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S42  
1989  
v.12

## **[Shoreline evaluations, 1989].**

Volume 12

Port Nellie Juan, Blue Fiord

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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 |

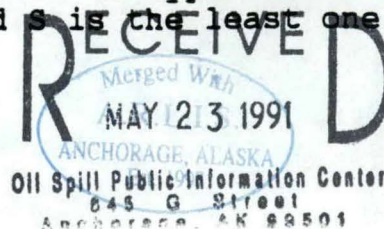
## SHORELINE TYPE

|            |      |
|------------|------|
| 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)



(version 5/04/89)

SHORELINE PRE-CLEANUP ASSESSMENT BLOCK REPORT

Location (see enclosed map): BLUE FIORD BLOCK

Includes Shoreline Segments: BF-1, BF-2, BF-3, BF-4, BF-5,  
BF-6, BF-7, BF-8, BF-9

Submitted :

(for Exxon)

Date: 7/8/89

ISCC <sup>Recommendation</sup> Approval:

Sherrill K. Christopher

Date: 7/17/89

FOSC Approval:

C. S. Robbins

Date: 7/17/89

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

FOC

CDP

NOA

EPA

USDA (FS)

USFW

A.DEC

A.FG

A.DNR

CAC

PWSCA

USFS

(version 5/02/89)

SHORELINE CLEANUP PROGRAM

DATE 7/05/89

SHORELINE SEGMENT BF-1

LOCATION: (see enclosed map) PORT NELLIE JUAN-BLUE FIORD

ADEC NO. \_\_\_\_\_ SHORELINE ASSESSMENT DATE: 6/03/89

Recommended Cleanup Activity(ies):

No cleanup recommended at this time, subject to FOSC ~~swat~~  
approval. No oil observed.  
REASSESSMENT AT A LATER DATE.

Priorities Considerations:

~~Class 4:~~ ~~light contamination.~~ NO OIL OBSERVED.  
~~Class B:~~ resources absent.

Ecological Constraints (from site survey):

No ecological constraints.

Archeological Constraints (from site survey):

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

Charles E. Holmes  
State Historic Preservation Officer \*

Date: July 7, 1989

ISCC: Sharon K. Christopher

Date: 7/17/89

EXXON: [Signature]

Date: 7/18/89

FOSC: [Signature]

Date: 7/17/89

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

- BF-1, BF-2, BF-3, BF-4, BF-5, BF-6,  
BF-7, BF-8, BF-9

7/10/82  
USFWS

This area has not been surveyed for bald eagles

P O R

58  
NELLY  
VAB  
200

JUN 11

LIGHTHOUSE  
 RESERVE

五

Port. ~~Stellian~~ Stellian

Eschara  
Peak

Established

3301e PK

Blue Fiord.

Derickson  
Ball

BF-9 4428

BF-8

**BF-7**

BF-1

**BF-2**

BF-3

BF-4

BF-5

**BF-6**

Date: BF-1 Time: 18:00

Observer: Bob Betts (Arch.)

Surveyed From: Foot/Boat/Helio/Plane

Weather: Sun/Cloud/Rain/Snow

**LOCATION**

LOCATION Port Nellie Juan / Blue Ford SEGMENT NUMBER BF-1

LENGTH OF SHORELINE SEGMENT: 4800 m

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

**SHORELINE:**

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

Slope: LANG/HANG/VER

Wave Exposure: High/Med/Low

Sediment: B20 % / C20 % / P10 % / G10 % / S0 % / M0 % / R40 %

Drift Debris on Beach: Yes/No

Supra/Upper/Mid/Lower Type Drift wood  
Seaweed (Fucus)

**OIL**

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

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

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

Sporadic: Y/N % of Segment N/A

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

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

Fresh 0 % Mousse 0 % Tar Formation: 0 %

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

**Comments:**

The shore zone consists of steep to vertical rocky headlands with pocket cobble/gravel beaches. The pocket cobble/gravel beaches are high angle beaches with pebble storm berms in the upper H. intertidal zone. Included in the northern study area of BF-1 was the entire eastern and south western shore zones of the island (see map)

No cleanup is recommended because no apparent oiling was observed by the S.C.A.T. team.

Photos taken, Roll # T4-A/G Roll 2

Photo - 4 1 1 -

Blue Fjord - BF-I

Beach 3

6/3/89

17:30

M. Foget  
P. Crank  
B. Betts

stream

COVE

Water

gravel/cobble  
with sand/mud  
in the lower intertidal  
zone

v - grass

 - gravel/cobble

mmm - rocky headlands  
w/ boulders

--- oil boom

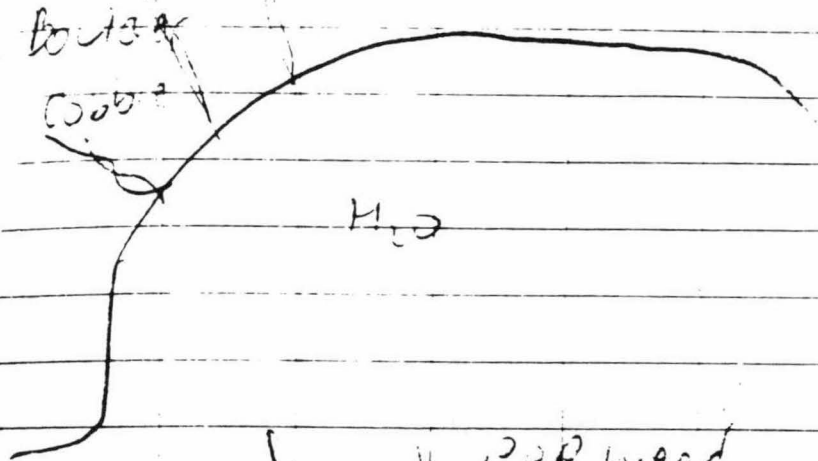
~~DEFINITION~~ 1140

50° Bo. 101

50° C. 101

30° 1110

50° 101  
Grass 1110



dr. Howard 101 weed  
H. 10

LOCATION: Port Nellie Is. Blue Fjord SITE: Island 1/back OBSERVER: Crank

LOCATION PREFIX: BE SEG. NO.: BF1 LENGTH: 4800 m (M)

DATE: 6/03/89 TIME (HDDM): 17:55 TIDE HT.: mid-low (M)

OILED ZONE: Splash High Medium Low - No oil was observed

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

dense patches - small intercobble beds

Balanus (Barnacles): Patchy Y/N Contin. Y/N <sup>Moderate</sup> 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 not observed, however several species of a smaller gastropod were present in abundant numbers

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

OTHER OBSERVATIONS: \_\_\_\_\_

CLEANUP PRECAUTIONS: No oil observed. Suggest no clean-up efforts made in this segment at this time.

MAMMALS: Otters 1 Harbor Seals 2 Sea Lions — Whales —  
Other \_\_\_\_\_

BIRDS: 1 scoter, 3 gulls

GENERAL OBSERVATIONS: Vertical rock walls

(version of 4/29/89)

CULTURAL RESOURCE EVALUATION

Date 6-3-89 Location Port NELLIE JUAN Site EAST COAST OF BLUE FLORP

Location Prefix BF Segment # 1 Length 4800 M

Survey Method:

Air \_\_\_\_\_ (A - indicate on map) Boat X (A - indicate on map)

Ground X (G - indicate on map)

Known cultural resources (AHRS #) None Data Source \_\_\_\_\_

Oil conditions/beach visibility No oil - excellent Beach visibility

Width of beach zone surveyed 10-50 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 90% vertical rock face with pocket gravel or rock beaches

Fresh Water Sources numerous small creeks

Sea Exposure Exposed to Port Nellie Juan except for east side of large Island at northern end of segment

Access/Safety accessible by boat only in calm weather

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

Monitoring during cleanup needed yes/no Collection yes/no

Photos: Color Roll # None Frames \_\_\_\_\_

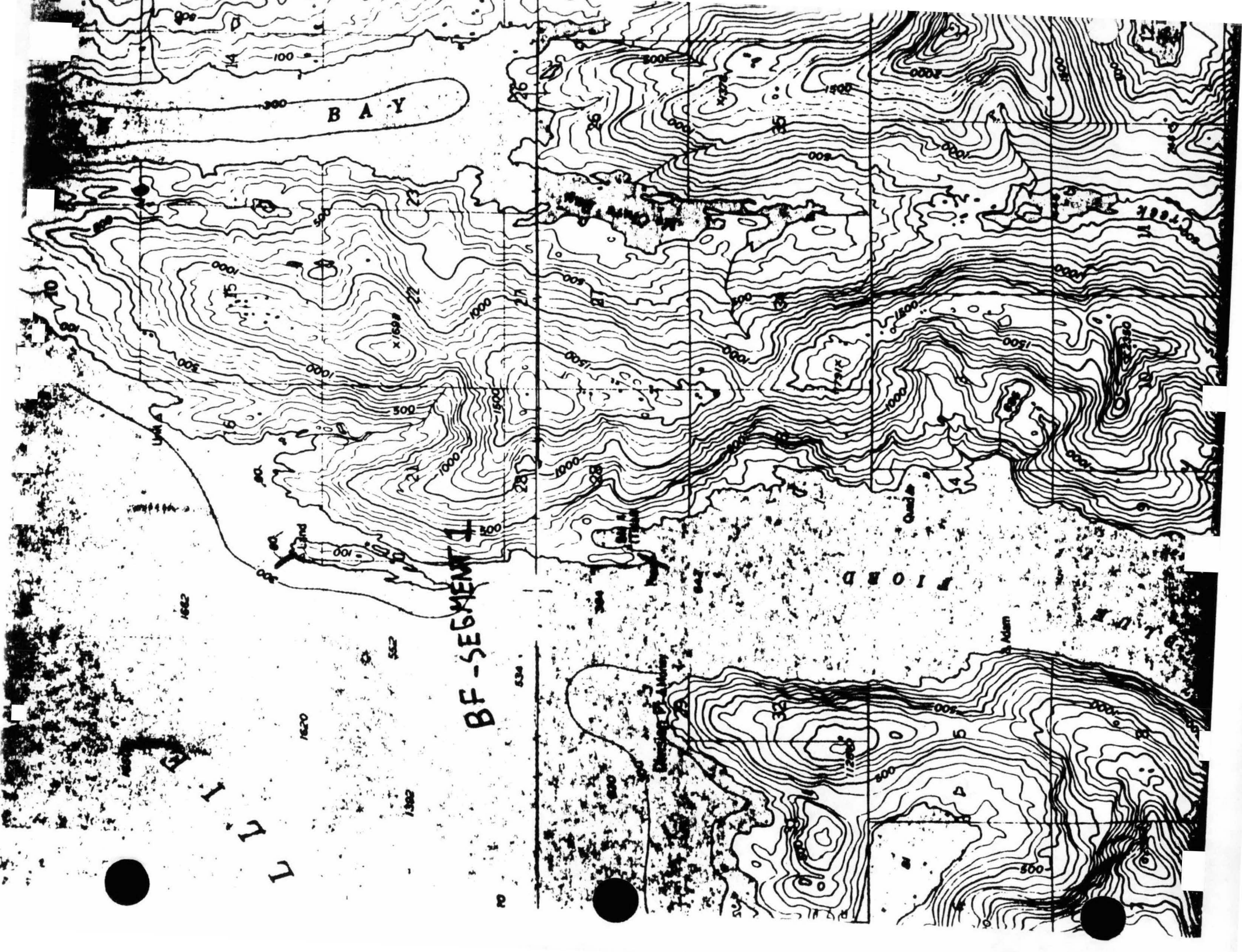
B/W Roll # None Frames \_\_\_\_\_

Observer(s) Bob Betts

Time survey started 1730 Time survey ended 1930

Cultural resource considerations/restraints:

No oil observed, no clean-up recommended. No restraints



SHORELINE CLEANUP PROGRAM

DATE 7/05/89

SHORELINE SEGMENT BF-2

LOCATION: (see enclosed map) PORT NELLIE JUAN-BLUE FIORD

ADEC NO. \_\_\_\_\_ SHORELINE ASSESSMENT DATE: 6/03/89

Recommended Cleanup Activity(ies):

No cleanup recommended at this time, subject to FOSC  
approval. No oil observed.  
REASSESSMENT AT A LATER DATE.

Priorities Considerations:

~~Class 4: light contamination.~~ NO OIL OBSERVED. RESOURCES  
~~Class B: resources present.~~ PRESENT.

Ecological Constraints (from site survey):

Probable salmon stream. (224-40-14920). NOTIFY ADF+G AND RAT  
48 HRS PRIOR TO COMMENCING ANY CLEANUP.

Archeological Constraints (from site survey):

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

Charles Z. Hines

State Historic Preservation Officer \*

Date: July 7, 1989

ISCC: Sharon K. Christopher

Date: 7/17/89

EXXON: C. Hines

Date: 87-07-17

FOSC: C. S. Adkins

Date: 7/17/89

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

Date: 6/3/89 Time: 14:30

Observer: Bob Batts (Arch)

Surveyed From: Foot/Boat/Helio/Plane

Weather: Sun/Cloud/Rain/Snow/

**LOCATION**

LOCATION Port Nellie Jaur / Iliue Fiord SEGMENT NUMBER BF-2

LENGTH OF SHORELINE SEGMENT: 1800 m

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

**SHORELINE:**

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

Slope: LANG/HANG/VER

Wave Exposure: High/Med/Low

Sediment: B10 / C20 / P5 / G10 / S5 / M0 / R50

Drift Debris on Beach: Yes/No Supra/Upper/Mid/Lower Type Driftwood  
Seaweed (fu)

**OIL**

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

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

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

Sporadic: Y/N % of Segment N/A

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

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

Fresh 0 % Mousse 0 % Tar Formation: 0 %

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

**Comments:**

Shore zone consists of steep to vertical rocky headlands with  
a large cove. Steep pocket cobble/gravel beaches are along the  
edge of the cove with a low angle gravel beach at the  
north end of the cove. Several streams feed into the north end of the  
cove and the mouth (south end) is boomed off. (see map)

No clean up is recommended because no apparent oiling

shore zone was observed by the SCAT team,

Photos taken #14,15 on roll # T4-A/5 Roll 2

Port Nellie Juan  
LOCATION: Blue Fiord SITE: Beach 1 OBSERVER: Crank (Bio)  
LOCATION PREFIX: BF SEG. NO.: BF 2 LENGTH: 1800m (M)  
DATE: 10/3/89 TIME (HHMM): 1930 TIDE HT.: Low (M)

OILED ZONE: Splash High Medium Low - No oil observed

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 <sup>Moderate</sup> Sparse Y/N None Y/N

Mytilus in small to moderate size patches

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

Balanus in dense to moderate patches - connected by sparse numbers.

**Littorina**

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

No Littorina were observed

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

Only a few limpets were observed.

OTHER OBSERVATIONS: Probable Salmon Stream

CLEANUP PRECAUTIONS: No oil observed. Suggest clean-up efforts not made in this section at this time

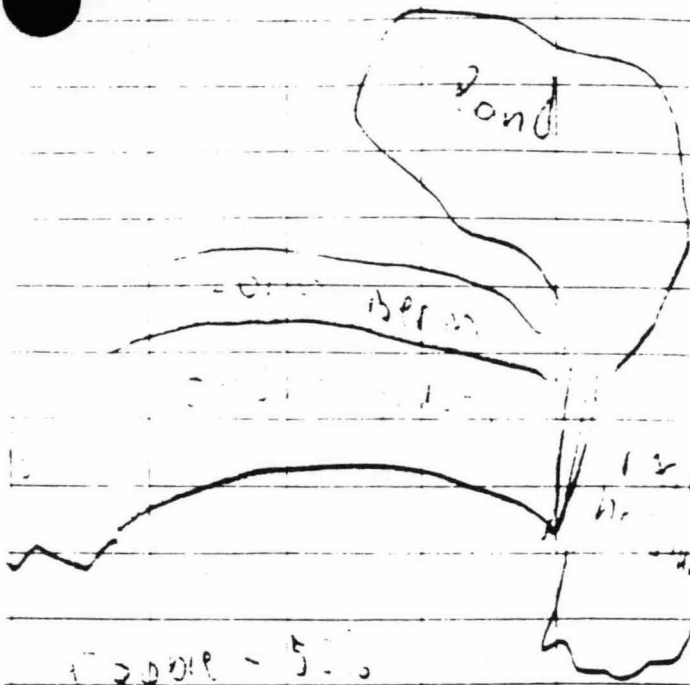
MAMMALS: Otters      Harbor Seals      Sea Lions      Whales       
                    other     

BIRDS:     

GENERAL OBSERVATIONS: 2 waterfalls - cove was beamed  
Large freshwater influence on beach

V - cross

Free

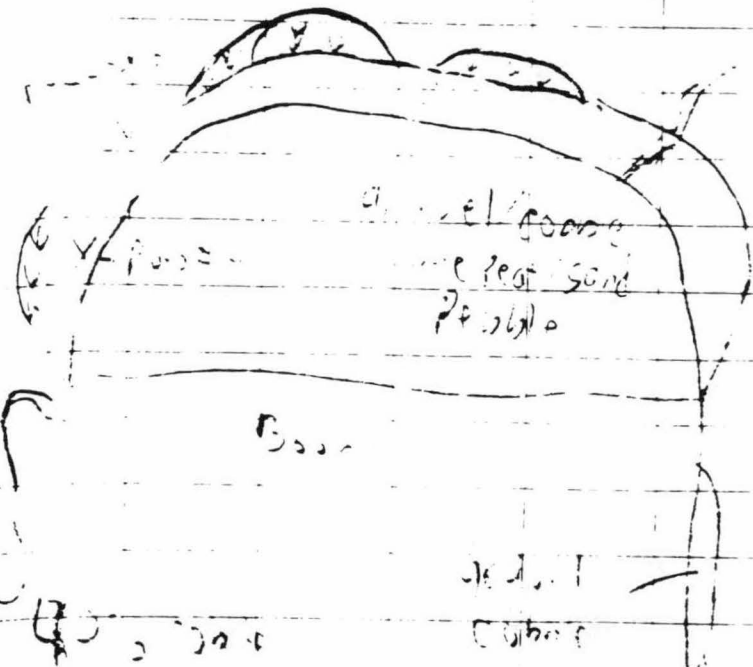


Coarse - 5%

fine - 30%

10% - 10%

drilled pop week - wood



V - cross

Gravel/Coarse  
fine peat sand  
Pebbles

Base

Gravel  
Cobble

15% - 10%

30% gravel

5% - 10% gravel

10% pebbles

15% - 10% sand/pebbles

Gravel  
Cobble  
rock  
face

E. - bay facing North

SW. End bay Facing N.

Photo 5

(version of 4/29/89)

CULTURAL RESOURCE EVALUATION

Date 6-3-89 Location PORT NELLIE JUAN Site EAST COAST BLUE FLORO

Location Prefix BE Segment # 2 Length 1800 M

Survey Method:

Air \_\_\_\_\_ (A - indicate on map) Boat X (A - indicate on map)

Ground X (G - indicate on map)

Known cultural resources (AHRS #) NONE Data Source \_\_\_\_\_

Oil conditions/beach visibility No oil - excellent beach visibility

Width of beach zone surveyed 15 m Tree fringe surveyed 20 M

Cultural resources observed in beach zone (AHRS code) NONE

Cultural resources observed in tree fringe (AHRS code) NONE

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

Shore Profile low angle pocket beaches (rock and gravel) with rocky headlands

Fresh Water Sources Two major streams at head of bay.

Sea Exposure Sheltered bay open to south - well protected anchorage

Access/Safety Safe boat access in all sea conditions

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

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

Photos: Color Roll # NONE Frames \_\_\_\_\_

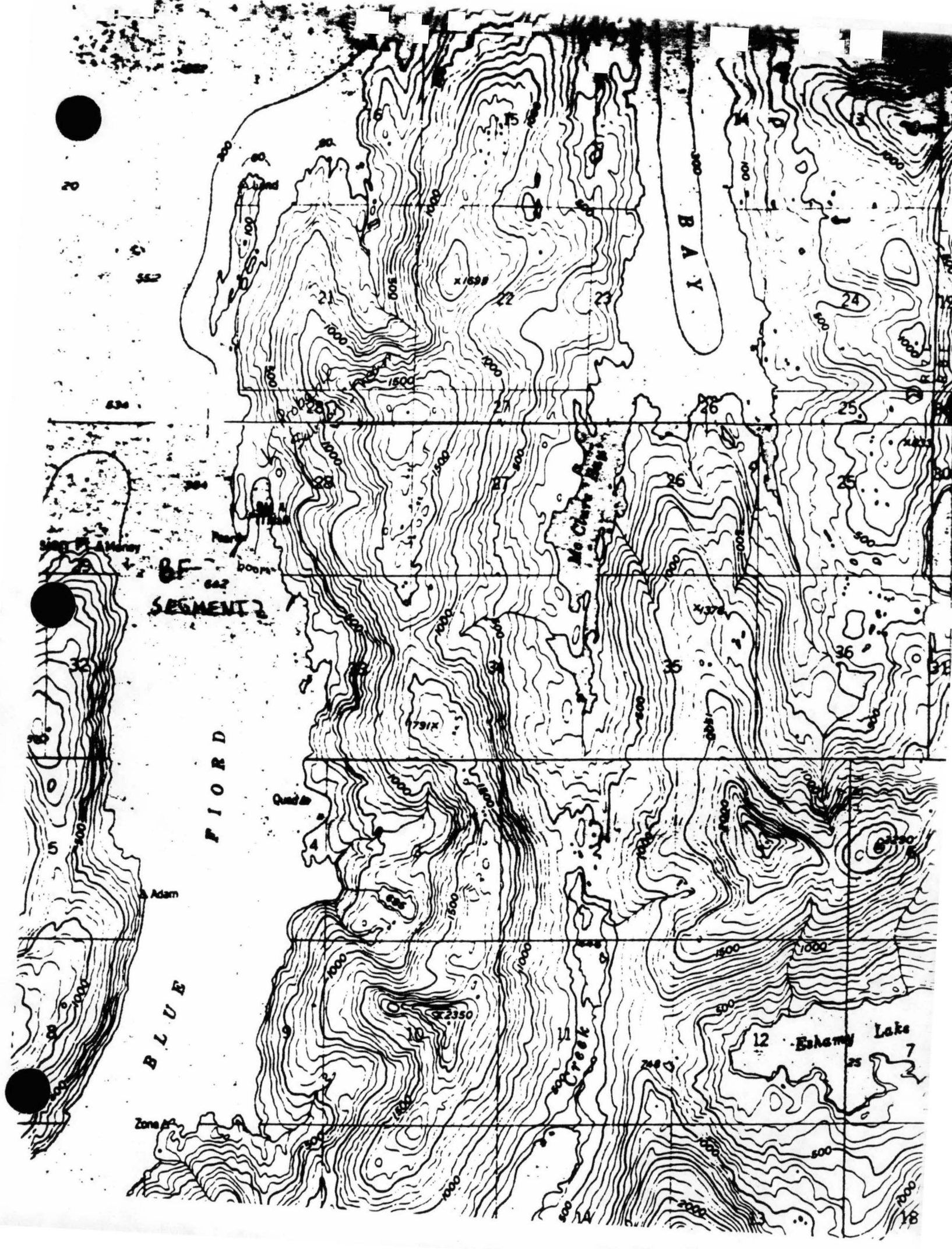
B/W Roll # NONE Frames \_\_\_\_\_

Observer(s) Bob Bette

Time survey started 1930 Time survey ended 1950

Cultural resource considerations/restraints:

No oil, no clean-up recommended. No restraints



SHORELINE CLEANUP PROGRAM

DATE 7/05/89

SHORELINE SEGMENT BF-3

LOCATION: (see enclosed map) PORT NELLIE JUAN-BLUE FIORD

ADEC NO. \_\_\_\_\_ SHORELINE ASSESSMENT DATE: 6/03/89

Recommended Cleanup Activity(ies):

No cleanup recommended at this time, subject to FOSC  
approval. No oil observed.  
REASSESSMENT AT A LATER DATE.

Priorities Considerations:

~~Class 4: light contamination.~~ NO OIL OBSERVED.  
~~Class B: resources absent.~~

Ecological Constraints (from site survey):  
No ecological constraints.

Archeological Constraints (from site survey):

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

Charles E. Holmes  
State Historic Preservation Officer \*

Date: July 7, 1989

ISCC: Sharon K. Christopher

Date: 7/17/89

EXXON: L. Helstrom

Date: 8907-17

FOSC: C. G. Robbins

Date: 7-17-89

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

**Date:** 6/3/89 **Time:** 20:00

**Observer:** Bob Betts (Arch.)

**Surveyed From:** Foot/Boat/Helio/Plane

**Weather:** Sun/Cloud/Rain/Snow/

**LOCATION**

**LOCATION** Port + Nellie Juan / Blue Ford

**SEGMENT NUMBER** 3

**LENGTH OF SHORELINE SEGMENT:** 1200 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 % / C20 % / P10 % / G10 % / S0 % / M0 % / R40 %

**Drift Debris on Beach:** Yes/No

**Supra/Upper/Mid/Lower Type** Driftwood  
Seaweed (Fucus)

**OIL**

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

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

**Continuous:** Y/N % of Segment N/A

**Width of Band:** N/A

**Sporadic:** Y/N % of Segment N/A

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

**Pooled Oil:** 0 % **"Free" Oil:** 0 % **Coated:** 0 % / 0 % / 0 %

**Fresh** 0 % **Mousse** 0 % **Tar Formation:** 0 %

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

**Comments:**

Shore zone consists of steep to vertical rocky headlands  
with pocket cobble/gravel beaches. The pocket gravel beaches  
are high angle beaches with gravel storm berms in the upper  
high intertidal zone. The Island at the southern end of BF-3 (see map)  
actually connected by a Low angled spit at Low tide. <sup>The</sup> western side of Island <sup>was</sup> ~~was~~

No Clean up is recommended because no apparent oiling of  
the zone was observed by the S.C.A.T. team.

Photos taken # 16, roll # TY-A/G Roll 2

quail  
Bent

Rock  
face

quail  
Bent  
Photo #6

Rock  
face  
Photo #7  
quail  
Bent

Photo #16 facing N. on Bent #3  
#17 S. end BF-3 looking at  
drift

076155

Departed Jenny girl

± 20 BF 4 - 1/2

± 21 + - c page

± 22 + - c page

± 23

± 24 + - c page

± 25 N. BF - 3 facing N.

± 26 N. BF - 3 facing N.

OVER JOINT

± 27

± 28 + - c page

± 29 S. end BF-3 facing N.

± 30 + - c page

± 31 S. end BF-4 facing S.

± 32 S. end BF-4 facing N.

men

A

LOWTIE - 1005

910

gravel

29

100m

gravel

Rocky

stream

23

22

Rocky

stream

B/C

Low tide

BF-6

21

gravel

Zone gravel

24



13m11

9/14/11



Photo #16 facing N. on Beach = 3  
#17 S. end BF-3 looking @ 4  
dr. 11 100ft 100ft

Bob Belts (Arlene)  
Mike Fayet (CP 47)  
Patty Crank (Arlene)

LOCATION: Blue Ford SITE: Beach 1 OBSERVER: Patty Crank (Arlene)  
LOCATION PREFIX: BF SEG. NO.: BF 3 LENGTH: 1200 (M)  
DATE: 6/3/89 TIME (HHMM): 2000 TIDE HT.: low (M)

OILED ZONE: Splash High Medium Low - No oil observed

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 <sup>Moderate</sup> 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: \_\_\_\_\_

CLEANUP PRECAUTIONS: No oil observed. Suggest  
clean-up efforts not made in this section at  
this time.

MAMMALS: Otters 1 Harbor Seals \_\_\_\_\_ Sea Lions \_\_\_\_\_ Whales \_\_\_\_\_  
Other \_\_\_\_\_

BIRDS: \_\_\_\_\_

GENERAL OBSERVATIONS: Small pond behind storm  
berm

(version of 4/29/89)

CULTURAL RESOURCE EVALUATION

Date E-3-89 Location Point Nellie Juan Site EAST COAST OF BLUE FLOR

Location Prefix BE Segment # 3 Length 1200 M

Survey Method:

Air \_\_\_\_\_ (A - indicate on map) Boat X (A - indicate on map)

Ground X (G - indicate on map)

Known cultural resources (AHRS #) None Data Source \_\_\_\_\_

Oil conditions/beach visibility No oil - excellent visibility

Width of beach zone surveyed 20 m Tree fringe surveyed 10 M

Cultural resources observed in beach zone (AHRS code) None

Cultural resources observed in tree fringe (AHRS code) None

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

Shore Profile Rocky headlands (95%) with moderate to high angle pocket <sup>rock</sup> beaches

Fresh Water Sources many small creeks

Sea Exposure Exposed to Blue Fjords

Access/Safety Safe access by boat in calm seas.

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

Monitoring during cleanup needed yes no Collection yes no

Photos: Color Roll # None Frames \_\_\_\_\_

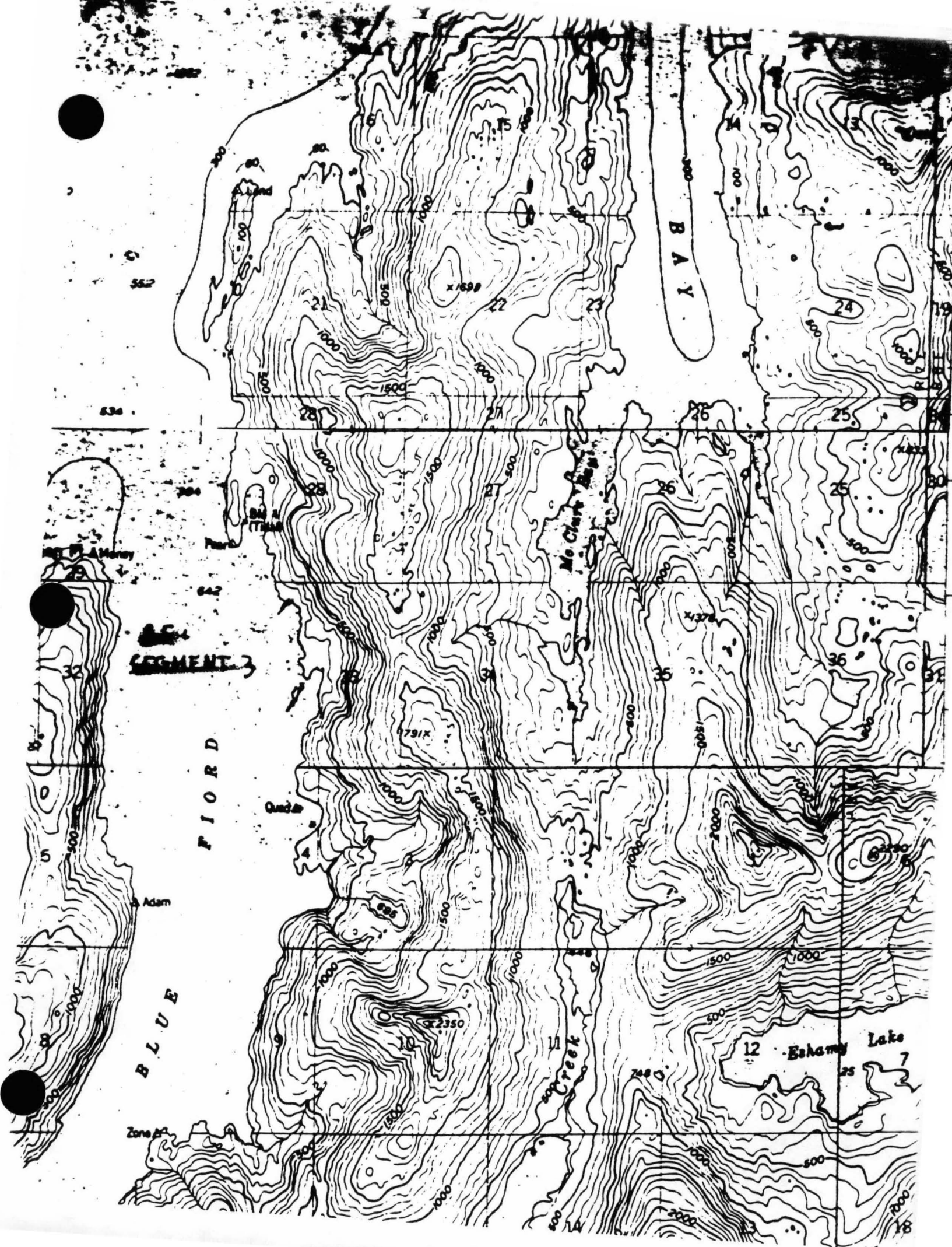
B/W Roll # None Frames \_\_\_\_\_

Observer(s) Bob Berre

Time survey started 2000 Time survey ended 2030

Cultural resource considerations/restraints:

No oil - no clean-up recommended. No restraints



SHORELINE CLEANUP PROGRAM

DATE 7/05/89

SHORELINE SEGMENT BF-4

LOCATION: (see enclosed map) PORT NELLIE JUAN-BLUE FIORD

ADEC NO. \_\_\_\_\_ SHORELINE ASSESSMENT DATE: 6/03/89

Recommended Cleanup Activity(ies):

No cleanup recommended at this time, subject to FOSC approval. No oil observed.

REASSESSMENT AT A LATER DATE.

Priorities Considerations: HIGH RECREATIONAL USE IN COVE AT NORTH END.

~~Class 4: light contamination.~~

~~Class B:~~ resources present. NO OIL OBSERVED.

Ecological Constraints (from site survey):

Probable salmon stream. (224-40-14915). CONTACT ADF&G AND RAT CATALOGED

48 HOURS PRIOR TO COMMENCING ANY CLEANUP.

Archeological Constraints (from site survey):

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

Charles E. Holmes  
State Historic Preservation Officer \*

Date: July 7, 1989

ISCC: Sharon K. Christopher

Date: 7/17/89

EXXON: C. H. H.

Date: 87-07-17

FOSC: C. S. Robbins

Date: 7-17-89

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

Date: 6/3/89 Time: 20:15

Observer: Bob Betts (Arch)

Surveyed From: Foot/Boat/Helio/Plane

Weather: Sun/Cloud/Rain/Snow/F

**LOCATION**

LOCATION Port Nellie Juan / Blue Fiord

SEGMENT NUMBER 4

LENGTH OF SHORELINE SEGMENT: 2800 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 / C15 / P5 / G10 / S0 / M0 / R50

Drift Debris on Beach: Yes/No Supra/Upper/Mid/Lower Type Driftwood  
Seaweed (fucus)

**OIL**

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

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

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

Sporadic: Y/N % of Segment N/A

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

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

Fresh 0 % Mousse 0 % Tar Formation: 0 %

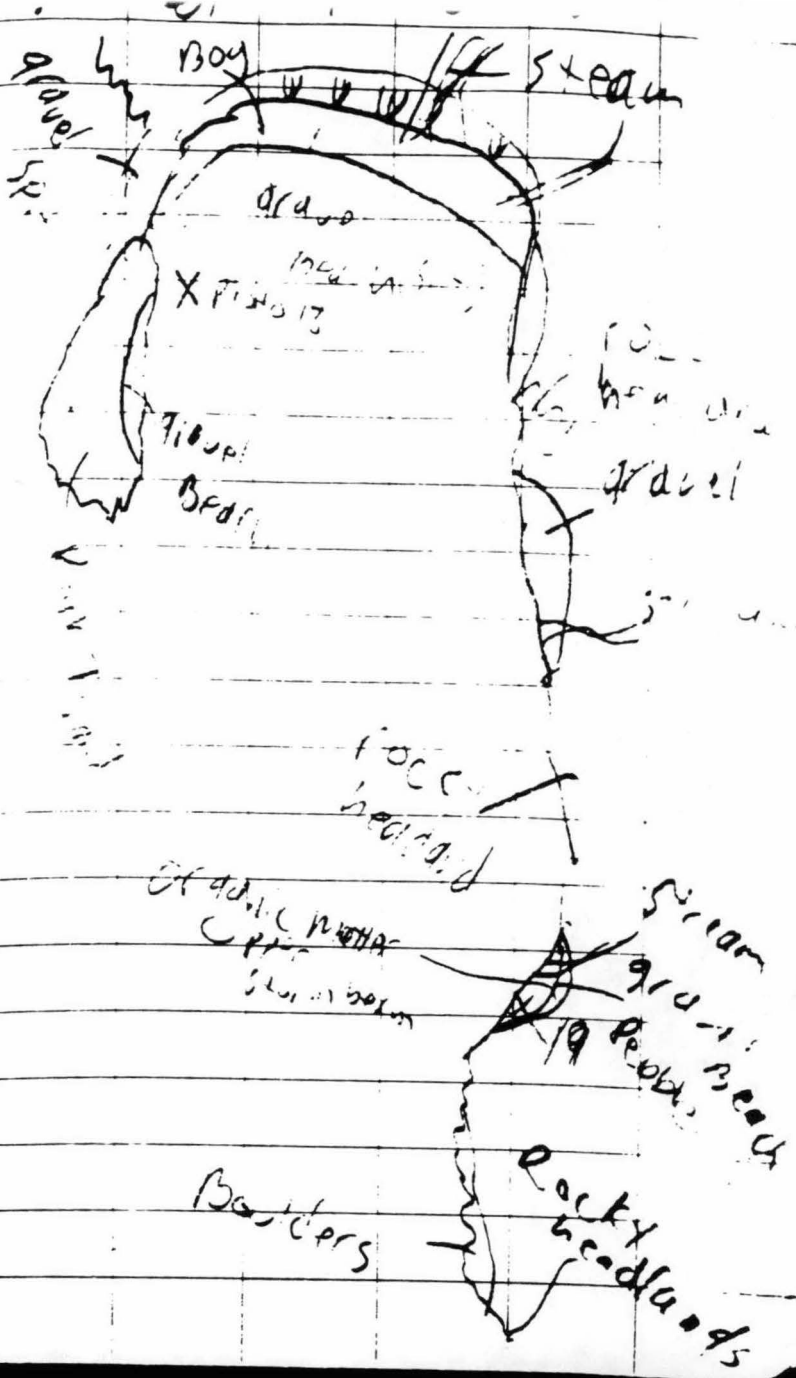
Drift Debris Oiled? Yes/No Supra/Upper/Mid/Lower Amount: H/M/L/

**Comments:**

Shore zone consists of steep to vertical rocky headlands with pocket gravel beaches. Pocket beaches are high angle beaches with gravel storm berms in upper high intertidal zone. The Island located at the northern end of BF-4 connected by a spit at low tide and composes the western end of a sheltered cove with a stream at its head. The eastern side of the Island and spit were studied in segment BF-4.

No clean up activities are recommended because no apparent oiling of the shore zone was observed by the S.C.A.T. team

Photos taken #18, 19, 20 roll # T4-A/G Roll 2



BF-4  
 North cove east shore

Port Nellie Juan/  
LOCATION: Blue Fiord SITE: Beach 1 OBSERVER: Betty (C. G.)  
LOCATION PREFIX: BF SEG. NO.: BF4 LENGTH: 2800 (M)  
DATE: 6/3/89 TIME (HHMM): 2015 TIDE HT.: low/mid (M)

OILED ZONE: Splash High Medium Low - No oil observed

SUBSTRATUM: Rocks Boulder Cobble Gravel Sand Mud  
*headlands beach*

**LIVE BIOTA**

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

covered vertical rocks and cobble/gravel/sand/mud beach

**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

Several species of small gastropods

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

Moderate population of limpets living under Fucus

OTHER OBSERVATIONS: Probable Salmon Stream

eelgrass bed, Waterfalls

CLEANUP PRECAUTIONS: No oil observe. Suggest clean-up  
efforts not made in this section at this time.

MAMMALS: Otters 3 Harbor Seals      Sea Lions      Whales       
Other     

BIRDS: 1 gull

GENERAL OBSERVATIONS: Cove mostly estuarine

(version of 4/29/89)

CULTURAL RESOURCE EVALUATION

Date 6-3-89 Location PORT NELLIE JUAN Site EAST COAST BLUE FLOR

Location Prefix BF Segment # 4 Length 2800

Survey Method:

Air \_\_\_\_\_ (A - indicate on map) Boat X (A - indicate on map)

Ground X (G - indicate on map)

Known cultural resources (AHRS #) None Data Source \_\_\_\_\_

Oil conditions/beach visibility no oil - excellent visibility

Width of beach zone surveyed 10-20 m Tree fringe surveyed 0-10 M

Cultural resources observed in beach zone (AHRS code) None

Cultural resources observed in tree fringe (AHRS code) None

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

Shore Profile 90% rocky headlands w/ 10% low angle rock beaches in bay at north & south ends of segment

Fresh Water Sources numerous creeks

Sea Exposure Exposed to Blue Fjords

Access/Safety easy access by boat in calm weather

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

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

Photos: Color Roll # None Frames \_\_\_\_\_

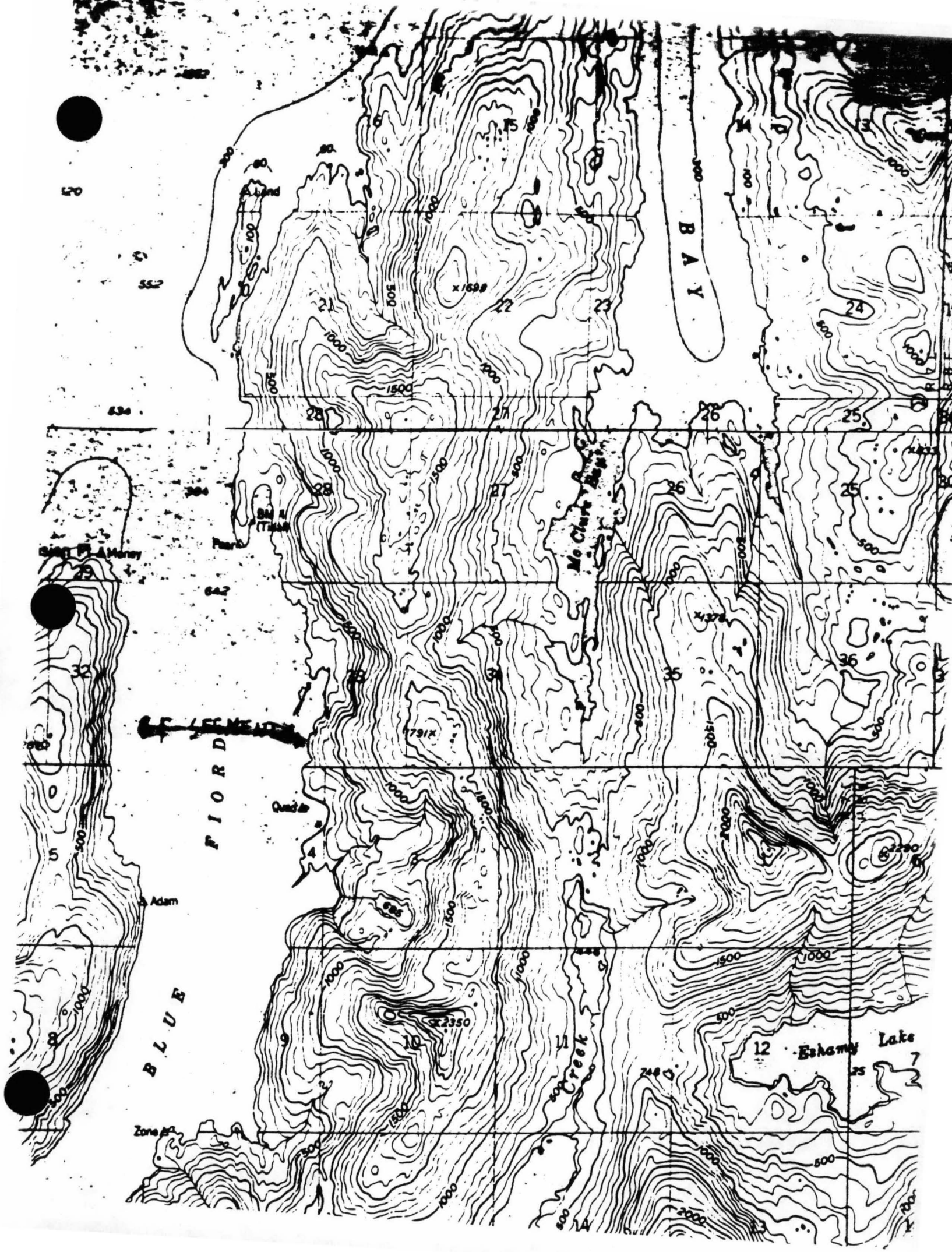
B/W Roll # None Frames \_\_\_\_\_

Observer(s) Bob Rette

Time survey started 2030 Time survey ended 2055

Cultural resource considerations/restraints:

No oil, no clean-up recommended, no restraints



SHORELINE CLEANUP PROGRAM

DATE 7/05/89

SHORELINE SEGMENT BF-5

LOCATION: (see enclosed map) PORT NELLIE JUAN-BLUE FIORD

ADEC NO. \_\_\_\_\_ SHORELINE ASSESSMENT DATE: 6/04/89

Recommended Cleanup Activity(ies):

No cleanup recommended at this time, subject to FOSC approval. No oil observed.

REASSESSMENT AT A LATER DATE

Priorities Considerations:

~~Class 4: light contamination.~~

~~Class B: resources present.~~

NO OIL OBSERVED - RESOURCES PRESENT.

Ecological Constraints (from site survey):

Seal haulout : ~15 adults, 2 pups present in the segment, see map for location.

NOTE: LAND OWNED BY CHENEGA VILLAGE CORP. PERMIT NO ACCESS TO UPLANDS AT ANY TIME.

Archeological Constraints (from site survey):

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

Charles E. Holmes

State Historic Preservation Officer \*

Date: July 7, 1989

ISCC: Sharon K. Christopher

Date: 7/17/89

EXXON: C. Weston

Date: 8/07-17

FOSC: C. S. Doherty

Date: 7/17/89

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

**SHORELINE OIL EVALUATION**Mike Fogel (S.E.)  
Patty Crank (S.H.)Date: 6/4/89 Time: 7:00Observer: Bob Betts (Arch.)Surveyed From: Foot/Boat/Helio/PlaneWeather: Sun/Cloud/Rain/Snow/Fo**LOCATION**LOCATION Port Nellie Juan / Blue Ford SEGMENT NUMBER BF-5LENGTH OF SHORELINE SEGMENT: 3200 mACCESS: Foot/Vehicle/Boat/Barge/Helio/Float Plane**SHORELINE:**Shoreline Type: SPI/BEA/COV/HLD/STRTSlope: LANG/HANG/VERWave Exposure: High/Med/LowSediment: B30% / C20% / P10% / G10% / S0% / M0% / R30%Drift Debris on Beach: Yes/NoSupra/Upper/Mid/Lower Type Driftwood

Seaweeds (Full)

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

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

Continuous: Y/N % of Segment N/A Width of Band: N/A mSporadic: Y/N % of Segment N/AEst. Oil Thickness where > 1cm: N/A cm Est. Oil Penetration: N/A cmPooled Oil: 0% "Free" Oil: 0% Coated: H 0% / M 0% / L 0%Fresh 0% Mousse 0% Tar Formation: 0%Drift Debris Oiled? Yes/No Supra/Upper/Mid/Lower Amount: H/M/L/**Comments:**

The shore zone consists of steep to vertical rocky headland  
 with some high angle cobble/gravel beaches. There are two  
 low angle gravel beaches located in the large cove at the northern  
 end of BF-5.

No cleanup is recommended because no apparent oil  
 of the shore zone was observed by the S.C.A.T. team.

Photos taken #22 roll # 74-A/G Roll #2

# Blue Ford

## Shoreline Segment lengths

Sta # Length (meters)

1 4800

2 1800

3 1200

4 2800

5 3200

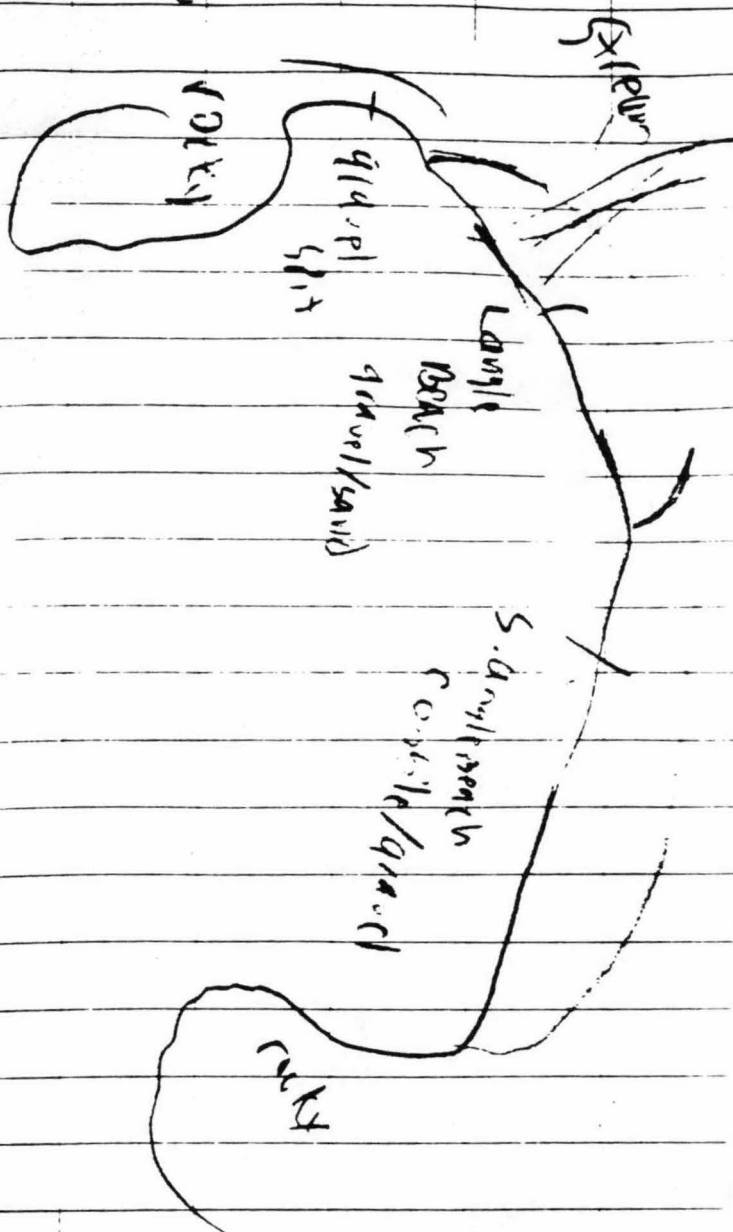
6 1800

7

8 2400

9 3000

Beach 1 ~~2-5~~



# ECOLOGICAL EVALUATION

LOCATION: Port Nellie Juan/ Blue Fiord SITE: Beach 1 OBSERVER: Mike Foget (O.G.)  
Bob Betts (Archae)  
Patty Crank (Biol)  
 LOCATION PREFIX: BF SEG. NO.: 5 LENGTH: 3200 (M)  
 DATE: 6/14/62 TIME (HMM): 0700 TIDE HT.: low (M)

OILED ZONE: Splash High Medium Low - No observed oil

SUBSTRATUM: Rocks Boulder Cobble Gravel Sand Mud Vertical rock walls with pocket beaches of boulder, cobble, gravel, sand, mud.

## LIVE BIOTA

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

Continuous population ranging from dense to sparse concentrations

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

dense patches esp. on rock faces, small intergravel

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

Continuous population ranging from dense to sparse concentrations.

## Littorina

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

None observed - small gastropods were present.

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

OTHER OBSERVATIONS: Small stream (80-100 yds) before falls, encrusting corraline algae

CLEANUP PRECAUTIONS: No oil observed. Suggest no cleanup efforts made on this segment. Seal haulout with pups

MAMMALS: Otters 2 (Adult with pup) Harbor Seals 17 (15 adults, 2 pups) Sea Lions — Whales —  
 Other —

BIRDS: Bald Eagle, 1 gull

GENERAL OBSERVATIONS: Large freshwater influence - (several falls)

(version of 4/29/89)

CULTURAL RESOURCE EVALUATION

Date 6-4-89 Location PR - NELLIE JUAN Site EAST SIDE, BLUE FIORD

Location Prefix BF Segment # 5 Length 3200 M

Survey Method:

Air \_\_\_\_\_ (A - indicate on map) Boat X (A - indicate on map)

Ground X (G - indicate on map)

Known cultural resources (AHRS #) None Data Source \_\_\_\_\_

Oil conditions/beach visibility No oil on beach surfaces

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

Cultural resources observed in beach zone (AHRS code) None

Cultural resources observed in tree fringe (AHRS code) None

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

Shore Profile 95% vertical rock, gravel and rock beaches - moderate to high angle

Fresh Water Sources numerous creeks and streams

Sea Exposure exposed to Blue Fiord and westerly seas.

Access/Safety Safe boat access in calm seas - large cove in north part of segment

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

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

Photos: Color Roll # None Frames \_\_\_\_\_

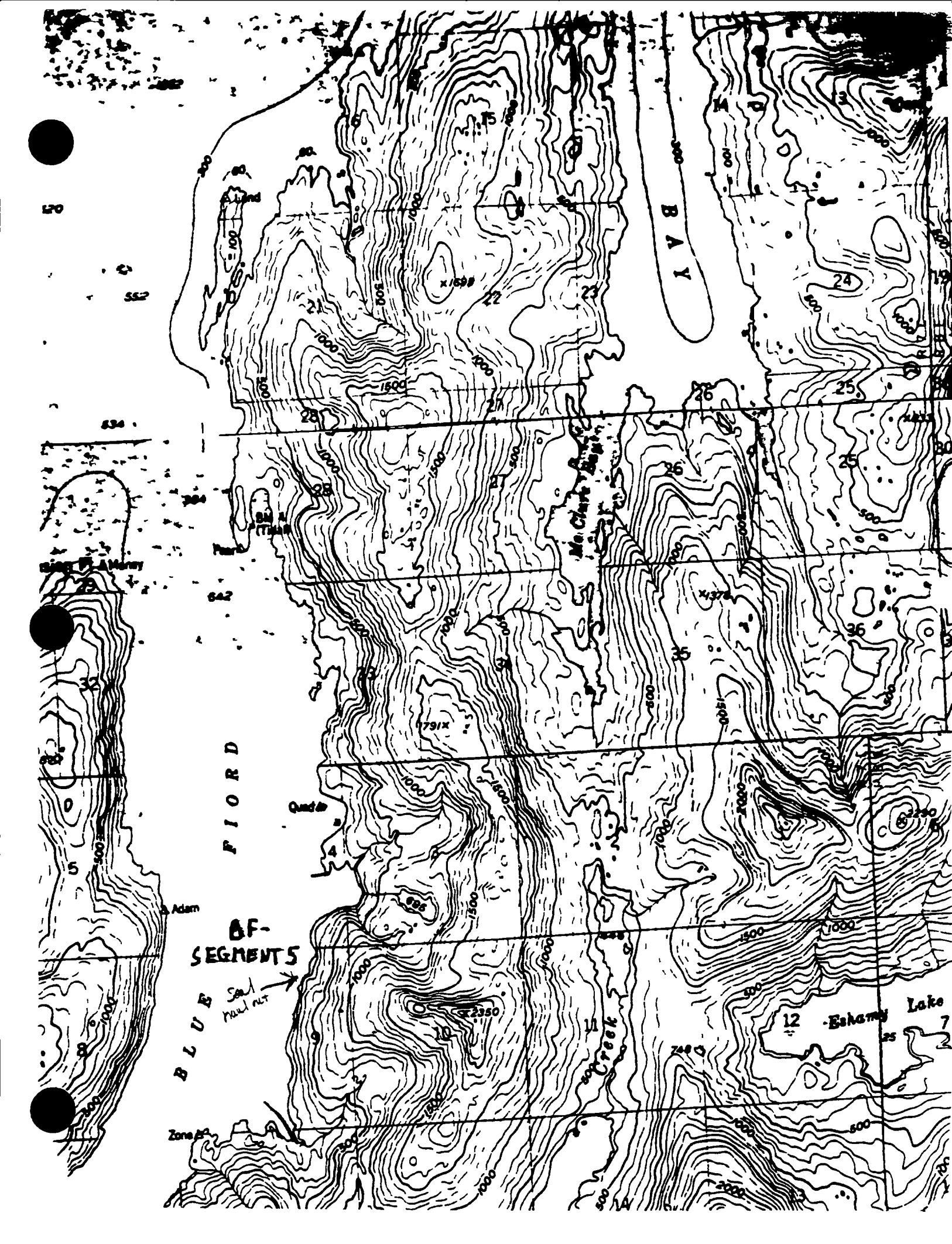
B/W Roll # None Frames \_\_\_\_\_

Observer(s) Bob Bitts

Time survey started 0720 Time survey ended ca. 0800

Cultural resource considerations/restraints:

No oil observed, no clean-up recommended, no archaeological constraints.



SHORELINE CLEANUP PROGRAM

DATE 7/05/89

SHORELINE SEGMENT BF-6

LOCATION: (see enclosed map) PORT NELLIE JUAN-BLUE FIORD

ADEC NO. \_\_\_\_\_ SHORELINE ASSESSMENT DATE: 6/04/89

Recommended Cleanup Activity(ies):

No cleanup recommended at this time, subject to FOSC  
approval. No oil observed.  
REASSESSMENT AT A LATER DATE.

Priorities Considerations:

~~Class 4: light contamination.~~ NO OIL OBSERVED.  
~~Class B: resources present.~~

Ecological Constraints (from site survey):  
Probable salmon stream.

NOTE: LAND OWNED BY CHEVEGA VILLAGE CORP. PERMIT NO ACCESS TO  
UPLANDS AT ANY TIME.

Archeological Constraints (from site survey):

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

Charles E. Holmes  
State Historic Preservation Officer \*

Date: July 7, 1989

ISCC: Sharon K. Christopher

Date: 7/17/89

EXXON: L. H. H. H.

Date: 89-07-17

FOSC: C. E. Dillman

Date: 7/17/89

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

Mike Forget (W.G.)  
Patty Crank (Biol.)  
Observer: Bob Betts (Arch.)

Date: 6/4/84 Time: \_\_\_\_\_

Surveyed From: Foot/Boat/Helio/Plane

Weather: Sun/Cloud/Rain/Snow/:

**LOCATION**

LOCATION Port Nellie Juan / Blue Fiord SEGMENT NUMBER BF-6

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: B20 / C20 / P10 / G10 / S5 / M5 / R30

Drift Debris on Beach: Yes/No Supra/Upper/Mid/Lower Type Driftwood  
Seaweed (fucus)

**OIL**

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

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

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

Sporadic: Y/N % of Segment N/A

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

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

Fresh 0 % Mousse 0 % Tar Formation: 0 %

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

**Comments:**

Shore zone consists of steep to vertical rocky headlands with some high angle boulder/cobble pocket beaches. The boulder/cobble beaches are exposed only at low tide. There is a low angle beach location in the east end of BF-6 at the mouth of a stream. This beach is high in mud and organics at the lower intertidal zone.

No cleanup activities are recommended because no apparent oiling was observed by the S.C.A.T. team,

Photo's # 24, 25 roll # 74 -A/G roll # 2

U. End Photo #2

U. End Low angle view

r. p. ~~middle~~ middle, 250'

C. 400'

100' high angle bottom

W. 100'

Mon-ly 100' 100'

ROCKS - COUS, high angle view

B/C bottom exposed and a

Low site

**ECOLOGICAL EVALUATION**Mike Fogel (O.G.)  
Bob Belts (Arch)  
Patty Crank (Biol)

LOCATION: Port Nellie Juan / Blue Fiord SITE: Beach 1 OBSERVER: Patty Crank (Biol)  
LOCATION PREFIX: BF SEG. NO.: BF 6 LENGTH: 1800 (M)  
DATE: 6/4/62 TIME (HDDM): 0800 TIDE HT.: \_\_\_\_\_ (M)

OILED ZONE: Splash High Medium Low No observed oil

SUBSTRATUM: Rocks Boulder Cobble Gravel, Sand MudVertical rock walls with  
pocket beaches of cobble,  
sand + mud.**LIVE BIOTA**Fucus (algae): Patchy Y/N Contin. Y/N Dense Y/N Sparse Y/N None Y/NContinuous population ranging from dense to sparse concentrationsMytilus (Mussels): Patchy Y/N Contin. Y/N Dense Y/N Sparse Y/N None Y/NExtensive juvenile mussel bed - intergravel next to stream (estuarine)Balanus (Barnacles): Patchy Y/N Contin. Y/N Dense Y/N Sparse Y/N None Y/NContinuous population ranging from dense to sparse concentrations**Littorina**Patchy Y/N Contin. Y/N Dense Y/N Sparse Y/N None Y/NNone observed - other small gastropods were present.Littorata: Patchy Y/N Contin. Y/N Dense Y/N Sparse Y/N None Y/NOTHER OBSERVATIONS: eelgrass beds present - probable salmon stream  
starfish, tubeworms; polychaete worms presentCLEANUP PRECAUTIONS: Oil not observed. Suggest no clean-up efforts  
made on this segment at this time.MAMMALS: Otters — Harbor Seals 3 adults 1 pup <sup>in water</sup> Sea Lions — Whales —  
Other \_\_\_\_\_

BIRDS: \_\_\_\_\_

GENERAL OBSERVATIONS: low sloping beaches

(version of 4/29/89)

CULTURAL RESOURCE EVALUATION

Date 6-4-89 Location PORT NELLIE JUAN Site EAST SIDE BLUE FIORD

Location Prefix BF Segment # 6 Length 1800 M

Survey Method:

Air \_\_\_\_\_ (A - indicate on map) Boat X (A - indicate on map)

Ground X (G - indicate on map)

Known cultural resources (AHRS #) None Data Source \_\_\_\_\_

Oil conditions/beach visibility No oil on beach surfaces

Width of beach zone surveyed 20 - 30 m Tree fringe surveyed 0

Cultural resources observed in beach zone (AHRS code) None

Cultural resources observed in tree fringe (AHRS code) None

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

Shore Profile 95% vertical rock, pocket beaches - moderate to high angle rock and gravel beach

Fresh Water Sources numerous creeks and streams

Sea Exposure North exposure to Blue Fiord - unprotected to north seas

Access/Safety easy boat access in calm seas

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 # None Frames \_\_\_\_\_

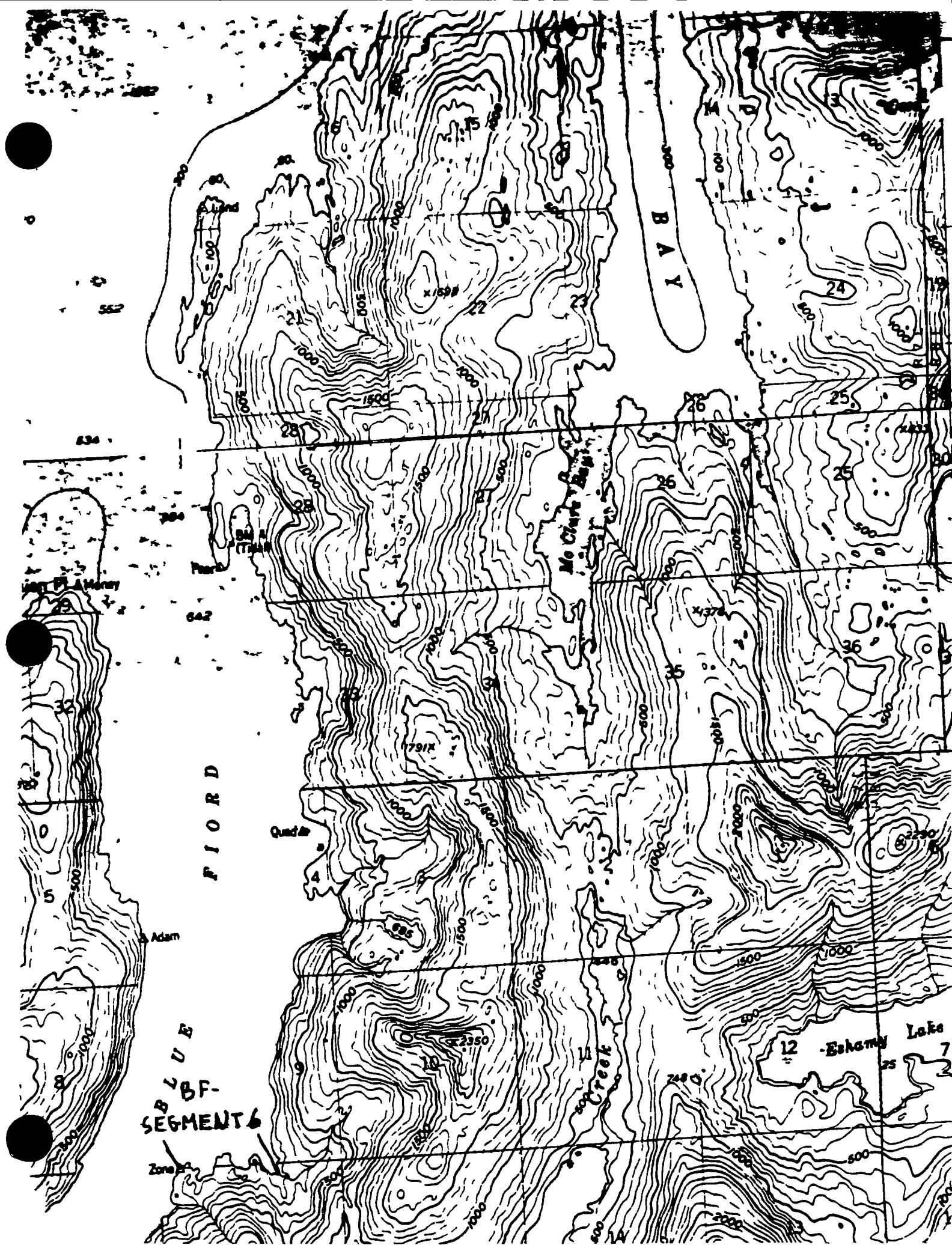
B/W Roll # None Frames \_\_\_\_\_

Observer(s) Bob Betts

Time survey started ca. 0800 Time survey ended ca. 0830

Cultural resource considerations/restraints:

No oil observed, no clean-up recommended, no  
archaeological constraints



SHORELINE CLEANUP PROGRAM

DATE 7/05/89

SHORELINE SEGMENT BF-7

LOCATION: (see enclosed map) PORT NELLIE JUAN-BLUE FIORD

ADEC NO. \_\_\_\_\_ SHORELINE ASSESSMENT DATE: 6/04/89

Recommended Cleanup Activity(ies):

No cleanup recommended at this time, subject to FOSC  
approval. No oil observed.  
REASSESSMENT AT A LATER TIME.

Priorities Considerations: medium use recreational area.

~~Class 4+ light contamination.~~ NO OIL OBSERVED  
~~Class B+ resources present.~~

Ecological Constraints (from site survey):

Crews should avoid disturbing intercobble mussel beds and mud flats.

NOTE: LANDS OWNED BY CHENEGA VILLAGE CORP. PERMIT NO ACCESS TO UPLANDS AT ANY TIME.

Archeological Constraints (from site survey):

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

Charles E. Adams  
State Historic Preservation Officer \*

Date: July 7, 1989

ISCC: Sharon K. Christopher

Date: 7/17/89

EXXON: L. Adams

Date: 89-07-17

FOSC: C. E. Adams

Date: 7/17/89

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

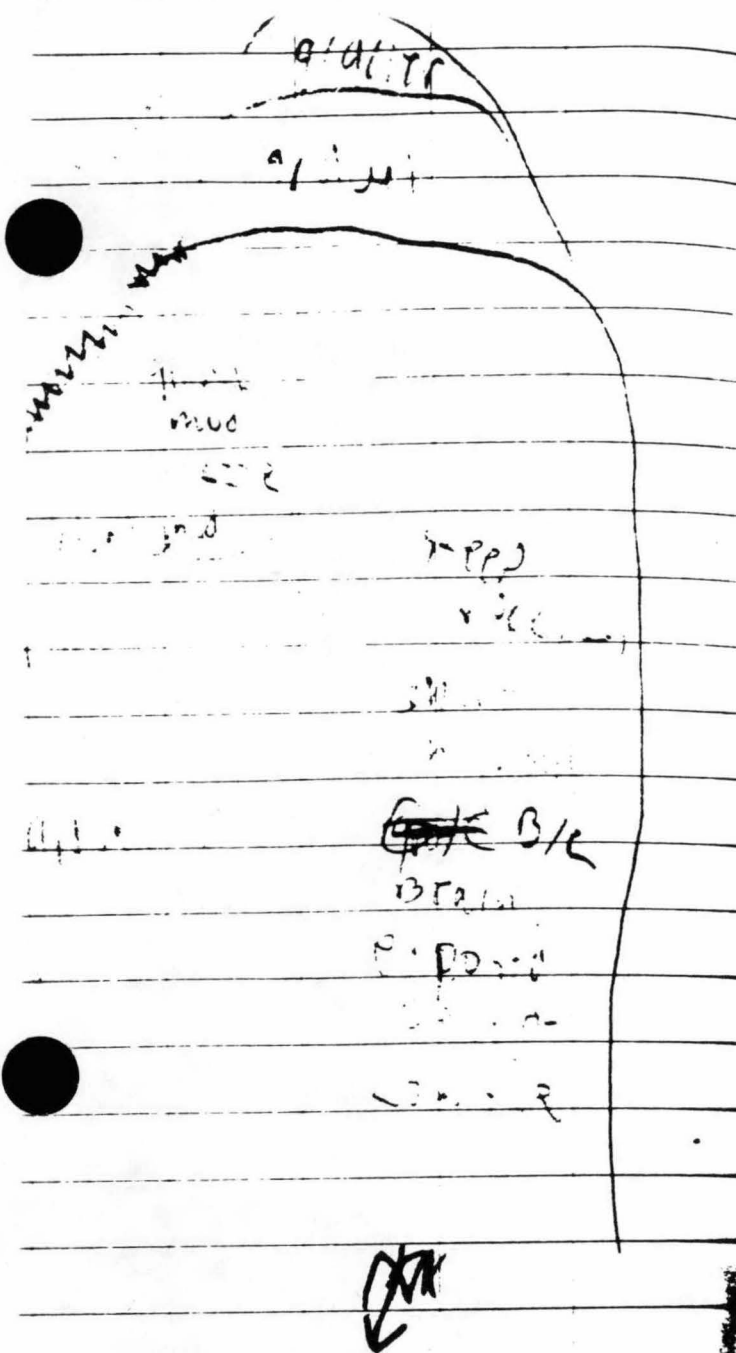
**SHORELINE OIL EVALUATION**Mike Foget (O.G.)  
Patty Crank (Bio.)Date: 6/4/89 / Time: 8:45Observer: Bob Betts (Arch)Surveyed From: Foot/Boat/Helio/PlaneWeather: Sun/Cloud/Rain/Snow/F**LOCATION**LOCATION Port Nellie Juan / Blue FiordSEGMENT NUMBER BF-7LENGTH OF SHORELINE SEGMENT: Full map not available mACCESS: Foot/Vehicle/Boat/Barge/Helio/Float Plane**SHORELINE:**Shoreline Type: SPI/BEA/COV/HLD/STRTSlope: LANG/HANG/VERWave Exposure: High/Med/LowSediment: B20 % / C15 % / P10 % / G5 % / S5 % / M5 % / R40 %Drift Debris on Beach: Yes/NoSupra/Upper/Mid/Lower Type DriftwoodSeaweed (Fucus)**OIL**Degree of Oiling: Heavy/Moderate/Light/No Oil/Unobserved

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

Continuous: Y/N % of Segment N/AWidth of Band: N/A mSporadic: Y/N % of Segment N/AEst. Oil Thickness where > 1cm: N/A cm Est. Oil Penetration: N/A cmPooled Oil: 0 % "Free" Oil: 0 % Coated: H 0 % / M 0 % / L 0 %Fresh 0 % Mousse 0 % Tar Formation: 0 %Drift Debris Oiled? Yes/No Supra/Upper/Mid/Lower Amount: H/M/L/**Comments:**

The shore zone is mainly composed of high angle to vertical rocky headlands with boulders at their base which are exposed only at low tide. At the head of the Fiord is a long low angle beach high in mud and organics at the lower intertidal zone. There are also a few high angle cobble/gravel pocket beaches.

No cleanup activities are recommended because no apparent oiling of the shore zone was observed.



mostly high angle gravel  
 steep - beaches exposed only at  
 low tide with rock face  
 on the ~~west~~ east  
 west  
~~East~~ side is composed  
 of steep - very boulder  
 covered - sea - rock -  
 face, needing boat  
 to pass on low tide  
 to reach by boat

LOCATION: Port Nellie Juan/ Blue Fiord SITE: Beach 1 OBSERVER: Mike Foget (o.e. Bob Belts Can. Party Crank (Biot  
LOCATION PREFIX: BF SEG. NO.: BF 7 LENGTH: Map not avail. (M)  
DATE: 6/14/62 TIME (HMM): 0845 TIDE HT.: low (M)

OILED ZONE: Splash High Medium Low No oiled observed  
SUBSTRATUM: Rocks Boulder Cobble Gravel Sand Mud Vertical rock wall with boulder/cobble/gravel/mud beaches

#### LIVE BIOTA

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

Continuous population with dense to sparse concentrations

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

Patchy with dense to sparse concentrations - intercobble mussel bed present  
Continuous on vertical wall

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

Continuous population with dense to sparse concentrations

#### Littorina

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

Observations made from Achilles - unable to determine Littorina population concentrations

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

Observations made from Achilles - unable to determine population concentrations

OTHER OBSERVATIONS: Small Mudflat (1-2 m wide) at water edge, Sulphur color encrusting corraline algae in LITZ

CLEANUP PRECAUTIONS: No oil observed. Suggest no clean up effort made in this segment at this time.

MAMMALS: Otters \_\_\_\_\_ Harbor Seals \_\_\_\_\_ Sea Lions \_\_\_\_\_ Whales \_\_\_\_\_  
Other \_\_\_\_\_

BIRDS: 1 Bald Eagle, 1 Skimmer, 21 ducks, 2 gulls, 2 murrees, 1 tern

GENERAL OBSERVATIONS: Textbook zonation on ~~rock~~ vertical wall

(version of 4/29/89)

CULTURAL RESOURCE EVALUATION

Date 6-4-89 Location CORT NEVILL JUAN Site HEAD OF BLUE FIORD  
Location Prefix BF Segment # 7 Length NO MAP COVERAGE  
Survey Method:  
Air \_\_\_\_\_ (A - indicate on map) Boat X (A - indicate on map)  
Ground \_\_\_\_\_ (G - indicate on map)  
Known cultural resources (AHRS #) None Data Source \_\_\_\_\_  
Oil conditions/beach visibility No oil on beach surfaces  
Width of beach zone surveyed 0 m Tree fringe surveyed 0 M  
Cultural resources observed in beach zone (AHRS code) None  
Cultural resources observed in tree fringe (AHRS code) None  
General observations justifying survey method and segment's site probability:  
Shore Profile Vertical rock wall except for broad low angle beach at head of Fiord  
Fresh Water Sources Numerous creeks and major streams at head of Fiord  
Sea Exposure Open and exposed to northern seas - otherwise protected  
Access/Safety Easy access by boat in calm seas. Helicopter access at head of Fiord  
Probability of undiscovered sites in beach zone (circle one) (1) 2 3 4 5  
Monitoring during cleanup needed yes/(no) Collection yes/(no)  
Photos: Color Roll # None Frames \_\_\_\_\_  
B/W Roll # None Frames \_\_\_\_\_  
Observer(s) Bob Bitt  
Time survey started ca 0900 Time survey ended ca 0930  
Cultural resource considerations/restraints:  
No oil observed, no cleanup recommended, no archaeological constraints.

BF-7

PROPOSED  
MARINE PARK

MAIN B  
HATCHER  
OF ALA

Green — High Use  
Red — Med Use  
Not Colored — Low Use

5/18/89 SHH & JST

UM USE  
EATIONAL

41  
POTENTIAL  
CABIN SITE

MCCLURE  
BAY

FISHING CT

IMPORTANT SPORT FISHING  
SS, RS, PS, CS, DV, CT  
FLOAT PLANE LANDING

POTENTIAL  
CABIN SITE

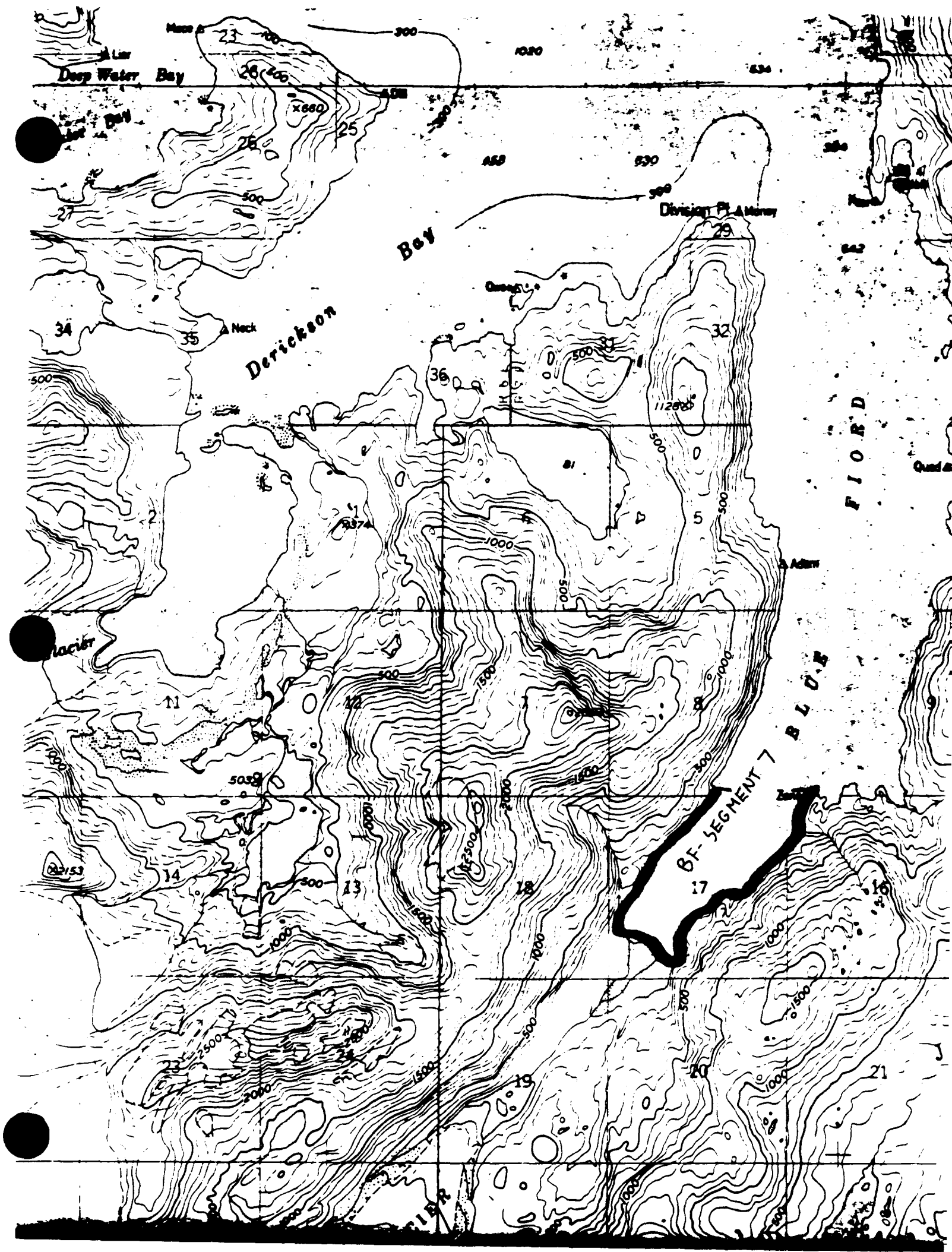
61

FLOAT PLANE  
LANDING

FISHING  
SS, RS, PS, CS, DV, CT

FIORD

BLUE



SHORELINE CLEANUP PROGRAM

DATE 7/05/89

SHORELINE SEGMENT BF-8

LOCATION: (see enclosed map) PORT NELLIE JUAN-BLUE FIORD

ADEC NO. \_\_\_\_\_ SHORELINE ASSESSMENT DATE: 6/04/89

Recommended Cleanup Activity(ies):

No cleanup recommended at this time, subject to FOSC  
approval. No oil observed.  
REASSESSMENT AT A LATER DATE.

Priorities Considerations: medium use recreational area.

~~Class 4: light contamination.~~ NO OIL OBSERVED.

~~Class B: resources absent.~~

Ecological Constraints (from site survey):

No ecological constraints.

Archeological Constraints (from site survey):

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

Charles E. Hoffman  
State Historic Preservation Officer \*

Date: July 7, 1989

ISCC: Sharon K. Christopher

Date: 7/17/89

EXXON: L. Miller

Date: 87-07-17

FOSC: C. S. Dillion

Date: 7/17/89

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

**SHORELINE OIL EVALUATION**Mike Forget (O.G.)  
Patty Crank (Biol.)  
Observer: Bob Betts (Arch.)Date: 6/4/89 Time: 9:05Surveyed From: Foot/Boat/Helio/PlaneWeather: Sun/Cloud/Rain/Snow/F**LOCATION**LOCATION Port Nellie Juan/Blue FordSEGMENT NUMBER BF-8LENGTH OF SHORELINE SEGMENT: 2400 mACCESS: Foot/Vehicle/Boat/Barge/Helio/Float Plane**SHORELINE:**Shoreline Type: SPI/BEA/COV/HLD/STRTSlope: LANG/HANG/VERWave Exposure: High/Med/LowSediment: B 25 % / C 10 % / P 5 % / G 5 % / S 0 % / M 0 % / R 55 %Drift Debris on Beach: Yes/No Supra/Upper/Mid/Lower Type Driftwood  
seaweed (fuc.)**OIL**Degree of Oiling: Heavy/Moderate/Light/No Oil/Unobserved

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

Continuous: Y/N % of Segment N/A Width of Band: N/ASporadic: Y/N % of Segment N/AEst. Oil Thickness where > 1cm: N/A cm Est. Oil Penetration: N/A cmPooled Oil: 0 % "Free" Oil: 0 % Coated: H 0 % / M 0 % / L 0 %Fresh 0 % Mousse 0 % Tar Formation: 0 %Drift Debris Oiled? Yes/No Supra/Upper/Mid/Lower Amount: H/M/L/**Comments:**

The shore zone consists of steep to vertical rocky headlands  
with some high angle pocket cobble/gravel beaches. There are some  
pocket boulder/cobble shore zones at the base of these rocky headlands  
which are exposed only at low tide.

No cleanup activities are recommended because  
no apparent oiling of the shore zone was observed.

Photos # 27 Roll # T4-A/G roll # 2

~~BF-8~~  
~~BF-8~~

Rocky headlands with some  
shor. ~~exposed~~ oyster  
corals ~~exposed~~ exposed  
only at Low tide  
mostly very rock c/

R-~~60~~ 60

B-~~25~~ 25

C-~~10~~ 10

G-5

BF-9 9.50

Rocky headlands with some

shor. - B/C beaches with

exposed only at low tide

mostly with rock

a couple of gravel pocket beaches

at the south end of BF-1

Port Nellie Juan/  
LOCATION: Blue Fiord SITE: Beach 1 OBSERVER: Mike Fogel (O.B.)  
Bob Belts (Arche)  
LOCATION PREFIX: BF SEG. NO.: BF8 LENGTH: 2400 m (M)  
DATE: 10/4/89 TIME (HRS): 0905 TIDE HT.: low (M)

OILED ZONE: Splash High Medium Low No oil observed

SUBSTRATUM: Rocks Boulder Cobble Gravel Sand Mud

Vertical rock  
steep packet beaches  
of boulders, cobble: gravel

#### LIVE BIOTA

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

Continuous population with dense to sparse concentrations

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

Small breaks in population in the cobble beaches. <sup>furthest</sup> North beach has extensive intergravel bed.

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

Continuous population with dense to sparse concentrations

#### Littorina

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

None observed - other small gastropods were present

Littorata: Patchy Y/N Contin. Y/N Dense Y/N Moderate Sparse Y/N None Y/N

Present in moderate to sparse concentrations

OTHER OBSERVATIONS: Encrusting coralline algae in LITZ

Starfish present - Eelgrass present

CLEANUP PRECAUTIONS: No oil observed. Suggest no clean-up efforts made on this segment at this time.

MAMMALS: Otters      Harbor Seals 1 on rock; 2 in water Sea Lions      Whales       
Other     

BIRDS: Few seen

GENERAL OBSERVATIONS: Several waterfalls - large freshwater influence.

(version of 4/29/89)

CULTURAL RESOURCE EVALUATION

Date 6-4-89 Location PORT NELLIE TUN Site WEST SIDE OF BLUE FLOR

Location Prefix BE Segment # 8 Length 2400 M

Survey Method:

Air \_\_\_\_\_ (A - indicate on map) Boat X (A - indicate on map)

Ground X (G - indicate on map)

Known cultural resources (AHRS #) NONE Data Source \_\_\_\_\_

Oil conditions/beach visibility no oil on beach surfaces

Width of beach zone surveyed 10-30 m Tree fringe surveyed 0

Cultural resources observed in beach zone (AHRS code) NONE

Cultural resources observed in tree fringe (AHRS code) NONE

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

Shore Profile 99% vertical rock wall - a few pocket beaches, only one beach with access to Forest zone.

Fresh Water Sources numerous creeks and waterfalls - no large streams or brooks

Sea Exposure Exposed to easterly seas from Blue Field.

Access/Safety Easy boat access in calm seas

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

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

Photos: Color Roll # NONE Frames \_\_\_\_\_

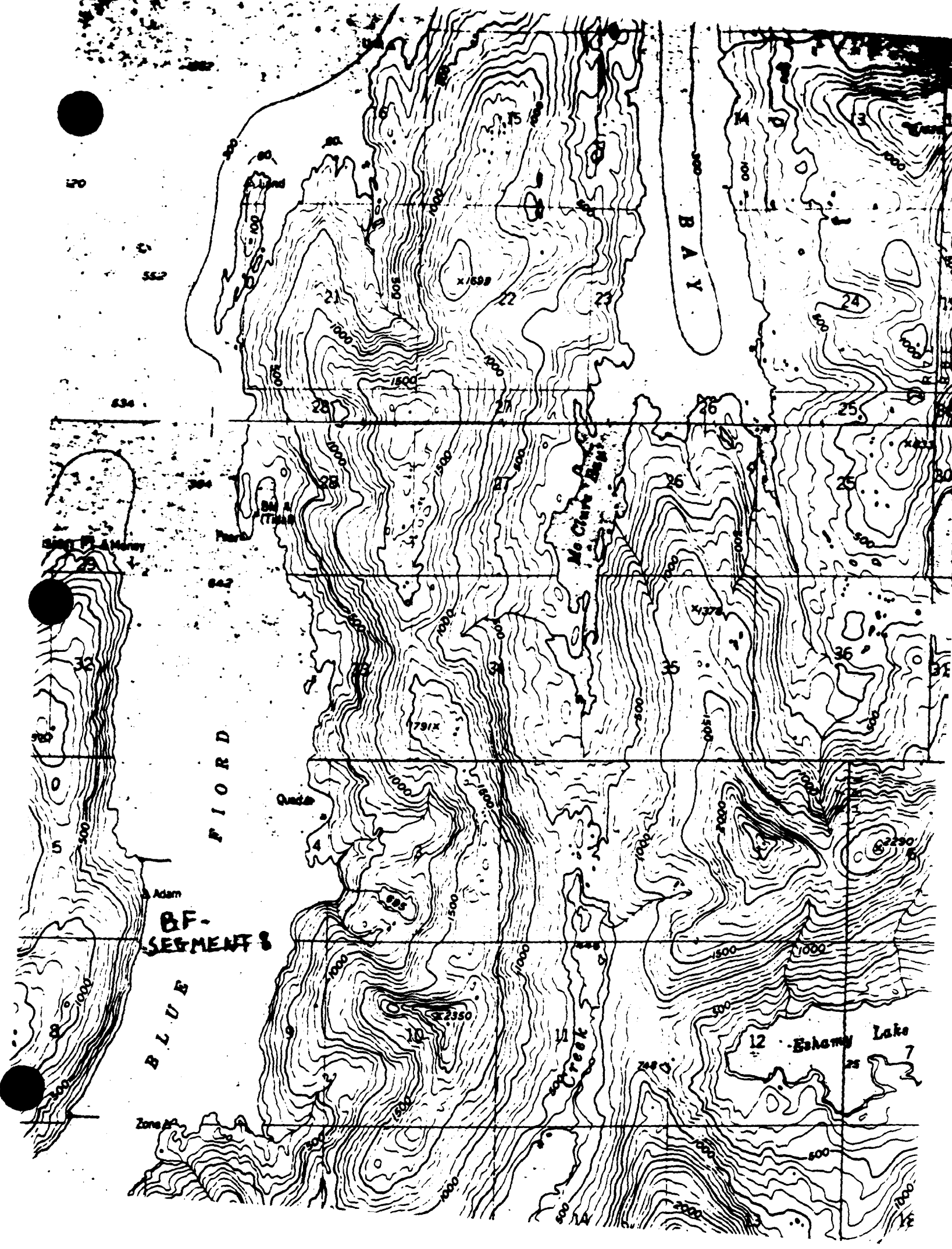
B/W Roll # NONE Frames \_\_\_\_\_

Observer(s) FOR BETTS

Time survey started Ca 0930 Time survey ended 1011

Cultural resource considerations/restraints:

No oil observed, no clean-up recommended, no archaeological constraints.



(version 5/02/89)

SHORELINE CLEANUP PROGRAM

DATE 7/05/89

SHORELINE SEGMENT BF-9

LOCATION: (see enclosed map) PORT NELLIE JUAN-BLUE FIORD

ADEC NO. \_\_\_\_\_ SHORELINE ASSESSMENT DATE: 6/04/89

Recommended Cleanup Activity(ies):

No cleanup recommended at this time, subject to FOSC  
approval. No oil observed.  
REASSESSMENT AT A LATER DATE.

Priorities Considerations: medium use recreational area.

~~Class 4: light contamination.~~ NO OIL OBSERVED

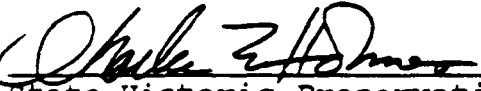
~~Class B+ resources absent.~~

Ecological Constraints (from site survey):

No ecological constraints.

Archeological Constraints (from site survey):

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



State Historic Preservation Officer \*

Date: July 7, 1989

ISCC: Sharon K. Christopher

Date: 7/17/89

EXXON: C. Tetlow

Date: 89-07-17

FOSC: C. E. Doolin

Date: 7/17/89

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

**SHORELINE OIL EVALUATION**

Mike Foget (O.G.)  
Patty Crank (Biol.)  
Bob Betts (Arch.)

Date: 6/4/89 Time: 9:50

Observer: Bob Betts (Arch.)

Surveyed From: Foot/Boat/Helio/Plane

Weather: Sun/Cloud/Rain/Snow/F

**LOCATION**

LOCATION Port + Nellie Juan / Blue Fiord

SEGMENT NUMBER BF-9

LENGTH OF SHORELINE SEGMENT: 3000 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% / C15% / P5% / G5% / S0% / M0% / R55%

Drift Debris on Beach: Yes/No

Supra/Upper/Mid/Lower Type Driftwood  
Seaweed (Fucus)

**OIL**

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

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

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

Sporadic: Y/N % of Segment N/A

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

Shore zone consists of steep to vertical rocky  
headlands with some short boulder/cobble beaches which are  
only exposed at low tide. There are a couple of high angle  
gravel pocket beaches at the southern end of segment 9

No cleanup activities are recommended because no  
oiling of the shore zone was observed.

Photos 29, 30 roll # T4-A/G roll #2

# ECOLOGICAL EVALUATION

LOCATION: Port Nellie Juan/ Blue Fiord SITE: Beach 1 OBSERVER: Mike Foget (CG) Bob Belts (Arche) Patty Crank (Bid)  
 LOCATION PREFIX: BF SEG. NO.: BF 9 LENGTH: 3000 (M)  
 DATE: 6/4/89 TIME (HHMM): 0950 TIDE HT.: low (M)

OILED ZONE: Splash High Medium Low No oil observed

SUBSTRATUM: Rocks Boulder Cobble Gravel Sand Mud  
 Vertical Rock Wall -  
 Rocks mud and a  
 Cobble gravel beach.

## LIVE BIOTA

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

Continuous population: dense concentrations on rocks, sparse to sparse

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

Continuous population: dense concentrations on rocks, moderate to sparse on grass

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

Continuous population ranging from dense to sparse concentrations.

## Littorina

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

None observed - other small gastropod species present

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

Present in moderate to coarse concentrations.

OTHER OBSERVATIONS: Elgrows bed, small freshwater stream  
Pond behind storm berm.

CLEANUP PRECAUTIONS: No observed oil. Suggest clear up after  
not made in this section

MAMMALS: Otters River Harbor Seals 3 adults 1 pup in Water Sea Lions \_\_\_\_ Whales \_\_\_\_  
 Other \_\_\_\_

BIRDS: Terr.

GENERAL OBSERVATIONS: \_\_\_\_\_

(version of 4/29/89)

CULTURAL RESOURCE EVALUATION

Date 6-4-89 Location PORT NELLIE JUAN Site WEST ENTRANCE BLUE FIORD

Location Prefix BE Segment # 9 Length 3000 M

Survey Method:

Air \_\_\_\_\_ (A - indicate on map) Boat X (A - indicate on map)

Ground X (G - indicate on map)

Known cultural resources (AHRS #) NONE Data Source \_\_\_\_\_

Oil conditions/beach visibility NO OIL ON BEACH SURFACES

Width of beach zone surveyed 10-20 m Tree fringe surveyed 0 M

Cultural resources observed in beach zone (AHRS code) NONE

Cultural resources observed in tree fringe (AHRS code) NONE

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

Shore Profile 98% vertical rock, small rock and gravel pocket beaches, very limited access to Forest zone except at Muddy Point.

Fresh Water Sources NUMEROUS CREEKS AND WATER FALLS.

Sea Exposure Exposed to northern seas from Port Nellie Juan.

Access/Safety Only boat access in calm seas.

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

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

Photos: Color Roll # NONE Frames \_\_\_\_\_

B/W Roll # NONE Frames \_\_\_\_\_

Observer(s) BOB BETTS

Time survey started 1011 Time survey ended 1100

Cultural resource considerations/restraints:

NO OIL OBSERVED, NO CLEAN-UP RECOMMENDED, NO ARCHAEOLOGICAL CONSTRAINTS.

