U. J. F.C. Recardo, ORIGINAL LOG BOOK OF THE "FISH HANK" UNITED STATES FISH CONVISSION STATION NUMBERS Numbers 1122 to 1155

1. J. Feih Comm. Dredging Records, No: 1122-1149.

1882.

11 22 Iname over 10 38 down 11.50 heaving in 11.23 wh 11.43 Quat lot of a cancila Aroundani, arth Astri-Alle Lynnessi on it.

and Realin Letter

ó

Instrument used, TRACIVI
Current number of observation, 1122
Date, Aug 28 th 1882
Date, Ang 20 -1. 1882
Locality, Off Mantuckact
Bearings. 2001, 70 - 02 11 Lorg. 68° - 30' 12
Time of day, 11.28; of tide,
State of sky, & C
Temperature of air, 70
" surface of water, 47
". at depth of 3 fathoms, 66 10 force, 60
" of bottom, 2/ 0 1/2
Depth. in fathoms. 337 = 351
Notion of And & Stones
Direction of surface current NNE. for ce y
Direction of surface current, N/V.E. for ce 4 Earce of Surface current, N.W.
Direction of bottom current,
Force of bottom current.
Name of vessel, Fish Hawk
To what service attached, U.S. Fish Commission
Name and rank of commanding officer, Swith 7. d.
Fanner. U.S.N.
Name and position of observer, J. B. Blich
Midohipman, U.S. A.

REMARKS. 1123 500 J-rand + ber 12.31 down 12.37 hearing in 3.22 W/ 3.33 At 233 or rest of led and 27 - SSI fine out Sycall but Very interesting hand of nare things. Phormosoma Ligsbeyi Eledone versucosa New Pennatuled Colossendeis Calassea Several plercible bea urching Phromosona Supably i Accordentert." Pleurotomella againque Margarich acgatis Peckin vitiens

26 3 3 59 lEW⊾terr,rae et€berr,

Instrument used. Dech Sca Frank Current number of observation, //29 Date Ang. 25 th 1882, Locality, "If in and deal Bearings, Bat 9,22-39,43" 1 bong. 63 - 54 W Time of day. 12. 52 ; of tide. State of sky. 1.C Temperature of air. 70 surface of water, n at depth of fathoms. of bottom. 39 Depth, in fathoms, $7\delta/=787$ Nature of bottom, Sand in Gullen muld Direction of surface current, 14.11. E Force 4 Driet Porce of surface current. N. A. L. Direction of bottom current, Force of bottom current. Name of vessel, To what service attached.

Name and rank of commanding officer.

J. W. Blista Mid'n 91, 5.11.

1124 REMARKS. Snawlover 429 down 4.44 Leaving in 5/17 up 3, 4/4? 831 Ind out 831 find out Large haul, autoaluable Acanella Normani, lot. Acarekogorgia armala Bolocera Truediae Pandalus propingues. Diploleraster multipes, Leryon quinquedens, Octopies Bairdii Rossia megaplera 20therown Acw Chiton Pennatula borcalis. Aralinoecia arlifero lot. Astrochele Symani on acanella Calliostoma accidentale Aborrhais occidentalis Margarila regalis Sipho pubercus Choristes elegand New Chilm (Mopalia?) Pennalula Vorealis (2)

Instrument used, Dech Sca Drage Current number of observation, //24 Aug 2 4 1 18891 Date. Locality. MI handucket Bearings. Lat 20°-01 N Long 68: 54 N Time of day, 4, 67 ; of tide, State of sky. Temperature of air, 65 surface of water, 65 41 at depth of fathoms. of botiom. 99 Depth, in fathoms, 690 - 640 Nature of bottom, fing 2 and 1 green mud Direction of entrace current, N.N.E. Force 4 Porce of surface chirrent. N. N. X N / Direction of bottom current. Force of bottom current.

Midn. M.S.N.

Name of vessel,

To what service attached,

Name and rank of commanding officer,

Name and position of observer, J. W. Blist

1123

Frank over 6.08 down 8.10 toaning in 6.32 up 6.50 517 find out

Azalinaccia artifey Acanella tormani. Bundes Tuediae. Lagartia abyssicola Pandalus propinguns. Lichodes maia Geryn quinquedens. Reclin vitreus Verebrahulin deptentionalis Scaphander puncto Striatus Schizastic Tragilis.

LEWEST CLASS TECCH

Instrument used, Dech Sea France Current number of observation, 1/25 Date 44926 18821 Locality, Off Manter clast Bearings, bat 40°-13 Sona 68°- 56 W Time of day, 5.43 ; of tide. State of sky, FE Temperature of air. 15 " surface of water, 64 " at depth of fathoms. .. of bottom. 40 Depth, in fathoms, 284 - 291 Nature of bottom, Sand & Mud Wind N. N.E. Force of Direction of surface current, N. N.E. Force of Swift N. M. X.M. 11 Direction of bottom current. Force of bottom current. Name of vessel. To what service attached.

Name and rank of commanding officer,

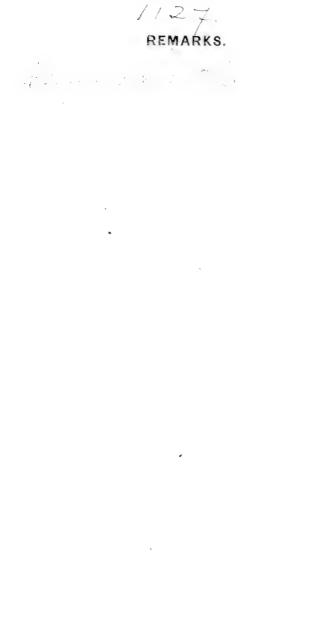
1126.

Cancer borcalis Matyonichus o accelatios Homacus amoreans miglilies Loulis. Echinaracknic parma Asicilias trombasic A backgaris

Instrument used, Thank Current number of observation. 119 (Date. Ina. 28 1282 Locality, Viney and Isund Bearings, Say, Dead St. Thouse N.S. MU 2 3/4 Time of day, 1.416; of tide, half with (weat, State of sky, b.e Temperature of air, 72 surface of water, 88 at depth of 11 fathoms, of bottom, 63 1/2 Depth, in fathoms, 14 blacks much & a and Nature of bottom. Direction of surface current, S. J. F. 5.8.18 Direction of bottom current. Force of bottom current, Name of vessel, To what service attached,

Name and position of observer,

Name and rank of commanding officer,



, in the Sec

Trend Instrument used. Current number of observation, 1197 Date. Amoral 12121 Locality, y werey and Lower Giahi Bearings. NXS Time of day, 2,30; of tide. 235 (West State of sky. JE Temperature of air, 65 surface of water, cat depth of fathoms. of bottom. f. 4 Depth, in fathoms, 10 R S.S.E Nature of bottom, Direction of = 858 Fare of Direction of bottom current. Force of bottom current, Name of vessel. To what service attached,

Name and rank of commanding officer,

1128 REMARKS.

•

.

pance av 1126.

.

.

.

۶. .

1
Instrument used, D Ned ge
Current number of observation. 1123
Date, Aug. 28 1882
Locality, Marca de Contra de
Locality, March Lead Lot 151 34 0
W Just 22
Time of day, 3.10 ; of tide, 20%.
State of sky, F.C.
Temperature of air, -19
" - surface of water, $\delta \in$
\therefore at depth of fathoms,
" of bottom, SS
Depth, in fathoms, 9
Nature of bottom, grace 20 vd r. mod Direction of surface current, 355 Figure 4 Force of surface current, 5×6 14
Force of surface current, $J X \in / \mathcal{G}$
Direction of bottom current,
Force of boltom current,
Name of vessel,
To what service attached,
Name and rank of commanding officer,

112.2

Echanarachunis parma Artereds Mitoloula arenata A. Farle Caplanda Cancer unoration Clarker Marine bollenner. Fallin Let. Male Langer Con Contacto Machia Locater Langer Seyte a sea prove ter e

Instrument used, Dredge Current number of observation. // 2 9 y cet 1852 Date. J. Ch. -1. Locality. Bearings. Time of day. 9.03 : of tide. State of sky. Temperature of air, 72 surface of water, 5 \dot{c} at depth of fathoms, of bottom. 32Depth. in fathoms. Sand y ster Nature of bottom, Direction of surface current, current. Direction of bottom current. Force of bottom current. Name of vessel, To what service attached, Name and rank of commanding officer.

1130.

game openies as 1129

Instrument used. of observation. Current number Date. Locality. Bearing Time of day, 2 . 3 ; of tide. State of sky. Temperature of air, 72 surface of water, 65 at depth of 44 fathoms, of bottom. 62 Depth, in fathoms, Savd 1 Nature of bottom, Direction of am 14 . 1 Direction of bottom current. Force of bottom current. Name of vessel, To what service attached,

Name and rank of commanding officer.

1131

26 me ao 1/29

•

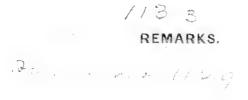
•

Instrument used, Dudon Current number of observation. 11 3 1 Date, Stel 2 2. A 1882 Locality. If the Maria Loand Bearings. Trusting, Tillogs S.E how 2. 29 ; of tide. Time of day. State of sky, 1-C Temperature of air, 72 surface of water, 5 at depth of fathoms, of bottom. 6 9 e 6 Depth, in fathoms, 4 Nature of bottom, Rend & strings E.M.E. form uneant. Direction of surf EXAL 1, Force of surface on Direction of bottom current, Force of bottom current, Name of vessel. To what service attached, Name and rank of commanding officer.



Star and the start

Instrument used, D and ge 1132 Current number of observation. 1822 111 Date. Locality. If the Mana Loor of Bearings, Frishing Villag SEX Time of day, L , Y ; of tide. State of sky. W.C 7.2 Temperature of air. surface of water, 6 9 at depth of fathoms, of bottom. 8 2 Depth, in fathoms. Nature of bottom. Direction of a Direction of bottom current, Force of bottom current, Name of vessel, To what service attached, Name and rank of commanding officer,



Instrument used, Dredge. 113 Current number of observation, 18821 Date, Jak 2 " is Maris Land Locality. him Bearings. Time of day, 3.16 ; of tide. State of sky, 1. C Temperature of air, 72 at depth of fathoms, of bottom, 12 Depth. in fathoms, Danc Nature of bottom. Direction of surface Farmer of Direction of bottom current, Force of bottom current.

Name of vessel,

To what service attached,

Name and rank of commanding officer,

REMARKS. Jecific éna to Surjace 1.0283-25 Sfine, 1.6235-65

•

Instrument used, Travel Current number of observation, 1185 Date. 10/1. 112 1832 Locality. Monempha Bian Bearings. Say Head in a stand a second Time of day. 1.26 : of tide. « State of sky. Temperature of air. 76 surface of water, 66 at depth of fathoms. ć. of bottom, 6,4 Depth, in fathoms. 9 1/2 rd. I and Nature of bottom, 20. Fisice 4 Direction of surface ourrent. I E Force of surface current. Direction of bottom current. Force of bottom current. Name of vessel, To what service attached, Name and rank of commanding officer,

Instrument used, Travel Current number of observation. / / . . Date, John + 6 = 1822 Locality, Vine ford gourd Bearings. Gay Head Lt, 11/2 5 Time of day, 2.20; of tide. Stade (low) 2013 State of sky, J-C. Temperature of air, 7/ surface of water. 16 at depth of fathoms. 22 of bottom. $\dot{\gamma}$ Depth, in fathoms, 7/9 Nature of bottom, Jard 9 mind Direction of surface current, Force of surface ourrent. Direction of bottom current. Force of bottom current. Name of vessel, To what service attached, Name and rank of commanding officer,

.

Instrument used, Dr. C.C. Current number of observation. 11 9 4 Date, & that 6 F Locality. Bearings, Hally A. HSWY THE HU Time of day, 3,56 ; of tide, East to State of sky, FC Temperature of air. 76 surface of water, -/ (at depth of ć. fathoms. of bottom. 1.3 Depth, in fathoms, /6 Nature of bottom, Mud in airmont. Direction of sur Farce of surface eurrent. Direction of bottom current. Force of bottom current. Name of vessel, To what service attached.

Name and rank of commanding officer,

1137 Sanface 1.6 242 87 sfra. 42 17 In a ye dit to an till form tills heaving in 100 up 7000 870 june, out at 7.00 over ided in 141 for.

.

Instrument used, I Darve
Current number of observation, 1/3 7
Date, 2 ept. 8 4 1882
Locality. I Berta
Bearings, Lo at - 39% 46' W
Long - 1710 - 30' 11
Time of day, 6,00 A H; of tide,
State of sky, N-C
Temperature of air. 6 8
" surface of water, 76
" at depth of 5 fathoms, 69, 10 from 62 1/2
·· of bottom, 4 4
Depth, in fathoms, 173
Nature of bottom, fing 20 hd
Direction of surface current.
Force of surface current, 2 wift NH12 1/2
Direction of bottom current,
Force of bottom current,
Name of vessel,
To what service attached,
Name and rank of commanding officer,

1198 Specific Santes Surface 1.0241 70 3 f n ~ 21/ 173 21/ 71 France ther 7.33 torm 17,8 ? heaving in 8.02 up \$ 15 8 50 france out

. .

Instrument used, Dech Sia The is Current number of observation. 1190 Date, I that 8 th 188.2 Locality. Bearings, Lat 390, 391 1 Dong 710-34' 12 Time of day, 7.24 ; of tide. State of sky, Or C Temperature of air, 72 surface of water, 17/ at depth of 5 fathoms, 170 of bottom. 4/K Depth, in fathoms. 18 8 Nature of bottom, $2\pi/2^{-1}$ Direction of surface current. Faree o Direction of bottom current. Force of bottom current. Name of vessel. To what service attached.

Name and rank of commanding officer,

1189 Sheafic Superior 1. 8 2 3 6 7 5 Sunface 5 frie 38 17/ 39 172 Bruch oner 2.23 Ann ? 3 hoaving in 9.40 wh is is 355 Juno i met

ł .

Instrument used, Dech Jea Thawl Current number of observation. Date Schot Sthe 1582 Locality. Of (BOrda Daland Bearings, to at 39- 97 6:10 17 3-Time of day, 8 . 48 ; of tide. State of sky. NC Temperature of air, 74 surface of water, 72at depth of 5 fathoms, PO 13 / 21-2 84 of bottom. 29 Depth, in fathoms, Nature of bottom, 10 1 10 Direction of surface A SIY. 2 67 17 2 49644 49 1/2 4709 7 49 417 703 47 417 703 Frechendrice at 95 / ... is Direction of bottom current, Korce of bottom carrent, 1. 47999 Name of vessel,

To what service attached,

Name and rank of commanding officer,

Shecific Granitis Surface 1.0240 79 37 5 forma 179 ý., · 11.22 la si si si si

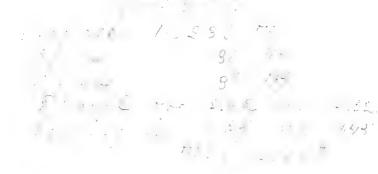
11215

Lerjon quistoens, ser, large. Labinea prinseps, Pandalus propringuus, Archaster aga esizie.

Instrument used, Deck Joa Trawe Current number of observation, 1140 Date, Loht R & ISER Locality, U.J. Blow w Dord Bearings. but 392 541 Time of day, 10.93 ; of tide, State of sky, 1-- C Temperature of air. 78 surface of water, 79 at depth of 3 fathoms, 72 10 free 18 of bottom. 40 Depth, in fathoms, 374 with many for a much a Nature it with for early a ME much 9 200 current. W 12 1 - - 2 Direction of surface Fire of surface earrent. Birection of bottom current. Force of bottom current, 25 Name of vessel,

To what service attached,

Name and rank of commanding officer,



In France wings Heropos, Clione papil ionacca, Caralina longitasti's , ali'e,

Thank net emply,



Instrument used. Dich Saa T Current number of observation. 1141 Date, Sale 9 th 1882 Locality. Of Block Delard Bearings. Lat 391 - 32' N Bearings. . it. 71 -Time of day, 19 9 7 ; of tide, State of sky. NC Temperature of air, 80 surface of water, 74 at depth of 7 fathoms, 79 11 1 2 70 of botiom, 40 Depth, in fathoms, 389 Nature of bottom, Sand or much Direction of Direction of bottom current, Force of bottom current, Name of vessel, To what service attached. Name and rank of commanding officer,

11412

Shee, Shall 2. 18 ma 40 Thank jun 205 dome 2.20 howing in \$140 up 8.17 \$ 10 for 2 put

of canelia Arazimani.

Instrument used, I selv sca Fiame Current number of observation. P. U. Date 28.6.1 Locality. If Blocks doc + 291-Lia Bearings. Sma 1/22 Time of day, 1-3 9 ; of tide. State of sky, Temperature of air. surface of water. 1741 100 20 at depth of 5 fathoms, 74 of bottom, 41 Depth, in fathoms. Nature of bottom, " the set of h Lin current. Direction of surface Lirection of bottom current. Force of bottom current, Name of vessel, To what service attached, Name and rank of commanding officer.

Surface 1.6288 74 5. 36 12 5. 36 12 The second solution 4.45 barring in 4.45 up 5.10 746 product 5.10 4.45 product 12 for 5) 101 - 5

15. Sector States and States

ech See Franci Instrument used. Current number of observation. / 1882 Date. Bloda Dad Locality. 900 Bearings. : of tide. Time of day. State of sky. 30 Temperature of air, surface of water, 77 4 F? at depth of 5 fathoms. of bottom. Depth, in fathoms, Nature of bottom, Direction of surface 2 Force of surfa NT enche i 93 Direction of bottom current. a 4 Force of bottom current, Name of vessel, To what service attached,

Name and rank of commanding officer,

durfaie 1.6240 72 5 frie 1, 42418 73 29 5 11 41 172 Traw Cover 616 down 8.81 bearing in 6.50 up 1.40 750 fine out boat The we riet.

Instrument used, Dech Sea I Sacol Current number of observation, // Date, gather Ent 1886 Locality, 614 Blacker 8 1 at 802 8 Bearings. Time of day. 6. 7 3 Pin of tide. State of sky. Temperature of air. 17 3 surface of water, 174 at depth of 5 fathoms, 79 16/2.2 172 of bottom, 4/ Depth. in fathoms. Nature of bottom, Direction of surface current. Tome current. Lirection of inition current. Force of bottom corrent. Name of vessel.

To what service attached,

Name and rank of commanding officer,

Cad prande Instrument used. Current number of observation. 1145 Jept. 21. 1882 Date If mareta's Vineyard Locality. C Bearings, Lat. 40° 03' Long. 700 28. ; of tide. Time of day, State of sky, Temperature of air. surface of water. at depth of fathoms, of bottom. Depth, in fathoms. 135-160 Nature of bottom. Direction of surface current. Force of surface current. Direction of bottom current. Force of bottom current. Jeh. Josie Reeves Name of vessel. To what service attached. Name and rank of commanding officer. Capt. J. 12 Collins. Name and position of observer,

R. J.L zauls -our)

10:

The Sch. Jose's Record of New York Capt. F. M. Redmond, accompanied to Capt. J. Lo. Collins U.S. F.C. spent 2 days on che round where Lopholatelus Chamelenteeifs should occur. They set cartrands . and tobater poto covered wich helting. bur found none of chat drucies of fin Arthing but the abudeel entered she pob, and chio chez di) in freat abundances on che trans were caught have, dogfish, Akales. Joure fish, and ared fish (24, ?) and a few tweeletrales serve hew Haven,

Ca) Li auch Instrument used. Current number of observation, 1146. Date. Jept. 2, 24, 882 Locality. Of, 17 artha's binezard, Bearings. Lat. 40002! N. Bearings. long, 70041' W. Time of day, ; of tide, State of sky. Temperature of air. surface of water. 41 at depth of fathoms. of bottom. Depth, in fathoms, 130-150. Nature of bottom. Direction of surface current. Force of surface current, Direction of bottom current. Force of bottom current, Joh Josie Record. Name of vessel, To what service attached, Name and rank of commanding officer f. W. Collens.

Cat. A Instrument used. Current number of observation, 1147. Date. Sept. 22. 1982 Locality. Off Matchastineya Bearings, Lat. 40,01'N. dang. 71002' W. ; of tide. Time of day, State of sky, Temperature of air. surface of water. 64 at depth of fathoms. of bottom. Depth, in fathoms, 1 2. 5. Nature of bottom. Direction of surface current, Force of surface current. Direction of bottom current. Force of bottom current. Name of versel. Ich. Josei Recirco. To what service attached, Name and rank of commanding officer, J. W. Collins, Name of vessel.

De 2 tr Instrument used. Current number of observation. 1148 Jept. 23, 1882, Date. Locality. Off Marchas binezard. Bearings, Lat. 39° 54' N. 2' w. ang, 7102 Time of day, ; of tide, State of sky, Temperature of air, surface of water. at depth of fathoms, of bottom. Depth, in fathoms, / O 0 Nature of bottom. Direction of surface current, Force of surface current, Direction of bottom current. Force of bottom current. Reever, Nature of vessel. Jeh. He To what service attached, Name and rank of commanding officer.

the To Instrument used. Current number of observation. 23, 1882 Larchai line Date. Locality. 390000 Bearings. · W. 02 1 4 ; of tide. Time of day, State of sky, Temperature of air. surface of water, at depth of fathoms, .. of bottom. Depth, in fathoms, // 0, Nature of bottom. Direction of surface current, Force of surface current, Direction of bottom current. Force of bottom current. Record v, Colli Name of vessel, To what service attached, Name and rank of commanding officer.

1150 ARKS. Every thing served. hen Gener conjugato en Manufactor & alleration about all buy, out 21 and and and Aller 2 Clark March 1 All States

Tracic ++50 Instrument used. Current number of observation. Date. Locality. 4. 390581 Bearings. ng. 700 37' lo. Time of day, 6, 35 Wof tide, -6. C State of sky. Temperature of air, surface of water. 6 2at depth of 5 fathoms, 62, of bottom, Depth, in fathoms, 1 day 0 Sauch Nature of bottom. Direction of surface current, E. 1/2 m. Horiet to. Force of surface current, Direction of bottom current. Force of bottom current, Name of vessel. To what service attached, Name and rank of commanding officer.

1151,

REMARKS.

About every thing sauch

-bar Europe Arrive rates

1240 Contractor

Instrument used. It Tracel,
Current number of observation. 1151,
Date, Gch. 14, 1882
Locality. L Bearings. Lat. 39058'30" A.
Bearings, Lat. 290 3 8 50" A.
Long. 70:37'00" w.
Time of day. J. H. 5 ; of fide, T. C.
State of sky, 6.
Temperature of air, 66,
" surface of water, 6 2-
at depth of 6 fathoms, 6 2 .
of bottom, 14 8
Depth, in fathoms, / 2 5,
Nature of bottom, A. auch
Direction of surface current, Force of surface current, Force of surface current,
Fore of surface current,
Direction of bottom current.
Force of bottom current.
Name of vessel, Fice hat a carte,
To what service attached,
Name and rank of commanding officer.

Repair of the

State of the second second infree and to brashingle

++52 Traw C Instrument used. 1152 Current number of observation. UCF. 4 100 Date. Locality. 521 Marthas baneyour Bennings Lat, 39° 58' N. Long. 70° 35' W. Time of day. 8, 42 , of tide - CL State of sky, C. C Temperature of air, 68, surface of water, 😕 Zaat depth of 5 fathoms, 6 2of bottom, 48 115 Depth, in fathoms, Nature of bottom, Kartush Direction of surface current. Et 11/2m and we Force of surface current. Direction of bottom current, Force of bottom current, Freshtlande. Name of vessel. To what service attached, Name and rank of commanding officer,

1153,

Same have but is a Same Bolecera Jundian beyabach Luciena Callera Apalenceia Europeia elde second Ne d'angle y colle Carrie of alignments of well profit placed Thank liting, Denne Mark

Instrument used. 1153. Current number of observation. 6-ch. 4, 1882 Date. Lat. 390 54 M. Locality. Bearings. ng. 70037'LU. Time of day, / C , Y & ; of fide L State of sky, As Temperature of air, $-\frac{1}{2}$ surface of water, 62,4 at depth of S fathoms. 6. of bottom, 444, Depth, in fathoms, 225 Nature of bottom. Direction of surface current, Force of statuce current Direction of bottom current, Force of bottom current, Name of vessel. To what service attached, Name and rank of commanding officer. Name and position of observer,

1154

dimitar to Carr. Idra alino e e la about 10 burhils Many an all alining Quilt a with have Conte moste The off Sagardia aby son for all

TEMPERATURE RECORD. Instrument used. 11 15 Current number of observation, Oct 4.18 Date. Locality, Off Martha's Grace, Bearings. Lat. 39° 55' 31" N. (obs) 2029. 40039'00. lv. Time of day, 12,10; of tide, 1 State of sky, The C. Temperature of air. 672 surface of water. 6 2-1/2 at depth of fathoms, of bottom, That Lake Depth, in fathoms. 273 Nature of bottom. Direction of surface current. A. by W. Mam Force of surface ch Direction of bottom current. Force of bottom current. Name of vessel, To what service attached, Name and rank of commanding officer,

1151

and to Arakaster i l'and in the formation of the second to a and with few and alcaneary and the

et provident and provident and provident and the the form the second second Langton Jose for

18 a. agassign send to town

2020

Kiel + Instrument used, No La Current number of observation, / French h Date. Locality. Bearings. Lat. 39°52' dong, 70030 · lo. Time of day, HI , at it's ; of tids. State of sky. 6. C Temperature of air, (0 44surface of water. 6 3 at depth of \$ fathoms, \$ 4 of bottom. 4 Depth, in fathoms, - 5-2.0 Nature of bottom, , Direction of surface current. 1.0 Force of surface current. Direction of bottom current. Force of bottom current. Name of vessel, To what service attached. Name and rank of commanding officer,

e

Instrument used,

Current number of observation.

Date,

Locality,

Bearings,

Time of day,

; of tide.

State of sky,

Temperature of air.

- " surface of water,
- " at depth of fathoms,
- " of bottom,

Depth, in fathoms.

Nature of bottom.

Direction of surface current.

Force of surface current,

Direction of bottom current,

Force of bottom current.

Name of vessel,

To what service attached,

Name and rank of commanding officer.

Instrument used,

Current number of observation,

Date,

Locality,

Bearings,

Time of day,

; of tide,

State of sky,

Temperature of air,

" surface of water,

" at depth of fathoms,

" of bottom,

Depth, in fathoms,

Nature of bottom,

Direction of surface current,

Force of surface current.

Direction of bottom current.

Force of bottom current.

Name of vessel,

To what service attached,

Name and rank of commanding officer,

Instrument used,
Current number of observation,
Date.
Locality,
Bearings,
Time of day, ; of tide.
State of sky,
Temperature of air,
surface of water,
" at depth of fathoms,
" of bottom,
Depth, in fathoms.
Nature of bottom,
Direction of surface current,
Force of surface current,
Direction of bottom current.
Force of bottom current.
Name of vessel,
To what service attached,
Name and rank of commanding officer,

Instrument used, Current number of observation. Date. Locality. Bearings, ; of tide. Time of day, State of sky, Temperature of air, surface of water, fathoms. 6+ at depth of eć. of bottom, Depth. in fathoms, Nature of bottom. Direction of surface current. Force of surface current, Direction of bottom current, Force of bottom current, Name of vessel, To what service attached, Name and rank of commanding officer,

Instrument used,

Current number of observation.

Date,

Locality.

Bearings.

Time of day,

; of tide,

State of sky,

Temperature of air.

- surface of water,
- " at depth of fathoms,
- .. of bottom,

Depth, in fathoms,

Nature of bottom,

Direction of surface current,

Force of surface current,

Direction of bottom current,

Force of bottom current,

Name of vessel,

To what service attached,

Name and rank of commanding officer,

· · · ·

Instrument used.

Current number of observation.

Date,

Locality.

Bearings.

Time of day,

; of tide,

State of sky,

Temperature of air,

·· surface of water,

at depth of fathoms,

" of bottom,

Depth, in fathoms,

Nature of bottom,

Direction of surface current,

Force of surface current,

Direction of bottom current.

Force of bottom current,

Name of vessel,

To what service attached,

Name and rank of commanding officer,

LEMO IN CODE

Instrument use:1.

Current number of observation.

Date.

Locality.

Bearings.

Time of day.

: of tide,

State of sky,

Temperature of air,

surface of water,

at depth of fathoms,

" of bottom,

Depth, in fathoms,

Nature of bottom,

Direction of surface current,

Force of surface current,

Direction of bottom current.

Force of bottom current,

Name of vessel,

To what service attached,

Name and rank of commanding officer,