



Sea-Bird Scientific  
13431 NE 20<sup>th</sup> Street  
Bellevue, WA 98005  
USA

+1 425-643-9866  
seabird@seabird.com  
www.seabird.com

SENSOR SERIAL NUMBER: 1852  
CALIBRATION DATE: 25-Apr-19

SBE 37 CONDUCTIVITY CALIBRATION DATA  
PSS 1978: C(35,15,0) = 4.2914 Siemens/meter

#### COEFFICIENTS:

g = -1.059275e+000  
h = 1.511259e-001  
i = -2.005407e-004  
j = 3.996105e-005

CPcor = -9.5700e-008  
CTcor = 3.2500e-006  
WBOTC = 1.0378e-006

| BATH TEMP<br>(° C) | BATH SAL<br>(PSU) | BATH COND<br>(S/m) | INSTRUMENT<br>OUTPUT (Hz) | INSTRUMENT<br>COND (S/m) | RESIDUAL<br>(S/m) |
|--------------------|-------------------|--------------------|---------------------------|--------------------------|-------------------|
| 22.0000            | 0.0000            | 0.00000            | 2649.66                   | 0.00000                  | 0.00000           |
| 1.0000             | 34.8762           | 2.98060            | 5169.76                   | 2.98062                  | 0.00002           |
| 4.5000             | 34.8562           | 3.28812            | 5362.16                   | 3.28811                  | -0.00001          |
| 15.0000            | 34.8131           | 4.27126            | 5934.82                   | 4.27122                  | -0.00004          |
| 18.5000            | 34.8035           | 4.61685            | 6123.15                   | 4.61685                  | -0.00000          |
| 24.0000            | 34.7920           | 5.17541            | 6415.55                   | 5.17545                  | 0.00004           |
| 29.0000            | 34.7826           | 5.69742            | 6676.88                   | 5.69743                  | 0.00001           |
| 32.5001            | 34.7723           | 6.06920            | 6856.74                   | 6.06918                  | -0.00002          |

$f = \text{Instrument Output(Hz)} * \sqrt{1.0 + \text{WBOTC} * t} / 1000.0$

t = temperature (°C); p = pressure (decibars);  $\delta = \text{CTcor}$ ;  $\epsilon = \text{CPcor}$ ;

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

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

