

## Reference Material and Inter-laboratory Quality Control Materials Product Summary

July 2024

Version: 1

**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.

*Ordering Reference Materials and/or Quality Control Materials, acknowledges you have read and understood our terms and conditions. These can be found at: <https://www.global-proficiency.com/terms-conditions>*

### Reference Materials: Soil Material

Product Type	Soil	Soil
Product ID	803-C-1	804-C-1
Expiry Date	31 Jan 27	30 Jun 27
Sample Size	150g	150g
Electrical Cond (dS/m)	0.0684	0.345
Exch Magnesium (cmol+/kg)	1.09	
Exch Potassium (cmol+/kg)	0.744	0.750
pH CaCl <sub>2</sub> (pH units)	4.12	6.74



---

<b>pH Water (pH units)</b>		7.32
<b>Total Carbon (%)</b>	0.945	2.12
<b>Total Nitrogen (%)</b>	0.0801	0.137
<b>Total Organic Carbon (%)</b>		2.13
<b>Total Phosphorus (%)</b>	0.0413	0.0224

**QC Material: Soil Material**

Matrix: Soil Material	Product ID	12905-QC	13039-QC	13957-QC	13953-QC	13958-QC	13959-QC	13964-QC	13965-QC
	Process Run	PR10728	PR10728	PR10916	PR11098	PR11098	PR11098	PR11403	PR11403
	Expiry Date	31 Jan 27	30 Jun 27	05 Jun 28	11 Sep 28	11 Sep 28	11 Sep 28	01 Mar 29	01 Mar 29
	Sample Size	150g	150g	150g	150g	150g	150g	150g	150g
	Acid P (mg/kg)	42.3	90.0	10.1	321	53.3	6.20	46.8	168
	Bray P (mg/kg)	20.3	36.3	7.82	80.4	13.2	1.87	33.4	61.3
	CaCl2 Extractable B (mg/kg)	0.523	0.810	0.500	2.17	0.521	1.05	0.204	1.34
	Colwell P (mg/kg)	52.5	45.9	14.8	168	29.0	16.0	34.5	92.2
	Electrical Cond (dS/m)	0.0680	0.340	0.0940	0.266	0.322	0.529	0.264	0.161
	Exch Aluminium (cmol+/kg)	0.983	0.0100	0.454	0.0190	0.0120	0.0110	0.0370	0.0150
	Exch Calcium (cmol+/kg)	1.80	7.81	1.65	15.0	13.6	23.0	4.03	6.92
	Exch Magnesium (cmol+/kg)	1.14	1.80	0.916	4.21	2.13	6.99	0.540	3.20
	Exch Potassium (cmol+/kg)	0.745	0.744	0.145	1.27	0.277	1.73	0.815	1.00
	Exch Sodium (cmol+/kg)	0.110	0.854	0.152	0.331	0.330	0.704	0.0410	0.357
	Ext Copper (mg/kg)	2.03	1.60	0.408	1.71	1.03	3.30	0.530	0.788
	Ext Iron (mg/kg)	78.3	134	390	87.2	99.2	84.5	56.1	49.7
	Ext Manganese (mg/kg)	194	9.50	7.22	51.3	8.48	22.9	70.3	31.9
	Ext Sulphur (mg/kg)	27.0	56.6	15.9	81.8	97.0	213	30.3	13.2
	Ext Zinc (mg/kg)	3.58	15.1	2.44	16.3	9.32	12.4	2.24	12.4
	Olsen P (mg/kg)	17.5	18.2	8.40	68.2	11.9	5.61	15.8	40.1
	Organic Carbon W&B (%)	0.768	1.89	1.83	3.76	1.51	1.23	1.05	1.53

	<b>PBI Colwell (L/kg)</b>	97.7	60.3	71.0	60.5	82.0	153	36.0	49.5
	<b>pH CaCl2 (pH units)</b>	4.09	6.74	4.39	6.22	7.66	7.40	5.20	6.67
	<b>pH Water (pH units)</b>	4.88	7.30	5.06	6.74	8.12	7.75	5.70	7.32
	<b>Total Carbon (%)</b>	0.939	2.10	1.97	4.25	1.66	1.48	1.20	1.70
	<b>Total Nitrogen (%)</b>	0.0760	0.134	0.115	0.249	0.110	0.154	0.119	0.150
	<b>Total Organic Carbon (%)</b>	0.902	2.06	1.87	4.03	1.57	1.33	1.20	1.65
	<b>Total Phosphorus (%)</b>	0.0420	0.0220	0.0080	0.0570	0.0170	0.0180	0.0230	0.0370
	<b>Water Ext Cl (mg/kg)</b>	8.16	183	24.5	41.0	39.8	16.2	15.7	32.3