Measurement of Copper, Zinc, Lead, and Chromium in Marine Mud Samples by Microwave Digestion ICP-OES Using Chemometric t-Test

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Supporting Information

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Table S1.The calculation process of independent sample T-test analysis between the sea mud and GSB07-3903-2021

Group Statistics

	DS	N	Mean	Std. Deviation	Std. Error Mean
DE	1.00	4	66.2398	34.43531	17.21765
	2.00	4	182.2228	127.24817	63.62408

Independent Samples Test

		Levene's Test for Equality of Variances	t-test for Equality of Means
		P.	P. (2-tailed)
DE	Equal variances assumed	0.009	0.129
	Equal variances not assumed		0.165

Table S2.The calculation process of independent sample T-test analysis between the sea mud and GSS-4

Group Statistics

	DS	N	Mean	Std. Deviation	Std. Error Mean
DE	1.00	4	182.2228	127.24817	63.62408
	2.00	4	174.2155	153.87307	76.93654

Independent Samples Test

		Levene's Test for Equality of Variances	t-test for Equality of Means
		P.	P. (2-tailed)
DE	Equal variances assumed	0.776	0.939
	Equal variances not assumed		0.939

Table S3.The calculation process of independent sample T-test analysis between the sea mud and GSS-5

Group Statistics

	DS	N	Mean	Std. Deviation	Std. Error Mean
DE	1.00	4	182.2228	127.24817	63.62408
	2.00	4	312.9620	234.90536	117.45268

Independent Samples Test

		Levene's Test for Equality of Variances	t-test for Equality of Means
		P.	P. (2-tailed)
DE	Equal variances assumed	0.089	0.366
	Equal variances not assumed		0.376

Table S4.The calculation process of independent sample T-test analysis between ICP-MS and this research method ICP-OES

Group Statistics

	DS	N	Mean	Std. Deviation	Std. Error Mean
Cu	1.00	6	432.5968	7.87386	3.21449
	2.00	6	440.7481	6.19695	2.52989
Zn	1.00	6	308.3002	0.98578	0.40244
	2.00	6	308.6312	7.82308	3.19376
Cr	1.00	6	63.0172	0.29023	0.11849
	2.00	6	61.6931	1.99075	0.81272
Pb	1.00	6	42.6155	0.83452	0.34069
	2.00	6	41.8322	1.07357	0.43828

Independent Samples Test

		Levene's Test for Equality of Variances	t-test for Equality of Means
		P.	P. (2-tailed)
Cu	Equal variances assumed	0.818	0.074
	Equal variances not assumed		0.076
Zn	Equal variances assumed	0.003	0.920
	Equal variances not assumed		0.922

Cr	Equal variances assumed	0.001	0.138
	Equal variances not assumed		0.165
Pb	Equal variances assumed	0.893	0.189
	Equal variances not assumed		0.190

Note: DE=Different elements; DS=Different samples; N=Number.