

# SEA-BIRD ELECTRONICS, INC.

1808 136th Place N.E., Bellevue, Washington, 98005 USA  
 Phone: (425) 643 - 9866 Fax (425) 643 - 9954 Email: seabird@seabird.com

SENSOR SERIAL NUMBER: 1374  
 CALIBRATION DATE: 12-Sep-03

SBE4 CONDUCTIVITY CALIBRATION DATA  
 PSS 1978: C(35,15,0) = 4.2914 Seimens/meter

## GHJ COEFFICIENTS

g = -4.32791050e+000  
 h = 5.28264070e-001  
 i = -1.13581010e-004  
 j = 3.45096068e-005  
 CPcor = -9.5700e-008 (nominal)  
 CTcor = 3.2500e-006 (nominal)

## ABCDM COEFFICIENTS

a = 1.62747480e-005  
 b = 5.27977915e-001  
 c = -4.32736373e+000  
 d = -8.76678856e-005  
 m = 4.2  
 CPcor = -9.5700e-008 (nominal)

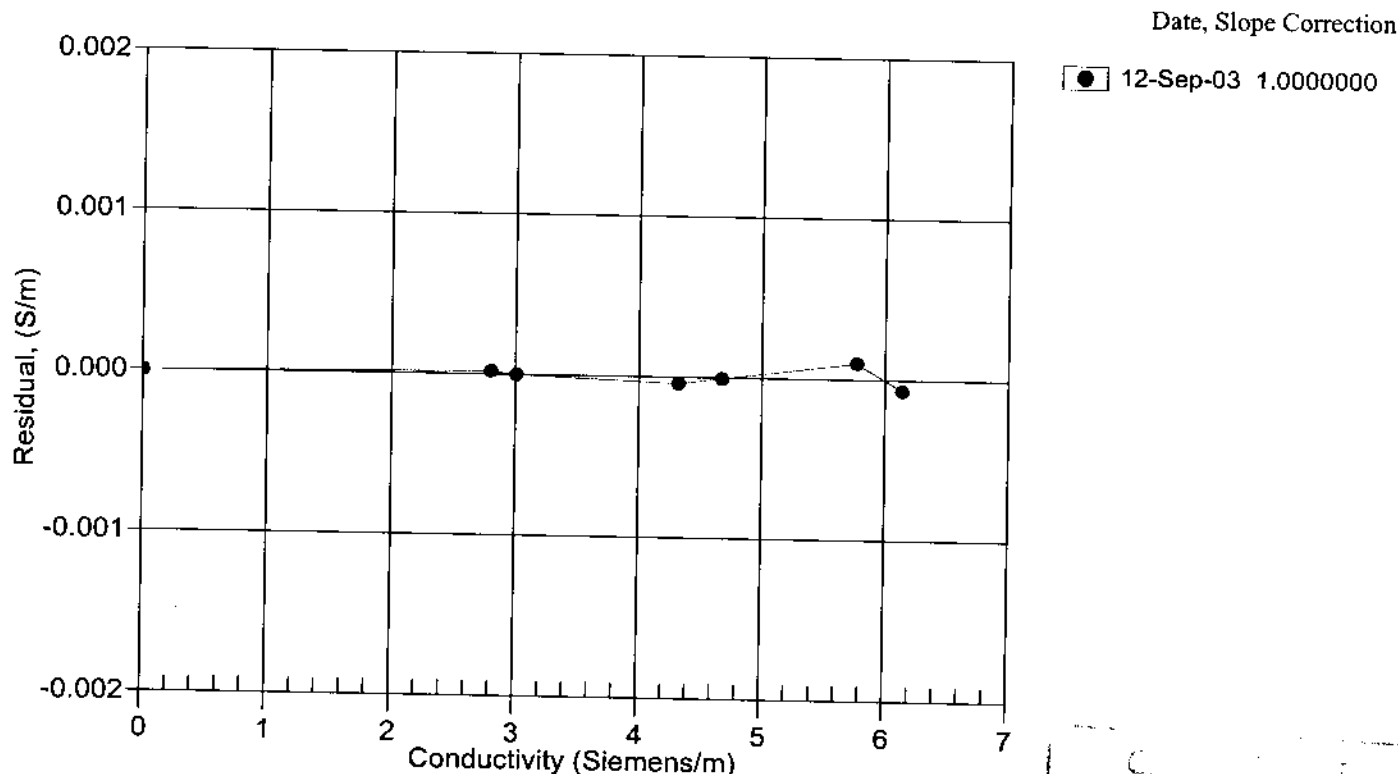
BATH TEMP (ITS-90)	BATH SAL (PSU)	BATH COND (Siemens/m)	INST FREQ (kHz)	INST COND (Siemens/m)	RESIDUAL (Siemens/m)
0.0000	0.0000	0.00000	2.86240	-0.00000	-0.00000
-1.4000	35.2521	2.80219	7.81645	2.80221	0.00002
1.0000	35.2497	3.00945	8.06215	3.00945	-0.00000
14.9999	35.2521	4.31936	9.46672	4.31932	-0.00004
18.4999	35.2525	4.66993	9.80804	4.66992	-0.00001
29.0000	35.2516	5.76552	10.80402	5.76562	0.00010
32.5000	35.2482	6.14271	11.12565	6.14264	-0.00007

Conductivity = (g + hf<sup>2</sup> + if<sup>3</sup> + jf<sup>4</sup>) / 10(1 + δt + εp) Siemens/meter

Conductivity = (af<sup>m</sup> + bf<sup>2</sup> + c + dt) / [10 (1 + εp)] Siemens/meter

t = temperature[°C]; p = pressure[decibars]; δ = CTcor; ε = CPcor;

Residual = (instrument conductivity - bath conductivity) using g, h, i, j coefficients



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AFTER Repair  
**SEA-BIRD ELECTRONICS, INC.**

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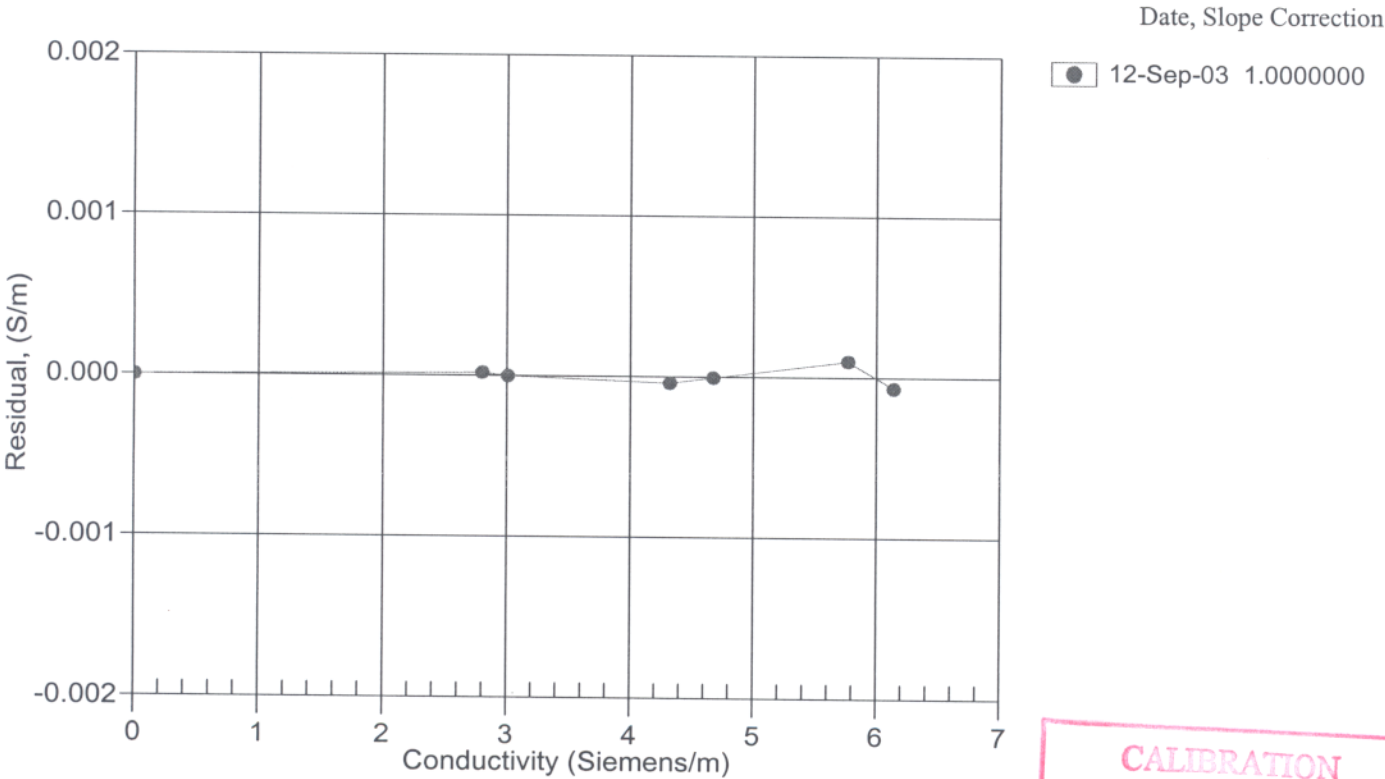
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 t = temperature[°C]; p = pressure[decibars]; δ = CTcor; ε = CPcor;  
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CALIBRATION  
 AFTER  
 MODIFICATIONS