TESTING SUMMARY

Field Monitoring Results
Seatac, Washington

Summary: Monitoring was conducted on a Stormceptor model STC 900 during four storm events from March, 1999 to October, 1999. The results from this test indicated a high level of removal of total suspended solids (TSS) and total petroleum hydrocarbons (TPH) during this period.

TSS Removal	TPH Removal	TN Removal	TP Removal	Cu Removal
87%	99%	43%	11%	28%

All removal rates are based on mass reduction over the four event period. The removal efficiency was based on load reduction since the concentrations of pollutants varied with each storm. Estimates of pollutant removal based on concentrations would be misleading during storms when the pollutant concentrations are low or near the laboratory detection limits. Results that were below the detection limits were omitted from the analysis. **Results show approximately 80% of collected sediment was finer than 50 microns**. Details are included in Table 1.

Methodology: Associated Earth Sciences Inc., (ASI) of Kirkland, Washington was retained to perform independent field monitoring on a STC 750. ASI installed two ISCO automatic samplers upstream and downstream of the unit. A bubbler flow meter was installed downstream of the Stormceptor unit in the discharge pipe. A tipping bucket rain gauge was located on-site to record the rainfall. The samplers collected flow proportional quality samples.

Effluent levels of oil were all less than 5 ppm. Two events had elevated levels of oil (35 ppm and 34 ppm) in the influent storm water to the Stormceptor. Detailed results for each storm are provided on the following page.

Project Details: The monitoring site is a 0.40 hectare Texaco gas station and convenience store located near Seatac Airport and Seattle, Washington. The site is subject to high average daily traffic volumes due to the joint convenience store/gas station application.

This summary is continued on the back of this page

Amtest Laboratories in Redford, Washington performed a grain particle size analysis of captured material in the Stormceptor System. Results are detailed in the table below:

Table 1. Particle Size Distribution (PSD)	
Particle Size	**% Finer Than**
500	93.6
250	91.1
125	87.5
53.	81.5
38	61.5
16	43.7
8	31.7
4	22.5
2	13.7
1	8.4
<1	0

Result for each storm event are detailed below, all values are in mg/l except for the removal efficiencies and rainfall depths as noted. Removal rates are mass reduction based on flow composite quality samples (load). Value less than the detection limit were analyzed as zero.

Table 2. Removal Results, Stormceptor STC 750 Seatac, Washington						
	Date	**3/13/99**	**4/25/99**	**5/3/99**	**10/28/99**	**Removal**
	Rain (mm)	**20.3**	**4.3**	**4.6**	**7.6**	
TSS	First Flush in	100	300			**87.4%**
	First Flush out	6	55			
	Composite in	23	40	16	240	
	Composite out	8	18	5	10	
TPH	First Flush in	0	35			**99.1%**
	First Flush out	0	4.8			
	Composite in	0	0	0	24	
	Composite out	0	0	0	0	
TP	First Flush in	0.076	0.72			**11.1%**
	First Flush out	0.064	0.7			
	Composite in	0.064	0.32		0.43	
	Composite out	0.049	0.38		0.35	
TN	First Flush in	2.6	2.4			**43.0%**
	First Flush out	0.8	2.1			
	Composite in	1.2	1.4	1.5	2.7	
	Composite out	0.43	1.4	1.3	1.7	
Cu	First Flush in	0.014	0.027			**27.9%**
	First Flush out	0.006	0.015			
	Composite in	0	0	0.021		
	Composite out	0	0	0.017		
Zn	First Flush in	0.27	0.53			**0%**
	First Flush out	0.10	0.24			
	Composite in	0.14	0.054	0.24		
	Composite out	0.15	0.26	0.19		

For more information, please contact the Stormceptor Canada Inc. at (800) 565-4801 for more complete results of this test, or with any other questions regarding our Stormceptor testing program.