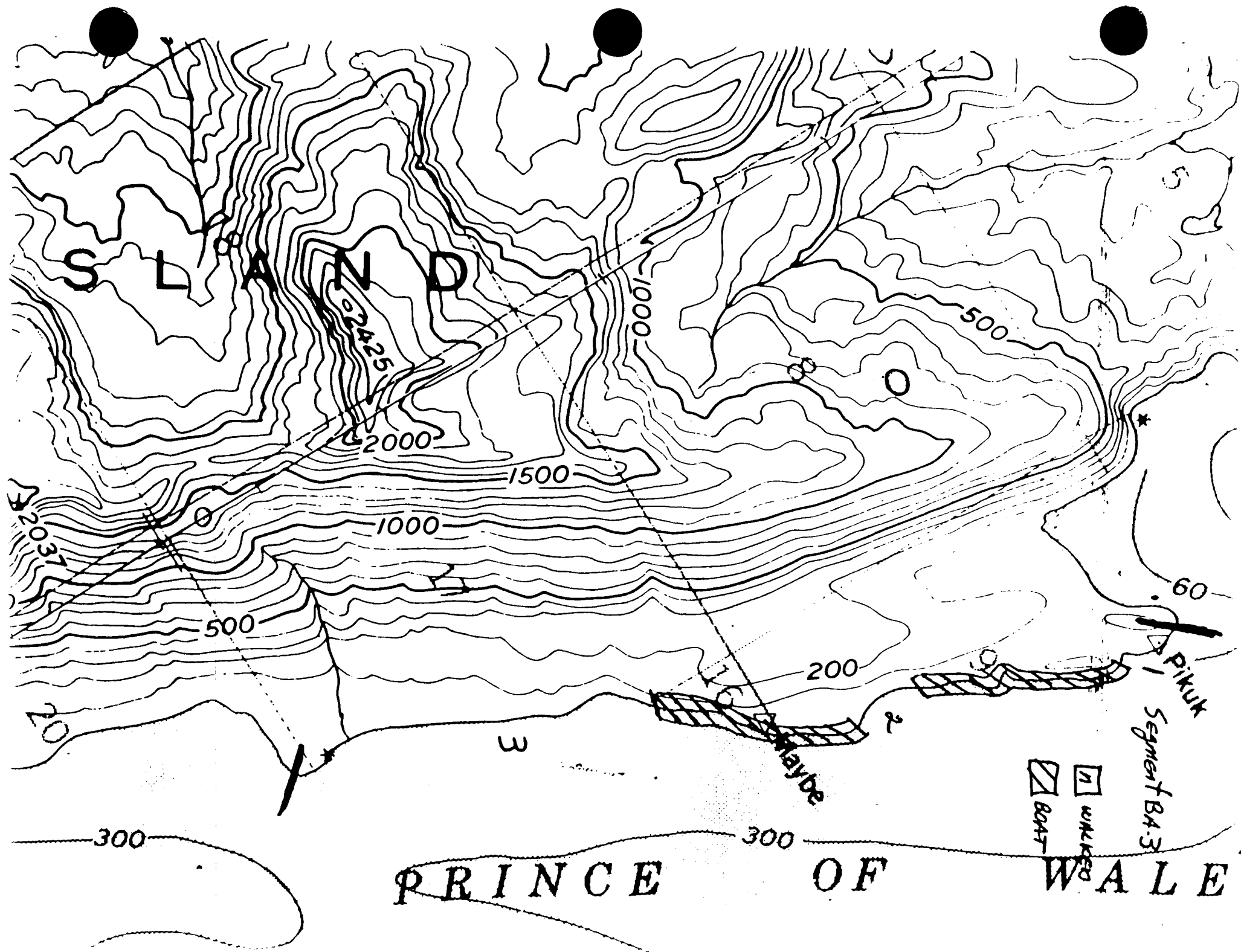
B/W Roll # Frames

Observer(s) C. Wilson

Time survey started 0520 Time survey ended 0900

Cultural resource considerations/restraints:

Standard restraint



SEG BA-1 INSPECTION # 1
DATE 8/3/89

TREATMENT MANUAL 6/15/89

SEGMENT
INSPECTION RECORD

Shoreline Treatment Process(es) Completed for this Segment

☐ Hot water wash	☐ Mechanical _____
☐ Warm water wash	☐ Non-mechanical _____
☐ Water deluge	☒ Other <u>MANUAL DEBRIS REMOVAL</u>

Exxon

Treatment as indicated above has been completed. Request demobilization from this segment.

Comments TREATMENT OF SEGMENT BA-1 IS COMPLETE
READY FOR DEMOB AND DEPLOYMENT TO NEW SECT.
Signature Richard C. Harrelson Date: 8/3/89 Time: 1905
Printed Name Richard C. Harrelson

Existing Shoreline Condition As Visually Determined by USCG

Surface Oil		Subsurface Oil
Percent	Degree of Oiling	☐ Yes ☒ No
<u>0</u>	Heavy	Comments _____ _____ _____ _____ _____
<u>3</u>	Medium	
<u>3</u>	Light	
<u>4</u>	Very Light	
<u>90</u>	None	
100 %		

Reassessment

☒ Yes - necessary ☐ No - not necessary unless re-oiled

ADEC rep Comments lower oil % and demobilization. No gross
contamination. For balls on one 150 yd section
spaced 30-40' apart. Recommend moving to heavily oiled area.
Signature Denny R. Timmons Date: 8/3/89 Time: 1910 hrs
Printed Name Denny R. Timmons, Engr Engr, ADEC

FOSC rep

Demobilization approved/disapproved
Comments No Gross Contamination
12,000 yds
Signature Arthur J. Smith Date 8/3/89 Time: 1912 hrs
Printed Name Arthur J. Smith LTJG

COPY: EXXON ADEC FOSC ISCC

12,800 meters

SEG BA-2 INSPECTION # 1
DATE 8/3/89SEGMENT
INSPECTION RECORD

Shoreline Treatment Process(es) Completed for this Segment

☐

Hot water wash

☐

Mechanical

☐

Warm water wash

☐

Non-mechanical

☐

Water deluge

☒Other MANUAL DEBRIS REMOVAL

Exxon

Treatment as indicated above has been completed. Request demobilization from this segment.

Comments TREATMENT OF SEGMENT BA-2 IS COMPLETE
READY FOR DEMOB AND DEPLOYMENT TO NEW SEG
 Signature Ph C Harrison Date: 8/3/89 Time: 19:05
 Printed Name Richard C. Harrison

Existing Shoreline Condition As Visually Determined by USCG

Surface Oil

Subsurface Oil

Percent Degree of Oiling

☒ Yes☐ No

0
10
10
0
80

Heavy

Medium

Light

Very Light

None

100 %

Comments Some subsurf.
medium 6 to 8 in. approx.
6 to 8 inches down

Reassessment

☒

Yes - necessary

☐

No - not necessary unless re-oiled

ADEC rep Comments Curator of To and demobilization. No mechanical
treatment. Matrix of fragmented shale w/ mouse compounds
medium oiling. Come back and retreat this if time permits. No gross
 Signature Denny R. Timmons Date: 8/3/89 Time: 1920
 Printed Name Denny R. Timmons, Engr Engr, ADEC

FOSC rep

Demobilization approved/disapprovedComments NO GROSS CONTAMINATION

Signature

Arthur J SmithDate: 8/3/89 Time: 1916 hrs

Printed Name

Arthur J Smith LTJG

SEG BA-3 INSPECTION # 1
DATE 8/3/89

SEGMENT INSPECTION RECORD

Shoreline Treatment Process(es) Completed for this Segment

☐ Hot water wash
☐ Warm water wash
☐ Water deluge

☐ Mechanical _____
☐ Non-mechanical _____
☒ Other No Work Required

Exxon

Treatment as indicated above has been completed. Request demobilization from this segment.

Comments TREATMENT OF SEGMENT BA-3 IS COMPLETE
READY FOR DEMOB AND DEPLOYMENT TO NEW STN.
 Signature Rich C. Hansen Date: 8/3/89 Time: 19506
 Printed Name Richard C. Hansen

Existing Shoreline Condition As Visually Determined by USCG

Surface Oil

Percent	Degree of Oiling
----------------	-------------------------

Subsurface Oil

☐ Yes ☒ No

	Heavy
	Medium
	Light
5	Very Light
95	None

Comments _____

100 %

Reassessment

☒ Yes - necessary

☐ No - not necessary unless re-oiled

ADEC rep Comments: Lower of 70 and mobilization. No gross contamination
Very light band observed in the 100' stretch. Recommend
mining to heavier contaminated segment to treat.
 Signature Denny R. Timmons Date: 8/13/89 Time: 19:23
 Printed Name Denny R. Timmons, Envir. Engr., PDEC

5060 108

Very small Area of light ring

Signature On the S-ill Date 1389 Time: 1925 hrs

Printed Name Arthur T Smith CTJG

(version 5/04/89)

SHORELINE PRE-CLEANUP ASSESSMENT BLOCK REPORT

Location (see enclosed map): BAINBRIDGE ISLAND NORTHWEST BLOCK

Includes Shoreline Segments: BA-04, BA-05, BA-06

Submitted : W. Stulp Date: 7/31/89
(for Exxon)

ISCC ^{RECOMMENDATION} Approval: Jacqueline Michel Date: 7/31/89

FOSC Approval: C. S. Nelson Date: 7/31/89

The cleanup procedures identified in the Shoreline Cleanup Program are recommended. Modifications to these systems can be made in the field. Exxon and other field personnel are encouraged to suggest innovations and productivity enhancements to the OSC's on-scene representative. The OSC's representative has the authority to approve on-site modifications. The Field Resource Team should be consulted if these actions do not fit within the Ecological Constraints of the Shoreline Cleanup Program. Requirements for safety and the protection of cultural material must be observed.

Distribution:

Exxon Shoreline Coordinator
Exxon Shoreline Supervisor
Exxon SCAT file

FOSC
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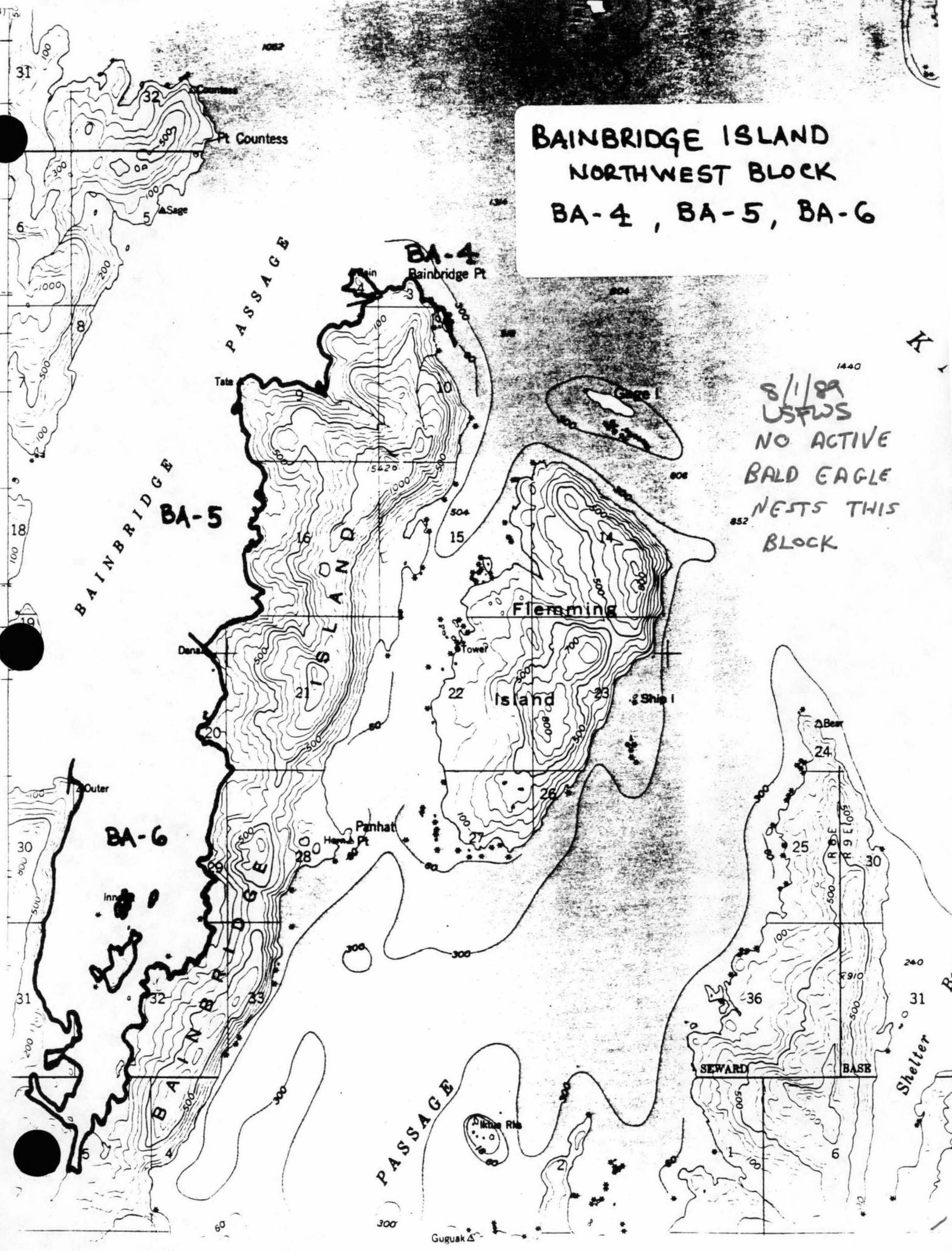
ATA

SCOT NOTE

SHORELINE SEGMENTS WITHIN
THIS BLOCK ARE ON LANDS
OWNED BY CHENEGA VILLAGE
CORPORATION. NO ACCESS TO
UPLAND AREAS AT ALL TIMES.

**BAINBRIDGE ISLAND
NORTHWEST BLOCK
BA-4 , BA-5, BA-6**

8/1/89
USFWS
NO ACTIVE
BALD EAGLE
NESTS THIS
BLOCK



(version 6/14/89)

SHORELINE CLEANUP PROGRAM

DATE 7/26/89

SHORELINE SEGMENT BA-04

LOCATION: (see enclosed map) BAINBRIDGE ISLAND-North end

ADEC NO. _____ SHORELINE ASSESSMENT DATE: 7/22/89

Recommended Cleanup Activity(ies):

- Manually remove contaminated drift material (fucus and driftwood) and patches of mousse.
- Flood/flush with warm to hot water (up to 140°F) on low angle beaches.
- Use moderate to high pressure washing on rocks.
- Use other approved methods as appropriate.

Priorities Considerations:

Class 3-4: Moderate to light oil.

Class B: Resources absent.

Ecological Constraints (from site survey): Work at mid tide + or take appropriate measures to protect lower intertidal zone.

~~THERE ARE 3 CATALOGUED ANADROMOUS STREAMS (ADS 226-40-16550, 226-40-16557, 226-40-16570). CONTACT ADEC PRIOR TO CLEANUP.~~ *JH 7/21/89*

Archeological Constraints (from site survey): *CS 89-0731 890731 JH 7/21/89*

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

Angus Reger
State Historic Preservation Officer *

Date: 7/28/89

ISCC: *Jacqueline M. Moberg*

Date: 7/21/89

EXXON: *Don Schilling*

Date: 7/28/89 890731

FOSC: *CS Moberg*

Date: 7/31/89

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

SHORELINE OIL EVALUATIONMike Fogel (COG)
John Monarch (Biol)Date: 7/22/89 Time: 8:45Observer: Cur + Wilson (arch)Surveyed From: Foot/Boat/Helio/PlaneWeather: Sun/Cloud/Rain/Snow/Fc**LOCATION**LOCATION Bainbridge Is.SEGMENT NUMBER BA-04LENGTH OF SHORELINE SEGMENT: 1850 mACCESS: Foot/Vehicle/Boat/Barge/Helio/Float Plane**SHORELINE:**Shoreline Type: SPI/BEA/COV/HLD/STRTSlope: LANG/HANG/VERWave Exposure: High/Med/LowSediment: B20% / C10% / P5% / G5% / S0% / M0% / R60%Drift Debris on Beach: Yes/NoSupra/Upper/Mid/Lower Type Driftwood
drift focus**OIL**

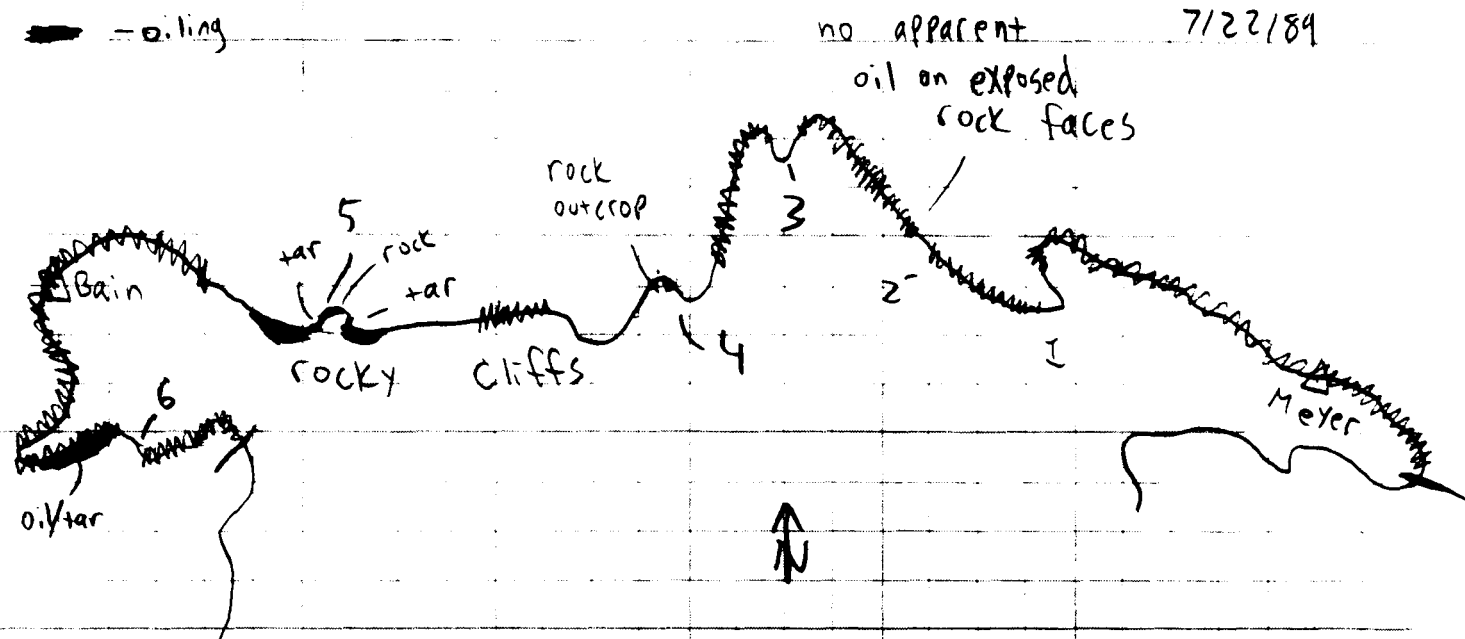
Degree of Oiling:

Localized
Heavy/Moderate/Light/No Oil/UnobservedArea of Beach Impact: SU / SP / H / M / LContinuous: Y/N % of Segment 1 Width of Band: 10 m ^{max observed}Sporadic: Y/N % of Segment 10 ^{max. observed}Est. Oil Thickness where > 1cm: 0 cm Est. Oil Penetration: 20 cmPooled Oil: 0 % "Free" Oil: 0 % Coated: H0% / M0% / L0%Fresh 0 % Mousse 10 % Tar Formation: 10 %Drift Debris Oiled? Yes/No Supra/Upper/Mid/Lower Amount: H/M/L**Comments:**

Shore Zone consists mostly of rocky headlands and boulders. These areas show no apparent oiling. The pocket beaches (see map), have localized light/moderate oil/tar. Beach 5 has the heaviest concentration of tar. The gravel beach has been converted to asphalt. ~~Appropriate~~ appropriate methods should be used for clean up.

BA-04
Bainbridge Is.
Mike Roget
7/22/89

mmmm - rocky headlands
- oiling



- 1) Low angle small pocket cobble beach. Tarring ranges from supra to mid intertidal zone. Moderate oiling of Fucus and muscle beds. 5cm penetration in gravel storm berm. Low wave exposure in pocket cove.
- 2) High angle small pocket cobble beach. Localized moderate oiling in the HITZ. Some tar splashes on rock faces in the HITZ. Some oiled fucus. All oil and tar occurs in protected areas on the western side of the cove.
- 3) Boulder/cobble beach with light localized oiling in the HITZ occurring in the protected areas.
- 4) Gravel/sand beach w/ some cobble and boulders on the sides. Localized light oiling in protected areas on east side among boulders in HITZ. Also some lightly oiled drift fucus in the supra ITZ.
- 5) High angle gravel beach. Heavy tarring in protected locations on beach. The penetration of tar > 25cm in some location. Tar has mixed with gravel to form an asphalt. Located in the supra ITZ are oiled drift fucus and 1 foot diameter tar clumps.
- 6) Shale pocket beach. Moderate oil/tar located in the upper ITZ on the vertical rock face on the North side of the beach.

ECOLOGICAL EVALUATION

LOCATION: Bainbridge Island SITE: WEST SHORE, PWS OBSERVER: MONARCH

LOCATION PREFIX: BA SEG. NO.: 04 LENGTH: _____ (M)

DATE: 7/22/89 TIME (HHMM): 0845 hrs TIDE HT.: -2.3 +1.5 (M)

OILED ZONE: Splash High Medium Low

SUBSTRATUM: Rocks Boulder Cobble Gravel Sand Mud

LIVE BIOTA

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

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

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

Littorina

Patchy Y/N Contin. Y/N Dense Y/N Sparse Y/N None Y/N

Adult + sub-adults common on cobblestone beaches + in Fucus. Nereis sp. - most commonly found in patches of barnacles + mussels. egg clusters fairly common

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

Very common to common in low tide zone especially beneath Fucus.

OTHER OBSERVATIONS: low tide and sub-tide zones diverse; with the exception of a few lightly oiled areas biota did not appear to be affected in this segment

CLEANUP PRECAUTIONS: _____

MAMMALS: Otters 2+1 pup Harbor Seals 1 Sea Lions — Whales 2 killer
Other evidence of bear activity above splash zone

BIRDS: Bald Eagles - 3; Canada Geese 2; Clark Legged Kittiwake - numerous; Murrelets - 53; Glaucous winged Gull - 17; Hairy Woodpecker - 6; Rufous Hummingbird - 1;

GENERAL OBSERVATIONS: _____

(version of 4/29/89)

CULTURAL RESOURCE EVALUATION

Date 7/22/89 Location Bainbridge Island Site

Location Prefix BA Segment # BA-4 Length 1850

Survey Method:

Air (A - indicate on map) Boat ✓ (A - indicate on map)

Ground ✓ (G - indicate on map)

Known cultural resources (AHRS #) 095 None Data Source None ~~De Laguna~~

Oil conditions/beach visibility light to none

Width of beach zone surveyed 5-20 m Tree fringe surveyed 10

Cultural resources observed in beach zone (AHRS code) None

Cultural resources observed in tree fringe (AHRS code) CMT

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

Shore Profile Beaches are pebbles in sheer wall face

Fresh Water Sources None

Sea Exposure open to north

Access/Safety hazardous - fair

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

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

Photos: Color Roll # Frames

B/W Roll # Frames

Observer(s) C. Wilson

Time survey started 0815 Time survey ended 1100

Cultural resource considerations/restraints:

Standard

IN R I D G E

BA-4

Bain 1933 Bainbridge

Meyer

9/18

Poppy

Ga

300

Cape

504

Ga

Dory

Babe

DONALDSON



Cape

Cape

Cape

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Cape

(version 5/02/89)

SHORELINE CLEANUP PROGRAM

DATE 7/26/89

SHORELINE SEGMENT BA-05

LOCATION: (see enclosed map) BAINBRIDGE ISLAND-North end

ADEC NO. _____ SHORELINE ASSESSMENT DATE: 7/22/89

Recommended Cleanup Activity(ies):

No cleanup recommended at this time (subject to FOSC reassessment at a later date), due to light discontinuous oil and medium wave exposure.

Priorities Considerations:

Class 4: Light oil.

Class B: Resources absent.

Ecological Constraints (from site survey):

No cleanup recommended.

Archeological Constraints (from site survey):

If cleanup is conducted and heretofore undiscovered cultural materials are uncovered, contact Exxon's Archeological Field Director and take actions prescribed in the Operational Guidelines for Shoreline Cleanup dated 4/21/89 as amended.

IF CLEANUP OCCURS, A MORE DETAILED ARCHEOLOGICAL SURVEY WILL BE REQUIRED.

Donaloo Regier
State Historic Preservation Officer *

Date: 7/28/89

ISCC:

Jaqueline Michel

Date: 7/31/89

EXXON:

Wm. Stulip

Date: 7/23/89 8907-31

FOSC:

CE Patton

Date: 7/31/89

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

SHORELINE OIL EVALUATIONDate: 7/22 / Time: 11:10Observer: Mike FogetSurveyed From: Foot/Boat/Helio/PlaneWeather: Sun/Cloud/Rain/Snow/I**LOCATION**LOCATION Bainbridge Is.SEGMENT NUMBER BA-05LENGTH OF SHORELINE SEGMENT: 4600 mACCESS: Foot/Vehicle/Boat/Barge/Helio/Float Plane**SHORELINE:**Shoreline Type: SPI/BEA/COV/HLD/STRTSlope: LANG/HANG/VERWave Exposure: High/Med/LowSediment: B 20% / C 10% / P 5% / G 5% / S 0% / M 0% / R 60%Drift Debris on Beach: Yes/NoSupra/Upper/Mid/Lower Typedriftwood
folus**OIL**

Degree of Oiling:

Heavy/Moderate/Light/No Oil/UnobservedArea of Beach Impact: SU / SP / H / M / LContinuous: Y/N % of Segment 0Width of Band: 0Sporadic: Y/N % of Segment 1Est. Oil Thickness where > 1cm: 0 cm Est. Oil Penetration: 0 cmPooled Oil: 0 % "Free" Oil: 0 % Coated: H 0% / M 0% / L 0%Fresh 0 % Mousse 0 % Tar Formation: 100 %Drift Debris Oiled? Yes/No Supra/Upper/Mid/Lower Amount: H/M/L/**Comments:**

The only oiling observed was at beach 3 (see attached map)
This is a gravel beach with very light sporadic tarring occurring. There is
a 5 cm discontinuous tar band located in the upper ITZ along a rock face on
the north end of the beach. Most of BA-5 consists of steep forested
cliffs with a few pocket beaches. No apparent oil was observed along the
shore zone except for beach 3.

ECOLOGICAL EVALUATION

LOCATION: Bainbridge Island SITE: West Shore, PWS OBSERVER: MONARCH

LOCATION PREFIX: BA SEG. NO.: 05 LENGTH: _____ (M)

DATE: 7/22/89 TIME (HHMM): 11:00 hrs TIDE HT.: -2.3 to +1.5 (M)

OILED ZONE: Splash High Medium Low

SUBSTRATUM: Rocks Boulder Cobble Gravel Sand Mud

LIVE BIOTA

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

Fucus typical of that found in OTHER SEGMENTS THAT ARE UNOILED by oil

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

Mytilus typical of unaffected areas

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

Balanus typical of unaffected areas

Littorina

Patchy Y/N Contin. Y/N Dense Y/N Sparse Y/N None Y/N

Littorina typical

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

Limpets typical

OTHER OBSERVATIONS: SHORELINE IN ENTIRE SECTION APPEARS TO BE UNAFFECTED BY OIL

CLEANUP PRECAUTIONS: NO CLEANUP RECOMMENDED FOR THE FEW SPLASHES, ^{+globs} ENCOUNTERED

MAMMALS: Otters 4+2 pups Harbor Seals - Sea Lions - Whales 1 Humpback
Other EVIDENCE OF BEARS IN UPPER TIDAL ZONE

BIRDS: Eagles-3; Arctic Tern-4; Murrelets-27; Black-legged Kittiwakes-numerous; Glaucous-winged gull-1;
Marbled Murrelet-2; Mew Gull-3;

GENERAL OBSERVATIONS: ALL BIOTA IN THIS SEGMENT APPEARS TO BE VERY HEALTHY

(version of 4/29/89)

CULTURAL RESOURCE EVALUATION

Date 4/22/89 Location Bainbridge Island Site

Location Prefix BA Segment # BA-5 Length 4600m

Survey Method:

Air (A - indicate on map) Boat ✓ (A - indicate on map)

Ground ✓ (G - indicate on map)

Known cultural resources (AHRS #) 075 Data Source DeJager

Oil conditions/beach visibility patchy to none

Width of beach zone surveyed 5-20 m Tree fringe surveyed 10m

Cultural resources observed in beach zone (AHRS code) 07 None

Cultural resources observed in tree fringe (AHRS code) CHT

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

Shore Profile beaches are relatively flat and broad and

Fresh Water Sources uplands are generally flat and accessible

Sea Exposure open to north-west

Access/Safety good on beaches

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

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

Photos: Color Roll # Frames

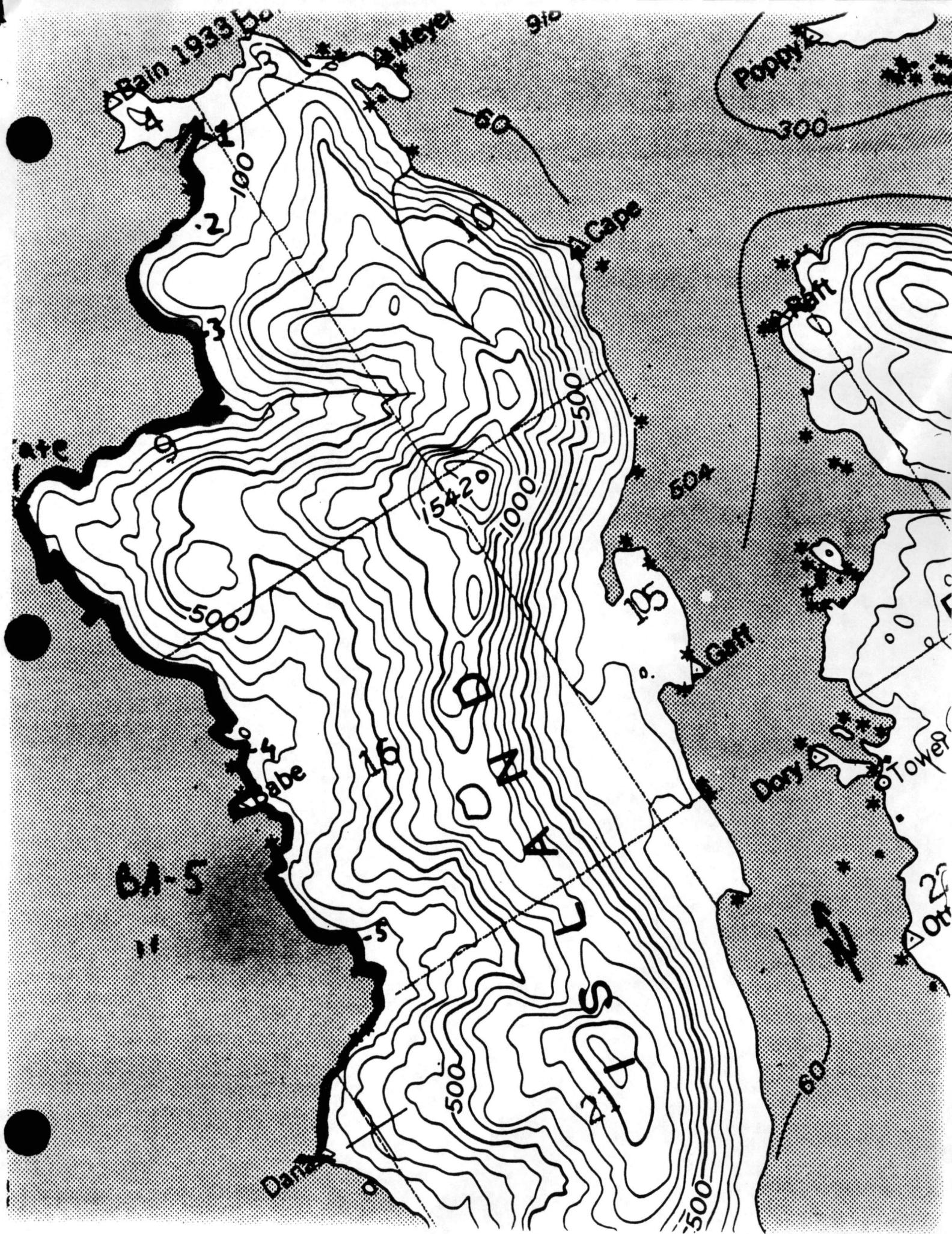
B/W Roll # Frames

Observer(s) C. Wilson

Time survey started 1100 Time survey ended 1400

Cultural resource considerations/restraints:

Standard



(version 5/02/89)

SHORELINE CLEANUP PROGRAM

DATE 7/26/89

SHORELINE SEGMENT BA-06

LOCATION: (see enclosed map) BAINBRIDGE ISLAND-North end

ADEC NO. _____ SHORELINE ASSESSMENT DATE: 7/23/89

Recommended Cleanup Activity(ies):

No cleanup recommended at this time (subject to FOSC reassessment at a later date), due to no oil.

Priorities Considerations:

No oil.

Ecological Constraints (from site survey):

THERE ARE 3 CATALOGUED ANADROMOUS STREAMS (226-40-16510
-16554
16570) - 6 8907-51
Ju
7/31/89

Archeological Constraints (from site survey):

If cleanup is conducted and heretofore undiscovered cultural materials are uncovered, contact Exxon's Archeological Field Director and take actions prescribed in the Operational Guidelines for Shoreline Cleanup dated 4/21/89 as amended.

Douglas Reger
State Historic Preservation Officer *

Date: 7/28/89

ISCC: Jacqueline Michel

Date: 7/31/89

EXXON: Wm Stalup

Date: 7/28/89, 8907-51

FOSC: O. E. Robbin

Date: 7/31/89

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

SHORELINE OIL EVALUATION

Date: 7/23/89 Time: 11:00

Observer: Mike Fogel

Surveyed From: Foot/Boat/Helio/Plane

Weather: Sun/Cloud/Rain/Snow/F

LOCATION

LOCATION Bainbridge Is.

SEGMENT NUMBER BA-06

LENGTH OF SHORELINE SEGMENT: 16100 m

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

Low tide

SHORELINE:

Shoreline Type: SPI/BEA/COV/HLD/STRT

Slope: LANG/HANG/VER

Wave Exposure: High/Med/Low

at head of bay, salmon stream mouth

Sediment: B30 / C20 / P10 / G10 / S / M / R30

Drift Debris on Beach: Yes/No

Supra/Upper/Mid/Lower Type Driftwood

focus

OIL

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

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

Continuous: Y/N % of Segment Width of Band:

Sporadic: Y/N % of Segment

Est. Oil Thickness where > 1cm: cm Est. Oil Penetration:

Pooled Oil: % "Free" Oil: % Coated: H % / M % / L %

Fresh % Mousse % Tar Formation: %

Drift Debris Oiled? Yes/No Supra/Upper/Mid/Lower Amount: H/M/L/

Comments:

No oil was observed along this segment therefore
no cleanup activities are recommended. The salmon streams
at the head of the bay were boomed off (see map).

ECOLOGICAL EVALUATION

LOCATION: Bainbridge Island SITE: WEST SHORE, PWS OBSERVER: MONAHAN

LOCATION PREFIX: BA SEG. NO.: 06 LENGTH: _____ (M)

DATE: 7/23/89 TIME (HHMM): 1100 HRS TIDE HT.: -0.8 (M)

OILED ZONE: Splash High Medium Low - NONE

SUBSTRATUM: Rocks Boulder Cobble Gravel Sand Mud

LIVE BIOTA

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

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

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

Littorina

Patchy Y/N Contin. Y/N Dense Y/N Sparse Y/N None Y/N

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

OTHER OBSERVATIONS: SHORELINE + ALL INTERTIDAL ZONES healthy + robust
throughout the ENTIRE SEGMENT.

CLEANUP PRECAUTIONS: NONE

MAMMALS: Otters 9+3 Harbor Seals 27 Sea Lions - Whales -

Other Black Bear SWIMMING across ARM of BAY

SEAL haulout with 23 seals on northernmost island in bay.

BIRDS: ERBIES - 8 - ONE OBSERVED TAKING SALMON FROM STREAM; Black-legged Kittiwake -

COMMON; Glaucous winged Gull - numerous; Murrelets - common; Dipper - AT STREAM.

GENERAL OBSERVATIONS: SEA STARS WERE VERY ABUNDANT IN THIS SECTION -

may have been observed more commonly had the tide been lower -

(version of 4/29/89)

CULTURAL RESOURCE EVALUATION

Date 7/23/89 Location Bainbridge Island Site

Location Prefix BA Segment # BA-6 Length 16.1 Km.

Survey Method:

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

Ground ✓ (G - indicate on map)

Known cultural resources (AHRS #) None Data Source None

Oil conditions/beach visibility no oil

Width of beach zone surveyed 5-40m Tree fringe surveyed 10m

Cultural resources observed in beach zone (AHRS code) None

Cultural resources observed in tree fringe (AHRS code) None

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

Shore Profile beaches were flat to moderately sloped

Fresh Water Sources Area 3 was crossed by two salmon streams

Sea Exposure protected to east and north

Access/Safety good for beaches

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

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

Photos: Color Roll # _____ Frames _____

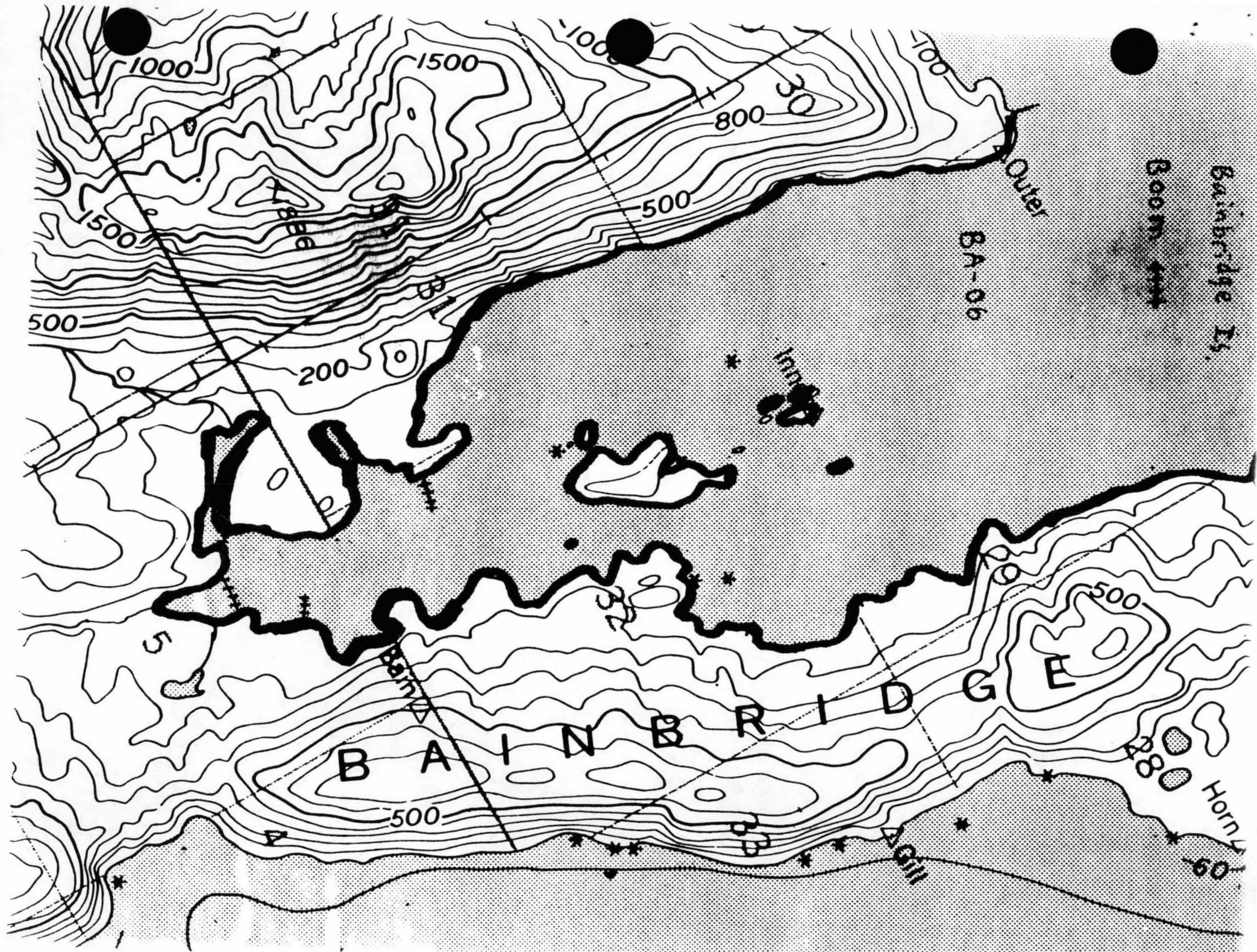
B/W Roll # _____ Frames _____

Observer(s) C. Nelson

Time survey started 1055 Time survey ended 1430

Cultural resource considerations/restraints:

Standard.



B A I N B

Dane

BA-06

20

104 Bath

Outer

Inne

29

500

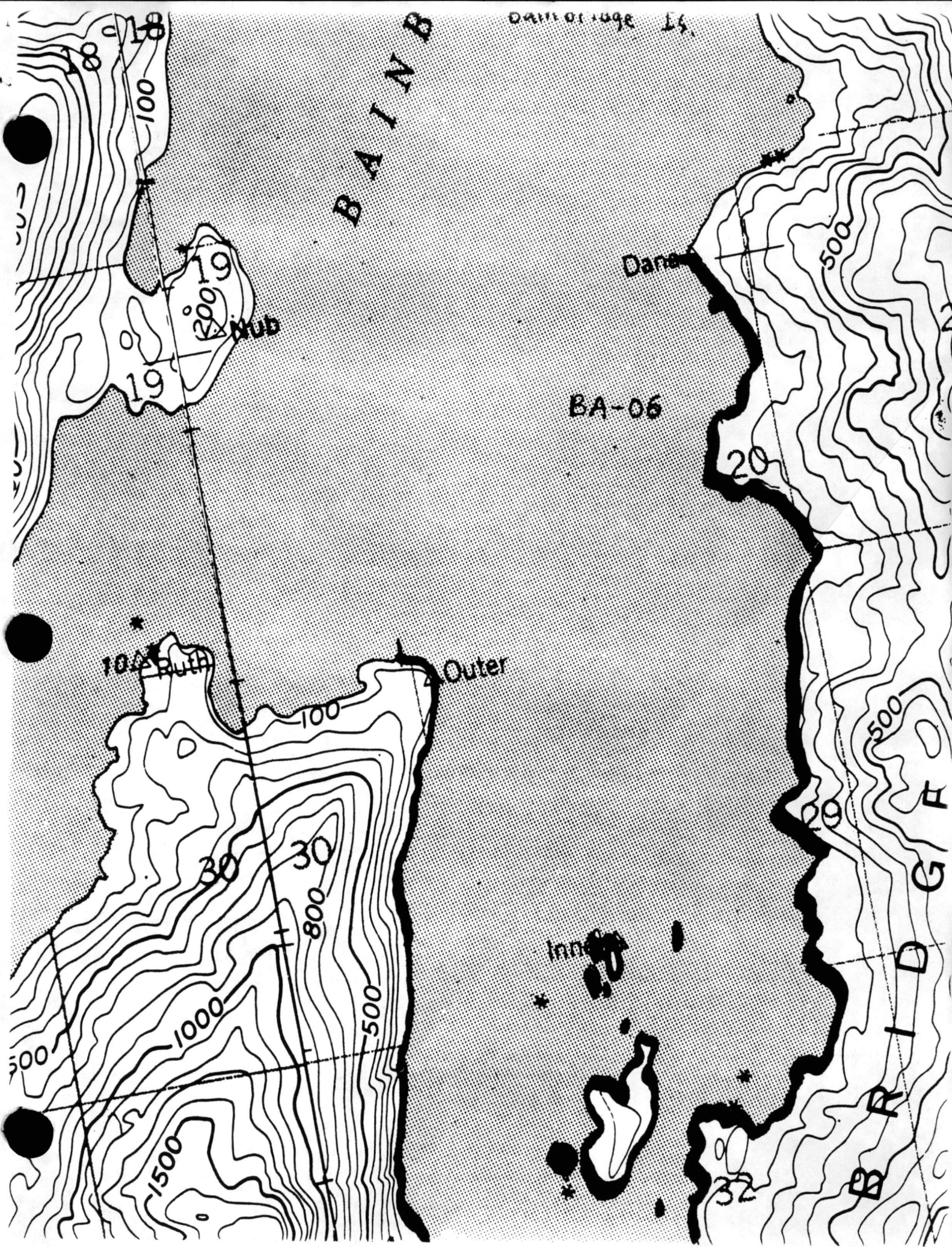
F

G

D

B

32



SEG BA-4 INSPECTION # 1
DATE 8-10-89

SEGMENT
INSPECTION RECORD

TREATMENT MAP NO. 01207

Shoreline Treatment Process(es) Completed for this Segment



Hot water wash



Mechanical



Warm water wash



Non-mechanical Pan-Rm/Surgeons



Water deluge



Other Debris Removal

Exxon

Treatment as indicated above has been completed. Request demobilization from this segment.

Comments

Signature

C. F. Duggins

Date: 8/10/89 Time: 1700

Printed Name

C F Duggins

Existing Shoreline Condition As Visually Determined by USCG

Surface Oil

Subsurface Oil

Percent

Degree of Oiling



Yes



No

0

Heavy

1

Medium

2

Light

3

Very Light

94

None

100 %

Comments Very light coating
on small rocks in several
beach areas

Reassessment



Yes - necessary



No - not necessary unless re-oiled

ADEC rep

Comments Concur w/ 90 and demobilization approval. Treatment
has stabilized. No gross contamination observed.
Reassess at a later date for re-oiling.

Signature

Dennis R. Timmons

Date: 8/10/89 Time: 1946

Printed Name

Dennis R. Timmons, ENV Eng, ADEC

FOSC rep

Demobilization approved / disapproved

Comments

Area looks very good

Signature

Paul R. Daniels

Date: 8/10/89 Time: 1945

TREATMENT MANUAL 3.1.3-

SEG BA-5 INSPECTION # 1

SEGMENT

DATE 8-10-89

INSPECTION RECORD

Shoreline Treatment Process(es) Completed for this Segment

☐

Hot water wash

☐

Mechanical

☐

Warm water wash

☐

Non-mechanical

☐

Water deluge

☒Other Removes OIL & DEBRIS

Exxon

Treatment as indicated above has been completed. Request demobilization from this segment.

Comments

Signature

C. F. DugginsDate: 8/10/89 Time:

Printed Name

C. F. Duggins

Existing Shoreline Condition As Visually Determined by USCG

Surface Oil

Subsurface Oil

Percent Degree of Oiling

☒

Yes

☐

No

_____	Heavy
_____	Medium
<u>1%</u>	Light
<u>2%</u>	Very Light
<u>97%</u>	None

100 %

Comments ALONG COBBLE LINESUPPER TIDAL AREAS. NOTHEAVY

Reassessment

☒

Yes - necessary

☐

No - not necessary unless re-oiled

ADEC rep Comments REQUESTED FOR BUT NOT PRESENT.

Signature

Date: 8/10/89 Time:

Printed Name

FOSC rep

Demobilization approved / disapprovedComments MINOR AMOUNTS OF OIL IN COAST W/ COBBLES.

Signature

Thomas D. JohnsonDate: 8/10/89 Time: 1940

Printed Name

Thomas D. Johnson LT USCG

SEG BA-6 INSPECTION # 1

SEGMENT

TREATMENT MANU. 12, 5, 1, 3, 7

DATE 8/10/89

INSPECTION RECORD

Shoreline Treatment Process(es) Completed for this Segment

☐

Hot water wash

☐

Mechanical

☐

Warm water wash

☐

Non-mechanical

☐

Water deluge

☒Other Removes Oil & Debris

Exxon

Treatment as indicated above has been completed. Request demobilization from this segment.

Comments

Signature

C. F. DugginsDate: 8/10/89 Time:

Printed Name

C. F. Duggins

Existing Shoreline Condition As Visually Determined by USCG

Surface Oil

Subsurface Oil

Percent Degree of Oiling

☒

Yes

☐

No

Heavy

Medium

Light

Very Light

None

1%2%97%

100 %

Comments

Light oil in fewsmall areas.

Reassessment

☒

Yes - necessary

☐

No - not necessary unless re-oiled

ADEC rep

Comments

REQUESTED FOR BUT UNAVAILABLE.

Signature

Date: / / Time:

Printed Name

FOSC rep

Demobilization

approved disapproved

Comments

OCCASIONAL TAN PATCHES

Signature

Thomas D. HarrisonDate: 8/10/89 Time: 1942

Printed Name

Thomas D. Harrison LT USCG

(version 5/04/89)

SHORELINE PRE-CLEANUP ASSESSMENT BLOCK REPORT

Location (see enclosed map): BAINBRIDGE PASSAGE CENTRAL BLOCK

Includes Shoreline Segments: BA-07, BA-08

Submitted :

W.F. Vabary
(for Exxon)

Date:

8-4-89

ISCC Recommendation:

Sharon K. Christopher

Date:

8-9-89

FOSC Approval:

D.S. Cram

Date:

8-12-89

The cleanup procedures identified in the Shoreline Cleanup Program are recommended. Modifications to these systems can be made in the field. Exxon and other field personnel are encouraged to suggest innovations and productivity enhancements to the OSC's on-scene representative. The OSC's representative has the authority to approve on-site modifications. The Field Resource Team should be consulted if these actions do not fit within the Ecological Constraints of the Shoreline Cleanup Program. Requirements for safety and the protection of cultural material must be observed.

Distribution:

Exxon Shoreline Coordinator
Exxon Shoreline Supervisor
Exxon SCAT file

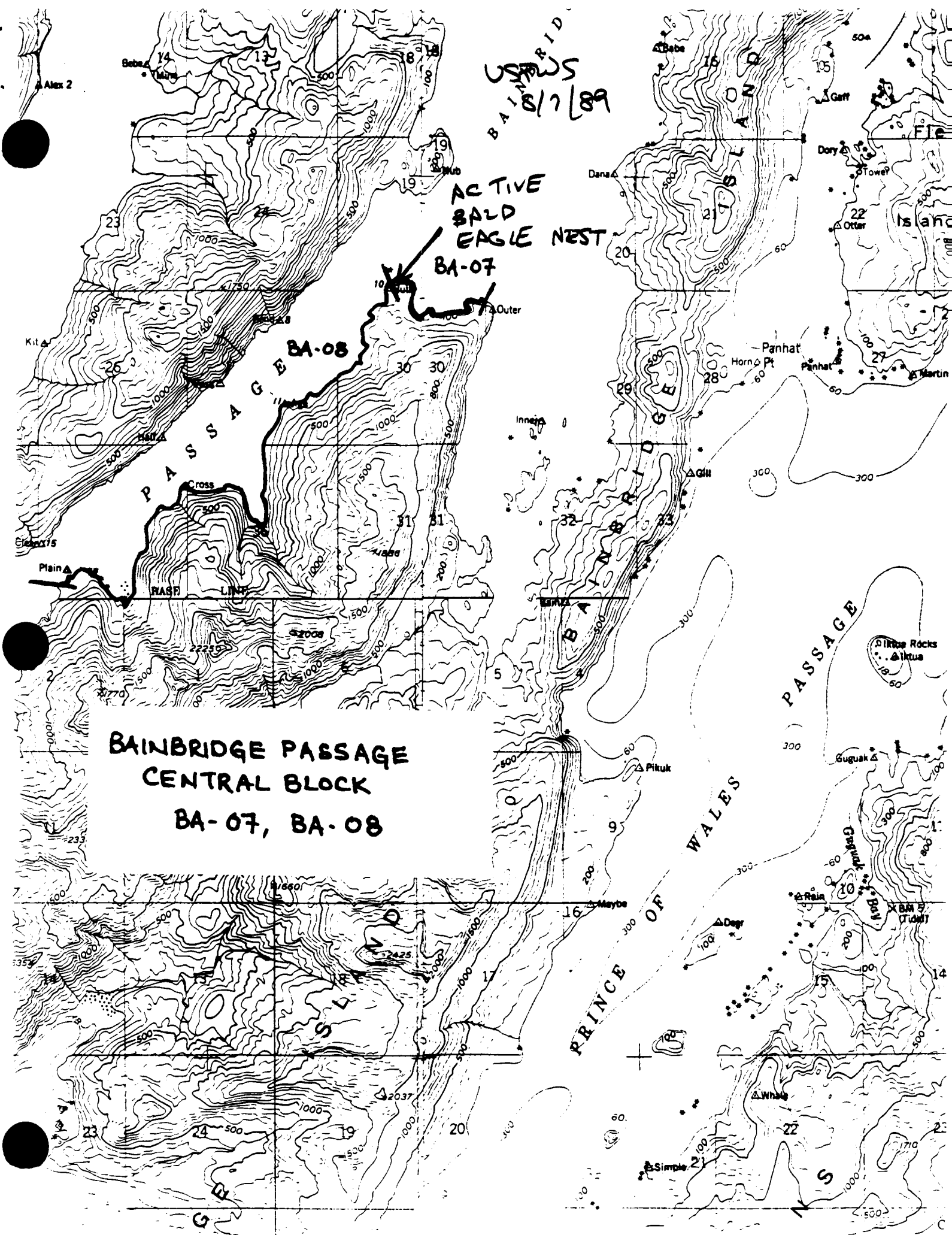
SHPO
FOSC
CDFU
NOAA
EPA
USDA (FS)
USFW
A.DEC
A.FG
A.DNR
CAC
PWSCA
USFS

USNWS
BAINBRIDGE
8/1/89

ACTIVE
BALD
EAGLE NEST
BA-07

BA-08

BAINBRIDGE PASSAGE
CENTRAL BLOCK
BA-07, BA-08



(version 6/14/89)

SHORELINE CLEANUP PROGRAM

DATE 8/03/89 SHORELINE SEGMENT BA-07
LOCATION: (see enclosed map) BAINBRIDGE ISLAND-Bainbridge
Passage (Bainbridge Passage Central Block)
ADEC NO. _____ SHORELINE ASSESSMENT DATE: 7/25/89

Recommended Cleanup Activity(ies):

- Manually remove contaminated drift material (fucus and driftwood) and patches of mousse.
- Flood/flush with warm to hot water (up to 140°F) on low angle beaches.
- Use moderate to high pressure washing on rocks.
- Use other approved methods as appropriate.

Priorities Considerations:

Class 3-4: Moderate to light oil

8/9/89
1/9/89
Ecological Constraints (from site survey): Work at mid tide + or take appropriate measures to protect lower intertidal zone.
ACTIVE BALD EAGLE NEST - SEE ADVISORY.

Archeological Constraints (from site survey):

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

Charles E. Holmes
State Historic Preservation Officer *

Date: August 4, 1989

ISCC: Sharon K. Christopher

Date: 8-9-89

EXXON: Daniel D. Tapp

Date: 8/9/89

FOSC: D.E. Cragg

Date: 8-12-89

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

SHORELINE OIL EVALUATION

Date: 7/25/89 Time: 10:20

Observer: Mike Fogel

Surveyed From: Foot/Boat/Helio/Plane

Weather: Sun/Cloud/Rain/Snow/Fog

LOCATION

LOCATION Bainbridge Is.

SEGMENT NUMBER BA-07

LENGTH OF SHORELINE SEGMENT: 1600 m

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

SHORELINE:

Shoreline Type: SPI/BEA/COV/HLD/STRT

Slope: LANG/HANG/VER

Wave Exposure: High/Med/Low

Sediment: B25% / C15% / P10% / G15% / S- / M- / R35%

Drift Debris on Beach: Yes/No Supra/Upper/Mid/Lower Type Driftwood
logs

OIL

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

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

Continuous: Y/N % of Segment 15 Width of Band: 10 m

Sporadic: Y/N % of Segment 30

Est. Oil Thickness where > 1cm: - cm Est. Oil Penetration: 25 cm maximum

Pooled Oil: - % "Free" Oil: - % Coated: H- / M- / L-

Fresh - % Mousse 20 % Tar Formation: 30 %

Drift Debris Oiled? Yes/No Supra/Upper/Mid/Lower Amount: H/M/L/
Locally

Comments:

Shore zone consists of rocky headlands with pocket gravel beaches (sema)
There is a discontinuous 3' tar band along the rocky headlands in the +HITZ.
Oiling is mostly light or no oiling with localized moderate oiling on
beaches 1 through 5. High pressure steam cleaning is recommended for
moderately oiled rocky headlands and boulders. Removal of contaminated drift material
is recommended. For light and moderately oiled beaches use appropriate
technology

bridge Is.

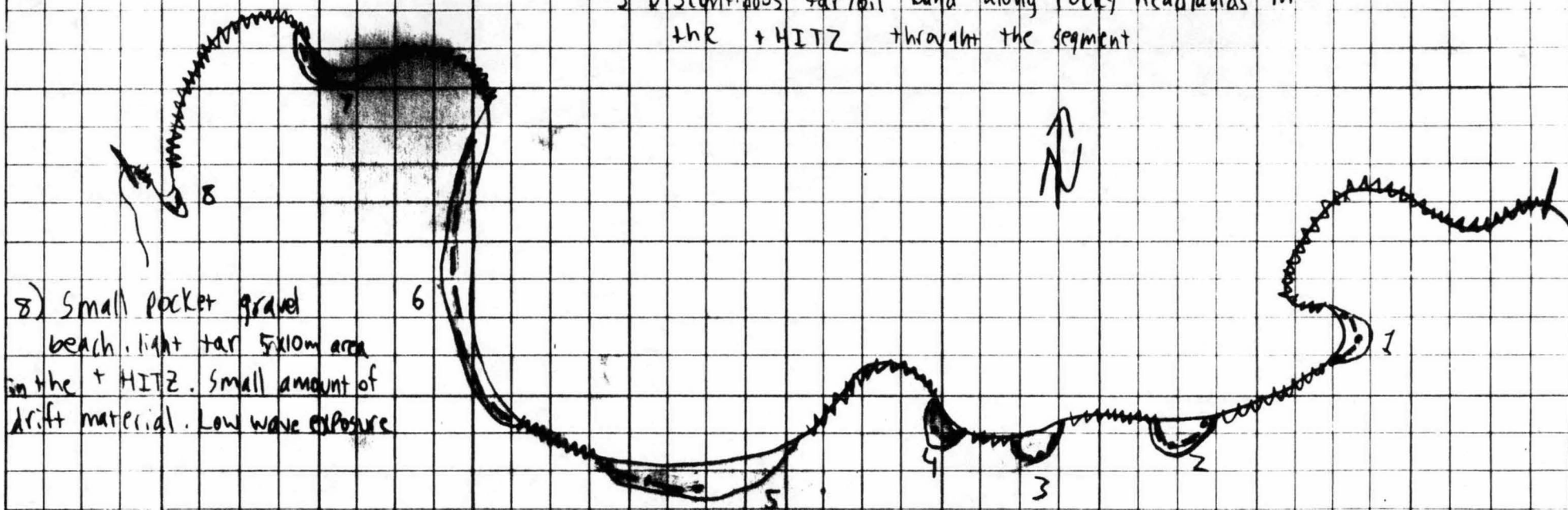
BA-07

Ke Foet
7/25/89

Rocky headlands

-oiling

3" Discontinuous tar/oil band along rocky headlands in the + HITZ throughout the segment



8) Small pocket gravel beach, light tar 5x10m area in the + HITZ. Small amount of drift material. Low wave exposure

1) Boulder/cobble beach - moderate tar/oiling, ranging from the supra to HITZ. oiled drift material in the supra ITZ. Protected cove with low wave exposure, light sheen on the water. 3" tar band along the rock face in the HITZ

2) Small pocket gravel beach. Moderate mousse on 30 m long beach. Oiling ranges from supra to low ITZ. oiled driftwood and fucus. 5 cm penetration with a maximum of 20cm in the storm berm.

3) 80 m long gravel beach. moderate oiling in the HITZ (12m band) light oil in the Low + medium ITZ (20m band). some tar cakes present in the MITZ. 20cm max penetration in the storm berm.

4) Same characteristics and oiling as beach 3, moderate oil

5) High angle gravel beach 100 m long. moderate oiling ranging from the supra to mid ITZ. light oil in the low ITZ. Large amount of oiled drift fucus in the storm berm. 15 cm penetration maximum in the storm berms. Oiling is only on the west side of the beach

6) Boulder beach, 3" tar band at the + HITZ

7) Gravel/Boulder beach, light oiling in the HITZ among the boulders on the west side of the beach.

ECOLOGICAL EVALUATION

LOCATION: Bainbridge Island SITE: WEST SHORE, PWS OBSERVER: MONARCH

LOCATION PREFIX: BA SEG. NO.: 07 LENGTH: _____ (M)

DATE: 1/1 TIME (HHMM): ^{1020 hrs}1230 hrs TIDE HT.: +1.5 (M)

OILED ZONE: splash High Medium Low

SUBSTRATUM: Rocks Boulder cobble Gravel Sand Mud

LIVE BIOTA

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

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

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

Littorina

Patchy Y/N Contin. Y/N Dense Y/N Sparse Y/N None Y/N

NOT found on high ENERGY BEACHES - WHETHER OILED OR NOT

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

OTHER OBSERVATIONS: PRESENCE of biota in density & distribution a function of exposure of beach to wave action

CLEANUP PRECAUTIONS: CLEANUP NOT RECOMMENDED - AREAS THAT ARE HEAVILY OILED ARE VERY SMALL - APPROXIMATELY 20 SQ. METERS

MAMMALS: Otters 4 Harbor Seals 2 Sea Lions — Whales —
Other _____

BIRDS: PACIFIC winged-gull - common; Black-legged Kittiwake - common - 2 EAGLES - Black-bystreer CATCHERS - Semi-palmated PLOVERS

GENERAL OBSERVATIONS: MOST OIL WAS FOUND ON HIGH ENERGY BEACHES - WOULD PROBABLY HAVE MORE IMPACT IF CLEANED - BETTER TO BE LEFT AND LET NATURAL PROCESSES during the WINTER CLEAN THE BEACH.

(version of 4/29/89)

CULTURAL RESOURCE EVALUATION

Date 7/25/89 Location Banbury Island Site _____

Location Prefix BA Segment # BA-07 Length 1600m

Survey Method:

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

Ground ✓ _____ (G - indicate on map)

Known cultural resources (AHRS #) None Data Source None

Oil conditions/beach visibility light to none

Width of beach zone surveyed 10-15 m Tree fringe surveyed 10m

Cultural resources observed in beach zone (AHRS code) None

Cultural resources observed in tree fringe (AHRS code) None

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

Shore Profile There are six pocket beaches in the segment that is other than water face.

Fresh Water Sources None

Sea Exposure Beaches 1 through 5 face north to face west

Access/Safety to beaches good

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

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

Photos: Color Roll # _____ Frames _____

B/W Roll # _____ Frames _____

Observer(s) C. Culver

Time survey started 1020 Time survey ended 1200

Cultural resource considerations/restraints:

Standard



(version 5/02/89)

SHORELINE CLEANUP PROGRAM

DATE 8/03/89 SHORELINE SEGMENT BA-08
LOCATION: (see enclosed map) BAINBRIDGE ISLAND-Bainbride
Passage (Bainbridge Passage Central Block)
ADEC NO. _____ SHORELINE ASSESSMENT DATE: 7/27/89

Recommended Cleanup Activity(ies):

No cleanup recommended at this time (subject to FOSC reassessment at a later date), due to no oil.

Priorities Considerations:

No oil.

Ecological Constraints (from site survey):

Rich intertidal life may be adversely effected by cleanup activities.

Archeological Constraints (from site survey):

If cleanup is conducted and heretofore undiscovered cultural materials are uncovered, contact Exxon's Archeological Field Director and take actions prescribed in the Operational Guidelines for Shoreline Cleanup dated 4/21/89 as amended.

Charles J. Holmes
State Historic Preservation Officer *

Date: August 4, 1989

ISCC: Sheila K. Christopher

Date: 8-9-89

EXXON: Daniel A. Tipton

Date: 8/9/89

FOSC: D.E. Crum

Date: 8-12-89

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

SHORELINE OIL EVALUATION

Date: 7/27/87 Time: 14:20

Observer: Mike Foget

Surveyed From: Foot/Boat/Helio/Plane

Weather: (Sun)/Cloud/Rain/Snow/Fog

LOCATION

LOCATION Bainbridge Is. SEGMENT NUMBER BA-08

LENGTH OF SHORELINE SEGMENT: 6700 m

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

SHORELINE:

Shoreline Type: SPI/BEA/COV/HLD/STRT

Slope: LANG/HANG/VER

Wave Exposure: High/Med/Low

Sediment: B 30 / C 20 / P 5 / G 5 / S — / M — / R 40

Drift Debris on Beach: Yes/No Supra/Upper/Mid/Lower Type Dr. Wood
or. + focus

OIL

Degree of Oiling: Heavy/Moderate/Localized very Light/No Oil/Unobserved

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

Continuous: Y/N % of Segment — Width of Band: — m

Sporadic: Y/N % of Segment 1

Est. Oil Thickness where > 1cm: — cm Est. Oil Penetration: — cm

Pooled Oil: — % "Free" Oil: — % Coated: H — % / M — % / L — %

Fresh — % Mousse — % Tar Formation: 100 %

Drift Debris Oiled? Yes/No Supra/Upper/Mid/Lower Amount: H/M/L/

Comments:

The segment consists mostly of rocky headlands with some pocket Boulder/cobble beaches. No oil was observed through most of the segment. There were some tar splotches observed throughout the segment in High ITZ. Beaches 1-4 (see map) all had only several tar splotches on them. Therefore no cleanup activities are recommended.

ECOLOGICAL EVALUATION

LOCATION: East side Bainbridge Island SITE: _____ OBSERVER: Crank

LOCATION PREFIX: BA SEG. NO.: 8 LENGTH: 6700 (M)

DATE: 07 127 189 TIME (HHMM): 1420-1450 TIDE HT.: + 4' - 5 1/2' (M)

OILED ZONE: Splash High Medium Low *Sporadic drops on cobble and tar ca 5*

SUBSTRATUM: Rocks Boulder Cobble Gravel Sand Mud

LIVE BIOTA

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

Dense and continuous throughout most of the segment. Influenced area of patchy, moderate distribution

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

Interspersed intergravel/cobble mussel beds on beaches. Patchy, moderate to sparse on rocky headlands at this tide level.

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

Continuous population throughout segment with moderate to dense concentrations

Littorina

Patchy Y/N Contin. Y/N Dense Y/N Sparse Y/N None Y/N

Associated with Fucus Moderate to sparse concentrations

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

Found mainly on or under Fucus. Moderate to sparse concentration

OTHER OBSERVATIONS: _____

CLEANUP PRECAUTIONS: Clean-up not recommended at this time. Foot traffic

and machinery used in clean-up efforts pose greater danger to the biota living in this segment than the present minute oil.

MAMMALS: Otters 13 Harbor Seals 1 1 pup Sea Lions _____ Whales _____

Other _____

BIRDS: Marbled Murrelets Pigeon Guillemots Black foot Kittiwake, Common Murre Gull

GENERAL OBSERVATIONS: Oystercatchers Kingfisher Biota in this segment appears healthy.

(version of 4/29/89)

CULTURAL RESOURCE EVALUATION

Date 7/27/89 Location Bimble Island Site _____

Location Prefix BA Segment # BA-08 Length _____

Survey Method:

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

Ground ✓ (G - indicate on map)

Known cultural resources (AHRS #) None Data Source None

Oil conditions/beach visibility light to none

Width of beach zone surveyed 7-15 m Tree fringe surveyed 10m

Cultural resources observed in beach zone (AHRS code) None

Cultural resources observed in tree fringe (AHRS code) None

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

Shore Profile beaches are either boulder or cobble-covered and steep or moderately sloped.

Fresh Water Sources Areas 2 & 3 have streams.

Sea Exposure protected to the west

Access/Safety good to fair

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

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

Photos: Color Roll # _____ Frames _____

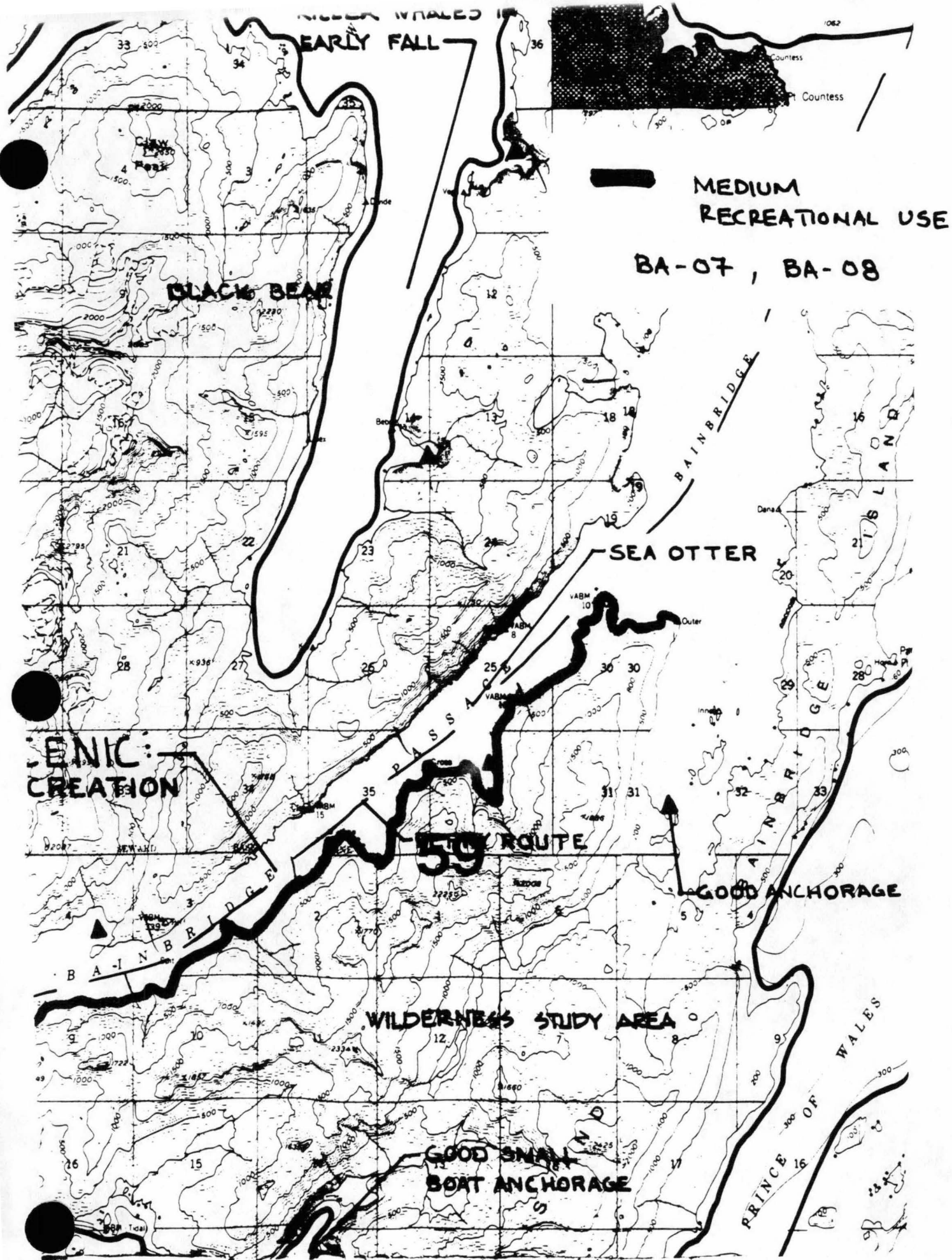
B/W Roll # _____ Frames _____

Observer(s) Chubon

Time survey started 1430 Time survey ended 1700

Cultural resource considerations/restraints:

Standard





BA-07

BA-07

Shoreline Treatment & Records are Completed for this Segment

- ☐ Cold water wash
☐ Warm water wash
☐ Water deluge

- ☐ Mechanical
☐ Non-mechanical
☐ Other

Exxon

Treatment as indicated above has been completed. Request demobilization

from this segment.

Comments

Signature *RC Harrison*

Date: 9/5/89 Time: 13:10

Printed Name RC HARRISON

Existing Shoreline Condition As Visually Determined by USCG

Surface Oil Percent	Degree of Oiling
<u>> 1</u>	Heavy
<u>5</u>	Medium
<u>2</u>	Light
<u>10</u>	Very Light
<u>82</u>	None
100 %	

Existing Shoreline Condition As Visually Determined by ADEC

Surface Oil Percent	Degree of Oiling
<u>> 3</u>	Heavy
<u>10</u>	Medium
<u>20</u>	Light
<u>0</u>	Very Light
<u>67</u>	None
100 %	

- ☒ Subsurface Oil Yes ☐ No

COMMENT BELOW

Reassessment

- ☒ Yes - necessary
☐ No - not necessary unless re-oiled

- ☒ Subsurface Oil Yes ☐ No

COMMENT BELOW

Reassessment

- ☒ Yes - necessary
☐ No - not necessary unless re-oiled

ADEC rep

Comments A few pockets of medium oiling, ~~not~~ with oil impacting some of the grassy areas.

Signature Dale Gardner

Date: 9/5/89 Time: 16:25

Printed Name DALE GARDNER ADEC Inspector

FOSC rep

Demobilization approved/disapproved

Comments NO CROSS CONTAMINATION

Signature *Paul Perdue*

Date: 9/15/89 Time: 14:20

Printed Name Paul Perdue

COPY: EXXON ADEC /FOSC ISCC

(version 5/04/89)

SHORELINE PRE-CLEANUP ASSESSMENT BLOCK REPORT

Location (see enclosed map): BAINBRIDGE PASSAGE SOUTH BLOCK

Includes Shoreline Segments: BA-09

Submitted :

Wm. Stirling
(for Exxon)

Date: 7/2/89

ISCC Approval:

^{RECOMMENDATION}
Joseph M. Muhl

Date: 7/21/89

FOSC Approval:

Debbie

Date: 7/31/89

The cleanup procedures identified in the Shoreline Cleanup Program are recommended. Modifications to these systems can be made in the field. Exxon and other field personnel are encouraged to suggest innovations and productivity enhancements to the OSC's on-scene representative. The OSC's representative has the authority to approve on-site modifications. The Field Resource Team should be consulted if these actions do not fit within the Ecological Constraints of the Shoreline Cleanup Program. Requirements for safety and the protection of cultural material must be observed.

Distribution:

Exxon Shoreline Coordinator
Exxon Shoreline Supervisor
Exxon SCAT file

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USFW
A.DEC
A.FG
A.DNR
CAC
PWSCA
USFS
SHPO

114

BAINBRIDGE PASSAGE
SOUTH BLOCK

BA-9

8/1/8
USFWS

B
A
I
N
B
R
I
D
G
E

Pt Waters

BA-9

B A I N B R I D G E

ACTIVE
BALD EAGLE
NEST

Hogg Pt

BM 11
(Tidal)

(version 5/02/89)

SHORELINE CLEANUP PROGRAM

DATE 7/26/89

SHORELINE SEGMENT BA-09

LOCATION: (see enclosed map) BAINBRIDGE ISLAND-Northwest end

ADEC NO. _____ SHORELINE ASSESSMENT DATE: 7/24/89

Recommended Cleanup Activity(ies):

No cleanup recommended at this time (subject to FOSC reassessment at a later date), due to very light oil and high wave exposure.

Priorities Considerations:

Class 4: Light oil

Class B: Resources absent

Ecological Constraints (from site survey):

No cleanup recommended.

Archeological Constraints (from site survey):

If cleanup is conducted and heretofore undiscovered cultural materials are uncovered, contact Exxon's Archeological Field Director and take actions prescribed in the Operational Guidelines for Shoreline Cleanup dated 4/21/89 as amended.

IF CLEANUP DOES OCCUR, CREWS SHOULD ~~NOT~~ BE PROHIBITED ACCESS TO UPLANDS ON THE WESTERN MOST 1/2 MILE OF THE SEGMENT.

608907.31

JEM
7/11/89

Douglas Keger
State Historic Preservation Officer *

Date: 7/28/89

ISCC: Josephine Muehle

Date: 7/31/89

EXXON: Wm. Stephen L. Miller

Date: 7/28/89 8907.31

FOSC: C. E. Robbin

Date: 7/31/89

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

SHORELINE OIL EVALUATION

Date: 7/24 / Time: 10:30

Observer: Mike Foget

Surveyed From: Foot/Boat/Helio/Plane

Weather: Sun/Cloud/Rain/Snow/Fog

LOCATION

LOCATION Gainbridge Is. SEGMENT NUMBER BA-09

LENGTH OF SHORELINE SEGMENT: 6900 m

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

SHORELINE:

Shoreline Type: SPI/BEA/COV/HLD/STRT

Slope: LANG/HANG/VER

Wave Exposure: High/Med/Low

Sediment: B20 % / C40 % / P10 % / G5 % / S- % / M- % / R25 %

Drift Debris on Beach: Yes/No

Supra/Upper/Mid/Lower Type Drift wood focus

OIL

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

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

Continuous: Y/N % of Segment - Width of Band: - m

Sporadic: Y/N % of Segment >>1

Est. Oil Thickness where > 1cm: - cm Est. Oil Penetration: - cm

Pooled Oil: - % "Free" Oil: - % Coated: H - % / M - % / L - %

Fresh - % Mousse 100 % Tar Formation: - %

Drift Debris Oiled? Yes/No Supra/Upper/Mid/Lower Amount: H/M/L/

Comments:

The shore zone consists mostly of high angle cobble beaches with some rocky headlands. Several moussé bills were observed at the southern end of the segment (the mouth of the Gainbridge passage). This is a very high energy beach as indicated by lack of flora and fauna in the intertidal zone. Due to the nature of this area, no clean up activities are recommended, the high energy of the beach should remediate what little oil is present.

ECOLOGICAL EVALUATION

LOCATION: Bainbridge Island SITE: West Shore, PuS OBSERVER: MONARCH

LOCATION PREFIX: BA SEG. NO.: 29 ^{juv} LENGTH: _____ (M)

DATE: 7/24/88 TIME (HHMM): 1030 hrs ^{1400 hrs} TIDE HT.: +0.5' (M)

OILED ZONE: Splash High Medium Low

SUBSTRATUM: Rocks Boulder cobble Gravel Sand Mud

LIVE BIOTA

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

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

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

Littorina

Patchy Q/N Contin. Y/N Dense Q/N Sparse Q/N None Q/N

Limpets: Patchy Q/N Contin. Y/N Dense Y/N Sparse Q/N None Q/N

OTHER OBSERVATIONS: Density and diversity of biota was a function of the ENERGY INPUT OF THE BEACH. At those beaches near the gulf that showed intense wave action were nearly void of biota in the middle and upper tidal zones. This was not low enough to evaluate the lower portions of the tidal zones
CLEANUP PRECAUTIONS: ADRIE REQUIRED

MAMMALS: Otters 24pm Harbor Seals 3 Sea Lions — Whales 1?
Other _____

BIRDS: Glaucous winged gulls - common; black-legged kittiwake - common; Mew Gull - common
Murrelets; black-oystercatchers; semi-palmated plovers unidentified

GENERAL OBSERVATIONS: LESS OTTERS & SEALS OBSERVED IN THIS SECTION - STRONG

CURRENT AND ABSENCE OF SUITABLE HUNTING SITES WERE PROBABLY THE PRIMARY
Contributing factors

(version of 4/29/89)

CULTURAL RESOURCE EVALUATION

Date 7/24/89 Location Bainbridge Island Site

Location Prefix BA Segment # BA- 9^{CTUS} Length 7Km

Survey Method:

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

Ground (G - indicate on map)

Known cultural resources (AHRS #) None Data Source None

Oil conditions/beach visibility a few tracks on one beach - the rest is clean

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

Cultural resources observed in beach zone (AHRS code) None

Cultural resources observed in tree fringe (AHRS code) None

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

Shore Profile beaches are generally broad and flat, upland

Fresh Water Sources are steep and mountainous

Sea Exposure beach / open - no reef protected to west

Access/Safety beaches - good

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

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

Photos: Color Roll # Frames

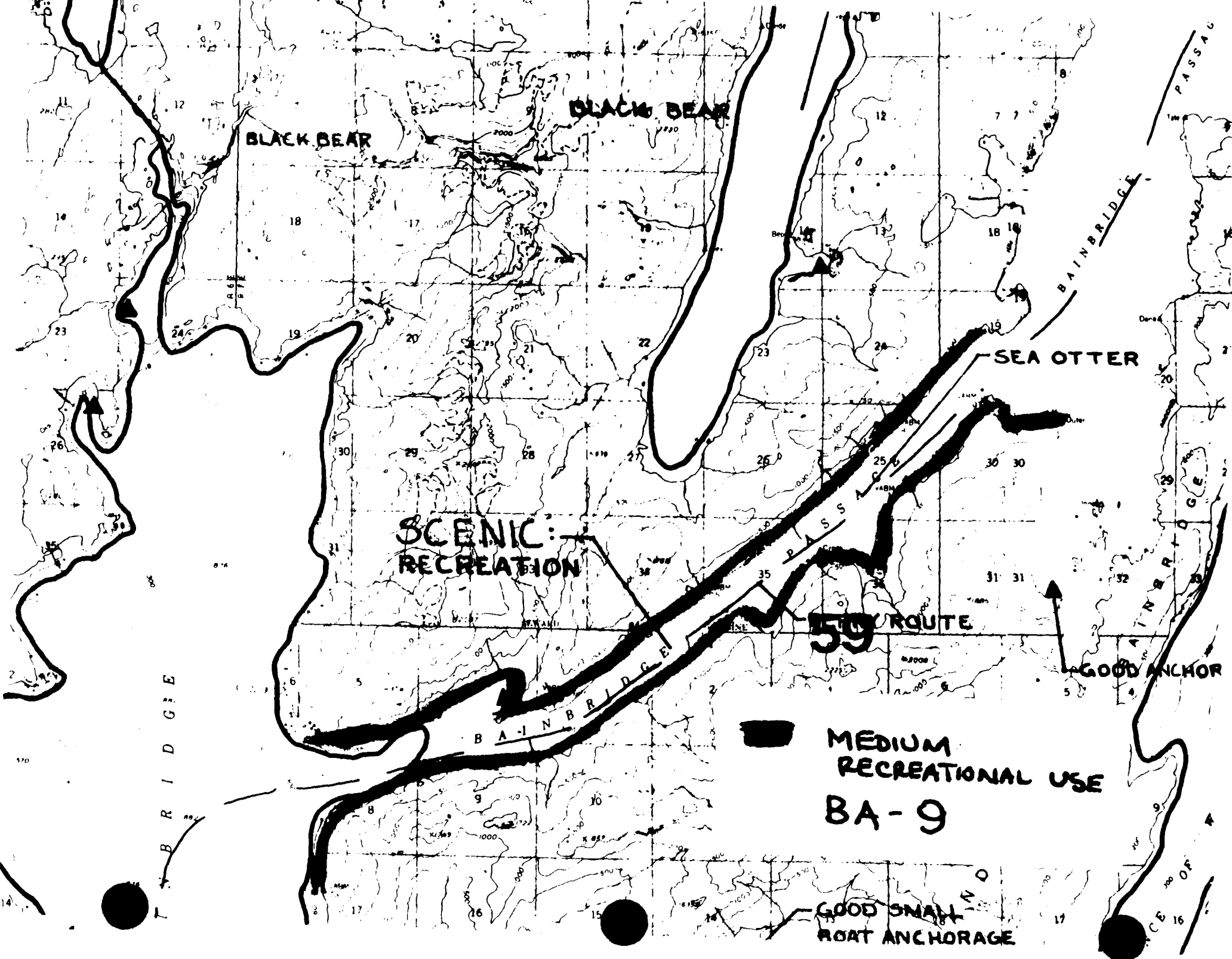
B/W Roll # Frames

Observer(s) C. Wilson

Time survey started 10:30 Time survey ended 1330

Cultural resource considerations/restraints:

Standard



BLACK BEAR

BLACK BEAR

SCENIC
RECREATION

SEA OTTER

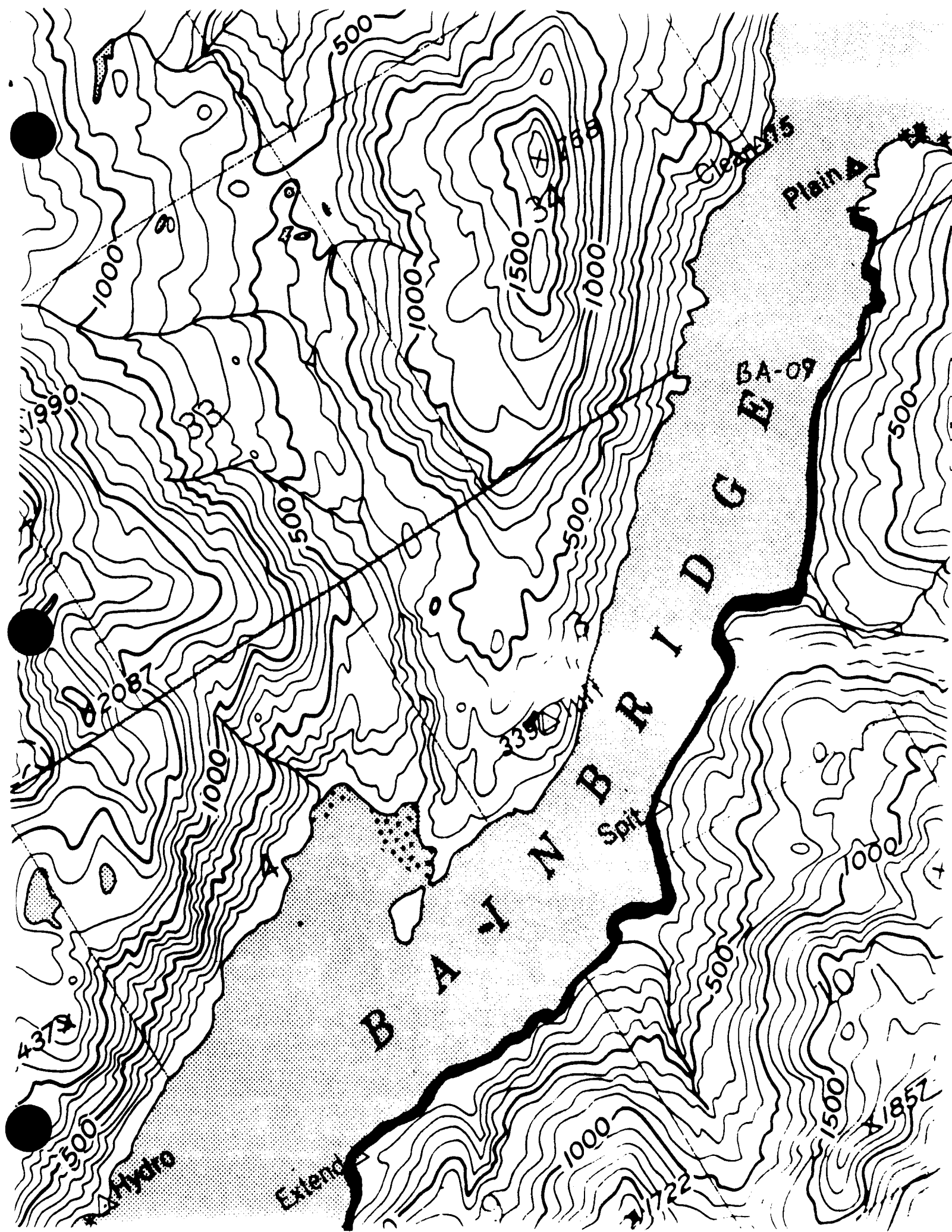
59
ROUTE

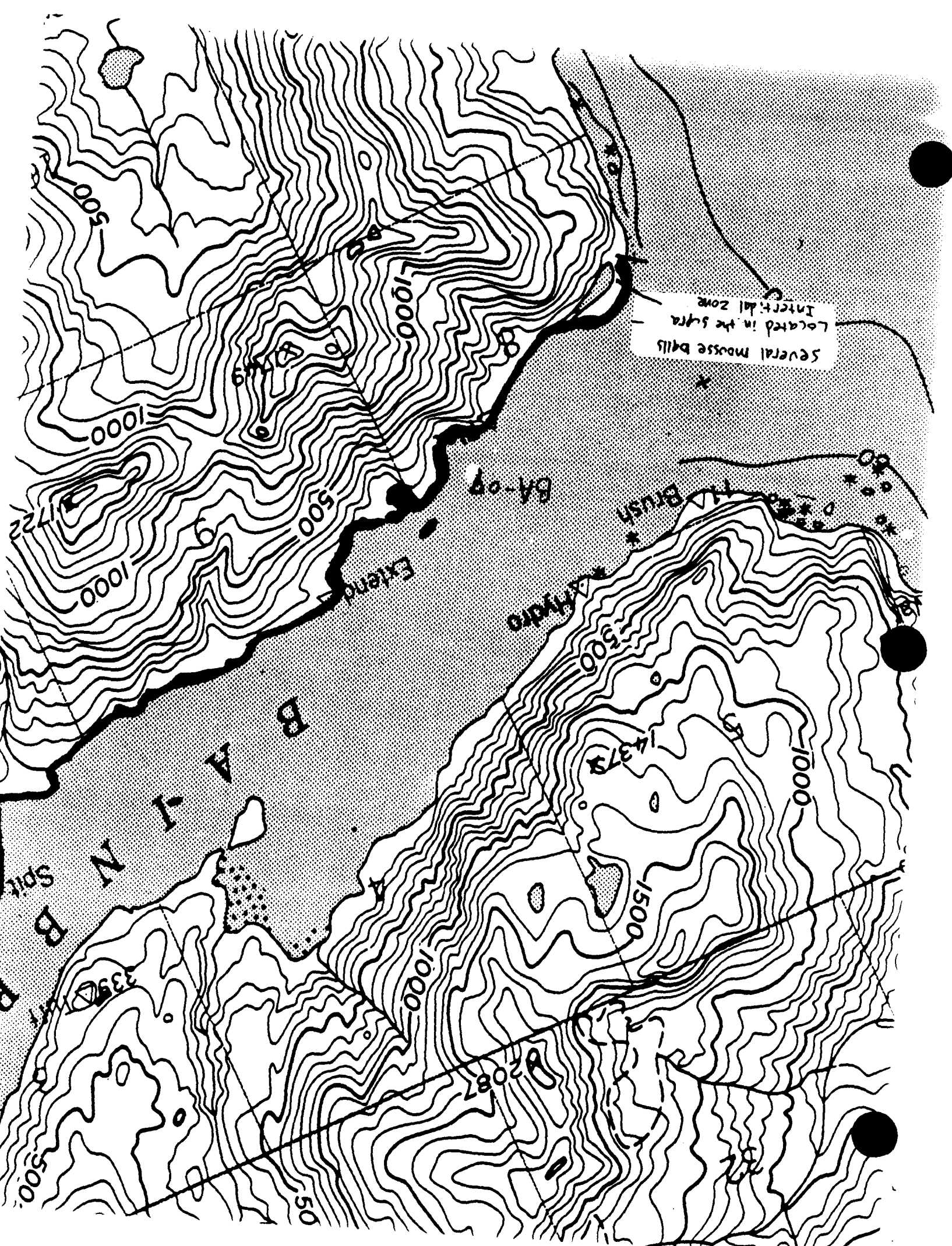
GOOD ANCHOR

MEDIUM
RECREATIONAL USE

BA-9

GOOD SMALL
BOAT ANCHORAGE





SEG PA-9 INSPECTION # 1
DATE 8/10/89

SEGMENT INSPECTION RECORD

TREATMENT MARCHEL, 07/10/89

Shoreline Treatment Process(es) Completed for this Segment

☐
☐
☐

Hot water wash
Warm water wash
Water deluge

☐
☐
☒

Mechanical
Non-mechanical
Other Removal of Oil & Debris

Exxon

Treatment as indicated above has been completed. Request demobilization from this segment.

Comments

Signature C. F. Duggin

Date: 8/10/89 Time:

Printed Name C. F. Duggin

Existing Shoreline Condition As Visually Determined by USCG

Surface Oil

Percent Degree of Oiling

Subsurface Oil

☐ Yes ☒ No

 Heavy
 Medium
 Light
 Very Light
100% None

100 %

Comments

Reassessment

☒

Yes - necessary

☐

No - not necessary unless re-oiled

ADEC rep Comments REQUESTED FOR BUT NOT AVAILABLE

Signature

Date: / / Time:

Printed Name

FOSC rep

Demobilization approved / disapproved

Comments NO OIL OBSERVED DURING INSPECTION

Signature Thomas D. [unclear] Date: 8/10/89 Time: 1945

(version 8/04/89)

SHORELINE PRE-CLEANUP ASSESSMENT BLOCK REPORT

Location (see enclosed map): SWANSON BAY BLOCK

8/29/89

Includes Shoreline Segments: BA-100

Submitted : W. E. Viskamp Date: 8-29-89
(for Exxon)

ISCC Recommendation: Sharon K. Christopher Date: 9-1-89

FOSC Approval: C. Z. Noll Date: 9-1-89

The cleanup procedures identified in the Shoreline Cleanup Program are recommended. Modifications to these systems can be made in the field. Exxon and other field personnel are encouraged to suggest innovations and productivity enhancements to the OSC's on-scene representative. The OSC's representative has the authority to approve on-site modifications. The Field Resource Team should be consulted if these actions do not fit within the Ecological Constraints of the Shoreline Cleanup Program. Requirements for safety and the protection of cultural material must be observed.

Distribution:

Exxon Shoreline Coordinator
Exxon Shoreline Supervisor
Exxon SCAT file

SHPO
FOSC
CDFU
NOAA
EPA
USDA (FS)
USFW
A. DEC
A. FG
A. DNR
CAC
PWSCA
USFS

(version 5/02/89)

SHORELINE CLEANUP PROGRAM

DATE 8/29/89

SHORELINE SEGMENT BA-100

LOCATION: (see enclosed map) SWANSON BAY-SW Bainbridge Island

ADEC NO. _____ SHORELINE ASSESSMENT DATE: 8/16/89

Recommended Cleanup Activity(ies):

No cleanup recommended (subject to FOSC reassessment at a later date) due to no oil.

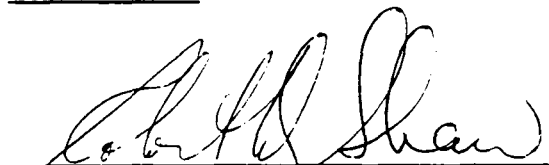
Priorities Considerations: - Medium recreational use.
No oil.

Ecological Constraints (from site survey):

If cleanup is planned, a detailed ecological survey must be conducted.

Archeological Constraints (from site survey):

If cleanup is planned, a full archaeological assessment must be conducted.



State Historic Preservation Officer *

Date: Aug 29, 89

ISCC: Sharon K. Christopher

Date: 9-1-89

EXXON: Daniel S. Taft

Date: 9-1-89

FOSC: C. G. Nelson

Date: 9-1-89

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

SHORELINE OIL EVALUATIONDate: 8/16 / Time: 19:00Observer: Mike FogelSurveyed From: Foot/Boat/Helio/PlaneWeather: Sun/Cloud/Rain/Snow/FogLOCATIONLOCATION Swanson Bay - SW Bainbridge Is. SEGMENT NUMBER BA-100LENGTH OF SHORELINE SEGMENT: 1800 mACCESS: Foot/Vehicle/Boat/Barge/Helio/Float PlaneSHORELINE:Shoreline Type: SPI/BEA/COV/HLD/STRTSlope: LANG/HANG/VERWave Exposure: High/Med/LowSediment: B 15 % / C 35 % / P 5 % / G 10 % / S 5 % / M - % / R 30 %Drift Debris on Beach: Yes/No Supra/Upper/Mid/Lower Type Driftwood
Drift FucusOILDegree of Oiling: Heavy/Moderate/Light/No Oil/Unobserved

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

Continuous: Y/N % of Segment - Width of Band: - mSporadic: Y/N % of Segment -Est. Oil Thickness where > 1cm: - cm Est. Oil Penetration: - cmPooled Oil: - % "Free" Oil: - % Coated: H - % / M - % / L - %Fresh - % Mousse - % Tar Formation: - %Drift Debris Oiled ? Yes/No Supra/Upper/Mid/Lower Amount: H/M/L/

Comments:

The south shore consists mostly of cobble/gravel beaches with approx. 35% rocky headlands. The North shore is composed mostly of rocky headlands with pocket cobble beaches. The segment was surveyed by helicopter, although the long stretch of cobble beach on the south shore was surveyed by foot. Through out the segment the fucus and barnicals appeared to be very healthy and showed no signs of oiling this also goes for the drift logs on the beaches. There is a continuous Lichen band through the segment in the HITZ. No oil was observed during this survey.

Surveyed by foot Mike Royer

000
..... very light oil
- - - light oil
- - - med oil

lots of
barnacles
Boulder beach

maybe
light oil but
white barnacles
looks like dark lichen

healthy
fucus
appears to
be lichen
the THZT2
no beach
to land on

healthy fucus

Procession Rocks

Low tide

1) cobble and beach no oil

20' (BLYING SOUND D-4)

INTERIOR-GEOLOGICAL SURVEY, RESTON, VIRGINIA 1988

SCALE 1:63360

1 2 3 4 MILES
12000 15000 18000 21000 FEET

PRINCE OF WALES
Squirr
Turn

RU

No 1

8/16

time 19:00 hrs

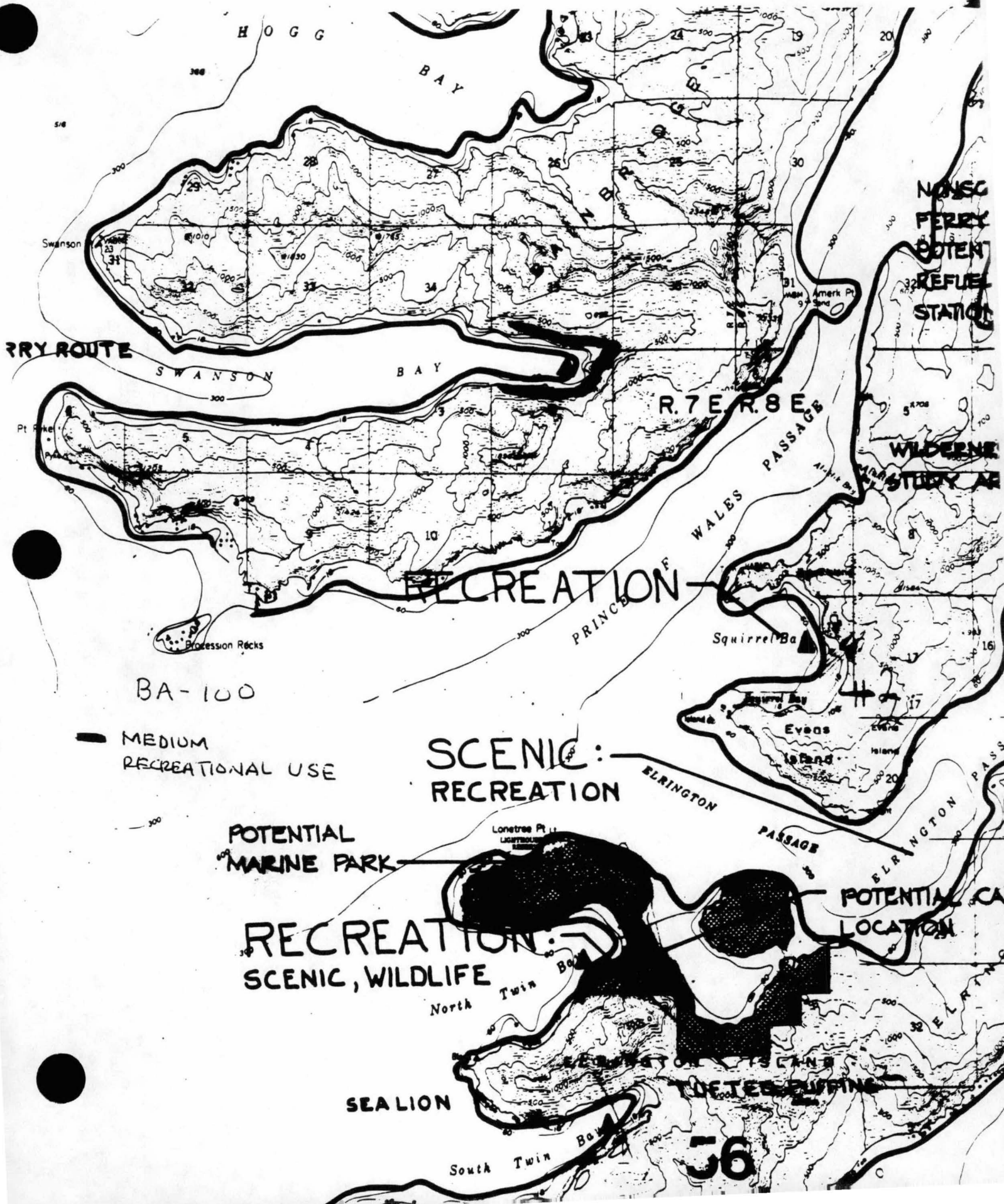
weather - overcast rain/fog

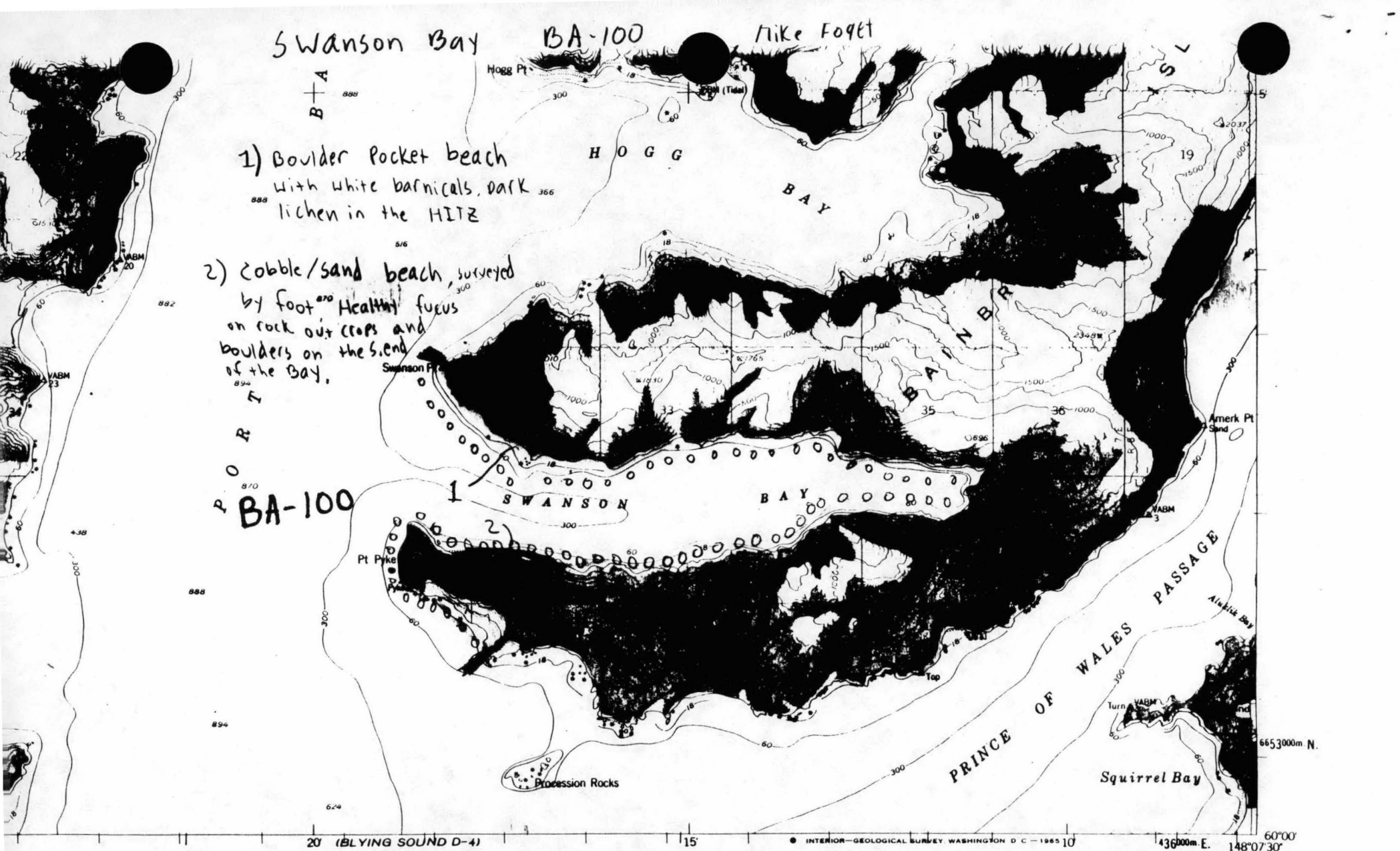
comments

unable to land on west end of Swanson bay due to high winds, weather was rain/fog

Shoreline in beach was rich with fucus and barinicals which both appeared to be very healthy

East shore is mostly cobble/gravel beaches with approx 30%-40% rocky headlands. West shore is composed mostly of rocky headlands with intermittent Pocket^{cobble} Beaches. There is a continuous lichen band in the HITZ through ~~the~~ Swanson bay. There appears to be no oiling in Swanson bay





******* SCOT NOTE *******

**THERE ARE ITEMS OF GREAT CONCERN IN THIS APPROVAL BLOCK
THAT AFFECT THE DEPLOYMENT OF CREWS AND EQUIPMENT.**

READ THIS FIRST

**NOTE THAT THE UPLANDS IN SHORELINE SEGMENTS CONTAINED IN
THE BAINBRIDGE ISLAND EAST BLOCK HAVE BEEN SELECTED FOR
TRANSFER TO THE CHENEGA VILLAGE CORPORATION. PERMIT NO
ACCESS TO UPLANDS AT ANY TIME.**

(version 5/04/89)

SHORELINE PRE-CLEANUP ASSESSMENT BLOCK REPORT

Location (see enclosed map): BAINBRIDGE PASSAGE NORTHWEST BLOCK

Includes Shoreline Segments: BP-01, BP-02, BP-03, BP-04

Submitted :

(for Exxon)

Date:

8/5/89

ISCC Recommendation:

Sharon K. Christopher

Date:

8-9-89

FOSC Approval:

[Signature]

Date:

8-12-89

The cleanup procedures identified in the Shoreline Cleanup Program are recommended. Modifications to these systems can be made in the field. Exxon and other field personnel are encouraged to suggest innovations and productivity enhancements to the OSC's on-scene representative. The OSC's representative has the authority to approve on-site modifications. The Field Resource Team should be consulted if these actions do not fit within the Ecological Constraints of the Shoreline Cleanup Program. Requirements for safety and the protection of cultural material must be observed.

Distribution:

Exxon Shoreline Coordinator
Exxon Shoreline Supervisor
Exxon SCAT file

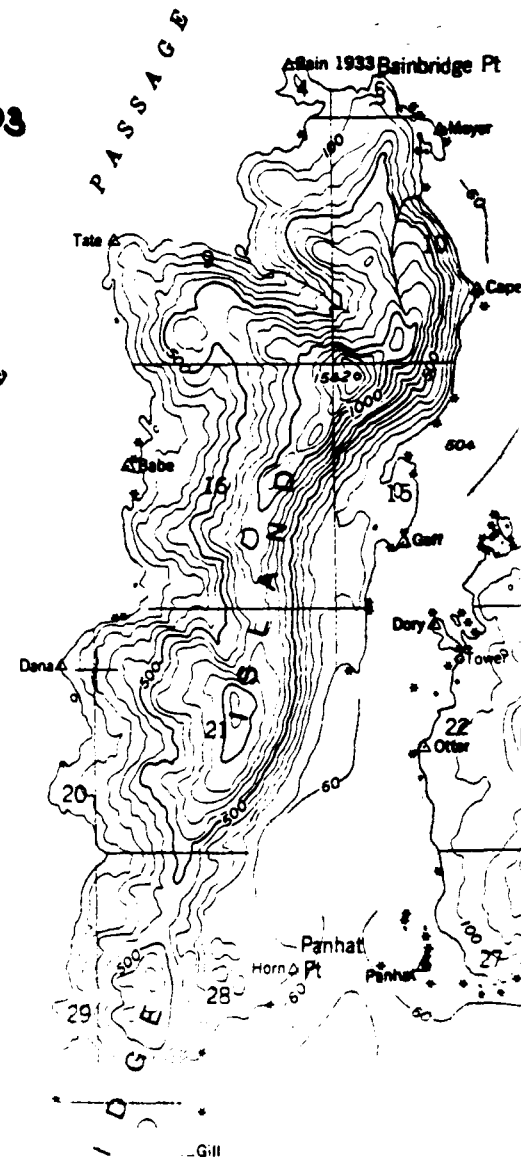
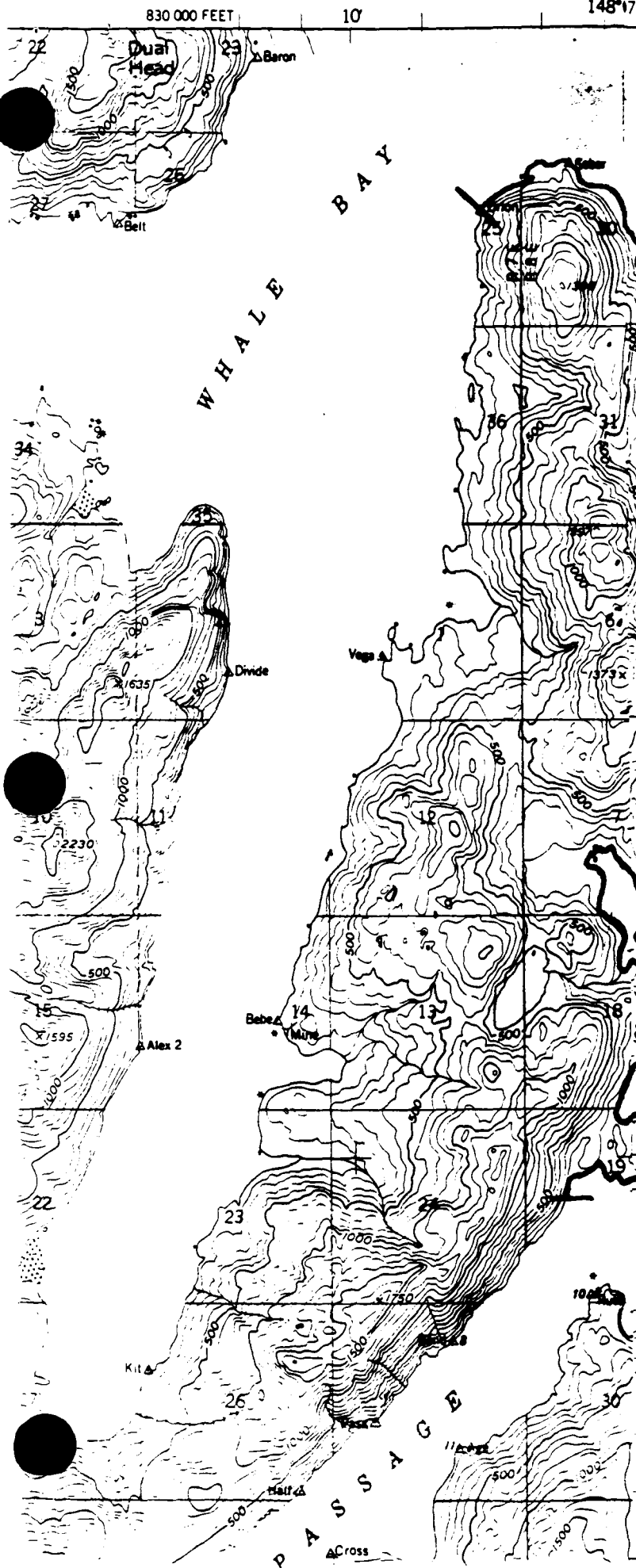
SHPO
FOSC
CDFU
NOAA
EPA
USDA (FS)
USFW
A.DEC
A.FG
A.DNR
CAC
PWSCA
USFS

BP-01, BP-02,
BP-03, BP-04

USFWS

8/7/89

No active
band edge nests
at this time



(version 5/02/89)

SHORELINE CLEANUP PROGRAM

DATE 8/03/89 SHORELINE SEGMENT BP-01
LOCATION: (see enclosed map) BAINBRIDGE PASSAGE-Mainland side
(Bainbridge Passage Northwest Block)
ADEC NO. _____ SHORELINE ASSESSMENT DATE: 7/28/89

Recommended Cleanup Activity(ies):

No cleanup recommended at this time (subject to FOSC reassessment at a later date), due to light oil, high wave exposure and ecological constraints.

Priorities Considerations: Medium recreational use.

Class 4: Light oil

Class A: Resources present

Ecological Constraints (from site survey):

Rich intertidal life may be adversely effected by cleanup activities, therefore, no cleanup is recommended.

Archeological Constraints (from site survey):

If cleanup is conducted and heretofore undiscovered cultural materials are uncovered, contact Exxon's Archeological Field Director and take actions prescribed in the Operational Guidelines for Shoreline Cleanup dated 4/21/89 as amended.

Charles E. Holmes
State Historic Preservation Officer *

Date: August 4, 1989

ISCC: Sharon K Christopher

Date: 8-9-89

EXXON: Daniel L. Tapp

Date: 8-9-89

FOSC: D.E. Cavanaugh

Date: 8-12-89

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

SHORELINE OIL EVALUATION

Date: 7/28 / Time: 15:00

Observer: Mike Fogel

Surveyed From: Foot/Boat/Helio/Plane

Weather: Sun/Cloud/Rain/Snow/Fog

LOCATION

LOCATION Mainland in Bainbridge Passage SEGMENT NUMBER BP-01

LENGTH OF SHORELINE SEGMENT: 3700 m

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

SHORELINE:

Shoreline Type: SPI/BEA/COV/HLD/STRT

Slope: LANG/HANG/VER

Wave Exposure: High/Med/Low

Sediment: B30% / C10% / P5% / G5% / S—% / M—% / R50%

Drift Debris on Beach: Yes/No Supra/Upper/Mid/Lower Type Driftwood
drift focus

OIL

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

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

Continuous: Y/N % of Segment _____ Width of Band: 0.5 m

Sporadic: Y/N % of Segment 50

Est. Oil Thickness where > 1cm: — cm Est. Oil Penetration: — cm

Pooled Oil: —% "Free" Oil: —% Coated: H—% / M—% / L—%

Fresh —% Mousse —% Tar Formation: 100%

Drift Debris Oiled? Yes/No Supra/Upper/Mid/Lower Amount: H/M/L/

Comments:

rocky headlands

BP-01

7/28

Mike Foget

Bainbridge Passage (mainland)

1) Beach 1 is a high angle Cobble/Gravel Pocket beach with a small stream at the north end. Only a few tar splotches were observed in the HITZ

2) Beach 2 is a high angle Gravel pocket beach with some protruding bedrock. Only a few tar splotches in the HITZ were observed

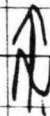
3) Beach 3 is a high angle gravel pocket beach. There is a small localized patch of light tar on the North end of the beach on a rock face. Also several tar splotches observed in the HITZ.

4) The south end of Beach 4 is a sand/Gravel beach. A few tar balls were observed in the HITZ. On the western end of the beach the shore zone changes to a Boulder Cobble beach. There is a light discontinuous tar band located in the HITZ, that runs the length of the western end of the beach from the south to the north.

discontinuous light tar band in the HITZ ave. 5cm wide

discontinuous light tar band in the HITZ

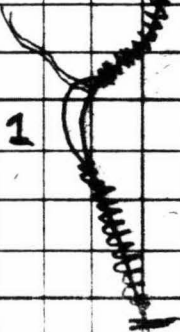
very light discontinuous tar band ave. 2cm wide



1

2

3



ECOLOGICAL EVALUATION

LOCATION: Bainbridge Passage Mainland SITE: _____ OBSERVER: Crank
 LOCATION PREFIX: BP SEG. NO.: 1 LENGTH: 3700 (M)
 DATE: 27/28/89 TIME (HHMM): 1500 TIDE HT.: +5' ~~(+6)~~

OILED ZONE: Splash High Medium Low *Few splashes at southern end of beach increasing to 10m band about 10cm wide at the northern end.*
 SUBSTRATUM: Rocks Boulder Cobble Gravel Sand Mud *Rocky headlands with pebbles boulder/cobble/gravel beach*

LIVE BIOTA

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

Vertical rock faces: continuous and dense. Beach 1: continuous and moderate. Beach 2: patchy - sparse on beach down to beach 3: patchy - moderate. small patch approx 4m x 1m of dying Fucus with light oil. Beach 4: patchy - sparse

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

Vertical rock faces: patchy with dense to sparse concentrations. Beach 1, 2: dense intertidal bed. Beach 3, 4: have sparse concentrations of mussels at this tide level.

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

Continuous population throughout segment with dense to moderate concentrations

Littorina

Patchy Y/N Contin. Y/N Dense Y/N Sparse Y/N None Y/N *Moderate*

Beach 1: patchy with moderate concentration. Beach 2: sparse on beach, dense on rock terrace. Beach 3: patchy with moderate to sparse concentrations. Beach 4: sparse

Limpets: Patchy Y/N Contin. Y/N Dense Y/N Sparse Y/N None Y/N *Moderate*

Beach 1: patchy - moderate. Beach 2: dense: cont on rock terrace. Beach 3: patchy with moderate to sparse concentrations. Beach 4: sparse

OTHER OBSERVATIONS: There is a small stream on beach 1 with potential salmon habitat not listed by AEC as a macroinvertebrate stream. Small Creek on beach 4.

CLEANUP PRECAUTIONS: Suggest clean-up not be conducted at this time as operation may cause a greater negative impact than present oil

MAMMALS: Otters _____ Harbor Seals _____ Sea Lions _____ Whales _____
 Other _____

BIRDS: Kittiwakes and Gulls

GENERAL OBSERVATIONS: _____

(version of 4/29/89)

CULTURAL RESOURCE EVALUATION

Date 7/28/89 Location Bainbridge Parkway Site

Location Prefix BP Segment # BP-1 Length 3.7 Km

Survey Method:

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

Ground (G - indicate on map)

Known cultural resources (AHRS #) None Data Source None

Oil conditions/beach visibility light to none

Width of beach zone surveyed 5-15 m Tree fringe surveyed 10m

Cultural resources observed in beach zone (AHRS code) None

Cultural resources observed in tree fringe (AHRS code) None

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

Shore Profile Four beaches are moderately steep to steep

Fresh Water Sources Beaches 2 and 4 have streams

Sea Exposure protected to east or north

Access/Safety good on beaches

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

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

Photos: Color Roll # Frames

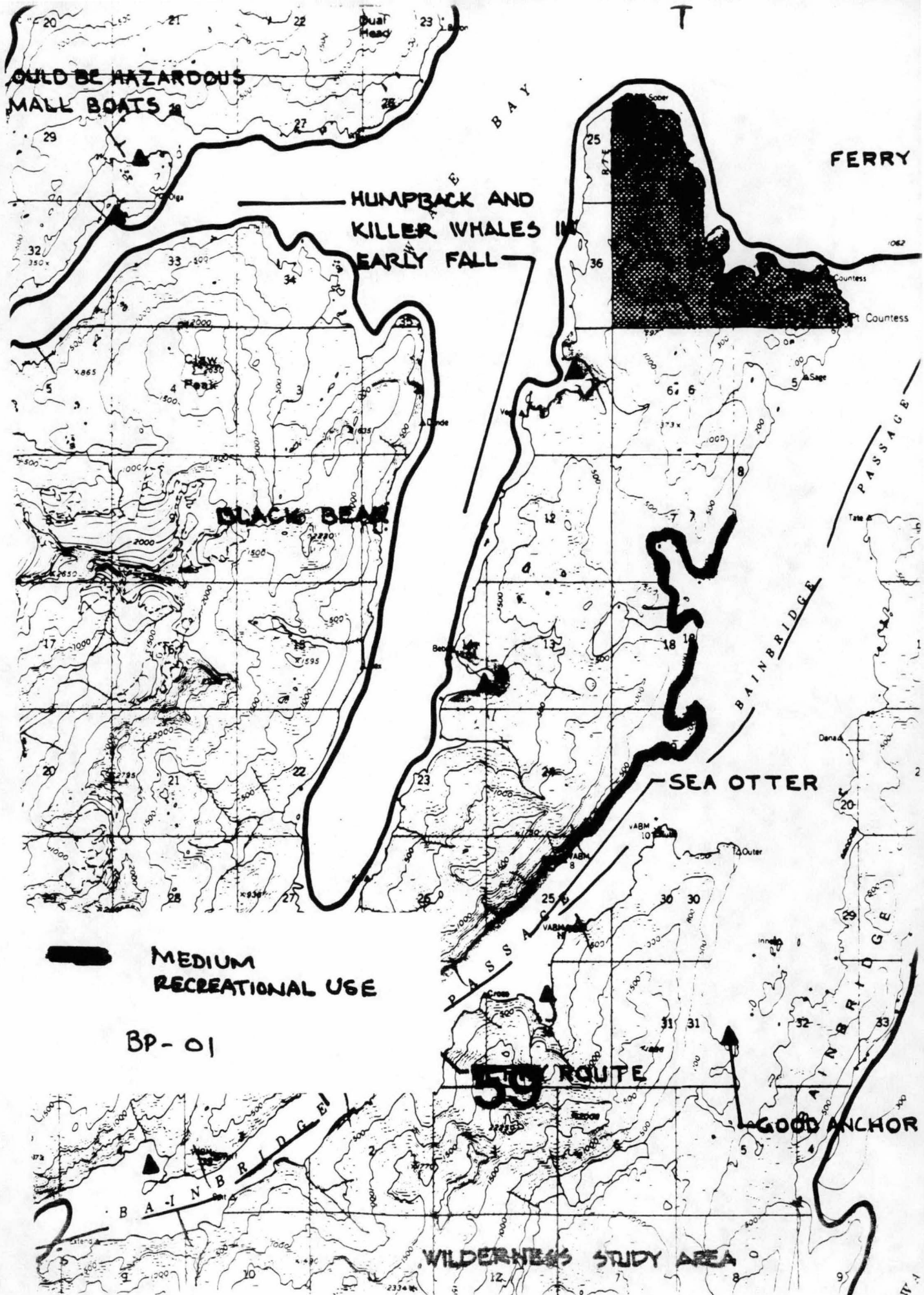
B/W Roll # Frames

Observer(s) C. Gibson

Time survey started 1500 Time survey ended 1700

Cultural resource considerations/restraints:

Standard





BAINBRIDGE

BP-01

14 Mine

104

(version 5/02/89)

SHORELINE CLEANUP PROGRAM

DATE 8/03/89

SHORELINE SEGMENT BP-02

LOCATION: (see enclosed map) BAINBRIDGE PASSAGE-Mainland side
(Bainbridge Passage Northwest Block)

ADEC NO. _____ SHORELINE ASSESSMENT DATE: 7/29/89

Recommended Cleanup Activity(ies):

No cleanup recommended at this time (subject to FOSC
reassessment at a later date), due to no oil.

Priorities Considerations: Medium recreational use.
No oil.

Ecological Constraints (from site survey):

Rich intertidal life may be adversely effected by cleanup
activities. Anadromous fish stream in this segment, notify
ADF&G and RAT 48 hours prior to beginning cleanup
activities. sc 8/9/
DOT 89

Archeological Constraints (from site survey):

If cleanup is conducted and heretofore undiscovered cultural
materials are uncovered, contact Exxon's Archeological Field
Director and take actions prescribed in the Operational
Guidelines for Shoreline Cleanup dated 4/21/89 as amended.

Charles E. H. Jones
State Historic Preservation Officer *

Date: August 5, 1989

ISCC: Sharon K. Christopher

Date: 8-9-89

EXXON: Daniel D. Tipton

Date: 8-9-89

FOSC: D. E. Crenshaw

Date: 8-12-89

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

SHORELINE OIL EVALUATION

Date: 7/29/89 Time: 07:00

Observer: Mike Foget

Surveyed From: Foot/Boat/Helio/Plane

Weather: Sun/Cloud/Rain/Snow/Fog

LOCATION

LOCATION Bainbridge Passage Mainland

SEGMENT NUMBER BP-02

LENGTH OF SHORELINE SEGMENT: 2600 m

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

SHORELINE:

Shoreline Type: SPI/BEA/COV/HLD/STRT

Slope: LANG/HANG/VER

Wave Exposure: High/Med/Low

Sediment: B30% / C15% / P10% / G10% / S___% / M___% / R35%

Drift Debris on Beach: Yes/No

Supra/Upper/Mid/Lower Type driftwood
drift fucus
orbent pads

OIL

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

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

Continuous: Y/N % of Segment ___ Width of Band: ___ m

Sporadic: Y/N % of Segment ___

Est. Oil Thickness where > 1cm: ___ cm Est. Oil Penetration: ___ cm

Pooled Oil: ___% "Free" Oil: ___% Coated: H___% / M___% / L___%

Fresh ___% Mousse ___% Tar Formation: ___%

Drift Debris Oiled? Yes/No Supra/Upper/Mid/Lower Amount: H/M/L/

Comments:

Segment is located in a bay which is mostly rocky headlands
with several pocket cobbles/gravel beaches. A Boom is located at
the head of the bay (see map). A few tar spots were
present on beaches one and two. With the exception of the
few tar balls observed on beaches one and two, no oiling appears
to be present therefore cleanup activities are not recommended.

ECOLOGICAL EVALUATION

LOCATION: Mainland off Bainbridge Pass SITE: _____ OBSERVER: Crank
 LOCATION PREFIX: BP SEG. NO.: 2 LENGTH: 2600 (M)
 DATE: 129 189 TIME (HHMM): 0700-0930 TIDE HT.: +2 - +5 feet Infrequent
 OILED ZONE: Splash High Medium Low
 SUBSTRATUM: Rocks Boulder Cobble Gravel Sand Mud

LIVE BIOTA

Fucus (algae): Patchy Y/N Contin. Y/N Dense Y/N Sparse Y/N None Y/N
 Small Island: dense and sparse. Beach 1: patchy and dense Beach 2: patchy, sparse on beach, dense on boulders
 Beach 3: dense near stream sparse on rest of beach Beach 4+5: dense patches esp abundant near stream

Mytilus (Mussels): Patchy Y/N Contin. Y/N Dense Y/N Sparse Y/N None Y/N
 Small Island: sparse Beach 1: patchy and moderate Beach 2: patchy, moderate to sparse concentrations
 Beach 3: extensive intercobble bed dense near stream, moderate away from stream sparse on boulders
 Beach 4+5: extensive intercobble beds adjacent stream. Small dense patches on boulders.

Balanus (Barnacles): Patchy Y/N Contin. Y/N Dense Y/N Sparse Y/N None Y/N
 Continuous population with a dense to moderate concentration

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

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

OTHER OBSERVATIONS: ADFG Jan 1988

25% of mussels on east headland of beach 3 are small (= 1-1.5 cm long)

CLEANUP PRECAUTIONS: Cleanup not recommended at this time as beaches appear to be healthy and cleanup operations may cause a greater impact on the biota than the minute amount of present oil.

MAMMALS: Otters _____ Harbor Seals _____ Sea Lions _____ Whales 3 Humpback
 Other _____

BIRDS: _____

GENERAL OBSERVATIONS: _____

(version of 4/29/89)

CULTURAL RESOURCE EVALUATION

Date 7/29/89 Location Banhudge Passage Site _____

Location Prefix BP Segment # BP-02 Length 2.6 Km

Survey Method:

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

Ground ✓ (G - indicate on map)

Known cultural resources (AHRS #) None Data Source None

Oil conditions/beach visibility little to none

Width of beach zone surveyed 7-15 m Tree fringe surveyed On

Cultural resources observed in beach zone (AHRS code) None

Cultural resources observed in tree fringe (AHRS code) None CMT*

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

Shore Profile Fine beaches washed more flat to moderately steep in slope. Most of slope was water face.

Fresh Water Sources Small stream.

Sea Exposure protected to north and east

Access/Safety good on beaches

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

Monitoring during cleanup needed yes no Collection yes no

Photos: Color Roll # _____ Frames _____

B/W Roll # _____ Frames _____

Observer(s) C. Johnson

Time survey started 0805 Time survey ended 1800

Cultural resource considerations/restraints:

Standard.

* SEE CULTURAL RESOURCE EVALUATION SUPPORTING DOCUMENT COVER SHEET FOR A DESCRIPTION.



(version 5/02/89)

SHORELINE CLEANUP PROGRAM

DATE 8/03/89

SHORELINE SEGMENT BP-03

LOCATION: (see enclosed map) BAINBRIDGE PASSAGE-Mainland side
(Bainbridge Passage Northwest Block)

ADEC NO. _____ SHORELINE ASSESSMENT DATE: 7/30/89

Recommended Cleanup Activity(ies):

No cleanup recommended at this time (subject to FOSC reassessment at a later date), due to no oil.

Priorities Considerations:

No oil.

Ecological Constraints (from site survey):

Rich intertidal life may be adversely effected by cleanup activities.

Archeological Constraints (from site survey):

If cleanup is conducted and heretofore undiscovered cultural materials are uncovered, contact Exxon's Archeological Field Director and take actions prescribed in the Operational Guidelines for Shoreline Cleanup dated 4/21/89 as amended.

Charles E. Holmes
State Historic Preservation Officer *

Date: August 4, 1989

ISCC: Sharon K. Christopher

Date: 8-9-89

EXXON: James R. Tapp

Date: 8-9-89

FOSC: D. E. Conway

Date: 8-12-89

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

SHORELINE OIL EVALUATION

Date: 7/30 / Time: 06:50

Observer: Mike Foget

Surveyed From: Foot/Boat/Helio/Plane

Weather: Sun/Cloud/Rain/Snow/Fog

LOCATION

LOCATION Bainbridge Passage (mainland) SEGMENT NUMBER BP-03

LENGTH OF SHORELINE SEGMENT: 5600 m

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

SHORELINE:

Shoreline Type: SPI/BEA/COV/HLD/STRT

Slope: LANG/HANG/VER

Wave Exposure: High/Med/Low

Sediment: B30% / C15% / P5% / G10% / S—% / M—% / R40%

Drift Debris on Beach: Yes/No Supra/Upper/Mid/Lower Type Driftwood
drift fucus

OIL

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

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

Continuous: Y/N % of Segment — Width of Band: — m

Sporadic: Y/N % of Segment —

Est. Oil Thickness where > 1cm: — cm Est. Oil Penetration: — cm

Pooled Oil: —% "Free" Oil: —% Coated: H—% / M—% / L—%

Fresh —% Mousse —% Tar Formation: —%

Drift Debris Oiled? Yes/No Supra/Upper/Mid/Lower Amount: H/M/L/

Comments:

Segment consists mostly of rocky headlands with two
bays and several pocket cobble/gravel beaches. A few tar balls
were observed on beaches one and four (see map). With the
exception of a few tar balls, no apparent oil was
observed therefore no cleanup activities are recommended.

ECOLOGICAL EVALUATION

LOCATION: Mainland-Bainbridge Passage SITE: Between Point Countess ^{#Bench Mark Low and} OBSERVER: Frank
 LOCATION PREFIX: BP SEG. NO.: 3 LENGTH: 4100 (M)

DATE: 07/30/89 TIME (HHMM): 0650-0900 TIDE HT.: -1 to +1 ft (M)

OILED ZONE: Splash High Medium Low ^{a few small tar marks}

SUBSTRATUM: Rocks Boulder Cobble Gravel Sand Mud ^{Rocky ridges, wet pocket beaches}

LIVE BIOTA

Fucus (algae): Patchy Y/N Contin. Y/N Dense Y/N Sparse Y/N None Y/N ^{Moderate}
 Headlands: continuous and dense; Beach 1, 2 + 4: patchy with dense to moderate concentrations
 Beach 3: patchy, sparse on cobble + moderate on boulders Beach 5: continuous and dense

Mytilus (Mussels): Patchy Y/N Contin. Y/N Dense Y/N Sparse Y/N None Y/N ^{Moderate}
 Patchy distribution with moderate to sparse concentrations

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

Littorina

Patchy Y/N Contin. Y/N Dense Y/N Sparse Y/N None Y/N

Nucella present in moderate patches

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

OTHER OBSERVATIONS: Abundant fresh water in area - all beaches run
freshwater runoff, beaches 2+3 have small waterfalls, small patches of eelgrass
Beach 4 had a large amount of clam and mussel shell debris.

CLEANUP PRECAUTIONS: Beach appears healthy at this time. Cleanup not
recommended. Bald Eagle site if cleanup occurs contact ADFG 48 hrs prior.
Cleanup operations may cause greater impact on biota than present oil

MAMMALS: Otters Harbor Seals Sea Lions Whales
 Other

BIRDS: Bald Eagle, Dippers, Murrelets, Arctic Terns, Gulls

GENERAL OBSERVATIONS: One reported Bald Eagle nest at Pt. Countess
did not see nest from beach - not known to USFWS

(version of 4/29/89)

CULTURAL RESOURCE EVALUATION

Date 7/31/89 Location Bainbridge Passage Site

Location Prefix BP Segment # BP-3 Length 4.6 Km

Survey Method:

Air (A - indicate on map) Boat ✓ (A - indicate on map)

Ground ✓ (G - indicate on map)

Known cultural resources (AHRS #) None Data Source None

Oil conditions/beach visibility light to none

Width of beach zone surveyed 10-30 m Tree fringe surveyed 10m

Cultural resources observed in beach zone (AHRS code) None

Cultural resources observed in tree fringe (AHRS code) None

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

Shore Profile The beaches are mostly steep and access to the beach is generally difficult because of steep vertical wash behind the

Fresh Water Sources There is a stream and there is one near area 4.

Sea Exposure open to the east

Access/Safety good on beaches

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

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

Photos: Color Roll # Frames

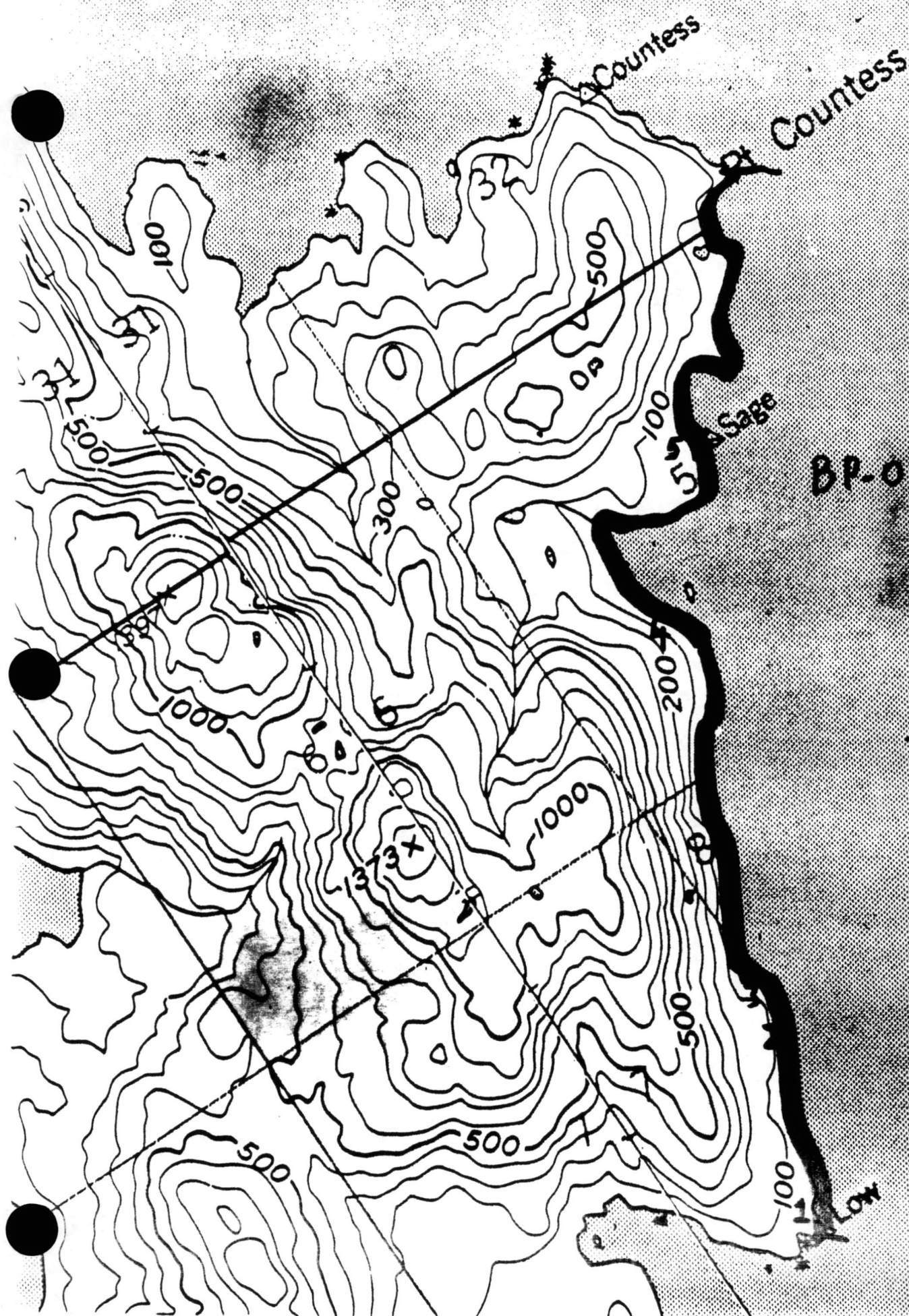
B/W Roll # Frames

Observer(s) C. Gibson

Time survey started 0650 Time survey ended 0915

Cultural resource considerations/restraints:

Standard



BP-03

(version 6/14/89)

SHORELINE CLEANUP PROGRAM

DATE 8/03/89

SHORELINE SEGMENT BP-04

LOCATION: (see enclosed map) BAINBRIDGE PASSAGE-Mainland side
(Bainbridge Passage Northwest Block)

ADEC NO. _____ SHORELINE ASSESSMENT DATE: 7/30/89

Recommended Cleanup Activity(ies):

- Manually remove contaminated drift material (fucus and driftwood).
- Flood/flush with warm to hot water (up to 140° F) on low angle beaches. MINIMIZE EROSION AND INSTITUTE SEDIMENTATION CONTROLS, ESPECIALLY ON BEACHES 3, 6, 7+10.
- Use moderate to high pressure washing on rock.
- Use other approved methods as appropriate.

Priorities Considerations:

Class 3-4: Moderate to light oil
Class A: Resources present

Ecological Constraints (from site survey): Work at mid tide + or take appropriate measures to protect lower intertidal zone. A possible anadromous stream is located in this segment. Notify ADF&G and RAT 48 hours prior to beginning cleanup activities. ~~A bald eagle's nest is located in this segment (see advisory).~~ NOT ACTIVE.

Archeological Constraints (from site survey):

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

Charles E. Holmes
State Historic Preservation Officer *

Date: August 4, 1989

ISCC: Sharon K. Christopher

Date: 8-9-89

EXXON: Daniel S. Tipton

Date: 8-9-89

FOSC: D.E. Conway

Date: 8-12-89

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

SHORELINE OIL EVALUATION

Date: 7/30 / Time: 09:00

Observer: Mike Foget

Surveyed From: Foot/Boat/Helio/Plane

Weather: Sun/Cloud/Rain/Snow/Fog

LOCATION

LOCATION Mainland between Bainbridge Passage
and Whale Bay

SEGMENT NUMBER BP-04

LENGTH OF SHORELINE SEGMENT: 7400 m

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

SHORELINE:

Shoreline Type: SPI/SEA/COV/HLD/STRT

Slope: LANG/HANG/VER

Wave Exposure: High/Med/Low

Sediment: B25 / C20 / P10 / G10 / S / M / R35

Drift Debris on Beach: Yes/No

Supra/Upper/Mid/Lower Type Driftwood
Drift Fucus

OIL

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

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

Continuous: Y/N % of Segment 5 Width of Band: 5 m

Sporadic: Y/N % of Segment 15

Est. Oil Thickness where > 1cm: — cm Est. Oil Penetration: 20 ^{max} cm

Pooled Oil: — % "Free" Oil: — % Coated: H — % / M — % / L 10 %

Fresh — % Mousse — % Tar Formation: 90 %

Drift Debris Oiled? Yes/No Supra/Upper/Mid/Lower Amount: H/M/L

Comments:

Segment consists of rocky headlands with 3 bays and several
Pocket Beaches. The segment has a high wave exposure. No oil was observe
on the rocky headlands. oil was only observed in the protected bays and
some of the pocket gravel beaches. No oil was observed after beach 10.
Beaches lightly oiled were 1, 2, 4, 5 and 9 those beaches with moderate tar/oil
are 3, 6, 7 and 10. See attached maps

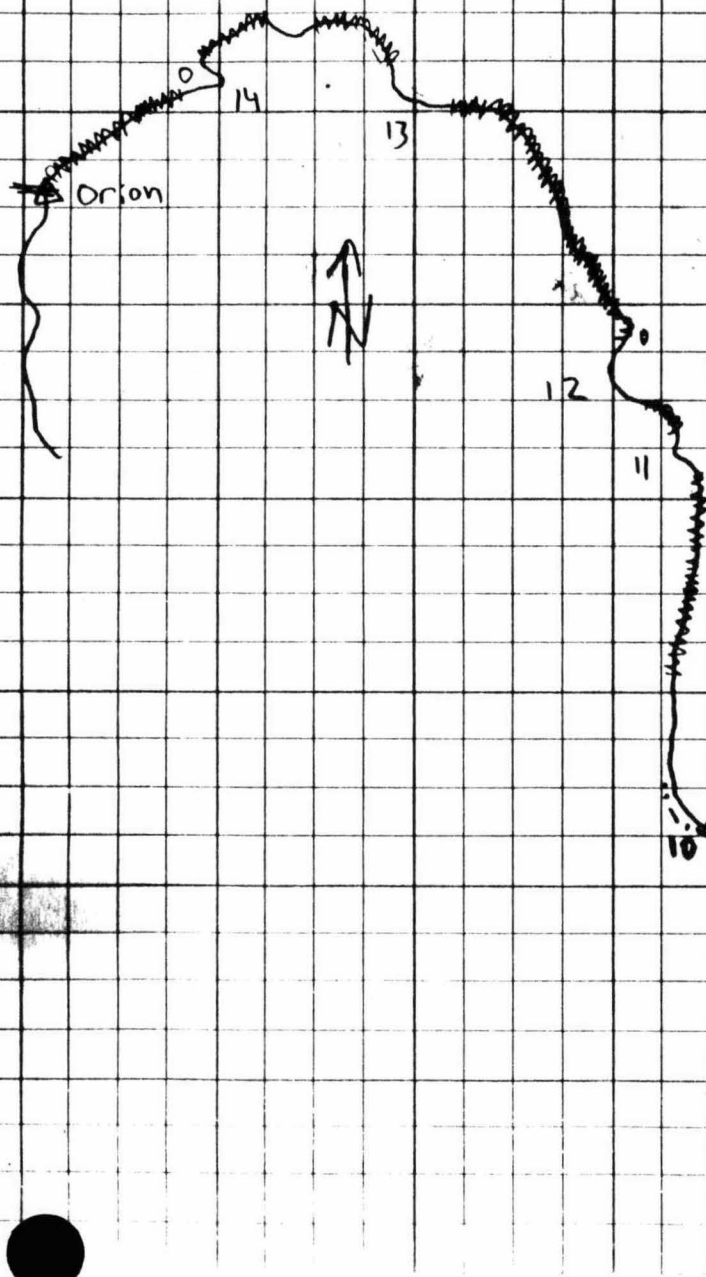
4. 1, 2, 4, 5, 9

3, 6, 7, 10

mainland - rocky headlands

Mainland headland between Bainbridge Passage and Whale bay
Mike Fogel Team 4 7/30

BP-04 map 1



1) Gravel pocket beach, 1m light oil band in the gravel storm berm in the +HITZ, 5m very light oil band located in the HITZ, Oiled drift material in the +HITZ, Also a 3m x 10m moderate tar patch is located on the west end of the beach in the HITZ

2) Gravel pocket beach, 2m moderate tar band located in the gravel storm berm, maximum penetration is 10cm. There is a 10m wide strip of light tar located in the High to medium ITZ. This beach has a high wave exposure and appears to have washed soil off of the large rocks and boulders.

3) Located in a bay, gravel beach (see attached map 2)

4) Gravel beach with a light 3m tar band in the HITZ, Maximum penetration 5cm, No sign of oil on rock out crops, High wave exposure.

Pt. Count

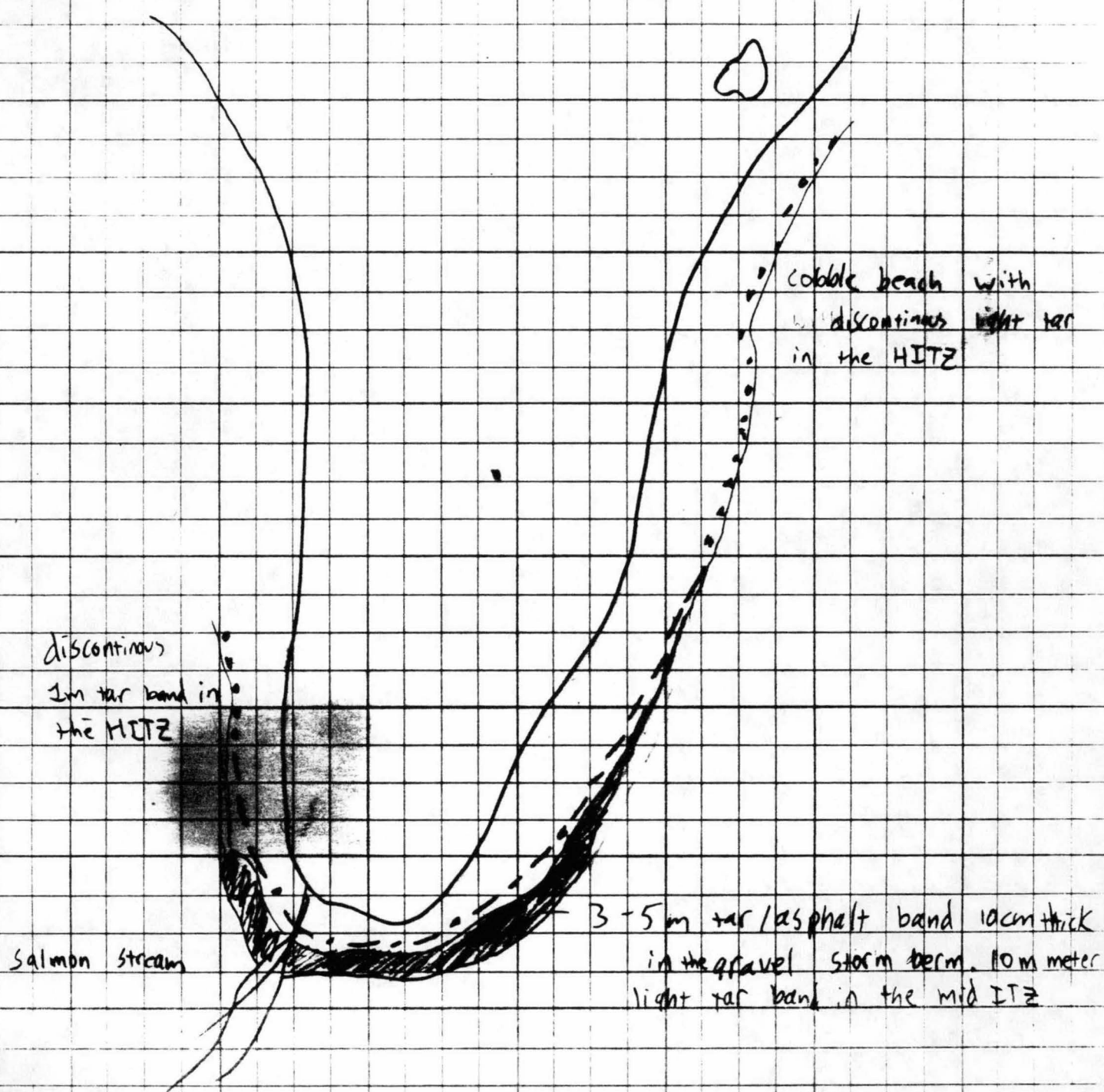
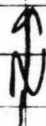
- 5) Gravel cobble beach with light discontinuous tar splotching in the HITZ
- 6) Gravel beach with moderate tar which ranges from the low to high ITZ. Maximum penetration 10 cm. The tar (asphalt) band is 20 m wide. Also there are large tar patches on the beach.
- 7) Small pocket gravel beach with a 20m wide moderate tar (asphalt) band. The tar ranges through the whole tidal zone, from the Low ITZ to the High ITZ.
- 8) Beach 8 is a gravel beach with a Salmon stream. This beach has two booms to protect it and no oil was observed.
- 9) A small pocket gravel beach with a light 3m tar band located in the MITZ. High wave exposure.
- 10) see attached map 3
- 11) Cobble / gravel / Boulder beach with no apparent oil
- 12) Cobble / gravel beach with no apparent oil
- 13) gravel beach with no apparent oil
- 14) gravel beach with no apparent oil

BP-04

Beach 3

map 2

 - moderate tar



BP-04

Map 4

Beach 10

gravel beach in the
low ITZ throughout
the bay

Large
Boulders
and no
apparent oil

Large cobble / boulders
with a discontinuous
1 meter tar band in the
+ HITZ

In the HITZ is a 5m
5m moderate tar (asphalt)
band in the gravel storm
berm w/ 10 cm maximum
penetration. Light tar
in the MITZ.

stream —

ECOLOGICAL EVALUATION

LOCATION: Mainland on Bainbridge Passage SITE: _____ OBSERVER: Crank
 LOCATION PREFIX: BP SEG. NO.: 4 LENGTH: 7400 (M)
 DATE: 27/30/89 TIME (HHMM): 0900 - 1200 TIDE HT.: +1 - +9 ft
0730 - 0945 -1 - +3 ft
 OILED ZONE: Splash High Medium Low asphalting - see map
 SUBSTRATUM: Rocks Boulder Cobble Gravel Sand Mud

LIVE BIOTA

Fucus (algae): Patchy Y/N Contin. Y/N Dense Y/N Sparse Y/N None Y/N
Moderate
 Patchy distribution with dense to sparse concentrations on beaches 1-9 and 13.
 Continuous and dense to med on headlands and beaches 10-12 and 14.
 Small areas of contaminated Fucus and beaches 3 & 4.
Mytilus (Mussels): Patchy Y/N Contin. Y/N Dense Y/N Sparse Y/N None Y/N
Moderate
 Patchy distribution with moderate to sparse concentrations on headlands and beaches 1, 2, 4-9, & 13.
 Extensive intergravel/cobble mussel beds on beaches 3, 10, 11, 12 & 14.
Balanus (Barnacles): Patchy Y/N Contin. Y/N Dense Y/N Sparse Y/N None Y/N
Moderate
 Continuous population with dense to moderate concentration.

Littorina

Patchy Y/N Contin. Y/N Dense Y/N Sparse Y/N None Y/N

Limpets: Patchy Y/N Contin. Y/N Dense Y/N Sparse Y/N None Y/N
Moderate

OTHER OBSERVATIONS: Salmon Stream # 637 at beach 7, possible salmon
streams on beaches 3, 5, 10. Clams shells on the beaches
Stream gravel on beach 3 is oil coated.

CLEANUP PRECAUTIONS: Salmon Stream and Bald Eagle nesting area. Contact
ADEG 48 hrs prior to cleanup. Use appropriate precautions to avoid contaminating
the lower intertidal zone. Beach 14 has other dug holes in gravel.

MAMMALS: Otters 1 scatter Harbor Seals 2 Sea Lions _____ Whales 4 Humpback
 Other Fresh Bear scat

BIRDS: Bald Eagle, Gulls, Kittiwakes, Murre, Murrelets, Guillemots

GENERAL OBSERVATIONS: There are 5 reported Bald Eagles nest in this segment,

all empty
beaches 1, 2 & 4 - low biota on beach, biota found on the boulder and mudflats

(version of 4/29/89)

CULTURAL RESOURCE EVALUATION

Date 7/31/89 Location Bainbridge Passage Site

Location Prefix BP Segment # BP-04 Length 7.4 Km

Survey Method:

Air (A - indicate on map) Boat ✓ (A - indicate on map)

Ground ✓ (G - indicate on map)

Known cultural resources (AHRS #) None Data Source None

Oil conditions/beach visibility moderate ~~None to very little to none~~

Width of beach zone surveyed 5-15 m Tree fringe surveyed None

Cultural resources observed in beach zone (AHRS code) None

Cultural resources observed in tree fringe (AHRS code) None

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

Shore Profile beaches are moderately to steeply sloped; trees occur

have streams. Pocket beaches have inaccessible uplands; others have some

Fresh Water Sources several streams

Sea Exposure usually open to north

Access/Safety good on beaches

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

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

Photos: Color Roll # Frames

B/W Roll # Frames

Observer(s) C. Nelson

Time survey started 0915 7/30/89 Time survey ended 1000 7/31/89

Cultural resource considerations/restraints:

Standard.

BP-04

9/6/89

INSPECTION REPORT

Shoreline Treatment Process(es) Completed for this Segment



Hot water wash



Mechanical



Warm water wash



Non-mechanical



Water deluge

Other Hand work

Exxon

Treatment as indicated above has been completed. Request demobilization from this segment.

Comments

Signature

R C Harrelson

Date: 9/6/89 Time: 1852

Printed Name

R C HARRELSON

Existing Shoreline Condition As Visually Determined by USCG

Surface Oil
Percent Degree of Oiling

<u>21</u>	Heavy
<u>3</u>	Medium
<u>0</u>	Light
<u>0</u>	Very Light
<u>96</u>	None
100 %	

Subsurface Oil



Yes



No

COMMENT BELOW

Reassessment



Yes - necessary



No - not necessary unless re-oiled

Existing Shoreline Condition As Visually Determined by ADEC

Surface Oil
Percent Degree of Oiling

<u>1</u>	Heavy
<u>5</u>	Medium
<u>90</u>	Light
<u>5</u>	Very Light
<u>80</u>	None
100 %	

Subsurface Oil



Yes



No

COMMENT BELOW

Reassessment



Yes - necessary



No - not necessary unless re-oiled

ADEC rep

Comments

Signature

Dale Gardner

Date: 9/6/89 Time: 2020

Printed Name

DALE GARDNER

FOSC rep

Comments

Demobilization approved/disapproved

Signature

Paul Roney

Date: 9/6/89 Time: 2015

Printed Name

PAUL RONEY

COPY:

EXXON

ADEC

FOSC

ISCC

4.75

(version 5/04/89)

SHORELINE PRE-CLEANUP ASSESSMENT BLOCK REPORT

Location (see enclosed map): GAGE ISLAND BLOCK

Includes Shoreline Segments: GA-01

Submitted : WFW/abamp Date: 8-4-89
(for Exxon)

ISCC Recommendation: Sharon K Christophers Date: 8-9-89

08 FOSC Approval: D E. Conway Date: 8-12-89

The cleanup procedures identified in the Shoreline Cleanup Program are recommended. Modifications to these systems can be made in the field. Exxon and other field personnel are encouraged to suggest innovations and productivity enhancements to the OSC's on-scene representative. The OSC's representative has the authority to approve on-site modifications. The Field Resource Team should be consulted if these actions do not fit within the Ecological Constraints of the Shoreline Cleanup Program. Requirements for safety and the protection of cultural material must be observed.

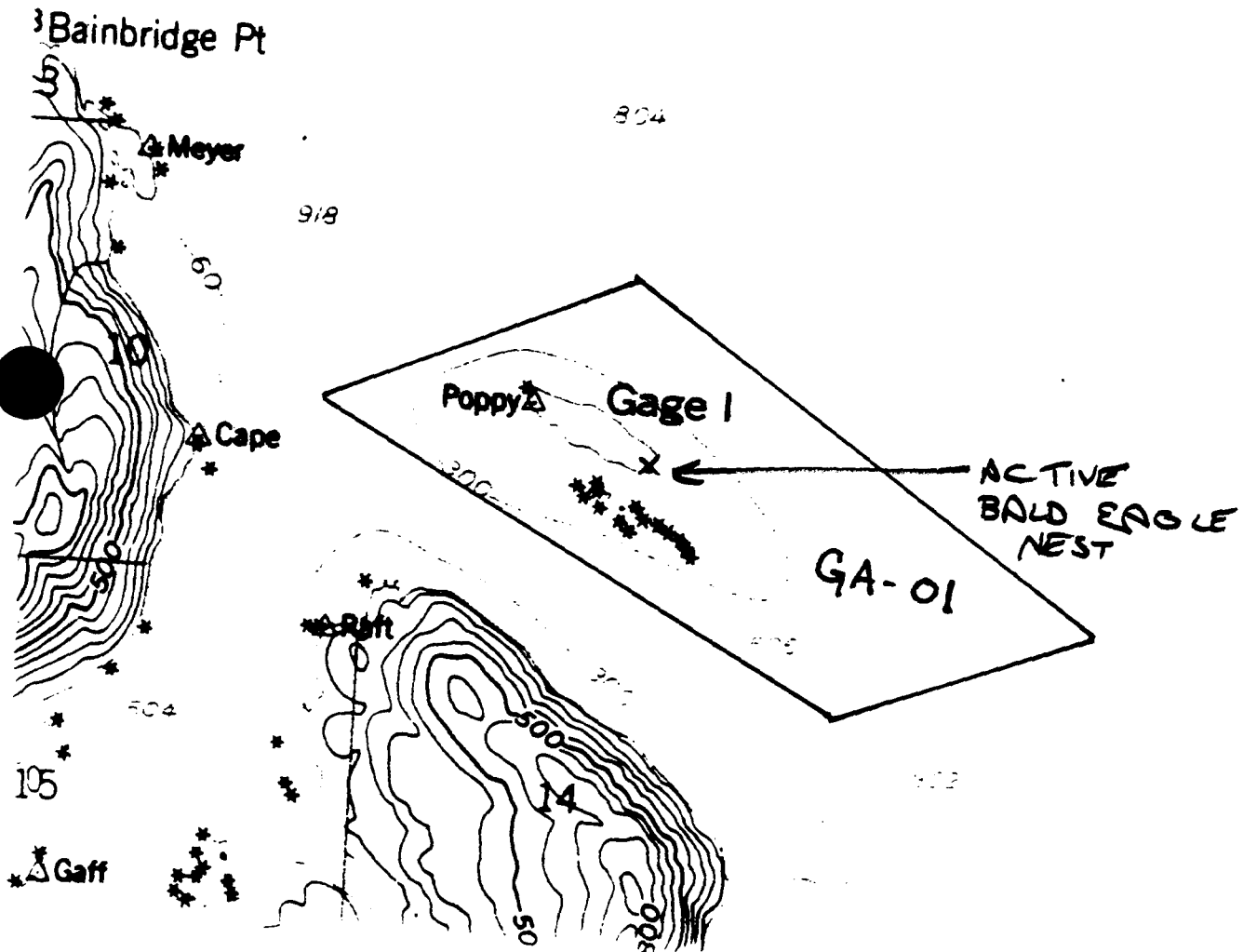
Distribution:

Exxon Shoreline Coordinator
Exxon Shoreline Supervisor
Exxon SCAT file

SHPO
FOSC
CDFU
NOAA
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USDA (FS)
USFW
A.DEC
A.FG
A.DNR
CAC
PWSCA
USFS

8/7/89
USFWS

GAGE ISLAND BLOCK GA-01



(version 5/02/89)

SHORELINE CLEANUP PROGRAM

DATE 8/03/89 SHORELINE SEGMENT GA-01
LOCATION: (see enclosed map) GAGE ISLAND
(Gage Island Block)

ADEC NO. _____ SHORELINE ASSESSMENT DATE: 8/02/89

Recommended Cleanup Activity(ies):

No cleanup recommended at this time (subject to FOSC reassessment at a later date), due to light oil, high wave exposure and ecological constraints.

Priorities Considerations:

Class 4: Light oil
Class A: Resources present

Ecological Constraints (from site survey):

Rich intertidal life may be adversely effected by cleanup activities, therefore, no cleanup is recommended. An active bald eagle's nest is located in this segment. (See advisory).

Archeological Constraints (from site survey):

If cleanup is conducted and heretofore undiscovered cultural materials are uncovered, contact Exxon's Archeological Field Director and take actions prescribed in the Operational Guidelines for Shoreline Cleanup dated 4/21/89 as amended.

Charles E. Holmes
State Historic Preservation Officer *

Date: August 4, 1989

ISCC: Sharon K. Christopher

Date: 8-9-89

EXXON: Donald S. Telford

Date: 8-9-89

FOSC: D. S. Craig

Date: 8-11-89

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

SHORELINE OIL EVALUATION

Date: 8/2/89 / Time: 07:05

Observer: Mike Foget

Surveyed From: Foot/Boat/Helio/Plane

Weather: Sun/Cloud/Rain/Snow/Fog

LOCATION

LOCATION Gage Is.

SEGMENT NUMBER GA-01

LENGTH OF SHORELINE SEGMENT: 2100 m

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

SHORELINE:

Shoreline Type: SPI/BEA/COV/HLD/STRT

Slope: LANG/HANG/VER

Wave Exposure: High/Med/Low

Sediment: B / C / P / G / S / M / R

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

OIL

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

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

Continuous: Y/N of Segment 10 Width of Band: 0.5 m

Sporadic: Y/N of Segment 25

Est. Oil Thickness where > 1cm: cm Est. Oil Penetration: cm

Pooled Oil: "Free" Oil: Coated: H / M / L

Fresh Mousse Tar Formation: 100

Drift Debris Oiled? Yes/No Supra/Upper/Mid/Lower Amount: H/M/L/

Comments:

Segment is a rock Island mostly with vertical rock
faces. A Discontinuous light tar band in the + HITZ is present on the
South side of the Island, and the north western side of the rock
outcrop which lies just south of Gage Island. The western section of
Gage Is (location of the poppy benchmark), has a few tar
splotches located in the + HITZ. No cleanup is recommended due to
ecological constraints.

ECOLOGICAL EVALUATION

LOCATION: Gage Island SITE: _____ OBSERVER: Crank

LOCATION PREFIX: GA SEG. NO.: 01 LENGTH: 2100 (M)

DATE: 08/02/89 TIME (HHMM): 0705 TIDE HT.: -1 ft (M)

OILED ZONE: Splash High Medium Low

SUBSTRATUM: Rocks Boulder Cobble Gravel Sand Mud

LIVE BIOTA

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

Moderate on Gage - Dense on rocks just south of Gage

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

Sparse on Gage. In dense frequent patches on rocks south of Gage.

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

Littorina

Patchy Y/N Contin. Y/N Dense Y/N Sparse Y/N None Y/N

Surveyed by boat - unable to identify distribution

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

Surveyed by boat - unable to identify distribution

OTHER OBSERVATIONS: Bubbles in water - similar in appearance to detergent bubbles

CLEANUP PRECAUTIONS: Cleanup not recommended at this time. Operations may cause a greater impact on biota than present oil.

MAMMALS: Otters _____ Harbor Seals 10 Sea Lions _____ Whales _____
Other _____

BIRDS: Bald Eagle, Pigeon Guillemot, Gulls, Kittiwakes, Arctic Tern

GENERAL OBSERVATIONS: Rocks just off the southern end of

some small rocks in the water

(version of 4/29/89)

CULTURAL RESOURCE EVALUATION

Date 8/2/89 Location St. George Island Site

Location Prefix GA Segment # GA-1 Length 2.1 km

Survey Method:

Air (A - indicate on map) Boat ✓ (A - indicate on map)

Ground (G - indicate on map)

Known cultural resources (AHRS #) None Data Source None

Oil conditions/beach visibility light sand

Width of beach zone surveyed 0 m Tree fringe surveyed 0

Cultural resources observed in beach zone (AHRS code) None

Cultural resources observed in tree fringe (AHRS code) None

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

Shore Profile The entire island is ^{in shore} vertical wall face

Fresh Water Sources None

Sea Exposure Open except to south

Access/Safety Impossible

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

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

Photos: Color Roll # Frames

B/W Roll # Frames

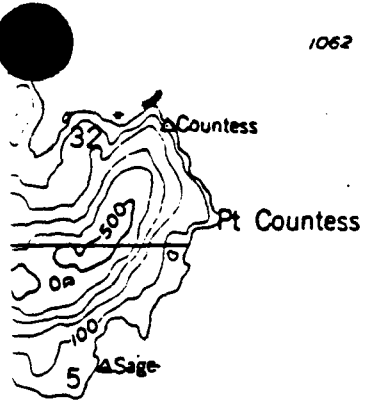
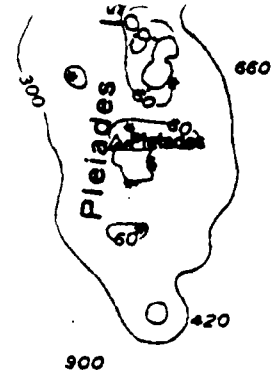
Observer(s) C. Anderson

Time survey started 0705 Time survey ended 0735

Cultural resource considerations/restraints:

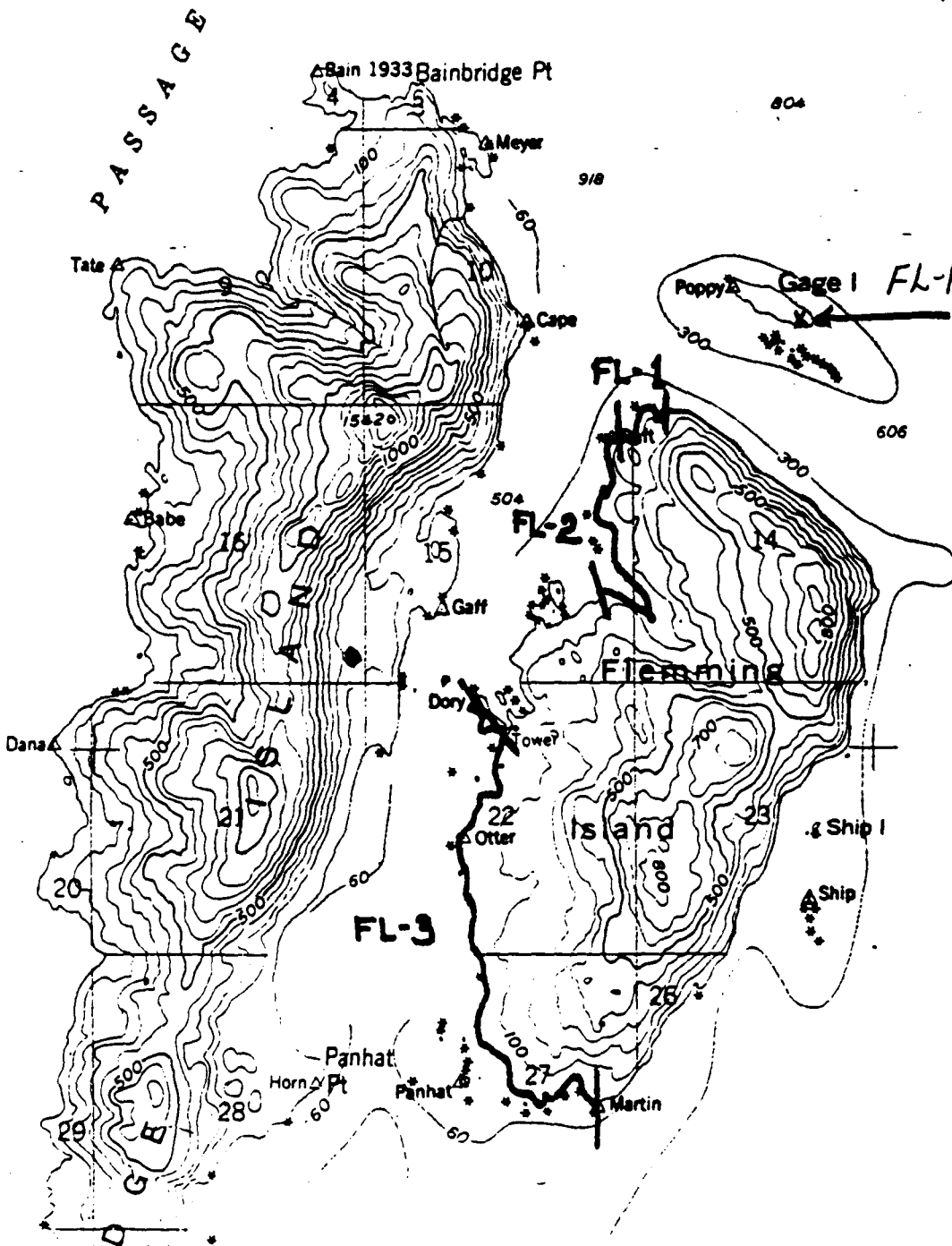
Standard

7/20/89
USFWS

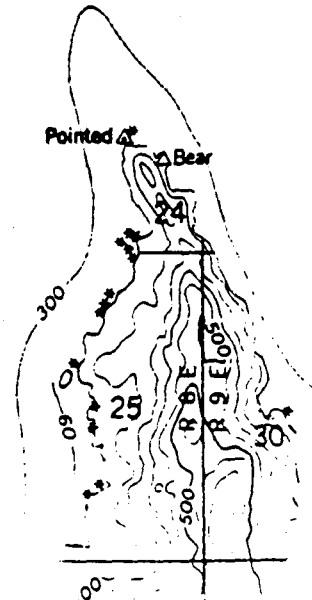


FLEMMING ISLAND WEST BLOCK

FL-1, FL-2, FL-3



ACTIVE
BALD
EAGLE
NEST



FLEMMING ISLAND

1314

804



GA-01

— tar band

Bain 1933 Bainbridge Pt

Meyer

918

60

Cape

504

105

Gage 1
Poppy
Light tar band
300
606

300

500

14

608

500

Flemming

700

(version 5/04/89)

signed copy

O.R.

9/14

SHORELINE PRE-CLEANUP ASSESSMENT BLOCK REPORT

Location (see enclosed map): WHALE BAY BLOCK

Includes Shoreline Segments: WH-01, WH-02, WH-03

Submitted : *[Signature]* Date: *8/5/89*
(for Exxon)

ISCC Recommendation: *Sharon K. Christopher* Date: *8-9-89*

FOSC Approval: *D.E. Chang* Date: *8-12-89*

The cleanup procedures identified in the Shoreline Cleanup Program are recommended. Modifications to these systems can be made in the field. Exxon and other field personnel are encouraged to suggest innovations and productivity enhancements to the OSC's on-scene representative. The OSC's representative has the authority to approve on-site modifications. The Field Resource Team should be consulted if these actions do not fit within the Ecological Constraints of the Shoreline Cleanup Program. Requirements for safety and the protection of cultural material must be observed.

Distribution:

Exxon Shoreline Coordinator
Exxon Shoreline Supervisor
Exxon SCAT file

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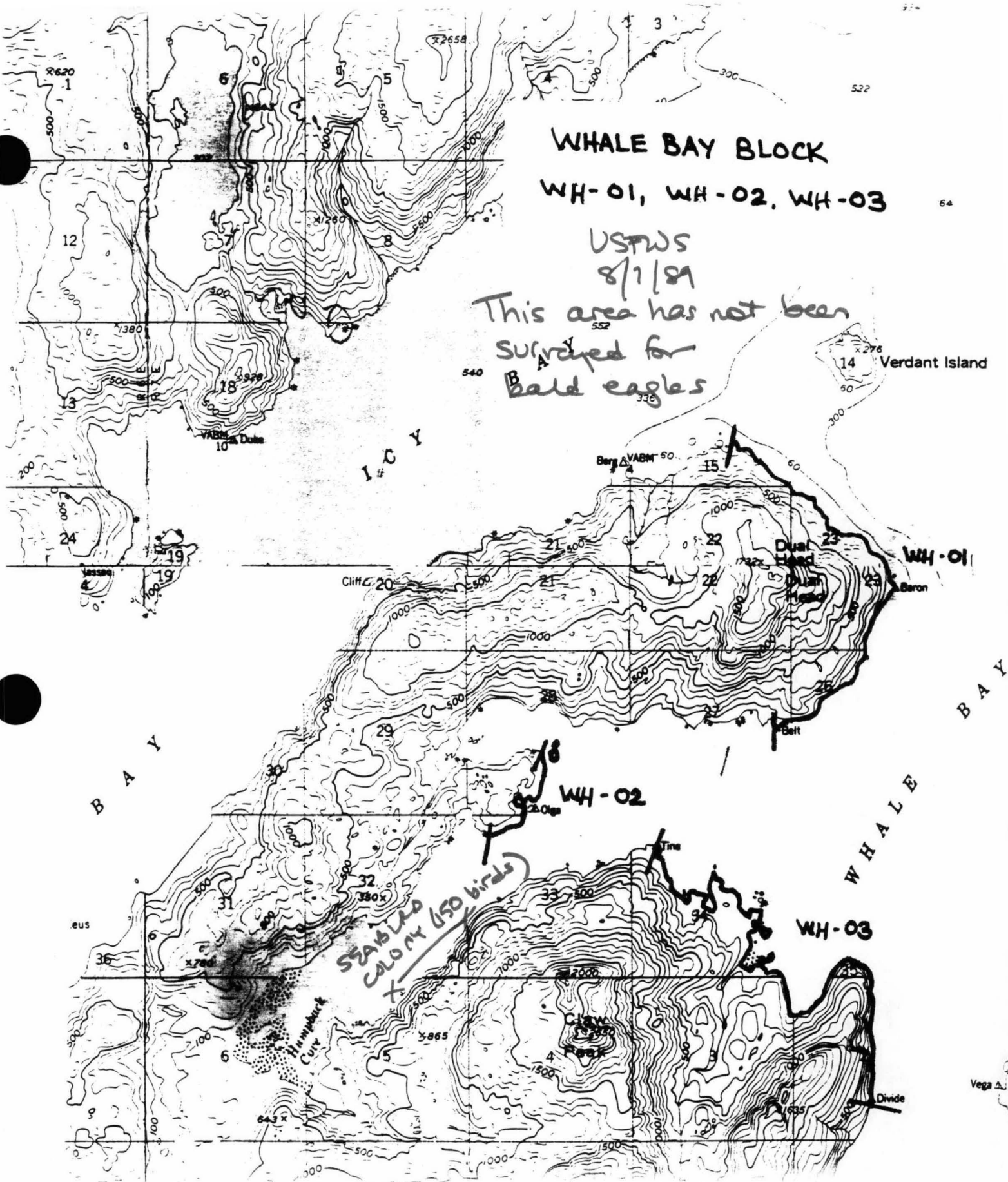
WHALE BAY BLOCK

WH-01, WH-02, WH-03

USFWS

8/1/81

This area has not been
surveyed for
Bald eagles



(version 5/02/89)

SHORELINE CLEANUP PROGRAM

DATE 8/03/89 SHORELINE SEGMENT WH-01
LOCATION: (see enclosed map) WHALE BAY - Dual Head
(Whale Bay Block)

ADEC NO. _____ SHORELINE ASSESSMENT DATE: 7/31/89

Recommended Cleanup Activity(ies):

No cleanup recommended at this time (subject to FOSC reassessment at a later date), due to no oil.

Priorities Considerations:

No oil.

Ecological Constraints (from site survey):

The rich intertidal life may be adversely effected by cleanup activities.

Archeological Constraints (from site survey):

If cleanup is conducted and heretofore undiscovered cultural materials are uncovered, contact Exxon's Archeological Field Director and take actions prescribed in the Operational Guidelines for Shoreline Cleanup dated 4/21/89 as amended.

Charles E. Holmes
State Historic Preservation Officer *

Date: August 4, 1989

ISCC: Sharon K. Christopher

Date: 8-9-89

EXXON: Daniel P. Tipton

Date: 8-9-89

FOSC: D. E. Craven

Date: 8-12-89

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

SHORELINE OIL EVALUATION

Date: 8/31/89 / Time: 9:45

Observer: Mike Foget

Surveyed From: Foot/Boat/Helio/Plane

Weather: Sun/Cloud/Rain/Snow/Fog

LOCATION

LOCATION Whale Bay - Duell head

SEGMENT NUMBER WM-01

LENGTH OF SHORELINE SEGMENT: 4200 m

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

SHORELINE:

Shoreline Type: SPI/BEA/COV/HLD/STRT

Slope: LANG/HANG/VER

Wave Exposure: High/Med/Low

Sediment: B25 / C15 / P10 / G10 / S- / M- / R40

Drift Debris on Beach: Yes/No Supra/Upper/Mid/Lower Type drift wood
drift focus

OIL

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

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

Continuous: Y/N % of Segment - Width of Band: - m

Sporadic: Y/N % of Segment -

Est. Oil Thickness where > 1cm: - cm Est. Oil Penetration: - cm

Pooled Oil: - % "Free" Oil: - % Coated: H- / M- / L-

Fresh - % Mousse - % Tar Formation: - %

Drift Debris Oiled? Yes/No Supra/Upper/Mid/Lower Amount: H/M/L/

Comments:

Segment consists mostly of rocky headlands with some high
angle gravel pocket beaches. The shore zone is one of the headlands
to the mouth of whale bay and has a high wave exposure.
No oil was observed in this segment and therefore no cleanup
activities are recommended.

ECOLOGICAL EVALUATION

LOCATION: Mainland Whale Bay SITE: _____ OBSERVER: Crank
 LOCATION PREFIX: WH SEG. NO.: 1 LENGTH: 4200 (M)

DATE: 07/31/89 TIME (HHMM): 0945-1120 TIDE HT.: +4 - +7 ft ~~12~~

OILED ZONE: Splash High Medium Low Oil not found in this segment

SUBSTRATUM: Rocks Boulder Cobble Gravel Sand Mud Headland with pocket beaches,

LIVE BIOTA

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

Continuous on headlands; boulders
Patchy on beaches with dense to moderate concentrations

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

Moderate
Patchy distribution with moderate to dense concentrations

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

Littorina

Patchy Y/N Contin. Y/N Dense Y/N Sparse Y/N None Y/N

Associated with Fucus on beaches

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

Heaviest concentration found with Fucus

OTHER OBSERVATIONS: Clam shells on the beaches

CLEANUP PRECAUTIONS: Biota appear healthy, no oil observed on beaches - clean-up not recommended.

MAMMALS: Otters 1 Harbor Seals 1 Sea Lions _____ Whales 1 Humpback
 Other _____

BIRDS: Bald Eagle, 9 Goldeneye, 2 Dippers, 18 Arctic terns, Gulls

GENERAL OBSERVATIONS: _____

(version of 4/29/89)

CULTURAL RESOURCE EVALUATION

Date 7/31/89 Location W. Lake Bay Site _____

Location Prefix WH Segment # WH-1 Length 4.2 Km

Survey Method:

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

Ground L (G - indicate on map)

Known cultural resources (AHRS #) None Data Source None

Oil conditions/beach visibility none

Width of beach zone surveyed 10-25 m Tree fringe surveyed 10m

Cultural resources observed in beach zone (AHRS code) None

Cultural resources observed in tree fringe (AHRS code) None CMT?

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

Shore Profile beaches are moderately sloped and gravel-covered

Fresh Water Sources None

Sea Exposure Open to north and south

Access/Safety good on beaches

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

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

Photos: Color Roll # _____ Frames _____

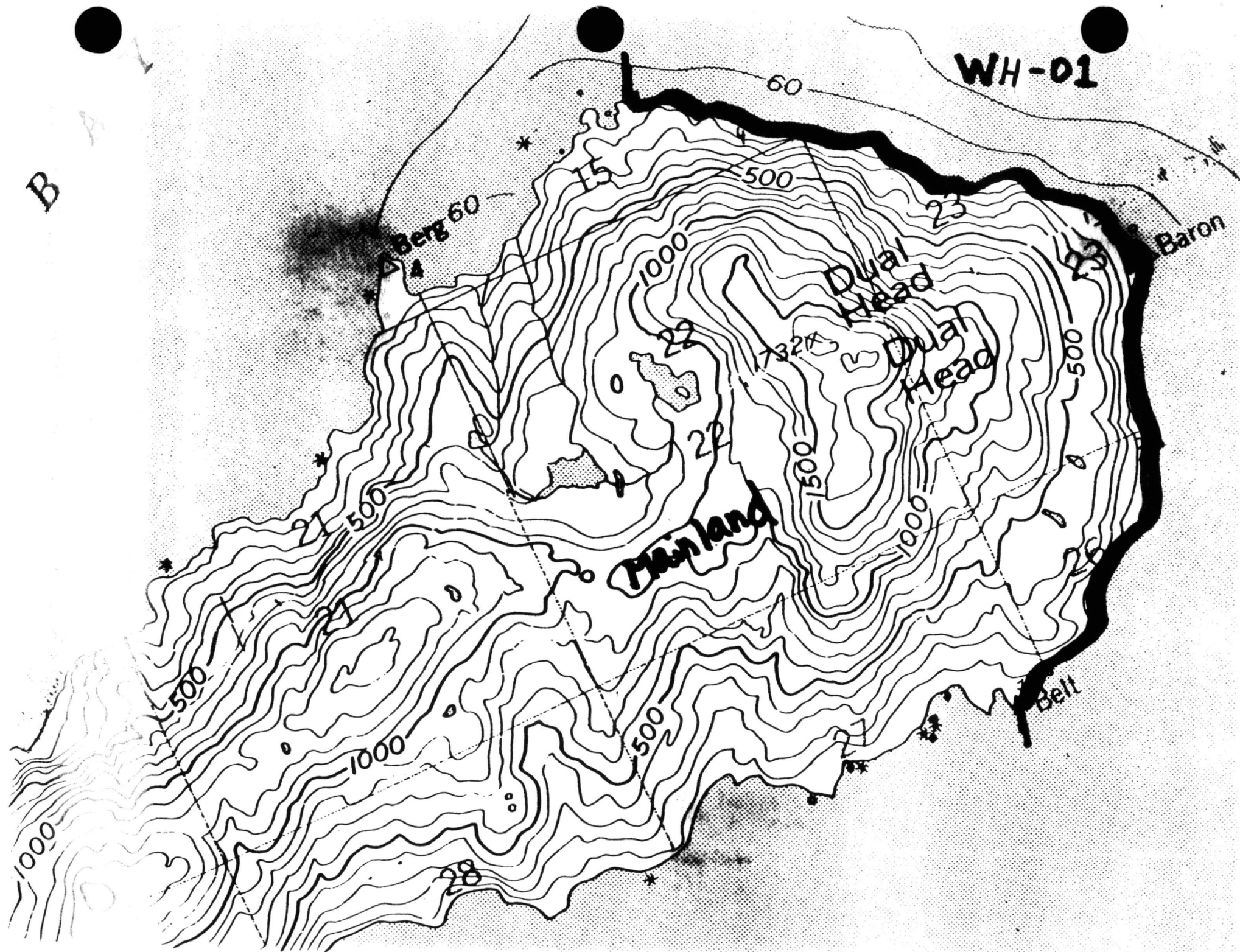
B/W Roll # _____ Frames _____

Observer(s) C. Johnson

Time survey started 1000 Time survey ended 1130

Cultural resource considerations/restraints:

Standard.



(version 5/02/89)

SHORELINE CLEANUP PROGRAM

DATE 8/03/89

SHORELINE SEGMENT WH-02

LOCATION: (see enclosed map) WHALE BAY

(Whale Bay Block)

ADEC NO. _____ SHORELINE ASSESSMENT DATE: 8/01/89

Recommended Cleanup Activity(ies):

No cleanup recommended at this time (subject to FOSC reassessment at a later date), due to no oil.

Priorities Considerations:

No oil.

Ecological Constraints (from site survey):

No constraints, due to no oil.

Archeological Constraints (from site survey):

If cleanup is conducted and heretofore undiscovered cultural materials are uncovered, contact Exxon's Archeological Field Director and take actions prescribed in the Operational Guidelines for Shoreline Cleanup dated 4/21/89 as amended.

Charles E. Holmes
State Historic Preservation Officer *

Date: August 4, 1989

ISCC: Sharon K. Christopher

Date: 8-9-89

EXXON: Stanley D. Tapp

Date: 8-2-89

FOSC: D. E. Cram

Date: 8-12-89

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

SHORELINE OIL EVALUATION

Date: 8/1/89 Time: 7:10

Observer: Mike Foget

Surveyed From: Foot/Boat/Helio/Plane

Weather: Sun/Cloud/Rain/Snow/Fog

LOCATION

LOCATION Whale bay

SEGMENT NUMBER WH-02

LENGTH OF SHORELINE SEGMENT: 1600 m

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

SHORELINE:

Shoreline Type: SPI/SEA/COV/HLD/STRT

Slope: LANG/HANG/VER

Wave Exposure: High/Med/Low

Sediment: B35 / C10 / P__ / G5 / S__ / M__ / R55

Drift Debris on Beach: Yes/No Supra/Upper/Mid/Lower Type Driftwood
Drift Fucus

OIL

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

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

Continuous: Y/N % of Segment Width of Band: m

Sporadic: Y/N % of Segment

Est. Oil Thickness where > 1cm: cm Est. Oil Penetration: cm

Pooled Oil: % "Free" Oil: % Coated: H % / M % / L %

Fresh % Mousse % Tar Formation: %

Drift Debris Oiled? Yes/No Supra/Upper/Mid/Lower Amount: H/M/L/

Comments:

The segment is located in whale bay. There is moderate wave exposure. The segment consists of a rocky shore zone with some small rock islands laying just off shore. There is one small pocket cobble gravel beach located in a cove. No apparent oil was observed, therefore no clean up activities are recommended.

ECOLOGICAL EVALUATION

LOCATION: Whale Bay SITE: _____ OBSERVER: Park

LOCATION PREFIX: WH SEG. NO.: 2 LENGTH: 1600 (M)

DATE: 18/01/89 TIME (HHMM): 0700 TIDE HT.: +1' (M)

OILED ZONE: Splash High Medium Low Trace in the zone

SUBSTRATUM: Rocks Boulder Cobble Gravel Sand Mud

LIVE BIOTA

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

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

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

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

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

OTHER OBSERVATIONS:

There are other dugger holes in the beach as

clean up not recommended because it is

There are other dugger holes in the beach as
clean up not recommended because it is
checked at this time.

There are other dugger holes in the beach as
clean up not recommended because it is
checked at this time.

MAMMALS: Otters _____ Harbor Seals _____ Sea Lions _____ Whales _____

BIRDS: Seal, Pigeon, Gull, Murrelet, Arctic Tern

GENERAL OBSERVATIONS: Beach has small stream

(version of 4/29/89)

CULTURAL RESOURCE EVALUATION

Date 8/1/89 Location Whale Bay Site _____

Location Prefix WH Segment # WH-2 Length 1.6 km

Survey Method:

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

Ground ✓ (G - indicate on map)

Known cultural resources (AHRS #) None Data Source None

Oil conditions/beach visibility None

Width of beach zone surveyed 15 m Tree fringe surveyed 10m

Cultural resources observed in beach zone (AHRS code) None

Cultural resources observed in tree fringe (AHRS code) None

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

Shore Profile There is one small pocket beach in the vertical wall face that makes up most of the segment

Fresh Water Sources None

Sea Exposure protected to the east

Access/Safety good on beach

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

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

Photos: Color Roll # _____ Frames _____

B/W Roll # _____ Frames _____

Observer(s) C. Cohen

Time survey started 0710 Time survey ended 0745

Cultural resource considerations/restraints:

Standard



(version 5/02/89)

SHORELINE CLEANUP PROGRAM

DATE 8/03/89 SHORELINE SEGMENT WH-03

LOCATION: (see enclosed map) WHALE BAY

(Whale Bay Block)

ADEC NO. _____ SHORELINE ASSESSMENT DATE: 8/01/89

Recommended Cleanup Activity(ies):

No cleanup recommended at this time (subject to FOSC reassessment at a later date), due to no oil.

Priorities Considerations:

No oil.

*DOT 8-9-89
SC 8-9-89*

Ecological Constraints (from site survey):

A cataloged anadromous stream is located in this segment (226-20-16220)

If cleanup is conducted, contact ADF&G and RAT 48 hours prior to beginning activities.

Archeological Constraints (from site survey):

If cleanup is conducted and heretofore undiscovered cultural materials are uncovered, contact Exxon's Archeological Field Director and take actions prescribed in the Operational Guidelines for Shoreline Cleanup dated 4/21/89 as amended.

Charles Z. Adams
State Historic Preservation Officer *

Date: Aug 9, 1989

ISCC: Sharon K. Christopher

Date: 8-9-89

EXXON: Daniel S. Tipton

Date: 8-9-89

FOSC: D. E. Cray

Date: 8-12-89

* Signature required to satisfy stipulations in Alaska DNR land
management plan for tide and surge areas.

SHORELINE OIL EVALUATION

Date: 8/1/89 Time: 7:45

Observer: Mike Foget

Surveyed From: Foot/Boat/Helio/Plane

Weather: Sun/Cloud/Rain/Snow/Fog

LOCATION

LOCATION Whale Bay

SEGMENT NUMBER WH-03

LENGTH OF SHORELINE SEGMENT: 6700 m

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

SHORELINE:

Shoreline Type: SPI/BEA/COV/HLD/STRT

Slope: LANG/HANG/VER

Wave Exposure: High/Med/Low

Sediment: B20 / C30 / P10 / G15 / S- / M- / R25

Drift Debris on Beach: Yes/No Supra/Upper/Mid/Lower Type Driftwood
Drift Fucus

OIL

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

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

Continuous: Y/N % of Segment - Width of Band: - m

Sporadic: Y/N % of Segment -

Est. Oil Thickness where > 1cm: - cm Est. Oil Penetration: - cm

Pooled Oil: - % "Free" Oil: - % Coated: H- / M- / L-

Fresh - % Mousse - % Tar Formation: - %

Drift Debris Oiled? Yes/No Supra/Upper/Mid/Lower Amount: H/M/L/

Comments:

The segment is located in Whale Bay and consists mostly
of cobbles beaches with some rocky headlands. The segment
has a high wave exposure except for the protected bays and those
beaches protected by rocky islands close to shore, one of the bays
is boomed off (see map). No apparent oil was observed therefore
no clean up activities are recommended

ECOLOGICAL EVALUATION

LOCATION: Whale Bay SITE: _____ OBSERVER: J. R. K.

LOCATION PREFIX: WH SEG. NO.: 2 LENGTH: 6700 (M)

DATE: 8/10/89 TIME (HHMM): 0745 TIDE HT.: +3' ~~0.5~~

OILED ZONE: Splash High Medium Low 700

SUBSTRATUM: Rocks Boulder Cobble Gravel Sand Mud

LIVE BIOTA

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

Dense and continuous on headlands, patches on beach.

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

Dense, extensive beds near both streams on beach 1, sparse between streams
Dense on headlands

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

Littorina

Patchy Y/N Contin. Y/N Dense Y/N Sparse Y/N None Y/N

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

OTHER OBSERVATIONS: Thick large eelgrass beds and clam near
mouth of stream Octopus delphini on beach 1

CLEANUP PRECAUTIONS: Clean up not recommended because
oil was not found at this time

MAMMALS: Otters 2 Harbor Seals 2 Sea Lions _____ Whales _____
Other _____

BIRDS: Bald Eagle, American Ducks

GENERAL OBSERVATIONS: This segment has several probable salmon

(version of 4/29/89)

CULTURAL RESOURCE EVALUATION

Date 8/1/89 Location Whale Bay Site _____

Location Prefix WH Segment # WH-3 Length 6.7 Km.

Survey Method:

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

Ground (G - indicate on map)

Known cultural resources (AHRS #) None Data Source None

Oil conditions/beach visibility no oil

Width of beach zone surveyed 30 m Tree fringe surveyed 10

Cultural resources observed in beach zone (AHRS code) None

Cultural resources observed in tree fringe (AHRS code) None

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

Shore Profile The beach is moderately sloped and gravel/cobble covered.

Fresh Water Sources Two streams

Sea Exposure Protected to the north.

Access/Safety good on the beach I walked

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

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

Photos: Color Roll # _____ Frames _____

B/W Roll # _____ Frames _____

Observer(s) Carlson

Time survey started 0745 Time survey ended 0930

Cultural resource considerations/restraints:

Standard.

