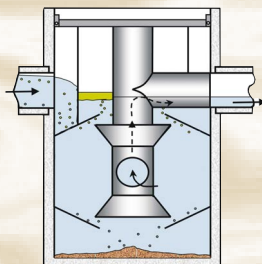


Downstream Defender®



Independent Chemical Analysis



Product Profile:

- Available in a range of standard chamber sizes.
- No power required and no moving parts.
- Resistant to re-entrainment.
- Highly efficient with minimal headloss.
- Inlet and outlet pipes at same level.
- Small footprint.
- Delivered in its own concrete chamber/ready to install.
- Low maintenance.

A 4 litre sample of sediment was collected from a Downstream Defender® during an annual inspection and pump out. The sediment sample was divided into two equal parts, one was taken to a soils laboratory to determine the particle size distribution and the second was taken to an environmental laboratory for chemical analysis.

Summary of Chemical Analysis Results			
Parameter	Data	Units	MDL*
Arsenic, total	7.50	mg/kg	0.10
Barium, total	30.00	mg/kg	30.00
Cadmium, total	2.10	mg/kg	0.50
Chromium, total	34.00	mg/kg	5.00
Copper, total	101.00	mg/kg	3.00
Lead, total	242.00	mg/kg	5.00
Mercury, total	0.36	mg/kg	0.03
Nickel, total	16.00	mg/kg	5.00
Selenium, total	0.67	mg/kg	0.03
Silver, total	5.00	mg/kg	5.00
Zinc, total	465.00	mg/kg	3.00
Oil and Grease	2.30	percent	0.1 percent
Phosphorus, total	1500.00	mg/kg	300.00
Total Solids	38.47	percent	0.01 percent

Summary of Particle Size Distribution Results			
Sieve Size (Mesh)	Sieve Size (Microns)	Sample 1 Percent Passing	Sample 2 Percent Passing
¾ inch	18,750	100.00	100
½ inch	12,500	99.90	100
¼ inch	6,250	99.70	99.5
#4	4,750	99.60	99.4
#10	2,000	99.10	98.7
#20	840	98.10	97.6
#40	420	97.30	96.6
#60	250	96.80	96.1
#100	150	96.40	95.6
#200	75	95.50	94.9

* MDL—Minimum Detection Limit

The sediment collected from the solids collection facility contained a significant fraction of fine silt and clay particles with over 95% of the particles finer than 75 microns. While the removal efficiency of the Downstream Defender® cannot be verified from the sample, as it does not relate to a particular flow rate, the results indicate that the unit is capable of removing and retaining extremely fine particles. This is significant as the chemical pollutants and heavy metals tend to be associated with the finer particles.

This information is for guidance only and not intended to form part of a contract. Hydro International pursues a policy of continual product development and reserves the right to amend specifications without prior notice. Equipment is patented in countries throughout the world.

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