



Obsidian Onsite Services, inc.

August 12, 2016

Mr. Dwayne Roadcap
Division of Onsite Sewage and Water Services
Virginia Department of Health
109 Governor Street
Richmond, VA 23219

Re: Engineer's Certification Statement
Clearstream 500DA, 600DA, 750DA, 800DA & 1,000DA Wastewater Treatment System

Dear Mr. Roadcap,

The Clearstream Model 500DA, aerobic treatment unit, was tested from May 2012 through November 2012 and certified by Gulf Coast Testing, LLC as meeting NSF Standard 245. During the test program, the average influent total nitrogen was 42 mg/l and the average effluent total nitrogen was 19 mg/l (a 55% reduction). Additional results of the testing program indicate that the average influent BOD was 278 mg/l and the average effluent CBOD was 4 mg/l (based on 118 data points).

Therefore, in my professional opinion, that the subject Clearstream Models are capable of consistently producing "end of pipe" effluent meeting TL-3 treatment criteria.

Feel free to contact me with any questions.

Sincerely,

Joel S. Pinnix, PE

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