



EVOS
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1552
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S42
1989
v.7

[Shoreline evaluations, 1989].

Volume 7

Perry Island

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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

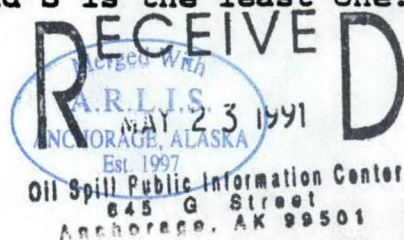
SHORELINE TYPE

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

sent to TR + OR

(version 5/04/89)

SHORELINE PRE-CLEANUP ASSESSMENT BLOCK REPORT

Location (see enclosed map): PERRY ISLAND SOUTHEAST BLOCK

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

Submitted :

BA Lyman
(for Exxon)

Date: 5/21/89

8 FOSC Approval:

CS Robbins

Date: 5/23/89

ISCC Recommendation:

Flow - 5/22/89

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

Operations should minimize disturbance
to seals present in segment PR1.

(version 5/02/89)

SHORELINE CLEANUP PROGRAM

DATE 5/20/89 SHORELINE SEGMENT PR-1

LOCATION: (see enclosed map) PERRY ISLAND - South Bay

ADEC NO. _____ SHORELINE ASSESSMENT DATE: 5/17/89

Recommended Cleanup Activity(ies):

No cleanup - No oil observed.

Priorities Considerations:

None.

Ecological Constraints (from site survey):

None. No cleanup recommended. Ecological constraints should be reconsidered if cleanup recommendation is changed.

Archeological Constraints (from site survey):

If cleanup is planned, cultural resource assessment is required.
as amended.

Charles E. Hansen
State Historic Preservation Officer *

Date: May 21, 1989

EXXON: _____

Date: _____

FOSC: _____

Date: _____

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

SHORELINE OIL EVALUATIONDate: 05/17/89 / Time: 1430Observer: MEYERSurveyed From: Foot/Boat/Helio/PlaneWeather: Sun/Cloud/Rain/Snow/FogLOCATIONLOCATION PERRY ISLAND - South BaySEGMENT NUMBER 101LENGTH OF SHORELINE SEGMENT: 12,500 mACCESS: Foot/Vehicle/Boat/Barge/Helio/Float PlaneSHORELINE:Shoreline Type: SPI/SEM/COV/HLD/STRTSlope: LANG/HANG/VERWave Exposure: High/Med/LowSediment: B 10 / C 10 / P 15 / G 10 / S 3 / M 2 / R 50Drift Debris on Beach: Yes/No Supra/Upper/Mid/Lower Type LOGS
(NOT OILED)OILDegree 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:

Surveyed primarily by boat, no oil seen. Four beaches walked, no oiled debris at tide line, no oil seen on beach.

ECOLOGICAL EVALUATION

LOCATION: PEREV ISLAND
South Bay SITE: PR-1 OBSERVER: MEYER
 LOCATION PREFIX: PR SEG. NO.: 1 LENGTH: 12,500 (M)
 DATE: 05/17/89 TIME (HDDN): 1430 TIDE HT.: _____ (M)

OILED ZONE: Splash High Medium Low NO OIL

SUBSTRATUM: Rocks Boulder Cobbles Gravel Sand Mud

LIVE BIOTA

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

Fucus band common on rock faces and boulders - all healthy, no oil noted.

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

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

Littorina

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

Patches of Littorina noted on rock outcrops in Fucus.

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

Five Littorina noted in tidal pools adjacent to pebble beaches.

OTHER OBSERVATIONS: ±15 Harbor Seals hauled out on barrier rock near Beach #9, no oil
individuals noted.

CLEANUP PRECAUTIONS: NO OIL - NO CLEANUP RECOMMENDED

SEA

MANUALS: OTTERS 4 Harbor Seals 17 ± 1 Sea Lions _____ Whales _____
 OTHER LAND OTTERS - 2

BIRDS: Great Black-throated - 1; Common Merganser - 2; Herring Gull - 4; Cormorant sp. - 2; Pigeon Gull -
(30 together)

GENERAL OBSERVATIONS: Herring Gull - 1; Herring Gull - 3; Glaucous-winged Gull - 32; Murrelet sp. - 6;
Lesser Yellowlegs - 1; Sandpiper - 2; NW Crow - 1; Eagle - 1;

(version of 4/29/89)

CULTURAL RESOURCE EVALUATION

Date 5/17/89 Location Perry Island Site ✓

Location Prefix PR Segment # PR-1 Length 12,500
~~10,000~~

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 0-10 M Tree fringe surveyed 0-10

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 mostly flat, sand/gravel beach

Fresh Water Sources several streams are in the beach area, mostly in the core of the head of the bay

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 1630 Time survey ended 1800

Cultural resource considerations/restraints:

If heretofore undiscovered cultural materials are uncovered during cleanup contact Edgar archeologist, C. Hobley, immediately



PERRY ISLAND SOUTHEAST BLOCK

1386

1092

870

1298

(version 5/02/89)

SHORELINE CLEANUP PROGRAM

DATE 5/20/89

SHORELINE SEGMENT PR-2

LOCATION: (see enclosed map) PERRY ISLAND - Southern Tip

ADEC NO. _____ SHORELINE ASSESSMENT DATE: 5/18/89

Recommended Cleanup Activity(ies):

- Only requires one (1) crew and landing craft.
- High pressure, hot water on headland rocks of Beach 2 only.
- No cleanup recommended for other areas of segment (due to lack of access and ecological constraints).

Priorities Considerations:

Class 3B for headland rocks of Beach 2.

Ecological Constraints (from site survey):

No work should be conducted on Beach #1 due to enclosed pond which is oil free. *Avoid streams or banks of streams unless the Resource Advisory Team Biologist authorizes cleanup on a site-specific basis.*

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: May 21, 1989

EXXON: _____

Date: 5/21/89

FOSC: _____

Date: 5/23/89

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

SHORELINE OIL EVALUATION

Date: 5/18/89 Time: 0830

Observer: C. DILLON

Surveyed From: Foot/Boat/Helio/Plane

Weather: Sun/Cloud/Rain/Snow/Fo

LOCATION

LOCATION PERCY ISLAND SEGMENT NUMBER 2 (Beach 1)

LENGTH OF SHORELINE SEGMENT: 300 m in lagoon ^{50 m at water line opening up to} for beach 1

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 / C30 / P30 / S10 / M5 / R

Drift Debris on Beach: Yes/No

Supra/Upper/Mid/Lower Type logs (small amo)

OIL

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

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

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

Sporadic: Y/N % of Segment 30

Est. Oil Thickness where > 1cm: _____ cm Est. Oil Penetration: 0 - 2 cm

Pooled Oil: 0 % "Free" Oil: 0 % Coated: H _____ % / M _____ % / L 30 %

Fresh 25 (skinned) % Mousse 5 % Tar Formation: 0 %

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

Comments:

only 2 logs slightly oiled

See diagram #1 for details. Beach area contains a tidal lagoon pond with some light oil coating surrounding it about half way around.

Segment consists of 5 beaches of somewhat varying conditions. Some beaches will be described on separate evaluation forms.

SHORELINE OIL EVALUATION

Date: 5/18/89 / Time: 0930

Observer: C. Dillon

Surveyed From: Foot/Boat/Helio/Plane

Weather: Sun/Cloud/Rain/Snow/Fo

LOCATION

LOCATION PERRY ISLAND

SEGMENT NUMBER PR-2 (Beach 2)

LENGTH OF SHORELINE SEGMENT: 40 m for beach 2

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 / P20 / G / S / M / R20

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 moderate/heavy coat with free oil on headland rocks

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

Sporadic: Y/N % of Segment 20

Est. Oil Thickness where > 1cm: 4 cm Est. Oil Penetration: 0 cm

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

Fresh _____ % Mousse 20 % Tar Formation: _____ %

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

Comments:

Beach is clean except for moderate to heavy coating and free mousse on the headland rocks at the eastern border of the beach.

SHORELINE OIL EVALUATION

Date: 5/18/89 Time: 1000

Observer: C. Dillon

Surveyed From: Foot/Boat/Helio/Plane

Weather: Sun/Cloud/Rain/Snow/Fog

LOCATION

LOCATION Perry Island

SEGMENT NUMBER PR-200 (Beaches 3+)

LENGTH OF SHORELINE SEGMENT: 200 m

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

SHORELINE:

→ shallow draft at

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

Slope: LANG/LANG/VER

Wave Exposure: High/Med/Low

Sediment: B 10% / C 30% / F 50% / G ___% / S ___% / M ___% / R 10%

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

OIL

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

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

Continuous: Y/N % of ^{beaches} segment 100 Width of Band: 20 m

Sporadic: Y/N % of Segment ___

Est. Oil Thickness where > 1cm: ___ cm Est. Oil Penetration: >10 cm

Pooled Oil: 0% "Free" Oil: 0% Coated: H 10% / M 90% / L ___%

Fresh 90% (stained): Mousse 10% Tar Formation: ___%

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

Comments:

This section of the segment has two beaches separated by high & vertical rocks. Both beaches are primarily pebbles and cobbles with a moderate weathered coating on the surface. Sediments and penetrates the pebbles at least 10 cm. The beaches are protected (access prevented) by a lot of rocks in the water. Wave action is very high and will probably clean these beaches better than the crew could if they could even get near the beaches.

00830 5/18 Segment PR-2 (675m total)

loss (clean)

woods

VERT

loss (clean)

wy. Rain
sunrise fast
bit by the top

(2)

Beach/cove

low wave exp

Light oil

B/C/P

oiled log

pond

no oil

Light oil

VERT/HANG

woods

B/C/P

no oil

no oil

2 oiled logs
on U112
(insignificant)

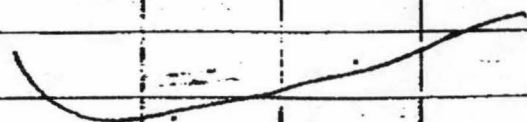
upper (U112)
pen: none to 2cm
explosive 30%

started light cut

5% - 100%

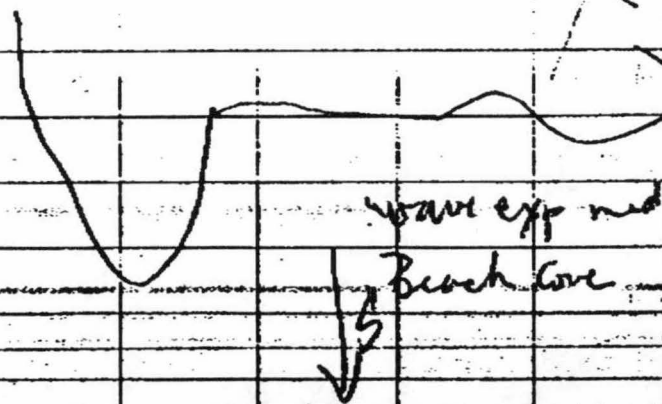
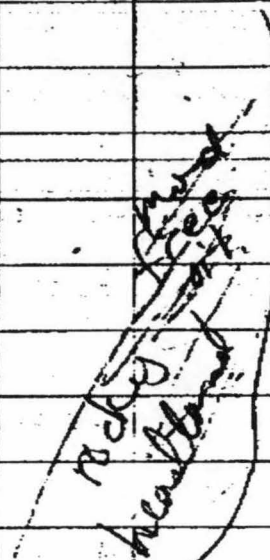
③ Beach 2

Post survey
lets/boat H 1.5



B/C

K/P
clean

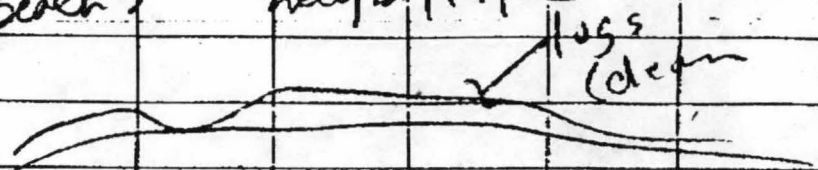


wave exp. med
Beach core

Beach 3

Post survey
helo/let/H pl

④



logs
(clean)

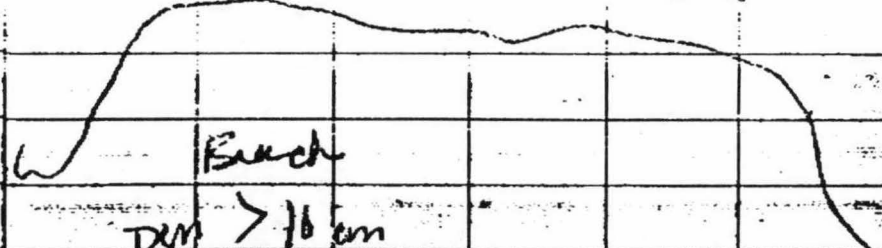


algae (mosses)

100%
100%
100%

P/G/S
70%
70%

B/C
36%



Beach

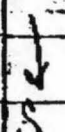
pen > 10 cm

Cost. 100% L coast

wave exp. high

drift debris on L SZ light colored

large on S SZ - clean

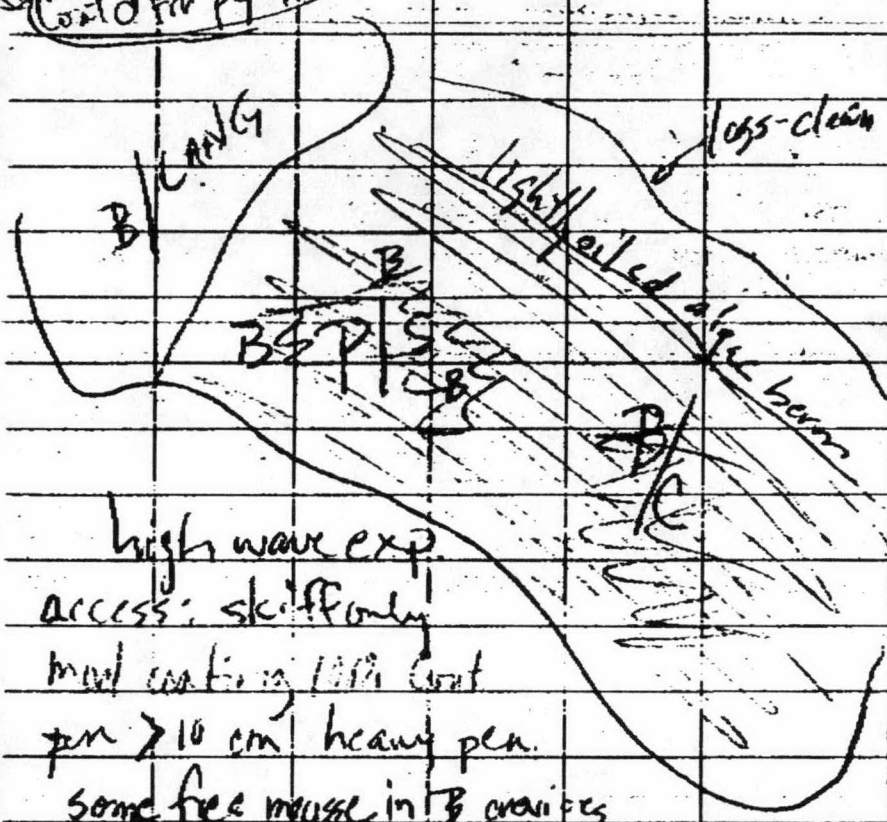


Beach 4

boat survey

PR-2

④ (could find PR-4)



not feasible for cleanup No equity issues

Beach 5 PR-2 end

boat survey - no access

A lot of rocks in the water preventing boat access to beach. Beach is mostly boulders with some larger rocks and cobbles. Coated moderately with oil on L-M ITZ. Some clean logs on E-ITZ

ECOLOGICAL EVALUATION

LOCATION: Perry Island SITE: PR-2 OBSERVER: MEYER

LOCATION PREFIX: PR- SEG. NO.: 2 LENGTH: 675 (M)

DATE: 05/18/89 TIME (HMM): 0830 TIDE HT.: _____ (M)

OILED ZONE: Splash ~~High~~ Medium Low

SUBSTRATUM: ~~Rocks~~ ~~Shoulder~~ ~~Cobble~~ ~~Gravel~~ ~~Sand~~ Mud

LIVE BIOTA

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

Beach #1, #2, #3 had patches of moussed fucus;

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

Patches of heavily oiled mussels on Beaches #1, #2, #3, 85%+ closed (dies).

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

Beach 1, patches of oiled Balanus on west end; Beach 3, patches of oiled Balanus on south end, few Balanus

Littorina

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

Littorina in fucus band along headland rock - unoiled area.

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

Few Limpets seen, several oiled but healthy

OTHER OBSERVATIONS: White, waxy (soap-like?) particulate in area, tin rocks and floating on water surface.

CLEANUP PRECAUTIONS: Leave Beach #1 as is due to enclosed oil-free pond.

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

BIRDS: 1 Murrelets sp., 1 Pigeon Guillemot; 2 Oystercatchers, 2 Glaucous-winged Gulls, 1 Kingfisher

GENERAL OBSERVATIONS: _____

(version of 4/29/89)

CULTURAL RESOURCE EVALUATION

Date 5/18/89 Location Perry Island Site

Location Prefix PR Segment # PR-2 Length 675m

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 with some mounds

Width of beach zone surveyed 2-5 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 steep, heavily cobbled beach

Fresh Water Sources none

Sea Exposure open to southeast

Access/Safety rocks in front of beach makes access difficult

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 # CW28 Frames 2, 3

B/W Roll # Frames

Observer(s) C. Wilson

Time survey started 0710 Time survey ended 0825

Cultural resource considerations/restraints:

If heretofore undiscovered cultural resources are
uncovered during cleanup contact Eppan
archaeologist, C. Mohrby immediately



PERRY ISLAND SOUTHEAST BLOCK

1386

1092

870

1298

(version 5/02/89)

SHORELINE CLEANUP PROGRAM

DATE 5/20/89

SHORELINE SEGMENT PR-3

LOCATION: (see enclosed map) PERRY ISLAND

ADEC NO. _____ SHORELINE ASSESSMENT DATE: 5/18/89

Recommended Cleanup Activity(ies):

- Pitch forks/shovels to pick up oiled algae.
- Saws to cut up branches, tree trunk.
- High pressure, hot water flushing on south bank of cove mouth.
- Low pressure, hot water flushing on beach at north bank of cove mouth.

Priorities Considerations:

Ecological Constraints: Avoid streams or banks of streams unless the Resource

Advisory Team Biologist authorizes cleanup on a site-specific basis.

Attempt to leave fucus hold fasts and mytilus beds as intact as possible.

Fucus cleanup should be consistent with Shoreline Manual.

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: May 21, 1989

EXXON: _____

Date: 5/21/89

FOSC: _____

Date: 5/21/89

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

SHORELINE OIL EVALUATION

Date: 5/18/89 Time: 1100-1300

Observer: C. Dillon

Surveyed From: Foot/Boat/Helio/Plane

Weather: Sun/Cloud/Rain/Snow/

LOCATION

LOCATION Perry Island

SEGMENT NUMBER PR-3

LENGTH OF SHORELINE SEGMENT: 2500 m

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

SHORELINE:

→ only just to mouth of cove.

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

Slope: LANG/HANG/VER

Wave Exposure: High/Med/Low

Sediment: B5 / C60 / P30 / G4 / S / M / R5

Drift Debris on Beach: Yes/No Supra/Upper/Mid/Lower Type logs/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 _____ Width of Band: _____

Sporadic: Y/N % of Segment 15

Est. Oil Thickness where > 1cm: _____ cm Est. Oil Penetration: < 8 cm

Pooled Oil: 0 % "Free" Oil: 0 % Coated: H / M10 / L5

Fresh 10 % Mousse 5 % Tar Formation: _____

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

Comments:

only at head of cove

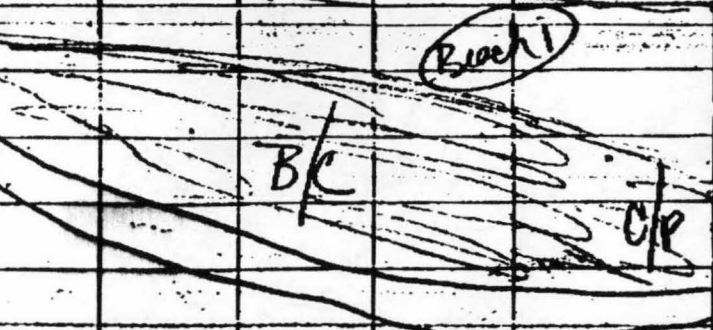
See diagram for details. Segment consists of a deep cove with continuous beaches. Most of segment is clean except moderate coating at east and west banks of the mouth and a lot of oiled debris ~~at~~ the beach at the head of the cove. Debris at head of cove which is oiled includes some small trash, a lot of grass and algae and a lot of branches and small tree trunks.

1100 5/18 + PR-3

1/95

⑤

Submerged



Light - clean
B/C/P

Foot survey

L-S ITZ

logs
algae
trash
oiled
chain saws
pitch fork

Beach 2

light - med coating L-M ITZ
med-heavy w/ some fine w/d mass
on M ITZ in bands
no peal / no pooled oil

Foot survey

Cove w/ beach all along shore line
access: boat, float plane, helo, small barge
low wave exposure. [↑] maybe

Light to clean
B/Cobble / Pebble beaches

Beach 3

at headland B/C/P $\leq 8cm$

Coating L-M on M-U ITZ (clean along S ITZ)
Beach 3 is end of PR-3
cont'd pg 9

ECOLOGICAL EVALUATION

LOCATION: Perry Island SITE: PR-3 OBSERVER: MEYER

LOCATION PREFIX: PR SEG. NO.: 3 LENGTH: 2500 (M)

DATE: 05 / 18 / 89 TIME (HMM): 1100 TIDE HT.: _____ (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 on south side of cave generally oil free + healthy, little fucus on north side.

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

Occasional oiling of mytilus, most closed (alive).

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

Occasional oiling of Balanus.

Littorina

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

Abundant littorina on rock faces with barnacles and fucus.

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

OTHER OBSERVATIONS: Modestly
Heavy hoisted line of debris at head of cave - collection of debris
by hand, post substrate.

CLEANUP PRECAUTIONS:

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

BIRDS: 1 Eagle, 1 Raven, Arctic Tern

GENERAL OBSERVATIONS:

(version of 4/29/89)

CULTURAL RESOURCE EVALUATION

Date 5/18/89 Location Perry Island Site

Location Prefix PR- Segment # PR-3 Length 2500

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 & no stand

Width of beach zone surveyed 2-10 m Tree fringe surveyed 10m

Cultural resources observed in beach zone (AHRS code) None

Cultural resources observed in tree fringe (AHRS code) EYE

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

Shore Profile bedrock beach with large boulders

Fresh Water Sources two streams - one near EYE

Sea Exposure protected

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 # C478 Frames 4, 9

B/W Roll # Frames

Observer(s) C. Wilson

Time survey started 0930 Time survey ended 1100

Cultural resource considerations/restraints:

If boulders uncovered cultural material is
uncovered during cleanup notify Egan. unclassified
immediately



PERRY ISLAND SOUTHEAST BLOCK

INSPECTION # 1DATE 6/13/89

SEGMENT INSPECTION RECORD

Shoreline Treatment Process(es) Completed for this Segment

☐ Hot water wash	☐ Mechanical
☐ Warm water wash	☐ Non-mechanical
☐ Water deluge	☒ Other <u>No Cleaning</u>

Exxon

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

Comments No Cleaning Required

Signature Peter A. Allen Date: 6/13/89 Time: _____

Printed Name Peter A. Allen

Existing Shoreline Condition As Visually Evaluated by ADEC and USCG

Surface Oil

☐ Heavily oiled
☐ Medium oiled
☐ Lightly oiled
☒ Very lightly oiled
☐ No oil

Subsurface Oil

☐ Heavily oiled
☐ Medium oiled
☐ Lightly oiled
☒ Very lightly oiled
☒ No oil

☐ No surface oil and no subsurface oil

Block checked by Exxon, not USCG or ADEC

Reassessment

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

ADEC rep

Comments Recommend assessment in future to ensure floating oil has not contaminated further

Signature Denny Timmons Date: 6/16/89 Time: 2010

Printed Name DENNY TIMMONS, ENV. ENGR, ADEC

FOSC rep

MOBILIZATION NOT REQUIRED @ THIS TIME
~~Demobilization approved/disapproved~~ ☒

Comments DUE TO VERY LITTLE AMOUNTS OF OIL - MOBILIZATION NOT REQUIRED @ THIS TIME.

Signature Thomas D. Jackson Date: 6/16/89 Time: 2010

Printed Name THOMAS D. JACKSON, LT, USCG

EXXON VALDEZ

SHORELINE TREATMENT APPROVAL

SHORELINE SEGMENT NUMBER PR 3

SHORELINE SEGMENT NAME PERRY ISLAND

SUBMITTED FOR APPROVAL 5/29 89

COMMENTS:

MONITOR (3-5) DAYS AND PACK RE-OILED AREAS WITH SORBENT MATERIAL

James J. Flute
Signature of EXXON rep

ADEC comments on the condition of this shoreline segment and action recommendation.

ADEC Rep Bob Cannone accompanied the Survey Team of PR-3, NO Objections.

Signature of ADEC rep

Coast Guard Comments and Action.

X Completed removal of gross contamination to the extent that the oil will not migrate. Site will require reassessment at a later date to determine future treatment.

____ The majority of surface oil contamination has been removed. The site will require reassessment at a later date to determine future treatment.

____ All contamination has been removed. No further treatment required unless re-oiled.

* ReOiling WAS MINOR AND CONSISTANT WITH Phase ONE CRITERIA.

Robert R. Braden LT SCOTI
Signature of Coast Guard rep

XC: ADEC
EXXON
FSOC

PR-02
DATE 8-27-89
SEGMENT
INSPECTION RECORD

Shoreline Treatment Process(es) Completed for this Segment

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

Exxon

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

Comments Treatment of Segment PR-02 is complete. Ready for Demobilization and Deployment To New Segment

Signature Harold A Russell

Date: 8/27/89 Time: 12:35

Printed Name Harold A Russell

Existing Shoreline Condition As Visually Determined by USCG

Surface Oil	Percent	Degree of Oiling
less than 1%	1%	Heavy
less than 2%	2%	Medium
less than 6%	6%	Light
less than 16%	16%	Very Light
less than 65%	65%	None
	100 %	

Heavy/medium in colder gravel areas ☒ 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
less than 1%	1%	Heavy
less than 2%	2%	Medium
less than 6%	6%	Light
less than 25%	25%	Very Light
less than 42%	42%	None
	100 %	

Subsurface Oil ☒ Yes ☐ No
COMMENT BELOW

Reassessment

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

ADEC rep

Comments Some patches of medium oiling have been treated but more severe losses retained due to sheering. Also need to clean up oil-soaked debris + vegetation. Some subsurface

Signature Joseph J. Santora

Date: 8/27/89 Time: 1:35 in 9am

Printed Name Joseph J. Santora

FOSC rep

Demobilization approved/disapproved

Comments Agreed pending removal of boom & oil soaked debris - approved

Signature Paul B. Gausle

Date: 8/27/89 Time: 1:30 for his remediation

Printed Name Paul B. Gausle LT

COPY: EXXON ADEC FOSC ISCC

(version 5/13/89)

5/28

SHORELINE PRE-CLEANUP ASSESSMENT BLOCK REPORT

Location (see enclosed map): PERRY ISLAND - EAST BLOCK

Includes Shoreline Segments: PR-4, PR-5, PR-6, PR-7, PR-8, PR-9
PR-10, PR-11

Submitted :

DA Lyman
(for Exxon)

Date:

5/26/89

ISCC ^{Recommendation} Approval:

Jaqueline Melius

Date:

5/28/89

FOSC Approval:

David Zampieri

Date:

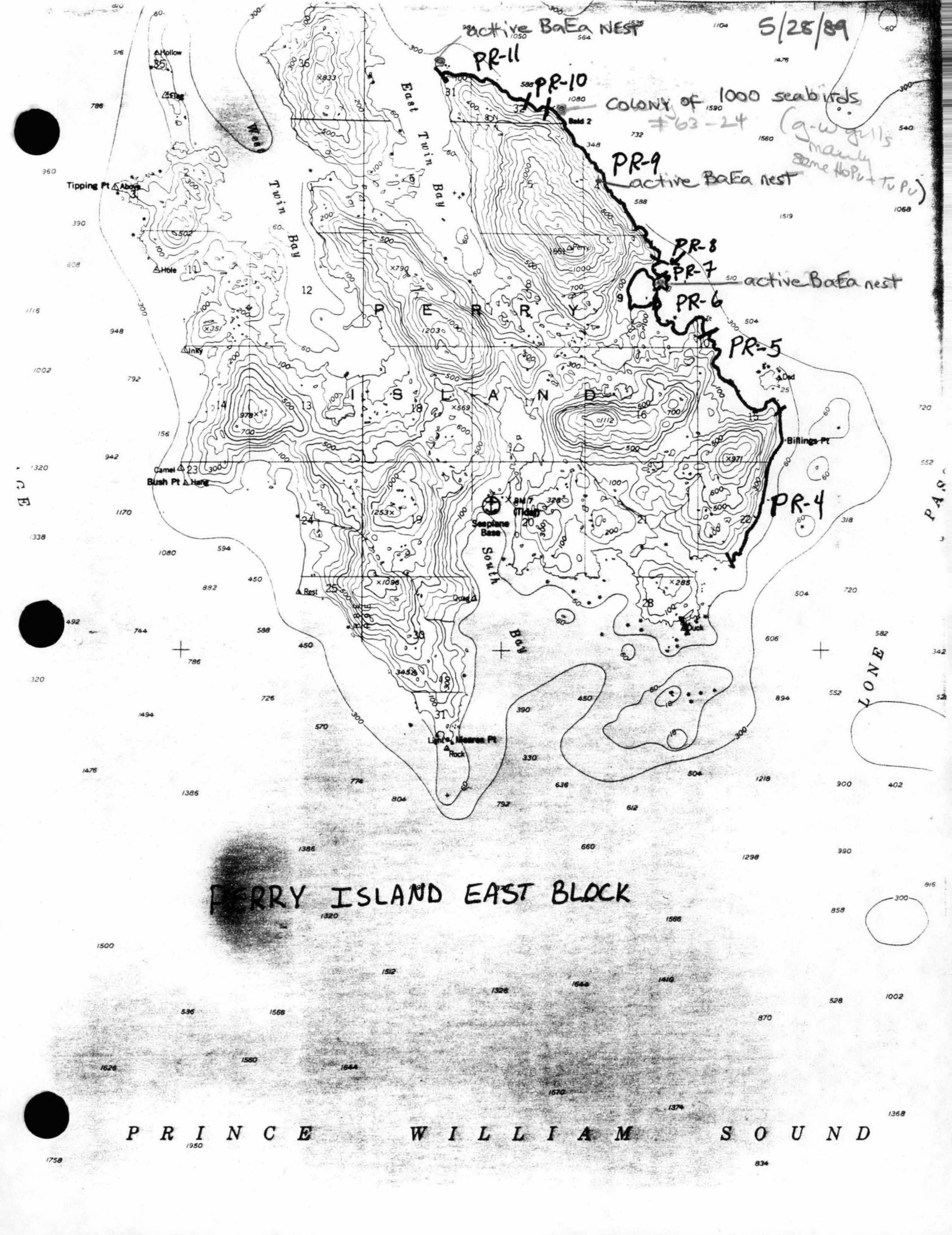
5/28/89

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



PERRY ISLAND EAST BLOCK

PRINCE WILLIAM SOUND

(version 4/29/89)

SHORELINE CLEANUP PROGRAM

DATE 5/24/89

SHORELINE SEGMENT PR-4

LOCATION: (see enclosed map) Perry Island - Southeast

ADEC NO. _____ SHORELINE ASSESSMENT DATE: 5/18/89

Recommended Cleanup Activity(ies):

Recommend no cleanup.

Priorities Considerations:

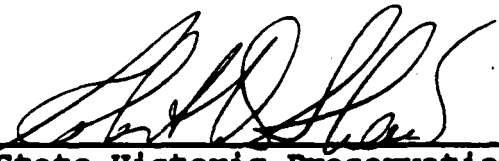
None.

Ecological Constraints (from site survey):

Cleanup of light oil could severely damage otherwise healthy fucus.

Archeological Constraints (from site survey):

No constraints necessary because no cleanup is recommended. If cleanup activities occur constraints should be reconsidered.

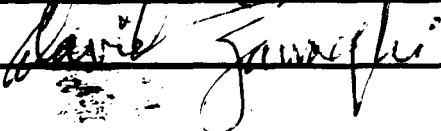


State Historic Preservation Officer *

Date: May 25, 1989

EXXON: 

Date: 5/8/89

FOSC: 

Date: 5/21/89

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

Date: 5/18/89 Time: 1600-1615

Observer: C. DILLON

Surveyed From: Foot/Boat/Helio/Plane

Weather: Sun/Cloud/Rain/Snow/Fog

LOCATION

LOCATION PERRY ISLAND

SEGMENT NUMBER PR-4

LENGTH OF SHORELINE SEGMENT: 3200 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 20% / P 10% / G ___% / S ___% / M ___% / R 50%

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

OIL

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

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

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

Sporadic: Y/N % of Segment 10

Est. Oil Thickness where > 1cm: 0 cm Est. Oil Penetration: 0 cm

Pooled Oil: 0% "Free" Oil: 0% Coated: H ___% / M ___% / L 10% (90% clear)

Fresh (Stained) 10% Mousse _____ Tar Formation: _____

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

Comments:

Segment consists of vertical cliff rocks and beach areas along a straight and rocky shoreline. The majority of the segment is unoiled. Some small areas are stained by a 1 meter (or less) wide band of oil but this oil band is very sporadic and not at all extensive or continuous anywhere. Oil band is a light coating only.

ECOLOGICAL EVALUATION

LOCATION: PERRY ISLAND SITE: PR-4 OBSERVER: MEYER
LOCATION PREFIX: PR SEG. NO.: 4 LENGTH: 3200 (M)
DATE: 05/18/89 TIME (HHMM): 1600 TIDE HT.: _____ (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 generally continuous in medium-low tidal zone and unoiled - no cleanup recommended, thus no potential for damage to Fucus.

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

Occasional balanus at high tide zone oiled

Littorina

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

Littorina abundant in patches in Fucus on boulders/rocks below oiled high tide zone.

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

No limpets seen, majority of segment covered in large boat.

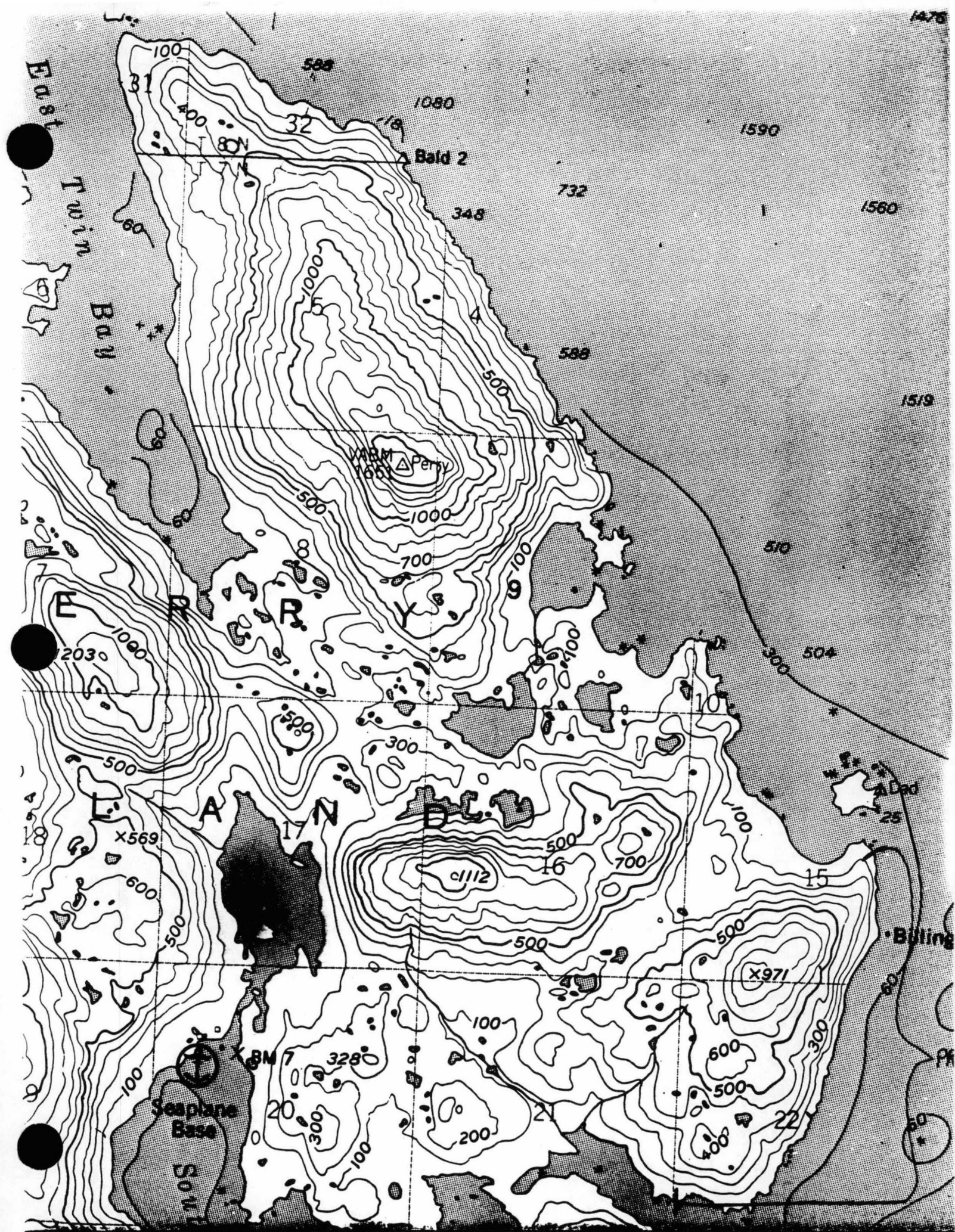
OTHER OBSERVATIONS: 95% of segment surveyed by large boat, oiling was sporadic.
along high tide mark on vertical rock. ^{only} One beach walked had light oil present, no biota in oiled area except for patches of oiled fucus.

CLEANUP PRECAUTIONS: No cleanup recommended

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

BIRDS: 2 Murrelet sp., 1 Raven, 2 Glaucous-winged gulls, 3 pigeon guillemot,

GENERAL OBSERVATIONS: _____



(version of 4/25/89)

CULTURAL RESOURCE EVALUATION FOR OILED SHORELINE

Date 5/19/89 Location Perry Island Site _____

Location Prefix PR Segment # PR-4 Length 2100 3200

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 mostly clear

Width of beach zone surveyed 0-2m Tree fringe surveyed 0-10

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 steep, bouldered beach and sheer walls

Fresh Water Sources none

Sea Exposure open to southeast

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 # _____ Frames _____

Observer(s) C. Nelson

Time survey started 1600 Time survey ended 1635

Cultural resource considerations/restraints:

If heretofore undiscovered cultural resources are
uncovered during cleanup contact Exxon archaeologist,
C. Mobley, immediately

no cleanup
recommended
on cover sheet
PR

(version 4/29/89)

SHORELINE CLEANUP PROGRAM

DATE 5/24/89

SHORELINE SEGMENT PR-5

LOCATION: (see enclosed map) Perry Island - East shore and

"DAD: Island (Dad is a benchmark designation).

ADEC NO. _____ SHORELINE ASSESSMENT DATE: 5/18/89

Recommended Cleanup Activity(ies): Vacuum or scoop up pooled oil on beach #2. Collect oiled fucus (beaches 1 & 4). Hot (up to 140 F) water, pressure flushing on boulders and cobbles. Hot water, low pressure flushing on sand areas of island. Use cold water dilution near healthy muscle beds (beach #7). Protect mid and lower intertidal zone from oiling. Avoid stream on beach #5.

Priorities Considerations:

Class 2: heavy oil.

Class A: resources present.

Ecological Constraints (from site survey): Restrict cleanup activity to mid-high tide to avoid oiling of biota in mid-low tide zone. Avoid as much as possible the patchy mussel beds at lower tide line. Use cold water flooding with hot pressure on beach #7, a second hose of cold below cleanup area to cool hot water prior to contact with extensive low-tide mussel beds may be appropriate. On beach #7 protection of the mussel beds should be a priority. REFER TO THE ATTACHED GUIDE ON FUCUS REMOVAL.

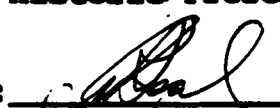
Archeological Constraints (from site survey):

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.

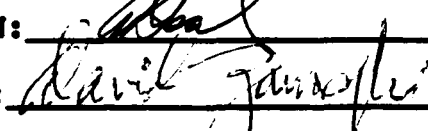


State Historic Preservation Officer *

Date: May 25, 1989

EXXON: 

Date: May 28 / 89

FOSC: 

Date: 5/28/89

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

Date: 5/18/89 Time: 1615-1945

Observer: C. J. LLOYN

Surveyed From: Foot/Boat/Helio/Plane

Weather: Sun/Cloud/Rain/Snow/Fog

LOCATION

LOCATION PERRY ISLAND

SEGMENT NUMBER PR-5

LENGTH OF SHORELINE SEGMENT: 2700 m (includes offshore Island)

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

SHORELINE:

↳ maybe

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 _____ 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 of 7 beaches and one side of an island. Conditions are somewhat variable from throughout the segment so each section has been evaluated on a separate form. Diagrams of each beach are attached for detail.

Date: 5/18/89 Time: 1615-1645

Observer: C. Dillon

Surveyed From: Foot/Boat/Helio/Plane

Weather: Sun/Cloud/Rain/Snow/Fog

LOCATION

LOCATION Perry Island SEGMENT NUMBER PR-5 (Beaches 1 & 2)

LENGTH OF SHORELINE SEGMENT: ~ 50 m (beach 1) ~ 20 m (beach 2)

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 70 % / P % / G % / S % / M % / R 5 %

Drift Debris on Beach: Yes/No Supra/Upper/Mid/Lower Type logs/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 30 Width of Band: 3-5 m

Sporadic: Y/N % of Segment 40

Est. Oil Thickness where > 1cm: 5-6 cm Est. Oil Penetration: 0 cm

Pooled Oil: 5 % "Free" Oil: 45 % Coated: H 5 % / M 10 % / L 75 %

Fresh (Stained) 95 % Mousse 5 % Tar Formation: %

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

Comments:

Beach 1 has heavy band of oil on vertical rocks at north extent of beach and some lightly oiled algae at the Upper ITZ. See Diagram #1 for details
Beach 2 has 2 pools of mousse 5-6 cm deep at South end of beach trapped among the boulders on the Upper ITZ and middle ITZ. See diagram #1 for details.

Date: 5/18/89 Time: 1645-1730

Observer: C. DILLON

Surveyed From: Foot/Boat/Helio/Plane

Weather: Sun/Cloud/Rain/Snow/Fog

LOCATION

LOCATION PERAY Island SEGMENT NUMBER PR-5 (Beaches 3 & 4)

LENGTH OF SHORELINE SEGMENT: 800 m (for both beaches)

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 5 % / C 50 % / P 30 % / G % / S % / M % / R 5 %

Drift Debris on Beach: Yes/No Supra/Upper/Mid/Lower Type logs/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 40 Width of Band: 1-10 m

Sporadic: Y/N % of Segment

Est. Oil Thickness where > 1cm: <4 cm Est. Oil Penetration: 1-4 cm

Pooled Oil: 0 % "Free" Oil: <5 % Coated: H 65 % / M 30 % / L %

Fresh 90 % Mousse 10 % Tar Formation: %

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

Comments:

Beach 3 is clean except for a 15 x 5 ft band of heavy oil on the northern bordering headland rocks.

Beach 4 has one large log with some oil on one side and some lightly oiled algae (at the northern end of the beach). The log can probably be cleaned rather than cut up and disposed of.

See Diagram #2 for details.

Date: 5/18/89 Time: 1730-1800

Observer: C. Dillon

Surveyed From: Foot/Boat/Helio/Plane

Weather: Sun/Cloud/Rain/Snow/Fog

LOCATION

LOCATION Perry Island

SEGMENT NUMBER PL-5 (Island)

LENGTH OF SHORELINE SEGMENT: 150 m (west shore of island only)

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 70% / P 10% / G 10% / S 5% / M 5% / R 5%

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 % of Segment 90 Width of Band: _____ m

Sporadic: Y/N % of Segment _____

Est. Oil Thickness where > 1cm: 4 cm Est. Oil Penetration: 3-10 cm

Pooled Oil: 0% "Free" Oil: 5% Coated: H 0% / M 90% / L 5%

Fresh 60% Mousse 15% Tar Formation: 15%

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

Comments:

See Diagram #2 for details

Date: 5/18/89 Time: 1800-1900

Observer: C. Dillon

Surveyed From: Foot/Boat/Helio/Plane

Weather: Sun/Cloud/Rain/Snow/Fog

LOCATION

LOCATION PERRY Island SEGMENT NUMBER PR-5 (Beaches 5 & 6)

LENGTH OF SHORELINE SEGMENT: 900 m (both beaches and headlands)

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: B 25% / C 55% / P 15% / G ___% / S ___% / M ___% / R 5%

Drift Debris on Beach: Yes/No Supra/Upper/Mid/Lower Type logs/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 90 Width of Band: 2-15 m

Sporadic: Y/N % of Segment _____

Est. Oil Thickness where > 1cm: 4 cm Est. Oil Penetration: < 8 cm - see Comm.

Pooled Oil: 0% "Free" Oil: 5% Coated: H 55% / M 40% / L ___%

Fresh 70% Mousse 30% Tar Formation: ___%

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

Comments:

Beach 5 has an algae and pebble berm on the Upper
ITZ that is about 30 cm deep. Underneath the berm
is a layer of moussed sediment. Recommend not
disturbing this during cleanup since it is
adjacent to the stream.

See Diagram #3 for details

Date: 5/18/89 Time: 1900-1945

Observer: C. Dillon

Surveyed From: Foot/Boat/Helio/Plane

Weather: Sun/Cloud/Rain/Snow/Fog

LOCATION

LOCATION Perry Island SEGMENT NUMBER PR-5 (Beach 7)

LENGTH OF SHORELINE SEGMENT: 50 m (end of segment)

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: B 45 % / C 5 % / P % / G % / S % / M % / R 50 %

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

OIL

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

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

Continuous: Y/N % of Segment 70 Width of Band: 8 m

Sporadic: Y/N % of Segment

Est. Oil Thickness where > 1cm: <4 cm Est. Oil Penetration: 0 cm

Pooled Oil: 0 % "Free" Oil: 5 % Coated: H 60 % / M 20 % / L 15 %

Fresh 80 % Mousse 20 % Tar Formation: %

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

Comments:

Beach 7 is a large boulder pile bordered all around (including along the water's edge) by high angle and vertical rocks. Access is very difficult and may only be feasible at high tide. See Diagram #4 for details.

DIAGRAM 1

PR-4 SE side of Island - clean STR/BK Beach 2: ~20m wide

PR-5 1615 5/19/89 Segment PR-5 E. side of Isl.

partly cloudy/sunny
Beach 1: foot survey
~50 m across: boat, barge, float plane

beach headland VERT/HANG

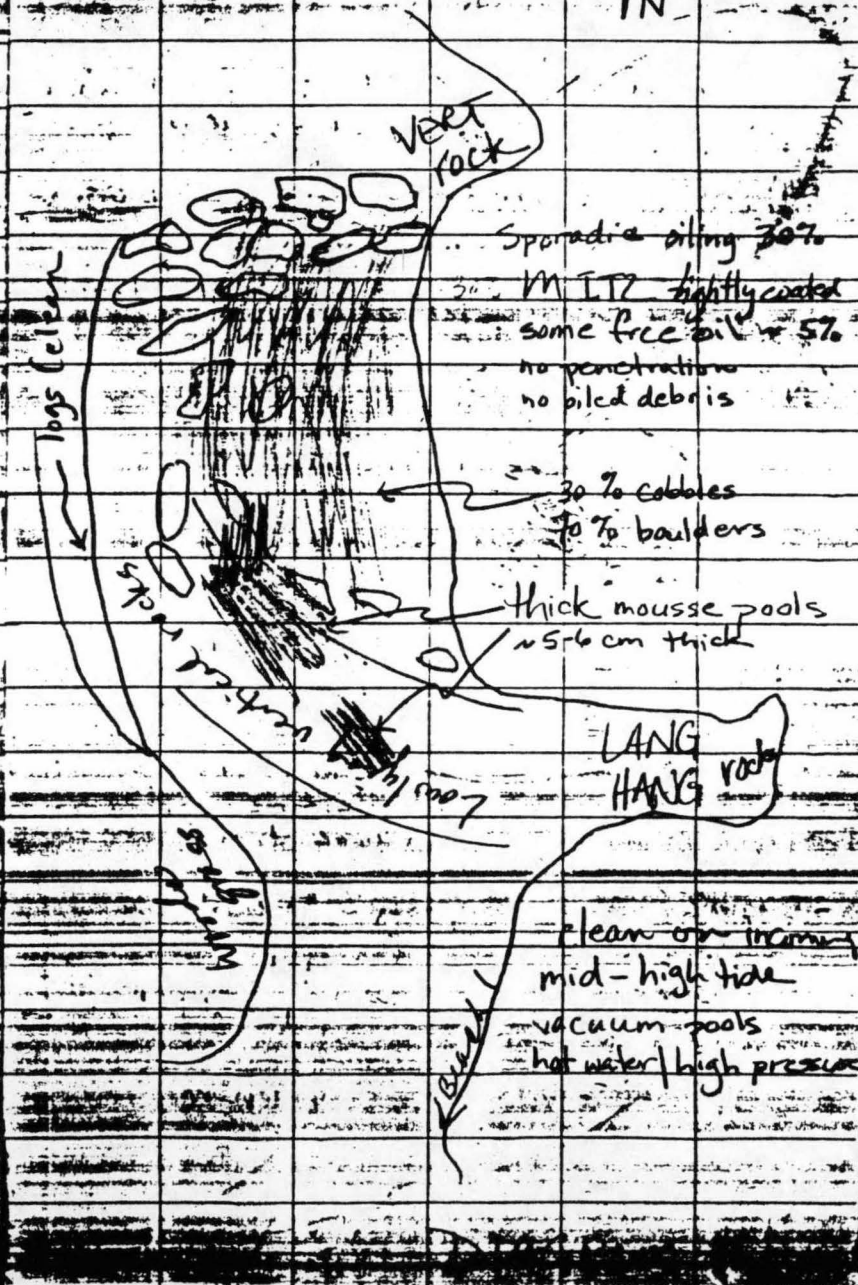
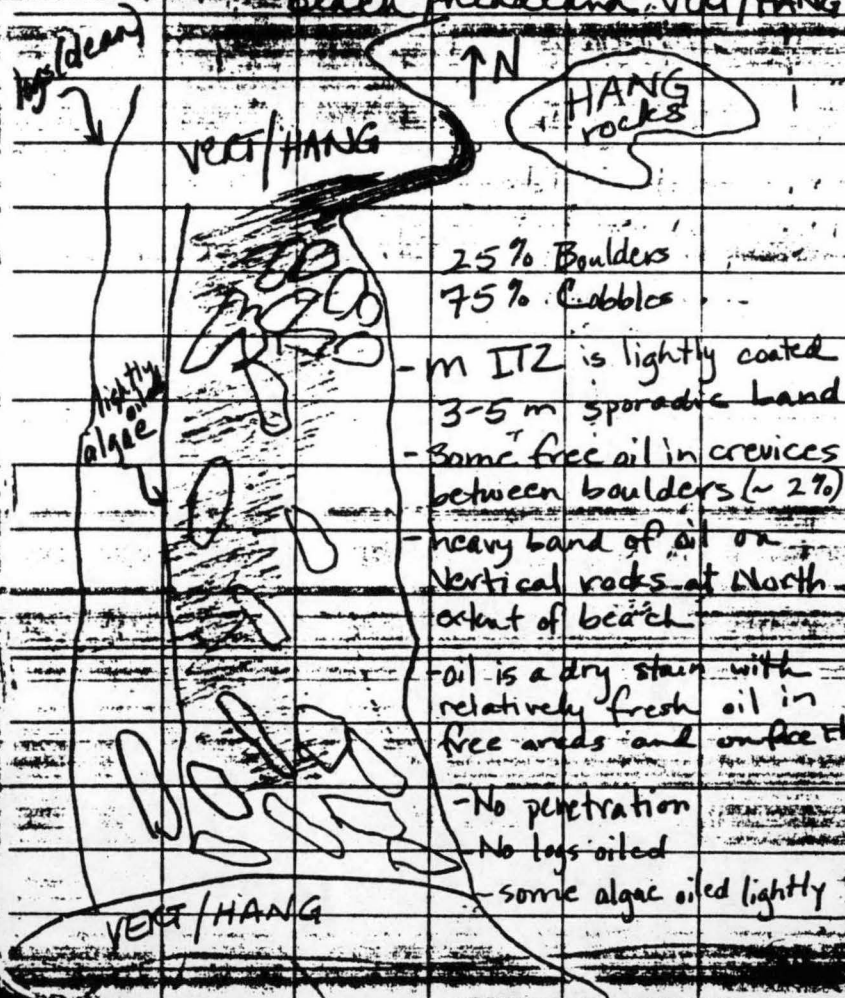
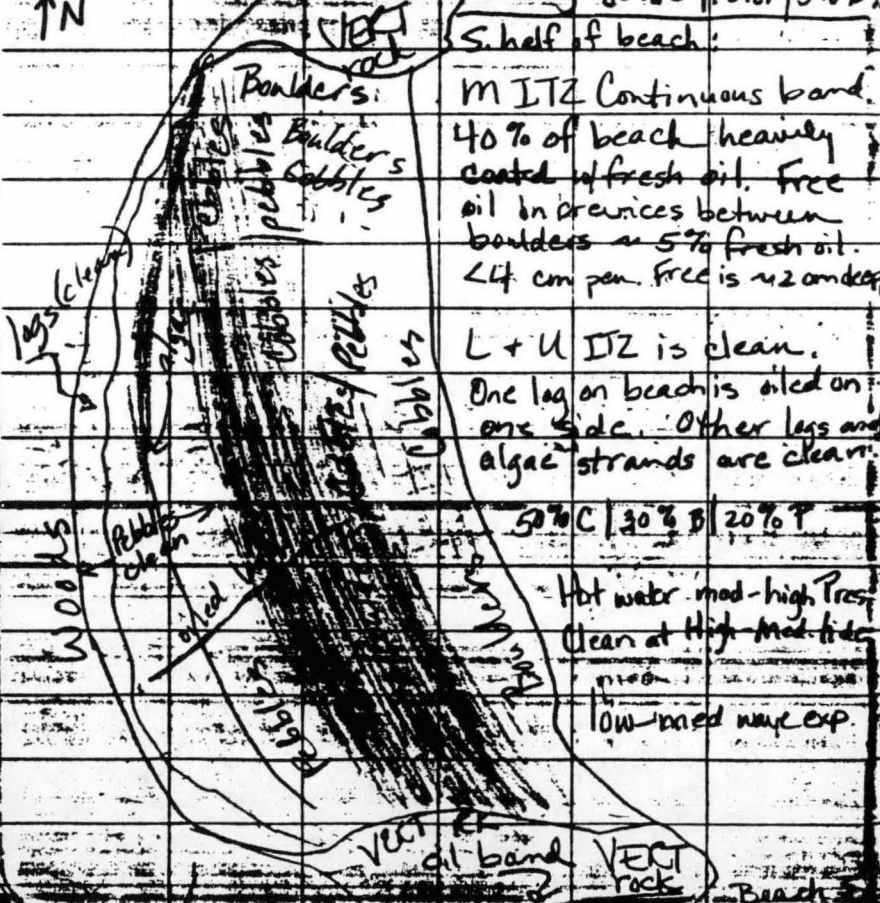
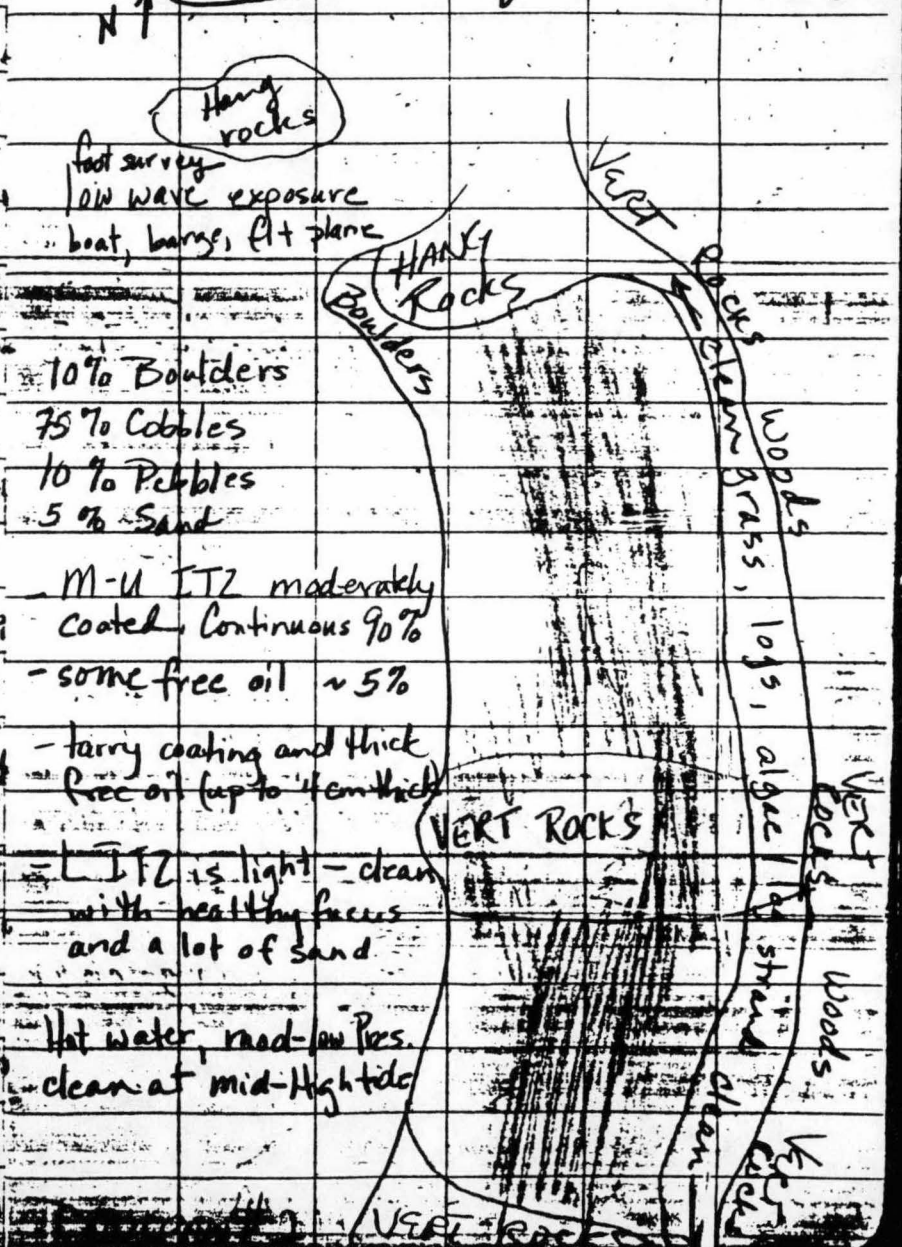


DIAGRAM #2
 (1) Beach 3 further North of beach 2 is clean except for a band of heavy oil on the vertical headland rock separating it from Beach 4. The band is about 4-5 ft wide and 12-15 ft long. There is lim. mussels and snail biota just underneath the oil band.

Beach 4 (ends on 13) N half of beach - MITZ
 is oiled mod-hvy continuous coating 80% C 15% P 5% B



5/18:1730 PR-5 on W. side of Island off (12)
 ISLAND E. side of Cove on Perry Is.



⑬ Beach 5 PR-4

↑N

DIAGRAM #3

Beach 6

↑N

⑭

foot survey
boat/helofloat/berge access
low-med wave exp.

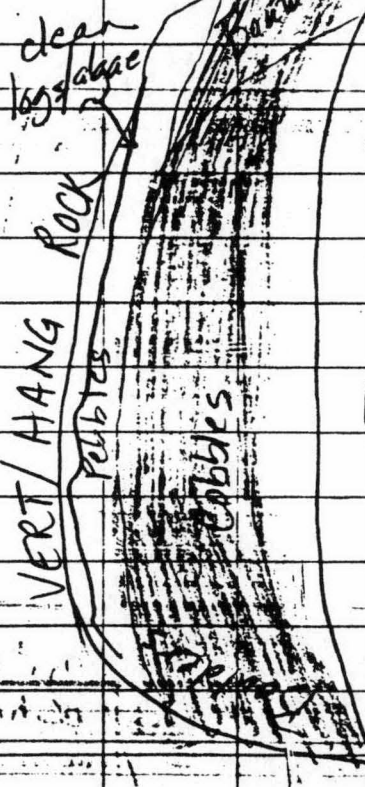
VERT
HANG



U-Supra ITZ
has pebbles that are
clean on surface
up to 730cm
deep but oiled
pebbles underneath.
Stream area
is clean

M-U ITZ has
continuous band of
heavy coated fresh +
mouse with areas
of free oil between
boulders ~ 1cm deep
60% beach oiling
70% Fresh/25% mouse
5% free oil
40% B/50% C/10% P

VERTICAL FACE ROCK
black band 2m wide



M-U ITZ mod-heavy
coating Continuous 100%
of beach 10m wide
Some algae strands on
M ITZ

L ITZ is light-clean

low-med wave exp
helofloat/float plane
foot survey

80% C/10% B/10% P

DIAGRAM #3

(15) Beach 7 (end of Segment)

DIAGRAM #7

foot survey access: boat / At pin / barge
low wave exp.

↑ N

HANG RX

Vertical
rock

muscle beds in crevice

large
amount
of fallen
trees
(clams)

algae
beds

heavy coating

Boat Idler
(some cobble)

heavy coating

Vert
rock

Vert
rock

60% heavy coating w/ red oil 15%

↑ Woods

heavy coating

Boat Idler

heavy coating

muscle beds

light oil
coating
on m II 2

Clear only at high + mid tides

Hot water w/ cold filtration to protect muscles
High Pressure flushing

Vertical vt

ECOLOGICAL EVALUATION

LOCATION: PERRY ISLAND SITE: PR-5 OBSERVER: MEYER
 LOCATION PREFIX: PR SEG. NO.: 45 LENGTH: 2700 (M)
 DATE: 05/18/89 TIME (HHMM): 1600 TIDE HT.: _____ (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 in oiled zone retaining mousse, healthy in lower tidal zones which generally were free of oiling

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

Mytilus in oiled zone coated on shell but closed (alive); Very dense, large ^{retaining mousse} ~~area~~ ^{patch} on beach #7 below oiled area that are uncoiled (headlands on either side of boulder beach).

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

Grosse naked barnacles on log on Beach #1

Littorina

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

Not present in oiled zone; present in fair numbers in uncoiled *fucus* along rocky outcrops.

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

Not present in oiled zone.

OTHER OBSERVATIONS: ~~Beach~~ Beach #7 has extensive mussel beds on north and south ends of boulder/cobble area which are at low tide line and lower. Beach #5 has stream.

CLEANUP PRECAUTIONS: Avoid stream on Beach #5. Mussel beds on Beach #7 should be avoided by restricting cleanup activity to mid/high tide and using a SECOND cold water flooding ~~hot~~ ^{SEA} hot water cleanup to avoid hot/warm water washing over mussel beds.

MAMMALS: Otter 1 Harbor Seals 2 Sea Lions _____ Whales _____
 other _____

BIRDS: 2 Murrelet sp., 3 Pigeon guillemot, 2 wandering tattlers, 1 raven, 1 eagle, 1 yellowlegs sp.

GENERAL OBSERVATIONS: _____

(version of 4/25/89)

CULTURAL RESOURCE EVALUATION FOR OILED SHORELINE

Date 5/19/89 Location Perry Island Site _____

Location Prefix PR Segment # PR-5 Length 1700

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 lightly oiled

Width of beach zone surveyed 2-10 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 steep, cobbled and bouldered beachers with

Fresh Water Sources two streams

Sea Exposure open to southwest

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 _____

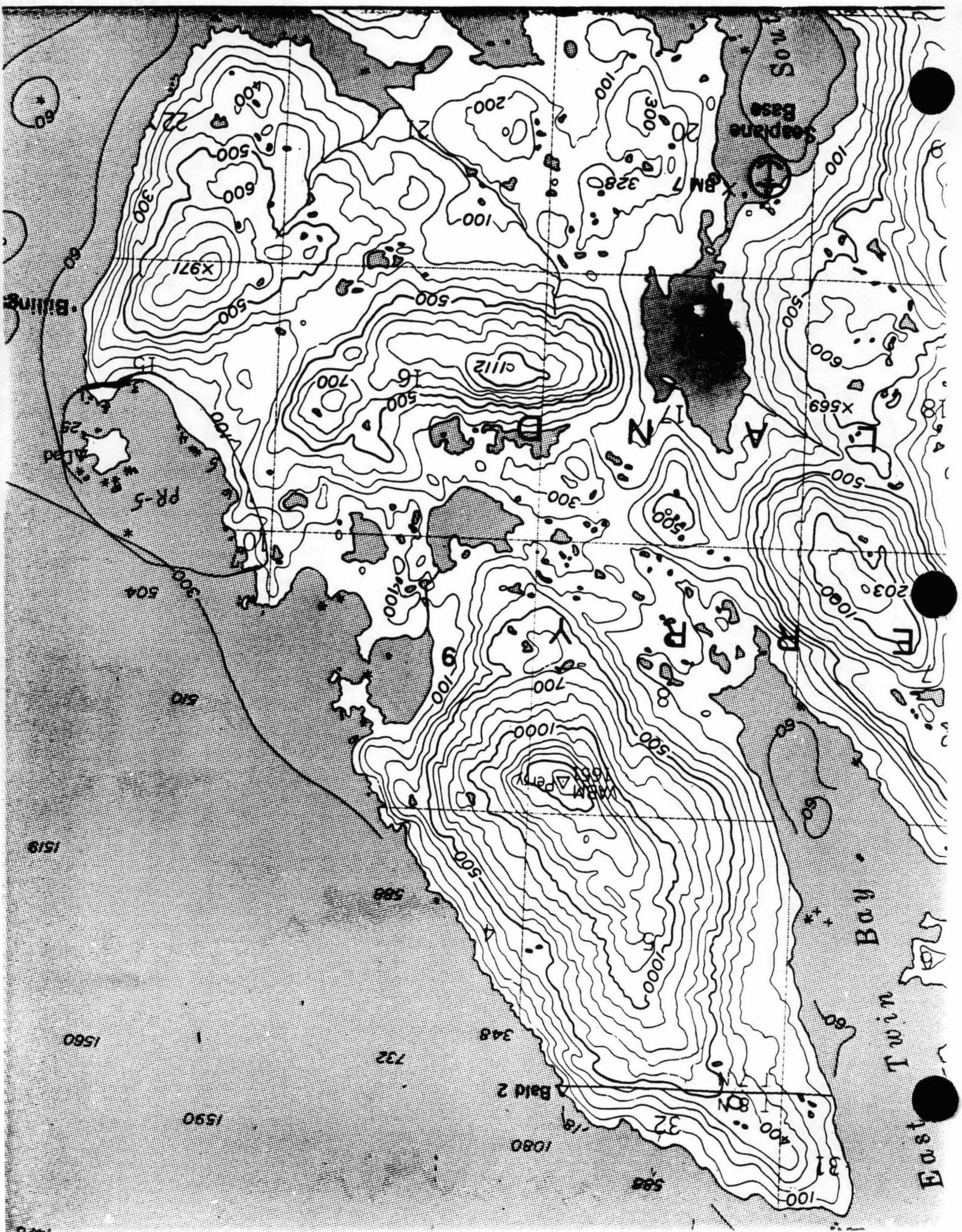
B/W Roll # _____ Frames _____

Observer(s) C. Gibson

Time survey started 11:15 Time survey ended 2000

Cultural resource considerations/restraints:

If boulder uncovered cultural materials are
uncovered during cleanup notify Exxon
archaeologist, C. Hobbs



(version 4/29/89)

SHORELINE CLEANUP PROGRAM

DATE 5/24/89

SHORELINE SEGMENT PR-6

LOCATION: (see enclosed map) Perry Island - East side PR-6
includes two beaches located south of a large lagoon

ADEC NO. _____ SHORELINE ASSESSMENT DATE: 5/19/89

Recommended Cleanup Activity(ies): Wave action is cleaning the light coating of oil which occurs sporadically on this beach and no cleanup activities are therefore recommended on beach #1. Beach #2 requires cleanup, particularly on the north end. Medium to high pressure, hot water (up to 140 F) will likely be required to remove tar deposits.

Priorities Considerations:

Class 4: low oil.

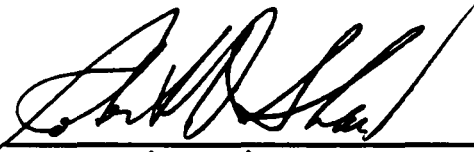
Class A: resources present.

Ecological Constraints (from site survey):

Protect lower intertidal zone during cleanup. Preferably wash when tide level is above that 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.

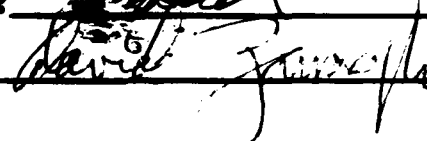


State Historic Preservation Officer *

Date: May 25, 1989

EXXON: 

Date: May 28 / 89

FISC: 

Date: 5/28/89

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

SHORELINE OIL EVALUATION

111 WILCOX ST.
R. Reardon
M. BOZEMAN

Date: MAY 19 Time: 17:00

Observer: M. BOZEMAN

Surveyed From: Foot/Boat/Helio/Plane

Weather: Sun/Cloud/Rain/Snow/Fog

LOCATION

LOCATION PERRY ISLAND

SEGMENT NUMBER PR 6 - Beach 1

LENGTH OF SHORELINE SEGMENT: _____ m

Beach 1 = 350 m
Total Segment = 1300 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: BSD / CSD / P___ / G___ / S___ / M___ / R___

Drift Debris on Beach: Yes/No

Supra/Upper/Mid/Lower Type log s

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 SD - narrow band 1-2 m in relief

Est. Oil Thickness where > 1cm: NA cm Est. Oil Penetration: 5-10 cm

Pooled Oil: 0 % "Free" Oil: 0 % Coated: H___ / M___ / L99 %

Fresh 0 % Mousse 0 % Tar Formation: <1 %

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

Comments:

South half of beach has only sporadic oil cover, on north half - ~~oil~~ oil is generally only found on the protected or underside of the cobbles indicating substantial cleaning has occurred. Manual clean-up is not warranted at this site.

Date: May 19/89 Time: 17:30 hrsObserver: R. ReamerSurveyed From: Foot/Boat/Helio/PlaneWeather: Sun/Cloud/Rain/Snow/Fog**LOCATION**LOCATION Perry IslandSEGMENT NUMBER PR 6 - Beach 2

LENGTH OF SHORELINE SEGMENT: _____ m

ACCESS: Foot/Vehicle/Boat/Barge/Helio/Float Plane{ Beach 2 = 400m
Total Segment = 1300m**SHORELINE:**Shoreline Type: SPI/BEA/COV/HLD/STRTSlope: LANG/HANG/VERWave Exposure: High/Med/LowSediment: B 25 / C 25 / P 25 / G / S / M / R 10Drift Debris on Beach: Yes/NoSupra/Upper/Mid/Lower Type LOGS**OIL**Degree of Oiling: Heavy/Moderate/Light/No Oil/UnobservedArea of Beach Impact: SU / SP / H / M / LContinuous: (Y/N) % of Segment 75Width of Band: 6 to 10 mSporadic: (Y/N) % of Segment _____Est. Oil Thickness where > 1cm: NA cm Est. Oil Penetration: 5 to 10 cmPooled Oil: 0 % "Free" Oil: 0 % Coated: H 0 / M 10 / L 20Fresh 0 % Mousse 0 % Tar Formation: 5 %Drift Debris Oiled? Yes/No Supra/Upper/Mid/Lower Amount: H/M/L/**Comments:**pebble upper beachsee map overSouth 1/2 of beach is boulders - North half iscobbles. Wave action has cleaned top and exposedside of most boulders. Lee and underside of bouldershave a light to mod oil coatings. Affected area is6 to 10 m wide. Recommend clean-up of north end ofbeach (low priority) Check south end at time of cleanings toto determine effectiveness of
wave action in further
removing oil. If oil has
persisted, clean south
end of beachon the south end of the beach. Pebble
and cobbles on the north end ok
or completely covered where oil occurs
in areas

LOCATION: Perry Island SITE: Beach #1 OBSERVER: M. Bozeman

LOCATION PREFIX: PR SEG. NO.: 06 LENGTH: 350 (M)

DATE: 5/19/89 TIME (HHMM): 1600 TIDE HT.: _____ (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

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

OTHER OBSERVATIONS: Most oiling at High to mid intertidal zone. Organisms most abundant on Rocky headland points.

CLEANUP PRECAUTIONS: Stay away from lower intertidal - otherwise OK. No manual cleanup recommended at this time.

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

BIRDS: _____

GENERAL OBSERVATIONS: _____

LOCATION: PERRY Is. SITE: Beach #2 OBSERVER: M. Bozant

LOCATION PREFIX: PR SEG. NO.: 04 LENGTH: 400m (M)

DATE: 5, 19, 89 TIME (HHMM): 1730 TIDE HT.: _____ (M)

OILED ZONE: Splash High Medium Low

SUBSTRATUM: Rocks Boulder Cobble Gravel Sand Mud

LIVE BIOTA

↓
TOTAL Segment:
1300m

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: Light to moderate oil at high
portions of beach - well above biota in most cases
North portion of beach more oiled than South.
CLEANUP PRECAUTIONS: STAY Above lower intertidal zone
for cleanup -

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

BIRDS: _____

GENERAL OBSERVATIONS: Small stream enters from west -
limited fish potential. Surrounding Headland
Rocks have light to moderate oiling at High Tide
Level.

LOCATION: Perry Is. SITE: Beach #3 OBSERVER: M. Bottem
LOCATION PREFIX: PR SEG. NO.: 06 LENGTH: _____ (M)
DATE: 5, 19, 89 TIME (HHMM): 2005 TIDE HT.: _____ (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 observed

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

Not observed

OTHER OBSERVATIONS: _____

CLEANUP PRECAUTIONS: Protect LITZ during cleanup.

MAMMALS: Otter _____ Harbor Seals _____ Sea Lions _____ Whales _____

BIRDS: _____

GENERAL OBSERVATIONS: _____

(version of 4/29/89)

CULTURAL RESOURCE EVALUATION

Date 1 PR-6 Location Perry Island Site _____

Location Prefix PR Segment # PR-6 Length 1300

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 sporadic oil, good visibility

Width of beach zone surveyed 30 m Tree fringe surveyed _____

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 high angle beach

Fresh Water Sources one small seep on beach

Sea Exposure exposed to NE

Access/Safety easy access / no safety factors

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) R Reanier

Time survey started 1700 Time survey ended 1720

Cultural resource considerations/restraints:

If heretofore undiscovered cultural materials
are discovered during cleanup, contact
Exxon archeologist C. Mobley immediately.

588

1519

BM Perry
1661

PR-6 light oil

R.

Y

62

81

N

D

c1112

500

700

500

500

X971

600

500

400

lane
se

BM 7

20

328

200

NONE

X285

28

100

ADuck

Billings Pt

504

606

Bd

(version 4/29/89)

SHORELINE CLEANUP PROGRAM

DATE 5/24/89

SHORELINE SEGMENT PR-7

LOCATION: (see enclosed map) Perry Island - small cove on the east side.

ADEC NO. _____ SHORELINE ASSESSMENT DATE: 5/19/89

Recommended Cleanup Activity(ies): Use hot water (up to 140 F) with high pressure on boulder beaches and rocky headlands. Hot water with moderate pressure on cobble beaches containing pockets of sand and pebbles. Use water flooding to carry oil down beach for recovery.

Priorities Considerations:

Class 2-3: moderate/high
Class A: resources present

Ecological Constraints (from site survey): Protect the lower intertidal zone by appropriate means during cleanup. Avoid disturbance of nesting eagles. Protect stream if it is identified in ADF&G anadromous stream catalogue. REFER TO ATTACHED
ACTIVE GUIDE ON BIRD EAGLE ADVISORY.

Archeological Constraints (from site survey):
Access by cleanup personnel prohibited near historic structure just above the high tide line. 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.

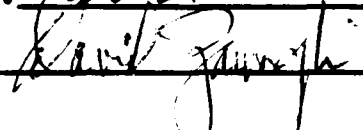


State Historic Preservation Officer *

Date: May 25, 1989

EXXON: 

Date: May 28 / 89

FOSC: 

Date: 5/27/89

* Signature required to satisfy stipulations in Alaska DNR land

SHORELINE OIL EVALUATION

Date: MAY 19 Time: 10:20 hrs → 11:45 hrs Observer: Mr. B. B. B.

Surveyed From: Foot/Boat/Helio/Plane

Weather: Sun/Cloud/Rain/Snow/Fog

LOCATION

LOCATION PERRY ISLAND

SEGMENT NUMBER PR-07

LENGTH OF SHORELINE SEGMENT: 1800 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 50% / C 30% / P 10% / G ___% / S ___% / M ___% / R 10%

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

↳ logs on < 10% of beach

OIL

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

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

Continuous: Y/N % of Segment 99 Width of Band: 3 to 15 m

Sporadic: Y/N % of Segment ___

Est. Oil Thickness where > 1cm: N/A cm Est. Oil Penetration: 5 to 10 cm

Pooled Oil: 0% "Free" Oil: 0% Coated: H 20% / M 55% / L 25%

Fresh 0% Mousse 0% Tar Formation: 1%

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

Comments:

A 2.5 Km wide & sheltered bay with a narrow entrance channel. There is a rock in the middle of the access channel. The south side of the channel is deeper. Consider bringing in equipment at high tide. During a rising tide, oil was observed to being floated off the beach and formed a slick in the bay. Areas of beach down slope of small gravel/boulder bed, steep gradient streams are comparatively clean of oil. We do not have a data back camera and so no photos were taken.

LOCATION: Perry Island SITE: East Side OBSERVER: M. Bozeman
LOCATION PREFIX: PR SEG. NO.: 07 LENGTH: 1800 (M)
DATE: 5/19/89 TIME (HHMM): 10:15 TIDE HT.: _____ (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
Fairly continuous band except along cobbles on west side.

Mytilus (Mussels): Patchy Y/N Contin. Y/N Dense Y/N Sparse Y/N None Y/N
Few patches along rock substrates near mouth

Balanus (Barnacles): Patchy Y/N Contin. Y/N Dense Y/N Sparse Y/N None Y/N
Dense to sparse depending upon location

Littorina

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

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

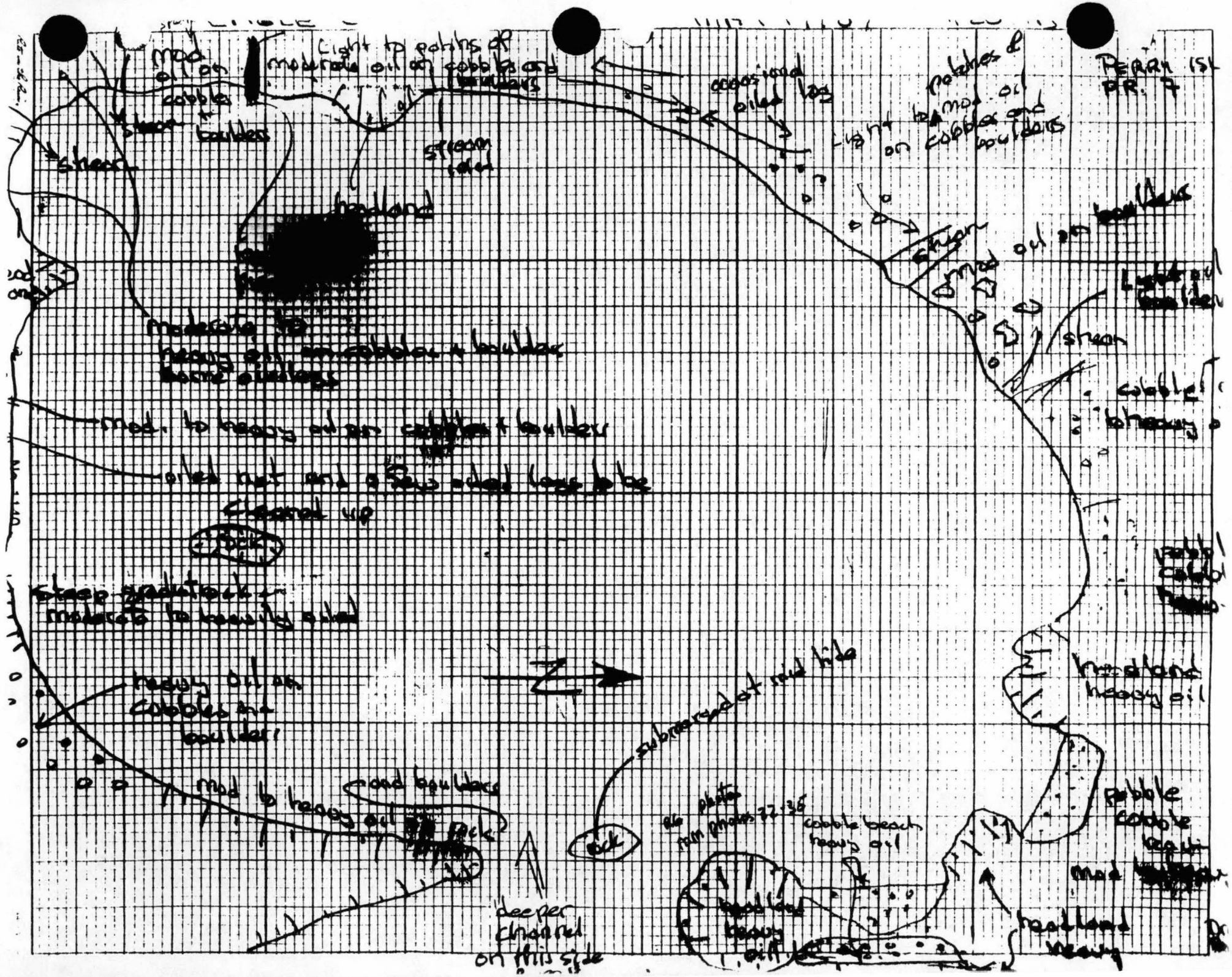
OTHER OBSERVATIONS: Extensive Eel grass beds throughout
most of sub tidal - steep stream drains into SW cove
from lake ~ 0.5 km distant.

CLEANUP PRECAUTIONS: Protect lower intertidal & subtidal div.
Cleanups - Protect stream if it is identified in ADFG
and/or stream catalogue.

MAMMALS: Otter 1 Harbor Seals 1 Sea Lions _____ Whales _____
Other

BIRDS: Pair of nesting Eagles at SE entrance to Bay

GENERAL OBSERVATIONS: Much of intertidal is oiled - lower
intertidal area appears less affected.



(version of 4/29/89)

CULTURAL RESOURCE EVALUATION

Date 5-19-89 Location Perry Island site PR-7

Location Prefix PR Segment # PR-7 Length 1600 m

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 Good visibility, moderate oil

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

Cultural resources observed in beach zone (AHRS code) _____

Cultural resources observed in tree fringe (AHRS code) FXF

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

Shore Profile high angle

Fresh Water Sources Stream enters SW corner of bay

Sea Exposure Sheltered bay

Access/Safety Easy access, avoid rocks in right center of inlet

No safety considerations
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 _____

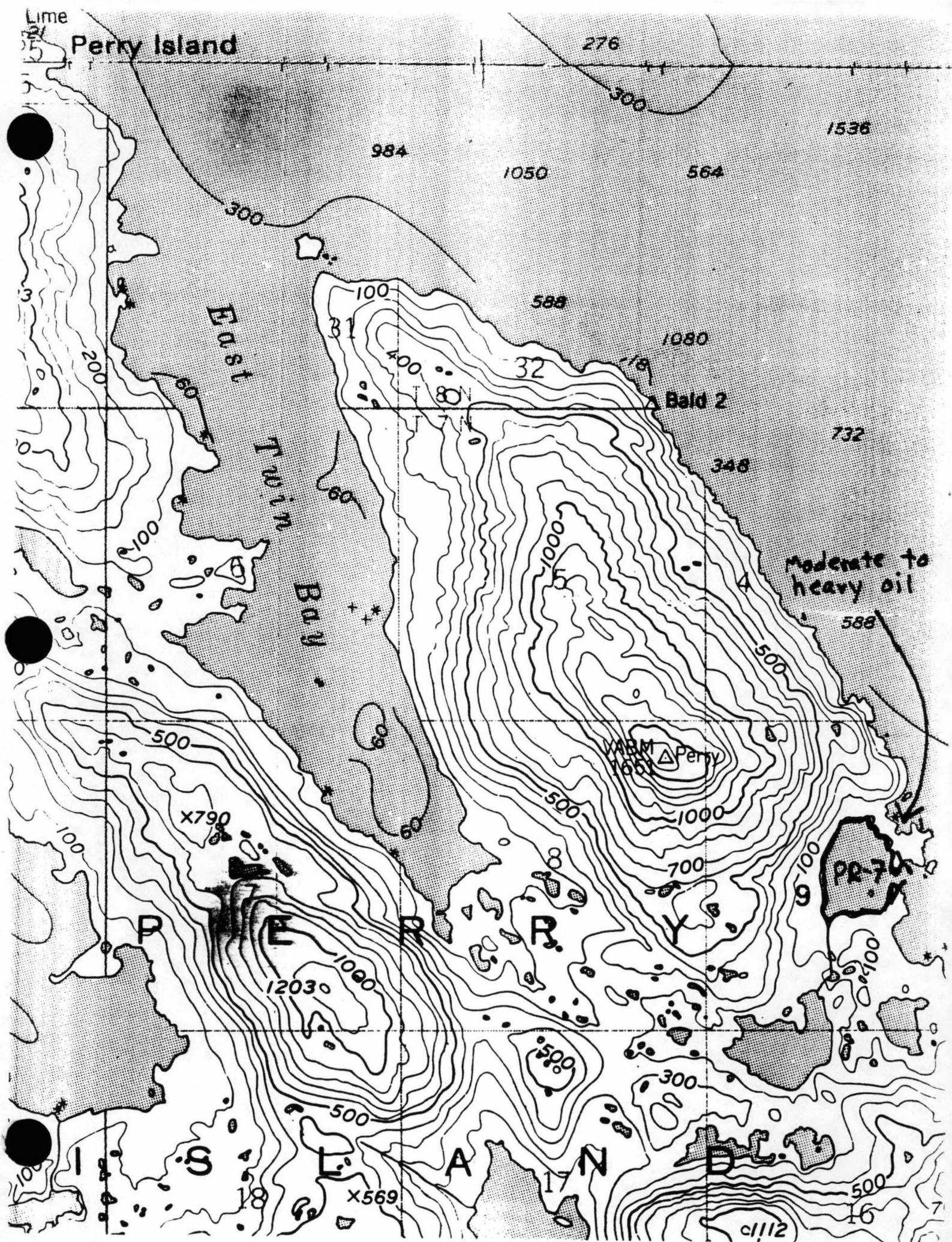
B/W Roll # _____ Frames _____

Observer(s) R. Reanier

Time survey started 1020 Time survey ended 1145

Cultural resource considerations/restraints:

During cleanup activities an Exxon archeologist with a copy of the field notes should cordon off a 5m diameter area around the structure with police barricade tape, surveyor's flagging, or other suitable material. Security personnel will insure that workers are kept away from the cordoned area.



(version 4/29/89)

SHORELINE CLEANUP PROGRAM

DATE 5/24/89

SHORELINE SEGMENT PR-8

LOCATION: (see enclosed map) Perry Island - on the east side

This segment consists of rocky headlands and 3 small beaches located immediately north of a large lagoon.

ADEC NO. _____ SHORELINE ASSESSMENT DATE: 5/19/89

Recommended Cleanup Activity(ies): The 3 moderate to heavily oiled beaches in this segment should be cleaned with hot/moderate to high pressure water (up to 140 F). Clean or remove oiled logs and drift, harvest dead fucus. Evaluate the feasibility of cleaning the headlands with high pressure hot water.

Priorities Considerations:

REFER TO ATTACHED GUIDANCE
ON FUCUS.

Class 2-3: heavy to moderate.

Class A: resources present.

Ecological Constraints (from site survey):

Clean when tide is above mussel beds located in lower intertidal zone or provide sufficient protection to prevent oiling.

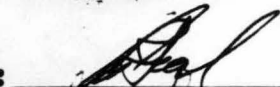
Archeological Constraints (from site survey):

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: May 25, 1989

EXXON: 

Date: May 28 / 89

FOSC: 

Date: 5/28/89

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

SHORELINE OIL EVALUATION

Date: MAY 19 Time: 19:30

Observer: M. Buzza
R. Reanier

Surveyed From: Foot/Boat/Helio/Plane

Weather: Sun/Cloud/Rain/Snow/Fog

LOCATION

LOCATION Perry Island

SEGMENT NUMBER PR 3-Beach 1

LENGTH OF SHORELINE SEGMENT: 750 m

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

{ Beach 1 = 20m
Total Segment = 750m

SHORELINE:

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

Slope: LANG/HANG/VER

Wave Exposure: High/Med/Low

Sediment: BS0 % / C25 % / P25 % / G % / S % / M % / R %

Drift Debris on Beach: Yes/No

Supra/Upper/Mid/Lower Type

Logs +
SWISS

OIL

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

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

Continuous: Y/N % of Segment 100 Width of Band: 20-25 m

Sporadic: Y/N % of Segment

Est. Oil Thickness where > 1cm: 14/17 cm Est. Oil Penetration: 710 cm

Pooled Oil: 0 % "Free" Oil: 0 % Coated: H % / M100 % / L %

Fresh 0 % Mousse 10 % Tar Formation: 05 %

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

Comments:

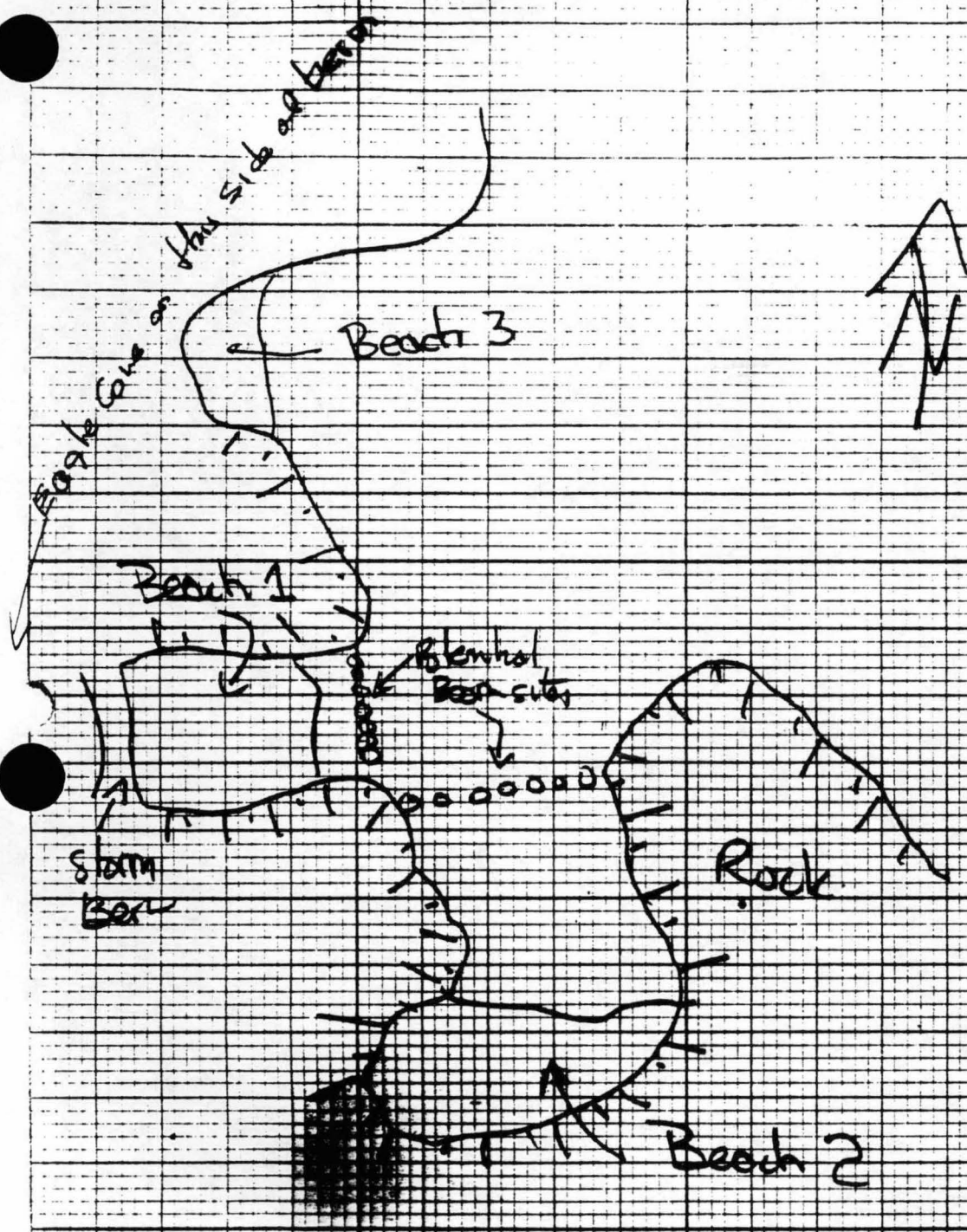
This narrow beach has a rock bluff on either end.
Mid to High - ITZ - is at least moderately oiled. Clean
with hot water when tide is above mussel level at L. ITZ
If work is conducted at lower water level - flood
lower beach in cold water. Remove all oiled debris and
harvest. over fishes

to protect mussel beds.
Evaluate cleaning headlands with high pressure hoses.
Use a boom tied between the headlands to collect the oil

May 1, 1957

FR 3

m. miles



LOCATION: Perry Is. SITE: Beach #1 OBSERVER: M. Bozeman
LOCATION PREFIX: PR SEG. NO.: 08 LENGTH: 20 (M)
DATE: 5/19/89 TIME (HHMM): 1930 TIDE HT.: _____ (M)

OILED ZONE: Splash High Medium Low

SUBSTRATUM: Rocks Boulder Cobble Gravel Sand Mud

TOTAL segment
= 750m

LIVE BIOTA

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

Little on cobbles

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

Numerous along boulders

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

most below mid-intertidal zone

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

OTHER OBSERVATIONS: Moderately oiled beach - Drift
debris heavily oiled (including logs)

CLEANUP PRECAUTIONS: clean when tide is above LITZ
Hand harvest oiled algae & debris.

MAMMALS: Otter 1 Harbor Seals 1 Sea Lions _____ Whales _____

BIRDS: _____

GENERAL OBSERVATIONS: Some Tay and Mousse at
higher elevations of beach.

LOCATION: Perry Is. SITE: Beach 2 OBSERVER: M. Rozema N
LOCATION PREFIX: PR SEG. NO.: 08 LENGTH: 20 (M)
DATE: 5/19/89 TIME (HHMM): 1945 TIDE HT.: _____ (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

NOT ON COBBLES to speak of.

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: organisms only present in LITZ
heavily oiled Fucus along rock headland.

CLEANUP PRECAUTIONS: Clean when water level is above
LITZ

MAMMALS: Otter _____ Harbor Seals _____ Sea Lions _____ Whales _____

BIRDS: _____

GENERAL OBSERVATIONS: _____

(version of 4/29/89)

CULTURAL RESOURCE EVALUATION

Date 15-19-89 Location Perry Island Site _____

Location Prefix PR Segment # PR-8 Length 750 m

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 Moderately oiled / clear visibility

Width of beach zone surveyed 30 m Tree fringe surveyed —

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 high angle

Fresh Water Sources NONE

Sea Exposure exposed to NE

Access/Safety easy access / no safety considerations

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

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

Photos: Color Roll # _____ Frames _____

B/W Roll # _____ Frames _____

Observer(s) R. Reanier

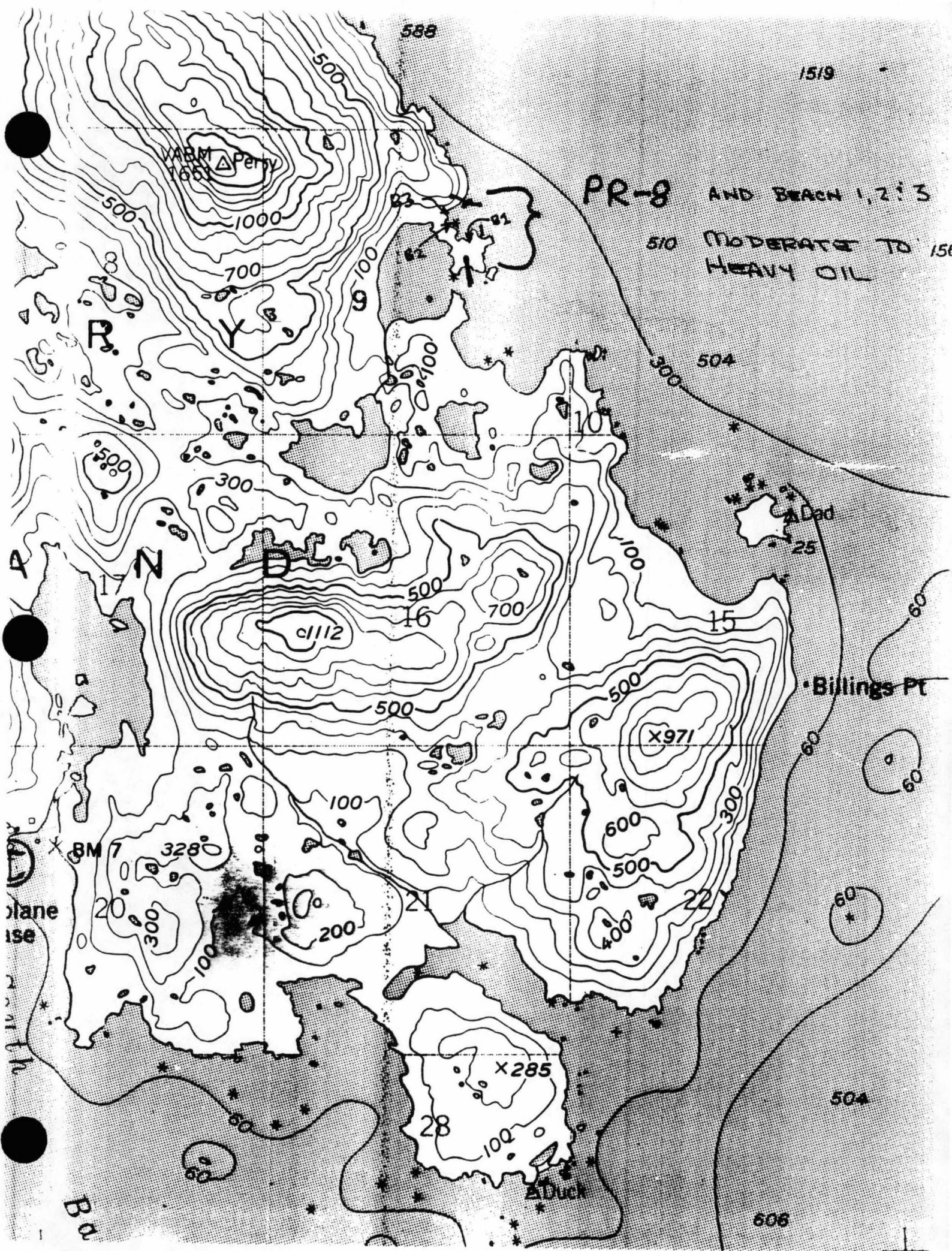
Time survey started 1930 Time survey ended 2000

Cultural resource considerations/restraints:

If heretofore undiscovered cultural materials are
discovered during cleanup, contact Exxon Archeologist
C. Mobley immediately

PR-8 AND BEACH 1, 2, 3

510 MODERATE TO HEAVY OIL



(version 4/29/89)

SHORELINE CLEANUP PROGRAM

DATE 5/24/89

SHORELINE SEGMENT PR-9

LOCATION: (see enclosed map) A Section of Rocky Coast located on the North west side of Perry Island. South of East Twin Bay

ADEC NO. _____ SHORELINE ASSESSMENT DATE: 5/20/89

Recommended Cleanup Activity(ies): A continuous, narrow, light coating of oil occurs on the southern end of this segment. All other areas are oil free. Given the small amount of oil and the high exposure to wave action, no cleanup activities are recommended.

Priorities Considerations:

None. See above.

Ecological Constraints (from site survey):

~~None.~~ ACTIVE BALD EAGLE NEST, REFER TO ATTACHED BALDEAGLE ADVISOR
NOTE PRESENCE OF SEABIRD COLONY WITH ±1000 BIRDS. IF CLEANUP IS RECOMMENDED, NOTE AIRCRAFT RESTRICTIONS IN ATTACHED SHEET.

Archeological Constraints (from site survey):

No constraints necessary because no cleanup is recommended. If cleanup activities occur constraints should be reconsidered.

Bob Shaw
State Historic Preservation Officer *

Date: May 25, 1989

EXXON: [Signature]

Date: May 28/89

FOSC: [Signature]

Date: 5/27/89

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

SHORELINE OIL EVALUATION

Date: MAY 19 Time: 20:00

Observer: R. Reimer

Surveyed From: Foot/Boat/Helio/Plane

Weather: Sun/Cloud/Rain/Snow/Fog

LOCATION

LOCATION Perry Island

SEGMENT NUMBER PR-9

LENGTH OF SHORELINE SEGMENT: 3100 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 1 / C 1 / P 1 / G 1 / S 1 / M 1 / R 100

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 _____ Width of Band: _____ m

Sporadic: Y/N % of Segment 10 % on south end

Est. Oil Thickness where > 1cm: N/A cm Est. Oil Penetration: 0 cm

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

Fresh 0 % Mousse 0 % Tar Formation: 0 %

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

Comments:

A near vertical section of rocky coast. A ~30 cm high band of light oil occurs on the south end of the segment. No oil occurs on the remainder of the section. No clean-up is required

LOCATION: Berry Island SITE: Headland Rocks OBSERVER: M. Bozeman
 LOCATION PREFIX: PR SEG. NO.: 09 LENGTH: 3100 (M)
 DATE: 5, 19, 89 TIME (HHMM): 20:00 TIDE HT.: _____ (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

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

OTHER OBSERVATIONS: Clean to sporadic Lt. oil coating
at High water line.

CLEANUP PRECAUTIONS: _____

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

BIRDS: _____

GENERAL OBSERVATIONS: Vertical headland rocks with
abundant biota.

(version of 4/29/89)

CULTURAL RESOURCE EVALUATION

Date 5-19-89 Location Perry Island Site

Location Prefix PR Segment # PR-9 Length 3100

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 NONE OIL / excellent visibility

Width of beach zone surveyed 0 - ~~200~~ ^{Light oil on Swn 1/3} Tree fringe surveyed —

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 vertical wall

Fresh Water Sources NONE

Sea Exposure Exposed to NE

Access/Safety Access easy / Dangerous vertical wall

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

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

Photos: Color Roll # Frames

B/W Roll # Frames

Observer(s) R. Reanier

Time survey started 2000 Time survey ended 2145

Cultural resource considerations/restraints:

IF heretofore undiscovered cultural materials
are uncovered during cleanup, contact Exxon
archeologist C. Mabley immediately.

Line

21
15

Perry Island

276

300

1536

984

1050

564

300

100

588

1080

East
Twin
Bay

31

400

32

80N

Bald 2

PR-9
light to
732 no oil

348

588

500

500

x790

500

WBM
1001
Perry

700

P

12030

R

R

Y

100

I

S

L

A

N

B

100

x569

500

300

500

c1112

16

70

(version 4/29/89)

SHORELINE CLEANUP PROGRAM

DATE 5/24/89

SHORELINE SEGMENT PR-10

LOCATION: (see enclosed map) Perry Island - North east side
south of east Twin Bay

ADEC NO. _____ SHORELINE ASSESSMENT DATE: 5/19/89

Recommended Cleanup Activity(ies):

High pressure hot water (up to 140 F) may be used on areas where oil is heavily weathered. Sorbants may be used to enhance recovery of oil.

Priorities Considerations:

Class 4: light oil.
Class B: resources absent.

Ecological Constraints (from site survey):

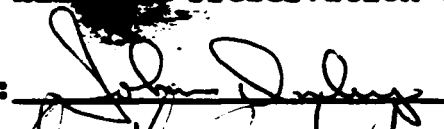
Protect middle and lower intertidal zone by appropriate means to prevent oiling of these clean areas.

Archeological Constraints (from site survey):

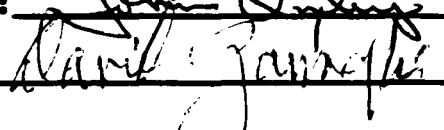
If heretofore undiscovered cultural materials are uncovered during cleanup, contact Exxon's Archeological Field Director and take actions prescribed in the Operational Guidelines for Shoreline Cleanup dated 4/21/89 as amended.


State Historic Preservation Officer *

Date: May 25, 1989

EXXON: 

Date: _____

FOSC: 

Date: 5/24/89

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

SHORELINE OIL EVALUATION

Mile 11.2 J.S.
Marty Zimmerman
Rick Reanier

189
Date: MAY 19 Time: 21:00

Observer: Rick Reanier

Surveyed From: Foot/Boat/Helio/Plane

Weather: Sun/Cloud/Rain/Snow/Fog

LOCATION

LOCATION PERRY ISLAND SEGMENT NUMBER PR 10

LENGTH OF SHORELINE SEGMENT: 300 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 40% / C 25% / P 15% / G % / S % / M % / R 20%

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

Fucus

OIL

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

Area of Beach Impact: SU / SP / H / M / L south end of beach

Continuous: Y/N % of Segment 50 Width of Band: 2 to 6 m

Sporadic: Y/N % of Segment 50 - north end of beach

Est. Oil Thickness where > 1cm: N/A cm Est. Oil Penetration: 0 cm

Pooled Oil: < 1 % "Free" Oil: < 1 % Coated: H 0 % / M 5 % / L 70 %

Fresh 0 % Mousse < 1 % Tar Formation: 25 %

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

Comments:

on this boulder, cobble and pebble beach

Much of oil is in the form of tar. Pools of

tar occur in depressions around rocks

White "Soap-like" powder occurs on beach in recent

deposit of Fucus + other debris (similar to that on South

end of Island). This site would benefit from

being cleaned - However the amount of oil/tar is small compared to other sites located further south. If this site was to be cleaned, high pressure hot water would likely be required in order to remove the oil and tar.

Mike Miles

gravel cobble beach
lighter colored
with
blocks
of for

isolated patches
of small for
deposits

light to medium
brownish
conglomerate
to sand
partly to
the south

Boulder + Cobble Beach

near vertical
bedding
approx. 8 m high

Rock

LOCATION: Perry Is. SITE: _____ OBSERVER: M. Bozeman
 LOCATION PREFIX: PR SEG. NO.: 10 LENGTH: 300 (M)
 DATE: 5/20/89 TIME (HHMM): 2100 TIDE HT.: _____ (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

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

NOT Observed

OTHER OBSERVATIONS: Oil & Patchy Tar (Lt to moderate) in
HITZ - well above most of biota

CLEANUP PRECAUTIONS: clean when Tides are above
LITZ

MAMMALS: Otter 4 Harbor Seals 4 Sea Lions _____ Whales _____

BIRDS: _____

GENERAL OBSERVATIONS: _____

(version of 4/29/89)

CULTURAL RESOURCE EVALUATION

Date 1 5-19-89 Location Perry Island site

Location Prefix PR Segment # PR-10 Length 300

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 / excellent visibility

Width of beach zone surveyed 35 m Tree fringe surveyed

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 high angle cobble and boulder beach

Fresh Water Sources NONE

Sea Exposure exposed to the North

Access/Safety Easy access, no safety considerations

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

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

Photos: Color Roll # Frames

B/W Roll # Frames

Observer(s) R. Reanier

Time survey started 2100 Time survey ended 2130

Cultural resource considerations/restraints:

If heretofore undiscovered cultural material is
uncovered during cleanup contact Exxon
archeologist C. Mcbley immediately

PR-10

LIGHT OIL AND
TAR

East
Twin Bay

Bald 2

BM Perry

Seaplane
Base

Billing



(version 4/29/89)

SHORELINE CLEANUP PROGRAM

DATE 5/25/89

SHORELINE SEGMENT PR-11

LOCATION: (see enclosed map) Perry Island - Northeast end
(including small unnamed island)

ADEC NO. _____ SHORELINE ASSESSMENT DATE: 5/19 & 5/20/89

Recommended Cleanup Activity(ies): High pressure hot water (up to 140 degrees F) may be used to remove tar formations. Sorbants may be used to enhance recovery of oil. No cleanup is recommended for portions of P-11 with no oil present.

Priorities Considerations: Class 4 - light oil
Class B - resources absent

Ecological Constraints (from site survey):

Do not use high pressure on mussels or barnacles.
Protect middle and lower intertidal zone by appropriate means to prevent oiling of these clean areas.

ACTIVE BALD EAGLE NESTS. REFER TO ATTACHED
BALD EAGLE ADULTORY.

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: May 25, 1989

EXXON: 

Date: May 28 / 89

FOSC: 

Date: 5/28/89

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

REMARKS ON EVALUATION

11 MAY 20/89

✓ 07:45-08:00

11112 11 22 2011

Marty Bozeman

Date: MAY 19/89 Time: 21:30 - 22:30

Observer: Rick Reanier

Surveyed From: Foot/Boat/Helio/Plane

Weather: Sun/Cloud/Rain/Snow/Fog

LOCATION

LOCATION PERRY ISLAND SEGMENT NUMBER PR 11

LENGTH OF SHORELINE SEGMENT: 1500

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: B05 / C / P / G / S / M / R⁹⁵

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 0 Width of Band: _____ m

Sporadic: (Y)N # of Segment 5

Est. Oil Thickness where > 1cm: N/A cm Est. Oil Penetration: 0 cm

Pooled Oil: 0 % "Free" Oil: 0 % Coated: H % / M % / L 95 %
Fresh 0 % Mousse 0 % Tar Formation: 5 %

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

Comments:

This segment of coast consists of steep gradient rock. Sections ~~are~~ contain colluvial blocks or talus. Most of this segment is un-oiled and no clean-up is required. Light to moderate concentrations of tar occur in patches on the ^{east side of the} un-norred island at the north end of this segment. Given the small quantity of oil at this site, cleanup is not recommended.

LOCATION: Perry Is. SITE: Headland rocks OBSERVER: M. Bozeman
LOCATION PREFIX: PR SEG. NO.: 11 LENGTH: 1500 (M)
DATE: 5/20/89 TIME (HHMM): 21:30 TIDE HT.: 0.7.42 (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

VARIES w/location

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

VARIES w/location

Listofina

☒ 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:

CLEANUP PRECAUTIONS:

No clean up recommended

MAMMALS: Otter 1 Harbor Seals 1 Sea Lions 1 Whales 1

BIRDS:

GENERAL OBSERVATIONS: Sporadic light oil at High water level.

(version of 4/29/89)

CULTURAL RESOURCE EVALUATION

Date 5-19-89 5-20-89 Location Perry Island Site _____
Location Prefix PR Segment # PR-11 Length 1500 m

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 to no oil / excellent visibility

Width of beach zone surveyed 0 m Tree fringe surveyed —

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 vertical rock wall

Fresh Water Sources NONE

Sea Exposure exposed to North

Access/Safety Easy access / dangerous rock wall

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) Reaney

Time survey started 2130 5/19 Time survey ended 2230 5/19

0745 5/20

0745 5/20

Cultural resource considerations/restraints:

If ~~etc~~ undiscovered cultural resources are
uncovered during subsequent cleanup activities,
contact Exxon archeologist C. Mebley immediately



INSPECTION # 1DATE 6/16/89

SEGMENT INSPECTION RECORD

Shoreline Treatment Process(es) Completed for this Segment

☐	Hot water wash	☐	Mechanical
☐	Warm water wash	☐	Non-mechanical
☐	Water deluge	☒	Other <u>No Cleaning</u>

Exxon

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

Comments No CleaningENVIRONMENTALLY SAFESignature Kenneth M. Mathias Date: 6/16/89 Time: Printed Name Kenneth M. Mathias

Existing Shoreline Condition As Visually Evaluated by ADEC and USCG

Surface Oil	Subsurface Oil
☐ Heavily oiled	☐ Heavily oiled
☐ Medium oiled	☐ Medium oiled
☐ Lightly oiled	☐ Lightly oiled
☒ Very lightly oiled	☒ Very lightly oiled
☐ No oil	☐ No oil
☐ No surface oil and no subsurface oil	

Reassessment

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

ADEC rep Comments Recommend coming back in future to mobilize & reassess segment, too heavily contaminated segment.

Signature Denny R. Timmons Date: 6/17/89 Time: 2100hrs

Printed Name Denny R. Timmons, Env. Engr, ADEC

FOSC rep

MOBILIZATION NOT REQUIRED @ THIS TIME
Demobilization approved/disapproved Dis

Comments DUE TO VERY LIGHT AMOUNTS OF OILING, MOBILIZATION NOT REQUIRED @ THIS TIME.

Signature Thomas D. Harrison Date: 6/17/89 Time: 2050

Printed Name THOMAS D. HARRISON LT USCG

2/14

SEG PR-07 INSPECTION # _____

SEGMENT _____

DATE 8-12-89

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 PR-07 is complete. Ready fordemobilization and deployment to a new segmentSignature Harold A Russell Date: 8/12/89 Time: 14:20Printed Name Harold A Russell

Existing Shoreline Condition As Visually Determined by USCG

Surface Oil		Subsurface Oil
Percent	Degree of Oiling	☒ Yes ☐ No
_____	Heavy	Comments <u>Some surface oil</u> <u>in cobble & large rock</u> <u>areas</u>
_____	Medium	
<u>2%</u>	Light	
<u>5%</u>	Very Light	
<u>97%</u>	None	
100 %		

Reassessment

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

 ADEC rep Comments ADEC rep not available -
approved prior visit

 Signature _____ Date: / / Time: _____
 Printed Name _____

FOSC rep

 Demobilization approved / disapproved
 Comments Approved to remove shore & sea beam
after two more tide changes - vac remaining
 Signature Paul B. Gansle Date: 8/12/89 Time: 14:30
 Printed Name Paul B. Gansle I.T.

 Cont.
 with
 Sec.

INSPECTION # 1

DATE 6/13/89

SEGMENT INSPECTION RECORD

Shoreline Treatment Process(es) Completed for this Segment

☐	Hot water wash	☐	Mechanical
☐	Warm water wash	☐	Non-mechanical
☐	Water deluge	☒	Other <u>No Cleaning Required</u>

Exxon

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

Comments No Cleaning Required

Signature Peter A. Allen Date: 6/13/89 Time:

Printed Name Peter A. Allen

Existing Shoreline Condition As Visually Evaluated by ADEC and USCG

Surface Oil	Subsurface Oil
☐ Heavily oiled	☐ Heavily oiled
☐ Medium oiled	☐ Medium oiled
☐ Lightly oiled	☐ Lightly oiled
☒ Very lightly oiled	☒ Very lightly oiled
☐ No oil	☒ No oil
☐ No surface oil and no subsurface oil	

} MARKED BY EXXON REP NOT CG OR ADEC - SUSPECT VERY LIGHTLY OILED IN FEW LOCATIONS

Reassessment

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

ADEC rep

Comments ADEC REP STAN JUSTICE PRESENT ON SURVEY

Signature _____ Date: / / Time:

Printed Name _____

FOSC rep

MOBILIZATION NOT REQUIRED @ THIS TIME
~~Demobilization approved/disapproved~~ DISAP

Comments MOBILIZATION NOT REQUIRED @ THIS TIME DUE

TO MINIMAL AMOUNTS OF OIL CURRENTLY PRESENT

Signature Thomas D. Harrison Date: 6/14/89 Time: 2040

Printed Name THOMAS D. HARRISON LT USCG

INSPECTION # 1

DATE 6/16/89

SEGMENT INSPECTION RECORD

Shoreline Treatment Process(es) Completed for this Segment

☐ Hot water wash	☐ Mechanical
☐ Warm water wash	☐ Non-mechanical
☐ Water deluge	☒ Other <u>No Cleaning</u>

Exxon

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

Comments No Cleaning

Signature

Date: 6/16/89 Time:

Printed Name

Kenneth M. Mathias

Existing Shoreline Condition As Visually Evaluated by ADEC and USCG

Surface Oil

☐ Heavily oiled
☐ Medium oiled
☒ Lightly oiled
☐ Very lightly oiled
☐ No oil

☐ No surface oil and no subsurface oil

Subsurface Oil

☐ Heavily oiled
☐ Medium oiled
☒ Lightly oiled
☐ Very lightly oiled
☐ No oil

Reassessment



Yes - necessary



No - not necessary unless re-oiled

ADEC rep

Comments no objections to moving to a segment more heavily contaminated at this time.

Signature

Date: 6/16/89 Time: 2:10

Printed Name

Denny R. Thomas, ENV ENG, ADEC

FOSC rep

Demobilization approved ~~disapproved~~

Comments Segment needs to have the few pom-poms & misc cleanup equipment that has washed ashore picked up.

Signature

Date: 6/16/89 Time: 2:10

Printed Name

Thomas D. Harrison, CT, USCG

INSPECTION # 1

DATE 6/13/89

SEGMENT INSPECTION RECORD

Shoreline Treatment Process(es) Completed for this Segment

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

Exxon

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

Comments No Cleaning Required

Signature Peter A. Allen Date: 6/13/89 Time:

Printed Name Peter A. Allen

Existing Shoreline Condition As Visually Evaluated by ADEC and USCG

Surface Oil	Subsurface Oil
☐ Heavily oiled	☐ Heavily oiled
☐ Medium oiled	☐ Medium oiled
☒ Lightly oiled	☒ Lightly oiled
☐ Very lightly oiled	☐ Very lightly oiled
☐ No oil	☒ No oil
<u>3 - Block markers by Exxon</u> <u>NOT LG OR ADEC</u> <u>TDA</u>	
☐ No surface oil and no subsurface oil	

Reassessment

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

ADEC rep

Comments ADEC REP STAN JUSTICE WAS PRESENT DURING INSPECTION

Signature _____ Date: / / Time: _____

Printed Name _____

FOSC rep

MOBILIZATION NOT REQUIRED @ THIS TIME
Demobilization approved/disapproved

Comments MOBILIZATION @ PRESENT TIME NOT REQUIRED
DUE TO LIMITED AMOUNTS OF OIL.

Signature Thomas D. Harrison Date: 6/14/89 Time: 2120

Printed Name Thomas D. Harrison LT USCG

(version 5/24/89)

SHORELINE PRE-CLEANUP ASSESSMENT BLOCK REPORT

Location (see enclosed map): PERRY ISLAND WEST BLOCK

Includes Shoreline Segments: PR-12, PR-13, PR-14, PR-15, PR-16

Submitted : *Alma Adams* Date: 5-29-89
(for Exxon)

ISCC ^{RECOMMENDATION} Approval: *Jaqueline Michel* Date: 6-2-89

FOSC Approval: *Q. Robbins* Date: 6-3-89

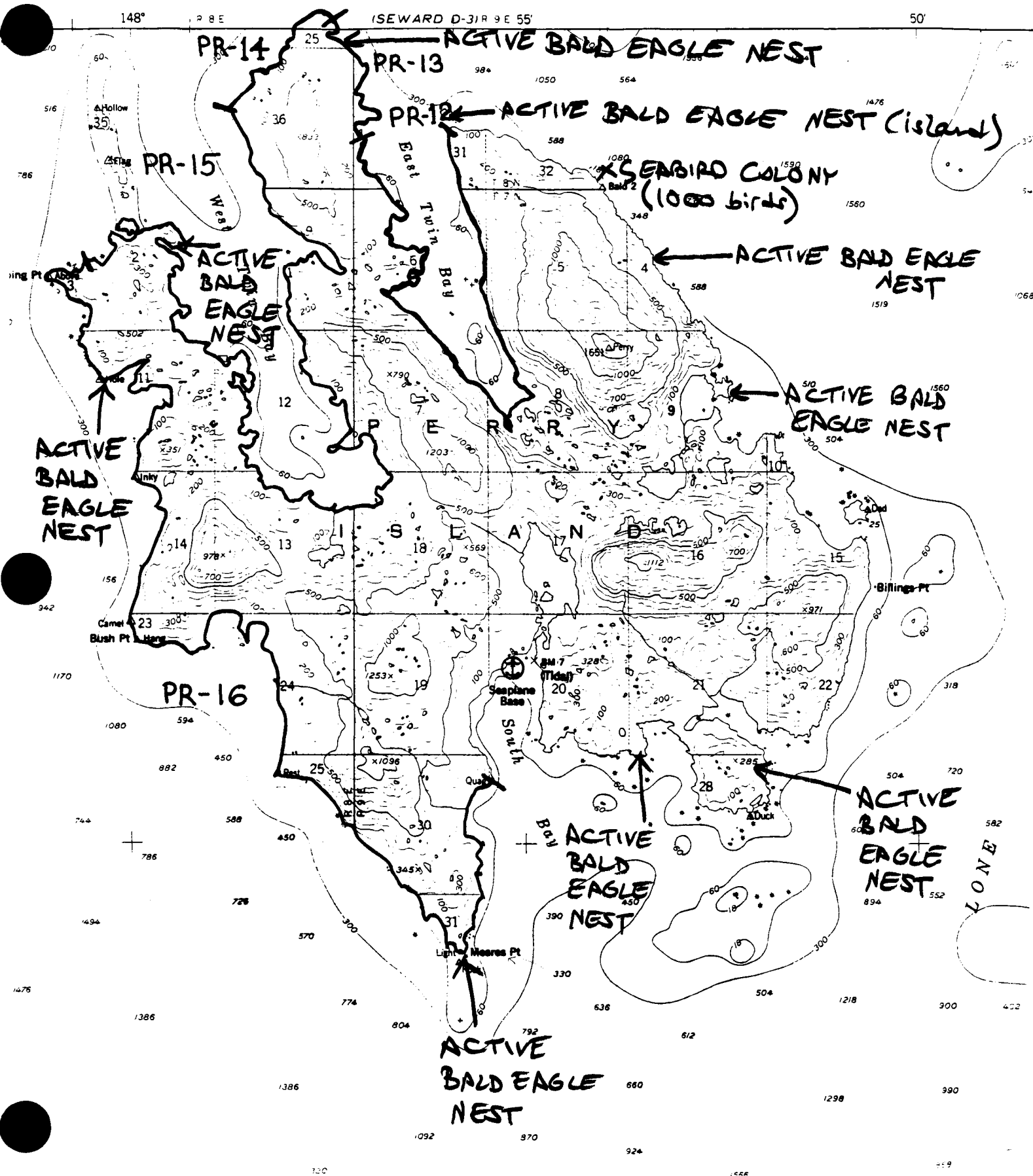
The cleanup procedures identified in the Shoreline Cleanup Program are recommended. Modifications to these systems can be made in the field. Exxon and other field personnel are encouraged to suggest innovations and productivity enhancements to the OSC's on-scene representative. The OSC's representative 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
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USDA (FS)
USFW
A. DEC
A. FG
A. DNR
CAC
PWSCA
USFS
SHPO

PERRY ISLAND



(version 5/02/89)

SHORELINE CLEANUP PROGRAM

DATE 5/28/89

SHORELINE SEGMENT PR-12

LOCATION: (see enclosed map) East Twin Bay on Perry Island

ADEC NO. _____ SHORELINE ASSESSMENT DATE: 5/20/89

Recommended Cleanup Activity(ies): AT THIS TIME, SUBJECT TO FOSC REVIEW,

- No cleanup activities are recommended, because, sporadic, small tar deposits and/or a very light coating of oil occur on the entrance to this bay and the segment has up to medium wave exposures. All other areas are oil free.

Priorities Considerations: .

None.

Ecological Constraints (from site survey):

None.

Archeological Constraints (from site survey):

No constraints are necessary because no cleanup is recommended.
If cleanup activities occur, constraints should be reconsidered.

Douglas R. Reger
State Historic Preservation Officer *
15cc Jaques Michel

Date: 5/29/89

EXXON: John Dwyer

6/3/89

Date: JUNE 3/89

FOSC: St. Noble

Date: 6-3-89

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

SHORELINE OIL EVALUATION

Date: May 20/37 Time: 08:00 → 09:00

Observer: _____

Surveyed From: Foot/Boat/Helio/Plane

Weather: Sun/Cloud/Rain/Snow/Fog

LOCATION

LOCATION Perry Island

SEGMENT NUMBER PR-12

LENGTH OF SHORELINE SEGMENT: 9600 m

East Twin Bay

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: B45 / C5 / P5 / G / S / M / R45

Drift Debris on Beach: Yes/No

Supra/Upper/Mid/Lower Type logs

OIL

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

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

5-10 cm high band
on vertical rock
2-3 m wide band
on high angle m
beach.

Continuous: Y/N % of Segment _____

Width of Band: _____

Sporadic: Y/N % of Segment 10-20%

Est. Oil Thickness where > 1cm: N/A cm Est. Oil Penetration: 0 cm

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

Fresh 0 % Mousse 0 % Tar Formation: 50 % of area affect

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

Comments:

Northern 800 m on east side of the bay has a 5-10 cm high "light" bituminous "like" occur
at the H.L.T.Z. In frequent blobs of tar on high 4 boulder zone.
The northern 500 m on the west side has no oil or tar
The shoreline consists of near vertical rock with a continuous boulder foreshore. Stream at south end of bay has a formed a rubble beach
East side of bay - entire area - sporadic tar blobs occur a 500m long section at H.W.L. 2-3 m wide. No clear "P" warranted for this segment due to the small amount of oil which has been deposited
(The beach is)

ECOLOGICAL EVALUATION

LOCATION: Perry Is. SITE: East Twin Bay OBSERVER: M. Bozeman
 LOCATION PREFIX: PR SEG. NO.: 12 LENGTH: 9600 (M)
 DATE: 5/20/89 TIME (HHMM): 0800 TIDE HT.: _____ (M)

OILED ZONE: Splash High Medium Low

SUBSTRATUM: Rocks Boulder Cobble Gravel Sand Mud

LIVE BIOTA Hardlands Beaches

Fucus (algae): Patchy Y/N ^{mostly} 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: Extensive eelgrass in subtidal

CLEANUP PRECAUTIONS: No cleanup recommended.

MAMMALS: Otters _____ Harbor Seals 1 Sea Lions _____ Whales _____
 Other _____

BIRDS: 2 Brants

GENERAL OBSERVATIONS: Patchy Tar & some light oiling

(version of 4/29/89)

CULTURAL RESOURCE EVALUATION

Date 1 5-20-89 Location Perry Island Site East Twin Bay

Location Prefix PR Segment # PR-12 Length 9600 m

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 Spuradic tar deposits near mouth of bay
excellent visibility

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

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 High angle beach ranging from gravel to boulder.

Fresh Water Sources A ~~small~~ stream enters the head of the bay minor
creeks • flow over beaches occasionally along rd beach.

Sea Exposure Entire segment is within sheltered East Twin Bay

Access/Safety Easy access / no safety considerations

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

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

Photos: Color Roll # Frames

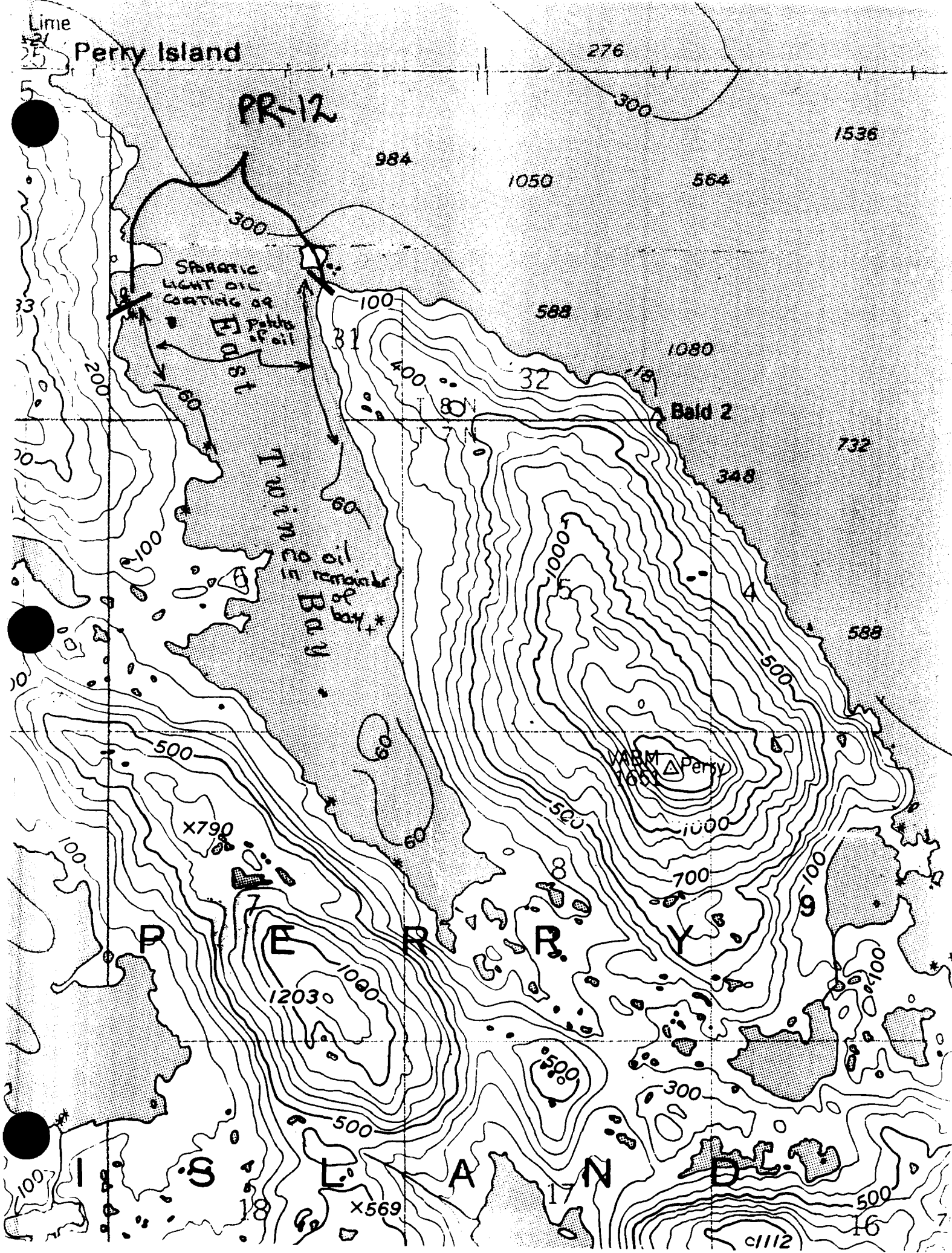
B/W Roll # Frames

Observer(s) R. Reamer

Time survey started 0800 Time survey ended 0900

Cultural resource considerations/restraints:

If undiscovered cultural materials are uncovered
during subsequent cleanup, contact Exxon
archeologist C. Mobley immediately



Lime

Perry Island

PR-12

SARATIC
LIGHT ON
CORNING OF

Twin Bay

Bald 2

Perry

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c/1112

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7

(version 5/02/89)

SHORELINE CLEANUP PROGRAM

DATE 5/28/89

SHORELINE SEGMENT PR-13

LOCATION: (see enclosed map) Perry Island - West shore of
East Twin Bay in the area immediately south of Point Perry

ADEC NO. _____ SHORELINE ASSESSMENT DATE: 5/20/89

Recommended Cleanup Activity(ies): Beach 1 in this segment should be cleaned with high pressure/hot water. However, given the comparatively small quantity of oil which has been deposited, the cleanup priority should be low. Beach 2 and the headland portions of this segment do not have sufficient oil to warrant being cleaned. Heavily oiled seaweed deposits on beach 3 should be removed manually. The north and south portions of beach 3 should be cleaned with hot water/mod to high pressure cleaning if wave action does not remove the moderate oil deposits which currently occur in this area. The on-site command officer should inspect these areas when the oiled weed is removed to determine if sufficient oil remains to justify a cleanup operation, ~~AT THIS~~
TIME, SUBJECT TO FOSC REVIEW.

Priorities Considerations:

- 3A

Ecological Constraints (from site survey): Cleanup of beach #1 should occur when the tides are above middle intertidal zone to protect biota on lower portion of beach similarly, this approach should be followed in cleanup activities are later recommended on beach #3.

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.

Douglas L. Reger
State Historic Preservation Officer *
ISCC J. Michael

Date: 5/29/89
6/3/89

EXXON: John D. Dwyer

Date: JUNE 3/89

FOSC: E. J. Noblin

Date: 6-3-89

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

SHORELINE OIL EVALUATION

MIKE
MARTIN
RICK

Date: MAY 20 / Time: 09:15

Observer: _____

Surveyed From: Foot/Boat/Helio/Plane

Weather: Sun/Cloud/Rain/Snow/Fog

LOCATION

LOCATION PERRY ISLAND

SEGMENT NUMBER PR 13-Beach

LENGTH OF SHORELINE SEGMENT: _____ m

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

Beach 1 = 100 m
Total Segment = 2300

SHORELINE:

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

Slope: LANG/HANG/VER

Wave Exposure: High/Med/Low - TO THE EAST

Sediment: B50 / C30 / P10 / G / S / M / R10

Drift Debris on Beach: Yes/No

Supra/Upper/Mid/Lower Type logs and sea weed

OIL

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

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

Continuous: Y/N % of Segment 100 Width of Band: 4 to 6 m

Sporadic: Y/N % of Segment 10

Est. Oil Thickness where > 1cm: N/A cm Est. Oil Penetration: 0 cm

Pooled Oil: 0 % "Free" Oil: 0 % Coated: H0 / M10 / L70

Fresh 0 % Mousse 0 % Tar Formation: 20 %

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

Comments:

This beach would benefit from being cleaned. However, given the ^{relatively small} amount of oil on the beach, it is not a high priority site. Cleaning should be done at mid water to protect downslope biota.

Headland between Beach 1 + Beach 2 has a light oil slick for 1st 25 m north of beach 1.

SHORELINE OIL EVALUATION

mike miles 30-5
Marty Bozeman
Rick Reamer

Date: May 20 / 89 Time: 09:40

Observer: Rick Reamer

Surveyed From: Foot/Boat/Helio/Plane

Weather: Sun/Cloud/Rain/Snow/Fog

LOCATION

LOCATION Perry Island

SEGMENT NUMBER PR-13-Beach 2

LENGTH OF SHORELINE SEGMENT: m

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

Beach 2 = 30 m
Total Segment = 230

SHORELINE:

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

Slope: LANG/HANG/VER

Wave Exposure: High/Med/Low

Sediment: B30 % / C30 % / P % / G % / S % / M % / R40 %

Drift Debris on Beach: Yes/No

Supra/Upper/Mid/Lower Type Log + Weed

OIL

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

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

Continuous: Y/N % of Segment 100 Width of Band: 2-4 m

Sporadic: Y/N % of Segment

Est. Oil Thickness where > 1cm: H/A cm Est. Oil Penetration: <5 cm

Pooled Oil: 0 % "Free" Oil: 0 % Coated: H0 % / M0 % / L75 %

Fresh 0 % Mousse 0 % Tar Formation: 25 %

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

Comments:

Insufficient oil to warrant cleaning. Site is exposed to the South and wave action is expected to remove oil over time.

Head land between Beach 2 and 3 contains a sporadic light coating of oil. No clean-up is warranted.

White powder coming in with the tide

SHORELINE OIL EVALUATION

mike m...
marty ...

Date: MAY 20 / Time: 10:00 hrs

Observer: Rick Pearson

Surveyed From: Foot/Boat/Helio/Plane

Weather: Sun/Cloud/Rain/Snow/Fog

LOCATION

LOCATION Perry Island

SEGMENT NUMBER

FF 13 - Beach 3

LENGTH OF SHORELINE SEGMENT: m

{ Beach 3 = 50 m
Total Segment = 2300 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% / P40% / G% / S% / M% / R%

Drift Debris on Beach: Yes/No

Supra/Upper/Mid/Lower Type logs and weeds

OIL

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

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

Continuous: Y/N % of Segment 100 Width of Band: 2-4 m

Sporadic: Y/N % of Segment

Est. Oil Thickness where > 1cm: H/A cm Est. Oil Penetration: 5 cm

Pooled Oil: 0% "Free" Oil: 0% Coated: H0% / M5% / L90%

Fresh % Mousse % Tar Formation: <5%

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

Comments: white powder coming in with the tide

This small pocket beach is located between 2 rocky

headlands. The pebbles on the upper ITZ were

originally moderately oiled wave action has substantially

cleared the beach except for small areas on the

west end of the beach. ~~The~~ Wood deposits (primarily

brush) on the upper part of the beach are heavily

oiled and warrant being removed. The rocky headland

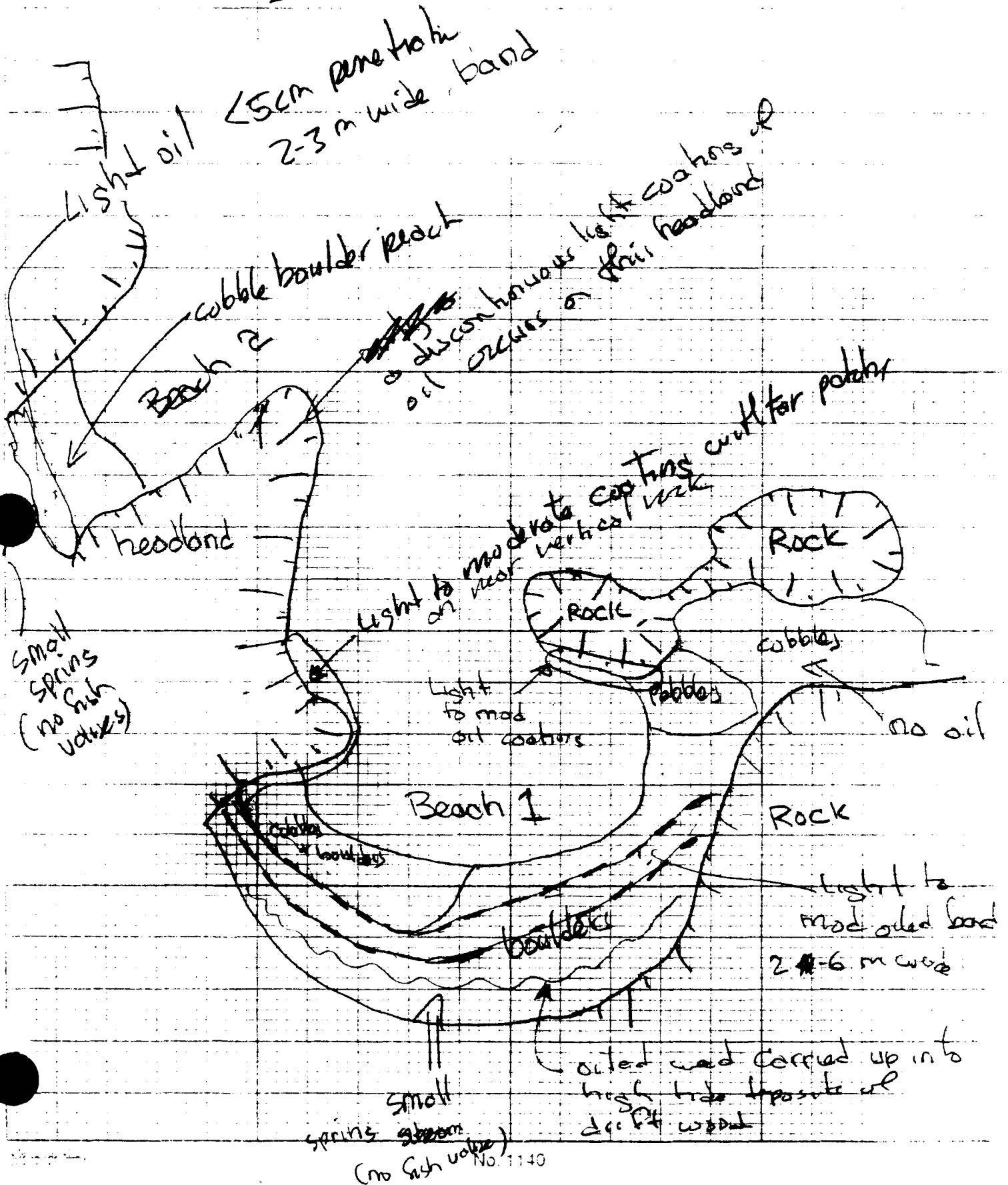
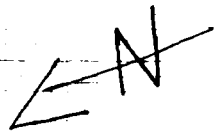
adjacent to the beach have a ~~low~~ light to moderate oil exposure

but they are expected to be cleaned by wave action. No oil

clean-up (other than removing the oiled weed) is here see recommended

MAY 20/89
mike miles

PR-13



ECOLOGICAL EVALUATION

LOCATION: Perry Is. SITE: Barc-#1 OBSERVER: M. Bozeman
 LOCATION PREFIX: PR SEG. NO.: 13 LENGTH: 100 (M)
 DATE: 5/20/89 TIME (HHMM): 0915 TIDE HT.: _____ (M)

OILED ZONE: Splash High Medium Low

SUBSTRATUM: Rocks Boulder Cobble Gravel Sand Mud

↓ T.O.P. Seawall
= 2300m

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: lower to mid-ITZ shows most abundance of organisms (boulder substrate)

CLEANUP PRECAUTIONS: Cleanup should be conducted during mid tide levels to protect Biota in LITZ

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

BIRDS:

GENERAL OBSERVATIONS: East Facing beach with Lt/mud oil high in ITZ and above on logs & grass

ECOLOGICAL EVALUATION

LOCATION: Perry Is SITE: Beach #2 OBSERVER: M. Coleman
 LOCATION PREFIX: PR SEG. NO.: 13 LENGTH: 80 (M)
 DATE: 5/20/89 TIME (HHMM): 0940 TIDE HT.: _____ (M)

OILED ZONE: Splash High Medium Low

SUBSTRATUM: Rocks Boulder Cobble Gravel Sand Mud

✓ TOTAL SPREAD
= 12300 m

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

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

NOT OBSERVED

OTHER OBSERVATIONS: Exposed beach - wave action is expected to clean the light degree of oil present.

CLEANUP PRECAUTIONS: (N/A) NOT recommended for cleanup. - Too little oil present.

MAMMALS: Otters 1 Harbor Seals _____ Sea Lions _____ Whales _____
 other _____

BIRDS:

GENERAL OBSERVATIONS: Small stream enters @ Head of beach - no fisheries value.

ECOLOGICAL EVALUATION

LOCATION: Perry Is SITE: Beach 3 OBSERVER: M. Bozeman
 LOCATION PREFIX: PR SEG. NO.: 13 LENGTH: 50 (M)

DATE: 5/20/89 TIME (HHMM): _____ TIDE HT.: _____ (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

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

OTHER OBSERVATIONS: Remainder of segment (mostly rocks)
islands) has insufficient oil to warrant description.

CLEANUP PRECAUTIONS: Currently, no cleanup recommended
except for hand removal of oiled debris - It
late examination shows need for oil removal along beach margins.
It should be considered when tides are high enough to protect biota.
 MAMMALS: Otters _____ Harbor Seals _____ Sea Lions _____ Whales _____
 Other _____

BIRDS: _____

GENERAL OBSERVATIONS: Small pocket beach with strand
line of oiled algae & debris. Lt to moderate oil on
boundaries sides of beach - Moderate energy beach that
is likely to be cleaned by wave action

(version of 4/29/89)

CULTURAL RESOURCE EVALUATION

Date 1 5-20-89 Location Perry Island Site

Location Prefix PR Segment # PR-13 Length 2300 m

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 moderate to light oil / excellent visibility

Width of beach zone surveyed 25 m Tree fringe surveyed

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 High angle boulder to cobble beaches, rocky headland

Fresh Water Sources None

Sea Exposure Exposed to East

Access/Safety Easy access / no safety considerations

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) R Reanier

Time survey started 0900 Time survey ended 0945

Cultural resource considerations/restraints:

If undiscovered cultural materials are uncovered
during cleanup, contact C. Mobley, Exxon
archeologist, immediately.

Point Perry Lime

Perry Island

BEACH 3

PR-13 loc
LIGHT TO S
MODERATE ON

300

BEACH 2

BEACH 1

East Twin Bay

Bay

Twin Bay

12

P

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100

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100

100

100

100

100

100

948

792

(version 4/29/89)

SHORELINE CLEANUP PROGRAM

DATE 5/28/89

SHORELINE SEGMENT PR-14

LOCATION: (see enclosed map) Perry Island-The northern portion
of the westside of Cape Perry

ADEC NO. _____ SHORELINE ASSESSMENT DATE: 5/20/89

Recommended Cleanup Activity(ies):

- No cleanup required. No oil was found on this segment.

Priorities Considerations:

- None.

Ecological Constraints (from site survey):

- None.

Archeological Constraints (from site survey):

No constraints are necessary because no cleanup is recommended.
If cleanup activities occur, constraints should be reconsidered. AND A
CAC REPRESENTATIVE MUST BE PRESENT DURING CLEANUP.

Douglas L. Reger
State Historic Preservation Officer *
ISCC Joseph Michael

Date: 5/29/89
6/3/89

EXXON: John Dwyer

Date: JUNE 3/89

FOSC: W. S. Robbins

Date: _____

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

(version 4/29/89)

SHORELINE CLEANUP PROGRAM

DATE 5/28/89

SHORELINE SEGMENT PR-15

LOCATION: (see enclosed map) Perry Island-West Twin Bay,
Hollow and Flag Island and Coast west to Above Point

ADEC NO. _____ SHORELINE ASSESSMENT DATE: 5/20/89

Recommended Cleanup Activity(ies):

- Cleanup activities are not required because no oil was found in this segment.

Priorities Considerations:

- None.

Ecological Constraints (from site survey):

- None.

Archeological Constraints (from site survey):

No constraints are necessary because no cleanup is recommended.
If cleanup activity occurs, constraints should be reconsidered.

Douglas R. Reger
State Historic Preservation Officer *
ISCC Jaime Michel

EXXON: John Dwyer

FOSC: John Dwyer

Date: 5/29/89

06/03/89

Date: June 3/89

Date: _____

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

SHORELINE OIL EVALUATION

MIKE MILES
MARTIN ROBERTS
RICK REANIERDate: MAY 20 1999 Time: 10:30 hrs

Observer: _____

Surveyed From: Foot/Boat/Helio/PlaneWeather: Sun/Cloud/Rain/Snow/Fog**LOCATION**LOCATION PERRY ISLANDSEGMENT NUMBER PR 14LENGTH OF SHORELINE SEGMENT: 2000 mACCESS: 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 5 % / P % / G % / S % / M % / R 90 %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 Width of Band: mSporadic: Y/N % of Segment Est. Oil Thickness where > 1cm: N/A 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:**

This rocky section of coast (which contains a
number of very small cobble/boulder pocket beaches) is exposed
to the NW has a NW exposure. No oil was found
along this segment.

ECOLOGICAL EVALUATION

LOCATION: Perry Is. SITE: Point Perry OBSERVER: M. Poremba
 LOCATION PREFIX: PR SEG. NO.: 14 LENGTH: 2000 (M)
 DATE: 5/20/89 TIME (HHMM): 10:30 TIDE HT.: _____ (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

Varies with location

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

Varies with location

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

Varies with location

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:

No oil - No cleanup needed
Noted

CLEANUP PRECAUTIONS:

N/A

MAMMALS: Otters 1 Harbor Seals _____ Sea Lions _____ Whales _____
 Other _____

BIRDS: _____

GENERAL OBSERVATIONS: _____

(version of 4/29/89)

CULTURAL RESOURCE EVALUATION

Date 1 5-20-89 Location Perry Island Site

Location Prefix PR Segment # PR-14 Length 2000 m

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 NO OIL / EXCELLENT VISIBILITY

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

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 coastline with local small cobble beaches

Fresh Water Sources NONE

Sea Exposure Exposed to NORTHWEST

Access/Safety difficult access / potential wave hazards

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

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

Photos: Color Roll # Frames

B/W Roll # Frames

Observer(s) R. Reanier

Time survey started 1030 Time survey ended 1045

Cultural resource considerations/restraints:

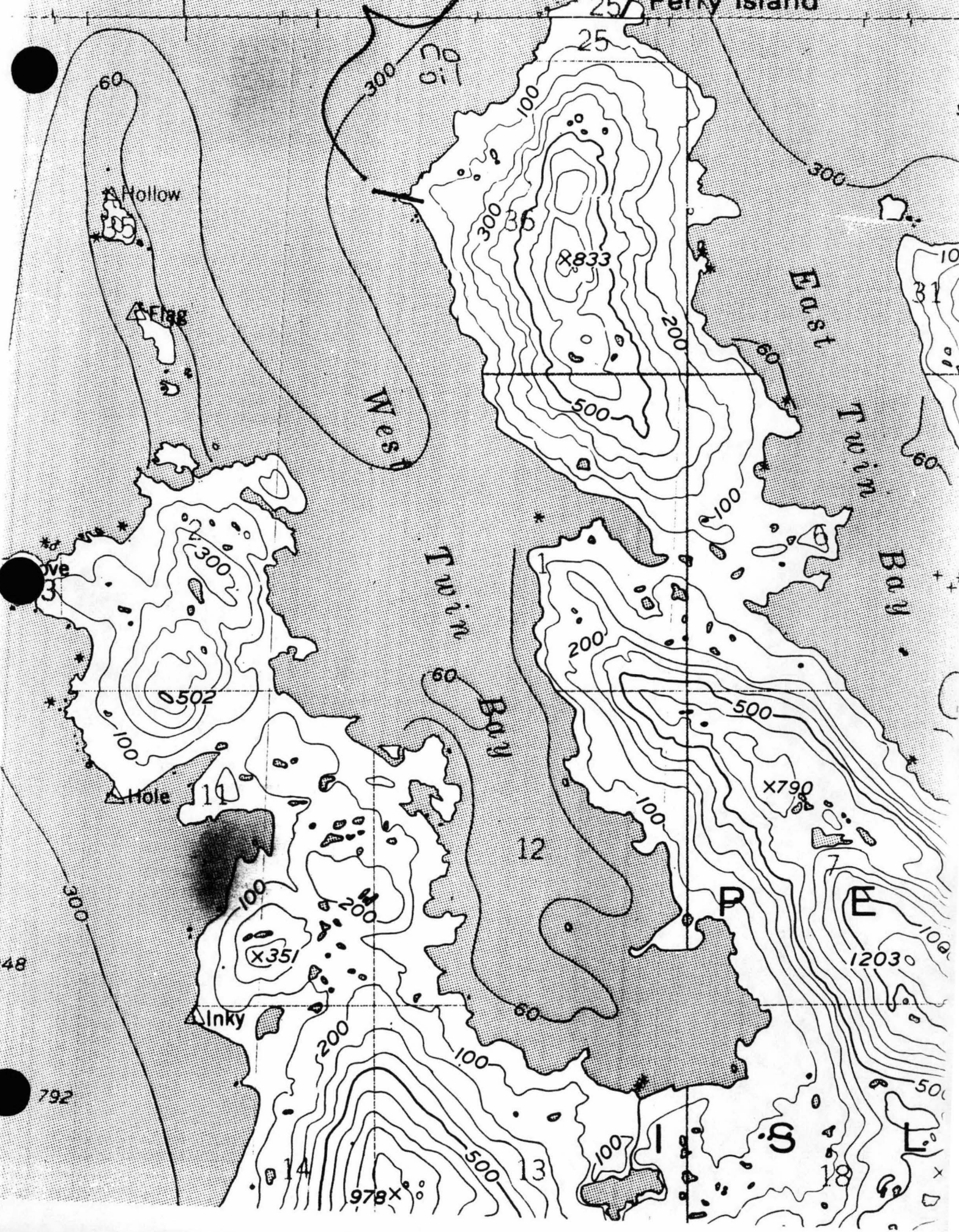
IF ~~any~~ undiscovered cultural materials are
discovered during any subsequent cleanup,
contact Exxon archeologist C. Mobley
immediately.

PR-14

Point Perry

25

Perry Island



948

792

978X°

1203°

(version 4/29/89)

SHORELINE CLEANUP PROGRAM

DATE 5/28/89

SHORELINE SEGMENT PR-15

LOCATION: (see enclosed map) Perry Island-West Twin Bay,

Hollow and Flag Island and Coast west to Above Point

ADEC NO. _____ SHORELINE ASSESSMENT DATE: 5/20/89

Recommended Cleanup Activity(ies):

- Cleanup activities are not required because no oil was found in this segment.

Priorities Considerations:

- None.

Ecological Constraints -(from site survey):

- None.

Archeological Constraints (from site survey):

No constraints are necessary because no cleanup is recommended.
If cleanup activity occurs, constraints should be reconsidered.

Douglas R. Reger
State Historic Preservation Officer *
ISCC Jaqueline Michel
EXXON: John Dwyer
FOSC: Greg Nobbis

Date: 5/29/89
06/03/89
Date: June 3/89
Date: _____

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

SHORELINE OIL EVALUATION

MIKE M. CAS 20
MARTY BOZEMAN
RICK REANER

Date: MAY 20/89 Time: 10:30 - 12:30

Observer: _____

Surveyed From: Foot/Boat/Helio/Plane

Weather: Sun/Cloud/Rain/Snow/Fog

LOCATION

LOCATION PERRY ISLAND

SEGMENT NUMBER PR-15

LENGTH OF SHORELINE SEGMENT: 17600 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: B10 / C10 / P10 / G / S / M / R70

Drift Debris on Beach: Yes/No

Supra/Upper/Mid/Lower Type loss + weed

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: 0 cm Est. Oil Penetration: 0 cm

Pooled Oil: 0 % "Free" Oil: 0 % Coated: H0 % / M0 % / L0 %

Fresh 0 % Mousse 0 % Tar Formation: 0 %

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

Comments:

This segment includes west Twin Bay, the headland on the west side of the entrance, Flag Island and Hollow Island. The shore principally consists of near vertical rock. Some areas have narrow high angle boulder beaches. Small pocket beaches occur in the bay or in small indentations. Wave exposure in west Twin Bay varies between low and moderate. The headland and islands west of the bay have moderate wave exposure. No oil was seen in this segment and clean-up activities are not known.

ECOLOGICAL EVALUATION

LOCATION: Long Is SITE: _____ OBSERVER: M. Rozema
 LOCATION PREFIX: PR SEG. NO.: 15 LENGTH: 17,000 (M)
 DATE: 5/20/89 TIME (HHMM): 10:30 TIDE HT.: _____ (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

Varies w/location

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

Varies w/location

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

Varies w/location

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: No Oil Spill

CLEANUP PRECAUTIONS:

N/A

no cleanup needed

MAMMALS: Otters 1 Harbor Seals 1 Sea Lions _____ Whales _____
 Other _____

BIRDS: _____

GENERAL OBSERVATIONS: _____

(version of 4/29/89)

CULTURAL RESOURCE EVALUATION

Date 5-20-89 Location Perry Island site West Twin Bay

Location Prefix PR Segment # PR-15 Length 17,600 m

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 NO OIL / EXCELLENT VISIBILITY

Width of beach zone surveyed 0-25 m Tree fringe surveyed —

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 High angle beaches, some rocky coastline on west end.

Fresh Water Sources A major stream enters on at the head of the bay

Sea Exposure Sheltered bay, except exposed to NW on west end of segment

Access/Safety Easy access/no safety consideration

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) R R earier

Time survey started 1030 Time survey ended 1230

Cultural resource considerations/restraints:

If ~~any~~ herebefore undiscovered cultural materials are uncovered during any subsequent cleanup activities, contact Exxon archeologist C. Mobley immediately

Point Perry Lime

Perry Island

PR-15

West

NO OIL

Twin Bay

East Twin Bay

Hollow

Flag

502

Hole

Inky

X833

X790

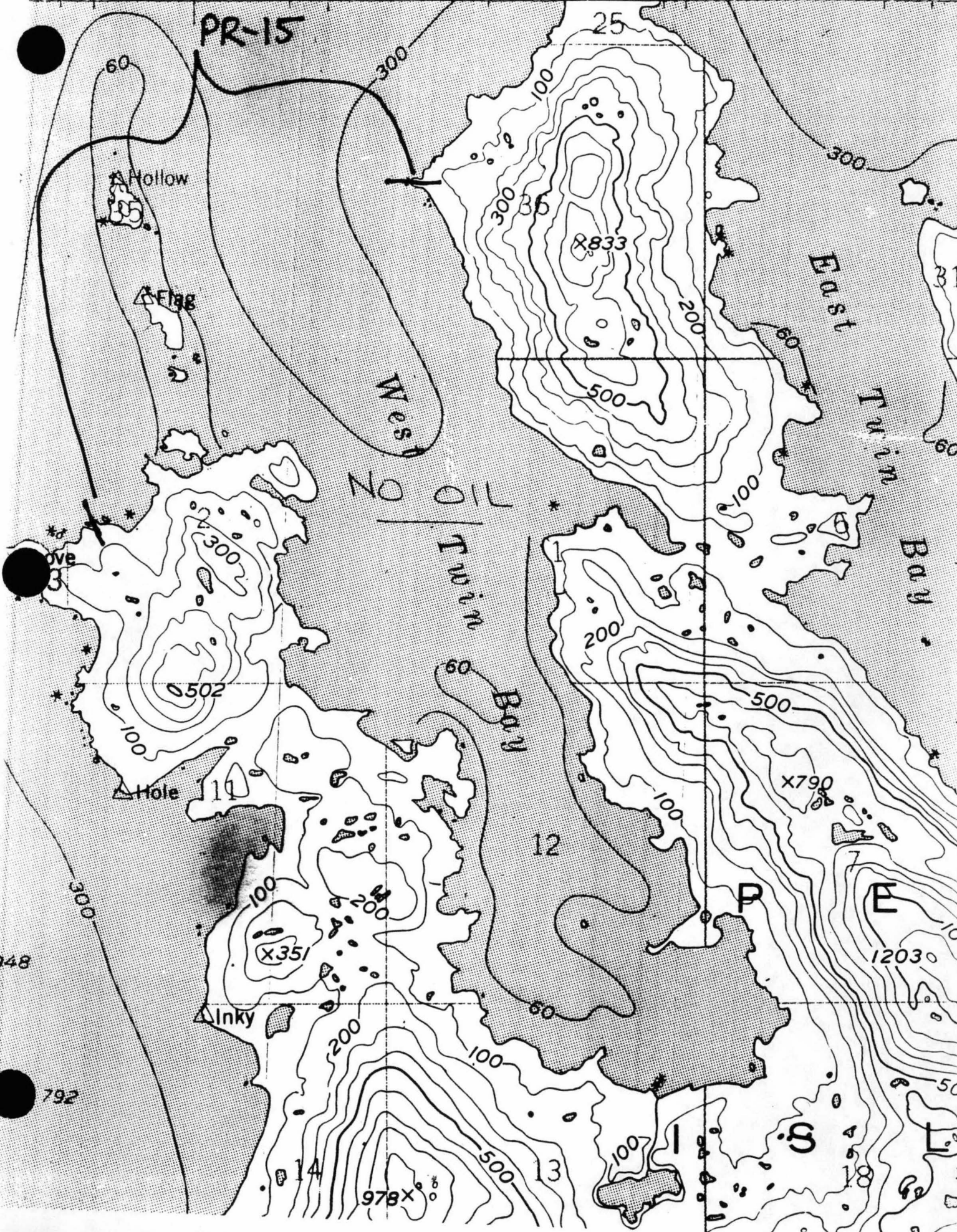
X351

978X

1203

948

792



(version 5/02/89)

SHORELINE CLEANUP PROGRAM

DATE 5/28/89

SHORELINE SEGMENT PR-16

LOCATION: (see enclosed map) Perry Island - South tip
(Beach just east of Meares Point)

ADEC NO. _____ SHORELINE ASSESSMENT DATE: _____

Recommended Cleanup Activity(ies): For beach #1 (east of Meares Point).

- Manually collect oiled debris (algae/twigs/logs)
- Use hot water, high pressure flushing on boulders/cobbles.
- Use hot water, low to medium pressure/agitation on smaller deeply penetrated sediments (pebbles/cobbles on upper intertidal zone.)

Priorities Considerations:

BEACH #2 HAS HIGH RECREATIONAL USE BY KAYAKERS AND IT SHOULD BE PLACED FOR HIGH PRIORITY IN PHASE II CLEANUP

Ecological Constraints (from site survey): Only beach #1 is recommended for cleanup. Because of abundant, flush low tide/subtidal zone including dense mussel beds. Confine all hot water flushing and skimming to mid high tide times.

NOTE THAT THERE IS AN ACTIVE BALD EAGLE NEST ON MEARES PT., BETWEEN BEACHS 1 & 2. (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.

A CAC REPRESENTATIVE MUST BE NOTIFIED OF WHEN CLEANUP IS SCHEDULED SO THEY CAN BE ON SITE DURING CLEANUP OF BEACHS 1 AND 2.

Walter R. Reger

State Historic Preservation Officer *
ISCC *Jaqueline Michel*

EXXON: *John Dwyer*

FOSC: *JS Robbins*

Date: 5/29/89

6/3/89

Date: JUNE 3/89

Date: 6-3-89

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

SHORELINE OIL EVALUATION

Date: 5/19/89 Time: 1730-2030

Observer: C. Dillan

Surveyed From: Foot/Boat/Helio/Plane

Weather: Sun/Cloud/Rain/Snow/Fog

LOCATION

LOCATION PERRY ISLAND SEGMENT NUMBER PR-16

LENGTH OF SHORELINE SEGMENT: 15,000 m (8.5 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 10 / C 40 / P 45 / G / S / M / R 5

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

OIL

Degree of Oiling: Heavy Moderate Light No Oil Unobserved ^{one beach} ^{one beach} ^{99% of segment}

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

Continuous: Y/N % of Segment 1 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:

This page summarizes the entire segment which covers the west side of Perry Island. Only 2 beaches (at Meares Pt.) were impacted by oil at all; one of those beaches (shown on attached diagram 2) was so lightly oiled as to be considered negligible. The other beach was heavily oiled and is evaluated on the following form.

SHORELINE OIL EVALUATION

Date: 5/19/89 Time: 1810-1850

Observer: C. Dillion

Surveyed From: Foot/Boat/Helio/Plane

Weather: Sun/Cloud/Rain/Snow/Fog

LOCATION

LOCATION PERRY ISLAND

SEGMENT NUMBER PR-16 (Beach 1)

LENGTH OF SHORELINE Beach SEGMENT: 100 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 40% / C 20% / P 30% / G ___% / S ___% / M ___% / R 10%

Drift Debris on Beach: Yes/No Supra/Upper/Mid/Lower Type Twigs / grass / logs / algae

OIL

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

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

Continuous: Y/N % of Beach Segment 100 Width of Band: 10-20 m

Sporadic: Y/N % of Segment _____

Est. Oil Thickness where > 1cm: 6 cm Est. Oil Penetration: >15 cm

Pooled Oil: 5% "Free" Oil: 10% Coated: H 85% / M ___% / L ___%

Fresh 100% Mousse _____% Tar Formation: _____%

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

Comments:

Boulders at North end of beach contain many pools and free oil as well as a lot of oiled algae and twigs between crevices. Remainder of beach is mostly cobbles and pebbles, deeply penetrated with a large amount of oiled algae and logs in the middle and upper intertidal zone.

See Diagram #1 for details.

⑭ PR-16 Beach 1, 5/19/89 DIAGRAM #1
Time 1810 - 1850



West Cove at Mears Pt.

⑮

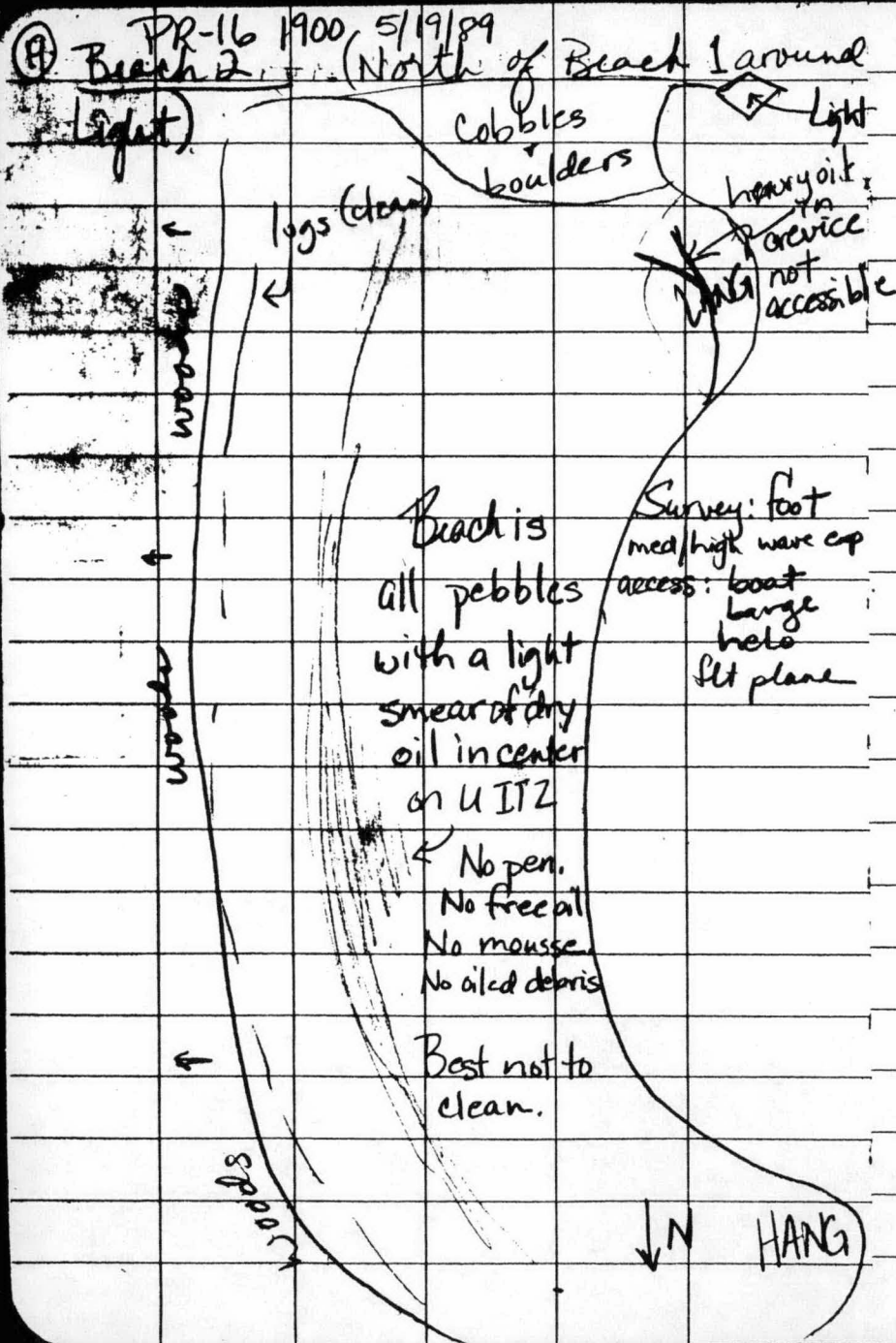
Boulders at N end of beach are heavily coated with fresh black oil. There are many pools of oil up to 6 cm deep and a lot of free oil in the crevices. Heavily oiled algae and twigs are scattered all over the boulder field.

The cobbles/pebbles covering the rest of the beach are heavily coated with penetration floor > 15 cm deep.

An oiled algae strand covers the oiled extent of the MITZ and there are several oiled logs in the MITZ. A lot of oiled algae in MITZ as well.

All oil is a heavy, fresh coat with a lot of free oil and some pools among larger rocks.

Light



Continuing along west side of Perry Island. Shoreline is almost entirely cobble and pebble beaches with some fucus and mussel covered boulders and small headlands.

Except for the 2 beaches at the west side of Meares Pt. (one of which was negligably oiled), this segment has not been oiled at all.

End of segment: Tipping Pt.

Not recommended for clean up.

DIAGRAM #2

ECOLOGICAL EVALUATION

LOCATION: PERRY ISLAND SITE: PR-16 OBSERVER: MEYER
 LOCATION PREFIX: PR SEG. NO.: 16 LENGTH: 15,000 (M)
 DATE: 05/19/89 TIME (HHMM): 1730 TIDE HT.: _____ (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
Beach #1 Fucus dead in oiled area, 50% unhealthy on North end LTZ. Heavily oiled/morose on South end.
Mytilus (Mussels): Patchy (Y/N) Contin. Y/N Dense (Y/N) Sparse Y/N None Y/N
Mussel beds dense and unoiled in LTZ directly below heavily oiled boulders on North end of Beach #1; oiled mussels about 50% open in mid-tidal zone.
Balanus (Barnacles): Patchy (Y/N) Contin. Y/N Dense (Y/N) Sparse Y/N None Y/N
Beach #1 - oiled barnacles crumble easily, oiled throughout mid-tidal zone on North + South ends. Unoiled in LTZ.

Littorina
 Patchy (Y/N) Contin. Y/N Dense (Y/N) Sparse Y/N None Y/N
Littorina abundant and alive in LTZ and subtidal directly below heavily oiled MTZ.

Limpets: Patchy (Y/N) Contin. Y/N Dense Y/N Sparse (Y/N) None Y/N
Alive in LTZ directly below heavily oiled MTZ.
 (North + South ends of Beach #1)

OTHER OBSERVATIONS: Low tide, subtidal area on Beach #1 rich with ^{live} biota - starfish, anemones
abundant littorina, moon snails, hermit crabs, mussel beds, small fish, limpets. Three mature and one immature Bald Eagles at Southern Tip Light. Schools of fingerlings off Beach #1.

CLEANUP PRECAUTIONS: Biota is directly adjacent to midtidal heavily oiled zone, and extreme care
must be exercised - confine cleanup of beach to mid-high tides as egress from beach will be
over these lush tidal areas. Do not use hot water in dense mussel areas - cool hot water with cold flooding.
 (Live, abundant on north + south ends of beach #1)

MAMMALS: Otters 3 Harbor Seals 3 Sea Lions _____ Whales _____
 other _____

BIRDS: Pigeon Guillemot -1 Glaucous-winged Gull -28 Eagle -3 Noddy -1 Mew Gull -4 Harlequin Duck -7
Great Blue Heron -1 Murrelets -6 Arctic Tern -2 Common Merganser -1

GENERAL OBSERVATIONS: 99% of segment was oil-free with abundant biota.

(version of 4/29/89)

CULTURAL RESOURCE EVALUATION

Date 5/20/89 Location Perry Island Site _____

Location Prefix PR Segment # 16 Length 15,000 m

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 one beach heavy, on beach very light, the rest was clean

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

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 Area 1 steep colored beach, area 2 the same, area 3 moderately sloped gravel beach

Fresh Water Sources Several streams

Sea Exposure open to south or west

Access/Safety Area 1 poor, Area 2 the same, area 3 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 # None Frames _____

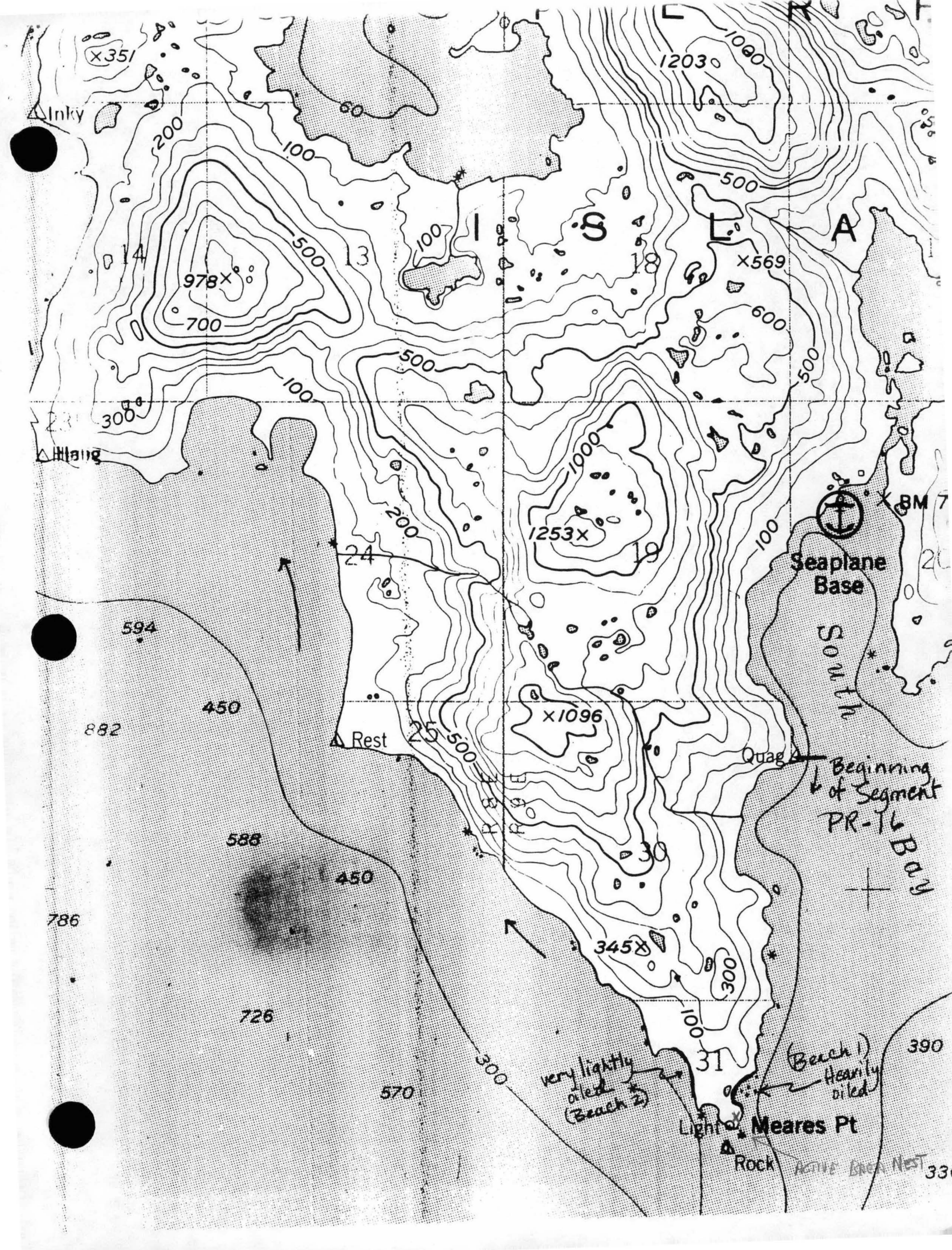
B/W Roll # C. Wilson Frames _____

Observer(s) C. Wilson

Time survey started 1730 Time survey ended 2030

Cultural resource considerations/restraints:

If hitherto undiscovered cultural resources are uncovered during cleanup contact Eppur archaeologist C. Mobley immediately.



850 000 FEET (ZONE 4) :

148°

2 2 1

(SEWARD D-3) P. 9 E. 55'



SEC PR-13

TREATMENT MANUAL 6/3/89

INSPECTION # 1

DATE 6/13/89

SEGMENT INSPECTION RECORD

Shoreline Treatment Process(es) Completed for this Segment

☐

Hot water wash

☐

Mechanical

☐

Warm water wash

☐

Non-mechanical

☐

Water deluge

☒

Other

Exxon

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

Comments No Cleaning Required

Signature

Peter A. Allen

Date: 6/13/89 Time:

Printed Name

Peter A. Allen

Existing Shoreline Condition As Visually Evaluated by ADEC and USCG

Surface Oil

☐

Heavily oiled

☐

Medium oiled

☒

Lightly oiled

☐

Very lightly oiled

☐

No oil

☐

No surface oil and no subsurface oil

Subsurface Oil

☐

Heavily oiled

☐

Medium oiled

☒

Lightly oiled

☐

Very lightly oiled

☒

No oil

3 black marks by Exxon -
not CA or ADEC

Reassessment

☒

Yes - necessary

☐

No - not necessary unless re-oiled

ADEC rep

Comments ADEC REP STAN TULLER WAS PRESENT DURING INSPECTION.

Signature

Date: / / Time:

Printed Name

FOSC rep

Mobilization NOT Required @ this time
Demobilization approved/disapproved

Comments Mobilization NOT Required @ this time due to limited amounts of oil.

Signature

Thomas D. Warren

Date: 6/14/89 Time: 2120

Printed Name

THOMAS D. WARREN

USCG

COPY: EXXON ADEC FOSC ISCC

FOSC 6/4/89

INSPECTION # 1DATE 6/13/89

SEGMENT INSPECTION RECORD

Shoreline Treatment Process(es) Completed for this Segment

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

Exxon

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

Comments No Cleaning Required

Signature Peter A. Allen

Date: 6/13/89 Time: _____

Printed Name Peter A. Allen

Existing Shoreline Condition As Visually Evaluated by ADEC and USCG

Surface Oil

☐ Heavily oiled
☐ Medium oiled
☐ Lightly oiled
☒ Very lightly oiled
☐ No oil
☐ No surface oil and no subsurface oil

Subsurface Oil

☐ Heavily oiled
☐ Medium oiled
☒ Lightly oiled
☐ Very lightly oiled
☒ No oil

3 blocks checked by Exxon
not ADEC or USCG

Reassessment



Yes - necessary



No - not necessary unless re-oiled

ADEC rep

Comments - Recommended moving to more heavily contaminated areas at this time.

Signature Danny R. Timmons Date: 6/16/89 Time: 2015

Printed Name Danny R. Timmons ENV. ENGR, ADEC

FOSC rep

Demobilization approved/disapproved

Comments VERY LITTLE SURFACE OIL - COBBLE SHORELINE HAD LIGHT OILING.

Signature Thomas D. Johnson Date: 6/16/ Time: 2015

Printed Name Thomas D. Johnson LT USCG

PR-16
DATE 8-27-89
SEGMENT
INSPECTION RECORD

Shoreline Treatment Process(es) Completed for this Segment



Hot water wash



Mechanical



Warm water wash



Non-mechanical SNARE



Water deluge



Other

Exxon

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

Comments Treatment of segment PR-16 is complete. Ready for Demobilization and Deployment to Next Segment

Signature Ronald A Russell

Date: 8/27/89 Time: 12:31

Printed Name Harold A Russell

Existing Shoreline Condition As Visually Determined by USCG

Surface Oil

Percent Degree of Oiling

less than

1%

Heavy

less than

1%

Medium

2%

Light

2%

Very Light

94%

None

100 %

Existing Shoreline Condition As Visually Determined by ADEC

Surface Oil

Percent Degree of Oiling

less than 1%

Heavy

less than 1%

Medium

5%

Light

5%

Very Light

88%

None

100 %

Heavy to medium ☒ Yes ☐ No
South beach areas
COMMENT BELOW

Subsurface Oil



Yes



No

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 Very long segment ~ 10 miles. Southeast beaches heavily impacted. PR-16

Subsurface is gravel beaches. Grass contamination removed. No free flowing oil observed.

Signature Recommends re-oiling of beach areas in sand pits. PR-16 to remove oil & debris. Date: 8/27/89 Time: 13:13

Printed Name Joseph S. Santoro

FOSC rep

Demobilization approved / disapproved

Comments to replace snare & rake oil soaked debris - bio remediation

Signature Paul B. Gault

Date: 8/27/89 Time: 1300

Printed Name Paul B. Gault LT

COPY: EXXON ADEC FOSC ISCC