

PARAMETER	METHODS REFERENCE	Detection Limits Routine	Pond sample
pH	APHA 4500-H <sup>+</sup> -B	na	8.23
CONDUCTIVITY (EC) (dS/m)	APHA 2510-B	<0.01	21.00
TOTAL DISSOLVED SALTS (mg/L)	calculation using EC x 680	<7	14,280
TOTAL SUSPENDED SOLIDS (mg/L)	GFC equiv. filter - APHA 2540-D	<1	4,040
BICARBONATE (ALKALINITY) (mg/L CaCO <sub>3</sub> equivalent)	** Total Alkalinity - APHA 2320	<1	85
WATER HARDNESS (mg/L CaCO <sub>3</sub> equivalent)	** using Ca&Mg calculation	<1	1552
TOTAL SULPHIDE (mg/L S <sub>2</sub> <sup>-</sup> )	** APHA 4500-S <sub>2</sub> <sup>-</sup> F	<0.05	0.12
SODIUM (mg/L)	APHA 3125 ICPMS <sup>*note 1&amp;2</sup>	<0.05	753
POTASSIUM (mg/L)	APHA 3125 ICPMS <sup>*note 1&amp;2</sup>	<0.05	6,244
CALCIUM (mg/L)	APHA 3125 ICPMS <sup>*note 1&amp;2</sup>	<0.05	576
MAGNESIUM (mg/L)	APHA 3125 ICPMS <sup>*note 1&amp;2</sup>	<0.05	28
SODIUM ABSORPTION RATIO	BY CALCULATION	na	8.3
CHLORIDE (mg/L)	APHA 3125 ICPMS <sup>*note 2</sup> or ** APHA 4500-Cl <sup>-</sup>	<1	6,898
sulfur	raw data	<0.3	42.2
SULFATE (mg/L SO <sub>4</sub> <sup>2-</sup> )	APHA 3125 ICPMS <sup>*note 2</sup>	<1	127
CHLORIDE/ SULFATE RATIO	Calculation	..	54.5
FLUORIDE (mg/L)	** APHA 4500-F <sup>-</sup> -D	<0.1	0.42
DISSOLVED IRON (mg/L)	APHA 3125 ICPMS <sup>*note 1&amp;2</sup>	<0.05	<0.05
SILVER (mg/L)	APHA 3125 ICPMS <sup>*note 1&amp;2</sup>	<0.001	0.001
ALUMINIUM (mg/L)	APHA 3125 ICPMS <sup>*note 1&amp;2</sup>	<0.005	44.000
ARSENIC (mg/L)	APHA 3125 ICPMS <sup>*note 1&amp;2</sup>	<0.001	0.017
CADMIUM (mg/L)	APHA 3125 ICPMS <sup>*note 1&amp;2</sup>	<0.001	0.001
CHROMIUM (mg/L)	APHA 3125 ICPMS <sup>*note 1&amp;2</sup>	<0.001	0.121
HEXAVALENT CHROMIUM (mg/L)	APHA 3125 ICPMS <sup>*note 1&amp;2</sup>	<0.001	0.050
COPPER (mg/L)	APHA 3125 ICPMS <sup>*note 1&amp;2</sup>	<0.001	0.235
IRON (mg/L)	APHA 3125 ICPMS <sup>*note 1&amp;2</sup>	<0.005	63.100
MANGANESE (mg/L)	APHA 3125 ICPMS <sup>*note 1&amp;2</sup>	<0.001	1.430
NICKEL (mg/L)	APHA 3125 ICPMS <sup>*note 1&amp;2</sup>	<0.001	0.066
LEAD (mg/L)	APHA 3125 ICPMS <sup>*note 1&amp;2</sup>	<0.001	0.071
SELENIUM (mg/L)	APHA 3125 ICPMS <sup>*note 1&amp;2</sup>	<0.002	0.006
ZINC (mg/L)	APHA 3125 ICPMS <sup>*note 1&amp;2</sup>	<0.001	0.994
MERCURY (mg/L)	APHA 3125 ICPMS <sup>*note 1&amp;2</sup>	<0.0005	<0.0005
LITHIUM (mg/L)	** APHA 3125 ICPMS <sup>*note 1&amp;2</sup>	<0.001	0.612
BERYLLIUM (mg/L)	** APHA 3125 ICPMS <sup>*note 1&amp;2</sup>	<0.001	0.003
VANADIUM (mg/L)	** APHA 3125 ICPMS <sup>*note 1&amp;2</sup>	<0.001	0.111
BORON (mg/L)	** APHA 3125 ICPMS <sup>*note 1&amp;2</sup>	<0.01	0.21
COBALT (mg/L)	** APHA 3125 ICPMS <sup>*note 1&amp;2</sup>	<0.001	0.044
MOLYBDENUM (mg/L)	** APHA 3125 ICPMS <sup>*note 1&amp;2</sup>	<0.001	0.118
ANTIMONY (mg/L)	** APHA 3125 ICPMS <sup>*note 1&amp;2</sup>	<0.001	0.001
STRONTIUM (mg/L)	** APHA 3125 ICPMS <sup>*note 1&amp;2</sup>	<0.001	12.084
BARIUM (mg/L)	** APHA 3125 ICPMS <sup>*note 1&amp;2</sup>	<0.001	7.698
RUBIDIUM (mg/L)	** APHA 3125 ICPMS <sup>*note 1&amp;2</sup>	<0.001	1.603
URANIUM (mg/L)	** APHA 3125 ICPMS <sup>*note 1&amp;2</sup>	<0.001	0.002
TIN (mg/L)	** APHA 3125 ICPMS <sup>*note 1&amp;2</sup>	<0.001	0.005
CERIUM (mg/L)	** APHA 3125 ICPMS <sup>*note 1&amp;2</sup>	<0.001	0.169
THORIUM (mg/L)	** APHA 3125 ICPMS <sup>*note 1&amp;2</sup>	<0.001	0.013
<b>BTEX</b>			
Benzene (µg/L or ppb)	subcontracted: Envirolab report 75382	<5	<1
Toluene (µg/L or ppb)	subcontracted: Envirolab report 75382	<5	<1
Ethylbenzene (µg/L or ppb)	subcontracted: Envirolab report 75382	<5	<1
m+p-Xylene (µg/L or ppb)	subcontracted: Envirolab report 75382	<10	<2
o-Xylene (µg/L or ppb)	subcontracted: Envirolab report 75382	<5	<1
Total BTEX (µg/L or ppb)	subcontracted: Envirolab report 75382	<10	Not detected
<b>Total Recoverable Hydrocarbons (TRH)</b>			
Total Recoverable Hydrocarbons:	subcontracted: Envirolab report 75382		
C10-C14 Fraction (µg/L or ppb)	subcontracted: Envirolab report 75382	<50	<50
C15-C28 Fraction (µg/L or ppb)	subcontracted: Envirolab report 75382	<200	<100
C29-C36 Fraction (µg/L or ppb)	subcontracted: Envirolab report 75382	<50	<100
Sum of C10-C36 (µg/L or ppb)	subcontracted: Envirolab report 75382	<200	Not detected
TOTAL CYANIDE (mg/L)	subcontracted: Envirolab report 75382	<1	<0.004

**Notes:**

1. Acid extractable metals - samples acidified with nitric acid and then filtered through 0.45µm cellulose acetate
2. Metals/ salts analysed by ICP-MS (Inductively Coupled Plasma - Mass Spectrometry) or ICP-OES (Inductively Coupled Plasma - Optical Emission Spectrometry)
3. 1 mg/L (milligram per litre) = 1 ppm (part per million) = 1000 µg/L (micrograms per litre)= 1000 ppb (part per billion)
4. For conductivity - 1 dS/m = 1 mS/cm = 1000 µS/cm
5. In Pesticide Analysis Screening, no other pesticides occurred above reportable levels in the attached list
6. For Bacteria - cfu= colony forming unit
7. Analysis performed according to APHA, 2005, "Standard Methods for the Examination of Water & Wastewater", 21st Edition, except where stated otherwise.
8. Analysis conducted between sample arrival date and Report provision date
9. \*\* denotes these test procedures are as yet not NATA accredited but quality control data is available
10. .. Denotes not requested



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