

Rye Water District

Water Testing Results April 2016

At the Rye Water District's Annual meeting held at the Rye Jr High School on March 26th. Several concerned citizens of Rye requested the Commissioners' to have the water tested for the presents of Perfluorinated compounds (PFCs) and 1,4 Dioxane. The Water Commissioners'' unanimously agreed to that request.

A qualified laboratory was located, contracted, and sampling bottles obtained. On April 6th each water source (3 wells) was sampled and samples were shipped overnight to the laboratory for processing. Sampling data results are summarized in the table below. Additionally, these results were provided to NHDES for their information and reference. A very sensitive analytical method that can detect PFCs down to a part-per-trillion level was used. Because of the widespread use of PFCs it is not unusual to find these compounds in groundwater and surface water through-out the nation anywhere water samples are analyzed at the part-per-trillion level. For reference, standard drinking water analysis normally only test for contamination down to the part-per-billion value. Concentrations of PFCs in groundwater below 10 parts-per-trillion are normal and are an expected anthropogenic "background" concentration. The results of these Rye Water District's water quality tests indicated that PFCs were detected at a concentration ranging from non-detect to 6 parts-per-trillion which are below the expected "background" concentration and are well below any health guideline for drinking water established by USEPA and any state in the nation.

Sampling Results for Perfluorinated Compounds and 1.4 – Dioxane

	Perfluorinated Compounds			1.4 - Dioxane
	PFOS	PFOA	PFHxS	
Garland Well	6 ppt	6 ppt	ND	ND
Bailey Well	ND	ND	ND	ND
Cedar Run Well	ND	2 ppt	ND	ND
Sampling Process Information				
EPA Method	537	537	537	522
Method Detection Limit*	4 ppt	2 ppt	3 ppt	70 ppt

ppt =parts per trillion (same as ng/L)

ND = non detect

*Method Detection Limit: Is defined as the minimum concentration of a substance that can be measured and reported with 99% confidence that the analyte concentration is greater than zero and is determined from analysis of a sample in a given matrix containing the analyte. (40 CFR Appendix B part 136)