

AMPHIDROME[®] FACILITY REPORT

Plant & Location: Silver Brook Farms, Norwell, MA

Massachusetts DEP Permit Number: W009675

Facility type: Housing development.

Design: This plant was designed to meet groundwater discharge limits including a total nitrogen of ≤ 19 mg/L. The design and average influent parameters are provide in the table below.

Parameter	Design Values	Actual Values
Flow	9,900 gpd	6,390 gpd
BOD ₅	250 mg/L	154.2 mg/L
TKN	70 mg/L	34.6 mg/L
C/N	3.6	4.46

C/N - Carbon-to-nitrogen ratio measured as BOD₅/TKN.

Summary: This plant is an Amphidrome[®] with no denitrification filter (Plus[®] filter), and has been in operation since 2003. The average effluent results for the life of the plant (since February, 2003) are shown in the table below.

	BOD ₅	TSS	Total N
Permit Limit	<i>30 mg/L</i>	<i>30 mg/L</i>	<i>19 mg/L</i>
Average	19.0 mg/L	16.2 mg/L	13.2 mg/L

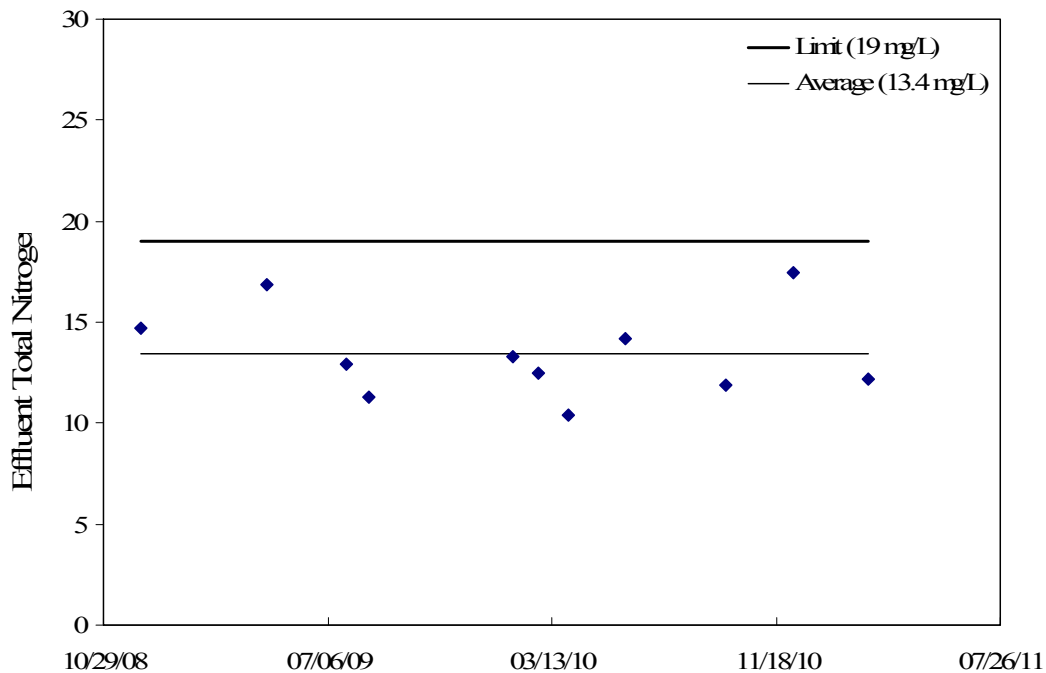


Figure 1. Silver Brook Farms Effluent Total Nitrogen