

Each water purification project is unique. On-site verification & optimization is routinely performed before a purchase decision is made. Purifics facilitates and expedites on-site pilot verification using our Packaged Pilot Systems (PPS). The on-site test program consists of a series of test runs at various operating parameters to determine optimal rates and cost structure. During this testing, influent and effluent samples are drawn for analysis. Pilot tests are typically as short as one week in duration or up to several months, as determined by the client / regulator.

The Packaged Pilot Systems are “SMART”, fully automated and operated by a touch-screen SCADA system that is equipped with full remote; control, data logging and video. PPS are easily delivered on-site and operational within an hour. The mobile systems are identical to full-scale systems. Consequently, full-scale system design is simply a linear scale-up of capacity based on the test data.

On-Site Verification Proposal & Pilot Protocol

An on-site verification proposal is available upon request for your specific requirement.

Prior to testing, a pilot protocol is co-developed by Purifics and the client. The goal of the protocol is to verify treatment to the client's specifications, verify O&M cost estimates, and to obtain the required engineering data for the design & regulatory approval of a full-scale water purification system.

Verification Testing & Optimization

In the initial phase of the test program, treatment is performed to the client's specifications. Once effluent compliance is verified, optimization tests are performed to reduce O&M costs and equipment size. This is accomplished by varying flow rate, system power and other proprietary techniques. After optimization is complete, sustained purification is performed as per the pilot protocol.

Laboratory Analysis

Laboratory testing is the responsibility of the client. The client must select and approve the lab used in the program.



PPS 4 – Remote Webcam

Test Report & Full-Scale System Recommendation

At the conclusion of the on-site pilot verification a final test report, consisting of the objectives, description, results, discussion, conclusions, system recommendations, and an appendix of the test data is submitted to the client. A full-scale treatment train recommendation is made. This recommendation includes capital, operating and maintenance costs, as well as other system parameters.

Mobilization & Demobilization

The mobile system is prepared for transport to the client's site upon receipt of a purchase order. The delivery date can be as early as one week after receipt of the PO. The delivery time, method and other logistics will be coordinated with the client. Logistics, such as the test location, site security and access, client procedures and regulations and power requirements, are also discussed at this time.

The mobile system will be demobilized and returned to Purifics upon conclusion of the testing. Operation & disposal of the treated water is the responsibility of the client.



Packaged Pilot Systems

PPS	1	4	5	7	8	DeWRS
Capacity	10-18 gpm (0.6-1.1 L/s)	10-18 gpm (0.6-1.1 L/s)	10-18 gpm (0.6-1.1 L/s)	10-18 gpm (0.6-1.1 L/s)	10-18 gpm (0.6-1.1 L/s)	
CUF M	10	10	10	10	10	
Photo-Cat	DL				DL	
DeWRS M	*	*	*	*	*	4
DIT		✓	✓	✓		
Enclosure Power	480V/277V, 80 Amps	480V, 20 Amps**	480V, 34 Amps**	480V, 28 Amps**	480V/277V, 80 Amps	480V, 7 Amps**
Max Flow (gpm)	20	40	40	40	20	1
Size (ft)	40 x 8 x 9.5	20 x 8 x 8	20 x 8 x 8	20 x 8 x 8	40 x 8 x 9	6 x 3 x 7
Weight	24,000 lbs	12,000 lbs	12,000 lbs	12,000 lbs	24,000 lbs	500 lbs

* Can be added to pilot ** 3Ph, Delta, FLA – includes Aux. Equipment



PPS 1



PPS 1 Interior



PPS 4



PPS 5



PPS 5 Interior



PPS 7



PPS 8



DeWRS



DIT