# Sea-Bird Electronics, Inc.

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SENSOR SERIAL NUMBER: 0026
CALIBRATION DATE: 07-Feb-17

SBE 45 CONDUCTIVITY CALIBRATION DATA
PSS 1978: C(35,15,0) = 4.2914 Siemens/meter

COEFFICIENTS:

```
g = -1.052267e+000
h =  1.461883e-001
i = -7.140502e-004
j =  7.343608e-005

CPcor = -9.5700e-008
CTcor =  3.2500e-006
WBOTC = -2.3683e-005
```

| BATH TEMP (° C) | BATH SAL (PSU) | BATH COND (S/m) | INSTRUMENT OUTPUT (Hz) | INSTRUMENT COND (S/m) | RESIDUAL (S/m) |
|---|---|---|---|---|---|
| 22.0000 | 0.0000 | 0.00000 | 2696.47 | 0.00000 | 0.00000 |
| 1.0000 | 34.6997 | 2.96695 | 5274.66 | 2.96695 | -0.00000 |
| 4.5000 | 34.6803 | 3.27315 | 5471.88 | 3.27316 | 0.00001 |
| 15.0000 | 34.6390 | 4.25216 | 6058.76 | 4.25215 | -0.00001 |
| 18.5000 | 34.6305 | 4.59637 | 6251.75 | 4.59635 | -0.00002 |
| 24.0000 | 34.6212 | 5.15280 | 6551.42 | 5.15284 | 0.00003 |
| 29.0000 | 34.6161 | 5.67321 | 6819.35 | 5.67319 | -0.00001 |
| 32.5000 | 34.6135 | 6.04461 | 7004.08 | 6.04455 | -0.00007 |

f = Instrument Output(Hz) * sqrt(1.0 + WBOTC * t) / 1000.0

t = temperature (°C); p = pressure (decibars); $\delta$ = CTcor; $\varepsilon$ = CPcor;

Conductivity (S/m) = $(g + h * f^2 + i * f^3 + j * f^4) / 10 (1 + \delta * t + \varepsilon * p)$

Residual (Siemens/meter) = instrument conductivity - bath conductivity