



Sea-Bird Scientific
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SENSOR SERIAL NUMBER: 0131
 CALIBRATION DATE: 17-May-22

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

COEFFICIENTS:

g = -1.01065281e+001
 h = 1.13563410e+000
 i = -2.71233129e-003
 j = 2.97104071e-004

CPcor = -9.5700e-008 (nominal)
 CTcor = 3.2500e-006 (nominal)

| BATH TEMP (° C) | BATH SAL (PSU) | BATH COND (S/m) | INSTRUMENT OUTPUT (kHz) | INSTRUMENT COND (S/m) | RESIDUAL (S/m) |
|--------------------|-------------------|--------------------|----------------------------|--------------------------|-------------------|
| 22.0000 | 0.0000 | 0.00000 | 2.99039 | 0.00000 | 0.00000 |
| 0.9999 | 34.5872 | 2.95823 | 5.92649 | 2.95825 | 0.00002 |
| 4.4999 | 34.5672 | 3.26352 | 6.14966 | 3.26350 | -0.00002 |
| 15.0000 | 34.5266 | 4.23982 | 6.81375 | 4.23981 | -0.00000 |
| 18.4999 | 34.5181 | 4.58305 | 7.03203 | 4.58305 | -0.00000 |
| 23.9999 | 34.5089 | 5.13792 | 7.37089 | 5.13793 | 0.00001 |
| 29.0000 | 34.5043 | 5.65694 | 7.67394 | 5.65695 | 0.00001 |
| 32.5000 | 34.5017 | 6.02730 | 7.88283 | 6.02729 | -0.00001 |

f = Instrument Output (kHz)

t = temperature (°C); p = pressure (decibars); δ = CTcor; ϵ = 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

