

PILOT PROGRAM

ON-SITE PILOT STUDIES DEMONSTRATE EFFECTIVENESS OF ECONOMICAL FILTRATION

Pilot tests conducted at numerous facilities demonstrate that Loprest treatment processes successfully reduce iron, manganese, arsenic, nitrate, and many other select contaminants in drinking water to well below the Maximum Contaminant Level (MCL). Loprest will provide a trailer-mounted pilot unit that includes unit delivery, setup, and operation. Upon completion of the pilot study, Loprest will prepare a Pilot Study Report and a detailed cost proposal for a full-scale system.

PURPOSE OF THE PILOT STUDY

- Demonstrate the removal of the contaminant to comply with the MCL
- Demonstrate the simplicity of operation of the Loprest treatment process
- Demonstrate the effectiveness of Loprest's Water Scour System.
- Complete piloting requirements for regulatory approval
- Evaluate media performance

LOPREST WATER PILOT PROGRAM

- Project specific test protocol
- Configured for Fe, Mn, As, Nitrate and Hardness in single or combined removal processes
- Pilot unit is completely self-contained and ready to operate when it arrives on-site
- Operator training will occur when pilot unit arrives
- All necessary supplies and equipment will be provided with the pilot unit
- Length of pilot test is typically 3-5 days
- Utility monitors operation and collects samples



PILOT PROGRAM

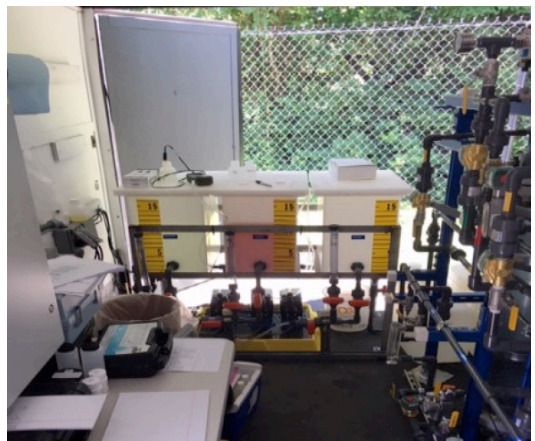
LOPREST TRAILER-MOUNTED PILOT UNIT

The trailer-mounted pilot unit is a self-contained, heated, 8' x 16' fully enclosed trailer and can be in operation within hours of arrival. The pilot unit equipment is mounted inside the trailer, along with tools, sampling and monitoring equipment, a work area, and an inventory of supplies and materials necessary for operating the pilot unit.

Setup of the pilot unit consists of securing and leveling the trailer on-site, connecting the water source, discharge and electrical power. The Utility will need to provide a single 120VAC, 15-amp outlet, an access point for source water and a discharge point for treated water. Electrical power is connected via drop cord. The sample water inlet and treated discharge are connected to the trailer with external garden hose connections.

The media filter columns are backwashed automatically using one of several backwash trigger points set at the PLC controller. Set points for filter backwash can be initiated manually, by operating time interval, by filter differential pressure loss or by filtered water discharge conditions. Based upon the filter run requirements and the testing protocol for the test(s) a filter backwash frequency is selected. Backwashing of the filter units is accomplished by directing treated and finished water from the integrated treated water collection tank. Backwash water supply is directed automatically to each filter column sequentially in an upflow direction through the media column to expand the media bed and release the collected solids to exit out of the top of the filter media column. The backwashed liquid and solids are sent to the wastewater discharge connection out of the trailer.

Once the pilot unit is in operation, Loprest will instruct the operating staff regarding the pilot unit operation and monitoring and sampling procedures. The Utility will be responsible for daily monitoring of the system and collecting water samples and sending them to the laboratory for analysis. The number of samples and frequency of collection will be determined by Loprest for each pilot study and may require modifications during the course of the study. When the pilot test is completed and all laboratory results are received, a Pilot Study Report will be delivered to the Utility. The Pilot Study Report is typically completed within 30 to 60 days.



For more information contact:

Loprest, a division of WRT:

loprest.com • 303.424.5355

