Cuvo Pumping Solutions, Inc.

Typical Specifications for
Dedicated Redi-Flo2™ Groundwater Sampling Assemblies

1.0 Scope

1.1 The system shall be capable of variable speed pumping of ground water.
1.2 The system shall fit inside a 2", Sch.40 PVC well or larger.
1.3 The system shall utilize a Grundfos 2" Redi-Flo pump.
1.4 The system shall be capable of operation by one person.
1.5 The system shall be delivered fully assembled, individually bagged, boxed, tagged, and custom sized by each well.
1.6 The system shall be manufactured by Cuvo Pumping Solutions, Inc.

Motor Cable / Discharge Tubing Assembly Design

2.1 The motor lead shall be continuous Tefzel insulated with no splices.
2.2 The discharge tubing shall be continuous Teflon Lined Polyethylene with no splices.
2.3 The motor lead and discharge tubing shall be cable tied together every 5 feet.
2.4 The discharge tubing shall be connected to the top of the discharge housing on the pump with a T-316 Stainless Steel Swagelok fitting.

3.0 Well Seal Design

3.1 The well seal shall provide a water-tight barrier at the top of the monitor well casing.
3.2 The well seal shall be capable of installation without the use of special tools.
3.3 The well seal shall be manufactured out of T-304 Stainless Steel with all fittings that come in contact with the water manufactured from a minimum of T-304 Stainless Steel material.
3.4 The well seal shall have a minimum of 3 ports. One port for connection to the pump discharge tubing, one port for connection to the electrical motor lead, and one port to allow for insertion of a portable liquid level indicator. This third port will also house the Teflon Sample Tube Assembly when the pump is not in use.
3.5 Each port on the well seal shall have a threaded cap that provides a watertight barrier when tightened by hand. All caps shall be secured to the top of the well seal with a flexible chain.
3.6 The well seal shall be supplied with an eight (8) ft. Teflon discharge tube assembly that will thread to the top of the top of the well seal when the pump is in use. Also referred to as "Sample Tube Assembly".
3.7 The well seal shall have an aluminum ID tag with the following information: Well ID number, installation depth, date of installation.
3.8 The well seal shall be manufactured by Cuvo Pumping Solutions, Inc. or equal.

4.0 Pump / Motor Design

4.1 The pump shall be an electric submersible.

4.2 The pump shall be constructed entirely of stainless steel and Teflon.

4.3 The pump shall have a weight of 5.5 pounds.

4.4 The pump shall have the varying capacity of pumping as low as 100 ml/min. to a maximum of 9 GPM.

4.5 The pump shall be capable of variable performance between 2,300 and 23,000 RPM.

4.6 The pump motor shall be capable of operation between 46 and 400 hertz by the use of an SI/MP1-115/230v Variable Frequency Drive as manufactured by Grundfos Pumps Corporation. This drive also contains built in motor protection.

4.7 The pump and motor shall be manufactured by Grundfos Pumps Corporation.