

# Sea-Bird Electronics, Inc.

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SENSOR SERIAL NUMBER: 1335  
CALIBRATION DATE: 15-Aug-12

SBE4 CONDUCTIVITY CALIBRATION DATA  
PSS 1978: C(35,15,0) = 4.2914 Seimens/meter

## GHIJ COEFFICIENTS

g = -3.97252295e+000  
h = 5.02171854e-001  
i = -6.88403428e-005  
j = 3.17265022e-005  
CPcor = -9.5700e-008 (nominal)  
CTcor = 3.2500e-006 (nominal)

## ABCDM COEFFICIENTS

a = 2.10600789e-005  
b = 5.01987117e-001  
c = -3.97210703e+000  
d = -8.53112368e-005  
m = 4.1  
CPcor = -9.5700e-008 (nominal)

| BATH TEMP<br>(ITS-90) | BATH SAL<br>(PSU) | BATH COND<br>(Siemens/m) | INST FREQ<br>(kHz) | INST COND<br>(Siemens/m) | RESIDUAL<br>(Siemens/m) |
|-----------------------|-------------------|--------------------------|--------------------|--------------------------|-------------------------|
| 0.0000                | 0.0000            | 0.00000                  | 2.81243            | 0.00000                  | 0.00000                 |
| -1.0000               | 34.7838           | 2.80220                  | 7.97036            | 2.80221                  | 0.00000                 |
| 1.0001                | 34.7841           | 2.97348                  | 8.18020            | 2.97349                  | 0.00001                 |
| 15.0000               | 34.7857           | 4.26826                  | 9.61725            | 4.26822                  | -0.00004                |
| 18.5000               | 34.7855           | 4.61472                  | 9.96615            | 4.61474                  | 0.00001                 |
| 29.0001               | 34.7841           | 5.69765                  | 10.98384           | 5.69771                  | 0.00006                 |
| 32.5001               | 34.7767           | 6.06988                  | 11.31190           | 6.06984                  | -0.00004                |

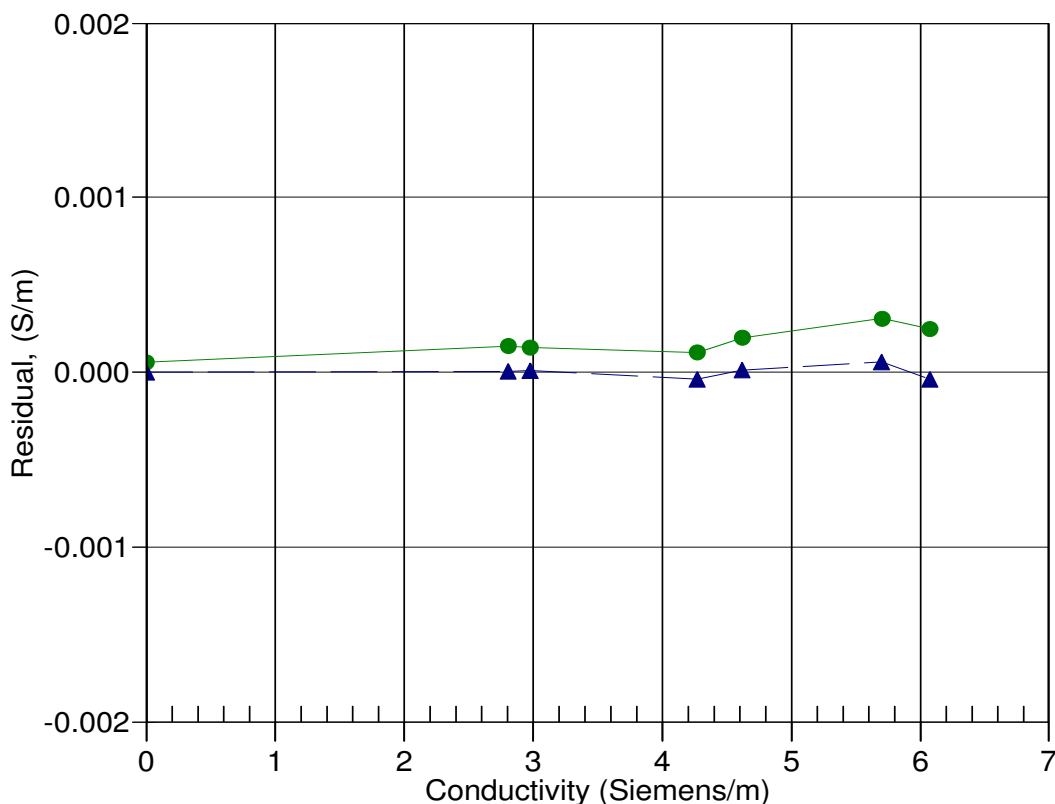
Conductivity =  $(g + hf^2 + if^3 + jf^4) / 10(1 + \delta t + \epsilon p)$  Siemens/meter

Conductivity =  $(af^m + bf^2 + c + dt) / [10(1 + \epsilon p)]$  Siemens/meter

t = temperature[°C]; p = pressure[decibars];  $\delta$  = CTcor;  $\epsilon$  = CPcor;

Residual = (instrument conductivity - bath conductivity) using g, h, i, j coefficients

Date, Slope Correction



24-Aug-10 0.9999566  
15-Aug-12 1.0000000