

**<u>CUSTOMER</u>**: Reading Area Water Authority Reading, PA

ENGINEER: BCM Engineers Plymouth Meeting, PA

## PROJECT DESCRIPTION:

Mix a 15,000,000 gallon water reservoir (300' diameter) to maintain equal temperature and chlorine residual throughout the reservoir.

## **SPECIAL REQUIREMENTS:**

The system needed to be in its own all-weather outdoor enclosure.

## PHI SOLUTION:

The system was designed with 16 bubble forming plates with their location in the tank determined by the CFD model and included two PHI-500 enclosures that each house PHI 360 components and a 15 hp compressor. Using two compressors connected and controlled by the PHI software limits the start surge power to prevent the plant's outdated electrical infrastructure from overloading.

## RESULTS:

Temperature readings taken from customer's predetermined test points showed a temperature differential of 1/10°F between all test locations. Prior to PHI mixer installation and start-up, the reservoir water was stratified and readings showed a 6° F temperature variance.



View: Inside Reservoir



(See Reverse for Application Drawing)

