

**Attachment 4a. Listing of Testing, Analytes & Metals to be Measured by Matrix and Required Volume**

Testing	Analytes *	Matrix	Volume Required
Persistent Organic Pollutants	PCB congeners (18, 28, 44, 49, 52, 66, 74, 87, 99, 101, 118, 128, 138, 146, 149, 151, 153, 156, 157, 167, 170, 172, 177, 178, 180, 183, 187, 189, 194, 195, 196, 201, 206, 209) hexachlorobenzene gamma-hexachlorocyclohexane beta-hexachlorocyclohexane dieldrin oxychlorane trans-nonachlor heptachlor epoxide p,p'-DDT o,p'-DDT p,p'-DDE mirex PBDE congeners (47, 99, 100, 153, 154, 183 and maybe 209)	Serum	4 mL
Lipids	Total cholesterol Triglycerides	Serum	0.15 mL
Perfluorinated chemicals	PFOS PFOA Other fluorinated chemicals	Serum	1 mL
Cotinine	Cotinine	Serum	1 mL
Metals	Lead Mercury Cadmium	Whole blood	2 mL
Phytoestrogens	Genistein Daidzein Equol o-desmethylangolensin matairesinol enterodiol enterolactone	Urine	2 mL
Creatinine	creatinine	Urine	0.15 mL
Cortisol	cortisol	Saliva	
Male fecundity	sperm concentration, 24-hour motility, morphology	Semen	3mL