



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: 0273  
 CALIBRATION DATE: 29-Nov-17

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

COEFFICIENTS:

g = -9.64911248e+000      CPcor = -9.5700e-008 (nominal)  
 h = 1.07914527e+000      CTcor = 3.2500e-006 (nominal)  
 i = -2.63832076e-003  
 j = 2.54412657e-004

| BATH TEMP<br>(° C) | BATH SAL<br>(PSU) | BATH COND<br>(S/m) | INSTRUMENT<br>OUTPUT (kHz) | INSTRUMENT<br>COND (S/m) | RESIDUAL<br>(S/m) |
|--------------------|-------------------|--------------------|----------------------------|--------------------------|-------------------|
| 22.0000            | 0.0000            | 0.00000            | 2.99805                    | 0.00000                  | 0.00000           |
| 1.0000             | 34.8281           | 2.97688            | 6.06246                    | 2.97688                  | 0.00001           |
| 4.5000             | 34.8075           | 3.28398            | 6.29386                    | 3.28397                  | -0.00001          |
| 15.0000            | 34.7648           | 4.26596            | 6.98184                    | 4.26596                  | -0.00000          |
| 18.5000            | 34.7557           | 4.61120            | 7.20787                    | 4.61120                  | 0.00000           |
| 24.0000            | 34.7457           | 5.16928            | 7.55864                    | 5.16929                  | 0.00000           |
| 28.9999            | 34.7404           | 5.69127            | 7.87226                    | 5.69127                  | -0.00000          |
| 32.5000            | 34.7374           | 6.06379            | 8.08843                    | 6.06379                  | -0.00000          |

f = Instrument Output (kHz)

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

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

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

