

6028-6075

ORIGINAL LOG BOOK OF THE "FISH HAWK"

UNITED STATES FISH COMMISSION

STATION NUMBERS

Apr. 18-98

Numbers 6028 to 6075

121
57

4) 64

RECORD OF DREDGING, TEMPERATURE AND DENSITY.

6028

Station No. 100 — 2028

Date, Nov. 15 - 1898

Time of day, 12 m ; of tide, 4th of ebb.

Locality, Off Pt. Judith Inlet

Exact position, Pt. Judith Light
4 N. 1/2 W. 2 miles mag.

Depth, 6 1/2 fathoms

Nature of bottom, Hard

Dredging instrument used, 7 fath beam trawl

Direction of drift, S. S. W. ; distance, 3/8 mile

Temperature of air, 45 therm. No., 7297

“ of surface water, “

“ at depth of fathoms, “

“ at bottom, “

Density at surface, 1.023 temp., 11.5

“ at depth of fathoms, “

“ at bottom, 1.023 “ 14.0

Number of salinometer, 7104

Barometer reading, 30.08

State of sky, Blue

Direction of wind, N. W. ; force, 5

Rain, No

Direction of surface current, S. S. W. ; force, 1/2 knot

“ of bottom “ ; force, “

Name of vessel, U. S. F. C. S. Fish Hawk

Service to which attached, Fish Commission

Name and rank of commanding officer, Lt. Comdr
R. G. Sampson, USN

Name and position of observer,
J. H. Miller
Thos. W. W.

NOTES RELATING TO STATION NO. 100

- 3 Rara Eumacia
- 8 Opuzul haka
- 1 other " ")
- 4 - 18 Spum. sulphur.
- 4 Mucedos same form
- Few Sand Follal.
- E Limnionis in tritica +
- Li Vittoriai.
- Diaphasiae. Opuzul red algae

no stars

Bottom very rocky. Shov
dredge in consequence
6029

643

RECORD OF DREDGING, TEMPERATURE AND DENSITY.

— ~~2029~~

Station No. 101

Date, Nov 15th 1898

Time of day, 1.05 pm; of tide, $\frac{1}{2}$ to $\frac{5}{8}$ ebb

Locality, Off Pt. Judith west

Exact position, Pt. Judith Light.

D. W. 1/4 S. 1.63 miles mag.

Depth, 6 $\frac{1}{2}$ fathoms

Nature of bottom, Hard rocky

Dredging instrument used, 7 foot beam trawl

Direction of drift, S. W.; distance, 1/8 mile

Temperature of air, 46° Fahr therm. No., 7397

“ of surface water, “

“ at depth of fathoms, “

“ at bottom, “

Density at surface, 1.020 temp., 11.5°

“ at depth of fathoms, “

“ at bottom, 1.023 “ 14.0°

Number of salinometer, 7104

Barometer reading, 30.16

State of sky, Blue

Direction of wind, N. W.; force, 5

Rain, No

Direction of surface current, Slack water

“ of bottom “; force, “

Name of vessel, U. S. F. C. S. Fish Hawk

Service to which attached, Fish Commission

Name and rank of commanding officer, Lt. Comdr
A. G. Davenport, USN

Name and position of observer, J. M. G.
J. H. W. S. M. G.

NOTES RELATING TO STATION NO. 101

Red Algae

Bryozoa numerous.

Scraps of Sulphur Sponge

Few crabs. Spirocha

Small cribrella. minute

Cat. fringed

Diaphasia = Hydrallmania

Kelp with shells

Dalleteria

Coraline.

1 sand dollar

Urosalpinx

E. Longicauda in l. littoria

1 small eel (fork?)

Small Mytilus shells, few

1 small cucumber

young sea robin.

Anchovy.

Bottom very rocky. Trawl taken in
immediately 6030

643

RECORD OF DREDGING,

TEMPERATURE AND DENSITY.

Station No. 102 ~~2030~~
Date, Nov. 15, 1898
Time of day, 1:18 ; of tide, 5^h 18^m 9st
Locality, Off Pt Judith Light
Exact position, Pt Judith Light
S. 76° W. 1.52 mile mag.
Depth, 11 fathoms
Nature of bottom, Very rocky
Dredging instrument used, 7 feet beam trawl
Direction of drift, S. x W. ; distance, 1/8 mile
Temperature of air, 46 therm. No., 7397
" of surface water, "
" at depth of fathoms, "
" at bottom, "
Density at surface, 1.023 temp., 12.0° =
" at depth of fathoms, "
" at bottom, 1.023 " 14.1° =
Number of salinometer, 7104
Barometer reading, 30.10
State of sky, Blue
Direction of wind, N.W. ; force, 3
Rain, no
Direction of surface current, Slack water ; force,
" of bottom " ; force,
Name of vessel, U.S.F.C.S. Fish Hawk
Service to which attached, Fish Hawk
Name and rank of commanding officer, Lt. Comdr
R. G. Sampson, USN
Name and position of observer,
J. M. Hagan
Barometer No.

NOTES RELATING TO STATION NO. 102

1 fove fish.

~~Small~~ small cummies, numerous

5 several pairs of astronfia

Few pair of sulphur sponge

Red algae

White star, several

Byzonia tenella.

Diaphasia? = *Hydrallmania*

Several *Cribrella*,

Mactra.

Acyonium, few small pieces

Amachis -

Young *Cyclonaria*.

Few sand dollars.

Broken shell of *Anomia*,

Byzonia

Spisrobia,

few small annelids

Bottom very rocky.
Trawl taken in proximity
6031

RECORD OF DREDGING, TEMPERATURE AND DENSITY.

Station No. 103 ~~2031~~
 Date, Nov. 15-1891
 Time of day, 1:35 of tide, 5th 35^m of ebb
 Locality, East of Pt. Judith Light House
 Exact position, Pt. Judith Light
 E x S 1/2 mile way
 Depth, 9 fathoms
 Nature of bottom, Very rocky
 Dredging instrument used, 7 fathom trawl
 Direction of drift, S.W. 1/2 W distance, 1/2 mile
 Temperature of air, 46° Fahr therm. No., 7297
 " of surface water, "
 " at depth of fathoms, "
 " at bottom, "
 Density at surface, 1.023 temp., 11.5°C
 " at depth of fathoms, "
 " at bottom, 1.023 " 12°C
 Number of salinometer, 7104
 Barometer reading, 30.10
 State of sky, Blue
 Direction of wind, N.W. ; force, 3
 Rain, No
 Direction of surface current, Slack water ; force,
 of bottom " ; force,
 Name of vessel, U.S.F.C. S. Fish Hawk
 Service to which attached, Fish Commission
 Name and rank of commanding officer, Lt. Comdr
 R. B. Davenport, USN

Name and position of observer,
 J. M. ...
 J. M. ...

NOTES RELATING TO STATION NO. 103

numerous common

Caps. formicata - live

1 young samp.

Red algae

Myosira

Spirites

Few *Cribrella* small

E. longicarpus in several points

Dead shells of *C. formicata* +

Cydocardina

Fragment of sulph. sponge

Arachis

Fritin with *E. longicarpus*

Trawl torn,
Very rocky bottom,
6032

643

RECORD OF DREDGING,

TEMPERATURE AND DENSITY.

Station No. 104 — 2032

Date, Nov. 15-98

Time of day, 1:50 pm ; of tide, 5th 50^m of ebb

Locality, South of Pt. Judith

Exact position, Pt. Judith Light

N x E, .75 mile mag

Depth, 6 3/4 fathoms

Nature of bottom, Very rocky

Dredging instrument used, 7 foot beam trawl

Direction of drift, S. W. x W. 1/4 N. ; distance, 1/4 mile

Temperature of air, 48° Fahr therm. No., 7397

“ of surface water, “

“ at depth of fathoms, “

“ at bottom, “

Density at surface, 1.023 temp., 11.2

“ at depth of fathoms, “

“ at bottom, 1.023 “ 11.8°

Number of salinometer, 7104

Barometer reading, 30.10

State of sky, Blue

Direction of wind, N. W. ; force, 3

Rain, No

Direction of surface current, Slack water ; force,

“ of bottom “ ; force,

Name of vessel, U.S.F.C.S. Fish Hawk

Service to which attached, Fish Commission

Name and rank of commanding officer, Lt. Comdr

R.G. Darraport, USNavy

Name and position of observer, J. M. Kelley

W. S. Darraport

Storge Toru

NOTES RELATING TO STATION NO. 104

Red Algae with spines &
Bryozoa & pennaria type

Small amphipods, few

Pelia sp.

Few small cummies

" " anabella

Lepidoprotus

Machis astyris

1 small piece sea-porc

6033

643

RECORD OF DREDGING,

TEMPERATURE AND DENSITY.

Station No. 105 — 2033
 Date, Nov. 15 - 98
 Time of day, 3.03 ; of tide, Low water
 Locality, S. W. of Pt. Judith.
 Exact position, Pt. Judith Light
E. N. E. 75 mile mag.
 Depth, 5 fathoms
 Nature of bottom, Stony
 Dredging instrument used, Dredge
 Direction of drift, N. N. W. ; distance, 3/8 mile
 Temperature of air, 49 therm. No., 709
 " of surface water, " "
 " at depth of fathoms, "
 " at bottom, "
 Density at surface, 1.023 temp., 11.0
 " at depth of fathoms, "
 " at bottom, 1.023 " 11.1
 Number of salinometer, 7104
 Barometer reading, 30.10
 State of sky, Blue, cloudy
 Direction of wind, N. W. ; force, 3
 Rain, no
 Direction of surface current, E. 1/2 S. 1/2 W. ; force, "
 " of bottom " ; force, "
 Name of vessel, U. S. Fish Hawk
 Service to which attached, Fish Comm.
 Name and rank of commanding officer, Lt Commr
R. S. Darnley, USN
 Name and position of observer, J. M. ...
off. USN

Astyris

Chiton, extra.

Urosalpinx,

Cribrella few

Algae + Bryozoa, numerous
mass of kelp. Sponges

Spiracles

Fossils. Few

Few lumines. small

Purple star

Small pieces purple star

Some kelp.

Membranipora

✓ Fortia star 1 inch

Few idotea

Coralline plentiful

Few Saccinaria

Small poroidea

Urosalpinx with hermit crab

Fortia with E. Analepes

Anachis numerous, also +
occupied by hermit crabs

terrestris (?)

3 Purple stars " 1 inch

1 or 2 Fucus (?)

6034

643

RECORD OF DREDGING,
TEMPERATURE AND DENSITY.

Station No. 106 ~~2034~~

Date, Nov. 15, 98

Time of day, 7:20^{AM}; of tide, 1/2 hr of flood

Locality, Off Sp. of Breakwater

Exact position, Pt. Judith Light

Co. W. 1.50 miles mag.

Depth, 6 1/4

Nature of bottom, Gravelly sand

Dredging instrument used, Dredge

Direction of drift, N x E 1/2 S; distance, 1/2 mile

Temperature of air, 47° therm. No. 739

" of surface water, " "

" at depth of fathoms, " "

" at bottom, " "

Density at surface, 1.023 temp., 11.00

" at depth of fathoms, " "

" at bottom, 1.023 " 10.30

Number of salinometer, 7104

Barometer reading, 30.10

State of sky, Blue light clouds

Direction of wind, N. W.; force, 3

Rain, no

Direction of surface current, E; force, 1/2 knot

" of bottom " " ; force, "

Name of vessel, U. S. F. C. S. Fish Hawk

Service to which attached, Fish Commission

Name and rank of commanding officer, Lt. Comm. R. G. DeCamp, USNA

Name and position of observer, J. H. Hellebrandt, USNA

Gravel, sand
 Red & brown algae } abundant
 Cerebrum }
 Liptoclinium albidum.
 Scap. of sulph. sponge
 Bryozoa plentiful.
 Sponges - minute.
 Pelia, several
 Nerid. sp. several
 L. tenebrosa
 Several pieces of sea fan.
 Few cistrellas.
 Small purple star 1 1/2 x 1/2 in
~~Star~~ Young cancer borealis
 Small cirrarians.
 Lepidodactylus, Todda
 Crayon - Anachis
 Nematode sp. (?)
 E. Anelipes
 Ruckel 3.
 L. tricornata

6035

RECORD OF DREDGING,
TEMPERATURE AND DENSITY.

Station No. 107 2055
 Date, Nov 15
 Time of day, 2.40 ; of tide, 40^m of flood
 Locality, West of Pt. Judith Lk.
 Exact position, Pt. Judith Light
 E 1/2 S.
 Depth, 7 fathoms
 Nature of bottom, Sandy & gravelly
 Dredging instrument used, Dredge
 Direction of drift, N.W. x W ; distance, 1/2 mile
 Temperature of air, 48° therm. No., 7297
 " of surface water, "
 " at depth of fathoms, "
 " at bottom, "
 Density at surface, 1.023 temp., 11.0°
 " at depth of fathoms, "
 " at bottom, 1.023 " 10.2°
 Number of salinometer, 7104
 Barometer reading, 30.10
 State of sky, Blue light clouds
 Direction of wind, N.W. ; force, 4
 Rain, no
 Direction of surface current, E ; force, 1/2 knot
 " of bottom " ; force, "
 Name of vessel, U.S.F.C. Fish Hawk
 Service to which attached, Fish Commission
 Name and rank of commanding officer, Lt. Comdr
 R. S. Davenport, USN
 Name and position of observer, J. H. ...
 R. S. Davenport

NOTES RELATING TO STATION NO. 107

Sandy about same as preceding
Sponges, Algae, Neriids
L. truncata, *Mastra*,
Isopods *Yungia canaliculata*
Homothoe, *Cirratulus*, *Pyrosoma*
Intia, *Yungia canaliculata*
Cap. formicata & *plana*
Sand dollar
Astynus, *L. tenebrosa* (?)

6036

643

RECORD OF DREDGING,
TEMPERATURE AND DENSITY.

Station No. 108 2036
 Date, Nov. 15-98
 Time of day, 3 pm; of tide, 1 h. of flood
 Locality, West of Pt. Judith
 Exact position, Pt. Judith Light
N 22 1/4 W 3 miles mag.
 Depth, 5 3/4
 Nature of bottom, trawl sand
 Dredging instrument used, Dredge
 Direction of drift, N. 1/2 W; distance, 1/2 mile
 Temperature of air, 47° therm. No., 7397
 " of surface water, " "
 " at depth of fathoms, "
 " at bottom, "
 Density at surface, 1.023 temp., 10.8
 " at depth of fathoms, "
 " at bottom, 1.023 " 10.1°
 Number of salinometer, 7104
 Barometer reading, 30.11
 State of sky, blue light - clear
 Direction of wind, n.w; force, 2
 Rain, no
 Direction of surface current, E; force, 1/3 knots
 " of bottom " ; force, "
 Name of vessel, U.S.F.C.S. Fish Hawk
 Service to which attached, Fish Commission
 Name and rank of commanding officer, Lt Comdr
R. G. Vanampur, USN
 Name and position of observer, J. M. ...
Permanent Navy

NOTES RELATING TO STATION NO. 108

Cliona - pieces numerous

Pellia. Crangon.

C. Formicata - plasma

1 Hydrotus

E. Bernhardus in l heros

Isopods. Hedra.

L. truncata with E. longicauda

Empty skate egg.

Coraline + Bryozoa

Red Algae

Small cancer morata

" " borealis

Nereida shell.

Citrilla astarte costana

♂ Forbesii from 1/8 to 3/4 inch

L. truncata, Nereids, sp.

Few small cancer

Numerous small amphipods

1 Small Amphipod

6037

643

RECORD OF DREDGING,
TEMPERATURE AND DENSITY.

Station No. 109 — 2037
 Date, Nov. 15, 1898
 Time of day, 3.15 pm ; of tide, 1/4 h of flood
 Locality, West of Pt. Judith
 Exact position, Pt. Judith Light
 Ex. V. 3.75 miles mag
 Depth, 5 3/4 fathoms
 Nature of bottom, sand & mud
 Dredging instrument used, 10 feet Trawl
 Direction of drift, W x S ; distance, 1/2 mile
 Temperature of air, 47° fahr therm. No., 7397
 " of surface water, "
 " at depth of fathoms, "
 " at bottom, ~~100~~ "
 Density at surface, 1.023 temp., 10.7° =
 " at depth of fathoms, "
 " at bottom, 1.023 " 10.8° =
 Number of salinometer, 7104
 Barometer reading, 30.11
 State of sky, Blue light Cloud
 Direction of wind, NW ; force, 4
 Rain, no
 Direction of surface current, E ; force, 1/4
 " of bottom " ; force,
 Name of vessel, U.S.F.C.S. Fish Hawk
 Service to which attached, Fish Commission
 Name and rank of commanding officer, Lt. Commr
 R. G. Wainwright USN
 Name and position of observer, J. H. ...
 ... mag

NOTES RELATING TO STATION NO. 109

- 2 Spinnel hake
- 2 smaller flounder
- 1 1/2 *Mora moro*
- 3 *L. heros*, *lin*
- 1 *Bombardus*
- Ammonite*, *Lepidodermis* several
- Algae, Bryozoa, *Coraline*
- Small *curculio*, *Spriobis*
- Few *Crangon*
- Small pieces of sea rock
- Leptoclinium*
- L. thubroni* ⁴⁻⁵ ^{inverte} abundant on kelp
- 1 *Cancer borealis* young
- 1 *Penaeus* *unshini*
- Cribrella*, *Anachis* shells
- 5 *Fucus* stems 1 to 2 m
- W. purple stem*
- T. lina*, *Eurocalpinis* with 5 long
- Pelia*, *Mastra* young ^{1/2}
- Fritia*, *astarte* *castanea*
- 2 *Amelopus*
- Arctopus*

RECORD OF DREDGING,
TEMPERATURE AND DENSITY.

Very rocky bottom, Trawl fouled
& had to be hauled 6038

Station No. 110 — ~~2058~~

Date, Nov 15 - 98

Time of day, 3.30 ; of tide, 1/2 hr of flood

Locality, West of Pt. Jewett.

Exact position, Pt. Jewett Light
E. 3/4 S. 4.50 miles mag

Depth, 5 fathoms

Nature of bottom, Rocky

Dredging instrument used, 10 feet beam trawl

Direction of drift, S. W. 1/2 W ; distance, 3/8 mile

Temperature of air, 47 therm. No., 7397

“ of surface water, “

“ at depth of fathoms, “

“ at bottom, “

Density at surface, 1.023 temp., 11.0°

“ at depth of fathoms, “

“ at bottom, 1.020 “ 10.9°

Number of salinometer, 7104

Barometer reading, 30.11

State of sky, Blue, light-clouds

Direction of wind, N. W ; force, 4

Rain, No

Direction of surface current, E ; force, 1/4 knots

“ of bottom “ ; force, “

Name of vessel, U. S. Fish Hawk

Service to which attached, Fish Commission

Name and rank of commanding officer, Dr. Connor
R. G. Danziger, Usual

Name and position of observer, J. H. Kelligan
Pharmacist Usual

NOTES RELATING TO STATION NO. 110

Kelp with *S. tenebrosa* (?)

Bryozoa. *Coralline*

Few small ~~clumps~~ of multibranching eggs

Red & brown Algae

Few small *Ceramium*

5 Purple stars. Star 1 in to 2 1/4

Rock ed. 3 (?)

Spirifer,

1 *Ferussacii* star. About mid

6039

RECORD OF DREDGING, TEMPERATURE AND DENSITY.

Station No. 111 - 2039
 Date, Nov. 16-98
 Time of day, 8.55 am; of tide, High water
 Locality, Cast. Nassau Point & Bay
 Exact position, Castle Hill Light,
N. N. E. - 7/10 mile mag
 Depth, 10 to 20 fathoms
 Nature of bottom, Mud
 Dredging instrument used, 7 fur beam trawl
 Direction of drift, D. 3/4 N.; distance, 3/8 of mile
 Temperature of air, 51° Fahr. therm. No., 7397
 " of surface water, "
 " at depth of fathoms, "
 " at bottom, "
 Density at surface, 1.0224 temp., 17.2° C
 " at depth of fathoms, "
 " at bottom, 1.023 " 17° C
 Number of salinometer, 7104
 Barometer reading, 30.76
 State of sky, Blue - haze
 Direction of wind, N. W.; force, Light
 Rain, no
 Direction of surface current, 0; force, 0
 " of bottom " ; force, "
 Name of vessel, U. S. F. C. S. Fish Hawk
 Service to which attached, Fish Commission
 Name and rank of commanding officer, Dr. Comer
R. S. Dawenport. USNavy
 Name and position of observer,
J. M. Sullivan
Pharmacist. USNavy

NOTES RELATING TO STATION NO. 111

1 Amber skate

Several small flounder

from window frame

sev. *Raja erinacea*

1 - 18 spine sculpin

1 good sized cunner

1 young sea robin

1 spinnaker hake

Cardiasson simulatum

Pipe fish

Pellia mutica, *Tritia*

E. longicauda in tubia & *l. truncata*

Few Crangon

10 Maroon stars 2 to 4 inches

1 *Pandulus annulicornis*

RECORD OF DREDGING, TEMPERATURE AND DENSITY.

6040

Station No. 112 — ~~2040~~

Date, Nov. 16th 1898

Time of day, 9.35 am; of tide, 3/4 h of ebb.

Locality, Harrafaurell Bays

Exact position, Cattle Hill Light
S. E. 3/8 E. .12 of mile mag.

Depth, 26 Fathoms

Nature of bottom, Hard smooth bottom

Dredging instrument used, 7 feet beam trawl

Direction of drift, S. W.; distance, 3/8 of mile

Temperature of air, 48° Fahr therm. No., 7397

“ of surface water, “

“ at depth of fathoms, “

“ at bottom, “

Density at surface, 1.022 + temp., 11.2°

“ at depth of fathoms, “

“ at bottom, 1.023 + “ 11.0°

Number of salinometer, 7104

Barometer reading, 30.27

State of sky, Blue haze

Direction of wind, N. W.; force, Light.

Rain, no

Direction of surface current, 0; force, 0

“ of bottom “; force, “

Name of vessel, US F.C. Fish Hawk

Service to which attached, Fish Commission

Name and rank of commanding officer, Lt. Comdr
R. G. Davenport, usnavy

Name and position of observer,
J. M. Milligan
Pharmacist US Navy

Crayon numerous
Squid like several
Raia Smiacea. 1 Conger eel
~~Protia flouida~~

1 Muddy James, Aspida
Pandalus numerous.
Hyppolyte. Paucipus
1 Currier Red Algae.

Diaphania? Spongia
Laminaria Bryozoa.
Penaria hydroid, Ceratium.
Old skate egg with hydroid
1 Brittle Star, Lepidometus

Cancer torulosus, Cynthia. Cornual?
Hydroids, small unibranch ^{currier}
Modiola mod. shell, Cribrella
Spongia. Heteromysis, formosa.
Balanus. Bee pork

. Purple star small, 1 1/2 to 4 in
Tadpole Amphipod

Caprellid young prubly
Pipe fish, 1 small scute ten ten
1 mottled rock eel (?)

Aureomone sp. netridian
E. longicauda in tritica

6041

643

RECORD OF DREDGING,

TEMPERATURE AND DENSITY.

Station No. 113 — 2041
 Date, Nov 16-98
 Time of day, 10:10 am; of tide, 1 1/2 h. of eb.
 Locality, Narragansett Bay.
 Exact position, Red Island Light
N x E. 1/4 E. 1/2 E. 1/4 of mile mag.
 Depth, 23 fathoms
 Nature of bottom, Smooth, hard
 Dredging instrument used, 7 foot beam trawl
 Direction of drift, S. D. E. 1/4 E.; distance, 3/8 of mile
 Temperature of air, 58° Fahr therm. No., 7397
 “ of surface water, “
 “ at depth of fathoms, “
 “ at bottom, “
 Density at surface, 1.022 temp., 11.
 “ at depth of fathoms, “
 “ at bottom, 1.023 “ 12.2
 Number of salinometer, 7104
 Barometer reading, 30.28
 State of sky, Blue hazy
 Direction of wind, N. W.; force, Light
 Rain, No
 Direction of surface current, S. W.; force, 1 knot
 “ of bottom “; force,
 Name of vessel, U. S. F. C. S. Fish Hawk
 Service to which attached, Fish Commission
 Name and rank of commanding officer, Lt. Comdr
R. S. Davenport, USNavy
 Name and position of observer,

J. M. McIlhenny
Pharmacist, USNavy

NOTES RELATING TO STATION NO. 113

3 *Raja tomacca*

8 spume hake

1 young siler hake? 1 Red Algae

1 cancer tomalis. large

1 " " *trivittatus* ^{young} shell.

Panopeus ^{plagiatus} *Pandanus* with eggs

Amphipoda & *Hyphalid* plentiful

1 young cancer tomalis

2 small *Arctia*. *Diaphasia* plentiful

Aspidobis. *Chondrus* in fruit.

1 large *Anomia tenella* in bottle

1 small *buccinum*. *Bryozoa*

Cynthia carnea. *Anomia aculeata*

Small *membranipora*, *Metridium*

Cibicella. *Crepidula plana*.

Obelia. Remnants of *Bugula*

Shells of *Cylocardia*

Modiola corrugata? 1 1/2 in fresh

1 young sea urchin! Bottle stain

1 small green *urchin*

Dead shell of *pecten* pen.

Botryllus. *Mod. Modiola*.

✓ Purple stars 1/4 to 2 in.

^{but} *Lepidostichus* ^{small} *Mod. membranipora*

Anachis. Few amphipods

✓ *Longicornis* on tube

✓ *Adonia*. *Littorina alba*,

1 *Conus* shell small

RECORD OF DREDGING, TEMPERATURE AND DENSITY.

6042

Station No. 114 - 2052
 Date, Nov. 16 - 98
 Time of day, 11. Am.; of tide, 4th. of str.
 Locality, Narragansett Bay
 Exact position, Goold Island Light
N. E. Pt., 1.28 mile mag.
 Depth, 9 3/4.
 Nature of bottom, Muddy & shelly
 Dredging instrument used, 7 feet beam trawl
 Direction of drift, P. W. 3/8 S.; distance, 1/16 of mile
 Temperature of air, 54° Fahren therm. No., 7397
 " of surface water, "
 " at depth of fathoms, "
 " at bottom, "
 Density at surface, 1.021 - t temp., 10.8°
 " at depth of fathoms, "
 " at bottom, 1.023 " 11.0°
 Number of salinometer, 7104
 Barometer reading, 30.28
 State of sky, Blue. Lt. clouds.
 Direction of wind, N. W.; force, very light.
 Rain, no
 Direction of surface current, P. W.; force, 1/2 knot
 " of bottom " force,
 Name of vessel, U. S. F. C. S. Fish Hawk
 Service to which attached, Fish Commission
 Name and rank of commanding officer, Act. Comdr
R. S. Davenport, USN
 Name and position of observer, J. M. McLean
Pharmacist USN

NOTES RELATING TO STATION NO. 114

3 *Rana esmaera*. 1 small.

2 *Cancer irroratus*.

1 - 4 sp. *floum*.

3 *musculum* *larum*

Shells of *Mya*

Lucina pilosa.

1 large *Cyclops* larva

1 " *hake*.

~~numerous~~ *Astarte* yellow (?) ~~color~~

Pandanus. *Astarte undatum*.

1 young squid *hake*

1 " *gibber*

Cyprina shells - *tritia*

Littorina. *Chlorophora*

Goldia. *Cyclocardia*. *Callista* *Comus*

E. in *longicaulus* in *tritia* and

L. truncata. *L. littorina*.

+ 100 *Forbesii* *Stas.*

1 large pipe fish - *Trophonina*

Cerithium *primordatum*

Liri *Goldia*, *tritia*, *Cyclocardia*.

L. truncata. *Nassa* *vires* (?)

Fus *Anelids*. 1 young *Cancer* *irroratus*

Craugon few. *Asterodes*

Fus *Bolea*. ~~as~~ ~~7~~

6043

RECORD OF DREDGING,

TEMPERATURE AND DENSITY.

Station No. 115 — 2043
 Date, Nov. 16 - '95
 Time of day, 11.55 am ; of tide, 2/3 h. of ebb.
 Locality, Narragansett Bay
 Exact position, Light n. fr. Canonial - Field
 N. N. W. 1/8 N. 2.50 miles mag.
 Depth, 15 fathoms
 Nature of bottom, muddy, shelly
 Dredging instrument used, 7 foot beam trawl
 Direction of drift, S. W. 1/4 D. ; distance, .3 of mile
 Temperature of air, 58° Fahr therm. No., 7397
 " of surface water, "
 " at depth of fathoms, "
 " at bottom, "
 Density at surface, 1.021 temp., 10.1° C
 " at depth of fathoms, "
 " at bottom, 1.022 + .. 10.5° C
 Number of salinometer, 7104
 Barometer reading, 30.26
 State of sky, blue light clouds
 Direction of wind, Calm ; force, light
 Rain, no
 Direction of surface current, N. W. ; force, 1/2 knot
 " of bottom " ; force,
 Name of vessel, U. S. Fish Hawk
 Service to which attached, Fish Commission
 Name and rank of commanding officer, Lt. Comdr
 Name and position of observer, R. G. Dawson
 J. H. Mason

NOTES RELATING TO STATION NO. 115

2 *Rana ornata*

2 *Agonostomus* lake

1 *Conger* ed.

1 *Holothurion*

1 *Squilla*.

3 *Comes borealis*

3 " *invarialis*

for burk. Forbes stars.

Yoldia of di shells. 1 *perlin* tin.

Mya. *Clidiasphaera*. Yellow *astaria*

Venus. *Tritia*, *Callista*

E. longicauda in *Tritia* + *E. littorea*

L. tricerata, *Luccina filosa*

Modiola corugata (?) *Cap. formicata*

Fus. aculeata 1 *gemma* *rostrata*

Nucula. *Craspedon* *plumbea*

Peryploma, *Loxell*, (?)

Cardium *pinnulatum* shells

Yoldia alive, *retrorsa* with *E.*

longicauda, *Fus. contracta*, sp.

Nassa *vires* (?)

Trawl fouled the bottom. Had
to take it up 6044

643

RECORD OF DREDGING,
TEMPERATURE AND DENSITY.

Station No. 116 — 2044
 Date, Nov. 16 - 1898
 Time of day, 11.55 Am; of tide, 3 h. of ebb.
 Locality, Narragansett Bay.
 Exact position, Sand point light
 N. N. E. 3/4 E. 1.37 miles mag.
 Depth, 18 fathoms
 Nature of bottom, Clayey
 Dredging instrument used, 7 ft beam Trawl
 Direction of drift, S. N. 3/4 W. distance, .5 of mile
 Temperature of air, 58° Fahr therm. No., 7397
 " of surface water, "
 " at depth of fathoms, "
 " at bottom, "
 Density at surface, 1.020 temp., 10.1°
 " at depth of fathoms, "
 " at bottom, 1.022 " 11.0°
 Number of salinometer, 7104
 Barometer reading, 30.25
 State of sky, Blue light clouds
 Direction of wind, Calm; force.
 Rain, no
 Direction of surface current, N. W. ; force, 1/2 knot
 " of bottom " ; force,
 Name of vessel, U.S.F.C. Fish Hawk
 Service to which attached, Fish Comm
 Name and rank of commanding officer, Lt. Comdr
 R. G. Davenport, USN
 Name and position of observer,
 W. M. Miller
 Plummer

1 *Cancer irroratus*

2 " *borealis*

Number of *parvidentus*

1 *Latrunculus*, *Pelica*

1 *scytopus* large.

Muss shell. *Callista*, *Astarte*

Few *Anelids*. *Tritia*

Oyster shells. *Capridula* shells

Brittle star. Small *porch* tube

Dev. netroidium

2 young *Squilla* terna

Several large *Muster* of *Chalonia*

Lepidostichus. *Crangon*

Palaemon? *Bygonia*

Anomoea aculeata.

2 tubes of *P. oculifera* (?)

Cynthia carmenum (?)

a little *Hydrois*

Few *Anomoea* shells. *Spirorbis*

RECORD OF DREDGING, TEMPERATURE AND DENSITY.

6045

Station No. 117 - 2045
 Date, Nov. 16 - 1898.
 Time of day, 1.14 P.M.; of tide, 4 1/2 h of eb
 Locality, Narragansett Bay
 Exact position, Sand Point Light.
N x W. 3/8 W. .68 mile way
 Depth, 13 1/2 fathoms.
 Nature of bottom, Soft, Paris Hard.
 Dredging instrument used, 7 feet beam trawl
 Direction of drift, 4 7/8 W.; distance, .37 of mile
 Temperature of air, 50° Fahr therm. No., 7397
 " of surface water, " "
 " at depth of " fathoms, "
 " at bottom, "
 Density at surface, 1.020 temp., 10.2° C
 " at depth of " fathoms, "
 " at bottom, 1.022 + " 11.0° =
 Number of salinometer, 7104
 Barometer reading, 30 - 21
 State of sky, Blue, light clouds
 Direction of wind, N. E; force, ✓
 Rain, No.
 Direction of surface current, N. S. W.; force, 1/3 knot
 " of bottom " " ; force,
 Name of vessel, U.S.C.P. Fish Hawk
 Service to which attached, Fish Commission
 Name and rank of commanding officer, Dr. Amos
R. G. Davenport, USN
 Name and position of observer, J. W. McPherson
Pharmacist, USN

NOTES RELATING TO STATION NO. 117

9 Rain tomacca, few Squid here

1 Blue crab,

1 4 spot flounder small

3 mudow pane "

Cluster of Chalmia, Sea-weed.

Mordida Corrugata.

Crangon. Parastacus

L. tricerata - Yoldia

Auremona, methidium

L. longicauda Tutia

Botryllus Clidocypus,

Nucula. Few sandalms.

Callista Corvula.

Shells of Clidocypus, nuculina

Cap. fornicata, few anelids.

125 Forbesii Mars.

E. Longicauda in Tutia & L. littoria

Rock cells?

Two Yoldia, Tutia-callista.

Lepidomachus.

6046

RECORD OF DREDGING,
TEMPERATURE AND DENSITY.

Station No. 118 - 2040

Date, Nov. 16 - 98

Time of day, 1.40 pm; of tide, 4 3/4 h of ebb.

Locality, Massachusetts Bay;

Exact position, Card Point Light
S. 44 x N. 1/2 W. .5 of mile mag.

Depth, 15 fathoms

Nature of bottom, muddy - shelly -

Dredging instrument used, 7 feet beam trawl

Direction of drift, S. x W. 3/4 W. distance, .35 of mile

Temperature of air, 50° Fahr therm. No., 7897

“ of surface water, “

“ at depth of fathoms, “

“ at bottom, “

Density at surface, 1.020 temp., 9.8° C

“ at depth of fathoms, “

“ at bottom, 1.021 + “ 11.3° C

Number of salinometer, 7104

Barometer reading, 30.20

State of sky, Blue - light clouds

Direction of wind, P. P. E; force, 2

Rain, No

Direction of surface current, P. S. W; force, 1/2 knot

“ of bottom “; force, “

Name of vessel, U. S. F. C. S. Fish Hawk

Service to which attached, Fish Commission

Name and rank of commanding officer, Lt. Comdr.
A. G. Danforth, USN

Name and position of observer, J. H. Killian
Pharmacist, USN

E. Pollicaris in Pycnotypus shell

G. plana

Cancer irroratus

numerous ~~Astarte~~ ~~costata~~ undatum

Small white holothurians, several

E. longicauda nitida + l. tricolorata.

Zophoria ^{identical} Crangon

* Pycnotypus lva, Tritia

Fulpus ^{shell} Callista - Anomia

L. tricolorata: Clidophora

Shells of cyclocardina, Anomia shells

Panopeus. Mytilus shells

Shells of mya + anomia. Yoldia

Lva callista, few anelids

Small cluster of chalcids

Cardium pinnulatum, C. formosa

Small pecten ten. Common pecten shells

L. littoria shells

75 Forberii stars

1 large fish

1 young squinid larva

Finer material not fully looked over

6047

643

RECORD OF DREDGING,
TEMPERATURE AND DENSITY.

Station No. 119 - 2047
 Date, Nov. 16 - 1898
 Time of day, 1.55 ; of tide, Sh 7/8
 Locality, Narragansett Bay
 Exact position, Sand Point Light.
S. W. 1.75 miles mag
 Depth, 11 fathoms
 Nature of bottom, Muddy Shelly
 Dredging instrument used, 7 foot beam trawl
 Direction of drift, S. by W. 3/4 W. ; distance, .28 of mile
 Temperature of air, 50° Fahr. therm. No., 7397
 " of surface water, " "
 " at depth of fathoms, " "
 " at bottom, " "
 Density at surface, 1.020 temp., 9.8° C
 " at depth of fathoms, " "
 " at bottom, 1.023 " 10.7° C
 Number of salinometer, 7104
 Barometer reading, 30.20
 State of sky, Blue, light clouds
 Direction of wind, P. S. E. ; force, 2
 Rain, no
 Direction of surface current, S. A. W. ; force, 1/2 knot
 " of bottom " " ; force, " "
 Name of vessel, U. S. F. C. S. Fish Hawk
 Service to which attached, Fish Commission
 Name and rank of commanding officer, Dr. Comdr.
R. G. Davenport, USN
 Name and position of observer, J. M. Illigan
Plummer

NOTES RELATING TO STATION NO. 119

E. Longicauda in *Trichostema* shell
Small *Raia* *Erasmia*.

Two minute flowers

1 *Minion* *Lucia*

1 *Cancer* *innotatus*

About 100 *Trichostema* *Blais* 156 ^{small} _{small}

Shells of *cyprina*, *Mya*, common *Pecten*

Venus, *Anomia*, *Tardus*,

Mytilus, *Mytilus*, *Mulinia*

Mytilus *lata*.

Trichostema 1 piece.

Crangon, *Stomatopoda*

Shells of *Bochodroma* *Leannum*

RECORD OF DREDGING, TEMPERATURE AND DENSITY.

6058

Station No. 120 — ~~2058~~

Date, Nov. 16-1898

Time of day, 2.30 pm; of tide, 5/8 h ebb

Locality, Narragansett Bay

Exact position, Sand Point Light
U. S. H. 1.6 miles away

Depth, 3 3/4 fathoms.

Nature of bottom, Soft mud.

Dredging instrument used, 7 foot beam trawl

Direction of drift, U. S. 3/8 E; distance, 25 miles

Temperature of air, 49° Fahr therm. No., 7397

“ of surface water, “

“ at depth of fathoms, “

“ at bottom, “

Density at surface, 1.020 temp., 9.8° C

“ at depth of fathoms, “

“ at bottom, 1.021 “ 10.2° C

Number of salinometer, 7105

Barometer reading, 30.20

State of sky, Blue cloudy

Direction of wind, N. N. E; force, 2

Rain, no

Direction of surface current, 0 x tr; force, 1/3 knots

“ of bottom “; force, “

Name of vessel, U. S. F. S. Fish Hawk

Service to which attached, Fish Commission

Name and rank of commanding officer, Dr. Comdr
R. V. Davenport, USN

Name and position of observer,
J. M. [unclear]
[unclear]

NOTES RELATING TO STATION NO. 120

25 - Window pane

20 Winter flounder

1 Cowen *truncatus*

Small *Rana* *truncata* ser. small

Pipe fish

Young of *haki*. *Peripala*.

Membranipora. Common pecten

veins, *cyrtus*, *cyclonaria*.

Liri scale egg. *C. pinnata*.

Petricola *anomer*. *Craugon*

Callista *anura*

3 *Forbesii* *Stans*

Rock abs(?) *Arachis*.

Tritia. *Chidrophus*

Allyanassa, *Capriolata* *convexa*

Urosalpinx shell.

L. truncata *E. anelipes*.

L. littorea with *E. longicauda*

6049

RECORD OF DREDGING,
TEMPERATURE AND DENSITY.

Station No. 121 - 2049
 Date, Nov. 16. 1898
 Time of day, 2.50 ; of tide, Low water,
 Locality, Narragansett Bay.
 Exact position, Sand Point Light
 S. x W. 7/8 N. 2.15 miles away
 Depth, 4 fathoms
 Nature of bottom, Muddy,
 Dredging instrument used, 7 foot beam trawl
 Direction of drift, S. 1/8 W. ; distance, 1.3 miles
 Temperature of air, 49° Fahr therm. No., 7397
 " of surface water, "
 " at depth of fathoms, "
 " at bottom, "
 Density at surface, 1.020 temp., 10.2° C
 " at depth of fathoms, "
 " at bottom, 1.021 " 11° F
 Number of salinometer, 7104
 Barometer reading, 30.20
 State of sky, Blue, light clouds
 Direction of wind, S. S. E ; force, 2
 Rain, no
 Direction of surface current, S. S. W ; force, 1/3 knot
 " of bottom " ; force,
 Name of vessel, U. S. F. C. S. Fish Hawk
 Service to which attached, Fish Commission
 Name and rank of commanding officer, Lt. Comdr
 R. U. Deavenport
 Name and position of observer, J. H. Higgins
 Pharmacist - usno

NOTES RELATING TO STATION NO. 121

5 *Palaemonetes*. & 1 small
 8 *Trinoides* *pacifica* *florida*
 of *Trinoides* "

about 50 small tubes diam. 1/2 to 1/4 in.
 Shells of *Lucania filosa*.

Sulphur sponge.

Escharella. *Peripoda*.

Membranipora.

Hydractinia

Chidophora shells. *Urtica* shells.

Acorn shells. *Cynthia partita*.

C. formicata shells. *Littoria*.

Astarte undatum *Scapharca*

E. longicauda. Common *pelecum*.

Modiolus corrugata. *Littoria*.

Balanus. *Urtica caudata* *litt.*

Yellow *astarte*. *Littoria*

Callista. *C. ^{shells} punctulata*

Trophon. *Crangon*

Squilla fish. *Tru amphipods*

A few large shells of *Pisidium*

Continued p. 1

Trawl taken up in 208 fath

Temp bottom 58°

643 Density 1031 6050

RECORD OF DREDGING,
Trawl badly torn and
TEMPERATURE AND DENSITY.
little material

Station No. 172 - 2050 Obtained.

Date, Jan. 13. 1899

Time of day, 10, 45 - am ; of tide.

Locality, Off entrance San Juan Harbor
Old fort bearing 0.75 N. 1 1/2 miles

Exact position, Battery on E. Boqueron S. 82 E / 1/2
distance 3 1/2 miles. mag.

Depth, 99 fathoms

Nature of bottom, Sand mud

Dredging instrument used, 1/2 ft. beam trawl

Direction of drift, E. N. E ; distance, 1 mile

Temperature of air, 82° therm. No., 7397

" of surface water, 77°

" at depth of 46 fathoms, 79°

" at bottom, 70°

Density at surface, 1023 temp., 1022

" at depth of fathoms, 1024 "

" at bottom, 1026 "

Number of salinometer, 7164

Barometer reading, 30.03

State of sky, Blue light clouds

Direction of wind, E. S. E ; force, 1/2

Rain, No

Direction of surface current, ; force,

light swell from eastward

" of bottom " ; force,

Name of vessel, U. S. F. C. S. Fish Hawk

Service to which attached, Fish Commission

Name and rank of commanding officer, Lt. Comdr

R. G. Davenport, US Navy

Name and position of observer, J. S. Milligan

Pharmacist, US Navy

NOTES RELATING TO STATION NO. 122

Trawl badly torn, and little
obtained.

A few specimens brittle stars,
1 fish. *Peropoma*,
1 piece of coral

Dredge hauled in 30 minutes
101 fathom temp log,
Density 1.024 - 7164 sal,
643 6051

RECORD OF DREDGING,

TEMPERATURE AND DENSITY.

Station No. 120 - 2057
Date, Jan. 13 1899
Time of day, 1.20 ; of tide,
Locality, Outside Entrance San Juan Harbor
~~Station 'Cabezon' 5 1/2 miles~~
Exact position, Point of El Biquero, E. S. E
3 1/2 miles Position of Tangle taken up. Cabral
sta for P. N. S. 1 1/2 miles E. Biquero O. E. 1/2 E.
Depth, 45 fathoms, 2 3/4 miles
Nature of bottom, Sandy mud.
Dredging instrument used, Tangle
Direction of drift, E 3/4 N.; distance, 3/4 mile
Temperature of air, 84° Fahr therm. No., 7397
" of surface water, " "
" at depth of fathoms, " "
" at bottom, " 77
Density at surface, 1023 temp., 24°
" at depth of fathoms, " "
" at bottom, 1027 " 77° Fahr
Number of salinometer, 7164
Barometer reading, 30.02
State of sky, Blue & cloudy
Direction of wind, E. N. E. ; force, 2
Rain, no
Direction of surface current, ; force,
" of bottom " ; force,
Name of vessel, U. S. F. C. S. Fish Hawk
Service to which attached, Fish Commission
Name and rank of commanding officer, St. Comdr
R. G. Davenport USN
Name and position of observer,
J. D. Milligan
Pharmacian Navy

NOTES RELATING TO STATION NO. 123

Tangle used.

sounded in 187 fathoms.

Dredge taken up in 355 feet.

643

RECORD OF DREDGING,

TEMPERATURE AND DENSITY.

Station No. ³ 124 - ~~2057~~

Date, Jan 13th 1899

Time of day, 3.15 : of tide,

Locality, Outside Ent. San Juan Harbor

Exact position, Old Fort O. N. $\frac{3}{4}$ N. 5 $\frac{1}{2}$ miles
 Fort on El Beyumpo N $\frac{1}{2}$ W $\frac{1}{2}$ N. 3 miles

Depth, 300 fathoms

Nature of bottom, Sandy mud.

Dredging instrument used, ~~Small~~ Dredge

Direction of drift, N $\frac{1}{2}$ E. $\frac{3}{4}$ E, distance, 1 $\frac{1}{2}$ miles

Temperature of air, 79° Fahr therm. No., 7397

" of surface water, " 58.5

" at depth of fathoms, "

" at bottom, "

Density at surface, 1.023 temp., 26.5°C

" at depth of fathoms, "

" at bottom, 1.028 " 28.0°C

Number of salinometer, 7164

Barometer reading, 29.98

State of sky, Blue, light clouds

Direction of wind, ENE. ; force, 2

Rain, no

Direction of surface current, ; force,

" of bottom " ; force,

Name of vessel, U.S.F.C. S. Fish Hawk

Service to which attached, Fish Com.

Name and rank of commanding officer, Lt. Comdr
 R. G. Saweyers, USN

Name and position of observer, J. M. Williams
 Pharmacist, USN

NOTES RELATING TO STATION NO. _____

6053

643

RECORD OF DREDGING,

TEMPERATURE AND DENSITY.

4

Station No. 125 — 2053
 Date, Jan. 16th 1899
 Time of day, 10.30 ; of tide, ebb
 Locality, San Juan Harbor
 Exact position, N. W. angle of Muro's castle
1/4 mile
 Depth, 4 fathoms to 7 1/2 fathoms
 Nature of bottom, Sand (fine)
 Dredging instrument used, Dredge
 Direction of drift, N x W. ; distance, 1/4 mile
 Temperature of air, 77° Fahr. therm. No., 7397
~~" of surface water, " "
 " at depth of fathoms, "
 " at bottom, "~~
 Density at surface, 1.023 temp., 26.5
~~" at depth of fathoms, " "
 " at bottom, 1.0242 " 26.0~~
 Number of salinometer, 7164
 Barometer reading, 30.08
 State of sky, Blue, light clouds.
 Direction of wind, East ; force, 2
 Rain, No
 Direction of surface current, N. ; force, 1/4 kts
 " of bottom " ; force,
 Name of vessel, U.S.F.C.S. Fish Hawk
 Service to which attached, Fish Com.
 Name and rank of commanding officer, Lt. Comdr
R. G. Sawyer, U.S. Navy
 Name and position of observer, J. Milligan
Pharmacist, U.S. Navy

NOTES RELATING TO STATION NO.

6054

643

RECORD OF DREDGING,
TEMPERATURE AND DENSITY.

5

Station No. 176 — ~~2054~~

Date, Jan. 16th 1899

Time of day, 11⁰⁰ Am.; of tide, Ebb

Locality, Pan Juan Harbor

Exact position, N. W. angle of Puerto
Caste $3/8$ mile

Depth, $4\frac{1}{2}$ fath to $5\frac{1}{2}$

Nature of bottom, Sand & mud.

Dredging instrument used, Tangle & dredge

Direction of drift, N.; distance, $1/4$ mile

Temperature of air, 77° Fahr. therm. No., 7397

“ of surface water, “

“ at depth of fathoms, “

“ at bottom, “

Density at surface, 1.023 temp., 25° C

“ at depth of fathoms, “

“ at bottom, 1.025 “ 25.2° C

Number of salinometer, 7164

Barometer reading, 30.07

State of sky, Overcast.

Direction of wind, East. (Squally) E.; force, 5.

Rain, No

Direction of surface current, N.; force, $1/4$ knot

“ of bottom “; force,

Name of vessel, U. S. F. C. S. Fish Hawk

Service to which attached, Fish Com.

Name and rank of commanding officer, Lt. Comdr.

R. G. Darcupur. Usman

Name and position of observer,

Amillyan
Pharmacist

NOTES RELATING TO STATION NO.

53 fathoms
Taken up in 130 fath. 6055
Temp. 66° Fahr = 20°C
Density, 1.0245

643

RECORD OF DREDGING
Surface sea, 1.023 + 26°C temp.
TEMPERATURE AND DENSITY.

Station No. ~~127~~ 2055
Date, Jan. 18th 1899
Time of day, 11.15 am; of tide,
Locality, Off Aquadilla, P. R.
Exact position, N. E. point of Descobeeo Isld
N x S. 1/4 E. 18 1/4 miles. Pt de Bragueu St. Home
N. E. x N. 3/4 N. 3 1/4 miles
Depth, 137 fathoms.
Nature of bottom, Rocky, Sand mud & shell
Dredging instrument used, Dredge & trawl.
Direction of drift, N. E. x E.; distance, 1/2 mile
Temperature of air, 82° Fahr. therm. No., 7397
" of surface water, "
" at depth of fathoms, "
" at bottom, "
Density at surface, 1.023 temp., 26.2°C
" at depth of fathoms, "
" at bottom, 1.0248 " 24°C
Number of salinometer, 7164
Barometer reading, 29.98
State of sky, Blue, light cloud.
Direction of wind, E; force, 3
Rain, no.
Direction of surface current, 0; force, 0
" of bottom " ; force,
Name of vessel, U. S. L. C. S. Fish Hawk
Service to which attached, Fish Com.
Name and rank of commanding officer, Lt. Comdr
R. G. Dawsonport, U.S. Navy
Name and position of observer,
J. M. Gilligan
Pharmacist, U.S. Navy

NOTES RELATING TO STATION NO.

Taken up in 237 fath,
Bottom temp 60° Fahr. 24° C
" Density - 1.0242
Surface " 1.023 6056
643 " temp. 76° C

RECORD OF DREDGING,
TEMPERATURE AND DENSITY.

Station No. 178 — 256
Date, Jan. 18, 1899
Time of day, 1.20 ; of tide,
Locality, Off Aguadilla, P.R.
Exact position, San Carlos church in Aguadilla 0.5 x E 1/4 E
3 miles. Pt. de Bouguen Light House N. E. 1/2 E.
3 1/4 miles.
Depth, 248 fath.
Nature of bottom, Sand, mud & shells.
Dredging instrument used, Dredge + Tangles.
Direction of drift, N x E 1/2 E ; distance, 1/2 miles.
Temperature of air, 87° Fahr therm. No., 7397
" of surface water, "
" at depth of fathoms, "
" at bottom, "
Density at surface, 1.023.2 temp., 76.5° C
" at depth of fathoms, "
" at bottom, 1.025 " 24.5° C
Number of salinometer, 7164
Barometer reading, 29.93
State of sky, Blue light clouds.
Direction of wind, E, ; force, 3
Rain, No
Direction of surface current, 0 ; force, 0
" of bottom " ; force,
Name of vessel, U. S. F. C., Fish Hawk
Service to which attached, Fish Com.
Name and rank of commanding officer, Lt. Comdr
R. G. Sawyers, USN
Name and position of observer,
J. M. McLean
Pharmacist

NOTES RELATING TO STATION NO. 128



NOTES RELATING TO STATION NO. _____

RECORD OF DREDGING,

TEMPERATURE AND DENSITY.

Taken up in *7 fathoms*.
6058 *30 minutes*

Station No. *130* *Chart no. 372* *2058*
 Date, *Jan. 19 1899*
 Time of day, *3 pm.*; of tide,
 Locality, *Mayaguez Harbor.*
 Exact position, *Cushin House Exd. 1/2 miles*
Pr. del Algarrobo 20 x W. 1/8 miles
 Depth, *7 1/4 fath.*
 Nature of bottom, *Muddy*
 Dredging instrument used, *9 fur beam trawl.*
 Direction of drift, *S 1/4 W.*; distance, *1/2 mile*
 Temperature of air, *79° fah* therm. No., *1013*
 " of surface water, " *1297*
 " at depth of fathoms, "
 " at bottom, "
 Density at surface, *1.023* temp., *26° C*
 " at depth of fathoms, "
 " at bottom, *1.025* " *26° C*
 Number of salinometer, *7164*
 Barometer reading, *29.89*
 State of sky, *Blue - light clouds.*
 Direction of wind, *S. E.*; force, *3*
 Rain, *no -*
 Direction of surface current, *0*; force, *0*
 " of bottom " ; force,
 Name of vessel, *U. S. F. C. S. Fish Hawk*
 Service to which attached, *Fish Commission*
 Name and rank of commanding officer, *Lt. Comdr*
R. G. Saverport, US Navy
 Name and position of observer,

J. O. Milligan
Commander, US Navy

NOTES RELATING TO STATION NO.

RECORD OF DREDGING,

TEMPERATURE AND DENSITY

6059

Station No. ²⁰⁵⁹ 131 - Chart no. - 372

Date, Jan. 19, 1899.

Time of day, 4 pm. ; of tide,

Locality, Mayaguez Harbor -

Exact position, Custom House E. 1/4 D. 2 miles
Pt. del Algarrobo N x E. 3/4 E. 1 3/8 miles

Depth, 7 to 10 fathoms.

Nature of bottom, Muddy.

Dredging instrument used, 9 ft beam trawl.

Direction of drift, South ; distance, 5/8 mile

Temperature of air, 83° Fahr. therm. No., 1.013
7597

" of surface water, "

" at depth of fathoms, "

" at bottom, "

Density at surface, 1.023 ✓ temp., 26° C

" at depth of fathoms, "

" at bottom, 1.027 " 27° C

Number of salinometer, 7164

Barometer reading, 29.89.

State of sky, Blue, light clouds.

Direction of wind, S.E. ; force, 3

Rain, no

Direction of surface current, 0 ; force, 0

" of bottom " ; force,

Name of vessel, U. S. F. C. S. Fish Hawk

Service to which attached, Fish Commission

Name and rank of commanding officer, Lt. Comdr
R. G. Sawyers, USN

Name and position of observer, W. H. Morgan
Pharmacist, USN

NOTES RELATING TO STATION NO. _____

RECORD OF DREDGING,

TEMPERATURE AND DENSITY.

6060

Station No. *132 - Chart no. 372* *2060*
 Date, *Jan. 19 1909*
 Time of day, *4.20* ; of tide,
 Locality, *Mayaguez Harbor*
 Exact position, *Custom House Ex. S. 1/40. 2 1/4 miles*
Pt. de Algarrobo W. 1/4 E. 1 1/8 miles
 Depth, *17 fathoms*
 Nature of bottom, *Muddy*
 Dredging instrument used, *Dredge*
 Direction of drift, *North* ; distance, *3/8 mile*
 Temperature of air, *84° Fahr.* therm. No., *1.013*
 " of surface water, "
 " at depth of fathoms, "
 " at bottom, ~~*1.0205*~~ "
 Density at surface, *1.023* temp., *26.2° C*
 " at depth of fathoms, "
 " at bottom, *1.0245* " *27° C*
 Number of salinometer, ~~*29.90*~~ *7164*
 Barometer reading, *29.90*
 State of sky, *Blue - light clouds*
 Direction of wind, *S. E.* ; force, *1*
 Rain, *No*
 Direction of surface current, *0* ; force, *0*
 " of bottom " ; force,
 Name of vessel, *U.S. Fish Hawk*
 Service to which attached, *Fish Comm.*
 Name and rank of commanding officer, *Lt. Comdr*
R. S. Davenport, U.S.N.
 Name and position of observer,

R. S. Davenport
Observer

NOTES RELATING TO STATION NO.

6061

RECORD OF DREDGING,

TEMPERATURE AND DENSITY.

2061

Station No. 133 - Chart no. 372

Date, Jan. 20 1899,

Time of day, 9.50 ; of tide,

Locality, Harbor Mayaguez

Exact position, Pt. del Aguero S. x W. 1/2 miles
19/6 Pt. del Aguero N. E x E 1/4 E. 1 1/4 miles

Depth, 18 fathoms

Nature of bottom, Sandy mud

Dredging instrument used, 9 foot beam trawl

Direction of drift, S. x E. ; distance, 3/8 mile

Temperature of air, 78° Fahr. therm. No., 1.013

" of surface water, "

" at depth of fathoms, "

" at bottom, "

Density at surface, 1.023 temp., 26.2° C

" at depth of fathoms, "

" at bottom, 1.024 " 26° C

Number of salinometer, 7164

Barometer reading, 30.02

State of sky, Blue, light clouds

Direction of wind, S. E. ; force, 1/4

Rain, no

Direction of surface current, — ; force, —

" of bottom " ; force, —

Name of vessel, U. S. F. C. S. Fish Hawk

Service to which attached, Fish Commission

Name and rank of commanding officer, Lt. Comdr.

R. H. Sawyer, USN

Name and position of observer, W. H. Miller, USN

NOTES RELATING TO STATION NO. _____

Taken up at 25 fath.
Den. 1.0238
Temp. 26° C 6062

RECORD OF DREDGING,

TEMPERATURE AND DENSITY. 2062

Station No. 134 Chart no 372

Date, Jan. 20 - 1899

Time of day, 10.15 am. ; of tide,

Locality, Mayaguez Harbor.

Exact position, Black buoy east harbor N.E. 1/2 E. 1/2 mile
Red buoy " " E.S.E. 1/2 mile
Bridge came up N to 30

Depth, 30 fathoms

Nature of bottom, Mud, sand & shells.

Dredging instrument used, Dredge

Direction of drift, S. x E. 3/4 E ; distance, 1/2 mile

Temperature of air, 78° Fahr., therm. No., 1.053

" of surface water, "

" at depth of fathoms, "

" at bottom, "

Density at surface, 1.023 temp., 26° C

" at depth of fathoms, "

" at bottom, 1.024 " 25° C

Number of salinometer, 7164

Barometer reading, 30.00

State of sky, Blue, light clouds.

Direction of wind, East ; force, 1

Rain, No

Direction of surface current, — ; force,

" of bottom " : force,

Name of vessel, U.S.F.C. Fish Hawk

Service to which attached, Fish Commission

Name and rank of commanding officer, Lt. Comdr

R. G. Davenport, W. Navy

Name and position of observer, R. G. Davenport

Pharmacist, Navy

NOTES RELATING TO STATION NO.

Hauled in 75 fathoms.
Bottom Density 1.025
" Temp 68. Fahr 6063

643

RECORD OF DREDGING,

TEMPERATURE AND DENSITY.

Station No. ²⁰⁶³ 135 - Chart no 1001
Date, Jan. 20 - 1899,
Time of day, 10.45 ; of tide,
Locality, Mayaguez Harbor
Exact position, ^{Wedge came up Jangle's Land South about Pt. Melonnet} South - 14 1/2 miles.
Pt. del algarrobo E. 23 1/2 miles
Depth, 76 fathoms
Nature of bottom, ^{rocky coral & sand.} 14 feet beam trawl.
Dredging instrument used, 9 feet beam trawl,
Direction of drift, South ; distance, 1 mile
Temperature of air, 78.0 Fahr therm. No. 1,013
" of surface water, "
" at depth of fathoms, "
" at bottom, "
Density at surface, 1.0232 temp., 25.8°C
" at depth of fathoms, "
" at bottom, 1.025 " ^{20.20} 68.1 Fahr
Number of salinometer, 7164
Barometer reading, 29.99
State of sky, Cloudy
Direction of wind, S.E. ; force, 1
Rain, No -
Direction of surface current, - ; force, -
" of bottom " ; force, -
Name of vessel, U.S.F.C.S. Fish Hawk
Service to which attached, Fish Commission
Name and rank of commanding officer, Lt. Comdr
R.G. Sawyer, USNavy
Name and position of observer, J.H. Milner
Commanr, USNavy

NOTES RELATING TO STATION NO.

Taken up in 22 fathoms
Bottom Density 1.024
643 " Temp 78° Fahr. 25.6° C

RECORD OF DREDGING,

6064

TEMPERATURE AND DENSITY. 2064

Station No. 136 - Chart no 1001

Date, Jan. 20 - 1899

Time of day, 11.35 am ; of tide,

Locality, Mayaguez Harbor ^{niles}

Exact position, ^{niles} 2 1/2 miles S. of St. Mellones

22 to Custom House. E. 1/4 N. 4 3/8 miles

Depth, 33 1/2 fathoms

Nature of bottom, Sand & mud

Dredging instrument used, Dredge

Direction of drift, South ; distance, 1/2 mile.

Temperature of air, 77° Fahr therm. No., 1,013

" of surface water, "

" at depth of fathoms, "

" at bottom, "

Density at surface, 1.023 temp., 25.7° C

" at depth of fathoms, "

" at bottom, 1.0243 nephth " 24.7° C 76.5° Fahr

Number of salinometer, 7164

Barometer reading, 29.98

State of sky, Overcast,

Direction of wind, P. E. ; force, 3

Rain, No Yes. light

Direction of surface current, - ; force,

" of bottom " ; force,

Name of vessel, U. S. F. C. S. Fish Hawk

Service to which attached, Fish Commission

Name and rank of commanding officer, Lt. Comdr.

R. S. Darcus, USN

Name and position of observer,

J. M. Phillips
Pharmacist, USN

NOTES RELATING TO STATION NO.

Bridge taken up - caught
in bottom. 6065

643

RECORD OF DREDGING,

TEMPERATURE AND DENSITY. 2065

Station No. 137 - Chart no. 1001
 Date, Jan. 20 - 1899
 Time of day, 1.30 pm; of tide,
 Locality, Harbor Mayaguez
 Exact position, Custom house. N. E. 3/4 E. 4 1/2 miles
1/2 mile of land south abut of melones. 11 miles
 Depth, 4 to 5 fathoms
 Nature of bottom, Coral bottom
 Dredging instrument used, Dredge
 Direction of drift, South; distance, 1/2 mile
 Temperature of air, 80° Fahr therm. No., 1,013
 " of surface water, " "
 " at depth of fathoms, " "
 " at bottom, " "
 Density at surface, 1.0232 temp., 26° C
 " at depth of fathoms, " 25° C
 " at bottom, 1.0236 " 68° Fahr
 Number of salinometer, 7164
 Barometer reading, 29.91
 State of sky, - Cloudy
 Direction of wind, S. S. E.; force, 1/2
 Rain, No
 Direction of surface current, " ; force, "
 " of bottom " ; force "
 Name of vessel, U. S. F. C. S. Fish Hawk
 Service to which attached, U. S. Commission
 Name and rank of commanding officer, Dr. Comdr
R. S. Davenport, USN
 Name and position of observer, W. M. Allen
Observer, USN

NOTES RELATING TO STATION NO.

643

RECORD OF DREDGING,

TEMPERATURE AND DENSITY. 2066

Station No.

138 - Chart no 1001

Date,

Jan. 20 1898

Time of day,

7.35

; of tide,

Locality,

Mayaguez Harbor

Exact position,

Pt. Jiguero light no. 2121. 9 miles

Depth,

177 fathoms

Nature of bottom,

Mud & sand

Dredging instrument used,

9 fur beam trawl

Direction of drift,

S. 1/2 E.

; distance,

1 mile

Temperature of air,

78°

therm. No. 1013

"

of surface water,

"

"

at depth of fathoms,

"

"

at bottom,

"

Density at surface,

1.023

temp.,

76° C

"

at depth of fathoms,

"

"

at bottom,

1.0246 (61° Fahr)

73° C

Number of salinometer,

7164

Barometer reading,

29.90

State of sky,

blue, light clouds

Direction of wind,

S. S. E.

; force,

1/2

Rain,

no -

Direction of surface current,

; force,

"

of bottom

"

; force,

Name of vessel,

U.S.F.C.S. Fish Hawk

Service to which attached,

Fish Com.

Name and rank of commanding officer,

St. Comdr

Name and position of observer,

R. G. Sawyer, 2d Lt

J. Milligan

Ch. Norman

NOTES RELATING TO STATION NO.

Taken up at 97 fathoms
Bottom, *Decid. 1,024*
643 " Temp. 68 Fahr. 26°C

RECORD OF DREDGING,

6067 TEMPERATURE AND DENSITY 2067

Station No. 139 - Chart no - 1001

Date, Jan. 20 - 1899,

Time of day, 3:40 pm; of tide,

Locality, *Mayaguez Harbor*

Exact position, *Drage came up Pt. Jaquez St. H. N. 10 1/2 miles*

Pt del algarrobo E x N. 1/2 N 5 1/4 miles.

Depth, 120 fathoms

Nature of bottom, *lotal*

Dredging instrument used, *drage*

Direction of drift, *S.W. 1/2 S*; distance, 3/4 mile

Temperature of air, 84° Fahr., therm. No., 1,013

" of surface water, "

" at depth of fathoms, "

" at bottom, "

Density at surface, 1.023 ✓ temp., 26.3°C

" at depth of fathoms, "

" at bottom, 1.025 " 65° Fahr

Number of salinometer, 7164

Barometer reading, 29.90

State of sky, *blue light clouds*

Direction of wind, *N. N. E*; force, 1/2

Rain, *no.*

Direction of surface current, — ; force, —

" of bottom " — ; force, —

Name of vessel, *U.S.F.C. Fish Hawk*

Service to which attached, *Fish Com.*

Name and rank of commanding officer, *Rt. Comd*

R. B. Carpenter, USN

Name and position of observer,

*J. M. ...
Ph. ...*

NOTES RELATING TO STATION NO.

Trawl came up in 224 fath
Bar. Sunday 1.0218
Temp. 58° fahr + 24° C

6431

RECORD OF DREDGING,

6068

TEMPERATURE AND DENSITY

Water Haul

Station No. 140 - dark no.

Date, Jan. 21 - 1899

Time of day, 17.55 ; of tide,

Locality, Mayaguez Harbor
Trawl came up Custom Ho. S. S. E. 1/2 E. 7 1/2 miles
Exact position,

Pt. Jiguero St. N. W. E. 8 1/4 miles

Depth, 237 fathoms

Nature of bottom, (?)

Dredging instrument used, 9 fath beam trawl

Direction of drift, S. S. E. ; distance, 1/2 mile

Temperature of air, 58° fahr therm. No., 1013

" of surface water,

" at depth of fathoms,

" at bottom,

Density at surface, 1.023

temp., 28° C

" at depth of fathoms,

" at bottom, 1.0242

23.7° C
57° fahr

Number of salinometer, 7164

Barometer reading, 29.96

State of sky, Blue

Direction of wind, P. W. ; force, 1

Rain, No

Direction of surface current, ; force,

" of bottom " ; force,

Name of vessel, U. S. F. C. S. Fish Hawk

Service to which attached, Fish Com

Name and rank of commanding officer, Lt. Comdr

R. G. Sargoyan

Name and position of observer, J. W. Johnson
Ch. W. Sargoyan

NOTES RELATING TO STATION NO.

643

Hauled up in 293 fathoms
Density 1.0242
Temp 58° Fahr 23.7° C

RECORD OF DREDGING,
TEMPERATURE AND DENSITY.

6069

Station No. 141, Chart no. 2069

Date, Jan. 21 - 1899

Time of day, 2.10 pm; of tide,

Locality, Mayaguez Harbor

Exact position, Pt. Figueroa Sr. Ho. N. 1/4 E. 8 1/4 miles

Custom Ho. E. S. E. 1/2 E. 7 7/8 miles

Depth, 31 fathoms

Nature of bottom, Mud & sand.

Dredging instrument used, Dredge

Direction of drift, R. N. E. 1/2 E.; distance, 1/2 mile

Temperature of air, 80° Fahr. therm. No., 1.013

" of surface water, "

" at depth of fathoms, "

" at bottom, "

Density at surface, 1.023 temp., 26.6° C

" at depth of fathoms, "

" at bottom, 1.0242 " 23.5° C
56° Fahr

Number of salinometer, 7164

Barometer reading, 29.92

State of sky, Blue

Direction of wind, S. W.; force, 1

Rain, No

Direction of surface current, - ; force, -

" of bottom " ; force, "

Name of vessel, U.S.F.C.S. Fish Hawk

Service to which attached, Fish Com.

Name and rank of commanding officer, Lt. Ames

R. G. Sawyer, U.S.N.

Name and position of observer, J. M. Mullan

Ch. H. H. H.

NOTES RELATING TO STATION NO.

Trawl came up in 220 fathoms
Bot. Density - 1.0242
" Temp 60° Fahr 20° C

643

6070 RECORD OF DREDGING,
TEMPERATURE AND DENSITY.

Station No. 12 ✓ Characo, 2070
Date, Jan. 21 - 1899
Time of day, 3.15 pm ; of tide,
Locality, Mayaguez Harbor
Exact position, ^{When trawl came up} Cushman Ho. E 5/8 O. 9 miles
P. Jiquero Light. N. 7/8 E. 10 miles
Depth, 275 fathom
Nature of bottom, Rocky
Dredging instrument used, 9 fms beam trawl
Direction of drift, S. W. W. ; distance, 5/8 mile
Temperature of air, 78° Fahr. therm. No., 1.013
" of surface water, " "
" at depth of fathoms, " "
" at bottom, " "
Density at surface, 1.0233 temp., 26° C
" at depth of fathoms, " "
" at bottom, 1.0242 " 24.6° C
" 59° Fahr
Number of salinometer, 7164
Barometer reading, 29.91
State of sky, Blue
Direction of wind, S. W. ; force, 1
Rain, no
Direction of surface current, - ; force, -
" of bottom " ; force, -
Name of vessel, U.S.F.C. S. Fish Hawk
Service to which attached, Fish Com.
Name and rank of commanding officer, Lt Comdr
R. G. Lawrence, USN
Name and position of observer, J. W. Miller
H. W. S. S.

NOTES RELATING TO STATION NO.

Trawl came up in 163 fath.
Bottom Density ~~1.025~~ 1.025
Temp. 61.5 fath 22.0°
643 " 6071

RECORD OF DREDGING,

TEMPERATURE AND DENSITY.

Trawl hauled away, carrying
195 fathoms of wire 207 f
Station No. 14
Date, Jan. 24-1899.
Time of day, 11.50 ; of tide,
Locality, Outside Harbor. Mayaguez
Trawl came
Exact position, Custom Ho. E. 3/4 N. 9 1/4 miles
Pt. de Jiguera l. by. N + E. 11 1/4 miles
Depth, 199 fathoms
Nature of bottom, (1.1)
Dredging instrument used, 9 furl beam trawl
Direction of drift, S. 1/2 W. ; distance, 1 mile
S 4
Temperature of air, 84 therm. No., 1.013
" of surface water, "
" at depth of fathoms, "
" at bottom, "
Density at surface, 1.023 temp., 27°C
" at depth of fathoms, "
" at bottom, 1.0245 " 25.5°C
Number of salinometer, 7164
Barometer reading, 29.96
State of sky, Blue
Direction of wind, S. E. ; force, 2
Rain, No -
Direction of surface current, - ; force, -
" of bottom " ; force, -
Name of vessel, U. S. F. C. S. Fish Hawk.
Service to which attached, Fish Commission
Name and rank of commanding officer, Lt. Comdr.
R. G. Davenport, U.S. Navy
Name and position of observer,
J. D. Milligan
Pharmacist, U.S. Navy

NOTES RELATING TO STATION NO. _____

6072

RECORD OF DREDGING,
TEMPERATURE AND DENSITY.

Station No. 144 -

Date, ~~20~~

January 20 1899

Time of day, 1.20 ; of tide,

Locality, ~~Off Pt. Molines~~

Off Pt. Molines, D. Side of Roanoke
Exact position, Cabo Rojo St. No. D. O. E. 5 1/2 miles
Off Guanquilla N. N. E. 1/2 miles mag.

Depth, 7 1/2 fathoms

Nature of bottom, Coral, sand - shelly

Dredging instrument used, Tangle -

Direction of drift, N. 3/8 E. ; distance, 1 1/2 miles

Temperature of air, 76 Fahr therm. No., 1013

" of surface water, "

" at depth of fathoms, "

" at bottom, "

Density at surface, 1.0228 temp., 26°C

" at depth of fathoms, "

" at bottom, 1.023 " 26°C

Number of salinometer, 7164

Barometer reading, 29.96

State of sky, Cloudy, blue.

Direction of wind, S. E. ; force, 4

Rain, No.

Direction of surface current, - ; force, -

" of bottom " - ; force, -

Name of vessel, U. S. F. C. S. Fish Hawk.

Service to which attached, Fish Commission

Name and rank of commanding officer, Lt. Comdr,

R. G. Sawcport, USNavy

Name and position of observer, J. D. Milligan

Pharmacist, USNavy

NOTES RELATING TO STATION NO.

net dropped from dredge from weight of material. - no record

643

6073

RECORD OF DREDGING,
TEMPERATURE AND DENSITY.

Station No. 145 2073
 Date, Jan. 25 1899
 Time of day, 2.05 ; of tide,
 Locality, Off Molina,
 Exact position, Atalaya Rock. N. 1/4 E. 1 7/8 m.
Pt. Guairiquilla S. 1/4 E. 3/4 E. 1 1/8 miles
 Depth, 8 fathoms
 Nature of bottom, S. S.
 Dredging instrument used, Dredge
 Direction of drift, N. 1/4 E. ; distance, 3/4 mile
 Temperature of air, 80° fahr., therm. No. 1.013
 " of surface water, " "
 " at depth of fathoms, " "
 " at bottom, " "
 Density at surface, 1.023 temp., 26° C
 " at depth of fathoms, " "
 " at bottom, 1.023 " 27° C
 Number of salinometer, 7164
 Barometer reading, 29.95
 State of sky, Blue, light clouds
 Direction of wind, S. E. ; force, 4
 Rain, no
 Direction of surface current, " ; force, "
 " of bottom " ; force, "
 Name of vessel, U. S. F. C. S. Fish Hawk
 Service to which attached, Fish Commission
 Name and rank of commanding officer, St. Comdr
R. G. Davenport, USNavy
 Name and position of observer,

J. Milligan
Pharmacist USNavy

NOTES RELATING TO STATION NO.

6074

RECORD OF DREDGING, TEMPERATURE AND DENSITY.

Station No. 146 — ~~2074~~

Date, Jan 25th 1899

Time of day, 2:35 ; of tide,

Locality, Off Puerto Real
~~When tugs to canyon~~

Exact position, Pt. Guaniquilla S. 74 E. 2 miles
Pt. Boca-puerta E 1/4 N, 1 mile mag

Depth, 8 1/4 fathom

Nature of bottom, Sandy & Coral

Dredging instrument used, Traugle

Direction of drift, E. N. E. ; distance, 1/2 mile

Temperature of air, 82° Fahr therm. No. 1013

“ of surface water, “

“ at depth of fathoms, “

“ at bottom, “

Density at surface, 1.023 temp., 26° C

“ at depth of fathoms, “

“ at bottom, 1.023 “ 26° C

Number of salinometer, 7164

Barometer reading, 29.94

State of sky, Blue, light clouds.

Direction of wind, De E ; force, 1 1/2

Rain, no.

Direction of surface current, — ; force, —

“ of bottom “ — ; force, —

Name of vessel, U. S. F. C. S. Fish Hawk

Service to which attached, Fish Commission

Name and rank of commanding officer, St. Comdr
R. G. Davenport, us navy

Name and position of observer, Dr. Milligan
Pharmacist, us navy

NOTES RELATING TO STATION NO. _____



6075

RECORD OF DREDGING,
TEMPERATURE AND DENSITY.

Station No. 147 ²⁰⁷⁵

Date, Jan. 25 1899,

Time of day, 3.20 ; of tide,

Locality, Off Buena Vista

Exact position, Pt. Guainilla I. O. E. 3 1/2 miles
Fanduco Cay East 1 3/4 miles

Depth, 8 1/2 fathoms

Nature of bottom, sandy, coral.

Dredging instrument used, dredge

Direction of drift, N.W. ; distance, 3/4 mile

Temperature of air, 80° Fahr., therm. No., 1013

“ of surface water, “

“ at depth of fathoms, “

“ at bottom, “

Density at surface, 1.0228 temp., 26.0° C

“ at depth of fathoms, “

“ at bottom, 1.023 “ 25.5° C

Number of salinometer, 7164

Barometer reading, 29.93

State of sky, Blue, light cloud; light rain

Direction of wind, S.E. ; force, 1/2

Rain, no light rain

Direction of surface current, — ; force, —

“ of bottom “ — ; force, —

Name of vessel, U.S.F.C.S. Fish Hawk.

Service to which attached, Fish Commission

Name and rank of commanding officer, Lt. Comdr
R. S. Dawkins, USNavy

Name and position of observer,
J. D. Milligan
Pharmacist USNavy

NOTES RELATING TO STATION NO.

RECORD OF DREDGING, TEMPERATURE AND DENSITY.

Station No.

Date,

Time of day, ; of tide,

Locality,

Exact position,

Depth,

Nature of bottom,

Dredging instrument used,

Direction of drift, ; distance,

Temperature of air, therm. No.,

" of surface water, "

" at depth of fathoms, "

" at bottom, "

Density at surface, temp.,

" at depth of fathoms, "

" at bottom, "

Number of salinometer,

Barometer reading,

State of sky,

Direction of wind, ; force,

Rain,

Direction of surface current, ; force,

" of bottom " ; force,

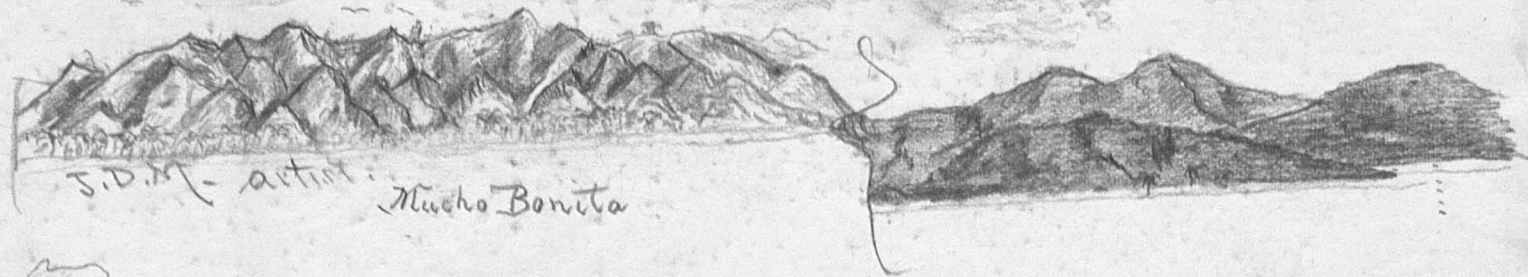
Name of vessel,

Service to which attached,

Name and rank of commanding officer,

Name and position of observer,

NOTES RELATING TO STATION NO. _____



S.D.M. - artist. Mucho Bonita

