

Report No: CA_CANSA_140506

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Scope: Analysis of water samples to obtain baseline data.

Water samples were supplied by CANSA. Samples were acidified to pH < 2 prior to inductively coupled plasma mass spectrometry (ICP-MS) analysis, which was performed on an Agilent 7700 system. Samples were filtered prior to ion chromatographic analysis (IC) which was performed on a Waters Breeze HPLC system using an IC Pak A column with Borate Gluconate buffer.

	Method(Units)	Albrechts 3/6	Albrechts 4/6
Aluminium	ICP-MS (mg/L)	0.002	0.002
Vanadium	ICP-MS (µg/L)	0.05	0.04
Chromium	ICP-MS (µg/L)	0.11	0.09
Manganese	ICP-MS (mg/L)	0.029	0.029
Iron	ICP-MS (mg/L)	0.163	0.193
Cobalt	ICP-MS (µg/L)	0.24	0.23
Nickel	ICP-MS (mg/L)	0.001	0.001
Copper	ICP-MS (mg/L)	0.001	0.001
Zinc	ICP-MS (mg/L)	0.011	0.012
Arsenic	ICP-MS (µg/L)	0.24	0.26
Selenium	ICP-MS (mg/L)	< 0.001	< 0.001
Molybdenum	ICP-MS (mg/L)	0.003	0.003
Cadmium	ICP-MS (µg/L)	0.01	0.01
Tin	ICP-MS (mg/L)	< 0.0001	< 0.0001
Antimony	ICP-MS (µg/L)	0.17	0.17
Mercury	ICP-MS (mg/L)	< 0.0001	< 0.0001
Strontium	ICP-MS (mg/L)	1.531	1.491
Uranium	ICP-MS (mg/L)	0.006	0.006
Lead	ICP-MS (µg/L)	0.31	0.28
Barium	ICP-MS (mg/L)	< 0.1	< 0.1
Calcium	ICP-MS (mg/L)	95.05	98.56
Potassium	ICP-MS (mg/L)	1.43	1.43
Magnesium	ICP-MS (mg/L)	28.36	28.25
Sodium	ICP-MS (mg/L)	69.01	69.70
Phosphorous	ICP-MS (mg/L)	< 0.05	< 0.05
Silicon	ICP-MS (mg/L)	11.61	11.60
Ammonia	Enzymatic (mg/L)	<0.3	<0.3
Chloride	IC (mg/L)	45.6	47.5
Sulphate	IC (mg/L)	66.9	65.3
Nitrate	IC (mg/L)	<0.5	<0.5
Nitrite	IC (mg/L)	<0.5	<0.5

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