ORIGINAL LOG BOOK OF THE "FISH HAWK"

UNITED STATES FISH COMMISSION

STATION NUMBERS

Numbers 7446 to 7495

RECORD OF DREDGING,

TEMPERATURE AND DENSITY.

Station No. 7443

Date, Jan 30, 1903

Time of day, 10 30 A. M.; of tide, H. W.

Locality, Lower Sandusky Beach, Lake Erie

Exact position, 2 3/4 m. N. W. of Lower Sandusky Beach

Depth, 8 feet

Nature of bottom, Sand

Dredging instrument used, Small scrape dredge

Direction of drift, East : distance, 1/2 mi

Temperature of air, 76 therm. No.,

" of surface water, "

" at depth of fathoms, "

" at bottom, "

Density at surface, 1.0221 temp., 24

" at depth of fathoms, "

" at bottom, "

Number of salinometer, 7452

Barometer reading, 29.92

State of sky, Clear

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

Rain,

Direction of surface current, : force,

" of bottom " : force,

Name of vessel, Fish Hawk

Service to which attached, Fish Commission

Name and rank of commanding officer, James A. Smith Boatswain, U. S. N.

Name and position of observer,

Vernon E. West.

NOTES RELATING TO STATION NO. [illegible]

2 [illegible]
1 [illegible]

RECORD OF DREDGING,

TEMPERATURE AND DENSITY.

Station No. 7447

Date, Jan 30, 1903

Time of day, 11:05 A. M.: of tide, 3/4 ebb

Locality, Lower Jupiter Beach Inlet, Fla.

Exact position, 2 3/4 mi. N. W. of West end of Lower Matecumbe Key

Depth, 8 1/2 feet

Nature of bottom, Soft mud over rock

Dredging instrument used, Small scrape dredge

Direction of drift, S. E. : distance, 1/6 mile

Temperature of air, 76 therm. No.,

" of surface water, "

" at depth of fathoms, "

" at bottom, "

Density at surface, 1.0221 temp., 24.5

" at depth of fathoms, "

" at bottom, "

Number of salinometer, 7457

Barometer reading, 29.91

State of sky, Clear

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

Rain,

Direction of surface current, : force,

" of bottom " : force,

Name of vessel, Fish Hawk

Service to which attached, Fish Commission

Name and rank of commanding officer, James A. Smith Boatswain, U. S. N.

Name and position of observer,

Vernon E. West

NOTES RELATING TO STATION NO. 2222

At Pylon on bridge

RECORD OF DREDGING,

TEMPERATURE AND DENSITY.

Station No. 7440

Date, Jan. 30, 1913

Time of day, 11:30 A.M. : of tide, 3/4 [illegible]

Locality, Lower Jewfish Creek Lake Fla.

Exact position, 1 mi. E. x N. of Southern Little Pelican Keys

Depth, 8 feet

Nature of bottom, Marl

Dredging instrument used, Small scrape dredge

Direction of drift, East : distance, 1/6 mi.

Temperature of air, 76 therm. No.,

" of surface water, "

" at depth of fathoms, "

" at bottom, "

Density at surface, 1.0222 temp., 24.5

" at depth of fathoms, "

" at bottom, "

Number of salinometer, 7455

Barometer reading, 29.91

State of sky, Clear

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

Rain,

Direction of surface current, : force,

" of bottom " : force,

Name of vessel, Fish Trawl

Service to which attached, Fish Commission

Name and rank of commanding officer, James A. Smith Boatswain, U.S.N.

Name and position of observer, Vernon C. Wade

NOTES RELATING TO STATION NO. 2228

2 shafts [illegible] sponges
2 [illegible] sponges

RECORD OF DREDGING,

TEMPERATURE AND DENSITY.

Station No. 7442

Date, June 30, 1913

Time of day, 1:35 P.M. : of tide, Low Water

Locality, Lower Jewfish Creek Lake, Fla.

Exact position, 1 Mile N. E. x E. of Jewfish Creek.

Depth, 11 feet.

Nature of bottom, Sand

Dredging instrument used, Small scrape dredge

Direction of drift, S. W. : distance, 1/10 mi.

Temperature of air, 78 therm. No.,

" of surface water, "

" at depth of fathoms, "

" at bottom, "

Density at surface, 1.0220 temp., 25

" at depth of fathoms, "

" at bottom, "

Number of salinometer, 7450

Barometer reading, 29.96

State of sky, Clear

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

Rain,

Direction of surface current, : force,

" of bottom " : force,

Name of vessel, Fish Hawk

Service to which attached, Fish Commission

Name and rank of commanding officer, James A. Smith Boatswain, U. S. N.

Name and position of observer, Vernon E. West.

NOTES RELATING TO STATION NO. [illegible]

2 commercial sponge
[illegible]

RECORD OF DREDGING,

TEMPERATURE AND DENSITY.

Station No. 7459

Date, Jan. 30 1912

Time of day, 2:05 P. M.: of tide Low Water

Locality, Lower Jenfish Bush Lake, Fla.

Exact position, 1 mi N. W. of N. of Jenfish Bush

Depth, 8 feet

Nature of bottom. Sandy

Dredging instrument used Small scrape dredge

Direction of drift, West : distance, 16 m

Temperature of air. 77 therm. No.,

" of surface water, "

" at depth of fathoms. "

" at bottom, "

Density at surface. 1.0224 temp., 25

" at depth of fathoms. "

" at bottom. "

Number of salinometer. 7459

Barometer reading. 29.98

State of sky, Clear

Direction of wind. N. W. : force. 3

Rain.

Direction of surface current, : force,

" of bottom " : force,

Name of vessel, Fish Hawk

Service to which attached. Fish Commission

Name and rank of commanding officer, James A. Smith Boatswain, U. S. N.

Name and position of observer,

Vernon C. West.

NOTES RELATING TO STATION NO. [illegible]

[illegible]

RECORD OF DREDGING.

TEMPERATURE AND DENSITY.

Station No. 74 [illegible]

Date. [illegible]

Time of day, [illegible] A. M.; of tide, [illegible]

Locality, [illegible]

Exact position, [illegible]

Depth. 8 feet

Nature of bottom, sandy

Dredging instrument used, small scrape dredge

Direction of drift, [illegible]; distance. [illegible]

Temperature of air. [illegible] therm. No.,

" of surface water, "

" at depth of fathoms, "

" at bottom, "

Density at surface, 1.0232 temp., 27.5

" at depth of fathoms. "

" at bottom, "

Number of salinometer, 7955

Barometer reading. 29.24

State of sky, Partly cloudy

Direction of wind, South ; force. 4

Rain.

Direction of surface current. : force,

" of bottom " : force,

Name of vessel, [illegible]

Service to which attached, [illegible]

Name and rank of commanding officer, [illegible]

Boatswain, U. S. N.

Name and position of observer,

Vernon C. West

NOTES RELATING TO STATION NO.

RECORD OF DREDGING.

TEMPERATURE AND DENSITY.

Station No. 7452

Date, Feb 4 1913

Time of day. [illegible] : of tide, [illegible]

Locality, [illegible] Lake, [illegible]

Exact position, [illegible]

Depth, [illegible]

Nature of bottom, [illegible]

Dredging instrument used, [illegible]

Direction of drift. [illegible] : distance, [illegible]

Temperature of air. 76 therm. No.,

" of surface water. "

" at depth of fathoms. "

" at bottom. "

Density at surface. [illegible] temp., [illegible]

" at depth of fathoms. "

" at bottom. "

Number of salinometer. [illegible]

Barometer reading. [illegible]

State of sky. [illegible]

Direction of wind, [illegible] : force, [illegible]

Rain.

Direction of surface current. : force.

" of bottom " : force.

Name of vessel, Fish Hawk

Service to which attached, Fish Commission

Name and rank of commanding officer, [illegible]

Name and position of observer,

Vernon C West

NOTES RELATING TO STATION NO.

RECORD OF DREDGING.

TEMPERATURE AND DENSITY.

Station No. [illegible]

Date, [illegible]

Time of day [illegible] ; of tide, [illegible]

Locality, [illegible]

Exact position, [illegible]

Depth, [illegible]

Nature of bottom, [illegible]

Dredging instrument used, [illegible]

Direction of drift, [illegible] ; distance, [illegible]

Temperature of air, 77 therm. No.,

" of surface water, "

" at depth of fathoms, "

" at bottom, "

Density at surface, [illegible] temp. [illegible]

" at depth of fathoms, "

" at bottom, "

Number of salinometer, [illegible]

Barometer reading, [illegible]

State of sky, Clear

Direction of wind, [illegible] ; force, [illegible]

Rain,

Direction of surface current, : force,

" of bottom " : force,

Name of vessel, [illegible]

Service to which attached, [illegible]

Name and rank of commanding officer, [illegible]

Name and position of observer,

[illegible]

NOTES RELATING TO STATION NO.

RECORD OF DREDGING.

TEMPERATURE AND DENSITY.

Station No. [illegible]

Date, Feb. [illegible], [illegible]

Time of day, [illegible] A. M.; of tide, [illegible]

Locality, Barnes Lake, Fla.

Exact position, [illegible] N. E. of Little Pelican Key

Depth, [illegible]

Nature of bottom, [illegible]

Dredging instrument used, [illegible]

Direction of drift, [illegible]; distance, [illegible]

Temperature of air, 78 therm. No.,

" of surface water, "

" at depth of fathoms, "

" at bottom, "

Density at surface, [illegible] temp., [illegible]

" at depth of fathoms, "

" at bottom, "

Number of salinometer, [illegible]

Barometer reading, 29.87

State of sky, [illegible]

Direction of wind, South; force, 3

Rain,

Direction of surface current, : force,

" of bottom " : force,

Name of vessel, [illegible]

Service to which attached, [illegible]

Name and rank of commanding officer, [illegible]

Name and position of observer, [illegible]

NOTES RELATING TO STATION NO.

RECORD OF DREDGING.

TEMPERATURE AND DENSITY.

Station No. 74355

Date, Feb. 4, 1903

Time of day, [illegible] A. M.; of tide, low water

Locality, Barnes Lake [illegible]

Exact position, [illegible]

Depth, [illegible]

Nature of bottom, Sand & gravel

Dredging instrument used, Smith & Cape dredge

Direction of drift, [illegible]; distance, [illegible]

Temperature of air, 78 therm. No.,

" of surface water, "

" at depth of fathoms, "

" at bottom, "

Density at surface, 1.0229 temp., 25

" at depth of fathoms, "

" at bottom, "

Number of salinometer, 749

Barometer reading, 29.87

State of sky, Clear

Direction of wind, South; force, 3

Rain,

Direction of surface current, : force,

" of bottom " : force,

Name of vessel, Fish Hawk

Service to which attached, Fish Commission

Name and rank of commanding officer, James A. [illegible]

Lt. Commdr., U. S. N.

Name and position of observer, [illegible]

NOTES RELATING TO STATION NO.

RECORD OF DREDGING,

TEMPERATURE AND DENSITY.

Station No. [illegible]

Date, Feb. 4 [illegible]

Time of day, [illegible] P. M. : of tide, [illegible]

Locality, [illegible]

Exact position, 1½ mi. S.S.E. of [illegible] Point Key

Depth, [illegible] fathoms

Nature of bottom, [illegible]

Dredging instrument used, [illegible]

Direction of drift, [illegible] : distance, [illegible]

Temperature of air, 79 therm. No.,

" of surface water, "

" at depth of fathoms, "

" at bottom, "

Density at surface, [illegible] temp., 25

" at depth of fathoms, "

" at bottom, "

Number of salinometer, [illegible]

Barometer reading, 29.85

State of sky, Partly [illegible]

Direction of wind, South : force, 2

Rain,

Direction of surface current, : force,

" of bottom " : force,

Name of vessel, [illegible]

Service to which attached, [illegible] Commission

Name and rank of commanding officer, James A. Smith

Boatswain, U. S. N.

Name and position of observer,

Vernon E. Wood

NOTES RELATING TO STATION NO.

RECORD OF DREDGING,

TEMPERATURE AND DENSITY.

Station No. 7857

Date, [illegible] 4, 1893

Time of day, 2:15 P M. : of tide, [illegible]

Locality, [illegible] Bay [illegible]

Exact position, 2 3/4 [illegible] N. to W. [illegible]

Depth, [illegible]

Nature of bottom, [illegible]

Dredging instrument used, [illegible]

Direction of drift, [illegible] : distance, [illegible]

Temperature of air, 75 therm. No.,

" of surface water, "

" at depth of fathoms, "

" at bottom, "

Density at surface, 1.0217 temp., 25

" at depth of fathoms, "

" at bottom, "

Number of salinometer, [illegible]

Barometer reading, 29.85

State of sky, [illegible]

Direction of wind, [illegible] : force, 3

Rain,

Direction of surface current, : force,

" of bottom " : force,

Name of vessel, [illegible]

Service to which attached [illegible]

Name and rank of commanding officer, [illegible]

Name and position of observer, [illegible]

NOTES RELATING TO STATION NO.

RECORD OF DREDGING,

TEMPERATURE AND DENSITY.

Station No. [illegible]

Date. [illegible], 1[illegible]

Time of day. [illegible] ; of tide, [illegible]

Locality, [illegible]

Exact position. [illegible]

Depth, [illegible]

Nature of bottom. [illegible]

Dredging instrument used, [illegible]

Direction of drift, [illegible] : distance, [illegible]

Temperature of air. 77 therm. No.,

" of surface water. "

" at depth of fathoms. "

" at bottom, "

Density at surface. [illegible] temp., [illegible]

" at depth of fathoms. "

" at bottom. "

Number of salinometer. [illegible]

Barometer reading. 29.[illegible]

State of sky. [illegible]

Direction of wind, S. S. W. : force. 2

Rain,

Direction of surface current. : force,

" of bottom " : force.

Name of vessel. [illegible]

Service to which attached. [illegible]

Name and rank of commanding officer, [illegible]

Name and position of observer,

[illegible]

NOTES RELATING TO STATION NO.

RECORD OF DREDGING,

TEMPERATURE AND DENSITY.

Station No. [illegible]

Date, [illegible]

Time of day, [illegible] M.; of tide, [illegible]

Locality, [illegible]

Exact position, [illegible]

Depth, [illegible]

Nature of bottom, [illegible]

Dredging instrument used, [illegible]

Direction of drift, [illegible] : distance, [illegible]

Temperature of air, 77 therm. No., [illegible]

" of surface water, "

" at depth of fathoms, "

" at bottom, "

Density at surface, [illegible] temp., [illegible]

" at depth of fathoms, "

" at bottom, "

Number of salinometer, [illegible]

Barometer reading, 29.95

State of sky, [illegible]

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

Rain,

Direction of surface current, : force,

" of bottom " : force,

Name of vessel, [illegible]

Service to which attached, [illegible]

Name and rank of commanding officer, [illegible]

Name and position of observer, [illegible]

NOTES RELATING TO STATION NO.

RECORD OF DREDGING,

TEMPERATURE AND DENSITY.

Station No. [illegible]

Date, [illegible] 5 [illegible]

Time of day, [illegible] : of tide, [illegible]

Locality, [illegible]

Exact position, [illegible]

Depth, [illegible]

Nature of bottom, [illegible]

Dredging instrument used, [illegible]

Direction of drift, [illegible] : distance, [illegible]

Temperature of air. 77 therm. No.,

" of surface water, "

" at depth of fathoms, "

" at bottom, "

Density at surface, [illegible] temp.,

" at depth of fathoms, "

" at bottom. "

Number of salinometer, [illegible]

Barometer reading, 29.75

State of sky, [illegible]

Direction of wind, S. [illegible] : force, 2

Rain,

Direction of surface current, : force,

" of bottom " : force,

Name of vessel, [illegible]

Service to which attached, [illegible]

Name and rank of commanding officer, [illegible]

[illegible]

Name and position of observer,

[illegible]

NOTES RELATING TO STATION NO.

RECORD OF DREDGING.

TEMPERATURE AND DENSITY.

Station No. [illegible]

Date, [illegible]

Time of day, [illegible] ; of tide, [illegible]

Locality, [illegible]

Exact position, [illegible]

Depth. [illegible] feet

Nature of bottom, [illegible]

Dredging instrument used, [illegible]

Direction of drift, [illegible] ; distance. [illegible]

Temperature of air, [illegible] therm. No.,

" of surface water, "

" at depth of fathoms, "

" at bottom, "

Density at surface, [illegible] temp., [illegible]

" at depth of fathoms, "

" at bottom, "

Number of salinometer. [illegible]

Barometer reading. [illegible]

State of sky, [illegible]

Direction of wind, [illegible] ; force. [illegible]

Rain.

Direction of surface current, : force,

" of bottom " : force,

Name of vessel, [illegible]

Service to which attached, [illegible]

Name and rank of commanding officer, [illegible]

Name and position of observer, [illegible]

NOTES RELATING TO STATION NO.

RECORD OF DREDGING.

TEMPERATURE AND DENSITY.

Station No. [illegible] 2

Date, [illegible] 18

Time of day, 2.25 P.M.; of tide, [illegible]

Locality, Hawk Channel, Fla.

Exact position, 2 mi. S.W. x W. of S.E. point of Long Key

Depth, 2½ fathoms

Nature of bottom, Hard sand x g[illegible]

Dredging instrument used, Oyster dredge

Direction of drift, S.W.; distance, ¼ mi.

Temperature of air, 62 therm. No., [illegible]

" of surface water, "

" at depth of fathoms, "

" at bottom, "

Density at surface, 1.0249 temp., [illegible]

" at depth of fathoms, "

" at bottom, "

Number of salinometer, [illegible]

Barometer reading, 30.17

State of sky, Cloudy

Direction of wind, N.N.E.; force, [illegible]

Rain,

Direction of surface current, : force,

" of bottom " : force,

Name of vessel, [illegible]

Service to which attached, [illegible]

Name and rank of commanding officer,

[illegible]

Name and position of observer,

NOTES RELATING TO STATION NO.

RECORD OF DREDGING.

TEMPERATURE AND DENSITY.

Station No. [illegible]

Date. [illegible]

Time of day, 2.45 P.M. ; of tide, 1/2 ebb.

Locality, Hawk Channel, Fla.

Exact position, 1/4 mile S. x W. of S. E. point Long Key.

Depth, 2 1/2 fathoms

Nature of bottom, [illegible]

Dredging instrument used, Eng. Co. dredge

Direction of drift, S. W. ° ; distance, 1/4 mi.

Temperature of air, 82 therm. No.,

" of surface water, "

" at depth of fathoms, "

" at bottom, "

Density at surface, 1.0249 temp., 81

" at depth of fathoms, "

" at bottom, "

Number of salinometer, [illegible]

Barometer reading, 30.17

State of sky, Cloudy

Direction of wind, S. E. ; force, 5

Rain,

Direction of surface current, ; force,

" of bottom " ; force,

Name of vessel, [illegible]

Service to which attached,

Name and rank of commanding officer,

Name and position of observer,

NOTES RELATING TO STATION NO.

RECORD OF DREDGING.

TEMPERATURE AND DENSITY.

Station No. 7454

Date, Feb. 18, 1903

Time of day, 3.35 P.M.; of tide, 3/4 ebb.

Locality, Hawk Channel

Exact position, 1 Mile E. x S. of West end of Lower Matecumbe Key

Depth, 3 fathoms

Nature of bottom, Mud

Dredging instrument used, Ewell dredge

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

Temperature of air, 65 therm. No.,

" of surface water, "

" at depth of fathoms, "

" at bottom, "

Density at surface, 1.0254 temp., 20.5

" at depth of fathoms, "

" at bottom, 1.0250 " 20.5

Number of salinometer, 7450

Barometer reading, 30.12

State of sky, Cloudy

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

Rain,

Direction of surface current, : force,

" of bottom " : force,

Name of vessel, Fish Hawk

Service to which attached, Fish Commission

Name and rank of commanding officer, James [illegible]

Boatswain, U. S. N.

Name and position of observer,

[illegible]

NOTES RELATING TO STATION NO. 7484

acidum

[illegible]

[illegible]

[illegible]

several [illegible] of sponges

[illegible] small fish

[illegible]

[illegible]

[illegible]

[illegible]

RECORD OF DREDGING.

TEMPERATURE AND DENSITY.

Station No. 7465

Date, Feb. 18, 1912

Time of day, 4.55 P.M.; of tide, 3/4 [illegible]

Locality, Block Island

Exact position, 1/2 [illegible] N. E. of [illegible]

Depth, 2 1/2 fathoms

Nature of bottom, Rock and [illegible]

Dredging instrument used, Ogden dredge

Direction of drift, West ; distance, 1/4 mi.

Temperature of air, 65 , therm. No.,

" of surface water, "

" at depth of fathoms, "

" at bottom, "

Density at surface, 1.02252 temp., 19.5

" at depth of fathoms, "

" at bottom, "

Number of salinometer, 7455

Barometer reading, 30.12

State of sky, Clear

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

Rain,

Direction of surface current, : force.

" of bottom " : force.

Name of vessel, Black Hawk

Service to which attached, Fish Commission

Name and rank of commanding officer, James R. [illegible]

Boatswain U. S. N.

Name and position of observer,

[illegible]

NOTES RELATING TO STATION NO. [illegible]

RECORD OF DREDGING,

TEMPERATURE AND DENSITY.

Station No. 7466

Date, Feb. 19 1903

Time of day, 8:50 A.M.; of tide, ½ flood

Locality. Hawk Channel, Fla.

Exact position. 1¼ mi E of Sea Table Key.

Depth, 2½ fathoms

Nature of bottom. Sand

Dredging instrument used. Cyclone dredge

Direction of drift, S. W. : distance, ½ mi.

Temperature of air. 61 therm. No.,

" of surface water, "

" at depth of fathoms. "

" at bottom, "

Density at surface. 1.0250 temp., 20.5

" at depth of fathoms, "

" at bottom. "

Number of salinometer. 7450

Barometer reading. 3020

State of sky. Cloudy

Direction of wind. North : force. 4

Rain.

Direction of surface current. : force,

" of bottom " : force,

Name of vessel. Fish Hawk

Service to which attached. Fish Commission

Name and rank of commanding officer. [illegible]

Name and position of observer,

Vernon C. West.

NOTES RELATING TO STATION NO.

RECORD OF DREDGING,

TEMPERATURE AND DENSITY.

Station No. 7457

Date, Feb. 19, 1902

Time of day, 12 30 P.M.; of tide, Flood

Locality, Green Shoals, Hawk Channel, Fla.

Exact position, 4¼ n. W. ½ W. of Elbow Reef beacon

Depth, 2¾ fathoms

Nature of bottom, Gray coral with sand.

Dredging instrument used, Oyster dredge

Direction of drift, West; distance, 1½ n.

Temperature of air, 70 therm. No.,

" of surface water, "

" at depth of fathoms, "

" at bottom, "

Density at surface, 1.0253 temp., 20.5

" at depth of fathoms, "

" at bottom, "

Number of salinometer, 7450

Barometer reading, 30.23

State of sky, Cloudy

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

Rain,

Direction of surface current, ; force,

" of bottom " ; force,

Name of vessel, Fish Hawk

Service to which attached, Fish Commission

Name and rank of commanding officer, James A. Lockwood, Boatswain, U. S. N.

Name and position of observer, [illegible]

NOTES RELATING TO STATION NO.

RECORD OF DREDGING,

TEMPERATURE AND DENSITY.

Station No. 7468

Date, Feb. 19, 1913

Time of day, 1 00 P. M.; of tide. High Water

Locality, Greenwich Cove, Rhode Island

Exact position. 2 mi. S. S. W. from Rocky Hill Beacon

Depth, 2½ fathoms

Nature of bottom. Sand & gravel

Dredging instrument used. Petite dredge

Direction of drift, West : distance, ½ mile.

Temperature of air. 72 therm. No.,

" of surface water, "

" at depth of fathoms, "

" at bottom, "

Density at surface. 1.1253 temp., 29.5

" at depth of fathoms, "

" at bottom, "

Number of salinometer. 7450

Barometer reading. 30.22

State of sky. Cloudy

Direction of wind. N. E. : force. 5

Rain.

Direction of surface current. : force,

" of bottom " : force.

Name of vessel. Fish Hawk

Service to which attached Fish Commission

Name and rank of commanding officer. James A. Smith Boatswain, U. S. N.

Name and position of observer.

Vernon C. West

NOTES RELATING TO STATION NO. 2918

several springs

[illegible]

[illegible]

[illegible]

[illegible]

several [illegible]

RECORD OF DREDGING,

TEMPERATURE AND DENSITY.

Station No. 7468

Date. [illegible] 18, [illegible]

Time of day, 1:20 P.M.: of tide, High Water

Locality, [illegible] Shoals, Frank Channel

Exact position. 1/4 mi S.W. x S. of Basin Hill Beacon

Depth, 2 fathoms

Nature of bottom. sand & gravel

Dredging instrument used. Oyster dredge

Direction of drift, W [illegible] : distance, 1/8 mi

Temperature of air. 69 therm. No.,

" of surface water. "

" at depth of fathoms. "

" at bottom, "

Density at surface. 1.1250 temp., 20.5

" at depth of fathoms. "

" at bottom. "

Number of salinometer, 7[illegible]

Barometer reading. 30.20

State of sky. Cloudy

Direction of wind, N E ; force. 5

Rain.

Direction of surface current, ; force,

" of bottom " : force,

Name of vessel, Frank H. [illegible]

Service to which attached, [illegible]

Name and rank of commanding officer, [illegible] Smith

[illegible]

Name and position of observer.

[illegible]

NOTES RELATING TO STATION NO.

RECORD OF DREDGING,

TEMPERATURE AND DENSITY.

Station No. 7471

Date, Feb. 25, 1912

Time of day, 10:30 A.M. of tide, 3/4 ebb

Locality West Coupons, Fla.

Exact position. [illegible]

Depth, 7 ft.

Nature of bottom. soft mud

Dredging instrument used,

Direction of drift, : distance,

Temperature of air. 72 therm. No.,

" of surface water, "

" at depth of fathoms, "

" at bottom, "

Density at surface. 1.0204 temp., 21

" at depth of fathoms, "

" at bottom, "

Number of salinometer, 7451

Barometer reading. 30.02

State of sky. Partly cloudy

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

Rain,

Direction of surface current, : force,

" of bottom " : force,

Name of vessel, Fish Hawk

Service to which attached [illegible]

Name and rank of commanding officer, [illegible]

Name and position of observer, [illegible]

NOTES RELATING TO STATION NO.

RECORD OF DREDGING.

TEMPERATURE AND DENSITY.

Station No. 7471

Date, Feb. 25, 1913

Time of day. 10:41 A.M.; of tide. Ebb.

Locality, West Coast, Fla.

Exact position, [illegible]

Depth, 7½ fa.

Nature of bottom, soft mud

Dredging instrument used,

Direction of drift, ; distance,

Temperature of air. 73 therm. No.,

" of surface water. "

" at depth of fathoms. "

" at bottom. "

Density at surface. 1.0213 temp., 21

" at depth of fathoms. "

" at bottom. "

Number of salinometer. 74.9

Barometer reading. 30.12

State of sky. Partly cloudy

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

Rain.

Direction of surface current. : force,

" of bottom " : force,

Name of vessel, Fish Hawk

Service to which attached, Fish Commission

Name and rank of commanding officer, James A. Smith

Boatswain, U.S.N.

Name and position of observer,

[illegible]

NOTES RELATING TO STATION NO.

RECORD OF DREDGING.

TEMPERATURE AND DENSITY.

Station No. 7472

Date, Feb 25 1913

Time of day, 11:00 A.M. : of tide, Low Water

Locality, East Coupon, Fla.

Exact position, 1/4 mile S.W. of 2 Range Tangent

Depth, 6 1/2 ft.

Nature of bottom, soft mud

Dredging instrument used,

Direction of drift, ; distance,

Temperature of air. 71 therm. No.,

" of surface water, "

" at depth of fathoms. "

" at bottom, "

Density at surface, 1.0172 temp., 21

" at depth of fathoms. "

" at bottom. "

Number of salinometer, 7049

Barometer reading, 30.02

State of sky, Partly Cloudy

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

Rain,

Direction of surface current. : force,

" of bottom " : force.

Name of vessel, Fish Hawk

Service to which attached, Fish Commission

Name and rank of commanding officer, James A. Smith

Boatswain, U.S.N.

Name and position of observer,

[illegible]

NOTES RELATING TO STATION NO. [illegible]

RECORD OF DREDGING.

TEMPERATURE AND DENSITY.

Station No. 7473

Date, Feb. 20, 1902

Time of day, 11.20 A.M.: of tide, [illegible]

Locality, [illegible]

Exact position, [illegible]

Depth, [illegible]

Nature of bottom, [illegible]

Dredging instrument used,

Direction of drift, : distance.

Temperature of air. 71 therm. No.,

" of surface water, "

" at depth of fathoms, "

" at bottom, "

Density at surface. 1.0202 temp., 21

" at depth of fathoms, "

" at bottom, "

Number of salinometer. 2099

Barometer reading. —

State of sky. Partly [illegible]

Direction of wind, [illegible] : force. [illegible]

Rain.

Direction of surface current, : force.

" of bottom " : force,

Name of vessel, Fish Hawk

Service to which attached, [illegible]

Name and rank of commanding officer, [illegible]

Name and position of observer, [illegible]

NOTES RELATING TO STATION NO. 7+73

RECORD OF DREDGING.

TEMPERATURE AND DENSITY.

Station No. 7474

Date, [illegible]

Time of day, [illegible] : of tide, [illegible]

Locality, [illegible]

Exact position, [illegible]

Depth,

Nature of bottom, [illegible]

Dredging instrument used, [illegible]

Direction of drift, [illegible] : distance, [illegible]

Temperature of air, [illegible] therm. No.,

" of surface water, "

" at depth of fathoms. "

" at bottom, "

Density at surface, [illegible] temp., [illegible]

" at depth of fathoms, "

" at bottom, "

Number of salinometer, [illegible]

Barometer reading, [illegible]

State of sky, [illegible]

Direction of wind, [illegible] : force, [illegible]

Rain,

Direction of surface current, : force,

" of bottom " : force.

Name of vessel, [illegible]

Service to which attached, [illegible]

Name and rank of commanding officer, [illegible]

Boatswain, [illegible]

Name and position of observer,

[illegible]

NOTES RELATING TO STATION NO.

RECORD OF DREDGING.

TEMPERATURE AND DENSITY.

Station No. 7425

Date, March 6, 1902

Time of day, [illegible] : of tide, [illegible]

Locality, Key [illegible] Bay, Fla.

Exact position, 1¾ mi. N. x E. of Adams Key

Depth, 7½ ft.

Nature of bottom, [illegible]

Dredging instrument used, [illegible]

Direction of drift, [illegible] ; distance, [illegible]

Temperature of air, 76 therm. No.,

" of surface water, "

" at depth of fathoms. "

" at bottom, "

Density at surface, 1.0220 temp., 20°

" at depth of fathoms. "

" at bottom. "

Number of salinometer, 74

Barometer reading, 30.06

State of sky, [illegible]

Direction of wind, [illegible] ; force, [illegible]

Rain,

Direction of surface current, : force,

" of bottom " : force,

Name of vessel, Fish Hawk

Service to which attached, [illegible]

Name and rank of commanding officer, [illegible] U.S.N.

Name and position of observer,

[illegible]

NOTES RELATING TO STATION NO. [illegible]

RECORD OF DREDGING,

TEMPERATURE AND DENSITY.

Station No. [illegible]

Date, March 6, 1903

Time of day. 1 00 P.M. : of tide, [illegible]

Locality [illegible]

Exact position. [illegible]

Depth, [illegible]

Nature of bottom. [illegible]

Dredging instrument used, [illegible]

Direction of drift. W. by N. : distance. 1.6 mi.

Temperature of air. 76 therm. No.,

" of surface water. "

" at depth of fathoms. "

" at bottom. "

Density at surface. 1.0233 temp., 25

" at depth of fathoms. "

" at bottom. "

Number of salinometer. [illegible]

Barometer reading. 30.05

State of sky. [illegible]

Direction of wind. [illegible] : force. [illegible]

Rain.

Direction of surface current, : force,

" of bottom " : force,

Name of vessel. [illegible]

Service to which attached [illegible]

Name and rank of commanding officer, [illegible]

Name and position of observer. [illegible]

NOTES RELATING TO STATION NO.

RECORD OF DREDGING,

TEMPERATURE AND DENSITY.

Station No. 77

Date, March 6, 1903

Time of day 1:45 P.M. : of tide, High water

Locality, Key Biscayne Bay, Fla.

Exact position, 1½ miles N. of Land Key

Depth, 10 ft.

Nature of bottom, [illegible]

Dredging instrument used, Small scoop dredge

Direction of drift, N. E. : distance, ½ mile.

Temperature of air, 76 therm. No.,

" of surface water, "

" at depth of fathoms. "

" at bottom, "

Density at surface, 1.0232 temp., 25

" at depth of fathoms. "

" at bottom. "

Number of salinometer, 7457

Barometer reading, 30.05

State of sky, Partly cloudy

Direction of wind, East : force, 4

Rain.

Direction of surface current, : force,

" of bottom " : force,

Name of vessel, Fish Hawk

Service to which attached, [illegible]

Name and rank of commanding officer, [illegible]

Ens. [illegible], U.S.N.

Name and position of observer,

[illegible] Hart

NOTES RELATING TO STATION NO.

RECORD OF DREDGING.

TEMPERATURE AND DENSITY.

Station No. 7428

Date, March 6, 1913

Time of day, 2.[illegible] P.M. : of tide, High water

Locality, Key Largo Bay, Fla.

Exact position, ½ mile S. of [illegible] of Fowlers Rock

Depth, [illegible]

Nature of bottom, [illegible]

Dredging instrument used, [illegible]

Direction of drift, West : distance, [illegible]

Temperature of air, [illegible] therm. No.,

" of surface water, "

" at depth of fathoms. "

" at bottom. "

Density at surface, [illegible] temp., [illegible]

" at depth of fathoms. "

" at bottom. "

Number of salinometer, [illegible]

Barometer reading, [illegible]

State of sky, Partly cloudy

Direction of wind, East : force, 5

Rain.

Direction of surface current. : force,

" of bottom " : force,

Name of vessel, Fish Hawk

Service to which attached, [illegible]

Name and rank of commanding officer, [illegible]

Boatswain, U.S.N.

Name and position of observer,

[illegible]

NOTES RELATING TO STATION NO.

RECORD OF DREDGING,

TEMPERATURE AND DENSITY.

Station No. [illegible]

Date. [illegible]

Time of day. [illegible] : of tide, [illegible]

Locality. [illegible]

Exact position. [illegible]

Depth. 9 ft.

Nature of bottom. [illegible]

Dredging instrument used. [illegible]

Direction of drift. [illegible] : distance [illegible]

Temperature of air. [illegible] therm. No.,

" of surface water, "

" at depth of fathoms. "

" at bottom. "

Density at surface. 1.0239 temp., [illegible]

" at depth of fathoms. "

" at bottom. "

Number of salinometer. [illegible]

Barometer reading. [illegible]

State of sky. [illegible]

Direction of wind. [illegible] : force. [illegible]

Rain.

Direction of surface current. : force,

" of bottom " : force,

Name of vessel. [illegible]

Service to which attached. [illegible]

Name and rank of commanding officer. [illegible]

Name and position of observer. [illegible]

NOTES RELATING TO STATION NO.

RECORD OF DREDGING,

TEMPERATURE AND DENSITY.

Station No. [illegible]

Date. [illegible]

Time of day, [illegible] P. M.; of tide, High water

Locality, [illegible] Bay, [illegible]

Exact position, [illegible] Key

Depth, 9 ft.

Nature of bottom, Hard sand.

Dredging instrument used, [illegible]

Direction of drift, East; distance, 1/6 mi.

Temperature of air, 75 therm. No.,

" of surface water, "

" at depth of fathoms, "

" at bottom, "

Density at surface, 1.1234 temp., 25

" at depth of fathoms, "

" at bottom, "

Number of salinometer, [illegible]

Barometer reading, [illegible]

State of sky, Partly cloudy

Direction of wind, [illegible]; force, 4

Rain,

Direction of surface current, ; force,

" of bottom " ; force,

Name of vessel, [illegible]

Service to which attached, [illegible]

Name and rank of commanding officer, [illegible]

Name and position of observer, [illegible]

NOTES RELATING TO STATION NO.

RECORD OF DREDGING.

TEMPERATURE AND DENSITY.

Station No. [illegible]

Date, March [illegible]

Time of day, [illegible] M.; of tide, [illegible]

Locality, [illegible] Key, Fla.

Exact position, [illegible]

Depth, 11 ft

Nature of bottom, sand & grass

Dredging instrument used, [illegible]

Direction of drift, N. W. ; distance, [illegible] mi.

Temperature of air, 76 therm. No.,

" of surface water. "

" at depth of fathoms. "

" at bottom, "

Density at surface, 1.0237 temp., [illegible]

" at depth of fathoms, "

" at bottom, "

Number of salinometer, [illegible]

Barometer reading, [illegible]

State of sky, [illegible]

Direction of wind, S. N. E. ; force, [illegible]

Rain,

Direction of surface current, ; force,

" of bottom " ; force.

Name of vessel, [illegible]

Service to which attached, [illegible]

Name and rank of commanding officer, [illegible]

Boatswain, U. S. N.

Name and position of observer,

[illegible]

NOTES RELATING TO STATION NO. [illegible]

Several snakes
2 species of [illegible]

RECORD OF DREDGING.

TEMPERATURE AND DENSITY.

Station No. [illegible]

Date, [illegible]

Time of day, [illegible] A. M.; of tide, 3/4 [illegible]

Locality, [illegible]

Exact position, 3½ mi. S. W. ½ W. [illegible]

Depth, [illegible]

Nature of bottom, [illegible]

Dredging instrument used, [illegible] dredge

Direction of drift, [illegible] ; distance, ½ mi.

Temperature of air, [illegible] therm. No.,

" of surface water, "

" at depth of fathoms, "

" at bottom, "

Density at surface, [illegible] temp., [illegible]

" at depth of fathoms, "

" at bottom, "

Number of salinometer, [illegible]

Barometer reading, [illegible]

State of sky, [illegible]

Direction of wind, [illegible] ; force, [illegible]

Rain,

Direction of surface current, : force,

" of bottom " : force,

Name of vessel, [illegible]

Service to which attached, [illegible]

Name and rank of commanding officer, [illegible]

Name and position of observer, [illegible]

NOTES RELATING TO STATION NO.

RECORD OF DREDGING,

TEMPERATURE AND DENSITY.

Station No. 7463

Date, [illegible]

Time of day, [illegible] : of tide, [illegible]

Locality, Key Biscayne Bay, Fla.

Exact position, [illegible]

Key

Depth, 10

Nature of bottom, [illegible]

Dredging instrument used, [illegible]

Direction of drift, [illegible] : distance, [illegible]

Temperature of air. [illegible] therm. No.,

" of surface water, "

" at depth of fathoms. "

" at bottom. "

Density at surface, 1.1232 temp., [illegible]

" at depth of fathoms. "

" at bottom. "

Number of salinometer. 7459

Barometer reading. 30.25

State of sky, Partly [illegible]

Direction of wind, E. N. E. : force. [illegible]

Rain.

Direction of surface current. : force.

" of bottom " : force.

Name of vessel. Fish Hawk

Service to which attached, Fish Commission

Name and rank of commanding officer. [illegible]

[illegible] U. S. N.

Name and position of observer,

[illegible]

NOTES RELATING TO STATION NO.

RECORD OF DREDGING,

TEMPERATURE AND DENSITY.

Station No. [illegible]

Date, March 7, 1903

Time of day, [illegible] : of tide, [illegible]

Locality, Key Biscayne Bay, Fla.

Exact position, 4 1/4 mi. N. 1/2 E. of Cape Florida.

Depth, 1 1/2 fathoms

Nature of bottom, sand & grass

Dredging instrument used, [illegible]

Direction of drift, [illegible] : distance, [illegible]

Temperature of air, 75 therm. No.,

" of surface water, "

" at depth of fathoms, "

" at bottom, "

Density at surface, 1.0229 temp., 29

" at depth of fathoms, "

" at bottom, "

Number of salinometer, [illegible]

Barometer reading, 30.[illegible]

State of sky, Partly cloudy

Direction of wind, E. N. E. : force, 4

Rain.

Direction of surface current, : force,

" of bottom " : force,

Name of vessel, Fish Commission

Service to which attached, Fish Commission

Name and rank of commanding officer, [illegible]

Name and position of observer, [illegible]

NOTES RELATING TO STATION NO.

RECORD OF DREDGING.

TEMPERATURE AND DENSITY.

Station No. [illegible]

Date, [illegible]

Time of day, [illegible] M.; of tide, [illegible]

Locality, Big Pleasure Bay, N. Y.

Exact position, 3 mi. S.W. x W. of Coney Island

Depth, 11 1/2 ft

Nature of bottom, sand & grass

Dredging instrument used, Oyster dredge

Direction of drift, N. W. ; distance, 1/2 mi.

Temperature of air, [illegible] therm. No.,

" of surface water, "

" at depth of fathoms, "

" at bottom, "

Density at surface, 1.0212 temp., 24

" at depth of fathoms, "

" at bottom, "

Number of salinometer, [illegible]

Barometer reading, 30.05

State of sky, Partly Cloudy

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

Rain,

Direction of surface current, ; force,

" of bottom " ; force,

Name of vessel, Fish Hawk

Service to which attached, Fish Commission

Name and rank of commanding officer, James A. Smith Boatswain, U. S. N.

Name and position of observer,

Vernon L. Kellogg

NOTES RELATING TO STATION NO.

RECORD OF DREDGING,

TEMPERATURE AND DENSITY.

Station No. 7426

Date. March 7, 1902

Time of day. 9:30 A. M.: of tide, Low water

Locality. Key Biscayne Bay, Fla.

Exact position. 3 mi. W. by S. of Cape Florida

Depth. 16 ft.

Nature of bottom. sand & gravel

Dredging instrument used. Clyde's dredge

Direction of drift. N. W. : distance. ½ mile

Temperature of air. 75 therm. No.,

" of surface water, "

" at depth of fathoms, "

" at bottom, "

Density at surface. 1.0213 temp., 74

" at depth of fathoms, "

" at bottom, "

Number of salinometer. 7450

Barometer reading. 30.06

State of sky. Partly cloudy

Direction of wind. E. N. E.: force. 4

Rain.

Direction of surface current. : force,

" of bottom " : force,

Name of vessel. Fish Hawk

Service to which attached. Fish Commission

Name and rank of commanding officer. [illegible] U. S. N.

Name and position of observer. [illegible]

NOTES RELATING TO STATION NO.

RECORD OF DREDGING,

TEMPERATURE AND DENSITY.

Station No. 7777

Date, March 10, 1903

Time of day. 7.25 P. M.; of tide, 3/4 ebb.

Locality, Bay Biscayne Bay, Fla.

Exact position, 1 mi W. of Lake

[illegible] Beach.

Depth. 1 1/2 ft.

Nature of bottom. Bar

Dredging instrument used, Small scrape dredge

Direction of drift, S W. ; distance, 1/6 mi.

Temperature of air. 74 therm. No.,

" of surface water, "

" at depth of fathoms. "

" at bottom, "

Density at surface. 1.0231 temp., 23

" at depth of fathoms. "

" at bottom. "

Number of salinometer. 7750

Barometer reading. 30.06

State of sky. Partly cloudy

Direction of wind, East ; force, 4

Rain.

Direction of surface current, ; force,

" of bottom " ; force,

Name of vessel. Fish Hawk

Service to which attached. Fish Commission

Name and rank of commanding officer, James [illegible]

U. S. N.

Name and position of observer,

Vernon E. [illegible]

NOTES RELATING TO STATION NO. [illegible]

[illegible]

RECORD OF DREDGING,

TEMPERATURE AND DENSITY.

Station No. 7428

Date. March 10, 1885

Time of day. [illegible] P. M.; of tide, [illegible]

Locality. Biscayne Bay, Florida

Exact position. [illegible] of Arsenicker Bank.

Depth. [illegible]

Nature of bottom. [illegible]

Dredging instrument used. Smith scrape dredge

Direction of drift, West ; distance, [illegible] mi.

Temperature of air. [illegible] therm. No.,

" of surface water, "

" at depth of fathoms. "

" at bottom. "

Density at surface. 1.0200 temp., [illegible]

" at depth of fathoms. "

" at bottom. "

Number of salinometer. 7450

Barometer reading. [illegible]

State of sky. Partly cloudy

Direction of wind. East ; force, 7

Rain.

Direction of surface current. ; force,

" of bottom " ; force,

Name of vessel. Fish Hawk

Service to which attached. Fish Commission

Name and rank of commanding officer, [illegible]
Boatswain, U. S. N.

Name and position of observer, [illegible]

NOTES RELATING TO STATION NO.

RECORD OF DREDGING,

TEMPERATURE AND DENSITY.

Station No. 7949

Date, March 11, 1905

Time of day, 8:25 A.M. : of tide, 3 P.M.

Locality, Billes Lake, Biscayne Bay, Fla.

Exact position, 2½ m. N. E. [illegible] Point

Depth, 8 ft.

Nature of bottom, Hard sand

Dredging instrument used, [illegible]

Direction of drift, West : distance, [illegible]

Temperature of air, 74 therm. No.,

" of surface water, "

" at depth of fathoms, "

" at bottom, "

Density at surface, 1.0233 temp., 25

" at depth of fathoms, "

" at bottom, "

Number of salinometer, 7955

Barometer reading, 30.10

State of sky, Partly cloudy

Direction of wind, East ; force, 1

Rain,

Direction of surface current, : force,

" of bottom " ; force,

Name of vessel, Fish Hawk

Service to which attached, Fish Commission

Name and rank of commanding officer, James A. Smith
Lieutenant, U. S. N.

Name and position of observer,
Vernon E. West

NOTES RELATING TO STATION NO. 2407

RECORD OF DREDGING,

TEMPERATURE AND DENSITY.

Station No. [illegible]

Date, March 10, 1883

Time of day, 8:45 A. M.; of tide, 3/4 ebb

Locality, [illegible]

Exact position, [illegible]

Depth, [illegible]

Nature of bottom, [illegible]

Dredging instrument used, [illegible]

Direction of drift, [illegible] : distance, [illegible]

Temperature of air, 74 therm. No.,

" of surface water, "

" at depth of fathoms, "

" at bottom, "

Density at surface, 1.0245 temp., 23

" at depth of fathoms, "

" at bottom, "

Number of salinometer, 7457

Barometer reading, [illegible]

State of sky, Partly cloudy

Direction of wind, [illegible] : force, [illegible]

Rain,

Direction of surface current, : force,

" of bottom " : force,

Name of vessel, Fish Hawk

Service to which attached, Fish Commission

Name and rank of commanding officer, [illegible]

Name and position of observer, [illegible]

NOTES RELATING TO STATION NO.

RECORD OF DREDGING.

TEMPERATURE AND DENSITY.

Station No. 7491

Date, March 10, 1913

Time of day, 10 30 A.M. of tide ¾ ebb

Locality, Canal Sound, Fla.

Exact position, 1 mile N. x E ½ E of Palm Key Sound.

Depth, 13½ ft.

Nature of bottom, Fine sand

Dredging instrument used, [illegible]

Direction of drift, West ; distance, [illegible]

Temperature of air, 75 therm. No.,

" of surface water, "

" at depth of fathoms, "

" at bottom, "

Density at surface, 1.0224 temp., 27

" at depth of fathoms, "

" at bottom, "

Number of salinometer, 7400

Barometer reading, 3112

State of sky, Partly cloudy

Direction of wind, East ; force, 4

Rain,

Direction of surface current, ; force,

" of bottom " ; force,

Name of vessel, Fish Hawk

Service to which attached, Fish Commission

Name and rank of commanding officer, [illegible] Boatswain, U.S.N.

Name and position of observer, [illegible]

NOTES RELATING TO STATION NO. [illegible]

RECORD OF DREDGING.

TEMPERATURE AND DENSITY.

Station No. 7492

Date, March 10, 1913

Time of day, 11:00 A. M.; of tide. 3/4 ebb

Locality, Card Sound, Fla.

Exact position, 1 1/2 mi. S. W. by W. of Pumpkin Key

Depth, 11 1/2 ft

Nature of bottom, Soft sand & grass

Dredging instrument used, [illegible]

Direction of drift, West ; distance, 1/6 mi.

Temperature of air. 75° therm. No.,

" of surface water, "

" at depth of fathoms, "

" at bottom, "

Density at surface. 1.0222 temp., 24

" at depth of fathoms, "

" at bottom, "

Number of salinometer, 7456

Barometer reading. 30.12

State of sky. Partly clear

Direction of wind, East ; force. 4

Rain,

Direction of surface current, : force.

" of bottom " : force.

Name of vessel, Fish Hawk

Service to which attached, Fish Commission

Name and rank of commanding officer, [illegible]

Name and position of observer, [illegible]

NOTES RELATING TO STATION NO.

RECORD OF DREDGING.

TEMPERATURE AND DENSITY.

Station No. 7 & 9 2

Date, March 15, 1902

Time of day, 11:10 A. M.; of tide Low water

Locality, Card Sound, Fla.

Exact position, 1/2 mi. N. of Pumpkin Key

Depth, 10 ft.

Nature of bottom, Bay

Dredging instrument used, Small scrape dredge

Direction of drift, West; distance, 1/2 mi.

Temperature of air, 72° therm. No.,

" of surface water, "

" at depth of fathoms, "

" at bottom, "

Density at surface, 1.0222 temp., 24

" at depth of fathoms, "

" at bottom, "

Number of salinometer, 2 & 3

Barometer reading, 30.12

State of sky, Partly cloudy

Direction of wind, East; force, 4

Rain.

Direction of surface current, : force,

" of bottom " : force.

Name of vessel, Fish Hawk

Service to which attached, Fish Commission

Name and rank of commanding officer, Jas. A. Smith

Boatswain, U. S. N.

Name and position of observer,

Vernon E. West.

NOTES RELATING TO STATION NO. [illegible]

[illegible]

RECORD OF DREDGING,

TEMPERATURE AND DENSITY.

Station No. 7494

Date, March 12, 1923

Time of day, 9 20 A. M. ; of tide, ½ ebb

Locality, Hawk Channel

Exact position, 5 mi. N. E. x E. of southern end of Samson Key

Depth, 9 ft.

Nature of bottom, Hard sand & grass

Dredging instrument used, Small [illegible] [illegible]

Direction of drift, East ; distance, 1½ mi.

Temperature of air, 73 therm. No.,

" of surface water, "

" at depth of fathoms, "

" at bottom, "

Density at surface, 1 0252 temp., 23

" at depth of fathoms, "

" at bottom, "

Number of salinometer, 7450

Barometer reading, 3001

State of sky, Partly cloudy

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

Rain,

Direction of surface current, : force,

" of bottom " : force,

Name of vessel, Fish Hawk

Service to which attached, Fish Commission

Name and rank of commanding officer, James [illegible]
Boatswain, U. S. N.

Name and position of observer,
Vernon C. West.

NOTES RELATING TO STATION NO. 7797

1 sand dollar
3 species of non-commercial sponges
2 univalves

RECORD OF DREDGING.

TEMPERATURE AND DENSITY.

Station No. 7495

Date, March 12, 1903

Time of day, 9 A. M.; of tide, ½ ebb.

Locality, Hawk Channel, Fla.

Exact position, 5/8 mi. E. x N. of bottom Ragged Key

Depth, 12½ ft.

Nature of bottom, Hard sand.

Dredging instrument used, [illegible]

Direction of drift, East; distance, ½ mi.

Temperature of air, 73 therm. No.,

" of surface water, "

" at depth of fathoms, "

" at bottom, "

Density at surface, 1.0250 temp., 23

" at depth of fathoms, "

" at bottom, "

Number of salinometer, 7450

Barometer reading, 30.01

State of sky, Partly cloudy

Direction of wind, E. N. E.; force, 7

Rain,

Direction of surface current, : force,

" of bottom " : force,

Name of vessel, Fish Hawk

Service to which attached, Fish Commission

Name and rank of commanding officer, Joseph Smith Boatswain, U. S. N.

Name and position of observer, Vernon E. West.

NOTES RELATING TO STATION NO. 7425

Nothing on dredge