

Instruments:

Sampling equipment: dual-flow McLane Research in-situ pumps (WTS-LV). More details can be found in the patent description (<https://patents.google.com/patent/US20130298702>) and official website of the manufacturer (<https://mclanelabs.com/wts-lv-large-volume-pump/>). Other instrumentation is shown in the Table 3 below.

Table 3. Instrumentation used in the sample analysis

Measured parameters	Derived parameters	Instrumentation	Model numbers
POC & PN	POM	Elemental Analyzer	CE Instruments NC2500
$\delta^{13}\text{C}$ & $\delta^{15}\text{N}$		Mass Spectrometer	ThermoFinnigan Delta Plus XP isotope ratio
bSi	OPAL	Nutrient Analyzer	Lachat QuikChem 8000 Flow Injection Analyzer
PIC	CaCO ₃	Coulometer	UIC Carbon dioxide coulometer
pTM	LITHO, FeOH ₃ & MnO ₂	ICP-MS	Element XR high-resolution ICP-MS (Thermo)