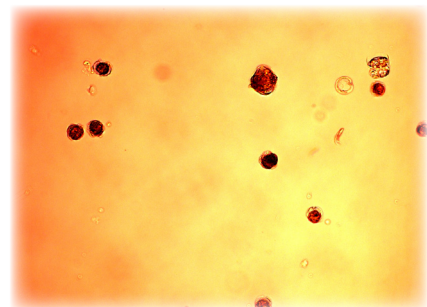


AV@ubY' bgrfi a Ybhg'MJY'X'G[b]UWbh<56'8UHU'

G'WYbh]g'g' UFY' XYd'cn]b['g]Y' YFU' X]ZZYfYbh' AV@ubY']bgrfi a Ybhg' hc' V@'YVh' X]j Yfg' j]Yk g' cZ' \Ufa Z' U[U' V'cca' 'fk56k'XUHU'



Alexandrium Cells in a Sample
Photo courtesy of Kerry Norton, WHOI

6fi W' ?YUZYfz' ?Yffm Bcfhcbz' UbX' ch\Yf' fYgU'FWYfg' Z'ca' 8f' 8cb' 5bXYfgcb' @UVz' K ccXg' <c'Y' CWUbc[fUd\]W' bgr]hi h]cb' fK <C# \Uj Y' V@'UVcfUYX' k]h' 8f' 7]bXm D]g'U' b' cZ' I !AUgg' 8Ufha ci h' g]bW' &\$\$(' i g]b[' AV@ubY' D'ntcd'Ub' hcb' GJa d'Yfg'fDDG'UbX'GYX]a Ybh'HFUdghc' ghi Xnth\Y'X]g]f]Vi h]cbz'fUbgdcf'f'UbX' XY'j] Yfm cZ' h\Y' hcl]WX]bcU[U'Y'UH' Alexandrium fundyense' V'cca g'h\Uh' Wli g'Y'X'h]Y''

b' &\$%- žg]b[b]UWbh<56 XUHk YFY' V@'YVh'X' i g]b[' AV@ubY' gJa d'Yfg'

Xi f]b[' U' fYX' h]XY' V'cca' k]h']b' h\Y' ; CACCG'Vi cmbYk cf_]b' h\Y' ; i' Z'cZ' AU]bY' H\YDDG'V@'YVh'X'5'YI UbX]f]i a' W'g'Z'ca' k]h']b' h\Y' fYX' h]XY' V'cca' UbX' ' GYX]a Ybh' HFUdghc' V@'YVh'X' U' 'Uf[Y' Ua ci bh' cZ' 5'YI UbX]f]i a' V'g]g' XYd'cg]h'X' Xck bgrfYUa']b' h\Y' V@'UghU' U'ck 'Uh'h\Y'YbX'cZ'h\Y'V'cca' " G'hi Xn]b[' a]X]g]fYUa' UbX' YbX' cZ' V'cca' V'g]g'V@'bh]f]Vi h\Y' hc' U' [fYUHYf' i bXYfg]UbX]b[' cZ'h\Y'XYj Y'cda Ybh'cZ' X]bcU[U'Y'UH' V'g]g' UbX' h\Y' V@'UghU' W'ffYbh'U'ck''

Hcl]W' U[UY' WUb' bck' VY' YI Ua]bYX' Uh' h\Y' [Ybca]W' Y]Y' i g]b[' U'bYk' AV@ubY']bgrfi a Ybh' h\Y' 9bj]f'c'ba YbhU' GJa d'Y' DfcW'ggcf' f'P'DE' " ?YUZYf' UbX' 8f' 8cb' 5bXYfgcb' UFY' i g]b[' Ub' 9GD' Zcf' U' ^c]bh' K <C# 9bj]f'c'ba YbhU' D'fchYV]cb' 5[YbW'h' f'P'DE' d'fc'YVh']b' h\Y' ; i' Z' cZ' AU]bY' " H\]g[Ybca]W'g]i Xmdfcj]XYg]Ubch\Yf' d'Yfg]d'V]m]Y' 'cb' fYX' h]XY' V'cca g' Vm]XYbh]Zn]b[UbX'V@'i bh]b[5'YI UbX]f]i a' W'g' "

H\Y' 9GD' DDG' UbX' GYX]a Ybh'HFUdghc' k]' U' VY' i gYX']b' V@'bh]bi YX' fYX' h]XY' ghi X]Yg]b' &\$%&

Photos from the Deck

K Ubh' U' bYk' AV@ubY' h'g]f]h3 J]g]h' a WUbY'UVg'V@'a' UbX'gYbX' i g'U'd\chc''



Photo: Mike Gregg, APL-UW

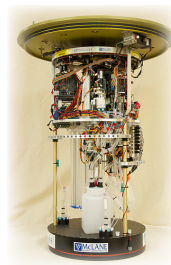
MMP, Monterey Submarine Canyon



D\chc. "F]W' ?f]g\UY'Xz'K <C#

Steel Buoy, Beaufort Sea

AV@ubY' 5bbci bWg'BYK' GJa d'Yf' 5j U]UW]]hm



K YUFY' d'YUgYX' hc' Ubbci bW' h\Y' Uj U]UW]]hm'cZ'UbYk' gJa d'Yfz' h\Y' 9bj]f'c'ba YbhU' GJa d'Y' DfcW'ggcf' f'P'DE' " K cf_]b[' k]h' 'ci' f' dUf'bh'Yfg' Uh' Acbh'YfYm' 6Um' fYg'U'FW' ' bgr]hi h'Y' UbX' Gdm] 'Ugg]' 6]cg]W'f]m' AV@ubY'f]g' U'f'g]h' 9GD' k U'g'g]dd'YX' hc' 8f' 8cb' 5bXYfgcb' Uh'K' ccXg' <c'Y' CWUbc[fUd\]W' bgr]hi h]cb']b' >i' bY''

H\Y' 9GD' V@'YVh'g' UbX' UbU'mmYg'k Uh'Yf' gJa d'Yg' in situ' i g]b[' a c'YV' Uf' d'fc'VYg' h\Uh']XYbh]Zma']W'ccf[Ub]ga g'UbX' h\Y]f' [YbY' d'fc'Xi V'g] : cf' a cFY']bZ'ca Uh]cb' g'Y' mclanelabs.com''

BYk' #HD'GYbgcf' b'hY[fU]cb

H\Y' #D']g'bck']bhY[fU]YX' k]h' h\Y' H'Y'X'nbY' F8=8cdd' Yf' JY' c'W'f'miGYbgcf' f'BJ' G' UbX' K' Yh'UVg'HF]d'Yh'gYbgcf' H\Y' 8J'G' a YUg' fYg' h\Y' j' Y' c'V'f'micZ' CWUbc' W'ffYbh]g' H\Y'K' Yh'UVghf]d'Yh' a YUg' fYg' ' k Uj Y'Yb[h'g'cZ'cdh]W' VUW'g'W'HY' H\Y' GUh'Ub]h]V' G' B5'b]f'fU]Y' gYbgcf' UbX' F6F' V@'bXi V]j]]hm]hYa d'YfU]h' fY' XYd'h' ^c[[Yf' f'7H8E' UFY' U'gc' bck']bhY[fU]YX' k]h' d'fc'U'Yf' U'fa k UFY' UbX' Y'V'f'cb]V]g'



Photo: Andrew Bowie, University of Tasmania

WTS-LV, Tasman Sea

