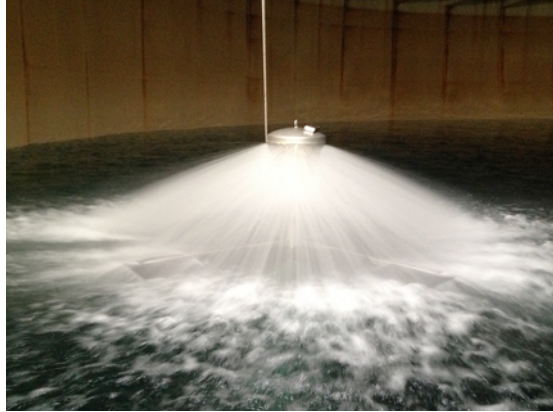


**Key Words:** Pueblo West, CO., potable, THM removal, spray nozzle, stratification, mixing, chlorine



**Photos:** The photo on the left shows Tank 110 with blower assembly. The center photo shows a GridBee SN15 operating in a similar tank. On the right is a close-up of the blower assembly for this SN15 system.

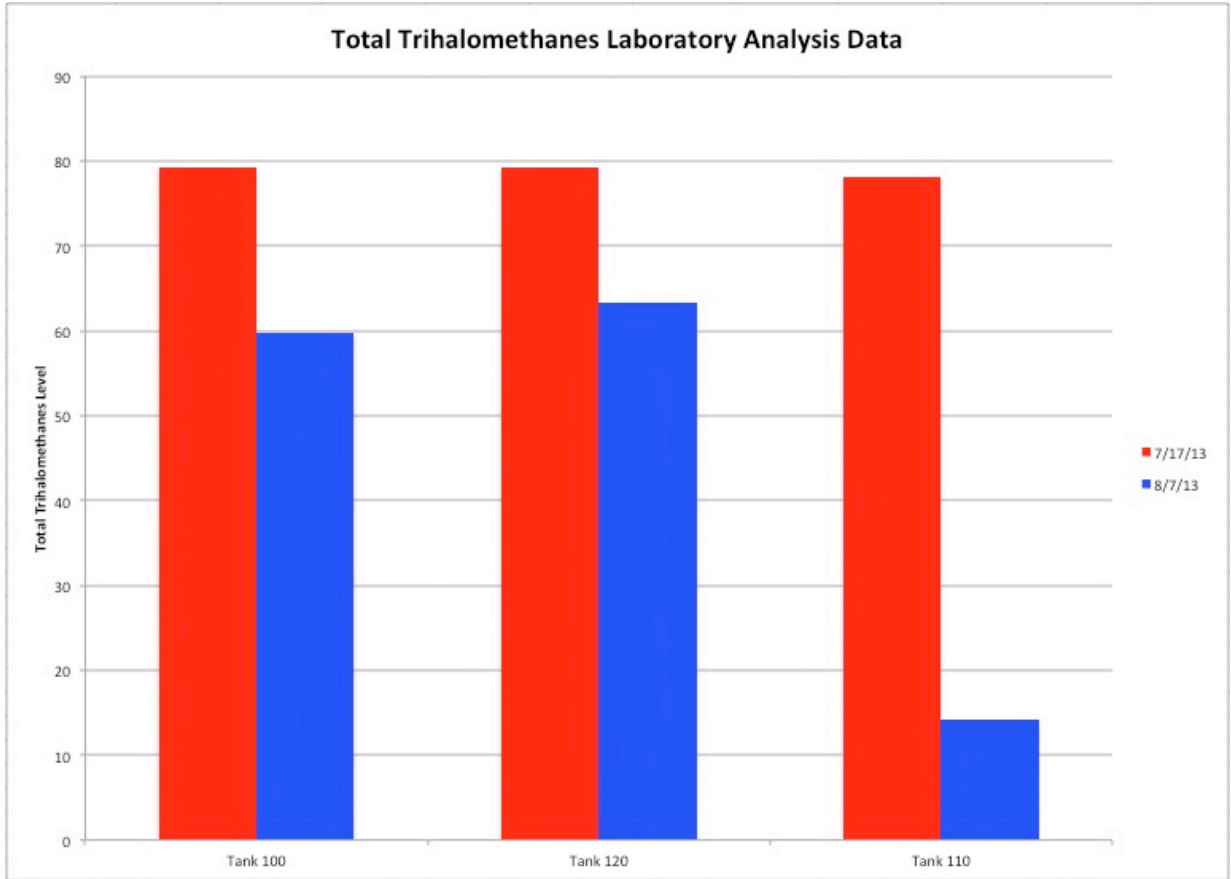
**Owner:** Pueblo West Metro District, Pueblo West CO.; Contact: Greg Lamont; Telephone: 719-547-5048; Email: [glamont@pwmd-co.us](mailto:glamont@pwmd-co.us)

**System Overview:** Tank 110 is one of three tanks at this site serving the potable needs of Pueblo Colorado. It is a welded steel ground storage tank with a capacity of 2.5 MG. Tank height is 24 ft. with a diameter of 140 ft. Average flow rate is 355,000 gpd with a peak flow rate of 948,000 gpd. The system disinfectant is chlorine.

**Reported Problem Before SolarBee Installation:** Water quality problems included excessive trihalomethane (THM) concentrations and thermal stratification, creating uneven water age issues. To ensure full EPA compliance and to optimize the community's potable water quality, the community sought a reliable, affordable means for removing THMs.

**SolarBee Installation:** Date: 7/15/2013; installed one GridBee SN15 Floating Spray Nozzle THM removal system with a supplemental GridBee GS-12 submersible mixer. The GridBee SN15 Floating Spray nozzle THM removal system is designed to achieve 40-50% reduction of THMs in this system.

**Results:** In testing the performance of the GridBee SN15 Floating Spray Nozzle THM system and the GridBee GS-12 in tank 110, the District set up two control tanks that did not contain any SolarBee equipment, tank 100 and tank 120. The graph below depicts the outstanding results of this comparison study and shows approximately a 77 % reduction in THM levels in tank 110. The readings depicted by the red and blue bars were taken about 3 weeks apart. You will note that there was a natural decline in the THM levels in the control tanks during that period. The District is extremely happy with the results, and they have ordered the same THM reduction systems for tanks 100 and 120. The District will serve as a positive contact for future installations.



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