

Florida Sample Analysis

(Silt Stop Blend / Floc Log Applications)

Sample	Location	Description	APS Application	Results and Special Instructions
Sample	Analysis date 8/15/07 by: LBS	Sample Type	Floc Log Type	Reaction Time / NTU Reading
	City of Tallahassee Water Quality Division 3805-A Springhill Rd. Tallahassee, FL 32310 850-891-1200 850-891-1062 (fax) G. Watts wattsg@talgov.com	Lake Hilaman Water Sample Solarbee Experiment pH- 6.61 NTU- 9.45 Hardness- 50 ppm CaCO ₃ Phosphorus- 5-6 ppm PO ₄ (estimate)	703d#3	38-40 seconds / 6.60 NTU at 60-70 GPM / log Phosphorus- 2-3 ppm PO ₄ (estimate)

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Expectations of performance using the Floc Logs:

- Water sample provided as a background, before installation of SolarBee.
- Total Phosphorus levels initially measured at 5-6 ppm PO₄ / 50%+ reduction after treatment with the 703d#3 Floc Log.
- Turbidity levels initially measured at 9.45 NTU / 30%+ reduction after treatment with the 703d#3 Floc Log.
- Would expect to see significant reduction of chlorophyll A with adequate Floc Log reaction and mixing.

Note: Mixing / reaction times will be very important when using the Floc Logs with the mixing being continuous for the time stated to obtain the best results. The dosage rate should be **60-70 GPM flow / Floc Log** placed in a series or row. Capturing the particulate after the mixing reaction has been completed will help increase final water clarity.

With adequate mixing and reaction with the above Floc Logs, we estimate that 50% of the total phosphorus in the lake water can be removed. By decreasing the amount of phosphorus available to plants, the amount of algae in the lake will decrease, causing a drop in levels of chlorophyll A.

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Sample	Location	Description	APS Application	Results and Special Instructions
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Sample Analysis date 8/17/07 by: LBS

Sample Type

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Water Quality Division
3805-A Springhill Rd.
Tallahassee, FL 32310
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Lake Hilaman
Water Sample
Solarbee Experiment

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Note: Total Phosphorus levels in previous testing had been estimated using Hach Phosphate test strips. Additional testing performed to more closely assess the reduction in Total Phosphorus levels after reaction with the Floc Logs.

Testing for Total Phosphorus (High Range, 0.0 mg/L - 100.0 mg/L) using Molybdovanadate Method with Acid Persulfate Digestion and analysis by spectrophotometer.

Two samples were tested (along with the required blank) one of the untreated lake water and the second after treatment with the 703d#3 Floc Log and removal of the flocculated material.

The blank read as 0.7 mg/L PO₄

The untreated water read as 1.0 mg/L, which accounting for the blank results in 0.3 mg/L PO₄

The treated water read as being below detection limits (\leq 0.0 mg/L PO₄)