



Initial Pump Flow Test

Standard Operating Procedure

WASTE
REDUCTION
& DISPOSAL
DIVISION

Groundwater Monitoring

The optimum flow rate for each well will be established during well development or redevelopment, or in advance of the actual sampling event. The well must be gauged for depth to water (SWL) prior to the installation of the dedicated pump and before pumping of any water from the well.

1. After pump installation and confirmation that the surface water level (SWL) has returned to its original level (as determined prior to pump installation), start the bladder pump at a discharge rate between 0.5 to 1.0 Liters per minute *without* any water quality instruments connected the pump discharge.
2. Continuously monitor the water level in the well casing for any change from the original measurement.
3. If significant drawdown is observed, incrementally reduce the pump's flow rate until the SWL drawdown ceases and stabilizes.
4. Total drawdown from the initial (static) water level is not to exceed 0.33ft. (4 inches).
5. Once the optimum flow rate has been determined and documented, connect the water quality instrument apparatus to be used to the well discharge.
6. Determine the control settings required to achieve the well's optimum flow rate with the water quality instrument apparatus connected.
7. Document all control settings on the gauging and sampling sheet specific to the well's ID so that it may be utilized for its subsequent purging and sampling events.

Benefit of Compliance to Instruction:

- Ensures consistency in all readings
- Compliance with Regulatory guidelines
- Significant water conservation
- Provides proper QA/ QC for all wells sampled
- Allows for a consistent, reliable, historical record of analytical results

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Consequence of Non-Compliance to Instruction:

- Inaccurate readings
 - Useless data that must be sampled again
 - Re-sampling and analysis cost overruns
 - Disciplinary action
 - Impacts to groundwater not identified in timely fashion
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Environmental Management System (EMS) –ISO 14001

PROCESS MAP #: GW-1.0

Reviewed by: Ray Purtee, *Senior Mechanical Engineer*

Approved by: Kip Sturdevan, *Deputy Environmental Services Director, WRAD*

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