ORIGINAL LOG BOOK OF THE "GRAMPUS"

UNITED STATES FISH COMMISSION

STATION NUMBERS

Numbers 10266 to 10314

1915

Begin 1915 with
station 10266

also 10267 if convenient.

Repeat #10278 (coming down.

Sta in hole off Bay Fundy.

" " Grand Manan Chan.

" " Passamoquoddy Bay.

" off Matinicus (10276

Provincetown off Cape Cod, in about 40 fath.

relation of herring - diatoms & red-feed, - stations.

Station No. 10266 Date: May 4 1915

Hour: 1.30 P. M. to . M.

Position: Lat. 42°30′ Long. 70°20′

Locality: Off Gloucester, Mass.

Depth: 137 m. Bottom: Sample:

Wind: Direction, N.E. Force, Light

Sea: smooth Sky: partly cloudy.

TEMPERATURES

Depth	Thermometer—Make and No.	Reading	Stem Temp.	Correction	Corrected Temp.	W. Sample	Bottle used
0	~~S+V 533~~	6.11				✓	
50	S+V 533	3.60	55			✓	Big.
130	" "	3.60	55			✓	"

CURRENTS

Depth	Hour	Tide	Time down	Revolutions	Speed	Direction

Color of water: Transparency:

REMARKS: Left Gloucester this day bound for Yarmouth, N.S. Bigelow in charge. 11—5314

NETS, ETC., USED

Description	Depth	TIME		Speed
		Down	Up	
	m.			
20 net.	0	½ hr.		1½
#5 silk	0	"		"
½ meter " Vertical	125-0			—
Helgoland	50-0	½ hr.		"

11—5314

NOTES

Plankton mostly small Calanus, - a few sagittae, medusae & schizopods.

Station No. 10267 Date: May 5 1915

Hour: 6 A. . M. to . M.

Position: Lat. 42°38' Long. 69°36'

Locality:

Depth: 273 m. Bottom: Sample:

Wind: Direction, N E. Force, Light

Sea: Smooth. Sky: Overcast.

TEMPERATURES

Depth	Thermometer—Make and No.	Reading	Stem Temp.	Correction	Corrected Temp.	W. Sample	Bottle used
0		6.11				✓	
50	R.	5.05	6.5			✓	Big
130	SW533	4.74	6			✓	Ech.
260	"	6.56	6.			✓	Big.

CURRENTS

Depth	Hour	Tide	Time down	Revolutions	Speed	Direction

Color of water: Transparency:

REMARKS:

11—5314

NETS, ETC., USED

Description	Depth	TIME		Speed
		Down	Up	
#20	0	1/2 hr		
#5	0	"		
Hel.	85-0	"		
1/2 m. vertical	250-0			

11—5314

NOTES

Surface nets — diatom scum — mostly Chaetoceras + some Rhizosolenia, — the 1/4 #5 net strained yielded over 2 quarts.
#20 clogged altogether.
A few large Calanus + Euchaeta.
Helgoland net worked below the diatom swarm, as it got very few.

This day came aboard 1 Ruby crowned kinglet
1 White throat sparrow
1 Ipswich "
1 Palm warbler - (died)
Skin made.

Station No. 10268 Date: May 5 1915

Hour: 5 P. .M. to .M.

Position: Lat. 42°51' Long. 68°43'

Locality:

Depth: 198 m. Bottom: Sample:

Wind: Direction, Calm. Force,

Sea: smooth Sky: Partly cloudy.

TEMPERATURES

Depth	Thermometer—Make and No.	Reading	Stem Temp.	Correction	Corrected Temp.	W. Sample	Bottle used
m.							
0		6.11				✓	
50	S.V. 533	4.80	5.5			✓	Eck
100	R.	4.50	5.5			✓	Big
190	S.V. 533	5.60	5.5			✓	"

CURRENTS

Depth	Hour	Tide	Time down	Revolutions	Speed	Direction

Color of water: Transparency:

REMARKS:

11—5314

NETS, ETC., USED

Description	Depth	TIME		Speed
		Down	Up	
# 20 silk	0	½ hr.		
½ meter, vertical	175–0			

11—5314

NOTES

Considerable diatoms in vertical + surface nets. Surface haul small.

No whales or fish seen so far; a few porpoises last night.

Station No. 10269 Date: May 6 1915

Hour: 8 A.M. to .M.

Position: Lat. 43° 04′ Long. 67° 56′

Locality:

Depth: 192 m. Bottom: Sample:

Wind: Direction, calm. Force,

Sea: smooth Sky: clear.

TEMPERATURES

Depth	Thermometer—Make and No.	Reading	Stem Temp.	Correction	Corrected Temp.	W. Sample	Bottle used
0		4.44				✓	
50	SV. 533	4.30	5			✓	Eck
100	R.	4.45	5			✓	Big
185	SV 533	5.80	5			✓	"

CURRENTS

Depth	Hour	Tide	Time down	Revolutions	Speed	Direction

Color of water: Transparency:

REMARKS:

11—5314

NETS, ETC., USED

Description	Depth	TIME		Speed
		Down	Up	
20	0		1/2 h	
#5	0		"	
1/2 m. vertical	175=0			
Hel.	85=0		1/2 h.	

11—5314

NOTES

Very little on surface except diatoms.
A few Calanus in Hel. net, also 6 or 7 large Oione.

Station No. 10270 Date: May 6 1915

Hour: 5 P. M. to . M.

Position: Lat. 43° 14′ Long. 67° 07′

Locality:

Depth: 203 m. Bottom: Sample:

Wind: Direction, W Force, light

Sea: smooth Sky: clear

TEMPERATURES

Depth	Thermometer—Make and No.	Reading	Stem Temp.	Correction	Corrected Temp.	W. Sample	Bottle used
0		3.61				✓	
50	S.W. 533	3.09	4			✓	Big
100	R.	3.90	4			✓	"
190	SW 533	5.90	4.5			✓	"

CURRENTS

Depth	Hour	Tide	Time down	Revolutions	Speed	Direction

Color of water: Transparency:

REMARKS:

11—5314

NETS, ETC., USED

Description	Depth	TIME		Speed
		Down	Up	
#20	0	½ hr.		
#5	0	"		
½ m.	175-0	vertical		
Meter	50-0	½ hr.		
Helgoland.	150-0	"		

11—5314

NOTES

Water clear, ~~color~~ ½ meter not visible 20 m.

Surface hauls showed Calanus abundant, almost no microplankton
Vertical haul made large catch Calanus.
Hel. + meter " " " "
Many small Bolina on surface

3 P.M. passed a red light buoy G.3. adrift.

10 AM, arrived in Yarmouth Hbr. N.S. + came to ⚓.

Station No. 10271 Date: May 7 191

Hour: 4 A. M. to 5 A. . M.

Position: Lat. 43°26' Long. 66°28'

Locality: German Bank.

Depth: 73 m. Bottom: Sample:

Wind: Direction, N. W. Force, light

Sea: Smooth. Sky: clear

TEMPERATURES

Depth	Thermometer—Make and No.	Reading	Stem Temp.	Correction	Corrected Temp.	W. Sample	Bottle used
0		3.05				✓	
35	R.	3.32	4.5			✓	Big.
70	S.W. 533	3.31	3.5			✓	"

CURRENTS

Depth	Hour	Tide	Time down	Revolutions	Speed	Direction
0	Midnight to 4 A.M.				2 knots or more	W.

Color of water: Transparency:

REMARKS:

11—5314

NETS, ETC., USED

Description	Depth	TIME		Speed
		Down	Up	
# 20	0	½ hr		
# 5	0	"		
Hel.	60-0	"		
½ m.	70-0	vertical		

11—5314

NOTES

No diatoms.
Helgoland net – 2 gal. Pleurobrachia, a few Schizopods & large sagittae, several young fish (3 sp.), & 2 Clione.

Surface, mostly Pleurobrachia.

On last half run from Sta 10270, 44 miles was logged to gain 22 miles — strong W. current of upwards of 2 knots.

Station No. 10272 Date: May 10 1915

Hour: 11 A. ~~4 A~~ . M. to ~~5 A~~ . M.

Position: Lat. 43° 52' Long. 66° 41'

Locality:

Depth: 94 m. Bottom: Sample:

Wind: Direction, N. W. Force, fresh

Sea: smooth Sky: clear

TEMPERATURES

Depth	Thermometer—Make and No.	Reading	Stem Temp.	Correction	Corrected Temp.	W. Sample	Bottle used
0		3.89				✓	~~Bag~~
50	R.	3.44	4			✓	Bag.
90	S.W. 533	3.62	4			✓	"

CURRENTS

Depth	Hour	Tide	Time down	Revolutions	Speed	Direction

Color of water: Transparency:

REMARKS:

11—5314

NETS, ETC., USED

Description	Depth	TIME		Speed
		Down	Up	
# 20	0	½ hr		
# 5	0	"		
Helgoland	60-0	"		
½ meter.	80-0	vertical		

• 11—5314

NOTES

Vertical haul rather scanty.
20 net rich
Helgoland net rich – mostly calanus.

Station No. 10273 Date: May 10 1915

Hour: 6 P. M. to . M.

Position: Lat. 44° 5' Long. 67° 32'

Locality:

Depth: 232 m. Bottom: Sample:

Wind: Direction, ~~brisk~~ S.W. Force, brisk

Sea: choppy Sky: clear

TEMPERATURES

Depth	Thermometer—Make and No.	Reading	Stem Temp.	Correction	Corrected Temp.	W. Sample	Bottle used
0		4.72				✓	
50	SW 533	4.82	5			✓	Big
100	R	5.10	5			✓	"
150	R	4.98	5			✓	"
225	SW 533	6.25	5			✓	"

CURRENTS

Depth	Hour	Tide	Time down	Revolutions	Speed	Direction

Color of water: Transparency:

REMARKS:

11—5314

NETS, ETC., USED

Description	Depth	TIME		Speed
		Down	Up	
# 20 net	0			
# 5 "	0			
Helgoland.	120 = 0			

11—5314

NOTES

Helgoland net. — small copepods & schyopods.

Station No. 10274 Date: May 10 1915

Hour: 11 P. M. to . M.

Position: Lat. 44° 13' Long. 67° 51'

Locality:

Depth: 87 m Bottom: Sample:

Wind: Direction, N. W. Force, brisk, with severe squall.

Sea: Choppy Sky: Cloudy

TEMPERATURES

Depth	Thermometer—Make and No.	Reading	Stem Temp.	Correction	Corrected Temp.	W. Sample	Bottle used
0		4.17				✓	
80	SWS-33	4	5			✓	Big
40	R. failed.					✓	"

CURRENTS

Depth	Hour	Tide	Time down	Revolutions	Speed	Direction

Color of water: Transparency:

REMARKS:

11—5314

NETS, ETC., USED

Description	Depth	TIME		Speed
		Down	Up	
No nets —				

11—5314

NOTES

Sudden severe squall interfered with station — impossible to use nets.

1 Chest with 16 gal tank full of alcohol went adrift + overboard.

Arrived S.W. Hbr. Me., 7 Am. May 11th
N.W. gale most of the day.

Left S.W. Hbr. 6 PM.

Station No. 10270 Date: May 11 1915

Hour: 9 P. . M. to . M.

Position: Lat. 44° 09' Long. 68° 09'

Locality:

Depth: 34 m. Bottom: Sample:

Wind: Direction, N. W. Force, light

Sea: smooth Sky: clear.

TEMPERATURES

Depth	Thermometer—Make and No.	Reading	Stem Temp.	Correction	Corrected Temp.	W. Sample	Bottle used
0		4.44.				✓	

CURRENTS

Depth	Hour	Tide	Time down	Revolutions	Speed	Direction

Color of water: Transparency:

REMARKS:

11—5314

NETS, ETC., USED

Description	Depth	TIME		Speed
		Down	Up	
#20	0	20 min.		
Meter	30-0	"		
8 ft.	0	"		
1/2 m.	50-0	vertical		

11—5314

NOTES

Rich diatom haul in all nets. Little else.
Several young fish in large net.

Station No. 10276 Date: May 12th 1915

Hour: 8 A.. M. to . M.

Position: Lat. 43° 44' Long. 68° 50'

Locality: Off Matinicus.

Depth: 84 m. Bottom: Sample:

Wind: Direction, SSW Force, light

Sea: smooth Sky: clear.

TEMPERATURES

Depth	Thermometer—Make and No.	Reading	Stem Temp.	Correction	Corrected Temp.	W. Sample	Bottle used
0		5.00				✓	
40	SW533	4.24	5			✓	Big
80	SW533	4.24	5			✓	"

CURRENTS

Depth	Hour	Tide	Time down	Revolutions	Speed	Direction

Color of water: green & soupy. Transparency:

REMARKS:

11—5314

NETS, ETC., USED

Description	Depth	TIME		Speed
		Down	Up	
#20	0	1/2 hr		
#5	0	"		
Helgoland	60-0	"		
1/2 meter	75-0	vertical		

11—5314

NOTES

Practically nothing except diatoms, which were very abundant, and a few young fish on surface.

J

Station No. 10277 Date: May 13 1915

Hour: 1 P. . M. to . M.

Position: Lat. 43°32′ Long. 69°46′

Locality:

Depth: 101 m. Bottom: Sample:

Wind: Direction, N. Force, Squally

Sea: smooth Sky: overcast

TEMPERATURES

Depth	Thermometer—Make and No.	Reading	Stem Temp.	Correction	Corrected Temp.	W. Sample	Bottle used
0		7.78				✓	
50	SVS 33	4.23	6			✓	Big
95	"	4.20	6			✓	"

CURRENTS

Depth	Hour	Tide	Time down	Revolutions	Speed	Direction

Color of water: brown Transparency:

REMARKS:

11—5314

NETS, ETC., USED

Description	Depth	TIME		Speed
		Down	Up	
20 net	0	1/2 hr		
Helgoland net	60-0	"		
1/2 m. net.	75-0	vertical		

11—5314

NOTES

Water brown with diatoms all the way out from Boothbay. Large nets clogged with them — little else

Station No. 10278 Date: May 14 1915

Hour: 1,30 P.M. to .M.

Position: Lat. 43° Long. 70°12'

Locality:

Depth: 183 m. Bottom: Sample:

Wind: Direction, S.E. Force, light

Sea: smooth Sky: clear

TEMPERATURES

Depth	Thermometer—Make and No.	Reading	Stem Temp.	Correction	Corrected Temp.	W. Sample	Bottle used
0		7.78				✓	
50	SV 533	4.12	7			✓	Big
100	R	3.54	7			✓	"
175	SV 533	3.80	7			✓	"

CURRENTS

Depth	Hour	Tide	Time down	Revolutions	Speed	Direction

Color of water: brown. Transparency:

REMARKS:

11—5314

NETS, ETC., USED

Description	Depth	TIME		Speed
		Down	Up	
20 net	0	½ hr.		
" " "	0	"		
8 ft net	60-0	"		
½ m "	150-0	vertical		

11—5314

NOTES

Surface water sample taken off C. Elizabeth.

Water brown with diatoms
8 ft net ½ pt. Calanus & a few Clione

A large fin-back whale.
Herring-gulls & gannets, but saw no fish.

At 6 P.M., Sat. Long. (approx.) made a trial tow with 8 ft net, at 40-0 meters, for ½ hr. Breeze light and only made about 2 miles per hour.

Station No. 10279 Date: May 26th 1915

Hour: 10 A.M. to 11 A.M.

Position: Lat. 42° 17' Long. 70° 07'

Locality: Off Cape Cod.

Depth: 75 m. Bottom: Sample:

Wind: Direction, S.W. Force, light

Sea: Smooth Sky: Cloudy

TEMPERATURES

Depth	Thermometer—Make and No.	Reading	Stem Temp.	Correction	Corrected Temp.	W. Sample	Bottle used
0		10.0	—			✓	
40	7 & 7. 233	5.28	9.5			✓	Big
70	3 & V533	4.04	12			✓	"

CURRENTS

Depth	Hour	Tide	Time down	Revolutions	Speed	Direction

Color of water: Transparency:

REMARKS:

11—5314

NETS, ETC., USED

Description	Depth	TIME		Speed
		Down	Up	
1/2 m. net	65-0	Vertical		
Helgoland "	60-0		1/2 hr.	
20 net	0		"	
#5 "	0		"	

11—5314

NOTES

Vertical haul contained a fair quantity of Calanus — practically nothing else.

Helgoland net, about 1/2 quarts of Calanus, a few jelley fish + Cliones, and 16 larval flounders.

20 net fair haul micro. Red.

#5. " very little, (Calanus etc)

Station No. 10280 Date: May 31 191 5

Hour: 7 A. M. to 8 A. M.

Position: Lat. 43° 45′ Long. 69° 32′

Locality: 7 miles SE from Boothbay Hbr.

Depth: 28 m. Bottom: Sample:

Wind: Direction, N.E. Force, Light.

Sea: Smooth Sky: Clear.

TEMPERATURES

Depth	Thermometer—Make and No.	Reading	Stem Temp.	Correction	Corrected Temp.	W. Sample	Bottle used
0		6.95				✓	
25	S.V. 533	5.78	17			✓	Big.

CURRENTS

Depth	Hour	Tide	Time down	Revolutions	Speed	Direction

Color of water: Transparency:

REMARKS:

11—5314

NETS, ETC., USED

Description	Depth	TIME Down	TIME Up	~~Speed~~
Meter silk	15–0	1/2 hr.		Mostly at 5 or 6 m.
# 20 net	0	"		
# 5 "	0	"		

11—5314

NOTES

Meter net – 2 ~~gts~~ Calanus, 8 Clione, 3 Sagittae, Several fish-larvae, 1 Aspidophoroides larva. 2 Cyclopterus, a few fish eggs.

20 net, scanty diatoms
5 " A few Calanus, 1 Schyopod, many fish eggs. A few fish larvae

2 large fin back whales seen.

10 or 12 seiners in company after herring, + getting a few. This is the place that herring were caught in great numbers yesterday, + from which Sample 12 was taken.

Very few herring on surface today, but all the red-feed was 5 or 6 m. down.

Station No. 10281 Date: June 4th 1915

Hour: 12.30 P.M. to 1.30 P.M.

Position: Lat. 44°48' Long. 66°55'

Locality: 2 1/4 miles SE from W. Quoddy Head.

Depth: 87 m. Bottom: Sample:

Wind: Direction, S.W. Force, fresh

Sea: smooth Sky: cloudy

TEMPERATURES

Depth	Thermometer—Make and No.	Reading	Stem Temp.	Correction	Corrected Temp.	W. Sample	Bottle used
0		4.44				✓	
40	N+Y. 233	4.65	6			✓	Big.
80	S+V. 533	4.66	6.5			✓	"

CURRENTS

Depth	Hour	Tide	Time down	Revolutions	Speed	Direction

Color of water: Transparency:

REMARKS:

11—5314

NETS, ETC., USED

Description	Depth	TIME		Speed
		Down	Up	
1/2 meter net	80-0	Vertical		
Meter net.	50-0	1/2 hr.		
# 20 net	0		"	
# 5 "	0		"	

11—5314

NOTES

Vertical haul had nothing visible in it & was thrown away.
#5 net ditto.
#20 very scant micro.
Meter net struck a little streak of Calanus, scanty.

Floating rockweed abundant.

Station No. 10282 Date: June 10 191 5

Hour: 8 A.M. to 10 A.M.

Position: Lat. 44° 25' Long. 66° 32'

Locality: 13 miles W. from Petit Passage N.S.

Depth: 194 m. Bottom: Sample:

Wind: Direction, 0 Force, 0

Sea: smooth. Sky: thick fog + showers

TEMPERATURES

Depth	Thermometer—Make and No.	Reading	Stem Temp.	Correction	Corrected Temp.	W. Sample	Bottle used
0		6.43					✓
50	S+V. 533 7 = 7.233	5.78 5.75	@ 6.5 @ 7.25				✓
100	"	5.22	@ 6.5				✓
180	S+V. 533	5.30	@ 7.				✓

CURRENTS

Depth	Hour	Tide	Time down	Revolutions	Speed	Direction
		H.W. Slack				

Color of water: Transparency:

REMARKS:

11—5314

NETS, ETC., USED

Description	Depth	TIME		Speed
		Down	Up	
1/2 meter	180-0	vertical		
20 silk	0	1/2 hr.		
#5 "	0	"		
Helgoland	175-0	"		
Meter silk	75-0	"		

11—5314

NOTES

At 6 AM took surface sample + surface temp (43), 1 mile W. from Petit Passage. Also surface tow, (thick diatoms + few Calanus) with #5 + 20 nets. Thick fog shutting in.

At this station
Vertical haul scanty, mostly Calanus.
20 + #5 surface, absolutely nothing, thrown away.
Helgoland, abundant Calanus, mostly.
Meter silk, scanty " , " .

2.30 P.M., close to Grand Manan bank, took surface sample + temperature, which had risen to 46°

Station No. 10283 Date: June 10 1915

Hour: 7.40 P.M. to 9.30 P.M.

Position: Lat. 44°.15' Long. 67°.23'

Locality: 21 miles SE by E from Petit Manan.

Depth: 209-180 m Bottom: Sample:

Wind: Direction, W Force, fresh

Sea: smooth Sky: clear

TEMPERATURES

Depth	Thermometer—Make and No.	Reading	Stem Temp.	Correction	Corrected Temp.	W. Sample	Bottle used
0		~~5.42~~				✓	
50	S+V 533	5.30	6			✓	Big
100	H+T 233	5.12	6			✓	"
180	S+V 503	3.64	6			✓	"

CURRENTS

Depth	Hour	Tide	Time down	Revolutions	Speed	Direction

Color of water: Transparency:

REMARKS:

11—5314

NETS, ETC., USED

Description	Depth	TIME		Speed
		Down	Up	
1/2 meter net	180-0	Vertical		
Struck bottom.				
#20 net	0	1/2 hr		
#5 "	0	"		
Helgoland net	100-0	"		

11—5314

NOTES

Helgoland net, 1 1/2 quarts of schizopods, and abundant red-feed

Vertical haul, large amount of sam.

~~#~~ #5 + 20 nets on surface very scant.

Station No. 10284 Date: June 11 1915

Hour: 5.15 A.M. to 6.30 A.M.

Position: Lat. 44° 09' Long. 67° 54'

Locality: 12 miles S by E from Schoodic buoy.

Depth: 91 m, shoaling. Bottom: Sample:

Wind: Direction, calm. Force, calm.

Sea: smooth. Sky: Hazy.

TEMPERATURES

Depth	Thermometer—Make and No.	Reading	Stem Temp.	Correction	Corrected Temp.	W. Sample	Bottle used
0		5.45				✓	.
40	N+Z.233	5.15	7.			✓	Big.
80	S+V 533	5.25	9			✓	"

CURRENTS

Depth	Hour	Tide	Time down	Revolutions	Speed	Direction

Color of water: Transparency:

REMARKS:

11—5314

NETS, ETC., USED

Description	Depth	TIME		Speed
		Down	Up	
1/2 meter -	80-0	Vertical		
20 net	0		1/2 hr	
5 "	0		"	
Meter silk.	70-0		"	

11—5314

NOTES

1/2 meter net, vertical haul, had a fair catch of red feed.
20 net. fair micro haul.
5 " scanty.
Meter net, 2 qts solid red feed; Clione, 1 Sagitta.

Station No. 10285 Date: June 14th 1915

Hour: 6.30 A.M. to 7.30 A.M.

Position: Lat. 44° 09' Long. 68° 09'

Locality: Off Duck Id. Me.

Depth: Bottom: Sample:

Wind: Direction, 0 Force, 0

Sea: smooth Sky: Cloudy.

TEMPERATURES

Depth	Thermometer—Make and No.	Reading	Stem Temp.	Correction	Corrected Temp.	W. Sample	Bottle used
0		8.05				✓	

CURRENTS

Depth	Hour	Tide	Time down	Revolutions	Speed	Direction

Color of water: Transparency:

REMARKS:

11—5314

NETS, ETC., USED

Description	Depth	TIME		Speed
		Down	Up	
20 net	0	10 minutes		
1/2 meter net	5-0	15 minutes		

11—5314

NOTES

A few minutes tow clogged the nets with diatoms.

1/2 meter net also had some red-feed & fish-eggs.

Station No. 10286 Date: June 14 1915

Hour: 9.30 A.M. to 10.30 A.M.

Position: Lat. 43° 59' Long. 68° 15'

Locality:

Depth: 95 meters Bottom: Sample:

Wind: Direction, S Force, light

Sea: smooth Sky: foggy.

TEMPERATURES

Depth	Thermometer—Make and No.	Reading	Stem Temp.	Correction	Corrected Temp.	W. Sample	Bottle used
0		7.50				✓	
40	N+Z. 233	5.44	7			✓	Big
80	S+V. 533	5.20	7			✓	"

CURRENTS

Depth	Hour	Tide	Time down	Revolutions	Speed	Direction

Color of water: Transparency:

REMARKS:

11—5314

NETS, ETC., USED

Description	Depth	TIME		Speed
		Down	Up	
1/2 meter net	80-0	Vertical		
Meter net	70-0	1/2 hr.		
1/2 meter "	3-0	"		
20 net	0	"		

11—5314

NOTES

Vertical haul, fair amt. Calanus.

Meter net, fair haul, mostly Calanus + some fish-eggs. 1 Pint Calanus, 1 Clione 3 small sagittae + a few small jelly-fish.

1/2 meter, some Calanus + fish eggs.

20 net micro abundant — red.

Station No. 10287 Date: June 14 1915

Hour: . M. to . M.

Position: Lat. 43°44' Long. 68°50'

Locality: Off Matinicus Rock.

Depth: 78 meters Bottom: Sample:

Wind: Direction, S. Force, light

Sea: smooth Sky: clear.

TEMPERATURES

Depth	Thermometer—Make and No.	Reading	Stem Temp.	Correction	Corrected Temp.	W. Sample	Bottle used
0		~~7.68~~				✓	
35	H+T 233	5.95	12			✓	
70	SV. 533	4.90	13			✓	

CURRENTS

Depth	Hour	Tide	Time down	Revolutions	Speed	Direction

Color of water: Transparency:

REMARKS:

11—5314

NETS, ETC., USED

Description	Depth	TIME		Speed
		Down	Up	
1/2 meter net	70-0	Vertical		
Meter net	50-0	1/2 hr.		
20 "	0		"	
1/2 meter net	3-0		"	

11—5314

NOTES

The 20 net, working on the surface, contained only a fair haul of diatoms, and was not clogged. The 1/2 meter net, 3-0 meters, + meter net, 50-0 meters were badly clogged with diatoms.

Meter net, many jelly fish, 2 sp. a few sagittae, 2 sp. 6 Clione, 1 Pneumodermon many small pteropods, a few fish eggs, + 1 qt. Calanus, of which only a sample saved.

1/2 meter net, surface, many fish eggs (cod or haddock) few Calanus + masses of diatoms.

Station No. 10288 Date: June 19 1915

Hour: 2.30 A.M. to 4.30 A.M.

Position: Lat. 43° 28′ Long. 67° 30′

Locality:

Depth: 227 m. Bottom: Sample:

Wind: Direction, O Force, calm

Sea: smooth Sky: clear

TEMPERATURES

Depth	Thermometer—Make and No.	Reading	Stem Temp.	Correction	Corrected Temp.	W. Sample	Bottle used
0		49.5				✓	
50	SV 533	5.70	9			✓	Bag
100	" "	4.96	8			✓	"
150	H.T 233	5.70	9			✓	"
220	SV. 533	6.30	9			✓	"

CURRENTS

Depth	Hour	Tide	Time down	Revolutions	Speed	Direction

Color of water: Transparency:

REMARKS:

11—5314

NETS, ETC., USED

Description	Depth	TIME		Speed
		Down	Up	
1/2 meter net	200-0	Vertical		
20 net	0	1/2 hr.		
1/2 meter net	0			
Meter "	85-0		"	
Helgoland "	200-0		"	

11—5314

NOTES

20 net fairly rich.
1/2 meter on surface, much Calanus.

Meter net, 85-0 mostly Calanus - many large Euthemisto, few sagittae, few Clione many medusae.

Helgoland net, mostly Calanus, many Euchaeta, few Euthemisto some large Meganyctiphanes, few sagittae; 1 young fish.

8 AM Blake said he saw some Physalia.

Several large sharks seen on surface at some distance, during this day.

Station No. 10289 Date: June 19 1915

Hour: 11 AM. M. to 11.45 AM.

Position: Lat. 43° 27' Long. 66° 51'

Locality:

Depth: 153 m. Bottom: Sample:

Wind: Direction, S. Force, light

Sea: smooth Sky: fog.

TEMPERATURES

Depth	Thermometer—Make and No.	Reading	Stem Temp.	Correction	Corrected Temp.	W. Sample	Bottle used
0		46	7			✓	
50	SV 533	5.95	7			✓	Beq
100	HZ 233	5.78	8			✓	"
150	SV. 533	5.85	7			✓	"
150	H.Z. 233	5.95	8				

CURRENTS

Depth	Hour	Tide	Time down	Revolutions	Speed	Direction

Color of water: Transparency:

REMARKS:

11—5314

NETS, ETC., USED

Description	Depth	TIME		Speed
		Down	Up	
None				

11—5314

NOTES

Station No. 10290 Date: June 19 1915

Hour: 6 P.M. to 7.30 P.M.

Position: Lat. 43°24' Long. 66°22'

Locality: German Bank.

Depth: 64 m. Bottom: Sample:

Wind: Direction, S Force, light

Sea: smooth Sky: fog.

TEMPERATURES

Depth	Thermometer—Make and No.	Reading	Stem Temp.	Correction	Corrected Temp.	W. Sample	Bottle used
0		43				✓	
25	Hy 233	5.92	7			✓	Big
60	S.V. 533	5.88	6.5			✓	"

CURRENTS

Depth	Hour	Tide	Time down	Revolutions	Speed	Direction

Color of water: Transparency:

REMARKS: 11—5314

On run from Sta 10289 to 10290, encountered strong set to N. & N.W. putting vessel off her course about 5 miles.

NETS, ETC., USED

Description	Depth	TIME		Speed
		Down	Up	
1/2 meter	60-0	Vertical		
20 net	0		1/2 hr	
1/2 meter	0		"	
Meter net	40-0		"	

11—5314

NOTES

20 net fairly rich.

Meter net, big haul of Pleurobrachia, also many young Pholis + Aspidophoroides, + 1 or 2 lumpfish + sculpins.

Station No. 10291 Date: June 23 1915

Hour: 8 A. M. to . M.

Position: Lat. 43°29' Long. 65°08'

Locality:

Depth: 78 m Bottom: Sample:

Wind: Direction, W Force, fresh

Sea: smooth Sky: clear

TEMPERATURES

Depth	Thermometer—Make and No.	Reading	Stem Temp.	Correction	Corrected Temp.	W. Sample	Bottle used
0		48				✓	
30	H.y. 233	3.5	6.5			✓	Bir.
75	S.W. 533	1.07	5			✓	"

CURRENTS

Depth	Hour	Tide	Time down	Revolutions	Speed	Direction

Color of water: Transparency:

REMARKS:

11—5314

NETS, ETC., USED

Description	Depth	TIME		Speed
		Down	Up	
1/2 meter	70-0	Vertical		
20 net	0	1/2 hour		
1/2 m net	0		"	
meter net	60-0		"	

11—5314

NOTES

Vertical haul rich – Euthemisto + sagittae, Oikopleura + some copepods.

Meter net, equal parts large Sagitta elegans + Calanus, many Euthemisto, 2 fish fry.

Surface scanty, 20 net fair.

(High N. wind yesterday).

Station No. 10292 Date: June 23 1915

Hour: 11 A.M. to .M.

Position: Lat. 43°19' Long. 64°59'

Locality:

Depth: 157 m. Bottom: Sample:

Wind: Direction, SW Force, light

Sea: smooth Sky: clear

TEMPERATURES

Depth	Thermometer—Make and No.	Reading	Stem Temp.	Correction	Corrected Temp.	W. Sample	Bottle used
0		47.5				✓	
50	SV533	.90	6.			✓	Bag
75	HH233	.90	6			✓	"
100	HH233	2.1(?)	6			✓	"
150	SV533	4.38	6.5			✓	"

CURRENTS

Depth	Hour	Tide	Time down	Revolutions	Speed	Direction

Color of water: Transparency:

REMARKS:

11—5314

NETS, ETC., USED

Description	Depth	TIME		Speed
		Down	Up	
No nets.				

11—5314

NOTES

Station No. 10293 Date: June 23 1915

Hour: 4 P. M. to . M.

Position: Lat. 42° 59' Long. 64° 43'

Locality:

Depth: 87 m. Bottom: Sample:

Wind: Direction, E Force, faint

Sea: smooth (swell) Sky: cloudy

TEMPERATURES

Depth	Thermometer—Make and No.	Reading	Stem Temp.	Correction	Corrected Temp.	W. Sample	Bottle used
0		50				✓	
40	Ny 233	1.6	6			✓	Bit
85	SV. 533	1.8	6			✓	"

CURRENTS

Depth	Hour	Tide	Time down	Revolutions	Speed	Direction

Color of water: Very blue. Transparency:

REMARKS:

11—5314

NETS, ETC., USED

Description	Depth	TIME		Speed
		Down	Up	
1/2 meter	75-0	Vertical		
20 net	0	1/2 hr		
1/2 meter "	0	"		
Meter "	60-0	"		

11—5314

NOTES

Fair catch in vertical haul – very large Oikoplewra with red edges

Meter net, mostly large Euthemisto, some Calanus, Euchaeta, some schizopods + medusae, 3 large Oikoplewra, 2 Clione many large sagittae, 3 fish eggs + many large Euthemisto eggs.

Station No. 10294 Date: June 23 1915

Hour: 11 P. M. to . M.

Position: Lat. 42° 36' Long. 64° 27'

Locality:

Depth: 176 m. Bottom: Sample:

Wind: Direction, E. Force, light

Sea: swell Sky: rain.

TEMPERATURES

Depth	Thermometer—Make and No.	Reading	Stem Temp.	Correction	Corrected Temp.	W. Sample	Bottle used
0		49.5				✓	
40	SV 533	3.1	8			✓	Big
80	NZ 233	2.27	7			✓	"
120	" "	7.5	7.5			✓	"
170	SV 533	8.25	7.			✓	"

CURRENTS

Depth	Hour	Tide	Time down	Revolutions	Speed	Direction

Color of water: Transparency:

REMARKS:

11—5314

NETS, ETC., USED

Description	Depth	TIME		Speed
		Down	Up	
1/2 meter	170-0	Vertical		
20 net	0	1/2 hr		
1/2 m "	0	"		
meter "	100-0	"		

11—5314

NOTES

Vertical haul, fair, Calanus + Euthemisto, some Sagittae + Sinacina.

Meter net, Many Beröe, Mostly large Calanus, Euchaeta, + many Pleuromamma Few large sagittae, few large Sinacina balea, 1 Clione, 1 Euchaetia + 1 Aglantha.

Station No. 10295 Date: June 24 1915

Hour: 3 A. M. to . M.

Position: Lat. 42° 22' Long. 64° 16'

Locality:

Depth: 1000 fathoms (Chart) Bottom: Sample:

Wind: Direction, E Force, brisk

Sea: Swell Sky: Rain.

TEMPERATURES

Depth	Thermometer—Make and No.	Reading	Stem Temp.	Correction	Corrected Temp.	W. Sample	Bottle used
0	~~[illegible]~~	5.2				✓	
80	HH 233	3.75	10			✓	Big
200	SV 533	8.2	10			✓	"
300	HH 233	7.3	10			✓	"
500	SV 533	5.05	10			✓	"

CURRENTS

Depth	Hour	Tide	Time down	Revolutions	Speed	Direction

Color of water: Transparency:

REMARKS:

11—5314

NETS, ETC., USED

Description	Depth	TIME		Speed
		Down	Up	
20 net	0		1/2 hr	
1/2 m net	0		"	
Meter net	500-0		"	

11—5314

NOTES

Surface hauls very scant.

Meter net 500-0 m. Mostly copepods, Calanus, Euchaeta (large) + many Pleuromamma. Many large Sagitta lyra, + 2 other species. 2 myctophids, 1 Cyclothone signata, + 1 other Sternoptychid. Many Sinacina, some Diphyes, some Schizopods + few large Euthemisto.

Nearing Sta 10296 saw 3 Physalia

Station No. 10296 Date: June 24 1915

Hour: 6 P. M. to . M.

Position: Lat. 42° 28' Long. 65° 37'

Locality: Browns Bank.

Depth: 90 m. Bottom: Sample:

Wind: Direction, W Force, Brisk

Sea: swell Sky: clear.

TEMPERATURES

Depth	Thermometer—Make and No.	Reading	Stem Temp.	Correction	Corrected Temp.	W. Sample	Bottle used
0		50				✓	
40	Ty 233	2.88	8			✓	Bé
80	Ty 233	7.45	9			✓	"

CURRENTS

Depth	Hour	Tide	Time down	Revolutions	Speed	Direction

Color of water: Transparency:

REMARKS:

11—5314

NETS, ETC., USED

Description	Depth	TIME		Speed
		Down	Up	
20 net	0	1/2 hr.		
Meter "	50-0	"		

11—5314

NOTES

Meter net, Very rich haul of Calanus, about 1/6 of a bucket full, 1 Euchaeta, many large Euttemisto, Several Phronima + their houses, 1 Cyclothone signata, 1 Salpa, few small Sagittae.

Station No. 10297 Date: June 25 1915

Hour: 12.15 A M. to . M.

Position: Lat. 42°17' Long. 66°03'

Locality: Eastern Channel

Depth: 238 m. Bottom: Sample:

Wind: Direction, W Force, light

Sea: smooth Sky: cloudy

TEMPERATURES

Depth	Thermometer—Make and No.	Reading	Stem Temp.	Correction	Corrected Temp.	W. Sample	Bottle used
0		50				✓	
40	Hy 233	8.60	10			✓	Bag
100	SV 533	8.17	9			✓	"
150	Hy 233	7.72	10			✓	"
225	SV 533	7.20	9			✓	"

CURRENTS

Depth	Hour	Tide	Time down	Revolutions	Speed	Direction

Color of water: Transparency:

REMARKS:

11—5314

NETS, ETC., USED

Description	Depth	TIME		Speed
		Down	Up	
No nets.				

11—5314

NOTES

Station No. 10298 Date: June 25 1915

Hour: 3 P. . M. to . M.

Position: Lat. 42°26′ Long. 67°45′

Locality:

Depth: 247 m. Bottom: Sample:

Wind: Direction, W Force, light

Sea: smooth Sky: clear

TEMPERATURES

Depth	Thermometer—Make and No.	Reading	Stem Temp.	Correction	Corrected Temp.	W. Sample	Bottle used
0	S	54.5				✓	
50	S.V. 533	5.28	9			✓	Big
100	H.Z. 233	5.10	9.5			✓	"
150	S.V. 533	5.80	9.5			✓	"
225	H.Z. 233	6.95	9			✓	"

CURRENTS

Depth	Hour	Tide	Time down	Revolutions	Speed	Direction

Color of water: Transparency:

REMARKS:

11—5314

NETS, ETC., USED

Description	Depth	TIME		Speed
		Down	Up	
20 net	0	1/2 hr.		
1/2 meter net	200-0	vertical		

11—5314

NOTES

20 net rich.

Vertical haul scanty.

11 miles W. from this station many small Cyanea on + near surface, also red streaks. Diffed with 20 net + caught a few Calanus. Water thick, probably streaks were same micro as at the station.

5 finback whales seen today. Probably feeding — they would blow five to ten times, 15 to 20 seconds apart, and then go down for about three minutes.

Station No. 10299 Date: June 26 191 5

Hour: 6 A. . M. to . M.

Position: Lat. 42°30' Long. 69°15'

Locality:

Depth: 219 m Bottom: Sample:

Wind: Direction, SW Force, light

Sea: smooth Sky: cloudy.

TEMPERATURES

Depth	Thermometer—Make and No.	Reading	Stem Temp.	Correction	Corrected Temp.	W. Sample	Bottle used
0		56.5				✓	
50	W 4.233	6.3	11			✓	Big
100	"	4.7	10			✓	"
210	S.V. 533	5.8	10			✓	"

CURRENTS

Depth	Hour	Tide	Time down	Revolutions	Speed	Direction

Color of water: Transparency:

REMARKS:

11—5314

NETS, ETC., USED

Description	Depth	TIME		Speed
		Down	Up	
1/2 meter net	200-0	Vertical		
20 net	0	15 minutes		
Meter "	200-0	20	"	

11—5314

NOTES

Vertical haul, large catch of Calanus

Meter net, large catch pure Calanus, with 2 or 3 Euthemisto.

Large finback whale in company at this station.

Station No. 10300 Date: July 7th 1915

Hour: 10 A. M. to . M.

Position: Lat. Long.

Locality: 1 mile off Race Point, Cape Cod

Depth: 59 meters Bottom: sand & mud Sample:

Wind: Direction, none Force, none

Sea: smooth Sky: clear.

TEMPERATURES

Depth	Thermometer—Make and No.	Reading	Stem Temp.	Correction	Corrected Temp.	W. Sample	Bottle used
0		62				✓	
50	N. & J. 233	6.90	16			✓	Big

CURRENTS

Depth	Hour	Tide	Time down	Revolutions	Speed	Direction

Color of water: Transparency:

REMARKS:

11—5314

NETS, ETC., USED

Description	Depth	TIME		Speed
		Down	Up	
Bottom net (etramin)	Bottom		1/2 hr	
Meter net silk	0		"	
20 "	0		"	

11—5314

NOTES

Large haul of larval fishes in bottom net, also many Sagitta.

Many fish eggs in surface haul

20 net scant.

Hardly any copepods

Station No. 10301 Date: July 15 1915

Hour: 10 A. M. to 11 A. M.

Position: Lat. Long.

Locality: 3 miles SW by W. from Sibley Id. Light, Me.

Depth: 73 m. Bottom: Sample:

Wind: Direction, S Force, light

Sea: smooth Sky: fog.

TEMPERATURES

Depth	Thermometer—Make and No.	Reading	Stem Temp.	Correction	Corrected Temp.	W. Sample	Bottle used
0		48				✓	
60	N+Y 233	7.20	9			✓	Beq.

CURRENTS

Depth	Hour	Tide	Time down	Revolutions	Speed	Direction

Color of water: Transparency:

REMARKS: 11—5314

This station was made to determine conditions on account of the great scarcity of herring in this region.

NETS, ETC., USED

Description	Depth	TIME		Speed
		Down	Up	
Meter net	50-0 m		1/2 hr.	
1/2 " "	0		"	
20 " "	0		"	

11—5314

NOTES

20 net rich diatom haul (but not the "swarm" which sometimes occurs).

1/2 m. net, surface, many fish-eggs, 2 or 3 species. Many very young Calanus + a few green copepods.

Meter net, 50-0 m. Many young Calanus, many fish eggs. A few larval fish + green copepods.

No "red-feed" or other feed at all.

Station No. 10302 Date: July 19 1915

Hour: 10.30 A.M. to 11.30 A.M.

Position: Lat. Long.

Locality: 1 mile off Great Duck Id. Me.

Depth: 53 m. Bottom: Sample:

Wind: Direction, SW Force, light

Sea: smooth Sky: partly cloudy.

TEMPERATURES

Depth	Thermometer—Make and No.	Reading	Stem Temp.	Correction	Corrected Temp.	W. Sample	Bottle used
0		53				✓	
20	N+Z 233	8.09	13			✓	Big
45	S+V 533	7.35	11			✓	"

CURRENTS

Depth	Hour	Tide	Time down	Revolutions	Speed	Direction

Color of water: Transparency:

REMARKS: This station was made to determine conditions on account of the great scarcity of herring in this region.

NETS, ETC., USED

Description	Depth	TIME		Speed
		Down	Up	
Meter net	40-0 m		1/2 hr	
20 "	0		"	
1/2 m "	0		"	

11—5314

NOTES

Surface hauls showed diatoms in abundance, with numerous fish eggs + very small copepods.

Meter net was clogged with swarms of diatoms. Numerous fish eggs + abundant minute copepods

No red-feed or other feed suitable to herring etc.

The diatom swarm at this station was distinctly below the surface.

Station No. 10303 Date: Aug 4 1915

Hour: 12.30 P.M. to 2.00 P.M.

Position: Lat. Long.

Locality: Off Monhegan gas buoy.

Depth: 80 m. (44 fath) Bottom: Sample:

Wind: Direction, N.E. Force, light

Sea: smooth Sky: cloudy

TEMPERATURES

Depth	Thermometer—Make and No.	Reading	Stem Temp.	Correction	Corrected Temp.	W. Sample	Bottle used
0		5.3				✓	
35	S&V 533	8.15	13			✓	Big
75	N&H 233	6.10	13			✓	"

CURRENTS

Depth	Hour	Tide	Time down	Revolutions	Speed	Direction

Color of water: Transparency:

REMARKS: 11—5314

This station made because of appearance of large herring at Monhegan Aug. 2nd

NETS, ETC., USED

Description	Depth	TIME		Speed
		Down	Up	
1/2 m. net	70-0	vertical		
Meter silk net	60-0	1/2 hr.		
1/2 " " "	0	"		
20 net " "	0	"		

11—5314

NOTES

All nets except 20 net clogged with micro. (green).

20 net fair haul micro.
Quant. haul, abundant small Calanus & fish eggs.

1/2 m net surface haul & meter net 60-0 practically the same as quant. haul.
Vast numbers of fish eggs the most striking feature.

Station No. 10304 Date: Aug 6-7 191 5

Hour: 11.15 P. M. to 1.45 A. M.

Position: Lat. 43°32' Long. 67°35'

Locality:

Depth: 219 m. Bottom: 120 fath. Sample:

Wind: Direction, SE Force, light.

Sea: mod. Sky: cloudy

TEMPERATURES

Depth	Thermometer—Make and No.	Reading	Stem Temp.	Correction	Corrected Temp.	W. Sample	Bottle used
0		52.5				✓	
25	S+V. 533	8.40	13				
50	H+J 233	6.28	10			✓	Big
100	" "	4.80	10.5			✓	"
150	S+V 533	6.54	9.5			✓	"
200	H+J 233	6.95	9.5			✓	"

CURRENTS

Depth	Hour	Tide	Time down	Revolutions	Speed	Direction

Color of water: Transparency:

REMARKS:

11—5314

NETS, ETC., USED

Description	Depth	TIME		Speed
		Down	Up	
1/2 m. net	200-0	vertical		
Meter silk	150-0	1/2 hr.		
20 net	0	1/2 hr.		
#5 (1ft) net.	0	1/2 hr.		

11—5314

NOTES

Large hauls of Calanus on surface.

Station No. 10305 Date: Aug 18 1915

Hour: 10.30 A. M. to 11.30 A. M.

Position: Lat. Long.

Locality: Off Gt. Duck Id., Me.

Depth: 63 m. Bottom: Sample:

Wind: Direction, N. W. Force, Stiff breeze

Sea: choppy Sky: clear

TEMPERATURES

Depth	Thermometer—Make and No.	Reading	Stem Temp.	Correction	Corrected Temp.	W. Sample	Bottle used
0		57.5				✓	
25	S+V 533	9.45	12			✓	Big
50	N+Z 233	8.85	11			✓	"

CURRENTS

Depth	Hour	Tide	Time down	Revolutions	Speed	Direction

Color of water: Transparency:

REMARKS:

11—5314

NETS, ETC., USED

Description	Depth	TIME		Speed
		Down	Up	
Meter net	40-0	1/2 hr.		
20 net	0	20 min.		
1 ft #5 net	0	"		

11—5314

NOTES

Moderate haul micro.

Abundant Calanus + fish-eggs.

Blowing too hard for vertical haul.

Station No. 10306 Date: Aug 31 1915

Hour: 11 A. M. to . M.

Position: Lat. 42° 31' Long. 70° 19'

Locality:

Depth: Bottom: 81 fath. Sample:

Wind: Direction, W Force, light

Sea: smooth Sky: clear.

TEMPERATURES

Depth	Thermometer—Make and No.	Reading	Stem Temp.	Correction	Corrected Temp.	W. Sample	Bottle used
0 m.		61				✓	
50	SV 533	7.38	12			✓	Big
100	" "	6.15	12			✓	"
140	NH 233	5.90	12.5			✓	"

CURRENTS

Depth	Hour	Tide	Time down	Revolutions	Speed	Direction

Color of water: Transparency:

REMARKS:

11—5314

NETS, ETC., USED

Description	Depth	TIME		Speed
		Down	Up	
20 net	0		½ hr	
½ m.	0		"	
Meter (coarse)	40-0		"	
Helgoland,	110-0		"	
½ m.	140-0		vertical	

11—5314

NOTES

20 net — fair haul micro.
½ m. on surface, very scanty, 3 Pleurobrachia + a few Anomalocera.

Meter net, (entire). A few young gadoids, many Euthemisto, few Calanus.

Helgoland net, - about 1 pint Calanus.

Station No. 10307 Date: Aug 31 1915

Hour: 6 P. M. to . M.

Position: Lat. 42° 40' Long. 69° 34'

Locality:

Depth: 245 m. Bottom: Sample:

Wind: Direction, NNE. Force, light

Sea: smooth Sky: cloudy.

TEMPERATURES

Depth	Thermometer—Make and No.	Reading	Stem Temp.	Correction	Corrected Temp.	W. Sample	Bottle used
0		63				✓	
50	SV 533	7.95	14			✓	Big.
100	NZ 233	5.15	12.5			✓	"
150	SV 533	5.30	12			✓	"
200	"	5.87	12			✓	"
235	NZ 233	6.4	13			✓	"

CURRENTS

Depth	Hour	Tide	Time down	Revolutions	Speed	Direction

Color of water: Transparency:

REMARKS:

11—5314

NETS, ETC., USED

Description	Depth	TIME		Speed
		Down	Up	
20 net	0	1/2 hr		
1/2 m net	0	"		
Meter net } Helgoland } 1 ft net }	220-0	"		
1/2 m	235-0	vertical		

11—5314

NOTES

Hauls preserved entire.

Station No. 10308 Date: Sept 1 1915

Hour: 2 A..M. to 4 A .M.

Position: Lat. 42°52' Long. 68°40'

Locality:

Depth: 185 m Bottom: Sample:

Wind: Direction, NNE Force, brisk

Sea: high choppy Sky: cloudy

TEMPERATURES

Depth	Thermometer—Make and No.	Reading	Stem Temp.	Correction	Corrected Temp.	W. Sample	Bottle used
0		60.5				✓	
40	SV 408	9.10	13			✓	Big
90	" 533	6.56	13			✓	"
165	NZ 233	5.75	12			✓	"

CURRENTS

Depth	Hour	Tide	Time down	Revolutions	Speed	Direction

Color of water: Transparency:

REMARKS:

11—5314

NETS, ETC., USED

Description	Depth	TIME		Speed
		Down	Up	
20 net	0	1/2 hr		
1/2 meter	0		"	
Helgoland net	50-0		"	

11—5314

NOTES

Too rough for vertical haul.

Very large haul of ~~[illegible]~~ young Sebastes — very little else.

Helgoland, 50-0 Some Sebastes, very little else

Station No. 10309 Date: Sept 1 1915

Hour: 3 P.M. to 5.30 P.M.

Position: Lat. 43°08' Long. 67°52'

Locality:

Depth: 221 m. Bottom: Sample:

Wind: Direction, NE Force, brisk

Sea: choppy Sky: cloudy.

TEMPERATURES

Depth	Thermometer—Make and No.	Reading	Stem Temp.	Correction	Corrected Temp.	W. Sample	Bottle used
0	~~Old Hy.~~	60				✓	
50	Old Hy.	49				✓	Big
100	SV 533	5.90	12			✓	"
150	"	5.92	11			✓	"
210	Hy 233	6.10	12.5			✓	"

CURRENTS

Depth	Hour	Tide	Time down	Revolutions	Speed	Direction

Color of water: Transparency:

REMARKS:

11—5314

NETS, ETC., USED

Description	Depth	TIME		Speed
		Down	Up	
20 net	0	1/2 hr		
1/2 m net	0	"		
Meter net (coarse)	130-0	"		
1/2 m.	200-0	vertical		

11—5314

NOTES

#20, rich haul red micro.

1/2 m surface - very scanty.

Vertical haul, very rich Calanus.

Meter net. - preserved entire.

Station No. 10310 Date: Sept 2 1915

Hour: 6 A. M. to 7.15 A. M.

Position: Lat. 43° 15' Long. 67° 03'

Locality:

Depth: 201 m. Bottom: Sample:

Wind: Direction, NE. Force, light

Sea: smooth Sky: Hazy.

TEMPERATURES

Depth	Thermometer—Make and No.	Reading	Stem Temp.	Correction	Corrected Temp.	W. Sample	Bottle used
0		56				✓	
50	Old Nz.	44.7				✓	Big.
100	"	42				✓	"
190	SV533	7.16	9			✓	"

CURRENTS

Depth	Hour	Tide	Time down	Revolutions	Speed	Direction

Color of water: Transparency:

REMARKS:

11—5314

NETS, ETC., USED

Description	Depth	TIME		Speed
		Down	Up	
20 net.	0		1/2 hr	
1/2 m net	0		"	
Meter " coarse	175-0		"	
1/2 m net.	190-0		vertical	

11—5314

NOTES

Very rich vertical haul

20 net, rich micro.

All hauls preserved entire.

Station No. 10311 Date: Sept 2 191 5

Hour: 6 P. M. to . M.

Position: Lat. 43° 22' Long. 66° 17'

Locality: German Bank.

Depth: 73 m. Bottom: Sample:

Wind: Direction, Force, Calm

Sea: smooth Sky: clear.

TEMPERATURES

Depth	Thermometer—Make and No.	Reading	Stem Temp.	Correction	Corrected Temp.	W. Sample	Bottle used
0		49				✓	
30	Old Nz.	50.5				✓	Big.
65	SV 533	10.1	10			✓	"

CURRENTS

Depth	Hour	Tide	Time down	Revolutions	Speed	Direction

Color of water: Transparency:

REMARKS:

11—5314

NETS, ETC., USED

Description	Depth	TIME		Speed
		Down	Up	
20 net	0		1/2 hr	
1/2 m net	0		"	
Meter " coarse	50-0		"	
1/2 m vertical	60-0		vertical.	

11—5314

NOTES

Many small Pleurobrachia in all nets.
20 net - rich micro.
Meter net A few larval herring, Sebastes & Cyclopterus.

Station No. 10312 Date: Sept 2 1915

Hour: 11.30 P. M. to . M.

Position: Lat. Long.

Locality: Off Cape Sable (bearing N.N.E.)

Depth: 58 m Bottom: (32 fath) Sample:

Wind: Direction, Force, calm.

Sea: high swell Sky: clear.

TEMPERATURES

Depth	Thermometer—Make and No.	Reading	Stem Temp.	Correction	Corrected Temp.	W. Sample	Bottle used
0		56				✓	
25	old Nq.	49				✓	
50	S.V. 533	7.5	11.5			✓	

CURRENTS

Depth	Hour	Tide	Time down	Revolutions	Speed	Direction

Color of water: Transparency:

REMARKS:

11—5314

NETS, ETC., USED

Description	Depth	TIME		Speed
		Down	Up	
None				

11—5314

NOTES

Station No. 10313 Date: Sept 6 1915

Hour: 9 A. M. to . M.

Position: Lat. 43°28' Long. 65°06'

Locality:

Depth: 78 m. Bottom: Sample:

Wind: Direction, S Force, light

Sea: smooth Sky: clear.

TEMPERATURES

Depth	Thermometer—Make and No.	Reading	Stem Temp.	Correction	Corrected Temp.	W. Sample	Bottle used
0		5.9				✓	
20	S.V 408	3.6	15			✓	Big
50	Old Nz.	38				✓	"
70	SV 533	2.5	12			✓	"

CURRENTS

Depth	Hour	Tide	Time down	Revolutions	Speed	Direction

Color of water: Transparency:

REMARKS:

11—5314

NETS, ETC., USED

Description	Depth	TIME		Speed
		Down	Up	
20 net	0	1/2 hr		
1/2 m "	0		"	
Meter net, coarse	50-0		"	
1/2 meter net	70-0	Vertical		

11—5314

NOTES

Radiolarians in both nets on surface

Meter net - practically nothing but a few Beroe + Euthemisto.

Vertical haul - fair.

Station No. 10314 Date: Sept. 6 1915

Hour: 1 P. . M. to . M.

Position: Lat. 43°20' Long. 64°59'

Locality:

Depth: 164 m. Bottom: Sample:

Wind: Direction, S. Force, light

Sea: smooth Sky: clear

TEMPERATURES

Depth	Thermometer—Make and No.	Reading	Stem Temp.	Correction	Corrected Temp.	W. Sample	Bottle used
0		59				✓	
25	old N.Y.	46.2				✓	Big
50	SV533	.	12			✓	"
75	SV408		10			✓	"
100	old N.Y.	41				✓	"
150	" "	41.1				✓	"

CURRENTS

Depth	Hour	Tide	Time down	Revolutions	Speed	Direction

Color of water: Transparency:

REMARKS:

11—5314

NETS, ETC., USED

Description	Depth	TIME		Speed
		Down	Up	
None				

11—5314

NOTES