

**APPENDIX 1 : Specific Methods used for the Analysis of Parameters indicated in this report.**

Parameter	Method	Estimated Uncertainty (%)
pH (at 25 °C) - Lab	SABS 11 : (1990 – 3 <sup>rd</sup> Revision)	0,019
pH (at 25 °C) – Field*	SABS 11 : (1990 – 3 <sup>rd</sup> Revision)	-
Langelier Saturation Index (at 25 °C)*	Calculation	-
Conductivity (mS/m) (at 25 °C)	STD Method 2501 A (1992)	2,15
Turbidity (NTU)	Hach 8237	1,81
Colour (mg/l as Pt)*	Hach 8025	-
Total Alkalinity (mg/l as CaCO <sub>3</sub> )*	STD Methods 2320 (1992)	-
Total Hardness (mg/l as CaCO <sub>3</sub> )	SABS SM 1265 (2000)	0,09
Calcium (mg/l as CaCO <sub>3</sub> )	SABS SM 1265 (2000)	0,09
Magnesium (mg/l as CaCO <sub>3</sub> )	SABS SM 1265 (2000)	0,08
Chloride (mg/l as Cl)	SABS 202 (2 <sup>nd</sup> Revision)	0,08
Fluoride (mg/l as F)	Hach 8029	0,19
Iron (µg/l as Fe)	SANS 5207 (2004)	0,09
Manganese (µg/l as Mn)	SANS 5209 (2005)	0,09
Aluminium (µg/l as Al)	SANS 6169 (2005)	0,14
Calcium Carbonate Precipitation Potential*	Calculation	-
Free Chlorine (mg/l)*	Lovibond Method 3	-
Sodium (mg/l as Na)	SANS 6050 (2004)	0,08
Potassium (mg/l as K)	STD Method 3111 B (1992)	0,07
Zinc (mg/l as Zn)	SANS 5214 (2005)	0,08
Nitrate Nitrogen (mg/l as N)	Hach 8150	0,12
Nitrate Nitrogen (mg/l as N)	Lovibond Method using Brucine	0,057
Nitrite Nitrogen (mg/l as N)	Lovibond Method	0,08
Nitrate & Nitrite Nitrogen (mg/l as N)	Hach 8150	-
Ammonia (mg/l as N)	STD Method 4500-NH <sub>3</sub> :C (1992)	0,07
Sulphate (mg/l as SO <sub>4</sub> )	Hach 8051	0,17
Total Dissolved Solids*	STD Method 2501 A (1992)	1,63
E.coli (organisms per 100 ml)	SABS 221 (2002)	-
Coliforms (organisms per 100 ml)	SABS 221 (2002)	-
Total Plate Count (organisms per ml)	Petrifilm™	-
Faecal coliforms (organisms per 100 ml)	SABS SM 221 (2002)	-
Settleable Solids (ml/l)*	STD Method 2540 F (1992)	-
Chemical Oxygen Demand (mg/l)	SANS 6048 (2005)	0,08
Total Kjeldahl Nitrogen (mg/l)*	Hach 8075	-
Dissolved Oxygen (mg/l)*	STD Method 4500 O-G	-
Total Suspended Solids (mg/l)*	STD Method 2540 D (1992)	-
Volatile Suspended Solids (mg/l)*	STD Method 2540 E (1992)	-
Total Phosphate (mg/l as P)*	STD Method 4500-PB (1992) / Hach 8114	-
Ortho Phosphate (mg/l as P)*	Hach 8114	-
Copper (µg/l as Cu)	SANS 5203 (2005)	0,13
Oil & Grease (mg/l)*	SABS 1051 (Nov 1982)	-

\* Tests marked “Not SANAS Accredited” in this report are not included in the SANAS Schedule of Accreditation for this laboratory.

(Schedule of Accreditation excludes sampling)