

Cruise: F7-86 HWDate: 12/1/86 JD: 335Station No.: 01

Latation: Lat.: 17° 5.9 / 17° 06.02'
 ON + OFF Bottom Long.: 168° 19.4 / 168° 22.39'

DREDGE #
 Transponder Grid: CD 1
 X: _____ Y: _____

Site Description and Target: Karin Ridge, upper part of east slope; from central part of ridge adjacent to Johnston Is.

Dredge type: CD chain by by Finger: 300 m. Transponder: _____ m.

Dredge in water: 1729 z Depth: 2910 m. CTD: yes _____ no X

Dredge on bottom: ? 1940 z Depth: 2255 m. Wire out: 2710 m.
 maybe?

Events: time; tension, wire angle, heading, speed, ~~X~~ ~~Y~~ coordinates, ect.

1808 z: paying out wire, $d = 3150$ m, $17^{\circ} 06.2'$, $168^{\circ} 19.1$

1940 z: dredge on bottom (?) Need more data - record every 30 minutes if nothing else happens

2105 z: 3400 m of wire out

2115 z: ^{~5.5} first bite, ^{~1900 m} 3125 m wire, $d = 17^{\circ} 4.4$, $168^{\circ} 22.0$

2121 z: ^{~6.0} second + third bite, ^{~6.0} ^{wire out} 3250 m, $d = 1910$ m, $17^{\circ} 04.4$, $168^{\circ} 22.1$

2148 z: { ^{6.5t} bite, wire 2875 m, $d = 1885$ m, $17^{\circ} 4.6$, $168^{\circ} 22.6$
 { ^{6.0t} " at 2861 m wire

2150 z: ^{6.2t} bite, wire hung up, 2856 m out.

2200 z: ^{7.1t} still hung up, 1880 m depth

2224 z: ^{8.55t} broke free & hung up again; 1900 m; 2708 w.o.

2246 z: UN STUCK; 1863 m depth; 2600 w.o.

2254 Off bottom; 2200 m w.o.; 1862 m depth; $17^{\circ} 06.02'$ $168^{\circ} 22.39'$

Dredge off bottom: 2254 z Depth: 1862 m. Wire out: 2200 m.

X: _____ Y: _____

Notes: All Tons recorded in British Tons - several large bites then 200-300 of no bites, then small bites, then hung-up for 55 minutes -

Dredge Station Log

03

Cruise: F7-86-HW

Date: 12-3-86 JD: 337

Station No.: 03

start dredge in H₂O | end

| | |
|----------|-----------|
| on | off |
| 16° 24.4 | 169° 32.7 |

Bottom
according to dead reckoning, on/off lat/longs are identical. See note on navigation below

DREDGE # CD 2

Transponder Grid: _____

X: _____ Y: _____

Latation: Lat.: 16° 26.5 | 16° 26.3
 Long.: 169° 31.8 | 169° 33.3

Site Description and Target: South Western end of DNA camera survey area on southern side of Johnston Island

Dredge type: CD Pinger: 570 m. Transponder: _____ m.
 Dredge in water: 1240 z Depth: 2600 m. CTD: yes — no
 Dredge on bottom: 1436 z Depth: 2650 m. Wire out: 3340 m.

Events: time; tension, wire angle, heading, speed, X-Y co-ordinates, ect.

- 1240 z: dredge in water, d = 2600m, Lat 16° 26.5 Lon 169° 31.8
- 1242 z: 250 m wire out,
- 1249 z: attaching TDR at 50 m
- 1300 z: paying out wire, d = 2390 m, 16° 26.2, 169° 32.8
- 1308 z: 500 m out and attaching pinger, d = 2360 m
- 1340 z: Routine, dredge still going down
- 1403 z: 2200 m wire out, lost navigation, d = 2390 m
- 1436 z: dredge on bottom, 3340 m of wire, d = 2650 m, ^{16° 24.4} _{169° 32.7}
- 1447 z: 5.3t bite, wire 3234 m out,
- 1448 z: 4.5t bite, wire 3225 m out,
- 1449 z: 5.8t bite wire 3220 m out,

Dredge off bottom: 1457 z Depth: 2920 m. Wire out: 3132 m.

X: _____ Y: Lat: 16° 24.4 Lon: 169° 32.7

Notes:

Navigation was bad — dredge somewhere between [Lat 16° 26.4, Lon 169° 32.7] several bites, going down slope, navigation out, position approximate, dredged over a small rise TDR indicates depth between — TDR didn't work depth ~ 2650 - 2900 m

Dredge Station Log

Cruise: _____

Date: _____ JD: _____

Station No.: _____

Latitude: Lat.: _____

Long.: _____

DREDGE #

~~Transponder Grid:~~ _____

X: _____ Y: _____

Site Description and Target: _____

Dredge type: _____ Pinger: _____ m. Transponder: _____ m.

Dredge in water: _____ z Depth: _____ m. CTD: yes _____ no _____

Dredge on bottom: _____ z Depth: _____ m. Wire out: _____ m.

Events: time; tension, wire angle, heading, speed, X-Y co-ordinates, ect.

1450 z; 7.5t bite, wire 3208 m out, d = 2800 m, $16^{\circ}24.4'$ } D
 $169^{\circ}32.7'$ }

1457 z; dredge off bottom, wire 3132 m out, d = 2920 m

z; _____

Dredge off bottom: 1457 z Depth: 2920 m. Wire out: 3132 m.

X: _____ Y: _____

Notes:

Dredge Station Log

Cruise: F7-86-HW

REDESCRIBED BY ALICE

Date: 12-3-86 JD: 337

Station No.: 03

Location: Lat.: 16° 28.46N
Long.: 169° 18.60W

DREDGE # CD 2
Transponder Grid: _____
X: _____ Y: _____

Site Description and Target: South Western end of DNA camera survey area on southern side of Johnston Island

Dredge type: CD TDR 250m
Pinger: 500 m. Transponder: _____
Dredge in water: 1240 z Depth: 2600 m. TDR: yes no
Dredge on bottom: 1436 z Depth: 2650 m. Wire out: 3340 m.

Events: time; tension, wire angle, heading, speed, X-Y co-ordinates, ect.

- 1246 z: dredge down 250m - TDR attached to line
- 1308 z: dredge down 500m - Pinger attached to line
- 1326 z: pulling out line - bottom depth 2380m. - course 0.9 speed 1.6
- 1336 z: wire out 1277m, Lat 16°30.59N, Long 169° 18.87W, Course 341.7 speed 1.6
- 1350 z: Wire out 2000m, ^{depth 2350/2400} 1.5t, 16°30.9N, 169°18.98W, Course 349, speed 1.68
- 1406 z: wire out 3000m, ~~1.8t~~ 1.8t, 16°31N, 169°19W, Course 339, sp. 1.68
- 1410 z: wire out 3200m, course 341, speed 1.68, 1.75t
- 1420 z: wire out 3300m, 16°31.77N, 169°19.24W, 1.8t, depth 2600.
- 1426 z: wire out 3450m, t = 1.95 course 340.4, speed 1.68, ship drifting western
- 1436 z: ON BOTTOM, 3340m, 9 tons, depth = 2650 ^{depth = 2750m}
- 1440 z: 2 bites, 5.2 tons, 3280m wire out.
- 1446 z: Bite, 5.3 tons, 3234m cable out, 16°32.51N, 169°19.52W.
- 1448 z: Bite 4.5 tons, 3225m cable out, depth 2800 metres
- 1450 z: Bite 5.8 tons, 3207m cable out.
- 1451 z: Bite 5.9 tons, 3207m cable out.

Dredge off bottom: 1456 z Depth: 2900 m. Wire out: 3132 m.
X: _____ Y: _____

Notes: All tons in British tons.

Cruise: F7-86-HW

Date: 12-4-86 JD: 338

Station No.: 07

sample inb
2750-2029m

Latitude: Lat.: 16° 23.0 ^{start} 16° 24.5 ^{end}

DREDGE # CD5
Transponder Grid: _____

Longitude: Long.: 169° 31.5 169° 33.5

X: _____ Y: _____

Site Description and Target: southern side of Johnston Island

Dredge type: CD Pinger: X m. Transponder: _____ m.
Dredge in water: 1754 z Depth: 2520 m. CTD: yes no
Dredge on bottom: 2000 z Depth: 2750 m. Wire out: 3160 m.

| Events: time; tension, H ₂ O depth, LAT, LON, heading, speed, X-Y co-ordinates, ect. | tension | H ₂ O depth | LAT | LON | heading | wire out | misc |
|---|---------------|-----------------------------|-------------|------------|--------------------|----------|-----------------|
| 1754 z; | 0 | 2520 m | 16° 23.0 | 169° 31.5 | 346 | 0 | dredge in |
| 1804 z; | 1.1 | 2520 m | 16° 39' N | 169° 24' W | 347 | 1500 | feeding wire |
| 1832 z; | 1.3 | 2650 | 16° 34.9' N | 169° 24' W | 349 | 2150 | feeding wire |
| 1841 z; | 1.3 | 2620 | 16° 35' N | 169° 24' W | 350 | 2630 | feeding wire |
| 1846 z; | 1.4 | ? NO TRACE | 16° 35' N | 169° 24' | 270 ^{CRS} | 3100 | TOWING |
| 1900 z; | 1.4 | 2590 | 16° 35.6' | 169° 24.3' | 340 | 3100 | TOWING |
| 1930 z; | 1.3 | 2590/2 2650 (REFLECTORS) | 16° 35.6' | 169° 24.4' | 327 | 3100 | TOWING |
| 1940 z; | 1.3 | 2440 ? 2700 | 16° 36.7' | 169° 25.1' | HOLDING POSITION | 3250 | PAYING WIRE |
| 1952 z; | 2.0 | 2410 2600/2740 | 16° 36.9' | 169° 25' | " | " | Pulling in wire |
| * 2000 z; | Bite 4.2 | 2750 ON bottom | 16° 24.2' R | 169° 33.5' | | 3160 | 1st Bite |
| 2004 z; | 3.6, 3.8, 3.4 | | | | | 3100 | |
| 2008 z; | 4.0, 4.6, 4.7 | | | | | 3078 | constant pull |

Dredge off bottom: 2028z z Depth: 2350 m. Wire out: 2896 m.
Lat 16° 24.5 Lon 169° 33.5 Radar X: _____ Y: _____

Notes: * Dragging on the bottom, several bites at 3.8t

| Wire cut | Pull | depth |
|----------|------|-------|
| 3061 | 5.2t | 2400 |
| 3025 | 5.5t | 2400 |
| 3022 | 5.5t | 2380 |
| 2870 | 4.0t | 2350 |
| 2046 | 3.8t | |

 over for summary

by radar.

on bottom:

16° 24.2

169° 33.5

depth ≈ 2750 m

off bottom:

16° 24.5

169° 33.5

depth ≈ 2420 m

several sites ranging from 4.2 to 5.7 E

Dredge Station Log

Cruise: F786 HW

sample int 0.

Date: Dec 4, 86 JD: 339

Station No.: STA 8

0921z

Location: BOTTOM ON / OFF
Lat.: 16

DREDGE #
Transponder Grid: CD6

Long.: 168

X: _____ Y: _____

Site Description and Target: Central Western Karin Ridge (Dredging up west side)

Dredge type: chain bag Pinger: ∅ m. THIS IS A TDR - TIME DEPTH RECORD
Dredge in water: 0949 z Depth: 3000 m. Transponder _____ m. ~~yes~~ yes _____ no
Dredge on bottom: _____ z Depth: _____ m. Wire out: _____ m.

| Events: time; tension, wire angle, heading, speed, X-Y co-ordinates, ect. | tension | H ₂ O depth | LAT | LON | heading | speed | wo | MISC |
|---|---|------------------------|-------------|-------------|---------|-------|--------|--------------------|
| 0949 z; | 0.94 | 3000 m | 17° 13.34 N | 168° 22.8 W | 350.4 | 1.79 | 0 | |
| 1020 z; | 1.34 | 3180 m | 17° 13.63 N | 168° 22.8 W | 348.9 | 1.79 | 1700 m | Feeding Wire |
| 1026 z; | 1.50 | 3200 m | 17° 13.7 N | 168° 22.9 W | 344.9 | 1.79 | 2000 m | Holding Position |
| 1032 z; | 1.60 | 3220 m | 17° 13.9 N | 168° 22.9 W | 348.8 | 1.79 | 2300 m | Holding Position |
| 1040 z; | 1.74 | 3250 m | 17° 14.16 N | 168° 22.9 W | 353.9 | 1.79 | 2715 m | Holding Position |
| 1044 z; | 2.20 | 3280 m | 17° 14.4 N | 168° 23 W | 338 | 1.79 | 3200 m | Holding Wire dept. |
| 1100 z; | STATION TERMINATED - DEFECTIVE GEAR IN CABLE WINCH. | | | | | | | |
| z; | | | | | | | | |
| z; | | | | | | | | |
| z; | | | | | | | | |
| z; | | | | | | | | |
| z; | | | | | | | | |

Dredge off bottom: _____ z Depth: _____ m. Wire out: _____ m
X: _____ Y: _____

Notes: worked on wind + cable for several hours then re-occupied station 08 - and started all over - see following pages

Dredge Station Log

Cruise: F7-86-HW

SAMPLE DEPTH
2240-2150 m

Date: Dec. 5. 86 JD: 339

Station No.: 08

start end

Latation:

Lat.: 16°58.5 / 16°59.2 } SAT
Long.: 168°35.1 / 168°35.2 }

GPS

DREDGE #

Transponder Grid: CD6

X: _____ Y: _____

Site Description and Target:

central western Karin Ridge
(dredging up west side)

Dredge type: CD Pinger: _____ m. Transponder: _____ m.

Dredge in water: 1422 z Depth: 3050 m. ~~TDR~~ ~~CTD~~: yes _____ no

Dredge on bottom: 1632 z Depth: 2300 m. Wire out: 3500 m.

Events: time; tension, wire angle, heading, speed, X-Y co-ordinates, ect.

| time | tension | H ₂ O depth | LAT | LONG | heading | wo | MISC |
|---------|---------|------------------------|--------------------|---------------------|---------|--------|------------------|
| 1422 z; | — | 3050 | 16°58.5 | 168°35.1 | 285 | — | dredge in t |
| 1426 z; | 0.4 t | 3080 | " " | " " | 298 | 280 m | hold on |
| 1446 z; | — | 3140 | 16°58.9 | 168°35.6 | 323 | 326 m | more prob |
| 1506 z; | — | 3230 | 16°59.1 | 168°35.9 | 326 | 560 m | paying on |
| 1525 z; | 1.0 t | 3110 | 16°59.3 | 168°35.7 | 85 | 1400 m | still payi |
| 1539 z; | 1.4 t | 2920 | 16°59.3 | 168°35.4 | 87 | 2000 m | paying on |
| 1551 z; | 1.6 t | 2830 | 16°59.3 | 168°35.4 | 84 | 2500 m | " |
| 1602 z; | 2.1 t | 2760 | 16°59.2 | 168°35.2 | 68 | 3019 m | holding |
| 1610 z; | 2.0 t | 2700 | no sat | no GPS | 63 | 3150 | |
| 1614 z; | 2.0 t | 2600 | no LAT | DR all screwed up | | 3500 | |
| 1632 z; | 3.0 t | 2300 | 16°59.4 | 168°34.9 | 64 | 3500 | dredge on bottom |

*extrapolated

Dredge off bottom: _____ z Depth: _____ m. Wire out: _____ m

X: _____ Y: _____

Notes: several big and small bites, dredge hung up twice, bits from depths of 2240m to 2150m.

C.DG continued

Dredge Station Log

Cruise: F-7-86-AW

Date: Dec. 5, 86 JD: 339

Station No.: 08

DREDGE # CDG

Location: Lat.: _____

Transponder Grid: _____

Long.: _____

X: _____ Y: _____

Site Description and Target: _____

Dredge type: _____ Pinger: _____ m. Transponder: _____ m.

Dredge in water: _____ z Depth: _____ m. CTD: yes _____ no _____

Dredge on bottom: _____ z Depth: _____ m. Wire out: _____ m.

Events: time; tension, wire angle, heading, speed, X-Y co-ordinates, ect.

| Time | tension | H ₂ O depth | Lat | Lon (Sat) | heading | wo | Misc |
|---------|---------------------------------------|------------------------|---------|---------------------------|---------|--------|-------------------|
| 1640 z; | 3.6 t | 2240 | 16°59.6 | 168°34.5 | 64 | 3498 m | 22 bites |
| 1658 z; | — | no further | | ? | | 3600 m | bringing in about |
| 1703 z; | 6.60 t | 2180 | 16°59.9 | 168° ^(DR) 33.9 | 66 | 3088 m | big bite |
| 1714 z; | — | 2160 | | | 63 | 3000 m | no more bites |
| 1720 z; | 3.3 t | 2150 | | | 68 | 2960 | small bite |
| 1721 z; | 8.0 t | 2150 | 16°59.2 | 168° ^(DR) 35.2 | 73 | 2956 | hung up |
| 1725 z; | — | " | | | 124 | 2954 | loose |
| 1736 z; | ~3.2 t ^{several small bites} | 2170 | | | 64 | 2840 | small bit several |
| 1737 z; | 3.6 t | 2170 | | | 61 | 2832 | not one bite |
| 1738 z; | 3.6 t | " | | | " | 2828 | small bite |
| 1739 z; | 3.4 t | 2160 | | | | 2825 | small bite |

Dredge off bottom: _____ z Depth: _____ m. Wire out: _____ m

X: _____ Y: _____

Notes:

Cruise: F7-86-HW

Date: Dec. 5, 86 JD: 337

Station No.: 08

DREDGE # CDG

Latitude: Lat.: _____

Transponder Grid: _____

Long.: _____

X: _____ Y: _____

Site Description and Target: _____

Dredge type: _____ Pinger: _____ m. Transponder: _____ m.

Dredge in water: _____ z Depth: _____ m. CTD: yes — no —

Dredge on bottom: _____ z Depth: _____ m. Wire out: _____ m.

Events: time; tension, wire angle, heading, speed, X-Y co-ordinates, ect.

| z; | tension | H ₂ O depth | LOT | LOX | heading | wo | Misc |
|---------|----------------------------------|------------------------|----------|-------------------------|---------|------|------------------|
| 1742 z; | 3.4 t | 2160 | 16° 59.2 | 168° 35.2 ^{DR} | 64 | 2800 | bite |
| 1746 z; | 3.8 t | 2150 | | | 64 | 2768 | bite |
| 1747 z; | 3.4 + 4.7 | 2150 | | | 65 | 2758 | 2 bites |
| 1755 z; | 6.3 t | 2150 | 16° 59.2 | 168° 35.2 ^{DR} | 202 | 2729 | hung up |
| 1756 z; | — | 2170 | " | " | 268 | 2715 | broke loose |
| 1800 z; | ~5.5 to 6.0 when taking up slack | 2170 | " | " | 287 | 2632 | still hung up |
| 1814 z; | hung up | 2230 | " | " | " | 2704 | still hung up |
| 1817 z; | 3.6 | 2260 | " | " | 301 | 2400 | broke loose |
| 1818 z; | 3.6 | 2275 | " | " | 299 | 2275 | dredge coming up |
| 1901 z; | dredge on deck | | | | | | |

Dredge off bottom: 1818 z Depth: 2275 m. Wire out: 2275 m.

X: _____ Y: _____

Notes:

Cruise: F 7 86 - HW

SAMPLING INTERVAL:
2120 - 2360 m

Date: Dec 5 86 JD: 339

Station No.: 09

| | | | | | | |
|------------|------------------------|------------------|-----------------|------------------|----------------------|-------------------------|
| | start of sta | end of station | ON Bottom | OFF BOTTOM | DREDGE # <u>CD 7</u> | Transponder Grid: _____ |
| Latitude: | Lat.: <u>16 58.5</u> | <u>16 58.62</u> | <u>16 58.7</u> | <u>16 58.62</u> | | |
| Longitude: | Long.: <u>168 35.1</u> | <u>168 33.01</u> | <u>168 34.5</u> | <u>168 32.99</u> | X: _____ | Y: _____ |

Site Description and Target: Central Western Karin Ridge dredging up West side.

Dredge type: CD Pinger: _____ m. Transponder: _____ m.
 Dredge in water: 2010 z Depth: 3100 m. ~~EPB~~ TDR: yes no
 Dredge on bottom: 2192 z Depth: 2480 m. Wire out: 3500 m.

Events: time; tension, wire angle, heading, speed, X-Y co-ordinates, ect.

| Time | Tension | H ₂ O depth | LAT | LONG | heading | speed | W/O | Misc |
|---------|--------------------|------------------------|-----------|-----------|---------|-------|---------|-----------------------|
| 2027 z; | 1.10 Tons | 3100 m | 16° 58.5' | 168° 35.1 | 065 | | 1000 m. | Misc Lat/Long = E |
| 2044 z; | 1.55 | 3050 | " | " | 071 | | 2000 | EP |
| 2053 z; | 1.8 T | 3080 | " | " | 066 | | 2500 | EP |
| 2059 z; | 2.01 | 2980 | 16° 58.6' | 168° 35.4 | 070 | | 3000 | Satellite fix |
| 2107 z; | 1.8 | 2950 | " | " | 065 | | 3300 | EP |
| 2111 z; | 2.0 | 2890 | " | " | 067 | | 3500 | EP |
| 2146 z; | 2.8-2.9 | 2480 | 16° 58.7 | 168° 34.5 | 071 | | 3500 | SAT → Dredge on b |
| 2149 z; | 3.3 | 2430 | " | CDR | 070 | | 3500 | going + bringing wire |
| 2155 z; | 4.2 | 2360 | " | " | 071 | | 3448 | EP |
| 2207 z; | 3.5, 3.9, 5.0, 7.0 | 2280 | " | " | 70.2 | 1.8 | 3390 | EP |
| 2213 z; | 4.7 | 2270 | " | " | 70.1 | 1.8 | 3328 | EP |

Dredge off bottom: 2304 z Depth: 210 m. Wire out: 2216 m.

X: _____ Y: _____

* speed over bottom 0.1 knot

Notes:

NAVIGATION POOR, USING ESTIMATED POSITIONS FROM SATELLITES WHICH COMING IN ABOUT EVERY 1-3 HRS (2240 - 2150 aiming for this H₂O depth)

Cruise: F7-86-HW

Date: Dec 4 '86 JD: 339

Station No.: 09

Location: Lat.: 16° 58.5 16 58.62 16 58.7 16 58.62 DREDGE # CD7
 Long.: 168° 35.1 168 33.01 168 34.5 168 32.99 X: _____ Y: _____

Site Description and Target: _____

Dredge type: CD Fincer: _____ m. Transponder: _____ m.
 Dredge in water: _____ z Depth: _____ m. CTD: yes no
 Dredge on bottom: _____ z Depth: _____ m. Wire out: _____ m.

| Events: time; | tension, | wire angle, | heading, | speed, | X-Y co-ordinates, | ect. | MISC | |
|----------------------|-----------------|------------------------|------------------------|------------------------|-------------------------------|------------|-------------------|--|
| z; | tension | H ₂ O depth | LAT | Lon | heading | speed | wo | |
| <u>22:32</u> z; | | <u>2170</u> | <u>16 58.69</u> | <u>168.3452</u> | <u>70.0</u> | <u>and</u> | <u>3328</u> | having in EP to dredge up slope |
| <u>22:37</u> z; | <u>4.8</u> | <u>2160</u> | <u>"</u> | <u>"</u> | <u>70.0</u> | <u>"</u> | <u>3050</u> | EP no up d |
| <u>22:53</u> z; | <u>7.4</u> | <u>2130</u> | SAT <u>16 58.62</u> | <u>168 32.99</u> | <u>70.3</u> | <u>0.0</u> | <u>2700</u> | SAT |
| <u>2255, 2257</u> z; | <u>7.2, 7.8</u> | <u>2120</u> | <u>"</u> | <u>"</u> | <u>70.5</u> | <u>"</u> | <u>2675, 2650</u> | |
| <u>2300</u> z; | <u>7.4, 5.5</u> | <u>2120</u> | <u>58.62</u> | <u>32.99</u> | <u>70.0</u> | <u>0.0</u> | <u>2640, 2630</u> | |
| <u>2304</u> z; | <u>2.2</u> | <u>2110</u> | <u>"</u> | <u>"</u> | <u>69.8</u> | <u>0.0</u> | <u>2216</u> | off Bottom |
| <u>2324</u> z; | <u>-</u> | <u>1990</u> | <u>"</u> | <u>"</u> | <u>Ship coming around</u> | | <u>1200</u> | Problem in wheel room dredge on d EOSTA |
| <u>2354</u> z; | <u>0</u> | <u>2115</u> | <u>16 58.62</u> | EP <u>168 33.01</u> | <u>254</u> | <u>1.5</u> | <u>0</u> | |
| z; | | | | | | | | |
| z; | | | | | | | | |

Dredge off bottom: 2304 z Depth: 2110 m. Wire out: 2216 m
 X: _____ Y: _____

Notes: Summary - bites (>4.0 mt) 2360 m depth to 2120 m depth

Cruise: F7 86 HW

SAMPLE DEPTH INTERVAL
2900-1685

Date: Dec 5 86 JD: 340

Station No.: 10

ON BOTTOM

0123 START OF STATION EOS ON BOTTOM OFF BOTTOM DREDGE #
 Location: Lat.: 16 58.81 17° 02.15' 17 05.17 CD 8
 Long.: 168 34.5 168° 34.9' 168 32.43 X: _____ Y: _____

Site Description and Target: Central Karin Ridge. Dredging up West side, aiming for 2240-2150 meters H₂O depth.

Dredge type: CD Pinger: Ø m. Transponder: Ø m.
 Dredge in water: 0123 z Depth: 3360 m. CTD: yes no
 Dredge on bottom: 0248 z Depth: 2675 m. Wire out: 3300 m.

Events: time; tension, wire angle, heading, speed, X-Y co-ordinates, ect.

| Time | tension | H ₂ O depth | LAT | LONG | heading | speed | Wire out | MISC |
|----------|---------|------------------------|-----------|------------|---------|-------|----------|--|
| 01:55 z; | 1.3 mt | 3230 | 16° 58.8 | 168 34.5 | 32.0 | 1.77 | 1750 | MISC |
| 0159 z; | | 3140 | 17° 00.98 | 168.36.5 | 32.0 | 1.77 | | 60 mt / min SAT |
| 0211 z; | 2 mt | 3060 | 17: 00.88 | 168.36.99 | 34.2 | <1.77 | 2700 | holding wire till get deeper |
| 0231 z; | | 2900 | " | " | 55.1 | <1.77 | 2700 | paying out wire to reach bottom |
| 0240 z; | | 2770 | " | " | 54.6 | <1.77 | 3050 | |
| 0244 z; | | 2740 | 17° 02.08 | 168° 34.94 | 55.3 | <1.77 | 3225 | GPS |
| 0248 z; | | 2675 | 17° 02.15 | 168° 34.92 | 54.8 | <1.77 | 3300 | ON BOTTOM |
| 0301 z; | 2.3 mt | 2520 | 17° 02.31 | 168° 34.86 | 55.8 | 1/4 | 3300 | going to speed 1/2 x 1/2 knot |
| 0312 z; | | 2400-2450 | 17° 02.52 | 168° 34.72 | 54.6 | 1/2 | 3300 | No Bottom into haul at 20-30 m/wire |
| 0317 z; | | 2200 | 17° 02.55 | 168° 34.7 | 53.1 | | 3200 | |
| 0319 z; | | 2180 | 17° 02.56 | 168° 34.7 | 55.9 | | 3200 | Karin asker skip to hold port & will start pay dredge in |

Dredge off bottom: 0551 z Depth: 1685 m. Wire out: 1804 m.

X: _____ Y: _____

Notes:

Long haul.

0248-0551 → 1/3 hrs on bottom

Cruise: F786 HW

Date: 12/5/86 JD: 340

Station No.: 10

SAMPLE DEPTH

INTERVAL

| | |
|--------------|---------------|
| ON BOTTOM | OFF BOTTOM |
|--------------|---------------|

Latation: Lat.: _____

17° 02.15' | 17° 05.17'

DREDGE #

Transponder Grid: CD 8

Long.: _____

168° 34.72 | 168° 32.43 X: _____

Y: _____

Site Description and Target: Central Karim Ridge. Dredging up westside aiming for 2240-2150 meters of depth

Dredge type: CD Pinger: ♀ m. Transponder: ♂ m.

Dredge in water: 0123 z Depth: 3360 m. CTD: yes no

Dredge on bottom: 0248 z Depth: 2675 m. Wire out: 3900 m.

| Events: time | tension | wire angle | heading | speed | X-Y co-ordinates | ect. | Misc | |
|----------------|------------------------|-------------|------------------|-------------------|------------------|----------------|----------------------------------|--|
| | H ₂ O depth | LAT | LONG | heading | spd | wo | | |
| <u>0347</u> z: | <u>no bites</u> | <u>2040</u> | <u>17° 02.26</u> | <u>168° 35.41</u> | | <u>3000</u> | | |
| <u>0413</u> z: | <u>no bite</u> | <u>1920</u> | <u>17° 02.26</u> | <u>168.35.4</u> | <u>53.2</u> | <u>2900</u> | | |
| <u>0416</u> z: | <u>6:fe 4.8</u> | <u>1910</u> | " | " | <u>53.8</u> | <u>2900</u> | | |
| <u>0421</u> z: | | <u>1900</u> | " | " | <u>55.4</u> | <u>2900</u> | <u>bring in 1/2 offline dec!</u> | |
| <u>0442</u> z: | <u>no bite</u> | <u>1805</u> | <u>17° 04.20</u> | <u>168° 33.49</u> | <u>53.0/17</u> | <u>2800</u> | <u>letting out!</u> | |
| <u>0507</u> z: | <u>nada</u> | <u>1760</u> | <u>04.63</u> | <u>33.12</u> | <u>54.7</u> | <u><1.7</u> | <u>2740</u> | <u>going to haul some line to dredge. Parking!</u> |
| <u>0516</u> z: | <u>7.7</u> | <u>1740</u> | <u>.70</u> | <u>32.94</u> | <u>54.8</u> | <u><1.7</u> | <u>2515</u> | |
| <u>0522</u> z: | <u>8.1</u> | <u>1850</u> | | | | | <u>2500</u> | <u>hung up</u> |
| <u>0528</u> z: | | <u>1850</u> | | | <u>55.4</u> | <u><1.7</u> | | <u>broke free</u> |
| <u>0545</u> z: | | | <u>32.54</u> | | <u>05.08</u> | | | <u>pulling dredge in slowly.</u> |
| <u>0551</u> z: | | <u>1685</u> | <u>17 05.17</u> | <u>168 32.43</u> | <u>56</u> | <u><1.7</u> | <u>1804</u> | <u>off bottom</u> |

Dredge off bottom: 0551 z Depth: 1685 m. Wire out: 1804 m.

X: _____ Y: _____

Notes:

Cruise: F7-86 HW

Sample Interval

2530-2250m

Date: 12-6-86 JD: 340

Station No.: 13

| | | | | | |
|-----------|------------------------|------------------|----------------|-----------------|--------------------------------|
| | Start | end | on bot. | off bot. | DREDGE # |
| Latation: | Lat.: <u>17°05.6</u> | <u>17 08 48</u> | <u>17°08.3</u> | <u>168°19.1</u> | Transponder Grid: <u>CD 11</u> |
| | Long.: <u>168°17.6</u> | <u>168 20 27</u> | <u>17°08.2</u> | <u>168°19.3</u> | |
| | | | X: _____ | Y: _____ | |

Site Description and Target: Karin Seamount range, east side -

Dredge type: CD Pinger: _____ m. Transponder: _____ m.
 Dredge in water: 1904 z Depth: 3260 m. ~~CTD~~ ^{TDR}: yes no
 Dredge on bottom: 2038 z Depth: 2530 m. Wire out: 3500 m.

Events: time; tension, wire angle, heading, speed, X-Y co-ordinates, ect.

| z; | tension | H ₂ O depth | LAT | LN | SAT | heading | wo | Misc |
|----------------|------------|------------------------|----------------|-----------------|-----|------------|--------------|-----------------------------|
| <u>1922</u> z; | <u>0.9</u> | <u>3180</u> | <u>17°08.3</u> | <u>168°17.8</u> | | <u>298</u> | <u>1000m</u> | <u>paying out wire</u> |
| <u>1929</u> z; | <u>1.2</u> | <u>3150</u> | <u>"</u> | <u>"</u> | | <u>299</u> | <u>1500m</u> | <u>↓</u> |
| <u>1936</u> z; | <u>1.4</u> | <u>3120</u> | | | | <u>300</u> | <u>1900</u> | <u>↓</u> |
| <u>1948</u> z; | <u>1.8</u> | <u>3080</u> | <u>"</u> | <u>"</u> | | <u>298</u> | <u>2500</u> | <u>↓</u> |
| <u>1953</u> z; | <u>2.2</u> | <u>3060</u> | <u>"</u> | <u>"</u> | | <u>304</u> | <u>2900</u> | <u>↓</u> |
| <u>1959</u> z; | <u>1.9</u> | <u>3030</u> | <u>"</u> | <u>"</u> | | <u>281</u> | <u>3200</u> | <u>↓</u> |
| <u>2005</u> z; | <u>2.1</u> | <u>2940</u> | <u>"</u> | <u>"</u> | | <u>272</u> | <u>3500</u> | <u>holding</u> |
| <u>2038</u> z; | <u>3.5</u> | <u>2530</u> | <u>17°08.3</u> | <u>168°19.1</u> | | <u>272</u> | <u>3500</u> | <u>on bottom first bite</u> |
| <u>2041</u> z; | <u>4.2</u> | <u>2520</u> | <u>"</u> | <u>"</u> | | <u>271</u> | <u>3500</u> | <u>bite</u> |
| <u>2043</u> z; | <u>3.4</u> | <u>2350?</u> | <u>"</u> | <u>"</u> | | <u>275</u> | <u>"</u> | <u>bite</u> |

Dredge off bottom: 2137 z Depth: 2250 m. Wire out: 2940 m.
 X: _____ Y: _____

Notes: several big bites > 6t, hung up at least twice

CD 11 Cont. p. 2

Cruise: F7-86-HW

Date: 12-6-86 JD: 340

Station No.: 13

DREDGE # CD 11

Latitude: Lat.: _____

Transponder Grid: _____

Long.: _____

X: _____ Y: _____

Site Description and Target: _____

Dredge type: chain bag Pinger: _____ m. Transponder: _____ m.

Dredge in water: _____ z Depth: _____ m. CTD: yes no

Dredge on bottom: _____ z Depth: _____ m. Wire out: _____ m.

Events: time; tension, wire angle, heading, speed, X-Y co-ordinates, ect.

| z; | tension | H ₂ O depth | LAT | LOn | heading | wo | Misc |
|---------|---------|------------------------|---------|----------|---------|------|-------------|
| 2044 z; | 3.4 t | 2350 | 17°08.3 | 168°19.1 | 276 | 3500 | bite |
| 2048 z; | 4.4 t | 2320 | " | " | 272 | 3500 | big bite |
| 2050 z; | 4.7 t | 2280 | " | " | 273 | 3479 | " |
| 2053 z; | 6.1 t | 2280 | " | " | 277 | 3473 | big bite |
| 2054 z; | 5.5 t | 2280 | " | " | 270 | " | hung up |
| 2100 z; | 8.2 t | 2270 | " | " | 297 | 3479 | broken free |
| 2103 z; | 3.3 t | | | | 286 | 3428 | bites |
| 2103 z; | 4.9 t | | | | " | 3425 | bites |
| 2103 z; | 4.0 - | | | | " | 3415 | bite |
| 2104 z; | 3.5 t | | | | " | 3400 | bite |

Dredge off bottom: _____ z Depth: _____ m. Wire out: _____ m.

X: _____ Y: _____

Notes:

Dredge Station Log

Cruise: F7-86-HW

Date: 12-6-86 JD: 340

Station No.: 13

DREDGE # CD 11

Location: Lat.: _____

Transponder Grid: _____

Long.: _____

X: _____ Y: _____

Site Description and Target: _____

Dredge type: CD Pinger: _____ m. Transponder: _____ m.
 Dredge in water: _____ z Depth: _____ m. ^{TDR} CTD: yes no
 Dredge on bottom: _____ z Depth: _____ m. Wire out: _____ m.

Events: time; tension, wire angle, heading, speed, X-Y co-ordinates, ect..

| z; | tension | H ₂ O depth | LAT | LN | heading | speed | wo | MISC |
|----------------------------|---------|------------------------|---------|----------|-----------|-------|------|---------------------|
| 2105 z; | 3.0 | 2260 | 17°08.3 | 168°19.1 | 284 | | 3390 | bite |
| 2107 z; | 8.0 | 2260 | 17°08.2 | 168°19.3 | 268 | | 3360 | bite |
| 2108 z; | 3.4 | 2260 | " | " | 268 | | 3360 | bite |
| 2109 z; | 5.7 | 2250 | " | " | 269 | | 3350 | bite |
| 2116 z; | 7.5 | 2240 | " | " | 274 | | 3252 | hung up broke lo |
| 2119 z; | 7.3 | 2260 | " | " | 266 | | 3241 | hung up again |
| 2124 z; | 7.4 | 2260 | " | " | 266 | | 3219 | still hung up |
| 2129 z; | — | 2260 | " | " | 300 | | 3200 | broke lo |
| 2137 z; | 2.8 | 2250 | " | " | 342 | | 2940 | off bottle |
| ²²³⁰ 2247 z; | 5 | 2500 | " | " | 133.7/145 | | 0 | on deck EUS |

Dredge off bottom: 2137 z Depth: 2250 m. Wire out: 2940 m
 X: _____ Y: _____

Notes:

Dredge Station Log

Cruise: F7 86 HW drudge interval 2550-2100 Date: 12 6 86 JD: 341
 bite interval 2170-2100

Station No.: 14 Bottom

| | | | | | |
|------------------------|-------------------------------------|--------------------|------------------|------------------|--|
| | ON STA | OFF STA | on | off | |
| Letation: | Lat.: <u>17:06.13</u> ^{EP} | <u>17° 08' 08"</u> | <u>17 06.28</u> | <u>17 07.97</u> | DREDGE # <u>CD 12</u> |
| Start of Sta 0025 z | Long.: <u>168:16.73</u> | <u>168° 20.46'</u> | <u>168 17.34</u> | <u>168 20.02</u> | Transponder Grid: _____ X: _____ Y: _____ |

Site Description and Target: Dredging up the East side of Central Karim Ridge.

Dredge type: chain bag Pinger: 0 m. Transponder: 0 m.
 Dredge in water: 0031 z Depth: 3000 m. CTD: yes no
 Dredge on bottom: 0119 z Depth: 2550 m. Wire out: 2600 m.

| Events: time; tension, H ₂ O depth, LAT, LON, EP, heading, sid, WD | tension | H ₂ O depth | LAT | LON | EP | heading | sid | WD | Notes |
|---|----------|------------------------|-----------|-----------|----|---------|------|------------|---|
| 0057 z; | | 2650 | 17°06.28 | 168°17.3F | | 294.1° | 1.6* | 1500 | Missed allow 45 to drift So. |
| 0112 z; | | 2580 | 17°06.28 | 168.1734 | EP | 296.0 | 1.6 | 2225 | |
| 0119 z; | | 2550 | no update | | | 300.1 | 1.6 | 2600 | ON BOTTO |
| 0141 z; | | 2430 | " | " | | 304.0 | 1.6 | 3100 | stopped pinging & will pull in when get |
| 0150 z; | 2 mt | 2280 | " | " | | 305.0 | 1.6 | 3100 | speeding 21 to increase tension |
| 0200 z; | 3.6, 3.5 | 2210 | " | " | | 395. | 1.6 | 3100 | |
| 0207 z; | 6.2 | 2170 | " | " | | | | | under will bring & since cable. |
| 0211 z; | 4.9, 6.2 | 2150 | " | " | | | | 3080, 3020 | |
| 0213 z; | 3.95 | 2150 | " | " | | | | 3050 | |
| 0222 z; | 5.6, 7.8 | 2130 | no update | | | 289.3 | 1.6 | 2909, 2903 | |
| z; | 5.8 | | | | | | | 2875 | |

Dredge off bottom: 0255 z Depth: 2110 m. Wire out: 2400 m.
 X: _____ Y: _____

Notes: Infrequent sat. fixes. Aiming to dredge from 2450 - 2300

Dredge Station Log

Cruise: F7 86 HW

Date: Dec 6 86 JD: 341

Station No.: 14

Location: STA. Start / End
 Lat.: 17°06.13 / 17°08.08'
 Long.: 168°16.73 / 168°20.46'

DREDGE # _____
 Transponder Grid: CD 12
 X: _____ Y: _____

Site Description and Target: _____

Dredge type: CD Pinger: 0 m. Transponder: 0 m.
 Dredge in water: _____ z Depth: _____ m. CTD: yes — no —
 Dredge on bottom: _____ z Depth: _____ m. Wire out: _____ m.

Events: time; tension, wire angle, heading, speed, X-Y co-ordinates, etc.

| Time | Tension | H ₂ O depth | Lat | Lon | heading | SP | misc | MISC |
|----------|----------|------------------------|----------------------|------------|---------|-----|------------|---------------------|
| 0227 z; | 8 | 2130 | 17 06.28 | 168 17.31 | 287.6 | <1 | 2875 | MISC |
| 0228 z; | 6.6, 5.8 | 2130 | GP updating fixes | from bad | " | <1 | 2865, 2830 | " |
| 0231 z; | 5.2 | 2120 | | | | | 2820 | |
| 0231 z; | 3.4 | 2120 | | | 284 | | 2755 | |
| 0230 z; | 8.4 | 2130 | | | | | 2770 | |
| 0243 z; | 4.9 | 2100 | 17 07.92 | 168 19.98 | 295 | 1.6 | 4700 | |
| 0249 z; | 8 | 2100 | 17 07.95 | 168 19.97 | 295 | 1.6 | 2670 | |
| 0251 z; | 7.9, 5.8 | 2100 | 07.97 | 19.98 | " | " | 2655, 2600 | |
| 0255 z; | ~ | 2110 | 17 07.97 | 168 20.02 | 265.2 | " | 2400 | off bottom |
| _____ z; | | | | | | | | OES |
| 0336 z; | | 2040 | 17 08.08' | 168 20.46' | 307 | 1.6 | | on deck / EAS 14 |

Dredge off bottom: 0255 z Depth: 2110 m. Wire out: 2400 m.
 X: _____ Y: _____

Notes:

Dredge Station Log

Cruise: F7 86 HW sample interval
2310-2140m Date: Dec 7 86 JD: 341

Station No.: 15

| | | | | | | |
|-----------|------------------------|-----------------|-----------------|-----------------|----------|--------------------------------|
| Latation: | STATION-START | END | <u>on bot</u> | <u>off bot</u> | DREDGE # | Transponder Grid: <u>CD 13</u> |
| | Lat.: <u>16°26.6'N</u> | <u>16°25.2</u> | <u>16°26.2</u> | <u>16°25.2</u> | | |
| | Long.: <u>169°33'W</u> | <u>169°33.5</u> | <u>169°32.4</u> | <u>169°32.9</u> | X: _____ | Y: _____ |

Site Description and Target: Dredging Near Johnston Island Camera Site

Dredge type: CD Pinger: - NO - m. Transponder: _____ m.
 Dredge in water: 1111 z Depth: 2390 m. CTD: yes — no —
 Dredge on bottom: 1238 z Depth: 2350 m. Wire out: 3150 m.

| Events: time; tension, wire angle, heading, speed, X-Y co-ordinates, ect.: | | | | | | | | |
|--|---------------|------------------------|------------|-------------|---------|-------|------|-----------------|
| Time | (t) tension | H ₂ O depth | LAT | LONG | heading | speed | wo | MISC |
| 1111 z; | 0 | 2390 | 16°26.6' N | 169°33' W | 345 | 1.61 | 0 | Dredge in WATER |
| 1130 z; | 1.0 | 2470 | " | " | 352 | 1.62 | 1000 | Feeding Wire |
| 1139 z; | 1.2 | 2480 | 16°26.8' N | 169°32.9' W | 109.5 | 1.56 | 1500 | Feeding Wire |
| 1148 z; | 1.5 | 2480 | 16°26.7' N | 169°32.8' W | 123 | 1.62 | 2000 | Feeding Wire |
| 1159 z; | 1.9 | 2410 | " | " | 123 | 1.62 | 2400 | Feeding Wire |
| 1209 z; | 1.7 | 2370 | " | " | 125 | 1.62 | 2950 | " |
| 1214 | 1.6 | 2360 | " | " | 125 | 1.62 | 3050 | " |
| 1217 z; | 1.7 | 2350 | " | " | 125 | 1.60 | 3150 | " |
| 1238 | 1.8 | 2350 | 16°26.2 | 169°32.4 | 124 | 1.60 | 3150 | on bottom |
| 1249 z; | 1.9 | " | " | " | " | " | 3200 | " |
| 1302 | 2.8 | 2305 | 16°25.9 | 169°32.2 | 133 | 1.6 | 3250 | small bite |
| 1305 z; | 3.1, 3.2, 3.3 | 2310 | " | " | " | " | " | " |
| 1315 | 3.5 + 3.3 | 2330 | 16°25.8 | 169°32.1 | 155 | 1.6 | 3217 | bites |
| 1318 z; | 3.6, 3.9 | " | " | " | " | " | 3177 | bites |
| 1319 | 3.5 | " | " | " | " | " | 3160 | bite |
| 1319 z; | 5.2 | " | " | " | " | " | 3144 | " |

Dredge off bottom: 1408 z Depth: 2080 m. Wire out: 2170 m.
 X: _____ Y: _____

Notes: GPS fixes for all lats + longs, several large > 50 and many small bites, hang up twice
 Samples probably came from 2350-2300m

CD 15

Dredge Station Log

Cruise: F7-86-HW

Bite Interval
2310 - 2140

Date: 7-12-86 JD: 341

Station No.: 15

Latation: Lat.: _____

Long.: _____

DREDGE #

Transponder Grid: CD 13

X: _____ Y: _____

Site Description and Target: _____

Dredge type: _____ Pinger: _____ m. Transponder: _____ m.

Dredge in water: _____ z Depth: _____ m. CTD: yes — no —

Dredge on bottom: _____ z Depth: _____ m. Wire out: _____ m.

Events: time; tension, wire angle, heading, speed, X-Y co-ordinates, ect.:

| Time | tension | H ₂ O depth | LAT | LONG | heading | WC | MISC |
|----------|------------|------------------------|----------|-----------|---------|------|-----------------------|
| 1321 z; | 3.0 to 3.5 | 23 20 | 16° 25.6 | 169° 32.2 | 156 | 3125 | misc many small bites |
| 1322 z; | 5.7 | " | " | " | 153 | 3111 | bite |
| 1322 z; | 4.0 to 3.9 | " | " | " | " | 3104 | " |
| 1324 z; | 5.7 | " | " | " | " | 3075 | bite |
| 1325 z; | 8.0 to 8.2 | " | " | " | " | 3060 | hung up |
| 1335 z; | | 22 80 | " | " | 199 | 2980 | loose |
| 1338 z; | | " | " | " | 204 | 2973 | hung up ag |
| 1340 z; | 7.7 | 22 40 | 16° 25.6 | 169° 32.4 | 205 | 2940 | broke for |
| 1347 z; | 3.0 to 3.1 | 21 70 | " | " | 204 | 2800 | small bite |
| 1351 z; | 4.2 | 21 40 | 16° 25.4 | 169° 32.5 | 210 | 2714 | bite |
| 1408 z; | 2.0 | 20 80 | 16° 25.2 | 169° 32.9 | 267 | 2120 | off bottom |
| 1450 z; | | | 16° 25.2 | 169° 33.5 | | | Dredge on dec |
| _____ z; | | | | | | | |
| _____ z; | | | | | | | |
| _____ z; | | | | | | | |
| _____ z; | | | | | | | |

Dredge off bottom: _____ z Depth: _____ m. Wire out: _____ m

X: _____ Y: _____

Notes:

Dredge Station Log

Cruise: F 7 86 HW

sample interval
2340-2530

Date: 12-7-86 JD: 341

Station No.: 16

Latation: { } } }
 Lat.: 16°26.6 16°26.2
 Long.: 169°31.9 169°33.6

on bottom / off bottom
16°26.8 16°26.2
169°32.3 169°33.6

DREDGE # _____
 Transponder Grid: CD14
 X: _____ Y: _____

Site Description and Target: South of Johnston I. in camera site area

Dredge type: CD Pinger: _____ m. Transponder: _____ m.
 Dredge in water: 1537 z Depth: 2620 m. CTD: yes no
 Dredge on bottom: 1643 z Depth: 2370 m. Wire out: 2900 m.

Events: time; tension, wire angle, heading, speed, X-Y co-ordinates, ect.:

| z; | tension | H ₂ O depth | LAT | LONG | heading | wo | MISC |
|---------|---------------|------------------------|---------|----------|---------|------|------------------|
| 1555 z; | 1.1 | 2510 | 16°26.6 | 169°31.9 | 326 | 1000 | feeding out wire |
| 1612 z; | 1.5 | 2400 | 16°26.8 | 169°32.3 | 303 | 2300 | " |
| 1621 z; | 1.9 | 2380 | GPS off | " | 003 | 2500 | " |
| 1643 z; | 2.5 | 2370 | ? | ? | 279 | 2900 | on bottom |
| 1646 z; | 2.7, 3.1, 3.4 | 2350 | ? | ? | 287 | 2900 | small bite |
| 1650 z; | 3.9 | " | ? | ? | " | " | " |
| 1654 z; | 4.9 | 2340 | 16°26.3 | 169°32.8 | 280 | 2900 | bite |
| 1703 z; | 7.2 | 2350 | " | " | " | 2885 | hung up tangram |
| 1705 z; | 4.2 | " | " | " | 285 | 2877 | bite |
| 1706 z; | 4.0 | " | " | " | " | 2890 | " |
| 1707 z; | 6.8 | 2340 | " | " | 272 | 2864 | big bite |
| 1716 z; | 8.8 t | 2370 | " | " | 284 | 2840 | hung up |
| 1719 z; | 2.5 | 2370 | ? | ? | 285 | 2826 | broke cov. |
| 1723 z; | 2.8 | " | ? | ? | 286 | 2799 | |

Dredge off bottom: 1733 z Depth: 2530 m. Wire out: 2600 m.
 X: _____ Y: _____

Notes:

Dredge Station Log

Cruise: F7-86-HW

Date: 12-7-86 JD: 341

Station No.: 16

DREDGE #

Transponder Grid: CD 14

Latitude: Lat.: _____

Long.: _____

X: _____ Y: _____

Site Description and Target: _____

Dredge type: _____ Pinger: _____ m. Transponder: _____ m.

Dredge in water: _____ z Depth: _____ m. CTD: yes — no —

Dredge on bottom: _____ z Depth: _____ m. Wire out: _____ m.

Events: time; tension, wire angle, heading, speed, X-Y co-ordinates, ect.:

| | tension | H ₂ O depth | LAT | LONG | heading | wo | MISC |
|---------|---------|------------------------|----------|-----------|---------|--------|------------|
| 1733 z; | 2.2-3.0 | 2530 | 16° 26.2 | 169° 33.6 | 269 | 2600 | off bottom |
| 1804 z; | 2.0 | — | — | — | — | 1000 m | coming up |
| 1827 z; | — | — | " | " | — | — | on deck |
| z; | | | | | | | |
| z; | | | | | | | |
| z; | | | | | | | |
| z; | | | | | | | |
| z; | | | | | | | |
| z; | | | | | | | |
| z; | | | | | | | |
| z; | | | | | | | |

Dredge off bottom: _____ z Depth: _____ m. Wire out: _____ m.

X: _____ Y: _____

Notes:

Dredge Station Log

Cruise: F7-86-HW

Sample Interval
2350-2250

Date: 12-7-86 JD: 341

Station No.: 17

on bot. | off bottom

Latation: Lat.: 16° 25.0 / 16 24.9 | 169° 33.2 / 169° 33.2 End, 16° 25.1 | 16° 25.4

DREDGE #

radar

Long.: 169° 31.0 / 169 33.6

Transponder Grid: CD15

X: _____ Y: _____

Site Description and Target: South of Johnston I, south of the camera site area.

Dredge type: CD Pinger: / m. Transponder: _____ m.
 Dredge in water: 1924 z Depth: 2580 m. CTD: yes — no
 Dredge on bottom: 2123 z Depth: 2250 m. Wire out: 2797 m.

Events: time; tension, wire angle, heading, speed, X-Y co-ordinates, ect.

| | tension | H ₂ O depth | Lat | Long | heading | wo | MISC |
|---------|-----------------|------------------------|----------|-----------|---------|------|-------------------------|
| 1944 z; | 1.0 | 2560 | 16° 25.2 | 169° 31.2 | 248 | 1100 | |
| 1951 z; | 1.1 | 2410 | " | " | | 1500 | paying out |
| 2001 | 1.4 | 2220 | " | " | 255 | 1740 | |
| 2007 z; | 1.4 | | 16° 25.0 | 169° 31.8 | | 2300 | |
| 2012 | | 2210 | " | " | 252 | 2700 | holding |
| 2026 z; | 2.4 | 2055 | 16° 25.0 | 169° 31.8 | 304 | 2700 | not left |
| 2043 | 1.9 | | " | " | | 2750 | paying out |
| 2057 z; | | | " | " | | 2750 | holding |
| 2123 z; | 2.6 3.1, 3.2 | 2250 | 16° 25.1 | 169° 33.2 | 281 | 2797 | on bottom little bit |
| 2125 z; | 2.6 to 2.7 | 2250 | " | " | | 2778 | small bit |
| 2126 z; | 3.3 | 2350 | " | " | | 2776 | bite |
| 2130 z; | 3.7 | | 16° 25.1 | 169° 33.7 | | 2712 | bite |
| 2131 z; | 4.8 | 2250 | " | " | 0283 | 2693 | bite |
| 2132 z; | 5.3 | 2250 | " | " | 027.7 | 2678 | bite |

Dredge off bottom: 2152 z Depth: 2280 m. Wire out: 2250 m

X: _____ Y: _____

Notes:

Dredge Station Log

Cruise: F-7-86-HW

Date: 12-7-86 JD: 341

Station No.: STA 17

DREDGE # CD15
 Transponder Grid: _____

Location: Lat.: _____

Long.: _____

X: _____ Y: _____

Site Description and Target: _____

Dredge type: _____ Pinger: _____ m. Transponder: _____ m.

Dredge in water: _____ z Depth: _____ m. CTD: yes _____ no _____

Dredge on bottom: _____ z Depth: _____ m. Wire out: _____ m.

Events: time; tension, wire angle, heading, speed, X-Y co-ordinates, ect..

| | tension | H ₂ O depth | LAT | LONG | heading | wo | MISC |
|---------|---------|------------------------|---------|----------|------------|------|-------------------|
| 2137 z; | 3.7 | 2270 | 16°24.9 | 169°33.6 | 18.6 | 2617 | bites |
| 2142 z; | ~2.6 | 2310 | " | " | 44.9 | 2529 | bites several one |
| 2145 z; | 2.8 | 2310 | " | " | 55.8 | 2524 | bite |
| 2149 z; | 3.2 | 2300 | " | " | 56.2 | 2453 | bite |
| 2152 z; | — | 2280 | 16°25.4 | 169°33.2 | 58.8 | 2250 | off bottom |
| 2230 z; | 0 | 2520 | " 24.9 | " 33.6 | 32.8 1.6 | 0 | on deck |
| z; | | | | | | | |
| z; | | | | | | | |
| z; | | | | | | | |
| z; | | | | | | | |

Dredge off bottom: 2152 z Depth: 2280 m. Wire out: 2250 m

X: _____ Y: _____

Notes:

Cruise: F7 - 1/2 - HW

Date: Dec 7 1965 JD: 341-342

Station No.: 18
on station EOS

| | | |
|------------|----------|----------|
| ON BOTTOM | 16 26.4 | 169 32.0 |
| OFF BOTTOM | 16 25.27 | 169 33.5 |
| | ??? | ??? |

Latitude: Lat.: 16° 26.64 / 16° 26.01
Longitude: Long.: 169 32.0 / 169 34.82
DREDGE # _____
Transponder Grid: CD 16
X: _____ Y: _____

Site Description and Target: South of Johnson Head

Dredge type: Chain drag Pinger: 0 m. Transponder: 0 m.
Dredge in water: 2349 z Depth: 2850 m. CTD: yes no
Dredge on bottom: 0058 z Depth: 2650 m. Wire out: 2700 m.

Events: time; tension, wire angle, heading, speed, X-Y co-ordinates, ect.

| z; | tension | H ₂ O depth | LAT | LONG | heading | spd | wo | MISC |
|------|--------------------|------------------------|----------|-----------|---------|-----|------|------------------------------|
| 2349 | | 2850 | 16 26.4 | 169 32.0 | 325.5 | 1.7 | 0 | IN H ₂ O ON STA |
| 0018 | | 2750 | | | 326.5 | | 1600 | ship holding |
| 0030 | | 2780 | | | | | 2260 | ship holding |
| 0032 | | 2650 | | | | | 2700 | ON BOTTOM |
| 0058 | | 2600 | | | 250 | <1 | 3250 | holding wire, prep to dredge |
| 0104 | 3.2, 4.2, 4.2, 4.3 | 2550 | 16 26.58 | 169 31.98 | 242 | <1 | 3520 | bottom is flat |
| 0126 | 3.5, 4.2, 4.3, 3.2 | " | " | " | " | " | " | waiting to go |
| 0152 | 3.5, 3.3, 3.7 | " | " | " | " | " | " | uphill |
| 0138 | 6.0, 4.9, 2.6, 3.7 | 2540 | " | " | " | " | " | GOING UPHILL |
| 0203 | | 2650 | | | | | 2800 | off bottom |

0255 ON DECK
Dredge off bottom: 0203 z Depth: 2650 m. Wire out: 2800 m.
Lab #: 1 Lon #: 2
some where near 16 25.27, 169 33.5

Notes:
Aiming for 2650-2350 going SW
Tide range of 1.5m, 1.5m from
out

Dredge Station Log

Cruise: F7-86-HW

Date: 7 Dec 86 JD: 342

Station No.: 20

Bottom

| | | | | | | | |
|-----------|--------|-------------------|-----------------|-----------------|-----------------|--------------------------|--------------|
| | STA | ON | OFF | ON | OFF | DREDGE # | |
| Location: | Lat.: | <u>16°25.89'</u> | <u>16°26.6</u> | <u>16°25.6</u> | <u>16°25.8</u> | Transponder Grid: | <u>CD 18</u> |
| | Long.: | <u>169°30.89'</u> | <u>169°32.0</u> | <u>169°31.1</u> | <u>169°33.2</u> | X: _____ | Y: _____ |

Site Description and Target: South of Central Johnston Island; just outside of southeastern corner of DNA camera survey area

Dredge type: USGS Chain Bag Pinger: _____ m. Transponder: _____ m.

Dredge in water: 0849 z Depth: 2750 m. CTD: yes — no

Dredge on bottom: 0939 z Depth: 2690 m. Wire out: 2800 m.

Events: time; tension, wire angle, heading, speed, X-Y co-ordinates, ect..

| | tension | H ₂ O depth | LAT | LONG | heading | spd | wire | Misc |
|----------------|------------|------------------------|-----------------|------------------|------------|---------------|-------------|-------------------|
| <u>0930</u> z: | | <u>2730</u> | <u>16°25.88</u> | <u>169°30.65</u> | <u>232</u> | <u>2.4 kt</u> | <u>2400</u> | |
| <u>0939</u> z: | ? | <u>2690</u> | <u>16°25.57</u> | <u>169°31.09</u> | <u>236</u> | <u>4 kt</u> | <u>2800</u> | <u>on bottom</u> |
| <u>0952</u> z: | | <u>2600</u> | <u>25.45</u> | <u>31.46</u> | <u>240</u> | <u>4 kt</u> | <u>3200</u> | |
| <u>1004</u> z: | <u>4.7</u> | <u>2560</u> | <u>16°25.4</u> | <u>169°31.7</u> | <u>255</u> | <u>1.8</u> | <u>3200</u> | <u>bite</u> |
| <u>1006</u> z: | <u>3.9</u> | " | " | " | <u>259</u> | <u>1.7</u> | <u>3200</u> | <u>bite</u> |
| <u>1007</u> z: | <u>3.7</u> | " | " | " | <u>256</u> | | <u>3200</u> | <u>bite</u> |
| <u>1008</u> z: | <u>4.3</u> | <u>2530</u> | " | " | <u>254</u> | <u>1.7</u> | <u>3200</u> | <u>bite</u> |
| <u>1015</u> z: | <u>5.4</u> | <u>2420</u> | <u>16°25.4</u> | <u>169°31.9</u> | <u>248</u> | <u>1.8</u> | <u>3200</u> | <u>bite</u> |
| <u>1041</u> z: | | <u>2110</u> | " | <u>169°32.8</u> | <u>261</u> | <u>1.8</u> | <u>2886</u> | |
| <u>1055</u> z: | <u>2.2</u> | <u>2160</u> | " | " | <u>273</u> | <u>1.7</u> | <u>2669</u> | <u>pulling in</u> |
| <u>1110</u> z: | — | <u>2280</u> | <u>16°25.8</u> | <u>169°33.2</u> | <u>043</u> | <u>1.7</u> | <u>2390</u> | <u>off bottom</u> |
| <u>1113</u> z: | <u>2.1</u> | | | | | | <u>2300</u> | <u>coming up</u> |
| <u>1200</u> z: | — | | <u>16°26.6</u> | <u>169°32.0</u> | | | | <u>on deck</u> |
| z: | | | | | | | | |

Dredge off bottom: 1110 z Depth: 2280 m. Wire out: 2390 m

X: _____ Y: _____

Notes: sample interval 2110 - 2730 m, samples probably from 2420 - 2560 m

Dredge Station Log

Cruise: F7 86 HW on bottom / off bottom Date: Dec. 8, 86 JD: 342

Station No.: 21
 16° 26.7 | 16° 26.9
 169° 32.0 | 169° 33.9

Location: on Station Lat.: 16° 26.3 | 16° 26.8 DREDGE # _____
off Station Lat.: _____ Transponder Grid: CD19
 Long.: 169° 31.16 | 169° 34.2 X: _____ Y: _____

Site Description and Target: Dredge across southern part of camera area south of Johnston I.

Dredge type: CD Pinger: _____ m. Transponder: _____ m.
 Dredge in water: 1245 z Depth: 2750 m. CTD: yes — no
 Dredge on bottom: 1346 z Depth: 2530 m. Wire out: 3100 m.

Events: time; tension, wire angle, heading, speed, X-Y co-ordinates, ect..

| | tension | H ₂ O depth | Lat | Lon | heading | spd | w/o | Misc |
|---------|---------|------------------------|-----------|-----------|---------|-----|-------|------------------------------|
| 1307 z; | 1.1 | 2710 | 16° 26.7 | 169° 31.7 | 048 | — | 1200 | Misc |
| 1310 z; | 1.3 | 2730 | | | 074 | — | 1365 | |
| 1310 z; | 1.4 | 2770 | 16° 26.6 | 169° 32.0 | 072 | — | 1725 | |
| 1322 z; | 1.6 | 2810 | | | 107 | — | 2000 | |
| 1329 z; | 1.9 | 2780 | 16° 26.8 | 169° 31.5 | 251 | — | 2412 | |
| 1339 z; | 1.9 | 2610 | 16° 26.65 | 169° 32.0 | — | — | 3000 | |
| 1346 z; | 2.3 | 2530 | 16° 26.7 | 169° 32.0 | 258 | — | 3000 | on bottom |
| 1406 z; | 2.15 | 2430 | 16° 26.5 | 169° 32.3 | 275 | — | 3100 | |
| 1433 z; | — | 2520 | | | 296 | — | 3200 | pulling out a little more |
| 1446 z; | ? | 2570 | 16° 26.6 | 169° 33.4 | 301 | — | 3300 | wire out |
| 1505 z; | | 2880 | 16° 26.9 | 169° 33.9 | 286 | — | 2900. | off bottom |
| 1558 | | | 16° 26.8 | 169° 34.2 | | | | dredge on deck |

Dredge off bottom: 1505 z Depth: 2880 m. Wire out: 2900 m.
 X: _____ Y: _____

Notes: Sample interval 2530 - 2880 m, samples probably from 2430 to 2530 - only two small bites

Dredge Station Log

Cruise: F7-86-14W

Date: Dec. 8. 86 JD: 342

Station No.: 22

on bottom | off bottom

Location:

Lat.: 16°24.7 | 16°24.8
 Long.: 169°31.5 | 169°31.9

16°25.0 | 16°24.8
169°31.5 | 169°31.9

DREDGE # CD 20

Transponder Grid: _____

X: _____ Y: _____

Site Description and Target: Johnston Isl. (same old area)
southern part of camera survey area

Dredge type: U.S.G.S Chain bag Pinger: _____ m. Transponder: _____ m.

Dredge in water: 1643 z Depth: ? bathy. messed up m. CTD: yes — no

Dredge on bottom: 1817 z Depth: 2100 m. Wire out: 3000 m.

Events: time; tension, wire angle, heading, speed, X-Y co-ordinates, ect..

| | tension | H ₂ O depth | LAT | LONG | heading | spd | wo | MISC |
|---------|------------|------------------------|---------|----------|---------|-----|--------|------------|
| 1712 z; | 1.5 | 2420 | 16°24.7 | 169°31.5 | 72 | 1.6 | 1500 m | paying out |
| 1722 z; | 1.7 | 2500 | 16°24.8 | 169°31.5 | 69 | 2.3 | 2400 m | " |
| 1739 z; | 1.65 | 2370 | 16°24.8 | 169°31.0 | 343. | — | 3000 | holding |
| 1817 z; | 2.2 to 2.5 | 2100 | 16°25.0 | 169°31.5 | 343 | | 3000 | on bottom |
| 1819 z; | 3.2 to 3.6 | 2100 | " | " | | | 3000 | bites |
| 1820 z; | 4.6 | 2100 | " | " | 348 | | 3000 | bite |
| 1821 z; | 7.9 | 2090 | " | " | 351 | | 3000 | big bite |
| 1828 z; | 8.4 | 2070 | " | " | 348 | | 3000 | hung up |
| 1844 z; | 2.0 | 2240 | 16°25.2 | 169°31.9 | 53 | | 2886 | loose agn. |
| 1848 z; | 2.0 | | | | 21 | | 2900 | holding |
| 1850 z; | 2.8 | 2280 | 16°25.5 | 169°31.4 | | | 2900 | bite |
| 1852 z; | 2.9-3.0 | " | " | " | 348 | | " | bites |
| 1853 z; | 2.9 to 3.3 | 2270 | " | " | 345 | | 2900 | small bite |
| 1854 z; | 4.5 | 2275 | " | " | 335 | | 2895 | bite |

Dredge off bottom: 1945 z Depth: 2210 m. Wire out: 2441 m

X: _____ Y: _____

Notes:

sample interval from 2100 - 2340 m
hung up several times

Cruise: F7-86 -HW

Date: Dec. 8, 1986 JD: 342

Station No.: 22

DREDGE # CD 20

Latitude: Lat.: _____

Transponder Grid: _____

Long.: _____

X: _____ Y: _____

Site Description and Target: _____

Dredge type: _____ Pinger: _____ m. Transponder: _____ m.
 Dredge in water: _____ z Depth: _____ m. CTD: yes — no —
 Dredge on bottom: _____ z Depth: _____ m. Wire out: _____ m.

Events: time; tension, wire angle, heading, speed, X-Y co-ordinates, ect..

| z; | tension | H ₂ O depth | LAT | LONG | heading | spd | wo | MISC |
|------|---------|------------------------|----------|-----------|---------|-----|------|----------------|
| 1856 | 8.0 | 2240 | 16° 25.5 | 169° 31.4 | 317 | | 2883 | hung up |
| 1910 | 4.2 | — | " | " | 56 | | 2880 | loose |
| 1912 | 4.5-32 | 2400 | " | " | 12 | | 2880 | bites |
| 1915 | 8.0 | " | " | " | | | " | hung up again |
| 1919 | 8.0 | 2380 | " | " | 57 | | 2875 | loose |
| 1921 | 2.3 | | | | | | 2800 | holding |
| 1928 | 4.7 | 2340 | 16° 24.8 | 169° 31.9 | 343 | | 2798 | bite |
| 1943 | | 2230 | " | " | 346 | | 2469 | pulling in |
| 1945 | 2.3 | 2210 | 16° 24.8 | 169° 31.9 | 345 | | 2441 | off bottom |
| 2000 | 1.7 | — | — | — | — | | 1500 | coming up |
| 2026 | | | | | | | | dredge on deck |
| z; | | | | | | | | |
| z; | | | | | | | | |

Dredge off bottom: _____ z Depth: _____ m. Wire out: _____ m.
 X: _____ Y: _____

Notes:

Dredge Station Log

1062

TOTAL DEPTH INTERVAL _____

Cruise: F7-86-HW BITE DEPTH INTERVAL _____ Date: Dec. 8. 86 JD: 342

- 343

Station No.: 23

DREDGE # CD 21

Transponder Grid: _____

X: _____ Y: _____

| Latation: | ON STA | | OFF STA | | BOTTOM | |
|-----------------------|------------------|-----|------------------|------------------|--------|-----|
| | ON | OFF | ON | OFF | ON | OFF |
| Lat.: <u>16°26'</u> | <u>16°26.7'</u> | | <u>16°26.6'</u> | <u>16°27.2'</u> | | |
| Long.: <u>169°31'</u> | <u>169°32.8'</u> | | <u>169°31.7'</u> | <u>169°31.8'</u> | | |

Site Description and Target: Johnston Is. (SOS)
southern part of camera area TARGET DEPTH _____

Dredge type: U.S.G.S. chain bag Pinger: m. Transponder: _____ m.

Dredge in water: 2129 z Depth: 2830 m. CTD: yes — no <

Dredge on bottom: 2213 z Depth: 2730 m. Wire out: 2750 m.

Events: time; tension, wire angle, heading, speed, X-Y co-ordinates, ect..

| time | tension | H ₂ O depth | LAT | LOn | heading | spd | wo | MISC |
|----------------|----------------------|------------------------|------------------|-------------------|------------|------------|-------------|--------------------------|
| <u>2129</u> z; | | | | | | | | START STA 23 |
| <u>2142</u> z; | <u>1.0</u> | <u>2810</u> | <u>16°26'</u> | <u>169°31'</u> | <u>354</u> | | <u>1000</u> | going down |
| <u>2153</u> z; | <u>1.4</u> | <u>2810</u> | " | " | <u>349</u> | | <u>1790</u> | |
| <u>2200</u> z; | <u>1.5</u> | <u>2820</u> | " | " | | | <u>2100</u> | |
| <u>2213</u> z; | <u>2</u> | <u>2730</u> | " | " | <u>354</u> | <u>1.8</u> | <u>2750</u> | on bottom, pausing scope |
| <u>2228</u> z; | | <u>2680</u> | | | <u>354</u> | <u>4.1</u> | <u>3200</u> | Star + dredging no slope |
| <u>2246</u> z; | <u>4.2, 3.8, 4.2</u> | <u>2550</u> | | | | | <u>3200</u> | |
| <u>2248</u> z; | <u>3.9, 6.9</u> | <u>2530</u> | <u>16°26.6'</u> | <u>169°31.7'</u> | | | <u>3200</u> | radar |
| <u>2251</u> z; | <u>3.7</u> | <u>2520</u> | | | | | " | |
| <u>2256</u> z; | <u>3.4, 4.2, 4.2</u> | <u>2510</u> | <u>16°25.13'</u> | <u>169°30.86'</u> | | | " | Birds & SAT |
| <u>2301</u> z; | <u>3.1, 6.6</u> | <u>2480</u> | | | | | | |

Dredge off bottom: 2337 z Depth: 2350 m. Wire out: 2600 m

X: _____ Y: _____

Notes:

T
V
C
L
1
2

354 17.85

Dredge Station Log

Cruise: F7-86-4W TOTAL DEPTH INTERVAL 2810-2350 m BITE DEPTH INTERVAL 2550-2370 m Date: Dec. 8, 86 JD: -343

Station No.: 23

| Latation: | ON STA | OFF STA | Bottom | |
|------------------------|--------|---------|-----------------|-----------------|
| | ON | OFF | ON | OFF |
| Lat.: <u>16° 27.0</u> | | | <u>16° 26.</u> | <u>16° 27.2</u> |
| Long.: <u>169 31.8</u> | | | <u>169° 31'</u> | <u>169 31.8</u> |

DREDGE # _____
 Transponder Grid: CD21
 X: _____ Y: _____

Site Description and Target: _____

Dredge type: _____ Pinger: _____ m. Transponder: _____ m.
 Dredge in water: _____ z Depth: _____ m. CTD: yes — no —
 Dredge on bottom: _____ z Depth: _____ m. Wire out: _____ m.

Events: time; tension, wire angle, heading, speed, X-Y co-ordinates, ect..

| Time | tension | H ₂ O depth | LAT | LOn | heading | spd | wo | MISC |
|----------------|---------------------------|------------------------|------------------|-------------------|---------|-----|-------------------------|----------------------------|
| <u>2307</u> z; | <u>4.6</u> | <u>2520</u> | <u>16° 27.0'</u> | <u>169° 31.8'</u> | | | <u>3200</u> | <u>radar</u> |
| <u>2313</u> z; | <u>3.5, 4.1</u> | <u>2530</u> | | | | | <u>11</u> | |
| z; | <u>3.8</u> | <u>2475</u> | | | | | <u>11</u> | |
| <u>2321</u> z; | <u>3.9, 3.8, 3.9</u> | <u>2460</u> | <u>16° 27.0'</u> | <u>169° 31.8'</u> | | | <u>11</u> | <u>many sides maintain</u> |
| <u>2324</u> z; | <u>3.9, 4.8, 4.2, 4.3</u> | <u>2410</u> | | | | | <u>3180, 3170, 3165</u> | <u>5000 ft, 10 wire</u> |
| <u>2325</u> z; | <u>5.2, 4.2, 5.7, 4.9</u> | <u>2410</u> | | | | | <u>3155, 31-0</u> | |
| z; | <u>4.0, 5.2, 4.3</u> | | | | | | <u>3107</u> | |
| <u>2335</u> z; | <u>6.9, 6.2</u> | <u>2370</u> | | | | | <u>2950, 2941</u> | |
| <u>2337</u> z; | <u>—</u> | <u>2350</u> | <u>16° 27.2'</u> | <u>169° 31.8'</u> | | | <u>2600</u> | <u>off bottom radar</u> |
| <u>0036</u> z; | | <u>2460</u> | <u>16 26.7</u> | <u>169 32.8</u> | | | <u>0</u> | <u>on deck</u> |
| z; | | | | | | | | <u>EUS</u> |

Dredge off bottom: 2337 z Depth: 2350 m. Wire out: 2600 m
 X: _____ Y: _____

Notes: Very bad navigation, using radar. Radar conflicts greatly with satellites but is internally consistent
359° 16.6 205 350° 16.7

Dredge Station Log

TOTAL DEPTH INTERVAL 2630-2330

Cruise: F-7-86-HW

BITE DEPTH INTERVAL 2430-2340

Date: Dec 8, 1986 JD: 343

Station No.: 24

| | | | | | | |
|-----------|-------------------------|------------------|-----------------|-------------------|----------|-------------------------------|
| Location: | ON STA | OFF STA | Bottom GPS | | DREDGE # | Transponder Grid: <u>CD22</u> |
| | Lat.: <u>16°25.5'</u> | <u>16 26.04</u> | ON | OFF | | |
| | Long.: <u>169°30.2'</u> | <u>169 33.63</u> | <u>169 30.6</u> | <u>169°33.58'</u> | X: _____ | Y: _____ |

Site Description and Target: Johnston Island - south-eastern part of Dredge Camera Survey Area

Dredge type: ME 65 Chumbe Pinger: _____ m. Transponder: _____ m.
 Dredge in water: 0122 z Depth: _____ m. CTD: yes no
 Dredge on bottom: 0202 z Depth: _____ m. Wire out: _____ m.

| Events: time; | tension | wire angle | heading | speed | X-Y co-ordinates, ect.. | MISC | | |
|--------------------|----------|------------------------|----------|-----------|-------------------------|------|-------------------------|---------------------------------------|
| | | H ₂ O depth | LAT | LONG | heading | spd | wo | |
| z; | | | | | | | | |
| 0122 z; | | | 16 25.5 | 169 30.2 | | | | |
| 0155 z; | | | 16°25.6 | 169 30.8 | 321.8 | <1 | 2125 | parking ship |
| 0208 z; | | 2630 | | | | | 2750 | on bottom |
| 0225 z; | | 2520 | 16 25.7 | 169 31.4 | 318 | 4.6 | 3200 | scope is out |
| 0237 z; | | | 16 25.66 | 169 32.17 | | | | Keoni called for ship to get possible |
| 0248 z; | 3.2, 3.5 | 2430 | | | | | 3100 | |
| 0257 z; | | 2350 | | | | | | |
| 0302 z; | 6.2 | 2340 | | | | | 3045 | |
| 0305 z; | 3.8 | 2340 | | | | | 3020 | |
| 0312 z; | | 2350 | 16°25.95 | 169°32.91 | 321 | <1.6 | 2850 | |
| 0332 z; | | 2320 | 16°26.00 | 169°33.14 | 321 | <1.6 | 2620 | |
| 0340 z; | | 2330 | 16°26.04 | 169°33.38 | 324 | <1.6 | 2400 | OFF BOTTOM |
| 0425 z; | | 3500 | 16 25.03 | 169 33.23 | | | | ON DECK |
| Dredge off bottom: | | 0340 z | | | Depth: <u>2330</u> m. | | Wire out: <u>2400</u> m | |

X: _____ Y: _____

Notes:

aiming for 25 to 2400m
not too many rocks boys...

26 13
33 63

Dredge Station Log

Cruise: F7 86 HW TOTAL DEPTH INTERVAL _____ BITE DEPTH INTERVAL _____ Date: Dec 8, 86 JD: 343

Station No.: 25

Location: ON STA OFF STA Bottom ON OFF DREDGE #
 Lat.: 16 26.00 16 26.20 16° 26.09' 16° 26.25' Transponder Grid: CD 23
 Long.: 169 31.06 169 33.95 169° 31.09' 169° 32.98' X: _____ Y: _____

Site Description and Target: S. Central Johnston Island Ridge

Dredge type: CD Pinger: Ø m. Transponder: Ø m.
 Dredge in water: 0449 z Depth: 2750 m. CTD: yes no
 Dredge on bottom: 2538 z Depth: 2440 m. Wire out: _____ m.

| Events: time; | tension | wire angle | heading | speed | X-Y co-ordinates, ect., | | | |
|-----------------|--------------------------------|------------------------|----------|-----------|-------------------------|--------|--------------|--|
| | | H ₂ O depth | LAT | LONG | heading | spd | wo | MISC |
| 0449 z; | 0 | 2750 | 16 26.00 | 169 31.06 | 87.4 | 0 | 0 | in 1620/on 56 |
| 0505 z; | | 2770 | 26.19 | 31.01 | 67 | | 1920 | |
| 0537 z; | | 2740 | 26.09 | 31.09 | 277 | 1/2 kt | | on bottom |
| 0551 z; | | 2590 | 26.12 | 31.64 | 288 | 1/2 kt | 3250 | stopped pinger out |
| 0610 z; | | 2570 | 26.06 | 32.14 | 0 | | | |
| 0616 z; | 6.1, 3.1, 3.2 | 2370 | 26.09 | 32.27 | | | | |
| 0620 z; | 3.9, 3.5, 3.1 5.6, 3.9, 3.7 | 2370 | 26.11 | 32.29 | 70 | | 3180 3175 | Captain trying to hold |
| 0623 z; | 3.1, 4.2, 5.8 | 2360 | 26.12 | 32.32 | 37.6 | | 3155 3140 | Captain allowing ship to drift |
| 0629 z; | 3, 3.5 | 2346 | 26.13 | 32.44 | | | 3075 | 1.4 kt Capt trying to slow ship down |
| 0635 z; | 3.5 | 2360 | 26.19 | 32.59 | | | | 1.45 knot |
| 0641 z; | 3.5 | 2350 | 26.21 | 32.68 | 348.0 | | 2935 | |
| 0647 | 0 | | 26.20 | 33.95 | | | | EOS 25 |

Dredge off bottom: 0657 z Depth: 2370 m. Wire out: 2750 m.
 X: _____ Y: _____

Notes: Difficult to keep speed over bottom at a reasonable value
SAMPLE INTERVAL 2370 to 2350 m Lat 16° 26.09' Lon 169° 32.27
to 26.21 32.68°

Dredge Station Log

Cruise: F786 HW TOTAL DEPTH INTERVAL _____ BITE DEPTH INTERVAL _____ Date: Dec 8, 86 JD: 343

Station No.: 25

| Location: | ON STA | | OFF STA | | Bottom | |
|-----------|----------------|------------------|----------------|------------------|--------|-----|
| | Lat. | Long | Lat. | Long | ON | OFF |
| | <u>1626.00</u> | <u>169°31.06</u> | <u>1626.09</u> | <u>169°31.09</u> | | |

DREDGE # _____
 Transponder Grid: CD23
 X: _____ Y: _____

Site Description and Target: _____

Dredge type: _____ Pinger: _____ m. Transponder: _____ m.
 Dredge in water: _____ z Depth: _____ m. CTD: yes no
 Dredge on bottom: _____ z Depth: _____ m. Wire out: _____ m.

Events: time; tension, wire angle, heading, speed, X-Y co-ordinates, ect..

| Time | tension | H ₂ O depth | LAT | LONG | heading | spc | wo | MISC |
|----------------|---------|------------------------|----------------|------------------|--------------|-----|-------------|-----------------------|
| <u>0646</u> z; | | <u>2350</u> | <u>1626.17</u> | <u>169°32.79</u> | <u>324.2</u> | | | |
| <u>48</u> z; | | <u>2370</u> | <u>1626.15</u> | <u>32.82</u> | | | | <u>n1.5</u> |
| <u>0652</u> z; | | <u>~2370</u> | <u>26.22</u> | <u>32.95</u> | <u>42.6</u> | | <u>2840</u> | |
| <u>0657</u> z; | | <u>2370</u> | <u>26.25</u> | <u>32.98</u> | <u>33.0</u> | | <u>2750</u> | <u>bag off bottom</u> |
| <u>0747</u> z; | | <u>?</u> | <u>26.20</u> | <u>33.95</u> | | | | <u>EOS 25</u> |
| _____ z; | | | | | | | | |
| _____ z; | | | | | | | | |
| _____ z; | | | | | | | | |
| _____ z; | | | | | | | | |
| _____ z; | | | | | | | | |
| _____ z; | | | | | | | | |
| _____ z; | | | | | | | | |

Dredge off bottom: 0657 z Depth: 2370 m. Wire out: 2750 m
 X: _____ Y: _____

Notes:

Dredge Station Log

TOTAL DEPTH INTERVAL 3160-2320

BITE DEPTH INTERVAL 2380-2290

Cruise: F7-86HW

Date: 12-8-86 JD: 343

Station No.: 26

| | | | | |
|-----------|-----------------------|-----------------|---------------------|---------------------|
| | ON STA | OFF STA | Bottom | |
| Latation: | Lat.: <u>16°25.47</u> | <u>16°26.4</u> | ON° <u>16°25.58</u> | OFF° <u>16°25.9</u> |
| Long.: | <u>169°30.11</u> | <u>169°33.9</u> | <u>169°32.18</u> | <u>169°33.1</u> |

DREDGE # _____
 Transponder Grid: CD 24
 X: _____ Y: _____

Site Description and Target: South-Central Johnston Island - south
submer to south western transect of DPA camera survey

Dredge type: USGS Chain bag Pinger: _____ m. Transponder: _____ m.
 Dredge in water: 0928 z Depth: _____ m. CTD: yes no
 Dredge on bottom: 0928 z Depth: 3160 m. Wire out: 3300 m.

| Events: | time; | tension | wire angle | heading, | speed, | X-Y co-ordinates, | ect., | MISC |
|---------|-------|-------------|------------------------|----------|-----------|-------------------|-------|------------------------|
| | | | H ₂ O depth | LAT | Lon | heading | spd | wo |
| 0911 | z; | | 3070 | 16°25.58 | 169°30.69 | 59.5 | 2.28 | 2420 |
| 0928 | z; | | 3160 | 25.41 | 30.64 | 226 | 2.66 | 3300 on bottom |
| 0943 | z; | | 2790 | 25.00 | 30.09 | 225 | 1.78 | 3800 Pulling out slack |
| 0949 | z; | | 2690 | 25.00 | 31.38 | 239 | 1.78 | 3880 stopping wo |
| 0953 | z; | 3.43 | 2380 | 16°24.9 | 169°31.8 | 349 | 1.8 | " bites |
| 1021 | z; | 2.2 | 2380 | 16°25.0 | 169°32.0 | 344 | 1.8 | 3800 big bite |
| 1022 | | 8.2 | " | | | " | | 3730 hung up |
| 1023 | z; | 4.2 | | | | | | 3760 loose |
| 1041 | z; | {4.4 4.5 | 2310 | 16°25.5 | 169°32.2 | 21.0 | 1.8 | 3390 bites |
| 1042 | z; | 5.0 | 2310 | " | " | " | " | 3340 bites |
| 1049 | z; | 7.7 | " | " | " | " | " | 3116 |
| 1120 | z; | 2.4 | 2290 | " | 169°32.4 | 19.6 | 1.8 | 3200 |
| | | | 2250 | " | " | " | " | 2700 pulling in |

Dredge off bottom: 1128 z Depth: 2320 m. Wire out: 2500 m.
 X: _____ Y: _____

Notes:

Dredge Station Log

Cruise: F7-86-HW TOTAL DEPTH INTERVAL _____ BITE DEPTH INTERVAL _____ Date: 343 JD: 12-8-82

Station No.: 26

Location: Lat.: _____ Long.: _____
 ON STA OFF STA , ON OFF
 BOTTOM

DREDGE # CD 24
 Transponder Grid: _____
 X: _____ Y: _____

Site Description and Target: _____

Dredge type: _____ Pinger: _____ m. Transponder: _____ m.
 Dredge in water: _____ z Depth: _____ m. CTD: yes no
 Dredge on bottom: _____ z Depth: _____ m. Wire out: _____ m.

Events: time; tension, wire angle, heading, speed, X-Y co-ordinates, ect..

| | tension | H ₂ O depth | LAT | LONG | heading | spd | wo | MISC |
|----------------|------------|------------------------|-----------------|------------------|------------|------------|-----------------------|-------------------|
| z; | | | | | | | | |
| <u>1122</u> z; | | <u>2320</u> | <u>16° 25.9</u> | <u>169° 33.1</u> | <u>002</u> | <u>1.8</u> | <u>2500</u> | <u>off bottom</u> |
| <u>1132</u> z; | | <u>2340</u> | <u>"</u> | <u>"</u> | <u>"</u> | <u>-</u> | <u>2300</u> | |
| <u>1146</u> z; | <u>1.8</u> | | <u>16° 26.6</u> | <u>169° 33.9</u> | | | <u>1500</u> | |
| <u>1212</u> z; | | <u>2530</u> | <u>"</u> | <u>"</u> | | | <u>Dredge on deck</u> | |
| z; | | | | | | | | |
| z; | | | | | | | | |
| z; | | | | | | | | |
| z; | | | | | | | | |
| z; | | | | | | | | |
| z; | | | | | | | | |
| z; | | | | | | | | |

Dredge off bottom: _____ z Depth: _____ m. Wire out: _____ m.
 X: _____ Y: _____

Notes:

Dredge Station Log

TOTAL DEPTH INTERVAL 2320-2450

Cruise: F7-86-HW BITE DEPTH INTERVAL 2320-2450 Date: Dec. 9. 86 JD: 343

Station No.: 27

Location: Lat.: 16° 25.2 16° 26.6 16° 26.0 16° 26.7 DREDGE # CD 25
 Long.: 169° 30.6 169° 32.7 169° 32.3 169° 33.0 Transponder Grid: _____
 GPS ↗ X: _____ Y: _____

Site Description and Target: Some old stuff one more time!
South-Central Johnston Is. - camera survey area

Dredge type: U.S.G.S chain bag Pinger: _____ m. Transponder: _____ m.
 Dredge in water: 1313 z Depth: 2910 m. TDR
ETD: yes - no
 Dredge on bottom: 1427 z Depth: 2320 m. Wire out: 3200 m.

| z; | tension | H ₂ O depth | Lat | Long | heading | Sp | Wire | Misc |
|---------|----------|------------------------|----------|-----------|---------|-----|------|-------------------------|
| 1313 z; | | 2910 | 16° 25.2 | 169° 30.7 | 357 | | | bag in H ₂ O |
| 1334 z; | 1.0 | 2840 | 16° 25.4 | 169° 31.1 | 360 | 1.6 | 1200 | going down |
| 1340 z; | 1.2 | 2620 | " | 31.4 | 007 | 1.6 | 1500 | |
| 1348 z; | 1.4 | 2550 | " | " | 356 | 1.6 | 2000 | |
| 1357 z; | 1.6 | 2460 | 16° 25.8 | 169° 31.8 | 353 | 1.7 | 2500 | |
| 1406 z; | 2.1 | 2320 | 16° 26.0 | 169° 32.3 | 350 | 1.6 | 3000 | |
| 1427 z; | 3.4-3.6 | 2320 | 16° 26.0 | 169° 32.3 | 350 | 1.6 | 3200 | on bottom + biting |
| 1428 z; | 4.2 | " | " | " | " | " | 3200 | biting |
| 1429 z; | 4.2 | " | " | " | " | " | " | " |
| 1431 z; | 3.7 | " | " | " | " | " | " | " |
| 1432 z; | 4.1 | 2350 | " | " | 347 | 1.6 | " | " |
| 1433 z; | 4.1 | " | " | " | " | " | " | " |
| 1445 z; | 8.0 | " | 16° 26.2 | 169° 32.7 | 346 | 1.6 | 3200 | hung up |
| 1448 z; | 9.5 | " | " | " | 337 | 1.6 | 3260 | " |
| 1449 z; | 4.5 | " | " | " | " | " | 3240 | loose? |
| 1453 z; | 3.6 | " | " | " | 342 | 1.6 | 3160 | holding w/ bites |
| 1454 z; | 4.6, 4.3 | " | " | " | " | " | " | " |

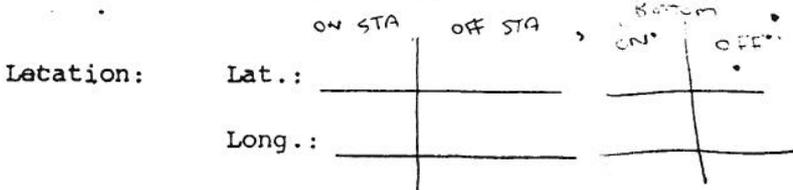
Dredge off bottom: 1609 z Depth: 2450 m. Wire out: 2560 m.
 X: _____ Y: _____

Notes:

Dredge Station Log

Cruise: F7-86-W TOTAL DEPTH INTERVAL _____ BITE DEPTH INTERVAL _____ Date: Dec. 9. 86 JD: 343

Station No.: 27



DREDGE # CD 25
Transponder Grid: _____

X: _____ Y: _____

Site Description and Target: _____

Dredge type: _____ Pinger: _____ m. Transponder: _____ m.
Dredge in water: _____ z Depth: _____ m. CTD: yes — no —
Dredge on bottom: _____ z Depth: _____ m. Wire out: _____ m.

Events: time; tension, wire angle, heading, speed, X-Y co-ordinates, ect..

| | tension | H ₂ O depth | LAT | LONG | heading | spd | w/o | MISC |
|---------|------------|------------------------|----------|-----------|---------|-----|------|----------------|
| 1510 z; | 3.2, 4.2 | 2350 | 16° 26.3 | 169° 33.2 | 354° | 1.6 | 3160 | bites |
| 1511 | 5.8 | " | " | " | " | " | " | bite |
| 1515 z; | 3.0 to 3.1 | " | " | " | 352 | " | " | bites |
| 1517 | 3.3 | 2380 | 16° 26.4 | 169° 33.4 | 356 | 1.6 | 3160 | bite |
| 1520 z; | 3.6 | " | " | " | " | " | " | bite |
| 1521 z; | 3.2, 3.6 | 2360 | " | " | 350 | " | " | bite |
| 1540 z; | 3.4 + 3.5 | 2340 | 16° 26.6 | 169° 33.5 | 86 | 1.6 | 3000 | bites |
| 1544 | 3.1 | " | " | " | " | " | 2956 | bite |
| 1549 z; | 2.8 to 3.2 | 2450 | 16° 26.7 | 169° 33.3 | 84 | 1.6 | 2900 | bites |
| 1552 | 3.0 to 3.1 | " | " | " | 87 | " | 2860 | bites |
| 1557 z; | 3.1 | " | " | 169° 33.2 | 88 | " | 2797 | " |
| 1600 | 3.2 | " | " | " | " | " | 2775 | " |
| 1603 z; | 3.6 | " | " | " | " | " | 2741 | " |
| 1609 z; | 2.1 | 2450 | 16° 26.7 | 169° 33.0 | | 1.6 | 2560 | off bottom |
| 1656 z; | | 2010 | | | | | | dredge on deck |
| z; | | | | | | | | |

Dredge off bottom: _____ z Depth: _____ m. Wire out: _____ m.
X: _____ Y: _____

Notes:

Dredge Station Log

Cruise: F786-HW TOTAL DEPTH INTERVAL 3150-2226 BITE DEPTH INTERVAL 2350-2220 Date: 12-9-86 JD: 343

Station No.: 28 -344

Location:

| | | | |
|-------------------------|------------------|-----------------|-----------------|
| ON STA | OFF STA | Bottom | |
| Lat.: <u>16° 25.6</u> | <u>16 26.00</u> | ON | OFF |
| Long.: <u>169° 27.8</u> | <u>169 32.60</u> | <u>16° 26.2</u> | <u>16 26.25</u> |
| <i>Radar</i> | | | |

DREDGE # CD 26
Transponder Grid: _____
X: _____ Y: _____

Site Description and Target: South-central Johnston Isl. - camera survey sea (again!!)

Dredge type: U.S.G.S chain bag Pinger: _____ m. Transponder: _____ m.
 Dredge in water: 1915 z Depth: 3220 m. TDR CTD: yes — no ←
 Dredge on bottom: 2218 z Depth: 2350 m. Wire out: _____ m.

Events: time; tension, wire angle, heading, speed, X-Y co-ordinates, ect.

| z; | tension | H ₂ O depth | RADAR | | heading | Spd | wire | MISC |
|----------------|--------------------------------|------------------------|---|------------------|------------|------------|-------------|---|
| | | | Lat | Long | | | | |
| <u>1937</u> | <u>1.0</u> | <u>3150</u> | <u>16° 25.7</u> | <u>169° 28.6</u> | <u>352</u> | <u>1.8</u> | <u>1200</u> | <u>going down</u> |
| <u>1946</u> z; | <u>1.4</u> | | | | | | <u>1800</u> | <u>"</u> |
| <u>2011</u> z; | <u>2.2</u> | <u>3170</u> | <u>16° 25.7</u> | <u>169° 29.4</u> | <u>346</u> | <u>1.8</u> | <u>2200</u> | <u>"</u> |
| <u>2101</u> z; | | <u>2890</u> | <u>wire too far to the east are now moving west</u> | | | <u>347</u> | <u>3200</u> | <u>holding</u> |
| <u>2126</u> z; | | <u>2700</u> | <u>16° 25.7</u> | <u>169° 30.8</u> | <u>344</u> | | <u>3200</u> | <u>"</u> |
| <u>2143</u> z; | | <u>2550</u> | <u>16° 25.9</u> | <u>169° 31.3</u> | <u>352</u> | <u>1.8</u> | <u>3200</u> | <u>"</u> |
| <u>2218</u> z; | <u>4.9, 3.2</u> | <u>2350</u> | <u>26.2</u> | <u>31.6</u> | <u>338</u> | <u>1.8</u> | <u>3200</u> | <u>maybe on bottom on bottom via bite</u> |
| <u>2219</u> z; | <u>4.0, 3.4</u> | <u>2320</u> | <u>"</u> | <u>"</u> | <u>"</u> | <u>"</u> | <u>"</u> | |
| <u>2221</u> z; | <u>3.1, 3.2, 3.3</u> | <u>"</u> | <u>"</u> | <u>"</u> | <u>"</u> | <u>"</u> | <u>"</u> | |
| <u>2223</u> z; | <u>4.1, 3.4, 4.1, 4.6</u> | <u>"</u> | <u>"</u> | <u>"</u> | <u>"</u> | <u>"</u> | <u>"</u> | |
| <u>2226</u> z; | <u>3.9, 3.1, 3.2, 5.0, 4.1</u> | <u>"</u> | <u>"</u> | <u>"</u> | <u>"</u> | <u>"</u> | <u>"</u> | |

Dredge off bottom: 2319 z Depth: 2440 m. Wire out: 2600 m.
 X: _____ Y: _____

Notes:

Dredge Station Log

Cruise: F7-86-HW Date: 12-9-86 JD: 343

Station No.: 28

| | | | |
|-----------------|------------------|---------|------------------|
| | ON STA | OFF STA | Bottom |
| Latation: Lat.: | <u>16°25.6'</u> | | <u>16°26.2'</u> |
| Long.: | <u>169°27.8'</u> | | <u>169°31.6'</u> |

DREDGE # _____
 Transponder Grid: CD 26
 X: _____ Y: _____

Site Description and Target: South Central Johnston Island - Southern
Survey Area

Dredge type: ^{USGS} Chain Bagg Pinger: _____ m. Transponder: _____ m.
 Dredge in water: 1915 z Depth: 3220 m. CTD: yes no
 Dredge on bottom: _____ z Depth: _____ m. Wire out: _____ m.

| Events: time; | tension | wire angle | heading | speed | X-Y co-ordinates | ect., | Misc | |
|----------------|---------------------------|-------------|-----------------|------------------|------------------|--------------|-------------|--------------------|
| | H ₂ O depth | Lat | Long | Heading | Spd | Wire | | |
| <u>2228</u> z: | <u>3.7, 5.0, 3.5</u> | <u>2270</u> | <u>16° 26.2</u> | <u>169° 31.6</u> | <u>33.8</u> | <u>1.8</u> | <u>3200</u> | |
| <u>2240</u> z: | <u>3.5, 4.2, 3.5</u> | <u>2220</u> | " | " | | | <u>3190</u> | |
| <u>2241</u> z: | <u>5.7, 3.5, 3.7</u> | " | " | " | | | <u>3180</u> | |
| <u>2242</u> z: | <u>5.2, 5.3, 3.9</u> | " | " | " | | | <u>3175</u> | |
| <u>2243</u> z: | <u>3.4, 3.5, 3.3, 3.4</u> | <u>2240</u> | <u>26.3</u> | <u>32.0</u> | | | <u>3129</u> | |
| <u>2252</u> z: | <u>3.5, 3.8, 4.1, 3.6</u> | <u>2260</u> | " | " | | | <u>3000</u> | |
| <u>2258</u> z: | <u>3.4, 5.7</u> | <u>2310</u> | " | " | | | <u>2923</u> | |
| <u>2301</u> z: | <u>3.7</u> | <u>2340</u> | <u>26.35</u> | <u>32.6</u> | | | <u>2895</u> | |
| <u>2319</u> z: | | <u>2440</u> | <u>26.25</u> | <u>32.75</u> | | | <u>2600</u> | <u>off bottom</u> |
| <u>0006</u> z: | <u>0</u> | <u>2610</u> | <u>26.00</u> | <u>32.00</u> | <u>43.4</u> | <u><1</u> | | <u>ON DECK EOS</u> |
| z: | | | | | | | | |

Dredge off bottom: 2319 z Depth: 2440 m. Wire out: 2600 m.
 X: _____ Y: _____

Notes:

3
 25
 2.5
 17.
 16.5

Dredge Station Log

Cruise: F7-86-HW TOTAL DEPTH INTERVAL _____ BITE DEPTH INTERVAL _____ Date: 12-10-86 JD: 344

Station No.: 29

Location: ON STA OFF STA Bottom ON OFF
 Lat.: 16°38.6 16°38.6 16°38.7
 Long.: 168°07.3 168°10.2 168°09.8
 (25 m.)

DREDGE # CD 27
 Transponder Grid: _____

X: _____ Y: _____

Site Description and Target: Eastern flank of south-central Kona Ridge

Dredge type: U.S.G.S. chain bag Pinger: _____ m. Transponder: _____ m.
 Dredge in water: 1406 z Depth: ~3750 m. TDR CTD: yes no
 Dredge on bottom: 1557 z Depth: 2700 m. Wire out: 3900 m.

Events: time; tension, wire angle, heading, speed, X-Y co-ordinates, ect.,

| Time | Tension | H ₂ O depth | Lat | Long | heading | Spd | Wire | Misc |
|---------|---------------|------------------------|---------|----------|---------|-----|------|-----------------------|
| 1425 z; | 0.9 | 3640 | 16°38.7 | 168°07.8 | 340 | 1.6 | 1000 | going down |
| 1436 | 1.1 | 3560 | 16°38.8 | 168°08.1 | 345 | 1.6 | 1500 | " |
| 1444 z; | 1.3 | 3510 | " | " | 338 | 1.6 | 2000 | " |
| 1452 | 1.5 | 3450 | 16°38.8 | 168°08.5 | 334 | 1.6 | 2500 | " |
| 1500 z; | 1.9 | 3350 | " | " | 322 | 1.6 | 3000 | " |
| 1507 | 2.0 | | | | | | 3500 | |
| 1520 z; | 2.6 | 3140 | 16°38.8 | 168°09.0 | 335 | 1.6 | 3900 | holding |
| 1557 z; | 3.2 | 2700 | 16°38.7 | 168°09.8 | 331 | 1.6 | " | on bottom |
| 1612 | 3.2 to 3.9 | | | | | | 3900 | big bite |
| z; | 4.1 | 2900 | 16°38.8 | 168°10.1 | 338 | 1.6 | 3900 | several bites |
| 1618 | 3.5 | 2820 | " | " | 344 | 1.6 | 3900 | bite |
| 1622 z; | 4.3 | 2800 | " 38.8 | " 10.2 | 337 | 1.6 | " | " |
| 1642 | 3.5 | 2650 | " | " 10.4 | 335 | 1.6 | 3900 | " |
| 1644 z; | 3.8, 4.2, 4.5 | " | " | " | " | " | " | multiple bites |
| 1646 | 5.2 | 2650 | " | " | 343 | 1.6 | 3900 | begin to pull |
| 1652 z; | 8.2 | 2660 | 16°38.8 | 168°10.4 | 059 | 1.6 | 3890 | hung up |
| 1710 | 7.2 | 2750 | " | " | 069 | 1.6 | 3750 | " |
| 1721 z; | 4.0 | | | | | | 3513 | " |
| 1810 | 4 | 3050 | | | 068 | 1.6 | 3589 | still stuck |
| 1825 z; | 2.0 to 2.1 | 2980 | | | | | | may have lost the bag |

Dredge off bottom: 1825 z Depth: 2980 m. Wire out: 3589 m.

X: _____ Y: _____

Notes: Dredge bag lost! May be rest in place! The best bag on the ocean floor!

Dredge Station Log

Cruise: F7-86-HW TOTAL DEPTH INTERVAL 2210-1950m BITE DEPTH INTERVAL 2210-2070m Date: 12-10-86 JD: 344

Station No.: 30

Location: *No. 1000 STA* Lat.: 16°38' *off STA* 16°40.8' *Bottom* DREDGE # CD 28
 Long.: 168°04' 168°12.1' Transponder Grid: _____
 X: _____ Y: _____

Site Description and Target: eastern flank of the central
Kauai Seamount Range

Dredge type: CD Pinger: _____ m. Transponder: _____ m.
 Dredge in water: 1956 z Depth: 2290 m. CTD: yes ~~no~~
 Dredge on bottom: 2182 z Depth: 2210 m. Wire out: 2800 m.

Events: time; tension, wire angle, heading, speed, X-Y co-ordinates, ect..

| z; | tension | H ₂ O depth | LAT | LONG | heading | Spd | Wire | Misc |
|---------|-------------|------------------------|-----------|-----------|---------|-----|------|------------------|
| 2039 z; | 1.6 | ~2500 | ? | | 352 | 1.8 | 2000 | feeding wire out |
| 2045 z; | 1.7 | | | | | | 2440 | " |
| 2052 z; | 1.6 | 2370 | | | | | 2800 | " |
| 2122 z; | ~2.2 to 2.4 | 2210 | | | | | 2800 | on bottom bites |
| 2107 z; | 3.3 | 2210 | | | | | " | bites |
| 2110 z; | 3.4+3.2 | " | | | 337 | 1.6 | " | " |
| 2112 z; | 5.6 | 2160 | | | | | " | bites |
| 2113 z; | 3.4+3.0 | " | | | 343 | 1.6 | " | hung up + loose |
| 2119 z; | 7.8 | 2070 | | | 004 | | 2812 | hung up + loose |
| 2137 z; | | 1950 | 16°40.8' | 168°12.1' | 038 | 1.6 | 2500 | pulling in |
| 2147 z; | | 2000 | " | " | 062 | 1. | 1950 | off bottom |
| 2230 z; | | | god knows | | | | | on deck |
| z; | | | | | | | | |

Dredge off bottom: 2147 z Depth: 2000 m. Wire out: 1950 m.
 X: _____ Y: _____

Notes: Navigation bad - location for "off bottom" only
satellite fix within several hours

DREDGE PROBABLY CAME FROM ~ 2200 m

Dredge Station Log

Cruise: F7-86-HW TOTAL DEPTH INTERVAL 2500-1950 BITE DEPTH INTERVAL 2310-2370 and 2120-1970 Date: 12-10-86 JD: 344

Station No.: 31 -345

| | | | | |
|-----------|------------------------------|-------------------|-------------------|-------------------|
| Location: | ON STA | OFF STA | Bottom | DREDGE # |
| | Lat.: <u>16° 40.79 (2)</u> | <u>16° 43.25</u> | <u>16° 42.37</u> | |
| | Long.: <u>168° 12.11 (2)</u> | <u>168° 12.58</u> | <u>168° 14.24</u> | X: _____ Y: _____ |

Site Description and Target: Somewhere on South Central Karim
Ridge. Trying to dredge NE side of ridge top.
Aiming for H₂O depths ~ 2000-1600 m.

Dredge type: CD Pinger: Φ m. Transponder: 6 m.
 Dredge in water: 2302 z Depth: 2500 m. CTD: yes — no ✓
 Dredge on bottom: 2345 z Depth: 2340 m. Wire out: 2500 m.

| Events: time; tension, H ₂ O depth, LAT, LONG, heading, speed, X-Y co-ordinates, ect.. | tension | H ₂ O depth | LAT | LONG | heading | Spd | W/O | MISC |
|---|----------------------|------------------------|--------------------|-------------------|------------|------------|-------------|--|
| <u>2257</u> z; | | | <u>16 40.79</u> | <u>168 12.11</u> | <u>272</u> | <u>4.5</u> | <u>0</u> | <u>MISC 505 31</u> |
| <u>2302</u> z; | | <u>2500</u> | <u>16 42</u> | <u>168 10</u> | <u>54</u> | <u>2.0</u> | | <u>Dredge in H₂O</u> |
| <u>2325</u> z; | | <u>2300</u> | <u>(SAT) 42 47</u> | <u>1247</u> | <u>49</u> | <u>0</u> | <u>1420</u> | |
| <u>2345</u> z; | | <u>2340</u> | | | | | | |
| <u>2352</u> z; | | <u>2100-2400?</u> | | | | | <u>2500</u> | <u>on bottom</u> |
| <u>0005</u> z; | <u>2.7</u> | <u>2310</u> | <u>43.25</u> | <u>12.58</u> | <u>340</u> | <u>4.6</u> | <u>2500</u> | |
| <u>0013</u> z; | <u>2.5</u> | <u>2290</u> | | | <u>"</u> | <u>"</u> | <u>2500</u> | |
| <u>0021</u> z; | <u>3.2, 3.6</u> | <u>2360</u> | | | | | | |
| <u>0025</u> z; | <u>2.1, 2.9, 2.3</u> | <u>2370</u> | <u>249.9</u> | | | | <u>2500</u> | <u>Drifting 756-7570-</u> |
| <u>0036</u> z; | | <u>2390</u> | | | <u>335</u> | | <u>2500</u> | |
| <u>0050</u> z; | | <u>2400</u> | | | | | <u>2500</u> | <u>off bottom from around to 90 SE</u> |
| <u>0208</u> z; | | <u>2130</u> | <u>16° 43.0</u> | <u>169° 13.69</u> | <u>167</u> | <u>2.3</u> | <u>2500</u> | <u>GPS</u> |

Dredge off bottom: 0330 z Depth: 2100 m. Wire out: 2350 m.
 X: _____ Y: _____

Notes: NAVIGATION NON-EXISTANT. NAVIGATING FROM A RANDOM POINT
BEARING OF 10.065°

2316-2370
1000

Dredge Station Log

TOTAL DEPTH INTERVAL 2120-1970m

Cruise: F7-86-HW BITE DEPTH INTERVAL 2120-1970m Date: 12-10-86 JD: 345

Station No.: 31

| | | | | | | |
|-----------|----------|---------|----------------------|-----------------------|----------|--------------------------------|
| Location: | ON STA | OFF STA | Bottom | | DREDGE # | Transponder Grid: <u>CD 29</u> |
| | Lat.: ? | | ON° <u>16° 43.21</u> | OFF° <u>16° 42.37</u> | | |
| | Long.: ? | | <u>168° 13.52</u> | <u>168 14.24</u> | X: _____ | Y: _____ |

Site Description and Target: _____

Dredge type: CD Pinger: / m. Transponder: / m.
 Dredge in water: 2300 z Depth: ? m. CTD: yes no
 Dredge on bottom: 0250 z Depth: 2120 m. Wire out: 2900 m.

| Events: time; tension, H ₂ O depth, heading, speed, X-Y co-ordinates, ect. | tension | H ₂ O depth | LAT | LONG | heading | Spd | wo | MISC |
|---|---------------------------|------------------------|----------------|-------------------|--------------|-------------|-------------|-------------------------|
| <u>0245</u> z; | | | ? | ? | | | <u>2900</u> | MISC |
| <u>0250</u> z; | <u>sub biter</u> | <u>2120</u> | <u>1643.31</u> | <u>168° 13.32</u> | <u>142.6</u> | <u>2.63</u> | <u>2900</u> | <u>ON BOTTOM #2</u> |
| <u>0254</u> | <u>2.2, 2.3</u> | | | | | | | |
| <u>0257</u> z; | <u>2.2, 2.4, 2.4</u> | | <u>42.12</u> | <u>13.92</u> | <u>149.</u> | | | |
| <u>0258</u> z; | <u>3.0, 3.4, 2.9</u> | <u>2110</u> | | | | | | <u>WIRE coming in -</u> |
| <u>0259</u> | <u>2.7, 2.7, 3.2</u> | | | | | | <u>2875</u> | |
| <u>0303</u> z; | <u>3.2, 2.9, 3.0, 2.8</u> | <u>2060</u> | | | | | <u>2823</u> | |
| <u>0306</u> | <u>2.5, 2.8, 3.0</u> | <u>2090</u> | <u>42.04</u> | <u>13.53</u> | <u>315</u> | | <u>2760</u> | |
| <u>0308</u> z; | <u>2.8</u> | <u>2000</u> | | | | | <u>2740</u> | |
| <u>0300</u> | <u>3.2, 3.0, 3.1</u> | <u>1970</u> | <u>42.10</u> | <u>13.68</u> | <u>326</u> | | <u>2725</u> | |
| <u>0312</u> z; | | | | | | | <u>2715</u> | |
| <u>0313</u> | <u>3.0, 3.0, 3.2</u> | <u>1950</u> | <u>42.17</u> | <u>13.87</u> | | | <u>2675</u> | |
| <u>0317</u> z; | | <u>1950</u> | | | | | <u>2660</u> | |
| <u>0322</u> | <u>4.1</u> | <u>1970</u> | <u>42.22</u> | <u>14.00</u> | | | <u>2613</u> | |
| <u>0331</u> z; | | <u>2100</u> | <u>42.37</u> | <u>14.24</u> | <u>346</u> | <u>41</u> | <u>2545</u> | <u>OFF BOTTOM</u> |
| <u>0410</u> z; | | <u>2330</u> | <u>43.06</u> | <u>13.77</u> | <u>63.8</u> | | <u>2350</u> | <u>ON DECK</u> |
| <u>0412</u> z; | | <u>2250</u> | <u>42 92</u> | <u>13 88</u> | <u>62</u> | | | <u>E05 31</u> |

Dredge off bottom: 0330 z Depth: 2100 m. Wire out: 2350 m

X: _____ Y: _____

Notes:

Dredge Station Log

Cruise: F7-86 HW TOTAL DEPTH INTERVAL _____ BITE DEPTH INTERVAL _____ Date: Dec 10 86 JD: 345

Station No.: 32

Location: Lat.: 16°32.74' ON STA OFF STA Bottom CN' DEPT'
 Long.: 168°17.17' 168°16.83' 168°16.38' DREDGE # _____
 Transponder Grid: CD 30 X: _____ Y: _____

Site Description and Target: West side of Central Karim Ridge

Dredge type: USGS Chain Trawl Pinger: _____ m. Transponder: _____ m.
 Dredge in water: 0535 z Depth: 2250+ m. CTD: yes — no —
 Dredge on bottom: 0611 z Depth: 2000 m. Wire out: 2000 m.

| Events: time; tension, H ₂ O depth, LAT, LONG, heading, speed, X-Y co-ordinates, ect., | | | | | | | |
|---|--------------------------------|-------------|-----------------|------------------|-------------|----------|-------------------------------------|
| <u>0603</u> z: | | <u>2020</u> | <u>16°33.10</u> | <u>168°16.83</u> | <u>54</u> | <u>1</u> | <u>1630</u> |
| <u>0611</u> z: | | <u>2000</u> | <u>33.19</u> | <u>16.76</u> | | | <u>2000</u> on bottom |
| <u>0630</u> z: | | <u>1960</u> | <u>33.46</u> | <u>16.55</u> | <u>68.2</u> | | <u>2700</u> Holding wire |
| <u>0641</u> z: | <u>2.2, 2.1, 2.1</u> | <u>1950</u> | <u>33.60</u> | <u>16.25</u> | | | <u>2700</u> |
| <u>0642</u> z: | <u>2.0, 2.6, 2.4, 2.3</u> | " | " | " | | | " |
| <u>0645</u> z: | <u>2.5, 2.9, 2.8, 2.6</u> | " | " | " | | | " |
| <u>0649</u> z: | <u>4.5, 2.7, 2.8, 3.8, 4.2</u> | <u>1930</u> | " | " | | | " |
| <u>0649</u> z: | <u>2.3, 2.5, 2.7, 3.2</u> | " | <u>33.66</u> | <u>16.11</u> | | | " Holding position bringing wire in |
| <u>0651</u> z: | <u>3.2, 5.4, 3.3</u> | " | | | | | <u>2695, 2684</u> |
| <u>0652</u> z: | <u>3.1, 4.9, 3.6, 6.7</u> | " | | | | | <u>2675, 2668</u> |
| <u>0654</u> z: | <u>2.6, 2.8, 3.8, 4.8</u> | " | | | | | <u>2625, 2610</u> |
| <u>0656</u> z: | <u>7.5</u> | <u>1920</u> | <u>16°33.68</u> | <u>168°15.96</u> | <u>106</u> | | <u>2630</u> hung up |
| <u>0716</u> | | <u>1950</u> | <u>33.47</u> | <u>16.38</u> | <u>344</u> | | <u>2200</u> freed off bottom |

Dredge off bottom: 0716 z Depth: 1950 m. Wire out: 2200 m.
 X: _____ Y: _____

Notes: