



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: 0826  
CALIBRATION DATE: 31-Oct-18

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

COEFFICIENTS:

g = -1.056772e+000  
h = 1.559473e-001  
i = -7.323454e-005  
j = 3.299139e-005

CPcor = -9.5700e-008  
CTcor = 3.2500e-006  
WBOTC = -2.7407e-005

| 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            | 2603.68                   | 0.00000                  | 0.00000           |
| 1.0000             | 34.6969           | 2.96673            | 5071.74                   | 2.96674                  | 0.00001           |
| 4.5000             | 34.6775           | 3.27292            | 5260.59                   | 3.27290                  | -0.00001          |
| 14.9999            | 34.6358           | 4.25180            | 5822.86                   | 4.25179                  | -0.00000          |
| 18.5000            | 34.6271           | 4.59597            | 6007.85                   | 4.59597                  | -0.00000          |
| 23.9999            | 34.6179           | 5.15236            | 6295.20                   | 5.15237                  | 0.00002           |
| 29.0000            | 34.6132           | 5.67279            | 6552.32                   | 5.67278                  | -0.00001          |
| 32.5000            | 34.6109           | 6.04421            | 6729.70                   | 6.04423                  | 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

