

Reference Material and Inter-laboratory Quality Control Materials Product Summary

December 2021

Version: 2

Assigned Values: Values provided have been generated from an Inter-Laboratory Proficiency Programme (ILPP). The reference material values provided in this summary are the mean of the results after the exclusion of statistical outliers. The Assigned Range provided for the Inter-laboratory QC Materials is the range of test values available for purchase. Each Reference and QC Material comes with a Data Summary Sheet.

Missing Values and Available Tests: For Reference Materials where property values do not meet the statistical criteria, the summary values have not been provided. For this reason, not all tests will be available for every Reference Material of the same matrix. However, if there are 3 or more data points available, an Assigned Value will be provided with the corresponding QC material.

Sample Sizes: Available sample sizes are shown for reference materials.

Reference Materials: Soil Material

Product Type	Soil	Soil	Soil	Soil	Soil	Soil	Soil
Product ID	603-C-2	444-C-1	652-C-1	619-C-1	620-C-1	651-C-1	650-C-1
Expiry Date	31 Mar 23	30 Jun 23	30 Jan 24	30 Jun 24	30 Jun 24	31 Mar 25	30 Jun 25
Sample Size	150g	150g	150g	150g	150g	150g	150g
CaCl ₂ Extractable B (mg/kg)	0.799		0.304	0.425	1.37	1.91	0.863
Colwell P (mg/kg)	20.7		225	11.5	24.7	67.1	64.3
Electrical Cond (dS/m)	0.221	0.159	0.0847		0.176		0.233
Exch Calcium (cmol+/kg)	31.8		3.75	0.729	12.4	22.1	15.0

Exch Magnesium (cmol+/kg)	8.92		0.733	0.496	5.87	27.5	4.79
Exch Potassium (cmol+/kg)	1.25		0.578	0.191	1.14	0.862	0.575
Exch Sodium (cmol+/kg)	1.11		0.0379	0.0520	0.217	0.956	0.0497
Ext Copper (mg/kg)	2.00		0.348	0.240	1.52	3.40	
Ext Iron (mg/kg)	11.3		232	211	18.6	15.1	84.6
Ext Manganese (mg/kg)		4.92	34.0	5.27	41.2	98.6	72.9
Ext Zinc (mg/kg)	0.336	0.474	4.52	1.21	1.97	1.10	
Organic Carbon W&B (%)	0.707		1.58	1.47	0.736	2.02	1.60
PBI Colwell (L/kg)	115					92.2	69.9
pH CaCl2 (pH units)			4.74	4.00		7.74	
pH Water (pH units)	8.36	7.54			7.99	8.39	6.47
Total Carbon (%)	0.904	0.720	1.76	1.64	0.882	2.50	1.88
Total Nitrogen (%)	0.0823		0.197		0.0881	0.229	0.188

QC Material: Soil Material

Matrix: Soil Material	Product ID	10589-QC	11127-QC
	Process Run	PR9660	PR9660
	Expiry Date	30 Sep 26	30 Sep 26
	Sample Size	150g	150g
	Acid P (mg/kg)	23.5	38.8
	Bray P (mg/kg)	10.3	3.72
	CaCl ₂ Extractable B (mg/kg)	0.829	3.36
	Colwell P (mg/kg)	20.7	7.14
	Electrical Cond (dS/m)	0.212	2.64
	Exch Aluminium (cmol+/kg)	2.00	0.0040
	Exch Calcium (cmol+/kg)	2.44	36.4
	Exch Magnesium (cmol+/kg)	2.38	15.8
	Exch Potassium (cmol+/kg)	0.364	0.533
	Exch Sodium (cmol+/kg)	0.398	11.1
	Ext Copper (mg/kg)	0.963	1.09
	Ext Iron (mg/kg)	276	7.90
	Ext Manganese (mg/kg)	15.1	21.3
	Ext Sulphur (mg/kg)	44.1	1795
	Ext Zinc (mg/kg)	1.91	0.588
	Olsen P (mg/kg)	7.66	2.53

	Organic Carbon W&B (%)	3.64	0.525
	PBI Colwell (L/kg)	276	84.5
	pH CaCl2 (pH units)	4.21	7.88
	pH Water (pH units)	4.74	8.10
	Total Carbon (%)	4.06	0.790
	Total Nitrogen (%)	0.241	0.0330
	Total Organic Carbon (%)	4.03	0.567
	Total Phosphorus (%)	0.0180	0.0140
	Water Ext Cl (mg/kg)	53.2	476