

Bongard's Creameries Successful Sludge Reduction Program with T195 Mega Bugs Plus

Perham, MN

South Pond

2013 Average Sludge



2017 Average Sludge



- * South Pond - 8.8 acres
- * Operation Depth - 12'
- * Pond Capacity - 38,000,000 gallons
- * Reduced Sludge - 85%
- * Approximately 5,735,000 gallons of sludge removed
- * Increased retention time by 17 days
- * Saving the Company approximately **\$630,000** in sludge removal costs. (Based on \$0.11 per gallon to remove mechanically.)

77% Reduction in Sludge Depth Since 2013

Bongard's Creameries Successful Sludge Reduction Program with T195 Mega Bugs Plus

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North Pond

2013 Average Sludge



2017 Average Sludge



- * North Pond - 8.8 acres
- * Operation Depth - 12'
- * Pond Capacity - 38,000,000 gallons
- * Reduced Sludge - 77%
- * Approximately 3,345,000 gallons of sludge removed
- * Increased retention time by 10 days
- * Saving the Company approximately **\$368,000** in sludge removal costs. (Based on \$0.11 per gallon to remove mechanically.)

77% Reduction in Sludge Depth Since 2013