SBE16plusV2 SeaCAT Moored

Instrument Configuration

Instrument Serial Number:	16-50217
Instrument Firmware Version:	3.1.9
Zero Conductivity Frequency:	2797.61
Communications Format:	RS232
Communications Settings:	9600 baud, 8 Data Bits, No Parity

Installed Devices/Sensors

Data Format	*Measurement*	*Sensor Type*	*Serial Number*	*Rating*
Count	Temperature	Internal	N/A	N/A
Frequency	Conductivity	Internal	N/A	N/A

Maximum Depth: 600m

CAUTION - The maximum deployment depth will be limited by the measurement range of the pressure sensor, if installed, an attached sensor, if installed, or the housing.

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SENSOR SERIAL NUMBER: 50217
CALIBRATION DATE: 04-May-17

SBE 16plus V2 TEMPERATURE CALIBRATION DATA
ITS-90 TEMPERATURE SCALE

COEFFICIENTS:

a0 = 1.250145e-003
a1 = 2.764805e-004
a2 = -1.269420e-006
a3 = 1.840898e-007

BATH TEMP (° C)	INSTRUMENT OUTPUT (counts)	INST TEMP (° C)	RESIDUAL (° C)
1.0000	554694.000	0.9999	-0.0001
4.4999	489410.600	4.5000	0.0001
15.0000	330177.400	14.9999	-0.0001
18.5000	288099.400	18.4999	-0.0001
23.9999	231435.500	24.0000	0.0001
29.0000	188659.900	29.0001	0.0001
32.5000	162974.300	32.4999	-0.0001

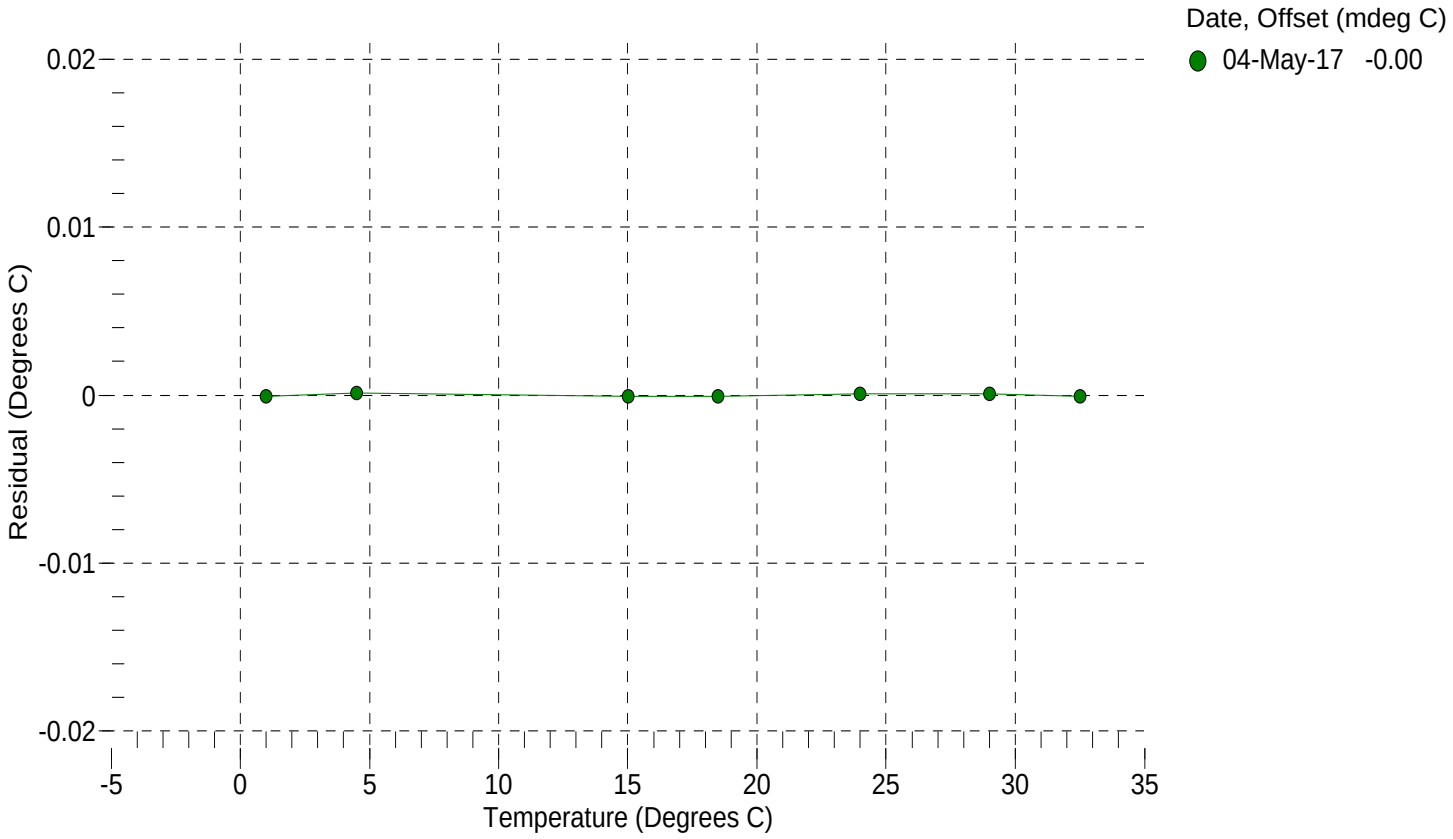
n = Instrument Output (counts)

MV = (n - 524288) / 1.6e+007

R = (MV * 2.900e+009 + 1.024e+008) / (2.048e+004 - MV * 2.0e+005)

Temperature ITS-90 (°C) = $1/\{a0 + a1[ln(R)] + a2[ln^2(R)] + a3[ln^3(R)]\} - 273.15$

Residual (°C) = instrument temperature - bath temperature



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SENSOR SERIAL NUMBER: 50217
CALIBRATION DATE: 04-May-17

SBE 16plus V2 CONDUCTIVITY CALIBRATION DATA
PSS 1978: C(35,15,0) = 4.2914 Siemens/meter

COEFFICIENTS:

```
g = -1.010016e+000
h =  1.292356e-001
i = -1.407343e-004
j =  2.647615e-005

CPcor = -9.5700e-008
CTcor =  3.2500e-006
```

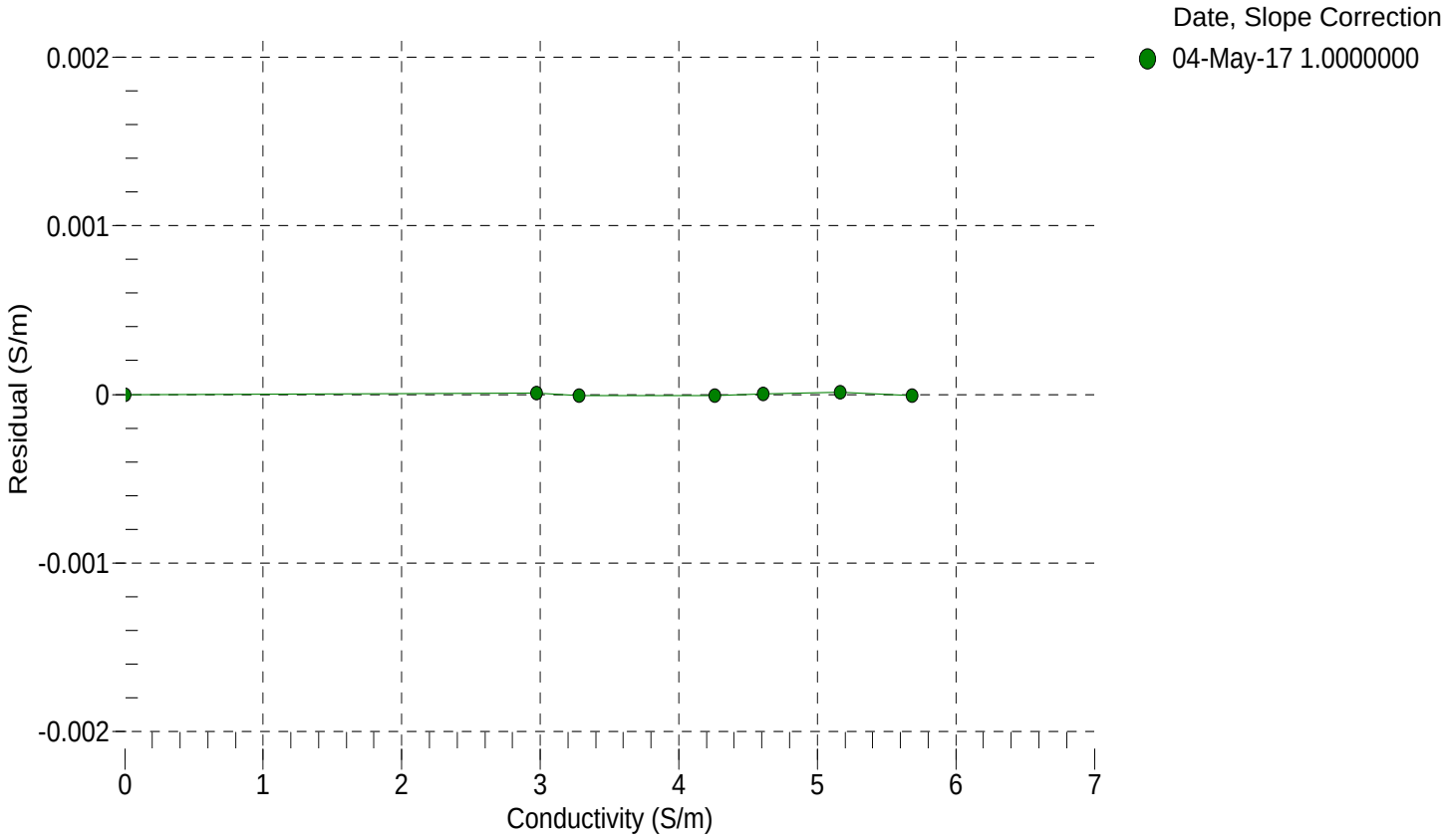
BATH TEMP (° C)	BATH SAL (PSU)	BATH COND (S/m)	INSTRUMENT OUTPUT (Hz)	INSTRUMENT COND (S/m)	RESIDUAL (S/m)
22.0000	0.0000	0.00000	2797.61	0.0000	0.00000
1.0000	34.7898	2.97392	5551.47	2.9739	0.00001
4.4999	34.7700	3.28078	5760.57	3.2808	-0.00001
15.0000	34.7271	4.26183	6382.57	4.2618	-0.00001
18.5000	34.7183	4.60677	6587.06	4.6068	0.00000
23.9999	34.7090	5.16442	6904.54	5.1644	0.00001
29.0000	34.7045	5.68606	7188.50	5.6861	-0.00001
32.5000	34.7026	6.05840	7384.26	6.0583	-0.00014

f = Instrument Output (Hz) / 1000.0

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

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

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



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Pressure Test Certificate

Test Date: 2017-05-01

Description: SBE-16P SeaCat

Sensor Information:

Model Number: SBE-16P

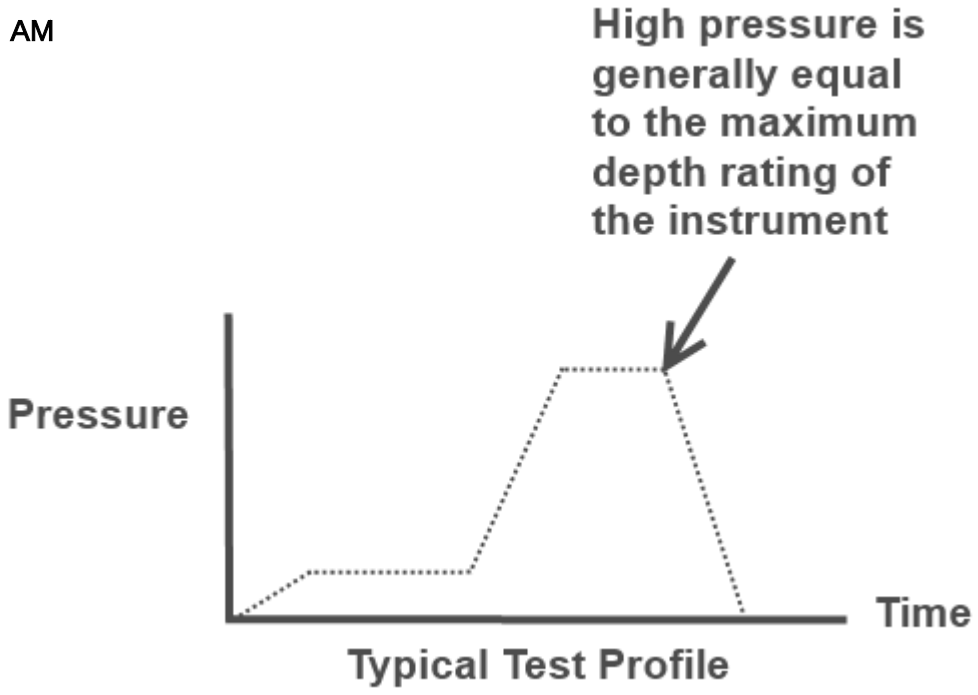
Serial Number: 50217

Pressure Test Protocol:

Low Pressure Test:	40	PSI	Held For:	15	Minutes
High Pressure Test:	870	PSI	Held For:	15	Minutes

Passed Test: True

Tested By: AM



Typical Test Profile