

UH Hilo Analytical laboratory		5/27/09			
Contact: T. Davis					
wwwsite: http://www.uhh.hawaii.edu/~analab					
Table of Analytical Methods					
Disolved & Particulate Nutrients					
	<u>Required</u>		<u>Detection</u>	<u>Detection</u>	<u>Method</u>
Nutrient	volume (ml)	Instrument/method	limits (uM)	limits (ug/L)	Reference **
Nitrate +Nitrite	15	AutoAnalyzer (Pulse), colorimetric	0.1	2	EPA 353.2
Orthophosphate	" " " "	" " " "	0.1	3	EPA 365.1
Silicate	" " " "	" " " "	1	28	EPA 366
Ammonium	" " " "	" " " "	1	14	I-2525-89
Total Phosphorus	15	AutoAnalyzer (Pulse), colorimetric	0.1	3	USGS I-4650-03
Total Organic Carbon	50	Shimdzu TOC-V, high temperature combustion NDIR detection	10	120	EPA 415.1
Total Dissolved Nitrogen	50	ShimadzuTNM-1, high temp. combustion chemiluminescence detection	1	14	ASTM D5176
Particulate C N	300	Costech Elemental Analyzer -high temperature combustion	0.005mg	0.005mg	EPA 440
¹³ C/ ¹² C & ¹⁵ N/ ¹⁴ N (20ug N & 100ug C required)	1000	Elemental Analyzer-Isotope Ratio Mass Spectrometry (Thermo DeltaV)	N/A	N/A	N/A
** Methods available at www.nemi.gov (National Env. Methods Index)					