



sercon
The *Stable* Isotope Company

TOC-Cryoprep-IRMS



SerCon have combined the power of TOC analysis with the analytical prowess of the SerCon CryoPrep

Providing High Precision ^{13}C analysis from dissolved Carbon

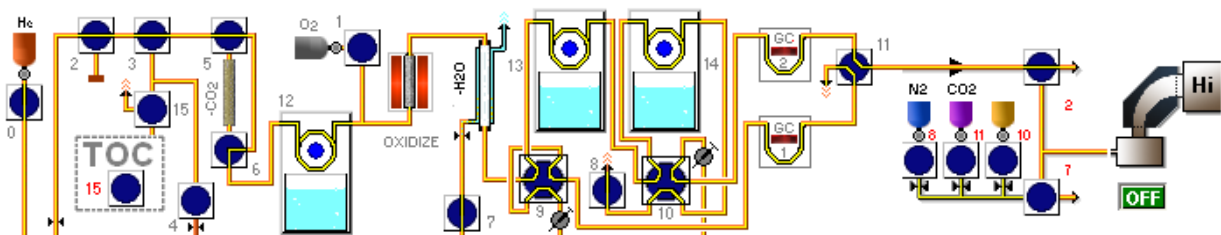
Interfaces with all TOC manufacturer's instrumentation, combustion or chemical oxidation

Capable of all standard CryoPrep atmospheric trace gas analysis and more

Designed to operate with the revolutionary SerCon 20-20 IRMS and SerCon Elemental Analysers

Compatible with all elemental analyzer and IRMS combinations

The TOC-CryoPrep provides the most capable environmental stable isotope monitoring system



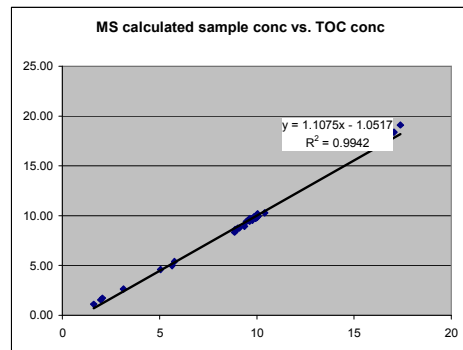
Actual Screen Graphic from SerCon Callisto Software

Designed following requests from environmental scientists, the TOC-CryoPrep interface permits the analysis of water samples for dissolved carbon (TIC, TOC, TC) at ultra-low sample volumes and ultra low concentrations.



Example data set, produced by interfacing with Analytical Sciences Thermalox TOC-TN system. Injection volumes of 160ul, concentrations of 10ppm to 0.5ppm carbon.

1 qc	160	1.30E-07	-28.33321226				9.933884	9.74
2 qc	160	1.30E-07	-28.85730454				10.0594	9.92
3 qc	160	1.31E-07	-28.18468775				10	9.84
4 CO2 TOC_	160	1.31E-07	-28.29996901					8.92
5 TM	160	1.22E-07	-24.68646286	Soil Extract			9.361613	8.76
6 TM	160	1.18E-07	-24.49184887		-24.53867379		9.018484	8.76
7 TM	160	1.18E-07	-24.76265338		0.180629775		9.088719	8.76
8 TM	160	1.17E-07	-24.33429007				8.993385	8.69
9 TM	160	1.15E-07	-24.41811377				8.854167	8.34
10 SU10	160	1.27E-07	-25.64856352				9.764043	9.54
11 qc	160	1.35E-07	-28.00322258				10.40416	10.30
12 CO2 TOC_	160	1.30E-07	-28.29996901				10	9.85
13 TM20	160	1.15E-07	-23.90941041	Soil Extract			8.873012	8.62
14 TM10	160	6.54E-08	-23.13215734		-22.57766094		5.043743	4.60
15 TM5	160	4.06E-08	-22.25273891		1.241548687		3.139335	2.64
16 TM1	160	2.08E-08	-21.01633708				1.604818	1.12
17 SU10	160	1.22E-07	-25.68900919				9.460628	9.42
18 qc	160	1.30E-07	-28.3201184				10.0601	9.98
19 CO2 TOC_	160	1.29E-07	-28.29996901				10	9.83
20 SU10	160	1.27E-07	-26.22612515	Sucrose 10ppm			9.876056	9.91
21 SU10	160	1.24E-07	-25.82553077		-26.00411739		9.620165	9.71
22 SU10	160	1.25E-07	-26.1073471		0.161214857		9.679394	9.65
23 SU10	160	1.24E-07	-25.95697099				9.625418	9.43
24 SU10	160	1.24E-07	-25.90461293				9.630647	9.54
25 qc	160	1.29E-07	-28.36100312				10.02822	10.20
26 CO2 TOC_	160	1.29E-07	-28.29996901				10	10.00
27 SU20	160	2.20E-07	-26.5709551	Sucrose 20 to 1ppm			17.05052	18.39
28 SU20	160	2.24E-07	-26.71689129		-24.85796348		17.37248	19.10
29 SU10	160	1.25E-07	-25.68988058		1.739569483		9.734718	9.70
30 SU10	160	1.27E-07	-25.73437763				9.850638	9.89
31 SU5	160	7.42E-08	-24.6110183				5.760053	5.41
32 SU5	160	7.26E-08	-24.99628175				5.634025	4.99
33 SU1	160	2.65E-08	-22.37081403				2.05601	1.73
34 SU1	160	2.53E-08	-22.19348912				1.960129	1.57
35 qc	160	1.28E-07	-28.42389363				9.966611	10.00
36 CO2 TOC_	160	1.29E-07	-28.29996901				10	10.10



QC 10ppm in DI Sucrose through Run
 -28.27705943 -25.74739521
 0.187481129 0.137648178