Alaska Department of Environmental Conservation
Office of the State Veterinarian Fish Monitoring Program
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ANALYTICAL RESULTS FOR PERFLUORINTED COMPOUNDS IN FISH TISSUE SAMPLES

Analytical Analysis for perfluorinated compounds performed by:
SGS AXYS Analytial Services ltd.
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https://www.axysanalytical.com/

Summary report prepared by:

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Report to: UAF

Sample Location(s): Tanana, Nenana, Healy Lake

Analytes: PFAS

Date of Report: August 21, 2019

Narrative:

SAMPLES AND ANALYSIS:

Samples were received at the State Environmental Health Lab (EHL) on June 17, 2019. They were stored at -20°C and processed according to standard operation procedures (SOP) of the Fish Monitoring Program and EHL. Standard EHL QA/QC procedures were followed. Eight homogenate samples, 4 fillet and 4 liver were sent to SGS-AXYS Analytical on June 19, 2019 for Per- and Polyfluoroalkyl Substances (PFAS) analysis.

PFAS compounds reported by SGS-AXYS include: PFBA, PFPeA, PFHxA, PFHpA, PFOA, PFNA, PFDA, PFUnA, PFDoA, PFTrDA, PFTeDA, PFBS, PFPeS, PFHxS, PFHpS, PFOS, PFNS, PFDS, PFDoS, 4:2 FTS, 6:2 FTS, 8:2 FTS, PFOSA, N-MeFOSA, N-EtFOSA, MeFOSAA, EtFOSAA, N-MeFOSE, N-EtFOSE, HFPO-DA, ADONA, 9Cl-PF3ONS, and 11Cl-PF3OUdS. Compounds in tissue were quantified using AXYS method MLA-043 which is an isotopic dilution method via HPLC/MS-MS. Detection limits range between 0.198 and 1.98 ng/g.

RESULTS:

A table of the data is provided below. Results are reported in ng/g (parts per billion) wet weight. PFAS Compounds (see above) not listed in Table 1 were not detected in the tissue samples.

See our website: http://dec.alaska.gov/eh/vet/fish-monitoring-program for further information about contaminants in fish and shellfish from the State of Alaska.

Fish consumption guidelines for Alaska can be found at http://dhss.alaska.gov/dph/Epi/eph/Pages/fish/default.aspx

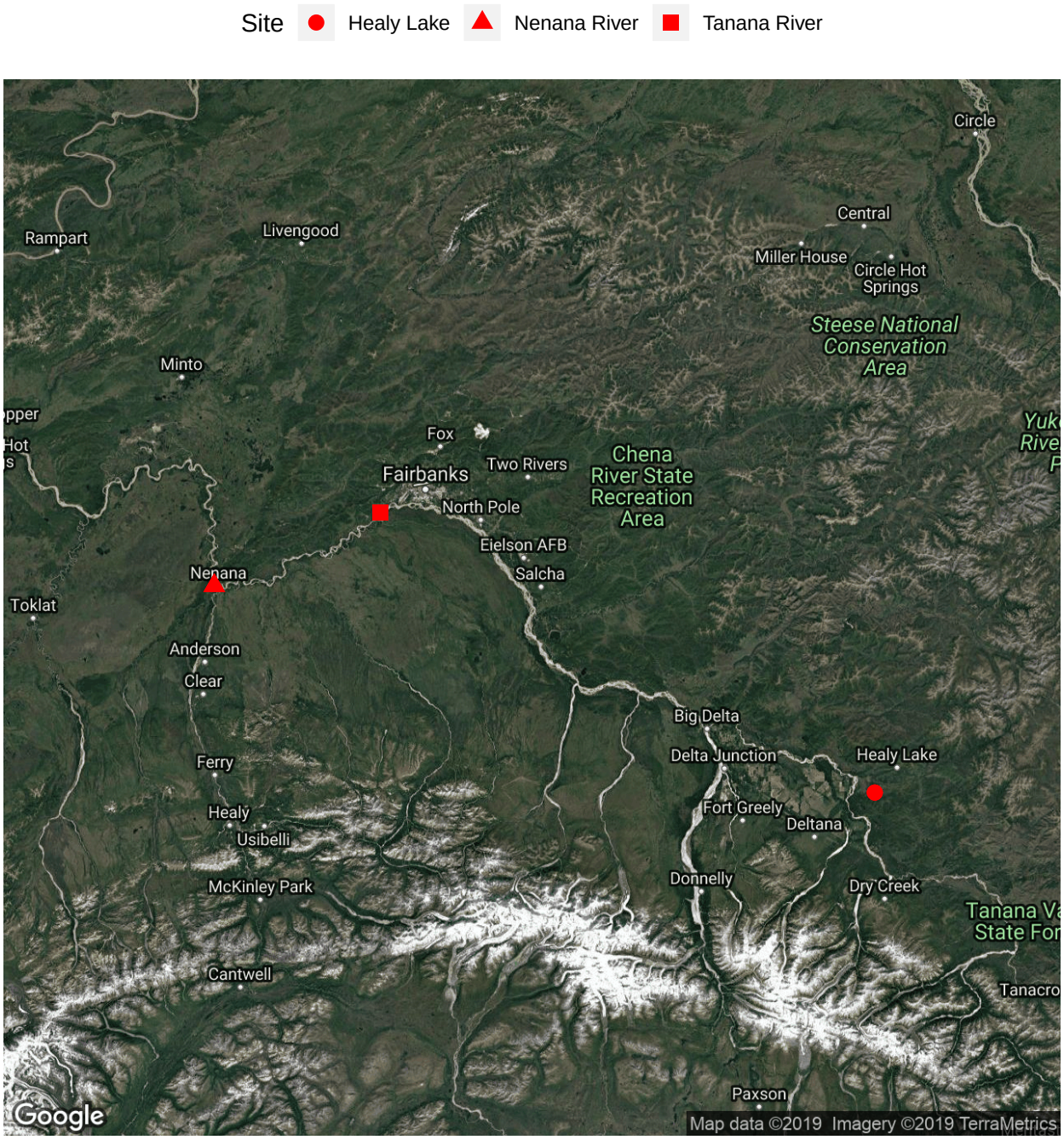

Figure 1: Sample Locations

Table 1: PFAS in Burbot from The Fairbanks Area 2019

Site	ClientID	Tissue	COMPOUND	CONC	UNIT
Healy Lake	19-7B	Liver	PFOS	0.355	ng/g (wet weight basis)
Nenana River Confluence	19-2B	Fillet	PFOS	0.251	ng/g (wet weight basis)
Nenana River Confluence	19-2B	Liver	PFHxA	2.720	ng/g (wet weight basis)
Nenana River Confluence	19-2B	Liver	PFOS	1.180	ng/g (wet weight basis)
Nenana River Confluence	19-5B	Liver	PFOS	1.090	ng/g (wet weight basis)
Nenana River Confluence	19-5B	Liver	N-EtFOSA	0.592	ng/g (wet weight basis)
Tanana River- Middle	19-6B	Fillet	PFOS	0.441	ng/g (wet weight basis)
Tanana River- Middle	19-6B	Liver	PFOS	1.300	ng/g (wet weight basis)

Note:
Only samples with detectable levels are included in the table