PARAMETER	BAK-1	BAK-2	BAK-3	BAK-4	NOTES
PH	7.04	7.34	7.09	6.88	pH should range between 6-9 in accordance with the licence and in drinking water quality standards the range should be from 6.5 - 8.5. ***Based on results submitted all samples fall within the acceptable range.*** Low pH may cause corrosion of some pipes. High pH may cause incrustation and scaling problems. High pH also progressively decreases chlorine disinfection efficiency.
Conductivity	30.7 µS/cm	75.3 µS/cm	56.7 µS/cm	65.0 µS/cm	Conductivity establishes a degree of mineralization to assess the effect of total concentration of ions on chemical equilibria, physiological effect on plants or animals, corrosion rates, etc. Conductivity in potable waters generally ranges from 50 to 1500 µS/cm. ***Based on results submitted all samples fall within the acceptable range.***
Calcium	2.80 mg/L	4.68 mg/L	5.74 mg/L	6.36 mg/L	Calcium contributes to the hardness of water. Although there is no guideline for Calcium, less than 75 mg/L is considered “Soft Water” and more than 300 mg/L is considered “Hard Water”. Small concentrations of calcium, combats corrosion of metal pipes. Large amounts of Calcium salt precipitate of heating to form harmful scale deposits. ***Baker Lake has soft water.***
Magnesium	1.17 mg/L	0.80 mg/L	1.02 mg/L	1.06 mg/L	Magnesium contributes to hardness. Magnesium Salt breaks down during boiling and forms scales in boilers. Although magnesium may contribute to undesirable tastes to drinking water, there is no evidence of adverse health effects attributed to magnesium in drinking water. There is no maximum acceptable concentration specified for Magnesium. Concentrations may vary from zero to several hundred mg/L

PARAMETER	BAK-1	BAK-2	BAK-3	BAK-4	NOTES
					depending on source and treatment of water. ***Based on results submitted all samples fall within the acceptable range.***
Tot-Hardness	11.8 mg/L	15.0 mg/L	18.5 mg/L	20.2 mg/L	Water hardness is caused by dissolved polyvalent metallic ions, principally Calcium and Magnesium. Hard waters have a tendency to form scale deposits. Soft water may result in corrosion of water pipes. Depending on other factors, hardness levels between 80 and 100 mg/L are considered to provide an acceptable balance between corrosion and incrustation. Water supplies with a hardness greater than 200 mg/L are considered poor but tolerated by consumers; those in excess of 500 mg/L are unacceptable for most domestic purposes. ***Based on results submitted all samples fall within the acceptable range.***
Sodium	1.34 mg/L	4.05 mg/L	2.60 mg/L	3.68 mg/L	At extremely high doses, Sodium can have toxic effects on the human body. The Aesthetic Objective of Sodium is 200 mg/L ***Based on results submitted all samples fall within the acceptable range.***
Potassium	0.73 mg/L	1.48 mg/L	0.80 mg/L	1.07 mg/L	Potassium ranks seventh among the elements in order of abundance . Concentration in drinking water seldom reaches 20 mg/L ***Based on results submitted all samples fall within the acceptable range.***
Sulphate	3 mg/L	6 mg/L	7 mg/L	8 mg/L	Water containing magnesium sulphate at levels above 1000 mg/L acts as a purgative in human adults. Lower concentrations may affect new users and children. Ingestion of water containing magnesium sulphate in excess of 600 mg/L can cause diarrhoea in children. The Aesthetic Objective of sulphate in drinking water is 500 mg/L. ***Based on results submitted all samples fall within the acceptable range.***

PARAMETER	BAK-1	BAK-2	BAK-3	BAK-4	NOTES
Tot-Sus. Solid	14 mg/L	3 mg/L	3 mg/L	25 mg/L	Total Suspended Solids refer mainly to the inorganic substances that are dissolved in water. The effects depend on levels of individual components; excessive hardness, taste, mineral deposition and corrosion are common properties of highly mineralized water. The Aesthetic Objective for TSS in drinking water is 500 mg/L. ***Based on results submitted all samples fall within the acceptable range.***
no3-n+no4-n	0.044 mg/L	0.257 mg/L	0.074 mg/L	0.114 mg/L	Nitrates are used as protein by plants and algae to stimulate growth. In freshwaters, the guideline concentration is 0.06 mg/L to avoid concentrations that stimulate prolific weed growth. The maximum allowable concentration for drinking water is 1 for nitrite and 10 for nitrate. ***Based on results submitted all samples fall within the acceptable range.***
Ammonia-N	0.005 mg/L	1.69 mg/L	0.191 mg/L	0.241 mg/L	Concentrations of ammonia and ammonia compounds in water are generally below 0.1 mg/L. The guideline concentration for ammonia in freshwater is 2.2 mg/L. ***Based on results submitted all samples fall within the acceptable range.***
Tot. Organic Carbon (water)	3.5 mg/L	4.9 mg/L	4.1 mg/L	4.6 mg/L	Total organic carbon is a direct expression of total organic content which is independent of the oxidation state of the organic matter and does not measure other organically bound elements such as nitrogen and hydrogen and inorganics that can contribute to the oxygen demand measured by the Biological Oxygen Demand and the Chemical Oxygen Demand. Typical values for wastewater range from 80 to 290 mg/L. ***Based on results submitted all samples fall within the acceptable range.***
Total Arsenic by Graphite F	2µg/L	2µg/L	2µg/L	2µg/L	Arsenic is classified as being carcinogenic to humans. The maximum allowable concentration for freshwater is 0.05 mg/L

PARAMETER	BAK-1	BAK-2	BAK-3	BAK-4	NOTES
					(50 µg/L). ***Based on results submitted all samples fall within the acceptable range.***
Tot-Cadmium	0.3µg/L	0.3µg/L	0.3µg/L	0.3µg/L	The maximum allowable concentration of cadmium is 0.005 mg/L (5 µg/L) ***Based on results submitted all samples fall within the acceptable range.***
Tot-Chromium	3µg/L	3µg/L	3µg/L	3µg/L	Chromium's maximum allowable concentration for drinking water is 0.05 mg/L. The maximum allowable concentration for freshwater, to protect fish, is 0.02 mg/L (20 µg/L) ***Based on results submitted all samples fall within the acceptable range.***
Tot-Copper	2µg/L	3µg/L	2µg/L	2µg/L	Copper in public water supplies enhances corrosion of aluminum and zinc and imparts an undesirable bitter taste to water. Staining of laundry and plumbing fixtures occurs at copper concentrations above 1.0 mg/L (1000 µg/L) The Aesthetic Objective for copper for freshwater varies from 0.002 to 0.005 mg/L (2 to 5 µg/L), depending on hardness. ***Based on results submitted all samples fall within the acceptable range.***
Tot-Iron	0.36 mg/L	0.43 mg/L	0.35 mg/L	1.36 mg/L	The Aesthetic Objective for iron in drinking water is 0.3 mg/L. At concentrations above 0.3 mg/L, iron can stain laundry and plumbing fixtures and cause undesirable tastes. It also causes the water to turn a reddish-brown colour. ***Based on results submitted all samples fall within the acceptable range.***
Tot-Nickel	1µg/L	1µg/L	1µg/L	1µg/L	The Maximum allowable concentration for Nickel varies from 0.025 mg/L to 0.15 mg/L (25 µg/L to 150 µg/L), depending on hardness. ***Based on results submitted all samples fall within the acceptable range.***
Tot-Lead	1µg/L	1µg/L	1µg/L	2µg/L	Lead is a cumulative general poison, with foetuses, infants, young children and pregnant women being most susceptible

PARAMETER	BAK-1	BAK-2	BAK-3	BAK-4	NOTES
					to adverse health effects. The maximum allowable concentration for lead varies from 0.001 to 0.007 mg/L (1 to 7 µg/L), depending on levels of hardness. ***Based on results submitted all samples fall within the acceptable range.***
Tot-Zinc	10µg/L	10µg/L	10µg/L	14µg/L	Water containing zinc at concentrations in excess of 5.0 mg/L (5000 µg/L) has an undesirable astringent taste and may be opalescent and develop a greasy film. The aesthetic objective for zinc for drinking water is 5.0 mg/L (5000 µg/L). The aesthetic objective for freshwater is 0.03 mg/L (30 µg/L). ***Based on results submitted all samples fall within the acceptable range.***
Tot-Mercury	0.01 µg/L	0.01 µg/L	0.01 µg/L	0.01 µg/L	Mercury is a toxic element that causes irreversible neurological symptoms. The maximum allowable concentration of mercury in drinking and freshwater is 0.001 mg/L (1 µg/L). ***Based on results submitted all samples fall within the acceptable range.***
Phenols	2.00 µg/L	2.00 µg/L	2.00 µg/L	2.00 µg/L	Phenols are derivatives of benzene. Phenol removal process includes superchlorination, chlorine dioxide treatment, ozonation and activated carbon adsorption. Chlorination may produce objectionable taste and odors. The maximum allowable concentration of benzene in drinking water is 0.005 mg/L (5µg/L). ***Based on results submitted all samples fall within the acceptable range.***
Oil&Grease	No bottle	No bottle	No bottle	No bottle	Oil and grease are materials recovered as substance soluble in a solvent. The aesthetic objective for oil and grease is 5 mg/L, or not visible on water surface.

Aesthetic Objective: Aesthetic Objectives apply to certain substances or characteristics of water that can affect its acceptance by consumers or interfere with for supplying good quality water. Where only Aesthetic Objectives are specified, these values are below those considered to constitute a health hazard. However, if a concentration in drinking water is well above an Aesthetic Objective, there is a possibility of a health hazard.

Maximum Acceptable Concentration: Maximum Acceptable Concentrations have been established for certain substances that are known or suspected to cause adverse effects on health. Drinking water that continually contains a substance at a level greater than its Maximum Acceptable Concentration will contribute significantly to consumers' exposure to the substance and may, in some instances , induce deleterious effects on health. However, short term excursions above the Maximum Acceptable Concentration do not necessarily mean that the water constitutes an undue risk to health.