

30 cts = $\frac{58107 \text{ cts}}{80 \text{ cm}}$

45.575665, -128.453218
45.570737, -128.468822

Best cast
EVER

Reeve Net Samples

Cruise: NH1208	Station: #2	Cast #: 1
Date: 8/11	Latitude: 45.575	Longitude: -128.453
Local time start: 22:07 on		Local time end:
Wire speed out: 20 m/min		Wire speed in: 5 m/min
Angle out: 20°		Angle in:
Wire out (m)	0 - 58107	1549.52 m
		1216.993 m ³

Cast comments:

Ø on flow meter, some movement in the wind pre-entry
TD not activated with magnet → seeing if net activation works.

Wire out to 150m, up to 45 m, sit for 10 min. up.

Taxonomic notes:

~~Clio~~ ~~balanidium~~ (1) Ga 58.6

lots *Limacina helicina* (lots) 2 forma *pacifica* (bigger, flat whorls)
acuta (smaller, higher whorls)

Clio pyramidata (8) Ga 01.25

pneumodermopa sp. (2) Ga 113.6

lots *Clio limacina* (14) Ga 04.17

Corolla ? (22) Ga 64.2

Neocalanus cristatus (6) Ga 227.4

Eucirella rostrata (2) Ga 76.4

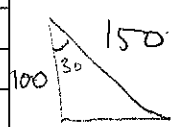
Nematobrachion flexipes (1) Eu 11.9

Thysanoessa longipes (1) Eu 15.3

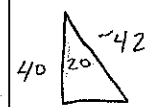
Nematoscelis difficilis (2) Eu 22.5

Euphausia pacifica (21) Eu 27.2

* 70% etOH = *Limacina helicina*



HD ish = 60



Reeve Net Samples

$$\cos 35^\circ \times W = 100$$

$$W = \frac{100}{\cos 35^\circ} = 122m$$

Cruise: NH1208	Station: Test 3	Cast #: 2
Date: 8/12/2012	Latitude: 46.620° N	Longitude: 133.522° W
Local time start:	22:30	Local time end:
Wire speed out: 20 m/min	19	Wire speed in: 5 m/min
Angle out: 35°		Angle in:
Wire out (m) 100		

Cast comments: FlowM start: 58097 end: 93179
 angle moved for 35° to 5-10° wire out 100, stopping
 at 40m (40m of wire) for 70 min. Up 5 m/min

Taxonomic notes:

Limacina helicina (pacific; acuta, h³?) (12) Co 56.10
pneumoderma sp (2) Co 113.7
Clione limacina (None taken)



Neoralanus cristatus (9) Co 227.5

Euphausia pacifica (3) Eu 27.3

Thysanoessa gregaria (1) Eu 3.6

Nematoscelis difficilis (2) Eu 22.6

Thysanoessa longipes (+30) Eu 15.4

TONS of *Corolla* (*spectabilis*?) ✓



* 70% of H = *Limacina helicina*

Reeve Net Samples

Cruise: NH1208	Station: Tost 4	Cast #: 3
Date: 8/13/2012	Latitude: 47.659	Longitude: -138.467
Local time start:		Local time end:
Wire speed out: 20 m/min		Wire speed in: 5 m/min
Angle out: 25°		Angle in: 35
Wire out (m)		

Cast comments: Flow M. start: 093237 Flow M end: 139857

Going to 120m wire out first
The net went under the ship - towed for some minutes
at 120m of wire ~ 98m depth.

Ship speed: 1.2-1.5 knots.

Taxonomic notes:

Stop at 91 m of wire - The boat is again over the net
(around 2 minutes)
10 minutes at 50 m of wire, at 1 knot on the water

limacina helicina (*acuta* & *pacifica* / h3) (32) Ga 56.11

clione limacina (9) Ga 4.18

clio pyramidata (*lancoleta*) Ga 1.26

Neocalanus cristatus (>50) Co 227.6

Metridia lucens (10) Co 221.4

Stylodcheiron maximum (4) Eu 39.5

Tessabranichion oculatus (13) Eu 24.3

Euphausia pacifica (18) Eu 27.4

Thysanoessa longipes (29) Eu 15.5

Thysanoessa spp (+30) Eu 55.2

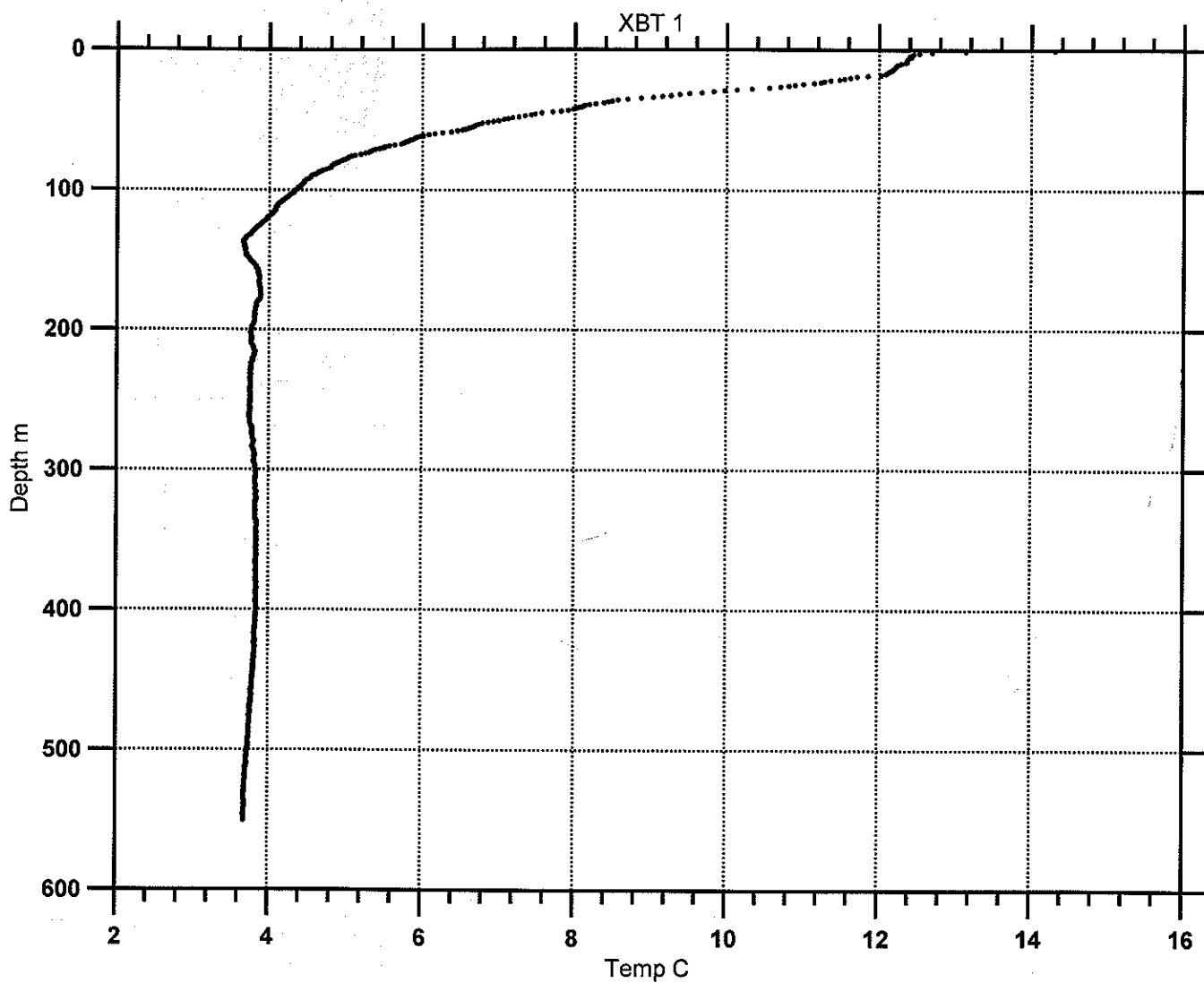
Bioluminescent siphonophore

lovely polychaete (pictures! Not preserved)

Tons of juvenile *clio pyramidata* (some veligers?)

small *limacina* as well

XBT 1 8/15/12 21:28
for Reeve #4



Notes: 2 types of jellies @
surface cyania??

saw sawny fish

Reeve Net Samples

Cruise: NH1208	Station: 1!	Cast #: 4
Date: 8/15/12	Latitude: 49.879	Longitude: -149.413
Local time start: 0:07	Flow start: 139870	Local time end:
Wire speed out: 35	Flow end: 168211	Wire speed in: 5 m/min & 2 m/min
Angle out: 35	Ship speed = 1.2 kts	Angle in: 50 then 35
Wire out (m) 64		

Cast comments: wire out to 64 m @ 35 m/min (oops). & was avoiding jellies
up to 50 @ 5 m/min from 50-30 @ 2 m/min
30-0 @ 5 m/min

Taxonomic notes:

Limacina helicina (acuta? A, 5 AB → striated more flattened) (-41) Ga 56.12
Clione limacina (1) Ga 4.19

Euphausia pacifica (23) Eu 27.5
Tessabrachion ocolatus (1) Eu 24.4
Thy Sarsocissa spp. (7) Eu 55.3

Neocalanus cristatus Cystical
Candacia Co

Squidlings
Nemertine worms
Neocalanus cristatus

Reeve
HONORARY to

time tow ended: 8/16/12 00:30

night

sta. 1

> vial

Reeve Net Samples

Cruise: NH1208	Station: 70-15	Cast #: 5
Date: 8/27/12	Latitude: 45.680142	Longitude: 129.805063
Local time start: 21:30	Flow start: 168211	Local time end:
Wire speed out: 20 m/min	Flow end: 198130	Wire speed in: 20 m/min then 5 m/min
Angle out: 40		Angle in: 15°
Wire out (m) 60		

Cast comments:

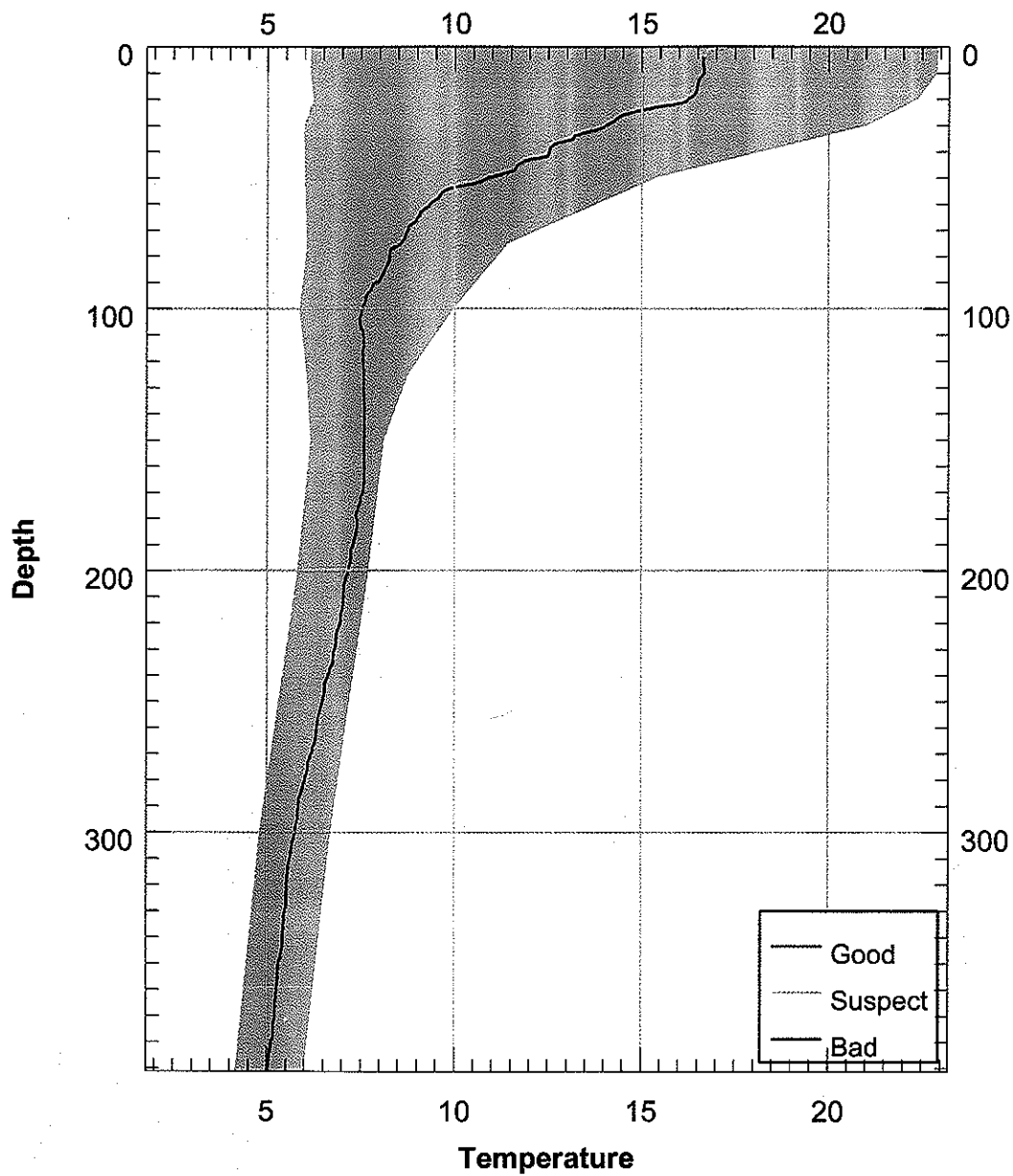
Down @ 20 m/min to 60 m up to 25 m @ 2 m/min
 then all the way up to 5 m/min
 actual depth 48.5

Taxonomic notes:

Clio pyramidata
Limacina ^{*helicina*} ~~*reversa*~~ (Tons) Ga 56.14
Preomoderna sp. (*collarellum*, *profundum*) (2)
Corolla sp. (*spectabilis*?) Tons 1
Chore limacina
Neulatania cristatus

8/27/12
Test station #S
Reeve #S

XBT Drop 2



Reeve Net Samples

Cruise: NH1208	Station: Test 6	Cast #: 6
Date: 08/28/2010	Latitude: 46.822	Longitude: -134.927
Local time start: 22:00	Flow start: 198150	Local time end:
Wire speed out: 20 m/min	Flow end: 238301	Wire speed in:
Angle out: 35°; 40°		Angle in:
Wire out (m) 90 m		

Cast comments:

90 m & wo @ 20 m/min in @ 3 m/min to 40 m then 5 m/min to 0



$$\frac{A}{90} = \cos 35^\circ$$

$$\underline{13.7 \text{ m}}$$

Taxonomic notes:

Clio pyramidata ONLY 1 large

Limacina helicina (lots) mostly flat (Liza only found 4 high spires) Ga 56.15 (36)

Clione helicina (25) Ga 04.21

Pneumoderma sp (atlanticum, pacificum?) (2) Ga 113.9

Neocalanus cristatus MILLIONS (~100?) Co 227.9

Thysanoessa sp (~50) Eu 55.24

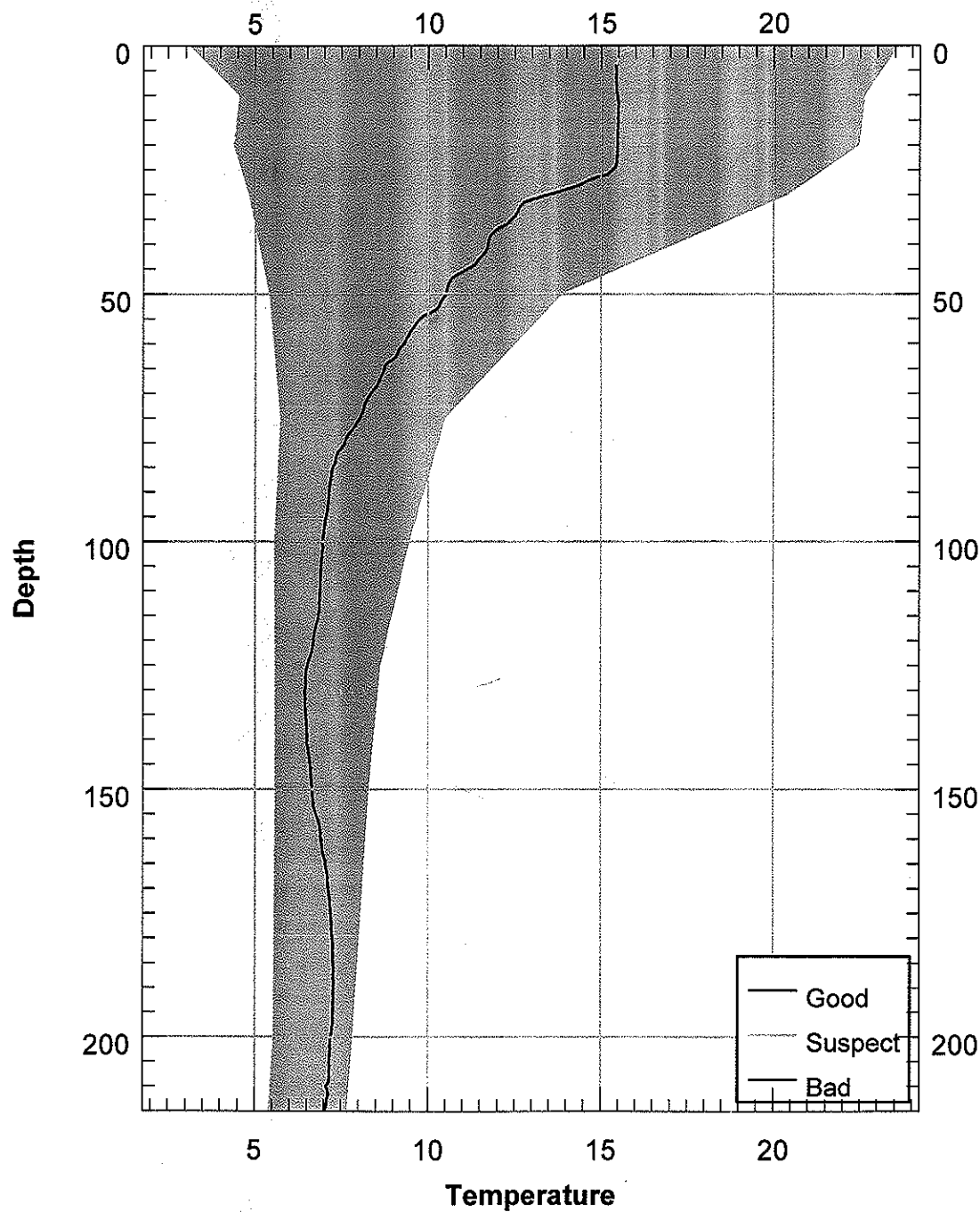
Euphausia pacifica (70) Eu 27.8

some chaetognaths (big), amphipods (phronima), fish larva, metridia lucens, big sergestids
fish eggs (Alex took some in etOH), radiolarians

~ 1/2 tow filtered for Lombard sample
1 myctophid fish for Lombard sample

8/28/12
Test #6
Cast #6

XBT Drop 3



Reeve Net Samples

Cruise: NH1208	Station: Test 07	Cast #: 7
Date: 8/29/12	Latitude: 47.572	Longitude: -140.186
Local time start: 22:00	Flow start: 238309	Local time end:
Wire speed out:	Flow end: 268056	Wire speed in:
Angle out: 15° incl 25°		Angle in: 25-30°
Wire out (m) 100 m (ideally)		

Cast comments:

to 100 at 20 m/min 100-60 at 5 60 to 40 at 2
40 to 0 at 5

Depth 100m - $\cos 25 = 90.6$ m

Taxonomic notes: (faking it works!!)

eliopyramidada Ga 01.28

lymacina helicia Ga 56.6

Neocalanus cristatus (67) G 22.10

amphipods, 1

fish larvae

pro- pneumoderma (4) 3

big chaetognath

euphausia (krill) pacifica (59)

thysannoessa sp (longipes gregoria) G 55.5

cell chain? T. longipes (14) G 15.8

shrimp?

scolecithrix sp (some)

clione limacina (2) 1

metridia lucens (00) G 22.5

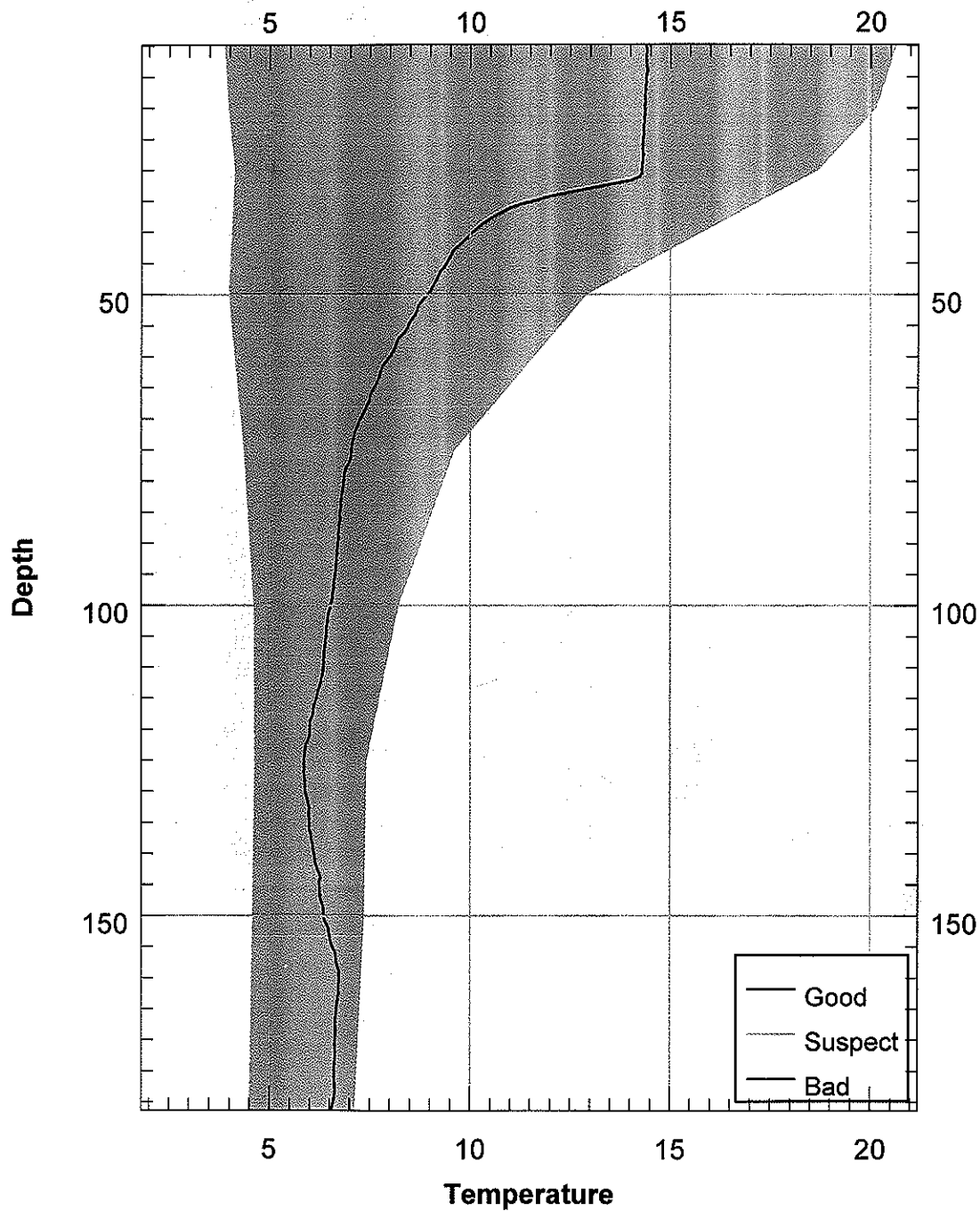
stylochiron maximum (3) G 39.7

tessabanchion oculatus (5) G 29.5

zooplankton sample taken for Lombard (~1/2 tow)

lucicutia sp (some)

08/29/12
Test st. 7
Test 7
XBT Drop 4



Reeve Net Samples

Cruise: NH1208	Station: test 8	Cast #: 8
Date: 08/30/2012	Latitude: 48.543	Longitude: -145.622
Local time start:	Flow start: 268057	Local time end:
Wire speed out: 20	Flow end: 294237	Wire speed in: 5, 2, 5
Angle out: 10° to 15° 25-30°		Angle in: 25°
Wire out (m) 100 mwo		Speed = 1.0 kts - 1.5 kts

Cast comments: to 100 @ 20 m/min 100-60 @ 5 m/min
 60-40 @ 2 m/min 40-0 @ 5 m/min

Taxonomic notes:

Comb jellies (majorly bioluminescent → photos), normal surface jellies,
 1 salp, amphipods, tiny squid, WAY less Neocal, practically no euphausiids
 chaetognaths,
 Very jelly community

Clione limacina tons of babies (40) Ga 04.23
 few purple adults

Limacina helicina (50) Ga 56.17

Clio pyramidata (1) Ga 01.29

Neocalanus cristatus (~117) Co 227.11

Canadia columbiana (5) Co 443.2

Euphausia pacifica (16) Eu 27.10

Tessabrachion oculatus (11) Eu 24.7

Thysanoessa longipes (13) Eu 15.9

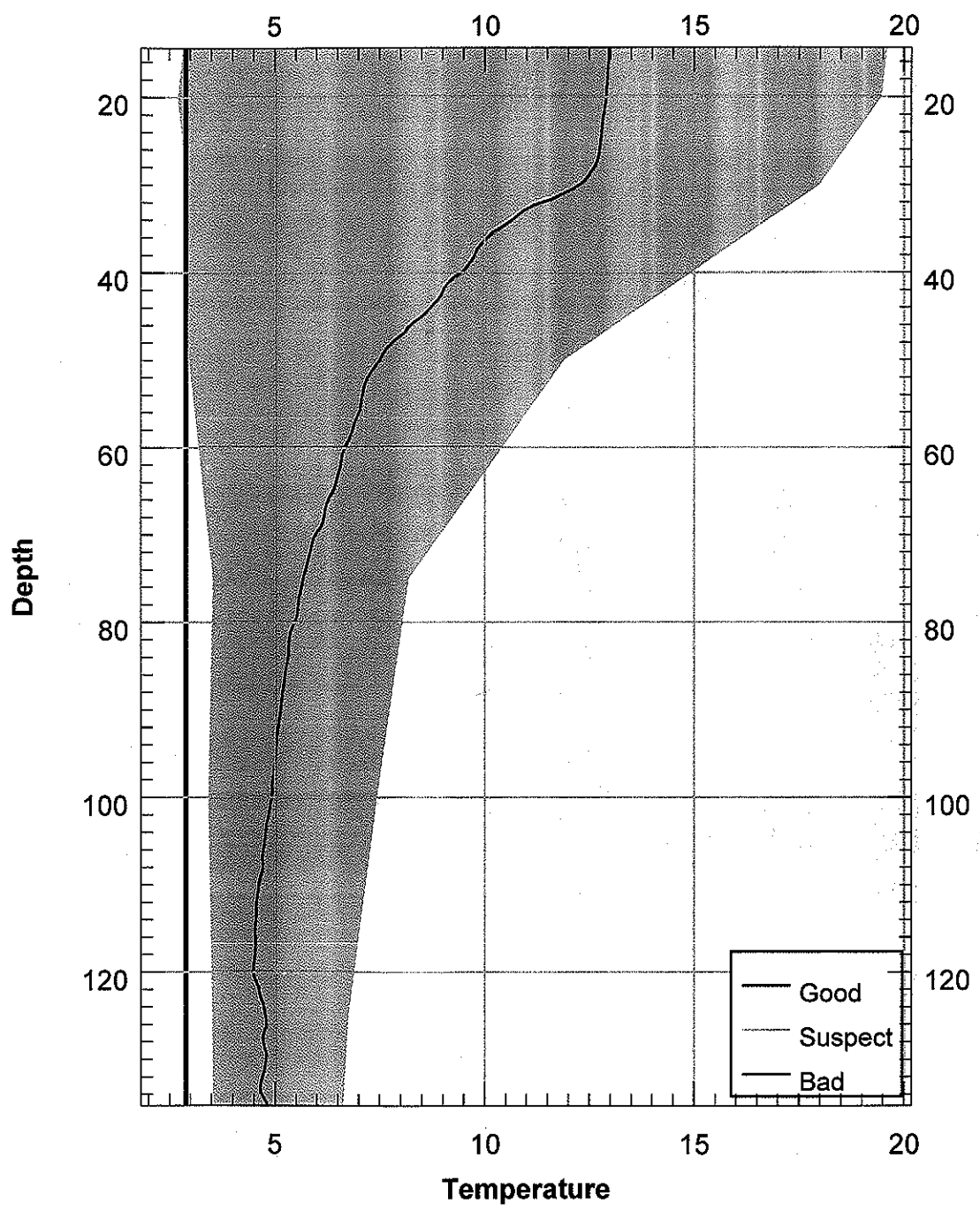
08/30/2012

Test # 8

Cast 8

XBT 5 failed!!!

XBT Drop 6



Reeve Net Samples

Cruise: NH1208	Station: 3	Cast #: 9
Date: 08/31/2012	Latitude: 48.915	Longitude: +148.607
Local time start: 23:05	Flow start: 294229	Local time end:
Wire speed out: 20	Flow end: 332244	Wire speed in: 5-2-5
Angle out: 25-35-		Angle in:
Wire out (m) 100 m		

Cast comments:

100-60-5
60-40-2
40-0-3 non stop surface

Taxonomic notes:

Limacina helicina (~36) ~~69~~ 56.18

TONS of Krill

E. pacifica

Tessarabrachion oculatus

Thysanoessa longipes

Neocalanus cristatus

Squid

photos & cryonals

Reeve Net Samples

Cruise: NH1208	Station: 6	Cast #: 10
Date: Sept 2 nd 9/2/12	Latitude: 47: 501	Longitude: -145.583
Local time start: 1:43	Flow start: 332245	Local time end:
Wire speed out: 20 m/min	Flow end: 347138	Wire speed in: 5 or 2 m/min
Angle out: ~15-40° 5°!!		Angle in: 5°
Wire out (m) 100 mwo		Ship = 1 kt -1.5 kts

Cast comments:

100 mwo @ 20 m/min. Up to 50 @ 5 m/min. Up to 30 @ 2 m/min
to surface @ 5 m/min

Taxonomic notes:

Limacina helicina Ga 56.19
Clio pyramidata Ga 01.30
Chione limacina Ga 04.24 (1a)

Neocalanus cristatus
Candacia colombiae
Euphasia pacifica
Thysanoessa longipes

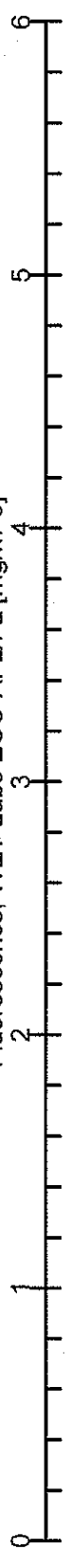
Jellies
Ctenophores
Siphonophores
Chaetognaths
Amphipods (skinny, fat, black)
few juv. fish

Rather sparse

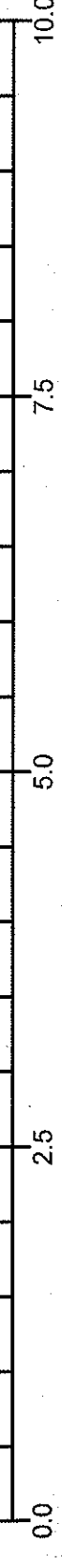
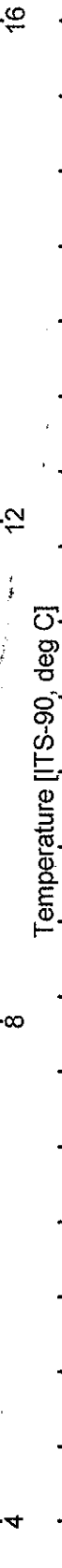
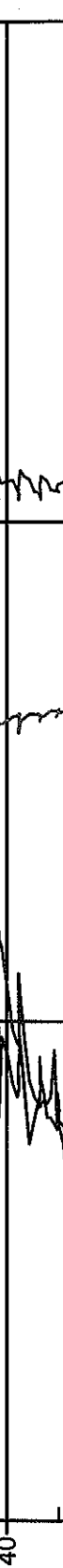
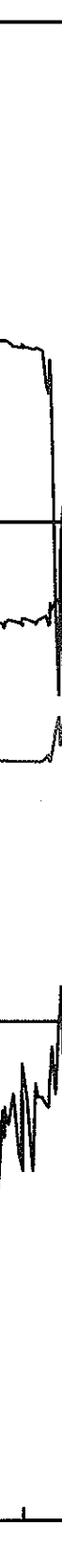
St 6, cast 10

0610.H: Main

Fluorescence, WET Labs ECO-AFL/FL [mg/m³]



Salinity, Practical [PSU]



Bottle
Firing
Sequence

Temperature [ITS-90, deg C]

Oxygen, SBE 43 [ml/l]

Reeve Net Samples

Cruise: NH1208	Station: 7	Cast #: 11
Date: 9/2/12	Latitude: 47° 00' 2	Longitude: -144.617
Local time start: 19:38	Flow start: 344142	Local time end:
Wire speed out: 20 m/min	Flow end: 393044	Wire speed in: 5 i 2
Angle out: 15-20°		Angle in: 30° 20°
Wire out (m) 100 mwo		Ship 1kt - 1.5 kts

Cast comments:

64.5
 100 mwo @ 20 m/min up to 60 @ 5 m/min. up to 25 @ 3 m/min
 to surface @ 5 m/min
 Sat @ 100 for awhile
 2 m/min
 by 40.3

Taxonomic notes:

maing Clione (macina) (notes)

Uca carolinensis (few)

Thesira branchion oculatus (2)

Thysanessa longipes

No Euphausia pacifica → might have been deep still

Candacia columbiae

Siphonophore, 2 big jellies, amphipods, chaetognaths, ostracods,
 radiolarians
 cute big red ones

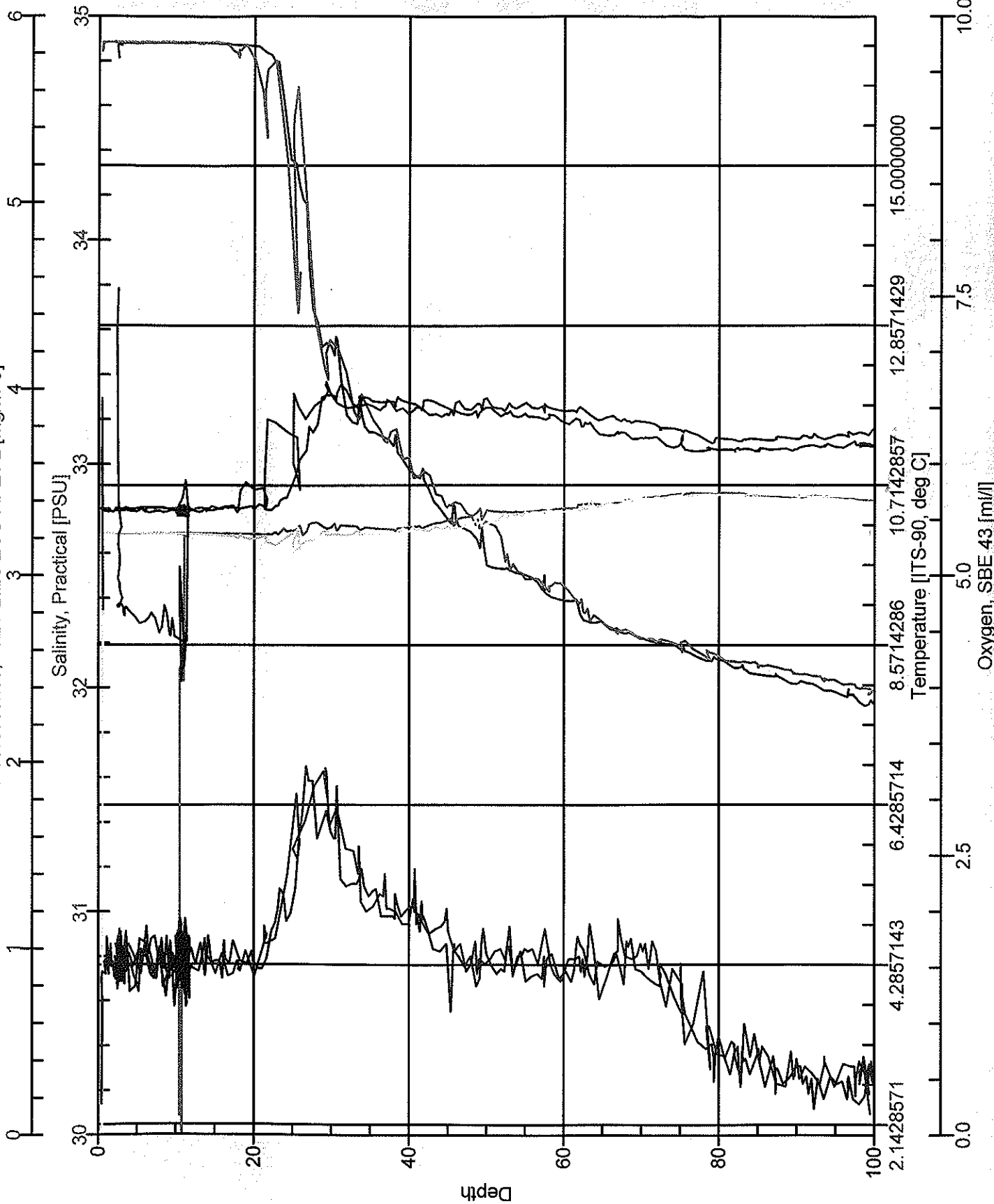
Limacina helicina (dominant acuta) Ga 56.20 (+50)

Clione limacina Ga 04.25 (+50)

Clio pyramidata Ga 01.31 (+20)

1117.h Main

Fluorescence, WET Labs ECO-AFL/FL [mg/m³]



Reeve Net Samples

Cruise: NH1208	Station: 11	Cast #: 12
Date: 9/4/12	Latitude: 44.946	Longitude: -141.319
Local time start:	Flow start: 393040	Local time end:
Wire speed out: 20 m/min	Flow end: 436076	Wire speed in: 5 3/2, 5
Angle out: 35°		Angle in: 40°
Wire out (m) 120 mwo		Ship = 1.7 kts ~ 1.3 kts

Cast comments:

120 mwo up to 70 @ 5 m/min up to 40 @
 3-2 m/min up to surface @ 5 m/min

Taxonomic notes:

Practically NOTHING

Some amphipods

3 pneumoderma (Ga 113.11)

7 limacina helicina (Ga 56.21)

a few small euphausia pacifica

(1?) Nematoscilis difficilis (Eu 22.7)

4 8
 2 5
 6 5

Reeve Net Samples

Cruise: NH1208	Station: 13	Cast #: 13
Date: 09/04/12	Latitude: 44.000878	Longitude: -139.742362
Local time start: 23:12	Flow start: 436 100	Local time end:
Wire speed out: 20 m/min	Flow end: 475007	Wire speed in: 5, 2, 5 m/min
Angle out: 15°		Angle in: 35° - 25°
Wire out (m): 90 mwd		Snip: 0.8 - 1.2 kts

Cast comments:

90 m @ 20 m/min. Up to 70 @ 5 m/min to 35 m/min
 sit for 5 min. Up to surface @ 5 m/min
 23:44 → 23:50

transducer says
 25 + 5 for 1/2
 depth on ship

Taxonomic notes:

Metridia lucens (most abundant, adults + copepodites) > 90% sample
Clausocalanus (pergus group)
Lucicutia
Gaeann sp.
Thysanoessa longiro.
Euphausia pacifica
Nematocelis difficilis
Euphausia
NO W. CRISTATUS

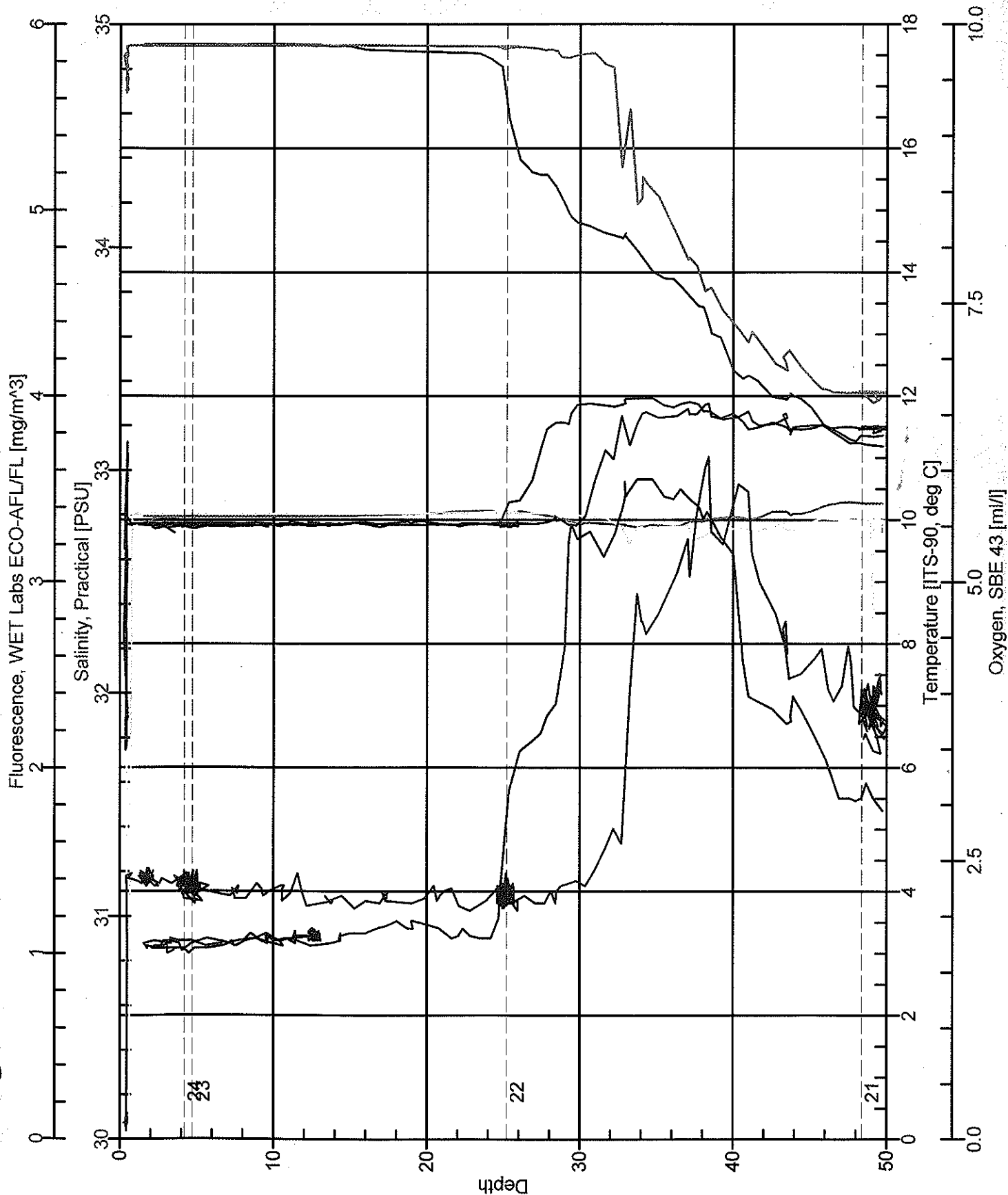
(Eu 22.8) *Nematocelis difficilis* =
 (Ga 04.26) *Chione lineata* =
 (Ga 13.13) *Pneumoderma meiseni*?

9/5/12

CTD cast

Bottle
Firing
Sequence
1 2 3
4 5 6
7 8 9
10 11 12
13 14 15
16 17 18
19 20 21
22 23 24

1524.hex: Main



Reeve Net Samples

Cruise: NH1208	Station: 15	Cast #: 14
Date: 08/05/02	Latitude: 43.082605	Longitude: -138.139095
Local time start: 21:09	Flow start: 475008	Local time end:
Wire speed out: 20 m/min	Flow end: 517963	Wire speed in: 2 m/min, 5%.
Angle out:		Angle in: 35-15° 25°
Wire out (m) 60		Ship 1-1.5 kts

Cast comments:

60 mwo @ 20 m/min up to 30 @ 2 m/min down to
 50 mwo @ 2 m/min, up to 30 mwo @ 2 m/min, up to surface
 @ 5 m/min

Taxonomic notes:

Improved catch

4 large (ish) *Clione pyramdata* (1) in et OH (Ga 01.32)
 ~10 *Clione helicina* (1) in et OH (Ga 56.22)
 2 *Corolla (spectabilis?)* (Ga 64.04)
Clione *Krohnii* (Ga 114.1)
 * *Clione limacina* → odd looking (Ga 04.27)

tiny squid, MANY salps, amphipods, jellies,

Neatobranchia flexilis
Euphausia recurva
Euphausia pacifica
Neurotoleia difficilis

Flare frozen

Reeve Net Samples

Cruise: NH1208	Station: 18	Cast #: 15
Date: 9/6/12	Latitude: 41.500	Longitude: -133.771
Local time start: 23:55	Flow start: 517979	Local time end:
Wire speed out: 20 m/min	Flow end: 573021	Wire speed in: 2.5
Angle out: 30°		Angle in: 30°
Wire out (m) 65 mwo		Ship 10-1.9 Kts

Cast comments:

down to 65 mwo @ 20 m/min up to 30 down to 50 up to 30 then 5/m min to surface

lost the screwdriver (CAEM)

Lost the acoustic signal here...

Tons of HUGE solitary chain salps
fast start & stop

Taxonomic notes:

- 1 *Diacria trispinosa* ⁰³³⁰⁸⁻³³⁵³ PHOTOS! (Ga 02.23)
- 1 *Pneumoderma* (fringed ^{Photos} lateral gill) (Ga 113.14)
- 5 *Cliopsis krohnii* (Ga 114.5)
- 3 *Clio pyramidata* (Ga 01.33)
- 1 *Pneumoderma* juvenile (Photos) (Ga 113.15)

Eu. pacifica flash frozen 1 Eu 27.11

Nematobrachion flexipes flash frozen + (Eu 01.9)

Eu. recurva flash frozen + (Eu 65.2)

4
17
10
10
6

Reeve Net Samples

Cruise: NH1208	Station: 19 (lost T1)	Cast #: 16
Date: 09/07/12	Latitude: 41.002512	Longitude: -135.000310
Local time start: 22:00	Flow start: 573.062	Local time end:
Wire speed out:	Flow end: 609.349	Wire speed in: 5.2.5
Angle out: 30°		Angle in: 30°
Wire out (m) 100 mwo		Ship 1-1.5

Cast comments:

100 mwo, up to 70 mwo @ 5 m/min, up to 30 mwo @ 2 m/min
to surface @ 5 m/min

MANY Salps & chain salps. Fast first & last 10 m

Taxonomic notes:

Nematobrachion flexus
Euphausia recurva
Thysanoessa longipes
Euphausia pacifica

→ 2N2

pneumoderma juveniles (Ga 113.16) ~30 PHOTOS
clipsis krohni (Ga 114.6) 12
Limacina inflata (Ga 115.16) PHOTOS ~ 100

TONS of *L. inflata*
 Frozen Sample for Lombard

Reeve Net Samples

Cruise: NH1208	Station: 21	Cast #: 17
Date: 9/8/12 DAY	Latitude: 39.949102	Longitude: -134.985845
Local time start: 1522	Flow start 6093450	Local time end: 16:40 h
Wire speed out: 20	Flow end 716146	Wire speed in: 5
Angle out: 45°		Angle in: 45
Wire out (m) 280		Ship

Cast comments:

280 mwo down at 20 m/min, up @ 5 m/min

→ 609350 - slow meter start

82 mwo slow to 2 m/min haul-in
then 47 mwo increase to 5 m/min

Taxonomic notes:

Atlantid holropod (Ga 109.3)
 Limacina inflata (Ga 11.17) ~100
 Cliopsis Krohni (Ga 114.7)
 Carolina uncinata TO LIZA

Big chaetognath, pretty centric diatom

Reeve Net Samples

Cruise: NH1208	Station: 21	Cast #: 18
Date: 9/8/12	Latitude: 40.062	Longitude: -135.091
Local time start: 23:39	Flow start: 716179	Local time end:
Wire speed out:	Flow end 775854	Wire speed in: 5 m/min
Angle out: 15°		Angle in:
Wire out (m) 250 mwo		Ship 60-6.7

12.5
SD

Cast comments:

Down to 250 mwo, up to surface @ 5 m/min

salps @ surface, fast first 10, & last 10 m

Taxonomic notes:

small pneumoderm (Ga 113.18) 1
juv. carolinids (Ga 115.1) 1
(Ga 115.2) 3

limacina infanta (Ga 111.18) ~50?

Chlopsis krohnii (Ga 114.8) 4

Eu. gibboides (Eu 44.7) 4

Eu. pacifica (Eu 27.12) 1

Eu. recurva (Eu 65.3) 2

Nemotocilis difficilis (Eu 22.9) 4

Stylocheiron longicorne (Eu 36.8) 3

Thysanopoda acutifrons (Eu 71.1) 4

Thysanoessa gregaria (Eu 3.17) 15

Some salps.

2439.100: Main

Fluorescence, WET Labs ECO-AFL/FL [mg/m³]

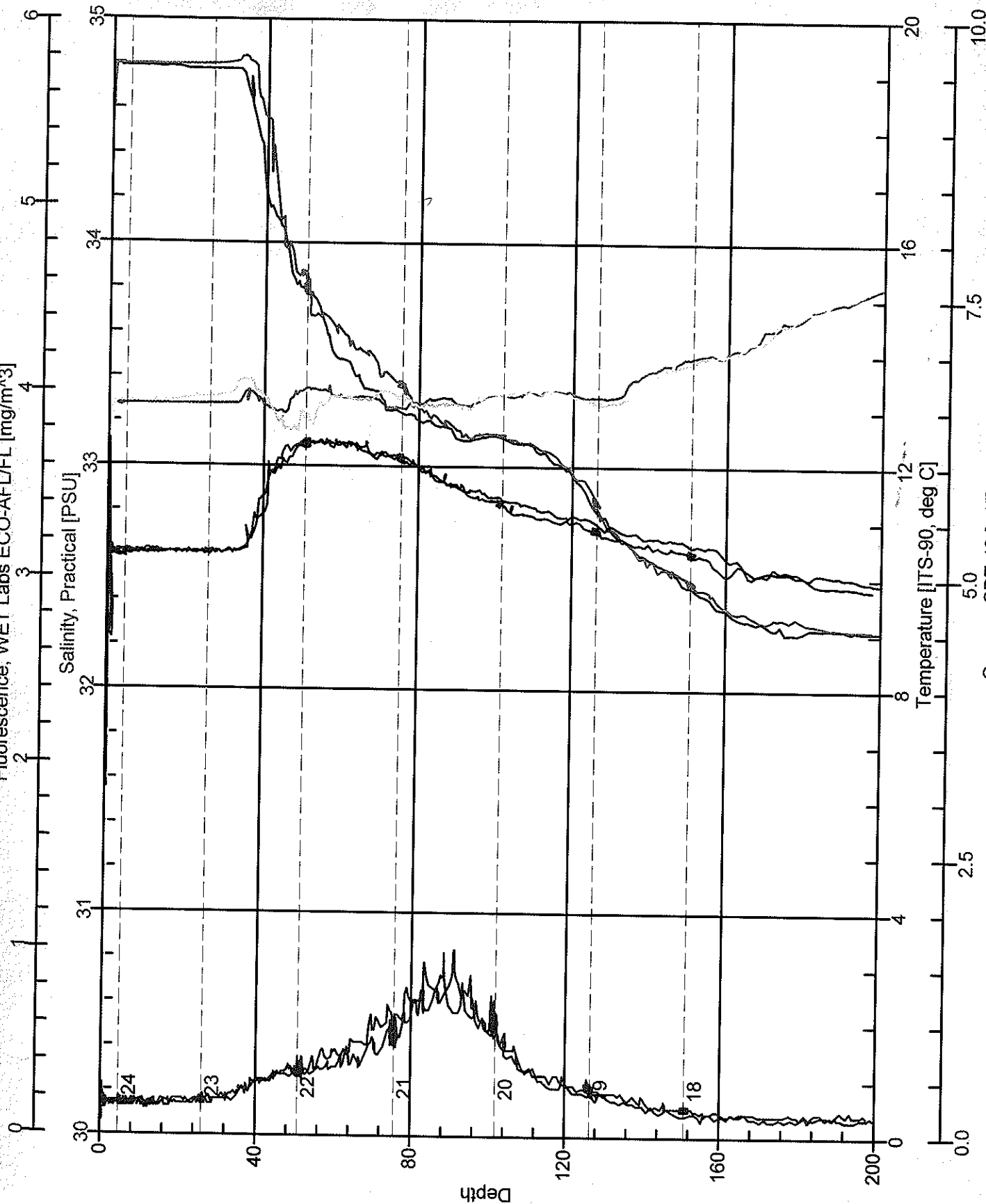
Salinity, Practical [PSU]

Temperature [ITS-90, deg C]

Oxygen, SBE 43 [ml/l]

For Reeve #19
9/10/12

Bottle
Firing
Sequence
1 2 3
4 5 6
7 8 9
10 11 12
13 14 15
16 17 18
19 20 21
22 23 24



Reeve Net Samples

Cruise: NH1208	Station: 24	Cast #: 19
Date: 9/9/12	Latitude: 38.629	Longitude: -135.046
Local time start:	Flw start 775848	Local time end:
Wire speed out: 20 m/min	Flw end 825380	Wire speed in: 5, 2, 5
Angle out:		Angle in: 25°
Wire out (m) 200 mwo		Ship AB-1, S

Cast comments: ~173?

200 mwo @ 20 m/min up to 60 mwo @ 5 m/min. to 30 @ 2 m/min
to surface @ 5 m/min

10 min
28
15
6
59

Taxonomic notes:

C. uncinata → LIZA

juvenile castrinids (18) Ga 115.3

Coriema columnella (5) Ga 06.17

Limacina bolimoides (4) Ga 12.12

Atlantis heterop (5) Ga 109.5

Limacina inflata (2) Ga 11.19

Thysanoessa peregus (3) Eu 03.8

Euphausia recurva (11) Eu 65.4

Euphausia multica (2) Eu 19.3

Euphausia parasitica (2) Eu 72.1

Nematobrandrium floripes (only 1/12)

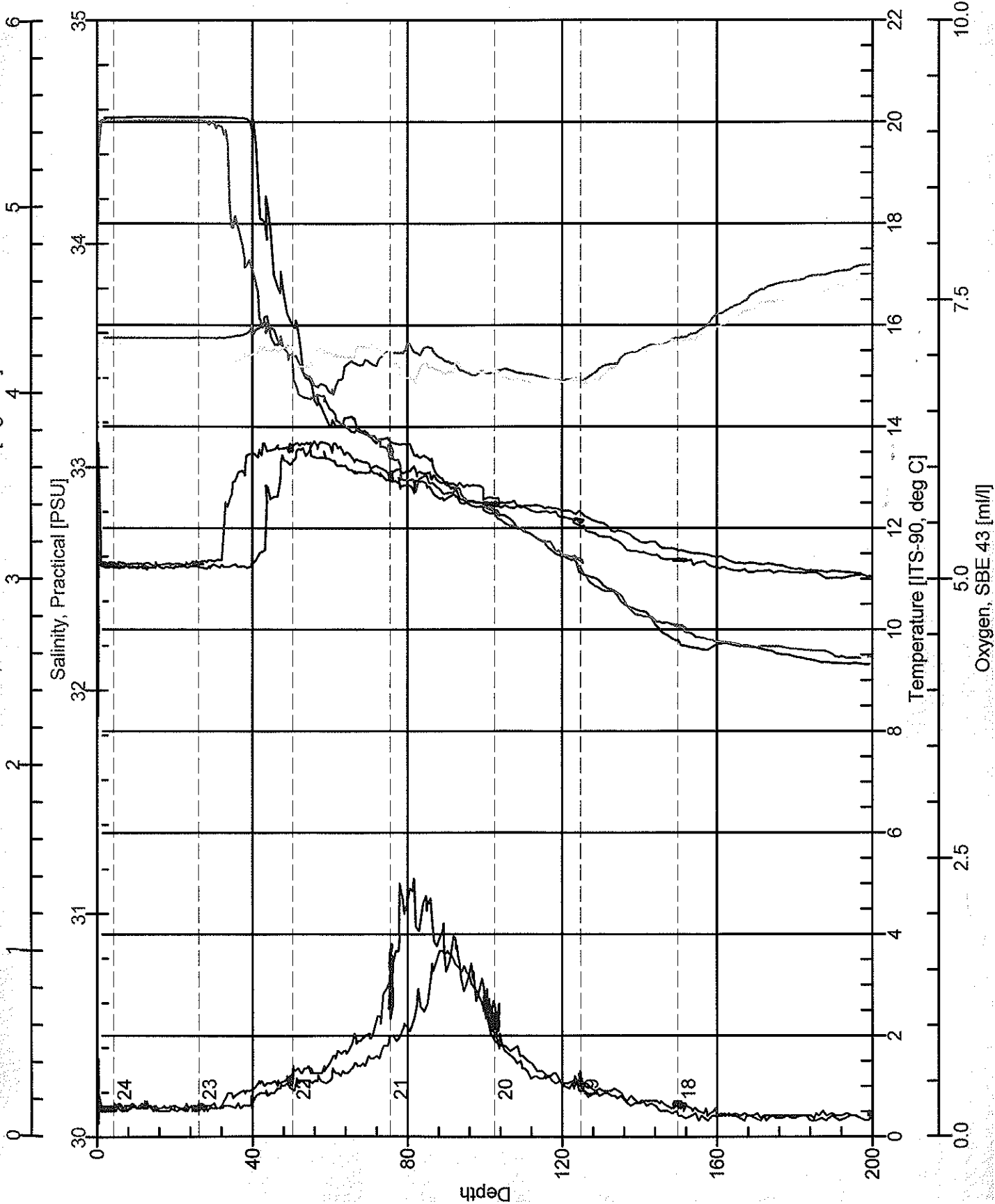
Stylocheiron longicorne (9) Eu 36.9

Thysanoessa + parasite 95% + PHOTOS

Big chaetognath, interesting polychaetes (alcipriid worm)

2744.H: Main

Fluorescence, WET Labs ECO-AFL/FL [mg/m³]



Bottle
Firing
Sequence
1 2 3
4 5 6
7 8 9
10 11 12
13 14 15
16 17 18
19 20 21
22 23 24

ABs CTD before
Reeve #20

Reeve Net Samples

Cruise: NH1208	Station: 27	Cast #: 20
Date: 9/10/12	Latitude:	Longitude:
Local time start:	Flow start 825383	Local time end:
Wire speed out:	Flow end 874755	Wire speed in:
Angle out: 15-20°		Angle in:
Wire out (m) 120 mmo		Ship 1.3-1.9

Cast comments: Chl @ 100m. Mei (0.4%) C. columnella @ 100-25m C. columnella @ 200-400m
 100m last MGH7 C. columnella 100-50 C. columnella 50-0

Down to 120 @ 20 m/min up to 90 @ 5 m/min up to 30 @ 2 m/min to surface a 5 m/min

Taxonomic notes:

Atlantids (2) Ga 109.6
 C. pyramidata (18) Ga 011.36
 Carolinid juveniles (1) Ga 115.4
 Cuvierina columnella (1) Ga 06.18
 L. bulimoides (5) Ga 12.13
 L. inflata (15) Ga 11.20

Thysanessa gregaria (3) Eu 03.9
 Euphausia recurva (2) Eu 65.5
 Euphausia multica (9) Eu 19.4
 Euphausia paragibbosa (4) Eu 72.2

6
 6
 30
 6
 48

Reeve Net Samples

Cruise: NH1208	Station: 27	Cast #: 21
Date: 9/11/12	Latitude: 37.382	Longitude: -135.081
Local time start: 3:46	Flow start: 874781	Local time end:
Wire speed out: 20 m/min	Flow end: 895647	Wire speed in:
Angle out:		Angle in: 40°
Wire out (m) 70 mws		Ship 1.3 - 1.9

Cast comments:

Down to 70 @ 20 m/min up to 30 @ 2 m/min sit 5 min up
8 m/min.

0-25 in Day moc = lots of clio (large)

Taxonomic notes:

Atlantids (5) Ga 109.7

L. bulimoides (5) Ga 12.14

L. inflata (~50) Ga 11.21

~~C. pyramidata~~

C. columbella (5) Ga 06.19

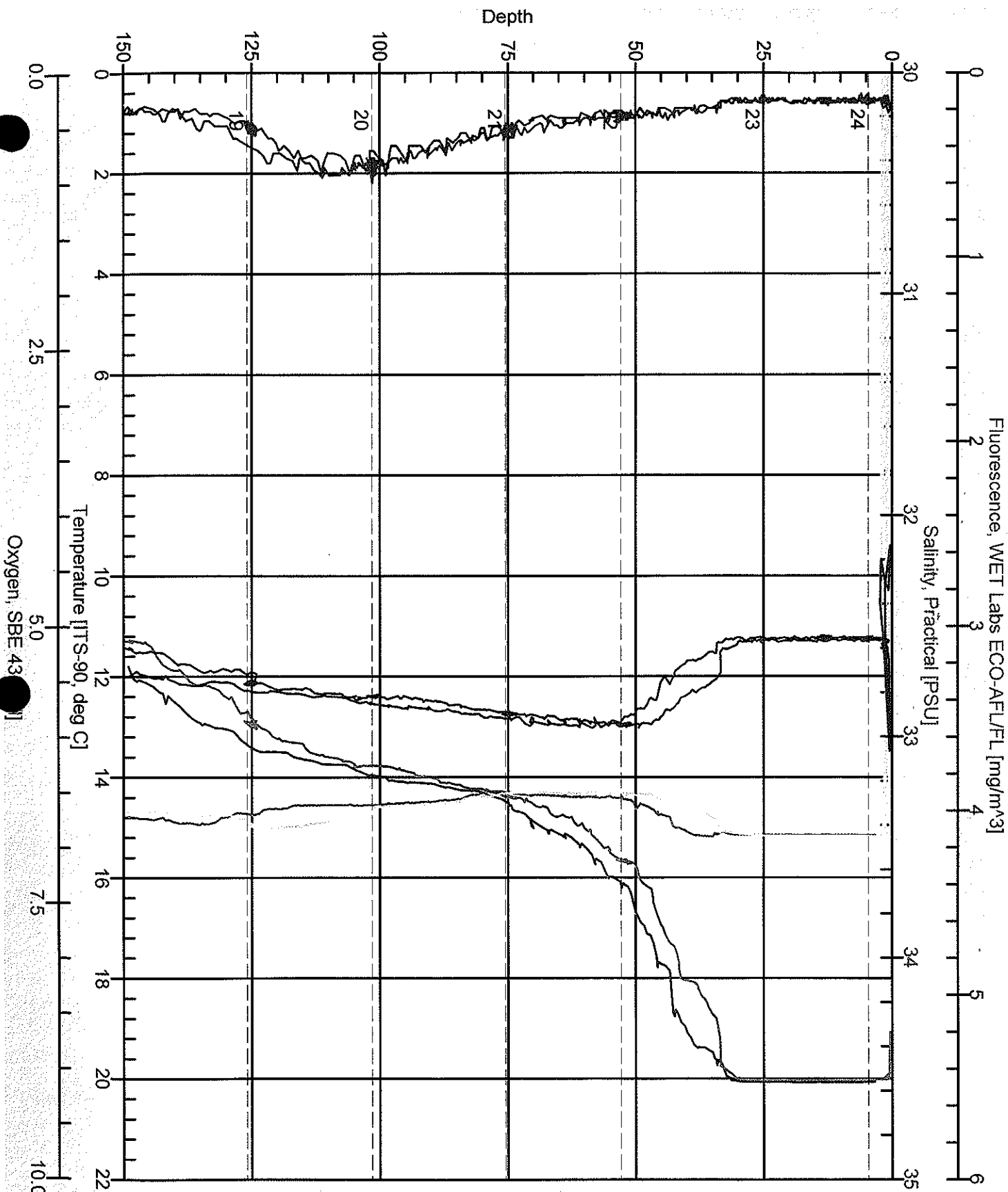
Carolinid juveniles (2) Ga 11.5

Clio pyramidata (few, small) were present, but they were misplaced.

4
20
5
3
47

CID before Pass 422

3048.hex: Main



Bottle
Firing
Sequence
1 2 3
4 5 6
7 8 9
10 11 12
13 14 15
16 17 18
19 20 21
22 23 24

Reeve Net Samples

Cruise: NH1208	Station: 30	Cast #: 22
Date: 9/11/12	Latitude: 35.552	Longitude: -135.009
Local time start: 22:30	Flow start: 895648	Local time end:
Wire speed out: 20 m/min	Flow end: 946459	Wire speed in: 5, 2, 5
Angle out: 25°-30°		Angle in: 30°-25°
Wire out (m) 150 mwd		Ship 1.3-1.9

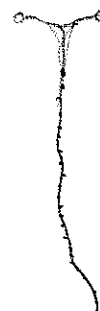
Cast comments:

150 mwd up a 5 m/min to 60 mwd. 2 m/min to 30 m to surface a 5 m/min

Taxonomic notes:

Styliola subula (3) Ga 13.18
atlantids (5) Ga 109.8
L. inflata (40) Ga 11.22
L. bulimoides (19) Ga 12.15
Atlantid (black) (1) Ga 109.9
Perade reticulata (1) Ga 47.11
juv. caroliniids (Gibber) (4) Ga 115.6
Clio pyramidata (6) Ga 01.37
carolinia uncinata WING Ga 29.16
gausia princeps (1) Co 118.10
pneumoderma (1) Ga 113.22
crazy fish larvae (2) ve 49.1
stylocheiron abbreviatum (14) Eu 11.10
Euphausia recurva (11) Eu 45.6
Euphausia hemigibba (1) Eu 45.2
Nematocelis tenella (1) Eu 50.3
Euphausia multica (1) Eu 19.5

8
 18
 15
 6
 47



Reeve Net Samples

Cruise: NH1208	Station: 30	Cast #: 23
Date: 9/12/12	Latitude: 35.670	Longitude: -134.903
Local time start: 4:39	Flow start: 946465	Local time end:
Wire speed out: 20 m/min	Flow end: 989517	Wire speed in: 2 rph
Angle out: 30°		Angle in: 30°
Wire out (m): 70 mwo		Ship: 0.8 - 1.8

Cast comments:

70 mwo sit @ 30m 7min up to 20 @ 3 sit 5 and then
up @ 5m/min

Taxonomic notes:

stylola subula (16) Ga 13.19
diana quadridentata (3) Ga 07.12
~~*pneumoderma*~~
hyalobaglis striata (3) Ga 09.16
pneumoderma juv. (1) Ga 13.23 PHOTOS 3961-4002
carolinia inflexa (2) Ga 37.12
I. bulimoides (~80) Ga 12.16
I. inflexa (~20) Ga 11.23
 misc caroliniid sp. (1) Ga 115.7
 caroliniid juv. (infl?) (1) Ga 115.8
limacina spp (resuri? trochiformes? other?) Ga 16.1
peracle reticulata (1) Ga 47.12
cuiverina columnella (1) 06.20
 heteropods (16) Ga 109.10

4
 3S
 45

Reeve

cruise: NH1208

time tow ended: 0527

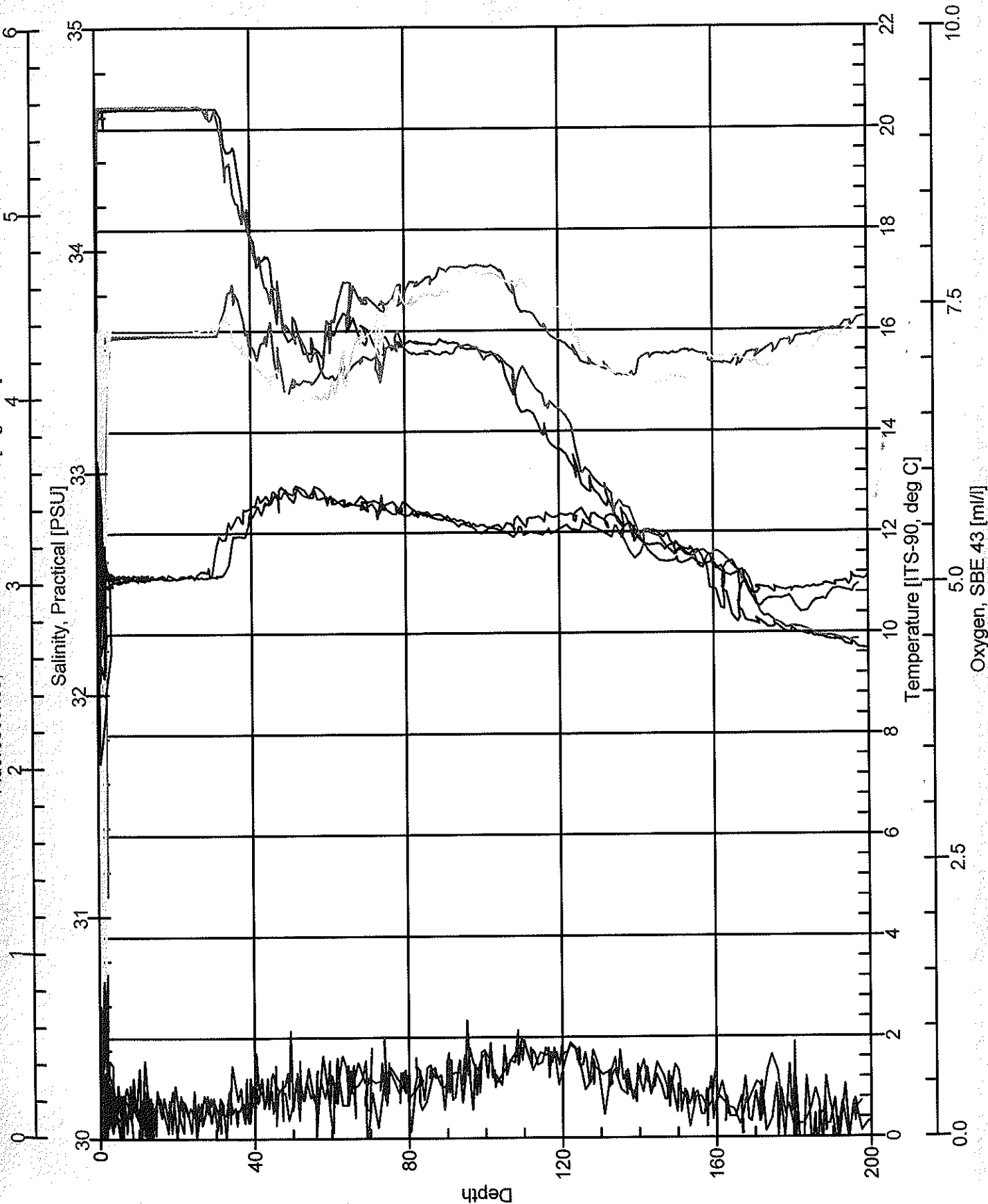
date: 12 Sep 2012

tow: Reeve 23

[illegible]

3049.hex:rain

Fluorescence, WET Labs ECO-AFL/FL [mg/m³]



Bottle
Firing
Sequence

Reeve Net Samples

Cruise: NH1208	Station: 32	Cast #: 24
Date: 9/13/12	Latitude: 34.443	Longitude: -135.111
Local time start: 3:34	flow start 989510	Local time end:
Wire speed out: 20 m/min	flow end 023202	Wire speed in: 5.2
Angle out: 20°		Angle in:
Wire out (m) 35 mwo		Ship - 1.3 - 2.0

Cast comments:

Down to 35 mwo up to 30 @ 5 sit for 10 up to 20 @ 2 m/min
sit for 10 up to surface at 2

Big fish in the water

Taxonomic notes:

padleochione (1) Ga 117.1

pneumoderma (1) Ga 113.27

stylochiron affine (10) Eu 51.2

Euphausia *multica* (2) Eu 19.6

Euphausia *recurva* (11) Eu 65.7

~~*L. bolimoides* Ga 12.17~~

~~*C. columnella*~~

See next sheet for pteropods

2
2
10
5
10
10
39

Recr

cruise: NH1208

time tow ended: 0404

date: 13 Sep 2012

tow: Reel 34

local

Reeve Net Samples

Cruise: NH1208	Station: 34	Cast #: 25
Date: 9/14/12	Latitude: 33.629	Longitude: -134.986
Local time start: 3:20	Start 023210	Local time end:
Wire speed out: 20 m/min	Stop 058785	Wire speed in:
Angle out:		Angle in:
Wire out (m) 35~		Ship 1.0 - 1.8

Cast comments:

Down to 35 mwo up to 30 @ 5 sit for 15 up to 20 @ 2 m/min sit for 15 up to surface @ 5 m/min

Taxonomic notes:

resp. { *Clio pyramidata*
C. inflexa
S. subata

C. inflexa in 95%. Ga 37.16

+ some submii
Stylochiron affine (50) Eu 51.3 (2) parasites = Eu 51.4
Euphausia recurva (10) Eu 65.8
Nematoscillus atlantica (1) Eu 4.10

Leftover sample in EtOH → many thecosae pteropods; 2 gymnoses
 labeled Reeve 25

17
15
-32
2
1
15
5
15
4

Reeve Net Samples

Cruise: 00473 NH1208	Station: Test St 9	Cast #: 26
Date: 18 Sep 2012	33.751	-133.502
Local time start:		Local time end:
Wire speed out: 20 m/min	Flow 058789	Wire speed in: 5.25 2.5
Angle out: 20	Flow 084629	Angle in: 15:20 ^{from 30'}
Wire out (m): 35		Ship: 1.3 -1.8

Cast comments:

to 35 @ 20 m/min up to 30 @ 2 sit for 15 min up to
20 @ 2 m/min sit for 15 up to surface @ 5 m/min

Taxonomic notes:

el 024 { D. quad (1) Ga
 { C. columnella (1) Ga 06.23
 { C. inflexa (1) Ga 37.17
resp. { C. pyramidata

Reeve Net Samples

Cruise: NH1208	Station: test 10	Cast #: 27
Date: 9/15/12	Latitude: 33 27 S	Longitude: 133.172
Local time start: 12:27	flow start 084660	Local time end:
Wire speed out: 20 m/min	flow stop 120228	Wire speed in: 5 m/min
Angle out: 30		Angle in: 30-35
Wire out (m) 100 mub		1.1 - 1.7

Cast comments:

down to 100 mub @ 20 m/min up @ 5 m/min to 75 sit for 5 up to 35 @ 5 m/min sit for 5 up to surface @ 5 m/min

Taxonomic notes:

C. columnella (1)
C. intlexa (2)
d. trispinosa (2)

} respiration

Bunch of Peracle reticulata

All interesting stuff in one
etch jar labeled R27

75 = 65
~~35 = 30~~
35 = 30

5
5
10
20
7
47