No 14.

Octr 13th 1889.

Mch 24th 1890.

Dr 3097 to 3168.

Hyd. 2147 to 2175.

# Sigebee.

## 4609 Turns on reel.

4609
175
4434

Correction Table. No 2 Reel. Correction 235

| Cor. | Turns. | Cor. | Turns. | Cor. | Turns |
|---|---|---|---|---|---|
| 0 | 50 | 31 | 1650 | 120 | 3250 |
| 0 | 100 | 33 | 1700 | 123 | 3300 |
| 0 | 150 | 35 | 1750 | 127 | 3350 |
| 1 | 200 | 37 | 1800 | 131 | 3400 |
| 1 | 250 | 39 | 1850 | 135 | 3450 |
| 1 | 300 | 41 | 1900 | 138 | 3500 |
| 2 | 350 | 43 | 1950 | 141 | 3550 |
| 2 | 400 | 45 | 2000 | 145 | 3600 |
| 3 | 450 | 47 | 2050 | 150 | 3650 |
| 3 | 500 | 50 | 2100 | 154 | 3700 |
| 4 | 550 | 53 | 2150 | 158 | 3750 |
| 5 | 600 | 55 | 2200 | 162 | 3800 |
| 5 | 650 | 57 | 2250 | 167 | 3850 |
| 6 | 700 | 60 | 2300 | 171 | 3900 |
| 7 | 750 | 63 | 2350 | 175 | 3950 |
| 8 | 800 | 66 | 2400 | 179 | 4000 |
| 9 | 850 | 68 | 2450 | 184 | 4050 |
| 10 | 900 | 71 | 2500 | 188 | 4100 |
| 11 | 950 | 74 | 2550 | 193 | 4150 |
| 12 | 1000 | 77 | 2600 | 197 | 4200 |
| 13 | 1050 | 80 | 2650 | 202 | 4250 |
| 14 | 1100 | 83 | 2700 | 206 | 4300 |
| 15 | 1150 | 86 | 2750 | 211 | 4350 |
| 16 | 1200 | 89 | 2800 | 216 | 4400 |
| 18 | 1250 | 92 | 2850 | 220 | 4450 |
| 19 | 1300 | 95 | 2900 | 225 | 4500 |
| 21 | 1350 | 99 | 2950 | 230 | 4550 |
| 22 | 1400 | 102 | 3000 | 235 | 4609 |
| 24 | 1450 | 106 | 3050 | 240 | |
| 25 | 1500 | 109 | 3100 | 245 | |
| 27 | 1550 | 113 | 3150 | 250 | |
| 29 | 1600 | 116 | 3200 | 253 | |

4609
418
4191

418
38
456

253
1002
4609
418
291

235
197
38

4609
340
4260

235.
219
16

# Tanner

## 377 Turns on Reel.

| | |
|---|---|
| Turns. 16 to 38 | +1 |
| 39 " 70 | +2 |
| 71 " 105 | +3 |
| 106 " 142 | +4 |
| 143 " 190 | +5 |
| 191 " 260 | +6 |
| 261 " 384 | +7 |

## Abbreviations for bottom.

| Abn. | Equivalent. | Abn. | Equivalent. |
|---|---|---|---|
| C | Clay | fne | fine |
| Co. | Coral. | hrd. | hard |
| G. | Gravel | lrge | large |
| Glob | Globegirina | rky | rocky |
| M. | Mud. | sft. | soft |
| Oz | Ooze | sml | small |
| P. | Pebbles | stk | stickey |
| R. | Rocks. | bk | black |
| S | Sand | br. | brown |
| Sh. | Shells. | bn | blue |
| Sp | Specks | choc. | chocolate |
| St. | Stones | dk | dark. |
| brk. | broken | gn | green |
| gy | gray. | rd. | red. |
| lt. | light | slat | slate |
| wh. | White | yl. | yellow. |
| crs. | Coarse. | | |

4600
34
4546

Oct. 13'89 3097
Mch. 29'90. 3168

3147
3175

W. M. H.

No. Hy 2147 Date October 13th 1889

Tanner Machine. Reel.

Turns 48 Cor. + 2 Depth 50

~~Shot or~~ lead 26.

Bottom M.

Bottom temperature 49.5

No. of Thermometer 51451 Cor. -0.3°

Corrected temperature 49.2°

Air 56 Surface 56 Drift.

Trawl or dredge or tangles

P. M.

| SOUNDING WIRE. | | TURNS. | DREDGE ROPE. | |
|---|---|---|---|---|
| DOWN. | UP. | | DOWN. | UP. |
| 10.03.00 | 10.4.40 | 0 | | |
| 10.03.30 | 10.03.40 | 100 | | |
| | | 200 | | |
| | | 300 | | |
| | | 400 | | |
| | | 500 | | |
| | | 600 | | |
| | | 700 | | |
| | | 800 | | |
| | | 900 | | |
| | | 1000 | | |
| | | 1100 | | |
| | | 1200 | | |
| | | 1300 | | |
| | | 1400 | | |
| | | 1500 | | |
| | | 1600 | | |
| | | 1700 | | |
| | | 1800 | | |
| | | 1900 | | |
| | | 2000 | | |
| | | 2100 | | |
| | | 2200 | | |
| | | 2300 | | |
| | | 2400 | | |

| | | | | |
|---|---|---|---|---|
| | | 2500 | | |
| | | 2600 | | |
| | | 2700 | | |
| | | 2800 | | |
| | | 2900 | | |
| | | 3000 | | |
| | | 3100 | | |
| | | 3200 | | |
| | | 3300 | | |
| | | 3400 | | |
| | | 3500 | | |
| | | 3600 | | |
| | | 3700 | | |
| | | 3800 | | |
| | | 3900 | | |
| | | 4000 | | |

SERIAL TEMPERATURE.

| DEPTH. | TEMP. | NO. OF THER. | COR. | COR. TEMP. |
|---|---|---|---|---|
| 25 | | | | |
| 50 | | | | |
| 100 | | | | |
| 200 | | | | |
| 300 | | | | |
| 400 | | | | |
| 500 | | | | |
| 600 | | | | |
| 700 | | | | |
| 800 | | | | |
| 900 | | | | |
| 1000 | | | | |

REMARKS.

W. 50 H

No. Hy 2148 Date October 13th 1889

Tanner Machine. Reel.

Turns 26 Cor. + 1 Depth 27

~~Shot~~ or lead 26.

Bottom M.

Bottom temperature 53.5

No. of Thermometer 51451 Cor. -0.2°

Corrected temperature 53.3°

Air 56 Surface 56 Drift.

Trawl or dredge or tangles

| P.M. SOUNDING WIRE. | | TURNS. | DREDGE ROPE. | |
|---|---|---|---|---|
| DOWN. | UP. | | DOWN. | UP. |
| 10.40.00 | 10.4.30 | 0 | | |
| 10.40.30 | 10.40.40 | 100 | | |
| | | 200 | | |
| | | 300 | | |
| | | 400 | | |
| | | 500 | | |
| | | 600 | | |
| | | 700 | | |
| | | 800 | | |
| | | 900 | | |
| | | 1000 | | |
| | | 1100 | | |
| | | 1200 | | |
| | | 1300 | | |
| | | 1400 | | |
| | | 1500 | | |
| | | 1600 | | |
| | | 1700 | | |
| | | 1800 | | |
| | | 1900 | | |
| | | 2000 | | |
| | | 2100 | | |
| | | 2200 | | |
| | | 2300 | | |
| | | 2400 | | |

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|---|---|---|---|---|
| | | 2500 | | |
| | | 2600 | | |
| | | 2700 | | |
| | | 2800 | | |
| | | 2900 | | |
| | | 3000 | | |
| | | 3100 | | |
| | | 3200 | | |
| | | 3300 | | |
| | | 3400 | | |
| | | 3500 | | |
| | | 3600 | | |
| | | 3700 | | |
| | | 3800 | | |
| | | 3900 | | |
| | | 4000 | | |

SERIAL TEMPERATURE.

| DEPTH. | TEMP. | NO. OF THER. | COR. | COR. TEMP. |
|---|---|---|---|---|
| 25 | | | | |
| 50 | | | | |
| 100 | | | | |
| 200 | | | | |
| 300 | | | | |
| 400 | | | | |
| 500 | | | | |
| 600 | | | | |
| 700 | | | | |
| 800 | | | | |
| 900 | | | | |
| 1000 | | | | |

REMARKS.

W.301-N

No. Hy 2149 Date October 13-89

Tanner Machine. Reel.

Turn's 22 Cor. + 1 Depth 23

~~Shot or~~ lead 26

Bottom fine akgy S.

Bottom temperature —

No. of Thermometer 51451 Cor. —

Corrected temperature —

Air 56 Surface 55 Drift.

Trawl or dredge or tangles

P. M.

| SOUNDING WIRE. | | TURNS. | DREDGE ROPE. | |
|---|---|---|---|---|
| DOWN. | UP. | | DOWN. | UP. |
| 11.26.00 | 11.27.30 | 0 | | |
| 11.26.30 | 11.26.40 | 100 | | |
| | | 200 | | |
| | | 300 | | |
| | | 400 | | |
| | | 500 | | |
| | | 600 | | |
| | | 700 | | |
| | | 800 | | |
| | | 900 | | |
| | | 1000 | | |
| | | 1100 | | |
| | | 1200 | | |
| | | 1300 | | |
| | | 1400 | | |
| | | 1500 | | |
| | | 1600 | | |
| | | 1700 | | |
| | | 1800 | | |
| | | 1900 | | |
| | | 2000 | | |
| | | 2100 | | |
| | | 2200 | | |
| | | 2300 | | |
| | | 2400 | | |

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|---|---|---|---|---|
| | | 2500 | | |
| | | 2600 | | |
| | | 2700 | | |
| | | 2800 | | |
| | | 2900 | | |
| | | 3000 | | |
| | | 3100 | | |
| | | 3200 | | |
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| | | 3400 | | |
| | | 3500 | | |
| | | 3600 | | |
| | | 3700 | | |
| | | 3800 | | |
| | | 3900 | | |
| | | 4000 | | |

SERIAL TEMPERATURE.

| DEPTH. | TEMP. | NO. OF THER. | COR. | COR. TEMP. |
|---|---|---|---|---|
| 25 | | | | |
| 50 | | | | |
| 100 | | | | |
| 200 | | | | |
| 300 | | | | |
| 400 | | | | |
| 500 | | | | |
| 600 | | | | |
| 700 | | | | |
| 800 | | | | |
| 900 | | | | |
| 1000 | | | | |

REMARKS.

No. Hy. 2150 Date Oct 14/89.

Jarmer Machine. Reel.

Turns 348 Cor. + 7 Depth 355.

Shot or lead 26 lbs.

Bottom m.

Bottom temperature 42

No. of Thermometer 51451 Cor. -0.3°

Corrected temperature 41.7°

Air 56 Surface 55 Drift.

Trawl or dredge or tangles ——

| SOUNDING WIRE. | | TURNS. | DREDGE ROPE. | |
|---|---|---|---|---|
| DOWN. | UP. | | DOWN. | UP. |
| 12-09-0 | 30-30 | 0 | | |
| 10-30 | 18-0 | 100 | | |
| 11-30 | 16-0 | 200 | | |
| 12-30 | 12-13-0 | 300 | | |
| | | 400 | | |
| | | 500 | | |
| | | 600 | | |
| | | 700 | | |
| | | 800 | | |
| | | 900 | | |
| | | 1000 | | |
| | | 1100 | | |
| | | 1200 | | |
| | | 1300 | | |
| | | 1400 | | |
| | | 1500 | | |
| | | 1600 | | |
| | | 1700 | | |
| | | 1800 | | |
| | | 1900 | | |
| | | 2000 | | |
| | | 2100 | | |
| | | 2200 | | |
| | | 2300 | | |
| | | 2400 | | |

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|---|---|---|---|---|
| | | 2500 | | |
| | | 2600 | | |
| | | 2700 | | |
| | | 2800 | | |
| | | 2900 | | |
| | | 3000 | | |
| | | 3100 | | |
| | | 3200 | | |
| | | 3300 | | |
| | | 3400 | | |
| | | 3500 | | |
| | | 3600 | | |
| | | 3700 | | |
| | | 3800 | | |
| | | 3900 | | |
| | | 4000 | | |

SERIAL TEMPERATURE.

| DEPTH. | TEMP. | NO. OF THER. | COR. | COR. TEMP. |
|---|---|---|---|---|
| 25 | | | | |
| 50 | | | | |
| 100 | | | | |
| 200 | | | | |
| 300 | | | | |
| 400 | | | | |
| 500 | | | | |
| 600 | | | | |
| 700 | | | | |
| 800 | | | | |
| 900 | | | | |
| 1000 | | | | |

REMARKS.

A.P.

No. Hy. 2151 Date Oct 14/89

Sigsbee Machine. Reel. 2

Turns 60 Cor. + 5 Depth 65

~~Shot~~ or lead 35 abs

Bottom bk S & W

Bottom temperature 49.2

No. of Thermometer 51451 Cor. -0.3°

Corrected temperature 48.9°

Air 56 Surface 55 Drift.

Trawl or dredge or tangles

| H.W SOUNDING WIRE. | | TURNS. | DREDGE ROPE. | |
|---|---|---|---|---|
| DOWN. | UP. | | DOWN. | UP. |
| 1-2-15 | 1-5-30 | 0 | | |
| | | 100 | | |
| | | 200 | | |
| | | 300 | | |
| | | 400 | | |
| | | 500 | | |
| | | 600 | | |
| | | 700 | | |
| | | 800 | | |
| | | 900 | | |
| | | 1000 | | |
| | | 1100 | | |
| | | 1200 | | |
| | | 1300 | | |
| | | 1400 | | |
| | | 1500 | | |
| | | 1600 | | |
| | | 1700 | | |
| | | 1800 | | |
| | | 1900 | | |
| | | 2000 | | |
| | | 2100 | | |
| | | 2200 | | |
| | | 2300 | | |
| | | 2400 | | |

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|---|---|---|---|---|
| | | 2500 | | |
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| | | 2800 | | |
| | | 2900 | | |
| | | 3000 | | |
| | | 3100 | | |
| | | 3200 | | |
| | | 3300 | | |
| | | 3400 | | |
| | | 3500 | | |
| | | 3600 | | |
| | | 3700 | | |
| | | 3800 | | |
| | | 3900 | | |
| | | 4000 | | |

SERIAL TEMPERATURE.

| DEPTH. | TEMP. | NO. OF THER. | COR. | COR. TEMP. |
|---|---|---|---|---|
| 25 | | | | |
| 50 | | | | |
| 100 | | | | |
| 200 | | | | |
| 300 | | | | |
| 400 | | | | |
| 500 | | | | |
| 600 | | | | |
| 700 | | | | |
| 800 | | | | |
| 900 | | | | |
| 1000 | | | | |

REMARKS.

A.A.

No. Hy 2152 Date Oct. 14/89

Sigsbee Machine. Reel.

Turns 575 Cor. + 52 Depth 627

Shot or lead 35 lbs

Bottom gw cw

Bottom temperature 38.8

No. of Thermometer 51451 Cor. −0.1°

Corrected temperature 38.7°

Air 56 Surface 55 Drift.

Trawl or dredge or tangles

| SOUNDING WIRE. | | TURNS. | DREDGE ROPE. | |
|---|---|---|---|---|
| DOWN. | UP. | | DOWN. | UP. |
| A.cw 1-48-30 | 3-0 | 0 | | |
| 50-0 | 2-0 | 100 | | |
| 51 | 1-0 | 200 | | |
| 52 | 2-0-0 | 300 | | |
| 53 | 59-0 | 400 | | |
| 54-30 | 58-0 | 500 | | |
| 55-30 | 1-57-0 | 600 | | |
| | | 700 | | |
| | | 800 | | |
| | | 900 | | |
| | | 1000 | | |
| | | 1100 | | |
| | | 1200 | | |
| | | 1300 | | |
| | | 1400 | | |
| | | 1500 | | |
| | | 1600 | | |
| | | 1700 | | |
| | | 1800 | | |
| | | 1900 | | |
| | | 2000 | | |
| | | 2100 | | |
| | | 2200 | | |
| | | 2300 | | |
| | | 2400 | | |

| | | | | |
|---|---|---|---|---|
| | | 2500 | | |
| | | 2600 | | |
| | | 2700 | | |
| | | 2800 | | |
| | | 2900 | | |
| | | 3000 | | |
| | | 3100 | | |
| | | 3200 | | |
| | | 3300 | | |
| | | 3400 | | |
| | | 3500 | | |
| | | 3600 | | |
| | | 3700 | | |
| | | 3800 | | |
| | | 3900 | | |
| | | 4000 | | |

SERIAL TEMPERATURE.

| DEPTH. | TEMP. | NO. OF THER. | COR. | COR. TEMP. |
|---|---|---|---|---|
| 25 | | | | |
| 50 | | | | |
| 100 | | | | |
| 200 | | | | |
| 300 | | | | |
| 400 | | | | |
| 500 | | | | |
| 600 | | | | |
| 700 | | | | |
| 800 | | | | |
| 900 | | | | |
| 1000 | | | | |

REMARKS.

507

H. C. F.

No. Dr 3097 Date Mch. 5th 690.

Hand Lead Machine. — Reel.

Turns — Cor. + — Depth 12

Shot or lead 20 lb.

Bottom Bu. M.

Bottom temperature —

No. of Thermometer — Cor. —

Corrected temperature —

Air 56° Surface 51° Drift. 3/4 m, Stalks

Trawl ~~or dredge or tangles~~ L. B.

| A.M. SOUNDING WIRE. | | TURNS. | A.M. DREDGE ROPE. | |
|---|---|---|---|---|
| DOWN. | UP. | | DOWN. | UP. |
| 11.40.00 | 11.42.00 | 0 | 11.43.15 | 02.15 |
| | | 36 100 | 46.35 | 12.00.00 |
| | | 200 | | |
| | | 300 | | |
| | | 400 | | |
| | | 500 | | |
| | | 600 | | |
| | | 700 | | |
| | | 800 | | |
| | | 900 | | |
| | | 1000 | | |
| | | 1100 | | |
| | | 1200 | | |
| | | 1300 | | |
| | | 1400 | | |
| | | 1500 | | |
| | | 1600 | | |
| | | 1700 | | |
| | | 1800 | | |
| | | 1900 | | |
| | | 2000 | | |
| | | 2100 | | |
| | | 2200 | | |
| | | 2300 | | |
| | | 2400 | | |

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|---|---|---|---|---|
| | | 2500 | | |
| | | 2600 | | |
| | | 2700 | | |
| | | 2800 | | |
| | | 2900 | | |
| | | 3000 | | |
| | | 3100 | | |
| | | 3200 | | |
| | | 3300 | | |
| | | 3400 | | |
| | | 3500 | | |
| | | 3600 | | |
| | | 3700 | | |
| | | 3800 | | |
| | | 3900 | | |
| | | 4000 | | |

SERIAL TEMPERATURE.

| DEPTH. | TEMP. | NO. OF THER. | COR. | COR. TEMP. |
|---|---|---|---|---|
| 25 | | | | |
| 50 | | | | |
| 100 | | | | |
| 200 | | | | |
| 300 | | | | |
| 400 | | | | |
| 500 | | | | |
| 600 | | | | |
| 700 | | | | |
| 800 | | | | |
| 900 | | | | |
| 1000 | | | | |

REMARKS.

No. 3098 Date Mch. 5th 1898.

Hand Lead Machine. Reel.

Turns — Cor. + — Depth 13 fms.

Shot or lead 14 lb.

Bottom bu. M.

Bottom temperature —

No. of Thermometer — Cor. —

Corrected temperature —

Air 56° Surface 51° Drift. 3/4 m. Sault.

Trawl or dredge or tangles L. B.

| P.M. SOUNDING WIRE. | | TURNS. | P.M. DREDGE ROPE. | |
|---|---|---|---|---|
| DOWN. | UP. | | DOWN. | UP. |
| 12. 16. 00 | 12. 17. 00 | 0 | 12. 18. 30 | 12-35-0 |
| | | 40 100 | 21. 05 | 36-30 |
| | | 200 | | — |
| | | 300 | | |
| | | 400 | | |
| | | 500 | | |
| | | 600 | | |
| | | 700 | | |
| | | 800 | | |
| | | 900 | | |
| | | 1000 | | |
| | | 1100 | | |
| | | 1200 | | |
| | | 1300 | | |
| | | 1400 | | |
| | | 1500 | | |
| | | 1600 | | |
| | | 1700 | | |
| | | 1800 | | |
| | | 1900 | | |
| | | 2000 | | |
| | | 2100 | | |
| | | 2200 | | |
| | | 2300 | | |
| | | 2400 | | |

| | | | | |
|---|---|---|---|---|
| | | 2500 | | |
| | | 2600 | | |
| | | 2700 | | |
| | | 2800 | | |
| | | 2900 | | |
| | | 3000 | | |
| | | 3100 | | |
| | | 3200 | | |
| | | 3300 | | |
| | | 3400 | | |
| | | 3500 | | |
| | | 3600 | | |
| | | 3700 | | |
| | | 3800 | | |
| | | 3900 | | |
| | | 4000 | | |

SERIAL TEMPERATURE.

| DEPTH. | TEMP. | NO. OF THER. | COR. | COR. TEMP. |
|---|---|---|---|---|
| 25 | | | | |
| 50 | | | | |
| 100 | | | | |
| 200 | | | | |
| 300 | | | | |
| 400 | | | | |
| 500 | | | | |
| 600 | | | | |
| 700 | | | | |
| 800 | | | | |
| 900 | | | | |
| 1000 | | | | |

REMARKS.

H. C. F.

507

No. 3099 Dz Date Mch. 10 1890.

Tanner Machine. — Reel.

Turns 19 Cor. + 1 Depth 20 fms.

Shot or lead 20 lbs.

Bottom fm. gy. S.

Bottom temperature 51°

No. of Thermometer 63899 Cor. −0. 2

Corrected temperature 50.8°

Air 50° Surface 51° Drift. 1/2 W. S. W. (Mag.

Trawl ~~or dredge or tangles~~ L. B.

| SOUNDING WIRE. P.M. DOWN. | UP. | TURNS. | DREDGE ROPE. P.M. DOWN. | UP. |
|---|---|---|---|---|
| 2.08.45 | 09.40 | 0 | 2.14.00 | 35.00 |
| 09.05 | 2.09.15 | 60 ~~100~~ | 17.15 | 2.33.00 |
| | | 200 | | |
| | | 300 | | |
| | | 400 | | |
| | | 500 | | |
| | | 600 | | |
| | | 700 | | |
| | | 800 | | |
| | | 900 | | |
| | | 1000 | | |
| | | 1100 | | |
| | | 1200 | | |
| | | 1300 | | |
| | | 1400 | | |
| | | 1500 | | |
| | | 1600 | | |
| | | 1700 | | |
| | | 1800 | | |
| | | 1900 | | |
| | | 2000 | | |
| | | 2100 | | |
| | | 2200 | | |
| | | 2300 | | |
| | | 2400 | | |

South Farralon Light House bore S.W. x W. 7/8 W. (Mag.) distant 14 miles.

| | | | | |
|---|---|---|---|---|
| | | 2500 | | |
| | | 2600 | | |
| | | 2700 | | |
| | | 2800 | | |
| | | 2900 | | |
| | | 3000 | | |
| | | 3100 | | |
| | | 3200 | | |
| | | 3300 | | |
| | | 3400 | | |
| | | 3500 | | |
| | | 3600 | | |
| | | 3700 | | |
| | | 3800 | | |
| | | 3900 | | |
| | | 4000 | | |

SERIAL TEMPERATURE.

| DEPTH. | TEMP. | NO. OF THER. | COR. | COR. TEMP. |
|---|---|---|---|---|
| 25 | | | | |
| 50 | | | | |
| 100 | | | | |
| 200 | | | | |
| 300 | | | | |
| 400 | | | | |
| 500 | | | | |
| 600 | | | | |
| 700 | | | | |
| 800 | | | | |
| 900 | | | | |
| 1000 | | | | |

REMARKS.

Shrimps. Flounders. Star fish.
Crustacea - Crabs. Anchovies.
Medusa - Smelt. ~~Sea Pe~~
Hydroid.

507

No. 3100 Dr Date Mch 10th 1890.

Tanner Machine. — Reel.

Turns 28 Cor. + 1 Depth 29 fms.

~~Shot or lead~~ 20 lbs.

Bottom crs. G.

Bottom temperature 50.6°

No. of Thermometer 63899 Cor. -0.2

Corrected temperature 50.4°

Air 50° Surface 51° Drift. 7/10 N. S.W. (Mag.

Trawl ~~or dredge or tangles~~ Large beam

P.M.

| SOUNDING WIRE. | | TURNS. | DREDGE ROPE. | |
|---|---|---|---|---|
| DOWN. | UP. | | DOWN. | UP. |
| 3. 16.45 | 17.45 | 0 | 3.22.00 | 47.15 |
| 17.00 | 3.17.15 | 90 ~~100~~ | 26.30 | 3.44.15 |
| | | 200 | | |
| | | 300 | | |
| | | 400 | | |
| | | 500 | | |
| | | 600 | | |
| | | 700 | | |
| | | 800 | | |
| | | 900 | | |
| | | 1000 | | |
| | | 1100 | | |
| | | 1200 | | |
| | | 1300 | | |
| | | 1400 | | |
| | | 1500 | | |
| | | 1600 | | |
| | | 1700 | | |
| | | 1800 | | |
| | | 1900 | | |
| | | 2000 | | |
| | | 2100 | | |
| | | 2200 | | |
| | | 2300 | | |
| | | 2400 | | |

South Farallon Lt. Ho. bore N. S.W. (Mag.)
distant 9 miles.

| | | | | |
|---|---|---|---|---|
| | | 2500 | | |
| | | 2600 | | |
| | | 2700 | | |
| | | 2800 | | |
| | | 2900 | | |
| | | 3000 | | |
| | | 3100 | | |
| | | 3200 | | |
| | | 3300 | | |
| | | 3400 | | |
| | | 3500 | | |
| | | 3600 | | |
| | | 3700 | | |
| | | 3800 | | |
| | | 3900 | | |
| | | 4000 | | |

SERIAL TEMPERATURE.

| DEPTH. | TEMP. | NO. OF THER. | COR. | COR. TEMP. |
|---|---|---|---|---|
| 25 | | | | |
| 50 | | | | |
| 100 | | | | |
| 200 | | | | |
| 300 | | | | |
| 400 | | | | |
| 500 | | | | |
| 600 | | | | |
| 700 | | | | |
| 800 | | | | |
| 900 | | | | |
| 1000 | | | | |

REMARKS.

Young Shark
Star fish. 5 sps. Flounders. Shells.
Rock fish. Horn cod. Skates.
Shrimps. ~~Log fish~~. Medusa.
Parasitic Crustacea. Worms
Roncador - pueral. Perch - a few small ones.

J&B

No. 3101 Dr Date Mar 10th 90

Tanner Machine. — Reel.

Turns 32 Cor. + 1 Depth 33 fath

~~Shot or lead~~ 20 lbs

Bottom Yl S.

Bottom temperature 57°

No. of Thermometer 63899 Cor. -0.2

Corrected temperature 50.8°

Air 49° Surface 51 Drift. 1 1/10' S. x W.

~~Trawl or dredge or tangles~~ Large Beam

| SOUNDING WIRE. | | TURNS. | DREDGE ROPE. | |
|---|---|---|---|---|
| DOWN. | UP. | | DOWN. | UP. |
| 4.29.15 | 4.29.55 | 0 | 4.29.30 | 4-56-46 |
| 29.35 | 4.29.40 | 100 | 4.35- | 4-51-16 |
| | | 200 | | |
| | | 300 | | |
| | | 400 | | |
| | | 500 | | |
| | | 600 | | |
| | | 700 | | |
| | | 800 | | |
| | | 900 | | |
| | | 1000 | | |
| | | 1100 | | |
| | | 1200 | | |
| | | 1300 | | |
| | | 1400 | | |
| | | 1500 | | |
| | | 1600 | | |
| | | 1700 | | |
| | | 1800 | | |
| | | 1900 | | |
| | | 2000 | | |
| | | 2100 | | |
| | | 2200 | | |
| | | 2300 | | |
| | | 2400 | | |

PM

PM

South Farallon Ft. Hs. bore N. S. W. 1/2 W.
(Mag.) distant 5 1/10 miles.

| | | | | |
|---|---|---|---|---|
| | | 2500 | | |
| | | 2600 | | |
| | | 2700 | | |
| | | 2800 | | |
| | | 2900 | | |
| | | 3000 | | |
| | | 3100 | | |
| | | 3200 | | |
| 3/4 W. | | 3300 | | |
| | | 3400 | | |
| | | 3500 | | |
| | | 3600 | | |
| | | 3700 | | |
| | | 3800 | | |
| | | 3900 | | |
| | | 4000 | | |

SERIAL TEMPERATURE.

| DEPTH. | TEMP. | NO. OF THER. | COR. | COR. TEMP. |
|---|---|---|---|---|
| 25 | | | | |
| 50 | | | | |
| 100 | | | | |
| 200 | | | | |
| 300 | | | | |
| 400 | | | | |
| 500 | | | | |
| 600 | | | | |
| 700 | | | | |
| 800 | | | | |
| 900 | | | | |
| 1000 | | | | |

REMARKS.

Skates. Jelly fish Flounders
Perch. 2 small Crabs
1 Squid.

J.E.B.

No. 3102 Dr Date Mar. 10th 1890.

Tanner Machine. Reel.

Turns 26 Cor. + 1 Depth 27 ft

~~Shot or~~ lead 20 lbs

Bottom C. & brk. Sh.

Bottom temperature 52°

No. of Thermometer 63899 Cor. -0.2°

Corrected temperature 51.8°

Air 49° Surface 51° Drift. 1 mile - S.½W.

Trawl or ~~dredge or tangles~~ Large Beam

| SOUNDING WIRE. | | TURNS. | DREDGE ROPE. | |
|---|---|---|---|---|
| DOWN. | UP. | | DOWN. | UP. |
| P.M. 5-40-30 | 5-41-45 | 0 | P.M. 5-43-50 | 6.19- |
| 41-05 | 5-41-07 | ~~100~~ 60 | 5-47-50 | 6.17.40 |
| | | 200 | | |
| | | 300 | | |
| | | 400 | | |
| | | 500 | | |
| | | 600 | | |
| | | 700 | | |
| | | 800 | | |
| | | 900 | | |
| | | 1000 | | |
| | | 1100 | | |
| | | 1200 | | |
| | | 1300 | | |
| | | 1400 | | |
| | | 1500 | | |
| | | 1600 | | |
| | | 1700 | | |
| | | 1800 | | |
| | | 1900 | | |
| | | 2000 | | |
| | | 2100 | | |
| | | 2200 | | |
| | | 2300 | | |
| | | 2400 | | |

South Farallon Lt. Ho. bore N.W. (Mag)
distant 1 2/10 miles.

| | | | | |
|---|---|---|---|---|
| | | 2500 | | |
| | | 2600 | | |
| | | 2700 | | |
| | | 2800 | | |
| | | 2900 | | |
| | | 3000 | | |
| | | 3100 | | |
| | | 3200 | | |
| | | 3300 | | |
| | | 3400 | | |
| | | 3500 | | |
| | | 3600 | | |
| | | 3700 | | |
| | | 3800 | | |
| | | 3900 | | |
| | | 4000 | | |

SERIAL TEMPERATURE.

| DEPTH. | TEMP. | NO. OF THER. | COR. | COR. TEMP. |
|---|---|---|---|---|
| 25 | | | | |
| 50 | | | | |
| 100 | | | | |
| 200 | | | | |
| 300 | | | | |
| 400 | | | | |
| 500 | | | | |
| 600 | | | | |
| 700 | | | | |
| 800 | | | | |
| 900 | | | | |
| 1000 | | | | |

REMARKS.

Sea (5) Anemone ~~Actinia~~. 1 Doz Cup Corals
1 Pecten, 1 ~~Red~~ Red Hydro-Coralline
1 Crab. 1 Fish (small)

607 B

No. 3103 Dr Date Mar. 10th 1890.

Tanner Machine. Reel.

Turns 65 Cor. + 2 Depth 67

~~Shot or~~ lead 20 lbs

Bottom fne dk S

Bottom temperature 58 1/2°

No. of Thermometer 63.899 Cor. -0.2°

Corrected temperature 57.9°

Air 49° Surface 49° Drift. 2 m West

Trawl ~~or dredge or tangles~~ Large Beam

| SOUNDING WIRE. | | TURNS. | DREDGE ROPE. | |
|---|---|---|---|---|
| DOWN. | UP. | | DOWN. | UP. |
| 6-46.30 | 6.47.45 | 0 | 6.49.45 | 34.54 |
| 6.47.20 | 6.47.20 | 100 | 51.30 | 29.27 |
| | | 200 | 7 00.30 | 7.24 35 |
| | | 300 | | |
| | | 400 | | |
| | | 500 | | |
| | | 600 | | |
| | | 700 | | |
| | | 800 | | |
| | | 900 | | |
| | | 1000 | | |
| | | 1100 | | |
| | | 1200 | | |
| | | 1300 | | |
| | | 1400 | | |
| | | 1500 | | |
| | | 1600 | | |
| | | 1700 | | |
| | | 1800 | | |
| | | 1900 | | |
| | | 2000 | | |
| | | 2100 | | |
| | | 2200 | | |
| | | 2300 | | |
| | | 2400 | | |

South Farallon Lt. bore N. x E. (Map) distant 4 miles.

| | | | | |
|---|---|---|---|---|
| | | 2500 | | |
| | | 2600 | | |
| | | 2700 | | |
| | | 2800 | | |
| | | 2900 | | |
| | | 3000 | | |
| | | 3100 | | |
| | | 3200 | | |
| | | 3300 | | |
| | | 3400 | | |
| | | 3500 | | |
| | | 3600 | | |
| | | 3700 | | |
| | | 3800 | | |
| | | 3900 | | |
| | | 4000 | | |

SERIAL TEMPERATURE.

| DEPTH. | TEMP. | NO. OF THER. | COR. | COR. TEMP. |
|---|---|---|---|---|
| 25 | | | | |
| 50 | | | | |
| 100 | | | | |
| 200 | | | | |
| 300 | | | | |
| 400 | | | | |
| 500 | | | | |
| 600 | | | | |
| 700 | | | | |
| 800 | | | | |
| 900 | | | | |
| 1000 | | | | |

REMARKS.

Flounder about 250. Midshipmen
1 Eel. Ling, Eelpouts, 2 Crabs

N.S.F.

507

No. 3104 Dt Date Mch. 11th 1890.

Sigsbee Machine. #2 Reel.

Turns 340 Cor. + 51 Depth 391 fms.

~~Shot or lead~~ 38 lb.

Bottom C.

Bottom temperature 41°

No. of Thermometer 63899 Cor. -0.2°

Corrected temperature 40.8°

Air 47° Surface 49° Drift. ~~1~~

Trawl ~~or dredge or tangles~~ Large beam

| A.M. SOUNDING WIRE. | | TURNS. | AM DREDGE ROPE. | |
|---|---|---|---|---|
| DOWN. | UP. | | DOWN. | UP. |
| 6.04.10 | 19.30 | 0 | 6.38.10 | 7.59.45 |
| 06.20 | 17.15 | 100 | 42.30 | 56.40 |
| 08.05 | 15.05 | 200 | 46.30 | 53.20 |
| 09.30 | 13.05 | 300 | 50.25 | 50.10 |
| 10.05 | 6.12.15 | 400 | 55.05 | 47.00 |
| | | 500 | 59.10 | 43.15 |
| | | 600 | 7.03.15 | 39.45 |
| | | 700 | 07.25 | 35.30 |
| | | 800 | 11.00 | 7.30.15 |
| | | 900 | | |
| | | 1000 | | |
| | | 1100 | | |
| | | 1200 | | |
| | | 1300 | | |
| | | 1400 | | |
| | | 1500 | | |
| | | 1600 | | |
| | | 1700 | | |
| | | 1800 | | |
| | | 1900 | | |
| | | 2000 | | |
| | | 2100 | | |
| | | 2200 | | |
| | | 2300 | | |
| | | 2400 | | |

South Farallon Lt. bore N. 1/4 W. (Mag)
distant 16 miles

| | | | | |
|---|---|---|---|---|
| | | 2500 | | |
| | | 2600 | | |
| | | 2700 | | |
| | | 2800 | | |
| | | 2900 | | |
| | | 3000 | | |
| | | 3100 | | |
| | | 3200 | | |
| 1½ S.E.x E. ½ E. | | 3300 | | |
| | | 3400 | | |
| | | 3500 | | |
| | | 3600 | | |
| | | 3700 | | |
| | | 3800 | | |
| | | 3900 | | |
| | | 4000 | | |

SERIAL TEMPERATURE.

| DEPTH. | TEMP. | NO. OF THER. | COR. | COR. TEMP. |
|---|---|---|---|---|
| 25 | | | | |
| 50 | | | | |
| 100 | | | | |
| 200 | | | | |
| 300 | | | | |
| 400 | | | | |
| 500 | | | | |
| 600 | | | | |
| 700 | | | | |
| 800 | | | | |
| 900 | | | | |
| 1000 | | | | |

REMARKS. Crimson Rock Fish. 2 sps. Macrurus. Shrimps. Shells. Sea anemone. Deepest Crabs. Spider Crabs. 1 Brachiopod. Eels. 3 sps. Star fish!

507

No. 3105 Dr Date Mar 11th 90.

Tanner Machine. — Reel.

Turns 211 Cor. + 6 Depth 217 fms.

~~Shot or~~ lead 20 lbs

Bottom fne. gy. S.

Bottom temperature 44.4°

No. of Thermometer 63899 Cor. -0.2°

Corrected temperature 44.2°

Air 52° Surface 51° Drift. SE x E 1.2 m

Trawl ~~or dredge or tangles~~ Large Beam

| SOUNDING WIRE. | | TURNS. | DREDGE ROPE. | |
|---|---|---|---|---|
| DOWN. | UP. | | DOWN. | UP. |
| 8 55.41 | 9.01.55 | 0 | 9.02.15 | 04.26 |
| ~~56.15~~ | 59.15 | 100 | 7.07.12 | 10.01 30 |
| 56.50 | 58.20 | 200 | 12.20 | 58 58 |
| 57.15 | 8.57.30 | ~~300~~ 230 | .16.05 | .49.05 |
| | | 400 | .19.45 | .45 40 |
| | | ~~500~~ 460 | 21.28 | 9.42.10 |
| | | 600 | | |
| | | 700 | | |
| | | 800 | | |
| | | 900 | | |
| | | 1000 | | |
| | | 1100 | | |
| | | 1200 | | |
| | | 1300 | | |
| | | 1400 | | |
| | | 1500 | | |
| | | 1600 | | |
| | | 1700 | | |
| | | 1800 | | |
| | | 1900 | | |
| | | 2000 | | |
| | | 2100 | | |
| | | 2200 | | |
| | | 2300 | | |
| | | 2400 | | |

AM.

South Farallon Ltks. bore N. x W. 1/2 W. (Mag) distant 20 1/2 miles.

| | | | | |
|---|---|---|---|---|
| | | 2500 | | |
| | | 2600 | | |
| | | 2700 | | |
| | | 2800 | | |
| | | 2900 | | |
| | | 3000 | | |
| | | 3100 | | |
| | | 3200 | | |
| | | 3300 | | |
| | | 3400 | | |
| | | 3500 | | |
| | | 3600 | | |
| | | 3700 | | |
| | | 3800 | | |
| | | 3900 | | |
| | | 4000 | | |

SERIAL TEMPERATURE.

| DEPTH. | TEMP. | NO. OF THER. | COR. | COR. TEMP. |
|---|---|---|---|---|
| 25 | | | | |
| 50 | | | | |
| 100 | | | | |
| 200 | | | | |
| 300 | | | | |
| 400 | | | | |
| 500 | | | | |
| 600 | | | | |
| 700 | | | | |
| 800 | | | | |
| 900 | | | | |
| 1000 | | | | |

REMARKS.

1 Black Cod, Sea Urchins, 7 Eel pouts, Flounders, Red Rock Fish, Several small Hermit Crabs in shells ~~Hermit Crabs~~, 2 Skates.

EB
507

No. 3106 Dr Date Mar. 11th 1890

Tanner Machine. Reel.

Turns 75 Cor. + 2 Depth 77 fms

~~Shot or~~ lead 20 lbs

Bottom fne. gz. S.

Bottom temperature not known

No. of Thermometer 63899 Cor. -0.2°

Corrected temperature —

Air 52° Surface 51° Drift. S.E.S. 1 m.

Trawl ~~or dredge or tangles~~ Large Beam

| SOUNDING WIRE. | | TURNS. | DREDGE ROPE. | |
|---|---|---|---|---|
| DOWN. | UP. | | DOWN. | UP. |
| 10.50.10 | 10.52.15 | 0 | 10.52.15 | 26.50 |
| 10.50.45 | 10.50.46 | ~~100~~ 95 | 58.05 | 23.40 |
| | | 200 | 11.02.30 | 11.20.15 |
| | | 300 | | |
| | | 400 | | |
| | | 500 | | |
| | | 600 | | |
| | | 700 | | |
| | | 800 | | |
| | | 900 | | |
| | | 1000 | | |
| | | 1100 | | |
| | | 1200 | | |
| | | 1300 | | |
| | | 1400 | | |
| | | 1500 | | |
| | | 1600 | | |
| | | 1700 | | |
| | | 1800 | | |
| | | 1900 | | |
| | | 2000 | | |
| | | 2100 | | |
| | | 2200 | | |
| | | 2300 | | |
| | | 2400 | | |

Farallon Lt. Ho. bore N.W. 7/8 N. (Mag.)
distant 22 miles.

| | | | | |
|---|---|---|---|---|
| | | 2500 | | |
| | | 2600 | | |
| | | 2700 | | |
| | | 2800 | | |
| | | 2900 | | |
| | | 3000 | | |
| | | 3100 | | |
| | | 3200 | | |
| | | 3300 | | |
| | | 3400 | | |
| | | 3500 | | |
| | | 3600 | | |
| | | 3700 | | |
| | | 3800 | | |
| | | 3900 | | |
| | | 4000 | | |

SERIAL TEMPERATURE.

| DEPTH. | TEMP. | NO. OF THER. | COR. | COR. TEMP. |
|---|---|---|---|---|
| 25 | | | | |
| 50 | | | | |
| 100 | | | | |
| 200 | | | | |
| 300 | | | | |
| 400 | | | | |
| 500 | | | | |
| 600 | | | | |
| 700 | | | | |
| 800 | | | | |
| 900 | | | | |
| 1000 | | | | |

REMARKS.

Skate Eggs. Red Rock Cod.
Basket Stars. Flounders. 2 kinds of
Slat fish. Holothurians. Pennatula
Sea Anemones. 3 Sculpin.

507 J6B N.C.F.

No. 3107 Dr Date Mar. 11. 1890

Tanner Machine. Reel.

Turns 49 Cor. + 2 Depth 51 fms

~~Shot or~~ lead 20 lbs

Bottom fne gy S.

Bottom temperature not known

No. of Thermometer 63899 Cor. -0.2°

Corrected temperature —

Air 52° Surface 52° Drift. E¼N-1.0'

Trawl ~~or dredge or tangles~~ Large Beam

| P.M. SOUNDING WIRE. DOWN. | UP. | TURNS. | P.M. DREDGE ROPE. DOWN. | UP. |
|---|---|---|---|---|
| 12.07.01 | 09.30 | 0 | 12.12.15 | 45.00 |
| 07.30 | 12.07.31 | 100 | 15.35 | 41.20 |
| | | ~~200~~ 150 | 17.05 | 12.38.50 |
| | | 300 | | |
| | | 400 | | |
| | | 500 | | |
| | | 600 | | |
| | | 700 | | |
| | | 800 | | |
| | | 900 | | |
| | | 1000 | | |
| | | 1100 | | |
| | | 1200 | | |
| | | 1300 | | |
| | | 1400 | | |
| | | 1500 | | |
| | | 1600 | | |
| | | 1700 | | |
| | | 1800 | | |
| | | 1900 | | |
| | | 2000 | | |
| | | 2100 | | |
| | | 2200 | | |
| | | 2300 | | |
| | | 2400 | | |

| | | | | |
|---|---|---|---|---|
| | | 2500 | | |
| | | 2600 | | |
| | | 2700 | | |
| | | 2800 | | |
| | | 2900 | | |
| | | 3000 | | |
| | | 3100 | | |
| | | 3200 | | |
| | | 3300 | | |
| | | 3400 | | |
| | | 3500 | | |
| | | 3600 | | |
| | | 3700 | | |
| | | 3800 | | |
| | | 3900 | | |
| | | 4000 | | |

SERIAL TEMPERATURE.

| DEPTH. | TEMP. | NO. OF THER. | COR. | COR. TEMP. |
|---|---|---|---|---|
| 25 | | | | |
| 50 | | | | |
| 100 | | | | |
| 200 | | | | |
| 300 | | | | |
| 400 | | | | |
| 500 | | | | |
| 600 | | | | |
| 700 | | | | |
| 800 | | | | |
| 900 | | | | |
| 1000 | | | | |

REMARKS.

1 Sea pen - A few Flounders.

No. 3108 Dr Date Mch. 11th 1890.

Tanner Machine. — Reel.

Turns 41 Cor. + 2 Depth 43

~~Shot or~~ lead 20 lbs.

Bottom R. & brk. sh.

Bottom temperature 51°

No. of Thermometer 63 899 Cor. -0.2°

Corrected temperature 50.8°

Air 53° Surface 53° Drift E. S. E. 1/2' -

Trawl ~~or dredge or tangles~~ large beam

| P.M. SOUNDING WIRE. | | TURNS. | P.M. DREDGE ROPE. | |
|---|---|---|---|---|
| DOWN. | UP. | | DOWN. | UP. |
| 1.24.30 | 25.40 | 0 | 1.26.10 | 46.30 |
| 24.45 | 1.24.55 | 100 | 29.25 | 36.10 |
| | | 150 200 | 31.05 | 1.34.15 |
| | | 300 | | |
| | | 400 | | |
| | | 500 | | |
| | | 600 | | |
| | | 700 | | |
| | | 800 | | |
| | | 900 | | |
| | | 1000 | | |
| | | 1100 | | |
| | | 1200 | | |
| | | 1300 | | |
| | | 1400 | | |
| | | 1500 | | |
| | | 1600 | | |
| | | 1700 | | |
| | | 1800 | | |
| | | 1900 | | |
| | | 2000 | | |
| | | 2100 | | |
| | | 2200 | | |
| | | 2300 | | |
| | | 2400 | | |

Pigeon Point Lt. Ho. bore S. 1 E. (Mag.) distant 13 miles.

| | | | | |
|---|---|---|---|---|
| | | 2500 | | |
| | | 2600 | | |
| | | 2700 | | |
| | | 2800 | | |
| | | 2900 | | |
| | | 3000 | | |
| | | 3100 | | |
| | | 3200 | | |
| | | 3300 | | |
| | | 3400 | | |
| | | 3500 | | |
| | | 3600 | | |
| | | 3700 | | |
| | | 3800 | | |
| | | 3900 | | |
| | | 4000 | | |

SERIAL TEMPERATURE.

| DEPTH. | TEMP. | NO. OF THER. | COR. | COR. TEMP. |
|---|---|---|---|---|
| 25 | | | | |
| 50 | | | | |
| 100 | | | | |
| 200 | | | | |
| 300 | | | | |
| 400 | | | | |
| 500 | | | | |
| 600 | | | | |
| 700 | | | | |
| 800 | | | | |
| 900 | | | | |
| 1000 | | | | |

REMARKS.

Net came to surface badly torn.
Few stone sea lilies.
Ophiuroans - 2 sps. Starfish -

H.C.F.

507

No. 3109 D1 Date Mch. 11th 1890.

Tanner Machine. — Reel.

Turns 38 Cor. + 2 Depth 40 fms.

~~Shot or~~ lead 20 lbs.

Bottom Rky.

Bottom temperature 51°

No. of Thermometer 63899 Cor. -0.2°

Corrected temperature 50.8°

Air 53° Surface 53° Drift. N.W. & W. 1 7/10

~~Trawl or dredge or~~ tangles

| P.M. SOUNDING WIRE. DOWN. | UP. | TURNS. | P.M. DREDGE ROPE. DOWN. | UP. |
|---|---|---|---|---|
| 1.48.00 | 1.49.00 | 0 | 1.50.30 | 2.00.15 |
| | | 60 ~~100~~ | 53.10 | 1.58.45 |
| | | 200 | | |
| | | 300 | | |
| | | 400 | | |
| | | 500 | | |
| | | 600 | | |
| | | 700 | | |
| | | 800 | | |
| | | 900 | | |
| | | 1000 | | |
| | | 1100 | | |
| | | 1200 | | |
| | | 1300 | | |
| | | 1400 | | |
| | | 1500 | | |
| | | 1600 | | |
| | | 1700 | | |
| | | 1800 | | |
| | | 1900 | | |
| | | 2000 | | |
| | | 2100 | | |
| | | 2200 | | |
| | | 2300 | | |
| | | 2400 | | |

12 Sand lines over starboard side — Cut over at 2.04 P.M. Hauled in at 2.30

Catch. - 3 Orange Rock Fish. 2 Red Rock Fish.

Drift 1/4 .56 x 6 1/2 E (mag)

Pigeon Point Light House bore E.S.E. 1/8 E. (mag)

distant 1 1/2 miles.

| | | | | |
|---|---|---|---|---|
| | | 2500 | | |
| | | 2600 | | |
| | | 2700 | | |
| | | 2800 | | |
| | | 2900 | | |
| | | 3000 | | |
| | | 3100 | | |
| | | 3200 | | |
| | | 3300 | | |
| | | 3400 | | |
| | | 3500 | | |
| | | 3600 | | |
| | | 3700 | | |
| | | 3800 | | |
| | | 3900 | | |
| | | 4000 | | |

SERIAL TEMPERATURE.

| DEPTH. | TEMP. | NO. OF THER. | COR. | COR. TEMP. |
|---|---|---|---|---|
| 25 | | | | |
| 50 | | | | |
| 100 | | | | |
| 200 | | | | |
| 300 | | | | |
| 400 | | | | |
| 500 | | | | |
| 600 | | | | |
| 700 | | | | |
| 800 | | | | |
| 900 | | | | |
| 1000 | | | | |

REMARKS.

Several ~~stone~~ sea lilies. (Antedon.)
2 sps. Star fish.
Ophiuroans.

No. 3. 507

No. 3110 Dr Date Mch 11th 1890.

Tanner Machine. Reel.

Turns 37 Cor. + 2 Depth 39 fms

~~Shot or~~ lead 20 lbs.

Bottom P.

Bottom temperature 51.2°

No. of Thermometer 63899 Cor. -0.2°

Corrected temperature 51°

Air 53° Surface 53° Drift. NE¾N 7'

~~Trawl or dredge or~~ tangles

| SOUNDING WIRE. | | TURNS. | DREDGE ROPE. | |
|---|---|---|---|---|
| P.M. DOWN. | UP. | | P.M. DOWN. | UP. |
| 2.59.05 | 3.00.05 | 0 | 3.02.45 | 24.15 |
| 59.30 | 2.59.38 | 60 ~~100~~ | 07.15 | 3.20.00 |
| | | 200 | | |
| | | 300 | | |
| | | 400 | | |
| | | 500 | | |
| | | 600 | | |
| | | 700 | | |
| | | 800 | | |
| | | 900 | | |
| | | 1000 | | |
| | | 1100 | | |
| | | 1200 | | |
| | | 1300 | | |
| | | 1400 | | |
| | | 1500 | | |
| | | 1600 | | |
| | | 1700 | | |
| | | 1800 | | |
| | | 1900 | | |
| | | 2000 | | |
| | | 2100 | | |
| | | 2200 | | |
| | | 2300 | | |
| | | 2400 | | |

12 Hand lines put over port side - over at 3.10 P.M. on at 3.30 Catch - Nix - Drift 1/4' SE x S (mag) Pigeon Point Lt. Ho. bore S.E. x E. (Mag) distant 10 6/10 miles.

| | | | | |
|---|---|---|---|---|
| | | 2500 | | |
| | | 2600 | | |
| | | 2700 | | |
| | | 2800 | | |
| | | 2900 | | |
| | | 3000 | | |
| | | 3100 | | |
| | | 3200 | | |
| | | 3300 | | |
| | | 3400 | | |
| | | 3500 | | |
| | | 3600 | | |
| | | 3700 | | |
| | | 3800 | | |
| | | 3900 | | |
| | | 4000 | | |

SERIAL TEMPERATURE.

| DEPTH. | TEMP. | NO. OF THER. | COR. | COR. TEMP. |
|---|---|---|---|---|
| 25 | | | | |
| 50 | | | | |
| 100 | | | | |
| 200 | | | | |
| 300 | | | | |
| 400 | | | | |
| 500 | | | | |
| 600 | | | | |
| 700 | | | | |
| 800 | | | | |
| 900 | | | | |
| 1000 | | | | |

REMARKS.

Several spec. Star fish.

N.C.F.

507

No. 2153 Hyd Date Mar 11th 1891

Tanner Machine. Reel.

Turns 20 Cor. + 1 Depth 21 fms.

~~Shot~~ or lead 20 lbs.

Bottom fne. bk. S.

Bottom temperature 53°

No. of Thermometer 63899 Cor. -0.2°

Corrected temperature 52.8°

Air 55° Surface 53°. Drift.

Trawl or dredge or tangles

P.M.

| SOUNDING WIRE. | | TURNS. | DREDGE ROPE. | |
|---|---|---|---|---|
| DOWN. | UP. | | DOWN. | UP. |
| 3. 52. 45 | 53.20 | 0 | | |
| 52. 55 | 3.53.00 | 100 | | |
| | | 200 | | |
| | | 300 | | |
| | | 400 | | |
| | | 500 | | |
| | | 600 | | |
| | | 700 | | |
| | | 800 | | |
| | | 900 | | |
| | | 1000 | | |
| | | 1100 | | |
| | | 1200 | | |
| | | 1300 | | |
| | | 1400 | | |
| | | 1500 | | |
| | | 1600 | | |
| | | 1700 | | |
| | | 1800 | | |
| | | 1900 | | |
| | | 2000 | | |
| | | 2100 | | |
| | | 2200 | | |
| | | 2300 | | |
| | | 2400 | | |

9 Hand lines over port side at 3.55
In at -4.07.
Calcti: Nil

Pigeon Point Lt. Ho. bore S.E. 1/4 S. (Mag.)
distant 8 8/10 miles.

| | | | | |
|---|---|---|---|---|
| | | 2500 | | |
| | | 2600 | | |
| | | 2700 | | |
| | | 2800 | | |
| | | 2900 | | |
| | | 3000 | | |
| | | 3100 | | |
| | | 3200 | | |
| | | 3300 | | |
| | | 3400 | | |
| | | 3500 | | |
| | | 3600 | | |
| | | 3700 | | |
| | | 3800 | | |
| | | 3900 | | |
| | | 4000 | | |

SERIAL TEMPERATURE.

| DEPTH. | TEMP. | NO. OF THER. | COR. | COR. TEMP. |
|---|---|---|---|---|
| 25 | | | | |
| 50 | | | | |
| 100 | | | | |
| 200 | | | | |
| 300 | | | | |
| 400 | | | | |
| 500 | | | | |
| 600 | | | | |
| 700 | | | | |
| 800 | | | | |
| 900 | | | | |
| 1000 | | | | |

REMARKS.

J.E.B. 507

No. 2154 Hec Date Mar. 11. 1890

Hand lead Machine. Reel.

Turns — Cor. + — Depth 10 fms

~~Shot or~~ lead 14 lbs

Bottom brk. Sh. R.

Bottom temperature —

No. of Thermometer — Cor. —

Corrected temperature —

Air 60° Surface 53° Drift.

Trawl or dredge or tangles

| P.M. SOUNDING WIRE. DOWN. | UP. | TURNS. | DREDGE ROPE. DOWN. | UP. |
|---|---|---|---|---|
| 4.30.00 | 4.31.00 | 0 | | |
| | | 100 | | |
| | | 200 | | |
| | | 300 | | |
| | | 400 | | |
| | | 500 | | |
| | | 600 | | |
| | | 700 | | |
| | | 800 | | |
| | | 900 | | |
| | | 1000 | | |
| | | 1100 | | |
| | | 1200 | | |
| | | 1300 | | |
| | | 1400 | | |
| | | 1500 | | |
| | | 1600 | | |
| | | 1700 | | |
| | | 1800 | | |
| | | 1900 | | |
| | | 2000 | | |
| | | 2100 | | |
| | | 2200 | | |
| | | 2300 | | |
| | | 2400 | | |

10 Hand Lines over port side at 4.30

Inst 4.42

Catch Nil

Pigeon Point Lt. Ho. Sore S.E. 7/8 S. (Mag.)

distant 5 2/10 miles.

| | | | | |
|---|---|---|---|---|
| | | 2500 | | |
| | | 2600 | | |
| | | 2700 | | |
| | | 2800 | | |
| | | 2900 | | |
| | | 3000 | | |
| | | 3100 | | |
| | | 3200 | | |
| | | 3300 | | |
| | | 3400 | | |
| | | 3500 | | |
| | | 3600 | | |
| | | 3700 | | |
| | | 3800 | | |
| | | 3900 | | |
| | | 4000 | | |

SERIAL TEMPERATURE.

| DEPTH. | TEMP. | NO. OF THER. | COR. | COR. TEMP. |
|---|---|---|---|---|
| 25 | | | | |
| 50 | | | | |
| 100 | | | | |
| 200 | | | | |
| 300 | | | | |
| 400 | | | | |
| 500 | | | | |
| 600 | | | | |
| 700 | | | | |
| 800 | | | | |
| 900 | | | | |
| 1000 | | | | |

REMARKS.

NC. F.

507

No. 3111 Dr Date Mch. 11th 1890.

Tanner Machine. - Reel.

Turns 19 Cor. + 1 Depth 20

~~Shot or~~ lead 20 lbs.

Bottom gy. S.

Bottom temperature 53°

No. of Thermometer 63899 Cor. -0.2°

Corrected temperature 52.8°

Air 60° Surface 53° Drift. 1/4 m S x 2 1/2 E

~~Trawl or dredge or~~ tangles

| P.M. SOUNDING WIRE. DOWN. | UP. | TURNS. | P.M. DREDGE ROPE. DOWN. | UP. |
|---|---|---|---|---|
| 5.11.30 | 12.45 | 0 | 5.27.00 | 38.40 |
| 12.10 | 5.12.20 | ~~100~~ 30 | 28.05 | 5.36.31 |
| | | 200 | | |
| | | 300 | | |
| | | 400 | | |
| | | 500 | | |
| | | 600 | | |
| | | 700 | | |
| | | 800 | | |
| | | 900 | | |
| | | 1000 | | |
| | | 1100 | | |
| | | 1200 | | |
| | | 1300 | | |
| | | 1400 | | |
| | | 1500 | | |
| | | 1600 | | |
| | | 1700 | | |
| | | 1800 | | |
| | | 1900 | | |
| | | 2000 | | |
| | | 2100 | | |
| | | 2200 | | |
| | | 2300 | | |
| | | 2400 | | |

11 Hand lines over starboard side at 5.15 - In at 5.25

Catch - Nix.

Pigeon Point Lt. Ho. bore S.E. 7/8 E. (Mag.)

distant 3 1/10 miles.

| | | | | |
|---|---|---|---|---|
| | | 2500 | | |
| | | 2600 | | |
| | | 2700 | | |
| | | 2800 | | |
| | | 2900 | | |
| | | 3000 | | |
| | | 3100 | | |
| | | 3200 | | |
| | | 3300 | | |
| | | 3400 | | |
| | | 3500 | | |
| | | 3600 | | |
| | | 3700 | | |
| | | 3800 | | |
| | | 3900 | | |
| | | 4000 | | |

SERIAL TEMPERATURE.

| DEPTH. | TEMP. | NO. OF THER. | COR. | COR. TEMP. |
|---|---|---|---|---|
| 25 | | | | |
| 50 | | | | |
| 100 | | | | |
| 200 | | | | |
| 300 | | | | |
| 400 | | | | |
| 500 | | | | |
| 600 | | | | |
| 700 | | | | |
| 800 | | | | |
| 900 | | | | |
| 1000 | | | | |

REMARKS.

NC 3.

507

No. 3112 Dt Date Mch 12th 1890

Tanner Machine. — Reel.

Turns 289 Cor. + 7. Depth 296 fms.

~~Shot or~~ lead 26 lb.

Bottom fne. gy. S.

Bottom temperature 42°

No. of Thermometer 63899 Cor. -0.2°

Corrected temperature 41.8°

Air 51° Surface 52° Drift. 2' SE x E

Trawl ~~or dredge or tangles~~ large beam

| SOUNDING WIRE. | | TURNS. | DREDGE ROPE. | |
|---|---|---|---|---|
| A.M. DOWN. | UP. | | A.M. DOWN. | UP. |
| 5.46.15 | 54.45 | 0 | 6.00.00 | 07.15 |
| 47.20 | 53.15 | 100 | 06.15 | 04.20 |
| 48.15 | 51.10 | 200 | 10.15 | 7.01.05 |
| 49.10 | 5.49.25 | 296 300 | 14.12 | 57.55 |
| | | 400 | 18.40 | 54.25 |
| | | 500 | 22.30 | 50.55 |
| | | 600 | 26.05 | 6.46.50 |
| | | 700 | | |
| | | 800 | | |
| | | 900 | | |
| | | 1000 | | |
| | | 1100 | | |
| | | 1200 | | |
| | | 1300 | | |
| | | 1400 | | |
| | | 1500 | | |
| | | 1600 | | |
| | | 1700 | | |
| | | 1800 | | |
| | | 1900 | | |
| | | 2000 | | |
| | | 2100 | | |
| | | 2200 | | |
| | | 2300 | | |
| | | 2400 | | |

Pigeon Point Light bore S.W. x W. 7/8 W. (Mag.) distant 18 8/10 miles.

| | | | | |
|---|---|---|---|---|
| | | 2500 | | |
| | | 2600 | | |
| | | 2700 | | |
| | | 2800 | | |
| | | 2900 | | |
| | | 3000 | | |
| | | 3100 | | |
| | | 3200 | | |
| | | 3300 | | |
| | | 3400 | | |
| | | 3500 | | |
| | | 3600 | | |
| | | 3700 | | |
| | | 3800 | | |
| | | 3900 | | |
| | | 4000 | | |

SERIAL TEMPERATURE.

| DEPTH. | TEMP. | NO. OF THER. | COR. | COR. TEMP. |
|---|---|---|---|---|
| 25 | | | | |
| 50 | | | | |
| 100 | | | | |
| 200 | | | | |
| 300 | | | | |
| 400 | | | | |
| 500 | | | | |
| 600 | | | | |
| 700 | | | | |
| 800 | | | | |
| 900 | | | | |
| 1000 | | | | |

REMARKS.

Deep sea sole — 1 doz. large.
1/2 doz. Hag fish. 2 Eel pouts.
Alcyonarians - few - Bushel Star fish 4 sp.
Hermit Crabs - shell - 3 Red Sebastes.
6 spec. Deep sea fishes. Few Spider Crabs.
Holothurians. Alcyonarians.
Shrimps -

507 JEB

No. 3113 Dr Date Mar. 12. 90

Tanner Machine. Reel.

Turns 68 Cor. + 2 Depth 70 fms

~~Shot or~~ lead 26 lbs

Bottom fne gy S

Bottom temperature 49°

No. of Thermometer 63899 Cor. -0.2°

Corrected temperature 48.8°

Air 54° Surface 52° Drift. 1' ENE

Trawl ~~or dredge or tangles~~ Large Beam

| A.M. SOUNDING WIRE. DOWN. | UP. | TURNS. | A.M. DREDGE ROPE. DOWN. | UP. |
|---|---|---|---|---|
| 7.47.20 | 50.30 | 0 | 7.50.45 | 27.45 |
| 48 10 | 7.48.13 | 100 | .56.10 | 23 05 |
| | | 200 | .59.10 | 8.19 01 |
| | | 300 | | |
| | | 400 | | |
| | | 500 | | |
| | | 600 | | |
| | | 700 | | |
| | | 800 | | |
| | | 900 | | |
| | | 1000 | | |
| | | 1100 | | |
| | | 1200 | | |
| | | 1300 | | |
| | | 1400 | | |
| | | 1500 | | |
| | | 1600 | | |
| | | 1700 | | |
| | | 1800 | | |
| | | 1900 | | |
| | | 2000 | | |
| | | 2100 | | |
| | | 2200 | | |
| | | 2300 | | |
| | | 2400 | | |

Pigeon Point Lt. Ho. bore S. W. x W. (Mag.) distant 13 miles.

| | | | | |
|---|---|---|---|---|
| | | 2500 | | |
| | | 2600 | | |
| | | 2700 | | |
| | | 2800 | | |
| | | 2900 | | |
| | | 3000 | | |
| | | 3100 | | |
| | | 3200 | | |
| | | 3300 | | |
| | | 3400 | | |
| | | 3500 | | |
| | | 3600 | | |
| | | 3700 | | |
| | | 3800 | | |
| | | 3900 | | |
| | | 4000 | | |

SERIAL TEMPERATURE.

| DEPTH. | TEMP. | NO. OF THER. | COR. | COR. TEMP. |
|---|---|---|---|---|
| 25 | | | | |
| 50 | | | | |
| 100 | | | | |
| 200 | | | | |
| 300 | | | | |
| 400 | | | | |
| 500 | | | | |
| 600 | | | | |
| 700 | | | | |
| 800 | | | | |
| 900 | | | | |
| 1000 | | | | |

REMARKS.

About 40 Flounders, 2 Crabs, Holothurians, Sculpins, 2 sp. Rockfish, 2 Moloysks, Alcyonarians,

No. 3114 D^I Date Mar. 12. 1890

Tanner Machine. — Reel.

Turns 60 Cor. + 2 Depth 62 fms

~~Shot or lead~~ 26 lbs

Bottom M.

Bottom temperature —

No. of Thermometer 63899 Cor. —

Corrected temperature —

Air 56° Surface 52° Drift. E½N. 1.3'

Trawl ~~or dredge or tangles~~ Large Beam

| A.M. SOUNDING WIRE. DOWN. | UP. | TURNS. | A.M. DREDGE ROPE. DOWN. | UP. |
|---|---|---|---|---|
| 9.06.30 | 09.15 | 0 | 9.12.40 | 35.07 |
| 07.00 | 9.07.10 | 100 | 16.40 | 33.20 |
| | | ~~200~~ 150 | 18.20 | 9.31.43 |
| | | 300 | | |
| | | 400 | | |
| | | 500 | | |
| | | 600 | | |
| | | 700 | | |
| | | 800 | | |
| | | 900 | | |
| | | 1000 | | |
| | | 1100 | | |
| | | 1200 | | |
| | | 1300 | | |
| | | 1400 | | |
| | | 1500 | | |
| | | 1600 | | |
| | | 1700 | | |
| | | 1800 | | |
| | | 1900 | | |
| | | 2000 | | |
| | | 2100 | | |
| | | 2200 | | |
| | | 2300 | | |
| | | 2400 | | |

Pigeon Point Lt. Hs. bore N. E. 5/8 N. (Mag.) distant 8 4/10 miles.

| | | | | |
|---|---|---|---|---|
| | | 2500 | | |
| | | 2600 | | |
| | | 2700 | | |
| | | 2800 | | |
| | | 2900 | | |
| | | 3000 | | |
| | | 3100 | | |
| | | 3200 | | |
| | | 3300 | | |
| | | 3400 | | |
| | | 3500 | | |
| | | 3600 | | |
| | | 3700 | | |
| | | 3800 | | |
| | | 3900 | | |
| | | 4000 | | |

## SERIAL TEMPERATURE.

| DEPTH. | TEMP. | NO. OF THER. | COR. | COR. TEMP. |
|---|---|---|---|---|
| 25 | | | | |
| 50 | | | | |
| 100 | | | | |
| 200 | | | | |
| 300 | | | | |
| 400 | | | | |
| 500 | | | | |
| 600 | | | | |
| 700 | | | | |
| 800 | | | | |
| 900 | | | | |
| 1000 | | | | |

## REMARKS.

Lost Thermometer 63899 & 1-26 lbs Lead
Numerous Ophiurans, Large Star fish;
1 Large Naked Mollusk, Few Mid-Shipmen,
1 doz. Small Rock fish, Citharichthys,
2 Sps. Deep sea Sole, Holothurians,

JEB
507

No. 3115 Dr Date Mar 12th 1890

Tanner Machine. Reel.

Turns 42 Cor. + 1 Depth 43 fms

~~Shot or~~ lead 26 lbs

Bottom fne bk. S.

Bottom temperature —

No. of Thermometer 61751 Cor. —

Corrected temperature —

Air 53 Surface 52 Drift. E 1/4 N 1.3'

Trawl ~~or dredge or tangles~~ Large Beam

| A.M. SOUNDING WIRE. DOWN. | UP. | TURNS. | A.M. DREDGE ROPE. DOWN. | UP. |
|---|---|---|---|---|
| 10.15.32 | 10.17.01 | 0 | 10.17.15 | 41.10 |
| 16 – | 10.16.02 | 100 | 19.– | 39.– |
| | | ~~200~~ 120 | 19.45 | 10.38.15 |
| | | 300 | | |
| | | 400 | | |
| | | 500 | | |
| | | 600 | | |
| | | 700 | | |
| | | 800 | | |
| | | 900 | | |
| | | 1000 | | |
| | | 1100 | | |
| | | 1200 | | |
| | | 1300 | | |
| | | 1400 | | |
| | | 1500 | | |
| | | 1600 | | |
| | | 1700 | | |
| | | 1800 | | |
| | | 1900 | | |
| | | 2000 | | |
| | | 2100 | | |
| | | 2200 | | |
| | | 2300 | | |
| | | 2400 | | |

Pigeon Point Lt. Ho. bearing N. x W. 1/8 W. (Mag.) distant 6 miles.

| | | | | |
|---|---|---|---|---|
| | | 2500 | | |
| | | 2600 | | |
| | | 2700 | | |
| | | 2800 | | |
| | | 2900 | | |
| | | 3000 | | |
| | | 3100 | | |
| | | 3200 | | |
| | | 3300 | | |
| | | 3400 | | |
| | | 3500 | | |
| | | 3600 | | |
| | | 3700 | | |
| | | 3800 | | |
| | | 3900 | | |
| | | 4000 | | |

SERIAL TEMPERATURE.

| DEPTH. | TEMP. | NO. OF THER. | COR. | COR. TEMP. |
|---|---|---|---|---|
| 25 | | | | |
| 50 | | | | |
| 100 | | | | |
| 200 | | | | |
| 300 | | | | |
| 400 | | | | |
| 500 | | | | |
| 600 | | | | |
| 700 | | | | |
| 800 | | | | |
| 900 | | | | |
| 1000 | | | | |

REMARKS.

5 Ganiolepisos, 8 octopus, Hag fish, Numerous large star fishes (5 species), 1 doz small Perch, 100 small flounders, few shrips, 6 skates, skate Eggs, Mollusks, 2 crabs, 2 doz mudshipmen, Small shells,

507 JEB

No. 3116 Dt Date Mar 12th '90

Hand ~~Machine.~~ lead Reel.

Turns — Cor. + — Depth 16 fms

~~Shot or~~ lead 12 lbs

Bottom Rky

Bottom temperature —

No. of Thermometer — Cor. —

Corrected temperature —

Air 55 Surface 54 Drift. SE x E. 3/10

~~Trawl or~~ dredge ~~or tangles~~ ships

| SOUNDING WIRE. DOWN. | SOUNDING WIRE. UP. | TURNS. | DREDGE ROPE. DOWN. | DREDGE ROPE. UP. |
|---|---|---|---|---|
| A.M. 11.35.00 | 11.36.00 | 0 | A.M. 11.37.12 | 42.00 |
| | | ~~100~~ 19 | 38.05 | 11 41 03 |
| | | 200 | | |
| | | 300 | | |
| | | 400 | | |
| | | 500 | | |
| | | 600 | | |
| | | 700 | | |
| | | 800 | | |
| | | 900 | | |
| | | 1000 | | |
| | | 1100 | | |
| | | 1200 | | |
| | | 1300 | | |
| | | 1400 | | |
| | | 1500 | | |
| | | 1600 | | |
| | | 1700 | | |
| | | 1800 | | |
| | | 1900 | | |
| | | 2000 | | |
| | | 2100 | | |
| | | 2200 | | |
| | | 2300 | | |
| | | 2400 | | |

12 Handline Starboard at 11.17.
In at 11.34
Catch 1 Red Rock Cod.

Point Ans Nuevo bore N.W. x W. 1/2 W. (Mag)
distant 1 4/10 miles -

| | | | | |
|---|---|---|---|---|
| | | 2500 | | |
| | | 2600 | | |
| | | 2700 | | |
| | | 2800 | | |
| | | 2900 | | |
| | | 3000 | | |
| | | 3100 | | |
| | | 3200 | | |
| | | 3300 | | |
| | | 3400 | | |
| | | 3500 | | |
| | | 3600 | | |
| | | 3700 | | |
| | | 3800 | | |
| | | 3900 | | |
| | | 4000 | | |

## SERIAL TEMPERATURE.

| DEPTH. | TEMP. | NO. OF THER. | COR. | COR. TEMP. |
|---|---|---|---|---|
| 25 | | | | |
| 50 | | | | |
| 100 | | | | |
| 200 | | | | |
| 300 | | | | |
| 400 | | | | |
| 500 | | | | |
| 600 | | | | |
| 700 | | | | |
| 800 | | | | |
| 900 | | | | |
| 1000 | | | | |

## REMARKS.

Brachiopod Shells Gorgonian Coral
1 ~~Ec~~. Holothurian Shells. Sponges
(Ex species)

507 J&B

No. 2155 Hyd. Date Mar 12 - 90

Hand ~~Machine.~~ lead Reel.

Turns — Cor. + — Depth 17 fms

~~Shot or lead~~ 12 lbs

Bottom Rky. Sh.

Bottom temperature —

No. of Thermometer — Cor. —

Corrected temperature —

Air 55° Surface 54° Drift. SE x E. 2'

Trawl or dredge or tangles

| a.m. SOUNDING WIRE. DOWN. | UP. | TURNS. | DREDGE ROPE. DOWN. | UP. |
|---|---|---|---|---|
| 11.45.00 | 11.46.00 | 0 | | |
| | | 100 | | |
| | | 200 | | |
| | | 300 | | |
| | | 400 | | |
| | | 500 | | |
| | | 600 | | |
| | | 700 | | |
| | | 800 | | |
| | | 900 | | |
| | | 1000 | | |
| | | 1100 | | |
| | | 1200 | | |
| | | 1300 | | |
| | | 1400 | | |
| | | 1500 | | |
| | | 1600 | | |
| | | 1700 | | |
| | | 1800 | | |
| | | 1900 | | |
| | | 2000 | | |
| | | 2100 | | |
| | | 2200 | | |
| | | 2300 | | |
| | | 2400 | | |

Hand lines over Star-board side 11.45

Inst 11.50

Catch - Nil

Pt. Año Nuevo bore N.W. x W. 1/4 W. (Mag.)

distant 1 9/10 miles.

| | | | | |
|---|---|---|---|---|
| | | 2500 | | |
| | | 2600 | | |
| | | 2700 | | |
| | | 2800 | | |
| | | 2900 | | |
| | | 3000 | | |
| | | 3100 | | |
| | | 3200 | | |
| | | 3300 | | |
| | | 3400 | | |
| | | 3500 | | |
| | | 3600 | | |
| | | 3700 | | |
| | | 3800 | | |
| | | 3900 | | |
| | | 4000 | | |

SERIAL TEMPERATURE.

| DEPTH. | TEMP. | NO. OF THER. | COR. | COR. TEMP. |
|---|---|---|---|---|
| 25 | | | | |
| 50 | | | | |
| 100 | | | | |
| 200 | | | | |
| 300 | | | | |
| 400 | | | | |
| 500 | | | | |
| 600 | | | | |
| 700 | | | | |
| 800 | | | | |
| 900 | | | | |
| 1000 | | | | |

REMARKS.

N.A.F.

507

No. 3117 D± Date Mch. 12th 1890.

Tanner Machine. Reel.

Turns 41 Cor. + 2 Depth 43 fms.

~~Shot or lead~~ 25 lb.

Bottom bk. S. & M.

Bottom temperature 51°

No. of Thermometer 61 751 Cor. +0.3°

Corrected temperature 50.7°

Air 53° Surface 52° Drift. 1' S.E. ½ E.

~~Trawl or dredge or tangles~~ large beam

| SOUNDING WIRE. | | TURNS. | DREDGE ROPE. | |
|---|---|---|---|---|
| P.M. DOWN. | UP. | | P.M. DOWN. | UP. |
| 12. 25. 32 | 27. 05 | 0 | 12. 28. 00 | 54. 00 |
| 25. 55 | 12. 26. 00 | 100 | 33. 45 | 51. 20 |
| | | 120 ~~200~~ | 34. 15 | 1. 50. 10 |
| | | 300 | | |
| | | 400 | | |
| | | 500 | | |
| | | 600 | | |
| | | 700 | | |
| | | 800 | | |
| | | 900 | | |
| | | 1000 | | |
| | | 1100 | | |
| | | 1200 | | |
| | | 1300 | | |
| | | 1400 | | |
| | | 1500 | | |
| | | 1600 | | |
| | | 1700 | | |
| | | 1800 | | |
| | | 1900 | | |
| | | 2000 | | |
| | | 2100 | | |
| | | 2200 | | |
| | | 2300 | | |
| | | 2400 | | |

Pigeon Point Lt. Ho. bore N.W. ½ N. (Mag.) distant 10½ miles.

| | | | | |
|---|---|---|---|---|
| | | 2500 | | |
| | | 2600 | | |
| | | 2700 | | |
| | | 2800 | | |
| | | 2900 | | |
| | | 3000 | | |
| | | 3100 | | |
| | | 3200 | | |
| | | 3300 | | |
| | | 3400 | | |
| | | 3500 | | |
| | | 3600 | | |
| | | 3700 | | |
| | | 3800 | | |
| | | 3900 | | |
| | | 4000 | | |

SERIAL TEMPERATURE.

| DEPTH. | TEMP. | NO. OF THER. | COR. | COR. TEMP. |
|---|---|---|---|---|
| 25 | | | | |
| 50 | | | | |
| 100 | | | | |
| 200 | | | | |
| 300 | | | | |
| 400 | | | | |
| 500 | | | | |
| 600 | | | | |
| 700 | | | | |
| 800 | | | | |
| 900 | | | | |
| 1000 | | | | |

REMARKS.

2 Flounders - 2 Mollucks -
1 Squid -

H.C.F.

507

No. 3118 Dr Tanner Date March 12th 1890.

Machine. — Reel.

Turns 52 Cor. + 2 Depth 54 fms.

~~Shot or~~ lead 25 lbs.

Bottom Rky. & Co.

Bottom temperature 50.6°

No. of Thermometer 61751 Cor. +0.3°

Corrected temperature 50.9°

Air 56° Surface 55° Drift. 3/4' S.&E. 1/2 E.

~~Trawl or~~ dredge ~~or tangles~~ ships.

| P.M. SOUNDING WIRE. DOWN. | UP. | TURNS. | P.M. DREDGE ROPE. DOWN. | UP. |
|---|---|---|---|---|
| 1.15.45 | 17.10 | 0 | 1.22.50 | 1.34.05 |
| 16.15 | 1.16.20 | 80 ~~100~~ | 26.20 | 1.29.00 |
| | | 200 | | |
| | | 300 | | |
| | | 400 | | |
| | | 500 | | |
| | | 600 | | |
| | | 700 | | |
| | | 800 | | |
| | | 900 | | |
| | | 1000 | | |
| | | 1100 | | |
| | | 1200 | | |
| | | 1300 | | |
| | | 1400 | | |
| | | 1500 | | |
| | | 1600 | | |
| | | 1700 | | |
| | | 1800 | | |
| | | 1900 | | |
| | | 2000 | | |
| | | 2100 | | |
| | | 2200 | | |
| | | 2300 | | |
| | | 2400 | | |

12 hand lines over starboard side at 1.30 P.M.
In at 1.55.
Catch - 1 Culters Cod.
6 Yellow tail rock fish
8 Red Rock fish.

Santa Cruz Lt. Hs. bore E. N.E. 3/4 E. (Mag.)
distant 13 miles.

| | | | | |
|---|---|---|---|---|
| | | 2500 | | |
| | | 2600 | | |
| | | 2700 | | |
| | | 2800 | | |
| | | 2900 | | |
| | | 3000 | | |
| | | 3100 | | |
| | | 3200 | | |
| | | 3300 | | |
| | | 3400 | | |
| | | 3500 | | |
| | | 3600 | | |
| | | 3700 | | |
| | | 3800 | | |
| | | 3900 | | |
| | | 4000 | | |

SERIAL TEMPERATURE.

| DEPTH. | TEMP. | NO. OF THER. | COR. | COR. TEMP. |
|---|---|---|---|---|
| 25 | | | | |
| 50 | | | | |
| 100 | | | | |
| 200 | | | | |
| 300 | | | | |
| 400 | | | | |
| 500 | | | | |
| 600 | | | | |
| 700 | | | | |
| 800 | | | | |
| 900 | | | | |
| 1000 | | | | |

~~Ship~~

1 Dredge lost. REMARKS.

N.C.F. 507

No. 3119 Dr Date Mch. 12th 1890

Tanner Machine. — Reel.

Turns 52 Cor. + 2 Depth 54 fms

~~Shot or lead~~ 25 lbs.

Bottom Rky. & Co.

Bottom temperature 50.6°

No. of Thermometer 61751 Cor. + 0.3°

Corrected temperature 50.9°

Air 56° Surface 55° Drift. —

~~Trawl or dredge or~~ tangles

| P.M. SOUNDING WIRE. | | TURNS. | P.M. DREDGE ROPE. | |
|---|---|---|---|---|
| DOWN. | UP. | | DOWN. | UP. |
| 1. 50. 00 | 53. 10 | 0 | 1. 54. 00 | 03. 15 |
| 51. 20 | 1. 51. 35 | 85 ~~100~~ | 57. 40 | 2. 00. 00 |
| | | 200 | | |
| | | 300 | | |
| | | 400 | | |
| | | 500 | | |
| | | 600 | | |
| | | 700 | | |
| | | 800 | | |
| | | 900 | | |
| | | 1000 | | |
| | | 1100 | | |
| | | 1200 | | |
| | | 1300 | | |
| | | 1400 | | |
| | | 1500 | | |
| | | 1600 | | |
| | | 1700 | | |
| | | 1800 | | |
| | | 1900 | | |
| | | 2000 | | |
| | | 2100 | | |
| | | 2200 | | |
| | | 2300 | | |
| | | 2400 | | |

Santa Cruz Lt. Ho. bore E.N.E. 3/8 E. (Mag.)
distant 13 miles.

| | | | | |
|---|---|---|---|---|
| | | 2500 | | |
| | | 2600 | | |
| | | 2700 | | |
| | | 2800 | | |
| | | 2900 | | |
| | | 3000 | | |
| | | 3100 | | |
| | | 3200 | | |
| | | 3300 | | |
| | | 3400 | | |
| | | 3500 | | |
| | | 3600 | | |
| | | 3700 | | |
| | | 3800 | | |
| | | 3900 | | |
| | | 4000 | | |

SERIAL TEMPERATURE.

| DEPTH. | TEMP. | NO. OF THER. | COR. | COR. TEMP. |
|---|---|---|---|---|
| 25 | | | | |
| 50 | | | | |
| 100 | | | | |
| 200 | | | | |
| 300 | | | | |
| 400 | | | | |
| 500 | | | | |
| 600 | | | | |
| 700 | | | | |
| 800 | | | | |
| 900 | | | | |
| 1000 | | | | |

REMARKS.

Crinoids - Star fish. Ophiuranes -

N.C.M.

No. 2156 Hyd. Date Mch. 12th 1890.

Tanner Machine. — Reel.

Turns 118 Cor. + 4 Depth 122 fms.

Shot or lead 25 lbs.

Bottom Hk. S. & M.

Bottom temperature 47.8°

No. of Thermometer 61751 Cor. —

Corrected temperature 47.8°.

Air 56° Surface 55° Drift.

Trawl or dredge or tangles

| SOUNDING WIRE. | | TURNS. | DREDGE ROPE. | |
|---|---|---|---|---|
| DOWN. | UP. | | DOWN. | UP. |
| P.M. 2.17.25 | 20.45 | 0 | | |
| 18.25 | 19.10 | 100 | | |
| 18.40 | 2.18.45 | 200 | | |
| | | 300 | | |
| | | 400 | | |
| | | 500 | | |
| | | 600 | | |
| | | 700 | | |
| | | 800 | | |
| | | 900 | | |
| | | 1000 | | |
| | | 1100 | | |
| | | 1200 | | |
| | | 1300 | | |
| | | 1400 | | |
| | | 1500 | | |
| | | 1600 | | |
| | | 1700 | | |
| | | 1800 | | |
| | | 1900 | | |
| | | 2000 | | |
| | | 2100 | | |
| | | 2200 | | |
| | | 2300 | | |
| | | 2400 | | |

| | | | | |
|---|---|---|---|---|
| | | 2500 | | |
| | | 2600 | | |
| | | 2700 | | |
| | | 2800 | | |
| | | 2900 | | |
| | | 3000 | | |
| | | 3100 | | |
| | | 3200 | | |
| | | 3300 | | |
| | | 3400 | | |
| | | 3500 | | |
| | | 3600 | | |
| | | 3700 | | |
| | | 3800 | | |
| | | 3900 | | |
| | | 4000 | | |

SERIAL TEMPERATURE.

| DEPTH. | TEMP. | NO. OF THER. | COR. | COR. TEMP. |
|---|---|---|---|---|
| 25 | | | | |
| 50 | | | | |
| 100 | | | | |
| 200 | | | | |
| 300 | | | | |
| 400 | | | | |
| 500 | | | | |
| 600 | | | | |
| 700 | | | | |
| 800 | | | | |
| 900 | | | | |
| 1000 | | | | |

REMARKS.

N.O.F. 507

No. 3120 D1 Date Mch. 12th 1890

Tanner Machine. — Reel.

Turns 52 Cor. + 2 Depth 54 fms.

~~Shot or~~ lead 25 lbs.

Bottom gn. M. & S. & Rks.

Bottom temperature 49.7°

No. of Thermometer 61751 Cor. —

Corrected temperature 49.7°

Air 56° Surface 54° Drift. N.N.W.½W.

~~Trawl or dredge or~~ tangles

| P.M. SOUNDING WIRE. | | TURNS. | P.M. DREDGE ROPE. | |
|---|---|---|---|---|
| DOWN. | UP. | | DOWN. | UP. |
| 2.41.00 | 42.35 | 0 | 2.43.30 | 57.15 |
| 41.30 | 2.41.40 | ~~100~~ 80 | 48.00 | 2.54.45 |
| | | 200 | | |
| | | 300 | | |
| | | 400 | | |
| | | 500 | | |
| | | 600 | | |
| | | 700 | | |
| | | 800 | | |
| | | 900 | | |
| | | 1000 | | |
| | | 1100 | | |
| | | 1200 | | |
| | | 1300 | | |
| | | 1400 | | |
| | | 1500 | | |
| | | 1600 | | |
| | | 1700 | | |
| | | 1800 | | |
| | | 1900 | | |
| | | 2000 | | |
| | | 2100 | | |
| | | 2200 | | |
| | | 2300 | | |
| | | 2400 | | |

Santa Cruz Lt. Ho. bore E.N.E. (Mag.) distant 11 miles.

| | | | | |
|---|---|---|---|---|
| | | 2500 | | |
| | | 2600 | | |
| | | 2700 | | |
| | | 2800 | | |
| | | 2900 | | |
| | | 3000 | | |
| | | 3100 | | |
| | | 3200 | | |
| 1/2 mile - | | 3300 | | |
| | | 3400 | | |
| | | 3500 | | |
| | | 3600 | | |
| | | 3700 | | |
| | | 3800 | | |
| | | 3900 | | |
| | | 4000 | | |

SERIAL TEMPERATURE.

| DEPTH. | TEMP. | NO. OF THER. | COR. | COR. TEMP. |
|---|---|---|---|---|
| 25 | | | | |
| 50 | | | | |
| 100 | | | | |
| 200 | | | | |
| 300 | | | | |
| 400 | | | | |
| 500 | | | | |
| 600 | | | | |
| 700 | | | | |
| 800 | | | | |
| 900 | | | | |
| 1000 | | | | |

REMARKS.

2 Star fishes. 1 Ascidian -
1 Sea Urchin - 1 Crinoid.

A. C. F.

507

No. 3121 Dr Date Mch. 12th 1890.

Tanner Machine. — Reel.

Turns 46 Cor. + 2 Depth 48 fms.

~~Shot or lead~~ 25 lb.

Bottom gn. M. S.

Bottom temperature 49.8°

No. of Thermometer 61751 Cor. —

Corrected temperature 49.8°

Air 55° Surface 53° Drift. N. N. W. 1/2 W.

~~Trawl or dredge or~~ tangles

| P.M. SOUNDING WIRE. | | TURNS. | P.M. DREDGE ROPE. | |
|---|---|---|---|---|
| DOWN. | UP. | | DOWN. | UP. |
| 3.14.30 | 16.10 | 0 | 3.16.30 | 28.00 |
| 15.05 | 3.15.15 | ~~100~~ 70 | 20.00 | 3.26.45 |
| | | 200 | | |
| | | 300 | | |
| | | 400 | | |
| | | 500 | | |
| | | 600 | | |
| | | 700 | | |
| | | 800 | | |
| | | 900 | | |
| | | 1000 | | |
| | | 1100 | | |
| | | 1200 | | |
| | | 1300 | | |
| | | 1400 | | |
| | | 1500 | | |
| | | 1600 | | |
| | | 1700 | | |
| | | 1800 | | |
| | | 1900 | | |
| | | 2000 | | |
| | | 2100 | | |
| | | 2200 | | |
| | | 2300 | | |
| | | 2400 | | |

Santa Cruz Lt. Ho. bore E. N. E. 7/8 E. (Mag.)
distant 11 miles.

| | | | | |
|---|---|---|---|---|
| | | 2500 | | |
| | | 2600 | | |
| | | 2700 | | |
| | | 2800 | | |
| | | 2900 | | |
| | | 3000 | | |
| | | 3100 | | |
| | | 3200 | | |
| 1/4 mile | | 3300 | | |
| | | 3400 | | |
| | | 3500 | | |
| | | 3600 | | |
| | | 3700 | | |
| | | 3800 | | |
| | | 3900 | | |
| | | 4000 | | |

SERIAL TEMPERATURE.

| DEPTH. | TEMP. | NO. OF THER. | COR. | COR. TEMP. |
|---|---|---|---|---|
| 25 | | | | |
| 50 | | | | |
| 100 | | | | |
| 200 | | | | |
| 300 | | | | |
| 400 | | | | |
| 500 | | | | |
| 600 | | | | |
| 700 | | | | |
| 800 | | | | |
| 900 | | | | |
| 1000 | | | | |

REMARKS.

4 very small star fish.

N.C.F. J.E.B.

507

No. 3122 Dr Date Mch. 12th 1890.

Tanner Machine. — Reel.

Turns 36 Cor. + 2 Depth 38 fms.

~~Shot or~~ lead 25 lbs.

Bottom gy. S. & M.

Bottom temperature 52°

No. of Thermometer 61751 Cor. +0.3°

Corrected temperature 52.3°

Air 55° Surface 52° Drift. 1/4' N. x W.

~~Trawl or dredge or~~ tangles

| P.M. SOUNDING WIRE. | | TURNS. | P.M. DREDGE ROPE. | |
|---|---|---|---|---|
| DOWN. | UP. | | DOWN. | UP. |
| 3.40.35 | 41.30 | 0 | 3.42.50 | 54.00 |
| 40.45 | 3.40.55 | ~~100~~ 60 | 45.30 | 3.52.00 |
| | | 200 | | |
| | | 300 | | |
| | | 400 | | |
| | | 500 | | |
| | | 600 | | |
| | | 700 | | |
| | | 800 | | |
| | | 900 | | |
| | | 1000 | | |
| | | 1100 | | |
| | | 1200 | | |
| | | 1300 | | |
| | | 1400 | | |
| | | 1500 | | |
| | | 1600 | | |
| | | 1700 | | |
| | | 1800 | | |
| | | 1900 | | |
| | | 2000 | | |
| | | 2100 | | |
| | | 2200 | | |
| | | 2300 | | |
| | | 2400 | | |

Santa Cruz Lt. Hs. bore E. 1/4 N. (Mag.)
distant 10 6/10 miles.

| | | | | |
|---|---|---|---|---|
| | | 2500 | | |
| | | 2600 | | |
| | | 2700 | | |
| | | 2800 | | |
| | | 2900 | | |
| | | 3000 | | |
| | | 3100 | | |
| | | 3200 | | |
| | | 3300 | | |
| | | 3400 | | |
| | | 3500 | | |
| | | 3600 | | |
| | | 3700 | | |
| | | 3800 | | |
| | | 3900 | | |
| | | 4000 | | |

SERIAL TEMPERATURE.

| DEPTH. | TEMP. | NO. OF THER. | COR. | COR. TEMP. |
|---|---|---|---|---|
| 25 | | | | |
| 50 | | | | |
| 100 | | | | |
| 200 | | | | |
| 300 | | | | |
| 400 | | | | |
| 500 | | | | |
| 600 | | | | |
| 700 | | | | |
| 800 | | | | |
| 900 | | | | |
| 1000 | | | | |

REMARKS.

2 sps. star fish.

JEB

507

No. 3123 Dr Date Mar. 12. 90

Tanner Machine. Reel.

Turns 31 Cor. + 2 Depth 32 fms

~~Shot or~~ lead 25 lbs

Bottom fne gy S. + M.

Bottom temperature 52.5°

No. of Thermometer 61751 Cor. +0.3°

Corrected temperature 52.8°

Air 56° Surface 54° Drift. ——

~~Trawl or dredge or~~ tangles

| P.M. SOUNDING WIRE. DOWN. | UP. | TURNS. | P.M. DREDGE ROPE. DOWN. | UP. |
|---|---|---|---|---|
| 4.36.45 | 37.45 | 0 | 4.44.10 | 57.45 |
| 37.02 | 4.37.04 | ~~100~~ 60 | 4.48.55 | 4.55 — |
| | | 200 | | |
| | | 300 | | |
| | | 400 | | |
| | | 500 | | |
| | | 600 | | |
| | | 700 | | |
| | | 800 | | |
| | | 900 | | |
| | | 1000 | | |
| | | 1100 | | |
| | | 1200 | | |
| | | 1300 | | |
| | | 1400 | | |
| | | 1500 | | |
| | | 1600 | | |
| | | 1700 | | |
| | | 1800 | | |
| | | 1900 | | |
| | | 2000 | | |
| | | 2100 | | |
| | | 2200 | | |
| | | 2300 | | |
| | | 2400 | | |

Santa Cruz Lt. Ho. E.N.E. 1/2 E. (Mag.)
distant 6 8/10 miles.

| | | | | |
|---|---|---|---|---|
| | | 2500 | | |
| | | 2600 | | |
| | | 2700 | | |
| | | 2800 | | |
| | | 2900 | | |
| | | 3000 | | |
| | | 3100 | | |
| | | 3200 | | |
| | | 3300 | | |
| | | 3400 | | |
| | | 3500 | | |
| | | 3600 | | |
| | | 3700 | | |
| | | 3800 | | |
| | | 3900 | | |
| | | 4000 | | |

SERIAL TEMPERATURE.

| DEPTH. | TEMP. | NO. OF THER. | COR. | COR. TEMP. |
|---|---|---|---|---|
| 25 | | | | |
| 50 | | | | |
| 100 | | | | |
| 200 | | | | |
| 300 | | | | |
| 400 | | | | |
| 500 | | | | |
| 600 | | | | |
| 700 | | | | |
| 800 | | | | |
| 900 | | | | |
| 1000 | | | | |

REMARKS.

Nothing.

N.S.F. 507

No. 3124 DI Date Mch 13th 1890-

Tanner Machine. — Reel.

Turns 20 Cor. + 1 Depth 21 fms

~~Shot or~~ lead 25 lbs.

Bottom Rky.

Bottom temperature 52°

No. of Thermometer 61751 Cor. +0.3°

Corrected temperature 52.3°

Air 45° Surface 51° Drift. —

Trawl ~~or dredge or tangles~~ large beam.

| A.M. SOUNDING WIRE. | | TURNS. | A.M. DREDGE ROPE. | |
|---|---|---|---|---|
| DOWN. | UP. | | DOWN. | UP. |
| 6. 40 .15 | 41.05 | 0 | 6.42.00 | 48.30 |
| 40.30 | 6.40.38 | 60 ~~100~~ | 44.30 | 6.45.20 |
| | | 200 | | |
| | | 300 | | |
| | | 400 | | |
| | | 500 | | |
| | | 600 | | |
| | | 700 | | |
| | | 800 | | |
| | | 900 | | |
| | | 1000 | | |
| | | 1100 | | |
| | | 1200 | | |
| | | 1300 | | |
| | | 1400 | | |
| | | 1500 | | |
| | | 1600 | | |
| | | 1700 | | |
| | | 1800 | | |
| | | 1900 | | |
| | | 2000 | | |
| | | 2100 | | |
| | | 2200 | | |
| | | 2300 | | |
| | | 2400 | | |

Santa Cruz Lt. Ho. bearing N.N.E. 3/4 E. (Mag.)
distant 2 8/10 miles.

| | | | | |
|---|---|---|---|---|
| | | 2500 | | |
| | | 2600 | | |
| | | 2700 | | |
| | | 2800 | | |
| | | 2900 | | |
| | | 3000 | | |
| | | 3100 | | |
| | | 3200 | | |
| | | 3300 | | |
| | | 3400 | | |
| | | 3500 | | |
| | | 3600 | | |
| | | 3700 | | |
| | | 3800 | | |
| | | 3900 | | |
| | | 4000 | | |

SERIAL TEMPERATURE.

| DEPTH. | TEMP. | NO. OF THER. | COR. | COR. TEMP. |
|---|---|---|---|---|
| 25 | | | | |
| 50 | | | | |
| 100 | | | | |
| 200 | | | | |
| 300 | | | | |
| 400 | | | | |
| 500 | | | | |
| 600 | | | | |
| 700 | | | | |
| 800 | | | | |
| 900 | | | | |
| 1000 | | | | |

REMARKS.

Gorgonian Coral. Cup Coral - Bryozoa.
~~Ascidians plentiful~~ - Ophiuroans.
Abundance of Salpae - 1 small
Spider Crab. 1 Shrimp -
Few small sponges - trawl not
somewhat torn -

H.C.F.

507

No. 3125 Dr Date Mch. 13th 1890.

Tanner Machine. — Reel.

Turns 63 Cor. + 2 Depth 65 fms.

~~Shot or~~ lead 25 lbs.

Bottom fne. gy. S. & sh.

Bottom temperature 48.4°

No. of Thermometer 61751 Cor. —

Corrected temperature 48.4°

Air 49° Surface 52° Drift. S.E.x E. 8/10'

Trawl ~~or dredge or tangles~~ Large Beam & Mud Bag

| A.M. SOUNDING WIRE. | | TURNS. | A.M. DREDGE ROPE. | |
|---|---|---|---|---|
| DOWN. | UP. | | DOWN. | UP. |
| 7.36.55 | 38.50 | 0 | 7.41.30 | 19.45 |
| 37.35 | 7.37.45 | 100 | 48.20 | 16.36 |
| | | ~~200~~ 185 | 53.30 | 8.13.35 |
| | | 300 | | |
| | | 400 | | |
| | | 500 | | |
| | | 600 | | |
| | | 700 | | |
| | | 800 | | |
| | | 900 | | |
| | | 1000 | | |
| | | 1100 | | |
| | | 1200 | | |
| | | 1300 | | |
| | | 1400 | | |
| | | 1500 | | |
| | | 1600 | | |
| | | 1700 | | |
| | | 1800 | | |
| | | 1900 | | |
| | | 2000 | | |
| | | 2100 | | |
| | | 2200 | | |
| | | 2300 | | |
| | | 2400 | | |

Santa Cruz Lt. Hs. Bore N.E. x E. 5/8 E. (Mag.)
distant 9 miles.

| | | | | |
|---|---|---|---|---|
| | | 2500 | | |
| | | 2600 | | |
| | | 2700 | | |
| | | 2800 | | |
| | | 2900 | | |
| | | 3000 | | |
| | | 3100 | | |
| | | 3200 | | |
| | | 3300 | | |
| | | 3400 | | |
| | | 3500 | | |
| | | 3600 | | |
| | | 3700 | | |
| | | 3800 | | |
| | | 3900 | | |
| | | 4000 | | |

SERIAL TEMPERATURE.

| DEPTH. | TEMP. | NO. OF THER. | COR. | COR. TEMP. |
|---|---|---|---|---|
| 25 | | | | |
| 50 | | | | |
| 100 | | | | |
| 200 | | | | |
| 300 | | | | |
| 400 | | | | |
| 500 | | | | |
| 600 | | | | |
| 700 | | | | |
| 800 | | | | |
| 900 | | | | |
| 1000 | | | | |

REMARKS. 1 Star fish 2 Midshipmen 50 specimens (5 species) Small Rock Cod 10 Zaniolepis, 3 Hag fish, 3 bucketfuls of Holothurians, 4 Large crabs, 8 skates, 12 deep sea flounders (2 species) 1 Whiting 2 specimens ~~atherestes~~ Hippoglossoides. 4 Sea urchins

No. 3126 Dr Date Mar 13th 1890

Sigsbee Machine. #2 Reel.

Turns 418 Cor. + 38 Depth 456 fms

~~Shot or~~ lead 35 lb.

Bottom gn M.

Bottom temperature 52 1/2°

No. of Thermometer 61751 Cor. +0.3°

Corrected temperature 52.8°

Air 54 Surface 53 Drift. S.x E. 1/2 E. 1

Trawl ~~or dredge or tangles~~ Large Beam

| Am SOUNDING WIRE. DOWN. | UP. | TURNS. | Am DREDGE ROPE. DOWN. | UP. |
|---|---|---|---|---|
| 8.46.06 | 58.10 | 0 | 9.00.30 | 27.05 |
| 47.05 | 57.56 | 100 | 04.15 | 21.40 |
| 47.58 | 57.30 | 200 | 08.05 | 19.05 |
| 48.54 | 56.55 | 300 | 10.47 | 16.12 |
| 49.46 | 56.13 | 400 | 14.55 | 13.00 |
| 50.02 | 55.15 | 500 | 20.50 | 10.05 |
| | | 600 | 24.30 | 06.58 |
| | | 700 | 27.15 | 03.45 |
| | | 800 | 29.08 | 10.00.05 |
| | | 900 | | |
| | | 1000 | | |
| | | 1100 | | |
| | | 1200 | | |
| | | 1300 | | |
| | | 1400 | | |
| | | 1500 | | |
| | | 1600 | | |
| | | 1700 | | |
| | | 1800 | | |
| | | 1900 | | |
| | | 2000 | | |
| | | 2100 | | |
| | | 2200 | | |
| | | 2300 | | |
| | | 2400 | | |

Santa Cruz Ct. So. bore N.E. x N. (Mag.)
distant 11 7/10 miles.

| | | | | |
|---|---|---|---|---|
| | | 2500 | | |
| | | 2600 | | |
| | | 2700 | | |
| | | 2800 | | |
| | | 2900 | | |
| | | 3000 | | |
| | | 3100 | | |
| | | 3200 | | |
| | | 3300 | | |
| | | 3400 | | |
| | | 3500 | | |
| | | 3600 | | |
| | | 3700 | | |
| | | 3800 | | |
| | | 3900 | | |
| | | 4000 | | |

## SERIAL TEMPERATURE.

| DEPTH. | TEMP. | NO. OF THER. | COR. | COR. TEMP. |
|---|---|---|---|---|
| 25 | | | | |
| 50 | | | | |
| 100 | | | | |
| 200 | | | | |
| 300 | | | | |
| 400 | | | | |
| 500 | | | | |
| 600 | | | | |
| 700 | | | | |
| 800 | | | | |
| 900 | | | | |
| 1000 | | | | |

## REMARKS.

1/2 bbl. deep sea urchins (2 species)
1/2 Peck shells. 50 Glyptocephalus Cynicoglossus averaging 2 lbs each. 1/2 doz species small deep sea fish. Ophiurians. 1/2 doz Alcyonarians ~~Ovarians~~ Shrimps two species. 1/2 doz Hag fish
2 Blk Cod. 3 species Star fish

507

No. 3127 Dr Date Mch 13th 1890.

Sigsbee Machine. #2 Reel.

Turns 382 Cor. + 36 Depth 418 fms.

~~Shot or lead~~ 35 lbs

Bottom gn. M + S.

Bottom temperature 40.5°

No. of Thermometer 61751 Cor. –

Corrected temperature 40.5°

Air 56° Surface 53° Drift. S.E. x S. 1/2 mile

Trawl ~~or dredge or tangles~~ Large Beam + Mud

| Am SOUNDING WIRE. DOWN. | UP. | TURNS. | Am DREDGE ROPE. DOWN. | UP. |
|---|---|---|---|---|
| 11.00.25 | 10.30 | 0 | 11.15.05 | 38.20 |
| 01.15 | 09.50 | 100 | 20.25 | 36.10 |
| 02.05 | 09.10 | 200 | 24.05 | 33.00 |
| 03.02 | 08.25 | 300 | 29.30 | 31.10 |
| 03.58 | 11.07.45 | 400 | 31.20 | 28.30 |
| | | 500 | 34.25 | 25.10 |
| | | 600 | 36.15 | 21.50 |
| | | 700 | 41.10 | 18.30 |
| | | 800 | 44.30 | 12.15.00 |
| | | 900 | | |
| | | 1000 | | |
| | | 1100 | | |
| | | 1200 | | |
| | | 1300 | | |
| | | 1400 | | |
| | | 1500 | | |
| | | 1600 | | |
| | | 1700 | | |
| | | 1800 | | |
| | | 1900 | | |
| | | 2000 | | |
| | | 2100 | | |
| | | 2200 | | |
| | | 2300 | | |
| | | 2400 | | |

Pt. Pinas Lt. Ks. bore E. S.E. 1/2 E. (Mag.) distant 13 6/10 miles.

| | | | | |
|---|---|---|---|---|
| | | 2500 | | |
| | | 2600 | | |
| | | 2700 | | |
| | | 2800 | | |
| | | 2900 | | |
| | | 3000 | | |
| | | 3100 | | |
| | | 3200 | | |
| | | 3300 | | |
| bag. | | 3400 | | |
| | | 3500 | | |
| | | 3600 | | |
| | | 3700 | | |
| | | 3800 | | |
| | | 3900 | | |
| | | 4000 | | |

SERIAL TEMPERATURE.

| DEPTH. | TEMP. | NO. OF THER. | COR. | COR. TEMP. |
|---|---|---|---|---|
| 25 | | | | |
| 50 | | | | |
| 100 | | | | |
| 200 | | | | |
| 300 | | | | |
| 400 | | | | |
| 500 | | | | |
| 600 | | | | |
| 700 | | | | |
| 800 | | | | |
| 900 | | | | |
| 1000 | | | | |

REMARKS.

5 sps. Small deep sea fishes.
1 doz. Deep sea sole. 7 1/2 lbs. each.
1 large Spotted sole (new sp.) 1 Chaniodus.
1 Sebastes - 2 sps. Red shrimp -

J.E.B. 507. NCP.

No. 3128 Dr Date Mch 13th 1890.

Sigsbee Machine. #2 Reel.

Turns 574 Cor. + 53 Depth 627 fms

~~Shot or~~ lead 35 lb.

Bottom bu M.

Bottom temperature 38.9° -

No. of Thermometer 61751 Cor. —

Corrected temperature 38.9°

Air 56° Surface 53° Drift. E.S.E. 1/8 E.

Trawl ~~or dredge or tangles~~ large beam, & mud bag

| P.M. SOUNDING WIRE. DOWN. | UP. | TURNS. | P.M. DREDGE ROPE. DOWN. | UP. |
|---|---|---|---|---|
| 12.41.30 | 55.30 | 0 | 1.00.00 | 51.45 |
| 42.15 | 54.50 | 100 | 04.50 | 48.35 |
| 43.05 | 54.15 | 200 | 08.30 | 45.20 |
| 44.00 | 53.20 | 300 | 12.00 | 42.15 |
| 44.55 | 52.10 | 400 | 14.10 | 38.20 |
| 45.05 | 51.05 | 500 | 16.40 | 34.40 |
| 46.45 | 12.50.10 | 600 | 19.30 | 31.00 |
| | | 700 | 22.00 | 27.15 |
| | | 800 | 24.00 | 23.45 |
| | | 900 | 26.00 | 20.35 |
| | | 1000 | 28.00 | 17.15 |
| | | 1100 | 30.20 | 14.05 |
| | | 1200 | 34.10 | 2.11.00 |
| | | 1300 | | |
| | | 1400 | | |
| | | 1500 | | |
| | | 1600 | | |
| | | 1700 | | |
| | | 1800 | | |
| | | 1900 | | |
| | | 2000 | | |
| | | 2100 | | |
| | | 2200 | | |
| | | 2300 | | |
| | | 2400 | | |

Pt. Pinos Lt. Ho. bore E. 1/2 S. (Mag.) distant 10 miles.

| | | | | |
|---|---|---|---|---|
| | | 2500 | | |
| | | 2600 | | |
| | | 2700 | | |
| | | 2800 | | |
| | | 2900 | | |
| | | 3000 | | |
| | | 3100 | | |
| | | 3200 | | |
| 2 6/10 miles | | 3300 | | |
| | | 3400 | | |
| | | 3500 | | |
| | | 3600 | | |
| | | 3700 | | |
| | | 3800 | | |
| | | 3900 | | |
| | | 4000 | | |

SERIAL TEMPERATURE.

| DEPTH. | TEMP. | NO. OF THER. | COR. | COR. TEMP. |
|---|---|---|---|---|
| 25 | | | | |
| 50 | | | | |
| 100 | | | | |
| 200 | | | | |
| 300 | | | | |
| 400 | | | | |
| 500 | | | | |
| 600 | | | | |
| 700 | | | | |
| 800 | | | | |
| 900 | | | | |
| 1000 | | | | |

REMARKS.

N.C.F. 507
J.E.B.

No. 3129 Dr Date Mch. 13th 1890.

Sigsbee Machine. #2 Reel.

Turns 187 Cor. + 17 Depth 204 fms.

~~Shot or~~ lead 35 lbs.

Bottom S.M.

Bottom temperature 43.7°

No. of Thermometer 61751 Cor. —

Corrected temperature 43.7°

Air 66° Surface 57° Drift. —

Trawl ~~or dredge or tangles~~ large beam & Mud bag.

| P.M. SOUNDING WIRE. DOWN. | UP. | TURNS. | P.M. DREDGE ROPE. DOWN. | UP. |
|---|---|---|---|---|
| 3. 26.50 | 31.00 | 0 | 3.33.10 | 23:00 |
| 27.55 | 30.10 | 100 | 48.15 | 19.45 |
| 28.45 | 3.29.15 | 200 | 43.20 | 16.50 |
| | | 300 | 47.00 | 14.50 |
| | | 400 | 51.15 | 4 10.40 |
| | | 500 | | |
| | | 600 | | |
| | | 700 | | |
| | | 800 | | |
| | | 900 | | |
| | | 1000 | | |
| | | 1100 | | |
| | | 1200 | | |
| | | 1300 | | |
| | | 1400 | | |
| | | 1500 | | |
| | | 1600 | | |
| | | 1700 | | |
| | | 1800 | | |
| | | 1900 | | |
| | | 2000 | | |
| | | 2100 | | |
| | | 2200 | | |
| | | 2300 | | |
| | | 2400 | | |

Pt. Pinos Lt. No. bore E. 3/4 S. (Mag.)
distant 4 4/10 miles.

| | | | | |
|---|---|---|---|---|
| | | 2500 | | |
| | | 2600 | | |
| | | 2700 | | |
| | | 2800 | | |
| | | 2900 | | |
| | | 3000 | | |
| | | 3100 | | |
| | | 3200 | | |
| | | 3300 | | |
| | | 3400 | | |
| | | 3500 | | |
| | | 3600 | | |
| | | 3700 | | |
| | | 3800 | | |
| | | 3900 | | |
| | | 4000 | | |

## SERIAL TEMPERATURE.

| DEPTH. | TEMP. | NO. OF THER. | COR. | COR. TEMP. |
|---|---|---|---|---|
| 25 | | | | |
| 50 | | | | |
| 100 | | | | |
| 200 | | | | |
| 300 | | | | |
| 400 | | | | |
| 500 | | | | |
| 600 | | | | |
| 700 | | | | |
| 800 | | | | |
| 900 | | | | |
| 1000 | | | | |

## REMARKS.

12 ~~Atheresthes~~ Hippoglossoides flounders 12 deep sea flounder 2 spec
1 Parophrys 12 Rock Cod Small 2 spec. 40 very
small Rock Cod. 7 Zaniolepis. 12 Eel pouts (small
24 Alligator fish 7 octopis 6 Hag fish
4 skates (2 species) 6 Basket Star fish 50 Crinoids
6 shark Eggs

No. 3130 D Date Mch. 14th 1890.

Hand lead - Machine. — Reel.

Turns — Cor. + — Depth 9 fms.

~~Shot or lead~~ 12 lbs.

Bottom lt. S. & Rks.

Bottom temperature —

No. of Thermometer — Cor. —

Corrected temperature —

Air 67° Surface 58° Drift. —

Trawl ~~or dredge or tangles~~ Small beam.

| P.M. SOUNDING WIRE. | | TURNS. | P.M. DREDGE ROPE. | |
|---|---|---|---|---|
| DOWN. | UP. | | DOWN. | UP. |
| 12.18.00 | 12.19.00 | 0 | 12.20.15 | 43.30 |
| | | 50 | | |
| | | 100 | 21.30 | 12.41.15 |
| | | 200 | | |
| | | 300 | | |
| | | 400 | | |
| | | 500 | | |
| | | 600 | | |
| | | 700 | | |
| | | 800 | | |
| | | 900 | | |
| | | 1000 | | |
| | | 1100 | | |
| | | 1200 | | |
| | | 1300 | | |
| | | 1400 | | |
| | | 1500 | | |
| | | 1600 | | |
| | | 1700 | | |
| | | 1800 | | |
| | | 1900 | | |
| | | 2000 | | |
| | | 2100 | | |
| | | 2200 | | |
| | | 2300 | | |
| | | 2400 | | |

Almeja Point bore N. N. × N. 3/4 N. (Mag.) distant 1 mile.

| | | | | |
|---|---|---|---|---|
| | | 2500 | | |
| | | 2600 | | |
| | | 2700 | | |
| | | 2800 | | |
| | | 2900 | | |
| | | 3000 | | |
| | | 3100 | | |
| | | 3200 | | |
| | | 3300 | | |
| | | 3400 | | |
| | | 3500 | | |
| | | 3600 | | |
| | | 3700 | | |
| | | 3800 | | |
| | | 3900 | | |
| | | 4000 | | |

SERIAL TEMPERATURE.

| DEPTH. | TEMP. | NO. OF THER. | COR. | COR. TEMP. |
|---|---|---|---|---|
| 25 | | | | |
| 50 | | | | |
| 100 | | | | |
| 200 | | | | |
| 300 | | | | |
| 400 | | | | |
| 500 | | | | |
| 600 | | | | |
| 700 | | | | |
| 800 | | | | |
| 900 | | | | |
| 1000 | | | | |

REMARKS.

Crabs - 3 large
1 Skate. 1 Flounder. Few young Flounders.
2 Holothurians. 1 large Ascidian.
2 Red star fish. 1 Mollusk.

N.C.F.
507

No. 3131 Dr Date Mch. 14th 1890.
Tanner Machine. — Reel.

Turns 46 Cor. + 2 Depth 48 fms.

~~Shot or~~ lead 25 lb.

Bottom Tr. M. + R.

Bottom temperature 50.5°

No. of Thermometer 61751 Cor. +0.3°

Corrected temperature 50.8°

Air 67° Surface 58° Drift. N.E. x N. 1/2 mile

Trawl ~~or dredge or tangles~~ Small beam —

| P.M. SOUNDING WIRE. | | TURNS. | P.M. DREDGE ROPE. | |
|---|---|---|---|---|
| DOWN. | UP. | | DOWN. | UP. |
| 1.32.00 | 33.15 | 0 | 1.34.30 | 59.00 |
| 32.25 | 1.32.35 | 100 | 39.05 | 54.15 |
| | | 150 ~~200~~ | 41.25 | 1.52.00 |
| | | 300 | | |
| | | 400 | | |
| | | 500 | | |
| | | 600 | | |
| | | 700 | | |
| | | 800 | | |
| | | 900 | | |
| | | 1000 | | |
| | | 1100 | | |
| | | 1200 | | |
| | | 1300 | | |
| | | 1400 | | |
| | | 1500 | | |
| | | 1600 | | |
| | | 1700 | | |
| | | 1800 | | |
| | | 1900 | | |
| | | 2000 | | |
| | | 2100 | | |
| | | 2200 | | |
| | | 2300 | | |
| | | 2400 | | |

Point Cinco Lt. So. bore S. 5/8 W. (Mag.)
distant 3 1/2 miles.

| | | | | |
|---|---|---|---|---|
| | | 2500 | | |
| | | 2600 | | |
| | | 2700 | | |
| | | 2800 | | |
| | | 2900 | | |
| | | 3000 | | |
| | | 3100 | | |
| | | 3200 | | |
| | | 3300 | | |
| | | 3400 | | |
| | | 3500 | | |
| | | 3600 | | |
| | | 3700 | | |
| | | 3800 | | |
| | | 3900 | | |
| | | 4000 | | |

SERIAL TEMPERATURE.

| DEPTH. | TEMP. | NO. OF THER. | COR. | COR. TEMP. |
|---|---|---|---|---|
| 25 | | | | |
| 50 | | | | |
| 100 | | | | |
| 200 | | | | |
| 300 | | | | |
| 400 | | | | |
| 500 | | | | |
| 600 | | | | |
| 700 | | | | |
| 800 | | | | |
| 900 | | | | |
| 1000 | | | | |

REMARKS.

Dredge net badly torn -
Nothing taken -

N.O.F.

507

No. 3132 Dr Date Mch. 14th 1890.

Tanner Machine. — Reel.

Turns 32 Cor. + 1 Depth 33 fms.

~~Shot or~~ lead 25 lbs.

Bottom br. M.

Bottom temperature 51.8°

No. of Thermometer 61751 Cor. +0.3°

Corrected temperature 52.1°

Air 62° Surface 55° Drift. N.W. 4/10 mile

Trawl ~~or dredge or tangles~~ Small beam.

| P.M. SOUNDING WIRE. | | TURNS. | P.M. DREDGE ROPE. | |
|---|---|---|---|---|
| DOWN. | UP. | | DOWN. | UP. |
| 2.27.50 | 29.00 | 0 | 2.30.00 | 52.30 |
| 28.10 | 2.28.20 | 100 | 34.00 | 2.49.00 |
| | | 200 | | |
| | | 300 | | |
| | | 400 | | |
| | | 500 | | |
| | | 600 | | |
| | | 700 | | |
| | | 800 | | |
| | | 900 | | |
| | | 1000 | | |
| | | 1100 | | |
| | | 1200 | | |
| | | 1300 | | |
| | | 1400 | | |
| | | 1500 | | |
| | | 1600 | | |
| | | 1700 | | |
| | | 1800 | | |
| | | 1900 | | |
| | | 2000 | | |
| | | 2100 | | |
| | | 2200 | | |
| | | 2300 | | |
| | | 2400 | | |

Point Pinos Lt. Ho. bore N.x E. 1/2 E. (Mag.)
distant 7 3/10 miles.

| | | | | |
|---|---|---|---|---|
| | | 2500 | | |
| | | 2600 | | |
| | | 2700 | | |
| | | 2800 | | |
| | | 2900 | | |
| | | 3000 | | |
| | | 3100 | | |
| | | 3200 | | |
| | | 3300 | | |
| | | 3400 | | |
| | | 3500 | | |
| | | 3600 | | |
| | | 3700 | | |
| | | 3800 | | |
| | | 3900 | | |
| | | 4000 | | |

SERIAL TEMPERATURE.

| DEPTH. | TEMP. | NO. OF THER. | COR. | COR. TEMP. |
|---|---|---|---|---|
| 25 | | | | |
| 50 | | | | |
| 100 | | | | |
| 200 | | | | |
| 300 | | | | |
| 400 | | | | |
| 500 | | | | |
| 600 | | | | |
| 700 | | | | |
| 800 | | | | |
| 900 | | | | |
| 1000 | | | | |

REMARKS.

3 Hag Eels. 1 Skate.
2 Midshipmen. Small Rock
fish. 2 Octopus. 2 Roncador
Few Shrimps.

H.O.F. 567

No. 3133 Dr Date Mch. 14th 1890

Tanner Machine. — Reel.

Turns 36 Cor. + 1 Depth 37 fms. to

~~Shot or~~ lead 25 lbs.

Bottom Br. M.

Bottom temperature 52°

No. of Thermometer 61751 Cor. +0.3°

Corrected temperature 52.3°

Air 59° Surface 55° Drift. N.N.E. 3/4 E.

Trawl ~~or dredge or tangles~~ small beam. 1/2 mile

| P.M. SOUNDING WIRE. | | TURNS. | P.M. DREDGE ROPE. | |
|---|---|---|---|---|
| DOWN. | UP. | | DOWN. | UP. |
| 3.22.15 | 24.10 | 0 | 3.24.30 | 42.50 |
| 23.00 | 3.23.05 | 100 | 29.00 | 3.38.10 |
| | | 200 | | |
| | | 300 | | |
| | | 400 | | |
| | | 500 | | |
| | | 600 | | |
| | | 700 | | |
| | | 800 | | |
| | | 900 | | |
| | | 1000 | | |
| | | 1100 | | |
| | | 1200 | | |
| | | 1300 | | |
| | | 1400 | | |
| | | 1500 | | |
| | | 1600 | | |
| | | 1700 | | |
| | | 1800 | | |
| | | 1900 | | |
| | | 2000 | | |
| | | 2100 | | |
| | | 2200 | | |
| | | 2300 | | |
| | | 2400 | | |

Salinas Landing bore N.E. x E. 1/4 E. (Mag.)
distant 1 1/2 miles.

| | | | | |
|---|---|---|---|---|
| | | 2500 | | |
| | | 2600 | | |
| 62 fms. | | 2700 | | |
| | | 2800 | | |
| | | 2900 | | |
| | | 3000 | | |
| | | 3100 | | |
| | | 3200 | | |
| | | 3300 | | |
| | | 3400 | | |
| | | 3500 | | |
| | | 3600 | | |
| | | 3700 | | |
| | | 3800 | | |
| | | 3900 | | |
| | | 4000 | | |

SERIAL TEMPERATURE.

| DEPTH. | TEMP. | NO. OF THER. | COR. | COR. TEMP. |
|---|---|---|---|---|
| 25 | | | | |
| 50 | | | | |
| 100 | | | | |
| 200 | | | | |
| 300 | | | | |
| 400 | | | | |
| 500 | | | | |
| 600 | | | | |
| 700 | | | | |
| 800 | | | | |
| 900 | | | | |
| 1000 | | | | |

REMARKS.

Numerous mud worm tubes. Numerous Dentalia. Numerous small shells washed from the mud.

507 JEB

No. 3134 Dr Date Mar 14th '90.

Tanner Machine. — Reel.

Turns 12 Cor. + 1 Depth 13 fms.

~~Shot or~~ lead 25 lbs

Bottom fine S & M

Bottom temperature 54.2'

No. of Thermometer 61751 Cor. +0.3°

Corrected temperature 54.5°

Air 59° Surface 54° Drift. N. 1/4 N.

Trawl ~~or dredge or tangles~~ Large Beam

| P.M. SOUNDING WIRE. DOWN. | UP. | TURNS. | P.M. DREDGE ROPE. DOWN. | UP. |
|---|---|---|---|---|
| 4.21.50 | 4 23.40 | 0 | 4.24.55 | 42.40 |
| 22.50 | 4.22.55 | ~~100~~ 50 | 29.10 | 4.40.55 |
| | | 200 | | |
| | | 300 | | |
| | | 400 | | |
| | | 500 | | |
| | | 600 | | |
| | | 700 | | |
| | | 800 | | |
| | | 900 | | |
| | | 1000 | | |
| | | 1100 | | |
| | | 1200 | | |
| | | 1300 | | |
| | | 1400 | | |
| | | 1500 | | |
| | | 1600 | | |
| | | 1700 | | |
| | | 1800 | | |
| | | 1900 | | |
| | | 2000 | | |
| | | 2100 | | |
| | | 2200 | | |
| | | 2300 | | |
| | | 2400 | | |

Pajaro Wharf bore E.N.E. (mag) distant 1 7/10 miles.

| | | | | |
|---|---|---|---|---|
| | | 2500 | | |
| | | 2600 | | |
| | | 2700 | | |
| | | 2800 | | |
| | | 2900 | | |
| | | 3000 | | |
| | | 3100 | | |
| | | 3200 | | |
| 1/2 mile. | | 3300 | | |
| | | 3400 | | |
| | | 3500 | | |
| | | 3600 | | |
| | | 3700 | | |
| | | 3800 | | |
| | | 3900 | | |
| | | 4000 | | |

SERIAL TEMPERATURE.

| DEPTH. | TEMP. | NO. OF THER. | COR. | COR. TEMP. |
|---|---|---|---|---|
| 25 | | | | |
| 50 | | | | |
| 100 | | | | |
| 200 | | | | |
| 300 | | | | |
| 400 | | | | |
| 500 | | | | |
| 600 | | | | |
| 700 | | | | |
| 800 | | | | |
| 900 | | | | |
| 1000 | | | | |

REMARKS.

4 large Lunatia - 1 doz. Porcador. Numerous small shells washed from the mud.

H.C.F.
507
Ja B

No. 3135 Dr Date Mch. 14 #1890.
Tanner Machine. — Reel.
Turns 15 Cor. + — Depth 15 fms.
~~Shot or~~ lead 25 lbs.
Bottom fne. gy. S.
Bottom temperature 54.4°
No. of Thermometer 61751 Cor. +0.3°
Corrected temperature 54.7°
Air 59° Surface 54° Drift. W. 1/4 S.
Trawl ~~or dredge or tangles~~ Large beam.

| P.M. SOUNDING WIRE. DOWN. | UP. | TURNS. | P.M. DREDGE ROPE. DOWN. | UP. |
|---|---|---|---|---|
| 5.13.50 | 14.20 | 0 | 5.15.00 | 28.02 |
| 14.00 | 5.14.05 | 50 ~~100~~ | 17.30 | 5.31.15 |
| | | 200 | | |
| | | 300 | | |
| | | 400 | | |
| | | 500 | | |
| | | 600 | | |
| | | 700 | | |
| | | 800 | | |
| | | 900 | | |
| | | 1000 | | |
| | | 1100 | | |
| | | 1200 | | |
| | | 1300 | | |
| | | 1400 | | |
| | | 1500 | | |
| | | 1600 | | |
| | | 1700 | | |
| | | 1800 | | |
| | | 1900 | | |
| | | 2000 | | |
| | | 2100 | | |
| | | 2200 | | |
| | | 2300 | | |
| | | 2400 | | |

Santa Cruz Lt Ho. bore N.N.W. 3/8 W. (Mag.)
distant 6 miles.

| | | | | |
|---|---|---|---|---|
| | | 2500 | | |
| | | 2600 | | |
| | | 2700 | | |
| | | 2800 | | |
| | | 2900 | | |
| | | 3000 | | |
| | | 3100 | | |
| | | 3200 | | |
| 1/2 mile | | 3300 | | |
| | | 3400 | | |
| | | 3500 | | |
| | | 3600 | | |
| | | 3700 | | |
| | | 3800 | | |
| | | 3900 | | |
| | | 4000 | | |

SERIAL TEMPERATURE.

| DEPTH. | TEMP. | NO. OF THER. | COR. | COR. TEMP. |
|---|---|---|---|---|
| 25 | | | | |
| 50 | | | | |
| 100 | | | | |
| 200 | | | | |
| 300 | | | | |
| 400 | | | | |
| 500 | | | | |
| 600 | | | | |
| 700 | | | | |
| 800 | | | | |
| 900 | | | | |
| 1000 | | | | |

REMARKS.

2 flounders
6 Roncador
a few worn shells

H.O.N. 507

No. 3136 DI Date Mch 15th 1890.

Hand lead Machine. — Reel.

Turns — Cor. + — Depth 7 fms.

~~Shot or~~ lead 12 lbs.

Bottom gy. S.

Bottom temperature —

No. of Thermometer — Cor. —

Corrected temperature —

Air 49° Surface 52° Drift. S 1/4 W. 1 in

Trawl ~~or dredge or tangles~~ Small beam.

| A.M. SOUNDING WIRE. | | TURNS. | A.M. DREDGE ROPE. | |
|---|---|---|---|---|
| DOWN. | UP. | | DOWN. | UP. |
| 6.24.00 | 6.25.00 | 0 | 6.26.00 | 38.50 |
| | | 30 ~~100~~ | 28.30 | 6.36.15 |
| | | 200 | | |
| | | 300 | | |
| | | 400 | | |
| | | 500 | | |
| | | 600 | | |
| | | 700 | | |
| | | 800 | | |
| | | 900 | | |
| | | 1000 | | |
| | | 1100 | | |
| | | 1200 | | |
| | | 1300 | | |
| | | 1400 | | |
| | | 1500 | | |
| | | 1600 | | |
| | | 1700 | | |
| | | 1800 | | |
| | | 1900 | | |
| | | 2000 | | |
| | | 2100 | | |
| | | 2200 | | |
| | | 2300 | | |
| | | 2400 | | |

Santa Cruz Lt. Hs. bore N. S. W. 1/2 W. (Mag.) distant 1 8/10 miles.

| | | | | |
|---|---|---|---|---|
| | | 2500 | | |
| | | 2600 | | |
| | | 2700 | | |
| | | 2800 | | |
| | | 2900 | | |
| | | 3000 | | |
| | | 3100 | | |
| | | 3200 | | |
| | | 3300 | | |
| | | 3400 | | |
| | | 3500 | | |
| | | 3600 | | |
| | | 3700 | | |
| | | 3800 | | |
| | | 3900 | | |
| | | 4000 | | |

SERIAL TEMPERATURE.

| DEPTH. | TEMP. | NO. OF THER. | COR. | COR. TEMP. |
|---|---|---|---|---|
| 25 | | | | |
| 50 | | | | |
| 100 | | | | |
| 200 | | | | |
| 300 | | | | |
| 400 | | | | |
| 500 | | | | |
| 600 | | | | |
| 700 | | | | |
| 800 | | | | |
| 900 | | | | |
| 1000 | | | | |

REMARKS.

2 doz. Roncador. Few Perch.
1 doz. Smelts. 1 large Flounder.
1 Skate. 1 Rock fish. Shrimps.

No. 3137 D Date Mch. 15th 1890.

Hand lead Machine. — Reel.

Turns — Cor. + — Depth 17 fms.

~~Shot or~~ lead 12 lbs.

Bottom S. & P.

Bottom temperature —

No. of Thermometer — Cor. —

Corrected temperature —

Air 50° Surface 52° Drift. S/4 W. 2'

Trawl ~~or dredge or tangles~~ Small beam.

| A.M. SOUNDING WIRE. | | TURNS. | A.M. DREDGE ROPE. | |
|---|---|---|---|---|
| DOWN. | UP. | | DOWN. | UP. |
| 6.43.20 | 6.44.00 | 0 | 6.44.45 | 56.50 |
| | | ~~100~~ 110 | 46.30 | 6.55.00 |
| | | 200 | | |
| | | 300 | | |
| | | 400 | | |
| | | 500 | | |
| | | 600 | | |
| | | 700 | | |
| | | 800 | | |
| | | 900 | | |
| | | 1000 | | |
| | | 1100 | | |
| | | 1200 | | |
| | | 1300 | | |
| | | 1400 | | |
| | | 1500 | | |
| | | 1600 | | |
| | | 1700 | | |
| | | 1800 | | |
| | | 1900 | | |
| | | 2000 | | |
| | | 2100 | | |
| | | 2200 | | |
| | | 2300 | | |
| | | 2400 | | |

Santa Cruz Pt. Ho. bore N.W. x N. (Mag.) distant 7/10 mile.

| | | | | |
|---|---|---|---|---|
| | | 2500 | | |
| | | 2600 | | |
| | | 2700 | | |
| | | 2800 | | |
| | | 2900 | | |
| | | 3000 | | |
| | | 3100 | | |
| | | 3200 | | |
| | | 3300 | | |
| | | 3400 | | |
| | | 3500 | | |
| | | 3600 | | |
| | | 3700 | | |
| | | 3800 | | |
| | | 3900 | | |
| | | 4000 | | |

SERIAL TEMPERATURE.

| DEPTH. | TEMP. | NO. OF THER. | COR. | COR. TEMP. |
|---|---|---|---|---|
| 25 | | | | |
| 50 | | | | |
| 100 | | | | |
| 200 | | | | |
| 300 | | | | |
| 400 | | | | |
| 500 | | | | |
| 600 | | | | |
| 700 | | | | |
| 800 | | | | |
| 900 | | | | |
| 1000 | | | | |

REMARKS.

6 Roncador.
6 Perch.
1 Skate.
Few shrimps:
Ascidians.

1 Hag fish.
~~Crab.~~
1 Midshipmen.
1 Rock Crab.

N.C.F.

507

No. 3138 Dr Date Mch. 15th 1890.

Tanner Machine. — Reel.

Turns 19 Cor. + — Depth 19 fms.

~~Shot or~~ lead 25 lbs.

Bottom fne. S. & M. St.

Bottom temperature 55.1°

No. of Thermometer 61751 Cor. +0.3°

Corrected temperature 55.4°

Air 52° Surface 52° Drift. S.SW. 2

~~Trawl or~~ dredge ~~or tangles~~ Ships.

| A.M. SOUNDING WIRE. DOWN. | UP. | TURNS. | A.M. DREDGE ROPE. DOWN. | UP. |
|---|---|---|---|---|
| 7.08.40 | 09.05 | 0 | 7.10.00 | 17.35 |
| 08.46 | 7.08.50 | 30 ~~100~~ | 11.35 | 7.16.15 |
| | | 200 | | |
| | | 300 | | |
| | | 400 | | |
| | | 500 | | |
| | | 600 | | |
| | | 700 | | |
| | | 800 | | |
| | | 900 | | |
| | | 1000 | | |
| | | 1100 | | |
| | | 1200 | | |
| | | 1300 | | |
| | | 1400 | | |
| | | 1500 | | |
| | | 1600 | | |
| | | 1700 | | |
| | | 1800 | | |
| | | 1900 | | |
| | | 2000 | | |
| | | 2100 | | |
| | | 2200 | | |
| | | 2300 | | |
| | | 2400 | | |

Santa Cruz Lt. Ho. bore N. 1/2 W. (Mag.)
distant 1 8/10 miles.

| | | | | |
|---|---|---|---|---|
| | | 2500 | | |
| | | 2600 | | |
| | | 2700 | | |
| | | 2800 | | |
| | | 2900 | | |
| | | 3000 | | |
| | | 3100 | | |
| | | 3200 | | |
| | | 3300 | | |
| | | 3400 | | |
| | | 3500 | | |
| | | 3600 | | |
| | | 3700 | | |
| | | 3800 | | |
| | | 3900 | | |
| | | 4000 | | |

SERIAL TEMPERATURE.

| DEPTH. | TEMP. | NO. OF THER. | COR. | COR. TEMP. |
|---|---|---|---|---|
| 25 | | | | |
| 50 | | | | |
| 100 | | | | |
| 200 | | | | |
| 300 | | | | |
| 400 | | | | |
| 500 | | | | |
| 600 | | | | |
| 700 | | | | |
| 800 | | | | |
| 900 | | | | |
| 1000 | | | | |

REMARKS.

Few shells washed out of sand:

H.C.M. 507

No. 3139 Dr Date Mch. 15th 1890.

Tanner Machine. — Reel.

Turns 26 Cor. + 1 Depth 27 fms.

~~Shot or~~ lead 25 lbs.

Bottom gn. M.

Bottom temperature 52.6°

No. of Thermometer 61751 Cor. + 0.3°

Corrected temperature 52.9°

Air 52° Surface 52° Drift. W.S.W. 5/8 N.

~~Trawl or~~ dredge ~~or tangles~~ Ships.

| A.M. SOUNDING WIRE. DOWN. | UP. | TURNS. | A.M. DREDGE ROPE. DOWN. | UP. |
|---|---|---|---|---|
| 7. 30. 00 | 30. 50 | 0 | 7. 32. 15 | 42. 20 |
| 30. 12 | 7. 30. 25 | 50 ~~100~~ | 35. 00 | 7. 39. 35 |
| | | 200 | | |
| | | 300 | | |
| | | 400 | | |
| | | 500 | | |
| | | 600 | | |
| | | 700 | | |
| | | 800 | | |
| | | 900 | | |
| | | 1000 | | |
| | | 1100 | | |
| | | 1200 | | |
| | | 1300 | | |
| | | 1400 | | |
| | | 1500 | | |
| | | 1600 | | |
| | | 1700 | | |
| | | 1800 | | |
| | | 1900 | | |
| | | 2000 | | |
| | | 2100 | | |
| | | 2200 | | |
| | | 2300 | | |
| | | 2400 | | |

Santa Cruz Ct. Ho. bore N. 1/2 E. (Mag.) distant 3 miles.

| | | | | |
|---|---|---|---|---|
| | | 2500 | | |
| | | 2600 | | |
| | | 2700 | | |
| | | 2800 | | |
| | | 2900 | | |
| | | 3000 | | |
| | | 3100 | | |
| | | 3200 | | |
| .2 mile | | 3300 | | |
| | | 3400 | | |
| | | 3500 | | |
| | | 3600 | | |
| | | 3700 | | |
| | | 3800 | | |
| | | 3900 | | |
| | | 4000 | | |

SERIAL TEMPERATURE.

| DEPTH. | TEMP. | NO. OF THER. | COR. | COR. TEMP. |
|---|---|---|---|---|
| 25 | | | | |
| 50 | | | | |
| 100 | | | | |
| 200 | | | | |
| 300 | | | | |
| 400 | | | | |
| 500 | | | | |
| 600 | | | | |
| 700 | | | | |
| 800 | | | | |
| 900 | | | | |
| 1000 | | | | |

REMARKS.

Few small worms & shells washed from sand and mud.

JEB 507

No. 3140 Dr Date Mar. 15 '90.

Tanner Machine. — Reel.

Turns 29 Cor. + / Depth 30 fms

~~Shot or~~ lead 25 lbs.

Bottom M.

Bottom temperature 52°

No. of Thermometer 61751 Cor. +0.3°

Corrected temperature 52.3°

Air 53° Surface 52° Drift. N.W. 0.2'

~~Trawl or~~ dredge ~~or tangles~~ Ships

| A.M. SOUNDING WIRE. DOWN. | UP. | TURNS. | A.M. DREDGE ROPE. DOWN. | UP. |
|---|---|---|---|---|
| 7.59.30 | 8.00.15 | 0 | 8.01.30 | 11.30 |
| 59.45 | 7.59.55 | 100 | 8.02.20 | 8.10.00 |
| | | 200 | | |
| | | 300 | | |
| | | 400 | | |
| | | 500 | | |
| | | 600 | | |
| | | 700 | | |
| | | 800 | | |
| | | 900 | | |
| | | 1000 | | |
| | | 1100 | | |
| | | 1200 | | |
| | | 1300 | | |
| | | 1400 | | |
| | | 1500 | | |
| | | 1600 | | |
| | | 1700 | | |
| | | 1800 | | |
| | | 1900 | | |
| | | 2000 | | |
| | | 2100 | | |
| | | 2200 | | |
| | | 2300 | | |
| | | 2400 | | |

Santa Cruz Lt. Ho. bearing N.E. x N. (Mag.) distant 3 8/10 miles.

| | | | | |
|---|---|---|---|---|
| | | 2500 | | |
| | | 2600 | | |
| | | 2700 | | |
| | | 2800 | | |
| | | 2900 | | |
| | | 3000 | | |
| | | 3100 | | |
| | | 3200 | | |
| | | 3300 | | |
| | | 3400 | | |
| | | 3500 | | |
| | | 3600 | | |
| | | 3700 | | |
| | | 3800 | | |
| | | 3900 | | |
| | | 4000 | | |

SERIAL TEMPERATURE.

| DEPTH. | TEMP. | NO. OF THER. | COR. | COR. TEMP. |
|---|---|---|---|---|
| 25 | | | | |
| 50 | | | | |
| 100 | | | | |
| 200 | | | | |
| 300 | | | | |
| 400 | | | | |
| 500 | | | | |
| 600 | | | | |
| 700 | | | | |
| 800 | | | | |
| 900 | | | | |
| 1000 | | | | |

REMARKS.

Worms
and small shells.

No. 3141 Dr Date Mar. 15 1890.

Tanner Machine. — Reel.

Turns 23 Cor. + 1 Depth 24 fms

~~Shot or lead~~ 25 lbs.

Bottom fine gy S. & M.

Bottom temperature 52.7°

No. of Thermometer 61751 Cor. +0.3°

Corrected temperature 53°

Air 53° Surface 52° Drift. NE&N 0.2

~~Trawl or~~ dredge ~~or tangles~~ Shipes

| SOUNDING WIRE. DOWN. | SOUNDING WIRE. UP. | TURNS. | DREDGE ROPE. DOWN. | DREDGE ROPE. UP. |
|---|---|---|---|---|
| 8 22.15 | 23.05 | 0 | 8 25.10 | 32.10 |
| 22.30 | 8 22.32 | ~~100~~ 40 | 27.15 | 8.30-29 |
| | | 200 | | |
| | | 300 | | |
| | | 400 | | |
| | | 500 | | |
| | | 600 | | |
| | | 700 | | |
| | | 800 | | |
| | | 900 | | |
| | | 1000 | | |
| | | 1100 | | |
| | | 1200 | | |
| | | 1300 | | |
| | | 1400 | | |
| | | 1500 | | |
| | | 1600 | | |
| | | 1700 | | |
| | | 1800 | | |
| | | 1900 | | |
| | | 2000 | | |
| | | 2100 | | |
| | | 2200 | | |
| | | 2300 | | |
| | | 2400 | | |

Santa Cruz Lt. Hs. bearing N.E. 3/4 E. (Mag.) distant 3 1/2 miles -

| | | | | |
|---|---|---|---|---|
| | | 2500 | | |
| | | 2600 | | |
| | | 2700 | | |
| | | 2800 | | |
| | | 2900 | | |
| | | 3000 | | |
| | | 3100 | | |
| | | 3200 | | |
| | | 3300 | | |
| | | 3400 | | |
| | | 3500 | | |
| | | 3600 | | |
| | | 3700 | | |
| | | 3800 | | |
| | | 3900 | | |
| | | 4000 | | |

SERIAL TEMPERATURE.

| DEPTH. | TEMP. | NO. OF THER. | COR. | COR. TEMP. |
|---|---|---|---|---|
| 25 | | | | |
| 50 | | | | |
| 100 | | | | |
| 200 | | | | |
| 300 | | | | |
| 400 | | | | |
| 500 | | | | |
| 600 | | | | |
| 700 | | | | |
| 800 | | | | |
| 900 | | | | |
| 1000 | | | | |

REMARKS.

A few shells and worms

507 JEB

No. 3142 Dr. Date Mar 15 '90

Hand Lead ~~Machine~~. Reel. —

Turns — Cor. + — Depth 13 fms

~~Shot or~~ lead 12 lbs

Bottom fne. S. & Rky. Patches

Bottom temperature —

No. of Thermometer — Cor. —

Corrected temperature —

Air 53 Surface 52 Drift. 2/10' East.

~~Trawl or~~ dredge ~~or tangles~~ ships

| SOUNDING WIRE. | | TURNS. | DREDGE ROPE. | |
|---|---|---|---|---|
| DOWN. | UP. | | DOWN. | UP. |
| 8.40.00 | 8.42.00 | 0 | 8.43.10 | 50.10 |
| | | ~~100~~ 30 | 45.45 | 8.49.08 |
| | | 200 | | |
| | | 300 | | |
| | | 400 | | |
| | | 500 | | |
| | | 600 | | |
| | | 700 | | |
| | | 800 | | |
| | | 900 | | |
| | | 1000 | | |
| | | 1100 | | |
| | | 1200 | | |
| | | 1300 | | |
| | | 1400 | | |
| | | 1500 | | |
| | | 1600 | | |
| | | 1700 | | |
| | | 1800 | | |
| | | 1900 | | |
| | | 2000 | | |
| | | 2100 | | |
| | | 2200 | | |
| | | 2300 | | |
| | | 2400 | | |

Santa Cruz Lt. Hs. bearing N.E. 3/4 E. (Mag.) distant 2 1/2 miles.

| | | | | |
|---|---|---|---|---|
| | | 2500 | | |
| | | 2600 | | |
| | | 2700 | | |
| | | 2800 | | |
| | | 2900 | | |
| | | 3000 | | |
| | | 3100 | | |
| | | 3200 | | |
| | | 3300 | | |
| | | 3400 | | |
| | | 3500 | | |
| | | 3600 | | |
| | | 3700 | | |
| | | 3800 | | |
| | | 3900 | | |
| | | 4000 | | |

SERIAL TEMPERATURE.

| DEPTH. | TEMP. | NO. OF THER. | COR. | COR. TEMP. |
|---|---|---|---|---|
| 25 | | | | |
| 50 | | | | |
| 100 | | | | |
| 200 | | | | |
| 300 | | | | |
| 400 | | | | |
| 500 | | | | |
| 600 | | | | |
| 700 | | | | |
| 800 | | | | |
| 900 | | | | |
| 1000 | | | | |

REMARKS.

a few small crabs. Shells and worms

J.E.M. 507

No. 3143 Dr. Date Mar. 15 '90.

Hand Lead Machine. — Reel.

Turns — Cor. + — Depth 9 fms

~~Shot or lead~~ 12 lbs

Bottom Rocky.

Bottom temperature —

No. of Thermometer — Cor. —

Corrected temperature —

Air 57 Surface 53 Drift. E. 3/4 N.

~~Trawl or dredge or tangles~~ ships

| A.M. SOUNDING WIRE. DOWN. | UP. | TURNS. | A.M. DREDGE ROPE. DOWN. | UP. |
|---|---|---|---|---|
| 9.00.00 | 9.02.00 | 0 | 9.04.05 | 07.30 |
| | | 28 100 | 05.25 | 9.05.45 |
| | | 200 | | |
| | | 300 | | |
| | | 400 | | |
| | | 500 | | |
| | | 600 | | |
| | | 700 | | |
| | | 800 | | |
| | | 900 | | |
| | | 1000 | | |
| | | 1100 | | |
| | | 1200 | | |
| | | 1300 | | |
| | | 1400 | | |
| | | 1500 | | |
| | | 1600 | | |
| | | 1700 | | |
| | | 1800 | | |
| | | 1900 | | |
| | | 2000 | | |
| | | 2100 | | |
| | | 2200 | | |
| | | 2300 | | |
| | | 2400 | | |

7 Hand lines over Portside at 9.12 -
Inst 9.21 -
Calab Nex

Santa Cruz Lt. Ho. bore N. N. E. 1/2 E. (Mag.)
distant 1 3/10 miles.

| | | | | |
|---|---|---|---|---|
| | | 2500 | | |
| | | 2600 | | |
| | | 2700 | | |
| | | 2800 | | |
| | | 2900 | | |
| | | 3000 | | |
| | | 3100 | | |
| | | 3200 | | |
| 1/10 mile | | 3300 | | |
| | | 3400 | | |
| | | 3500 | | |
| | | 3600 | | |
| | | 3700 | | |
| | | 3800 | | |
| | | 3900 | | |
| | | 4000 | | |

SERIAL TEMPERATURE.

| DEPTH. | TEMP. | NO. OF THER. | COR. | COR. TEMP. |
|---|---|---|---|---|
| 25 | | | | |
| 50 | | | | |
| 100 | | | | |
| 200 | | | | |
| 300 | | | | |
| 400 | | | | |
| 500 | | | | |
| 600 | | | | |
| 700 | | | | |
| 800 | | | | |
| 900 | | | | |
| 1000 | | | | |

REMARKS.

Dredge came up badly torn. and empty.

607

No. 3144 Dr Date Mar 15th 1890.

Sumner Machine. — Reel.

Turns 19 Cor. + 1 Depth 20 fms

~~Shot or~~ tead 25 lbs

Bottom S. + G. Rks. M. [illegible] ts.

Bottom temperature —

No. of Thermometer — Cor. —

Corrected temperature —

Air 57° Surface 54° Drift. S. 1/4 E.

~~Trawl or~~ dredge ~~or tangles~~ slips

| A.M. SOUNDING WIRE. | | TURNS. | A.M. DREDGE ROPE. | |
|---|---|---|---|---|
| DOWN. | UP. | | DOWN. | UP. |
| 9.35.00 | 9.37.00 | 0 | 9.38.05 | 47.05 |
| | | 50 ~~100~~ | ~~47~~.45 | 9.46.15 |
| | | 200 | | |
| | | 300 | | |
| | | 400 | | |
| | | 500 | | |
| | | 600 | | |
| | | 700 | | |
| | | 800 | | |
| | | 900 | | |
| | | 1000 | | |
| | | 1100 | | |
| | | 1200 | | |
| | | 1300 | | |
| | | 1400 | | |
| | | 1500 | | |
| | | 1600 | | |
| | | 1700 | | |
| | | 1800 | | |
| | | 1900 | | |
| | | 2000 | | |
| | | 2100 | | |
| | | 2200 | | |
| | | 2300 | | |
| | | 2400 | | |

Santa Cruz Pt. Ho. bore N.N.E. 1/2 E. (Mag.) distant 2 miles.

| | | | | |
|---|---|---|---|---|
| | | 2500 | | |
| | | 2600 | | |
| | | 2700 | | |
| | | 2800 | | |
| | | 2900 | | |
| | | 3000 | | |
| | | 3100 | | |
| | | 3200 | | |
| 2/10 mile. | | 3300 | | |
| | | 3400 | | |
| | | 3500 | | |
| | | 3600 | | |
| | | 3700 | | |
| | | 3800 | | |
| | | 3900 | | |
| | | 4000 | | |

SERIAL TEMPERATURE.

| DEPTH. | TEMP. | NO. OF THER. | COR. | COR. TEMP. |
|---|---|---|---|---|
| 25 | | | | |
| 50 | | | | |
| 100 | | | | |
| 200 | | | | |
| 300 | | | | |
| 400 | | | | |
| 500 | | | | |
| 600 | | | | |
| 700 | | | | |
| 800 | | | | |
| 900 | | | | |
| 1000 | | | | |

REMARKS.

Worms & shells / several species washed out of the mud & sand

J 6B
507

No. 3145 Dr Date Mar 15 '90.

Tanner Machine. Reel.

Turns 54 Cor. + 2 Depth 56 fms

~~Shot or~~ lead 25 lbs

Bottom fne gy Sr

Bottom temperature 49½°

No. of Thermometer 61751 Cor. —

Corrected temperature 49.5°

Air 57 Surface 54 Drift. N.1/4 N.

Trawl ~~or dredge or tangles~~ Large beam.

| A.M. SOUNDING WIRE. DOWN. | UP. | TURNS. | A.M. DREDGE ROPE. DOWN. | UP. |
|---|---|---|---|---|
| 10.26.55 | 10.28 | 0 | 10.36.25 | 02.05 |
| 27.05 | 10.27.07 | 100 | 41.40 | 11 00 07 |
| | | ~~200~~ 150 | 42.20 | 10 58.16 |
| | | 300 | | |
| | | 400 | | |
| | | 500 | | |
| | | 600 | | |
| | | 700 | | |
| | | 800 | | |
| | | 900 | | |
| | | 1000 | | |
| | | 1100 | | |
| | | 1200 | | |
| | | 1300 | | |
| | | 1400 | | |
| | | 1500 | | |
| | | 1600 | | |
| | | 1700 | | |
| | | 1800 | | |
| | | 1900 | | |
| | | 2000 | | |
| | | 2100 | | |
| | | 2200 | | |
| | | 2300 | | |
| | | 2400 | | |

Santa Cruz Lt. Ho. bore N. x E. (Mag.)
distant 6 8/10 miles.

| | | | | |
|---|---|---|---|---|
| | | 2500 | | |
| | | 2600 | | |
| | | 2700 | | |
| | | 2800 | | |
| | | 2900 | | |
| | | 3000 | | |
| | | 3100 | | |
| | | 3200 | | |
| 1 mile. | | 3300 | | |
| | | 3400 | | |
| | | 3500 | | |
| | | 3600 | | |
| | | 3700 | | |
| | | 3800 | | |
| | | 3900 | | |
| | | 4000 | | |

SERIAL TEMPERATURE.

| DEPTH. | TEMP. | NO. OF THER. | COR. | COR. TEMP. |
|---|---|---|---|---|
| 25 | | | | |
| 50 | | | | |
| 100 | | | | |
| 200 | | | | |
| 300 | | | | |
| 400 | | | | |
| 500 | | | | |
| 600 | | | | |
| 700 | | | | |
| 800 | | | | |
| 900 | | | | |
| 1000 | | | | |

REMARKS.

About 4 o Midshipmen
1 Doz flounders 2 species
½ Dz Sea Pens
2 very small fish 1 squid

EB

507

No. 3146 Dr. Date Mar. 15 90

Tanner Machine. Reel.

Turns 60 Cor. + 2 Depth 62 fms

~~Shot or~~ lead 25 lbs

Bottom gn. M. + Rks

Bottom temperature 49.5°

No. of Thermometer 61751 Cor. —

Corrected temperature 49.5°

Air 57° Surface 54° Drift. —

Trawl ~~or dredge or tangles~~ Small Beam

| A.M. SOUNDING WIRE. DOWN. | UP. | TURNS. | A.M. DREDGE ROPE. DOWN. | UP. |
|---|---|---|---|---|
| 11.50.15 | 51.55 | 0 | 11.53.05 | 12.30 |
| 50.55 | 11.51.— | 100 | 12.04.50 | 11.00 |
| | | 110 ~~200~~ | 07.15 | 12.09.00 |
| | | 300 | | |
| | | 400 | | |
| | | 500 | | |
| | | 600 | | |
| | | 700 | | |
| | | 800 | | |
| | | 900 | | |
| | | 1000 | | |
| | | 1100 | | |
| | | 1200 | | |
| | | 1300 | | |
| | | 1400 | | |
| | | 1500 | | |
| | | 1600 | | |
| | | 1700 | | |
| | | 1800 | | |
| | | 1900 | | |
| | | 2000 | | |
| | | 2100 | | |
| | | 2200 | | |
| | | 2300 | | |
| | | 2400 | | |

Santa Cruz Lt. Ho. bore N.E. 3/4 E. (Mag.)
distant 9 miles.

| | | | | |
|---|---|---|---|---|
| | | 2500 | | |
| | | 2600 | | |
| | | 2700 | | |
| | | 2800 | | |
| | | 2900 | | |
| | | 3000 | | |
| | | 3100 | | |
| | | 3200 | | |
| | | 3300 | | |
| | | 3400 | | |
| | | 3500 | | |
| | | 3600. | | |
| | | 3700 | | |
| | | 3800 | | |
| | | 3900 | | |
| | | 4000 | | |

SERIAL TEMPERATURE.

| DEPTH. | TEMP. | NO. OF THER. | COR. | COR. TEMP. |
|---|---|---|---|---|
| 25 | | | | |
| 50 | | | | |
| 100 | | | | |
| 200 | | | | |
| 300 | | | | |
| 400 | | | | |
| 500 | | | | |
| 600 | | | | |
| 700 | | | | |
| 800 | | | | |
| 900 | | | | |
| 1000 | | | | |

REMARKS.

50 Midshipmen. 1 large Sea anemone.
2 Skates. 1 Flounder.
Few shells. 2 Holothurians.
1 small Sea Urchin.

No. 2157 Hyd Date Mch. 15th 1890

Tanner Machine. — Reel.

Turns 94 Cor. + 3 Depth 97 fms.

~~Shot or~~ lead 25 lbs.

Bottom cra. Bk. S. & M.

Bottom temperature 47.6°

No. of Thermometer 61751 Cor. —

Corrected temperature 47.6°

Air 57° Surface 55° Drift.

Trawl or dredge or tangles

| PM. SOUNDING WIRE. | | TURNS. | DREDGE ROPE. | |
|---|---|---|---|---|
| DOWN. | UP. | | DOWN. | UP. |
| 1. 19.30 | 22.30 | 0 | | |
| 20.30 | 1. 20.45 | 100 | | |
| | | 200 | | |
| | | 300 | | |
| | | 400 | | |
| | | 500 | | |
| | | 600 | | |
| | | 700 | | |
| | | 800 | | |
| | | 900 | | |
| | | 1000 | | |
| | | 1100 | | |
| | | 1200 | | |
| | | 1300 | | |
| | | 1400 | | |
| | | 1500 | | |
| | | 1600 | | |
| | | 1700 | | |
| | | 1800 | | |
| | | 1900 | | |
| | | 2000 | | |
| | | 2100 | | |
| | | 2200 | | |
| | | 2300 | | |
| | | 2400 | | |

N.C. 3.

| | | | |
|---|---|---|---|
| Surface | | 2500 | net - |
| P.M. | | 2600 | |
| 1.30.00 | 1.40.00 | 2700 | |
| | | 2800 | |
| Saw school | | 2900 | of whale - |
| + large | | 3000 | numbers of |
| sea birds - | | 3100 | feeding on |
| the surface. | | 3200 | |
| | | 3300 | |
| Gulls - ~~Gullemots~~ | | 3400 | Gullimots. |
| Black footed | | 3500 | + Short tailed |
| Albatrosses. | | 3600 | |
| | | 3700 | |
| — | | 3800 | |
| Ano Nuevo | | 3900 | Pt. bors |
| N. x W. (Mag) | | 4000 | dist. 8 miles. |

SERIAL TEMPERATURE.

| DEPTH. | TEMP. | NO. OF THER. | COR. | COR. TEMP. |
|---|---|---|---|---|
| 25 | | | | |
| 50 | | | | |
| 100 | | | | |
| 200 | | | | |
| 300 | | | | |
| 400 | | | | |
| 500 | | | | |
| 600 | | | | |
| 700 | | | | |
| 800 | | | | |
| 900 | | | | |
| 1000 | | | | |

REMARKS.

NC 3.



No. 3147 Dr Date Mch. 15th 1890

Tanner Machine. — Reel.

Turns 54 Cor. + 2 Depth 56 fms.

~~Shot or~~ lead 25 lbs.

Bottom br. M.

Bottom temperature 49.2°

No. of Thermometer 61751 Cor. —

Corrected temperature 49.2°

Air 57° Surface 55° Drift. N.N.W.

Trawl ~~or dredge or tangles~~ Small beam.

| P.M. SOUNDING WIRE. DOWN. | UP. | TURNS. | P.M. DREDGE ROPE. DOWN. | UP. |
|---|---|---|---|---|
| 1.59.30 | 01.40 | 0 | 2.05.00 | 31.25 |
| 59.55 | 2.00.15 | 100 | 09.30 | 2.27.00 |
| | | 200 | | |
| | | 300 | | |
| | | 400 | | |
| | | 500 | | |
| | | 600 | | |
| | | 700 | | |
| | | 800 | | |
| | | 900 | | |
| | | 1000 | | |
| | | 1100 | | |
| | | 1200 | | |
| | | 1300 | | |
| | | 1400 | | |
| | | 1500 | | |
| | | 1600 | | |
| | | 1700 | | |
| | | 1800 | | |
| | | 1900 | | |
| | | 2000 | | |
| | | 2100 | | |
| | | 2200 | | |
| | | 2300 | | |
| | | 2400 | | |

Ins Nuevo Pt. bore N.x N. 3/4 W. (Mag.)
distant 6 1/2 miles

| | | | | |
|---|---|---|---|---|
| | | 2500 | | |
| | | 2600 | | |
| | | 2700 | | |
| | | 2800 | | |
| | | 2900 | | |
| | | 3000 | | |
| | | 3100 | | |
| | | 3200 | | |
| 1/2 mile. | | 3300 | | |
| | | 3400 | | |
| | | 3500 | | |
| | | 3600 | | |
| | | 3700 | | |
| | | 3800 | | |
| | | 3900 | | |
| | | 4000 | | |

SERIAL TEMPERATURE.

| DEPTH. | TEMP. | NO. OF THER. | COR. | COR. TEMP. |
|---|---|---|---|---|
| 25 | | | | |
| 50 | | | | |
| 100 | | | | |
| 200 | | | | |
| 300 | | | | |
| 400 | | | | |
| 500 | | | | |
| 600 | | | | |
| 700 | | | | |
| 800 | | | | |
| 900 | | | | |
| 1000 | | | | |

4600
575
4025

235
185
52

REMARKS. 50 Flounders 6 species
Several Small Star Fish. 3 sps. Few
Small Ophiurans. Numerous Sea Urchins.
Bel pouts. 80 Midshipmen. 2 sps of
Holothurians. 3 Surcula Shells.
Small worms and Shells.
Pycnopodia starfish. 2 skates

NCF. 507 JEB.

No. 3148 Do Date Mch. 15th 1890.

Tanner Machine. — Reel.

Turns 45 Cor. + 2 Depth 47 fms.

~~Shot or~~ lead 25 lbs.

Bottom Cr. M.

Bottom temperature 51°

No. of Thermometer 61751 Cor. + 0.3°

Corrected temperature 51.3°

Air 56° Surface 54° Drift. —

Trawl ~~or dredge or tangles~~ Small Beam.

| P.M. SOUNDING WIRE. DOWN. | UP. | TURNS. | P.M. DREDGE ROPE. DOWN. | UP. |
|---|---|---|---|---|
| 3.59.30 | 01.30 | 0 | 4.03.00 | 28.40 |
| 59.55 | 4.00.00 | 100 | 4.09.05 | 4.25.30 |
| | | 150 | | |
| | | 200 | | |
| | | 300 | | |
| | | 400 | | |
| | | 500 | | |
| | | 600 | | |
| | | 700 | | |
| | | 800 | | |
| | | 900 | | |
| | | 1000 | | |
| | | 1100 | | |
| | | 1200 | | |
| | | 1300 | | |
| | | 1400 | | |
| | | 1500 | | |
| | | 1600 | | |
| | | 1700 | | |
| | | 1800 | | |
| | | 1900 | | |
| | | 2000 | | |
| | | 2100 | | |
| | | 2200 | | |
| | | 2300 | | |
| | | 2400 | | |

Pigeon Point Lt. Ho. bore N.E. 3/4 N. (Mag.) distant 4 1/2 miles.

| | | | | |
|---|---|---|---|---|
| | | 2500 | | |
| | | 2600 | | |
| | | 2700 | | |
| | | 2800 | | |
| | | 2900 | | |
| | | 3000 | | |
| | | 3100 | | |
| | | 3200 | | |
| | | 3300 | | |
| | | 3400 | | |
| | | 3500 | | |
| | | 3600 | | |
| | | 3700 | | |
| | | 3800 | | |
| | | 3900 | | |
| | | 4000 | | |

SERIAL TEMPERATURE.

| DEPTH. | TEMP. | NO. OF THER. | COR. | COR. TEMP. |
|---|---|---|---|---|
| 25 | | | | |
| 50 | | | | |
| 100 | | | | |
| 200 | | | | |
| 300 | | | | |
| 400 | | | | |
| 500 | | | | |
| 600 | | | | |
| 700 | | | | |
| 800 | | | | |
| 900 | | | | |
| 1000 | | | | |

REMARKS.

½ doz Flounder (4 species) Sea Urchin 2 skates 3 Surcula shells. 2 naked Mollusks Ophiuans. Several large star-fishes. 20 small Midshipmen

No. 3149 DT Date Mch. 15th 1890

Tanner Machine. — Reel.

Turns 43 Cor. + 2 Depth 45 fms

~~Shot or~~ lead 25 lbs.

Bottom gr. M.

Bottom temperature 50.8°

No. of Thermometer 61751 Cor. +0.3°

Corrected temperature 51.1°

Air 55° Surface 54° Drift. —

Trawl ~~or dredge or tangles~~ Small beam.

| SOUNDING WIRE. | | TURNS. | DREDGE ROPE. | |
|---|---|---|---|---|
| DOWN. | UP. | | DOWN. | UP. |
| 5.08.07 | 09.25 | 0 | 5.10.00 | 38.15 |
| 08.25 | 5.08.35 | 100 | 15.00 | 5:32.45 |
| | | 200 | | |
| | | 300 | | |
| | | 400 | | |
| | | 500 | | |
| | | 600 | | |
| | | 700 | | |
| | | 800 | | |
| | | 900 | | |
| | | 1000 | | |
| | | 1100 | | |
| | | 1200 | | |
| | | 1300 | | |
| | | 1400 | | |
| | | 1500 | | |
| | | 1600 | | |
| | | 1700 | | |
| | | 1800 | | |
| | | 1900 | | |
| | | 2000 | | |
| | | 2100 | | |
| | | 2200 | | |
| | | 2300 | | |
| | | 2400 | | |

Pigeon Point Lt. Hs. bore E. ½ S. (mag.) distant 7½ miles.

| | | | | |
|---|---|---|---|---|
| | | 2500 | | |
| | | 2600 | | |
| | | 2700 | | |
| | | 2800 | | |
| | | 2900 | | |
| | | 3000 | | |
| | | 3100 | | |
| | | 3200 | | |
| | | 3300 | | |
| | | 3400 | | |
| | | 3500 | | |
| | | 3600 | | |
| | | 3700 | | |
| | | 3800 | | |
| | | 3900 | | |
| | | 4000 | | |

SERIAL TEMPERATURE.

| DEPTH. | TEMP. | NO. OF THER. | COR. | COR. TEMP. |
|---|---|---|---|---|
| 25 | | | | |
| 50 | | | | |
| 100 | | | | |
| 200 | | | | |
| 300 | | | | |
| 400 | | | | |
| 500 | | | | |
| 600 | | | | |
| 700 | | | | |
| 800 | | | | |
| 900 | | | | |
| 1000 | | | | |

REMARKS. 1/2 doz Anchovies 1 Doz Star fish
12 ~~Paroplays~~ Paroplays, flounders (Paroplays)
20 citharichthys flounders
5 ~~Glyptocephalus~~ flounders (Glyptocephalus)
3 roncador. 12 midshipmen mostly small
1 Doz Zaniolepis. 1 Large Sun Star

A.F.P.
H.C.F.

507

No. 3150 Dr. Date March 21st 90

Tanner Machine. Reel.

Turns 20 Cor. + 1 Depth 21

Shot or lead 25 lbs.

Bottom fne. gy. S.

Bottom temperature 52°

No. of Thermometer 61751 Cor. +0.3°

Corrected temperature 52.3°

Air 51 Surface 55 Drift. 1 2/10 N 0 x W

Trawl ~~or dredge or tangles~~ Large beam.

| SOUNDING WIRE. | | TURNS. | P.M. DREDGE ROPE. | |
|---|---|---|---|---|
| P.M. DOWN. | UP. | | DOWN. | UP. |
| 12-20-0 | 12-21-30 | 0 | 12.24.10 | 43.50 |
| | | ~~100~~ 60 | 26.50 | 12.41.45 |
| | | 200 | | |
| | | 300 | | |
| | | 400 | | |
| | | 500 | | |
| | | 600 | | |
| | | 700 | | |
| | | 800 | | |
| | | 900 | | |
| | | 1000 | | |
| | | 1100 | | |
| | | 1200 | | |
| | | 1300 | | |
| | | 1400 | | |
| | | 1500 | | |
| | | 1600 | | |
| | | 1700 | | |
| | | 1800 | | |
| | | 1900 | | |
| | | 2000 | | |
| | | 2100 | | |
| | | 2200 | | |
| | | 2300 | | |
| | | 2400 | | |

| | | | | |
|---|---|---|---|---|
| | | 2500 | | |
| | | 2600 | | |
| | | 2700 | | |
| | | 2800 | | |
| | | 2900 | | |
| | | 3000 | | |
| | | 3100 | | |
| | | 3200 | | |
| | | 3300 | | |
| | | 3400 | | |
| | | 3500 | | |
| | | 3600 | | |
| | | 3700 | | |
| | | 3800 | | |
| | | 3900 | | |
| | | 4000 | | |

SERIAL TEMPERATURE.

| DEPTH. | TEMP. | NO. OF THER. | COR. | COR. TEMP. |
|---|---|---|---|---|
| 25 | | | | |
| 50 | | | | |
| 100 | | | | |
| 200 | | | | |
| 300 | | | | |
| 400 | | | | |
| 500 | | | | |
| 600 | | | | |
| 700 | | | | |
| 800 | | | | |
| 900 | | | | |
| 1000 | | | | |

REMARKS. 12 doz. large Flounders - & a few young ones. 5 sps. 1 Rock fish. 1 Skate. 1/2 doz. Tom cod. 1 qt. Shrimps. 1 Sub-full large Medusa 1 Small Sculpin. 1 Perch. 2 large Crabs - (Cancer Magister) -

No. 3151 Dr. Date March 21/90

Tanner. Machine. Reel.

Turns 36 Cor. + 1 Depth 87

~~Shot~~ or lead 25 lbs.

Bottom crs. S. rd. Sp.

Bottom temperature 51 3/5

No. of Thermometer 6,755,1 Cor. +0.3°

Corrected temperature 51.6°

Air 52 Surface 55 Drift. 1.5 S.E.

Trawl or ~~dredge or tangles~~ Large Beam

| SOUNDING WIRE. | | TURNS. | P.W DREDGE ROPE. | |
|---|---|---|---|---|
| P.W DOWN. | UP. | | DOWN. | UP. |
| 2-3-30 | 2-1-30 | 0 | 2-5-0 | 30-0 |
| | | 100 | 2-9-45 | 2-25-0 |
| | | 110 | 2-10-15 | |
| | | 200 | | |
| | | 300 | | |
| | | 400 | | |
| | | 500 | | |
| | | 600 | | |
| | | 700 | | |
| | | 800 | | |
| | | 900 | | |
| | | 1000 | | |
| | | 1100 | | |
| | | 1200 | | |
| | | 1300 | | |
| | | 1400 | | |
| | | 1500 | | |
| | | 1600 | | |
| | | 1700 | | |
| | | 1800 | | |
| | | 1900 | | |
| | | 2000 | | |
| | | 2100 | | |
| | | 2200 | | |
| | | 2300 | | |
| | | 2400 | | |

| | | | | |
|---|---|---|---|---|
| | | 2500 | | |
| | | 2600 | | |
| | | 2700 | | |
| | | 2800 | | |
| | | 2900 | | |
| | | 3000 | | |
| | | 3100 | | |
| | | 3200 | | |
| | | 3300 | | |
| | | 3400 | | |
| | | 3500 | | |
| | | 3600 | | |
| | | 3700 | | |
| | | 3800 | | |
| | | 3900 | | |
| | | 4000 | | |

SERIAL TEMPERATURE.

| DEPTH. | TEMP. | NO. OF THER. | COR. | COR. TEMP. |
|---|---|---|---|---|
| 25 | | | | |
| 50 | | | | |
| 100 | | | | |
| 200 | | | | |
| 300 | | | | |
| 400 | | | | |
| 500 | | | | |
| 600 | | | | |
| 700 | | | | |
| 800 | | | | |
| 900 | | | | |
| 1000 | | | | |

REMARKS.

24 Flounders = (5 species)
1 Crab.
6 species small Shells.

A.F.P.

No. 3152 Dr. Date March 21/90

Tanner Machine. Reel.

Turns 35 Cor. + 1 Depth 36

~~Shot~~ or lead 25 lbs.

Bottom fne. gy. S

Bottom temperature 50.3

No. of Thermometer 6,751 Cor. +0.3°

Corrected temperature 50.6°

Air 52° Surface 55° Drift. —

Trawl or ~~dredge or tangles~~ Large Beam

| SOUNDING WIRE. | | TURNS. | P.M. DREDGE ROPE. | |
|---|---|---|---|---|
| P.M. DOWN. | UP. | | DOWN. | UP. |
| 3-22-30 | 3-24-0 | 0 | 3-23-30 | 49-0 |
| | | 100 | 3-30-0 | 3-45-0 |
| | | 110 | 32 30 | |
| | | 200 | | |
| | | 300 | | |
| | | 400 | | |
| | | 500 | | |
| | | 600 | | |
| | | 700 | | |
| | | 800 | | |
| | | 900 | | |
| | | 1000 | | |
| | | 1100 | | |
| | | 1200 | | |
| | | 1300 | | |
| | | 1400 | | |
| | | 1500 | | |
| | | 1600 | | |
| | | 1700 | | |
| | | 1800 | | |
| | | 1900 | | |
| | | 2000 | | |
| | | 2100 | | |
| | | 2200 | | |
| | | 2300 | | |
| | | 2400 | | |

| | | | | |
|---|---|---|---|---|
| | | 2500 | | |
| | | 2600 | | |
| | | 2700 | | |
| | | 2800 | | |
| | | 2900 | | |
| | | 3000 | | |
| | | 3100 | | |
| | | 3200 | | |
| | | 3300 | | |
| | | 3400 | | |
| | | 3500 | | |
| | | 3600 | | |
| | | 3700 | | |
| | | 3800 | | |
| | | 3900 | | |
| | | 4000 | | |

## SERIAL TEMPERATURE.

| DEPTH. | TEMP. | NO. OF THER. | COR. | COR. TEMP. |
|---|---|---|---|---|
| 25 | | | | |
| 50 | | | | |
| 100 | | | | |
| 200 | | | | |
| 300 | | | | |
| 400 | | | | |
| 500 | | | | |
| 600 | | | | |
| 700 | | | | |
| 800 | | | | |
| 900 | | | | |
| 1000 | | | | |

## REMARKS.

30 Parophrys 1 Psettichthys
6 Glyptocephalus, 12 small Perch
6 Hemistruma 2 Skates
1 Pleuronectes 2 Ice Crabs
24 Citharichthys Shrimps
Star Fish

No. 3153 Dr Date Mch. 21st 1890.

Tanner Machine. — Reel.

Turns 31 Cor. + 1 Depth 32 fms.

~~Shot or~~ lead 25 lbs.

Bottom gn. M.

Bottom temperature 51.0°

No. of Thermometer 61751 Cor. +0.3°

Corrected temperature 51.3°

Air 52° Surface 52° Drift. North 1/2 mile

Trawl ~~or dredge or tangles~~ large beam.

| SOUNDING WIRE. | | TURNS. | DREDGE ROPE. | |
|---|---|---|---|---|
| DOWN. | UP. | | DOWN. | UP. |
| 5. 04. 45 | 05. 45 | 0 | 5.06. 15 | 29. 45 |
| 05. 02 | 5. 05. 10 | 90 | 11. 30 | 5. 26. 35 |
| | | 100 | | |
| | | 200 | | |
| | | 300 | | |
| | | 400 | | |
| | | 500 | | |
| | | 600 | | |
| | | 700 | | |
| | | 800 | | |
| | | 900 | | |
| | | 1000 | | |
| | | 1100 | | |
| | | 1200 | | |
| | | 1300 | | |
| | | 1400 | | |
| | | 1500 | | |
| | | 1600 | | |
| | | 1700 | | |
| | | 1800 | | |
| | | 1900 | | |
| | | 2000 | | |
| | | 2100 | | |
| | | 2200 | | |
| | | 2300 | | |
| | | 2400 | | |

| | | | | |
|---|---|---|---|---|
| | | 2500 | | |
| | | 2600 | | |
| | | 2700 | | |
| | | 2800 | | |
| | | 2900 | | |
| | | 3000 | | |
| | | 3100 | | |
| | | 3200 | | |
| | | 3300 | | |
| | | 3400 | | |
| | | 3500 | | |
| | | 3600 | | |
| | | 3700 | | |
| | | 3800 | | |
| | | 3900 | | |
| | | 4000 | | |

SERIAL TEMPERATURE.

| DEPTH. | TEMP. | NO. OF THER. | COR. | COR. TEMP. |
|---|---|---|---|---|
| 25 | | | | |
| 50 | | | | |
| 100 | | | | |
| 200 | | | | |
| 300 | | | | |
| 400 | | | | |
| 500 | | | | |
| 600 | | | | |
| 700 | | | | |
| 800 | | | | |
| 900 | | | | |
| 1000 | | | | |

REMARKS.

1 Crab - (C. Productus) -
1 doz. Crabs - (C. Magister). Shells -
1 Roncador. 1 Octopus. A few Alcyonarian Corals. 30 Parophrys.
12 Citharichthys. 6 Glyptocephalus.
2 doz. Anchovies - 2 doz. Small Sculpins - (3 species). A few Dom cod, Rock fish, Midshipmen. Skates, Small starfish and shrimps.

No. 3154 Dr Date Mch. 21st 1890.

Tanner Machine. — Reel.

Turns 19 Cor. + 1 Depth 20 fms

~~Shot or~~ lead 25 lbs.

Bottom He. S. & M.

Bottom temperature 51.5°

No. of Thermometer 61751 Cor. +0.3°

Corrected temperature 51.8°

Air 51° Surface 52° Drift. N. W. x W. ½ W.

Trawl ~~or dredge or tangles~~ large beam.

| P.M. SOUNDING WIRE. | | TURNS. | P.M. DREDGE ROPE. | |
|---|---|---|---|---|
| DOWN. | UP. | | DOWN. | UP. |
| 5.44.45 | 45.20 | 0 | 5.46.30 | 6.01.45 |
| 44.55 | 5.45.00 | 50 ~~100~~ | 49.40 | 5.59.05 |
| | | 200 | | |
| | | 300 | | |
| | | 400 | | |
| | | 500 | | |
| | | 600 | | |
| | | 700 | | |
| | | 800 | | |
| | | 900 | | |
| | | 1000 | | |
| | | 1100 | | |
| | | 1200 | | |
| | | 1300 | | |
| | | 1400 | | |
| | | 1500 | | |
| | | 1600 | | |
| | | 1700 | | |
| | | 1800 | | |
| | | 1900 | | |
| | | 2000 | | |
| | | 2100 | | |
| | | 2200 | | |
| | | 2300 | | |
| | | 2400 | | |

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|---|---|---|---|---|
| | | 2500 | | |
| | | 2600 | | |
| | | 2700 | | |
| | | 2800 | | |
| | | 2900 | | |
| | | 3000 | | |
| | | 3100 | | |
| | | 3200 | | |
| 3/10 mile. | | 3300 | | |
| | | 3400 | | |
| | | 3500 | | |
| | | 3600 | | |
| | | 3700 | | |
| | | 3800 | | |
| | | 3900 | | |
| | | 4000 | | |

SERIAL TEMPERATURE.

| DEPTH. | TEMP. | NO. OF THER. | COR. | COR. TEMP. |
|---|---|---|---|---|
| 25 | | | | |
| 50 | | | | |
| 100 | | | | |
| 200 | | | | |
| 300 | | | | |
| 400 | | | | |
| 500 | | | | |
| 600 | | | | |
| 700 | | | | |
| 800 | | | | |
| 900 | | | | |
| 1000 | | | | |

REMARKS.

1 P. stellatus. 6 Parophrys.
1 Benronichthys decurrens -
1 Sunatia shell. 1/2 doz. Skates.
1 doz. Midshipmen. 2 Crabs. C. Magister

No. 3155-55 Date Mar. 22. 1890

Lanner Machine. — Reel.

Turns 34 Cor. + 1 Depth 35-fms

~~Shot or~~ lead 25 lbs

Bottom gn. M.

Bottom temperature —

No. of Thermometer — Cor. —

Corrected temperature —

Air 37 Surface 32 Drift. S.S.W. 1/4 Mi

Trawl ~~or dredge or tangles~~ Large Beam

| SOUNDING WIRE. | | TURNS. | DREDGE ROPE. | |
|---|---|---|---|---|
| DOWN. | UP. | | DOWN. | UP. |
| PM | | | PM | |
| | | 0 | 6.42.00 | .03.10 |
| 6.40.00 | 6.41.00 | 100 | 6.45.00 | 7.00.00 |
| | | 110 ~~200~~ | .47.00 | 7.00.00 |
| | | 300 | | |
| | | 400 | | |
| | | 500 | | |
| | | 600 | | |
| | | 700 | | |
| | | 800 | | |
| | | 900 | | |
| | | 1000 | | |
| | | 1100 | | |
| | | 1200 | | |
| | | 1300 | | |
| | | 1400 | | |
| | | 1500 | | |
| | | 1600 | | |
| | | 1700 | | |
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| | | 1900 | | |
| | | 2000 | | |
| | | 2100 | | |
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| | | 3000 | | |
| | | 3100 | | |
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| | | 3500 | | |
| | | 3600 | | |
| | | 3700 | | |
| | | 3800 | | |
| | | 3900 | | |
| | | 4000 | | |

SERIAL TEMPERATURE.

| DEPTH. | TEMP. | NO. OF THER. | COR. | COR. TEMP. |
|---|---|---|---|---|
| 25 | | | | |
| 50 | | | | |
| 100 | | | | |
| 200 | | | | |
| 300 | | | | |
| 400 | | | | |
| 500 | | | | |
| 600 | | | | |
| 700 | | | | |
| 800 | | | | |
| 900 | | | | |
| 1000 | | | | |

REMARKS.

3 long fin Flounders. 6 Citharichthys 6 Paralophrys 6 Roncador 12 Tom Cod. 2 Sea Anemones 2 species of Small Shells A few shrimps (2 species) 3 Large Crabs 1 Whiting, 2 Midshipmen, 1 Hag fish + 1 Rock Cod.

J. E. B. A. P.

No. 3156 Dr Date Mar 22. '90

Tanner Machine. — Reel.

Turns 48 Cor. + 2 Depth 50 fms.

~~Shot or~~ lead 25 lbs

Bottom S.

Bottom temperature 45.3°

No. of Thermometer 61751 Cor. —

Corrected temperature 45.3°

Air 51 Surface 52 Drift. ~

Trawl or ~~dredge or tangles~~ Large Beam

| A.M. SOUNDING WIRE. | | TURNS. | A.M. DREDGE ROPE. | |
|---|---|---|---|---|
| DOWN. | UP. | | DOWN. | UP. |
| 7. 45-15 | 46.30 | 0 | 7. 46-00 | |
| 45.32 | 7.45.45 | 100 | 55 15 | |
| | | 200 | 56 45 | 8-12-0 |
| | | 300 | | |
| | | 400 | | |
| | | 500 | | |
| | | 600 | | |
| | | 700 | | |
| | | 800 | | |
| | | 900 | | |
| | | 1000 | | |
| | | 1100 | | |
| | | 1200 | | |
| | | 1300 | | |
| | | 1400 | | |
| | | 1500 | | |
| | | 1600 | | |
| | | 1700 | | |
| | | 1800 | | |
| | | 1900 | | |
| | | 2000 | | |
| | | 2100 | | |
| | | 2200 | | |
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| | | 2400 | | |

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| | | 2500 | | |
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| | | 3600 | | |
| | | 3700 | | |
| | | 3800 | | |
| | | 3900 | | |
| | | 4000 | | |

## SERIAL TEMPERATURE.

| DEPTH. | TEMP. | NO. OF THER. | COR. | COR. TEMP. |
|---|---|---|---|---|
| 25 | | | | |
| 50 | | | | |
| 100 | | | | |
| 200 | | | | |
| 300 | | | | |
| 400 | | | | |
| 500 | | | | |
| 600 | | | | |
| 700 | | | | |
| 800 | | | | |
| 900 | | | | |
| 1000 | | | | |

## REMARKS.

60 Flounders 5 species
2 Octopus 1 Eel Pout
small shells 2 Squid
2 species Porch. 5 Star fish
3 Gaviolepis

A.F.P.

507

No. 3157 Dr. Date March 22/90

Tanner Machine. Reel.

Turns 45 Cor. + 2 Depth 47

~~Shot or~~ lead 25 lbs

Bottom fine gy. S.

Bottom temperature 50.3

No. of Thermometer 61751 Cor. +0.3°

Corrected temperature 50.6°

Air 51° Surface 53° Drift. 1½ m S ¾ E

Trawl ~~or dredge or tangles~~ Large Beam

| A.M. SOUNDING WIRE. | | TURNS. | A.M. DREDGE ROPE. | |
|---|---|---|---|---|
| DOWN. | UP. | | DOWN. | UP. |
| 9-0-0 | 9-1-30 | 0 | 9-2-30 | 26-30 |
| | | 100 | 9-7-0 | 9-24-0 |
| | | 120 | | |
| | | 200 | | |
| | | 300 | | |
| | | 400 | | |
| | | 500 | | |
| | | 600 | | |
| | | 700 | | |
| | | 800 | | |
| | | 900 | | |
| | | 1000 | | |
| | | 1100 | | |
| | | 1200 | | |
| | | 1300 | | |
| | | 1400 | | |
| | | 1500 | | |
| | | 1600 | | |
| | | 1700 | | |
| | | 1800 | | |
| | | 1900 | | |
| | | 2000 | | |
| | | 2100 | | |
| | | 2200 | | |
| | | 2300 | | |
| | | 2400 | | |

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|---|---|---|---|---|
| | | 2500 | | |
| | | 2600 | | |
| | | 2700 | | |
| | | 2800 | | |
| | | 2900 | | |
| | | 3000 | | |
| | | 3100 | | |
| | | 3200 | | |
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| | | 3500 | | |
| | | 3600 | | |
| | | 3700 | | |
| | | 3800 | | |
| | | 3900 | | |
| | | 4000 | | |

SERIAL TEMPERATURE.

| DEPTH. | TEMP. | NO. OF THER. | COR. | COR. TEMP. |
|---|---|---|---|---|
| 25 | | | | |
| 50 | | | | |
| 100 | | | | |
| 200 | | | | |
| 300 | | | | |
| 400 | | | | |
| 500 | | | | |
| 600 | | | | |
| 700 | | | | |
| 800 | | | | |
| 900 | | | | |
| 1000 | | | | |

REMARKS.

30 Flounders. Citharic [illegible]
few Shales
1 Midshipman

507

No. 2158. Hyd. Date March 22/90

Tanner Machine. Reel.

Turns 36 Cor. + 1 Depth 37

~~Shot~~ or lead 25 lbs.

Bottom Sh.

Bottom temperature 51.7

No. of Thermometer 617.51 Cor. +0.3°

Corrected temperature 52°

Air √3 Surface √3 Drift.

Trawl or dredge or tangles ——

| SOUNDING WIRE. | | TURNS. | DREDGE ROPE. | |
|---|---|---|---|---|
| A.W. DOWN. | A.W. UP. | | DOWN. | UP. |
| 10-0-0 | 10-1-0 | 0 | | |
| | | 100 | | |
| | | 200 | | |
| | | 300 | | |
| | | 400 | | |
| | | 500 | | |
| | | 600 | | |
| | | 700 | | |
| | | 800 | | |
| | | 900 | | |
| | | 1000 | | |
| | | 1100 | | |
| | | 1200 | | |
| | | 1300 | | |
| | | 1400 | | |
| | | 1500 | | |
| | | 1600 | | |
| | | 1700 | | |
| | | 1800 | | |
| | | 1900 | | |
| | | 2000 | | |
| | | 2100 | | |
| | | 2200 | | |
| | | 2300 | | |
| | | 2400 | | |

| | | | | |
|---|---|---|---|---|
| | | 2500 | | |
| | | 2600 | | |
| | | 2700 | | |
| | | 2800 | | |
| | | 2900 | | |
| | | 3000 | | |
| | | 3100 | | |
| | | 3200 | | |
| | | 3300 | | |
| | | 3400 | | |
| | | 3500 | | |
| | | 3600 | | |
| | | 3700 | | |
| | | 3800 | | |
| | | 3900 | | |
| | | 4000 | | |

SERIAL TEMPERATURE.

| DEPTH. | TEMP. | NO. OF THER. | COR. | COR. TEMP. |
|---|---|---|---|---|
| 25 | | | | |
| 50 | | | | |
| 100 | | | | |
| 200 | | | | |
| 300 | | | | |
| 400 | | | | |
| 500 | | | | |
| 600 | | | | |
| 700 | | | | |
| 800 | | | | |
| 900 | | | | |
| 1000 | | | | |

REMARKS.

A.P.

No. 2159 Hyd Date March 22/90.

Tanner Machine. Reel.

Turns 38 Cor. + 1 Depth 39

~~Shot~~ or lead 25 lbs.

Bottom Rky.

Bottom temperature 51

No. of Thermometer 61751 Cor. + 0.3°

Corrected temperature 51.3°

Air 53 Surface 53 Drift.

Trawl or dredge or tangles

| SOUNDING WIRE. | | TURNS. | DREDGE ROPE. | |
|---|---|---|---|---|
| AW DOWN. | AW UP. | | DOWN. | UP. |
| 10-7-15 | 10-8-15 | 0 | | |
| | | 100 | | |
| | | 200 | | |
| | | 300 | | |
| | | 400 | | |
| | | 500 | | |
| | | 600 | | |
| | | 700 | | |
| | | 800 | | |
| | | 900 | | |
| | | 1000 | | |
| | | 1100 | | |
| | | 1200 | | |
| | | 1300 | | |
| | | 1400 | | |
| | | 1500 | | |
| | | 1600 | | |
| | | 1700 | | |
| | | 1800 | | |
| | | 1900 | | |
| | | 2000 | | |
| | | 2100 | | |
| | | 2200 | | |
| | | 2300 | | |
| | | 2400 | | |

| | | | | |
|---|---|---|---|---|
| | | 2500 | | |
| | | 2600 | | |
| | | 2700 | | |
| | | 2800 | | |
| | | 2900 | | |
| | | 3000 | | |
| | | 3100 | | |
| | | 3200 | | |
| | | 3300 | | |
| | | 3400 | | |
| | | 3500 | | |
| | | 3600 | | |
| | | 3700 | | |
| | | 3800 | | |
| | | 3900 | | |
| | | 4000 | | |

SERIAL TEMPERATURE.

| DEPTH. | TEMP. | NO. OF THER. | COR. | COR. TEMP. |
|---|---|---|---|---|
| 25 | | | | |
| 50 | | | | |
| 100 | | | | |
| 200 | | | | |
| 300 | | | | |
| 400 | | | | |
| 500 | | | | |
| 600 | | | | |
| 700 | | | | |
| 800 | | | | |
| 900 | | | | |
| 1000 | | | | |

REMARKS.

507

No. 2160 Hyd. Date March 22/90

Annet Machine. Reel.

Turns 43 Cor. + 2 Depth 45

Shot or lead 25 lbs.

Bottom S L & R Ky.

Bottom temperature 50.5

No. of Thermometer 61751 Cor. +0.3°

Corrected temperature 50.8°

Air 53 Surface 53 Drift.

Trawl or dredge or tangles

| SOUNDING WIRE. | | TURNS. | DREDGE ROPE. | |
|---|---|---|---|---|
| A.W DOWN. | A.W UP. | | DOWN. | UP. |
| 10-14-0 | 10-15-0 | 0 | | |
| | | 100 | | |
| | | 200 | | |
| | | 300 | | |
| | | 400 | | |
| | | 500 | | |
| | | 600 | | |
| | | 700 | | |
| | | 800 | | |
| | | 900 | | |
| | | 1000 | | |
| | | 1100 | | |
| | | 1200 | | |
| | | 1300 | | |
| | | 1400 | | |
| | | 1500 | | |
| | | 1600 | | |
| | | 1700 | | |
| | | 1800 | | |
| | | 1900 | | |
| | | 2000 | | |
| | | 2100 | | |
| | | 2200 | | |
| | | 2300 | | |
| | | 2400 | | |

| | | | | |
|---|---|---|---|---|
| | | 2500 | | |
| | | 2600 | | |
| | | 2700 | | |
| | | 2800 | | |
| | | 2900 | | |
| | | 3000 | | |
| | | 3100 | | |
| | | 3200 | | |
| | | 3300 | | |
| | | 3400 | | |
| | | 3500 | | |
| | | 3600 | | |
| | | 3700 | | |
| | | 3800 | | |
| | | 3900 | | |
| | | 4000 | | |

SERIAL TEMPERATURE.

| DEPTH. | TEMP. | NO. OF THER. | COR. | COR. TEMP. |
|---|---|---|---|---|
| 25 | | | | |
| 50 | | | | |
| 100 | | | | |
| 200 | | | | |
| 300 | | | | |
| 400 | | | | |
| 500 | | | | |
| 600 | | | | |
| 700 | | | | |
| 800 | | | | |
| 900 | | | | |
| 1000 | | | | |

REMARKS.

A.P.

507

No. 2161 Hyd Date March 22/90

Danner Machine. Reel.

Turns 28 Cor. + 1 Depth 29

~~Shot~~ or lead 25 lbs.

Bottom Rxy.

Bottom temperature 51 1/2

No. of Thermometer 6175 Cor. +0.3°

Corrected temperature 51.4°

Air 53 Surface 53 Drift.

~~Trawl or dredge or~~ tangles

| SOUNDING WIRE. | | TURNS. | DREDGE ROPE. | |
|---|---|---|---|---|
| A.M. DOWN. | A.M. UP. | | DOWN. | UP. |
| 10-26-0 | 10-27-15 | 0 | | -0 |
| | | 100 | | |
| | | 200 | | |
| | | 300 | | |
| | | 400 | | |
| | | 500 | | |
| | | 600 | | |
| | | 700 | | |
| | | 800 | | |
| | | 900 | | |
| | | 1000 | | |
| | | 1100 | | |
| | | 1200 | | |
| | | 1300 | | |
| | | 1400 | | |
| | | 1500 | | |
| | | 1600 | | |
| | | 1700 | | |
| | | 1800 | | |
| | | 1900 | | |
| | | 2000 | | |
| | | 2100 | | |
| | | 2200 | | |
| | | 2300 | | |
| | | 2400 | | |

Stopped to fish at 10-29-30 A.M.
Put 13 Lines over ship side
caught 2 Red Rock Cod.
Took in lines at 10-45-0

| | | | | |
|---|---|---|---|---|
| | | 2500 | | |
| | | 2600 | | |
| | | 2700 | | |
| | | 2800 | | |
| | | 2900 | | |
| | | 3000 | | |
| | | 3100 | | |
| | | 3200 | | |
| | | 3300 | | |
| | | 3400 | | |
| | | 3500 | | |
| | | 3600 | | |
| | | 3700 | | |
| | | 3800 | | |
| | | 3900 | | |
| | | 4000 | | |

SERIAL TEMPERATURE.

| DEPTH. | TEMP. | NO. OF THER. | COR. | COR. TEMP. |
|---|---|---|---|---|
| 25 | | | | |
| 50 | | | | |
| 100 | | | | |
| 200 | | | | |
| 300 | | | | |
| 400 | | | | |
| 500 | | | | |
| 600 | | | | |
| 700 | | | | |
| 800 | | | | |
| 900 | | | | |
| 1000 | | | | |

REMARKS.

507

A.P.

No. 3158 Dr. Date March 22/90

Tanner Machine. Reel.

Turns 28 Cor. + 1 Depth 29

Shot or lead 25 lbs.

Bottom Rky.

Bottom temperature 51½

No. of Thermometer 61751 Cor. +0.3°

Corrected temperature 51.4°

Air 53 Surface 53 Drift. —

~~Trawl or dredge or~~ tangles

| A.M. SOUNDING WIRE. DOWN. | UP. | TURNS. | A.M. DREDGE ROPE. DOWN. | UP. |
|---|---|---|---|---|
| 10-50-0 | 10-51-0 | 0 | 10-55-0 | 11-05-0 |
| | | 100 | | |
| | | 200 | | |
| | | 300 | | |
| | | 400 | | |
| | | 500 | | |
| | | 600 | | |
| | | 700 | | |
| | | 800 | | |
| | | 900 | | |
| | | 1000 | | |
| | | 1100 | | |
| | | 1200 | | |
| | | 1300 | | |
| | | 1400 | | |
| | | 1500 | | |
| | | 1600 | | |
| | | 1700 | | |
| | | 1800 | | |
| | | 1900 | | |
| | | 2000 | | |
| | | 2100 | | |
| | | 2200 | | |
| | | 2300 | | |
| | | 2400 | | |

Put over 13 Lines at 11-10 A.M.

Caught -

Took in Lines at 11-20

| | | | | |
|---|---|---|---|---|
| | | 2500 | | |
| | | 2600 | | |
| | | 2700 | | |
| | | 2800 | | |
| | | 2900 | | |
| | | 3000 | | |
| | | 3100 | | |
| | | 3200 | | |
| | | 3300 | | |
| | | 3400 | | |
| | | 3500 | | |
| | | 3600 | | |
| | | 3700 | | |
| | | 3800 | | |
| | | 3900 | | |
| | | 4000 | | |

SERIAL TEMPERATURE.

| DEPTH. | TEMP. | NO. OF THER. | COR. | COR. TEMP. |
|---|---|---|---|---|
| 25 | | | | |
| 50 | | | | |
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| 700 | | | | |
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REMARKS.

Small quantity of Red Coral
12 Cups "
2 Star fish
3 Sea urchins

507 A.P.

No. 3159 Dr. Date March 22/90

Danner Machine. — Reel.

Turns 26 Cor. + 1 Depth 27

Shot or lead 25 lbs.

Bottom Rky

Bottom temperature —

No. of Thermometer — Cor. —

Corrected temperature —

Air 53 Surface 53 Drift. —

~~Trawl or dredge or~~ tangles

| Aw SOUNDING WIRE. | | TURNS. | Aw DREDGE ROPE. | |
|---|---|---|---|---|
| DOWN. | UP. | | DOWN. | UP. |
| 11-20-0 | 11-20-0 | 0 | 11-22-0 | 11-30 |
| | | 45 | 11-25-0 | 11-29-0 |
| | | 100 | | |
| | | 200 | | |
| | | 300 | | |
| | | 400 | | |
| | | 500 | | |
| | | 600 | | |
| | | 700 | | |
| | | 800 | | |
| | | 900 | | |
| | | 1000 | | |
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| | | 3900 | | |
| | | 4000 | | |

SERIAL TEMPERATURE.

| DEPTH. | TEMP. | NO. OF THER. | COR. | COR. TEMP. |
|---|---|---|---|---|
| 25 | | | | |
| 50 | | | | |
| 100 | | | | |
| 200 | | | | |
| 300 | | | | |
| 400 | | | | |
| 500 | | | | |
| 600 | | | | |
| 700 | | | | |
| 800 | | | | |
| 900 | | | | |
| 1000 | | | | |

REMARKS.

Star fish
Red Coral
cup Coral
Sponge
Worms.

507 A.F.P.

No. 3160 Dr. Date March 22/90

Tanner Machine. — Reel.

Turns 38 Cor. + 1 Depth 39

~~Shot~~ or lead 25 lbs.

Bottom Rky.

Bottom temperature 51.5

No. of Thermometer 61751 Cor. +0.3°

Corrected temperature 51.8°

Air 52 Surface 52 Drift. —

~~Trawl or dredge or~~ tangles

| SOUNDING WIRE. | | TURNS. | Pw DREDGE ROPE. | |
|---|---|---|---|---|
| Tw DOWN. | UP. | | DOWN. | UP. |
| 11-45-0 | 11-46-0 | 0 | 12-5-0 | 17-0 |
| | | 80 100 | 7-0 | 12-15-0 |
| | | 200 | | |
| | | 300 | | |
| | | 400 | | |
| | | 500 | | |
| | | 600 | | |
| | | 700 | | |
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| | | 2100 | | |
| | | 2200 | | |
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| | | 2400 | | |

At 11-47 Head Put over ship side 13 Fish Lines, Caught 1 small RK Cod.

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SERIAL TEMPERATURE.

| DEPTH. | TEMP. | NO. OF THER. | COR. | COR. TEMP. |
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| 25 | | | | |
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| 100 | | | | |
| 200 | | | | |
| 300 | | | | |
| 400 | | | | |
| 500 | | | | |
| 600 | | | | |
| 700 | | | | |
| 800 | | | | |
| 900 | | | | |
| 1000 | | | | |

REMARKS.

N.C. 507 J.

No. 2162 Hyd. Date Mch. 22d 1890.

Tanner Machine. — Reel.

Turns 317 Cor. + 7 Depth 324 fms.

~~Shot or~~ lead 25 lbs.

Bottom R. & C.

Bottom temperature 42.°

No. of Thermometer 61 751 Cor. —

Corrected temperature 42°

Air 52 Surface 53 Drift. ~~~ N. & N.

Trawl or dredge or tangles

P.M.

| SOUNDING WIRE. | | TURNS. | DREDGE ROPE. | |
|---|---|---|---|---|
| DOWN. | UP. | | DOWN. | UP. |
| 1.00.40 | 08.50 | 0 | | |
| 01.30 | 07.10 | 100 | | |
| 02.20 | 05.40 | 200 | | |
| 03.10 | 04.05 | 300 | | |
| 03.30 | 1.03.45 | 400 | | |
| | | 500 | | |
| | | 600 | | |
| | | 700 | | |
| | | 800 | | |
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SERIAL TEMPERATURE.

| DEPTH. | TEMP. | NO. OF THER. | COR. | COR. TEMP. |
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| 25 | | | | |
| 50 | | | | |
| 100 | | | | |
| 200 | | | | |
| 300 | | | | |
| 400 | | | | |
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| 700 | | | | |
| 800 | | | | |
| 900 | | | | |
| 1000 | | | | |

REMARKS.

N.C.F. 507

No. 3161 Dr Date Mch. 22d 1890.

Sigsbee Machine. #2 Reel.

Turns 175 Cor. + 16 Depth 191 fms.

~~Shot or~~ lead 38 lbs.

Bottom fne gy. S.

Bottom temperature 44.5°

No. of Thermometer 61751 Cor. —

Corrected temperature 44.5°

Air 52 Surface 52 Drift. NW x W½W

Trawl ~~or dredge or tangles~~ Large beam and

| P.M. SOUNDING WIRE. | | TURNS. | P.M. DREDGE ROPE. | |
|---|---|---|---|---|
| DOWN. | UP. | | DOWN. | UP. |
| 1.53.00 | 1.59.00 | 0 | 2.01.00 | 56.45 |
| 1.53.55 | 1.58.00 | 100 | 05.00 | 52.40 |
| 1.54.45 | 1.57.30 | 200 | 08.30 | 48.50 |
| | | 300 | 11.30 | 46.00 |
| | | 400 | 14.10 | 42.50 |
| | | ~~500~~ 450 | 16.45 | 2:41.00 |
| | | 600 | | |
| | | 700 | | |
| | | 800 | | |
| | | 900 | | |
| | | 1000 | | |
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SERIAL TEMPERATURE.

| DEPTH. | TEMP. | NO. OF THER. | COR. | COR. TEMP. |
|---|---|---|---|---|
| 25 | | | | |
| 50 | | | | |
| 100 | | | | |
| 200 | | | | |
| 300 | | | | |
| 400 | | | | |
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| 600 | | | | |
| 700 | | | | |
| 800 | | | | |
| 900 | | | | |
| 1000 | | | | |

REMARKS.

12 Pole. 2 sp. Flounders. 1/2 doz. Hag fish.
3 Eel pouts. 2 sp. Rock fish.
12 Sculpin. 6 Sea urchins. Few shrimps
1/2 pt. Worms. Few small shells.
20 small Rock fish.

H.C.F. 507

No. 2163 Hyd. Date Mch. 22d 1890.

Sigsbee Machine. #2 Reel.

Turns 825 Cor. + 75 Depth 900 fms.

~~Shot or~~ lead 38 lbs.

Bottom gn. M.

Bottom temperature 36.8°

No. of Thermometer 61751 Cor. —

Corrected temperature 36.8°

Air 52 Surface 53 Drift.

Trawl or dredge or tangles

P.M.

| SOUNDING WIRE. | | TURNS. | DREDGE ROPE. | |
|---|---|---|---|---|
| DOWN. | UP. | | DOWN. | UP. |
| 3.32.45 | 52.35 | 0 | | |
| 33.30 | 51.45 | 100 | | |
| 34.20 | 51.00 | 200 | | |
| 35.20 | 50.15 | 300 | | |
| 36.20 | 49.30 | 400 | | |
| 37.35 | 48.40 | 500 | | |
| 38.50 | 47.55 | 600 | | |
| 40.15 | 47.00 | 700 | | |
| 41.30 | 45.55 | 800 | | |
| 41.50 | ~~3.~~ 45.20 | 825 ~~900~~ | 5.2 | |
| | | 1000 | | |
| | | 1100 | | |
| | | 1200 | | |
| | | 1300 | | |
| | | 1400 | | |
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| | | 3900 | | |
| | | 4000 | | |

SERIAL TEMPERATURE.

| DEPTH. | TEMP. | NO. OF THER. | COR. | COR. TEMP. |
|---|---|---|---|---|
| 25 | | | | |
| 50 | | | | |
| 100 | | | | |
| 200 | | | | |
| 300 | | | | |
| 400 | | | | |
| 500 | | | | |
| 600 | | | | |
| 700 | | | | |
| 800 | | | | |
| 900 | | | | |
| 1000 | | | | |

REMARKS.

507

Jet B

No. 3162 Dr. Date March 22nd 1890

Sigsbee Machine. #2 Reel.

Turns 506 Cor. + 47 Depth 553 fms

~~Shot or~~ lead 38 lbs

Bottom Gn M.

Bottom temperature 39°

No. of Thermometer 61751 Cor. —

Corrected temperature 39°

Air 52 Surface 53 Drift. 2½' N x W (mag)

Trawl ~~or dredge or tangles~~ Large Beam

| P.M. SOUNDING WIRE. DOWN. | UP. | TURNS. | P.M. DREDGE ROPE. DOWN. | UP. |
|---|---|---|---|---|
| 4 34.40 | 47.10 | 0 | 4.50.45 | 31.15 |
| 36.15 | 46.15 | 100 | 55.50 | 27.31 |
| 37.10 | 45.50 | 200 | 58.15 | 26.10 |
| 39.15 | 45.05 | 300 | 5.01.15 | 23.30 |
| 40.20 | 44.15 | 400 | 04-0 | 20.20 |
| 41.35 | 43.30 | 500 | 6-30 | 16.45 |
| 41.45 | 44-42.45 | 600 | 9.30 | 11.30 |
| | | 700 | 11-30 | 08.30 |
| | | 800 | 14-30 | 04.15 |
| | | 900 | 17-0 | 6.00.45 |
| | | 1000 | 20-0 | 57.15 |
| | | 1100 | 23.45 | 5.46-56 |
| | | 1200 | | |
| | | 1300 | | |
| | | 1400 | | |
| | | 1500 | | |
| | | 1600 | | |
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SERIAL TEMPERATURE.

| DEPTH. | TEMP. | NO. OF THER. | COR. | COR. TEMP. |
|---|---|---|---|---|
| 25 | | | | |
| 50 | | | | |
| 100 | | | | |
| 200 | | | | |
| 300 | | | | |
| 400 | | | | |
| 500 | | | | |
| 600 | | | | |
| 700 | | | | |
| 800 | | | | |
| 900 | | | | |
| 1000 | | | | |

REMARKS.

1 Anthomastus. few deep water shrimps 1 small fish
Trawl not come up fast.

Jk B

No. 3163 Dr Date Mar. 22. 90

Sigsbee Machine. # 2 Reel.

Turns 64 Cor. + 5 Depth 69 fms

~~Shot or~~ lead 38 lbs

Bottom fne gy S

Bottom temperature 48.5°

No. of Thermometer 61751 Cor. —

Corrected temperature 48.5°

Air 50 Surface 52 Drift. 2' NE×N

Trawl ~~or dredge or tangles~~ Large Beam

| P.M. SOUNDING WIRE. DOWN. | UP. | TURNS. | P.M. DREDGE ROPE. DOWN. | UP. |
|---|---|---|---|---|
| 7.06.15 | 09.09 | 0 | 7.13.15 | 51.10 |
| 07.09 | 7.08.25 | 100 | 7.19.40 | 53.10 |
| | | 200 | 26.05 | 7.50 00 |
| | | 300 | | |
| | | 400 | | |
| | | 500 | | |
| | | 600 | | |
| | | 700 | | |
| | | 800 | | |
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SERIAL TEMPERATURE.

| DEPTH. | TEMP. | NO. OF THER. | COR. | COR. TEMP. |
|---|---|---|---|---|
| 25 | | | | |
| 50 | | | | |
| 100 | | | | |
| 200 | | | | |
| 300 | | | | |
| 400 | | | | |
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| 800 | | | | |
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| 1000 | | | | |

REMARKS.

3 skates 1 Rat fish 20 Flounder - (3 species) 1/2 doz Rock Cod (2 species) 1 doz. Eel pouts. 1 Zaniolepis - 3-4 Sculpins 1 doz. crinoids. 2 or 3 large ophurians a few annelids 2 species pectens some stones. Net cameup torn.

A.P.

No. 3164 D.T. Date March 23/90

Tanner Machine. Reel.

Turns 59 Cor. + 2 Depth 61

~~Shot~~ or lead 25 lbs.

Bottom RKy

Bottom temperature 48.5

No. of Thermometer 61 7051 Cor. —

Corrected temperature 48.50

Air 49 Surface 50 Drift. 1m E N E 1/2 E

~~Trawl or~~ dredge ~~or tangles~~ Ships Dredge

| SOUNDING WIRE. | | TURNS. | DREDGE ROPE. | |
|---|---|---|---|---|
| Aw DOWN. | UP. | Aw | DOWN. | UP. |
| 5-31-0 | 5-32-30 | 0 | 5-37-0 | 59-0 |
| | | 100 | 45-0 | 5-55-0 |
| | | 200 | | |
| | | 300 | | |
| | | 400 | | |
| | | 500 | | |
| | | 600 | | |
| | | 700 | | |
| | | 800 | | |
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SERIAL TEMPERATURE.

| DEPTH. | TEMP. | NO. OF THER. | COR. | COR. TEMP. |
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| 25 | | | | |
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| 600 | | | | |
| 700 | | | | |
| 800 | | | | |
| 900 | | | | |
| 1000 | | | | |

REMARKS.

1 Star fish
3 Verrilliaz?
a few Shells
4 Holothurian

507

A.F.P.

No. 3165 Dr. Date March 23/90

Tanner Machine. — Reel.

Turns 48 Cor. + 2 Depth 50

~~Shot~~ or lead 25 lbs.

Bottom gn m.

Bottom temperature 49

No. of Thermometer 6,751 Cor. —

Corrected temperature 49°

Air 49 Surface 50 Drift. 7/10 m NEXE

~~Trawl or~~ dredge or tangles Ships Dredge

| SOUNDING WIRE. | | TURNS. | A.M. DREDGE ROPE. | |
|---|---|---|---|---|
| A.M. DOWN. | UP. | | DOWN. | UP. |
| 6-30-30 | 6-32-0 | 0 | 6-32-30 | 50-0 |
| | | 100 90 | 35-0 | 6-46-30 |
| | | 200 | | |
| | | 300 | | |
| | | 400 | | |
| | | 500 | | |
| | | 600 | | |
| | | 700 | | |
| | | 800 | | |
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SERIAL TEMPERATURE.

| DEPTH. | TEMP. | NO. OF THER. | COR. | COR. TEMP. |
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| 300 | | | | |
| 400 | | | | |
| 500 | | | | |
| 600 | | | | |
| 700 | | | | |
| 800 | | | | |
| 900 | | | | |
| 1000 | | | | |

REMARKS.

Small Shells & worms.

No. 3166 Dr. Date March 28/90

Tanner Machine. — Reel.

Turns 40 Cor. + 2 Depth 42

~~Shot or lead~~ 25 lbs.

Bottom gn w

Bottom temperature 50

No. of Thermometer 6175 Cor. +0.3°

Corrected temperature 50.3°

Air 52 Surface 52 Drift. 1½ m S½ W

Trawl or ~~dredge or tangles~~ Small Beam

| SOUNDING WIRE. | | TURNS. | DREDGE ROPE. | |
|---|---|---|---|---|
| DOWN. | UP. | | DOWN. | UP. |
| 7-20-30 | 7-21-30 | 0 | 7-23-0 | 53-15 |
| | | 100 | 26-0 | 7-50-0 |
| | | 200 | | |
| | | 300 | | |
| | | 400 | | |
| | | 500 | | |
| | | 600 | | |
| | | 700 | | |
| | | 800 | | |
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SERIAL TEMPERATURE.

| DEPTH. | TEMP. | NO. OF THER. | COR. | COR. TEMP. |
|---|---|---|---|---|
| 25 | | | | |
| 50 | | | | |
| 100 | | | | |
| 200 | | | | |
| 300 | | | | |
| 400 | | | | |
| 500 | | | | |
| 600 | | | | |
| 700 | | | | |
| 800 | | | | |
| 900 | | | | |
| 1000 | | | | |

REMARKS.

4 sps. Flounders. 6 large Crabs.
Star fish.

NG 9.



No. 3167 Dr Date Mch. 23d 1890.

Tanner Machine. — Reel.

Turns 32 Cor. + 1 Depth 33 fms.

~~Shot or~~ lead 25 lbs.

Bottom gn. M.

Bottom temperature 49.5°

No. of Thermometer 61751 Cor. —

Corrected temperature 49.5°

Air 53° Surface 52° Drift. E. ½ S.

Trawl ~~or dredge or tangles~~ small beam.

| A.M. SOUNDING WIRE. | | TURNS. | A.M. DREDGE ROPE. | |
|---|---|---|---|---|
| DOWN. | UP. | | DOWN. | UP. |
| 8. 22 .30 | 24.00 | 0 | 8. 25.30 | 51.00 |
| 23.00 | 8. 23.12 | 80 100 | 27.50 | 8. 48.05 |
| | | 200 | | |
| | | 300 | | |
| | | 400 | | |
| | | 500 | | |
| | | 600 | | |
| | | 700 | | |
| | | 800 | | |
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SERIAL TEMPERATURE.

| DEPTH. | TEMP. | NO. OF THER. | COR. | COR. TEMP. |
|---|---|---|---|---|
| 25 | | | | |
| 50 | | | | |
| 100 | | | | |
| 200 | | | | |
| 300 | | | | |
| 400 | | | | |
| 500 | | | | |
| 600 | | | | |
| 700 | | | | |
| 800 | | | | |
| 900 | | | | |
| 1000 | | | | |

REMARKS. 2 large Hag fish - (Myxine glutinosa) 1 large Medusa.
50 Flounders. (5 sps.) - 200 Anchovies.
2 small Star fishes.
1 naked Mollusk.
Several Alcyonarians.

JEB

507

No. 2164 Heyd Date Mar 24. 1890

Tanner Machine. — Reel. —

Turns 58 Cor. + 2 Depth 60 fms

~~Shot or~~ lead 25 lbs

Bottom Sh. + S

Bottom temperature 49.7°

No. of Thermometer 61751 Cor. —

Corrected temperature 49.7°

Air 51 Surface 51 Drift.

Trawl or dredge or tangles

| SOUNDING WIRE. | | TURNS. | DREDGE ROPE. | |
|---|---|---|---|---|
| DOWN. | UP. | | DOWN. | UP. |
| 9. 09.20 | 11.45 | 0 | | |
| 09 55 | 9.10-02 | 100 | | |
| | | 200 | | |
| | | 300 | | |
| | | 400 | | |
| | | 500 | | |
| | | 600 | | |
| | | 700 | | |
| | | 800 | | |
| | | 900 | | |
| | | 1000 | | |
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| | | 3900 | | |
| | | 4000 | | |

SERIAL TEMPERATURE.

| DEPTH. | TEMP. | NO. OF THER. | COR. | COR. TEMP. |
|---|---|---|---|---|
| 25 | | | | |
| 50 | | | | |
| 100 | | | | |
| 200 | | | | |
| 300 | | | | |
| 400 | | | | |
| 500 | | | | |
| 600 | | | | |
| 700 | | | | |
| 800 | | | | |
| 900 | | | | |
| 1000 | | | | |

REMARKS.

EB

No. 2165 Leyd Date Mar. 24 1890

Tanner Machine. — Reel.

Turns 38 Cor. + 1 Depth 39 fms

~~Shot or~~ lead 25 lbs

Bottom R

Bottom temperature 50.9°

No. of Thermometer 6175 Cor. +0.3°

Corrected temperature 51.2°

Air 51 Surface 51 Drift. 51

Trawl or dredge or tangles

A.M.

| SOUNDING WIRE. | | TURNS. | DREDGE ROPE. | |
|---|---|---|---|---|
| DOWN. | UP. | | DOWN. | UP. |
| 9.28 45 | 30.00 | 0 | | |
| 29.05 | 9.28-15 | 100 | | |
| | | 200 | | |
| | | 300 | | |
| | | 400 | | |
| | | 500 | | |
| | | 600 | | |
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SERIAL TEMPERATURE.

| DEPTH. | TEMP. | NO. OF THER. | COR. | COR. TEMP. |
|---|---|---|---|---|
| 25 | | | | |
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| 100 | | | | |
| 200 | | | | |
| 300 | | | | |
| 400 | | | | |
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| 700 | | | | |
| 800 | | | | |
| 900 | | | | |
| 1000 | | | | |

REMARKS.

JGB

No. 2166 Hey Date Mar. 24th 90

Tanner Machine. — Reel.

Turns 34 Cor. + 1 Depth 35 fms

~~Shot or~~ lead 25 lbs

Bottom Rky.

Bottom temperature —

No. of Thermometer — Cor. —

Corrected temperature —

Air 51 Surface 51 Drift.

Trawl or dredge or tangles

AM

| SOUNDING WIRE. | | TURNS. | DREDGE ROPE. | |
|---|---|---|---|---|
| DOWN. | UP. | | DOWN. | UP. |
| 9,35,00 | 9,37,00 | 0 | | |
| | | 100 | | |
| | | 200 | | |
| | | 300 | | |
| | | 400 | | |
| | | 500 | | |
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SERIAL TEMPERATURE.

| DEPTH. | TEMP. | NO. OF THER. | COR. | COR. TEMP. |
|---|---|---|---|---|
| 25 | | | | |
| 50 | | | | |
| 100 | | | | |
| 200 | | | | |
| 300 | | | | |
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| 600 | | | | |
| 700 | | | | |
| 800 | | | | |
| 900 | | | | |
| 1000 | | | | |

REMARKS.

Vol B

No. 2167 Key Date Mar. 24 90

Tanner Machine. Reel.

Turns 36 Cor. + 1 Depth 37 fm

~~Shot or~~ lead 25 lbs

Bottom Rky

Bottom temperature 51°

No. of Thermometer 61751 Cor. +0.3°

Corrected temperature 51.3°

Air 52 Surface 52 Drift.

Trawl or dredge or tangles

SDM.

| SOUNDING WIRE. | | TURNS. | DREDGE ROPE. | |
|---|---|---|---|---|
| DOWN. | UP. | | DOWN. | UP. |
| 9.42.50 | 44- | 0 | | |
| 43.07 | 9.43.10 | 100 | | |
| | | 200 | | |
| | | 300 | | |
| | | 400 | | |
| | | 500 | | |
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SERIAL TEMPERATURE.

| DEPTH. | TEMP. | NO. OF THER. | COR. | COR. TEMP. |
|---|---|---|---|---|
| 25 | | | | |
| 50 | | | | |
| 100 | | | | |
| 200 | | | | |
| 300 | | | | |
| 400 | | | | |
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| 600 | | | | |
| 700 | | | | |
| 800 | | | | |
| 900 | | | | |
| 1000 | | | | |

REMARKS.

JEB

No. 2168 Heyd Date Mar. 24 '90.

Tanner Machine. — Reel.

Turns 29 Cor. + 1 Depth 30 fms

~~Shot or lead~~ 25 lbs

Bottom Rky + Co.

Bottom temperature 51

No. of Thermometer 61751 Cor. +0.3°

Corrected temperature 51.3°

Air 52 Surface 52 Drift.

Trawl or dredge or tangles

A.M.

| SOUNDING WIRE. | | TURNS. | DREDGE ROPE. | |
|---|---|---|---|---|
| DOWN. | UP. | | DOWN. | UP. |
| 9. 51.15 | 52.10 | 0 | | |
| 51.45 | 9. 51.48 | 100 | | |
| | | 200 | | |
| | | 300 | | |
| | | 400 | | |
| | | 500 | | |
| | | 600 | | |
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| | | 800 | | |
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SERIAL TEMPERATURE.

| DEPTH. | TEMP. | NO. OF THER. | COR. | COR. TEMP. |
|---|---|---|---|---|
| 25 | | | | |
| 50 | | | | |
| 100 | | | | |
| 200 | | | | |
| 300 | | | | |
| 400 | | | | |
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| 600 | | | | |
| 700 | | | | |
| 800 | | | | |
| 900 | | | | |
| 1000 | | | | |

REMARKS.

607 JEB

No. 3168 D2 Date Mar. 24. 90

Tanner Machine. — Reel.

Turns 33 Cor. + 1 Depth 34

~~Shot or~~ lead 25 lbs

Bottom Rky + Co.

Bottom temperature —

No. of Thermometer 61751 Cor. —

Corrected temperature —

Air 52 Surface 52 Drift. .5' NNW

~~Trawl or dredge or~~ tangles

| A.M. SOUNDING WIRE. DOWN. | UP. | TURNS. | P.M. DREDGE ROPE. DOWN. | UP. |
|---|---|---|---|---|
| 9.58.10 | 07- | 0 | 10.36-15 | 53.30 |
| 58.30 | 10.05- | ~~100~~ 55 | 38.20 | 10.50.15 |
| | | 200 | | |
| | | 300 | | |
| | | 400 | | |
| | | 500 | | |
| | | 600 | | |
| | | 700 | | |
| | | 800 | | |
| | | 900 | | |
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| | | 2400 | | |

9 Hand lines over Starboard side at 10.13
In at 10.30
Catch 1 ~~Orange~~ Red Rock fish

At 3.37 P.M. returned to this position and fished again with 13 hand lines over starboard side.

Catch - 28 Red Rock fish - average weight 4½ lbs.
2 Yellow tail rock fish.
1 Orange rock fish.
2 Cultus Cod.

| | | | |
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Dory lowered at 10.00 and returned at 4.10 P.M. having caught 45 Red Rock Fish - average weight 6 1/2 lbs. 25 lbs.

SERIAL TEMPERATURE.

| DEPTH. | TEMP. | NO. OF THER. | COR. | COR. TEMP. |
|---|---|---|---|---|
| 25 | | | | |
| 50 | | | | |
| 100 | | | | |
| 200 | | | | |
| 300 | | | | |
| 400 | | | | |
| 500 | | | | |
| 600 | | | | |
| 700 | | | | |
| 800 | | | | |
| 900 | | | | |
| 1000 | | | | |

2 Cultus Cod -

REMARKS.

Wire caught in bottom + broke.
Lost Thermometer #61751 & 5 fms Wire
+ 1-25 lb lead

Cup Coral + Sponges

507 J E B

No. 2169 Hyp Date Mar 24 90

Tanner Machine. — Reel.

Turns 38 Cor. + 2 Depth 40

~~Shot or~~ lead 25 lb

Bottom Rky

Bottom temperature —

No. of Thermometer — Cor. —

Corrected temperature —

Air 52° Surface 52° Drift.

Trawl or dredge or tangles

| A.M. SOUNDING WIRE. DOWN. | UP. | TURNS. | DREDGE ROPE. DOWN. | UP. |
|---|---|---|---|---|
| 11.00.15 | .01.30 | 0 | | |
| .00 45 | 11-00.50 | 100 | | |
| | | 200 | | |
| | | 300 | | |
| | | 400 | | |
| | | 500 | | |
| | | 600 | | |
| | | 700 | | |
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| | | 3900 | | |
| | | 4000 | | |

SERIAL TEMPERATURE.

| DEPTH. | TEMP. | NO. OF THER. | COR. | COR. TEMP. |
|---|---|---|---|---|
| 25 | | | | |
| 50 | | | | |
| 100 | | | | |
| 200 | | | | |
| 300 | | | | |
| 400 | | | | |
| 500 | | | | |
| 600 | | | | |
| 700 | | | | |
| 800 | | | | |
| 900 | | | | |
| 1000 | | | | |

REMARKS.

No. 2170 Hyr Date Mar. 24. 90

Tanner Machine. — Reel.

Turns 53 Cor. + 2 Depth 55

~~Shot or~~ lead 25 lbs

Bottom Cro Bk S. + blk Sh.

Bottom temperature —

No. of Thermometer — Cor. —

Corrected temperature —

Air 52° Surface 52° Drift.

Trawl or dredge or tangles —

| SOUNDING WIRE. | | TURNS. | DREDGE ROPE. | |
|---|---|---|---|---|
| DOWN. | UP. | | DOWN. | UP. |
| 11. 16 50 | 11. 18 30 | 0 | | |
| 17. 15 | 17. 18 | 100 | | |
| | | 200 | | |
| | | 300 | | |
| | | 400 | | |
| | | 500 | | |
| | | 600 | | |
| | | 700 | | |
| | | 800 | | |
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| | | 3900 | | |
| | | 4000 | | |

SERIAL TEMPERATURE.

| DEPTH. | TEMP. | NO. OF THER. | COR. | COR. TEMP. |
|---|---|---|---|---|
| 25 | | | | |
| 50 | | | | |
| 100 | | | | |
| 200 | | | | |
| 300 | | | | |
| 400 | | | | |
| 500 | | | | |
| 600 | | | | |
| 700 | | | | |
| 800 | | | | |
| 900 | | | | |
| 1000 | | | | |

REMARKS.

No. 2171 Hey Date Mar. 24 90

Zamer Machine. — Reel.

Turns 63 Cor. + 2 Depth 65 fms

~~Shot or~~ lead 25 lbs

Bottom gy. S. & brk sh.

Bottom temperature —

No. of Thermometer — Cor. —

Corrected temperature —

Air 52 Surface 52 Drift.

Trawl or dredge or tangles —

| SOUNDING WIRE. | | TURNS. | DREDGE ROPE. | |
|---|---|---|---|---|
| DOWN. | UP. | | DOWN. | UP. |
| 11.26.30 | 28.15 | 0 | | |
| 27.05 | 11.27.10 | 100 | | |
| | | 200 | | |
| | | 300 | | |
| | | 400 | | |
| | | 500 | | |
| | | 600 | | |
| | | 700 | | |
| | | 800 | | |
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| | | 3900 | | |
| | | 4000 | | |

SERIAL TEMPERATURE.

| DEPTH. | TEMP. | NO. OF THER. | COR. | COR. TEMP. |
|---|---|---|---|---|
| 25 | | | | |
| 50 | | | | |
| 100 | | | | |
| 200 | | | | |
| 300 | | | | |
| 400 | | | | |
| 500 | | | | |
| 600 | | | | |
| 700 | | | | |
| 800 | | | | |
| 900 | | | | |
| 1000 | | | | |

REMARKS.

No. 2172 Hy Date Mar. 24. 90

Garner Machine. — Reel.

Turns 135 Cor. + 4 Depth 139 fms

~~Shot or~~ lead 25 lbs

Bottom G. & brk. sh.

Bottom temperature —

No. of Thermometer — Cor. —

Corrected temperature — —

Air 55 Surface 55 Drift. —

Trawl or dredge or tangles —

| SOUNDING WIRE. | | TURNS. | DREDGE ROPE. | |
|---|---|---|---|---|
| DOWN. | UP. | | DOWN. | UP. |
| 11. 38.05 | 42.30 | 0 | | |
| 39.06 | 40.10 | 100 | | |
| 39.45 | 39.50 | 200 | | |
| | | 300 | | |
| | | 400 | | |
| | | 500 | | |
| | | 600 | | |
| | | 700 | | |
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| | | 3000 | | |
| | | 3100 | | |
| | | 3200 | | |
| | | 3300 | | |
| | | 3400 | | |
| | | 3500 | | |
| | | 3600 | | |
| | | 3700 | | |
| | | 3800 | | |
| | | 3900 | | |
| | | 4000 | | |

SERIAL TEMPERATURE.

| DEPTH. | TEMP. | NO. OF THER. | COR. | COR. TEMP. |
|---|---|---|---|---|
| 25 | | | | |
| 50 | | | | |
| 100 | | | | |
| 200 | | | | |
| 300 | | | | |
| 400 | | | | |
| 500 | | | | |
| 600 | | | | |
| 700 | | | | |
| 800 | | | | |
| 900 | | | | |
| 1000 | | | | |

REMARKS.

No. 2173 Hy Date Mar 24. 90

Tanner Machine. — Reel.

Turns 71 Cor. + 2 Depth 73 fms

~~Shot or~~ lead 25 lbs

Bottom RK.

Bottom temperature —

No. of Thermometer — Cor. —

Corrected temperature —

Air 55 Surface 55 Drift.

Trawl or dredge or tangles —

| SOUNDING WIRE. | | TURNS. | DREDGE ROPE. | |
|---|---|---|---|---|
| DOWN. | UP. | | DOWN. | UP. |
| 11.50.40 | 5230 | 0 | | |
| 57.20 | 11.51.25 | 100 | | |
| | | 200 | | |
| | | 300 | | |
| | | 400 | | |
| | | 500 | | |
| | | 600 | | |
| | | 700 | | |
| | | 800 | | |
| | | 900 | | |
| | | 1000 | | |
| | | 1100 | | |
| | | 1200 | | |
| | | 1300 | | |
| | | 1400 | | |
| | | 1500 | | |
| | | 1600 | | |
| | | 1700 | | |
| | | 1800 | | |
| | | 1900 | | |
| | | 2000 | | |
| | | 2100 | | |
| | | 2200 | | |
| | | 2300 | | |
| | | 2400 | | |

| | | | | |
|---|---|---|---|---|
| | | 2500 | | |
| | | 2600 | | |
| | | 2700 | | |
| | | 2800 | | |
| | | 2900 | | |
| | | 3000 | | |
| | | 3100 | | |
| | | 3200 | | |
| | | 3300 | | |
| | | 3400 | | |
| | | 3500 | | |
| | | 3600 | | |
| | | 3700 | | |
| | | 3800 | | |
| | | 3900 | | |
| | | 4000 | | |

SERIAL TEMPERATURE.

| DEPTH. | TEMP. | NO. OF THER. | COR. | COR. TEMP. |
|---|---|---|---|---|
| 25 | | | | |
| 50 | | | | |
| 100 | | | | |
| 200 | | | | |
| 300 | | | | |
| 400 | | | | |
| 500 | | | | |
| 600 | | | | |
| 700 | | | | |
| 800 | | | | |
| 900 | | | | |
| 1000 | | | | |

REMARKS.

EB

No. 2174 Hey Date Mar. 24. 90

Tanner Machine. Reel.

Turns 54 Cor. + 2 Depth 56 fms

~~Shot or~~ lead 25 lbs

Bottom brk sh.

Bottom temperature ——

No. of Thermometer —— Cor. ——

Corrected temperature ——

Air 55 Surface 55 Drift. ——

Trawl or dredge or tangles ——

P.M.

| SOUNDING WIRE. | | TURNS. | DREDGE ROPE. | |
|---|---|---|---|---|
| DOWN. | UP. | | DOWN. | UP. |
| 12-01.30 | 02-35 | 0 | | |
| 02-05 | 12-02-10 | 100 | | |
| | | 200 | | |
| | | 300 | | |
| | | 400 | | |
| | | 500 | | |
| | | 600 | | |
| | | 700 | | |
| | | 800 | | |
| | | 900 | | |
| | | 1000 | | |
| | | 1100 | | |
| | | 1200 | | |
| | | 1300 | | |
| | | 1400 | | |
| | | 1500 | | |
| | | 1600 | | |
| | | 1700 | | |
| | | 1800 | | |
| | | 1900 | | |
| | | 2000 | | |
| | | 2100 | | |
| | | 2200 | | |
| | | 2300 | | |
| | | 2400 | | |

| | | | | |
|---|---|---|---|---|
| | | 2500 | | |
| | | 2600 | | |
| | | 2700 | | |
| | | 2800 | | |
| | | 2900 | | |
| | | 3000 | | |
| | | 3100 | | |
| | | 3200 | | |
| | | 3300 | | |
| | | 3400 | | |
| | | 3500 | | |
| | | 3600 | | |
| | | 3700 | | |
| | | 3800 | | |
| | | 3900 | | |
| | | 4000 | | |

SERIAL TEMPERATURE.

| DEPTH. | TEMP. | NO. OF THER. | COR. | COR. TEMP. |
|---|---|---|---|---|
| 25 | | | | |
| 50 | | | | |
| 100 | | | | |
| 200 | | | | |
| 300 | | | | |
| 400 | | | | |
| 500 | | | | |
| 600 | | | | |
| 700 | | | | |
| 800 | | | | |
| 900 | | | | |
| 1000 | | | | |

REMARKS.

507

A.F.P.

No. 2,75 Ay. Date March 24/90

Tanner. Machine. Reel.

Turns 33 Cor. + 1 Depth 34

~~Shot~~ or lead 25 lbs.

Bottom R & C.

Bottom temperature —

No. of Thermometer — Cor. —

Corrected temperature

Air 55 Surface 55 Drift.

Trawl or dredge or tangles —

| SOUNDING WIRE. | | TURNS. | DREDGE ROPE. | |
|---|---|---|---|---|
| P.M. DOWN. | UP. | | DOWN. | UP. |
| 12-13-0 | 12-14-30 | 0 | | |
| | | 100 | | |
| | | 200 | | |
| | | 300 | | |
| | | 400 | | |
| | | 500 | | |
| | | 600 | | |
| | | 700 | | |
| | | 800 | | |
| | | 900 | | |
| | | 1000 | | |
| | | 1100 | | |
| | | 1200 | | |
| | | 1300 | | |
| | | 1400 | | |
| | | 1500 | | |
| | | 1600 | | |
| | | 1700 | | |
| | | 1800 | | |
| | | 1900 | | |
| | | 2000 | | |
| | | 2100 | | |
| | | 2200 | | |
| | | 2300 | | |
| | | 2400 | | |

| | | | | |
|---|---|---|---|---|
| | | 2500 | | |
| | | 2600 | | |
| | | 2700 | | |
| | | 2800 | | |
| | | 2900 | | |
| | | 3000 | | |
| | | 3100 | | |
| | | 3200 | | |
| | | 3300 | | |
| | | 3400 | | |
| | | 3500 | | |
| | | 3600 | | |
| | | 3700 | | |
| | | 3800 | | |
| | | 3900 | | |
| | | 4000 | | |

SERIAL TEMPERATURE.

| DEPTH. | TEMP. | NO. OF THER. | COR. | COR. TEMP. |
|---|---|---|---|---|
| 25 | | | | |
| 50 | | | | |
| 100 | | | | |
| 200 | | | | |
| 300 | | | | |
| 400 | | | | |
| 500 | | | | |
| 600 | | | | |
| 700 | | | | |
| 800 | | | | |
| 900 | | | | |
| 1000 | | | | |

REMARKS.