

**Arctic Great Rivers Observatory: Sample collection overview**

<b>Constituent</b>	<b>Arctic GRO II 2012-2016</b>	<b>Arctic GRO I Comprehensive 2009-2011</b>	<b>Arctic GRO I High Resolution 2009-2011</b>	<b>PARTNERS 2004-2007</b>
Temperature	✓	✓		✓
pH	✓	✓		✓
TSS	✓	✓		✓
Water isotopes	$\delta^{18}\text{O}$ , $\delta^2\text{H}$	$\delta^{18}\text{O}$ , $\delta^2\text{H}$		$\delta^{18}\text{O}$ , $\delta^2\text{H}$
Alkalinity	✓	✓		✓
Dissolved organic carbon	Concentration, $^{13}\text{C}$ , $^{14}\text{C}$	Concentration, $^{13}\text{C}$ , $^{14}\text{C}$	Concentration	Concentration, $^{13}\text{C}$ , $^{14}\text{C}$
DOC, fractionation		HPOA, HPON, HPI, TPIA (percent and SUVA)		
Absorbance	Scans, 200-800 nm	Scans, 200-800 nm		SUVA, a375
Lignin phenols		S8, L8, C/V, S/V, (Ad/Al)V, (Ad/Al)S		
POC	Concentration, $^{13}\text{C}$ , $^{14}\text{C}$	Concentration, $^{13}\text{C}$ , $^{14}\text{C}$		Concentration, $^{13}\text{C}$ , $^{14}\text{C}$
PON	Concentration, $^{15}\text{N}$	Concentration, $^{15}\text{N}$		Concentration, $^{15}\text{N}$
Nutrients, dissolved inorganic	$\text{PO}_4$ , $\text{NO}_3$ , $\text{NH}_4$ , $\text{SiO}_2$	$\text{PO}_4$ , $\text{NO}_3$ , $\text{NH}_4$ , $\text{SiO}_2$	$\text{PO}_4$ , $\text{NO}_3$ , $\text{NH}_4$ , $\text{SiO}_2$	$\text{NO}_3$ , $\text{NH}_4$ , $\text{SiO}_2$
Nutrients, total dissolved	TDN, TDP	TDN, TDP		TDN, TDP
Anions	Cl, $\text{SO}_4$ , F	Cl, $\text{SO}_4$ , F		Cl, $\text{SO}_4$
Cations	Na, Ca, Mg, K	Na, Ca, Mg, K		Na, Ca, Mg, K
Trace Elements	As, Ba, Mn, Mo, Ni, Sb, Sr, U	As, Ba, Mn, Mo, Ni, Sb, Sr, U		As, Ba, Cd, Ce, Co, Cr, Cs, Cu, Fe, La, Li, Mn Mo, Nd, Ni, Pb, Pr, Rb, Re, Sr, Tl, U, V, Zn
Mercury	Total Hg			