

HEIGHT OF CAMERA LENS ABOVE SEABED $=30 \mathrm{in}(76 \mathrm{~cm})$
SIZE OF BOTTOM AREA IMAGED AT 30 in ABOVE SEABED $=30 \times 20 \mathbb{N}(76 \times 51 \mathrm{CM})$ CONSEC STA $\qquad$ USGS STATION $\qquad$
$\qquad$ Sta

NOTE
2 parallel lasers 15 un apart
DWN Video is colorisored on DUD and 8 mun tape

Gopro FWD Video is color: downloaded from camera

$$
\text { EDT }=U T E-4 \mathrm{lw}
$$



HEIGHT OF CAMERA LENS ABOVE SEABED $=30 \mathrm{in}(76 \mathrm{~cm})$
SIZE OF BOTTOM AREA IMAGED AT 30 in ABOVE SEABED $=30 \times 20$ IN ( $76 \times 51 \mathrm{CM}$ ) CONSEC STA $/$ USGS STATION $4 / 0 /$
page valentine, usgs coastal and mafine geology program, wodos hole, ma
SBNMS Site S I, Sta




HEIGHT OF CAMERA LENS ABOVE SEABED $=30$ in ( 76 cm ) SIZE OF BOTTOM AREA IMAGED AT 30 in ABOVE SEABED $=30 \times 20$ IN $(76 \times 51 \mathrm{CM})$ CONSES STA $\qquad$ USGS STATION $\qquad$






SIZE OF BOTTOM AREA IMAGED AT 30 in ABOVE SEABED $=30 \times 20 \mathrm{IN}(76 \times 51 \mathrm{CM})$ CONSEC STA 1 USGS STATION


HEIGHT OF CAMERA LENS ABOVE SEABED $=30$ in ( 76 cm )
SIZE OF BOTTOM AREA IMAGED AT 30 in ABOVE SEABED $=30 \times 20 \operatorname{IN}(76 \times 51 \mathrm{~cm})$ CONSEC STA 10 USGS STATION 410



Photo of sample in grab on deck $=$ \#
Prelim. visual texture from VIDEO or SAMPLE =
DIGITAL STILL PHOTOS OF SEABED: Canon digital G12 camera, 12 MPixels; jpeg images

| No. | Cumul. <br> No. | Time (UTC) <br> UH MM SS | JPG <br> image \# | DVD \# | Description <br> V $=$ in photo | Filename <br> Auk2014015_sta_img\# |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | 42 | 000727 | 7837 |  |  |  |
| 2 |  | 0804 | 7838 |  |  |  |
| 3 |  | 0817 | 7839 |  |  |  |
| 4 |  | 083 | 7840 |  |  |  |
| 5 |  | 0905 | 7841 |  |  |  |
| 6 |  | 0929 | 7842 |  |  |  |
| 7 |  | 1010 | 7843 |  |  |  |
| 8 |  | 1038 | 7844 |  |  |  |
| 9 | 50 | 1113 | 7845 |  |  |  |
| 10 |  |  |  |  |  |  |

HEIGHT OF CAMERA LENS ABOVE SEABED $=30$ in ( 76 cm )
SIZE OF BOTTOM AREA IMAGED AT 30 in ABOVE SEABED $=30 \times 20$ IN $(76 \times 51 \mathrm{CM})$ CONSEC STA 12 UUSGS STATION



HEIGHT OF CAMERA LENS ABOVE SEABED $=30$ in ( 76 cm ) SIZE OF BOTTOM AREA IMAGED AT 30 in ABOVE SEABED $=30 \times 20 \mathrm{NN}(76 \times 51 \mathrm{CM})$ CONSEC STA 1 GUSGS STATION I 4 (4


HEIGHT OF CAMERA LENS ABOVE SEABED $=30$ in ( 76 cm )
SIZE OF BOTTOM AREA IMAGED AT 30 in ABOVE SEABED $=30 \times 20$ IN ( $76 \times 51$ CM) CONSEC STA




HEIGHT OF CAMERA LENS ABOVE SEABED $=30 \mathrm{in}$ ( 76 cm )
SIZE OF BOTTOM AREA IMAGED AT 30 in ABOVE SEABED $=30 \times 20 \mathrm{IN}(76 \times 51 \mathrm{~cm})$ CONSEC STAIC USGS STATION $1 /(\%$
PAGE VALENTINE, USGS COASTAL AND MARINE GEOLOGY PROGRAM, WOODS HOLE, MA


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HEIGHT OF CAMERA LENS ABOVE SEABED $=30$ in ( 76 cm )
SIZE OF BOTTOM AREA IMAGED AT 30 in ABOVE SEABED $=30 \times 20 \mathrm{IN}(76 \times 51 \mathrm{CM}$ ) CONSEC STA 20 USGS STATION 4120





 Bottom temp deg $\mathrm{C}(7.7)$ : Surface ( -1 m ) temp deg $\mathrm{C} /(1.5$; Difference deg $\mathrm{C} \Longrightarrow$; (Onset TidbiT v2)
Photo of sample in grab on deck = \#
Prelim. visual texture from VIDEO or SAMPLE =
DIGITAL STILL PHOTOS OF SEABED: Canon digital G12 camera, 12 MPixels; jpeg images

| No. | Cumul. <br> No. | Time (UTC) <br> HH MM SS | JPG <br> image \# | DVD \# | Description <br> V $=$ in photo | Filename <br> Auk2014015_sta_img \# |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 |  |  |  |  |  |  |
| 2 |  |  |  |  |  |  |
| 3 |  |  |  |  |  |  |
| 4 |  |  |  |  |  |  |
| 5 |  |  |  |  |  |  |
| 6 |  |  |  |  |  |  |
| 7 |  |  |  |  |  |  |
| 8 |  |  |  |  |  |  |
| 9 |  |  |  |  |  |  |
| 10 |  |  |  |  |  |  |

HEIGHT OF CAMERA LENS ABOVE SEABED $=30 \mathrm{in}(76 \mathrm{~cm})$
SIZE OF BOTTOM AREA IMAGED AT 30 in ABOVE SEABED $=30 \times 20 \operatorname{IN}(76 \times 51 \mathrm{~cm})$ CONSEC STA 2 la USGS STATION 4126
page valentine, usgs coastal and marine geology program, woods hole, ma


| No. | Cumul. No. | Time (UTC) HH MM SS | $\begin{gathered} \text { JPG } \\ \text { image } \# \end{gathered}$ | DVD \# | Description $\sqrt{ }=$ in photo | Filename Auk2014015_sta_img \# |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 |  | $\rightarrow$ had deta | inot | nowe | la fime on serued | - no CTD |
| 2 |  |  |  |  |  | NÓGOPRO |
| 3 |  |  |  |  |  | VIDEO |
| 4 |  |  |  |  |  |  |
| 5 |  |  |  |  |  |  |
| 6 |  |  |  |  |  |  |
| 7 |  |  |  |  |  |  |
| 8 |  |  |  |  |  |  |
| 9 |  |  |  |  |  |  |
| 10 |  |  |  |  |  |  |

HEIGHT OF CAMERA LENS ABOVE SEABED $=30$ in ( 76 cm )
SIZE OF BOTTOM AREA IMAGED AT 30 in ABOVE SEABED $=30 \times 20 \operatorname{IN}(76 \times 51 \mathrm{CM})$ CONSEC STA 77
page valentine, usgs coastal and marine geology program, wood hole, ma


HEIGHT OF CAMERA LENS ABOVE SEABED $=30 \mathrm{in}(76 \mathrm{~cm})$ SIZE OF BOTTOM AREA IMAGED AT 30 In ABOVE SEABED = $30 \times 20 \operatorname{IN}(76 \times 51 \mathrm{CM}$ ) CONSEC STA $\qquad$ USES STATION 4128
$\qquad$ , Sta

$\qquad$ Sta



pre-tripped - no smpl attempted -; jaws partly open -; washout -; refusal -; too gravelly/shelly -

| V TAPE COUNTER |
| :--- |
| FORWARD |
| V TAPE COUNTER |
| DOWN |


| START: HM MM SS |
| :---: |
| START: HM MM SS |
| $00 \quad 1754$ |


Photo of sample in grab on deck $=\#$
Prelim. visual texture from VIDEO or SAMPLE = DIGITAL STILL PHOTOS OF SEABED: Canon digital G12 camera, 12 Pixels; jpeg images

| No. | Cumuli. <br> No. | Time (UTC) <br> UH MM SS | JPG <br> image \# | DVD \# | Description <br> $=$ in photo | Filename <br> Auk2014015_sta_img \# |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | 4 | 205732 | 7861 |  |  |  |
| 2 | 5 | 5915 | 7862 |  |  |  |
| 3 |  |  |  |  |  |  |
| 4 |  |  |  |  |  |  |
| 5 |  |  |  |  |  |  |
| 6 |  |  |  |  |  |  |
| 7 |  |  |  |  |  |  |
| 8 |  |  |  |  |  |  |
| 9 |  |  |  |  |  |  |
| 10 |  |  |  |  |  |  |

HEIGHT OF CAMERA LENS ABOVE SEABED $=30 \mathrm{in}(76 \mathrm{~cm})$
SIZE OF BOTTOM AREA IMAGED AT 30 In ABOVE SEABED $=30 \times 20$ IN ( $76 \times 51 \mathrm{CM}$ ) CONSES STA 30 USGS STATION





HEIGHT OF CAMERA LENS ABOVE SEABED $=30$ in ( 76 cm )
$\qquad$ , Sta 33


HEIGHT OF CAMERA LENS ABOVE SEABED $=30 \mathrm{in}(76 \mathrm{~cm})$ SIZE OF BOTTOM AREA IMAGED AT 30 in ABOVE SEABED $=30 \times 20 \mathrm{IN}(76 \times 51 \mathrm{CM}$ ) CONSEC STAZ4 USGS STATION 4135




HEIGHT OF CAMERA LENS ABOVE SEABED $=30$ in $(76 \mathrm{~cm})$ SIZE OF BOTTOM AREA IMAGED AT 30 in ABOVE SEABED $=30 \times 20 \operatorname{IN}(76 \times 51 \mathrm{CM})$ CONSEC STA 37 USGS STATION 4138



SIZE OF BOTTOM AREA IMAGED AT 30 in ABOVE SEABED $=30 \times 20 \mathrm{IN}(76 \times 51 \mathrm{CM})$ CONSEC STA39 USGS STATION


HEIGHT OF CAMERA LENS ABOVE SEABED $=30 \mathrm{in}(76 \mathrm{~cm})$
SIZE OF BOTTOM AREA IMAGED AT 30 in ABOVE SEABED $=30 \times 20$ IN $(76 \times 51 \mathrm{~cm})$ CONSES STA 40 USES STATION



pre-tripped - no smpl attemptes -; jaws partly open -; washout -; refusal -; too gravelly/shelly -


| att epifauna | herring eggs | skate | SEABED DESCRIPTIION |  |
| :---: | :---: | :---: | :---: | :---: |
| $\checkmark$ Boltenia tunic. | lobster | Suberites spg | storm ripples | (y.) $n$ |
| brachiopod | moon snail | squid | gvl in ripple troughs | (v. $n$ |
| bushy bry/hyd | mussels | yellow encr. spg | small ripples | y, $n$ |
| juvenile cod | ocean pout. | colc alpae | sand partial veneer on gravel | $y, \mathrm{n}$ |
| cancer crab | Polymastia spg | - | gravel pavement | $y, n$ |
| cod | redencr.spg |  | pebweder storm | v/2 |
| cunner | red hake |  |  |  |
| dk yellow spg | sand dollars |  | sand lance in water column | y. (m) |
| Didemnum cols | sand lance adults |  | sand lance in substrate | y. n ) |
| dogfish | sand lance juvs |  |  |  |
| Eucratea loricata | - scallops and |  |  |  |
| Filograna implexa | sculpin 0 |  |  |  |
| $\checkmark$ finger spg | sea stars |  |  |  |
| flounder | shells \& fragments |  | trawl/dredge marks | y, $n$ |
| T haddock | silver hake |  | ambient light |  |
| Bottom temp deg C S. 1 | Surface ( 1 m) temp deg C | Difference deg C | - (Onse! Tidbit v2) |  |

Photo of sample in grab on deck =\#_._Prelim. visual texture from VIDEO or SAMPLE =
DIGITAL STILL PHOTOS OF SEABED: Canon digital G12 camera, 12 MPixels; jpeg images

| No. | Cumul. <br> No. | Time (UTC) <br> HH MM SS | JPG <br> image \# | DVD \# | Description <br> $=$ in photo | Filename <br> Auk2014015_sta img \# |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | 26 | 021531 | 7882 |  |  |  |
| 2 | 27 | 1645 | 7883 |  |  |  |
| 3 | 28 | 1739 | 7884 |  |  |  |
| 4 | 29 | 1805 | 7885 |  |  |  |
| 5 |  |  |  |  |  |  |
| 6 |  |  |  |  |  |  |
| 7 |  |  |  |  |  |  |
| 8 |  |  |  |  |  |  |
| 9 |  |  |  |  |  |  |
| 10 |  |  |  |  |  |  |






[^1]SIZE OF BOTTOM AREA IMAGED AT 30 in ABOVE SEABED $=30 \times 20 \operatorname{IN}(76 \times 51 \mathrm{CM})$ CONSEC STA 47 USGS STATION



HEIGHT OF CAMERA LENS ABOVE SEABED $=30 \mathrm{in}(76 \mathrm{~cm})$
SIZE OF BOTTOM AREA IMAGED AT 30 in ABOVE SEABED $=30 \times 20$ IN ( $76 \times 51 \mathrm{~cm}$ ) CONSEC STA 49 USGS STATION $4 / 50$


HEIGHT OF CAMERA LENS ABOVE SEABED $=30$ in ( 76 cm )
SIZE OF BOTTOM AREA IMAGED AT 30 in ABOVE SEABED $=30 \times 20 \mathrm{~N}(76 \times 51 \mathrm{CM})$ CONSEC STA USGS STATION


[^0]:    page valentine, usgs coastal and marine geology program. woods hole, ma
    SBNMS Site 5 . Sta

[^1]:    HEIGHT OF CAMERA LENS ABOVE SEABED -30 in ( 76 cm )

